

St Thomas, Crumpsall

Surface Water & Sustainable Drainage (Planning Condition 10c & 11)



John Southworth Builders Ltd



Drainage Strategy

SURFACE WATER DRAINAGE STRATEGY

THE PROPOSED DRAINAGE STRATEGY TO BE MAINTAINED AS SEPARATE FOLI AND SURFACE WATER DRAINAGE SYSTEM.

THE SURFACE WATER DRAINAGE STRATEGY HAS BEEN DESIGNED IN ACCORDANCE WITH BS EN 124 AND THE BUILDING REGULATIONS APPROVED DOCUMENT A 600, WHICH INDICATES THE FOLLOWING REQUIREMENTS FOR THE DISPOSAL OF SURFACE WATER DRAINAGE FROM DEVELOPMENT SITES:

1. DISCHARGE TO INFILTRATION
2. DISCHARGE TO DRAINAGE
3. DISCHARGE TO SEWER

IN LINE WITH THE BUILDING REGULATIONS, THE DRAINAGE STRATEGY SHOULD BE CONSIDERED FIRST WHEN LOOKING TO DISCHARGE SURFACE WATER FROM PROPOSED DEVELOPMENT SITES.

ON THE BASIS, INFILTRATION TESTING HAS BEEN CARRIED OUT ON SITE IN THE REAR GARDENS FOR PROPOSED PLOTS 3 TO 5. THE TESTING CONFIRMED AN INFILTRATION RATE OF 1.0 L/S/M².

AN INFILTRATION BLANKET IS PROPOSED WITHIN REAR GARDENS FOR PROPOSED PLOTS 3 TO 5. THE INFILTRATION BLANKET SHOULD BE 150mm DEEP AND 150mm WIDE. THE BASE OF THE BLANKET SHOULD BE 150mm BELOW THE GROUND LEVEL ON THE YEAR STORM EVENT INCLUDING A 1% ALLOWANCE FOR CLIMATE CHANGE.

MAINTENANCE OF DRAINAGE SYSTEMS

THE REAR GARDENS FOR SURFACE WATER DRAINAGE PROPOSED AS A DRAINAGE SYSTEM ARE RELATIVELY TRADITIONAL IN NATURE AND SHOULD PROVIDE YEARS OF LOW MAINTENANCE OPERATION IN RELATION TO THE ANTICIPATED LIFE OF THE PROPOSED DEVELOPMENT.

HOWEVER IN LINE WITH GOOD PRACTICE, THE INSTALLATIONS SHOULD BE MAINTAINED ON AN ANNUAL BASIS AS A MINIMUM. WITH ADDITIONAL INSPECTIONS CONSIDERED FOR PROPOSED PLOTS 3 TO 5. THE INFILTRATION BLANKET SHOULD BE MAINTAINED ON AN ANNUAL BASIS.

COLLECTED AND LINED DRAINAGE CHANGES SHOULD BE INSPECTED AND FOR CLEANED OUT AT 15 MONTHLY INTERVALS.

PROPOSED DRAINAGE CHANGES, SUCH AS POT PIPES ETC. SHOULD BE INSPECTED AT 15 MONTHLY INTERVALS TO ENSURE THAT THE PROPOSED DRAINAGE SYSTEM IS RUNNING FREELY.

WHERE PROBLEMS ARE IDENTIFIED WITH THE REAR GARDENS PROPOSED, IT MAY BE NECESSARY TO CLEAN OUT AND CITY SURVEY THE PROPOSED DRAINAGE SYSTEM TO CONFIRM THE NATURE OF THE PROBLEM.

ANY PROBLEMS IDENTIFIED BY THESE INSPECTIONS SHOULD BE IMMEDIATELY REPORTED AS SOON AS POSSIBLE TO THE DEVELOPER/MANAGEMENT OF THE DRAINAGE SYSTEM IN ORDER TO AVOID POTENTIAL DAMAGE TO THE DRAINAGE SYSTEM ITSELF OR THE DEVELOPMENT THAT IT SERVES.

IT IS ANTICIPATED THAT THE ROUTINE MONITORING AND MAINTENANCE OF THE DRAINAGE SYSTEMS WILL BE CARRIED OUT BY THE DEVELOPER/MANAGEMENT OF THE DRAINAGE SYSTEM. THE DEVELOPER/MANAGEMENT OF THE DRAINAGE SYSTEM SHOULD BE A SPECIALIST DRAINAGE SURVEYOR AND/OR CONTRACTOR IF ANY PROBLEMS ARE REQUIRED OF A MORE COMPLICATED NATURE.

PRELIMINARY

P01	UPDATED TO SUIT NEW RW POP-UPS AND TO DISCHARGE THE INFILTRATION	14.11.18	HB	AJW
P02	AMENDED TO REFLECT RESULTS OF DRAINAGE SURVEY (14.11.18)	14.11.18	RPT	AJW
P03	AMENDED TO REFLECT RESULTS OF DRAINAGE SURVEY (14.11.18)	14.11.18	RPT	AJW
P04	PRELIMINARY ISSUE	14.11.18	RPT	AJW
Rev.	Amendment	Date	By	Chkd

ST. THOMAS SCHOOL, RESIDENTIAL

Client

JOHN SOUTHWORTH BUILDINGS

Proposed

PROPOSED DRAINAGE LAYOUT

8243

WML CONSULTING

Call: 01246 810000

www.wmlconsulting.co.uk

Project No.

