FOUNDATION PLAN

1.0m wide (max) RC retaining wall/ underpinning to be laid in hit and miss sequence to full width of wall

Columns C1 to be supported on 1200mm long x 1200mm wide x 450mm thick RC pad foundations

Vault 4 (existing)

Columns C1 to be supported on 1200mm long x 1200mm wide x 450mm thick RC pad foundations

Vault 3 (existing)

Columns C1 to be supported on 1200mm long x 1200mm wide x 450mm thick RC pad foundations

Columns C1 to be supported on 1200mm long x 1200mm wide x 450mm thick RC pad foundations

Vault 2 (existing)

1.0m wide (max) RC retaining wall/ underpinning to be laid in hit and miss sequence to full width of wall

Columns C1 to be supported on 1200mm long x 1200mm wide x 450mm thick RC pad foundations

Columns C1 to be supported on 1200mm long x 1200mm wide x 450mm thick RC pad foundations

Vault 1 (existing)

1.0m wide (max) RC retaining wall/ underpinning to be laid in hit and miss sequence to full width of wall

LOWER GROUND FLOOR PLAN

Suitability of existing lintel TBC following further opening up works. New lintel might be required.

Existing arch opening to be exposed

Portal Frames Beams to be placed under arch's spring

New opening may require demolishing of existing brick arch. TBC

Portal Frames Beams to be placed under arch's spring

Existing arch opening to be exposed

Portal Frames Beams to be placed under arch's spring

New stairs to Architect's details and specifications

C1 B1 (over) C1
C1 B1 (over) C1

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Legend:
→ Proposed 250mm RC suspended slab
→ Proposed 250mm RC suspended slab
P→ Proposed lateral propping during works
↻ Denotes Arch

0 1 2

L1 - Hi-Spec Range R6 (100w x 145dp)
Naylor Concrete Lintel (or similar approved)
No. to suit wall width. Provide min. 150mm
end bearing for precast lintels.

Portal Frames: Beams B1 - 203x203x60 UC
Columns C1 - 203x203x52 UC

Rev	Date	Drawn	Eng	Amendment
P1	22.06.21	JP	PCh	Issued for information
I	21.09.16	JP	PCh	Issued for information

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FOUNDATION AND LOWER GROUND FLOOR PLANS
GENERAL ARRANGEMENT

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Drawing No	16003/01	Rev	P1
Drawn	JP	Eng	PCh
Scales			1:100@A3

