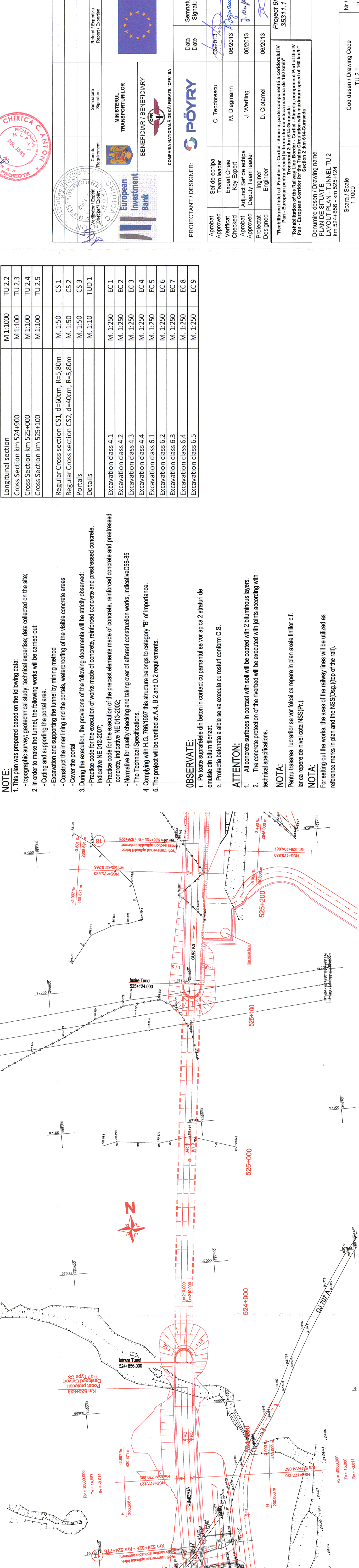


**Layout Plan  
Tunnel TU 2  
M=1:1000**



**NOTE:**

- This plan was prepared based on the following data:
  - topographic survey, geotechnical study; technical expertise, data collected on the site;
- In order to make the tunnel, the following works will be carried-out:
  - Cutting and supporting the portal area.
  - Excavation and supporting the tunnel by mining method
  - Construct the inner lining and the portals, waterproofing of the visible concrete areas
  - Cover the portal
- During the execution, the provisions of the following documents will be strictly observed:
  - Practice code for the execution of works made of concrete, reinforced concrete and prestressed concrete, indicative NE 013-2002;
  - Normative for quality checking and taking over of afferent construction works, indicative C56-85
  - The Technical Specifications.
- Complying with H.G. 766/1997 this structure belongs to category "B" of importance.
- The project will be verified at A, 4, B, 2 and D.2 requirements.

**OBSERVATE:**

- Pe toate suprafețele din beton în contact cu pământul se vor aplica 2 straturi de emulsie din bitum fiericit.
- Protecția betonată a abiei se va executa cu rosturi conform C.S.

**ATTENTON:**

- All concrete surfaces in contact with soil will be coated with 2 bituminous layers.
- The concrete protection of the riverbed will be executed with joints according with technical specifications.

**NOTA:**

Pentru trasarea lucrărilor se vor folosi ca repere în plan axele liniilor c.f. iar ca repere de nivel cota NSS(Pr.).

**NOTA:**

For setting out the works, the axes of the railway lines will be utilized as reference marks in plan and the NSS(Dsg.) (top of the rail).

Longitudinal section	M. 1:1000	TU 2.2
Cross Section km 524+900	M. 1:100	TU 2.3
Cross Section km 525+000	M. 1:100	TU 2.4
Cross Section km 525+100	M. 1:100	TU 2.5
Regular Cross section CS1, d=60cm, R=5,80m	M. 1:50	CS 1
Regular Cross section CS2, d=40cm, R=5,80m	M. 1:50	CS 2
Portals	M. 1:50	CS 3
Details	M. 1:10	TUD 1
Excavation class 4.1	M. 1:250	EC 1
Excavation class 4.2	M. 1:250	EC 2
Excavation class 4.3	M. 1:250	EC 3
Excavation class 4.4	M. 1:250	EC 4
Excavation class 6.1	M. 1:250	EC 5
Excavation class 6.2	M. 1:250	EC 6
Excavation class 6.3	M. 1:250	EC 7
Excavation class 6.4	M. 1:250	EC 8
Excavation class 6.5	M. 1:250	EC 9



PROIECTANT / DESIGNER:  
**PÖYRY**

Aprobat / Approved	Sef de echipa / Team leader	C. Teodorescu	06/2013	Semnatura / Signature	[Signature]
Verificat / Checked	Expert Cheie / Key Expert	M. Diegmann	06/2013		[Signature]
Aprobat / Approved	Adjunct Sef de echipa / Deputy Team leader	J. Werfling	06/2013		[Signature]
Proiectat / Designed	Inginer / Engineer	D. Ciotarnel	06/2013		[Signature]

"Reabilitarea liniei c.f. Frontiera - Curtici - Simeria, parte componentă a coridorului IV Pan - European pentru circulația trenurilor cu viteză maximă de 160 km/h"  
Tronsoanel 2: km 614-Gurasada  
"Rehabilitation of the Railway Line Border - Curtici - Simeria, component Part of the IV Pan - European Corridor for maximum speed of 160 km/h"  
Section 2: km 614-Gurasada

Denumire desen / Drawing name:  
PLAN DE SITUATIE  
LAYOUT PLAN - TUNNEL TU 2  
km 524+856 - km 525+124

Scara / Scale	1:1000	Cod desen / Drawing Code	TU 2.1	Nr / No	TU 2
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