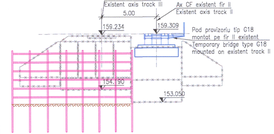
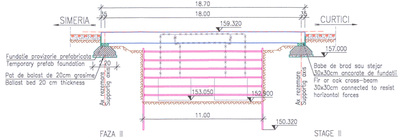
FAZELE I SI II – SECTIUNE LONGITUDINALA
PHASES I AND II – LONGITUDINAL SECTION



FAZELE I SI II – SECTIUNE TRANSVERSALA
PHASES I AND II – CROSS SECTION



FAZA I
Firul II existent – circulatie cu viteza normala
Firul III existent – circulatie cu viteza normala

1. Se amenajeaza drumul de acces, platforma tehnologica si organizarea de santier.
2. Se indentifica, se picheteaza, se deviaza si se pun in siguranta cablurile SCB, TTR din zona lucrarilor

STAGE I
Existent track II – traffic with normal speed
Existent track III – traffic with normal speed

1. Arranging the access road, the technological platform and the site organization.
2. Identifying, pegging out, deviating and securing the SCB, TTR cables from the works' area

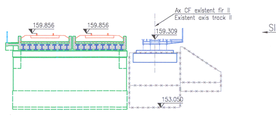
FAZA II
Firul II existent – circulatie inchisa
Firul III existent – circulatie cu restrictie de viteza 30km/h

1. Se scoate de sub tensiune firul I existent si se asigura protectia electrica.
2. Se sectioneaza si se detensioneaza linia.
3. Se demonteaza suprastructura CF pe o lungime de 30m.
4. Se scoate din cale tablierul si se transporta in depozit.
5. Se demoleaza zidurile de garda ale culeelor pentru a permite introducerea in cale a podului provizoriu.
6. Se decompune prismul de piatra sparta si stratul de repartitie, realizand o platforma pentru utilajul de batere a palplanselor conform desenului.
7. Se sapa gropile de fundatie pentru rezemele podului provizoriu.
8. Se realizeaza o perna de balast de 20cm bine compactata.
9. Se aseaza blocurile de rezemare prefabricate din beton pe perna de balast.
10. Se monteaza podul provizorii G18.7 cu calea prinsa direct si la rare s-o realizat electroizolarea si protectia electrica..
11. Se repune sub tensiune linia de contact
12. Se redeschide circulatia cu 30Km/h in trepte de viteza.

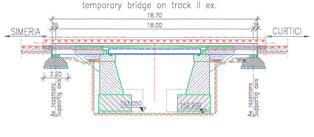
STAGE II
Existing track II – closed traffic
Existing track III – traffic with speed limit30km/h

1. Cutting–off the voltage on existing track I and ensuring the electric protection.
2. Sectioning and cutting–off the voltage on the line.
3. Dismantling the railway superstructure on a length of 30m.
4. Removing the deck from the track and transporting it to the warehouse.
5. Dismantling the guard walls of the abutments to allow the insertion of the temporary bridge into the track.
6. Scraping the crushed stone prism and the distribution layer, obtaining a platform for the sheet piles' drive in equipment according to the drawing.
7. Digging foundation holes for the bearings of the temporary bridge.
8. Executing a 20cm well compacted ballast bed.
9. Placing the concrete precast bearing blocks on the ballast bed.
10. Mounting the temporary bridge G18.7 with the track directly fastened, having the electric insulation and electric protection done.
11. Restoring the voltage on the contact line
12. Reopening the traffic for the speed of 30km/h with speed limits.

FAZA III – SECTIUNE LONGITUDINALA
PHASE III – LONGITUDINAL SECTION



FAZA III – SECTIUNE TRANSVERSALA FIR III ex. – pod prov. pe firul II ex.
PHASE III – CROSS SECTION track III ex – temporary bridge on track II ex.



