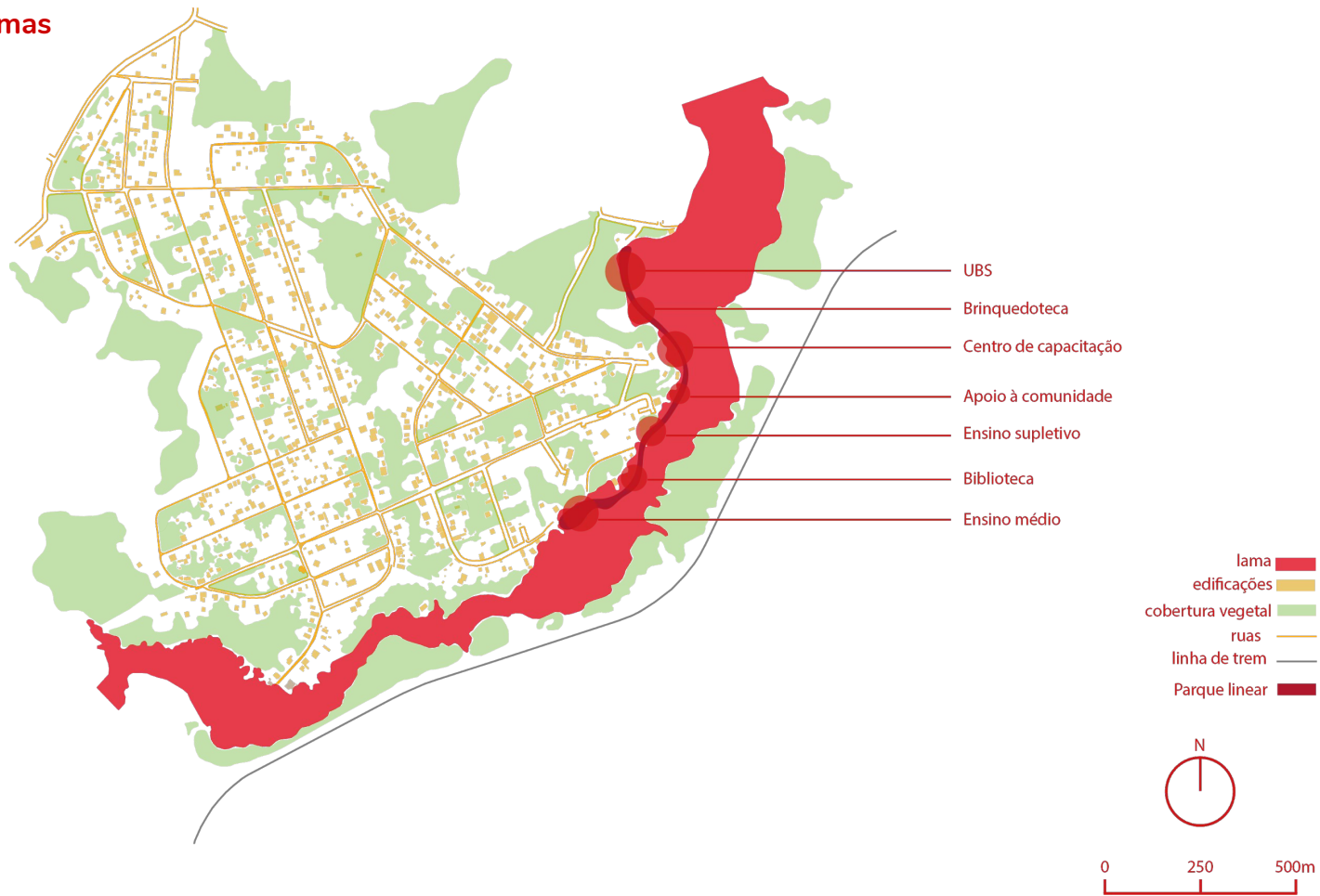


BAUBOTANIK: RECUPERAÇÃO EM ÁREAS DEGRADADAS

Grupo 07 | Fabiana Costa | Marcella Frassinelli

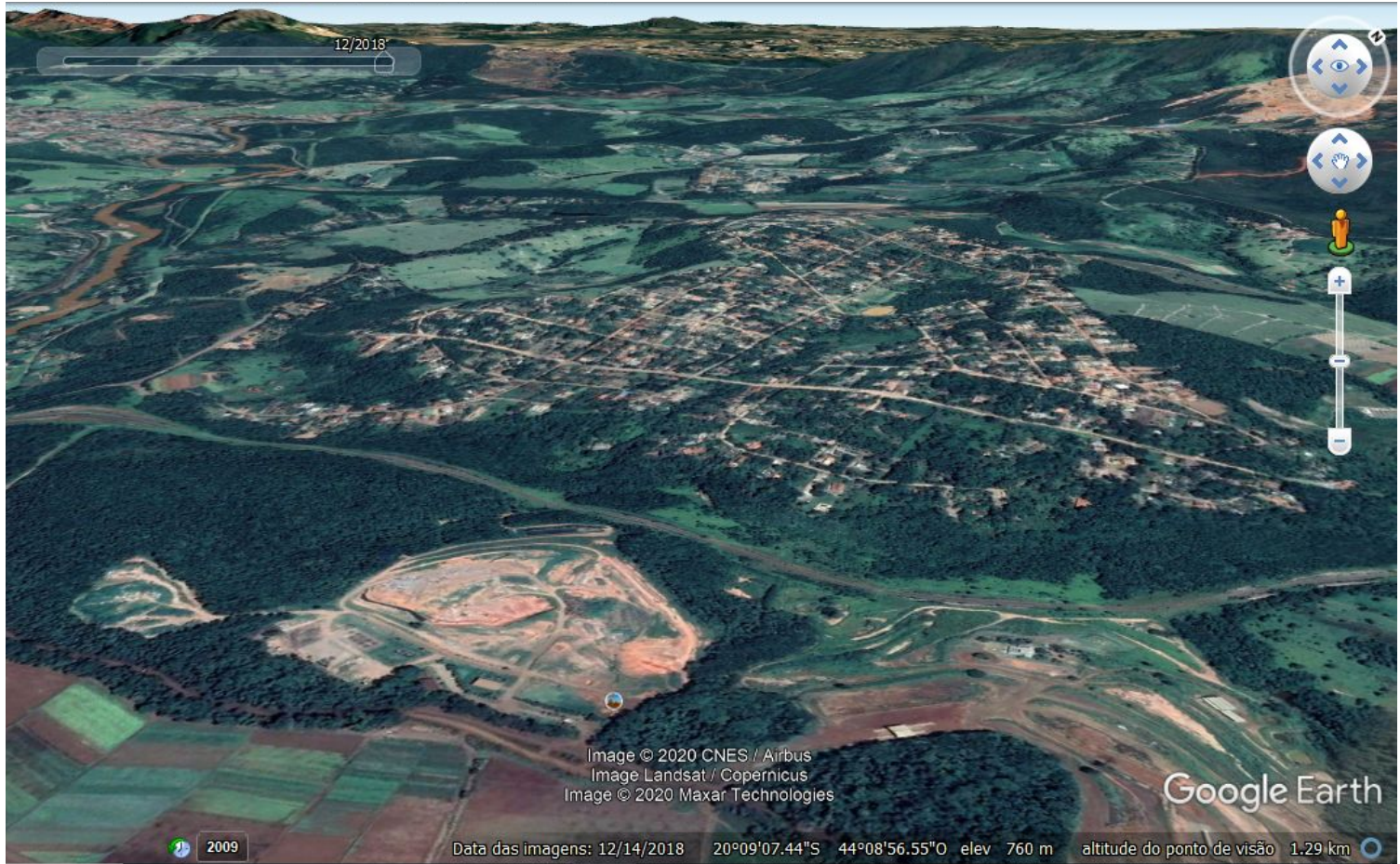
Distribuição dos programas



Imagens do bairro Parque Cachoeira







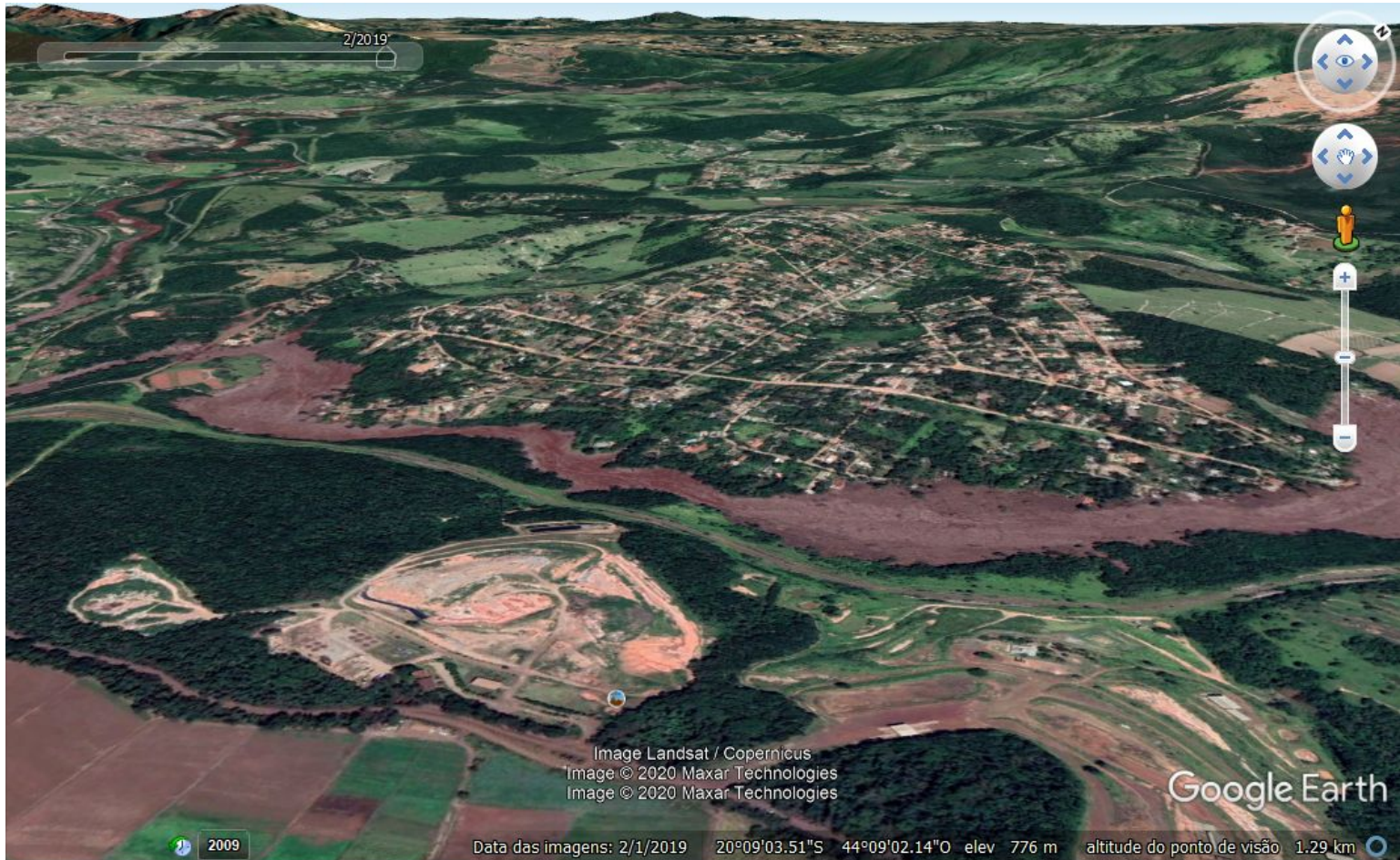
12/2018

Image © 2020 CNES / Airbus
Image Landsat / Copernicus
Image © 2020 Maxar Technologies

Google Earth

2009

Data das imagens: 12/14/2018 20°09'07.44"S 44°08'56.55"O elev 760 m altitude do ponto de visão 1.29 km



