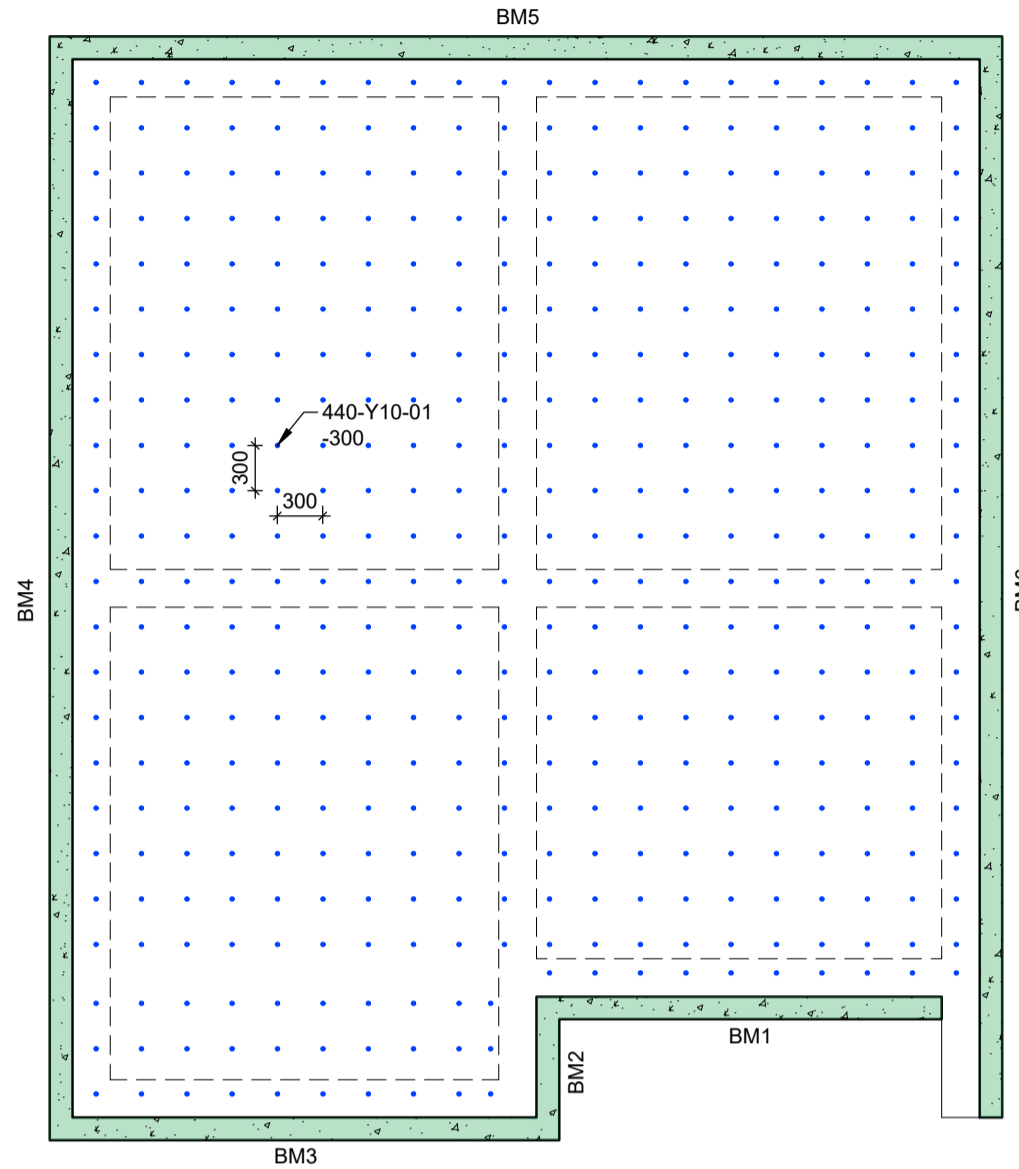


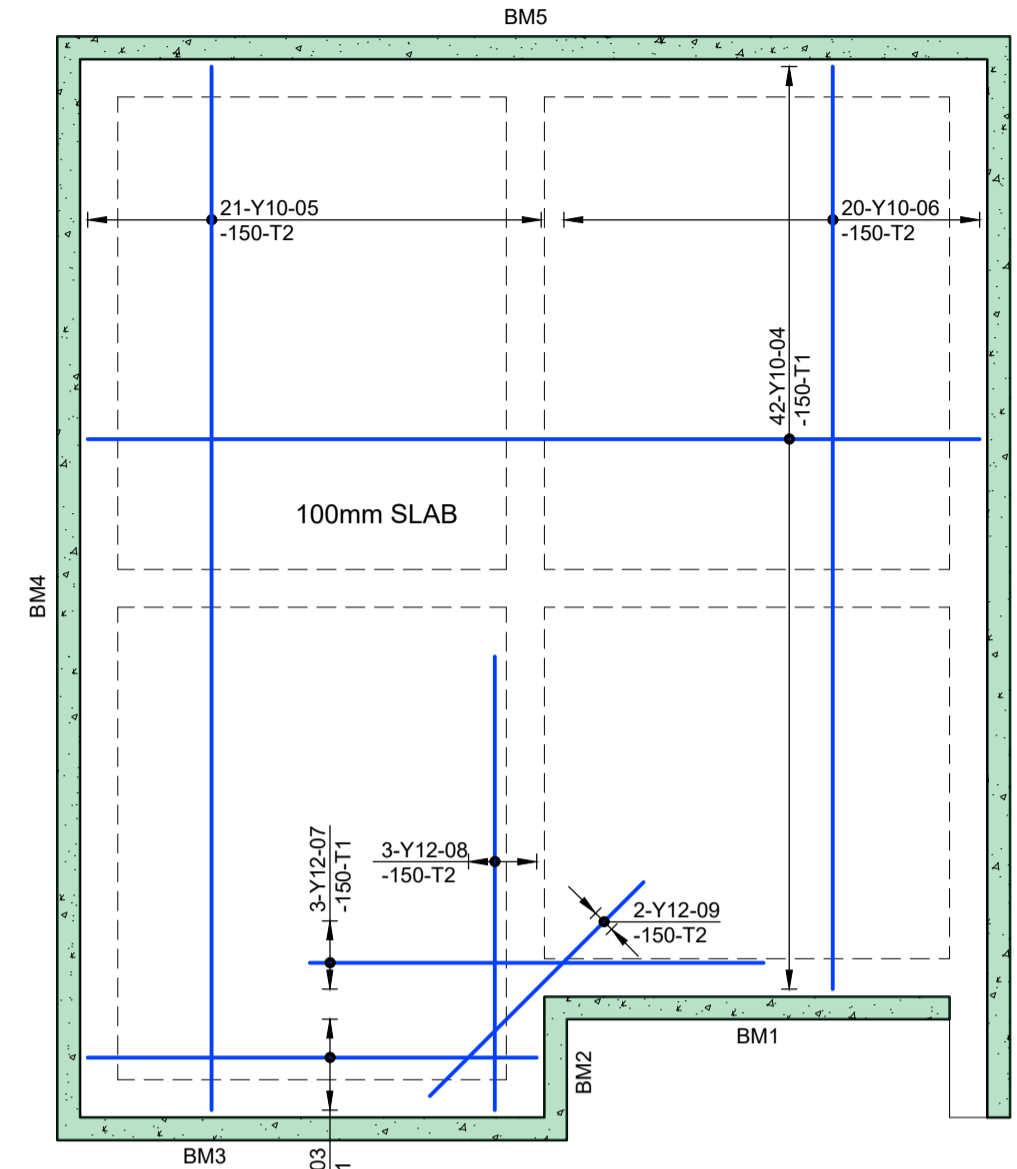
NHBRC:
SOIL CLASSIFICATION : H2
COMPETENT PERSON : DW TERBLANCHE
NHBRC NR : 300241492
ECSA : 201630290

