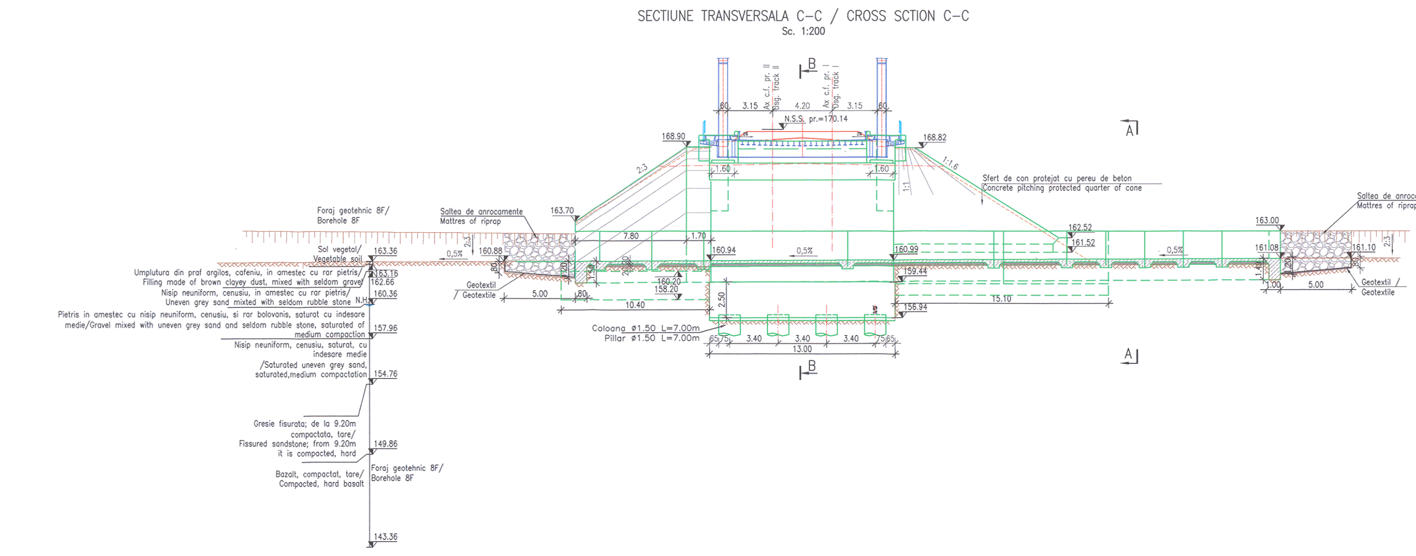
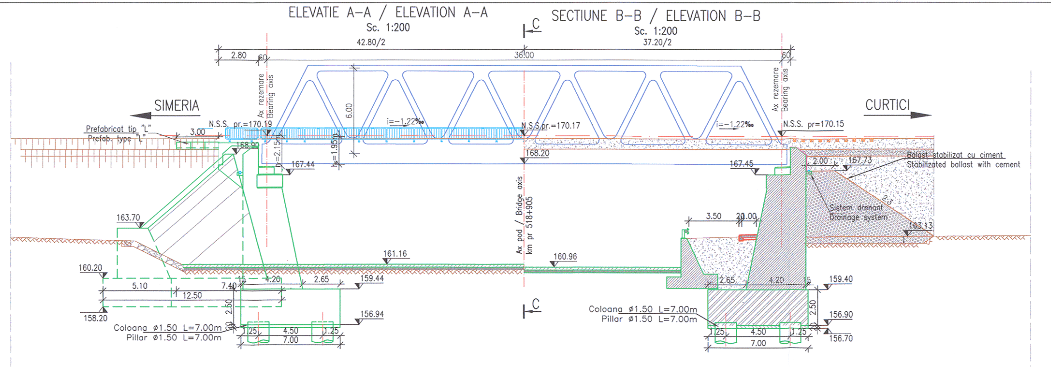