2/2019

Image Landsat / Copernicus
Image © 2020 Maxar Technologies
Image © 2020 Maxar Technologies

Google Earth

2009

Data das imagens: 2/1/2019 20°09'03.51"S 44°09'02.14"O elev 776 m altitude do ponto de visão 1.29 km

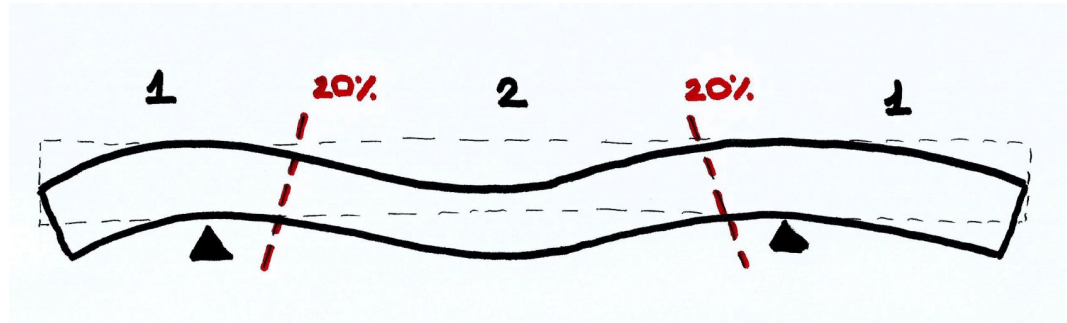
Cálculo Estrutural - Vigas

1) Viga em balanço de 1,75

$$L_o = 2 \cdot 1,75 = 3,5\text{m}$$

$$h = 3,5/15 = 0,24\text{m ou } 240\text{mm}$$

$$b = 0,24/1,5 \text{ a } 4 = 0,06\text{m (60mm) a } 0,16\text{m (160mm)}$$



2) Viga sem balanço de 5,5m

