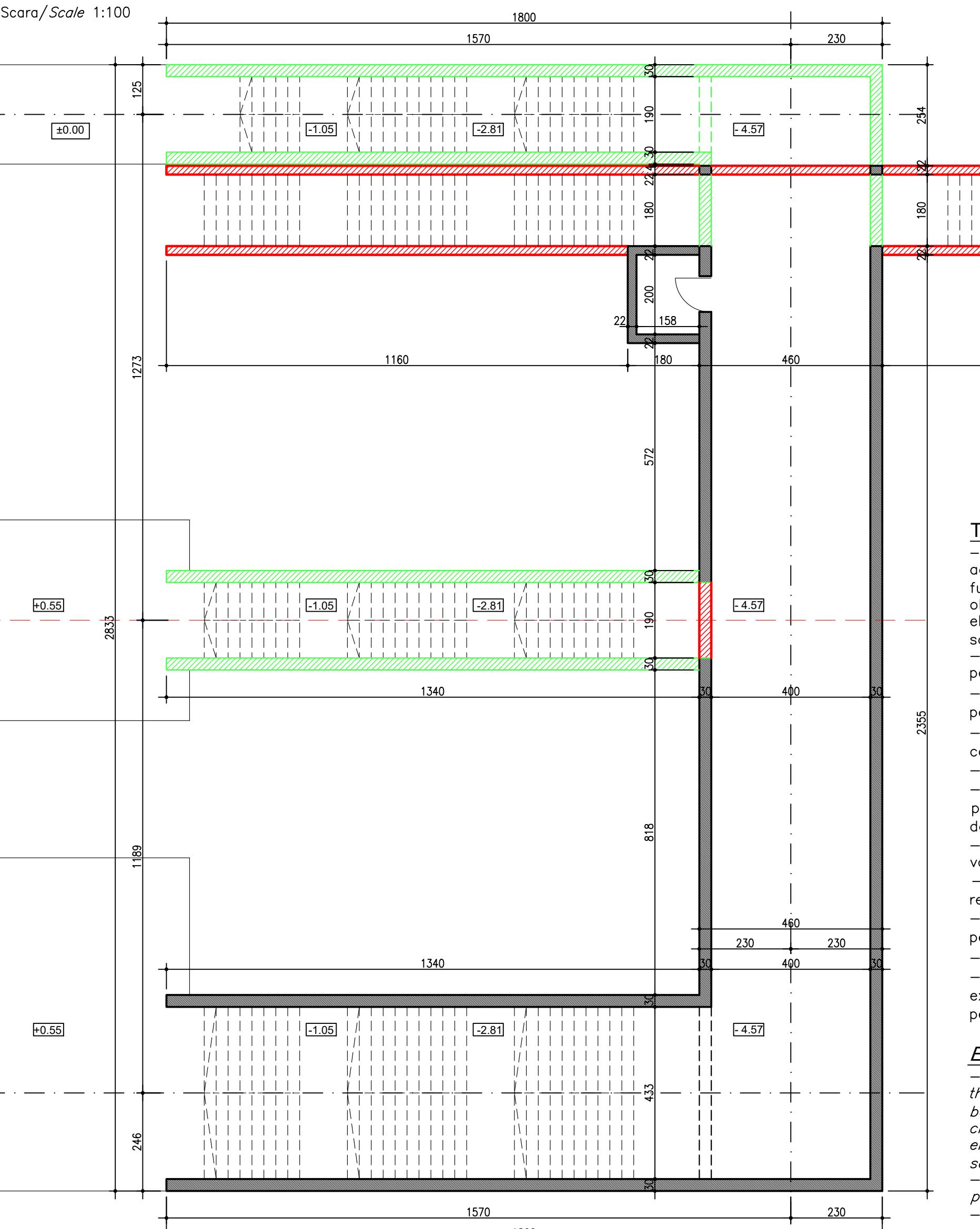


STATIA C.F. BANEASA / BANEASA RAILWAY STATION

Tunel pietonal. Lucrari de reabilitare si extindere. / Pedestrian tunnel. Rehabilitation and expansion works.