RAFT DESIGN:
COMPETENT PERSON : DW TERBLANCHE
NHBRC NR : 300241492
ECSA : 201630290

- NOTES:**
- SCABBLE SURFACE OF EXISTING SLAB TO EXPOSE AGGREGATES. REMOVE ALL LAITANCE AND DUST PARTICLES.
 - 150mm DOWELED CHEMICAL ANCHORS (Y10 @ 300mm c/c) IN BOTH DIRECTIONS TO BE EPOXIED INTO EXISTING SLAB TO A DEPTH OF 75mm MIN.
 - SIKADUR 32N WET 1 TO DRY EPOXY OR SIMILAR APPROVED TO BE APPLIED ON EXISTING SLAB WHICH MUST BE DRY AND CLEAN OF ALL DUST AND LAITANCE. THIS PRODUCT MUST BE APPLIED ON EXISTING SLAB WITH A BRUSH. NEW SLAB TO BE CAST WHEN SIKADUR 32N LAYER IS STILL TACKY.
 - NEW SLAB TO BE CONTINUOUSLY CURED FOR A PERIOD OF 3 DAYS.
 - CUBE RESULTS TO BE SUBMITTED TO ENGINEER FOR 7 DAYS AND 28 DAYS FOR EVERY BATCH OF CONCRETE CAST.
 - NEW RAFT SLAB AND BEAMS TO HAVE A MINIMUM CHARACTERISTIC COMPRESSIVE STRENGTH OF 25MPa AT 28 DAYS. CONCRETE CLASS 25/13.
- METHOD STATEMENT FOR INSTALLATION OF DOWELS/ANCHORS**
- DRILL HOLES TO A DEPTH OF 75mm INTO EXISTING RAFT SLAB. DIAMETER OF HOLE TO BE IN ACCORDANCE WITH DOWEL SIZE.
 - REMOVE ALL DUST PARTICLE AND LAITANCE FROM HOLE BY MEANS OF A BLOW PUMP OR COMPRESSED AIR.
 - DRILLED HOLE TO BE CLEANED USING STEEL BRUSH.
 - INJECT SIKA ANCHOR FIX OR SIMILAR APPROVED PRODUCT STARTING FROM THE BOTTOM OF THE HOLES. CARE MUST BE TAKEN WHEN INJECTING THE PRODUCT TO AVOID AIR ENTRAPMENT.
 - INSERT DOWEL ANCHOR IN A ROTARY MOTION WHICH MAY RESULT IN SOME OF THE PRODUCT BEING EXPELLED FROM THE HOLE.
 - DOWEL/ANCHORS MUST NOT BE MOVED DURING THE CURING PERIOD OF THE INJECTED PRODUCT.
 - INJECTED PRODUCT TO BE USED TO FIX DOWELS/ANCHORS IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS AND INSTRUCTION.
 - PRODUCT TO BE APPROVED IN PRINCIPLE BY THE DESIGNER PRIOR TO BEING USED ON SITE.
- QUALITY CONTROL TESTS TO BE DONE**
- A. CONCRETE CUBE TESTS:**
- 1 SET OF CUBES (3) REQUIRED FOR EVERY 30m³ (5 TRUCKS) OF CONCRETE PLACED.
 - SAMPLES TO BE TAKEN FROM DIFFERENT BATCHES AND RANDOMLY CHOSEN.
 - AT LEAST ONE SAMPLE SHALL BE TAKEN FROM EACH DAY'S PLACING OF DIFFERENT GRADES OF CONCRETE.
 - TESTS TO BE PERFORMED BY A SANAS APPROVED LABORATORY.
 - ALL CONCRETE TEST CUBES MUST BE SUPPLIED TO THE ENGINEER WITHIN 7 DAYS OF REACHING AGE (7 AND 28 DAYS) FOR APPROVAL.



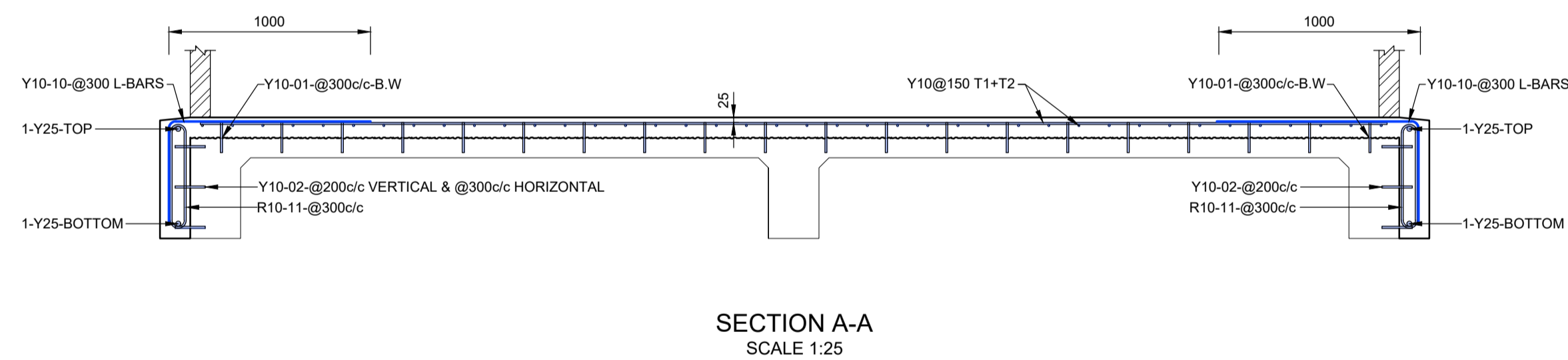
PLAN - BEAM & DOWEL BAR LAYOUT
SCALE 1:50



