



FLOOD RISK AND SURFACE WATER
DRAINAGE STATEMENT

Soane Point, 6-8 Market Place, Reading, RG1 2EG

Engineering, Design and
Surveying Consultants

from inception to completion

Prepared for: Castleforge Partners
Ref: CV8200545/SH/DW/002
Issue 1: 14 July 2020

Document History

Issue	Date	Description	Prepared By	Checked By
1	14 Jul 20	First issue	S Haque	J Birch

Glanville

Glanville Consultants is a multi-disciplinary engineering, design and surveying consultancy with the following expertise:



Structural Engineering



Civil Engineering



Transport and Highways



Geomatics (Land Surveying)



Building Surveying



BIM

Cornerstone House
62 Foxhall Road
Didcot
Oxfordshire OX11 7AD

Offices also at:

3 Grovelands Business Centre
Boundary Way
Hemel Hempstead
Hertfordshire HP2 7TE

Telephone: 01235 515550

Telephone: 01442 835999

postbox@glanvillegroup.com
www.glanvillegroup.com

© Glanville Consultants Ltd. All rights reserved.

This report contains confidential information intended solely for the recipient. No part of this report may be copied, reproduced or stored electronically without prior written permission from Glanville Consultants Ltd. This report has been prepared in accordance with the commissioning brief and is for the client's exclusive use unless otherwise agreed in writing. Glanville Consultants Ltd does not accept liability for any use of this report, other than for the purposes for which it was originally prepared and provided. Third parties should not use or rely on the contents of this report without written permission from Glanville Consultants Ltd.

Contents

1.0	Introduction	1
2.0	Flood Risk Appraisal	2
3.0	Surface Water Drainage Strategy.....	3
4.0	Conclusion.....	4

Appendices

Appendix A:	Site Location Plan
Appendix B:	Proposed Site Roof Plan
Appendix C:	Proposed Landscaped Areas

1.0 Introduction

- 1.1 This report has been prepared by Glanville Consultants on behalf of Castleforge Partners to support a planning application (reference 200918/FUL) for the redevelopment of Soane Point, 6-8 Market Place, Reading.

Site Description

- 1.2 The site is located on Market Place, Reading, RG1 2EG. The approximate centre of the site is located at: Easting 471723; Northing 173462. A site location plan is included in Appendix A.
- 1.3 The site is approximately 0.29ha in size and currently comprises office and retail space within an urbanised city centre area, which is underlain by a basement car park. The site is bound to the west by Market Place, to the east by a private road and the north and south by neighbouring buildings.

Existing Surface Water Drainage

- 1.4 The catchment can be characterised as impermeable, comprising roof and hardstanding external ground areas. Surface water run-off from the existing development is understood to drain to the public sewer in Market Place. No third-party sewers or sustainable urban drainage (SuDS) features are known to be located within the site boundaries.

Development Proposals

- 1.5 The proposed development is for the internal and external refurbishment to the existing office building, along with the erection of a side wing and two-storey extension. A copy of the proposed site roof plan is included in Appendix B.

2.0 Flood Risk Appraisal

- 2.1 The National Planning Policy Framework (NPPF) states that a flood risk assessment is necessary for sites greater than one hectare in area or those located in Flood Zone 2 or Flood Zone 3. Since the site measures only 0.29ha in area and is not located in a high-risk flood zone, a full flood risk assessment is not required. However, in the interests of best practice, a brief evaluation of flood risk to the site is provided in this report.
- 2.2 The Environment Agency (EA) publishes flood zone mapping on the GOV.UK website which shows the modelled extents of fluvial flooding. The flood zone mapping indicates that the site is entirely located within Flood Zone 1, which is land at the lowest risk of fluvial flooding.
- 2.3 The EA publishes a 'Flood Risk from Surface Water' map (FRfSW) on the GOV.UK website which indicates the predicted risk of surface water flooding in the event that rainwater does not drain away through normal drainage systems or soak into the ground. The mapping indicates that the site is considered to be at a very low risk of surface water flooding.

