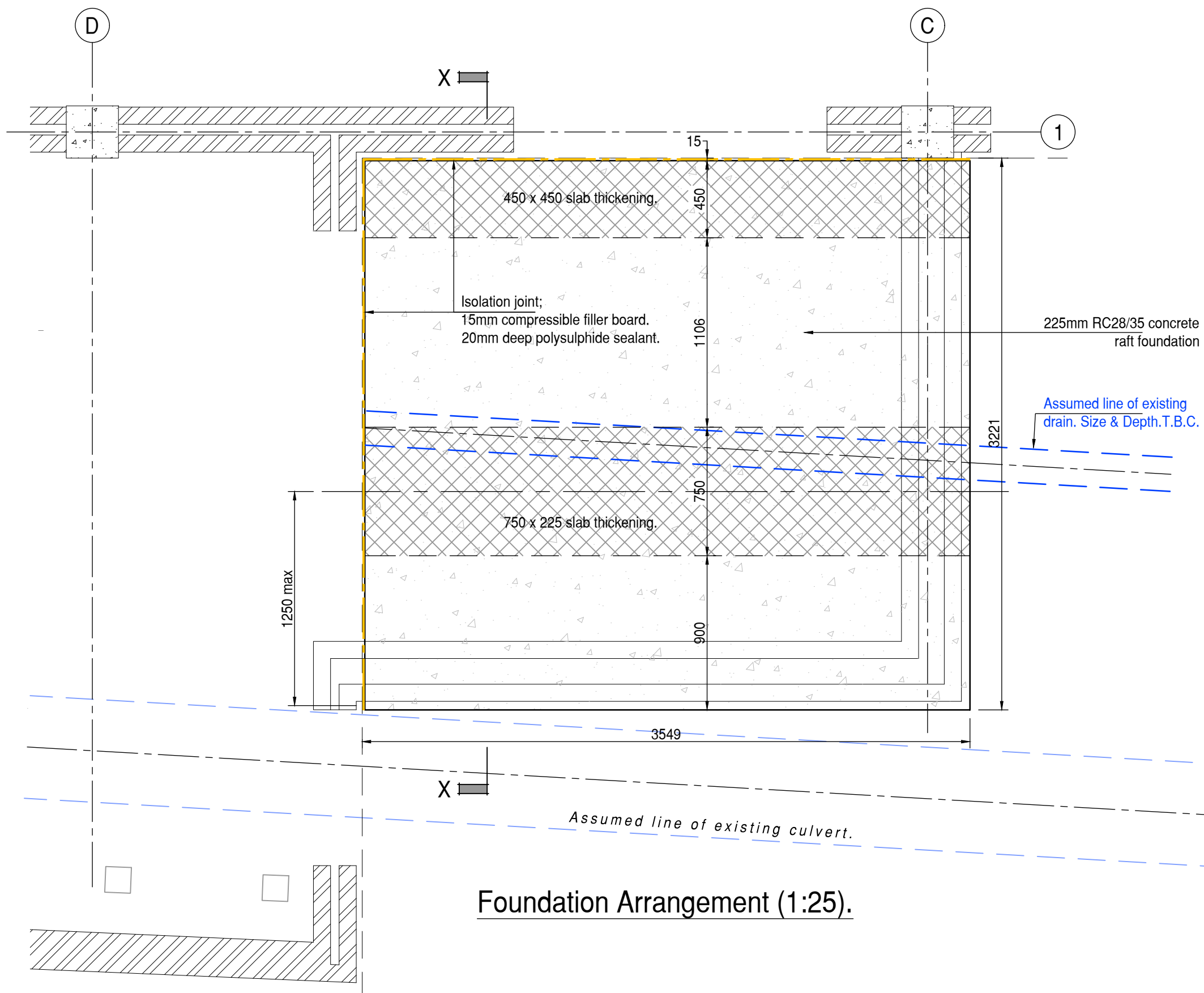
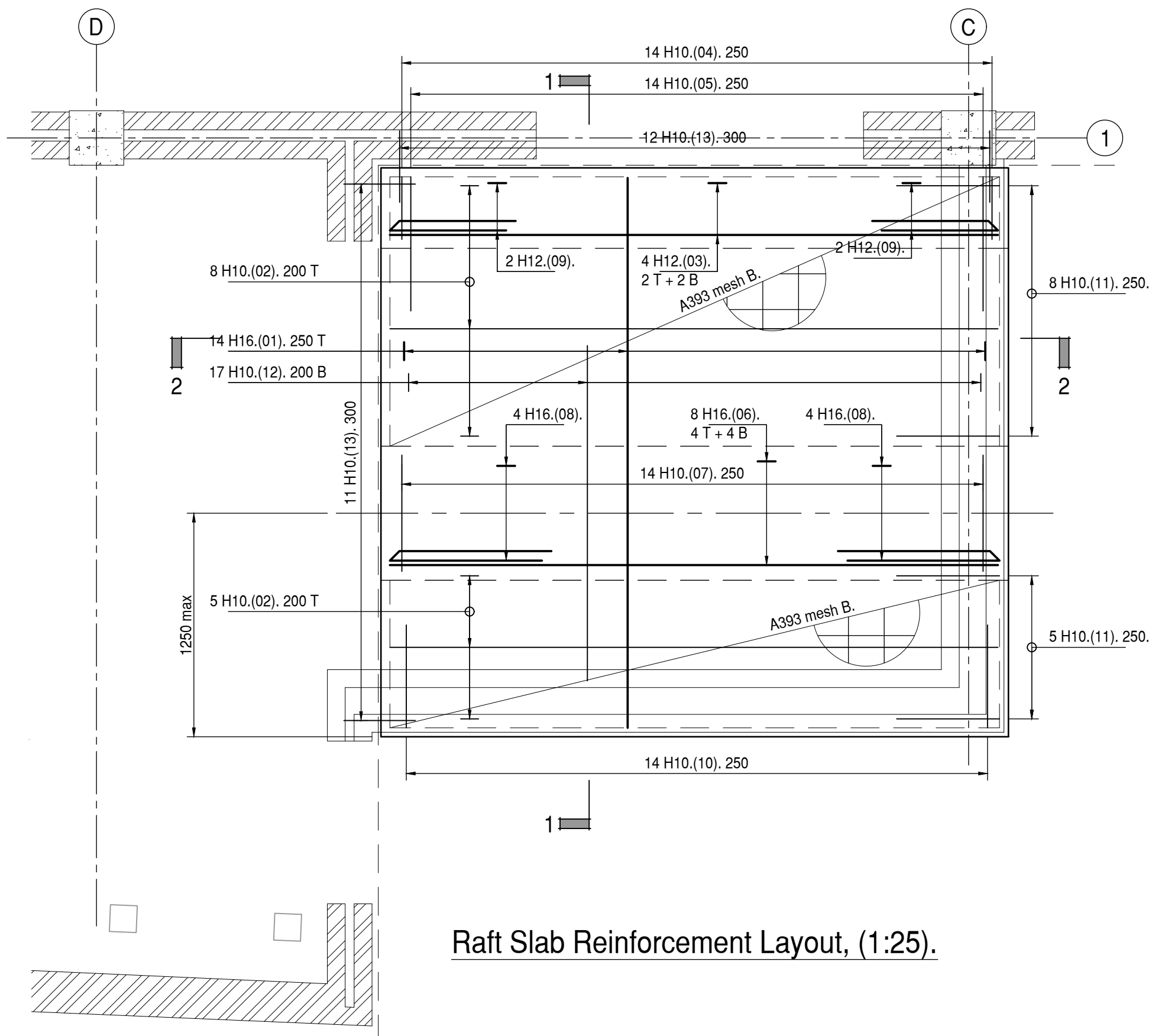
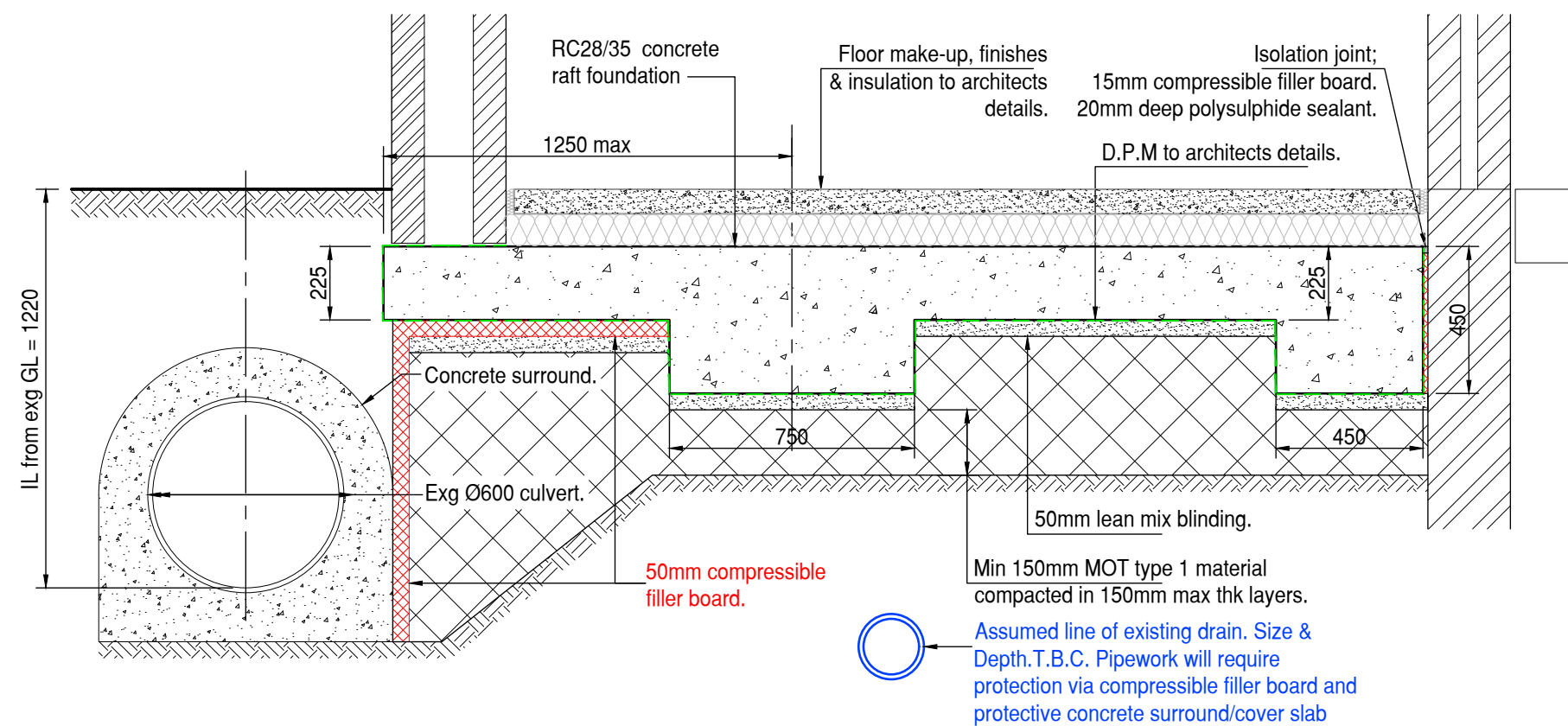




