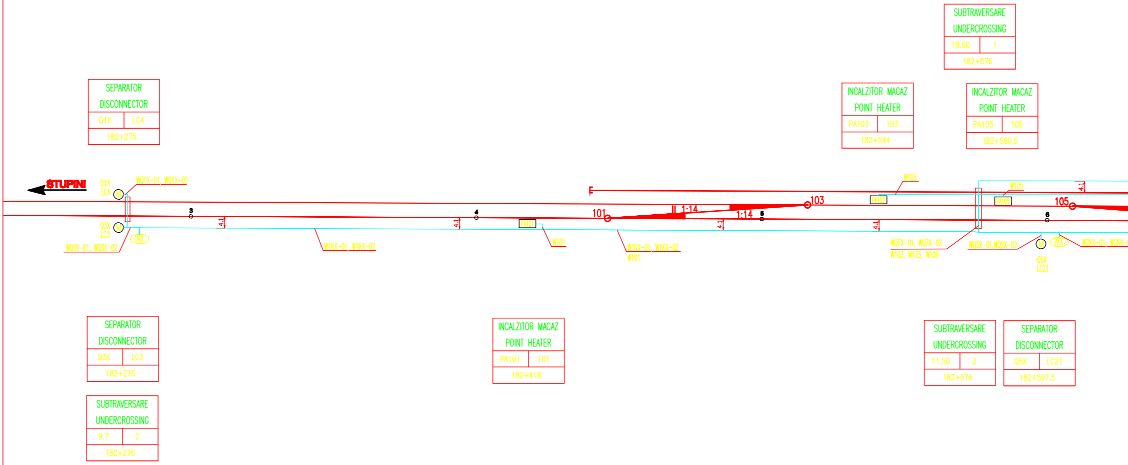
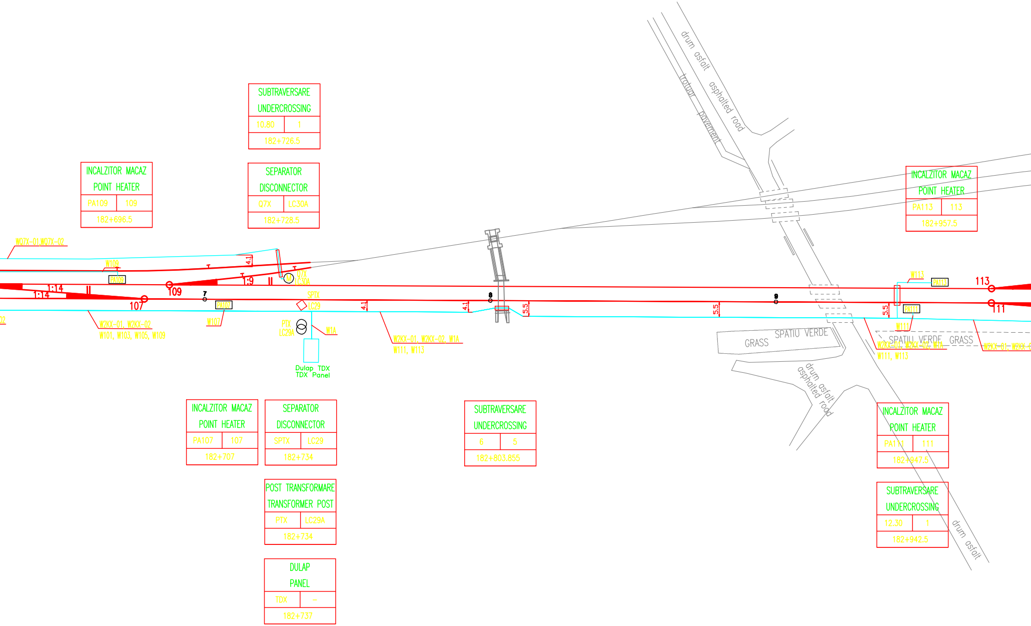
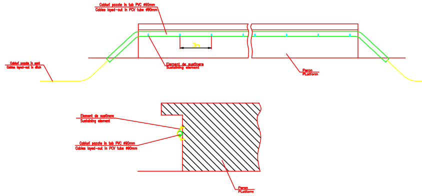
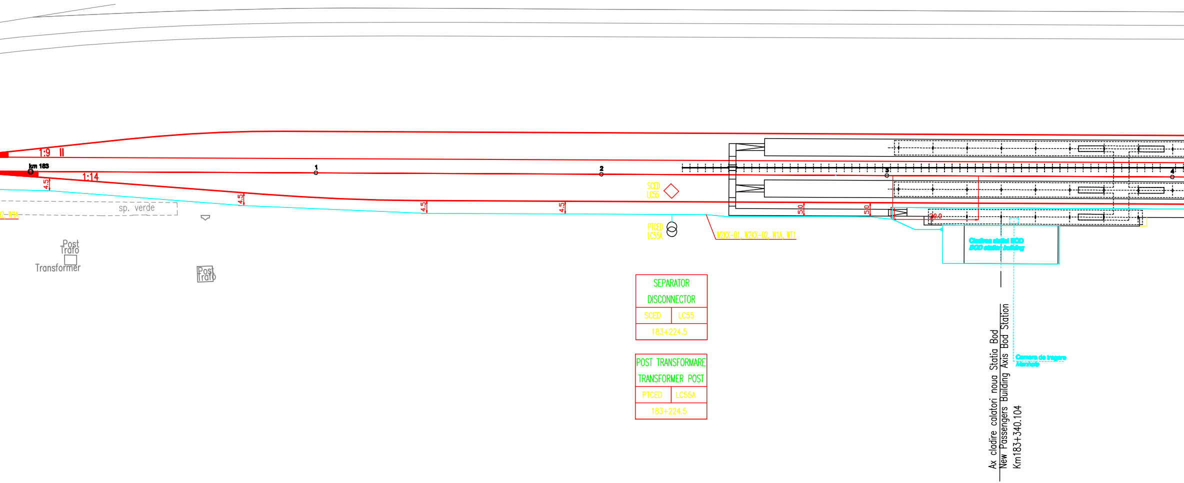

