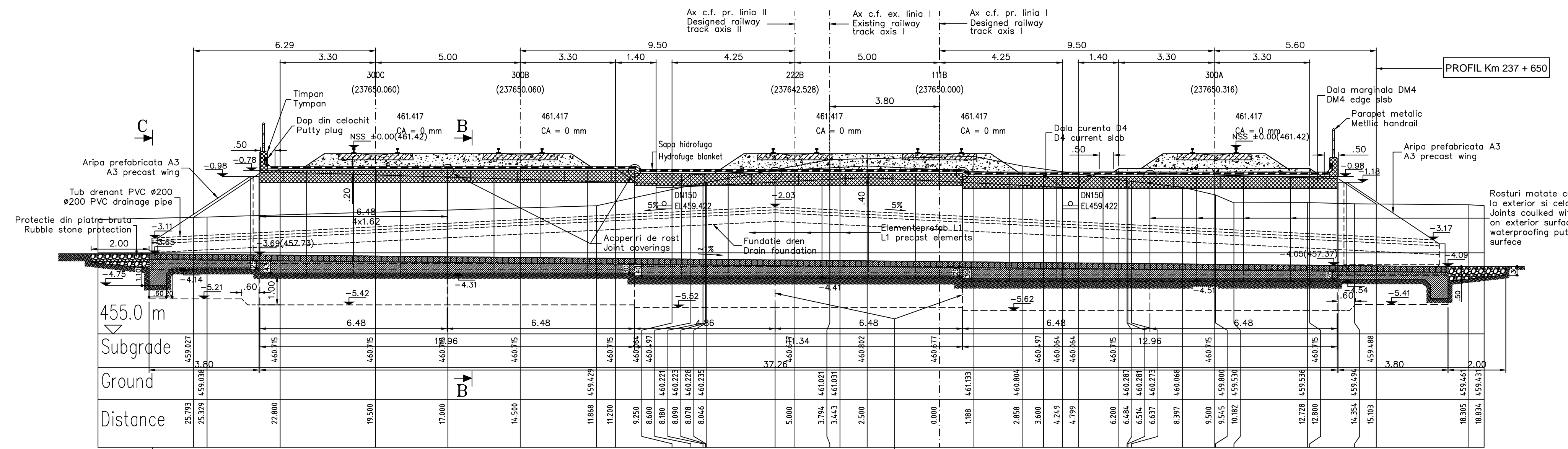


SECTIUNE A-A  
A-A SECTION



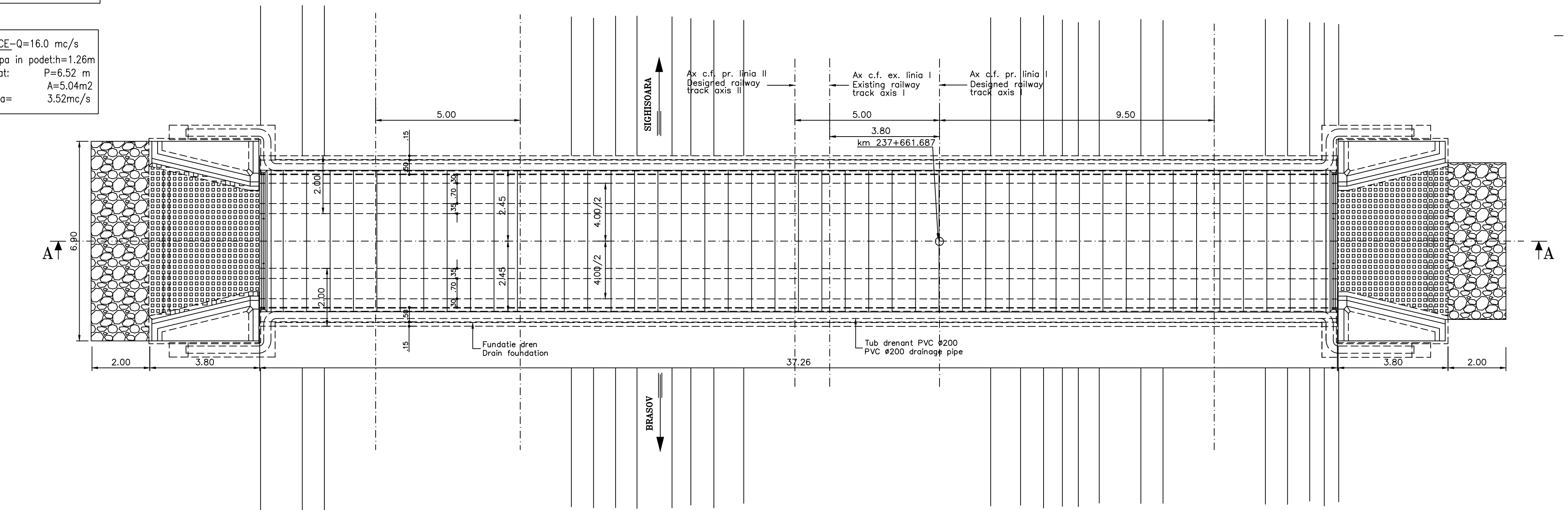
HYDRAULIC DATA

- Hydraulic height: h=1.26m
- Perimeter: P=5.52m
- Surface: S=5.04 m<sup>2</sup>
- Water low speed: V=3.52m/s

DATE HIDRAULICE-Q=16.0 mc/s

- Inaltimea de apa in podet: h=1.26m
