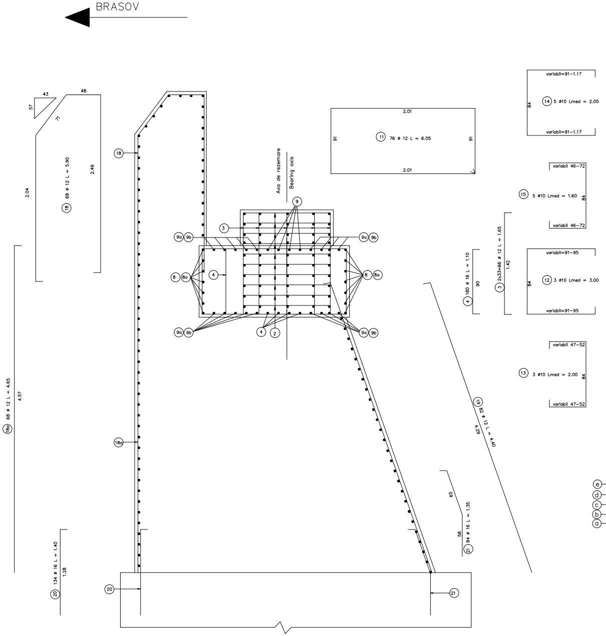
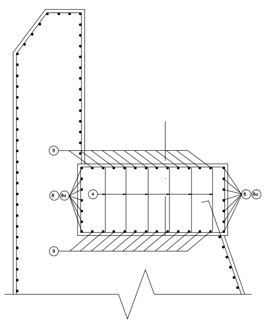
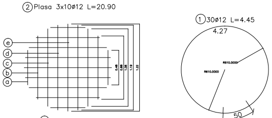
SECTIUNEA A–A
A–A SECTION

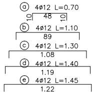

BRASOV
43
57
71
48
18 68 ø 12 L = 5.90
2.04
2.49
18
18a 68 ø 12 L = 4.65
4.57
18a
20 134 ø 16 L = 1.40
1.28
20
21
Axa de rezemare
Bearing axis
9
3
9a 9b
8 8a
4
4 2
2.01
11 76 ø 12 L = 6.05
91
4 180 ø 16 L = 1.10
90
3 2x33=66 ø 12 L = 1.65
1.42
variabil=91–1.17
14 5 ø10 Lmed = 2.05
84
variabil 46–72
15 5 ø10 Lmed = 1.60
variabil=91–95
12 3 ø10 Lmed = 3.00
variabil 47–52
13 3 ø10 Lmed = 2.00
19 82 ø 12 L = 4.40
4.29
65
21 84 ø 16 L = 1.35
58

SECTIUNEA B–B
B–B SECTION



C U Z I N E T

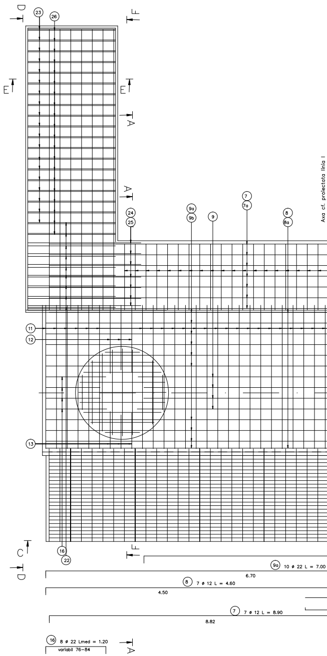

2 Plasa 3x10ø12 L=20.90
e
d
c
b
a
0.48
0.88
1.08
1.19
1.22
1 30ø12 L=4.45
4.27
R610.0000
R610.0000
50


a 4ø12 L=0.70
10
48
10
b 4ø12 L=1.10
89
c 4ø12 L=1.30
1.08
d 4ø12 L=1.40
1.19
e 4ø12 L=1.45
1.22

