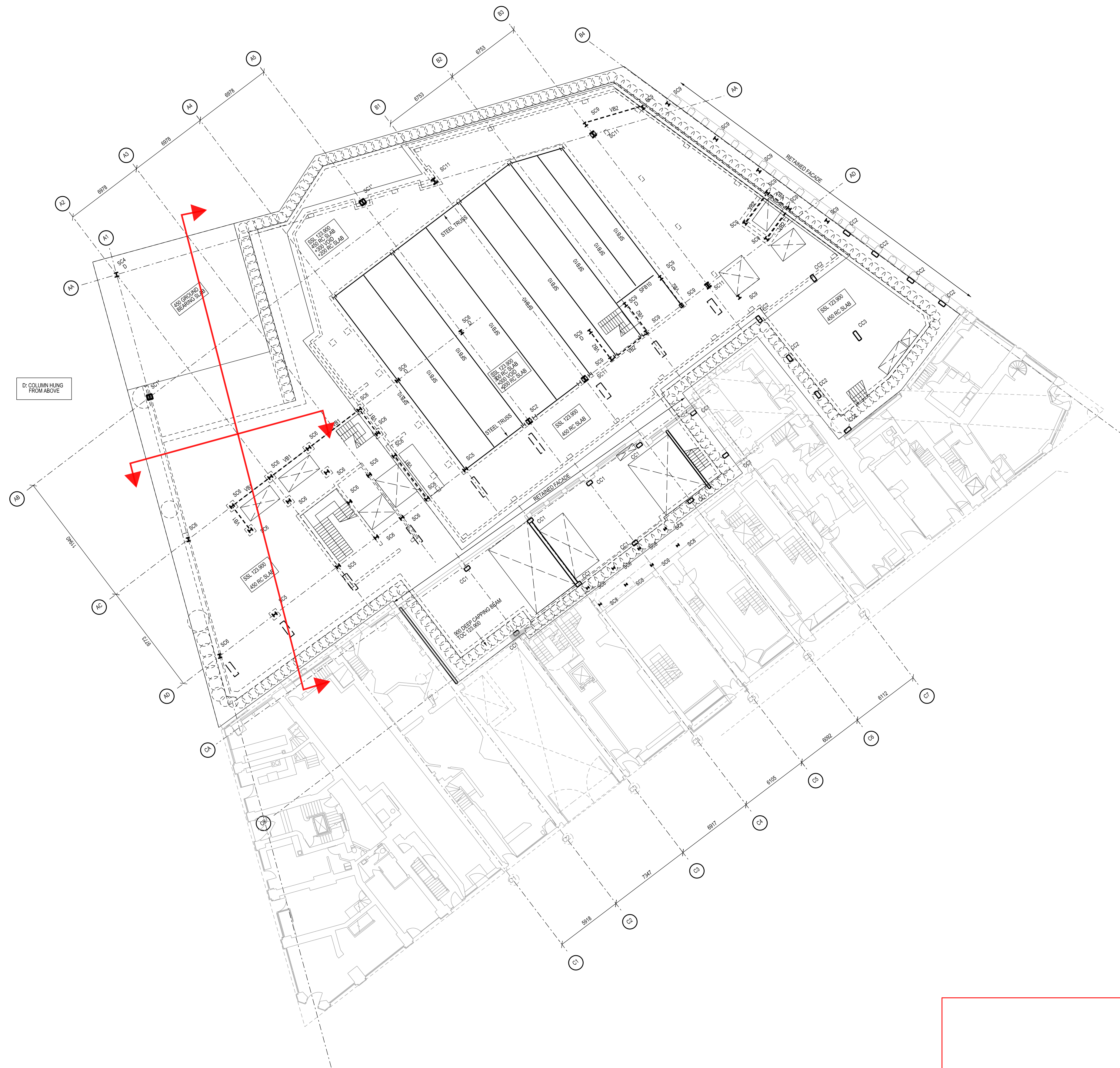




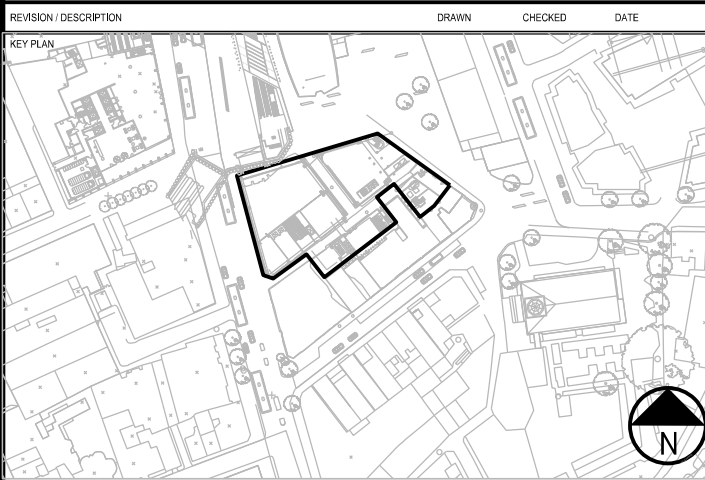
200mm THK RC SLAB ON
COMPOSITE METAL DECK

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NOTES

MEMBER SCHEDULE	
CONCRETE MEMBERS	
CC1	300x500 RC COLUMN
CC2	300x600 RC COLUMN
CC3	300x600 RC COLUMN
CC4	750x750 RC COLUMN
CC5	500x500 RC COLUMN
CC6	700x700 RC COLUMN
STEEL MEMBERS	
SC1	356x406 UC
SC1*	356x406 UC 12 No. ADDITIONAL WELDED PLATES
SC2	356x406 UC
SC3	356x368 UC
SC4	356x368 UC
SC5	305x305 UC
SC6	305x305 UC
SC7	254x254 UC
SC8	203x203 UC
SC9	305x305 UC
SC10	254x254 UC
SC11	356x406 UC
SC12	150x150 CRUCIFORM COLUMNS
SB1	610x305 UC
SB2	610x305 UC
SB3	610x305 UC
SB4	610x229 UC
SB5	610x229 UC
SB6	533x312 UB
SB7	533x312 UB
SB8	533x312 UB
SB9	533x312 UB
SB10	533x210 UB
SB11	533x210 UB
SB12	457x191 UB
SB13	457x191 UB
SB14	406x178 UB
SB15	406x178 UB
SB16	305x165 UB
SB17	305x165 UB
SB18	305x165 UB
SB19	152x89 UB
SB20	203x102 UB
SB21	254x146 UB
SB22	305x102 UB
SB23	457x191 UB
SB24	533x165 UB
SB25	533x165 UB
SB26	305x305 UC
FABRICATED MEMBERS	
SFB1	FAB 1000x200 COMPOSITE WITH SLAB
SFB2	FAB 950x200 COMPOSITE WITH SLAB
SFB3	FAB 500x250 COMPOSITE WITH SLAB
SFB4	FAB 500x200 COMPOSITE WITH SLAB
SFB5	FAB 350x150 COMPOSITE WITH SLAB
SFB6	FAB BOX 900x800x20
SFB7	FAB BOX 600x600x30
SFB8	FAB 600x300x165
SFB9	FAB 500x330x63
SFB10	FAB 1100x600x507
TRUSS MEMBERS	
T1	356x406 UC
T2	356x406 UC
T3	356x368 UC
T4	356x368 UC
T5	305x305 UC
T6	305x305 UC
T7	203x203 UC
T8	356x406 UC
BRACING MEMBERS	
VB1	323x94 CHS
VB2	168.3x5 CHS

P3	PRELIMINARY ISSUE	NA	CF	25/07/12
P2	PRELIMINARY ISSUE	NA	CF	17/07/12
P1	PRELIMINARY ISSUE	NA	CF	25/05/12



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PROJECT TITLE
ST GILES CIRCUS

