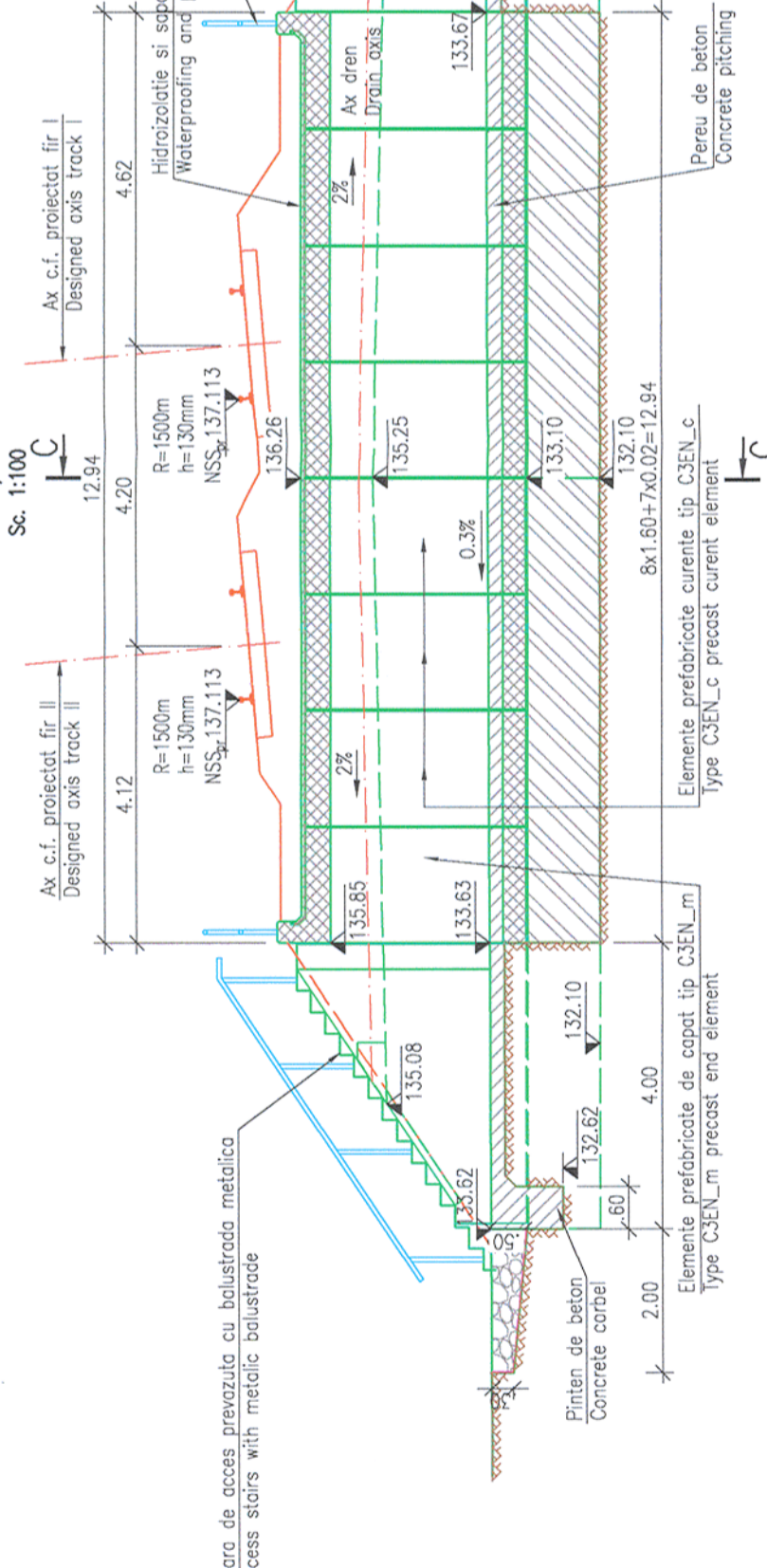
