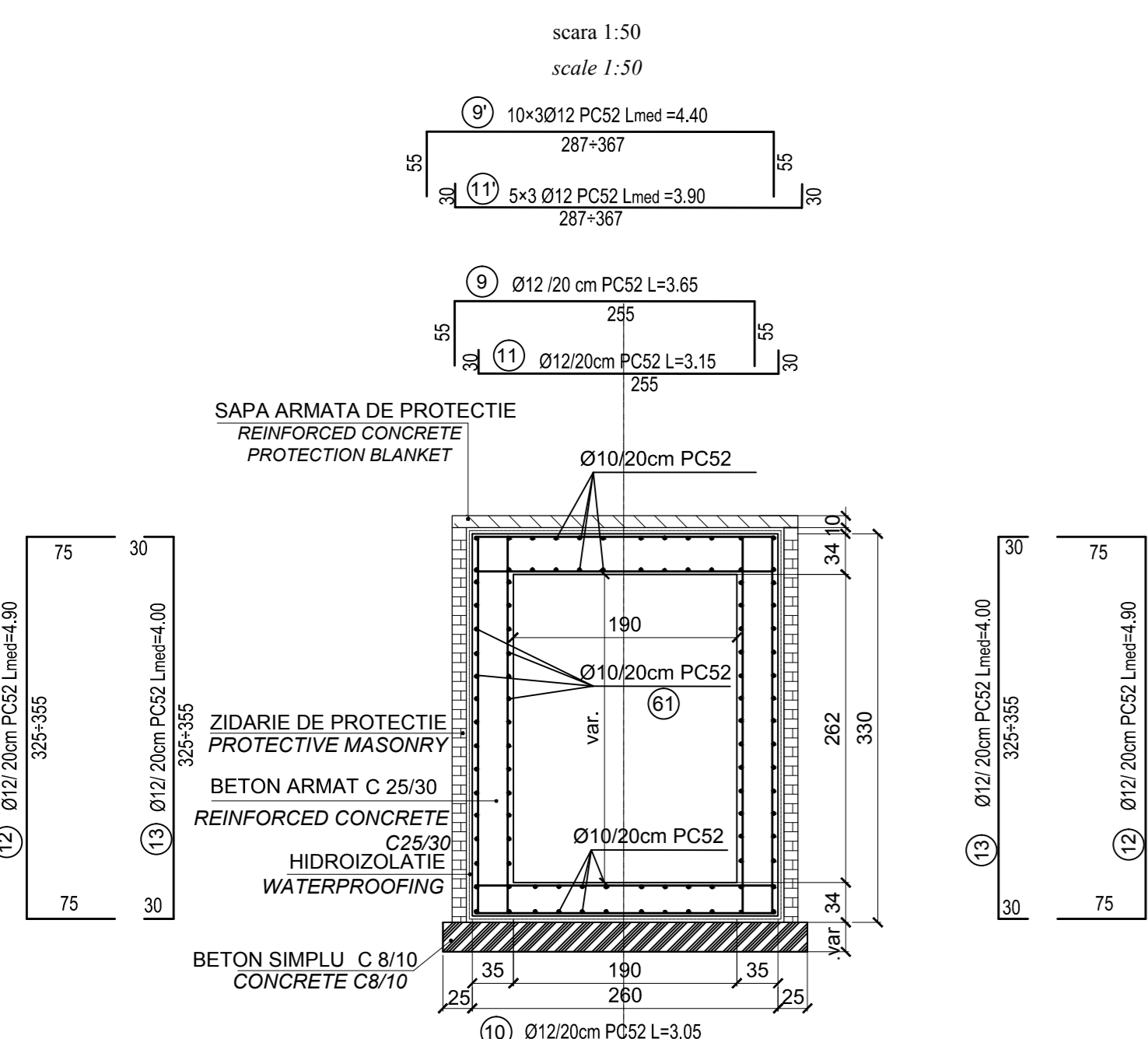
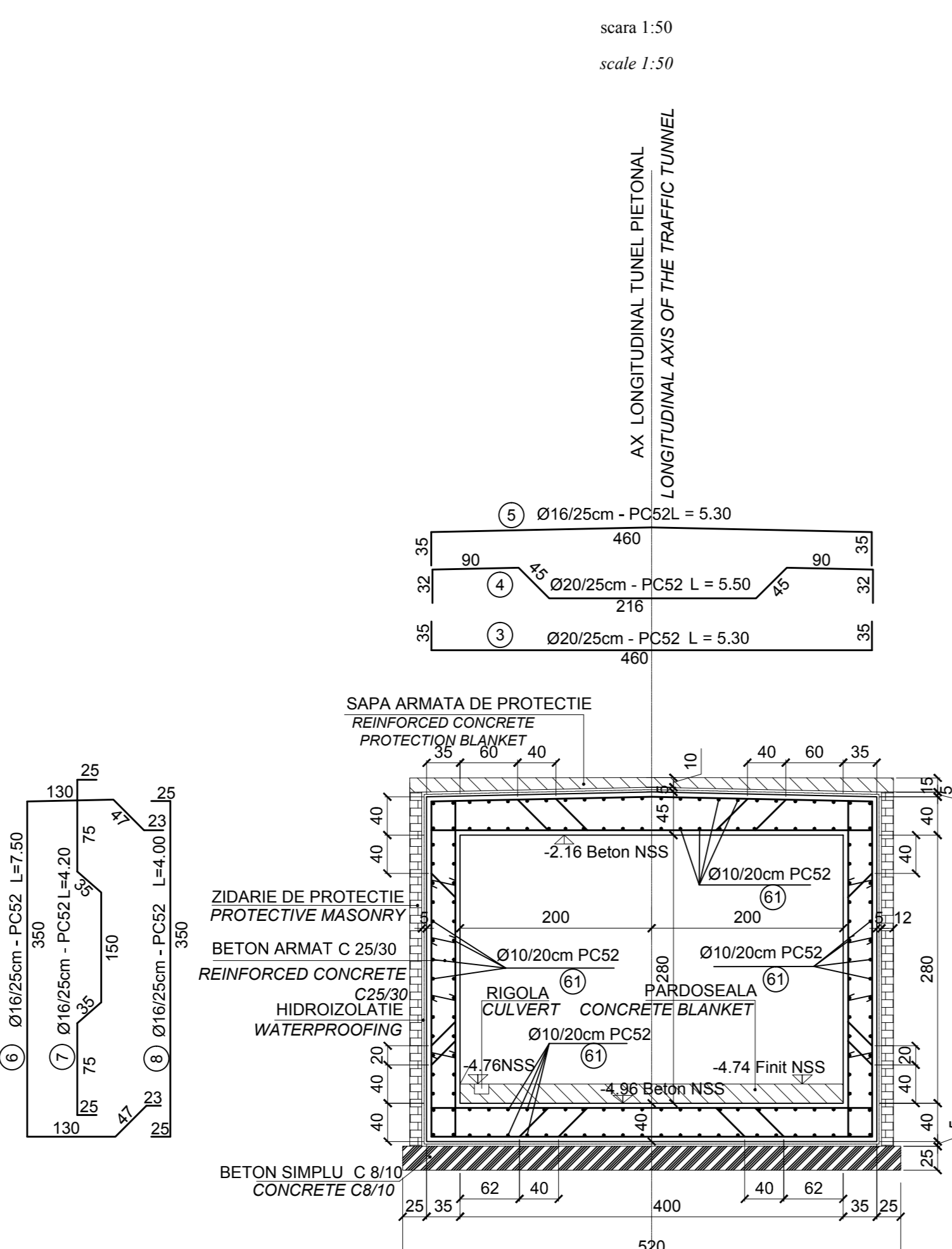