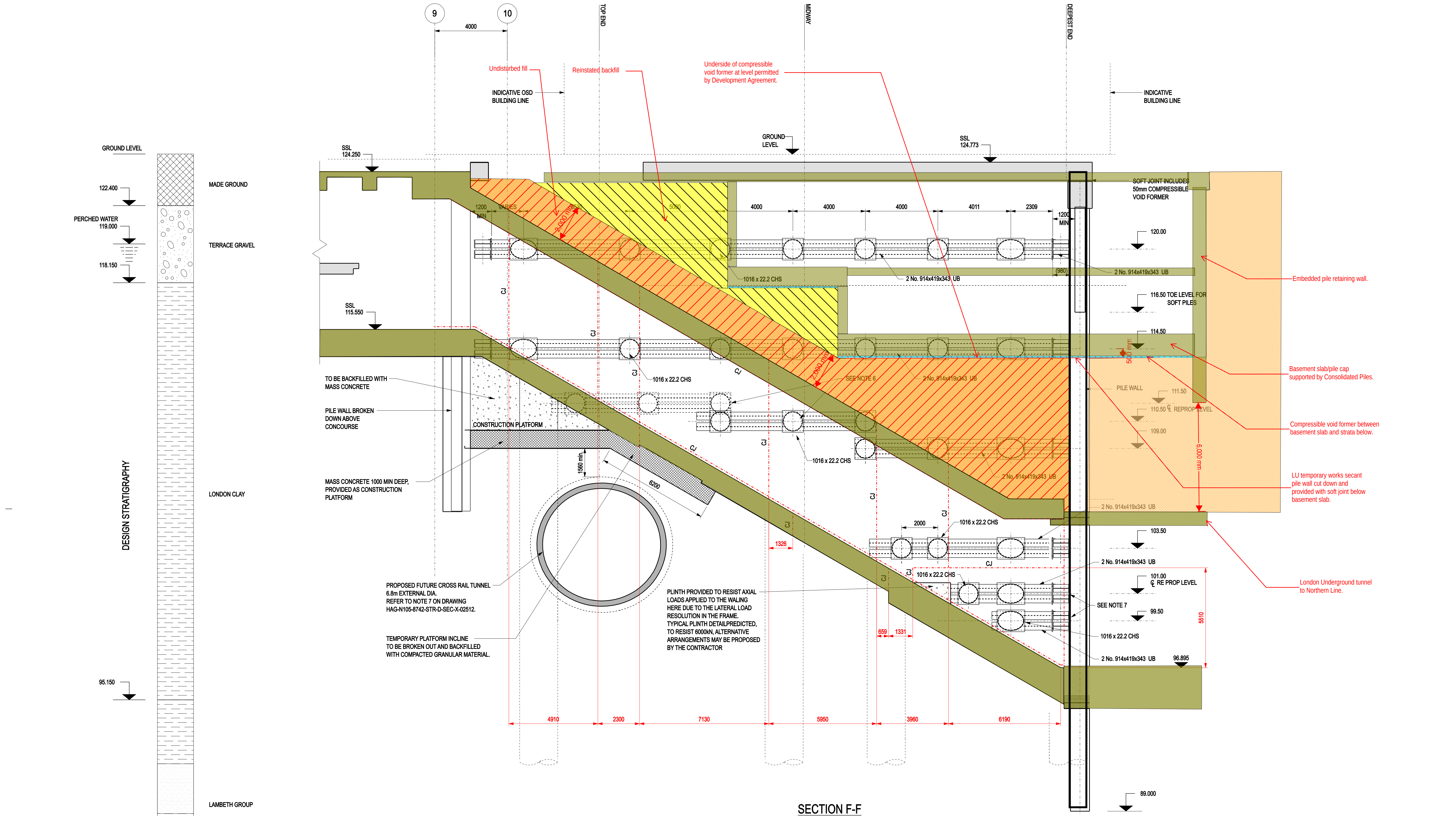
GROUND FLOOR PLAN

SCALE
1:200 @ A1
@ A3

DATE
24.04.12

PROJECT NUMBER	DRAWING NO.	REVISION
029	029-S-DRG-100	P3

WORK IN PROGRESS



Section A

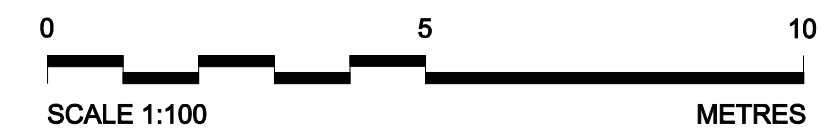
Project Title: St Giles Circus Redevelopment
Sketch Number: 029_SK046 Interface with NLEB.pdf
Author: CliveFussell
Date: 04/09/2012

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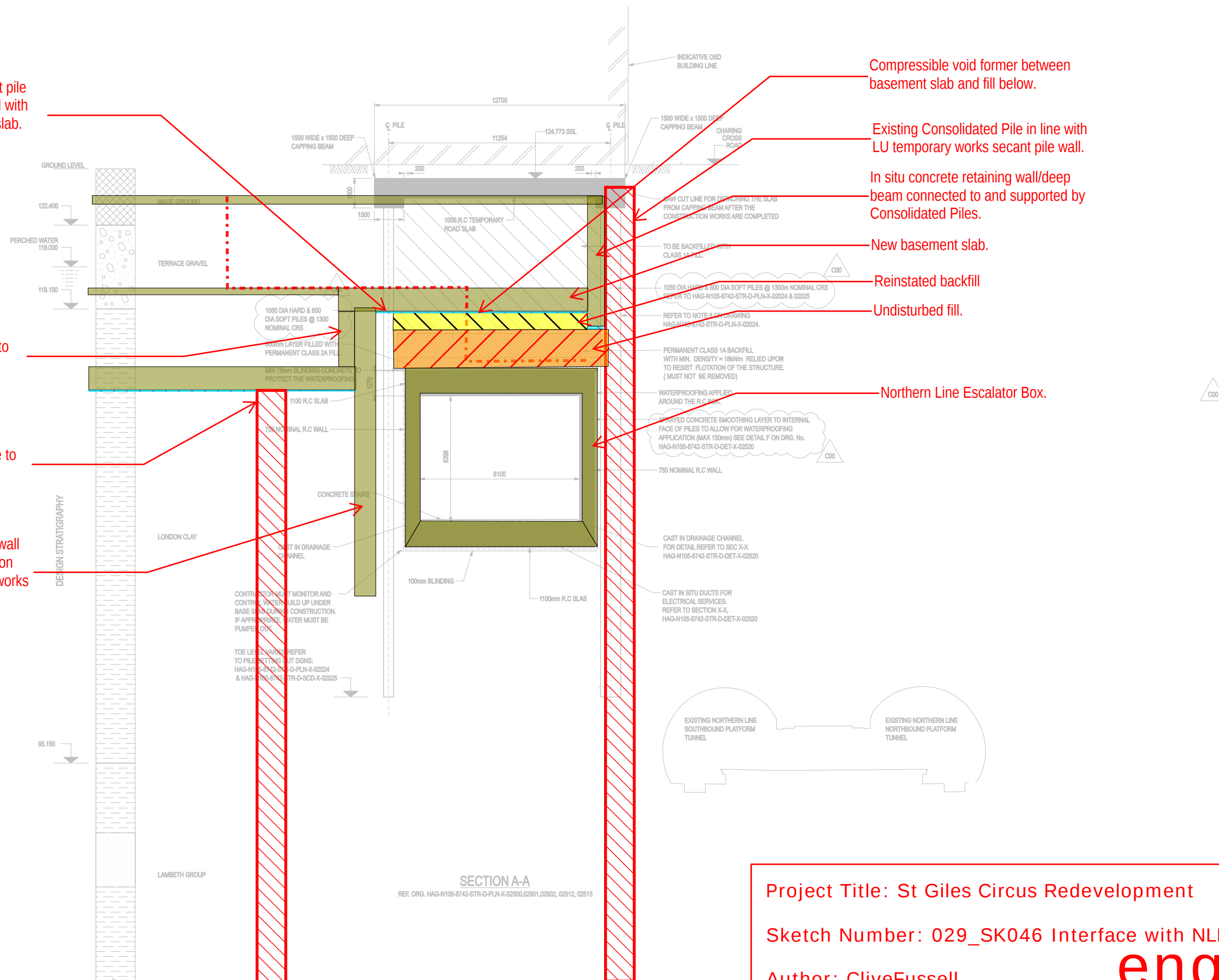
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CAD DRAWING CHANGE ON CAD ONLY



Compressible void former between basement slab and fill below.

Existing Consolidated Pile in line with
LU temporary works secant pile wall.

— In situ concrete retaining wall/deep beam connected to and supported by Consolidated Piles.

—New basement slab.

- Reinstated backfill

—Undisturbed fill.

——Northern Line Escalator Box.

In situ concrete lining wall to secant piled wall.

Existing Consolidated Pile to support basement slab.

Embedded pile retaining wall
constructed against London
Underground temporary works
secant piled wall..

Section B

Project Title: St Giles Circus Redevelopment

Sketch Number: 029_SK046 Interface with NLEB.pdf

Author: CliveFussell

Date: 04/09/2012

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DESIGN NOTE		 IMAGINE + CREATE + ENGINEER
Project no: 029	Date: 4 September 2012	
Project name: St Giles Circus		
Subject: North of Denmark Street Site – Proposed Construction Sequence		
Produced by: Clive Fussell		

This construction sequence assumes that the site is handed over to Consolidated Developments with the Northern Line Escalator Box (NLEB) backfilled to below the temporary road slab and that the temporary road slab is saw cut to disconnect it from the capping beams. All levels are based on the LUL datum (+100m above OD).

A: Enabling Works

1. Site set up.
2. Install monitoring system to Eastbound Crossrail tunnel .
3. Install monitoring system to NLEB.
4. Utility diversions/capping for those utilities that cross the site.
5. Install facade retention to York and Clifton Mansions (fill under-street vaults for kentledge, provide external steel frame retention system through windows with possible site accommodation above street, tie back through 59 St Giles High Street to avoid props across basement footprint).
6. Demolish York and Clifton Mansions.
7. Recover and store facades to 17 to 21 Denmark Place (provide steel frame around single storey sections of each facade, diamond saw cut facade from rear, lift out and store off-site. All subject to condition survey and assessment of facades to be retained).
8. Demolish 17 to 21 Denmark Place and buildings to North site of Denmark Place.

B: Piling Works

9. Install secant pile wall around basement footprint, starting at East side of NLEB and basement over link tunnel to Northern Line platforms.
10. Install secant pile wall either side of Crossrail tunnel, including 'adit' piles.
11. Install tension and load bearing piles over remainder of basement footprint.
12. Construct capping beam around basement perimeter.

