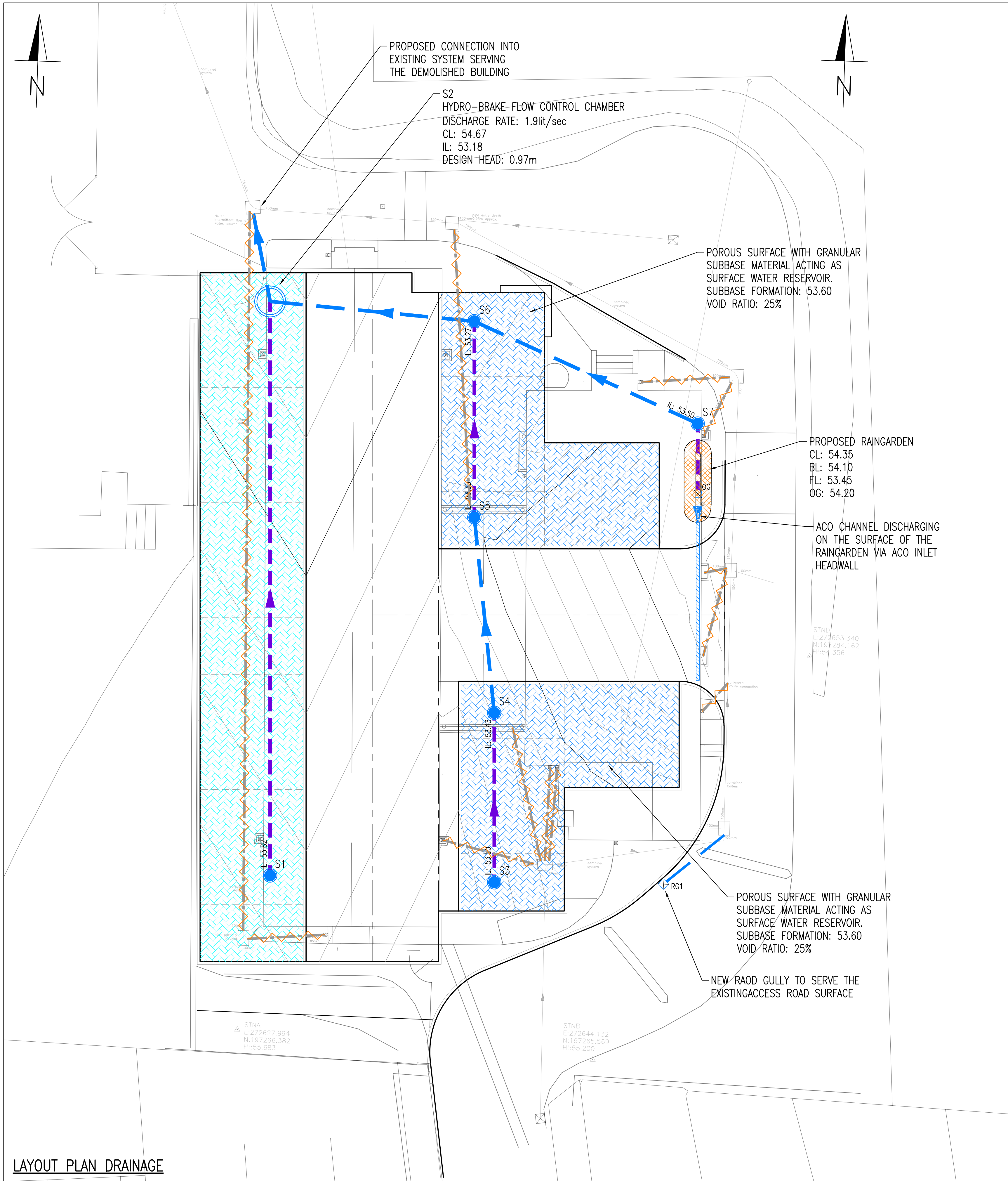




LAYOUT PLAN DRAINAGE

DRAINAGE STRATEGY.

