



# CLEVE HILL SOLAR PARK

## **OTHER DEADLINE 6 SUBMISSIONS THE APPLICANT'S REVIEW OF THE RELEVANT SECTIONS OF THE MEASS**

November 2019  
Revision A

Document Reference: 15.6.3  
Submitted: Deadline 7

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**CLEVE HILL**  
SOLAR PARK

## 1 MEDWAY ESTUARY AND SWALE STRATEGY REFERENCES TO CLEVE HILL

1. Table 1 sets out the references to "Cleve Hill" identified in the adopted Medway Estuary and Swale Strategy (MEASS)<sup>1</sup>. At the time of writing, the documents forming the MEASS had been submitted to the examination but not yet recorded in the [Examination Library](#).

**Table 1: References to "Cleve Hill" (or equivalent) in MEASS Documents**

Document	Reference Title	Page	Summary
MEASS Appendix B - Non-Technical Summary_Ver1	BA6.2: Cleve Hill	44	Summary of the preferred option and justification for flood and erosion risk management. <i>Cleve Hill regularly noted as "6.2" throughout documents.</i>
MEASS Appendix C - Damage Assessment Report_Ver1	Table 12: Summary of the agricultural Annual Average Damages (AADs) for each of the scenarios for the different Benefit Areas (BAs)	23	Table showing AAD for agricultural land depending on defence scenario taken.
	Table 21: Breakdown of Do-Nothing Damages (DND) in each BA.	30	Table showing DNDs in each BA by category.
MEASS Appendix D - Options Technical Report_Ver1	Table 7: Crest levels defined for different BAs	22	Table showing crest level requirement for works in each BA over time.
MEASS Technical Appendix E_BA6	Appraisal Summary Tables	24	Mapped overview of the preferred flood defence options for 6.2 Cleve Hill Managed Realignment.
	Management options table	25-41	Options preparation and assessment for the Cleve Hill BA; includes Do Nothing Assets at Risk (25), Long List to Short List (26), Long List (27), Short List (28-38), Environmental Scores (39), Summary (40) and Decisions (41).
MEASS Appendix F – Expenditure Profile_Ver1	Table 23: Expenditure Profile for BA 6.2s	26	Summary of spending over time based on the specified options
	Table 35: Expenditure Profile for MR Sites – Cash Cost (£)	39	Time-based expenditure for benefit sites, Cleve Hill spending £14.37m between years 21-50 under MR option.

<sup>1</sup> <https://www.gov.uk/government/publications/medway-estuary-and-swale-flood-and-coastal-risk-management-strategy/medway-estuary-and-swale-flood-and-coastal-risk-management-strategy>

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MEASS Appendix G – Economic Assessment Report_Ver1	3.2, Table 2: Results of the economic assessment (to Draft Leading Option 2) displaying the BCRs	21	Economic analysis of Cleve Hill strategies, showing %Annual Exceedance Probability, Costs, Benefits, Net Present Value (NPV), and BCR.
	3.2, Table 3: Incremental BCRs and selection of Preferred Economic Option	28	Estimated BCR from preferred strategy, with small justification.
	MR sites wider grouping analysis section, para.5 on page	32	Section discussing Cleve Hill’s ability to provide compensatory freshwater habitat as an MR site; conclusion is that site MR should be delayed to undertake further risk management studies. This data is shown in Table 5 below the paragraph.
	4.3, Table 6: Comparison between the cost of creating freshwater compensation or continuing to maintain the defences (moderation approach)	35	Required habitat compensation and its cost compared to cost of defence maintenance, with a concluding column or yes/no and a small summary of the taken decision.
	Table 8: Summary of the Draft Leading Options and the justifications for each decision.	42	Options and justifications from Economic Assessment, Compensatory Intertidal Habitat Requirements, and Review of Compensatory Freshwater Habitat Requirements.
	Table 9: MR costs (present value costs with 60% optimism bias).	46	Shows estimated necessary funding for MR strategy.
	Table 10: Proposed proportional split down of coastal squeeze costs	47	Shows split of costs including provision for upholding “Hold the Line” (HTL) strategy which is necessary for MR to be effective.
	Table 33: Summary of Economics and Outcome Measures for BA6.2	72	Overview of the full assessment of the Cleve Hill BA6.2 site, with a summary of preferred options, justifications, outcome measures (of economics, housing, and statutory environmental obligations), environmental impacts, funding of preferred options, moderation cost (cost-effectiveness analysis) for freshwater habitat.
MEASS Appendix H – Implementation Plan_Ver1	Table 2: High level risk schedule and mitigation	8	Includes the development of the Cleve Hill Solar Farm as a risk to the current MEASS strategy, including an adopted mitigation measure.
	Overview of Capital Schemes	12-16	Cost of scheme across 100-year plan.

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	Appendix A: 6.2: Cleve Hill Detailed Implementation Plan	121-124	Includes Options Summary (121), Key Risks and Mitigation (122), Impacts on Freshwater Habitats (122), Dependencies (122-123), Stakeholders (123), 'Plan B' (123), and Annual Implementation Plan (124).
MEASS Appendix I – Modelling Report_Ver1	6.5.1, Table 17: Summary of modelled flood extent for 2, 20, 50, 100, 200, and 1000 years return period events at present day	119	At present day, 6.2 does not flood under any return period (119).
	6.6.1, Table 18: Summary of modelled flood extent for the 1:2, 1:20, 1:50, 1:100, 1:200 and 1:1000 years return period events at future day (2116)	126	In future defended scenario (year 2116), 6.2 floods from 1:100-year return period.
	7.2, Table 19: Defence crest levels (mODN) per each HTL options and scenarios	133	Comparing defence crest levels per each HTL options and scenarios; present change upgrades mODN from 5.4 to 6.4, future remains 6.4.
	7.3.3 Future Sustain and Future upgrade	135	Notes risk of flooding in 6.2 during 1:1000-year event, accompanies Figure 90 on p. 138.
	9.2, Table 31: Leading Option for each of the benefit areas for the present day and future (2116)	204	Shows current and leading options, where both are "MR Maintain site 27", where site 27 is Cleve Hill.
	9.2, Table 32: Leading Option for each of the benefit areas for the present day and future (2116) – Defences crest levels	205	Data of leading option present- and future-day crest level, where present and future setback levels are also included.
	9.3 Table 33: Derived breach widths for all 22 proposed Managed Realignment sites	206	Breach width 152 m for MR27_Breach1 and 202 m for MR27_Breach2.
	9.5 Flood extent impacts on extreme events	219	Greater flood extent shown after leading options implemented due to combination with option in 7.2b.

