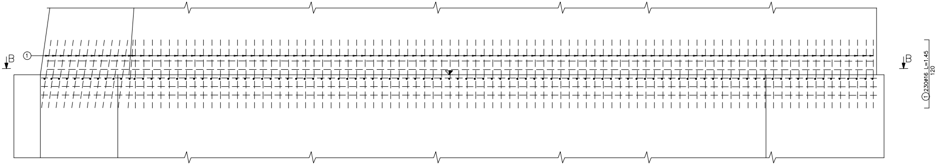
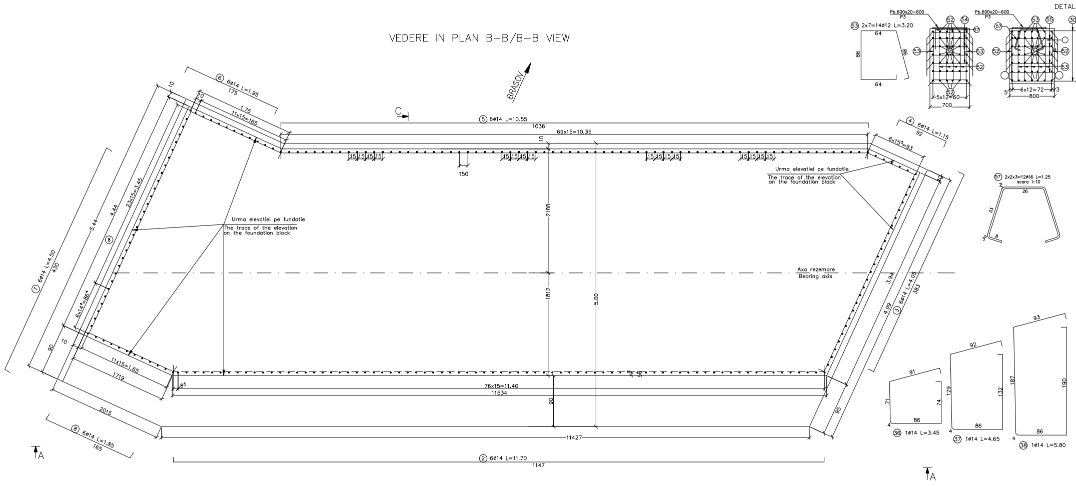
ARMAREA ROSTULUI ELEVATIE FUNDATIE/REINFORCEMENT RAFT ELEVATION FOUNDATION

VEDERE DIN FATA A–A CULEEA BRASOV (BUCURESTI)
BRASOV (BUCURESTI) ABUTMENT A–A VIEW

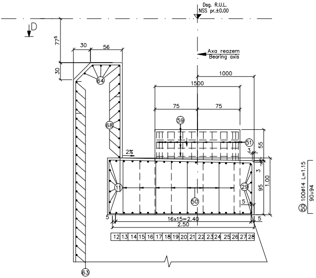

B
①
B
① 230ø16 L=1.45
120

VEDERE IN PLAN B–B/B–B VIEW


BRASOV
C
⑥ 6ø14 L=1.95
175
1.75
11x15=165
10
⑤ 6ø14 L=10.55
1036
69x15=10.35
10
15 15 15 15
150
④ 6ø14 L=1.15
92
6x15⁵=93
Urma elevatiei pe fundatie
The trace of the elevation on the foundation block
2188
1812
5.00
Axa rezemare
Bearing axis
⑦ 6ø14 L=4.50
430
5.44
4.44
23x15=3.45
⑧
6x14⁴=86⁴
90
10
11x15=1.65
1719
2015
⑧ 6ø14 L=1.85
165
8⁵
76x15=11.40
11534
90
11427
② 6ø14 L=11.70
1147
3.94
③ 6ø14 L=4.05
383
4.99
95
A
A
DETAL
Pb.600x20–600
P3
52
54
57
53
55
30
⑤3 2x7=14ø12 L=3.20
64
86
98
64
5x12=60
700
6x12=72
5
3
800
⑤7 2x2x3=12ø16 L=1.25
scara 1:10
26
33
8
91
71
74
86
4
③6 1ø14 L=3.45
92
129
132
86
4
③7 1ø14 L=4.65
93
187
190
86
4
③8 1ø14 L=5.80

