

CARACTERISTICI

- Categoria de importanta: Conform H.G. 786-oct 1997 - constructie de importanta normala (C)
Clasa de importanta: Conform Normativului P100 (proiectarea antisismica), clasa de importanta este III
Clasa de risc: Conform OMT 290/2000 : clasa de risc 1A
Conditii seismice: Conform Normativul P100-1/2006 : perioada de control (colt) Tc=0,7s si ag=0,16g

CONDITII GEOTEHNICE

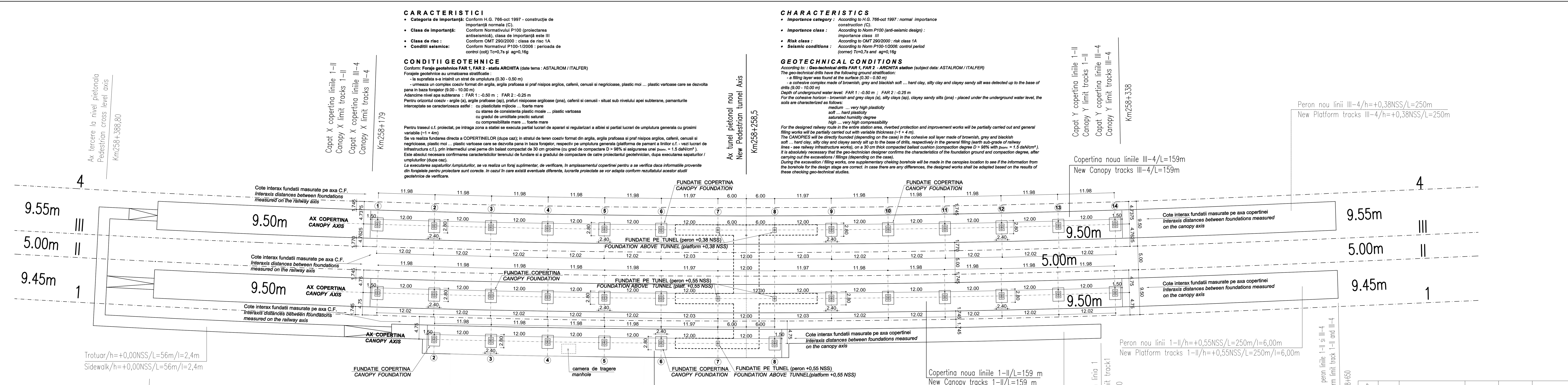
Conform: Foraje geotehnice FAR 1, FAR 2 - statia ARCHITA (date tema : ASTALROM / ITALFER)
Forajele geotehnice au urmatoarea stratificatie:
- la suprafata s-a intalnit un strat de umplutura (0.30 - 0.50 m)
- urmeaza un complex coeziv format din argila, argila proafasa si praf nisipos argilos, cafeniu, cenusi si negriosoase, plastic moi ... plastic vartoase care se dezvolta pana in baza forajelor (9.00 - 10.00 m)
Adancime nivel apa subterana : FAR 1 : -0.50 m ; FAR 2 : -0.25 m
Pentru orizontul coeziv - argile (a), argile proafase (ap), prafuri nisipoase argiloase (pna), cafenii si cenusi - situat sub nivelul apei subterane, pamanturile interceptate se caracterizeaza astfel: cu plasticitate mijlocie ... foarte mare sau starea de consistenta plastic moale ... plastic vartoasa cu gradul de umiditate practic saturat sau compresibilitate mare ... foarte mare
Pentru traseul c.f. proiectat, pe intraga zona a statiei se executa partial lucrari de aparari si regularizari a albiei si partial lucrari de umplutura generala cu grosimi variabile (-1 + 4 m)
Se va realiza fundarea directa a COPERTINEI (dupa caz); in stratul de teren coeziv format din argila, argila proafasa si praf nisipos argilos, cafeniu, cenusi si negriosoase, plastic moi ... plastic vartoase care se dezvolta pana in baza forajelor, respectiv pe umplutura generala (platforma de pamant a liniilor c.f. - vezi lucrari de infrastructura c.f.), prin intermediul unei peme din balast compactat de 30 cm grosime (cu grad de compactare D > 98% si asigurarea unei peme = 1.5 daN/cm²). Este absolut necesara confirmarea caracteristicilor terenului de fundare si a gradului de compactare de catre proiectantul geotehnicului, dupa executarea sapaturilor / umpluturilor (dupa caz).
La executarea sapaturilor / umpluturilor, se va realiza un foraj suplimentar, de verificare, in amplasamentul copertinei pentru a se verifica daca informatiile provenite din forajele pentru proiectare sunt corecte. In cazul in care exista eventuale diferente, lucrarile proiectate se vor adapta conform rezultatului acestor studii geotehnice de verificare.

