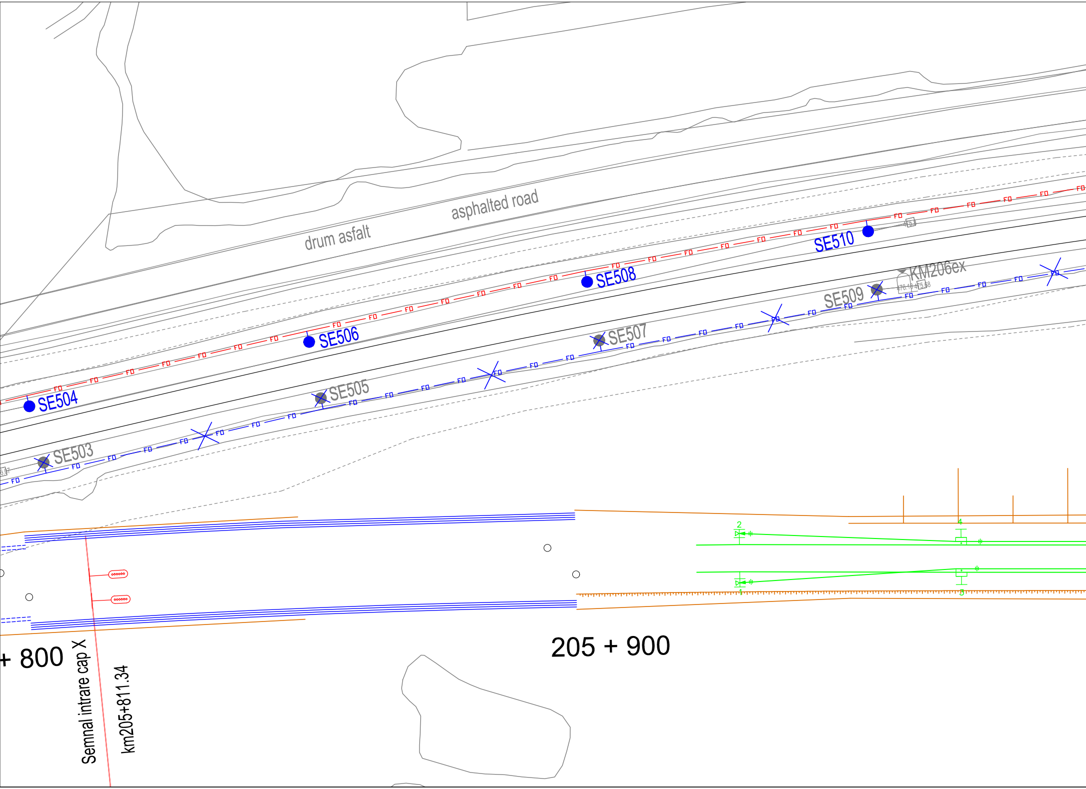
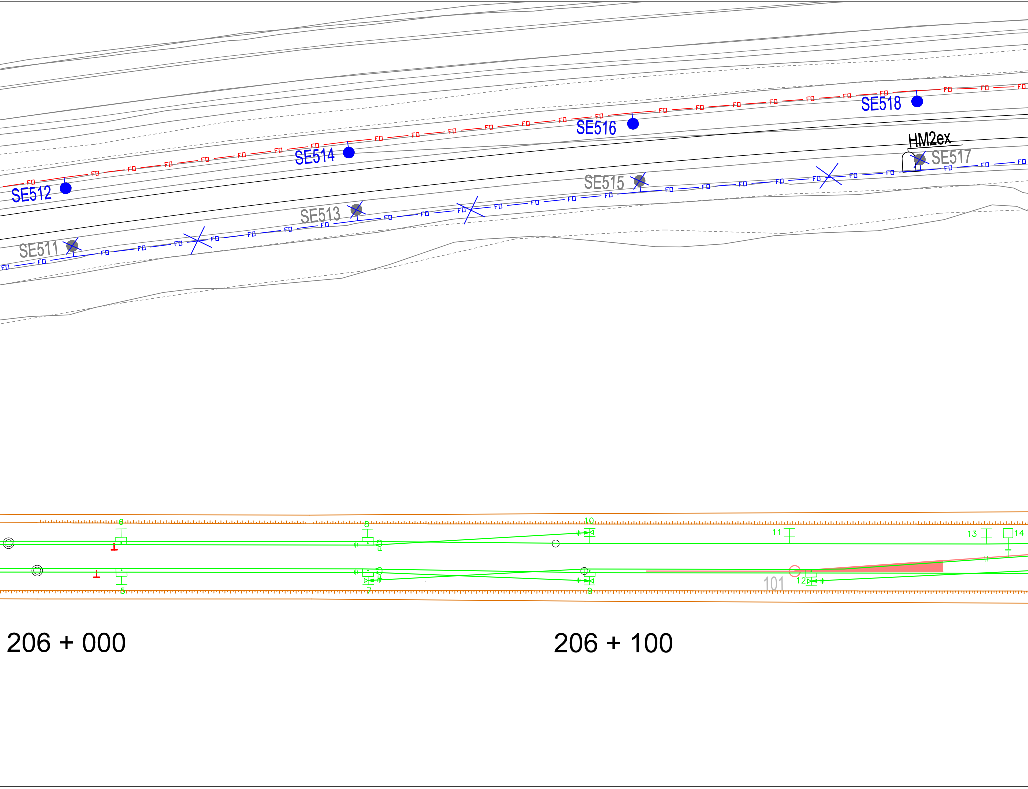
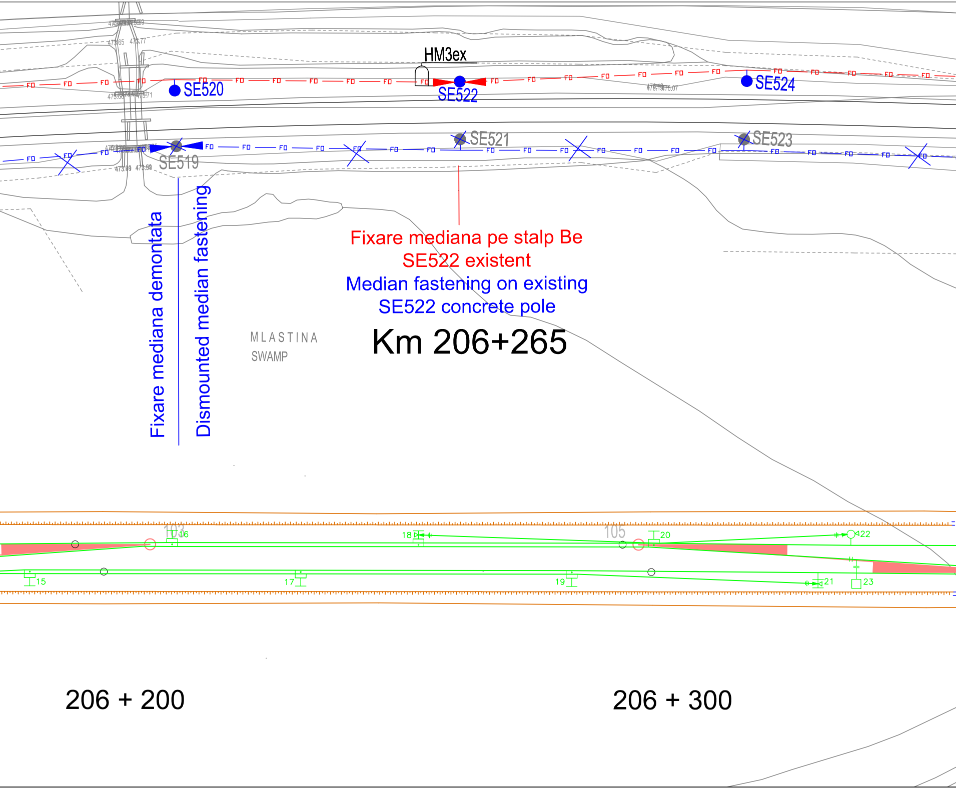

