East Midlands Gateway
Phase 2 (EMG2)

Document DCO 6.19C/MCO 6.19C

ENVIRONMENTAL STATEMENT

Technical Appendices

Appendix 19C

Climate Change Risk Assessment

October 2025

19

The East Midlands Gateway Phase 2
and Highway Order 202X and The East Midlands Gateway
Rail Freight and Highway (Amendment) Order 202X

SEGRO.COM/SLPEMG2

SEGRO

SEGRO LOGISTICS PARK

EAST MIDLANDS GATEWAY 2 (EMG2)

Environmental Statement: Appendix 19C - Climate Change Risk Assessment

794-PLN-ESH-00144
October 2025

Document status

Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date
0	First draft	TM	AP	AP	26/11/2024
1	Draft for consultation	TM	AP		25/06/2025
2	Final	TM	AP	AT	25/07/2025

Approval for issue

Andrew Tasker	[redacted]	25 July 2025

Prepared by:

RPS

Tomos Murray
Consultant - EIA and Sustainability

20 Western Avenue
Milton Park
Abingdon, Oxfordshire OX14 4SH

T [redacted]
E

Prepared for:

SEGRO (Properties) Ltd

Ian Rigby
Director, Technical Development, National Markets

Two Friargate
Station Square
Coventry, CV1 2GN

T [redacted]
E

Contents

Tables

Figures

Appendices

1 CLIMATE CHANGE RISK ASSESSMENT

1.1 Overview

1.1.1 This appendix to **Chapter 19: Climate Change** (**Document DCO/MCO 6.19**) summarises potential changes in climatic parameters at the EMG2 Project and considers whether there is potential for likely significant environmental effects, in line with the UK's guidance on climate change risk assessments (CCRAs).

1.1.2 Besides climate risks to the EMG2 Project itself, there are potential inter-relationships between climate change and several other environmental topic areas reported in other chapters of the Environmental Statement (ES), most notably flood risk. The climate projections summarised in this appendix have been provided to all ES chapter authors in order that any changes in the future baseline or sensitive receptors due to climate change can be evaluated if relevant to the respective impact assessments.

1.1.3 Legislation and policy in relation to climate change and CCRAs is set out in **Appendix 19a: Climate Change Policy Review**.

1.2 Methodology

1.2.1 The scope of this CCRA is defined in accordance with the Climate Change Committee's recommendations. This appendix considers the climate-related physical risks on the EMG2 Project and identifies the current and anticipated risks throughout its lifetime. This appendix evaluates the processes utilised for managing the risks through four key stages.

1. An assessment of the baseline climate to understand present-day vulnerability and assess current climate-related risks, opportunities, and levels of adaptation.
2. An assessment of future climate projections to understand the future vulnerability.
3. Identify the vulnerability of the EMG2 Project to climate change (including the identification of hazards and receptors) and undertake an assessment of the likelihood and severity of potential impacts and effects, respectively.
4. Identify adaptation and mitigation commitments.

1.2.2 In accordance with the approach to assessment within **Chapter 19: Climate Change** (**Document DCO/MCO 6.19**), the risk assessment presented in this appendix has considered the DCO Scheme (comprising EMG2 Works and Highways Works) and the MCO Scheme (comprising EMG1 Works) separately.

1.2.3 This CCRA considers climate risks on the operation of the EMG2 Project and its users. It does not assess climate risks for decommissioning, for the following reasons:

- The EMG2 Project is expected to be delivered over a number of years, and then to be in place permanently with no fixed lifetime or decommissioning phase. As such, climate risks in relation to the decommissioning of the EMG2 Project have not been assessed.

1.3 Baseline Climate

1.3.1 This section is common to both the DCO Application and MCO Application.

1.3.2 To understand the impact of climate change on the EMG2 Project, the baseline environment must be considered. Baseline climate conditions have been sourced from Met Office observed data from Sutton Bonington climate station. The observational data from Sutton Bonington climate station has been collected and averaged over 30 years from 1981 to 2010 and reviewed alongside regional observational data averaged over the same period (Met Office, 2020). The observational data is shown in Table 1.5 (Annex A).

1.3.3 The Midlands region experiences a temperate climate, with annual average maximum and minimum temperatures of 13.9°C and 6.1°C respectively, recorded at Sutton Bonington climate station (Met Office, 2020). Over the 1981-2010 baseline period, average maximum temperatures reached 21.7°C in July and minimum temperatures fell to an average of 1.3°C in February. This is consistent with regional climate patterns for the Midlands, though temperatures recorded at Sutton Bonington climate station are slightly warmer than the wider region. In the summer months, regional temperatures range between 9.4°C (average minimum temperature) and 21.1°C (average maximum temperature). In the winter months, regional temperatures range between 0.8°C (average minimum temperature) and 7.0°C (average maximum temperature). In recent years, temperature fluctuations have resulted in extreme high temperatures in the summer months, including in July 2022 when a temperature of 40.2°C was recorded in Pitsford, Northants (Met Office, 2024a). Monthly average maximum and minimum temperatures for Sutton Bonington climate station are shown in Figure 1.1.

1.3.4 Annual average precipitation recorded at Sutton Bonington climate station is lower than that reported regionally and nationally, at 620.2 mm a year (compared to 792.7 mm in the Midlands region and 1,142.0 mm across the UK). As such, the Midlands and in particular the EMG2 Project can be considered as areas that are exposed to reduced rainfall in comparison to the rest of the UK. However, recent extreme weather events have resulted in very large amounts of rainfall in the Midlands region, with 186 mm of rain falling in Leicestershire in September 2024 (Met Office, 2024b). Monthly average precipitation for Sutton Bonington climate station is shown in Figure 1.1.