$$L_o = 0,6 \cdot 5,5 = 3,3\text{m}$$

$$h = 3,3/15 = 0,22\text{m ou } 220\text{mm}$$

$$b = 0,22/1,5 \text{ a } 4 = 0,055 \text{ (55mm) a } 0,147 \text{ (147mm)}$$

$$\text{Área} = 11400 \text{ a } 38400$$

$$D = 136 \text{ a } 221,6\text{mm}$$

$$\text{Bitola } 139,7, \text{ peso nominal: } 120,2\text{kg/m}$$

Cálculo Estrutural - Vigas

3) Viga de 3m

$h = 3/15 = 0,2\text{m}$ ou 200mm

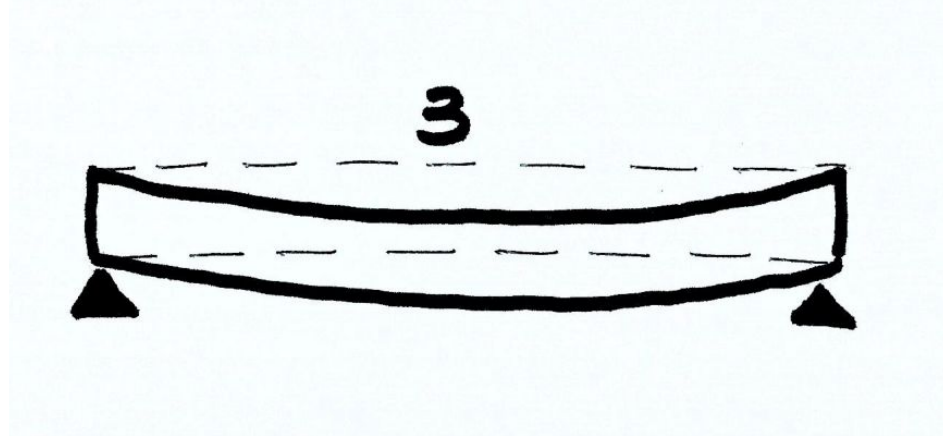
$b = 0,2/1,5 \text{ a } 4 = 0,05\text{m}$ (50mm) ou
0,14m (ou 140mm)