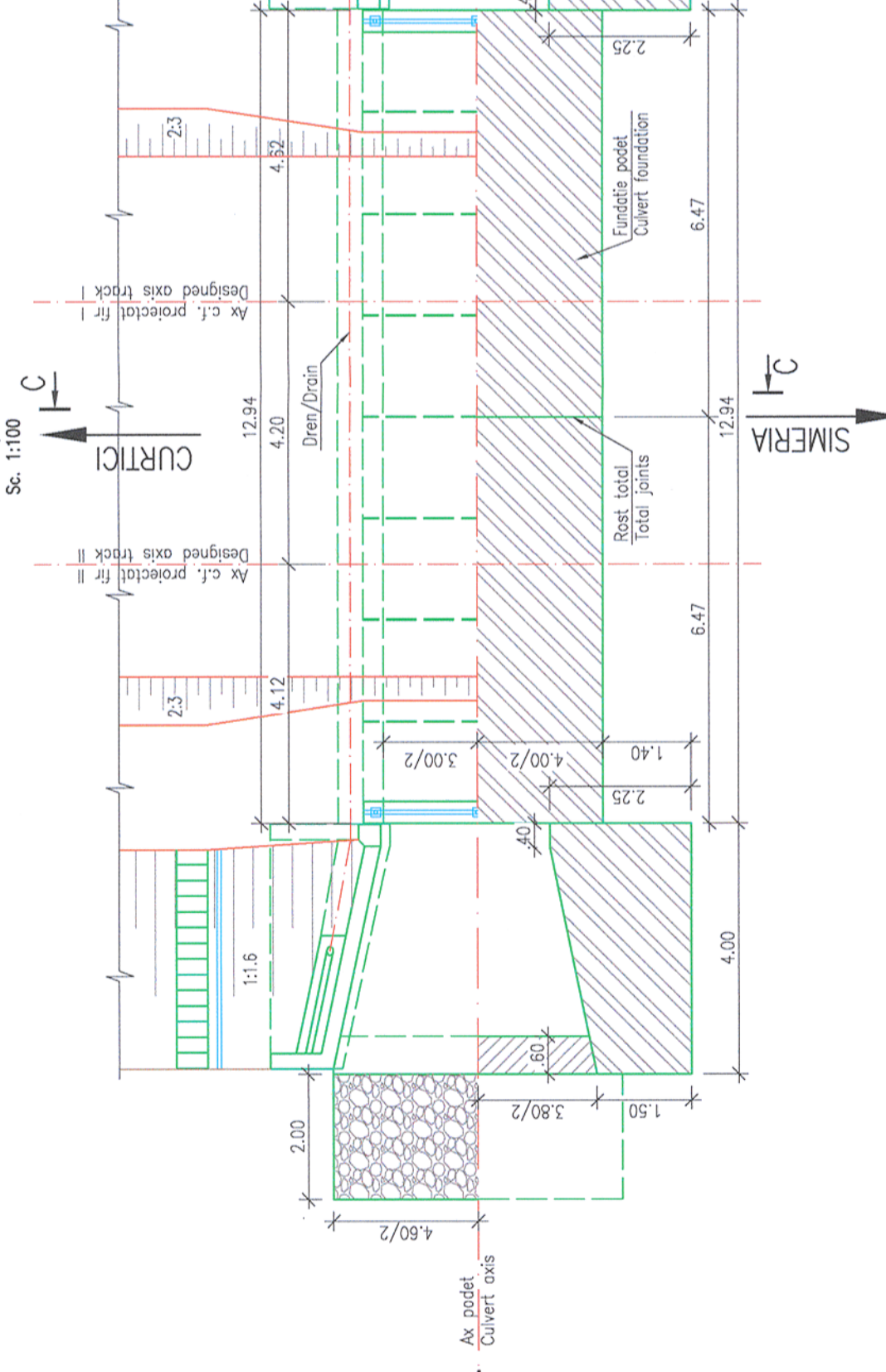


