SPECIFICATION NOTES

1. ALL DRAINAGE SHALL BE CONSTRUCTED AND COMMISSIONED IN ACCORDANCE WITH BS EN 295 & BS EN752, BUILDING REGULATIONS DOC. H AND ANY PARTICULAR REQUIREMENTS OF THE BUILDING CONTROL OFFICER.

2. DRAIN BEDDING IS TO BE PROVIDED AS D200.0, D200.1 and D200.2 AS SHOWN ON THE DRAINAGE DETAILS SHEETS.

3. 'EFFECTIVE COVER' IS THE MINIMUM DEPTH OF COVER OVER THE PIPE CROWN AT ANY TIME DURING THE CONSTRUCTION PROCESS.

4. ALL CONCRETE PIPEWORK, MANHOLES AND FITTINGS SHALL BE TO BS 5911 (ALL RELEVANT PARTS), ALL CONCRETE PIPEWORK TO BE TO HIGH STRENGTH

5. WHERE CONNECTIONS ARE TO BE MADE TO EXISTING MANHOLES/SEWERS, INVERT LEVELS, PIPE SIZES & ORIENTATION SHALL BE CHECKED PRIOR TO THE COMMENCEMENT OF THE WORKS AND ANY VARIANCE REPORTED TO THE ENGINEER IMMEDIATELY.

6. WHERE PIPELINES CROSS, EACH IS TO BE SURROUNDED WITH GRADE ST4 MASS CONCRETE FOR A DISTANCE NOT LESS THAN 1m CENTRED ON THE CROSSING POINT. LENGTH OF SURROUND TO BE EXTENDED AS NECESSARY TO WITHIN 150mm OF THE NEXT NEAREST FLEXIBLE JOINTS.

7. THE CONTRACTOR IS TO ENSURE THAT PROTECTIVE MEASURES ARE TAKEN TO ENSURE THAT DRAINAGE PIPEWORK AND FITTINGS ARE NOT DAMAGED BY SITE TRAFFIC PRIOR TO OVERSITE FILLING OPERATIONS BEING COMPLETED AROUND BUILDINGS.

8. ALL PRIVATE DRAINAGE PIPEWORK SHALL BE PVCu. ALL ADOPTED DRAINAGE TO BE VC. ALL UNDERBUILDING DRAINS TO BE LAID AT A GRADIENT OF 1:40

9. WHERE DRAINS PASS THROUGH FOUNDATIONS OR CONNECT TO MANHOLES, FLEXIBLE PIPE JOINTS ARE TO PROVIDED WITHIN 150mm OF THE FACE OF THE STRUCTURE AND WITHIN A FURTHER 600mm TO FORM A ROCKER PIPE.

10. WHERE PIPES PASS THROUGH SCREEN WALLS, FOOTINGS OR RETAINING WALLS, LINTELS ARE TO BE PROVIDED.

11. WHERE PIPELINES PASS WITHIN 1m OF BUILDINGS OR WALLS THE FOUNDATIONS ARE TO BE TAKEN DOWN BELOW THE BOTTOM OF THE TRENCH

12. 450mm DIA. INSPECTION CHAMBERS (FIC/SIC) MAY BE USED:
- WITH 350mm REDUCED OPENING WHERE THE DEPTH FROM COVER TO INVERT EXCEEDS 1000mm.

300mm DIA. POLYPROPYLENE ACCESS CHAMBERS (FAC/SAC) MAY BE USED
- WHERE THE DEPTH FROM COVER TO INVERT DOES NOT EXCEED 600mm AND WHERE THE PIPE SIZE DOES NOT EXCEED 100mm DIA.

