SUBTRAVERSARE	
UNDERCROSSING	
12.10	2
236+351	

SUBTRAVERSARE	
UNDERCROSSING	
23.60	1
236+455	

SUBTRAVERSARE	
UNDERCROSSING	
12.10	2
236+549	

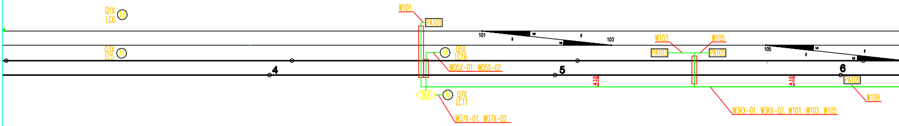
INCALZITOR MACAZ	
POINT HEATER	
PA101	101
236+457.5	

INCALZITOR MACAZ	
POINT HEATER	
PA103	103
236+536.5	

INCALZITOR MACAZ	
POINT HEATER	
PA105	105
236+557	

SEPARATOR	
DISCONNECTOR	
Q1X	LC6
236+348.5	

SEPARATOR	
DISCONNECTOR	
Q5X	LC16
236+457.5	


Q1X
LC6
M
Q3X
LC5
M
4
W101
PA101
Q5X
LC16
M
WQ5X-01, WQ5X-02
1KX
M
Q7X
LC11
WQ7X-01, WQ7X-02
101
103
5
4.10
W103
W105
PA103
PA105
W3KX-01, W3KX-02, W101, W103, W105
105
6
4.10
PA109
W109

SEPARATOR	
DISCONNECTOR	
Q3X	LC5
236+348.5	

SEPARATOR	
DISCONNECTOR	
Q7X	LC15
236+457.5	

INCALZITOR MACAZ	
POINT HEATER	
PA109	109
236+604	

SUBTRAVERSARE	
UNDERCROSSING	
12.10	2
236+455	

SUBTRAVERSARE UNDERCROSSING	
12.1	3
236+750.5	

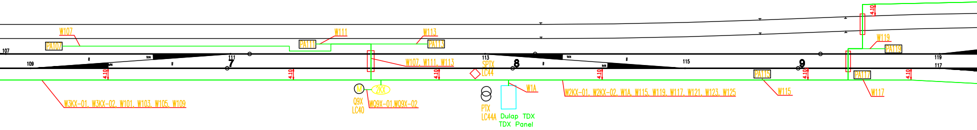
SUBTRAVERSARE UNDERCROSSING	
13.2	3
236+922.5	

INCALZITOR MACAZ POINT HEATER	
PA107	107
236+639.5	

INCALZITOR MACAZ POINT HEATER	
PA111	111
236+728.5	

INCALZITOR MACAZ POINT HEATER	
PA113	113
236+773.5	

INCALZITOR MACAZ POINT HEATER	
PA119	119
236+933.5	


W107
PA107
107
109
W111
PA111
111
7
W113
PA113
W107, W111, W113
113
SPTX
LC44
8
115
9
4.10
4.10
4.10
4.10
4.10
4.10
4.10
W119
PA119
119
117
PA115
PA117
W3KX-01, W3KX-02, W101, W103, W105, W109
M
2KX
Q9X
LC40
WQ9X-01,WQ9X-02
PTX
LC44A
Dulap TDX
TDX Panel
W1A
W2KX-01, W2KX-02, W1A, W115, W119, W117, W121, W123, W125
W115
W117