- Perimetru udut: P=5.52 m
- Arie: A=5.04m<sup>2</sup>
- V. curgere apa: V=3.52m/s

VEDERE IN PLAN  
PLAN VIEW



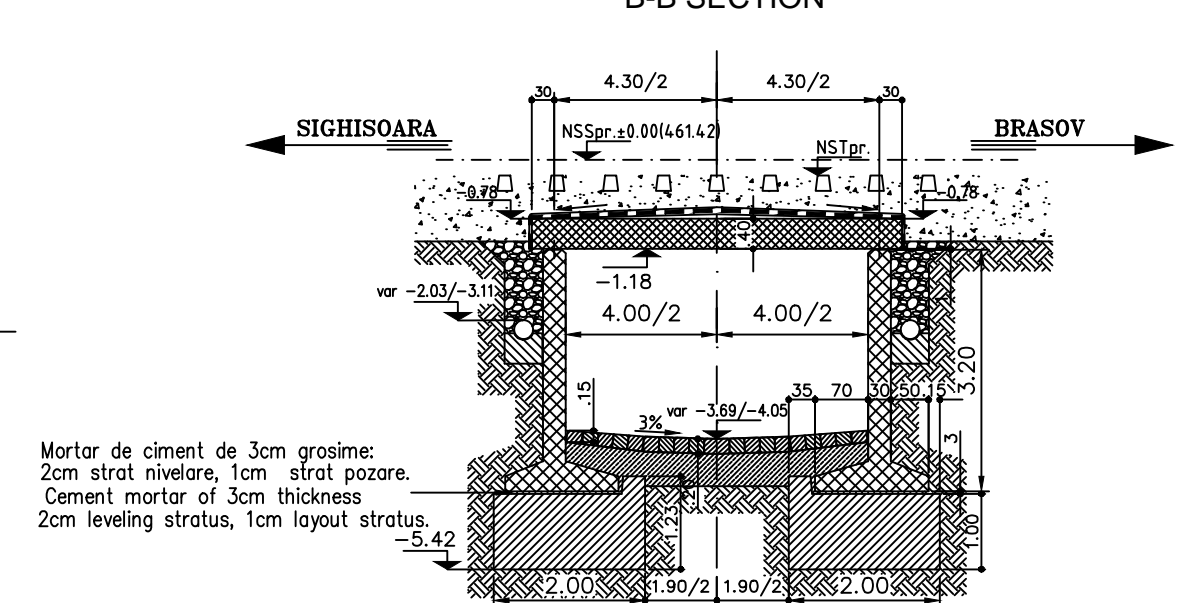
NOTA  
Numar de elemente prefabricate

- Dale marginale D4 2 buc.
- Dale curente D4 44 buc.
- Aripi prefabricate A3 4 buc.
- Elevatii L1 46 buc.

