



CLEVE HILL SOLAR PARK

STATEMENT OF COMMON GROUND BETWEEN THE APPLICANT AND LOWER MEDWAY INTERNAL DRAINAGE BOARD

August 2019
Revision A

Document Reference: 12.2.5
Submitted: Deadline 4

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SOLAR PARK



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DCO APPLICATION REFERENCE EN010085

STATEMENT OF COMMON GROUND (SOCG)

AUGUST 2019

BETWEEN:

- 1) CLEVE HILL SOLAR PARK LTD; AND**
 - 2) LOWER MEDWAY INTERNAL DRAINAGE BOARD**
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1 INTRODUCTION

1. This Statement of Common Ground (SoCG) has been prepared in relation to an application (the Application) made to the Secretary of State (SoS) for the Department for Business, Energy & Industrial Strategy (BEIS), under section 37 of the Planning Act 2008, seeking a Development Consent Order (DCO) for the Cleve Hill Solar Park (hereafter referred to as the Development). The Application was accepted by PINS on 14th December 2018.
2. This SoCG is being prepared as a means of clearly stating any areas of agreement and disagreement between the Applicant and Lower Medway Internal Drainage Board (LMIDB) which are set out in section 2.
3. The SoCG is supported by the following appendix:
 - Appendix A: Hydrological Figures.

2 AGREEMENT

4. Confirmation that Table 2 of this SoCG reflect the points of agreement at the stated date is provided in Table 1.

Table 1: Confirmation of Agreement

Date	Signatory	Signature
30/08/2019	M D Watson Chief Executive	M D Watson On behalf of the LMIDB

3 RULE 6 LETTER TOPICS

Table 2: LM IDB Comments

Rule 6 Letter SoCG Request	Applicant's Response	Status (LM IDB to complete)
<i>Comments</i>	<i>Applicant's response</i>	<i>E.g., Agreed / Not Agreed / N/A</i>
<p>Ongoing activities and operation of the infrastructure required to control local water levels.</p>	<p><u>Flow Control Structures</u></p> <p>Section 10.3.10 of Chapter 10 - Hydrology, Hydrogeology, Flood Risk and Ground Conditions of the ES [APP-040] identified that several manmade concrete flow controls were observed within the Hydrology Core Study Area. Discussions with the LM IDB and the Habitat Management Steering Group (HMSG) have indicated that these flow control structures are currently used to regulate water levels within the ditches within the Core Study Area.</p> <p>As part of the latest version of the Outline Landscape Biodiversity Management Plan (LBMP) [REP3-005] there are proposals to raise water levels. In order to promote favourable conditions for birds using the arable reversion habitat management area, as well as improving biodiversity across the site, water levels within the drainage ditch network within the site will be managed utilising existing flow control measures and through the introduction of new structures, such as drop boards sluices, as outlined within RSPBs 'Water management structures for conservation - Technical case study series'¹ [REP3-047].</p> <p>Existing flow control infrastructure will be used to achieve this aim and there will be an ongoing need to engage with all parties to deliver this. Figure 2238-PUB-085 in Appendix A of this SoCG shows the location of existing flow control structures.</p> <p>To maintain and manage higher ditch water levels across the site, new flow control structures, (likely to be drop board style sluices) will be located within drainage ditches at the Site. Figure 2238-PUB-093 in</p>	<p>IDB Land Drainage Consent will be required for all new structures under Land Drainage Act 1991 – the IDB need to ensure the new structures do not impact upstream landowners etc.</p>

