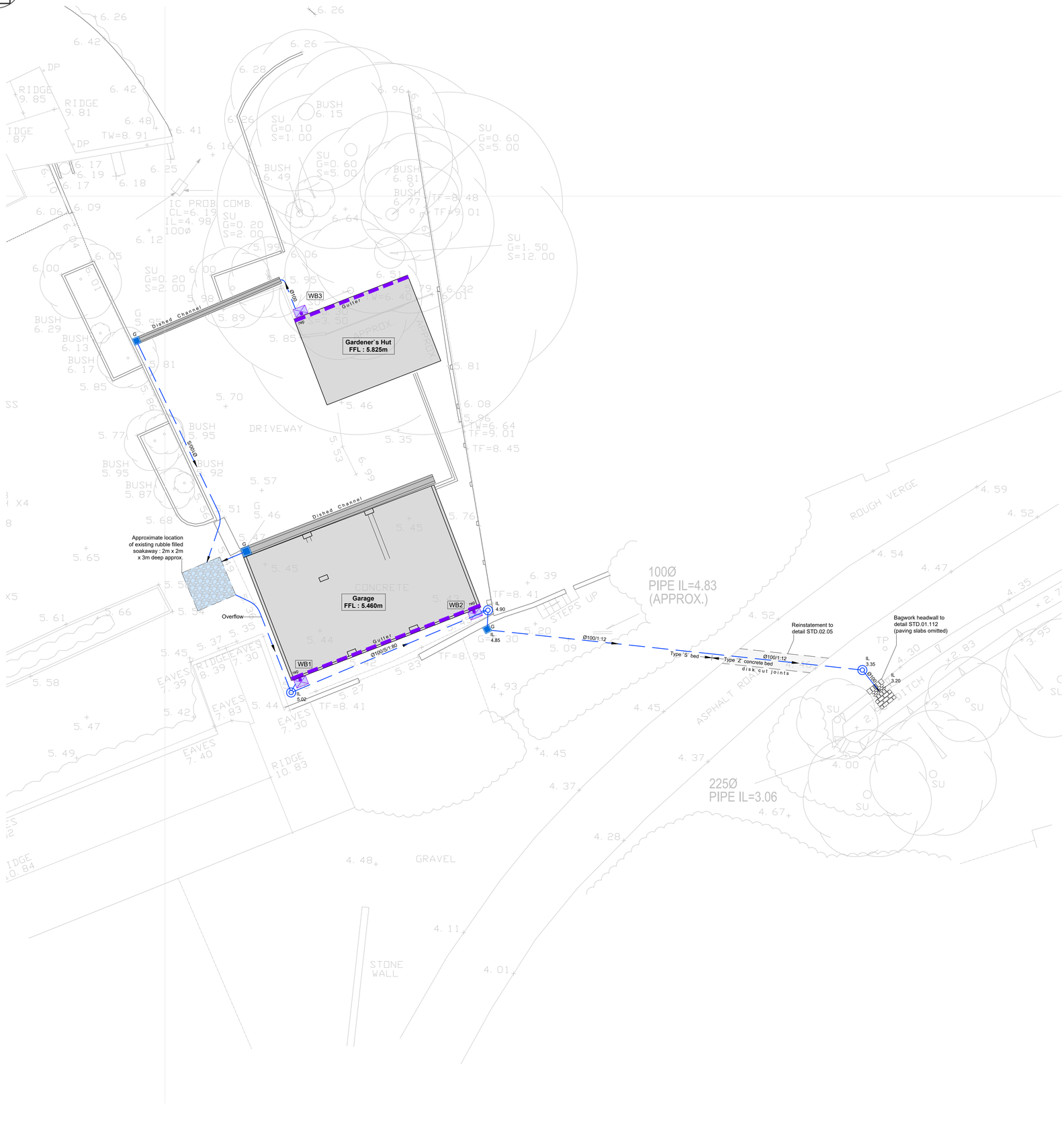


NOTES

1 This drawing to be read in conjunction with all relevant Architects and Engineers drawings and specifications.

2 Dimensions are in millimetres unless noted otherwise.

3 Original topographic survey undertaken by Shaw Colegate.
For full topographic survey information see Shaw Colegate drawing No. 06121-topo.
All levels based on O.S. Datum by GPS.

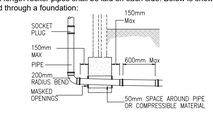
4 Before excavation commences, the Contractor shall ascertain the depths, sizes and locations of all services to be crossed. Any conflicts in levels between new works and existing services shall be notified to the Engineer.

