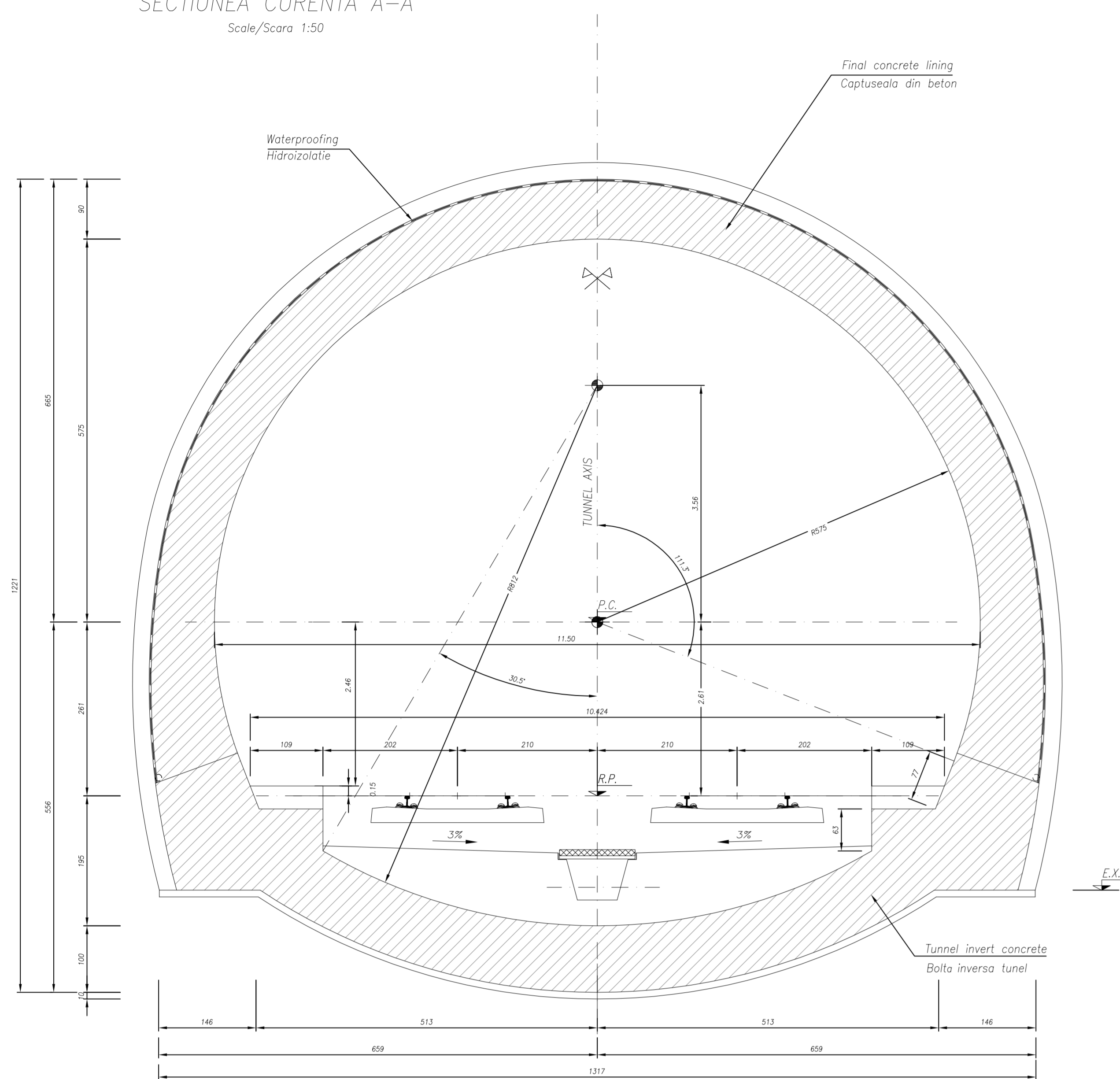
