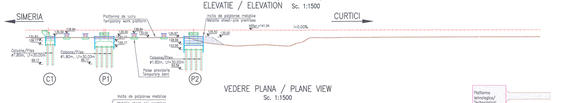
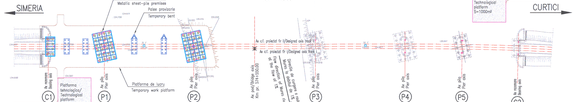
FAZA I: LUCRARI PREGATITOARE
STAGE I: PRELIMINARY WORKS

VEDERE PLANA / PLANE VIEW
Sc. 1:1500

FAZA II: REALIZARE INFRASTRUCTURI MAL SIMERIA (C1, P1, P2)
STAGE II: MAKING THE INFRASTRUCTURES ON THE SIMERIA BANK (C1, P1, P2)
ELEVATIE / ELEVATION Sc. 1:1500

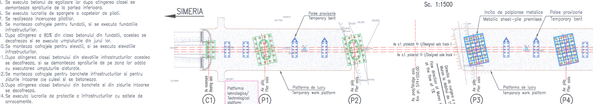


VEDERE PLANA / PLANE VIEW
Sc. 1:1500

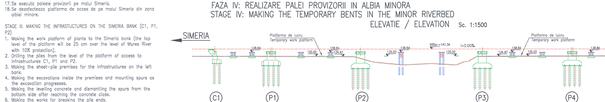


FAZA III: REALIZARE INFRASTRUCTURI MAL CURTICI (P3, P4, P5 si C2)
STAGE III: MAKING THE INFRASTRUCTURES ON THE CURTICI BANK (P3, P4, P5 and C2)
ELEVATIE / ELEVATION Sc. 1:1500

VEDERE PLANA / PLANE VIEW
Sc. 1:1500



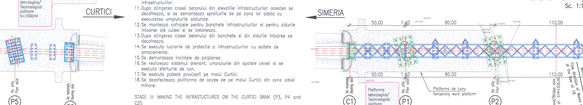
FAZA IV: REALIZARE PALEI PROVIZORII IN ALBIA MINORA
STAGE IV: MAKING THE TEMPORARY BENTS IN THE MINOR RIVERBED
ELEVATIE / ELEVATION Sc. 1:1500



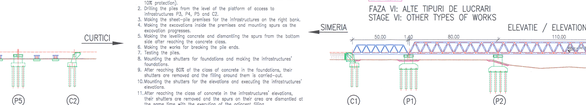
VEDERE PLANA / PLANE VIEW
Sc. 1:1500

FAZA V: MONTARE TABLIERE
STAGE V: MOUNTING THE DECKS
ELEVATIE / ELEVATION Sc. 1:1500

VEDERE PLANA / PLANE VIEW
Sc. 1:1500



FAZA VI: ALTE TIPURI DE LUCRARI
STAGE VI: OTHER TYPES OF WORKS
ELEVATIE / ELEVATION Sc. 1:1500



VEDERE PLANA / PLANE VIEW
Sc. 1:1500

FAZA I: LUCRARI PREGATITOARE
1. Se amenajeaza drumul de acces si platforma tehnologica.
2. Se realizeaza organizarea de santier.
3.Se executa rampele de acces.

STAGE I: PRELIMINARY WORKS
1. Arranging the access roads and the technological platforms.
2.Making the site organization.
3.Executing the access ramps.

FAZA II: REALIZARE INFRASTRUCTURI MAL SIMERIA (C1, P1, P2).
1. Se executa platforma de lucru a utilajelor si infrastructuri pe malul Simeria (cota superioara a platformei va fi cu 25 cm peste nivelul Muresului cu asigurare 10%).
2. Se formeaza rampe de la nivelul platformei de acces la infrastructurile C1, P1 si P2.
3. Se executa incintele de protejare pentru infrastructurile de pe malul Simeria.
4. Se executa epuizarile in interiorul incintelor se executa cu avioncarnos asezate pe vor inundat simplu.
5. Se executa betonul de egalizare in cupa stingerea closei se demonteaza sprotarile de la peretii incintelor.
6. Se executa turnarile de asezare a zidariilor de piatra.
7. Se realizeaza incarcarea piloților.
8. Se executa zidariile pentru fundatii, si se executa fundatiile propriu-zise.
9. Dupa stingerea a BCR din closa betonului din fundatii, acestea se decofreaza si se executa umplutarile din jurul lor.
10.Se montazza cofrajele pentru elevatii, si se executa elevatiile infrastructurilor.
11.Dupa stingerea closei betonului din elevatiile infrastructurilor acestea se decofreaza, si se demontazza sprotarile de pe zona lor odata cu executarea umpluturilor ulterioare.
12.Se montazza cofrajele pentru banchete infrastructurilor si peretii dalelor intarcere se executa la fel ca si elevatiile.
13.Dupa stingerea closei betonului din banchete si dupa intarcere se decofreaza.
14.Se executa lucrarile de protectie a infrastructurilor cu asfalte de concscontra.
15.Se executa lucrarile incintele de palplanse.
16.Se realizeaza aldemurj elevatii, umplutarile din spatele culeei si se executa eforturile de con.
17.Se executa palele provizorii pe malul Simeria.
18.Se desafectezza platforma de acces de pe malul Simeria din zona albiei minore.

