

Raymond Lee
Welwyn Hatfield Borough Council
The Campus
Welwyn Garden City
Herts
AL8 6AE

Ref: 190997/R Lee
14 Oct 2021

Dear Raymond

RE: 6/2021/2207/MAJ – Campus West, The Campus, Welwyn Garden City, AL8 6BX

Conisbee have been appointed by Welwyn Hatfield Borough Council (WHBC) to produce a Flood Risk Assessment (FRA) and Drainage Strategy to support a planning application for a new multi-storey decked car park at the site of the existing Campus West Car Park.

This note has been prepared to address comments raised by Hertfordshire County Council (HCC) Lead Local Flood Authority (LLFA) regarding the application, refer to correspondence attached at **Appendix A**.

Thames Water Pre-planning enquiry

A Pre-planning enquiry has been submitted to Thames Water. In response, Thames Water has confirmed that the proposed surface water connection to MH5301 and discharge rate is acceptable. Refer to Thames Water correspondence attached at **Appendix B**.

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Alan Conisbee and Associates Limited
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Existing site drainage

The application red line boundary extends to include areas to the north and south of Campus West / Roller City, and the access road east of the site to Digswell Road.

The proposed works in these areas is limited to the installation of new cycle storage to the south of Campus West / Roller City, and modifications to the white lining of parking bays to the north of Campus West.

It is proposed that the existing drainage systems in these areas are retained. GPR survey has been undertaken by Terrain Survey which confirms the layouts of the existing surface water systems in these areas. Refer to drawing TS20-006-4 attached at **Appendix C**.

As noted in the submitted FRA & Drainage Strategy Report, works to provide improvements to the existing drainage system serving the Roller City and Campus West Theatre have recently been implemented. Details of these works are included at Appendix E of the submitted report, and as-built drawings are included at **Appendix C** of this note.

I would be grateful if you could issue this technical note to Adam Rumble at HCC LLFA for his formal review and approval.

Please do not hesitate to contact me if you have any queries.

Yours sincerely

Andrew Marshall
For Conisbee

Cc Adam Rumble, HCC
 Chris Lloyd, AZ Urban Studio

APPENDIX A – HCC LLFA CONSULTATION RESPONSE

Director of Environment & Infrastructure:
Mark Kemp



Raymond Lee
Welwyn Hatfield Borough Council
The Campus
Welwyn Garden City
Herts
AL8 6AE

Lead Local Flood Authority
Post Point CHN 215
Hertfordshire County Council
County Hall, Pegs Lane
HERTFORD SG13 8DN

Contact Adam Rumble
Email FRMConsultations@hertfordshire.gov.uk

Date 01 October 2021

RE: 6/2021/2207/MAJ – Campus West, The Campus, Welwyn Garden City, AL8 6BX

Dear Raymond,

Thank you for consulting us on the above application for Expansion and adaptation of existing car park, including construction of new single suspended level parking deck, reorganisation of road and pavement arrangement, introduction of additional cycle parking, unction improvements and associated landscaping improvements at Campus West, The Campus, Welwyn Garden City, AL8 6BX.

Following a review of the submitted information in support of the application:

- Flood Risk Assessment and Drainage Strategy produced by Conisbee, Ref 190997/A Version 3, dated 08 April 202
- Phase 1 Geo-Environmental Assessment produced by WYG, Job No. A115248 Rev Draft, dated November 2019
- Ground Investigation Report produced by WYG, Job No. A115249 Rev V1 Final, dated March 2020
- Drainage Strategy produced by Conisbee, Drawing No. 190997-X-00-DR-C-1000 Rev P03, dated 26.03.21
- Site Location Plan produced by Bright Space Architects, DWG No. P001, dated 23.03.21

It is noted that due to poor ground conditions infiltration has been disregarded as a means of surface water discharge. There are also no watercourses in the close vicinity and as such the only feasible surface water discharge method is via a connection to public sewer.

We understand that the site plan has been updated since the Pre-Application stage where the LLFA were consulted. We note there is additional area included in the site layout now and the drainage strategy has not been updated to include the additional area.

We note that the Drainage Strategy Plan makes reference to an EAS Drawing 2486-SK04 for Details of Proposed Roller City Drainage Improvements Works. If part of the site is to be drained via a separate drainage system, the drawings should be submitted to the LPA.

