

General

- 1.1. This drawing is to be read in conjunction with all Architect's, Engineer's and Services Engineer's drawings and specifications.
- 1.2. Do not scale from any of the Civils drawings. All dimensions to be verified on site and any discrepancies should be highlighted.
- 1.3. All materials to comply with the relevant British Standard. General Drainage Specification
1. All private drains shall be constructed and commissioned in accordance with the relevant sections of the Building Regulations Approved Documents and relevant British Standards.
2. All pipework to be 100Ø minimum unless noted otherwise.
3. Private surface water drains shall be laid at a minimum gradient of 1 in 100 or to the gradients and invert levels shown.
4. Private foul water drains shall be laid at a minimum gradient of 1 in 80 or to the gradients and invert levels shown
5. Foul pipework connections to first access point shall be laid at a minimum gradient of 1 in 40 or to the levels shown.
6. All connections to be made soffit to soffit unless noted otherwise.
7. Pipe bedding to be Class 'B' bedding for rigid pipes and Class 'T' bedding for flexible pipes (100 mm granular bed and surround).
8. Where cover to soffit of pipe is less than 600 mm in private areas, the following shall apply:-
- a) Vitrified clay pipes - provide a 100 mm min. thick concrete bed and surround (instead of class 'B' & 'T' bedding) and a 13 mm thick compressible filler at each joint.
- b) uPVC pipes - provide a concrete bridging (in addition to class 'B' or 'T' bedding) in accordance with appendix A15, Building Regulations part 'H'.
9. All concrete indicated in the construction of drainage infrastructure (pipe bedding, bridging, manholes etc) shall be standardised prescribed concrete ST2 and is to conform to BS EN 206-1 and BS 8500-2. The maximum aggregate size shall be 20mm.
10. Foundations adjacent to pipe runs or manholes are to have their formation level set above the invert level no higher than the equivalent of the horizontal distance between the pipe/excavation trench and the foundation, minus 500mm.
11. Excavations for manholes, pipe runs etc located within a 45 degree load distribution splay from any adjoining existing foundations, are to be adequately supported for the duration of the works and pipe runs protected as note 8 above.
12. Where excavations for pipe runs are parallel and in close proximity to each other and/or other service trenches, The Contractor shall ensure that adequate safety measures, including temporary shoring, are provided in line with current health & safety legislation and good practice. Particular attention is to be paid to adjacent trenches of differing invert levels.
13. All existing drainage found on site during the works shall be investigated, its operational status confirmed and the following applied:-
- a) Inoperative drainage shall be cut back and pipe runs filled with concrete grout.
- b) 'Live' drainage shall be advised to the engineer.
- P01 For Approval07.12.22RJ

REV	COMMENTS	DATE	CHK
STATUS			

SUITABLE FOR
STAGE APPROVAL

mnp

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CLIENT

PROJECT

Loverock Road
Reading

DRAWING TITLE

Drainage Strategy GA Plan

SCALE @ A1

DRAWN BY

DATE

1:200

JSE

December 2022

MNP No.