drum asfalt
asphalted road
SE503
SE504
SE505
SE506
SE507
SE508
SE509
SE510
KM206ex
476.13
475.68
475.3
FO
2
1
4
3
+ 800
205 + 900
Semnal intrare cap X
km205+811.34


SE512
SE514
SE516
SE518
HM2ex
SE517
SE515
SE513
SE511
FD
6
8
10
11
13
14
5
7
9
12
101
206 + 000
206 + 100



HM3ex
SE520
SE522
SE524
SE521
SE523
SE519
FO
MLASTINA
SWAMP
103
105
15
16
17
18
19
20
21
22
23

Fixare mediana demontata

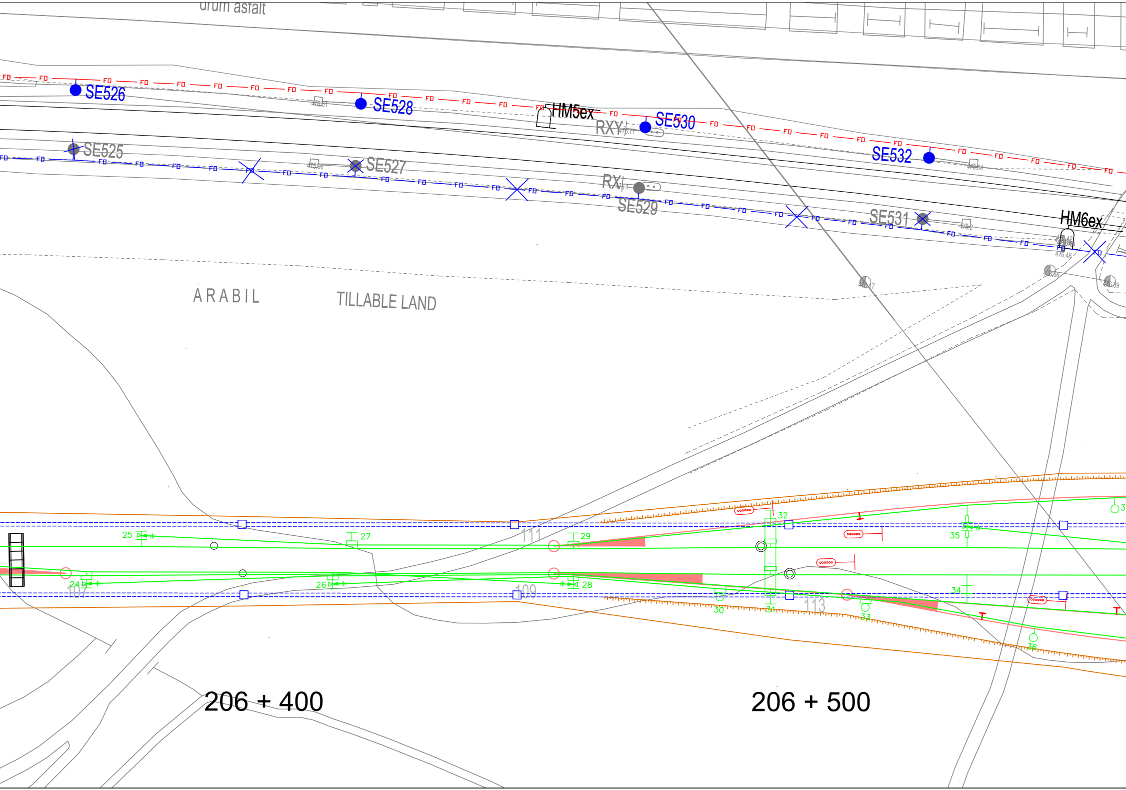
Dismounted median fastening

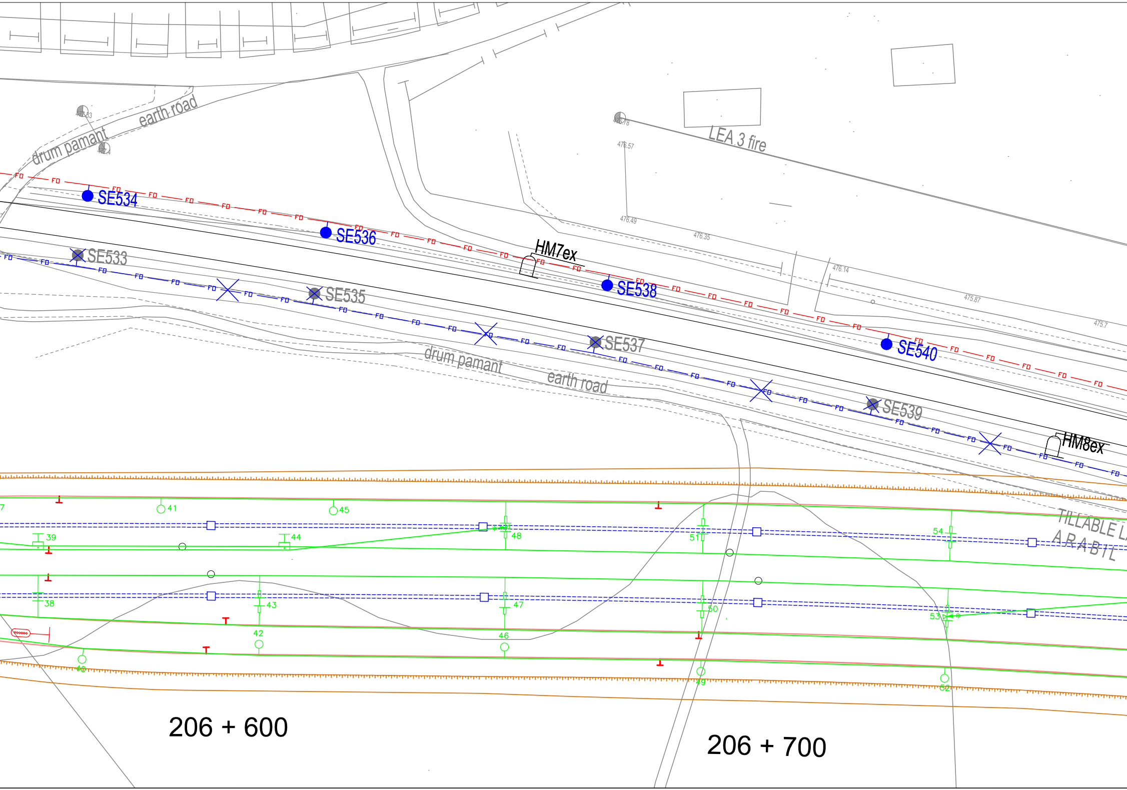
Fixare mediana pe stalp Be
SE522 existent
Median fastening on existing
SE522 concrete pole

