

FOUNDATION VENT STACK TAG IPR01-537-A-0001/0002 - PIECES: N.2
FONDAZIONE VENT STACK TAG IPR01-537-A-0001/0002 - PEZZI : N.2

BILL OF MATERIALS FOR CIVIL WORKS
COMPUTO DEI MATERIALI PER OPERE CIVILI

	QUANTITY FOR 1 ITEM QUANTITA' PER 1 ELEMENTO	QUANTITY FOR 2 ITEMS QUANTITA' PER 2 ELEMENTI
STRUCTURAL CONCRETE CALCESTRUZZO STRUTTURALE	8.68 m³	17.36 m³
LEAN CONCRETE MAGRONE	1.37 m³	2.74 m³
BITUMINOUS COATING RIVESTIMENTO BITUMINOSO	24.57 m²	49.14 m²
FORMWORK CASSEMATURA	14.28 m²	28.56 m²
REINFORCEMENT ARMATURA	579.78 kg	1159.56 kg
GROUTING MORTAR MALTA DI LIVELLAMENTO	0.08 m³	0.16 m³
ANCHOR BOLTS M48 TYPE BB BULLONI DI ANCORAGGIO M48 TIPO BB	n. 8 244.68 kg	n. 16 489.36 kg
EARTHING PLATE PIASTRA PER MESSA A TERRA	n. 1 pc	n. 2 pcs

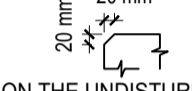
REFERENCE DOCUMENTS / DOCUMENTI DI RIFERIMENTO

IPR01-C5521-300-Q-TSD-0001	REF 1: Design Specification for Concrete Works
IPR01-C5521-000-Q-DQF-0001	REF 2: Anchor Bolts Standard
IPR01-C5521-000-Q-DQA-0001	REF 3: General Plot Plan
IPR01-C5521-961-Q-DQF-0014	REF 4: Foundations for Vent Stacks - Bar Bending List
IPR01-C5521-961-Q-TCE-0007	REF 5: Foundations for Vent Stacks - Calculation Report
IPR01-C5521-1070-537-Q-DQF-0001_Rev0	REF 6: IPR01 - Vent Stack - Foundation Loads with Anchor Bolts Details and Calculations
IPR01-C5521-1070-537-M-DM-0001_Rev0	REF 7: IPR01 - Vent Stack - General Arrangement Drawing
IPR01-C5521-900-Q-TSD-0001	REF 8: Specification for Earth Moving Works

LEGEND / LEGENDA

B.O.C. = BOTTOM OF CONCRETE / FONDO DEL CALCESTRUZZO
 F.G.L. = FINISHED GROUND LEVEL / LIVELLO DEL TERRENO FINITO
 --- = CONCRETE POURING INTERRUPTION / INTERRUZIONI DI GETTO
 T.O.G. = TOP OF GROUT / ESTRADOSSO MALTA DI LIVELLAMENTO
 T.O.C. = TOP OF CONCRETE / ESTRADOSSO DEL CALCESTRUZZO

REMARKS / NOTE

- ALL DIMENSIONS ARE IN mm, UNLESS OTHERWISE INDICATED. / TUTTE LE QUOTE SONO IN mm, SALVO DIVERSA INDICAZIONE.
- ALL ELEVATIONS ARE IN m. F.G.L. CORRESPONDS TO +39.25 m a.s.l. / TUTTE LE ELEVAZIONI SONO IN m. F.G.L. CORRISPONDE A +39.25 m s.l.m.
- ALL CONCRETE SURFACES IN CONTACT WITH SOIL BELOW GROUND LEVEL WILL BE PROTECTED BY A BITUMEN-BASED WATERPROOF COATING TYPE SIKa IGOL-2 OR SIMILAR. / TUTTE LE SUPERFICI IN CALCESTRUZZO IN CONTATTO CON IL TERRENO AL DI SOTTO DEL TERRENO SARANNO PROTETTE DA UN RIVESTIMENTO IMPERMEABILE A BASE DI BITUME TIPO SIKa IGOL-2 O SIMILARE.
- ALL THE EXPOSED EDGES WILL BE CHAMFERED AS SHOWN BELOW / TUTTI I BORDI ESPOSTI SARANNO SMUSSATI COME INDICATO SOTTO:

- WHERE FOUNDATIONS CANNOT BE PLACED ON THE UNDISTURBED SOIL BACKFILLING UP TO FOUNDATION LEVEL WILL BE CARRIED OUT WITH SELECTED MATERIAL PROPERLY COMPACTED ACCORDING TO REF. 8 OR WITH INCREASED THICKNESS OF LEAN CONCRETE. / DOVE LE FONDAZIONI NON POSSONO ESSERE POSTE SU TERRENO INDISTURBATO VERRANNO EFFETTUATI RINTERRI FINO AL LIVELLO DI FONDAZIONE CON MATERIALI SELEZIONATI E CORRETTAMENTE COMPATTATI IN ACCORDO AL REF. 8 O CON UN INCREMENTO DELLO SPESSORE DEL MAGRONE.
- BAR OVERLAPS SHALL BE AT LEAST 50 DIAMETERS / LA SOVRAPPORZIONE DELLE ARMATURE DOVRA' ESSERE ALMENO 50 DIAMETRI
- REFER TO REF. 1 FOR CONSTRUCTION REQUIREMENTS OF CONCRETE WORKS. / FARE RIFERIMENTO AL REF. 1 PER I REQUISITI DI COSTRUZIONI DI TUTTE LE STRUTTURE IN CALCESTRUZZO.
- AFTER ANCHOR BOLTS INSTALLATION AND BEFORE CONCRETE POURING AN ACCURATE CHECK OF ANCHOR BOLTS POSITION SHALL BE CARRIED OUT BY CIVIL SUBCONTRACTOR. / DOPO L'INSTALLAZIONE DEI TIRAFONDI E PRIMA DEL GETTO DEVE ESSERE ESEGUITO UN ACCURATO CONTROLLO DELLA LORO POSIZIONE DA PARTE DEL SUBAPPALTATORE CIVILE.