STAGE II: MAKING THE INFRASTRUCTURES ON THE SIMERIA BANK (C1, P1, P2).
1. Making the work platform of planta to the Simeria bank (the top level of the platform will be 25 cm over the level of Mures River with 10% protection).
2. Making the ramps from the level of the platform of access to infrastructures C1, P1 and P2.
3. Making the sheet-pile premises for the infrastructures on the left bank.
4. Making the excavations inside the premises and mounting ayuns on the sunken progressive.
5. Making the leveling concrete and dismantling the spurts from the bottom side after reaching the concrete closes.
6. Making the basis for breaking the ice pile ends.
7. Loading the piles.
8. Making the shutters for foundations and making the infrastructures' foundations.
9. After reaching BCR of the close of concrete in the foundations, their shutters are removed and the spurs on their ones are dismantled at the same time with the execution of the infrastructures' elevations.
10.Making the shutters for the infrastructures' elevations and for the wing walls of the abutment and covering with concrete.
11.After reaching the close of concrete in the elevations and in the wing walls, the shutters are removed.
12.Making the shipping system, the filling behind the abutment and carrying-out the core cushions.
13.Making the temporary bents on the Simeria bank.
14.Closing-down the access platform from the Simeria bank in the area of the minor riverbed.

FAZA III: REALIZARE INFRASTRUCTURI MAL CURTICI (P3, P4 si C2)
1. Se executa platformele de acces si utilajelor si infrastructuri pe malul Curtici (cota superioara a platformei va fi cu 25 cm peste nivelul Muresului cu asigurare 10%).
2. Se formeaza pilotii de la nivelul platformei de acces la infrastructurile P3, P4 si C2.
3. Se executa incintele de palplanse pentru infrastructurile de pe malul Curtici.
4. Se executa epuizarile in interiorul incintelor se adata cu avioncarnos asezate pe vor inundat simplu.
5. Se executa betonul de egalizare in cupa stingerea closei se demontazza sprotarile de la peretii incintelor.
6. Se executa turnarile de asezare a copatator de pilot.
7. Se realizeaza incarcarea piloților.
8. Se montazza cofrajele pentru fundatii, si se executa fundatiile propriu-zise.
9. Dupa stingerea a BCR din closa betonului din fundatii, acestea se decofreaza si se executa umplutarile din jurul lor.
10.Se montazza cofrajele pentru elevatii, si se executa elevatiile infrastructurilor.
11.Dupa stingerea closei betonului din elevatiile infrastructurilor acestea se decofreaza, si se demontazza sprotarile de pe zona lor odata cu executarea umpluturilor ulterioare.
12.Se montazza cofrajele pentru banchete infrastructurilor si peretii dalelor intarcere se executa la fel ca si elevatiile.
13.Dupa stingerea closei betonului din banchete si din dalele intarcere se decofreaza.
14.Se executa lucrarile de protectie a infrastructurilor cu asfalte de concscontra.
15.Se dermontazza incintele de protectie a infrastructurilor.
16.Se realizeaza aldemurj elevatii, umplutarile din spatele culeei si se executa eforturile de con.
17.Se executa palele provizorii pe malul Curtici.
18.Closing-down the access platforms on the Curtici dry zone and minore riverbed.

STAGE III: MAKING THE INFRASTRUCTURES ON THE CURTICI BANK (P3, P4 and C2).
1. Making the platform for the access of plants to the Curtici bank (the top level of the platform will be 25 cm over the level of Mures River with 10% protection).
2. Drilling the piles from the level of the platform of access to infrastructures P3, P4, P5 and C2.
3. Making the sheet-pile premises for the infrastructures on the right bank.
4. Making the excavations inside the premises and mounting ayuns on the sunken progressive.
5. Making the leveling concrete and dismantling the spurts from the bottom side after reaching the concrete close.
6. Making the basis for breaking the ice pile ends.
7. Loading the piles.
8. Making the shutters for foundations and making the infrastructures' foundations.
9. After reaching BCR of the close of concrete in the foundations, their shutters are removed and the spurs on their ones are dismantled at the same time with the execution of the infrastructures' elevations.
10.Mounting the shutters for the elevations and executing the infrastructures' elevations.
11.After reaching the close of concrete in the infrastructures' elevations, their shutters are removed and the spurs on their ones are dismantled at the same time with the execution of the wing walls.
12.Mounting the shutters for the infrastructures' benches and for the wing walls of the abutment and executing with concrete.
13.After reaching the close of concrete in the benches and in the wing walls, the shutters are removed.
14.Making the shipping system, the filling behind the abutment and carrying-out the core cushions.
15.Dismantling the shed-pile premises.
16.Making the dropping system, the filling behind the abutment and carrying-out the core cushions.
17.Making the temporary bents on the Curtici bank.
18.Closing-down the access platforms from the Curtici bank in the area of the minor riverbed

FAZA IV: REALIZARE PALEI PROVIZORII IN ALBIA MINORA
1. Se realizeaza palees provizorii in albia minora cu ajutorul unor platforme plutitoare.
2. Se montreaza si capetele din amonte dispozitivele de sport gheata.

