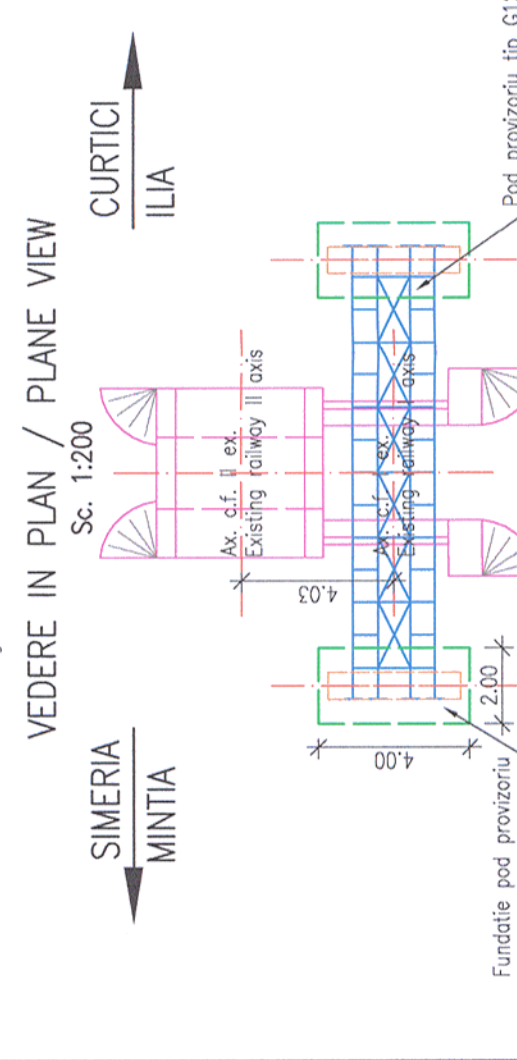
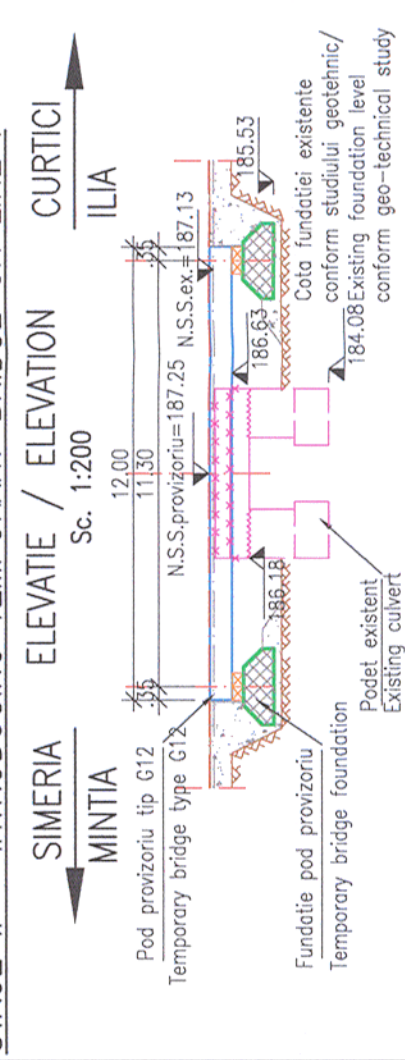
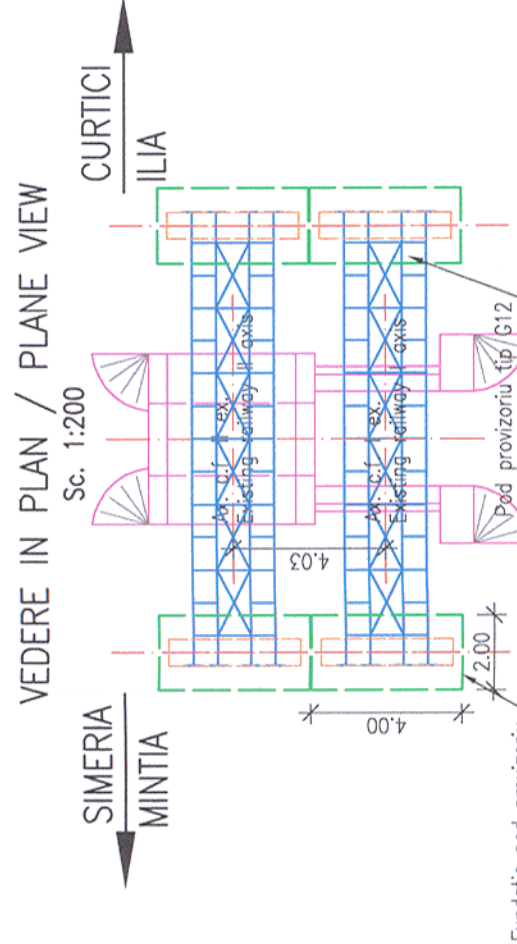
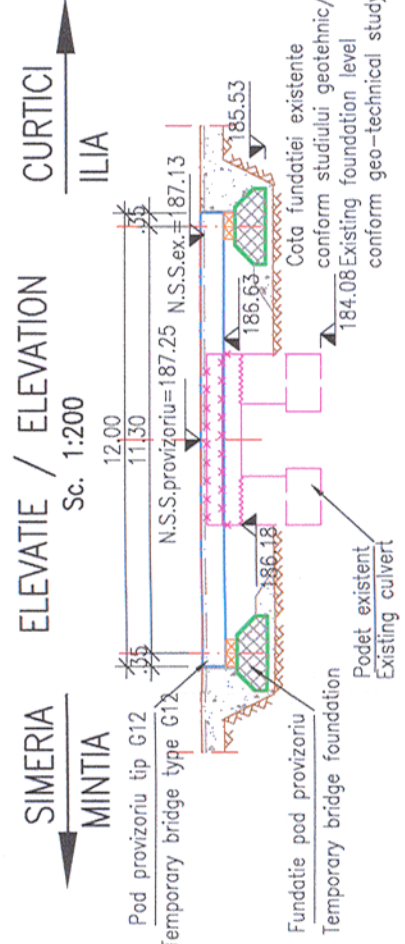


