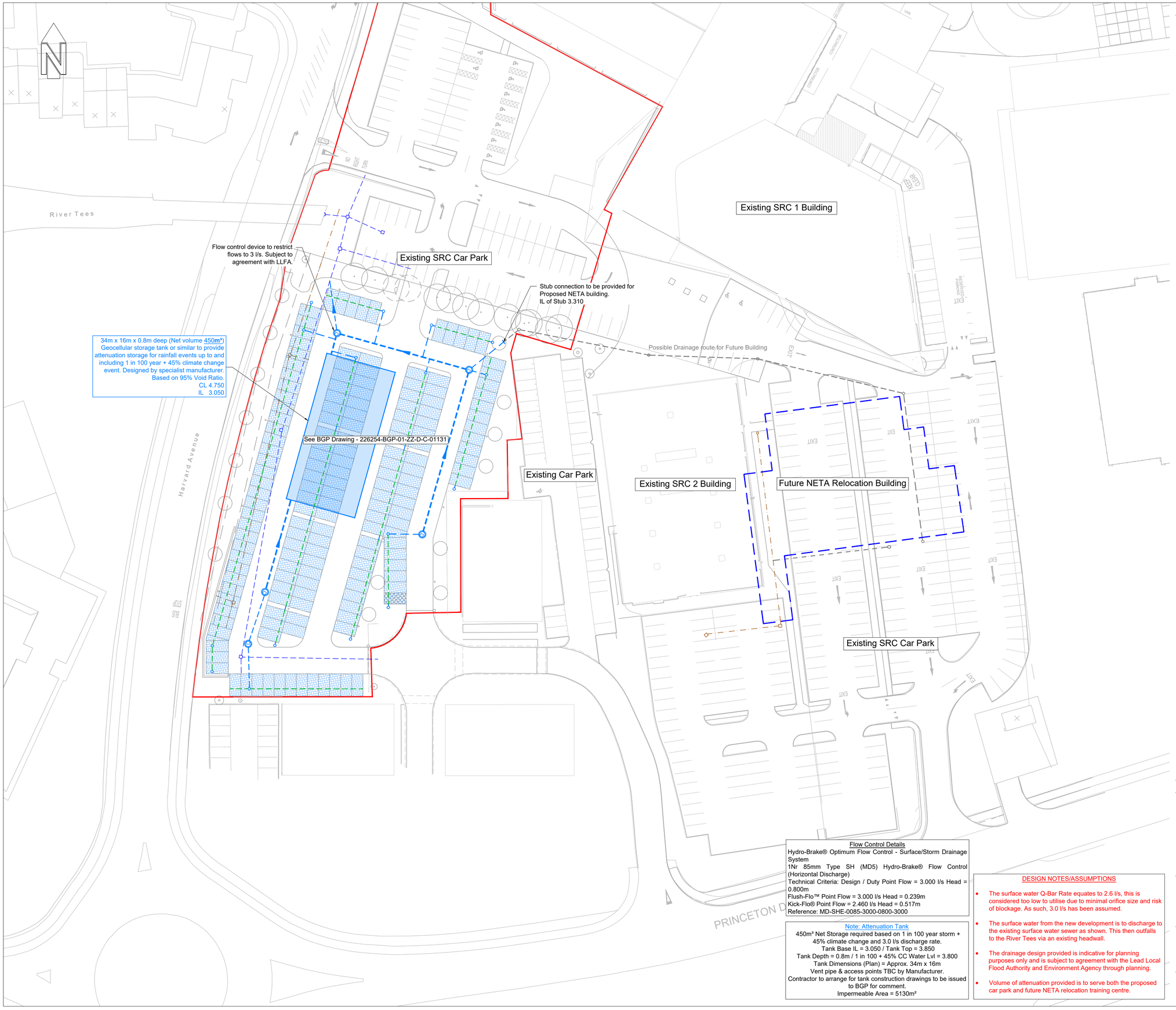

- DO NOT SCALE -

Notes

1. All works to be carried out in accordance with:
   - 1.1 Design and Construction Guidance (DCG) and Sewerage Sector Guidance (SSG) for all sewers proposed to be offered for adoption. (note - the SSG replaces Sewers for Adoption (SfA) for all new developments)
   - 1.2 BS EN 752 - 'Drain and Sewer Systems Outside Buildings'
   - 1.3 Current applicable Building Regulations
   - 1.4 BGP Specifications
   - 1.5 Manufacturer installation guidance and requirements
2. All levels shown are in metres and are relative to ordnance datum (m AOD).
3. Connection to Northumbrian Water sewers are only to be carried out under an S106 agreement by NWL approved term contractors unless agreed otherwise between both parties. (organised by main contractor)
4. Invert levels of all existing chambers and connection points are to be confirmed and engineer advised prior to commencement of any Drainage Works.
5. Where proposed sewers connect into existing sewers, the existing sewers must to be checked for line, level and condition preferably by a CCTV survey
6. Concrete bed and surround is required to all gully leads and to all pipes in highways/hardstanding where cover to pipe <1200mm
7. All pipes to be either extra strength V.C. to BS 65 or PVC certified to WIS 4-35-01 and BS/EN13476 or concrete pipes Class 120 to BS/EN 1916/BS5911-1 2002.
8. All RWP and slab penetration locations are indicative and accurate positions should be taken from the Architects drawings. All slab penetrations to be roddable above ground level via access pipe
9. Existing sewer positions are indicative and are not to be used in conjunction with design. Contractor to confirm location.
10. All existing drainage to be cleaned and jetted as part of the contract
11. All RWP connections to be 100Ø and Surface water sewers to be 150Ø unless noted otherwise.
12. All FW drains to be 150Ø UNO unless noted otherwise.
13. Contractor is responsible for positioning MHs so they do not compromise line or level of kerbing or other delineation at the juncture of two surface materials.
14. Cover levels shown are indicative and may vary on site. The contractor should adjust levels to suit site conditions
15. All internal manholes to be Type Y with double seal covers u.n.o
16. An underground attenuation tank is to be provided which has a capacity of 450m³. Tanks shall be designed by specialist contractor to provide the net volume of attenuation required and comply with recommendations by Ciria with regard to access for maintenance and strength. The strength of the tank should comply with Ciria document C737" Structural design of Modular Geocell drainage tanks". The construction, installation and venting requirements of the tank shall be strictly in accordance with manufacturer guidance.
