

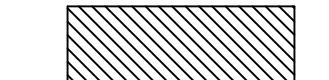

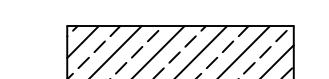
DATE HIDRAULICE:
 -Inaltimea de apa: h=0,96m
 -Perimetrul udut: P=3,92m
 -Aria uduta: A=1,92m²
 -Viteza de curgere a apei V=3,07m/s

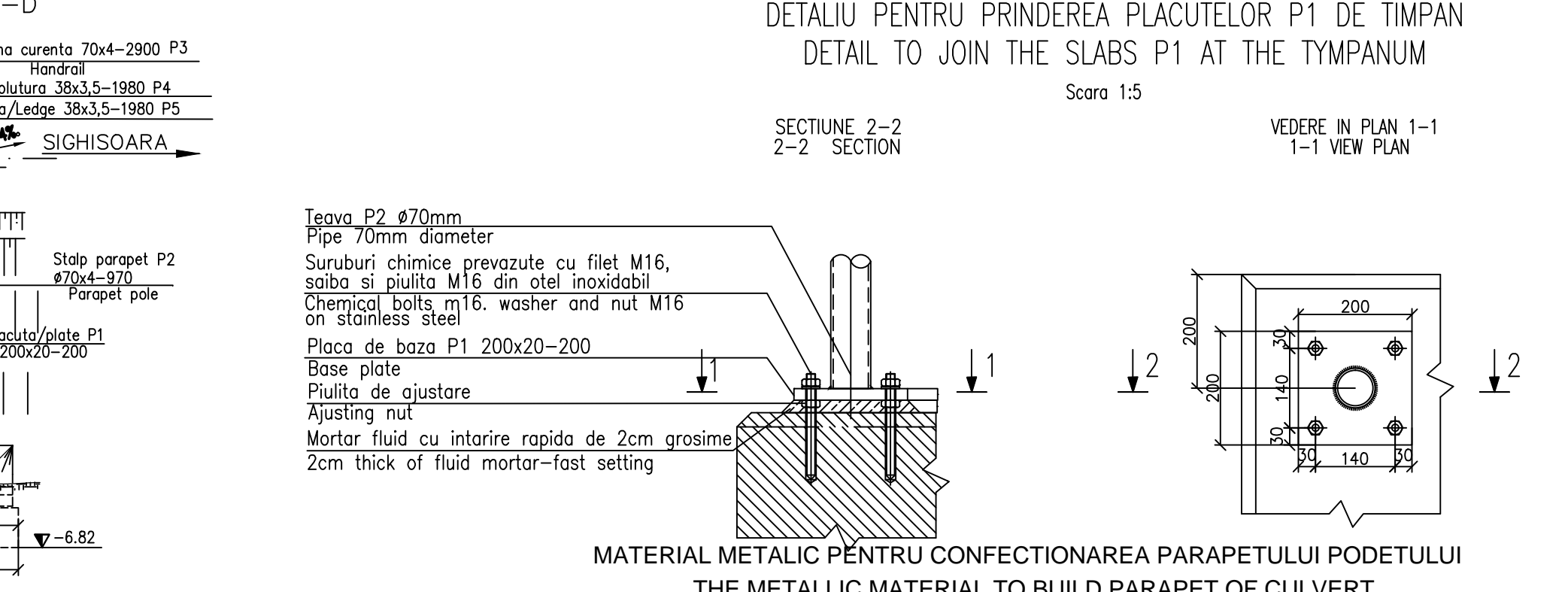
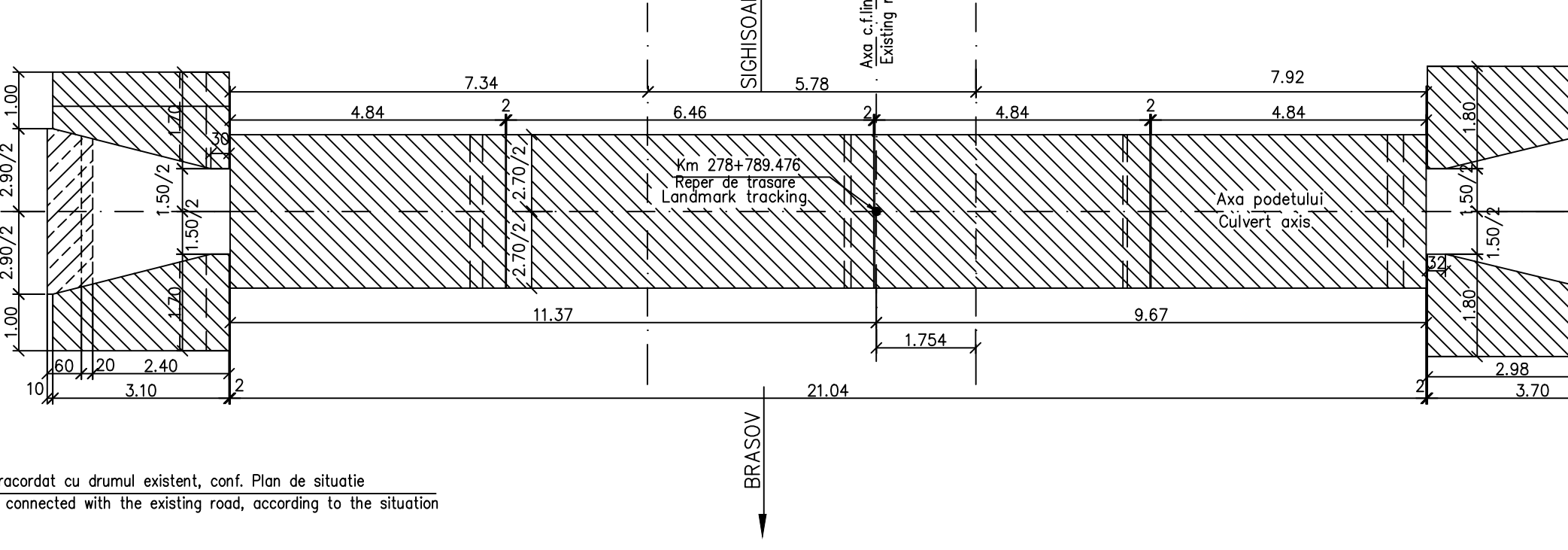
