

Area of open space
incorporating exercise trail
and landscaping.
(Please refer to EDP plans for details and
Quad engineering for further detail)

PHASE 1 DRAINAGE KEY

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

ENGINEERING & PHASE 2 KEY

- PROPOSED FINISHED FLOOR LEVEL
- RETAINING WALL HEIGHT SHOWN IS REQUIRED
- LANDSCAPED BATTER MAXIMUM 1:2
- TANKED WALL
- UNDERBUILT (ADDITIONAL BELOW DPC LEVEL)
- STEEPED ACCESS (PART M)
- SPOT LEVEL
- PROPOSED CONTOURS
- GRAVEL BOARD
- SURFACE WATER MANHOLE & SEWER (SAB ADAPTABLE)
- SURFACE WATER CHAMBER & LATERAL TO BE 150mm (SAB ADAPTABLE)
- SURFACE WATER CHAMBER & LATERAL TO BE 150mm (PRIVATE)
- PODDING EYE (PRIVATE) INLET LEVEL TO BE MINIMUM 450mm BELOW GROUND LEVEL
- FOUL WATER MANHOLE & SEWER (DOWN ADAPTABLE)
- FOUL WATER CHAMBER & LATERAL TO BE 100mm (DOWN ADAPTABLE)
- FOUL WATER CHAMBER & LATERAL TO BE 100mm (PRIVATE)
- ALL ADAPTABLE MANHOLES IN THE HIGHWAY TO HAVE 500mm COVERS
- ALL CHAMBERS IN SHARED DRIVES TO BE MINIMUM 450mm COVERS
- ALL CHAMBERS IN PRIVATE DRIVES TO HAVE MINIMUM BY25 COVERS
- ALL CHAMBERS LEAD TO LATERAL DRAINS ARE TO BE EITHER TYPE 3 OR 4
- HIGHWAY ADAPTABLE ROAD GULLY
- STONE GRP - 150mm to REAR GARDENS AROUND PATIOS
- STONE GRP - 225mm to HIGH SIDE OF RETAINING WALL OR LOW SIDE (WHERE SHOWN)
- NEAR DRAINAGE CHANNEL
- ADAPTABLE STREET LIGHTING
- TANKED BIO-RETENTION AREA WITH PROPOSED OVERFLOW GULLY
- ALTHON PRECAST HEADWALL
- SEL ENVIRONMENTAL 'DIFFUSER' UNIT
- ADAPTABLE RAIN GARDEN OVER FLOW GULLY
- ADAPTABLE WATER BREAK INLET
- PERMEABLE PAVING (SAB ADAPTABLE)
- PERMEABLE PAVING (PRIVATE)
- PERVIOUS DRIVE WITH PERMEABLE SUB-BASE (C/S FLAN TYPE 5)
- PRIVATE RAIN GARDEN
- 150mm POWER-SLOT HAS FULL-DRAIN PIPE SYSTEM WITH 50mm SLOTTED WITHIN PERMEABLE PAVING
- PRIVATE DRAINAGE KERS
- RAIN GARDEN 'GULLY CHUTE' (G/S)
- RAIN WATER PIPE - TO DISCHARGE AT SURFACE LEVEL OR INTO PRIVATE DRAINAGE CHANNEL
- HYDRO INTERNATIONAL DOWNSTREAM DEFENDER
- NON PERMEABLE BLOCK PAVING

APPROVED DMR CYMRU WELSH WATER PLASTIC PIPE SYSTEMS ARE AS FOLLOWS:

- WATLEY TWINWALL SYSTEM
- UPONOR ULTRABEST SYSTEM
- ULTRABEST SYSTEM
- POLYSEWER TWINWALL SYSTEM
- POLYPIPES - RIGIDSEWER (400mm-600mm AND 750mm-900mm)

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

CONSTRUCTION OF DEEP MANHOLES:
CONTRACTOR TO PROVIDE SUITABLE METHOD WITHIN 50mm SLOTTED WITHIN PERMEABLE PAVING
CONSTRUCTION OF LARGE 1:2 BATTER SLOPES
CONTRACTOR TO PROVIDE SUITABLE METHOD WITHIN 50mm SLOTTED WITHIN PERMEABLE PAVING
WORK SERIES 800 AND 800X GEOTECHNICAL ADVICE

- 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/STATUTORY UNDERTAKERS APPARATUS ADJACENT 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 AMALY OF CONTRADICTION BETWEEN ANY OF THE ABOVE IS TO BE REPORTED TO THE DEVELOPERS ENGINEER.
 - ALL LEVELS ARE IN TERMS OF THE OS DATUM.
- DRAINAGE NOTES**
- ALL PRIVATE DRAINAGE SHALL BE IN ACCORDANCE WITH BS5531 AND RELEVANT SECTIONS OF APPROPRIATE DOCUMENT H 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 JOINTLY JOINED 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 BACK OF FOOTPATH/ROAD. ALL CONNECTIONS WHEN LAD SHALL BE PROTECTED, AS NECESSARY AND MARKED WITH UNLESS STATED OTHERWISE (DOWN ADAPTABLE).
 - FOR PRIVATE DRAINS WHERE COVER TO PIPES IS LESS THAN 500mm IN REAR GARDENS OR 600mm IN OTHER AREAS PROTECTION IN THE FORM OF A 100mm THICK CONCRETE SURROUND.
 - WHERE PIPES PASS THROUGH SCREEN WALLS, FOOTINGS OR RETAINING WALLS UNITS ARE TO BE PROVIDED OVER UNDER BUILDINGS 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, TIAL 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 OBQUELY, AND IN THE DIRECTION OF THE MAIN FLOW.
 - ALL LOW SPOTS ON HARDSTANDING AREAS TO HAVE YARD GULLIES/ACD.
 - 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 FTI OR 600mm FROM THE EXTERNAL LEVEL.
 - ALL DRAINAGE TO BE ADOPTED 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.

Revisions

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