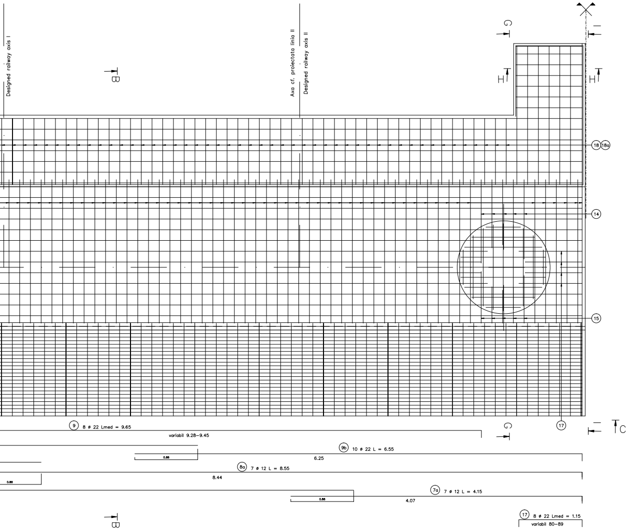
EXTRAS DE ARMATURA PENTRU O PLASA

EXTRAS DE ARMATURA PENTRU O PLASA

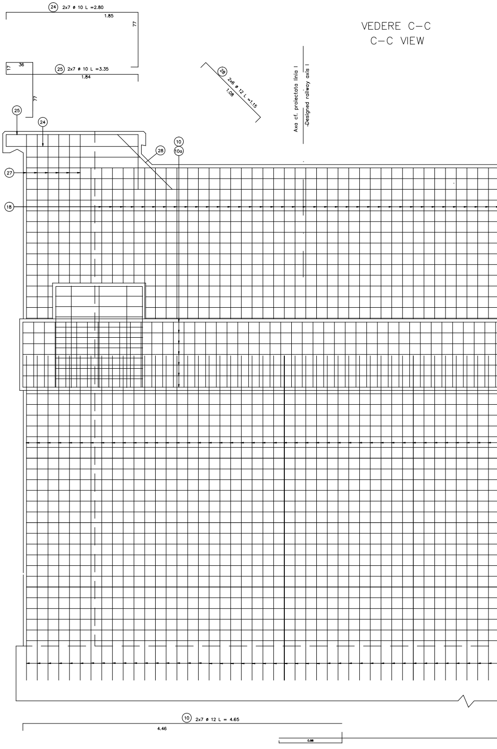
MARCA	DIAMETRU	BUC. ASEMENEA	LUNGIME PE BUCATA	LUNGIME/ø
				PC 52
				ø12
a	12	4	0.70	2.80
b	12	4	1.10	4.40
c	12	4	1.30	5.20
d	12	4	1.40	5.60
e	12	2	1.45	2.90
LUNGIMI PE DIAMETRU (m)				20.90

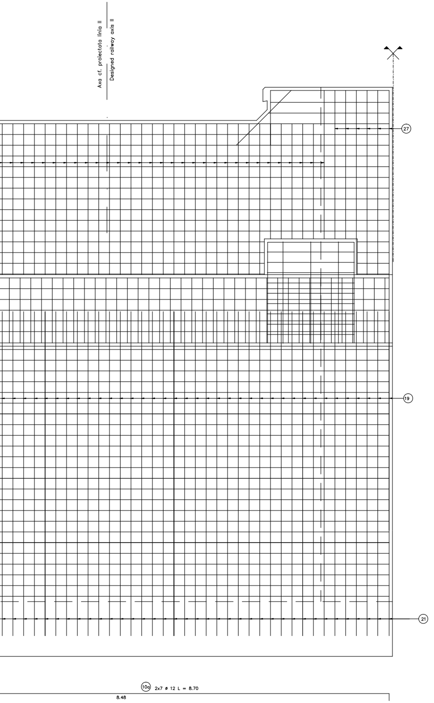

D
23
26
F
E
E
A
A
Axa cf. proiectata linia I
24
25
9a
9b
9
7
7a
8
8a
11
12
13
C
16
22
F
D
9a 10 ø 22 L = 7.00
6.70
8 7 ø 12 L = 4.60
4.50
7 7 ø 12 L = 8.90
8.82
16 8 ø 22 Lmed = 1.20
variabil 76–84
A