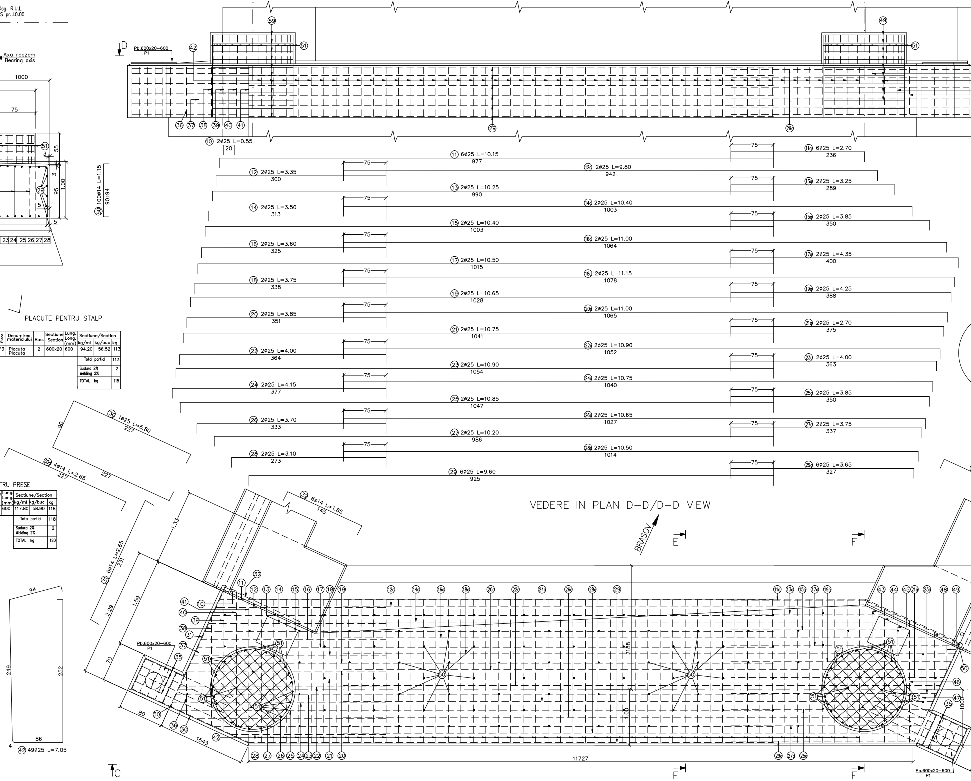
ARMAREA CUZINETILOR SI A BANCHETEI CUZINETILOR/REINFORCEMENT RAFT ELEVATION FOUNDATION

SECTIUNE E – E
SECTION E – E

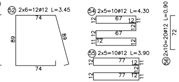

Dsg. R.U.L.
NSS pr.±0.00
D
77.5
30
30
56
Axa reazem
Bearing axis
1000
1500
75
75
(64)
(68)
(59)
(51)
2%
3
55
3
95
1.00
(11)
(29)
(50)
5
5
5
16x15=2.40
2.50
12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
(63)
(50) 100ø14 L=1.15
90÷94

VEDERE DIN FATA C–C CULEEA BRASOV (BUCURESTI)
BRASOV (BUCURESTI) ABUTMENT C–C VIEW

VEDERE IN PLAN D–D/D–D VIEW


Axa reazem
Axa reazem
D
Pb.600x20–600
P1
(42)
(59)
(51)
(49)
(51)
(36) (37) (38) (39) (40) (41)
(29)
(29a)
(10) 2ø25 L=0.55
20
(11) 6ø25 L=10.15
977
(11a) 6ø25 L=2.70
236
(12) 2ø25 L=3.35
300
(12a) 2ø25 L=9.80
942
(13) 2ø25 L=10.25
990
(13a) 2ø25 L=3.25
289
(14) 2ø25 L=3.50
313
(14a) 2ø25 L=10.40
1003
(15) 2ø25 L=10.40
1003
(15a) 2ø25 L=3.85
350
(16) 2ø25 L=3.60
325
(16a) 2ø25 L=11.00
1064
(17) 2ø25 L=10.50
1015
(17a) 2ø25 L=4.35
400
(18) 2ø25 L=3.75
338
(18a) 2ø25 L=11.15
1078
(19) 2ø25 L=10.65
1028
(19a) 2ø25 L=4.25
388
(20) 2ø25 L=3.85
351
(20a) 2ø25 L=11.00
1065
(21) 2ø25 L=10.75
1041
(21a) 2ø25 L=2.70
375
(22) 2ø25 L=4.00
364
(22a) 2ø25 L=10.90
1052
(23) 2ø25 L=10.90
1054
(23a) 2ø25 L=4.00
363
(24) 2ø25 L=4.15
377
(24a) 2ø25 L=10.75
1040
(25) 2ø25 L=10.85
1047
(25a) 2ø25 L=3.85
350
(26) 2ø25 L=3.70
333
(26a) 2ø25 L=10.65
1027
(27) 2ø25 L=10.20
986
(27a) 2ø25 L=3.75
337
(28) 2ø25 L=3.10
273
(28a) 2ø25 L=10.50
1014
(29) 6ø25 L=9.60
925
(29a) 6ø25 L=3.65
327
75
(30) 1ø25 L=5.80
227
90
227
(30a) 4ø14 L=2.65
227
(31) 6ø14 L=2.65
231
(32) 6ø14 L=1.65
145
1.33
1.59
2.29
70
80
1543
11727
2188
1.00
1000
BRASOV
E
F
E
F
C
Pb.600x20–600
P1
Pb.600x20–600
P1
(32) (11) (12) (13) (14) (15) (16) (17) (18) (19)
(12a) (14a) (16a) (18a) (20a) (22a) (24a) (26a) (28a) (29)
(11a) (13a) (15a) (17a) (19a)
(43) (44) (45) (21a) (23a) (48) (49)
(41) (10) (40) (39) (38) (31) (37) (35)
(51)
(50)
(36) (30) (42)
(28) (27) (26) (25) (24) (23) (22) (21) (20)
(29a) (27a) (25a)
(46) (47) (35)