NOTE  
Number of precast elements

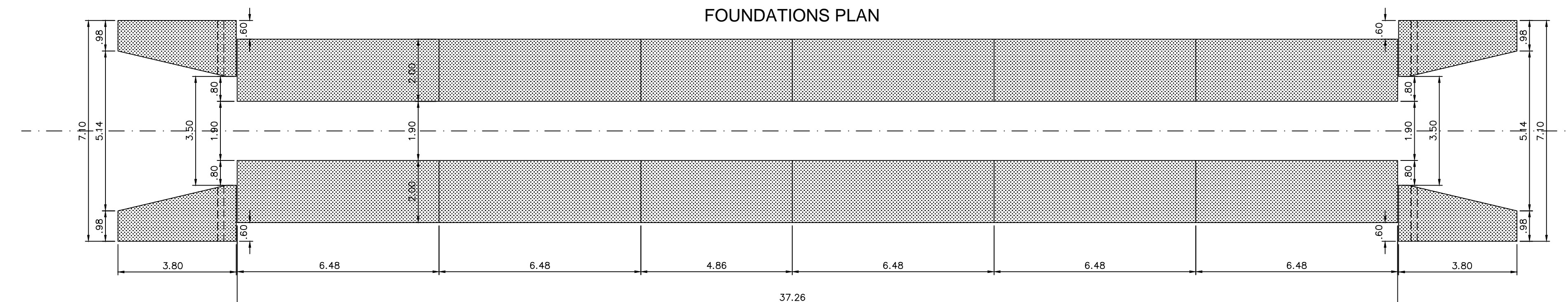
- Marginal slabs D4 2 pcs.
- Current slabs D4 44 pcs.
- Prefabricated wings A3 4 pcs.
- L1 elevation 46 pcs.

SECTIUNE B-B  
B-B SECTION



NOTA  
Pe blocul de fundatie se aterne un strat de 2 cm de mortar de ciment, pentru nivelare si un strat de 1 cm pentru rezemare.  
Prefabricatul se aseaza cu macarusa, dupa care, se ridica si se observe urma lasata pe stratul de mortar. In cazul in care nu s-a realizat rezemarea pe toata suprafata, se completeaza cu mortar de ciment si se reia operati.

PLANUL FUNDATIILOR  
FOUNDATIONS PLAN

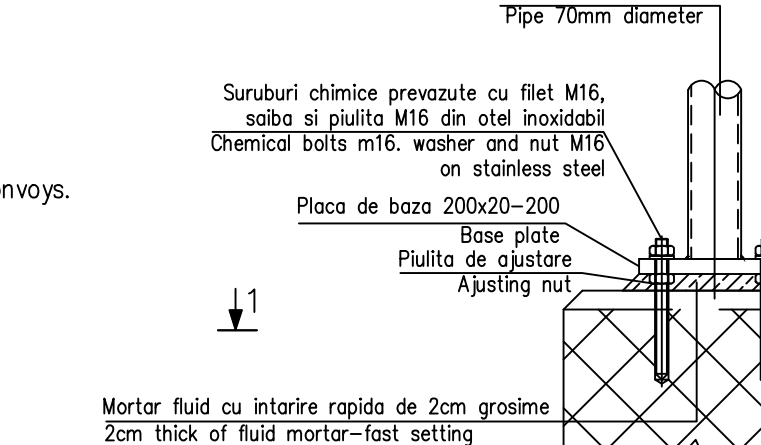


EXTRAS DE MATERIAL METALIC PENTRU CONFECTIONAREA UNUI PARAPET  
METALLIC MATERIAL NECESSARY FOR ONE GUARD RAIL

Poz. / Piece	Denumirea materialului / The denomination of the material	Buc. / Pcs	Sectiune / Section	Lung. / Long. (mm)	kg/ml	kg/buc	kg
P1	Placa fixare / Fixing plate	4	150x10	150	11.78	1.77	7.08
P2	Teava pahar / Support pipe	4	70x4	150	6.51	0.98	3.92
P3	Stalp / Pole	4	60x4	970	5.52	5.36	21.44
P4	Mana curenta / Handrail	1	60x4	4900	5.52	27.05	27.05
P5	Umplutura / Filling	3	38x4	1550	3.35	5.19	15.60
P6	Lisa / Strip	3	38x4	1550	3.35	5.19	15.60
Total partial							90.70
Sudura 2%							1.81
TOTAL							92.50