3.0 Surface Water Drainage Strategy

- 3.1 As discussed in Section 1, the site is considered impermeable and currently discharges surface water run-off to the public sewer in Market Place.
- 3.2 The development proposals introduce soft landscaping features at various storeys which will lead to an overall decrease in impermeable area at the site. The proposed development will see an increase in soft landscaped areas area by approximately 340m² (an improvement to the existing situation of zero). A roof plan for the proposed development showing the proposed permeable areas is included in Appendix C.
- 3.3 The introduction of soft landscaped areas will also aid in slowing the rate or attenuating of run-off to the downstream system and will aid in reducing flood risk to this receiving body as well as providing water quality benefits.
- 3.4 The proposals will also consider the following measures to reduce water consumption together with the reuse of grey water:
- Low flush WCs;
 - Flow restricted showers and taps; and
 - Rainwater or greywater harvesting.
- 3.5 Such measures can help to reduce the rate and volume of flows entering the downstream system. At the appropriate design stage, the final measures incorporated to reduce internal water usage will be confirmed.
- 3.6 Since the site is underlain by a basement car park and the proposals do not comprise its removal, the opportunity to explore infiltration drainage (such as soakaways) is constrained in this regard.
- 3.7 It is therefore proposed that run-off from the impermeable areas at the application site will continue to be managed through the existing drainage system that currently serves the site.
- 3.8 The proposed change of use will not involve an increase in the current impermeable area; therefore, there will be no increase in surface water run-off from the site post-development for all design rainfall events. As such there will be no increase in flood risk downstream.
- 3.9 As discussed, the surface water drainage strategy seeks to reuse the existing system and run-off rates will not exceed the existing rates. Therefore, there is no need to provide hydraulic design calculations. Betterment is provided to the existing situation through the introduction of new landscaped areas, which will aid in providing water quality benefits together with a reduction in the volume of water and / or peak flows being received by the downstream sewer.
- 3.10 Since no new connections are proposed, and there is no increase in surface water run-off discharging to the receiving sewer, it is proposed that the detailed design for the drainage system will be provided in due course. Further information in this regard could be made available as part of a condition discharge and/or in liaison with Building Control at the detailed design stage.
- 3.11 The drainage system on-site would remain under private ownership and be maintained by a management company.

4.0 Conclusion

4.1 This report has been prepared by Glanville Consultants on behalf of Castleforge Partners to support a planning application (reference 200918/FUL) for the redevelopment of Soane Point, 6-8 Market Place, Reading.