¹ http://ww2.rspb.org.uk/Images/Water_management_structures_tcm9-214636.pdf

Rule 6 Letter SoCG Request	Applicant's Response	Status (LM IDB to complete)
	<p>Appendix A of this SoCG shows the key existing and proposed flow control structures which will be used to achieve this aim.</p> <p>Water may be either held back behind the structure, or sluice boards used as a top height, above which water may 'overtop' in a controlled fashion to maintain the water level at known height. An example of the implementation of drop board sluices for arable reversion is provided as Technical case study No. 5: Berney Marshes, Norfolk of RSPBs 'Water management structures for conservation - Technical case study series' [REP3-047].</p> <p>As such, the Applicant seeks agreement from the LM IDB that existing flow control infrastructure can be used to achieve this aim and that IDB Land Drainage Consent will be required for all new structures under Land Drainage Act 1991 as the IDB need to ensure the new structures do not impact upstream landowners. There will be an ongoing need to engage with all parties to deliver this.</p>	
	<p><u>Watercourse Crossings (New and Upgraded Culverts)</u></p> <p>All new and upgraded watercourse crossings for the spine road, field accesses, and perimeter fence crossings identified within the latest version of the Outline Construction and Environmental Management Plan (CEMP) [REP3-006] and shown on Figure 2238-PUB-088 of Appendix A of this SoCG will require Land Drainage Consent from the LM IDB or will require Ordinary Watercourse consent from the Lead Local Flood Authority (Kent County Council). The relevant consent will be applied for alongside the discharge of Requirements 2 (h), 8 and 10 of the dDCO [REP3-003].</p> <p>The latest version of the Outline CEMP [REP3-006] and Outline LBMP [REP3-005] specifies mammal and eel friendly box culverts to be used. The design of the crossings will be confirmed during the detailed design phase, in consultation with the LM IDB and the Lead Local Flood Authority.</p>	<p>IDB Consent will be required for any new structure.</p> <p>Consent will not be given in advance since at this stage the type of culvert and their exact location and application form + fee have yet to be submitted. Please allow a maximum of 2 months for consultation process.</p>

Rule 6 Letter SoCG Request	Applicant's Response	Status (LM IDB to complete)
	<p>The Applicant seeks agreement from the LM IDB that the arrangements for works within watercourses as set out above are acceptable and that the wording of the Requirements is acceptable.</p>	
	<p><u>Ditch Reprofilng</u> Section 18 of the Outline LBMP [REP3-005] includes indicative cross sections for ditch reprofiling within the site. Appendix H - Aquatic Management Plan provides more detail on the proposed implementation and management of ditch habitats during construction and operation. The schedule for reprofiling ditches will be confirmed upon completion of water vole surveys. The Applicant seeks agreement from the LM IDB that the implementation and management of the ditches under LM IDB control within the site as set out in Appendix H of the Outline LBMP [REP3-005] are acceptable.</p>	<p>If the indicative ditch reprofiling is in line with Section 18 on page 84 [REP3-005] within the management plan then the IDB would be happy.</p>
	<p><u>Offsite Hydrological Impacts</u> Figure 2238-PUB-086 in Appendix A of this SoCG shows a catchment plan derived from Flood Estimation Handbook data, indicating that the Site is drained by a network of drainage ditches that do not have a wide catchment outside the control of the Applicant. The Development drains a catchment of 776 ha and offsite watercourses enter site through Nagden Drain (LM IDB asset ID 55), Graveney Church Drain (LM IDB asset ID 57), Cleve Cottage Drain (LM IDB asset ID 56) and White Drain (LM IDB asset ID 46A). These in turn discharge from the Development site via Nagden Sluice (EA Asset ID: 265437). Back Stream (LM IDB asset ID 48) flows from southwest to northeast before discharging into The Swale, approximately 2 km northeast of the Development, via Seasalter Pumping Station (EA Asset ID:</p>	

Rule 6 Letter SoCG Request	Applicant's Response	Status (LM IDB to complete)
	<p>262830).</p> <p>Photographs 3 and 4 on Figure 2238-PUB-085 in Appendix A of this SoCG show that existing flow control structures such as sluice gates can isolate the Development area from flows originating in Back Stream watercourse to the southeast of the Site (east of Seasalter Road).</p> <p>Similarly, existing outfalls and flow control structures are operated by Lower Medway IDB on Thorn Creek (LM IDB asset ID 58) to the south west of the Development (in proximity to Thorn Sluice Outfall – operated by the EA² Asset ID: 257358), which can be managed to ensure water levels within the Development can be isolated from levels in the immediate and wider catchment outside the Application site boundary.</p> <p>As such, raising water levels onsite via the existing flow control infrastructure and via non-return valves or sluice gates will not lead to an unacceptable change to the hydrological regime offsite.</p> <p>It is proposed that a detailed method statement will be submitted to the IDB and the HMSG for approval prior to the works being undertaken, as part of a Land Drainage Consent Application.</p> <p>Any initial works to construct infrastructure to alter water levels within watercourses, such as the installation of drop boards sluices, will require Land Drainage Consent from the LM IDB. This consent will be applied for alongside the discharge of Requirements 2 (h) 8 and 10 of the dDCO.</p> <p>The Applicant seeks agreement from the LM IDB that the proposed water level management and arrangements for works within watercourses as set out above will not have an adverse effect on offsite hydrology and water management and are therefore acceptable.</p> <p>Drains and control structures (such as outfalls) are labelled on Figure</p>	