CONCRETE / CALCESTRUZZO

REFERENCE STANDARD / NORMATIVA DI RIFERIMENTO	NTC 14-01-2008, EN 206-1
STRUCTURAL CONCRETE GRADE / CLASSE DEL CLS STRUTTURALE	C 28/35
LEAN CONCRETE GRADE / CLASSE DEL MAGRONE	C 12/15
CEMENT TYPE / TIPO DI CEMENTO	CEM IV/B 32.5 or CEM IV/B-M 42.5
MINIMUM CEMENT CONTENT (STRUCTURAL CONCRETE) CONTENUTO MINIMO DI CEMENTO (CALCESTRUZZO STRUTTURALE)	350 kg/m³
MINIMUM CEMENT CONTENT (LEAN CONCRETE) CONTENUTO MINIMO DI CEMENTO (MAGRONE)	270 kg/m³
EXPOSURE CLASS / CLASSE DI ESPOSIZIONE	XC2 (FOR FOUNDATIONS) XC3 (FOR RISING STRUCTURES)
PROPOSED SLUMP CLASS / CLASSE DI SLUMP PROPOSTA	S3 (100 - 150 mm) FOR HORIZONTAL STRUCTURES S4 (160 - 200 mm) FOR VERTICAL STRUCTURES
WATER SHALL COMPLY WITH REQUIREMENTS OF EN 1008 / L'ACQUA DEVE SODDISFARE LE RICHIESTE DELLA EN 1008	

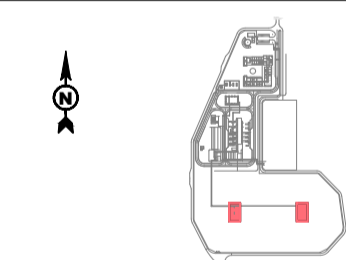
REINFORCEMENT STEEL / BARRE DI ARMATURA


REFERENCE STANDARD / NORMATIVA DI RIFERIMENTO	NTC 14-01-2008, ENV 1992-1-1 (EC2)
STEEL BARS / BARRE DI ACCIAIO	B450C

MINIMUM BAR COVER / COPRIFERRO MINIMO

FOR ALL SURFACES / PER OGNI SUPERFICIE	40 mm
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KEY PLAN / PIANTA CHIAVE