SEPARATOR
DISCONNECTOR
Q1X
LC4
182+275
STUPINI
Q1X
LC4
M
WQ1X-01, WQ1X-02
Q3X
LC3
M
1KX
WQ3X-01, WQ3X-02
3
4.1
W1KX-01, W1KX-02
4
4.1
PA101
W101
SEPARATOR
DISCONNECTOR
Q3X
LC3
182+275
SUBTRAVERSARE
UNDERCROSSING
9.7
2
182+276
INCALZITOR MACAZ
POINT HEATER
PA101
101
182+418
E
101
II 1:14
1:14
103
5
4.1
W1KX-01, W1KX-02
W101
4.1
PA103
W103
INCALZITOR MACAZ
POINT HEATER
PA103
103
182+544
SUBTRAVERSARE
UNDERCROSSING
18.00
1
182+576
INCALZITOR MACAZ
POINT HEATER
PA105
105
182+580.5
W105
PA105
105
4.1
6
WQ7X-01, WQ7X-02
W103, W105, W109
WQ5X-01,WQ5X-02
M
Q5X
LC21
2KX
W2KX-01, W2KX-
SUBTRAVERSARE
UNDERCROSSING
11.50
2
182+576
SEPARATOR
DISCONNECTOR
Q5X
LC21
182+597.5