C: NLEB Basement

13. Remove temporary road slab to NLEB and replace with steel propping system at +124.0m.
14. Excavate NLEB to +119.0m, maintaining 2.0m overburden to top of inclined concrete box.
15. Install temporary propping to NLEB at +120.0m.
16. Excavate NLEB to +114.0m and install blinding and compressible void former.
17. Construct basement slab above NLEB with discreet connection through LUL temporary secant wall to new secant wall to East of NLEB. West side supported off Consolidated Piles.
18. Construct retaining wall to West side of NLEB, spanning between Consolidated Piles.

19. Construct retaining wall to underside of mezzanine slab, supported by retaining wall to West side of NLEB and discreet connection through LUL temporary secant wall to new secant wall to East of NLEB.
20. Backfill outside retaining wall to underside mezzanine slab.
21. Construct mezzanine slab above NLEB.
22. Remove temporary propping to NLEB at +120.0m.
23. Construct retaining wall to underside of ground floor slab, supported by retaining wall to West side of NLEB and discreet connection through LUL temporary secant wall to new secant wall to East of NLEB.
24. Backfill outside retaining wall to below temporary props.
25. Remove temporary props at 124.5m
26. Backfill NLEB to underside of ground floor slab.
27. Construct ground floor slab above NLEB, supported off Consolidated Piles and new secant wall to East of NLEB.

D: Southern Basement

28. Excavate Southern Basement to +122.5m around NLEB.
29. Install temporary propping to Southern Basement at +123.5m around NLEB.
30. Excavate Southern Basement to +119.0m.
31. Install temporary propping to Southern Basement at +120.0m.
32. Excavate Southern Basement to formation level, breaking piles down to cut off level.
33. Install blinding and heave protection layer and then cast Southern Basement slab with openings for adit beam construction.

E: Northern Basement

34. Excavate Northern Basement to +119.0m.
35. Install temporary propping to Northern Basement at +120.0m.
36. Excavate Northern Basement to formation level, breaking piles down to cut off level.
37. Install blinding and heave protection layer and then cast Northern Basement slab with openings for adit beam construction.

F: Adit beam construction

38. Excavate and construct adit beams over Crossrail Tunnel in hit and miss.

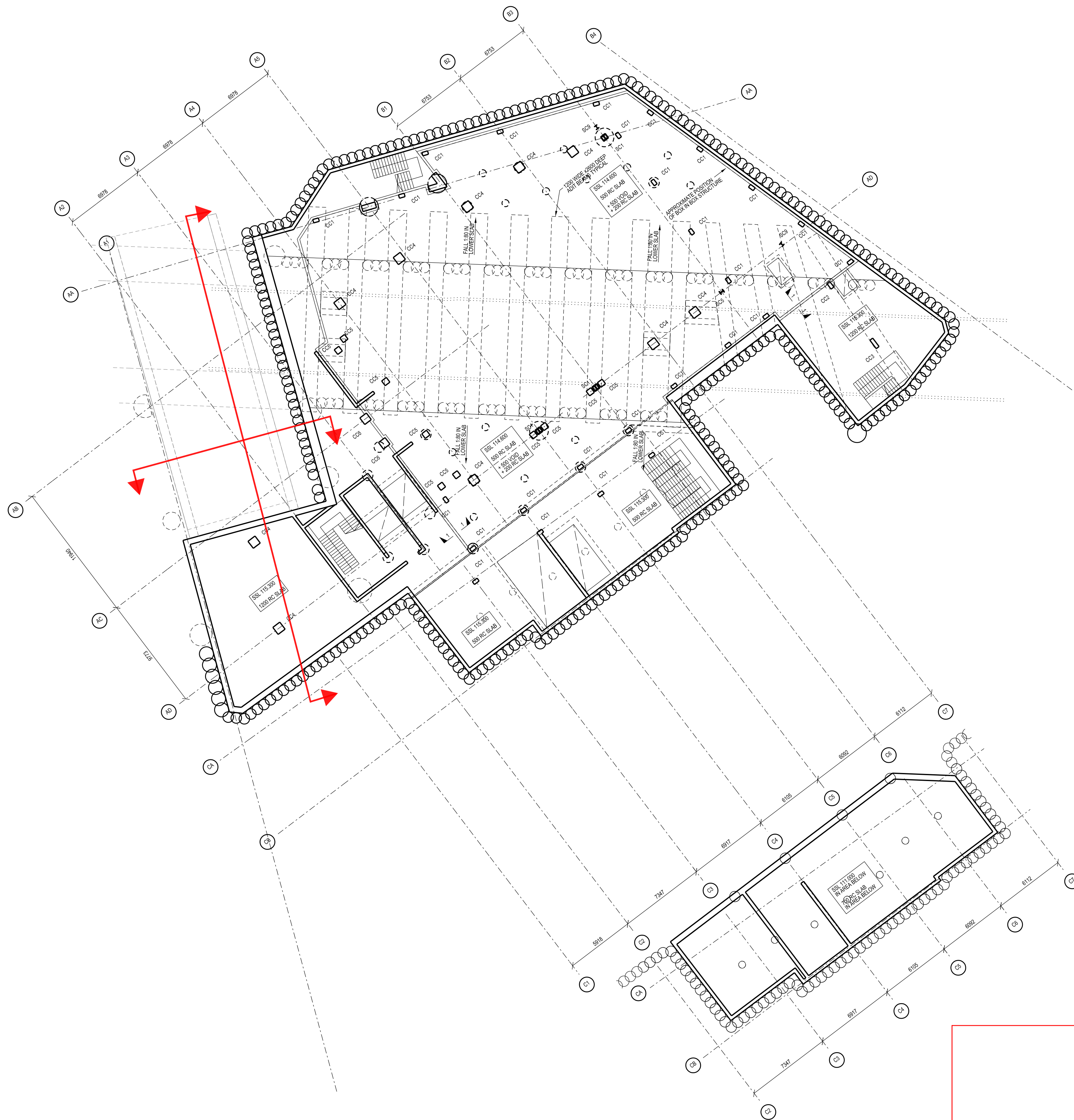
G: Crossrail over-basement

39. Excavate Crossrail Over-basement to 123.5m around NLEB.
40. Install temporary propping to Crossrail over-basement at +123.5m around NLEB.
41. Excavate Crossrail over-basement to +119.0m.
42. Install temporary propping to Crossrail over-basement at +120.0m.
43. Excavate Crossrail over-basement to formation level, exposing top of adit beams.
44. Cast Crossrail over-basement slab direct against blinding to control future heave.

H: Basement build out

45. Construct retaining wall liner walls, internal walls and columns to underside of mezzanine slab (excluding box in box construction).
46. Construct mezzanine slab (excluding box in box construction and where raking props pass through structure).

47. Install raking props between liner wall at underside of mezzanine slab and basement slab to prop retaining wall.
48. Remove temporary props installed at +120.0m.
49. Breakdown secant pile wall either side of Crossrail tunnel to basement slab level except where wall buttresses NLEB or where is supports propping at +123.5m.
50. Construct steel frame for auditorium roof slab.
51. Construct internal walls and columns to underside of ground floor slab.
52. Construct ground floor slab, including box in box structure with pre-compressed acoustic bearings to transfer propping forces across box in box slab.
53. Remove temporary propping at +123.5m.
54. Complete basement retaining wall liner wall.
55. Breakdown remaining secant either side of Crossrail tunnel to basement slab level .
56. Breakdown secant pile wall between basement above NLEB and main basement.
57. Remove raking props.
58. Complete box in box structure.
59. Superstructure.



200mm THK RC SLAB ON COMPOSITE METAL DECK

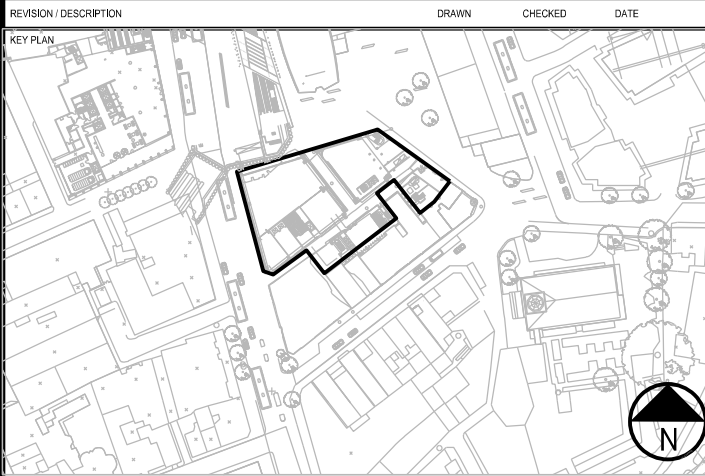
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NOTES