CONTRACTOR DOCUMENT NUMBER N. DOCUMENTO APPALTATORE	7900-CH-000160	REVISION NO. REVISIONE N.	0	
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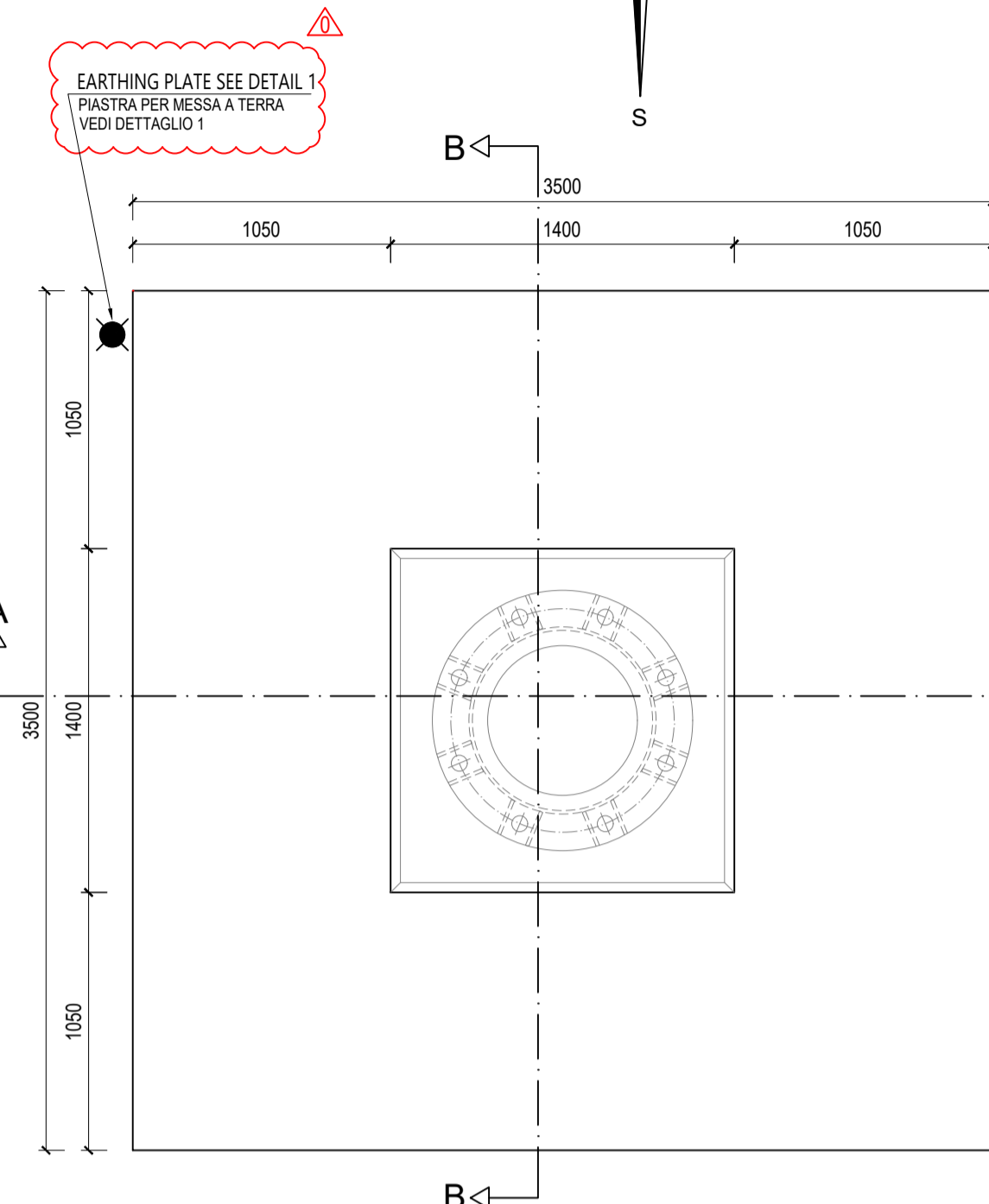
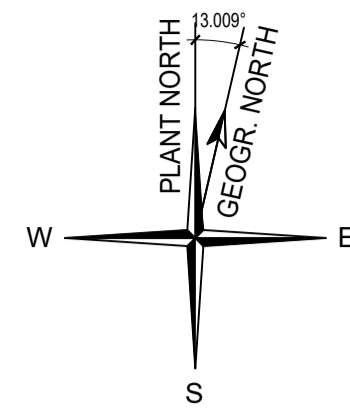
0	ISSUED FOR CONSTRUCTION	PMB	LEVANTINI/PIROMALLI	28-07-2017	
A	ISSUED FOR REVIEW	PMB	LEVANTINI/PIROMALLI	26-06-2017	
