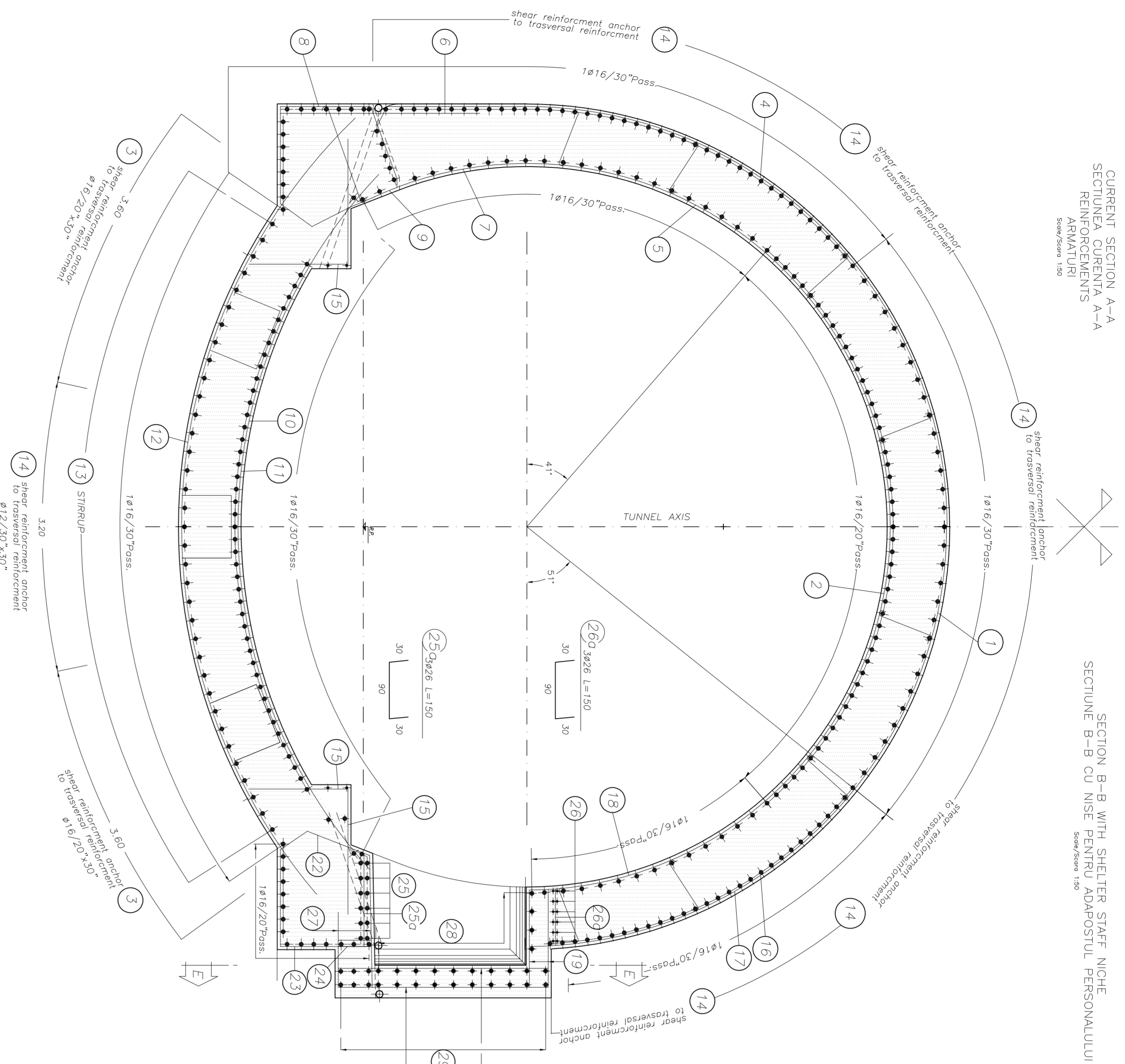