SECTIUNE TRANSVERSALA C–C / CROSS SCTION C–C
Sc. 1:200

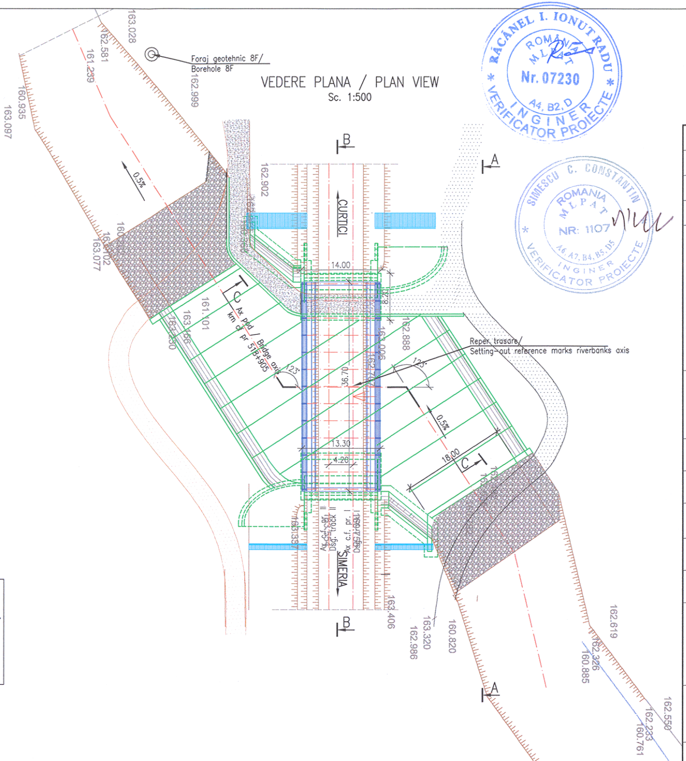
Foraj geotehnic 8F/
Borehole 8F
Sol vegetal/
Vegetable soil
Umplutura din praf argilos, cafeniu, in amestec cu rar pietris/
Filling made of brown clayey dust, mixed with seldom gravel
Nisip neuniform, cenusiu, in amestec cu rar pietris/
Uneven grey sand mixted with seldom rubble stone
N.H.
Pietris in amestec cu nisip neuniform, cenusiu, si rar bolovanis, saturat cu indesare medie/Gravel mixed with uneven grey sand and seldom rubble stone, saturated of medium compaction
Nisip neuniform, cenusiu, saturat, cu indesare medie
/Saturated uneven grey sand, saturated,medium compactation
Gresie fisurata; de la 9.20m compactata, tare/
Fissured sandstone; from 9.20m it is compacted, hard
Bazalt, compactat, tare/
Compacted, hard basalt
163.36
163.16
162.66
160.36
157.96
154.76
149.86
143.36
Saltea de anrocamente
Mattres of riprap
Geotextil
Geotextile
Sfert de con protejat cu pereu de beton
Concrete pitching protected quarter of cone
Ax c.f. pr. II
Dsg. track II
N.S.S. pr.=170.14
168.90
168.82
163.70
163.53
163.00
160.88
160.94
160.20
158.20
0,5%
2:3
7.80
1.70
5.00
10.40
13.00
3.15
4.20
3.40
Coloana ø1.50 L=7.00m
Pillar ø1.50 L=7.00m
B
A



ELEVATIE A–A / ELEVATION A–A
Sc. 1:200

SECTIUNE B–B / ELEVATION B–B
Sc. 1:200

42.80/2
37.20/2
2.80
60
36.00
SIMERIA
CURTICI
Prefabricat tip "L"
Prefab. type "L"
3.00
N.S.S. pr.=170.19
N.S.S pr.=170.17
N.S.S. pr=170.15
Ax rezemare
Bearing axis
i=–1.22‰
6.00
h=1.95m
168.90
168.20
167.44
167.45
167.73
163.70
163.13
161.16
160.96
160.20
159.44
159.40
158.20
156.94
156.90
156.70
Ax pod / Bridge axis
km pr 518+905
Balast stabilizat cu ciment
Stabilizated ballast with cement
Sistem drenant
Drainage system
5.10
12.50
7.40
4.20
2.65
3.50
20.00
2.00
2.50
1.25
4.50
7.00
Coloana ø1.50 L=7.00m
Pillar ø1.50 L=7.00m
C