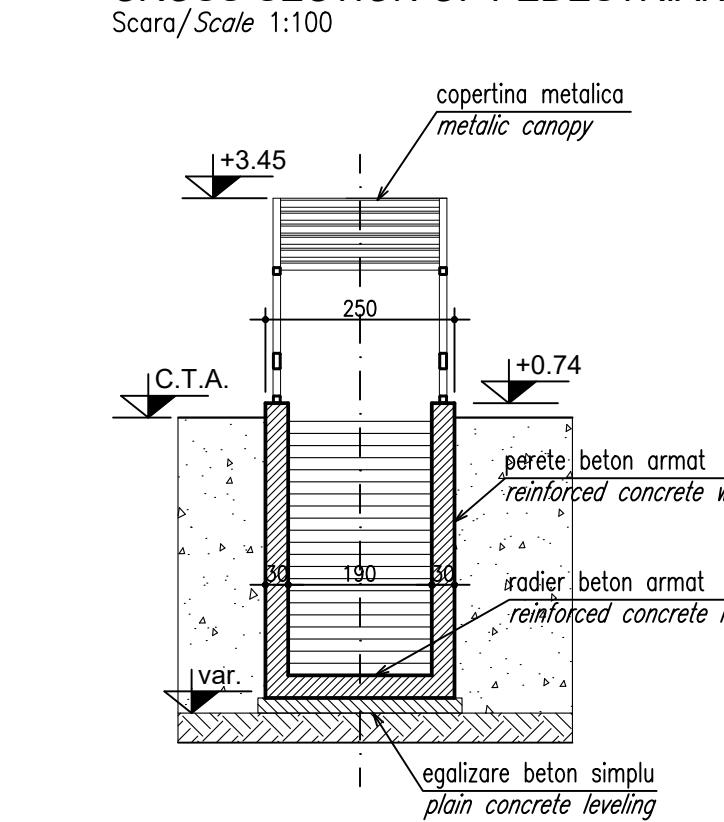
TEHNOLOGIE DE REALIZARE LUCRARI DE REABILITARE

- Demontarea placilor de travertin afectate de infiltratii si refacerea acestora. Defectele depistate pe suprafata betonului vor fi reparate in functie de tipul si de gravitatea lor (daca se observa fisuri/crapaturi oblice, orizontale sau transversale, burdusuri sau deplasari ale elementelor structurii, atunci va fi intintat expertul pentru a stabili solutie de remediere);
- Tratarea eventualelor fisuri si crapaturi prin injectii cu rasini poliuretanice elastice.
- Completerea tuturor elementelor decorative deteriorate (placi de pardoseala, placaje, tencuieri, etc.)
- Etansarea tunelului prin injectii intramurale si la extrados (daca este cazul) pe zonele cu infiltratii (pereti laterali ai gurilor de acces)
- Repararea locala a pardoselii si a treptelor scarilor;
- Completerea gratarilor sanitului de evacuare a apelor de pe pardoseala si curatarea sistemului de drenaj (inclusiv inlocuirea pompei de epuizare non-functională);
- Curatarea peretilor de inscrisurile rezultate in urma actelor de vandalism;
- Curatarea scheletului metalic al invelitoarelor la luciu metalic repararea (daca este cazul) si revopsirea acestuia;
- Refacerea sistemului de hidroizolare la imbinarea invelitoarei cu pereti gurilor de acces in tunel (pasaj);
- Inlocuirea invelitoarei din polycarbonat deteriorata.
- Refacerea partii superioare a peronelor si asigurarea pantei lor spre exteriorul peretilor (astfel incat apa din precipitatii sa nu stagneze pe perioane si sa se infiltreze in interior).