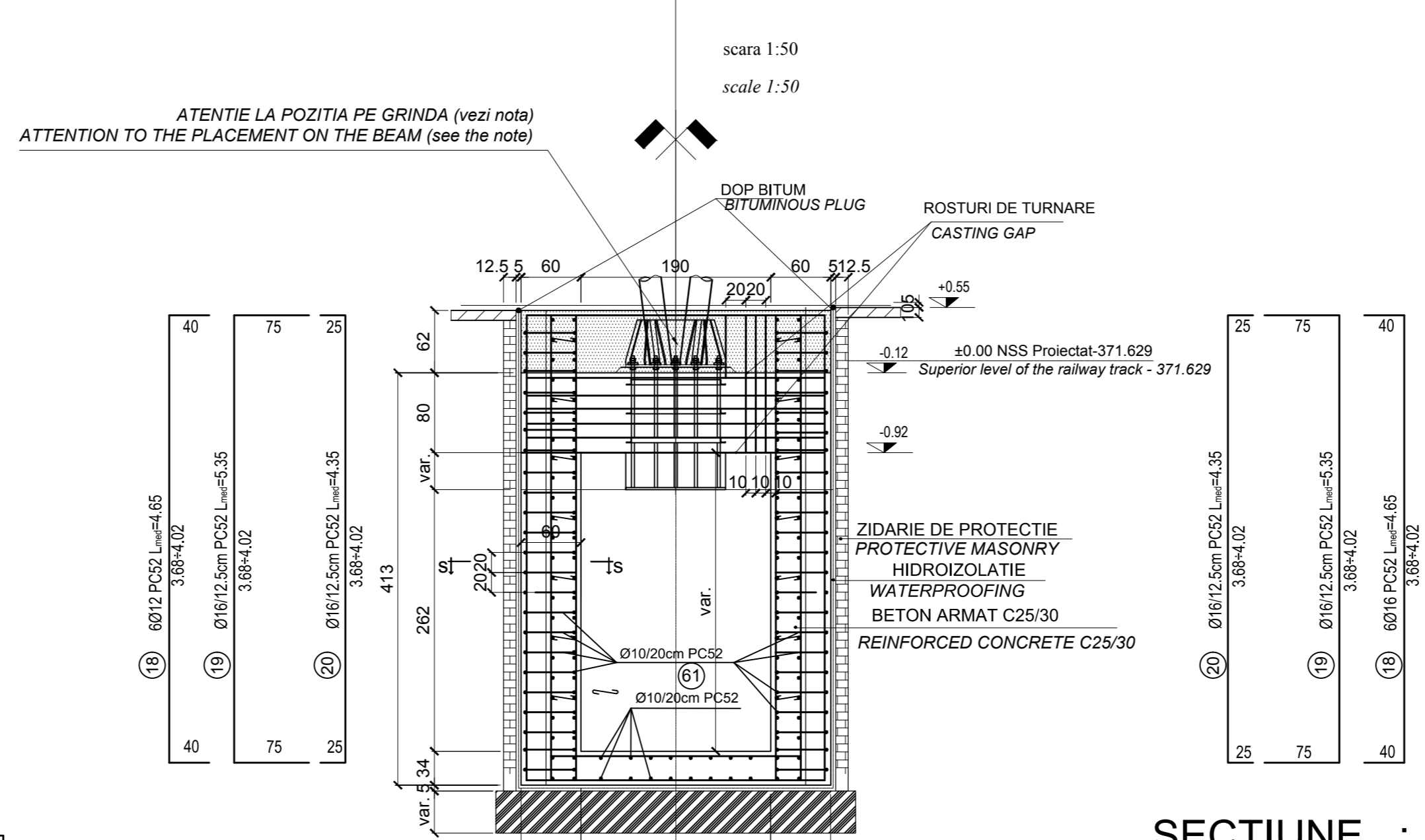
SECTIUNE : F-F
SECTION : F-F



SECTIUNE : E-E
SECTION : E-E



SECTIUNE : F'-F'
SECTION : F'-F'



RECOMANDARI TEHNOLOGICE SPECIFICE PENTRU FUNDATII STALPI COPERTINE PE TUNEL

Pentru pozitionarea carcasi de buloane de ancoraj in grinda tunelului se vor realiza urmatoarele:

In plan orizontal:
Se materializeaza axa copertinei (din dreptul grinzii), pe cofraj.
Se introduce carcasa in cofraj si se asigura verticalitatea buloanelor pe cele doua directii rectangulare
Se aliniaza axa carcasi cu axa copertinei, prin deplasarea carcasi in lungul grinzii

OBSERVATIE 1: Axa longitudinala a copertinei (trasata intodeauna fata de axele c.f. ale liniilor adiacente), nu coincide cu axa scarii de acces in tunel, sau axa peronului (cazul copertinelor in curba). Axa carcasi se aliniaza INTOTDEAUNA cu axa copertinei (in consecinta, axa stalpului copertinei nu va mai fi la jumatarea lungimii grinzii tunelului).

In plan vertical:
Cota superioara a grinzii tunelului (C.S.G.) trebuie sa fie la -0,12 m fata de N.S.S. proiectat (din dreptul grinzii); vezi: Sectiuni longitudinale prin scari acces tunel
OBSERVATIE 2: In statiile in care niveleta este orizontala, C.S.G.stanga este identica cu C.S.G.dreapta, in statiile in care niveleta are panta ascendenta sau descendenta (dupa caz), C.S.G.stanga difera de C.S.G.dreapta, dar sunt intodeauna la -0,12 m fata de N.S.S. proiectat (conf. punctului 2 - recomandari tehnologice generale) **Armare, betonare:**
Partea superioara a carcasi buloanelor de ancoraj se va asigura obligatoriu intr-un tipar pentru a se evita deplasari accidentale la turnarea betonului.
Se betoneaza grinda.