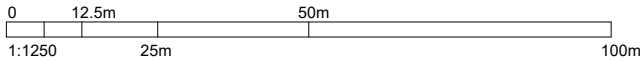
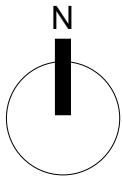
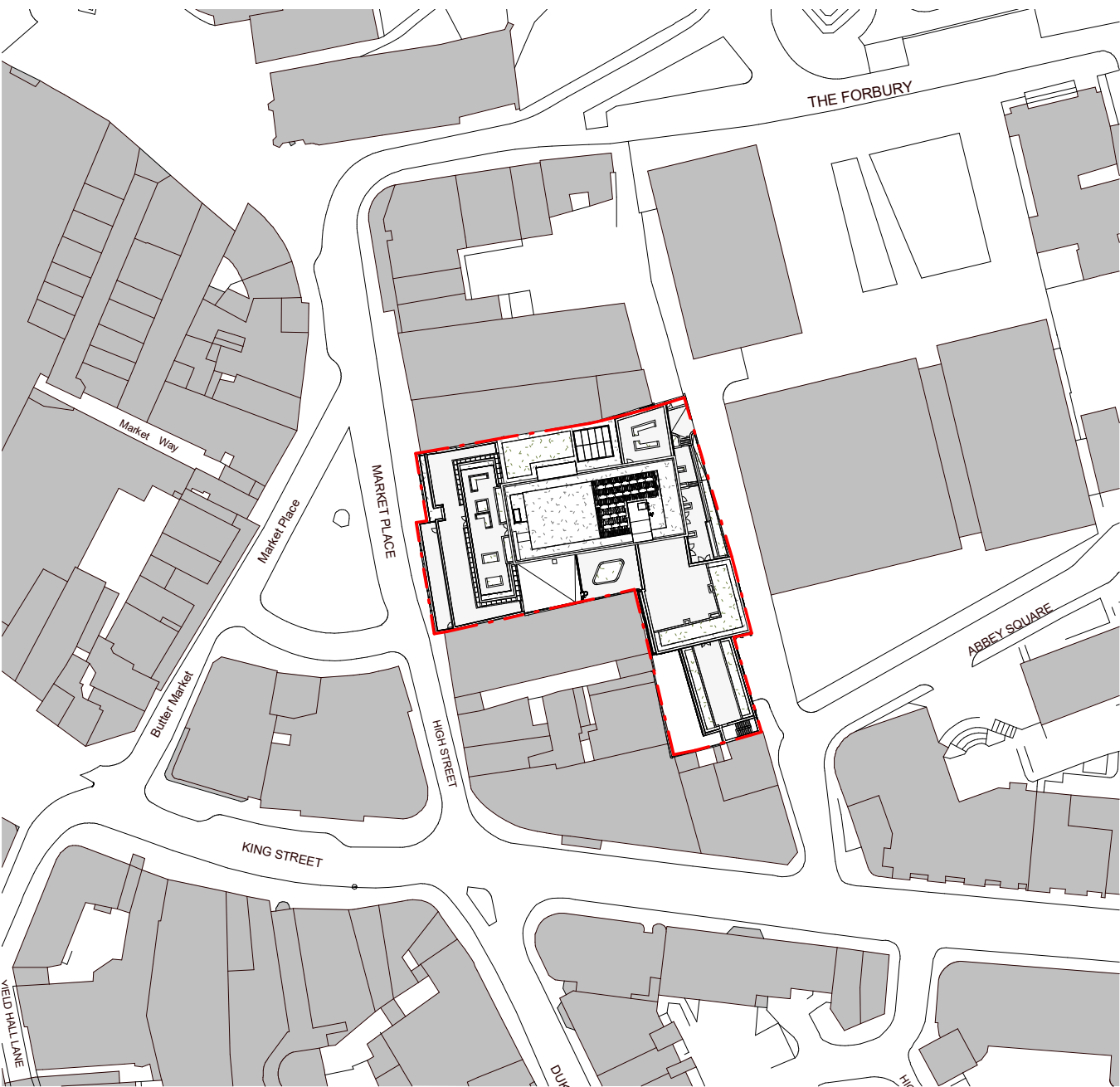
4.2 This report concludes that:

- The site is impermeable and is underlain by a basement car park and constraints are such that infiltration drainage techniques will not be feasible.
- The site currently drains to the adjacent public sewerage system.
- It is proposed that the site will continue to drain via existing connections to the adjacent public sewerage system.
- Soft landscaping features are proposed at various storeys which lead to an overall decrease in impermeable area when compared with the existing situation, which will in turn reduce run-off rates and volumes and provide water quality benefits.
- The proposals consider measures to reduce water consumption.
- Flood risk will not increase on-site or elsewhere as a result of the development.

4.3 The proposals are therefore considered to comply with national and local planning policy in terms of drainage and flood risk.

Appendices

Appendix A
Site Location Plan



NOTES:

THIS DRAWING IS PROTECTED BY COPYRIGHT.

ALL AREAS HAVE BEEN MEASURED FROM CURRENT DRAWINGS. THEY MAY VARY BECAUSE OF (EG) SURVEY, DESIGN DEVELOPMENT, CONSTRUCTION TOLERANCES, STATUTORY REQUIREMENTS OR RE-DEFINITION OF THE AREAS TO BE MEASURED.