MEMBER SCHEDULE	
CONCRETE MEMBERS	
CC1	300x500 RC COLUMN
CC2	300x600 RC COLUMN
CC3	300x900 RC COLUMN
CC4	750x750 RC COLUMN
CC5	500x500 RC COLUMN
CC6	700x700 RC COLUMN
STEEL MEMBERS	
SC1	356x406 UC
SC1*	356x406 UC 12 No. ADDITIONAL WELDED PLATES
SC2	356x406 UC
SC3	356x368 UC
SC4	356x368 UC
SC5	305x305 UC
SC6	305x305 UC
SC7	254x254 UC
SC8	203x203 UC
SC9	305x305 UC
SC10	254x254 UC
SC11	356x406 UC
SC12	150x150 CRUCIFORM COLUMNS
SB1	610x305 UC
SB2	610x305 UC
SB3	610x305 UC
SB4	610x229 UC
SB5	610x229 UC
SB6	533x312 UB
SB7	533x312 UB
SB8	533x312 UB
SB9	533x312 UB
SB10	533x210 UB
SB11	533x210 UB
SB12	457x191 UB
SB13	457x191 UB
SB14	406x178 UB
SB15	406x178 UB
SB16	305x165 UB
SB17	305x165 UB
SB18	305x165 UB
SB19	152x89 UB
SB20	203x102 UB
SB21	254x146 UB
SB22	305x102 UB
SB23	457x191 UB
SB24	533x165 UB
SB25	305x305 UC
FABRICATED MEMBERS	
SFB1	FAB 1000x200 COMPOSITE WITH SLAB
SFB2	FAB 950x200 COMPOSITE WITH SLAB
SFB3	FAB 500x350 COMPOSITE WITH SLAB
SFB4	FAB 500x200 COMPOSITE WITH SLAB
SFB5	FAB 350x150 COMPOSITE WITH SLAB
SFB6	FAB BOX 900x800x20
SFB7	FAB BOX 600x800x30
SFB8	FAB 600x300x165
SFB9	FAB 500x330x63
SFB10	FAB 1100x600x507
TRUSS MEMBERS	
T1	356x406 UC
T2	356x406 UC
T3	356x368 UC
T4	356x368 UC
T5	305x305 UC
T6	305x305 UC
T7	203x203 UC
T8	356x406 UC
BRACING MEMBERS	
VB1	323x346 CHS
VB2	168.3x5 CHS

P3	PRELIMINARY ISSUE	NA	CF	25/07/12
P2	PRELIMINARY ISSUE	NA	CF	17/07/12
P1	PRELIMINARY ISSUE	NA	CF	25/05/12



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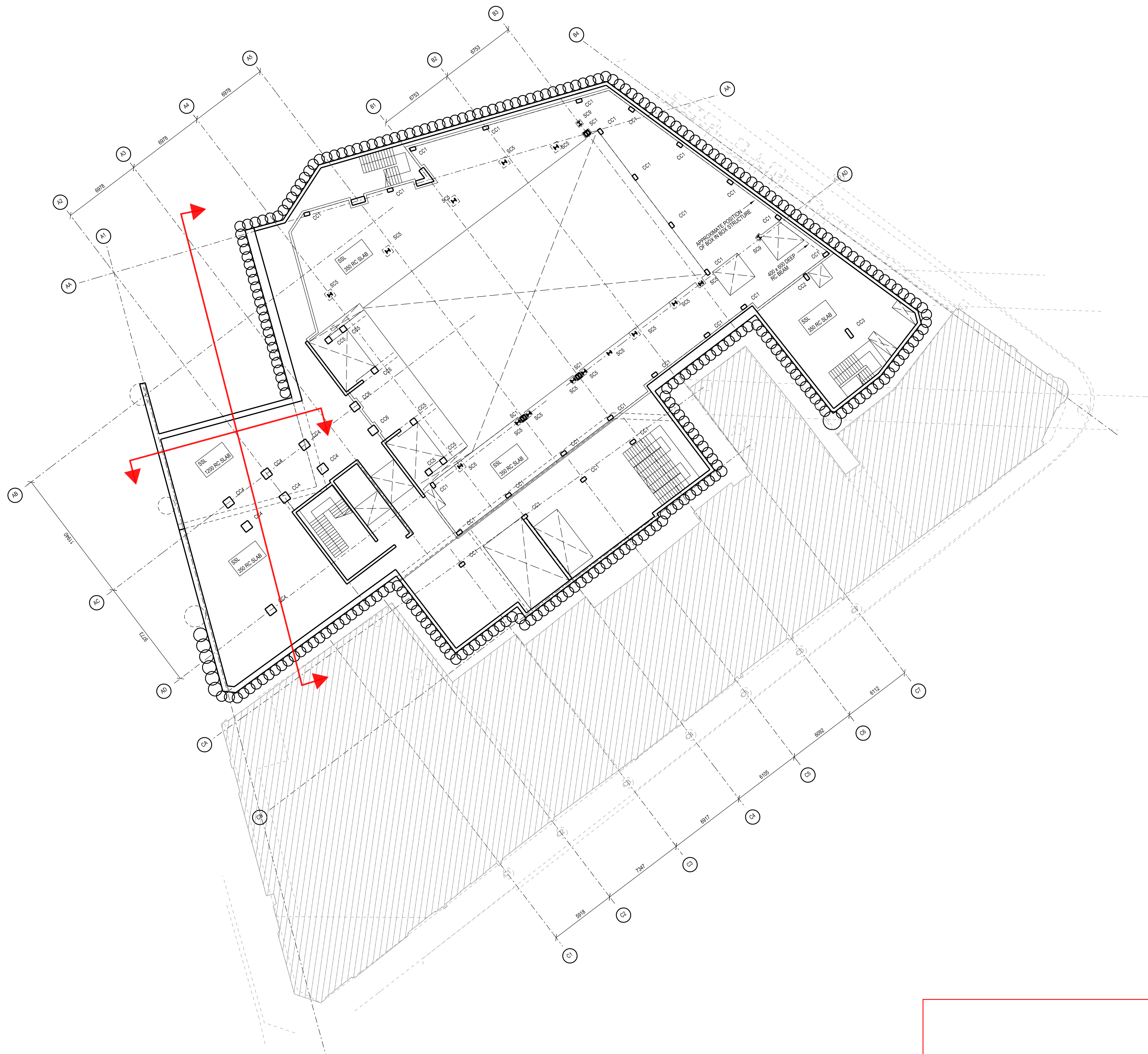
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ST GILES CIRCUS

ISSUE TITLE
BASEMENT PLAN

SCALE
1:200 @ A1
@ A3

DATE
24.04.12

PROJECT NUMBER	DRAWING NO.	REVISION
029	029-S-DRG-050	P3



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NOTES

MEMBER SCHEDULE	
CONCRETE MEMBERS	
CC1	300x500 RC COLUMN
CC2	300x600 RC COLUMN
CC3	300x600 RC COLUMN
CC4	750x750 RC COLUMN
CC5	500x500 RC COLUMN
CC6	700x700 RC COLUMN
STEEL MEMBERS	
SC1	356x406 UC
SC1*	356x406 UC 12 No. ADDITIONAL WELDED PLATES
SC2	356x406 UC
SC3	356x368 UC
SC4	356x368 UC
SC5	305x305 UC
SC6	305x305 UC
SC7	254x254 UC
SC8	203x203 UC
SC9	305x305 UC
SC10	254x254 UC
SC11	356x406 UC
SC12	150x150 CRUCIFORM COLUMNS
SB1	610x305 UC
SB2	610x305 UC
SB3	610x305 UC
SB4	610x229 UC
SB5	610x229 UC
SB6	533x312 UB
SB7	533x312 UB
SB8	533x312 UB
SB9	533x312 UB
SB10	533x210 UB
SB11	533x210 UB
SB12	457x191 UB
SB13	457x191 UB
SB14	406x178 UB
SB15	406x178 UB
SB16	305x165 UB
SB17	305x165 UB
SB18	305x165 UB
SB19	152x89 UB
SB20	203x102 UB
SB21	254x146 UB
SB22	305x102 UB
SB23	457x191 UB
SB24	533x165 UB
SB25	305x305 UC
FABRICATED MEMBERS	
SFB1	FAB 1000x200 COMPOSITE WITH SLAB
SFB2	FAB 950x200 COMPOSITE WITH SLAB
SFB3	FAB 500x350 COMPOSITE WITH SLAB
SFB4	FAB 500x200 COMPOSITE WITH SLAB
SFB5	FAB 350x150 COMPOSITE WITH SLAB
SFB6	FAB BOX 900x800x20
SFB7	FAB BOX 600x800x30
SFB8	FAB 600x300x165
SFB9	FAB 500x330x63
SFB10	FAB 1100x600x507
TRUSS MEMBERS	
T1	356x406 UC
T2	356x406 UC
T3	356x368 UC
T4	356x368 UC
T5	305x305 UC
T6	305x305 UC
T7	203x203 UC
T8	356x406 UC
BRACING MEMBERS	
VB1	323x94 CHS
VB2	168x345 CHS

P3	PRELIMINARY ISSUE	NA	CF	25/07/12
P2	PRELIMINARY ISSUE	NA	CF	17/07/12
P1	PRELIMINARY ISSUE	NA	CF	25/05/12

REVISION DESCRIPTION

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PROJECT TITLE

ST GILES CIRCUS

ISSUED TO	SCALE
MEZZANINE PLAN	1:200 @ A1
	@ A3
	DATE
	16.05.12
PROJECT NUMBER	REVISION
029	P3

DRAWING NO.	029-S-DRG-060
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NOTES

