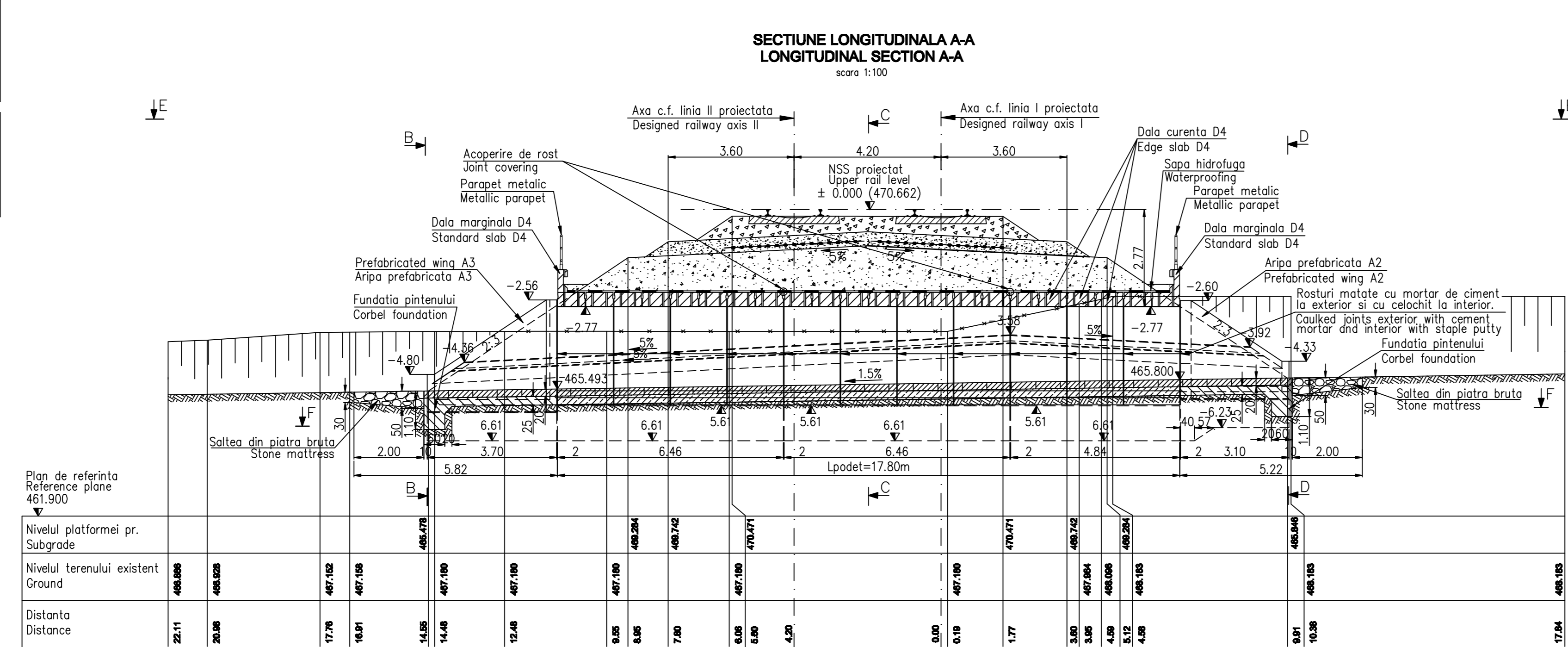
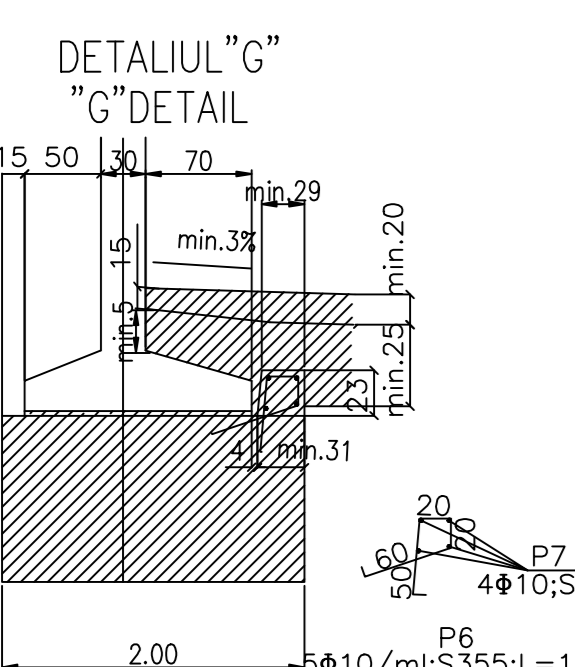


DATE HIDRAULICE:
 -Inaltimea de apa in podet: h=1.19m
 -Perimetrul uda: P=6.38m
 -Aria udata: A=4.76m²
 -Viteza de curgere a apei V=3.41m/s

NOTA
Numar de elemente prefabricate
 -Date marginile D4 2buc.
 -Date curente D4 2buc.
 -Aripi prefabricate A2 2buc.
 -Aripi prefabricate A3 2buc.
 -Elevatii L2 22buc.

