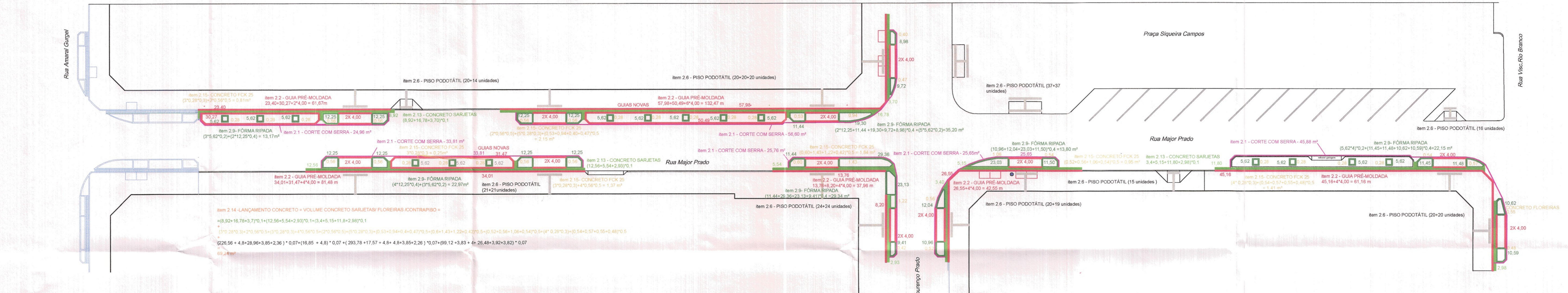
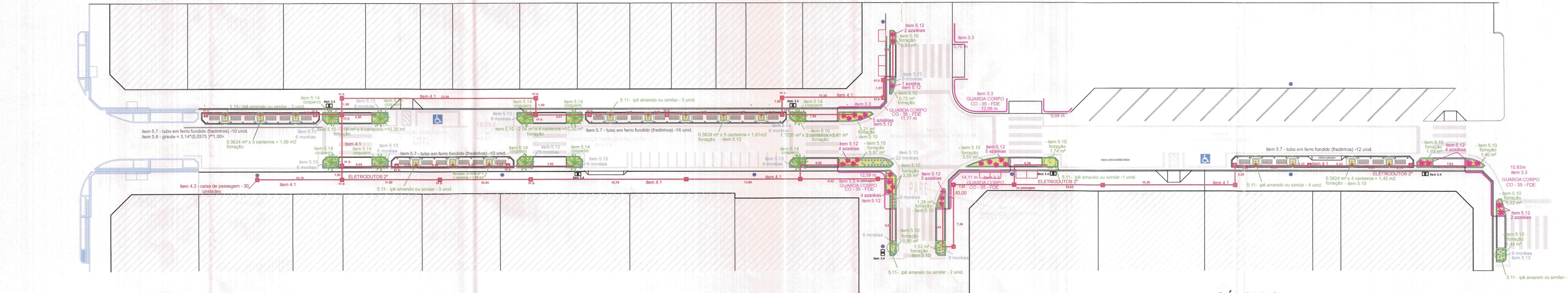


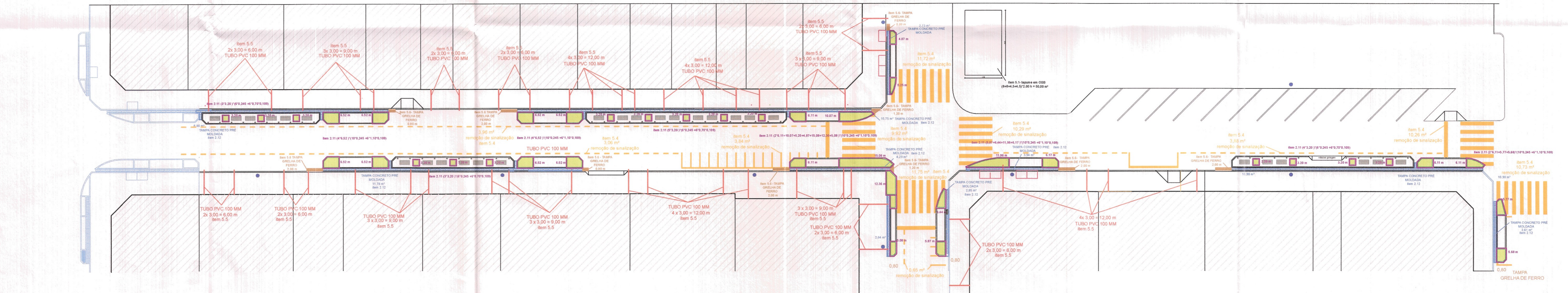
**CÁLCULO ITENS:**  
 1.3 / 1.4 / 1.5 / 1.6 / 2.3 / 2.4 / 2.5  
 2.8 / 2.10 / 2.16 / 5.2 / 5.15