VEDERE IN PLAN
PLAN VIEW

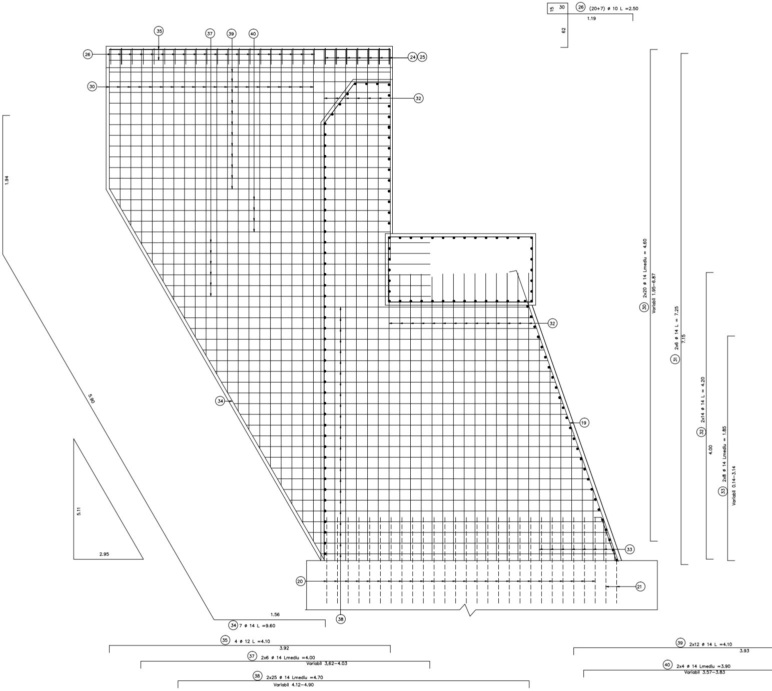

Designed railway axis I
Axa cf. proiectata linia II
Designed railway axis II
B
G
H
H
I
18 18a
14
15
17
C
9 8 ø 22 Lmed = 9.65
variabil 9.28–9.45
9b 10 ø 22 L = 6.55
0.88
6.25
8a 7 ø 12 L = 8.55
0.88
8.44
7a 7 ø 12 L = 4.15
0.88
4.07
17 8 ø 22 Lmed = 1.15
variabil 80–89
B

VEDERE C–C
C–C VIEW

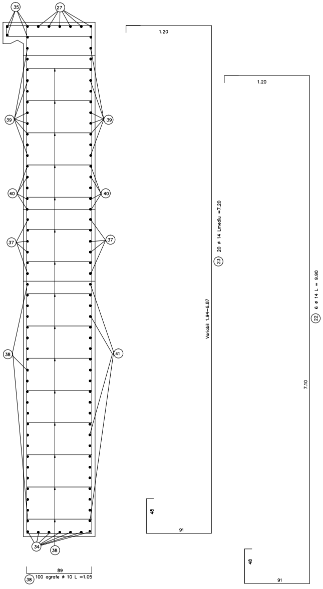

24 2x7 ø 10 L =2.80
1.85
77
36
17
25 2x7 ø 10 L =3.35
1.84
77
28 2x6 ø 12 L =1.15
1.08
Axa cf. proiectata linia I
Designed railway axis I
25
24
28
10
10a
27
18
10 2x7 ø 12 L = 4.65
4.46
0.88


Axa cf. proiectata linia II
Designed railway axis II
27
19
21
10a 2x7 ø 12 L = 8.70
8.48