² <https://environment.data.gov.uk/asset-management/id/asset/257358>

Rule 6 Letter SoCG Request	Applicant's Response	Status (LM IDB to complete)
	2238-PUB-094 within Appendix A of this document.	
<p>Assessment of hydrological, water quality, water resource and wildlife effects, including but not limited to surface water crossings, run-off, the risk of flooding, and contamination of surface and groundwaters: to include mitigation measures, including likely effectiveness, monitoring procedures and how mitigation will be secured within the DCO.</p>	<p>An assessment of potential effects on the hydrological environment is provided within Chapter 10 - Hydrology, Hydrogeology, Flood Risk and Ground Conditions of the ES [APP-040].</p> <p>The Flood Risk Assessment (FRA) submitted with the Application [APP-227] provides an assessment of flood risk and the potential for increased run-off rates as a result of the installation of the Development, along with the requirement of attenuation Sustainable Drainage Systems (SuDS).</p> <p>Good construction practice embedded in the design of the Development and further mitigation measures in are outlined within the latest version of the Outline CEMP [REP3-006].</p> <p>As identified in Section 10.4 Embedded Development Design of Chapter 10 - Hydrology, Hydrogeology, Flood Risk and Ground Conditions of the ES [APP-040], the effectiveness of construction practice and buffer distances has been demonstrated on large scale construction projects that Arcus has advised on.</p> <p>Water quality monitoring is proposed to provide an indication of the effectiveness of construction good practice and this is outlined in Section 8 Monitoring Programme of the latest version of the Outline CEMP [REP3-006].</p> <p>The requirement for water quality monitoring and construction good practice will be secured through Requirement 10 of the DCO.</p> <p>The Applicant seeks agreement from the LM IDB that the assessments</p>	<p>Water quality, ground water and monitoring will need to be agreed by the EA.</p> <p>The LMIDB are only concerned with the land drainage aspects of the site</p>




Rule 6 Letter SoCG Request	Applicant's Response	Status (LM IDB to complete)
	undertaken as set out above are adequate.	
Relationship with IDB Land Drainage Consent requirements.	<p>All watercourse crossings identified within Outline CEMP submitted with the Application (APP-205) will require Land Drainage Consent from the IDB or will require Ordinary Watercourse consent from the Lead Local Flood Authority (Kent County Council). This will be secured through Requirements 2 (h), 8 and 10 of the DCO.</p> <p>Similarly, all new flow control infrastructure will require Land Drainage Consent from the IDB or will require Ordinary Watercourse consent from the Lead Local Flood Authority (Kent County Council). This consent will be applied for alongside the discharge of Requirements 2 (h), 8 and 10 of the dDCO.</p> <p>As requested by the ExA all crossings (existing and proposed) and all flow control structures (existing and proposed), along with LM IDB assets have been plotted on an overall map (2238-PUB-095) for ease of reference and is provided in Appendix A of this document.</p>	Within the site all land drainage consents will be handled by the LMIDB because the entire site falls within the IDB drainage district.




APPENDIX A – HYDROLOGICAL FIGURES




- 2238-PUB-085 – Existing Infrastructure Locations and Photographs
- 2238-PUB-086 – FEH Catchment Plan
- 2238-PUB-088 – Existing and Proposed Ditch Crossing Location Plan
- 2238-PUB-093 – Existing and Proposed Flow Control Location Plan
- 2238-PUB-094 – Drain and Outfall Location Plan
- 2238-PUB-095 – Overall Drainage Management Plan

The following table should be read in conjunction with Figure 2238-PUB-085



Photograph ID	Photograph 1	Photograph 2	Photograph 3
1			
2			
3			



Photograph ID	Photograph 1	Photograph 2	Photograph 3
4			
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7			





Photograph ID	Photograph 1	Photograph 2	Photograph 3
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Photograph ID	Photograph 1	Photograph 2	Photograph 3
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Photograph ID	Photograph 1	Photograph 2	Photograph 3
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Photograph ID	Photograph 1	Photograph 2	Photograph 3
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Photograph ID	Photograph 1	Photograph 2	Photograph 3
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Photograph ID	Photograph 1	Photograph 2	Photograph 3
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Photograph ID	Photograph 1	Photograph 2	Photograph 3
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24			