P2	26.06.2020	Revised planning issue	CA	AC
P1	19.06.2020	Preliminary issue	CA	AC
No.	Date	Comments	Drawn	Chkd

Revisions

Issue Status
Preliminary

tp bennett
architecture
interiors
planning
One America Street | London SE1 0NE UK +44 (0) 20 7208 2000 www.tp-bennett.com

Project
**Market Place
6-8 Market Place
Reading, RG1 2DP**

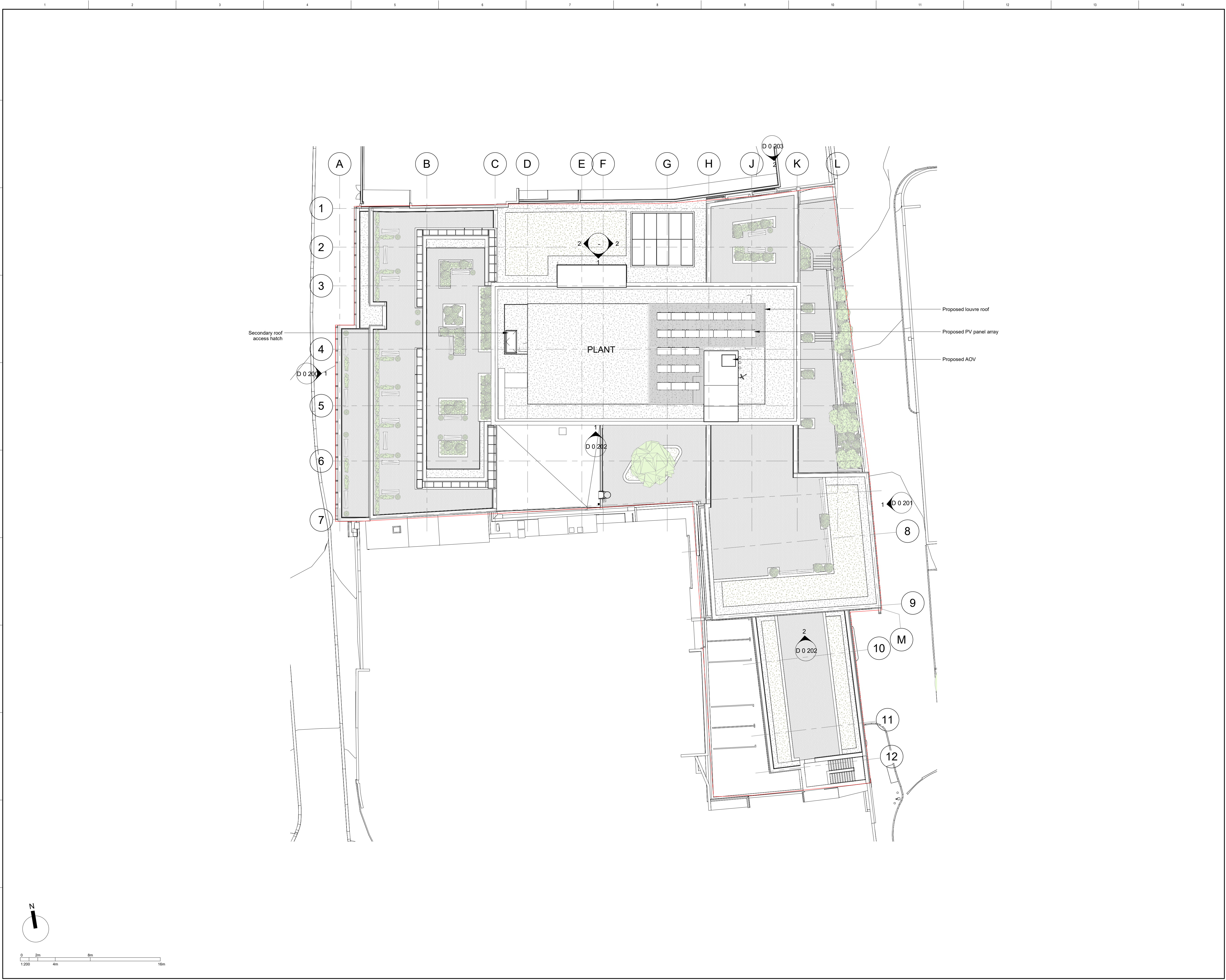
Drawing Title
**LOCATION PLAN
PLANNING**

