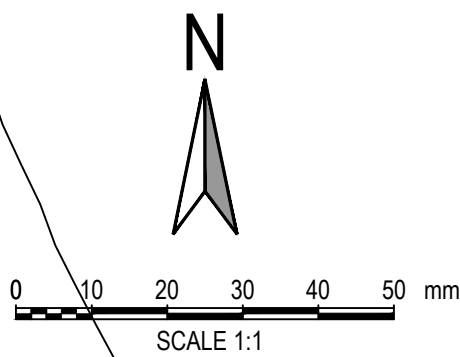




NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. ALL LEVELS ARE SHOWN IN METRES UNLESS NOTED OTHERWISE.
3. DO NOT SCALE FROM THE DRAWING. USE FIGURED DIMENSIONS ONLY.
4. ANY DISCREPANCIES TO BE REPORTED IMMEDIATELY TO THE ENGINEER.
5. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS, SUBCONTRACTORS AND SPECIALISTS DRAWINGS AND SPECIFICATIONS.
6. EXISTING SERVICES HAVE NOT BEEN SHOWN BUT ARE PRESENT - THE CONTRACTOR IS TO LIAISE WITH ALL STATUTORY AUTHORITIES PRIOR TO THE COMMENCEMENT OF ANY WORKS.

ADOPTABLE DRAINAGE NOTES:

1. THE DEVELOPER MUST SELF VET AND CERTIFY THAT THE DESIGN CRITERIA, MATERIAL STANDARDS AND WORKMANSHIP SPECIFICATIONS FOR THE PROPOSED ADOPTABLE SEWERS ARE IN ACCORDANCE WITH THOSE SET OUT IN 'SEWERS FOR ADOPTION' 7TH EDITION, THE WELSH MINISTERS STANDARDS AND THE REQUIREMENTS OF DCWW AS THE STATUTORY SEWERAGE UNDERTAKER.
2. SUBJECT TO A SECTION 104 ADOPTION AGREEMENT BEING COMPLETE, A SECTION 106 APPLICATION TO CONNECT MUST BE MADE TO DCWW. THE DEVELOPER SHALL GIVE 21 DAYS NOTICE PRIOR TO CONNECTION. THE WORKS MAY ONLY BE UNDERTAKEN BY A SIPS REGISTERED CONTRACTOR.
3. **HAZARDOUS WASTE**- CONTRACTOR TO PROVIDE EVIDENCE OF THE PROPOSED REMOVAL OF THE EXISTING PITCH FIBRE DRAINAGE RUN.
4. CONTRACTOR TO CONFIRM PRIOR TO THE ABANDONMENT OF SEWER THAT NO EXISTING CONNECTION UPSTREAM EXIST. (TO ENSURE NO EXISTING USERS ARE CUT OFF.)
5. COMPLIANCE WITH HEALTH & SAFETY MATTERS ON ANY TRENCH/MANHOLE IS OBLIGATORY AND A PERMIT TO ENTER A CONFIRMED SPACE IS REQUIRED WHEN CONNECTING SITE DRAINAGE TO THE EXISTING PUBLIC SEWERAGE SYSTEM. A PERMIT TO ENTER A CONFINED SPACE WILL BE OBTAINED FROM DWR CYMRU/WELSH WATER PRIOR TO THE WORKS COMMENCING ON ANY PUBLIC SEWERAGE SYSTEM.
6. MH COVER & FRAMES SHALL BE DUCTILE IRON WITH A MINIMUM SQUARE OPENING OF 675x675mm. COVERS SHALL BE DOUBLE TRIANGLE FOR 675mm SQUARE OPENINGS AND BE PROVIDED WITH LOOSE BOLTED CONNECTIONS. FRAME DEPTH SHALL BE 150mm.
7. ALL IRONWORK TO BE KITE MARKED BY BSI OR CERTIFIED BY EQUAL INSPECTION AUTHORITY.
8. PLANTING CLOSE TO ADOPTABLE DRAINAGE RUNS INDICATED IS TO ACCORD WITH THE SPECIFICATIONS IN SFA 7th EDITION SECTION C3.1.13 TO COMPLY WITH THE REQUIREMENTS OF SFA 7th & THE WELSH MINISTERS STANDARDS.
9. NOTE WHERE PLASTIC PIPE IS TO BE USED, IT MUST CONFORM WITH CLAUSES **E2.21** AND/OR **E2.22** IN SEWERS FOR ADOPTION 7th EDITION AND BE KITE MARKED. THE PLASTIC PIPES ACCEPTED BY DCWW FOR GRAVITY SEWERS FOR DIAMETERS OF 150mm - 300mm INCLUDE :
 - a. MARLEY TWINWALL SYSTEM
 - b. UPONER ULTRARIB SYSTEM
 - c. OSMA ULTRARIB SYSTEM
 - d. POLYSEWER TWINWALL SYSTEMPOLYPIPE RIGISEWER IS ACCEPTABLE AND AVAILABLE FOR 400mm-600mm AND 750mm-900mm DIAMETER RANGES. PLEASE BE MINDFUL OF THE PROPOSED PIPE MATERIAL MAKE FOR 375mm DIAMETER SEWERS AS CONCRETE PIPE MAY BE THE ONLY ACCEPTABLE OPTION AT THIS SIZE.
10. CONTRACTOR TO ENSURE PIPES WITH STIFFNESS OF SN8 OR GREATER ARE USED FOR PIPES LESS THAN 500mm Ø AND A MINIMUM OF SN2 FOR PIPES GREATER THAN 500mm Ø.

