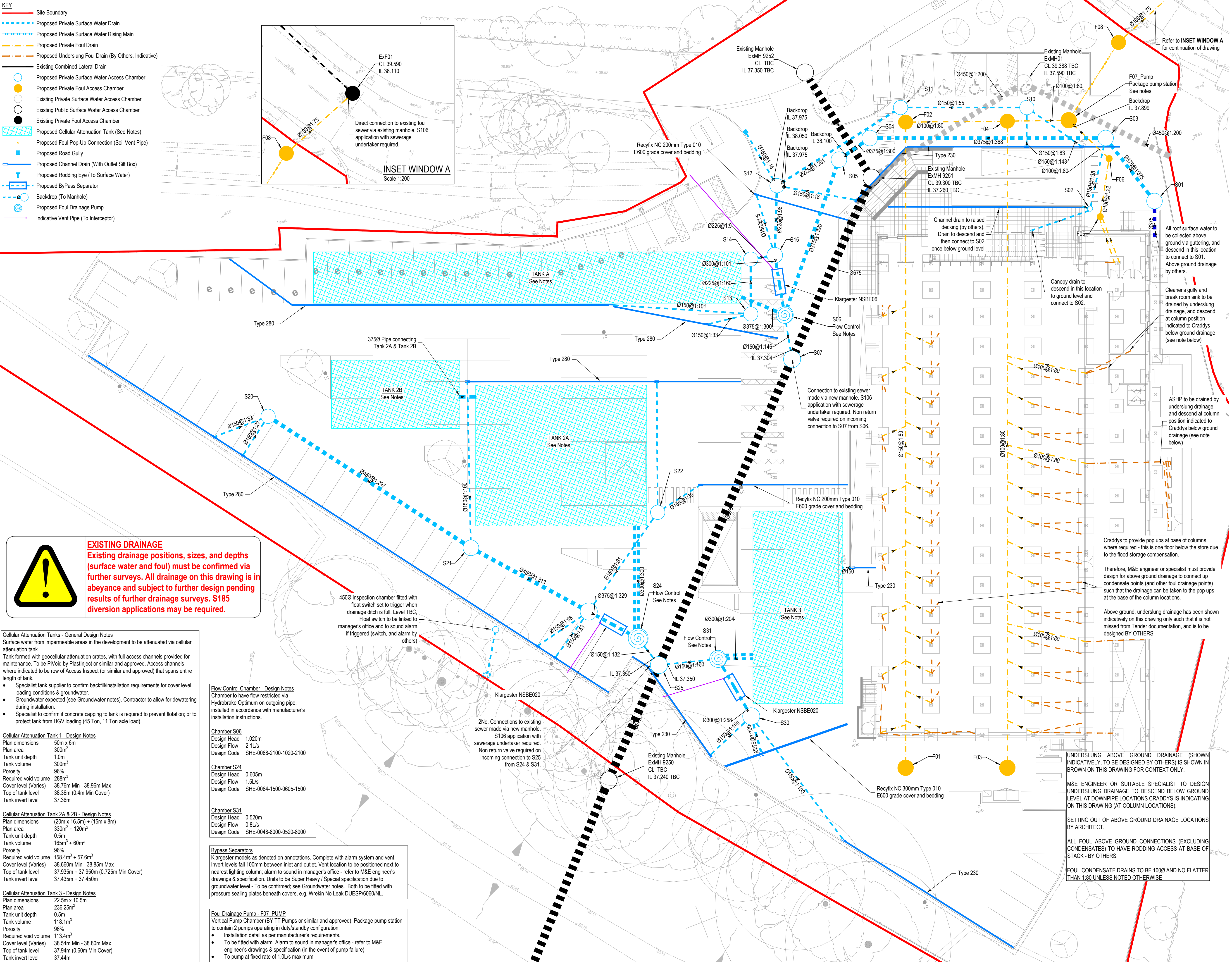


- KEY**
- Site Boundary
 - Proposed Private Surface Water Drain
 - Proposed Private Surface Water Rising Main
 - Proposed Private Foul Drain
 - Proposed Underslung Foul Drain (By Others, Indicative)
 - Existing Combined Lateral Drain
 - Proposed Private Surface Water Access Chamber
 - Proposed Private Foul Access Chamber
 - Existing Private Surface Water Access Chamber
 - Existing Public Surface Water Access Chamber
 - Existing Private Foul Access Chamber
 - Proposed Cellular Attenuation Tank (See Notes)
 - Proposed Foul Pop-Up Connection (Soil Vent Pipe)
 - Proposed Road Gully
 - Proposed Channel Drain (With Outlet Silt Box)
 - Proposed Rodding Eye (To Surface Water)
 - Proposed ByPass Separator
 - Backdrop (To Manhole)
 - Proposed Foul Drainage Pump
 - Indicative Vent Pipe (To Interceptor)



EXISTING DRAINAGE

Existing drainage positions, sizes, and depths (surface water and foul) must be confirmed via further surveys. All drainage on this drawing is in abeyance and subject to further design pending results of further drainage surveys. S185 diversion applications may be required.

Cellular Attenuation Tanks - General Design Notes
Surface water from impermeable areas in the development to be attenuated via cellular attenuation tank.
Tank formed with geocellular attenuation crates, with full access channels provided for maintenance. To be PIVoid by Plastinject or similar and approved. Access channels where indicated to be row of Access Inspect (or similar and approved) that spans entire length of tank.

- Specialist tank supplier to confirm backfill/installation requirements for cover level, loading conditions & groundwater.
- Groundwater expected (see Groundwater notes). Contractor to allow for dewatering during installation.
- Specialist to confirm if concrete capping to tank is required to prevent flotation; or to protect tank from HGV loading (45 Ton, 11 Ton axle load).

Cellular Attenuation Tank 1 - Design Notes
Plan dimensions 50m x 8m
Plan area 300m²
Tank unit depth 1.0m
Tank volume 300m³
Porosity 96%
Required void volume 288m³
Cover level (Varies) 38.76m Min - 38.96m Max
Top of tank level 38.36m (0.4m Min Cover)
Tank invert level 37.36m