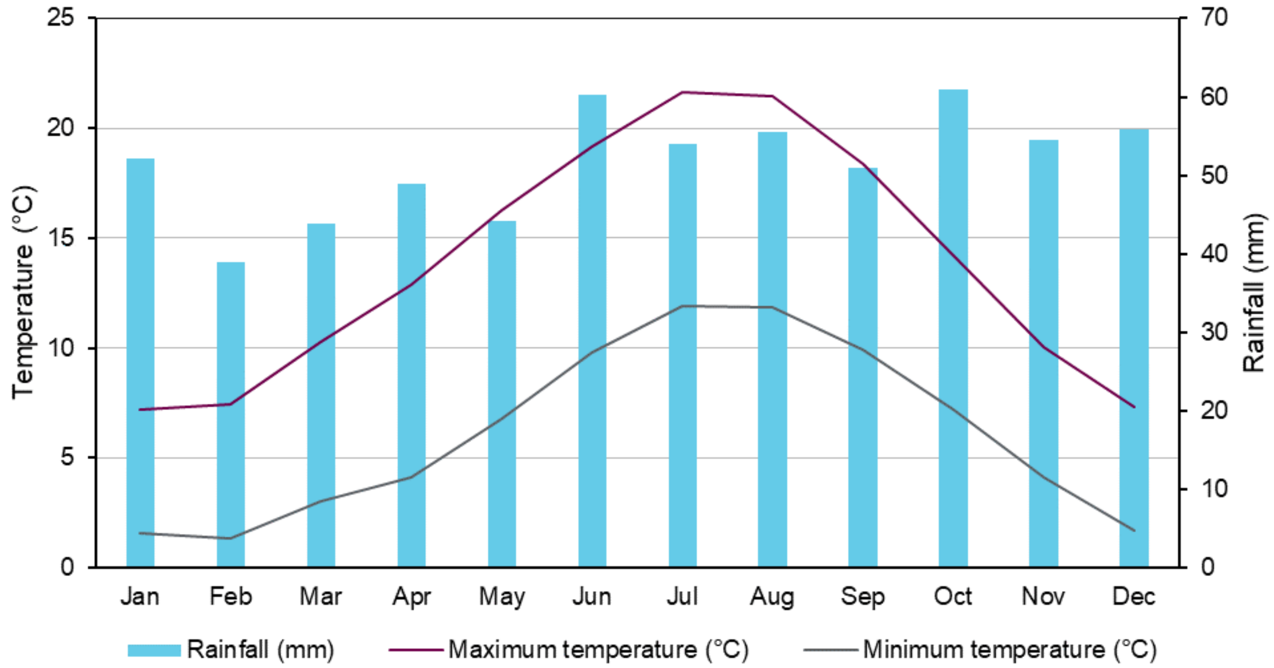

Figure 1.1: Baseline Climate Data for Sutton Bonington Climate Station

1.3.5 Annual average wind speeds at Sutton Bonington are lower than the wider Midlands region and the UK as a whole, at 6.89 kn (compared to 7.97 kn in the Midlands region and 9.37 kn across the UK). The EMG2 Project is therefore more sheltered from the wind when compared to the wider Midlands region and UK.

1.4 Climate Change Projections

1.4.1 This section is common to both the DCO Application and MCO Application.

1.4.2 Climate change has been identified as a process that is already taking place in the UK, in both academic research and all legislation and policy referenced in Appendix 19a: Climate Change Policy Review. The risks associated with rising temperatures, more frequent extreme weather patterns, flooding and droughts are further investigated within this section.

1.4.3 The Met Office Hadley Centre (MOHC) publishes both probabilistic climate change projections and downscaled global circulation model outputs for the UK at various spatial scales. This is called the UKCP18 dataset, first published in November 2018 and at v2.13.0 (MOHC, 2025) at the time of writing. The projections are based on representative concentration pathway (RCP) scenarios used by the Intergovernmental Panel on Climate Change. The RCP scenarios (four scenarios presented in the IPCC fifth Assessment report which are included within the UKCP18 database) describe different climatic futures, all of which are considered possible depending on the volume of Greenhouse Gases (GHGs) emitted. These provide the basis for future assessments of climate change and possible response strategies, thereby giving a low-high range in potential global GHG reduction initiatives and resulting rate of climatic effects over a given period.

1.4.4 The probabilistic projections published at 25 km grid cell scale are considered the most useful for this assessment, being designed to show a range of projection values that reflect uncertainty in modelled outcomes. The CP18 Overview Report (MOHC, 2018a) and supporting factsheets (MOHC, 2018b) for the wider regional and UK context have also been drawn upon.

1.4.5 The EMG2 Project is expected to be delivered over a number of years from 2027 to 3032, and then to be in place permanently with no fixed lifetime or decommissioning phase. Climate change projections for two periods in the mid- and late century have therefore been considered: average conditions during 2040-2069 and 2070-2099.

1.4.6 The Overview Report and factsheets indicate that in general, warmer, wetter winters and hotter, drier summers are predicted, though of course still with natural variations in that pattern from year to year. No clear trend in wind speeds or storminess is predicted, though the data currently published cannot make projections for local conditions and wind gusts.

1.4.7 Within the last two decades, annual average temperature and precipitation records have been consistently set in the UK relative to the preceding baseline period, although generally wetter rather than drier summers have been seen in this period. In the near future, roughly the next years to decade, these natural variations will likely continue to be the most visible year-to-year changes in climate but in subsequent decades, within the EMG2 Project's operating lifetime, the anthropogenic climatic changes are expected to become more apparent.