Ground floor level

Street level
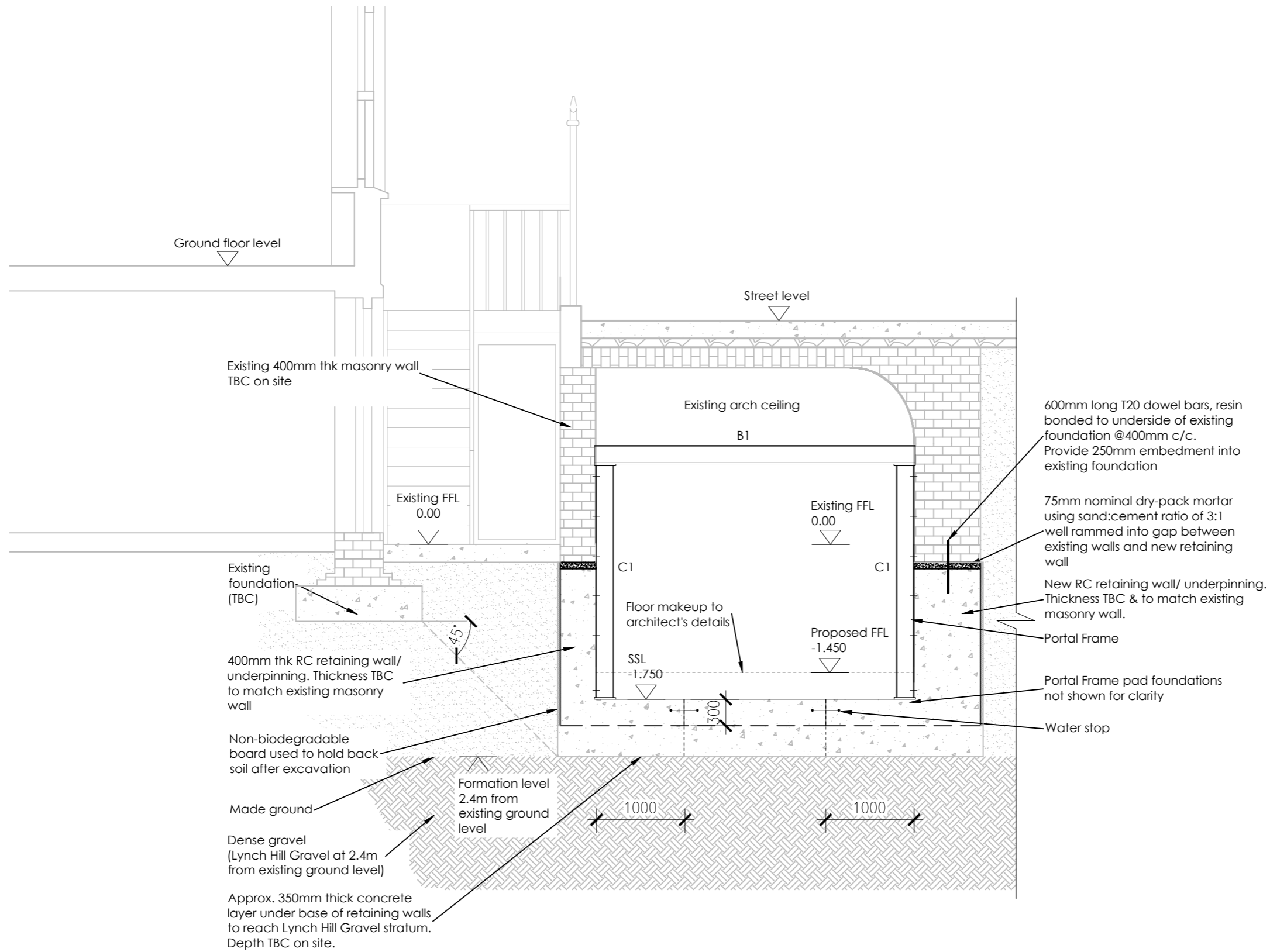
Existing 400mm thk masonry wall
TBC on site

Existing arch ceiling

B1

600mm long T20 dowel bars, resin
bonded to underside of existing
foundation @400mm c/c.
Provide 250mm embedment into
existing foundation

Existing FFL
0.00

Existing FFL
0.00

75mm nominal dry-pack mortar
using sand:cement ratio of 3:1
well rammed into gap between
existing walls and new retaining
wall

Existing
foundation
(TBC)

C1

C1

New RC retaining wall/ underpinning.
Thickness TBC & to match existing
masonry wall.

Portal Frame

45°

Floor makeup to
architect's details

Proposed FFL
-1.450

400mm thk RC retaining wall/
underpinning. Thickness TBC
to match existing masonry
wall

SSL
-1.750

Portal Frame pad foundations
not shown for clarity

Non-biodegradable
board used to hold back
soil after excavation

300

Water stop

Made ground

Formation level
2.4m from
existing ground
level

1000

1000

Dense gravel
(Lynch Hill Gravel at 2.4m
from existing ground level)

Approx. 350mm thick concrete
layer under base of retaining walls
to reach Lynch Hill Gravel stratum.
Depth TBC on site.

Legend:

Portal Frames: Beams B1 - 203x203x60 UC
                 Columns C1 - 203x203x52 UC

0   1   2

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SECTION A-A

Rev	Date	Drawn	Eng	Amendment
P1	22.06.21	JP	PCh	Issued for information
I	21.09.16	JP	PCh	Issued for information