SPECIFIED TECHNOLOGICAL RECOMMENDATIONS FOR CANOPY FOUNDATION ABOVE TUNNEL

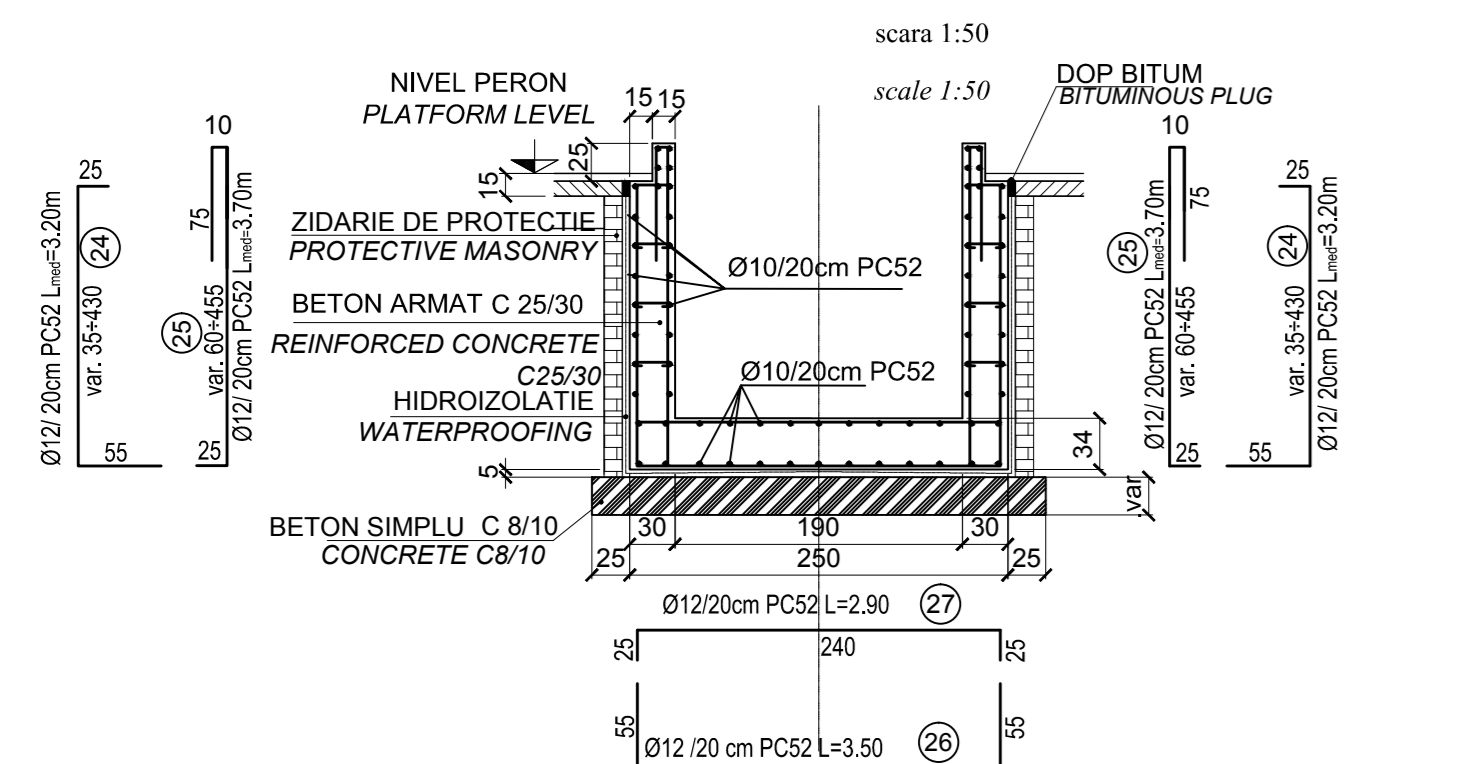
To place the anchoring bolts case in the tunnel beam, the following will be carried out:

Horizontal alignment:
The axis of the canopy (nearby the beam) will be marked on the shuttering.
The case will be introduced into the shuttering and the verticality of bolts will be provided on the two rectangular directions
The case axis will be lined up with the canopy axis, by moving the case along the beam.
REMARK 1: The longitudinal axis of the canopy (always traced in relation to the railway axis of adjacent lines) does not coincide to the axis of tunnel access stairs or the platform axis (case of canopies in curve). In this situation, the case axis will be ALWAYS lined up with the canopy axis (consequently, the canopy pole axis will not be placed at half of the length of tunnel beam).