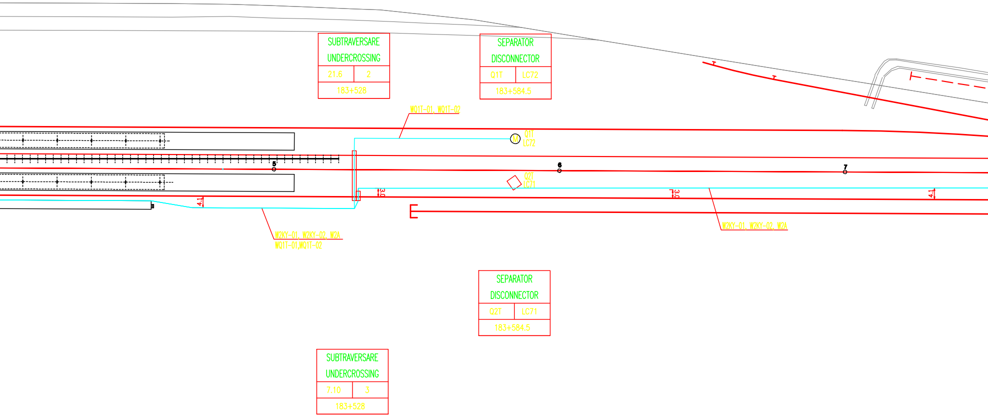


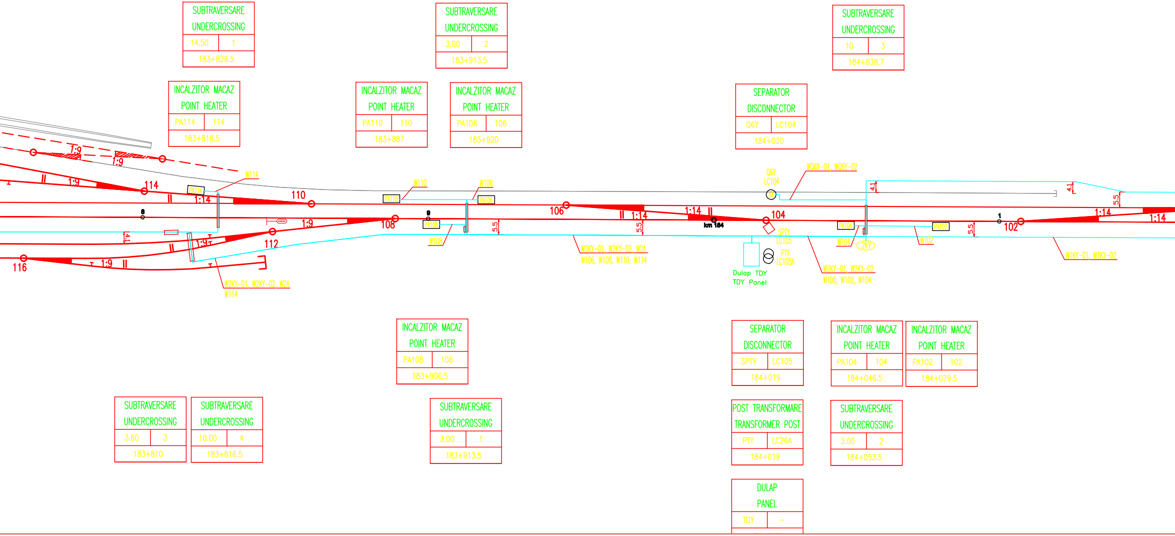
SUBTRAVERSARE
UNDERCROSSING
10.80
1
182+726.5
INCALZITOR MACAZ
POINT HEATER
PA109
109
182+696.5
SEPARATOR
DISCONNECTOR
Q7X
LC30A
182+728.5
drum asfalt
asphalted road
trotuar
pavement
INCALZITOR MACAZ
POINT HEATER
PA113
113
182+957.5
WQ7X-01,WQ7X-02
W109
PA109
4.1
1:14
1:14
109
107
1:9
Q7X
LC30A
M
7
8
9
SPTX
LC29
PA107
4.1
4.1
5.5
5.5
5.5
02
W2KX-01, W2KX-02
W101, W103, W105, W109
W107
PTX
LC29A
W1A
Dulap TDX
TDX Panel
W2KX-01, W2KX-02, W1A
W111, W113
W113
PA113
113
PA111
111
W111
GRASS
SPATIU VERDE
SPATIU VERDE GRASS
W2KX-01, W2KX-02, W1A
W111, W113
W2KX-01, W2KX-0
drum asfalt
asphalted road
INCALZITOR MACAZ
POINT HEATER
PA107
107
182+707
SEPARATOR
DISCONNECTOR
SPTX
LC29
182+734
SUBTRAVERSARE
UNDERCROSSING
6
5
182+803.855
INCALZITOR MACAZ
POINT HEATER
PA111
111
182+947.5
SUBTRAVERSARE
UNDERCROSSING
12.30
1
182+942.5
drum asfalt
POST TRANSFORMARE
TRANSFORMER POST
PTX
LC29A
182+734
DULAP
PANEL
TDX
–
182+737