1.4.8 Over the past decade, annual average temperature and precipitation have gradually increased when compared to preceding observational data baseline periods. These variations are likely to amplify over this century, with the anthropogenic climatic changes expected to become increasingly apparent (MOHC, 2018a).

1.4.9 Figure 1.2 to Figure 1.5 below, alongside Table 1.6 and Table 1.7 (included within Annex A) show potential climatic changes from the UKCP18 probabilistic dataset averaged over the 2040-2069 and 2070-2099 time periods relative to the 1981-2010 baseline presented in section 1.3 for the 25 km grid square in which the EMG2 Project is located. The data presented here is for the emissions pathway RCP8.5, which is a high-emissions scenario assuming 'business as usual' growth globally with little additional mitigation. This is a conservative (worst-case) approach for the assessment.

1.4.10 In summary, the data within Table 1.6 and Table 1.7 shows increased intensity in seasonal precipitation trends: precipitation is predicted to increase during the wettest season and decrease during the driest season. Temperatures are anticipated to increase across the year, both during the coldest and hottest seasons and months. Additionally, humidity is anticipated to increase. Table 1.7 indicates that these trends will continue and amplify towards the end of the century. These trends are shown graphically in Figure 1.2 to Figure 1.5.

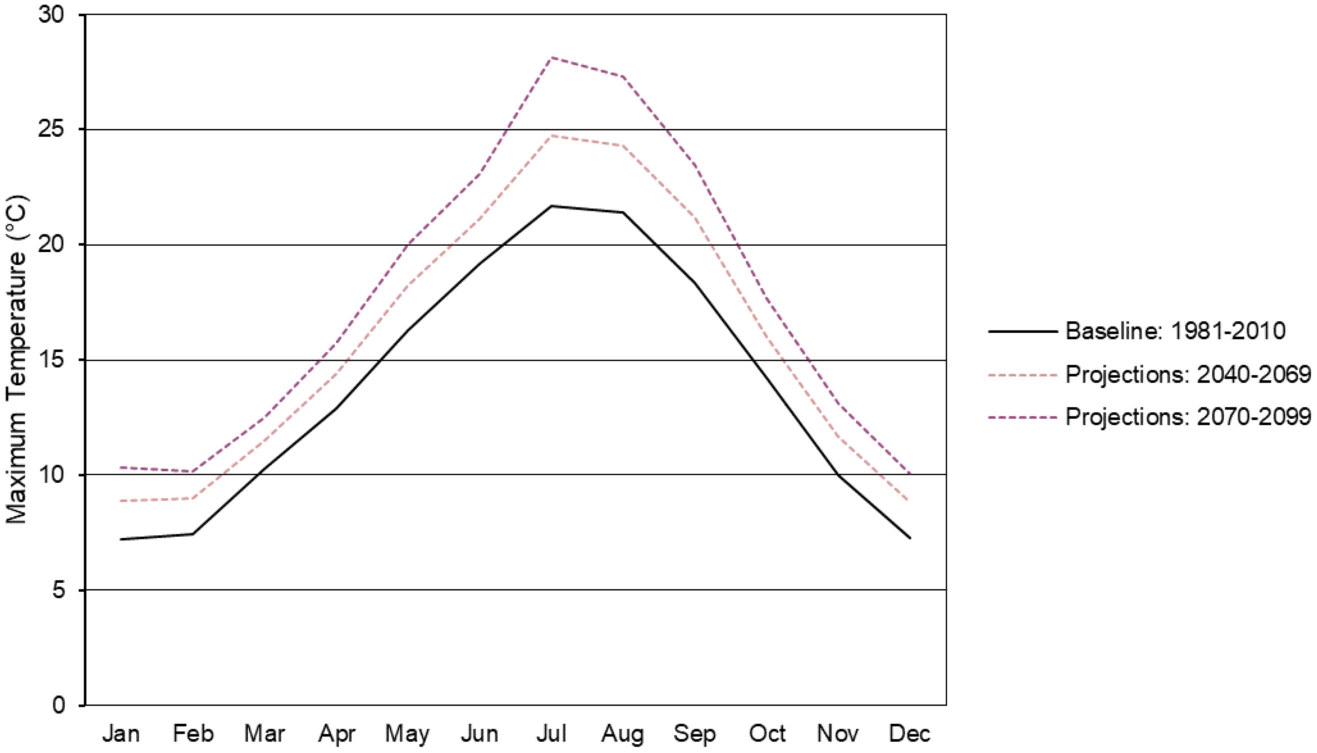

Figure 1.2: Maximum Daily Average Temperature Projections

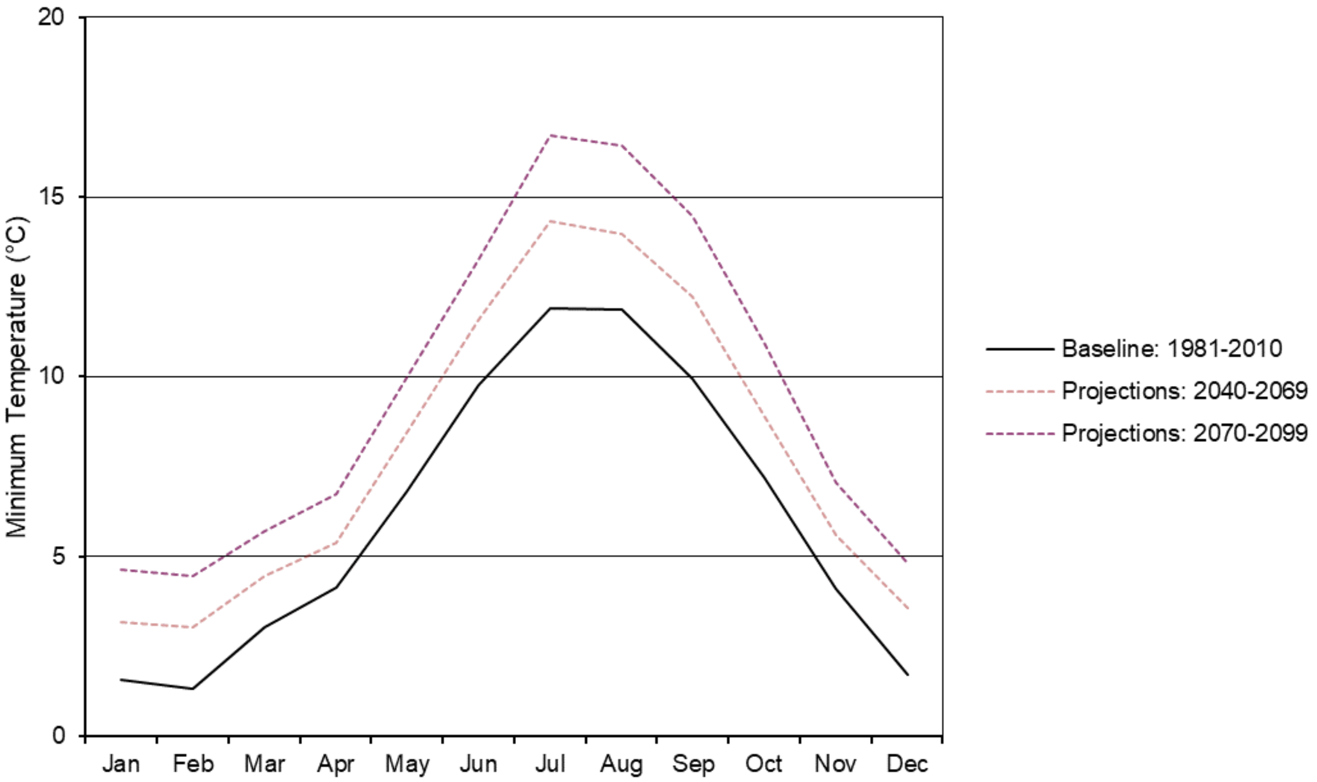

Figure 1.3: Minimum Daily Average Temperature Projections

Figure 1.4: Mean Monthly Precipitation Projections

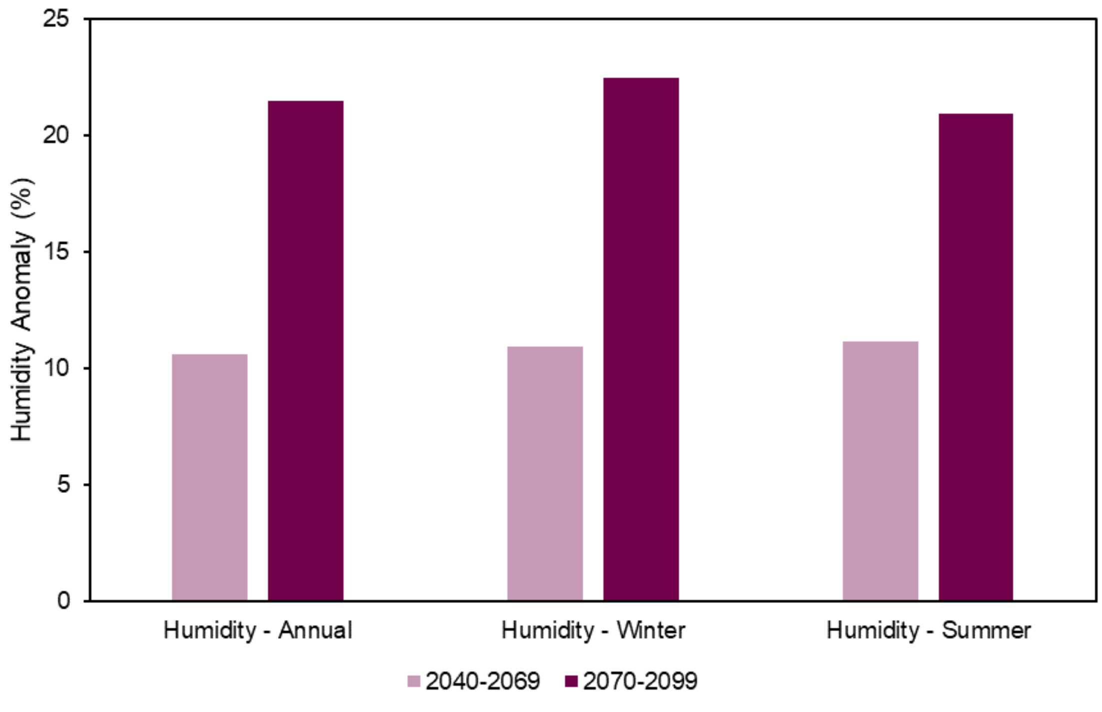

Figure 1.5: Mean Humidity Anomaly Projections

1.5 Climate Risk and Resilience Scoping

1.5.1 Based on the information available for the EMG2 Project, an initial screening exercise identified the relevant climate change risks informed by the UK Climate Independent Assessment (CCRA3), which are presented in Table 1.4. This table identifies relevant climate change risks for the DCO

Application (including EMG2 Works and Highways Improvements) and the MCO Application (including EMG1 Works).