8243 - WML - XX - 00 - DR - C - 1001

Project

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GENERAL NOTES

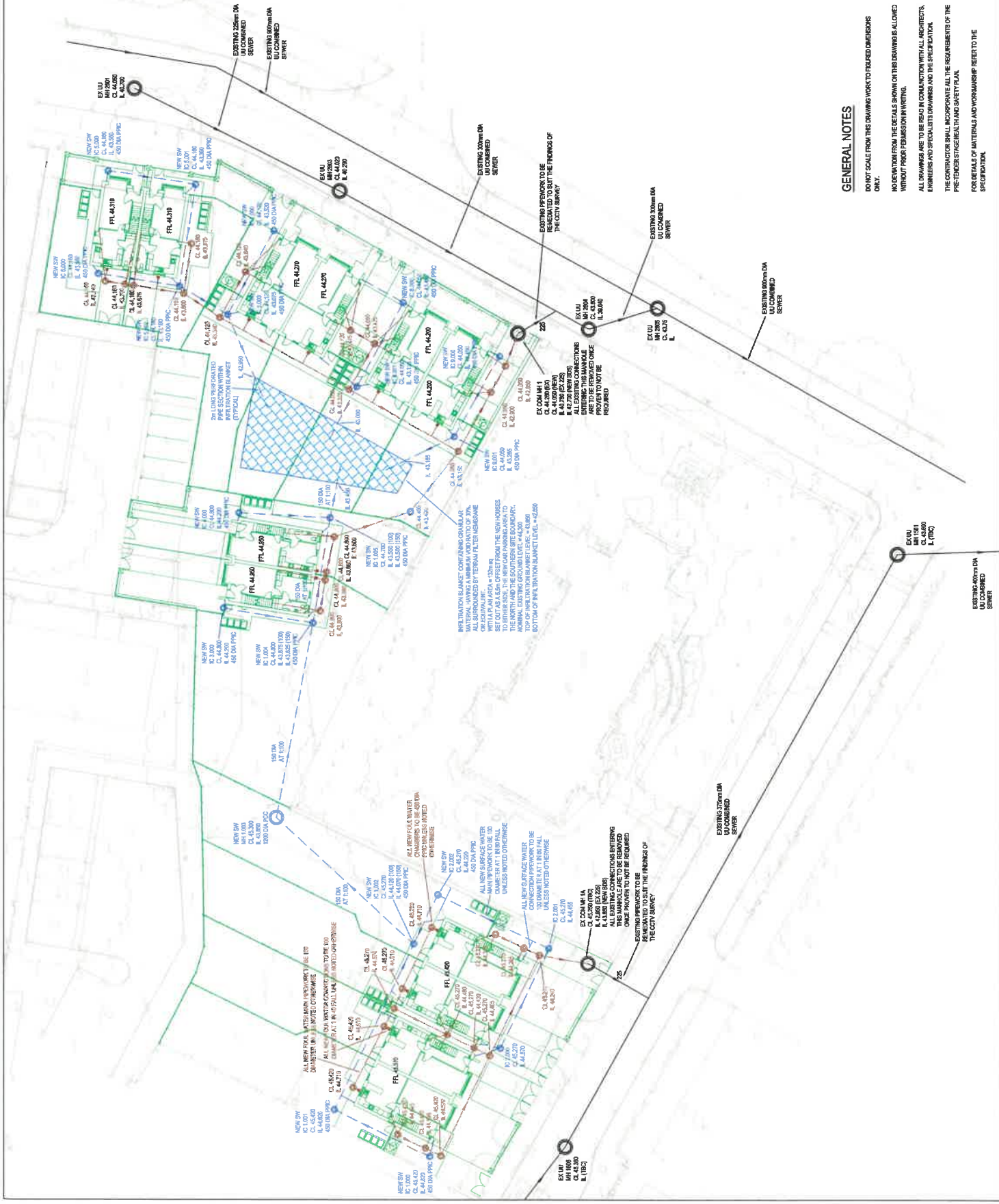
DO NOT SCALE FROM THE DRAWING WORK TO THE DIMENSIONS ONLY.

NO DEVIATION FROM THE DETAILS SHOWN ON THIS DRAWING IS ALLOWED WITHOUT PRIOR PERMISSION IN WRITING.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL APPLICABLE STANDARDS, SPECIFICATIONS AND THE SPECIFICATION.

THE CONTRACTOR SHALL INCORPORATE ALL THE REQUIREMENTS OF THE PRELIMINARY STAGE HEALTH AND SAFETY PLAN.

FOR DETAILS OF MATERIALS AND WORKMANSHIP REFER TO THE SPECIFICATION.



Filtration Membrane

(Data Sheet)

TS1000

Technical data

TenCate Polyfelt® TS1000 is a UV stabilized polypropylene continuous filament needle-punched nonwoven geotextile



Properties [Standard]		Unit	TS1000
Tensile strength [EN ISO 10319]	MD	kN/m	8
	CD	kN/m	8
Elongation at max. load [EN ISO 10319]	MD	%	90
	CD	%	75
Puncture resistance (CBR) [EN ISO 12236]		N	1500
Dynamic puncture resistance (cone drop) [EN ISO 13433]	hole-Ø	mm	26
Water permeability vertical [EN ISO 11058]	VI _{H50}	l/m ² s	130
Opening size [EN ISO 12956]	O ₉₀	mm	0.12
Thickness [EN ISO 9863-1]	at 2kPa	mm	0.8
Mass [EN ISO 9864]		g/m ²	105
Form of supply			
Width		m	4
Length		m	112.5
Area		m ²	450

The values given are average values obtained in our laboratories and in testing institutes. The right is reserved to make changes without notice at any time.

MD ... machine direction
CD ... cross direction

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Protective Fabrics
Outdoor Fabrics
Advanced Composites
Advanced Armour

Geosynthetics
Grass

Construction of the Filtration Tank



