GONDOLIN
Land & Water
Civil Engineering & Environmental Solutions

Project	Flushing BESS
Client	Harmony FI Ltd
Document Title	Firewater Management Plan
Revision	Rev1
Prepared by	Annie Steingold
Checked by	Stephen Donnan
Date	09/06/2025

1. Context

Gondolin Land and Water Ltd (Gondolin) has been appointed by Harmony FI Ltd (the Client) to prepare a Flood Risk and Drainage Assessment (FWMP) in support of a planning application for the construction of a Battery Energy Storage System (BESS) and Substation site with associated infrastructure on land north of Flushing, Aberdeenshire, AB42 4XT within the Aberdeenshire Council Local Planning Authority (LPA) area.

This Firewater Management Plan (FWMP) report is prepared and submitted on behalf of Harmony FL Ltd. ('the Applicant') and in support of an application for consent under S36 of the Electricity Act 1989 ('the application') and also comprises a request that Scottish Ministers give a direction under section 57(2) of the Town and Country Planning (Scotland) Act 1997 that planning permission for the development be deemed to be granted. It addresses matters referred to in Schedule 9 to the Electricity Act, to development plan and policy guidance and to consideration of material matters.

The application comprises land within Aberdeenshire Council Area – 20.72ha ('Application Site'). A site location plan is included as Appendix A.

The description of the proposed development which is the subject of this application is as follows:

'Construction and operation of a 400MW Battery Energy Storage System (BESS) with associated infrastructure including, access roads, sub-station buildings, supporting equipment, fencing, drainage infrastructure and landscaping.' at Land North of Longside Road, Flushing, Peterhead (GR: 405524, 847560).

This FWMP report is part of a suite of documents submitted with the application, as outlined below. These supporting documents are in addition to the formal application documents comprising the accompanying plans, sections, and elevations. The full suite of supporting documents is as follows:

- Planning Design and Access Statement (PDAS)
- Community Wealth Building Plan (CWBP)

- Pre-Application Consultation Report (PACR)
- Confidential Ecological Survey Report [note, contains sensitive information]
- Confidential Protected Species Report [note, contains sensitive information]
- Archaeological Desk-Based Assessment (ADBA)
- Landscape and Visual Impact Assessment (LVIA) and Landscape Strategy
- Noise Impact Assessment (NIA)
- Flood Risk & Drainage Assessment Report (FRDAR)
- Fire Water Management Plan (FWMP)
- Private Water Supply Impact Assessment
- Topographical Surveys
- Construction Traffic Management Plan
- Transport Statement
- Outline Battery Safety Management Plan (OBSMP)

The Electricity Works Environmental Impact Assessment (Scotland) Regulations 2017 are also relevant to the proposal as the proposal comprises development falling within Schedule 2 of those Regulations. A Screening request has been submitted to the ECU and the Decision was received on 17th March 2025. It confirmed that, "Scottish Ministers adopt the opinion that the proposal does not constitute EIA development and that the application submitted for this development does not require to be accompanied by an EIA report."

The purpose of this report is report is to outline the proposed measures to ensure appropriate water supply provisions and water runoff containment in the event of a fire are provided as part of the proposed development.

Gondolin Land & Water Ltd (Gondolin) have also prepared a Flood Risk and Drainage Assessment (FRDA) report [1] to accompany the application which should be reviewed in conjunction with this letter.

In light of the release of National Fire Chiefs Council (NFCC) guidance[2] for Fire Rescue Services with respect to BESS, Gondolin have prepared this Firewater Management Plan (FWMP) to demonstrate how firewater runoff volume would be controlled and managed at the site.

It is noted that new draft NFCC guidance has recently been released however this strategy is based on the 2023 adopted guidance. Comparison of both versions of the guidance indicates that the adopted 2023 version is considered more conservative given the updates indicated within the draft guidance in terms of water supply volumes etc.

This FWMP is based on the management and full containment of over 58 hours of storage at a rate of 1900 l/minute for a total volume of 6,713m^3 without intervention (within the BESS platform SuDS basin). This exceeds the minimum requirement for water supply of 2 hours at 1900 l/minute noted in the NFCC Guidance.

[1] Gondolin Land & Water Ltd (2025) Flushing BESS, FRDA Report Ref: GON.0533.0304, 9th June 2025
[2] National Fire Chiefs Council (2023) Grid Scale Battery Energy Storage System Planning – Guidance for FRS

Gondolin and / or Harmony FL Ltd shall liaise with the Scottish Fire and Rescue Service (SFRS) throughout the development and construction phases to ensure the proposed FWMP is in compliance with the latest best practice guidance.

2. Summary of Proposed Strategy

The proposed strategy to manage the firewater runoff generated is for **Full Containment** within the proposed SuDS Basin for the BESS development.

To achieve the full containment of the firewater runoff, specific control measures are proposed and details are included on Drawings FWMP-001, FWMP-002 and FWMP-003 enclosed.

A summary description of the FWMP Strategy Principles and Design Proposals are as follows:

1. The Engineered Formation Layer of the development platform (i.e., engineered base beneath the Type 3 stone capping layer) is to be suitably compacted and will be made impermeable. Firewater runoff will follow surface water drainage routes via subsurface perforated pipework and perimeter filter drains and will convey firewater runoff into the SuDS Basin. An enhanced network of herringbone drainage has been proposed within the design to ensure no firewater runoff is lost to the surrounding area.
2. Development surfaces will be suitably graded to promote the capture of flow within the proposed herringbone drainage systems.
3. The proposed SuDS basin shall be lined to prevent any uncontrolled discharge of potentially contaminated runoff.
4. The Hydrobrake chamber at the SuDS Basin outlet is to be fitted with a remotely operated penstock valve and appropriately signposted as the Firewater Isolation Valve. As the SuDS basin shall be lined, the piped outlet is the only viable pathway for contaminated firewater to enter the water environment.
5. The location and testing of the Firewater Isolation Valve will be duly incorporated into the site Operation and Maintenance (O&M) and Incident Response Plans. In the event of a fire, the Fire Isolation Valve is to be remotely closed as part of the wider site emergency response procedures to a fire being detected.
6. The Client will sign into an agreement with a local emergency waste disposal service who can provide a sealed mobile tanker to the site in a timely manner. This will provide the means to remove contaminated runoff quickly in the event there is also additional rainfall volume to accommodate, or the firefighting volume exceeds the minimum volume available of 6,713m^3. It is noted that the SuDS basin has capacity to store a 1-day rainfall event during the 1 in 30 year scenario whilst also being able to store over 34 hours of firewater runoff.
7. Access for a mobile tanker would be achieved via the proposed track adjacent to the SuDS Basin. A mobile tanker shall be able to empty the SuDS basin with an extended suction hose able to extend up to 10-30m. If preferred, an accessible manhole chamber for pumping purposes can be installed at a preferred location adjacent to the site access track.
8. It is recommended (if safe to do so) that any retained firewater is regularly tested within the SuDS basin. By undertaking water quality testing of the collected runoff, levels of contamination can be determined. This shall help determine where the collected runoff should be disposed of, which may include (subject to agreement with the SEPA)

reopening the outlet route if no contamination is present to allow the SuDS Basin to drain and discharge as normal. Monitoring and testing would be undertaken at regular intervals to ensure no change to the water quality.

9. Following the fire incident, appropriate inspections of FWMP control measures will be undertaken to ensure integrity is maintained and targeted measures will be drawn up for the Remediation Plan.
10. The Remediation Plan will likely involve continued closure of the Fire Isolation Valve for a period of time until the fire damaged equipment has been removed from site and high pressure targeted cleaning of the drainage system components has been conducted. Tankering of contaminated runoff off-site from the site may be required during this period. Topsoil lining the SuDS Basin may need to be stripped and disposed of off-site (i.e. at Landfill or similar). A schedule of soil sampling will be undertaken to determine this.
11. Only once the Topsoil is deemed safe or is replaced, the drainage system has been suitably washed and the water entering the SuDS Basin has been suitably tested and satisfies the relevant Environmental Quality Standards (EQS), will the Fire Isolation Valve be re-opened and surface water runoff be allowed to discharge to the watercourse to the east of the site.
12. Following the fire incident, updates to the O&M and Incident Response Plans will be made using site observations, feedback from SFRS and 'lessons learned'.

The above FWMP Summary should be considered provisional and a statement of commitment by the Client to implement the principles of the strategy. The exact final arrangements and details would be written up at the detailed design stages and into the site O&M and Incident Response Plans at the appropriate time.

3. Firefighting Water Supply

Scottish Water asset plans have been obtained to inform this assessment and are included as Appendix B to this document.

Review of local water supply plans indicates that there are public water mains that run some 500m south of the site for the residential properties just off Longside road (A950). Therefore, a connection to the mains to provide the firefighting flow rates required as stipulated by NFCC guidance (approximately 32 l/s) would not be feasible. Thus, for the purposes of this assessment, it is assumed that a connection to the existing mains is not possible which is considered a worst-case scenario.

As such, it is proposed to provide the initial fire fighting volume within the site through the provision of underground water storage within the site boundary. This storage provision shall be sized to provide the required initial 2 hour water supply for firefighting purposes as per NFCC guidance. The proposed water storage tanks are shown indicatively within the BESS development platform. The water storage tanks shall be fitted with a distribution system to provide hydrant access across the site to ensure fire fighting services can readily access the water supply at various locations across the site.

4. Closure

We trust the proposed measures and principles to manage firewater runoff at the proposed Flushing BESS are acceptable and provides SFRS the comfort that firewater can be appropriately managed at the site without posing a risk to the environment / human health.

Enc. ***Appendices:***

Appendix A – Site Location Plan

Appendix B – Scottish Water Asset Plans

Drawings:

FWMP-001 – Firewater Management Overview

FWMP- 002 – Earthworks Overview

FWMP-003 – Firewater Management Details

Appendix A – Site Location Plan

LEGEND

PLANNING BOUNDARY

REV	DATE	DESCRIPTION	BY	CHK
00	06/25	INITIAL ISSUE	GD	SD

CLIENT:
HARMONY FL LTD

PROJECT:
FLUSHING BESS

DRAWING TITLE:
SITE LOCATION PLAN

SCALE:
1:10,000 @ A3

DATE:
JUNE 2025

DRAWING NUMBER:
APPENDIX A

REV:
00

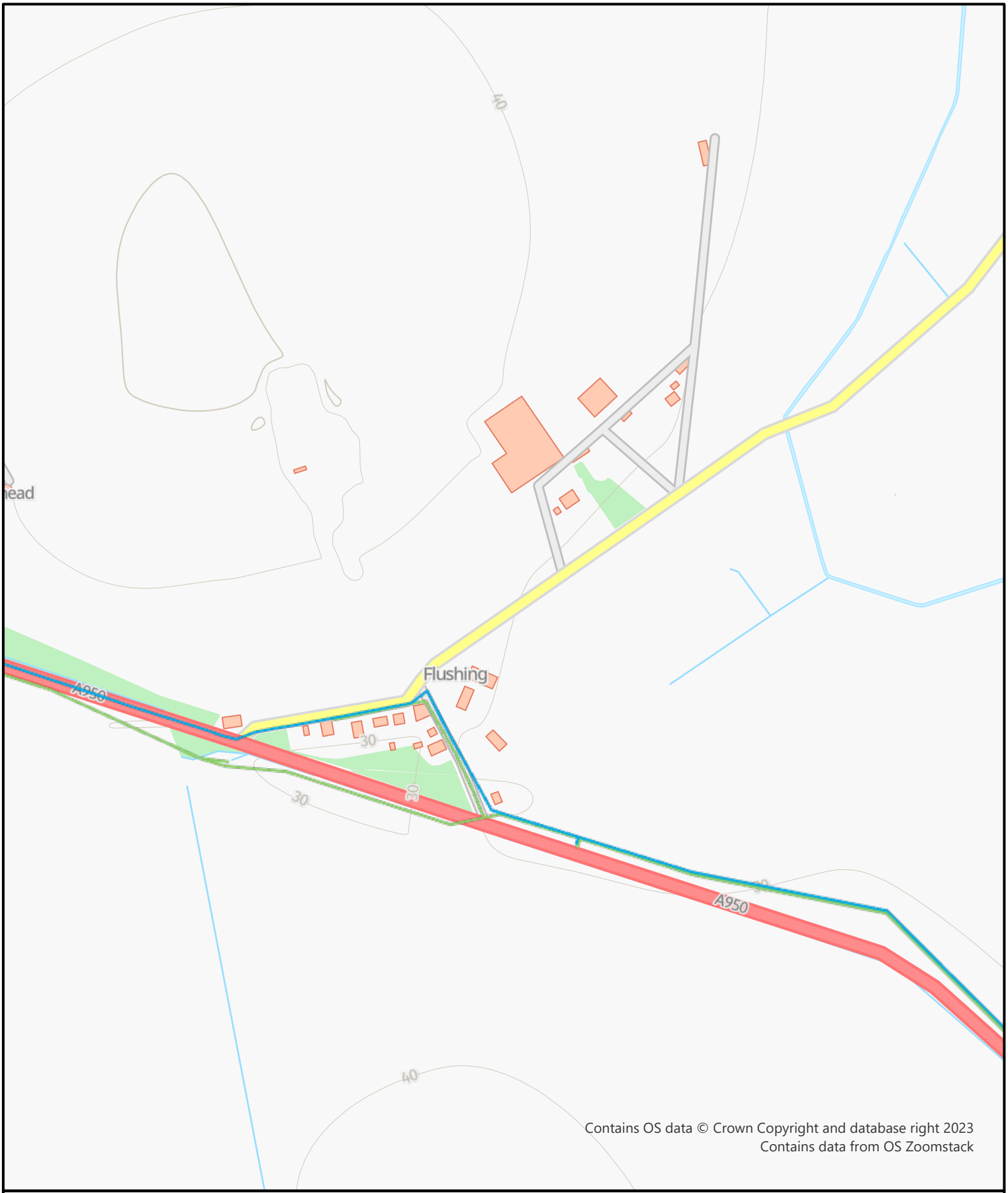
DRAWING STATUS:
FOR PLANNING

GONDOLIN LAND & WATER LTD
15 Quayside Street
Edinburgh
EH6 6EJ
Registered Company No. SC706920

GONDOLIN Land & Water

FRDA-001 Site Location Plan.dwg

Appendix B – Scottish Water Asset Plans



Warning! Damaging a large diameter trunk main (12"/300mm and above) can result in loss of life and major water supply and water quality problems.If you're planning any extension work in the vicinity of any large diameter mains shown on our maps, you must contact Scottish Water to arrange a site visit 08000 778 778 WELL IN ADVANCE OF THE WORKS.

Untitled map

SCALE: 1:4,910

Plotted By:
Date Plotted: 09/06/2025

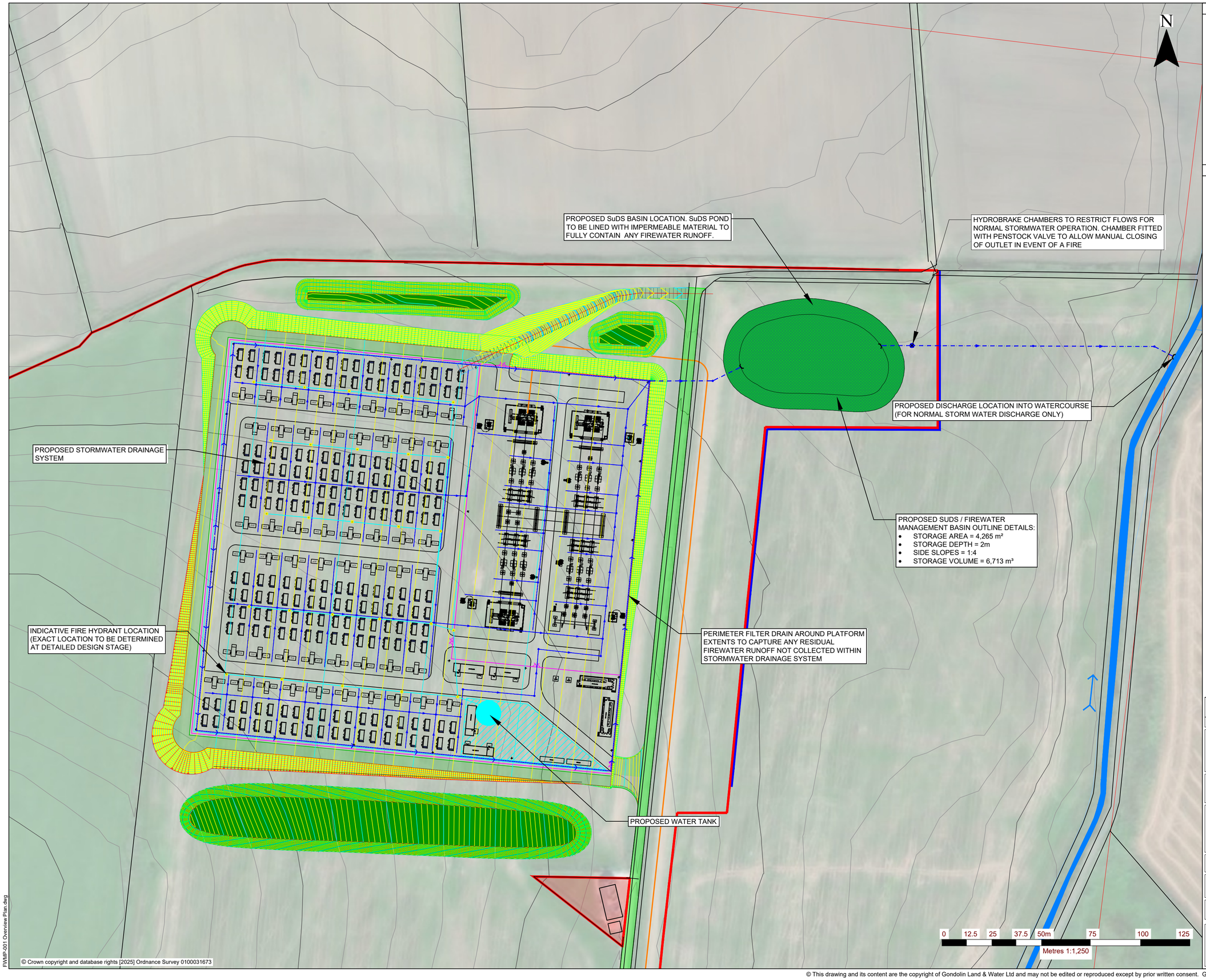
The representation of physical assets and the boundaries of areas in which Scottish Water and others have an interest does not necessarily imply their true positions. For further details contact the appropriate District office.

