



SYMMETRYS
STRUCTURAL / CIVIL ENGINEERS

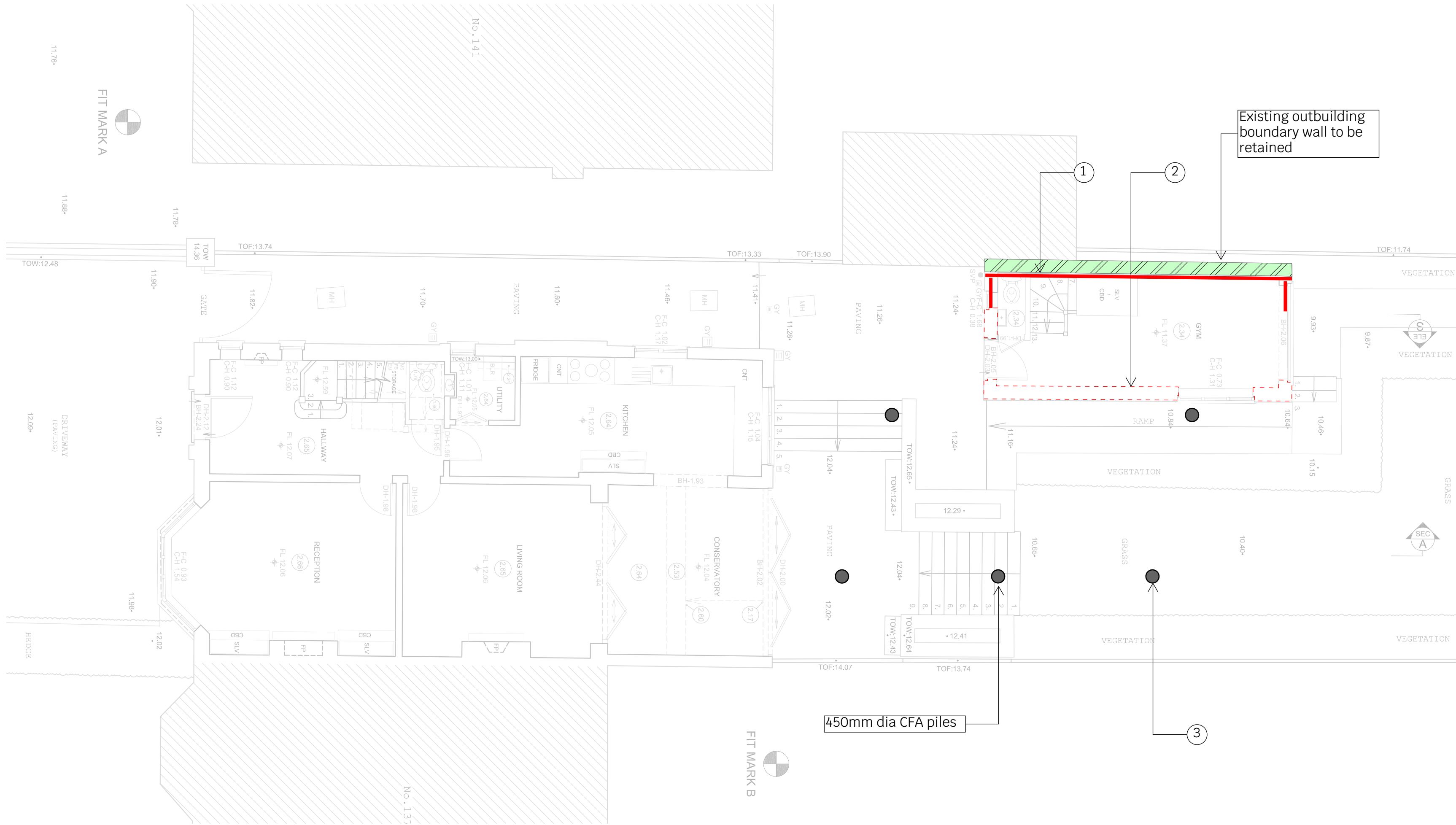
139 CRANLEY GARDENS

APPENDIX A

STAGE 2 DRAWINGS

Proposed method statement/suggested sequence of works

- 1 - Temporary prop boundary wall of existing outbuilding.
 - 2 - Demolish existing outbuilding except propped boundary wall.
 - 3 - Install CFA piles.
 - 4 - Underpin existing building walls where located above the proposed basement footprint, and install retaining walls in underpinning sequence down to proposed mezzanine / existing outbuilding basement level (*).
 - 5 - Extend underpinning below gable wall and party wall to prevent the occurrence of differential settlements.
 - 6 - Install temporary struts and walers to allow soil level to be reduced (*).
 - 7 - Excavate proposed basement area down to proposed mezzanine / existing outbuilding basement level.
 - 8 - Cut piles to proposed mezzanine / existing outbuilding basement slab cut-off level.
 - 9 - Demolish existing outbuilding walls at basement level.
 - 10 - Cast RC beams at ground floor level.
 - 11 - Cast RC slab at ground floor level.
 - 12 - Cast second stage underpinning to reach pool side formation level.
 - 13 - Cast RC slab above heave protection at basement mezzanine and pool side level.
 - 14 - Dismantle temporary works at basement mezzanine and pool side level.
 - 15 - Cast second stage underpinning to reach swimming pool formation level.
 - 16 - Install temporary struts and walers to allow soil level to be reduced (*).
 - 17 - Cut piles to proposed swimming pool slab cut-off level.
 - 18 - Cast RC slab above heave protection at basement swimming pool level.
 - 19 - Dismantle temporary works and proceed with installation of superstructure, which steps are not covered in this section.
- (*) Sequence of works to be read in conjunction with typical multi-stage underpinning sequence highlighted in drawing 21066-SYM-XX-XX-SK-S-0201/0202/0203-REV P1



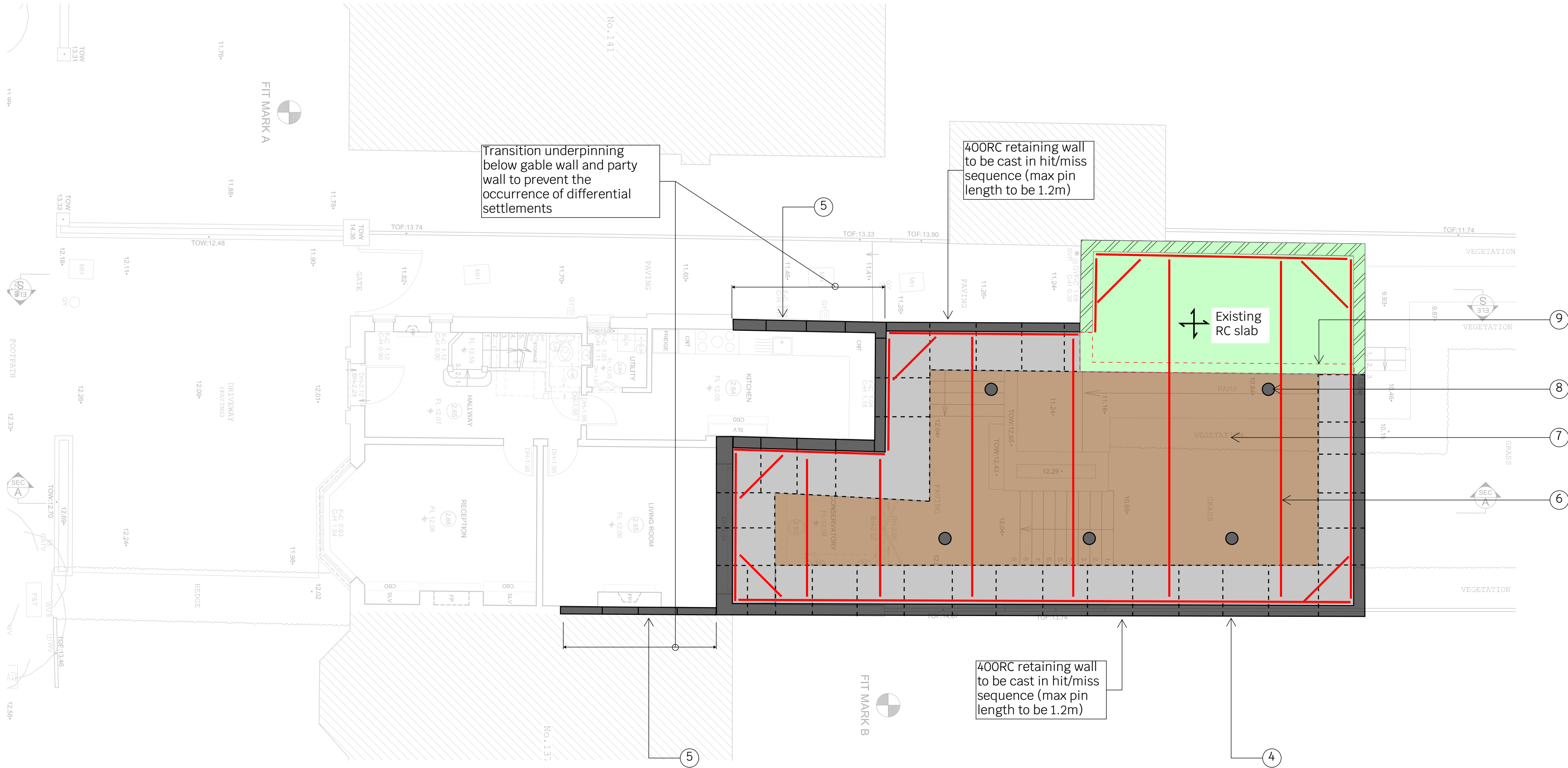
Ground floor plan (stages 1 to 3)

Notes:

- 1 - Do not scale this drawing
- 2 - Sequence of works only indicative. Temporary works design to confirm construction method statement
- 3 - Structural elements to be confirmed post planning.

