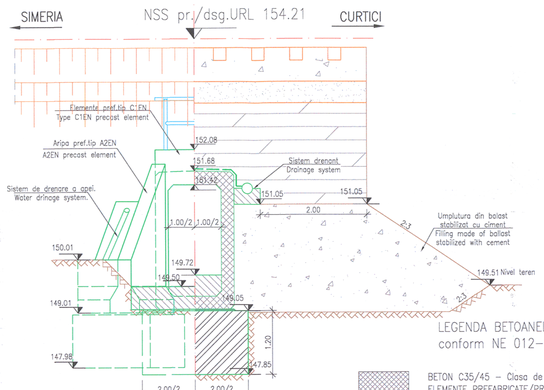
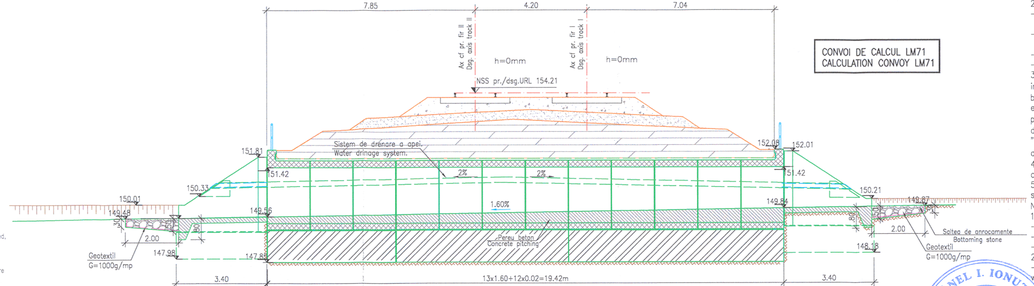
VEDERE/VIEW B-B sc. 1:50 — SECTIUNE/SECTION C-C sc.1:50




## 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+XF3, agregate $D_{max}$ 22. ELEVATII SI ZIDURI DE SPRIJIN/ELEVATIONS AND RETAINING WALLS
- 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. PEREU SI SCARI DE ACCES/PITCHING, ACCES AND STAIRS
- BETON C16/20 – Clasa de expunere X0+XF3, agregate $D_{max}$ 16. DREN, BETON DE PANTA SI DE EGALIZARE DRAINAGE, SLOPE AND LEAN CONCRETE

## SECTIUNE LONGITUDINALA /LONGITUDINAL SECTION

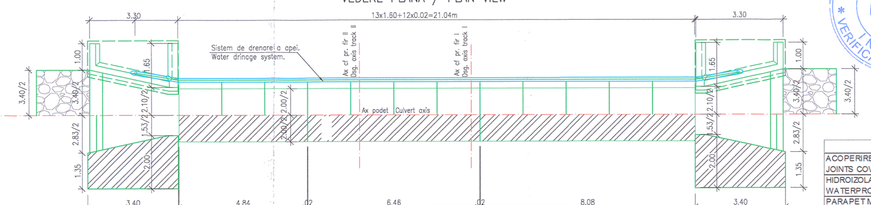



CONVOI DE CALCUL LM71
CALCULATION CONVOY LM71

FORAJ GEOTEHNIC
SHEET OF DRILLING
km 545+070

| | |
|---|---|
| 150.05 | |
| 149.65 | Sol vegetal |
| | Prof argilos, nisipos,cafeniu, galben, puin umed. Portos |
| 148.45 | Nisip fin prafos cafeniu-galbui, saturat cu indesare mijlocie |
| 147.05 | |
| | Pietris cu nisip neuniform galben cafeniu saturat, indesat |
| 145.05 | |

## VEDERE PLANA / PLAN VIEW




## PLAN FUNDATII / FOUNDATION PLAN

OBSERVATIE: Pe toate suprafetele din beton in contact cu pamantul se vor aplica 2 straturi de emulsie din bitum filerizat.

ATTENTION: All concrete surfaces in contact with soil will be coated with 2 bituminuous layers.