Drawing No	16003/03	Rev	P1
Drawn	JP	Eng	PCh
Scales			1:50@A3

STAGE 1

Existing FFL

Prop

Prop

STAGE 2

STAGE 3

Prop
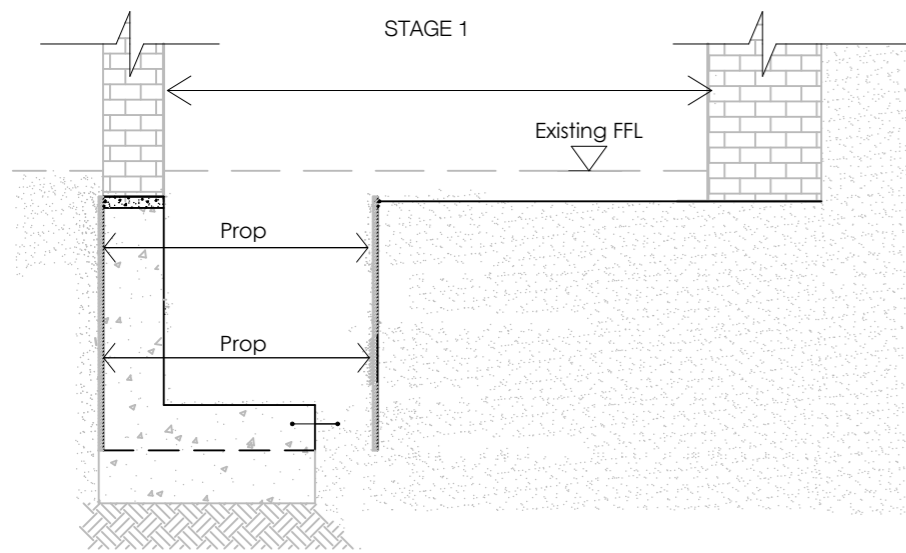
1. Excavate down approx. 200mm above foundation level.
2. Break out and remove existing vaults floor.

3. Excavate underpins in sequenced bays 1.0m wide (max). Non-biodegradable boards to be used to hold back soil after excavation. Insert the rear shutter of non-biodegradable board.
4. Cast approx. 350mm thick concrete layer under base of retaining wall to reach Lynch Hill Gravel stratum.
5. Place reinforcement, dowel bars and water stops. Erect formwork with a "letterbox" at the top. Front formwork to be propped against the undisturbed soil.
6. Cast base and stem of retaining wall / underpins. Terminate concrete 75mm below the underside of the existing footing and backfill each underpin excavation in compacted layers prior to moving to the next bays in sequence.
7. 24 hours after casting concrete, ram dry-pack mortar onto the gap between pre-existing footing and new RC underpin.
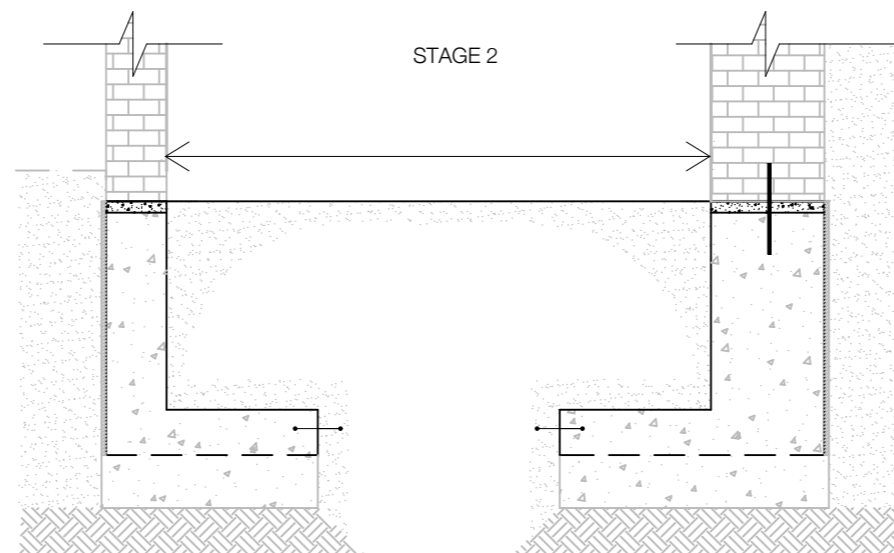
3. 8. Complete a pin in the corresponding position in the opposite wall then prop across the site to the undisturbed soil between.
9. Backfill around props with excavated spoil to form a working platform. This backfill is not to be used as lateral support for the underpins.
10. Continue until all perimeter walls have been completely underpinned following standard timings for underpinning, ensuring no excavation is carried out until at least 48 hours after casting an adjacent underpin.
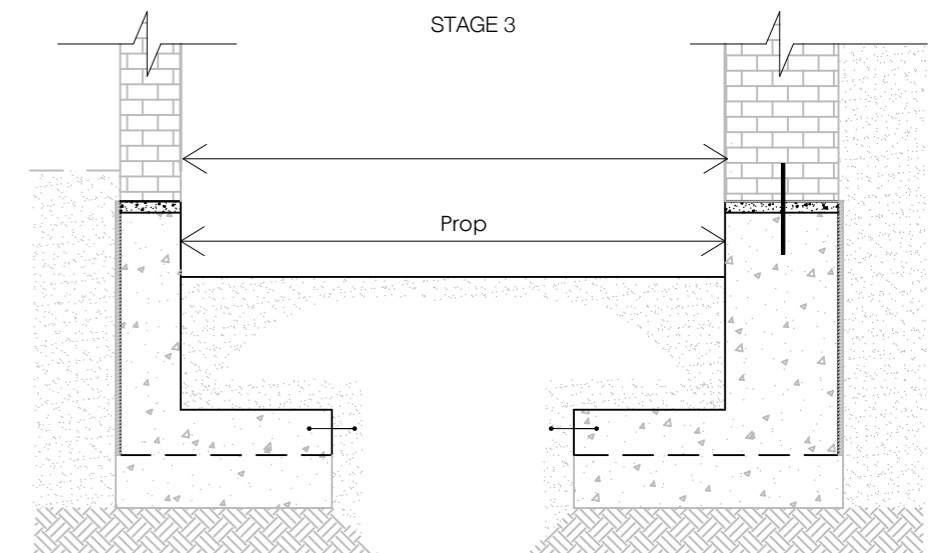
11. Once underpinning has been completed excavate down 500mm (approx) and install horizontal prop.

