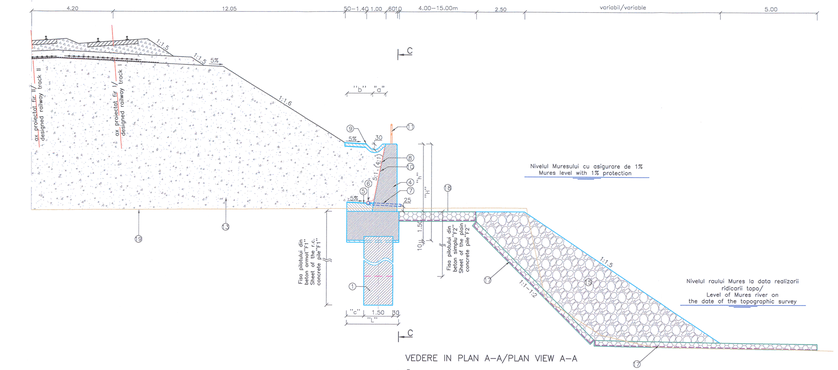
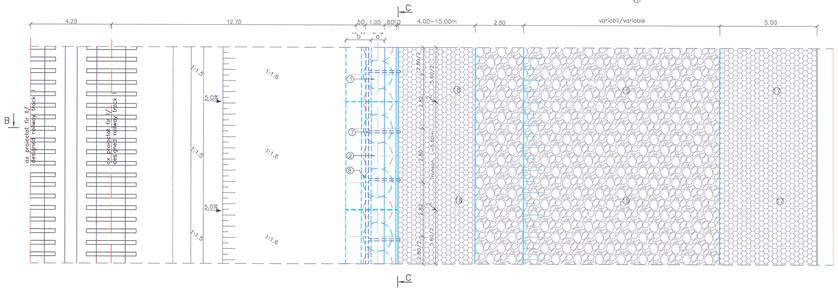
PLAN GENERAL 6
Zid de sprijin din beton armat fundat pe piloti forati secanti ø1500

GENERAL LAYOUT 6
Retaining wall made of r.c. with foundation on secant bored piles ø1500

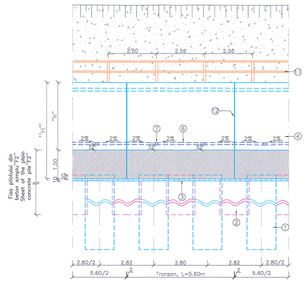
SECTIUNE TRANSVERSALA B–B/CROSS SECTION B–B



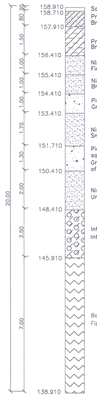
VEDERE IN PLAN A–A/PLAN VIEW A–A



SECTIUNE C–C/SECTION C–C



FISA FORAJULUI (BOREHOLE LOG) 11F
km 527+500, in ax proiectat)
(km 527+500, in shaft design)



Sol vegetal/Vegetal soil
Praf nisipos, argilos, cafeniu, plastic consistent
Brown, sandy, clayey, plastic consistent dust

Praf nisipos, cafeniu, plastic vartos
Brown, sandy, plastic stiff dust

Nisip fin, cafeniu, cu liant argilos, putin umed cu indesere medie/
Fine, brown sand with clayey binder, slightly moist, of medium compaction

Nisip cafeniu cu slab liant profos, saturat cu indesere medie/
Brown sand with weak dusty binder, saturated of medium compaction

Pietris in amestec cu nisip neuniform, cenusiu si bolovanis, saturat, indesat/
Gravel mixed with uneven brown sand and rubble stone, saturated, compacted

Nisip mic, cenusiu, saturat cu indesere medie/
Small-size, grey, saturated sand of medium compaction

Pietris in amestec cu nisip neuniform, cenusiu si bolovanis mare, saturat cu indesere medie–indesat
Gravel mixed with uneven grey sand and big-size rubble stone, saturated, of medium compaction–compacted

Nisip neuniform, cenusiu saturat, cu indesere medie/
Uneven, saturated, grey sand, of medium compaction

Intercalatii de roca cu argila profoasa, cenusie, plastic vartoasa, in grosimi de 3–7 cm./
Interlayers of rock and dusty grey clay, plastic stiff, with thickness between 3–7 cm.