VEDERE D–D
D–D VIEW

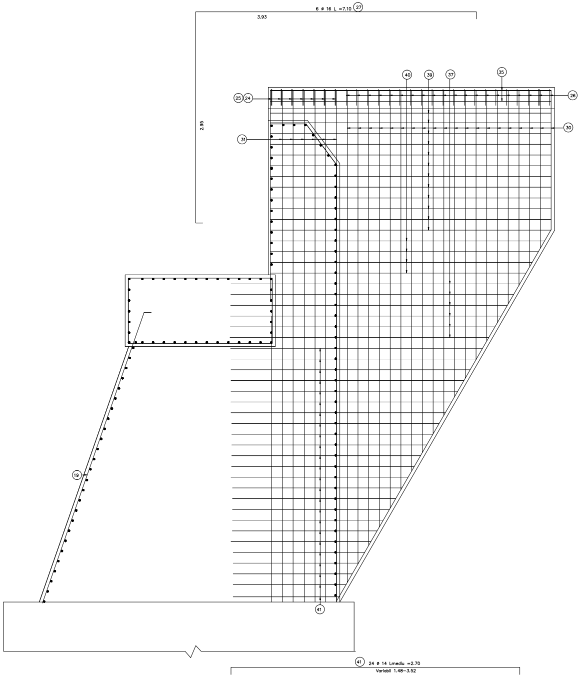

15
30
62
26 (20+7) ø 10 L =2.50
1.19
35
37
39
40
26
24
25
30
32
1.94
5.60
32
34
19
5.11
2.95
33
20
21
38
1.56
34 7 ø 14 L =9.60
35 4 ø 12 L =4.10
3.92
37 2x6 ø 14 Lmediu =4.00
Variabil 3,62–4.03
38 2x25 ø 14 Lmediu =4.70
Variabil 4.12–4.90
30 2x20 ø 14 Lmediu = 4.60
Variabil 1.95–6.87
31 2x6 ø 14 L = 7.25
7.15
32 2x14 ø 14 L = 4.20
4.00
33 2x8 ø 14 Lmediu = 1.85
Variabil 0.14–3.14
39 2x12 ø 14 L =4.10
3.93
40 2x4 ø 14 Lmediu =3.90
Variabil 3.57–3.83

SECTIUNEA E-E
E-E SECTION



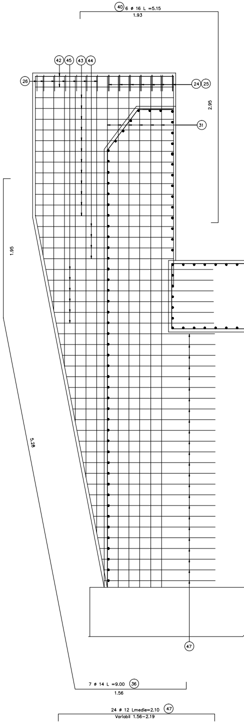
35
27
39
39
40
40
37
37
38
41
34
38
89
38 100 agrafe ø 10 L =1.05
1.20
Variabil 1.94–6.87
23 20 ø 14 Lmediu =7.20
48
91
1.20
7.10
22 6 ø 14 L = 9.90
48
91

VEDERE F-F
F-F VIEW

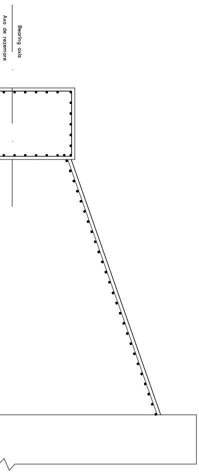


6 ø 16 L =7.10 27
3.93
2.95
40
39
37
35
25
24
26
30
31
19
41
41 24 ø 14 Lmediu =2.70
Variabil 1.48–3.52