1.5.2 Given the variability in the nature of the potential effects of climate change on the EMG2 Project, receptors have been identified on a risk-specific basis, including the workforce, the assets and their operation, maintenance and refurbishment, and end-users. In line with IEMA (2020) guidance and the Design Manual for Roads and Bridges (DMRB) LA 114: Climate (Highways England, 2021) guidance, the vulnerability and susceptibility have been considered in determining the severity of risk.

1.5.3 A high-level assessment of such risks has been undertaken, considering the hazard, the likelihood of the effect on the EMG2 Project and its users, and the consequence of that effect.

1.5.4 Each element of the risk assessment (likelihood and consequence) has been evaluated following the definitions in Table 1.1 and Table 1.2 below. An assessment of significance has been subsequently undertaken in line with the significance matrix presented in Table 1.3 below. Table 1.1 to Table 1.3 have been sourced from the DMRB LA 114 (Highways England, 2021) guidance.

1.5.5 Where relevant, the likelihood and consequence definitions provided within the DMRB LA 114 guidance have been adapted to make them suitable for the receptors identified. For example, levels of consequence for the EMG2 Works and EMG1 Works have been classified according to 'disruption to site operations', rather than 'disruption to strategic route'.

1.5.6 As set out in paragraph 1.4.5, climate projections in the mid- to late-century have been used to capture the range of climatic changes over the project lifetime, which aligns with the 60 year assessment period as recommended by Highways England (2021) guidance.

Table 1.1: Likelihood Category Definitions

Likelihood Category	Description (Probability and Frequency of Occurrence)
Very high	The event occurs multiple times during the lifetime of the project (60 years) e.g. approximately annually, typically 60 events.
High	The event occurs several times during the lifetime of the project (60 years) e.g. approximately once every five years, typically 12 events.
Medium	The event occurs limited times during the lifetime of the project (60 years) e.g. approximately once every 15 years, typically 4 events.
Low	The event occurs during the lifetime of the project (60 years) e.g. once in 60 years.
Very low	The event can occur once during the lifetime of the project (60 years).

Table 1.2: Consequence Category Definitions

Consequence of Impact	Description
Very large adverse	Operation – national level (or greater) disruption to strategic route(s) lasting more than 1 week.
Large adverse	Operation – national level disruption to strategic route(s) lasting more than 1 day but less than 1 week or regional level disruption to strategic route(s) lasting more than 1 week.
Moderate adverse	Operation – regional level disruption to strategic route(s) lasting more than 1 day but less than 1 week.
Minor adverse	Operation – regional level disruption to strategic route(s) lasting less than 1 day.
Negligible	Operation – disruption to an isolated section of a strategic route lasting less than 1 day.

Table 1.3: Significance Matrix

		Measure of Likelihood				
		Very low	Low	Medium	High	Very high
Measure of consequence	Very large	Not significant	**Significant**	**Significant**	**Significant**	**Significant**
	Large	Not significant	Not significant	**Significant**	**Significant**	**Significant**
	Moderate	Not significant	Not significant	**Significant**	**Significant**	**Significant**
	Minor	Not significant	Not significant	Not significant	Not significant	Not significant
	Negligible	Not significant	Not significant	Not significant	Not significant	Not significant

1.5.7 Table 1.4 shows the climate change risks to the EMG2 Project that have been identified and the risk scores assigned, following the approach set out above. Risks identified have been informed by the Climate Change Committee (CCC) third UK Climate Change Risk Assessment (CCRA3) (CCC, 2021) and DMRB LA 114 (Highways England, 2021).

1.5.8 The construction programme for the EMG2 Project is relatively short (construction is anticipated to be phased over a 5 year period, with all components of the EMG2 Project anticipated to be fully operational by 2032), with variations in climatic parameters minimal over this period when compared to the present day baseline, as set out in section 1.3. Any risks that would arise relate to worker health impacts due to heightened temperatures, and increased frequency and intensity of extreme weather events. Construction work practices are being adapted to existing evolving climate conditions and weather in the UK, with industry standard health and safety practices employed with regards to heatstroke or extreme weather events. As such, there are not considered to be any further significant climate risks associated with the construction phase. Risks arising during the construction phase have therefore not been considered further.

1.5.9 Given operational and maintenance activities at the EMG2 Works and EMG 1 Works are similar, risks identified for these elements of the EMG2 Project have been grouped together. Risks identified in relation to the Highways Works have been assessed separately.

1.5.10 The assessment of effects has taken into account embedded mitigation measures in determining the combined risk score. These mitigation measures are set out in Chapter 19: Climate Change (**Document DCO/MCO 6.19**) and Table 1.4 below. Considering the embedded mitigation measures, the potential risk posed to the EMG2 Project would be reduced to negligible (non-significant level) in EIA terms.