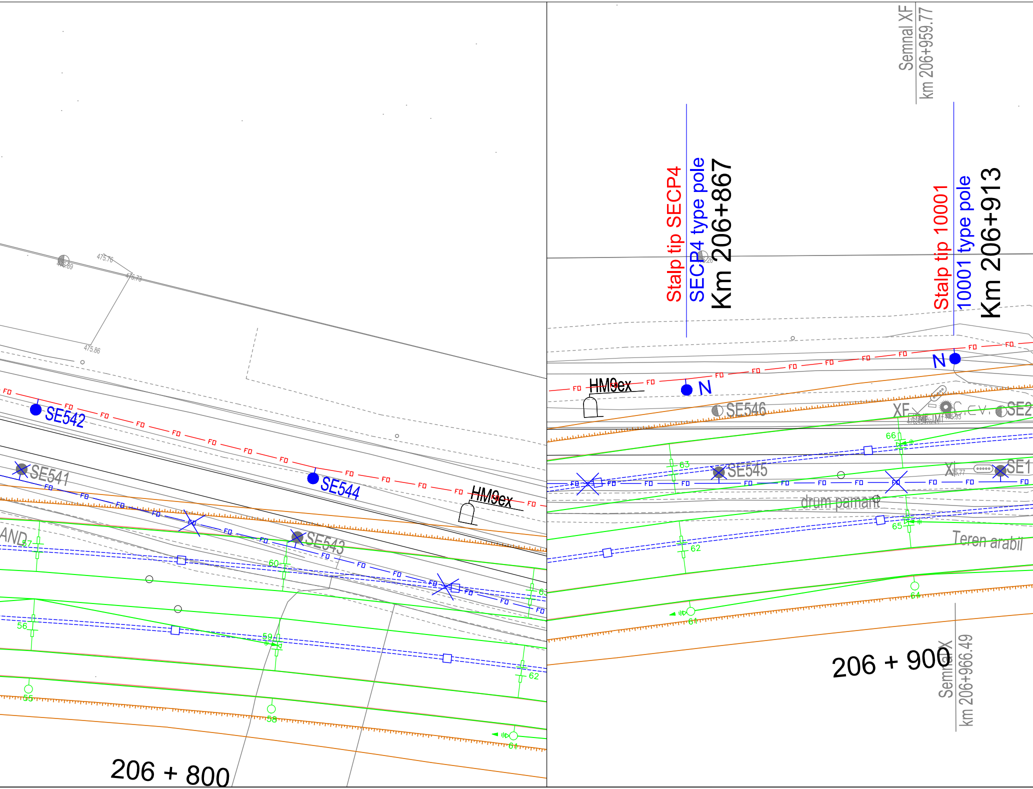
Km 206+265

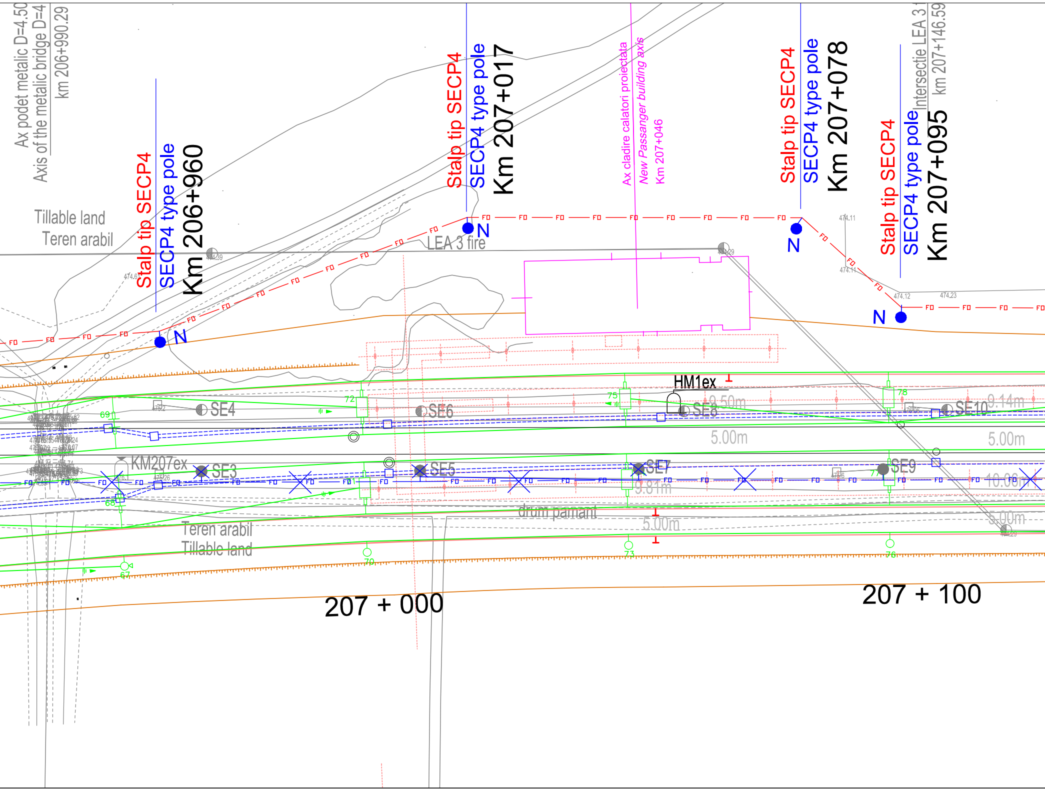
206 + 200

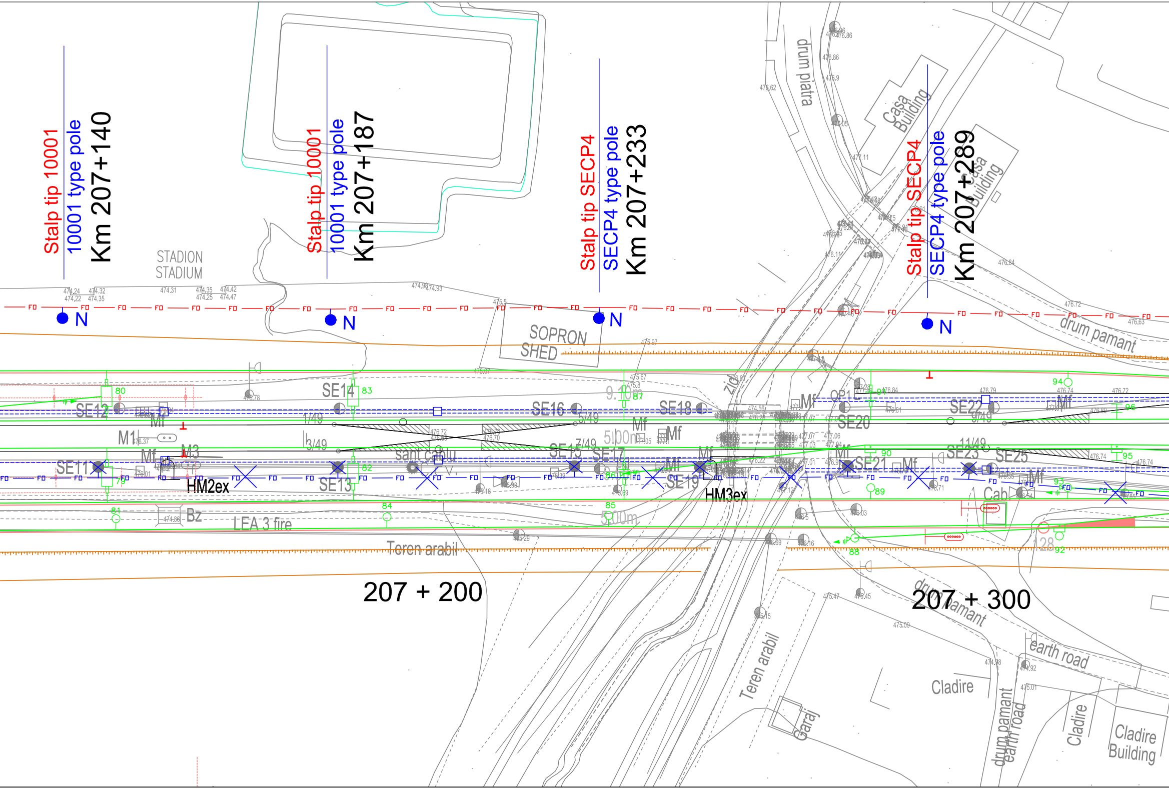
206 + 300

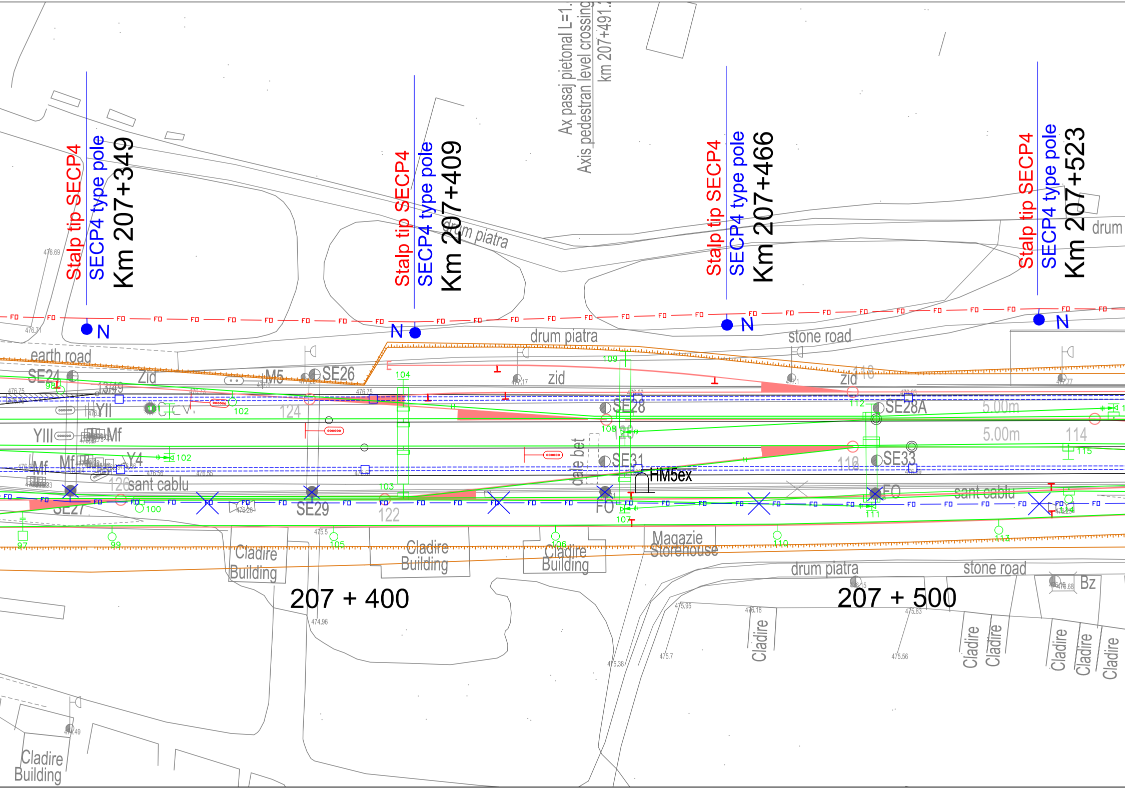

urum asfalt
SE526
SE528