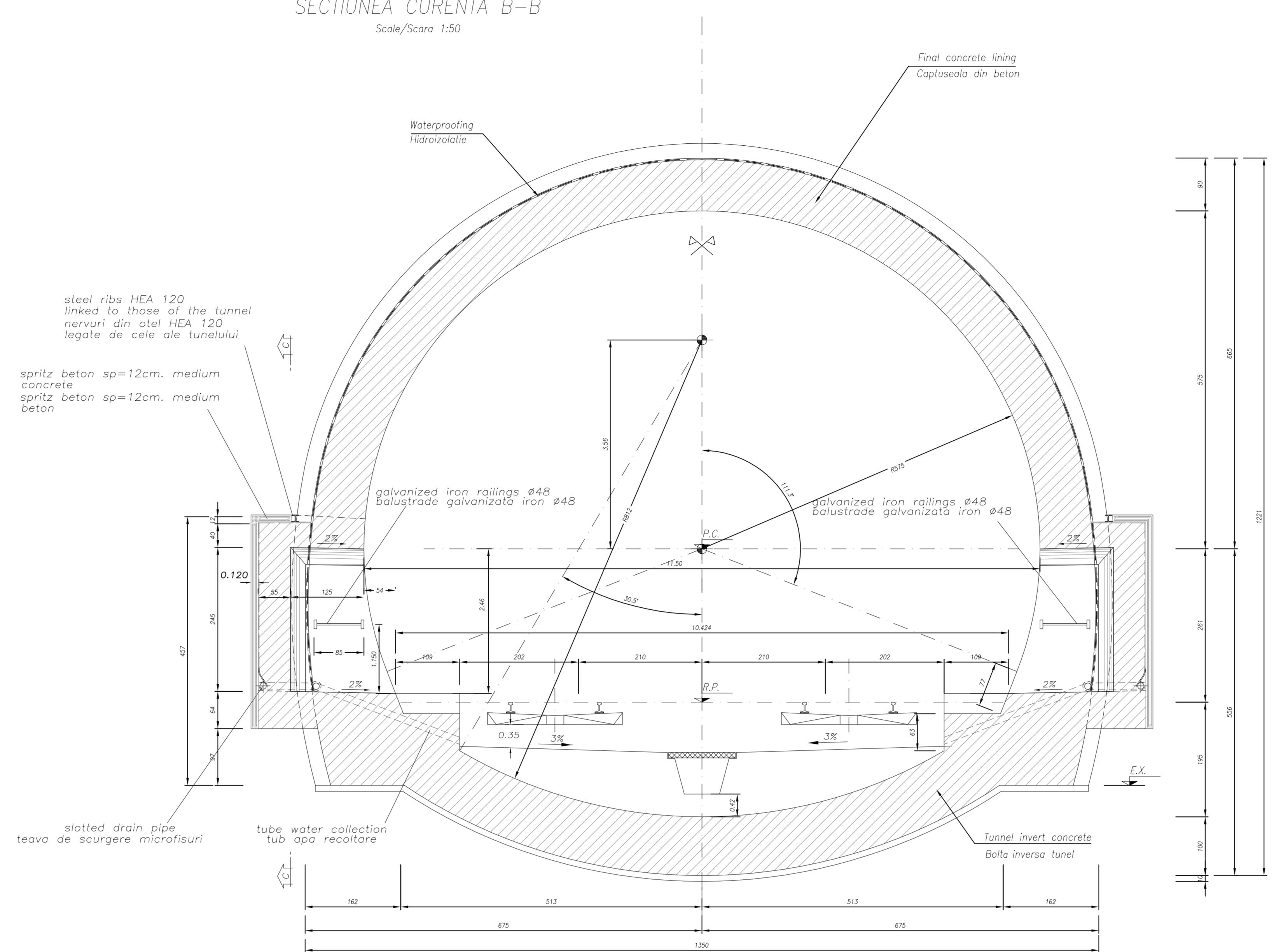