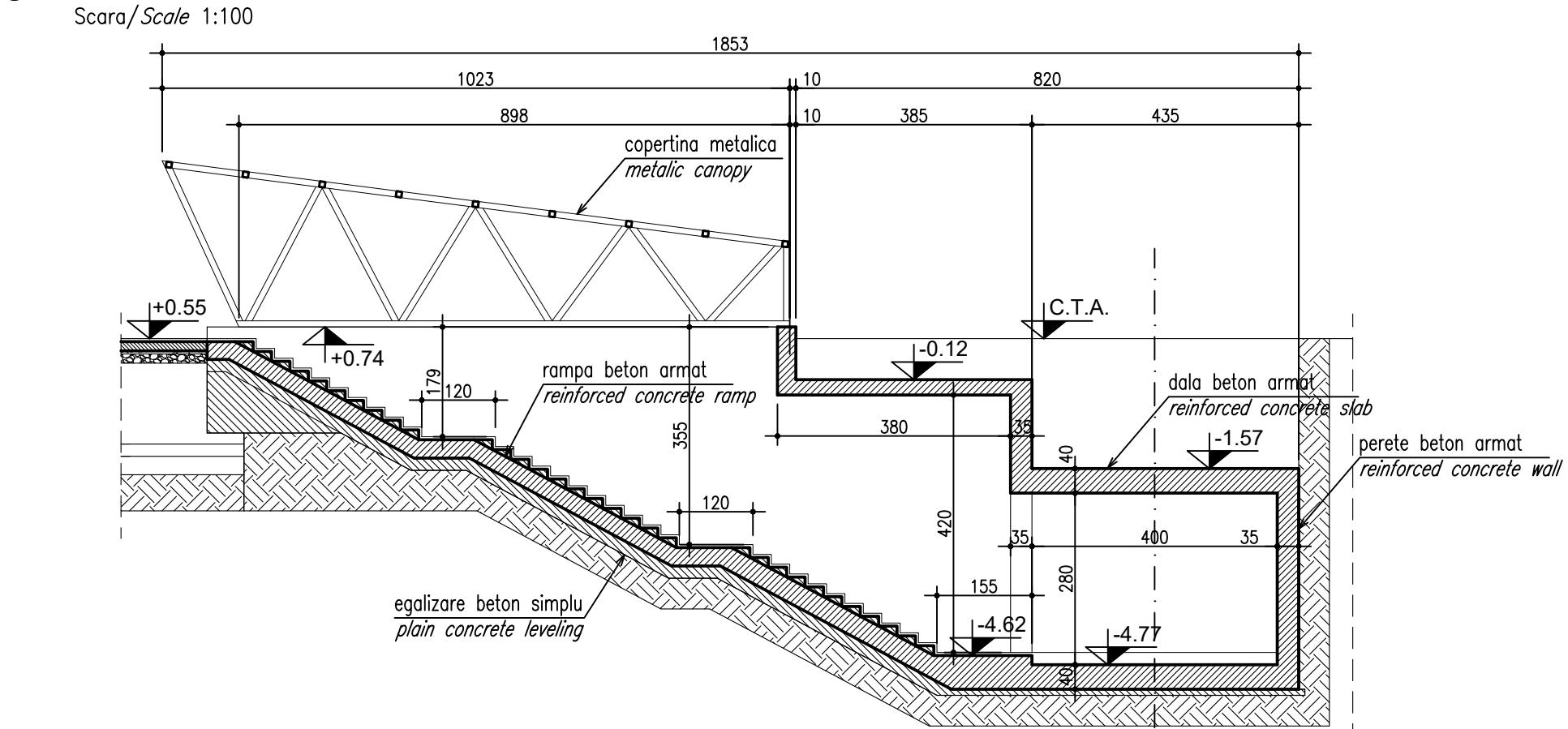
EXECUTION TECHNOLOGY OF REHABILITATION WORKS

- Dismantling travertine tiles affected by water infiltration and restoring them. Any defects detected on the concrete surface will be repaired based on their type and severity (if diagonal, horizontal, or transverse cracks are observed, as well as bulging or displacements of structural elements, the expert will be notified to determine appropriate remedial solutions).
- Treating potential cracks and fissures using injections with elastic polyurethane resins.
- Completing all deteriorated decorative elements (floor tiles, cladding, plaster, etc.).
- Sealing the tunnel through intramural and extrados injections (if necessary) in areas with infiltration (side walls of access openings).
- Performing localized repairs of the flooring and stair steps.
- Completing the grates of the drainage channel for surface water and cleaning the drainage system (including replacing the non-functional sump pump).
- Cleaning walls of graffiti caused by vandalism.
- Cleaning the metallic framework of the covers to a metallic shine, repairing it (if necessary), and repainting.
- Restoring the waterproofing system at the junction between the covers and the walls of the tunnel (passage) access openings.
- Replacing the damaged polycarbonate covers.
- Repairing the upper part of the platforms and ensuring their slope directs water away from the walls (to prevent water from stagnating on the platforms and infiltrating inside).