STAGE 4

Prop

Prop

Formation level

STAGE 5

Prop

Prop

STAGE 6

Props installed at 1.0m cc. To be removed once the frames have been installed.

12. Reduce dig to 2/3 the required depth and prop underpins.
13. Continue excavation to formation level.

14. Cast approx. 350mm thick concrete layer under middle part of slab to reach Lynch Hill Gravel stratum.
15. Arrange reinforcement and cast 300mm RC slab. Lapping with starter bars from toe of RC walls and place waterstop bars.
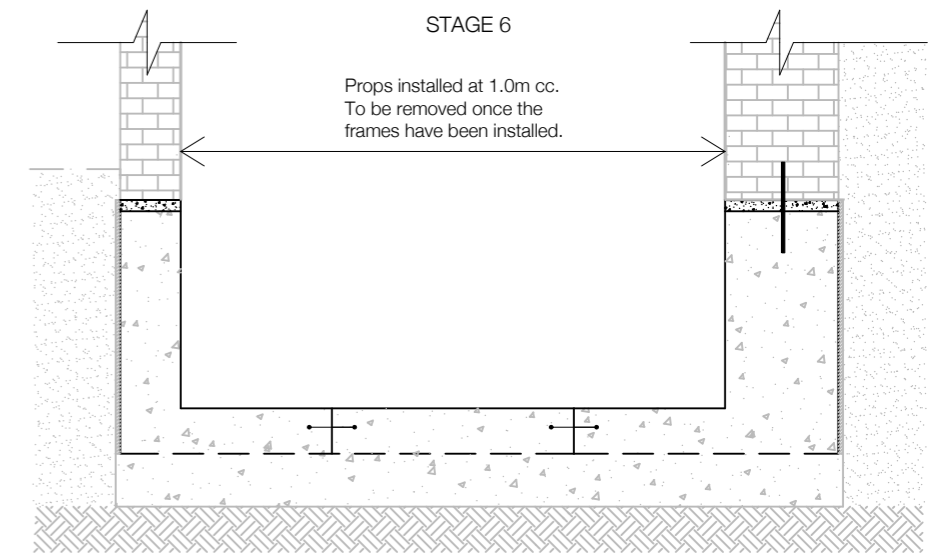
16. Once all concrete has cured, remove temporary upper level props.
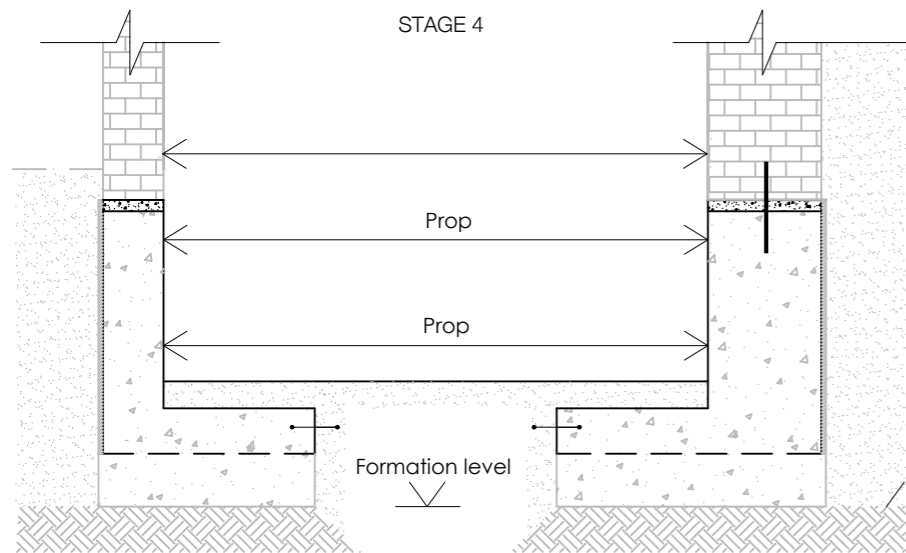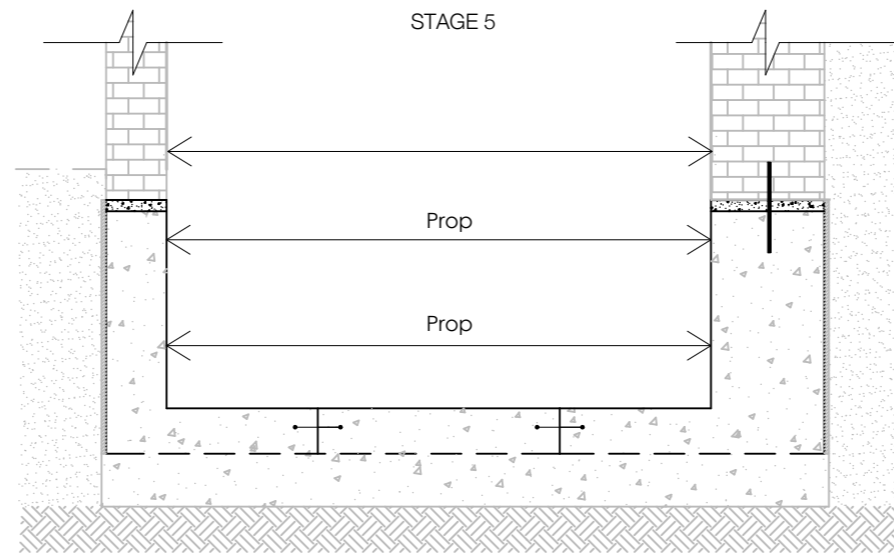
Legend:

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PROPOSED CONSTRUCTION
SEQUENCE

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Drawing No	16003/10	Rev	P1
Drawn	JP	Eng	PCh
Scales			1:50@A3

Rev	Date	Drawn	Eng	Amendment
P1	22.06.21	JP	PCh	Issued for information
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Project : Flat 1, 28 John Street, London WC1N
Number : 16003
Page : 01

ISSUE PURPOSE																
	I = Information		I	I	I											
	Co = Comment															
	B = Billing															
	T = Tender	D	21	22	28											
	C = Construction	M	09	06	07											
	F = Final Construction	Y	16	21	23											

DRG NO	TITLE	SIZE														
16003/01	Foundation & Lower Ground Plan General Arrangement	A3	-	P1	P1											
16003/03	Section A-A	A3	-	P1	P1											
16003/10	Proposed Construction Sequence	A3	-	P1	P1											
Report	Structural Methodology Statement Report		-	-	-											

ISSUED TO																
	Client		-	-	-											
	Architect		-	-	-											
	Quantity Surveyor															
	Services Engineer															
	CDM Coordinator															
	Contractor															
	Building Control															