REV. REV.	REMARK / DESCRIPTION NOTA / DESCRIZIONE	PREP ELA.	VFY VER.	APR APP.	DATE DATA

PROJECT TITLE / TITOLO PROGETTO: **TRANS ADRIATIC PIPELINE
GASDOTTO TRANS ADRIATICO**

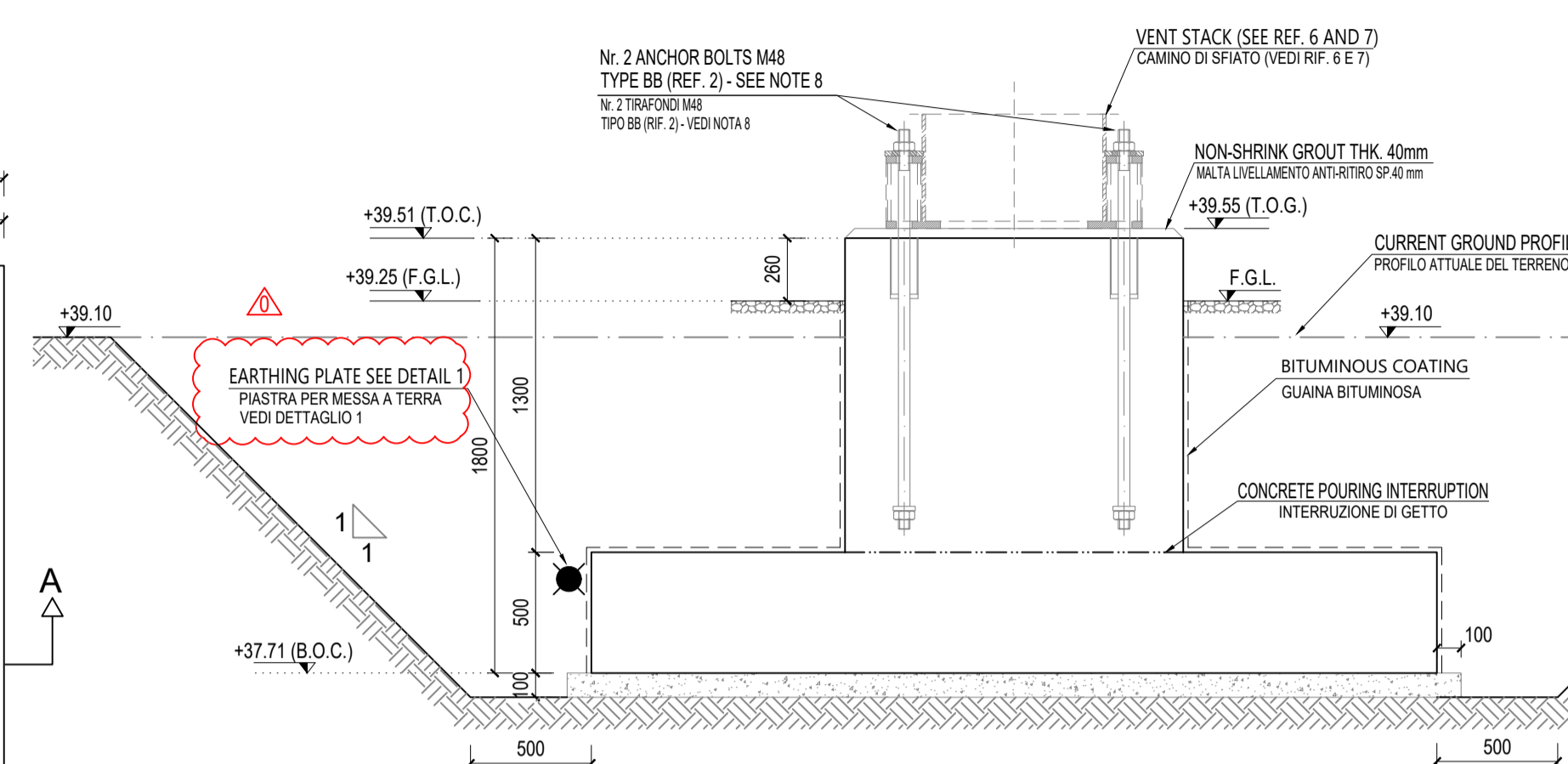
DRAWING TITLE / TITOLO DISEGNO: **FOUNDATIONS FOR VENT STACKS
FORMWORK AND REINFORCEMENT
FONDAZIONI CAMINI DI SFATIO - CASSERI ED ARMATURE**