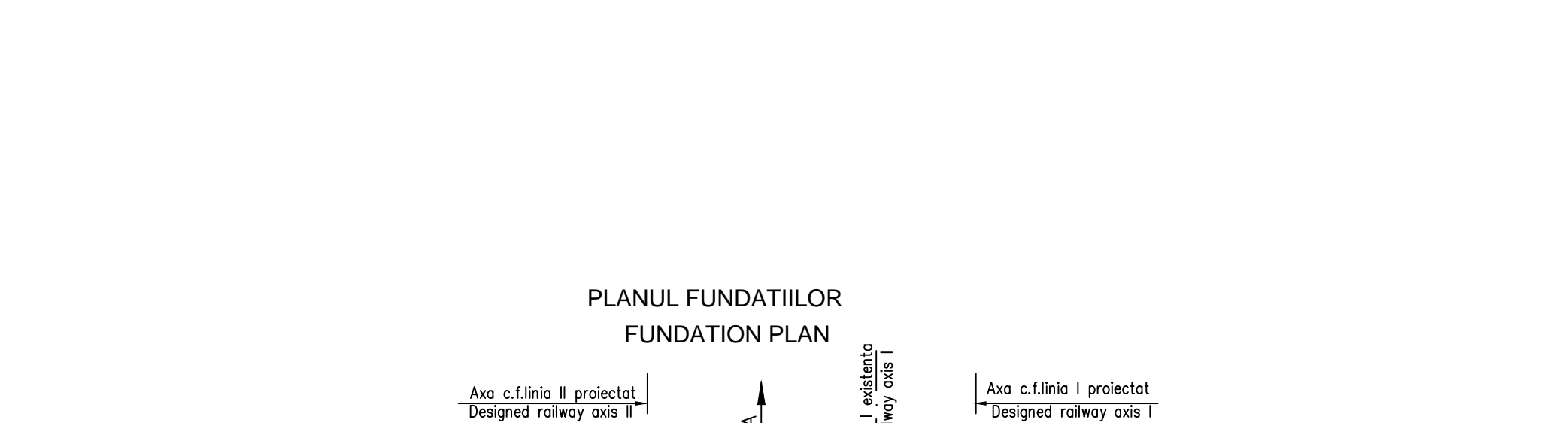
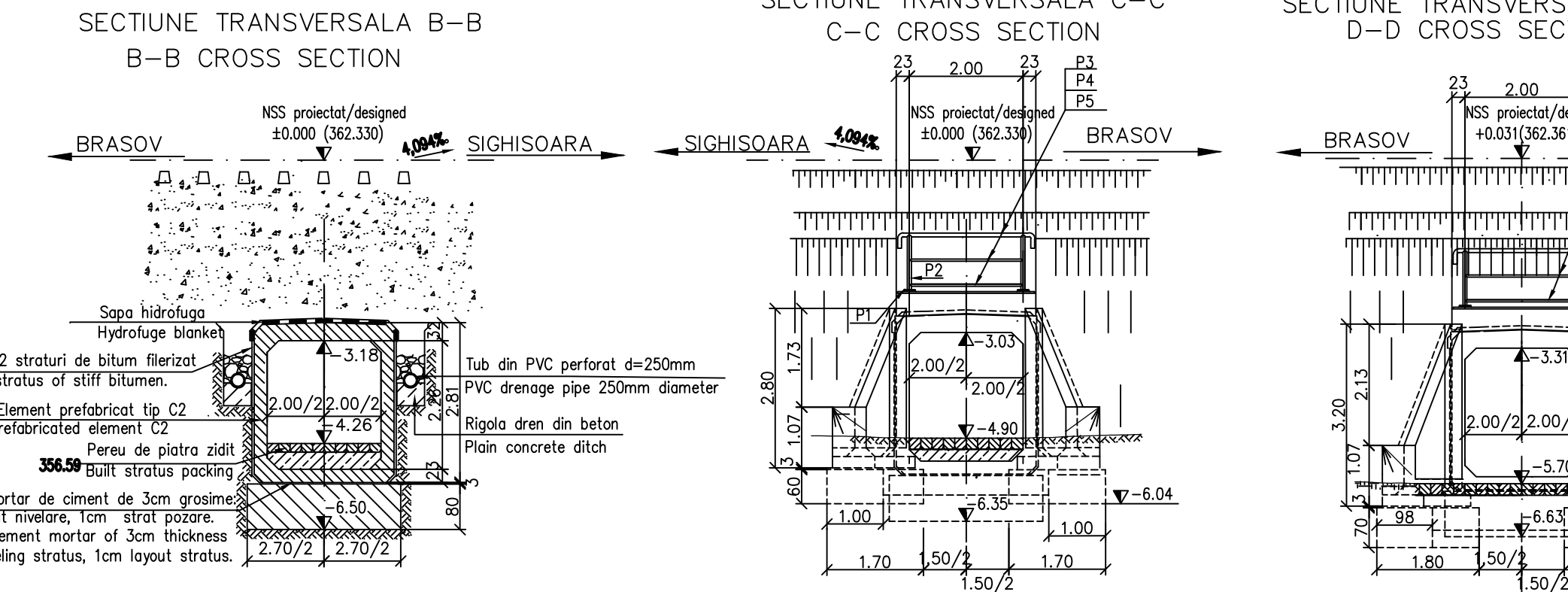
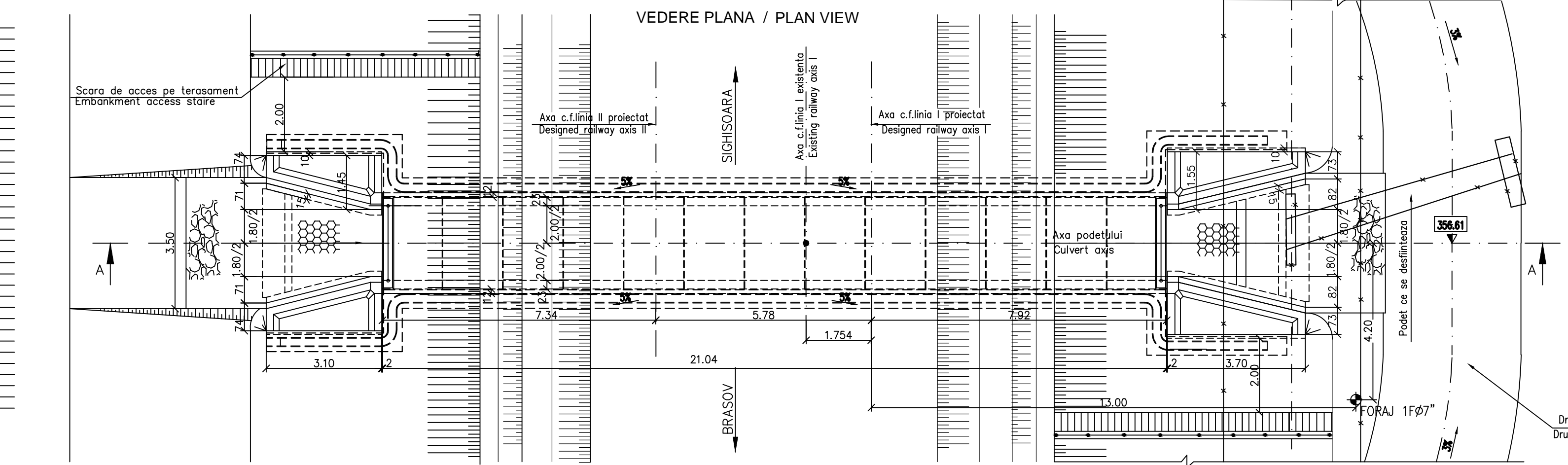