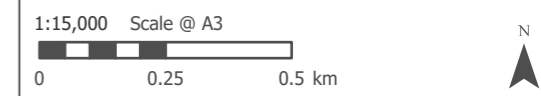
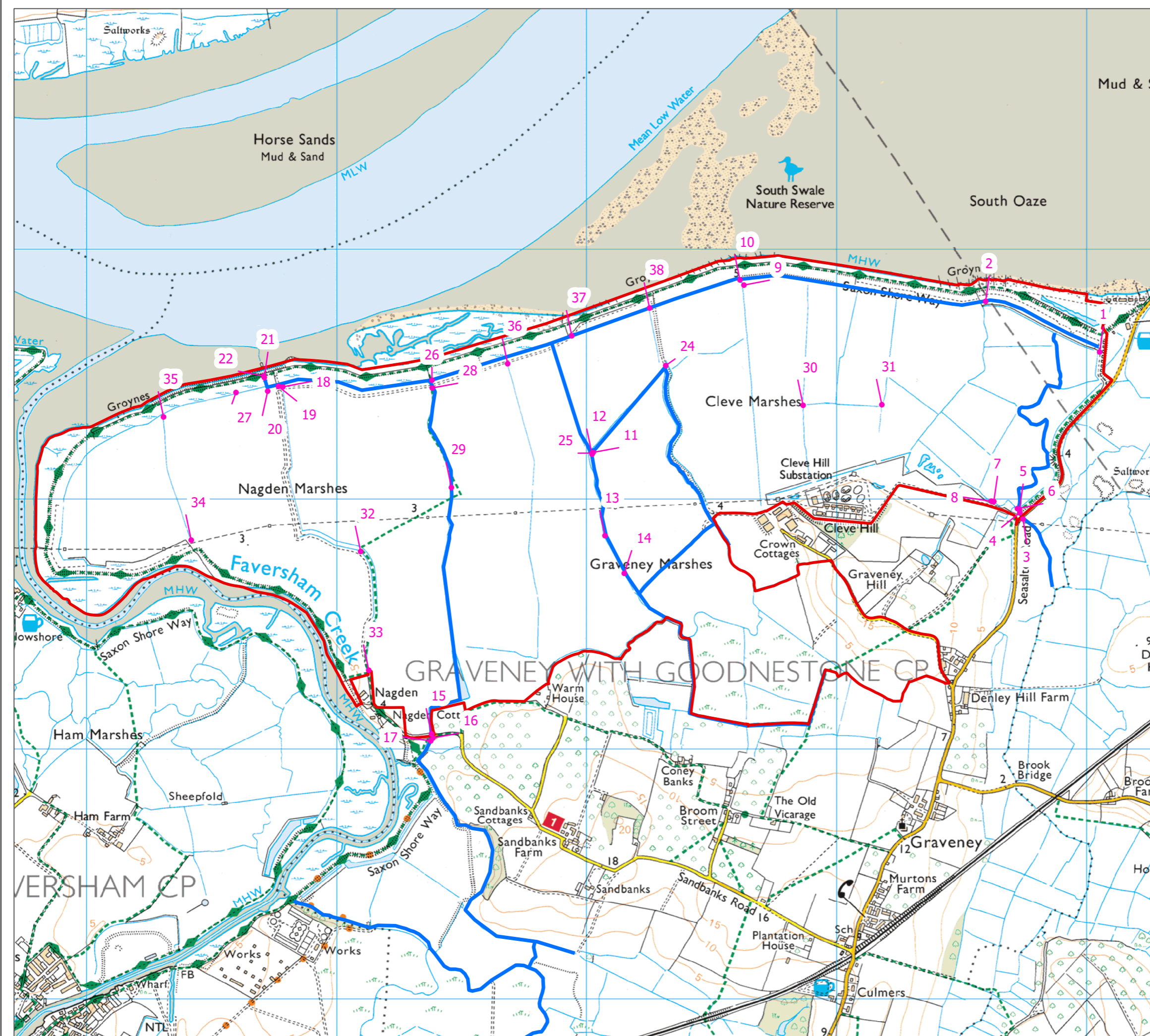
Photograph ID	Photograph 1	Photograph 2	Photograph 3
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Photograph ID	Photograph 1	Photograph 2	Photograph 3
37			
38			
39			
1			