FAZA I – LUCRARI PREGATITOARE
STAGE I – PRELIMINARY WORKS
FAZA II – INTRODUCERE POD PROVIZORIU PE LINIA I
STAGE II – INTRODUCING TEMPORARY BRIDGE ON LINE I



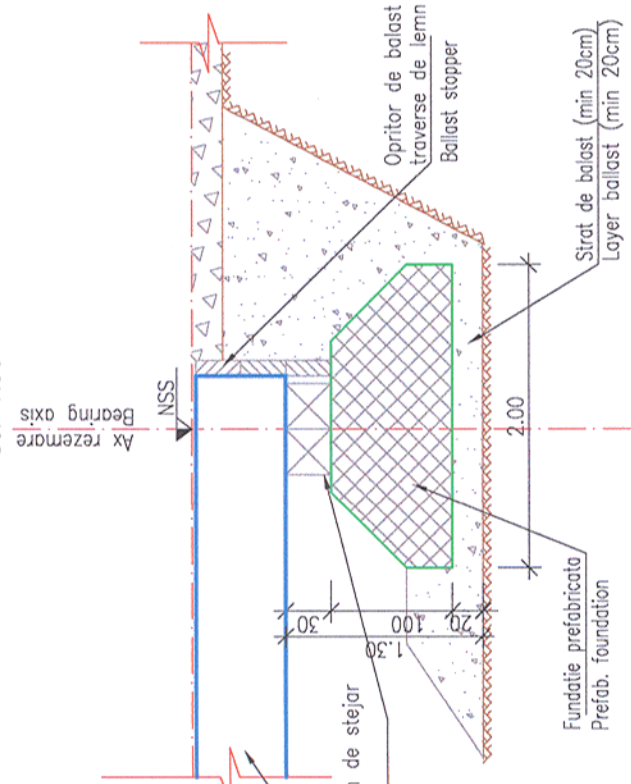
STAGE I: PRELIMINARY WORKS
Line I – traffic with normal speed;
Line II – closure of railway traffic;
1. Arrangement of the access road, technological platform and site organization;
2. Execution of protection and/or deviation works at the signaling and telecommunication installations;
3. Lifting the level on the bridge at the Designed NSS (top of the rail) and connection on each 60m at the end of each bridge;
4. Se executa lucrările de protecție a instalațiilor existente în cale si vecinate;
5. Se executa sprijinirea pe terasament la adăpostul sprâjinilor provizorii în lungul liniei si se poazea razelele prefabricate al podului provizoriu pe perne de balast bine compactate.
6. Se degajaza terasamentul, se demoleaza partial culeele existente si se introduce în cale podul provizoriu tip G12.
7. Se monteaza suprastructura CF pe podul provizoriu la cota NSS provizoriu si se racordeaza la capete pe terasament.
8. Se asigura continuitatea circulației de cale, se asigura electrozolearea sînelor si protecția electrică a podurilor provizorii.
9. Se remonteaza linia de contact si se pune sub tensiune la viteză până la Vmax = 30km/h conform planului provizoriu si se tine sub observație supravegherea liniei pe toata durata exploatării.

