FAZA I: LUCRARI PREGATITOARE:
Linia 0 : circulatie cu viteza normala.
Linia 1 : circulatie cu viteza normala.
Linia 1 : circulatie cu viteza normala.

1. Se realizeaza organizarea de santier (platforme tehnologice, drum de acces, trecere la nivel provizorie cu calea ferata etc).
Lucrarile de organizare vor cuprinde:
-construirea si instalarea de antreprenorului, care se-i permite sa satisfaca obligatiile de executie si calitate;
-toate materialele, instalatiile si dispozitivele, sistemele de control necesare executiei, in conformitate cu prevederile din proiect, cuteiul de santier si normativele in vigoare.
2. Se vor realizeaza lucrarile si se pun in siguranta eventualele cabluri gasite in amplasamentul viitorului pasaj. Avand in vedere ca lucrarea se afla in apropiere cali ferate se vor ocupa in mod deosebit cabliile BLR si TTR.
3. Se executa lucrarile de trasare.

STAGE I: PRELIMINARY WORKS:
Line 0 : normal speed traffic.
Line 1 : normal speed traffic.
Line 1 : normal speed traffic.

1. Making the site organization (technological platforms, access road, temporary level crossing with the railway track etc).
The organization works will comprise:
- constructions and installations of the contractor, that allow him to meet the execution and quality liabilities;
- all materials, installations and devices, control systems needed for the execution, in compliance with the project provisions, the technical specification and the norms in force.
2. Identifying, pegging-out and securing the eventual cables found on the location of the future passage. Taking into account that the work is located near the railway track, BLR and TTR cables will be especially searched out.
3. Executing the marking-out works.

FAZA II: EXECUTIA VIADUCTELOR DE ACCES:
Linia 0 : circulatie cu viteza normala.
Linia 1 : circulatie cu viteza normala.
Linia 1 : circulatie cu viteza normala.

Pentru executia pilelor P4 si P5 se va impune restrictie de viteza alternativ astfel:
Linia 1: restrictie de viteza de 50 km/h;
Linia 0 : circulatie cu viteza normala.
Linia 1 : restrictie de viteza de 50 km/h.

1. Se executa incintele de poziionare consolidate cu cadre metalice pentru toate infrastructurile. Cadrele se montaza pe masura ce avansezze sapatura. Pozitionarea aferente pilelor P4 si P5 se bat in pozue de circulatie succesive si scoatere de sub tensiune pentru pozitionarea care se afla in zona de circulatie a trenurilor.
2. Se bateaz betonul de egalizare urmand ca dupa stingerea si BCR din classa betonului sa poata fi demontat ultimul cadru de jos.
3. Se montaseza cofrajele, armatura si se betoneaza fundatiile infrastructurilor.
4. Se montaseza cofrajele, armatura si se betoneaza elevatiile infrastructurilor cur numai dupa stingerea clasei minime a betonului in fundatiile realizate anterior.
5. Se montaseza cofrajele, armatura si se betoneaza elevatiile infrastructurilor intoarse de la culee.
6. Se montaseza cofrajul diferent pe culeie.
7. Se executa pozitionarea si se executa umplutura cu pamant din jurul infrastructurilor. Pozitionarea aferente pilelor P4 si P5 se extrag in pozue de circulatie succesive si scoatere de sub tensiune.
8. Se executa dalele cu grilaj metalice inglobate aferente viaductelor de access (C1-P1, P1-P2, P2-P3, P3-P4, P5-P6, P6-P7, P7-P8, P8-P9, P9-C2).

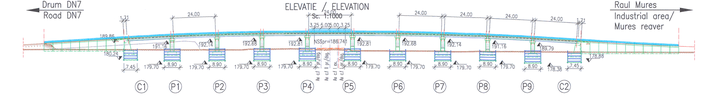
STAGE II: EXECUTION OF THE ACCESS VIADUCTS:
Line 0 : normal speed traffic.
Line 1 : normal speed traffic.
Line 1 : normal speed traffic.

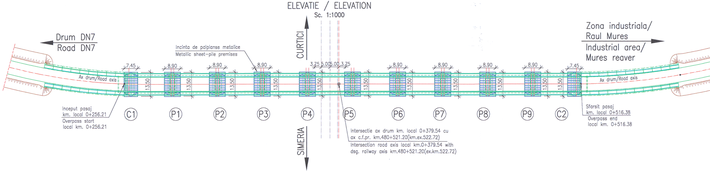
For the execution of piers P4 and P5 speed limits will be imposed alternatively, thus:
Line 1 : speed limit of 50 km/h.
Line 0 : normal speed traffic.
Line 1 : speed limit of 50 km/h.