IU DE CUZINET PENTRU STALPUL DE ELECTRIFICARE

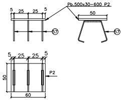

(52) 2x6=12ø12 L=3.45
74
89
68
74
(54) 2x5=10ø12 L=4.30
67
12
12
11
12
67
12
11
12
12
(55) 2x5=10ø12 L=3.90
77
12
12
11
12
77
12
12
11
(56) 2x10=20ø12 L=0.90
72

PLACUTE PENTRU STALP

Poz. Piece	Denumirea materialului	Buc.	Sectiune Section	Lung. Long. (mm)	Sectiune/Section kg/ml	kg/buc	kg
P3	Placuta Placuta	2	600x20	600	94.20	56.52	113
					Total partial		113
					Sudura 2% Welding 2%		2
					TOTAL kg		115

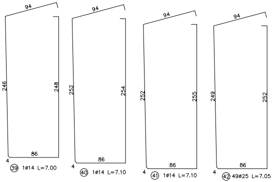
DETALIUL "a"

placuta pentru presa
scara 1:25


5
25
25
5
Pb.500x30–600 P2
50
(57)
(57)
5
25
25
5
50
P2
60

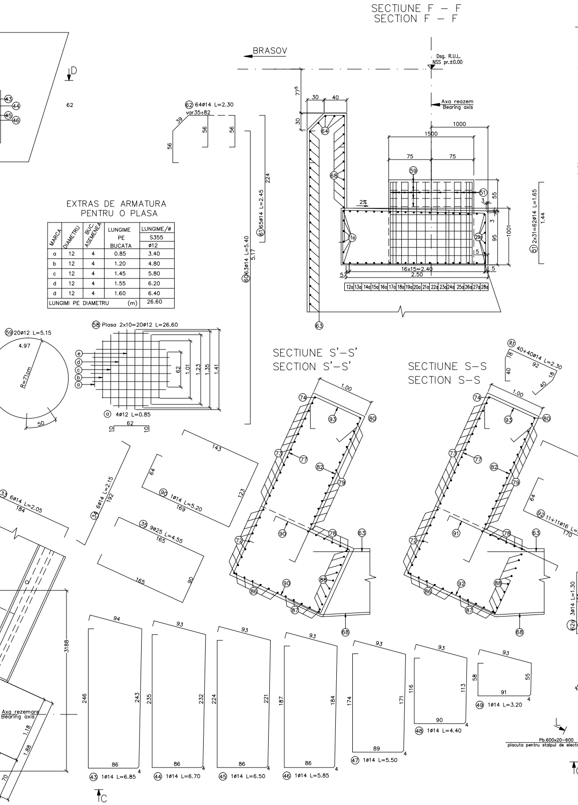
PLACUTE PENTRU PRESE

Poz. Piece	Denumirea materialului	Buc.	Sectiune Section	Lung. Long. (mm)	Sectiune/Section kg/ml	kg/buc	kg
P1	Placuta Placuta	2	500x30	600	117.80	58.90	118
					Total partial		118
					Sudura 2% Welding 2%		2
					TOTAL kg		120


94
246
248
86
4
(39) 1ø14 L=7.00
94
252
254
86
4
(40) 1ø14 L=7.10
94
252
255
86
4
(41) 1ø14 L=7.10
94
249
252
86
4
(42) 49ø25 L=7.05

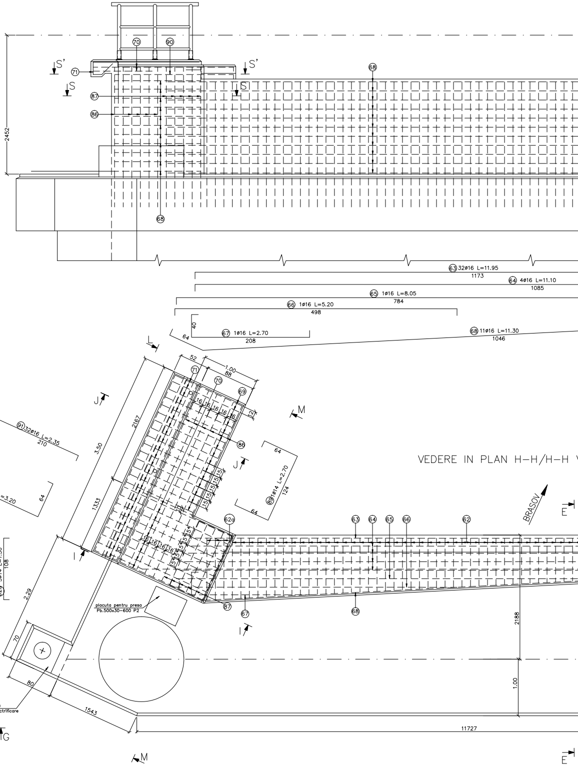
ARMAREA CUZINETILOR SI A BANCHETEI CUZINETILOR/RE