HM5ex
RXY
SE530
SE532
SE525
SE527
RXY
SE529
SE531
HM6ex
FD
ARABIL
TILLABLE LAND
25
27
29
32
35
24
26
28
30
31
33
34
36
107
109
111
113
206 + 400
206 + 500

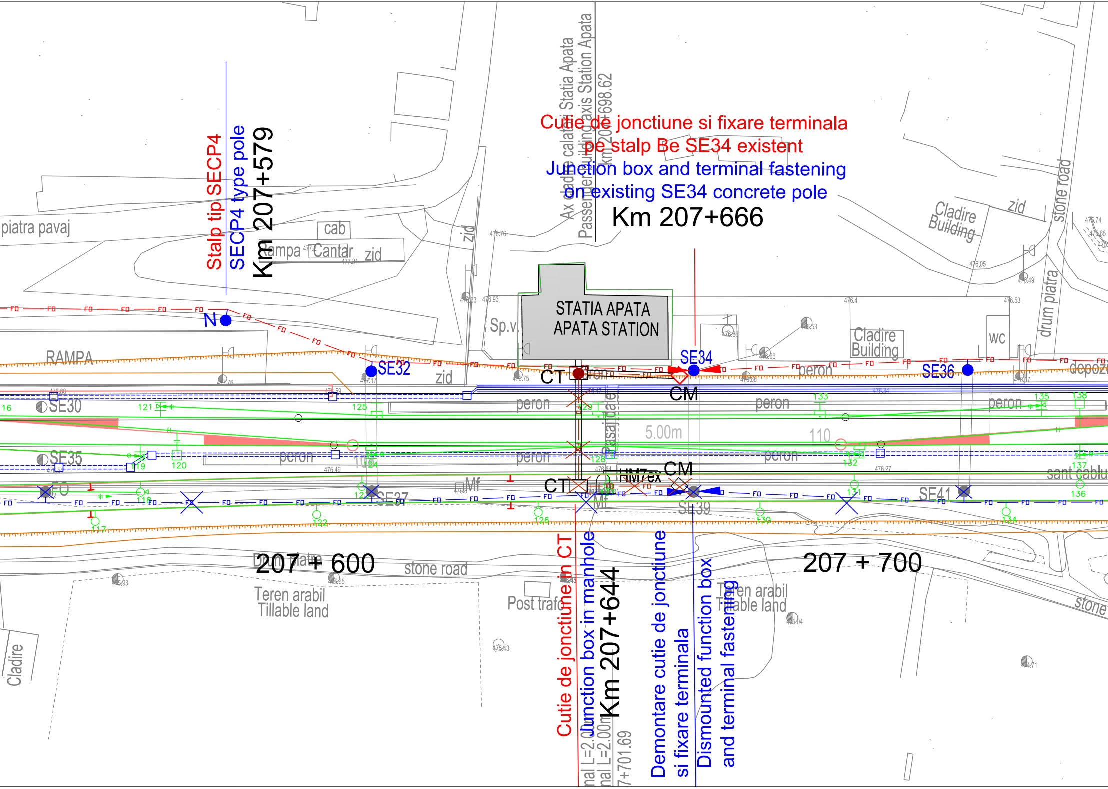

drum pamant
earth road
LEA 3 fire
476.57
476.49
476.35
476.14
475.87
475.7
SE534
SE536
HM7ex
SE538
SE540
SE533
SE535
SE537
SE539
HM8ex
drum pamant
earth road
TILLABLE L
ARABIL
41
45
39
44
48
51
54
38
43
47
50
53
42
46
40
49
52
206 + 600
206 + 700