Bazalt fisurat de la 13.70m compact tare /
Fissured basalt, from 13.70m it is compact, hard

NOTA:

1. Dispozitia generala ore ca obiect detalierea si aplicabilitatea lucrarilor de consolidare proiectate.
2. Elementele geometrice ale terasamentului c.f., dimensiunile treptelor de infratire cat si nivelul decaparii
fac obiectul specialitatii Suprastructura si Terasamente c.f. Acestea se regasesc in cadrul ocelului proiect in documentatii separate.
3. Pozitia barbacanelor din PVC ø50mm de la partea superioara a zidului de sprijin din beton armat este prevazuta in plansele care
detaliaza elevatia zidului de sprijin din beton armat.
4. Saltelele din gabioane se vor proteja la partea superioara prin torcretare in doua straturi, cu grosimea totala de 5cm.
5. Pilotii forati avand ø1500 se vor realiza din beton simplu clasa C25/30, XF1+XC2+XA1, sort 0–16mm.
6. Dimensiunile zidului de sprijin din beton armat fundat pe piloti secanti ø1500mm, precum si fisa pilotilor s–au stabilit pe baza
informatiilor geotehnice din studiul geotehnic, respectiv a forajului de la km 527+500pr., astfel incat incastrarea pilotilor so se realizeze in
stratul neafectat de toate.
7. In conditiile in care, in momentul realizarii forajelor pentru piloti, se constata neconcordante in ceea ce priveste straturile geotehnice
intercepteate, cu datele din forajele geo mentionate, in acest caz se va consulta proiectantul si geotehnicianul pentru adaptarea la teren a
lucrarilor de sprijinire proiectate.
8. Profilul transversal tip s–a intocmit pe baza profilelor transversale curente scara 1:200.
Pentru mai multe detalii, in paralel cu prezentul profil transversal tip, se vor consulta si profilel transversale curente.
9. Conform profilelor transversale curente sc. 1:200, pe zonele unde sunt prevazute umpluturi de ancoramente, gabioanele se vor aseza
dupa ce in prealabil se va realiza o umplutura din piatra bruta pentru nivelare si umplerea golurilor.
10. Inaintea executiei lucrarilor Constructorul va face o ridicare hidrografica, care va constitui baza masuratorilor de cantitati.
11. Daca se constata diferente mari fata de situatia proiectata, in special eroziuni si modificari ale formei si pantei talazului albiei minore,
se va instiinta Proiectantul pentru adaptarea la teren a solutiilor proiectate.
12. Deasemenea dupa fiecare viitura se va verifica starea lucrarilor precum si integritatea saltelelor, dupa caz, luandu–se masurile de
remediere care se impun.

NOTE:

1. The object of the general layout is to detail and apply the designed consolidation works.
2. The geometric elements of the railway embankment, the dimensions of the benches and also the level of the scraping are the object
of specialty Railway Superstructure and Embankments. They can be found within the same design but in different documentations.
3. The position of the PVC weepers ø50mm from the top side of the reinforced concrete retaining wall is provided in the drawings
detailing the retaining wall elevation.
4. Gabion mattresses will be protected at the top side through guniting in two layers, having a total thickness of 5 cm.
5. The bored piles with Ø1500 will be made of plain concrete class C25/30, XF1+XC2+XA1, sort 0–16mm.
6. The dimensions of r.c. retaining wall founded on secant piles with ø1500 and the sheet of the piles were establishedbased on
geo–technical information from geotechnical study, respectively the drilling from designed km527+500pr. so that the encase of the pile to be
executed in the layer of non–deteriorated basalt.
7. If during piles drilling execution, there are found incongruities of the intercepted geotechnical layers with the date of the mentioned geo
drillings, the designer and geo–technician will be consulted in order to adapt the designed progging–up works to the ground.
8. The cross–section type was prepared based on current cross–sections from scale 1:200.
For further details, you can also see the current cross–sections in the same time with this cross–section type.
9. According to the current cross–sections the current cross–sections, on the areas where there are provided fillings
of riprapp, the gabions will be placed after a preliminary filling of rough stone for leveling and filling the empty spaces
10. Before works' execution, the Contractor will make a hydrographic survey that will standat the basis of
quantities' measurements.
11. If major differences are noticed as compared to the designed situation, mainly erosions and modifications
of shape and slope of the minor riverbed, the Designer will be informed for adopting the site to the designed solutions.
12. Also, after each flood, the works' status will be checked as well as the integrity of mattresses,
depending on the case, taking necessary remedy measures.

