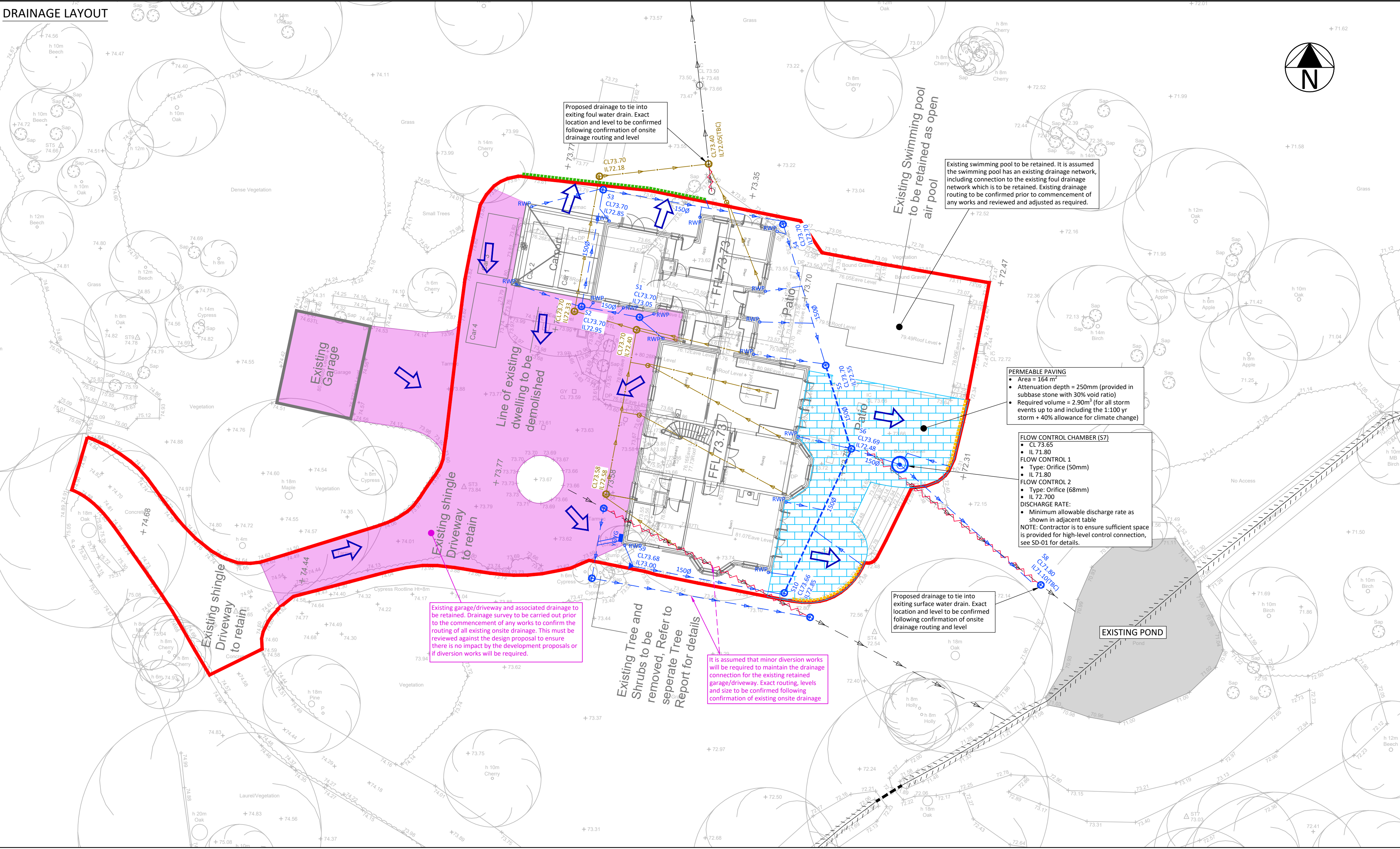


DRAINAGE LAYOUT



MAINTENANCE SCHEDULE - FILTER DRAIN		
Maintenance schedule	Required action	Typical frequency
Regular maintenance	Remove litter including leaf litter and debris from filter drain surface, access chambers and pre-treatment devices	Monthly (or as required)
	Inspect filter drain surface, inlet/outlet pipework and control systems for blockages, clogging, standing water and structural damage	Monthly
	Inspect pre-treatment systems, inlets and perforated pipework for silt accumulation, and establish appropriate silt removal frequencies	Six monthly
	Remove sediment from pre-treatment devices	Six monthly, or as required
Occasional maintenance	Remove or control tree roots where they are encroaching the sides of the filter drain, using recommended methods (eg NIUG, 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
MAINTENANCE SCHEDULE - PERMEABLE PAVING		
Maintenance schedule	Required action	Typical frequency
Regular maintenance	Brushing and vacuuming (standard cosmetic sweep over whole surface)	Once a year, after autumn leaf fall, or reduced frequency as required, based on site-specific observations of clogging or manufacturer's recommendations
Occasional maintenance	Stabilise and mow contributing and adjacent areas	As required
	Removal of weeds or management using glyphosate applied directly into the weeds by an applicator rather than spraying	As required - once per year on less frequently used pavements
