SHAPING OUR FUTURE

'Our challenge is to become a leading global university.'

Professor David Eastwood, Vice-Chancellor

Edgbaston Central Campus Development
Hybrid Planning Application

March 2012

Design and Access Statement Appendix C

Grange Road Bridge Crossing

Project 5

UNIVERSITY OF BIRMINGHAM

This document has been prepared by the University of Birmingham with:

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Contents

1.0 Introduction

1.1 Purpose of Report

This report forms part of the University of Birmingham's Hybrid Planning Application. The project for the Grange Road Bridge Crossing (Project 5 in the Hybrid Application) is submitted in Outline with all Matters Reserved. This Design and Access Statement includes parameter plans in Appendix 1, which form part of the technical application. The project consists of two elements: a new road bridge across the Bourn Brook and a ramp from the north side of the Bourn Brook down into the Brook to provide for maintenance access for Environment Agency vehicles.

This document should be read in conjuction with the other documents which make up the Hybrid Planning Application, in particular:

- Edgbaston Central Campus Masterplan.
- Transport Assessment.
- Floor Risk Assessment.

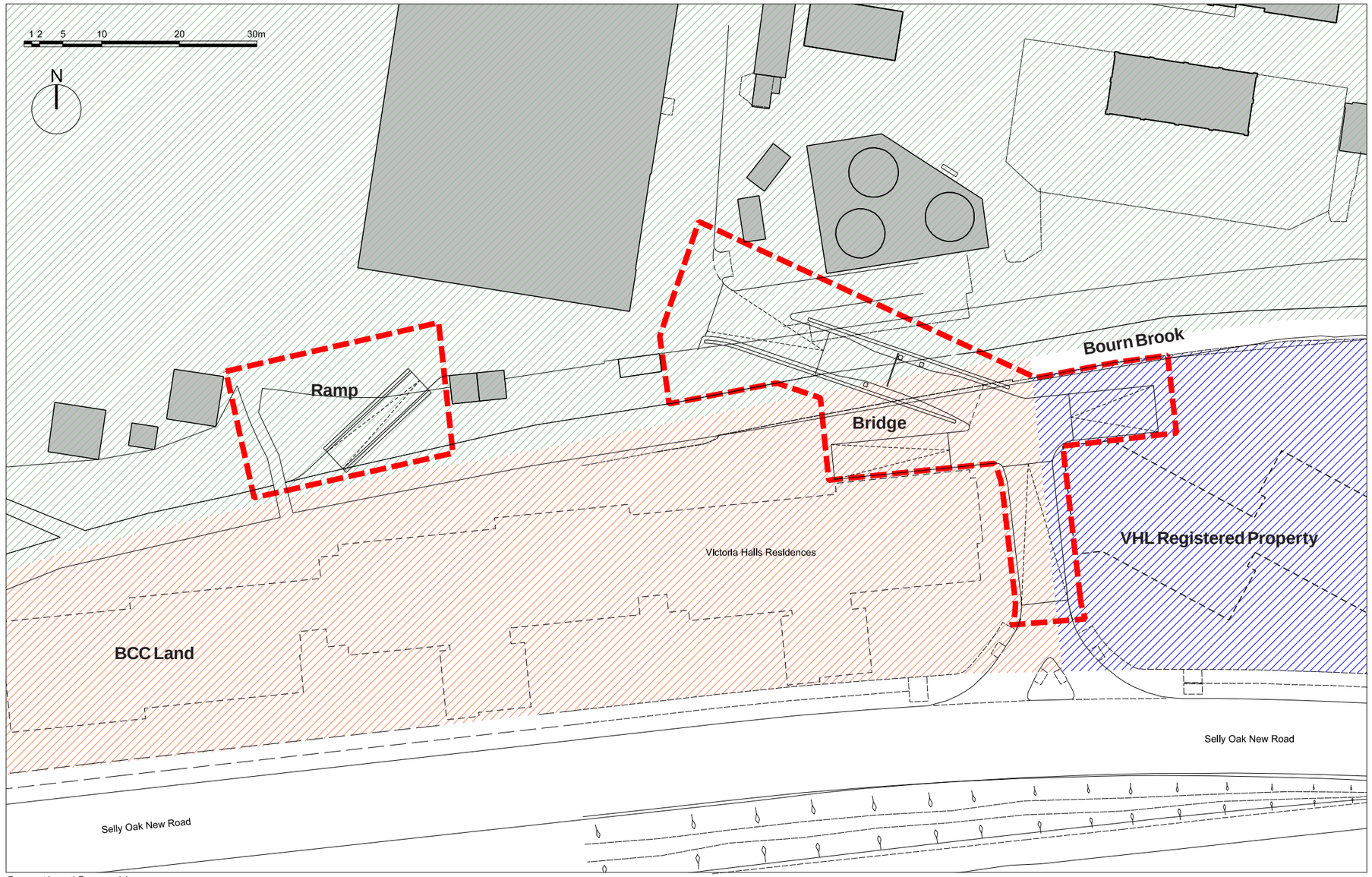
University of Birmingham, Edgbaston Campus Boundaries