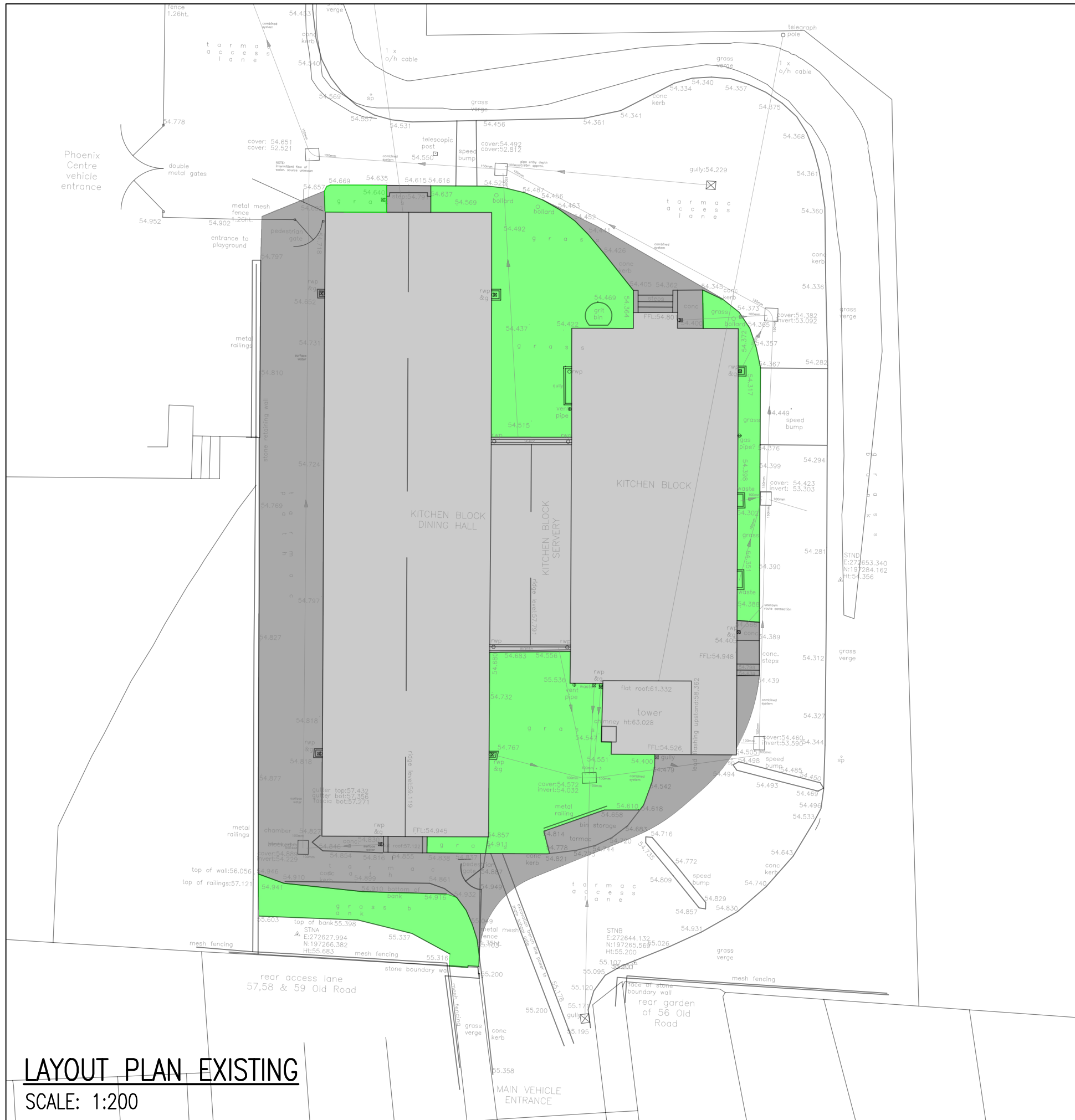
COMPLIANCE WITH STANDARDS

INFILTRATION TESTING WAS CARRIED OUT IN SA01 AT THE DEVELOPMENT SITE IN ACCORDANCE WITH BRE365 BY WYG. REPORT REFERENCE A111150-16. THE SOAKAWAY TEST UNDERTAKEN DID NOT ACHIEVE A VIABLE RESULTS DUE TO INSUFFICIENT FLOW TO CALCULATE AN INFILTRATION RATE.