Scottish Water
Trusted to serve Scotland

The Bridge
6 Buchanan Gate
Stepps
Glasgow
G33 6FB

Tel No: 08000 778 778

Drawings



NOTES

1. SITE LAYOUT TAKEN FROM DRAWING 'PA_70_PSP_C - PROPOSED SITE PLAN' PROVIDED BY HARMONY ENERGY.
2. SITE BOUNDARY TAKEN FROM 'PA_70_LP_A - LOCATION PLAN' PROVIDED BY HARMONY ENERGY.
3. TOPOGRAPHIC DATA TAKEN FROM DRAWING 'GCS7032_RAW_3D_DATA'.
4. DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER SCHEME DRAWINGS.
5. REFER TO DRAWINGS FRDA-004 FOR TYPICAL DRAINAGE DETAILS.
6. DESIGN SHOULD BE CONSIDERED OUTLINE DETAIL AND NOT FOR CONSTRUCTION. FINAL LEVELS, GRADIENTS AND ALIGNMENTS TO BE CONFIRMED AT LATER DESIGN STAGES.

LEGEND

- PLANNING BOUNDARY
- EXISTING MAJOR CONTOURS (5.0m INTERVAL)
- EXISTING MINOR CONTOURS (1.0m INTERVAL)
- BURN OF FAICHFIELD
- PROPOSED MAJOR CONTOURS (0.5m INTERVAL)
- PROPOSED MINOR CONTOURS (0.1m INTERVAL)
- PROPOSED PERFORATED PIPEWORK
- PROPOSED CONVENTIONAL PIPEWORK
- PROPOSED FILTER DRAIN
- PROPOSED MANHOLE / INSPECTION CHAMBER
- PROPOSED HYDROBRAKE CHAMBER
- PROPOSED SUDS BASIN
- PROPOSED HEADWALL
- PROPOSED FIREWATER STORAGE TANK (BURIED)
- PROPOSED FIREWATER HYDRANT
- PROPOSED FIREWATER PIPEWORK