2.0 The Site

2.1 Site Description

The site lies at the south-east edge of the University's Edgbaston Campus. The University service buildings directly to the north of the site are industrial in character, and include fuel stores and the University's CHP station. The area to the south of the site includes the 4 to 10 storey Victoria Halls Ltd development, and the proposed residences and sports pavilion which form a separate project (Project 6) within the Hybrid Planning Application.

3.0 Design



Current Land Ownership

3.1 Bridge Layout

The new access road from SONR leads to a new bridge crossing the Bourn Brook into the campus. The bridge is intended to be for service vehicles only and not for pedestrian access. Barriers will control access for vehicles and the bridge will not form an open through route to the campus. The proposed bridge is part of the University's wider transport plan, and giving direct access to the University's service area/back of house. This reduces service vehicles moving round the rest of the campus and pressure on the other entrances, helping to deliver a more pedestrian friendly environment.

The bridge is positioned at an angle to the Brook to connect to the University's existing road on the north bank and to accommodate the sweeps required by large vehicles. The University intend to take CHP mains across the Brook at the new bridge, potentially incorporating services into the bridge construction, and helping to reduce the University's carbon footprint by connecting to properties to the south of the brook, including the proposed residences and pavilion.

The layout of the bridge has been designed in discussion with the Environment Agency (EA) who require that the shape of the bridge should not restrict the flow of the Bourn Brook, and that there is clearance of 3m below the bridge for maintenance vehicles working in the Brook. In order to achieve this clearance, the roadway will be elevated by gentle ramped approaches to either side of the bridge.