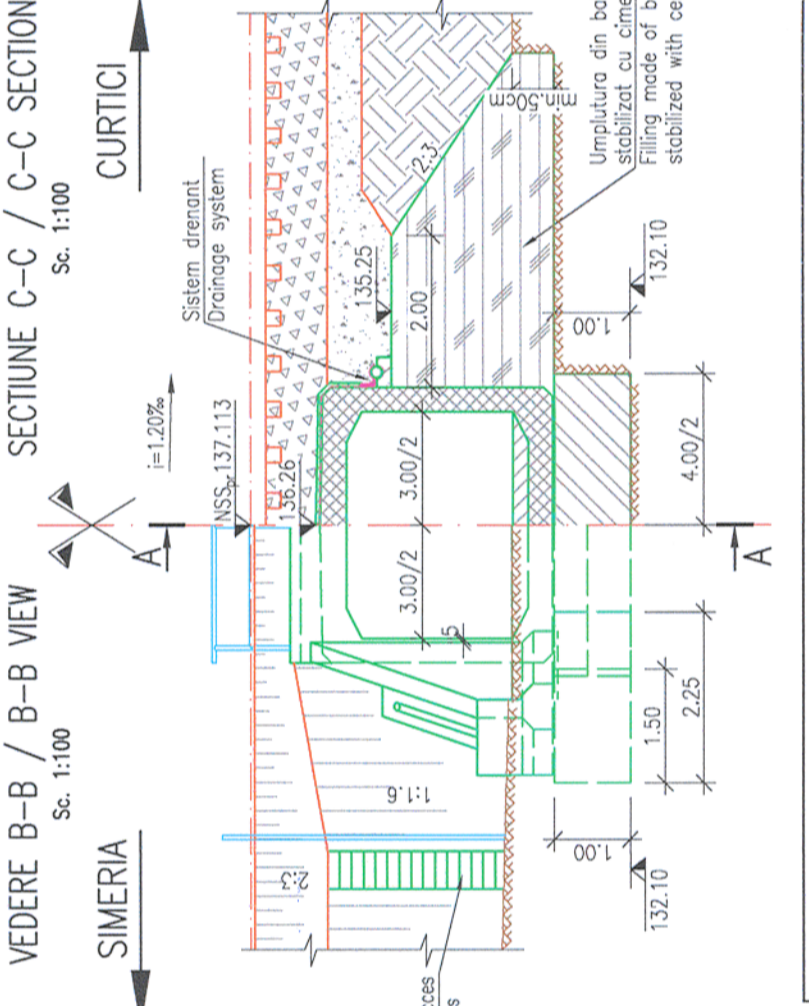
SECTIUNE LONGITUDINALA A-A / A-A LONGITUDINAL SECTION



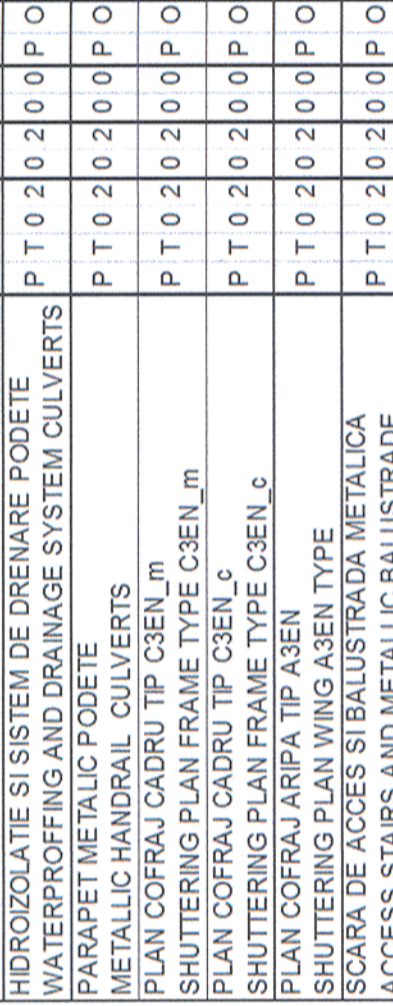
VEDERE PLANA SI PLANUL FUNDATIILOR / PLAN VIEW AND FOUNDATIONS PLAN



VEDERE B-B / B-B VIEW

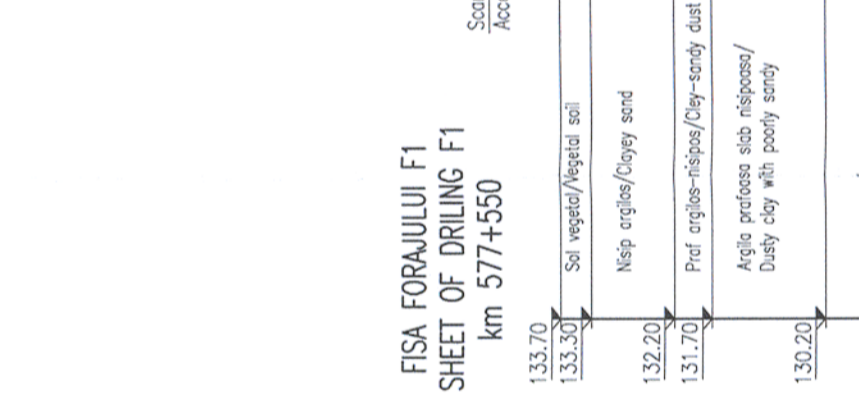


SECTIUNE C-C / C-C SECTION



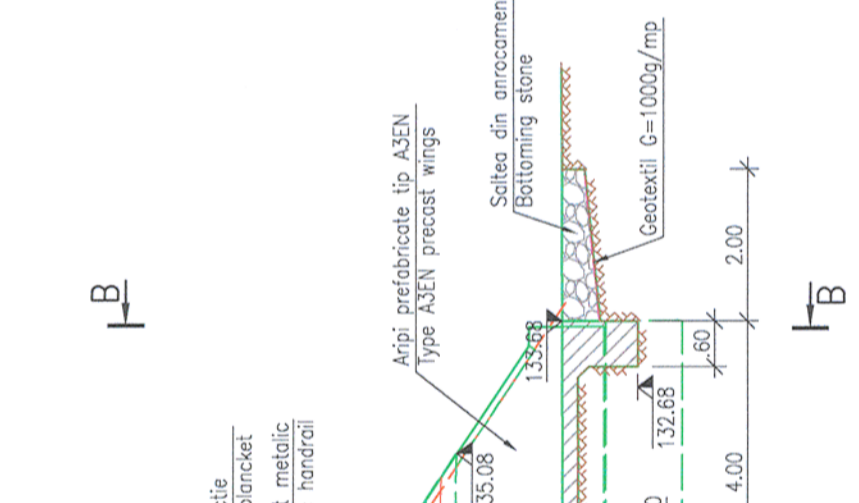
LEGENDA BETOANELOR/CONCRETE LEGEND

CONTOUR	DESCRIERE
[Pattern]	BETON C35/45 - Clasa de expunere XC4+XD1+XF3, agregate D _{max} 22
[Pattern]	ELEMENTE PREFABRICATE/PREFABRICATED ELEMENTS
[Pattern]	BETON C25/30 - Clasa de expunere XC2+XF1+XA1, agregate D _{max} 22.
[Pattern]	FUNDATII DIRECTE/DIRECT FOUNDATIONS
[Pattern]	BETON C25/30 - Clasa de expunere XC4+XF1+XM1, agregate D _{max} 16.
[Pattern]	SAPA DE PROTECTIE A HIDROIZOLATIEI/WATERPROOFING PROTECTION
[Pattern]	BETON C25/30 - Clasa de expunere XC4+XF3+XA1, agregate D _{max} 22.
[Pattern]	PEREU SI SCARI DE ACCES/PITCHING AND ACCESS STAIRS
[Pattern]	BETON C16/20 - Clasa de expunere X0+XF3, agregate D _{max} 16.
[Pattern]	DREN/DRAINAGE



