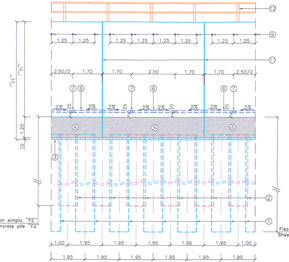
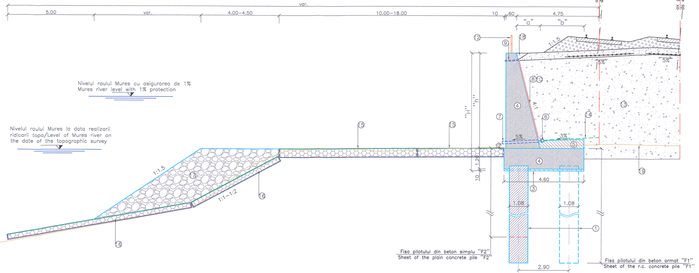
Plan general 3/General layout 3

Zid de sprijin din beton armat fundat pe doua randuri de piloti forati (piloti aval dispusi secant), D=1080mm, he=5.00–6.00m

Retaining wall made on r.c. with the foundation on two rows of drilled pillars (downstream pillars disposed secant) D=1080mm, he=5.00–6.00m

SECTIUNE TRANSVERSALA C–C/CROSS SECTION C–C

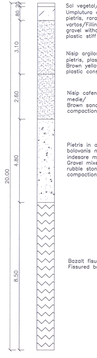




FISA FORAJULUI/BOREHOLE LOG

km 516+200pr. /km 517+300ex.

stanga 24.50m din ax fir l/left 24.50m from ax line I



Sol vegetal/Vegetal soil
Umplutura din praf argilos,cafeniu, in amestec cu pietris, rara piatra sparta si rar bolovanis, plastic vartos/Filling made of brown clayey dust, mixed with gravel without crushed stone and seldom rubble stone, plastic stiff

Nisip argilos, cafeniu-galbui, in amestec rar cu pietris, plastic consistent/
Brown yellow clayey sand, mixed with seldom gravel, plastic consistent

Nisip cafeniu cu slab liant pratos, umed, cu indesare medie/
Brown sand with weak moist dusty binder, of medium compaction

Pietris in amestec cu nisip neuniform, cenusiu, cafeniu, bolovanis mare si fragmente de roca, saturat cu indesare medie-compactat
Poorly graded gravel with coarse sand, grey-brown, big-size rubble stone and rock fragments, saturated, of medium compaction–compacted

Bazalt fisurat de la 12.20m compact, tare/
Fissured basalt from 12.2m compact, hard

Nota 2:

1. 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.
2. 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.

Note 2:

1. 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.
2. According to the current cross–sections the current cross–sections, on the areas where there are provided fillings of riprapa, the gabions will be placed after a preliminary filling of rough stone for leveling and filling the empty spaces.

LEGENDA:

1. Piloti forati din beton armat, D=1080mm, din beton armat clasa C25/30
2. Piloti forati din beton simplu, D=1080mm, din beton armat clasa C25/30
3. Beton de egalizare, clasa C12/15
4. Zid de sprijin din beton armat, clasa C30/37
5. Fundatie din, clasa C16/20
6. Tub din PEHD ø150mm gaurit la partea superioara
7. Barbacana din tub PEHD ø110mm
8. Geodren pe spatele zidului de sprijin
9. Barbacana din PEHD ø50mm
10. Hidroizolatie aplicata pe spatele zidului de sprijin
11. Rost de separatie din polistiren extrudat, grosime 2cm
12. Parapet metalic
13. Umplutura conform specialitate "Terasamente cf."
14. Umplutura conform specialitate "Terasamente cf."
15. Gabioane, protejate cu geotextil, h=50cm
16. Saltele din gabioane, h=30cm
17. Umplutura din ancoramente, g=50–1000kg/buc.
18. Filtru din material drenant
19. Limit terenului existent

LEGEND:

1. R.c. bored piles, D=1080mm, made of r.c. class C25/30
2. Plain concrete bored piles, D=1080mm, made of r.c. class C25/30
3. Leaning concrete, class C12/15
4. R.c. retaining wall, class C30/37
5. Drain foundation, class C16/20
6. ø150mm PEHD tube with holes at the top side
7. ø110mm PEHD tube weeper
8. Geo–drain on the backside of the retaining wall
9. ø50mm PEHD weeper
10. Waterproofing applied on the backside of the retaining wall
11. Separation joint made of extruded polystyrene, 2cm thickness
12. Metallic guardrail
13. Fill according to specialty "Railway embankments"
14. Fill according to specialty "Railway embankments"
15. Gabions protected with geo–textile, h=50cm
16. Gabion mattresses, h=30cm
17. Filling made of riprap, g=50–1000kg/pcs.
18. Filling made of draining material
19. Border of the existing land

