

REVISIONS	
Rev.	Description:
A	Initial issue.
B	Updated to latest layout.
C	Updated to latest layout.
D	Amended in accordance with LFA comments.
E	Amended in accordance with LFA comments.

Rev.	Date:	By:
A	06/07/19	SCH
B	05/07/19	SCH
C	23/10/21	SCH
D	04/04/22	SCH
E	07/02/23	SCH

Notes:

Existing predevelopment flows from site have been determined as 2.9 l/s based on Olan (Greenfield) form-10) catchment area of 0.354 hectares.

In accordance with current guidance and best practice flows from the site, post - development will be restricted to a maximum discharge rate equivalent to the pre-development. Over rate of 2.9 l/s.

Final discharge from the site will be to the adjoining watercourse with flow rates controlled by a hydrocrake.

Storm water storage is to be provided within the detention basin located next to the watercourse.

To ensure the discharge from the site does not have an adverse effect of the water quality of the receiving watercourse a 'wet' element to the detention pond will be utilised in accordance with CIRIA SUDS Handbook, C753. The wet pond allows any possible pollutants to 'settle' and not enter the receiving watercourse.

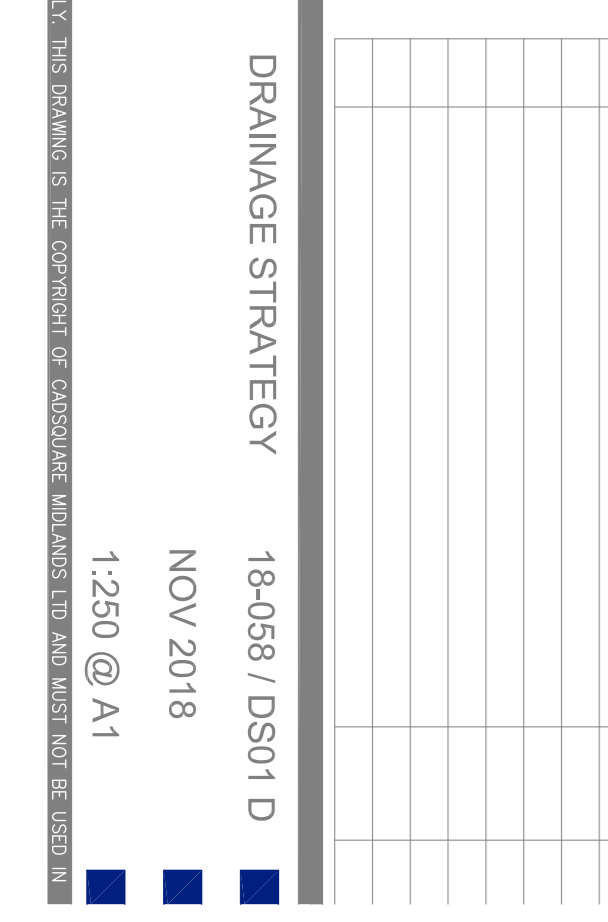
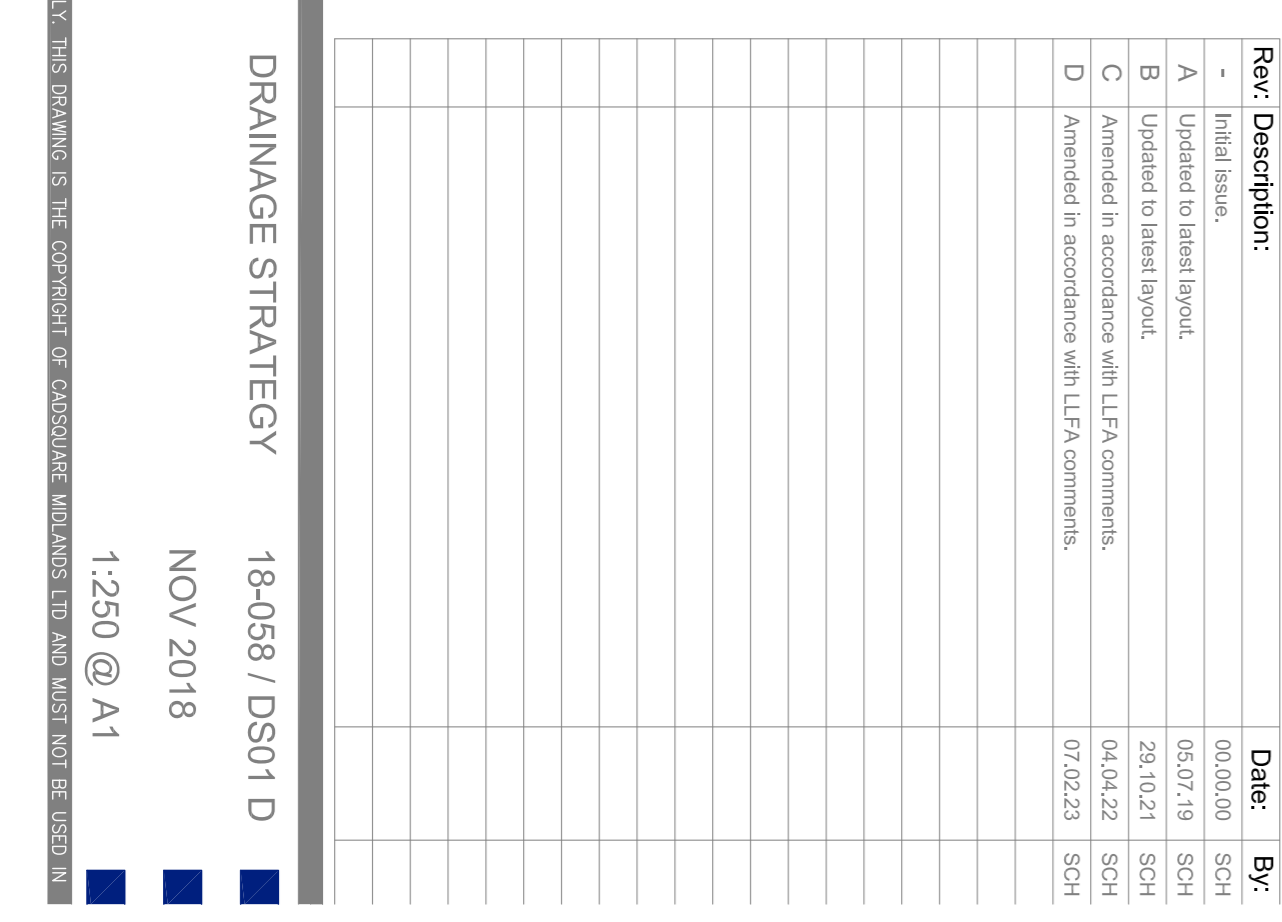
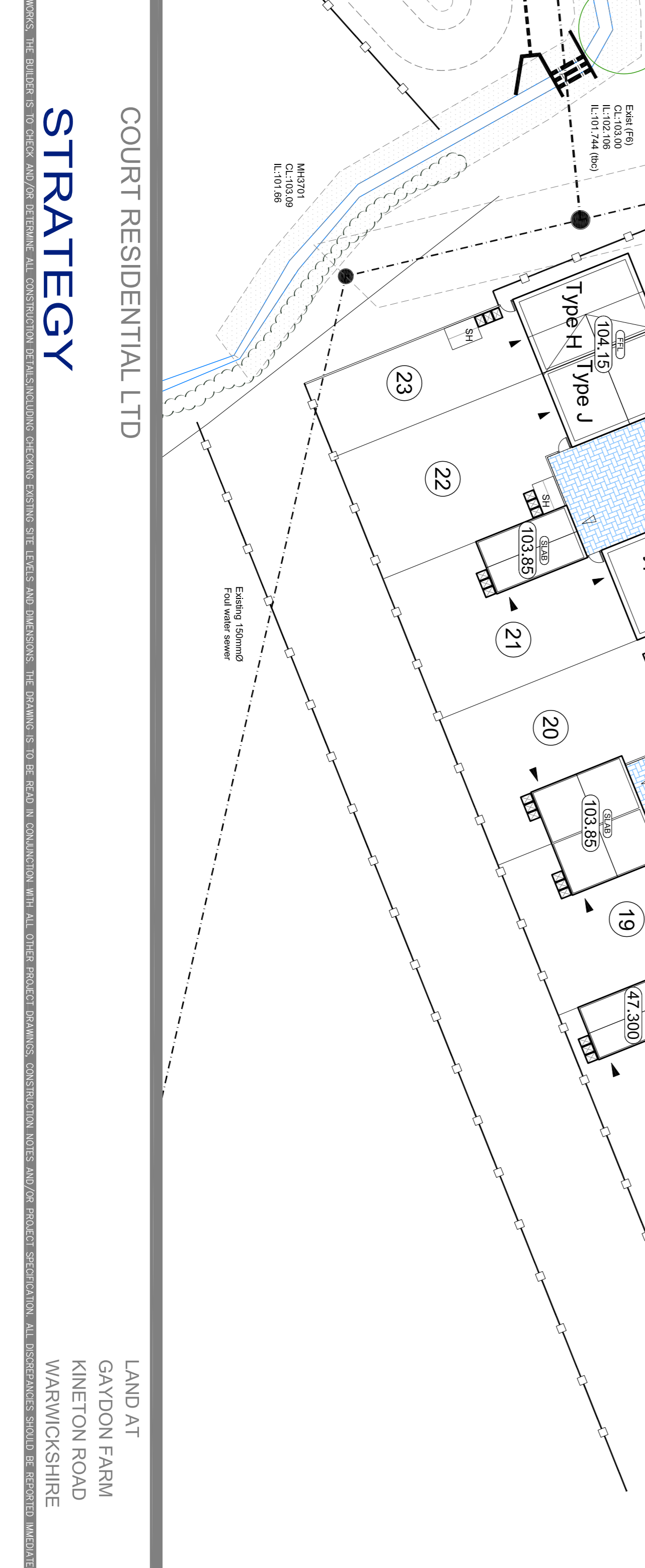
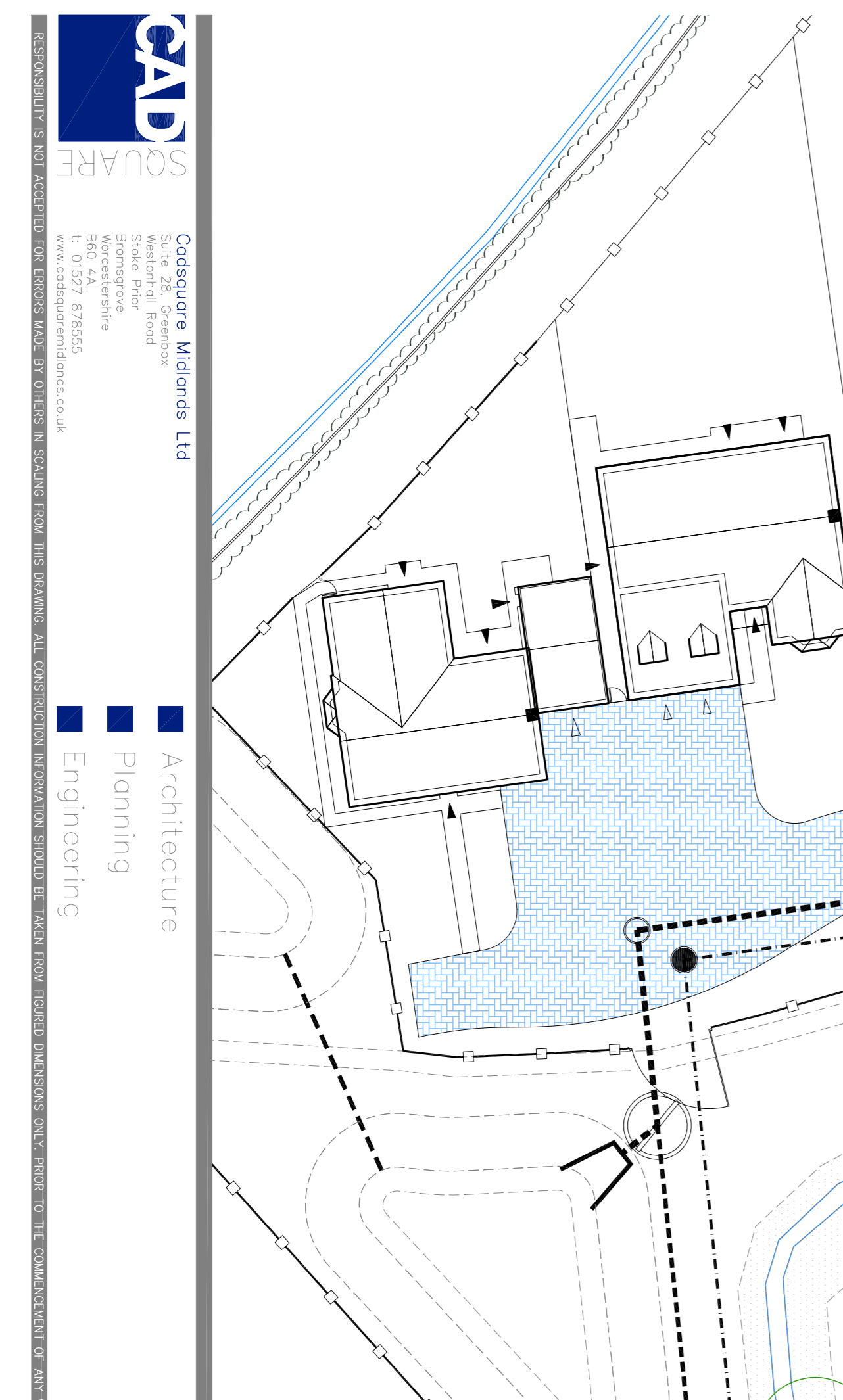
In addition 'banked' permeable paving is to be utilised on the hard standing areas to ensure that any surface water infiltrates into the sub-base to provide added filtration.

The proposed design allows attenuation to 2.9 l/s for all storm events up to and including 1:100 year events (+40% for climate change both summer and winter storms), and allows for all waters to be wholly contained within the site boundary with no exceedance flows.

To ensure the detention basin continues to operate effectively during periods of surface flooding from the brook the following measures are proposed:

- Geosynthetic barrier to be laid 300mm below finished levels to prevent water ingress. OR Alternatively, basin to be lined with 500mm puddling clay.
- Minimum 'top of bank level' to be 104.15m allowing 300mm freeboard over predicted maximum flood water level.
- Flap valve to be fitted to outfall headwall to prevent watercourse surcharging detention basin.
- Watercourse pipework and culverts to be regularly inspected for debris / damage, cleaned and repaired.

Foul water from the proposed development is to be collected by a network of gravity pipework and connected to the existing public foul drainage network.



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