



**Republic of Moldova  
Ministry of Transport and Road Infrastructure  
State Road Administration**

**and**

**European Bank for Reconstruction and Development**

**ROAD SECTOR PROGRAM**

**Rehabilitation of R14 Balti-Sarateni Road**

**Lot 1: km 26+600 to km 38+300**

**Lot 2: km 43+000 to km 61+000 and  
km 64+370-km 66+657**

**TENDER DOCUMENTS**

**PART 2 – REQUIREMENTS**

**LOT 1 DRAWINGS**

**Tendering No. RSP/2013/OT/W6**

**Invitation for Tenders No. RSP/2013/OT/W6/01-2**

**Chisinau, 2014**

**List of Drawings**  
**Lista desenelor**

N <sub>0</sub> Drawing	Name	Denumirea
1	2	3
<b>Road</b>		
<b>DA - Drum auto</b>		
1.	General data	Date generale
2.	Road plan PC 266+00 - PC 269+00	Plan drum PC 266+00 - PC 269+00
3.	Road plan PC 269+00 - PC 276+00	Plan drum PC 269+00 - PC 276+00
4.	Road plan PC 276+00 - PC 283+00	Plan drum PC 276+00 - PC 283+00
5.	Road plan PC 283+00 - PC 293+50	Plan drum PC 283+00 - PC 293+50
6.	Road plan PC 293+50 - PC 304+00	Plan drum PC 293+50 - PC 304+00
7.	Road plan PC 304+00 - PC 314+50	Plan drum PC 304+00 - PC 314+50
8.	Road plan PC 314+50 - PC 325+00	Plan drum PC 314+50 - PC 325+00
9.	Road plan PC 325+00 - PC 332+00	Plan drum PC 325+00 - PC 332+00
10.	Road plan PC 332+00 - PC 337+00	Plan drum PC 332+00 - PC 337+00
11.	Road plan PC 337+00 - PC 343+50	Plan drum PC 337+00 - PC 343+50
12.	Road plan PC 343+50 - PC 354+00	Plan drum PC 343+50 - PC 354+00
13.	Road plan PC 354+00 - PC 364+50	Plan drum PC 354+00 - PC 364+50
14.	Road plan PC 364+50 - PC 375+00	Plan drum PC 364+50 - PC 375+00
15.	Road plan PC 375+00 - PC 383+00	Plan drum PC 375+00 - PC 383+00
16.	Longitudinal Profile PC 266+00- PC 279+00	Profil Longitudinal PC 266+00- PC 279+00
17.	Longitudinal Profile PC 279+00- PC 292+80	Profil Longitudinal PC 279+00- PC 292+80
18.	Longitudinal Profile PC 292+80- PC 308+40	Profil Longitudinal PC 292+80- PC 308+40
19.	Longitudinal Profile PC 308+40- PC 324+00	Profil Longitudinal PC 308+40- PC 324+00
20.	Longitudinal Profile PC 324+00- PC 339+60	Profil Longitudinal PC 324+00- PC 339+60
21.	Longitudinal Profile PC 339+60- PC 355+20	Profil Longitudinal PC 339+60- PC 355+20
22.	Longitudinal Profile PC 355+20- PC 371+00	Profil Longitudinal PC 355+20- PC 371+00
23.	Longitudinal Profile PC 371+00- PC 383+00	Profil Longitudinal PC 371+00- PC 383+00
24.	Typical cross sections I, II	Profil transversal tip I, II
25.	Typical cross sections III, IV	Profil transversal tip III, IV
26.	Typical cross sections V	Profil transversal tip V
27.	Pavement construction	Construcția sistemului rutier
28.	Cross Sections of Earthwork PC 266+00 - PC 274+00	Profil Transversal Terasamente PC 266+00- PC 274+00
29.	Cross Sections of Earthwork PC 276+00 - PC 278+00	Profil Transversal Terasamente PC 276+00- PC 278+00
30.	Cross Sections of Earthwork PC 278+60 - PC 279+40	Profil Transversal Terasamente PC 278+60- PC 279+40
31.	Cross Sections of Earthwork PC 280+00	Profil Transversal Terasamente PC 280+00
32.	Cross Sections of Earthwork PC 280+40	Profil Transversal Terasamente PC 280+40
33.	Cross Sections of Earthwork PC 281+00	Profil Transversal Terasamente PC 281+00
34.	Cross Sections of Earthwork PC 281+40	Profil Transversal Terasamente PC 281+40
35.	Cross Sections of Earthwork PC 282+00	Profil Transversal Terasamente PC 282+00
36.	Cross Sections of Earthwork PC 282+40 - PC 283+60	Profil Transversal Terasamente PC 282+40- PC 283+60
37.	Cross Sections of Earthwork PC 284+00 - PC 286+00	Profil Transversal Terasamente PC 284+00- PC 286+00
38.	Cross Sections of Earthwork PC 288+00 - PC 295+00	Profil Transversal Terasamente PC 288+00- PC 295+00
39.	Cross Sections of Earthwork PC 295+55 - PC 295+80	Profil Transversal Terasamente PC 295+55- PC 295+80



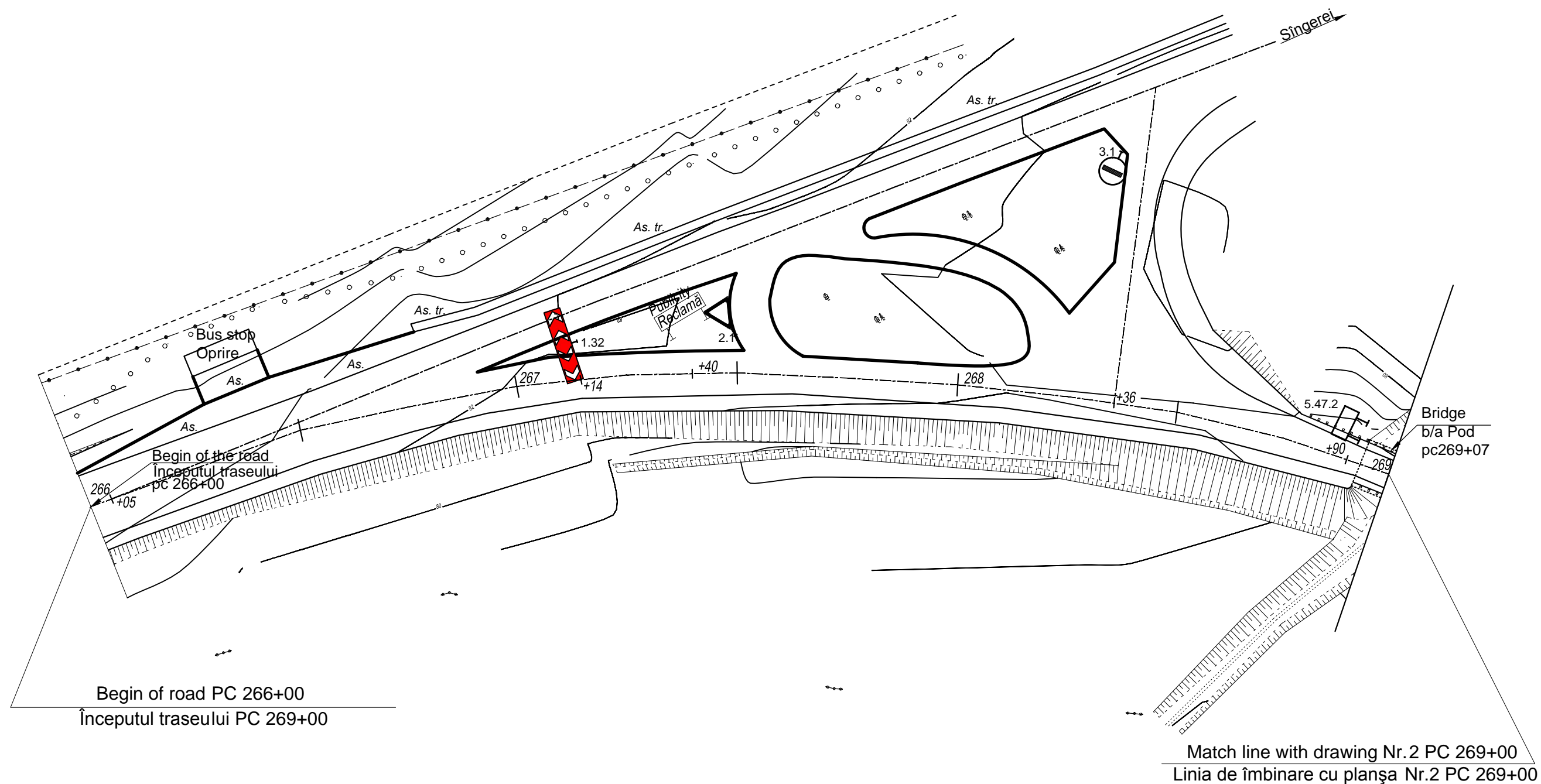
40.	Cross Sections of Earthwork PC 296+00 - PC 296+60	Profil Transversal Terasamente PC 296+00-PC 296+60
41.	Cross Sections of Earthwork PC 297+00 - PC 297+60	Profil Transversal Terasamente PC 297+00-PC 297+60
42.	Cross Sections of Earthwork PC 298+00 - PC 298+60	Profil Transversal Terasamente PC 298+00-PC 298+00
43.	Cross Sections of Earthwork PC 299+00 - PC 302+00	Profil Transversal Terasamente PC 299+00-PC 302+00
44.	Cross Sections of Earthwork PC 304+00 - PC 310+00	Profil Transversal Terasamente PC 304+00-PC 310+00
45.	Cross Sections of Earthwork PC 312+00 - PC 322+00	Profil Transversal Terasamente PC 312+00-PC 322+00
46.	Cross Sections of Earthwork PC 324+00 - PC 329+60	Profil Transversal Terasamente PC 324+00-PC 329+60
47.	Cross Sections of Earthwork PC 330+00 - PC 330+60	Profil Transversal Terasamente PC 330+00-PC 330+60
48.	Cross Sections of Earthwork PC 331+00 - PC 331+60	Profil Transversal Terasamente PC 331+00-PC 331+60
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51.	Cross Sections of Earthwork PC 334+00 - PC 335+00	Profil Transversal Terasamente PC 334+00-PC 335+00
52.	Cross Sections of Earthwork PC 336+00 - PC 345+00	Profil Transversal Terasamente PC 336+00-PC 345+00
53.	Cross Sections of Earthwork PC 346+00 - PC 351+00	Profil Transversal Terasamente PC 346+00-PC 351+00
54.	Cross Sections of Earthwork PC 352+00 - PC 357+50	Profil Transversal Terasamente PC 352+00-PC 357+50
55.	Cross Sections of Earthwork PC 358+00 - PC 363+00	Profil Transversal Terasamente PC 358+00-PC 363+00
56.	Cross Sections of Earthwork PC 364+00 - PC 369+00	Profil Transversal Terasamente PC 364+00-PC 369+00
57.	Cross Sections of Earthwork PC 370+00 - PC 375+00	Profil Transversal Terasamente PC 370+00-PC 375+00
58.	Cross Sections of Earthwork PC 376+00 - PC 379+00	Profil Transversal Terasamente PC 376+00-PC 379+00
59.	Cross Sections of Earthwork PC 380+00 - PC 383+00	Profil Transversal Terasamente PC 380+00-PC 383+00
60.	Culvert construction TN-160-III PC 281+26	Construcția podețului TN-160-III PC 281+26
61.	Culvert lengthening Ø 1,0 with tubes Nr.12 PC 375+38	Alungirea podețului Ø 1,0 cu tuburi Nr.12 PC 375+38
62.	Culvert lengthening Ø 1,0 with tubes Nr.12 PC 378+02	Alungirea podețului Ø 1,0 cu tuburi Nr.12 PC 378+02
63.	Culvert lengthening Ø 1,0 with tubes Nr.12 PC 382+31	Alungirea podețului Ø 1,0 cu tuburi Nr.12 PC 382+31
64.	Existing typical culverts	Podete existente tip
65.	Typical lined side drain $i < 5\%$	Santuri laterale tip $i < 5\%$
66.	Typical lined side drain $i > 5\%$	Santuri laterale tip $i > 5\%$
67.	Typical lined side drain $i > 5\%$	Santuri laterale tip $i > 5\%$
68.	Drainage chutes	Construcția cascadelor pe acostament
69.	Construction of the dissipator chutes	Camin de disipare pentru cascadi
70.	Typical side road	Drum lateral tip
71.	Entrance to properties type I-IV	Acces în curți tip I-IV

72.	Plan of Road traffic management PC 266+00 - PC 269+50	Planul organizarii circulatiei rutiere PC 266+00 - PC 269+50
73.	Plan of Road traffic management PC 269+50 - PC 276+50	Planul organizarii circulatiei rutiere PC 269+50 - PC 276+50
74.	Plan of Road traffic management PC 276+50 - PC 283+50	Planul organizarii circulatiei rutiere PC 276+50 - PC 283+50
75.	Plan of Road traffic management PC 283+50 - PC 293+50	Planul organizarii circulatiei rutiere PC 283+50 - PC 293+50
76.	Plan of Road traffic management PC 293+50 - PC 300+50	Planul organizarii circulatiei rutiere PC 293+50 - PC 300+50
77.	Plan of Road traffic management PC 300+50 - PC 307+50	Planul organizarii circulatiei rutiere PC 300+50 - PC 307+50
78.	Plan of Road traffic management PC 307+50 - PC 314+50	Planul organizarii circulatiei rutiere PC 307+50 - PC 314+50
79.	Plan of Road traffic management PC 314+50 - PC 321+50	Planul organizarii circulatiei rutiere PC 314+50 - PC 321+50
80.	Plan of Road traffic management PC 321+50 - PC 328+50	Planul organizarii circulatiei rutiere PC 321+50 - PC 328+50
81.	Plan of Road traffic management PC 328+50 - PC 335+50	Planul organizarii circulatiei rutiere PC 328+50 - PC 335+50
82.	Plan of Road traffic management PC 335+50 - PC 340+00	Planul organizarii circulatiei rutiere PC 335+50 - PC 340+00
83.	Plan of Road traffic management PC 340+00 - PC 349+50	Planul organizarii circulatiei rutiere PC 340+00 - PC 349+50
84.	Plan of Road traffic management PC 349+50 - PC 360+00	Planul organizarii circulatiei rutiere PC 349+50 - PC 360+00
85.	Plan of Road traffic management PC 360+00 - PC 370+00	Planul organizarii circulatiei rutiere PC 360+00 - PC 370+00
86.	Plan of Road traffic management PC 370+00- PC 377+50	Planul organizarii circulatiei rutiere PC 370+00- PC 377+50
87.	Plan of Road traffic management PC 377+50 - PC 383+00	Planul organizarii circulatiei rutiere PC 377+50 - PC 383+00
88.	Safety barrier for gantries	Parapet metalic
89.	Nonstandard road signs 5.61.2	Indicator rutier individual 5.61.2
90.	Nonstandard road signs 5.61.2	Indicator rutier individual 5.61.2
91.	Nonstandard road signs 5.61.2	Indicator rutier individual 5.61.2
92.	Nonstandard road signs 5.61.2	Indicator rutier individual 5.61.2
93.	Nonstandard road signs 5.61.2	Indicator rutier individual 5.61.2
94.	Nonstandard road signs 5.61.2	Indicator rutier individual 5.61.2
95.	Nonstandard road signs 5.61.2	Indicator rutier individual 5.61.2
96.	Nonstandard road signs 5.61.2	Indicator rutier individual 5.61.2
97.	Nonstandard road signs 5.61.2	Indicator rutier individual 5.61.2
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99.	Nonstandard road signs 5.61.2	Indicator rutier individual 5.61.2
100.	Nonstandard road signs 5.61.2	Indicator rutier individual 5.61.2
101.	Nonstandard road signs 5.63.1; 5.64	Nonstandard road signs 5.63.1; 5.64
102.	Nonstandard road signs 5.61.2	Indicator rutier individual 5.61.2
103.	Nonstandard road signs 5.61.2	Indicator rutier individual 5.61.2
104.	Nonstandard road signs 5.61.2	Indicator rutier individual 5.61.2
105.	Nonstandard road signs 5.63.1; 5.64	Nonstandard road signs 5.63.1; 5.64
106.	Nonstandard road signs 5.61.2	Indicator rutier individual 5.61.2
107.	Nonstandard road signs 5.61.2	Indicator rutier individual 5.61.2
108.	Nonstandard road signs 5.61.2	Indicator rutier individual 5.61.2

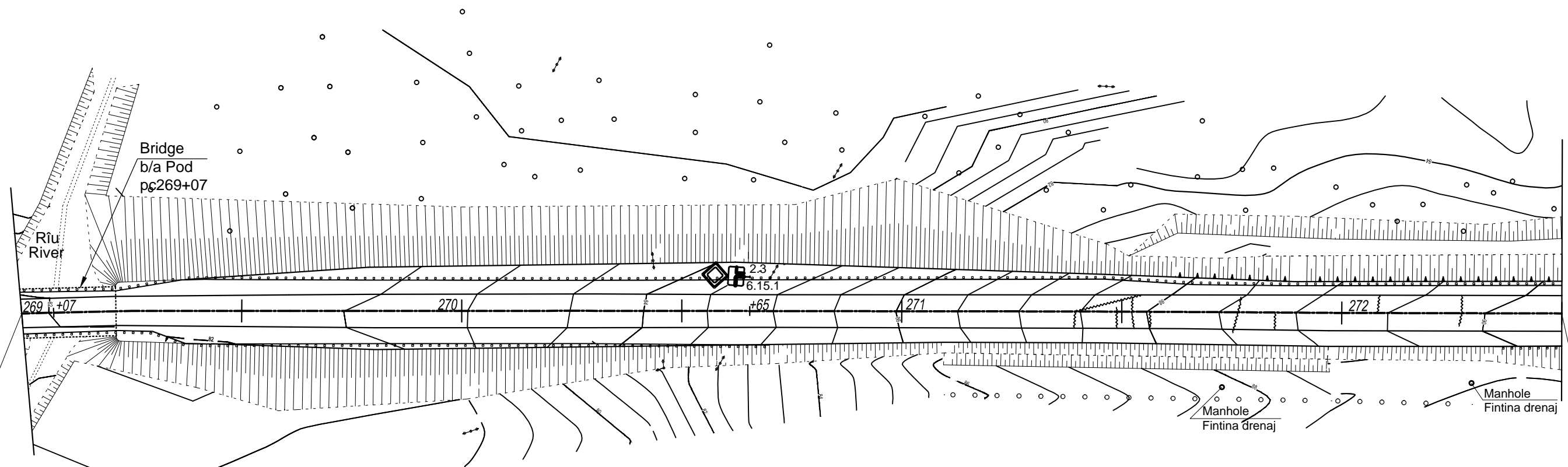
SCHEDULE OF BASIC SETS OF DRAWINGS BORDEROUL SETURLOR DE BAZA A DESENELOR				
Index Marcarea	Title Denumirea	Note Nota		
-DA	Road. Drumuri Auto			
-P	Bridges. Poduri			
-AT	Slip remedial works. Alunecari de teren			
SCHEDULE OF BASIC SETS OF DRAWINGS FOR ROADS BORDEROUL DESENELOR SETULUI -DA				
Item No Nr.d/o	Name Denumirea	Index Marcarea	Drawings Planse	Note Nota
1	General data Date generale	DG-DA	1	
2	Road plan Plan drum	PD-DA	1-14	
3	Longitudinal profile Profil longitudinal	PL-DA	1-8	
4	Typical cross sections Profile transversale tip	PTT-DA	1-3	
5	Pavement construction Constructia sistemului rutier	CSR-DA	1	
6	Cross sections of earthwork Profile transversale terasamente	PT-DA	1-32	
7	Culvert c.c. Ø1.0m, PC 281+26 Podet b.a. Ø1.0m, PC 281+26	P-DA	1	
8	Culvert c.c. Ø1.0m, PC 375+38 Podet b.a. Ø1.0m, PC 375+38	P-DA	1	
9	Culvert c.c. Ø1.0m, PC378+02 Podet b.a. Ø1.0m, PC378+02	P-DA	1	
10	Culvert c.c. Ø1.0m, PC382+13 Podet b.a. Ø1.0m, PC382+13	P-DA	1	
11	Existing typical culverts Podete existente tip	PET-DA	1	
12	Typical lined side drain i<5% Santuri laterale i<5%	SLT-DA	1	
13	Typical lined side drain i>5% Santuri laterale tip i>5%	SLT-DA	1-2	
14	Drainage chutes Constructia casiului pe acostament	CCA-DA	1	
15	Construction of the dissipator chute Camin de disipare pentru casiuri	CDC-DA	1	
16	Typical side road Drum lateral tip	DLT-DA	1	
17	Entrance to properties Acces in curti	AC-DA	1	
18	Plan of road traffic management Planul organizarii circulatiei rutiere	POCR-DA	1-16	
19	Safety barrier for gantries Parapet metalic	PM-DA	1	
20	Nonstandart road signs Indicator rutier individual	IRI-DA	1-20	

SCHEDULE OF BASIC SETS OF DRAWINGS FOR BRIDGES BORDEROUL DESENELOR SETULUI -P				
Item No Nr.d/o	Name Denumirea	Index Marcarea	Drawings Planse	Note Nota
1	Bridge. Pod	P-P	1-4	
2	Access stairs on the slope Scara de serviciu pe taluz	SS-P	1	
3	RC walkway 1.0m wide Trotuar din beton armatcu latimea de 1.0mm	TB-P	1	
4	Embedded base plates Piese înglobate PÎ-1, PÎ-2, PÎ-3	PI-P	1	
5	Approach to the bridge. 4.0m long Racordarea podului cu terasamentul. Lungimea de 4,0 m	RP-P	1	
6	Pedestian parapets Parapeti metalici pietonali	PMP-P	1	
7	Bridge guardrails. Guardrail posts Parapeti metalici de siguranta a circulatiei vehiculelor	PMS-P	1	
8	Bridge guardrails. Guardrail posts Parapeti metalici de siguranta a circulatiei vehiculelor Stilpii parapetilor CMLJ*, CÎ-3*.	PMS-P	1	
9	Bridge guardrails. Pipe brackets Parapeti metalici de siguranta a circulatiei vehiculelor Element de fixare a tevii	PMS-P	1	
10	Waterproofing to bridge deck and asphalt Hidroizolarea suprastructurii si îmbracamintea rutiera	HS-P	1	

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International	Rehabilitation of R14 Road Balti-Sarateni	ISP	S.Bogza		Date	03.2012	
		Designed	A.Gonciaruc		Scale		
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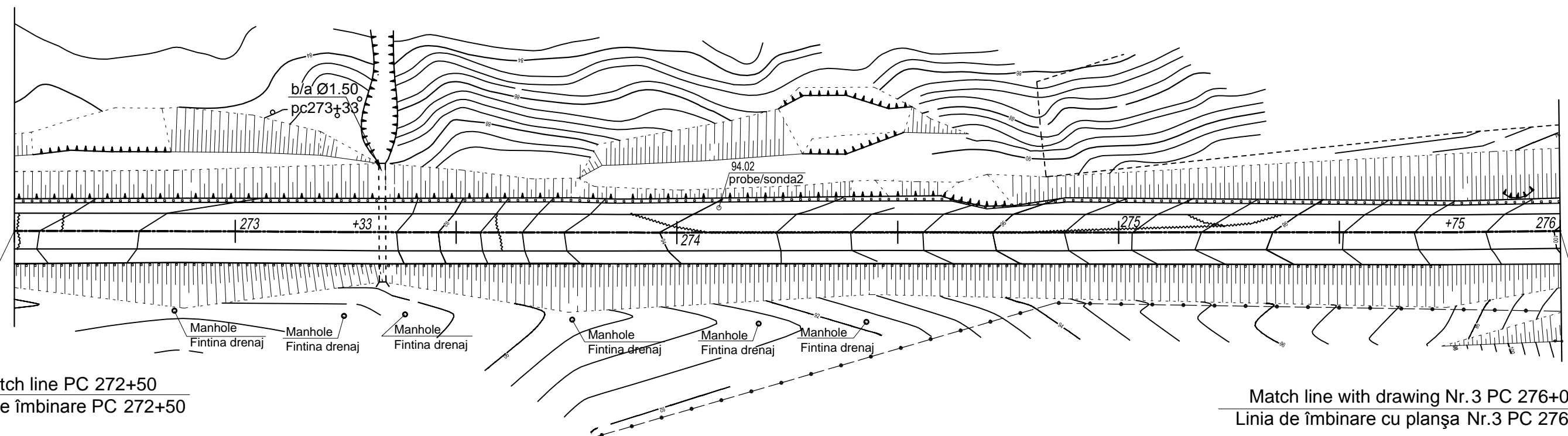


World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support Project				
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni  Road plan PC 266+00-269+00 Plan drum PC 266+00-269+00	ISP	S.Bogza		Date	03.2012
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Linia de îmbinare cu planșa Nr.1 PC 269+00

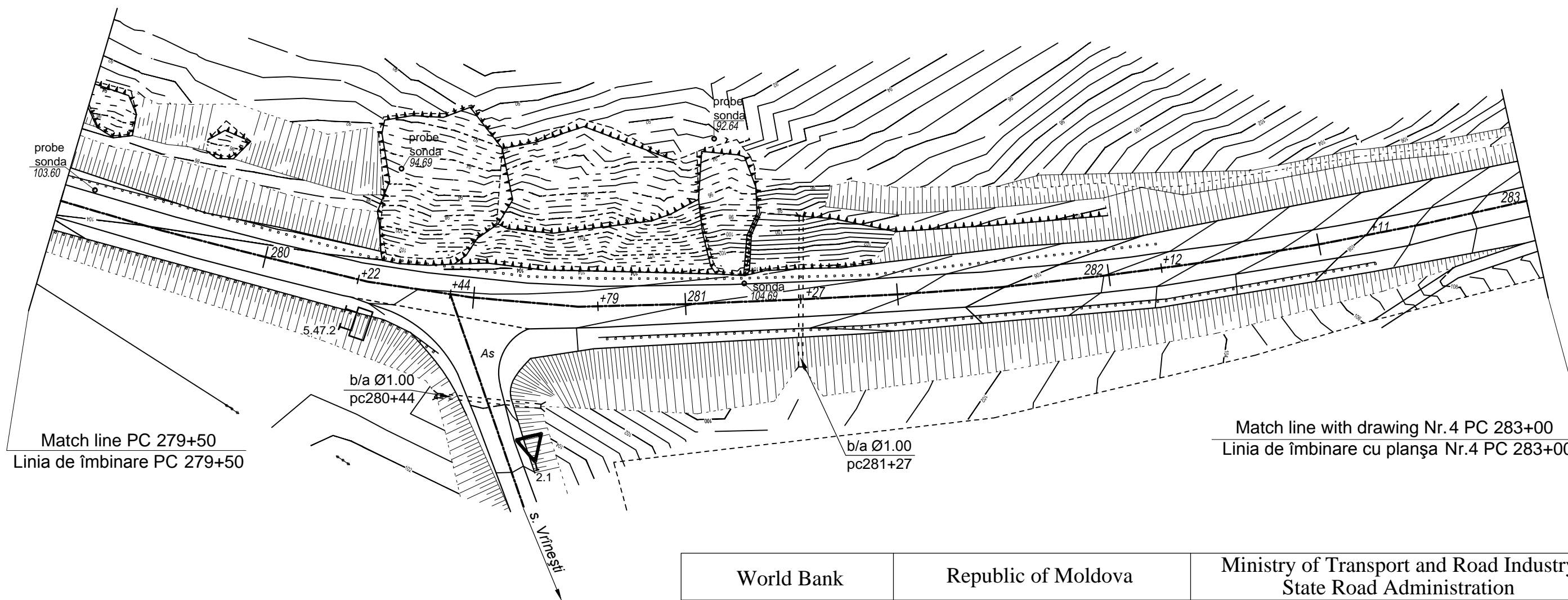
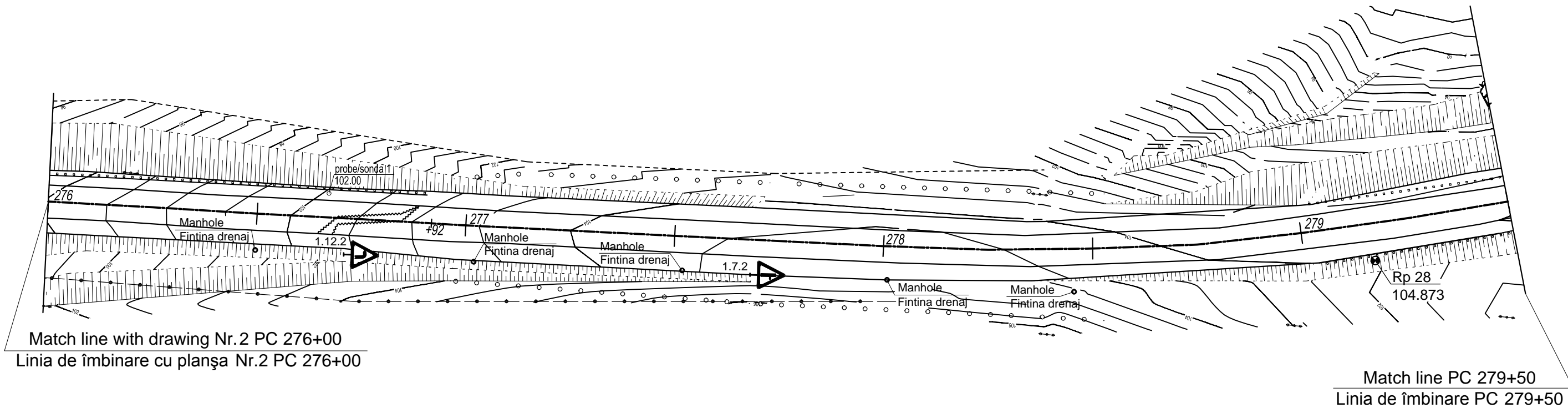
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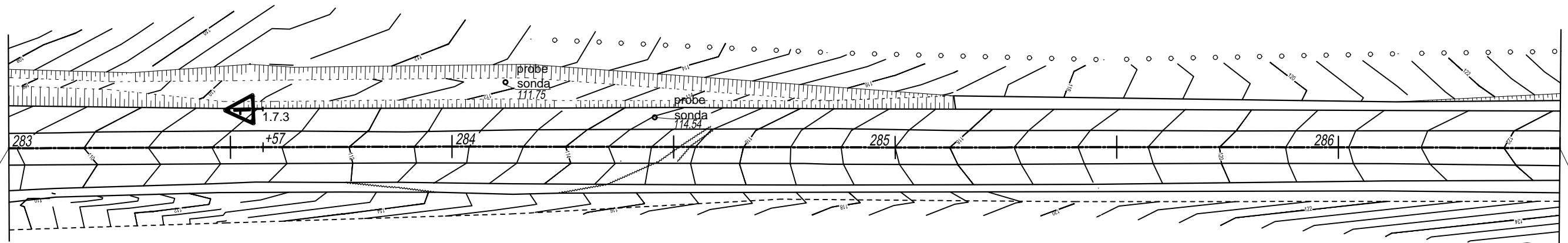
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Linia de îmbinare PC 272+50

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Linia de îmbinare cu planșa Nr.3 PC 276+00

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support Project				
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
Universcons	Road plan PC 269+00-276+00 Plan drum PC 269+00-276+00	Designed	A.Gonciaruc		Scale	1:1000
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		Control STAS	L.Pozdirca			

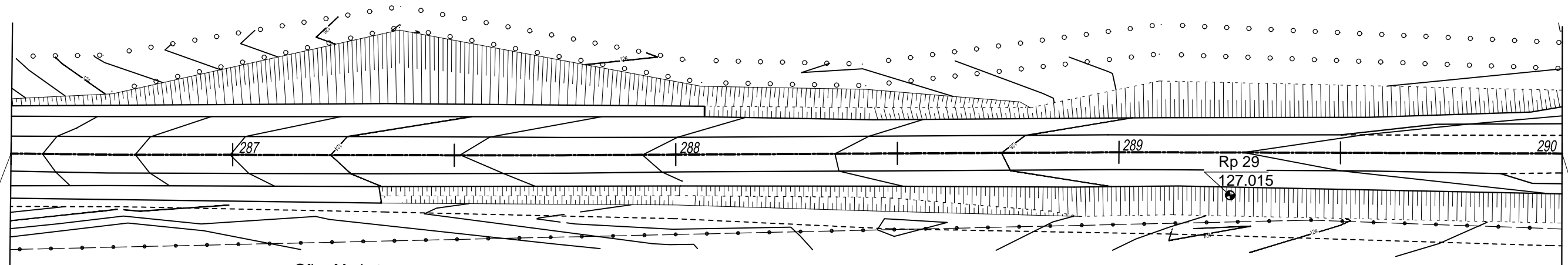


World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
	Road Sector Programme	Support	Project			
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza	Date	03.2012	
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		Control STAS	L.Pozdirca			



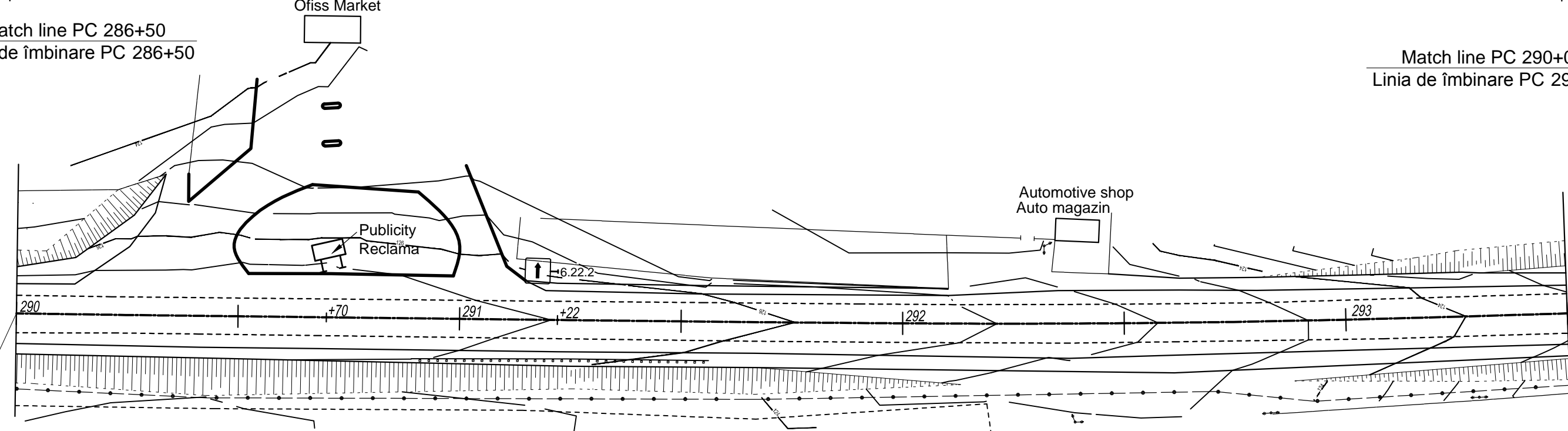
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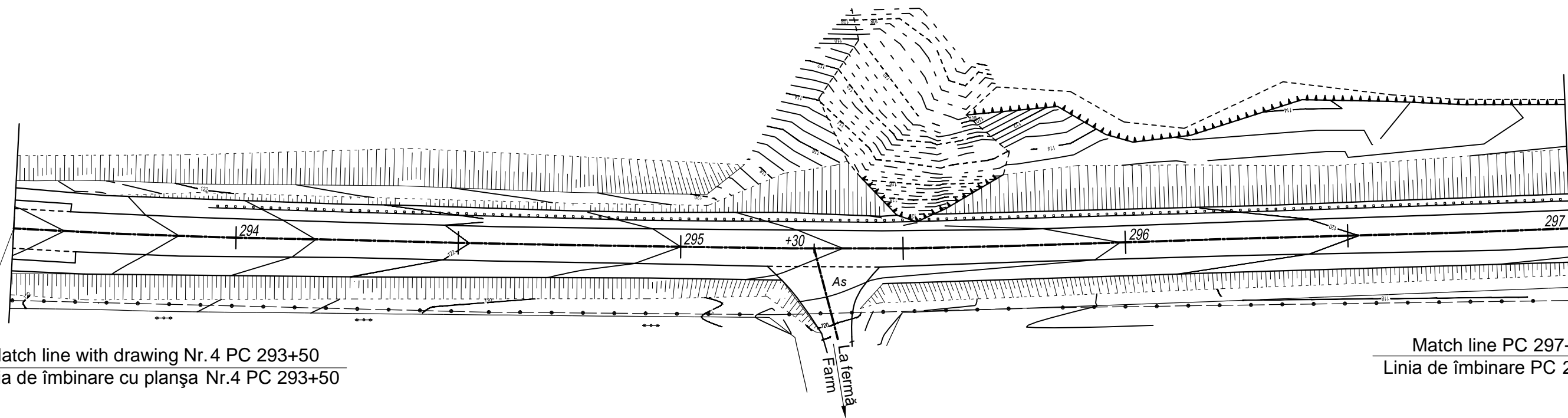


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Linia de îmbinare cu planșa Nr.5 PC 293+50

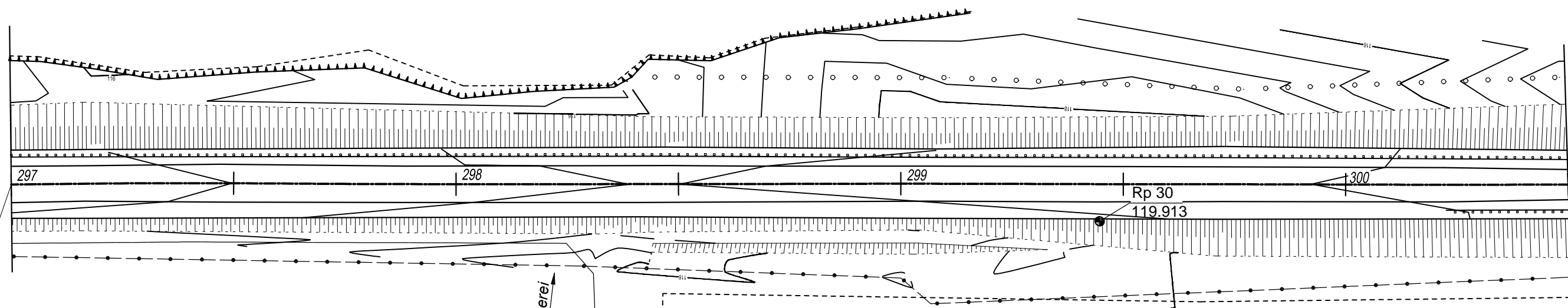
World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support Project				
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
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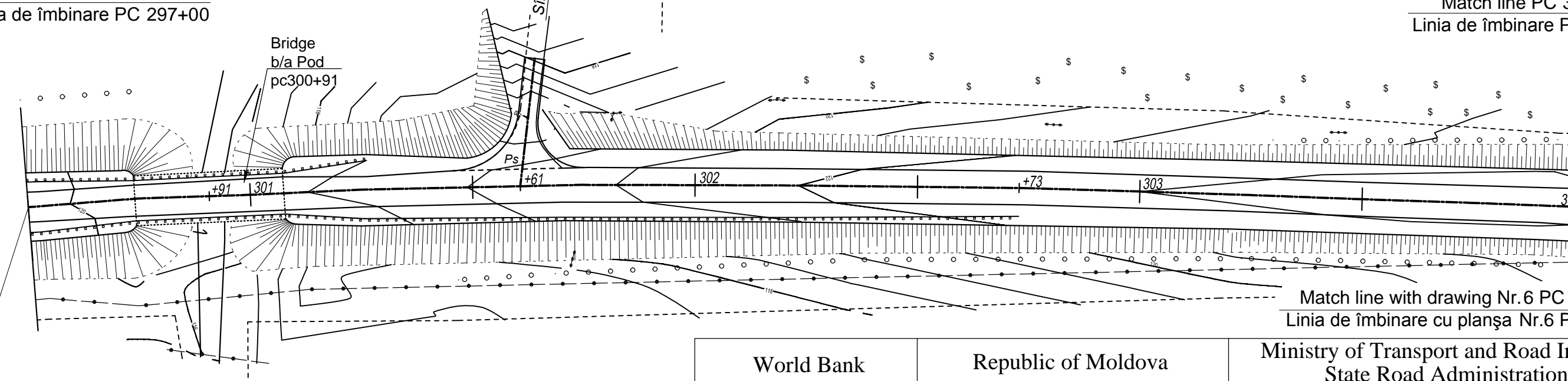
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Linia de îmbinare PC 297+00



Match line PC 297+00  
Linia de îmbinare PC 297+00

Match line PC 300+50  
Linia de îmbinare PC 300+50

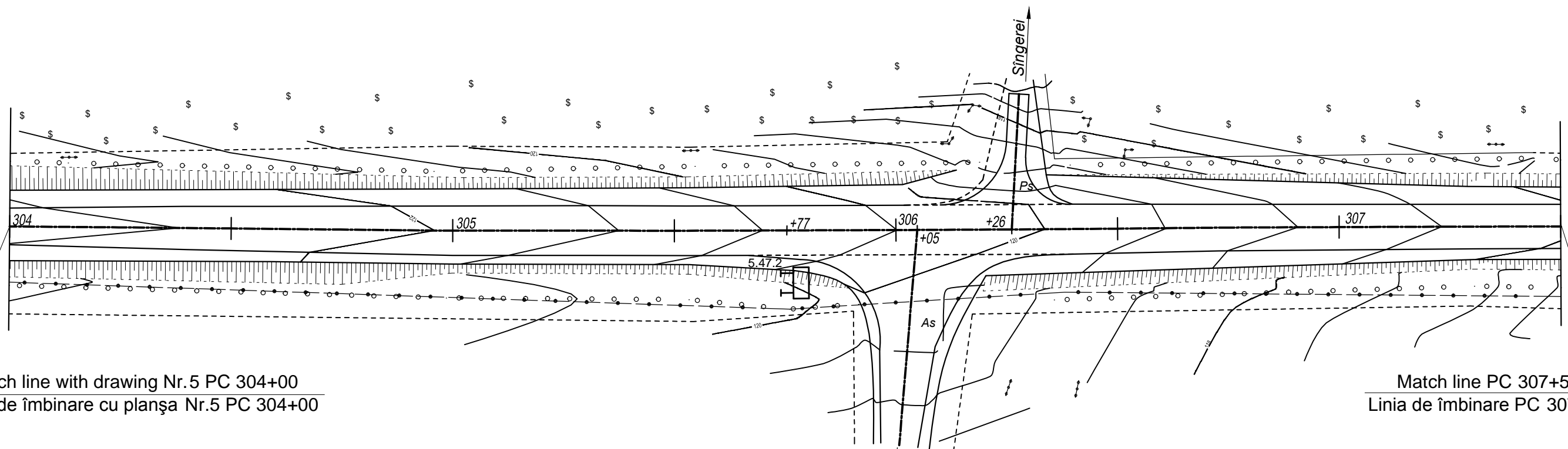


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Linia de îmbinare cu planșa Nr.6 PC 304+00

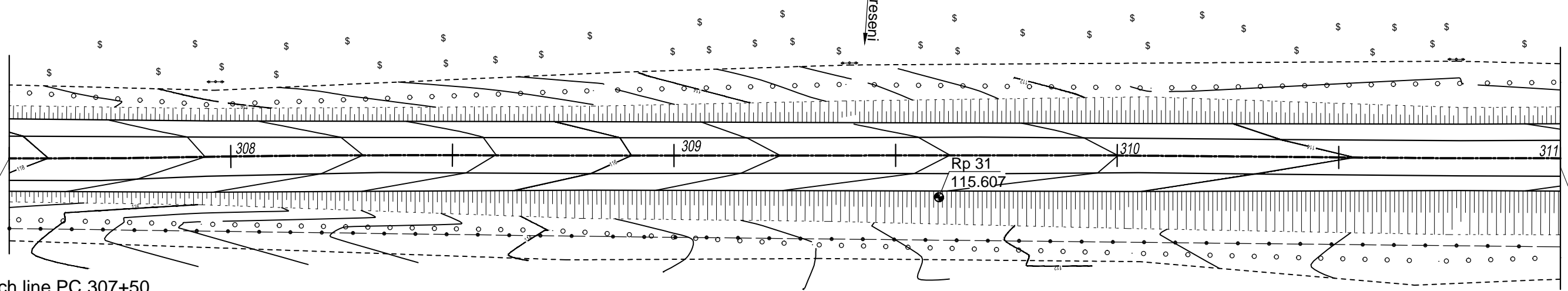
World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
	Road Sector	Programme	Support	Project		
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni		ISP	S.Bogza	Date	03.2012
Universcons	Road plan PC 293+50-304+00 Plan drum PC 293+50-304+00		Designed	A.Gonciaruc	Scale	1:1000
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			Control STAS	L.Pozdirca		





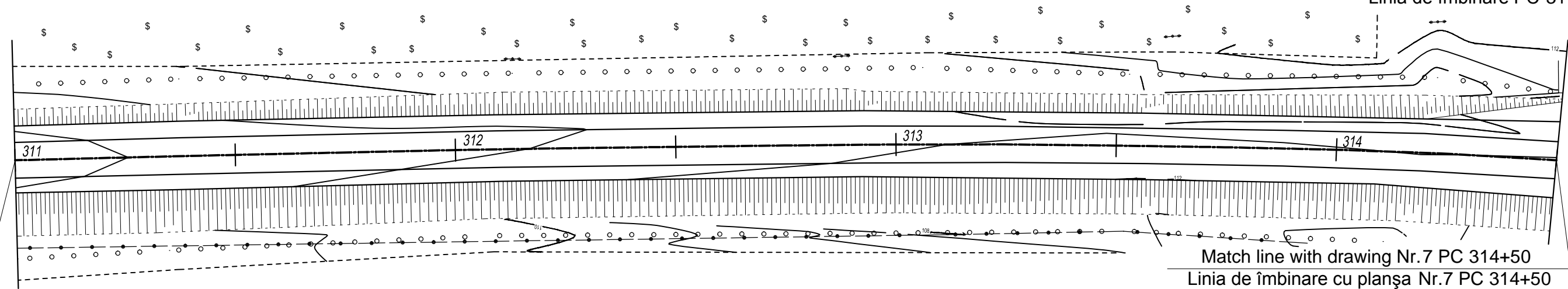
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Linia de îmbinare cu planșa Nr.5 PC 304+00

Match line PC 307+50  
Linia de îmbinare PC 307+50



Match line PC 307+50  
Linia de îmbinare PC 307+50

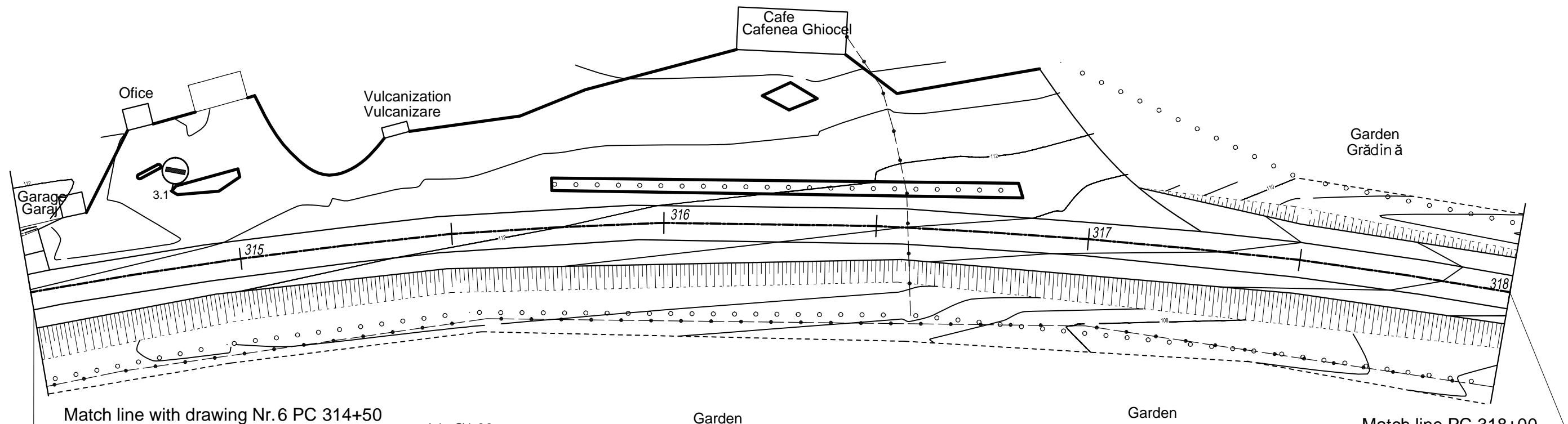
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Linia de îmbinare cu planșa Nr.7 PC 314+50

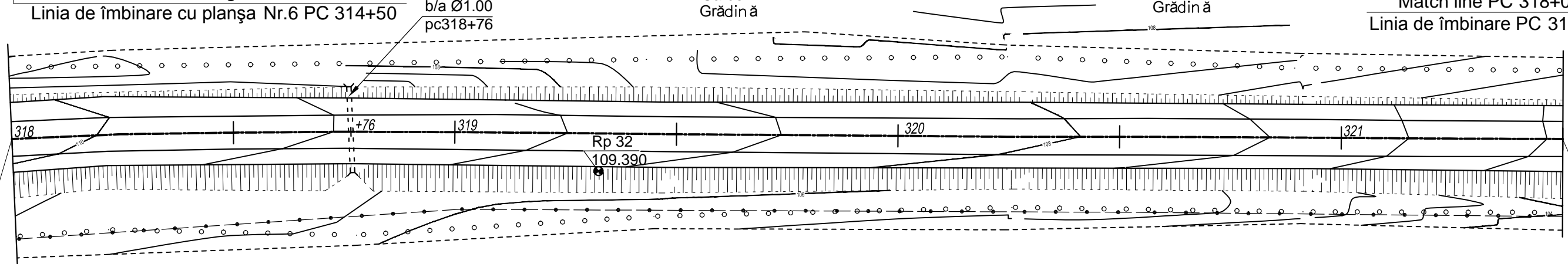
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World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
	Road	Sector	Programme	Support	Project	
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni		ISP	S.Bogza	Date	03.2012
Universcons	Road plan PC 304+00-314+50 Plan drum PC 304+00-314+50		Designed	A.Gonciaruc	Scale	1:1000
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			Control STAS	L.Pozdirca		



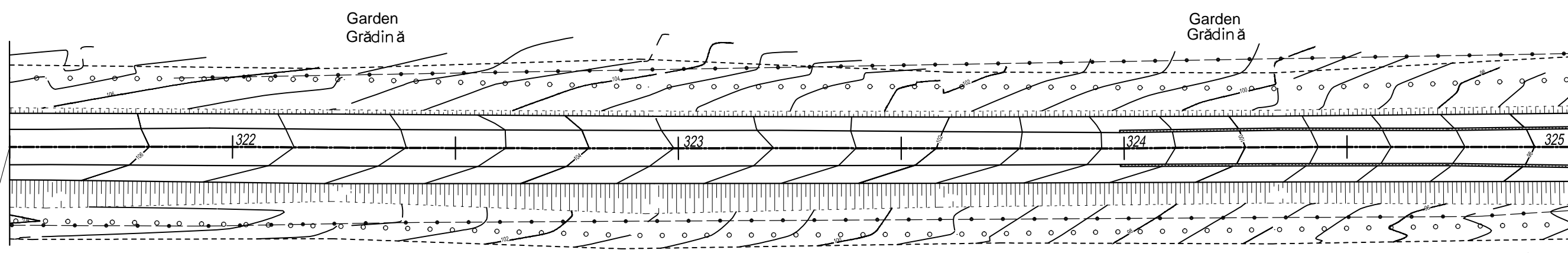
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Match line PC 318+00  
Linia de îmbinare PC 318+00



Match line PC 318+00  
Linia de îmbinare PC 318+00

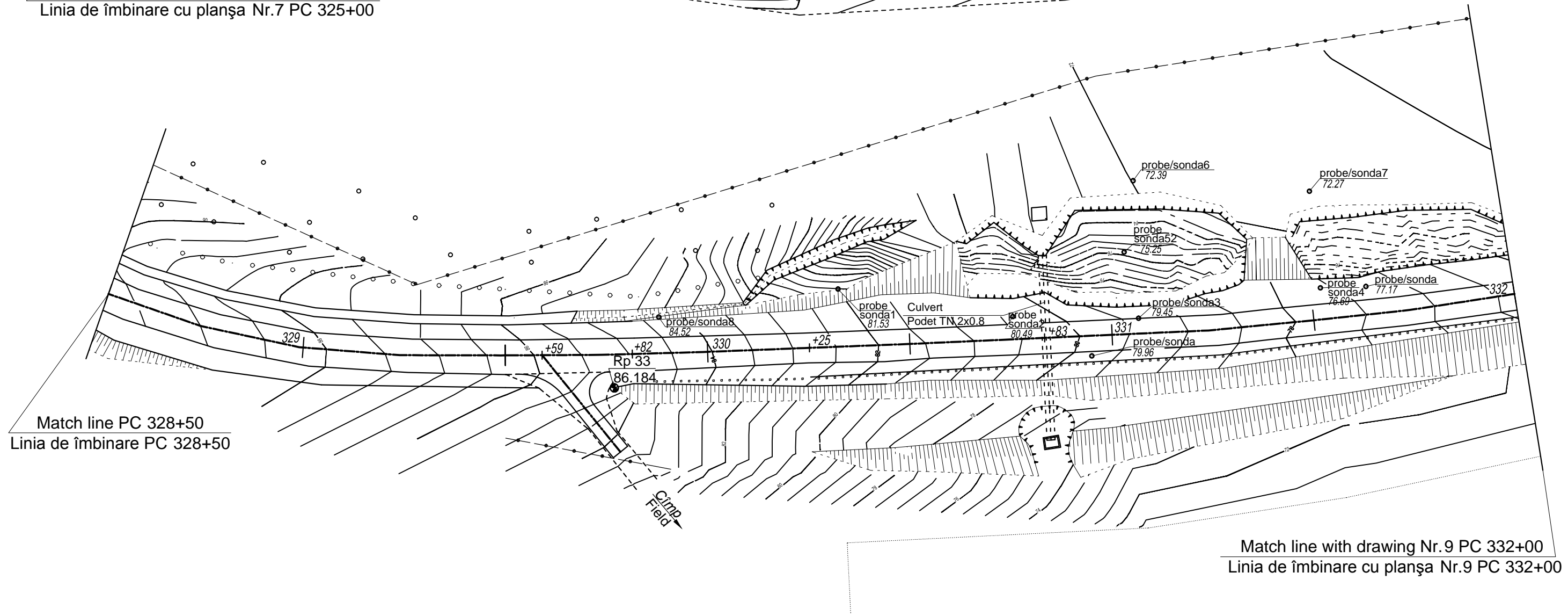
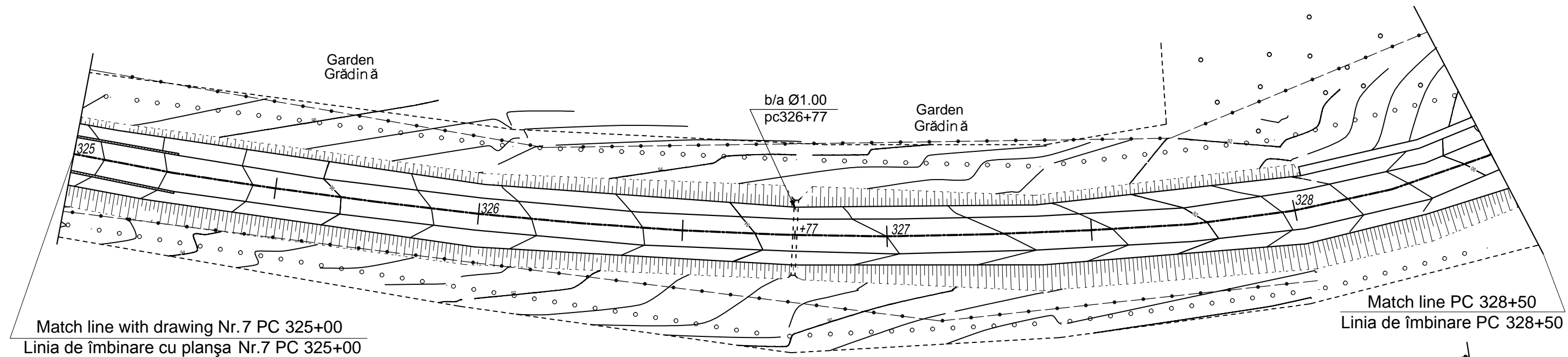
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Linia de îmbinare PC 321+50



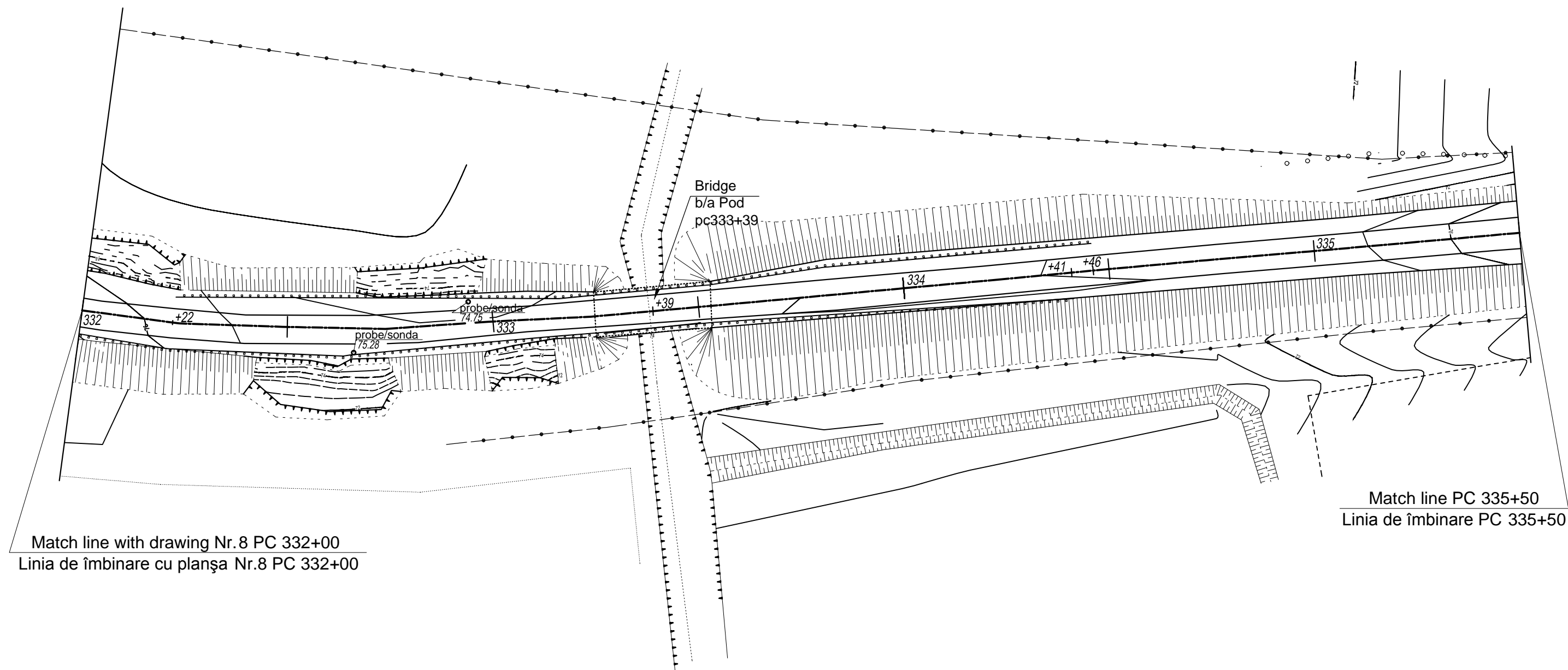
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Linia de îmbinare cu planșa Nr.8 PC 325+00

Match line PC 321+50  
Linia de îmbinare PC 321+50

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support Project				
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
Universcons	Drawing title Road plan PC 314+50-325+00 Plan drum PC 314+50-325+00	Designed	A.Gonciaruc		Scale	1:1000
		Checked	N.Tcaci		Drawing PD-DA 7	
		Control STAS	L.Pozdirca			

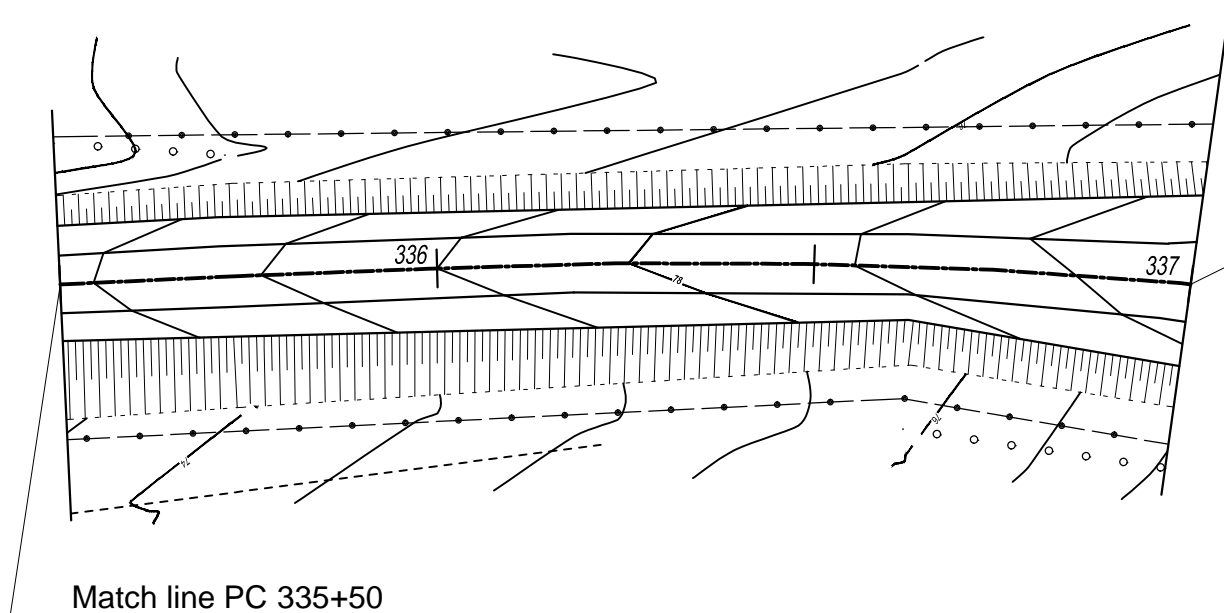


World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support Project				
Roughton International	Rehabilitation of R14 Road	ISP	S.Bogza		Date	03.2012
	Bălți-Sărăteni	Designed	A.Gonciaruc		Scale	1:1000
Universcons	Road plan PC 325+00-332+00 Plan drum PC 325+00-332+00	Checked	N.Tcaci		Drawing PD-DA 8	
		Control STAS	L.Pozdirca			



Match line with drawing Nr.8 PC 332+00  
 Linia de îmbinare cu planșa Nr.8 PC 332+00

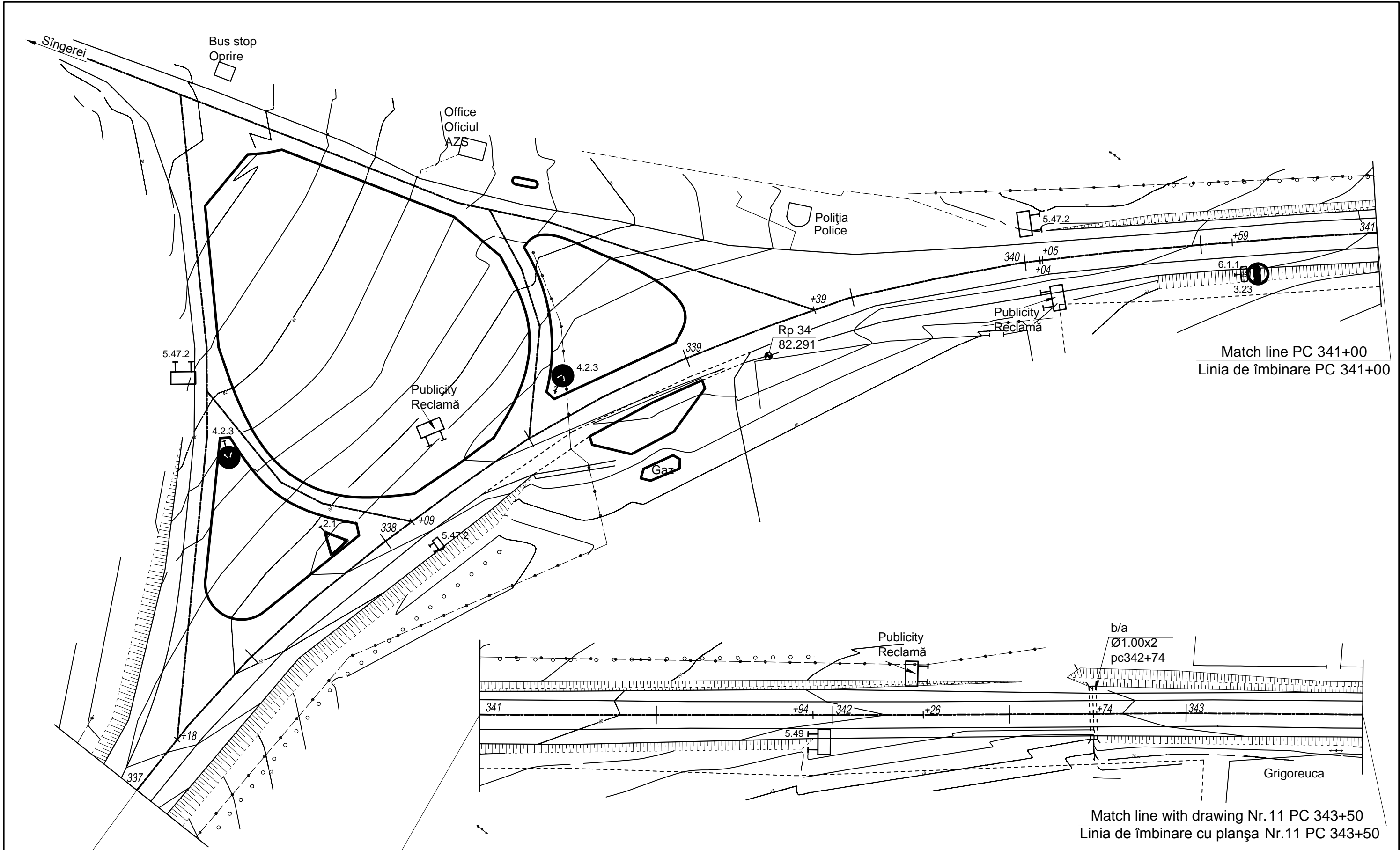
Match line PC 335+50  
 Linia de îmbinare PC 335+50



Match line with drawing Nr.10 PC 337+00  
 Linia de îmbinare cu planșa Nr.10 PC 337+00

Match line PC 335+50  
 Linia de îmbinare PC 335+50

World Bank		Republic of Moldova		Ministry of Transport and Road Industry State Road Administration			
		Road	Sector	Programme	Support	Project	
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni  Road plan PC 332+00-337+00 Plan drum PC 332+00-337+00	ISP		S.Bogza		Date	03.2012
		Designed		A.Gonciaruc		Scale	1:1000
		Checked		N.Tcaci		Drawing PD-DA 9	
		Control STAS		L.Pozdirca			

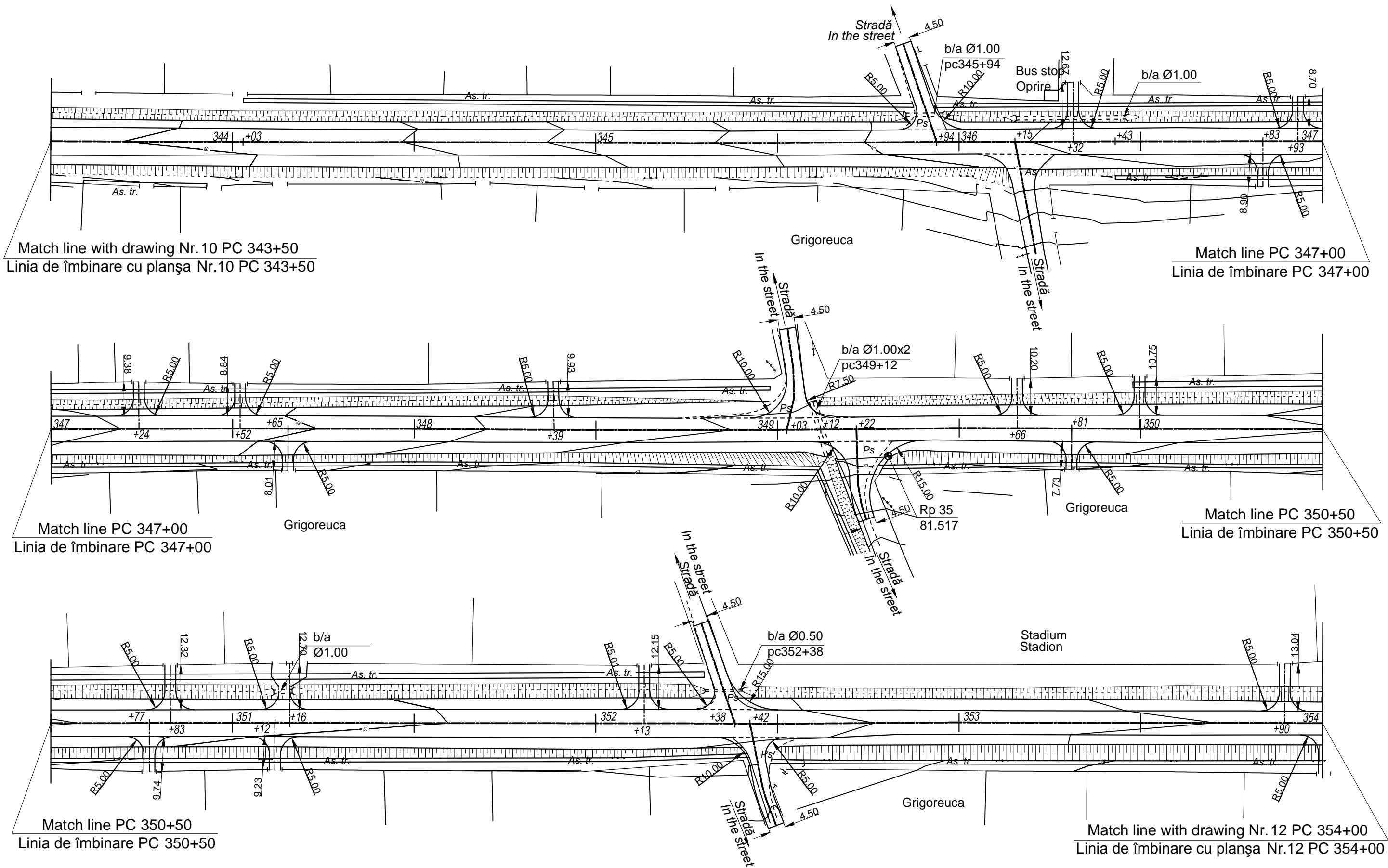


Match line with drawing Nr. 9 PC 337+00  
Linia de îmbinare cu planșa Nr.9 PC 337+00

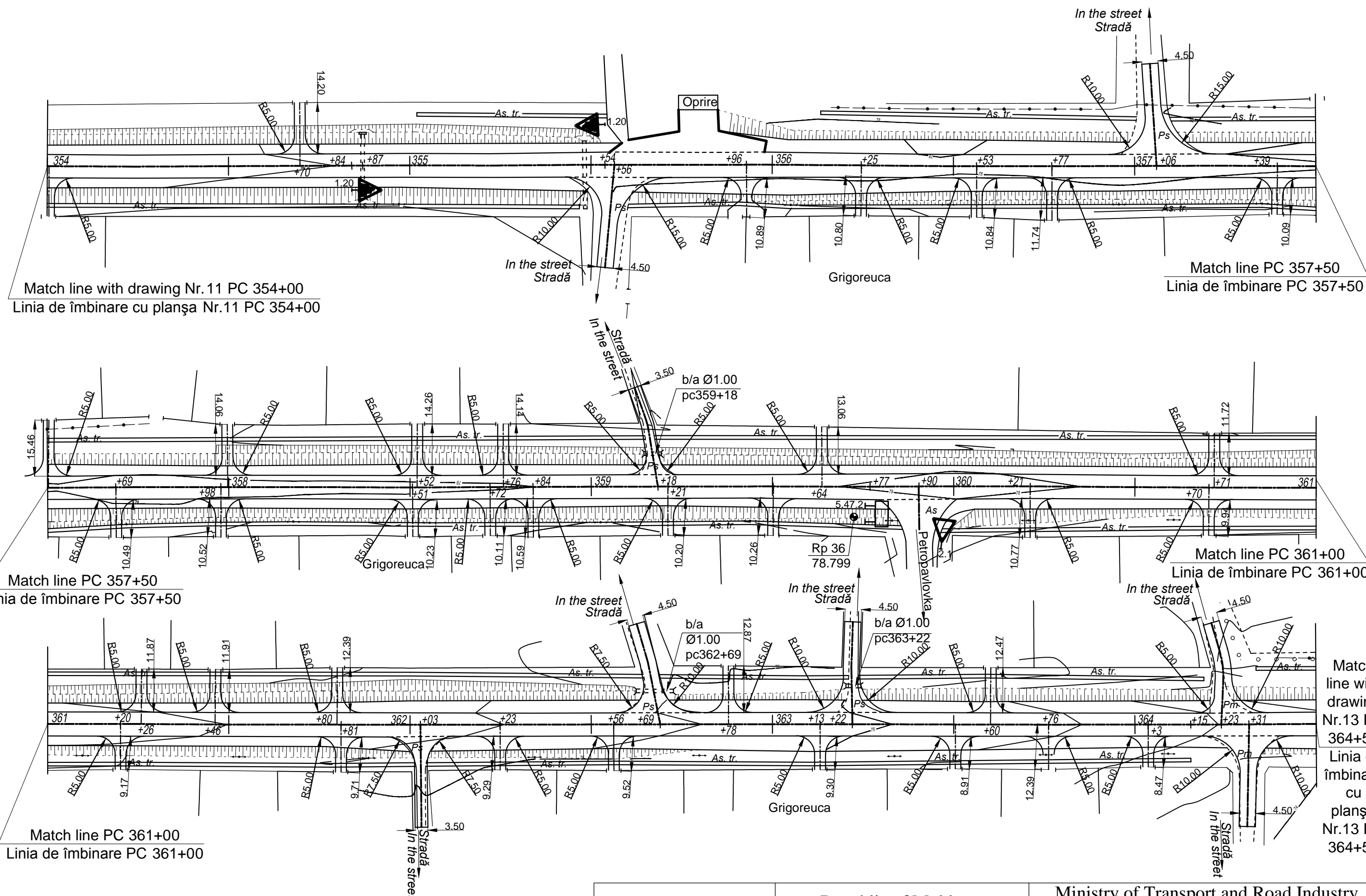
Match line PC 341+00  
Linia de îmbinare PC 341+00

Match line with drawing Nr. 11 PC 343+50  
Linia de îmbinare cu planșa Nr.11 PC 343+50

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road		Sector	Programme	Support	Project	
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni		ISP	S.Bogza	Date	03.2012
			Designed	A.Gonciaruc	Scale	1:1000
	Road plan PC 337+00-343+50 Plan drum PC 337+00-343+50		Checked	N.Tcaci	Drawing PD-DA 10	
			Control STAS	L.Pozdirca		

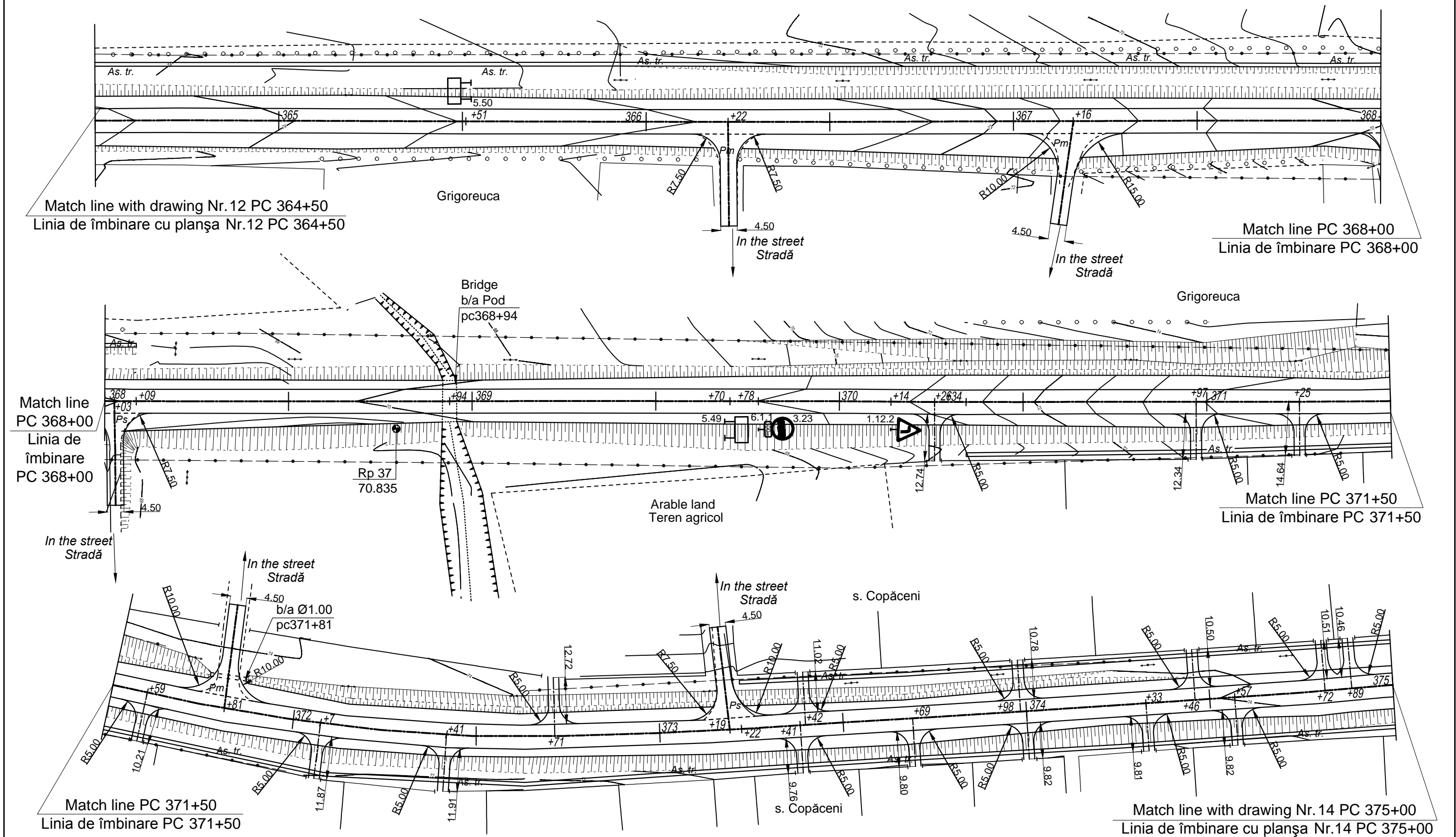


World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
Universcons	Drawing title Road plan PC 343+50-354+00 Plan drum PC 343+50-354+00	Designed	A.Gonciaruc		Scale	1:1000
		Checked	N.Tcaci		Drawing PD-DA 11	
		Control STAS	L.Pozdirca			



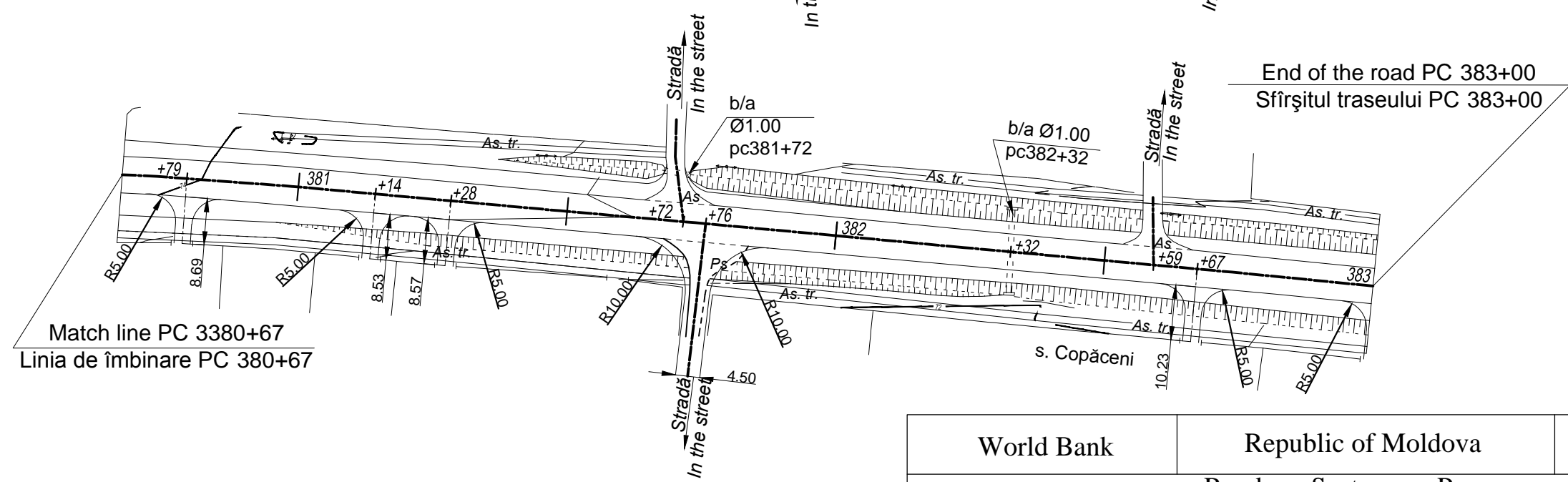
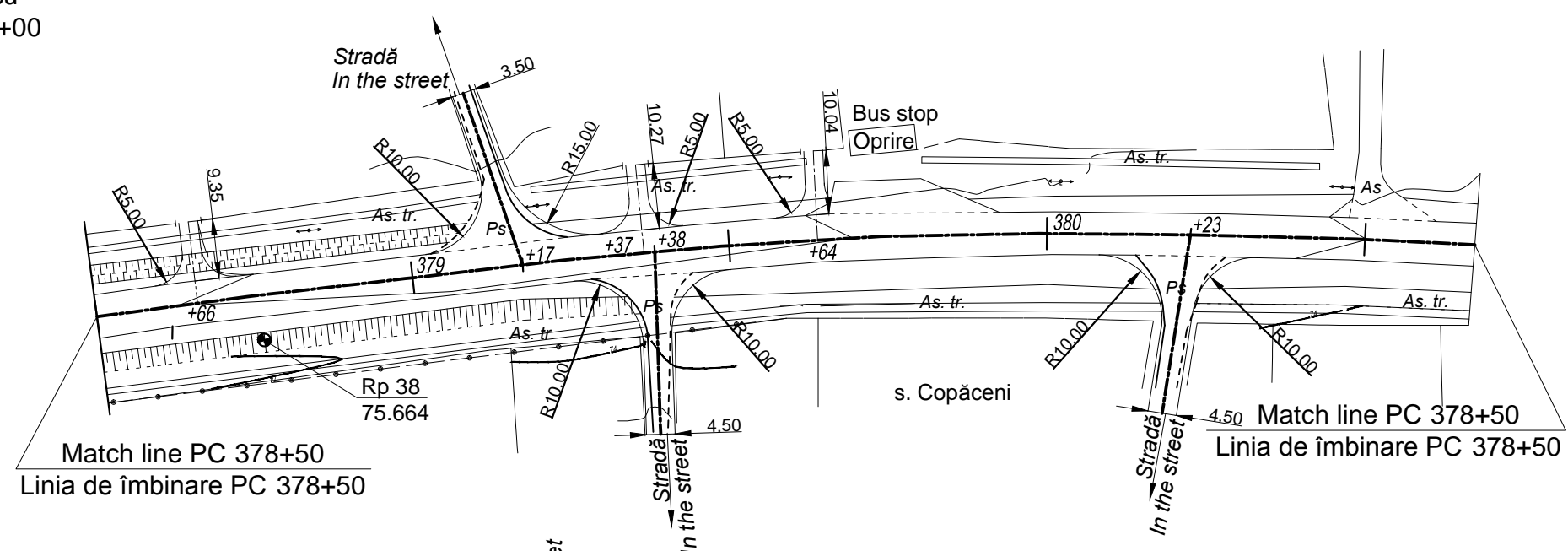
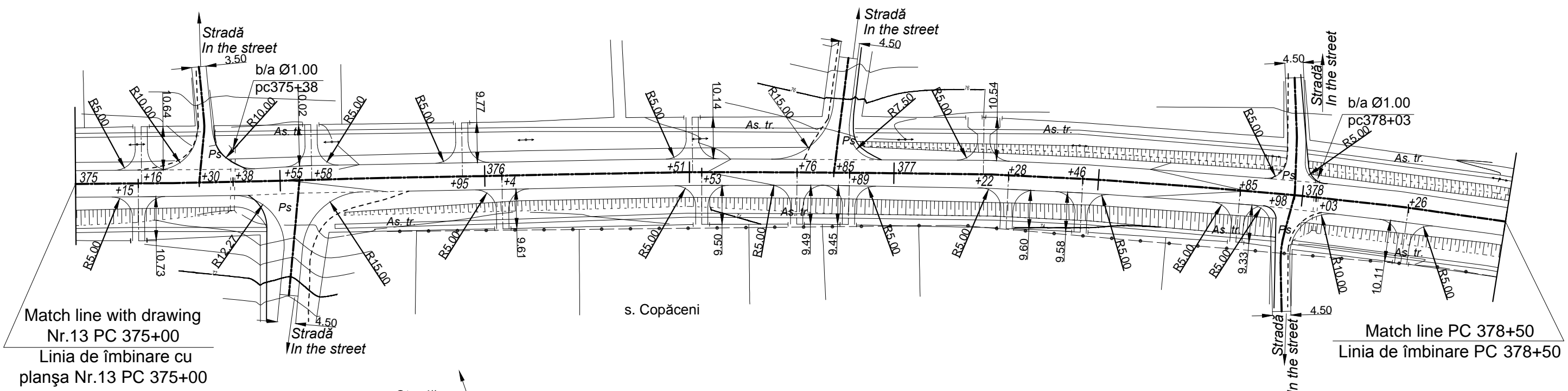
World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
	Road	Sector	Programme	Support	Project	
Roughton International	Rehabilitation of R14 Road		ISP	S.Bogza	Date	03.2012
	Bălți-Sărăteni		Designed	A.Gonciaruc	Scale	1:1000
Universcons	Road plan PC 354+00-364+50 Plan drum PC 354+00-364+50		Checked	N.Tcaci	Drawing PD-DA 12	
			Control STAS	L.Pozdirca		





World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support Project				
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
Universcons	Road plan PC 364+50-375+00 Plan drum PC 364+50-375+00	Designed	A.Gonciaruc		Scale	1:1000
		Checked	N.Tcaci		Drawing PD-DA 13	
		Control STAS	L.Pozdirca			



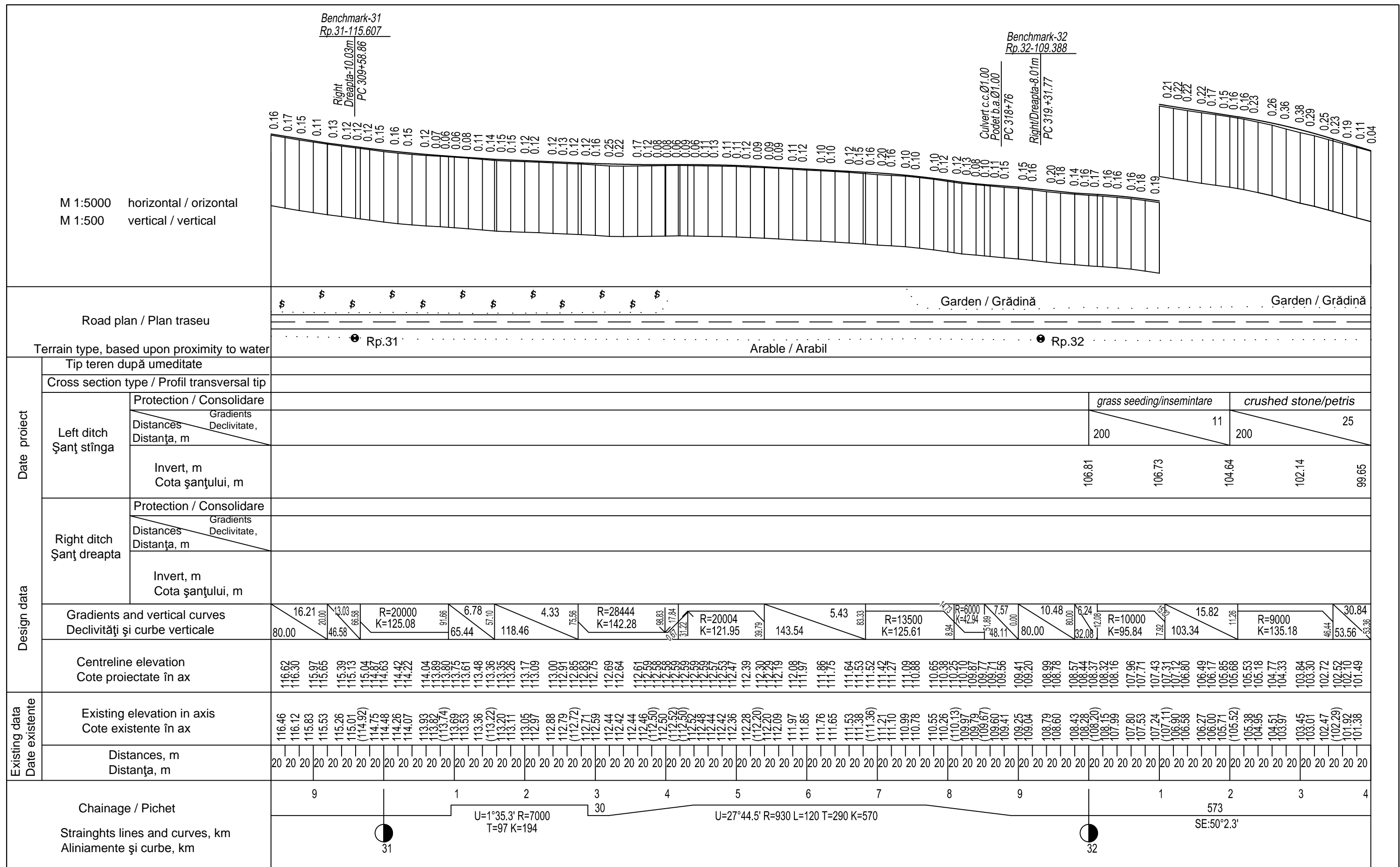


World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme		Support Project					
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
Universcons	Drawing title Road plan PC 375+00-383+00 Plan drum PC 375+00-383+00	Designed	A.Gonciaruc		Scale	1:1000	
		Checked	N.Tcaci		Drawing PD-DA 14		
		Control STAS	L.Pozdirca				









	EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
	Road Sector Programme Support Project							
	Roughton International  Universcons	Rehabilitation of R14 Road Chisinau-Sărăteni	ISP	S.Bogza		Date	03.2012	
			Designed	S.Postică		Scale	1:500	
		Drawing title Longitudinal Profile Profil Longitudinal PC 308+40 - PC 324+00	Checked	N.Tcaci		Drawing PL-DA-4		
Control STAS			L.Pozdirca					





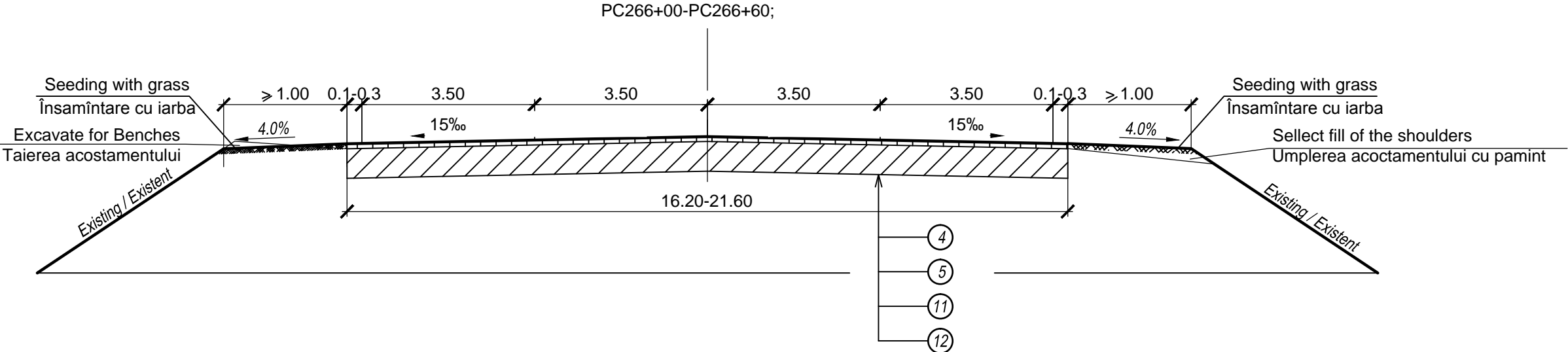






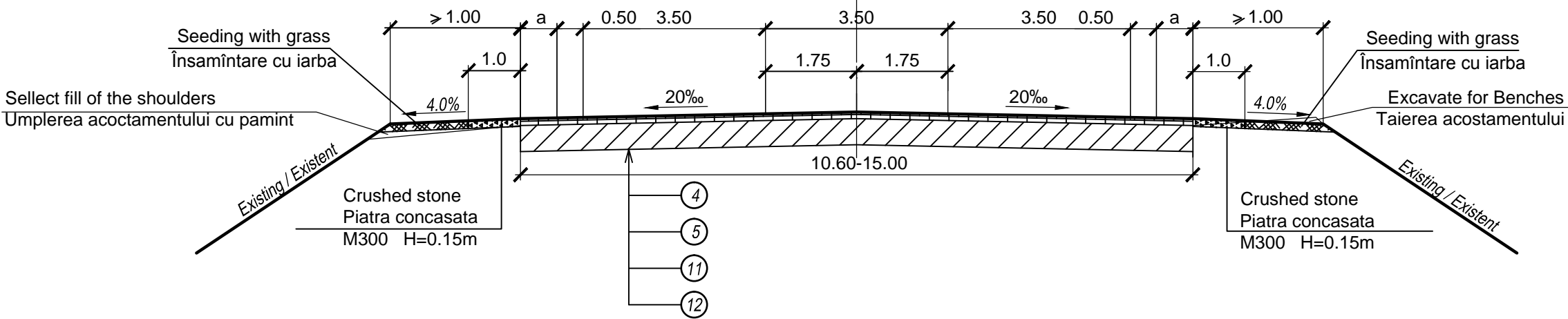


TYPICAL CROSS SECTION  
PROFIL TRANSVERSAL TIP I



TYPICAL CROSS SECTION  
PROFIL TRANSVERSAL TIP II

PC290+50-PC291+15;

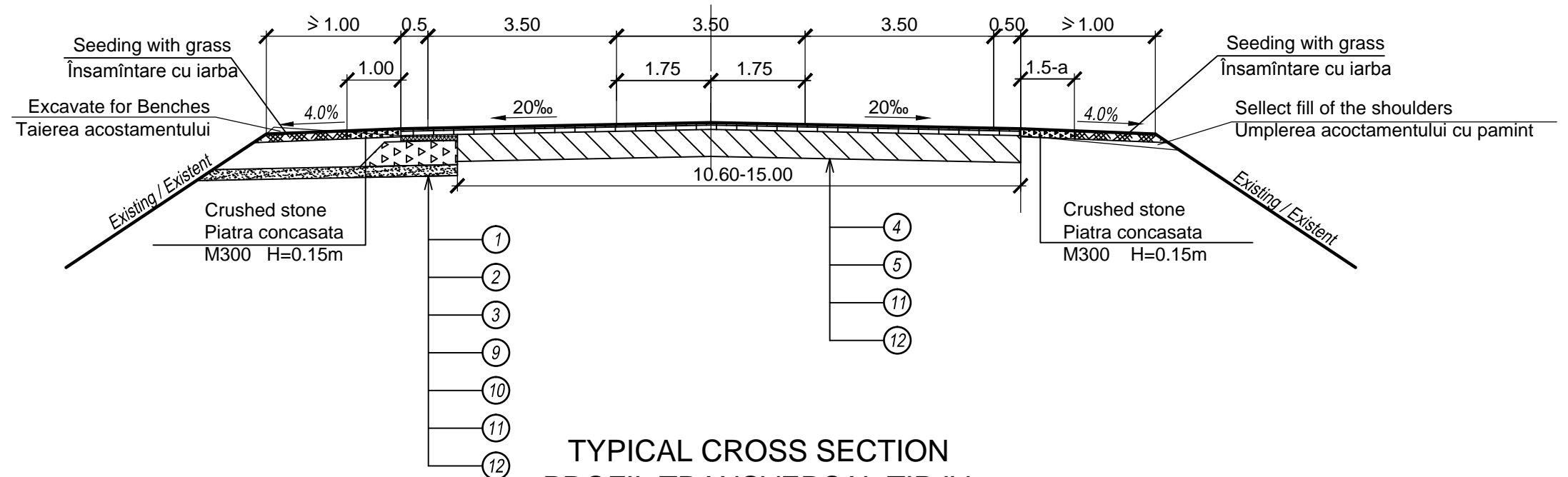


④ Sistem rutier existent	- 0.40-0.88cm	Existing pavement
⑤ Egalizare cu beton asfaltic cu granulație fina (mare) poros M1	- 3-13.5cm	Levelling with fine grained porous asphalt concrete M1
⑪ Geocompozit PGM-G 50/50		Geocompozit PGM-G 50/50
⑫ Beton asfaltic cu granulație fina dens Tip A M1	- 4cm	Fine grained dense asphalt type A M1

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support Project				
Roughton International  Universcons	Rehabilitation of R14 Road Balti-Sarateni	ISP	S.Bogza		Date	03.2012
		Designed	A.Gonciaruc		Scale	1:100
	Drawing title Typical cross sections I, II Profile transversale tip I, II	Checked	N.Tcaci		Drawing PTT-DA-1	
		Control STAS	L.Pozdirca			

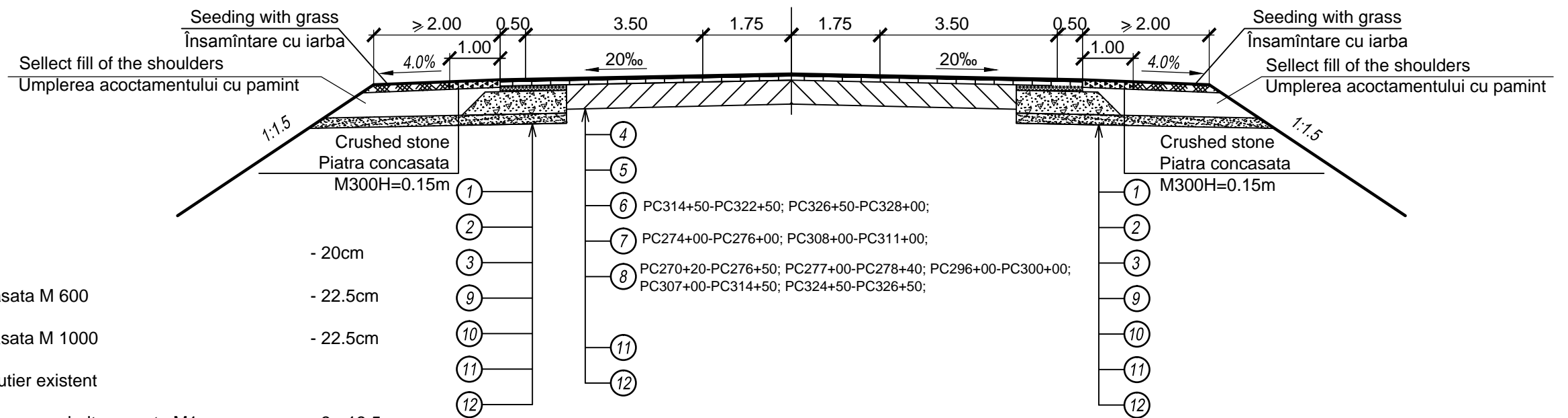
# TYPICAL CROSS SECTION PROFIL TRANSVERSAL TIP III

PC289+90-PC290+50; PC291+15-PC293+00;



# TYPICAL CROSS SECTION PROFIL TRANSVERSAL TIP IV

PC266+60-PC268+80; PC270+20-PC276+50; PC277+00-PC278+40; PC284+60-PC289+90;  
PC293+00-PC300+10; PC301+50-PC322+50; PC324+50-PC328+00; PC335+20-PC383+00;

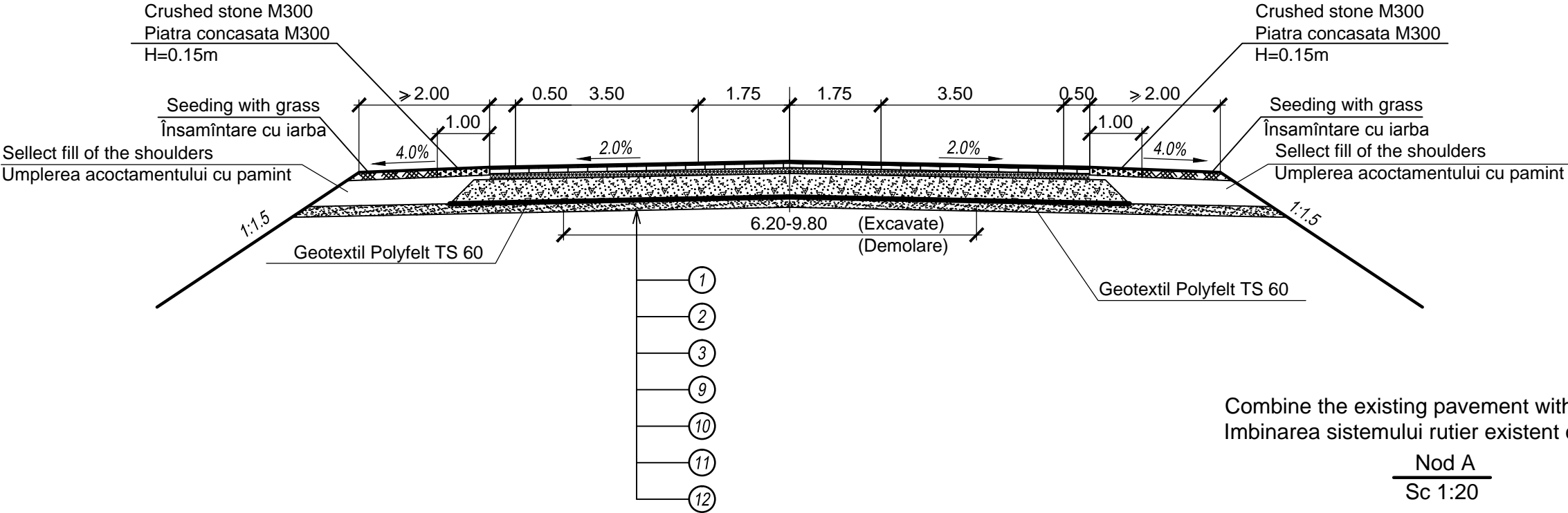


- ① Sand / Nisip - 20cm
- ② Crushed stone / Piatra concasata M 600 - 22.5cm
- ③ Crushed stone / Piatra concasata M 1000 - 22.5cm
- ④ Existing pavement / Sistem rutier existent
- ⑤ Levelling with fine grained porous asphalt concrete M1  
Egalizare cu beton asfaltic cu granulație fina (mare) poros M1 - 3 - 13.5cm
- ⑥ Coarse grained porous asphalt concrete M1  
Beton asfaltic cu granulație mare poros M1 - 8cm
- ⑦ Coarse grained porous asphalt concrete M1  
Beton asfaltic cu granulație mare poros M1 - 7cm
- ⑧ Coarse grained porous asphalt concrete M1  
Beton asfaltic cu granulație mare poros M1 - 4cm
- ⑨ Coarse grained porous asphalt concrete M1  
Beton asfaltic cu granulație mare poros M1 - 8.5cm
- ⑩ Coarse fine grained asphalt concrete M1  
Beton asfaltic cu granulație fina poros M1 - 6cm
- ⑪ Geocompozit PGM-G 50/50
- ⑫ Fine grained dense asphalt type A M1  
Beton asfaltic cu granulație fina dens Tip A M1 - 4cm

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support Project				
Roughton International	Rehabilitation of R14 Road Balti-Sarateni	ISP	S.Bogza		Date	03.2012
Universcons	Drawing title Typical cross sections III, IV Profile transversale tip III, IV	Designed	A.Gonciaruc		Scale	1:100
		Checked	N.Tcaci		Drawing PTT-DA-2	
		Control STAS	L.Pozdirca			