FAZA III – INTRODUCERE POD PROVIZORIU PE LINIA II
STAGE III – INTRODUCING TEMPORARY BRIDGE ON LINE II

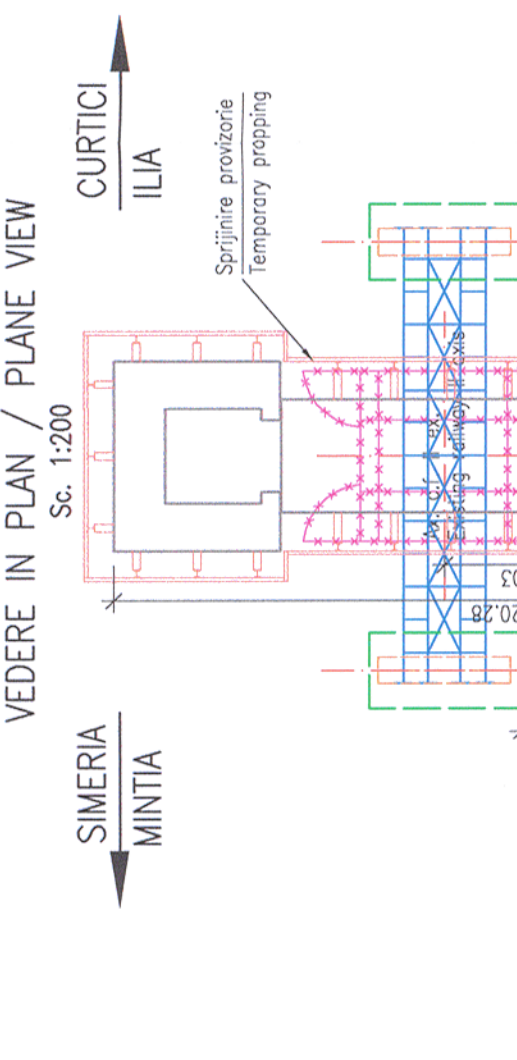
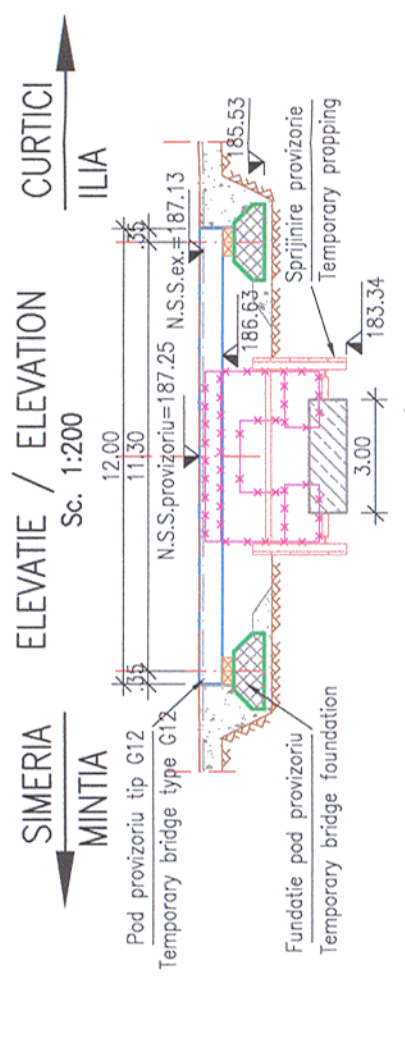


STAGE III: INTRODUCTION OF TEMPORARY BRIDGES ON LINE II
Line I – speed limit of 30km/h;
Line II – restriction of speed to 30km/h;
1. Se repeta toate operatiile prevazute la FAZA II pe linia II.

