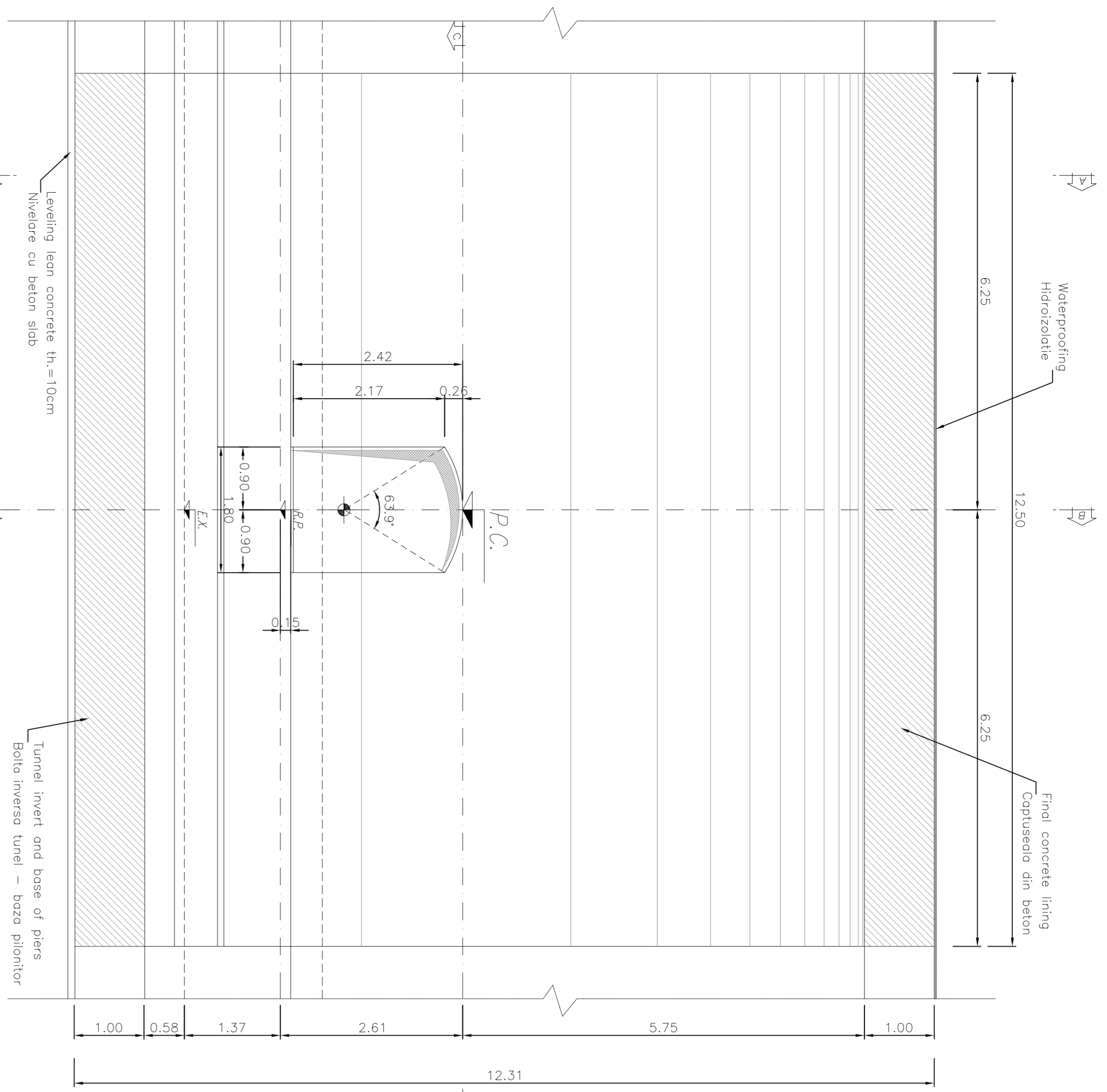
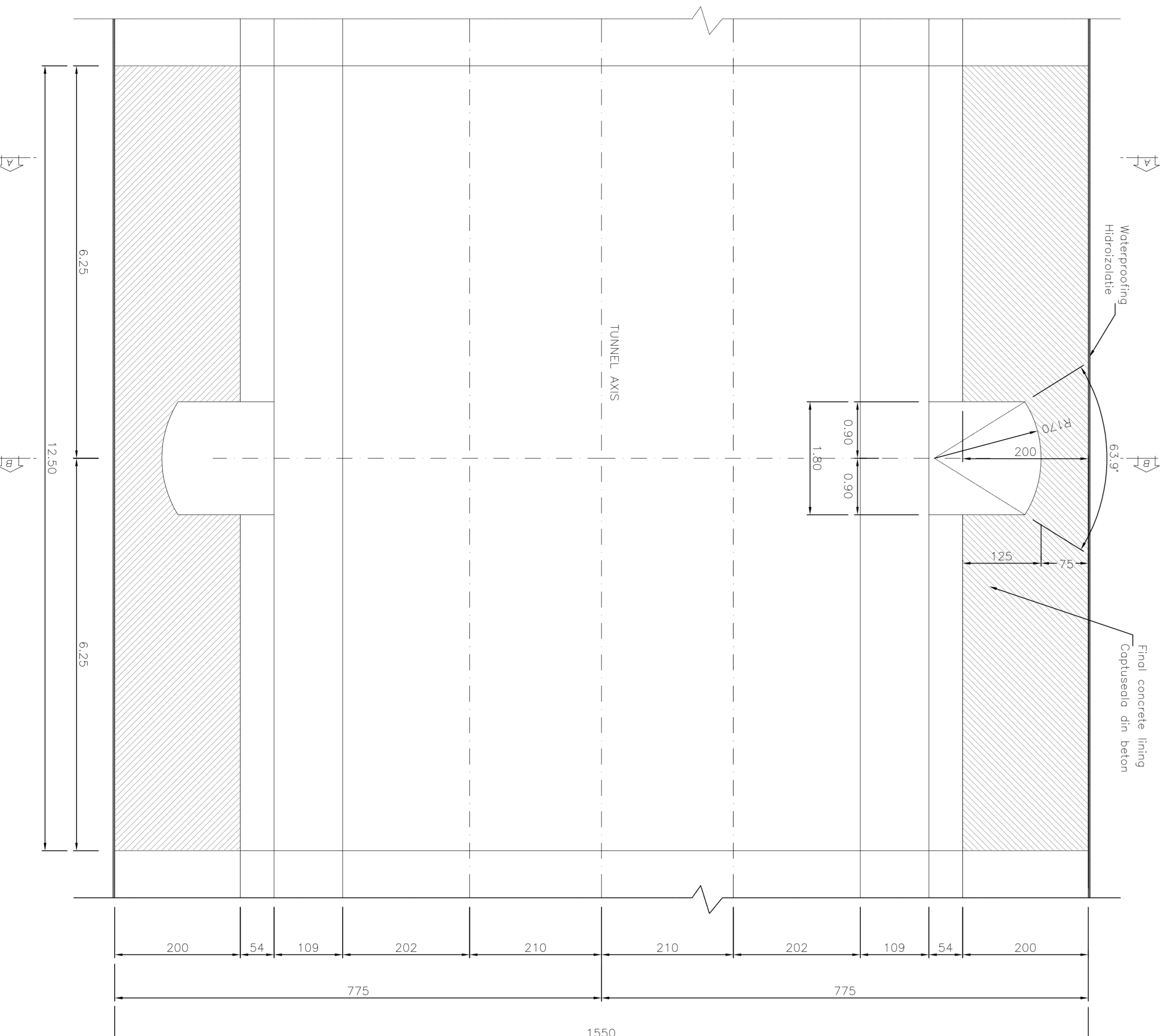