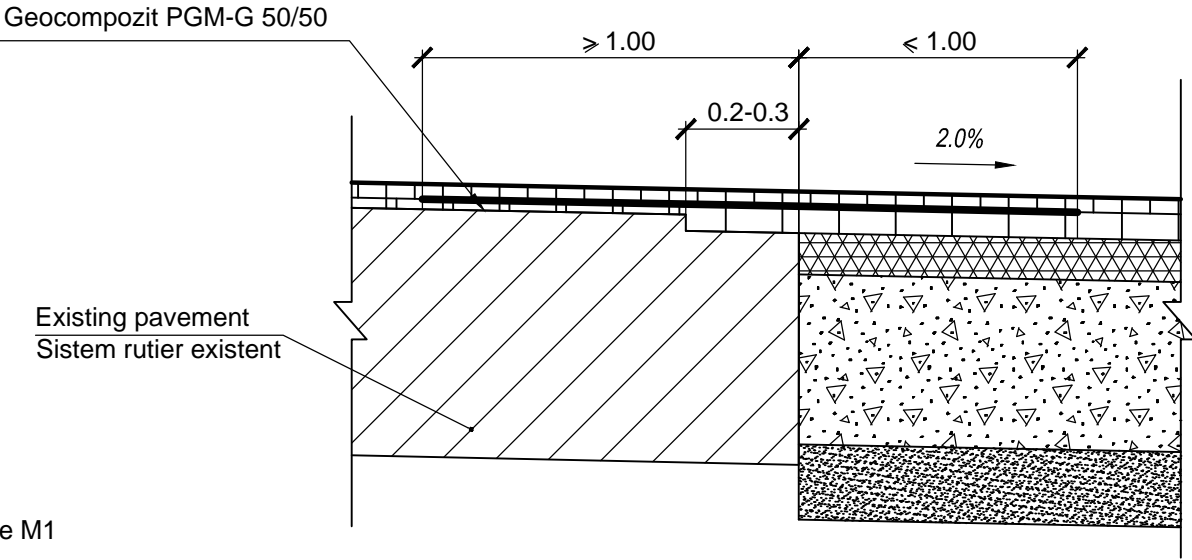
TYPICAL CROSS SECTION  
PROFIL TRANSVERSAL TIP V

PC268+80-PC268+92; PC269+20-PC270+20; PC276+50-PC277+00;  
PC278+40-PC284+60; PC300+10-PC300+73; PC301+06-PC301+50;  
PC322+50-PC324+50; PC328+00-PC333+24; PC333+52-PC335+20;



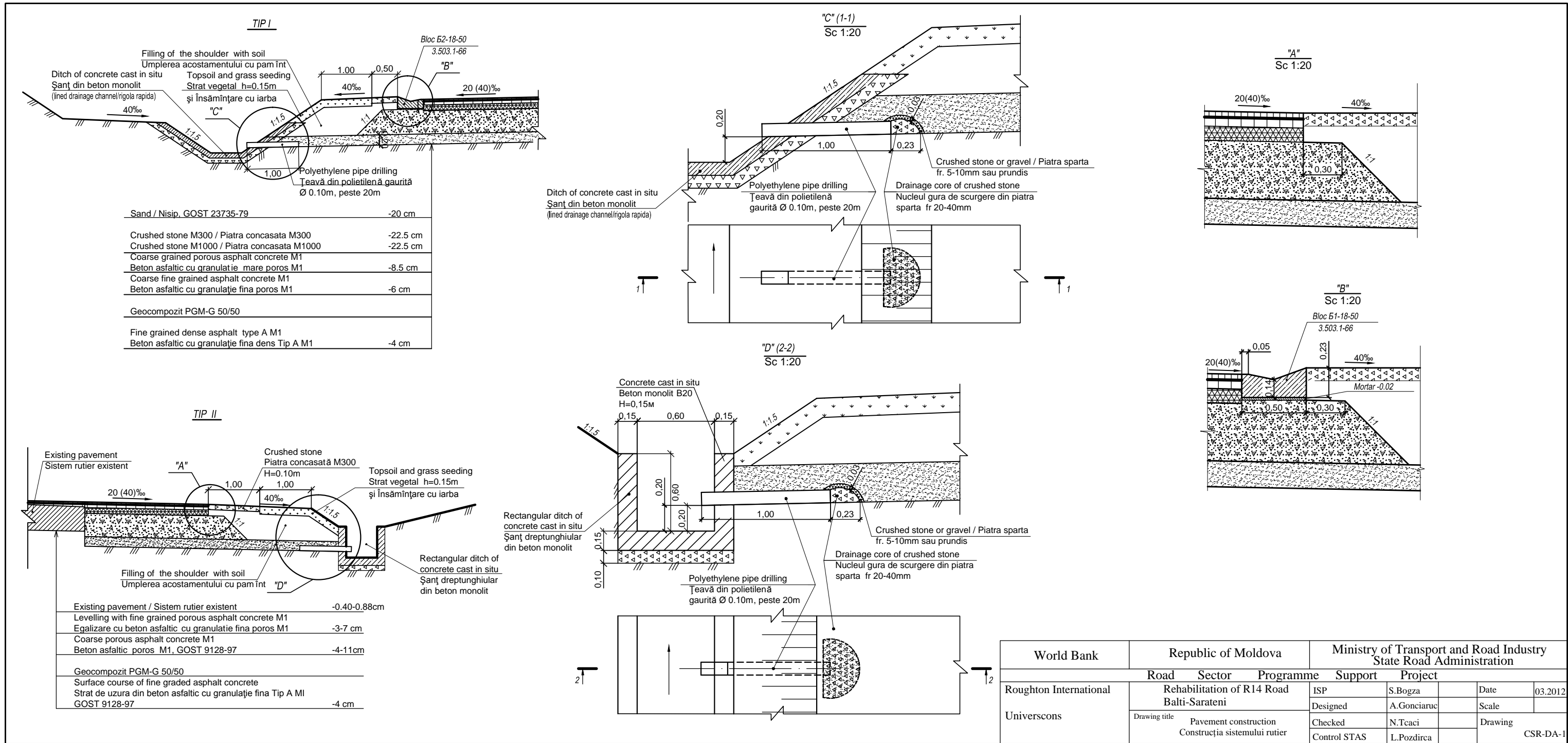
Combine the existing pavement with the new one  
Imbinarea sistemului rutier existent cu cel nou

Nod A  
Sc 1:20



① Nisip	- 20cm	Sand
② Piatra concasata M600	- 22.5cm	Crushed stone M600
③ Piatra concasata M1000	- 22.5cm	Crushed stone M1000
⑨ Beton asfaltic cu granulație mare poros M1	- 8.5cm	Coarse porous grained asphalt concrete M1
⑩ Beton asfaltic cu granulație fina poros M1	- 6cm	Fine grained porous asphalt concrete M1
⑪ Geocompozit PGM-G 50/50		Geocomposite PGM-G 50/50
⑫ Beton asfaltic cu granulație fina dens Tip A M1	- 4cm	Fine grained dense asphalt type A M1

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support Project				
Universcons	Rehabilitation of R14 Road Balti-Sarateni	ISP	S.Bogza		Date	03.2012
		Designed	A.Gonciaruc		Scale	1:100
	Typical cross sections V Profile transversale tip V	Checked	N.Tcaci		Drawing PTT-DA-3	
		Control STAS	L.Pozdirca			



M 1:200																	
Design data Date proiect	Gradient in lenght Declivitati in lungimi																
	Elevation Cote																
Existing data Date existente	Elevation Cote																
	Distances Distanta																

PC 266+00.00									
<p>M 1:200</p>									
Design data Date proiect	Gradient in lenght Declivitati in lungimi								
	Elevation Cote								
Existing data Date existente	Elevation Cote								
	Distances Distanta								

M 1:200							
Design data Date proiect	Gradient in lenght Declivitati in lungimi						
	Elevation Cote						
Existing data Date existente	Elevation Cote						
	Distances Distanta						

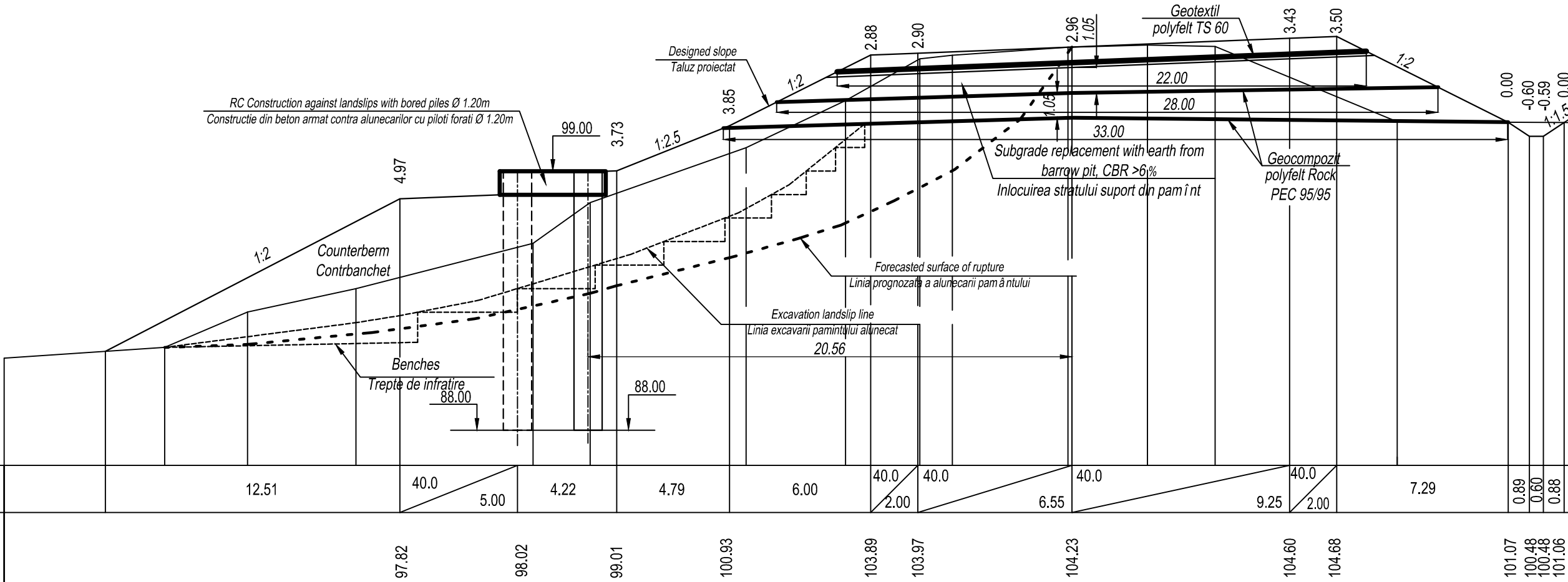
EBRD		Republic of Moldova		Ministry of Transport and Road Industry State Road Administration			
Road Sector		Programme Support		Project			
Roughton International		Rehabilitation of R14 Road Bălți-Sărăteni		ISP	S.Bogza	Date	03.2012
Universcons		Drawing title Cross Section of Earthwork Profile Transversale Terasamente PC 266+00 - PC 274+00		Designed	A.Gonciaruc	Scale	1:200
				Checked	N.Tcaci	Drawing PT-DA-1	
				Control STAS	L.Pozdirca		







M 1:200

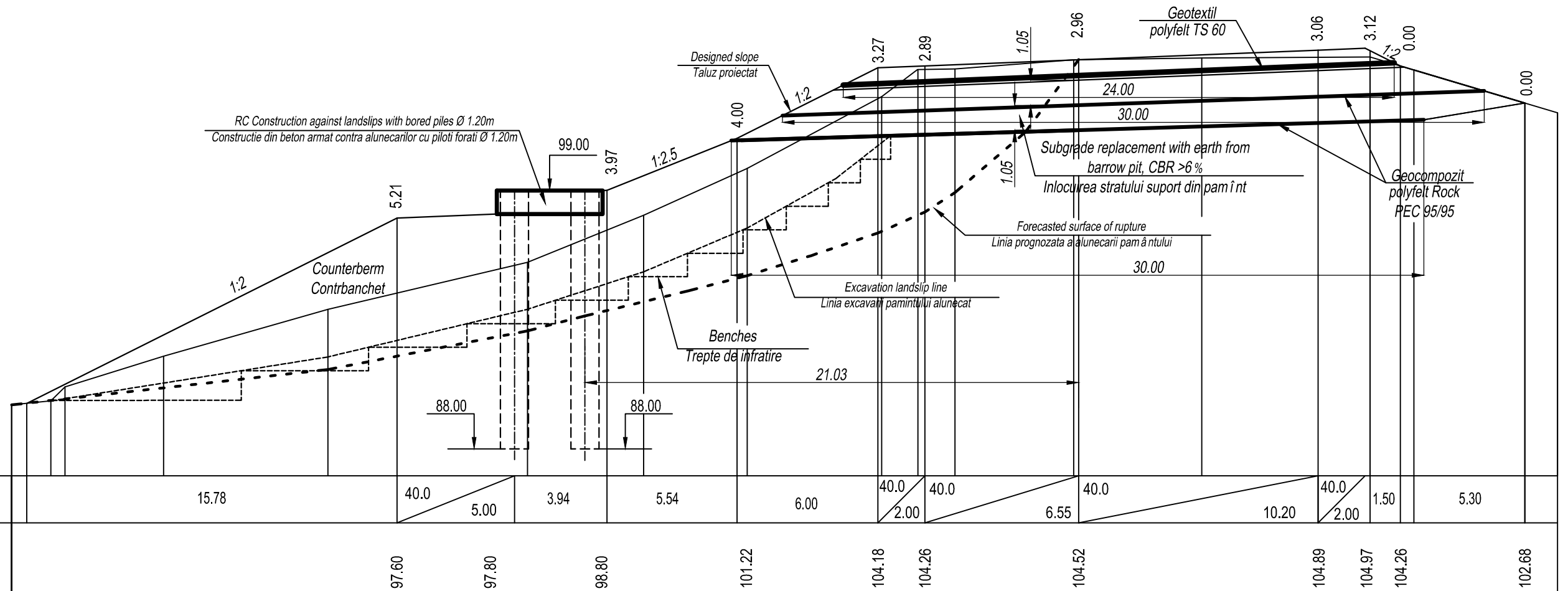


Design data Date proiect	Gradient in lenght Declivitati in lungimi				12.51		40.0	5.00	4.22	4.79	6.00	40.0	40.0	6.55	40.0	9.25	40.0	7.29	0.89	0.60	0.88
	Elevation Cote					97.82	98.02	99.01	100.93	103.89	103.97	104.23	104.60	104.68	101.07	100.48	100.48	101.06			
Existing data Date existente	Elevation Cote	(91.06)	91.50	93.00	94.00	95.92	97.65	100.00	102.00	103.77	103.93	104.27	104.36	104.29	101.10	101.13					
	Distances Distanțe	6.82	3.52	4.61	7.52	2.43	6.62	4.23	3.16	1.38	4.92	3.37	2.88	7.74	7.35						

PC 280+00.00

EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
		Designed	A.Gonciaruc		Scale	1:200
	Drawing title Cross Section of Earthwork Profile Transversale Terasamente PC 280+00	Checked	N.Tcaci		Drawing PT-DA-4	
		Control STAS	L.Pozdirca			

M 1:200

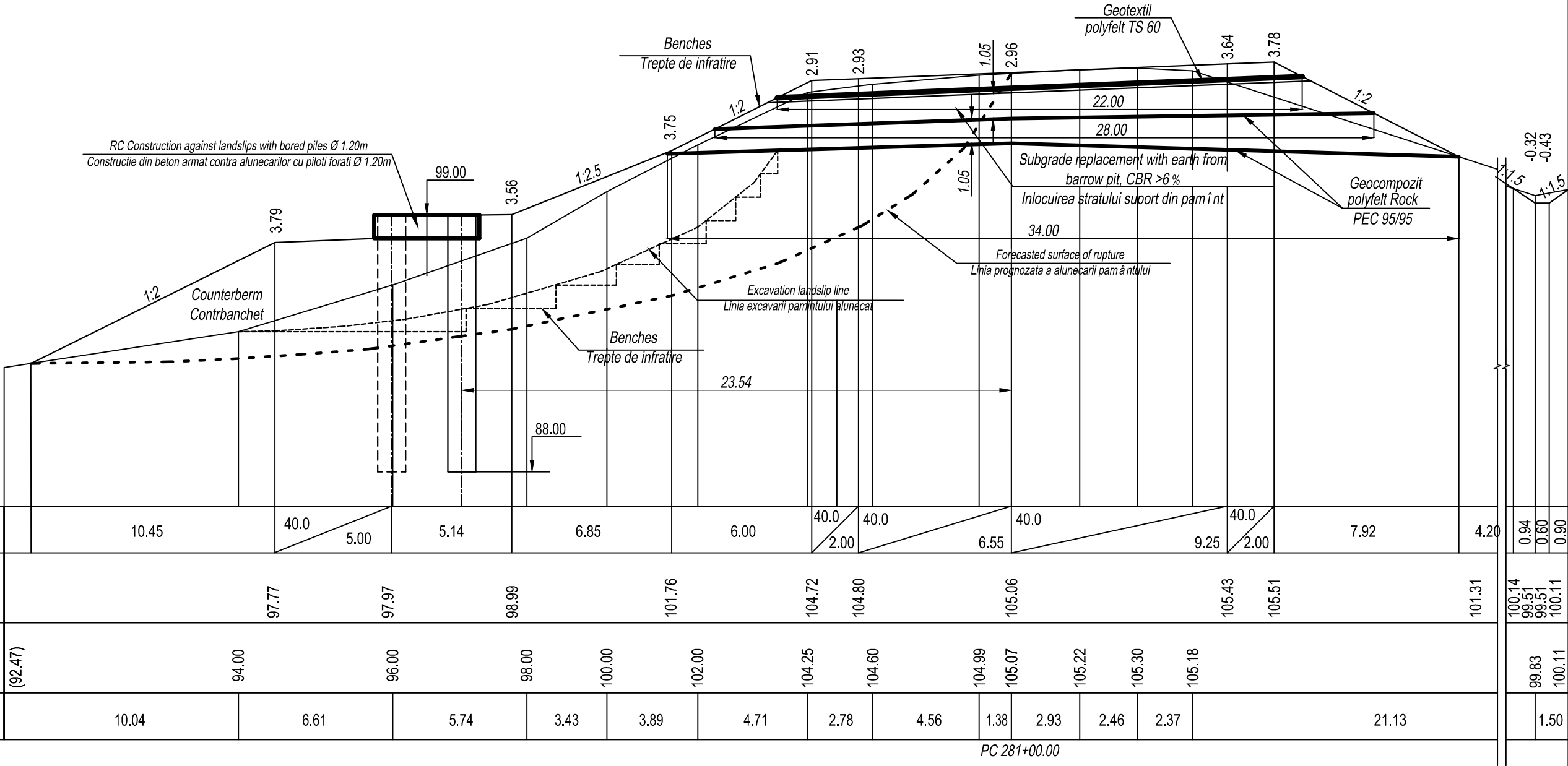


Design data Date proiect	Gradient in lenght Declivitati in lungimi	15.78 40.0 5.00 3.94 5.54 6.00 40.0 40.0 6.55 40.0 10.20 40.0 1.50 5.30													
	Elevation Cote	97.60 97.80 98.80 101.22 104.18 104.26 104.52 104.89 104.97 104.26 102.68													
Existing data Date existente	Elevation Cote	(89.93) 90.10 90.70 92.00 94.00 96.00 98.00 100.00 103.05 104.15 104.17 104.57 104.64 104.69 102.30													
	Distances Distanțe	1.67 0.60 4.20 7.00 8.50 4.95 4.41 5.73 1.54 1.58 5.05 5.24 7.17 7.99													

PC 280+40.00

EBRD		Republic of Moldova		Ministry of Transport and Road Industry State Road Administration			
		Road	Sector	Programme	Support	Project	
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni			ISP	S.Bogza	Date	03.2012
				Designed	A.Gonciaruc	Scale	1:200
	Drawing title Cross Section of Earthwork Profile Transversale Terasamente PC 280+40			Checked	N.Tcaci	Drawing PT-DA-5	
				Control STAS	L.Pozdirca		

M 1:200

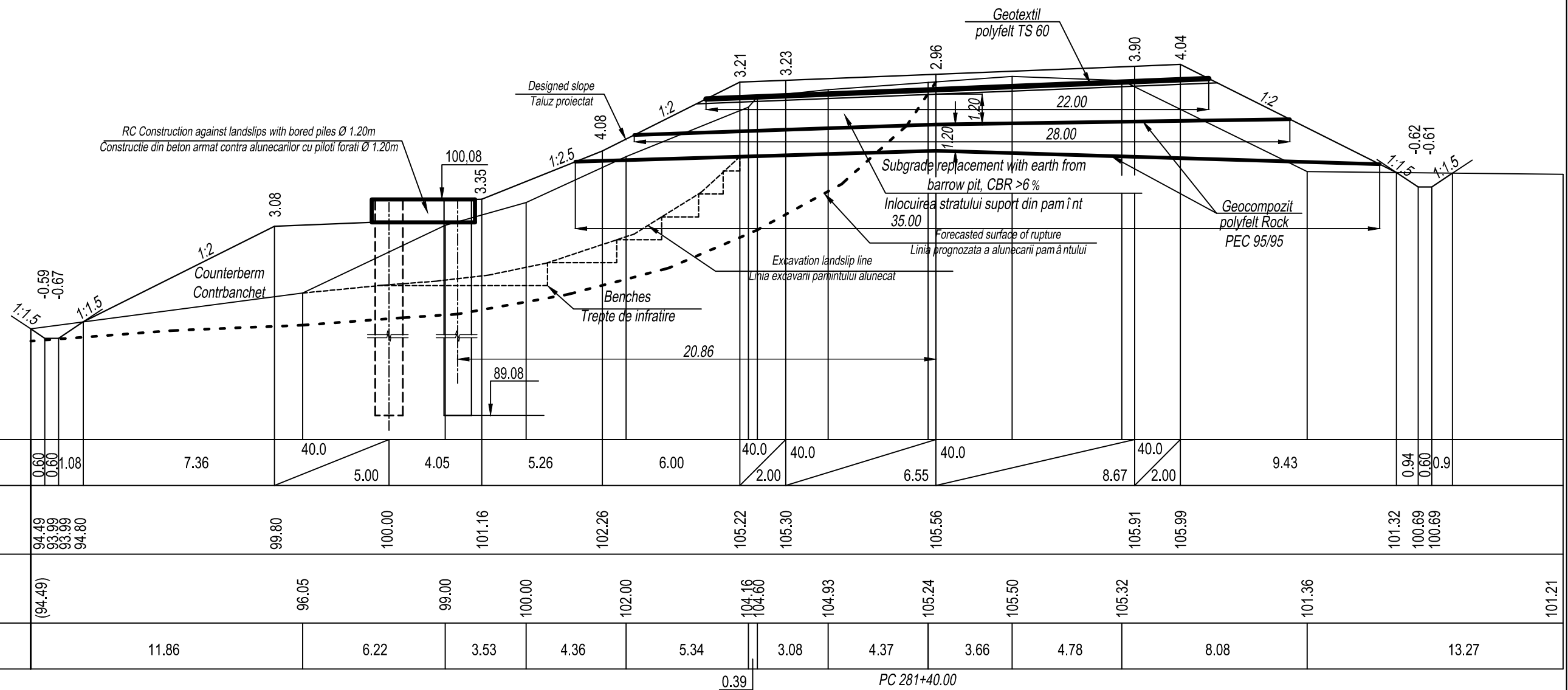


Design data Date proiect	Gradient in lenght Declivitati in lungimi		10.45	40.0	5.00	5.14	6.85	6.00	40.0	40.0	6.55	40.0	9.25	40.0	7.92	4.20	0.94	0.60	0.90
	Elevation Cote		97.77	97.97	98.99	101.76	104.72	104.80	105.06	105.43	105.51	101.31	100.14	99.51	99.51	100.11	99.83	99.51	100.11
Existing data Date existente	Elevation Cote	(92.47)	94.00	96.00	98.00	100.00	102.00	104.25	104.60	104.99	105.07	105.22	105.30	105.18			99.83	99.51	100.11
	Distances Distanțe		10.04	6.61	5.74	3.43	3.89	4.71	2.78	4.56	1.38	2.93	2.46	2.37	21.13			1.50	

PC 281+00.00

EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni		ISP	S.Bogza		Date	03.2012
			Designed	A.Gonciaruc		Scale	1:200
	Drawing title Cross Section of Earthwork Profile Transversale Terasamente PC 281+00		Checked	N.Tcaci		Drawing PT-DA-6	
			Control STAS	L.Pozdirca			

M 1:200

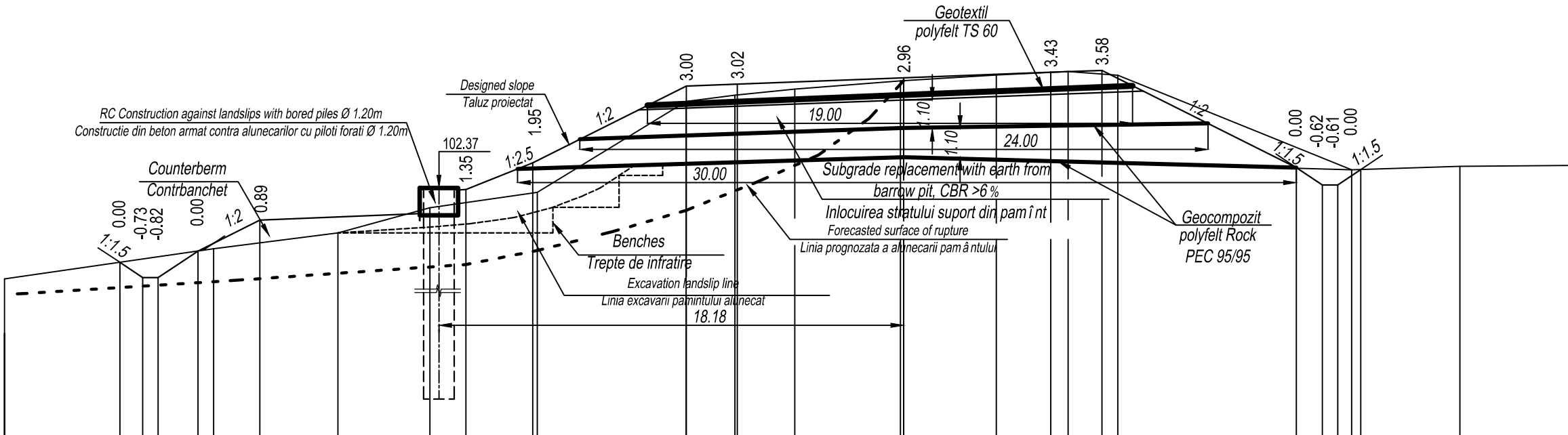


Design data Date proiect	Gradient in lenght Declivitati in lungimi	0.60	0.60	1.08	7.36	<div><div>40.0</div><div>5.00</div></div>	4.05	5.26	6.00	<div><div>40.0</div><div>2.00</div></div>	<div><div>40.0</div><div>6.55</div></div>	<div><div>40.0</div><div>8.67</div></div>	<div><div>40.0</div><div>2.00</div></div>	9.43	0.94	0.60	0.9	
	Elevation Cote	94.49	93.99	93.99	94.80	99.80	100.00	101.16	102.26	105.22	105.30	105.56	105.91	105.99	101.32	100.69	100.69	
Existing data Date existente	Elevation Cote	(94.49)				96.05		99.00	100.00	102.00	<div><div>104.16</div><div>104.60</div></div>	104.93	105.24	105.50	105.32		101.36	101.21
	Distances Distanta				11.86	6.22	3.53	4.36	5.34	<div><div>3.08</div><div>4.37</div></div>	3.66	4.78	8.08	13.27				

0.39 PC 281+40.00

EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme		Support	Project				
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni		ISP	S.Bogza		Date	03.2012
			Designed	A.Gonciaruc		Scale	1:200
	Drawing title Cross Section of Earthwork Profile Transversale Terasamente PC 281+40		Checked	N.Tcaci		Drawing PT-DA-7	
			Control STAS	L.Pozdirca			

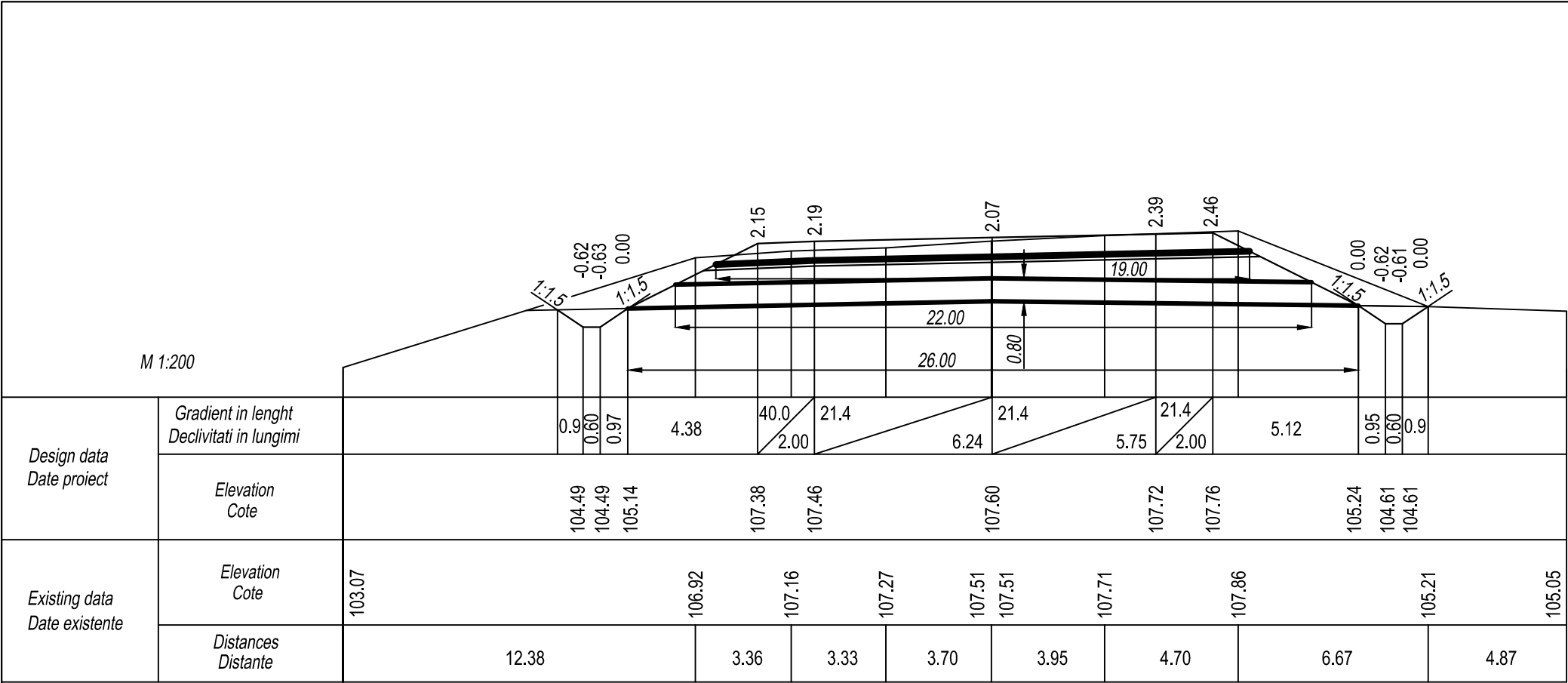
M 1:200



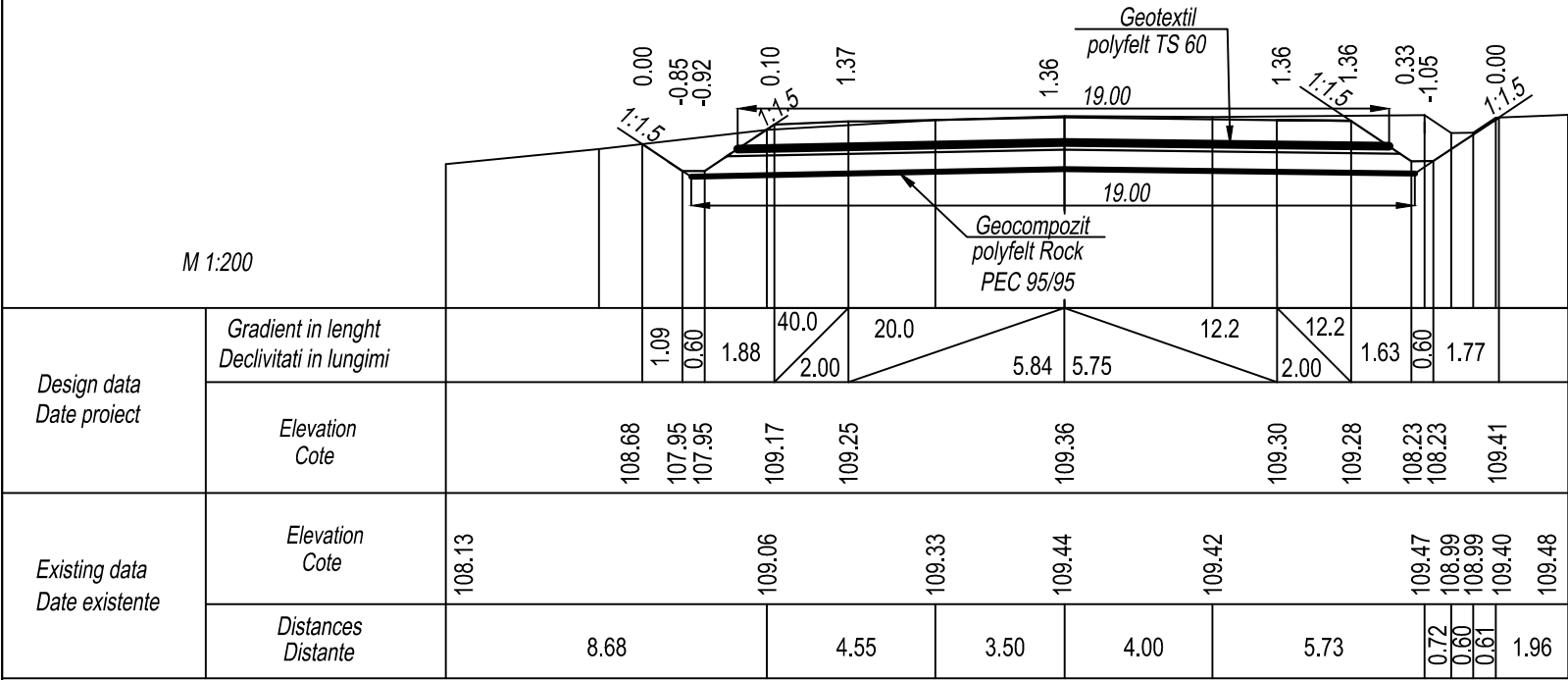
Design data Date proiect	Gradient in lenght Declivitati in lungimi		0.90	0.60	1.56	2.42	40.0 7.00		1.05	2.62	6.00	40.0 2.00	37.4 6.51	37.4 5.75	37.4 2.00	7.61	1.02	0.60	0.9			
	Elevation Cote		98.90	98.90	99.94	101.05	101.31 102.31		103.36		106.32	106.40	106.65 106.86		106.94	103.18 102.50		102.50	103.10			
Existing data Date existente	Elevation Cote	(96.69)			100.00		100.62	101.60		102.20		105.75	106.00	106.24	106.57	106.80	106.93	106.79	103.09		103.22	103.25
	Distances Distanțe		8.17			4.86	3.60	4.20		5.82	1.91	2.34	4.13	3.75	2.81	1.94	9.15		4.23	4.27		

PC 282+00.00

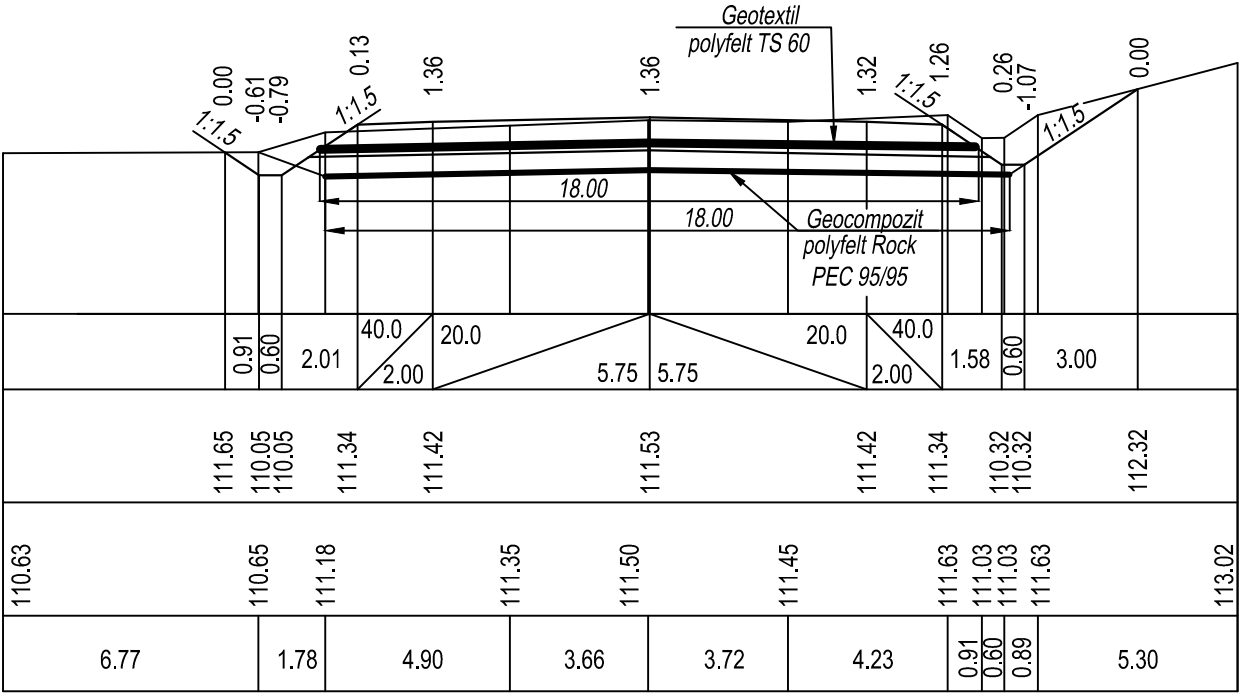
EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
		Designed	A.Gonciaruc		Scale	1:200
	Drawing title Cross Section of Earthwork Profile Transversale Terasamente PC 282+00	Checked	N.Tcaci		Drawing PT-DA-8	
		Control STAS	L.Pozdirca			



PC 282+40.00

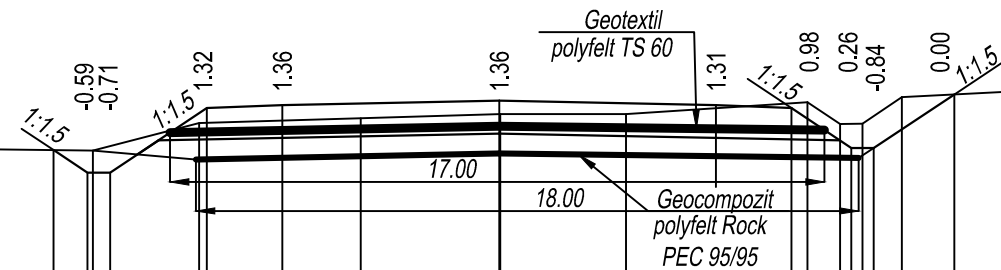


PC 283+00



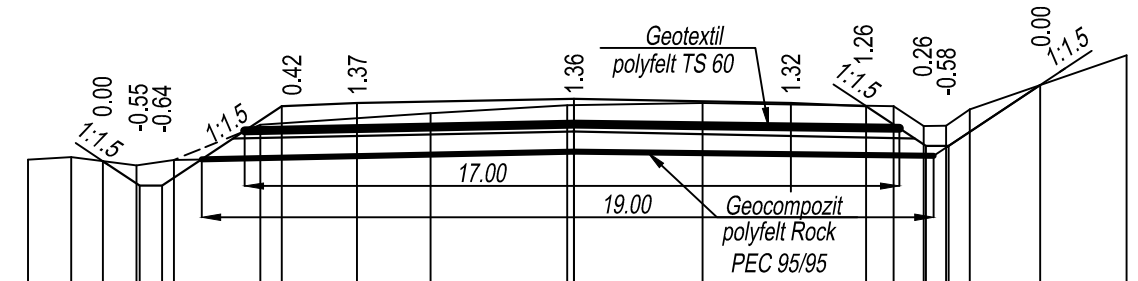
PC 283+60

EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
		Designed	A.Gonciaruc		Scale	1:200
	Drawing title Cross Section of Earthwork Profile Transversale Terasamente PC 282+40 - PC 283+60	Checked	N.Tcaci		Drawing PT-DA-9	
		Control STAS	L.Pozdirca			



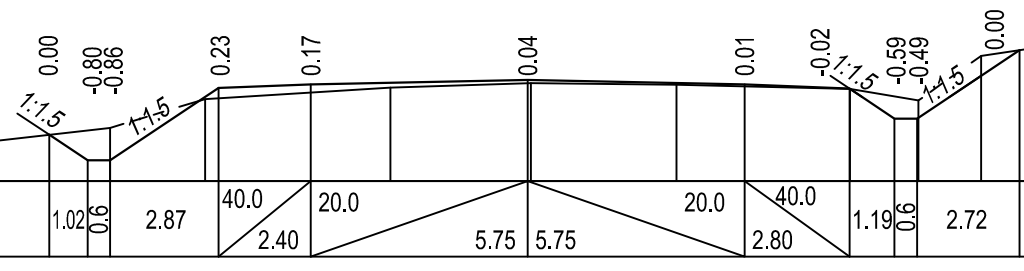
Design data Date proiect	Gradient in lenght Declivitati in lungimi		0.9	0.6	2.57	40.0 2.00	20.0	5.75	5.75	20.0	40.0 2.00	1.58	0.6	2.13				
	Elevation Cote		111.94	111.34	111.34	113.01	113.09		113.21		113.09	113.01	111.99	111.99	113.41			
Existing data Date existente	Elevation Cote	112.00		111.93		112.66		112.79		112.90		112.90		113.21	112.63	112.63	113.34	113.50
	Distances Distanțe		5.57		2.81		4.29		3.70		3.33		4.82					

PC 284+00.00



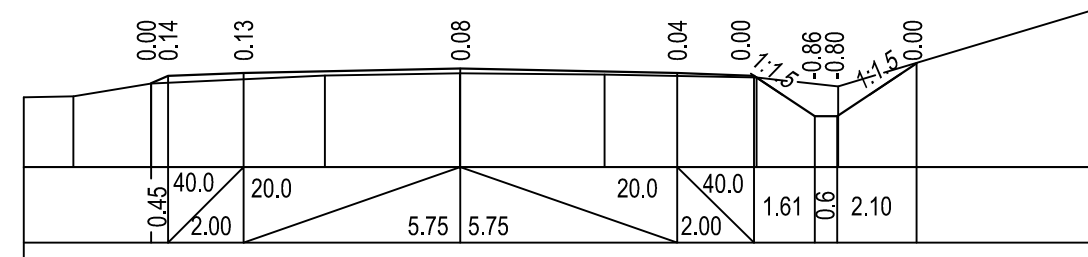
		0.97	0.6	3.17	40 2.00	20.0	5.75	5.75	20.0	40.0 2.00	1.59	0.6	2.42	
		114.31	113.66	113.66	115.74	115.82		115.93		115.82	115.74	114.72	114.72	116.33
114.36	114.42	114.20	114.35		115.28		115.59	115.80	115.86		115.78	115.25	115.25	115.69
1.14	1.73	0.99	2.30		4.52		3.62	3.59	5.07		0.79	0.60	0.63	4.16

PC 284+60.00



Design data Date project	Gradient in lenght Declivitati in lungimi	1.02	0.6	2.87	40.0 2.40	20.0	5.75	5.75	20.0	40.0 2.80	1.19	0.6	2.72
	Elevation Cote	116.19	115.51	115.51	117.39	117.48	117.59		117.48	117.37	116.61	116.61	118.42
Existing data Date existente	Elevation Cote	115.94	116.37	117.13		117.43	117.55		117.51		117.40	117.09	118.28 118.49
	Distances Distanțe	3.75		2.52	4.92		3.72	3.87		4.59	1.82	1.67	1.40

PC 285+00.00

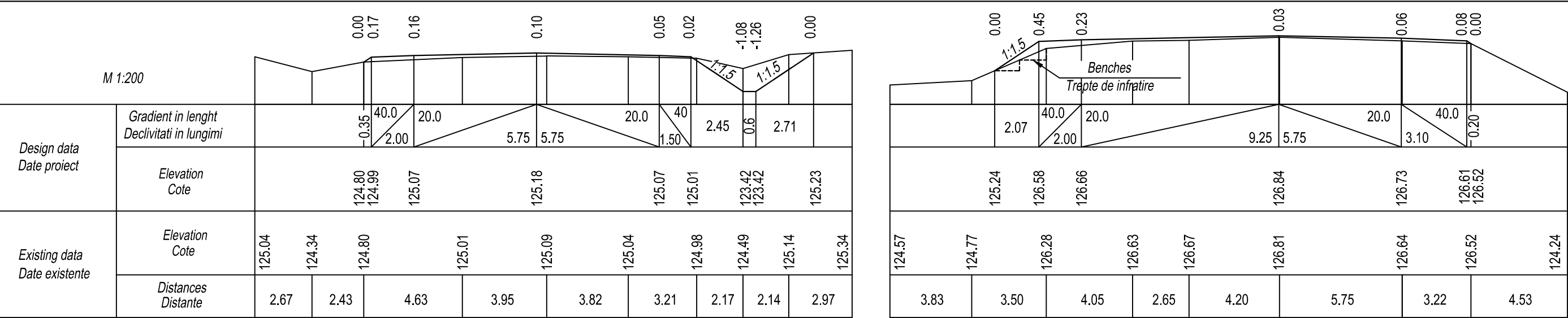


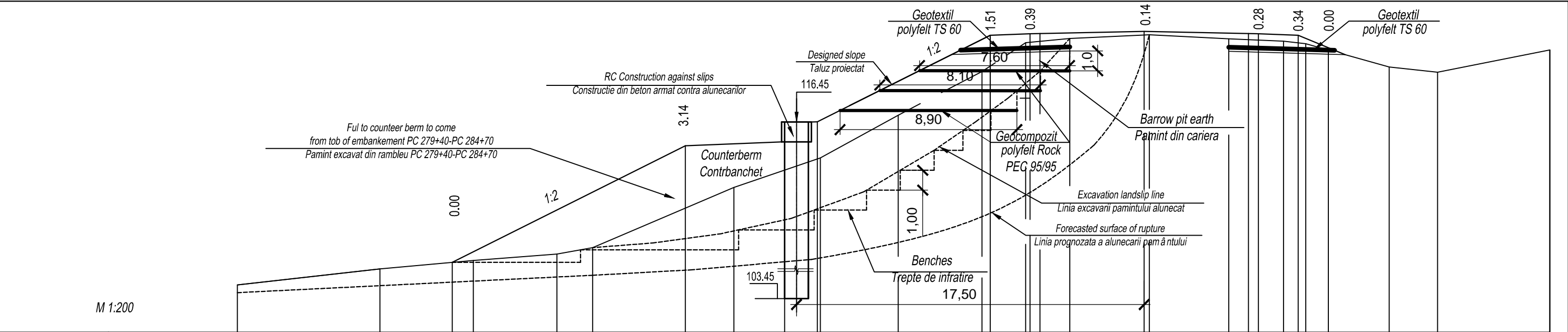
1.31	2.06	4.61	3.58	3.84	4.03	2.16	6.83
120.32 120.35	120.69	120.90	120.96	120.93	120.85	120.61	122.64
120.69 120.85	120.93	121.05	120.93	120.85	119.82 119.82	121.22	
<div> <div>40.0</div> <div>2.00</div> </div> <div>20.0</div> <div>5.75</div> <div>5.75</div> <div>20.0</div> <div> <div>40.0</div> <div>2.00</div> </div> <div>1.61</div> <div>0.6</div> <div>2.10</div>							

PC 286+00.00

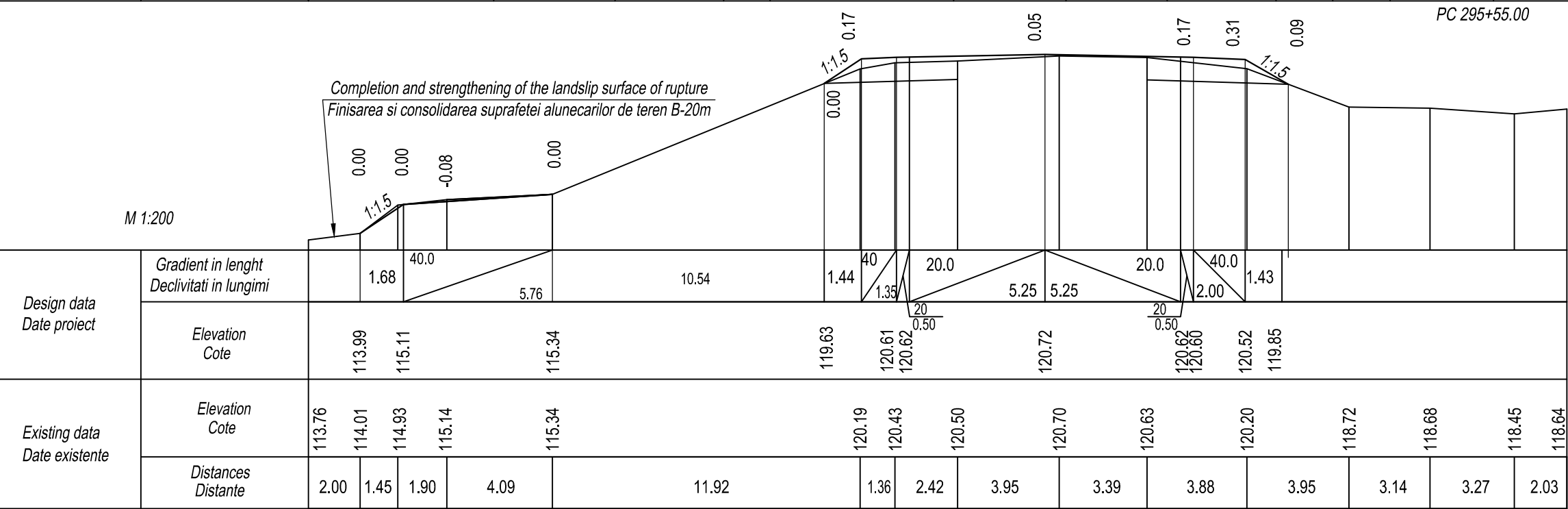
EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni  Drawing title Cross Section of Earthwork Profile Transversale Terasamente PC 284+00 - PC 286+00	ISP	S.Bogza		Date	03.2012	
		Designed	A.Gonciaruc		Scale	1:200	
		Checked	N.Tcaci		Drawing PT-DA-10		
		Control STAS	L.Pozdirca				





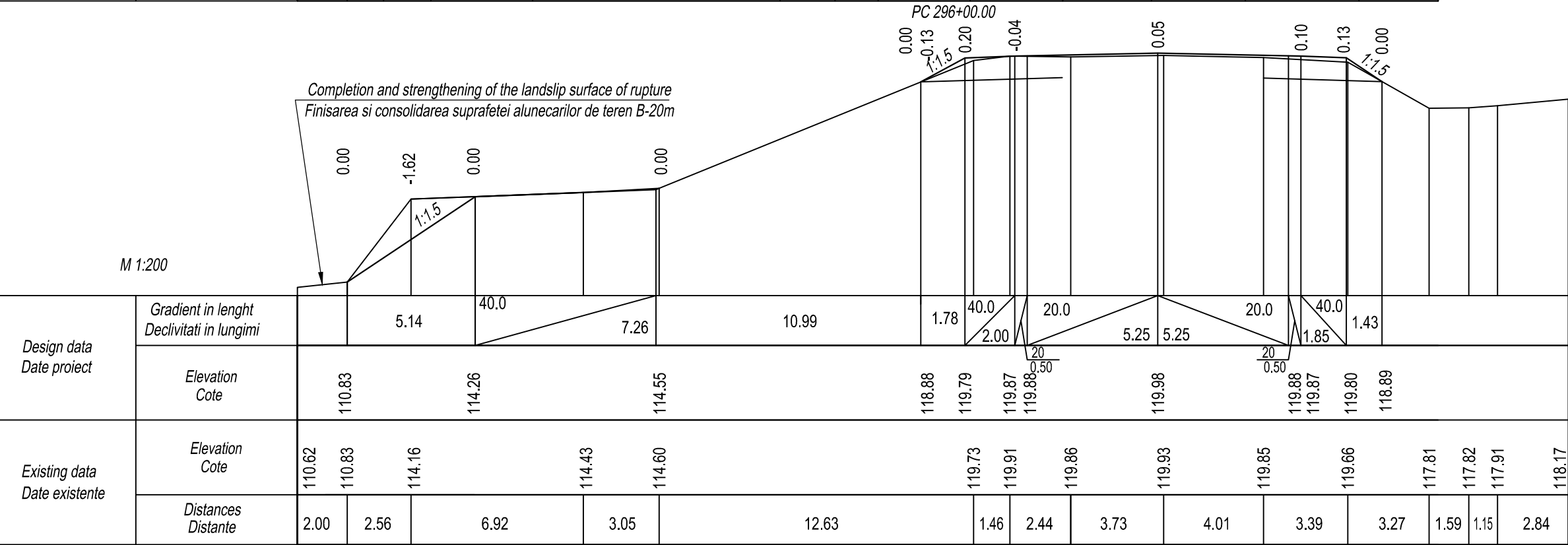
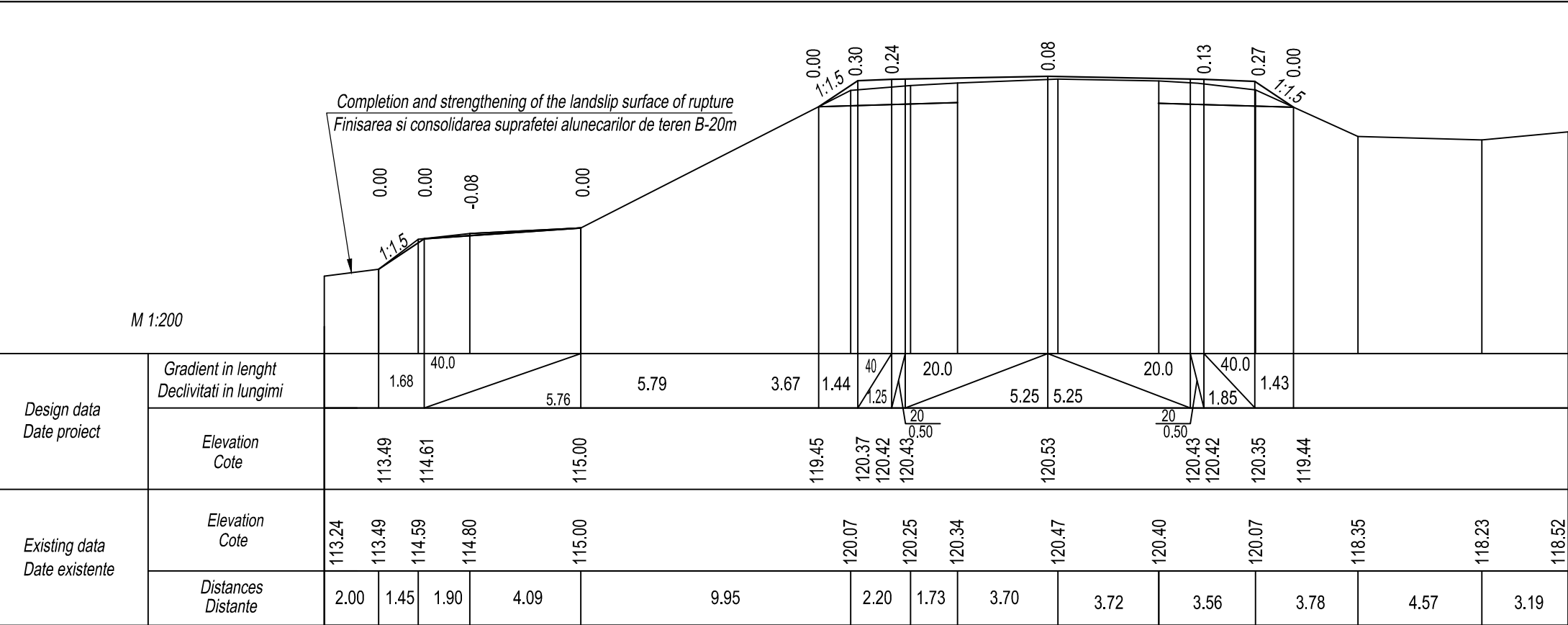


Design data Date proiect	Gradient in lenght Declivitati in lungimi					11.73		<div><div>40.0</div><div>5.00</div></div>	1.64		8.71		<div><div>40.0</div><div>2.00</div></div>	<div><div>20.0</div><div>0.50</div></div>	<div><div>20.0</div><div>5.25</div></div>	<div><div>20.0</div><div>5.25</div></div>	<div><div>20.0</div><div>0.50</div></div>	<div><div>40.0</div><div>2.00</div></div>	1.52														
	Elevation Cote		119.39				115.26		115.45	115.46			120.77	120.85	120.86		120.96		120.86	120.85	120.77	120.07											
Existing data Date existente	Elevation Cote	108.25		109.06		109.49		109.81	110.13		113.16		114.65		116.79		118.99		120.44	120.65		120.84		120.64		120.51	120.38		119.21		118.96		118.81
	Distances Distanta		7.18		4.69		4.21		1.80		7.11		4.35		3.92		4.22		2.20	2.22		4.00	4.00		2.76		1.12	4.20		2.43		5.65	

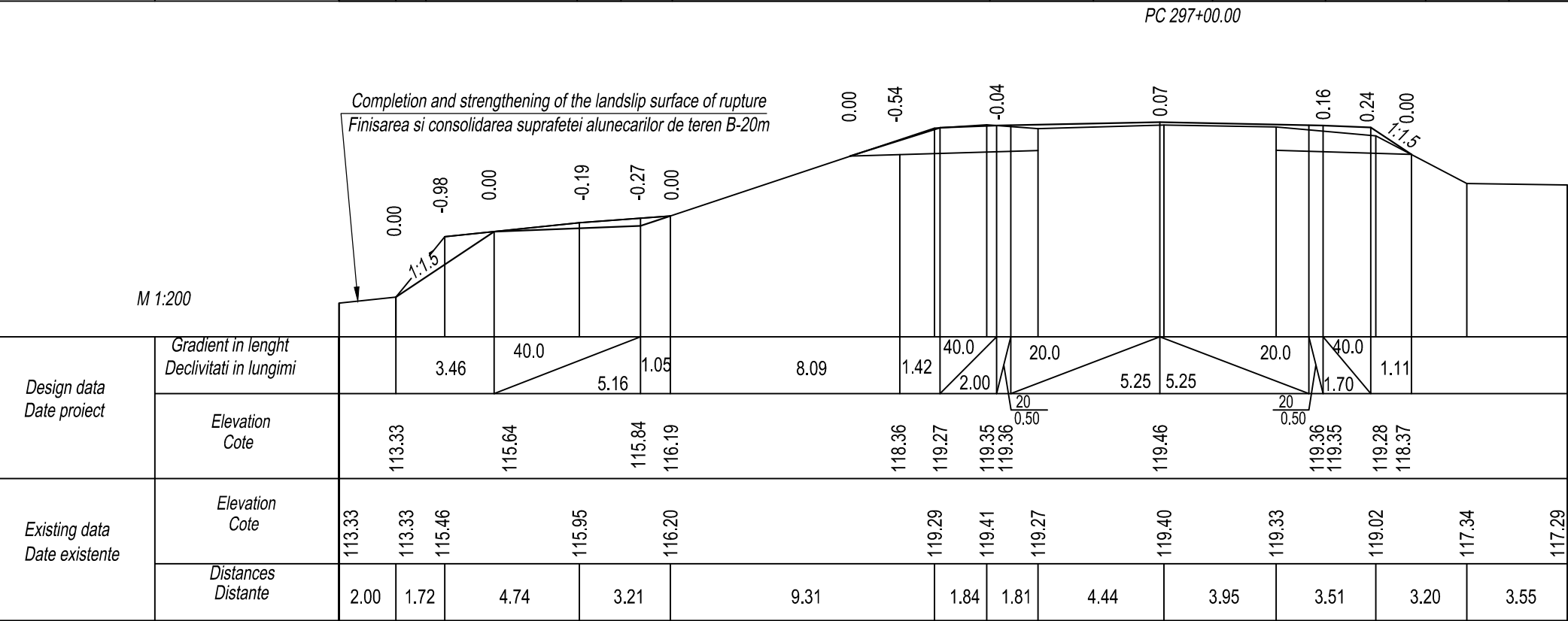
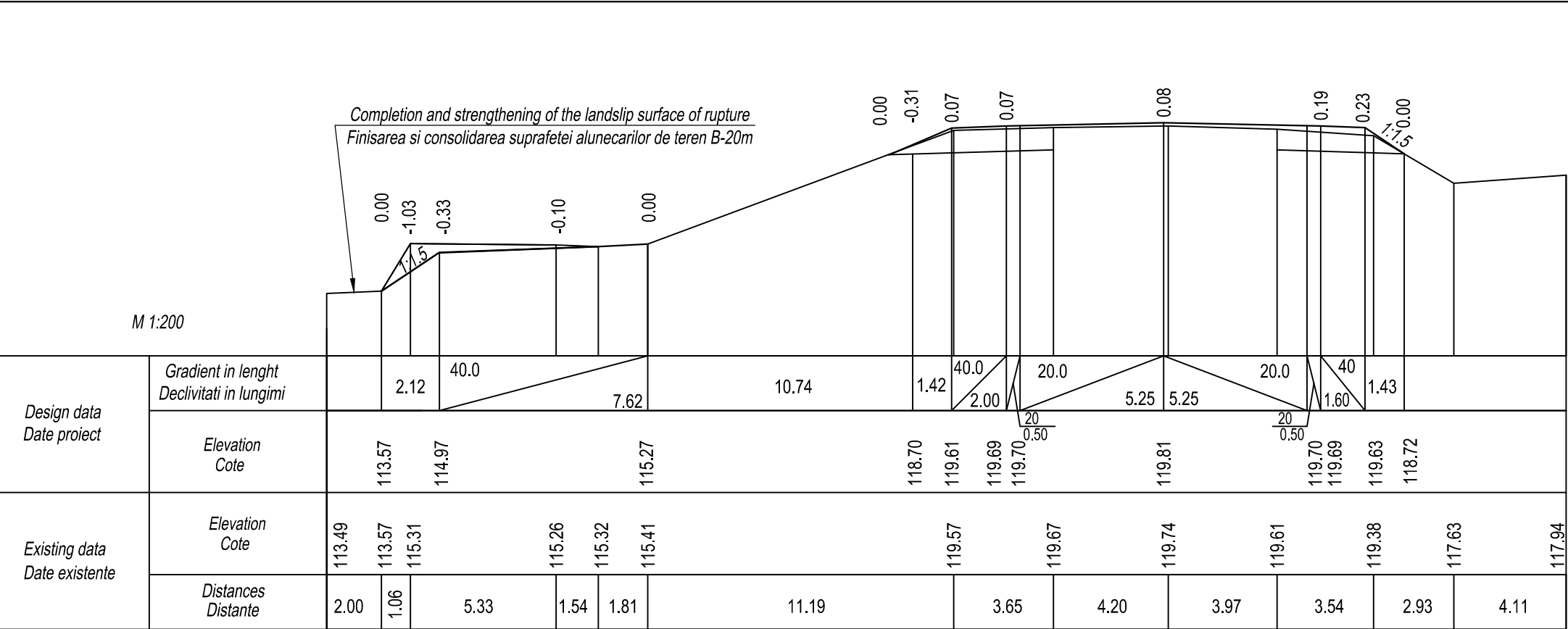


PC 295+80.00

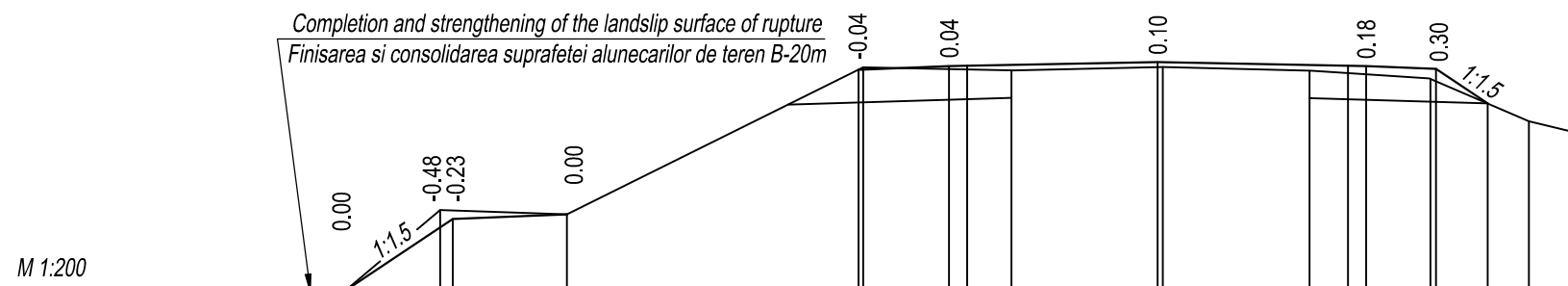
	EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
	Road		Sector	Programme	Support	Project		
	Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni		ISP	S.Bogza		Date	03.2012
				Designed	A.Gonciaruc		Scale	1:200
		Drawing title	Cross Section of Earthwork Profile Transversale Terasamente PC 295+55 - PC 295+80		Checked	N.Tcaci		Drawing PT-DA-12
Control STAS					L.Pozdirca			



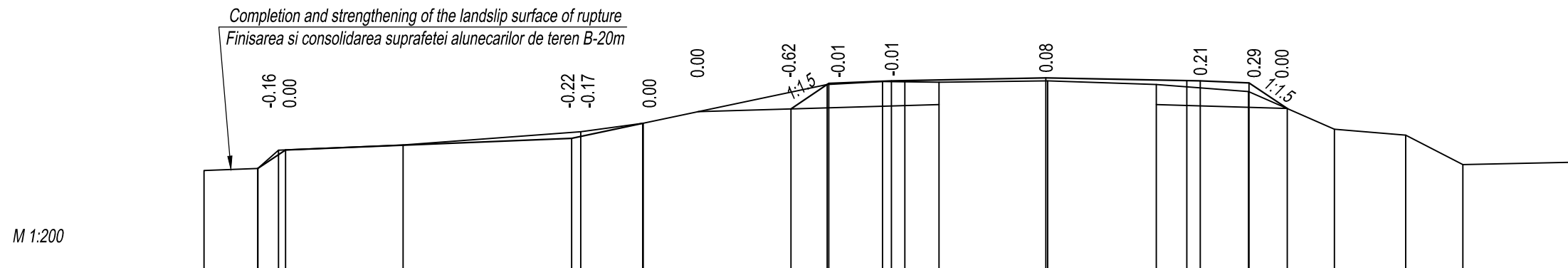
EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme		Support Project					
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
		Designed	A.Gonciaruc		Scale	1:200	
	Drawing title Cross Section of Earthwork Profile Transversale Terasamente PC 296+00 - PC 296+60	Checked	N.Tcaci		Drawing PT-DA-13		
		Control STAS	L.Pozdirca				



EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme		Support Project					
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
		Designed	A.Gonciaruc		Scale	1:200	
	Drawing title Cross Section of Earthwork Profile Transversale Terasamente PC 297+00 - PC 297+60	Checked	N.Tcaci		Drawing PT-DA-14		
		Control STAS	L.Pozdirca				

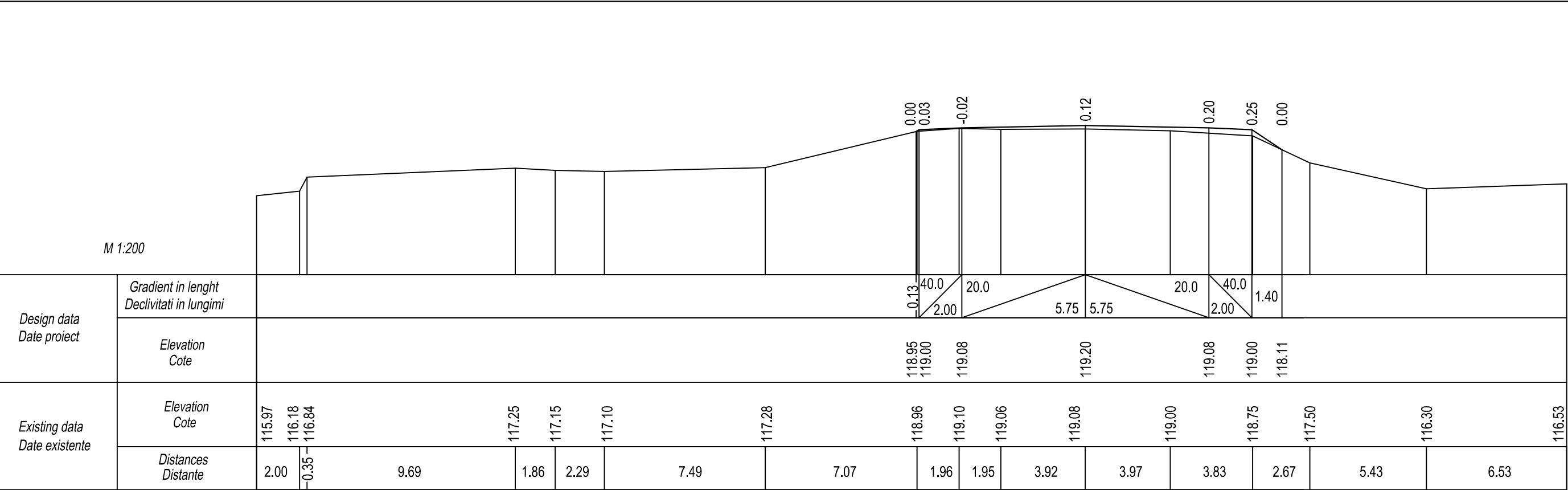


Design data Date project	Gradient in lenght Declivitati in lungimi		2.97	40.0 3.14	8.04	40.0 2.50	20.0 0.50	5.25	5.25	20.0 0.50	40 1.90	1.43	
	Elevation Cote	112.98	114.94	115.07		119.00	119.10 119.11		119.22		119.11 119.10	119.02	118.11
Existing data Date existente	Elevation Cote	112.89	112.97	115.19	115.07	119.11	119.03	119.12	119.02		118.81		117.63
	Distances Distanțe	1.92	2.61	3.50	8.17	4.16	4.10	4.10	3.25	2.75	1.6		

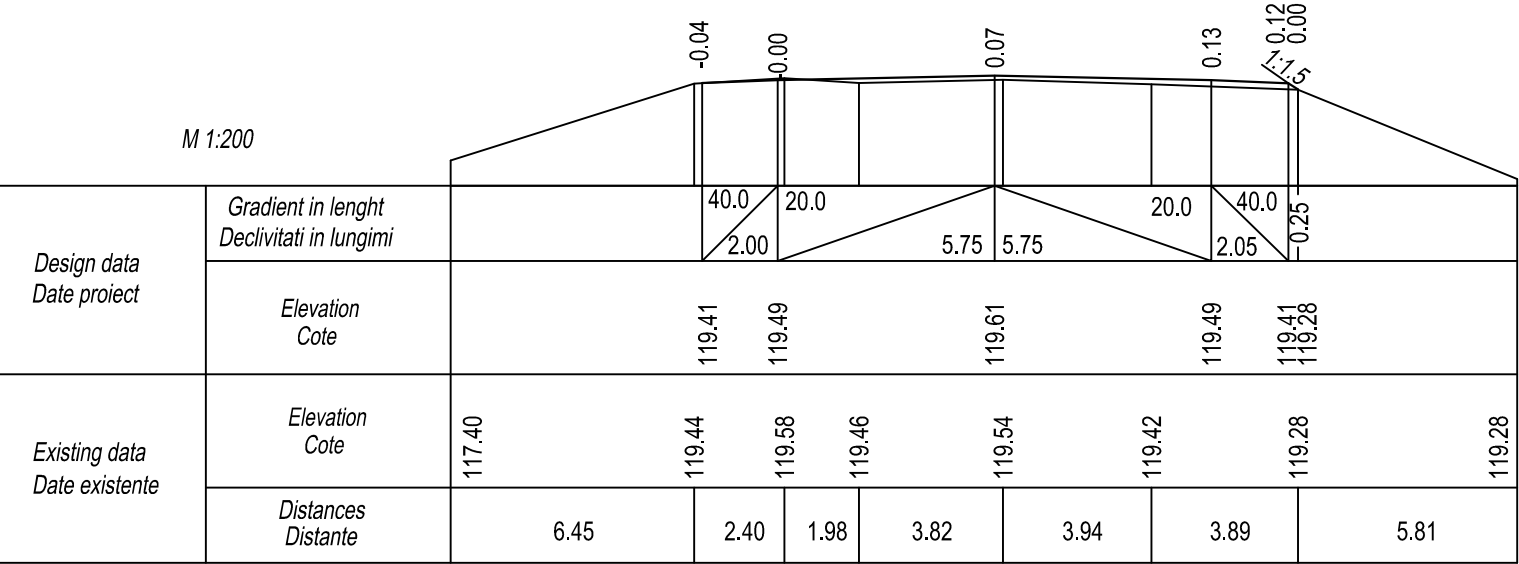


Design data Date proiect	Gradient in lenght Declivitati in lungimi	1.03	40.0	10.65	2.65	5.52	1.41	40.0	20.0	20.0	20.0	40	1.43				
	Elevation Cote	115.78	116.47	116.84	117.46	117.99	118.90	118.99	119.00	119.11	119.00	118.99	118.91	118.00			
Existing data Date existente	Elevation Cote	115.70	115.78	116.46	116.66	117.15	117.46	118.90	119.01	118.98	119.03	118.90	118.64	117.24	117.02	115.92	115.84
	Distances Distanțe	2.00	0.77	4.64	6.62	2.31	6.87	2.07	2.11	4.04	4.05	3.44	3.19	2.66	2.13	4.43	

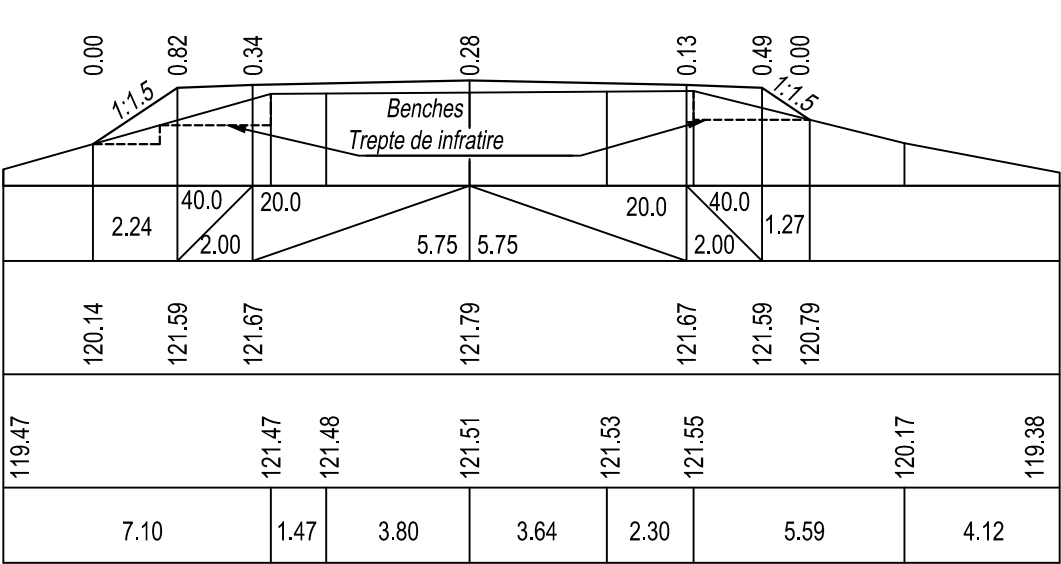
EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni  Drawing title Cross Section of Earthwork Profile Transversale Terasamente PC 298+00 - PC 298+60	ISP	S.Bogza		Date	03.2012
		Designed	A.Gonciaruc		Scale	1:200
		Checked	N.Tcaci		Drawing PT-DA-15	
		Control STAS	L.Pozdirca			



PC 299+00.00



PC 300+00.00

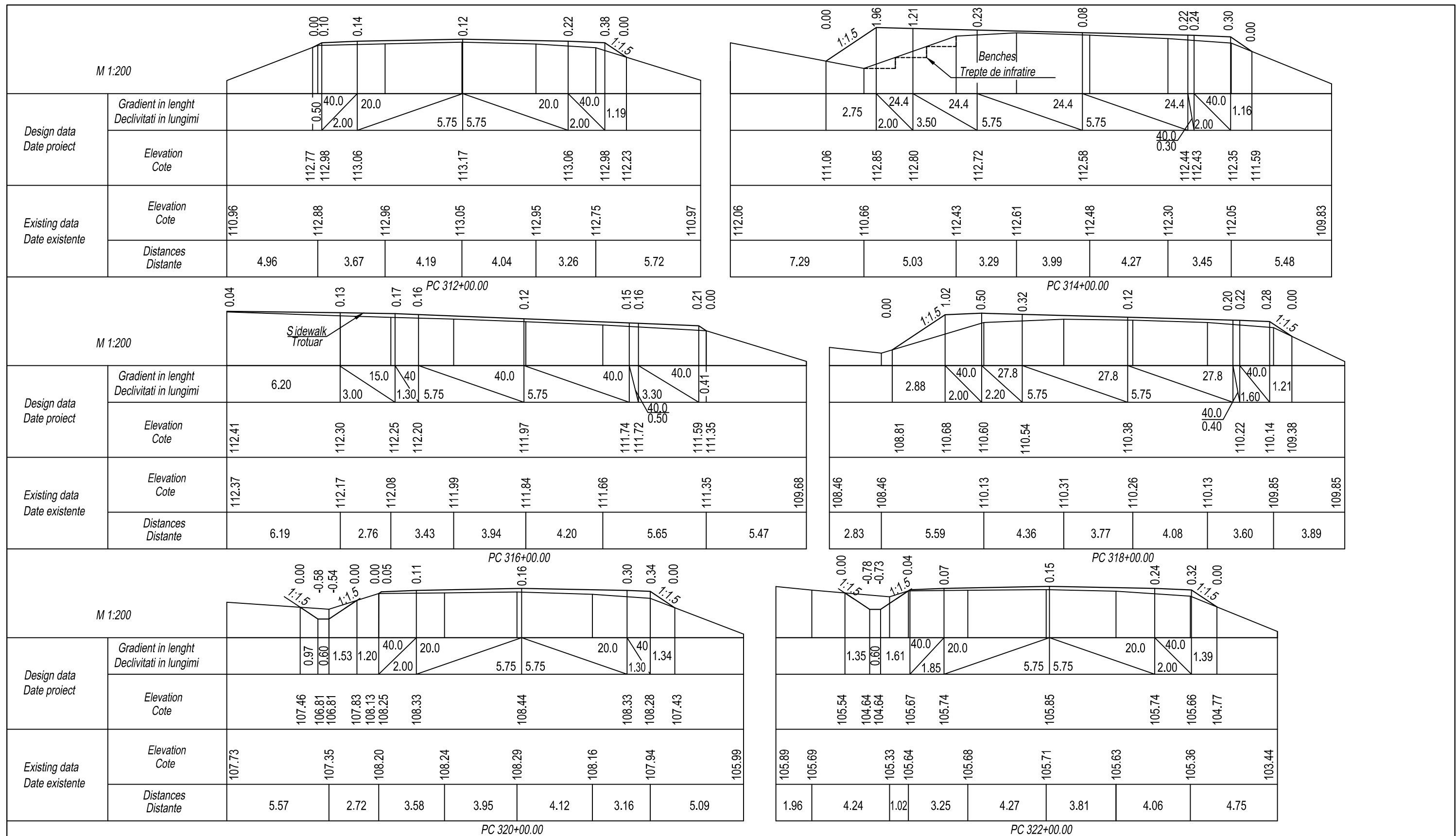


PC 302+00.00

EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
Universcons		Designed	A.Gonciaruc		Scale	1:200
	Drawing title Cross Section of Earthwork Profile Transversale Terasamente PC 299+00 - PC 302+00	Checked	N.Tcaci		Drawing PT-DA-16	
		Control STAS	L.Pozdirca			

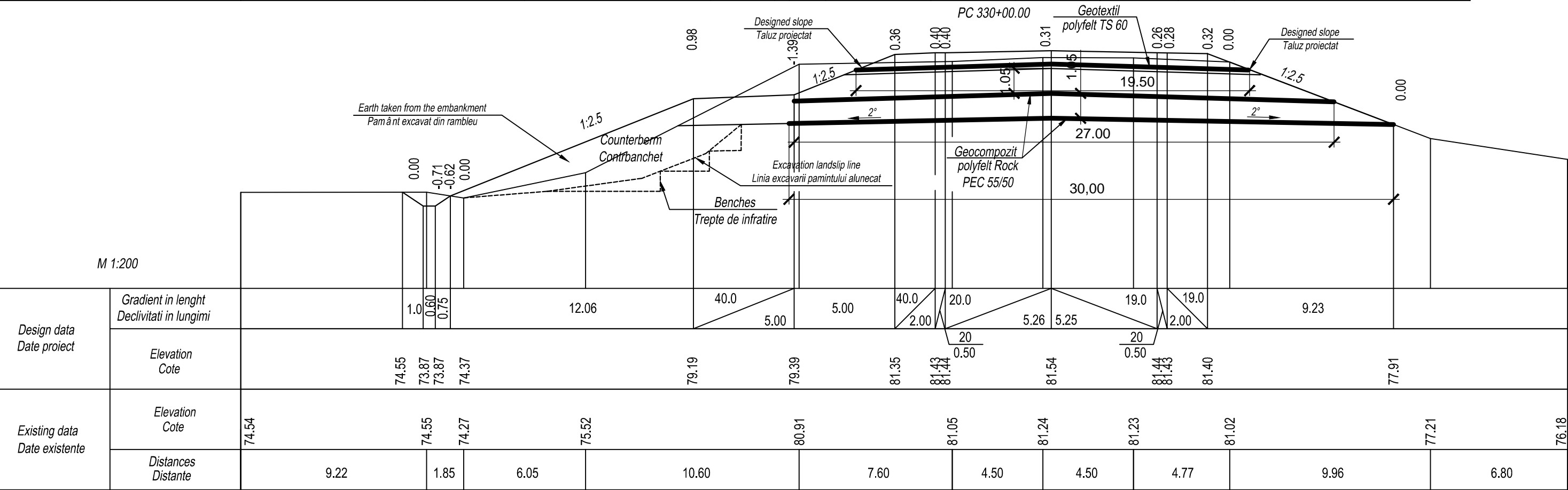
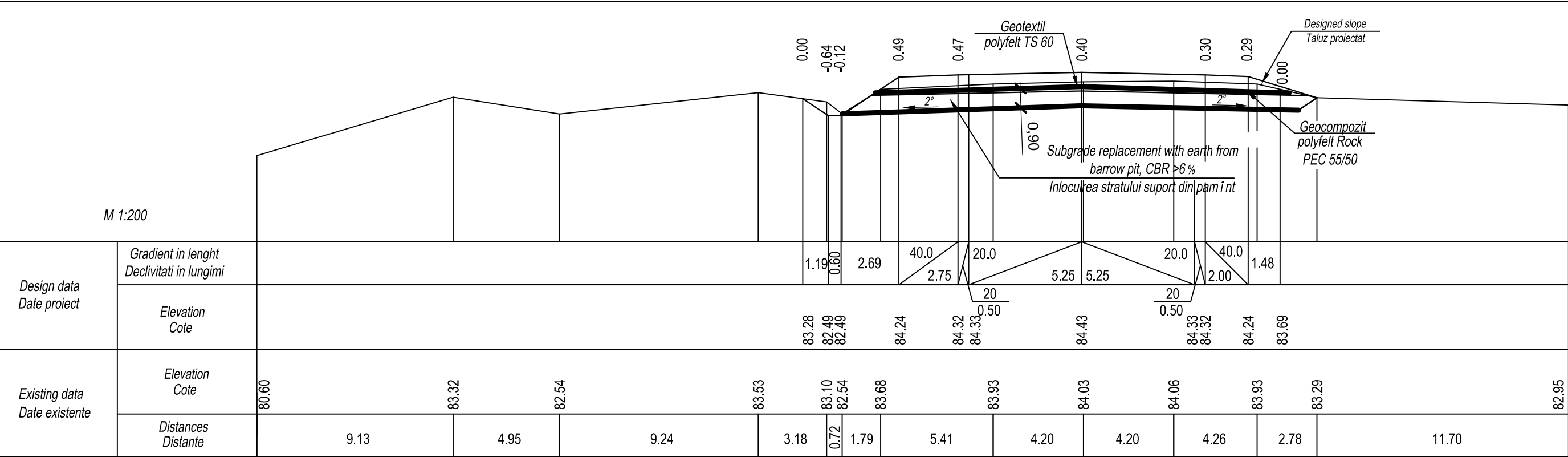






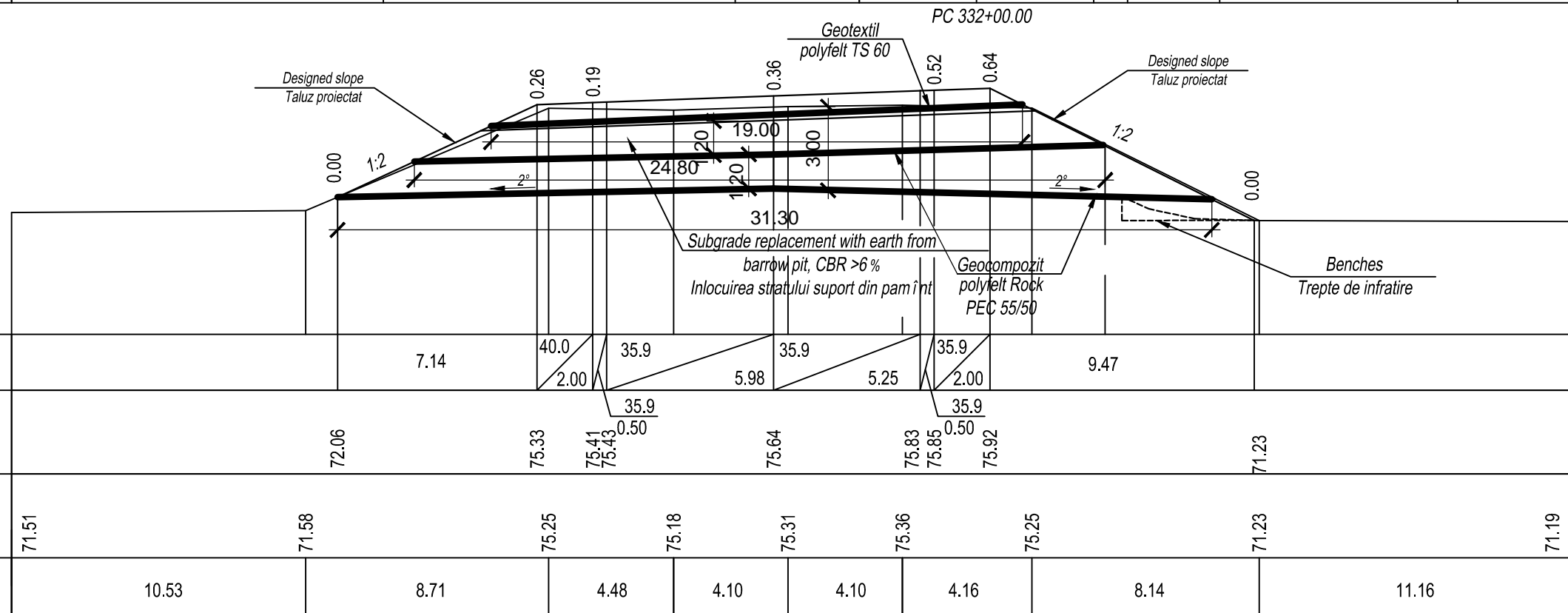
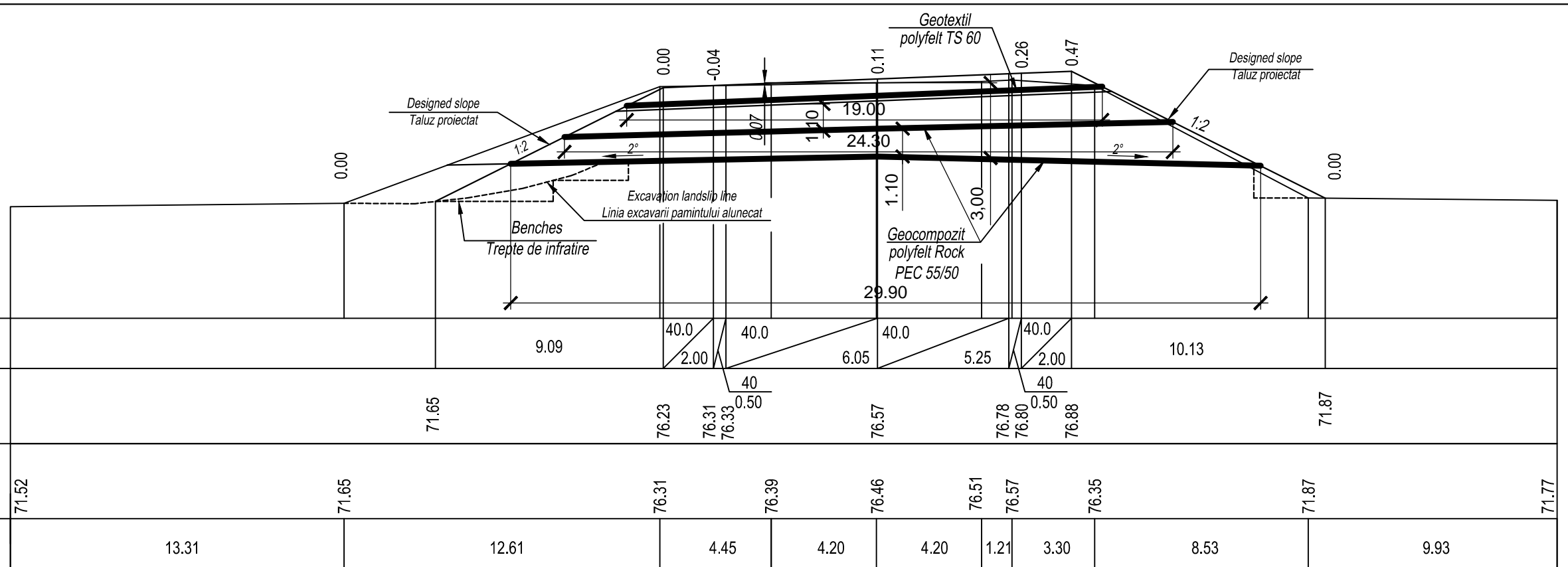
EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support Project				
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
		Designed	A.Gonciaruc		Scale	1:200
	Drawing title Cross Section of Earthwork Profile Transversale Terasamente PC 312+00 - PC 322+00	Checked	N.Tcaci		Drawing PT-DA-18	
		Control STAS	L.Pozdirca			





EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme		Support	Project				
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni		ISP	S.Bogza		Date	03.2012
			Designed	A.Gonciaruc		Scale	1:200
	Drawing title Cross Section of Earthwork Profile Transversale Terasamente PC 330+00 - PC 330+60		Checked	N.Tcaci		Drawing PT-DA-20	
			Control STAS	L.Pozdirca			



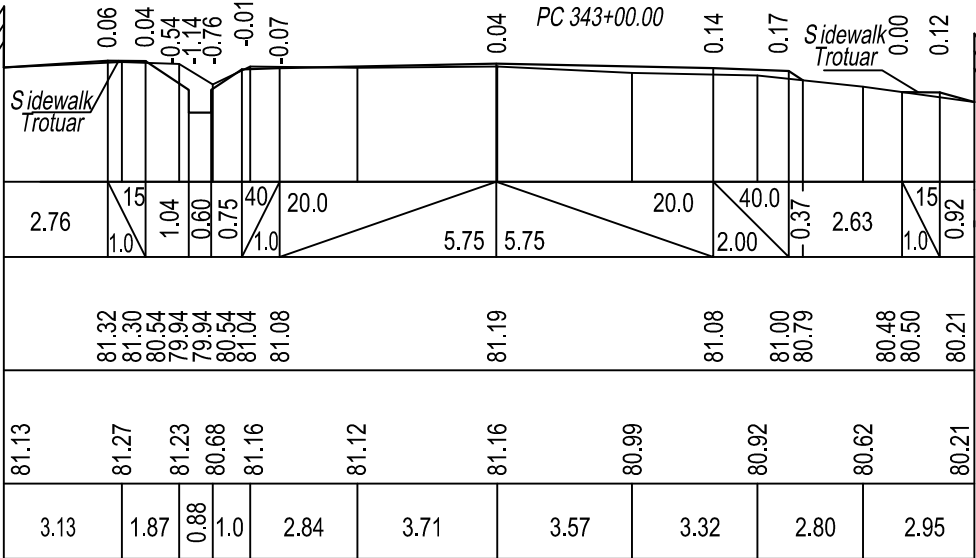
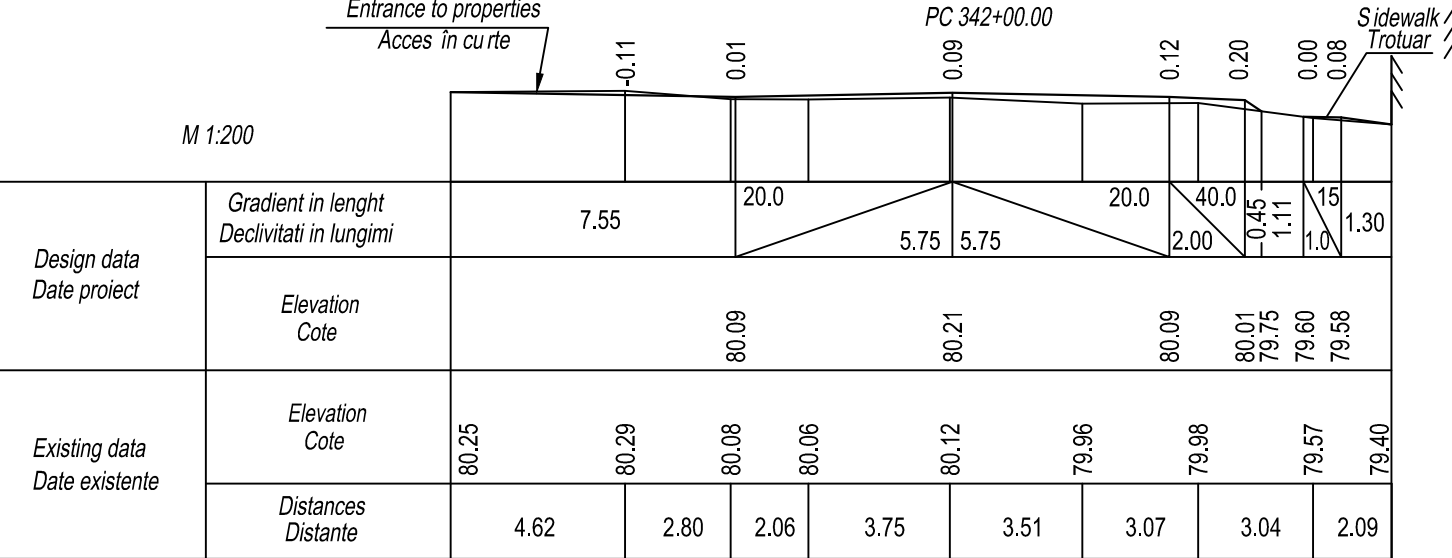
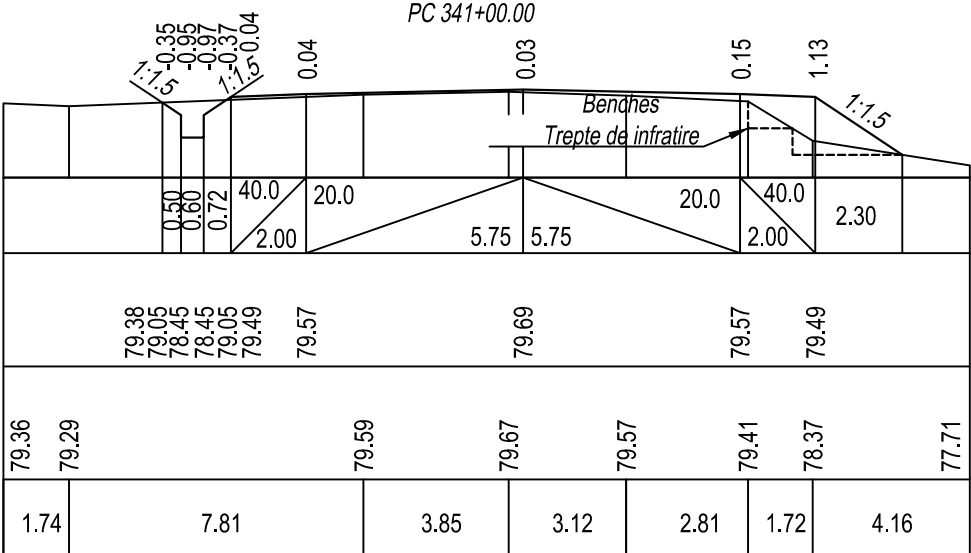
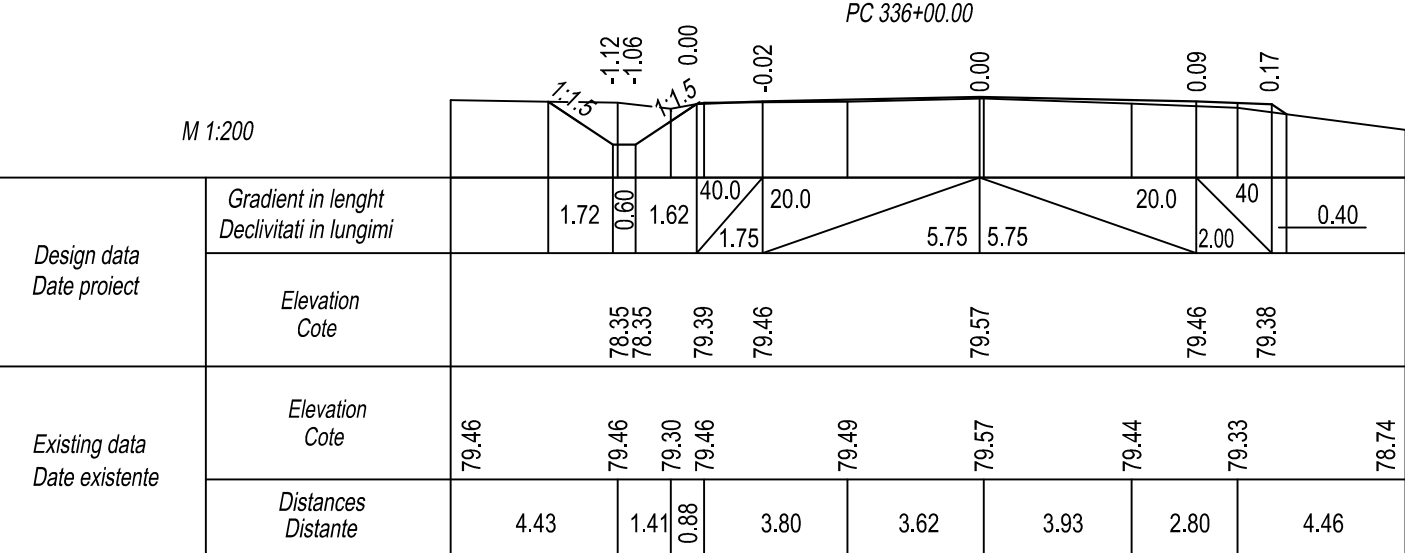
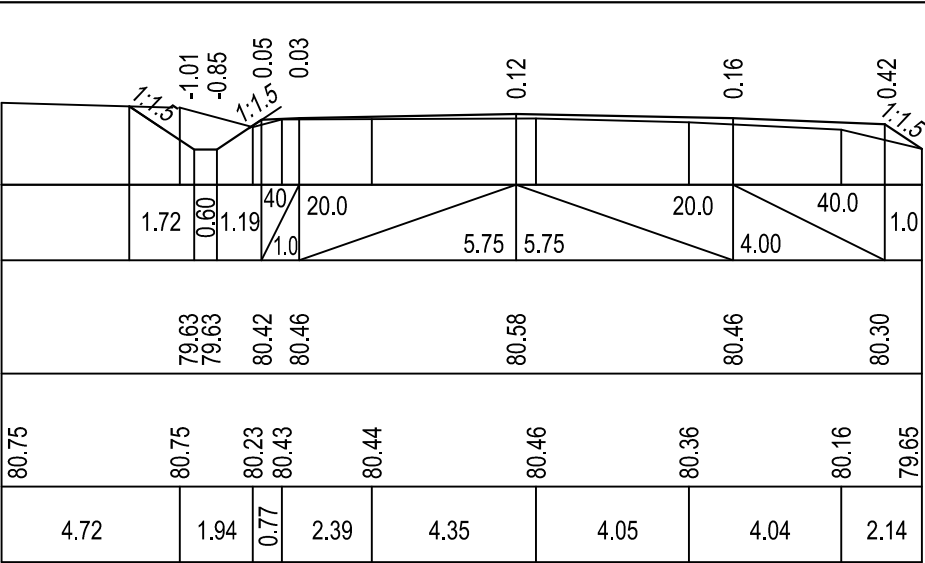
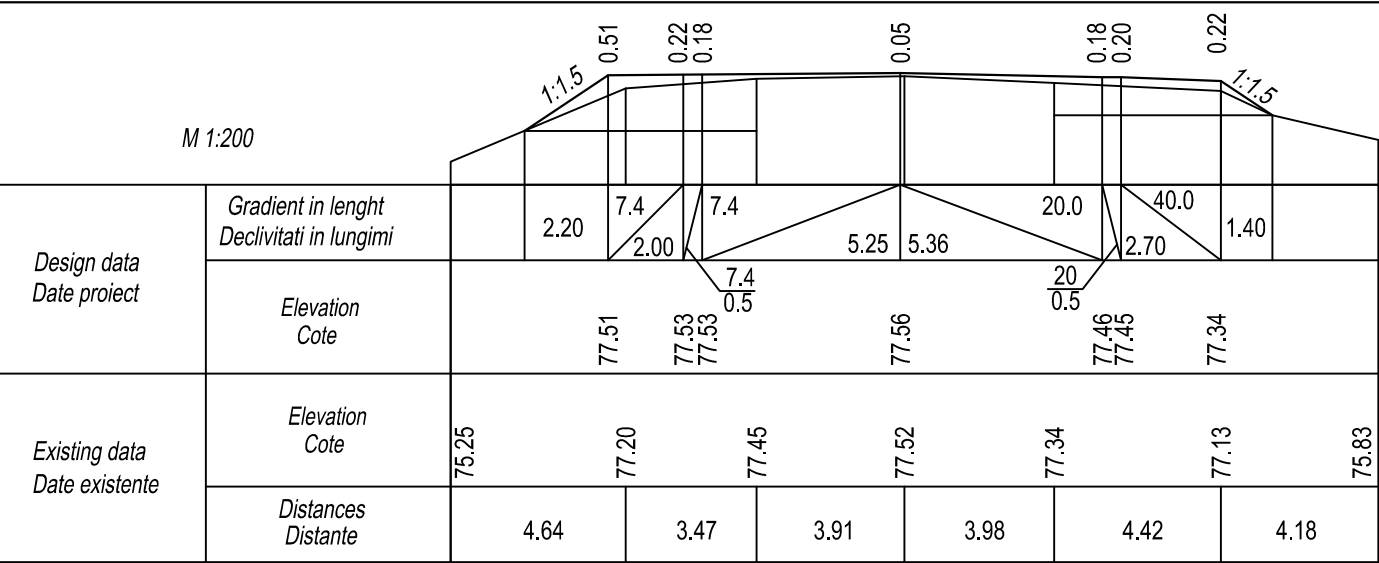


EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road      Sector      Programme      Support      Project							
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni  Drawing title      Cross Section of Earthwork Profile Transversale Terasamente PC 332+00 - PC 332+60	ISP	S.Bogza		Date	03.2012	
		Designed	A.Gonciaruc		Scale	1:200	
		Checked	N.Tcaci		Drawing PT-DA-22		
		Control STAS	L.Pozdirca				





