THE ARRANGEMENT OF BUILDING DRAINAGE SHOULD BE GENERALLY IN ACCORDANCE WITH THE STANDARD DRAWING BEM/OSMA/1

Private foul pumping station
cl 173.5
IL 169.30
RISER 172.15
DISCHARGE 173.0

F1 F2 F3 S1 S2 S3 S4 S5 S6 S7 S8 S9

150mm 1:150
225mm 1:28
225mm 1:29
300mm 1:99
375mm 1:24
2100mm 1:465
2100mm 1:496
2100mm 1:491
225mm 1:140

150Ø @1/150
150Ø @1/136
150Ø @1/147

WHERE LOW POINTS ARE INICATED AGAINST BUILDINGS IT IS ANTICIPATED THAT THE ACTUAL LOW POINT WILL BE OFFSET FROM THE BUILDING LINE BY A MINIMUM OF 150MM HORIZONTALLY AND 20MM VERTICALLY SO AS TO PROVIDE A WATER CHECK. WHERE PRACTICAL, THE USE OF CHANNEL DRAINAGE SYSTEMS SHALL BE PREFERRED FOR INDIVIDUAL DRIVE AREAS .GULLIES ARE PREFERRED FOR COMMUNAL OR LARGER AREAS. IT IS ESSENTIAL THAT THE GULLIES USED FOR A PARTICULAR APPLICATION AREA ADEQUATE IN NUMBER AND SCALE FOR THE PARTICULAR APPLICATION
THE PROVISION OF EXTERNAL STRUCTURES REQUIRES EXCAVATION WORK IN TRENCHES, AND REQUIRES NORMAL TRENCH PRECAUTIONS TO BE UNDERTAKEN.

THE PROVISION OF RETAINING WALLS MAY NECESSITATE THE UNDERCUTTING OF EXISTING SLOPES AND/OR STRUCTURES TO EFFECT THE NEW WALL CONSTRUCTION. SPECIALIST ADVICE IS REQUIRED IN THESE INSTANCES FROM AN APPROPRIATELY QUALIFIED STRUCTURAL AND GEOTECHNICAL ENGINEER TO ADDRESS THE ISSUES OF STRUCTURAL STABILITY. MATERIALS AND PLANT MUST NOT BE STORED ON THE HIGH SIDE OF AN UNDERCUT SLOPE AND THE AREA MUST BE GUARDED TO PREVENT FALLS FROM HEIGHT

ADEQUATE MEASURES MUST BE EMPLOYED TO PROVIDE SLOPE STABILITY OR STABILITY / SHORING TO EXISTING STRUCTURES, AND PARTICULAR ATTENTION SHOULD BE PAID TO THE WEATHER PROOFING OF ANY SLOPES THAT WILL BE EXPOSED FOR SOME TIME

SIMILAR PRECAUTIONS ARE REQUIRED WHEN WORKING IN PROXIMITY TO EXISTING RETAINED MATURE TREES. EXCAVATIONS MAY DESTABILISE STRUCTURAL ROOTS AND SHOULD IDEALLY BE UNDERTAKEN BY HAND TO AVOID OVERHEAD CONTACT BETWEEN PLANT AND TREE BOUGHS

METHOD STATEMENTS MAY BE REQUIRED BY THE PLANNING SUPERVISOR DEMONSTRATING OPERATIVE TRAINING AND COMPETANCE IN THESE ISSUES. PERSONAL PROTECTIVE EQUIPMENT MUST BE USED AT ALL TIMES

GARDEN LEVELS TO TIE INTO EX.TOP OF BANK
NOTE - BOUNDARY TO BE ESTABLISHED PRIOR TO LAYING OF FOUL DRAIN

NOTES
1) ALL BUILDING DRAINAGE IS TO COMPLY WITH BS8301 AND PART H BUILDING REGULATIONS. PIPES SHALL BE 100MM DIAMETER UNLESS OTHERWISE STATED ON THE DRAWINGS

2) PIPE BEDDING MATERIAL TO BE CLASS B 100MM THICKNESS, GRANULAR MATERIAL TO BE 10MM SINGLE SIZE. BACKFILL IS TO BE SELECTED FILL FREE FROM STONES LARGER THAN 40MM, CLAY MATTER, VEGETABLE MATTER AND FROZEN MATERIAL

