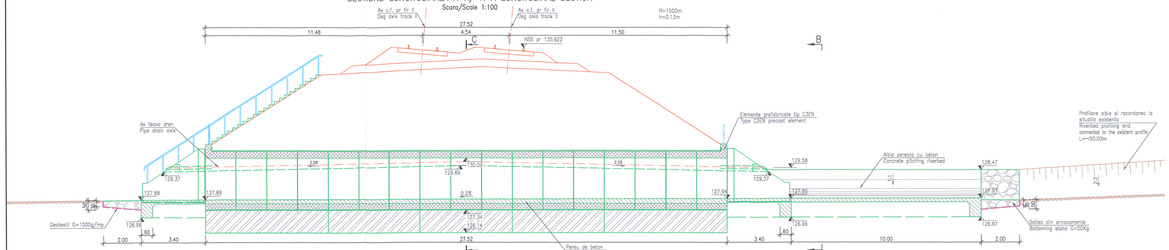
SECTIUNE LONGITUDINALA A–A/ A–A LONGITUDINAL SECTION

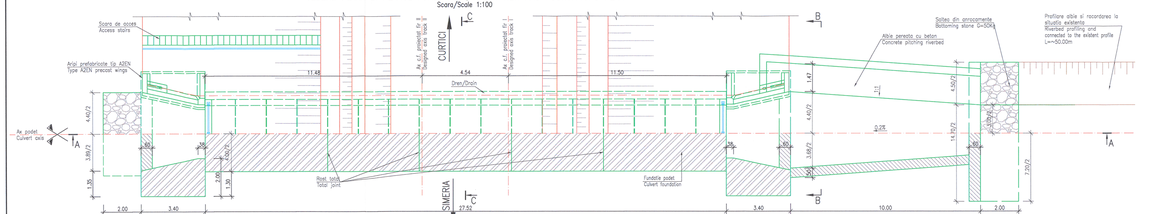
Scara/Scale 1:100



FISA FORAJULUI F1
DRILLING SHEET F1
Km pr / dsg 582+070

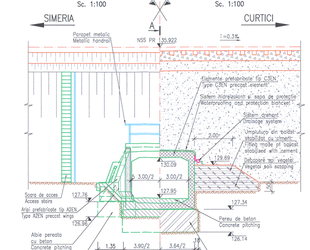
VEDERE PLANA SI PLANUL FUNDATIILOR/ PLAN VIEW AND FOUNDATIONS PLAN

Scara/Scale 1:100



VEDERE B–B / B–B VIEW
Sc. 1:100

SECTIUNE C–C / C–C SECTION
Sc. 1:100



NOTA:
Podetul tip cadru C2 are rol de desecare dupa trecerea viiturilor raului Mures si permite riveranilor subtroversarea cai ferate.

NOTE:
The box culvert type C2 has a drainage role after the passage of Mures River outrush and allows the riverside residents to undercross the railway line.

OBSERVATIE:
– Pe toate suprafetele din beton in contact cu pamantul se vor aplica 2 straturi de emulsie din bitum filerizat.
– Protectia betonului a albie se va executa cu rosturi conform celei de sarcini.

ATTENTION:
– All concrete surfaces in contact with soil will be coated with 2 bituminous layers.
– The concrete protection of the riverbed will be executed with joints according with technical specifications.

CONVOI DE CALCUL LM71
CALCULATION CONVOY LM71

PLANURI DETALII GENERALE / GENERAL DRAWING DETAILS	
ACOPERIRE ROSTURI ELEMENTE PREFABRICATE JOINTS COVERING PRECAST ELEMENTS	P T 0 2 0 2 0 0 P O 0 0 1
HIDROIZOLARE SI SISTEM DE DRENARE PODETE WATERPROOFING AND DRAINAGE SYSTEM CULVERTS	P T 0 2 0 2 0 0 P O 0 0 2
PARAPET METALIC PODETE METALLIC HANDRAIL CULVERTS	P T 0 2 0 2 0 0 P O 0 0 3
PLAN COFRAJ CADRU TIP C3EN_m SHUTTERING PLAN FRAME TYPE C3EN_m	P T 0 2 0 2 0 0 P O 0 1 1
PLAN COFRAJ CADRU TIP C3EN_c SHUTTERING PLAN FRAME TYPE C3EN_c	P T 0 2 0 2 0 0 P O 0 1 2
PLAN COFRAJ ARIPA TIP AZEN SHUTTERING PLAN WING AZEN TYPE	P T 0 2 0 2 0 0 P O 0 1 4
SCARA DE ACCES SI BALUSTRADA METALICA ACCESS STAIRS AND METALLIC BALUSTRADE	P T 0 2 0 2 0 0 P O 0 2 2