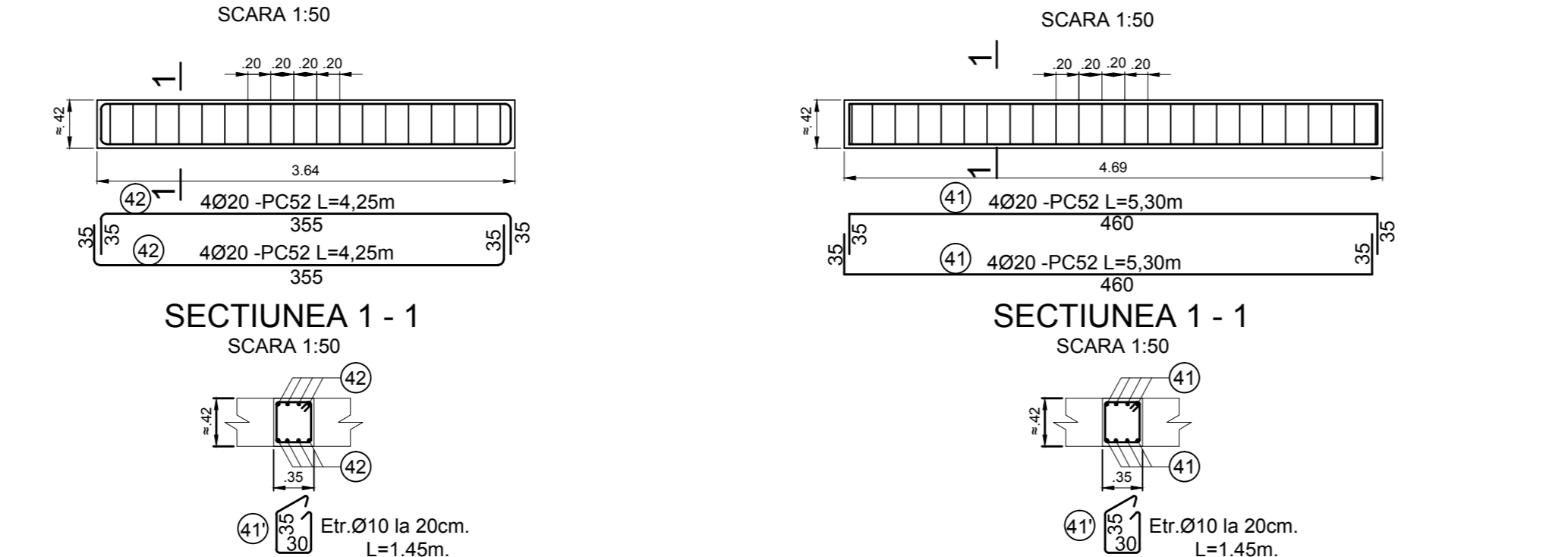
Vertical level alignment:
The tunnel beam upper level (C.S.G.) shall be placed at -0,12 m from the designed rail upper level, R.U.L. (nearby the beam); see Longitudinal sections through the tunnel access stairs
REMARK 2: In the stations where the level is horizontal, C.S.G.left is identical to C.S.G.right. In the stations where the level follows the upward / downward slope (depending on the case), C.S.G.left is different from C.S.G.right, but they are always placed at -0,12 m from the designed rail upper level R.U.L.; (conf. conditions mentioning at point 2 - general technological recommendations).

Reinforcing, concreting:
The beam will be reinforced (according to the Tunnel beams reinforcing details)
The upper part of the anchoring bolt case will be compulsorily secured with a frame to avoid accidental shifting during concrete casting.
The beam will be concreted.