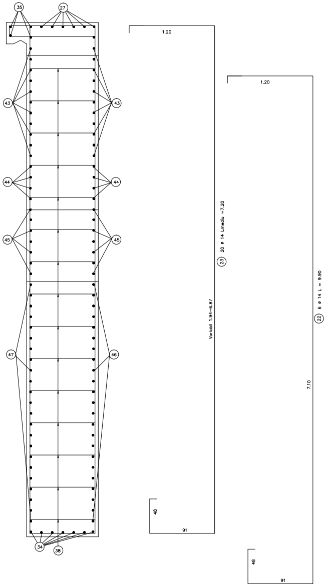
VEDERE G-G
G-G VIEW



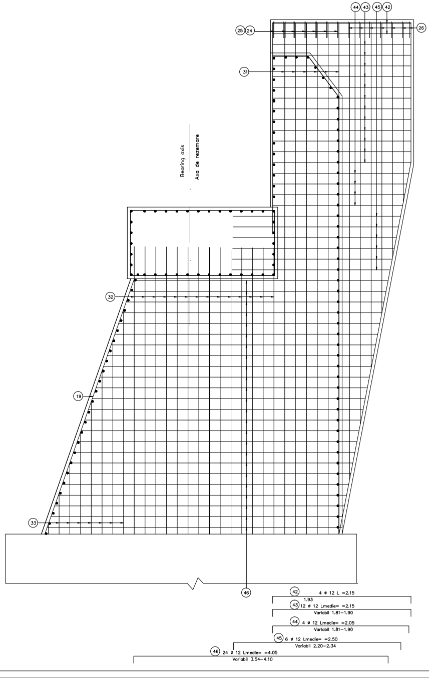
40 6 ø 16 L =5.15
1.93
42
45
43
44
26
24
25
2.95
31
1.95
5.28
47
7 ø 14 L =9.00 36
1.56
24 ø 12 Lmedie=2.10 47
Variabil 1.56–2.19


Bearing axis
Axa de rezemare

SECTIUNEA H–H
H–H SECTION


35
27
43
43
44
44
45
45
47
46
34
38
1.20
Variabil 1.94–6.87
23 20 ø 14 Lmediu =7.20
48
91
1.20
22 6 ø 14 L = 9.90
7.10
48
91

VEDERE I–I
I–I VIEW


44
43
45
42
25
24
26
31
Bearing axis
Axa de rezemare
32
19
33
46

42 4 ø 12 L =2.15
1.93
43 12 ø 12 Lmedie= =2.15
Variabil 1.81–1.90
44 4 ø 12 Lmedie= =2.05
Variabil 1.81–1.90
45 6 ø 12 Lmedie= =2.50
Variabil 2.20–2.34
46 24 ø 12 Lmedie= =4.05
Variabil 3.54–4.10