MEMBER SCHEDULE	
CONCRETE MEMBERS	
CC1	300x500 RC COLUMN
CC2	300x500 RC COLUMN
CC3	300x600 RC COLUMN
CC4	750x750 RC COLUMN
CC5	500x500 RC COLUMN
CC6	700x700 RC COLUMN
STEEL MEMBERS	
SC1	356x406 UC
SC1*	356x406 UC x2 No. ADDITIONAL WELDED PLATES
SC2	356x406 UC
SC3	356x368 UC
SC4	356x368 UC
SC5	305x305 UC
SC6	305x305 UC
SC7	254x254 UC
SC8	203x203 UC
SC9	305x305 UC
SC10	254x254 UC
SC11	356x406 UC
SC12	500x150 UC/RCF FORM COLUMNS
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SB2	610x305 I
SB3	610x305 I
SB4	610x229 I
SB5	610x229 I
SB6	533x312 I
SB7	533x312 I
SB8	533x312 I
SB9	533x312 I
SB10	533x210 I
SB11	533x210 I
SB12	457x191 I
SB13	457x191 I
SB14	406x178 I
SB15	406x178 I
SB16	305x165 I
SB17	305x165 I
SB18	305x165 I
SB19	152x89 I
SB20	203x102 I
SB21	254x146 I
SB22	305x102 I
SB23	457x191 I
SB24	533x165 I
SB25	533x165 I
SB26	305x305 UC
FABRICATED MEMBERS	
FBF1	FAB 500x500 COMPOSITE WITH SLAB
FBF2	FAB 500x200 COMPOSITE WITH SLAB
FBF3	FAB 500x305 COMPOSITE WITH SLAB
FBF4	FAB 500x200 COMPOSITE WITH SLAB
FBF5	FAB 305x150 COMPOSITE WITH SLAB
FBF6	FAB 305x100x80x20
FBF7	FAB 305x80x80x20
FBF8	FAB 600x330x185
FBF9	FAB 500x330x63
FBF10	FAB 1100x600x357
TRUSS MEMBERS	
T1	356x406 UC
T2	356x406 UC
T3	356x368 UC
T4	305x368 UC
T5	305x305 UC
T6	305x305 UC
T7	203x203 UC
T8	356x406 UC
BRACING MEMBERS	
VB1	323.56 CHS
VB2	168.345 CHS

P3	PRELIMINARY ISSUE	NA	CF	25/07/12
P2	PRELIMINARY ISSUE	NA	CF	17/07/12
P1	PRELIMINARY ISSUE	NA	CF	25/05/12

PERSON DESCRIPTION OPEN CLOSED DATE

KEY PLAN

A detailed aerial map of a residential neighborhood. A specific house is highlighted with a thick black outline. The house has a complex, multi-sided shape with several windows visible. Surrounding the highlighted house are other houses, streets, and green spaces. A north arrow is located in the bottom right corner of the map area.

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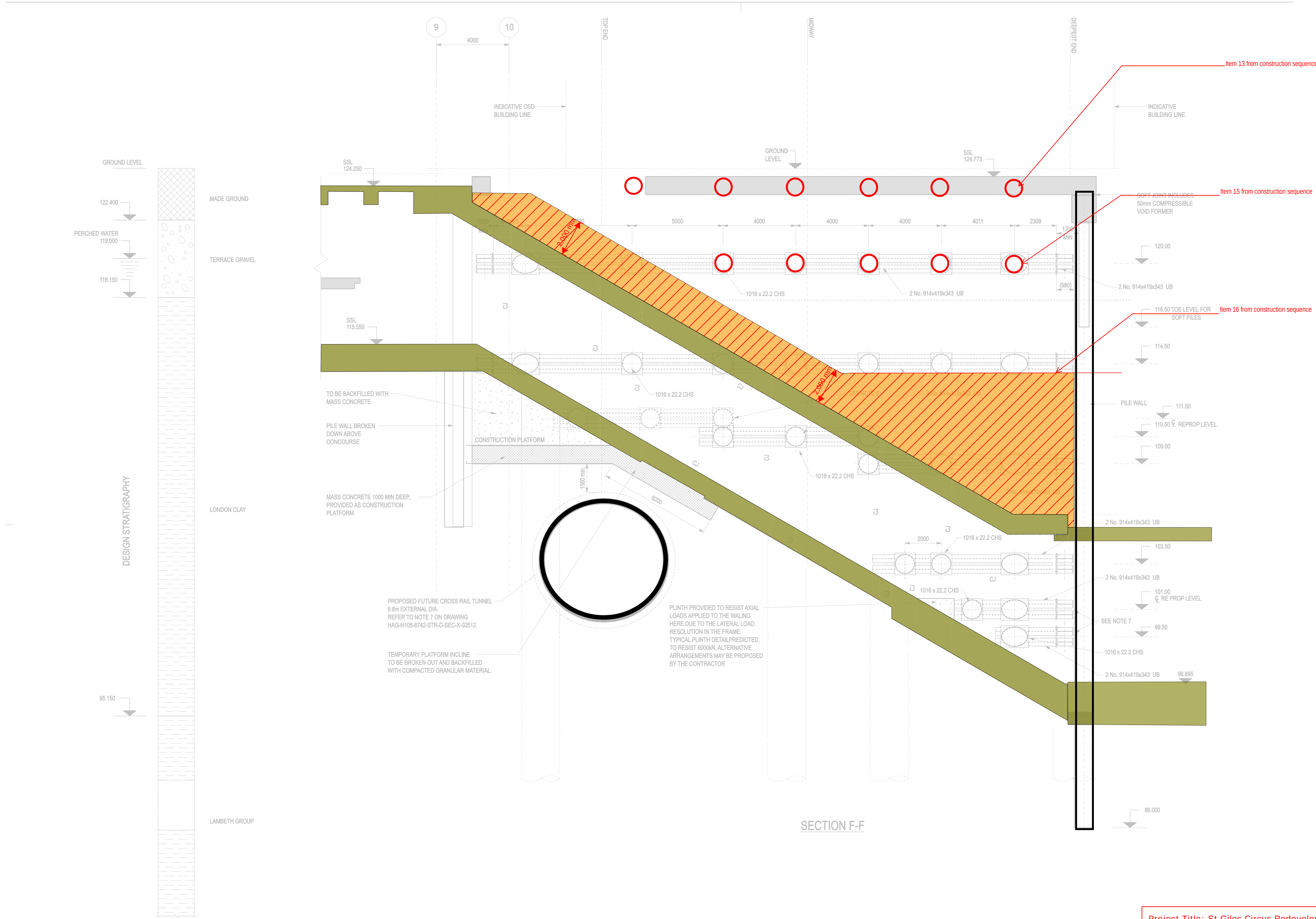
PROJECT TITLE
ST GILES CIRCUS

DRAWING TITLE
GROUND FLOOR PLAN

1:200 @ A:
@ A:

DATE
24.04.12

PROJECT NUMBER	DRAWING No.	REVISION
029	029-S-DRG-100	P3



SECTION F-F

Section A

Project Title: St Giles Circus Redevelopment

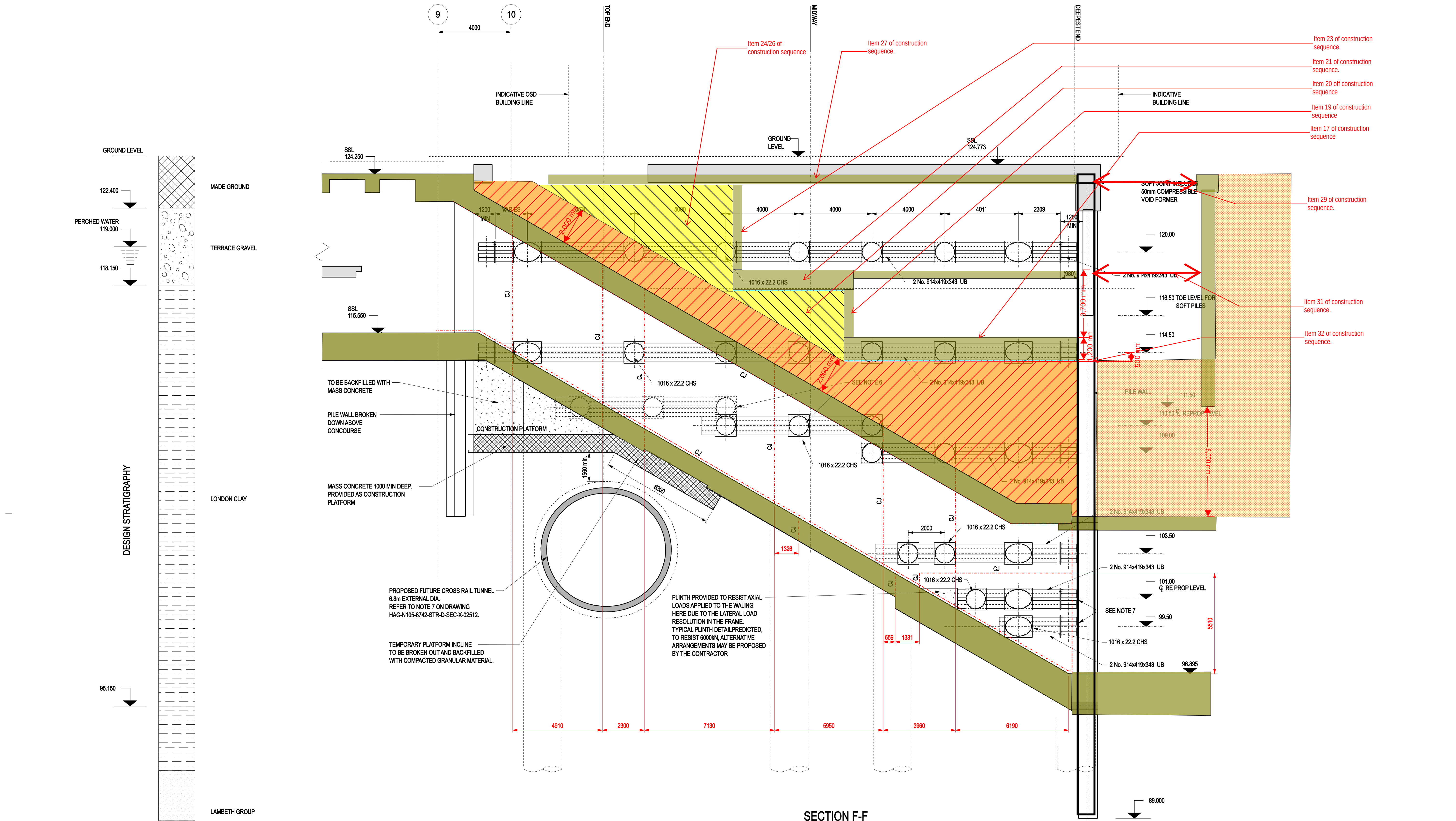
Sketch Number: 029_SK047 Construction sequence around NLE