LEGENDA BETOANELOR / CONCRETE LEGEND

- Beton de egalizare clasa C12/15, X0, sort 0–31m
  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

Nota 3:

1. Dispozitia generala are ca obiect detalierea si aplicabilitatea lucrarilor de consolidare proiectate.
2. Elementele geometrice ale terasamentului c.f., dimensiunile treptelor de infratire cat si nivelul decapori
fac obiectul specialitatii Suprastructura si Terasamente c.f. Acestea se regasesc in cadrul acestuia 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. 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 516+200pr. (km 517+300 ex.), celfel incat incastrarea pilotilor sa se realizeze in stratul de bazalt.
6. Pozitiile conform situatiei de momentul realizarii forajelor pentru piloti, se constata neconcordante in ceea ce priveste stratiurile geotehnice intercepate la cotele din forajele deja mentionate, in acest caz se va consulta proiectantul si geotehnicianul pentru adaptarea la teren a lucrarilor de sprijinire proiectate.
7. 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.
8. 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.
9. Inainte executiei lucrarilor Constructorul va face o ridicare hidrografica, care va constitui baza masuratorilor de cantitati.
10. Daca se constata diferente mari fata de situatia proiectata, in special eroturi si modificari ale formei si pantei talazului albiei minore, se vo instiinta Proiectantul pentruadaptarea la teren a solutiilor proiectate.
11. Desasemnea dupa fiecare viiture se va verifica starea lucrarilor precum si integritatea saltelelor, dupa caz, luandu–se masurile de remediere care se impun.

Note 3:

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 gunniting in two layers, having a total thickness of 5 cm.
5. The dimensions of r.c. retaining wall founded on secant piles with ø1500 and the sheet of the piles were established based on geo–technical information from geotechnical study, respectively the drilling from designed km516+200pr. (km 517+300ex) so that the encase of the pile to be executed in the layer of non–deteriorated basalt.
6. 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 propping–up works to the ground.
7. 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.
8. According to the current cross–sections the current cross–sections, on the areas where there are provided fillings of riprapa, the gabions will be placed after a preliminary filling of rough stone for leveling and filling the empty spaces
9. Before works' execution, the Contractor will make a hydrographic survey that will standat the basis of quantities' measurements.
10. 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 adapting the site to the designed solutions.
11. 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 B. A. FUNDAT PE PILOTI FORATI (PILOTII AVAL DISPUSI SECANT)

GEOMETRIC ELEMENTS AND THE APLICABILITY OF THE RETAINING WALL MADE ON R.C. WITH FOUNDATION ON BORED PILES (DOWNSTREAM SECANT 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	a	b	F1	F2
1	stangaleft	km 516+445.140 | km 516+486.230	41.09	5.00	6.20	1.25	2.65	16.00	12.00
2	stangaleft	km 516+486.230 | km 516+574.280	88.05	5.50	6.70	1.40	2.50	16.00	12.00
3	stangaleft	km 516+574.280 | km 516+703.420	129.14	6.00	7.20	1.50	2.40	16.00	12.00
	Lungime totala (m) / Total length (m)		258.28						

Nota 1:

1. Dispozitia generala are ca obiect detalierea si aplicabilitatea lucrarilor de consolidare proiectate.
2. Elementele geometrice ale terasamentului c.f., dimensiunile treptelor de infratire cat si nivelul decaporii
fac obiectul specialitatii Suprastructura si Terasamente c.f. Acestea se regasesc in cadrul acestuia 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.

Note 1:

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 gunniting in two layers, having a total thickness of 5 cm.

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 :

CFR

COMPANIA NATIONALA 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	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	

ROMANIA MINISTERUL TRANSPORTURILOR NR. 1107 CERTIFICAT DE ÎNMATRICULARE

"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 Illau - 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 Illau - end Y Gurasada

Project 9/ 35311.1

Faza / Phase: PTh +CS / TD + TS

Denumire desen / Drawing Title :

INTERVAL ILTEU - CAMPURI SURDUC

Plan general 3/ General layout 3

Scara / Scale	Revizia / Revision	Cod desen / Drawing Code	Nr. / No
1:100	1/16.05.2013	PT.02.01.17.CO.202	03/10