Área = 10000mm² a 28000mm²

D = 113 a 189mm

Bitola 120,65, peso nominal:

89,66kg/m



Detalhe do encontro da estrutura

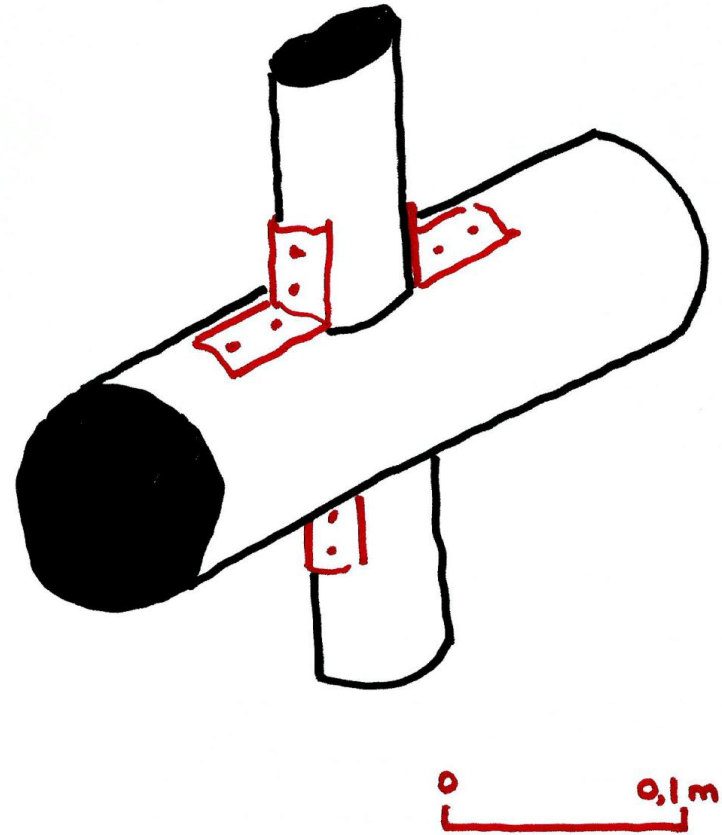
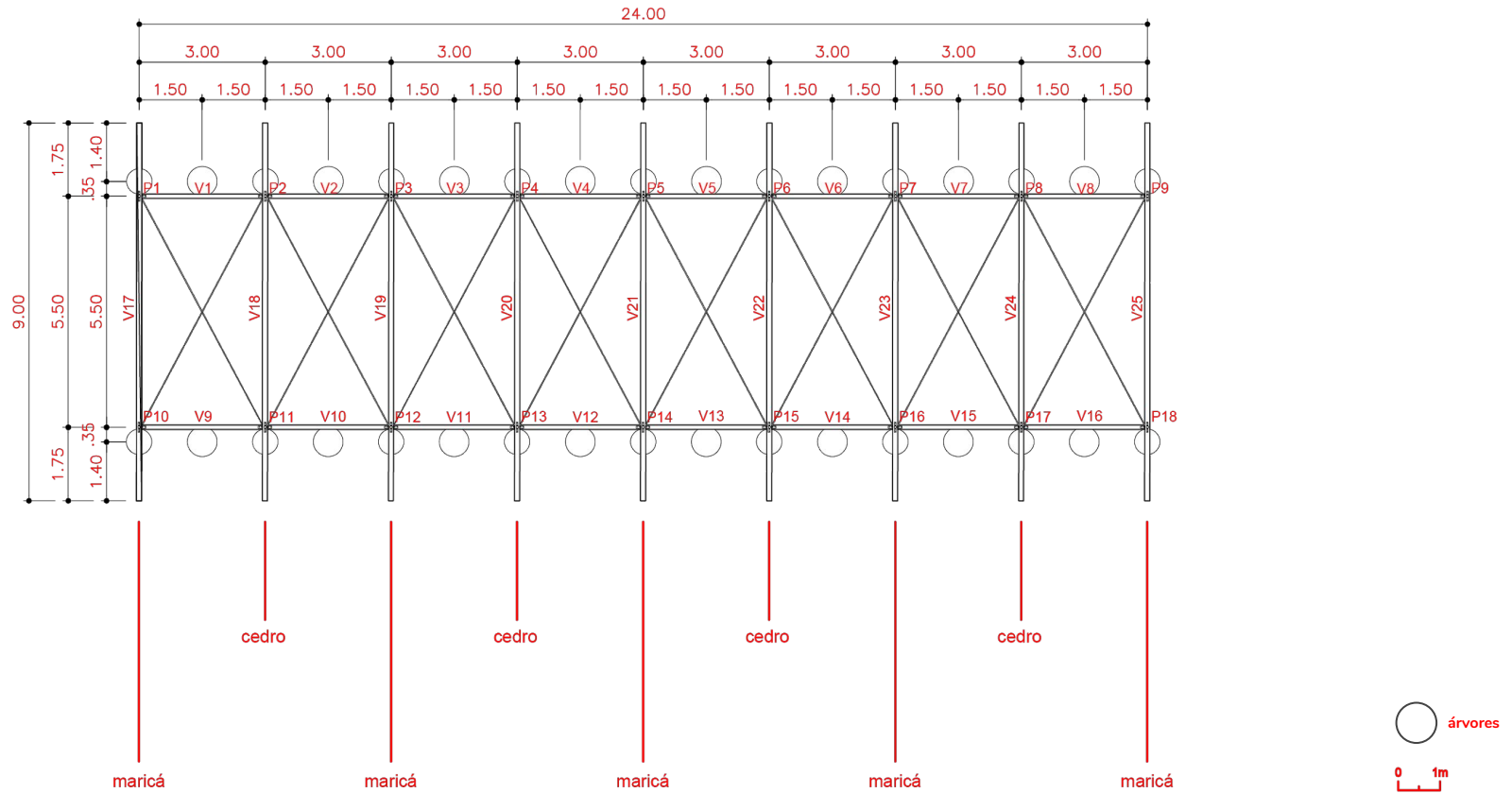