13. STEEL COVERS WITH/IN PROPERTY BOUNDARIES SHALL BE:
(UNLESS NOTED ON DRAWING OR MANHOLE SCHEDULE)
-ON PRIVATE DRIVEWAYS: FACTA GRADE B (BS EN ISO 1461: 1999)
-ON PRIVATE PATHWAYS, VERGES OR ON GARDENS: FACTA GRADE A (BS EN ISO 1461: 1999)

DUCTILE IRON COVERS OUTSIDE PROPERTY BOUNDARIES SHALL BE:
(UNLESS NOTED ON DRAWING OR MANHOLE SCHEDULE)
-ON ACCESS ROADS AND CAR PARKS: GRADE D400 (BS EN 124:1994)
-ON SHARED PATHWAYS, VERGES: GRADE A15 (BS EN 124:1994)

14. COVER LEVELS SHOWN 'CL' AND INVERT LEVELS SHOWN 'IL' ARE IN METRES ABOVE ORDNANCE DATUM.

15. ALL DRAINS TO BE 100mm DIAMETER UNLESS NOTED OTHERWISE

16. ALL DRAINS MARKED 'FWS' OR 'SWS' ARE PROPOSED ADOPTED SEWERS AND ARE TO BE CONSTRUCTED IN ACCORDANCE WITH 'SEWERS FOR ADOPTION, 7TH EDITION'

17. DRAINAGE CONNECTIONS NOT DIRECT TO A CHAMBER TO BE VIA AN OBLIQUE 45° JUNCTION

18. ALL CONNECTIONS INTO MANHOLES TO BE MADE SOFFIT TO SOFFIT UNLESS STATED OTHERWISE.

GENERAL NOTES:

1. DIMENSIONS ON THIS DRAWING SHALL NOT BE SCALED. ALL DIMENSIONS TO BE CHECKED ON SITE. ALL DETAILS AND DIMENSIONING RELATING TO SUB-CONTRACTOR'S OR SUPPLIER'S WORK MUST BE CHECKED AND AGREED BETWEEN THE SUB-CONTRACTOR OR THE SUPPLIER AND THE GENERAL CONTRACTOR.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND ENGINEERS DRAWINGS AND SPECIFICATION.
3. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL SITE DIMENSIONS BEFORE COMMENCING WORK.
4. THE MAIN CONTRACTOR IS RESPONSIBLE FOR ENSURING THE STABILITY OF STRUCTURE WHILST THE WORKS ARE IN PROGRESS.
5. DIFFERENCES BETWEEN THIS DRAWING AND THE SITE CONDITIONS ENCOUNTERED MUST BE REPORTED TO THE ENGINEER.

NOTATION:-
T.O.S.= TOP OF STEEL S.S.L.= STRUCTURAL SLAB LEVEL
F.G.L.= FINISH GROUND LEVEL F.F.L.= FINISHED FLOOR LEVEL
T.O.C.= TOP OF CHIMNEY T.O.F.= TOP OF FOUNDATION
F.L.= FORMATION LEVEL

KEY

- Private surface water drain
- Private foul drain
- Adoptable foul sewer
- Adoptable highway drain
- FIC — Foul Plastic Inspection Chamber - D202.6
- FAC — 300mm diameter Foul Water Access Chamber - D202.1B
- SIC — Surface Water Plastic Inspection Chamber - D202.6
- SCP — 500# SBL Control chamber SUDS02005 with orifice plate. Refer to plan for size.
- SCP — 500# SBL Wasp catchpit
- SAC — 300mm diameter Surface Water Access Chamber - D202.1B
- FWMH — Private Foul Manhole
- SWMH — Private Surface Water Manhole
- FWSMH — Adoptable Foul water Sewer Manhole
- HWMH — Adoptable Highway Manhole
- SVP — Foul drain point D307.0
- RWP — SW Drain point for RWP D203.5
- Drainage channel
- Permeable paving
- +9.400 — Proposed external levels
- DT — Distribution tank (Inlet) from roof drainage in permeable paving sub-base. See detail on drg 5101
- DT — Distribution tank (Outfall) in permeable paving sub-base. See detail on drg 5101

