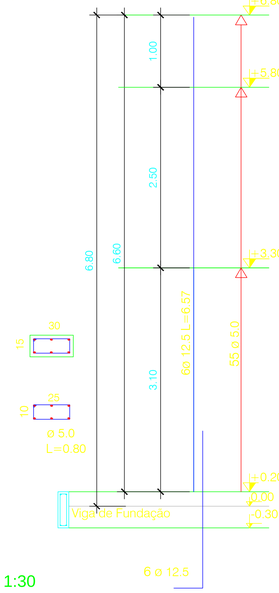
(15x30) - P1, P2, P3, P5



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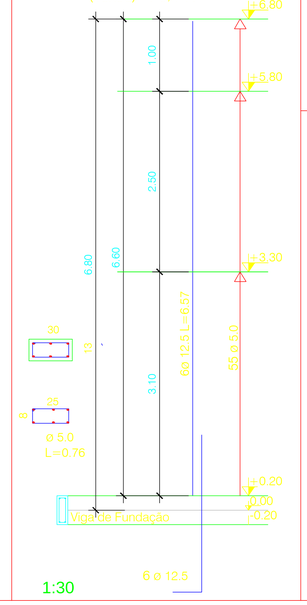
(13x30) - P6, P7.



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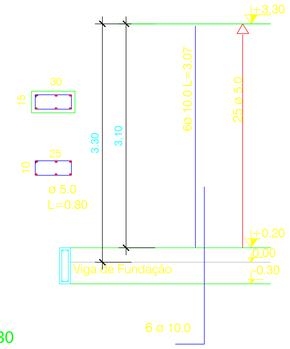
(15x30) - P4, P8, P14, P15, P16, P17.



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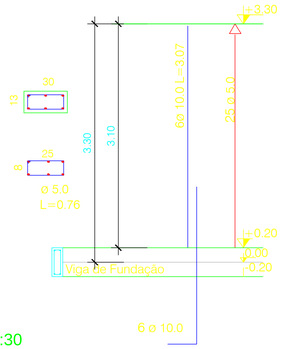
(13x30) - P9, P10, P11, P13.



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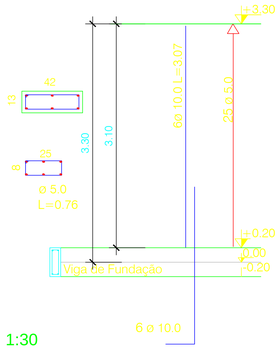
(13x42) - 12



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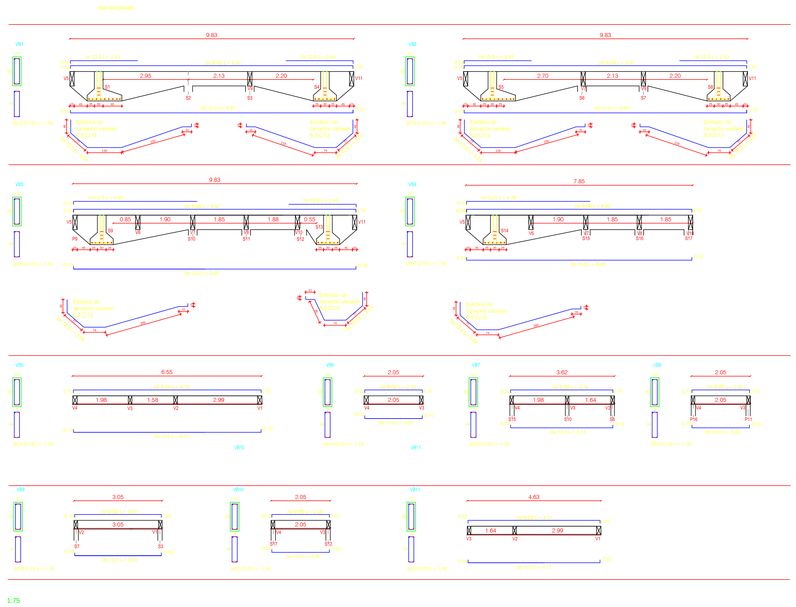
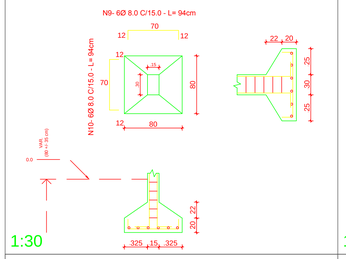


SAPATA 80 X 80 - PILAR (15 X 30) S15, S16, S17.



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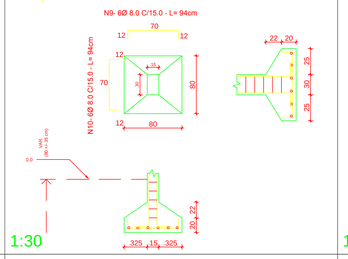
SAPATA 80 X 80 - PILAR (15 X 30) QUE MORRE NA VIGA DE BALDRAME S4, S14.



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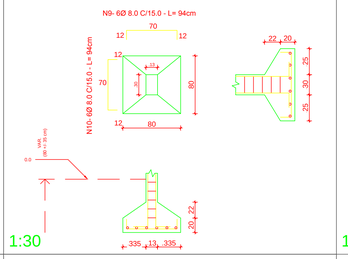
SAPATA 80 X 80 - PILAR (13 X 30) S10, S11.