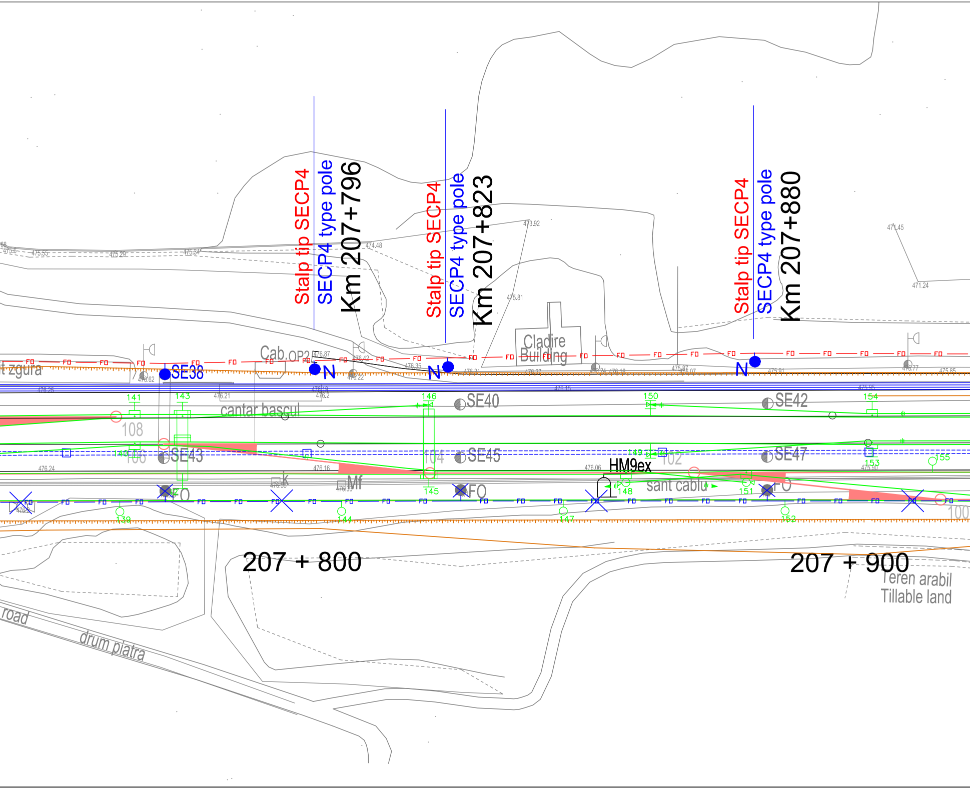

SE542
SE544
SE541
SE543
HM9ex
AND
FO
55
56
57
58
59
60
61
62
63
64
65
66
475.76
475.89
475.79
475.86
206 + 800
Semnal XF
km 206+959.77
Stalp tip SECP4
SECP4 type pole
Km 206+867
Stalp tip 10001
10001 type pole
Km 206+913
N
HM9ex
SE546
SE545
XF
X
SE2
SE1
drum pamant
Teren arabil
206 + 900
Semnal X
km 206+966.49

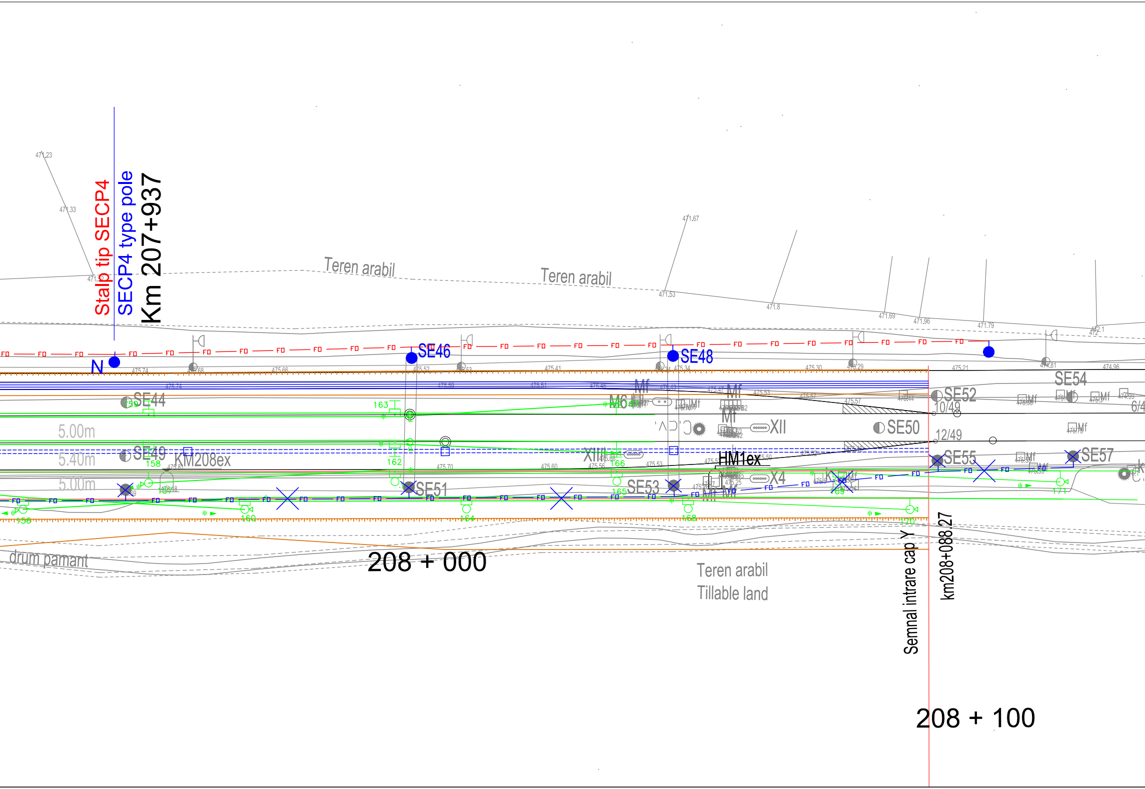

Ax podet metalic D=4.50
Axis of the metalic bridge D=4
km 206+990.29
Tillable land
Teren arabil
Stalp tip SECP4
SECP4 type pole
Km 206+960
N
Stalp tip SECP4
SECP4 type pole
Km 207+017
N
LEA 3 fire
Ax cladire calatori proiectata
New Passanger building axis
Km 207+046
Stalp tip SECP4
SECP4 type pole
Km 207+078
N
Intersectie LEA 3
km 207+146.59
Stalp tip SECP4
SECP4 type pole
Km 207+095
N
FO
HM1ex
SE4
SE6
SE8
SE10
9.50m
9.14m
5.00m
5.00m
KM207ex
SE3
SE5
SE7
SE9
9.81m
10.00m
drum pamant
5.00m
5.00m
Teren arabil
Tillable land
67
68
69
70
72
73
75
76
77
78
207 + 000
207 + 100

