Legend.

- Existing Public Surface Water Sewer Network
- Existing Public Foul or Combined Sewer Network
- Surface Water Drainage Pipework 150mm dia U.N.O
- Surface Water Drainage Pipework 150mm dia U.N.O
- Rainwater downpipe (position & size by others)
- 300mm dia Back Inlet Gully with filter screen
- 900mm dia catchpit inspection chamber
- 500mm dia catchpit inspection chamber
- PFC — Permafilter Flow Control unit in inspection chamber
- 750mm dia catchpit inspection chamber
- Medium duty Permavoid Treatment Attenuation Conduit 400mm thick
- Reservoir Pavement with 350mm thick SudsAgg Porous Sub-Base
- Permavoid Diffuser unit 150mm thick
- Permachannel Combined Collection & Treatment Channel, with adjacent 708 wide x 150mm thick Permavoid Diffuser Conduit

Notes.

1. This drawing is to be read in conjunction with all relevant architects, engineers and specialist drawings.
2. Rainwater Management System design and construction to Engineers Specification.
3. All work is to be carried out in accordance with the latest edition of Building Regulations, BSI Codes of Practice and Local Authority requirements.
4. Stormwater attenuation/retention system shall be Permavoid (or similar approved) pre-formed modular geocellular system with minimum 95% volumetric void ratio and minimum 52% effective perforated surface area.
5. Designs shall be based on sound structural calculations supported with clear laboratory test results and shall consider both collapse and unit deflection. Consideration shall also be given to the effect of unit deflection on the overlying surface materials. Permanent dead loads (including lateral loads) from overlying surfacing or structural elements shall be based upon the construction drawings. Live loadings from vehicles and activities at the surface including maintenance shall be considered. Modular geo-cellular systems must be designed as structural components, using structural design theory in accordance with CIRIA Report C680.
6. Geocellular units to be encapsulated with geotextile in accordance with the Engineers specification. Units are to be installed in accordance with the manufacturer's recommendations.
7. The geocellular system shall be encapsulated with a geotextile suitable to provide separation and filtration between the geocellular layer and the overlying landscape finishes and shall also be compatible with and protect the underlying waterproof membrane system. The geotextile shall be laid with 300mm overlaps, and be applied to external surfaces of the geocellular units as detailed on the Engineering drawing(s). Geotextile to be installed in accordance with the manufacturer's recommendations.
8. Waterproof geomembrane to be single layer cold applied robust welded flexible membrane suitable for waterproofing to structures and for water containment. Membrane to be nominal 1mm thick laid with minimum 120mm laps and welded seams. All welded seams shall be tested using appropriate non-destructive techniques such as air pressure testing of twin-wedge welded seams, air lance testing or similar. Geomembrane to be installed in accordance with the manufacturer's recommendations. The whole area of the installed membrane shall be visually inspected and tested using appropriate techniques such as dialectric testing or similar.
9. Geocellular units shall generally be laid with zero falls unless notes otherwise and laid on a prepared even formation that shall be free from undulations, sharp steps or protrusions. The formation shall achieve a maximum deflection of 5mm in 3.0m in any direction. The formation shall be inspected by the Engineer and installing contractor to ensue acceptability for the construction of the geocellular tank.
10. The installer shall ensure that all expected temporary construction loads have been considered as part of the structural design. Any load additional/unplanned to that considered as part of the structural design shall be immediately brought to the attention of the Engineer. All necessary precautions shall be taken to prevent the overloading of the geocellular structure.
11. Proprietary flow control outlets shall be provided to suit. Flow control outlets shall be sized to suit the required attenuation/retention application and be located where indicated in the Engineering drawings.
12. All dimensions are in millimetres unless otherwise stated.
13. Do not scale from this drawing. If in doubt ask.
14. Should there be any conflict between the details indicated on this drawing and those on other drawings the Engineer should be informed PRIOR to to works proceeding on site.
15. **Until technical approval has been obtained from the relevant Authority, it should be understood that all drawings are PRELIMINARY and NOT OR CONSTRUCTION.**
16. At all times the works are to be executed in accordance with the requirements of the Health and Safety at Work Act 1974 and current CDM Regulations.
17. Copyright in this document belongs to The Environmental Protection Group Ltd & all rights in it are reserved by the owner.
18. No part of this drawing may be copied, transferred, or made available to users other than the original recipient, including electronically, without prior permission from The Environmental Protection Group Ltd.

STATUS	REV	DATE	REVISION HISTORY	DSG | DRW | CHK | APP
S3	P02	07.11.22	Design amended due to updated proposed plans	RG | GH | SW | PW
S3	P01	28.02.18	Issued for comment and discussion	RG | JHR | RG | PC

ALL REVISIONS

CLIENT

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DRAWING TITLE

Maple & Poplar
Hayes, London
Surface Water Management
Alternative Sustainable Drainage Layout

	Name	Signature	Date
Designed by	RG		28/02/2018
Drawn by	JHR		28/02/2018
Checked	RG		28/02/2018
Approved	PC		28/02/2018

EPG REF	SCALE @ A1	BIM FILE NAME - REVISION
8798	1:200	-
	S3 - Suitable for Internal Review & Comment	

PROJECT	ISSUER	VOLUME	LEVEL	TYPE	ROLE	NUMBER	REV
8798	EPG	XX	00	DR	Y	0001	P02