VEDERE DIN FATA G–G CULEEA BRAS
BRASOV (BUCURESTI) ABUTMENT


SECTIUNE F – F
SECTION F – F
BRASOV
Dsg. R.U.L.
NSS pr.±0.00
Axa reazem
Bearing axis
77⁵
30
40
1500
1000
75
75
59
51
64
68
2%
11a
29a
55
3
95
1001
5
16x15=2.40
2.50
12a 13a 14a 15a 16a 17a 18a 19a 20a 21a 22a 23a 24a 25a 26a 27a 28a
63
62 64ø14 L=2.30
var35÷82
39
56
60 63ø14 L=5.40
5.17
61 65ø14 L=2.45
224
51 2x31=62ø14 L=1.65
1.44
D
43
44
45
46
62
59 20ø12 L=5.15
4.97
R=71cm
50
58 Plasa 2x10=20ø12 L=26.60
e
d
c
b
a
62
1.01
1.23
1.35
1.41
a 4ø12 L=0.85
10
62
10
SECTIUNE S'–S'
SECTION S'–S'
SECTIUNE S–S
SECTION S–S
93 40+40ø14 L=2.30
92
18
40
1.00
74
80
93
73
77
82
79
72
90
78
63
88
86
87
68
91
92
91 32ø16 L=2.35
210
92 11+11ø16 L=3.20
170
64
62a 3ø14 L=1.30
108
33 6ø14 L=2.05
184
34 6ø14 L=2.15
192
90 1ø14 L=5.20
169
143
123
35 9ø25 L=4.55
165
90
3188
Axa rezemare
Bearing axis
1.18
1.88
70
94
246
243
86
43 1ø14 L=6.85
93
235
232
44 1ø14 L=6.70
224
221
45 1ø14 L=6.50
187
184
46 1ø14 L=5.85
174
171
89
47 1ø14 L=5.50
116
113
90
48 1ø14 L=4.40
58
55
91
49 1ø14 L=3.20
4
C
L
Pb.600x20–600
placuta pentru stalpul de electrificare

EXTRAS DE ARMATURA PENTRU O PLASA

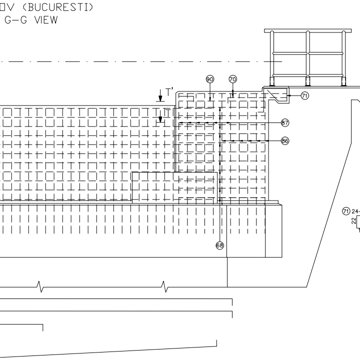
MARCA	DIAMETRU	BUC. ASEMENEA	LUNGIME PE BUCATA	LUNGIME/ø S355 ø12
a	12	4	0.85	3.40
b	12	4	1.20	4.80
c	12	4	1.45	5.80
d	12	4	1.55	6.20
d	12	4	1.60	6.40
LUNGIMI PE DIAMETRU (m)				26.60


70
90
71
S'
S
87
86
68
2452
63 32ø16 L=11.95
1173
64 4ø16 L=11.10
1085
65 1ø16 L=8.05
784
66 1ø16 L=5.20
498
67 1ø16 L=2.70
208
40
64
68 11ø16 L=11.30
1046
L
52
1.00
88
71
70
69
12
16
15
15
86
M
J
2167
3.50
1333
I
2.29
62a
89 1ø14 L=2.70
124
64
VEDERE IN PLAN H–H/H–H
BRASOV
E
63
64
65
66
62
87
67
68
placuta pentru presa
Pb.500x30–600 P2
70
80
1543
2188
1.00
11727
G
M

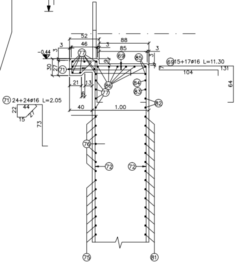
INFORCEMENT RAFT ELEVATION FOUNDATION

OV (BUCURESTI)

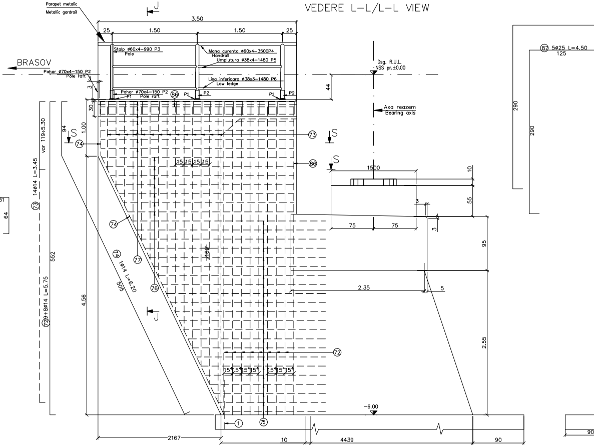
G-G VIEW


H
T'
T
90
70
71
87
86
68

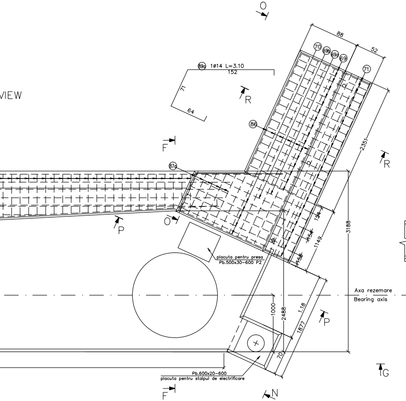
SECTIUNE J-J
SECTION J-J


-0.44
52
46
3
88
85
3
77
69
85
71
30
27
21
13
6
86
77
84
83
82
40
1.00
76
72
72
75
81
69 15+17ø16 L=11.30
104
131
64
71 24+24ø16 L=2.05
44
22
15
73

