SECTIUN

NOTA

Numar de elemente prefabricate

-Cadre C2 :	13buc
-Aripi prefabricate A2.	4buc.
-Timpane prefabricateT2	2buc

NOTE

Number of precast section

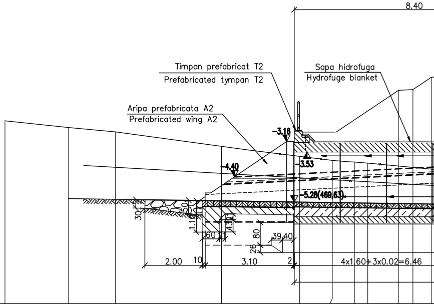
-Prefabricated frames C2	13pcs.
-Prefabricated wings A2	4pcs.
-Head-wall T2	2pcs.

DATE HIDRAULICE:

-Inaltimea de apa:	h=0,98m
-Perimetrul udat:	P=3,96m
-Aria udata:	A=1,96m²
-Viteza de curgere a apei	V=3,11m/s

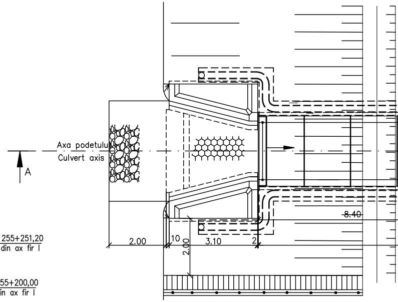
HIDRAULIC DATA:

-Hydraulic height:	h=0,98m
-Perimeter:	P=3,96m
-surface:	A=1,96m²
-Water flow speed:	V=3,11m/s


8.40
Timpan prefabricat T2
Prefabricated tympan T2
Sapa hidrofuga
Hydrofuge blanket
Aripa prefabricata A2
Prefabricated wing A2
-3.16
-3.53
-4.40
-5.28(469.63)
30
50
1.10
4.32
60
21
80
26
39.40
2.00
10
3.10
2
4x1.60+3x0.02=6.46

▽ 466.0 m datum

Nivelul platformei pr. Subgrade				471.494	471.143				473.451	473.476	473.909
Nivelul terenului existent Ground	472.385	472.151	472.000			471.000	470.944	470.908			
Distanta Distance	22.720	20.497	18.856	15.141	12.411	11.265	10.493	10.032	8.949	8.449	7.800


Axa podetului
Culvert axis
A
8.40
2.00
10
2.00
3.10
2

ARC-F54 km 255+251,20
stg. 24.10m din ax fir I

ARC-F53 km 255+200,00
stg. 24.40m din ax fir I

LEGENDA BETOANELOR
CONCRETE LIST

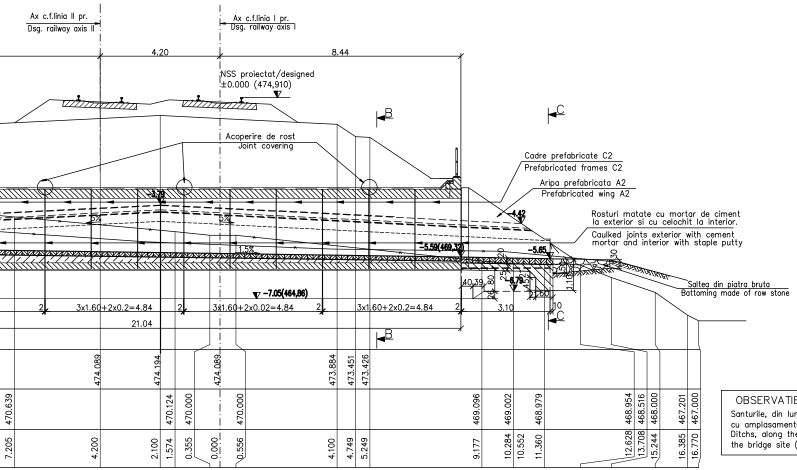
▨ -Beton în elemente prefabricate în general (cadre, aripi, timpane,):
-Concrete for prefabricated elements generally (frames,wings, tympana,
C 35/45 - CEM II/A - S 32,5 - (XC4+XF3+XA1) - A/C = 0,50 - Dmax22 - Cl 0,20