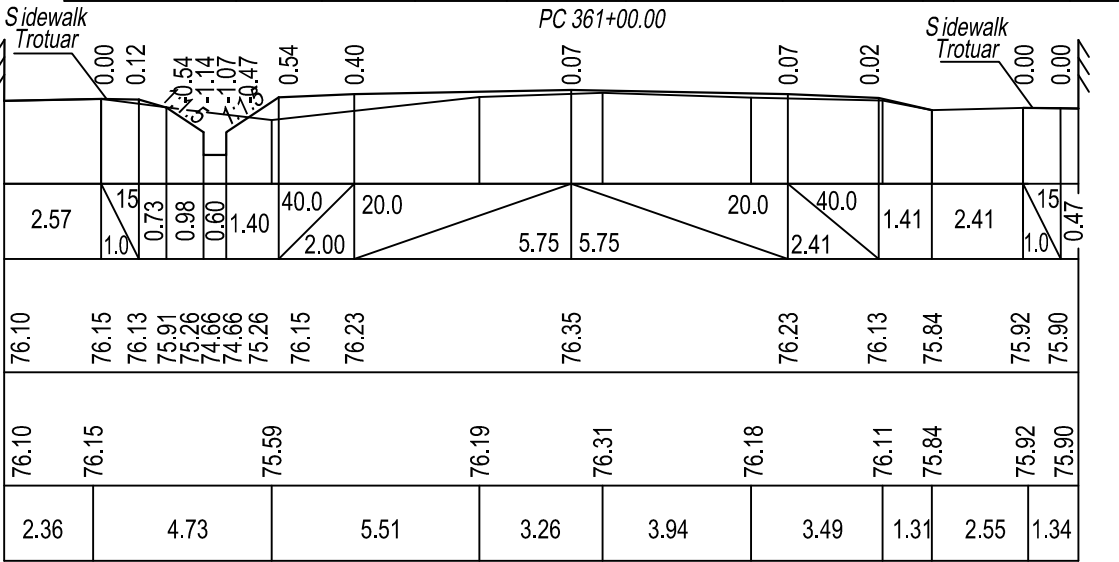
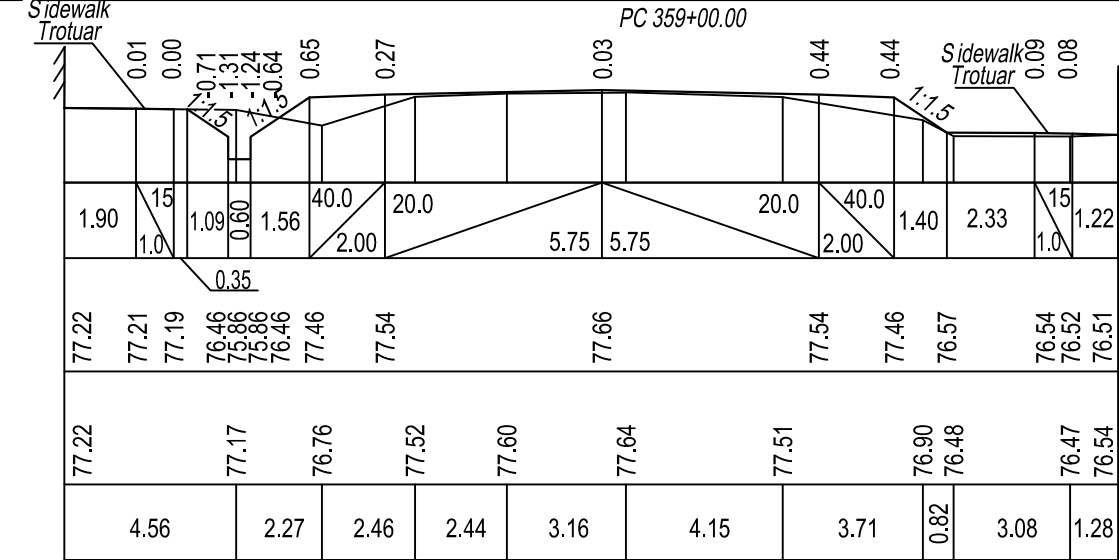
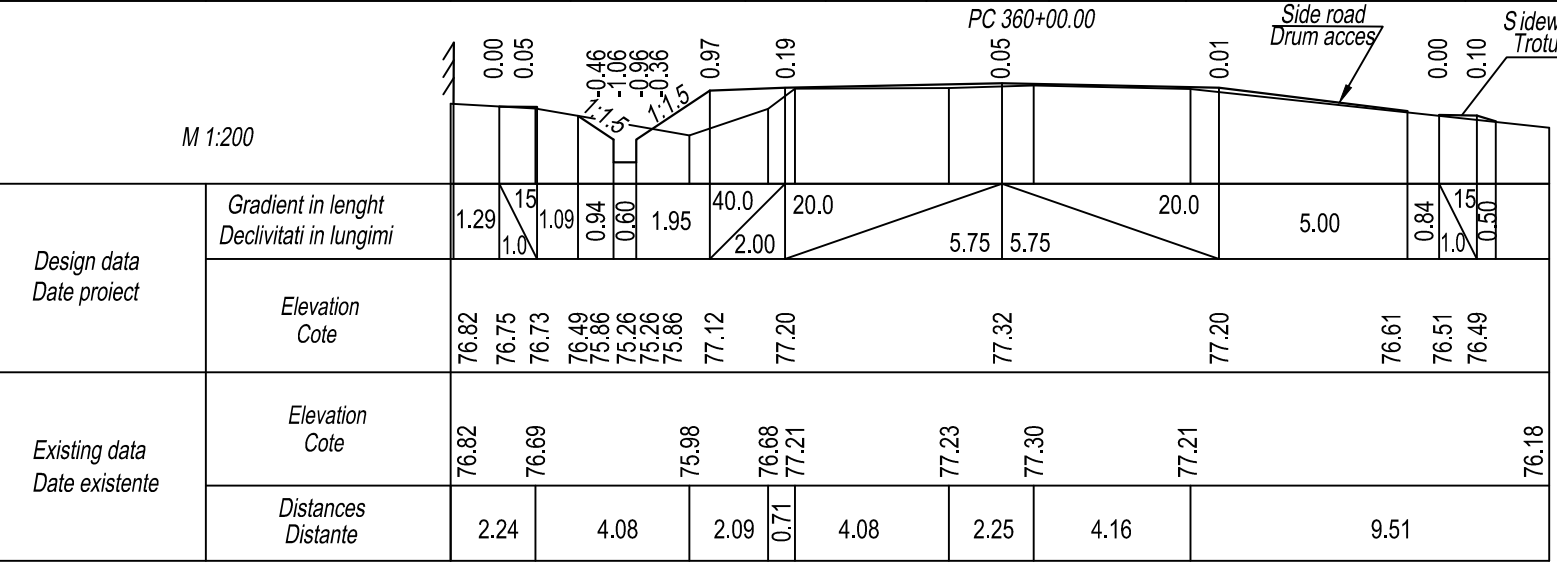
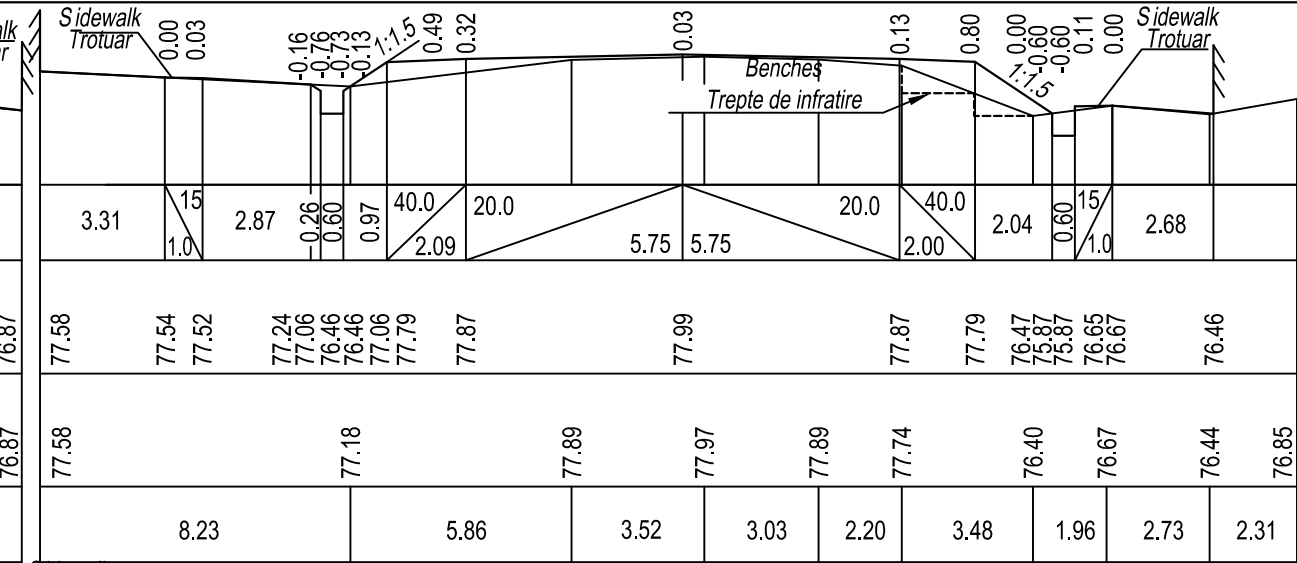
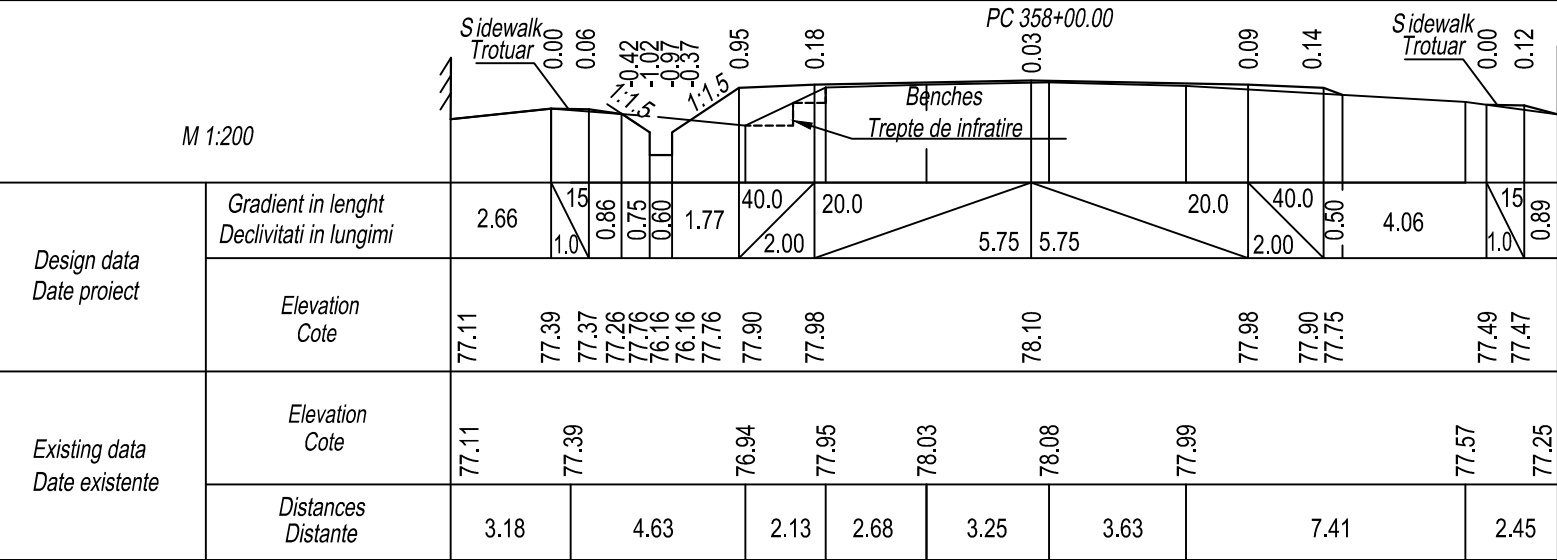
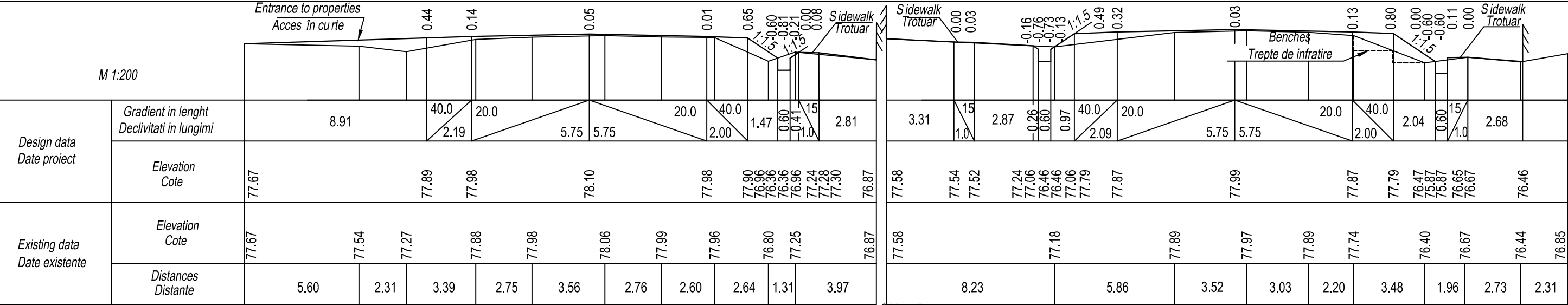




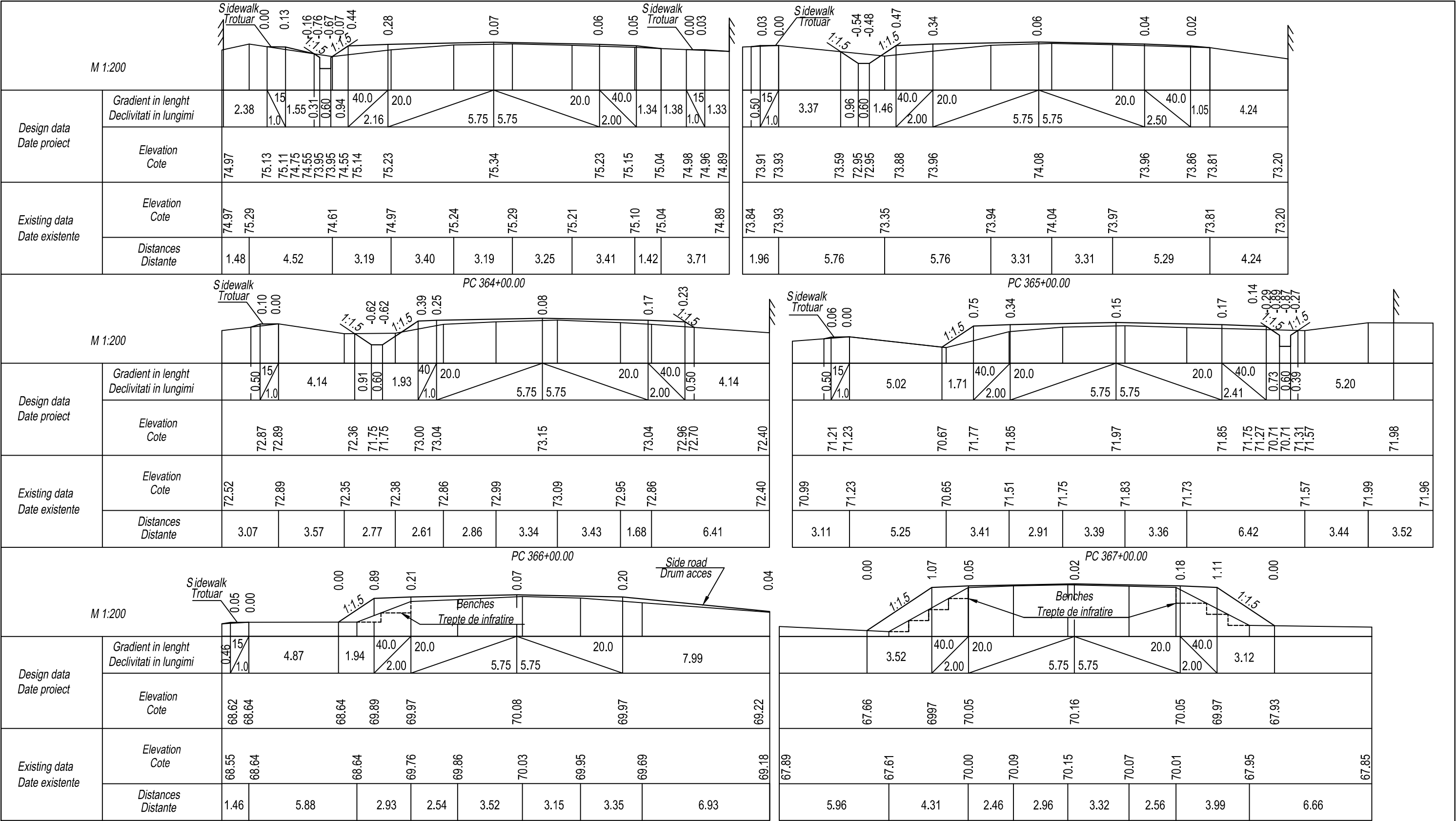
EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector		Programme Support		Project		
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni  Drawing title Cross Section of Earthwork Profile Transversale Terasamente PC 336+00 - PC 345+00	ISP		S.Bogza	Date	03.2012
		Designed		A.Gonciaruc	Scale	1:200
		Checked		N.Tcaci	Drawing PT-DA-25	
		Control STAS		L.Pozdirca		







PC 362+00.00											
PC 363+00.00											
EBRD			Republic of Moldova			Ministry of Transport and Road Industry State Road Administration					
			Road Sector			Programme Support			Project		
Roughton International			Rehabilitation of R14 Road Bălți-Sărăteni			ISP		S.Bogza		Date	03.2012
Universcons			Drawing title Cross Section of Earthwork Profile Transversale Terasamente PC 358+00 - PC 363+00			Designed		A.Gonciaruc		Scale	1:200
						Checked		N.Tcaci		Drawing PT-DA-28	
						Control STAS		L.Pozdirca			



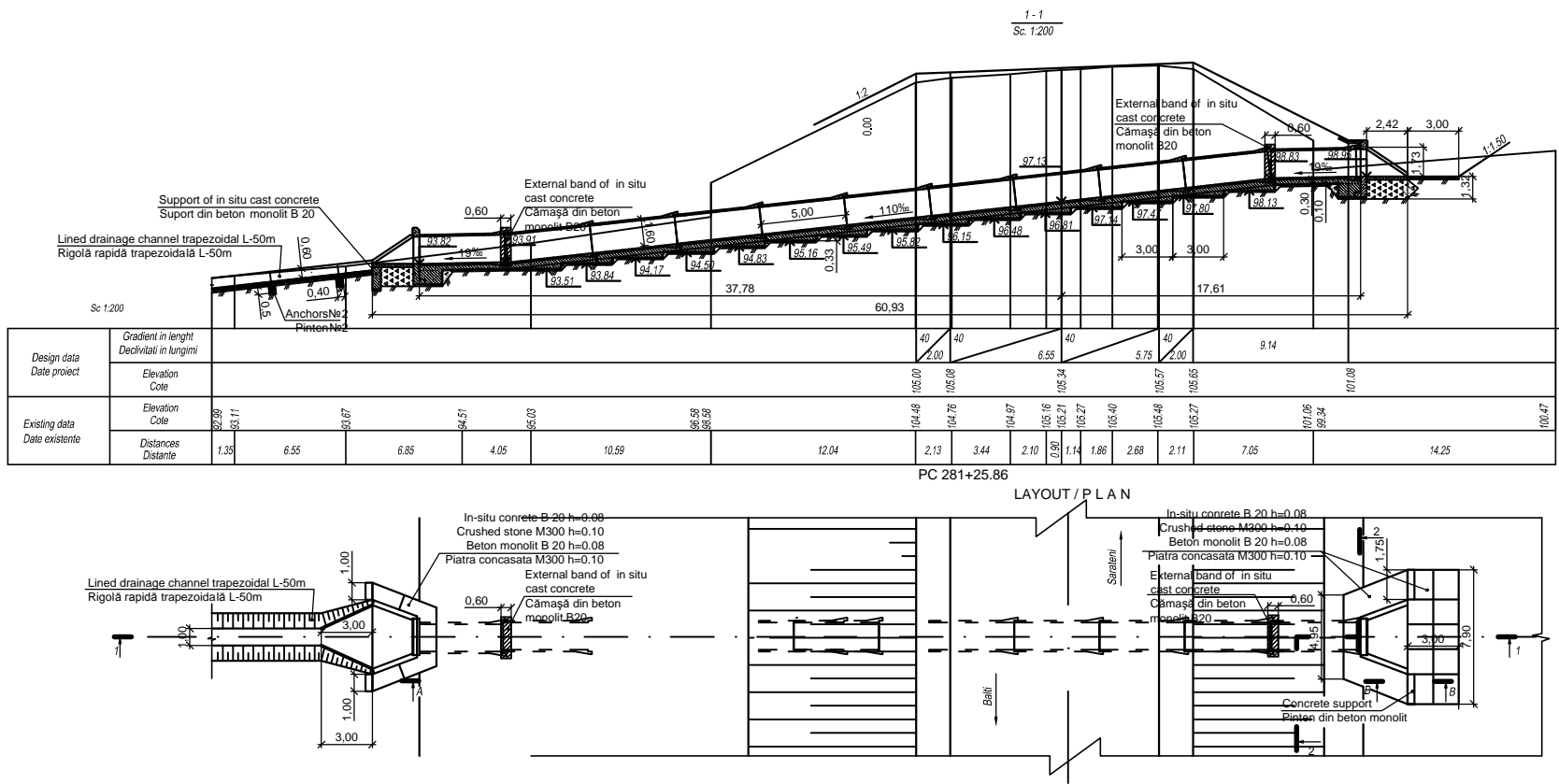
EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
Universcons		Designed	A.Gonciaruc		Scale	1:200
	Drawing title Cross Section of Earthwork Profile Transversale Terasamente PC 364+00 - PC 369+00	Checked	N.Tcaci		Drawing PT-DA-29	
		Control STAS	L.Pozdirca			



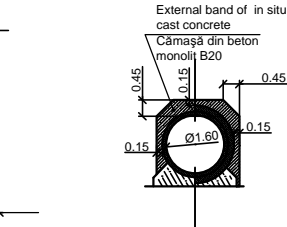
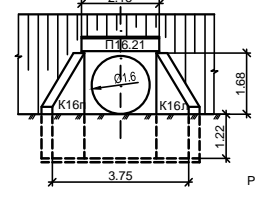









Facade of up-downstream end  
Fațada capatului amonte-aval  
Sc. 1:100( Lined drainage channel not shown)  
Sc. 1:100( Rigolă rapidă nu este aratăta)

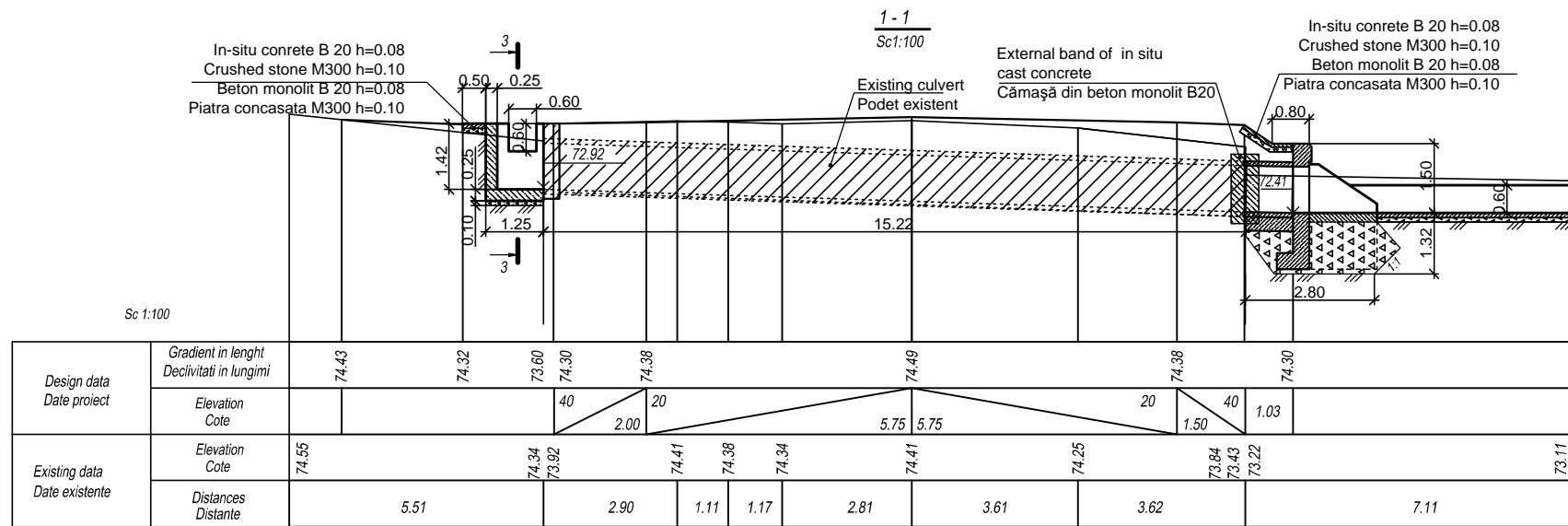


1. The culvert structure is done according to typical design 503-7-015.90.  
Podetele se construiesc conform proiectului tip seria 503-7-015.90.
2. Protection of the river bed and slopes - according to typical design 501-0-46 №937  
Consolidarea albiei și a taluzurilor se efectuează conform proiectului tip seria 501-0-46 №937
3. All dimensions given in metres.  
Toate dimensiunile sunt date in metri.
4. Level on culvert axis is calculated by height  $\Delta h$   
Cota pe axa podetului este calculata cu inaltimea  $\Delta h$

Main indices  
Indici fundamentali

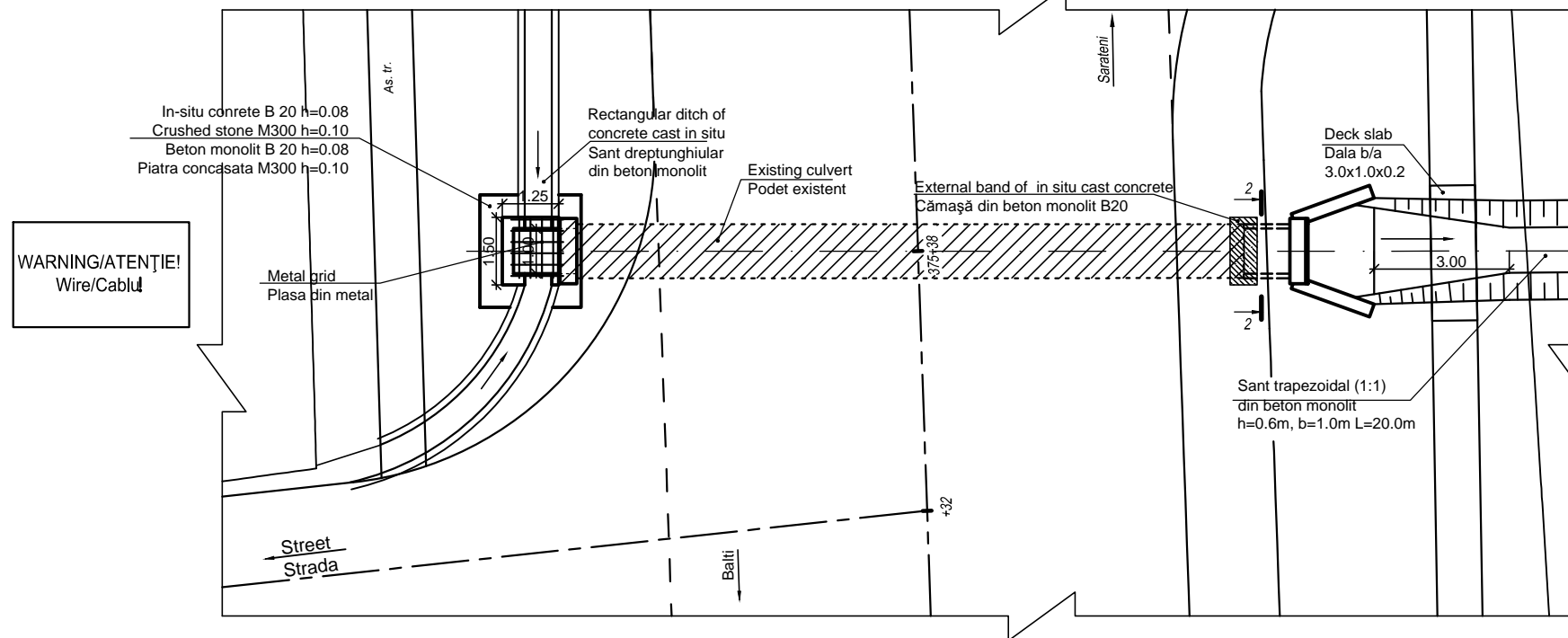
Location of culvert PC+ Amplasarea podetului PC+	Water course  Direcția curgerii	Levels.Remarca			Culvert length.Lungime podet m.				Intersection angle. intersectare unghi a , °	Gradient. Declivitatea ‰	Deepening of river-bed. Adâncimea albiei m	H crossed sm H crossed sm	Hydrologic features.Caract.Hidrolog.			Flow bahavout. Regim scurgere	Soils. Soluri
		Culvert boat.Rigola			Inlet. Amonte L 1	Outlet. Aval L 2	Total an the bed. Totala a rigolei. L	Esti fared flow. Q Volumul calculat. Q					HL water TTIB	Outlet velocite. Viteza la esire			
		Inleet. La intrare H 3	Axle. Pe axa H 4	Outlet. La esire H 5													
281+26		98.95	97.13	93.82	17.21	18.11	60.93	90				15				free-flow. Fara presiune	Heavy sandy loam. Argila nisipoasa grea.

EBRD	Republic of Moldova		Ministry of Transport and Road Industry State Road Administration			
	Road	Sector	Programme	Support	Project	
Roughton International	Rehabilitation of R14 Road		ISP	S.Bogza	Date	03.2012
Universcons	Bălți-Sărăteni		Designed	A.Gonciaruc	Scale	
	Drawing title Culvert construction TN-160-III		Checked	N.Tcaci	Drawing	
	Construcția podetului TN160-III PC 281+26		Control STAS	L.Pozdircă	CP-DA-1	

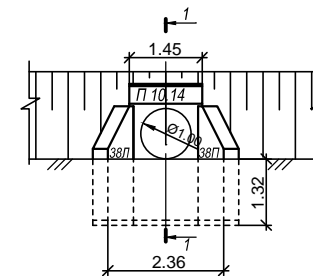


PC 375+38

LAYOUT / PLAN

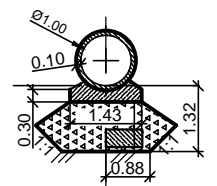


Facade of downstream end  
Fatada capatului aval  
Sc. 1:100

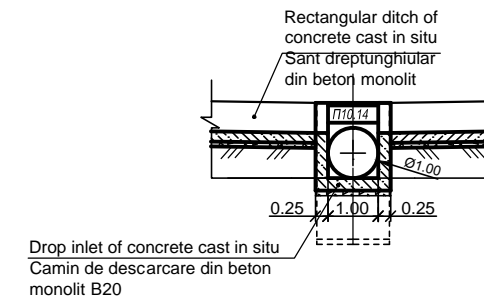


2-2

Sc. 1:100 (embankment not shown)  
Sc. 1:100 (rambleul nu este aratat)



3-3  
M 1:100

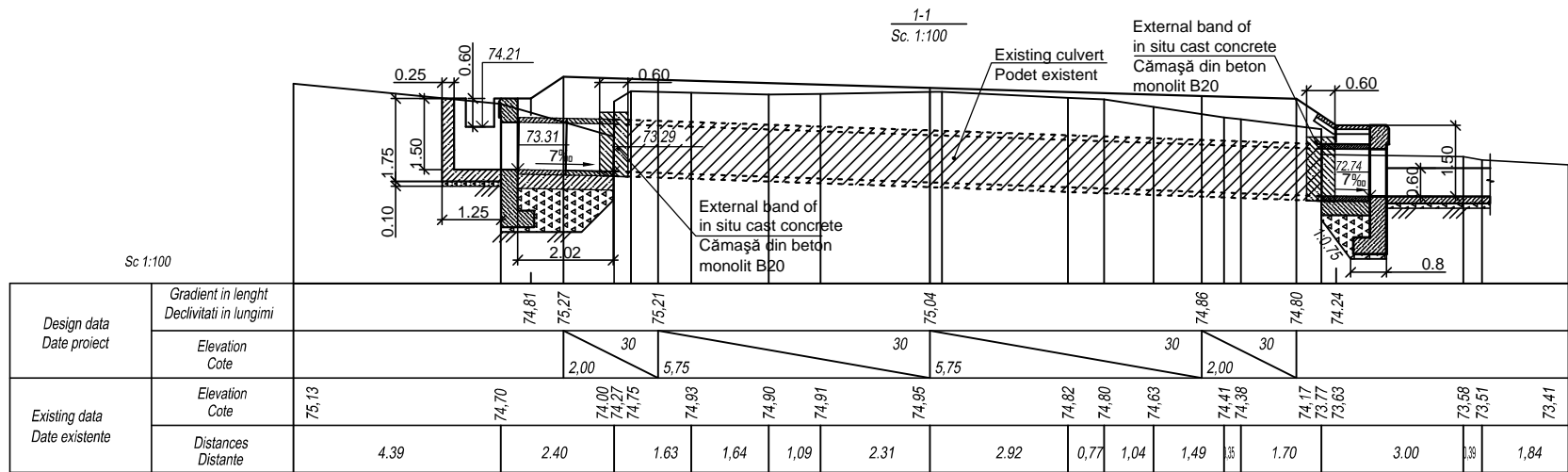


1. The culvert structure is done according to typical design 503-7-015.90.  
Podetele se construiesc conform proiectului tip seria 503-7-015.90.
2. Protection of the river bed and slopes - according to typical design 501-0-46 №937  
Consolidarea albiei și a taluzurilor se efectueaza conform proiectului tip seria 501-0-46 №937
3. All dimensions given in metres.  
Toate dimensiunile sunt date in metri.

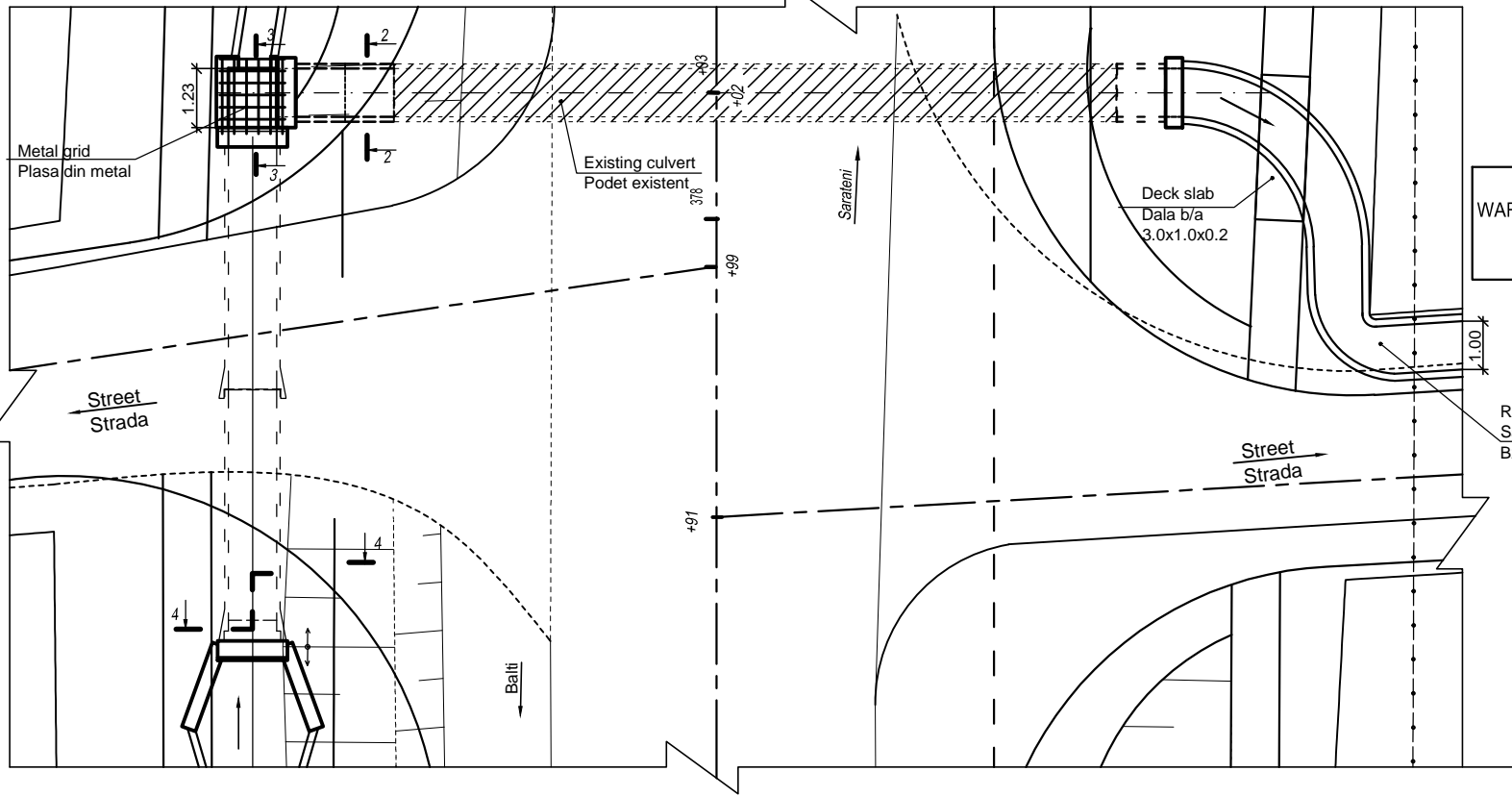
WARNING/ATENȚIE!  
Wire/Cablu!

A representative of the wire networks company should be invited  
prior to the beginning of the works  
La începutul lucrărilor de invitat reprezentantul rețelelor de cablu!

EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
Universcons	Drawing title Culvert lengthening Ø 1,0 with tubes Nr.12 Alungirea podetului Ø 1,0 cu tuburi Nr.12 PC 375+38	Designed	A.Gonciaruc		Scale	
		Checked	N.Tcaci		Drawing AP-DA-1	
		Control STAS	L. Pozdirca			

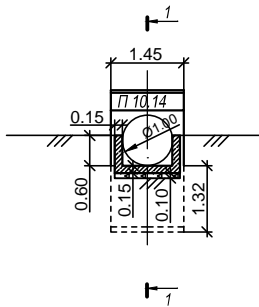


WARNING/ATENȚIE!  
Wire/Cablu!

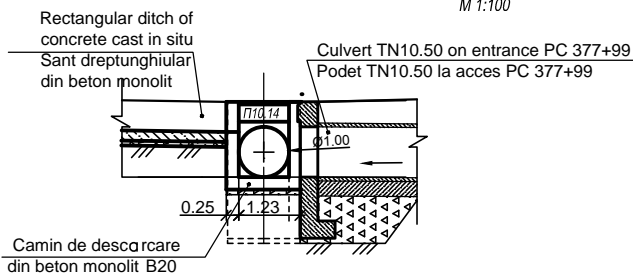
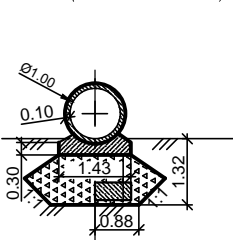


WARNING/ATENȚIE!  
Wire/Cablu!

Facade of downstream end  
Fatada capatului aval  
Sc. 1:100 (embankment not shown)  
Sc. 1:100 (rambleul nu este aratat)



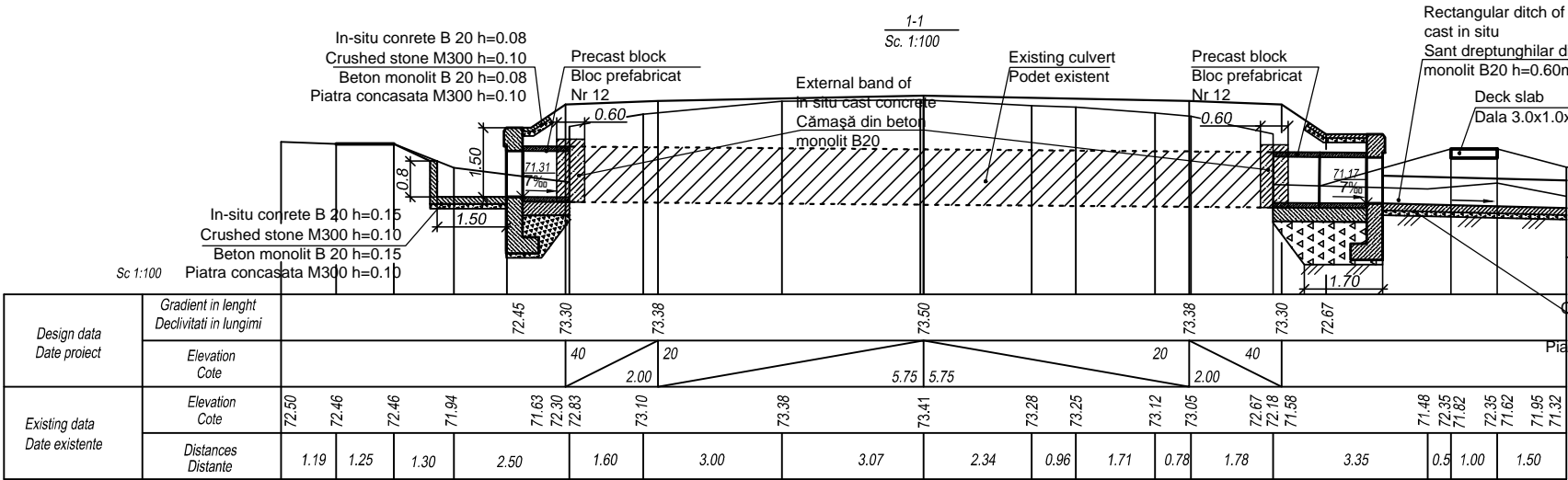
2-2  
Sc. 1:100 (embankment not shown)  
Sc. 1:100 (rambleul nu este aratat)



A representative of the wire networks company should be invited  
prior to the beginning of the works  
La începutul lucrărilor de invitat reprezentantul rețelelor de cablu!

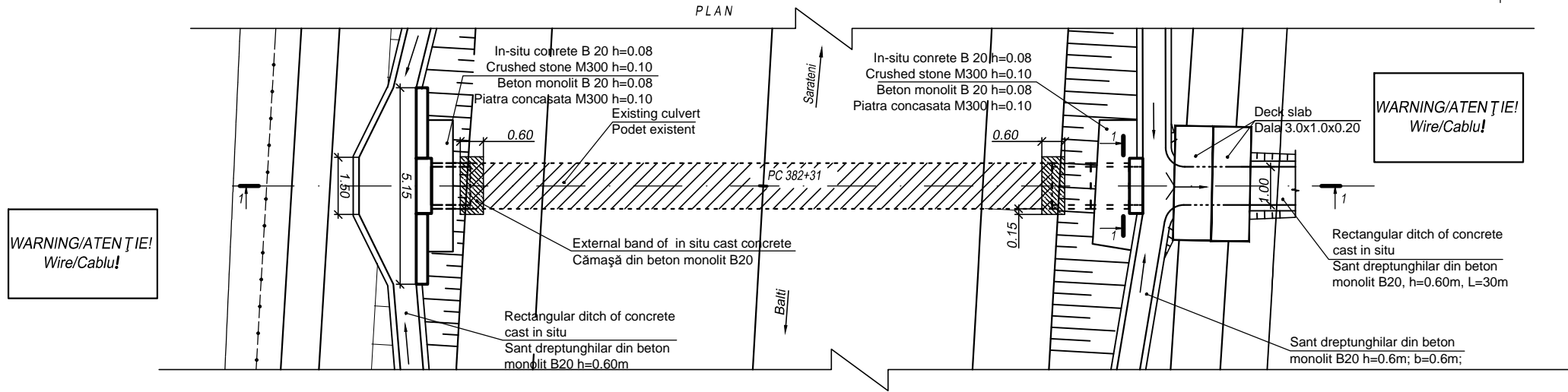
1. The culvert structure is done according to typical design 503-7-015.90.  
Podețele se construiesc conform proiectului tip seria 503-7-015.90.
2. Protection of the river bed and slopes - according to typical design 501-0-46 №937  
Consolidarea albiei și a taluzurilor se efectueaza conform proiectului tip seria 501-0-46 №937
3. All dimensions given in metres.  
Toate dimensiunile sunt date in metri.

EBRD	Republic of Moldova		Ministry of Transport and Road Industry State Road Administration			
Road Sector Programme Support Project						
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni		ISP	S.Bogza	Date	03.2012
Universcons	Drawing title Culvert lengthening Ø 1,0 with tubes Nr.12 Alungirea podețului Ø 1,0 cu tuburi Nr.12 PC 378+02	Designed	A.Goncianuc	Scale		
		Checked	N.Tcaci	Drawing AP-DA-1		
		Control STAS	L.Pozdirca			



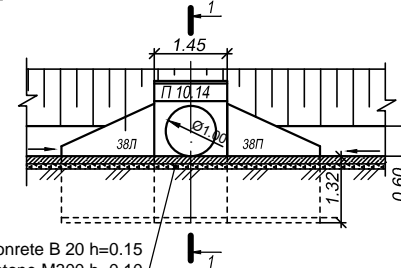
PC 382+31

PLAN



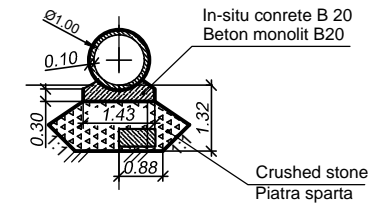
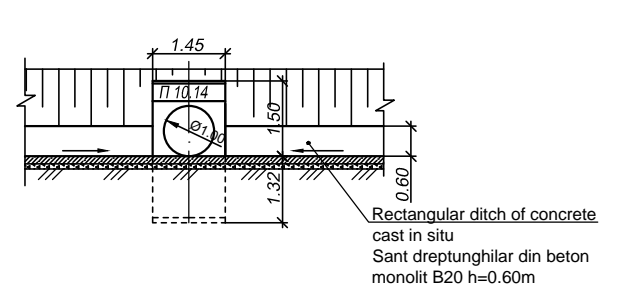
Facade of upstream end  
Fatada capatului amonte

Sc. 1:100



Facade of downstream end  
Fatada capatului aval

Sc. 1:100

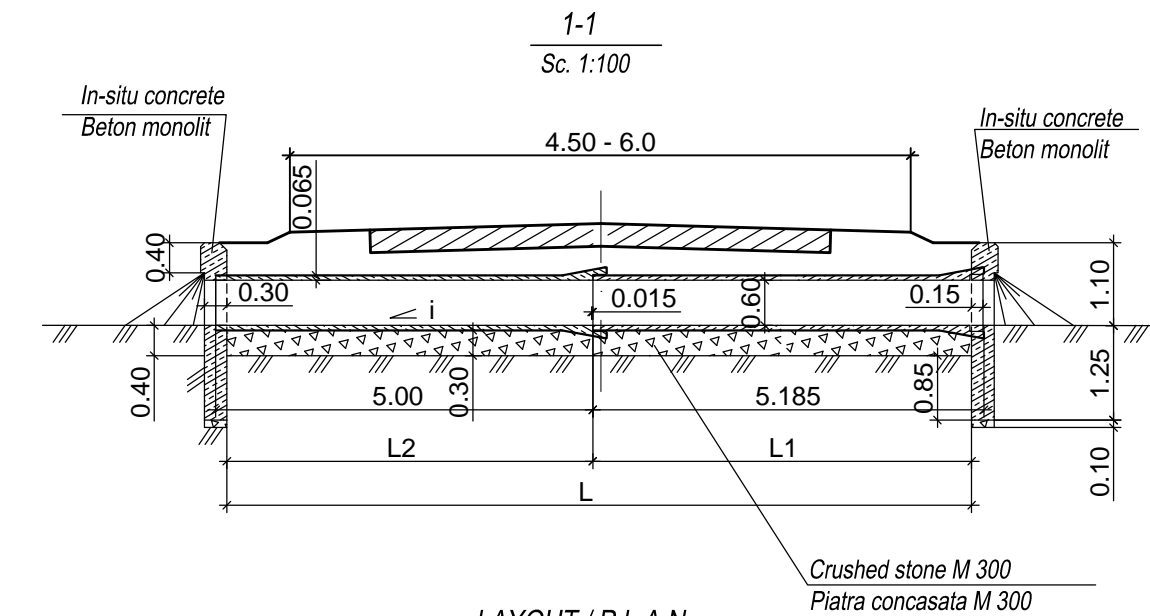


A representative of the wire networks company should be invited  
prior to the beginning of the works  
La începutul lucrărilor de invitat reprezentantul rețelor de cablu!

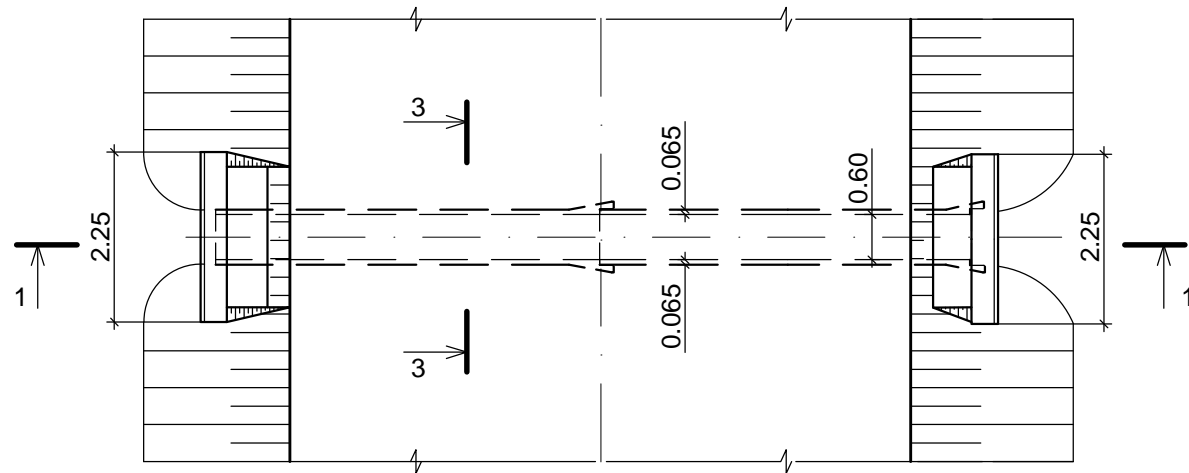
- The culvert structure is done according to typical design 503-7-015.90.  
Podetele se construiesc conform proiectului tip seria 503-7-015.90.
- Protection of the river bed and slopes - according to typical design 501-0-46 №937  
Consolidarea albiei și a taluzurilor se efectueaza conform proiectului tip seria 501-0-46 №937
- All dimensions given in metres.  
Toate dimensiunile sunt date in metri.

EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
Universcons	Drawing title Culvert lengthening Ø 1,0 with tubes Nr.12 Alungirea podetului Ø 1,0 cu tuburi Nr.12 PC 382+31	Designed	A.Goncianuc		Scale	
		Checked	N.Tcaci		Drawing AP-DA-1	
		Control STAS	L.Pozdirca			

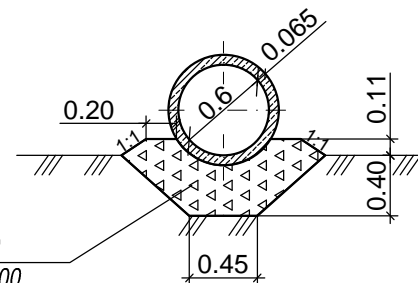
Culvert r.c. TH 60-III f/f side roads  
 Podeţ b/a TH 60-III f/f drumuri laterale



LAYOUT / PLAN  
 Sc. 1:100



3 - 3  
 Sc 1:50

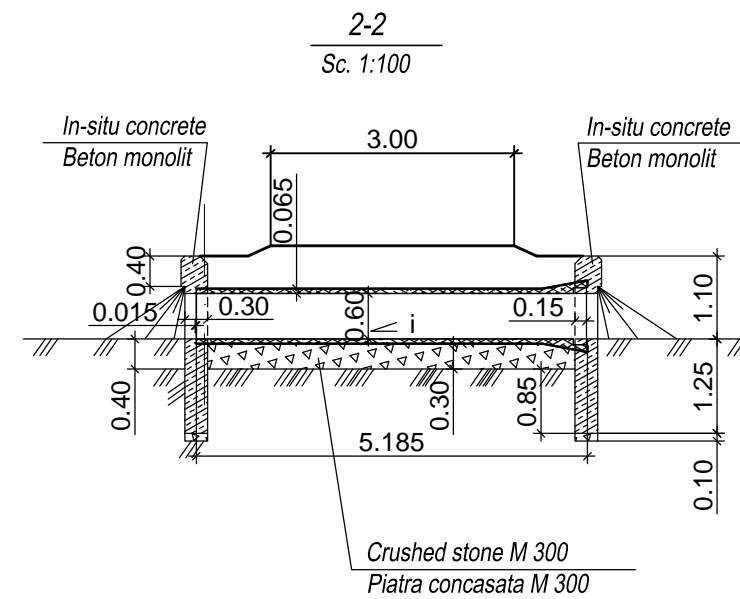


Quantities for pipe blocks  
 Cantitatile blocurilor podeţelor

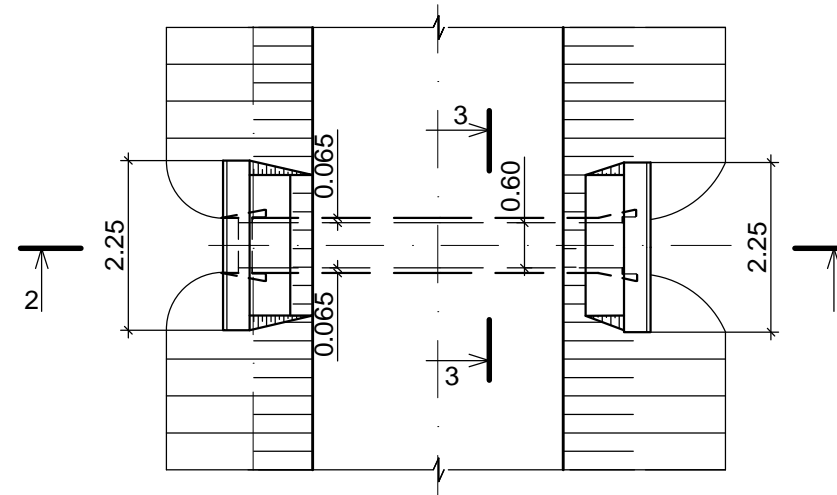
Block type Bloc prefabricat	Block dimensions Dimensiunile blocului	Block material Materialele blocului	Block volume, cu. m Volumul blocului, mc	Block weight, t Masa blocului, t
TH 60 - III	L - 5.0 δ - 0.065	Reinforced concrete B30 Beton armat B30	0.76	1.87

\* b.a. (beton armat) - r.c. (reinforced concrete)

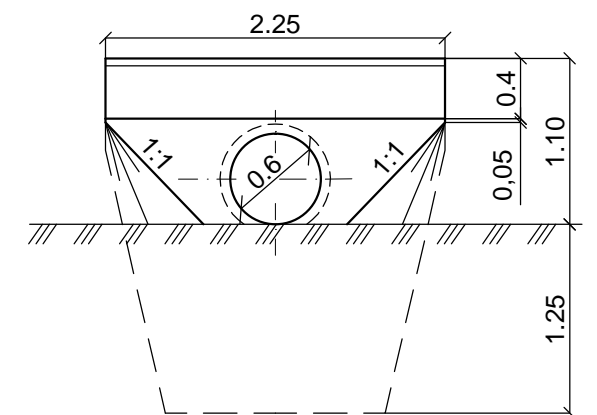
Culvert r.c. TH 60-III f/f entrances to properties  
 Podeţ b/a TH 60-III f/f intrări în curţi



LAYOUT / PLAN  
 Sc. 1:100

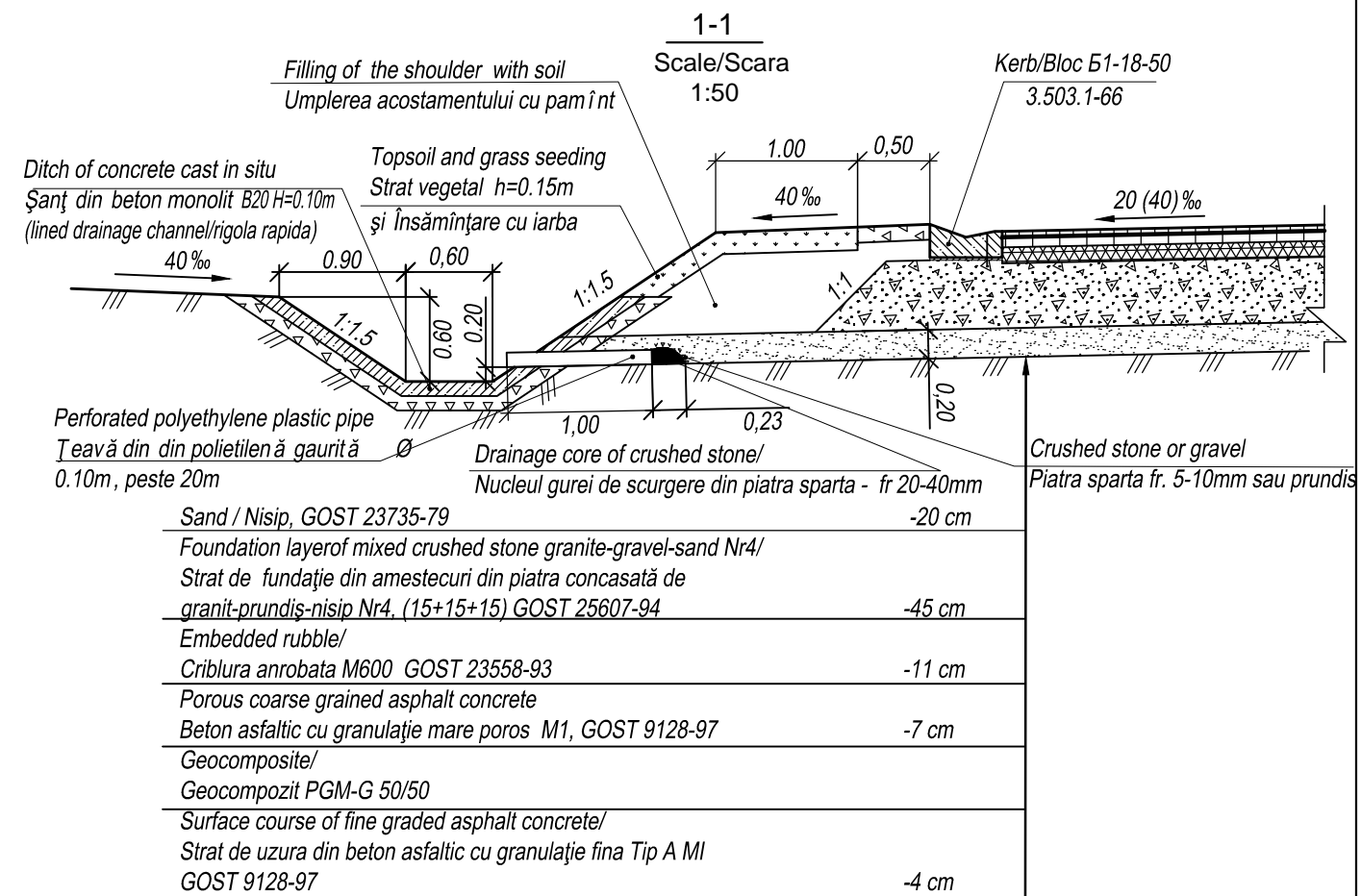


Facade of the outlet upstream-downstream Sc. 1:50  
 Fatada capatului amonte-aval Sc. 1:50

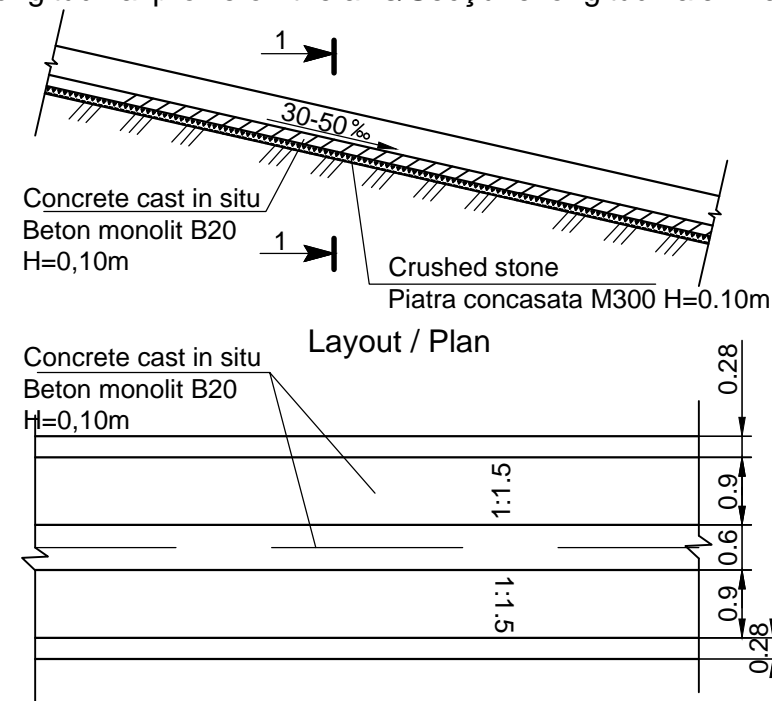


- The culvert structure is according to typical design 503-7-015.90.  
 Podetile se construiesc conform proiect tip seria 503-7-015.90.
- Protection of the river bed and slopes - according to typical design 501-0-46 №937  
 Consolidarea albiei si a taluzurilor se efectueaza conform proiect tip seria 501-0-46 №937
- Dimensions are given in metres.  
 Toata dimensiunile sunt date in metri.

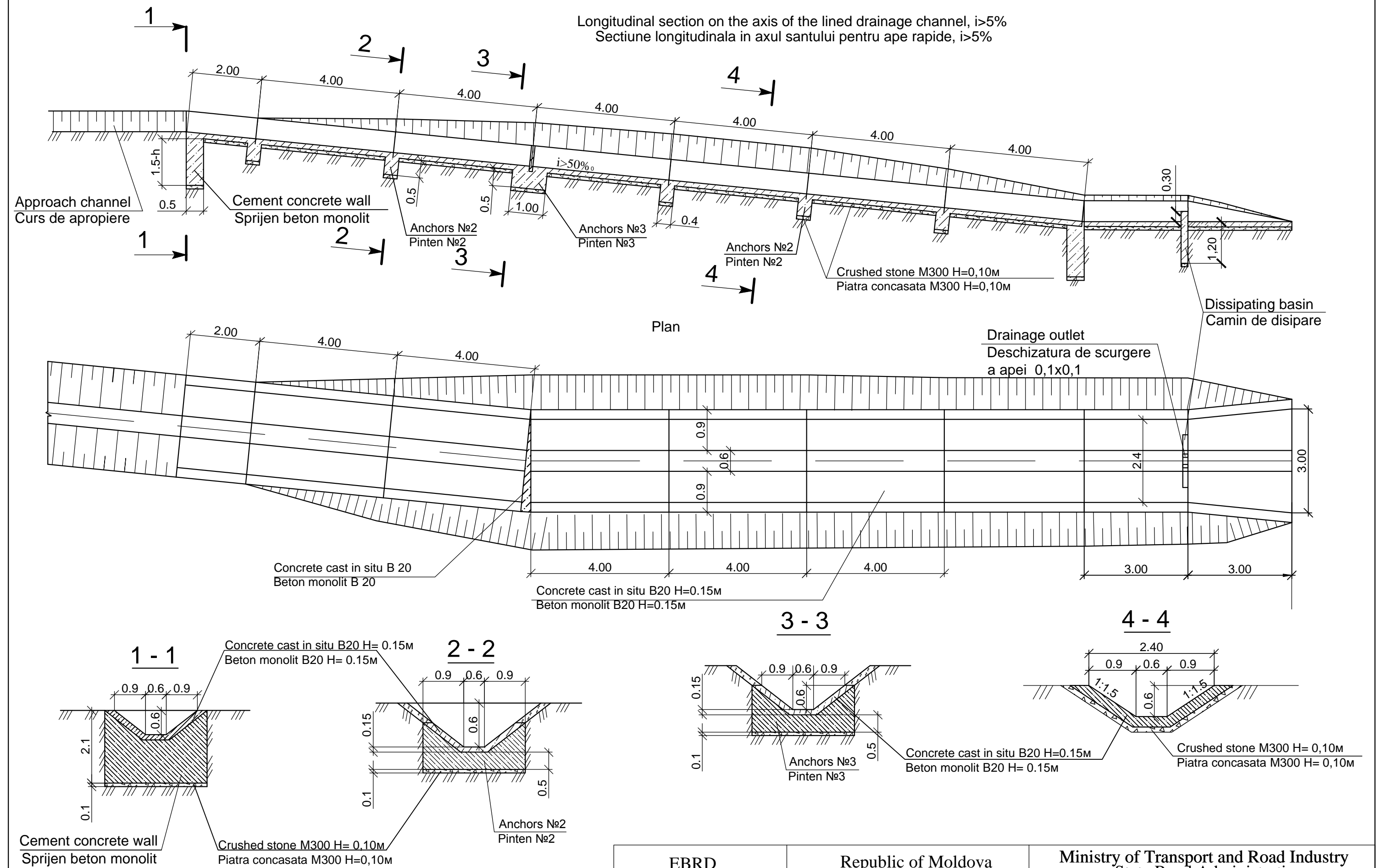
EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration			
Road Sector Programme		Support Project			
Roughton International  Universcons	Rehabilitation of R14 Road Bălţi-Sărăteni	ISP	S.Bogza	Date	03.2012
		Designed	A.Gonciaruc	Scale	
		Checked	N.Tcaci	Drawing PET-DA-1	
		Control STAS	L.Pozdirca		



Tip 1. Trapezoidal ditch/Șanț trapezoidal  
Longitudinal profile on the axis/Secțiune longitudinală în ax

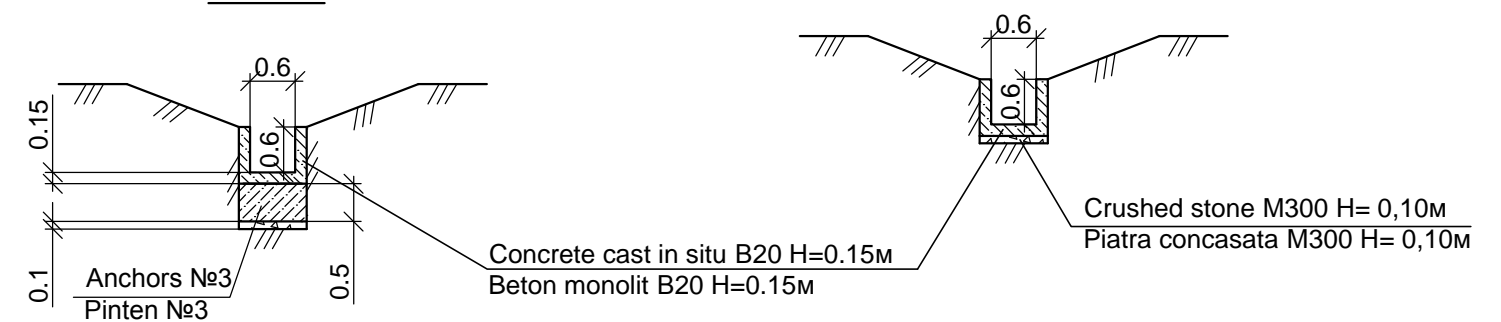
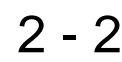
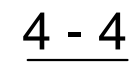
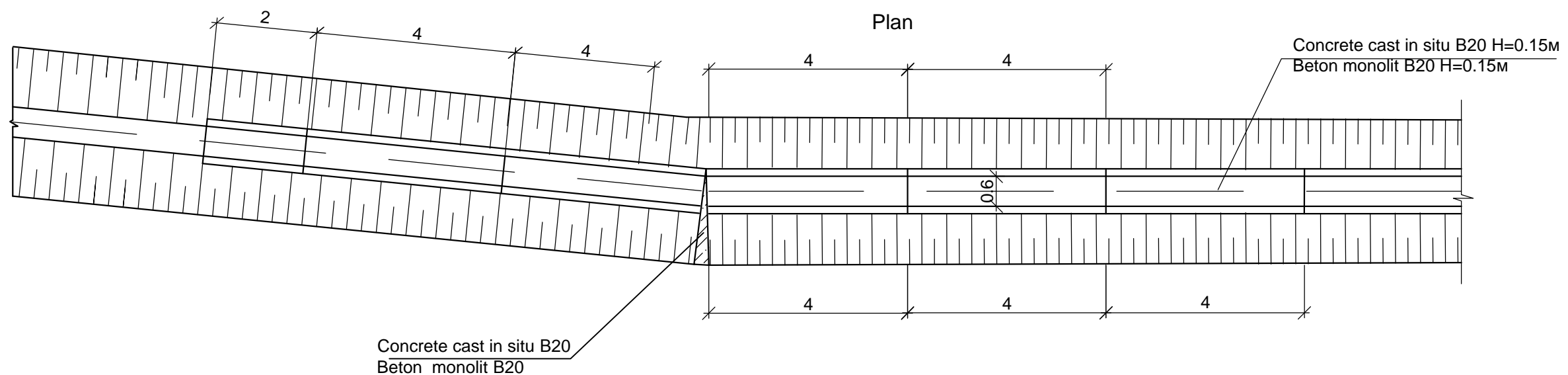


EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road      Sector      Programme      Support      Project						
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
Universcons		Designed	A.Gonciaruc		Scale	
	Drawing title	Checked	N.Tcaci		Drawing SLT-DA-1	
	Side drains reinforced with monolithic concrete B20 i < 5% Șanțuri laterale consolidate cu beton monolit B20 i < 5%	Control STAS	L.Pozdirca			



EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support Project				
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
Universcons	Drawing title Typical lined side drain $i > 5\%$ Santuri laterale tip $i > 5\%$	Designed	A.Gonciaruc		Scale	
		Checked	N.Tcaci		Drawing SLT-DA-1	
		Control STAS	L.Pozdirca			





Concrete cast in situ B20 H= 0.15M  
Beton monolit B20 H= 0.15M

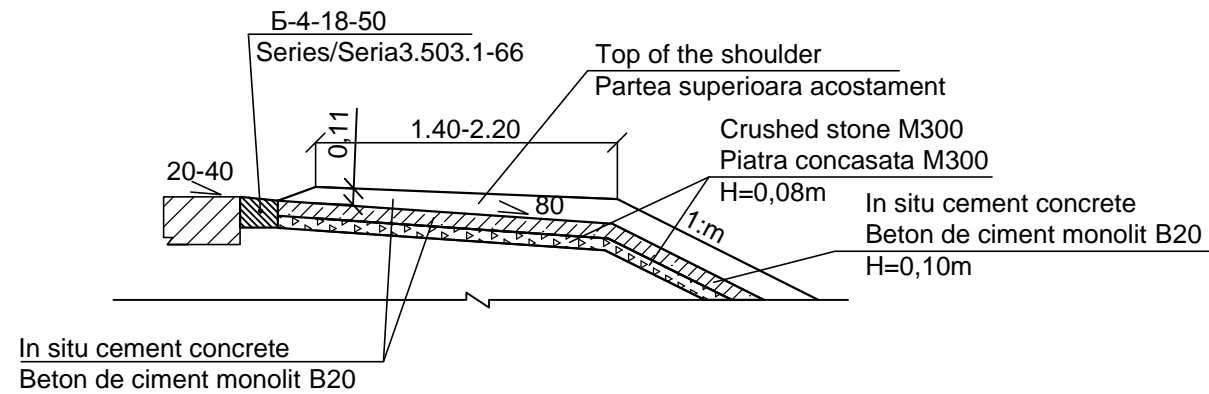
Anchors №2  
Pinten №2

EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
		Designed	A.Gonciaruc		Scale	
	Drawing title  Typical lined side drain i>5% Santuri laterale tip i>5%	Checked	N.Tcaci		Drawing  SLT-DA-2	
		Control STAS	L.Pozdirca			

## DRAINAGE CHUTES CONSTRUCTIA CASIULUI

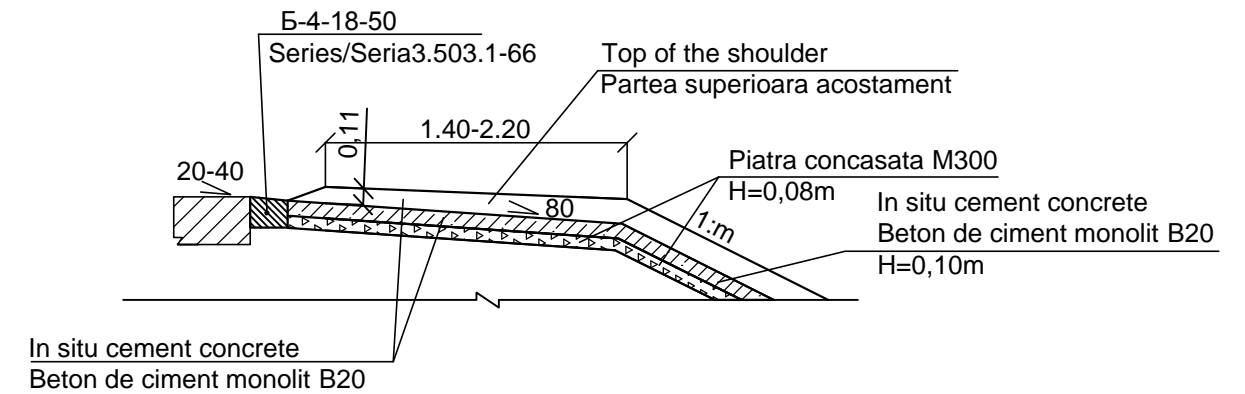
type A. In low places / tip A. In locurile joase

2 - 2  
Sc1:50

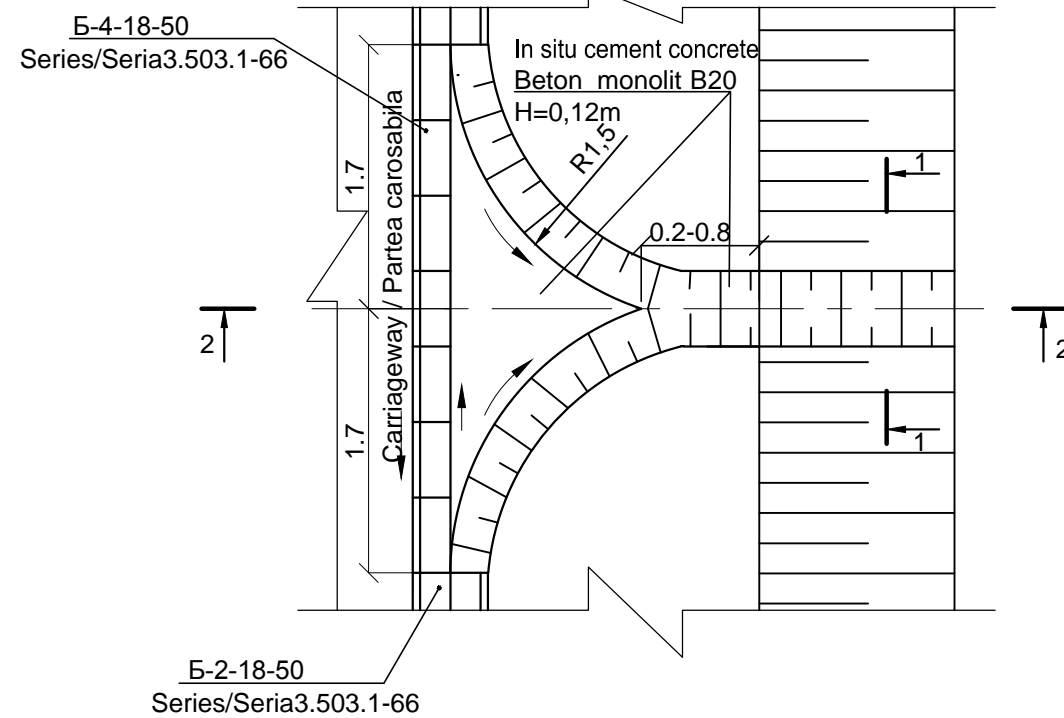


type B. In declivities / tip B. In declivitati

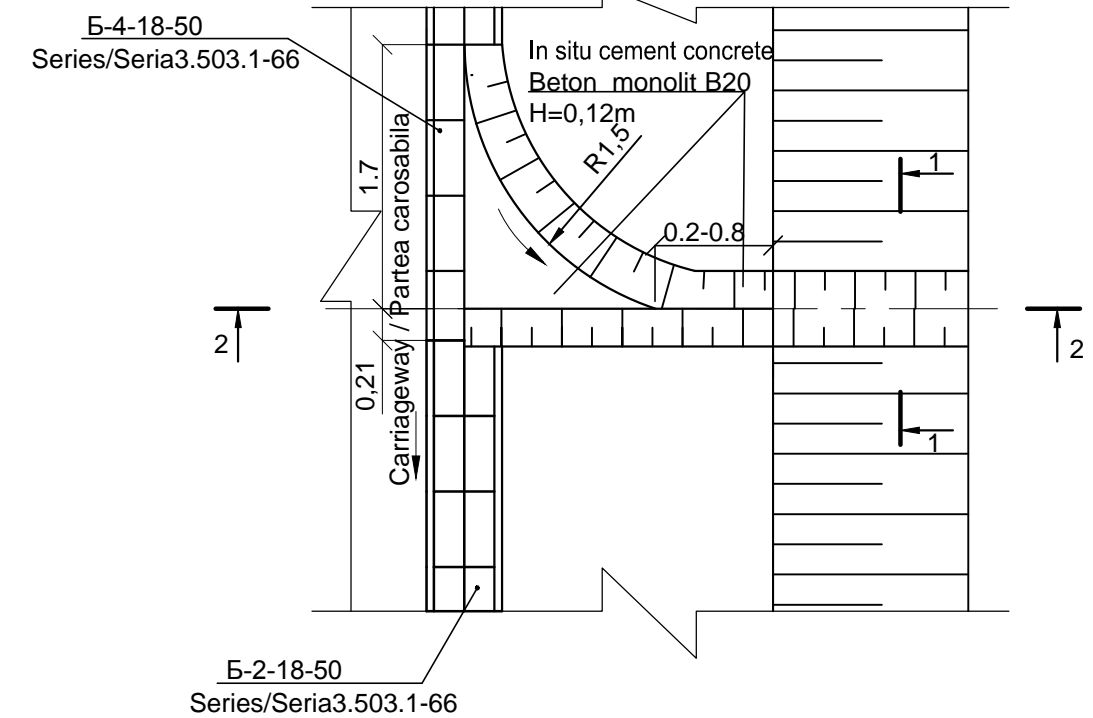
2 - 2  
Sc1:50



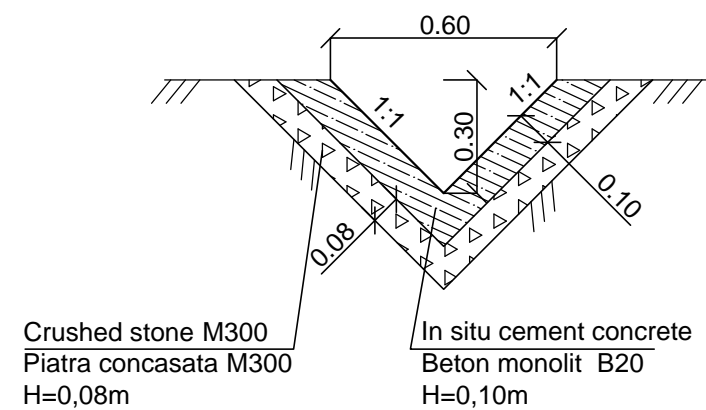
Sc1:50



Sc1:50

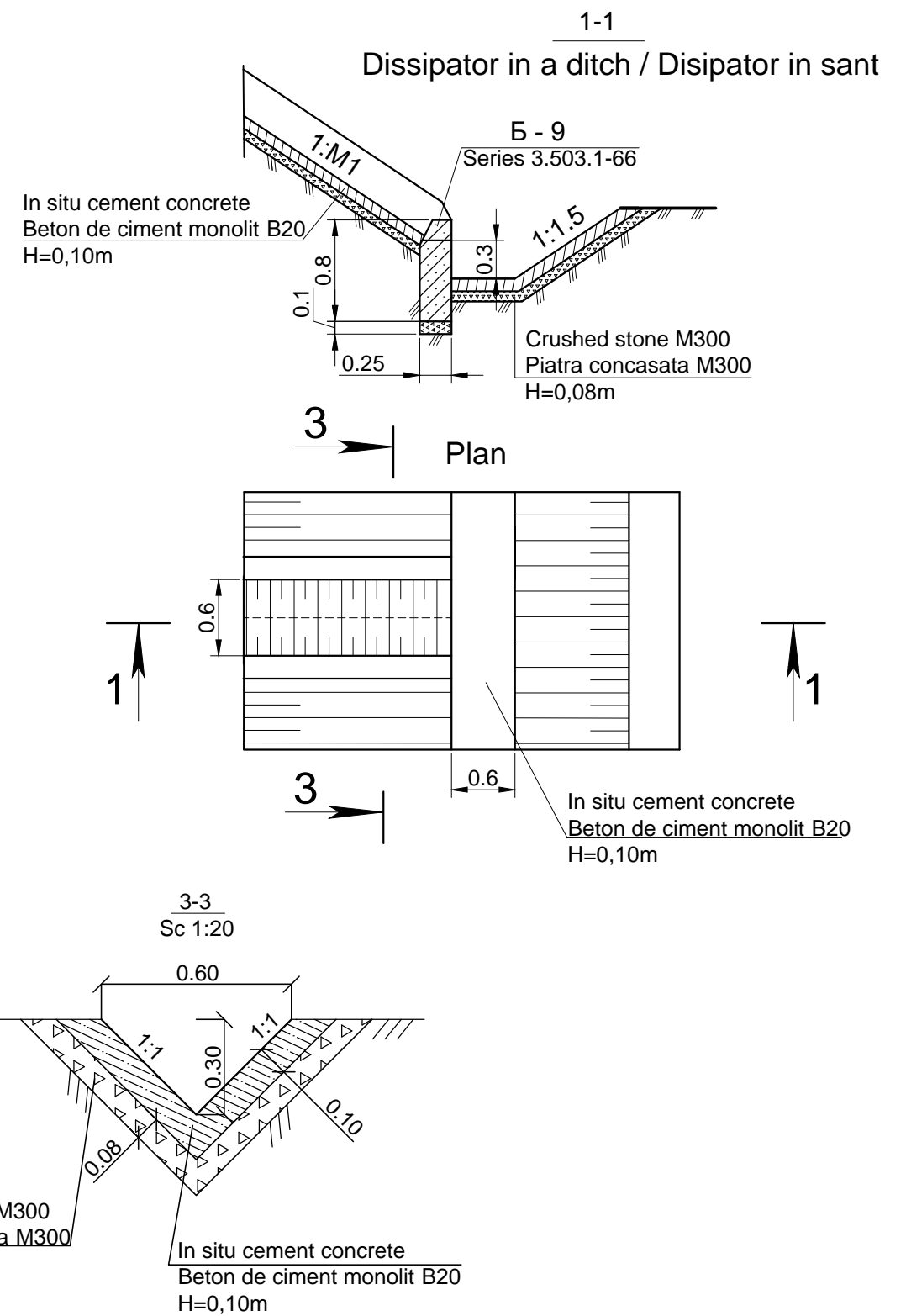
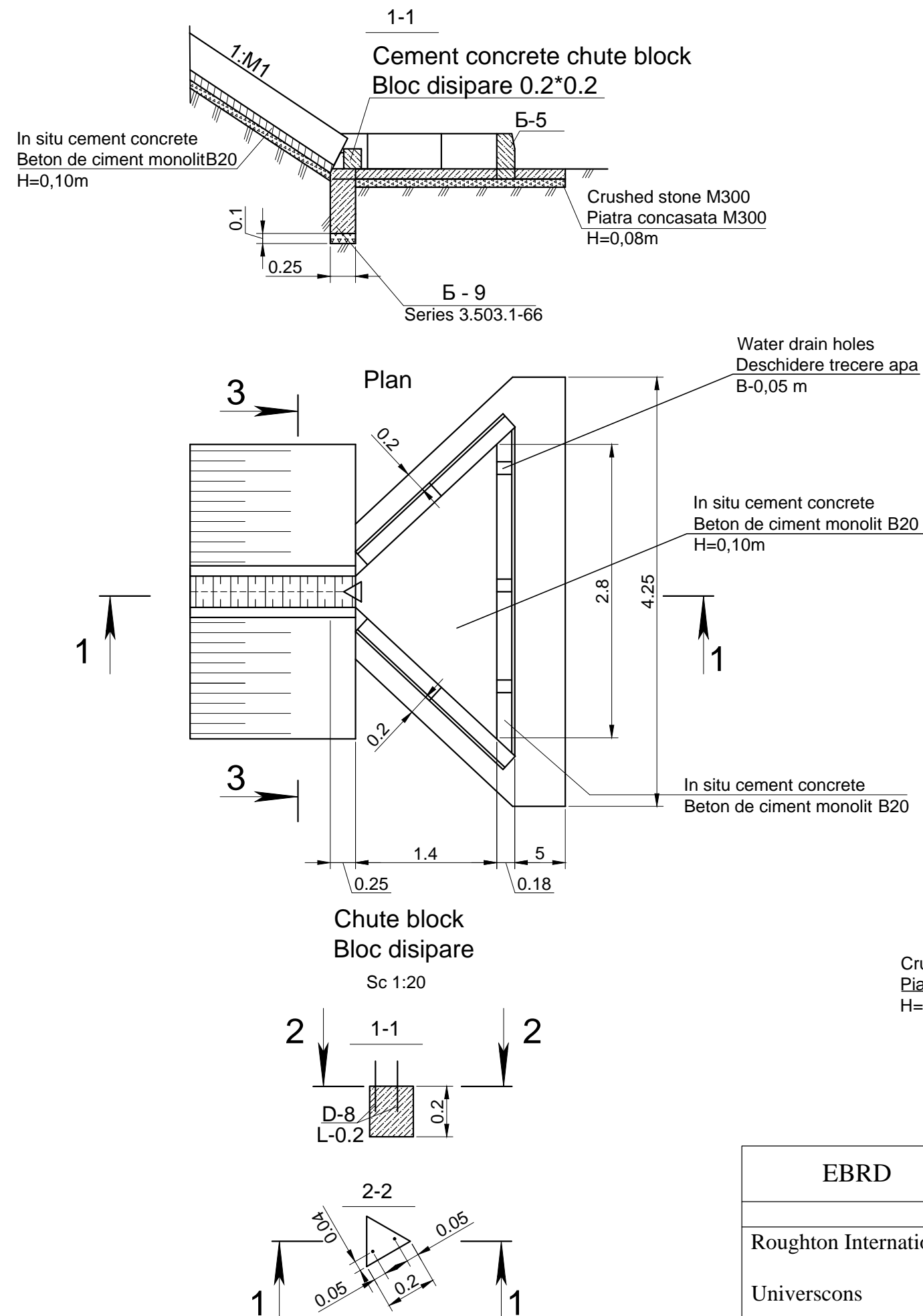


1 - 1  
Sc1:20

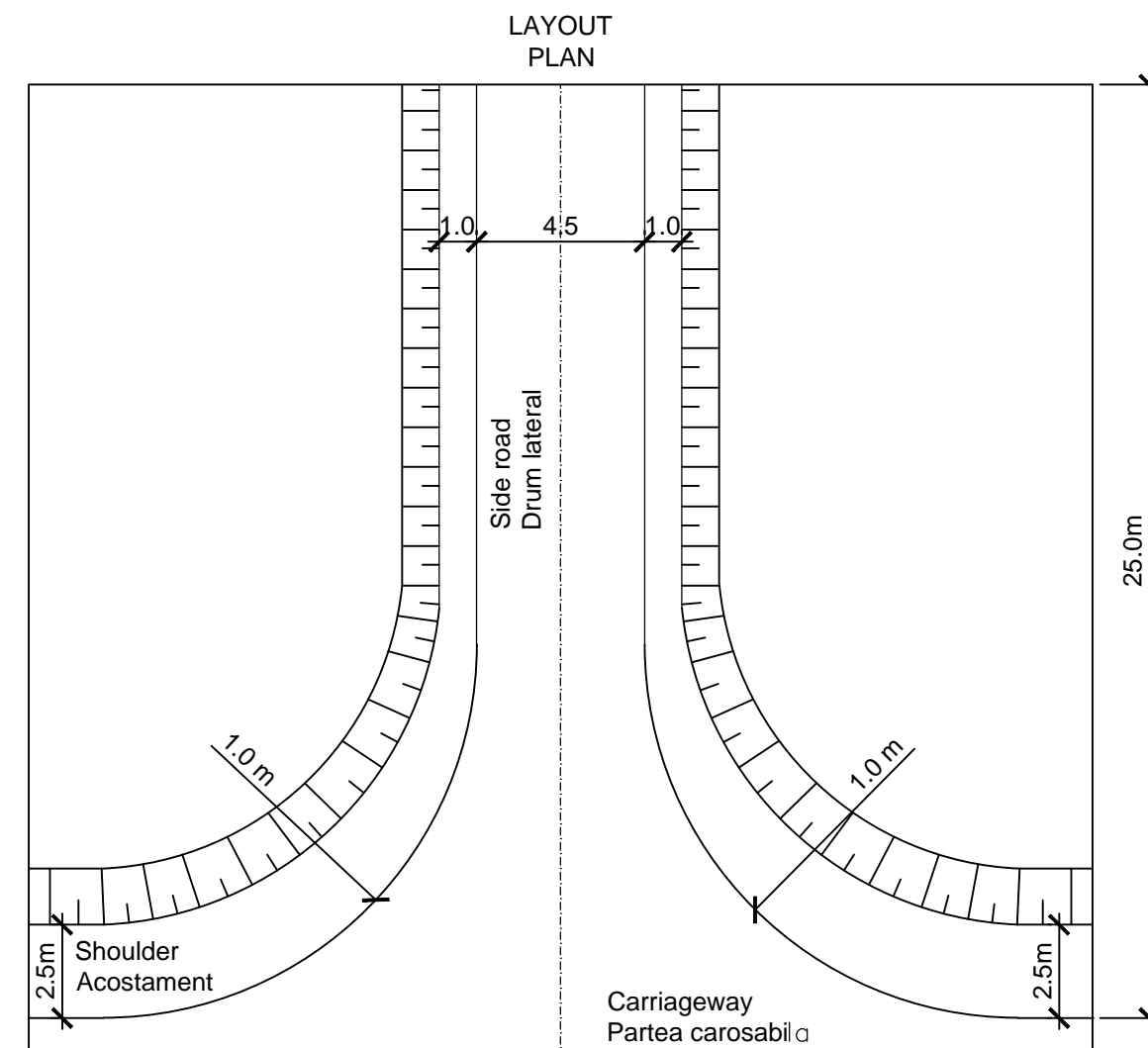
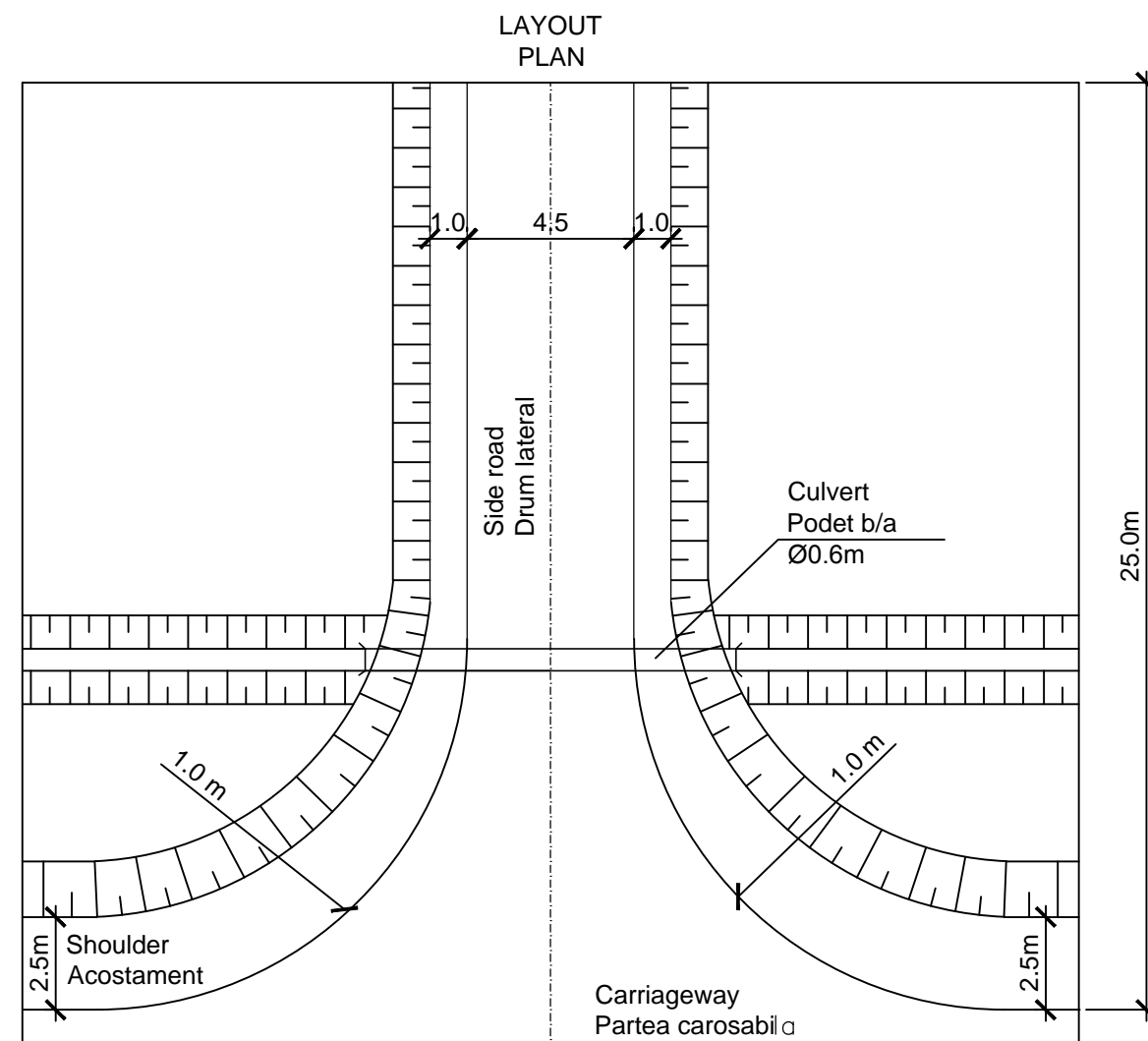


EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
		Designed	A.Gonciaruc		Scale	1:50
	Drawing title Drainage chutes construction on shoulder Construcția casului pe acostament	Checked	N.Tcaci		Drawing CCA-DA-1	
		Control STAS	L.Pozdirca			

# DISSIPATOR CHUTE CĂMIN DE DISIPARE PENTRU CASIU

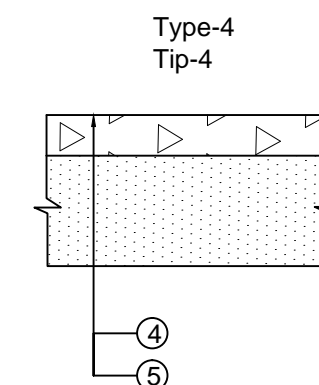
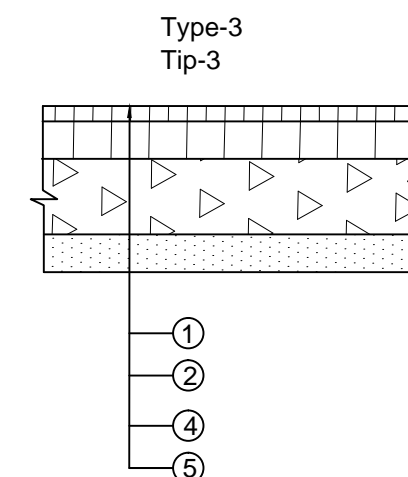
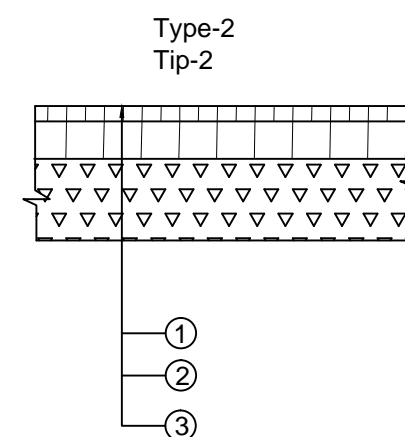
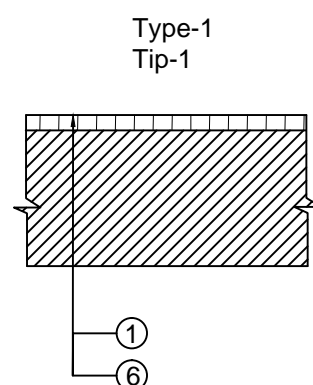


EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni  Drawing title Dissipator chute Camin de disipare pentru casiuri	ISP	S.Bogza		Date	03.2012
		Designed	A.Gonciaruc		Scale	
		Checked	N.Tcaci		Drawing DC-DA-1	
		Control STAS	L.Pozdirca			