Key

- Temporary waler beams and horizontal steel struts
- RC slab
- Existing RC slab
- Existing masonry wall
- Existing wall to be removed



Basement floor plan (proposed mezzanine/existing outbuilding basement level) (stages 4 to 9)

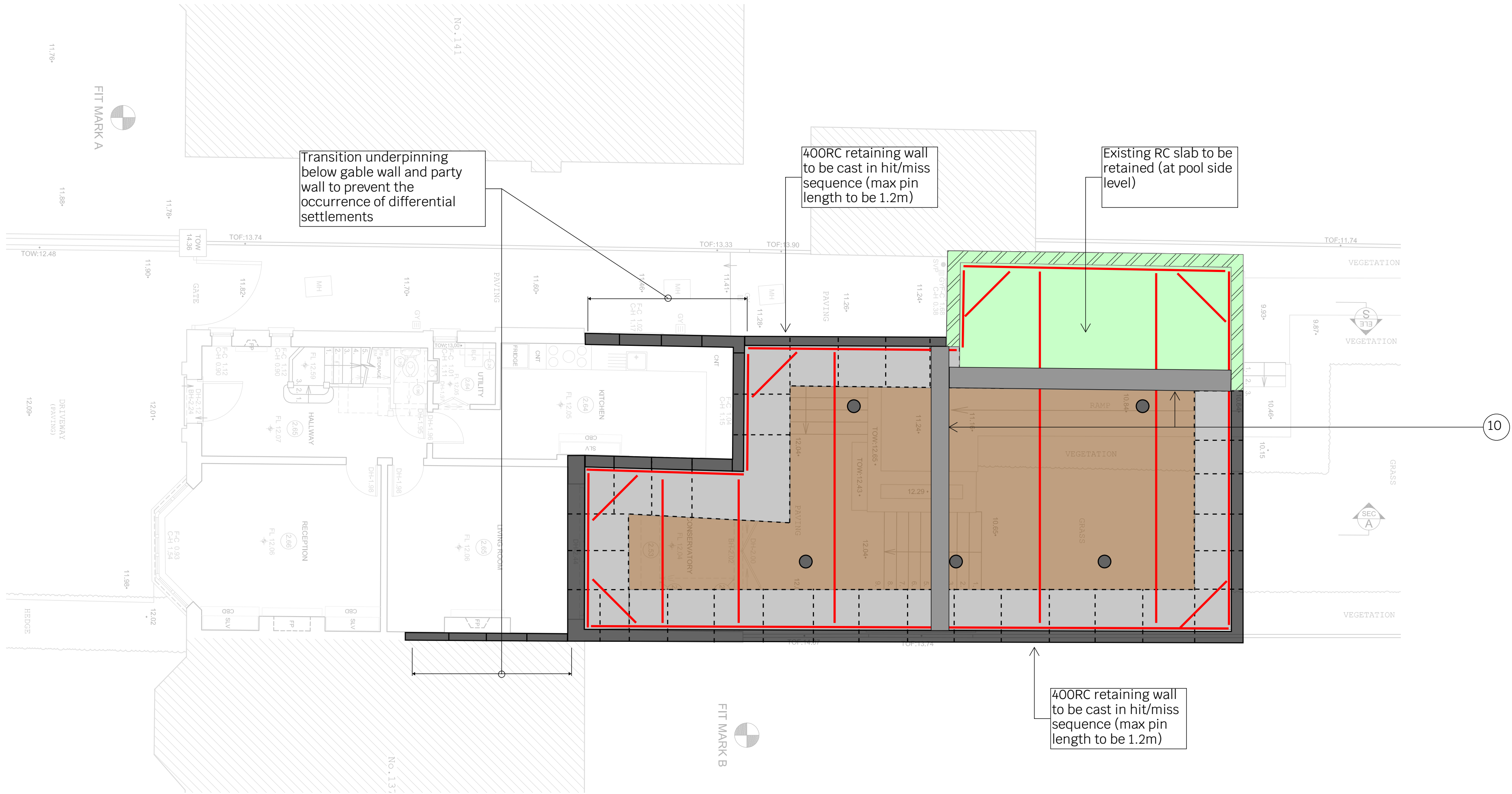
Proposed method statement/suggested sequence of works

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- 13 - Cast RC slab above heave protection at basement mezzanine and pool side level.
- 14 - Dismantle temporary works at basement mezzanine and pool side level.
- 15 - Cast second stage underpinning to reach swimming pool formation level.
- 16 - Install temporary struts and walers to allow soil level to be reduced (*).
- 17 - Cut piles to proposed swimming pool slab cut-off level.
- 18 - Cast RC slab above heave protection at basement swimming pool level.
- 19 - Dismantle temporary works and proceed with installation of superstructure, which steps are not covered in this section.

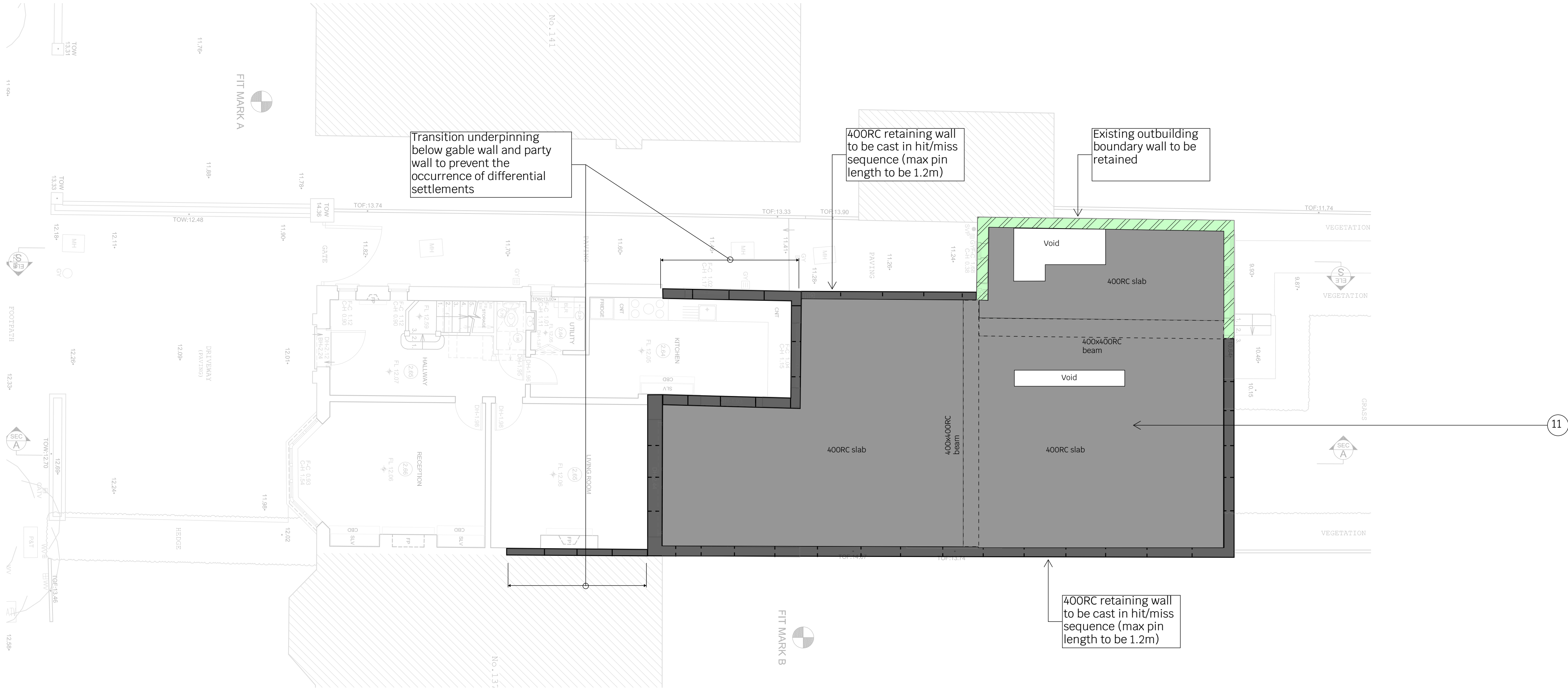
(*) Sequence of works to be read in conjunction with typical multi-stage underpinning sequence highlighted in drawing 21066-SYM-XX-XX-SK-S-0201/0202/0203-REV P1

Notes:

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- 3 - Structural elements to be confirmed post planning.