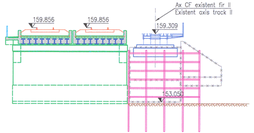
FAZA III
Firul II existent – circulatie cu restrictie de viteza 30km/h
Firul III existent – circulatie inchisa

1. Se scoate de sub tensiune firul III si se asigura protectia electrica.
2. Se sectioneaza si se detensioneaza linia.
3. Se demonteaza suprastructura CF.
4. Se bat palplanse ce vor ocaziul incintele pentru executia fundatiilor noi, aferente liniilor proiectate II si III.
5. Se scoate din cale tablierul existent pe linia III si elementele prefabricate de elevatie.
6. Se demoleaza infrastructurile existente.
7. Se executa sapaturile in incinte si montarea sprijinirilor pe masura ce avanseaza sapatura.
8. Se realizeaza fundatiile si elevatiile (inclusiv bancheta cuzinetilor) la cele doua culee noi.
9. Se realizeaza umplutura din spatele culeelor, drenul si racordarile cu terasamentul.
10. Se scot palplanselе, mai putin cele paralele cu linia CF.
11. Se realizeaza suprastructura pe liniile II si III proiectate, tablier cu grinzi metalice inglobate in beton, pe rezeme definitive si se executa hidroizolatia si protectia hidroizolatiei.
12. Se repune sub tensiune linia de contact si se asigura electroizolarea podului.
13. Se deschide circulatia cu 30Km/h in trepte de viteza pe cele doua linii proiectate II si III

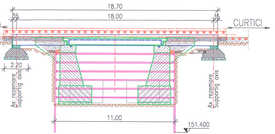
STAGE III
Existing track II – traffic with speed limit of 30km/h
Existing track III – closed traffic

1. Cutting–off the voltage on track III and ensuring the electric protection.
2. Sectioning and cutting–off the voltage on the line.
3. Dismantling the railway superstructure.
4. Driving in the sheet piles to form the premises for execution of the new foundations, afferent to designed lines II and III.
5. Removing from the track and deck existing on line III and the elevation precast elements.
6. Dismantling the existing infrastructures.
7. Executing excavations in the premises and mounting propping–ups as the excavation advances.
8. Executing the foundations and elevations (including the bearing boxes' banquette) at the two new abutments.
9. Executing the filling behind the abutments, the drain and connections to the embankments.
10. Removing the sheet piles, except for those parallel to the railway line.
11. Executing the superstructure on the designed lines II and III, the deck with metallic girders embedded in concrete on final bearings and executing the waterproofing and waterproofing protection.
12. Restoring the voltage on the contact line and ensuring the bridge electric insulation.
13. Opening the traffic with speed of 30km/h with speed limits on the two designed lines II and III

FAZA IV – SECTIUNE LONGITUDINALA
PHASE IV – LONGITUDINAL SECTION



FAZA IV – SECTIUNE TRANSVERSALA
PHASE IV – CROSS SECTION



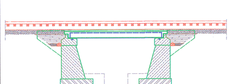
FAZA IV
Firul II proiectat – circulatie cu viteza normala
Firul III proiectat – circulatie cu 50Km/h
Firul II existent – circulatie inchisa

1. Se scoate de sub tensiune si se asigura protectia electrica.
2. Se demonteaza suprastructura CF.
3. Se scoate din cale podul provizoriu G18.5.
4. Se scot blocurile de rezemare prefabricate ale podului provizoriu.
5. Se demoleaza vechile infrastructuri .
6. Se bat palplanselе ce vor ocaziul incintele pentru executia fundatiilor noi, aferente liniei proiectate I .
7. Se executa sapaturile in incinte si montarea sprijinirilor pe masura ce avanseaza sapatura.
8. Se realizeaza fundatiile si elevatiile (inclusiv bancheta cuzinetilor) la cele doua culee noi.
9. Se realizeaza umplutura din spatele culeelor, drenul si racordarile cu terasamentul.
10. Se scot palplanselе.
11. Se realizeaza suprastructura pe linia 1 proiectata, tablier cu grinzi metalice inglobate in beton, pe rezeme definitive si se executa hidroizolatia si protectia hidroizolatiei.
12. Se repune sub tensiune linia de contact si se asigura protectia electrica.
13. Se redeschide circulatia cu 30 km/h si se ridica restrictia de viteza in trepte, conform normelor in vigoare.