DETALIU DE REZEMARE A PODULUI PROVIZORIU
DETAIL FOR TEMPORARY BRIDGE SUPPORTING

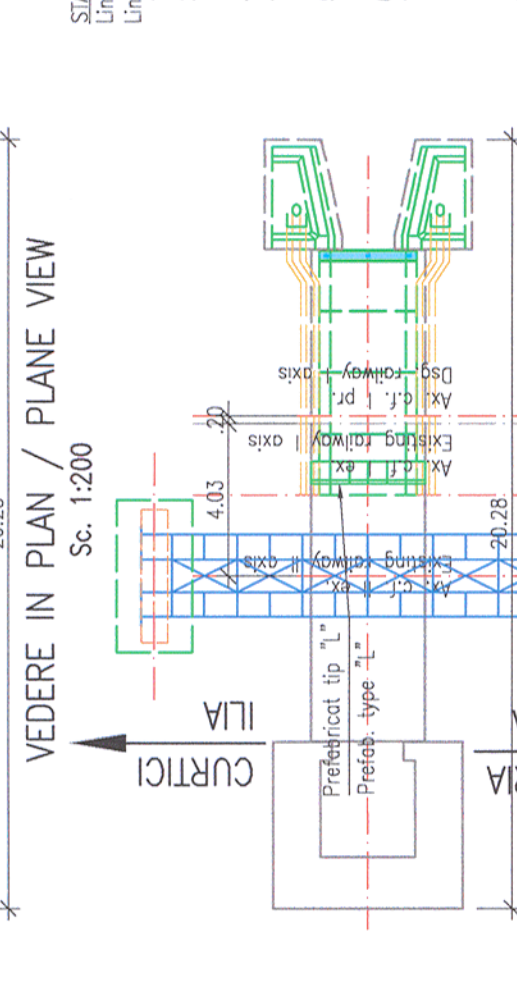
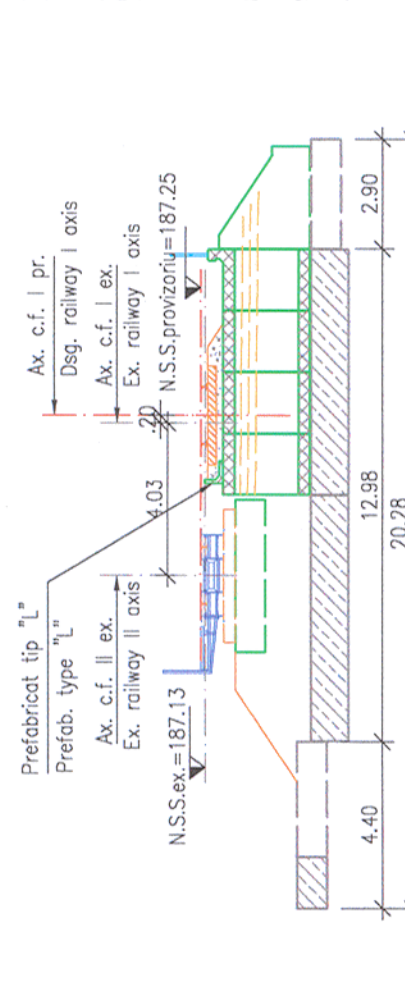


FAZA IV – DEMOLARE PODET EXISTENT SI EXECUTIE FUNDATII NOI
STAGE IV – DEMOLITION OF THE EXISTING CULVERT AND EXECUTION OF THE NEW FOUNDATION