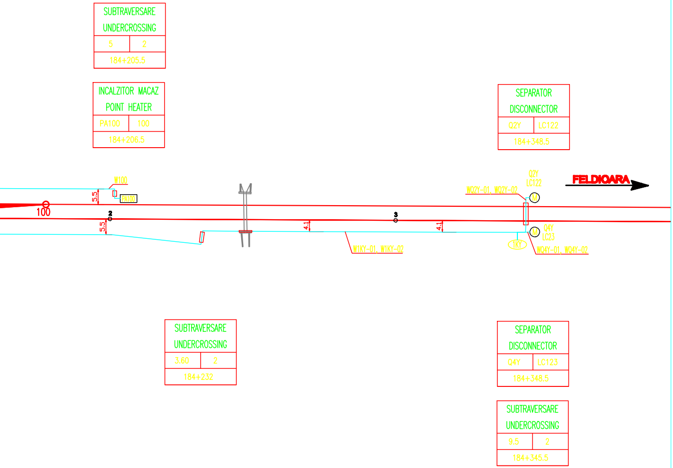
Schita pozarii cablurilor in zona peronului
Draft of cables laying-out in platform area
km. 183+245 ... km. 183+457


Cabluri pozate in tub PVC ø90mm
Cables layed-out in PCV tube ø90mm
3m
Cabluri pozate in sant
Cables layed-out in ditch
Element de sustinere
Sustaining element
Peron
PLatform
Element de sustinere
Sustaining element
Cabluri pozate in tub PVC ø90mm
Cables layed-out in PCV tube ø90mm
Peron
PLatform


1:9 II
km 183
1:14
4.5
4.5
4.5
4.5
1
2
3
4
sp. verde
02, W1A
Post
Trafo
Transformer
Post
Trafo
SCED
LC55
PTCED
LC55A
W2KX-01, W2KX-02, W1A, WT1
5.0
5.0
30.0
Cladirea statiei BOD
BOD station building
SEPARATOR
DISCONNECTOR
SCED
LC55
183+224.5
POST TRANSFORMARE
TRANSFORMER POST
PTCED
LC55A
183+224.5
Ax cladire calatori noua Statia Bod
New Passengers Building Axis Bod Station
Km183+340.104
Camera de tragere
Manhole


SUBTRAVERSARE
UNDERCROSSING
21.6
2
183+528
SEPARATOR
DISCONNECTOR
Q1T
LC72
183+584.5
WQ1T-01, WQ1T-02
Q1T
LC72
5
6
7
Q2T
LC71
3.0
3.0
4.1
4.1
W2KY-01, W2KY-02, W2A
WQ1T-01,WQ1T-02
W2KY-01, W2KY-02, W2A
SEPARATOR
DISCONNECTOR
Q2T
LC71
183+584.5
SUBTRAVERSARE
UNDERCROSSING
7,10
3
183+528