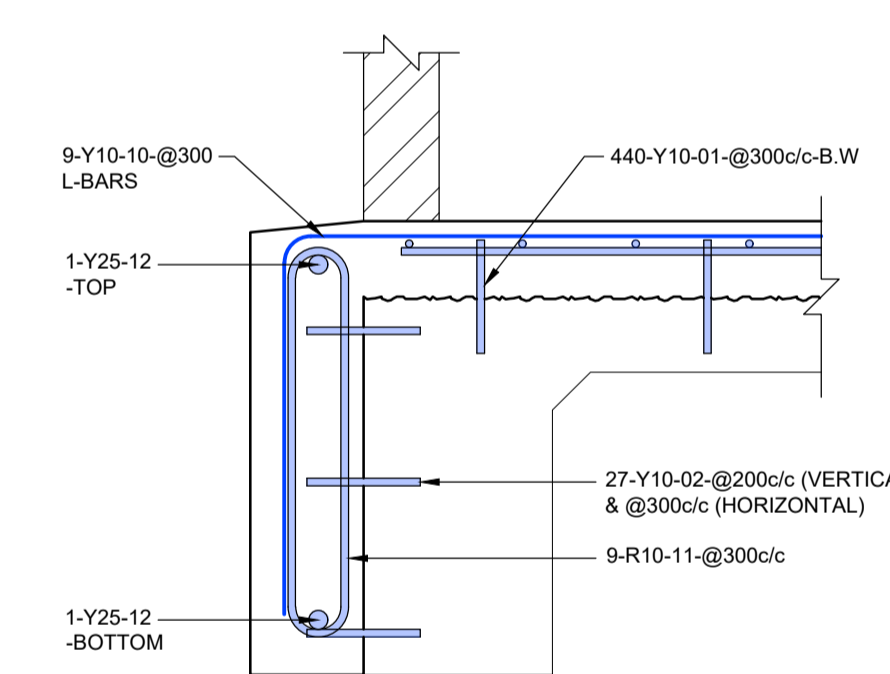
PLAN - SLAB REINFORCING LAYOUT
SCALE 1:50

MEMBER No. & SIZE	WAPENING / REINFORCEMENT					STANDAARD-BUIGINGS / STANDARD BENDINGS					GEMW. MASS	
	MEERK MARK	TYPE	No. PER UNIT	TOTAAL LENGTE	LENGTE	CODE	A	B	C	D		E
SLAB REINFORCING:												
01	Y10	440	36520	150	20	150						3379.90
02	Y10	264	21912	150	20	150						2027.96
03	Y10	5	415	2950	20	2950						755.36
04	Y10	42	3486	5900	20	5900						12890.10
05	Y10	21	1743	8900	20	8900						7420.47
06	Y10	20	1660	8100	20	8100						6247.74
07	Y12	3	249	3000	20	3000						460.89
08	Y12	3	249	3000	20	3000						460.89
09	Y12	2	166	2000	20	2000						204.85
BEAM REINFORCING:												
BM1 - 150x600mm												
12	Y25	2	166	3350	37	800						2140.10
10	Y10	9	747	1500	37	500						891.35
11	R10	9	747	1250	81	500	70					576.12
BM2 - 150x600mm												
13	Y25	2	166	2050	37	1250						1310.55
10	Y10	3	249	1500	37	500						230.45
11	R10	3	249	1250	81	500	70					192.04
BM3 - 150x600mm												
14	Y25	2	166	4470	37	1250						2856.77
10	Y10	10	830	1500	37	500						768.16
11	R10	10	830	1250	81	500	70					640.13
BM4 - 150x600mm												
15	Y25	2	166	8400	37	1250						5398.44
10	Y10	23	1909	1500	37	500						1766.77
11	R10	23	1909	1250	81	500	70					1472.31
BM5 - 150x600mm												
16	Y25	2	166	7400	37	1250						4729.34
10	Y10	20	1660	1500	37	500						1536.33
11	R10	20	1660	1250	81	500	70					1280.27
BM6 - 150x600mm												
17	Y25	2	166	7000	20	7000						4473.70
10	Y10	21	1743	1500	37	500						1613.14
11	R10	24	1992	1250	81	500	70					1536.33
												68830.46
												TOTAL