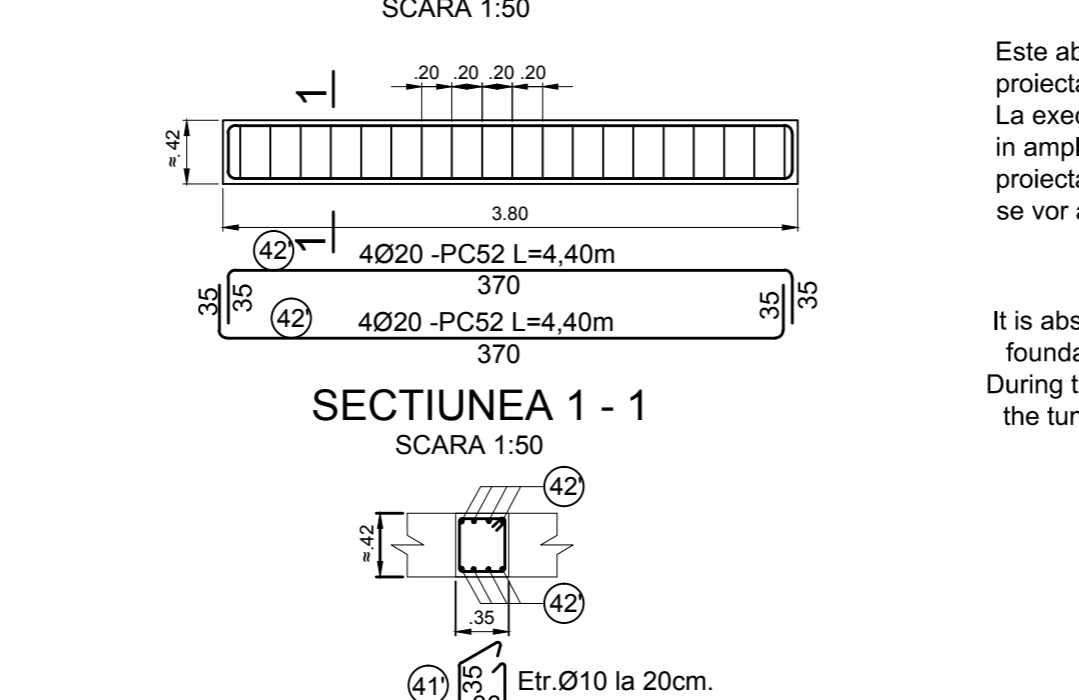
SECTIUNE : G-G
SECTION : G-G



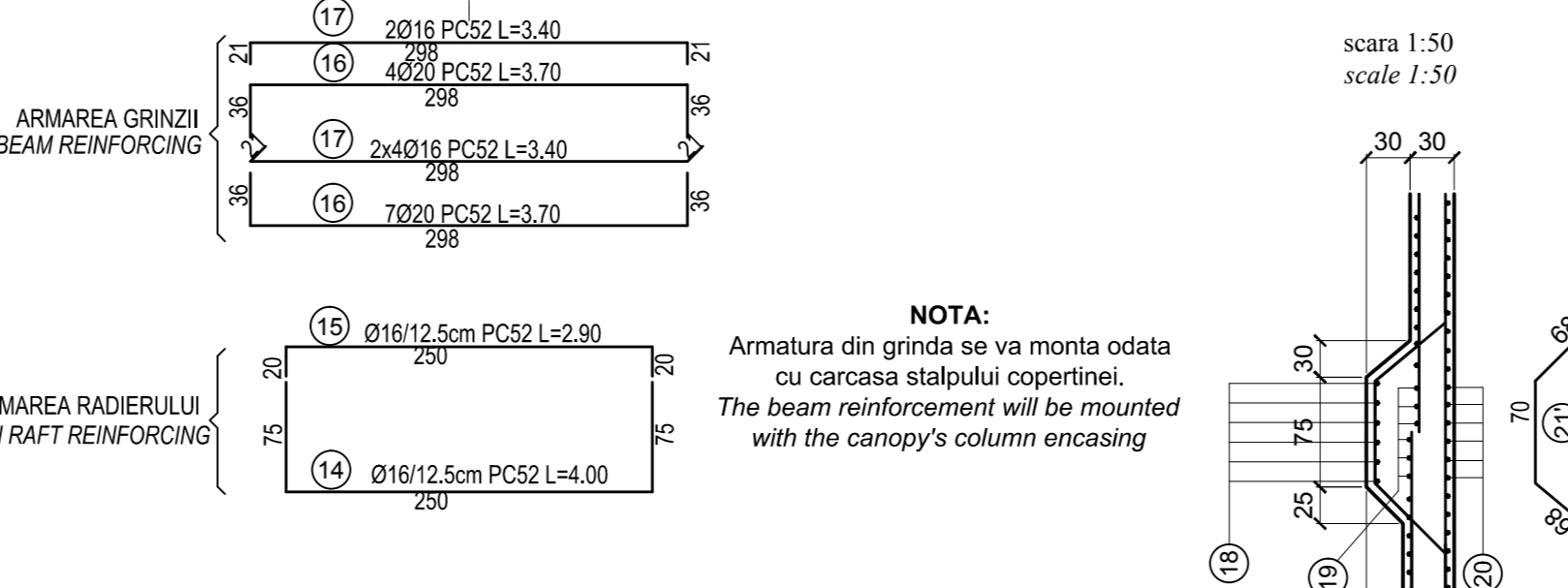
