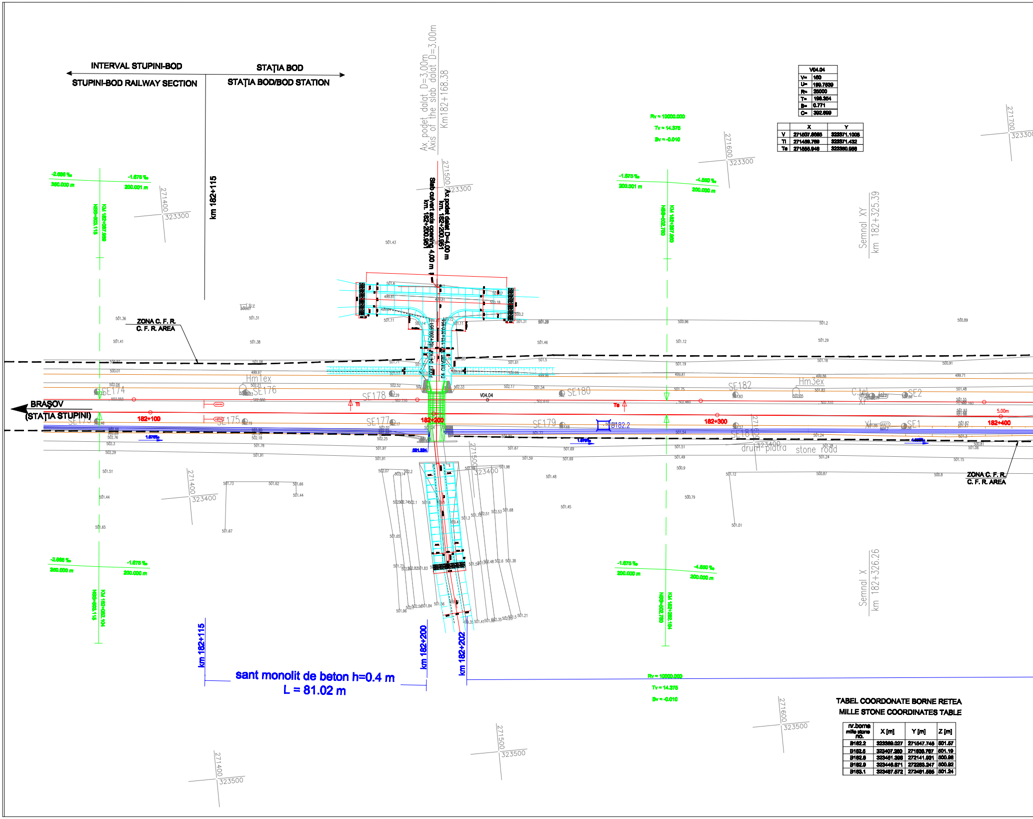

INTERVAL STUPINI-BOD
STUPINI-BOD RAILWAY SECTION
STAŢIA BOD
STAŢIA BOD/BOD STATION
km 182+115
Ax. podet dalat D=3,00m
Axis of the slab dalat D=3,00m
Km182+168.38
Slab culvert axis opening 4.00 m
km. 182+200.961
Ax podet dalat D=4.00 m
km. 182+200.961
ZONA C. F. R.
C. F. R. AREA
BRAŞOV
(STAŢIA STUPINI)
182+100
182+200
182+300
182+400
SE174
SE175
SE176
SE177
SE178
SE179
SE180
SE181
SE182
SE1
SE2
HmTex
Hm3ex
B182.2
V04.04
Ti
Te
5.00m
drum piatra
stone road
Semnal XY
km 182+325.39
Semnal X
km 182+326.26
Rv = 10000.000
Tv = 14.375
Bv = -0.010
-2.666 ‰
-1.675 ‰
-4.550 ‰
300.000 m
200.001 m
200.000 m
271400
271500
271600
271700
323300
323400
323500
km 182+200
km 182+202