- S1**
- REUSE – SURFACE WATER RUN-OFF TO BE COLLECTED WITHIN THE RAINGARDENS AND REUSED BY THE HYDRATION OF PLANTING.
 - INFILTRATION – NOT VIABLE FOR THIS DEVELOPMENT.
 - WATER BODY – NOT AVAILABLE FOR THIS DEVELOPMENT.
 - SURFACE WATER SEWER – NOT AVAILABLE FOR THIS DEVELOPMENT.
 - COMBINED SEWER – IT IS PROPOSED TO UTILISE AN EXISTING ONSITE CONNECTION TO SERVE THE PROPOSED CAR PARK WHICH DISCHARGES INTO THE PUBLIC COMBINED SEWER. THE PROPOSED DISCHARGE RATE HAS BEEN BASED ON EXISTING RUNOFF FOR 2 YEAR 180min STORM EVENT (2.7l/s). ADDITIONALLY, +30% CLIMATE CHANGE AND 10% URBAN CREEP, THEREFORE THE PROPOSED DISCHARGE RATE IS 1.9l/s. THE PROPOSED CATCHMENT AREA FOR THE CAR PARK IS 440m².
- S2**
- FIRST 5mm WILL BE CATERED FOR IN THE INITIAL ABSORPTION OF THE PERMEABLE PAVING SUB-BASE & RAINGARDENS.
 - SURFACE WATER SYSTEM TO BE DESIGNED TO FOR A RETURN PERIOD OF 100YRS + 30% CLIMATE CHANGE + 10% URBAN CREEP.
 - POROUS SUBBASE TO BE UTILISED AS ATTENUATION PRIOR TO A FINAL DISCHARGE INTO ONSITE COMBINE SYSTEM.
 - AN ATTENUATED DISCHARGE RATE OF 1.9lit/sec IS PROPOSED FOR THE DEVELOPMENT DISCHARGING INTO THE EXISTING SYSTEM.L.
- THE TABLE BELOW PROVIDES THE PROPOSED DISCHARGE RESTRICTIONS AND SUBSEQUENT BETTERMENT OVER EXISTING DISCHARGE RATES:

DISCHARGE RESTRICTIONS & BETTERMENT			
STORM EVENT	DISCHARGE RATE (LIT/SEC)	DISCHARGE RESTRICTION (LIT/SEC)	BETTERMENT (%)
1 IN 2 YEAR	2.7	1.9	30
1 IN 30 YEAR	4.7	1.9	60
1 IN 100 YEAR	5.8	1.9	67

- S3**
- WATER QUALITY WILL BE ACHIEVED VIA VARIOUS SUDS TECHNIQUES, SUCH AS PERMEABLE SURFACING & RAINGARDENS.
- S4**
- THE SUDS FEATURES MENTIONED ABOVE ARE AN IMPORTANT PART OF THE LANDSCAPE DESIGN. FULL LANDSCAPING PROPOSALS WILL BE PROVIDED IN DUE COURSE.
- S5**
- THE RAINGARDENS WILL BE PLANTED WITH NATIVE PLANT SPECIES TO PROVIDE DENSE AND DURABLE COVER OF VEGETATION THAT CREATES APPROPRIATE HABITAT FOR INDIGENOUS SPECIES.
- S6**
- NO FEATURES ARE TO BE OFFERED FOR ADOPTION.



