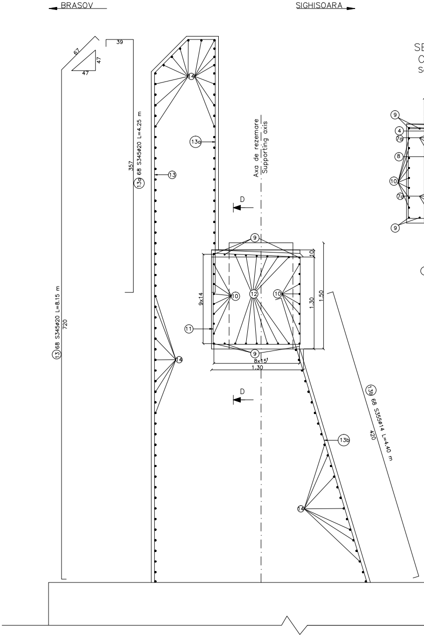
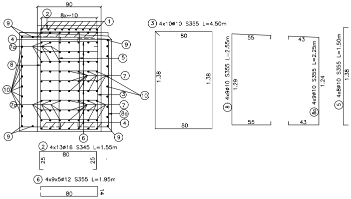
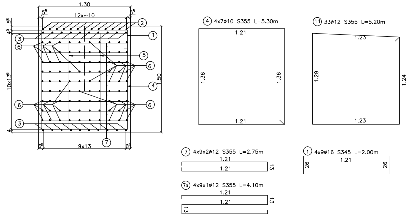
SECTIUNE B–B
B–B SECTION
Scara/Scale 1:20

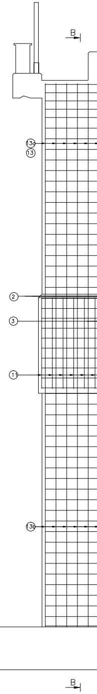

BRASOV
SIGHISOARA
67
47
47
39
357
⑬a 68 S345ø20 L=4.25 m
⑬ 68 S345ø20 L=8.15 m
720
⑭
⑬a
⑬
Axa de rezemare
Supporting axis
D
D
⑨
⑩
⑫
⑩
⑪
9x14
10
1.30
1.50
⑨
8x15¹
1.30
⑬b 68 S355ø14 L=4.40 m
420
⑬b
⑭
⑭

SECTIUNE C–C
C–C SECTION
Scara/Scale 1:20

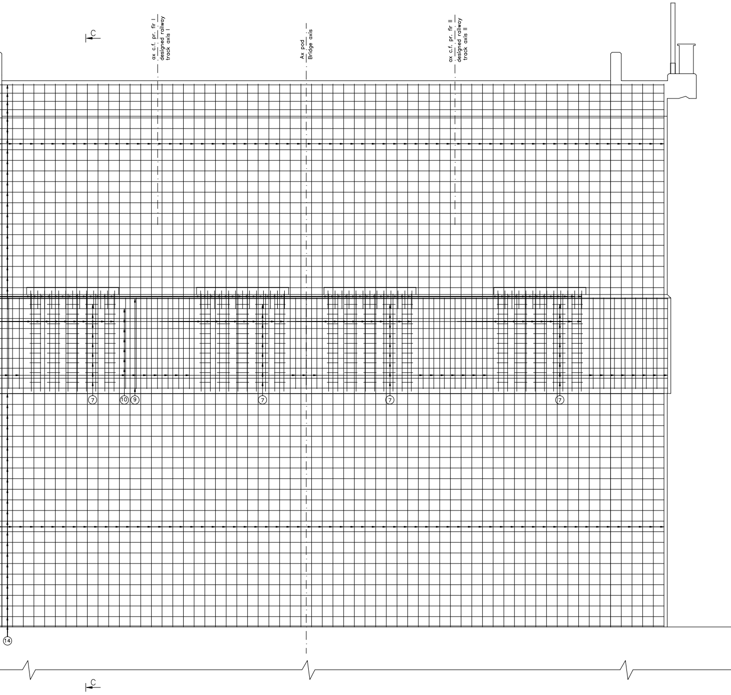

90
8x~10
①
②
⑨
④
⑦a
⑧
⑩
⑦a
⑨
⑨
⑤
⑦
③
⑩
⑦
⑧a
④
⑥
⑨
③ 4x10ø10 S355 L=4.50m
80
1.38
1.38
80
⑧ 4x9ø10 S355 L=2.55m
55
1.29
55
⑧a 4x9ø10 S355 L=2.25m
43
1.24
43
⑤ 4x8ø10 S355 L=1.50m
1.38
② 4x13ø16 S345 L=1.55m
80
25
25
⑥ 4x9x5ø12 S355 L=1.95m
80
14