HIDRAULIC DATA:
 -Hydraulic height: h=1.19m
 -Perimeter: P=6.38m
 -surface: A=4.76m²
 -Water flow speed: V=3.41m/s

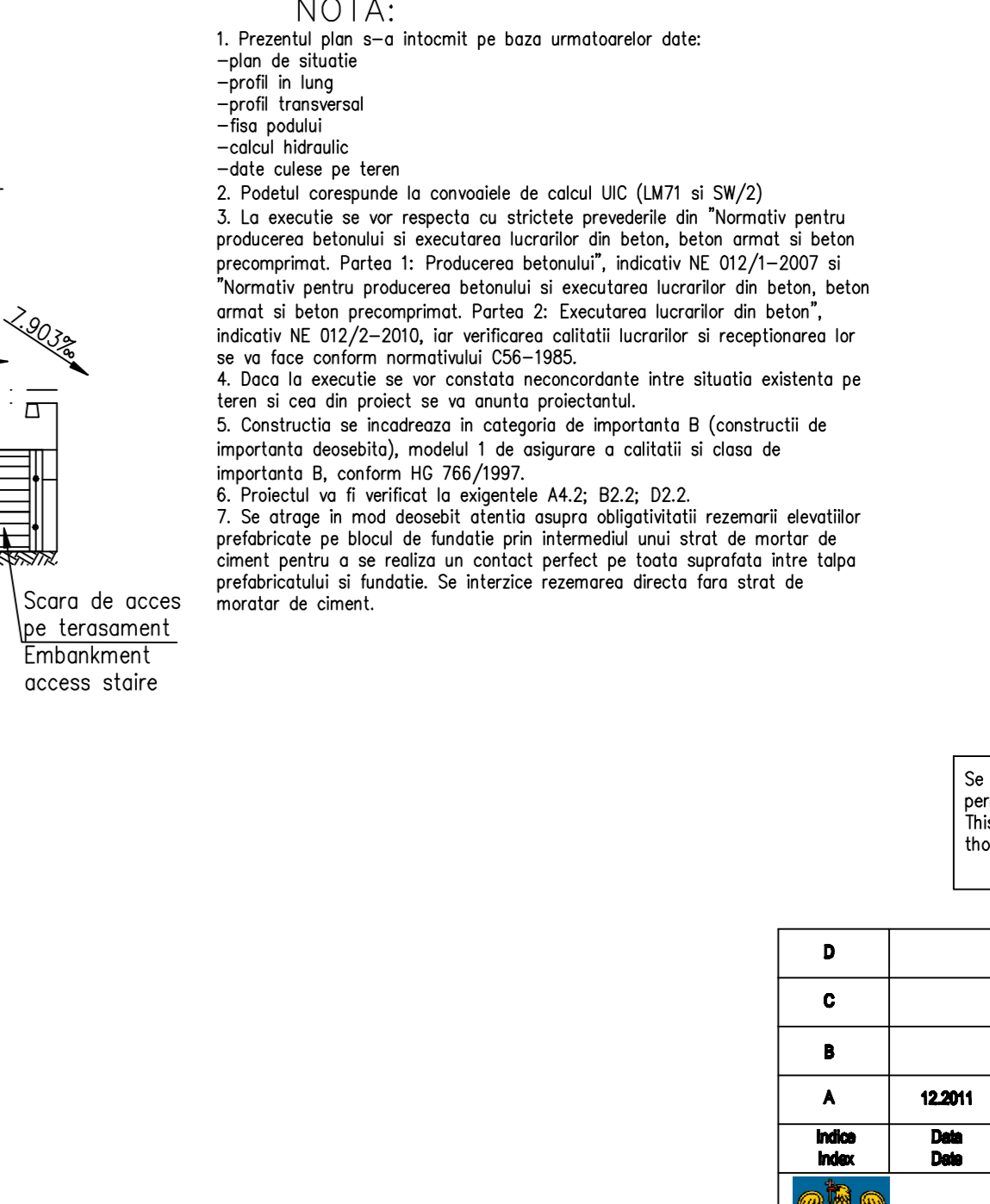
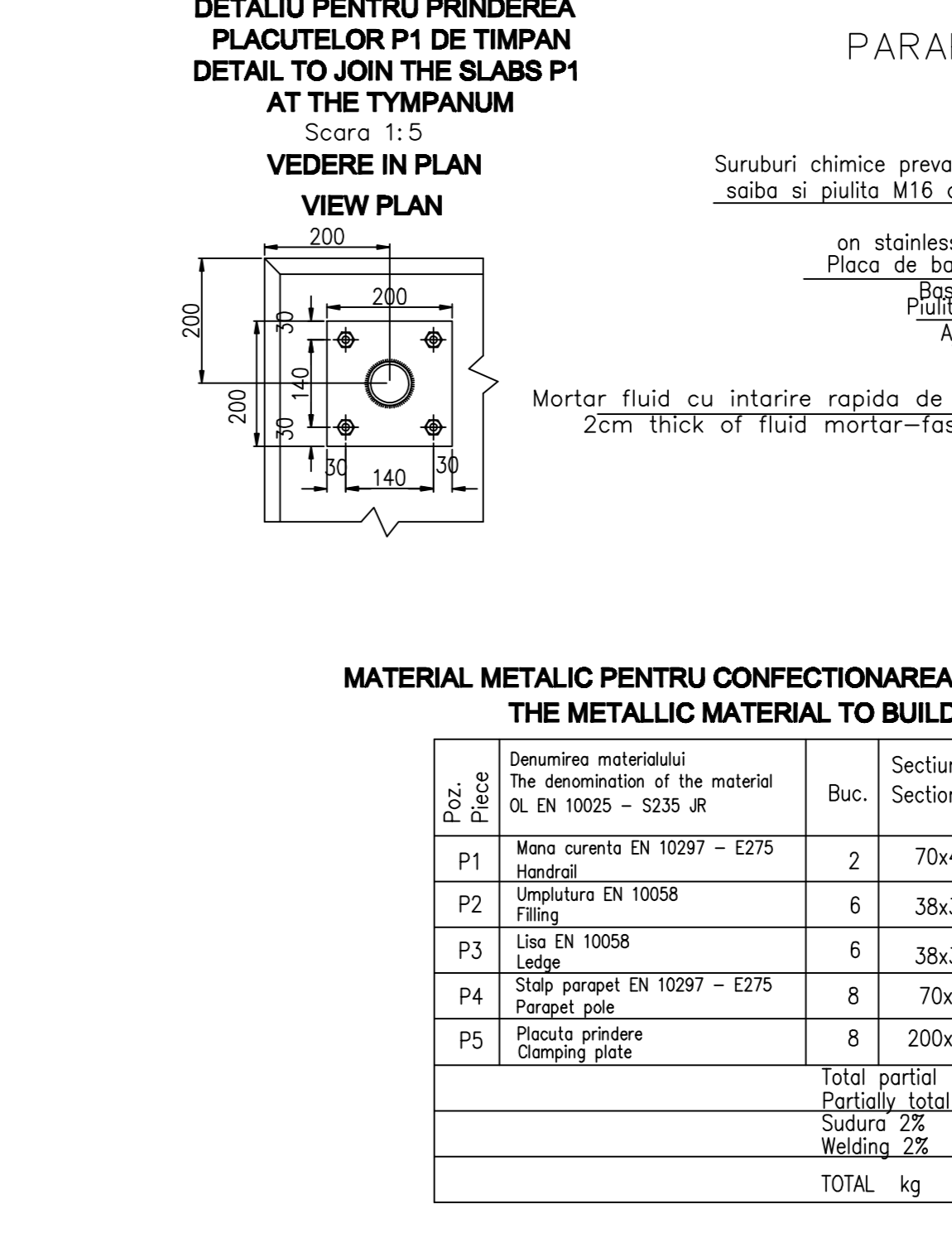
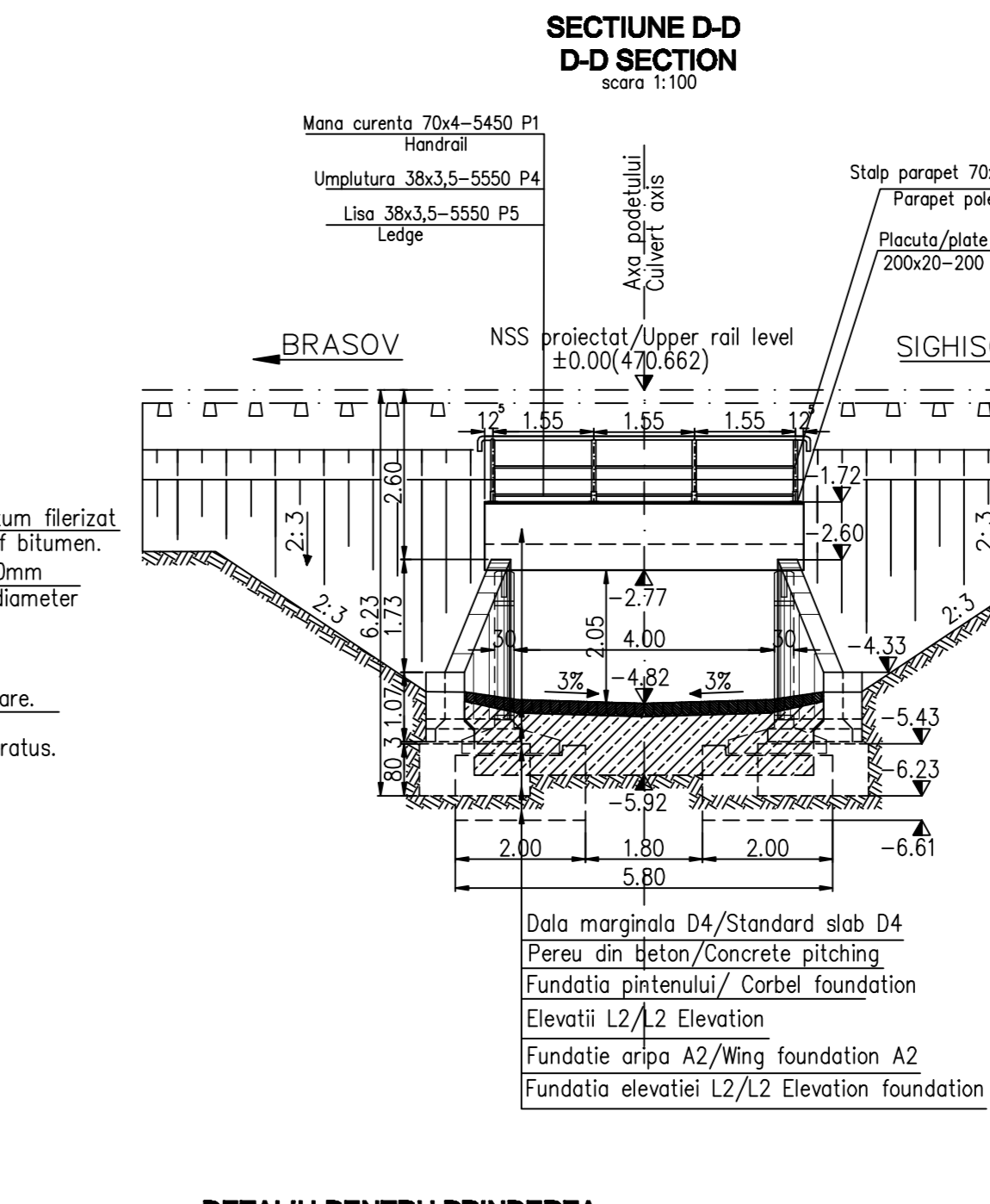
