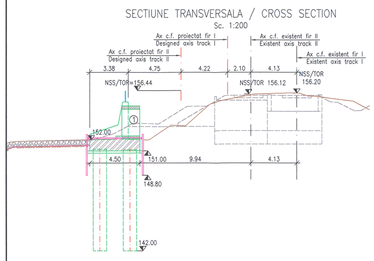
SECTIUNE TRANSVERSALA / CROSS SECTION

Sc. 1:200

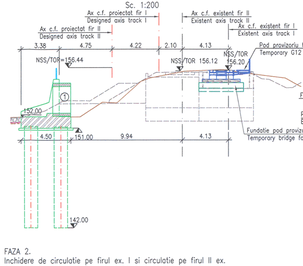


FAZA 1.
Circulatie cu viteza normala pe ambele linii existente:
- Se amenajeaza platforma tehnologica si organizarea de santier.
- Se identifica, picheteaza si se pun in siguranta instalatiile SCB, TTR, BLA din zona lucrarilor.
- Se realizeaza pilotii forati si radierul.
- Se monteaza primul cadru prefabricat din aval si se executa zidul de sprijin aval.

STAGE 1.
Traffic with normal speed on both existing lines:
- Arranging the technological platform and the site organization.
- Identifying, pegging-out and securing the SCB, TTR and BLA installations from the works' area.
- Executing bored piles and the pitching.
- Mounting the first downstream precast frame and executing the downstream retaining wall

SECTIUNE TRANSVERSALA / CROSS SECTION

Sc. 1:200

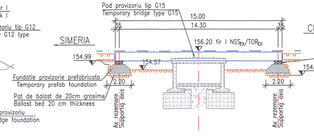


FAZA 2.
Inchidere de circulatie pe firul ex. I si circulatie pe firul II ex.
Circulatie cu restrictie de viteza 30km/h pe linia II ex.
- Se scoate de sub tensiune linia de contact si se asigura protectia electrica.
- Se executa lucrarile de linie necesare introducerii in cale a podului provizoriu pe linia I (detensionarea, taierea si crearea rosturilor de dilatatie la sine).
- Se demonteaza si se scoate calea pe zona podetului existent pentru introducerea in cale a podului provizoriu.
- Se executa sapatura pe terasament si se pozeaza reazemele prefabricate ale podului provizoriu pe o perna de balast bine compactat de 20cm grosime.
- Se continua sapatura pe terasament pentru asigurarea gabaritului podului provizoriu.
- Se demonteaza suprastructura podetului existent pentr a asigura gabaritul podului provizoriu.
- Se introduce in cale podul provizoriu tip G15, pe linia I.
- Se reface calea pe podul provizoriu. Nu se admit joante mecanice pe podurile provizorii. Ele se vor amplasa la minim 3,00m de capetele podului provizoriu.
- Se asigura continuitatea circuitelor de cale, se asigura electroizolarea sinelor si se asigura protectia electrica.
- Se repune sub tensiune linia de contact si se deschide circulatia feroviara pe linia II in trepte de viteza pana la Vmax = 30km/h.

STAGE 2.
Traffic closure on existing track I and traffic on existing track II.
Traffic with speed limit of 30km/h on existing track II.
- Cutting-off the voltage on the contact line and ensuring the electric protection.
- Executing line works necessary to place into the track the temporary bridge on line II (voltage cut-off, cut and creation of expansion joints at the rails).
- Dismantling and removing the track on the area of the existing culvert to place into the track the temporary bridge.
- Executing excavation on the embankment and laying-down the precast bearings of the temporary bridge on a 20cm thick well-compacted ballast bed.
- Continuing the excavation of the embankment to ensure the gauge of the temporary bridge.
- Dismantling the superstructure of the existing culvert to ensure the gauge of the temporary bridge.
- Placing into the track the temporary bridge type G15, on line I.
- Renewing the track on the temporary bridge. No mechanical joints are allowed on the temporary bridges. They will be placed at minimum 3,00m away from the ends of the temporary bridge.
- Ensuring the continuity of track circuits, ensuring the electric insulation of rails and the electric protection.
- Restoring the voltage on the contact line and opening the railway traffic on line II with speed limits of Vmax = 30km/h.

SECTIUNE LONGITUDINALA / LONGITUDINAL SECTION

Sc. 1:200



FAZA 3.
Circulatie pe firul I proiectat cu restrictie de viteza 30km/h, firul II inchis.
- Se executa sapatura cu sprijinirii transversale, se demoleaza podetul existent si racordarile cu terasamentul, inclusiv fundatiile acestora.
- Se executa fundatia podetului nou.
- Se monteaza prefiratcatele de la 2 la 8.
- Prefabricatul nr. 9 se va monta in pauza de circulatie.
- Se executa hidroizolatia protejata de sapa hidrofuga la extradosul cadrelor.
- Se executa umplutura si drenurile laterale la cota, conform detaliilor din proiect.
- Se completeaza umplutura pe firul II proiectat iar pe firul I proiectat pana la o cota permisa de podul provizoriu de pe firul I ex.
- Se completeaza terasamentul si se monteaza calea pentru linia II proiectata, la NSS existent si pozitia din proiect.
- Se asigura continuitatea circuitelor de cale, se asigura electroizolarea sinelor si se asigura protectia electrica.
- Se pune sub tensiune linia de contact, si se deschide circulatia restricte de viteza 30km/h pe linia II proiectata.