We understand that the surface water scheme for the site proposes to discharge into the existing Thames Water surface water sewer located to the south of the site. It is understood that the surface water discharge will be restricted to 5l/s.

It is noted that a geo-cellular storage structure is to be located underneath the car park footprint to provide surface water attenuation for all events up to and including the 1 in 100-year return period including an allowance for climate change.

We therefore advise the LPA that we object to the proposed development and suggest the LPA seek the additional information suggested above.

Overcoming our Objection

We would expect the applicant to provide confirmation from Thames Water that the proposed connection and discharge rate is acceptable. A Pre-Planning enquiry confirmation should be sought from Thames Water.

The applicant should update the drainage strategy to include the additional site area as we would expect the applicant to actively drain the entire site area. If there is existing site drainage that is to be reused for the additional site area this should be submitted to the LPA.

If there are areas of the site that are proposed to be drained via a separate drainage system, the plans should be submitted to the LPA.

Informative to the LPA

Please note that if the LPA decides to grant planning permission we wish to be notified for our records.

Yours sincerely,

Adam Rumble
Landscape / SuDS Officer
Environment and Infrastructure

**APPENDIX B – THAMES WATER PRE-PLANNING ENQUIRY
RESPONSE**



Mr Andrew Marshall
Conisbee
16 Signet Court, Swann Road
Cambridge
CB5 8LA



06 Jul. 20

Pre-planning enquiry: Confirmation of sufficient capacity

Dear Mr Marshall

Thank you for providing information on your development: **Campus West Car Park, Welwyn Garden City, Hertfordshire, AL8 6BX.**

Construction of the new multi-storey decked car park at the site of the existing Campus West Car Park. Surface water to be attenuated and discharged at max 5.1l/s into existing connection - MH5301. No foul water discharging into public sewer

We're pleased to confirm that there will be sufficient surface water capacity in our sewerage network to serve your development, so long as your phasing follows the timescale you've suggested.

This confirmation is valid for 12 months or for the life of any planning approval that this information is used to support, to a maximum of three years.

You'll need to keep us informed of any changes to your design – for example, an increase in the number or density of homes. Such changes could mean there is no longer sufficient capacity.

What happens next?

Please make sure you submit your connection application, giving us at least 21 days' notice of the date you wish to make your new connection/s.

If you've any further questions, please contact me on 0203 577 8082.

Yours sincerely

Artur Jaroma

Thames Water

APPENDIX C – EXISTING DRAINAGE

ELECTRO-MAGNETIC TECHNIQUES AND/OR GROUND PENETRATING RADAR HAVE BEEN USED IN THE FOLLOWING UNDERGROUND SERVICES. THE RESULTS ARE NOT INFALLIBLE AND TRAIL EXCAVATIONS SHOULD BE CARRIED OUT TO CONFIRM SERVICE IDENTIFICATION, POSITIONS AND PARTICULARLY DEPTHS, WHERE THESE ARE CRITICAL. ALTHOUGH ALL REASONABLE EFFORT HAS BEEN MADE IN SEARCHING AVAILABLE RECORDS, THE COMPLETENESS OF THE UNDERGROUND SERVICES INFORMATION CANNOT BE GUARANTEED. THE METHODS OF SURVEY DO NOT DIFFERENTIATE BETWEEN LIVE AND DEAD SERVICES AND AS SUCH ALL SERVICES SHOULD BE TREATED AS LIVE.

WHERE SERVICES ARE NON-METALLIC POSITIONS MAY BE TAKEN FROM RECORDS, TRENCH SCARS & SURFACE DETAIL.

WHERE QUOTED, DEPTH ESTIMATIONS ARE GENERALLY TO THE CENTRE OF THE SERVICE, DEPTHS TO GRAVITY SEWERS AND DRAINS ARE GENERALLY TO INVERT LEVELS UNLESS OTHERWISE STATED.

PIPE SIZES WHICH CANNOT BE OBTAINED BY VISUAL SURVEY ARE TAKEN FROM RECORD DRAWINGS OR MARKER PLATES.