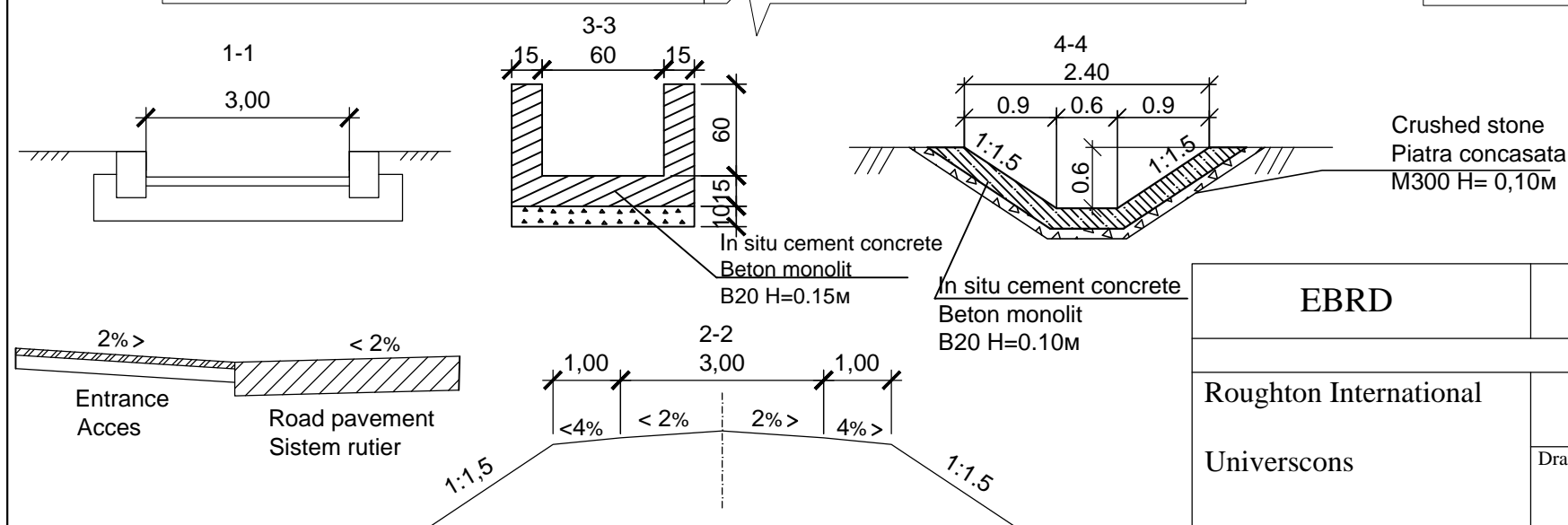
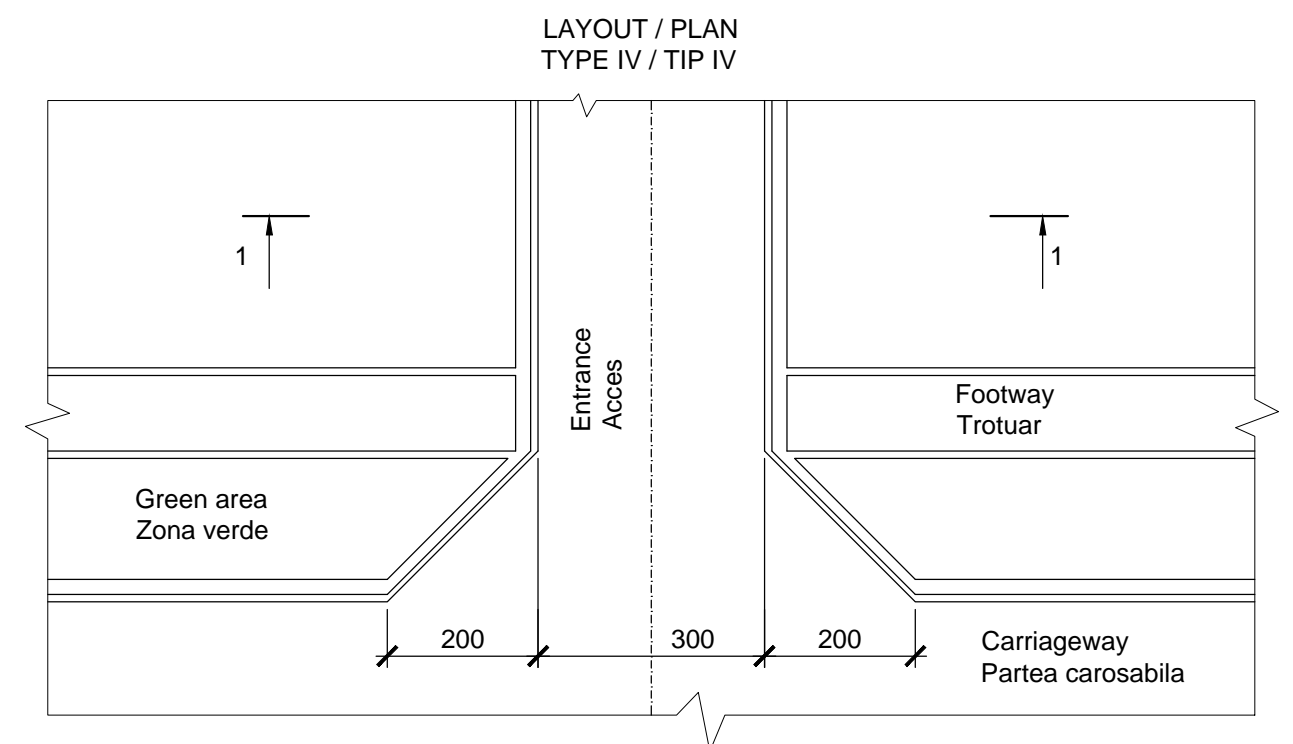
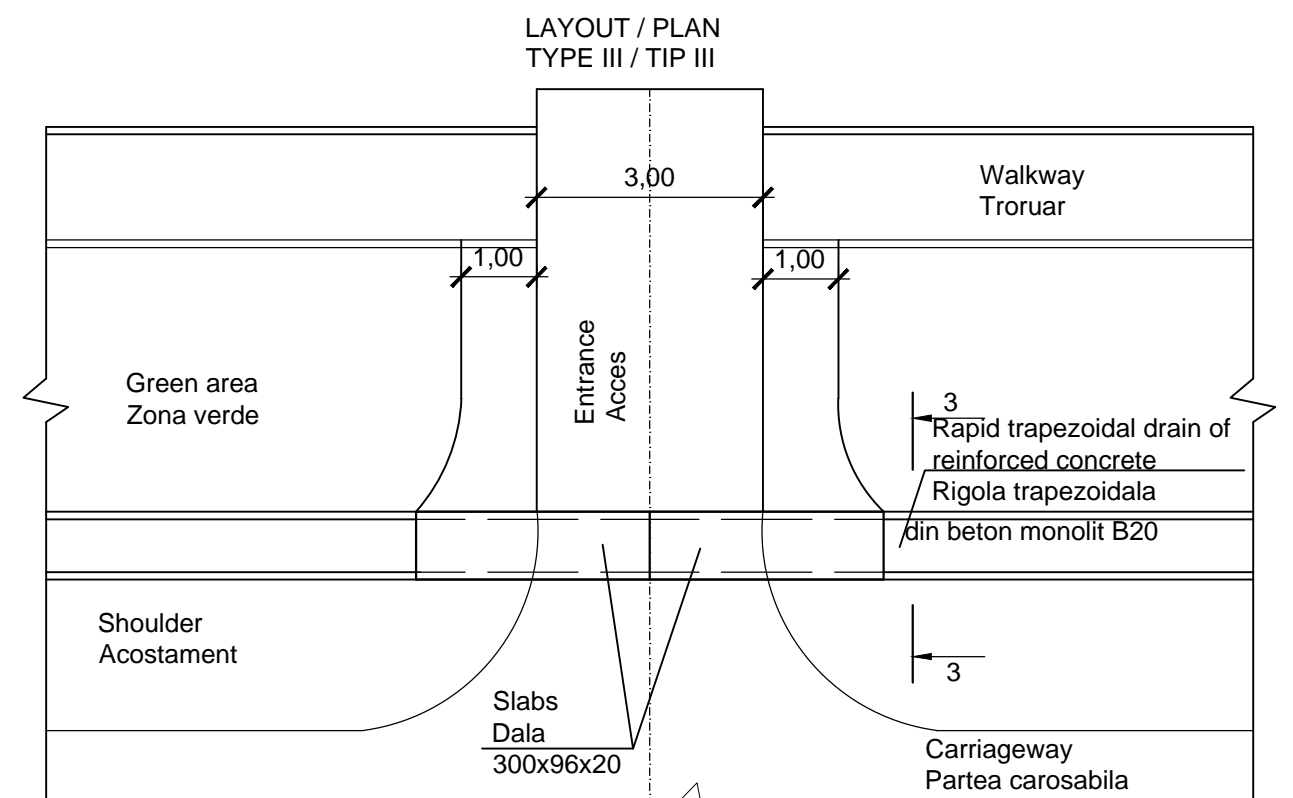
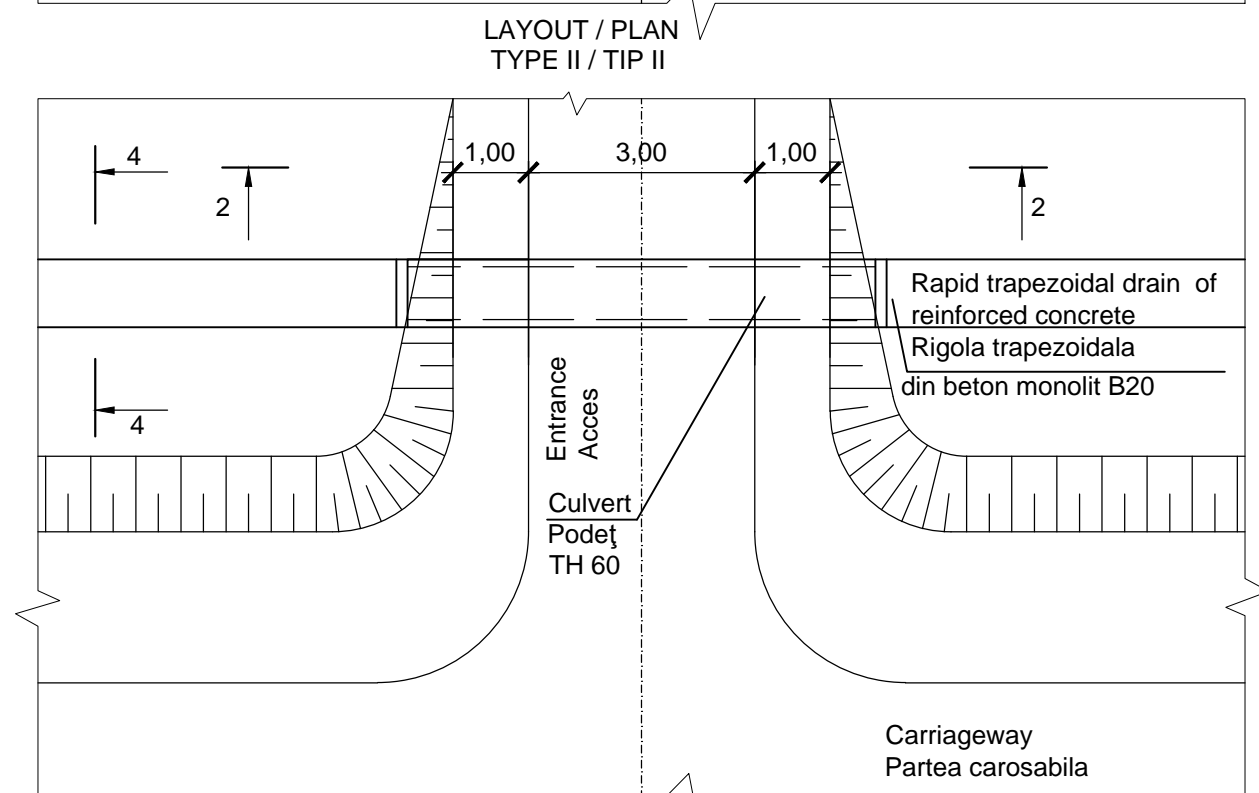
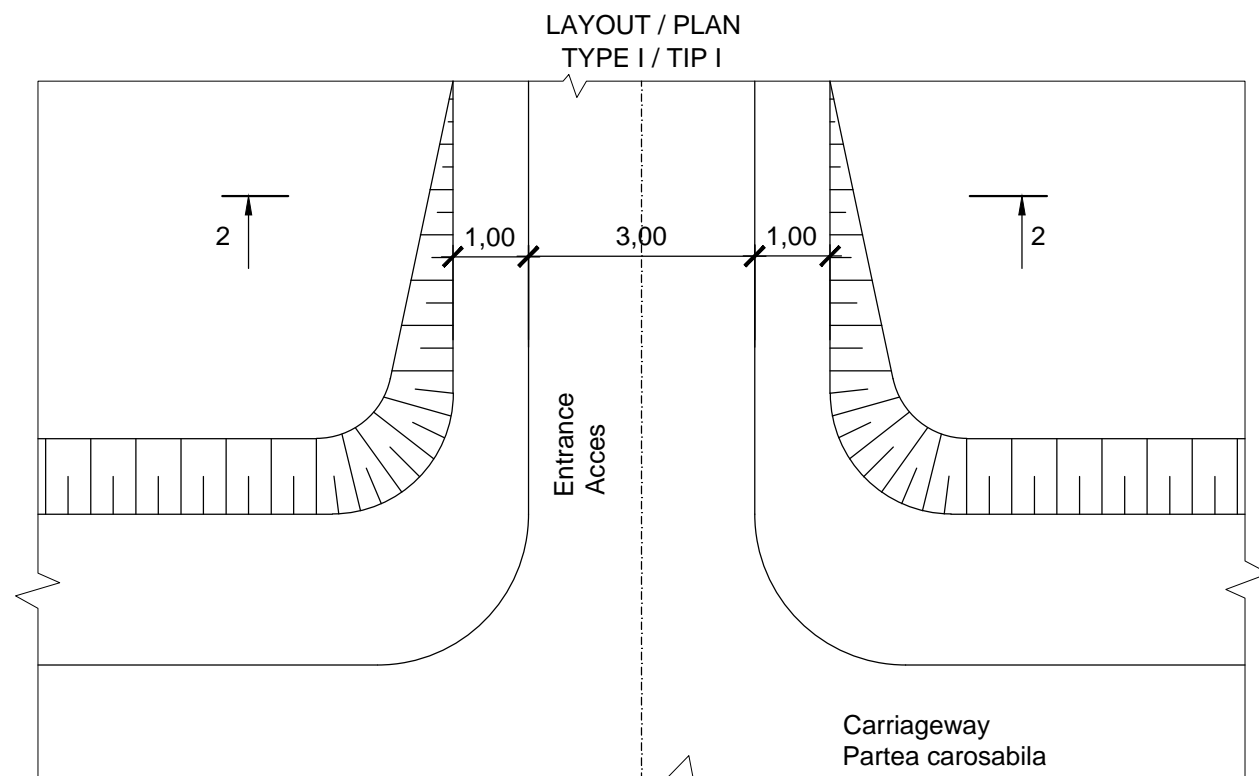


*Structure of pavement  
Construcția sistemului rutier*

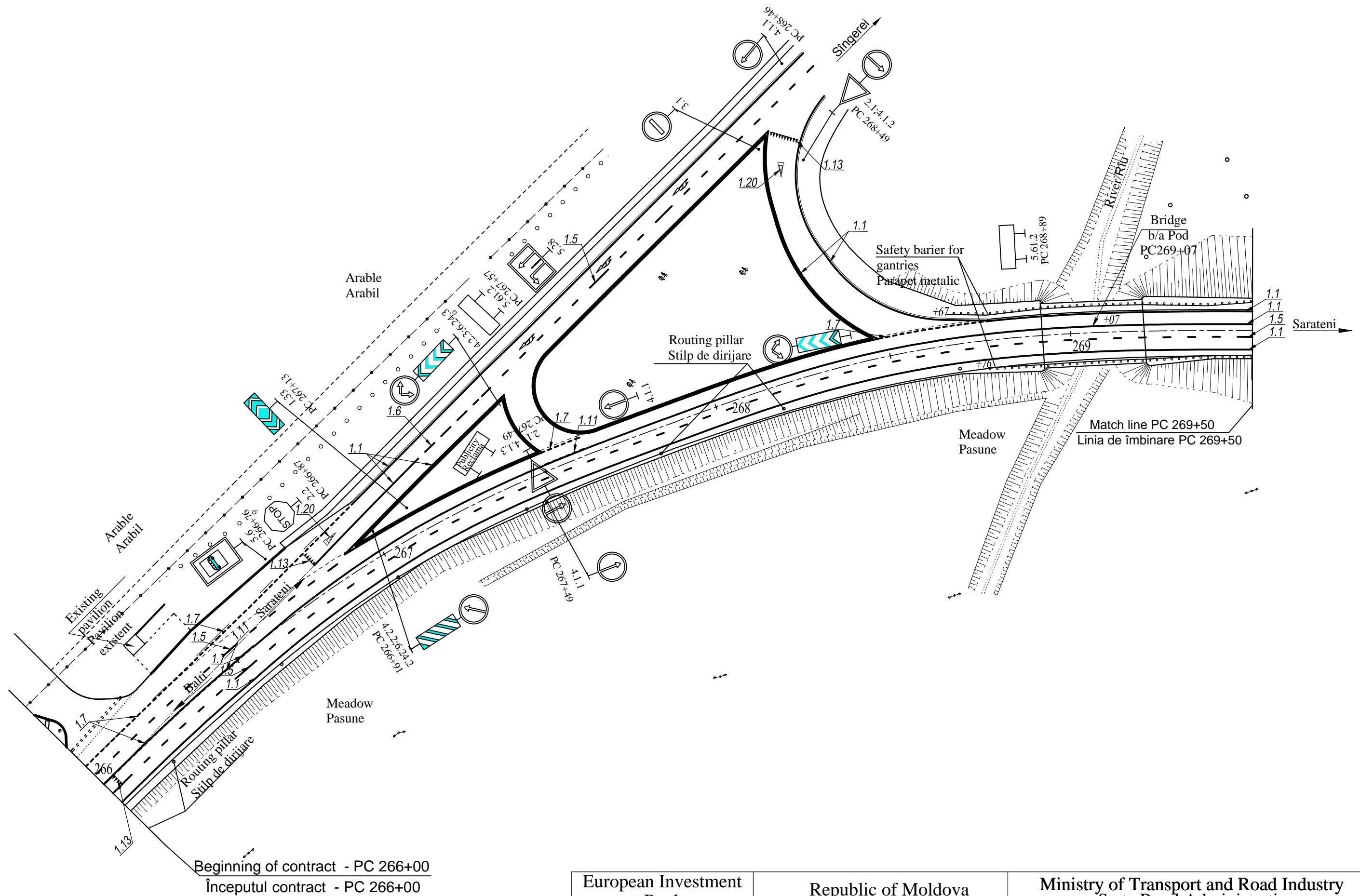
- ① -Fine grained dense asphalt type A M1  
Beton asfaltic cu granulatie fina dens tip A M1 h-4cm
- ② -Coarse grained porous asphalt type M1  
Beton asfaltic cu granulatie mare poros M1 h-8cm
- ③ -Crushed stone M300  
Piatra concasata M300 h-15cm
- ④ -Crushed stone M300  
Piatra concasata M300 h-25cm
- ⑤ -Sand  
Nisip h-10cm
- ⑥ -Existing road structure  
Imbracaminte existenta



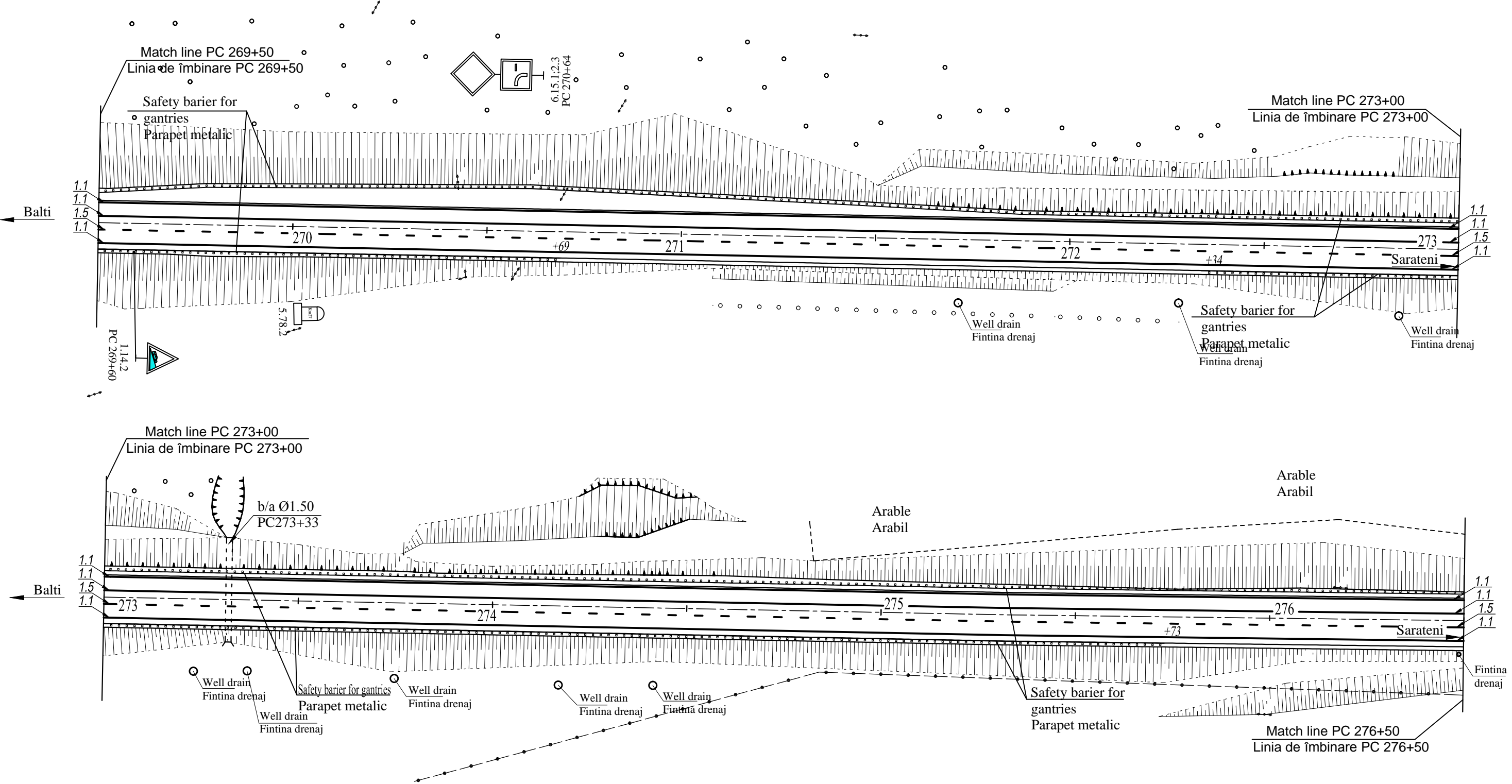
World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Balti-Sarateni	ISP	S.Bogza		Date	03.2012	
		Designed	A.Gonciaruc		Scale	1:200	
	Drawing title  Typical side road Drum lateral tip	Checked	N.Tcaci		Drawing  DLT-DA-1		
		Control STAS	L.Pozdirca				



EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
		Designed	A.Gonciaruc		Scale	1:100	
Universcons	Drawing title Entrance to properties, typical Acces in curti, Tip	Checked	N.Tcaci		Drawing AC-DA-1		
		Control STAS	L.Pozdirca				

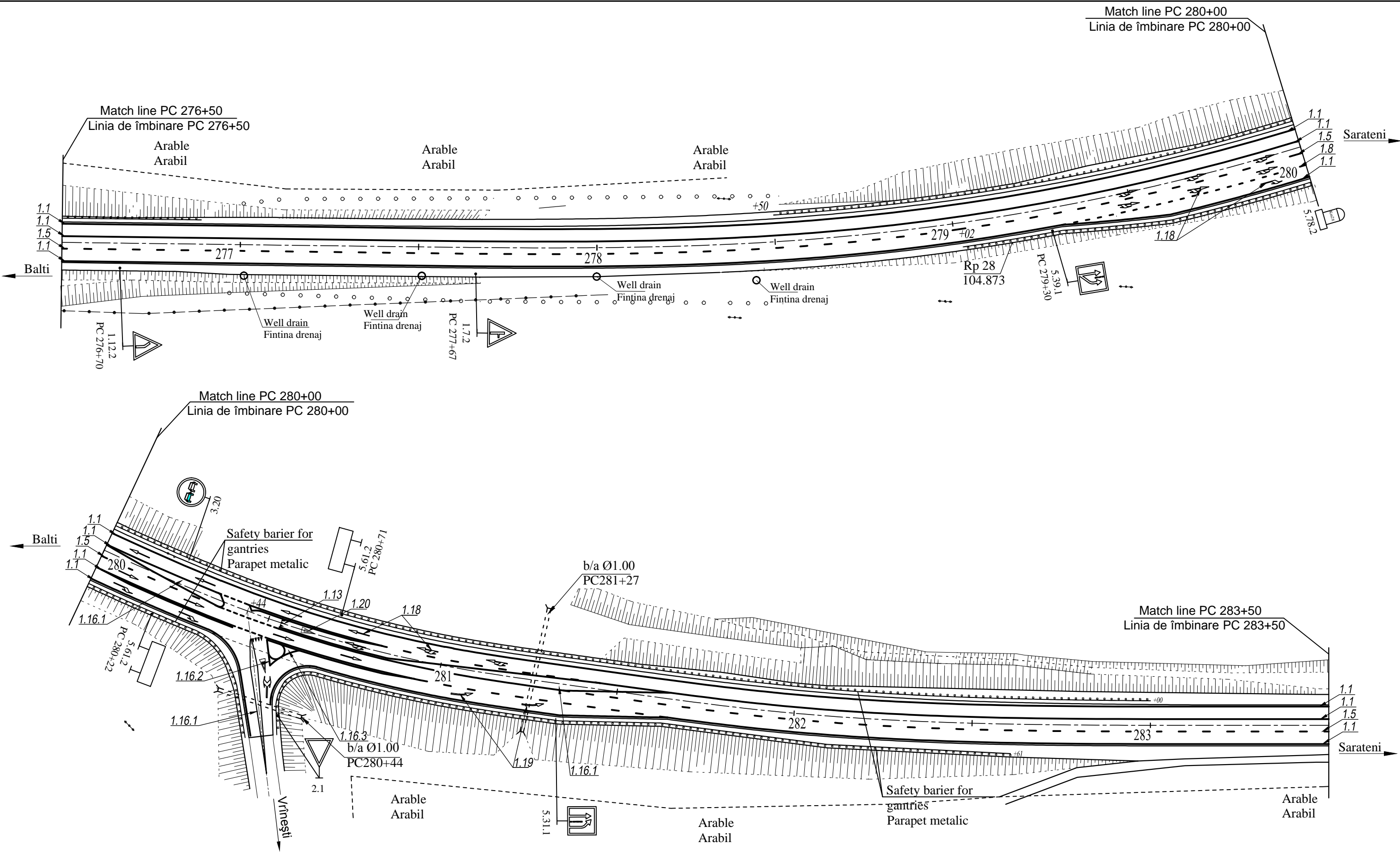


European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
		Designed	M.Marian		Scale	1:1000
Universcons	Drawing title Plan of road traffic management Planul organizării circulației rutiere PC 266+00 - PC269+50	Checked	N.Tcaci		Drawing POCR-DA-1	
		Control STAS	L.Pozdirca			



European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
Universcons	Drawing title Plan of road traffic management Planul organizării circulației rutiere PC 269+50 - PC276+50	Designed	M.Marian		Scale	1:1000
		Checked	N.Tcaci		Drawing POCR-DA-2	
		Control STAS	L.Pozdirca			



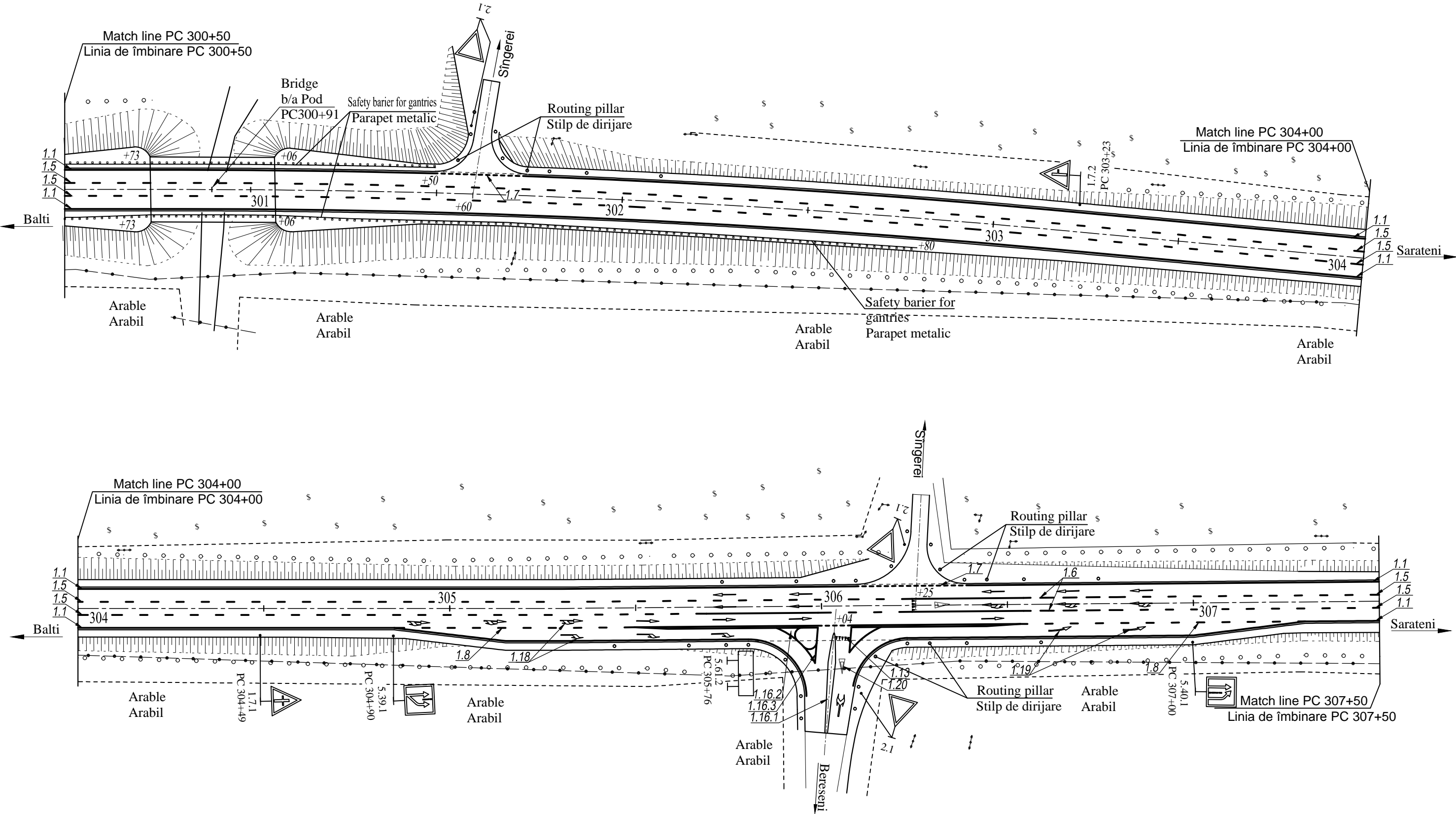


European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
Universcons		Designed	M.Marian		Scale	1:1000
	Drawing title Plan of road traffic management Planul organizării circulației rutiere PC 276+50 - PC283+50	Checked	N.Tcaci		Drawing POCR-DA-3	
		Control STAS	L.Pozdirca			

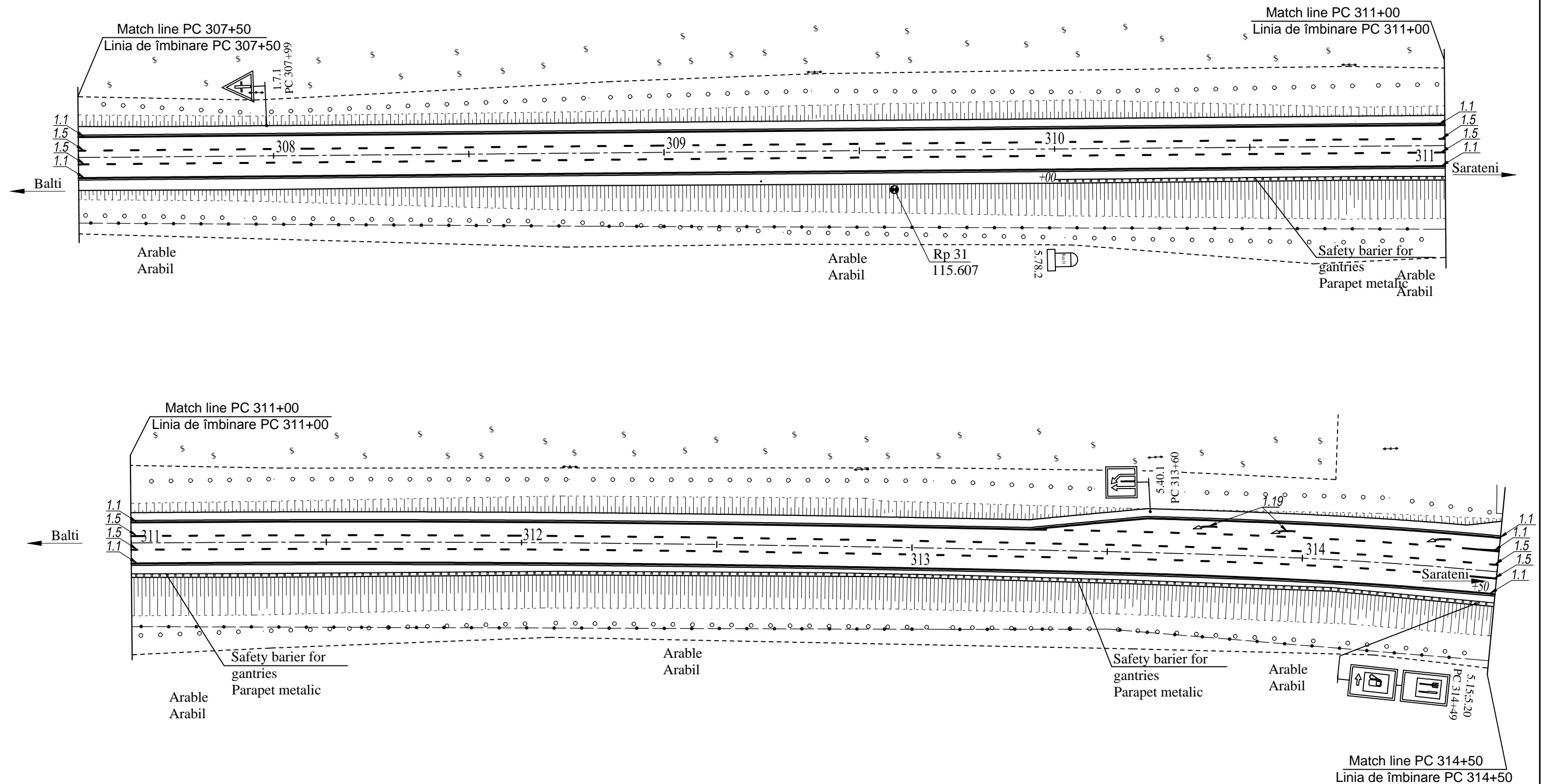




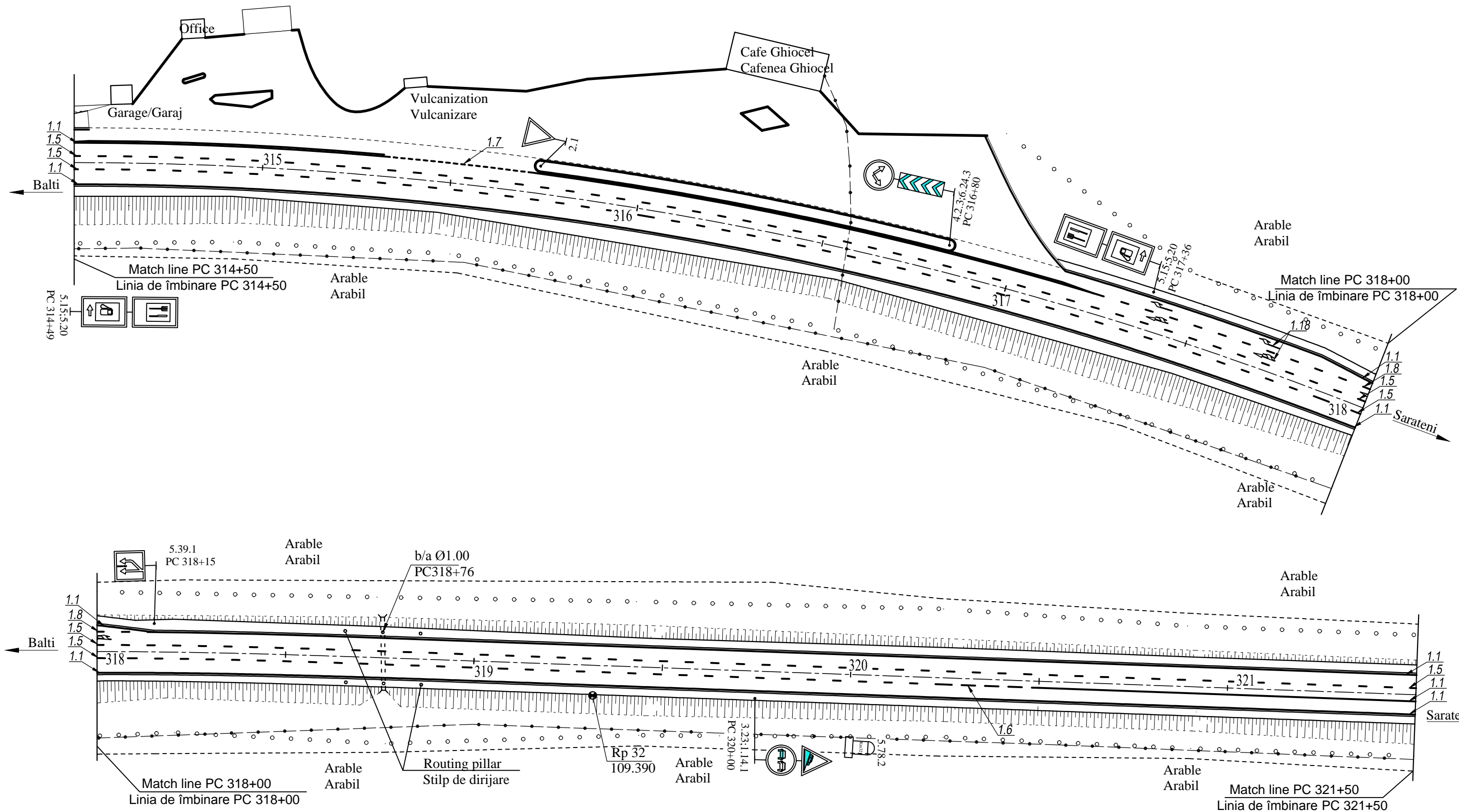




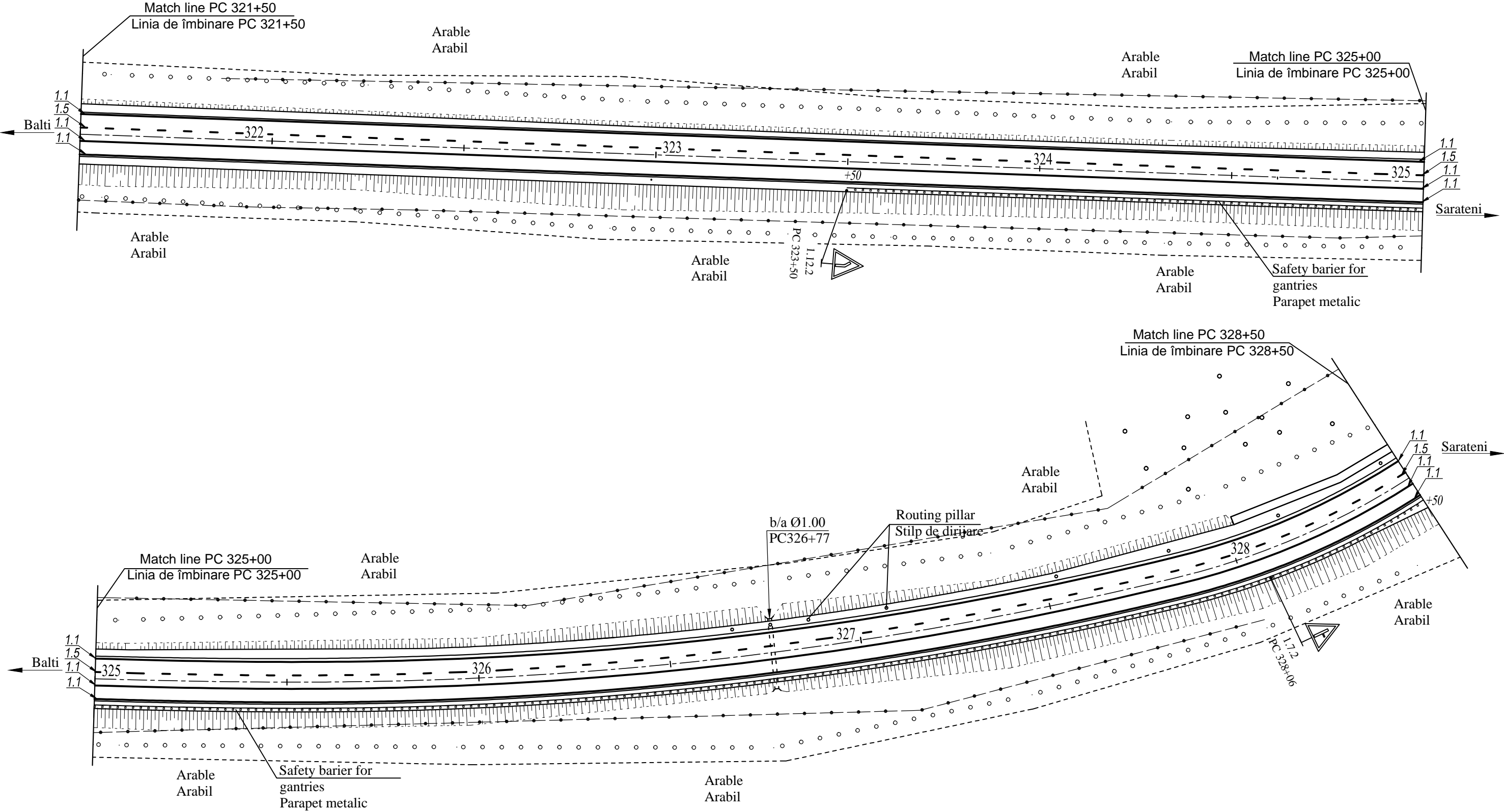
European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
		Designed	M.Marian		Scale	1:1000
	Drawing title Plan of road traffic management Planul organizării circulației rutiere PC 300+50 - PC307+50	Checked	N.Tcaci		Drawing POCR-DA-6	
		Control STAS	L.Pozdirca			



European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support	Project			
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
		Designed	M.Marian		Scale	1:1000
	Drawing title Plan of road traffic management Planul organizării circulației rutiere PC 307+50 - PC314+50	Checked	N.Tcaci		Drawing POCR-DA-7	

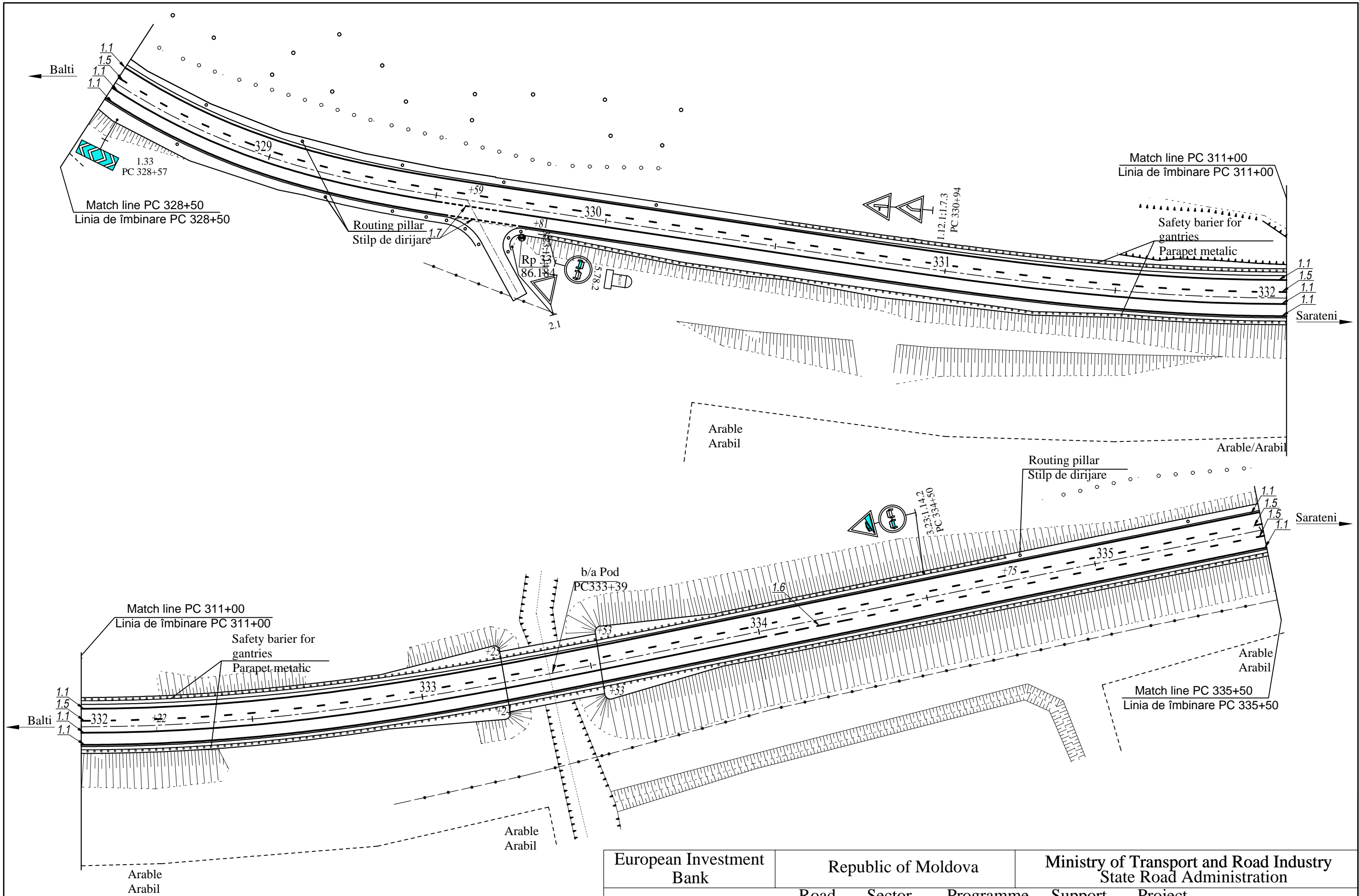


European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
		Designed	M.Marian		Scale	1:1000	
Universcons	Drawing title Plan of road traffic management Planul organizării circulației rutiere PC 314+50 - PC321+50	Checked	N.Tcaci		Drawing POCR-DA-8		
		Control STAS	L.Pozdirca				



European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support	Project			
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
Universcons	Drawing title Plan of road traffic management Planul organizării circulației rutiere PC 321+50 - PC328+50	Designed	M.Marian		Scale	1:1000
		Checked	N.Tcaci		Drawing POCR-DA-9	
		Control STAS	L.Pozdirca			

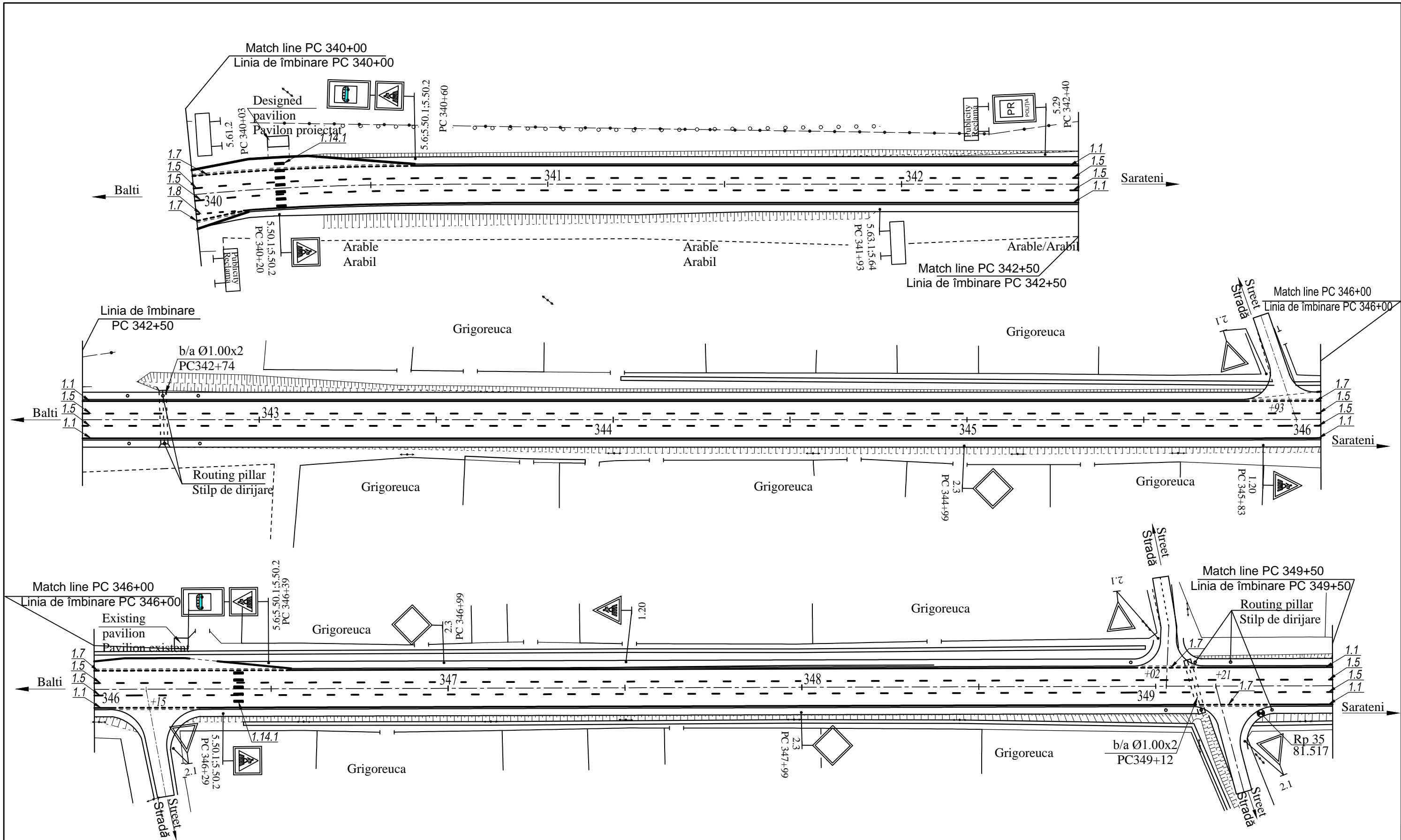




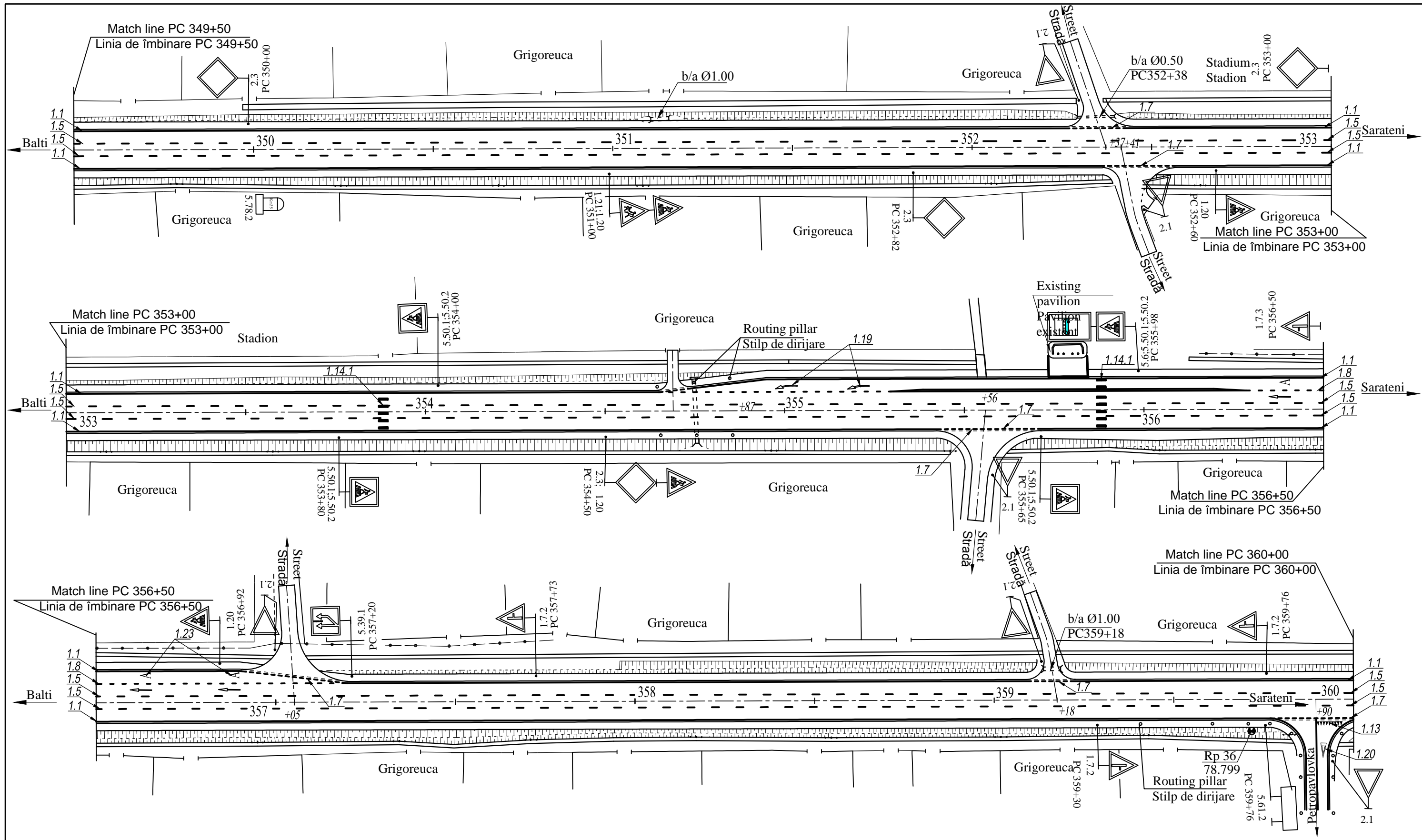
European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support	Project			
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
		Designed	M.Marian		Scale	1:1000
	Drawing title Plan of road traffic management Planul organizării circulației rutiere PC 328+50 - PC335+50	Checked	N.Tcaci		Drawing POCR-DA-10	
		Control STAS	L.Pozdirca			



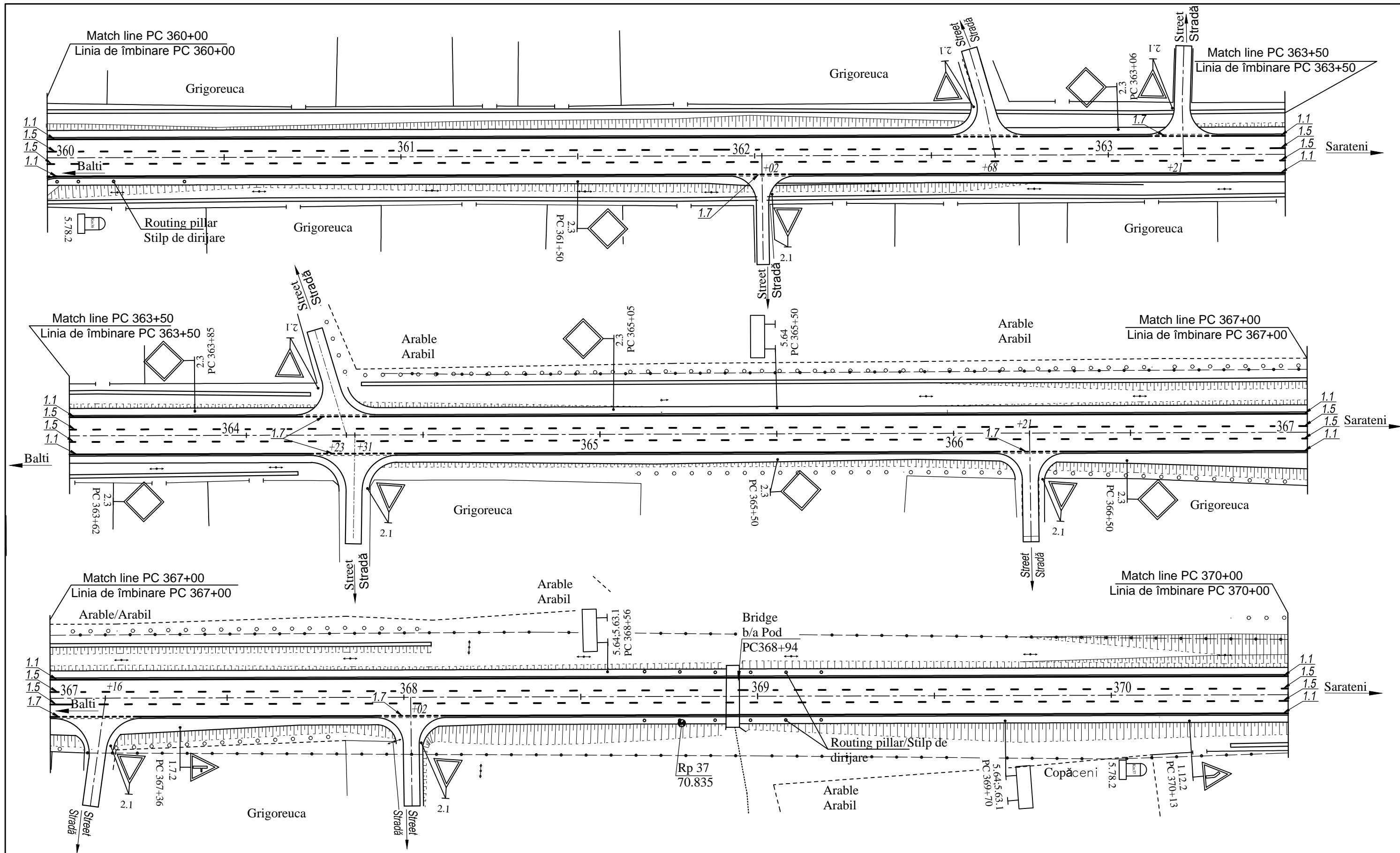




European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration						
		Road	Sector	Programme	Support	Project		
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP		S.Bogza		Date	03.2012	
Universcons		Designed		M.Marian		Scale	1:1000	
	Drawing title	Plan of road traffic management Planul organizării circulației rutiere PC 340+00 - PC349+50		Checked	N.Tcaci		Drawing POCR-DA-12	
	Control STAS		L.Pozdirca					



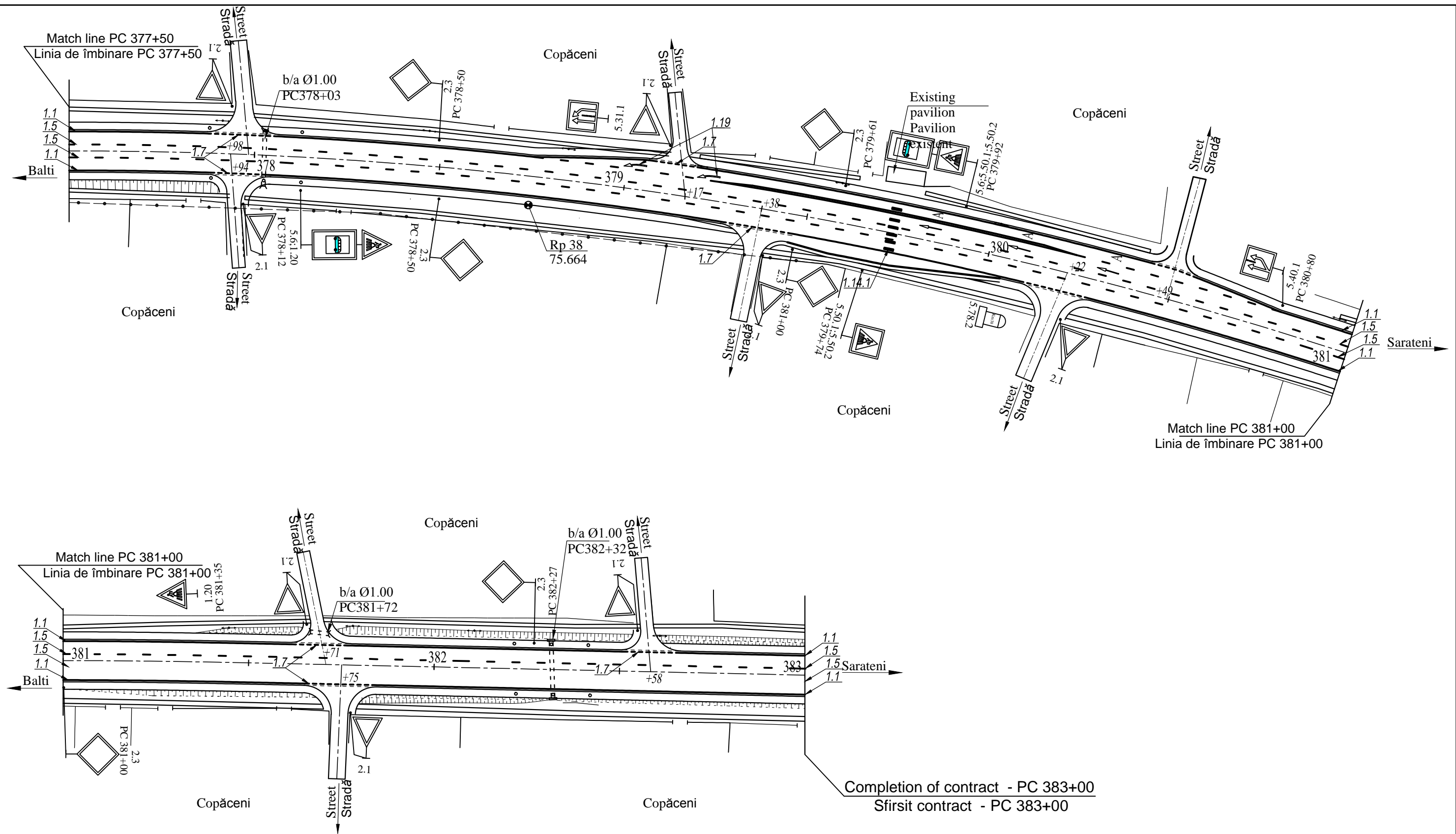
European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni		ISP	S.Bogza		Date	03.2012
			Designed	M.Marian		Scale	1:1000
Universcons	Drawing title Plan of road traffic management Planul organizării circulației rutiere PC 349+50 - PC360+00		Checked	N.Tcaci		Drawing POCR-DA-13	
			Control STAS	L.Pozdirca			



European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme		Support		Project			
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
Universcons		Designed	M.Marian		Scale	1:1000	
	Drawing title Plan of road traffic management Planul organizării circulației rutiere PC 360+00 - PC370+00	Checked	N.Tcaci		Drawing POCR-DA-14		
		Control STAS	L.Pozdirca				

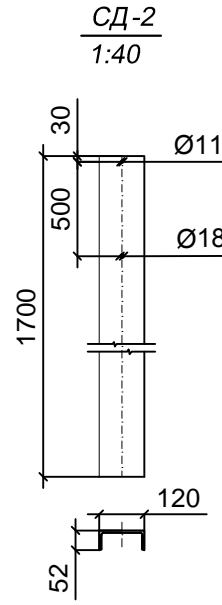
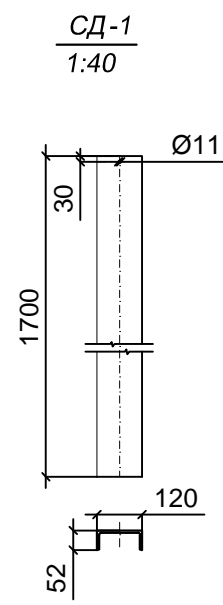
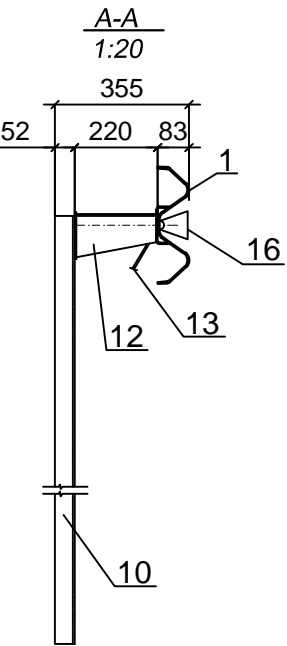
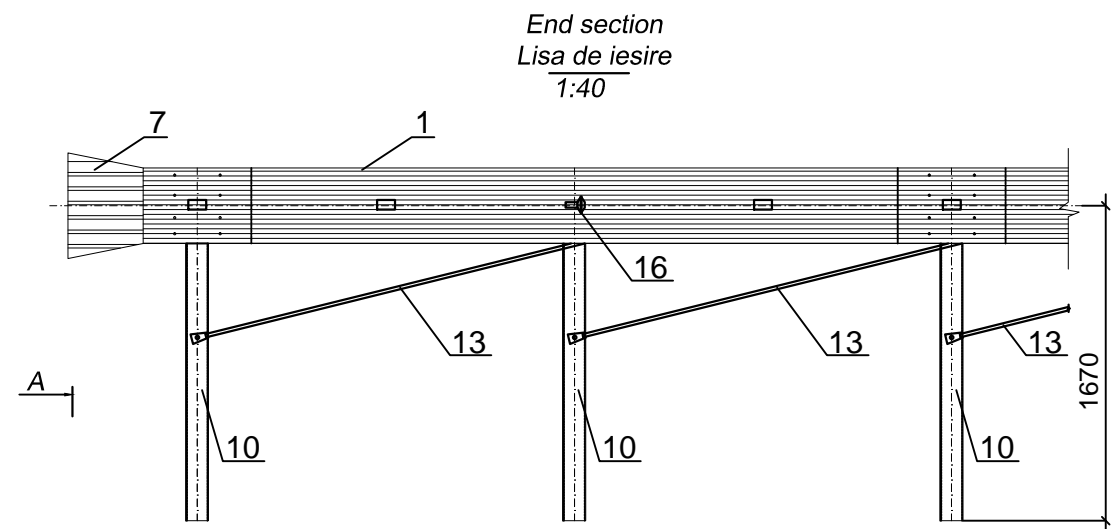
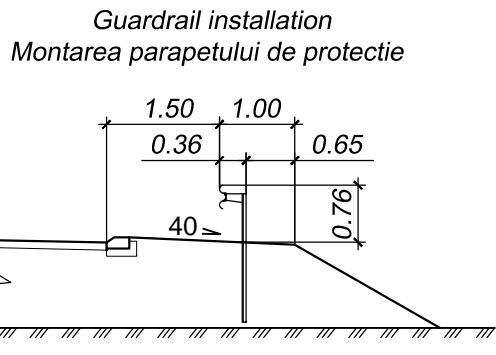
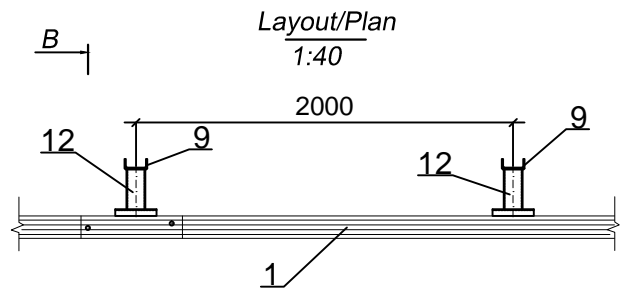
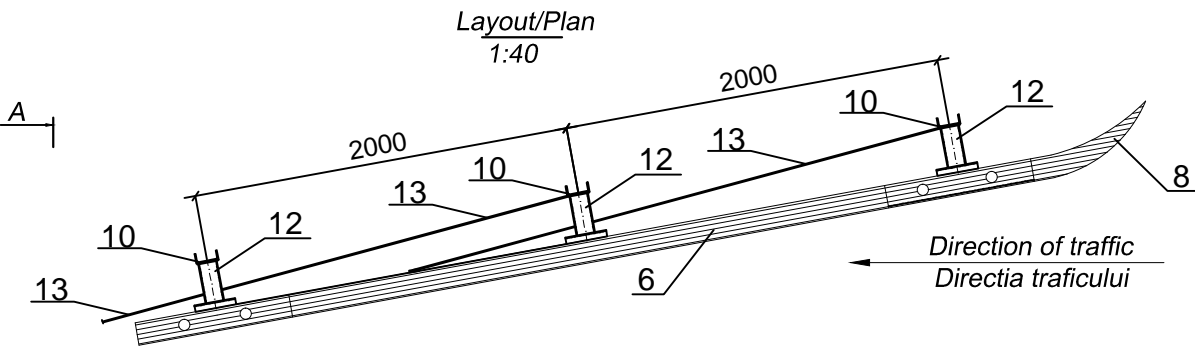
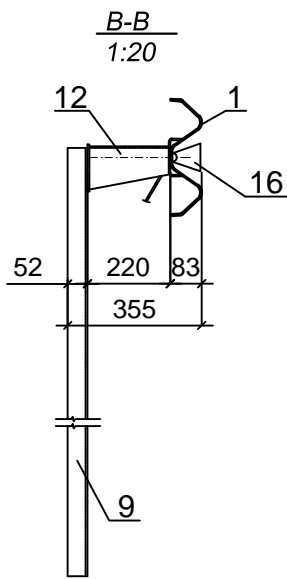
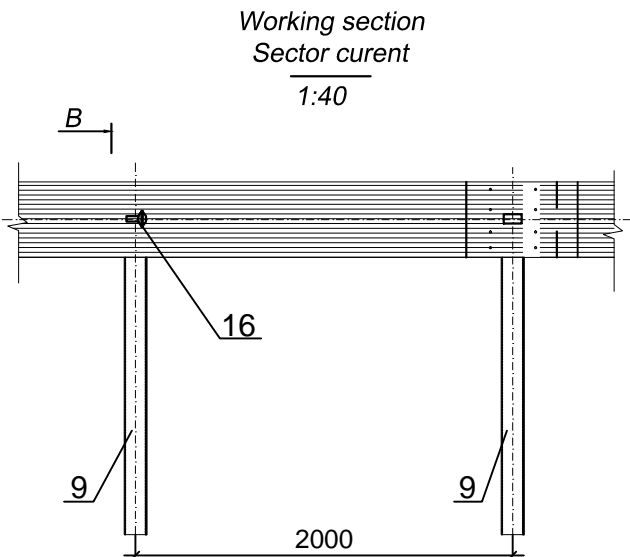
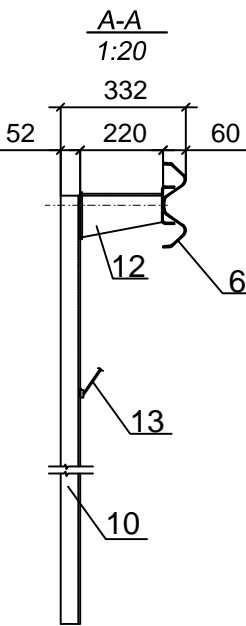
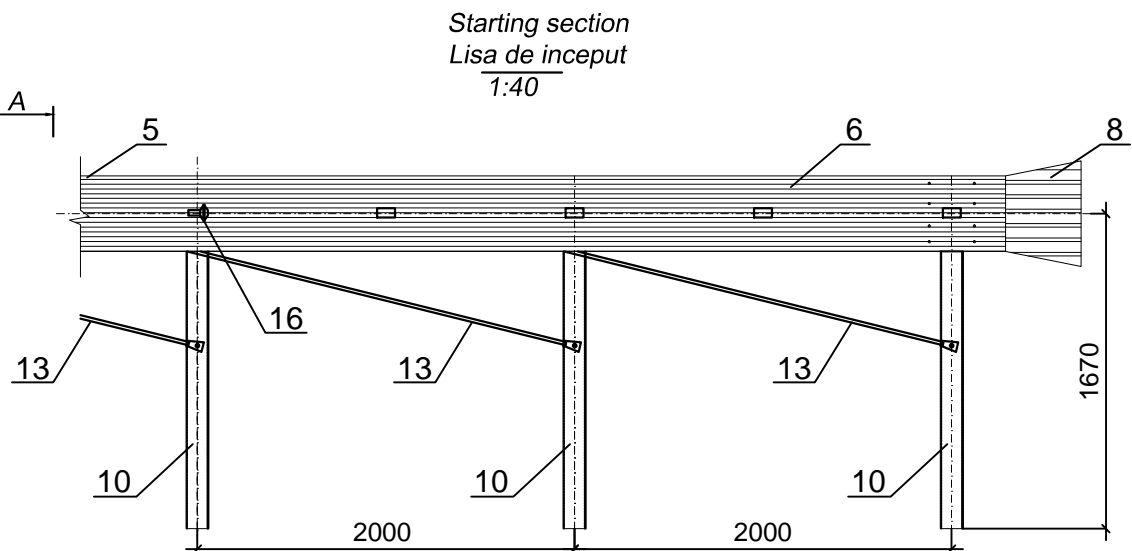




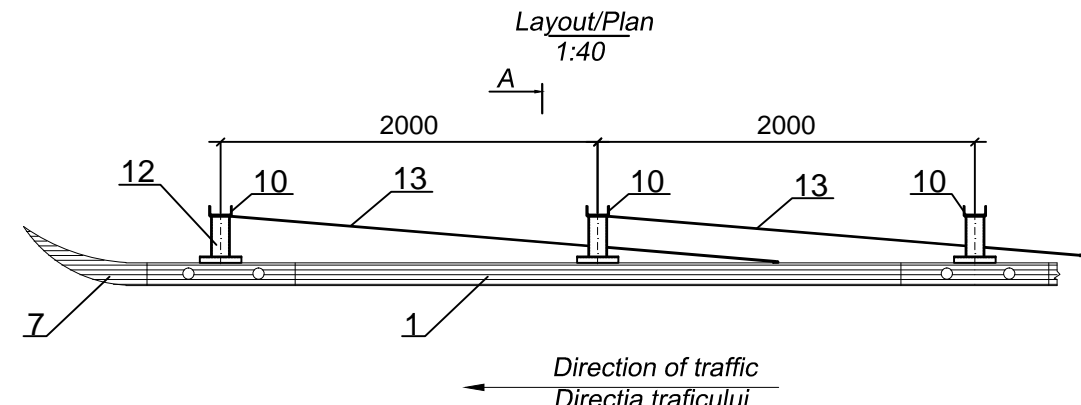


European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
Universcons	Drawing title Plan of road traffic management Planul organizării circulației rutiere PC 377+50 - PC383+00	Designed	M.Marian		Scale	1:1000
		Checked	N.Tcaci		Drawing POCR-DA-16	
		Control STAS	L.Pozdirca			

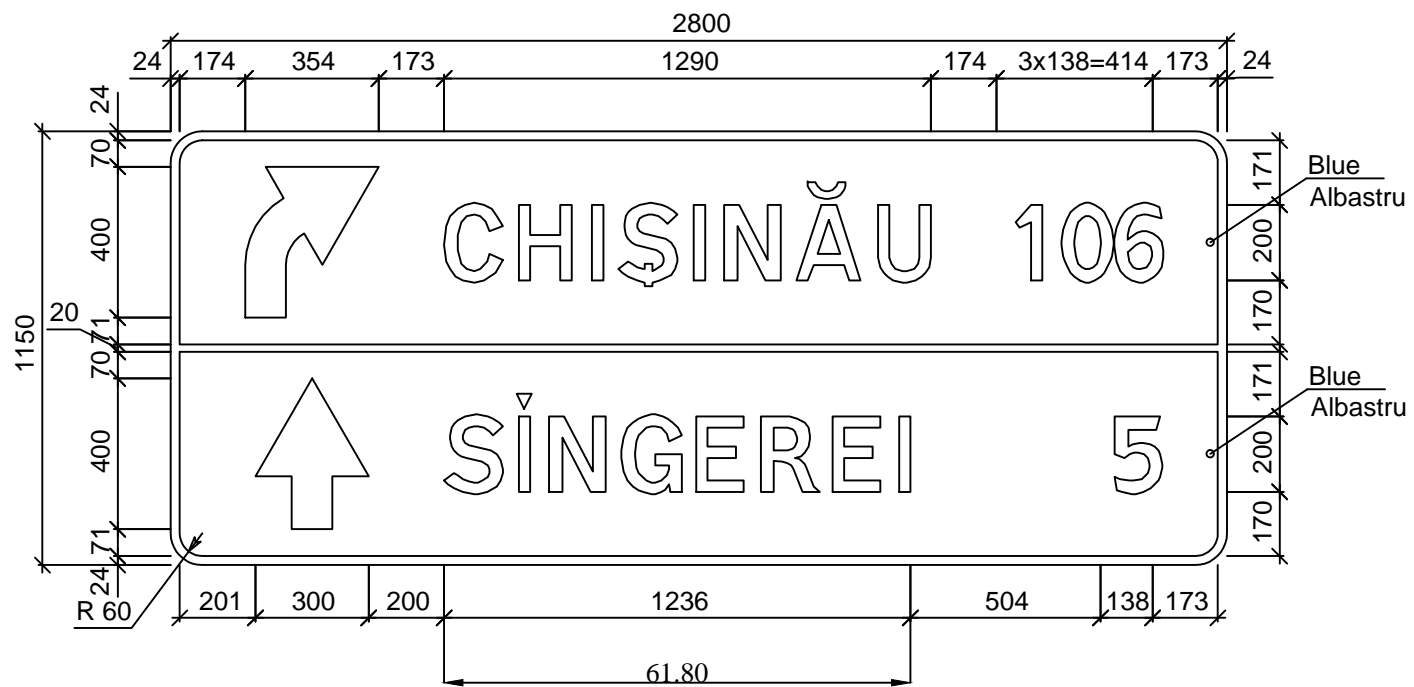
W - BEAM GUARDRAIL  
GLISIERA DE PROTECTIE



- 1 - W-beam section / Secția grinzii СБ - 1
- 5 - W-beam section / Secția grinzii СБ - 5
- 6 - W-beam section / Secția grinzii СБ - 6
- 7 - End element / Element final ЭК - 1
- 8 - End element / Element final ЭК - 2
- 9 - Post / Stîlp СД - 1
- 10 - Post / Stîlp СД - 2
- 12 - Rigid offset block / Consolă rigidă КЖ
- 13 - Diagonal connection / Cuplare diagonală СДД
- 16 - Refelection element / Element reflector ЭС - 1



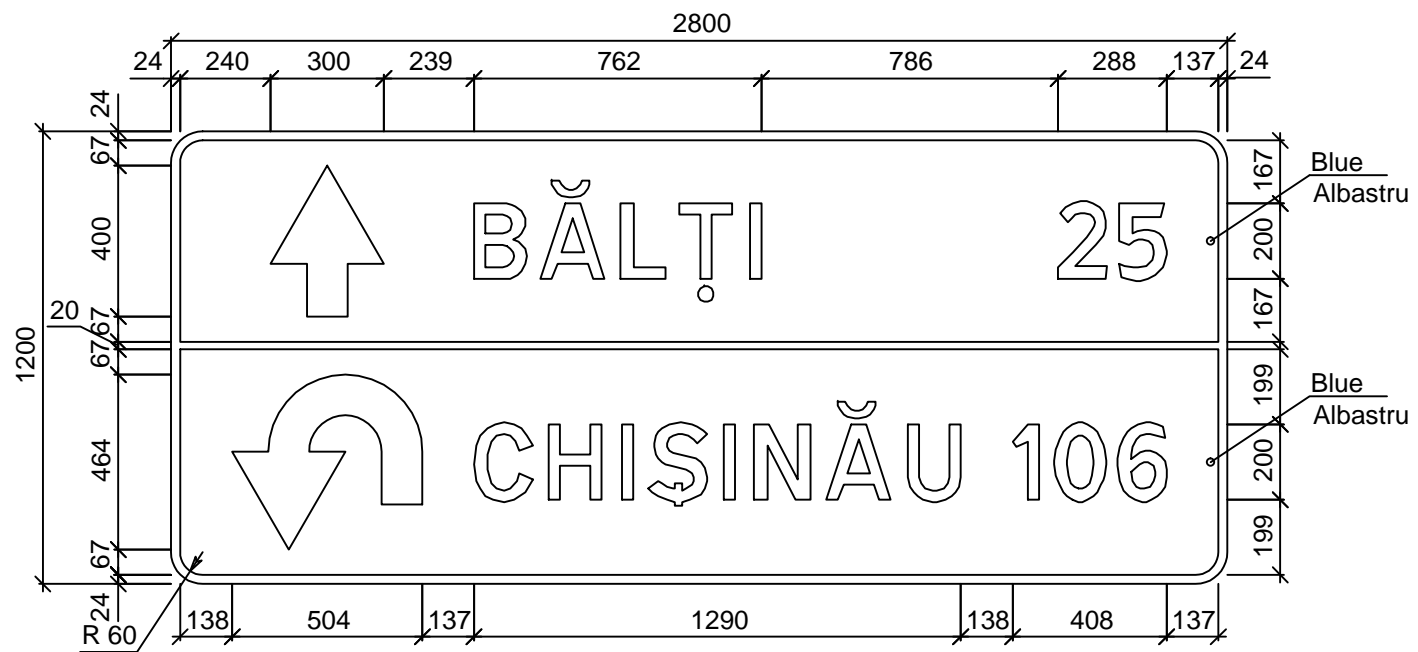
EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector		Programme Support		Project			
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
Universcons			Designed	A.Gonciaruc		Scale	1:40
	Drawing title Safety barrier for gantries Parapet metalic tip 11 ДО-ММ.2	Checked	N.Tcaci		Drawing PM-DA-1		
		Control STAS	L.Pozdirca				



**Note / Nota:**

Numar dupa GOST: 5.61.2 De orientare  
Panel/Panou: 2800 x 1150 mm  
Fon: Blue/Albastru  
Area/Aria: 3.22 m²  
Weight/Greutatea:  
Scale/Scara: 1 : 20  
Quantity/Cantitate: 1

European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
		Designed	M.Marian		Scale	1:20	
	Drawing title Nonstandart road sign 5.61.2 Indicator individual de orientare 5.61.2 PC 264+80	Checked	N.Tcaci		Drawing		
		Control STAS	L.Pozdirca		IRI-DA-1		

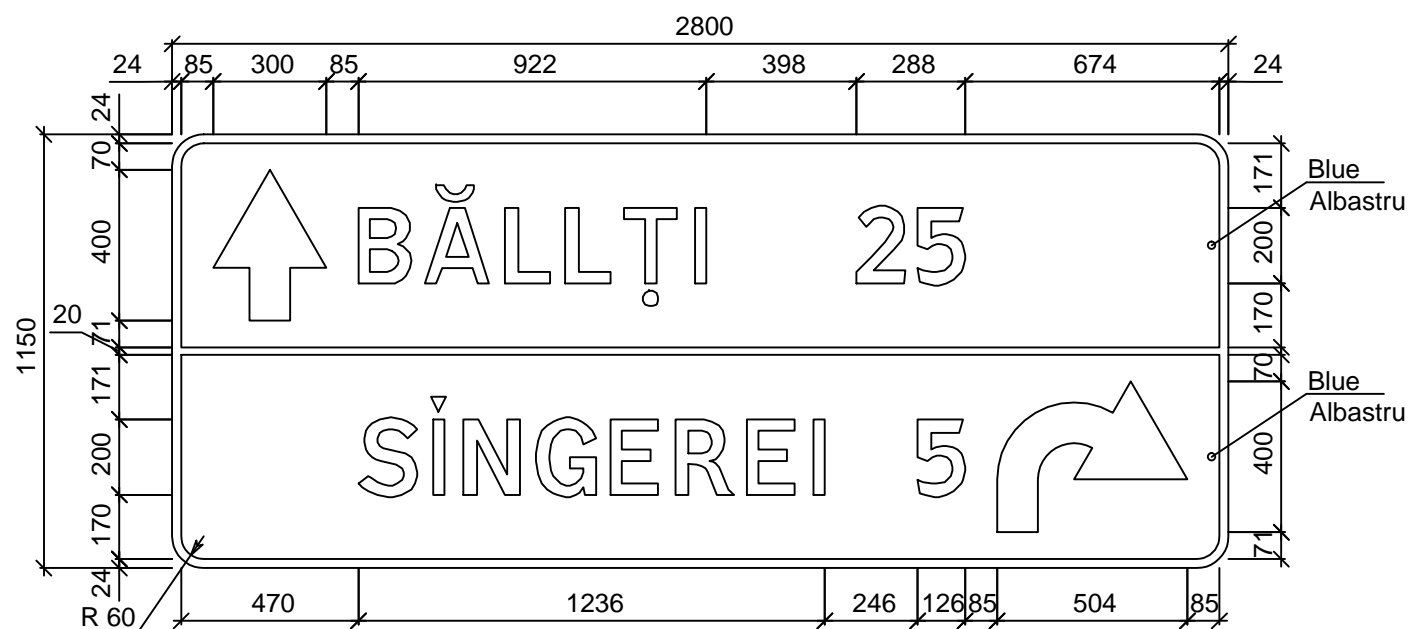


**Note / Nota:**

Numar dupa GOST: 5.61.2 De orientare  
Panel/Panou: 2800 x 1200 mm  
Fon: Blue/Albastru  
Area/Aria: 3.36 m²  
Weight/Greutatea:  
Scale/Scara: 1 : 20  
Quantity/Cantitate: 1

European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
		Designed	M.Marian		Scale	1:20	
	Drawing title Nonstandart road sign 5.61.2 Indicator individual de orientare 5.61.2 PC 267+57	Checked	N.Tcaci		Drawing IRI-DA-2		
		Control STAS	L.Pozdirca				

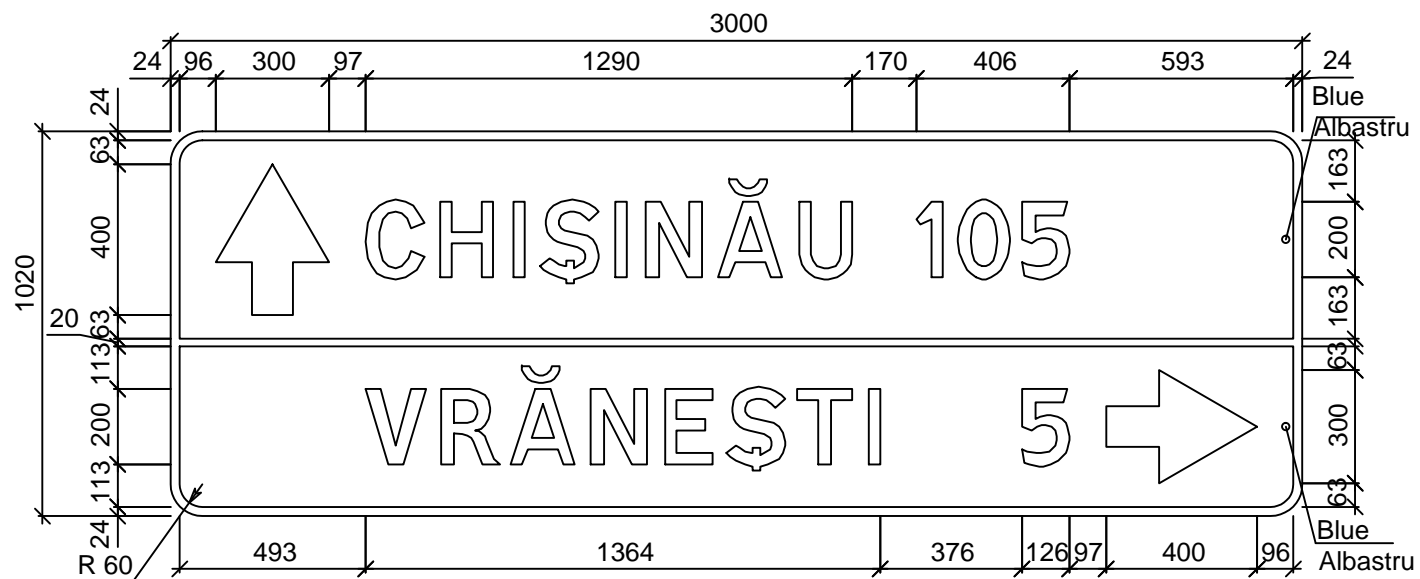




**Note / Nota:**

Numar dupa GOST: 5.61.2 De orientare  
Panel/Panou: 2800 x 1150 mm  
Fon: Blue/Albastru  
Area/Aria: 3.22m<sup>2</sup>  
Weight/Greutatea:  
Scale/Scara: 1 : 20  
Quantity/Cantitate: 1

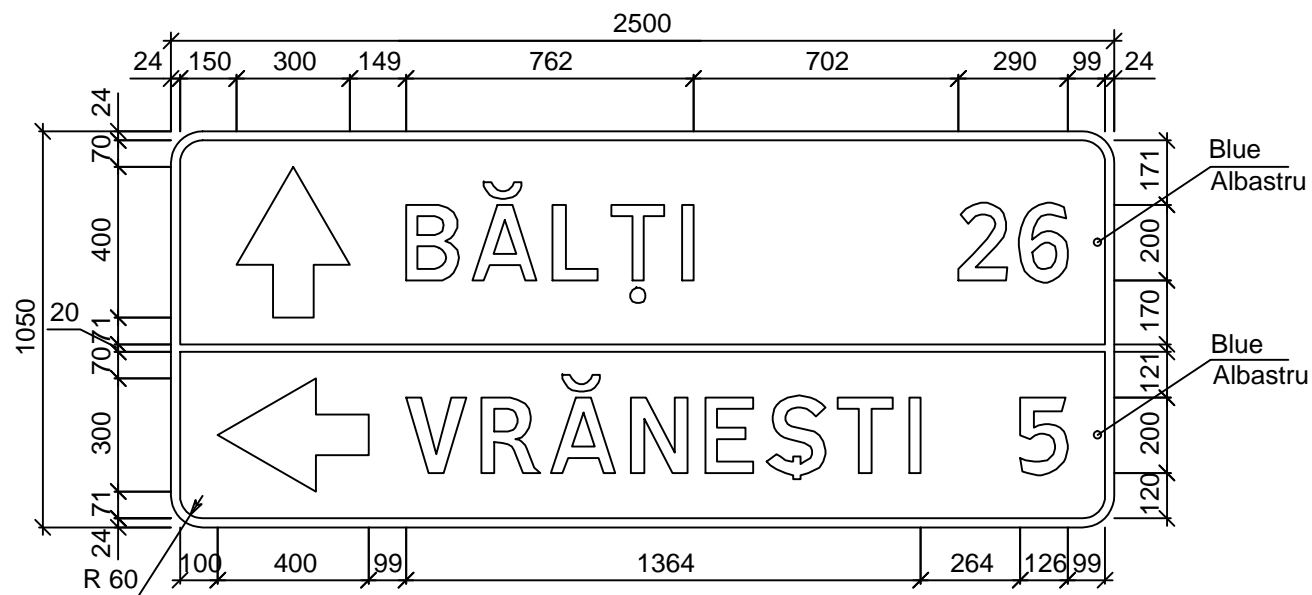
European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
		Designed	M.Marian		Scale	1:20	
	Drawing title Nonstandart road sign 5.61.2 Indicator individual de orientare 5.61.2 PC 268+89	Checked	N.Tcaci		Drawing IRI-DA-3		
		Control STAS	L.Pozdirca				



**Note / Nota:**

Numar dupa GOST: 5.61.2 De orientare  
Panel/Panou: 3000 x 1020 mm  
Fon: Blue/Albastru  
Area/Aria: 3.06m<sup>2</sup>  
Weight/Greutatea:  
Scale/Scara: 1 : 20  
Quantity/Cantitate: 1

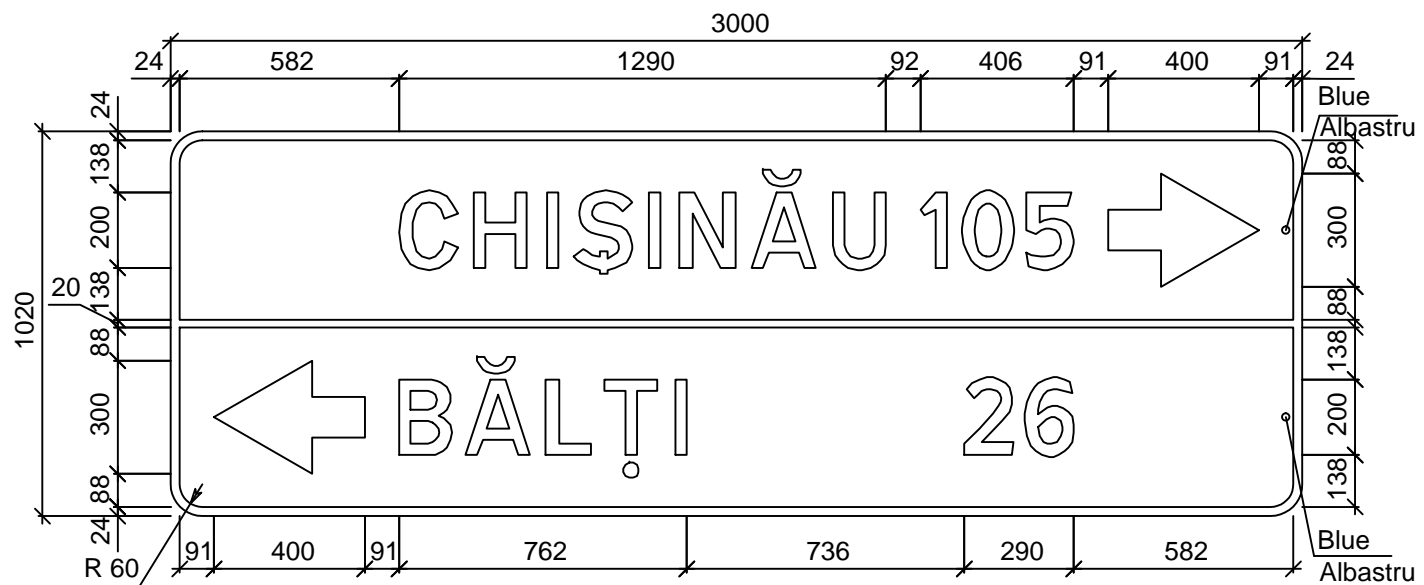
European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
		Designed	M.Marian		Scale	1:20	
	Drawing title Nonstandart road sign 5.61.2 Indicator individual de orientare 5.61.2 PC 280+22	Checked	N.Tcaci		Drawing IRI-DA-4		
		Control STAS	L.Pozdirca				



**Note / Nota:**

Numar dupa GOST: 5.61.2 De orientare  
 Panel/Panou: 2500 x 1050 mm  
 Fon: Blue/Albastru  
 Area/Aria: 2.63m<sup>2</sup>  
 Weight/Greutatea:  
 Scale/Scara: 1 : 20  
 Quantity/Cantitate: 1

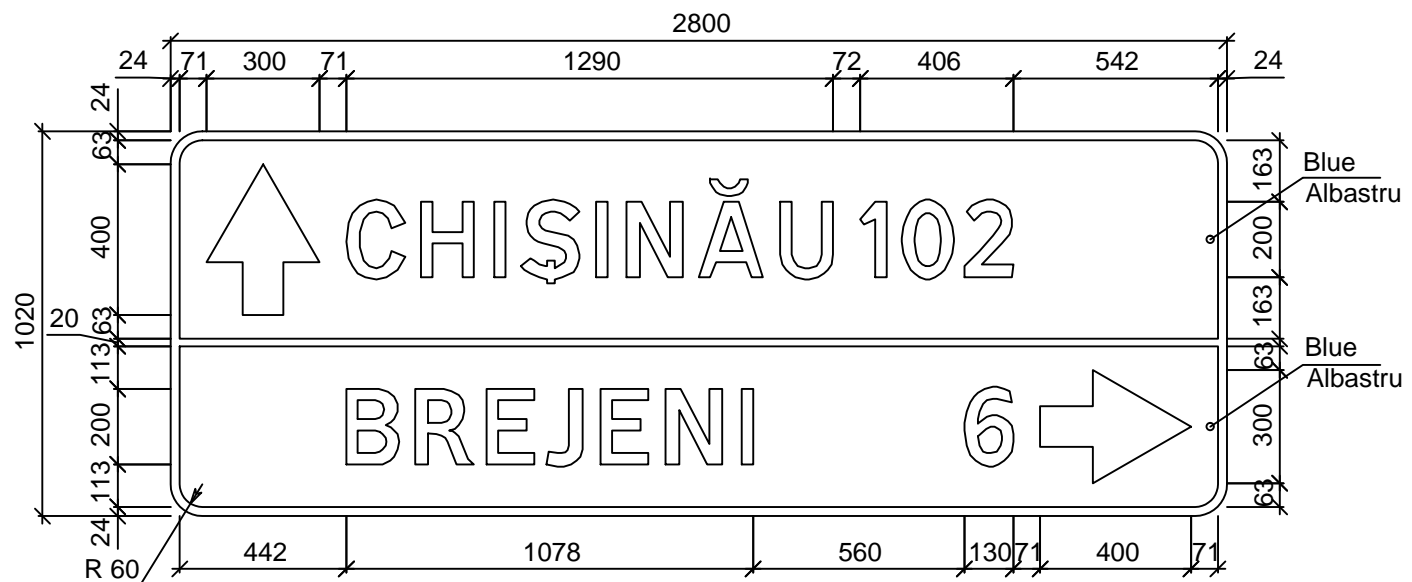
European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
		Designed	M.Marian		Scale	1:20	
	Drawing title Nonstandart road sign 5.61.2 Indicator individual de orientare 5.61.2 PC 280+71	Checked	N.Tcaci		Drawing IRI-DA-5		
		Control STAS	L.Pozdirca				



**Note / Nota:**

Numar dupa GOST: 5.61.2 De orientare  
Panel/Panou: 3000 x 1020 mm  
Fon: Blue/Albastru  
Area/Aria: 3.06m<sup>2</sup>  
Weight/Greutatea:  
Scale/Scara: 1 : 20  
Quantity/Cantitate: 1

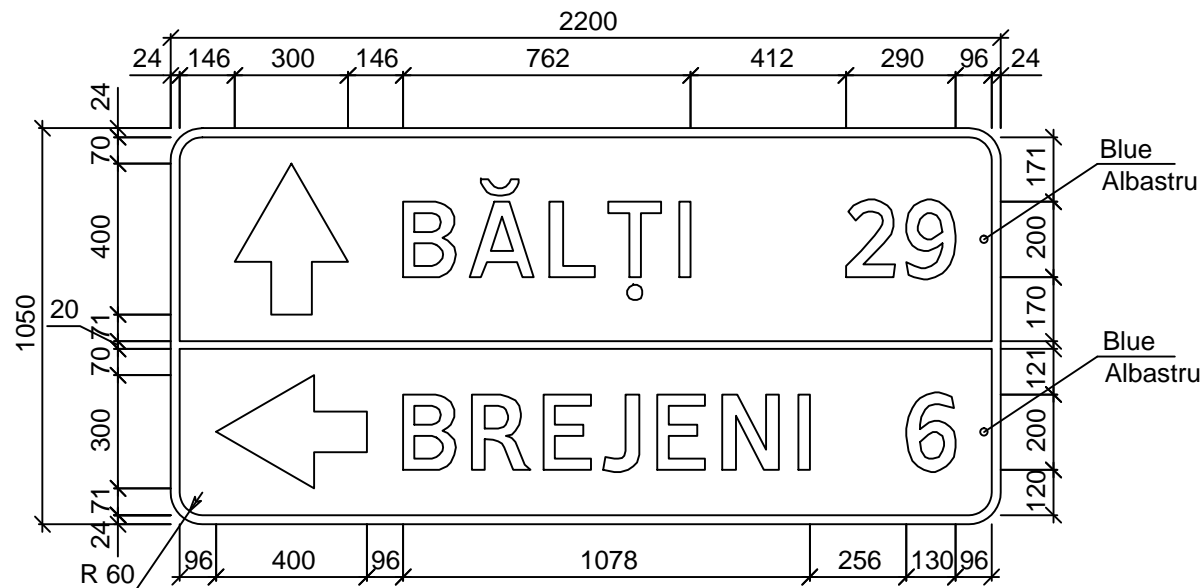
European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
		Designed	M.Marian		Scale	1:20	
	Drawing title Nonstandart road sign 5.61.2 Indicator individual de orientare 5.61.2 PC 280+60	Checked	N.Tcaci		Drawing IRI-DA-6		
		Control STAS	L.Pozdirca				



**Note / Nota:**

Numar dupa GOST: 5.61.2 De orientare  
 Panel/Panou: 2800 x 1020 mm  
 Fon: Blue/Albastru  
 Area/Aria: 2.86m<sup>2</sup>  
 Weight/Greutatea:  
 Scale/Scara: 1 : 20  
 Quantity/Cantitate: 1

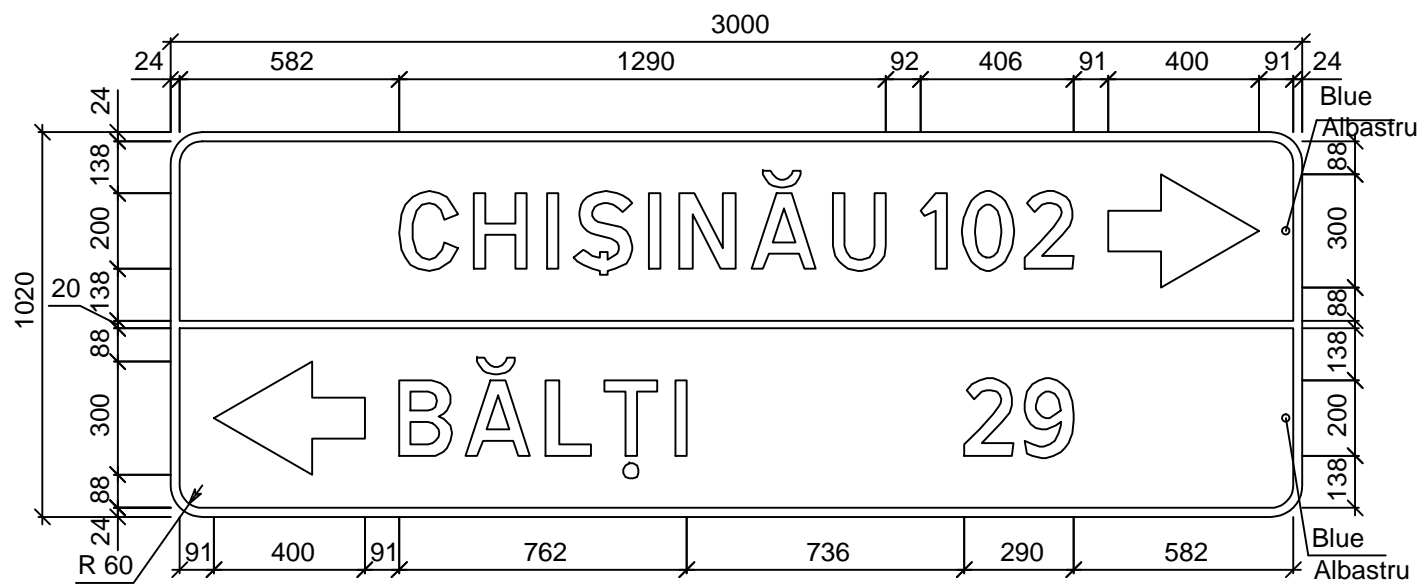
European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
		Designed	M.Marian		Scale	1:20	
	Drawing title Nonstandart road sign 5.61.2 Indicator individual de orientare 5.61.2 PC 305+76	Checked	N.Tcaci		Drawing IRI-DA-7		
		Control STAS	L.Pozdirca				



**Note / Nota:**

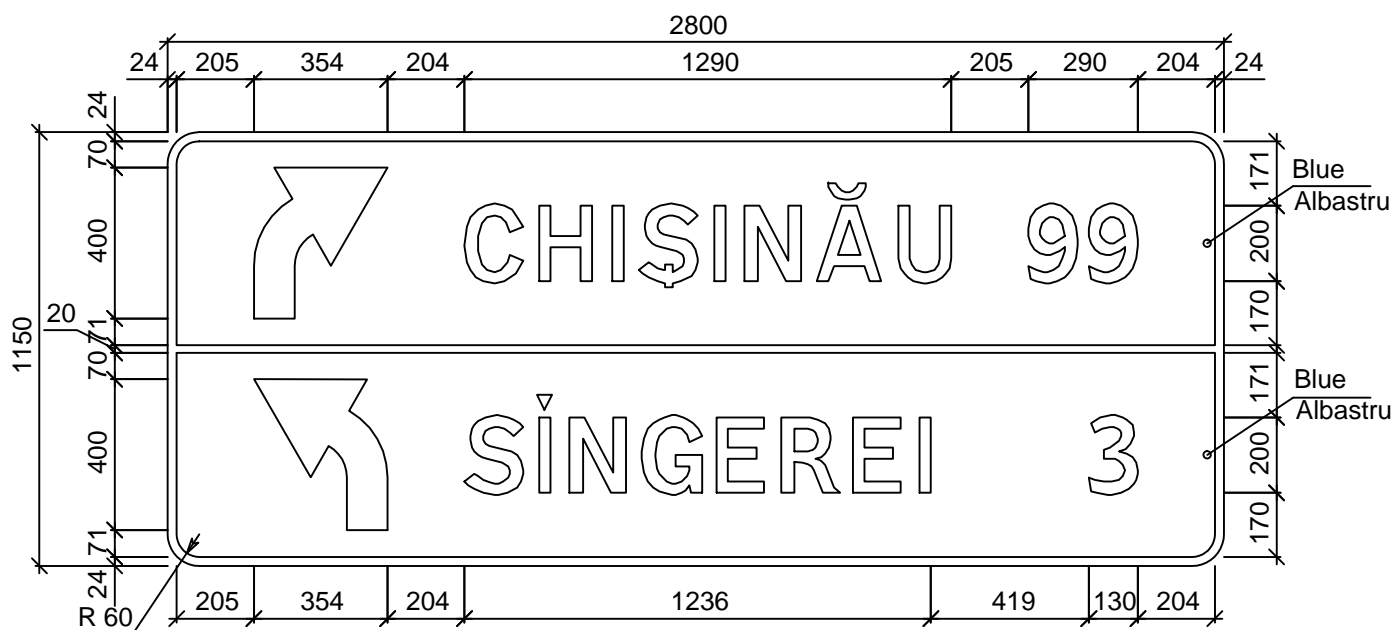
Numar dupa GOST: 5.61.2 De orientare  
 Panel/Panou: 2200 x 1050 mm  
 Fon: Blue/Albastru  
 Area/Aria: 2.31m<sup>2</sup>  
 Weight/Greutatea:  
 Scale/Scara: 1 : 20  
 Quantity/Cantitate: 1

European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
		Designed	M.Marian		Scale	1:20	
	Drawing title Nonstandart road sign 5.61.2 Indicator individual de orientare 5.61.2 PC 307+50	Checked	N.Tcaci		Drawing IRI-DA-8		
		Control STAS	L.Pozdirca				



**Note / Nota:**  
Numar dupa GOST: 5.61.2 De orientare  
Panel/Panou: 3000 x 1020 mm  
Fon: Blue/Albastru  
Area/Aria: 3.06m²  
Weight/Greutatea:  
Scale/Scara: 1 : 20  
Quantity/Cantitate: 1

European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support Project				
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
		Designed	M.Marian		Scale	1:20
	Drawing title Nonstandart road sign 5.61.2 Indicator individual de orientare 5.61.2 PC 306+15	Checked	N.Tcaci		Drawing IRI-DA-9	
		Control STAS	L.Pozdirca			

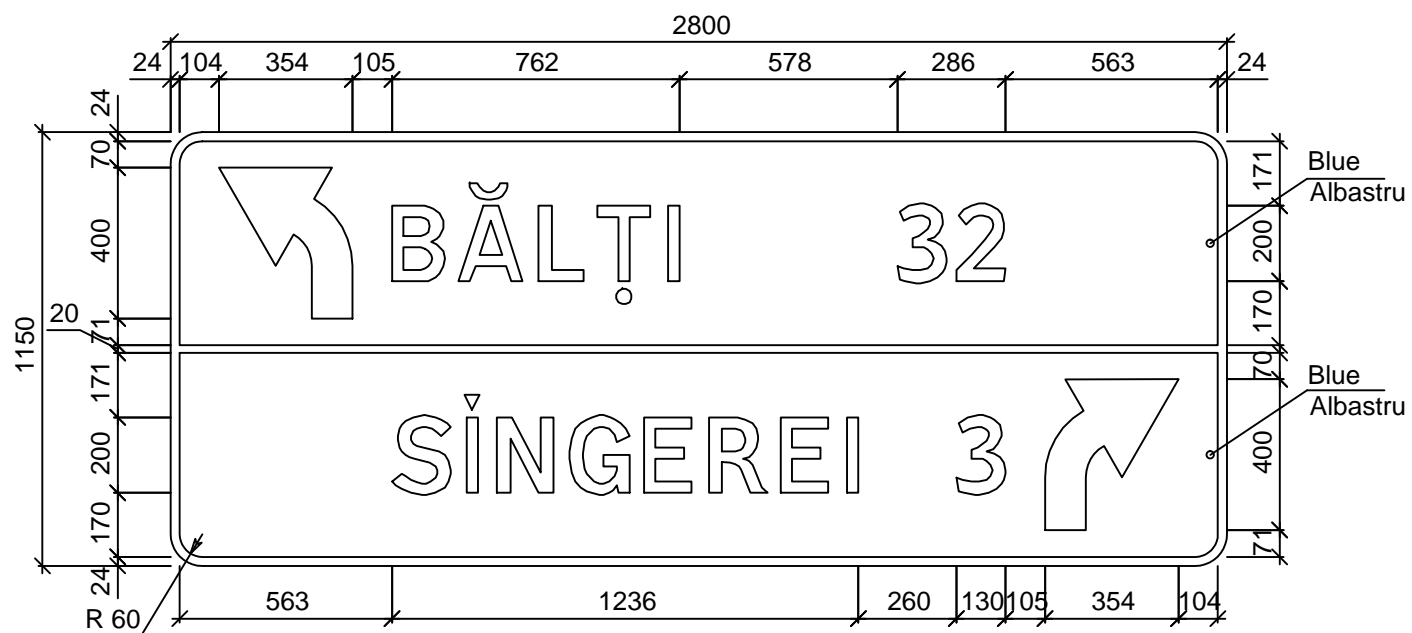


**Note / Nota:**

Numar dupa GOST: 5.61.2 De orientare  
 Panel/Panou: 2800 x 1150 mm  
 Fon: Blue/Albastru  
 Area/Aria: 3.22m<sup>2</sup>  
 Weight/Greutatea:  
 Scale/Scara: 1 : 20  
 Quantity/Cantitate: 1

European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
		Designed	M.Marian		Scale	1:20	
	Drawing title Nonstandart road sign 5.61.2 Indicator individual de orientare 5.61.2 PC 338+08	Checked	N.Tcaci		Drawing IRI-DA-10		
		Control STAS	L.Pozdirca				