Cellular Attenuation Tank 2A & 2B - Design Notes
Plan dimensions (20m x 16.5m) + (15m x 8m)
Plan area 330m² + 120m²
Tank unit depth 0.5m
Tank volume 165m³ + 60m³
Porosity 96%
Required void volume 158.4m³ + 57.6m³
Cover level (Varies) 38.660m Min - 38.85m Max
Top of tank level 37.935m + 37.950m (0.725m Min Cover)
Tank invert level 37.435m + 37.450m

Cellular Attenuation Tank 3 - Design Notes
Plan dimensions 22.5m x 10.5m
Plan area 236.25m²
Tank unit depth 0.5m
Tank volume 118.1m³
Porosity 96%
Required void volume 113.4m³
Cover level (Varies) 38.54m Min - 38.80m Max
Top of tank level 37.94m (0.60m Min Cover)
Tank invert level 37.44m

Flow Control Chamber - Design Notes
Chamber to have flow restricted via Hydrobrake Optimum on outgoing pipe, installed in accordance with manufacturer's installation instructions.

Chamber S06
Design Head 1.020m
Design Flow 2.1L/s
Design Code SHE-0068-2100-1020-2100

Chamber S24
Design Head 0.605m
Design Flow 1.5L/s
Design Code SHE-0064-1500-0605-1500

Chamber S31
Design Head 0.520m
Design Flow 0.8L/s
Design Code SHE-0048-8000-0520-8000

Bypass Separators
Klargester models as denoted on annotations. Complete with alarm system and vent. Invert levels fall 100mm between inlet and outlet. Vent location to be positioned next to nearest lighting column; alarm to sound in manager's office - refer to M&E engineer's drawings & specification. Units to be Super Heavy / Special specification due to groundwater level - To be confirmed; see Groundwater notes. Both to be fitted with pressure sealing plates beneath covers, e.g. Wrekin No Leak DUESP/6060/NL.

Foul Drainage Pump - F07_PUMP
Vertical Pump Chamber (BY TT Pumps or similar and approved). Package pump station to contain 2 pumps operating in duty/standby configuration.
Installation detail as per manufacturer's requirements.
To be fitted with alarm. Alarm to sound in manager's office - refer to M&E engineer's drawings & specification (in the event of pump failure)
To pump at fixed rate of 1.0L/s maximum

REV	DATE	DESCRIPTION	DRW	CHK
COT	18.12.25	FIRST ISSUE	AJP	RJH

GENERAL NOTES

DRAWINGS AND SPECIFICATIONS: This drawing is to be read in conjunction with all relevant Architects, Engineers and Specialists drawings together with the specification.