▨ Beton in fundatia podetelor, a elementelor de racordare (aripi, pinteni), in pereu
Concrete for the foundations of culverts, of connecting elements
(wings, breakwaters), in pitching
C25/30-CEM II/A-S 32,5-(XF1)-A/C=0,50-Dmax32-Cl0.20

▨ -Beton în rigola drenurilor, fundatiile sferturilor de con si pentru realizarea stratului suport pentru pereu:
-Concrete for the drain gutters, 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 în 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

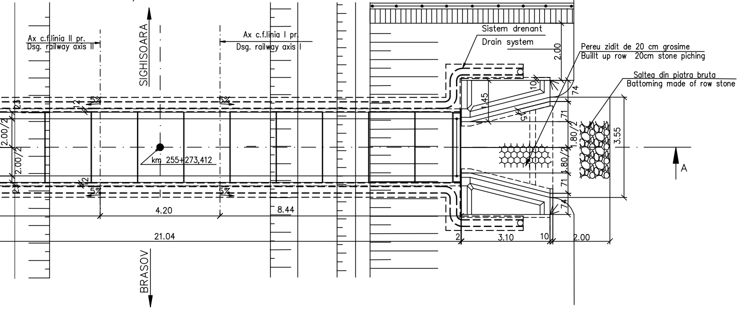
…NE LONGITUDINALA A–A/LONGITUDINAL SECTION A–A

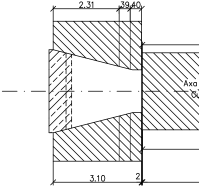

Ax c.f.linia II pr.
Dsg. railway axis II
Ax c.f.linia I pr.
Dsg. railway axis I
4.20
8.44
NSS proiectat/designed
±0.000 (474,910)
B
C
Acoperire de rost
Joint covering
Cadre prefabricate C2
Prefabricated frames C2
Aripa prefabricata A2
Prefabricated wing A2
-3.79
-4.42
5%
5%
1.5%
Rosturi matate cu mortar de ciment
la exterior si cu celochit la interior.
Caulked joints exterior with cement
mortar and interior with staple putty
-5.59(469,32)
-5.65
20
25
30
50
1.10
-6.79
45
40
39
80
26
21
60
Saltea din piatra bruta
Battoming made of row stone
-7.05(464,86)
2
3x1.60+2x0.2=4.84
2
3x1.60+2x0.02=4.84
2
3x1.60+2x0.2=4.84
2
3.10
10
21.04
474.089
474.194
474.089
473.884
473.451
473.426
470.639
470.124
470.000
470.000
469.096
469.002
468.979
468.954
468.516
468.000
467.201
467.000
7.205
4.200
2.100
1.574
0.355
0.000
0.556
4.100
4.749
5.249
9.177
10.284
10.552
11.360
12.628
13.708
15.244
16.385
16.770

OBSERVATIE / OBSERBATION

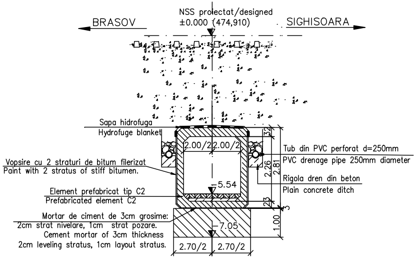
Santurile, din lungul terasamentului, se coreleaza cu amplasamentul podetului (colectiv Terasamente)
Ditchs, along the embankment, correlates the bridge site (collectively Earthworks)