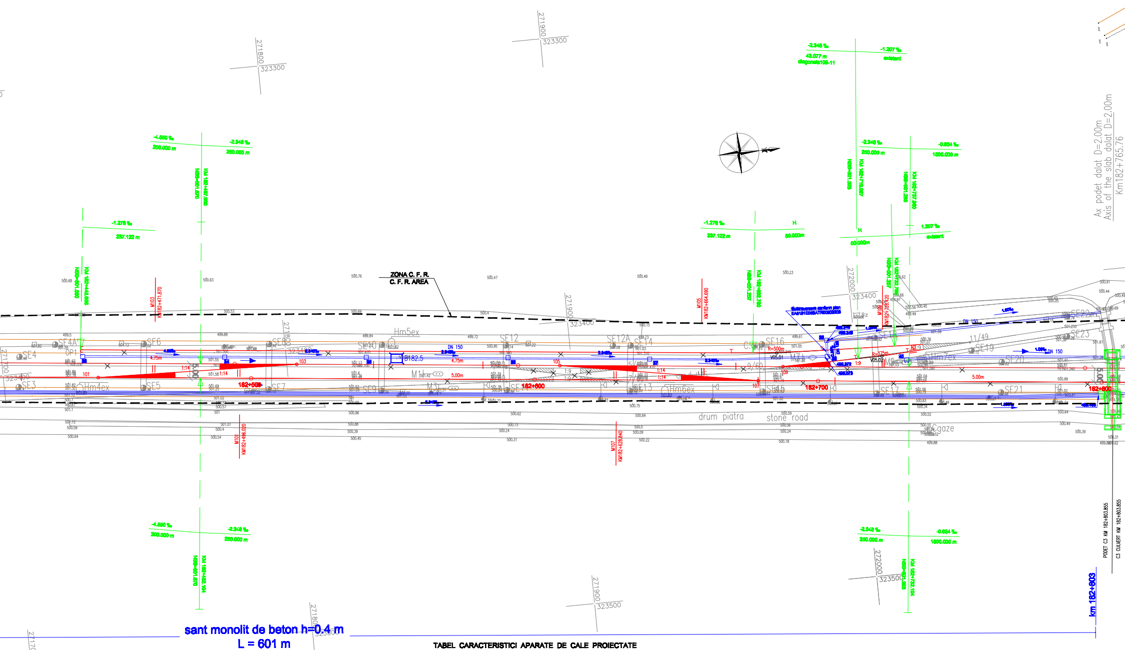
sant monolit de beton h=0.4 m
L = 81.02 m