SEPARATOR DISCONNECTOR	
Q9X	LC40
236+746.5	

SEPARATOR DISCONNECTOR	
SPTX	LC44
236+787	

POST TRANSFORMARE TRANSFORMER POST	
PTX	LC44A
236+792	

INCALZITOR MACAZ POINT HEATER	
PA115	115
236+887.5	

INCALZITOR MACAZ POINT HEATER	
PA117	117
236+922.5	

DULAP PANEL	
TDX	–
236+797	

SUBTRAVERSARE UNDERCROSSING	
13.2	4
236+917.5	

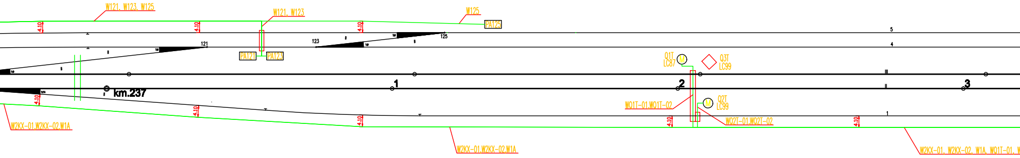
SUBTRAVERSARE	
UNDERCROSSING	
13.2	2
237+154.5	

INCALZITOR MACAZ	
POINT HEATER	
PA121	121
237+152.5	

INCALZITOR MACAZ	
POINT HEATER	
PA123	123
237+156	

INCALZITOR MACAZ	
POINT HEATER	
PA125	125
237+135.5	

SEPARATOR	
DISCONNECTOR	
Q3T	LC90
237+211	


W121, W123, W125
W121, W123
W125
PA125
4.10
121
123
125
PA121
PA123
5
4
Q1T
LC87
M
Q3T
LC99
km.237
1
2
3
Q2T
LC99
WQ1T-01,WQ1T-02
WQ2T-01,WQ2T-02
W2KX-01,W2KX-02,W1A
W2KX-01,W2KX-02,W1A
W2KX-01, W2KX-02, W1A, WQ1T-01, W

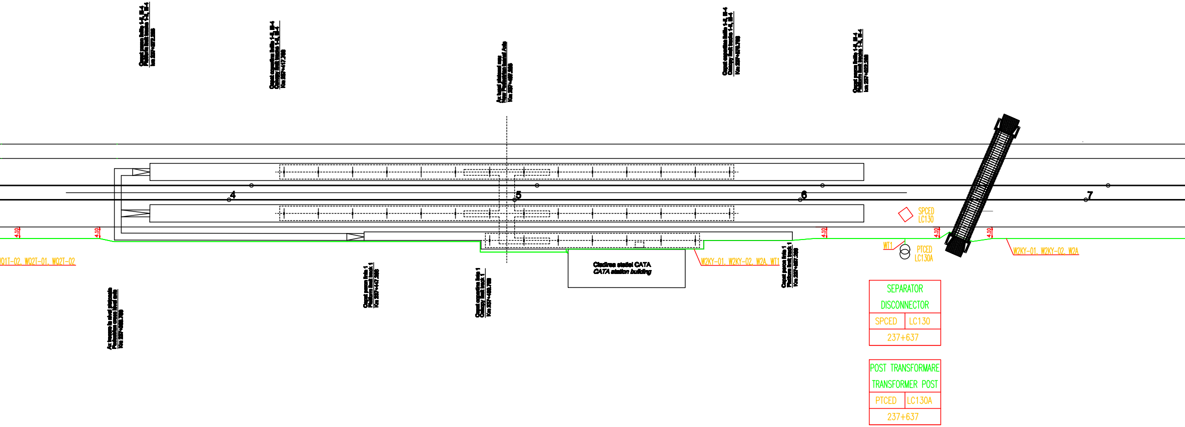
SEPARATOR	
DISCONNECTOR	
Q1T	LC87
237+200.5	

SEPARATOR	
DISCONNECTOR	
Q2T	LC89
237+211	

SUBTRAVERSARE	
UNDERCROSSING	
21.60	2
237+205	

SUBTRAVERSARE	
UNDERCROSSING	
8.2	1
237+205	

Staţia Caţa/ Caţa Station


4
5
6
7
4.10
WQ1T-02, WQ2T-01, WQ2T-02
Cladirea statiei CATA
CATA station building
W2KY-01, W2KY-02, W2A, WT1
SPCED
LC130
WT1
PTCED
LC130A
W2KY-01, W2KY-02, W2A
SEPARATOR
DISCONNECTOR
SPCED
LC130
237+637
POST TRANSFORMARE
TRANSFORMER POST
PTCED
LC130A
237+637