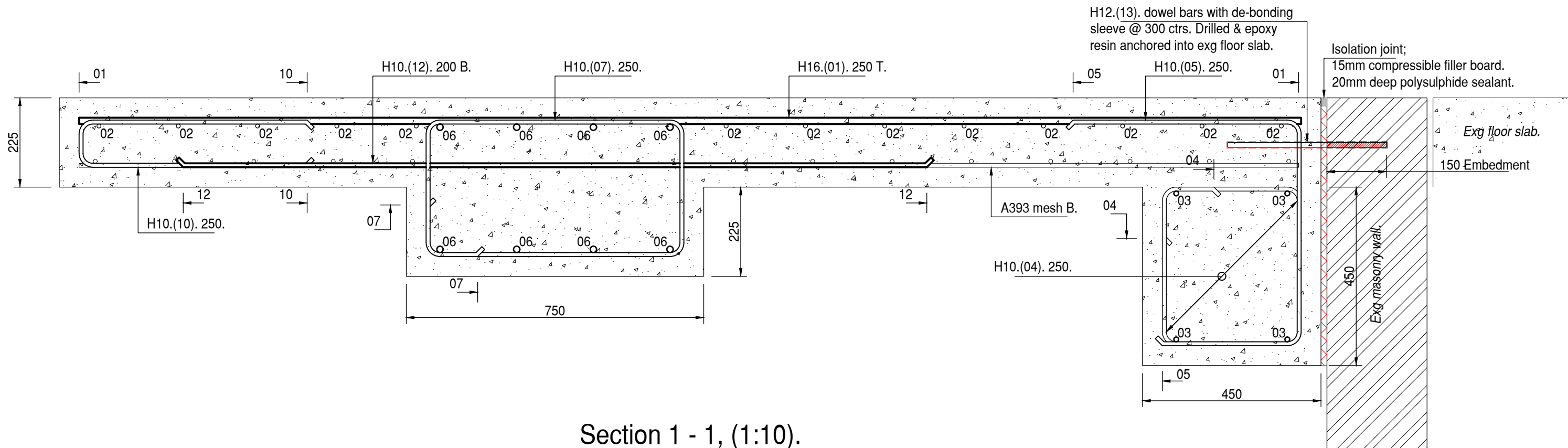
Foundation Arrangement (1:25).