Ground floor plan (stage 10)



Ground floor plan (stage 11)

Key

- Temporary waler beams and horizontal steel struts
- RC slab
- Existing RC slab
- Existing masonry wall
- Existing wall to be removed

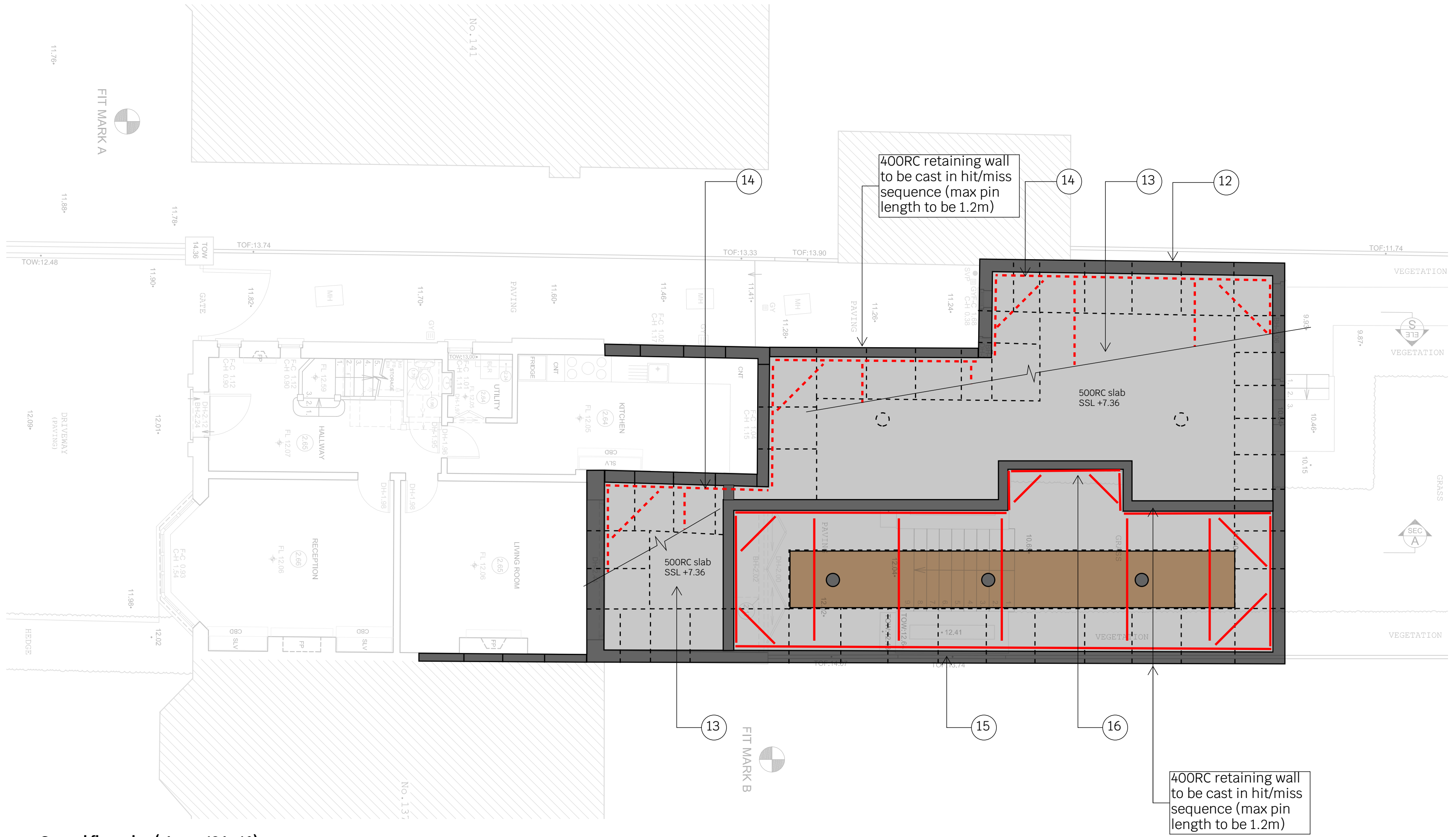
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- 18 - Cast RC slab above heave protection at basement swimming pool level.
- 19 - Dismantle temporary works and proceed with installation of superstructure, which steps are not covered in this section.

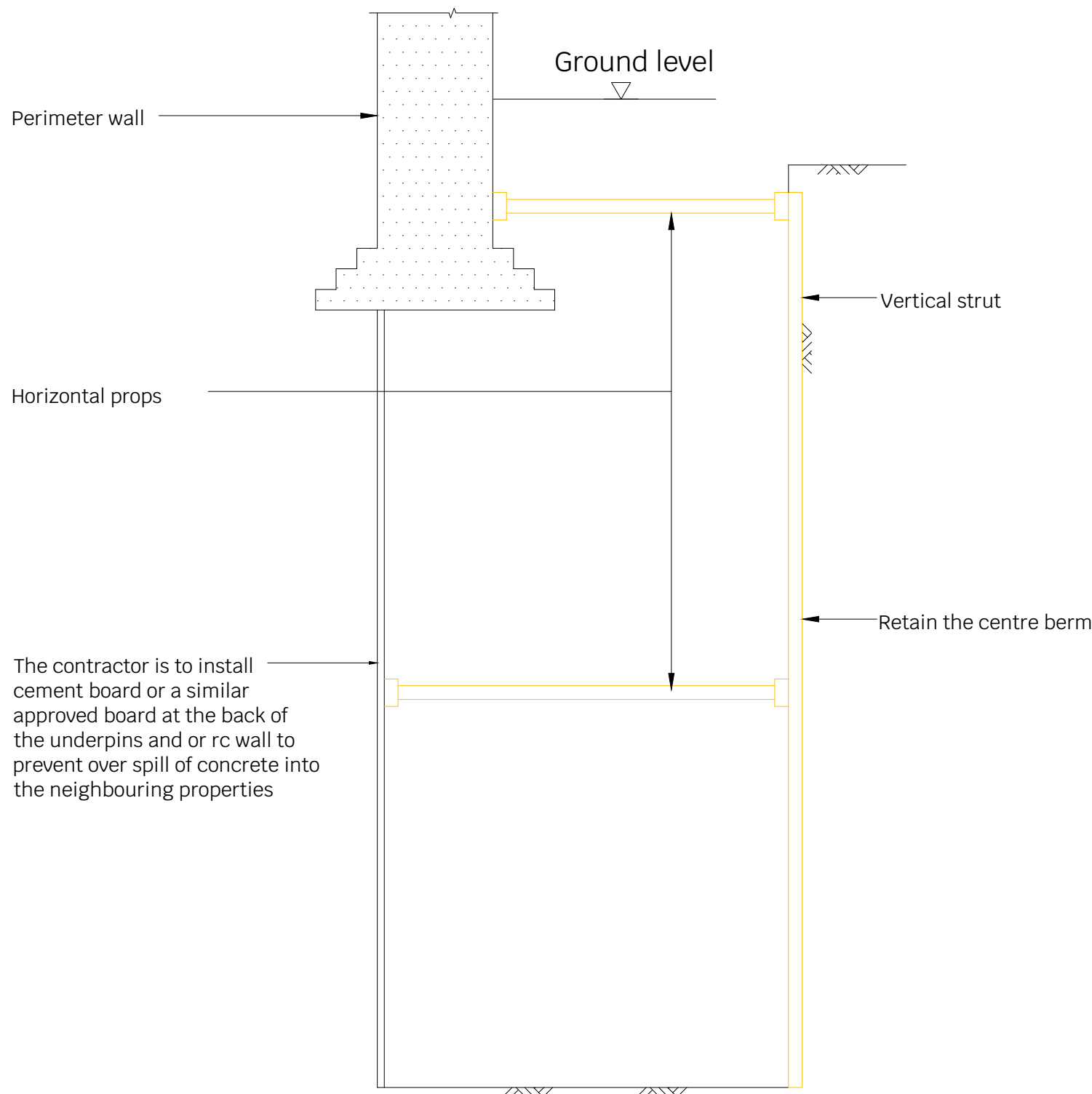
(*) Sequence of works to be read in conjunction with typical multi-stage underpinning sequence highlighted in drawing 21066-SYM-XX-XX-SK-S-0201/0202/0203-REV P1

Notes:

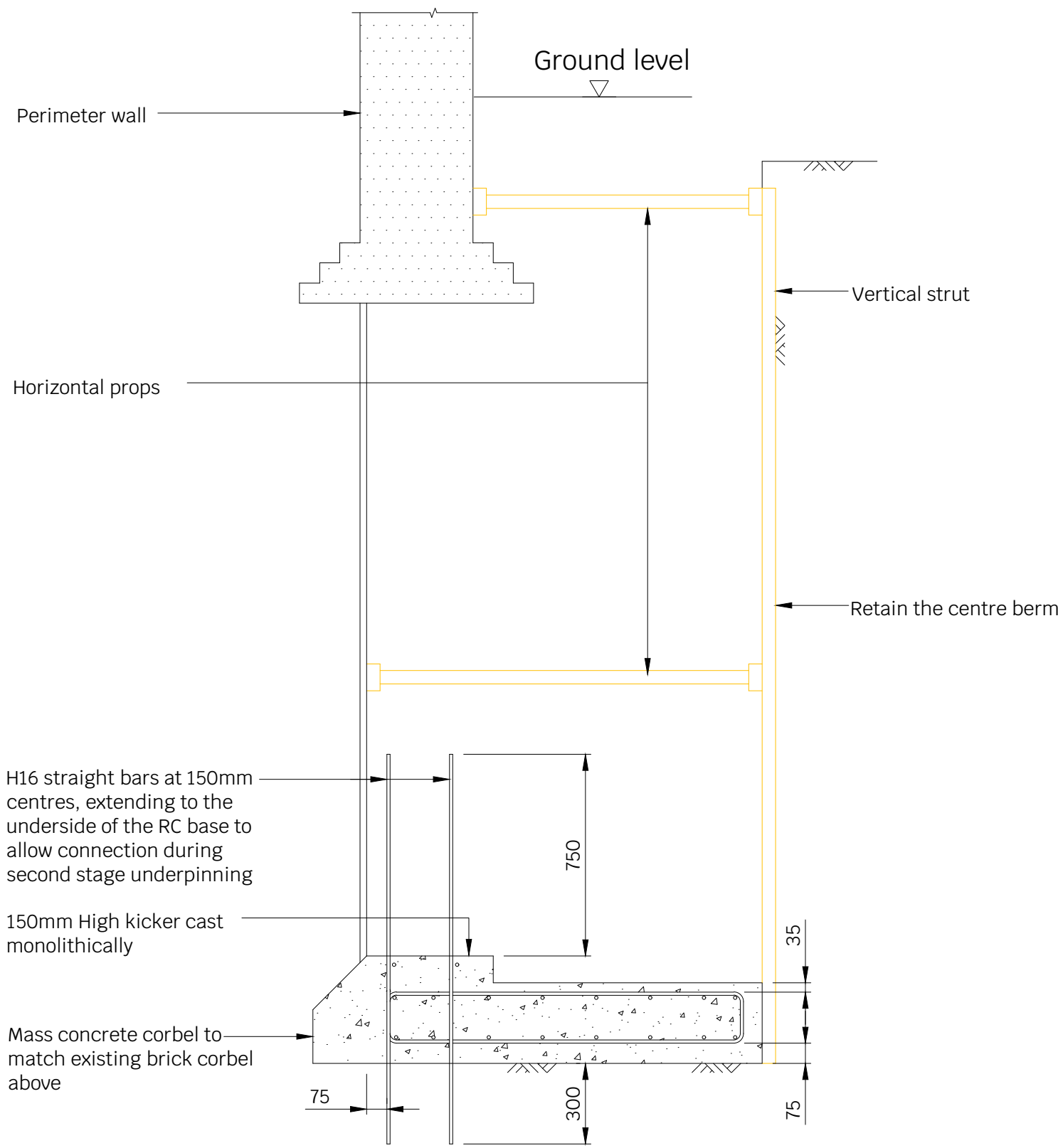
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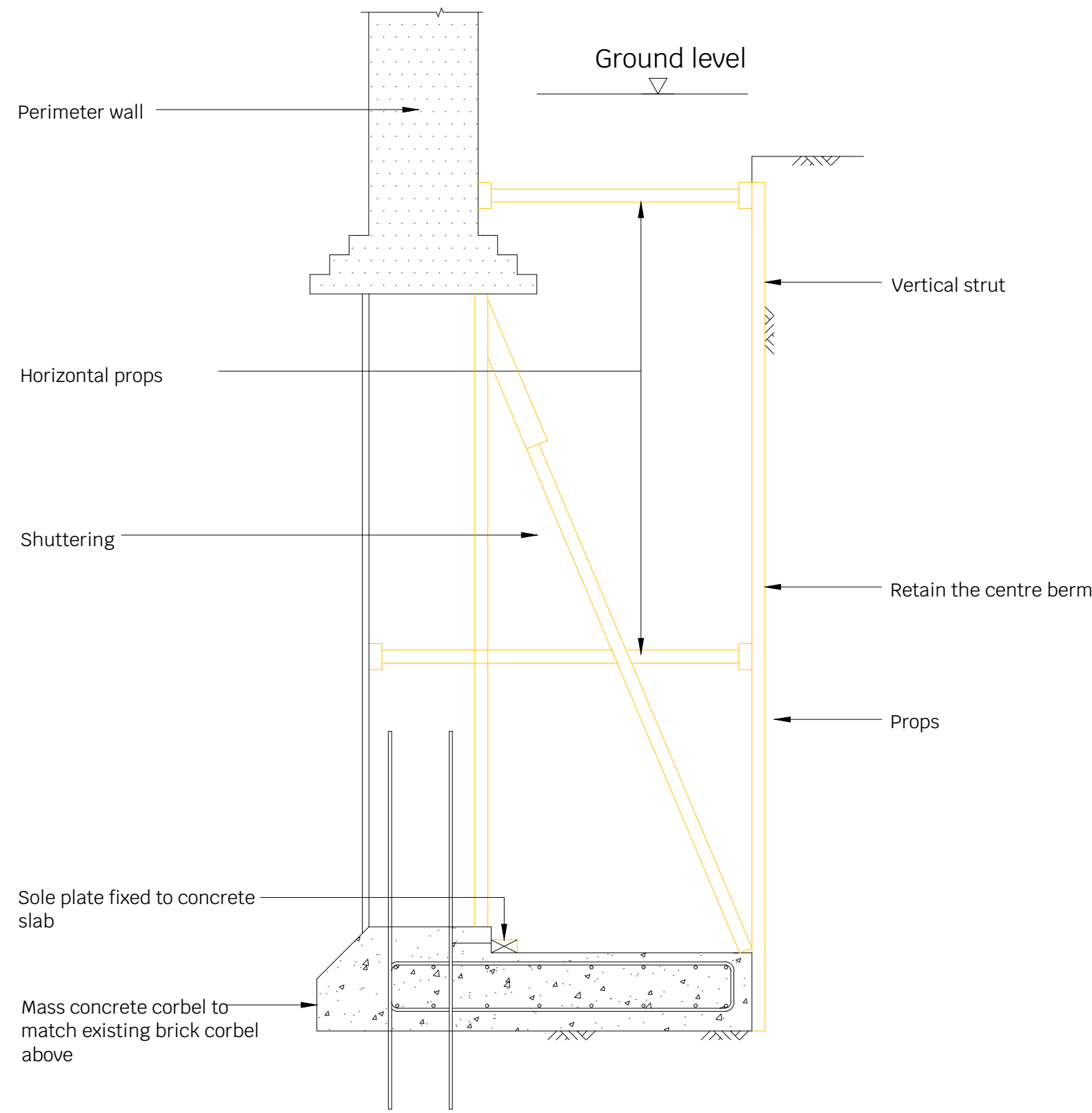
Note:
Underpins at each stage to be offset horizontally to avoid a continuous bottom to top vertical joint