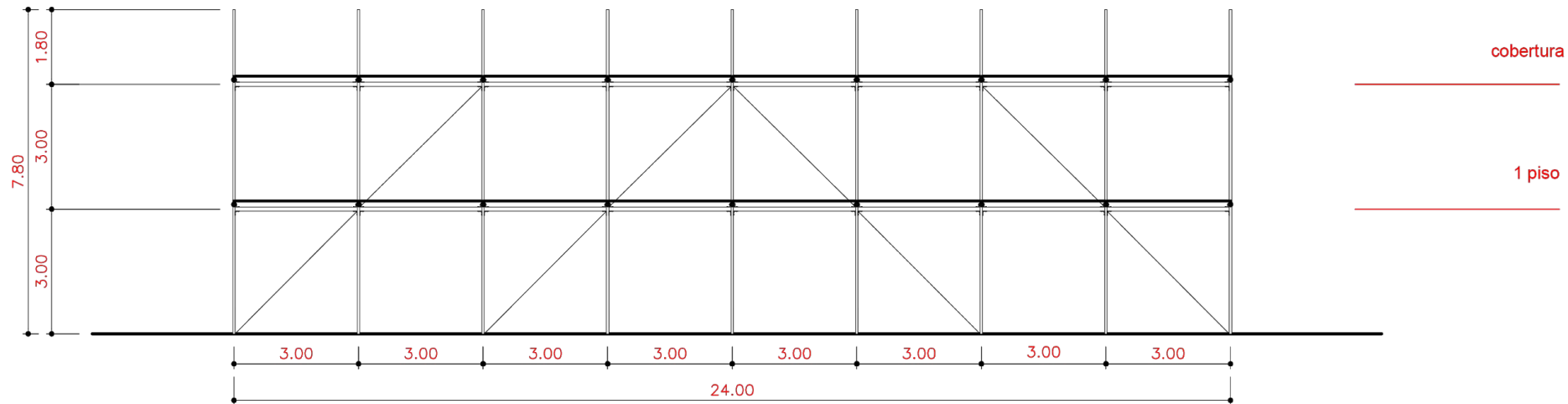
Foto da ligação entre árvore e estrutura