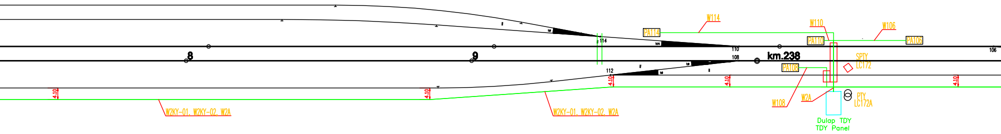
SUBTRAVERSARE	
UNDERCROSSING	
18.2	3
238+026.5	

INCALZITOR MACAZ	
POINT HEATER	
PA114	114
237+963	

INCALZITOR MACAZ	
POINT HEATER	
PA108	108
238+012	

INCALZITOR MACAZ	
POINT HEATER	
PA110	110
238+021.5	

INCALZITOR MACAZ	
POINT HEATER	
PA106	106
238+054.5	


W114
PA114
W110
PA110
W106
PA106
114
110
108
106
112
8
9
km.238
PA108
SPTY
LC172
4.10
4.10
4.10
4.10
4.10
W2KY-01, W2KY-02, W2A
W2KY-01, W2KY-02, W2A
W108
W2A
PTY
LC172A
Dulap TDY
TDY Panel

SEPARATOR	
DISCONNECTOR	
SPTY	LC172
238+032	

POST TRANSFORMARE	
TRANSFORMER POST	
PTY	LC172A
238+032	

SUBTRAVERSARE	
UNDERCROSSING	
6.60	1
238+026.5	

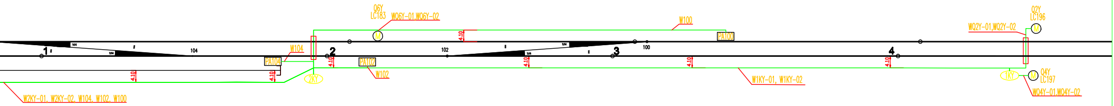
DULAP	
PANEL	
TDY	–
238+027	

SUBTRAVERSARE UNDERCROSSING	
13.2	3
238+195	

INCALZITOR MACAZ POINT HEATER	
PA100	100
238+340	

SEPARATOR DISCONNECTOR	
Q6Y	LC183
238+218	

SEPARATOR DISCONNECTOR	
Q2Y	LC194
238+447.5	


Q6Y
LC183
WQ6Y-01,WQ6Y-02
M
W100
PA100
Q2Y
LC196
WQ2Y-01,WQ2Y-02
M
1
1:14
II
104
W104
PA104
2
102
PA102
3
100
4
4.10
2KY
W102
W1KY-01, W1KY-02
1KY
M
Q4Y
LC197
WQ4Y-01,WQ4Y-02
W2KY-01, W2KY-02, W104, W102, W100