Table 1.4: Risk Scores for the EMG2 Project

Risk	Potential consequence	Embedded Mitigation Measures	How the measure will be secured	Residual Effects		
				Likelihood	Consequence	Significance
EMG2 Works and EMG1 Works						
Increases in average and extreme air temperatures, both in winter and summer	• High temperatures resulting in overheating within buildings leading to worker health impacts.	Building design to include adequate ventilation, in line with building regulations. Design to minimise excessive solar gain during the summer. Development design to include green infrastructure, which has the potential to reduce urban temperatures.	Included in design principles document/ project description	Medium	Negligible	Not significant
	• High temperatures leading to increased energy demand for cooling.			Very high	Negligible	Not significant
	• High temperatures and temperature fluctuations causing thermal contraction and expansion of the pavement, resulting in pavement surfaces cracking.	Internal road and parking design in line with best practice design standards. Regular maintenance of road and parking surfaces.	Included in design principles document/ project description. Included as part of operational maintenance management plan	Medium	Minor adverse	Not significant
Changes to rainfall patterns, leading to increased precipitation in winter and reduced precipitation in summer	• Flooding of site	Flood risk and drainage is assessed in **Chapter 13: Flood Risk and Drainage** (**Document DCO/MCO 6.13**). Appropriate climate change allowances for rainfall intensity and peak river flows have been considered in the assessment of effects and drainage design. Climate change allowances were agreed with statutory consultees. More information can be found in **Chapter 13: Flood Risk and Drainage**.				
	• Increased precipitation during the wettest season causing instability of embankments.	Drainage infrastructure will be designed to adequately manage rainfall and runoff. Detailed within Chapter 13: Flood Risk and Drainage (**Document DCO/MCO 6.13**).	Included in drainage strategy	Low	Moderate adverse	Not significant
	• Consistently decreased precipitation during the driest season resulting in drought and subsequent water shortages.	Severn Trent have a 25 year plan within their Water Resources Management Plan, supported by a supply and demand forecasts and Drought Plan (Severn Trent, 2019 and 2024).	Included in design principles document/ project description.	Low	Minor adverse	Not significant

Risk	Potential consequence	Embedded Mitigation Measures	How the measure will be secured	Residual Effects		
				Likelihood	Consequence	Significance
		Building design for water efficiency during operations and include water recycling measures within building design.				
	• Structural damage to buildings and pavement resulting from subsidence caused by drought (shrinking and swelling of soils due to excessive rainfall and drought).	Building regulations for structural design with safety margin. Internal road and parking design in line with best practice design standards.	Included in design principles document/ project description.	Low	Moderate adverse	Not significant
Increased frequency and intensity of extreme weather i.e. storms and high winds	• Structural damage to buildings resulting from extreme weather events (storms or snow loads).	Building regulations for structural design with safety margin.	Included in design principles document/ project description.	Low	Moderate adverse	Not significant
	• Increased frequency and intensity of extreme weather events (storms or snow loads) may cause damage to items such as signs, signals, lighting, fencing, and road markings throughout the development. This would result in increased maintenance costs.	Building regulations for structural design with safety margin. Ensure appropriate maintenance schedule.	Included in design principles document/ project description. Included as part of operational maintenance management plan	Medium	Negligible	Not significant
Increased humidity	• Increased humidity resulting in damage to building fabric from damp.	Building design to include adequate ventilation in line with building regulations.	Included in design principles document/ project description.	Low	Negligible	Not significant
Highways Works						
Increases in average and extreme air temperatures, both in winter and summer	• High temperatures and temperature fluctuations causing thermal contraction and expansion of the pavement, resulting in pavement surfaces cracking.	Road design in line with latest available National Highways design standards.	Included in design principles document/ project description.	Medium	Minor adverse	Not significant
	• High temperatures increasing the risk of road accidents due to overheating of vehicles, increased frequencies of vehicle fires or smoke from wildfires moving across the roads.	Road design in line with best practice requirements regarding emergency vehicle access.	Included in design principles document/ project description.	Medium	Minor adverse	Not significant
Changes to rainfall patterns, leading to	• Flooding of site	Flood risk and drainage is assessed in **Chapter 13: Flood Risk and Drainage** (**Document DCO/MCO 6.13**). Appropriate climate change allowances for rainfall intensity and peak river flows have been				

Risk	Potential consequence	Embedded Mitigation Measures	How the measure will be secured	Residual Effects		
				Likelihood	Consequence	Significance
increased precipitation in winter and reduced precipitation in summer		considered in the assessment of effects and drainage design. Climate change allowances were agreed with statutory consultees. More information can be found in **Chapter 13: Flood Risk and Drainage** (**Document DCO/MCO 6.13**).				
	• Reduced precipitation during summer and increased frequency of extreme weather events may lead to 'summer ice', where residues built up on roads during dry spells become slippery following heavy rain.	Road design in line with best practice requirements regarding emergency and maintenance vehicle access.	Included in design principles document/ project description.	High	Negligible	Not significant
	• Structural damage to bridge structure resulting from subsidence caused by drought (shrinking and swelling of soils due to excessive rainfall and drought)	Bridge design in line with National Highways design standards.	Included in design principles document/ project description.	Very low	Large adverse	Not significant
Increased frequency and intensity of extreme weather i.e. storms and high winds	• Increased frequency and intensity of extreme weather events (storms or snow loads) may cause damage to items such as signs, signals, lighting, fencing, and road markings throughout the Highway Works. This would result in increased maintenance costs.	Road design in line with latest available National Highways design standards. Ensure regular maintenance of road surfaces.	Included in design principles document/ project description. Included as part of operational maintenance management plan.	Medium	Negligible	Not significant
	• Structural damage/increased loading of bridge structure caused by extreme weather events and storms.	Bridge design in line with National Highways design standards.	Included in design principles document/ project description.	Very low	Large adverse	Not significant

REFERENCES

Climate Change Committee (2021) Independent Assessment of Climate Risk. Advice to Government for the UK's third Climate Change Risk Assessment (CCRA3). [online] https://www.theccc.org.uk/wp-content/uploads/2021/07/Independent-Assessment-of-UK-Climate-Risk-Advice-to-Govt-for-CCRA3-CCC.pdf. Accessed October 2024

Highways England (2021) Design Manual for Roads and Bridges LA 114: Climate. [online] https://standardsforhighways.co.uk/tses/attachments/d1ec82f3-834b-4d5f-89c6-d7d7d299dce0?inline=true. Accessed October 2024

HM Government (2022) UK Climate Change Risk Assessment 2022. Presented to Parliament pursuant to Section 56 of the Climate Change Act 2008. [online] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1047003/climate-change-risk-assessment-2022.pdf. Accessed October 2024.