WHERE GROUND PENETRATING RADAR HAS BEEN USED IT WILL
 PRIMARILY HAVE BEEN TO IDENTIFY UNDERGROUND UTILITIES
 IF POSSIBLE WE WILL ALSO IDENTIFY UNDERGROUND STRUCTURES/
 TANKS ETC. BUT CANNOT GUARANTEE TO HAVE LOCATED ALL SUCH
 THE USE OF RADAR CAN BE LIMITED BOTH BY SURFACE CONDITIONS
 AND ALSO BY SOIL TYPE. DEPTH ESTIMATES WOULD NOT NORMALLY
 BE PROVIDED FOR SERVICES LOCATED WITH GPR.

UTILITY KEY

CABLE / PIPE RISER
 BACKDROP / TRAPPED EXIT
 ELECTRIC CABLE
 TELECOMS CABLE
 CABLE TELEVISION
 COMMUNICATION CABLE
 WATER PIPE
 GAS PIPE
 ROOF DRAINAGE
 CONTAMINATED SURFACE
 SURFACE DRAINAGE
 COMBINED DRAINAGE
 VENTING MAIN
 FUEL PIPE
 OFFSET LIFT PIPE
 GAUGE LINE
 VAPOUR RECOVERY
 HEATING PIPES
 SERVICE DUCTS
 UNIDENTIFIED
 END OF TRACE

ABBREVIATIONS

[illegible]

Client
WELWYN HATFIELD BOROUGH
COUNCIL

Project
CAMPUS WEST, THE CAMPUS,
WELWYN GARDEN CITY, HERTS
AL8 6BX

Title
UNDERGROUND SURVEY

Drawing Number
TS20-006-4

Revision	Description	Date

Scale	1:200	Sheet	2 of 2
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Drawn by SC-ASL	Checked by LC	Date of Survey JAN 2020
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Accreditations