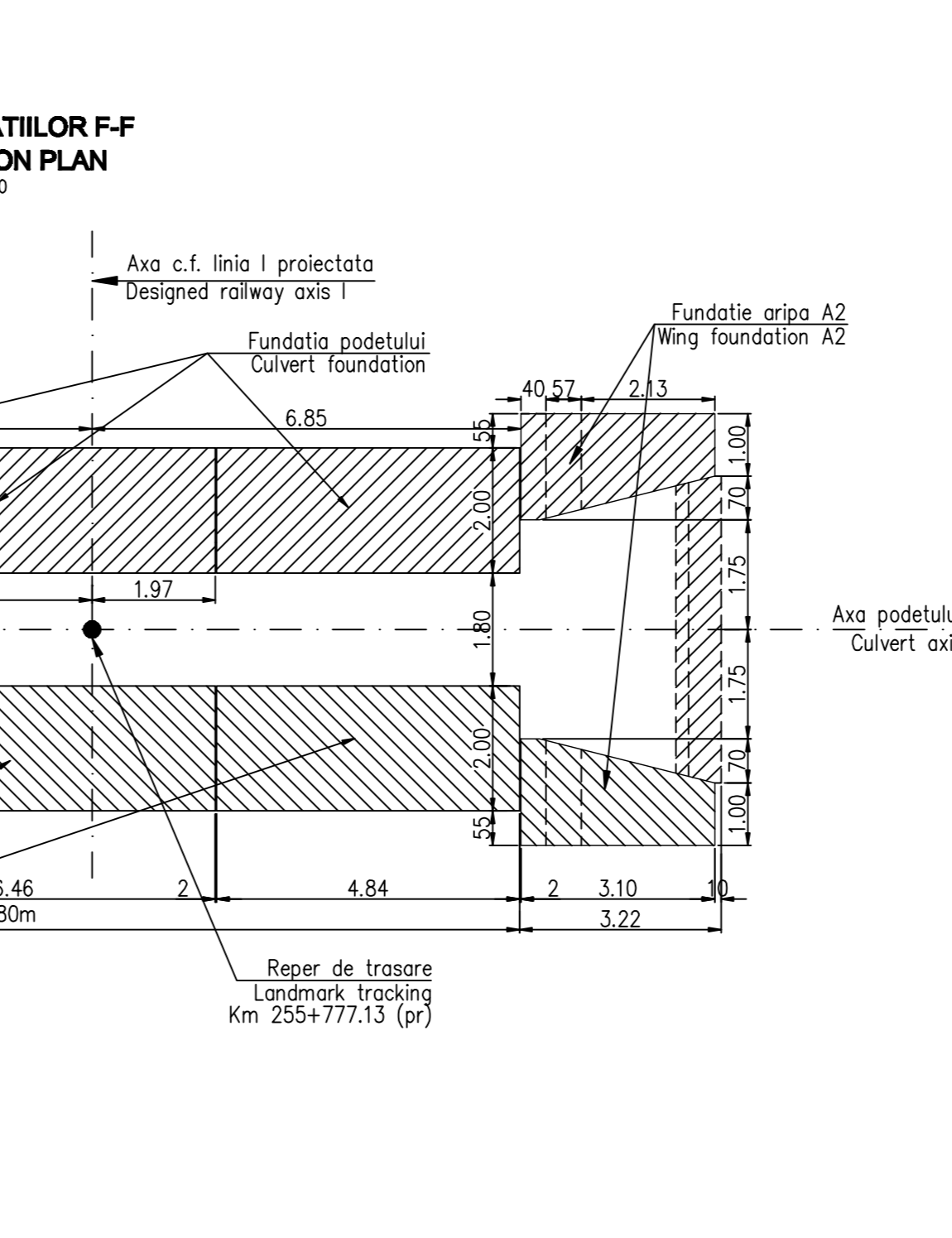
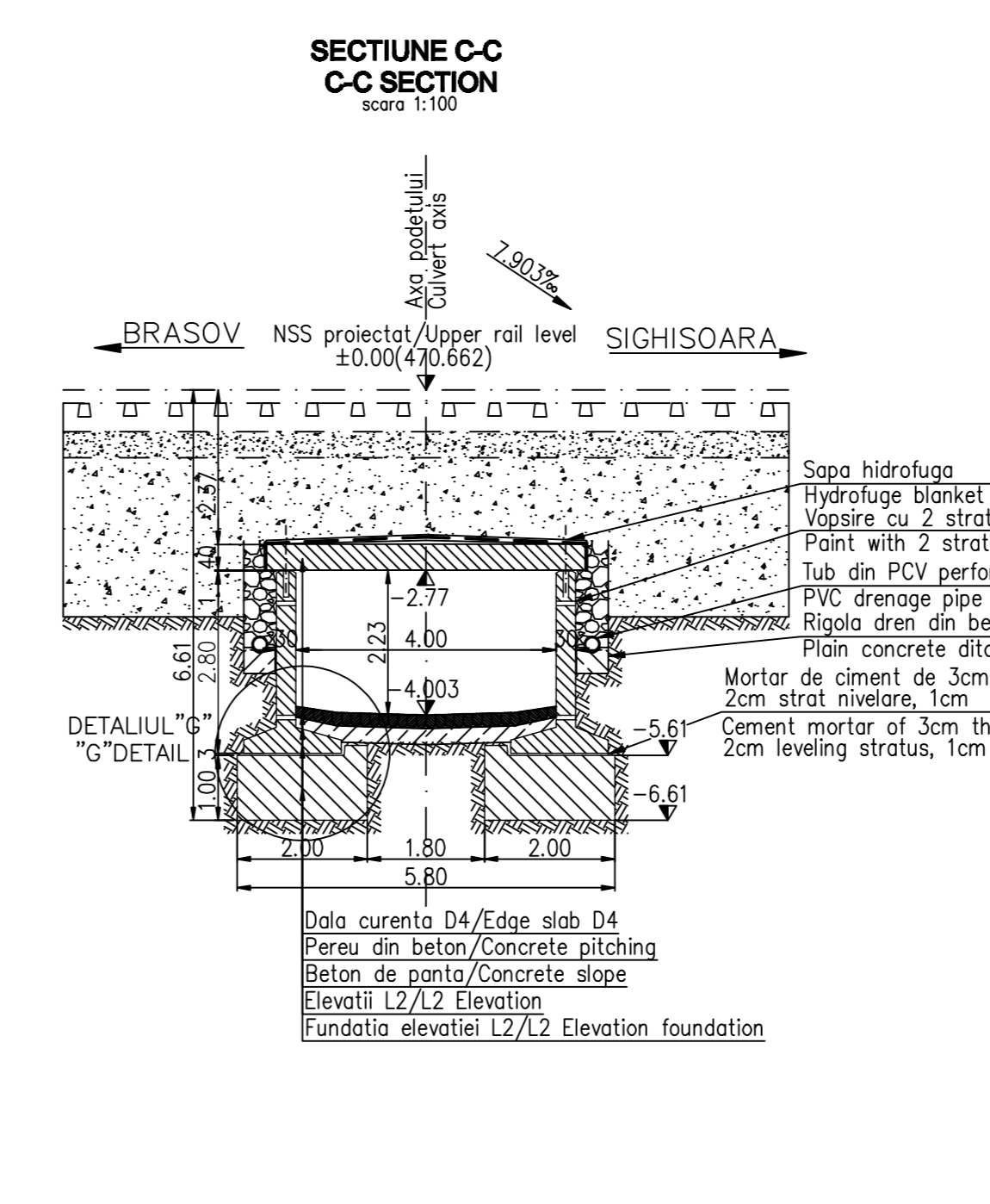
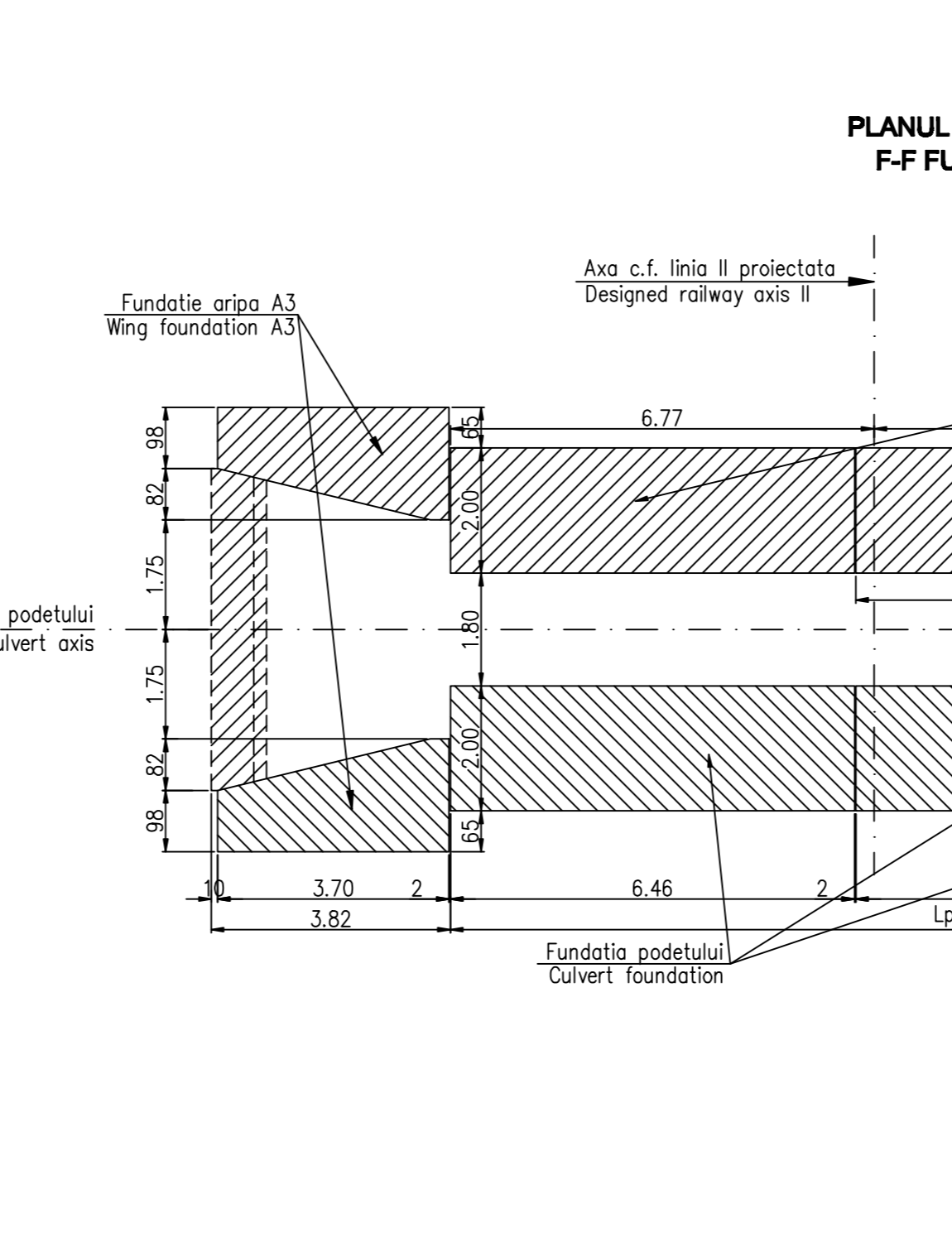