SEPARATOR DISCONNECTOR	
Q4Y	LC195
238+447.5	

INCALZITOR MACAZ POINT HEATER	
PA104	104
238+181	

INCALZITOR MACAZ POINT HEATER	
PA102	102
238+214	

SUBTRAVERSARE UNDERCROSSING	
13.2	2
238+445	

CABLE DESCRIPTION

DISCONNECTORS REMOTE CONTROL

Nr. No.	DE LA FROM	LA TO	TIP CABLU CABLE TYPE	ID	LUNGIME LENGTH (m)	DESCRIERE DESCRIPTION
1	Tablou CDS DRC Panel	2KX	CYAbY 2x35 mm^2	W2KX-01	927	alimentare motor și încălzire motor power-supply and heating
2	Tablou CDS DRC Panel	2KX	CSYAbY 27x1,5 mm2	W2KX-02	927	comandă și semnalizare / comand and signaling
3	2KX	3KX	CYAbY 2x35 mm2	W3KX-01	331	alimentare și încălzire 3KX power-supply and heating for disconnector 3KX
4	2KX	3KX	CSYAbY 21x1,5 mm2	W3KX-02	331	comandă și semnalizare separator 3KX comand and signaling for disconnector 3KX
5	2KX	Q9X	CYAbY 2x6 mm2	WQ9X-01	15	alimentare și încălzire Q9X power-supply and heating for disconnector Q9X
6	2KX	Q9X	CSYAbY 12x1,5 mm2	WQ9X-02	15	comandă și semnalizare separator Q9X comand and signaling for disconnector Q9X
7	3KX	Q5X	CYAbY 2x6 mm2	WQ5X-01	20	alimentare și încălzire Q5X power-supply and heating for disconnector Q5X
8	3KX	Q5X	CSYAbY 12x1,5 mm2	WQ5X-01	20	comandă și semnalizare separator Q5X comand and signaling for disconnector Q5X
9	3KX	Q7X	CYAbY 2x6 mm2	WQ7X-01	20	alimentare și încălzire Q7X power-supply and heating for disconnector Q7X
10	3KX	Q7X	CSYAbY 12x1,5 mm2	WQ7X-02	20	comandă și semnalizare separator Q7X comand and signaling for disconnector Q7X
11	PT-CED	tablou CED/IS panel	CYAbY 3x50 mm2	WT1	138	alimentare tablou distributie rezerva CED power supply distribution panel IS
12	Tablou CDS DRC Panel	Q1T	CSYAbY 12x1,5 mm2	WQ1T-02	440	comandă și semnalizare separator Q1T comand and signaling for disconnector Q1T
13	Tablou CDS DRC Panel	Q1T	CYAbY 2x16 mm2	WQ1T-01	440	alimentare și încălzire Q1T power-supply and heating for disconnector Q1T
14	Tablou CDS DRC Panel	Q2T	CSYAbY 12x1,5 mm2	WQ2T-02	359	comandă și semnalizare separator Q2T comand and signaling for disconnector Q2T
15	Tablou CDS DRC Panel	Q2T	CYAbY 2x10 mm2	WQ2T-01	359	alimentare și încălzire Q2T power-supply and heating for disconnector Q2T
16	Tablou CDS DRC Panel	2KY	CYAbY 2x35 mm2	W2KY-01	756	alimentare motor și încălzire motor power-supply and heating
17	Tablou CDS DRC Panel	2KY	CSYAbY 27x1,5 mm2	W2KY-02	756	comandă și semnalizare / comand and signaling
18	2KY	1KY	CYAbY 2x35 mm2	W1KY-01	272	alimentare motor și încălzire motor power-supply and heating
19	2KY	1KY	SYAbY 21x1,5 mm2	W1KY-02	272	comandă și semnalizare / comand and signaling
20	2KY	Q6Y	CYAbY 2x6 mm2	WQ6Y-01	43	alimentare și încălzire Q6Y power-supply and heating for disconnector Q6Y
21	2KY	Q6Y	CSYAbY 12x1,5 mm2	WQ6Y-02	43	comandă și semnalizare separator Q6Y comand and signaling for disconnector Q6Y
22	1KY	Q2Y	CSYAbY 12x1,5 mm2	WQ2Y-01	20	alimentare și încălzire Q2Y power-supply and heating for disconnector Q2Y
23	1KY	Q2Y	CYAbY 2x6 mm2	WQ2Y-02	20	comandă și semnalizare separator Q2Y comand and signaling for disconnector Q2Y
24	1KY	Q4Y	CSYAbY 12x1,5 mm2	WQ4Y-01	15	alimentare și încălzire Q4Y power-supply and heating for disconnector Q4Y
25	1KY	Q4Y	CYAbY 2x6 mm2	WQ4Y-02	15	comandă și semnalizare separator Q4Y comand and signaling for disconnector Q4Y