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MEASS Appendix J – Strategic Environmental Assessment Appendices_Ver1	8, Table 8.1: MEASS draft leading options that will or could potentially contribute to WFD objectives	191	BA6.2's MR leading option is said to contribute to WFD objectives
	Assessment of individual Draft Leading Options (DLOs)	256-257	Notes on the issues and implementation of the DLO for Cleve Hill, where <i>"The majority of this DLO comprises managed realignment onto agricultural land."</i>
	Assessment of Cumulative Effects – Epoch 1 (296), Epoch 2 & 3 (298)	296	Small description of DLO followed by colour-coded array of potential cumulative effects from the scenario.
MEASS Appendix J – Strategic Environmental Assessment_Ver1	4.5.2, Table 8: Policy Unit/Benefit Area Issues and Opportunities	36	Description of issues and opportunities within BA6.2
	Table 20: The MR sites proposed to be taken forwards based on a Strategy wide assessment	60 (repeated on 133)	Showing the compensation for SPA/Ramsar coastal squeeze of saltmarsh against total MR area.
	Section 7.24 Benefit Area 6.2 Faversham Creek to The Sportsman Pub Swale Mainland	100-102	Assessment of preferred option against a range of factors.
MEASS Appendix K - Habitat Regulation Assessment_Ver1	1.4, Table 1: The relationship between the Policy Units of the two component SMPs and the MEASS Benefits Areas and Units	10	Description of the SMP Policy Unit name of BA6.2.
	4.7.1, Table 3: Likely Significant Effects of the Short List of Potential Options.	43	Description of the SMP proposal, compliance, proximity to Nature 2000 sites, a brief description of the SMP proposal, and likely significant effects.
	4.8, Conclusion of the Screening Process	46-47	Lists BA6.2 as a site that will impact stated sites (SPAs et al) with HTL or NAI options; BA6.2 is also said to use MR or NAI to reduce the impact vs. HTL options.
	5.1, Table 4: Initial preferred Strategy options identified prior to Appropriate Assessment	49	Summary of preferred options through the 1st, 2nd, and 3rd epochs of the strategy.

Document	Reference Title	Page	Summary
	6.2, Table 8: Consideration of Alternatives	78	Justification for an alternative option vs. initial strategy option (both described); for BA6.2, alternative is MR in 2nd epoch – contains justification.
	Table 12: The MR sites proposed to be taken forwards based on a Strategy Wide assessment	86	Showing the area of saltmarsh habitat provided and cumulative habitat compensation.
	7.3.1 para.9 (below Figure 11)	88	Discussions of the potential of Cleve Hill to provide compensatory saltmarsh habitat dependent on solar farm construction or lack thereof.
MEASS Appendix L - Stakeholder Report_Ver1	5.3.2 Table 5: Specific concerns the RSPB has for each BA	33, 34	Comments from the RSPB about Cleve Hill as a MR site; in favour of site MR progression. In paragraph at top of p.34, particular KWT support for Cleve Hill option is reiterated.
	5.3.4 National Grid para.4	34	Concern over tower routes and structural integrity of electrical assets, including the area around Cleve Hill substation.
	5.3.5 Cleve Hill Solar Part LTD	34-35	Concerns raised in Feb. 2018 about MEASS, and that it does not meet objectives in a realistic way.
	5.3.6 Blue Transmission London Array Limited para.1	35	Questioning risk to current infrastructure and if MR allows floodwater encroachment into substation.
	5.3.10 Summary of MEASS project team response to consultation – Non-Statutory Consultees, Table 6	36	Summary of responses sent to all non-statutory consultees.
	6.2.2 Comments on specific Benefits Areas	46	Raises the conflict between an MR and solar farm, summarises that an MR site could be resumed after the termination of any solar lifecycle.
MEASS Appendix M – Carbon Optimisation Report_Ver1	2.2, Results and carbon drivers	10	All values are tonnes-CO2e and describe the release throughout different stages of the strategy; BA6.2 releases most in capital carbon and operational carbon which is typical compared to other BAs.
MEASS Appendix N - Risk Register_Ver1	Design Risks; Risk of adverse impacts on electricity pylons at Chetney and Cleve Hill.	13	Summary of consequences, impact, likelihood, risk, risk type, potential control measure, owner, and who should take actions.
	Monte Carlo Risk Register	16	Showing only M residual impact and M residual likelihood.

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MEASS Appendix S - Statement of Case_Ver1	H: Compensatory Measures, Table 7: The MR sites proposed to be taken forwards based on a Strategy Wide assessment	16	Showing the area of saltmarsh habitat provided and cumulative habitat compensation.
	H: Compensatory Measures, Second Epoch Intertidal Habitat Compensation	17	Section discussing Cleve Hill's ability to provide compensatory freshwater habitat as an MR site; conclusion is that site MR should be delayed to undertake further risk management studies.