REV	DATE	DESCRIPTION	BY	CHK
00	06/25	INITIAL ISSUE	GD	SD

CLIENT: HARMONY FL LTD

PROJECT: FLUSHING BESS

DRAWING TITLE: **FIREWATER MANAGEMENT OVERVIEW PLAN**

SCALE: 1:1,250 @ A2

DATE: JUNE 2025

DRAWING NUMBER: **FWMP-001**

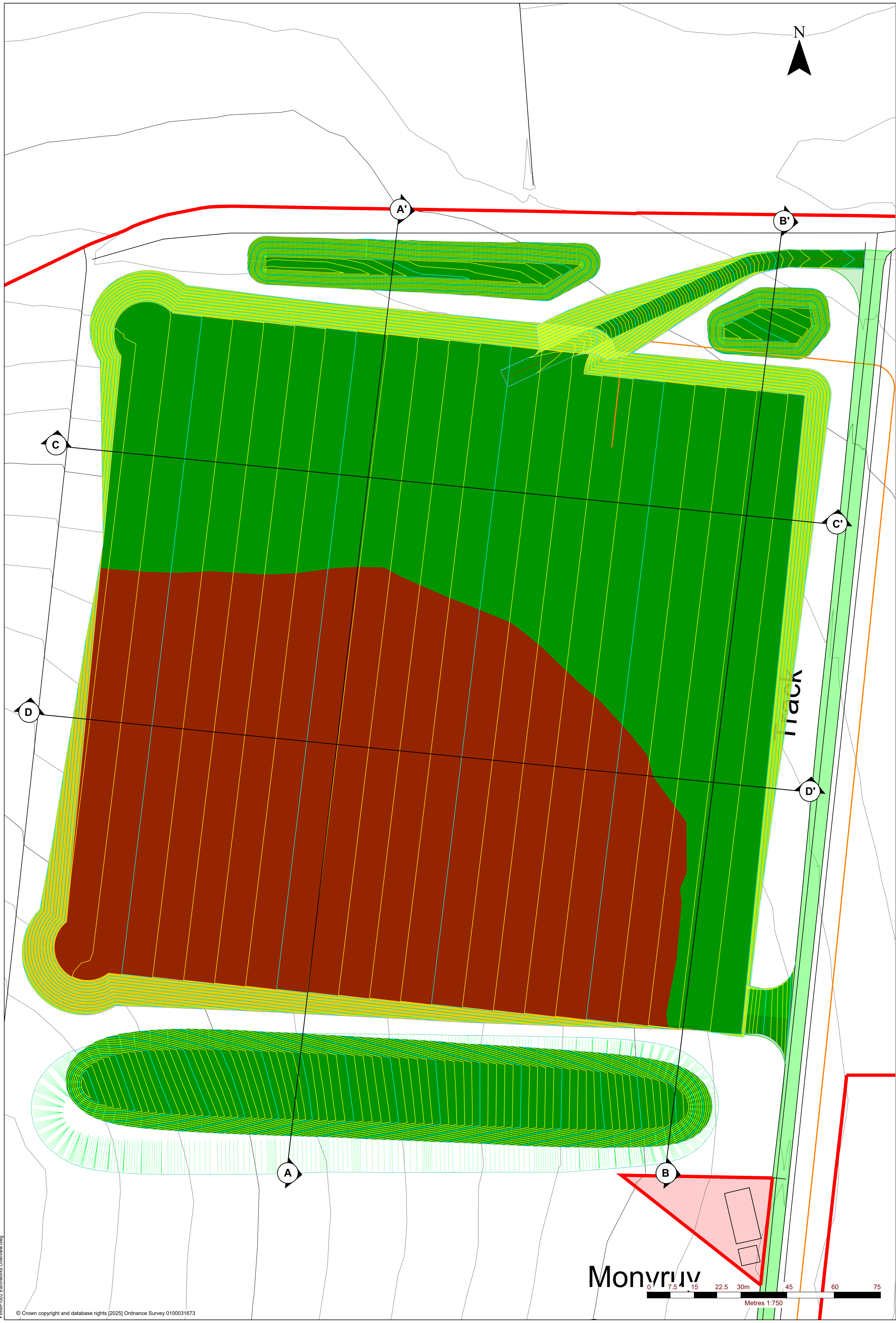
REV: **00**

DRAWING STATUS: FOR PLANNING

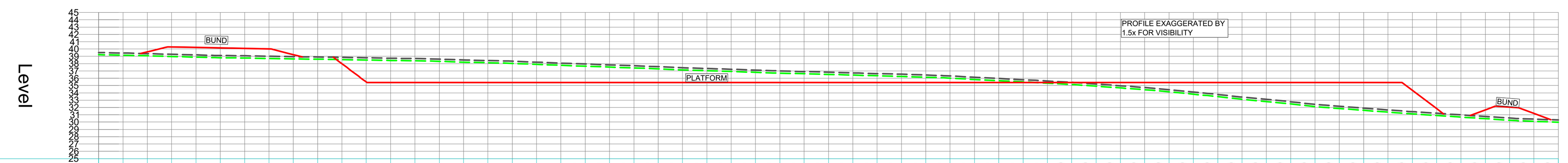
GONDOLIN LAND & WATER LTD
15 Quayside Street
Edinburgh
EH6 6EJ
Registered Company No. SC706920

GONDOLIN Land & Water

FWMP-001 Overview Plan.dwg

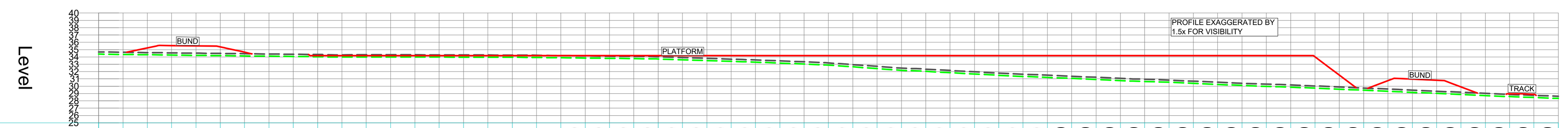


FWMP-002 Earthworks Overview.dwg



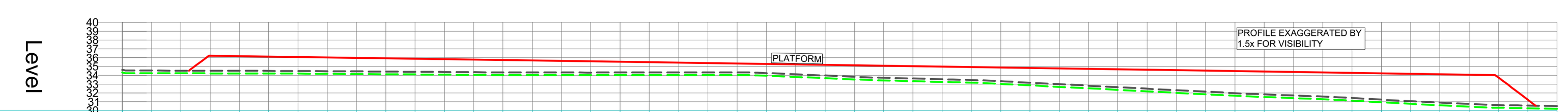
Chainage	Existing Ground Levels	Topsoil Stripped Levels	Proposed Levels
00	39.521	39.221	
05.00	39.452	39.152	
10.00	39.365	39.065	39.611
15.00	39.276	38.976	40.279
20.00	39.189	38.889	40.213
25.00	39.113	38.813	40.145
30.00	39.071	38.771	40.077
35.00	39.009	38.709	40.009
40.00	38.946	38.646	39.238
45.00	38.904	38.604	
50.00	38.859	38.559	37.984
55.00	38.797	38.497	35.483
60.00	38.735	38.435	35.399
65.00	38.690	38.390	35.400
70.00	38.612	38.312	35.400
75.00	38.505	38.205	35.400
80.00	38.421	38.121	35.400
85.00	38.332	38.032	35.400
90.00	38.200	37.900	35.401
95.00	38.067	37.767	35.401
100.00	37.949	37.649	35.401
105.00	37.830	37.530	35.402
110.00	37.709	37.409	35.402
115.00	37.580	37.280	35.402
120.00	37.442	37.142	35.402
125.00	37.331	37.031	35.403
130.00	37.229	36.929	35.403
135.00	37.112	36.812	35.403
140.00	37.002	36.702	35.403
145.00	36.917	36.617	35.404
150.00	36.829	36.529	35.404
155.00	36.727	36.427	35.404
160.00	36.637	36.337	35.405
165.00	36.551	36.251	35.405
170.00	36.438	36.138	35.405
175.00	36.307	36.007	35.405
180.00	36.132	35.832	35.405
185.00	35.962	35.662	35.406
190.00	35.798	35.498	35.406
195.00	35.624	35.324	35.406
200.00	35.441	35.141	35.406
205.00	35.211	34.911	35.407
210.00	34.974	34.674	35.407
215.00	34.725	34.425	35.407
220.00	34.431	34.131	35.407
225.00	34.117	33.817	35.408
230.00	33.782	33.482	35.408
235.00	33.421	33.121	35.408
240.00	33.106	32.806	35.408
245.00	32.782	32.482	35.408
250.00	32.412	32.112	35.409
255.00	32.161	31.861	35.409
260.00	31.911	31.611	35.409
265.00	31.661	31.361	35.409
270.00	31.422	31.122	34.343
275.00	31.201	30.901	31.843
280.00	30.985	30.685	
285.00	30.769	30.469	31.667
290.00	30.552	30.252	32.057
295.00	30.404	30.104	31.185
300.00	30.282	29.982	