DRAINAGE NOTES:

1. MH COVERS AND FRAMES TO CONFORM TO BS EN 124: -HIGHWAYS AND FOOTWAYS TO FRONT OF BUILDINGS (D400) -FOOTWAYS TO REAR OF BUILDINGS (C250).
2. TYPE S BEDDING AND SURROUND TO ALL PIPES EXCEPT IN THE FOLLOWING CIRCUMSTANCES, IN WHICH TYPE Z BEDDING AND SURROUND ARE TO BE USED:
 - DOMESTIC GARDENS AND PATHWAYS WITHOUT ANY POSSIBILITY OF VEHICULAR ACCESS, 0.35m;
 - DOMESTIC DRIVEWAYS, PARKING AREAS AND YARDS WITH HEIGHT RESTRICTIONS TO PREVENT ENTRY BY VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES, 0.5m;
 - DOMESTIC DRIVEWAYS, PARKING AREAS AND NARROW STREETS WITHOUT FOOTWAYS (E.G. MEWS DEVELOPMENT) WITH LIMITED ACCESS FOR VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES, 0.9m;
 - AGRICULTURAL LAND AND PUBLIC OPEN SPACE, 0.9m;
 - HIGHWAYS AND PARKING AREAS WITH UNRESTRICTED ACCESS TO VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES, 1.2m.
3. ALL EXISTING MANHOLE INVERTS TO BE CHECKED AND REPORTED TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF DRAINAGE WORKS. EXISTING PIPE CONNECTIONS ARE TO BE CCTV SURVEYED AND INSPECTED BY THE ENGINEER AND LOCAL AUTHORITY. IF THE PIPE CONNECTION IS FOUND TO BE DAMAGED OR IN DISTRESS, THE CONTRACTOR IS TO CARRY OUT REMEDIAL WORKS OR PROVIDE A NEW CONNECTION TO THE EXISTING SEWER (PIPE SIZE AND GRADIENT TO BE DETERMINED BY THE ENGINEER).
4. THE GRADIENTS INDICATED AGAINST THE DRAIN RUNS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL INSTALL DRAINS TO THE INVERT LEVELS SHOWN FOR EACH MANHOLE OR OTHER INDICATED POSITION.
5. ALL PLOT FOUL DRAINAGE TO BE MINIMUM 100mm DIAMETER UNLESS OTHERWISE NOTED.
6. ALL ADOPTABLE THERMOPLASTIC STRUCTURED WALL SEWER PIPE SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 13476-1 AND WIS 4-35-01 AND BS EN 13476-2 OR BS EN 13476-3. PIPES SHALL BE BSI KITEMARKED OR HAVE EQUIVALENT THIRD PARTY CERTIFICATION. PIPES LESS THAN OR EQUAL TO 500mm DIA. SHALL HAVE A SHORT-TERM RING STIFFNESS OF NOT LESS THAN 8kN/m² (SN8).
7. ALL JOINTING IN ACCORDANCE WITH MANUFACTURERS TECHNICAL ADVICE & SPECIFICATION.
8. ALL NON ADOPTABLE DRAINAGE TO BE THE STANDARD UPVC 110mm, 160mm DRAINAGE AND MANUFACTURED TO BS-EN 1401 AND BS 4660 UNLESS NOTED OTHERWISE.
9. ALL STORM WATER DRAINAGE TO BE A MINIMUM OF 150mm DIAMETER UNLESS OTHERWISE NOTED.
10. SOIL & VENT PIPE LOCATION AND NUMBER TO BE CONFIRMED WITH ARCHITECT.
11. PRIOR TO ORDERING ANY MATERIALS THE CONTRACTOR IS TO CONFIRM MANUFACTURER/PIPE MATERIAL AND GRADE PROPOSED WITH WATER AUTHORITY.
12. TEMPORARY WORKS DESIGN BY OTHERS.
13. DESIGN RISK ASSESSMENTS AND METHOD STATEMENTS ARE TO BE PROVIDED TO THE PRINCIPLE CONTRACTOR PRIOR TO THE COMMENCEMENT OF ANY WORKS.