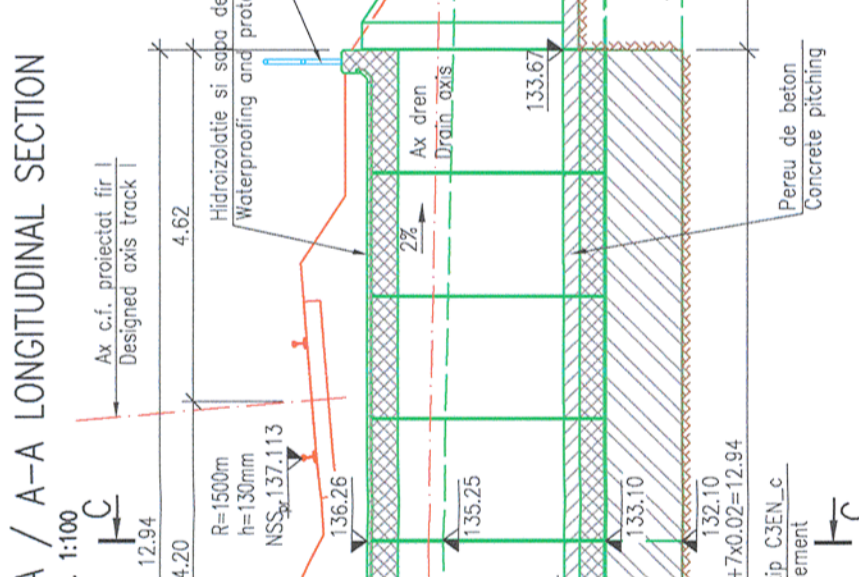
PLANURI DETALII GENERALE / GENERAL DRAWING DETAILS

ACOPERIRE ROSTURI ELEMENTE PREFABRICATE	JOINTS COVERING PRECAST ELEMENTS	P	T	0	2	0	0	0	0	1
HIDROIZOLATIE SI SISTEM DE DRENARE PODETE	WATERPROOFING AND DRAINAGE SYSTEM CULVERTS	P	T	0	2	0	0	0	0	2
PARAPET METALIC PODETE	METALLIC HANDRAIL CULVERTS	P	T	0	2	0	0	0	0	3
PLAN COFRAJ CADRU TIP C3EN_m	SHUTTERING PLAN FRAME TYPE C3EN_m	P	T	0	2	0	0	0	0	1
PLAN COFRAJ CADRU TIP C3EN_c	SHUTTERING PLAN FRAME TYPE C3EN_c	P	T	0	2	0	0	0	0	2
PLAN COFRAJ ARIPI TIP A3EN	SHUTTERING PLAN WING TYPE A3EN	P	T	0	2	0	0	0	0	5
SCARA DE ACCES SI BALUSTRA DA METALICA	ACCESS STAIRS AND METALLIC BALUSTRADE	P	T	0	2	0	0	0	0	2



