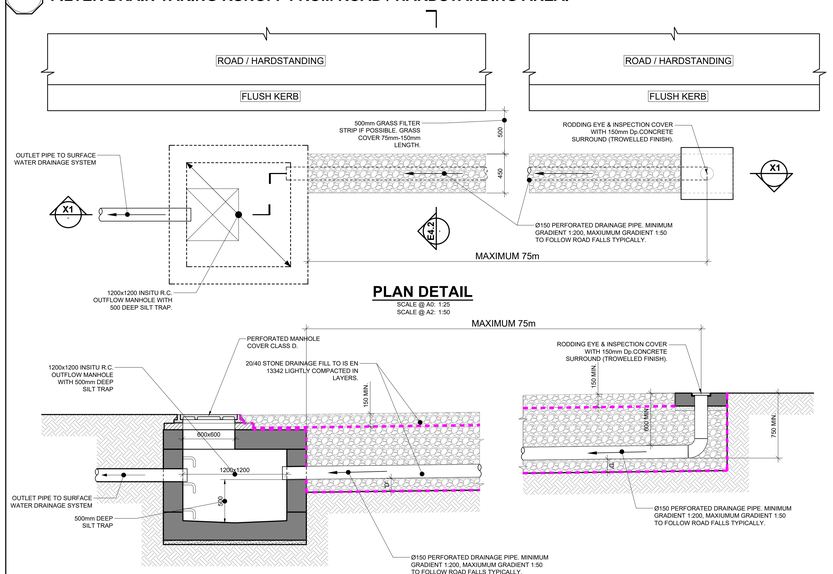
E4 FILTER DRAIN

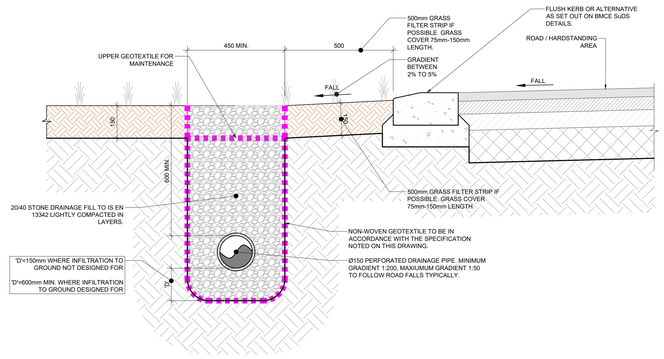
E4.1 FILTER DRAIN TAKING RUNOFF FROM ROAD / HARDSTANDING AREA.



PLAN DETAIL
SCALE @ A0: 1:25
SCALE @ A2: 1:50

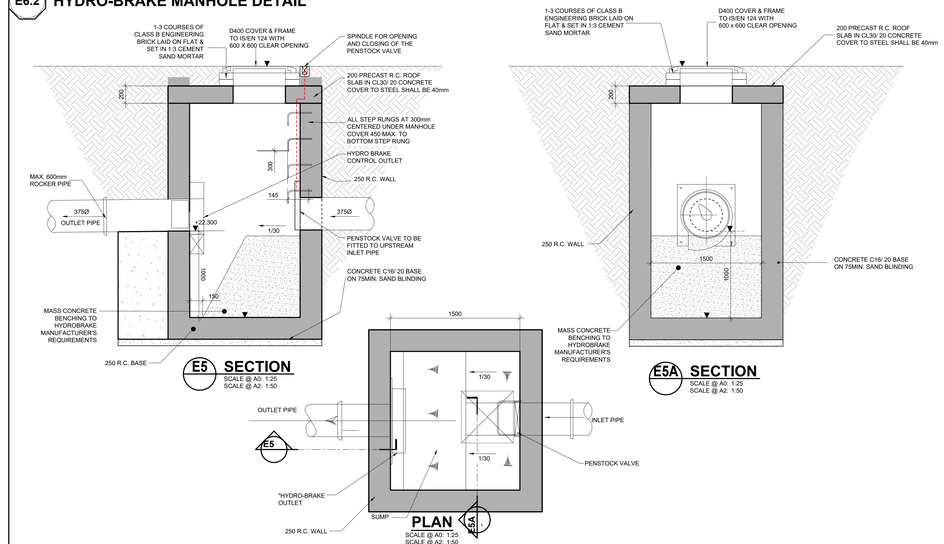
LONGITUDINAL SECTION
SCALE @ A0: 1:25
SCALE @ A2: 1:50

E4.2 FILTER DRAIN TAKING RUNOFF FROM ROAD / HARDSTANDING AREA.