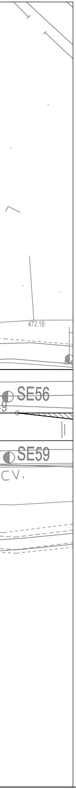

Stalp tip 10001
10001 type pole
Km 207+140
Stalp tip 10001
10001 type pole
Km 207+187
Stalp tip SECP4
SECP4 type pole
Km 207+233
Stalp tip SECP4
SECP4 type pole
Km 207+289
STADION
STADIUM
SOPRON
SHED
drum piatra
Casa
Building
Casa
Building
drum pamant
N
N
N
N
FO
SE11
SE12
SE13
SE14
SE15
SE16
SE17
SE18
SE19
SE20
SE21
SE22
SE23
SE25
M1
M3
Mf
HM2ex
HM3ex
1/49
3/49
5/49
7/49
9/49
11/49
OP1
Cab
Bz
LEA 3 fire
sant cablu
zid
Teren arabil
207 + 200
207 + 300
drum pamant
earth road
Teren arabil
Garaj
Cladire
Cladire
Cladire
Building
drum pamant
earth road
9.10m
5.00m
5.00m
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
128


Stalp tip SECP4
SECP4 type pole
Km 207+349
Stalp tip SECP4
SECP4 type pole
Km 207+409
Ax pasaj pietonal L=1.
Axis pedestrian level crossing
km 207+491.
Stalp tip SECP4
SECP4 type pole
Km 207+466
Stalp tip SECP4
SECP4 type pole
Km 207+523
drum piatra
drum
N
N
N
N
FO
earth road
drum piatra
stone road
Zid
zid
zid
SE24
SE26
SE27
SE28
SE28A
SE29
SE31
SE33
M5
YII
YIII
Mf
Mf
Mf
Y4
HM5ex
sant cablu
sant cablu
cale bet
5.00m
5.00m
97
98
99
100
102
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
118
122
124
126
Cladire
Building
Cladire
Building
Cladire
Building
Magazie
Storehouse
Cladire
Building
Cladire
Cladire
Cladire
Cladire
Cladire
Cladire
Bz
207 + 400
207 + 500
drum piatra
stone road
476.69
476.71
474.96
475.5
475.95
476.18
475.83
475.38
475.7
475.56
474.49


Cutie de jonctiune si fixare terminala
pe stalp Be SE34 existent
Junction box and terminal fastening
on existing SE34 concrete pole
Km 207+666
Stalp tip SECP4
SECP4 type pole
Km 207+579
Ax cladire calatori Statia Apata
Passenger building axis Station Apata
Km 207+698.62
STATIA APATA
APATA STATION
piatra pavaj
cab
Rampa
Cantar
zid
zid
Sp.v.
Cladire
Building
Cladire
Building
wc
zid
stone road
drum piatra
RAMPA
N
SE32
SE34
SE36
SE30
SE35
SE37
SE39
SE41
CT
CT
CM
CM
HM7ex
Mf
Mf
peron
peron
peron
peron
peron
peron
peron
Pasaj pietonal
5.00m
110
depozit
sant cablu
FO
207 + 600
207 + 700
Drum piatra
stone road
Teren arabil
Tillable land
Teren arabil
Tillable land
Post trafo
Cladire
stone road
Cutie de jonctiune in CT
Junction box in manhole
Km 207+644
Demontare cutie de jonctiune
si fixare terminala
Dismounted function box
and terminal fastening
nal L=2.00m
nal L=2.00m
7+701.69
116
117
118
119
120
121
122
124
125
126
128
129
130
131
132
133
134
135
136
137
138


Stalp tip SECP4
SECP4 type pole
Km 207+796
Stalp tip SECP4
SECP4 type pole
Km 207+823
Stalp tip SECP4
SECP4 type pole
Km 207+880
473.92
474.48
475.34
475.29
475.55
475.6
475.81
471.45
471.24
Cladire
Building
Cab.OP2
476.87
476.42
476.35
476.31
476.27
476.24
476.16
475.87
476.07
475.91
475.77
475.85
t zgura
476.62
SE38
N
476.22
N
N
476.25
476.19
476.2
476.21
476.15
475.95
141
143
146
150
154
SE40
SE42
cantar bascul
108
140
106
SE43
104
SE45
149
102
SE47
153
155
476.24
476.16
476.06
HM9ex
475.90
K
476.56
Mf
476.33
FO
145
FO
148
sant cablu
151
FO
FD
476.2
139
144
147
152
100
207 + 800
207 + 900
Teren arabil
Tillable land
road
drum piatra


Stalp tip SECP4
SECP4 type pole
Km 207+937
Teren arabil
Teren arabil
N
SE46
SE48
SE44
SE49
KM208ex
5.00m
5.40m
5.00m
SE51
SE53
XIII
XII
X4
HM1ex
M6
Mf
SE50
SE52
SE54
SE55
SE57
10/49
12/49
6/4
FO
156
158
159
160
162
163
164
165
166
168
169
170
171
drum pamant
208 + 000
Teren arabil
Tillable land
Semnal intrare cap Y
km208+088.27
208 + 100


472.18
SE56
SE59
CV

DESCRIEREA LUCRĂRILOR

Cablul cu fibre optice existent este instalat pe partea dreaptă a căii ferate şi este afectat construirea noilor linii c.f.