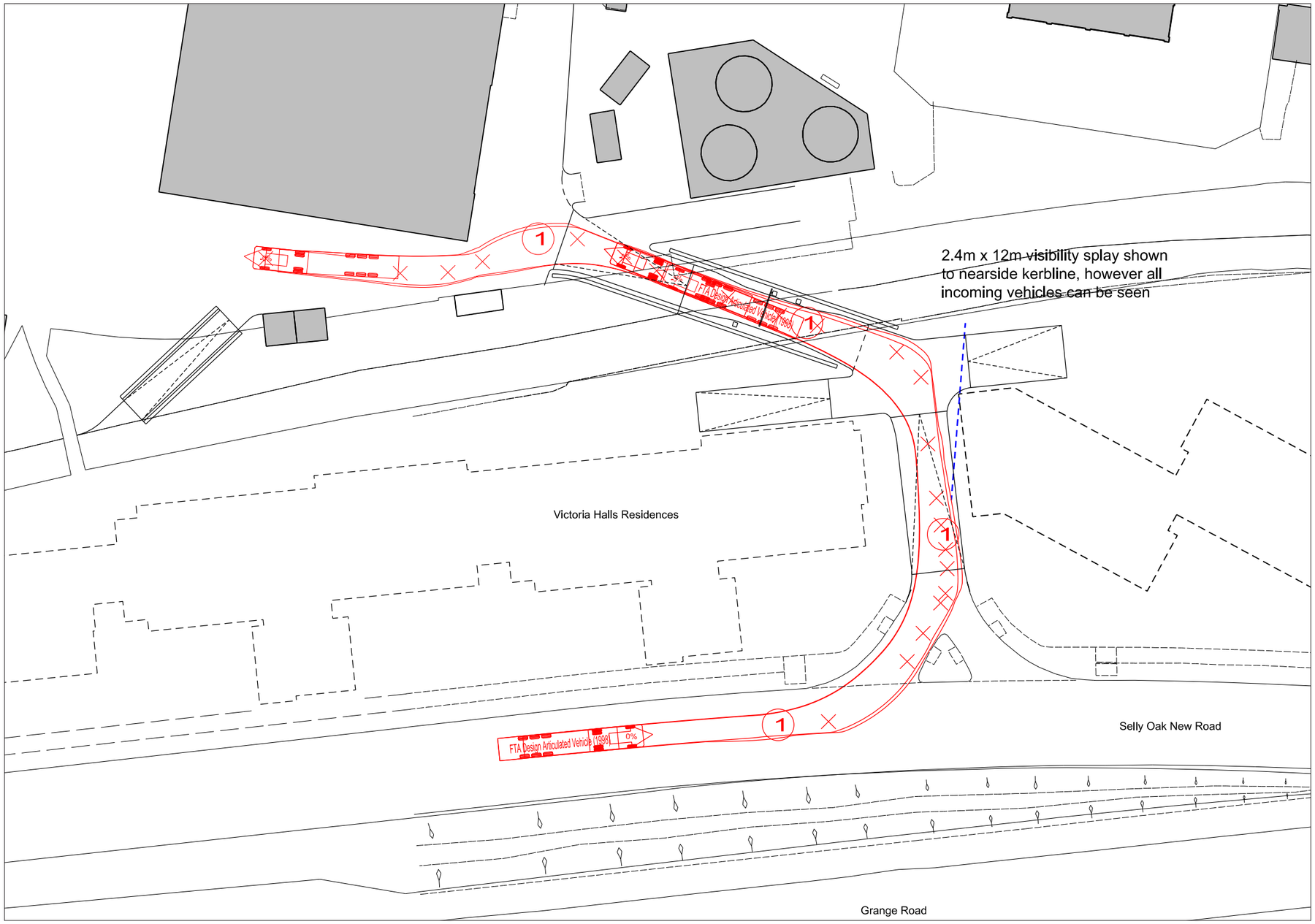
3.2 Access

A Transport Assessment has been carried out and has considered the level of traffic likely to use the access road off SONR to access the new service route across the bridge and the residences and pavilion.

The road off SONR leading to the bridge provides drop-off, disabled parking, access for service vehicles and also access for the Environment Agency along the Bourn Brook. Access to the proposed vehicle bridge will be controlled by barrier.

3.3 Ramp Layout

The EA have requested a ramp to give access into the Brook itself for maintenance and this is proposed to as an independent structure to the west of the bridge. This 3m wide 1:5 maximum ramp will allow the EA easy vehicular access to the brook, allowing them to clear and maintain it, and thereby reduce the risk of flooding. A ramp integrated with the bridge was considered, however vehicular swept path analyses demonstrated that this location was not possible.



4.0 Landscape

4.1 Flood Wall and Road

It is intended that the new access road between the University and Victoria Hall sites could also be paved to have the character of a shared surface (rather than a car park/ service road) forming a visual link between the two sites.

A 850mm high wall is proposed along the edge of the Brook across both the University and Victoria Halls sites providing a floor defence and a consistent boundary treatment. This wall will be integrated with the new bridge crossing.

4.2 Flooding and EA Requirements

The proposed road bridge into the campus has been laid out to ensure that it does not restrict flow or increase the risk of flooding. A joint strategy for flood risk has been developed for the University and Victoria Halls projects by Royal Haskoning, including flood modelling and mitigation measures. A separate flood risk assessment, as part of the Hybrid Planning Application document, has been issued (Dale Road, Selly Oak, Flood Risk Assessment). A number of meetings have been held with the Environment Agency to discuss the strategy and address their requirements. The flood strategy includes a continuous wall, 850mm high, along the edge of the Brook, and the road surface level of the bridge structure maintains this level to reduce the risk of flooding.