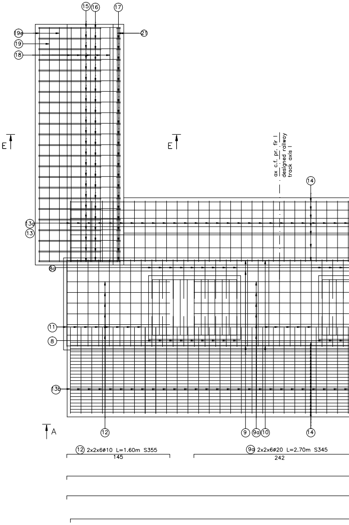
SECTIUNE D–D
D–D SECTION
Scara/Scale 1:20


1.30
5⁸
12x~10
5⁸
②
①
③
⑥
⑤
⑥
④
⑥
⑥
③
⑦
10x13⁶
1.50
6⁵
9x13
6⁵
④ 4x7ø10 S355 L=5.30m
1.21
1.36
1.36
1.21
⑪ 33ø12 S355 L=5.20m
1.23
1.29
1.24
1.23
⑦ 4x9x2ø12 S355 L=2.75m
1.21
1.21
13
⑦a 4x9x1ø12 S355 L=4.10m
1.21
1.21
13
13
① 4x9ø16 S345 L=2.00m
1.21
26
26


B
⑬a
⑬
②
③
⑪
⑬b
B

ELEVATIE A–A / A–A ELEVATION
Scara/Scale 1:20


C
ax c.f. pr. fir I
designed railway track axis I
Ax pod
Bridge axis
ax c.f. pr. fir II
designed railway track axis II
7
10
9
7
7
7
14
C


15
16
17
19a
19
18
21
E
E
ax c.f. pr. fir I
designed railway track axis I
14
13a
13
8a
11
8
13b
A
12
9
9a
10
14
⑫ 2x2x6ø10 L=1.60m S355
145
⑨a 2x2x6ø20 L=2.70m S345
242

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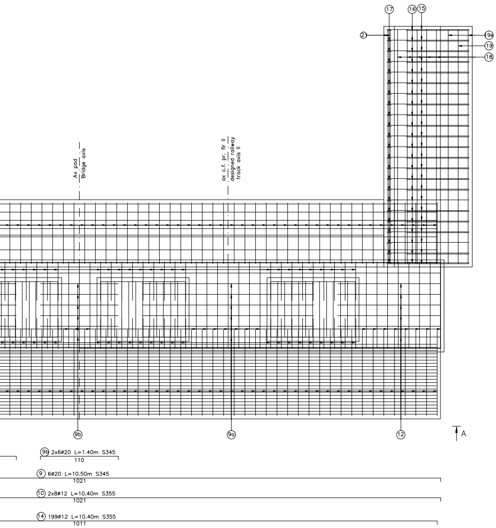
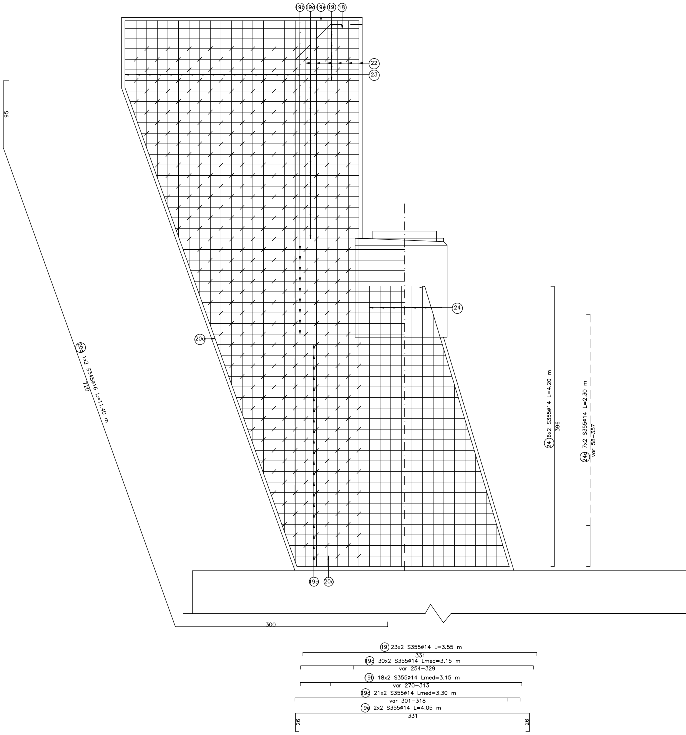
VEDERE IN PLAN/PLAN VIEW
Scara/Scale 1:20