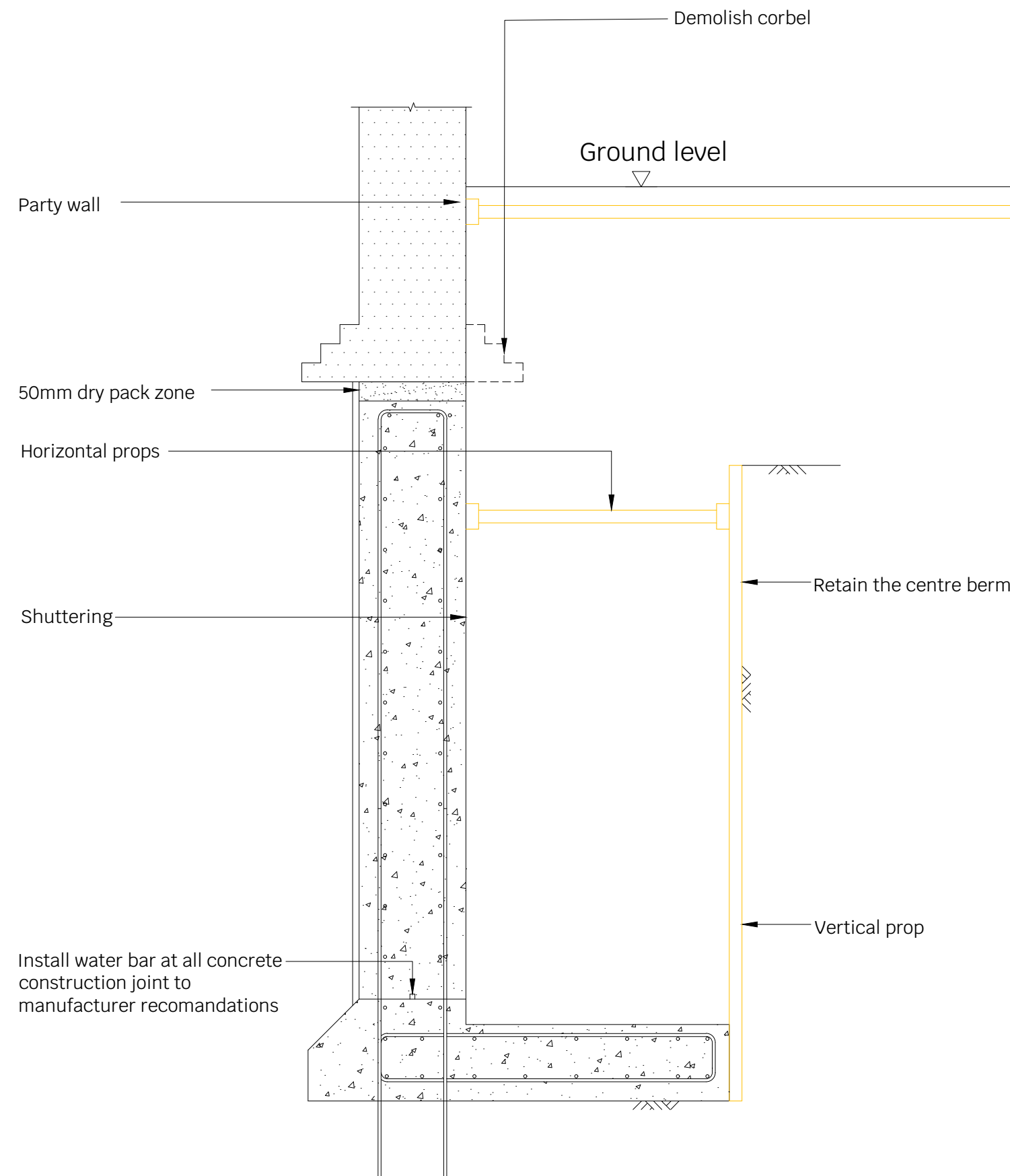
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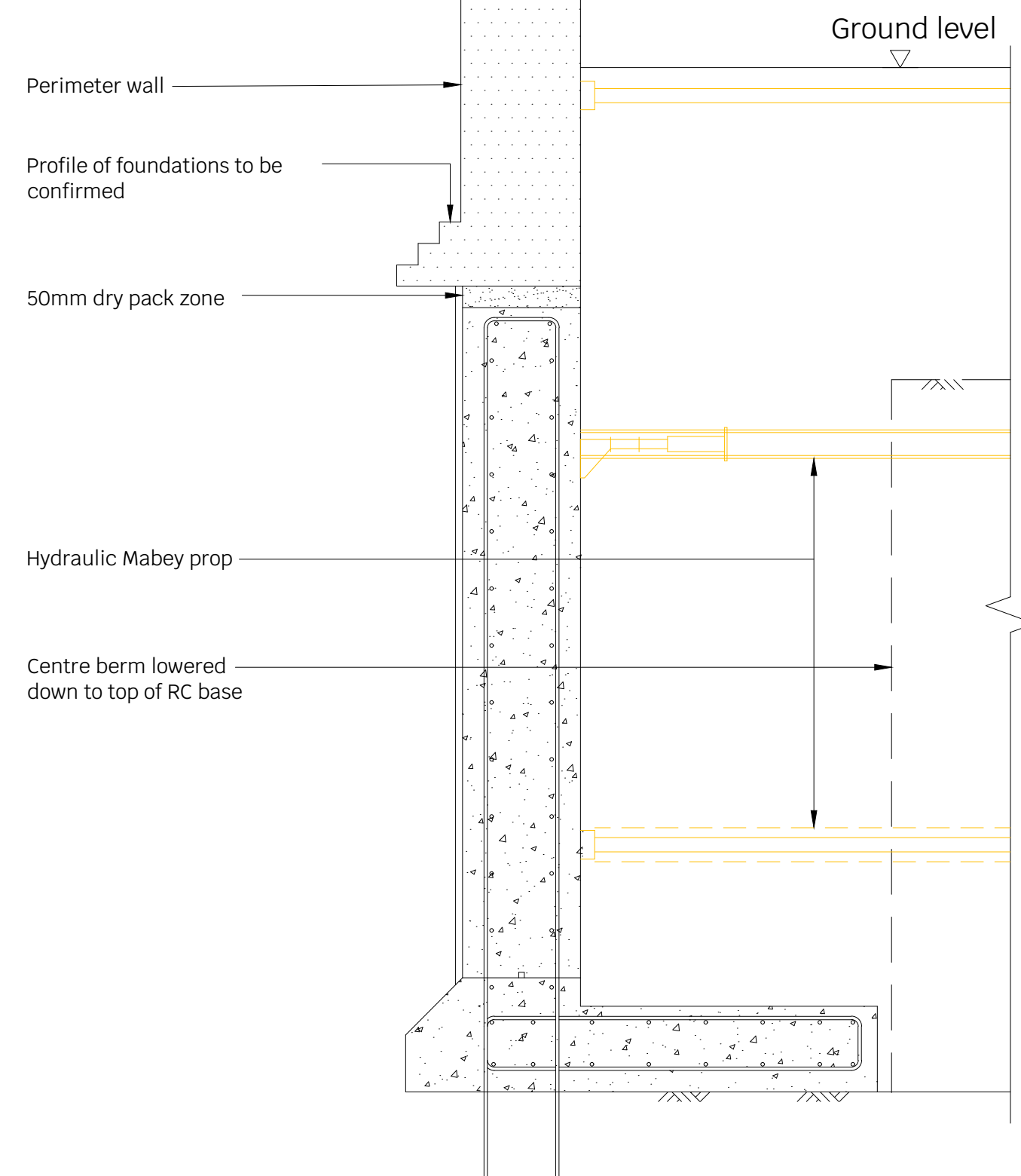
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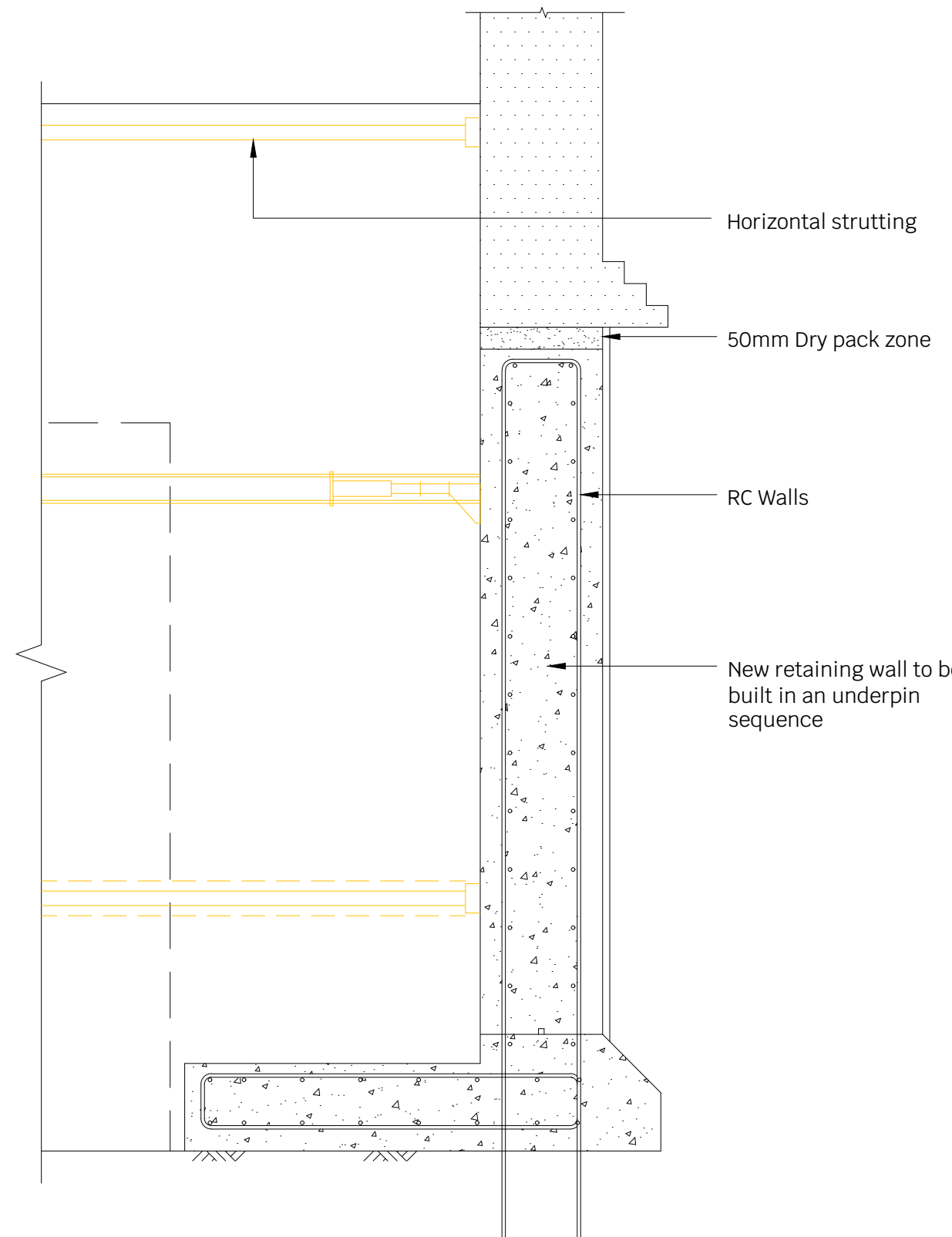
Sequence 3