Format Formato	A1	SCALE Scala	1:25	FACILITY CODE COD. IMPIANTO	IPR01	SYSTEM NO. SISTEMA N.	961	SHEET FOGLIO	1 of 1	RD CODE CODICE RD	-	REVISION NO. REVISIONE N.	0
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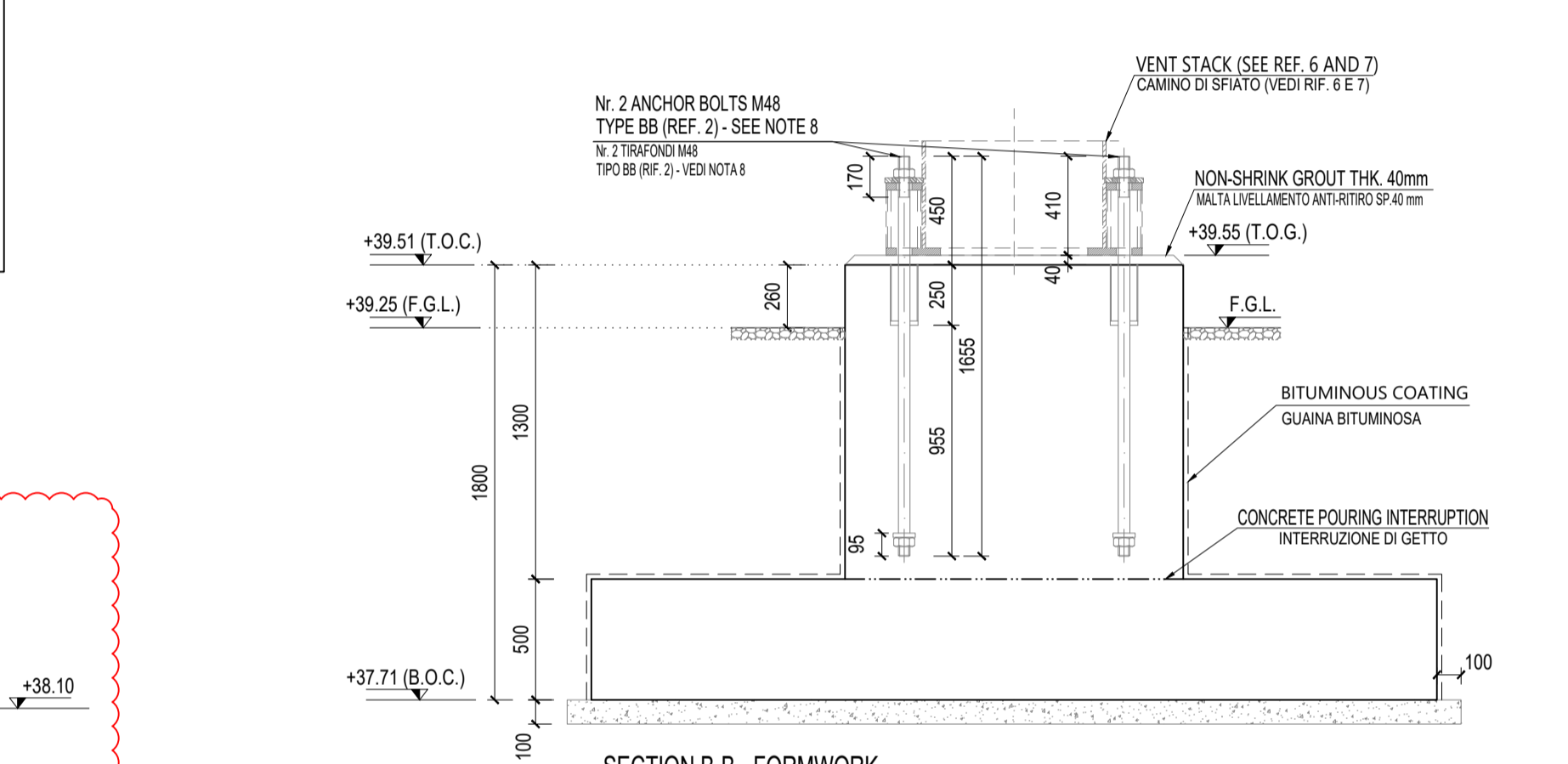
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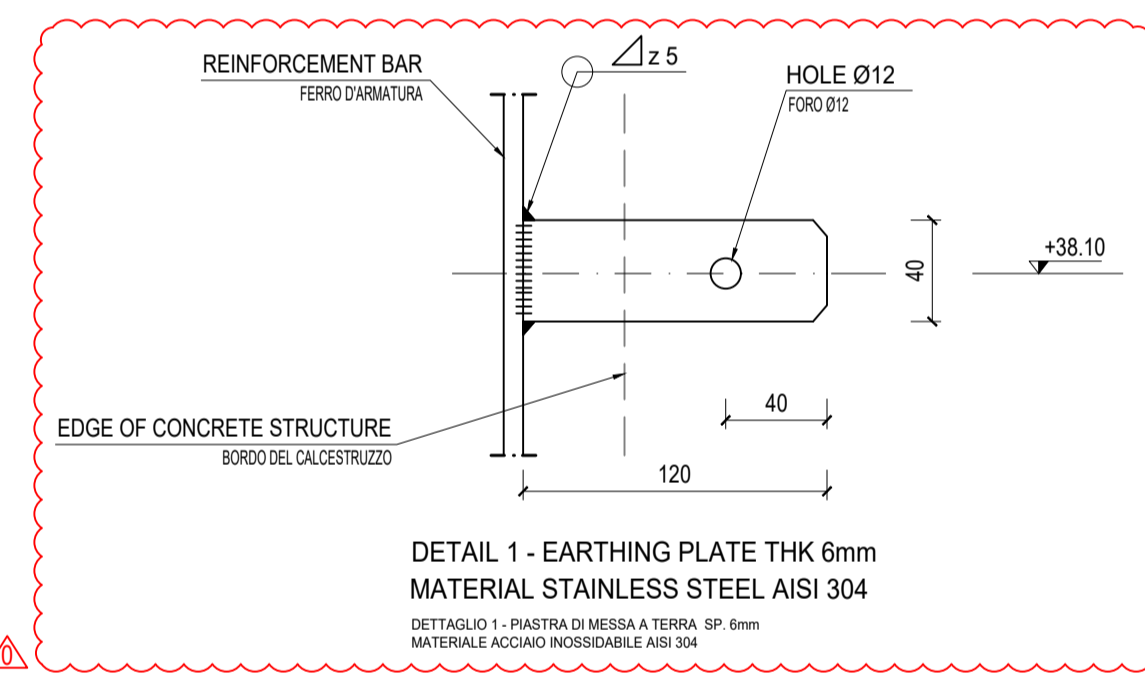
FOUNDATION PLAN +39.58 - FORMWORK
PIANTA FONDAZIONE +39.58 - CASSERATURE



