



GENERAL NOTES

- DO NOT SCALE FOR CONSTRUCTION PURPOSES.
- THE CONTRACTOR IS TO CHECK AND VERIFY ALL BUILDINGS AND SITE DIMENSIONS AND LEVELS, INCLUDING SEWER INVERT LEVELS, BEFORE WORKS START ON SITE. THE CONTRACTOR IS TO COMPLY IN ALL ASPECTS WITH THE CURRENT BUILDING LEGISLATION, BRITISH STANDARDS ETC.
- POSITIONS OF EXISTING SERVICES/STATIONARY UNDERTAKERS APPROPRIATE TO OR CROSSING PROPOSED EXCAVATIONS ARE TO BE CHECKED BY THE CONTRACTOR PRIOR TO STARTING WORK.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH AND CHECKED AGAINST ALL OTHER DRAWINGS, ENGINEERING DETAILS, SPECIFICATIONS AND ANY STRUCTURAL, GEOTECHNICAL OR OTHER SPECIALIST DOCUMENT PROVIDED. ANY ANOMALY OR CONTRADICTION BETWEEN ANY OF THE ABOVE IS TO BE REPORTED TO THE DEVELOPERS ENGINEER.
- ALL LEVELS ARE IN TERMS OF THE OS DATUM.

ENGINEERING & PHASE 2 KEY

- PROPOSED FINISHED FLOOR LEVEL
- RETAINING WALL (HEIGHT SHOWN IS REQUIRED UNLESS STATED OTHERWISE (DOWN ADAPTABLE) HEIGHT OF BOUNDARY WALLS OR FENCES)
- LANDSCAPED BATTER MAXIMUM 1:2
- TANKED WALL
- UNDERBELD (ADDITIONAL BELOW DPC LEVEL)
- STEPPED ACCESS (PART M)
- SPOT LEVEL
- PROPOSED CONTOURS
- GRAVEL BEARD
- SURFACE WATER MANHOLE & SENDER (SAB ADAPTABLE)
- SURFACE WATER CHAMBER & LATERAL TO BE 150mm# UNLESS STATED OTHERWISE (SAB ADAPTABLE)
- SURFACE WATER CHAMBER & LATERAL TO BE 150mm# (PRIVATE)
- ROOFING DYE (PRIVATE) INVERT LEVEL TO BE MINIMUM 450mm BELOW GROUND LEVEL
- FOUL WATER MANHOLE & SENDER (DOWN ADAPTABLE)
- FOUL WATER CHAMBER & LATERAL TO BE 100mm# UNLESS STATED OTHERWISE (DOWN ADAPTABLE)
- FOUL WATER CHAMBER & LATERAL TO BE 100mm# (PRIVATE)
- ALL ADAPTABLE MANHOLES IN THE HIGHWAY TO HAVE (DOWN CONDUITS)
- ALL CHAMBERS IN SHARED DRAINS TO BE MINIMUM 600mm DEEP
- ALL CHAMBERS IN PRIVATE DRAINS TO HAVE MINIMUM 750mm DEEP
- ALL CHAMBERS USED TO LATERAL DRAINS ARE TO BE EITHER TYPE 3 OR 4
- HIGHWAY ADAPTABLE ROAD GULLY
- STONE GRIP - 150mm TO REAR GARDENS AROUND PATIOS
- STONE GRIP - 225mm TO HIGH SIDE OF RETAINING WALL (OR LOW SIDE WHERE SHOWN)
- LINEAR DRAINAGE CHANNEL
- ADAPTABLE STREET LIGHTING
- TANKED BIO-RETENTION AREA WITH PROPOSED DETENTION GULLY
- ALTERN PRECAST HEADWALL
- SEL ENVIRONMENTAL DIPS/OUT UNIT
- ADAPTABLE RAIN GARDEN OVER FLOW GULLY
- ADAPTABLE WATER BREAK INLET
- PERMEABLE PAVING (SAB ADAPTABLE)
- PRIVATE PERMEABLE PAVING

