

 T J Booth Associates. Consulting Engineers 20A Eastgate St, Rochdale OL16 1DH	Project GB Services - Riverside Business Park (Proposed Unit 3)				Job Ref. rep-tjba-GBS-riverside business park-units 3- LLFA CONSULTATION RESPONSE-	
	Section LLFA Consultation Response				Sheet no./rev. 1 / 0	
	Calc. by DS	Date 23/06/2025	Chk'd by	Date	App'd by	Date

History.

Revision	Date	Reason
0	Jun 2025	Response to LLFA consultation dated 15th May 2025.

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	Section LLFA Consultation Response				Sheet no./rev. 2 / 0	
	Calc. by DS	Date 23/06/2025	Chk'd by	Date	App'd by	Date

Introduction.

Reference:

LLFA consultation dated 15th May 2025, ref: 25.00128.DOC Riverside Motors - Drainage Comments.

DOCUMENTS REVIEWED

23/01374/FUL

- Microdrainage Calculations (1 In 1, 1 In 30, 1 In 100)
- Phase 2 Site Investigation And Geo-Environmental Appraisal

25/00128/DOC

- Drainage plan & details ~~dwg-tjba-green-riverside business park-151221~~ Rev 0
- Microdrainage Calculations (1 in 1, 1 in 30, 1 in 100)
- Phase 2 Site Investigation and Geo-environmental appraisal
-

DRAINAGE & FLOOD OFFICER COMMENTS

Condition 5 of 23/01373/FUL requires the drainage scheme to incorporate.

- A restricted rate of surface water discharge to the adjacent watercourse to 5l/s, attenuation storage within the site, and an appropriately specified fuel interceptor.*
- Construction details for permeable paving including kerbing and cross-section of open graded sub-base, if this type of paving forms part of the sustainable drainage system.*
- Levels of the proposed drainage systems including proposed ground and finished floor levels in mAOD.*
- The background calculations of the MicroDrainage model or any other software or calculations that have been used for the drainage design.*
- Provision of a short Maintenance Document explaining how the surface water scheme will be maintained and managed after completion. This should include an As-Built drainage plan of the site.*

- The applicant has provided an updated drainage plan indicating the drainage arrangements of the scheme.
 - Surface water discharge restricted to 5 l/s to the adjacent watercourse
 - Attenuation storage
 - Shown a petrol interceptor included on the drainage scheme.
- The proposal has included Levels of the proposed drainage systems including proposed ground and finished floor levels in mAOD on the drainage plan drawing. However, the FRA identifies a minimum FFL of 145.95m. However, the drainage plan indicates lower FFLs. Please clarify.
- The proposal has included the appropriate micro-drainage calculations with the correct climate change events used to support their drainage scheme.
- The proposal has not yet indicated a maintenance plan for the SuDS components used within the drainage scheme. This is required to discharge condition 5.

DRAINAGE & FLOOD OFFICER SUMMARY:

- Clarify / confirm that FFLs are 145.95 minimum in accordance with the FRA.
- The condition requires the submission of a maintenance plan.
- The above points should be addressed before the application is approved.