**CÁLCULO ITENS:**  
 2.1 / 2.2 / 2.6 = 2.7 / 2.9 / 2.13 / 2.14 / 2.15

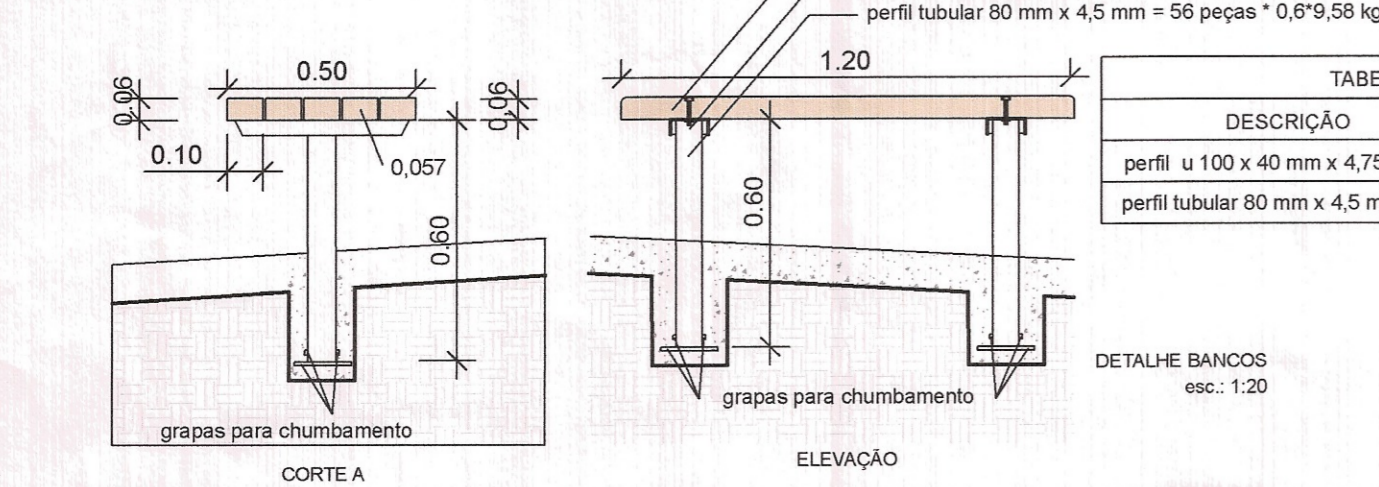


**CÁLCULO ITENS:**  
 3.3 / 3.4 / 4.1 / 4.2 / 5.3 / 5.7 / 5.10 /  
 5.11 / 5.12 / 5.13 / 5.14



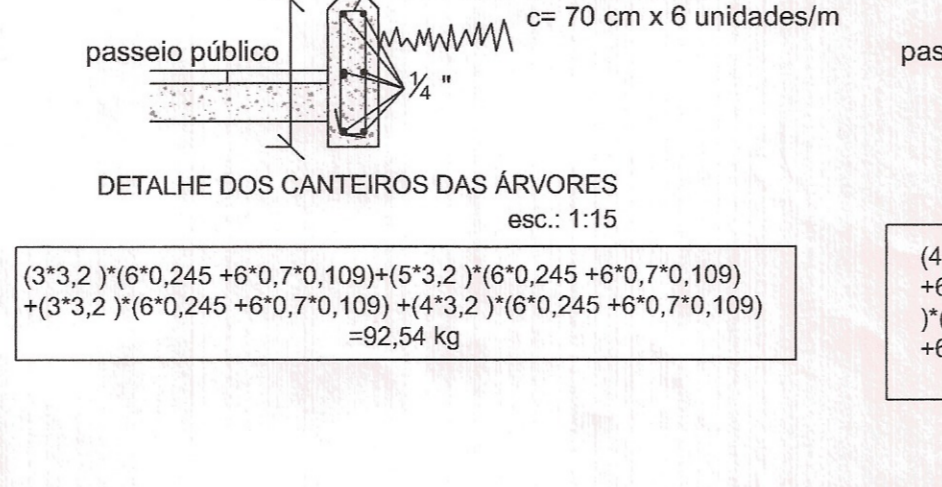
**CÁLCULO ITENS:**  
 2.11 / 2.12 / 5.1 / 5.4 / 5.5 /  
 5.6 / 5.11 /

