Approved, Inspector general

SCHEDULE TO CHECK THE QUALITY OF THE CONSTRUCTION WORKS

REHABILITATION OF THE RAILWAY LINE BUCUREȘTI – BRAȘOV, COMPONENT PART OF THE IV PAN – EUROPEAN CORRIDOR, FOR THE TRAINS CIRCULATION WITH MAXIMUM SPEED OF 160 KM/H

- BRASOV STATION -

As a beneficiary
• represented by
As a designer : Italfer S.p.A – Scott Wilson – Obermayer – Tecnic – AREX LIDER
COMPANY
• represented by
1 5
As a contractor
• represented by
represented by

Complying with Law no. 10/1995, HG no. 766/1997, HG no. 272/1994, HG no. 273/1994 and the norms in force.

They agree togheter on this shedule to check the quality of the construction works.

Crt.	Works to be inspected, checked or taken	Written document to be	Document	No. and date
No.	over from quality point of view, for	concluded:	concluded and	of the
1.00	which written documents must be drawn	PV – Report	signed by:	concluded
	up	PVRC – Report for acceptance the works quality PVT – Tracing report CRM – Register for material acceptance	 I – inspection for constructions B – beneficiary E – contractor P – designer G –geotechnical engineer 	document
0	1	2	3	4
Ι	STATION BUILDING			
1.1	Site delivery	P.V.	B.E.P	
1.1 1.2	Site delivery Checking the tracing	P.V. P.V.R.C.	B.E.P B.E	
1.1 1.2 1.3	Site delivery Checking the tracing Checking the elevation and the geometry of the foundation excavations	P.V. P.V.R.C. P.V.R.C.	B.E.P B.E B.E.	
1.1 1.2 1.3 1.4	Site delivery Checking the tracing Checking the elevation and the geometry of the foundation excavations Checking the nature and the quality of the natural terrain stratification	P.V. P.V.R.C. P.V.R.C. P.V.R.C.	B.E.P B.E B.E. B.E.G	
1.1 1.2 1.3 1.4	Site delivery Checking the tracing Checking the elevation and the geometry of the foundation excavations Checking the nature and the quality of the natural terrain stratification INFRASTRUCTURE	P.V. P.V.R.C. P.V.R.C. P.V.R.C.	B.E.P B.E B.E. B.E.G	

1.6	Checking the formworks for the	P.V.R.C.	B.E.
	foundation		
1.7	Checking the reinforcement for		
	foundations	P.V.R. C.	B.E.P.I.
	-Decisive phases - regarding the		
	preparation for casting the concrete in		
	the foundation rafter		
1.8	Checking the quality of concrete for	P.V.R.C.	B.E.
	foundations		
1.9	Carrying out the fillings up to the		
	superior levels from the design,	P.V.	B.E.
	campacting them and laying the		
	component layers of the floors		
	SUPERSTRUCTURE		
1.10	Checking the quality of the materials		
	prepared for the ground floor columns	C.R.M.	B.E.
1.11	Checking the formworks for the ground	P.V.	B.E.
	floor columns		
1.12	Decisive phases - Checking the	P.V.R.C.	B.E.P.I
	reinforcement for the ground floor		
	columns		
1.13	Checking the quality of the concrete	P.V.R.C.	B.E.
	casted for the ground floor columns		
1.14	Checking the quality of the materials		
	prepared for the slab over the ground	C.R.M.	B.E.
	floor		
1.15	Checking the formworks for the slab	P.V.R.C.	B.E.
	over the ground floor - beams and slabs		
1.16	Checking the reinforcement for the slab	P.V.R.C.	B.E.P.I
	over the ground floor - Decisive phases		
1.17	Checking the quality of the concrete	P.V.R.C.	B.E.
	casted for the slab over the ground floor		
1.18	Checking the quality of the materials		
	prepared for the columns at first floor	C.R.M.	B.E.
1.19	Checking the column formwork – 1st	P.V.	B.E.
	floor		
1.20	Checking the reinforcement for the 1st	P.V.R.C.	B.E.P.I
	Checking the reinforcement for the 1st		
	floor columns - Decisive phase		
1.21	Checking the quality of the casted	P.V.R.C.	B.E.
	concrete - for the columns from the 1st		
	floor		
1.22	Checking the formwork for the slab	P.V.R.C.	B.E.
	over the 1st floor - beams and slabs		
1.23	Checking the reinforcement for the slab	P.V.R.C.	B.E.P.I
	over the 1st floor - Decisive phase		
1.24	Checking the quality of the concrete	P.V.R.C.	B.E.
	casted for the slab over the 1st floor		
1.25	Checking the terrace	P.V.	B.E.
1.26	Checking the quality of the finishings	P.V.	B.E.