ANY WORKS ON SITE PRIOR TO PLANNING, HIGHWAY/ DRAINAGE APPROVALS BEING GRANTED TO BE UNDERTAKEN AT DEVELOPER / CONTRACTORS OWN RISK.

PRELIMINARY

PROPOSED DRAINAGE LEGEND

- 1500 @ 1:150 PROPOSED SURFACE WATER DRAINAGE
- 1000 @ 1:40 PROPOSED FOUL WATER DRAINAGE
- 1500 @ 1:150 PROPOSED HIGHWAYS DRAINAGE
- FLOW CONTROL CHAMBER - HYDROBRAKE (OSA)
- PROPOSED ALTHON HEADWALL
- RE- RODDING EYE
- PROPOSED PRIVATE FOUL DRAINAGE
- PRG- PROPOSED ROAD GULLY
- TFG- PROPOSED FOUL TRAPPED GULLY
- RWP- PROPOSED RAINWATER PIPE
- WB- PROPOSED WATER BUTT
- (ALL RAINWATER PIPE, WATERBUTT & INTERNAL DRAINAGE CONNECTION LOCATIONS TBC. BY ARCHITECT)
- PROPOSED DRAINAGE CHANNEL (ACO MD100 OSA)
- PERMEABLE PAVING PARKING BAY - MIN. 400mm TYPE 3 SUB-BASE WITH PERFORATED SUMP PIPE
- SDD SUMP DRAIN WITH OUTLET PIPE
- PROPOSED DIFFUSER BOX WITHIN DRAINAGE BLANKET
- DEMARCATION KERBING - TO DEMARCAT ADJACENT PERMEABLE PAVING SYSTEMS
- RAIN GARDEN / BIO RETENTION AREA WITH PERFORATED PIPE
- 1.2m HIGH TIMBER POST & 4 RAIL FENCE
- LIFE RING & SAFETY NOTICE

EXISTING DRAINAGE LEGEND

- EXISTING DCWW COMBINED DRAINAGE
- EXISTING DCWW SURFACE WATER DRAINAGE
- EXISTING DCWW RAW WATER PIPE WITH EASEMENT

EXISTING DRAINAGE TAKEN FROM DCWW ASSET MAPPING AND DRAINECH CCTV SURVEY UNDERTAKEN 17.03.2021

EXISTING SERVICES LEGEND

- EXISTING UNDERGROUND ELECTRICITY CABLES
- EXISTING UNDERGROUND STREET LIGHTING CABLES

03	UT	PG	1	22.08.24	UPDATED TO SUIT NEW SITE LAYOUT
02	UT	PG	1	12.07.24	MINOR AMENDMENTS
01	UT	PG	1	21.06.24	FIRST ISSUE

rev.	drawn	checked	approved	date	description
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Client
DANTWYN (PONTARDDULAI) LTD

Project
**GLYNHIR ROAD
PONTARDDULAI
SA4 8PT**

Title
**DRAINAGE LAYOUT
OVERVIEW**



date	drawn	checked	approved
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11.06.24	RM	PG	
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scale @ A1	project no.
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1:500	18649
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status	drg. no.	rev.
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P	18649/500	03
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DRAWING STATUS
A - Approval, AB - As-Built, C - Construction, D - Draft, P - Preliminary, T - Tender