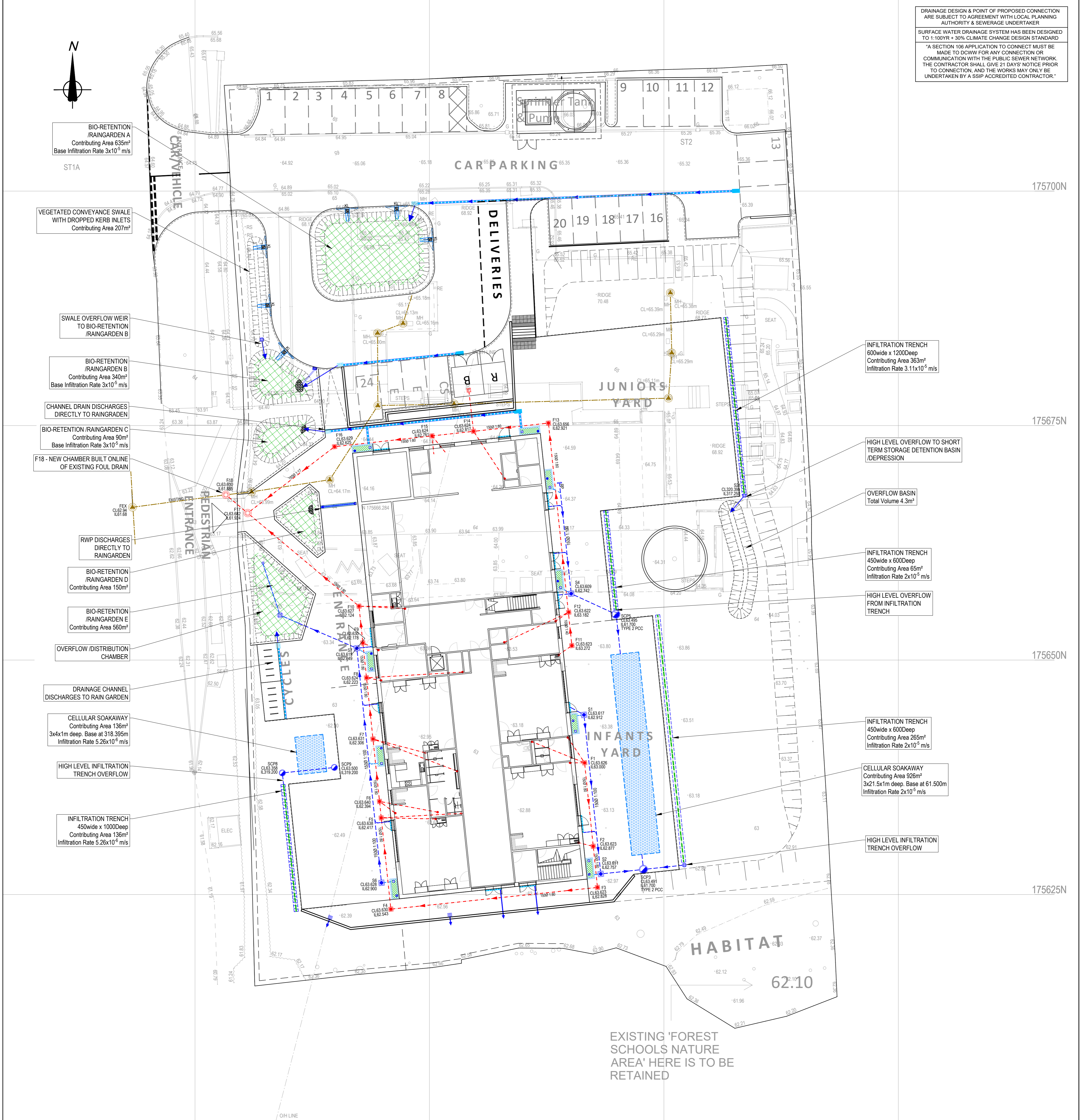


DRAINAGE DESIGN & POINT OF PROPOSED CONNECTION ARE SUBJECT TO AGREEMENT WITH LOCAL PLANNING AUTHORITY & SEWERAGE UNDERTAKER

SURFACE WATER DRAINAGE SYSTEM HAS BEEN DESIGNED TO 1:100YR + 30% CLIMATE CHANGE DESIGN STANDARD

"A SECTION 106 APPLICATION TO CONNECT MUST BE MADE TO DCWW FOR ANY CONNECTION OR COMMUNICATION WITH THE PUBLIC SEWER NETWORK. THE CONTRACTOR SHALL GIVE 21 DAYS' NOTICE PRIOR TO CONNECTION, AND THE WORKS MAY ONLY BE UNDERTAKEN BY A SSIP ACCREDITED CONTRACTOR."