Sequence 4



Sequence 5



Notes

- This drawing is to be read in conjunction with all relevant Architects & Engineers drawings and specifications
- Do not scale from this drawing

P1	26.04.23	SB	CA	Preliminary Issue
Rev	Date	Drwn	Chkd	Amendments

Drawing Status PRELIMINARY



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Job Title
139 CRANLEY GARDENS
LONDON N10 3AH

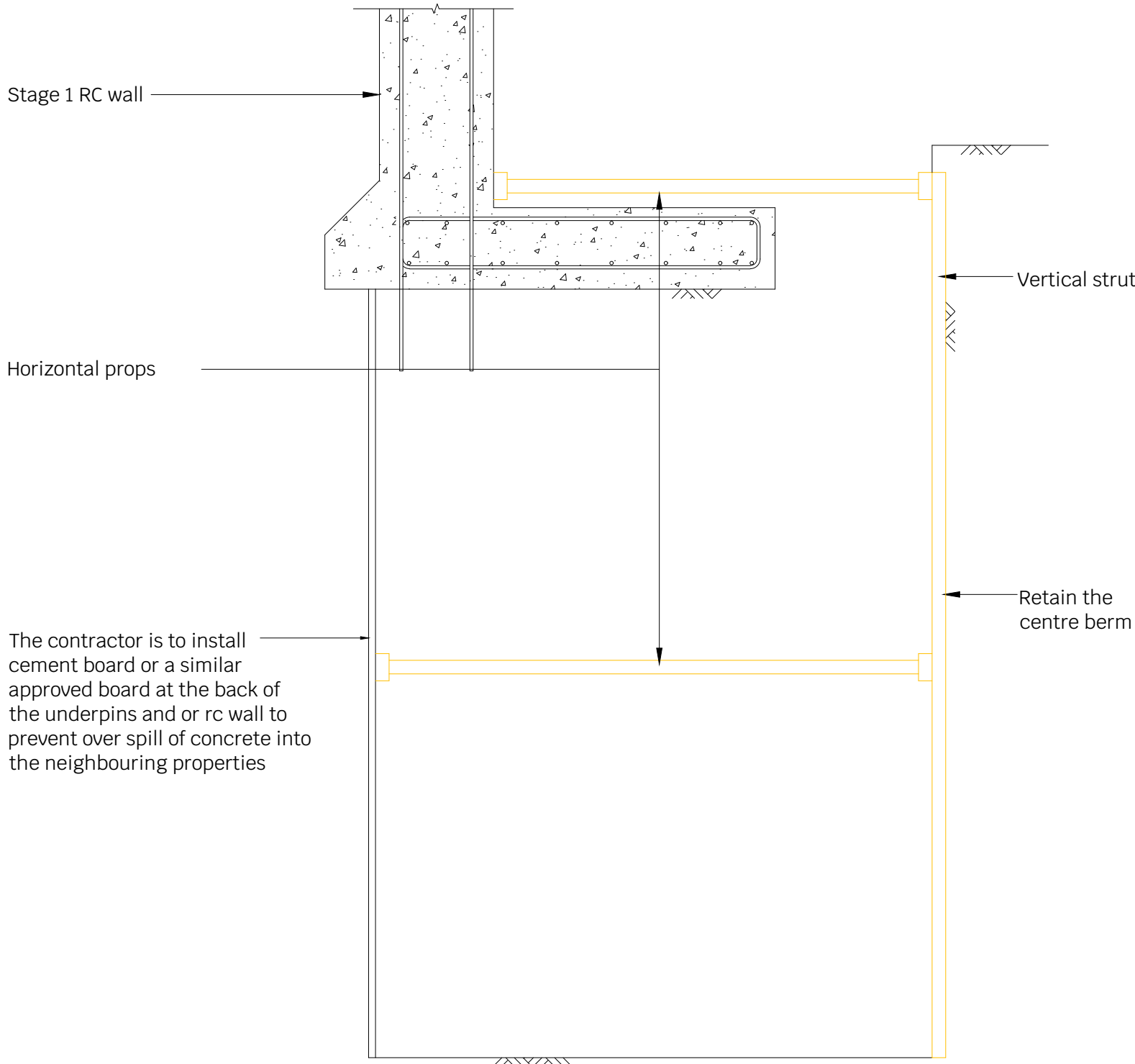
Drawing Title
TYPICAL MULTI STAGE
UNDERPINNING SEQUENCE
SHEET 1 OF 3

Project	Company	Zones	Level	Type	Role	Number
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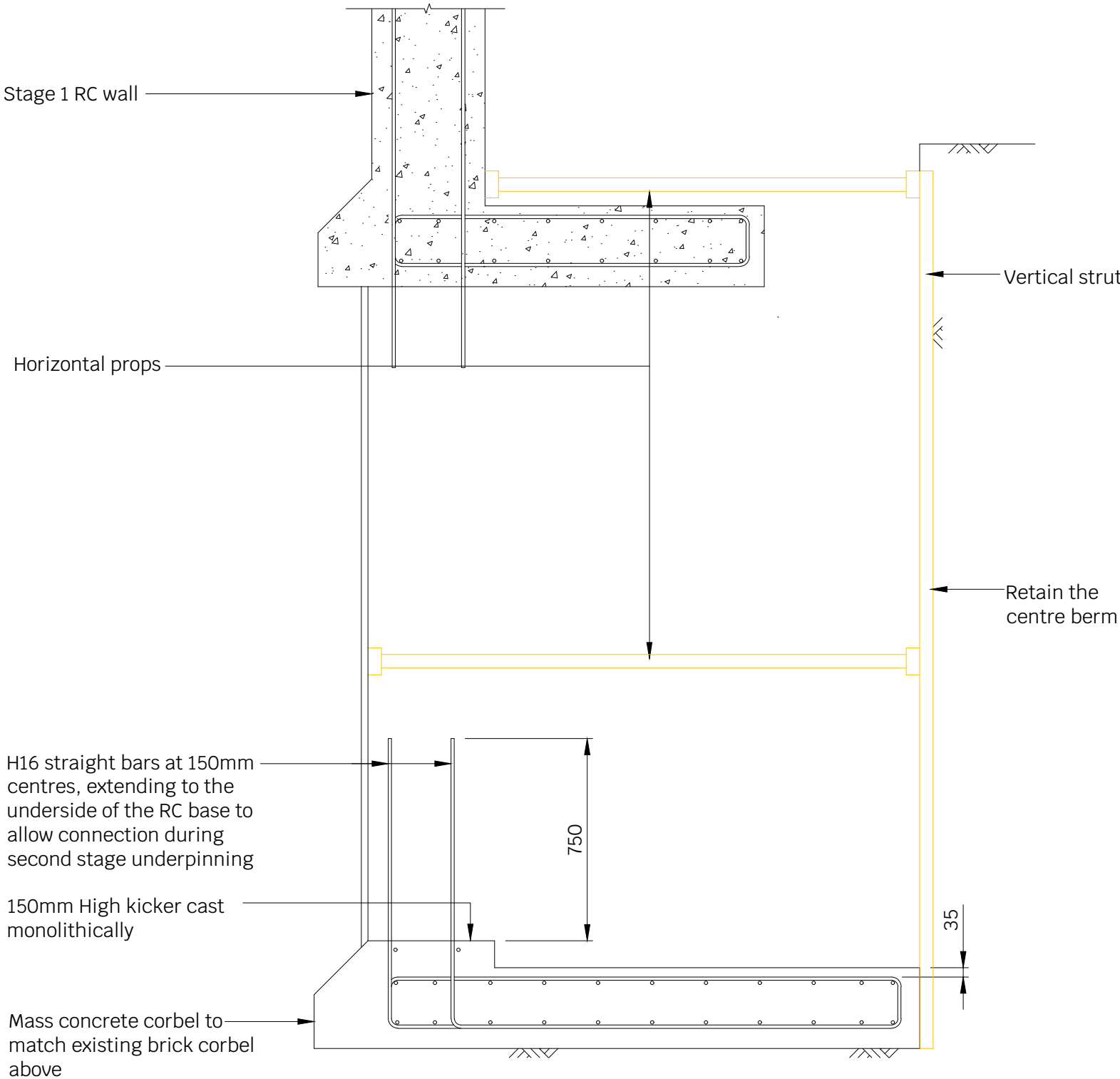
21066-	SYM	- XX	- XX	- DR	- S	- 0201
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Scale: 1:20 AT A1	Drawn By: JS	Revision:
Date: APRIL 2023	Checked By: SB	P1