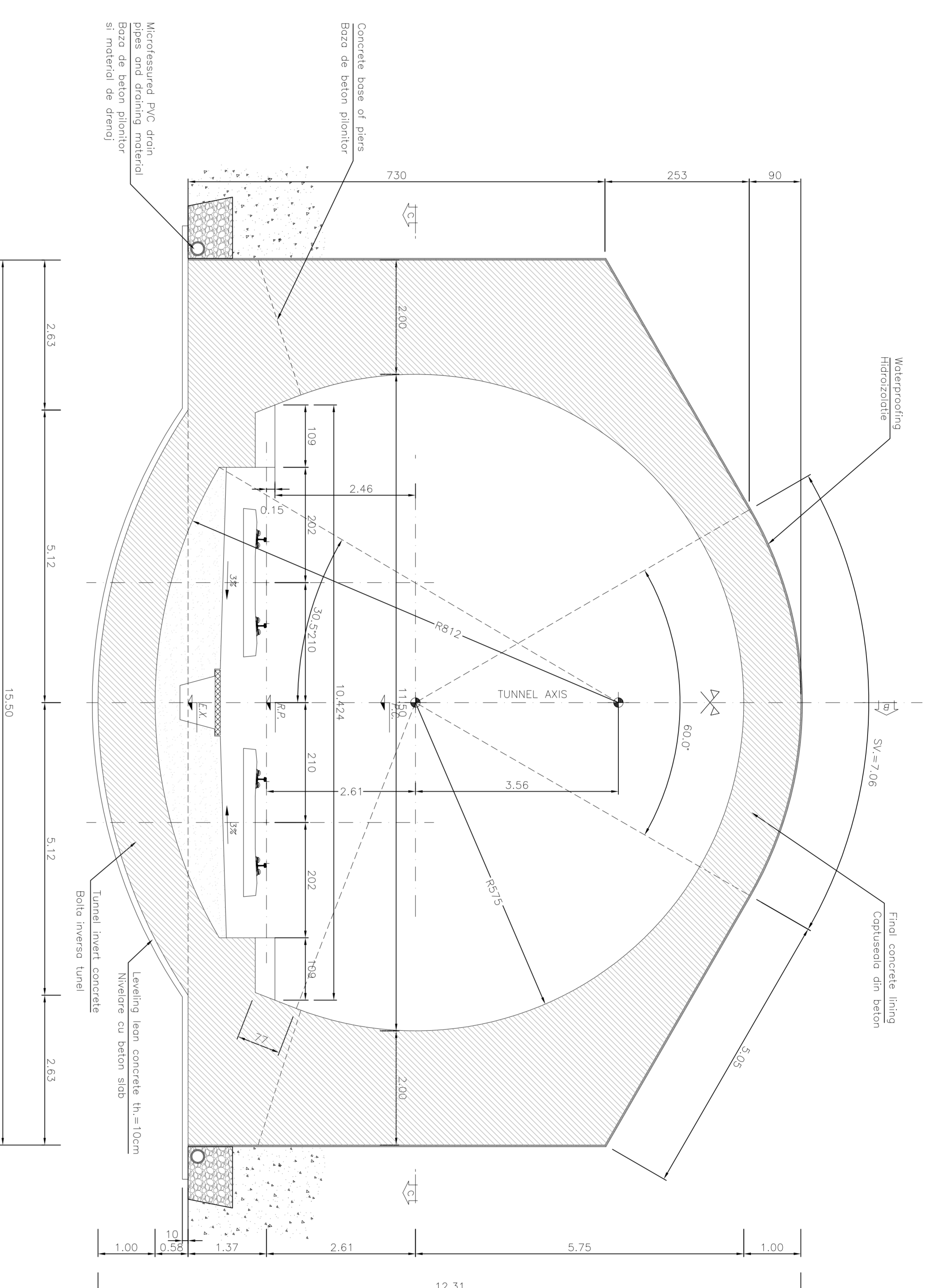
SECTION B-B  
SECTIUNEA CURENTA B-B  
Scale/Scara 1:50