Met Office (2020) UK Climate Averages. [online] https://www.metoffice.gov.uk/research/climate/maps-and-data/uk-climate-averages. Accessed October 2024

Met Office (2024a) UK Climate Extremes. [online] https://www.metoffice.gov.uk/research/climate/maps-and-data/uk-climate-extremes. Accessed October 2024

Met Office (2024b) Past weather events: Exceptionally wet month for parts of the Midlands. [online] https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/weather/learn-about/uk-past-events/interesting/2024/2024_07_september_rain.pdf. Accessed November 2024

Met Office Hadley Centre (2018a) UKCP18 Science Overview Report. [online] https://www.metoffice.gov.uk/pub/data/weather/uk/ukcp18/science-reports/UKCP18-Overview-report.pdf. Accessed October 2024

Met Office Hadley Centre (2018b) UKCP18 Factsheets. [online] https://www.metoffice.gov.uk/research/approach/collaboration/ukcp/data/factsheets. Accessed October 2024

Met Office Hadley Centre (2025) UK Climate Projections User Interface v2.13.0. [online] https://ukclimateprojections-ui.metoffice.gov.uk/ui/home. Accessed March 2025

Severn Trent (2019) Water Resources Management Plan 2019 [Online] https://www.severntrent.com/content/dam/stw-plc/our-plans/severn-trent-water-resource-management-plan.pdf. Accessed October 2024

Severn Trent (2024) Draft Water Resources Management Plan 2024. [online] https://www.severntrent.com/about-us/our-plans/water-resources-management-plan/dwrmp24-draft-documents/. Accessed October 2024

Annex A Data Tables

Table 1.5: Average weather conditions at Sutton Bonington Climate Station 1991-2010

Month	Maximum Temperature (°C)	Minimum Temperature (°C)	Days of air frost (days)	Sunshine (hours)	Rainfall (mm)	Days of rainfall ≥1 mm (days)	Monthly mean wind speed at 10 m (knots)
January	7.20	1.55	9.80	52.34	52.17	10.94	8.09
February	7.46	1.32	10.00	74.37	38.85	9.10	7.90
March	10.26	3.01	5.80	107.41	43.92	10.63	8.17
April	12.88	4.13	3.50	143.89	48.86	9.71	7.06
May	16.28	6.79	0.87	178.17	44.22	8.70	6.74
June	19.19	9.77	0.07	158.07	60.22	9.40	6.03
July	21.66	11.90	0	188.02	54.05	8.69	5.88
August	21.43	11.86	0	179.02	55.47	8.62	5.87
September	18.35	9.94	0.10	134.05	51.03	8.20	6.04
October	14.23	7.19	1.63	103.96	61.00	10.16	6.68
November	10.01	4.10	5.03	60.87	54.51	10.16	7.10
December	7.29	1.72	10.27	43.34	55.93	10.89	7.11
Annual	13.89	6.13	47.07	1423.51	620.23	115.20	6.89

Table 1.6: Climate Parameter Projections 2040-2069

Parameter	Units	10th percentile	Median value	90th percentile
Precipitation				
Precipitation – annual average	%	-8.13	-1.14	5.87
Precipitation – driest season	%	-19.54	-5.22	10.10
Precipitation – wettest season	%	-10.11	4.65	22.13
Precipitation – January	%	-12.23	11.19	40.67
Precipitation – January	%	-12.15	10.60	34.70
Precipitation – February	%	-22.57	1.44	25.55
Precipitation – March	%	-22.33	-3.58	16.10
Precipitation – April	%	-32.37	-8.03	14.38
Precipitation – May	%	-40.70	-11.27	18.69
Precipitation – June	%	-48.52	-18.33	13.27
Precipitation – July	%	-47.56	-21.29	7.62
Precipitation – August	%	-40.16	-11.04	21.75
Precipitation – September	%	-16.61	13.55	41.73
Precipitation – October	%	-7.37	14.66	41.23
Precipitation – November	%	-12.98	5.22	24.74
Precipitation – December	%	-12.23	11.19	40.67
Temperature				
Temperature – annual average	ºC	0.89	1.82	2.77
Temperature – hottest season average	ºC	1.06	2.42	3.79
Temperature – coldest season average	ºC	0.50	1.63	2.84