5 All drainage shall be in accordance with Building Regulations 2002: Part H & W.S.A Sewers for Adoption 7th edition.

6 Details of existing sewers & drains shall be confirmed by the contractor on site prior to the commencement of works.

7 Sewers of different diameters shall be laid soffit to soffit in manholes, unless backdrops are detailed.

8 Private drains passing through walls and footings are to be sleeved and a 600mm length of rocker pipe shall be laid on each side of the wall or footing. Runs under building shall have a type 'S' bed and surround, unless depth below underside of slab is less than 300mm where a 150mm bed and surround of concrete is to be used. Where pipes pass beneath foundations 600mm length rocker pipes shall be laid on each side. Below is shown a typical detail of a pipe sleeved through a foundation:



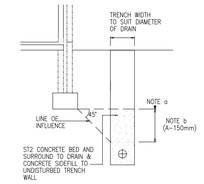
9 Manhole (M.H.) covers and inspection chamber (I.C.) shall be adjusted to suit final surface levels.

10 Where trench foundation levels lie above original levels, levels shall be made up with either well compacted layers of D.O.T type 1 or mix ST2 concrete.

11 Minimum gradients for pipes where no gradient is shown shall be 1:80.

12 Dimensions of M.H. on private drains and sewers to be in accordance with requirements of the Building Regulations.

13 Drainage trenches lower than foundations:
a) Where drainage trench is within 1.0 distance of a building the trench is to be filled with concrete mix ST 2up to the level of the foundation, in accordance with Building Regulation 2002: Part H, diagram 8.
b) Where drainage trench is distance 'A' from footing and the depth of trench below foundation level is geater than 'A' the lower trench shall be infilled with concrete mix ST 2 such that the top level of concrete infill is no less than ('A' - 150mm) below foundation level. Notes a) and b) are represented diagramatically below:



14 Pipe materials shall be:
a) For external private drain runs :
i) Clay pipes, extra strength or super strength in accordance with BS EN 295: 1991
ii) UPVC pipes on accordance with BS 4660 & BS 5481: 1989 (flexible pipes)

15 Flexible pipes - Where private flexible pipes have more than 900mm cover under vehicular areas and more than 600mm cover under gardens, bedding and backfill shall be Type S as shown on drawing STD.01.85.
For special protection where pipes are laid with less cover see notes below.
a) Where private flexible pipes have less than 900mm cover under vehicular areas, a reinforced concrete bridging slab shall be used (as Type 'Y' drawing STD.01.85) Reference Building Regulations 2000: Part H.
b) Where private flexible pipes have less than 600mm cover under gardens, concrete paving slabs laid as bridging slab shall be used (as Type 'X' drawing STD.01.85.) Reference Building Regulations 2002: Part H.

16 Rigid pipes - Bedding and backfill shall be Type 'S' as shown on drawing STD.01.85, except on lengths where special protection is required (see notes below).
a) Where Ø 100mm private ridid pipes have less than 400mm cover under vehicular areas, a Type 'Z' concrete surround shall be used (see drawing STD.01.85) Reference Building Regulations 2002: Part H.
b) Where Ø 100mm private ridid pipes have less than 300mm cover under garden areas, a Type 'Z' concrete surround shall be used (see drawing STD.01.85) Reference Building Regulations 2002: Part H
c) Where Ø 150mm private ridid pipes have less than 600mm cover under any areas, a Type 'Z' concrete surround shall be used (see drawing STD.01.85) Reference Building Regulations 2002: Part H

17 Trenches below existing carriageways and parking areas shall be reinstated with D.O.E Type 1 material in accordance with standard detail STD.02.05.

18 **Surface Water Attenuation :**

Garage :
2 No. proprietary slimline water butts (advise Freeflush Water Management Tel. 0161-460-9720), incorporating orifice plates shall attenuate peak outflows to no greater than 3.1 l/s during a M100 +40% storm event.
Nominal size = 0.58 x 0.37 x 1.82m ht.
Orifice = 35mm
Discharge Coefficient = 0.65

Gardener`s Hut :
1 No. proprietary slimline water butt (advise Freeflush Water Management), incorporating orifice plate shall attenuate peak outflows to no greater than 1.9 l/s during a M100 +40% storm event.
Nominal size = 0.45 x 0.23 x 1.22m ht.
Orifice = 50mm
Discharge Coefficient = 0.60

KEY

- Topographical Survey
- Proposals
- Proposed Surface Water Drains Ø100 Unless Noted Otherwise
- Surface Water Manhole/ Storm Ø450 Insp. Chamber/ Rodding Eye
- Ø100/S/1:80
  - Gradient
  - Bed Type (See STD.01.85)
  - Pipe Diameter
  - Direction of Fall
- Gulley to Client`s / Contractor`s Details
- Slimline Water Butt. See note No. 18
- Existing Rubble Filled Soakaway

REV	DESCRIPTION	CHECKED	DATE
P2	PLANNING ISSUE. 3 No. WATER BUTTS SHOWN TOGETHER WITH SPECIFICATION AT NOTE No. 18.	-	PF-19-07-21

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CLIENT
William Bolland

PROJECT
Barnham Court
Ancillary Buildings
Surface Water Drainage

DRAWN BY	CHECKED BY	DESIGNED BY
PF	JL	JL
SCALE @ A1	©DATE	STATUS
1:100	July 2021	Planning
JOB NO.	DRAWING NO.	REVISION
31789	EX.01	P2

ARUN DISTRICT COUNCIL DRAWING