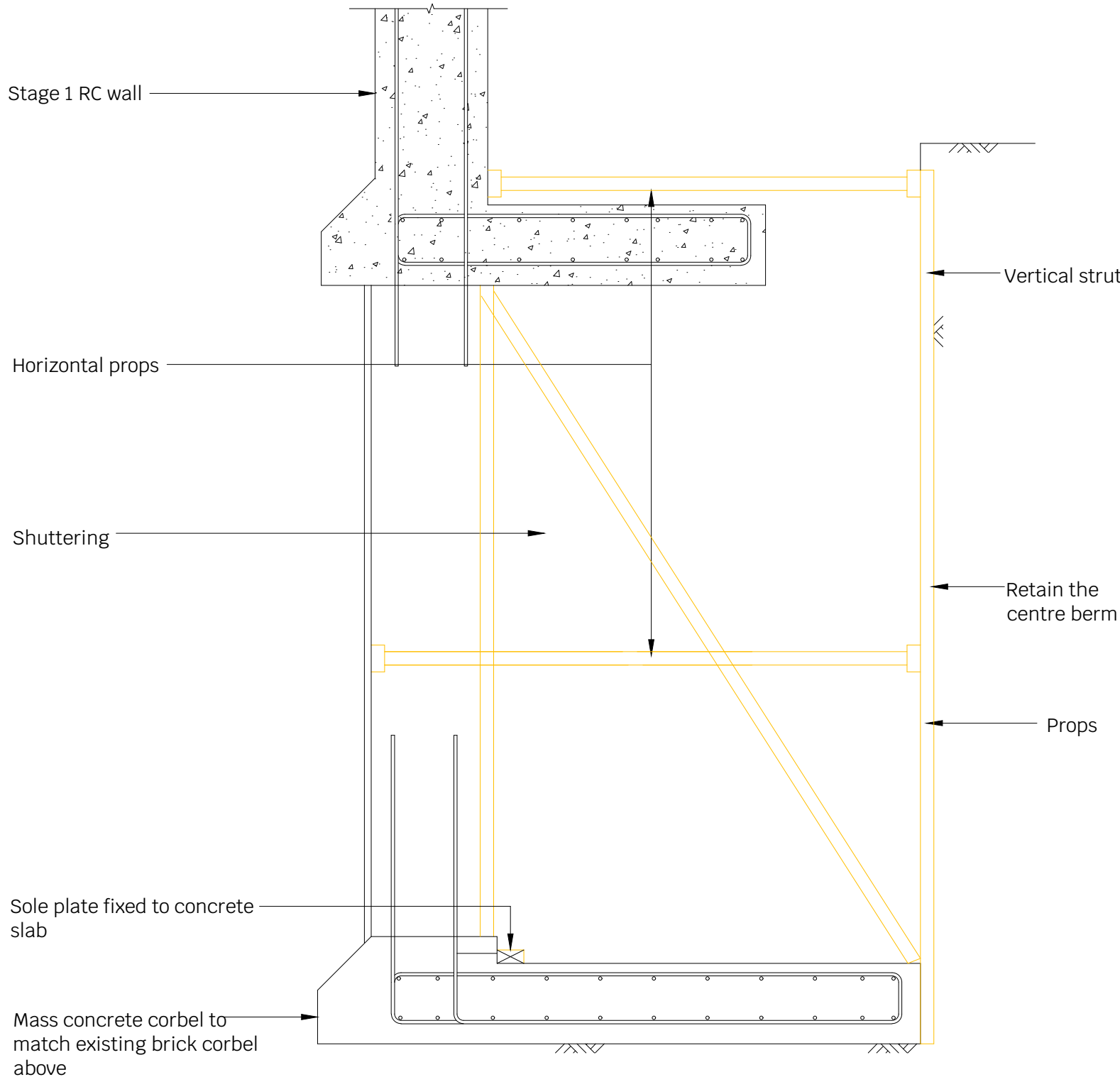
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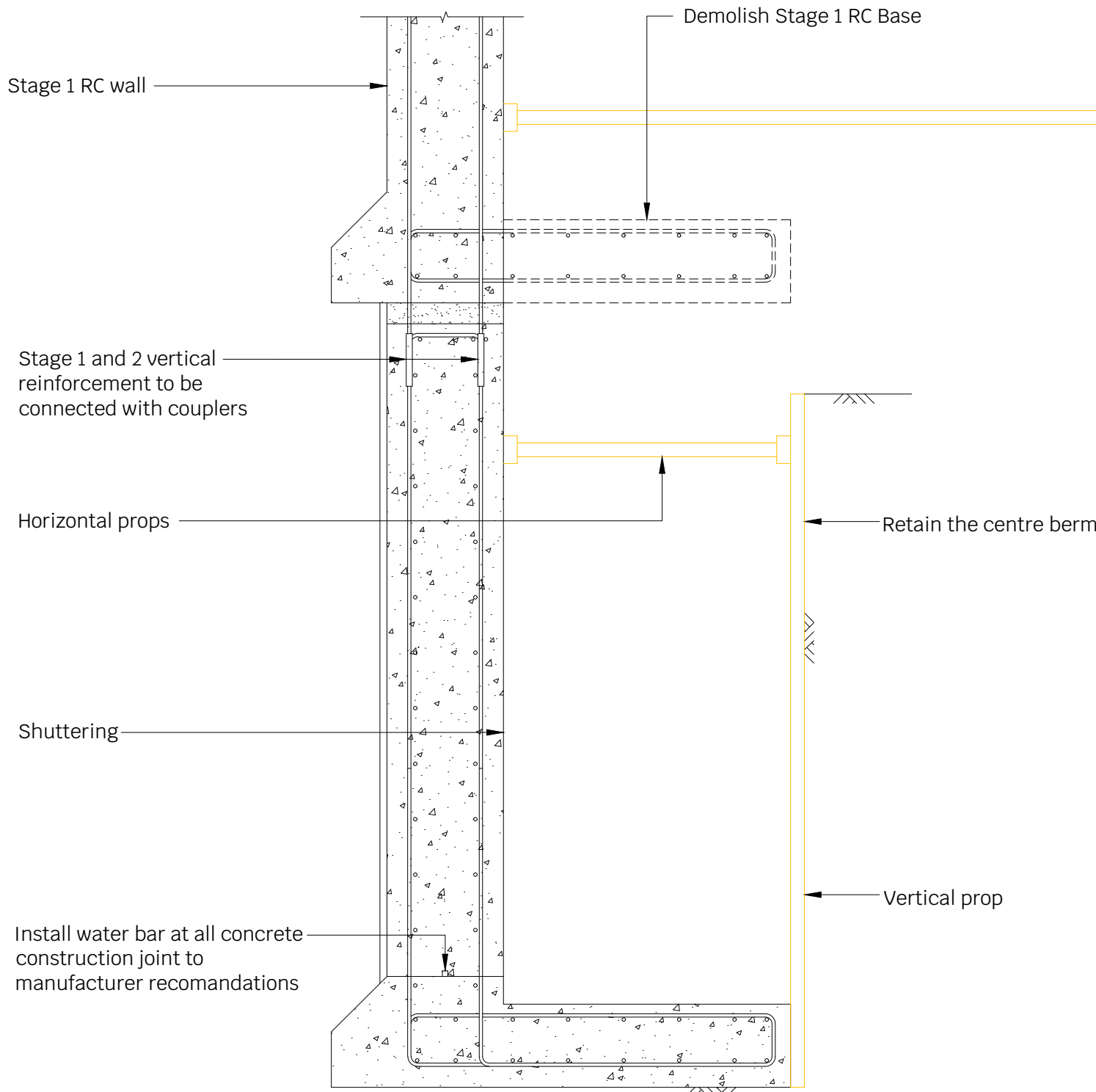
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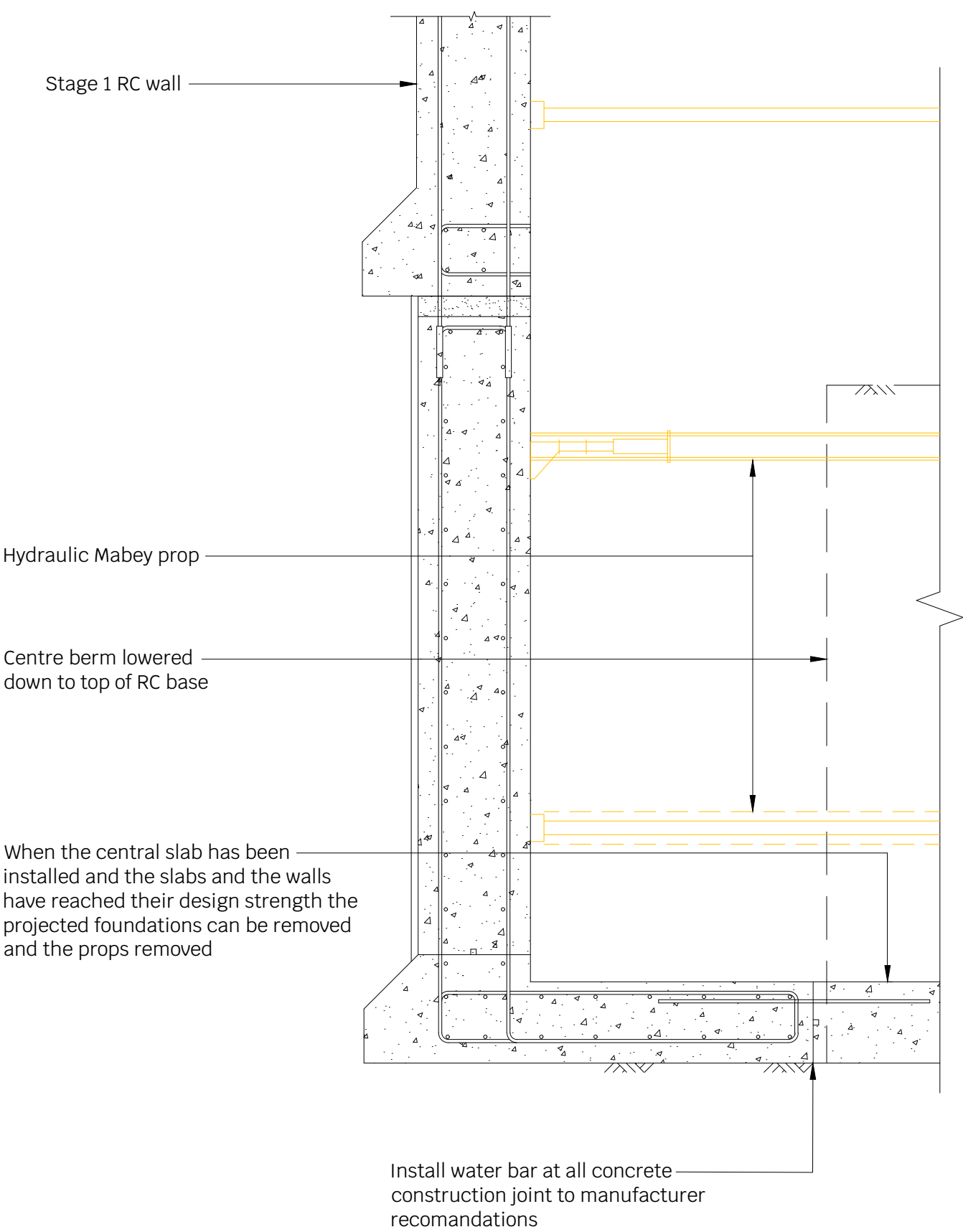
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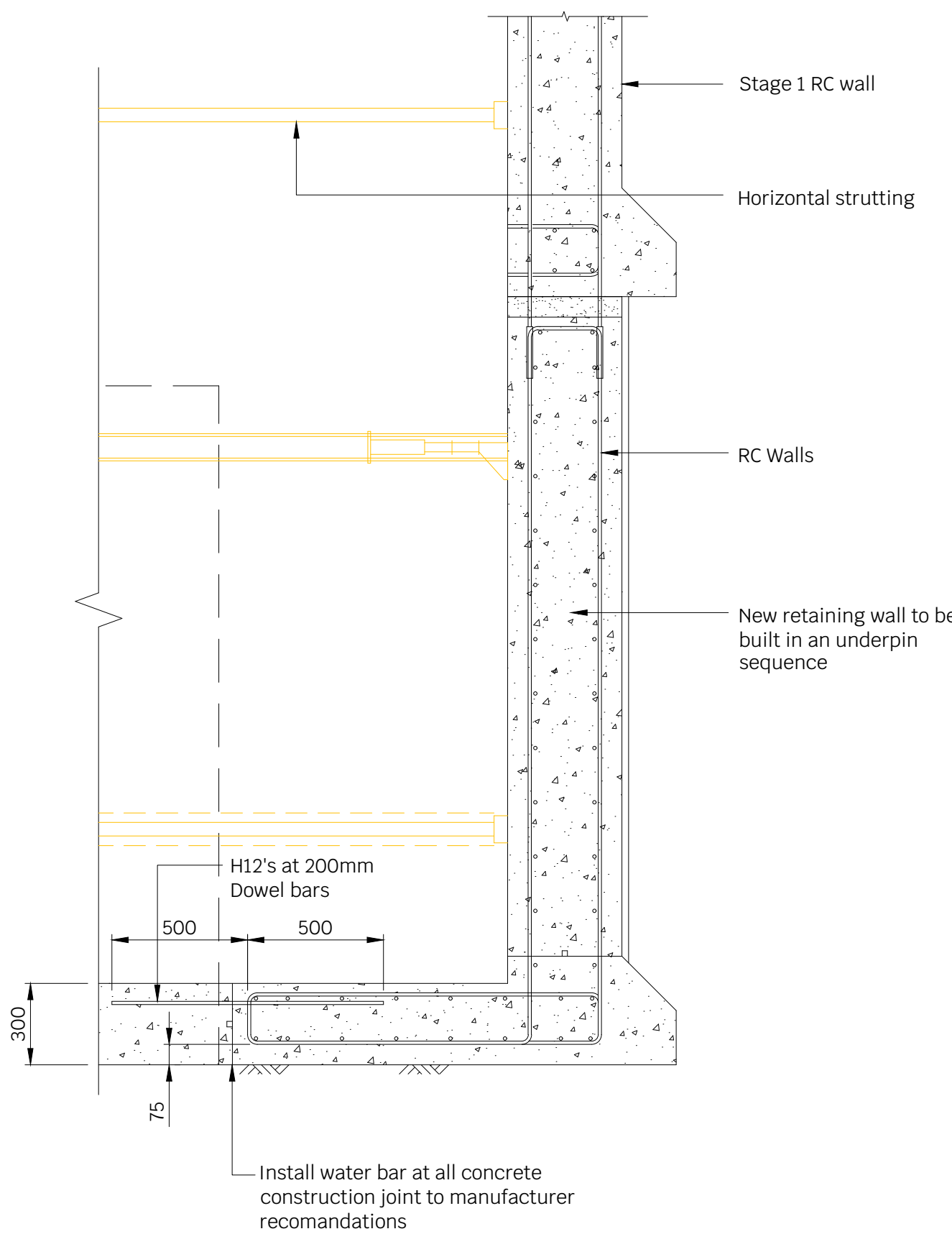
Sequence 8