V04.04	
V=	160
U=	199.7539
R=	25000
T=	198.364
B=	0.771
C=	392.699

	X	Y
V	271507.8066	323371.1006
Ti	271459.769	323371.432
Te	271555.946	323360.956

TABEL COORDONATE BORNE RETEA
MILLE STONE COORDINATES TABLE

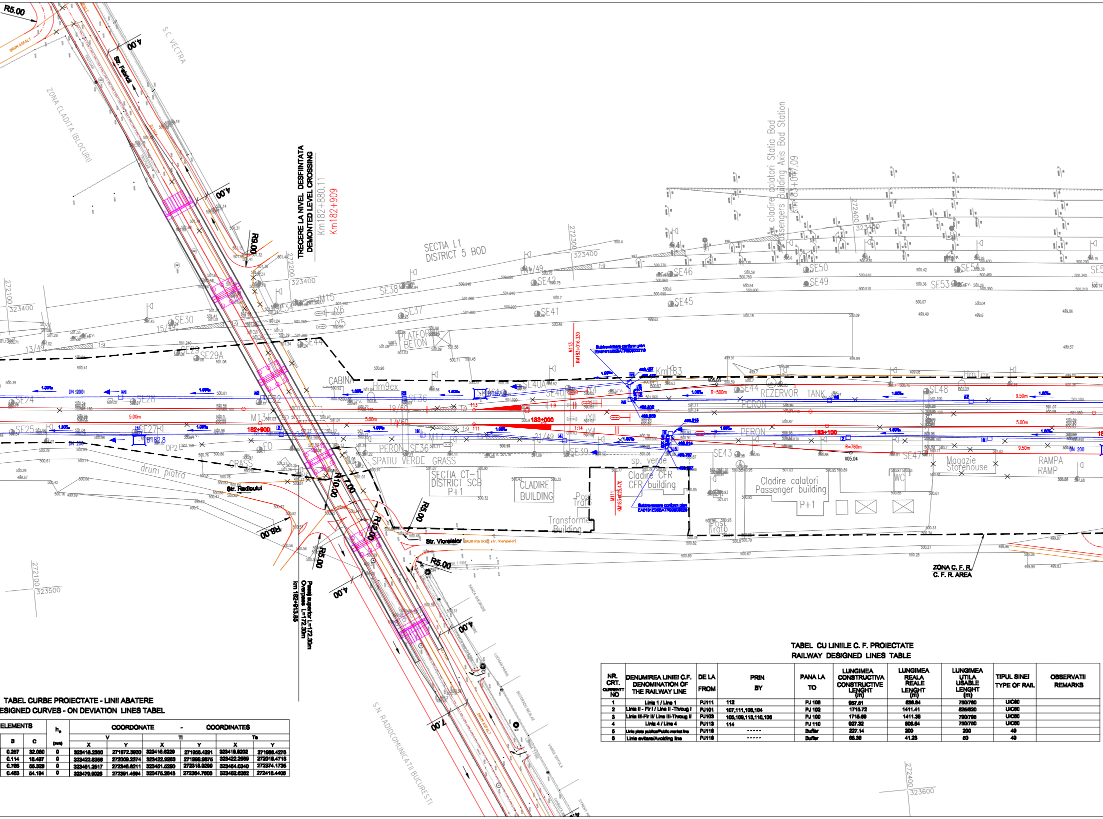
nr.borne mille stone no.	X [m]	Y [m]	Z [m]
B182.2	323369.027	271547.745	501.57
B182.5	323407.280	271836.767	501.19
B182.8	323451.396	272141.931	500.96
B182.9	323446.571	272263.247	500.92
B183.1	323487.572	272461.585	501.24


ZONA C. F. R.
C. F. R. AREA
drum piatra
stone road
182+600
182+700
182+800
B182.5
DN 150
Ax podet dalat D=2.00m
Axis of the slab dalat D=2.00m
Km182+765.76
PODET C3 KM 182+803.855
C3 CULVERT KM 182+803.855
km 182+803
M101 KM182+496.020
M103 KM182+471.670
M105 KM182+664.690
M107 KM182+628.840
sant monolit de beton h=0.4 m
L = 601 m
-4.660 ‰
200.000 m
-2.348 ‰
250.000 m
-1.278 ‰
237.122 m
H
60.000m
-0.634 ‰
1500.000 m
1.207 ‰
existent
43.077 m
diagonala106-11
SE3
SE4
SE4A
SE5
SE6
SE7
SE8
SE9
SE10
SE11
SE12
SE12A
SE13
SE14
SE15
SE16
SE17
SE18
SE19
SE20
SE21
SE22
SE23
Hm4ex
Hm5ex
Hm6ex
Hm7ex
OP1
M1
M3
M7
M9
101
103
105
107
109
111
113
1:14
1:9
4.75m
5.00m
R=500m
R=375m
V05.01
V05.02
gaze
271700
271800
271900
272000
323300
323400
323500

TABEL CARACTERISTICI APARATE DE CALE PROIECTATE
CHARACTERISTICS DESIGNED TURNOUTS TABLE

NR. CRT. NO	NR. P.G. NO	DEVIATIE DEVIATION		TIP TYPE	Tg.	R RADIUS (m)	TIPUL ACELOR TYPE OF SWITCH	PROVENIENTA		COORDONATE - COORDINATES	
		STG. LEFT	DR. RIGHT					NOI NEW	REFOLOSITI COMING FROM DISMANTLING	X	Y
1	101	●		60	1:14	760	flexibil	•		323403.6933	271733.3231
2	103	●		60	1:14	760	flexibil	•		323406.9616	271803.4713
3	105		●	60	1:14	760	flexibil	•		323416.2770	271896.8164
4	107		●	60	1:14	760	flexibil	•		323427.2847	271964.9618
5	109	●		60	1:9	300	flexibil	•		323423.1871	271974.1500
6	111		●	60	1:14	760	flexibil	•		323457.0860	272260.0966
7	113	●		60	1:9	300	flexibil	•		323452.1133	272260.5991