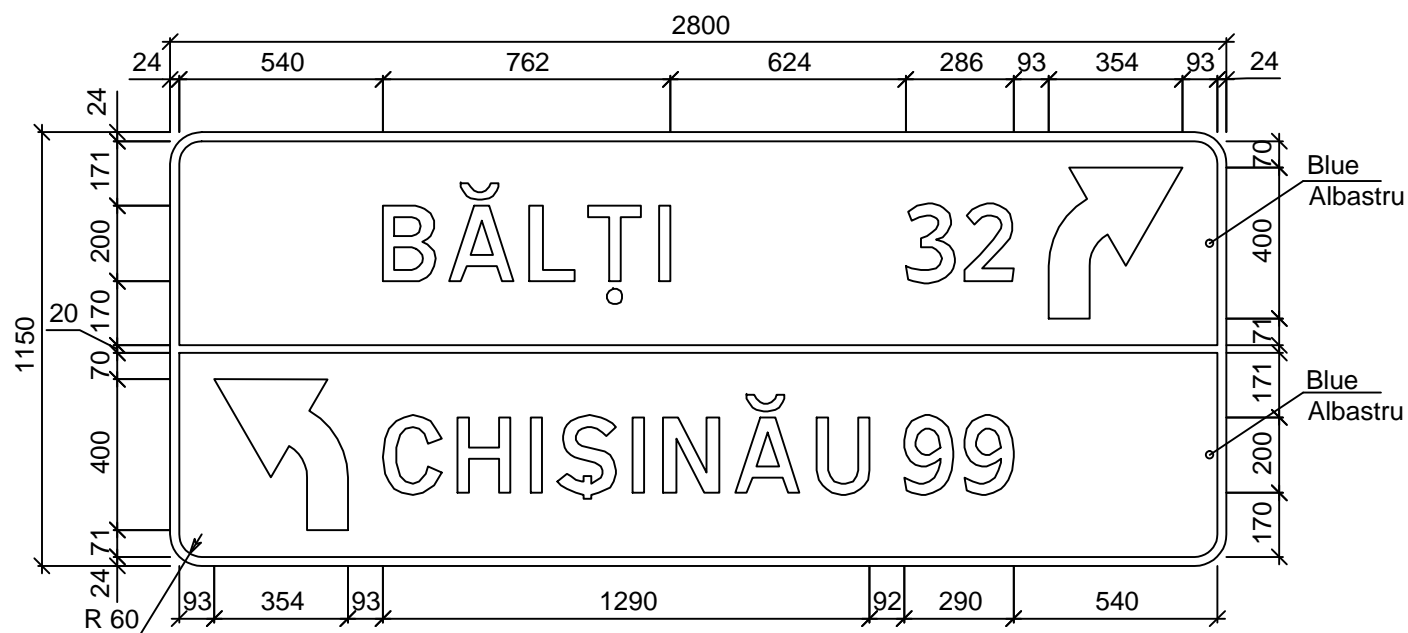




**Note / Nota:**

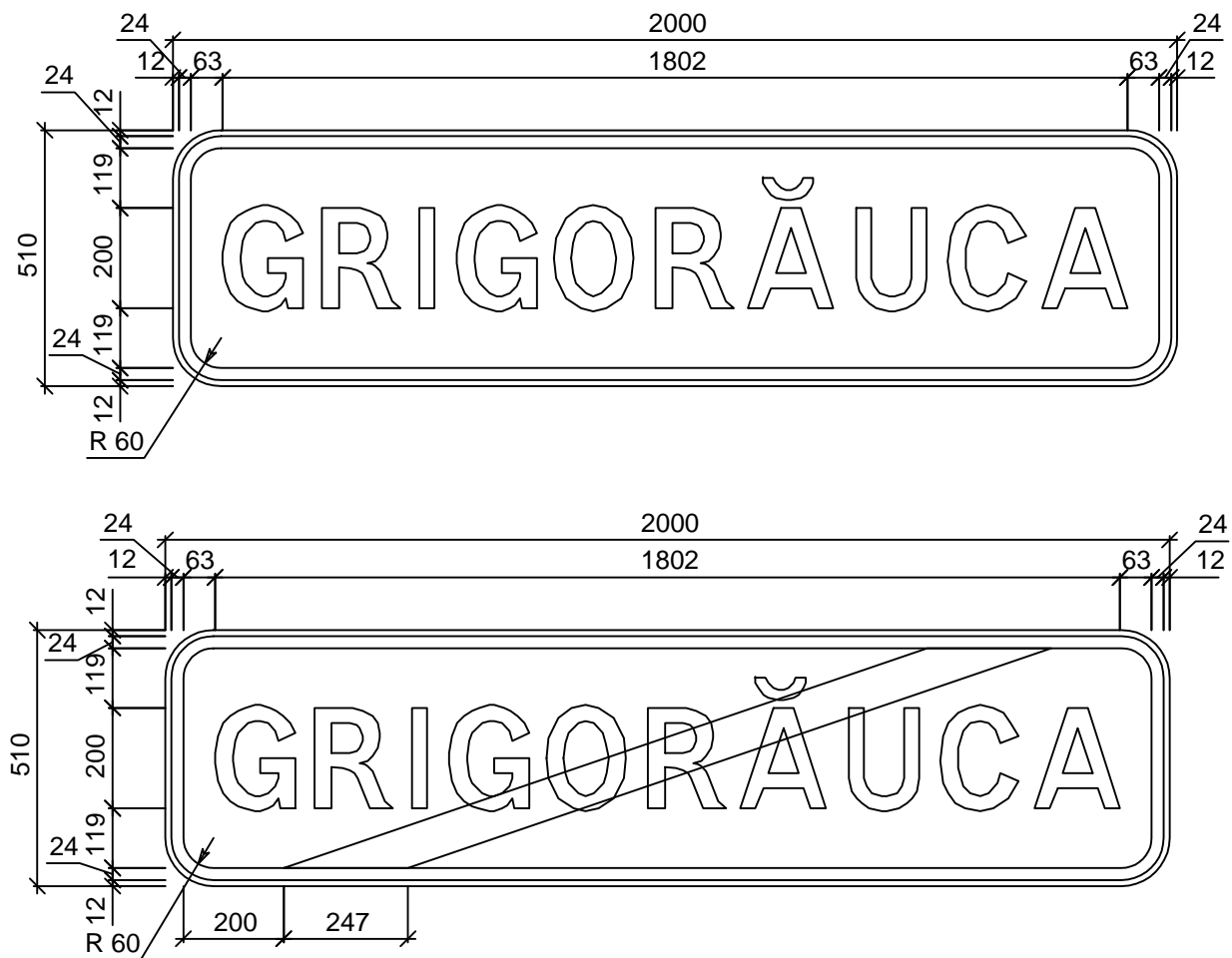
Numar dupa GOST: 5.61.2 De orientare  
 Panel/Panou: 2800 x 1150 mm  
 Fon: Blue/Albastru  
 Area/Aria: 3.22m<sup>2</sup>  
 Weight/Greutatea:  
 Scale/Scara: 1 : 20  
 Quantity/Cantitate: 1

European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
		Designed	M.Marian		Scale	1:20	
	Drawing title Nonstandart road sign 5.61.2 Indicator individual de orientare 5.61.2 PC 340+03	Checked	N.Tcaci		Drawing IRI-DA-11		
		Control STAS	L.Pozdirca				



**Note / Nota:**  
Numar dupa GOST: 5.61.2 De orientare  
Panel/Panou: 2800 x 1150 mm  
Fon: Blue/Albastru  
Area/Aria: 3.22m<sup>2</sup>  
Weight/Greutatea:  
Scale/Scara: 1 : 20  
Quantity/Cantitate: 1

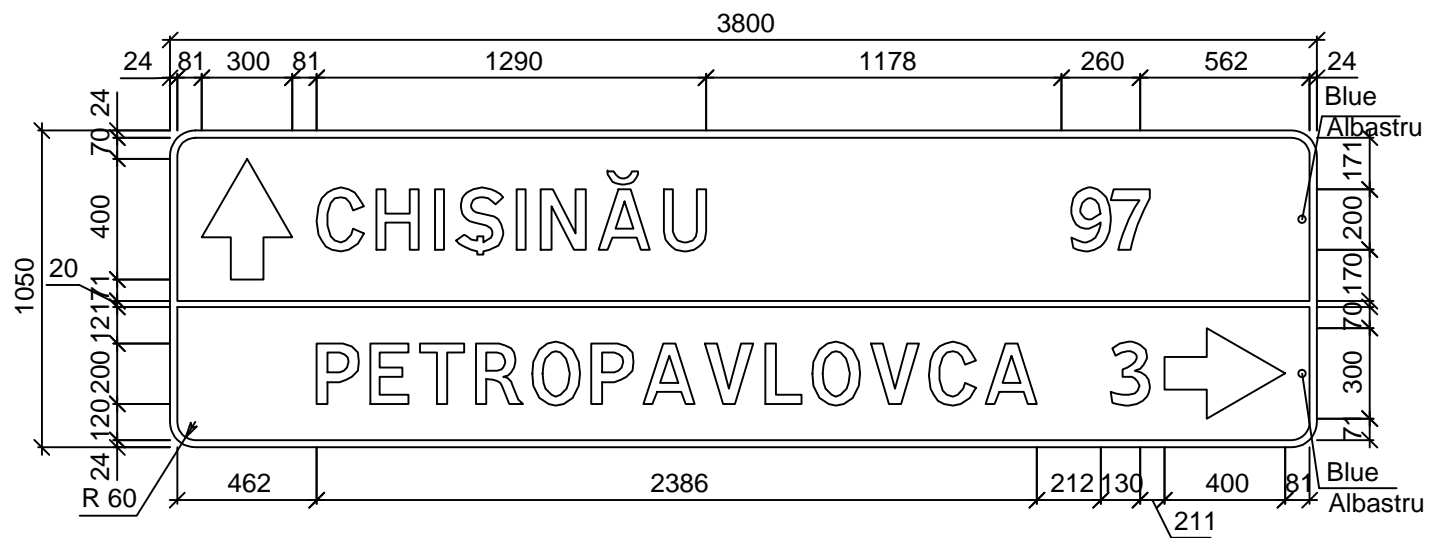
European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support Project				
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
		Designed	M.Marian		Scale	1:20
	Drawing title Nonstandart road sign 5.61.2 Indicator individual de orientare 5.61.2 PC 337+85	Checked	N.Tcaci		Drawing IRI-DA-12	
		Control STAS	L.Pozdirca			



**Note / Nota:**

Numar dupa GOST: 5.63.1; 5.64  
Panel/Panou: 2000 x 510 mm  
Fon: Blue/Alb  
Area/Aria: 1.02m<sup>2</sup>  
Weight/Greutatea:  
Scale/Scara: 1 : 15  
Quantity/Cantitate: 4

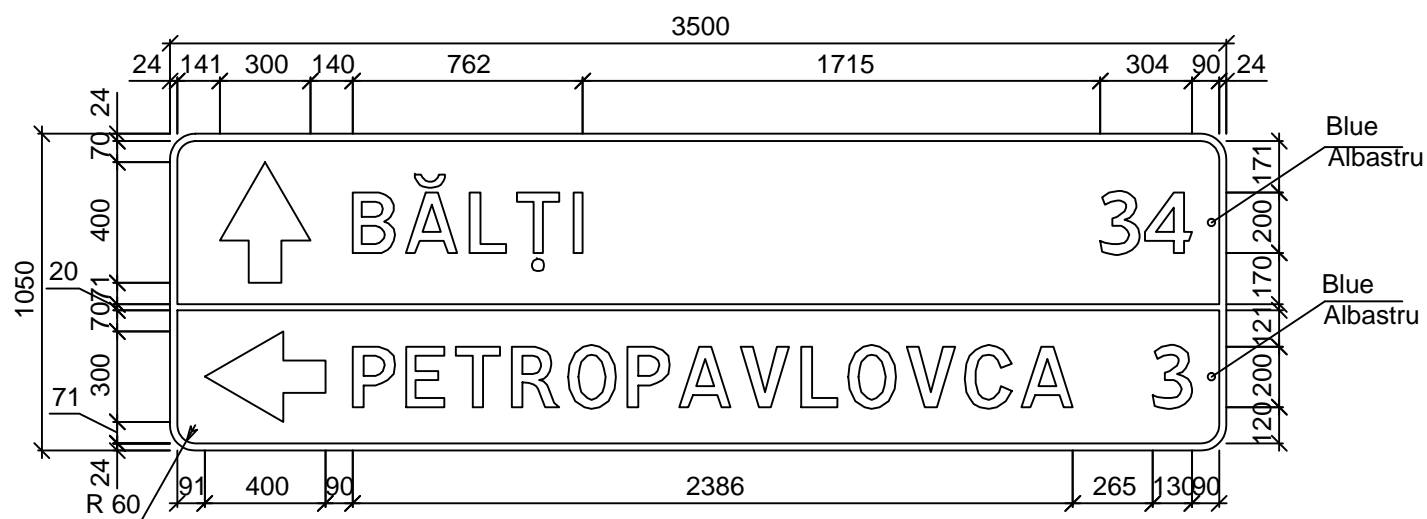
European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
		Designed	M.Marian		Scale	1:20	
	Drawing title Nonstandart road sign 5.63.1; 5.64 Indicator individual de orientare 5.63.1;5.64 PC 341+93;PC 365+50	Checked	N.Tcaci		Drawing IRI-DA-13		
		Control STAS	L.Pozdirca				



**Note / Nota:**

Numar dupa GOST: 5.61.2 De orientare  
Panel/Panou: 3800 x 1050 mm  
Fon: Blue/Albastru  
Area/Aria: 3.99m<sup>2</sup>  
Weight/Greutatea:  
Scale/Scara: 1 : 25  
Quantity/Cantitate: 1

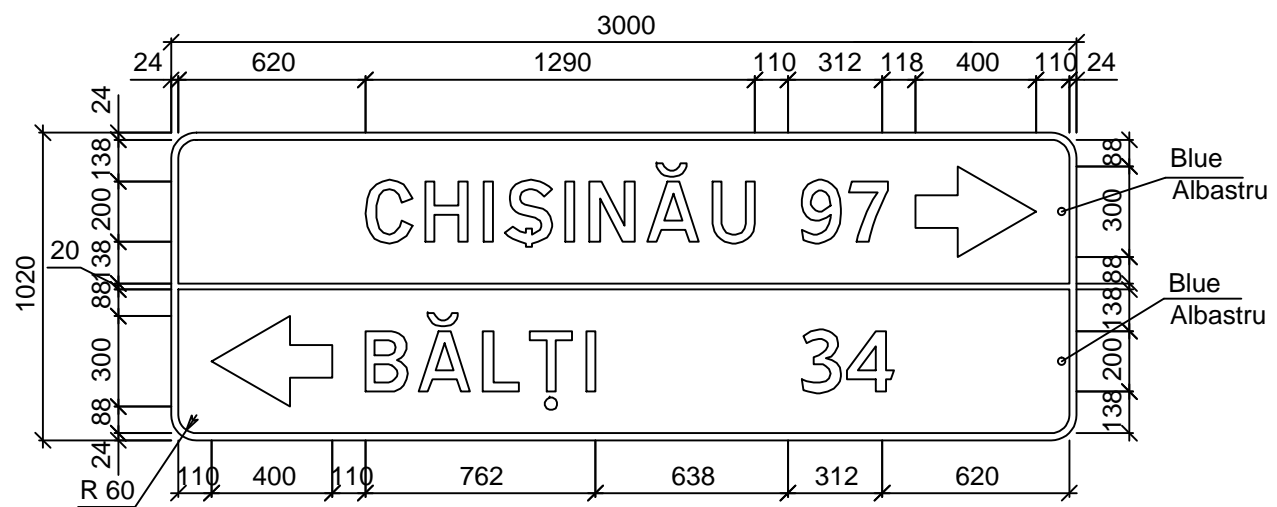
European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
		Designed	M.Marian		Scale	1:20	
	Drawing title Nonstandart road sign 5.61.2 Indicator individual de orientare 5.61.2 PC 359+76	Checked	N.Tcaci		Drawing IRI-DA-14		
		Control STAS	L.Pozdirca				



**Note / Nota:**

Numar dupa GOST: 5.61.2 De orientare  
Panel/Panou: 3500 x 1050 mm  
Fon: Blue/Albastru  
Area/Aria: 3.68m<sup>2</sup>  
Weight/Greutatea:  
Scale/Scara: 1 : 25  
Quantity/Cantitate: 1

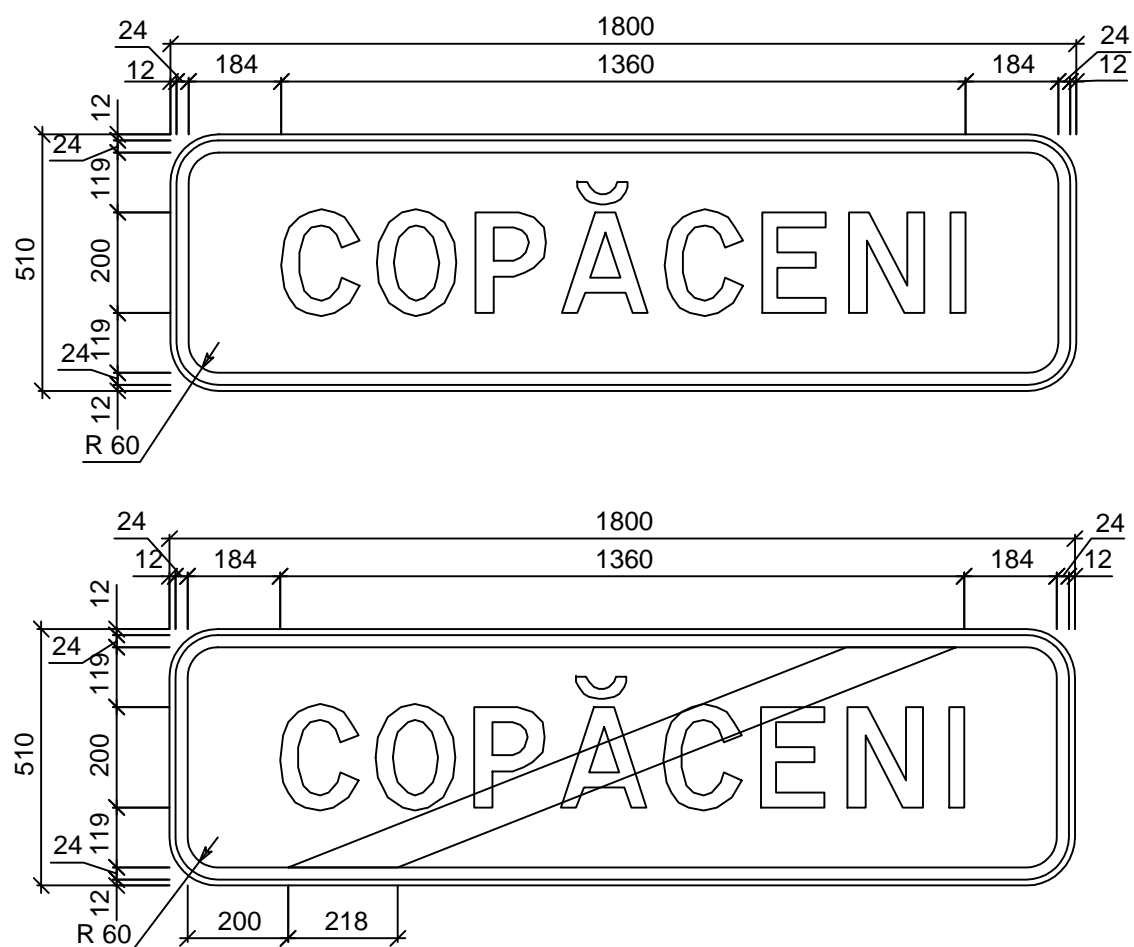
European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
		Designed	M.Marian		Scale	1:20	
Universcons	Drawing title Nonstandart road sign 5.61.2 Indicator individual de orientare 5.61.2 PC 360+50	Checked	N.Tcaci		Drawing		
		Control STAS	L.Pozdirca		IRI-DA-15		



**Note / Nota:**

Numar dupa GOST: 5.61.2 De orientare  
 Panel/Panou: 3000 x 1020 mm  
 Fon: Blue/Albastru  
 Area/Aria: 3.06m<sup>2</sup>  
 Weight/Greutatea:  
 Scale/Scara: 1 : 25  
 Quantity/Cantitate: 1

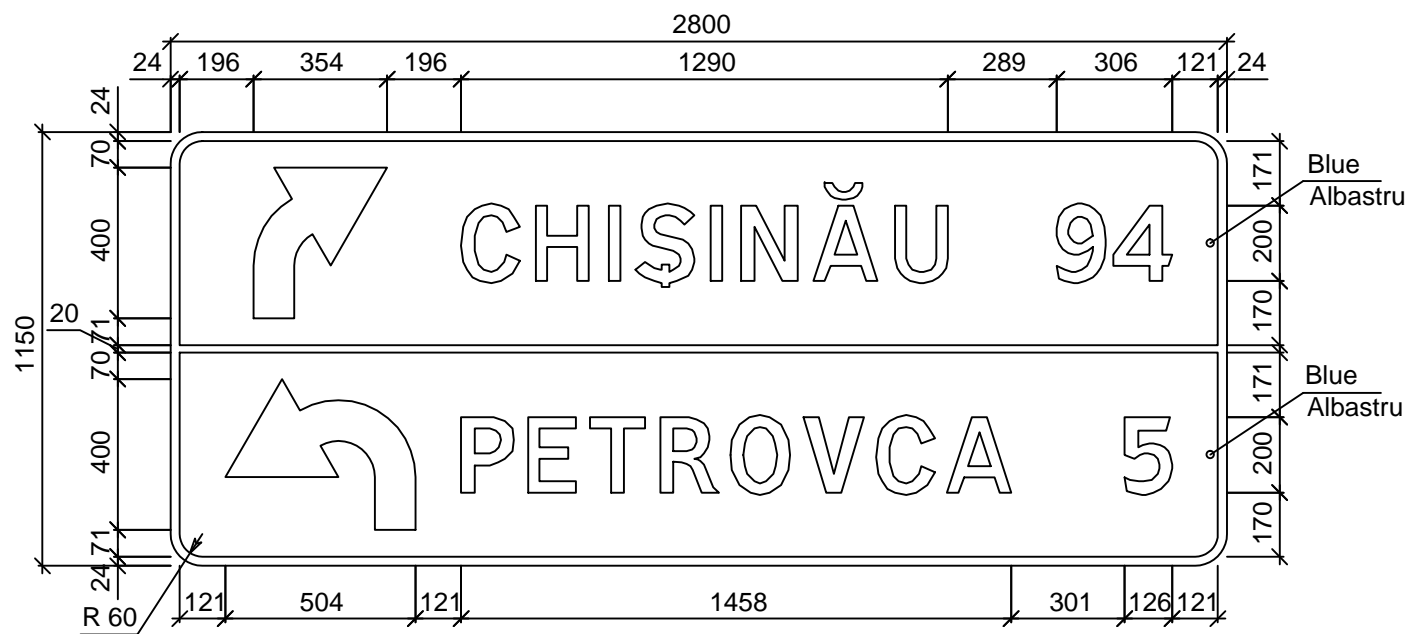
European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
		Designed	M.Marian		Scale	1:20	
	Drawing title Nonstandart road sign 5.61.2 Indicator individual de orientare 5.61.2 PC 359+95	Checked	N.Tcaci		Drawing IRI-DA-16		
		Control STAS	L.Pozdirca				



**Note / Nota:**

Numar dupa GOST: 5.63.1; 5.64  
Panel/Panou: 1800 x 510 mm  
Fon: White/Alb  
Area/Aria: 0.92m<sup>2</sup>  
Weight/Greutatea:  
Scale/Scara: 1 : 15  
Quantity/Cantitate: 4

European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
		Designed	M.Marian		Scale	1:20
Universcons	Drawing title Nonstandart road sign 5.63.1; 5.64 Indicator individual de orientare 5.63.1; 5.64 PC 369+70; PC 395+00	Checked	N.Tcaci		Drawing	
		Control STAS	L.Pozdirca		IRI-DA-17	

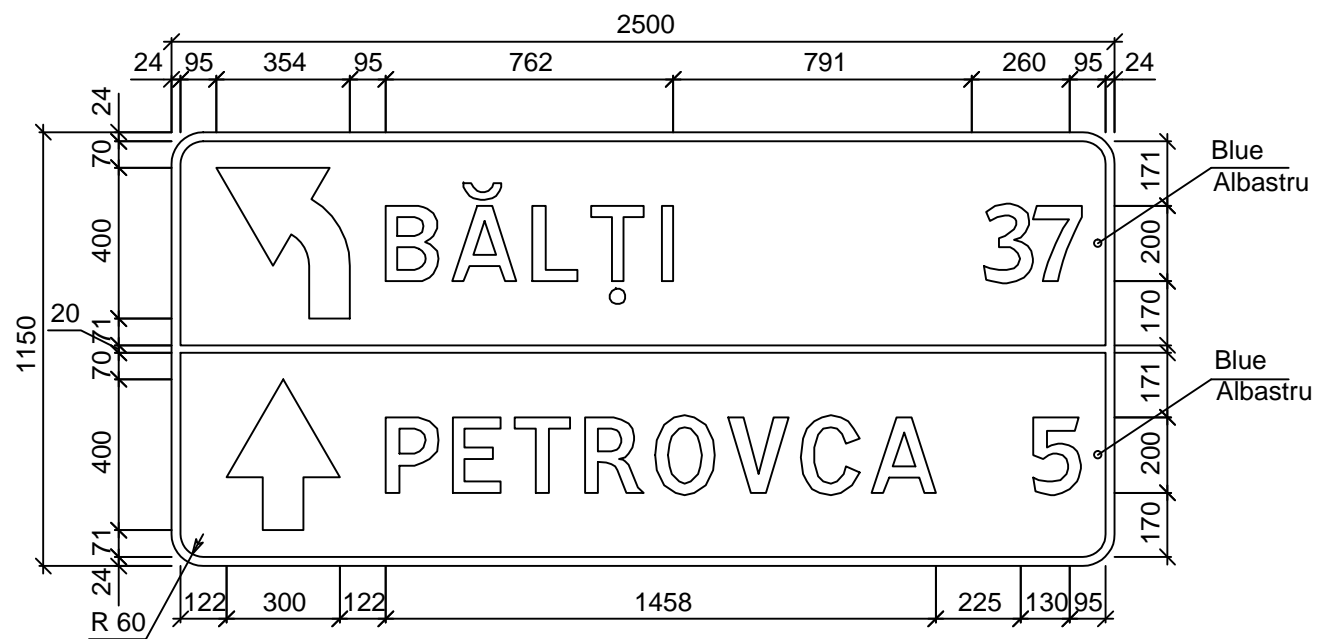


**Note / Nota:**

Numar dupa GOST: 5.61.2 De orientare  
Panel/Panou: 3800 x 1150 mm  
Fon: Blue/Albastru  
Area/Aria: 3.22m<sup>2</sup>  
Weight/Greutatea:  
Scale/Scara: 1 : 20  
Quantity/Cantitate: 1

European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
		Designed	M.Marian		Scale	1:20	
	Drawing title Nonstandart road sign 5.61.2 Indicator individual de orientare 5.61.2 PC 386+09	Checked	N.Tcaci		Drawing IRI-DA-18		
		Control STAS	L.Pozdirca				

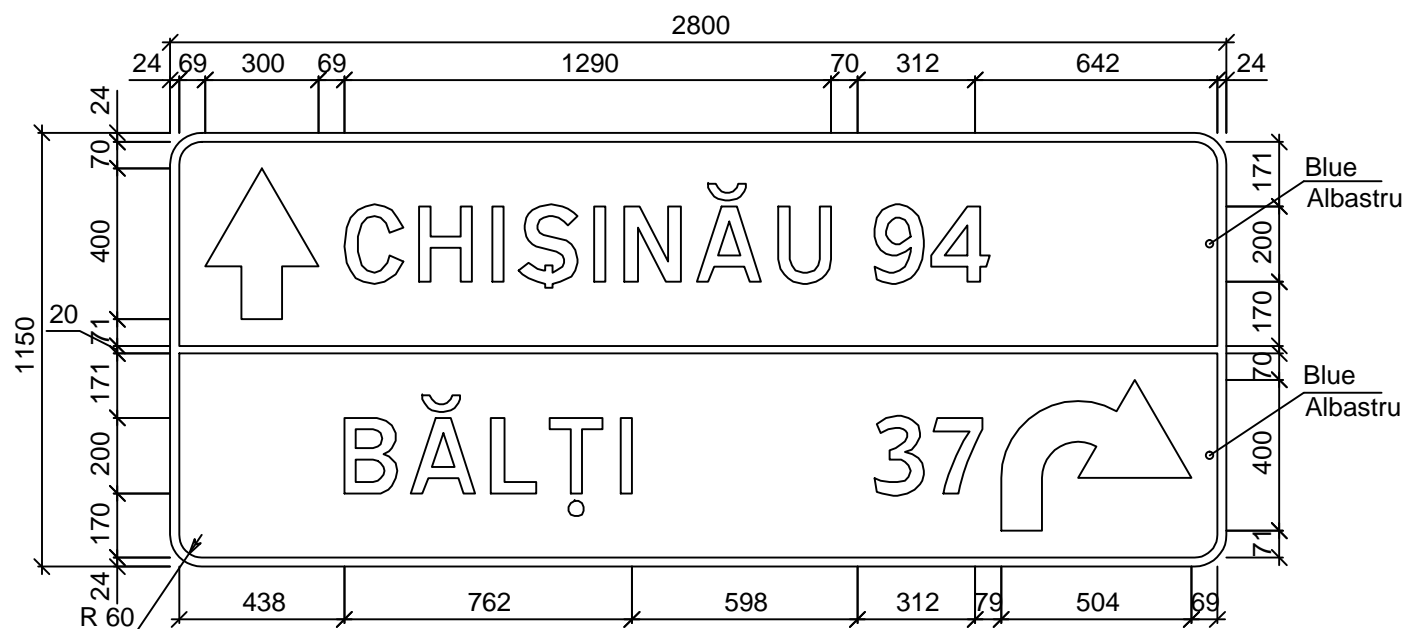




**Note / Nota:**

Numar dupa GOST: 5.61.2 De orientare  
 Panel/Panou: 2500 x 1150 mm  
 Fon: Blue/Albastru  
 Area/Aria: 2.88m<sup>2</sup>  
 Weight/Greutatea:  
 Scale/Scara: 1 : 20  
 Quantity/Cantitate: 1

European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
		Designed	M.Marian		Scale	1:20	
	Drawing title Nonstandart road sign 5.61.2 Indicator individual de orientare 5.61.2 PC 386+61	Checked	N.Tcaci		Drawing IRI-DA-19		
		Control STAS	L.Pozdirca				



**Note / Nota:**

Numar dupa GOST: 5.61.2 De orientare  
Panel/Panou: 2800 x 1150 mm  
Fon: Blue/Albastru  
Area/Aria: 3.22m<sup>2</sup>  
Weight/Greutatea:  
Scale/Scara: 1 : 20  
Quantity/Cantitate: 1

European Investment Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
		Designed	M.Marian		Scale	1:20	
	Drawing title Nonstandart road sign 5.61.2 Indicator individual de orientare 5.61.2 PC 385+80	Checked	N.Tcaci		Drawing		
		Control STAS	L.Pozdirca		IRI-DA-20		

List of executive drawings of the main set. Lista seturilor de bază a planșelor de execuție

Number Indicativ	Item / Denumirea	Note Notă	
2012/045D	Bridge /Lucrări de artă		

List of executive drawings of the main set. Lista planșelor de execuție a setului de bază 2012/045D (beginning/început)

Drawing Planșa	Item / Denumirea	Note Notă
1	General data / Date generale	
2	Bridge general view. Front view / Dispoziție generală a podului. Fațada.	
3	Bridge general view. Layout / Dispoziția generală a podului. Planul	
4	Bridge general view. Section 1-1 and 2-2 / Dispoziția generală a podului. Secțiunea 1-1 și 2-2	
5	General view of abutment 1, 4 / Dispoziția generală a culeei 1,4	
6	General view of pile 2, 3 / Dispoziția generală a pilei 2,3	
7	Approach to bridge at abutment 1 and 4 / Racordarea podului cu drumul la culeea 1 și 4	
8	Consolidation of cones / Consolidarea semiconurilor	
9	Monolithic joint MJ-1 / Nodul monolit NM-1	
10	Monolithic joint MJ-2 / Nodul monolit NM-2	
11	Monolithic joint MJ-3 / Nodul monolit NM-3	
12	Monolithic joint MJ-4 / Nodul monolit NM-4	
13	Monolithic joint MJ-5 / Nodul monolit NM-5	
14	Monolithic joint MJ-6 / Nodul monolit NM-6	
15	Collar beam CB-1 / Rigla R-1	
16	Collar beam CB-1. Reinforcement scheme. Specification / Rigla R-1. Schema de armare. Specificația	
17	Collar beam CB-2 / Rigla R-2	
18	Collar beam CB-2. Reinforcement scheme. Specification / Rigla R-2. Schema de armare. Specificația	
19	Protection wall PW-1,2 / Zid de gardă ZG-1,2	
20	Protection wall PW-1,2. Reinforcement scheme / Zid de gardă ZG-1,2. Schema de armare	
21	Protection wall PW-1,2. Specification / Zid de gardă ZG-1,2. Specificația	
22	The drawings RD-P, PSCV-P, PSP-P, NIPR-P, SS-P, CC-P, CP-P are common for all bridges Desenele RD-P, PSCV-P, PSP-P, NIPR-P, SS-P, CC-P, CP-P se refera la toate podurile	See bridge km 36+893 Vezi podul km 36+893

List of reference documents / Lista documentelor de referință și anexate

(beginning/  
început)

Document Number Indicativ	Item / Denumirea	Note Notă
	Reference documents / Documente de referință	
Серия 3.500.1-1.93	Сваи забивные железобетонные цельные сплошного квадратного сечения для опор мостов .	Piles /Piloți
Серия 3.503.1-81 Выпуски 1-1, 3-1	Пролетные строения сборные ж. б. длиной 12, 15, 18, 21, 24 и 33м из балок таврового сечения с напрягаемой арматурой для мостов и путепроводов	Pedestrian guardrail /Parapet de siguranță și pietonal
Серия 3.503.1-73 Выпуски 1	Пролетные строения сборные ж. б. длиной 12, 15, 18, 21,24 и 33м из балок таврового сечения с ненапрягаемой арматурой для мостов и путепроводов	Beams /Grinzi
Серия 3.503.1-101 Выпуск 0, 1	Изоляция проезжей части, перекрытие деформационных швов ж. б. строений длиной до 33м автодорожных мостов и путепроводов	Bridgeway parts /Elementele căii podului
ALGA Bearing and Expansion Joints	Expansion joints ALGAFLEX T instalation Procedure, 10.10.2005	Joint filling elements /Elemente de acoperire a rosturilor
Серия 3.501-156 Выпуски 0, 1	Укрепление русел, конусов и откосов насыпи у малых и средних мостов и водопропускных труб.	Surface protection /Protecția suprafețelor
BCH 24-88	Технические правила ремонта и содержания автомобильных дорог	Reinforced concrete repair /Reparația betonului armat
BCH 32-81	Инструкция по устройству гидроизоляции конструкций мостов и труб на железных, автомобильных и городских дорогах	Waterproofing of concrete surfaces / Izolarea suprafețelor de beton
СНУП 3.06.04-91	Мосты и трубы	Bridge, culvert works / Executarea lucrărilor

Note / Notă:

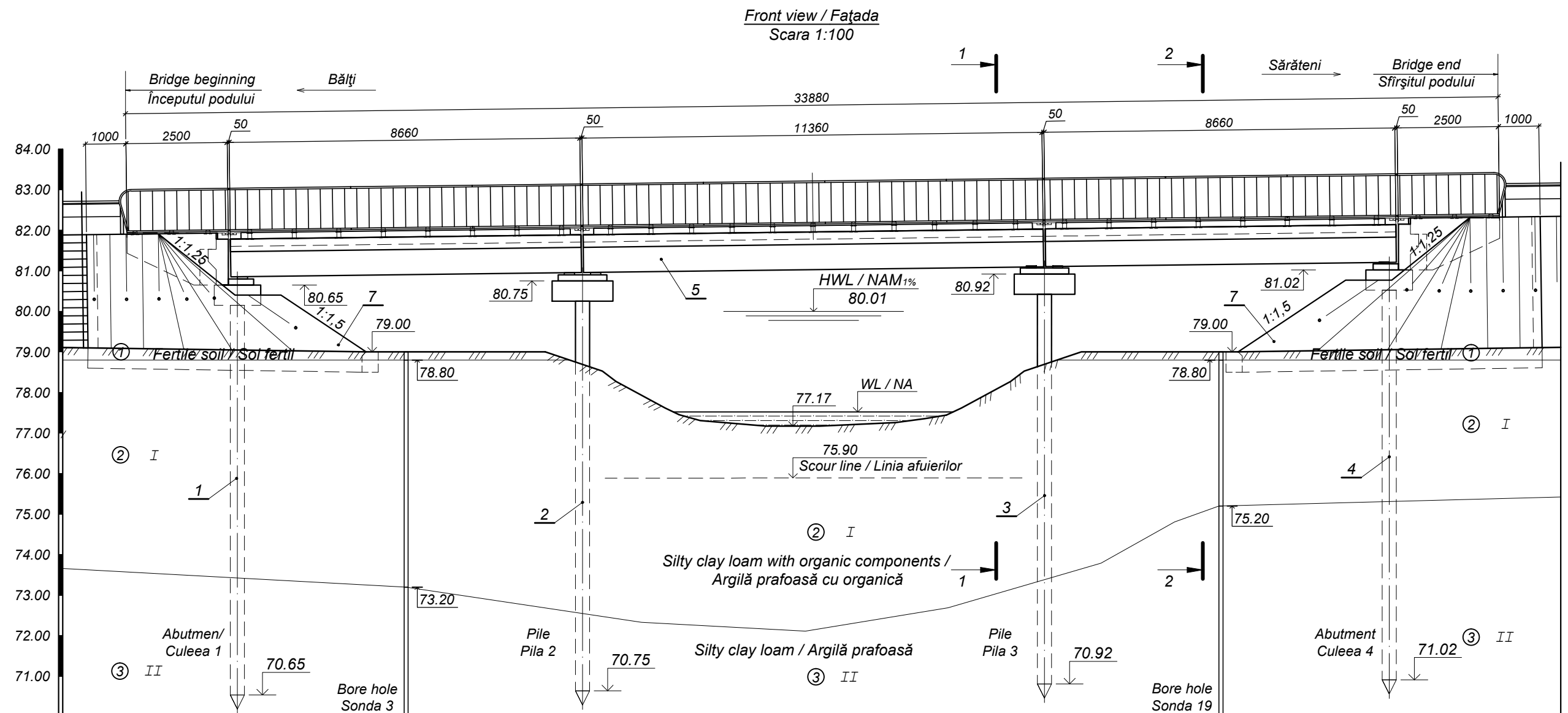
- Design norms / Normele de proiectare: СНУП 2.05.03-84 "Мосты и Трубы", СНУП 2.05.02-85\* "Автомобильные дорож".
- Road category /Categoria drumului auto - III. Bridge width / Gabaritul podului G-14,40+2x0,75 m.
- Reference loading / Sarcina de calcul: A11 și HK-80.
- Reference seismicity of construction / Seismicitatea de calcul a construcției - 7 grade.
- Baltic Sea reference level system. As base is taken Rp26 - 89.738 at PC261+585, (kilometer stone- placed on right side shoulder, direction after stakes) / Sistem de cote Baltic. Drept bază servesc reperul Rp26 - 89.738 la PC261+585, (borna de marcare a kilometrajului, amplasată pe acostament din partea dreaptă, direcție după pichetare).
- Decisive phases for checking and acceptance of repair works / Fazele determinante de verificare și recepție a lucrărilor de reparație:
  - Transmission of center line references, location and bench marks /Predarea trasării, amplasamentului și a bornelor de reper;
  - Infrastructure repair / Reparația infrastructurii (abutment /culeea 1, pile / pila 2, pile / pila 3, abutment / culeea 4);
  - Superstructure and bridge way works /Execuția suprastructurii și căii podului;
  - Approach to bridge works / Execuția racordării podului cu terasamentul.
- Type of works, determined as hidden works shall be checked and accepted with the record of verification results in Reports of quality check / Genul de lucrări determinate ca lucrări ascunse ce urmează a fi verificate și recepționate cu consemnarea rezultatelor verificării în procese verbale de verificare a calității:
  - Determination and positioning of road center lines and elements / Trasarea și poziționarea axelor și elementelor;
  - Bases and footings / Temeliile și fundațiile;
  - Inspection of materials, semifabricates and parts at entrances / Examinarea materialelor, semifabricatelor și elementelor la intrare;
  - Reinforcement and concrete of parts, formworks / Armarea și betonarea elementelor, cofrajele;
  - Welding of metal parts / Sudarea elementelor metalice.

The design is elaborated in accordance with the standards and requirements existing design rules / Proiectul este elaborat în conformitate cu cerințele normelor și regulilor în construcții în vigoare

Chief engineer / Inginer șef proiect compartiment

A. Cekan

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme		Support	Project				
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012	
		Designed	A.Cecan		Scale		
Universcons	Drawing title <i>Bridge.Pod, Km 26 + 906</i>	Checked	N.Tcaci		Drawing DG-P-1		
	<i>General data / Date generale</i>	Control STAS	L.Pozdirca				

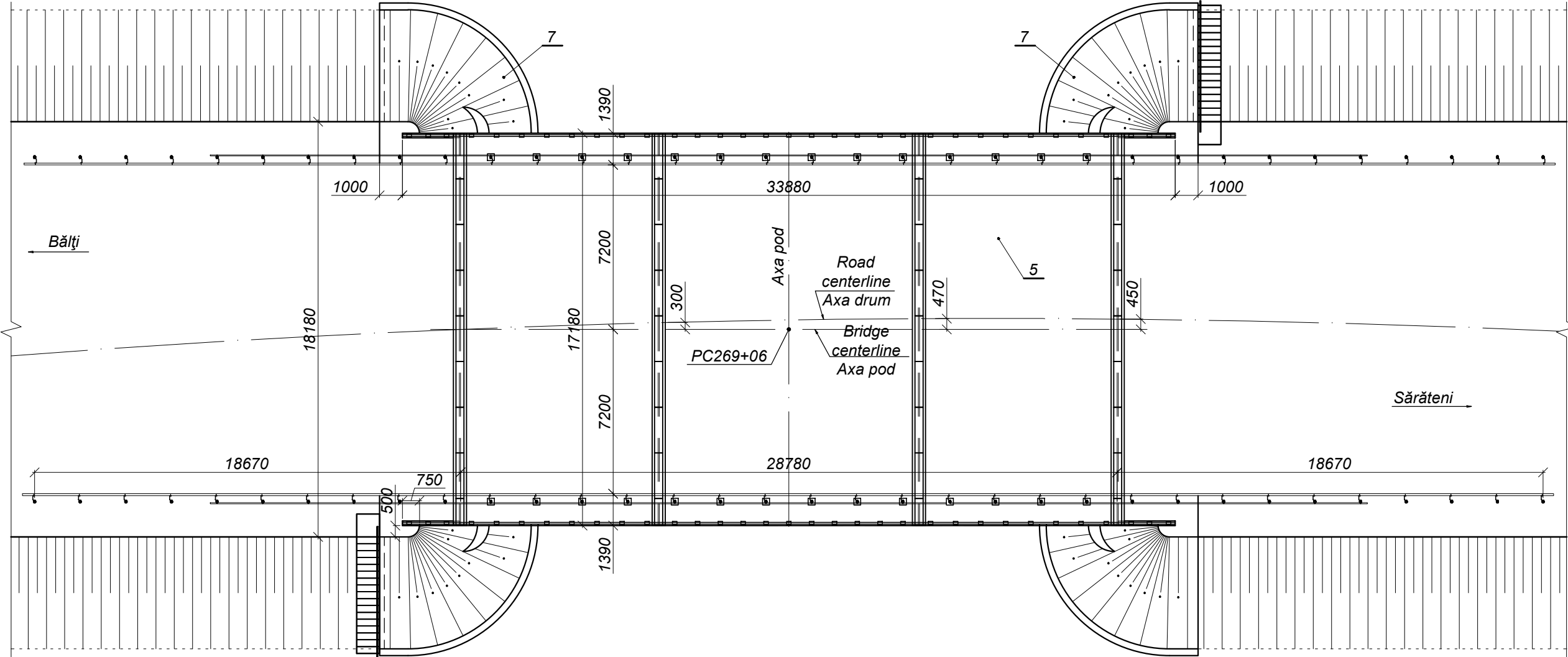


Design data Date proiect	Gradient/Declivitatea, ‰	13,2					28,78
	Distance/Distanța, m						
Site data Date teren	Level of carriage way axis / Cota pe axa părții carosabile, m	82.10	82.21	82.38	82.48		
	Ground level of carriage way axis / Cota teren pe axa părții carosabile, m	79.30	78.90	77.17	78.90	79.30	
	Distance / Distanța, m	7,63	6,78	6,65	7,76		

- 1 Abutment 1 / Culeea-1
- 2 Pile 2 / Pila-2
- 3 Pile 3 / Pila-3
- 4 Abutmen 4 / Culeea-4
- 5 Superstructure and bridge way / Suprastuctura și calea podului
- 7 Consolidation of cones / Consolidarea semiconurilor

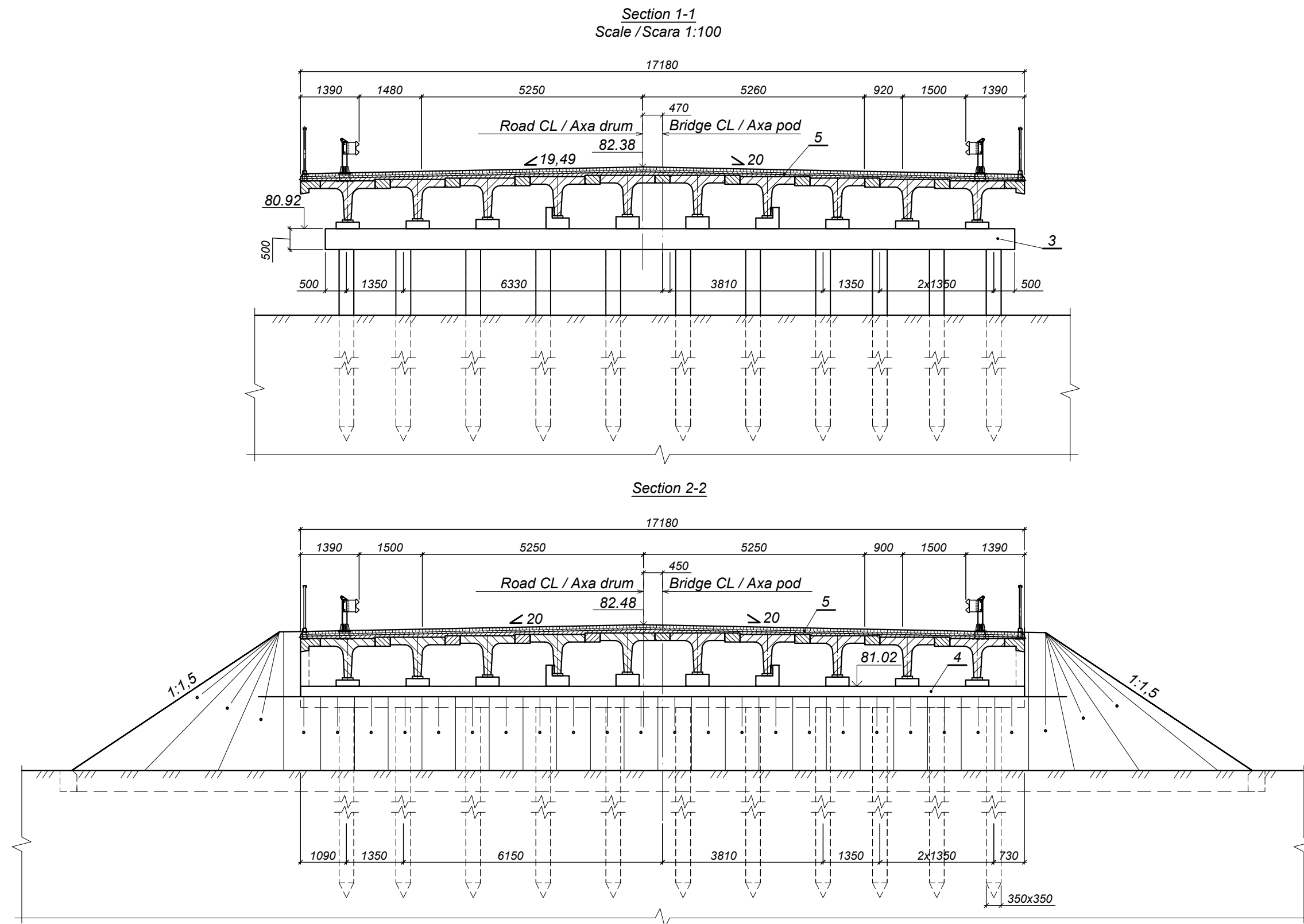
World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector		Programme Support		Project			
Roughton International	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza		Date	04.2012
			Designed	A.Cecan		Scale	
Universcons	Drawing title Bridge.Pod, Km 26 + 906 Bridge general view. Front view / Dispoziție generală a podului. Fațada.		Checked	N.Tcaci		Drawing F-P-1	
			Control STAS	L.Pozdirca			

Layout / Planul  
Scara 1:200



5 Superstructure and bridge way / Suprastuctura și calea podului  
7 Consolidation of cones / Consolidarea semiconurilor

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road      Sector      Programme      Support      Project							
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012	
		Designed	A.Cecan		Scale		
Universcons	Drawing title <i>Bridge.Pod, Km 26 + 906</i> <i>Bridge general view. Layout /</i> <i>Dispoziția generală a podului. Planul</i>	Checked	N.Tcaci		Drawing P-P-1		
		Control STAS	L.Pozdirca				



- 3 Pile 3/ Pila-3  
 4 Abutment 4 / Culeea-4  
 5 Superstructure and bridge way / Suprastuctura i calea podului

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector		Programme Support		Project			
Roughton International	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza		Date	04.2012
			Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 26 + 906</i> <i>Bridge general view. Section 1-1 and 2-2 /</i> <i>Dispoziția generală a podului. Secțiunea 1-1; 2-2</i>		Checked	N.Tcaci		Drawing S-P-1	
			Control STAS	L.Pozdirca			

[illegible]

Layout /  
Planul

17180

200 8390 8390 200

2500

800

350

275 275 275 250 200

4

5

3

2

Bălți

Sărateți

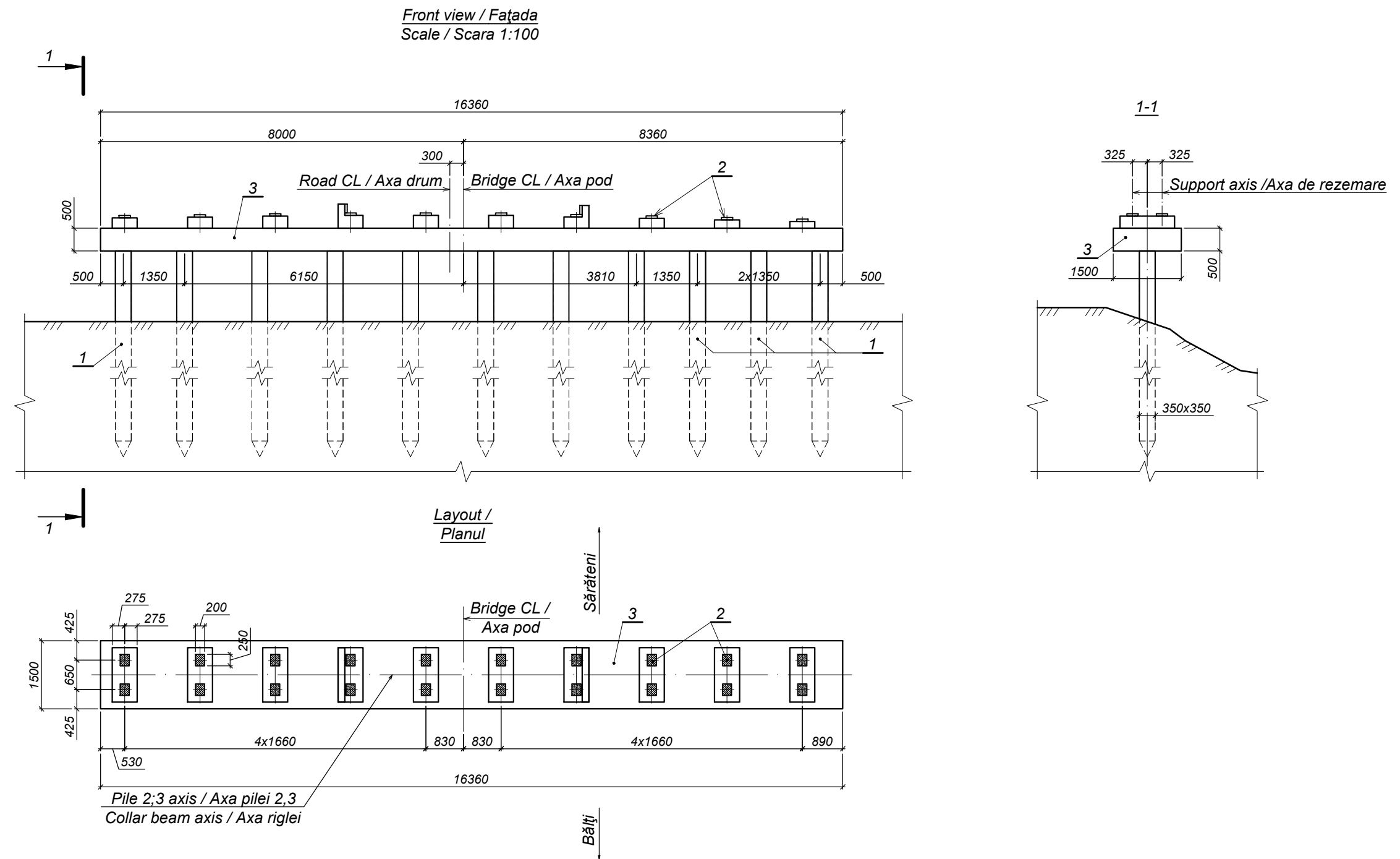
Road CL /Axa drum  
Bridge CL /Axa pod

Axa culeei 1,4  
Axa riglei

Technical drawing of a bridge pier cross-section (1-1) showing dimensions and structural details. The drawing includes the following elements:

- Section Line:** Indicated by "1-1" at the top.
- Dimensions:**
  - Top width: 225 and 125.
  - Top horizontal distance: 2500.
  - Left side horizontal distances: 1000 and 750.
  - Right side horizontal distance: 500.
  - Bottom width: 350x350.
- Structural Details:**
  - Reinforcement bars are shown with cross-sections of 4 and 3.
  - Concrete slopes are indicated with a 1:1.25 ratio on the left and a 1:1.5 ratio on the right.
  - A central vertical pier is shown with a width of 225.
- Labels:**
  - "Abutment 1;4 axis /Axa culeei 1,4"
  - "Support axis /Axa de rezemare"

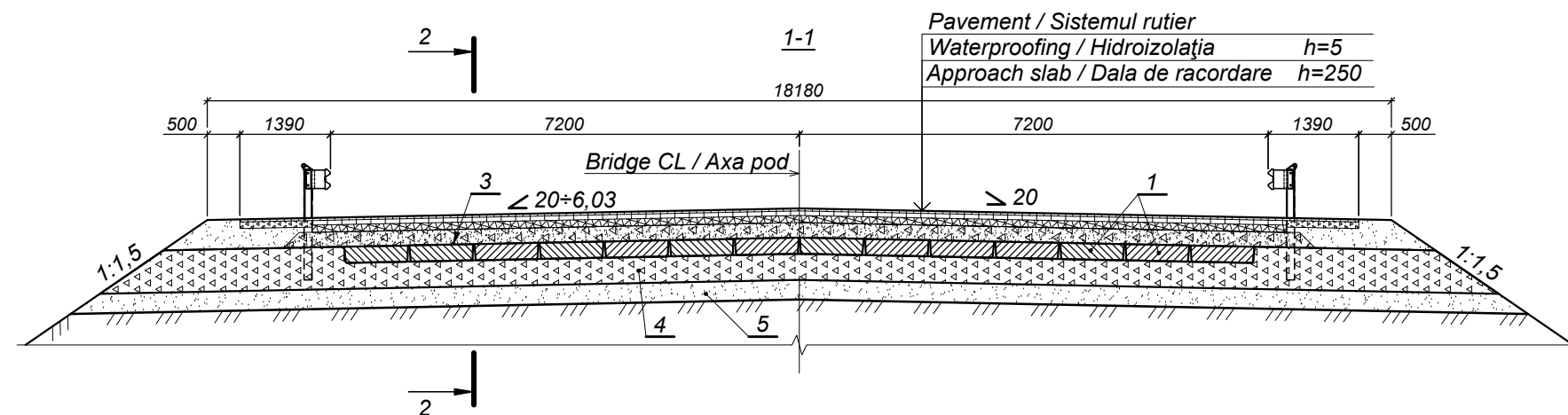
- |                                       |                                                                                                                                   |                                                                      |            |  |                  |         |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|------------|--|------------------|---------|
| World Bank                            | Republic of Moldova                                                                                                               | Ministry of Transport and Road Industry<br>State Road Administration |            |  |                  |         |
| Road Sector Programme Support Project |                                                                                                                                   |                                                                      |            |  |                  |         |
| Roughton International                | Rehabilitation of R14 Road<br>Balti-Sarateni                                                                                      | ISP                                                                  | S.Bogza    |  | Date             | 04.2012 |
|                                       |                                                                                                                                   | Designed                                                             | A.Cecan    |  | Scale            |         |
| Universcons                           | Drawing title <i>Bridge.Pod, Km 26 + 906</i><br><i>General view of abutment 1, 4 /</i><br><i>Dispoziția generală a culeei 1,4</i> | Checked                                                              | N.Tcaci    |  | Drawing<br>C-P-1 |         |
|                                       |                                                                                                                                   | Control STAS                                                         | L.Pozdirca |  |                  |         |



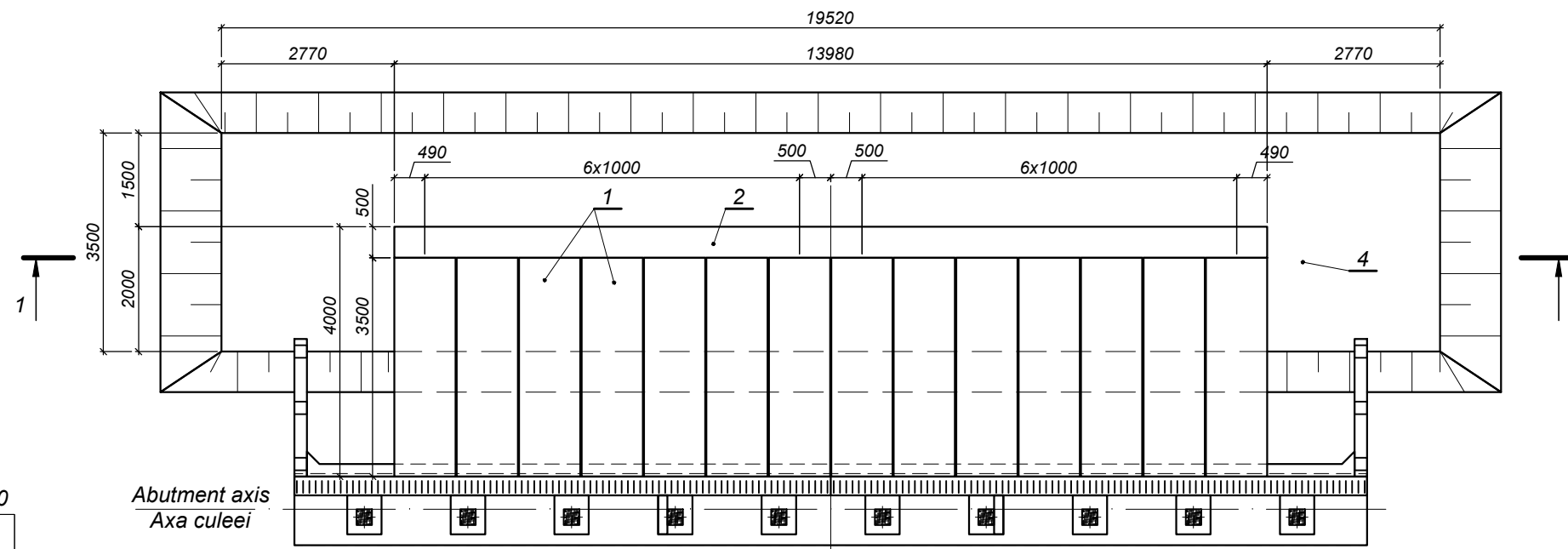
1. Piles / Piloți C10-35T4
2. Supporting rubber element / Aparat de reazem din cauciuc PO4 250x200x62-8-C
3. Collar beam CB-1 / Rigla R-1

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012
		Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 26 + 906</i> <i>General view of pile 2, 3 /</i> <i>Dispoziția generală a pilei 2,3</i>	Checked	N.Tcaci		Drawing PL-P-3	
		Control STAS	L.Pozdirca			

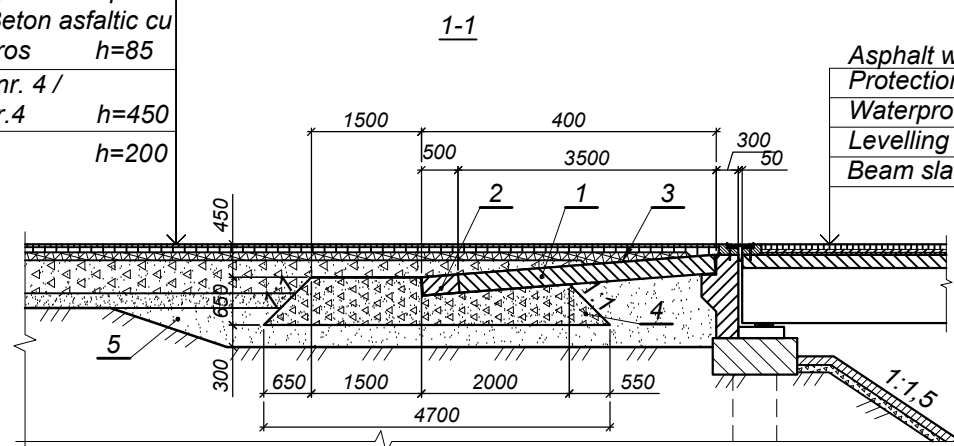




Layout / Planul  
(Pavement, consolidation and superstructure conventionally not shown) /  
(Sistemul rutier, consolidarea și suprastructura convențional nu sunt arătate)



Asphalt wearing course /  
Uzură din beton asfaltic h=40  
Geocomposite / Geocompozit  
PGM-G 50/50  
Porous asphalt concrete /  
Beton asfaltic poros h=60  
Coarse grainer porous asphalt  
concrete M1 / Beton asfaltic cu  
granul mare poros h=85  
Crushed stone nr. 4 /  
Piatră spartă Nr.4 h=450  
Sand / Nisip h=200

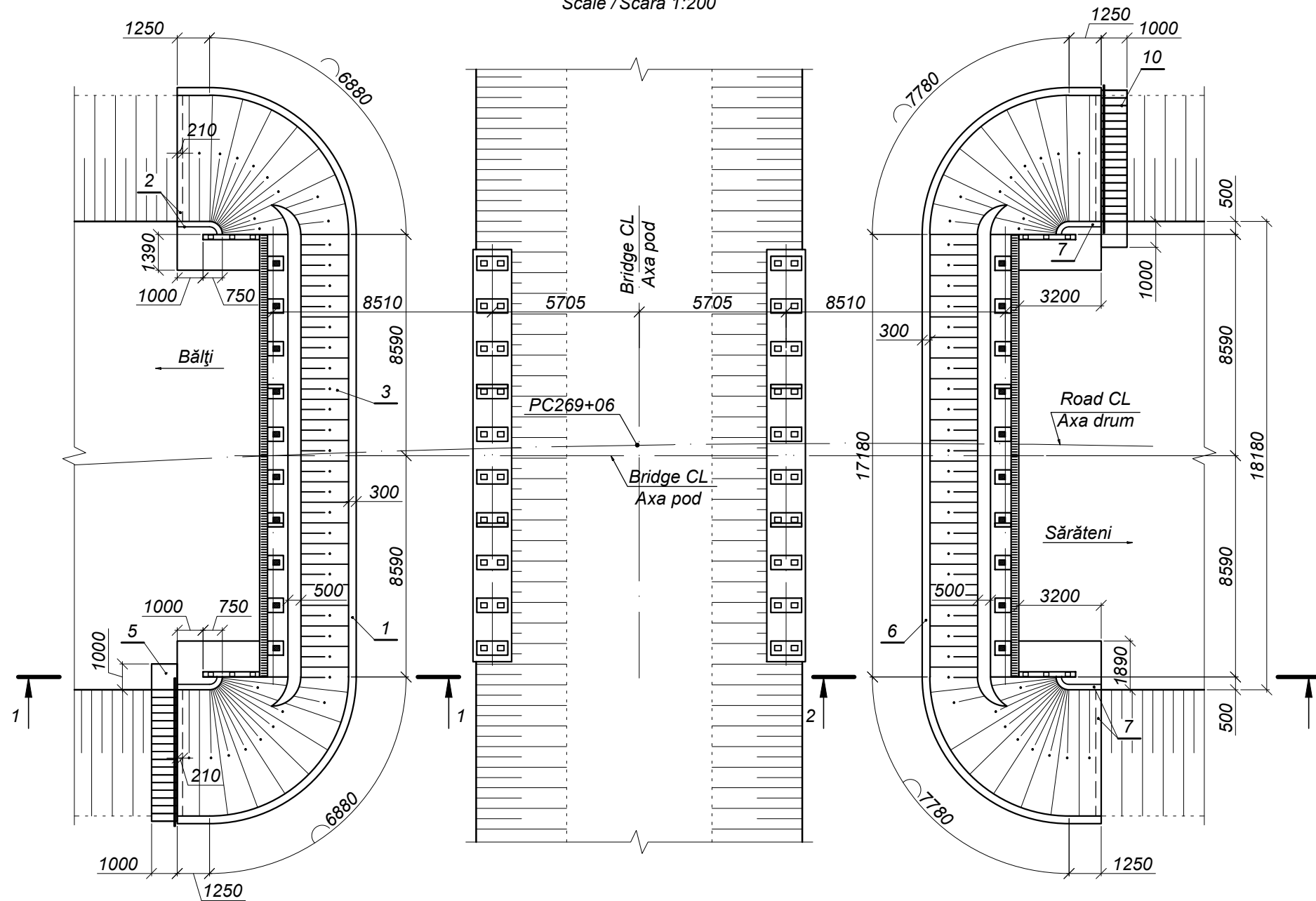


Asphalt wearing course / Îmbrăcămintă asfaltică h=70  
Protection layer / Strat de protecție h=40  
Waterproofing / Hidroizolația h=5  
Levelling course / Strat de egalizare h=30  
Beam slab / Placa grinzii h=180

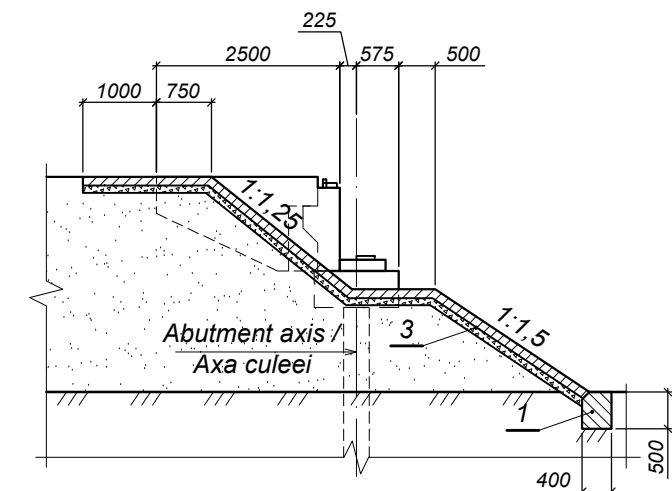
1. Approach slab / Dala de racordare П400.98.25-TAIII
2. Connecting joint of approaching slabs /  
Nodul de îmbinare a plăcilor de racordare NM-7
3. Waterproofing of approaching parts /  
Hidroizolarea elementelor de racordare
4. Crushed stone bed / Pat din piatră spartă M400
5. Sand with gravel mix / Amestec de nisip cu pietriș

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support Project				
Roughton International	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza	Date	04.2012
			Designed	A.Cecan	Scale	
Universcons	Drawing title Bridge.Pod, Km 26 + 906 Approach to bridge at abutment 1 and 4 / Racordarea podului cu drumul la culeea 1;4		Checked	N.Tcaci	Drawing RP-P-1	
			Control STAS	L.Pozdirca		

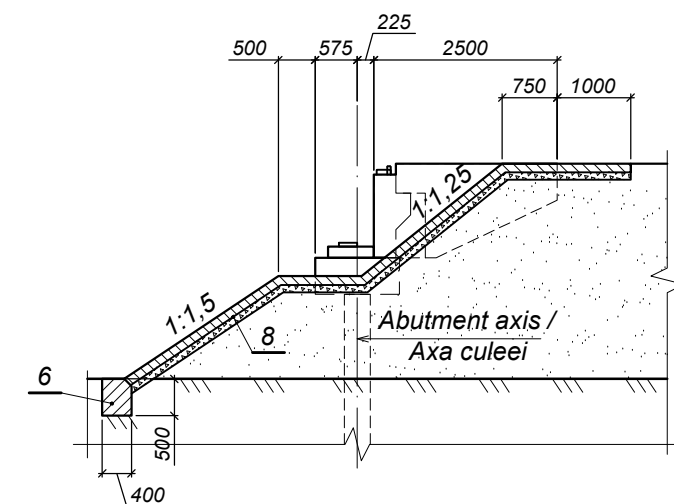
Layout / Planul  
(Bridge way and superstructure conventionally not shown) /  
(Calea podului și suprastructura convențional nu sunt arătate)  
Scale / Scara 1:200



1-1  
Scale / Scara 1:100

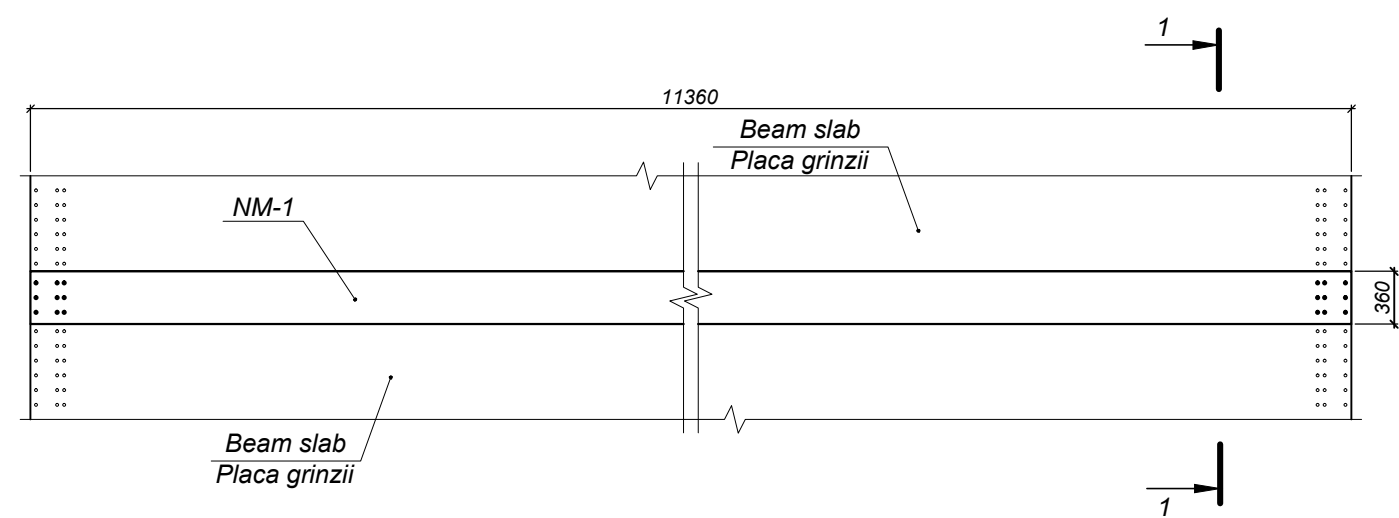


2-2  
Scale / Scara 1:100

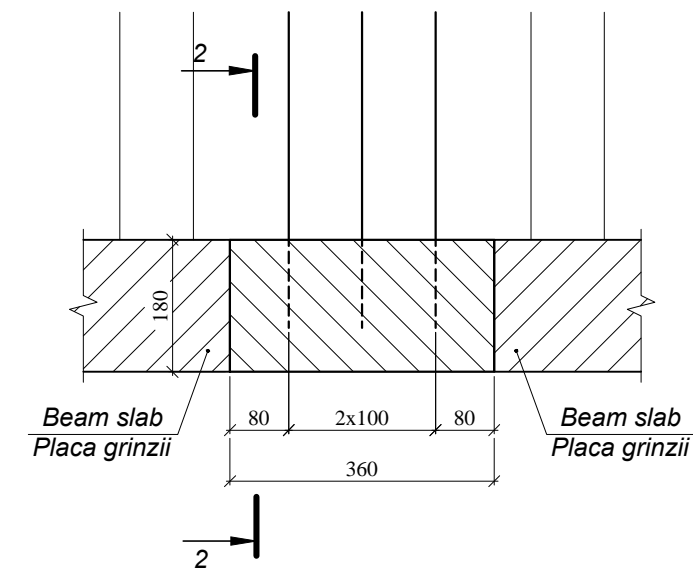


World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support Project				
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012
		Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 26 + 906</i> <i>Consolidation of cones /</i> <i>Consolidarea semiconurilor</i>	Checked	N.Tcaci		Drawing CS-P-1	
		Control STAS	L.Pozdirca			

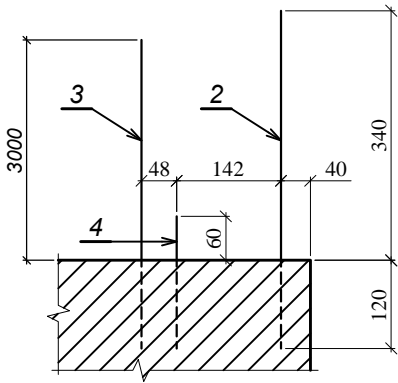
Formwork / Schema de cofraj  
Layout / Plan  
Scale / Scara 1:50



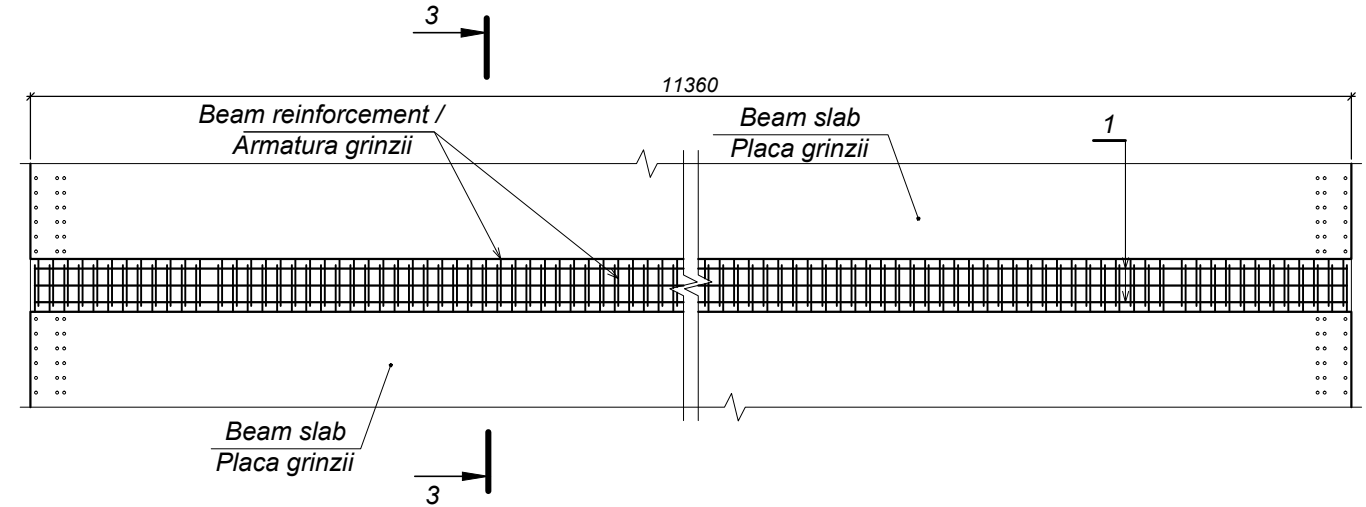
1-1  
Scale / Scara  
1:10



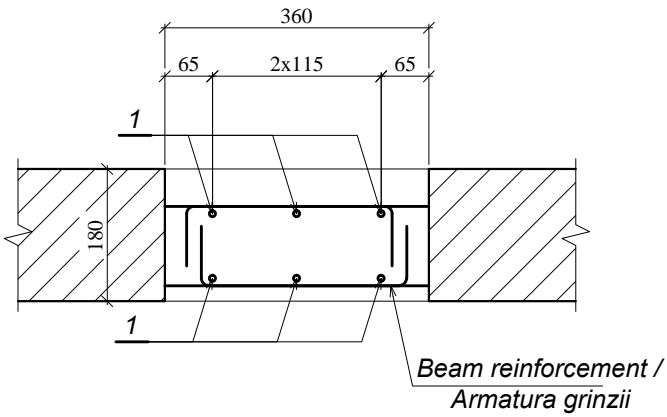
2-2



Reinforcement scheme / Schema de armare  
Layout / Plan



3-3



Quantity of steel per one element /  
Consumul de metal pentru un element, kg

Element name / Marca elementului	Reinforcement parts / Piese de armare				Total weight / Greutate totală
	Reinforcement type / Clasa armaturii			Total	
	A-I				
	ГОСТ 5781-82*				
	Ø8	Ø10	Total		
NM-1	27,0	3,6	30,6	30,6	30,6

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road      Sector      Programme      Support      Project							
Roughton International	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza		Date	04.2012
			Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 26 + 906</i> <i>Monolithic joint MJ-1 / Nodul monolit NM-1</i>		Checked	N.Tcaci		Drawing NM-P-1	
			Control STAS	L.Pozdirca			

Technical drawing of a beam slab (Placa grinzii) showing dimensions and reinforcement details.

The drawing includes the following elements:

- Dimensions:**
  - Overall length: 8660
  - Overall width: 960
- Reinforcement:**
  - Top reinforcement: NM-2
  - Bottom reinforcement: Beam slab / Placa grinzii
- Section Indicators:**
  - Section 1-1 is indicated at both ends of the slab.

Technical drawing of a beam slab cross-section. The drawing shows a horizontal section with a central reinforcement area. The top reinforcement is labeled "Beam reinforcement / Armatura grinzii" and the bottom reinforcement is labeled "Beam slab Placa grinzii". The total width of the slab is indicated as 8660. A vertical dimension line on the right side is labeled "1". A horizontal dimension line at the bottom is labeled "3". The drawing includes a break symbol in the center of the slab, indicating that the section is not to scale.

360

65 2x115 65

1

180

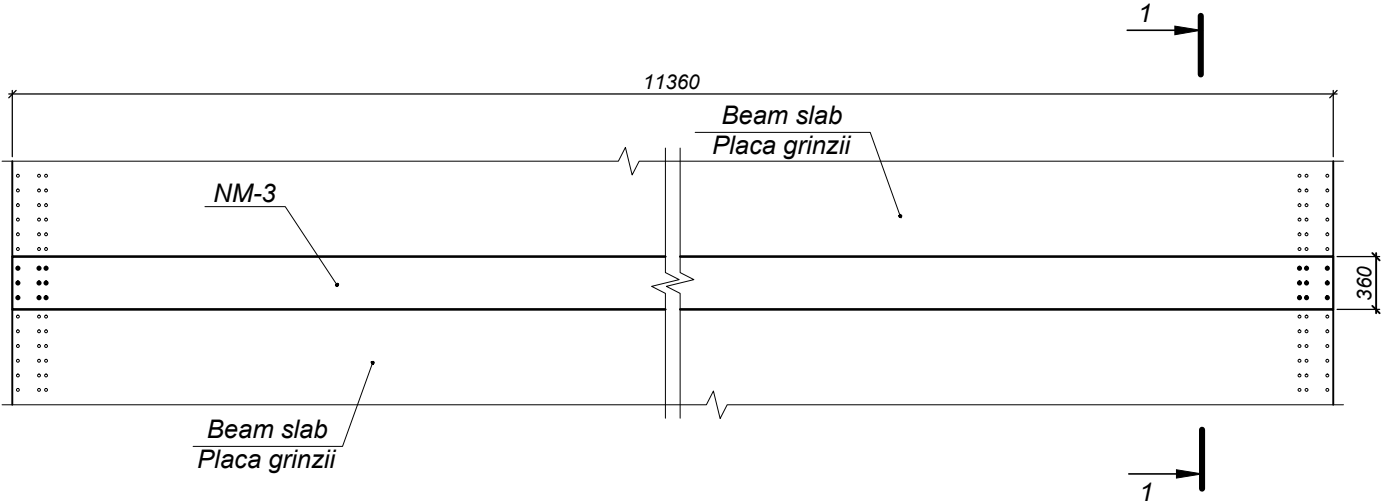
1

Beam reinforcement /  
Armatura grinzii

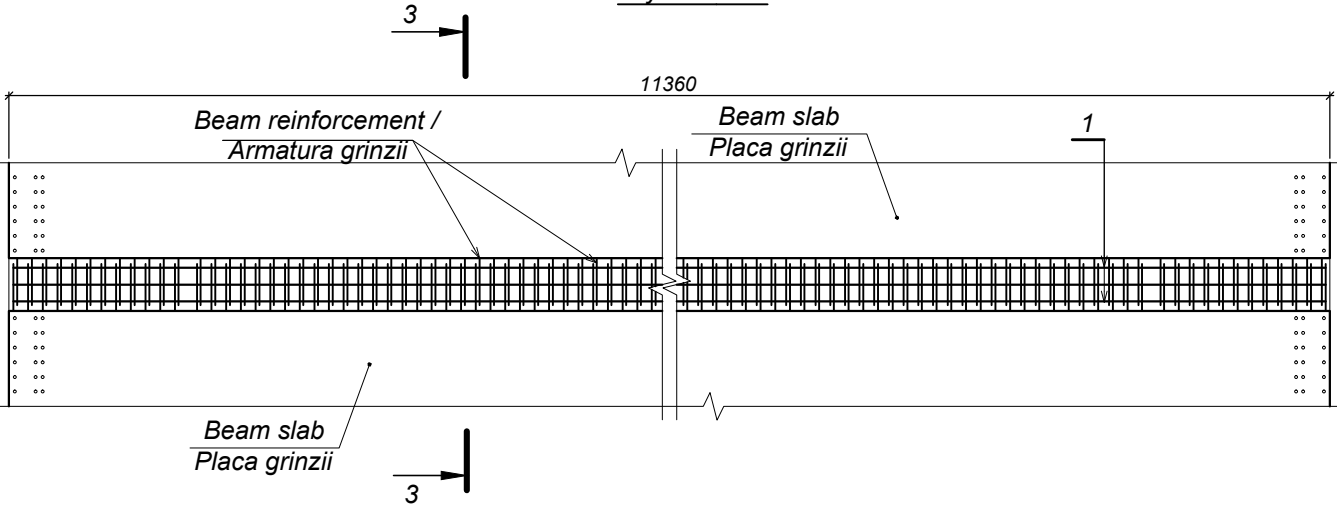
<i>Element name / Marca elementului</i>	<i>Reinforcement parts / Piese de armare</i>				<i>Total weight / Greutate totală</i>	
	<i>Reinforcement type / Clasa armaturii</i>					
	<i>A-I</i>					
	<i>ГОСТ 5781-82*</i>					
	<i>Ø8</i>	<i>Ø10</i>	<i>Total</i>	<i>Total</i>		
<i>NM-2</i>	<i>20,4</i>	<i>3,6</i>	<i>24,0</i>	<i>20,4</i>	<i>20,4</i>	

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International  Universcons	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012
		Designed	A.Cecan		Scale	
	Drawing title <i>Bridge.Pod, Km 26 + 906</i> <i>Monolithic joint MJ-2 / Nodul monolit NM-2</i>	Checked	N.Tcaci		Drawing  NM-P-2	
		Control STAS	L.Pozdirca			

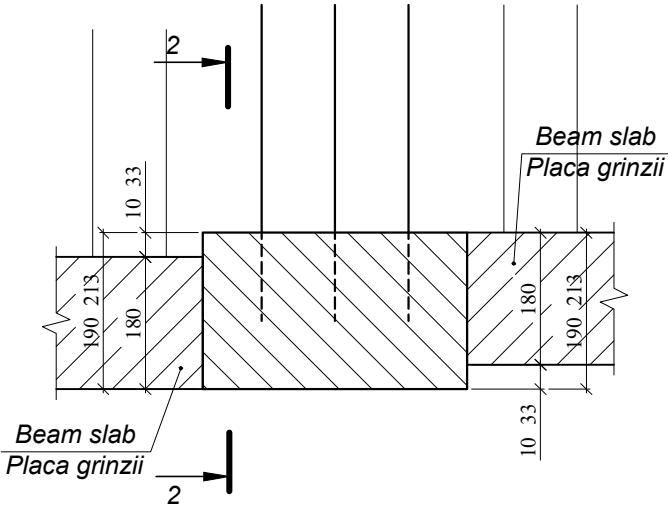
Formwork / Schema de cofraj  
Layout / Plan  
Scale / Scara 1:50



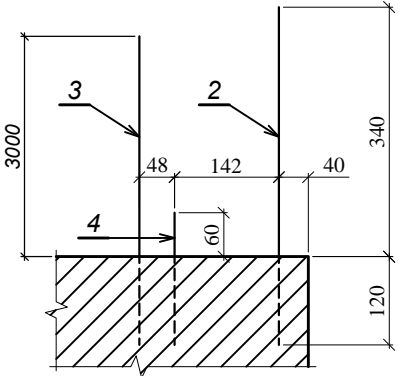
Reinforcement scheme / Schema de armare  
Layout / Plan



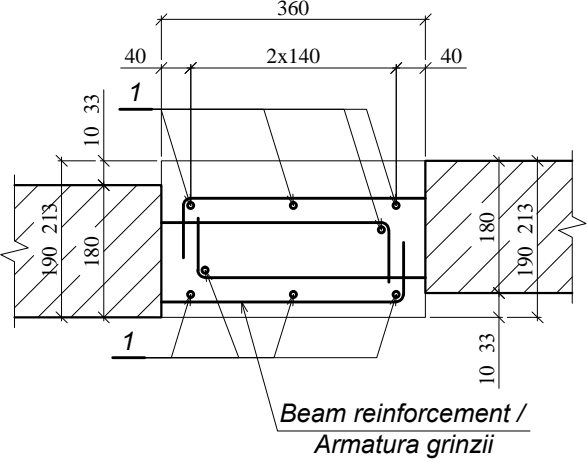
1-1  
Scale / Scara  
1:10



2-2



3-3

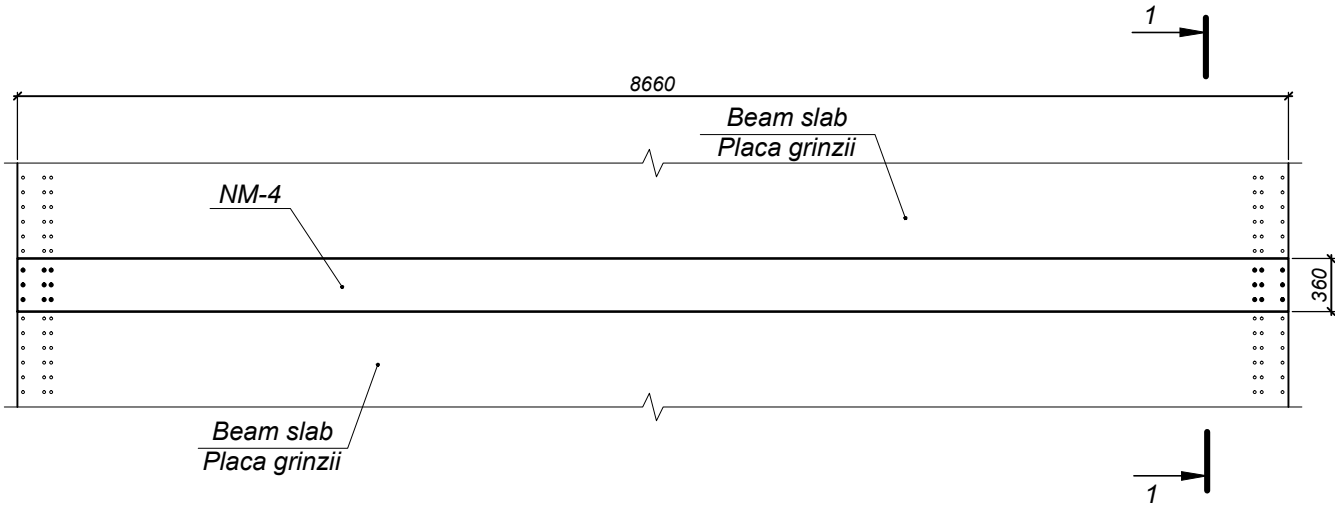


Quantity of steel per one element /  
Consumul de metal pentru un element, kg

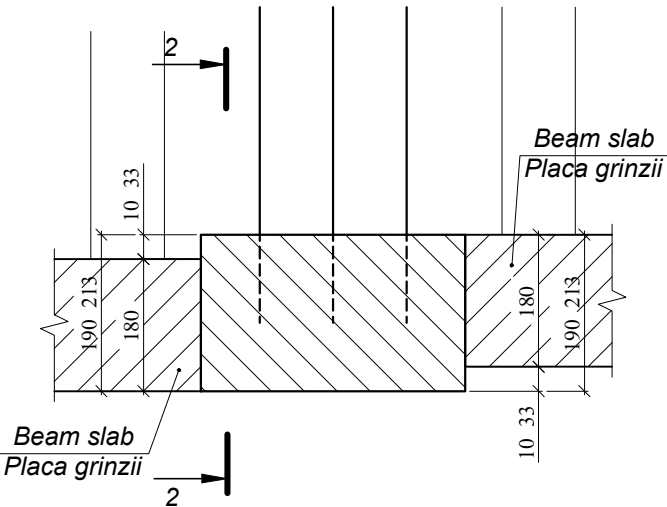
Element name / Marca elementului	Reinforcement parts / Piese de armare				Total weight / Greutate totală
	Reinforcement type / Clasa armaturii			Total	
	A-I				
	ГОСТ 5781-82*				
	Ø8	Ø10	Total		
NM-3	36,0	3,6	39,6	39,6	39,6

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support	Project			
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012
		Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 26 + 906</i> <i>Monolithic joint MJ-3 / Nodul monolit NM-3</i>	Checked	N.Tcaci		Drawing NM-P-3	
		Control STAS	L.Pozdirca			

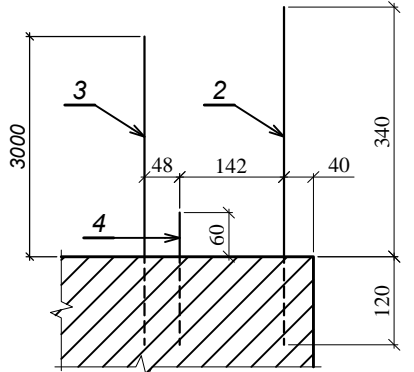
Formwork / Schema de cofraj  
Layout / Plan  
Scale / Scara 1:50



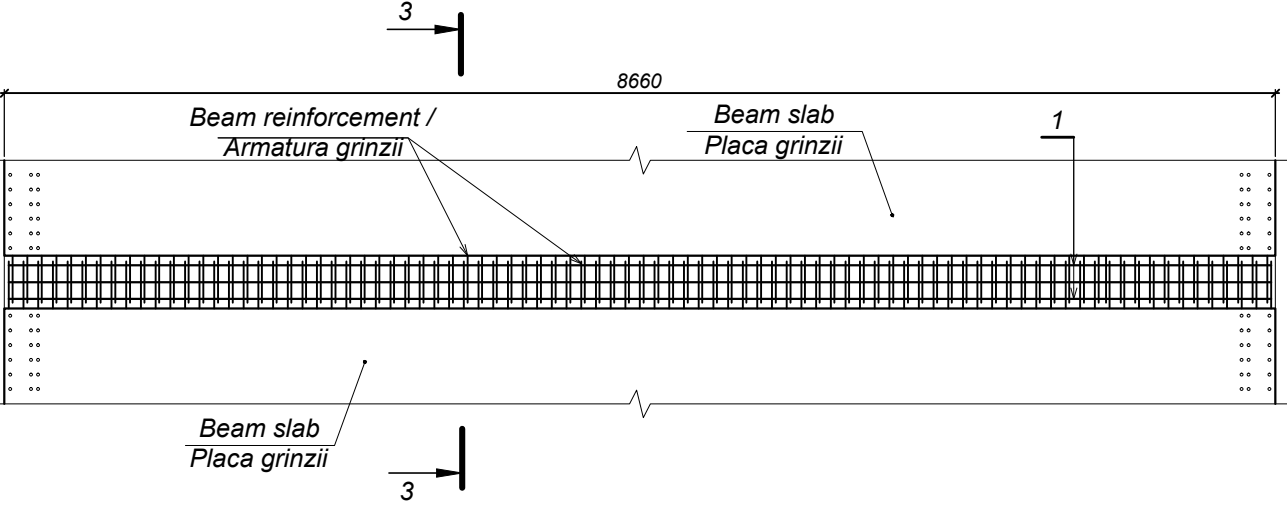
1-1  
Scale / Scara  
1:10



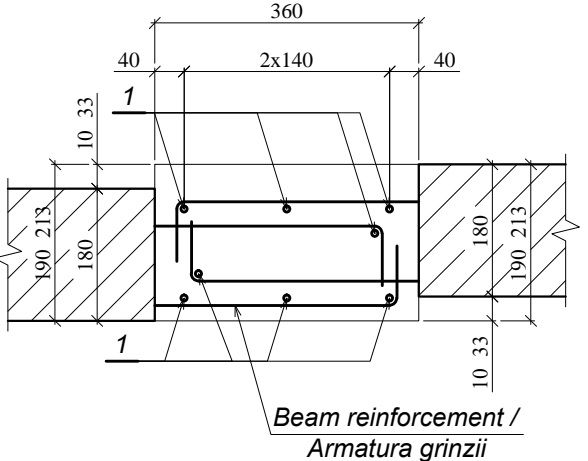
2-2



Reinforcement scheme / Schema de armare  
Layout / Plan



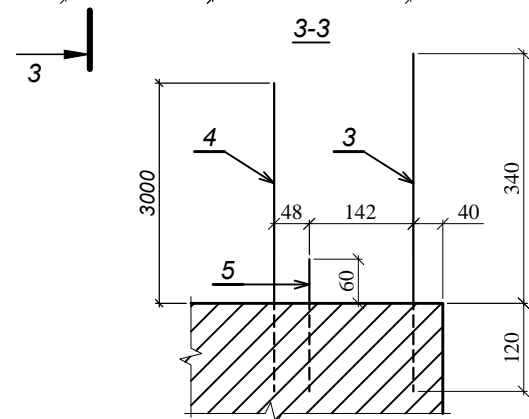
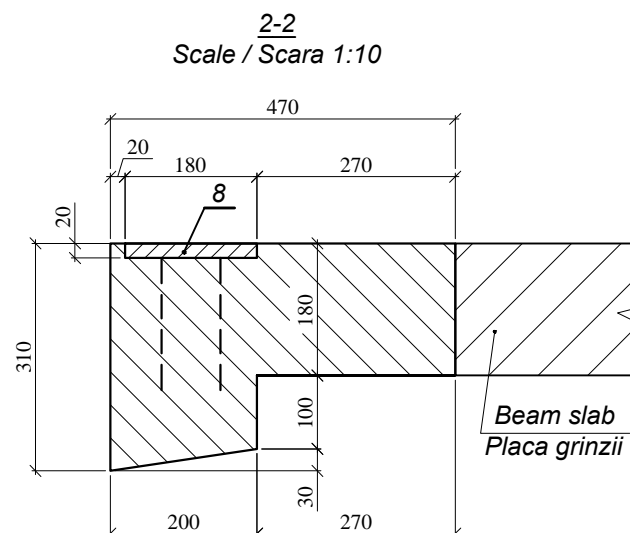
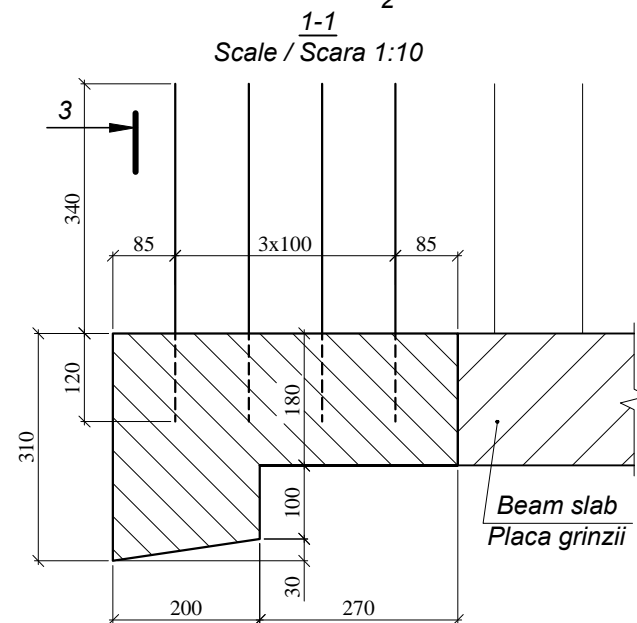
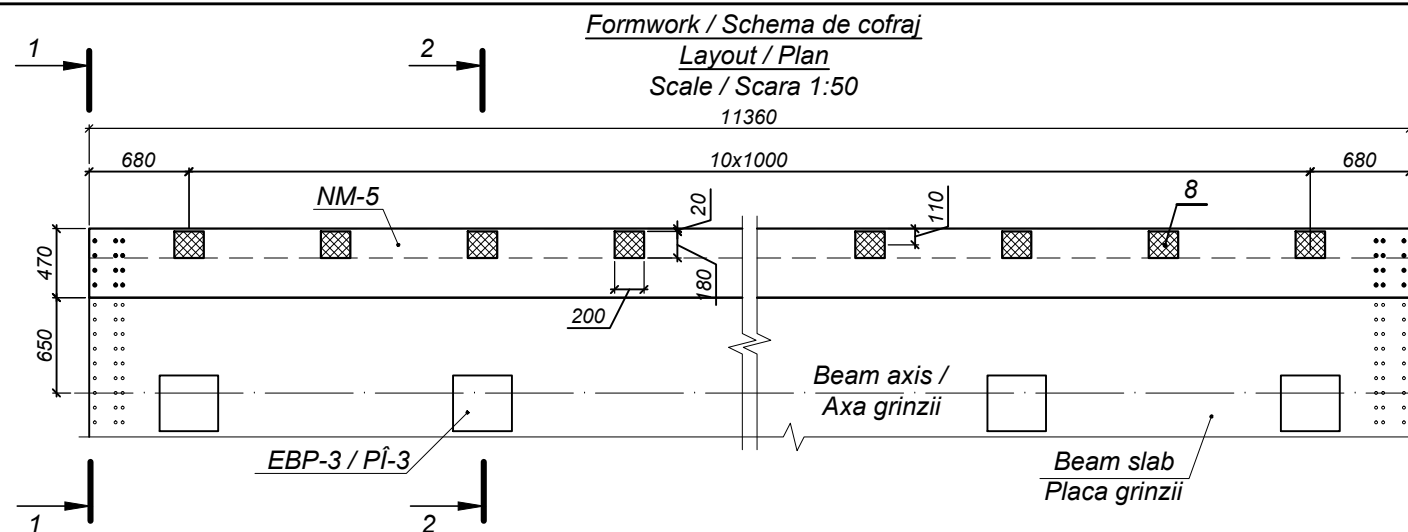
3-3



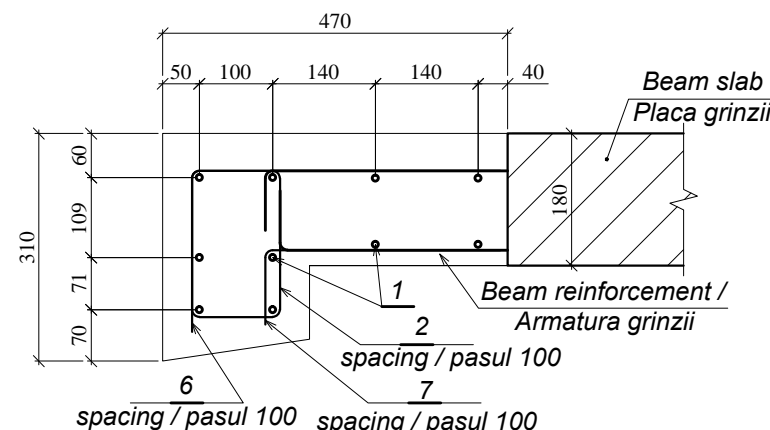
Quantity of steel per one element /  
Consumul de metal pentru un element, kg

Element name / Marca elementului	Reinforcement parts / Piese de armare				Total weight / Greutate totală
	Reinforcement type / Clasa armaturii				
	A-I				
	ГОСТ 5781-82*				
	Ø8	Ø10	Total		
NM-4	27,2	3,6	30,8	30,8	30,8

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support	Project			
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012
		Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 26 + 906</i> <i>Monolithic joint MJ-4 / Nodul monolit NM-4</i>	Checked	N.Tcaci		Drawing NM-P-4	
		Control STAS	L.Pozdirca			



**Reinforcement scheme / Schema de armare**  
**Scale / Scara 1:10**



**Table of parts / Tabela pieselor**

Pos. Poz.	Draft / Schiță
2	
6	
7	

**Specification / Specificația**

Format	Zona	Position / Pozitia	Document Number / Indicativ	Name / Denumirea	Quantity / Cantitatea	Note / Notă
<b>Parts / Piese</b>						
<b>A-I-8 GOCT 5781-82*</b> <b>Cm3nc3 GOCT 380-94</b>						
FP		1		<b>l=11300</b>	10	4,5 kg
FP		2		<b>l=760</b>	113	0,3 kg
<b>A-I-10 GOCT 5781-82*</b> <b>Cm3nc3 GOCT 380-94</b>						
FP		3		<b>l=460</b>	8	0,3 kg
FP		4		<b>l=420</b>	8	0,2 kg
FP		5		<b>l=180</b>	8	0,1 kg
<b>A-III-12 GOCT 5781-82*</b> <b>25Г2С GOCT 5781-82*</b>						
FP		6		<b>l=640</b>	113	0,6 kg
FP		7		<b>l=420</b>	113	0,4 kg
A4		8	2009/032D - 00.18.00	<b>Embedded base plate EBP-3 / Piesă înglobată PÎ-3</b>	11	6,9 kg
<b>Materials / Materiale</b>						
<b>GOCT 26633-91*</b>				<b>Concrete / Beton cl.B30, F200, W6</b>		1,22 m³

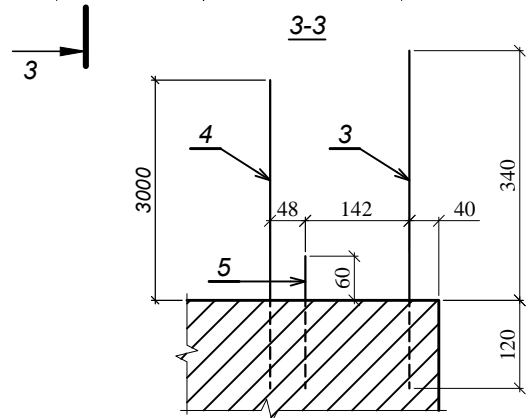
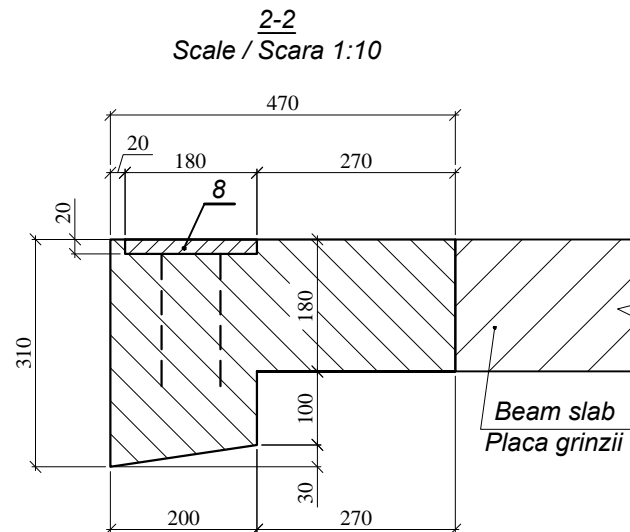
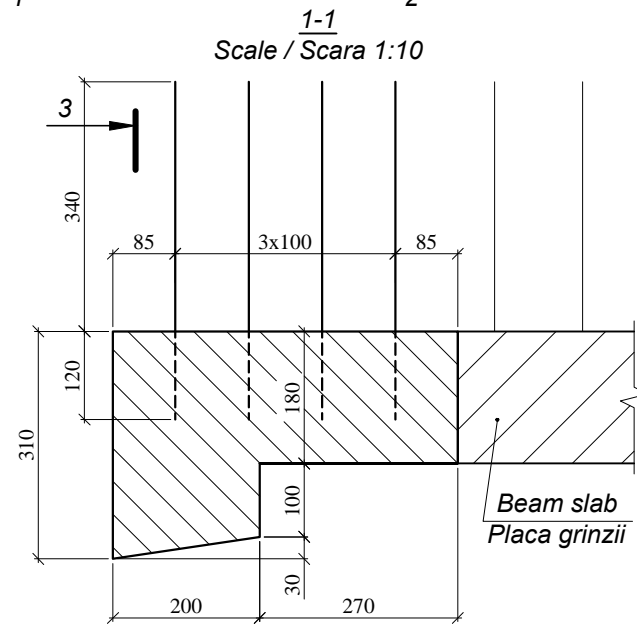
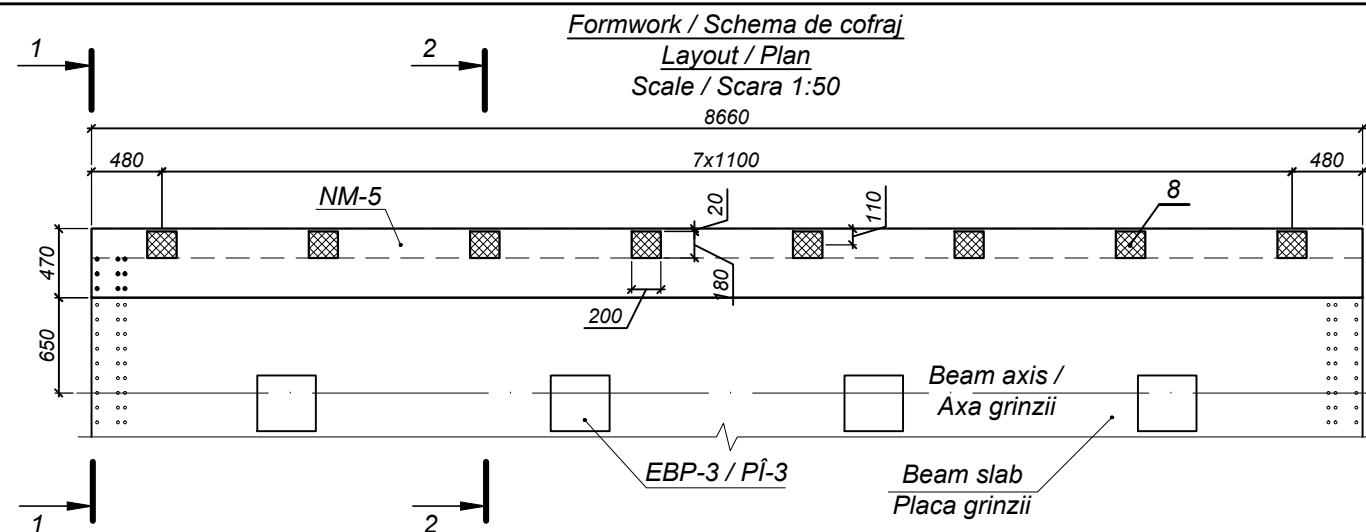
**Quantity of steel per one element / Consumul de metal pentru un element, kg**

Element name / Marca elementului	Reinforcement parts / Piese de armare						Embedded parts / Piese înglobate						Total weight / Greutate totală
	Reinforcement type / Clasa armaturii						Reinforc. type / Clasa armaturii		Steel type / Marca metalului				
	A-I			A-III			A-III		16Д				
	ГОСТ 5781-82*						ГОСТ 5781-82*		ГОСТ 103-76**				
	Ø8	Ø10	Total	Ø12	Total	Total	Ø16	Total	-20	Total	Total		
NM-5	78,9	4,8	83,7	113,0	113,0	196,7	13,2	13,2	62,7	62,7	75,9	272,6	

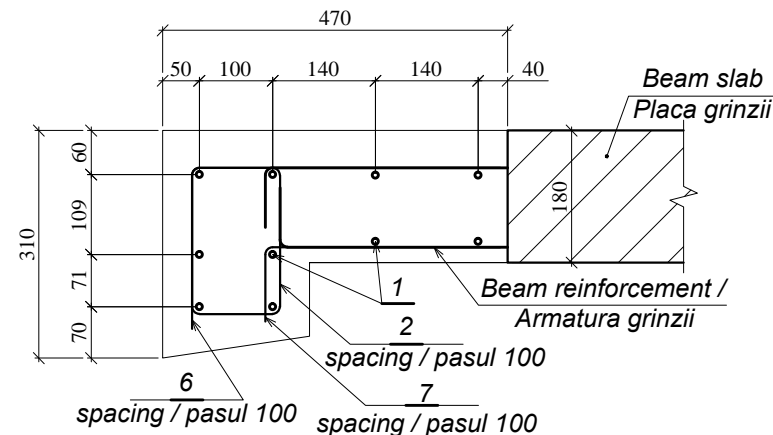
**Note / Notă:**

- Positions 6 and 7 shall be linked to beam slab cage by wiring /  
Pozitiile 6 și 7 se fixează de armatura plăcii grinzii prin legare cu sîrmă.