Planta geral

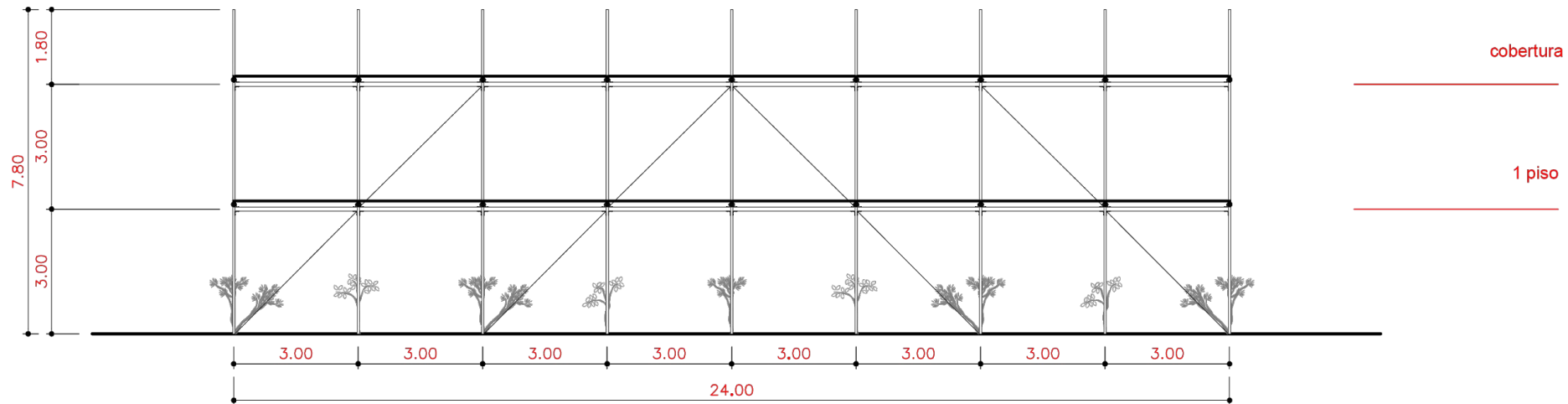


Corte longitudinal da estrutura



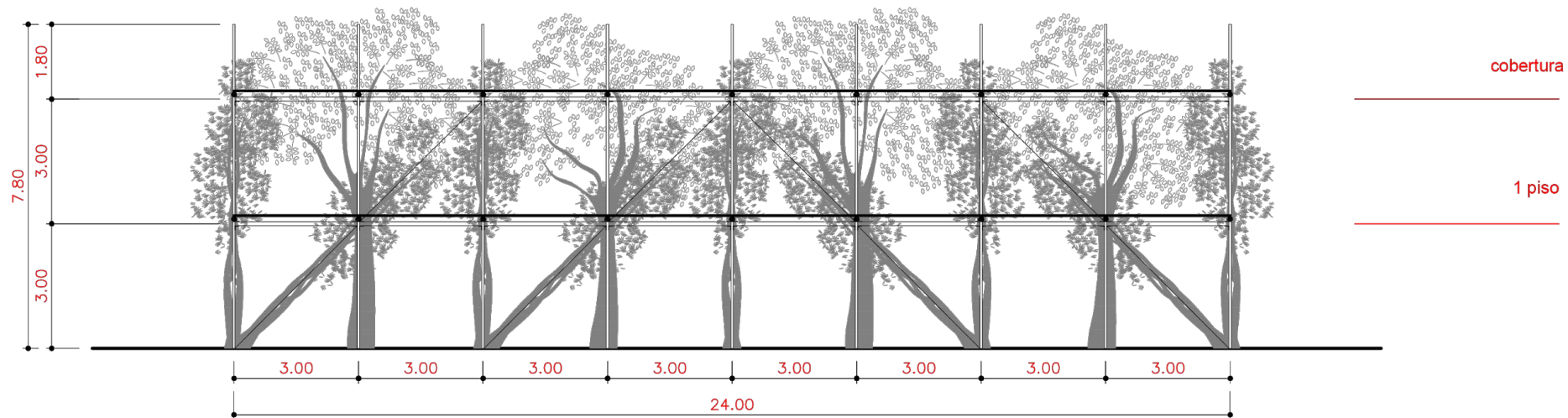
Corte longitudinal | desenvolvimento

1/3



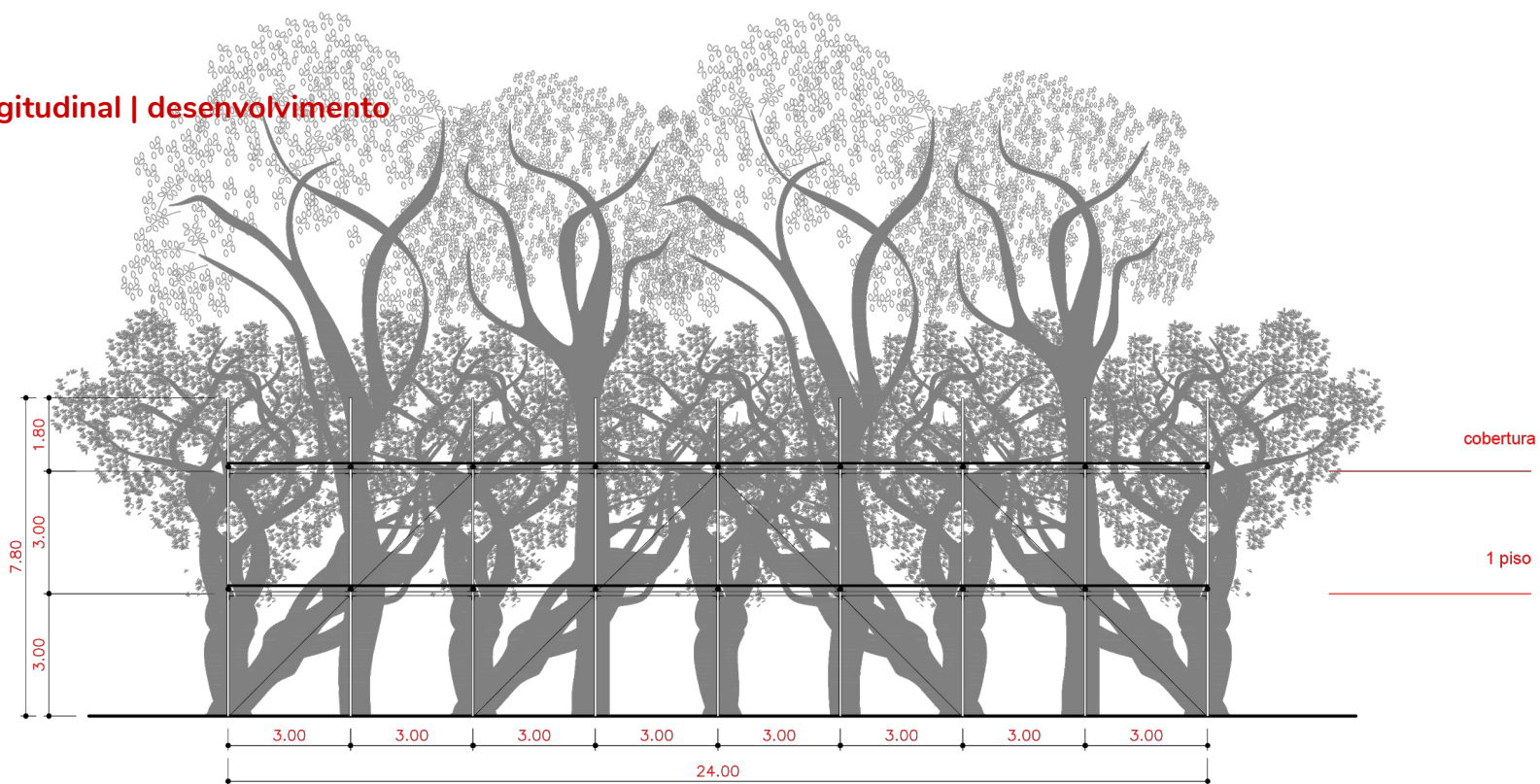