1. Making the sheet-pile premises consolidated with metallic frames for all infrastructures. The frames are mounted as the excavation progresses. The premises referent to piers P4 and P5 are given during successive traffic breaks and while the voltage is cut-off for sheet-piles located in the electric influence area.
2. Casting the leveling concrete and dismantling the last frame from the bottom side after reaching 80% of the concrete class.
3. Mounting the formwork, the reinforcement and pouring the concrete in the foundations of the infrastructures.
4. Mounting the formwork, the reinforcement and pouring the concrete in the elevations of the infrastructures but only after reaching the minimum class of the concrete in the previously executed foundations.
5. Mounting the formwork, the reinforcement and covering with concrete the wing walls from the abutments.
6. Casting the earth filling around the abutments.
7. Extracting the sheet-piles and executing the earth filling around the infrastructures. The sheet-piles afferent to piers P4 and P5 will be extracted during successive traffic breaks and while the voltage is cut-off.
8. Executing the slabs with embedded metallic graters afferent to the access viaducts (C1-P1, P1-P2, P2-P3, P3-P4, P5-P6, P6-P7, P7-P8, P8-P9, P9-C2).

FAZA I: LUCRARI PREGATITOARE:
STAGE I: PRELIMINARY WORKS:

FAZA II: EXECUTIA VIADUCTELOR DE ACCES:
STAGE II: EXECUTING THE ACCESS VIADUCTS:





FAZA III: EXECUTIA TABLIERULUI CENTRAL:
Linia 0 : restrictie de viteza de 30 km/h.
Linia 1 : restrictie de viteza de 30 km/h.
Linia 1 : restrictie de viteza de 30 km/h.

1. Toate elementele metalice montate deasupra liniei c.f. vor avea protectie electrica.
2. Se montaza cofrajele tablierului central. Montarea cofrajelor se face in inchidere de circulatie si scoatere de sub tensiune pe toate liniile c.f.
3. Se montaseza cofrajele tablierului central. Montarea cofrajelor se face in inchidere de circulatie si scoatere de sub tensiune pe toate liniile c.f.
4. Se montaza armatura si se betoneaza tablierul central (plaa de beton cu grilaj metalic inglobat). Betonarea tablierului se face in pauze de circulatie pe toate liniile c.f.
5. Se decofreaza tablierul in inchidere de circulatie si scoatere de sub tensiune pe toate liniile c.f.
6. Se reviine la circulatie cu viteza normala in trepte de viteza conform normativ in vigoare.

STAGE III: EXECUTION OF THE CENTRAL DECK:
Line 0 : speed limit of 30 km/h.
Line 0 : speed limit of 30 km/h.
Line 0 : speed limit of 30 km/h.

1. All metallic elements mounted above the railway line will have electric protection.
2. Mounting the metallic graters of the central deck. The graters are mounted while the traffic is closed and the voltage is cut-off on all railway lines.
3. Mounting the formwork of the central deck. The formwork is mounted while the traffic is closed and the voltage is cut-off on all railway lines.
4. Mounting the reinforcement and pouring the central deck with concrete (deck with embedded metallic graters). The deck is covered with concrete during the traffic break on all railway lines.
5. Dismantling the formwork of the central deck. The traffic is closed and the voltage is cut-off on all railway lines.
6. Restoring the traffic with normal speed on speed levels according to the norms in force.

FAZA IV: ALTE LUCRARI:
Linia 0 : circulatie cu viteza normala.
Linia 1 : circulatie cu viteza normala.
Linia 1 : circulatie cu viteza normala.

1. Concomitent cu lucrarile la pasaj se executa umpluturile pentru rampa si zidurile de sprijin pentru racordarea cu terasamentul.
2. Se executa lucrarile de drum si de asfaltarea de evacuare si ape din zidurile de sprijin.
3. Se executa restaurile trotuarelor.
4. Se executa hidroizolatia, sistemul rutier si umpluturile pentru trotuare pe rampa si pe pasaj.
5. Se executa parapetul metalic pe trotuare, parapetul metalic rutier de protectie si parapetul de protectie din plexiglas.
6. Se executa sistemul de iluminat.
7. Se executa lucrarile de semnalizare pe traseul nou de drum.
8. Se realizeaza conexiunile traseului existent cu traseul nou si se deschide circulatia auto pe noul traseu.
9. Se deseleteaza platformele, accesele din zona de lucru si organizarea de santier.