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road      Sector      Programme      Support      Project							
Roughton International  Universcons	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza		Date	04.2012
			Designed	A.Cecan		Scale	
	Drawing title <i>Bridge.Pod, Km 26 + 906</i> <i>Monolithic joint MJ-5 / Nodul monolit NM-5</i>		Checked	N.Tcaci		Drawing  NM-P-5	
			Control STAS	L.Pozdirca			



**Reinforcement scheme / Schema de armare**  
**Scale / Scara 1:10**



**Table of parts / Tabela pieselor**

Pos. Poz.	Draft / Schiță
2	
6	
7	

**Specification / Specificația**

Format	Zona	Position / Pozitia	Document Number / Indicativ	Name / Denumirea	Quantity / Cantitatea	Note / Notă
<b>Parts / Piese</b>						
<b>A-I-8 GOCT 5781-82*</b> <b>Cm3nc3 GOCT 380-94</b>						
FP		1		<b>I=8600</b>	<b>10</b>	<b>3,4 kg</b>
FP		2		<b>I=760</b>	<b>86</b>	<b>0,3 kg</b>
<b>A-I-10 GOCT 5781-82*</b> <b>Cm3nc3 GOCT 380-94</b>						
FP		3		<b>I=460</b>	<b>8</b>	<b>0,3 kg</b>
FP		4		<b>I=420</b>	<b>8</b>	<b>0,2 kg</b>
FP		5		<b>I=180</b>	<b>8</b>	<b>0,1 kg</b>
<b>A-III-12 GOCT 5781-82*</b> <b>25Г2С GOCT 5781-82*</b>						
FP		6		<b>I=640</b>	<b>86</b>	<b>0,6 kg</b>
FP		7		<b>I=420</b>	<b>86</b>	<b>0,4 kg</b>
A4		8	<b>2009/032D - 00.18.00</b>		<b>8</b>	<b>6,9 kg</b>
<b>Materials / Materiale</b>						
<b>GOCT 26633-91*</b>				<b>Concrete / Beton cl.B30, F200, W6</b>		<b>0,93 m³</b>

**Quantity of steel per one element / Consumul de metal pentru un element, kg**

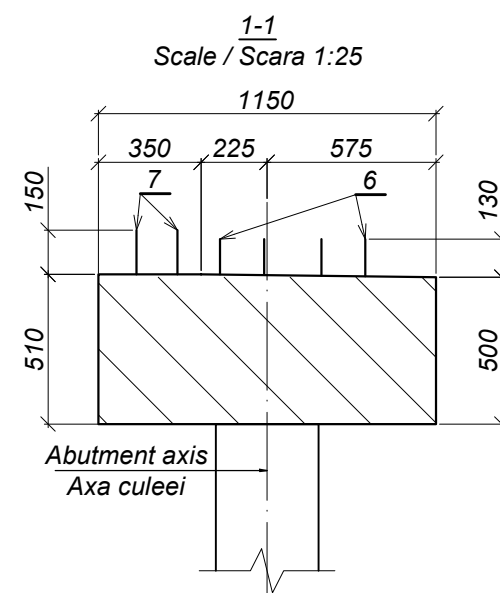
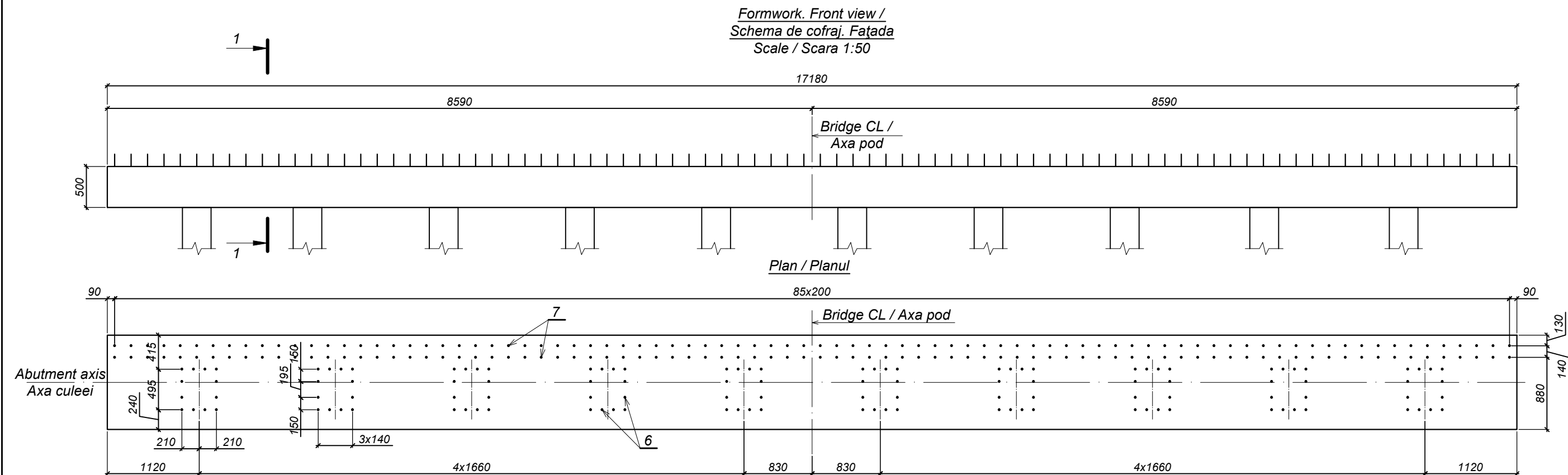
Element name / Marca elementului	Reinforcement parts / Piese de armare						Embedded parts / Piese înglobate						Total weight / Greutate totală
	Reinforcement type / Clasa armaturii						Reinforc. type / Clasa armaturii		Steel type / Marca metalului				
	A-I			A-III			A-III		16Д				
	ГОСТ 5781-82*						ГОСТ 5781-82*		ГОСТ 103-76**				
	Ø8	Ø10	Total	Ø12	Total	Total	Ø16	Total	-20	Total	Total		
NM-6	59,8	4,8	64,6	86,0	86,0	150,6	9,6	9,6	45,6	45,6	55,2	205,8	

**Note / Notă:**

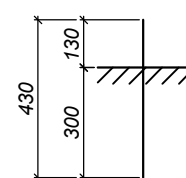
- Positions 6 and 7 shall be linked to beam slab cage by wiring /  
Pozitiile 6 și 7 se fixează de armatura plăcii grinzii prin legare cu sîrmă.

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road      Sector      Programme      Support      Project							
Roughton International	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza		Date	04.2012
			Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 26 + 906</i> <i>Monolithic joint MJ-6 / Nodul monolit NM-6</i>		Checked	N.Tcaci		Drawing NM-P-6	
			Control STAS	L.Pozdirca			

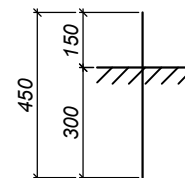




Position / Poz. 6  
Scale / Sc. 1:20



Position / Poz. 7  
Scale / Sc. 1:20

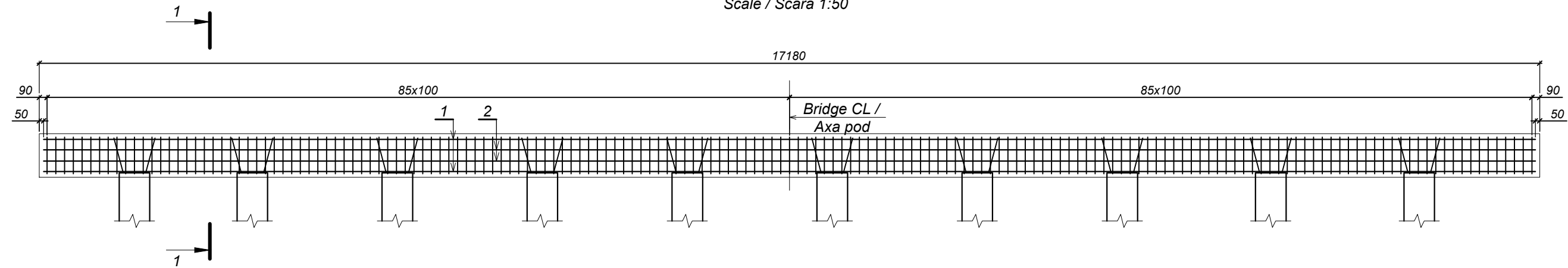


Quantity of steel per one element / Consumul de metal pentru un element, kg

Element name / Marca elementului	Reinforcement parts / Piese de armare							Total weight / Greutate totală
	Reinforcement type / Clasa armaturii							
	A-I				A-III			
	ГОСТ 5781-82*							
	Ø6	Ø8	Ø10	Total	Ø14	Ø20	Total	
CB -1 / R-1	5,6	650,1	41,2	696,9	146,0	611,8	757,8	1454,7

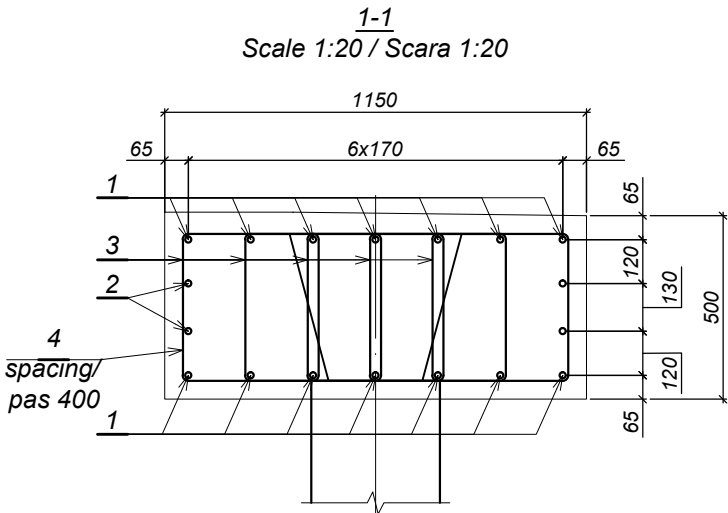
World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road		Sector	Programme	Support	Project	
Roughton International		Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza	Date 04.2012
Universcons		Drawing title <i>Bridge.Pod, Km 26 + 906</i> <i>Collar beam CB-1 /</i> <i>Rigla R-1</i>		Designed	A.Cecan	Scale
				Checked	N.Tcaci	Drawing R-P-1
				Control STAS	L.Pozdirca	

Reinforcement scheme / Schema de armare Front view / Fațada  
(pos. 6 and 7 conventionally not shown / poz.6 și 7 convențional nu sunt arătate)  
Scale / Scara 1:50



Specification / Specificația

Format	Zona	Position / Poziția	Document Number / Indicativ	Name / Denumirea	Quantity / Cantitatea	Note / Notă
				<u>Parts / Piese</u>		
FP		1		A-III-20 GOCT 5781-82*, l=17680 25Г2С GOCT 5781-82*	14	43,7 kg
FP		2		A-I-10 GOCT 5781-82*, l=17080 Cm3пc3 GOCT 380-94	4	10,3 kg
				A-I-8 GOCT 5781-82* Cm3пc3 GOCT 380-94		
FP		3		l=1720	855	0,7 kg
FP		4		l=3080	43	1,2 kg
FP		5		A-I-6 GOCT 5781-82*, l=25000 Cm3пc3 GOCT 380-94	1	5,6 kg
				A-III-14 GOCT 5781-82* 25Г2С GOCT 5781-82*		
FP		6		l=430	120	0,5 kg
FP		7		l=450	172	0,5 kg
				<u>Materials / Materiale</u>		
			GOCT 26633-91*	Concrete cl.B25, F200, W6 / Beton cl.B25, F200, W6		9,91 m³



Collar beam and pile connection joint /  
Nod de îmbinare a riglei cu pilotul  
Scale 1:20 / Scara 1:20

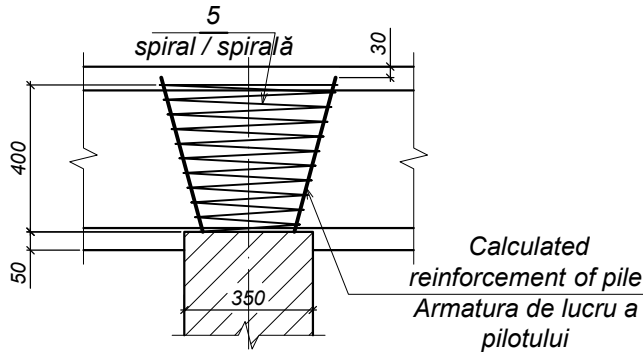


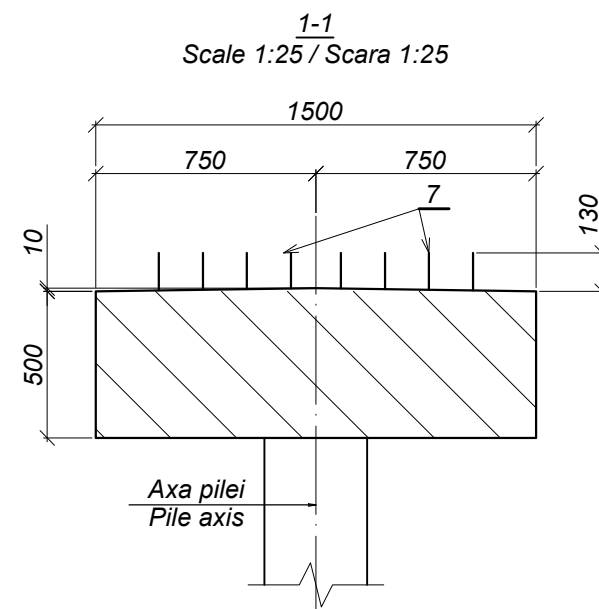
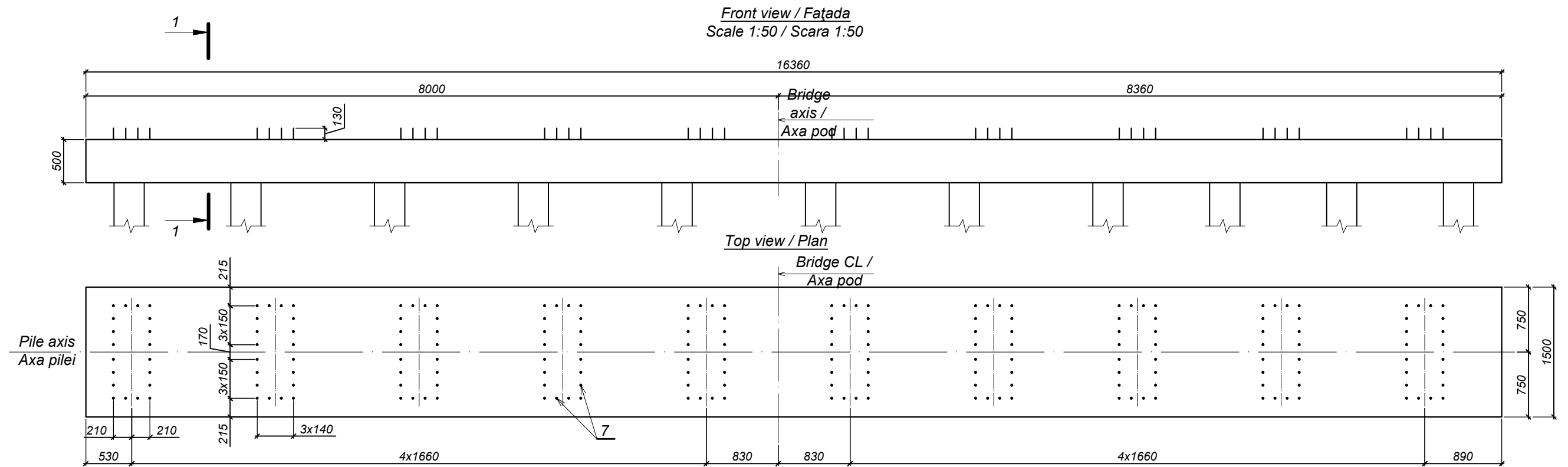
Table of parts / Tabela pieselor

Pos./ Poz.	Draft / Schiță
3	
4	

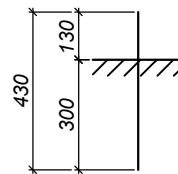
Note / Notă:

- Protection layer / Stratul de protecție - 50 mm.
- Length of position 1 implies the need to splice reinforcement bars by welding according to the type of splicing C23-P3 GOCT 14098-91 / Lungimea poziției 1 include necesitatea îmbinării barelor de armatură prin sudare conform tipului de îmbinare C23-P3 GOCT 14098-91
- For position 6, 7 see formwork scheme / Pentru poziția 6, 7 vezi schema de cofraj

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support	Project			
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012
		Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 26 + 906</i> <i>Collar beam CB-1. Reinforcement scheme.</i> <i>Specification</i> <i>Rigla R-1. Schema de armare.Specificația</i>	Checked	N.Tcaci		Drawing R-P-2	
		Control STAS	L.Pozdirca			



*Pos. 7 / Poz. 7*  
Scale 1:20 / Scara 1:20

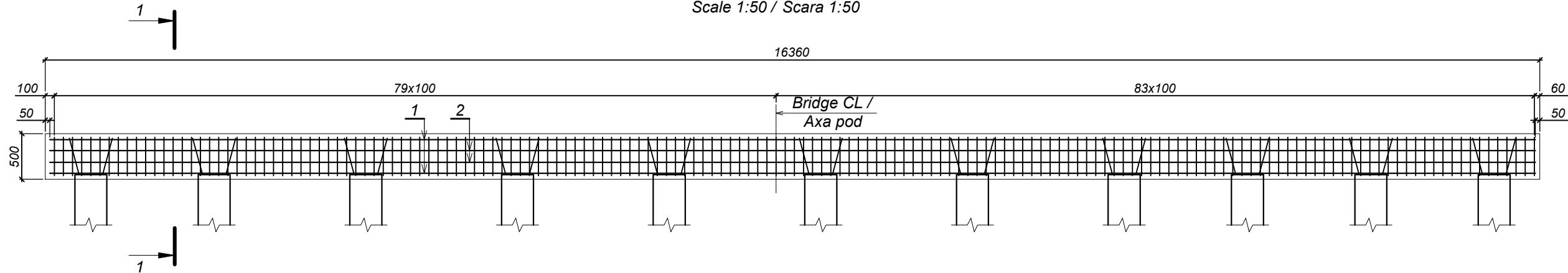


Quantity of steel per one element, kg /  
Consumul de metal pentru un element, kg

Element type / Marca elementului	Reinforcing bars. Piese de armare							Total weight / Greutate totală
	Reinforcement type / Clasa armaturii							
	A-I				A-III			
	ГОСТ 5781-82*							
	Ø6	Ø8	Ø10	Total	Ø14	Ø20	Total	
CB-2 / R-2	6,1	746,1	40,0	792,2	100,0	750,6	850,6	1642,8

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012
		Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 26 + 906</i> <i>Collar beam CB-2 / Rigla R-2</i>	Checked	N.Tcaci		Drawing R-P-3	
		Control STAS	L.Pozdirca			

Reinforcement scheme / Schema de armare  
Front view / Fațada  
(position 7 not shown) / (poz.7 convențional nu sunt arătată)  
Scale 1:50 / Scara 1:50

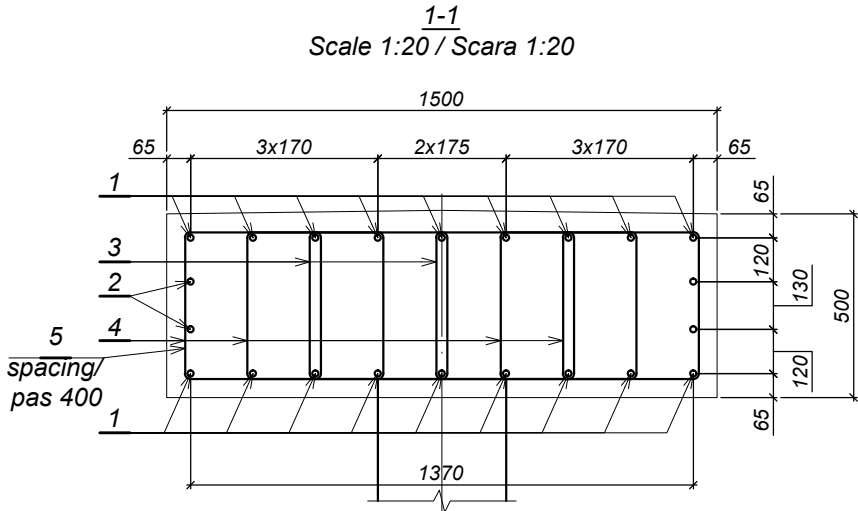


Specification / Specificația

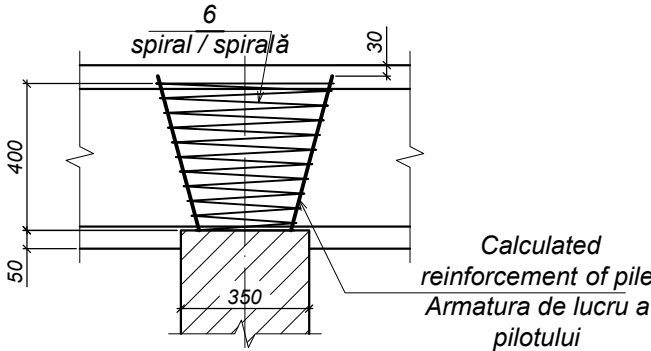
Format	Zona	Position / Poziția	Document Number / Indicativ	Name / Denumirea	Quantity / Cantitatea	Note / Notă
				<b>Parts / Piese</b>		
FP		1		A-III-20 GOCT 5781-82*, l=16860 25Г2С GOCT 5781-82*	18	41,7 kg
FP		2		A-I-10 GOCT 5781-82*, l=16260 Cm3пc3 GOCT 380-94	4	10,0 kg
				A-I-8 GOCT 5781-82* Cm3пc3 GOCT 380-94		
FP		3		l=1730	326	0,7 kg
FP		4		l=1720	652	0,7 kg
FP		5		l=3780	41	1,5 kg
FP		6		A-I-6 GOCT 5781-82*, l=27500 Cm3пc3 GOCT 380-94	1	6,1 kg
				A-III-14 GOCT 5781-82* 25Г2С GOCT 5781-82*		
FP		7		l=430	200	0,5 kg
				<b>Materials / Materiale</b>		
			GOCT 26633-91*	Concrete cl.B25, F200, W6 / Beton cl.B25, F200, W6		12,32 m³

Table of parts / Tabela pieselor

Pos./ Poz.	Draft / Schiță
3	
4	
5	



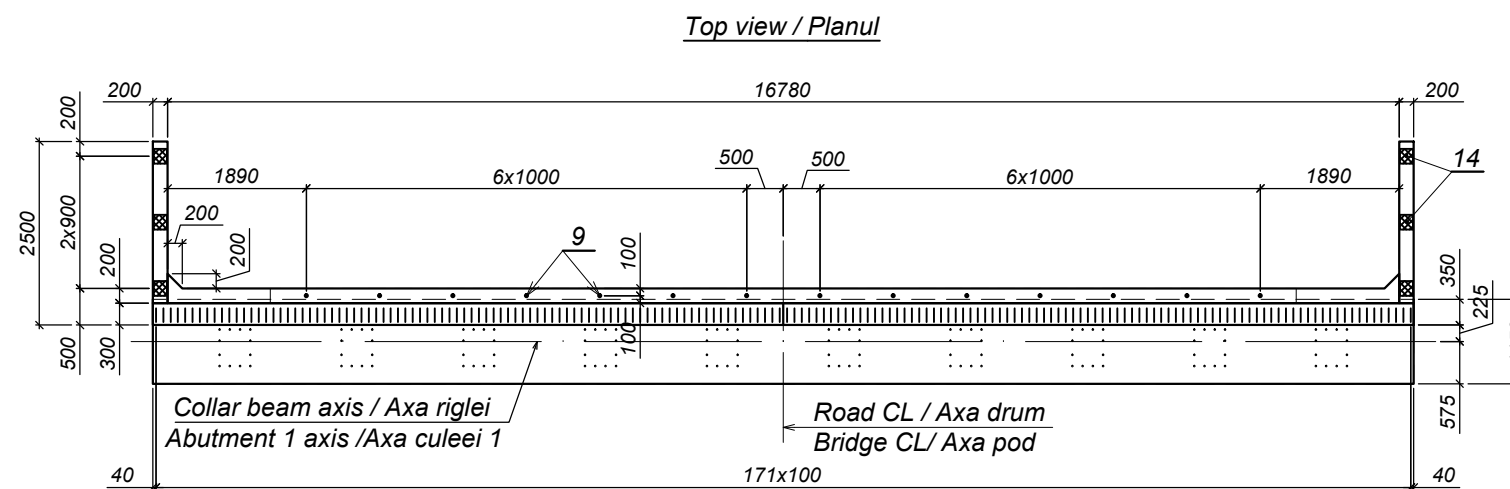
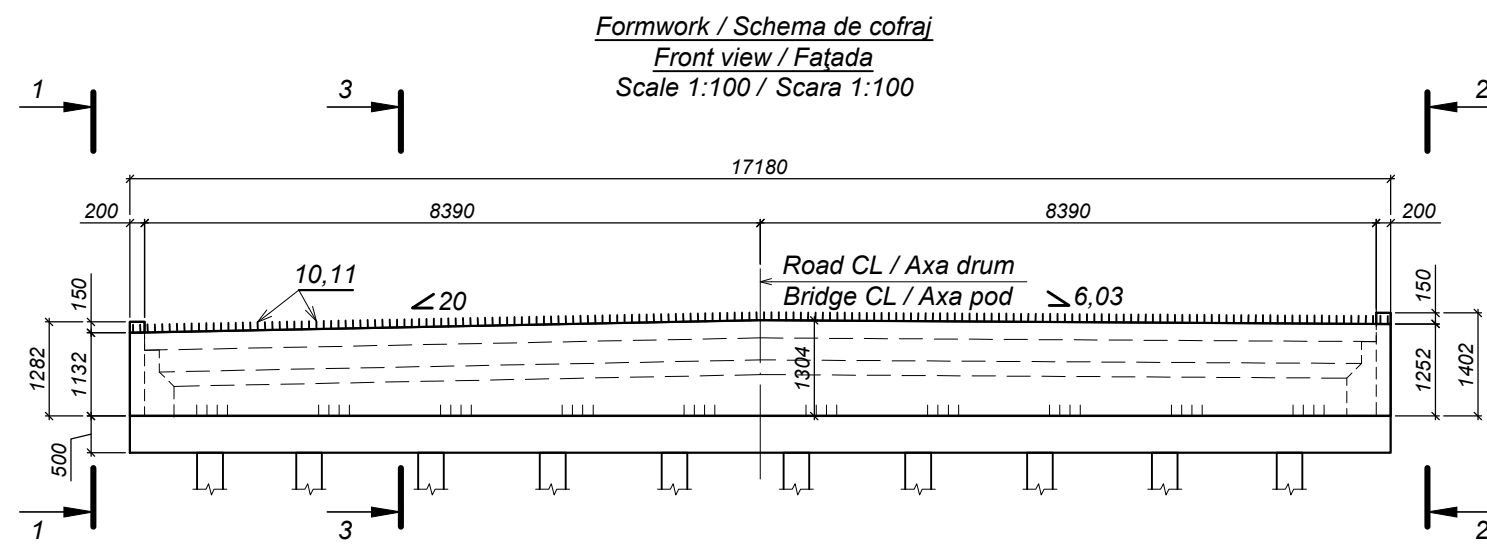
Collar beam and pile connection joint /  
Nod de îmbinare a riglei cu pilotul  
Scale 1:20 / Scara 1:20



Note / Notă:

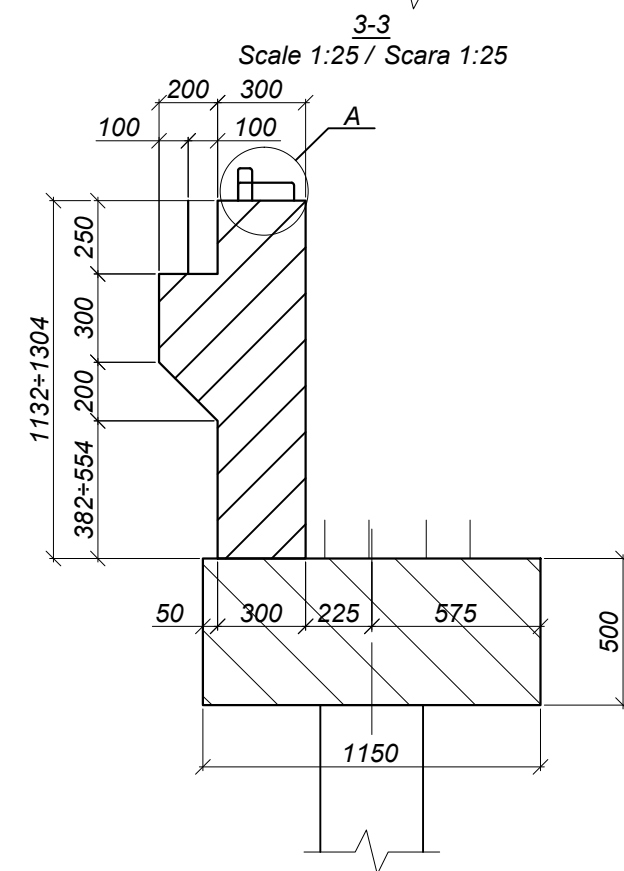
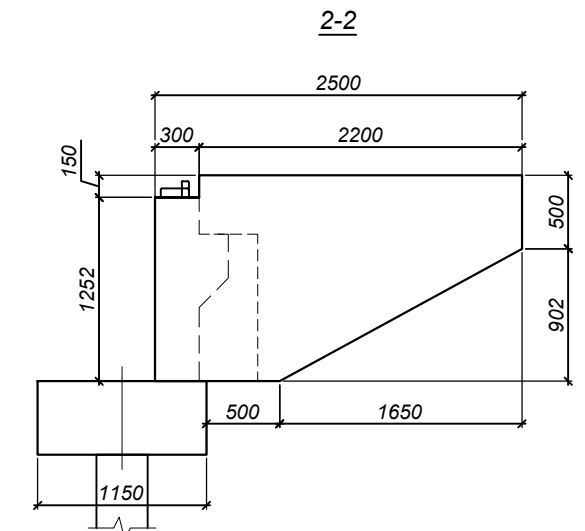
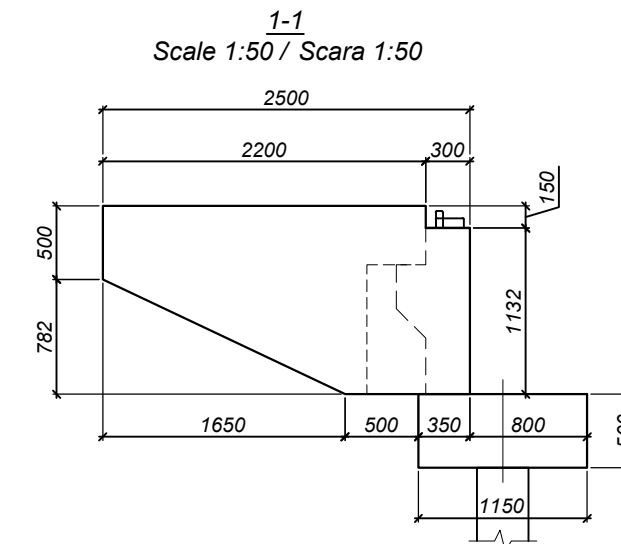
- Protection layer / Stratul de protecție - 50 mm.
- Length of position 1 implies the need to splice reinforcement bars by welding according to the type of splicing C23-P3 GOCT 14098-91 / Lungimea poziției 1 include necesitatea îmbinării barelor de armatură prin sudare conform tipului de îmbinare C23-P3 GOCT 14098-91
- For position 7 see formwork scheme / Pentru poziția 6, 7 vezi schema de cofraj

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme		Support Project					
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012	
		Designed	A.Cecan		Scale		
Universcons	Drawing title <i>Bridge.Pod, Km 26 + 906</i> <i>Collar beam CB-2. Reinforcement scheme.</i> <i>Specification</i> <i>Rigla R-2. Schema de armare.Specificația</i>	Checked	N.Tcaci		Drawing R-P-4		
		Control STAS	L.Pozdirca				

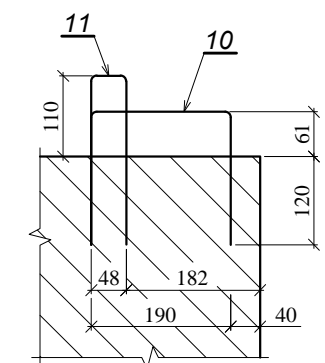


Quantity of steel per one element / Consumul de metal pentru un element, kg

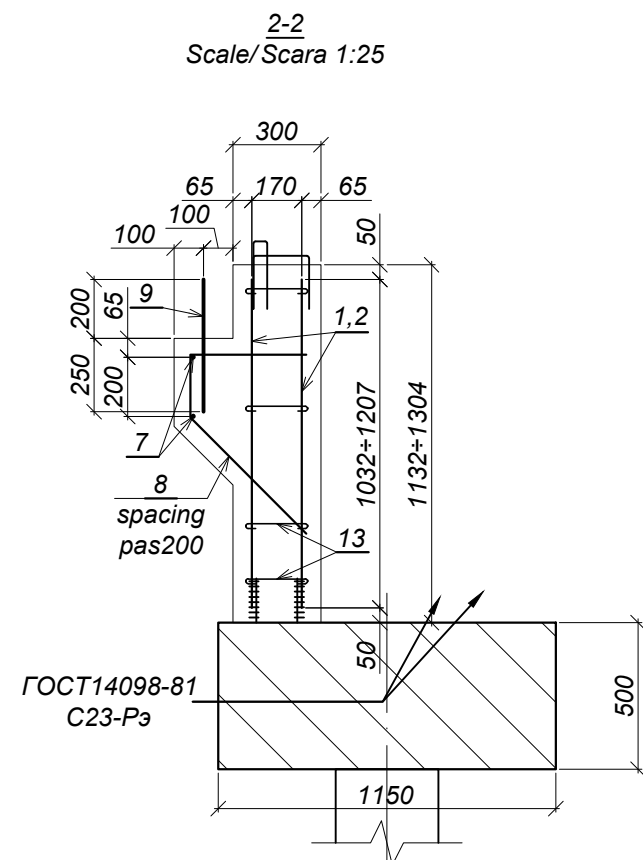
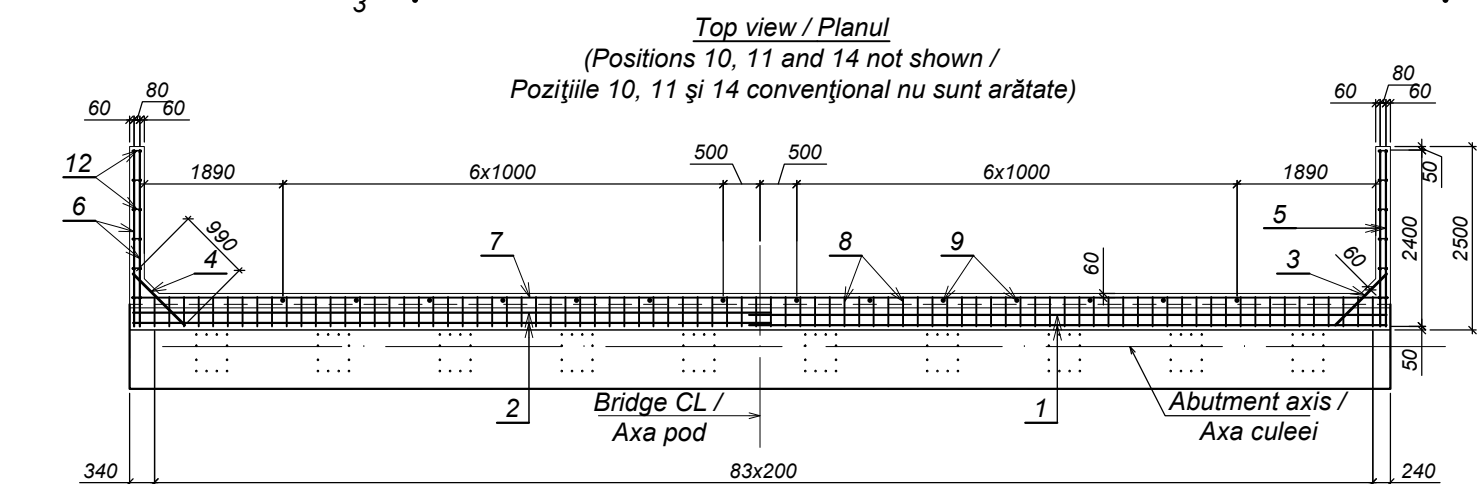
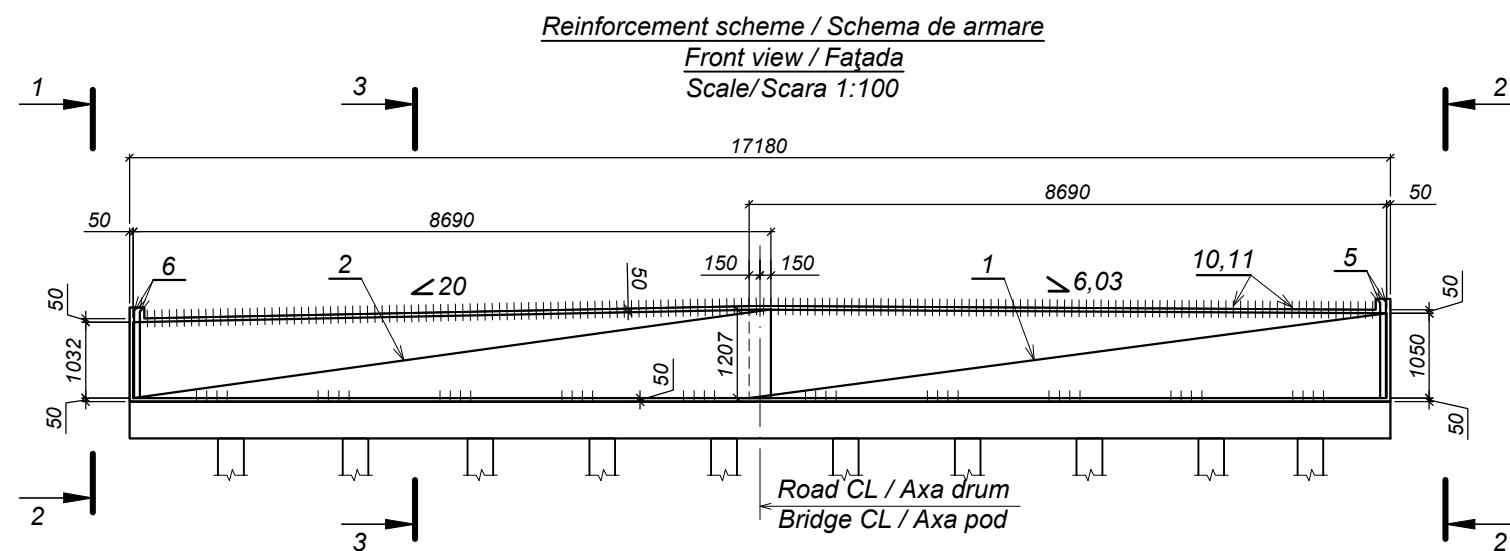
Element type / Marca elementulu	Reinforcement parts / Piese de armare									Embedded parts / Piese înglobate					Total weight / Greutate totală
	Reinforcement type / Clasa armaturii								Total	Reinforcement type / Clasa armaturii		Steel type		Total	
	A-I				A-III					A-III		16Д			
	ГОСТ 5781-82*									ГОСТ 5781-82*		ГОСТ 103-76**			
	Ø6	Ø10	Ø25	Total	Ø10	Ø12	Ø14	Total		Ø16	Total	-20	Total		
PW-1 / ZG-1	32,9	103,2	25,2	161,3	210,5	84,0	241,8	536,3	697,6	7,2	7,2	34,2	34,2	41,4	739,0



**Joint / Nodul A**  
 Scale 1:10 / Scara 1:10



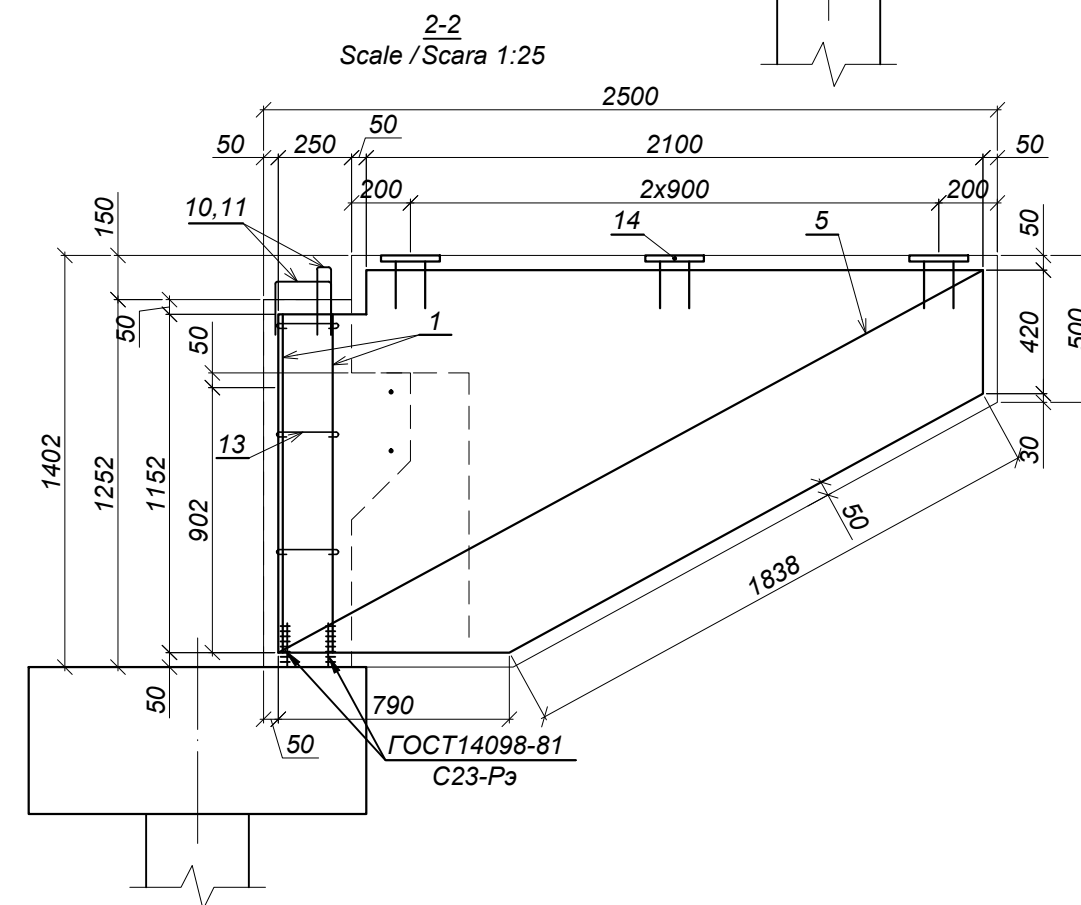
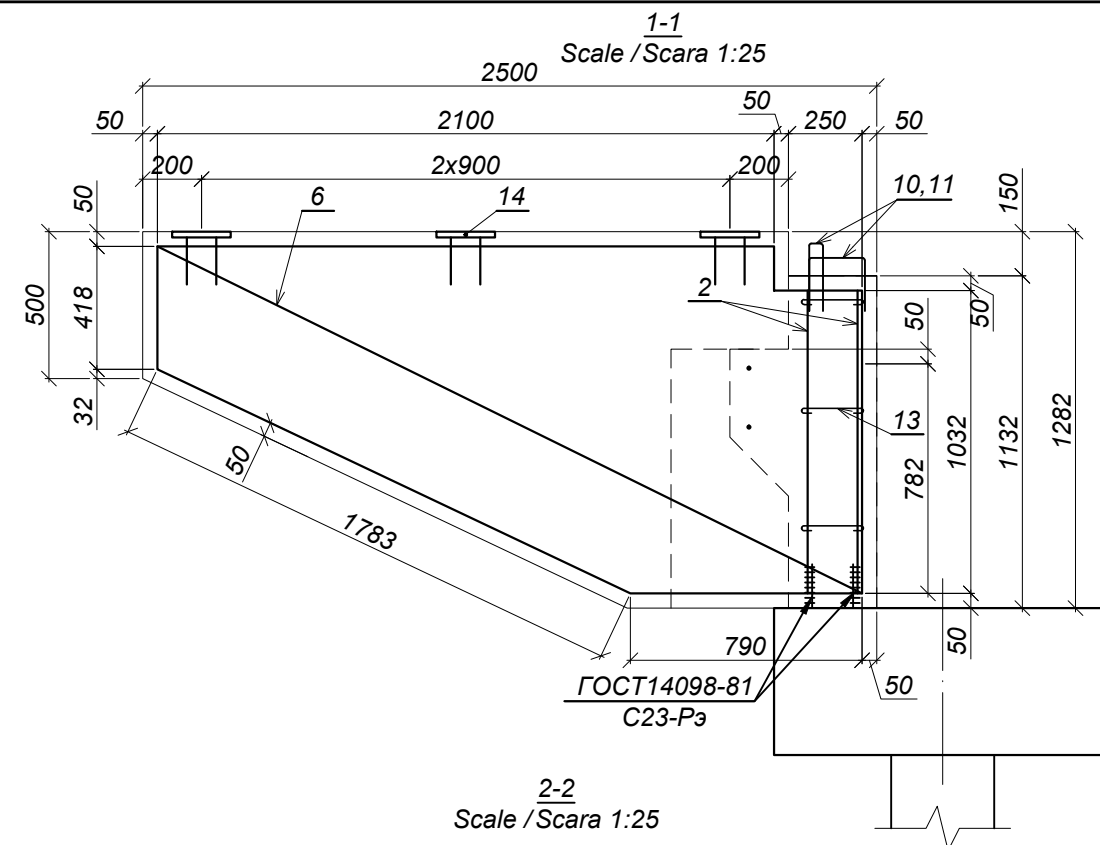
World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road      Sector      Programme      Support      Project							
Roughton International    Universcons	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza		Date	04.2012
			Designed	A.Cecan		Scale	
	Drawing title <i>Bridge.Pod, Km 26 + 906</i> <i>Protection wall PW-1,2 / Zid de gardă ZG-1,2</i>		Checked	N.Tcaci		Drawing  ZG-P-3	
			Control STAS	L.Pozdirca			



Note / Notă:  
1. Protection layer / Strat de protecție - 50 mm

Table of parts / Tabela pieselor

Pos./ Poz.	Draft / Schiță
8	
10	
11	
12	
13	



World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector		Programme Support		Project		
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012
		Designed	A.Cecan		Scale	
Universcons	Drawing title Bridge.Pod, Km 26 + 906 Protection wall PW-1,2. Reinforcement scheme Zid de gardă ZG-1,2. Schema de armare	Checked	N.Tcaci		Drawing ZG-P-3	
		Control STAS	L.Pozdirca			

Specification / Specificația						
Format	Zona	Position / Poziția	Document Number / Indicativ	Name / Denumirea	Quantity / Cantitatea	Note / Notă
				<u>Assembly elements</u> <u>Elemente de asamblare</u>		
FP		1	ГОСТ23279-85	Steel grid 4C <small>14 A-III-200</small> Plasă de oțel 4C <small>10 A-III-200</small> 120,7x869	2	10,25 m <sup>2</sup> 93,6 kg
		2	ГОСТ23279-85	Steel grid 4C <small>14 A-III-200</small> Plasă de oțel 4C <small>10 A-III-200</small> 120,7x869	2	9,73 m <sup>2</sup> 88,9 kg
		3	ГОСТ23279-85	Steel grid 4C <small>10 A-III-200</small> Plasă de oțel 4C <small>10 A-III-200</small> 90,2x99	1	0,89 m <sup>2</sup> 5,5 kg
		4	ГОСТ23279-85	Steel grid 4C <small>10 A-III-200</small> Plasă de oțel 4C <small>10 A-III-200</small> 78,2x99	1	0,77 m <sup>2</sup> 4,8 kg
		5	ГОСТ23279-85	Steel grid 4C <small>10 A-III-200</small> Plasă de oțel 4C <small>10 A-III-200</small> 240x120	2	2,37 m <sup>2</sup> 14,6 kg
		6	ГОСТ23279-85	Steel grid 4C <small>10 A-III-200</small> Plasă de oțel 4C <small>10 A-III-200</small> 240x118,2	2	2,16 m <sup>2</sup> 13,3 kg
				<u>Parts / Piese</u>		
		7		A-III-10 ГОСТ 5781-82*, l=17120 25Г2С ГОСТ 5781-82*	2	10,6 kg
		8		A-III-12 ГОСТ 5781-82*, l=1170 25Г2С ГОСТ 5781-82*	84	1,0 kg
		9		A-I-25 ГОСТ 5781-82*, l=450 Cm3пс3 ГОСТ 380-94	14	1,8 kg
				A-I-10 ГОСТ 5781-82* Cm3пс3 ГОСТ 380-94		
		10		l=550	172	0,3 kg
		11		l=510	172	0,3 kg
		12		A-I-6 ГОСТ 5781-82*, l=200 Cm3пс3 ГОСТ 380-94	66	0,05 kg
		13		A-I-6 ГОСТ 5781-82*, l=350 Cm3пс3 ГОСТ 380-94	296	0,1 kg
		14	2009/032D - 00.18.00	Embedded base plate EBP-3 / Piesă înglobată PÎ-3	6	6,9 kg
				<u>Materials / Materiale</u>		
			ГОСТ 26633-91*	Concrete cl.B25, F200, W6 / Beton cl.B25, F200, W6		9,96 m <sup>3</sup>

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road		Sector	Programme	Support	Project		
Roughton International		Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012
			Designed	A.Cecan		Scale	
Universcons		Drawing title <i>Bridge.Pod, Km 26 + 906</i> <i>Protection wall PW-1,2. Specification /</i> <i>Zid de gardă ZG-1,2. Specificația</i>	Checked	N.Tcaci		Drawing ZG-P-3	
			Control STAS	L.Pozdirca			

List of executive drawings of the main set. Lista seturilor de bază a planșelor de execuție

Number Indicativ	Item / Denumirea	Note Notă
2012/045D	Bridge /Lucrări de artă	

List of executive drawings of the main set. Lista planșelor de execuție a setului de bază 2012/045D

Drawing Planșa	Item / Denumirea	Note Notă
1	General data / Date generale	
2	Bridge general view. Front view / Dispoziție generală a podului. Fațada.	
3	Bridge general view. Layout / Dispoziția generală a podului. Planul	
4	Bridge general view. Section 1-1 and 2-2 / Dispoziția generală a podului. Secțiunea 1-1 și 2-2	
5	General view of abutment 1 / Dispoziția generală a culeei 1	
6	General view of pile 2 / Dispoziția generală a pilei 2	
7	Approach to bridge at abutment 1 and 4 / Racordarea podului cu drumul la culeea 1 și 4	
8	Consolidation of cones / Consolidarea semiconurilor	
9	Monolithic joint MJ-1 / Nodul monolit NM-1	
10	Monolithic joint MJ-2 / Nodul monolit NM-2	
11	Monolithic joint MJ-3 / Nodul monolit NM-3	
12	Collar beam CB-1 / Rigla R-1	
13	Collar beam CB-1. Reinforcement scheme. / Rigla R-1. Schema de armare.	
14	Collar beam CB-2 / Rigla R-2	
15	Collar beam CB-2. Reinforcement scheme. / Rigla R-2. Schema de armare.	
16	Protection wall PW-1 / Zid de gardă ZG-1	
17	Protection wall PW-1. Reinforcement scheme / Zid de gardă ZG-1. Schema de armare	
18	The drawings RD-P, PSCV-P, PSP-P, NIPR-P, SS-P, CC-P, CP-P are common for all bridges Desenele RD-P, PSCV-P, PSP-P, NIPR-P, SS-P, CC-P, CP-P se refera la toate podurile	See bridge km 36 + 893 Vezi podul km 36 + 893

Notă:

1. Normele de proiectare: CHuП 2.05.03-84 "Мосты и Трубы", CHuП 2.05.02-85\* "Автомобильные дороги".
2. Categoria drumului auto - III. Gabaritul podului G-13,50+2x0,75 m.
3. Sarcina de calcul: A11 și HK-80.
4. Seismicitatea de calcul a construcției - 7 grade.
5. Sistem de cote Baltic. Drept bază servesc reperul Rp30 - 119.913 la PC229+447 și Rp31 - 115,607 la PC309+598 ,(borna de marcare a kilometrajului, amplasată pe acostament din partea dreaptă, direcție după pichetaj).
6. Fazele determinante de verificare și recepție a lucrărilor de reparație:
  - Predarea trasării, amplasamentului și a bornelor de reper;
  - Reparația infrastructurii (culeea 1, pila 2, pila 3, culeea 4);
  - Execuția suprastructurii și căii podului;
  - Execuția racordării podului cu terasamentul.
7. Genul de lucrări determinate ca lucrări ascunse ce urmează a fi verificate și recepționate cu consemnarea rezultatelor verificării în procese verbale de verificare a calității:
  - Trasarea și poziționarea axelor și elementelor;
  - Temeliile și fundațiile;
  - Examinarea materialelor, semifabricatelor și elementelor la intrare;
  - Armarea și betonarea elementelor, cofrajele;
  - Sudarea elementelor metalice.

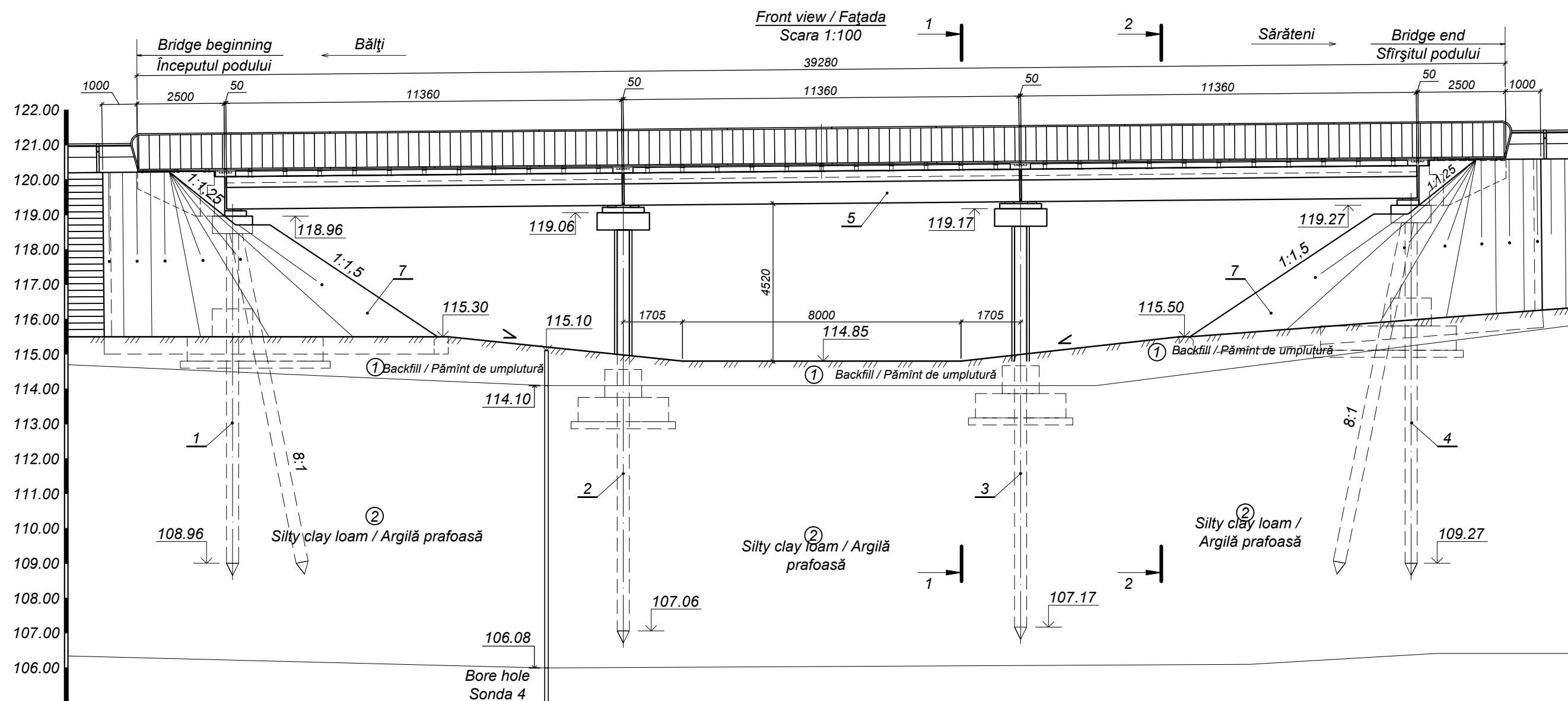
Document Number Indicativ	List of reference documents / Lista documentelor de referință și anexate Item / Denumirea	Note Notă
	Reference documents / Documente de referință	
Серия 3.500.1-1.93	Сваи забивные железобетонные цельные сплошного квадратного сечения для опор мостов .	Piles /Piloți
Серия 3.503.1-81 Выпуски 1-1, 3-1	Пролетные строения сборные ж. б. длиной 12, 15, 18, 21, 24 и 33м из балок таврового сечения с напрягаемой арматурой для мостов и путепроводов	Pedestrian guardrail / Parapet de siguranță și pietonal
Серия 3.503.1-73 Выпуски 1	Пролетные строения сборные ж. б. длиной 12, 15, 18, 21,24 и 33м из балок таврового сечения с ненапрягаемой арматурой для мостов и путепроводов	Beams /Grinzi
Серия 3.503.1-101 Выпуск 0, 1	Изоляция проезжей части, перекрытие деформационных швов ж. б. строений длиной до 33м автодорожных мостов и путепроводов	Bridgeway parts / Elementele căii podului
ALGA Bearing s and Expansion Joints	Expansion joints ALGAFLEX T instalation Procedure, 10.10.2005	Joint filling elements /Elemente de acoperire a rosturilor
Серия 3.501-156 Выпуски 0, 1	Укрепление русел, конусов и откосов насыпи у малых и средних мостов и водопропускных труб.	Surface protection / Protecția suprafețelor
BCH 24-88	Технические правила ремонта и содержания автомобильных дорог	Reinforced concrete repair /Reparația betonului armat
BCH 32-81	Инструкция по устройству гидроизоляции конструкций мостов и труб на железных, автомобильных и городских дорогах	Waterproofing of concrete surfaces/Izolarea suprafețelor de beton
CHuП 3.06.04-91	Мосты и трубы	Bridge, culvert works / Executarea lucrărilor

The design is elaborated in accordance with the standards and requirements existing design rules /  
Proiectul este elaborat în conformitate cu cerințele normelor și regulilor în construcții în vigoare  
Chief engineer /  
Inginer șef proiect compartiment

A. Cekan

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012	
		Designed	A.Cecan		Scale		
Universcons	Drawing title <i>Bridge.Pod, Km 30 + 091</i> <i>General data / Date generale</i>	Checked	N.Tcaci		Drawing	DG-P-1	
		Control STAS	L.Pozdirca				

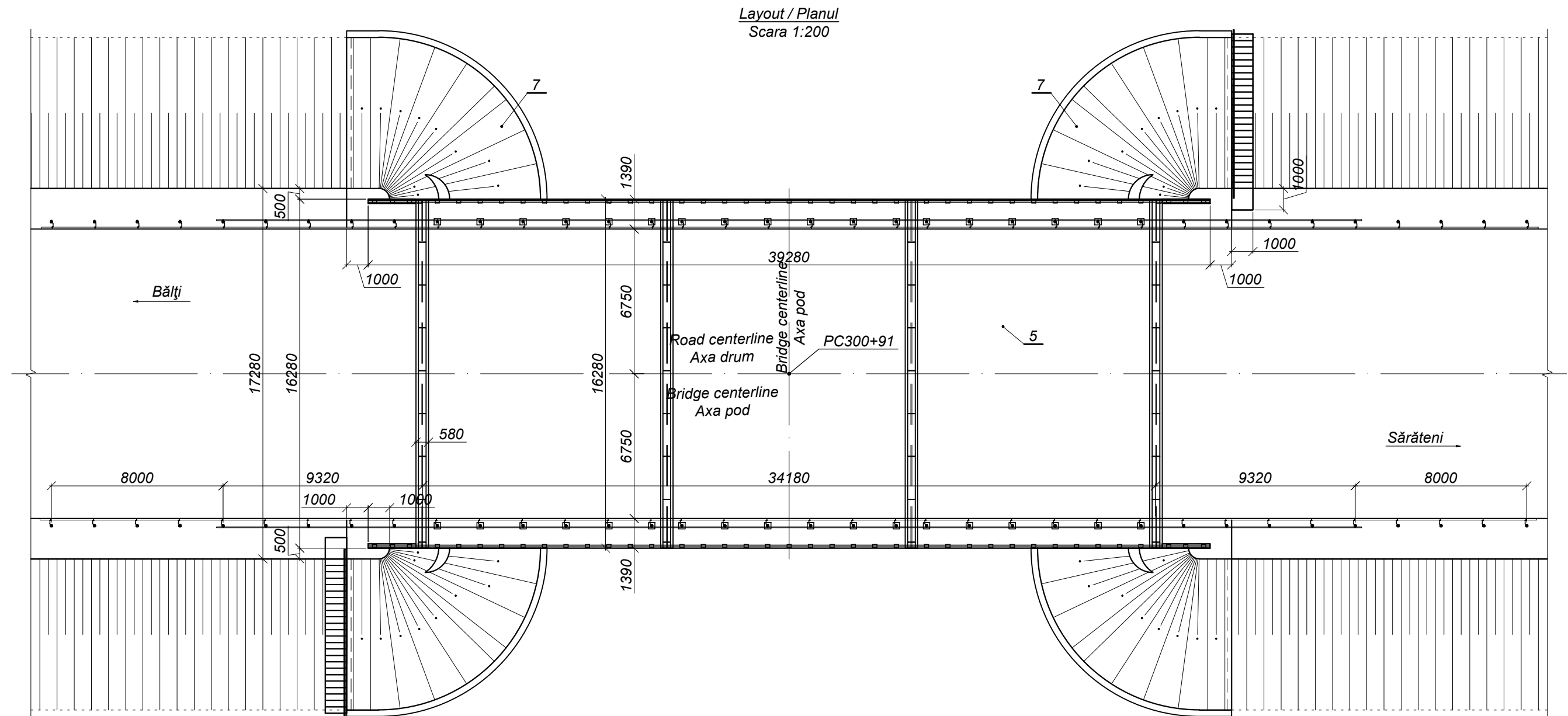




Design data Date proiect	Gradient/Declivitatea, %	9,1						
	Distance/Distanța, m	34.18						
Site data Date teren	Level of carriage way axis / Cota pe axa părții carosabile, m	120.41		120.51		120.62		120.72
	Ground level of carriage way axis / Cota teren pe axa părții carosabile, m	115.45	115.50	114.80	114.85	114.80	115.50	115.98
	Distance / Distanța, m		6,07	5,33	5,71	5,71	4,85	6,52

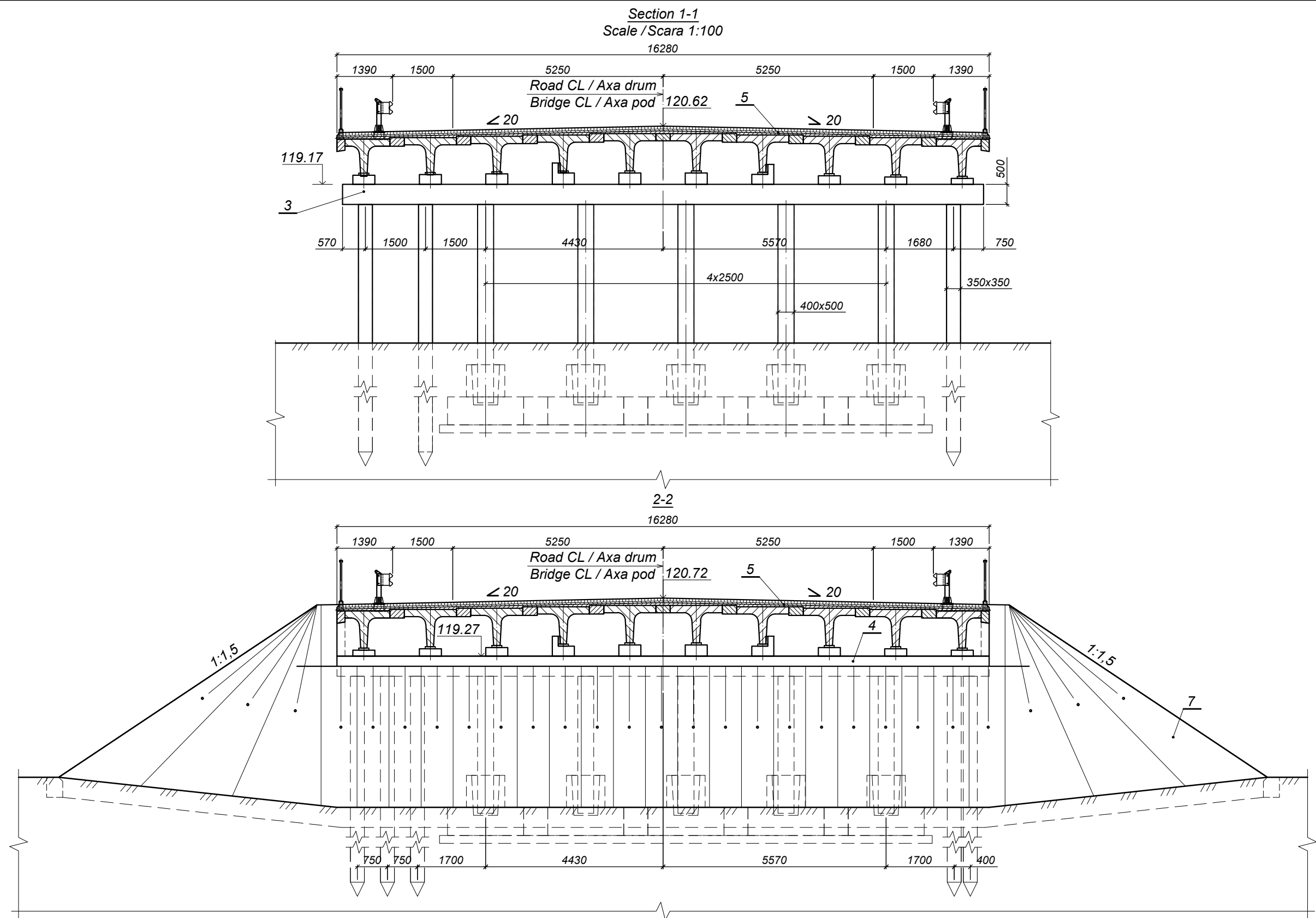
- 1 Abutment/Culeea-1
- 2 Pile/Pila-2
- 3 Pile/Pila-3
- 4 Abutmen/Culeea-4
- 5 Suprastructure and bridge's corriageway/Suprastuctura si calea podului
- 7 Consolidation of cones/Consolidarea semiconurilor

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road      Sector      Programme      Support      Project							
Roughton International	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza		Date	04.2012
			Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 30 + 091</i> <i>Bridge general view. Front view /</i> <i>Dispoziție generală a podului. Fațada.</i>		Checked	N.Tcaci		Drawing F-P-3	
			Control STAS	L.Pozdirca			



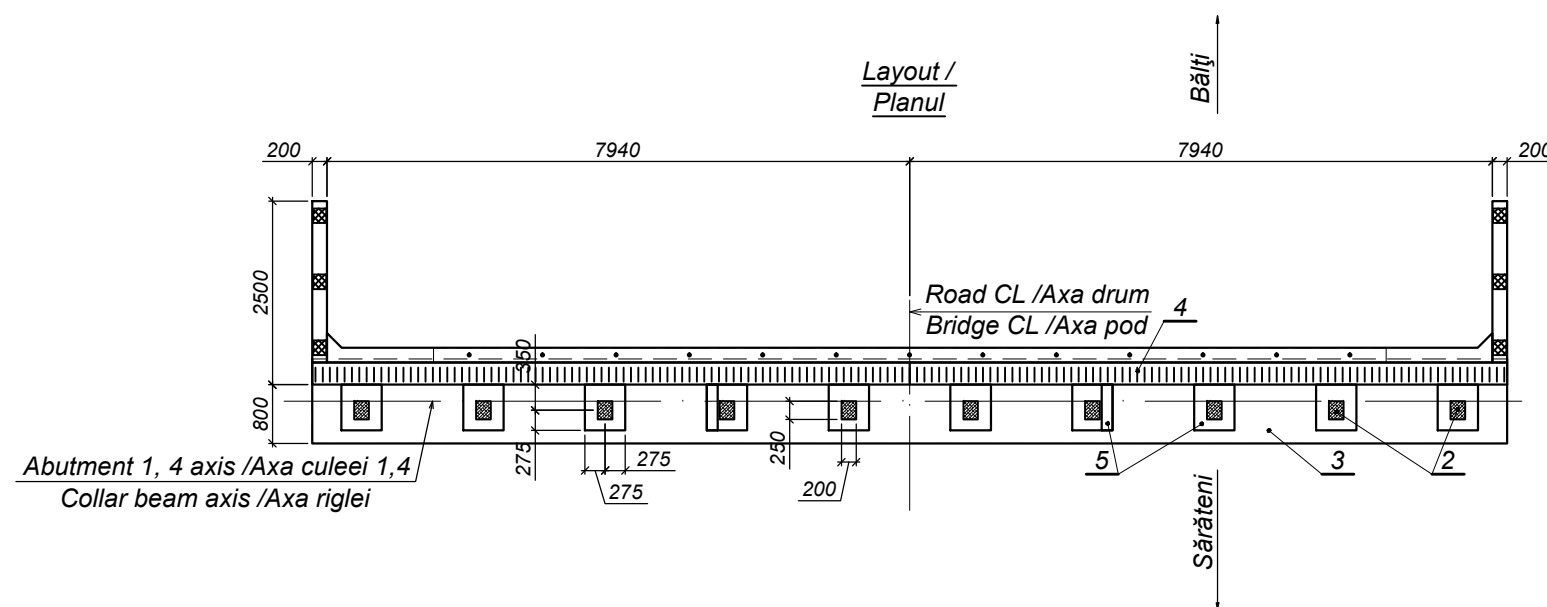
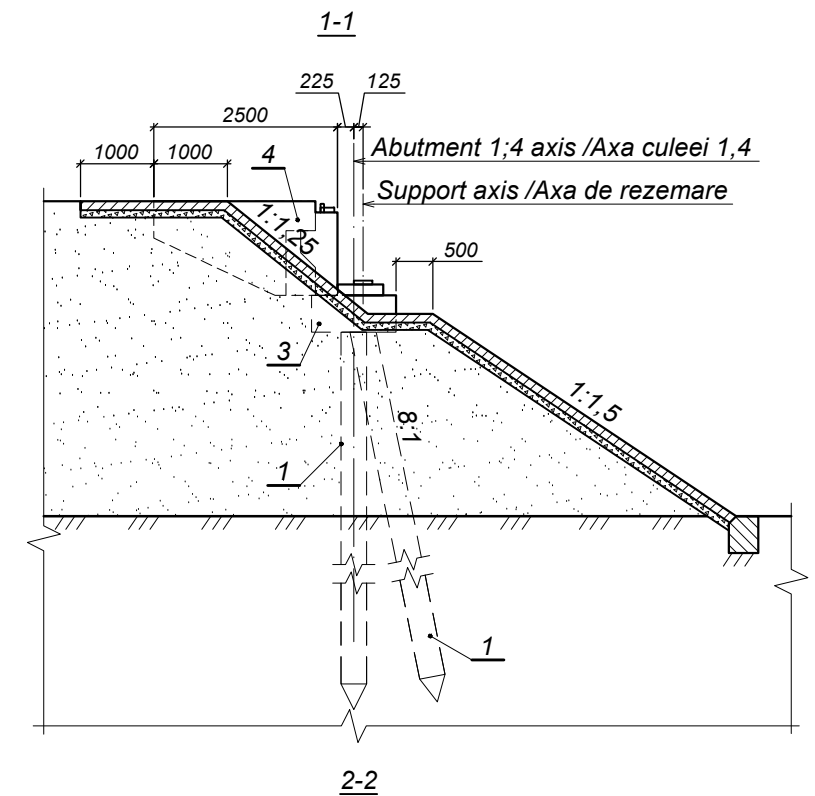
- 5 Suprastructure and bridge's carriageway/Suprastuctura si calea podului  
7 Consolidation of cones/Consolidarea semiconurilor

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012
		Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 30 + 091</i> <i>Bridge general view. Layout /</i> <i>Dispoziția generală a podului. Planul</i>	Checked	N.Tcaci		Drawing P-P-1	
		Control STAS	L.Pozdirca			



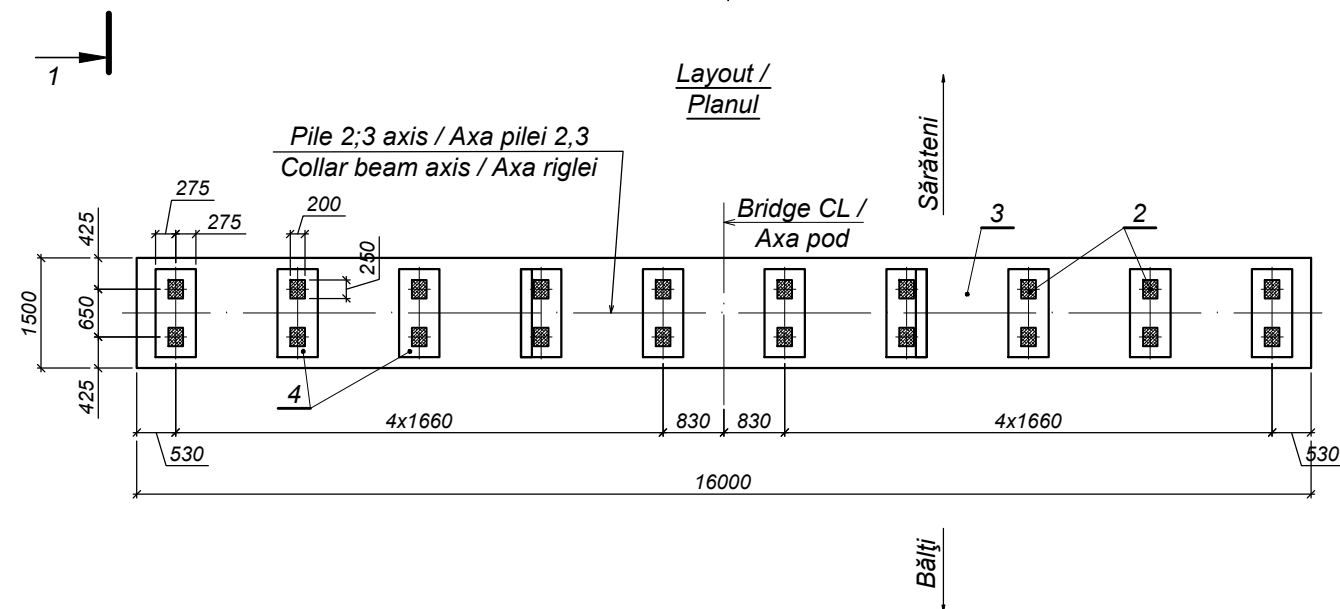
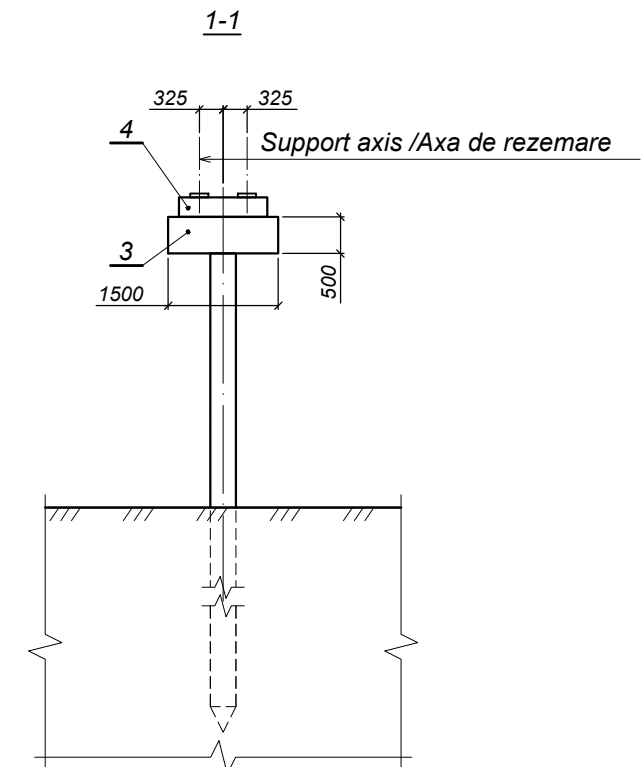
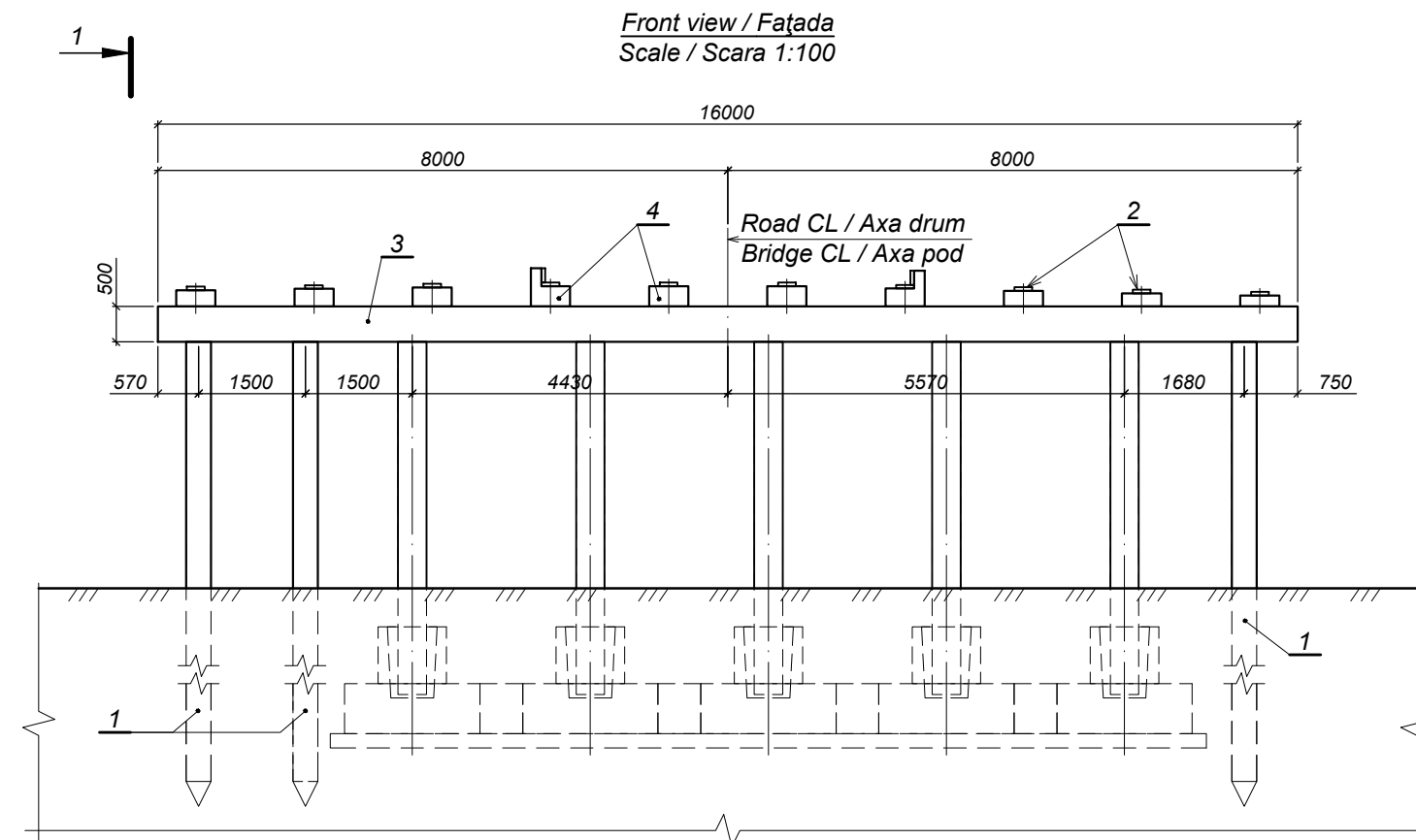
- 3 Pile/Pila-3  
4 Abutment/Culeea-4  
5 Suprastructure and bridge's corriageway/Suprastuctura si calea podului

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme		Support Project					
Roughton International	Rehabilitation of R14 Road Balti-Sarateni	ISP	S.Bogza		Date	04.2012	
		Designed	A.Cecan		Scale		
Universcons	Drawing title <i>Bridge.Pod, Km 30 + 091</i> <i>Bridge general view. Section 1-1 and 2-2 /</i> <i>Dispoziția generală a podului. Secțiunea 1-1; 2-2</i>	Checked	N.Tcaci		Drawing	S-P-1	
		Control STAS	L.Pozdirca				



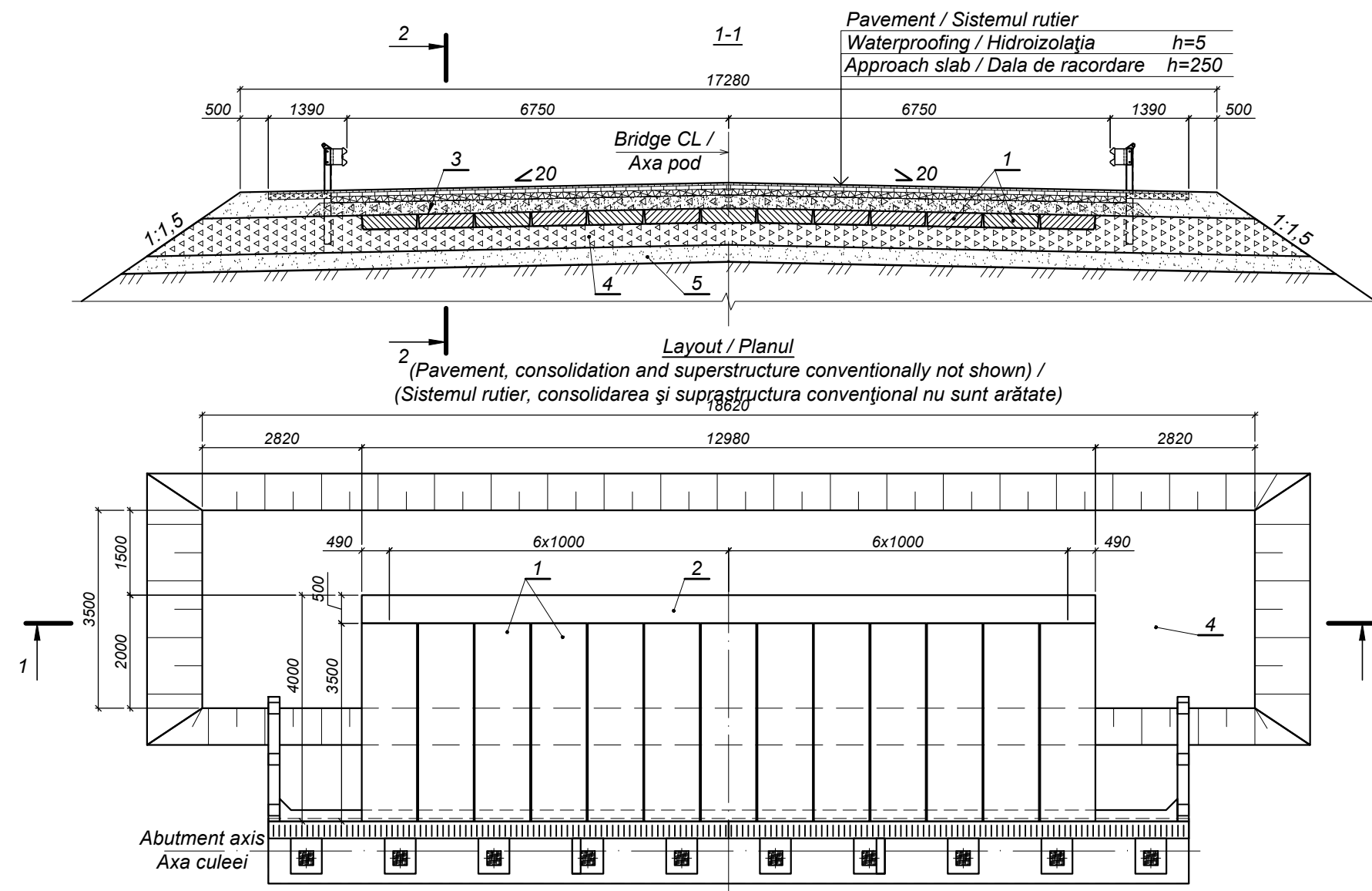
- 
- 225
- 125
- 4
- Abutment 1;4 axis /Axa culeei 1,4
- Support axis /Axa de rezemare
- 500
- 500
- 3
- 1150
- 1:1.5

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme		Support Project					
Roughton International  Universcons	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012	
		Designed	A.Cecan		Scale		
	Drawing title <i>Bridge.Pod, Km 30 + 091</i> <i>General view of abutment 1, 4 /</i> <i>Dispoziția generală a culeei 1.4</i>	Checked	N.Tcaci		Drawing  C-P-1		
		Control	STAS	L.Pozdirca			

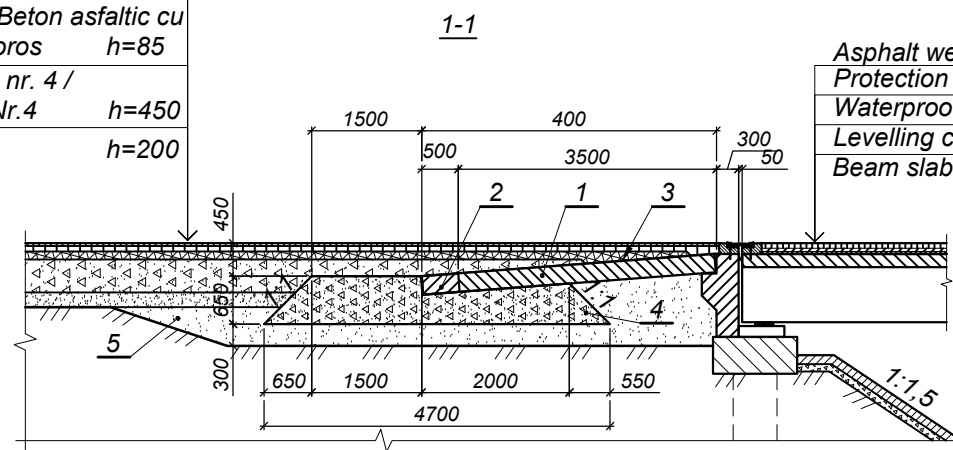


- 1 Piles / Piloți C10-35T3
- 2 Supporting rubber element / Aparat de reazem din cauciuc  
PO4 250x200x62-8-C
- 3 Collar beam/Rigla R-2
- 4 Bearing pads of pile2/Cuzineții pilei 2

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012	
		Designed	A.Cecan		Scale		
Universcons	Drawing title <i>Bridge.Pod, Km 30 + 091</i> <i>General view of pile 2, 3 /</i> <i>Dispoziția generală a pilei 2,3</i>	Checked	N.Tcaci		Drawing	PL-P-1	
		Control STAS	L.Pozdirca				



Asphalt wearing course /  
Uzură din beton asfaltic h=40  
Geocomposite / Geocompozit  
PGM-G 50/50  
Porous asphalt concrete /  
Beton asfaltic poros h=60  
Coarse grainer porous asphalt  
concrete M1 / Beton asfaltic cu  
granul mare poros h=85  
Crushed stone nr. 4 /  
Piatră spartă Nr.4 h=450  
Sand / Nisip h=200

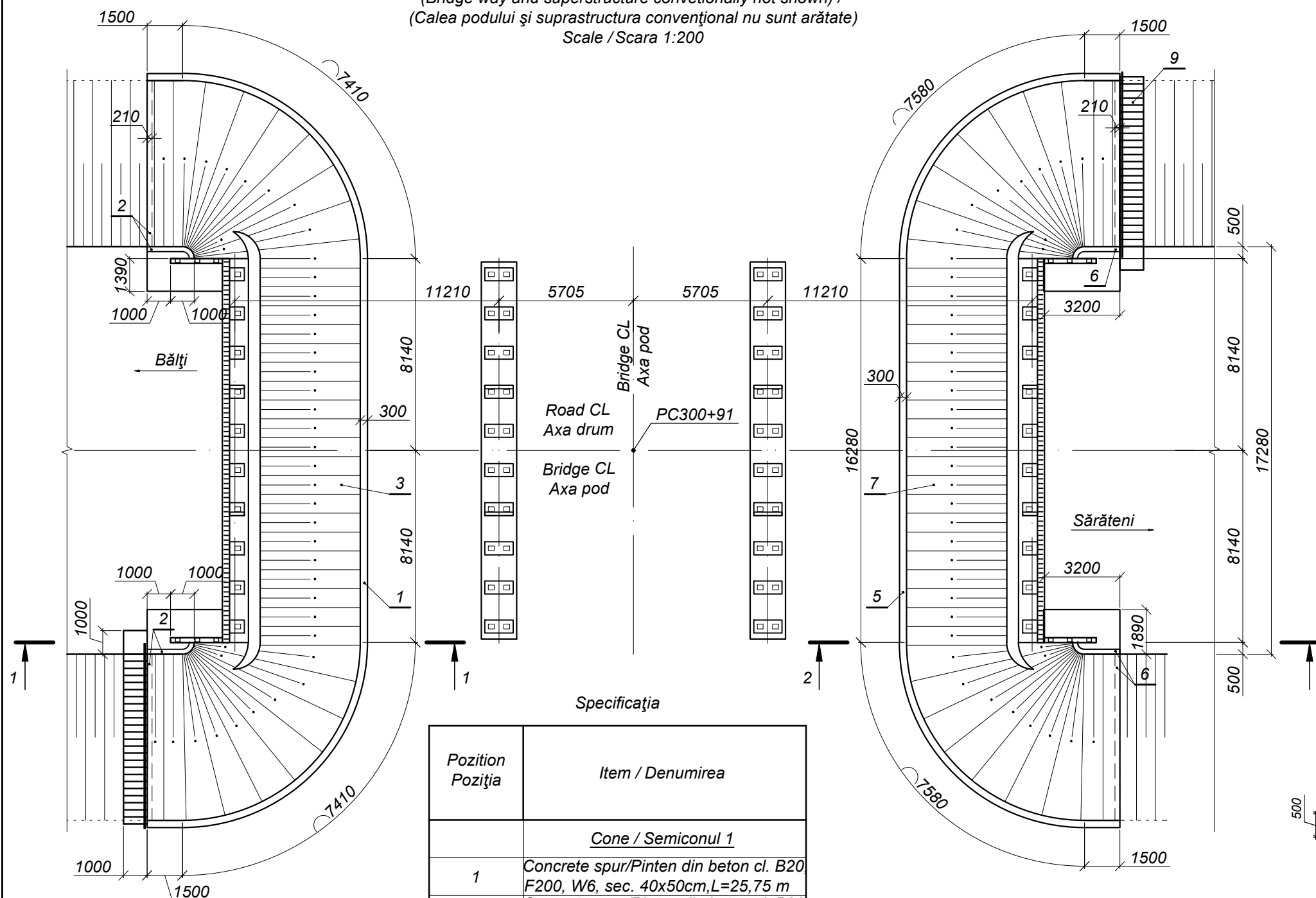


Asphalt wearing course / Îmbrăcămintă asfaltică h=70  
Protection layer / Strat de protecție h=40  
Waterproofing / Hidroizolația h=5  
Levelling course / Strat de egalizare h=30  
Beam slab / Placa grinzii h=180

- 1 Deck slab / Dala de racordare П400.98.25-TAIII
- 2 Connection joint between approach slabs / Nodul de îmbinare a plăcilor de racordare
- 3 Waterproofing of approach elements / Hidroizolarea elementelor de racordare
- 4 Crushed stone / Piatră spartă
- 5 Sand with gravel mix / Amestec de nisip cu pietriș

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road      Sector      Programme      Support      Project							
Roughton International	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza		Date	04.2012
			Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 30 + 091 Approach to bridge at abutment 1 and 4 / Racordarea podului cu drumul la culeea 1;4</i>		Checked	N.Tcaci		Drawing RP-P-1	
			Control STAS	L.Pozdirca			

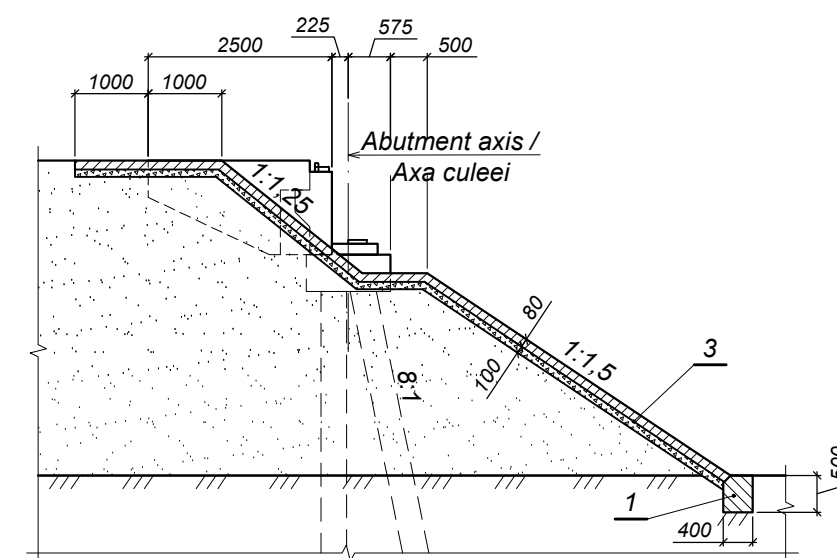
Layout / Planul  
(Bridge way and superstructure conventionally not shown) /  
(Calea podului și suprastructura convențional nu sunt arătate)  
Scale / Scara 1:200



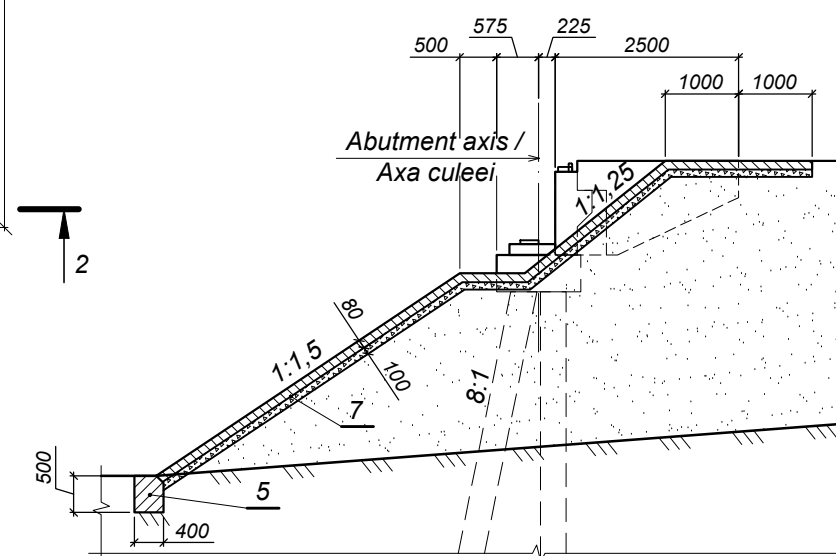
Specificația

Pozition Pozitia	Item / Denumirea
<u>Cone / Semiconul 1</u>	
1	Concrete spur/Pinten din beton cl. B20, F200, W6, sec. 40x50cm, L=25,75 m
2	Concrete spur/Pinten din beton cl. B20, F200, W6, sec. 21x50cm, L=10,00 m
3	Consolidation of cones/Consolidare con din b.a.cl.B20,F200,W6,h=12cm, pe pat de granit h=10cm
<u>Cone / Semiconul 2</u>	
5	Concrete spur/Pinten din beton cl.B20, F200, W6, sec. 40x50cm, L=31,20 m
6	Concrete spur/Pinten din beton cl.B20, F200, W6, sec. 21x50cm, L=9,20 m
7	Consolidation of cones/Consolidare con din b.a.cl.B20,F200,W6,h=12cm, pe pat de granit h=10cm