Remedial actions	Remediate any landscaping which, through vegetation maintenance or soil slip, has been raised to within 50 mm of the level of the paving	As required
	Remedial work to any depressions, rutting and cracked or broken blocks considered detrimental to the structural performance or a hazard to users, and replace lost jointing material	As required
	Rehabilitation of surface and upper substructure by remedial sweeping	Every 10 to 15 years or as required (if infiltration performance is reduced due to significant clogging)
Monitoring	Initial inspection	Monthly for three months after installation
	Inspect for evidence of poor operation and/or weed growth - if required, take remedial action	Three-monthly, 48 h after large storms in first six months
	Inspect silt accumulation rates and establish appropriate brushing frequencies	Annually
	Monitor inspection chambers	Annually

EXISTING BROWNFIELD DISCHARGE RATES (MODIFIED RATIONAL METHOD)	
Parameters	
Contributing area	0.05 ha ⁽¹⁾
PIMP	100%
CV	1
Time of concentration	5 minutes
Storm	
1:1 year storm	9.9 l/s
1:30 year storm	23.4 l/s
1:100 year storm	29.6 l/s

PROPOSED ALLOWABLE DISCHARGE RATES		
Storm	Discharge rate	Betterment over existing
1:1 year storm	4.95 l/s	50%
1:30 year storm	11.7 l/s	50%
1:100 year storm + 40% allowance for climate change	14.8 l/s	50%

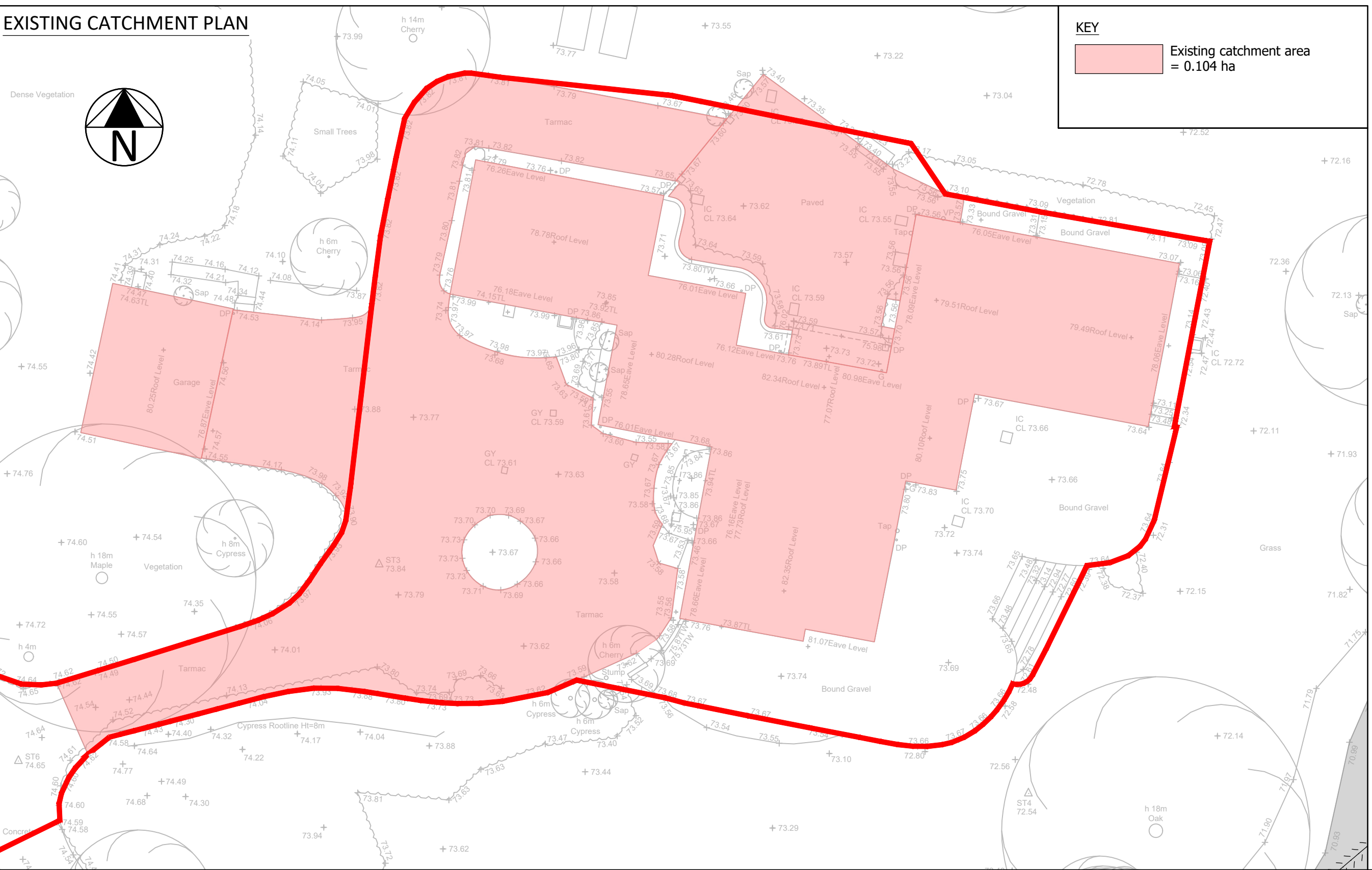
Note: (1) Catchment area is based the developable area (existing catchment minus existing catchment area to drain to existing as per existing scenario)

