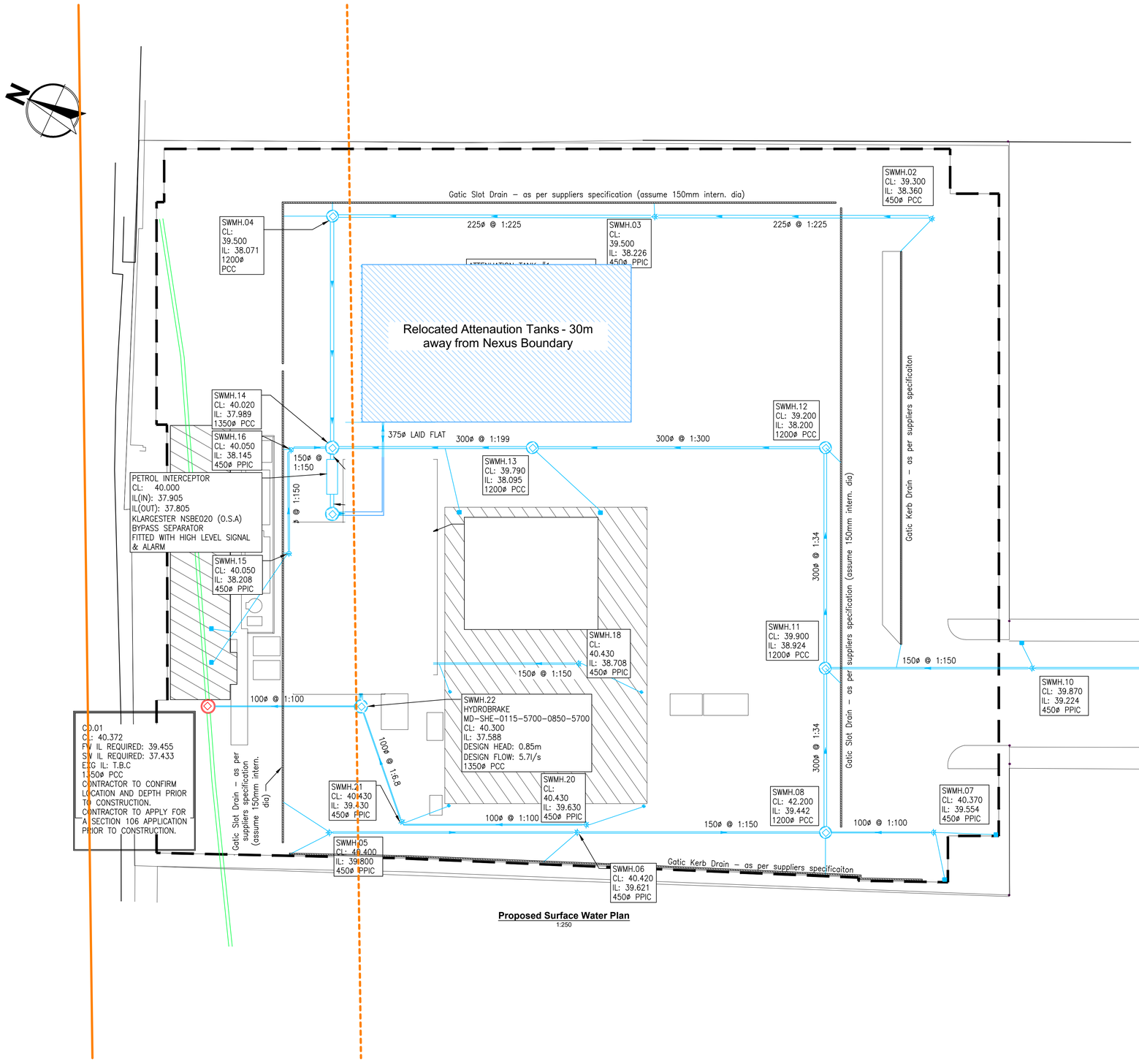

Proposed Surface Water Plan
1:250

1:50 - 0 1m 2m 3m 4m
1:5 - 0 100mm 200mm 300mm 400mm 5

KEY:

- Denotes Site Boundary Area
- Denotes Existing Combined Water Sewer
- Denoted Proposed Combined Chamber
- Denotes Proposed Surface Water Sewer
- Denotes Proposed Surface Water 450Ø PPIC
- Denotes Proposed Surface Water Manhole
- Denotes Proposed Hydrobrake Chamber
- Denotes Proposed Rainwater Pipe
- Denotes Proposed Attenuation Tank
- Denotes Proposed Road Gully

NOTES:

All dimension are in mm unless stated otherwise.