VEDERE PLANA / PLAN VIEW

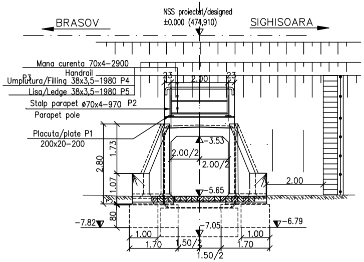

SIGHISOARA
BRASOV
Ax c.f.linia II pr.
Dsg. railway axis II
Ax c.f.linia I pr.
Dsg. railway axis I
Sistem drenant
Drain system
2.00
Pereu zidit de 20 cm grosime
Buillt up row 20cm stone piching
Saltea din piatra bruta
Battoming made of row stone
5%
5%
5%
5%
25
12
12
25
2.00/2
2.00/2
km 255+273,412
10
1.45
74
71
1.80/2
1.80/2
71
74
3.55
A
4.20
8.44
21.04
2
3.10
10
2.00


2.31
39
40
Axa
3.10
2

SECTIUNE TRANSVERSALA B–B
CROSS SECTION B–B

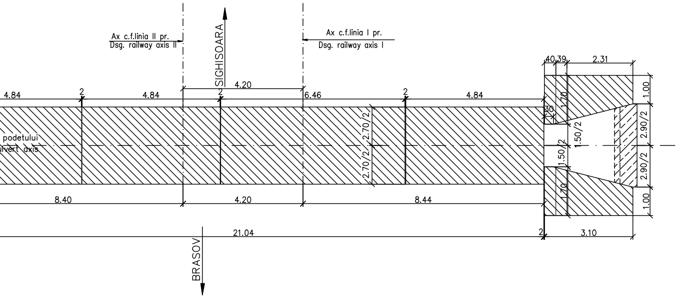

BRASOV
NSS proiectat/designed
±0.000 (474,910)
SIGHISOARA
Sapa hidrofuga
Hydrofuge blanket
Vopsire cu 2 straturi de bitum filerizat
Paint with 2 stratus of stiff bitumen.
Element prefabricat tip C2
Prefabricated element C2
Mortar de ciment de 3cm grosime:
2cm strat nivelare, 1cm strat pozare.
Cement mortar of 3cm thickness
2cm leveling stratus, 1cm layout stratus.
Tub din PVC perforat d=250mm
PVC drenage pipe 250mm diameter
Rigola dren din beton
Plain concrete ditch
2.00/2
2.00/2
-5.54
-7.05
2.26
2.81
32
23
1.00
3
2.70/2
2.70/2

SECTIUNE C–C
C–C SECTION


BRASOV
NSS proiectat/designed
±0.000 (474,910)
SIGHISOARA
Mana curenta 70x4–2900
Handrail
P3
Umplutura/Filling 38x3,5–1980 P4
Lisa/Ledge 38x3,5–1980 P5
Stalp parapet ø70x4–970 P2
Parapet pole
Placuta/plate P1
200x20–200
23
2.00
23
-3.53
2.00/2
2.00/2
-5.65
2.00
2.80
1.73
1.07
30
80
-7.82
-7.05
-6.79
1.00
1.70
1.50/2
1.70
1.00
1.50/2

Teava P2 ø70mm
Pipe 70mm diameter
Suruburi chimice prevazute
saiba si piulita M16 din ote
Chemical bolts m16. washe
on stainless steel
Placa de baza P1 200x20-
Base plate
Piulita de ajustare
Ajusting nut
Mortar fluid cu intarire rapi
2cm thick of fluid mortar–

PLANUL FUNDATIILOR
FUNDATION PLAN


Ax c.f.linia II pr.
Dsg. railway axis II
SIGHISOARA
Ax c.f.linia I pr.
Dsg. railway axis I
4.84
2
4.84
2
4.20
6.46
2
4.84
40
39
2.31
1.00
1.20
30
2.70/2
2.70/2
1.50/2
1.50/2
2.90/2
2.90/2
1.20
1.00
podetului
ulvert axis
8.40
4.20
8.44
21.04
2
3.10
BRASOV