POINT HEATERS

Nr. No.	DE LA FROM	LA TO	TIP CABLU CABLE TYPE	ID	LUNGIME LENGTH (m)	DESCRIERE DESCRIPTION
1	Panoul DRC	TDX	CSYAbY 12x1,5 mm^2	W1A	851	Comanda si semnalizare/Command and signalling
2	PTx	TDX	CYAbY 3x150 mm^2	WTDX	150	Alimentare tablou distributie TDX Power-supply for distribution box TDX
3	TDX	macaz/point 101	CYAbY 2x25 mm^2	W101	408	Alimentare macaz/Power-supply for point 101
4	TDX	macaz/point 103	CYAbY 2x25 mm^2	W103	300	Alimentare macaz/Power-supply for point 103
5	TDX	macaz/point 105	CYAbY 2x25 mm^2	W105	296	Alimentare macaz/Power-supply for point 105
6	TDX	macaz/point 107	CYAbY 2x16 mm^2	W107	192	Alimentare macaz/Power-supply for point 107
7	TDX	macaz/point 109	CYAbY 2x25 mm^2	W109	217	Alimentare macaz/Power-supply for point 109
8	TDX	macaz/point 111	CYAbY 2x25 mm^2	W111	90	Alimentare macaz/Power-supply for point 111
9	TDX	macaz/point 113	CYAbY 2x25 mm^2	W113	91	Alimentare macaz/Power-supply for point 113
10	TDX	macaz/point 115	CYAbY 2x25 mm^2	W115	117	Alimentare macaz/Power-supply for point 115
11	TDX	macaz/point 117	CYAbY 2x25 mm^2	W117	156	Alimentare macaz/Power-supply for point 117
12	TDX	macaz/point 119	CYAbY 2x16 mm^2	W119	176	Alimentare macaz/Power-supply for point 119
13	TDX	macaz/point 121	CYAbY 2x25 mm^2	W121	327	Alimentare macaz/Power-supply for point 121
14	TDX	macaz/point 123	CYAbY 2x25 mm^2	W123	327	Alimentare macaz/Power-supply for point 123
15	TDX	macaz/point 125	CYAbY 2x25 mm^2	W125	398	Alimentare macaz/Power-supply for point 125
16	macaz/point 101	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 101
17	macaz/point 101	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 101
18	macaz/point 103	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 103
19	macaz/point 103	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 103
20	macaz/point 105	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 105
21	macaz/point 105	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 105
22	macaz/point 107	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 107
23	macaz/point 107	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 107
24	macaz/point 109	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 109
25	macaz/point 109	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 109
26	macaz/point 111	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 111
27	macaz/point 111	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 111
28	macaz/point 113	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 113
29	macaz/point 113	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 113
30	macaz/point 115	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 115
31	macaz/point 115	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 115
32	macaz/point 117	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 117
33	macaz/point 117	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 117
34	macaz/point 119	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 119
35	macaz/point 119	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 119
36	macaz/point 121	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 121
37	macaz/point 121	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 121
38	macaz/point 123	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 123
39	macaz/point 123	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 123
40	macaz/point 125	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 125
41	macaz/point 125	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 125
42	Panoul DRC	TDY	CSYAbY 12x1,5 mm^2	W2A	594	Comanda si semnalizare/Command and signalling
43	PTy	TDY	CYAbY 3x70 mm^2	WTDY	150	Alimentare tablou distributie TDX Power-supply for distribution box TDX
44	TDY	macaz/point 100	CYAbY 2x35 mm^2	W100	363	Alimentare macaz/Power-supply for point 100
45	TDY	macaz/point 102	CYAbY 2x25 mm^2	W102	210	Alimentare macaz/Power-supply for point 102
46	TDY	macaz/point 104	CYAbY 2x25 mm^2	W104	204	Alimentare macaz/Power-supply for point 104
47	TDY	macaz/point 106	CYAbY 2x25 mm^2	W106	48	Alimentare macaz/Power-supply for point 106
48	TDY	macaz/point 108	CYAbY 2x16 mm^2	W108	22	Alimentare macaz/Power-supply for point 108
49	TDY	macaz/point 110	CYAbY 2x25 mm^2	W110	24	Alimentare macaz/Power-supply for point 110
50	TDY	macaz/point 114	CYAbY 2x16 mm^2	W114	90	Alimentare macaz/Power-supply for point 114
51	macaz/point 100	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 100
52	macaz/point 100	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 100
53	macaz/point 102	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 102
54	macaz/point 102	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 102
55	macaz/point 104	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 104
56	macaz/point 104	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 104
57	macaz/point 106	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 106
58	macaz/point 106	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 106
59	macaz/point 108	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 108
60	macaz/point 108	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 108
61	macaz/point 110	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 110
62	macaz/point 110	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 110
63	macaz/point 114	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 114
64	macaz/point 114	UT	MCGI 2x4 mm^2	–	10	Alimentare macaz/Power-supply for point 114