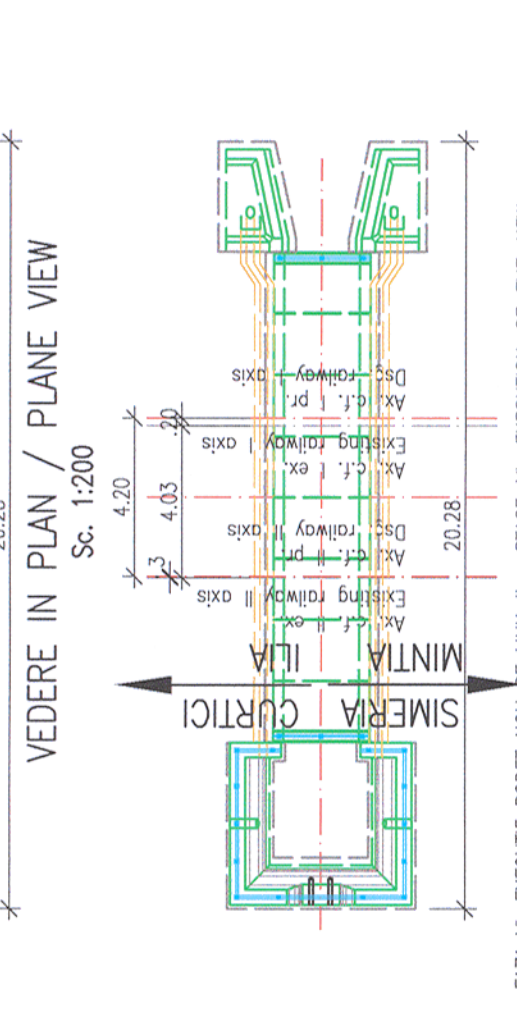
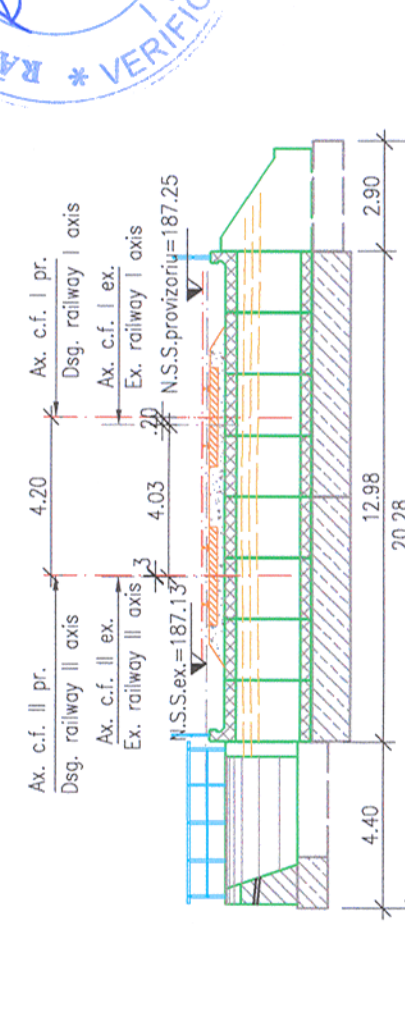
STAGE IV: DEMOLITION OF THE EXISTING CULVERT AND EXECUTION OF THE FOUNDATIONS FOR THE NEW CULVERT UNDER THE PROTECTION OF TEMPORARY BRIDGES
Line I – speed limit of 30km/h;
Line II – speed limit of 30km/h;
1. Cleaning the embankment around the culvert, demolition of the existing culvert and connections to the embankment, including rear foundations.
2. Execution of excavations for the foundation of the new bridge, while mounting precast concrete elements as the excavation is deepened.
3. Concreting the foundations of the culvert, two sheets of bitumen boards into the joints between the foundations. Demolishment of the precast concrete.
4. The operation is repeated till the whole supporting surface is obtained.