- KEY**
- Site boundary
 - Overland flow route
 - EXISTING PRIVATE DRAINAGE
 - Foul water sewer
 - Surface water sewer
 - Watercourse
 - Existing drainage to be abandoned (assumed, subject to onsite survey works)
- Note:**
- Routing shown is indicative only (based on sketch provided) showing the outfall routing of existing onsite drainage to help inform the design proposals. Exact level and routing of existing drainage features must be confirmed prior to the commencement of any works and design proposals reviewed and updated to suit.
 - Prior to abandoning any drainage the contractor is to confirm that no upstream connections are present.

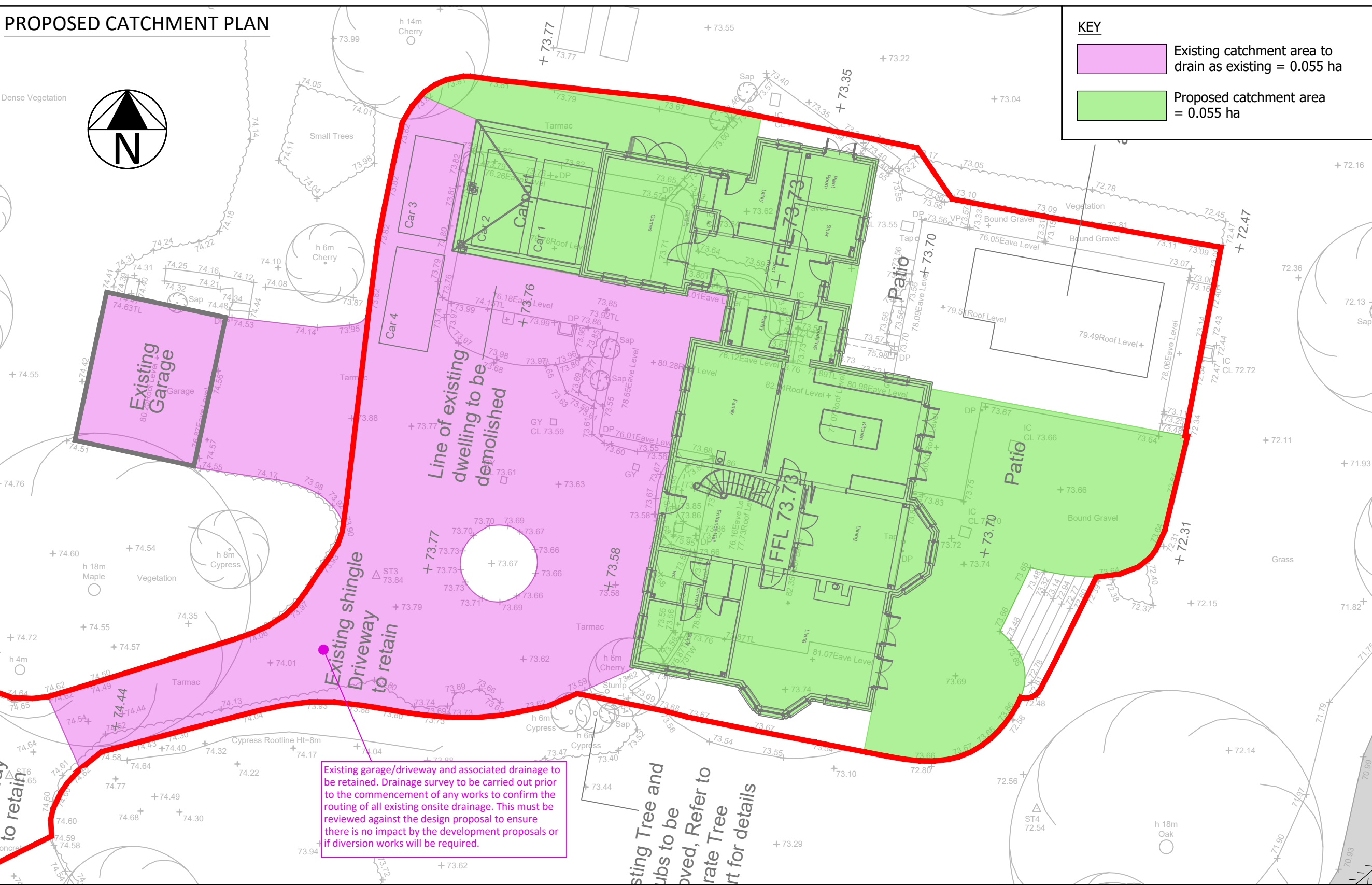
- PROPOSED PRIVATE DRAINAGE (FOR DETAILS REFER TO SD-01)**
- Foul water drain
 - Surface water drain (100Ø unless stated otherwise)
 - Foul water inspection chamber
 - Foul water mini inspection chamber
 - Surface water inspection chamber
 - Flow control chamber
 - Rainwater pipe (exact location to be confirmed by others)
 - Gully
 - Filter drain with connection to proposed drainage network.
 - Permeable paving
 - Perforated pipe set within permeable paving stone subbase
 - SC Fin drain located at low point of permeable paving within stone subbase with connection to proposed drainage network

- NOTES:**
- All building drainage works shall be carried out in accordance with the current British/European Standards BSEN752, the current Building Regulations and the Local Authority Building Control specifications and requirements.
 - Exact location of rainwater downpipes and all internal drainage points to be confirmed by architect. Rainwater pipe outlets to be roof-able. Once confirmed this is then to be reviewed in line with the drainage proposals.
 - All drainage works to be constructed from the outfall towards the head of run to ensure the outfall can be achieved.