NR.CURBA CURVE NO.	VITEZA SPEED (km/h)	ELEMENTE -		
		U	R	T
V05.01	40	196.9155	500	16.046
V05.02	40	196.6599	375	9.260
V05.03	40	192.9553	500	27.893
V05.04	65	195.4804	760	27.108


R5.00
DRUM ASFALT
4.00
Str. Fabricii
S.C. VECTRA
ZONA CLADITA (BLOCURI)
TRECERE LA NIVEL DESFIINTATA
DEMONTED LEVEL CROSSING
Km182+880.11
Km182+909
R9.00
272200
323400
272100
323400
SECTIA L1
DISTRICT 5 BOD
272300
323400
Ax cladire calatori Statia Bod
Passengers Building Axis Bod Station
Km 183+047.09
272400
323400
SE30
15/49
13/49
1:9
SE29
SE29A
SE38
SE37
M15
Y6
Y5
E34
E44
PLATFORMA
BETON
SE41
SE42
SE45
SE46
SE49
SE50
SE53
SE54
CABINA
Hm9ex
SE24
SE25
SE27
SE28
SE36
SE40
SE40A
SE43
SE44
SE47
SE48
SE39
19/60
17/60
21/49
M13
B182.8
B182.9
OP2
FO
182+900
183+000
183+100
Km183
Hm1ex
R=500m
R=760m
V05.03
V05.04
5.00m
9.50m
DN 200
1:14
1:9
REZERVOR
TANK
PERON
SPATIU VERDE
GRASS
sp. verde
drum piatra
Str. Radioului
SECTIA CT-1
DISTRICT SCB
P+1
CLADIRE
BUILDING
Post
Trafo
Transformer
Building
Cladire CFR
CFR building
Cladire calatori
Passenger building
Magazie
Storehouse
RAMPA
RAMP
WC
KM113
KM183+016.330
KM183+025.470
R8.00
R10.00
R12.00
Str. Viorelelor
DRUM PIATRA
Pasaj superior L=172.30m
Overpass L=172.30m
km 182+913.85
ZONA C. F. R.
C. F. R. AREA
272100
323500
S.N. RADIOCOMUNICATII BUCURESTI
272400
323600