**CÁLCULO ITENS 3.1 - MADEIRA BANCOS e 3.2 - ESTRUTURA METÁLICA BANCOS**  
**CÁLCULO ITEM 5.9 - VERNIZ BANCOS**  
 $(0,09 \times 2 + 0,10 \times 2) \times 28 + 0,057 \times 2 \times 5 \times 28 = 80,76 \text{ m}^2$



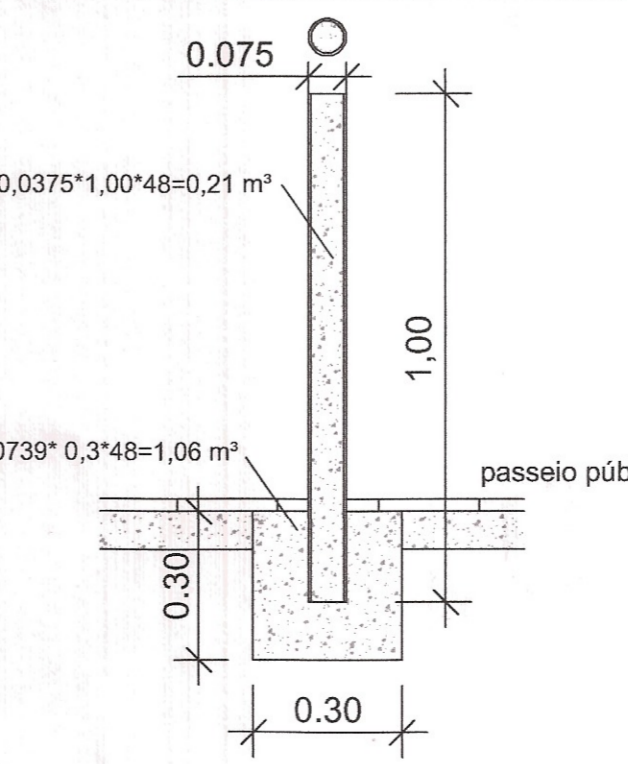
DESCRIÇÃO	kg/m
perfil u 100 x 40 mm x 4,75 mm	4,74
perfil tubular 80 mm x 4,5 mm	9,58

**CÁLCULO ITEM 2.11 FERRAGEM CANTEIROS E FLOREIRAS**



$$\begin{aligned}
 & (4 \times 6,52) \times (10,0 \times 2,45 + 6 \times 1,10 \times 1,09) + (4 \times 6,52) \times (10,0 \times 2,45 \\
 & + 6 \times 1,10 \times 1,09) + (2 \times 6,11 \times 10,0 \times 0,75 + 2 \times 6,11 \times 10,0 \times 0,75 + 12,36 \times 5,08 \\
 & + (3 \times 3,2) \times (6,0 \times 2,45 + 6 \times 0,70 \times 1,09) + (4 \times 3,2) \times (6,0 \times 2,45 + 6 \times 0,70 \times 1,09) \\
 & = 92,54 \text{ kg}
 \end{aligned}$$

**CÁLCULO ITEM 5.8 ARGAMASSA GRAUTE - FRADINHOS**  
 $= 0,21 + 1,06 = 1,27 \text{ m}^3$



**MUNICÍPIO DE JAHU**  
 SECRETARIA DE HABITAÇÃO E PLANEJAMENTO URBANÍSTICO

Local: CONTINUIDADE DA ÚLTIMA ETAPA DO BOULEVARD - 2ª PARTE  
 Local: RUA MAJOR PRADO - JAHU-SP  
 Referência: MEMÓRIA DE CÁLCULO

Silvio Cesar Guarnieri  
 Secretário de Projetos

Desenho: Silvio Cesar Guarnieri Escala: 1:250 Processo: 28/1122 FL: 02/02