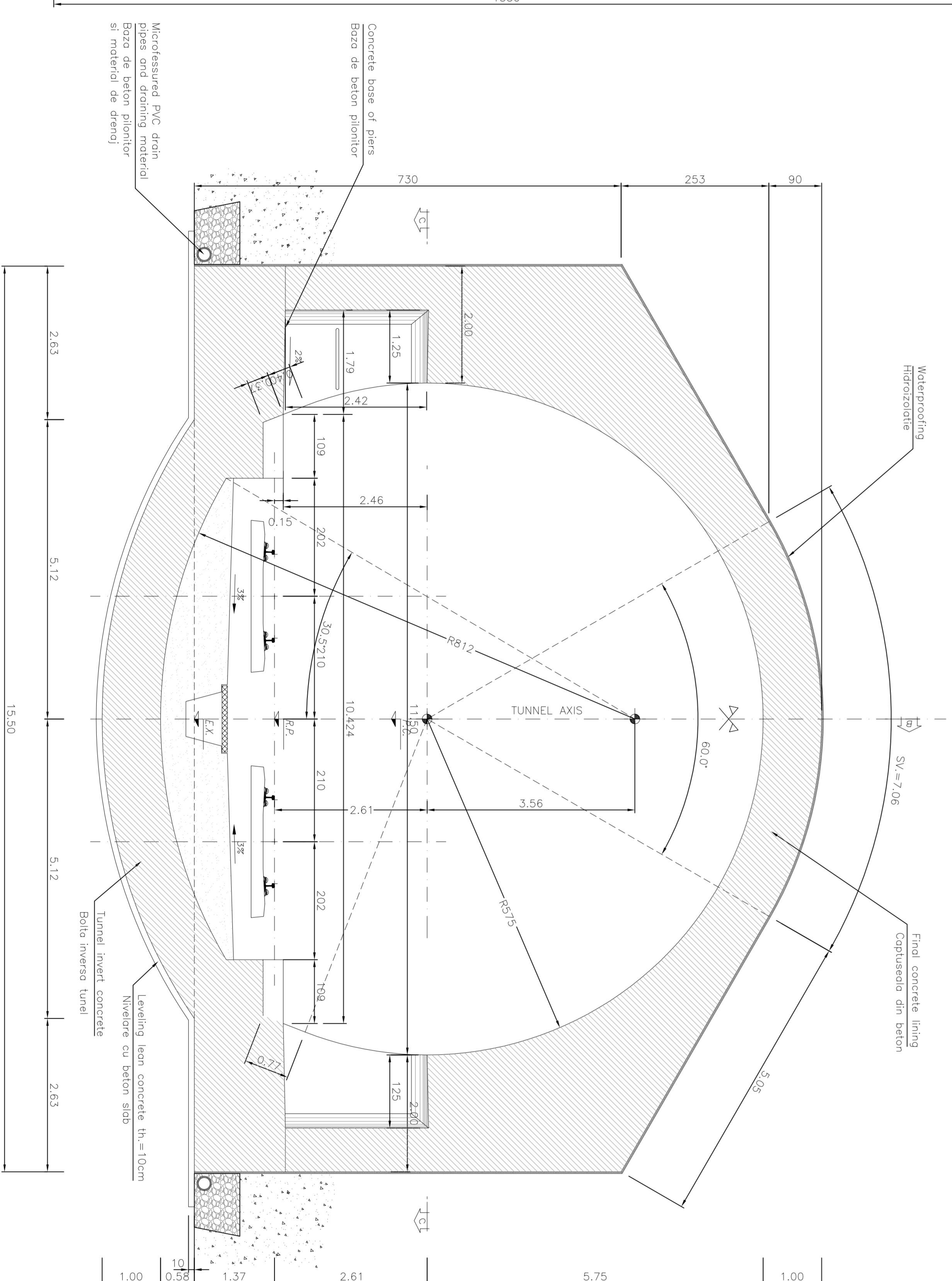
SECTION C-C  
SECTIUNEA CURENTA C-C  
Scale/Scara 1:50