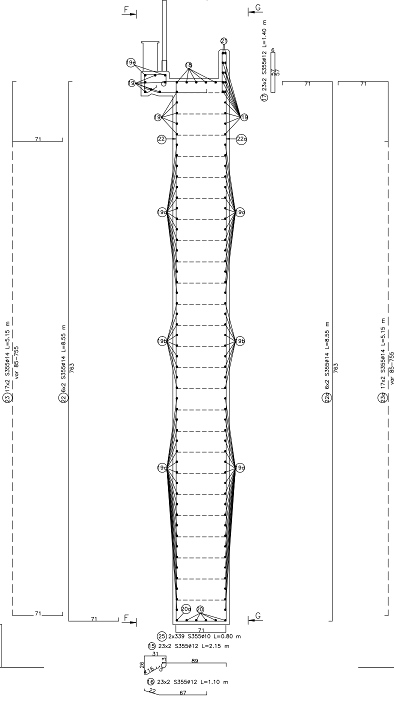

17
16
15
21
19e
19
18
Ax pod
Bridge axis
ax c.f. pr. fir II
designed railway track axis II
9b
9a
12
A
9b 2x6ø20 L=1.40m S345
110
9 6ø20 L=10.50m S345
1021
10 2x8ø12 L=10.40m S355
1021
14 199ø12 L=10.40m S355
1011

Beton: Concrete:	– C30/37 suprastructura/superstructure
Tipul grinzilor: Beams type:	– grinzi metalice sudate/steel welded girders
Otel pentru grinzi: Steel for the beams:	– (OL 37–EP) $S275J_3G_3$ (EN 10025/2004)
Armatura: Reinforcement:	– S355;S345
Strat de acoperire: Concrete cover	– min. 4cm expunere in aer/air exposed

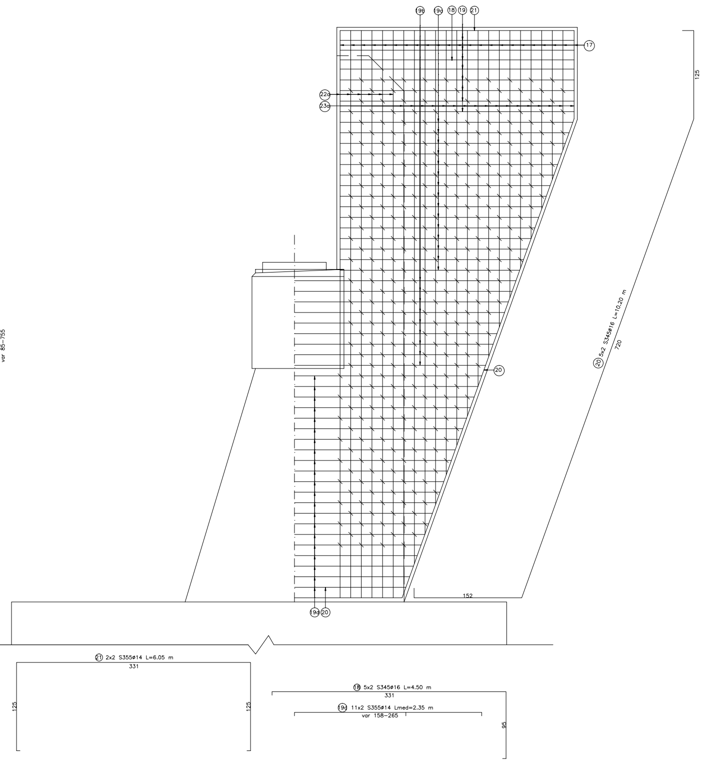
VEDERE F–F /F–F VIEW
Scara/Scale 1:20


19b
19a
19e
19
18
22
23
24
20a
19c
20a
95
20a 1x2 S345ø16 L=11.40 m
720
300
24 6x2 S355ø14 L=4.20 m
396
24a 7x2 S355ø14 L=2.30 m
var 58–357
19 23x2 S355ø14 L=3.55 m
331
19a 30x2 S355ø14 Lmed=3.15 m
var 254–329
19b 18x2 S355ø14 Lmed=3.15 m
var 270–313
19c 21x2 S355ø14 Lmed=3.30 m
var 301–318
19e 2x2 S355ø14 L=4.05 m
331
26
26