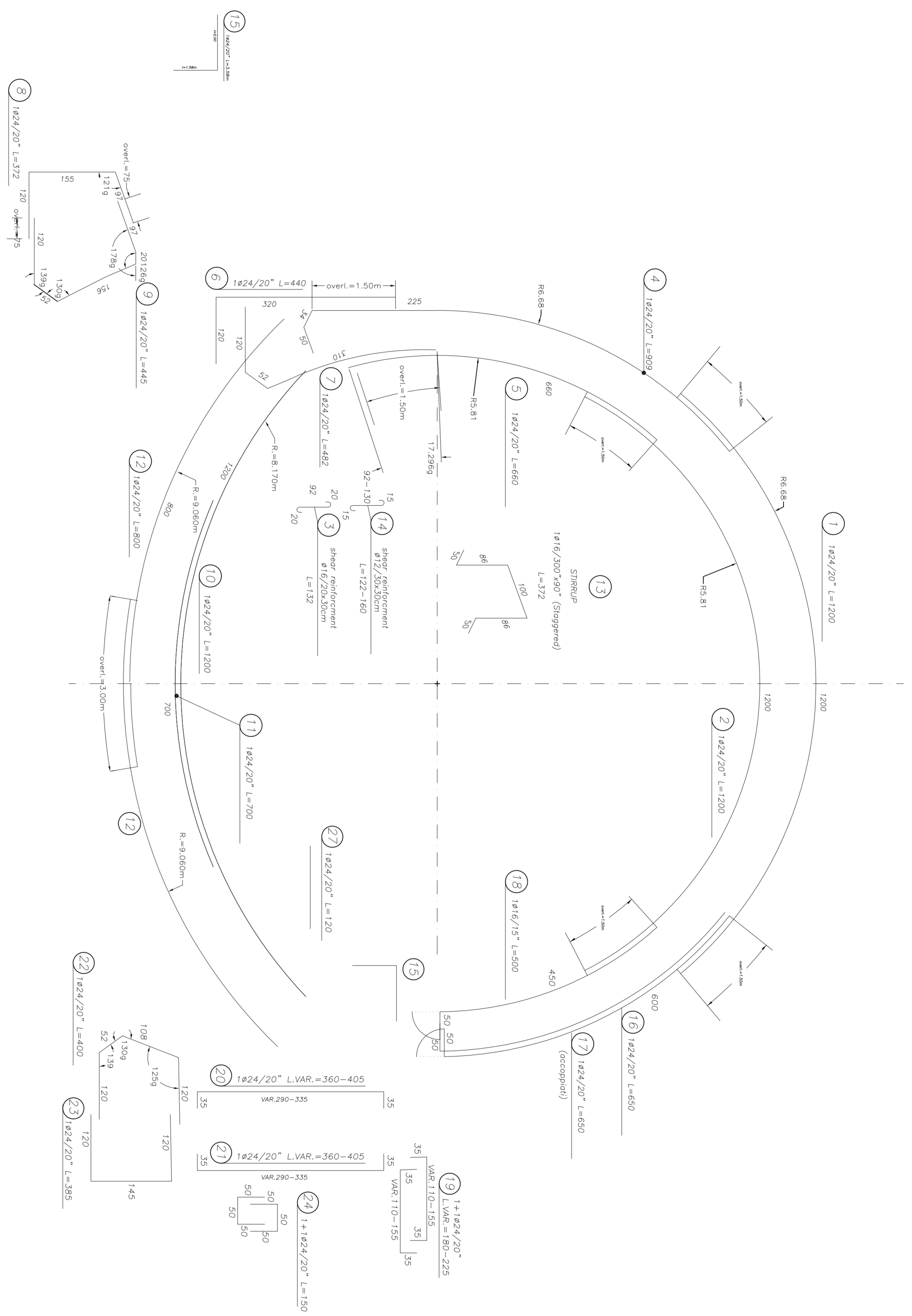