EXTRAS DE ARMARE

REINFORCEMENT TABLE

Marca	Ø Diametru	Bucati asemenea	Lungimea (m) /bucata	Lungimi/diametre				
				S355			S345	
				Ø 10	Ø 12	Ø 14	Ø 16	Ø 22
1	12	30	4.45		133.50			
2	12	2x30	20.90		1254.00			
3	12	2x33	1.65		108.90			
4	12	180	1.10		198.00			
5								
6								
7	12	7	8.9		62.30			
7a	12	7	4.15		29.05			
8	12	7	4.60		32.20			
8a	12	7	8.55		59.85			
9	22	8	9.60					76.80
9a	22	9	7.00					63.00
9b	22	9	6.55					58.95
10	12	14	4.65		65.10			
10a	12	14	8.70		121.80			
11	10	3	3.00	9.00				
12	12	76	6.05		459.80			
13	10	3	2.00	6.00				
14	10	5	2.05	10.25				
15	10	5	1.60	8.00				
16	22	8	1.20					9.60
17	22	8	1.15					9.20
18	12	68	5.90		401.20			
18a	12	68	4.65		316.20			
19	12	82	4.40		360.80			
20	12	132	1.40		184.80			
21	12	84	1.35		113.40			
22	14	6	9.90			59.40		
23	14	20	7.20			144.00		
24	10	14	2.80	39.20				
25	10	14	3.35	46.90				
26	10	20+7	2.50	67.50				
27	16	6	7.10				42.60	
28	12	12	1.15		13.80			
29	10	100	1.05	105.00				
30	14	40	4.60			184.00		
31	14	24	7.25			174.00		
32	14	28	4.20			117.60		
33	14	16	1.85			29.60		
34	14	7	9.60			67.20		
35	12	4	4.10		16.40			
36	14	7	9.00			63.00		
37	14	12	4.00			48.00		
38	14	50	4.70			235.00		
39	14	24	4.10			98.40		
40	16	6	5.15				30.90	
41	14	24	2.70			64.80		
42	12	4	2.15		8.60			
43	12	12	2.15		25.80			
44	12	4	2.05		8.20			
45	12	6	2.50		15.00			
46	12	24	4.05		97.20			
47	12	24	2.10		50.40			
	LUNGIMI / Ø			291.85	4136.30	1285.00	73.5	217.55
	GREUTATI / ML (kg)			0.617	0.888	1.210	1.578	2.984
	GREUTATI / Ø			180.07	3673.03	1554.85	115.98	649.17
	GREUTATI PE TIP DE OTEL			6173.11				
		x	110%	6790.42				
				6800.00				

Greutatea rotunjita pentru culeia dubla Brasov (kg)= 2x6800=13600

Greutatea rotunjita pentru 2 culei duble Brasov+Sighisoara(kg) =2x13600=27200

Beton armat/Reinforced concrete:	– C35/45 bancheta, zid de garda/ bench,wall guard – C25/30 elevatie, ziduri intoarse/ elevation, reverted walls
Armatura / reinforcement:	–S355 (PC 52; ø10–ø14) –S345 (PC 52; ø16)
Strat de acoperire/concrete cover	– min. 4cm expunere in aer/air exposed

NOTA/NOTE

Pentru mentinerea pozitiei corecte in timpul betonarii, se vor monta distantieri minim 4buc./m^2. Distantierii trebuie legati cu sarma de carcasa de armatura.

In order to maintain the correct position during concreting, minimum 4pcs./m^2 distance pieces shall be mounted. The distance pieces shall be connected to the reinforcing framework, using wire.

Se interzice copierea, difuzarea, imprumutarea sau utilizarea in alte scopuri, fara permisiunea AREX Lider Company ca proprietar al desenului. This drawing is forbidden to be copied, lent or used in other purposes than those previously approved by AREX Lider Company as its owner.

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

GUVERNUL ROMANIEI
ROMANIAN GOVERNMENT

PROIECT FINANȚAT DE UNIUNEA EUROPEANĂ
EUROPEAN UNION FINANCED PROJECT

CLIENT / CLIENT

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	Semnături Signature
Aprobat Approved	Şef proiect Project manager	R. Liuzza		
Aprobat Approved	Coordonator Secţiune 1 Section 1 Coordinator	C. Gambelli		
Verificat Checked	Expert Cheie Checking Expert	V. Kallidromitis		

SUBCONTRACTANT / SUBCONTRACTOR

AREX Lider COMPANY

Aprobat Approved	Responsabil Subconsultant Subconsultant Responsible	A.Stanciu - Dinulescu	02.2012	
Întocmit Elaborated	Proiectant Designer	Ioan Rentea	03.2012	

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 :

INTERVAL RACOS–CATA
POD/BRIDGE Km.233+919.686 L=35.00m
PLAN ARMARE CULEI
ABUTMENTS REINFORCEMENT RAILWAY TRACK

Codificare / Codification System	Scara / Scale 1:20	LOT / LOT	Nr. / No 01 / 01
EA51 01 E 12 BC PV 02 5 2 006 0			

594 X 4500