LAYOUT PLAN EXISTING

SCALE: 1:200

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

- PRIVATELY MAINTAINABLE PERFORATED STORM DRAINAGE SYSTEM
- PRIVATELY MAINTAINABLE STORM DRAINAGE SYSTEM
- EXISTING SEWER TO BE ABANDONED AND GRUBBED UP
- PROPOSED LINEAR DRAINAGE CHANNEL
- POROUS SURFACING WITH A FLAT GRANULAR SUBBASE FORMATION FL: 53.60
- POROUS SURFACING WITH 350mm DEEP SUBBASE
- PRIVATELY MAINTAINABLE RAINGARDEN

DRAINAGE NOTES

1. THE DEVELOPER MUST SELF-TEST AND CERTIFY THAT THE DESIGN CRITERIA, MATERIAL STANDARDS AND WORKMANSHIP SPECIFICATIONS FOR THE PROPOSED ADAPTABLE SEWERS ARE IN ACCORDANCE WITH THOSE SET OUT IN SEWERS FOR ADOPTION 7TH EDITION AND THE WELSH MINISTERS STANDARDS.
2. A SECTION 106 APPLICATION TO CONNECT MUST BE MADE TO DOWN. THE DEVELOPER SHALL GIVE 21 DAYS' NOTICE PRIOR TO CONNECTION. THE WORKS MAY ONLY BE UNDERTAKEN BY A SSP ACCREDITED CONTRACTOR.
3. CONTRACTOR TO ALLOW FOR ALL NECESSARY STREET WORKS LICENSES ASSOCIATED WITH DRAINAGE SERVICE INSTALLATION IN EXISTING PUBLIC HIGHWAY.
4. ALL WORK TO BE CARRIED OUT IN CONNECTION WITH SEWERS AND MANHOLES TO BE IN ACCORDANCE WITH THE HEALTH AND SAFETY GUIDELINE NO. 2 'SAFE WORKING IN SEWERS AND SEWAGE WORKS'.
5. THE COVER AND INVERT LEVELS OF ANY EXISTING MANHOLES ARE TO BE VERIFIED ON SITE PRIOR TO THE COMMENCEMENT OF THE WORKS. ALSO TO INCLUDE VERIFICATION OF MANHOLE AND PIPE DIAMETERS.
6. ALL ADAPTABLE SEWERS OR LATERAL DRAINS ARE TO BE Laid AT A MINIMUM GRADIENT OF 1:80 FOR 100mm DIA PIPES, 1:150 FOR 150mm DIA PIPES AND A MAXIMUM GRADIENT OF 1:5, WHERE SITE LAYOUT DICTATES A RAMPED BACKSLOPE MAY BE UTILISED, ALTHOUGH STEEPER GRADIENTS ARE PREFERRED, AND SHOULD BE PROVIDED WHERE PRACTICABLE.
7. LATERAL PIPEWORK WITHIN 1.2m TO THE FACE OF PROPOSED BUILDING TO COMPLY WITH THE REQUIREMENT OF CLAUSE B3.1.4 AND FIGURE B.1.
8. MINIMUM CLEAR OPENING OF MANHOLE COVERS TO BE 600 X 600MM FOR FOUL WATER AND 475 X 475MM FOR SURFACE WATER.
9. PRIOR TO LAYING ANY MATERIAL, THE SUBGRADE MUST BE INSPECTED AND ANY SOFT SPOTS REMOVED AND FILLED WITH TYPE 1 MATERIAL TO S100 CLAUSE 803-14.
10. ALL PERFORATED PIPES TO BE WRAPPED IN A PERMEABLE GEO-TEXTILE.

Rev.	Detail	By	Date
A	DRAWING UPDATED TO SUIT REVISED ARCHITECT LAYOUT.	DH	30.06.25

Reinforcement schedules nos.



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Client



Project
**NEW CAR PARK
COEDFFRANC PRIMARY
SCHOOL, STANLEY ROAD,
SKEWEN, NEATH**

Drawing Title

**PHASE 2
LAYOUT PLAN
DRAINAGE**

INFORMATION

Project No.	Drawing No.
C2112	C-011
Scales 1:100 (UNLESS STATED)	Date 07.04.25
Drawn JQ	Checked DH
Sheet Size A1	Revision A