CHARACTERISTICS

- Importance category: According to H.G. 786-oct 1997 : normal importance construction (C)
Importance class: According to Norm P100 (anti-seismic design) : importance class III
Risk class: According to OMT 290/2000 : risk class 1A
Seismic conditions: According to Norm P100-1/2006: control period (corner) Tc=0,7s and ag=0,16g

GEOTECHNICAL CONDITIONS

Conform: : Geo-technical drills FAR 1, FAR 2 - ARCHITA station (subject data: ASTALROM / ITALFER)
The geo-technical drills have the following ground stratification:
- a filling layer was found at the surface (0.30 - 0.50 m)
- a cohesive complex made of brownish, grey and blackish soft ... hard clay, silty clay and clayey sandy silt was detected up to the base of drills (9.00 - 10.00 m)
Depth of underground water level: FAR 1 : -0.50 m ; FAR 2 : -0.25 m
For the cohesive horizon - brownish and grey clays (a), silty clays (ap), clayey sandy silts (pna) - placed under the underground water level, the soils are characterized as follows:
medium ... very high plasticity soft ... hard plasticity saturated humidity degree high ... very high compressibility
For the designed railway route in the entire station area, inverted protection and improvement works will be partially carried out and general filling works will be partially carried out with variable thickness (-1 + 4 m).
The CANOPIES will be directly founded (depending on the case) in the cohesive soil layer made of brownish, grey and blackish soft ... hard clay, silty clay and clayey sandy silt up to the base of drills, respectively in the general filling (earth sub-grade of railway lines - see railway infrastructure works), on a 30 cm thick compacted ballast cushion (compaction degree D > 98% with peme = 1.5 daN/cm²). It is absolutely necessary that the geo-technical designer confirms the characteristics of the foundation ground and compaction degree, after carrying out the excavations / fillings (depending on the case).
During the excavation / filling works, one supplementary checking borshole will be made in the canopies location to see if the information from the borshole for the design stage are correct. In case there are any differences, the designed works shall be adapted based on the results of these checking geo-technical studies.



CLADIREA STATIEI ARCHITA ARCHITA STATION BUILDING

NOTA - RECOMANDARI TEHNOLOGICE:

- 1. Toate cotele de trasare longitudinale, transversale si verticale ale copertinelor au ca elemente de referinta: axele liniilor C.F., axa tunelului pietonal si cota ±0.00+NSS proiectata a fiecarui linii.
a. axele longitudinale ale fundatiilor stalpilor copertinelor se pozitioneaza (conform planului), fata de axele de cale ferata ale liniilor: 1, respectiv 1-II, respectiv III-4, proiectate.
b. transversal, trasarea axelor pentru fundatiile stalpilor copertinelor se va face avand ca reper axa tunelului pietonal; trasarea se va face 6 m stanga, 6 m dreapta fata de aceasta axa.
c. cota de fundare, este data fata de ±0.00+NSS proiectat al fiecarui linii in parte, respectiv: pentru copertina la linia 1 cota de referinta este ±0.00+NSS linia 1, pentru copertina la linia 1-II cota de referinta este ±0.00+NSS linia II, pentru copertina la linia III-4 cota de referinta este ±0.00+NSS linia III.
2. Trebuie avut in vedere ca atat copertinele (cu fundatiile aferente), cit si peronelele nou proiectate, urmaresc profilul longitudinal al liniilor cu panta descendentă (-4,935%) dinspre capatul X spre capatul Y.
3. Acest plan se va citi corelat cu planul de situatie (amplasament), planurile de suprastructura c.f. ale statiei si planurile de structura ale tunelului si ale peronelelor.
4. Este importanta corelarea cotelor verticale intre stalpii care se pozitioneaza pe grinzile tunelului (din axele 7 si 8) si stalpii si fundatiile adiacente ale copertinei; astfel incat sa se asigure continuitatea la nivelul superior al grinzilor transversale si panelor, cat si realizarea gabaritului pe intreaga lungime a copertinei.
5. Nu se vor prinde de elementele structurale ale copertinei altele echipamente sau dispozitive in afara celor prevazute in proiect (pentru orice modificare se va cere avizul proiectantului).
6. Pentru pozitionare si detalii stalpii linia de contact, vezi: PLAN DE SITUATIE MONTARI LC, aferent statiei.
7. Stalpii linia de contact strapung copertina in zona involtorii de polycarbonat (se va face decuparea si etansarea polycarbonatului dupa sectiunea stalpului LC).