- Development Site Boundary
- Lower Medway IDB Asset
- Site Photo



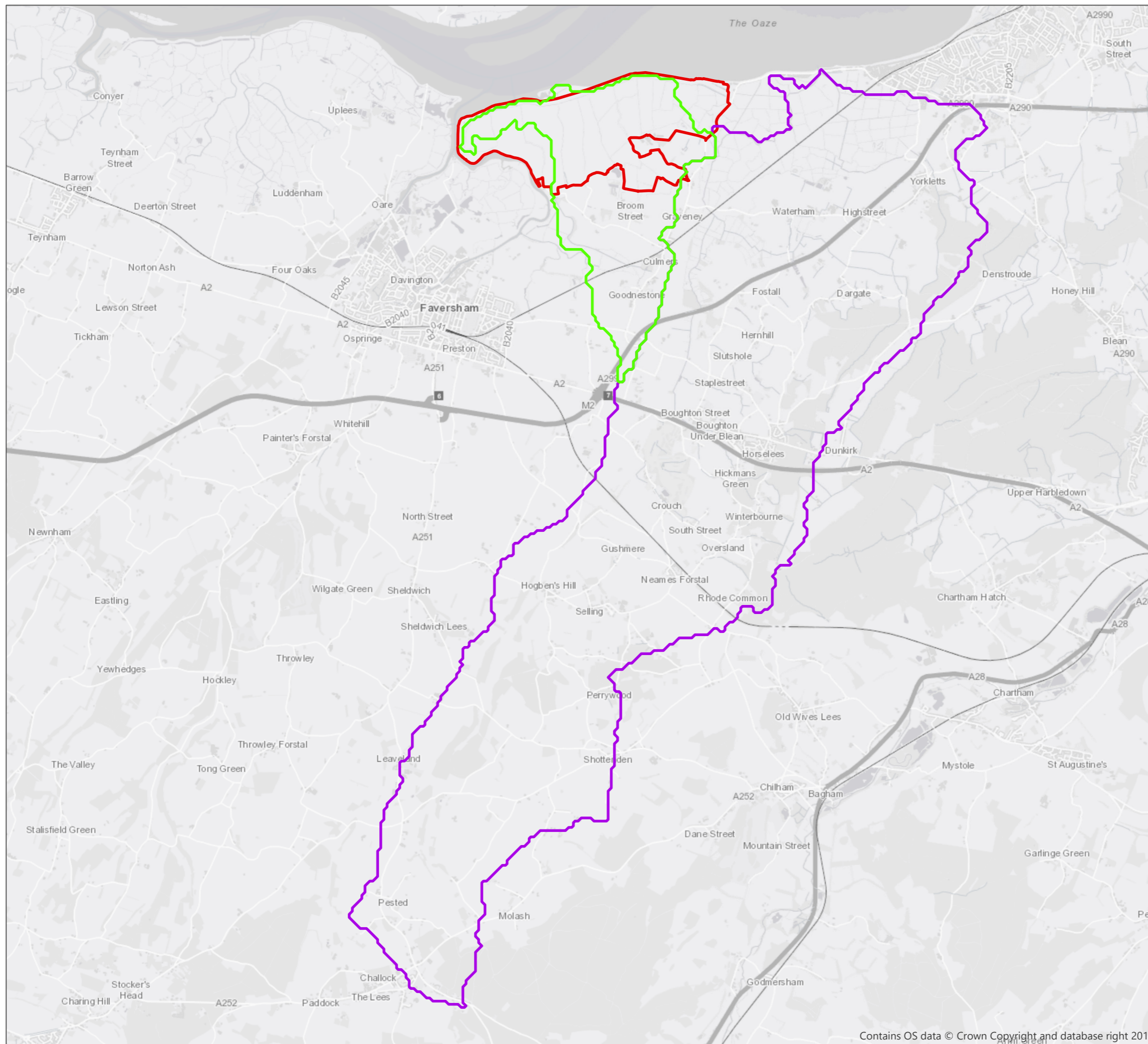
Produced By: LN	Ref: 2238-PUB-085
Checked By: MB	Date: 23/06/2019