NOTA:
1. Prezentul plan s-a intocmit in baza urmatoarelor date:
– studiu topografic;
– studiu geotehnic;
– studiu hidraulic;
– date culese pe teren
2. Pentru asigurarea scurgerii apelor pe zona traseului ci nou proiectat se executa urmatoarele lucrari:
– se va executa un podet nou cf tip C3EN;
– racordarea podetului nou cu terasamentele ai va fi asigurata in amonte si aval cu aripi prefabricate tip AZEN;
– se vor impermeabiliza suprafetele de beton vizibile;
– se prevede parapet metalic la ambele timpane ale podetului;
– se prevad scari de acces pe terasament, de o parte si alta a podetului;
– se va amenaja albia in interiorul podetului si intre aripi si 10,00m in amonte cu pereu de beton;
– sotloo din piatra bruta la ambele capete ale perelui;
– in amonte si aval se va racorda la albia naturala;
– la turnarea betonului in fundatii, se vor realiza rosturi totale. Rosturile din fundatii se vor suprapune rosturilor intre cadrele prefabricate minimum din trei in trei cadre.
3. La executie se vor respecta cu strictete prevederile din SR EN 206–1, NE 012–1:2007, NE 012–1:2010, NE013/2002, C56–85 si o Codului de Sarcini.
4. Conform H.G. 766/1997 lucrarea se incadreaza in categoria "B" a constructiilor de importanta deosebita.
5. Proiectul va fi verificat de verificatori atestati MLPAT la exigentele A.4, B.2 si D.2.

NOTE:
1. This plan was prepared based on the following data:
– topographic study;
– geotechnical study;
– hydraulic study;
– data collected on site.
2. In order to ensure the water discharge on the area of the new railway designed route, the following works will be executed:
– the connection of a new railway culvert type C3EN;
– the visible surfaces of concrete will be waterproofed;
– the connection of the new culvert with the embankments will be carried out upstream and downstream by help of precast wings type AZEN;
– metallic handrail is provided at both tympans of the culvert;
– access stairs are provided on the embankment, on one side and the other of the culvert;
– the riverbed will be arranged inside the culvert and between wings and 10.00m upstream with concrete pitching;
– mattress made of rough stone at both ends of the pitching;
– the natural riverbed will be connected upstream and downstream.
– when casting the concrete in the foundations, total joints will be executed. The joints in the foundations will be overlapped with the joints between the precast frames at least every three frames.
3. When executing, there will be strictly observed the provisions of SR EN 206–1, NE 012–1:2007, NE 012–1:2010, NE013/2002, C56–85 and of the Technical Specifications.
4. Complying with H.G. 766/1997 this structure belongs to category "B" of importance.
5. The project will be verified at A.4, B.2 and D.2 requirements.

LEGENDA BETOANELOR/CONCRETE LEGEND
conform NE 012–1:2007/SR EN 206–1

BETON C35/45 – Clasa de expunere XC4+XD1+XF3, agregate D_{max} 22
ELEMENTE PREFABRICATE/PREFABRICATED ELEMENTS

BETON C25/30 – Clasa de expunere XC2+XF1+XA1, agregate D_{max} 22.
FUNDATII DIRECTE/DIRECT FOUNDATIONS

BETON C25/30 – Clasa de expunere XC4+XF1+XM1, agregate D_{max} 16.
SAPA DE PROTECTIE A HIDROIZOLATIEI/WATERPROOFING PROTECTION

BETON C25/30 – Clasa de expunere XC4+XF3+XA1, agregate D_{max} 22.
PERELI SI SCARI DE ACCES/PITCHING, ACCES STAIRS

BETON C16/20 – Clasa de expunere XO+XF3, agregate D_{max} 16.
DREN, BETON DE PANTA
DRAINAGE, SLOPE CONCRETE

ANGHEL I. IONUT
ROMANIA
Nr. 07230
VERIFICATOR PROIECTE

ROMANIA C. CONSTANTIN
NR: 11078
VERIFICATOR PROIECTE

Prezentul plan anuleaza si inlocuieste versiunea anterioara
This plan cancels and replaces previous version

Verificator / Expert Checker / Expert	Cerinta Requirement	Semnatura Signature	Raport / Expertiza Report / Expertise

European Investment Bank

MINISTERUL TRANSPORTURILOR

BENEFICIAR / BENEFICIARY :
CFR
COMPANIA NAȚIONALĂ DE CĂI FERATE "CFR" SA

PROIECTANT / DESIGNER: PÖYRY			Data Date	Semnatura Signature
Aprobat Approved	Sef de echipa Team leader	C. Teodorescu	01.2013	
Verificat Checked	Expert Cheie Key Expert	R. Tudorascu	01.2013	
Subcontractant / Subcontractor VIOTOP				
Aprobat Approved	Adjunct Sef de echipa Deputy Team leader	A.M. Baicu	01.2013	
Proiectat Designed	Inginer Engineer	F. Ioanidi	01.2013	

"Reabilitarea liniei c.f. Frontiera – Curtici – Simeria , parte componenta a coridorului IV Pan – European pentru circulatia trenurilor cu viteza maxima de 160 km/h"
Tronsonul 2-A : km 614 – cap Y Bătrani
"Rehabilitation of the Railway Line Border – Curtici –Simeria , component Part of the IV Pan – European Corridor for the Trains Circulation with maximum speed of 160 km/h"
Section 2-A : km 614 – end Y Bătrani

Project 9i 35311.1

Faza / Phase: PTH+CS / TD+TS

Denumire desen / Drawing name:
DISPOZITIE GENERALA / GENERAL LAYOUT
PODET / CULVERT KM pr. 582+073

Scara / Scale	Revizia / Revision	Cod desen / Drawing Code	Nr / No
1:100	1 / 04.2013	PT.02.02.09.PO.17.03	03