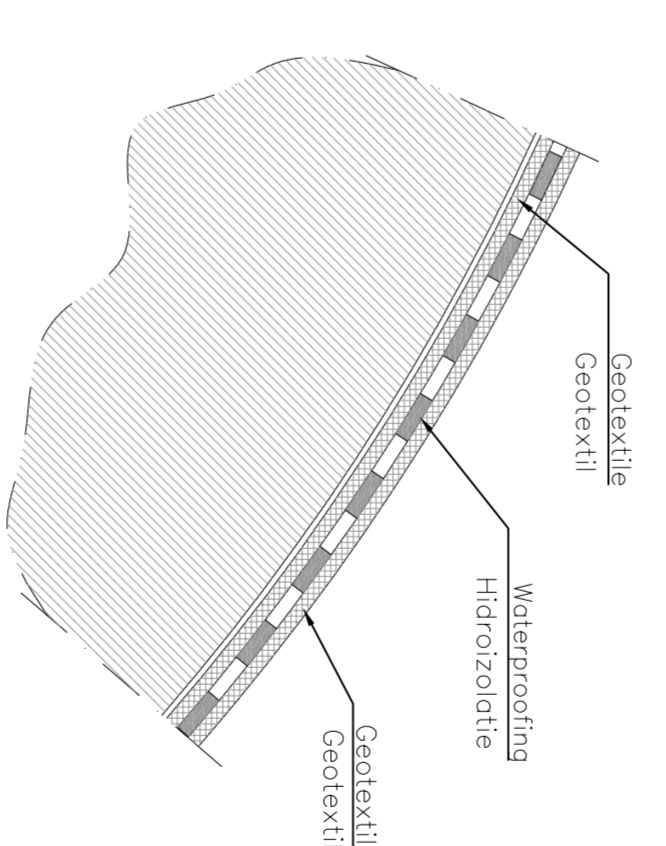
SECTION A-A  
SECTIUNEA CURENTA A-A  
Scale/Scara 1:50