SUBTRAVERSARE
UNDERCROSSING
14.50
1
183+826.5
SUBTRAVERSARE
UNDERCROSSING
3.00
2
183+913.5
SUBTRAVERSARE
UNDERCROSSING
10
3
184+038.7
INCALZITOR MACAZ
POINT HEATER
PA114
114
183+818.5
INCALZITOR MACAZ
POINT HEATER
PA110
110
183+887
INCALZITOR MACAZ
POINT HEATER
PA106
106
183+920
SEPARATOR
DISCONNECTOR
Q6Y
LC104
184+020
1:9
1:9
1:9
114
PA114
W114
1:14
110
8
1:9
108
112
1:9
116
1:9
4.1
W2KY-01, W2KY-02, W2A
W114
PA110
W110
W106
PA106
9
PA108
W108
5.5
106
1:14
5.5
1:14
km 184
104
W2KY-01, W2KY-02, W2A
W106, W108, W110, W114
Q6Y
LC104
M
WQ6Y-01, WQ6Y-02
SPTY
LC105
PTY
LC105A
Dulap TDY
TDY Panel
W2KY-01, W2KY-02
W100, W102, W104
4.1
4.1
PA104
W104
2KY
PA102
W102
5.5
1
102
1:14
1:14
5.5
W1KY-01, W1KY-02
INCALZITOR MACAZ
POINT HEATER
PA108
108
183+906.5
SEPARATOR
DISCONNECTOR
SPTY
LC105
184+019
INCALZITOR MACAZ
POINT HEATER
PA104
104
184+046.5
INCALZITOR MACAZ
POINT HEATER
PA102
102
184+079.5
SUBTRAVERSARE
UNDERCROSSING
3.60
3
183+810
SUBTRAVERSARE
UNDERCROSSING
10.00
4
183+816.5
SUBTRAVERSARE
UNDERCROSSING
3.00
1
183+913.5
POST TRANSFORMARE
TRANSFORMER POST
PTY
LC26A
184+019
SUBTRAVERSARE
UNDERCROSSING
3.00
2
184+053.5
DULAP
PANEL
TDY
–


SUBTRAVERSARE
UNDERCROSSING
5
2
184+205.5
INCALZITOR MACAZ
POINT HEATER
PA100
100
184+206.5
SEPARATOR
DISCONNECTOR
Q2Y
LC122
184+348.5
W100
PA100
5.5
100
2
5.5
4.1
3
4.1
W1KY-01, W1KY-02
WQ2Y-01, WQ2Y-02
Q2Y
LC122
M
M
Q4Y
LC23
1KY
WQ4Y-01, WQ4Y-02
FELDIOARA
SUBTRAVERSARE
UNDERCROSSING
3.60
2
184+232
SEPARATOR
DISCONNECTOR
Q4Y
LC123
184+348.5
SUBTRAVERSARE
UNDERCROSSING
9.5
2
184+345.5

DISCONNECTORS REM

Nr. No	De la From	La To	Tip Type	ID
1	Tablou CDS DRC Panel	2KX	CYAbY 2x35 mm^2	W2KX-01
2	Tablou CDS DRC Panel	2KX	CSYEAbY 33x1,5 mm^2	W2KX-02
3	2KX	1KX	CYABY 2x35 mm^2	W1KX-01
4	2KX	1KX	CSYEAbY 21x1,5 mm^2	W1KX-02
5	1KX	Q1X	CYAbY 2x6 mm^2	WQ1X-01
6	1KX	Q1X	CSEYAbY 12x1,5 mm^2	WQ1X-02
7	1KX	Q3X	CYAbY 2x6 mm^2	WQ3X-01
8	1KX	Q3X	CSYEAbY 12x1,5 mm^2	WQ3X-02
9	2KX	Q5X	CYAbY 2x6 mm^2	WQ5X-01
10	2KX	Q5X	CSYEAbY 12x1,5 mm^2	WQ5X-02
11	2KX	Q7X	CYAbY 2x6 mm^2	WQ7X-01
12	2KX	Q7X	CSYEAbY 12x1,5 mm^2	WQ57X-02
13	Tablou CDS DRC Panel	Q1T	CYAbY 2x6 mm^2	WQ1T-01
14	Tablou CDS DRC Panel	Q1T	CSYEAbY 12x1.5 mm^2	WQ1T-02
15	Tablou CDS DRC Panel	2KY	CYAbY 2x35 mm^2	W2KY-01
16	Tablou CDS DRC Panel	2KY	CSYEAbY 27x1,5 mm^2	W2KY-02
17	2KY	1KY	CYABY 2x35 mm^2	W1KY-01
18	2KY	1KY	CSYEAbY 21x1,5 mm^2	W1KY-02
19	1KY	Q2Y	CYAbY 2x6 mm^2	WQ2Y-01
20	1KY	Q2Y	CSYEAbY 12x1,5 mm^2	WQ2Y-02
21	1KY	Q4Y	CYAbY 2x6 mm^2	WQ4Y-01
22	1KY	Q4Y	CSYEAbY 12x1,5 mm^2	WQ4Y-02
23	1KY	Q6Y	CYAbY 2x6 mm^2	WQ6Y-01
24	1KY	Q6Y	CSYEAbY 12x1,5 mm^2	WQ6Y-02
25	PT-CED	tablou CED/IS panel	CYAbY 3x120 mm^2	WT1