Drainage Flow Management

Cleve Hill Solar Park

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- Development Site Boundary
- FEH Nagden Sluice Catchment
- FEH Seasalter Levels Catchment



1:60,000 Scale @ A3



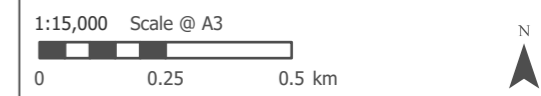
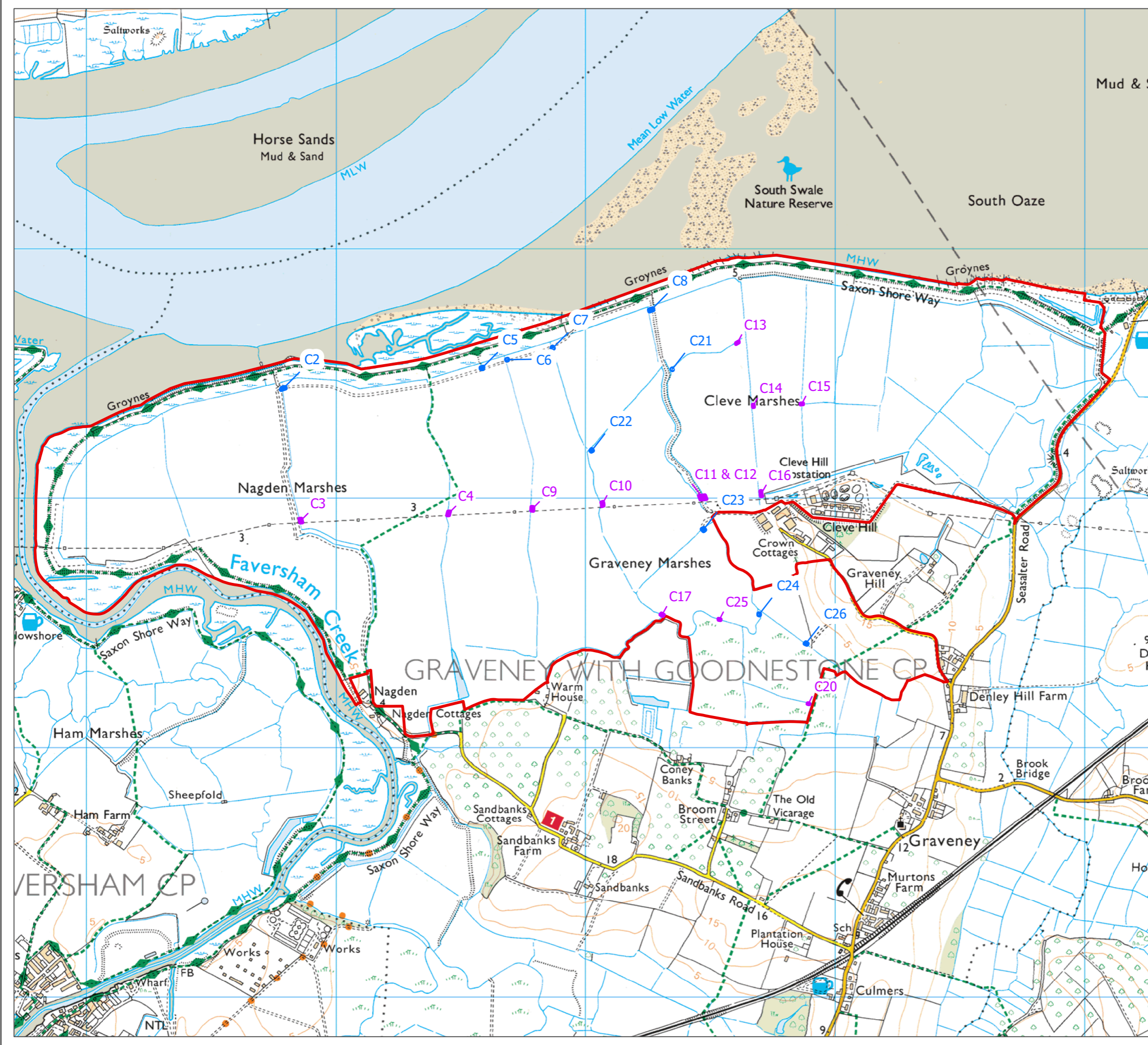