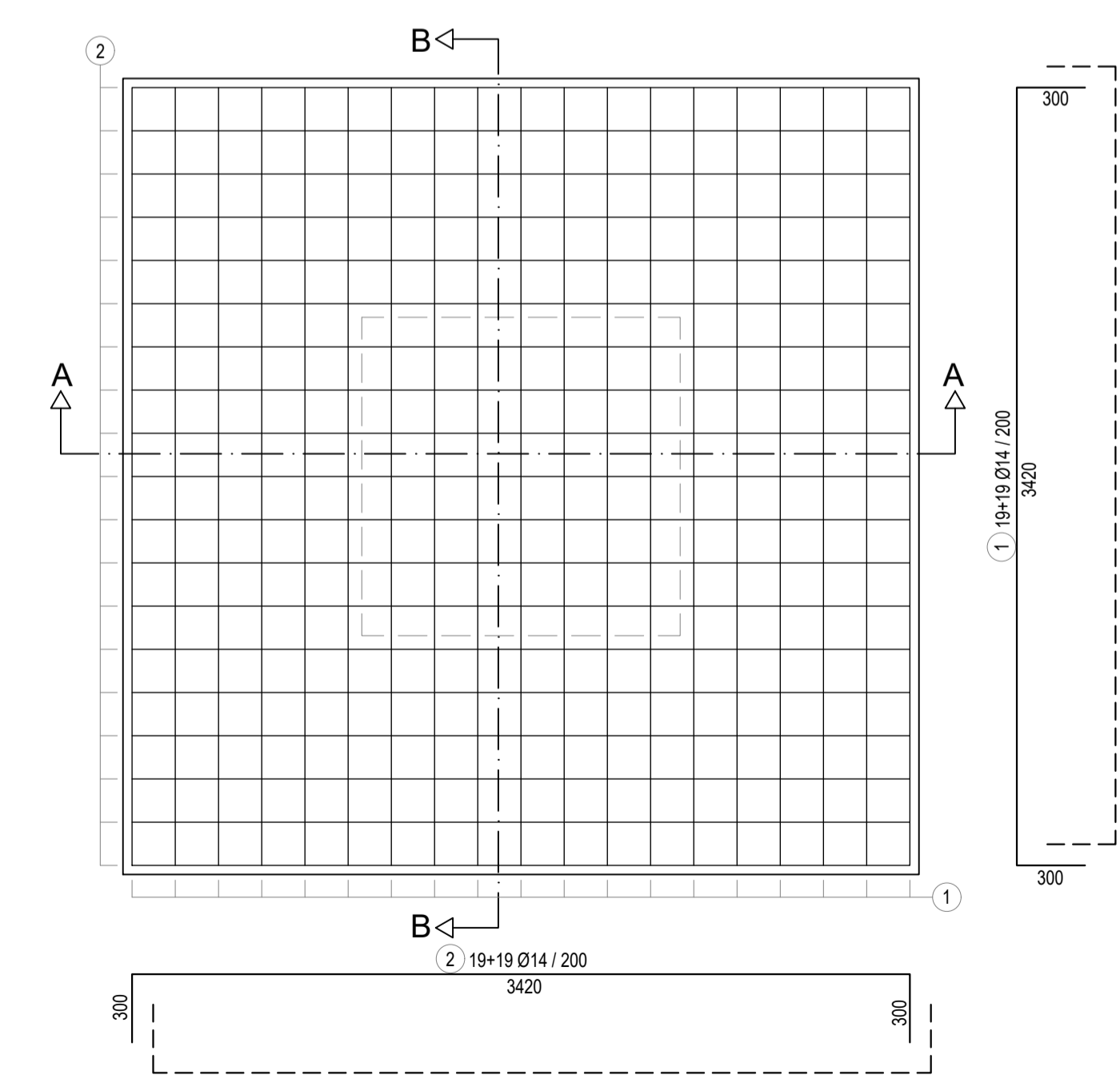
SECTION A-A - FORMWORK
SEZIONE A-A - CASSERATURE



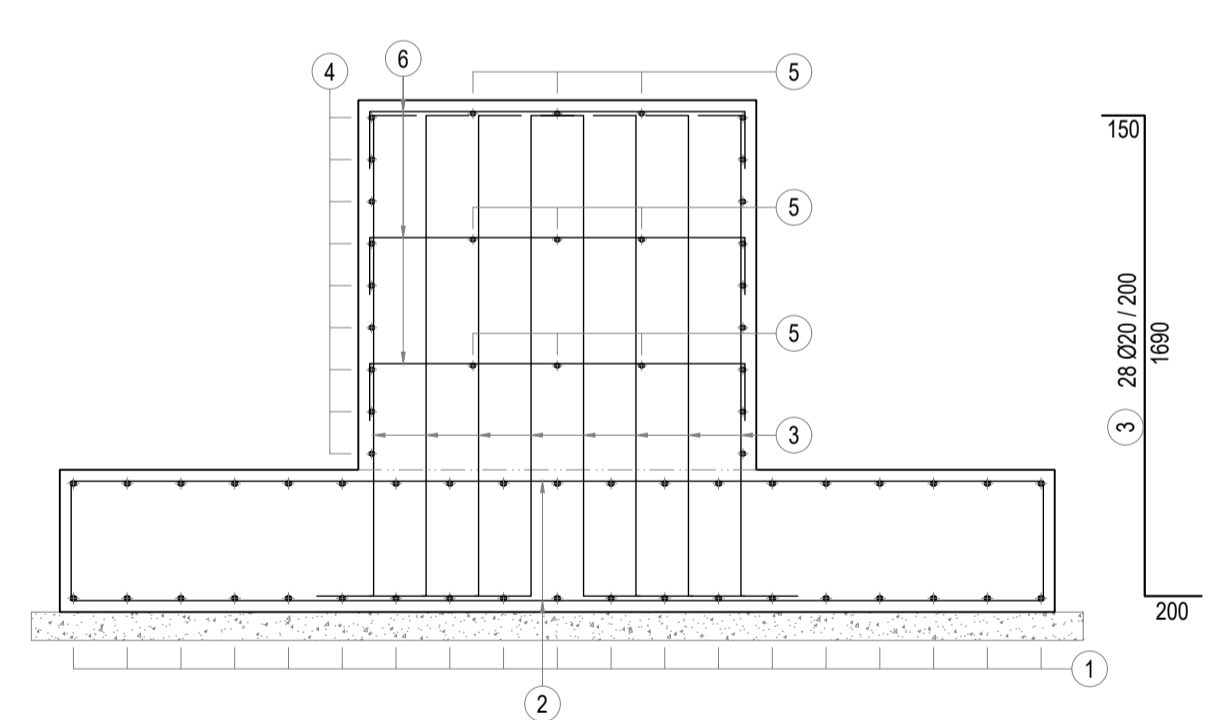
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SEZIONE B-B - CASSERATURE