Corte longitudinal | desenvolvimento

2/3

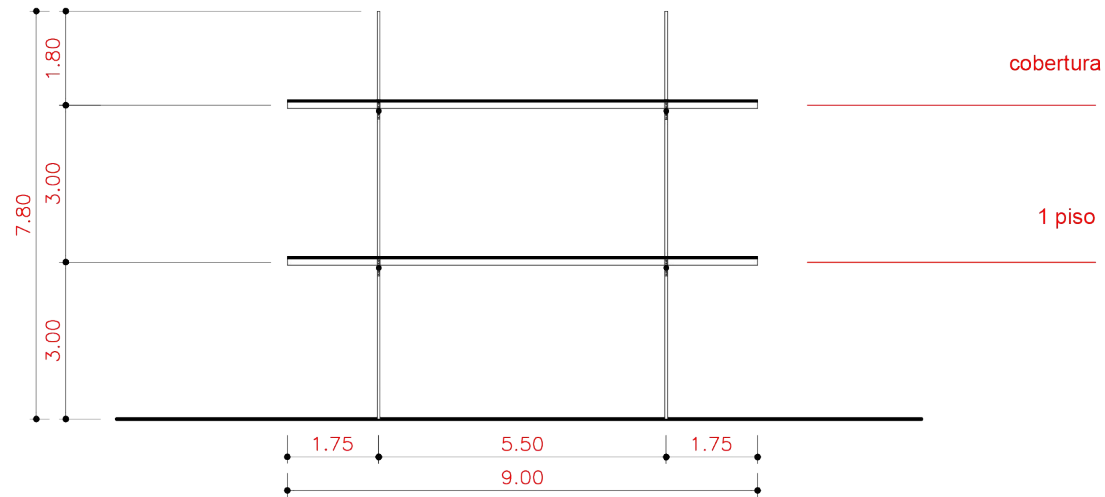


Corte longitudinal | desenvolvimento

3/3

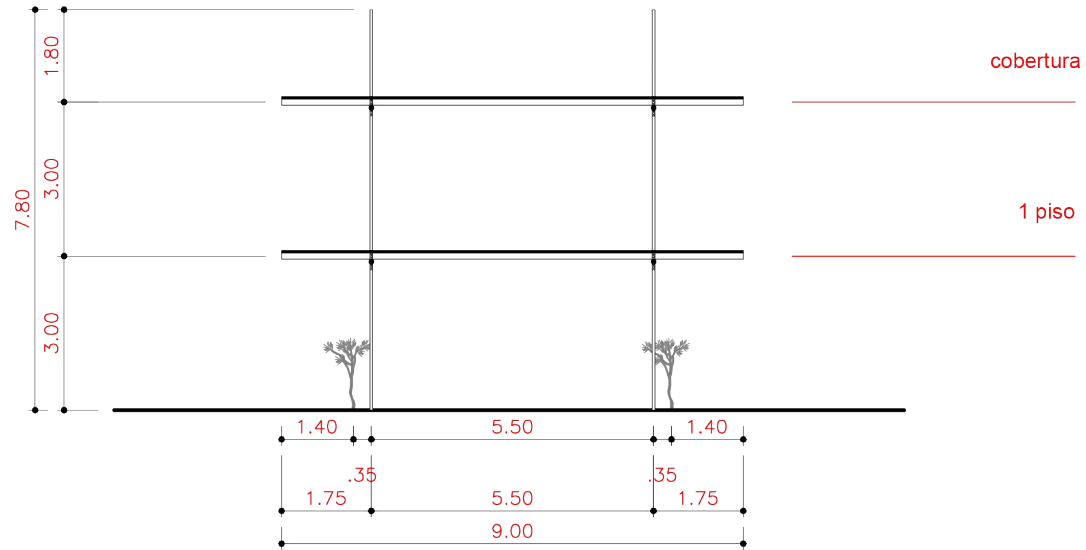


Corte transversal da estrutura



Corte transversal | desenvolvimento