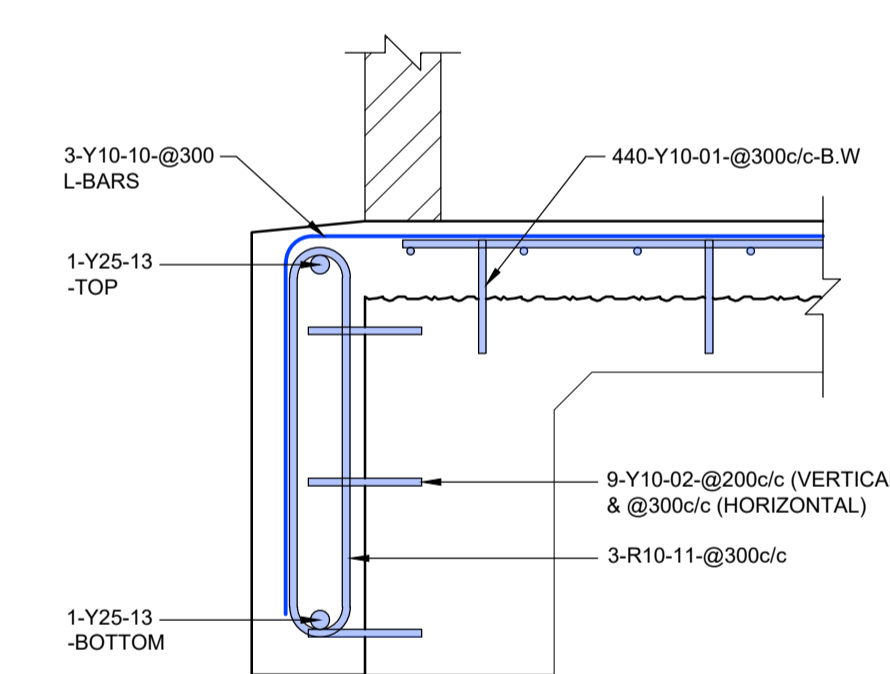
REINFORCING SCHEDULE



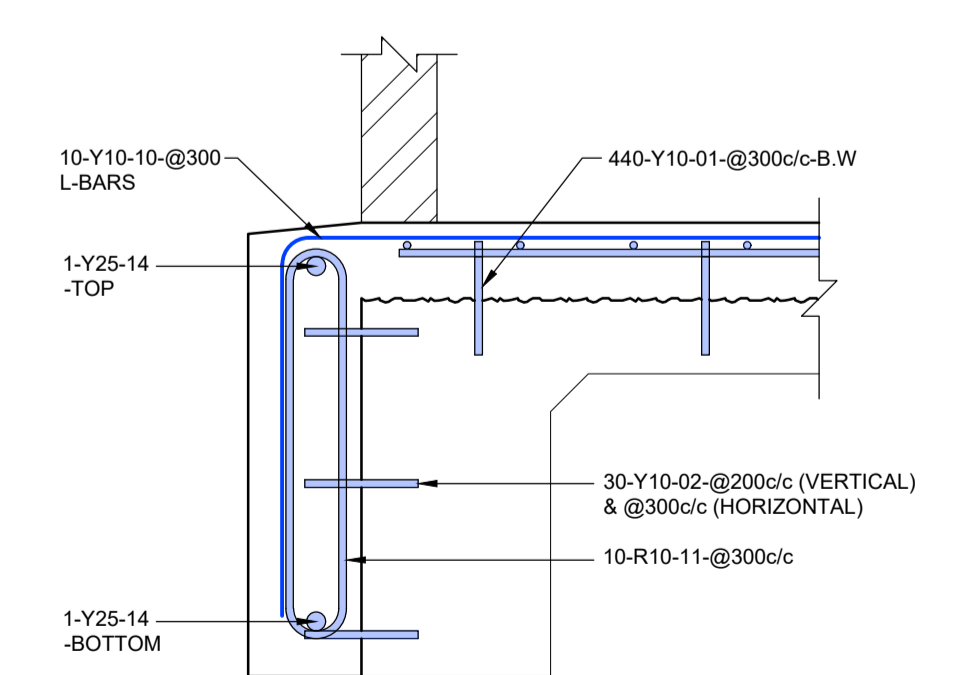
SECTION A-A
SCALE 1:25



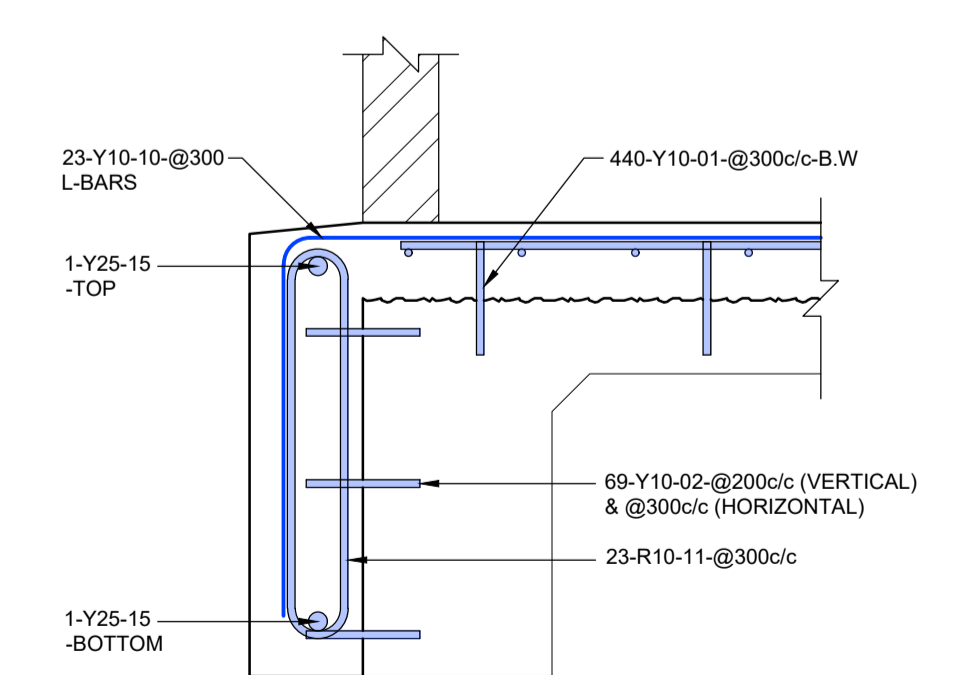
BM1
SCALE 1:10



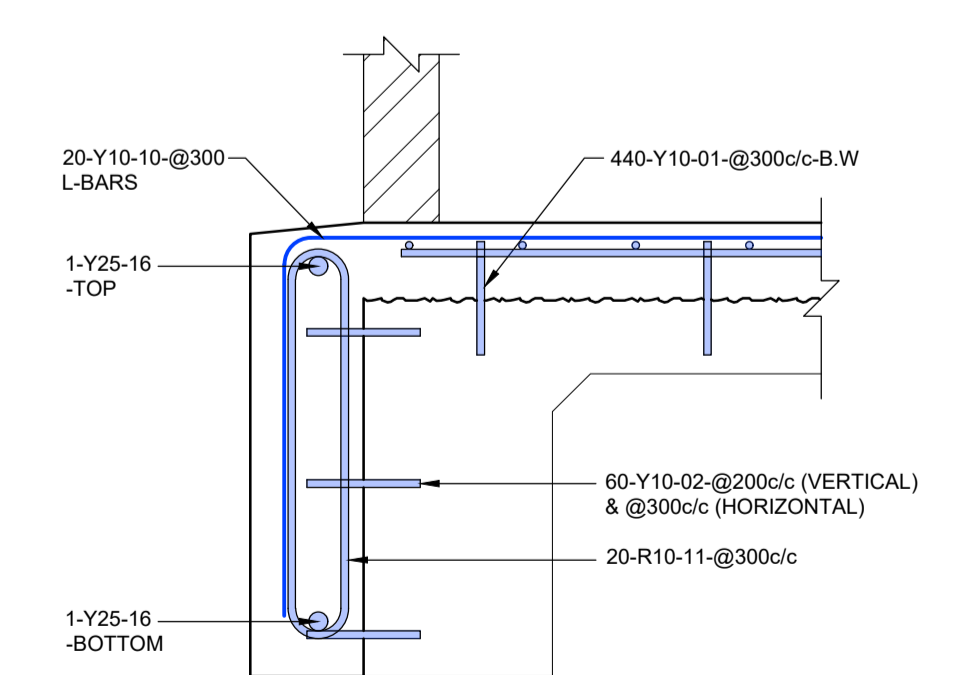
BM2
SCALE 1:10



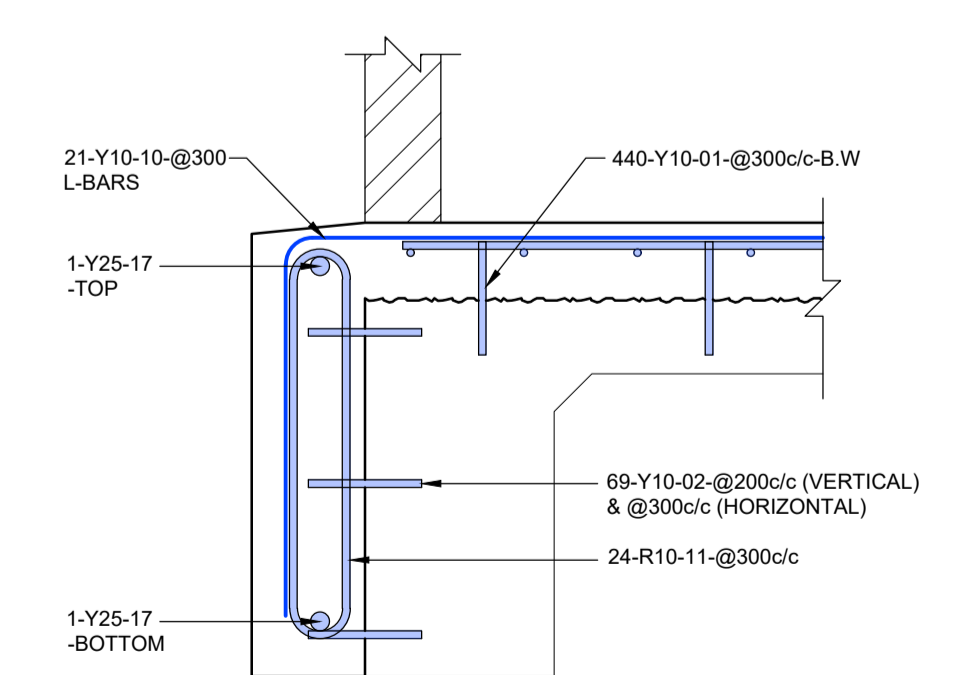
BM3
SCALE 1:10



BM4
SCALE 1:10



BM5
SCALE 1:10



BM6
SCALE 1:10

FOR CONSTRUCTION

100 MILLIMETRES ON ORIGINAL DRAWING		
(A)	BEFORE CONTRACT COMMENCES	
(A)	AFTER CONTRACT HAS COMMENCED	
Nr.	DATE	AMENDMENTS
(A)	2021-08-10	DESIGN REVIEW CHANGE TO ACCOMMODATE LOW COMPRESSION STRENGTH



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 PO Box 730, Mossel Bay, 6500, South Africa

CESA

PROJECT
KHAYAMNANDI 479 HOUSING PROJECT, DESPATCH

DRAWING DESCRIPTION
RAFT REINFORCEMENT LAYOUT FOR NEW DWELLING ON ERF 1309

DRAWING NO.
10415000-502

DESIGNED: DT	CHECKED: DT
DRAWN: KS	SCALE: AS SHOWN A1
APPROVED:	DATE: 2021-08-10
FILE PATH: Sharepoint \Port Elizabeth\100415000 - Khayamandi 479 Housing Project, Despatch	