Subtraversare

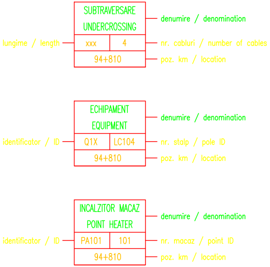
D

D

Po

Cod i

Numar sep
pe c


SUBTRAVERSARE
UNDERCROSSING
denumire / denomination
lungime / length
xxx
4
nr. cabluri / number of cables
94+810
poz. km / location
ECHIPAMENT
EQUIPMENT
denumire / denomination
identificator / ID
Q1X
LC104
nr. stalp / pole ID
94+810
poz. km / location
INCALZITOR MACAZ
POINT HEATER
denumire / denomination
identificator / ID
PA101
101
nr. macaz / point ID
94+810
poz. km / location

Legenda/Legend:

Cabluri	—	Cables
e in tub de PVC	▭	Rail undercrossing in PVC tube
Cutie distributie	1KX	Distribution box
ispozitiv electric	Ⓜ	Eletrical operating device
ispozitiv manual	◇	Manual operating device
ost transformare	○○	Transformer post
Cutie aparataj	PA106	Equipment box
dentificare cablu	W101, W103.......	Cable ID
arator si stalpul are este montat	Q4Y LC180	Disconnector number and pole on which is mounted

Indice Index	Data Date	Modificare Modification/Revision	Proiectant Designer	Aprobat Consultant Approved Consultant	Aprobat CFR Approved CFR
D					
C					
B					
A					

GUVERNUL ROMANIEI
MANIAN GOVERNMENT

PROIECT FINANȚAT DE UNIUNEA EUROPEAN Ă
EUROPEAN UNION FINANCED PROJECT

CFR

C.N.C.F. "C.F.R." - S.A.

CLIENT / CLIENT

ITALFERR
GRUPPO FERROVIE DELLO STATO
Joint Venture leader

Scott Wilson

OBERMEYER
PLANEN + BERATEN GmbH

TECNIC
Consulting Engineers

CONSULTANT / CONSULTANT

			Data Date	Semnătură Signature
Aprobat Approved	Şef proiect Project manager	R. Liuzza	11.2011	
Aprobat Approved	Coordonator Secţiune 1 Section 1 Coordinator	C. Gambelli	11.2011	
Verificat Checked	Expert Verificator Checking Expert	G. Buffarini	11.2011	

SUBCONTRACTANT / SUBCONTRACTOR

AREX COMPANY

Aprobat Approved	Responsabil Subcontractant Subcontractor Responsible	A.Stanciu - Dinulescu	24.11.2011	
Întocmit Elaborated	Proiectant Designer	M. Priporeanu	11.2011	

Reabilitarea liniei de cale ferata Braşov - Simeria, parte componentă a coridorului IV Pan European, pentru circulaţia trenurilor cu viteza maximă de 160 km/h,
Tronsonul : Braşov - Sighişoara
Rehabilitation of the railway line Braşov - Simeria, component Part of the IV Pan-European Corridor, for the trains circulation with maximum speed of 160 km/h,
Section : Braşov - Sighişoara

Proiect/Project
2004/RO/16/P/PA/003

Faza / Phase:
D.E. / E.D.

Denumire desen / Drawing Title :

Staţia c.f CAŢA/ CAŢA railway station
Plan trasee cabluri exterioare / Plan for outdoor cable routes

Codificare / Codification System	Scara / Scale 1:1000	LOT / LOT	Nr. / No 01 / 01

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