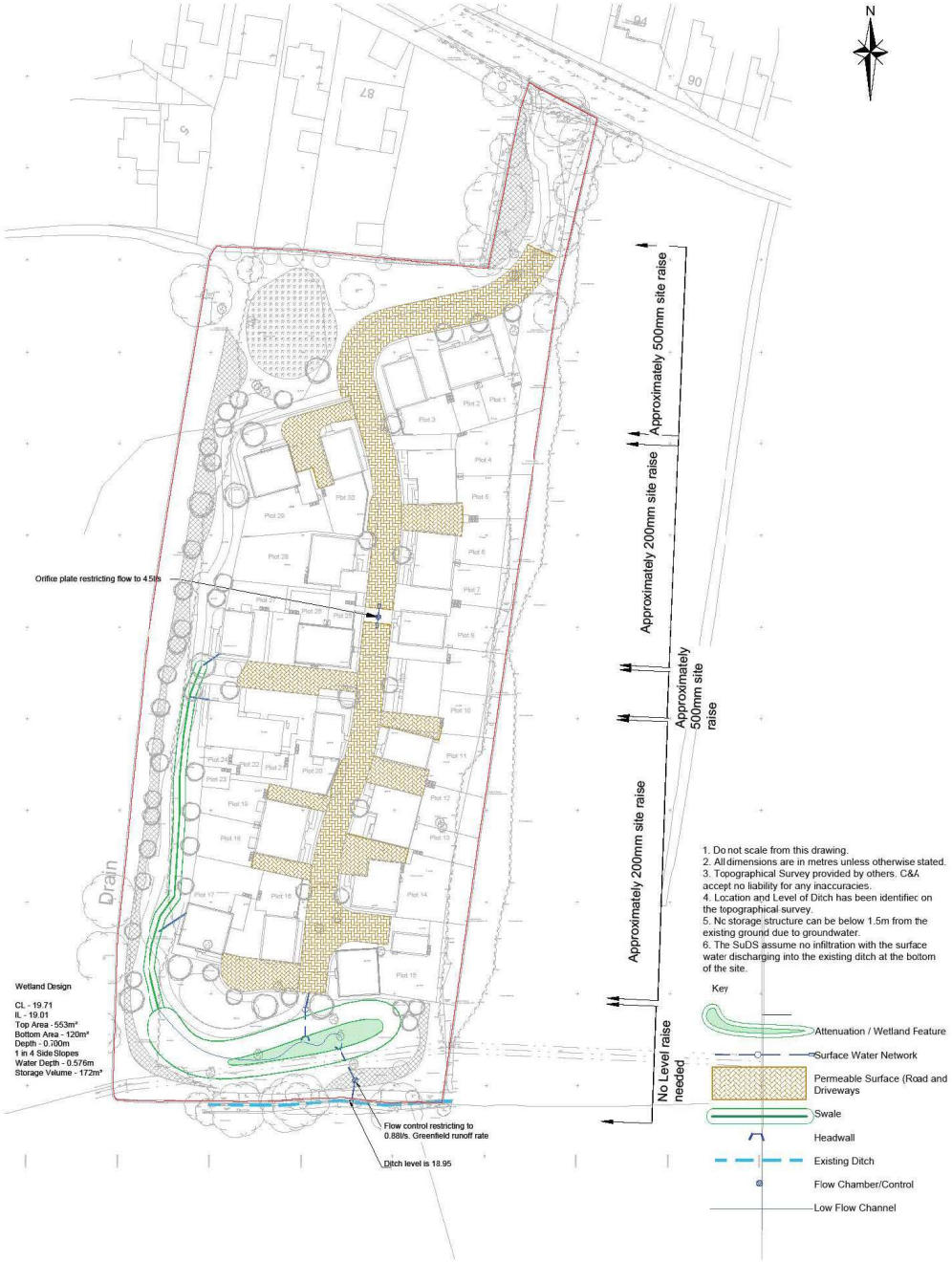
DRAINAGE - ATTENUATION BASIN DETAILS



The site has a small amount of Flood Zone 2 (1 in 1000 yr) flooding at the northwest corner. This has been respected by the use of the Sequential Approach as required under National Planning Policy, by leaving this area as open space with no built form on it.

As the site has been identified as accepting, low depth, surface water flooding at the access and predominantly along the eastern boundary, the internal layout has been sympathetically designed to allow surface water flooding to route along the new road carriageway to the watercourse at the southern boundary, instead of the eastern boundary. Ensuring it continues to flow toward the watercourse unimpeded without detriment to the new housing or upstream of the site. The confirmation of this Sequential Approach will be supported with a Sequential Test as the site progresses.

It is also noted that although the previous applications for the site had been refused and dismissed at appeal, flooding and on-site drainage where not a reason for this. Flood Risk and Drainage matters had been approved by the statutory authorities at the time.

The intended surface water strategy will utilise Sustainable Urban Drainage ('SuDs') techniques. Importantly, these techniques will regulate flows to the existing riparian watercourse bordering the development to the south and west.

The topography of the site, although gentle sloping, falls from north to south toward the existing water course that forms the southern boundary. As such development related runoff will ultimately discharge to the southern boundary and away from Mill Lane, utilising the Sustainable urban Drainage techniques as detailed below.

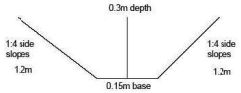
The SuDs will take the form of control at source via the use of permeable block paving with cellular storage beneath, within the private driveways, courtyard parking and the main road carriageway. In addition, an ecological attenuation dry pond will receive final flows and regulate flows to the water course which may be subject to a 1 in 100 year plus climate change storm event This forms a surface water management train will not only provide attenuation but also provides the first and second stage of pollution removal.

As stated above, the standard rainfall event on 1 in 1 year will be captured within porous paving. 1 in 30-year storm events will be held both in the porous paving and pipe network with some overflow to the pond. 1 in 100 year plus climate change storms filling all areas accordingly.

These will then be discharged to the water course via a pipe and headwall, following consent to both discharge to the riparian water course and construct a headwall within its banks will need to be obtained from the Lead Local Flood Authority. The current greenfield run off will be utilised as the allowable discharge to the water course.

Section through Basin (NTS)

Section of Proposed Swale (NTS)



Overall width of Swale is 2.55m