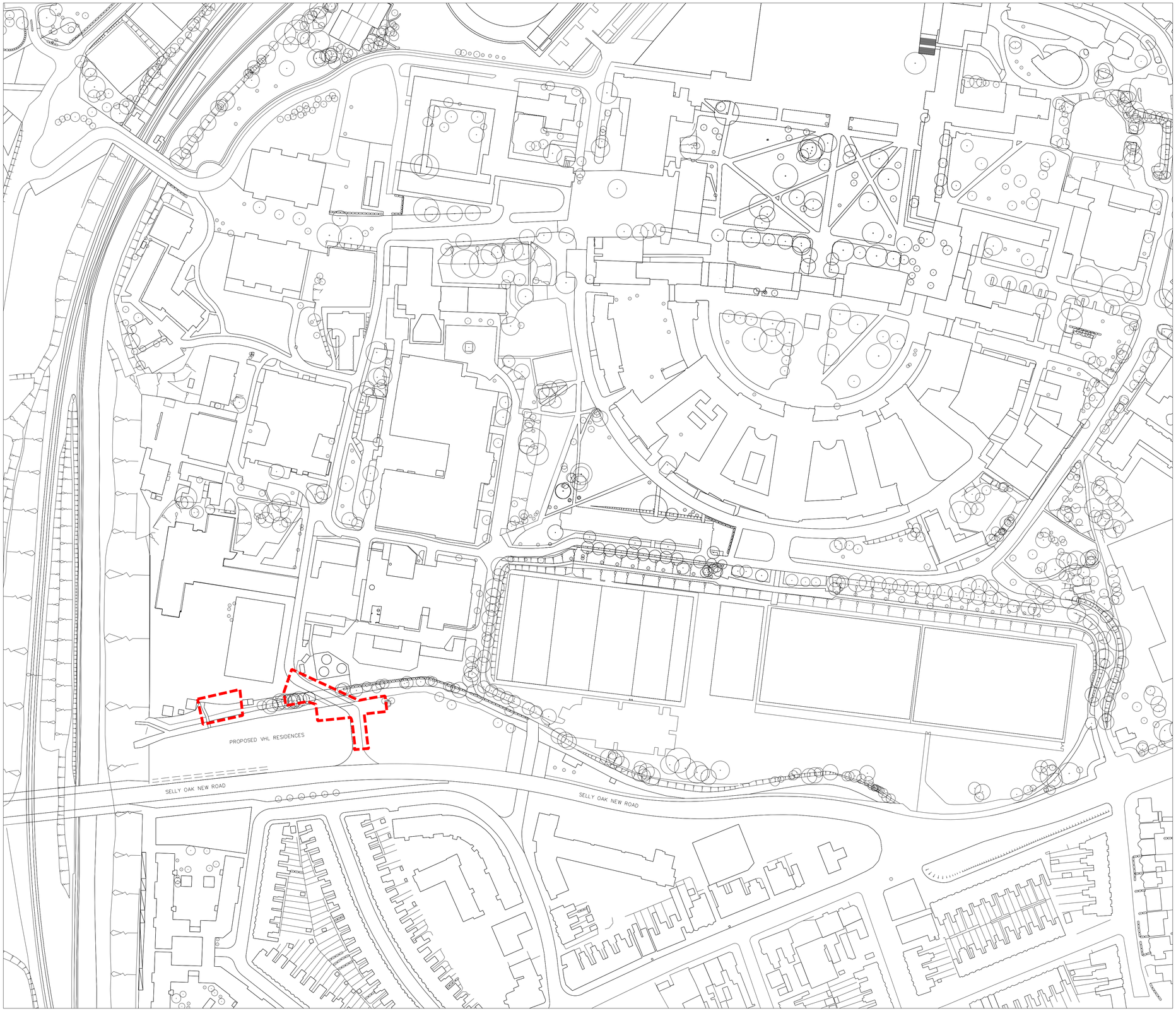
4.3 Ecology

RPS have carried out an ecological assessment of the site, which has been issued as part of the Edgbaston Central Campus Development Hybrid Application. The bridge is located in a section of the north bank where there is an existing break in the trees, and therefore few trees will need to be removed as part of the development (see Appendix 1 to this document). We believe the trees to be removed are of lower and moderate quality, and a tree survey of the proposed ramp site will be carried out to ascertain the number of trees lost in this part of the development. All trees removed will be replaced with trees of equal or better quality as part of the Hybrid Planning Application Project.