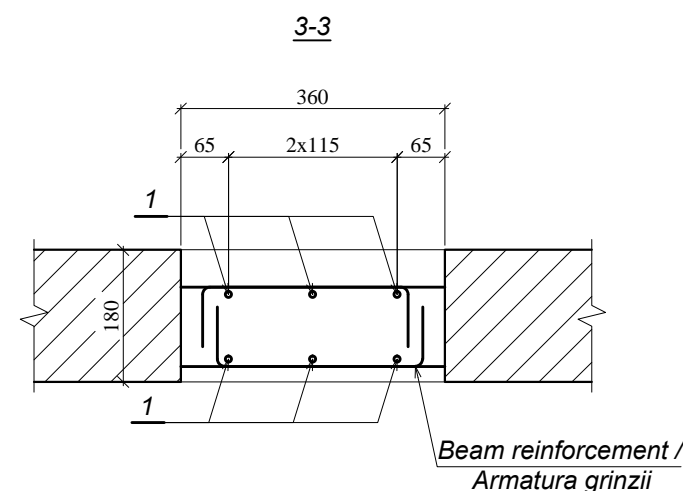
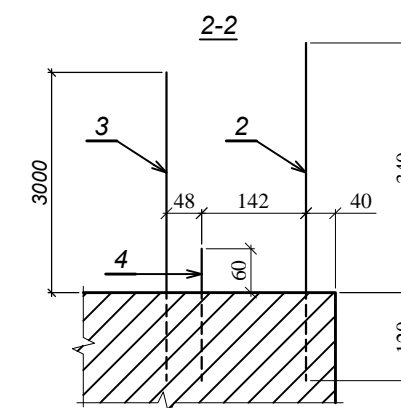
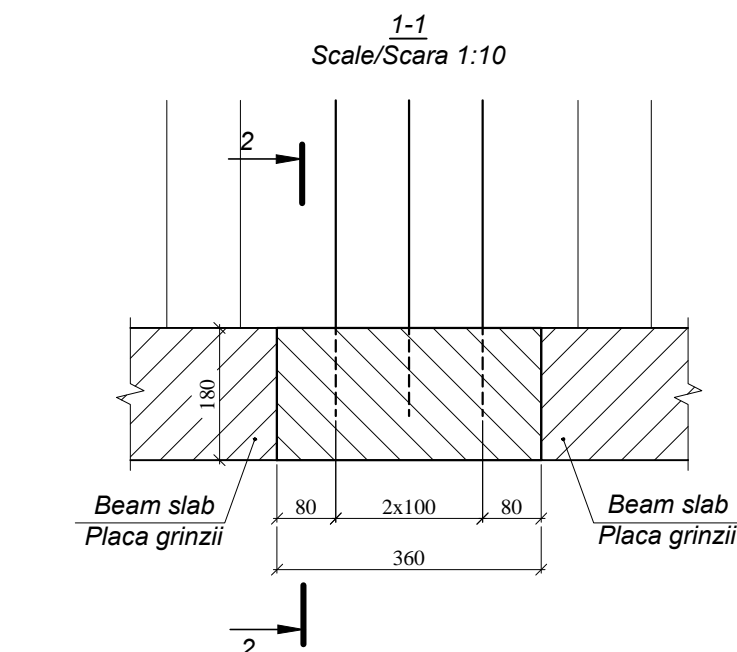
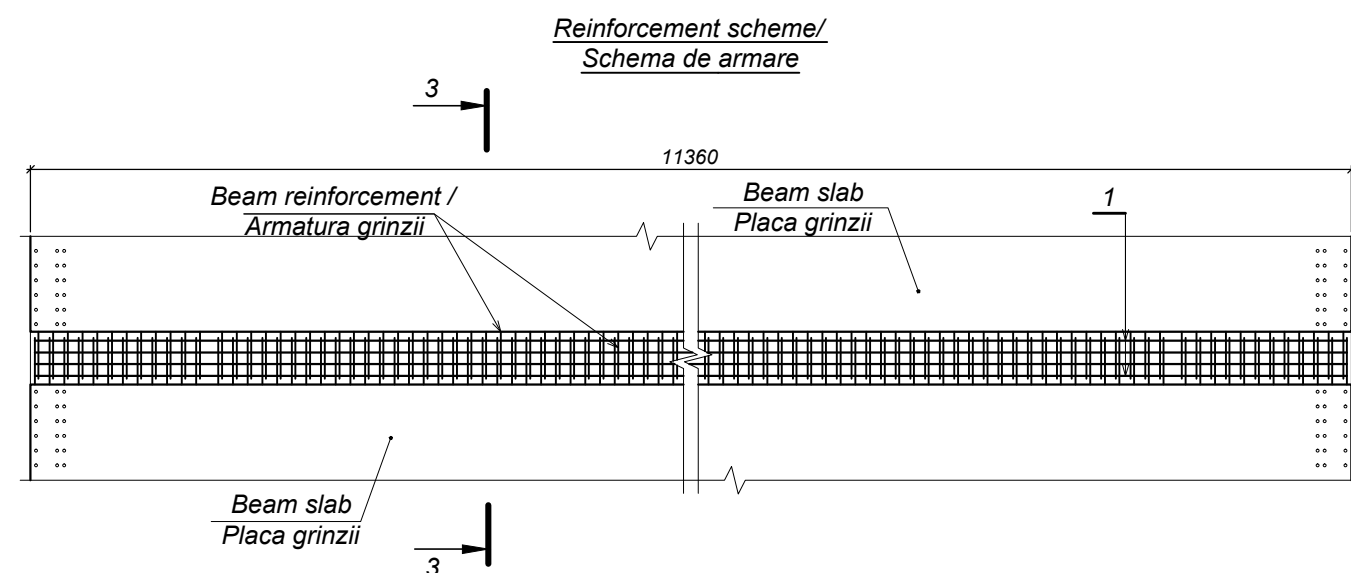
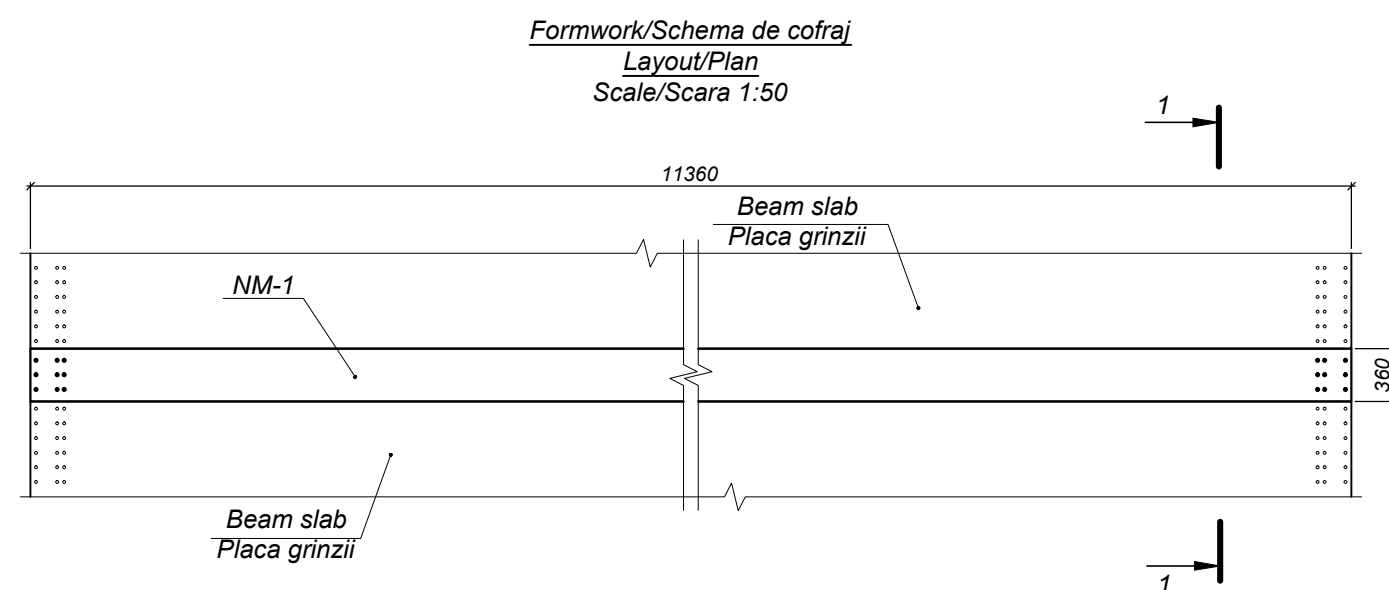
1-1  
Scale / Scara 1:100



2-2  
Scale / Scara 1:100



World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza		Date04.2012
			Designed	A.Cecan		Scale
Universcons	Drawing title <i>Bridge.Pod, Km 30 + 091</i>		Checked	N.Tcaci		DrawingCS-P-1
	<i>Consolidation of cones / Consolidarea semiconurilor</i>		Control STAS	L.Pozdirca		



Quantity of steel per one element  
Consumul de metal pentru un element, kg

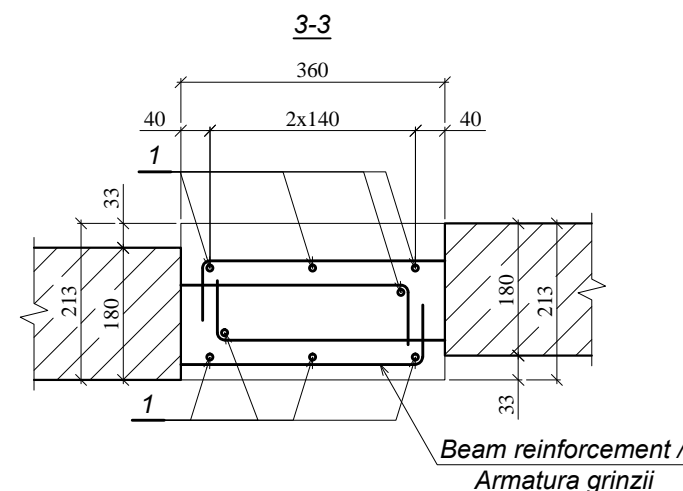
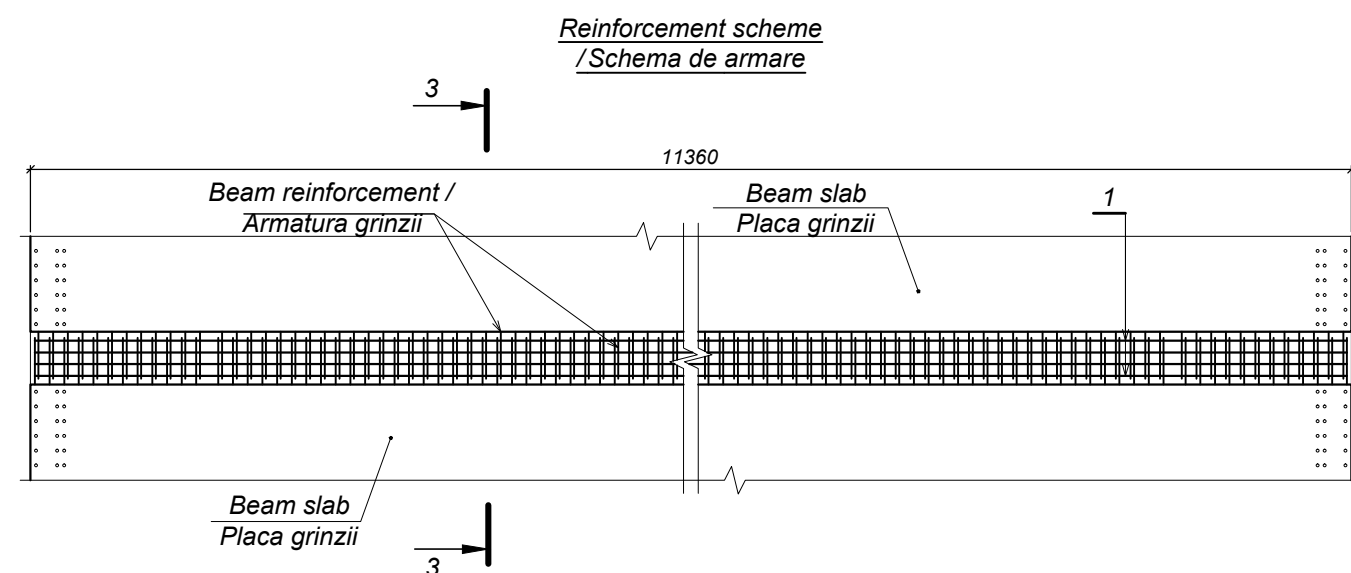
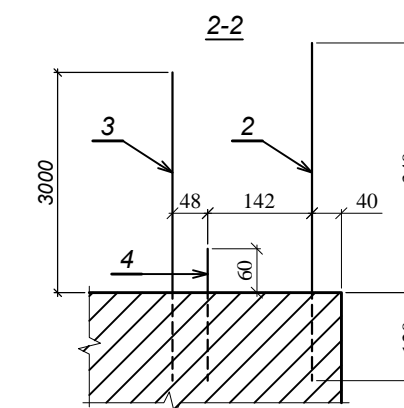
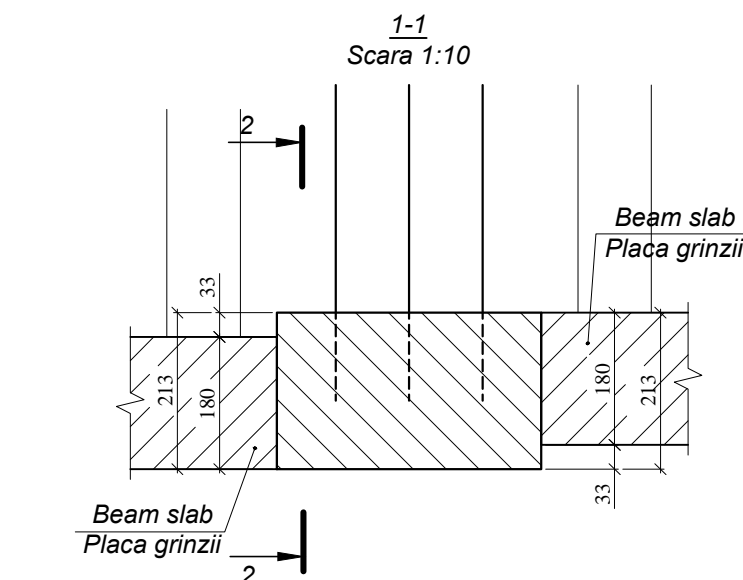
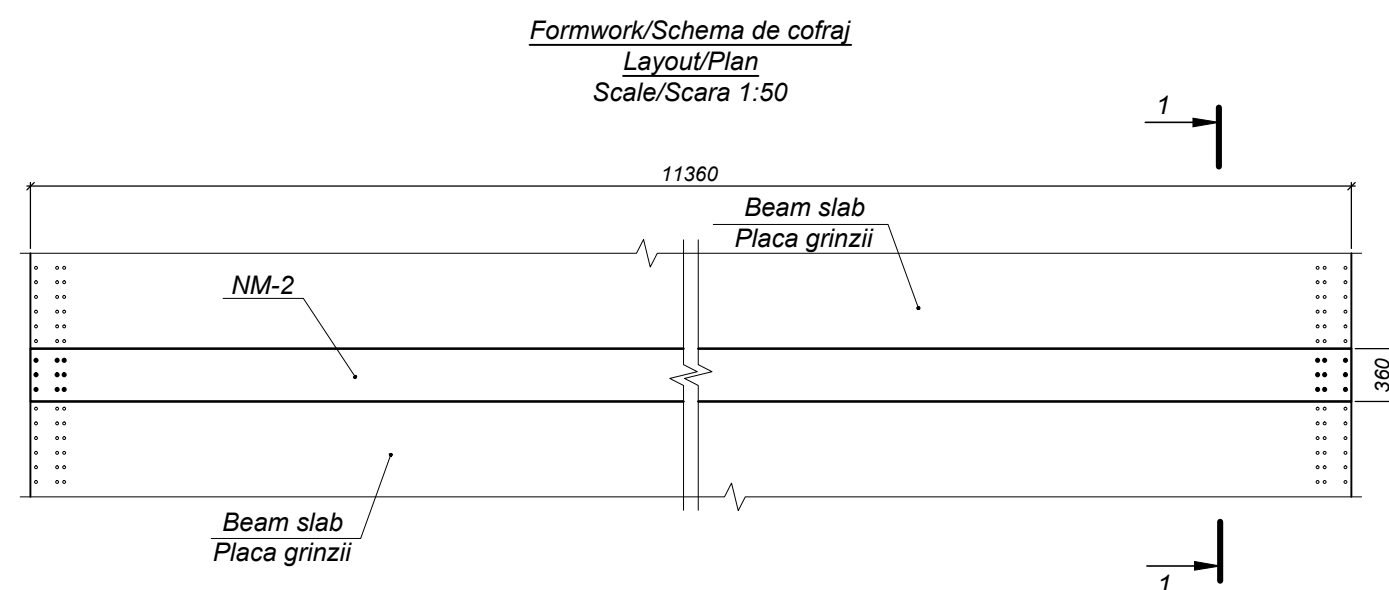
Consumul de metal pentru un element, kg						
Element name Marca elementului	Reinforcement parts Piese de armare				Total weight Greutate totală	
	Reinforcement type Clasa armaturii					
	A-I					
	ГОСТ 5781-82*					
	Ø8	Ø10	Total			Total
NM-1	27,0	3,6	30,6	30,6	30,6	

Specification / Specificația

Format	Zona	Position / Pozitia	Document Number / Indicativ	Item / Denumirea	Quantity / Cantitatea	Note / Notă
				<u>Parts / Piese</u>		
				A-I-8 ГОСТ 5781-82* Cm3nc3 ГОСТ 380-94		
FP		1		l=11300	6	4,5 kg
				A-I-10 ГОСТ 5781-82* Cm3nc3 ГОСТ 380-94		
FP		2		l=460	6	0,3 kg
FP		3		l=420	6	0,2 kg
FP		4		l=180	6	0,1 kg
				<u>Materials / Materiale</u>		
				ГОСТ 26633-91*Concrete/Beton cl.B30, F200, W6		0,74 m³

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road      Sector      Programme      Support      Project							
Roughton International	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza		Date	04.2012
			Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 30 + 091</i> <i>Monolithic joint MJ-1 / Nodul monolit NM-1</i>		Checked	N.Tcaci		Drawing NM-P-1	
			Control STAS	L.Pozdirca			





Quantity of steel per one element  
Consumul de metal pentru un element, kg

Consumul de metal pentru un element, kg						
Element name Marca elementului	Reinforcement parts Piese de armare				Total weight Greutate totală	
	Reinforcement type Clasa armaturii			Total		
	A-I					
	ГОСТ 5781-82*					
	Ø8	Ø10	Total			
NM-2	36,0	3,6	39,6	39,6	39,6	

Specification / Specificația

Format	Zona	Position / Pozitia	Document Number / Indicativ	Item / Denumirea	Quantity / Cantitatea	Note / Notă
				<u>Parts / Piese</u>		
				A-I-8 ГОСТ 5781-82* Cm3nc3 ГОСТ 380-94		
FP		1		l=11300	8	4,5 kg
				A-I-10 ГОСТ 5781-82* Cm3nc3 ГОСТ 380-94		
FP		2		l=460	6	0,3 kg
FP		3		l=420	6	0,2 kg
FP		4		l=180	6	0,1 kg
				<u>Materials / Materiale</u>		
			ГОСТ 26633-91*	Concrete/Beton cl.B30, F200, W6		0,87 m³

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road      Sector      Programme      Support      Project							
Roughton International	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza		Date	04.2012
			Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 30 + 091</i> <i>Monolithic joint MJ-2 / Nodul monolit NM-2</i>		Checked	N.Tcaci		Drawing NM-P-2	
			Control STAS	L.Pozdirca			

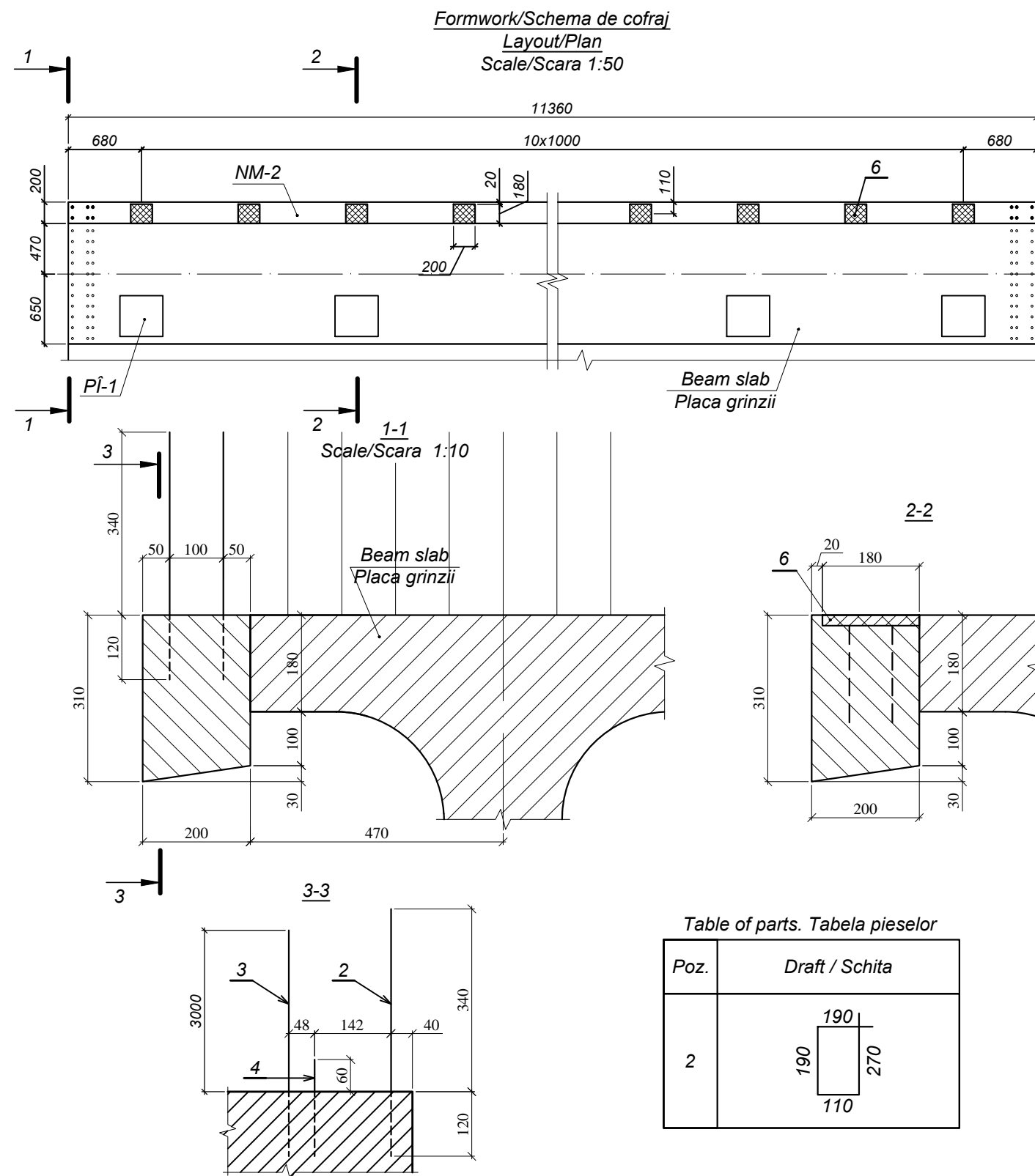


Table of parts. Tabela pieselor

Poz.	Draft / Schita
2	

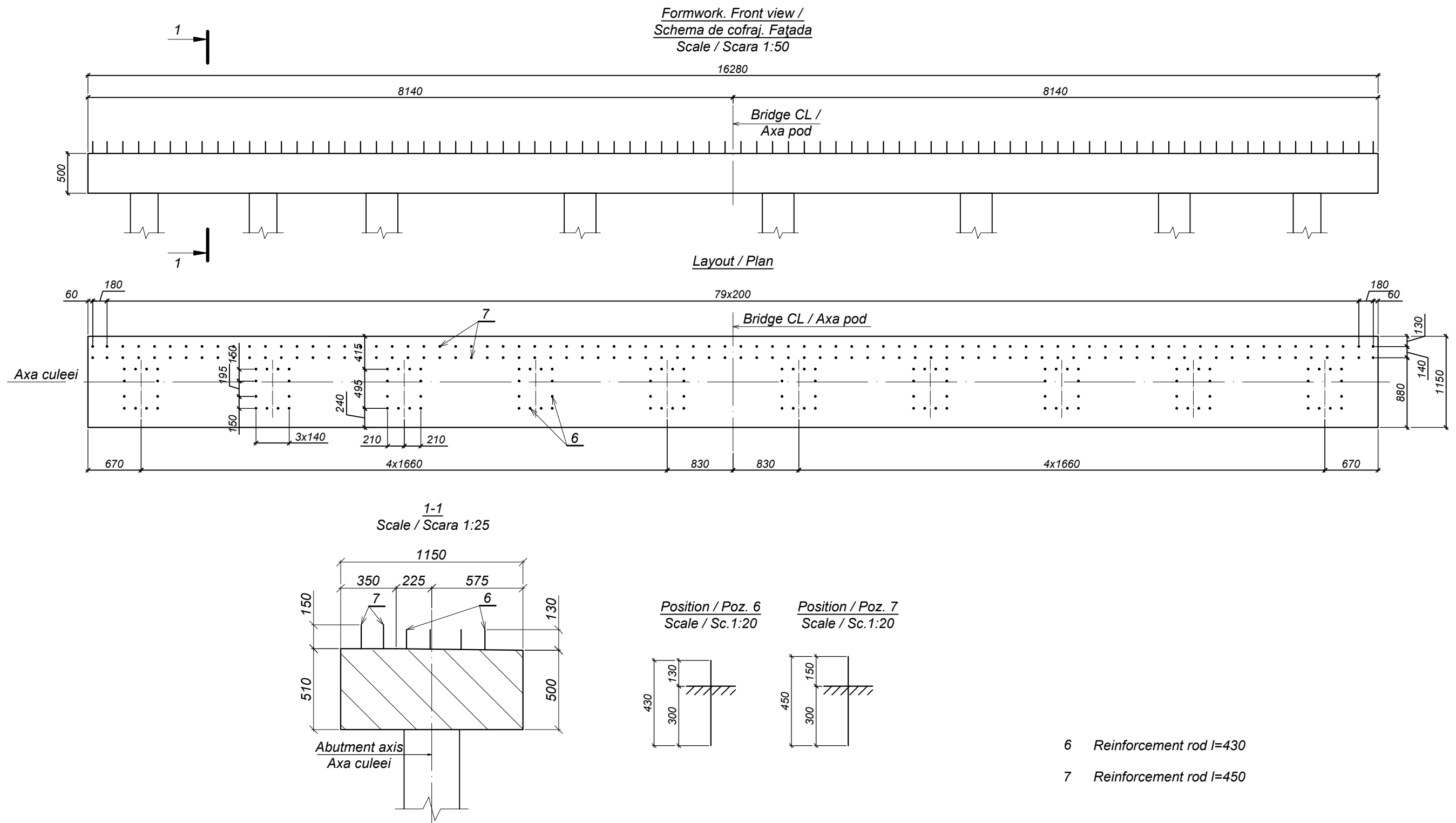
Quantity of steel per one element  
Consumul de metal pentru un element, kg

Element name Marca elementului	Reinforcement parts Piese de armare				Embedded base plate Piese înglobate					Total weight Greutate totală
	Reinforcement type Clasa armaturii			Total	Reinforcement type Clasa armaturii		Marca metalului		Total	
	A-I				A-III		16Д			
	ГОСТ 5781-82*				ГОСТ 5781-82*		ГОСТ 103-76**			
	Ø8	Ø10	Total		Ø16	Total	-20	Total		
NM-3	60,9	2,4	63,3	63,3	13,2	13,2	62,7	62,7	75,9	

Specification / Specificația

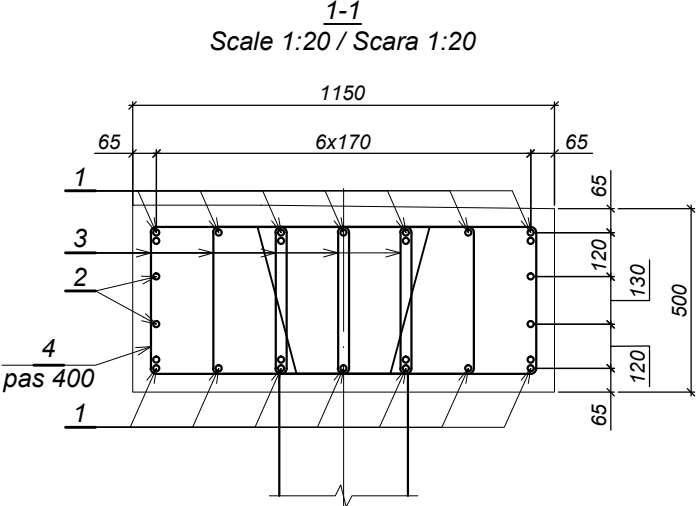
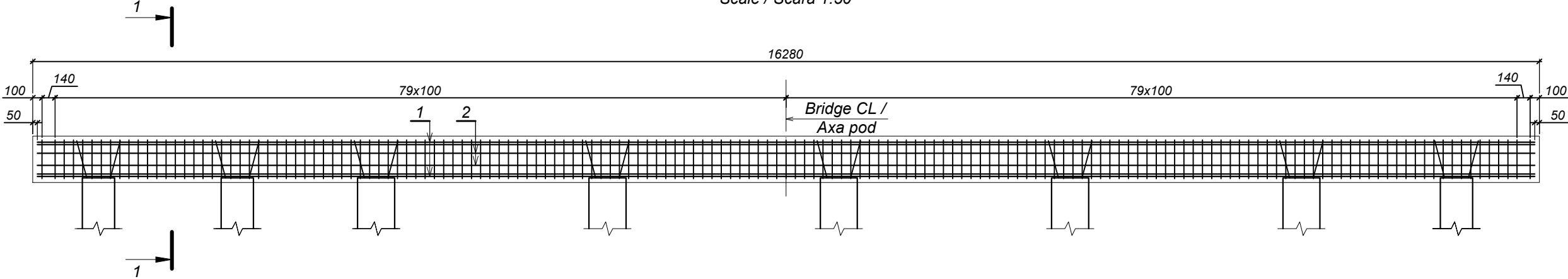
Format	Zona	Position / Pozitia	Document Number / Indicativ	Item / Denumirea	Quantity / Cantitatea	Note / Notă
				<u>Parts / Piese</u>		
				<u>A-I-8 ГОСТ 5781-82*</u> <u>См3пс3 ГОСТ 380-94</u>		
FP		1		$l=11300$	6	4,5 kg
FP		2		$l=760$	113	0,3 kg
				<u>A-I-10 ГОСТ 5781-82*</u> <u>См3пс3 ГОСТ 380-94</u>		
FP		3		$l=460$	4	0,3 kg
FP		4		$l=420$	4	0,2 kg
FP		5		$l=180$	4	0,1 kg
A4		6	200/032D - LA-00.18.00	Embedded base plat/Piesă înglobată PÎ-3	11	6,9 kg
				<u>Materials / Materiale</u>		
			ГОСТ 26633-91*	Concrete/Beton cl.B30, F200, W6		0,67 m³

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road      Sector      Programme      Support      Project						
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012
		Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 30 + 091</i> <i>Monolithic joint MJ-3 / Nodul monolit NM-3</i>	Checked	N.Tcaci		Drawing  NM-P-3	
		Control STAS	L.Pozdirca			



World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012
		Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 30 + 091</i> <i>Collar beam CB-1 /</i> <i>Rigla R-1</i>	Checked	N.Tcaci		Drawing R-P-1	
		Control STAS	L.Pozdirca			

Reinforcement scheme / Schema de armare Front view / Fațada  
(pos. 6 and 7 conventionally not shown / poz.6 și 7 convențional nu sunt arătate)  
Scale / Scara 1:50



Collar beam and pile connection joint /  
Nod de îmbinare a riglei cu pilotul  
Scale 1:20 / Scara 1:20

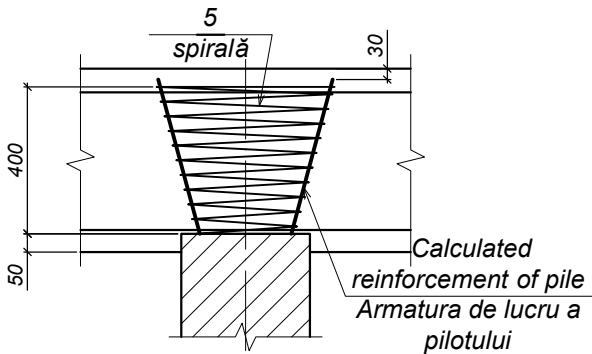


Table of parts / Tabela pieselor

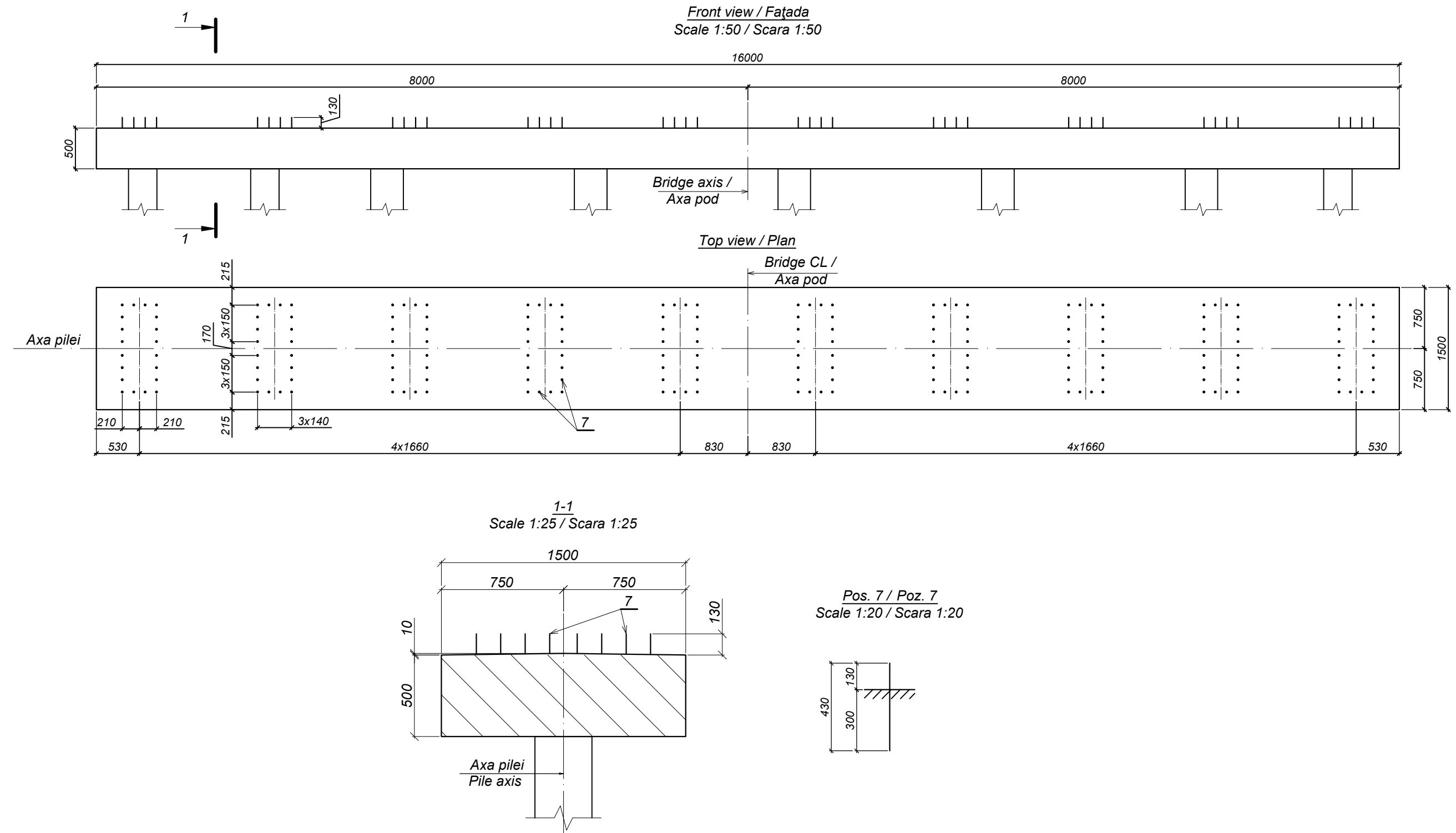
Pos./ Poz.	Draft / Schiță
3	
4	

- 1 A-III-20 ГOCT 5781-82\*, l=16580  
25Г2С ГOCT 5781-82\*  
2 A-I-10 ГOCT 5781-82\*, l=16180  
Cm3nc3 ГOCT 380-94  
3 Reinforcement rod l=1720  
4 Reinforcement rod l=3080  
5 A-I-6 ГOCT 5781-82\*, l=20000  
Cm3nc3 ГOCT 380-94

Note / Notă:

1. Protection layer / Stratul de protecție - 50 mm.  
2. Leangth of position 1 implies the need to splice reinforcement bars by welding according to the type of splicing C23-P3 ГOCT 14098-91 / Lungimea poziției 1 include necesitatea îmbinării barelor de armatură prin sudare conform tipului de îmbinare C23-P3 ГOCT 14098-91  
3. For position 6, 7 see formwork scheme / Pentru poziția 6, 7 vezi schema de cofraj

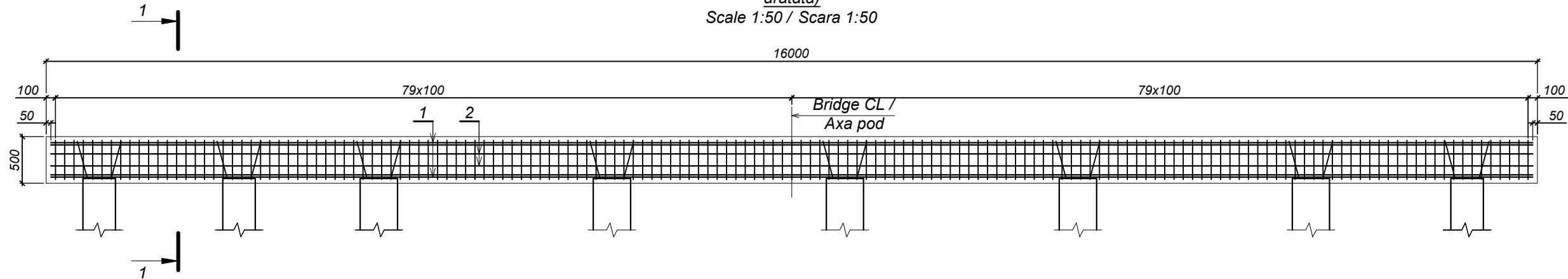
World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support	Project			
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012
		Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 30 + 091</i> <i>Collar beam CB-1. Reinforcement scheme.</i> <i>Specification</i> <i>Rigla R-1. Schema de armare.Specificația</i>	Checked	N.Tcaci		Drawing R-P-2	
		Control STAS	L.Pozdirca			



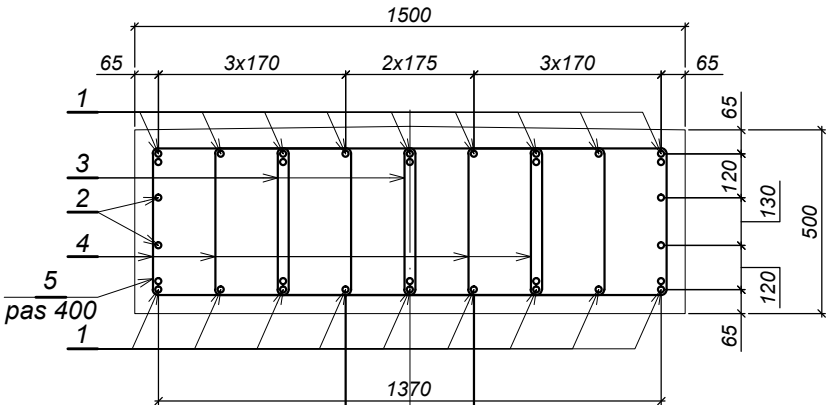
7 Reinforcement rod l=450

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012
		Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 30 + 091</i> <i>Collar beam CB-2 / Rigla R-2</i>	Checked	N.Tcaci		Drawing R-P-3	
		Control STAS	L.Pozdirca			

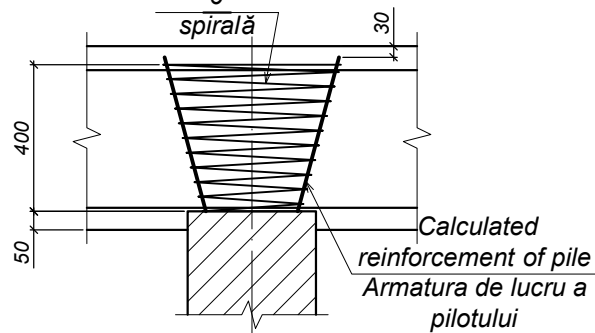
Reinforcement scheme / Schema de armare  
Front view / Fațada  
(position 7 not shown) / (poz.7 convențional nu sunt arătate)  
Scale 1:50 / Scara 1:50



1-1  
Scale 1:20 / Scara 1:20



Collar beam and pile connection joint /  
Nod de îmbinare a riglei cu pilotul  
Scale 1:20 / Scara 1:20



- 1 A-III-20 GOCT 5781-82\*, l=16300  
25Г2С GOCT 5781-82\*
- 2 A-I-10 GOCT 5781-82\*, l=15900  
Cm3nc3 GOCT 380-94
- 3 Reinforcement rod l=1730
- 4 Reinforcement rod l=1720
- 5 Reinforcement rod l=3780
- 6 A-I-6 GOCT 5781-82\*, l=20000  
Cm3nc3 GOCT 380-94

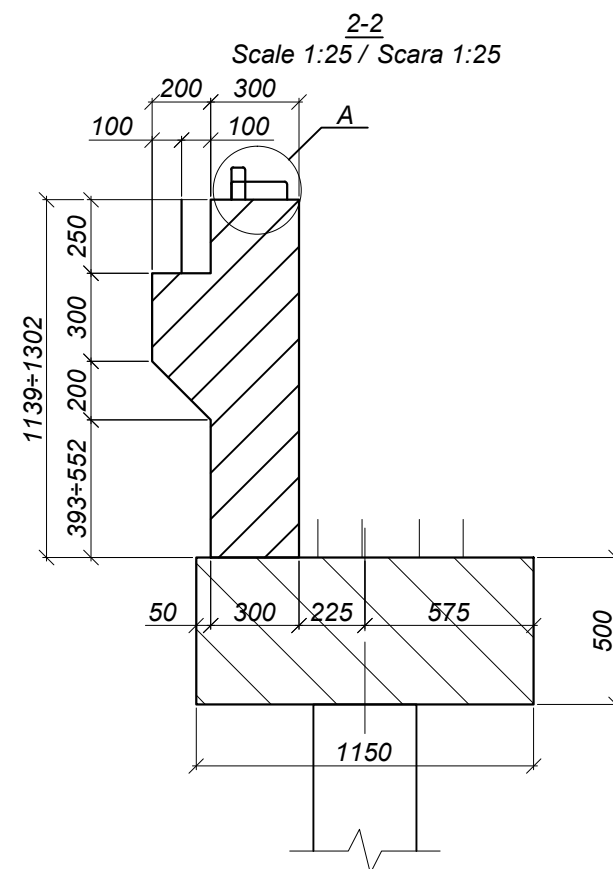
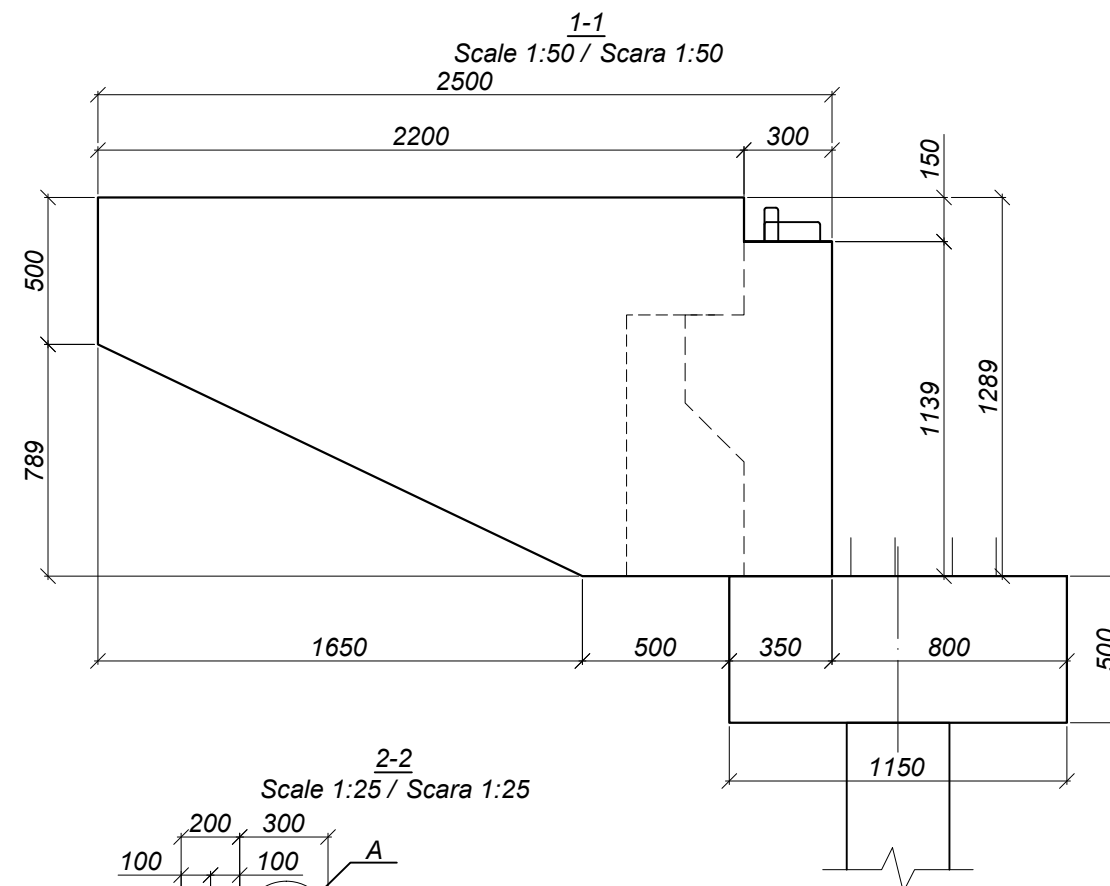
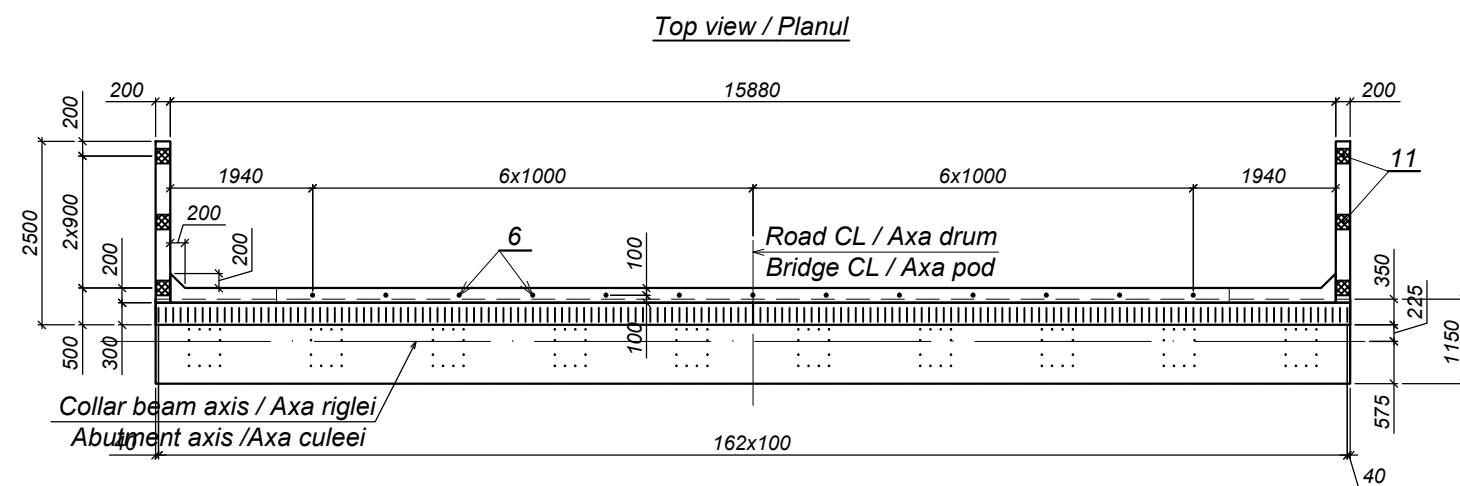
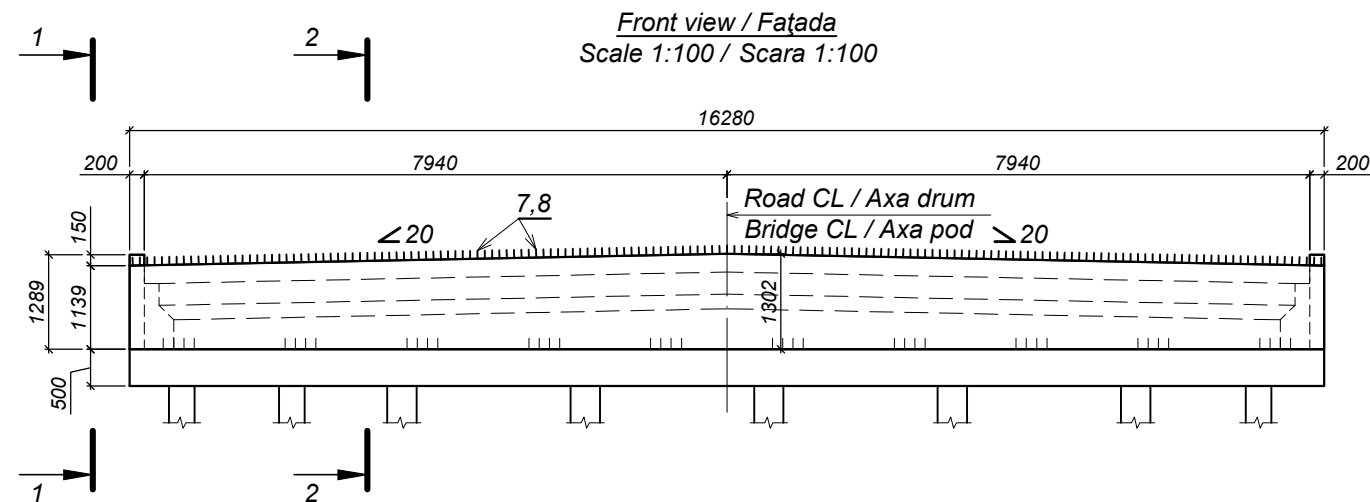
Table of parts / Tabela pieselor

Pos./ Poz.	Draft / Schiță
3	
4	
5	

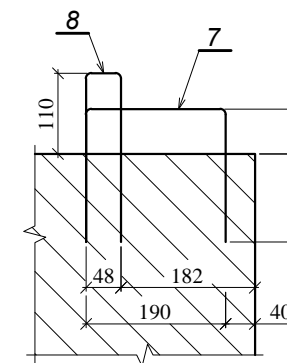
Note / Notă:

- 1. Protection layer / Stratul de protecție - 50 mm.
- 2. Leangth of position 1 implies the need to splice reinforcement bars by welding according to the type of splicing C23-P3 GOCT 14098-91 / Lungimea poziției 1 include necesitatea îmbinării barelor de armatură prin sudare conform tipului de îmbinare C23-P3 GOCT 14098-91
- 3. For position 7 see formwork scheme / Pentru poziția 6, 7 vezi schema de cofraj

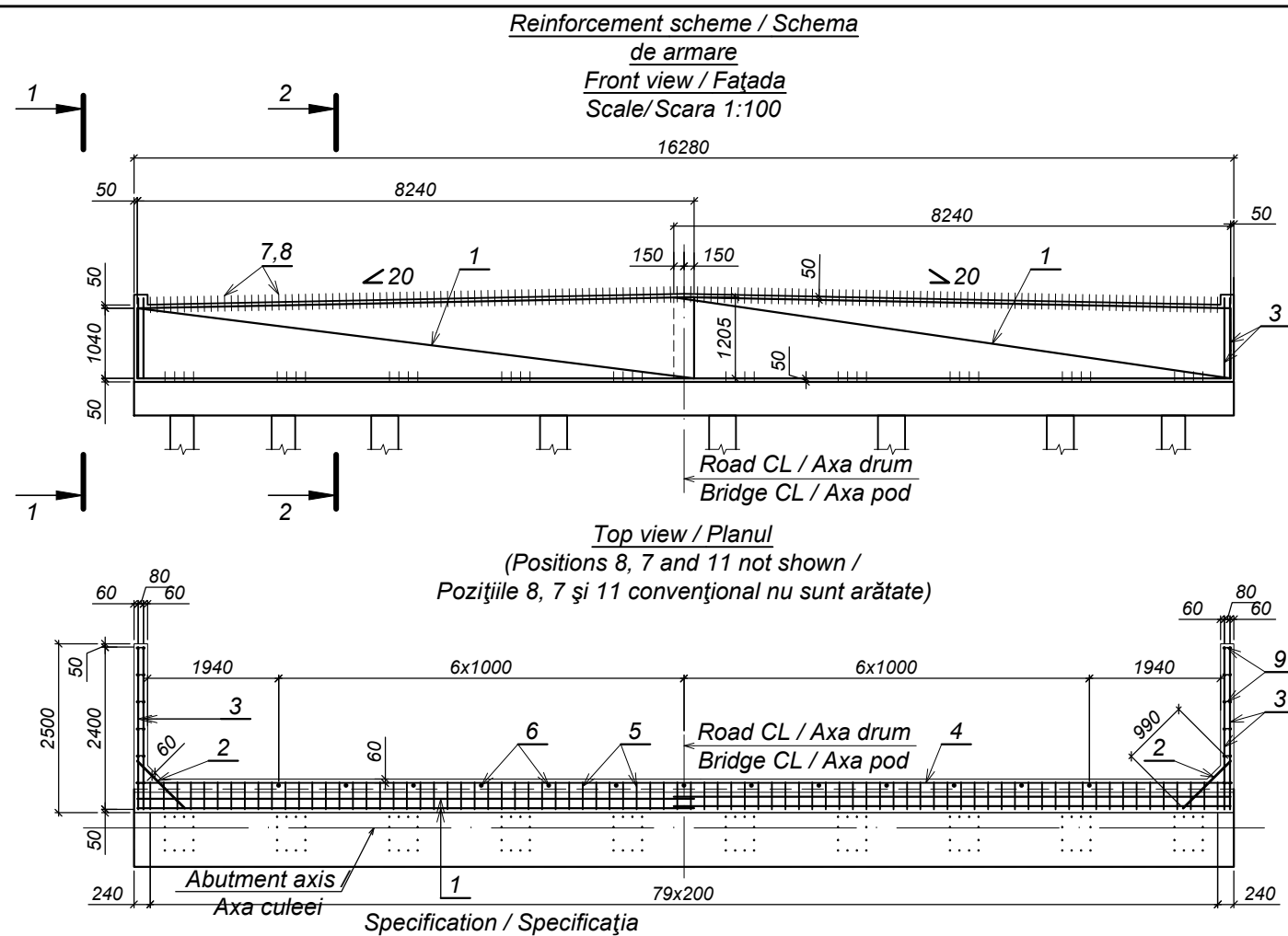
World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector		Programme	Support	Project		
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza	Date	04.2012	
		Designed	A.Cecan	Scale		
Universcons	Drawing title Bridge.Pod, Km 30 + 091 Collar beam CB-2. Reinforcement scheme. Specification Rigla R-2. Schema de armare.Specificația	Checked	N.Tcaci	Drawing	R-P-4	
		Control STAS	L.Pozdirca			



**Joint / Nodul A**  
Scale 1:10 / Scara 1:10



World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road      Sector      Programme      Support      Project						
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012
		Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 30 + 091</i> <i>Protection wall PW-1 / Zid de gardă ZG-1</i>	Checked	N.Tcaci		Drawing ZG-P-1	
		Control STAS	L.Pozdirca			

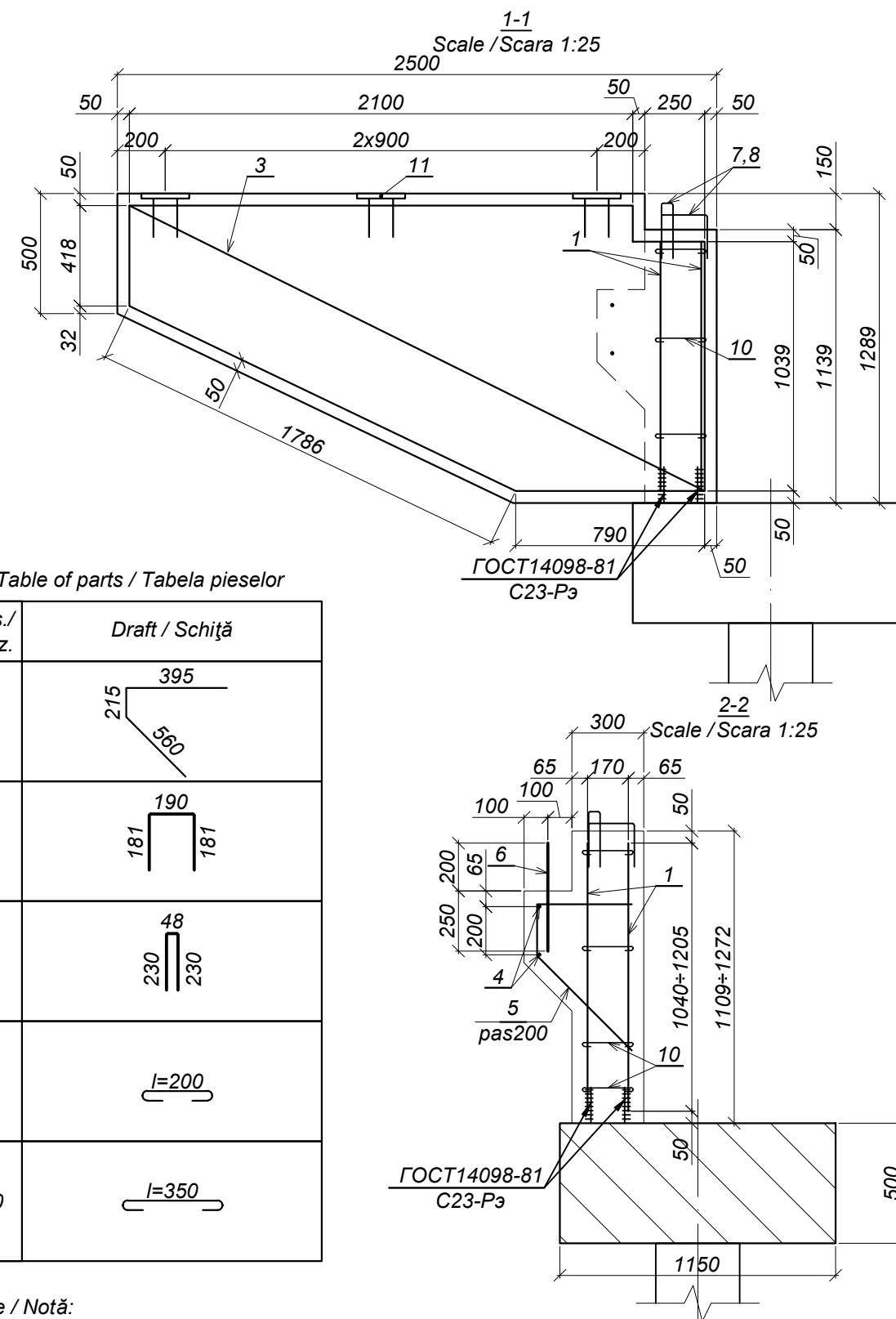


Format	Zona	Position / Poziția	Document Number / Indicativ	Name / Denumirea	Quantity / Cantitatea	Note / Notă
<b>Assembly elements / Elemente de asamblare</b>						
FP		1	ГОСТ23279-85	Steel grid 4C 14 A-III-200 Plasă de oțel 4C 10 A-III-200 120,5x824	4	9,25 m <sup>2</sup> 84,5 kg
		2	ГОСТ23279-85	Steel grid 4C 10 A-III-200 Plasă de oțel 4C 10 A-III-200 78,8x99	2	0,78 m <sup>2</sup> 4,8 kg
		3	ГОСТ23279-85	Steel grid 4C 10 A-III-200 Plasă de oțel 4C 10 A-III-200 240x118,9	4	2,19 m <sup>2</sup> 13,5 kg
<b>Parts / Piese</b>						
		4		A-III-10 ГОСТ 5781-82*, l=16220 25Г2С ГОСТ 5781-82*	2	10,0 kg
		5		A-III-12 ГОСТ 5781-82*, l=1170 25Г2С ГОСТ 5781-82*	80	1,0 kg
		6		A-I-25 ГОСТ 5781-82*, l=450 Cm3nc3 ГОСТ 380-94	13	1,8 kg
				A-I-10 ГОСТ 5781-82* Cm3nc3 ГОСТ 380-94		
		7		l=550	163	0,3 kg
		8		l=510	163	0,3 kg
		9		A-I-6 ГОСТ 5781-82*, l=200 Cm3nc3 ГОСТ 380-94	62	0,05 kg
		10		A-I-6 ГОСТ 5781-82*, l=350 Cm3nc3 ГОСТ 380-94	272	0,1 kg
		11	2009/032D - 00.05.00	Embedded base plate/Piesă în înglobată Pî-2	6	7,5 kg
<b>Materials / Materiale</b>						
			ГОСТ 26633-91*	Concrete cl.B25, F200, W6 / Beton cl.B25, F200, W6		8,18 m <sup>3</sup>

Table of parts / Tabela pieselor

Pos./ Poz.	Draft / Schiță
5	
7	
8	
9	
10	

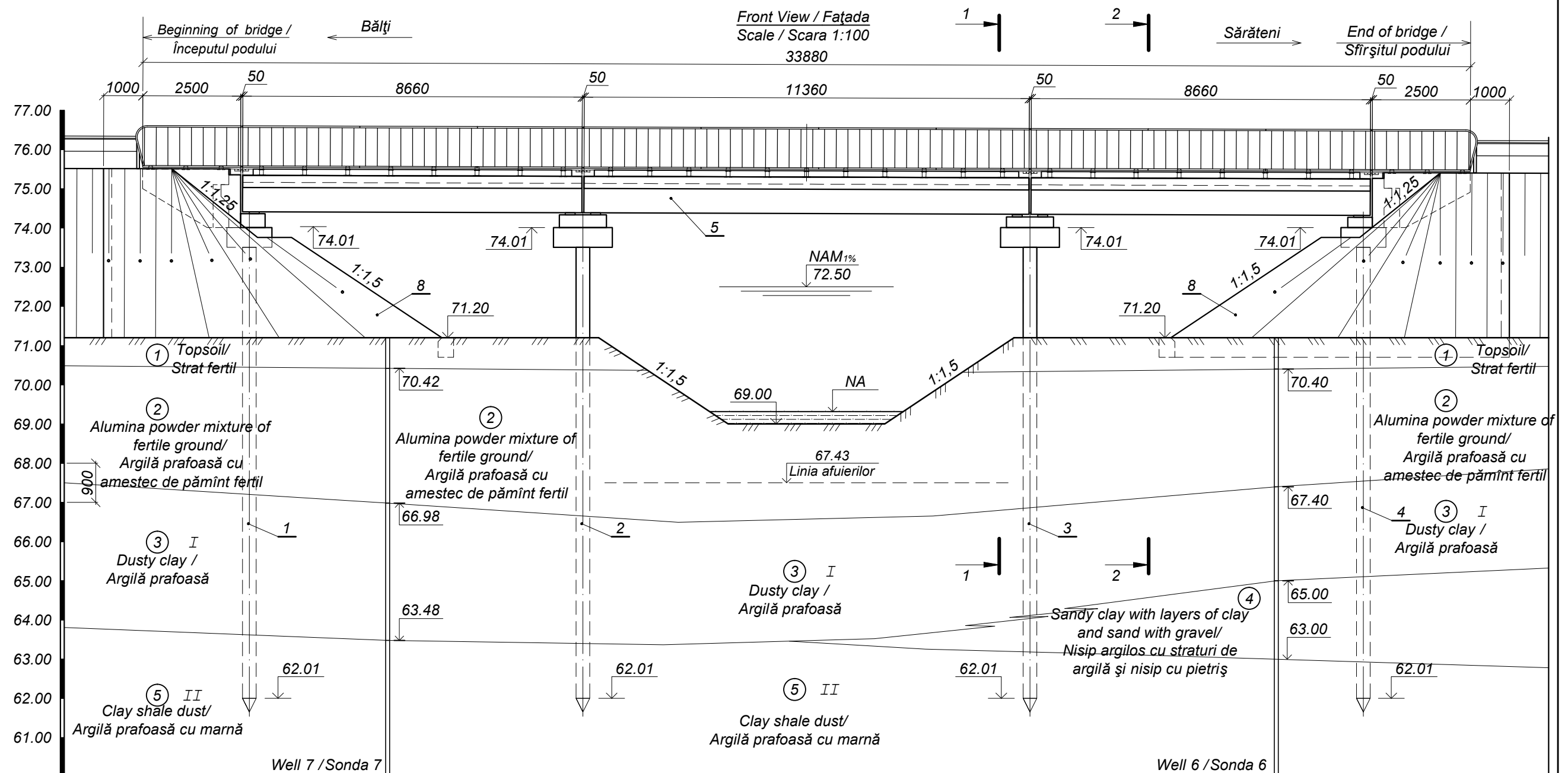
Note / Notă:  
 1. Protection layer / Strat de protecție - 50 mm



World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road      Sector      Programme      Support      Project							
Roughton International	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza		Date	04.2012
			Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 30 + 091</i> <i>Protection wall PW-1. Reinforcement scheme</i> <i>Zid de gardă ZG-1. Schema de armare</i>		Checked	N.Tcaci		Drawing ZG-P-2	
			Control STAS	L.Pozdirca			



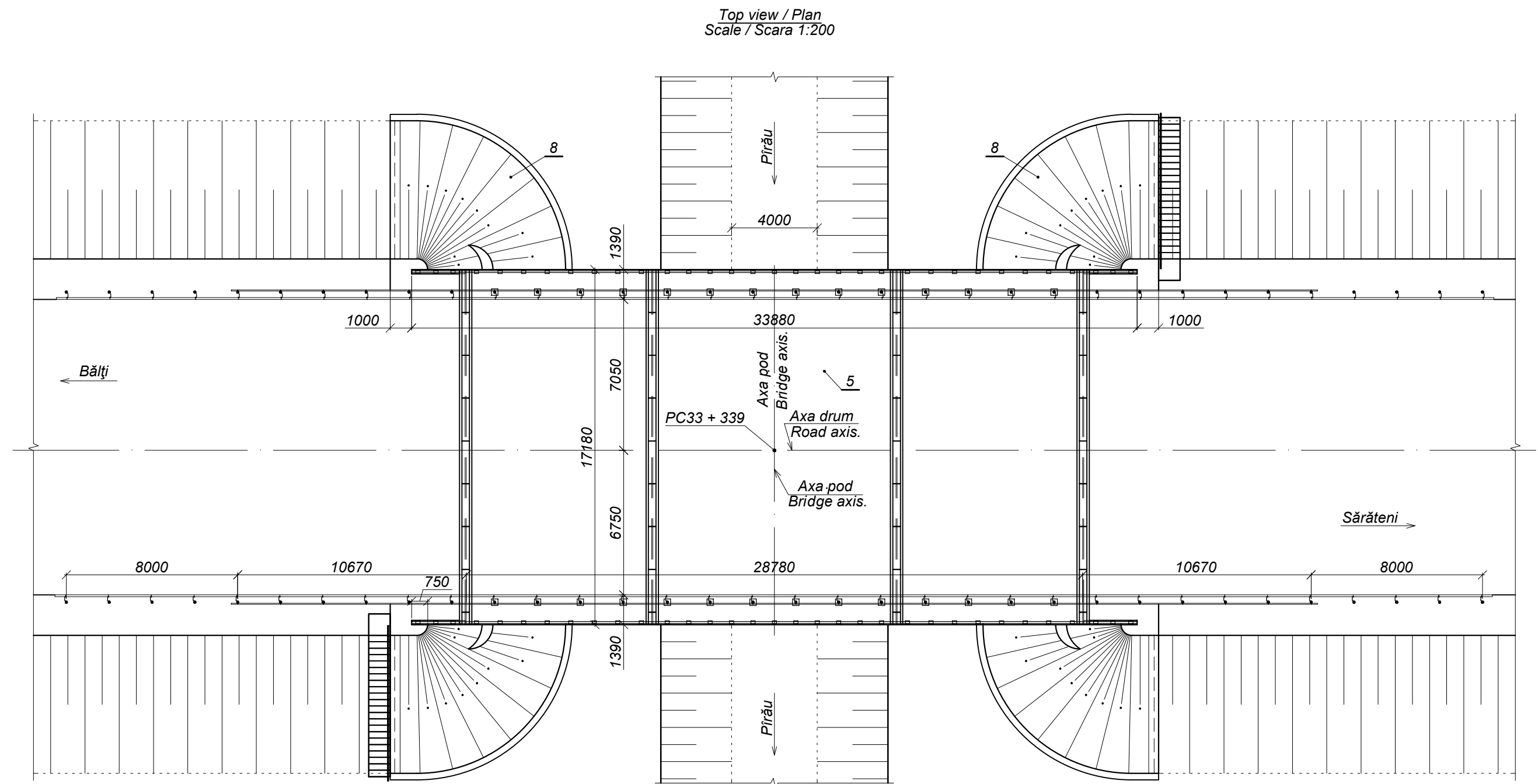




Design data/ Date proiect	Declivity, ‰ / Declivitatea, ‰		Distance, m / Distanța, m		Carriageway mark on axis, m / Cota pe axa părții carosabile, m		Carriageway land mark on axis, m / Cota teren pe axa părții carosabile, m		Distance / Distanța, m	
	0		28,78		75.46		71.30		5,20	
Land data / Date teren	75.46		75.46		75.46		75.46		75.46	
	71.30		71.20		71.10		69.00		69.00	
Distance / Distanța, m	5,20		3,50		3,70		4,00		3,70	
	3,50		5,20		3,50		3,70		3,50	

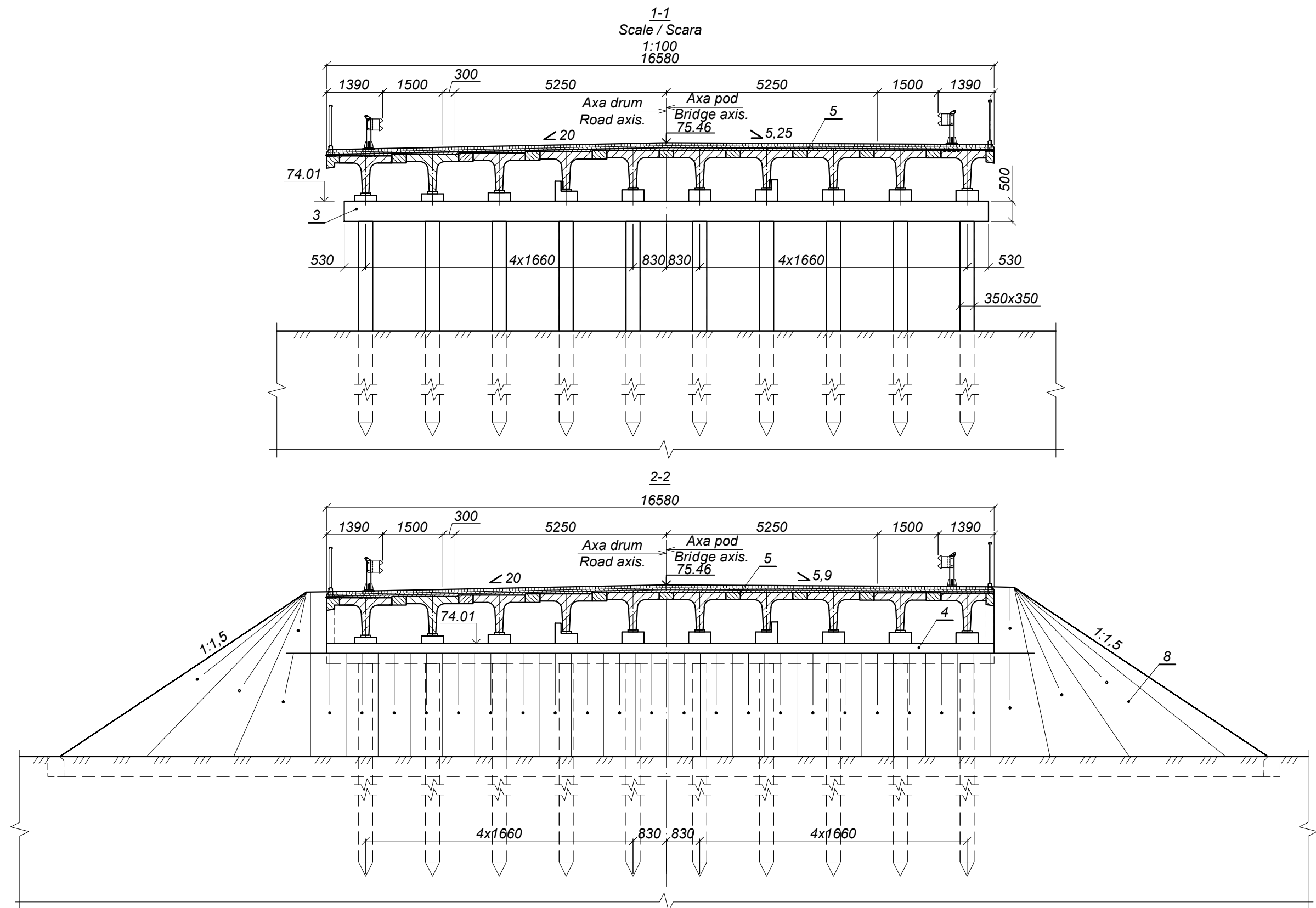
- 1 Abutmen/Culeea-1  
2 Pile/Pila-2  
3 Pile/Pila-3  
4 Abutmen/Culeea-4  
5 Suprastructure and bridge's corriageway/Suprastuctura si calea podului  
8 Consolidation of cones/Consolidarea semiconurilor

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012	
		Designed	A.Cecan		Scale		
Universcons	Drawing title <i>Bridge.Pod, Km 33 + 339</i> <i>Bridge general view. Front view /</i> <i>Dispoziție generală a podului. Fațada.</i>	Checked	N.Tcaci		Drawing F-P-1		
		Control STAS	L.Pozdirca				



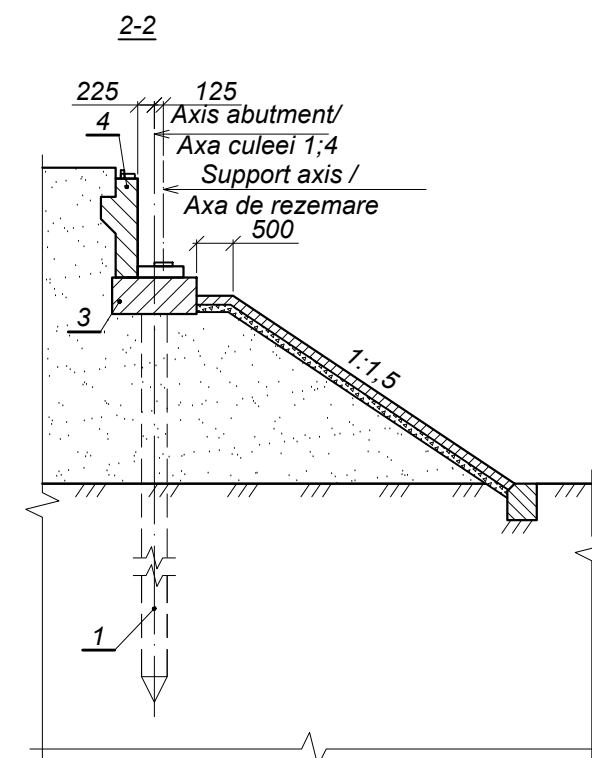
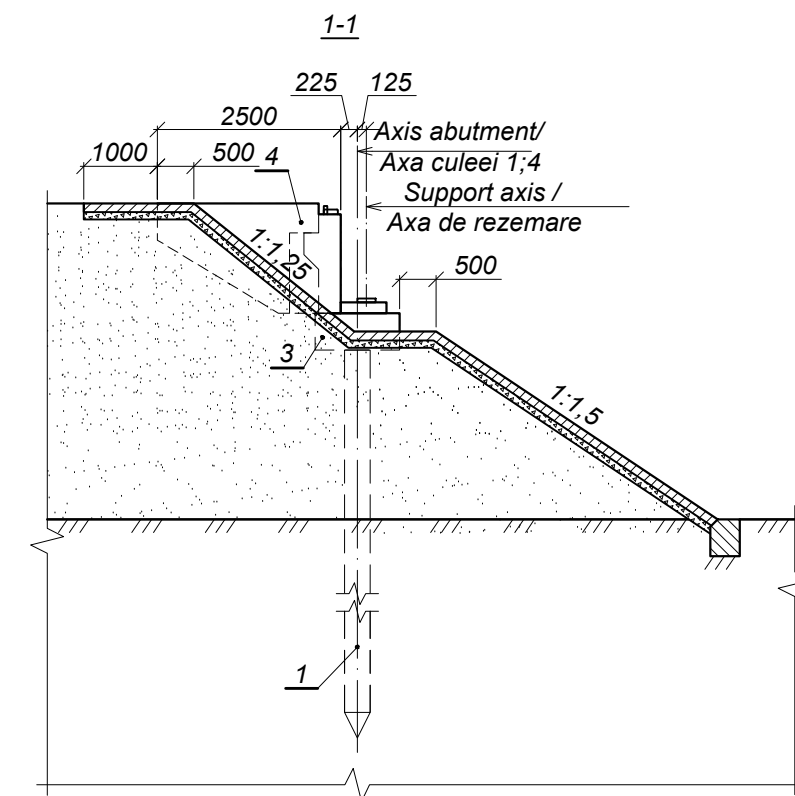
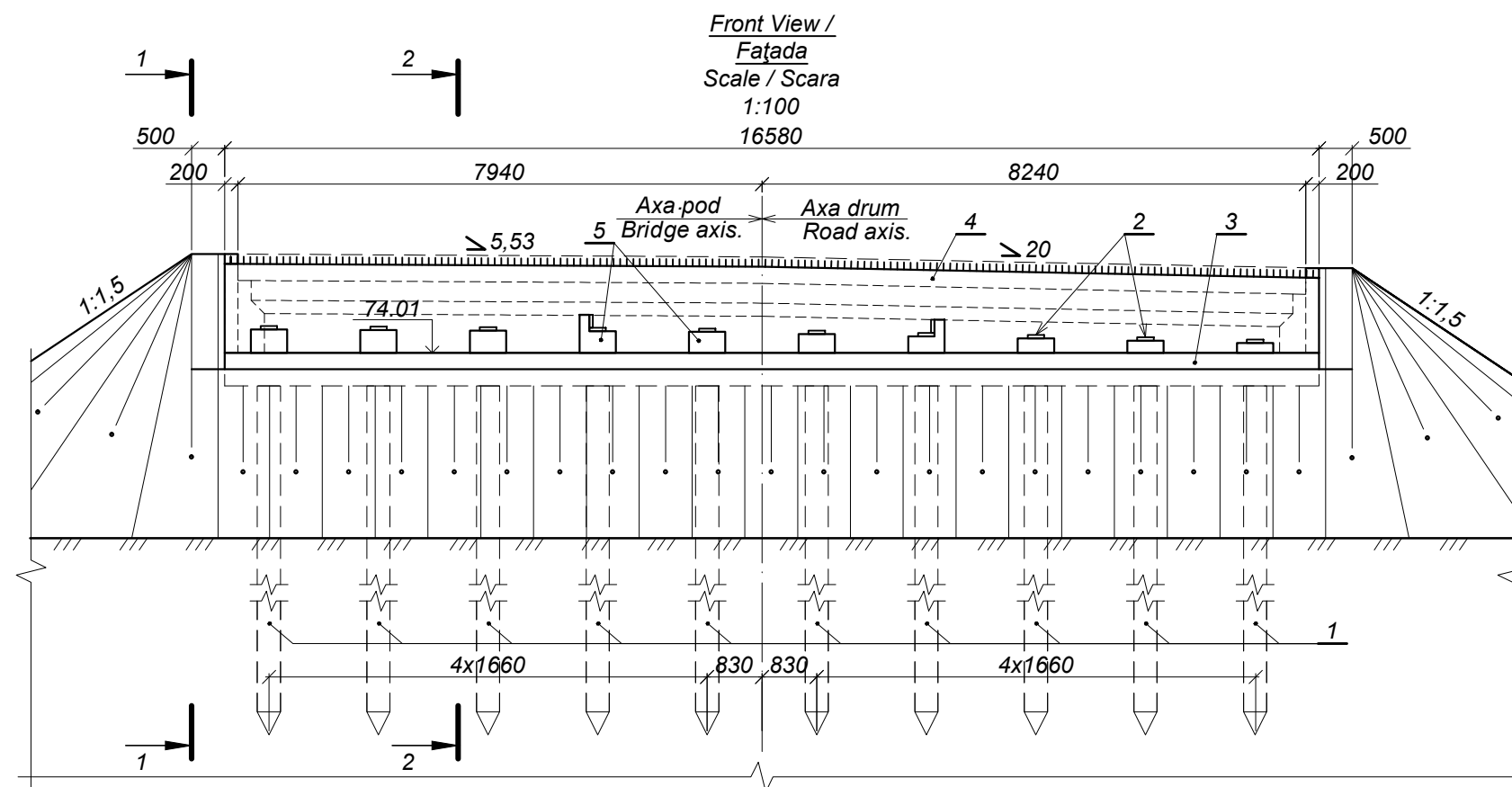
- 5 Superstructure and bridge way / Suprastuctura și calea podului  
8 Consolidation of cones / Consolidarea semiconurilor

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012	
		Designed	A.Cecan		Scale		
Universcons	Drawing title <i>Bridge.Pod, Km 33 + 339</i> <i>Bridge general view. Layout /</i> <i>Dispoziția generală a podului. Planul</i>	Checked	N.Tcaci		Drawing P-P-1		
		Control STAS	L.Pozdirca				



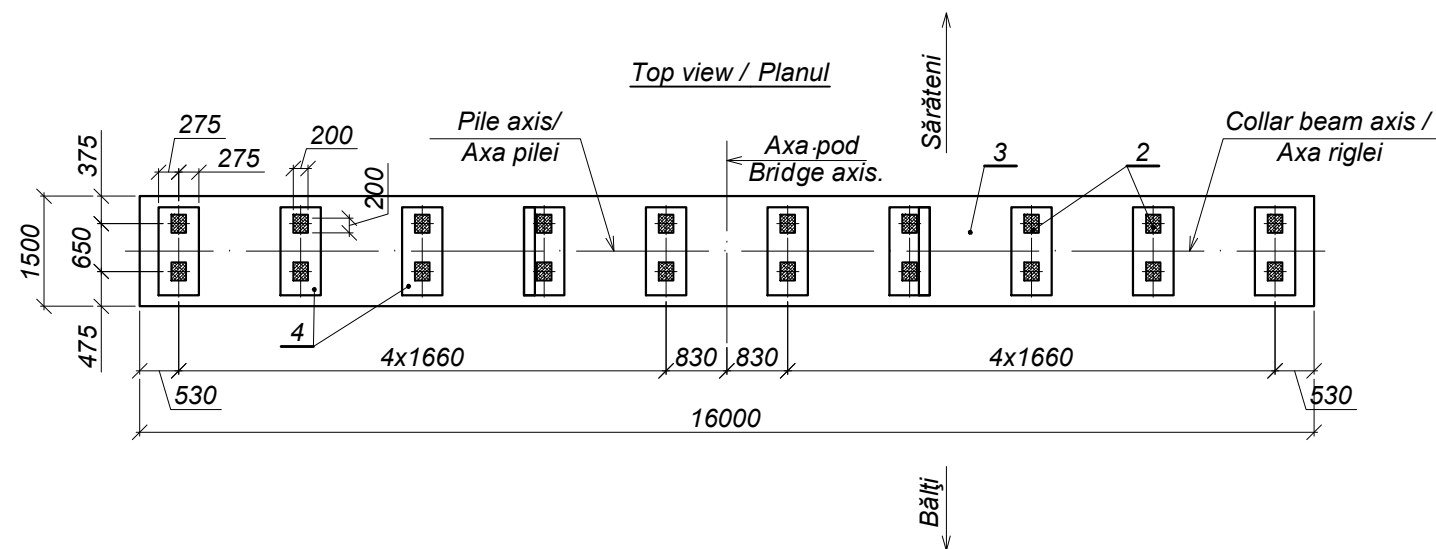
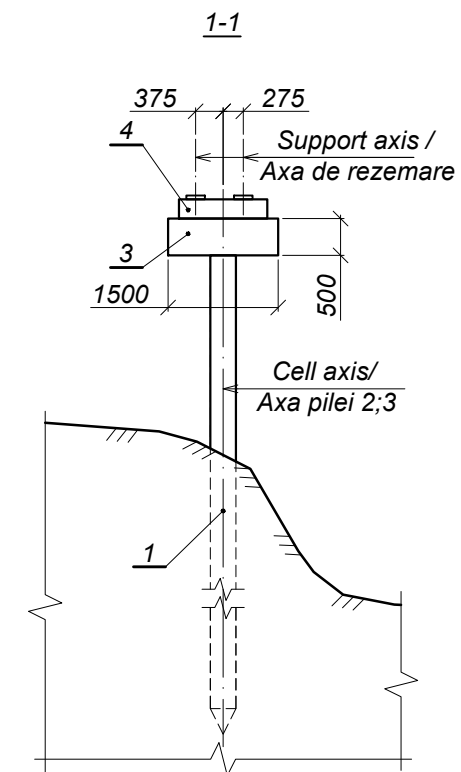
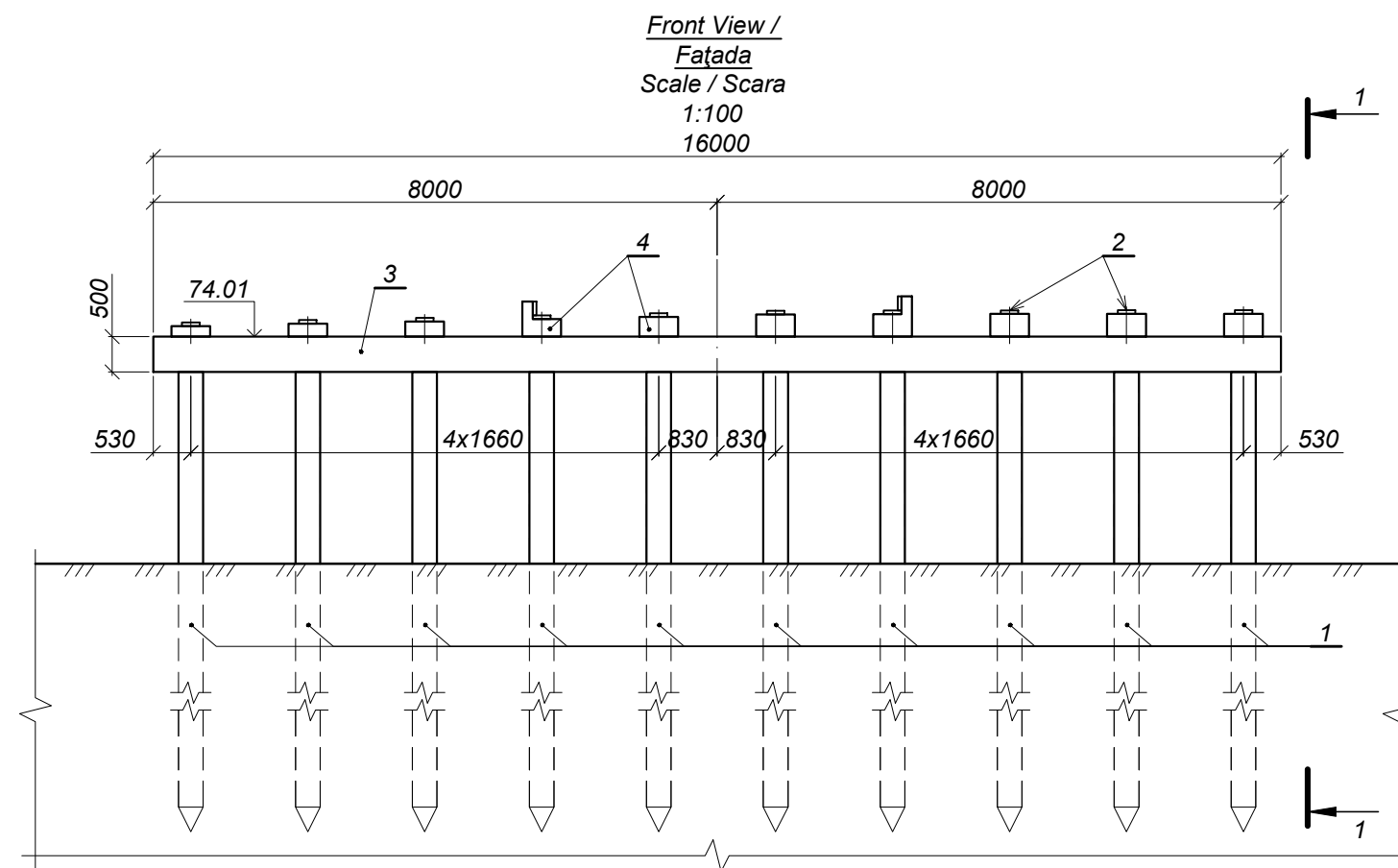
5 Superstructure and bridge way / Suprastuctura i calea podului  
8 Consolidation of cones / Consolidarea semiconurilor

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
	Road	Sector	Programme	Support	Project	
Roughton International	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza	Date	04.2012
Universcons	Drawing title Bridge.Pod, Km 33 + 339		Designed	A.Cecan	Scale	
	Bridge general view. Section 1-1 and 2-2 /		Checked	N.Tcaci	Drawing S-P-1	
	Dispoziția generală a podului. Secțiunea 1-1; 2-2		Control STAS	L.Pozdirca		

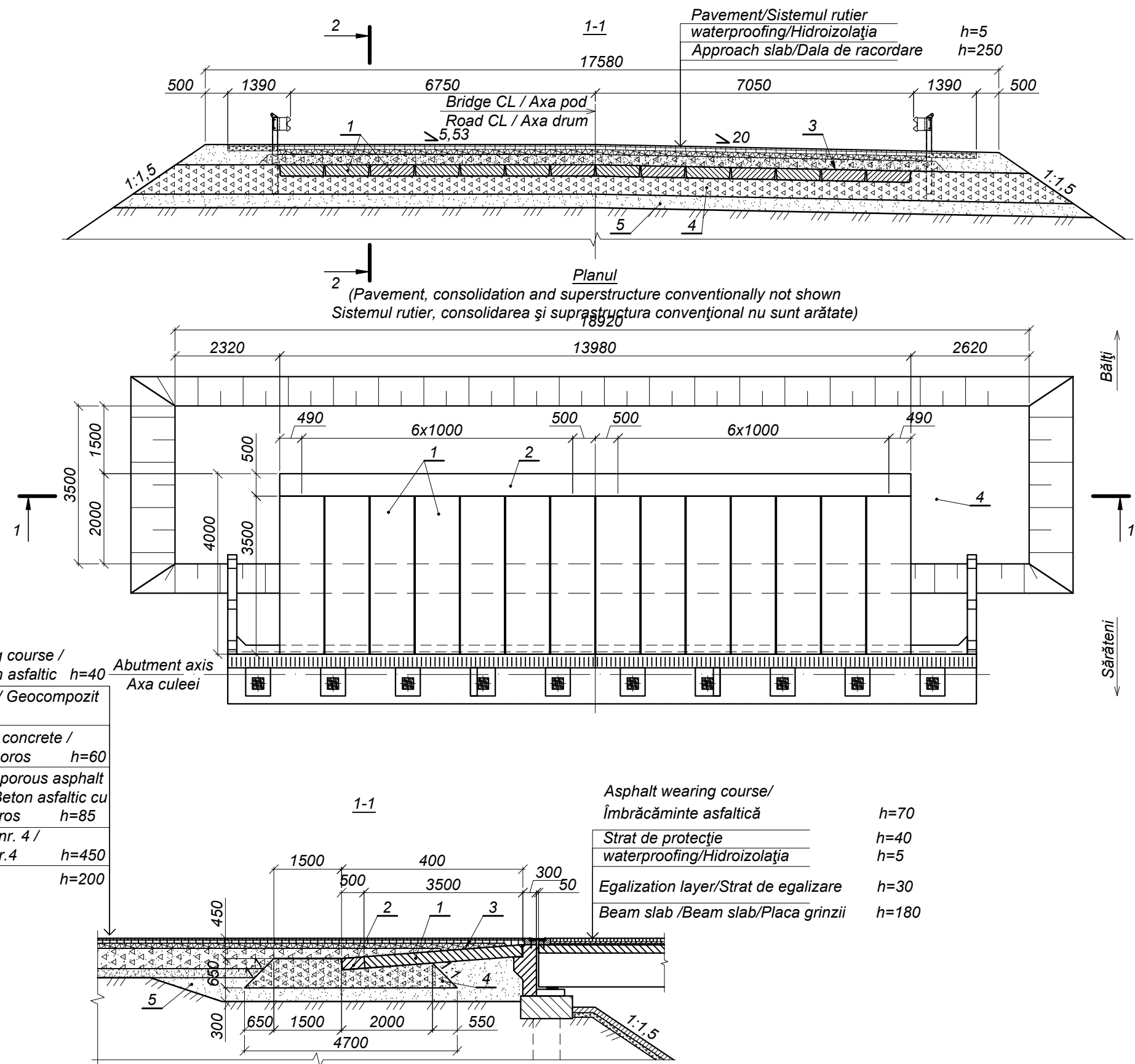


1. Piles / Piloți C10-35T4
2. Supporting rubber element / Aparat de reazem din cauciuc PO4 250x200x62-8-C
3. Collar beam CB-1 / Rigla R-1
4. Protection wall PW-1 / Zid de garda ZG-1
5. Bearing pads of abutment 1 / Cuzineții culeei 1
6. Surface waterproofing with bitumen and filler, in 2 layers / Hidroizolare suprafețelor din bitum filerizat în două straturi

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support Project				
Roughton International	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza	Date	04.2012
			Designed	A.Cecan	Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 33 + 339</i> <i>General view of abutment 1, 4 /</i> <i>Dispoziția generală a culeei 1,4</i>		Checked	N.Tcaci	Drawing C-P-1	
			Control STAS	L.Pozdirca		



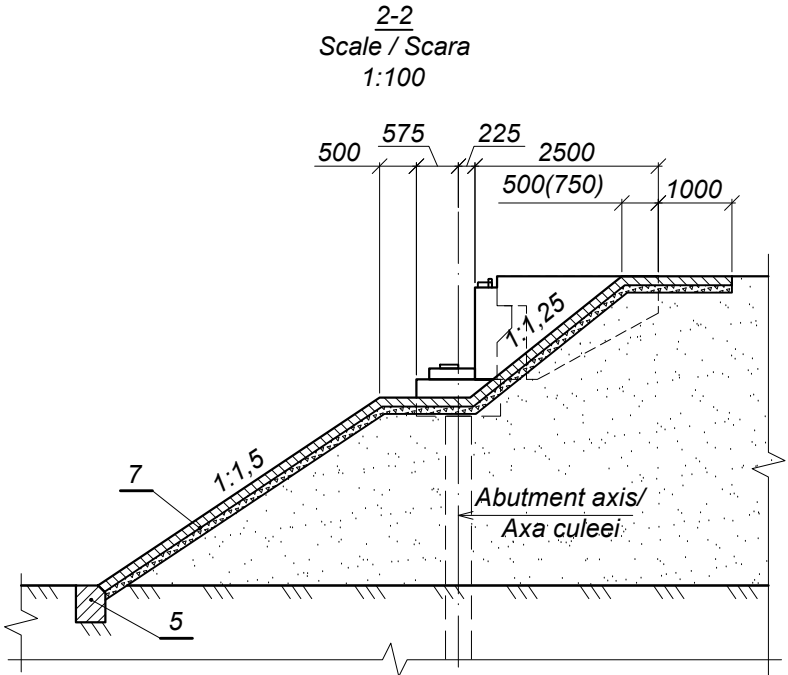
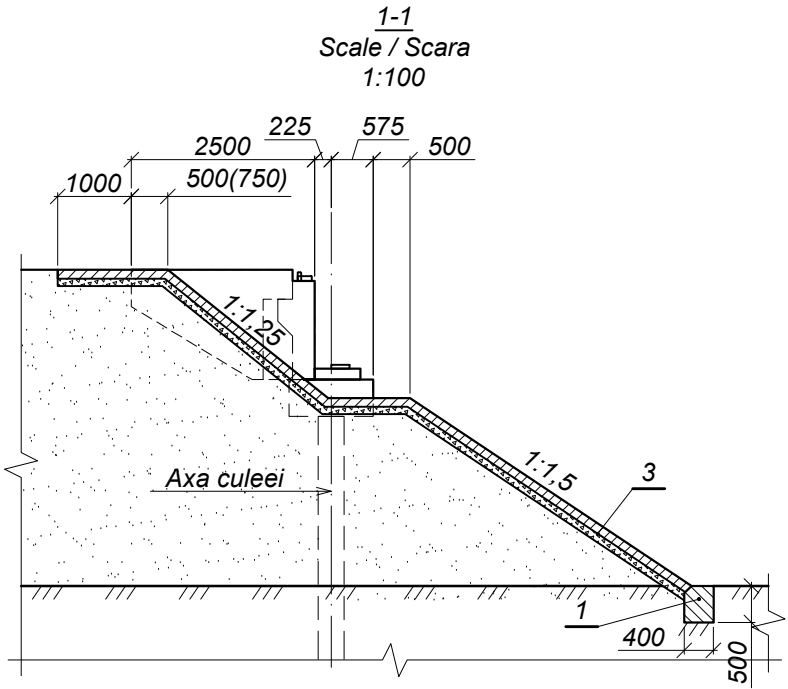
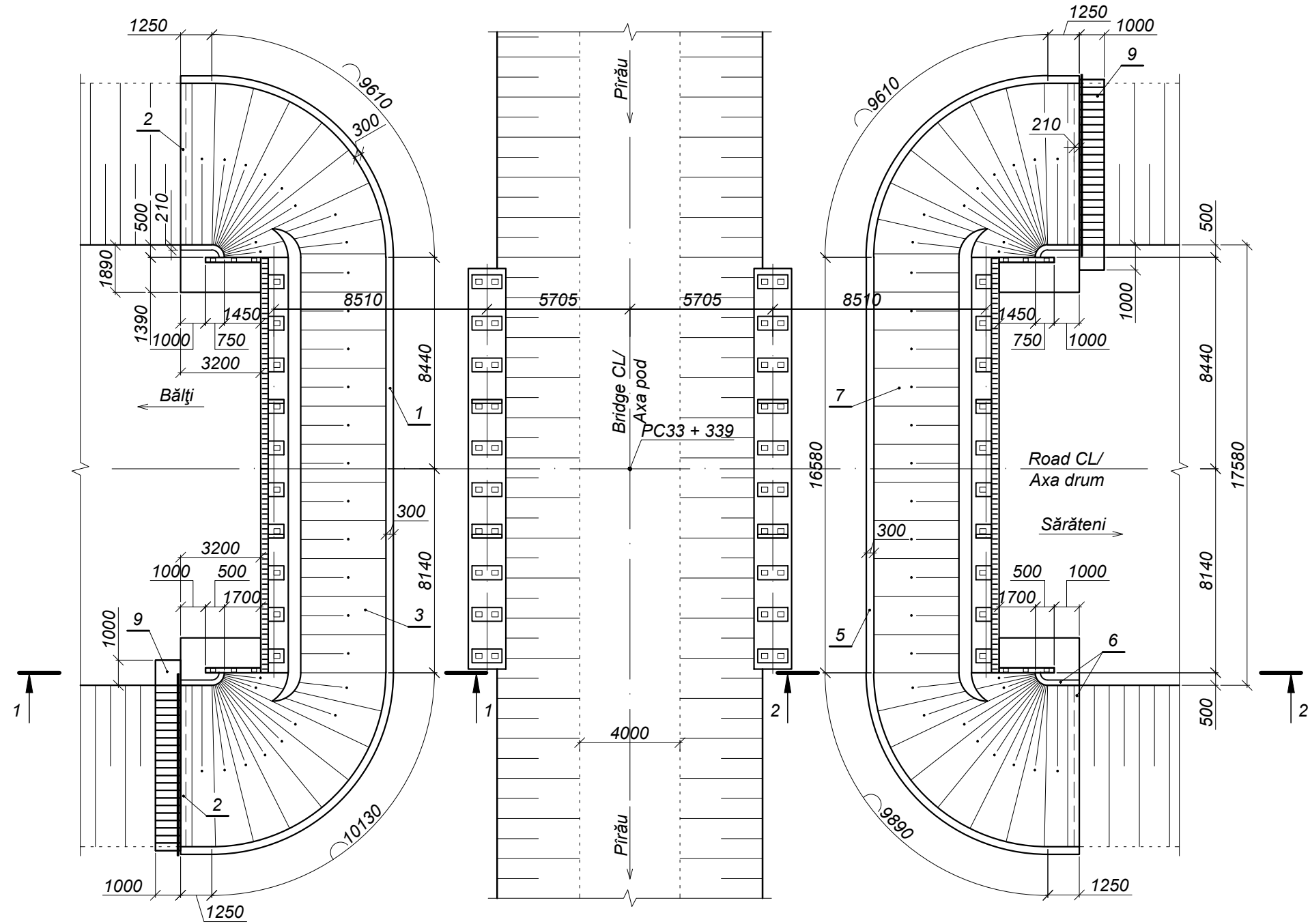
World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
		Road	Sector	Programme	Support	Project
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012
		Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 33 + 339</i> <i>General view of pile 2, 3 /</i> <i>Dispoziția generală a pilei 2,3</i>	Checked	N.Tcaci		Drawing PL-P-1	
		Control STAS	L.Pozdirca			



1. Approach slab / Dala de racordare П400.98.25-TAIII
2. Connecting joint of approaching slabs /  
Nodul de îmbinare a plăcilor de racordare NM-7
3. Waterproofing of approaching parts /  
Hidroizolarea elementelor de racordare
4. Crushed stone bed / Pat din piatră spartă M400
5. Sand with gravel mix / Amestec de nisip cu pietriș

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
	Road	Sector	Programme	Support	Project		
Roughton International	Rehabilitation of R14 Road Balti-Saratenii			ISP	S.Bogza	Date	04.2012
Universcons	Drawing title Bridge.Pod, Km 33 + 339 Approach to bridge at abutment 1 and 4 / Racordarea podului cu drumul la culeea 1;4			Designed	A.Cecan	Scale	
				Checked	N.Tcaci	Drawing RP-P-1	
				Control STAS	L.Pozdirca		

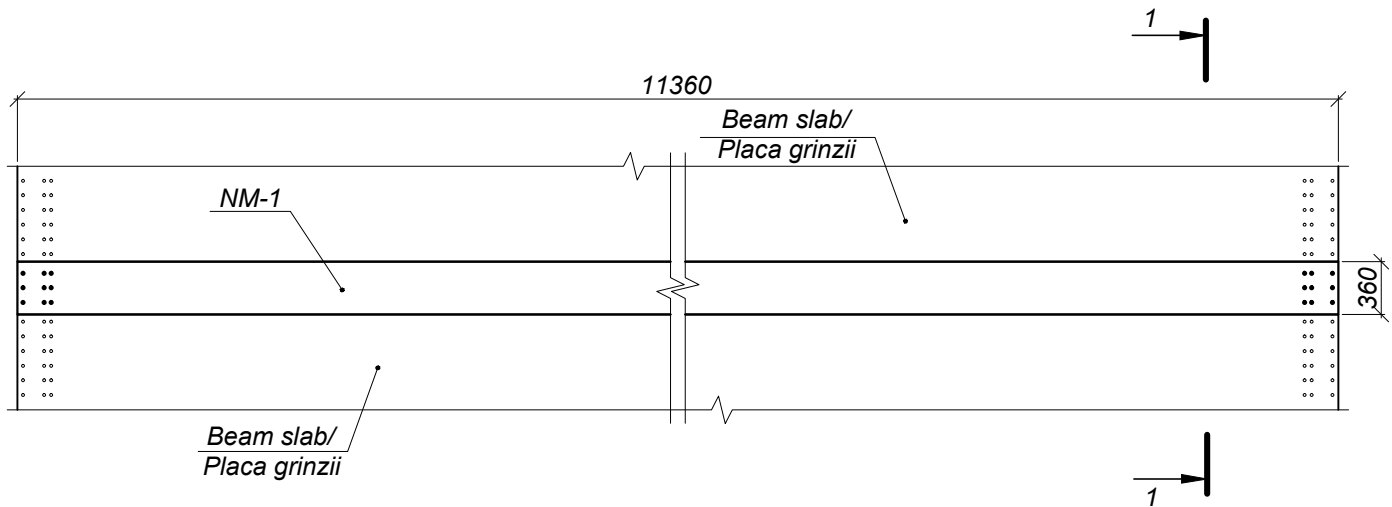
Planul  
(Bridge way and superstructure conventionally not shown/  
Calea podului și suprastructura convențional nu sunt arătate)  
Scale / Scara 1:200



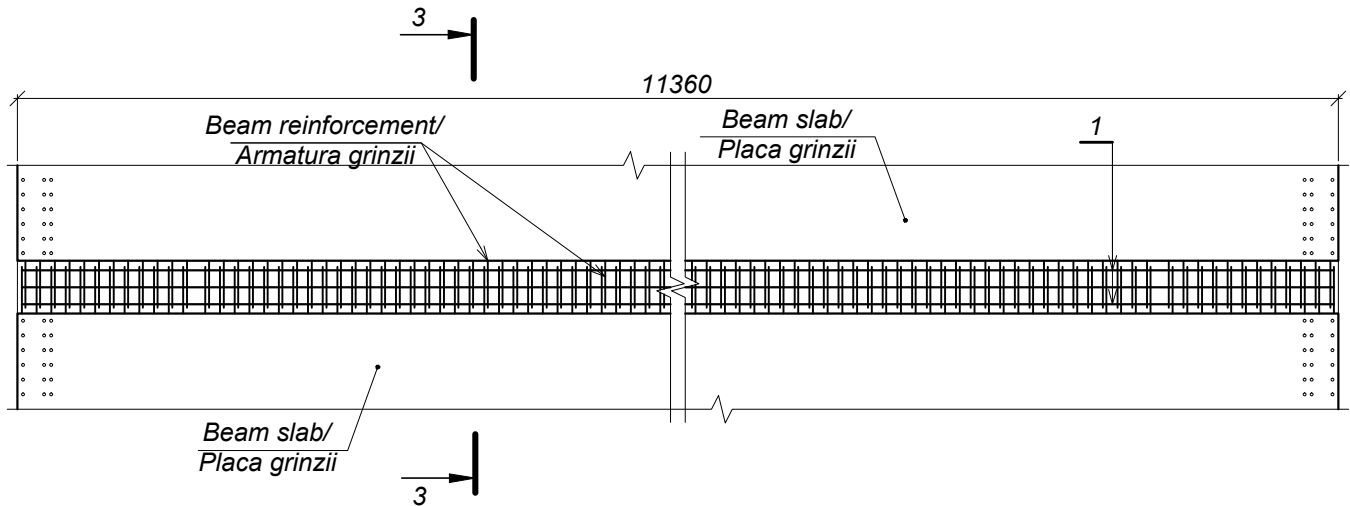
World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector		Programme	Support	Project		
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza	Date	04.2012	
		Designed	A.Cecan	Scale		
Universcons	Drawing title <i>Bridge.Pod, Km 33 + 339</i> <i>Consolidation of cones /</i> <i>Consolidarea semiconurilor</i>	Checked	N.Tcaci	Drawing	CS-P-1	
		Control STAS	L.Pozdirca			