5) MANHOLE COVERS IN DRIVES SHALL BE TO BSEN 124

LEGEND

- VIT CLAY RODDING EYE WITH ALLUMINIUM SCREW DOWN COVER IE HEPWORTH CODE 262 OR SIMILAR
- 450MM DIA PLASTIC ACCESS CHAMBER MAX DEPTH 1.2M IE HEPWORTH CODE PPC100 OR SIMILAR
- CONCRETE MANHOLE SECTION DEPTH EXCEEDING 1.2M DIMS TO SUIT REGS H3 TABLE 9 OR APPROVED NONAMAIN ENTRY PLASTIC ALTERNATIVE
- 225 DIA VIT CLAY INSPECTION CHAMBER MAX 450MM DEEP IE HEPWORTH IC200 OR SIMILAR
- 450MM DIA PLASTIC ACCESS CHAMBER MAX DEPTH 1.2M IE HEPWORTH CODE PPC100 OR SIMILAR
- CONCRETE MANHOLE SECTION DEPTH EXCEEDING 1.2M DIMS TO SUIT REGS H3 TABLE 9 OR APPROVED NON-MAIN ENTRY PLASTIC ALTERNATIVE
- BG / YG — TRAPPED BOTTLE GULLY MIN 150 X 150 WATERWAY
- MIN 370MM DIA 450MM DEEP TRAPPED GULLY WITH C250 STANDARD GRATING MIN 0.65 SQUARE METRE WATERWAY AREA
- CHANNEL BLOCK — PRE-FORMED DISHED PCC CHANNEL OR SUITABLE ALTERNATIVE TO FORM DRAINAGE PATH
- UPSTAND — WATER CHECK RETENTION TO EDGE OF PARKING AREA EITHER BULLNOSED EDGING OR KERB UPSTAND 25MM
- ACO 2 — APPROVED LINEAR DRAINAGE SYSTEM DOMESTIC STANDARD MIN 170MM WIDE WATERWAY OR PC DISHED CHANNEL AND GULLY ALTERNATIVE
- ACO — APPROVED LINEAR DRAINAGE SYSTEM COURTYARD STANDARD MIN 170MM WIDE WATERWAY AND SUITABLE FOR VEHICLE LOADINGS
- MODULAR / CELLULAR CRATE STORAGE SYSTEM- DIMENSIONS AND PREFERRED SYSTEM INDICATED ON DRAWINGS
- PCC RING SOAKAWAY SYSTEM- RING DIAMETER AND LEVELS STIPULATED ON DRAWINGS
- TANKING AND OR SPLIT DPC TO BRICKWORK TO DIMENSIONS INDICATED
- TANKING OF DPC BY DRIVE EDGING
- MAX 300 — MAXIMUM DEPTH OF FACING BRICKWORK IN MM BELOW THE NORMAL 2 COURSES BELOW DPC
- RET, MAX 501 — ANNOTATION OF RETAINED HEIGHT. MATERIAL BASED ON CLIENT SPEC AND RETAINED HEIGHT
- LOG RETAINING TO PROPRIETARY DETAILS MAX RETENTION 1200
- 1/12 STEPS 4 X 100 RISE 3 X 300 TREAD — INDICATION OF STEPS RAMPS AND ACCESS GRADIENTS COMMENSURATE WITH PART M OF THE BUILDING REGULATIONS WHERE ACCESS IS STEEPER THAN 1/20, RISE AND GOING TO BE STIPULATED

The site manager is to inspect all excavations for stability prior to any personell entering the trench. If any doubt whatsoever exists regarding the state of the ground the operative must refer the issue to the manager prior to entering the trench.

Site staff must observe all normal trench precautions for any excavation . Risks to staff include trench collapse due to plant or materials loading, trench instability due to running conditions or shrinkage and expansion, and gassing risk due to ground gasses or contact with live sewerage.

Appropriate method statements must be in place for these operations and the operatives must have demonstrated to the principal contractor evidence of their training and competance in respect of such works

Additional risks include falls from height and the potential for debris to be kicked into trenches. Appropriate barrier systems must be used where necessary

In deep systems, and at the discretion of the planning supervisor, trench working may be defined as confined spaces working and additional safety precautions including compliance with specific legislation, must be taken. Escape plans must be in place and gas monitoring equipment available.

With effect from 01 November 2008 Barratt Developments has entered into a dual supply arrangement with Burdens and Keyline for the provision of storm and foul drainage product, which will consist of all pipe work including fittings (concrete, clay and plastic), manhole rings, cover slabs, road gullies, cast iron covers gully gratings and concrete slabs, kerbs and edgings.

REV	DESCRIPTION	DATE	INITIAL

PURPOSE OF ISSUE	REV	DATE

STEPHEN DAYKIN CONSULTING Ltd
A civil engineering design consultancy for the development industry
33 Beaumaris Drive, Gedling
Nottingham NG4 2RA
Phone 0115 9404321 Fax 0115 9404184
e-mail stephen@stephendaykinconsulting.co.uk

PROJECT:
PROPOSED RESIDENTIAL DEVELOPMENT AT STANTON UNDER BARDON

CLIENT:
DAVID WILSON HOMES EAST MIDLANDS

TITLE:
EXTERNAL WORKS AND BUILDING DRAINAGE LAYOUT

DRAWN:	CHECKED:	DATE:
CO		##/01/13
SCALE: 1:200		
DWG No: E398/90		REV: -

DECONS · RM ·
Condition 4.