SECTION A-A' - LONGSECTION
Scale: H 1:250,V 1:167. Datum: 25.000



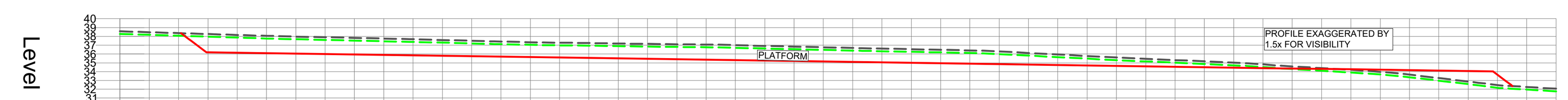
Chainage	Existing Ground Levels	Topsoil Stripped Levels	Proposed Levels
00	34.684	34.384	
05.00	34.641	34.341	
10.00	34.598	34.298	35.232
15.00	34.554	34.254	35.558
20.00	34.516	34.216	35.518
25.00	34.479	34.179	35.381
30.00	34.441	34.141	34.645
35.00	34.403	34.103	
40.00	34.365	34.065	
45.00	34.327	34.027	34.188
50.00	34.288	33.988	34.188
55.00	34.297	33.997	34.188
60.00	34.307	34.007	34.187
65.00	34.291	33.991	34.187
70.00	34.280	33.980	34.187
75.00	34.270	33.970	34.187
80.00	34.260	33.960	34.187
85.00	34.251	33.951	34.187
90.00	34.226	33.926	34.187
95.00	34.187	33.887	34.187
100.00	34.147	33.847	34.187
105.00	34.108	33.808	34.187
110.00	34.069	33.769	34.187
115.00	34.019	33.719	34.187
120.00	33.913	33.613	34.187
125.00	33.806	33.506	34.187
130.00	33.699	33.399	34.186
135.00	33.588	33.288	34.186
140.00	33.462	33.162	34.186
145.00	33.328	33.028	34.186
150.00	33.183	32.883	34.186
155.00	32.946	32.646	34.186
160.00	32.708	32.408	34.186
165.00	32.471	32.171	34.186
170.00	32.330	32.030	34.186
175.00	32.150	31.850	34.186
180.00	31.970	31.670	34.186
185.00	31.790	31.490	34.186
190.00	31.633	31.333	34.186
195.00	31.510	31.210	34.185
200.00	31.364	31.064	34.185
205.00	31.218	30.918	34.185
210.00	31.072	30.772	34.185
215.00	30.953	30.653	34.185
220.00	30.832	30.532	34.185
225.00	30.689	30.389	34.185
230.00	30.547	30.247	34.185
235.00	30.404	30.104	34.185
240.00	30.275	29.975	34.185
245.00	30.174	29.874	34.185
250.00	30.032	29.732	34.010
255.00	29.891	29.591	31.510
260.00	29.749	29.449	
265.00	29.607	29.307	30.764
270.00	29.463	29.163	30.962
275.00	29.316	29.016	30.816
280.00	29.169	28.869	29.914
285.00	29.022	28.722	
290.00	28.875	28.575	28.954
295.00	28.752	28.452	28.888
300.00	28.632	28.332	

SECTION B-B' - LONGSECTION
Scale: H 1:250,V 1:167. Datum: 25.000



Chainage	Existing Ground Levels	Topsoil Stripped Levels	Proposed Levels
00	34.628	34.328	
05.00	34.539	34.239	
10.00	34.532	34.232	
15.00	34.524	34.224	36.232
20.00	34.515	34.215	36.182
25.00	34.506	34.206	36.132
30.00	34.496	34.196	36.082
35.00	34.472	34.172	36.032
40.00	34.448	34.148	35.982
45.00	34.425	34.125	35.932
50.00	34.402	34.102	35.882
55.00	34.378	34.078	35.832
60.00	34.352	34.052	35.782
65.00	34.326	34.026	35.732
70.00	34.325	34.025	35.682
75.00	34.323	34.023	35.632
80.00	34.318	34.018	35.582
85.00	34.320	34.020	35.532
90.00	34.322	34.022	35.482
95.00	34.325	34.025	35.432
100.00	34.327	34.027	35.382
105.00	34.330	34.030	35.332
110.00	34.257	33.957	35.282
115.00	34.119	33.819	35.232
120.00	33.981	33.681	35.182
125.00	33.843	33.543	35.132
130.00	33.720	33.420	35.082
135.00	33.640	33.340	35.032
140.00	33.559	33.259	34.982
145.00	33.465	33.165	34.932
150.00	33.333	33.033	34.882
155.00	33.164	32.864	34.832
160.00	32.996	32.696	34.782
165.00	32.827	32.527	34.732
170.00	32.659	32.359	34.682
175.00	32.486	32.186	34.632
180.00	32.320	32.020	34.582
185.00	32.153	31.853	34.532
190.00	31.987	31.687	34.482
195.00	31.850	31.550	34.432
200.00	31.721	31.421	34.382
205.00	31.592	31.292	34.332
210.00	31.435	31.135	34.282
215.00	31.246	30.946	34.232
220.00	31.076	30.776	34.182
225.00	30.906	30.606	34.132
230.00	30.755	30.455	34.082
235.00	30.626	30.326	33.755
240.00	30.575	30.275	31.255
245.00	30.516	30.216	