TYPICAL SECTION
SCALE @ A0: 1:10
SCALE @ A2: 1:20

E6.2 HYDRO-BRAKE MANHOLE DETAIL



E5 SECTION
SCALE @ A0: 1:25
SCALE @ A2: 1:50

E5A SECTION
SCALE @ A0: 1:25
SCALE @ A2: 1:50

PLAN
SCALE @ A0: 1:25
SCALE @ A2: 1:50

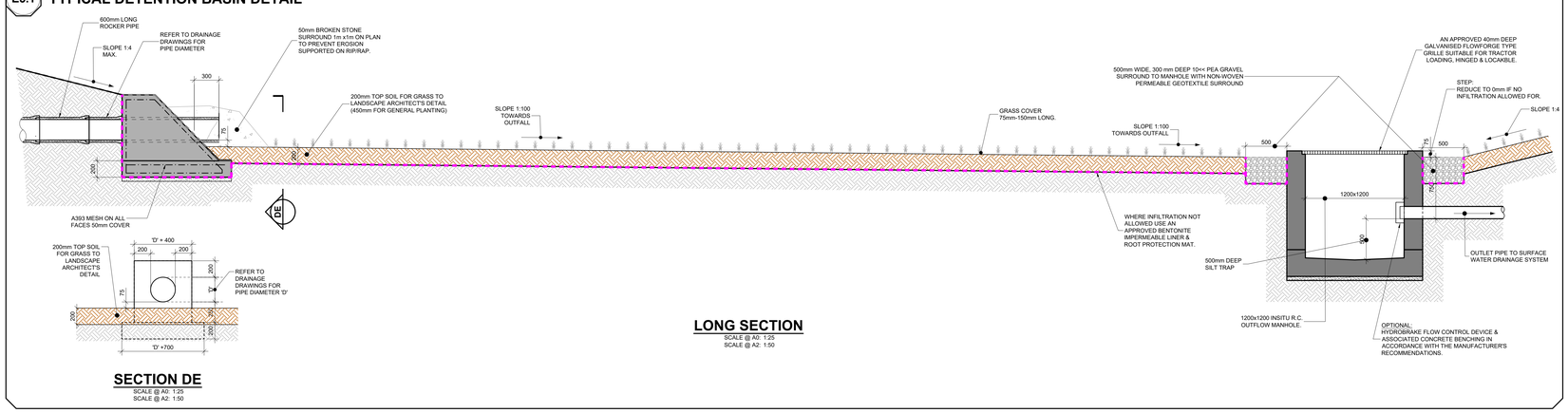
DETAILS OF HYDRO-BRAKE MANHOLE S1.4 WITH SILT TRAP (SIMILAR DETAILS APPLY FOR ALL SUCH MANHOLES)

MAINTENANCE REQUIREMENTS FOR FILTER DRAINS

REMOVE LITTER (INCLUDING LEAF LITTER) AND DEBRIS FROM FILTER DRAIN SURFACE, ACCESS CHAMBERS AND PRE-TREATMENT DEVICES ON A MONTHLY BASIS (OR AS REQUIRED).
INSPECT FILTER DRAIN SURFACE, INLET/OUTLET PIPEWORK AND CONTROL SYSTEMS FOR BLOCKAGES, CLOGGING, STANDING WATER AND STRUCTURAL DAMAGE ON A MONTHLY BASIS.
INSPECT PRE-TREATMENT SYSTEMS, INLETS AND PERFORATED PIPEWORK FOR SILT ACCUMULATION, AND ESTABLISH APPROPRIATE SILT REMOVAL FREQUENCIES ON A SIX MONTHLY BASIS .
REMOVE OR CONTROL TREE ROOTS WHERE THEY ARE ENCROACHING THE SIDES OF THE FILTER DRAIN, USING RECOMMENDED METHODS (e.g. NJUG, 2007 OR BS 3998:2010) AS REQUIRED
AT LOCATIONS WITH HIGH POLLUTION LOADS, REMOVE SURFACE GEOTEXTILE AND REPLACE, AND WASH OR REPLACE OVERLYING FILTER MEDIUM FIVE YEARLY, OR AS REQUIRED
CLEAR PERFORATED PIPEWORK OF BLOCKAGES AS REQUIRED.