ELEMENTELE GEOMETRICE SI APLICABILITATEA ZIDULUI DE SPRIJIN DIN BETON ARMAT FUNDAT PE PILOTI FORATI
GEOMETRIC ELEMENTS AND THE APLICABILITY OF THE RETAINING WALL MADE OF R.C. WITH FOUNDATION ON BORED PILES

Nr. crt/ No.	Pozitia fata de axa c.f./ Position against the railway axis	Aplicabilitate/ Aplicability		Lungime (m)/ Length (m)	Dimensiuni (m)/ Dimensions (m)							
					h	H	L	a	b	c	F1	F2
1	dreapta/right	Km 527+479.34	Km 527+490.58	11,24	4,00	5,50	3,00	1,00	1,30	1,20	16,00	12,00
2	dreapta/right	Km 527+490.58	Km 527+586.12	95,54	3,50	5,00	2,70	0,70	1,30	0,90	16,00	12,00
Lungime totala / Total length				106,78								

LEGENDA:

1. Piloti forati ø1500, din beton armat clasa C25/30
2. Piloti forati ø1500, din beton simplu clasa C25/30
3. Beton de egalizare, clasa C12/15
4. Zid de sprijin din beton armat, clasa C30/37
5. Fundatie dren, clasa C16/20
6. Tub din PEHD ø150mm gauri la partea superioara
7. Barbacana din tub PVC ø110mm
8. Geotextil la spatele zidului de sprijin
9. Rigola din beton
10. Hidroizolatie aplicata pe spatele zidului de sprijin
11. Parapet metalic
12. Rost de separatie din polistiren extrudat de grosime 2 cm
13. Umplutura conform specialitate "Terasamente cf."
14. Linia terenului existent
15. Ancoramente intre 50–1000 kg/buc
16. Geotextil
17. Saltea din gabioane, h=30cm
18. Gabioane, protejate cu geotextil, h=50cm
19. Linia terenului existent

LEGEND:

1. Bored piles ø1500, made of r.c. class C25/30
2. Bored piles ø1500 made of plain concrete C25/30
3. Lean concrete, class C12/15
4. Retaining wall made of r.c. class C30/37
5. Drain foundation, class C16/20
6. ø150mm PEHD tube perforated at the top side
7. Barbican made of ø110mm PVC tube
8. Geotextile at the back side of the retaining wall
9. Concrete gutter
10. Waterproofing applied on the back side of the retaining wall
11. Metallic guard–rail
12. The polystyrene separation joint has a thickness of 2 cm
13. Filling according to speciality "Railway embankments"
14. Border line of the existing land
15. Riprap with weight between 50 – 1000kg/buc
16. Geo–textil
17. Gabion mattress, h=30cm
18. Gabions protected with geo–textile, h=50cm
19. Border of the existing land

LEGENDA BETOANELOR / CONCRETE LEGEND

- Beton de egalizare clasa C12/15, X0, sort 0–31mm
  Equlisation concrete class C12/15, X0, sort 0–31mm
- Beton simplu clasa C16/20, XC2, sort 0–31mm
  Plain concrete class C16/20, XC2, sort 0–31mm
- Beton armat clasa C25/30, XF1+XC2+XA1, sort 0–16mm
  Reinforced concrete class C25/30, XF1+XC2+XA1, sort 0–16mm
- Beton armat clasa C30/37, XF1+XC4, sort 0–31mm
  Reinforced concrete class C30/37, XF1+XC4, sort 0–31mm

SIMEON C. GABRIEL
ROMANIA
M.T.P.T.
NR: 1107
CLAS. SALARIZ.
INGINER
VERIFICATOR PROIECTE

Acest 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 NAŢIONALĂ DE CĂI FERATE "CFR" SA

			Data Date	Semnatura Signature
PROIECTANT / DESIGNER: PÖYRY				
Aprobat Approved	Sef de echipa Team leader	C. Teodorescu	01.2013	
Verificat Checked	Expert Cheie Key Expert	L. Marculescu	01.2013	
Subcontractant / Subcontractor: VIOTOP				
Aprobat Approved	Adjunct Sef de echipa Deputy Team leader	A.M. Baicu	01.2013	
Proiectat Designed	Proiectant Designer	I. Osiac	01.2013	

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

Project 9i 35311.1

Faza / Phase: PTh +CS / TD + TS

Denumire desen / Drawing Title :

INTERVAL ILTEU - CAMPURI SURDUC
Plan general 6 / General layout 6

Scara / Scale	Revizia / Revision	Cod desen / Drawing Code	Nr. / No
1:100	1/16.05.2013	PT.02.01.17.CO.208	09/10