SECTION C-C' - LONGSECTION
Scale: H 1:250,V 1:167. Datum: 30.000



Chainage	Existing Ground Levels	Topsoil Stripped Levels	Proposed Levels
00	38.576	38.276	
05.00	38.475	38.175	
10.00	38.373	38.073	
15.00	38.271	37.971	36.210
20.00	38.170	37.870	36.160
25.00	38.068	37.768	36.110
30.00	37.982	37.682	36.060
35.00	37.907	37.607	36.010
40.00	37.831	37.531	35.960
45.00	37.754	37.454	35.910
50.00	37.676	37.376	35.860
55.00	37.591	37.291	35.810
60.00	37.505	37.205	35.760
65.00	37.421	37.121	35.710
70.00	37.340	37.040	35.660
75.00	37.290	36.990	35.610
80.00	37.240	36.940	35.560
85.00	37.189	36.889	35.510
90.00	37.147	36.847	35.460
95.00	37.110	36.810	35.410
100.00	37.073	36.773	35.360
105.00	37.007	36.707	35.310
110.00	36.928	36.628	35.260
115.00	36.850	36.550	35.210
120.00	36.771	36.471	35.160
125.00	36.692	36.392	35.110
130.00	36.621	36.321	35.060
135.00	36.552	36.252	35.010
140.00	36.484	36.184	34.960
145.00	36.408	36.108	34.910
150.00	36.286	35.986	34.860
155.00	36.119	35.819	34.810
160.00	35.948	35.648	34.760
165.00	35.776	35.476	34.710
170.00	35.608	35.308	34.660
175.00	35.461	35.161	34.610
180.00	35.313	35.013	34.560
185.00	35.166	34.866	34.510
190.00	35.022	34.722	34.460
195.00	34.820	34.520	34.410
200.00	34.598	34.298	34.360
205.00	34.399	34.099	34.310
210.00	34.200	33.900	34.260
215.00	33.972	33.672	34.210
220.00	33.657	33.357	34.160
225.00	33.266	32.966	34.110
230.00	32.875	32.575	34.060
235.00	32.473	32.173	33.643
240.00	32.260	31.960	
245.00	32.058	31.758	

SECTION D-D' - LONGSECTION
Scale: H 1:250,V 1:167. Datum: 30.000

NOTES

1. TOPOGRAPHIC DATA TAKEN FROM DRAWING 'GCS7032_TOPO' PROVIDED BY GRANITE CITY CURVEYS LTD.
2. SITE BOUNDARY TAKEN FROM DRAWING 'PA_70_LP_A - LOCATION PLAN' PROVIDED BY HARMONY ENERGY.
3. DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER SCHEME DRAWINGS.
4. REFER TO DRAWING 'FRDA-004' FOR TYPICAL DRAINAGE DETAILS
5. DESIGN SHOULD BE CONSIDERED OUTLINE DETAIL AND NOT FOR CONSTRUCTION. FINAL LEVELS, GRADIENTS AND ALIGNMENTS TO BE CONFIRMED AT LATER DESIGN STAGES

LEGEND

- PLANNING BOUNDARY
- EXISTING MAJOR CONTOURS (5.0m INTERVAL)
- EXISTING MINOR CONTOURS (1.0m INTERVAL)
- PROPOSED MAJOR CONTOURS (0.5m INTERVAL)
- PROPOSED MINOR CONTOURS (0.1m INTERVAL)
- AREA OF CUT
- AREA OF FILL

LEGEND - SECTION VIEW

- EXISTING GROUND LEVEL
- EXISTING SUPERFICIAL LEVEL (TOPSOIL STRIPPED)
- PROPOSED FORMATION LEVEL

REV	DATE	DESCRIPTION	BY	CHK
00	06/25	INITIAL ISSUE	GD	SD

CLIENT: HARMONY FL LTD

PROJECT: FLUSHING BESS

DRAWING TITLE: **EARTHWORKS OVERVIEW**

SCALE: 1:750 @ A1

DATE: JUNE 2025

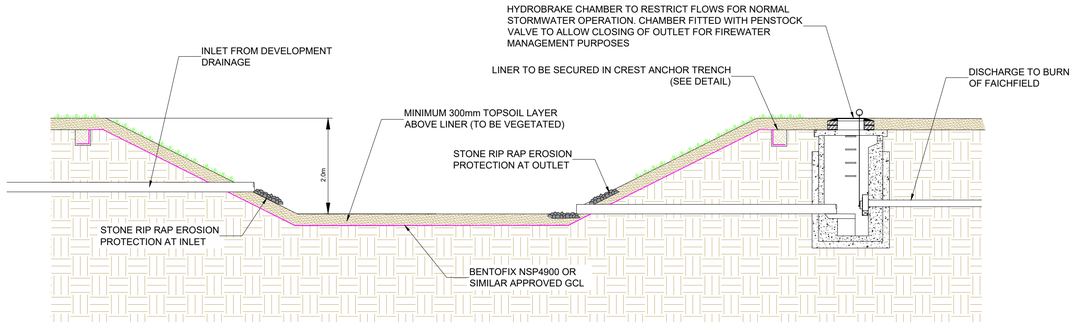
DRAWING NUMBER: **FWMP-002**

REV: **00**

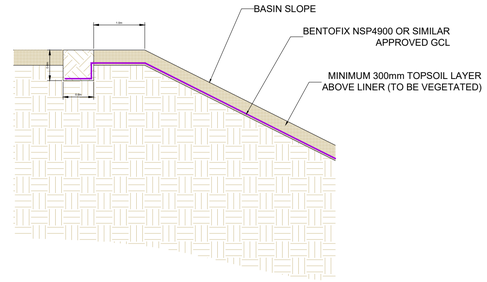
DRAWING STATUS: FOR PLANNING

GONDOLIN LAND & WATER LTD
15 Quayside Street
Edinburgh
EH6 6EJ
Registered Company No. SC706920