STAGE 3.
Traffic on designed track I with speed limit of 30km/h, track II closed.
- Executing excavation with cross-section prop-ups, demolishing the existing culvert and the connections to the embankment, including their foundations.
- Executing the foundations of the new culvert.
- Mounting the precast elements from 2 to 8.
- Precast element no. 9 will be mounted during traffic break.
- Executing the waterproofing protected by waterproofed blanket at the extrados of frames.
- Executing the filling and lateral drains at the level, according to the design details.
- Supplementing the filling on designed track II and on designed track I up to a level allowed by the temporary bridge from existing track I.
- Supplementing the embankment and mounting the track for designed line II, at the existing ToR and design position.
- Ensuring the continuity of track circuits, ensuring the electric insulation of rails and the electric protection
- Restoring the voltage on the contact line, and reopening the traffic with speed limit of 30km/h on designed line

SECTIUNE TRANSVERSALA / CROSS SECTION

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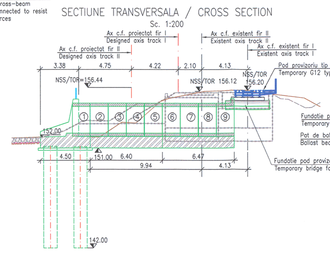

SECTIUNE LONGITUDINALA / LONGITUDINAL SECTION

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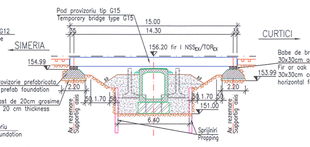

FAZA 4.
Circulatie pe firul II proiectat cu restrictie de viteza 30km/h, firul I inchis.
- Se executa lucrarile de protectie a instalatiilor existente in cale.
- Se scoate de sub tensiune linia de contact.
- Se demonteaza si se scoate calea pe zona podului provizoriu de pe linia I ex.
- Se scoate din cale podul provizoriu tip G15 si fundatiile provizorii ale acestuia.
- Se executa camera de colectare amonte
- Se completeaza umplutura pe firul I proiectat .
- Se completeaza terasamentul si se monteaza calea pentru linia I proiectata, la NSS existent si pozitia din proiect.
- Se asigura continuitatea circuitelor de cale, se asigura electroizolarea sinelor si se asigura protectia electrica
- Se deschide circulatia pe firul I proiectat in trepte de viteza conform instructiei.

STAGE 4.
Traffic on designed track II with speed limit of 30km/h, track I closed.
- Executing protection works for the installations existing on the track.
- Cutting-off the voltage on the contact line.
- Dismantling and removing the track from the area of the temporary bridge on existing line I.
- Removing from the track the temporary bridge type G15 and its temporary foundations.
- Executing the upstream collecting chamber
- Supplementing the filling on designed track I.
- Supplementing the embankment and mounting the track for designed line I, at the existing ToR and design position.
- Ensuring the continuity of track circuits, ensuring the electric insulation of rails and the electric protection
- Opening the traffic on designed track I with speed limits according to the instruction.

FAZA 5.
Circulatie pe firul I proiectat si firul II proiectat cu viteza normala.
- Se amenajeaza albia conform detaliilor din proiect.
- Se demonteaza oraganizarea de santie.
- Se dezafecteaza si se aduc la starea initiala terenurile ocupate pe perioada executiei.

STAGE 5.
Traffic on designed track I and designed track II with normal speed.
- Arranging the riverbed according to the design details.
- Removing the site organization.
- Closing down and restoring the lands occupied during execution to their initial status

SECTIUNE TRANSVERSALA / CROSS SECTION

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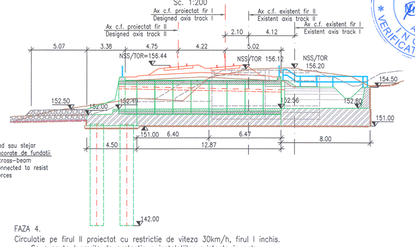

ANGANEL I. IONUT BADU
ROMANA
A.I.P.A.I.
AB 2080
INGINER
VERIFICATOR PROIECTE

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	C. Onu	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-B : cap Y Bârzava - cap Y Ilteu
"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-B : end Y Bârzava - end Y Ilteu

Project 9i 35311.1

Faza / Phase: PTH+CS / TD+TS

Denumire desen / Drawing name:

TEHNOLOGIE DE EXECUTIE / EXECUTION TECHNOLOGY
PODET / CULVERT KM pr. 538+317 (ex. 542+023)

Scara / Scale	Revizia / Revision	Cod desen / Drawing Code	Nr / No
1:200	1 / 04.2013	PT.02.02.15.PO.10.04	04