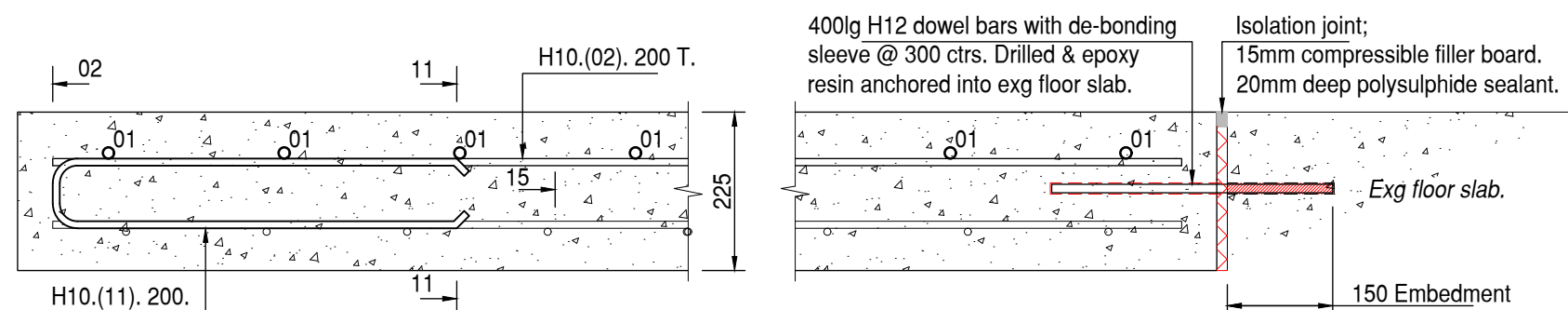
Raft Slab Reinforcement Layout, (1:25).