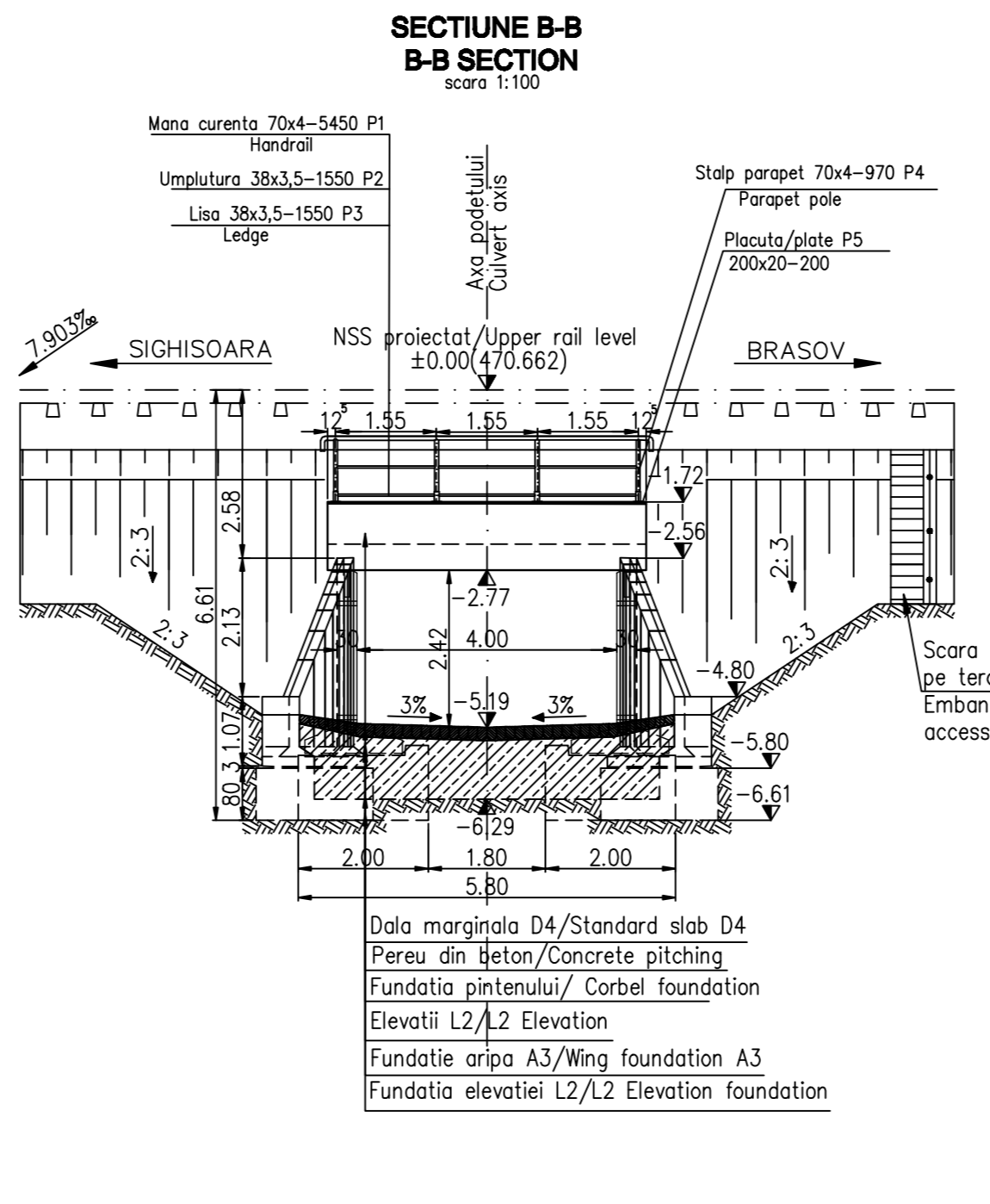
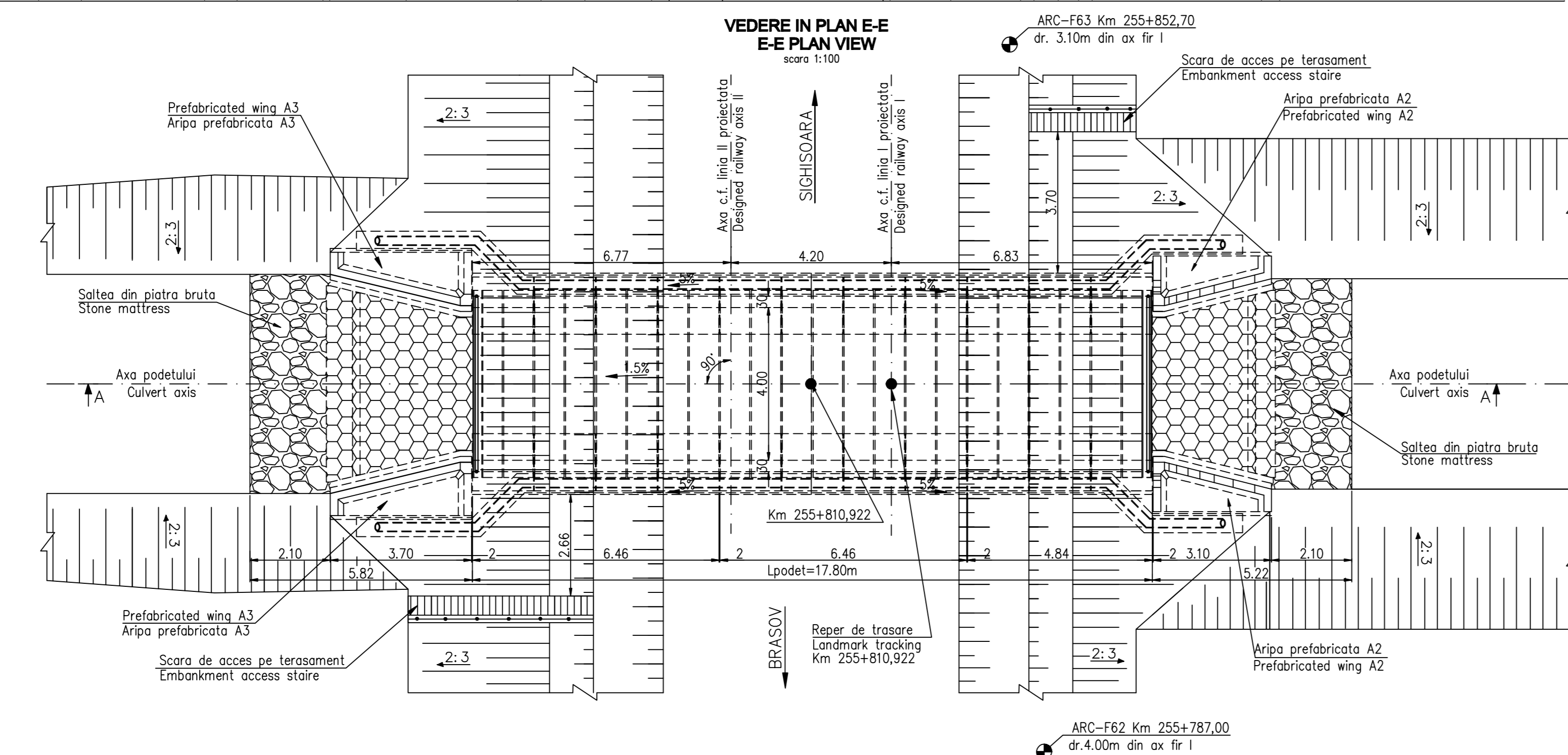
NOTE
Number of precast section
 -Standard slab D4 2pcs.
 -Edge slab D4 2pcs.
 -Prefabricated wings A2 2pcs.
 -Prefabricated wings A3 22pcs.
 -L2 elevation 22pcs.