NOTA:  
1. This plan has been drawn up based on the following data:  
- lay-out Plan  
- longitudinal Profile  
- cross-section Profile  
- hydraulic determination  
- Field Data  
2. The new culvert, 4.00m span shall be carried out using prefabricated elements : in superstructure D4 slabs and in infrastructure L1 elevations and independent foundations. The culvert corresponds to the P10 and SW2 determination conveys.  
3. The culverts shall be connected to the embankment as follows:  
- upstream using prefabricated wings A3  
- downstream prefabricated wings A3  
4. When carrying out the works, the Norm "Practice code for the concrete works execution, reinforced and pre-stressed concrete" NE 012/2-2010 and Practice code for concrete production CP 012/1-2007, the quality and the reception of the works shall be made accordingly to Norm C 56-1985.  
5. If during the execution, discrepancies are found between the existing situation on site and the situation stated in the project, the designer will be notified.  
6. The construction has been classified in B category of importance. High important constructions, model 1-ensuring the quality according to C.O. 766/97.  
7. The project will be checked in order to comply with the A4.2; B2.2; D2.2 requirements.  
8. Particular attention is drawn on binding prefabricated elevations settlement on block foundation through a layer of cement mortar to achieve a perfect contact over the entire surface between precast and foundation base. Propping is prohibited without direct layer of cement mortar.

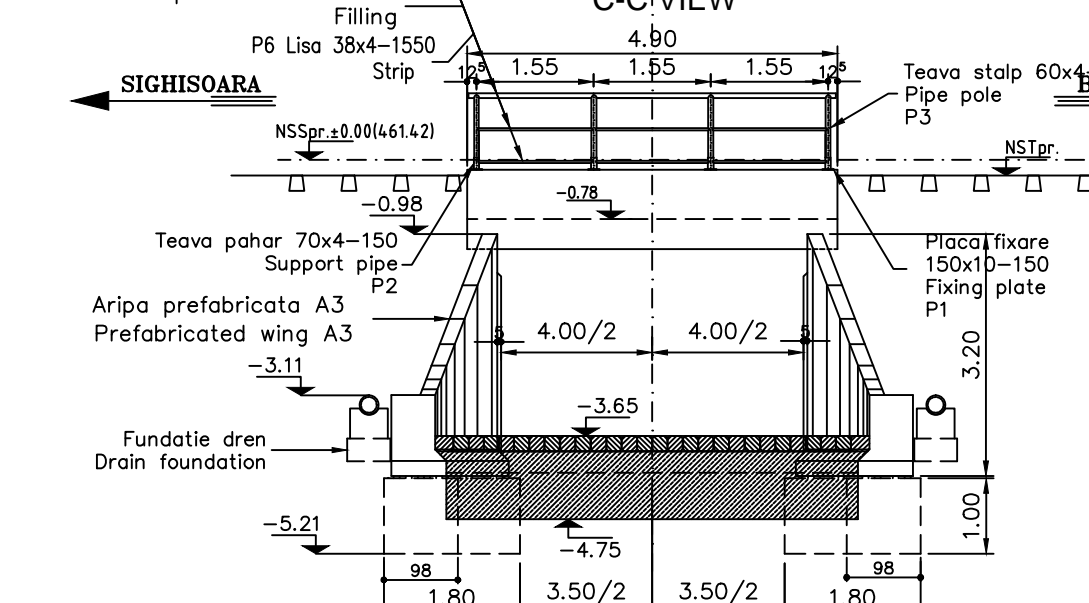
SECTIUNE 2-2  
2-2 SECTION



NOTA:  
Suruburi chimice prevazute cu filet M16, soba si pluta M16 din oel inoxidabil  
Chemical bolts m16, washer and nut M16 on stainless steel  
Placa de baza 200x20-200  
Base plate  
Plutita de ajustare  
Adjusting nut  
Mortar fluid cu intarire rapida de 2cm grosime  
2cm Thick of fluid mortar-fast setting

