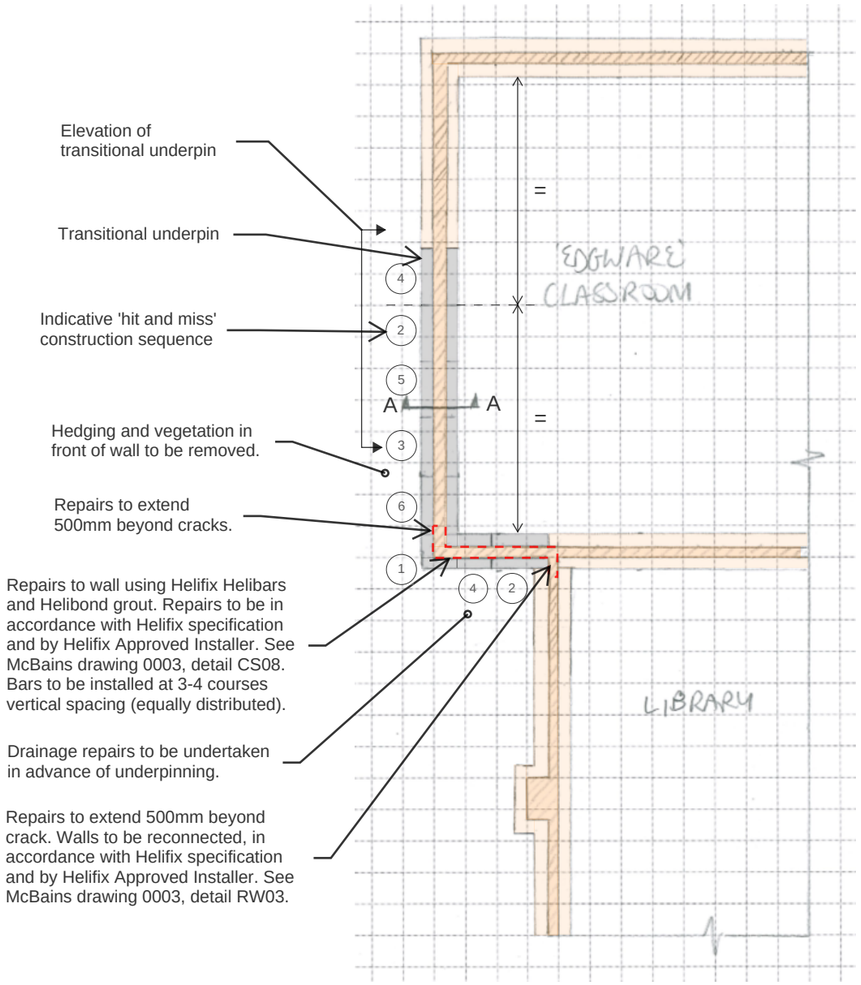
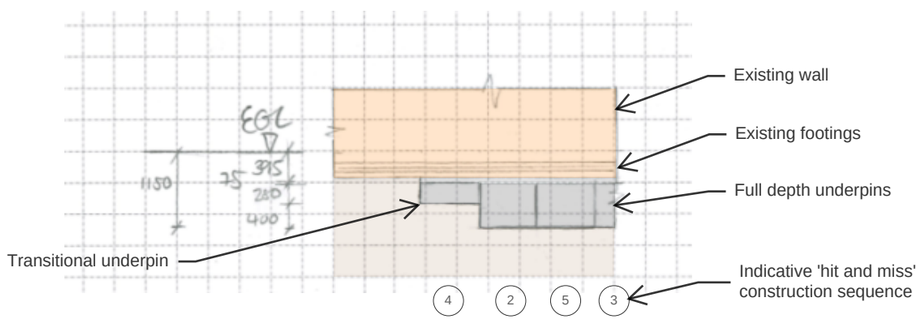
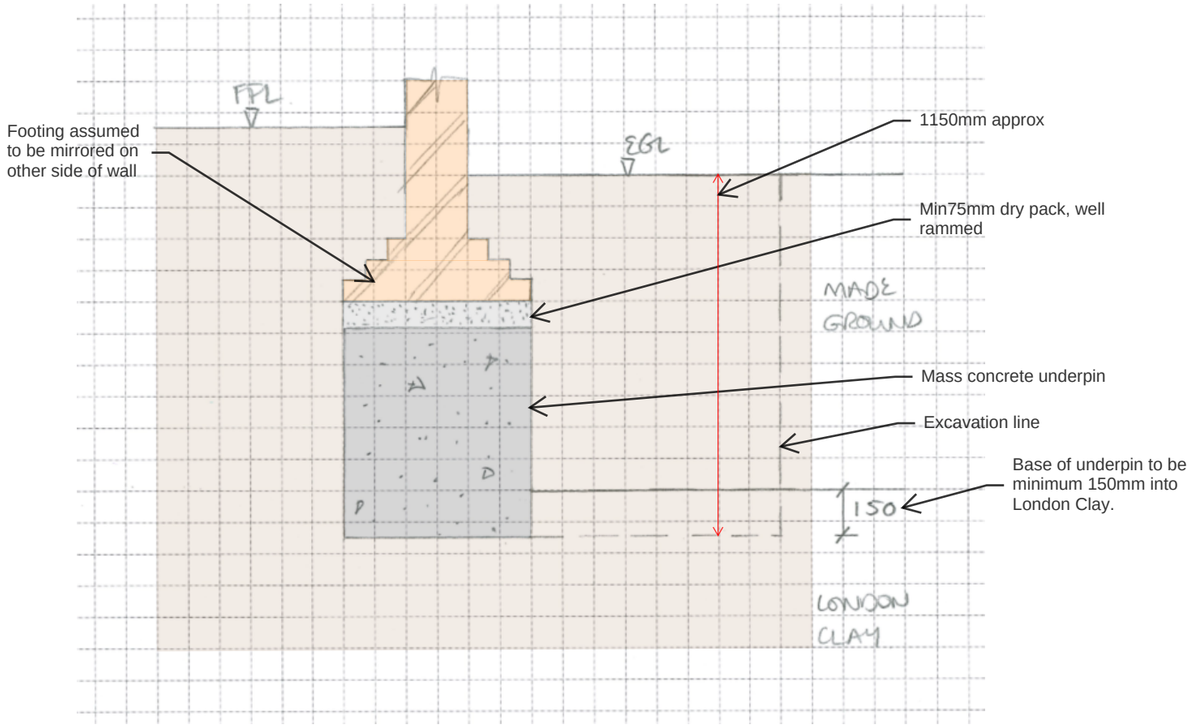