ARMARE GRINDA G1 - 35x42 -2buc. ARMARE GRINDA G2 - 35x42 -2buc.



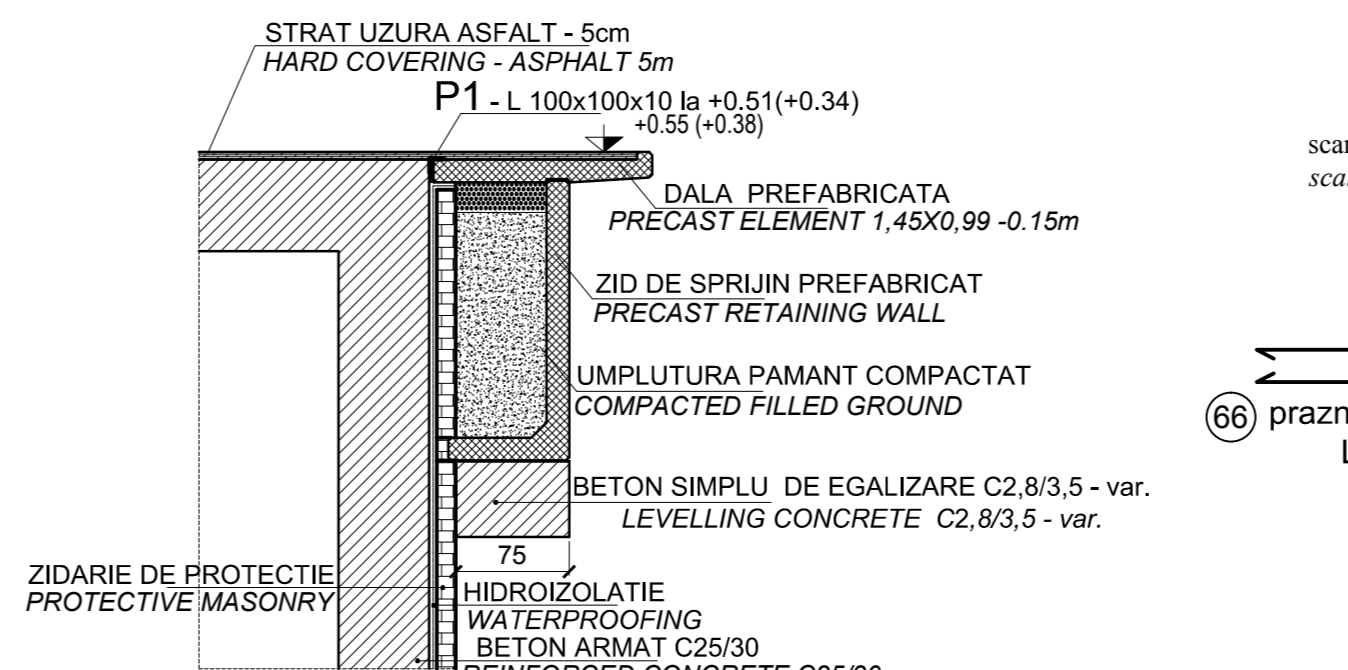
ARMARE GRINDA G3 - 35x42 -1buc.