Section X - X, (1:20).



Section 1 - 1, (1:10).



Section 2 - 2, (1:10).

Reinforcement.

1. Mesh reinforcement to be Grade 500N/mm² in accordance with BS 4483: 2005.
2. Bar reinforcement prefixed 'H' to be grade 500n/mm² deformed high tensile steel in accordance with BS 4449:2005+3:2016
3. Bar reinforcement shall be bent in accordance With BS 8666: 2005.
4. Concrete cover to reinforcement to be 50mm unless noted otherwise.
5. Minimum lap lengths to bar reinforcement to be 56 x smallest bar diameter unless noted otherwise.
6. This drawing is to be read in conjunction with all relevant Thomas Consulting Ltd Bar Bending Schedules No. 200.

Aggregates Used In Structural Concrete

1. All aggregates to be used in normal weight structural concrete should conform to BS EN 12620:2002+A1:2008 and should be from natural sources or air cooled blast-furnace slag.
2. Any aggregates to be used in structural concrete should not be frost susceptible or contain argillaceous, deleterious or any other unsuitable materials (such as high salt content).

In-Situ Ground Floor Slab.

1. Plan area of site is to be stripped of all vegetable, organic, foreign and deleterious matter. Refer to ground investigation report for average depth of unsuitable material.
2. All derelict structures or other disused sub-surface obstructions encountered below the line of the foundations, or slab are to be removed to within 1m of formation level. Any void created by such excavation must then be backfilled with suitably compacted type 1 stone hardcore
3. Plan area of floor slab is to be proof rolled following site strip. Soft spots identified are to be filled with type 6F2 stone prior to laying of sub-base layer.
4. Where required, bulk filling material is to comprise of type 6F2 stone, selected, graded, laid and compacted in accordance with tables 6/1, 6/2 and 6/4 of the department for transport manual of contract documents for highway works volume 1 - specification for highway works. The final 150mm layer beneath the floor slab shall comprise of type 1 stone.
5. Sub-base layer shall be a minimum 150mm thick and comprise of a type 1 unbound mixture suitable for placement within 500mm of cement-bound materials in accordance with clause 801 of department for transport manual of contract documents for highway works volume 1 - specification for highway works. It can contain crushed rock and crushed concrete but generally should not contain crushed slag, recycled aggregates or well burnt non-plastic shale and be selected, graded, laid and compacted to clause 803 and table 8/4 in accordance with the aforementioned document.
6. Sub-base layer shall be laid and compacted in accordance with table 8/4 of the department for transport manual of contract documents for highway works volume 1 - specification for highway works.
7. Ground floor slab is to be laid on damp proof membrane in accordance with the architect's specifications U.N.O.
8. All service entry positions, ducts and internal drainage positions are to be confirmed by the M&E engineer and architect.
9. Any penetrations through the damp proof membrane will need to be sealed using proprietary 'top hat' units or similar as per damp proof membrane manufacturer's details and specifications.
10. Ground floor slab is to be a minimum 225mm thick with reinforcement as detailed. with a minimum 50mm cover.
11. All structural concrete shall comply with BS EN 1992-1-1:2004+A1:2014 and 'the national structural concrete specification for building'.
12. Structural concrete to floor slab is to be designated mix RC28/35 to BS 8500-1:2015+A1:2016 AND BS EN 206:2013+A1:2016.
13. All concrete to be mechanically vibrated.
14. Sampling, making, curing and testing of concrete cubes shall be in accordance with BS EN 12350-1, BS EN 206-1 and BS EN 12390 parts 1, 2 and 3 respectively. A minimum 3 samples shall be taken for the initial 50 cubic metres of concrete laid with a further single sample required for each additional 150 cubic metres of concrete laid if concrete production is not controlled or 200 cubic metres if concrete production is certified. Each sample shall form 3 cubes, one to be tested at 7 days, one to be tested at 28 days and a spare. 7 and 28 day test results should be issued to Thomas Consulting Ltd following test completion.
15. For floor slabs receiving screed finish or insulation & screed finish:
Finish to concrete floor slab is to be a 'type u1 finish' with level and flatness in accordance with 'the national structural concrete specification for building construction'.
16. The method of curing the concrete is to be agreed with Thomas Consulting Ltd prior to casting the ground floor slab. Sprayed curing membranes are not to be used.
17. Floor screeds are to be in accordance with the architect's details and specification.