Produced By: LN	Ref: 2238-PUB-088
Checked By: MB	Date: 23/06/2019

Drainage Flow Management

Cleve Hill Solar Park

Contains OS data © Crown Copyright and database right 2018

- Development Site Boundary
- Improved Culverts
- New Culverts



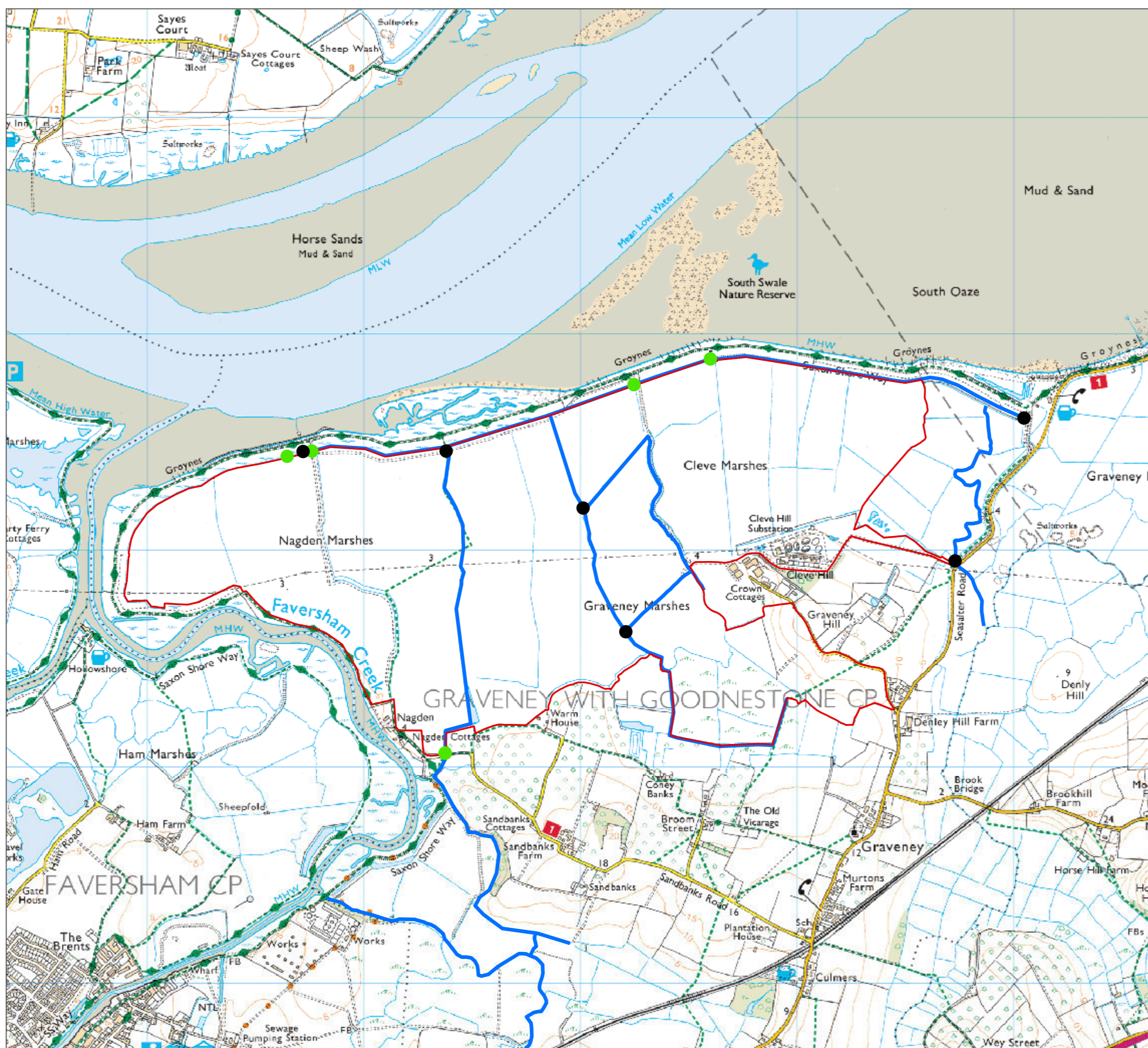
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Drainage Flow Management

Cleve Hill Solar Park

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- Site Boundary
- Lower Medway IDB Asset
- New Controls
- Existing Flow Controls