VEDERE PLANA / PLAN VIEW
Sc. 1:500

Foraj geotehnic 8F/
Borehole 8F
CURTICI
SIMERIA
Ax pod / Bridge axis
km cf pr 518+905
Reper trasare/
Setting-out reference marks riverbanks axis
Ax c.f. pr. II
Dsg. track II
Ax c.f. pr. I
Dsg. track I
14.00
13.30
4.20
36.70
18.00
123°
0.5%
163.028
162.581
161.239
160.935
163.097
162.999
162.902
161.101
163.077
162.888
163.406
162.986
163.320
160.820
162.619
162.326
160.885
162.550
162.233
160.761
A
B
C

CONVOI DE CALCUL LM71
CALCULATION CONVOY LM71

PLANURI DETALII GENERALE / GENERAL DRAWING DETAILS					
HIDROIZOLATIE SI ACOPERIRI DE ROSTURI WATERPROFFING AND EXPANSION JOINTS	P T 0 2	0 2	0 0	P O	0 1 9
SISTEM DE DRENARE PODURI BRIDGE DRAINAGE SYSTEM	P T 0 2	0 2	0 0	P O	0 2 0
ELEMENT PREFABRICAT TIP L PREFABRICATED ELEMENT TYPE L	P T 0 2	0 2	0 0	P O	0 2 1
SCARA DE ACCES SI BALUSTRADA METALICA ACCESS STAIRS AND METALLIC BALUSTRADE	P T 0 2	0 2	0 0	P O	0 2 2

Observatii privind realizarea coloanelor:

- Conform "NP123" Normativ privind proiectarea geotehnica a fundatiilor pe piloti, capacitatea portanta a coloanelor se va stabili la executie, dupa realizarea incarcarilor de proba (conform tabel 3, punctul 5.3.2.5);
- Incarcarile statice de proba vor avea la baza un proiect special, intocmit de catre antreprenorul lucrarii si se vor realiza in concordanta cu "NP045" Normativ privind incercarea pe teren a pilotilor de proba si a pilotilor din fundatii;
- Daca la executie , dupa realizarea incarcarilor de proba se va constata ca rezistenta unui pilot este mai mica decat cea avuta in vedere la proiectare atunci se va convoca proiectantul pentru redimensionarea fundatiilor si adaptarea proiectului la noua situatie;
- Pe toate coloanele se vor monta cate 3 tevi (conform indicatiilor din prezentul proiect) pentru realizarea controlului ultrasonic.

Observations concerning the columns' execution:

- According to "NP123" Normative for the geotechnical designing of foundations on piles, the bearing capacity of columns will be established at the execution, after carrying-out the test loadings (according to table 3, point 5.3.2.5);
- The static test loadings will be based on a special design, prepared by the work's contractor and will be carried-out in compliance "NP045" Normative concerning the site testing of test piles and of piles from foundations;
- If at the execution, after carrying-out the test loadings, it will be found that the strength of a pile is smaller than the one taken into account when designing, the designer will be convoked in order to resize the foundations and to adapt the design to the new situation;
- 3 pipes will be mounted on each column (according to the indications from this design), in order to carry-out the ultrasonic inspection.