E5 DETENTION BASIN

E5.1 TYPICAL DETENTION BASIN DETAIL



LONG SECTION
SCALE @ A0: 1:25
SCALE @ A2: 1:50

SECTION DE
SCALE @ A0: 1:25
SCALE @ A2: 1:50

NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL ENGINEERS & ARCHITECT'S DRAWINGS.FIGURED DIMENSIONS ONLY (NOT SCALING) TO BE USED. WHERE A CONFLICT OF INFORMATION EXISTS OR IF IN ANY DOUBT - ASK'.
2. CONSULTANTS TO BE INFORMED IMMEDIATELY OF ANY DISCREPANCIES BEFORE WORK PROCEEDS.

NOTES:

1. NON-WOVEN GEOTEXTILE SPECIFICATION. THE GEOTEXTILE SHALL:
   - SUSTAIN A TENSILE LOAD OF NOT LESS THAN 5.0kN/m AT BREAK AND HAVE A MINIMUM FAILURE STRAIN OF 10%

   WHEN DETERMINED IN ACCORDANCE WITH IS EN ISO 10319;
   - HAVE A MINIMUM PUNCTURE RESISTANCE OF 1200 N WHEN DETERMINED IN ACCORDANCE WITH IS EN ISO 12236;
   - HAVE A SIZE DISTRIBUTION OF PORE OPENINGS SUCH THAT THE APPARENT OPENING SIZE O90 WHEN DETERMINED

   IN ACCORDANCE WITH IS EN ISO 12956, OR OTHER APPROPRIATE TEST, IS LESS THAN 300 MICRONS
   - ALLOW WATER TO FLOW THROUGH IT, IN EITHER DIRECTION, NORMAL TO ITS PRINCIPAL PLANE AT A RATE OF NOT LESS

   THAN 10 l/m²/s, UNDER A CONSTANT HEAD OF WATER OF 100mm AND A MAXIMUM BREAKTHROUGH HEAD OF 50MM WHEN DETERMINED IN ACCORDANCE WITH IS EN ISO 12958.

2. PLAN AREA OF THE BIO-RETENTION AREA SHOULD BE 2-4% OF THE OVERALL AREA DRAINED. MAXIMUM WIDTH 10m UNLESS NOTED OTHERWISE.

PL2	16.05.25	ISSUED FOR PLANNING	MA
PL1	22.07.24	ISSUED FOR PLANNING	MA
ISSUE	DATE	DESCRIPTION	BY

Project Engineer: BO | Project Director: CK

BM STAGE: **PLANNING**

BARRETT MAHONY
Dublin Office: Sandwith House, 52-54 Lower Sandwith Street, Dublin 2, Ireland. Tel: (01) 677 3200 Fax: (01) 677 3164
London Office: 5th Floor, Mill House, 8 Mill Street, London SE1 2BA, United Kingdom Tel: (0044) 20 3750 3530
Consulting Engineers, Civil . Structural . Project Management.E-mail: bmce@bmce.ie Web: www.bmce.ie

CLIENT: **GOLDEN PORT HOMES LIMITED**

PROJECT TITLE: **FOREST LITTLE ROAD GOLDENPORT**

BM PROJECT No.: **24.183**

MODEL | REFERENCE: - | SUITABILITY: - | REVISION: -

DRAWING TITLE: **FILTER DRAIN, DETENTION BASIN DETAILS, WITH POND AND ASSOCIATED STRUCTURE'S DETAILS**

DWG | DRAWING REFERENCE: **FR-BMCE-ZZ-ZZ-DR-C-12321** | STATUS: - | REVISION: **PL2**