SECTIUNE E-E
E-E SECTION

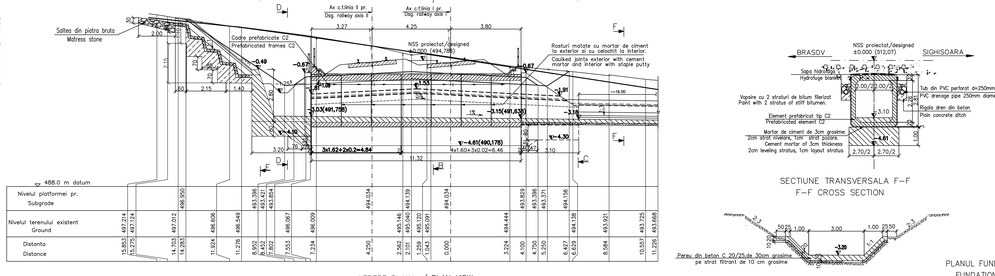
NOTA
Numar de elemente prefabricate
-Cadre C2 7buc
-Aripi prefabricate A2. 2buc.
-Timpane prefabricate T2 2buc

DATE HIDRAULICE:
-Inaltimea de apa: h=1,04m
-Perimetrul udat: P=4,08m
-Aria udata: A=2,08m²
-Viteza de curgere a apei V=3,20m/s

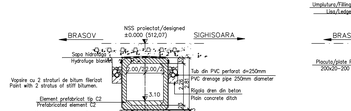
NOTE
Number of precast section
-Prefabricated frames C2 7pcs.
-Prefabricated wings A2 2pcs.
-Head-wall T2 2pcs.

HIDRAULIC DATA:
-Hydraulic height: h=1,04m
-Perimeter: P=4,08m
-surface: A=2,08m²
-Water flow speed: V=3,20m/s

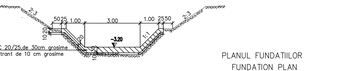
SECTIUNE LONGITUDINALA A-A/
LONGITUDINAL SECTION A-A



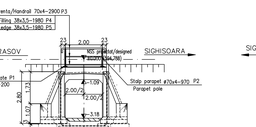
SECTIUNE TRANSVERSALA B-B
CROSS SECTION B-B



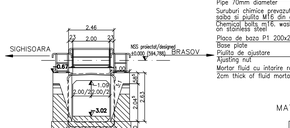
SECTIUNE TRANSVERSALA F-F
F-F CROSS SECTION



SECTIUNE C-C
C-C SECTION



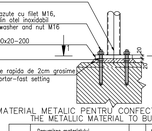
SECTIUNE D-D
D-D SECTION



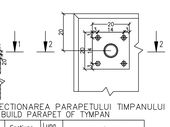
DETALIU PENTRU PRINDEREA PLACUTELOR P1 DE TIMPAN
DETAIL TO JOIN THE SLABS P1 AT THE TYMPANUM

Sc 1:5

SECTIUNE 2-2
2-2 SECTION



VEDERE IN PLAN 1-1
1-1 VIEW PLAN



MATERIAL METALIC PENTRU CONFECTIONAREA PARAPETULUI TIMPANULUI
THE METALLIC MATERIAL TO BUILD PARAPET OF TYMPAN

Pozz. 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'	Piscoiu prindere / Clamping plate	4	200x20	200	31.40	6.28	25.12
P2'	Stalp paraget EN 10297 - E275 / Parapet pole	4	70x4	970	6.51	6.32	25.26
P3'	Wana curenta EN 10297 - E275 / Handrail	2	70x4	1400	6.51	9.15	18.30
P4'	Umplutura EN 10058 / Filling	2	38x3,5	600	2.98	1.80	3.60
P5'	Lisa EN 10058 / Ledge	2	38x3,5	600	2.98	1.80	3.60
P1''	Piscoiu prindere / Clamping plate	3	200x20	200	31.40	6.28	18.84
P2''	Stalp paraget EN 10297 - E275 / Parapet pole	3	70x4	970	6.51	6.32	18.96
P3''	Wana curenta EN 10297 - E275 / Handrail	1	70x4	3950	6.51	25.70	25.70
P4''	Umplutura EN 10058 / Filling	2	38x3,5	1750	2.98	5.21	10.42
P5''	Lisa EN 10058 / Ledge	2	38x3,5	1750	2.98	5.21	10.42
			Total partial / Partially total				160.24
			Sudura 2% / Welding 2%				3.20
			TOTAL kg				165.00