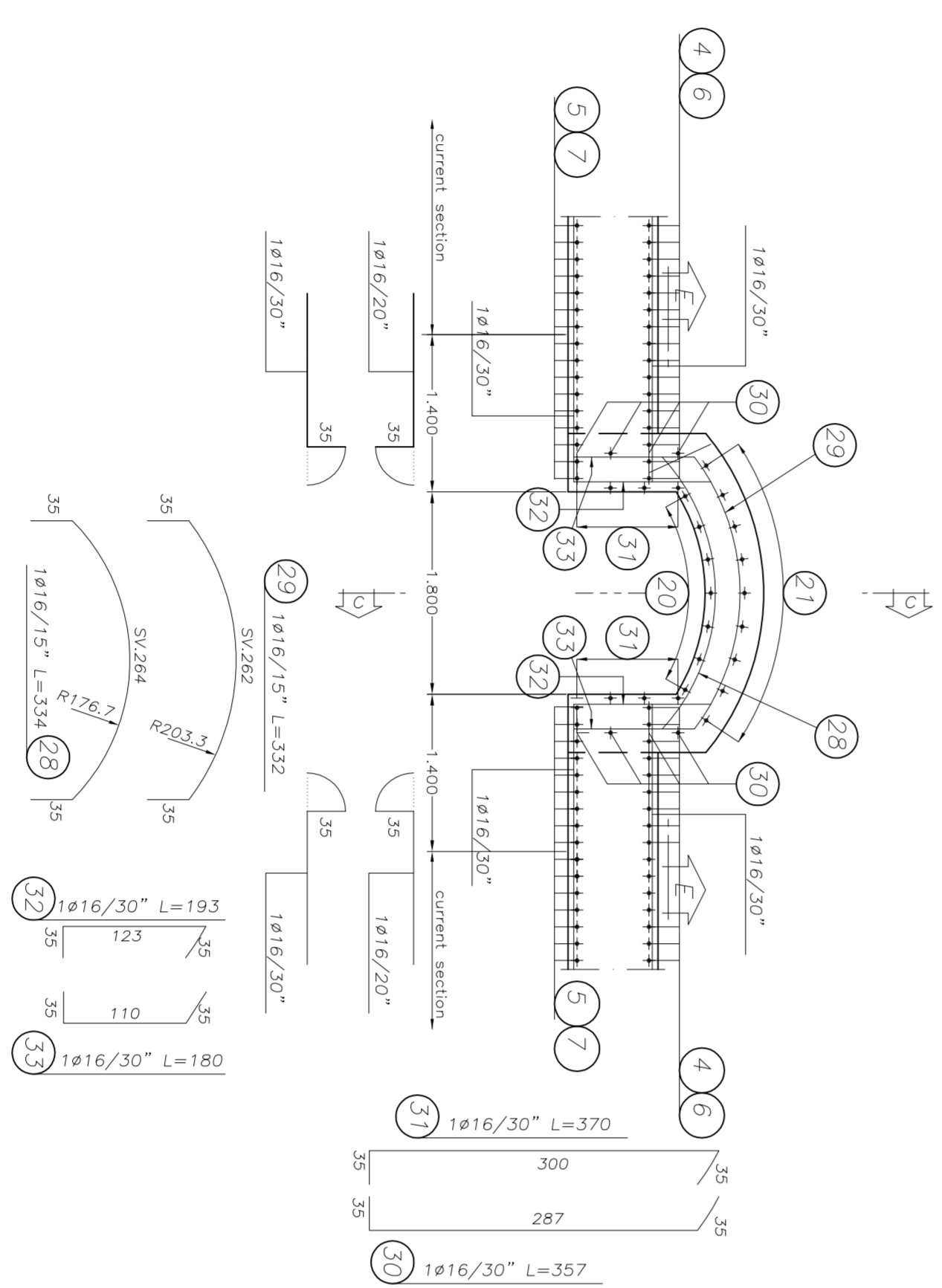