Poz. / Piece	Denumirea materialului / The denomination of the material	Buc.	Diametru / Diametre	Lung. / Long. (cm)	Sectiune / Section		
					kg/ml	kg/buc	kg
P6	Armatura Reinforced steel	20x2	Ø10	1.65	0.617	1.018	40.72
P7	Armatura Reinforced steel	4x2	Ø10	4.90	0.617	3.023	24.18
P8	Armatura Reinforced steel	32x4	Ø10	1.65	0.617	1.018	130.30
P9	Armatura Reinforced steel	4x4	Ø10	6.55	0.617	4.04	64.64
Total partial / Partial total					258.84		
Sudura 2%					5.20		
					266.00		

LEGENDA BETOANELOR CONCRETE LIST

- Beton in elemente prefabricate in general (cadre, aripi, timpane): Concrete for prefabricated elements generally (frames, wings, tympana), C 35/45 - CEM II/A - S 32,5 - (XC4+XF3+XA1) - A/C = 0,50 - Dmax22 - Cl 0,20
- Beton in fundatia podetului, a elementelor de racordare (aripi, pinteni), in percu (wings, breakwaters), in pitching C25/30-CEM II/A-S 32,5-(XF1)-A/C=0,50-Dmax32-Cl 0,20
- Beton in rigola drenurilor, fundatiile sferturilor de con si pentru realizarea stratului suport pentru percu: Concrete for the foundations of cone quarters and for the support layer of revetment: C 25/30 - CEM II/A - S 32,5 - (XC4+XF3+XA1) - A/C = 0,50 - Dmax32 - Cl 0,20
- Beton in stratul de protectie a hidroizolatiei: Concrete for the waterproofing protection layer: C 25/30 - CEM II/A - S 32,5 - (XC4+XF3) - A/C = 0,50 - Dmax16 - Cl 0,20