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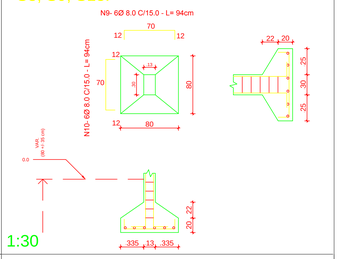
SAPATA 80 X 80 - PILAR (13 X 30) QUE MORRE NA VIGA DE BALDRAME S8, S9, S13.



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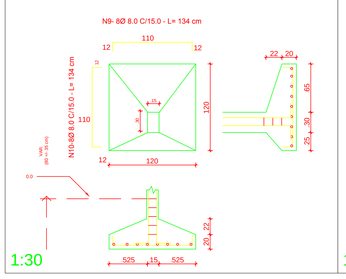
SAPATA 120 X 120 - PILAR (15 X 30) S1, S5.



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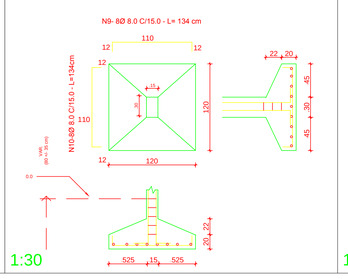
SAPATA 120 X 120 - PILAR (15 X 30) S2, S3.



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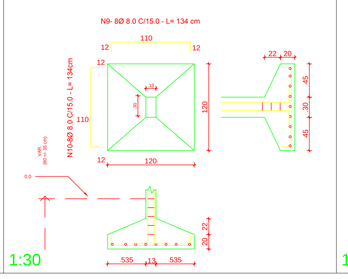
SAPATA 120 X 120 - PILAR (13 X 30) S6, S7.



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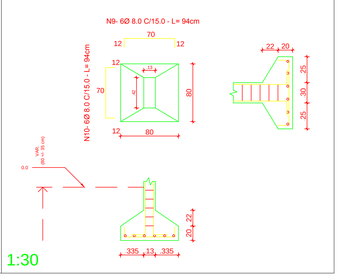
SAPATA 80 X 80 - PILAR (13 X 42) S12



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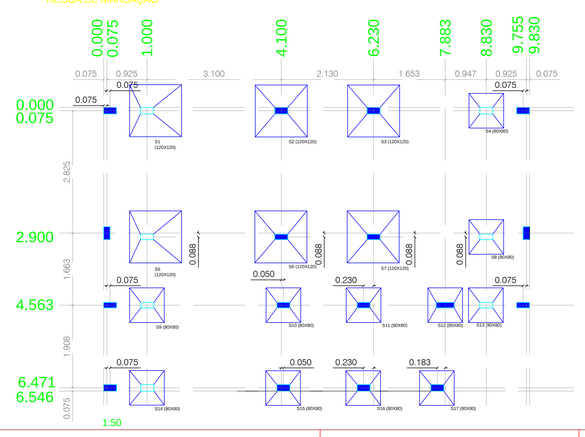
RÉGUA DE MARCAÇÃO



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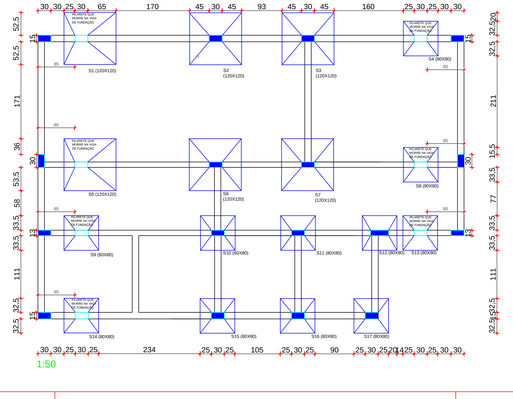
SAPATAS



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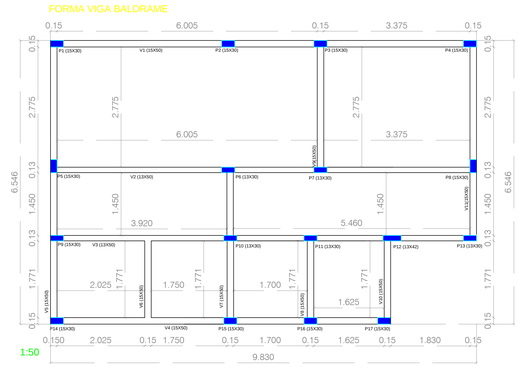
FORMA VIGA BALDRAME



1:50

SAPATAS			
Bitola	Quant.	Peso +10%	Unid.
Concreto	1,77		m³
Forma	22,35		m²
Lastro	10,88	1,088	m³
Ø 8,0	80,54	88,6394	kg

PILARES			
Bitola	Quant.	Peso +10%	Unid.
Concreto	1,18		m³
Forma	47,2		m²
Ø 5,0	73,8	81,18	kg
Ø 10,0	253,1	277,31	kg
Ø 12,5	345,6	381,767	kg

VIGA BALDRAME		
Bitola	Quant.	Peso +10%
Concreto	5,83	
Forma	80,88	
Ø 5,0	50,35	55,38
Ø 6,3	78,20	86,02
Ø 8,0	49,81	54,79
Ø 10,0	77,80	85,58
Ø 12,5	80,29	88,32

PREFEITURA MUNICIPAL DO RIO GRANDE

SECRETARIA MUNICIPAL DE COORDENAÇÃO E PLANEJAMENTO

UBS BARRA

BARRA | RIO GRANDE | RS

PROJETO ESTRUTURAL

FUNDAÇÕES E PILARES

SMCP 04.2018

OLDAIR ANTONIO COLARES
ENG. CIVIL - CREA RS 136653

01/02

ESCALA INDICADA

CTB SMCP_PADRÃO