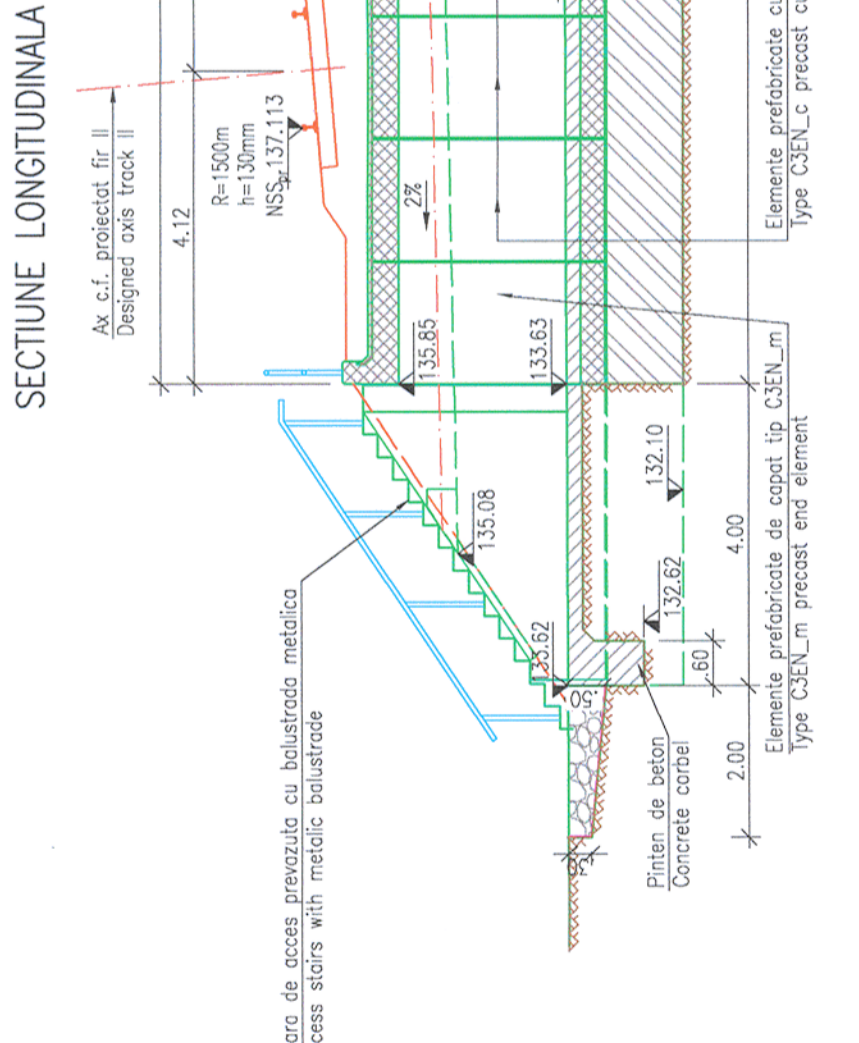
PLANURI DETALII GENERALE / GENERAL DRAWING DETAILS

ACOPERIRE ROSTURI ELEMENTE PREFABRICATE	JOINTS COVERING PRECAST ELEMENTS	P	T	0	2	0	0	0	0	1
HIDROIZOLATIE SI SISTEM DE DRENARE PODETE	WATERPROOFING AND DRAINAGE SYSTEM CULVERTS	P	T	0	2	0	0	0	0	2
PARAPET METALIC PODETE	METALLIC HANDRAIL CULVERTS	P	T	0	2	0	0	0	0	3
PLAN COFRAJ CADRU TIP C3EN_m	SHUTTERING PLAN FRAME TYPE C3EN_m	P	T	0	2	0	0	0	0	1
PLAN COFRAJ CADRU TIP C3EN_c	SHUTTERING PLAN FRAME TYPE C3EN_c	P	T	0	2	0	0	0	0	2
PLAN COFRAJ ARIPI TIP A3EN	SHUTTERING PLAN WING TYPE A3EN	P	T	0	2	0	0	0	0	5
SCARA DE ACCES SI BALUSTRA DA METALICA	ACCESS STAIRS AND METALLIC BALUSTRADE	P	T	0	2	0	0	0	0	2



CONVOI DE CALCUL LM71

ACOPERIRE ROSTURI ELEMENTE PREFABRICATE	JOINTS COVERING PRECAST ELEMENTS	P	T	0	2	0	0	0	0	1
HIDROIZOLATIE SI SISTEM DE DRENARE PODETE	WATERPROOFING AND DRAINAGE SYSTEM CULVERTS	P	T	0	2	0	0	0	0	2
PARAPET METALIC PODETE	METALLIC HANDRAIL CULVERTS	P	T	0	2	0	0	0	0	3
PLAN COFRAJ CADRU TIP C3EN_m	SHUTTERING PLAN FRAME TYPE C3EN_m	P	T	0	2	0	0	0	0	1
PLAN COFRAJ CADRU TIP C3EN_c	SHUTTERING PLAN FRAME TYPE C3EN_c	P	T	0	2	0	0	0	0	2
PLAN COFRAJ ARIPI TIP A3EN	SHUTTERING PLAN WING TYPE A3EN	P	T	0	2	0	0	0	0	5
SCARA DE ACCES SI BALUSTRA DA METALICA	ACCESS STAIRS AND METALLIC BALUSTRADE	P	T	0	2	0	0	0	0	2



CONVOI DE CALCUL LM71

ACOPERIRE ROSTURI ELEMENTE PREFABRICATE	JOINTS COVERING PRECAST ELEMENTS	P	T	0	2	0	0	0	0	1
HIDROIZOLATIE SI SISTEM DE DRENARE PODETE	WATERPROOFING AND DRAINAGE SYSTEM CULVERTS	P	T	0	2	0	0	0	0	2
PARAPET METALIC PODETE	METALLIC HANDRAIL CULVERTS	P	T	0	2	0	0	0	0	3
PLAN COFRAJ CADRU TIP C3EN_m	SHUTTERING PLAN FRAME TYPE C3EN_m	P	T	0	2	0	0	0	0	1
PLAN COFRAJ CADRU TIP C3EN_c	SHUTTERING PLAN FRAME TYPE C3EN_c	P	T	0	2	0	0	0	0	2
PLAN COFRAJ ARIPI TIP A3EN	SHUTTERING PLAN WING TYPE A3EN	P	T	0	2	0	0	0	0	5
SCARA DE ACCES SI BALUSTRA DA METALICA	ACCESS STAIRS AND METALLIC BALUSTRADE	P	T	0	2	0	0	0	0	2