SECTION A-A
SECTIUNEA CURENTA A-A
Scale/Scara 1:50



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



MATERIAL TABLE

TUNNEL INVERT CONCRETE:

- Type C2
- fck >=30 MPa
- Water/cement ratio <0.50
- Minimum structural Class S3/S4
- Exposure class related to environmental conditions: XA2
- Cement type CEM III/V
- Class of chloride content: Cl 0.20
- max aggregate = 32 mm

TUNNEL CROWN CONCRETE:

- Type C1
- fck >=30 MPa
- Water/cement ratio <0.50
- Minimum structural Class S4/S5
- Exposure class related to environmental conditions: XA2
- Cement type CEM III/V
- Class of chloride content: Cl 0.20
- max aggregate = 32 mm

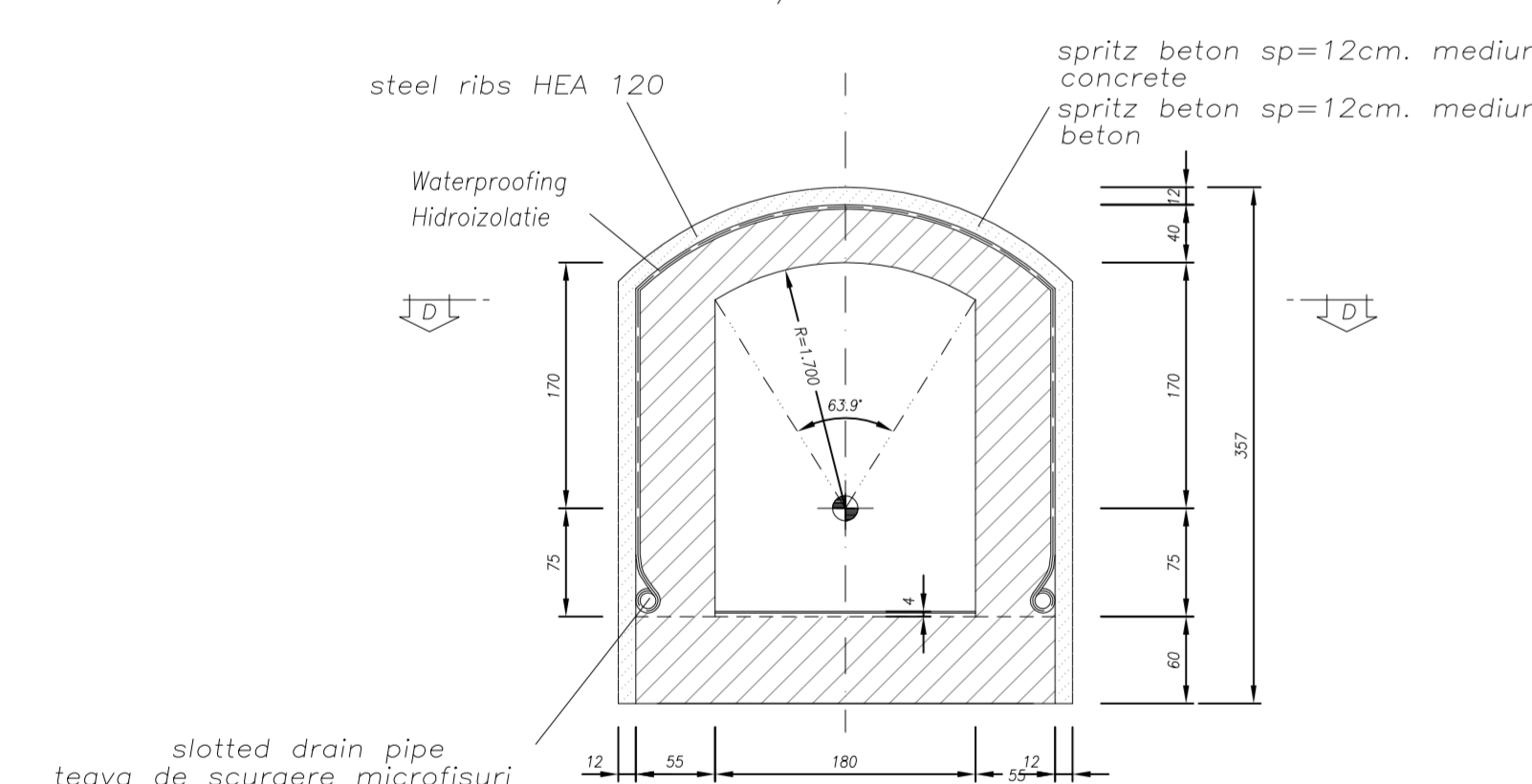
REINFORCING STEEL:

- B450C controlled by establishment
- Weldable

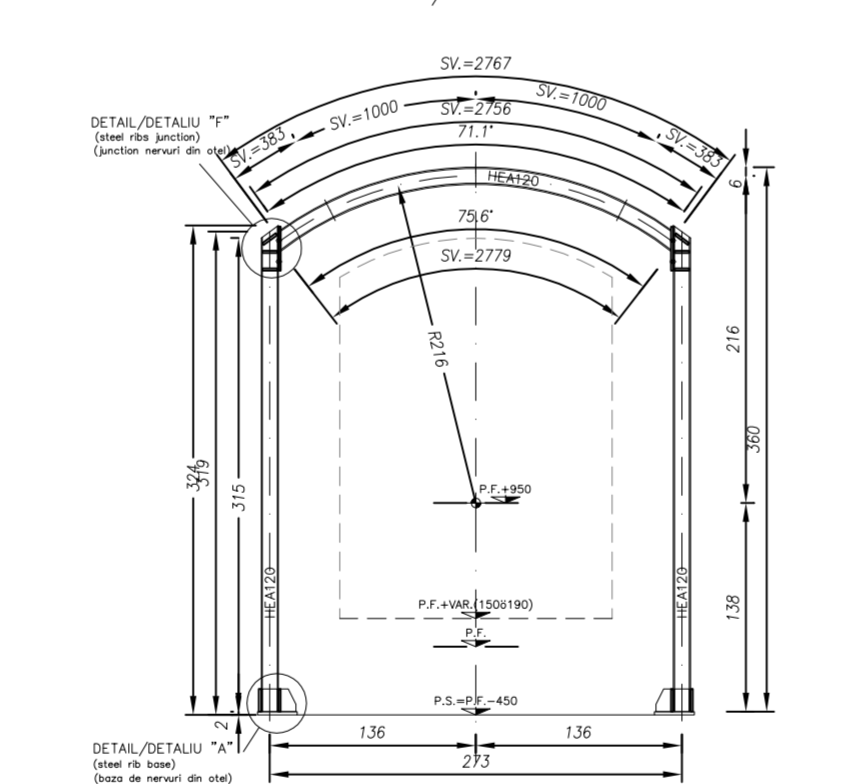
LEAN CONCRETE:

- Type 1
- fck >=12 MPa
- Cement type CEM I/V

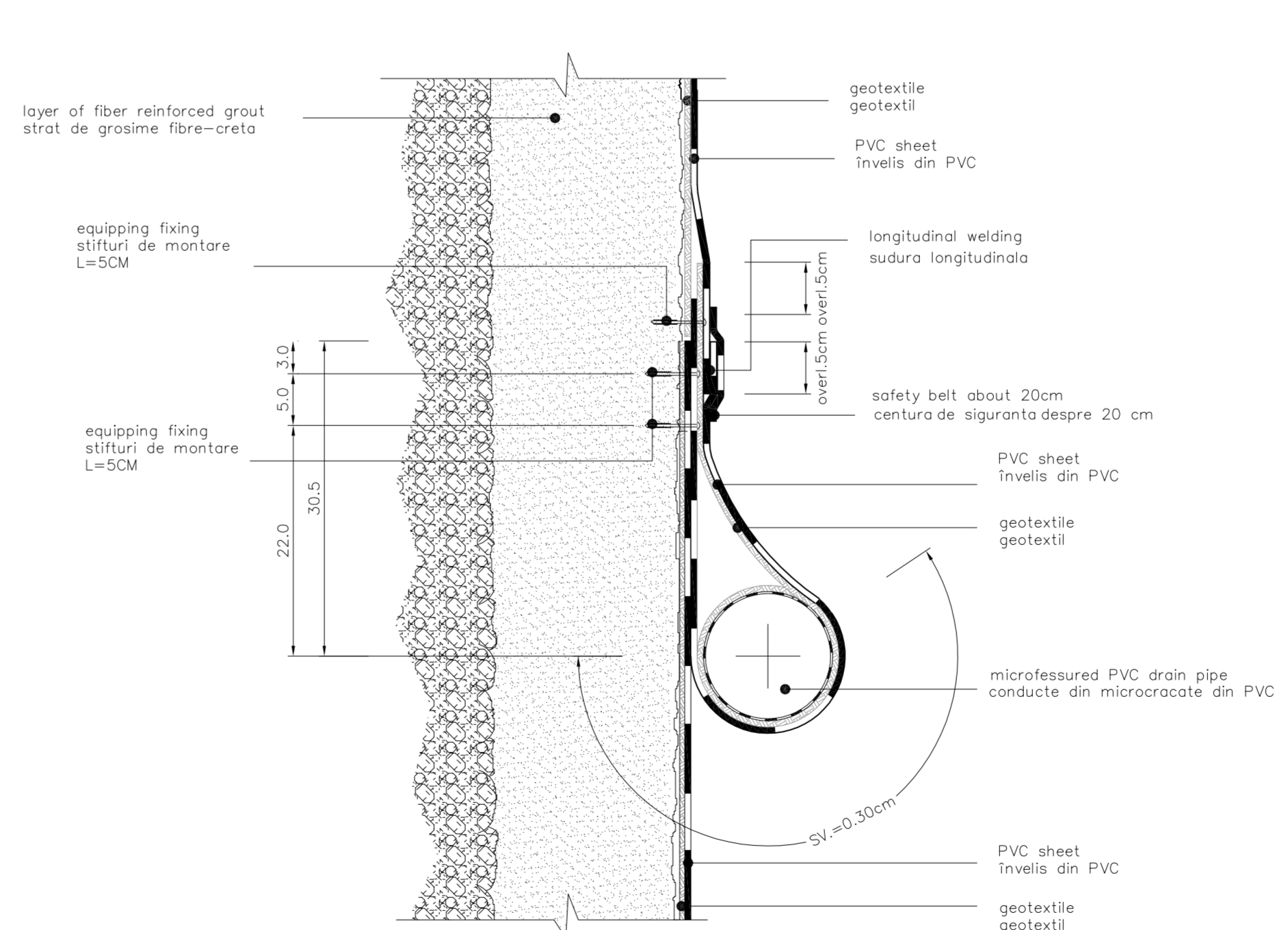
SECTION C-C
SECTIUNEA CURENTA C-C
Scale/Scara 1:50