Author: CliveFussell

Date: 04/09/2012

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Section A

Project Title: St Giles Circus Redevelopment

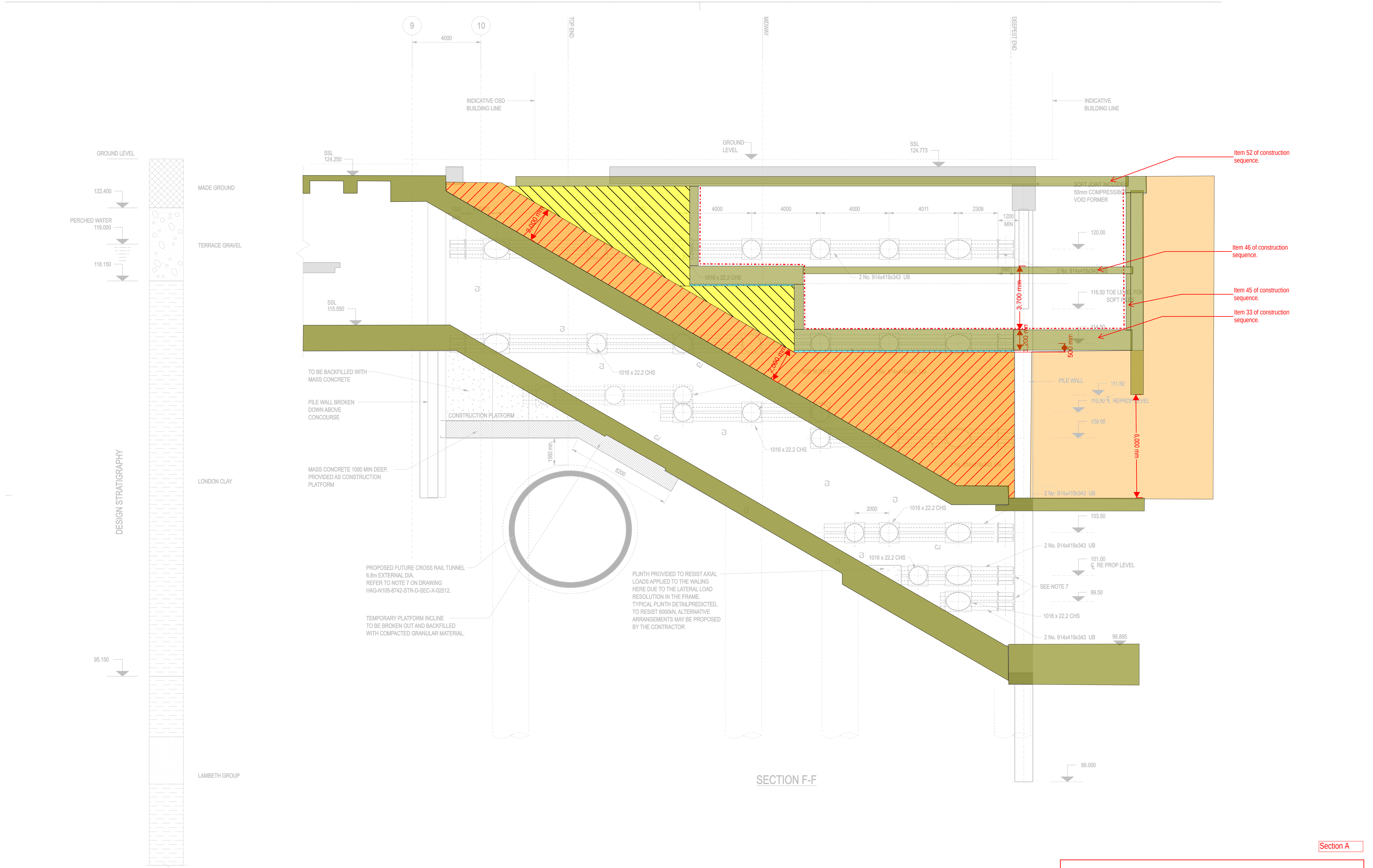
Sketch Number: 029_SK047 Construction sequence around NLE

Author: CliveFussell

Date: 04/09/2012

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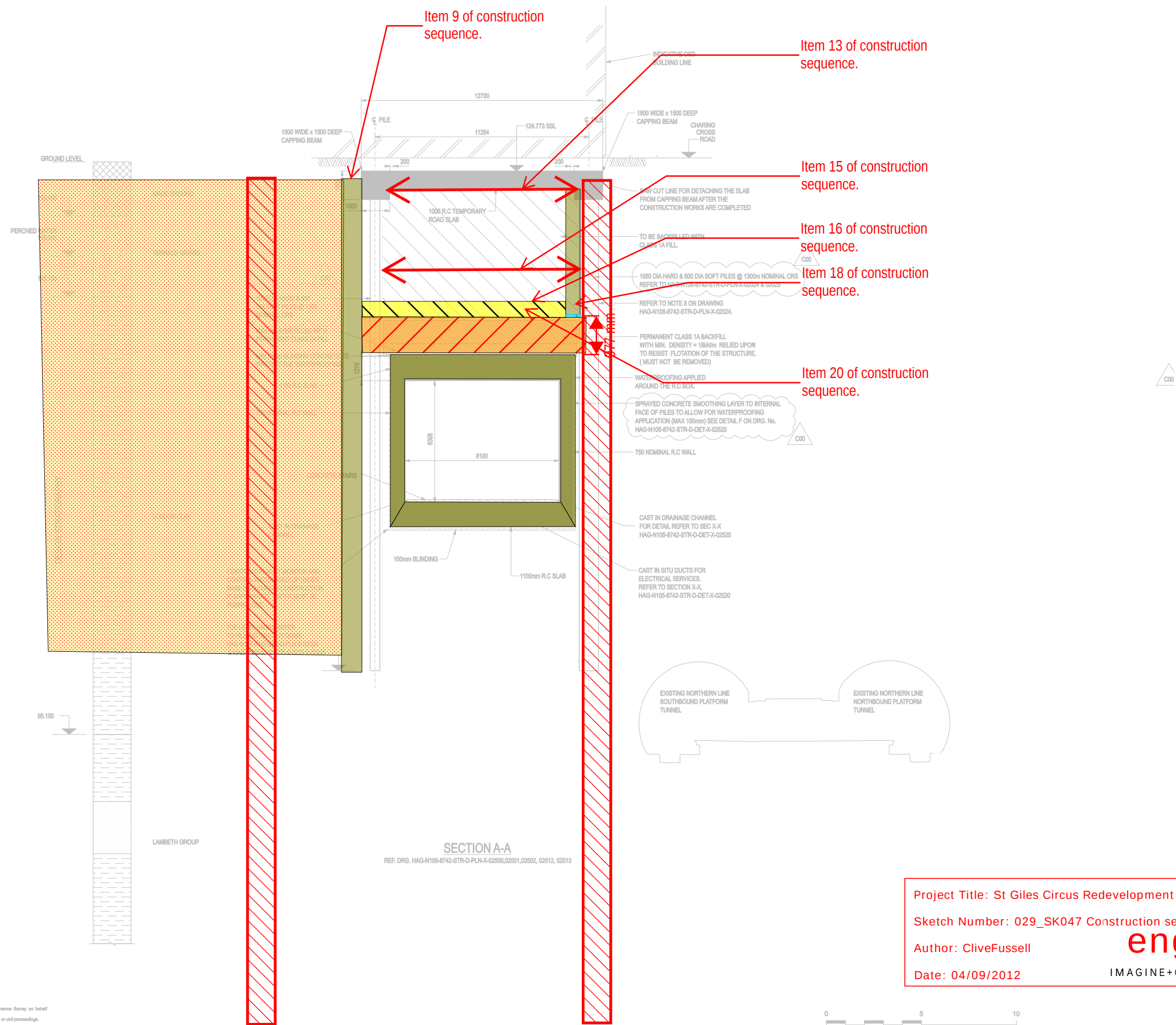
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Section A

Project Title: St Giles Circus Redevelopment
Sketch Number: 029_SK047 Construction sequence around NLE
Author: CliveFussell
Date: 04/09/2012

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Section B

Project Title: St Giles Circus Redevelopment
Sketch Number: 029_SK047 Construction sequence around NLE
Author: CliveFussell
Date: 04/09/2012