Appendix 1: Parameters Plans

5 10 25 50 100 150m

N



GENERAL NOTES

DO NOT SCALE DRAWINGS, USE FIGURED DIMENSIONS ONLY.

ALL DIMENSIONS TO BE CHECKED ON SITE DISCREPANCIES TO BE REPORTED IMMEDIATELY TO THE ARCHITECT

FOR STRUCTURAL DIMENSIONS AND SETTING OUT SEE STRUCTURAL ENGINEERS DRAWINGS

ALL INFORMATION SUBJECT TO STATUTORY APPROVALS BEING OBTAINED

INFORMATION NOT TO BE USED OTHER THAN AS DEFINED BY THE DRAWING STATUS

SPECIFIC NOTES:-

Redline application boundary

Rev	Date	Description	By	Chk	App
A	01/03/2012	Issued for planning	RB	GF	RS

MJP ARCHITECTS

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Key

Client

University of Birmingham

Project

Edgbaston Campus
Grange Road Bridge Project

Title

Location Plan

Job No.	Scale	Date
0504	1:1250@A1 / 1:2500@A3	06/02/2012

Issue Status

P L A N N I N G

Project No.	Disc	Zone	Drg Set	Serial	Rev
0504	A	HA	05	001	A

$FILES
$DATES
$USERS

1 2 5 10 20 30m

N

Exact location of trees in this area to be confirmed

Barrier

Section 003

Proposed Victoria Halls Residences

Student residences and sports pavilion subject to separate outline application

Selly Oak New Road

Selly Oak New Road

Grange Road

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SPECIFIC NOTES:-

Redline application boundary

Existing building

Existing tree

Tree to be removed. Approx. 8

3.0m wide access along Bourn Brook for Environment Agency maintainence vehicles

Rev	Date	Description	By	Chk	App
A	01/03/2012	Issued for planning	RB	GF	RS

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Key

Client
University of Birmingham

Project
Edgbaston Campus
Grange Road Bridge Project

Title
Proposed Site Plan
Parameters Plan

Job No.	Scale	Date
0504	1:250@A1 / 1:500@A3	06/02/2012

Issue Status
P L A N N I N G

Project No.	Disc	Zone	Drg Set	Serial	Rev
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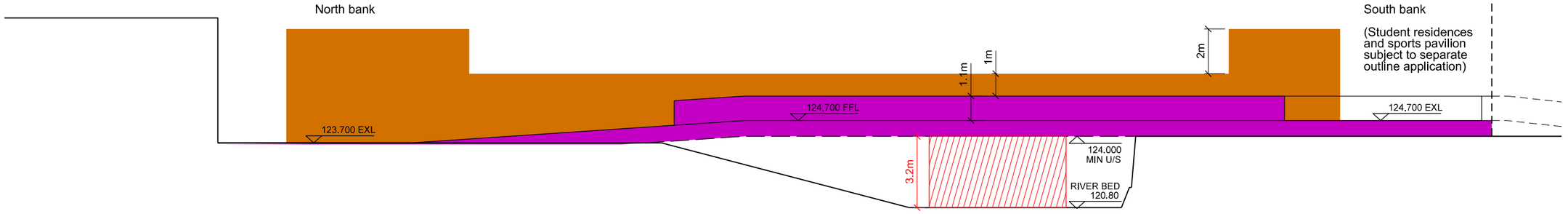

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SPECIFIC NOTES:-

Minimum extent of bridge/ramp

Maximum extent of bridge/ ramp

3.0m wide access along Bourn Brook for Environment Agency maintainence vehicles

Rev	Date	Description	By	Chk	App
B	08/03/2012	Re-issued for planning	TF	GF	RS
A	01/03/2012	Issued for planning	RB	GF	RS