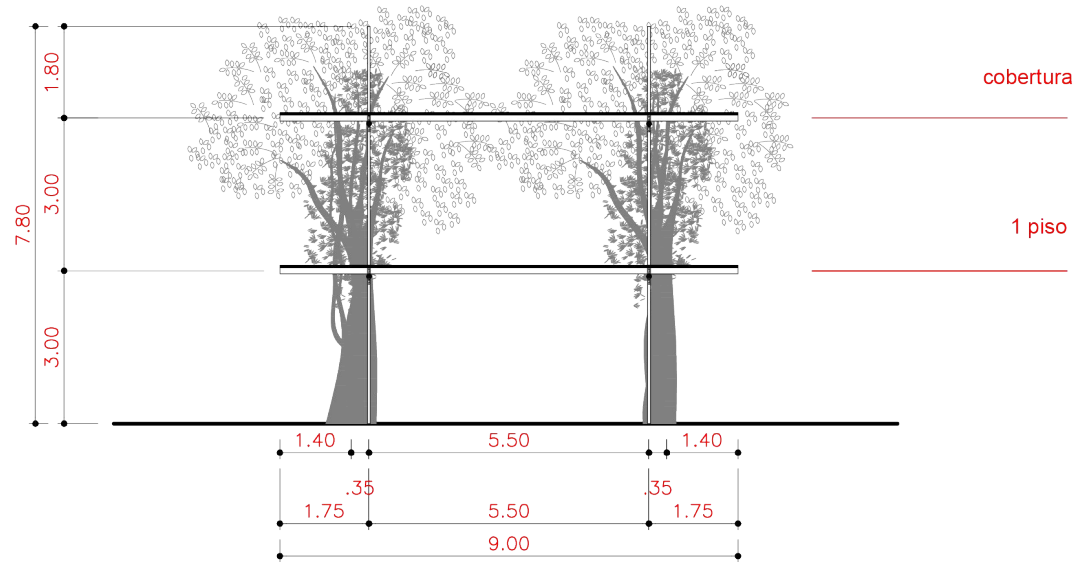
1/3



0 1m

Corte transversal | desenvolvimento

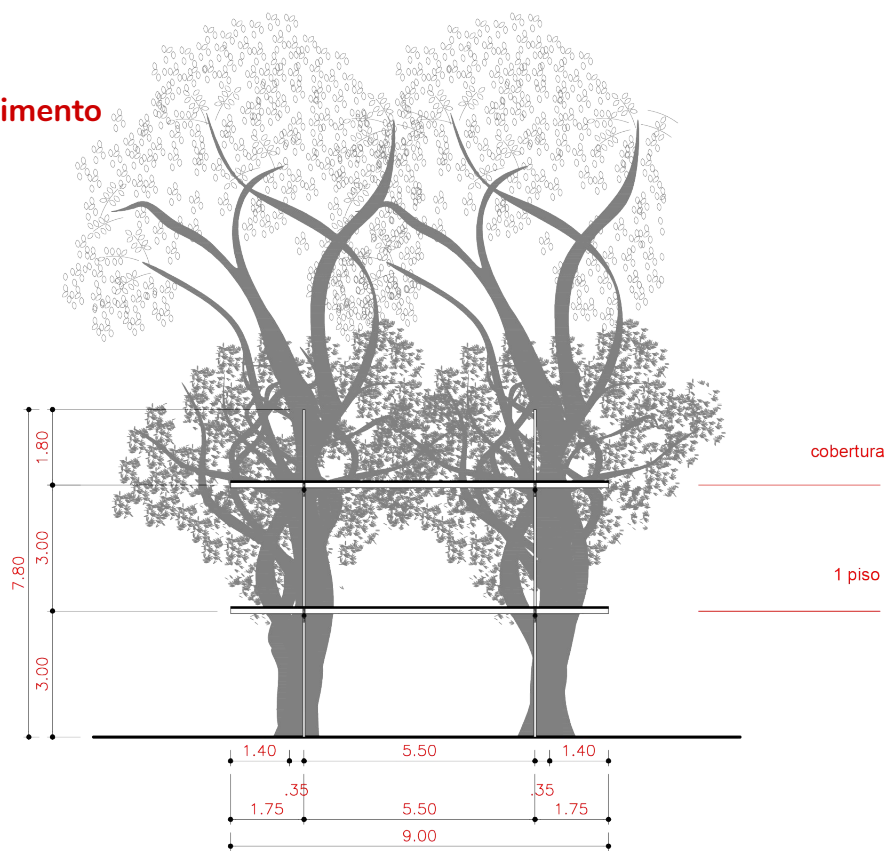
2/3



0 1m

Corte transversal | desenvolvimento

3/3



0 1m

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