Parameter	Units	10th percentile	Median value	90th percentile
Temperature – January average	ºC	0.14	1.60	3.24
Temperature – February average	ºC	0.35	1.59	2.89
Temperature – March average	ºC	0.17	1.32	2.53
Temperature – April average	ºC	0.13	1.36	2.64
Temperature – May average	ºC	0.69	1.83	3.01
Temperature – June average	ºC	0.48	1.86	3.38
Temperature – July average	ºC	1.07	2.76	4.49
Temperature – August average	ºC	0.57	2.46	4.45
Temperature – September average	ºC	0.94	2.54	4.44
Temperature – October average	ºC	0.35	1.71	3.13
Temperature – November average	ºC	0.46	1.55	2.71
Temperature – December average	ºC	0.16	1.68	3.25
Temperature – hottest season maximum	ºC	0.92	2.69	4.52
Temperature – January maximum	ºC	0.23	1.67	3.23
Temperature – February maximum	ºC	0.34	1.53	2.76
Temperature – March maximum	ºC	-0.06	1.22	2.59
Temperature – April maximum	ºC	0.02	1.51	3.09
Temperature – May maximum	ºC	0.57	1.96	3.38
Temperature – June maximum	ºC	0.17	1.96	3.95
Temperature – July maximum	ºC	0.90	3.11	5.35
Temperature – August maximum	ºC	0.57	2.86	5.34
Temperature – September maximum	ºC	0.86	2.86	5.25
Temperature – October maximum	ºC	0.45	1.76	3.18
Temperature – November maximum	ºC	0.63	1.63	2.73
Temperature – December maximum	ºC	0.19	1.56	2.98
Temperature – coldest season minimum	ºC	0.42	1.73	3.14
Temperature – January minimum	ºC	-0.04	1.61	3.47
Temperature – February minimum	ºC	0.42	1.71	3.10
Temperature – March minimum	ºC	0.22	1.46	2.81
Temperature – April minimum	ºC	0.09	1.25	2.50
Temperature – May minimum	ºC	0.55	1.66	2.89
Temperature – June minimum	ºC	0.61	1.83	3.20
Temperature – July minimum	ºC	1.03	2.41	3.82
Temperature – August minimum	ºC	0.44	2.12	3.89
Temperature – September minimum	ºC	0.73	2.28	4.04
Temperature – October minimum	ºC	0.23	1.73	3.30
Temperature – November minimum	ºC	0.24	1.51	2.82
Temperature – December minimum	ºC	0.06	1.84	3.75
Humidity				
Humidity – annual average	%	3.67	10.61	18.24
Humidity – winter	%	1.07	10.93	21.21
Humidity – summer	%	0.55	11.17	22.03

Table 1.7: Climate Parameter Projections 2070-2099

Parameter	Units	10th percentile	Median value	90th percentile
Precipitation				
Precipitation – annual average	%	-9.98	0.32	10.21
Precipitation – driest season	%	-29.46	-8.68	15.39
Precipitation – wettest season	%	-13.22	9.22	35.85
Precipitation – January	%	-14.76	20.52	67.70
Precipitation – January	%	-13.44	18.69	55.52
Precipitation – February	%	-28.07	5.27	41.51
Precipitation – March	%	-28.57	-3.23	24.99
Precipitation – April	%	-50.57	-20.26	12.31
Precipitation – May	%	-60.81	-28.22	11.40
Precipitation – June	%	-71.58	-36.61	4.88
Precipitation – July	%	-65.81	-34.08	4.29
Precipitation – August	%	-55.18	-18.03	27.08
Precipitation – September	%	-19.31	18.96	58.84
Precipitation – October	%	-4.46	26.81	66.33
Precipitation – November	%	-10.01	19.94	55.00
Precipitation – December	%	1.96	3.58	5.23
Temperature				
Temperature – annual average	ºC	1.96	3.58	5.23
Temperature – hottest season average	ºC	2.47	4.82	7.25
Temperature – coldest season average	ºC	1.19	2.98	4.95
Temperature – January average	ºC	0.69	3.11	5.77
Temperature – February average	ºC	0.86	2.88	4.92
Temperature – March average	ºC	0.66	2.42	4.29
Temperature – April average	ºC	0.93	2.67	4.51
Temperature – May average	ºC	1.53	3.46	5.50
Temperature – June average	ºC	1.51	3.65	5.99
Temperature – July average	ºC	2.59	5.68	8.75
Temperature – August average	ºC	1.81	5.14	8.52
Temperature – September average	ºC	2.14	4.74	7.81
Temperature – October average	ºC	1.48	3.57	5.79
Temperature – November average	ºC	1.22	3.00	4.85
Temperature – December average	ºC	0.70	2.95	5.38
Temperature – hottest season maximum	ºC	2.36	5.39	8.52
Temperature – January maximum	ºC	0.78	3.15	5.72
Temperature – February maximum	ºC	0.77	2.73	4.74
Temperature – March maximum	ºC	0.24	2.23	4.35
Temperature – April maximum	ºC	0.67	2.87	5.19
Temperature – May maximum	ºC	1.38	3.74	6.12
Temperature – June maximum	ºC	1.17	3.88	6.91
Temperature – July maximum	ºC	2.52	6.50	10.52
Temperature – August maximum	ºC	1.90	5.86	9.98
Temperature – September maximum	ºC	1.93	5.12	8.92
Temperature – October maximum	ºC	1.49	3.46	5.71

Parameter	Units	10th percentile	Median value	90th percentile
Temperature – November maximum	ºC	1.45	3.09	4.83
Temperature – December maximum	ºC	0.71	2.79	4.89
Temperature – coldest season minimum	ºC	1.03	3.12	5.52
Temperature – January minimum	ºC	0.37	3.10	6.25
Temperature – February minimum	ºC	1.05	3.13	5.35
Temperature – March minimum	ºC	0.79	2.70	4.98
Temperature – April minimum	ºC	0.82	2.60	4.52
Temperature – May minimum	ºC	1.35	3.20	5.24
Temperature – June minimum	ºC	1.62	3.49	5.53
Temperature – July minimum	ºC	2.33	4.82	7.34
Temperature – August minimum	ºC	1.42	4.58	7.72
Temperature – September minimum	ºC	1.93	4.53	7.46
Temperature – October minimum	ºC	1.44	3.73	6.19
Temperature – November minimum	ºC	1.01	2.97	5.11
Temperature – December minimum	ºC	0.45	3.10	6.08
Humidity				
Humidity – annual average	%	10.78	21.45	33.06
Humidity – winter	%	6.46	22.48	38.88
Humidity – summer	%	5.06	20.90	37.35