 - Contractor to verify location & level of receiving existing drainage prior to commencement of any works.
 - Contractor to verify locations of all existing services prior to commencement and arrange for any necessary protection, diversion or lowering works as required.
 - Proposed finished levels to be designed by others. As a result all proposed finished levels shown are to be reviewed in line with the proposed external works plan produced by others. Where levels are adjusted on the existing drive, existing gully locations are to be reviewed and adjusted as required.
 - Foul water minimum allowable gradient:
 - 1:80 where connected to a minimum of 1WC,
 - otherwise min 1:40
 - Surface water minimum allowable gradient of 1:100 unless otherwise stated.
 - Where retaining walls and plot/garage foundations are in the close vicinity of drainage, all foundations are to be below invert levels of pipes / tanks as not to cause loading onto drainage.
 - This drawing is intended to assist with gaining planning approval only. The contractor is to review all design proposals and make any required changes to ensure all proposals are coordinated and there is no conflicting information.
 - All proposals shown are based on information available at the time.
 - Prior to the commencement of any works all required agreements must be in place (i.e. S105 to communicate with the public sewer)

EXISTING CATCHMENT PLAN



PROPOSED CATCHMENT PLAN



B	Below slab drainage points updated	23/05/24	JH	MG
A	First issue	03/05/24	JH	MG
REV.	DESCRIPTION	Date	BY	CHK

DRAWING STATUS: FOR INFORMATION ONLY



CLIENT: Mr & Mrs J Marino

ARCHITECT: Bonney Architecture

PROJECT: Willow Wick Farm

TITLE: Drainage Strategy Layout

SCALE @ A1: 0 1:200 10 metres

PROJECT NO:	DRAWING NO:	REV:
23082	PDL-01	B