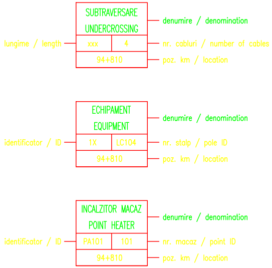
CABLE DESCRIPTION

OTE CONTROL

Lungime Length	Descriere Description
820	alimentare motor şi încălzire motor power-supply and heating
820	comandă şi semnalizare / comand and signaling
320	alimentare motor şi încălzire motor power-supply and heating
320	comandă şi semnalizare / comand and signaling
20	alimentare şi încălzire Q1X power-supply and heating for disconnector Q1X
20	comandă şi semnalizare separator Q1X comand and signaling for disconnector Q1X
15	alimentare şi încălzire Q3X power-supply and heating for disconnector Q3X
15	comandă şi semnalizare separator Q3X comand and signaling for disconnector Q3X
15	alimentare şi încălzire Q5X power-supply and heating for disconnector Q5X
15	comandă şi semnalizare separator Q5X comand and signaling for disconnector Q5X
20	alimentare şi încălzire Q7X power-supply and heating for disconnector Q7X
20	comandă şi semnalizare separator Q7X comand and signaling for disconnector Q7X
170	alimentare şi încălzire Q1T power-supply and heating for disconnector Q1T
170	comandă şi semnalizare separator Q1T comand and signaling for disconnector Q1T
650	alimentare motor şi încălzire motor power-supply and heating
650	comandă şi semnalizare / comand and signaling
350	alimentare motor şi încălzire motor power-supply and heating
350	comandă şi semnalizare / comand and signaling
20	alimentare şi încălzire Q2Y power-supply and heating for disconnector Q2Y
20	comandă şi semnalizare separator Q2Y comand and signaling for disconnector Q2Y
15	alimentare şi încălzire Q4Y power-supply and heating for disconnector Q4Y
15	comandă şi semnalizare separator Q4Y comand and signaling for disconnector Q4Y
20	alimentare şi încălzire Q6Y power-supply and heating for disconnector Q6Y
20	comandă şi semnalizare separator Q6Y comand and signaling for disconnector Q6Y
150	alimentare tablou distributie rezerva CED power supply distribution panel IS