1.27	Reception at the end of the works -	P.V.	B.E.P.I.
	Decisive phase		
Π	PLATFORMS		
2.1	Survey for passages for the existing TCF, IE, TTR cables in order not to be destroyed and in front of them the precast elements shall be executed cast- in-place in order to be emdedded	PV	B.E.
2.2	Site delivery - tracing the new platforms, according to the design	P.V.T.	B.E.P.
2.3	Carrying out the necessary excavation in trenches	P.V.	B.E.G.
2.4	Compacting the bottom of the excavation, laying the levelling layer necessary the component elements	P.V.	B.E.
2.5	Tracing and mounting the retaining wall type elements	P.V.T.	B.E.
2.6	Constructing the installation networks, foundations for the lighting poles, for the torchère etc.	P.V.	B.E.
2.7	Carrying out the compacted filling and laying the gravel layer and the polyethylene film	P.V.	B.E.
2.8	Checking the mounting of the prefabricated slabs on the retaining wall-type elements, of the reinforcement in order for concreting between them for completing the cast-in-place zones and the level crossings	P.V.	B.E.
2.9	Concreting the platform slabs	P.V.	B.E.
2.10	Acceptance at the end of the works –	P.V.	B.E.P.I.
	Decisive phase		
Ш	REHABILITATED CANOPIES		
3.1	Carrying out appropiate proppings (using timbering and metal elements) at the canopy structure	P.V.	B+E
3.2	Performing the appropriate strippings (exfoliated concrete, rust stained, visible reinforcement, degraded plasterings etc.)	P.V.	B+E
3.3	Choosing intervention solutions as the case may be, in accordance with the specialized company and the specialized designer	P.V.	B+E+P
3.4	Performing the required rehabilitation works for the canopy/canopies	P.V.	B+E
3.5	Checking the overall gauge of the canopy (in plane and on a vertical direction)	P.V.	B+E
3.6	Reception at the end of the works - DECISIVE PHASE	P.V.R.C F.D.	B+E+P+I

IV	GSM-R ANTENNA		
4.1	Site Rendering – Reception	P.V.	B.E. P.
4.2	Performing the excavation	P.V.	B.E.
4.3	Checking the terrain stratification at the	P.V.	B.E.G.
	end of the excavation		
4.4	Decisive phase – Checking the	P.V.R.C.	I.B.E.P.
	mounting of the micropiles before		
	injecting the mortar for concreting the		
	micropiles - Checking the mounting of		
	the micropile head		
4.5	Injection of mortar for concreting the	P.V.	B.E.
	micropiles		
4.6	Checking the foundation raft	P.V.	B.E.P.
	reinforcement before casting the		
	concrete		
4.7	Checking the anchoring system from the	P.V.	B.E.P.
	ratter before casting the concrete		
4.8	Concreting the foundation raft	P.V.	B.E.
4.9	Checking the quality and the aspect of	Conc. book + notes	B.E.
	the foundation		
4.10	Decisive phase	P.V.R.C.	I.B.E.P.
	Acceptance at the end of the works		
V	PROTECTION FENCE BETWEEN		
	TRACKS		
5.1	Introducing the fence poles in the soil	P.V.	B.E.
5.2	Mounting the fence panels	P.V.	B.E.
5.3	Checking the correct mounting, the	P.V.	B.E.
	embedding of the fence in the soil, of		
	their verticality and linearity		

NOTE:

1. Column 4 is to be filled on the date when the document foreseen at column 2 was concluded.

2. The contractor will inform in writing all the other concerned participants with minimum 10 days before the date when the checking is to take place.

3. At the taking over an objective, one copy of this completed schedule will be annexed to the Construction Book.

BENEFICIARY:

DESIGNER:

CONTRACTOR:

AREX LIDER COMPANY