DO NOT SCALE THIS DRAWING

A1

GENERAL NOTES:

1. Before construction commences, the setting out Engineer shall ensure that all setting out information is mutually compatible with all the drawings and documents provided by the designers. Where information is apparently contradictory or ambiguous, the design Engineer and/or the Architect is to be informed immediately. Thomas Consulting will accept no liability for setting out errors where work is constructed to incorrect information.
2. All drawings and documents are to be read in conjunction with one another, are mutually compatible and shall be read as such. All documents shall be checked to ensure that they are compatible by the contractor before construction commences. In the event of apparent ambiguity or contradiction the engineer and/or architect shall be notified immediately. Thomas Consulting accept no liability in the event of not being so notified and where construction work has commenced.
3. In accordance with CDM regulations 2015 this drawing has been prepared with due attention to identifying any unusual design hazards that may exist. Unusual design hazards are hazards that a reasonably competent contractor, experienced in this type of work may not be expected to identify. In dealing with unusual design hazards we have adopted the 'ERIC' principle and where possible eliminated (E) the hazard at design stage, if it has not been possible to eliminate the hazard we have endeavoured to reduce (R) it. Where it has not been possible to eliminate these hazards, the hazard is noted on the drawing with appropriate information (I) in order that the hazard can be controlled (C) during construction. It is the contractor's responsibility to fully acquaint themselves with all construction drawings before commencing construction and if in doubt about any matter to ask for clarification from the designer.
4. All drawings issued electronically for this scheme are provided for the sole purpose of assisting the design, procurement or construction of the structures for which Thomas Consulting have been appointed as Design Engineers/Consultants. They may not be used for any other purpose, nor may they be amended, copied, redistributed or issued to third parties without the written agreement of Thomas Consulting. All drawings remain under copyright to, and the intellectual property of, Thomas Consulting. Upon completion of the project, all drawings are to be deleted from your computer systems and all other electronic copies destroyed. Where electronic copies of final drawings are to be issued, these will be provided in a digital only format by Thomas Consulting (no other copies may be retained). By opening and using this drawing, it is assumed that you agree to abide by these Terms and Conditions.
5. Unless expressly agreed with a director of Thomas Consulting Ltd, for the purposes of the CDM regulations 2015 Thomas Consulting are not the Principal Designer. The client has been advised that they are required to appoint a Principal Designer. For further information see <http://www.hse.gov.uk/>.

REVISIONS

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
A	12-05-25	Construction issue.	GW	SW

DRAWING STATUS:

CONSTRUCTION ISSUE



CLIENT:

MCAU

PROJECT:

UNICORN GROCERY STORE.

DRAWING TITLE:

NEW RAFT SLAB REINFORCEMENT LAYOUT & DETAILS.

DATE CREATED: 17-04-2025	DRAWING SCALE: As noted @ A2	DRAWN BY: GW	CHECKED BY: SW	QA CATEGORY: 1
DRAWING REF:			REV:	

TC / P10682 / 24 / 200

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