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Key

Client
University of Birmingham

Project
Edgbaston Campus
Grange Road Bridge Project

Title
Proposed Bridge Section
Parameters Plan

Job No.	Scale	Date
0504	1:100@A1 / 1:200@A3	06/02/2012

Issue Status
P L A N N I N G

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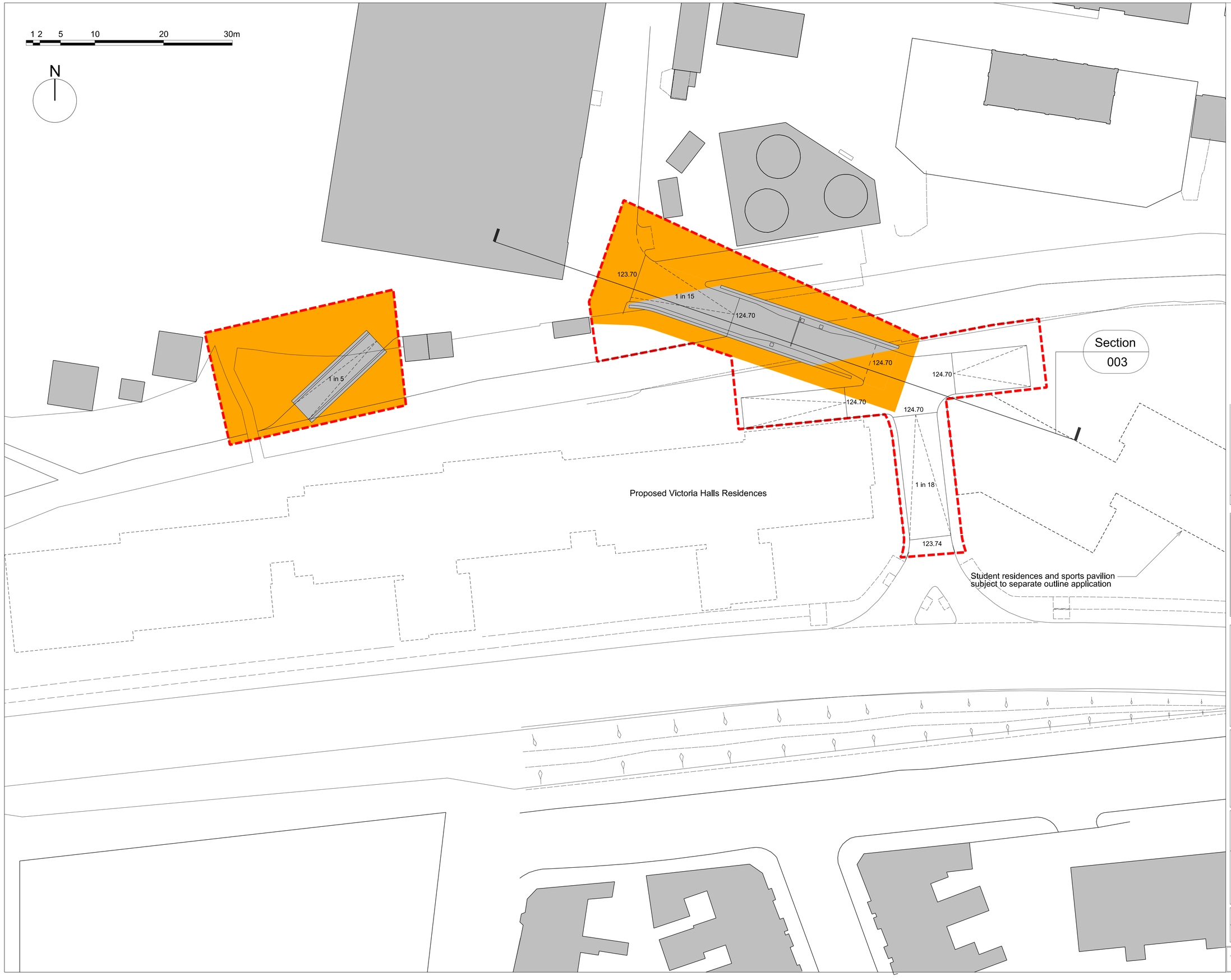

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SPECIFIC NOTES:-

Redline application boundary

Existing building

Minimum extent of bridge/ramp footprint

Maximum extent of bridge/ ramp footprint

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Bridge/Ramp Footprint
Parameters Plan

Job No.	Scale	Date
0504	1:250@A1 / 1:500@A3	06/02/2012

Issue Status

P L A N N I N G

Project No.	Disc	Zone	Drg Set	Serial	Rev
0504	A	HA	05	004	B

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