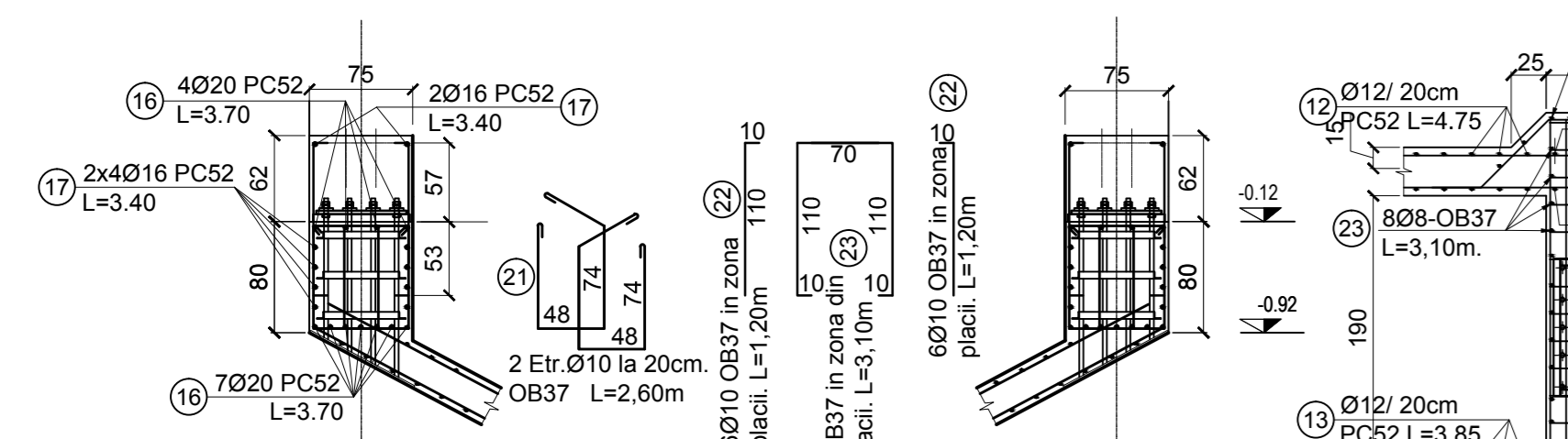
SECTIUNE : S-S
SECTION : S-S



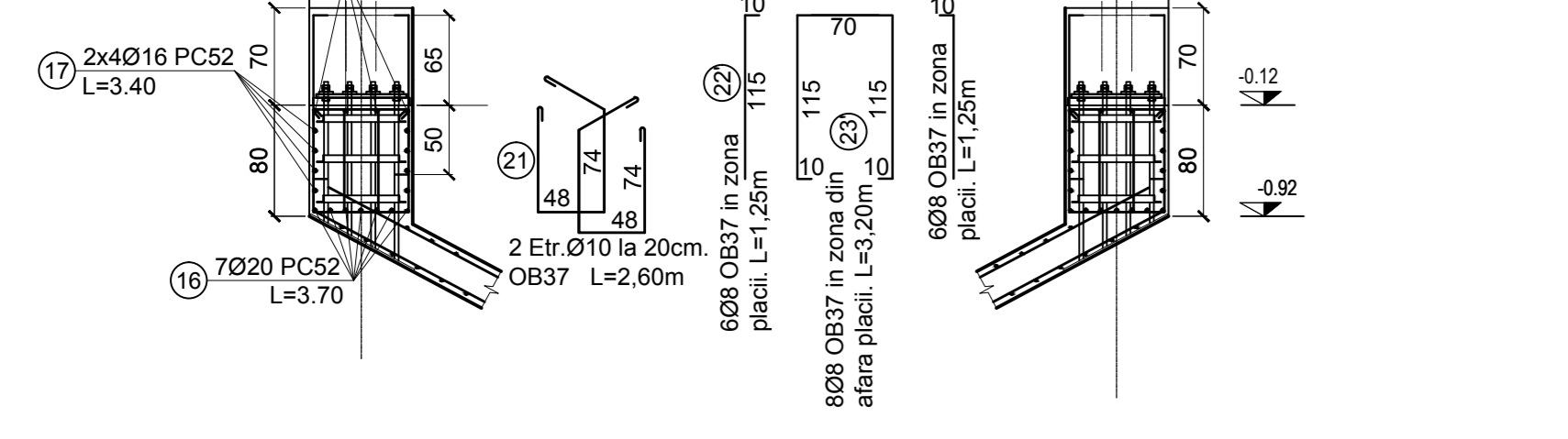
DETALII MONTARE DALA PREFABRICATA IN ZONA GRINDA FUNDATIE COPERTINA



DETALII ARMARE GRINDA PE TUNEL
PENTRU SECTIUNEA C - C



PENTRU SECTIUNEA B - B



| EXTRAS LAMINATE | | | | | | | | | | |
|---|-----------------------|--------------|-------------|--------------|-----------------|----------|----------|-------------|------------|--|
| Pozitia | Denumirea elementului | Grosime (mm) | Latime (mm) | Lungime (mm) | Greutate (kg/m) | Tip Otel | Nr. Buc. | Gr. Pozitie | Gr. Totala | |
| P1 | Tabla grinda | 10 | 100 | 750 | 7.85 | QL52 | 10 | 5.888 | 58.875 | |
| TOTAL GREUTATE SUBSTRANSIMBLE NETIZATE (kg) | | | | | | | | | 58.875 | |
| GREUTATE ELECTROZI DE SUDURA 3% (kg) | | | | | | | | | 1.766 | |
| GREUTATE grund 0.4% (kg) | | | | | | | | | 0.238 | |
| TOTAL GENERAL (kg) | | | | | | | | | 61 | |

PENTRU EXTRASUL DE ARMATURA VEZI PLAN TUNEL FOR THE REINFORCEMENT TABLE SEE THE TUNNEL PLAN

Beton simplu Plain concrete - C8/10 - F4 - T3 - IIa - 132.5 (R)
Beton armat Reinforcing concrete - C25/30 - F4 - T3 - IIa - 142.5 (R)
Armatură Reinforcements - PC 52
Armatură Reinforcements - OB 37

| | | | | | | | | | |
|--|------|-----------------------|------------|----------|------------|----------|------------|----------|-----|