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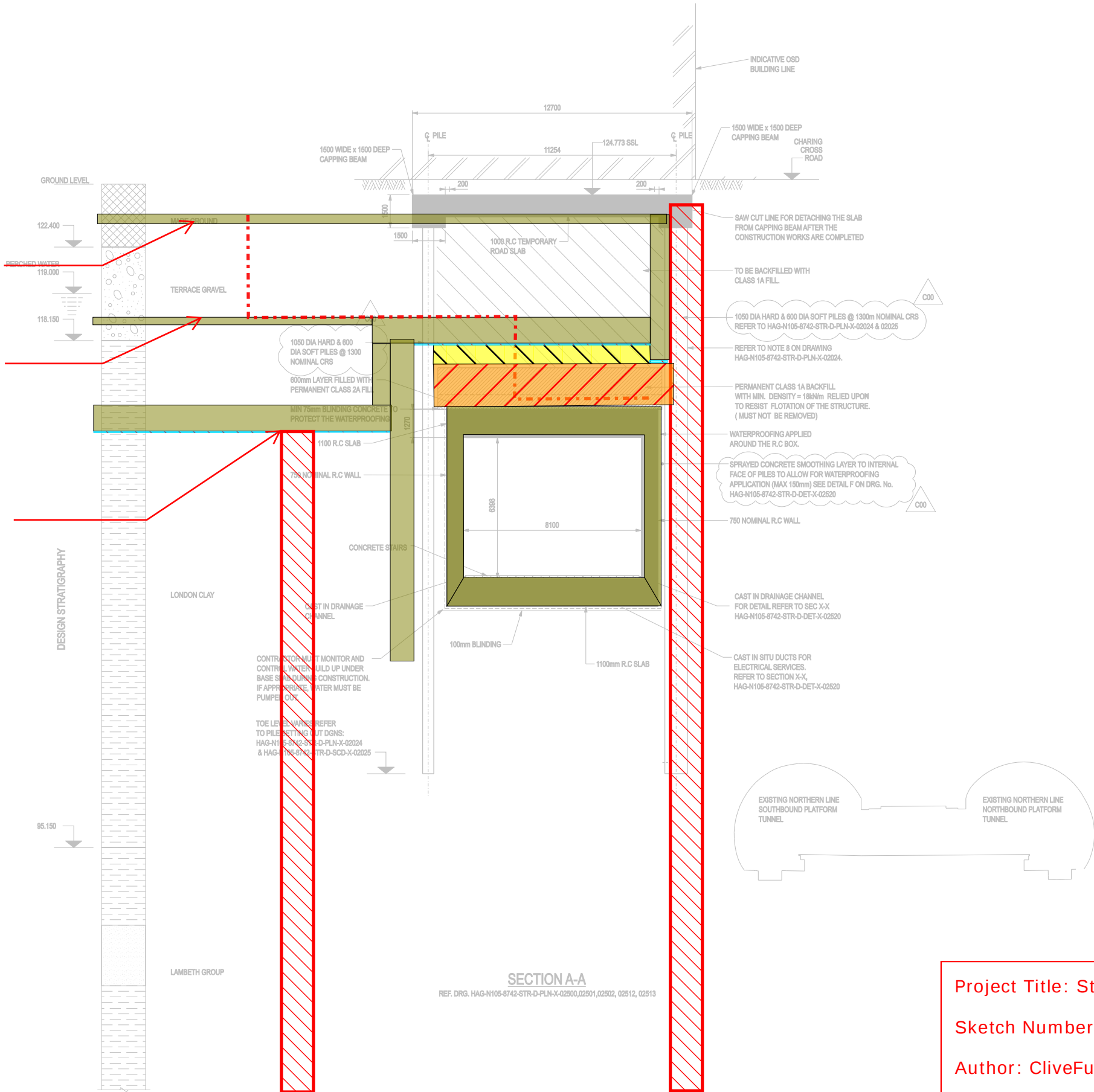
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Date: 04/09/2012

Item 52 of construction sequence.

Item 46 of construction sequence.

Item 33 of construction sequence.



Section B

Project Title: St Giles Circus Redevelopment

Sketch Number: 029_SK047 Construction sequence around NLE

Author: CliveFussell

Date: 04/09/2012

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0 5 10
SCALE 1:100 METRES

CAD DRAWING CHANGE ON CAD ONLY

Clive Fussell

From: Clive Fussell
Sent: 04 September 2012 19:19
To: 'SMBLocationEnquiries@tfl.gov.uk'
Cc: Kyte KatieJane; 'Steven Farthing'; Lousley Steve; Nathan Wheatley; Nigel de Grey; 'Cazes-Potgieter Patricia'; Hilary Skinner; 'Ian Chalk'; 'khbottomley@mac.com'; 'Richard Metcalfe'
Subject: RE: Tottenham Court Road Station - infrastructure protection/St Giles Circus redevelopment 2 of 2 [Filed 06 Sep 2012 09:19]
Attachments: Buro Happold drawings of Consolidated Piles.pdf; 029_SK046 Interface with NLEB.pdf; 120904 change in surcharge load.pdf; Proposed construction sequence around NLEB.pdf

Dear Sir/Madam,

Engenuiti are currently working with the developer to prepare civil and structural engineering documentation to support the planning application for the St Giles Circus redevelopment, the extent of which is indicated on the attached plan.

This development is subject to a 'Development Agreement' between the developer (Consolidated Developments) and the Secretary of State for Transport which outlines the scope of the basement development. Extracts from the Development Agreement are attached. As part of this Agreement 7 piles, known as the 'Consolidated Piles', were installed during the construction of the Northern Line Escalator Box (NLEB) at Tottenham Court Road Station. The Consolidated Piles will support the over site development around the NLEB.

Further to Patricia's email below, we are submitting the PRELIMINARY information requested by London Underground. We have previously met with Steve Lousley from the LU Tottenham Court Road Station upgrade team to explain the development. Minutes from that meeting are attached for your information. The attached information shows how the basement design has progressed within the scope previously identified in the Development Agreement:

- existing and proposed architectural plans, sections and elevations including demolition plans. (TOO LARGE TO EMAIL, WILL INVITE YOU TO DROPBOX FOLDER, CAN PROVIDE CD IF YOU GIVE US POSTAL ADDRESS)
- proposed foundation plans.
- Buro Happold drawings of the Consolidated Piles.(email 2)
- Interface with NLEB with dimensions indicating distance between proposed and existing structures.(email 2)
- Change in surcharge loads. Note that these loads exclude the weight of the superstructure which is supported on deep piles, including the 'Consolidated Piles' installed by LU as part of the development agreement. (email 2)
- Proposed construction sequence (email 2)

Section 23 of the Development Agreement states that "Except as specified elsewhere in this Agreement each party shall be responsible for all the costs and expenses incurred by it in connection with and incidental to the preparation, negotiation and completion of this Agreement."

Note that documentation has been submitted separately to Crossrail's safeguarding team and they have reviewed the proposals and have returned comments with no objections.

We are looking for LUL's confirmation that, subject to detail design and detailed method statements, they have no objection to the proposals prior to submitting for planning.

Please contact me if you have any queries regarding the structure of the proposed development or would like to arrange a meeting to discuss.

Best regards
Clive Fussell

Clive Fussell MEng (Oxon) MSt (Cantab) CEng MStructE
Director

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From: Cazes-Potgieter Patricia [<mailto:PatriciaCazes-Potgieter@tfl.gov.uk>]

Sent: 17 August 2012 09:18

To: Clive Fussell

Cc: Kyte KatieJane; 'Steven Farthing'; Lousley Steve; Nathan Wheatley; Nigel de Grey; Location Enquiries

Subject: RE: Tottenham Court Road Station - infrastructure protection/St Giles Circus redevelopment

Clive

I sought advice from colleagues about your query and was informed about the following:

Given the number of potential constraints of the site location, it must be demonstrated to the satisfaction of LUL engineers that:

- the location of existing London Underground structures and tunnels is suitably accommodated
- support is not taken from our structures or land and that our right of support is retained
- the development will not have any detrimental effect on our tunnels and structures either in the short or long term
- the design must be such that the loading imposed on our tunnels or structures is not increased or removed
- ground movement arising from demolition and construction has been considered
- the effects of noise and vibration arising from the adjoining operations within the structures and tunnels are taken in to account

LUL will need to be involved at all stages of planning, design and development. Therefore, details of the following will be required:

- existing and proposed plans, sections and elevations (including demolition plans if available)
- proposed foundation arrangements
- dimensions indicating distance between proposed and existing structures and our property boundary/assets (applicable where surface structures are involved, we are aware that tunnels will need to be surveyed to gain an accurate correlation)
- load calculations
- method statements

If not available at this early stage but once they are, a copy of those will need to be sent out so that LUL can assess what impact, if any, the proposed development may have on infrastructure. Please also note:

- bored Piles must not be constructed within a zone created by a rectangle formed by a six (6) metres offset above and below the extremity of the tunnel or other structure and three (3) metres offset horizontally from its sides
- bored Piles must not be under-reamed such that under-reaming encroaches in to the exclusion zone defined above
- driven bores or piling must not be undertaken within 15 metres of our tunnels

The above are guidelines only. Should it be necessary LUL will appoint an engineer to discuss the proposals further so that we can ensure the safety of the railway.

