



PROPOSED DISCHARGE INTO
EXISTING DITCH
DITCH LEVEL~84.44
OUTLET LEVEL-84.50

DETENTION BASIN 3
TOP LEVEL-83.80
BASE LEVEL-83.20
SUBBASE LEVEL-83.55
DEPTH-0.5m
AREA-38m²
MAX WATER LEVEL-0.4m
500mm DEEP GRANULAR
BLANKET UNDERLAYER

FW2 - PRIVATE
PACKAGE PUMPING
STATION REQUIRED
TT PUMPS TYPE VENUS
OR SIMILARLY APPROVED

GRAVITY CONNECTION
INTO EXISTING DCWW
FOUL SEWER
CONSTRUCTED AS
PART OF PHASE 1
CONSTRUCTION

DRAINAGE STRATEGY

- SURFACE WATER RUNOFF FROM HARD PAVED AREAS, I.E PLOT ROOF, DRIVEWAY & OUTHUSE TO BE COLLECTED VIA A SERIES OF ACO CHANNELS & CONVEYED TOWARDS THE BACK GARDEN.
- PROPOSED DETENTION BASIN TO ACT AS STORAGE FOR THE SITE, CONTROLLED VIA A 25MM ORIFICE PLATED CHAMBER BEFORE DISCHARGING INTO THE NEARBY STREAM AT A RATE OF 1 LIT/SEC.
- RAINWATER BUTT'S REQUIRED AT SELECTED RAINWATER DOWN PIPE TO EACH INDIVIDUAL PLOT. ARCHITECT TO CONFIRM PREFERRED LOCATIONS.
- REUSE - SURFACE WATER RUN-OFF TO BE COLLECTED WITHIN DETENTION BASIN AND REUSED BY THE HYDRATION OF PLANTING & WATER BUTTS ARE PROPOSED TO COLLECTING ROOF RUNOFF AT THE PLOT WITH AN OVERFLOW INTO PROPOSED ACO CHANNELS.
- INFILTRATION- SITE INVESTIGATION WERE UNDERTAKEN IN FEBRUARY 2019, 3NO. SOAKAWAY TESTS WERE UNDERTAKEN TO THE REQUIREMENTS OF BRE DIGEST 365 AND NO INFILTRATION WAS RECORDED DURING THE TESTING.
- WATER COURSE - SURFACE WATER ONSITE IS TO DISCHARGE INTO PROPOSED DETENTION BASIN BEFORE DISCHARGING INTO A NEARBY STREAM VIA AN ORIFICE PLATED CHAMBER AT AN ATTENUATED RATE.
- SURFACE WATER SEWER - NOT REQUIRED FOR THIS DEVELOPMENT.
- COMBINED SEWER - NOT REQUIRED FOR THIS DEVELOPMENT.
- FIRST 5MM WILL BE CATERED FOR IN THE INITIAL ABSORPTION OF THE VEGETATED BASIN.
- SURFACE WATER SYSTEM TO BE DESIGNED TO FOR A RETURN PERIOD OF 100YRS + 30% CLIMATE CHANGE.
- WATER QUALITY WILL BE ACHIEVED VIA THE VEGETATED DETENTION BASIN.
- VEGETATED DETENTION BASIN WILL BE AN IMPORTANT PART OF THE LANDSCAPE DESIGN. THE AREA WILL BE PLANTED AS PER THE LANDSCAPE ARCHITECTS SPECIFICATION AND WILL PROVIDE AMENITY CONTRIBUTION.
- DETENTION BASIN WILL BE PLANTED WITH NATIVE PLANT SPECIES TO PROVIDE DENSE AND DURABLE COVER OF VEGETATION THAT CREATES APPROPRIATE HABITAT FOR INDIGENOUS SPECIES.
- DRAINAGE NETWORK NOT OFFERED FOR ADOPTION.

FOUL STRATEGY

- PROPOSED PRIVATE PUMPING STATION TO DISCHARGE FOUL WATER VIA RISING MAIN TO AN EXISTING DCWW SEWER WITHIN THE A487 - SUBJECT TO S104 APPROVAL.

- GENERAL NOTES
1. DO NOT SCALE THIS DRAWING.
 2. CONTRACTOR TO CHECK ALL DIMENSIONS AND REPORT ALL ERRORS AND OMISSIONS TO THE ENGINEER.
 3. ANY DISCREPANCY TO BE REPORTED IMMEDIATELY TO THE ENGINEER.
 4. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, SUBCONTRACTORS AND SPECIALISTS DRAWINGS AND SPECIFICATIONS.

- KEY
- SITE BOUNDARY
 - PROPOSED PRIVATELY MAINTAINABLE STORM DRAINAGE
 - PRIVATELY MAINTAINABLE DRAINAGE - PERFORATED PIPES
 - DCWW ADOPTABLE GRAVITY FOUL DRAINAGE
 - PRIVATE GRAVITY FOUL DRAINAGE
 - PRIVATE DETENTION BASIN
 - PRIVATE SURFACE WATER OVERFLOW GULLY
 - PRIVATE LINEAR DRAINAGE CHANNEL
 - PROPOSED DCWW ADOPTABLE RISING MAIN
 - PROPOSED DCWW ADOPTABLE RISING MAIN

B	DRAWING AMENDED TO SUIT NEW LAYOUT	CH	04.10.22
A	CLIENT ADDED TO DRAWING	CH	04.10.22
Rev.	Detail	By	Date

Revisions

Reinforcement schedules nos.

Structural & Civil Engineering Consultants

First Floor
7 St James Crescent
Swansea
SA1 6DP

Telephone +44 1792 473 182
e-mail admin@cb3consult.co.uk
web www.cb3consult.co.uk

Client

Project

PHASE TWO HOUSING DEVELOPMENT AT THE BARN, DINAS CROSS PEMBROKESHIRE

Drawing Title

BARN REDEVELOPMENT LAYOUT PLAN DRAINAGE

PLANNING

Project No.	C1996	Drawing No.	C-SK03
Scales	1:200	Date	03.10.22
Drawn	CH	Checked	DH
Sheet Size	A3	Revision	B