NOTA:
1. Prezentul plan s-a intocmit in baza urmatoarelor date:
– studiu topografic;
– studiu geotehnic;
– studiu hidraulic.
2. La km 545+142, se vor executa:
– podet tip cadru C1EN, care se racordeaza la terasamentcu aripi A2EN atat in amonte cat si in aval;
– pereu din beton in podet precum si intre aripi, asigurandu-se astfel o panta de scurgere de 1,60%.
– suprafetele de beton vârbile se vor impermeabiliza.
– scari de acces cu balustrade metalice pe terasament.
3. La executie se vor respecta cu strictete prevederile din SREN 206-1, indicativ NE 012 "Codul de practica pentru executarea lucrarilor din beton, beton armat si beton precomprimat", NE 013-2002"Codul de practica pentru executia elementelor prefabricate din beton, beton armat si beton precomprimat", din "Instructiunile tehnice privind procedeele de remediere a defectelor pentru elementele de beton si beton armat" indicativ C149-87, din "Normativul pentru verificarea calitatii si receptia lucrarilor de constructii aferente" indicativ C56-85 si a Caietului 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 next data:
– topo survey;
– geo-technical study;
– hydraulic study;
2. On the designed railway route at km 545+142, there will be executed:
– box culvert type C1EN which will be connected upstream and downstream with precast wings type A2EN.
– metallic handrail mounted on the culvert.
– In the culvert as well as between the wings, a concrete pitching will be executed thus ensuring a discharge slope of 0,65%.
– The visible concrete areas will be waterproofed.
– access steps with metallic handrails are provided on the embankment.
3. There will be strictly respected the provisions from SREN 206-1, NE012"Practice code for plain concrete, reinforced concrete and prestressed concrete works execution" , NE013-2002 "Practice code for plain concrete, reinforced concrete and prestressed concrete prefabricated elements execution" from C149-87"Technical instructions regarding the fixing procedures for concrete and reinforced concrete elements" , from ind. C56-85"Normative for quality checking and works reception for different construction" and Technical Specifications of this project.
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.

**PLANURI DETALII GENERALE / GENERAL DRAWING DETAILS**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ACOPERIRE ROSTURI ELEMENTE PREFABRICATE<br>JOINTS COVERING PRECAST ELEMENTS | P | T | 0 | 2 | 0 | 0 | P | O | 0 | 1 |
| HIDROIZOLATIE SI SISTEM DE DRENARE PODETE<br>WATERPROFFING AND DRAINAGE SYSTEM CULVERTS | P | T | 0 | 2 | 0 | 0 | P | O | 0 | 2 |
| PARAPET METALIC PODETE<br>METALLIC HANDRAIL CULVERTS | P | T | 0 | 2 | 0 | 0 | P | O | 0 | 3 |
| PLAN COFRAJ CADRU TIP C1EN_m<br>SHUTTERING PLAN FRAME TYPE C1EN_m | P | T | 0 | 2 | 0 | 0 | P | O | 0 | 7 |
| PLAN COFRAJ CADRU TIP C1EN_c<br>SHUTTERING PLAN FRAME TYPE C1EN_c | P | T | 0 | 2 | 0 | 0 | P | O | 0 | 8 |
| PLAN COFRAJ ARIPA TIP A2EN<br>SHUTTERING PLAN WING A2EN TYPE | P | T | 0 | 2 | 0 | 0 | P | O | 1 | 4 |
| SCARA DE ACCES SI BALUSTRADA METALICA<br>ACCESS STAIRS AND METALLIC BALUSTRADE | P | T | 0 | 2 | 0 | 0 | P | O | 2 | 2 |
| FUNDATIE PREFABRICATA PENTRU PODURI PROVIZORII SI DETALII DE REZEMARE PODURI PROVIZORII<br>PREFABRICATED FOUNDATION FOR TEMPORARY BRIDGES AND PROPPING-UP DETAILS FOR TEMPORARY BRIDGES | P | T | 0 | 2 | 0 | 0 | P | O | 2 | 3 |

**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 : CFR

COMPANIA NAŢIONALĂ 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 | C. Vara-Oros | 01.2013 | |

**"Reabilitarea liniei c.f. Frontier ă - Curtici - Simeria, parte componentă a coridorului IV Pan - European pentru circula ţia trenurilor cu viteză maximă de 160 km/h"**
**Tronsonul 2-B : cap Y Bărzava - cap Y Ilteu**
**"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-B : end Y Bărzava - end Y Ilteu**

Project 9i 35311.1

Faza / Phase: PTH+CS / TD+TS

Denumire desen / Drawing name:

DISPOZITIE GENERALA / GENERAL LAYOUT
PODET / CULVERT KM pr. 545+142

| Scara / Scale | Revizia / Revision | Cod desen / Drawing Code | Nr / No |
|---|---|---|---|
| 1:50 | 1 / 04.2013 | PT 02 02 13 PO 04 03 | 03 |