Lucrările de protejare a cablului cu fibre optice existent se vor realiza în 2 faze.

Faza 1

A. Capătul X al staţiei

a) Inserarea unui cablu cu fibre optice nou pe partea stângă a căii ferate între semnalul de intrare X (începând de la stâlpul SE471 de pe intervalul Feldioara - Apaţa) şi stâlpul SE34 (de lângă clădirea existent a staţiei).

b) Cablul proiectat se va instala pe stâlpii de beton existenţi şi pe stîlpi noi, după cum urmează:

- pe stâlpii existenţi între SE504 - SE544
- pe stîlpi proiectaţi între SE544 şi SE32
- pe stâlpii existenţi între SE32 - SE34 (de lângă clădirea existentă)
- pe stâlpii existenţi între stâlpii SE34 - SE38
- pe stîlpi proiectaţi între SE38 şi SE46
- pe stâlpii existenţi între stâlpii SE46 - SE48
- pe stâlpi proiectaţi de la stâlpul SE48 spre staţia Racoş.

c) Cablul proiectat va avea o fixare mediană pe stâlpul SE522.

d) Trasa cablului proiectat va ocoli zona unde urmează a se construi noua clădire de călători.

e) Se va reface introducerea subterană a cablului în clădirea existentă a staţiei prin canalizaţia telefonică proiectată.

f) După preluarea comunicaţiilor pe noul cablu, cablul existent de pe partea dreaptă a căii ferate şi introducerea existentă de cablu la clădire se vor demonta.

B. Capătul Y al staţiei

a) Instalarea unui cablu cu fibre optice nou pe partea stângă a căii ferate între stâlpul SE34 (de lângă clădirea existent a staţiei) şi semnalul de intrare Y (continuă până la stâlpul SE129 de pe intervalul Apaţa - Racoş).
Cablul proiectat se instalează pe stâlpi existenţi şi pe stâlpi proiectaţi.

b) După preluarea comunicaţiilor pe noul cablu, cablul existent de pe partea dreaptă a căii ferate se va demonta.

DESCRIPTION OF WORKS

The existing fiber optic cable is installed on the right side of the railway tracks and it is affected by the construction of the new railway tracks.

The protection of the existing fiber optic cable will be performed in 2 phases.

1st Phase

A. X end of station

a) Insertion of new fiber optic cable on the left side of the railway tracks between the X entrance signal (starting from the SE471 pole on the Feldioara - Apaţa section) and the SE34 pole (near the existing station building).

b) The designed cable will be installed on the existing concrete poles and on new poles as follows:

- on existing poles between SE504 - SE544 poles
- on designed poles between SE544 and SE32 poles
- on existing poles between SE32 - SE34 poles (near the existing building)
- on existing poles between SE34 - SE38 poles
- on designed poles between SE38 and SE46 poles
- on existing poles between SE46 - SE48 poles
- on designed poles from SE48 pole towards Racoş station.

c) The designed cable will have a median fastening on SE522 pole.

d) The route of the designed cable will go around the area where it will be constructed the new passenger building.

e) It will be remade the underground introduction of cable in the existing station building through the designed telephone conduit.

f) After taking over of the communications on the new fibre optic cable, the existing cable from the right side of tracks and the existing cable introduction in the building will be dismounted.

B. Y end of station

a) Insertion of new fiber optic cable on the left side of the railway tracks between the SE34 pole (near the existing station building) and the Y entrance signal (continuing up to the SE129 pole on the Apaţa - Racoş section).
The designed cable is installed on the existing and designed poles.

b) After taking over of the communications on the new fibre optic cable, the existing cable from the right side of tracks will be dismounted.

LEGENDA TELECOMUNICATII
TELECOMMUNICATIONS LEGEND:

— FO —	Cablu FO aerian proiectat / Designed aerial OF cable
— FO —	Cablu FO proiectat instalat subteran Designed OF cable installed underground
✕ FO — FO ✕	Demontare cablu FO aerian existent Dismounted existing aerial OF cable
✕ FO — FO ✕	Demontare cablu FO existent subteran Dismounted existing OF cable installed underground
CM ◇	Cameretа de beton proiectata Designed concrete handhole
CT ▭	Camera de tragere existenta / Existing manhole
☒ ✕	Camera de tragere sau Cameretа demontata / Dismounted manhole or handhole
═	Canalizatie telefonica cu tevi PVC Telephone conduit with PVC pipes
N ●	Stalp de beton proiectat pentru sustinerea cablului FO Designed concrete pole for supporting the OF cable
●	Stalp de beton existent care se pastreaza Preserved existing concrete pole
●	Stalp de beton existen - demontat Dismounted existing concrete pole

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

GUVERNUL ROMANIEI
ROMANIAN GOVERNMENT

PROIECT FINANŢAT DE UNIUNEA EUROPEANĂ
EUROPEAN UNION FINANCED PROJECT

CLIENT / CLIENT

CFR

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

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		
Aprobat Approved	Coordonator Secţiune 1 Section 1 Coordinator	C. Gambelli		
Verificat Checked	Expert Verificator Checking Expert	Pino Amodio		

SUBCONTRACTANT / SUBCONTRACTOR

AREX COMPANY

Aprobat Approved	Responsabil Subcontractant Subcontractor Responsible	A.Stanciu - Dinulescu	07.2011	
Întocmit Elaborated	Proiectant Designer	Gabriela Trifan	07.2011	Trifan

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

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

Faza / Phase:
P.Th. / T.D.

Denumire desen / Drawing Title :

Mutarea si protejarea cablului FO existent - Faza 1
Plan de situatie - statia APATA station - Layout Plan
Removal and protection of existing OF cable - 1st Phase

Codificare / Codification System	Scara / Scale 1:500	LOT / LOT	Nr. / No 01 / 02

E A 5 1 | 0 1 | C | 0 9 | L 8 | T C | 0 4 | 5 | 1 | 0 0 1 | 1