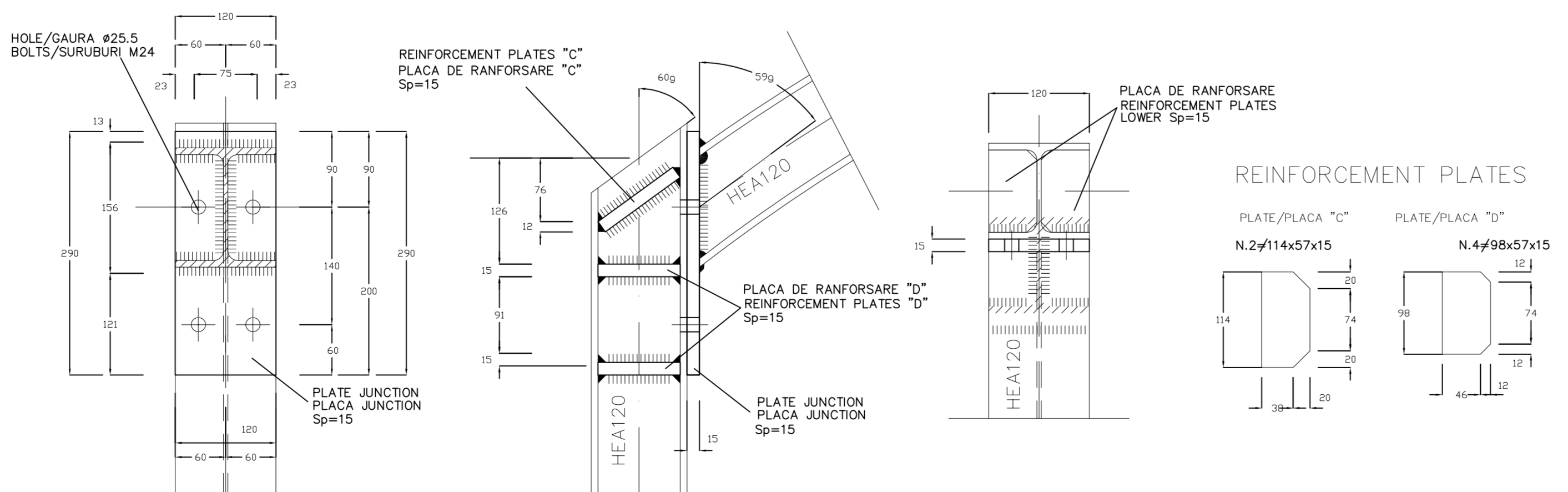
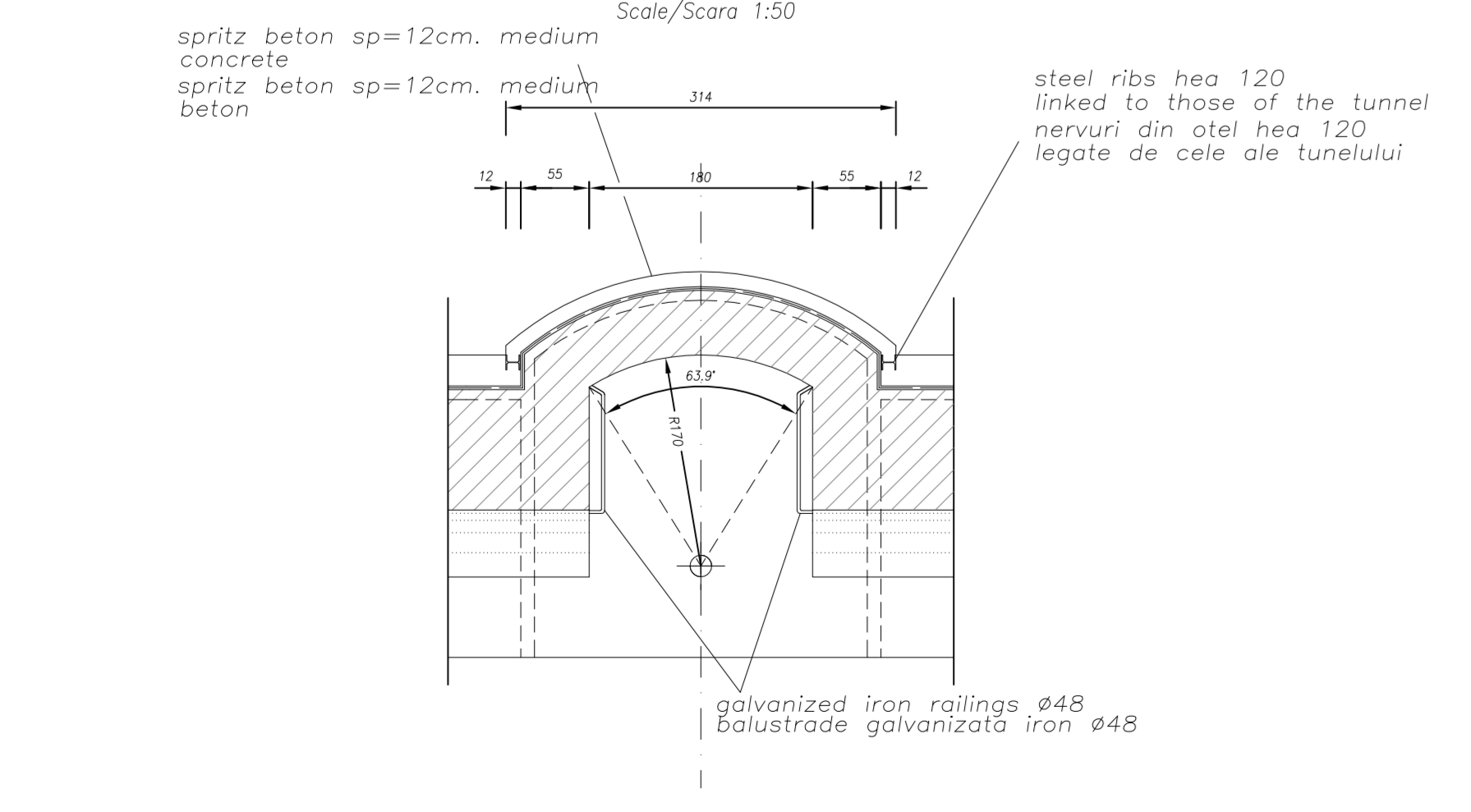
STEEL RIB NICHE HEA 120
NERVURI DIN OTEL NISE HEA 120
Scale/Scara 1:50