| D | | | | | | | | | |
| C | | | | | | | | | |
| B | | | | | | | | | |
| A | | | | | | | | | |
| Index | Data | Modificare | Proiectant | Aprobat | Consultant | Aprobat | Consultant | Aprobat | CFR |
| | Date | Modification/Revision | Designer | Approved | Consultant | Approved | Consultant | Approved | CFR |
| <p>GUVERNUL ROMANIEI ROMANIAN GOVERNMENT</p> <p>PROIECT FINANAT DE UNIUNEA EUROPEANA EUROPEAN UNION FINANCED PROJECT</p> <p>C.N.C.F. "C.F.R." - S.A.</p> <p>CLIENT / CLIENT</p> <p>CONSULTANT / CONSULTANT</p> <p>SUBCONTRACTANT / SUBCONTRACTOR</p> | | | | | | | | | |
| <p>Reabilitarea liniei de cale ferata Brasov - Sibiu, parte componenta a coridorului IV Pan European, pentru circulatia venurilor cu viteza maxima de 160 km/h, Tronsoanel: Brasov - Sighisoara</p> <p>Rehabilitation of the railway line Brasov - Sibiu, Component Part of the IV Pan-European Corridor, for the trans circulation with maximum speed of 160 km/h, Section : Brasov - Sighisoara</p> <p>Denumire desen / Drawing Title : STATA VANATORII - TUNEL PIETONAL SECTIUNI TRANSVERSALE E-E; F-F; F'-F'; G-G; VANATORII STATION - PEDESTRIAN TUNNEL CROSS SECTIONS F-F; E-E; F'-F'; G-G; TUNNEL BEAMS REINFORCEMENT DETAILS</p> | | | | | | | | | |
| <p>Proiect/Project 2004/RO16/PA/003</p> <p>Faza / Phase: P.Th. / T.D.</p> <p>Scale / Scale 1:50</p> <p>Lot / LOT No. No. 01/01</p> | | | | | | | | | |