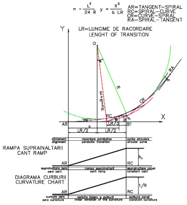
TABEL CU LINIILE C. F. PROIECTATE
RAILWAY DESIGNED LINES TABLE

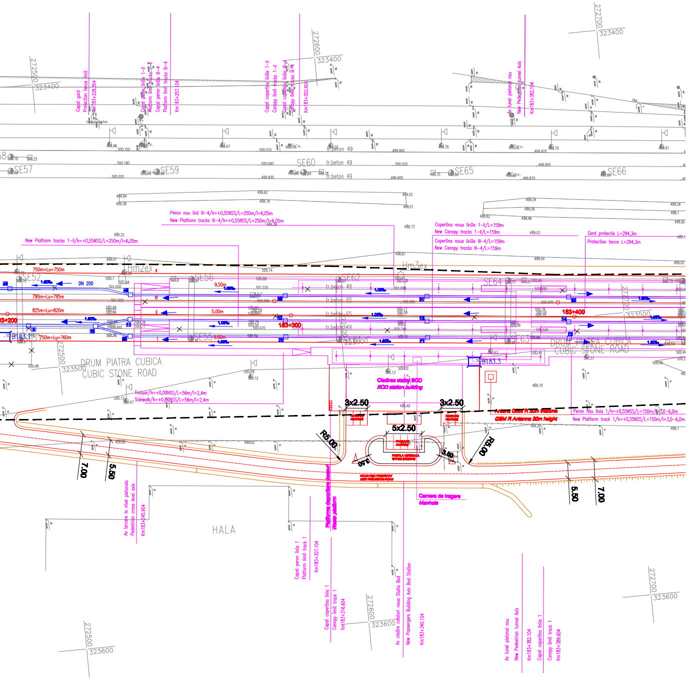
NR. CRT. CURRENTT NO	DENUMIREA LINIEI C.F. DENOMINATION OF THE RAILWAY LINE	DE LA FROM	PRIN BY	PANA LA TO	LUNGIMEA CONSTRUCTIVA CONSTRUCTIVE LENGHT (m)	LUNGIMEA REALA REALE LENGHT (m)	LUNGIMEA UTILA USABLE LENGHT (m)	TIPUL SINEI TYPE OF RAIL	OBSERVATII REMARKS
1	Linia 1 / Line 1	PJ111	112	PJ 106	957.51	836.84	760/760	UIC60	
2	Linia II - Fir I / Line II -Throug I	PJ101	107,111,108,104	PJ 102	1715.72	1411.41	826/820	UIC60	
3	Linia III-Fir II/ Line III-Throug II	PJ103	105,109,113,110,106	PJ 100	1715.68	1411.38	790/796	UIC60	
4	Linia 4 / Line 4	PJ113	114	PJ 110	927.32	806.84	760/760	UIC60	
5	Linia piata publica/Public market line	PJ116	-----	Buffer	227.14	200	200	49	
6	Linie evitare/Avoiding line	PJ116	-----	Buffer	68.36	41.23	50	49	

TABEL CURBE PROIECTATE - LINII ABATERE
ESIGNED CURVES - ON DEVIATION LINES TABEL

ELEMENTS		h_R	COORDONATE - COORDINATES					
			V		Ti		Te	
B	C	(mm)	X	Y	X	Y	X	Y
0.257	32.080	0	323418.2380	271972.3930	323416.6229	271958.4291	323419.8202	271988.4278
0.114	18.497	0	323422.8358	272009.2374	323422.9263	271999.9875	323422.2869	272018.4718
0.766	55.329	0	323451.2617	272346.8211	323451.5290	272318.9299	323454.0340	272374.1736
0.463	54.194	0	323479.9026	272391.4694	323475.2643	272364.7606	323482.6262	272418.4406

1	2


$m = \frac{L^2}{24\,R}$ $y = \frac{x^3}{6\,LR}$
AR=TANGENT-SPIRAL
RC=SPIRAL-CURVE
CR=CURVE-SPIRAL
RA=SPIRAL-TANGENT
Y
LR=LUNGIME DE RACORDARE
LENGHT OF TRANSITION
O
α
R
Ro=R+m
RC
CR
RA
m
X
AR
B1
LR/3
x
LR/2
LR/2
aliniament
alignment
racordare parabolica
parabolic transition
curba circulara
circular curve
RAMPA SUPRAINALTARII
CANT RAMP
h_n
AR
RC
supraînaltare zero
zero cant
rampa supraînaltarii
cant ramp
supraînaltare const
constant cant
DIAGRAMA CURBURII
CURVATURE CHART
1/R
AR
RC
curbura zero
zero curvature
variatia liniara a curburii
linear variation of the curvature
curbura const
constant curvature