Should you have any further enquiries, please contact SMBLocationEnquiries@tfl.gov.uk

Hope the helps
Regards

Patricia

From: Clive Fussell [<mailto:clive.fussell@engenuiti.com>]

Sent: 10 August 2012 16:24

To: Cazes-Potgieter Patricia

Cc: Kyte KatieJane; 'Steven Farthing'; Lousley Steve; Nathan Wheatley; Nigel de Grey

Subject: RE: Tottenham Court Road Station - infrastructure protection/St Giles Circus redevelopment

Patricia,

I've just been in touch with Steven Farthing at BH, who confirmed what transport information they are providing to TfL to support the planning application, however we're the **structural/civil** engineering consultants for the planning application and will be reporting on the construction of the basement near the Northern Line Escalator box. We've previously met with Steve Lousley and Katie-Jane Kyte at LU to present the scheme, but wanted to confirm the documentation London Underground's Infrastructure Protection team needed before submitting the planning application.

Best regards

Clive Fussell

Clive Fussell MEng (Oxon) MSt (Cantab) CEng MStructE
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From: Cazes-Potgieter Patricia [<mailto:PatriciaCazes-Potgieter@tfl.gov.uk>]
Sent: 02 August 2012 14:06
To: Clive Fussell
Cc: Kyte KatieJane; 'Steven Farthing'
Subject: RE: Tottenham Court Road Station - infrastructure protection/St Giles Circus redevelopment

Clive

TfL has held pre-application discussions with Buro Happold, acting as transport consultants for the foreseen planning application. I would therefore suggest to get in touch with them directly to understand TfL's requirements

Regards

Patricia Cazes-Potgieter | Area Manager (North & West) | Borough Planning
Transport for London | 9th Floor, Windsor House, 50 Victoria Street, London SW1H 0TL
Tel: 020 7126 4619 (auto 64619) | 078 5098 0663 | Email: patriciacazes-potgieter@tfl.gov.uk

For more information regarding the TfL Borough Planning team, including TfL's *Transport assessment best practice guidance* and pre-application advice please visit <http://www.tfl.gov.uk/businessandpartners/15393.aspx>

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From: Clive Fussell [<mailto:clive.fussell@engenuiti.com>]
Sent: 02 August 2012 13:49
To: Cazes-Potgieter Patricia
Cc: Kyte KatieJane
Subject: Tottenham Court Road Station - infrastructure protection/St Giles Circus redevelopment

Patricia,

I've been given your name by Katie-Jane Kyte at Tottenham Court Road Station Upgrade as the person she has been liaising with at Infrastructure Protection in respect of Tottenham Court Road and the Development Agreement between Consolidated Developments and the Secretary of State for Transport.

As you may be aware we are in the process of preparing the supporting information for the planning application for the St Giles Circus redevelopment which is likely to be submitted in the next couple of months. It would be useful to confirm the level of information you require at planning stage. Please can you contact me to discuss.

Best regards

Clive Fussell

Clive Fussell MEng (Oxon) MSt (Cantab) CEng MInstE
Director

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Checked by: PG

[illegible]

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Building Wall Loads							5th Fl	4th Floor		3rd Floor		2nd Floor		1st Floor		Wall	Gnd Floor		Wall	Basement		Wall	Total	
							Length	Length Hght		Length Hght		Length Hght		Length Hght		Type	Length Hght		Type	Length Hght		Type	Weight	
							m	m	m	m	m	m	m	m		m	m		m	m		KN		
52 St Giles High St							-	30.9	2.8	27.8	3.0	33.7	3.4	46.0	3.4	W	18.5	3.5	WG	19.3	2.9	WB	2449	
53 St Giles High St							-	19.1	2.8	12.8	3.0	23.4	3.4	23.4	3.4	W	14.9	3.5	WG	14.1	2.9	WB	1545.8	
54 St Giles High St							-	15.0	2.8	21.2	3.0	12.9	3.4	12.9	3.4	W	18.8	3.5	WG	13.0	2.9	WB	1378.8	
55 St Giles High St							-	16.8	2.8	19.4	3.0	24.7	3.4	24.7	3.4	W	22.7	3.5	WG	21.7	2.9	WB	1944.8	
56 St Giles High St							-	21.9	2.8	17.2	3.0	18.2	3.4	18.2	3.4	W	17.3	3.5	WG	17.0	2.9	WB	1600.3	
57 St Giles High St							-	11.3	2.8	9.4	3.0	9.1	3.4	9.1	3.4	W	9.1	3.5	WG	9.0	2.9	WB	832.44	
58 St Giles High St							-	42.4	2.8	35.1	3.0	36.6	3.4	36.6	3.4	W	36.6	3.5	WG	36.0	2.9	WB	3280.5	
1 Denmark Place							-	-	-	-	-	11.1	2.9	11.1	2.9	W	11.1	2.8	WG	10.4	2.9	WB	640.32	
2 Denmark Place							-	-	-	-	-	15.2	2.9	15.2	2.9	W	15.2	2.9	WG	16.7	2.9	WB	933.82	
3 Denmark Place							-	-	-	-	-	15.5	2.9	15.5	2.9	W	15.5	2.9	WG	14.9	2.9	WB	910.85	
4 Denmark Place							-	-	-	-	-	16.1	2.9	16.1	2.9	W	16.1	3.0	WG	15.5	2.9	WB	951.07	
5 Denmark Place							-	-	-	-	-	16.3	2.9	16.3	2.9	W	16.3	3.0	WG	16.3	2.9	WB	980.45	
6 Denmark Place							-	-	-	-	-	16.5	2.9	16.5	2.9	W	16.5	3.1	WG	10.3	2.9	WB	864	
17 Denmark Place							-	-	-	-	-	23.8	3.5	26.5	3.5	W	23.8	3.5	WG	23.3	2.8	WB	1614.1	
18 Denmark Place							-	-	-	-	-	29.3	2.4	29.3	3.0	W	29.3	3.4	WG	-	-	WB	1154.1	
19 Denmark Place							-	-	-	28.2	2.9	24.8	3.0	18.2	3.1	W	16.5	3.6	WG	15.9	3.1	WB	1502.3	
20 Denmark Place							-	-	-	-	-	22.7	3.0	22.7	3.2	W	23.4	3.7	WG	24.2	3.0	WB	1552.6	
21 Denmark Place							-	18.3	2.8	21.7	3.1	13.1	3.1	13.1	3.2	W	13.1	3.6	WG	12.6	3.0	WB	1305.4	
21 Denmark Street							-	-	-	-	-	-	-	6.9		W	22.2	3.5	WG	-	-	W	431.24	
4 Flitcroft Street							-	-	-	-	-	-	-	-	-		-	-		-	-			
1 Book Mews							-	-	-	-	-	-	-	-	-		-	-		-	-			

CHANGE IN SURCHARGE ASSESSMENT

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Project name: St Giles Circus

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Document no:

Rev: 0

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Prepared by: CF

Date: 04/09/2012

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Checked by: PG

Summary										Area	Wall load	Floor load	Excavation	Overburden	Total	Less SW of	Net decrease
										m2	kN/m2	kN/m2	Depth	Removed	Removed	basement slab	in surcharge
													m	kN/m2	kN/m2		
52 St Giles High St										76	32.2	20.5	8.1	145.8	198.5	16.8	181.7
53 St Giles High St										48	32.2	20.5	8.1	145.8	198.5	16.8	181.7
54 St Giles High St										31.1	44	20.5	8.1	145.8	210.6	16.8	193.8
55 St Giles High St										51.4	38	20.5	8.1	145.8	204.1	16.8	187.3
56 St Giles High St										65.3	25	20.5	8.1	145.8	190.8	28.8	162.0
57 St Giles High St										24.6	34	20.5	8.1	145.8	200.1	28.8	171.3
58 St Giles High St										92.1	36	20.5	8.1	145.8	201.9	28.8	173.1
1 Denmark Place										18.9	34	18.5	8.1	145.8	198.2	16.8	181.4
2 Denmark Place										29.9	31	18.5	8.1	145.8	195.5	16.8	178.7
3 Denmark Place										29.5	31	18.5	8.1	145.8	195.2	16.8	178.4
4 Denmark Place										31.6	30	18.5	8.1	145.8	194.4	16.8	177.6
5 Denmark Place										33.4	29	18.5	8.1	145.8	193.7	16.8	176.9
6 Denmark Place										33	26	10.65	8.1	145.8	182.6	16.8	165.8
17 Denmark Place										57	28	32.4	12.0	216	276.7	16.8	259.9
18 Denmark Place										69.3	17	10.65	14.8	266.4	293.7	16.8	276.9
19 Denmark Place										64.5	23	19.7	11.7	210.6	253.6	16.8	236.8
20 Denmark Place										61.7	25	39.2	11.8	212.4	276.8	16.8	260.0
21 Denmark Place										45.4	29	48.1	11.8	212.4	289.3	16.8	272.5
21 Denmark Street										94.6	5	15.7	0.0	0	20.3	0.0	20.3
4 Flitcroft Street												15.7	3.3	59.4	75.1	20.4	54.7
1 Book Mews												7.85	4.5	81	88.9	12.0	76.9
Existing ground level double basement													11	198	198	16.8	181.2
Existing ground level single basement													6	108	108	16.8	91.2
Basement extension													4.5	81	81	20.4	60.6