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

Poz. / Piece	Denumirea materialului / The denomination of the material	Buc.	Sectiune / Section	Lung. / Long. (mm)	kg/ml	kg/buc	kg
P1	Mono curenta EN 10297 - E275 Handrail	2	70x4	5450	6.51	35.47	70.96
P2	Umplutura EN 10058 Filling	6	38x3,5	1550	2.98	4.62	27.71
P3	Lisa EN 10058	6	38x3,5	1550	2.98	4.62	27.71
P4	Stalp parapet EN 10297 - E275 Parapet pole	8	70x4	970	6.51	6.32	50.56
P5	Placuta prindere Clamping plate	8	200x20	200	31.40	6.28	50.24
Total partial / Partial total					227.20		
Sudura 2%					4.54		
Welding 2%					4.54		
TOTAL					232		

NOTA:
 1. Prezentul plan s-a intocmit pe baza urmatoarelor date:
 -plan de situatie
 -profil in lung
 -profil transversal
 -fis podetului
 -calcul hidraulic
 -date cules pe teren
 2. Podetul corespunde la convosiile de calcul UIC (LM71 si SW/2)
 3. La executie se vor respecta cu strictete prevederile din Normativ pentru producerea betonului si executarea lucrarilor din beton, beton armat si beton precomprimat. Partea 2: Executarea lucrarilor din beton, indicativ NE 012/2-2010, iar verificarea calitatii lucrarilor si receptiunile lor se va face conform normativului C56-1985.
 4. Daca la executie se vor constata neconcordante intre situatia existenta pe teren si cea din proiect se va aminti proiectantului.
 5. Constructia se inscrieaza in categoria de importanta B (constructii de importanta deosebita), modul I de asigurare a calitatii si clasa de importanta B, conform HG 766/1997.
 6. Proiectul va fi verificat la exigentele A4.2, B2.2, D2.2.
 7. Se atrage in mod deosebit atentie asupra obligatiilor 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 tapau prefabricatului si fundatie. Se interzice rezemarea directa fara strat de mortar de ciment.
 8. In cazul in care la executie sunt constatate neconcordante intre situatia existenta pe teren si cea din proiect se va aminti proiectantului.
 9. Constructia se inscrieaza in categoria de importanta B (constructii de importanta deosebita), modul I de asigurare a calitatii si clasa de importanta B, conform HG 766/1997.
 10. Proiectul va fi verificat la exigentele A4.2, B2.2, D2.2.
 11. Se atrage in mod deosebit atentie asupra obligatiilor 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 tapau prefabricatului si fundatie. Se interzice rezemarea directa fara strat de mortar de ciment.

NOTE:
 1. This plan has been drawn up based on the following data:
 -Lay-out Plan
 -Longitudinal Profile
 -Cross-section Profile
 -Bridge's File
 -Hydraulic determination
 -Field Data
 2. The culvert corresponds to the UIC determination convays (LM71 and SW/2).
 3. 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", indicativ 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 accordingly to Norm C 56-1985.
 4. 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.
 5. The construction has been classified in B category of importance (high important constructions), mode I-ensuring the quality and class of importance B according to G.O. 766/97.
 6. The project will be checked in order to comply with the A4.2; B2.2; D2.2 requirements.
 7. 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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Indice / Index	Data / Date	Modificari / Modifications	Proiectant / Designer	Approbat / Approved	Approbat CFR / Approved CFR
A	12.2011	REVIZIA 1	Mihai Ady-Nicolae	Approbat / Approved	Approbat CFR / Approved CFR

GUVERNUL ROMANIEI ROMANIAN GOVERNMENT **PROIECT FINANȚAT DE UNIUNEA EUROPEANĂ EUROPEAN UNION FINANCED PROJECT**

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

CLIENT / CLIENT

ITALFER GRUPUL FERROVIE DELLO STATO **Scott Wilson** **OBBERMEYER** PLANEN + BERATAN GmbH **TECNIC** Consulting Engineers

CONSULTANT / CONSULTANT

Approbat / Approved	Proiectant / Designer	Data / Date	Semnatura / Signature
Approbat / Approved	Coordonator Secțiune 1 / Coordinator Section 1	R. Lizza	
Verificat / Checked	Expert Cheie / Keying Expert	C. Gambali	
		V. Kallidromitis	

SUBCONTRACTANT / SUBCONTRACTOR

Approbat / Approved	Responsabil Subcontractant / Subcontractant Responsible	Data / Date	Semnatura / Signature
Elaborat / Elaborated	Proiectant / Designer	A. Dirlucacu Stancu	09.2011
		Mihai Ady-Nicolae	09.2011

Reabilitarea liniei de cale ferata Brasov - Simeria, parte componentă a contonului IV Pan European, pentru circulația trenurilor cu viteză maximă de 160 km/h, Transonul 1
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 1: Brasov - Sighisoara

Denumire desen / Drawing Title
INTERVAL / SECTION :CATA-ARCHITA
PODET - KM 255+810,922 / KM 255+810,922- CULVERT
DISPOZITIE GENERALA / GENERAL DISPOSITION

Codificare / Codification System	Scara / Scale	LOT / LOT	Nr. / No
EA61 01 C 14 PA PO 06 7 1 002 1	1:100, 1:5		61/91