VEDERE L-L/L-L VIEW

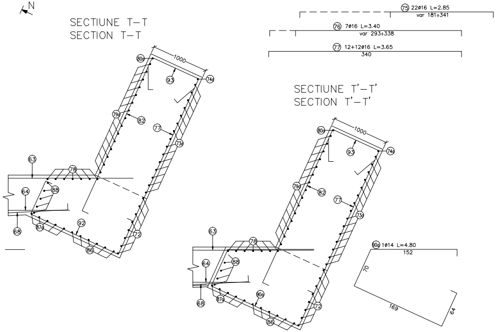

Parapet metalic
Metallic gardrail
J
3.50
25
1.50
1.50
25
Stalp ø60x4-990 P3
Pole
Mana curenta ø60x4-3500P4
Handrail
Umplutura ø38x4-1480 P5
BRASOV
Pahar ø70x4-150 P2
Pole raft
Dsg. R.U.L.
NSS pr.±0.00
Lisa inferioara ø38x3-1480 P6
Low ledge
Pahar ø70x4-150 P2
P1 Pole raft
86
P1
P2
P1
P2
44
3
30
Axa reazem
Bearing axis
1.00
94
S
74
73
S
S
86
var 119÷5.30
73 14ø14 L=3.45
15 15 15 15
1500
10
55
3
3
75
75
552
74
74 1ø14 L=6.20
505
77
160
95
76
72 9+8ø14 L=5.75
4.56
J
2.35
5
72
2.55
15 15 15 15
15 15 15
-6.00
1
75
2167
10
4439
90
87 5ø25 L=4.50
125
290
290
90

VIEW

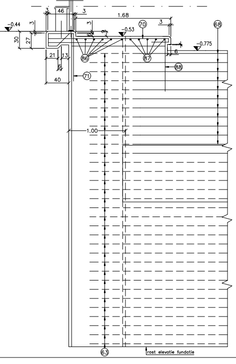

O
N
88
52
70
69b
69a
69
71
89a 1ø14 L=3.10
152
71
64
R
86
2351
F
R
87a
3188
P
O
154
1149
158
placuta pentru presa
Pb.500x30-600 P2
Axa rezemare
Bearing axis
1000
2488
1.18
P
1877
70
Pb.600x20-600
placuta pentru stalpul de electrificare
G
F
N

SECTIUNE T-T
SECTION T-T

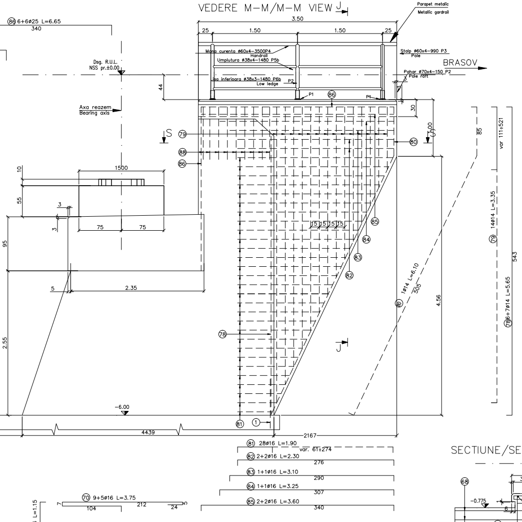
SECTIUNE T'-T'
SECTION T'-T'


75 22ø16 L=2.85
var 181÷341
76 7ø16 L=3.40
var 293÷338
77 12+12ø16 L=3.65
340
80a
1000
74a
93
79a
82
77
73a
63
78
64
88
92
72
68
87a
86
80a
1000
74a
93
79a
82
77
73a
63
78
64
88
90a
72
68
87a
86
90a 1ø14 L=4.80
152
70
169
64

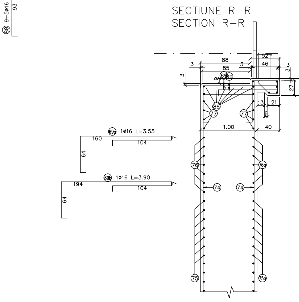
SECTIUNE/SECTION I-I


3
46
3
1.68
-0.44
3
3
-0.53
70
3
68
30
27
-0.775
6
21
13
86
87
88
6
40
71
1.00
63
rost elevatie fundatie