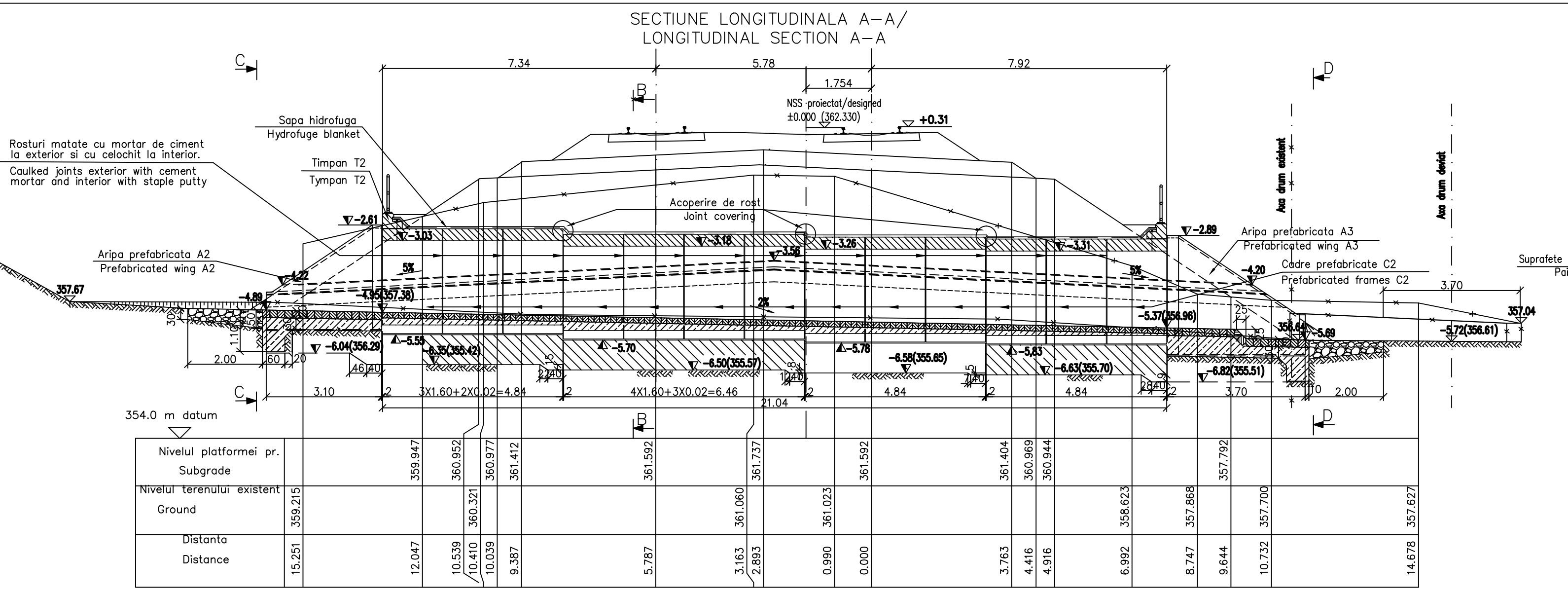
HIDRAULIC DATA:
 -Hydraulic height: h=0,96m
 -Perimeter: P=3,92m
 -surface: A=1,92m²
 -Water flow speed: V=3,07m/s