1:17,500 Scale @ A3

 0 0.25 0.5 km



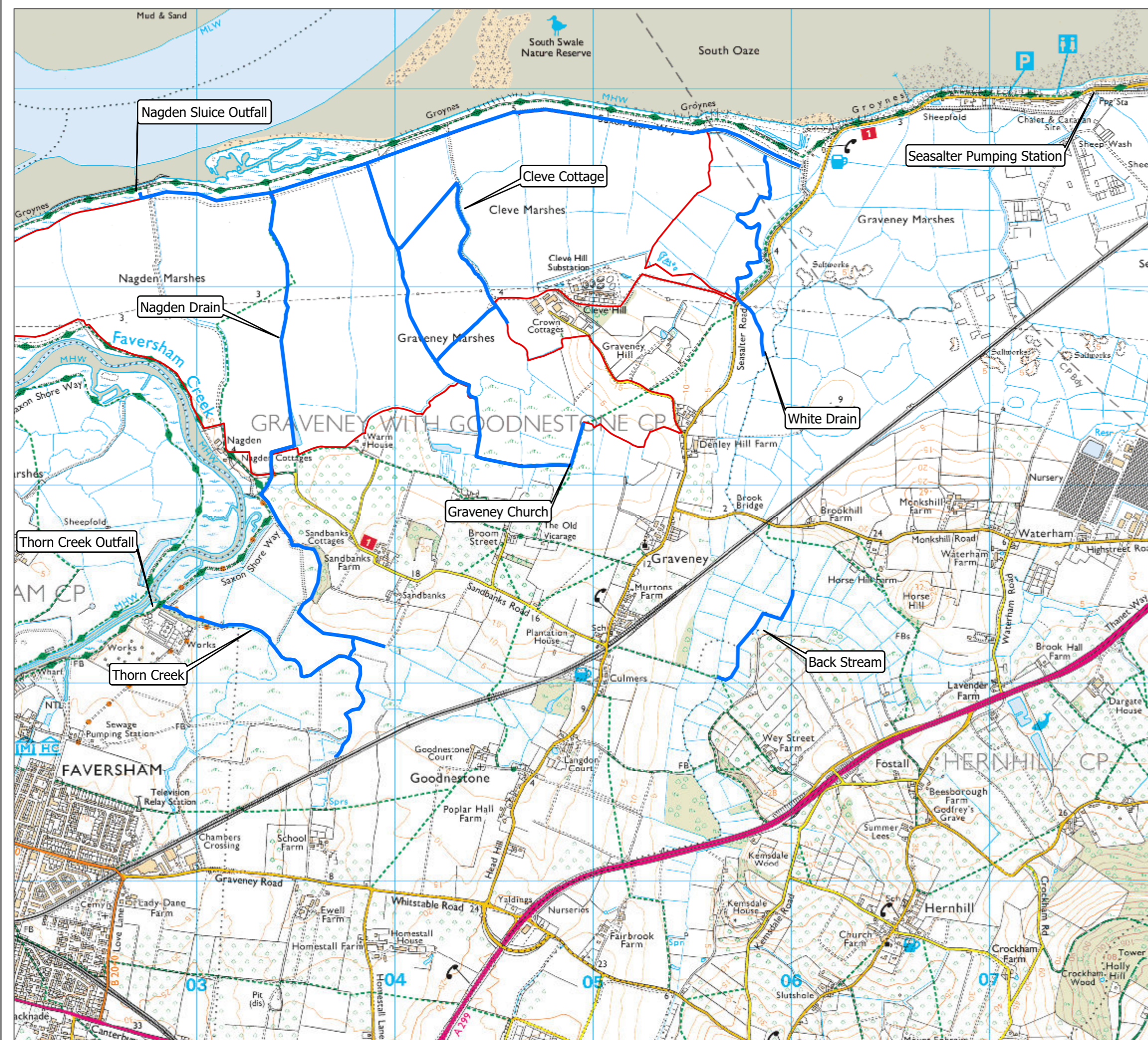
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Drainage Flow Management

Cleve Hill Solar Park

- Lower Medway IDB Asset
- Site Boundary



1:19,000 Scale @ A3
 0 250 500 m

Produced By: LN	Ref: 2238-PUB-094
Checked By: MB	Date: 20/08/2019

Drainage Flow Management

Cleve Hill Solar Park