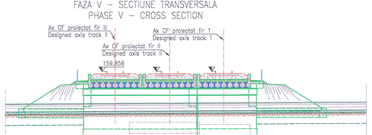
STAGE IV
Designed track II – traffic with normal speed
Designed track III – traffic with speed of 50Km/h
Existing track II – closed traffic

1. Cutting–off the voltage and ensuring the electric protection.
2. Dismantling the railway superstructure.
3. Removing from the track the temporary bridge G18.5.
4. Removing the precast bearing blocks on the temporary bridge.
5. Dismantling the old infrastructures.
6. Diving in the sheet piles to form the premises for execution of the new foundations, afferent to designed line I.
7. Executing excavations in the premises and mounting propping–ups as the excavation advances.
8. Executing the foundations and elevations (including the bearing boxes' banquette) at the two new abutments.
9. Executing the filling behind the abutments, the drain and connections to the embankments.
10. Removing the sheet piles.
11. Executing the superstructure on the designed line 1, the deck with metallic girders embedded in concrete on final bearings and executing the waterproofing and waterproofing protection.
12. Restoring the voltage on the contact line and ensuring the electric protection.
13. Reopening the traffic with speed of 30km/h and cancelling the speed limit, according to norms in force.

FAZA V – SECTIUNE LONGITUDINALA
PHASE V – LONGITUDINAL SECTION



FAZA V – SECTIUNE TRANSVERSALA
PHASE V – CROSS SECTION



FAZA V
Firul II – circulatie cu viteza normala
Firul III – circulatie cu viteza normala
Firul I – circulatie cu viteza normala

1. Se monteaza parapetul de protectie metalic.
2. Se executa scarile de acces pe terasament.
3. Se executa pereul de beton pe lungimea podului si intre culee.
4. Se pereaza albia amonte si aval si se calibreaza, racordandu–se la albia existenta.
5. Se executa saitelele din annocamente la capete.
6. Se dezafectează platformele, accesele din zona de lucru si organizarea de santier si se redau terenurile ocupate temporar circulitului initial.

FAZA V
Track II – traffic with normal speed
Track III – traffic with normal speed
Track I – traffic with normal speed

1. Mounting the metallic protection guard rail.
2. Executing the access stairs on the embankment.
3. Executing the concrete pitching on the bridge length and between abutments.
4. Pitching the upstream and downstream riverbed, making the connection to the existing riverbed.
5. Executing the riprap mattresses at ends.
6. Closing down the platforms, the access to the work area and the site organization and restoring the temporary occupied lands to the initial purpose.

NOTA:

1. CONVOIUL DE CALCUL PENTRU PODURILE PROVIZORII: G.978.5
2. Podurile provizorii se gasesc in dotarea Beneficiarului si pot fi puse la dispozitia Constructorului
3. Circulatia pe podurile provizorii se face cu viteza de maxim 30 km/h

NOTE:

1. CALCULATION CONVOY FOR THE TEMPORARY BRIDGES: G.978.5
2. Temporary bridges are in the endowment of the Beneficiary and can be made available to the Contractor
3. Traffic on the temporary bridges takes place with maximum speed 30 km/h

Detaliile prezentate in acest plan nu sunt obligatorii si pot fi modificate sau adaptate in functie de dotarile constructorului cu respectarea conditiilor de realizare a lucrarilor definitive prevazute in caietele de sarcini.

The details presented in this plan are not compulsory and can be modified or adapted depending on the constructor's endowments by observing the execution conditions of the final works provided in the Technical Specifications.

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 :

COMPANIA NAȚIONALĂ 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	T. Mihali	01.2013	

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

Project 9i 35311.1

Faza / Phase: PTH+CS / TD+TS

Denumire desen / Drawing name:

TEHNOLOGIE DE EXECUTIE / EXECUTION TECHNOLOGY
POD / BRIDGE KM pr. 531+415 (KM ex. 535+074)

Scara / Scale	Revizia / Revision	Cod desen / Drawing Code	Nr / No
1:200	1 / 04.2013	PT.02.02.16.PO.02.04	04