SECTIUNE E-E / E-E SECTION
Scara/Scale 1:20


F
G
⑰ 23x2 S355ø12 L=1.40 m
6
57
57
19e
19
18
21
19
19
22
22a
71
71
71
19a
19a
19b
19b
19c
19c
23 17x2 S355ø14 L=5.15 m
var 85-755
22 6x2 S355ø14 L=8.55 m
763
22a 6x2 S355ø14 L=8.55 m
763
23a 17x2 S355ø14 L=5.15 m
var 85-755
20a
20
71
71
F
G
71
㉕ 2x339 S355ø10 L=0.80 m
⑮ 23x2 S355ø12 L=2.15 m
31
26
13
16
4
5
89
⑯ 23x2 S355ø12 L=1.10 m
22
67

VEDERE G-G / G-G VIEW
Scara/Scale 1:20


19b
19a
18
19
21
17
22a
23a
125
20
⑳ 5x2 S345ø16 L=10.20 m
720
152
19d
20
㉑ 2x2 S355ø14 L=6.05 m
331
125
125
⑱ 5x2 S345ø16 L=4.50 m
331
19d 11x2 S355ø14 Lmed=2.35 m
var 158-265
95

EXTRAS DE ARMATURA PENTRU O CULEE
REINFORCEMENT FOR ONE ABUTMENT

Marca	Diametru	Lung./buc.[m]	Nr.buc.	S355			S345	
				Φ10	Φ12	Φ14	Φ16	Φ20
1	16	2,00	36				72,00	
2	16	1,55	52				80,60	
3	10	4,50	40	180,00				
4	10	5,30	28	148,40				
5	10	1,50	32	48,00				
6	12	1,95	180		351,00			
7	12	2,75	72		198,00			
7a	12	4,10	36		147,60			
8	10	2,55	36	91,80				
8a	10	2,25	36	81,00				
9	20	10,50	6					63,00
9a	20	2,70	24					64,80
9b	20	1,40	12					16,80
10	12	10,40	16		166,40			
11	12	5,20	33		171,60			
12	10	1,60	24	38,40				
13	20	8,15	68					554,20
13a	20	4,25	68					289,00
13b	14	4,40	68			299,20		
14	12	10,40	100		2060,60			
15	12	2,15	46		98,90			
16	12	1,10	46		50,60			
17	12	1,40	46		64,40			
18	16	4,50	10				45,00	
19	14	3,55	46			163,30		
19a	14	3,15	60			189,00		
19b	14	3,15	36			113,40		
19c	14	3,30	42			138,60		
19d	14	2,35	22			51,70		
19e	14	4,05	4			16,20		
20	16	11,40	2				22,80	
20a	16	10,20	10				102,00	
21	14	6,05	4			24,20		
22	14	8,55	12			102,60		
22a	14	8,55	12			102,60		
23	14	5,15	34			175,10		
23a	14	5,15	34			175,10		
24	14	4,20	12			50,40		
24a	14	2,30	14			32,20		
25	10	0,80	678	542,40				
Lungimi totale pe diametre			(m)	1130,00	3318,10	1633,60	322,40	987,80
Masa pe metru liniar			(kg/ml)	0,617	0,888	1,208	1,578	2,466
Masa pe diametre			(kg)	696.69	2945.86	1974.07	508.86	2436.06
Masa pe tip otel			(kg)	5617,00			2945,00	
Masa totala culee			(kg)	8565,00				
Pierdori 5%			(kg)	428,25				
Masa totala culee			(kg)	9000,00				

TOTAL POD (2 CULEI): 2 x 9000kg=18000.00kg
TOTAL BRIDGE (2 ABUTMENTS): 2 x 9000kg=18000.00kg

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 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	Semnătură Signature
Aprobat Approved	Șef proiect Project manager	R. Liuzza		
Aprobat Approved	Coordonator Secțiune 1 Section 1 Coordinator	C. Gambell		
Verificat Checked	Expert Check Checking Expert	V. Kallidromitis		

SUBCONTRACTANT / SUBCONTRACTOR

AREX

Aprobat Approved	Responsabil Subconsultant Subconsultant Responsible	A.Stanciu - Dinulescu	02.2012
Întocmit Elaborated	Proiectant Designer	Totan Ciprian	02.2012

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 CATA-ARCHITA
VIADUCT KM.251+436.241 D=5x30.00m/PLAN ARMARE CULEI
VIADUCT Km.251+436.241 D=5x30.00m
ABUTMENTS REINFORCEMENT PLAN

Codificare / Codification System	Scara / Scale 1:20	LOT / LOT	Nr. / No 01 / 01

E A 5 1 | 0 1 | E | 1 4 | B C | P V | 0 2 | 9 | 2 | 0 0 9 | 0