- MATERIALE
Beton de egalizare : C4/5 - T2/T3 - I 32,5 R/0 - 31
Beton simplu : C8/10 - T2/T3 - I 32,5 R/0 - 31
Beton armat : C18/22.5, C16/20- T3/T4 - I 32,5 R/0 - 16
Otel beton : PC 52, OB 37
Laminat : S235J2G3 (OL 37.2n), S275J2G3 (OL44.2n)
Buloane de ancorare M30-grupa 6.6

PLAN FUNDATII COPERTINE CANOPY FOUNDATION PLAN scara 1:250 scale 1:250

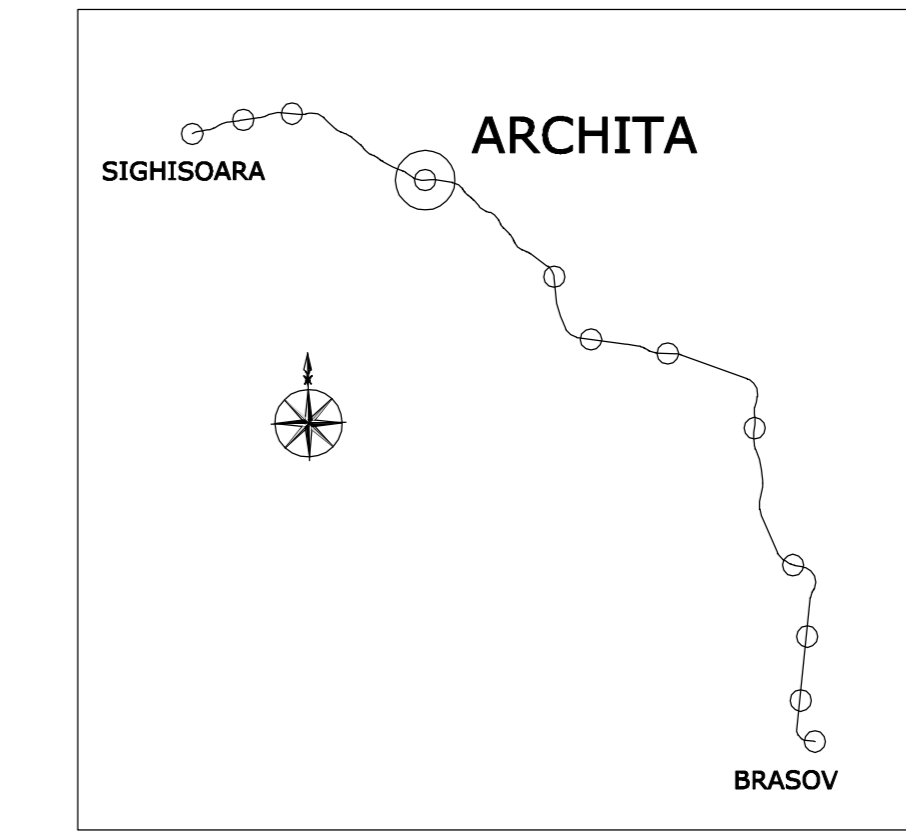
NOTE - TECHNOLOGICAL RECOMMENDATIONS:

- 1. All longitudinal, transversal and vertical levels of the canopy have as a reference: the railway axis, the axis of the pedestrian tunnel and the RUL designed ± 0.00 level of the rail (for each one).
a. the longitudinal axis of the canopy poles will be positioned according to the drawing as compared to the axis of designed lines: 1, respectively 1 - II, respectively III - 4.
b. the axis of the passengers tunnel shall be used as a guide mark when lining the transversal axis of the canopy poles; the lining shall be made from 6 m left and 6 m to right given the above-mentioned axis.
c. the foundation level refers to ±0.00+RUL designed for each one.
respectively: for canopy to line I, the reference level is ±0.00+RUL line I, for canopy to lines 1-II, the reference level is ±0.00+RUL line II, for canopy to lines III-4, the reference level is ±0.00+RUL line III.
2. It is important that both the three canopy (with corresponding foundations) as well as new platforms, follow the longitudinal profile of the new designed lines, with downward slope (-4.935%) from the X end towards the Y end of the station.
3. This plan shall be read in correlation with: site layout plan, the drawings for railway station superstructure, and the structural drawings of the tunnel, and of the platforms.
4. It is important to ensure the compliance of the vertical levels between the canopy poles resting on the tunnel beams (axis 7 and 8) and the adjacent poles (and corresponding foundations) of the canopy. So, it will be ensured the continued level of transversal beams and joints, and of the clearance for the entire canopy.
5. No other equipment or device, apart those foreseen in the project, shall be attached to the structural elements of the canopy.
6. For positioning and details of contact line poles, see: LAYOUT MOUNTING PLAN, LC, afferent to the station.
7. The contact line poles pierce through the canopy in the central area of the polycarbonate covering (the polycarbonate will be cut off and sealed around the LC pole section).

- MATERIALS
Leveling concrete : C4/5 - T2/T3 - I 32,5 R / 0 - 31
Plain concrete : C8/10 - T2/T3 - I 32,5 R / 0 - 31
Reinforced concrete : C18/22.5, C16/20- T3/T4 - I 32,5 R / 0 - 16
Steel concrete : PC 52, OB 37
Laminated : S235J2G3 (OL 37.2n), S275J2G3 (OL44.2n)
Anchoring bolts M30 , resistance group 6.6

- LEGENDA
N.S.S. = cota nivel superior sina proiectat
C.S.F. = cota superioara fundatiei
C.F. = cota de fundare
C.S.S. = cota superioara stalp

- LEGEND
R.U.L. = designed rail upper level = N.S.S.
C.S.F. = foundation upper level
C.F. = foundation level
C.S.S. = pole upper level



OBSERVATIE
Pozitionarea copertinelor in amplasamentul statiei se va face conform PLAN DE SITUATIE PROPUS statiei ARCHITA, avand ca reper kilometrajul firului I proiectat.

OBSERVATION
The canopies will be positioned in the station location according to PROPOSED LAYOUT PLAN station ARCHITA, having the kilometer positions of designed track I as reference

Table with columns: Index, Date, Modification, Projector, Designer, Approved, Date, Approved, Date, Approved, Date.

Logos for GUVERNUL ROMANIEI ROMANIAN GOVERNMENT, PROIECT FINANAT DE UNIUNEA EUROPEANA EUROPEAN UNION FINANCED PROJECT, and C.N.C.F. "C.F.R." - S.A.

CLIENT / CLIENT section with logos for ITALFERR, Scot Wilson, OBERMEYER, and TECNIC Consulting Engineers.

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SUBCONTRACTANT / SUBCONTRACTOR table with columns: Approved, Date, Signature, Checked, Date, Signature.

Denumire desen / Drawing Title: COPERTINE STATIA ARCHITA - PLAN FUNDATII COPERTINE CANOPY ARCHITA STATION - FOUNDATION PLAN

Table with columns: Codificare / Codification System, Scara / Scale, LOT / LOT, Nr. / No.