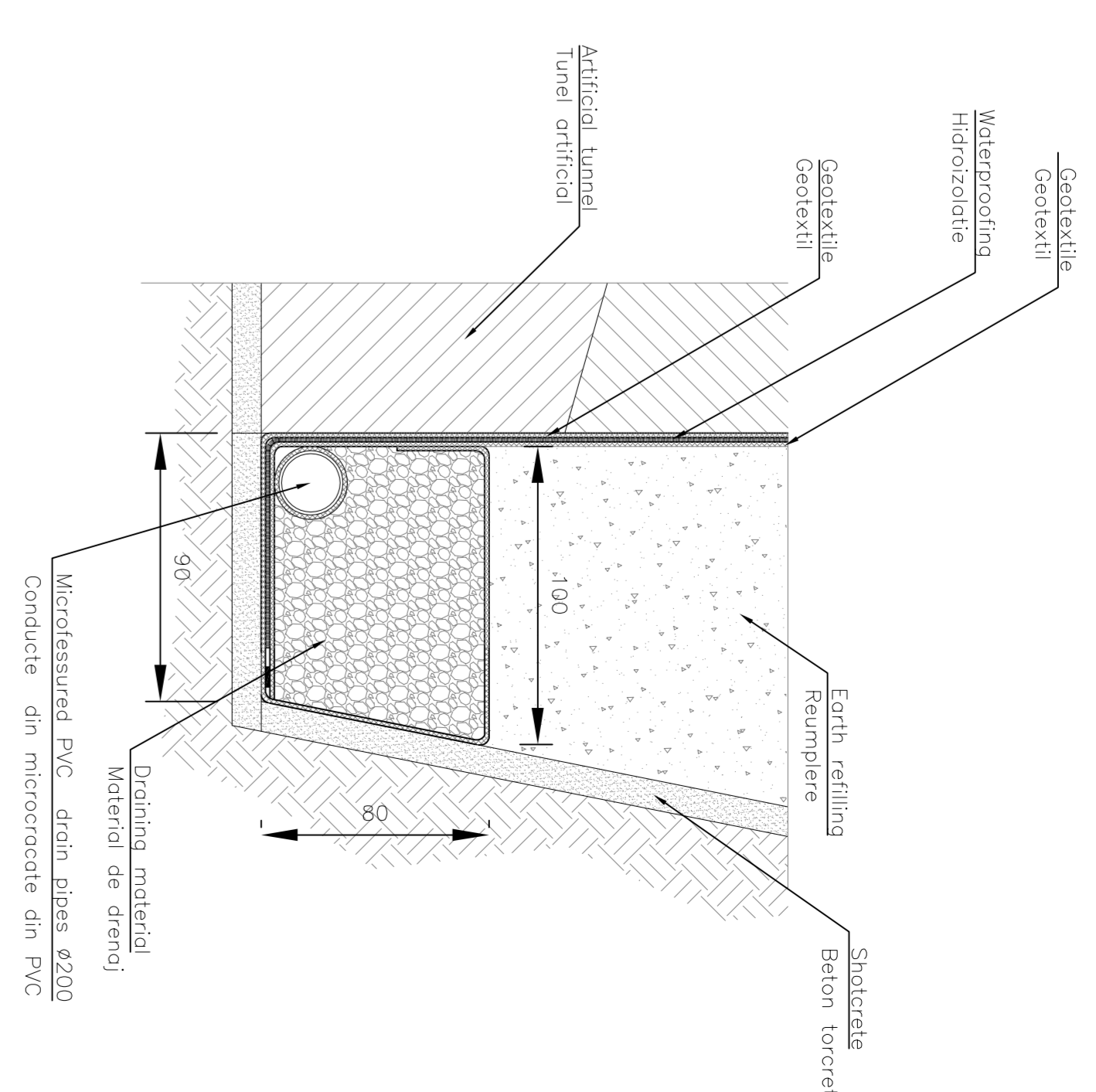
SECTION WITH SHELTER STAFF NICHE B-B  
SECTIUNEA CU NISE PENTRU ADAPOSTUL PERSONALULUI B-B  
Scale/Scara 1:50