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

Verificator / Expert
European Investment Bank

Cerinta Requirement
MINISTERUL TRANSPORTURILOR

Semnatura Signature
BENEFICIAR / BENEFICIARY : COMPANIA NATIONALA DE CAI FERATE "CFR" SA

Referat / Expertiza Report / Expertise
ROMANIA

PROIECTANT / DESIGNER: PÖYRY

Data Date
01.2013

Semnatura Signature
C. Teodorescu

Verificat / Checked
R. Tudorascu

Subcontractant / Subcontractor
MIOTOP

Aprobat / Approved
A.M. Baicu

Proiectat / Designed
A. Negrei

Project 91
35311.1

Faza / Phase:
PTH+CS / TD+TS

NOTA: Podetul tip cadru C3 are rol de desecare si permite invecinilor subtraversarea caii ferate.

NOTE: The box culvert type C3 has a drainage role and allows the roadside residents to undercross the railway line.

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

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

NOTA: Prezentul plan s-a intocmit in baza urmatoarelor date:

1. studiu topografic;
2. studiu geotehnic;
3. studiu hidrologic;
4. date culuse pe teren;
5. Pentru realizarea podetului nou se vor executa urmatoarele lucrari:
6. se va executa podet nou tip C3EN;
7. racordarea podetului nou cu terasamentele va fi asigurata in amonte si aval cu arpi prefabricate tip A3EN;
8. parapet din teava metalica pe limpanele podetului;
9. se prevad scari de acces pe terasament, de o parte si alta a podetului;
10. sa se va amenaja albia in interiorul podetului si intre arpi cu peruu;
11. sa se imperechizara suprafetel de beton vizuale;
12. la turnarea betonului in fundatii, se vor realiza rosturi totale. Rosturile din fundatii se vor suprapune rosturilor intre cadrele prefabricate;

3. La executie se vor respecta cu strictete prevederile din SR EN 206-1, "Codul de practica pentru executarea lucrarilor din beton, beton armat si beton precomprimat. Producere beton", indicativ NE 012-1:2007, NE 012-2:2010 si NE 013/2002, din "Normativul pentru verificarea calitatii si receptia lucrarilor de constructii diferite" 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.

NOTA: The present drawing was drafted based on the following data:

1. topographic study;
2. geotechnical study;
3. hydrological study;
4. data collected on site;

2. In order to execute the new culvert, there will not be carried on the next works:
- there will be carried on a new culvert type C3EN;
- the connection of the new culvert with the embankments will be ensured upstream and downstream with precast wings type A3EN;
- handrail made of metallic pipes on the both tympanon of the culvert;
- there are provided access scales on the embankment, on one side and the other side of the culvert;
- there will be arranged the riverbed inside the culvert and between the wings with pitching;
- the mattresses of 2.00 m length made of rubble stone at the upstream and downstream end of the culvert;
- all the visible concrete surfaces will be waterproofed;
- When casting the concrete of foundations, the total joints will be executed. The joints from foundations will overlap on the joints existent between the precast frames;

3. The provisions of the following legislation are to be strictly observed during execution "Code of practice for executing the concrete, reinforced concrete and prestressed concrete works", indicative NE 012-2007, NE 012-2:2010 and NE 013/2002, "Normative for checking the quality and the taking-over of related construction works" indicative C56-85, SR EN 206-1 and 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.

Denumire desen / Drawing name:
DISPOZITIE GENERALA / GENERAL LAYOUT
PODET / CULVERT KM pr. 577+496

Scara / Scale
1:100

Revizua / Revision
1 / 04.2013

Cod desen / Drawing Code
PT.02.02.09.PO.11.03

Nr / No
03