Drawn	Date	Scale @ A3 1 : 1250	Alt. Ref.
-------	------	------------------------	-----------

tp bennett Project No.	Series	Zone	Drawing No.	Rev.
A11831	D	0	111	P2

Appendix B

Proposed Site Roof Plan

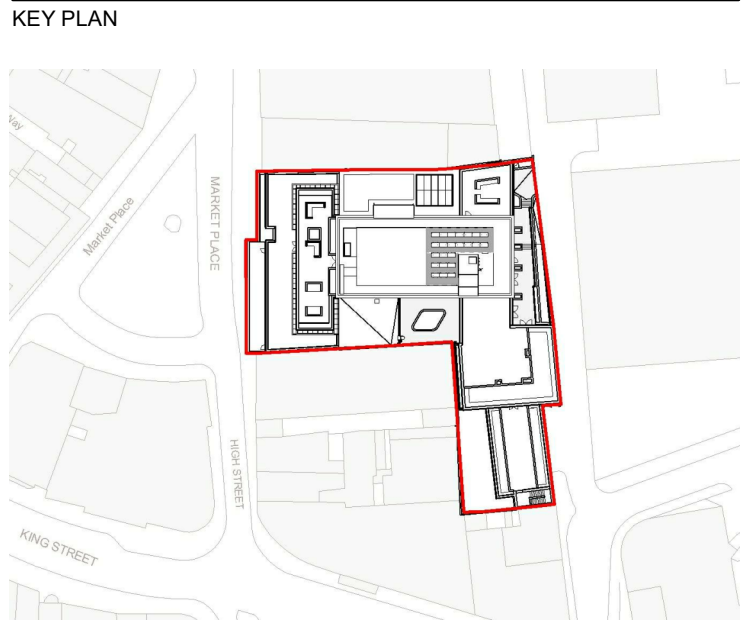


CLIENT
Castleforg & Partners

STRUCTURAL ENGINEER
London Structures Lab

SERVICES ENGINEER
Lehding Services Design Ltd

CONSULTANT



NOTES:

THIS DRAWING IS PROTECTED BY COPYRIGHT.

ALL AREAS HAVE BEEN MEASURED FROM CURRENT DRAWINGS. THEY MAY VARY BECAUSE OF (EG) SURVEY, DESIGN DEVELOPMENT, CONSTRUCTION TOLERANCES, STATUTORY REQUIREMENTS OR RE-DEFINITION OF THE AREAS TO BE MEASURED.

P3	26.06.2020	Revised planning issue	CA	AC
P2	19.06.2020	Planning issue	CA	AC
P1	12.06.2020	STAGE 2 ISSUE	RP	AC
No.	Date	Comments	Drawn	Checked