STAGE IV: OTHER WORKS:
Line 0 : normal speed traffic.
Line 1 : normal speed traffic.
Line 1 : normal speed traffic.

1. Making the filling for ramps and the retaining walls for the connection to the embankment at the same time with the works at the passage.
2. Making the draining system and the weepers for evacuating the water in the retaining walls.
3. Making the sidewalks restoration.
4. Making the waterproofing, the road system and the filling for sidewalks on ramps and on the passage.
5. Making the metallic handrail on the sidewalks, the metallic road protection handrail and the plexiglas protection guard rail.
6. Making the lighting system.
7. Making the signalling works on the new road route.
8. Making the connections of the existing route with the new route and opening the car traffic on the new route.
9. Closing-down the platforms, the accesses from the work area and the site organization.

OBSERVATIONS:
Observatii: Pe aprijirile pasarelei pot caracter informativ si ore la baza date geotehnice cuiasa din zona Invecinate. Datelile prinind external de aprijirile se vor definitive dupa realizarea studiilor geotehnice din amplasamentul pasajular.

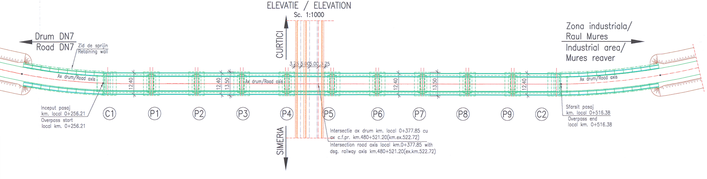
OBSERVATIONS:
The presented propping system has informative character and is based on geo-technical data collected from nearby areas. The details concerning the propping system will be defined after executing the geo-technical studies in the location of the passage.

NOTA:
1. Detaliile prezentate in acest plan nu sunt obligatorii si pot fi modificate sau adaptate in functie de datelor constructiunilu cu respectarea conditiilor de realizare si lucrilor definitive prevazute in cadrele de santier.
2. Realizarea lucrarilor o pasaj inainte sau dupa realizarea lucrarilor de cale ferata ramane la latitudinea constructorului.
3. Toate elementele metalice care se montaseza pestte calea ferata vor avea protectie electrica.
4. Pentru protectie muncitorilor in partea inferioara a suprastructurilor se va monta o plasa.
5. Orice neconcordanta intre elementele evuate in vedere la elaborarea proiectului si teren vs fi anunitata proiectantului pentru adaptare la situatia existenta.

NOTE:
1. 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.
2. The execution of the works of the passage before or after the execution of the railway track works is up for the constructor to decide.
3. All the metallic element that will be mounted over the electrified railways will have electric protection.
4. A mesh will be mounted at the lower side of the superstructures in order to protect the workers.
5. Any incongruity between the elements taken into account when preparing the design and the site will be announced to the designer so that he can adapt to the existing situation.

FAZA III: EXECUTIA TABLIERULUI CENTRAL:
STAGE III: EXECUTING THE CENTRAL DECK:

FAZA IV: ALTE LUCRARI:
STAGE IV: OTHER WORKS:



Prezentul plan anuleaza si inlocuieste versiunea anterioara
This plan cancels and replaces previous version

Verificator / Expert Checker / Expert	Coordonator Coordinator	Semnatura Signature	Aprobat / Expertiza Approved / Expertise

European Investment Bank

MINISTERUL TRANSPORTURILOR

BENEFICIAR / BENEFICIARY : CFR

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	A.Popa	01.2013	

"Reabilitarea liniei c.f. Frontier A - Curtici - Simeria; parte componenta a Coridorului IV Pan - European pentru circulatia trenurilor cu viteza maxima de 160 km/h"
Tronsonul 3: Gurasada - Simeria

"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 3: Gurasada - Simeria

Project Nr 35211.1	Faza / Phase: PTH+CS / TD+TS

Denumire desen / Drawing name:
PROCES TEHNOLOGIC / TECHNOLOGICAL PROCESS
PASAJ SUPERIOR / OVERPASS
KM.PR.(DSG.) 480+521.20

Scara / Scale	Revizia / Revision	Cod desen / Drawing Code	Nr / No
1:1000	1 / 04.2013	PT.03.02.26.PO.02.04	04