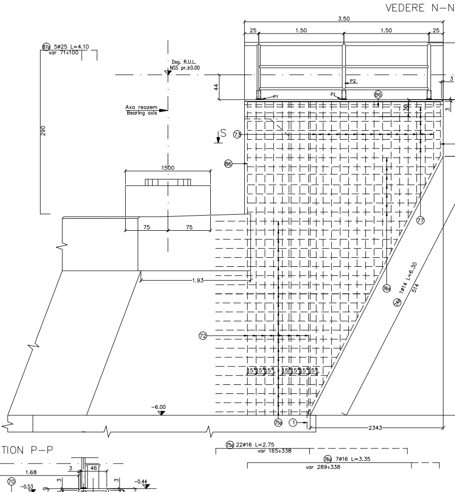
VEDERE M-M/M-M VIEW


Parapet metalic
Metallic gardrail
3.50
25
1.50
1.50
25
Mana curenta ø60x4-3500P4
Handrail
Umplutura ø38x4-1480 P5b
Lisa inferioara ø38x3-1480 P6b
Low ledge
Stalp ø60x4-990 P3
Pole
Pahar ø70x4-150 P2
Pole raft
BRASOV
P1
P2
86
(86) 6+6ø25 L=6.65
340
Dsg. R.U.L.
NSS pr.±0.00
Axa reazem
Bearing axis
44
30
85
var 111÷521
S
79
80
88
86
1500
10
55
3
95
75
75
15 15 15 15
85
84
83
82
1ø14 L=6.10
505
80
(79) 14ø14 L=3.35
543
(78) 6+7ø14 L=5.65
4.56
5
2.35
2.55
78
J
-6.00
81
1
4439
2167
(81) 28ø16 L=1.90
var. 61÷274
(82) 2+2ø16 L=2.30
276
(83) 1+1ø16 L=3.10
290
(84) 1+1ø16 L=3.25
307
(85) 2+2ø16 L=3.60
340
(70) 9+5ø16 L=3.75
104
212
24
7
5

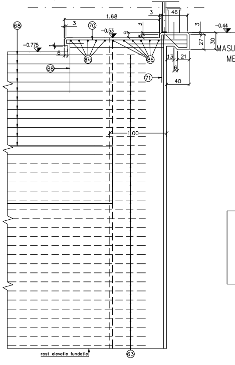
SECTIUNE R-R
SECTION R-R


(88) 9+5ø16 L=1.15
93
88
85
3
3
52
46
3
-0.44
3
69a
86
77
77
27
30
13
21
6
1.00
40
(69a) 1ø16 L=3.55
160
104
64
(69b) 1ø16 L=3.90
194
104
64
76
76a
74
74
75
75a

VEDERE N-N


3.50
25
1.50
1.50
25
(87a) 5ø25 L=4.10
var 71÷100
Dsg. R.U.L.
NSS pr.±0.00
290
44
Axa reazem
Bearing axis
P2
P1
P1
86
30
3
S
73
86
1500
77
75
75
1.93
76a
1ø14 L=6.30
514
74a
72
15 15 15 15 15 15 15
-6.00
75a
1
2343
(75a) 22ø16 L=2.75
var 165÷338
(76a) 7ø16 L=3.35
var 289÷338

SECTIUNE/SECTION P-P


68
1.68
3
46
3
70
-0.53
3
3
-0.44
-0.775
6
87a
86
27
30
88
71
13
21
6
40
1.00
rost elevatie fundatie
63

MASURATOAREA MATERIALULUI METALIC NECESAR PENTRU PARAPETUL UNEI CULEI
MEASURING THE METALLIC MATERIAL FOR PARAPET OF ONE ABUTMENT

Poz.	Denumirea materialului Piece denomination	Buc. Pcs.	Sectiune Section	Lung. Length. (mm)	Greutati – Weight		
					kg/ml	kg/buc	kg
P1	Placuta prindere pahar – Polate plate	6	100x10	150	7.85	1.18	7
P2	Pahar stalp parapet – Pole raft	6	70x4	150	6.51	0.98	6
P3	Stalp parapet – Pole	6	60x4	990	5.52	5.45	33
P4	Mana curenta – Handrail	2	60x4	3500	5.52	19.32	40
P5	Umplutura	4	38x4	1480	3.35	4.95	20
P6	Lisa inferioara – Low ledge	4	38x4	1480	3.35	4.95	20
					Total partial Partial total		126
					Sudura 2% Welding 2%		4
					TOTAL (kg)		130

TOTAL AMBELE CULEI 2X130=260kg (kg)
TOTAL FOR TWO ABUTMENTS 2X130=260kg (kg)

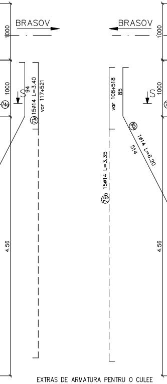
Beton: Concrete:	– C20/25 Beton armat în cuzineti si in bancheta cuzinetilor / Reinforced concrete in the cushions and cushions bench; – C20/25 Beton armat în elevatie si in zidurile intoarse/ Reinforced concrete in the elevation infrastructure and reverted walls; –C16/20 Beton simplu in fundatii/Plain concrete in abutments foundations:
Armatura: Reinforcement:	– S355; S345
Strat de acoperire: Concrete cover	– min. 4 cm expunere in aer/air exposed – min. 5 cm expunere in pamant/gravel exposed