SECTIUNE TRANSVERSALA ACCES TUNEL PIETONAL CROSS-SECTION OF PEDESTRIAN TUNNEL ACCESS



SECTIUNE LONGITUDINALA ACCES TUNEL PIETONAL LONGITUDINAL SECTION OF PEDESTRIAN TUNNEL ACCESS



TEHNOLOGIE DE REALIZARE LUCRARI DE EXTINDERE

In urma resistematisarii statiei este necesara adaptarea tunelului existent la noua configuratie a peronelor fiind necesara prelungirea tunelului astfel incat sa se poata realiza acces la peronale proiectate. Lucrurile de reconfigurare constau in:

- prelungirea tunelului inspre peronul intermediar proiectat dintre linile 3-4 (radier, pereti si planseu din beton armat) si demolare peretelui de timpul al tunelului existent, concomitent cu dezvoltarea unei structuri locale care sa poata sustine elementele structurale ramase in urma acestei modificar;
 - realizarea unui acces la peronul intermediar dintre liniile 1-2 (perpendicular in plan pe tunel):
 - o zona (care in sectiune sa fie de forma literei "U") alcatuita din scara cu rampe si podeste intermedia marginite lateral de ziduri din beton armat, fara planseu la partea superioara;
 - zona din vecinatatea tunelului (de sectiune chesonata) alcatuita din rampa si podest la partea inferioara, pereti laterali si dala la partea superioara.
 - practicarea unui gol de acces in peretele lateral al tunelului existent.
 - realizarea unui acces la peronul intermediar dintre liniile 3-4 (perpendicular in plan pe tunel):
 - o zona (care in sectiune sa fie de forma literei "U") alcatuita din scara cu rampe si podeste intermedia marginite lateral de ziduri din beton armat, fara planseu la partea superioara;
 - zona din vecinatatea tunelului (de sectiune chesonata) alcatuita din rampa si podest la partea inferioara, pereti laterali si dala la partea superioara.
 - renuntarea la cele doua accese existente din vecinatatea peronului intermediar nou proiectat dintre liniile 3-4 si astuparea acestora.
- Structurile tuturor elementelor noi introduse (mentionate mai sus) se vor realiza in solutie beton armat monolit.

EXECUTION TECHNOLOGY OF EXPANSION WORKS

As a result of the station's reorganization, it is necessary to adapt the existing tunnel to the new platform configuration, requiring the extension of the tunnel to provide access to the newly designed platforms. The reconfiguration works include:

- Extension of the tunnel towards the newly designed intermediate platform between tracks 3-4 (consisting of a reinforced concrete slab, walls, and ceiling) and the demolition of the tunnel's existing end wall. Simultaneously, a local structure will be developed to support the structural elements remaining after this modification.
 - Construction of an access to the intermediate platform between tracks 1-2 (perpendicular to the tunnel):
 - A section (with a "U"-shaped cross-section) consisting of stairs with ramps and intermediate landings, bordered laterally by reinforced concrete walls, with no ceiling at the top.
 - A channeled section near the tunnel consisting of a ramp and landing at the lower part, sidewalls, and a slab at the top.
 - Creating an access opening in the sidewall of the existing tunnel.
 - Construction of an access to the intermediate platform between tracks 3-4 (perpendicular to the tunnel):
 - A section (with a "U"-shaped cross-section) consisting of stairs with ramps and intermediate landings, bordered laterally by reinforced concrete walls, with no ceiling at the top.
 - A channeled section near the tunnel consisting of a ramp and landing at the lower part, sidewalls, and a slab at the top.
 - Elimination of the two existing accesses near the newly designed intermediate platform between tracks 3-4 and sealing them off.
- The structures of all newly introduced elements (as mentioned above) will be executed as monolithic reinforced concrete solutions.

ENTITATE CONTRACTANTA CONTRACTING ENTITY	C.N.C.F. "C.F.R." - S.A.	

CONTRACTANT CONTRACTOR	Nume Name	Data Date	Semnatura Signature
Sef Proiect Project Manager	ing. Viorel GORGONETU	11.2024	
Verificat Checked	ing. Dan PĂTRĂSCU	11.2024	
Proiectat Designed	ing. Franciska SEPRÓDI	11.2024	

"Modernizarea linilor si instalatiilor din Complexul Feroviar Bucuresti" Studiul de fezabilitate	Project / Project 38 / 2022
"Modernization lines and installations in the Bucharest Railway Complex Feasibility Study	Faza / Phase S.F. F.S.

Denumire / Title	STATIA C.F. BANEASA. TUNEL PIETONAL. LUCRARI DE REABILITARE SI EXTINDERE. / BANEASA RAILWAY STATION. PEDESTRIAN TUNNEL. REHABILITATION AND EXPANSION WORKS.	Scara / Scale 1:100
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Codificare / Codification System

C O B U S F R E Z D E V 4 7 0 8 0 0 1 R 0 0

Istoricul revizuirilor / Revision History		
Rev.	Data/Date	Descriere Modificare / Modification description
1		
2		
3		
4		