BUILDING REGULATIONS AND WARRANTY PROVIDER APPROVALS: Please note that it is the responsibility of the Client/Main Contractor to ensure that Building Regulations and warranty provider (e.g. NHBC) approval of all design and construction details is achieved prior to construction on site.

DRAINAGE NOTES

DRAINAGE STANDARDS: All private drainage works shall be in accordance with Building Regulations Document Part H. All adoptable drainage works shall be in accordance with Sewerage Sector Guidance Appendix C : Design and Construction Guidance and statutory undertaker's requirements.

ABOVE GROUND DRAINAGE: RWP/SVP drainage positions shown on Craddys drawings, upon which the below ground drainage is designed, are based upon the positions provided to us by the Architect and these are to be set out on the Architect's floor plans unless agreed otherwise. If above ground drainage positions change then Craddys will need to be informed of these changes in writing and the changes in position clearly noted or highlighted on a drawing, i.e. using revision clouds, with relevant CAD files provided to Craddys below ground drainage drawings to be updated. Note that should these changes occur following Craddys issue of Construction status drawings then there is a risk of the contractor undertaking abortive works.

LAYING DRAINAGE: It is recommended that all drains be laid starting from the downstream connection to the existing network and working upstream to and through the new development. Surface water drainage to be laid at 1:80 minimum unless noted otherwise (UNO). Foul drainage to be laid at 1:40 minimum UNO.

DRAINAGE PIPE SIZES: All private foul water drains to be 100mm diameter UNO; all private surface water drains to be 150mm diameter UNO.

MANHOLE COVER LEVELS: All manhole & inspection chamber cover levels are to be adjusted to suit the proposed finished surface levels. If the cover levels proposed in the drainage schedules vary from proposed surface level by more than 100mm, Contractor to notify Craddys.

PIPE MATERIAL: All private and adoptable drainage pipes less than 500mm diameter to be class SN8 Plastic. Pipes to be laid in 3m lengths.

PPIC: All PPIC's to be orientated such that the main discharge passes through the main/middle branch. Additionally all foul PPIC's to be orientated such that a toilet or bathroom soil stack connects to the middle/main branch.

CHANNEL DRAINS: Unless noted otherwise, all drainage channels to be "Recyfix Monotec 110mm" by Hauraton, with Trash Box at outlet. Channel Type as specified. To be installed in accordance with manufacturer's details. Grated covers to be D400 grade.

C D M : SIGNIFICANT HAZARDS	
THE FOLLOWING HEALTH AND SAFETY HAZARDS ARE IDENTIFIED BY THE DESIGNER AS ABNORMAL IN PURSUANCE OF THE CURRENT CONSTRUCTION DESIGN AND MANAGEMENT REGULATIONS.	
RISKS DURING CONSTRUCTION: - Existing Services - Deep Excavation - High Groundwater	
OPERATION / MAINTENANCE RISKS: No abnormal risks have been identified relating to this design element.	
RISKS DURING DEMOLITION/DECOMMISSIONING/DISMANTLING/ALTERATIONS: No abnormal risks have been identified relating to this design element.	
IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY COMPETENT & ADEQUATELY RESOURCED CONTRACTOR(S) TO SAFE SYSTEMS OF WORK.	
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Client	ALDI - Aldi Stores Ltd.
Project Title	ALDI STORE
Project Address	GAZELLE CLOSE WINNERSH, WOKINGHAM

Drawing Title					
PROPOSED DRAINAGE GENERAL ARRANGEMENT					
Job No.	Originator	Functional	Spacial	Type	Role
79-E1624 CDY	XX	XX	DR	C	
Drawing No.			Suitability	Revision	
0050			A4	C01	
Drawn	Checked	Date	Scale	Site	
AJP	RJH	18.12.25	1:200	A1	

Approved	Craddys Job#	IF YOU HAVE A QUERY CALL US
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