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VEDERE C-C  
C-C VIEW



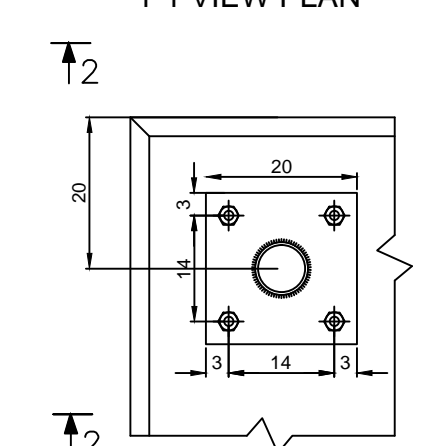
NOTA:  
1. Prezentul plan s-a intocmit pe baza urmatoarelor date:  
- plan de situatie  
- profil in lung  
- profil transversal  
- calcul hidraulic  
- date culesse pe teren  
2. Podetul proiectat de 4,00m lumina are suprastructura alcatuita din dale prefabricate D4  
Infrastructura este alcatuita dintr-o elevatie din elemente prefabricate L1 si fundatii independente.  
Podetul corespunde la convoaiele de calcul P10 si SW2.  
3. Racordarea podetului cu terasamentul si cu terenul natural se realizeaza:  
- in aval si amonte cu aripi prefabricate A3  
4. La executie se vor respecta cu strictete prevederile din normativul Codul de practica pentru executarea lucrurilor din beton, beton armat si beton precomprimat, NE 012/2-2010 si Cod de practica pentru producerea betonului CP 012/1-2007, iar verificarea calitatii lucrarilor si receptiunea lor se va face conform normativului C56-1985.  
5. Daca la executie se vor constata neconcordante intre situatia existenta pe teren si cea din proiect se va anunta proiectantul.  
6. Constructia se inadreaza in categoria B de importanta. Constructii de importanta deosebita, model 1 de asigurare a calitatii conform NS 766/97.  
7. Proiectul va fi verificat la exigentia A4.2; B2.2; D2.2.  
8. Se atrage in mod deosebit atentie asupra obligativitatii rezemarii elevatiilor prefabricate pe blocul de fundatie prin intermediul unui strat de mortar de ciment pentru a se realiza un contact perfect pe toata suprafata intre lapa prefabricatului si fundatie. Se interzice rezemarea directa fara strat de mortar de ciment.

LEGENDA BETOANELOR  
CONCRETE LIST

- Beton armat in elemente prefabricate-L1  
Reinforced concrete in the prefabricated elements  
C35/45-CEM I/A-S32,5-(XC4+XF3+XA2)-A/C=0,50-Dmax22-Q 0,20
- Beton in dale prefabricate din beton precomprimat  
Reinforced concrete in the prefabricated slabs  
C35/45-CEM I/A-S42,5-(XC4+XF3+XA2)-A/C=0,50-Dmax16-Q 0,10
- Beton simplu in fundatia elementelor prefabricate  
Plain concrete in the prefabricated elements foundations and wings  
C25/30-CEM I/A-S 32,5-(XF1)-A/C=0,50-Dmax32-Q 0,20
- Beton simplu de panta si in fundatia drenului  
Plain concrete slope and in the drain foundation  
C 25/30-CEM I/A-S 32,5-(XC4+XF3+XA1)-A/C=0,50-Dmax32-Q 0,20

DETALIU PENTRU PRINDEREA PLACUTELOR P1 DE TIMPAN  
DETAIL TO JOIN THE SLABS P1 AT THE TYMPANUM

VEDERE IN PLAN 1-1  
1-1 VIEW PLAN



Index	Date	Modificari / Revision	Proiectant / Designer	Approbat / Approved Consultant	Approbat CFR / Approved CFR
D					
C					
B					
A					

GUVERNUL ROMANIEI / ROMANIAN GOVERNMENT  
PROIECT FINANTAT DE UNIUNEA EUROPEANA / EUROPEAN UNION FINANCED PROJECT

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

CONSULTANT / CONSULTANT  
ITALFERR  
Scot Wilson  
OBERMEYER  
PLANEN + BERATEN GmbH  
TECNIC  
Consulting Engineers

SUBCONTRACTANT / SUBCONTRACTOR  
ARX  
A. Dinulescu Stanciu  
07.2011  
Stribu Vasile  
07.2011

Reabilitarea liniei de cale ferata Brasov - Simeria, parte component a coridorului IV Pan-European, pentru circula la trenurilor cu viteza maxima de 160 km/h, Brasov - Sighisoara, component Part of the IV Pan-European Corridor, for the trains circulation with maximum speed of 160 km/h, Section : Brasov - Sighisoara

Denumire desen / Drawing Title :  
PODET - km 237+661.687 - CULVERT  
DISPOZITIE GENERALA / GENERAL DISPOSITION

Codificare / Codification System  
Scara / Scale 1:100, 1:5  
LOT / LOT  
Nr./No 01/01

NOTA Se vor confecciona doua parapete