STATUS CODE

REV

22076

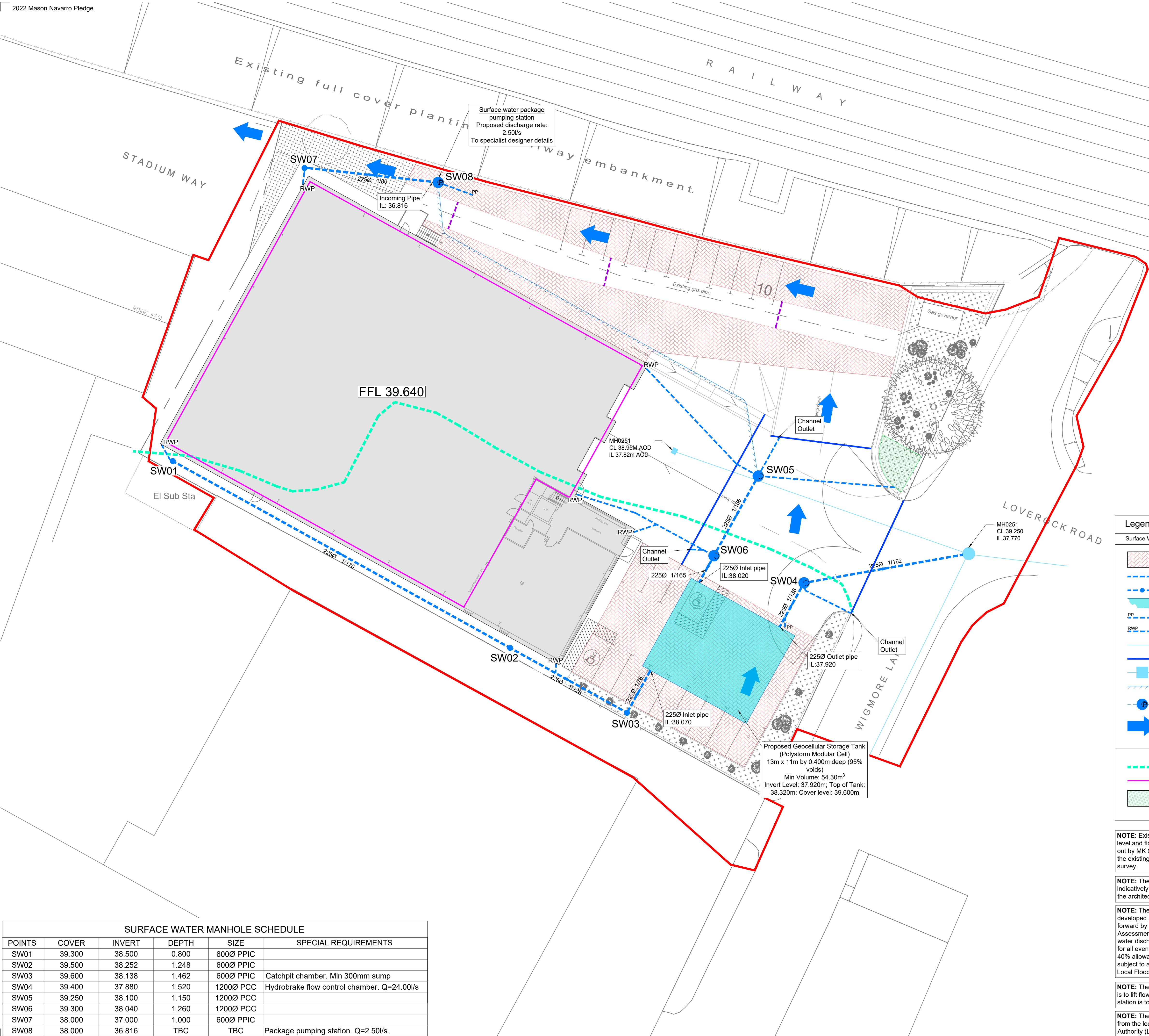
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P01

Ref No.

22076-MNP-XX- 00 -DR-C- 1800

SURFACE WATER MANHOLE SCHEDULE					
POINTS	COVER	INVERT	DEPTH	SIZE	SPECIAL REQUIREMENTS
SW01	39.300	38.500	0.800	600Ø PPIC	
SW02	39.500	38.252	1.248	600Ø PPIC	
SW03	39.600	38.138	1.462	600Ø PPIC	Catchpit chamber. Min 300mm sump
SW04	39.400	37.880	1.520	1200Ø PCC	Hydrobrake flow control chamber. Q=24.00l/s
SW05	39.250	38.100	1.150	1200Ø PCC	
SW06	39.300	38.040	1.260	1200Ø PCC	
SW07	38.000	37.000	1.000	600Ø PPIC	
SW08	38.000	36.816	TBC	TBC	Package pumping station. Q=2.50l/s.



Legend	
Surface Water	Description
	Tanked permeable pavement (300mm Type 3 sub-base)
	New surface water drain
	New surface water inspection chamber / manhole
	New storage attenuation tank
	New permeable pavement outlet
	New rain water down pipe
	Existing surface water sewer
	ACO M100D 0.0 drainage channel
	Existing surface water manhole
	New surface water rising main
	Surface water pump chamber
	Flow route direction arrow
	Design flood level (39.34m AOD)
	Proposed void extent
	Proposed bioretention area

NOTE: Existing drainage infrastructure alignment depth, size, level and flow has been taken from a site utility survey carried out by MK Surveys dated August 2018. For further details on the existing drainage arrangement please refer to the utility survey.

NOTE: The proposed rainwater downpipe positions are indicatively shown and final locations are to be confirmed by the architect or M&E consultant engineer.

NOTE: The proposed surface water strategy has been developed and is solely based on the proposed strategy put forward by Cole Easdon outlined in their Flood Risk Assessment Report dated April 2019. The proposed surface water discharge rate put forward by Cole Easdon is 24.00l/s for all events up to and including the 1 in 100 year event plus a 40% allowance for climate change - this proposed rate is subject to approval from the local water authority and Lead Local Flood Authority (LLFA)

NOTE: The proposed surface water package pumping station is to lift flows to SW05 at a rate of 2.50l/s. Package pumping station is to specialist designer details.

NOTE: The proposed drainage strategy is subject to approval from the local water authority and the Lead Local Flood Authority (LLFA).