

Flow control chamber.
Orifice plate diameter: 15mm
Design head: 0.98m
Peak discharge rate: 0.5l/s
(0.5l/s considered as a practical minimum flow rate given the necessary size of the orifice. A filtration membrane upstream of the orifice is advised to reduce the chance of blockage.

Above ground roddable access to be provided for this rain water downpipe, or alternatively a gully can be installed with roddable access.

Existing chamber has been removed

Existing combined sewer begins just under surface level and drains to to an outfall invert level of 12.690m AOD.

Combined sewer to be replaced at an initial invert level of at least 12.88m AOD (in order to connect to existing manhole at 1:80). This is to avoid a clash with the floor slab / cantilevered raft.

Replacement pipe to wrapped in a compressible material with a concrete surround to protect it from any potential settlement or surcharging occurring as a result of the new construction.

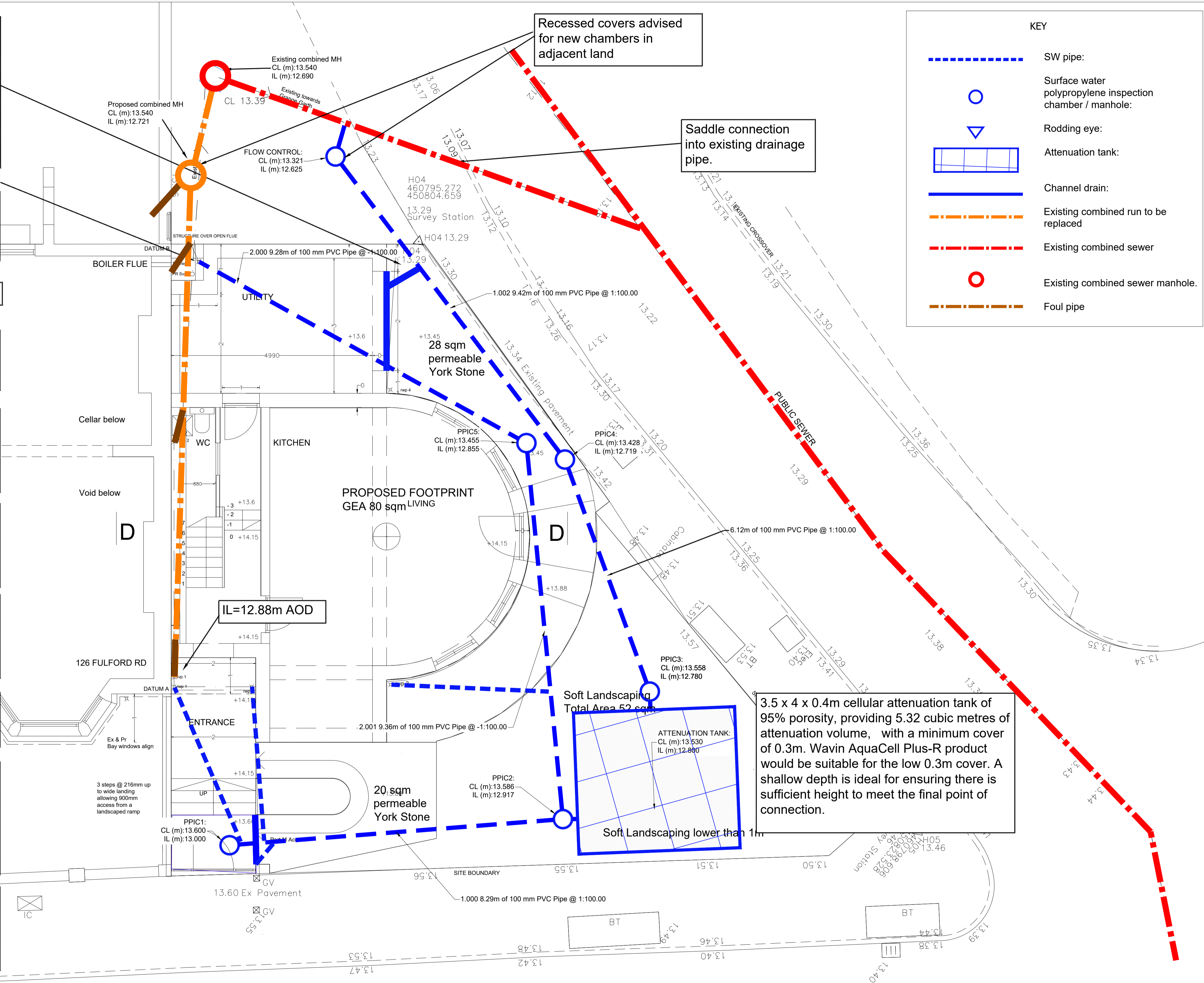
Existing hotel (126 Fulford Road) has been renovated with the internal bathrooms and appliances removed, therefore the only foul connection on this side of the building is at SVP1

The existing section of roof is to connect into the proposed attenuation system, adding 35 sq m of impermeable area.

Proposed SVPs to connect directly into existing combined sewer run running underneath building (which is to be replaced). Build over agreement associated with existing pipe is being resolved by the architect / client - design relates to proposed drainage only.

The foundation solution includes a raft with a downstand parallel to the pipe to avoid surcharging it or the existing foundations. The downstand is of a sufficient depth to achieve this.

Soakaways / surface water disposal via infiltration has not been considered viable due to proximity to building / road (within 5m) and predominantly cohesive / clay soils in York.



Recessed covers advised for new chambers in adjacent land

Saddle connection into existing drainage pipe.

KEY

- SW pipe: (dashed blue line)
- Surface water polypropylene inspection chamber / manhole: (blue circle)
- Rodding eye: (blue inverted triangle)
- Attenuation tank: (blue rectangle with grid)
- Channel drain: (solid blue line)
- Existing combined run to be replaced: (dashed orange line)
- Existing combined sewer: (dashed red line)
- Existing combined sewer manhole: (red circle)
- Foul pipe: (dashed brown line)

This drawing is to be read in conjunction with all relevant Architect's and Engineer's drawings and the specification.
This drawing should not be scaled.
All dimensions are to be verified by the contractor on site.
All discrepancies should be reported to the C.A. prior to the commencement of the works.
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Design summary:
The design considers 115 sq m of impermeable area from the proposed building (80 sq m) and the existing (35 sq m), given that permeable yorkstone is proposed for external areas, and a 1 in 100year (+ 40% climate change allowance) design storm, with a peak offsite discharge rate of 0.5l/s up to and including the M100 storm event

Date	Revision	Description	Drawn	Chkd
08.04.24	P03	Final point of connection adjusted	CM	RV
05.04.24	P02	Existing drainage clarified.	CM	RV
28.03.24	P01	Preliminary Issue	CM	RV

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Project:	Priory Round House	
Title:	Drainage Plan	
Status:	Preliminary	
Drawn:	CM	Checked: RV
Scale @ Size:	1:50 @A1	Date: 28.03.24
Job/Drawing No:	1044_01-RVE-XX-XX-DR-C-1000	Revision: P03