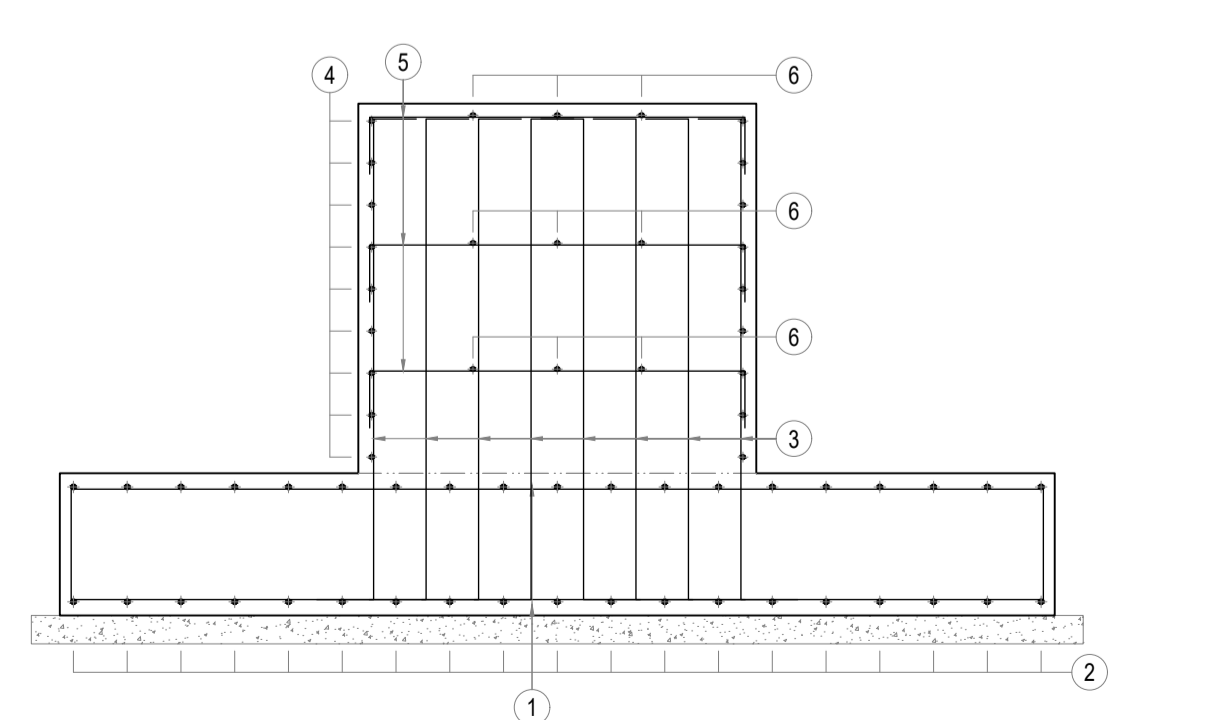
DETAIL 1 - EARTHING PLATE THK 6mm
MATERIAL STAINLESS STEEL AISI 304
DETTAGLIO 1 - PIASTRA DI MESSA A TERRA, SP. 6mm
MATERIALE ACCIAIO INossidabile AISI 304