Consultation by Keith Mealey

Drainage & Flooding Officer

✉ keith.mealey@rochdale.gov.uk

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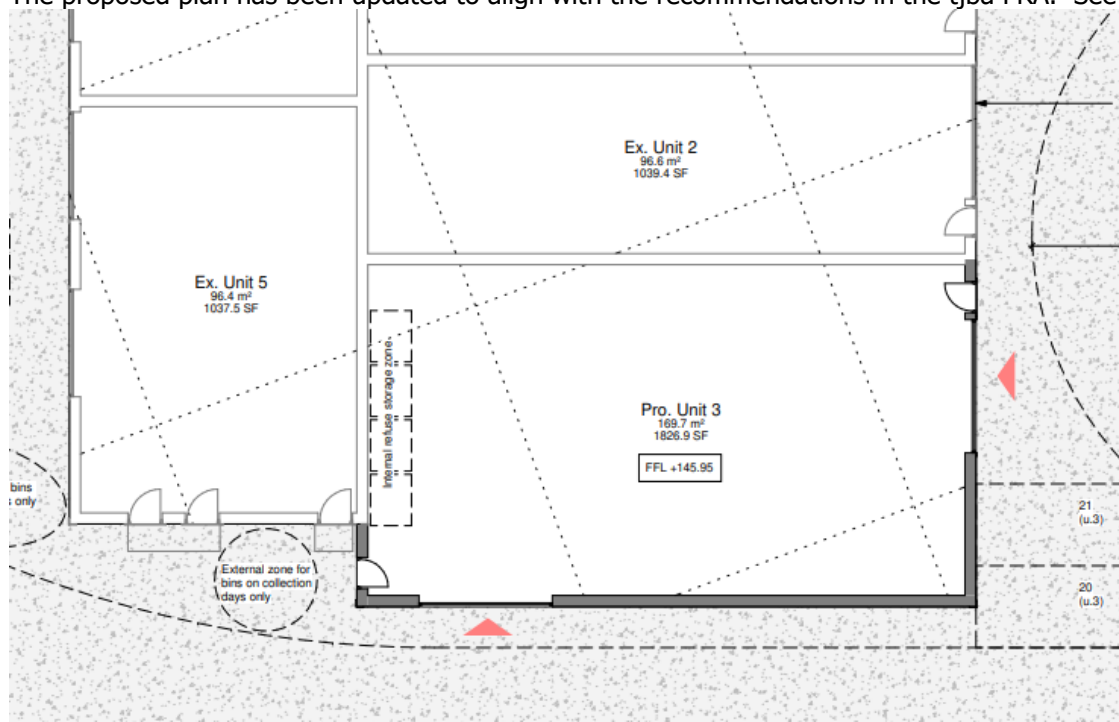
TJBA Response:

Please refer to full drainage design plan ref: dwg-tjba-GBS-riverside business park-drainage plan & details-rev1.

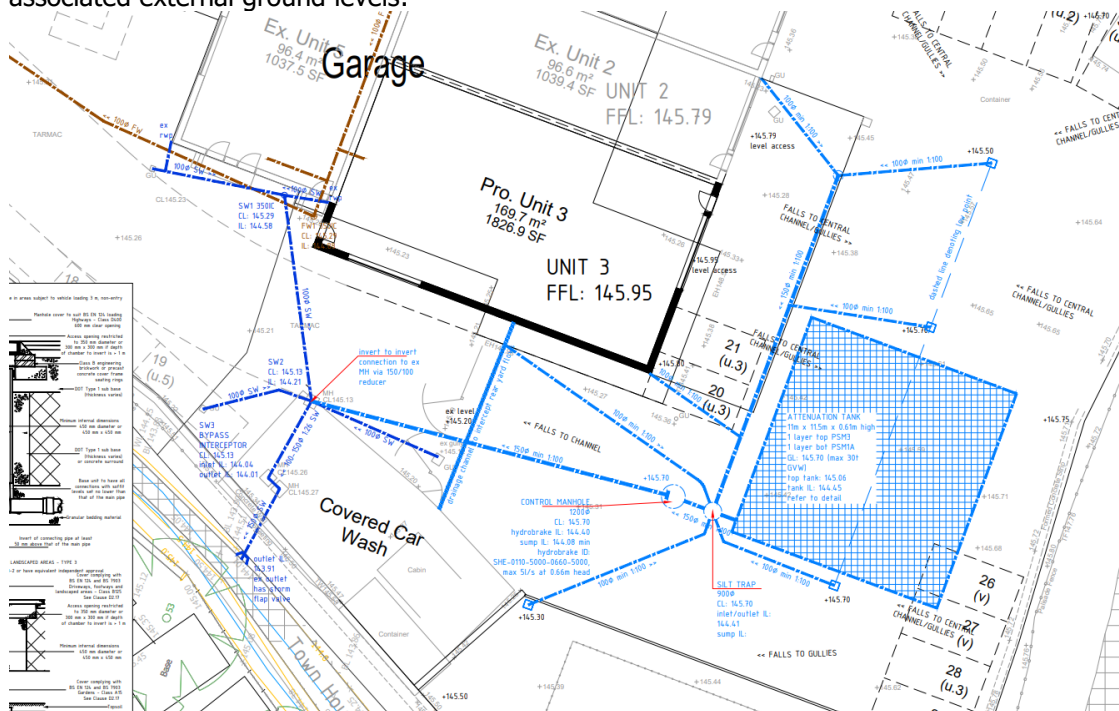
Referring directly to the LLFA Officer comments:

I. Clarify / confirm that FFLs are 145.95 minimum in accordance with the FRA.

The proposed plan has been updated to align with the recommendations in the tjba FRA. See below:



The tjba drainage plan excerpt below has also been updated with the 145.95m aOD Unite 3 FFL, and associated external ground levels:



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II. ***The condition requires the submission of a maintenance plan.***

A surface water implementation schedule & maintenance schedule have been included in the specification on the tjba drainage drawing. The reason for this is so that all site drainage details are kept in one easily accessible format.

The implementation schedule is to advise protection of the system throughout the different stages of development.

The maintenance schedule advises regular maintenance intervals once the system is operational.

Refer to schedules below:

IMPLEMENTATION SCHEDULE FOR DRAINAGE SYSTEMS, ATTENUATION TANKS & SOAKAWAYS		
IMPLEMENTATION PHASE	ACTION	REASON
Construction phase	All drainage pipes, gullies & manholes installed must be either covered, plugged or connections capped to isolate from construction SW flows.	To ensure construction debris does not enter the system while allowing general construction of the drainage system ready for plot completion.
Pre-habitation Phase	Only finished plots & associated drainage pipes, manholes & gullies may be brought online as long as they will not be subject to further construction flows & debris from upstream works.	To ensure adequate drainage of completed parts of the Site, while protecting the wider drainage system to parts of the Site still under construction from potential blockages.
Post Construction Phase	Site attenuation tank, control chamber/Hydrobrake or soakaways may only be brought online after construction of the Site has finished, and construction debris and silt entering the system is mitigated.	To ensure protection of the attenuation tank & hydrobrake, and to ensure they are not subject to SW flow overloaded with silt/debris which could damage or reduce long term storage capacity.
	All silt traps, control chambers and accessible soakaways to be checked for silt/debris, and cleaned accordingly	To ensure the system is free from silt/debris accumulation prior to sign off.

CIRIA C753 TABLE 21.3 OPERATION & MAINTENANCE REQUIREMENTS FOR ATTENUATION STORAGE TANKS		
MAINTENANCE SCHEDULE	REQUIRED ACTION	TYPICAL FREQUENCY
Regular maintenance	Inspect and identify any areas that are not operating correctly. If required, take remedial action	Monthly for 3 months then annually
	Remove debris from the catchment surface (where it may cause risks to performance)	Monthly
	For systems where rainfall infiltrates into the tank from above, check surface of filter for blockage by sediment, algae or other matter; remove and replace surface infiltration medium as necessary.	Annually
	Remove sediment from pre-treatment structures and/or internal forebays	Annually, or as required
Remedial actions	Repair/rehabilitate inlets, outlet, overflows and vents	As required
Monitoring	Inspect/check all inlets, outlets, vents and overflows to ensure that they are in good condition and operating as designed	Annually
	Survey inside of tank for sediment build-up and remove if necessary	Every 5 years or as required

III. ***The above points should be addressed before the application is approved.***

This information should be suitable for the LLFA to recommend discharge of the drainage conditions.