Revisions

Issue Status

Preliminary

tp bennett
architecture
interiors
planning

One America Street | London SE1 0NE UK +44 (0) 20 7208 2000 www.tpbenett.com

Project
Market Place
6-8 Market Place
Reading, RG1 2DP

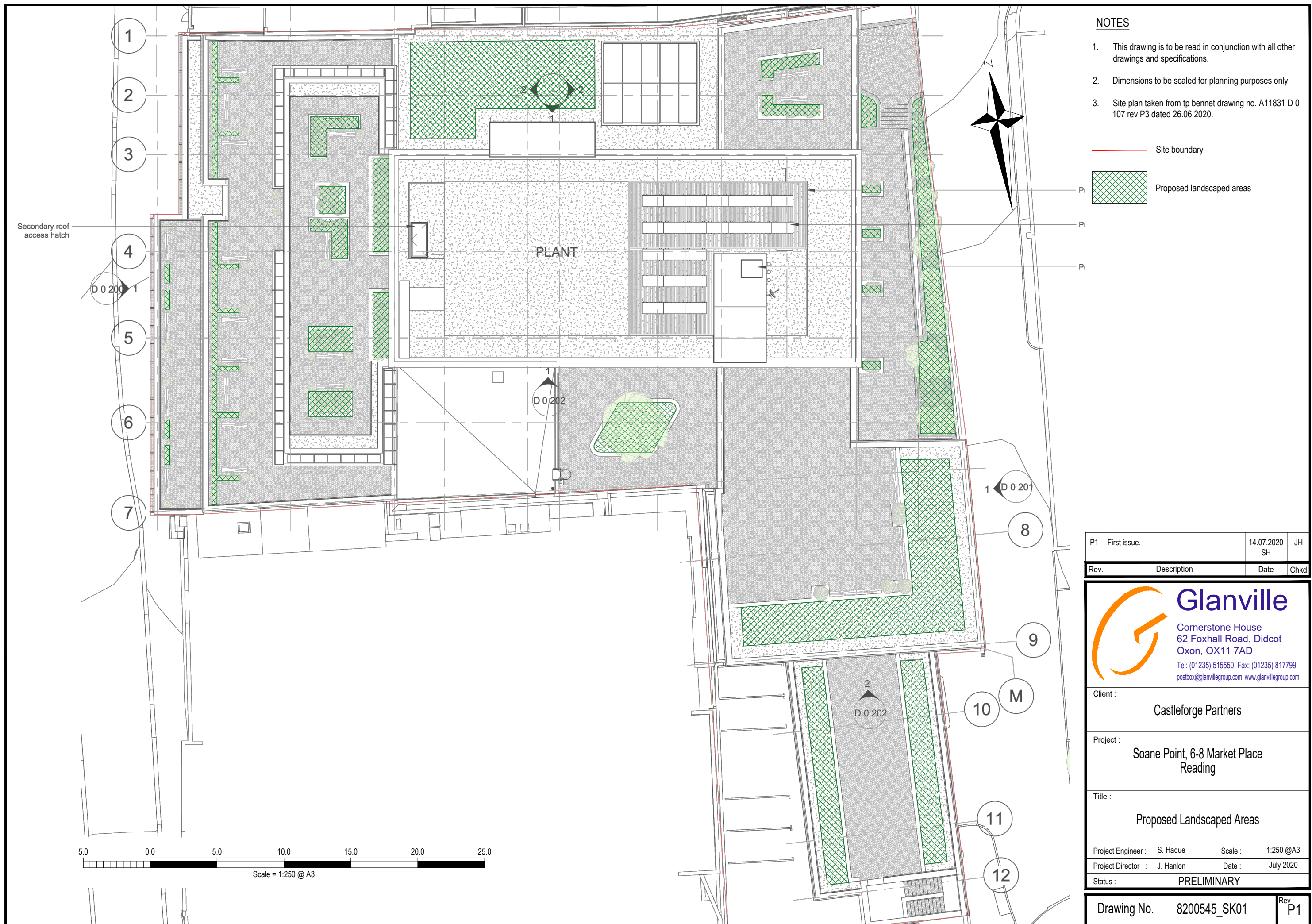
Drawing Title
LEVEL 07 ROOF
PLANNING

Drawn	Date	Scale @ A1	Alt. Ref.
		1 : 200	

tp bennett Project No.	Series	Zone	Drawing Number	Rev.
A11831	D	0	107	P3

Appendix C

Proposed Landscaped Areas



NOTES

1. This drawing is to be read in conjunction with all other drawings and specifications.
2. Dimensions to be scaled for planning purposes only.
3. Site plan taken from tp benet drawing no. A11831 D 0 107 rev P3 dated 26.06.2020.

— Site boundary

Proposed landscaped areas

P1	First issue.	14.07.2020 SH	JH
Rev.	Description	Date	Chkd



Glanville
Cornerstone House
62 Foxhall Road, Didcot
Oxon, OX11 7AD
Tel: (01235) 515550 Fax: (01235) 817799
postbox@glanvillegroup.com www.glanvillegroup.com

Client :	Castleforge Partners		
Project :	Soane Point, 6-8 Market Place Reading		
Title :	Proposed Landscaped Areas		
Project Engineer :	S. Haque	Scale :	1:250 @A3
Project Director :	J. Hanlon	Date :	July 2020
Status :	PRELIMINARY		

Drawing No.	8200545_SK01	Rev	P1
-------------	--------------	-----	----



Cornerstone House, 62 Foxhall Road
Didcot, Oxfordshire OX11 7AD

01235 515550
postbox@glanvillegroup.com
www.glanvillegroup.com

- Structural Engineering
- Civil Engineering
- Transport & Highways
- Geomatics (Land Surveying)
- Building Surveying
- BIM