WATERPROOFING DETAIL
DETALIUL HIDROIZOLATIEI



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



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

D					
C					
B					
A					
Index	Date	Modification/Revision	Projectant	Approved Consultant	Approved CFR
CLIENT / CLIENT					
CONSULTANT / CONSULTANT					
Approved	Project manager		R. Liuzza	Date	Signature
Approved	Coordinator/Section 1		C. Gambelli		
Verified	Tunnel Expert		C. Gambelli		
Checked	Tunnel Expert		C. Gambelli		
Elaborated	Project Designer		C. Gambelli		
SUBCONSULTANT / SUBCONSULTANT					
Approved	Responsabil Subconsultant				
Elaborated	Designer				
Rehabilitarea liniei de cale ferata Brasov - Simeria, parte componentă a coridorului IV Pan European, pentru circulația trenurilor cu viteză maximă de 160 km/h. Project/Project 2004/RO/16/PP/PA/003 Section 1 Brasov - Sighisoara Rehabilitation of the railway line Brasov - Simeria, component Part of the IV Pan-European Corridor, for the trains circulation with maximum speed of 160 km/h. Faza / Phase: P.Th. / T.D. Section 1 Brasov - Sighisoara					
Denumire desen / Drawing Title : ARCHITA 2 TUNNEL NATURAL TUNNEL Section type "B3" with and without niches - Formwork Section type "B3" cu si fara nise - Cofraje de constructie					
Codificare / Codification System		Scara / Scale		Nr. / No	
E A 5 1		variat / various		LOT	
0 1 C		1 4 B B		G N 0 4 0 0 0 0 7 0	