Project: Greenbrow Road, Wythenshaw

Planning Application No: 139537/FO/2024

Date: 30th March 2026

Document: Surface Water Drainage Design Philosophy

Redline Boundary Area		0.1462 ha
Predevelopment Drained Area		0.1462 ha
Post Development Areas	Roofs	0.0508 ha
	Paved Areas	0.0709 ha
	Soft landscaping	0.0245 ha
Post Development Drained Area		0.1217 ha
Greenfield Runoff Rates	QBar	1.0 l/s
	1:1	0.9 l/s
	1:2	1.0 l/s
	1:30	1.7 l/s
	1:100	2.1 l/s
Brownfield Method		35mm/hr + Betterment
Betterment Factor		50% as indicated in condition
Brownfield Discharge Rate (with betterment)		7.1 l/s
Existing Outfall Pipework		150mm Vitrified Cay outfall connection 12m into adjacent site
United Utilities Requirements		5.0l/s into surface water sewer
Design Storm Event		1: 100 + 45% Climate Change as indicated in condition
Urban Creep		0% - no room for an extension
Storage Required – based on 5l/s		45m^3
Discharge Hierarchy	Infiltration	No infiltration possible on site
	Watercourse	Nearest watercourse in Fairywell Brook to the south and Millbrook to the North – no direct connection possible due to third party land
	Surface Water Sewer	Nearest surface water sewer 15m to the east within Greenbrow Road
	Combined Sewer	Nearest combined sewer is 15m south of site – existing discharge location
	Connection proposed into surface water sewer as requested by United Utilities.	