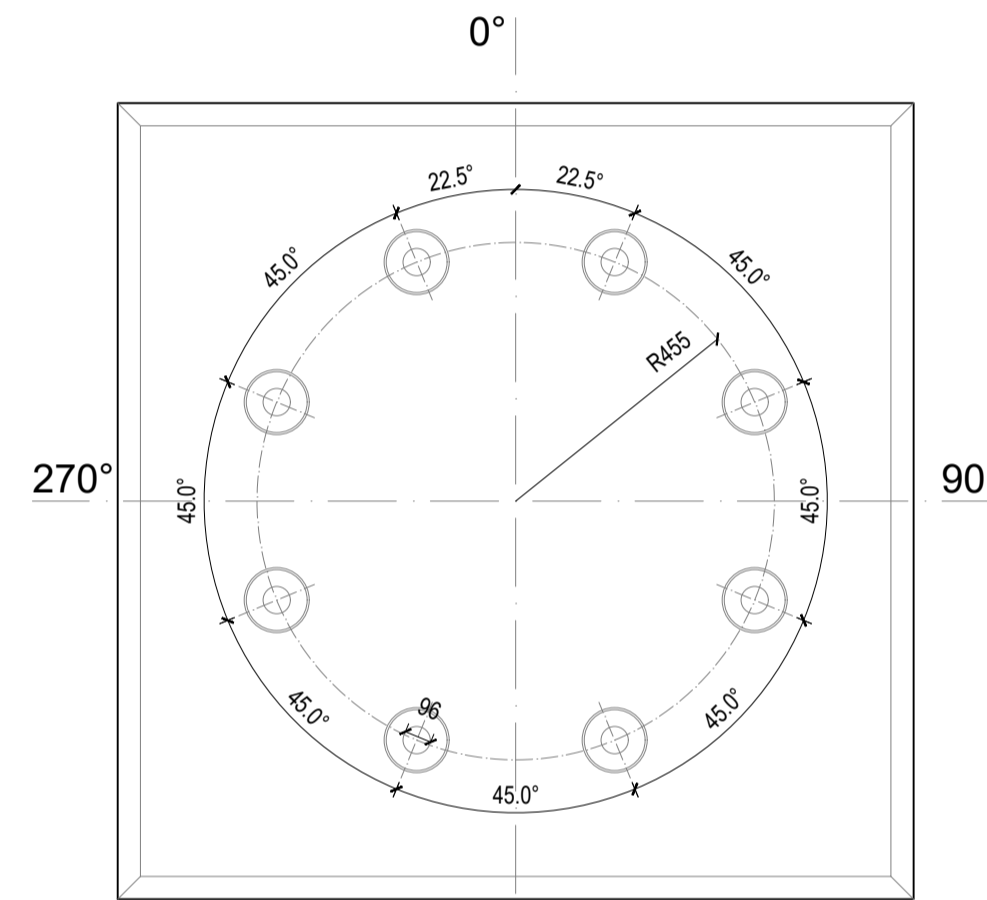
FOUNDATION PLAN - REINFORCEMENT
PIANTA FONDAZIONE - ARMATURA



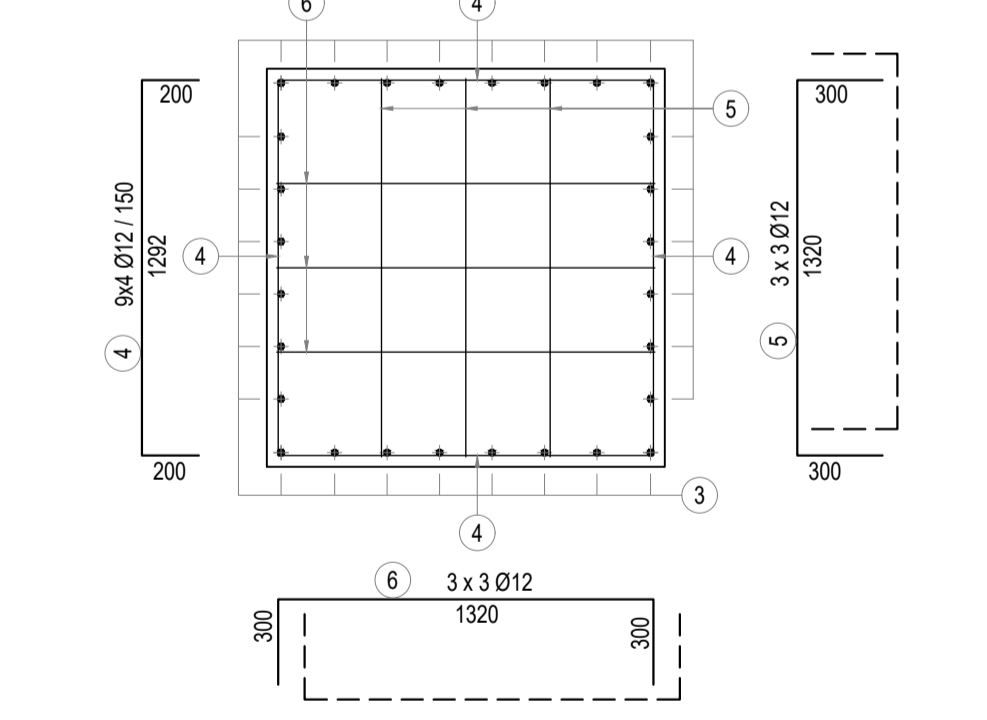
SECTION A-A - REINFORCEMENT
SEZIONE A-A - ARMATURA



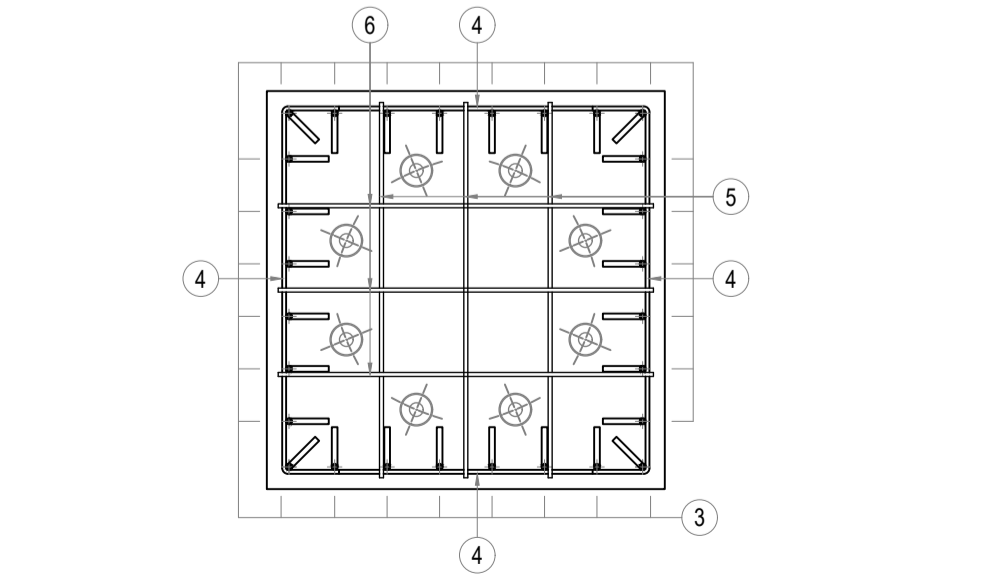
SECTION B-B - REINFORCEMENT
SEZIONE B-B - ARMATURA



ANCHOR BOLTS POSITIONING DETAIL
DETTAGLIO PER POSIZIONAMENTO DEI TIRAFONDI
SCALE / SCALA 1:25



PLAN +39.51 - REINFORCEMENT
PIANTA +39.51 - ARMATURA



REINFORCEMENT POSITIONING ON COLUMN
POSIZIONAMENTO ARMATURE SULLA COLONNA