PLAN



ELEVATION OF TRANSITIONAL UNDERPIN



SECTION A-A
Typical underpin
Based on TP02

Notes:
The contractor must verify all dimensions on site before commencing any work on shop drawings, do not scale from this drawing

GENERAL NOTES
1. Underpinning sequence shown is indicative. Final 'hit and miss' sequence to be by contractor.
2. Maximum width of underpin/unsupported masonry above to be 900mm.
3. All temporary works are the responsibility of the contractor.
4. Dimensions are in millimetres unless noted otherwise.

UNDERPINNING NOTES
1.1 Refer to plan for extent of underpinning to existing structure, including transitional underpins.
1.2 Underpin with hit and miss sequence with mass concrete to depth as shown, unless agreed otherwise with building control inspector.
1.3 Excavate sections marked 1 first to a width of at least 600mm (u.n.o) maintain support to foundation over a minimum length of 2m before the next excavation.
1.4 Thoroughly clean back the underside of existing foundation.
1.5 Drive 2no. 600 long h16 dowel bars at 400c/c for half their depth into the soil on either side of the underpin section at mid height of adjacent sections.
1.6 Wrap any drain pipes / services with 50 thick compressible boards (e.g. Polystyrene).
1.7 Shutter outside face leaving 'letter box' to receive fresh concrete and pour mass concrete to within 50-75mm from underside of existing structure. Cast concrete within 24 hours of initial excavation.
1.8 When concrete has hardened, ram dry pack mortar between new concrete and existing structure.
1.9 Allow 48 hours for dry pack to harden to sections marked 1 then repeat above process for sections marked 2, then 3, etc.
1.10 Backfill excavations locally and make good surface finishes.

EARTHWORKS NOTES
1.1 The contractor shall take all measures necessary to establish whether contaminated material is present. In the event that contaminated soils are found, the contractor shall employ suitable working methods to ensure this material can be safely excavated and disposed of off-site.
1.2 Any groundwater extracted shall be properly disposed of off-site. The contractor is solely responsible for paying all fees and gaining all permissions and licences necessary for the proper disposal of extracted ground water.
1.3 Take all necessary actions to maintain the works free from water where it may be deleterious to the works. Obtain all necessary approvals from the local authority, water authority and other interested parties to proposals for disposal of water from the works.
1.4 Prior to commencement of the works the contractor shall satisfy themselves as to the precise location of all underground services.
1.5 Refer to ground condition assessment report for details of the soil stratigraphy, ground water and general soil conditions.
1.6 The contractor shall review and confirm that the ground investigation information provided is adequate for his design and construction. If he is concerned about its adequacy, his tender should list his concerns before proceeding with design.

CONCRETE NOTES
1.1 Concrete specification generally: to BS EN 206-1 and BS EN 1992-1:1:2005.
1.2 Designated concrete for mass concrete foundations (where applicable):
- Designated concrete: GEN3 (C16/20)
- Reinforcement/embedded metal: None
- Aggregates: See BS8500-2 clause 4.3 (BSI derived document – Chapter 10). Size (maximum): 20mm
- Recycled coarse aggregates: permissible, subject to limitations of use in BS 8500-2 and BS EN 206
- Consistence class: Contractor's choice
- Exposure class: DS-2, AC-2)
- Admixtures: Concrete producer's choice
- Other requirements: None
1.3 Construction method, joints and pouring sequence of the superstructure are to be issued to the engineer for approval prior to the commencement of the work.
1.4 Concrete cubes: 1 set of 4 shall be taken at the following frequency:
- 1 set for each day of concreting
- 1 cube shall be crushed at 7 days and 1 at 28 days
- The remaining cubes shall be crushed only in the event of a test failure.
- Results are to be submitted to the engineer.

Rev	Description	Date	Issued By
P01	First issue	28/08/2025	CP

Drawn by	Reviewed by	Approved by
KV	CP	CP

MCB Number	Date created	Scale
62640	AUGUST 2025	NTS

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Client
LONDON BOROUGH OF MERTON

Project
SINGLEGATE PRIMARY SCHOOL

Drawing Title
PROPOSED UNDERPINNING

STRUCTURAL

Drawing / Document Reference								Status	
MSMSG	MCB	XX	XX	SK	S	0002		S2	P01
Project	Originator	Fnbr	Spbr	Form	Discipline	Number		Status	Revision