Sequence 9



Sequence 10



Notes

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Drawing Status		PRELIMINARY				
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Drawing Title TYPICAL MULTI STAGE UNDERPINNING SEQUENCE SHEET 2 OF 3						
Project	Company	Zones	Level	Type	Role	Number
21066-	SYM	- XX	- XX	- DR	- S	- 0202
Scale: 1:20 AT A1		Drawn By: JS		Revision : P1		
Date: APRIL 2023		Checked By: SB				

Proposed method statement/
suggested sequence of works

- 1
- Locally underpin walls at positions marked to be used to support temporary works

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Underpinning

1. Dry pack grout underpinning to be to the following specification:

a. Mix to be 3:1 of sharp sand o.p.c.

b. Sand to be sharpest that can be handled

c. Water content to be just enough to allow balling when compressed by hand
2. Excavation for new foundations to be carried out in maximum 1.0m lengths with a minimum clear space of 3.6m between open excavations at any one time
3. "Over-dig" for access purpose is only permitted in the direction away from the existing building. additional excavation of any kind which may undermine the existing foundations is strictly forbidden during underpinning operations
4. Underside of existing foundations to be underpinned shall be thoroughly cleaned to expose sound concrete/brickwork
5. New foundations to be concreted/bricked up to within 75mm of underside of the existing foundation (50mm absolute minimum clear)
6. After a minimum curing period of 24 hours, the 75mm gap is to be pinned by hand or machine rammed of dry pack grout
7. Subsequent excavations cannot commence for a minimum of 48 hours after pinning
8. Contractors method statement and programme is to be issued and approved prior to works commencing on site
9. Underpins to be connected with 4No. H16 bars

Foundations

1. All foundations to bear on gravel/clay strata minimum depth 1000mm. Allowable bearing pressure required 100kN/m²
2. All concrete to be grade 30 unless otherwise stated (30N/mm² minimum)
3. Blinding to be grade C25 concrete down to bearing strata (minimum 50mm)
- 4.Soft spots encountered in subgrade to be removed and filled in layers not greater than 300mm. Fill material to be inert graded granular materials of maximum size 25mm
5. All excavations to be cleaned and approved by engineer and building control officer on site prior to concreting or blinding
6. Maximum aggregates sizes as follows

- blinding and mass concrete - 20mm

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Drawing Status

PRELIMINARY



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Job Title

139 CRANLEY GARDENS

LONDON N10 3AH

Drawing Title

TYPICAL MULTI STAGE
UNDERPINNING SEQUENCE
SHEET 3 OF 3

Project	Company	Zones	Level	Type	Role	Number
21066-	SYM	- XX	- XX	- DR	- S	- 0203

Scale: 1:20 AT A1

Date: APRIL 2023

Drawn By: JS

Checked By: SB

Revision :

P1

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