FAZA V – EXECUTIE PODET NOU PE LINIA I
STAGE V – EXECUTION OF THE NEW CULVERT ON LINE I



STAGE V: EXECUTION OF THE NEW CULVERT ON TRACK I
Line I – closure of railway traffic;
Line II – speed limit of 30km/h;
1. Cutting-off the voltage and dismantling the contact line.
2. Dismantling and removing the track on the area of the temporary bridge.
3. Removing the track the temporary bridge type G12.
4. Mounting 9 precast elements from under Line I according to the montage technology.
5. Executing the connection to the embankment (downstream wings).
6. Execution of the drainage system and the waterproofing.
7. Executing the filling, according to the technical specifications, renewing the embankment and the track in the area of the culvert until a temporary level of the NSS (top of the rail).
8. Montage of the railway superstructure on line I and connection to the ends on the existing situation.
9. Provision of track circuits' continuity, of rails' electric insulation and cathode protection.
10. Mounting back the contact line, restoring the voltage and opening the traffic with speed limits Vmax = 30km/h according to the norms in force.

FAZA VI – EXECUTIE PODET NOU PE LINIA II
STAGE VI – EXECUTION OF THE NEW CULVERT ON LINE II



STAGE VI: EXECUTION OF THE NEW CULVERT ON LINE II
Line I – restriction of speed to 30km/h;
Line II – closure of railway traffic;
1. Se repeta toate operatiile prevazute la FAZA V pe linia II.

FAZA VIII – ALTE TIPURI LUCRARI:
FAZA VIII – OTHER TYPES OF WORKS

FAZA VIII – ALTE TIPURI LUCRARI:
Line I – circulație cu viteză normală;
Line II – circulație cu viteză normală;
1. Se executa pereti în puteli, între cripi si obligatori si pot fi modificate sau adaptate în funcție de etajarea construcțiilor cu lucrările necesare condițiilor de realizare a lucrărilor de reabilitare a liniei de cale si vecinate.
2. Beneficiarii si pot fi puse la dispozitia Constructorului obligatori si pot fi modificate sau adaptate în funcție de etajarea construcțiilor cu lucrările necesare condițiilor de realizare a lucrărilor de reabilitare a liniei de cale si vecinate.
3. Beneficiarii si pot fi puse la dispozitia Constructorului obligatori si pot fi modificate sau adaptate în funcție de etajarea construcțiilor cu lucrările necesare condițiilor de realizare a lucrărilor de reabilitare a liniei de cale si vecinate.
4. Beneficiarii si pot fi puse la dispozitia Constructorului obligatori si pot fi modificate sau adaptate în funcție de etajarea construcțiilor cu lucrările necesare condițiilor de realizare a lucrărilor de reabilitare a liniei de cale si vecinate.

NOTE: In urma lucrarilor la podul linia a fost ridicata la cota NSS provizorie. The lifting at the final designed NSS (top of rail) level will be carried-out during the line works.		NOTE: After the works at the culvert, the line was lifted at temporary NSS (top of rail) level. The lifting at the final designed NSS (top of rail) level will be carried-out during the line works.	
Prezentul plan anuleaza si inlocuieste versiunea anterioara This plan cancels and replaces previous version		Prezentul plan anuleaza si inlocuieste versiunea anterioara This plan cancels and replaces previous version	
Verificator / Expert Checker / Expert	Semnatura Signature	Referat / Expertiza Report / Expertise	
European Investment Bank	MINISTERUL TRANSPORTURILOR		
BENEFICIAR / BENEFICIARY : COMPANIA NATIONALA DE CAI FERATE "CFR" SA			
PROIECTANT / DESIGNER: PÖYRY	Data Date	Semnatura Signature	
Aprobat Approved	Sef de echipa Team leader	01.2013	
Verificat Checked	Expert Cheile Key Expert	01.2013	
Subcontractant / Subcontractor			
Aprobat Approved	Adjunct Sef de echipa Deputy Team leader	01.2013	
Proiectat Designed	Inginer Engineer	01.2013	
"Reabilitarea liniei c.f. Frontieră ă - Simeria, partea componentă a a Coridorului IV Pan - European pentru circulația trenurilor cu viteză maximă 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			
Denumire desen / Drawing name: TEHNOLOGIE DE EXECUTIE / TECHNOLOGICAL PROCESS PODET / CULTVERT KM.PR.(DSG.) 490+872.10 / KM.EX.(EX.) 490+886.10			
Scara / Scale 1:200; 1:50	Revizia / Revision 1 / 04.2013	Cod desen / Drawing Code PT.03.02.23.PO.04.04	Nr / No 04