NOTA:

1. Prezentul plan s-a intocmit in baza urmatoarelor date:
- studiu topografic;
- studiu geotehnic;
- date culese pe teren.
2. Pentru executia podului se vor executa urmatoarele lucrari:
- executia unei suprastructuri noi;
- executia infrastructurii noi;

suprastructura este de tip grinzi cu zabrele cu inaltimea de constructie de 1.95m si deschiderea de 36.00m;
- curatarea, calibrarea si pereerea albiei amonte si aval;
- impermeabilizarea suprafetelor din beton vizibile.
3. La executie se vor respecta cu strictete prevederile din:
- Codul de practica pentru executarea lucrarilor din beton, beton armat si beton precomprimat, indicativ NE 012;
- Codul de practica pentru executarea elementelor prefabricate din beton, beton armat si beton precomprimat, indicativ NE 013-2002;
- Normativul pentru verificarea calitatii si receptia lucrarilor de constructii aferente, indicativ C56-85
- Caietul 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. The plan was prepared based on the following data:
- topographic study;
- geo-technical study;
- data collected from the site.
2. For the bridge execution, the following works will be executed:
- execution of a new bridge;
- execution of the new infrastructure;
- the suprastructure is metallic truss girder height system of 1.95m and the span of 36.00m;
- cleaning and calibration of the upstream and downstream riverbed;
- coating all visible concrete surfaces.
3. During execution, there will be strctly observed the provisions of:
- Code of practice concerning the execution of the works made of concrete, reinforced concrete and pre-stressed concrete, indicative NE 012;
- Code of practice concerning the execution of the pre-cast elements made of concrete, reinforced concrete and pre-stressed concrete, indicative NE 013-2002;
- Normative for the the checking the quality and taking over of the afferent construction works, indicative C56-85
- 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 C25/30 – Clasa de expunere XC2+XF1+XA1, agregate D_{max} 22. RADIER COLOANE, FUNDATII DIRECTE SI FUNDATII PROVIZORII/CAP PILES, DIRECT FOUNDATIONS AND TEMPORARY FOUNDATIONS
▨	BETON C25/30 – Clasa de expunere XC4+XF3, agregate D_{max} 22. ELEVATII INFRASTRUCTURA SI ZIDURI DE SPRIJIN INFRASTRUCTURE ELEVATIONS AND RETAINING WALLS
▨	BETON C25/30 – Clasa de expunere XC4+XF1+XM1, agregate D_{max} 16. SAPA DE PROTECTIE A HIDROIZOLATIEI SI PREDALE WATERPROOFING PROTECTION AND PRESLABS
▨	BETON C25/30 – Clasa de expunere XC4+XF3+XA1, agregate D_{max} 22. ARIPI, SFERT DE CON, PEREU SI SCARI DE ACCES WINGS, QUARTER CONE, PITCHING AND ACCESS STAIRS
▨	BETON C16/20 – Clasa de expunere X0+XF3, agregate D_{max} 32. DREN, BETON DE PANTA, DE EGALIZARE DRAINAGE, SLOPE, LEAN CONCRETE

OBSERVATIE:
1.Pe toate suprafetele din beton in contact cu pamantul se vor aplica 2 straturi de emulsie din bitum filerizat.
2.Protectia betonata a albie se va executa cu rosturi conform C.S.

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

RĂCĂNEL I. IONUȚ RADU Nr. 07230
SIMESCU C. CONSTANTIN NR: 1107
CHIRICA C. ANTON

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

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

European Investment Bank

MINISTERUL TRANSPORTURILOR

BENEFICIAR / BENEFICIARY :

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	RTudorascu
Subcontractant / Subcontractor		VIOTOP		
Aprobat Approved	Adjunct Sef de echipa Deputy Team leader	A.M. Baicu	01.2013	
Proiectat Designed	Inginer Engineer	T. Nicolaescu	01.2013	Nu

"Reabilitarea liniei c.f. Frontieră - Curtici - Simeria, parte componentă a coridorului IV Pan - European pentru circulaţia trenurilor cu viteză maximă de 160 km/h"
Tronsonul 2-C : cap Y Ilteu - cap Y Gurasada
"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-C : end Y Ilteu - end Y Gurasada

Project 9i
35311.1

Faza / Phase:
PTH+CS / TD+TS

Denumire desen / Drawing name:

DISPOZITIE GENERALA/GENERAL LAYOUT
POD /BRIDGE KM pr.518+905

Scara / Scale	Revizia / Revision	Cod desen / Drawing Code	Nr / No
1:500 1:200	1 / 04.2013	PT.02.02.17.PO.05.03	03