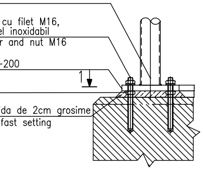
MATERIAL METALIC PENTRU CONFECTIONAREA PARAPETULUI PODETULUI
THE METALLIC MATERIAL TO BUILD PARAPET OF CULVERT

Poz. Piece	Denumirea materialului The denomination of the material OL EN 10025 – S235 JR	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 Partially total							111.74
Sudura 2% Welding 2%							2.24
TOTAL kg							115

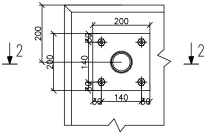
DETALIU PENTRU PRINDEREA PLACUTELOR P1 DE TIMPAN
DETAIL TO JOIN THE SLABS P1 AT THE TYMPANUM

Scara 1:5

SECTIUNE 2−2
2−2 SECTION


cu filet M16,
el inoxidabil
r and nut M16
-200
1
1
da de 2cm grosime
fast setting

VEDERE IN PLAN 1−1
1−1 VIEW PLAN


200
200
200
140
30
30
140
30
30
2
2

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NOTA:

1. Prezentul plan s−a intocmit pe baza urmatoarelor date:
−plan de situatie
−profil in lung
−profil transversal
−fisa podului
−calcul hidraulic
−date culese pe teren
2. Podetul corespunde la convoaiele 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 1: Producerea betonului", indicativ NE 012/1−2007 si "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 receptionarea 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 anunta proiectantul.
5. Constructia se incadreaza in categoria de importanta B (constructii de importanta deosebita), modelul 1 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 atentia 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 talpa prefabricatului si fundatie. Se interzice rezemarea directa fara strat de moratar 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 convoys (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" 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 noticed.
5. 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.
6. The project will be checked 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.

D					
C					
B					
A	**12.2011**	**Revizia 1**	**Elena Radu**		
Indice Index	**Data Date**	**Modificare Modification/Revision**	**Proiectant Designer**	**Aprobat Consultant Approved Consultant**	**Aprobat CFR Approved CFR**

GUVERNUL ROMANIEI
ROMANIAN GOVERNMENT

PROIECT FINANȚAT DE UNIUNEA EURO
EUROPEAN UNION FINANCED PR

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

CLIENT / CLIENT

ITALFERR
GRUPPO FERROVIE DELLO STATO
Joint Venture leader

Scott Wilson

OBERMEYER
PLANEN + BERATEN GmbH

TECNIC
Consulting Engineers

CONSULTANT / CONSULTANT

			Data Date	**Semnătură Signature**
Aprobat Approved	**Şef proiect Project manager**	**R. Liuzza**		
Aprobat Approved	**Coordonator Secțiune 1 Section 1 Coordinator**	**C. Gambelli**		
Verificat Checked	**Expert Cheie Checking Expert**	**V.Kallidromitis**		VK

SUBCONTRACTANT / SUBCONTRACTOR

Aprobat Approved	**Responsabil Subconsultant Subconsultant Responsible**	**A. Dinulescu Stanciu**	**10.2011**	
Întocmit Elaborated	**Proiectant Designer**	**Elena Radu**	**10.2011**	

Reabilitarea liniei de cale ferata Braşov - Simeria, parte componentă a coridorului IV Pan European, pentru circulația trenurilor cu viteza maximă de 160 km/h,
Tronsonul : Braşov - Sighişoara
Rehabilitation of the railway line Braşov - Simeria, component Part of the IV Pan-European Corridor, for the trains circulation with maximum speed of 160 km/h,
Section : Braşov - Sighişoara

Proiect/Project
2004/RO/16/P/PA/003

Faza / Phase:
P.Th. / T.D.

Denumire desen / Drawing Title :

INTERVAL / SECTION: CATA - ARCHITA
PODET - KM 255+273,412 / KM 255+273,412 - CULVERT
DISPOZITIE GENERALA / GENERAL DISPOSITION

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

EA51 01 C 14 PA PO 06 3 1 002 1