**DRAINAGE LEGEND**

- Existing foul drains retained or diverted during Phase 1 Works
- Proposed storm drain
- Proposed foul drains
- Proposed storm manhole
- Proposed storm inspection chamber
- Proposed foul manhole
- Proposed foul inspection chamber
- Proposed Catchpit / Sump Chamber
- SuDS Planter with overflow
- Threshold Drain
- RWP discharge to Set Paved hard landscaped surface channel
- Gully with direct outlet through retaining wall - high level
- Channel drain with direct outlet to raingarden
- 450 wide Dropped kerb inlet to swale /raingarden
- Overflow /Distribution chamber with perforated pipes
- Infiltration Trench
- Rodding Point
- Proposed Foul connection 1000
- Proposed Cellular Soakaway

Chambers For Non-adoptable Areas				
Type	Depth To Invert (m)	Min. Internal Size (mm)	Covers Sizes	
			Length x Width (mm)	Circular (mm)
Shallow	0.6 or less	150*	430x430	150
Deep	1.2 or less	450	300x300**	430
	>1.2	450	300*300**	Restrictd access to max. 350mm**

**SuDS DRAINAGE NOTES:**

- A. All SuDS drainage is subject to Local Authority SAB Approval, no works to be carried out prior to approval.
- B. Surface water drainage system has been designed to cater for all storm events up to and including 100yr + 30% Climate Change critical storm event.
- C. Prior to construction Contractor to familiarise themselves with the CIRIA report C768 - Guidance on the construction of SuDS.
- D. Surface Water drainage & SuDS maintenance - Surface water drainage system to be inspected and maintained in accordance with current best practices and in line with CIRIA Report C753 - The SuDS Manual.
- E. Infiltration rates used for design purposes are based upon closest test to ratify design.
- F. Storage provided within SuDS Planters has been excluded at design stage to cater for a worst case /overflow scenario.

**DESIGN NOTES:**

1. This drawing is to be read in conjunction with all other RVW Consulting Ltd. project drawings and specifications.
2. All levels are in metres above ordnance datum based on the topographical survey drawing supplied by the Client.
3. All existing drainage levels and outfall points shall be surveyed and verified by the contractor prior to the commencement of the works. Any discrepancies shall be reported to the Engineer immediately.
4. Pipework under adoptable highway with less than 1.2m cover, and other trafficked areas with less than 0.9m cover to receive concrete encasement. Compressible fillerboard (18mm thick) to be placed at pipe joints at least the width of the concrete surround.
5. Rainwater pipes to be discharged via vertical inlet hoppers.
6. Large radius bends to be used at the foot of vertical discharge pipes/svps.
7. Rodding eyes (RE) are to be used at the head of runs, where appropriate.
8. Manhole covers should not bridge different surfaces.
9. Where two pipelines (other than plastic pipes) cross with less than 300mm separation pipes are to be surrounded with Class Z concrete surround for not less than 1m centred on the crossing point. Concrete surround to be extended as necessary to within 150mm of nearest flexible joints.
10. All internal foul outlets and rainwater pipe positions are to be confirmed by the Architect.
11. All gully gratings are to be heavy duty with heel-guard gratings in pedestrian areas.

**Raingarden Bio-retention Area Schedule**

Area Ref.	Base Surface Area m <sup>2</sup>	Min. Raingarden Makeup - Engineered Soil, 100mm Transition Layer, Drainage Layer					Drainage Layer Depth (mm)
		Planting Bed Level mAOD	Base Level mAOD (Underside of drainage layer)	Exceedance Level mAOD	Freeboard Storage m <sup>2</sup> (exceedance level -50mm)	Engineered Soil Depth (mm)	
RGA	96.000	64.250	63.450	64.380	5.400	500.000	200.000
RGB	30.090	62.600	62.800	64.040	6.800	500.000	200.000
RGC	24.520	63.300	62.500	63.880	7.600	500.000	200.000
RGD	20.300	63.400	62.700	63.600	1.436	400.000	200.000
RGE	48.800	63.250	62.350	63.400	3.700	400.000	400.000

Post-development Permeable /Impermeable Site Areas - Total Site Area 5846m <sup>2</sup>		
Area Ref.	Area m <sup>2</sup>	Net Comparison m <sup>2</sup>
Access & Parking	1160	
School Yards	1352	
School Roof	1016	+1623
Soft Landscaping	2318	-983.000

Pre-development Permeable /Impermeable Site Areas - Total Site Area 5846m <sup>2</sup>	
Area Ref.	Area m <sup>2</sup>
Hard Surfacing	1905
School Roof	640
Soft Landscaping	3301

12. All gully pipework to be 150mm minimum diameter.
13. All below slab foul drainage to be sized as shown or minimum 100mm diameter laid to a minimum gradient of 1 in 40 or 1:80 if connected to WC.
14. All pipework to have flexible joints and fully in compliance with the Building Regulations Part H 2010.
15. All pipework beneath slabs to be provided with min. 150mm Class Z concrete bed and surround.
16. All pipework to be laid with soffit to soffit connections unless noted otherwise.
17. All redundant site drainage to be removed / grubbed-up to the approval of the Building Control officer.

Rev.	Date.	Details.	By.	Chk.
Amendments				

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VANGUARD WAY  
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Project: **St. David's Church in Wales Primary School**

Title: **Proposed Drainage Layout**

Drawn: DRW	Checked: DRW	Scale(s) at A1: 1:200
Date: 02.04.20	RVW Job N°: C6906	Revision: P1
Drawing Status: PRELIMINARY	Suitability: S0	

Drawing N°: **SDPS-RVW-ZZ-00-DR-C-2000**