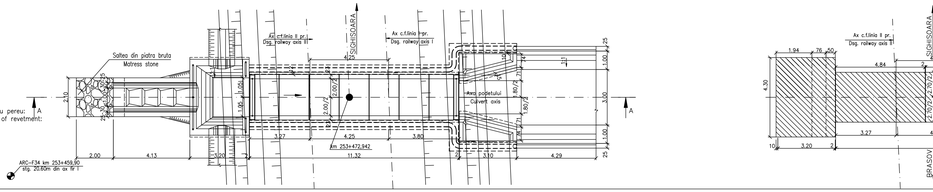
NOTE:
1. This plan has been drawn up based on the following data:
-Lay-out Plan
-Longitudinal Profile
-Cross-section Profile
-Bridge's File
-Hydraulic determination
-Field Data
2. The culvert corresponds to the UIC determination conveys (LM71 and SW/2).
3. The execution will strictly comply with the provisions of "Practice code for the concrete production and work 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 work 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. 766/997.
6. The project will be checked in order to comply with the A4.2; B2.2; D2.2.
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.

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

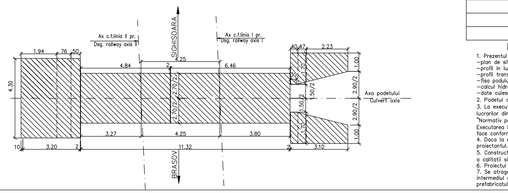
Pozz. Piece	Denumirea materialului / The denomination of the material OL EN 10025 - S235 JR	Buc.	Sectiune / Section	Lung. Long. (mm)	Sectiune/Section kg/ml	kg/buc	kg
P1	Piscoiu prindere / Clamping plate	4	200x20	200	31.40	6.28	25.12
P2	Stalp paraget EN 10297 - E275 / Parapet pole	4	70x4	970	6.51	6.32	25.26
P3	Wana 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

NOTA:
1. Prezentul plan s-a intocmit pe baza urmatoarelor date:
-plan de situatie
-profil in lung
-profil transversal
-file podului
-calcul hidraulic
-date culese pe teren
2. Podetul corespunde la convoadele de calcul UIC (LM71 si SW/2)
3. La executie se vor respecta cu stricteta prevederile din "Normativ pentru producerea betonului si executiera lucrarilor din beton, beton armat si beton precomprimat. Partea 1: Producerea betonului", indicativ NE 012/1-2007 si "Normativ pentru producerea betonului si executiera lucrarilor din beton, beton armat si beton precomprimat. Partea 2: Executiera lucrarilor din beton", indicativ NE 012/2-2010, iar verificarea calitatii lucrarilor si receptionarea lor se va face conform normativului C56-1985.
4. Daca in 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 model 1-ensuring the quality and class of importance B according to G.O. 766/997.
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 interdice rezemarea directa fara strat de mortar de ciment.

VEDERE PLANA / PLAN VIEW



PLANUL FUNDATIILOR
FUNDATION PLAN



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 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 in rigola dreniruri, fundatile sferturilor de con si pentru realizarea stratului support 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 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

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Indice Index	Data Date	Modificare Modification/Revision	Proiectat Designed	Aprobat Consultant Approved Consultant	Aprobat CFR Approved CFR
D					
C					
B					
A	12.2011	REVIZIA 1	Elena Radu		

GUVERNUL ROMANIEI
ROMANIAN GOVERNMENT

PROIECT FINANTAT DE UNIUNEA EUROPEANA
EUROPEAN UNION FINANCED PROJECT

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

			Date	Semnatura Signature
Aprobat Approved	Sef proiect Project manager	R. Liuzza		
Aprobat Approved	Coordonator Sectiune 1 Section 1 Coordinator	C. Gambelli		
Verificat Checked	Expert Check Checking Expert	V.Kalliórontis		

SUBCONTRACTANT / SUBCONTRACTOR

AREX

Aprobat Approved	Responsabil Subconsultant Subconsultant Responsible	A. Dinulescu Stanciu	11.2011	
Intocmit Elaborated	Proiectant Designer	Elena Radu	11.2011	

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

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

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

Denumire desen / Drawing Title :

INTERVAL / SECTION: CATA - ARCHITA
PODET - KM 253+472.942 / KM 253+472.942 - CULVERT
DISPOZITIE GENERALA / GENERAL DISPOSITION

Codificare / Codification System	Scara / Scale 1:100; 1:10	LOT / LOT	Nr. / No. 01 / 01
E A 5 1 0 1 C 1 4 P A P C 0 7 7 1 0 0 2 1			