ATENTIE/ATENTION

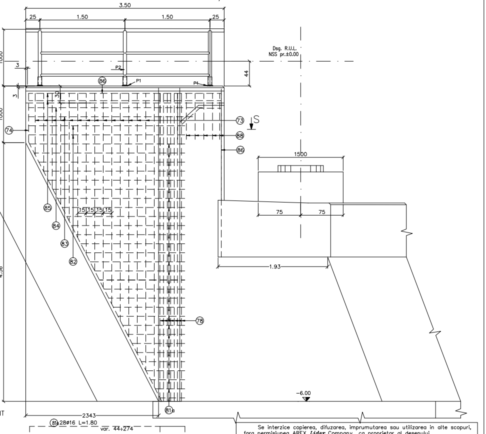
Aprovizionarea aparatelor de reazem se va face inaintea executarii cuzinetilor si a banchetei acestora. In cazul in care inaltimea aparatelor de reazem aprovizionate difera fata de cea considerata in proiect se vor modifica inaltimile pe reazem corespunzator cu noile aparate.

The bearing blocks shall be supplied before building the bearings and their seats. In case the height of the supplied bearing blocks differs from that given in the project, the heights on the seats shall be adjusted so as to comply with the new devices.

/N-N VIEW


BRASOV
1000
1000
4.56
94
var 117÷521
15ø14 L=3.40
79
74a

VEDERE O-O/O-O VIEW


3.50
25
1.50
1.50
25
BRASOV
1000
1000
4.56
3
3
30
P2
P1
P1
86
Dsg. R.U.L.
NSS pr.±0.00
44
var 108÷518
85
S
S
74
73
88
86
89
1ø14 L=6.20
514
15ø14 L=3.35
79b
1500
75
75
15 15 15 15
85
84
83
82
1.93
78
-6.00
81a
2343
81a 28ø16 L=1.80
var. 44÷274

EXTRAS DE ARMATURA PENTRU O CULEE
MEASURING OF THE REINFORCEMENTS FOR A ABUTMENT

Element	Marca	ø	Nr. Buc.	Lung/buc.	LUNGIME/ø			
					S355		S345	
					ø12	ø14	ø16	ø25
Rost elevatie fundatie Elevation-fundation raft	1	16	230	1.45			333.50	
	2	14	6	11.70		70.20		
	3	14	6	4.05		24.30		
	4	14	6	1.15		6.90		
	5	14	6	10.55		63.30		
	6	14	6	1.95		11.70		
	7	14	6	4.50		27.00		
	8	14	6	1.85		11.10		
Cuzinet	10	25	2	0.55				1.10
	11	25	6	10.15				60.90
	11a	25	6	2.70				5.40
	12	25	2	3.35				6.70
	12a	25	2	9.80				19.60
	13	25	2	10.25				20.50
	13a	25	2	3.25				6.50
	14	25	2	3.50				7.00
	14a	25	2	10.40				20.80
	15	25	2	10.40				20.80
	15a	25	2	3.85				7.70
	16	25	2	3.60				7.20
	16a	25	2	11.00				22.00
	17	25	2	10.50				21.00
	17a	25	2	4.35				8.70
	18	25	2	3.75				7.50
	18a	25	2	11.15				22.30
	19	25	2	10.65				21.30
	19a	25	2	4.25				8.50
	20	25	2	3.85				7.70
	20a	25	2	11.00				22.00
	21	25	2	10.75				21.50
	21a	25	2	2.70				5.40
	22	25	2	4.00				8.00
	22a	25	2	10.90				21.80
	23	25	2	10.90				21.80
	23a	25	2	4.00				8.00
	24	25	2	4.15				8.30
	24a	25	2	10.75				21.50
	25	25	2	10.85				21.70
	25a	25	2	3.85				7.70
	26	25	2	3.70				7.40
	26a	25	2	10.65				21.30
	27	25	2	10.20				20.40
	27a	25	2	3.75				7.50
	28	25	2	3.10				6.20
	28a	25	2	10.50				21.00
	29	25	6	9.60				57.60
	29a	25	6	3.65				21.90
	30	25	1	5.80				5.80
	30a	14	4	2.65		10.60		
	31	14	6	2.65		15.90		
	32	14	6	1.65		9.90		
	33	14	6	2.05		12.30		
	34	14	6	2.15		12.90		
	35	25	9	4.55				40.95
	36	14	1	3.45		3.45		
	37	14	1	4.65		4.65		
	38	14	1	5.80		5.80		
	39	14	1	7.00		7.00		
	40	14	1	7.10		7.10		
	41	14	1	7.10		7.10		
	42	14	4	7.05		28.20		
	43	14	1	6.85		6.85		
	44	14	1	6.70		6.70		
	45	14	1	6.50		6.50		
	46	14	1	5.85		5.85		
	47	14	1	5.50		5.50		
	48	14	1	4.40		4.40		
	49	12	1	3.20		3.20		
	50	12	100	1.15		115.00		
	51	14	62	1.65		102.30		
	52	12	12	3.45		41.40		
	53	12	14	3.20		44.80		
	54	12	10	4.30		43.00		
	55	12	10	3.90		39.00		
	56	12	20	0.90		18.00		
	57	16	12	1.25		15.00		
	58	12	20	26.60	532.00			
	59	12	20	5.15	103.00			