CURRENT SECTION A-A  
SECȚIUNEA CURENTA A-A  
REINFORCEMENTS  
ARMĂZĂRI

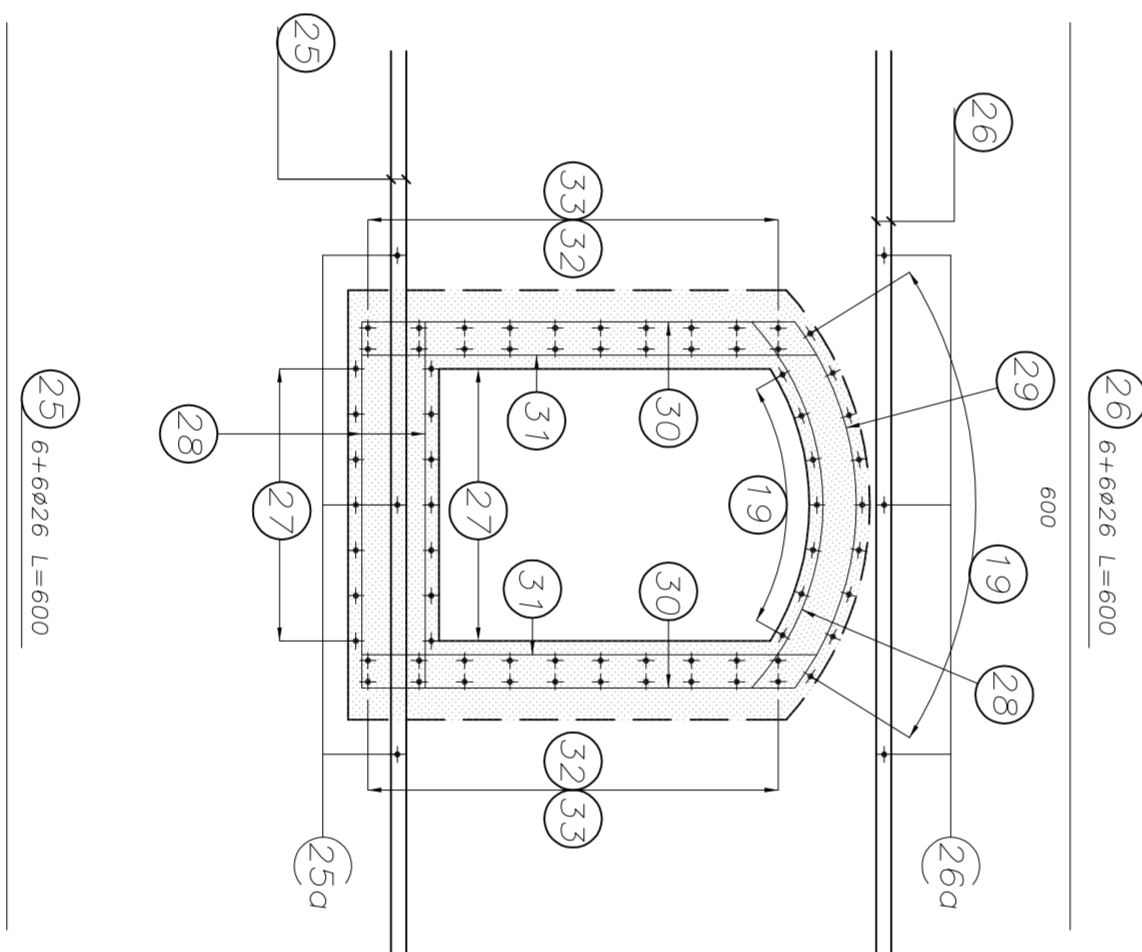


SECTION B-B WITH SHELTER STAFF NICH  
SECȚIUNEA B-B CU NIȘA FENESTRU ADĂPOȘTUL PERSONALULUI

PLAN WITH SHELTER STAFF NICH  
PLAN CU NIȘA FENESTRU ADĂPOȘTUL PERSONALULUI



CURRENT SECTION C-C  
SECȚIUNEA CURENTA C-C  
REINFORCEMENTS  
ARMĂZĂRI



**STEEIS TABLE**

REINFORCING STEEL

Legends measures:

Bending diameter  $R_b$  :  $R_b < \phi 20 \rightarrow \phi_b = 6\phi$   
 $\phi$  Bar  $\phi 20 - \phi 28 \rightarrow \phi_b = 8\phi$   
 $\phi$  Bar  $\phi 30 - \phi 36 \rightarrow \phi_b = 8\phi$

**MATERIAL TABLE**

TUNNEL LINER CONCRETE

- Type: C2
- $f_{ck} = 25.0$  MPa
- Water/cement ratio: 0.43/0.50
- Maximum aggregate size: S3/S4
- Exposure class related to environmental conditions: XA2
- Class of chloride content: CI 0.20
- $\phi$  max aggregate = 32 mm

TUNNEL CROWN CONCRETE

- Type: C1
- $f_{ck} = 20.0$  MPa
- Water/cement ratio: 0.43/0.50
- Maximum aggregate size: S3/S5
- Exposure class related to environmental conditions: XA2
- Class of chloride content: CI 0.20
- $\phi$  max aggregate = 32 mm

REINFORCING STEEL

- B500C
- Reinforce controlled by establishment
- Lap: 35
- $f_{yk} = 512$  MPa
- Cement type: CEM IV

**LEGEND**

RP = REFERENCE PLANE  
 EX = EXCAVATIONS PLANE  
 PC = CENTERS PLANE

**CLIENT / CLIENT**

CFR  
 CN.C.F. "C.F.R." S.A.

**CLIENT / CLIENT**

ROMANIAN GOVERNMENT  
 GOVERNUL ROMÂNIEI  
 EUROPEAN UNION FINANCED PROJECT

**PROJECT FINANȚATE UNINIUNEA EUROPEANĂ  
 EUROPEAN UNION FINANCED PROJECT**

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Editor: [Empty]

**CONDITII DE CALIFICARE SI DATA**

Conditiile / Conditions System	Starea / State	LOT	Nr. / No.
E   A   1	0   1	C   1   6	B   B
G   A   1	1   1	0   0	0   9
0	0	0	0