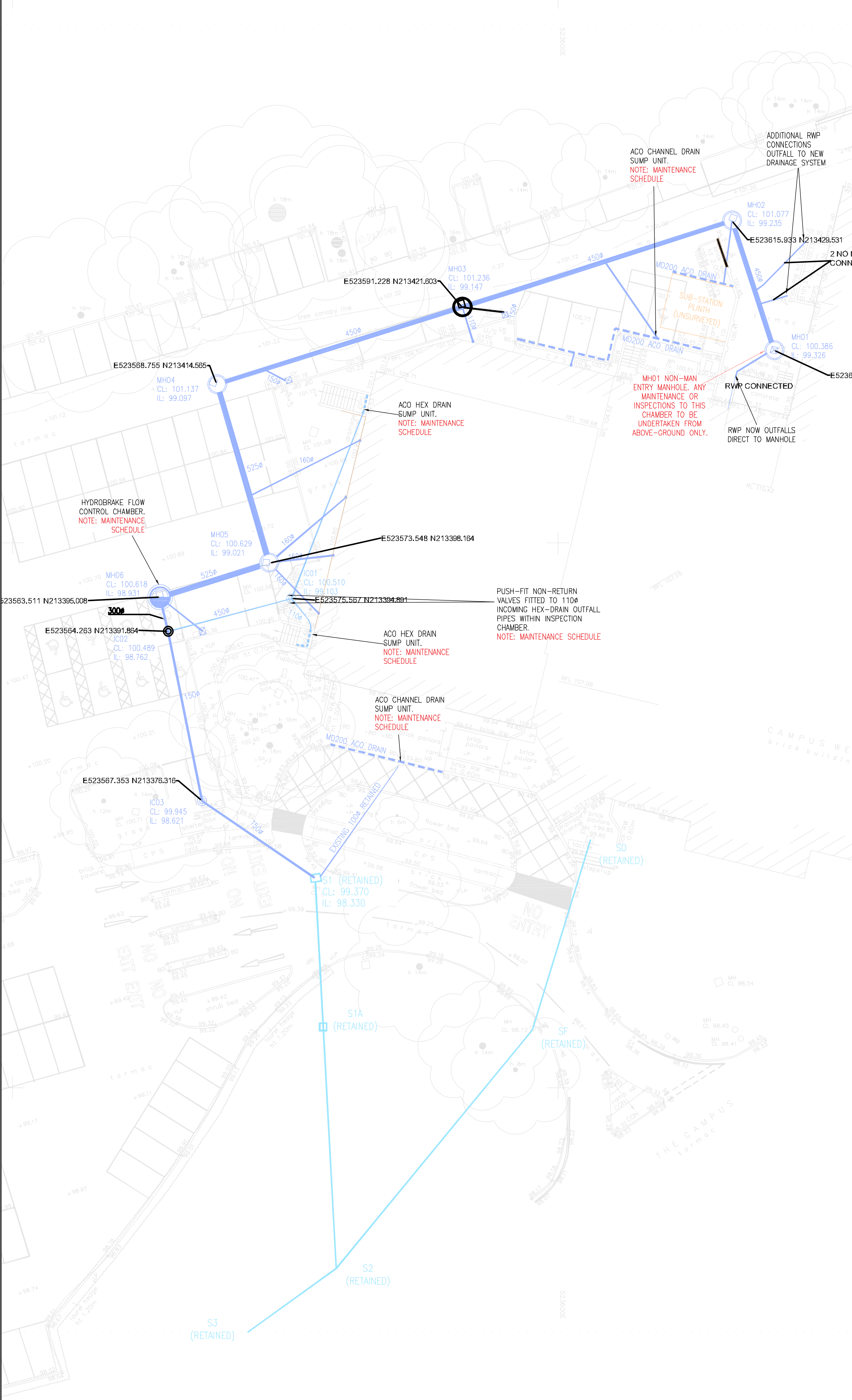
ICES THE SURVEY ASSOCIATION

Constructionline
Gold Member

SURVEY NOTE

Topographical survey TS20-006-1 is an extension of previous survey TS19-312-1, carried out in July 2019. No site verification of the previous survey has taken place.

A horizontal scale bar with markings at 0, 2, and 10 metres. The bar is divided into segments, with the first segment from 0 to 2 metres being shaded with vertical lines. The text 'SCALE BAR' is centered below the bar.



Management and Maintenance Plan for SuDS Features and Surface Water Drainage Systems

The following tasks are recommended for the management and maintenance of drainage features at Campus West:

Manholes and Sewers - YEARLY

Manhole covers should be lifted each year to remove visible debris and check for blockages - It is suggested that this is undertaken every November after the heaviest leaf-fall has occurred. Should a blockage occur at any time, it is advised to seek professional help to jet the drainage system to clean and clear the system. NB: operatives are NOT to enter manholes unless absolutely necessary and only if they have the relevant Working in Confined Spaces training or similar as required by HSE. RoSPA. If in doubt - check with Health and Safety Executive for guidance. It should be noted that Inspection Chambers and MH01 are non-man entry chambers and should only ever be maintained via ground-level.

Channel and Hex Drain Sump Units - EVERY 3 MONTHS

Due to the elevated risk of flooding that could occur if channel drains fail - It is strongly recommended that channel and hex-drain sump units are checked on a regular basis, as often as every 3 months, to check for and remove any silts, debris or leaves that could prevent waters from flowing freely.

Hydrobrake/Flow Control Device - EVERY 6 MONTHS

This should require minimal maintenance if sewers, manholes and channel drain sump units are maintained regularly. It is recommended that the flow control device chamber is checked on a 6 monthly basis, (mid November and mid May) and any silts and debris are removed.

PLEASE NOTE THAT ANY DEBRIS, SILTS OR MATERIAL FROM BLOCKAGES SHOULD BE REMOVED TO A TIP OFF SITE

REV	DATE	BY	DESCRIPTION	CHK	APD
DRAWING STATUS:					
AS BUILT					
Ordnance Survey (c) Crown Copyright 2018. All rights reserved. Licence number 100022432					
EAS Unit 23, The Moltings, Stanstead Abbots, Hertfordshire, SG12 8HG Tel: 01920 871777 www.easstp.co.uk					
CLIENT:					
WELWYN & HATFIELD DISTRICT COUNCIL					
ARCHITECT:					
PROJECT:					
ROLLER CITY AND CAMPUS WEST, WELWYN GARDEN CITY					
TITLE:					
PROPOSED SURFACE WATER DRAINAGE LAYOUT					
SCALE: A2: 1:250		DESIGN-DRAWN: MD		DATE: 10.09.2021	
PROJECT No: 2486		DRAWING No: AB-001			