17. Other services are not shown on this drawing,however their presence must be anticipated. The contractor is to confirm prior to commencing any works, the location and depth of all services that may affect the works the manufacturers requirements and recommendations.

S.H.E.
Do not excavate until all underground services have been identified and marked out. Refer to service providers drawings and to the utilities survey drawings. Unknown underground services may exist. Check for services by carrying out a scan with a cable avoidance tool.

Legend

- Proposed SW Drain
- Proposed FW Drain
- Existing FW Drain
- Existing SW Drain
- Site Boundary
- PPIC MH / Silt Trap (ST)
- PCC MH
- Proposed Permeable Paving
- Perforated Collector Pipe

NOT FOR PRICING

NOT FOR CONSTRUCTION

AMENDMENT	BY	REV	CHK	DATE
Issued for Planning	ZW	P01	RJW	19.04.2024

Billinghurst George & Partners
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Flow Control Details

Hydro-Brake® Optimum Flow Control - Surface/Storm Drainage System
1Nr 85mm Type SH (MD5) Hydro-Brake® Flow Control (Horizontal Discharge)
Technical Criteria: Design / Duty Point Flow = 3.000 l/s Head = 0.800m
Flush-Flo™ Point Flow = 3.000 l/s Head = 0.239m
Kick-Flo® Point Flow = 2.460 l/s Head = 0.517m
Reference: MD-SHE-0085-3000-0800-3000

Note: Attenuation Tank

450m³ Net Storage required based on 1 in 100 year storm + 45% climate change and 3.0 l/s discharge rate.
Tank Base IL = 3.050 / Tank Top = 3.850
Tank Depth = 0.8m / 1 in 100 + 45% CC Water Lvl = 3.800
Tank Dimensions (Plan) = Approx. 34m x 16m
Vent pipe & access points TBC by Manufacturer.
Contractor to arrange for tank construction drawings to be issued to BGP for comment.
Impermeable Area = 5130m²

DESIGN NOTES/ASSUMPTIONS

- The surface water Q-Bar Rate equates to 2.6 l/s, this is considered too low to utilise due to minimal orifice size and risk of blockage. As such, 3.0 l/s has been assumed.
- The surface water from the new development is to discharge to the existing surface water sewer as shown. This then outfalls to the River Tees via an existing headwall.
- The drainage design provided is indicative for planning purposes only and is subject to agreement with the Lead Local Flood Authority and Environment Agency through planning.
- Volume of attenuation provided is to serve both the proposed car park and future NETA relocation training centre.

Client	The Education Training Collective
Project	NETA Relocation - Stockton Riverside College
BGP Project No.	226254
Drawing Title	Drainage GA - Overall

Drawn	Date	Checked	Date	Size	Scale	Rev.
ZW	19.04.24	RJW	19.04.24	A1	1:400	P01

Location	Originator	Volume	Level	Form	Role	Unique No.
226254	BGP	01	ZZ	D	C	01130

File Reference
226254-BGP-01-ZZ-D-C-01130

In instances where this drawing completes or partly completes a contract, Billinghurst George & Partners will consider that it's product has been validated, unless in a period not exceeding 90 working days, the client advises to the contrary.