ABBREVIATIONS

D307.0	DETAIL NUMBER - SEE DRAINAGE DETAIL SHEET
FD	FOUL DRAIN
SWD	SURFACE WATER DRAIN
FWS	ADOPTABLE FOUL WATER SEWER
SWS	ADOPTABLE SURFACE WATER SEWER
MH	MANHOLE
IC	INSPECTION CHAMBER
SA	SOAKAWAY
FIC	450mm DIA. FOUL INSPECTION CHAMBER - D202.6
SIC	450mm DIA. SURFACE WATER INSPECTION CHAMBER - D202.6
FAC	300mm DIA. FOUL ACCESS CHAMBER - D202.1B
SAC	300mm DIA. SURFACE WATER ACCESS CHAMBER - D202.1B
CI	CAST IRON
VC	VITRIFIED CLAY
CONC	CONCRETE
PVC-U	POLYVINYL CHLORIDE - UNPLASTICISED
G	SMALL GULLY - D209.0
YG	YARD GULLY - D209.2
RG	ROAD GULLY - D209.1
CPG	CAR PARK GULLY - D208.2
OP	BELOW GROUND DRAIN POINT
SVP	SOIL VENT PIPE DROP
RP	EXTERNAL RODDING POINT - D213.1
DT	SURFACE WATER DISTRIBUTION TANK
FFL	FINISHED FLOOR LEVEL
SSL	STRUCTURAL SLAB LEVEL
GL	GROUND LEVEL
CL	COVER LEVEL
IL	INVERT LEVEL
SL	SUMP LEVEL
BL	BASE LEVEL
HL	HIGH LEVEL
BD	BACKDROP
CBS	CONCRETE BED & SURROUND
CLASS S	GRANULAR BED & SURROUND
CLASS B	GRANULAR BED

DESIGN NOTES

1. STORAGE DESIGN BASED ON 1 IN 100 YR STORM + 40%.

2. DRAIN POINTS AND LOCATIONS TO BE CONFIRMED BY ARCHITECT.

3. CONTRACTOR TO ESTABLISH LOCATIONS OF ALL EXISTING SERVICES PRIOR TO COMMENCING.

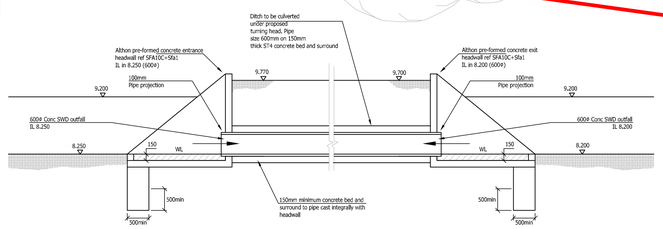
4. EXISTING TREES TO BE PROTECTED WHERE EXCAVATIONS RUN CLOSE.

5. APPROVAL TO BE GAINED FROM SOUTHERN WATER FOR CONNECTIONS TO SEWERS

NOTE

All ditches on the site for which Redrow has riparian responsibility to be cleared/desilted to the satisfaction of the ADC drainage engineer

SECTION CC - CULVERT CONSTRUCTION DETAILS (1:50)



STORAGE POND

Top of bank level min. 9.300
Outfall level 8.000
Base level 8.000
Reduced (wet) base level 7.750
Refer to drawing 5106 for pond sections

Existing culvert to be removed and ditch reinstated to match existing profile

Althon pre-formed concrete entrance headwall ref SFA10C+SfaI IL in 8.250 (600#)

Ditch to be culverted under proposed turning head. Pipe size 600mm ch 150mm thick ST4 concrete bed and surround

Althon pre-formed concrete exit headwall ref SFA10C+SfaI IL in 8.200 (600#)

Existing Ditch to be filled in and main ditch bank reinstated

Existing Ditch connection to be filled in and main ditch bank reinstated

Althon pre-formed concrete headwall ref SFA10B+SfaI IL 8.845

Concrete sandbag headwall as Drg 5106 IL 150mm out 8.495

Althon pre-formed concrete headwall ref SFA10B+SfaI Grille IL 450mm out 8.186

Althon pre-formed concrete headwall ref SFA08 IL 225mm out 8.000

Reduced wet pond base Pond Reed bed planting specification by others to meet the requirements of Defra CFS3 to improve water quality

