

Title: Proposed Drainage Strategy Technical Note

Date: 15th June 2018

1.0 Introduction

1.1 Jubb Consulting Engineers were appointed to produce a drainage strategy report for the proposed development of a site at 10 – 12 Devonshire Road, Bognor Regis. The development proposals consist of the construction of 6 new residential units and associated infrastructure.

1.1.1 To support the outline planning application, a drainage strategy report was submitted which included details of the proposed strategy for the disposal of wastewater flows from the site.

1.1.2 This technical note reviews the previously issued drainage strategy proposals following new information on the site, and provides an update on the proposed strategy to satisfy the discharge of planning conditions.

2.0 Proposed Drainage Strategy

2.1 The previous drainage strategy proposals for the site focussed on the inclusion of sustainable drainage systems for the disposing of run-off from impermeable areas of the site.

2.1.1 The preferred strategy was to discharge surface water flows via the use of infiltration techniques and specifically the use of soakaways.

2.1.2 It was proposed that a new drainage network would collect and convey flows from the development to the rear of the property. Flows would then be discharged via two soakaways located in the rear garden.

2.1.3 However, at the time of the original application submission no detailed information of the existing ground conditions was available. It was assumed that an infiltration solution would be suitable and the infiltration option was assessed on a conservative infiltration rate, with further onsite investigation required to confirm an accurate rate.

2.1.4 Since the original application, further onsite investigation has been undertaken on the proposed site. It has been confirmed that the site is affected by a shallow groundwater level. Consequently, it has been confirmed that an infiltration solution will not be suitable for the development.

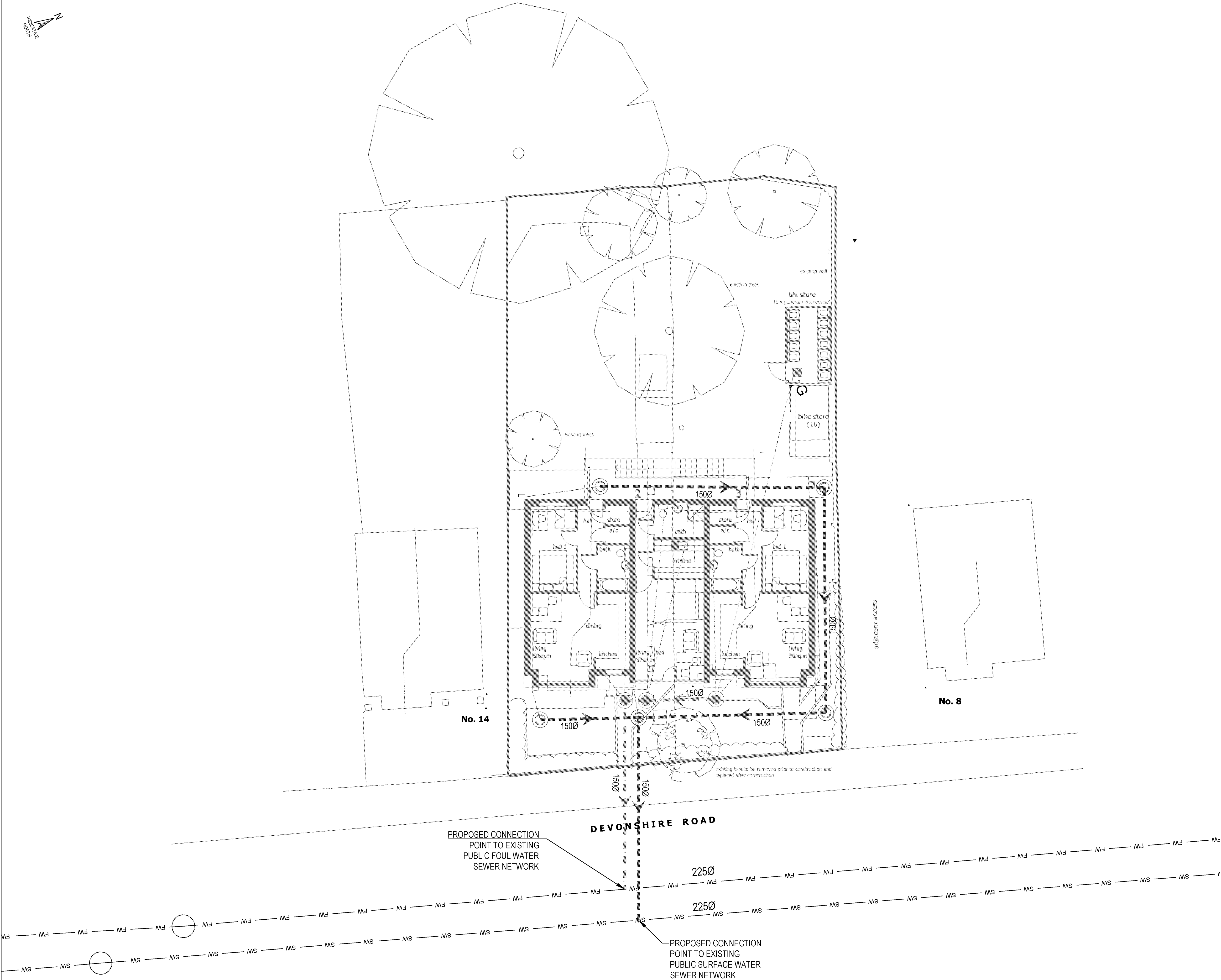
2.1.5 It is therefore proposed to discharge surface water flows to the existing public sewer located within Devonshire Road.