POINT HEATERS

Nr. No.	De la From	La To	Tip cablu Cable type	Lungime Length	Descriere Description
1	Panou CDS	TDX	CSYEAbY 12x1,5mmp	520	comanda si semnalizare/control and signalling
2	PTX	TDX	CYAbY 3x70mmp	150	alimentare / power supply
3	TDX	PA101	CYAbY 2x35mmp	300	alimentare / power supply
4	TDX	PA103	CYAbY 2x25mmp	240	alimentare / power supply
5	TDX	PA105	CYAbY 2x25mmp	150	alimentare / power supply
6	TDX	PA107	CYAbY 2x25mmp	70	alimentare / power supply
7	TDX	PA109	CYAbY 2x16mmp	80	alimentare / power supply
8	TDX	PA111	CYAbY 2x35mmp	260	alimentare / power supply
9	TDX	PA113	CYAbY 2x25mmp	270	alimentare / power supply
10	PA101	UT	MCGI 2x4mmp	10	alimentare / power supply
11	PA101	UT	MCGI 2x4mmp	10	alimentare / power supply
12	PA103	UT	MCGI 2x4mmp	10	alimentare / power supply
13	PA103	UT	MCGI 2x4mmp	10	alimentare / power supply
14	PA105	UT	MCGI 2x4mmp	10	alimentare / power supply
15	PA105	UT	MCGI 2x4mmp	10	alimentare / power supply
16	PA107	UT	MCGI 2x4mmp	10	alimentare / power supply
17	PA107	UT	MCGI 2x4mmp	10	alimentare / power supply
18	PA109	UT	MCGI 2x4mmp	10	alimentare / power supply
19	PA109	UT	MCGI 2x4mmp	10	alimentare / power supply
20	PA111	UT	MCGI 2x4mmp	10	alimentare / power supply
21	PA111	UT	MCGI 2x4mmp	10	alimentare / power supply
22	PA113	UT	MCGI 2x4mmp	10	alimentare / power supply
23	PA113	UT	MCGI 2x4mmp	10	alimentare / power supply
24	Panou CDS	TDY	CSYEAbY 12x1,5mmp	810	comanda si semnalizare/control and signalling
25	PTY	TDY	CYAbY 3x70mmp	150	alimentare / power supply
26	TDY	PA100	CYAbY 2x25mmp	180	alimentare / power supply
27	TDY	PA102	CYAbY 2x25mmp	100	alimentare / power supply
28	TDY	PA104	CYAbY 2x25mmp	20	alimentare / power supply
29	TDY	PA106	CYAbY 2x25mmp	100	alimentare / power supply
30	TDY	PA108	CYAbY 2x16mmp	150	alimentare / power supply
31	TDY	PA110	CYAbY 2x16mmp	180	alimentare / power supply
32	TDY	PA114	CYAbY 2x25mmp	260	alimentare / power supply
33	PA100	UT	MCGI 2x4mmp	10	alimentare / power supply
34	PA100	UT	MCGI 2x4mmp	10	alimentare / power supply
35	PA102	UT	MCGI 2x4mmp	10	alimentare / power supply
36	PA102	UT	MCGI 2x4mmp	10	alimentare / power supply
37	PA104	UT	MCGI 2x4mmp	10	alimentare / power supply
38	PA104	UT	MCGI 2x4mmp	10	alimentare / power supply
39	PA106	UT	MCGI 2x4mmp	10	alimentare / power supply
40	PA106	UT	MCGI 2x4mmp	10	alimentare / power supply
41	PA108	UT	MCGI 2x4mmp	10	alimentare / power supply
42	PA108	UT	MCGI 2x4mmp	10	alimentare / power supply
43	PA110	UT	MCGI 2x4mmp	10	alimentare / power supply
44	PA110	UT	MCGI 2x4mmp	10	alimentare / power supply
45	PA114	UT	MCGI 2x4mmp	20	alimentare / power supply
46	PA114	UT	MCGI 2x4mmp	20	alimentare / power supply
47	PTX	BJ1	CYAbY 1x50mmp	100	circuit de retur / return circuit
48	PTY	BJ2	CYAbY 1x50mmp	100	circuit de retur / return circuit


SUBTRAVERSARE
UNDERCROSSING
denumire / denomination
lungime / length
xxx
4
nr. cabluri / number of cables
94+810
poz. km / location
ECHIPAMENT
EQUIPMENT
denumire / denomination
identificator / ID
1X
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
Subtraversare in tub de PVC	▭	Rail undercrossing in
Cutie distributie	1KX	Distribution box
Dispozitiv electric	Ⓜ	Eletrical operating de
Dispozitiv manual	◇	Manual operating devi
Post transformare	8	Transformer post
Cutie aparataj	PA106	Equipment box
Cod identificare cablu	W101, W103......	Cable ID
Numar separator si stalpul pe care este montat	Q4Y LC180	Disconnector number on which is mounte

PVC tube

vice

ce

and pole

d

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

GUVERNUL ROMANIEI
MANIAN GOVERNMENT

PROIECT FINANŢAT DE UNIUNEA EUROPEANĂ
EUROPEAN UNION FINANCED PROJECT

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. Gambell	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	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 BOD/ BOD railway station
Plan trasee cabluri exterioare / Plan for outdoor cable routes

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

E A 5 1   0 1   E   0 5   D X   E G   0 0   3   5   0 0 5   0

297x2950