All private drainage works are to comply with the requirements of BS 752 Building Drainage and Building regulations 2010 approved document H 2015 edition. All adoptable drainage to comply with the requirements of Yorkshire Water and Sewers for Adoption (7th edition) including the relevant provisions of the combined addendum.

All materials, unless specified otherwise, shall comply with the relevant Britis Standard. Sources of materials are to be agreed with the employer's representative/engineer in advance of the works.

This drawing to be read in conjunction with all other engineering drawings an details and contract documentation.

Any discrepancies in the details shown to be reported to the employer's representative/engineer prior to construction.

Location and levels of existing drainage runs are based upon sewer record plans and must be checked on site prior to the commencement of any drainage works.

All existing services to be located prior to the commencement of any drainag works where necessary protection or diversions to be undertaken to avoid conflict with the proposed works.

All adoptable drainage and fittings to be flexibly jointed clayware to BS EN29 or concrete to BS 5911 Part 100. flexibly jointed UPVC pipes and fittings to WIS No 4-13-05 may be used for private building drainage systems only.

Typical pipe bedding to drainage where depth to soffit is greater than 600mm in landscaped areas and greater than 1200mm in Adoptable Highways and 900mm in other trafficked areas is to be class s (i.e. 10-14mm graded imported granular bed and surround for pipes up to 525Ø and 20-40mm graded imported granular bed and surround for pipes greater than 525Ø).

Where depth to soffit of drainage pipework is less than 600mm in landscaped areas and less than 1200mm in adoptable highways and 900mm in other trafficked areas then pipework is to be protected with 175mm thick C20 reinforced concrete slab.

Backfill to drainage trenches under carriageways to be Type 1 sub-base material, elsewhere backfill to be free draining readily compatible material, free from rubbish and organic matter, frozen soil clay lumps and large stones to be compacted in layers not exceeding 150mm thick.

Concrete mixes indicated on this drawing are designed mixes conforming to BS 8500-1, 2002.

A flexible joint shall be provided as close as is feasible to outside face of any structure into which a pipe is built, compatible with the satisfactory completior and subsequent movement of the joint. The length of the next pipe (rocker pipe) away from the structure shall be as shown in the table below.

Nominal Diameter of Pipe	Effective Length (m)
150mm - 600mm	0.6m
675mm - 750mm	1.0m
825mm and over	1.25m

All step irons to be polypropylene encapsulated to BS 1247 Parts 1-2, double step rungs (280mm min width at 250mm maximum centres). Maximum distance from cover level to first step to be 675mm.

All manhole / inspection chamber covers to be clearly marked 'SW' or 'FW', a appropriate, so as to be clearly visible from the surface. manhole covers to be 675x675 clear opening for pipes less than 875mm dia. and 675x675 clear opening for pipes 875mm dia. or greater. Min 675 x 675 access to chambers fitted with a ladder or flow control device.

Contractor to ensure the accuracy of all drainage connection details prior to commencement of works.

All pipework and fittings shall be laid strictly in accordance with manufacturer instructions.

Cover levels are approximate only. Exact levels to be determined on site to suit final surface levels.

All covers and gratings shall be D400 rated.

IMPORTANT NOTE - BUILDING REGULATIONS
THIS DRAWING FOR BUILDING REGULATION APPROVAL. ALL WORK TO CARRIED OUT IN ACCORDANCE WITH ALL THE LATEST BUILDING REGULATIONS, ALL AMENDMENTS, RELEVANT CODES OF PRACTICE A TO THE SATISFACTION OF THE BUILDING CONTROL OFFICER. IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT THE BUILDING CONTRO OFFICER AT RELEVANT WORK STAGE INSPECTIONS. THE CONTRACTO IS RESPONSIBLE FOR CHECKING SITE DIMENSIONS, MATERIALS AND A BUILDING WORK, SUCH WORK BEING INSPECTED AND APPROVED BY T BUILDING CONTROL INSPECTOR ON SITE AS APPROPRIATE.

Refer to GGP Consult for full drainage design & de

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Client: Arriva

Designer: Janus Architecture

Dwg Title: Proposed Surface Water Layout
Location: New Depot, Shields Road, Newcastle
Status: Tender

Project No: 156014 **Scale:** as noted @ A1
Dwg No: SKT 001 **Date:** December 21

TENDER