STAGE IV: MAKING THE TEMPORARY BENTS IN THE MINOR RIVERBED
1. Making the temporary bents in the minor riverbed by help of floating platforms.
2. Mounting devices for breaking the ice at the upstream ends.

FAZA V: MONTARE TABLIERE
1. Se montreaza halele interioare, ambratoarele, bonele grinzilor principale si contravantuirile superioare (se incep cu montarea la ajutorul utilajelor care au acoperi pe platforme or in vidia mineru cu ajutorul unor macarale pe pneuri).
2. Se montreaza platelajul metalic, cu exceptia acestuia in zona se afla palees provizorii.
3. Se pusticseaza tolmalele metalice pe acoperisul de beton.
4. Se executa palele provizorii, prin astfle libere toate in palees).
5. Se montazza platelajul metalic in zonele libere, oprtorii de beton si executa se inchizi.

STAGE V: MOUNTING THE DECKS
1. Mounting the lower flanges, the cross pieces, the bars of the main girders and the upper wind bracing (on some they are mounted by help of machines with access to the platforms and in the mine riverbed by help of the cranes on pneus).
2. Mounting the metallic bridge planking, except for the areas where there are temporary bents.
3. Fixing the metallic dece on the bearing devices.
4. Extending the temporary bents through the free spaces and closing the last ones.
5. Mounting the metallic bridge planks in the free areas, the bollard retainers and the footpath curbsawns.

FAZA VI: ALTE TIPURI DE LUCRARI
1. Se executa hidroizolatia cuvetur metalice pe podul nou.
2. Se montazza rosu de pietrisel.
3. Se executa cotes pe pod si pe terasament.
4. In zonerele cu lucrarile de augmentazzari si inzirile de deasnicienza circulatiei se realizeaza inzarcarea podului.
5. Se executa asfalte de acces pe terasament.
6. Se deschide circulatia feroviara in trepte de viteza conform instructiilor in vigoare.
7. Se desafectezza platformele din albia minora.
8. Se executa amenajarile de protectie a malurilor.
9. Se organizeaza de santier.

STAGE VI: OTHER TYPES OF WORKS
1. Making the waterproofing of the metallic vats on the new bridge.
2. Mounting the contact line.
3. Making the cotes on the bridge.
4. On the embankment making the bridge in correlation with the railway superstructure works before opening the traffic.
5. Making the access aisles on the embankment.
6. Opening the railway traffic in speed levels according to the instructions in force.
7. Closing-down the platforms in the area of the minor riverbed.
8. Closing-down the accesses from the work ones and the site organization.

NOTE:
1. Detaliile prezentate in acest plan nu sunt obligatorii si pot fi modificate sau completate in functie de optiunile constructorului cu respectarea conditiilor de realizare a lucrarilor si cu asumarea responsabilitatii de executie a lucrarii proiectantului.
2. Orice recomandarile intre elementele ovule in vedere la elaborarea proiectului si lanet va fi anuntzata proiectantului pentru adoptare in situatia existenta.

NOTE:
1. The details presented in this plan are not compulsory and can be modified or adapted depending on the constructor's endowment by observing the execution conditions of the final works provided in the technical project and with the assumption of responsibility.
2. Any incongruity between the elements taken into consideration when preparing the design and the site will be announced to the designer so that he can adapt to the existing situation.

RACHEL I. IONUȚ-BADU
Expert tehnic atestat
Nr. 07220
Prezentul plan anuleaza si inlocuieste versiunea anterioara
This plan cancels and replaces previous version

Verificator / Expert Checker / Expert	Cerinta Requirement	Semnatura Signature

MINISTERUL TRANSPORTURILOR

European Investment Bank

BENEFICIAR / BENEFICIARY :

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	R. Tudorascu	01.2013

Subcontractant / Subcontractor: VIOTOP

Aprobat Approved	Adjunct Sef de echipa Deputy Team leader	A.M. Balcu	01.2013
Proiectat Designed	Inginer Engineer	V. Aldescu	01.2013

"Reabilitarea liniei c.f. Frontiera română - Curtici - Simeria, parte componentă a coridorului IV Pan - European pentru circulația treniurilor cu viteză maximă de 160 km/h"
Tronsonul 2A : km 614 - cap Y Bârzava

"Rehabilitation of the Railway Line Border - Curtici - Simeria , component Part of the IV Pan - European Corridor for the circulation of trains with maximum speed of 160 km/h"
Section 2A : km 614 - end Y Bârzava

Project 9i 35311.1

Faza / Phase: PTH+CS / TD+TS

Denumire desen / Drawing name:
TEHNOLOGIE DE EXECUTIE / EXECUTION TECHNOLOGY
POD / BRIDGE KM pr. 574+550

Scara / Scale	Revizia / Revision	Cod desen / Drawing Code	Nr / No
1:1500	1 / 04.2013	PT.02.02.09.PO.05.04	04