272500
323400
272600
323400
272700
323400
Capat gard
Protection fence limit
Km183+228.354
Capat peron liniile 1-II
Platform limit tracks 1-II
Capat peron linii III-4
Platform limit tracks III-4
Km183+257.104
Capat copertina liniile 1-II
Canopy limit tracks 1-II
Capat copertina liniile III-4
Canopy limit tracks III-4
Km183+302.604
Ax tunel pietonal nou
New Pedestrian tunnel Axis
Km183+382.104
SE57
SE59
SE60
SE65
SE66
tr.beton 49
Peron nou linii III-4/h=+0,55NSS/L=250m/l=6,05m
New Platform tracks III-4/h=+0,55NSS/L=250m/l=6,05m
New Platform tracks 1-II/h=+0,55NSS/L=250m/l=6,05m
Copertina noua liniile 1-II/L=159m
New Canopy tracks 1-II/L=159m
Copertina noua liniile III-4/L=159m
New Canopy tracks III-4/L=159m
Gard protectie L=294,3m
Protection fence L=294,3m
HmZex
Hm3ex
750m=Lu=750m
790m=Lu=795m
825m=Lu=820m
750m=Lu=760m
DN 200
SE52
SE56
SE62
SE64
SE55
SE63
9.50m
5.00m
183+200
183+300
183+400
B183.1
B183.3
tr.beton 65
DRUM PIATRA CUBICA
CUBIC STONE ROAD
Trotuar/h=+0,00NSS/L=56m/l=2,4m
Sidewalk/h=+0,00NSS/L=56m/l=2,4m
Cladirea statiei BOD
BOD station building
Antena GSM R 30m inaltime
GSM R Antenna 30m height
Peron nou linia 1/h=+0,55NSS/L=150m/l=3,0-6,0m
New Platform track 1/h=+0,55NSS/L=150m/l=3,0-6,0m
3x2.50
3x2.50
5x2.50
R5.00
R5.00
3.50
3.50
7.00
5.50
5.50
7.00
Camera de tragere
Manhole
Platforma depozitare deseuri
Waste platform
HALA
Ax traversare la nivel pietonala
Pedestrian cross level axis
Km183+245.904
Capat peron linia 1
Platform limit track 1
Km183+307.104
Capat copertina linia 1
Canopy limit track 1
Km183+316.604
Ax cladire calatori noua Statia Bod
New Passengers Building Axis Bod Station
Km183+340.104
Ax tunel pietonal nou
New Pedestrian tunnel Axis
Km183+382.104
Capat copertina liniia 1
Canopy limit track 1
Km183+389.604
272600
323600
272700
323600
272500
323600

SIGHIŞOARA

(STAŢIA FELDIOARA)

LEGENDA
LEGEND

───	Ax linie c.f. existent Axis of existing railway line
─×─×─	Ax linie c.f. demontat Demounted axis line of railway line
─▨	Aparate de cale existente Existing turnouts
×─×─▨	Aparate de cale demontate Demounted turnouts
Name Level	Borne de retea Benchmarks
───	Ax linie c.f. proiectat Axis of designed railway line
┼─◀	Aparate de cale proiectate Designed turnouts
‖	Marca proiectata Designed marck
├─○	Semnal proiectat Designed signal
═══	Peron proiectat Designed platform
┄┄┄	Copertina proiectata Designed canopy
━━━	Sant monolit de beton Prefabricate concrete ditch
▬ ▬ ▬	Dren longitudinal Longitudinal drain
─┴─┴─	Ampriza sapatura/umplutura Excavation/fillings at the work place of natural soil
───	Lucrari de consolidare Consolidatio works
───	Lucrari de drumuri proiectate Designed road works
AD	Aparat de dilatatie-joante de compensare Expancion device-compensating joint

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

GUVERNUL ROMÂNIEI
ROMANIAN GOVERNMENT

PROIECT FINANŢAT DE UNIUNEA EUROPEANĂ
EUROPEAN UNION FINANCED PROJECT

CLIENT / CLIENT

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

CONSULTANT / CONSULTANT

			Data Date	Semnătură Signature
Aprobat Approved	Şef proiect Project manager	R. Liuzza		
Aprobat Approved	Coordonator Secţiune 1 Section 1 Coordinator	C. Gamboli		
Verificat Checked	Expert Verificator Checking Expert	S. MENICHINI		

SUBCONTRACTANT / SUBCONTRACTOR

Aprobat Approved	Responsabil Subcontractant Subcontractor Responsible	A.Stanciu - Dinulescu		
Întocmit Elaborated	Proiectant Designer	F. Mihai	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:
P.Th. / T.D.

Denumire desen / Drawing Title :

Plan de situaţie - Haltă mişcare Bod
Bod Railway Halt - Track Layout on designed plan

Codificare / Codification System	Scara / Scale 1:500	LOT / LOT	Nr. / No
E A 5 1 | 0 1 | C | 0 5 | L 8 | S L | 0 0 | 3 | 0 | 0 0 1 | 3			