2.1.6 The proposed development will be constructed on the footprint of the existing residential properties. Due to the small scale of the development there will only be a negligible increase in hardstanding area and surface water flows discharged from the site.

- 2.1.7 An existing Brownfield rate of 2.0 l/s has been calculated for the site using the modified rational method and FEH rainfall input. The anticipated discharge rate from the new development has been calculated as 2.8 l/s, this is only a marginal increase on the existing brownfield rate.
- 2.1.8 Surface water flows discharged from the site are below the minimum practical levels for attenuating and restricting flows. Consequently, it is proposed to discharge surface water flows at an unrestricted rate.
- 2.1.9 No changes to the original foul drainage strategy are proposed. Foul flows will be collected and conveyed via a new sewer network and will discharge into the existing public sewer within Devonshire Road.
- 2.1.10 An updated drainage strategy drawing is shown in appendix A.

Appendix A: Proposed Drainage Layout





Legend

- Proposed Surface Water Sewer
- Proposed Foul Water Sewer
- Proposed RWP Connection
- Proposed SVP Connection
- Proposed Gully
- Existing Public Surface Water Sewer
- Existing Public Foul Water Sewer

Notes:

- Existing sewer locations taken from a combination of survey data and asset plans. Contractor to check all downstream sewer positions and invert levels prior to commencement of construction.
- Sewers to be constructed in accordance with Sewers for Adoption 7th Edition and Building Regs Part H.
- Sewers to be structural walled PVC class SN4. Bed and surround to be granular class S where depth to soffit is greater than 1.2m in vehicular areas and 0.9m elsewhere. Where cover is less, bed and surround to be class Z concrete surround.
- Inspection chambers to be Type 3 or 4 PPIC.
- RWP and SVP locations have been assumed, final locations to be confirmed by architect.
- SVP connections to be 100mm min diameter @ 1:40 gradient.
- RWP connections to be 100mm min diameter @ 1:40 gradient.

P6	15.06.18	Discharge to public sewer	LE	DG
P5	13.02.17	Amended FW to avoid hedgerow	LE	DG
P4	10.02.17	Updated to suit latest layout	LE	DG
P3	25.01.17	Soakaway location changed to avoid tree	LE	DG
P2	20.10.16	Infiltration Strategy	LE	DG
P1	17.10.16	Preliminary issue	LE	DG

Rev Date Description By Apvd

PROJECT:
10 & 12 DEVONSHIRE ROAD, BOGNOR REGIS

TITLE:
PROPOSED DRAINAGE STRATEGY

CLIENT:
THE SEAMAN PARTNERSHIP

SCALE@A1:
1:100

PROJECT REF:
B16256
DRAWING No:
SK01
REV:
P6

Revision Referencing
P = Preliminary A = Approval T = Tender C = Construction