Element	Marca	ø	Nr. Buc.	Lung/buc.	LUNGIME/ø			
					S355		S345	
					ø12	ø14	ø16	ø25
Zid de garda	60	14	63	5.40		340.20		
	61	14	65	2.45		159.25		
	62	14	64	2.30		147.20		
	62a	14	3	1.30		3.90		
	63	16	32	11.95			382.40	
	64	16	4	11.10			44.40	
	65	16	1	8.05			8.05	
	66	16	1	5.20			5.20	
	67	16	1	2.70			2.70	
	68	16	11	11.30			124.30	
Zid intors stanga	69	16	15	3.25			48.75	
	70	16	9	3.75			33.75	
	71	16	24	2.05			49.20	
	72	14	9	5.75		51.75		
	73	14	14	3.45		48.30		
	74	14	1	6.20		6.20		
	75	16	22	2.85			62.70	
	76	16	7	3.40			23.80	
	77	16	12	3.65			43.80	
	78	16	6	5.65			33.90	
	79	14	14	3.35		46.90		
	80	14	1	6.10		6.10		
	81	16	22	1.90			41.80	
	82	16	2	2.30			4.60	
	83	16	1	3.10			3.10	
	84	16	1	3.25			3.25	
	85	16	2	3.60			7.20	
	86	25	6	6.65				39.90
	87	25	5	4.50				22.50
	88	16	9	1.15			10.35	
	89	14	1	2.70		2.70		
	90	14	1	5.20		5.20		
	91	16	32	2.35			75.20	
	92	16	11	3.20			35.20	
	93	14	40	2.30		92.00		
Zid intors dreapta	69	16	17	3.25			55.25	
	69a	16	1	3.55			3.55	
	69b	16	1	3.90			3.90	
	70	16	5	3.75			18.75	
	71	16	24	2.05			49.20	
	72	14	8	5.75		46.00		
	73a	14	15	3.40		51.00		
	74a	14	1	6.30		6.30		
	75a	16	22	2.75			60.50	
	76a	16	7	3.35			23.45	
	77	16	12	3.65			43.80	
	78	16	7	5.65			39.55	
	79a	14	15	3.35		50.25		
	80a	14	1	6.20		6.20		
	81a	16	28	1.80			50.40	
	82	16	2	2.30			4.60	
	83	16	1	3.10			3.10	
	84	16	1	3.25			3.25	
	85	16	2	3.60			7.20	
	86	25	6	6.65				39.90
	87a	25	5	4.10				20.50
	88	16	5	1.15			5.75	
	89a	14	1	4.30		4.30		
	90	14	1	4.80		4.80		
	92	16	11	3.20			35.20	
	93	14	40	2.30		92.00		
	Lungimi/ø				635.00	1977.45	1340.70	803.35
	Greutati/ml				0.888	1.208	1.578	3.853
	Greutati/ø				565	2390	2115	3100
	TOTAL				8170Kg			
	Pierderi 5%				410Kg			
	TOTAL PENTRU 1 CULEE				8580Kg			
	TOTAL PENTRU 2 CULEI				2X8580=17160Kg			

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.

D					
C					
B					
A	12.2011	Revizia 1 1 Revision	Campan Maria		
Indice Index	Data Date	Modificare Modification/Revision	Proiectant Designer	Aprobat Consultant Approval Consultant	Aprobat CFR Approval CFR

GUVERNUL ROMANIEI
ROMANIAN GOVERNMENT

PROIECT FINANȚAT DE UNIUNEA EURO
EUROPEAN UNION FINANCED PR

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	Semnătură Signature
Aprobat Approved	Şef proiect Project manager	R. Liuzza		
Aprobat Approved	Coordonator Secțiune 1 Section 1 Coordinator	C. Gamba...		
Verificat Checked	Expert Chek Checking Expert	V.Kallidromitis		

SUBCONTRACTANT / SUBCONTRACTOR

AREX

Aprobat Approved	Responsabil Subconsultant Subconsultant Responsible	A. Dinulescu Stanciu	12.2011	
Întocmit Elaborated	Proiectant Designer	Campan Maria	12.2011	

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

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

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

Denumire desen / Drawing Title :

INTERVAL / SECTION BOD - FELDIOARA
Pod Ghimbasel Km 179+087.689 - D=45.00m - PLAN ARMARE CULEI
Ghimbasel bridge Km 179+087.689 -REINFORCEMENT ABUTMENTS PLAN

Codificare / Codification System	Scara / Scale 1:25	LOT / LOT	Nr. / No 01 / 01

E A 5 1 | 0 1 | E | 0 4 | B C | P V | 0 0 | 2 | 2 | 0 0 6 | 1