WATERPROOFING TUNNEL CROWN DETAIL  
DETALIU CORONA TUNELULUI HIDROIZOLATIEI  
Scale/Scara 1:20



WATERPROOFING PIER DETAIL  
DETALIU PILONULUI HIDROIZOLATIEI  
Scale/Scara 1:20



**MATERIAL TABLE**

- TUNNEL INVERT CONCRETE:
  - Type C2
  - f<sub>ck</sub> >= 30 MPa
  - Min. cement ratio 140 kg/m<sup>3</sup>
  - Min. concrete strength class S3/S4
  - Exposure class related to environmental conditions MX2
  - Class of chloride content C 0.20
  - φ max aggregate = 32 mm
- TUNNEL CROWN CONCRETE:
  - Type C1
  - f<sub>ck</sub> >= 30 MPa
  - Min. cement ratio 120 kg/m<sup>3</sup>
  - Min. concrete strength class S3/S4
  - Exposure class related to environmental conditions MX2
  - Class of chloride content C 0.20
  - φ max aggregate = 32 mm
- REFERENCE SHEET:
  - Water/cement ratio 0.25/0
  - Water/cement ratio 0.25/0
  - Exposure class related to environmental conditions MX2
  - Class of chloride content C 0.20
  - φ max aggregate = 32 mm
- LEAK CONCRETE:
  - Type I
  - f<sub>ck</sub> >= 12 MPa
  - Cement type CEM I/V

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

Index	Date	Modification	Project	Author/Designer	Approved/Checked
0					
1					
2					
3					

**CLIENT / CLIENT**  
**CFR**  
**C.N.C.F. "C.F.R." S.A.**

**CONSULTANT / CONSULTANT**  
**TECNIC**  
**CONSULTING ENGINEERS**

**SUBCONSULTANT / SUBCONSULTANT**  
**CONSULTING ENGINEERS**

**PROJECT / PROJECT**  
**PROIECTUL DE PROIECTARE SI CONSTRUCTIE A TUNELULUI DE CURENTA SUBMARIAN**

**REVISIONS**  
 No. / Data / Descrierea  
 1 / 15.10.2023 / Revizuire proiect

**NOTES**  
 - Elemente de constructie incluse sa fie instalate pe panti de teren, la o distanta minima intre sarmele de constructie de 50cm (4.2.2.3 Escapare Singura ST1)

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 - Elemente de constructie incluse sa fie instalate pe panti de teren, la o distanta minima intre sarmele de constructie de 50cm (4.2.2.3 Escapare Singura ST1)