NOTA
 Numar de elemente prefabricate
 -Cadre C2 13buc.
 -Aripi prefabricate A2 2buc.
 -Aripi prefabricate A3 2buc.
 -Timpane prefabricate T2 2buc.

NOTE
 Number of precast section
 -Prefabricated frames C2 13pcs.
 -Prefabricated wings A2 2pcs.
 -Prefabricated wings A3 2pcs.
 -Head-wall T2 2pcs.

LEGENDA BETOANELOR CONCRETE LIST

-  Beton armat in elementele prefabricate
Reinforced concrete in the prefabricated elements
C35/45-CEM II/A-S32,5-(XC4+XF3+XA1)-A/C=0,50-Dmax 22-CI 0.20
-  Beton simplu in fundatia elementelor prefabricate si a arilor
Plain concrete in the prefabricated elements and wings
C25/30-CEM II/A-S 32,5(XF1)-A/C=0,50-Dmax 32-CI 0.20
-  Beton simplu de panta in pinteri si in rigola drenului
Plain concrete slope and spur the gutter drain
C 25/30-CEM II/A-S 32,5-(XC4+XF3+XA1)-A/C=0,50-Dmax32-CI 0.20



MATERIAL METALIC PENTRU CONFECTIONAREA PARAPETULUI PODETULUI / THE METALLIC MATERIAL TO BUILD PARAPET OF CULVERT

Denumire / Denomination	Buc.	Sectiune / Section	Lung. / Long. (mm)	Sectiune / Section		
				kg/ml	kg/buc	kg
P1 Placuta prindere / Clamping plate	4	200x20	200	31.40	6.28	25.12
P2 Stalp parapet EN 10297 - E275 / Parapet pole	4	70x4	970	6.51	6.32	25.26
P3 Mana curenta EN 10297 - E275 / Handrail	2	70x4	2900	6.51	18.88	37.76
P4 Umplutura EN 10058 / Filling	2	38x3,5	1980	2.98	5.90	11.80
P5 Lisa EN 10058 / Ledge	2	38x3,5	1980	2.98	5.90	11.80
Total partial						111.74
Sudura 2% / Welding 2%						2.24
TOTAL						115

NOTE:

- This plan has been drawn up based on the following data:
 -Layout Plan; Longitudinal Profile; Cross-section Profile; Bridge's File;
 -Hydraulic determination; Field Data.
- The culvert corresponds to the UIC determination convoys (LM71 and SW/2).
- The execution will strictly comply with the provisions of "Practice code for the concrete production and works execution, reinforced and pre-stressed concrete - Part 1: Practice code for concrete production" NE 012/1-2007 and "Practice code for the concrete production and works execution, reinforced and pre-stressed concrete - Part 2: The execution of concrete works." NE 012/2-2010, and the quality and the reception of the works shall be made according to Norm C 56-1985.
- 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.
- The construction has been classified in B category of importance (high important constructions), model 1-ensuring the quality and class of importance B according to G.O. 766/97.
- The project will be checked in order to comply with the A4.2; B2.2; D2.2 requirements.
- 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.

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Index	Date	Modificari / Revision	Proiectant / Designer	Approbat / Approved	Consultant / Approved
A	11.2011	Revizia 1	Elena Radu	Approbat / Approved	Approbat CFR / Approved CFR



SUVERNUL ROMANIEI / ROMANIAN GOVERNMENT
PROIECT FINANAT DE UNIUNEA EUROPEANA / EUROPEAN UNION FINANCED PROJECT

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



CONSULTANT / CONSULTANT

Approbat / Approved	Responsabil / Responsible	Data / Date	Semnatura / Signature
Approbat / Approved	Seif proiect / Project manager	R. Liuzza	
Verificat / Checked	Expert Cheie / Checking Expert	V. Kallidromitis	

SUBCONTRACTANT / SUBCONTRACTOR

Approbat / Approved	Responsabil / Responsible	Data / Date	Semnatura / Signature
Intocmit / Elaborated	Proiectant / Designer	Elena Radu	02.2011

Reabilitarea liniei de cale ferata Brasov - Simeria, parte componenta a coridorului IV Pan European, pentru circulatia trenurilor cu viteza maxima de 160 km/h,
Tronsonul : 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,
Section : Brasov - Sighisoara

Denumire desen / Drawing Title :
INTERVAL ALBESTI - SIGHISOARA / ALBESTI - SIGHISOARA SECTION
PODET - KM 278+789.476 / KM 278+789.476 - CULVERT
DISPOZITIE GENERALA / GENERAL DISPOSITION

Codificare / Codification System	Scara / Scale	LOT / LOT	Nr. / No
E A 5 1 0 1 C 2 0 P A P O 1 0 0 1 0 0 2 1	1:100; 1:5		01 / 01