GONDOLIN Land & Water



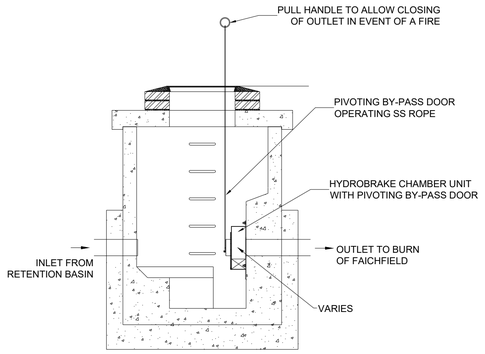
TYPICAL SECTION THROUGH ATTENUATION BASIN
NTS



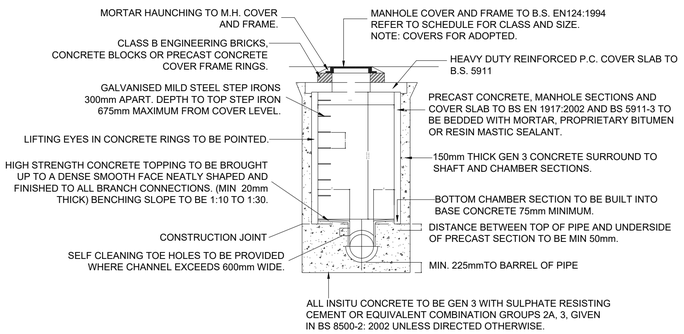
ANCHOR TRENCH DETAIL
NTS

NOTES

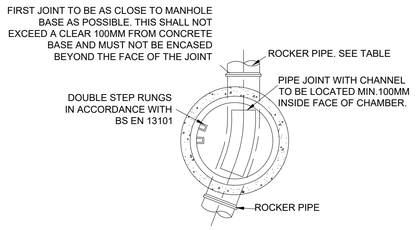
1. DO NOT SCALE THIS DRAWING.
2. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT MANUFACTURER'S DRAWINGS AND SPECIFICATIONS.
3. ALL PIPEWORK TO BE UPVC TO BS 4660 AND BS EN 1401-1, CLASS SN4 WITH FLEXIBLE JOINTS AND KITEMARK CERTIFIED (OR SIMILAR APPROVED).
4. THE CONTRACTOR IS TO REMAIN RESPONSIBLE FOR THE TEMPORARY STABILITY OF THE SURROUNDING GROUND THROUGHOUT THE CONSTRUCTION.
5. BEDDING CLASSES REFER TO THOSE FIVEN IN DMRB VOLUME 4, SECTION 2, PART 5, HA40/01, APPENDIX B.
6. ALL RELEVANT DRAINAGE ITEMS TO BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF 'SEWERS FOR ADOPTION'.
7. FOR DRAINAGE LAYOUT SEE DRAWING FRDA-003.
8. MANHOLE COVERS IN TRAFFICKED AREAS TO BE D400 LOAD CLASSIFICATION
9. MANHOLE COVERS ON NON-TRAFFICKED AREAS CAN BE B125 OR C250 LOAD CLASSIFICATION (AT CONTRACTORS DISCRETION)



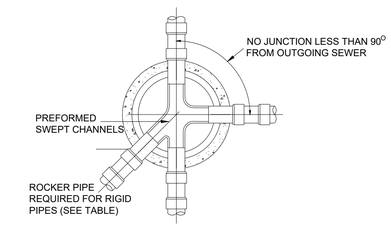
HYDROBRAKE OPTIMUM CHAMBER
NTS



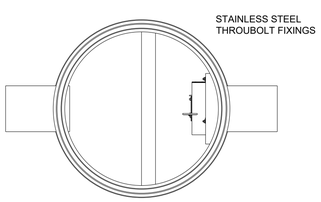
TYPICAL MANHOLE CHAMBER
NTS



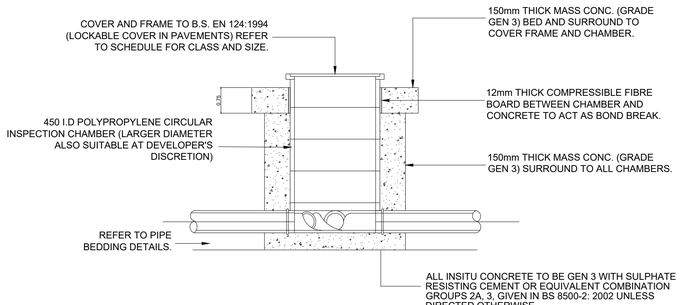
PLAN ON MANHOLE
NTS



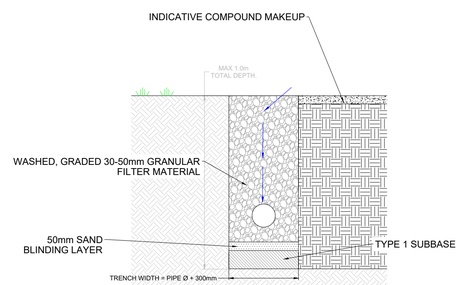
TYPICAL MANHOLE ARRANGEMENT OF PIPE JUNCTIONS
NTS



PLAN

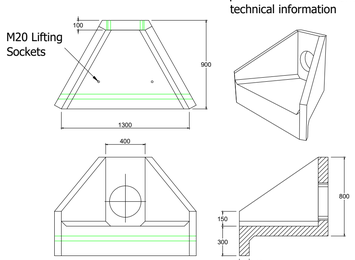


TYPICAL INSPECTION CHAMBER DETAIL
NTS



TYPICAL SECTION THROUGH CUT-OFF FILTER DRAIN AT COMPOUND EXTENTS
NTS

Note: Isometric drawing is for reference only, details may not accurately represent actual design - please see detailed views for technical information



PRECAST CONCRETE INLET HEADWALL (ATHLON H3CA OR SIMILAR) - FITTED TO SUDS BASIN INFLOW & OUTFLOW

REV	DATE	DESCRIPTION	BY	CHK
00	06/25	INITIAL ISSUE	CK	SD

CLIENT: HARMONY FL LTD

PROJECT: FLUSHING BESS

DRAWING TITLE: **FIREWATER MANAGEMENT DETAILS**

SCALE: NTS @ A1

DATE: JUNE 2025

DRAWING NUMBER: **FWMP-003**

REV: **00**

DRAWING STATUS: FOR PLANNING

GONDOLIN LAND & WATER LTD
15 Quayside Street
Edinburgh
EH6 6EJ
Registered Company No. SC706920

GONDOLIN Land & Water

FWMP-003 Details.dwg