PHASE 1 DRAINAGE KEY

- PROPOSED ADAPTABLE SURFACE SEWER - Subject to SAB Approval
- PROPOSED ADAPTABLE FOUL SEWER - Subject to SDA Approval
- NEWPORT CITY COUNCIL HIGHWAY ADAPTABLE ROAD GULLY DISTRIBUTOR CELL SERVING TANKED PERMEABLE SURFACING
- TANKED BIO-RETENTION AREA - See construction details
- TANKED PERMEABLE PAVING - See construction details
- MACRO PERMEABLE DRIVE - See construction details
- TYPICAL STEEPER GRADIENT SWALES WITH CHECK DAMS
- ACTIVE STORAGE SWALE
- SWALE MAINTENANCE STRIP - 0.3m wide, providing a level hard to the top of the swale to protect against erosion where levels will not allow greater width
- CELLULAR (PLASTIC) SURFACE WATER ATTENUATION TANK
- ALTERN CONCRETE HEADWALL - SEE SCHEDULE FOR DETAILS
- OUTLET HEADWALL - SEE SCHEDULE FOR DETAILS FROM DRAINAGE DETAILS
- FILTER STRIP DRAINAGE SERVING SHARED DRIVES - SEE CONSTRUCTION DETAILS - CHECKER CONSTRUCTION AREA SHOWN BY RED OUTLINE
- PERMEABLE PAVING OVERFLOW YARD GULLY
- PRIVATE PERMAVOID CELL WITHIN PRIVATE DRIVEWAYS
- LINEAR DRAINAGE CHANNEL (150mm WIDE AT THRESHOLD OF GARAGE)

