

Locação no eixo X	
Coordenadas (cm)	Nome
15.50	B3
300.50	B4
556.00	E1
811.50	B5
1112.00	B1
1112.50	B6
1381.55	B2
1381.59	B7
1677.10	B8
1991.05	B9
2307.09	B10
2584.50	B11

LOCALIZAÇÃO DAS ESTACAS											
Bloco	Nome	Tipo	Coordenada X (cm)	Coordenada Y (cm)	Carga máx. tf	Carga mín. tf	Momento máx. kgf.m	Momento mín. kgf.m	Força horiz. máx. tf	Força horiz. mín. tf	CA (cm)
B1	E1-1	R25	1112.00	99.45	1.77	0.07	570.84	2.88	0.46	0.00	-45
B2	E2-1	R25	1381.55	99.45	1.81	0.02	573.22	1.95	0.46	0.00	-45
B3	E3-1	R25	15.50	7.50	1.05	1.04	773.08	141.31	0.40	0.04	-35
B4	E4-1	R25	300.50	5.50	1.82	1.81	869.82	97.44	0.46	0.12	-35
B5	E5-1	R25	811.50	5.50	1.85	1.84	801.73	105.97	0.42	0.11	-35
B6	E6-1	R25	1112.50	5.50	2.30	0.60	538.48	97.12	0.46	0.06	-35
B7	E7-1	R25	1381.55	5.50	1.50	0.50	537.18	20.56	0.36	0.00	-35
B8	E8-1	R25	1677.10	5.50	1.70	1.69	774.12	17.68	0.49	0.00	-35
B9	E9-1	R25	1991.05	5.50	1.73	1.72	807.19	12.02	0.41	0.00	-35
B10	E10-1	R25	2307.09	5.50	1.67	1.66	840.69	25.75	0.42	0.00	-35
B11	E11-1	R25	2584.50	7.50	1.05	1.04	777.36	116.63	0.40	0.05	-35
E1	E1-1	C25	556.00	7.40	0.87	0.87	0.00	0.00	0.00	0.00	0

The diagram illustrates a 10-span continuous beam bridge. The spans are numbered 1 to 10. The bridge is supported by 11 piers, labeled P1 to P11. The dimensions and loads are as follows:

- Span 1:** Length 285. Pier P1: 18x30 cm, ha = 0 cm, hb = 50 cm, 1xR25.
- Span 2:** Length 255.5. Pier P2: 18x30 cm, ha = 0 cm, hb = 50 cm, 1xR25.
- Span 3:** Length 255.5. Pier P3: 18x30 cm, ha = 0 cm, hb = 50 cm, 1xR25.
- Span 4:** Length 300.5. Pier P4: 18x30 cm, ha = 0 cm, hb = 50 cm, 1xR25.
- Span 5:** Length 269.6. Pier P5: 18x30 cm, ha = 0 cm, hb = 50 cm, 1xR25. Pier P6: 18x30 cm, ha = 0 cm, hb = 60 cm, 1xR25.
- Span 6:** Length 295.6. Pier P7: 18x30 cm, ha = 0 cm, hb = 50 cm, 1xR25. Pier P8: 18x30 cm, ha = 0 cm, hb = 60 cm, 1xR25.
- Span 7:** Length 314. Pier P9: 18x30 cm, ha = 0 cm, hb = 50 cm, 1xR25.
- Span 8:** Length 316. Pier P10: 18x30 cm, ha = 0 cm, hb = 50 cm, 1xR25.
- Span 9:** Length 277.4. Pier P11: 18x30 cm, ha = 0 cm, hb = 50 cm, 1xR25.

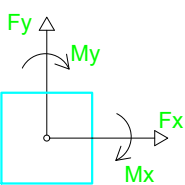
The bridge is subjected to a uniformly distributed load of 15.50 kN/m. The total length of the bridge is 2584.50 m. The bridge is supported by 11 piers, with the first pier (P1) located at the left end and the last pier (P11) at the right end. The bridge is shown in a plan view, with the spans and piers labeled. The dimensions are given in meters.

Escala 1:50

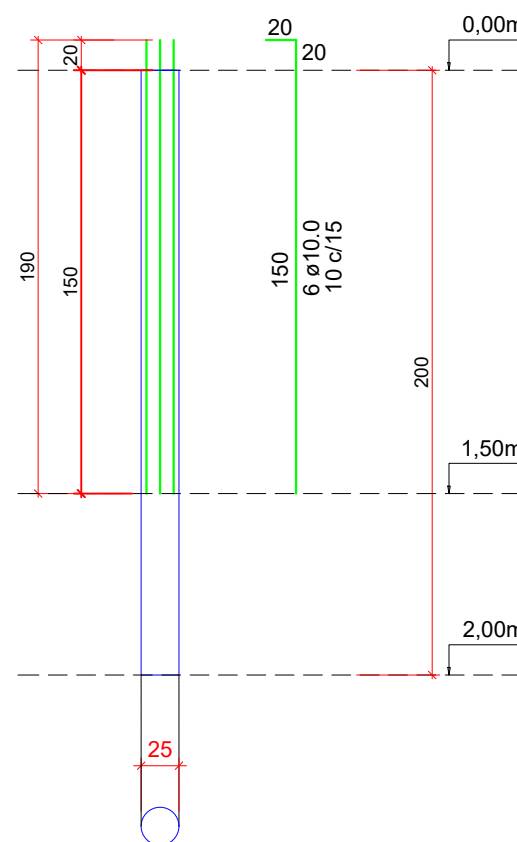
A square with side length 55. Inside the square is a circular hole with radius 11. The hole is divided into four equal quadrants by two perpendicular diameters. The top-left and bottom-right quadrants are shaded red, while the top-right and bottom-left quadrants are white.

Escala 1:25

A diagram of a rectangular plate with a blue top surface and a red bottom surface. The plate is supported by two red rectangular blocks. A coordinate system is shown with the origin at the bottom-left corner of the plate. The horizontal distance from the origin to the right edge is labeled ca . The vertical distance from the origin to the top edge is labeled hb . The total height of the plate is labeled ha . A dimension line indicates the total height ha from the bottom of the red blocks to the top of the blue surface. Another dimension line indicates the height hb from the origin to the top edge. A third dimension line indicates the horizontal distance ca from the origin to the right edge.



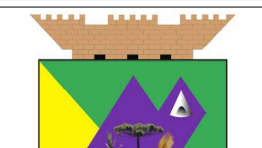
CORTE	SEÇÃO
ESC 1:50	ESC 1:20



SEÇÃO
ESC 1:20

LEGENDA:

 Estaca Escavada
12 Unidades

	PREFEITURA MUNICIPAL DE BITURUNA - PR Escola Municipal Antonio Greselle	
	Projeto:	
ESTRUTURAL MURO		
Cidade: Bituruna	Referência:	
Estado: Paraná	PLANTA DE LOCAÇÃO DE ESTACAS	
Desenho: ENG.FRANCIELE GONÇALVES	01 04	Responsável Técnico:
Escola: INDICADA		LUIZ RENATO FRIEDRICH RAMOS Engº Civil CREA 168233/D - PR
Data: ABRIL/2026		