Row of Gabion baskets 1m x 1m x 1m, 1/1m long

Proposed line of diverted Southern Water pump main (subject to Section 185 diversion agreement with Southern Water)

PROPOSED 300# DIVERTED FOUL RISING MAIN

Pump Main MH (Section 185) CL 9.500 IL TBC

Existing Ditch to be filled in and main ditch bank reinstated

Existing Ditch to be filled in with compacted Type 1 material, wrapped in Terram, with land drain to base wrapped in 20mm pea shingle. Refer to drawing 5107 for details.

Existing ditch to be filled in north of this location with Type 3. Proposed land drain to be laid through the Type 3 layer at existing ditch bed level and connected into a concrete sandbag headwall

Concrete sandbag headwall as Drg 5106 IL 150mm out 8.010

Existing Ditch to remain. To be de-silted and cleared to the satisfaction of the ADC engineer.

Hydrobrake flow control to 7.3l/s at 1.2m head. 150# overflow pipe at IL 9.100

Concrete sandbag headwall as Drg 5106 IL 225mm out 7.926. Note: no part of the headwall structure is to encroach into the ditch profile.

CONTROL MH 1200mm Cylindrical CL 9.300 IL 7.575

LAND DRAINAGE CONSENT REQUIRED FOR WORKS TO DITCHES

Ditch bed locally scraped to IL 7.800

Area to be filled in with compacted type 1 material, wrapped in Terram, with land drain to base wrapped in 20mm pea shingle. Refer to drawing 5107 for details.

Public Open Space 764.3m²

Play Area

Bin collection point for Plots 12-17

Bin collection point for Plots 18-23

Bin collection point for Plots 31,32 34

Bin collection point for plots 76,77 & 78

Bin collection point for Plots 79, 80, 81 & 82

Bin collection point for Plots 53,54

PERMEABLE PAVING AREA 4.000 - 1925QM FORMATION LEVEL 8.700 SUB-BASE THICKNESS VARIES

PERMEABLE PAVING AREA 3.000 - 1925QM FORMATION LEVEL 8.800 SUB-BASE THICKNESS VARIES

PERMEABLE PAVING AREA 3.000 - 490QM FORMATION LEVEL 9.300 SUB-BASE THICKNESS VARIES

PERMEABLE PAVING AREA 7.000 - 2095QM FORMATION LEVEL 9.300 SUB-BASE THICKNESS VARIES

PERMEABLE PAVING AREA - 755 SQM FORMATION SLOPING - DEPTH OF SUB-BASE 450mm THROUGHOUT

PERMEABLE PAVING AREA - 790 SQM FORMATION SLOPING - DEPTH OF SUB-BASE 450mm THROUGHOUT

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REV	DATE	DESCRIPTION	BY	CHK	APP
P3	25.06.20	REVISED TO ADC DRAINAGE COMMENTS	SDL	MR	
P2	29.05.20	REVISED TO ADC DRAINAGE COMMENTS	SDL	MR	
P1	06.03.20	PLANNING ISSUE	SL	MR	

CLIENT: REDROW HOMES

ARCHITECT: RHP

JOB TITLE: ANGEL & HYDE NURSERIES, YAPTON ROAD, BARNHAM

DRAWING TITLE: SITE DRAINAGE SHEET 1 OF 2

JOB No.	SCALE @ A1	DATE
H19812	1/200	MARCH 2020

DRAWN	ENGINEER	CHECKED	APP
MR	GTA		

STATUS: S3 — DRAWING SUITABILITY: SUITABLE FOR REVIEW

REVISION: P3 — RIBA STAGE: STAGE 4 – TECHNICAL DESIGN

DRAWING No.: 19812-GS-Z1-XX-DR-C-1060

UNABLE TO SURVEY FULL EXTENTS OF DITCH DUE TO DENSE VEGETATION