DRAINAGE NOTES

- ALL PRIVATE DRAINAGE SHALL BE IN ACCORDANCE WITH SCHEDULE 8 OF THE BUILDING REGULATIONS.
- THE CONTRACTOR IS TO CHECK THE LEVEL OF EXISTING SEWERS BEING USED AS OUTFALLS OR CROSSING PROPOSED DRAINAGE RUNS PRIOR TO LAYING ANY PIPES. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER.
- PRIVATE HOUSE DRAINAGE WILL BE FLEXIBLY JOINTED PLASTIC OR CLAY PIPEWORK, DIAMETER 100mm UNLESS SHOWN OTHERWISE.
- ALL CONNECTIONS FOR HOUSE DRAINAGE SHALL BE 100mm UNLESS NOTED OTHERWISE AND MUST EXTEND 500mm BEHIND THE THICK OF FOOTWAY/PAVING/ROAD. ALL CONNECTIONS WHEN LAID SHALL BE PLUGGED, PROTECTED AS NECESSARY AND MARKED WITH A STAKE FOR FUTURE USE. ALL PW DRAINAGE LATERALS FROM THE ADAPTABLE DRAINAGE SYSTEM TO BE 100mm. FOR PRIVATE DRAINS WHERE COVER TO PIPES IS LESS THAN 300mm IN VEHICULAR AREAS OR 600mm IN OTHER AREAS PROTECTION IN THE FORM OF A 100mm THICK CONCRETE SURROUND, SCREEN WALLS, FOOTINGS OR RETAINING WALLS UNITS ARE TO BE PROVIDED OVER UNDER BUILDINGS. THESE SHALL BE SURROUNDED WITH 150mm THICKNESS OF GRANULAR MATERIAL WHERE DRAINS PASS WITHIN 1m OF BUILDINGS THE WALL FOUNDATION SHALL BE TAKEN DOWN BELOW THE INVERT OF THE PIPE.
- WHERE DRAINS DO NOT EXCEED 600mm DEEP, PLASTIC OR CLAY ACCESS FITTINGS MINIMUM DIAMETER 225mm SHALL BE USED. ELSEWHERE PROPRIETARY PLASTIC OR PRECAST CONCRETE INSPECTION CHAMBERS SHALL BE USED.
- ALL GULLIES AND RAINWATER DOWNPIPES CONNECTED DIRECTLY TO DRAINS ARE TO BE RODDABLE.
- LEVELS AT DRAINAGE ACCESS POINTS ARE INVERTS.
- WHERE POSSIBLE, DRAINAGE RUNS SHOULD BE LAID AT A MINIMUM OF 3.0m FROM THE REAR OF PROPERTIES WHERE PRACTICAL TO ALLOW FOR FUTURE EXTENSIONS.
- ALL DRAINAGE SHALL BE LAID UPSTREAM AND EACH RUN BETWEEN MANHOLES SHALL BE LAID COMPLETE PRIOR TO BACKFILLING. WHERE THIS IS NOT PRACTICAL, TRAP HOLES OR OTHER MEANS OF IDENTIFYING THE LINE AND LEVEL OF SERVICES SHALL BE CARRIED OUT PRIOR TO WORKS COMMENCING.
- ALL BRANCH DRAINS, OR CONNECTIONS, ARE TO DISCHARGE TO THE COLLECTORS OBLIQUELY, AND IN THE DIRECTION OF THE MAIN FLOW.
- ALL LOW SPOTS ON HARDSTANDING AREAS TO HAVE TRAP GULLIES/ADS.
- ALL ADAPTABLE SURFACE WATER LATERALS ARE TO BE 150mm UNLESS NOTED OTHERWISE.
- ALL ADAPTABLE FOUL LATERALS ARE TO BE 100mm UNLESS NOTED OTHERWISE.
- ALL PRIVATE FOUL CHAMBERS IMMEDIATELY OUTSIDE THE PROPERTY ARE TO BE A MINIMUM OF 750mm FROM THE FFL OR 600mm FROM THE EXTERNAL LEVEL.
- ALL DRAINAGE TO BE ADAPTED UNDER A SECTION 104 AGREEMENT SHALL BE CARRIED OUT IN ACCORDANCE WITH "SEWERS FOR ADOPTION 7TH EDITION" INCLUDING THE DOWN ADDENDUMS.
- REFER TO MANHOLE SCHEDULES FOR FURTHER INFORMATION.
- ALL MANHOLE USED TO LATERAL DRAINS ARE TO BE EITHER TYPE 3 OR 4.
- ALL LATERALS OF 100mm DIAMETER ARE TO HAVE A MINIMUM GRADIENT OF 1 IN 80 AND A MAXIMUM GRADIENT OF 1 IN 5.
- ALL PIPE CONNECTIONS ARE TO BE SOFFIT TO SOFFIT CONNECTIONS UNLESS OTHERWISE SPECIFIED.

APPROVED DWR CDMR WELSH WATER PLASTIC PIPE SYSTEMS ARE AS FOLLOWS:

- WAPLEY TWINWALL SYSTEM
- UPONOR ULTRARIB SYSTEM
- CSW ULTRARIB SYSTEM
- POLYSEWER TWINWALL SYSTEM
- POLYPIPES - RIGIDWEL (400mm-600mm AND 750mm-900mm)

PLEASE NOTE THAT THE INSTALLER MUST BE ACCREDITED WITH THE BRITISH PLASTICS FEDERATION (BPF).

Revisions

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Org Status: **FOR APPROVAL**

CONSTRUCTION OF DEEP MANHOLES

CONTRACTOR TO PROVIDE SUITABLE METHOD OF CONSTRUCTION TO AVOID SLOPE EROSION WORK.

CONSTRUCTION OF LARGE 1/2 BATTER SLOPES.

CONTRACTOR TO PROVIDE SUITABLE METHOD OF CONSTRUCTION AT ALL WITH PROTECTION FOR HIGHWAY WORKS SLOPES AND NOT BEYOND BATTERWORKS.

CDM