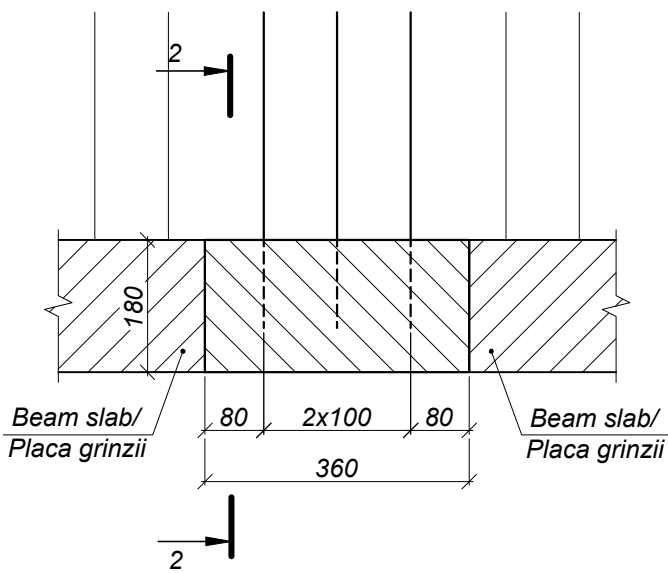
Formwork / Schema de cofraj  
Layout / Plan  
Scale / Scale / Scara 1:50



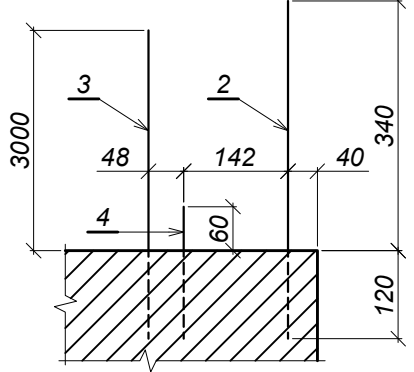
Reinforcement scheme / Schema de armare  
Layout / Plan



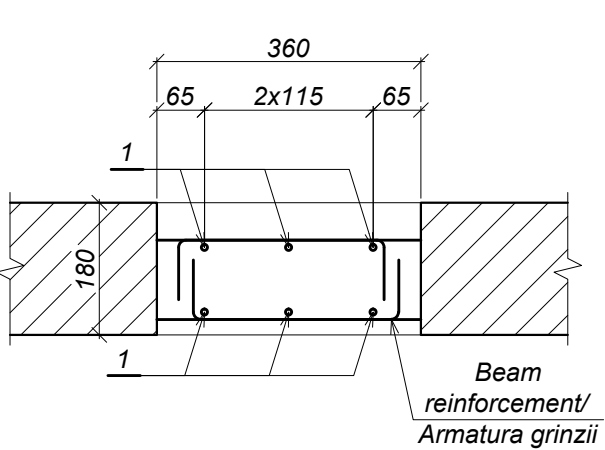
1-1  
Scale / Scara  
1:10



2-2



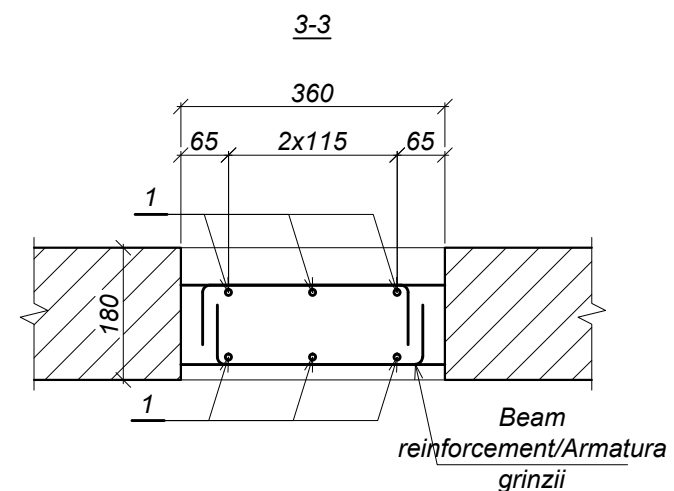
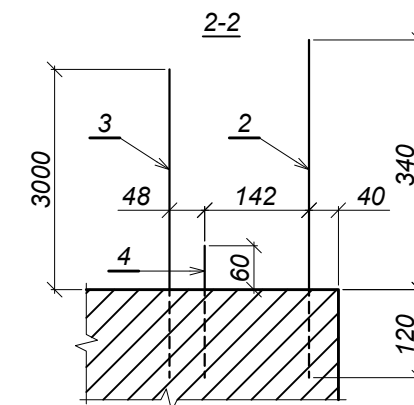
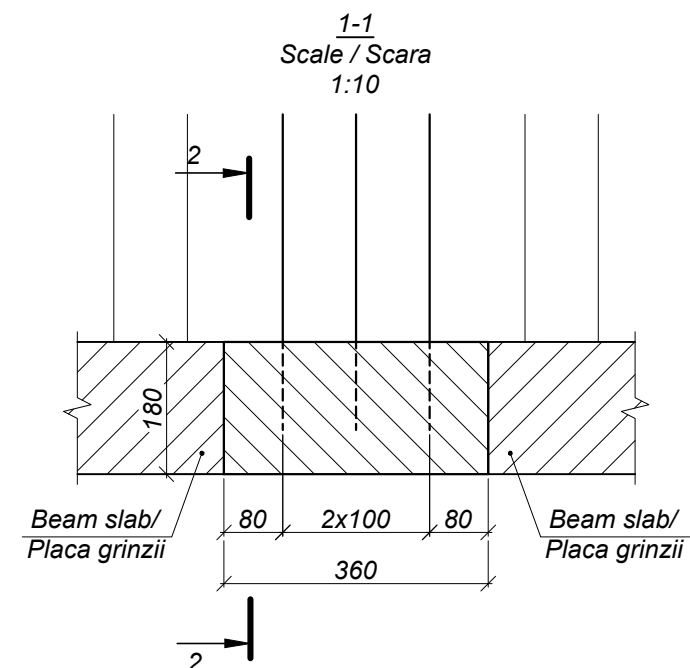
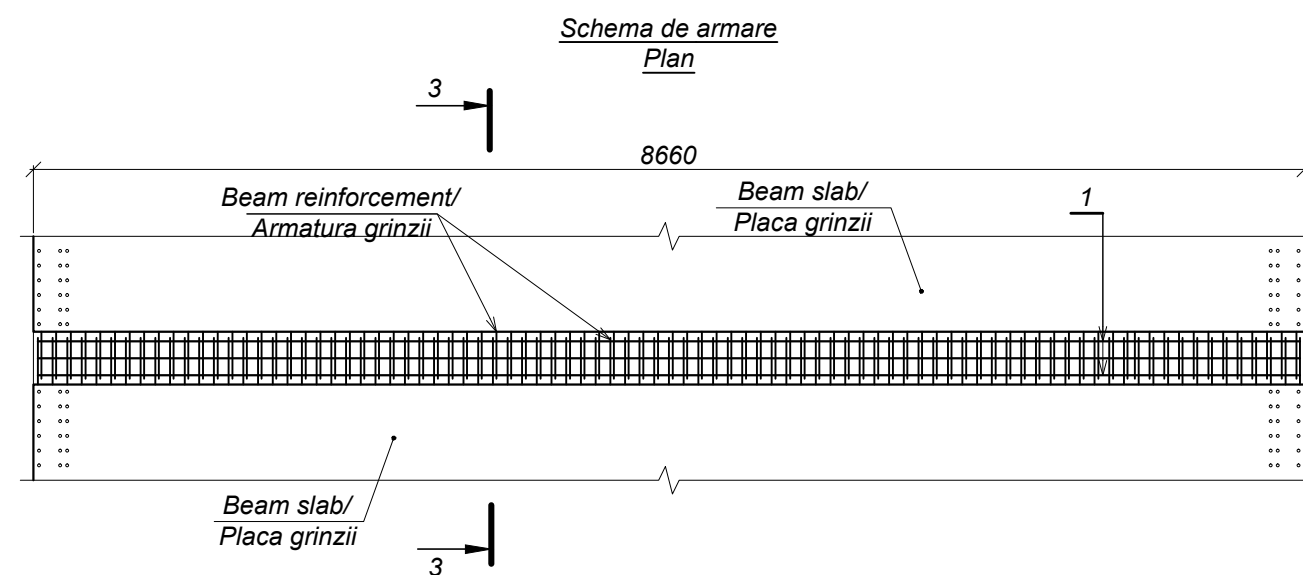
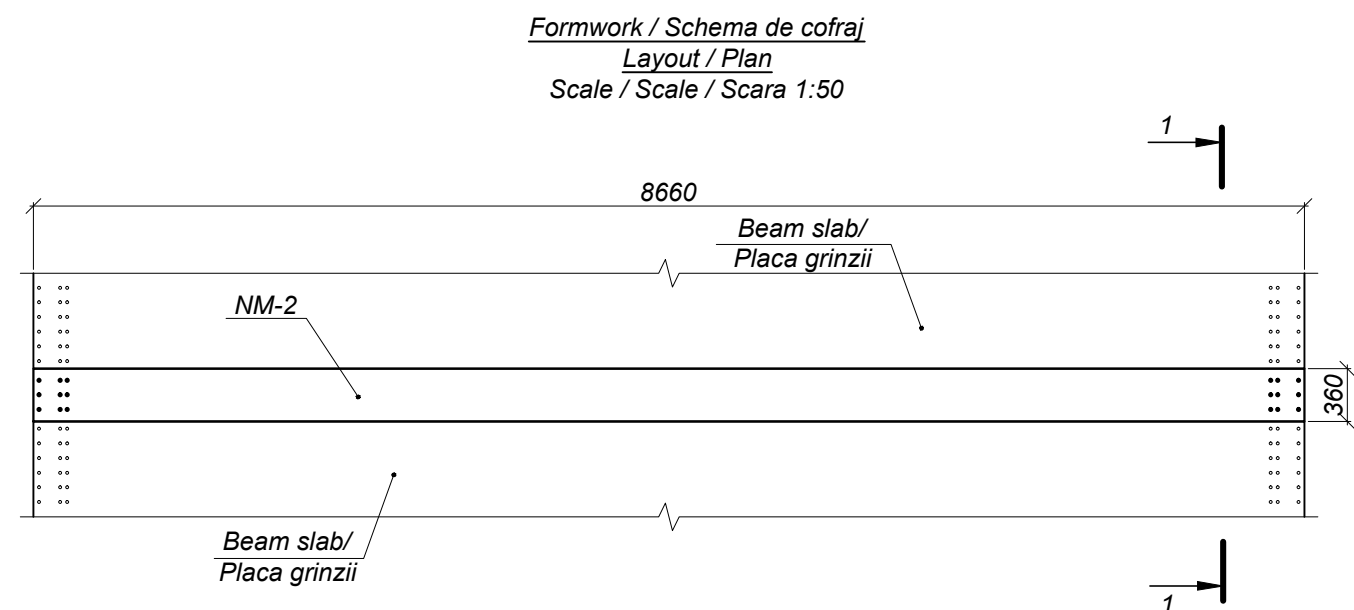
3-3



Quantity of steel per one element /  
Consumul de metal pentru un element, kg

Element name / Marca elementului	Reinforcement parts / Parts / Piese de armare				Total weight / Greutate totală
	Reinforcement type / Clasa armaturii			Total	
	A-I				
	ГОСТ 5781-82*				
	Ø8	Ø10	Total		
NM-1	27,0	3,6	30,6	30,6	30,6

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme		Support Project					
Roughton International	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza		Date	04.2012
			Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 33 + 339</i> <i>Monolithic joint MJ-1 / Nodul monolit NM-1</i>		Checked	N.Tcaci		Drawing NM-P-1	
			Control STAS	L.Pozdirca			

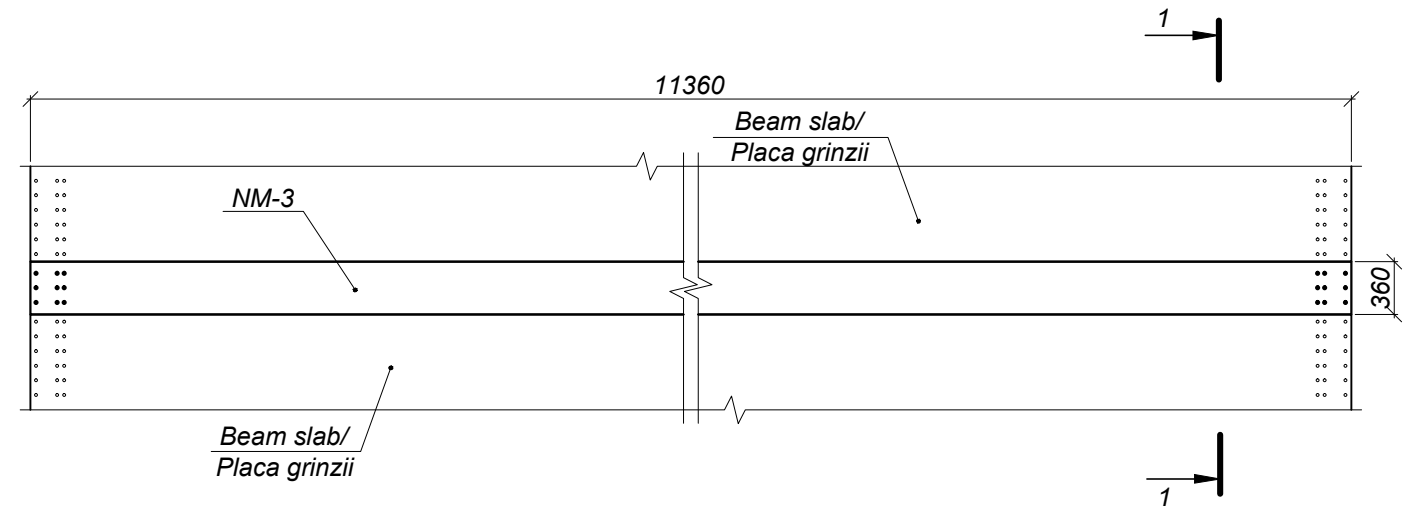


Quantity of steel per one element /  
 Consumul de metal pentru un element, kg

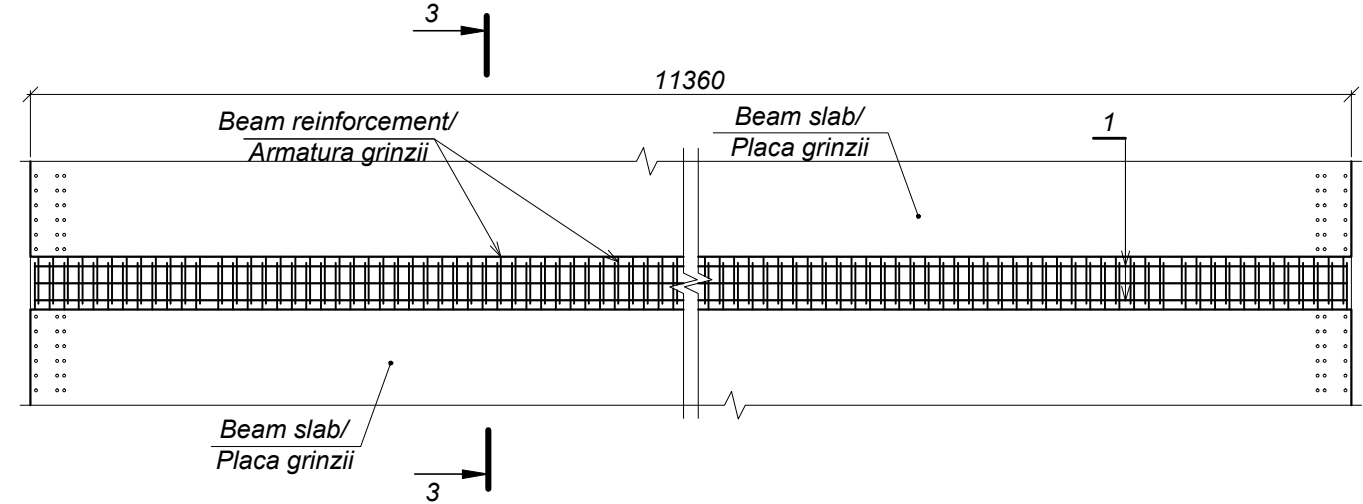
Element name / Marca elementului	Reinforcement parts / Parts / Piese de armare				Total weight / Greutate totală
	Reinforcement type / Clasa armaturii				
	A-I				
	ГОСТ 5781-82*				
	Ø8	Ø10	Total		
NM-2	20,4	3,6	24,0	20,4	20,4

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road      Sector      Programme      Support      Project							
Roughton International	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza		Date	04.2012
			Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 33 + 339</i> <i>Monolithic joint MJ-2 / Nodul monolit NM-2</i>		Checked	N.Tcaci		Drawing NM-P-2	
			Control STAS	L.Pozdirca			

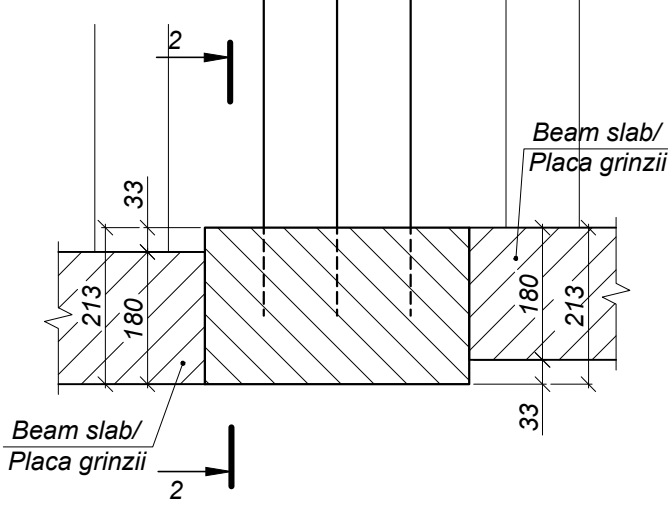
Formwork / Schema de cofraj  
Layout / Plan  
Scale / Scale / Scara 1:50



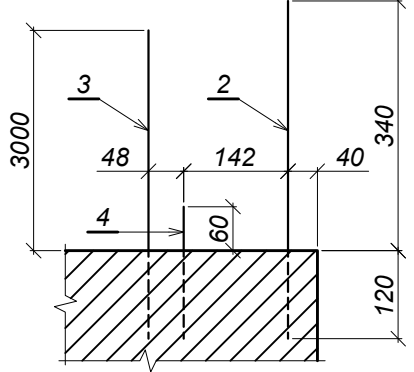
Schema de armare  
Plan



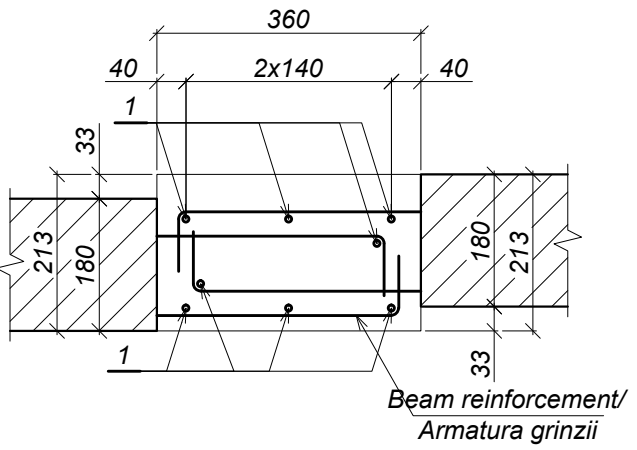
1-1  
Scale / Scara  
1:10



2-2



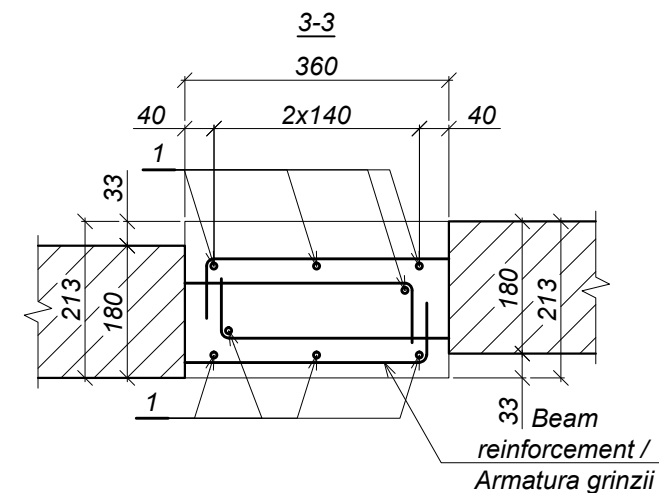
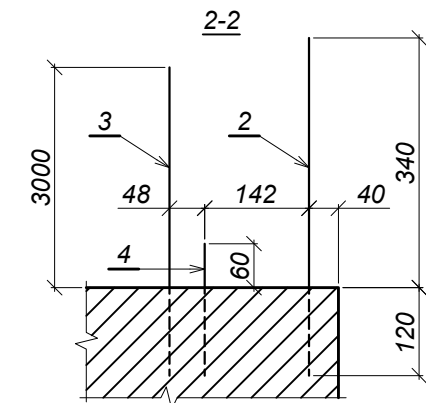
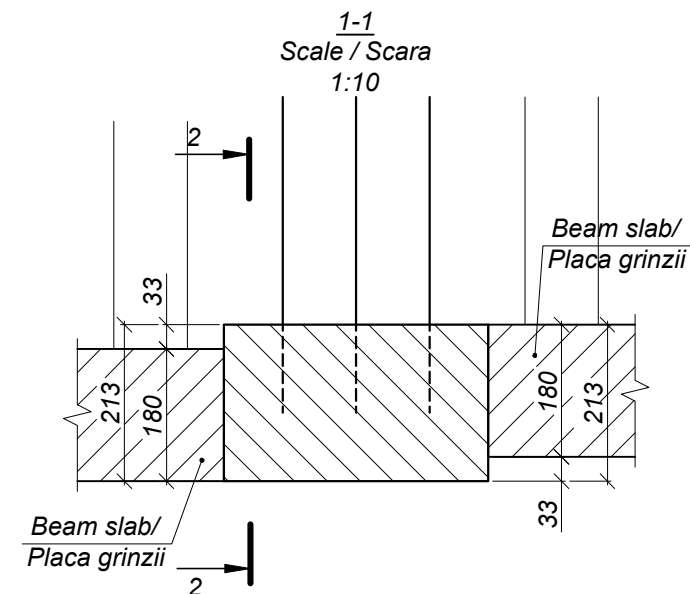
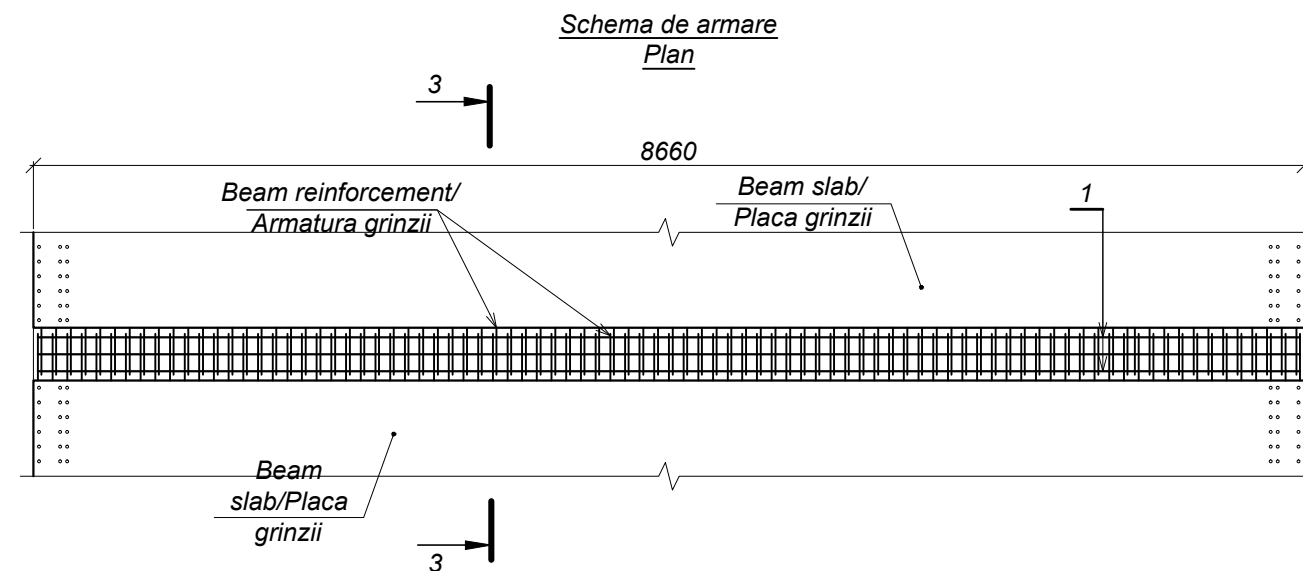
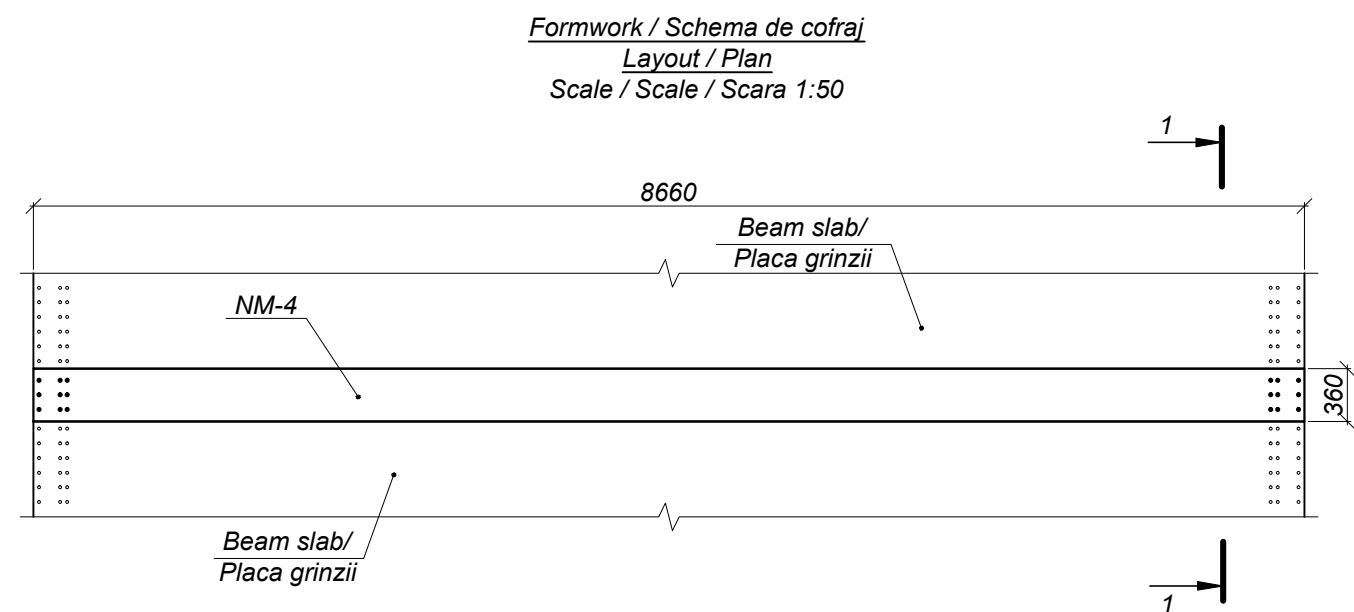
3-3



Quantity of steel per one element /  
Consumul de metal pentru un element, kg

Element name / Marca elementului	Reinforcement parts / Parts / Piese de armare				Total weight / Greutate totală
	Reinforcement type / Clasa armaturii			Total	
	A-I				
	ГОСТ 5781-82*				
	Ø8	Ø10	Total		
NM-3	36,0	3,6	39,6	39,6	39,6

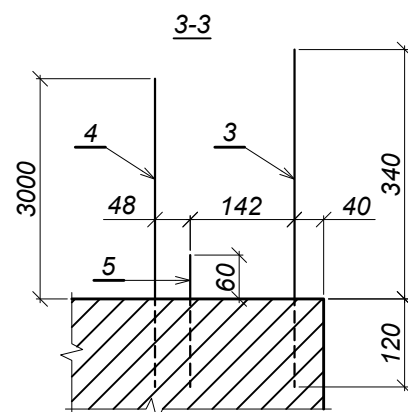
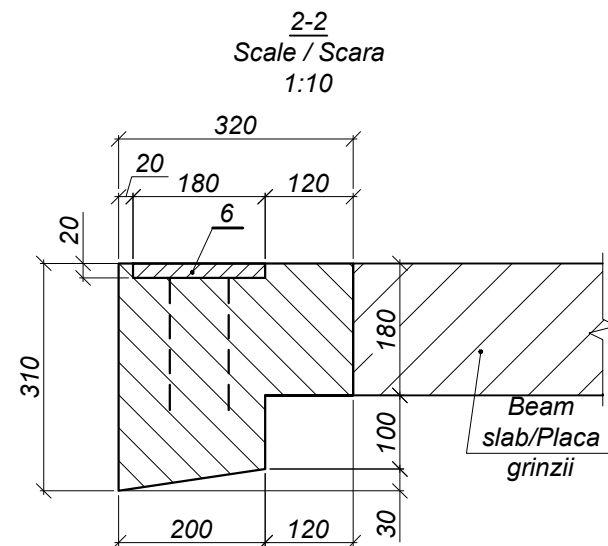
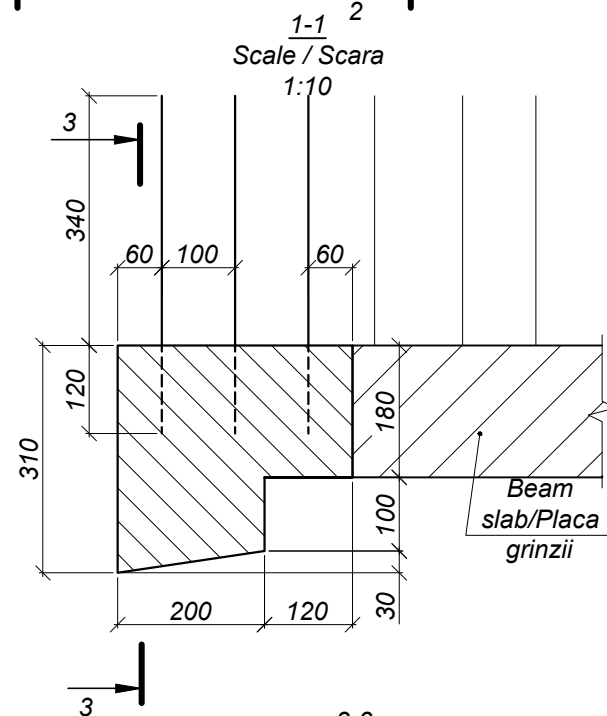
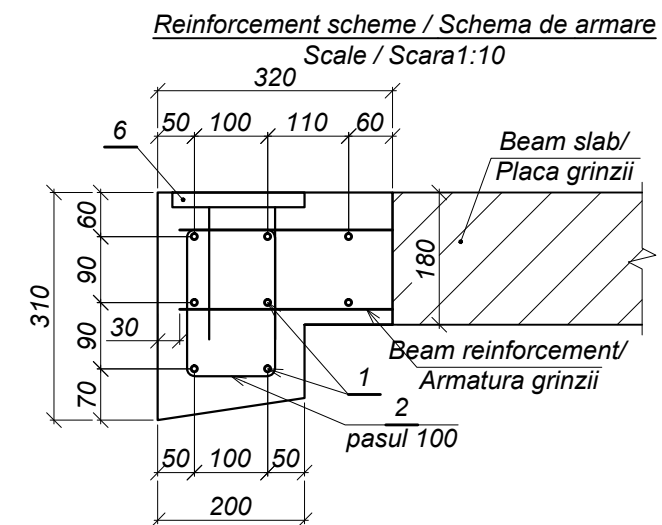
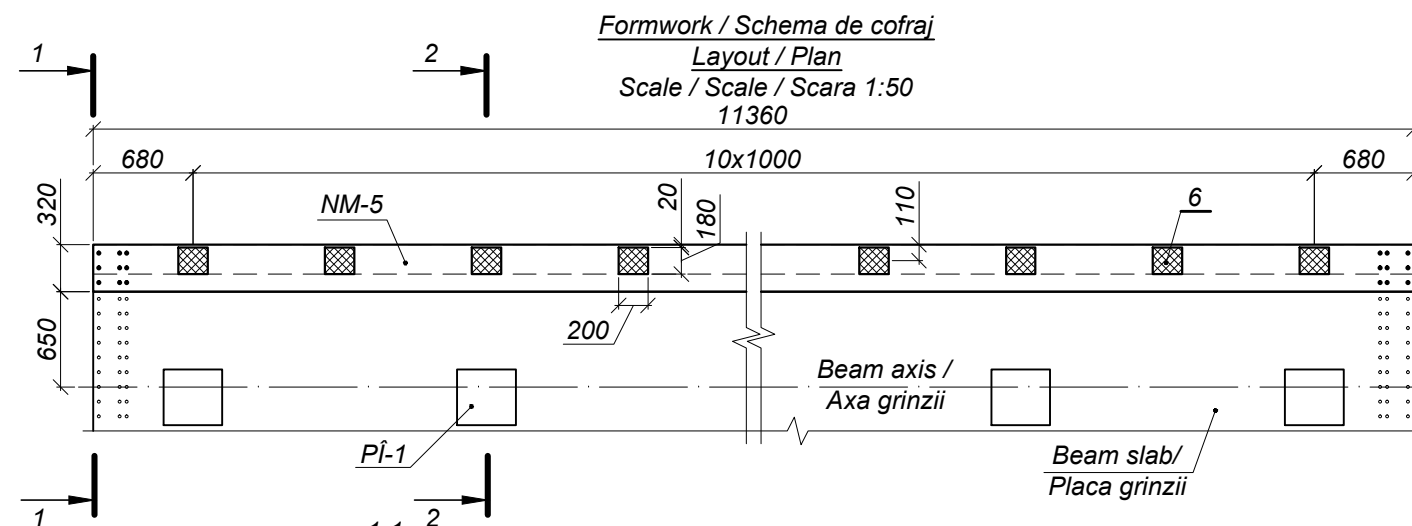
World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme		Support	Project				
Roughton International	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza		Date	04.2012
			Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 33 + 339</i> <i>Monolithic joint MJ-3 / Nodul monolit NM-3</i>		Checked	N.Tcaci		Drawing NM-P-3	
			Control STAS	L.Pozdirca			



Quantity of steel per one element /  
 Consumul de metal pentru un element, kg

Element name / Marca elementului	Reinforcement parts / Parts / Piese de armare				Total weight / Greutate totală
	Reinforcement type / Clasa armaturii				
	A-I				
	ГОСТ 5781-82*				
	Ø8	Ø10	Total		
NM-4	27,2	3,6	30,8	30,8	30,8

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support	Project			
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012
Universcons	Drawing title Bridge.Pod, Km 33 + 339 Monolithic joint MJ-4 / Nodul monolit NM-4	Designed	A.Cecan		Scale	
		Checked	N.Tcaci		Drawing NM-P-4	
		Control STAS	L.Pozdirca			



**Tabel of parts / Tabela Pieselor**

Poz.	Draft / Eschiz
2	

**Quantity of steel per one element / Consumul de metal pentru un element, kg**

Element name / Marca elementului	Reinforcement parts / Piese de armare				Embedded parts / Piese înglobate					Total weight / Greutate totală
	Reinforcement type / Clasa armaturii				Reinforc. type / Clasa armaturii		Steel type / Marca metalului			
	A-I				A-III		16Д			
	ГОСТ 5781-82*				ГОСТ 5781-82*		ГОСТ 103-76**			
	Ø8	Ø10	Total		Total	Ø16	Total	-20		
NM-5	69,9	3,6	73,5	73,5	13,2	13,2	62,7	62,7	75,9	149,4

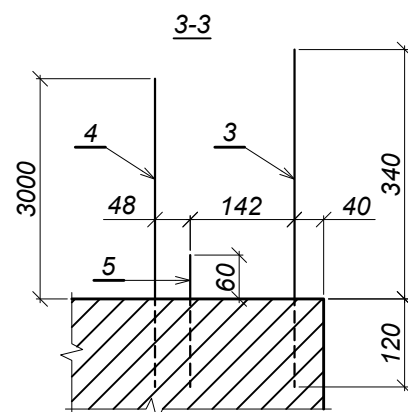
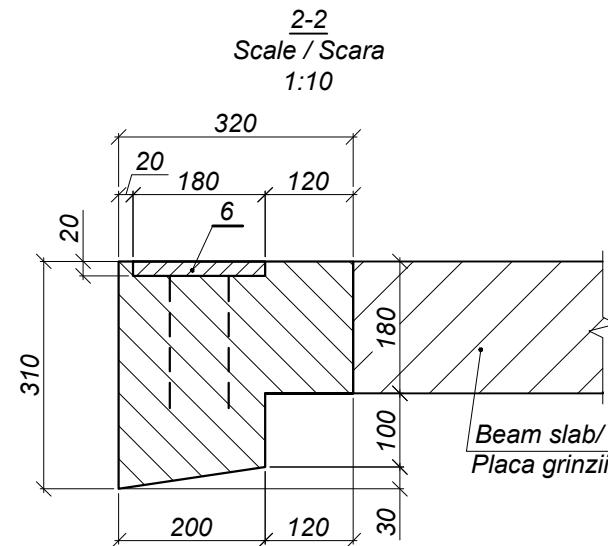
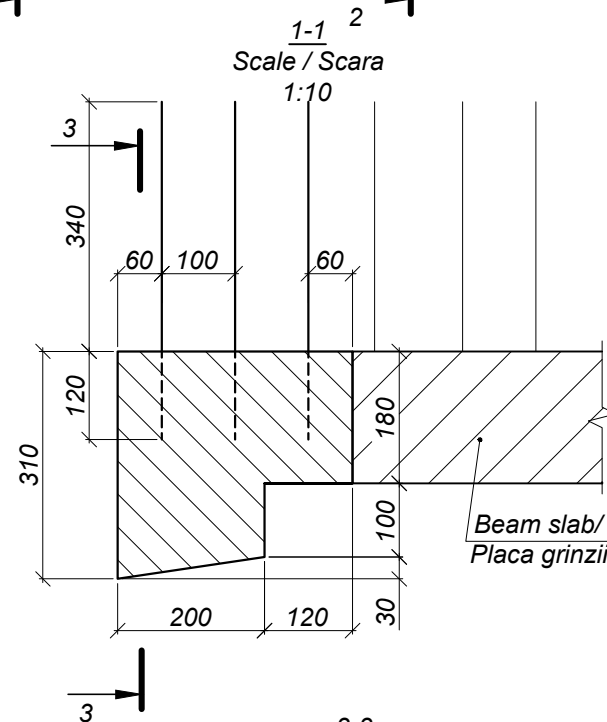
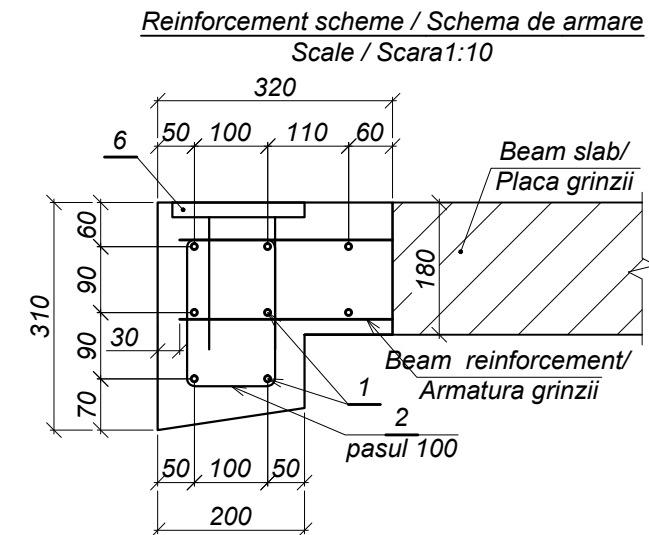
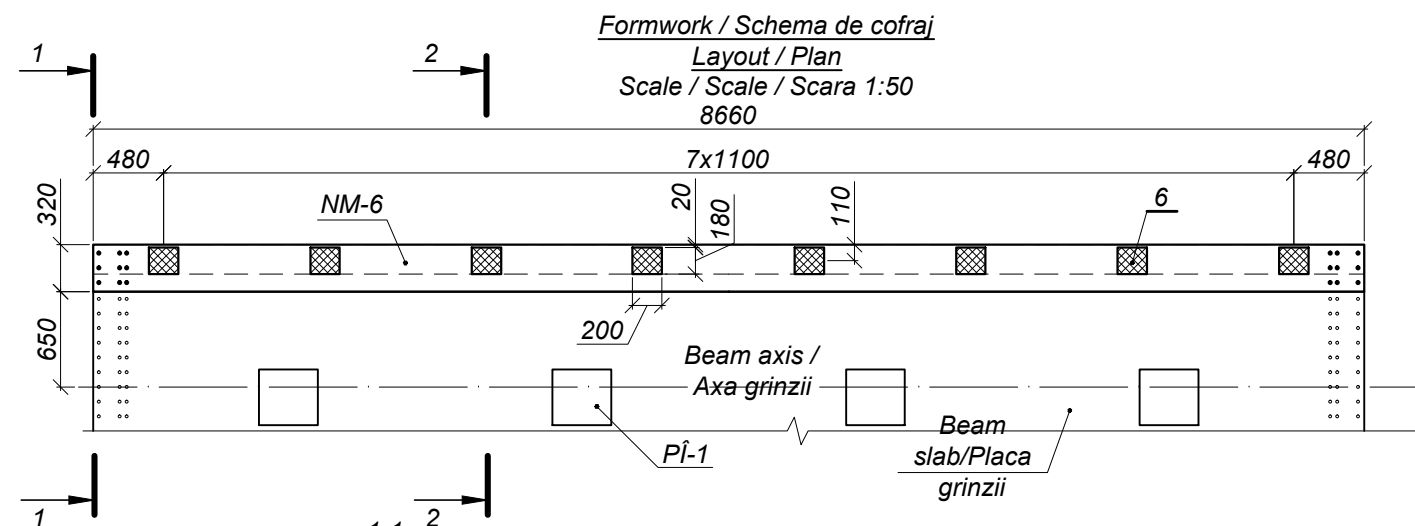
**Specification / Specificația**

Format	Zona	Position / Poziția	Document number / Indicativ	Name / Denumirea	Quantity / Cantitatea	Note / Notă
				<b>Parts / Piese</b>		
				A-I-8 ГОСТ 5781-82* Cm3nc3 ГОСТ 380-94		
FP		1		l=11300	8	4,5 kg
FP		2		l=760	113	0,3 kg
				A-I-10 ГОСТ 5781-82* Cm3nc3 ГОСТ 380-94		
FP		3		l=460	6	0,3 kg
FP		4		l=420	6	0,2 kg
FP		5		l=180	6	0,1 kg
A4		6	2009/032D - 00.00.00	Incorporated piece / Piesă înglobată PÎ-3	11	6,9 kg
				<b>Materials / Materiale</b>		
				ГОСТ 26633-91*		0,96 m³

**Note / Notă:**

- Reinforcing beam is cut according to drawing.  
Armatura grinzii se taie în conformitate cu desenul.

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road      Sector      Programme      Support      Project							
Roughton International  Universcons	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza		Date	04.2012
			Designed	A.Cecan		Scale	
	Drawing title <i>Bridge.Pod, Km 33 + 339</i> <i>Monolithic joint MJ-5 / Nodul monolit NM-5</i>		Checked	N.Tcaci		Drawing  NM-P-5	
			Control STAS	L.Pozdirca			



**Tabel of parts / Tabela Pieselor**

Poz.	Draft / Eschiz
2	

**Quantity of steel per one element / Consumul de metal pentru un element, kg**

Element name / Marca elementului	Reinforcement parts / Piese de armare				Embedded parts / Piese înglobate					Total weight / Greutate totală
	Reinforcement type / Clasa armaturii			Total	Reinforc. type / Clasa armaturii		Steel type / Marca metalului		Total	
	A-I				A-III		16Д			
	ГОСТ 5781-82*				ГОСТ 5781-82*		ГОСТ 103-76**			
	Ø8	Ø10	Total		Ø16	Total	-20	Total		
NM-6	53,0	3,6	56,6	56,6	9,6	9,6	45,6	45,6	55,2	111,8

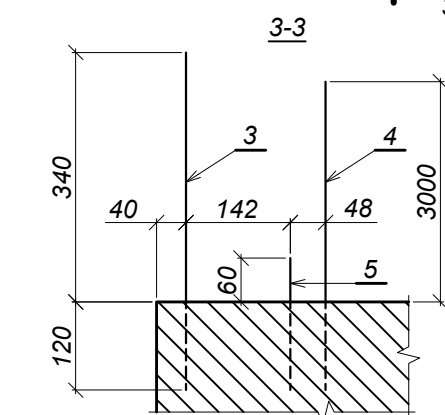
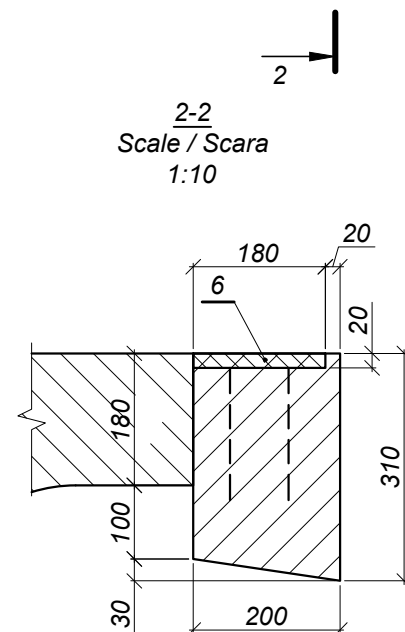
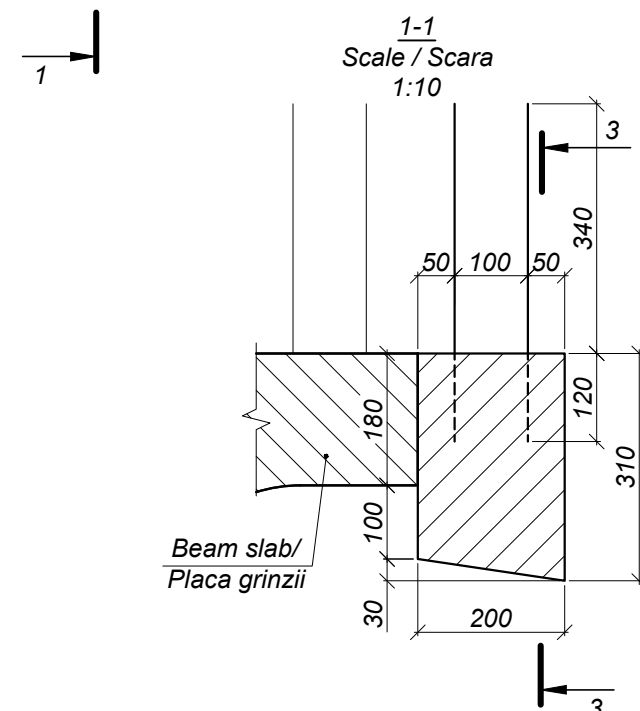
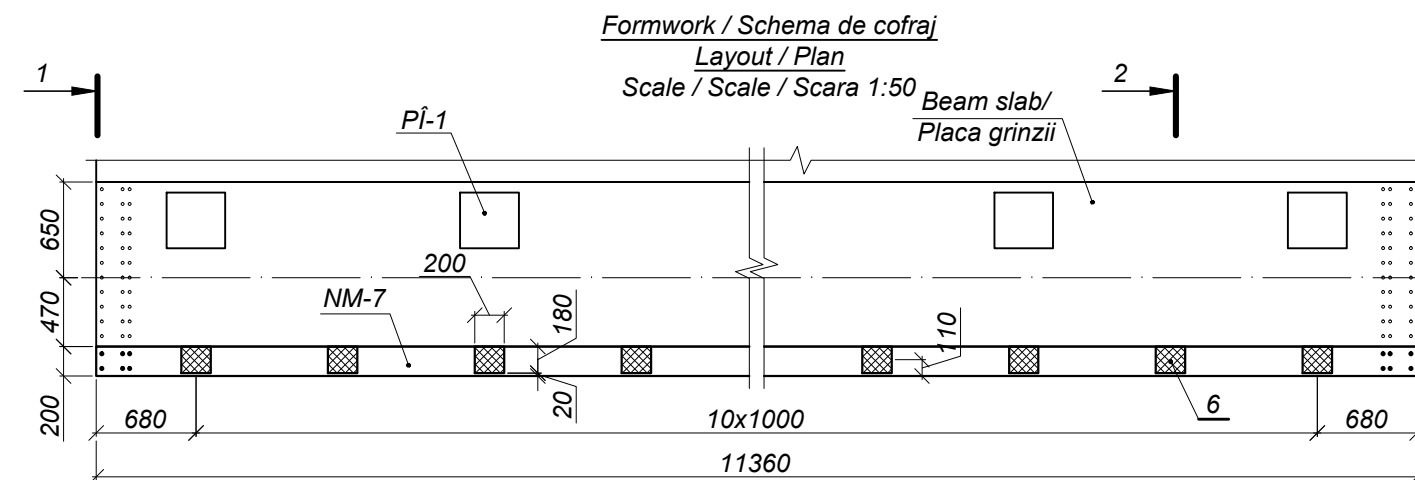
**Specification / Specificația**

Format	Zona	Position / Pozitia	Document number / Indicativ	Name / Denumirea	Quantity / Cantitatea	Note / Notă
				<b>Parts / Piese</b>		
				A-I-8 ГОСТ 5781-82* Cm3nc3 ГОСТ 380-94		
FP		1		l=8600	8	3,4 kg
FP		2		l=760	86	0,3 kg
				A-I-10 ГОСТ 5781-82* Cm3nc3 ГОСТ 380-94		
FP		3		l=460	6	0,3 kg
FP		4		l=420	6	0,2 kg
FP		5		l=180	6	0,1 kg
A4		6	2009/032D - 00.24.00	incorporated piece / Piesă înglobată PÎ-3	8	6,9 kg
				<b>Materials / Materiale</b>		
			ГОСТ 26633-91*	Concrete / Beton cl.B30, F200, W6		0,73 m³

**Note / Notă:**

- Reinforcing beam is cut according to drawing.  
Armatura grinzii se taie în conformitate cu desenul.

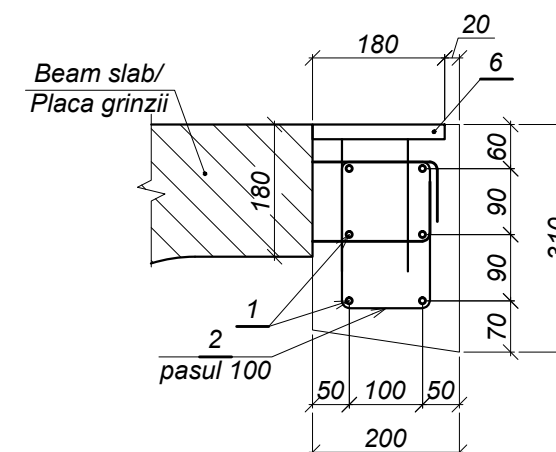
World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza		Date	04.2012
			Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 33 + 339</i> <i>Monolithic joint MJ-6 / Nodul monolit NM-6</i>		Checked	N.Tcaci		Drawing NM-P-6	
			Control STAS	L.Pozdirca			



Quantity of steel per one element / Consumul de metal pentru un element, kg

Element name / Marca elementului	Reinforcement parts / Piese de armare				Embedded parts / Piese înglobate					Total weight / Greutate totală
	Reinforcement type / Clasa armaturii			Total	Reinforc. type / Clasa armaturii		Steel type / Marca metalului		Total	
	A-I				A-III		16Д			
	ГОСТ 5781-82*				ГОСТ 5781-82*		ГОСТ 103-76**			
	Ø8	Ø10	Total		Ø16	Total	-20	Total		
NM-7	60,9	2,4	63,3	63,3	13,2	13,2	62,7	62,7	75,9	

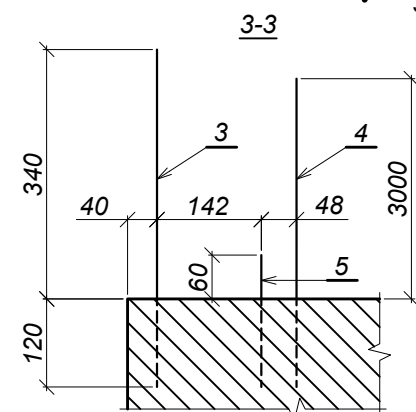
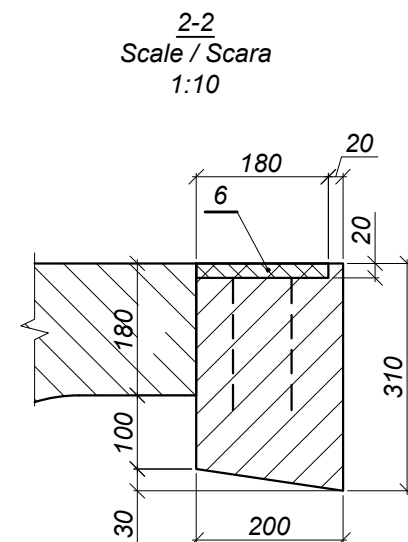
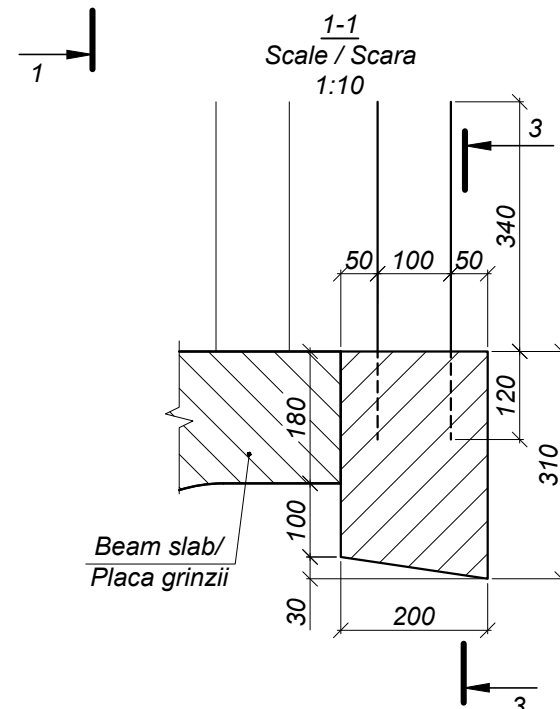
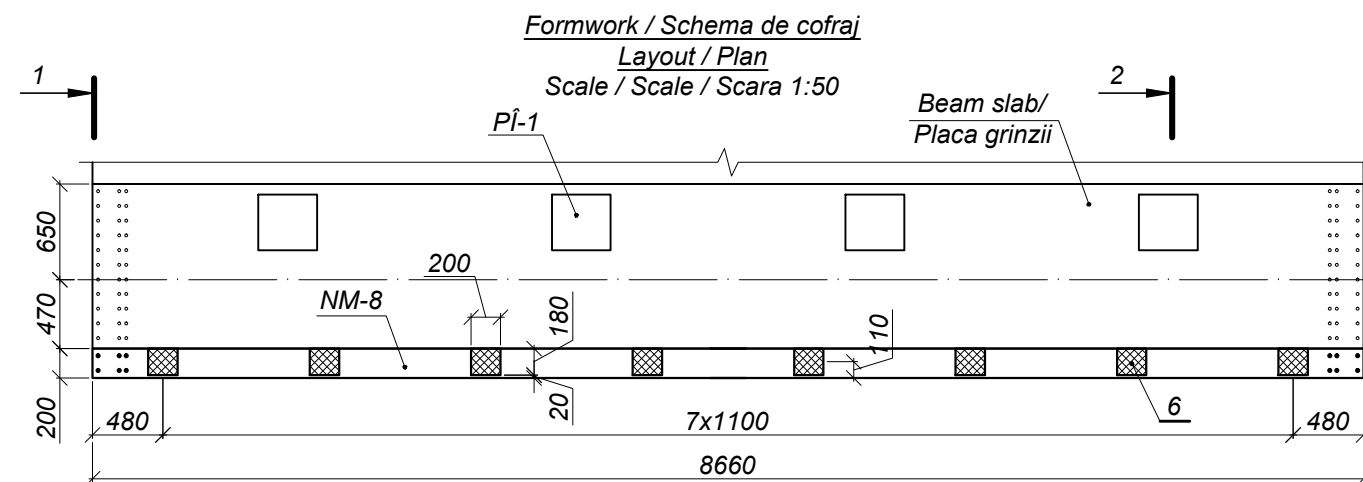
**Reinforcement scheme / Schema de armare**  
 Scale / Scara 1:10



**Specification / Specificația**

Format	Zona	Position / Pozitia	Document number / Indicativ	Name / Denumirea	Quantity / Cantitatea	Note / Notă
				<b>Parts / Piese</b>		
				A-I-8 ГОСТ 5781-82* Cm3nc3 ГОСТ 380-94		
FP		1		l=11300	6	4,5 kg
FP		2		l=760	113	0,3 kg
				A-I-10 ГОСТ 5781-82* Cm3nc3 ГОСТ 380-94		
FP		3		l=460	4	0,3 kg
FP		4		l=420	4	0,2 kg
FP		5		l=180	4	0,1 kg
A4		6	2009/032D - 00.24.00	Incorporated piece/Piesă înglobată P1-3	11	6,9 kg
				<b>Materials / Materiale</b>		
			ГОСТ 26633-91*	Concrete / Beton cl.B30, F200, W6		0,67 m³

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road      Sector      Programme      Support      Project							
Roughton International	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza		Date	04.2012
			Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 33 + 339</i> <i>Monolithic joint MJ-7 / Nodul monolit NM-7</i>		Checked	N.Tcaci		Drawing NM-P-7	
			Control STAS	L.Pozdirca			



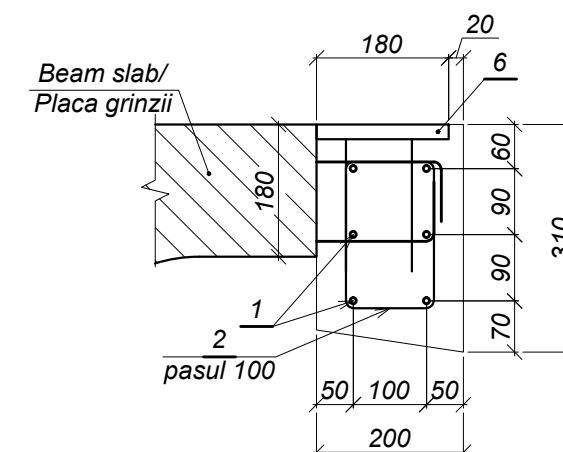
**Tabel of parts / Tabela Pieselor**

Poz.	Draft / Eschiz
2	

**Quantity of steel per one element / Consumul de metal pentru un element, kg**

Element name / Marca elementului	Reinforcement parts / Piese de armare				Embedded parts / Piese înglobate					Total weight / Greutate totală
	Reinforcement type / Clasa armaturii			Total	Reinforc. type / Clasa armaturii		Steel type / Marca metalului		Total	
	A-I				A-III		16Д			
	ГОСТ 5781-82*				ГОСТ 5781-82*		ГОСТ 103-76**			
	Ø8	Ø10	Total		Ø16	Total	-20	Total		
NM-8	46,2	2,4	48,6	48,6	9,6	9,6	45,6	45,6	55,2	103,8

**Reinforcement scheme / Schema de armare**  
 Scale / Scara 1:10

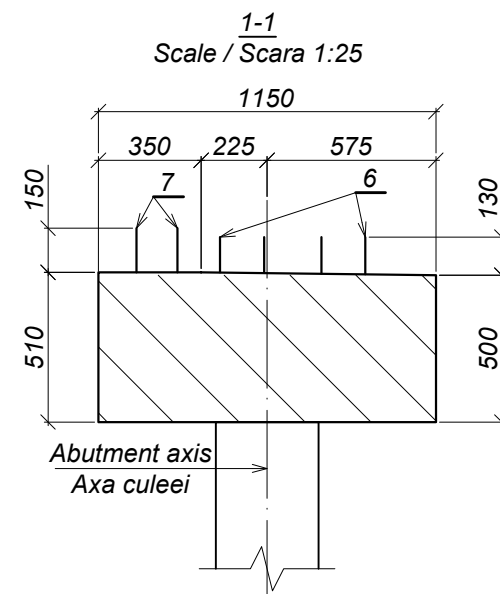
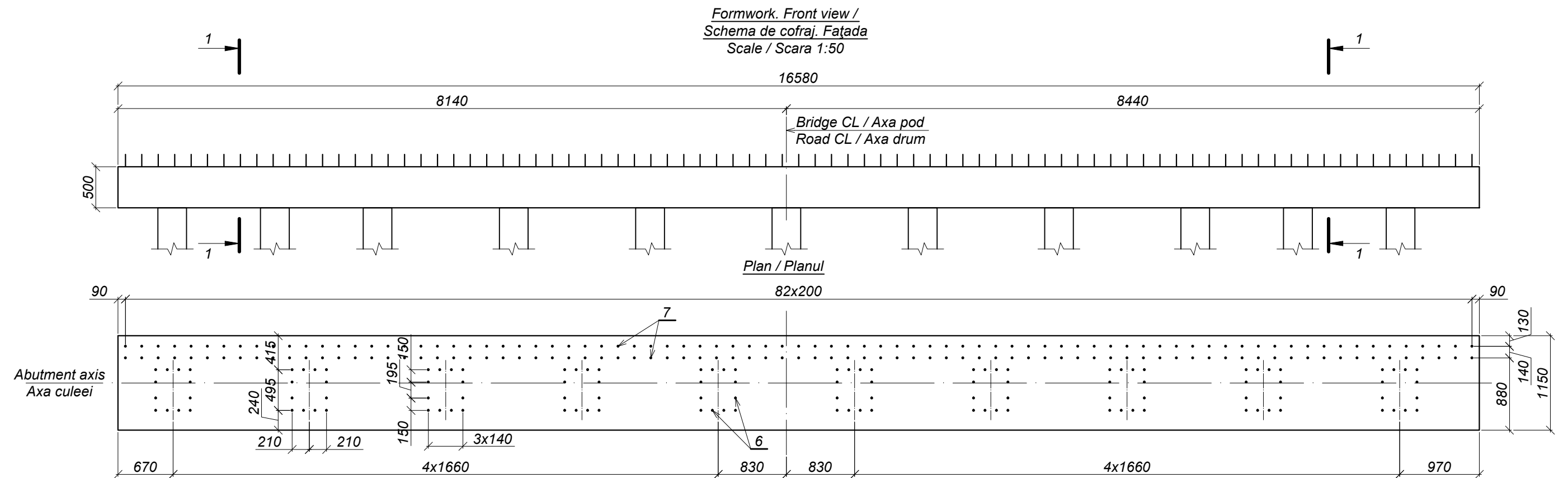


**Specification / Specificația**

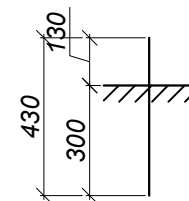
Format	Zona	Position / Pozitia	Document number / Indicativ	Name / Denumirea	Quantity / Cantitatea	Note / Notă
				<b>Parts / Piese</b>		
				A-I-8 ГОСТ 5781-82* Cm3nc3 ГОСТ 380-94		
FP		1		l=8600	6	3,4 kg
FP		2		l=760	86	0,3 kg
				A-I-10 ГОСТ 5781-82* Cm3nc3 ГОСТ 380-94		
FP		3		l=460	4	0,3 kg
FP		4		l=420	4	0,2 kg
FP		5		l=180	4	0,1 kg
A4		6	2009/032D - 00.24.00	Incorporated piece/Piesă înglobată PÎ-3	8	6,9 kg
				<b>Materials / Materiale</b>		
			ГОСТ 26633-91*	Concrete / Beton cl.B30, F200, W6		0,51 m³

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza		Date	04.2012
			Designed	A.Cecan		Scale	
	Drawing title <i>Bridge.Pod, Km 33 + 339</i> <i>Monolithic joint MJ-8 / Nodul monolit NM-8</i>		Checked	N.Tcaci		Drawing NM-P-8	
			Control STAS	L.Pozdirca			

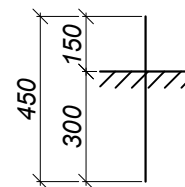




*Position / Poz. 6  
Scale / Sc. 1:20*



*Position / Poz. 7  
Scale / Sc. 1:20*

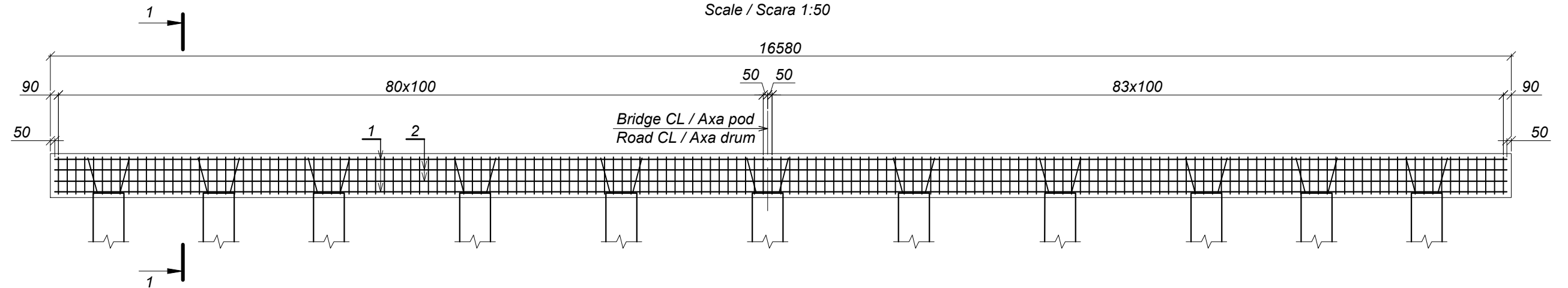


*Quantity of steel per one element / Consumul de metal pentru un element, kg*

Element name / Marca elementului	Reinforcement parts / Piese de armare							Total weight / Greutate totală
	Reinforcement type / Clasa armaturii							
	A-I			A-III				
	ГОСТ 5781-82*							
	Ø6	Ø8	Ø10	Total	Ø14	Ø20	Total	
R-1	6,1	627,9	40,8	674,8	143,0	583,8	726,8	1401,6

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012
		Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 33 + 339</i> <i>Collar beam CB-1 / Rigla R-1</i>	Checked	N.Tcaci		Drawing R-P-1	
		Control STAS	L.Pozdirca			

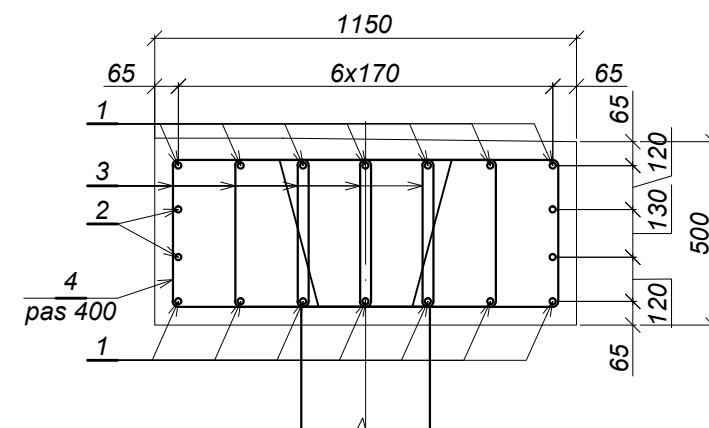
Schema de armare  
Fațada  
 (poz.6 și 7 convențional nu sunt arătate)  
 Scale / Scara 1:50



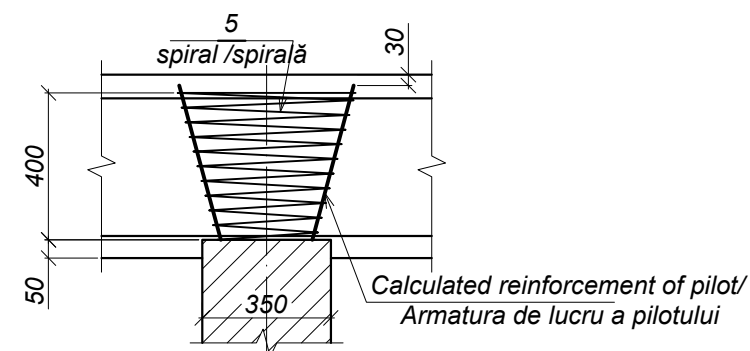
Specification / Specificația

Format	Zona	Position / Poziția	Document number / Indicativ	Name / Denumirea	Cant.	Note / Notă
				<u>Parts / Piese</u>		
FP		1		A-III-20 GOCT 5781-82*, l=16880 25Г2С GOCT 5781-82*	14	41,7 kg
FP		2		A-I-10 GOCT 5781-82*, l=16480 Cm3пc3 GOCT 380-94	4	10,2 kg
				A-I-8 GOCT 5781-82* Cm3пc3 GOCT 380-94		
FP		3		l=1720	825	0,7 kg
FP		4		l=3080	42	1,2 kg
FP		5		A-I-6 GOCT 5781-82*, l=27500 Cm3пc3 GOCT 380-94	1	6,1 kg
				A-III-14 GOCT 5781-82* 25Г2С GOCT 5781-82*		
FP		6		l=430	120	0,5 kg
FP		7		l=450	166	0,5 kg
				<u>Materials / Materiale</u>		
			GOCT 26633-91*	Concrete / Beton cl.B25, F200, W6		9,57 m³

1-1  
 Scale /  
 Scara 1:20



Collar beam and pile connection joint /  
Nod de îmbinare a riglei cu pilotul  
 Scale 1:20 / Scara 1:20



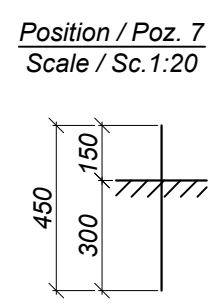
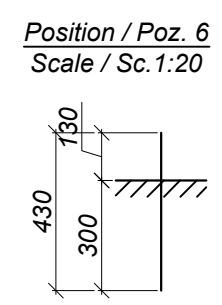
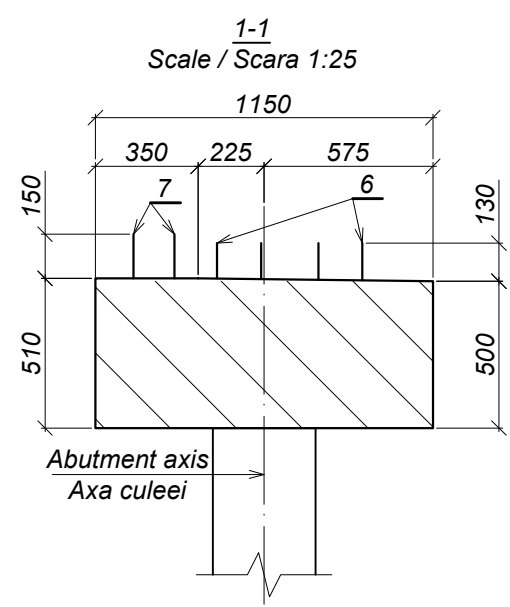
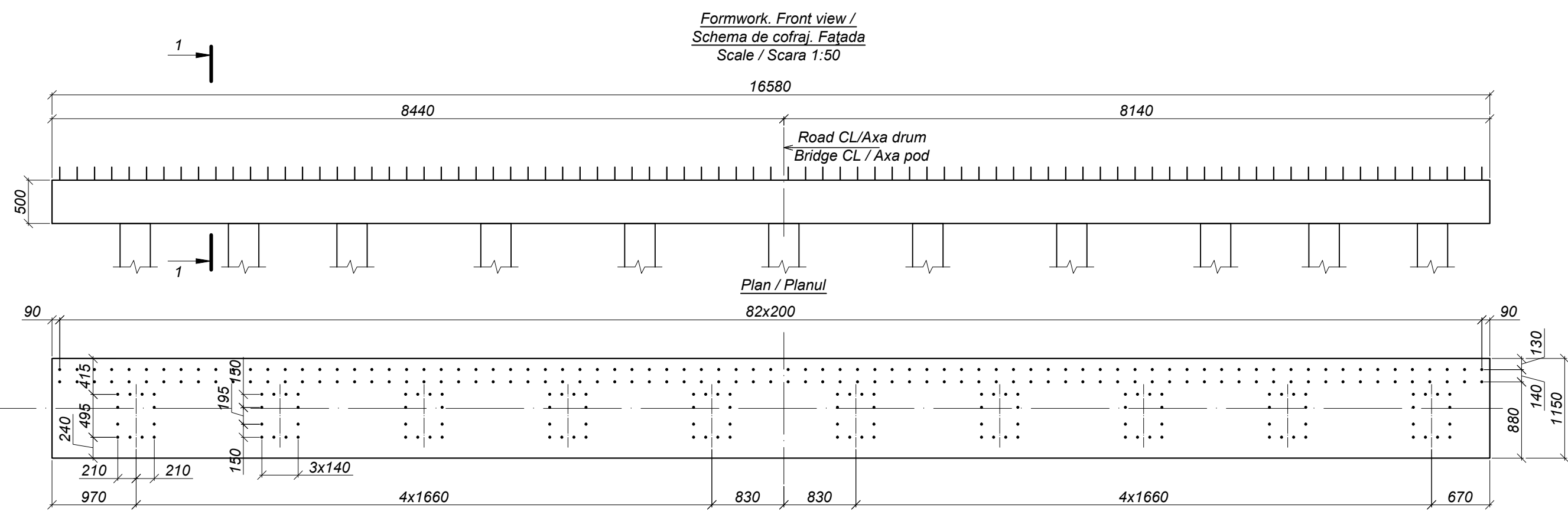
Tabel of parts / Tabela Pieselor

Poz.	Draft / Eschiz
3	
4	

Note / Notă:

- Protection layer / Stratul de protecție - 50 mm.
- Leangth of position 1 implies the need to splice reinforcement bars by welding according to the type of splicing C23-P3 GOCT 14098-91 /Lungimea poziției 1 include necesitatea îmbinării barelor de armatură prin sudare conform tipului de îmbinare C23-P3 GOCT 14098-91
- For position 6, 7 see formwork scheme / Pentru poziția 6, 7 vezi schema de cofraj

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
	Road	Sector	Programme	Support	Project	
Roughton International	Rehabilitation of R14 Road Balti-Sarateni		ISP	S.Bogza	Date	04.2012
Universcons	Drawing title <u>Bridge.Pod, Km 33 + 339</u> <u>Collar beam CB-1. Reinforcement scheme.</u> <u>Rigla R-1. Schema de armare.</u>		Designed	A.Cecan	Scale	
			Checked	N.Tcaci	Drawing R-P-2	
			Control STAS	L.Pozdirca		

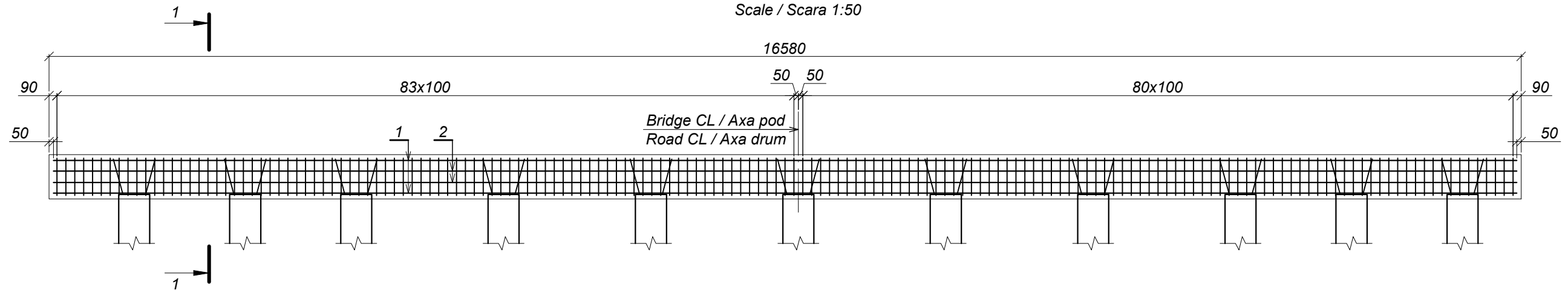


*Quantity of steel per one element / Consumul de metal pentru un element, kg*

Element name / Marca elementului	Reinforcement parts / Piese de armare							Total weight / Greutate totală
	Reinforcement type / Clasa armaturii							
	A-I				A-III			
	ГОСТ 5781-82*							
	Ø6	Ø8	Ø10	Total	Ø14	Ø20	Total	
R-2	6,1	627,9	40,8	674,8	143,0	583,8	726,8	1401,6

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road		Sector	Programme	Support	Project	
Roughton International		Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza	Date 04.2012
		Drawing title <i>Bridge.Pod, Km 33 + 339</i> <i>Collar beam CB-2 / Rigla R-2</i>		Designed	A.Cecan	Scale
Universcons				Checked	N.Tcaci	Drawing R-P-3
				Control STAS	L.Pozdirca	

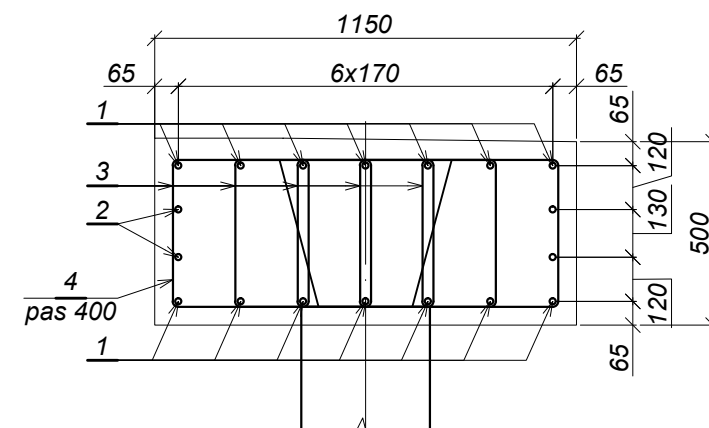
Schema de armare  
Fațada  
 (poz.6 și 7 convențional nu sunt arătate)  
 Scale / Scara 1:50



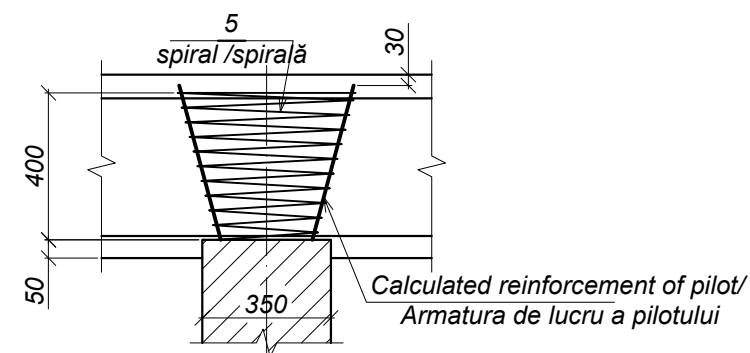
Specification / Specificația

Format	Zona	Position / Poziția	Document number / Indicativ	Name / Denumirea	Cant.	Note / Notă
				<u>Parts / Piese</u>		
FP		1		A-III-20 GOCT 5781-82*, l=16880 25Г2С GOCT 5781-82*	14	41,7 kg
FP		2		A-I-10 GOCT 5781-82*, l=16480 Cm3пc3 GOCT 380-94	4	10,2 kg
				A-I-8 GOCT 5781-82* Cm3пc3 GOCT 380-94		
FP		3		l=1720	825	0,7 kg
FP		4		l=3080	42	1,2 kg
FP		5		A-I-6 GOCT 5781-82*, l=27500 Cm3пc3 GOCT 380-94	1	6,1 kg
				A-III-14 GOCT 5781-82* 25Г2С GOCT 5781-82*		
FP		6		l=430	120	0,5 kg
FP		7		l=450	166	0,5 kg
				<u>Materials / Materiale</u>		
			GOCT 26633-91*	Concrete / Beton cl.B30, F200, W6		9,57 m³

1-1  
 Scale /  
 Scara 1:20



Collar beam and pile connection joint /  
Nod de îmbinare a riglei cu pilotul  
 Scale 1:20 / Scara 1:20



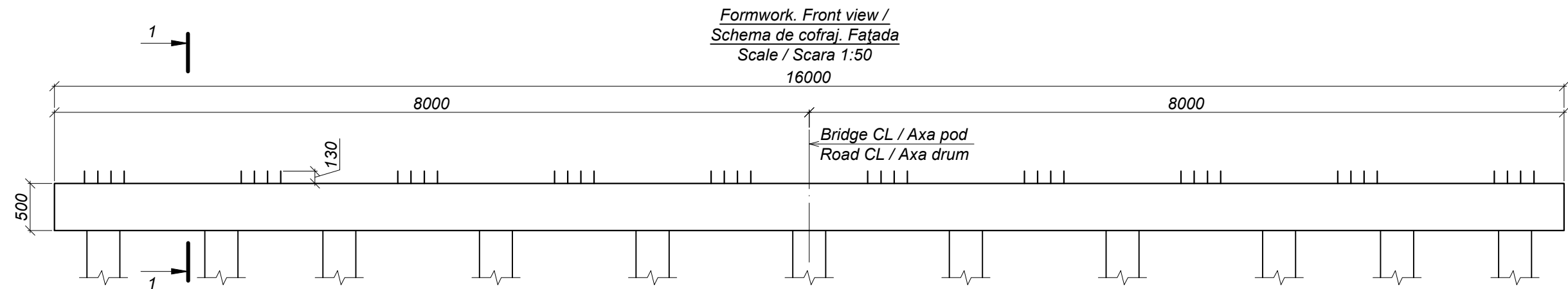
Tabel of parts / Tabela Pieselor

Poz.	Draft / Eschiz
3	
4	

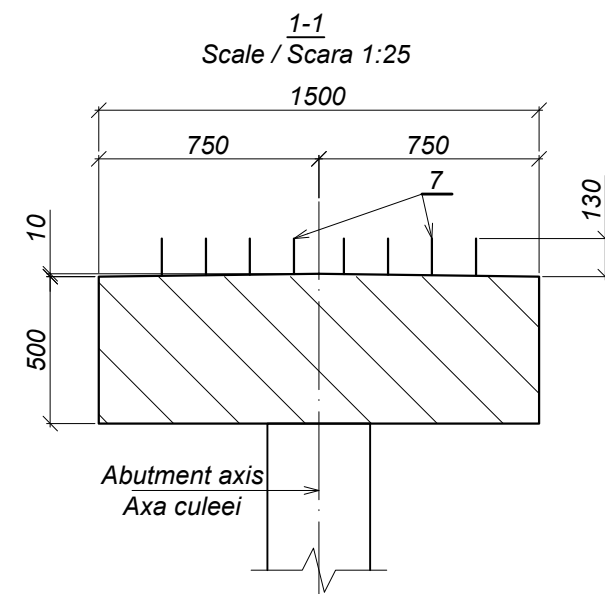
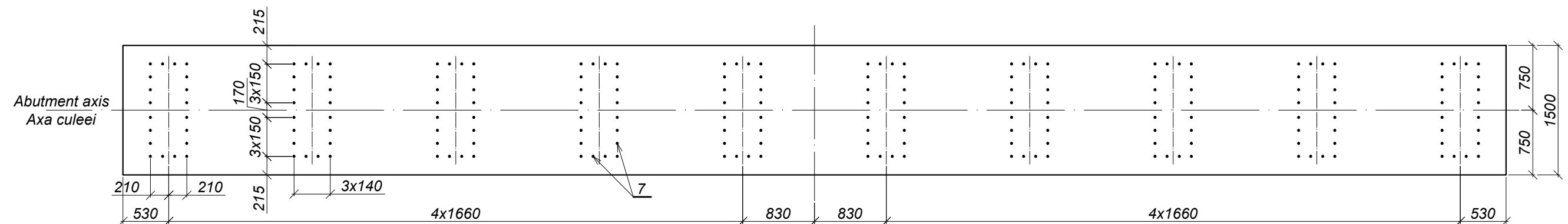
Note / Notă:

- Protection layer / Stratul de protecție - 50 mm.
- Leangth of position 1 implies the need to splice reinforcement bars by welding according to the type of splicing C23-P3 GOCT 14098-91 / Lungimea poziției 1 include necesitatea îmbinării barelor de armatură prin sudare conform tipului de îmbinare C23-P3 GOCT 14098-91
- For position 6, 7 see formwork scheme / Pentru poziția 6, 7 vezi schema de cofraj

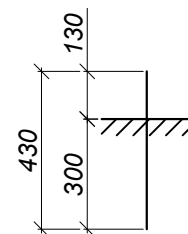
World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
	Road	Sector	Programme	Support	Project	
Roughton International	Rehabilitation of R14 Road Balti-Sarateni		ISP	S.Bogza	Date	04.2012
	Drawing title <i>Bridge.Pod, Km 33 + 339</i>		Designed	A.Cecan	Scale	
Universcons	Collar beam CB-2. Reinforcement scheme. Rigla R-2. Schema de armare.		Checked	N.Tcaci	Drawing R-P-4	
			Control STAS	L.Pozdirca		



Plan / Planul



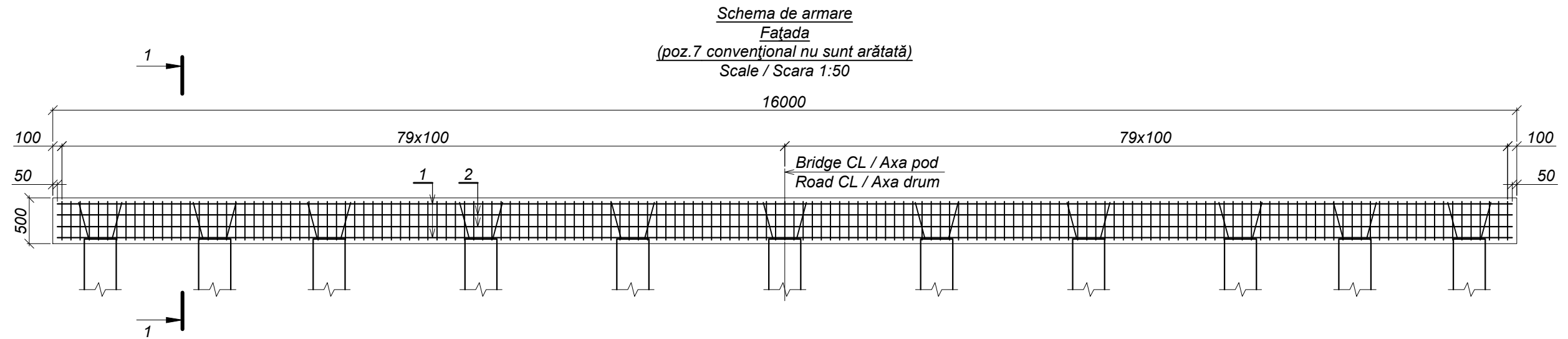
Position / Poz. 7  
Scale / Sc. 1:20



Quantity of steel per one element / Consumul de metal pentru un element, kg

Element name / Marca elementului	Reinforcement parts / Piese de armare							Total weight / Greutate totală
	Reinforcement type / Clasa armaturii							
	A-I				A-III			
	ГОСТ 5781-82*							
	Ø6	Ø8	Ø10	Total	Ø14	Ø20	Total	
R-3	6,1	727,8	39,2	773,1	100,0	725,4	825,4	1598,5

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road		Sector	Programme	Support	Project	
Roughton International		Rehabilitation of R14 Road Balti-Sarateni		ISP	S.Bogza	Date 04.2012
Universcons		Drawing title Bridge.Pod, Km 33 + 339 Collar beam CB-3 / Rigla R-3		Designed	A.Cecan	Scale
				Checked	N.Tcaci	Drawing R-P-5
				Control STAS	L.Pozdirca	



Specification / Specificația

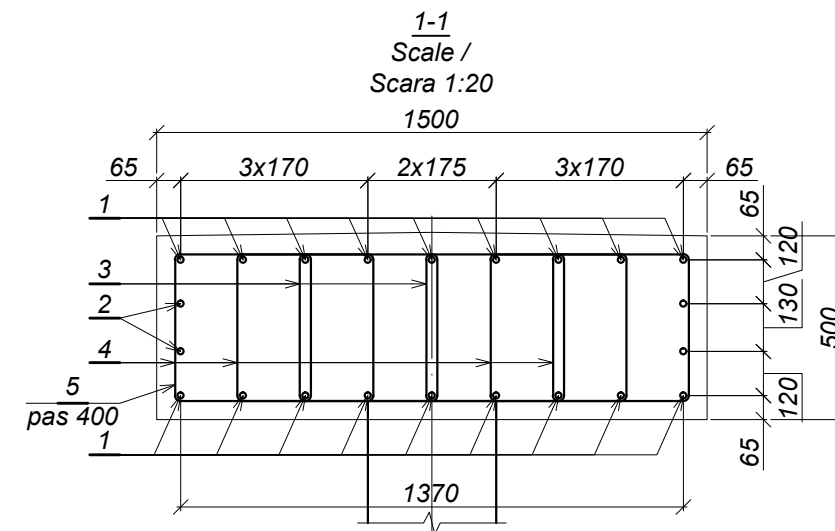
Format	Zona	Position / Poziția	Document number / Indicativ	Name / Denumirea	Cant.	Note / Notă
				<u>Parts / Piese</u>		
FP		1		A-III-20 GOCT 5781-82*, l=16300 25Г2С GOCT 5781-82*	18	40,3 kg
FP		2		A-I-10 GOCT 5781-82*, l=15900 Cm3пc3 GOCT 380-94	4	9,8 kg
				A-I-8 GOCT 5781-82* Cm3пc3 GOCT 380-94		
FP		3		l=1730	318	0,7 kg
FP		4		l=1720	636	0,7 kg
FP		5		l=3780	40	1,5 kg
FP		6		A-I-6 GOCT 5781-82*, l=27500 Cm3пc3 GOCT 380-94	1	6,1 kg
				A-III-14 GOCT 5781-82* 25Г2С GOCT 5781-82*		
FP		7		l=430	200	0,5 kg
				<u>Materials / Materiale</u>		
			GOCT 26633-91*	Concrete / Beton cl.B30, F200, W6		12,06 m³

Note / Notă:

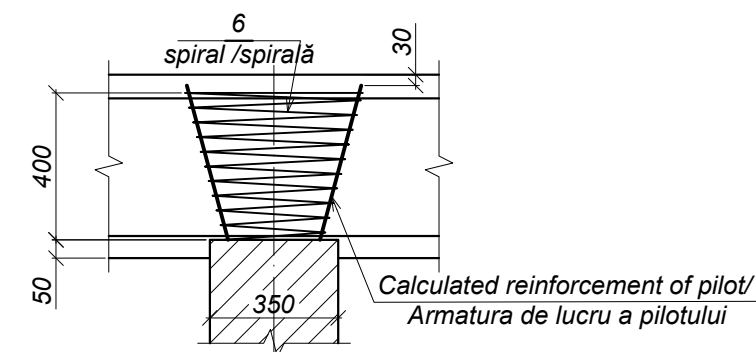
- Protection layer / Stratul de protecție - 50 mm.
- Length of position 1 implies the need to splice reinforcement bars by welding according to the type of splicing C23-P3 GOCT 14098-91 / Lungimea poziției 1 include necesitatea îmbinării barelor de armatură prin sudare conform tipului de îmbinare C23-P3 GOCT 14098-91
- For position 6, 7 see formwork scheme / Pentru poziția 6, 7 vezi schema de cofraj

Table of parts / Tabela Pieselor

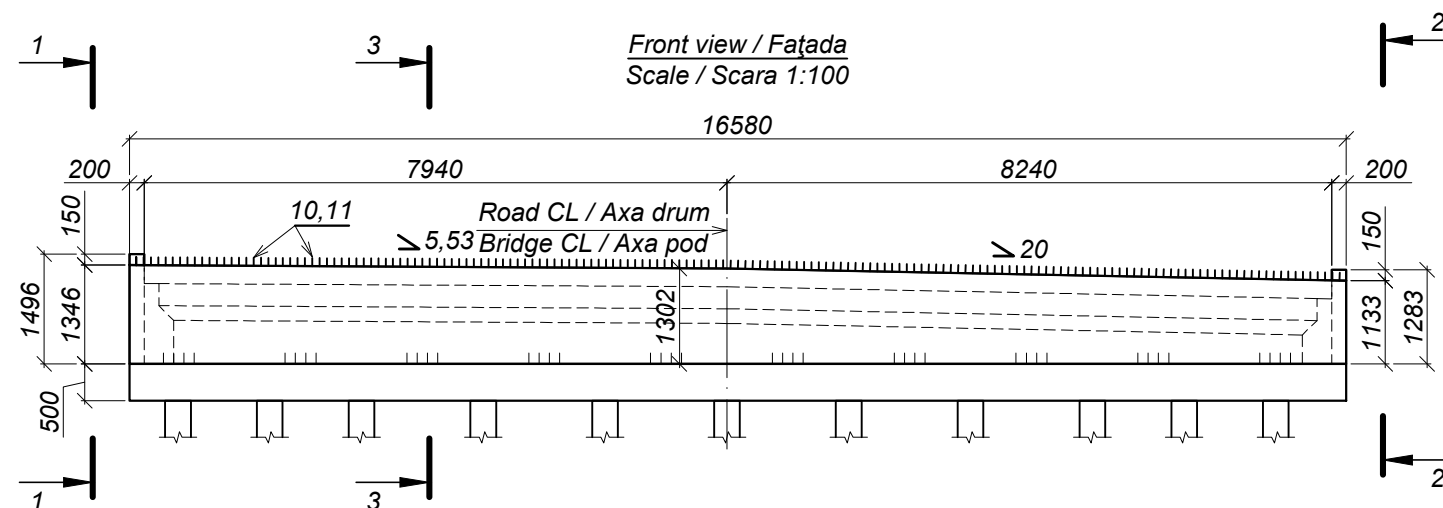
Poz.	Draft / Eschiz
3	
4	
5	



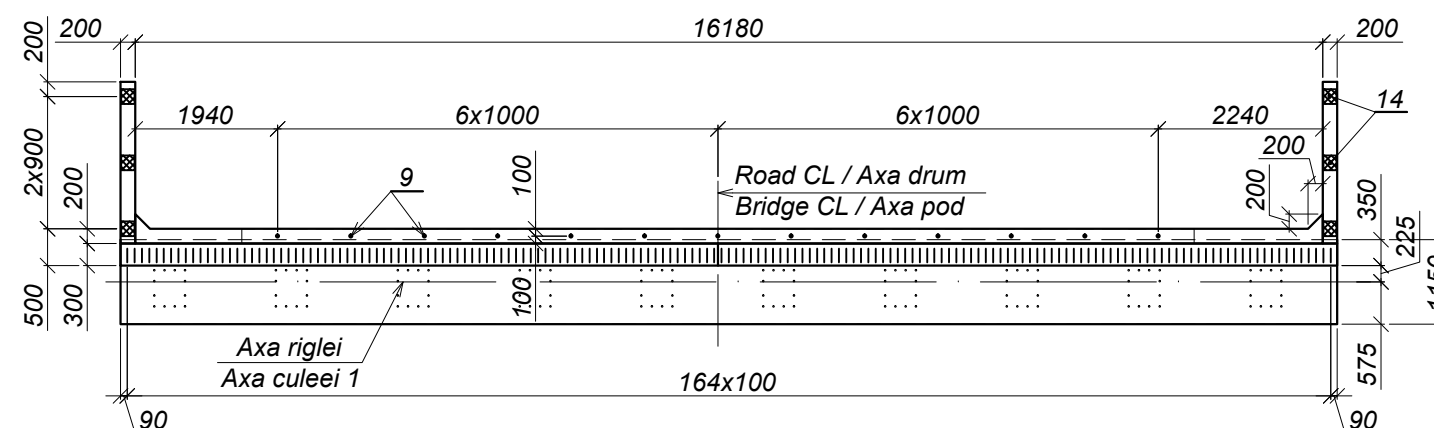
Collar beam and pile connection joint /  
Nod de îmbinare a riglei cu pilotul  
Scale 1:20 / Scara 1:20



World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
	Road	Sector	Programme	Support	Project	
Roughton International	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza	Date	04.2012
Universcons	Drawing title <i>Bridge.Pod, Km 33 + 339</i> <i>Collar beam CB-3. Reinforcement scheme.</i> <i>Rigla R-3. Schema de armare.</i>		Designed	A.Cecan	Scale	
			Checked	N.Tcaci	Drawing R-P-6	
			Control STAS	L.Pozdirca		

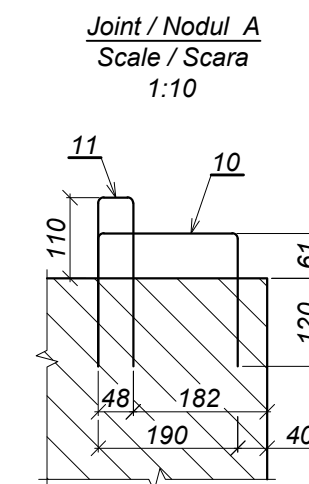
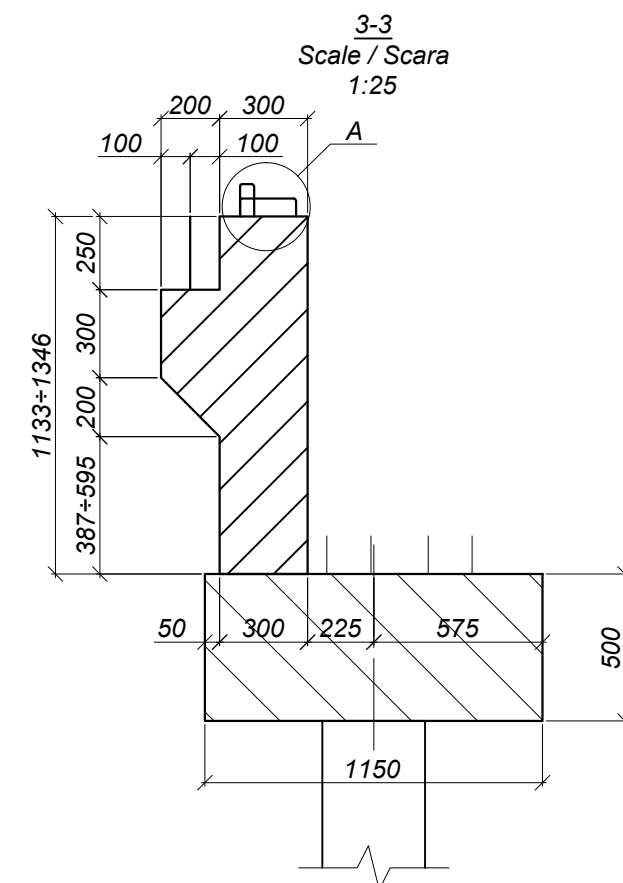
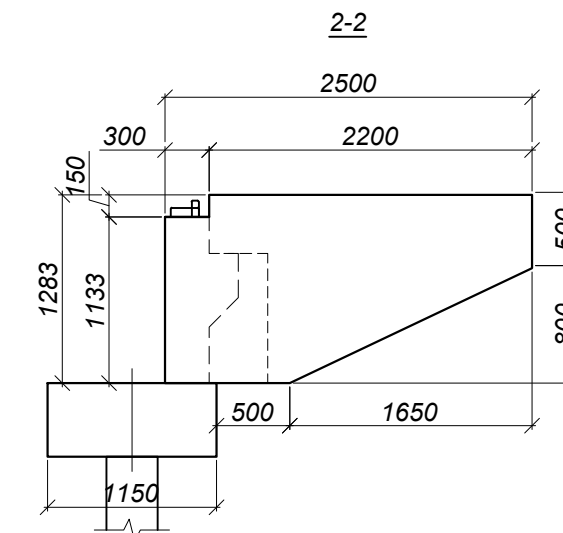
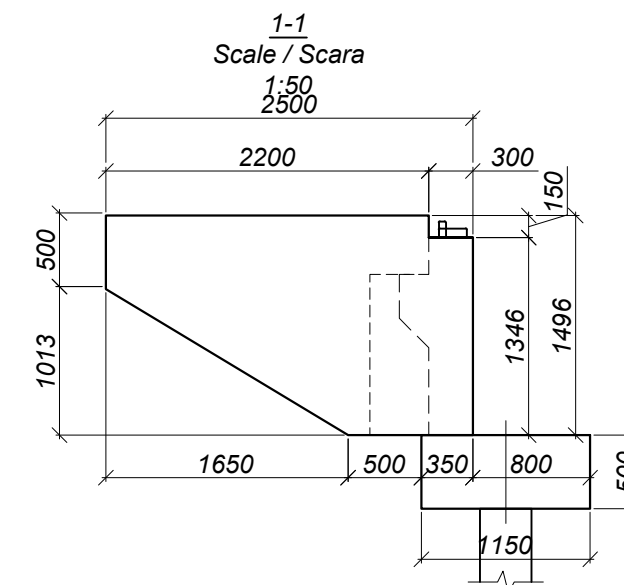


Plan / Planul

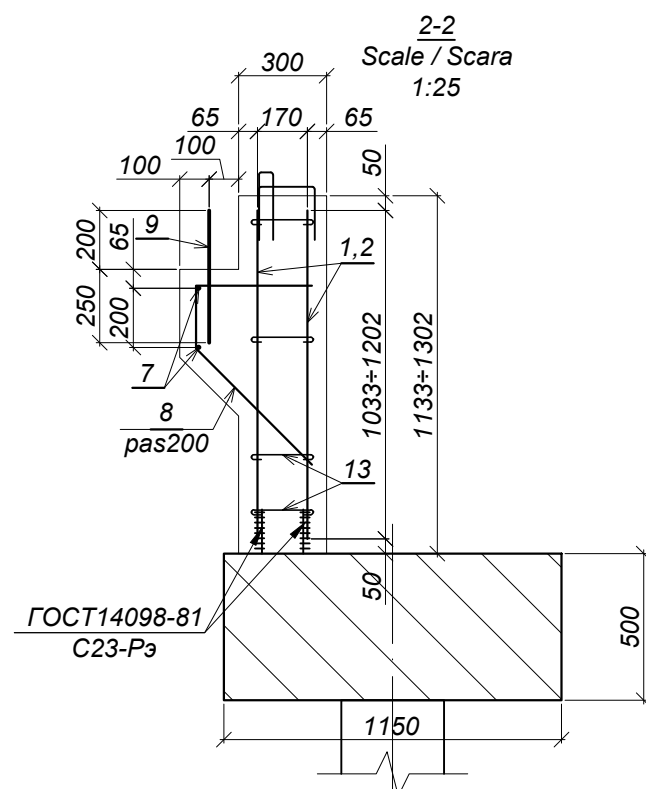
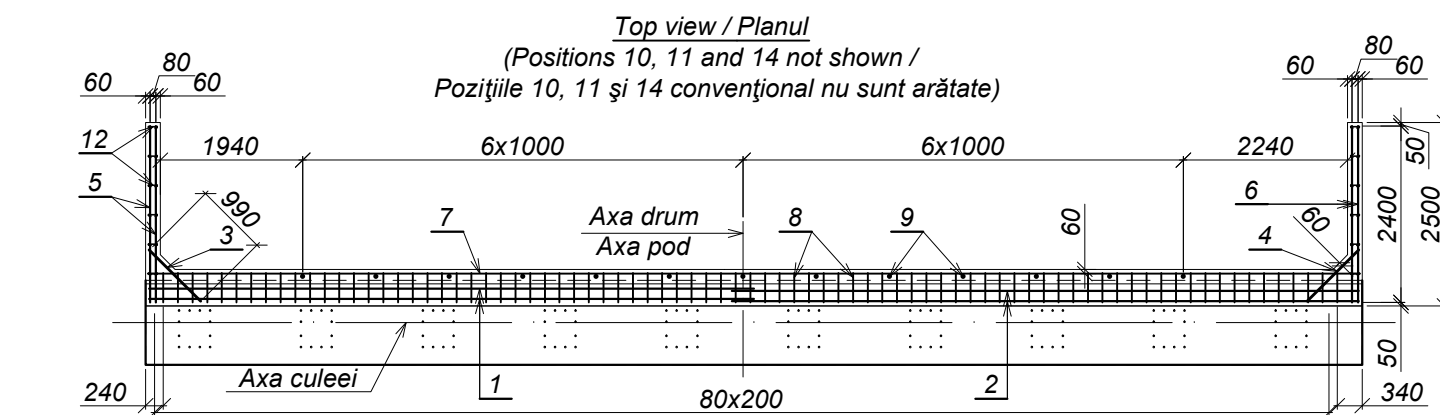


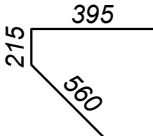
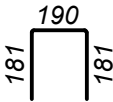


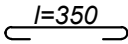
Quantity of steel per one element / Consumul de metal pentru un element, kg

Element type / Marca elementulu	Reinforcement parts / Piese de armare								Embedded parts / Piese înglobate					Total weight / Greutate totală	
	Reinforcement type / Clasa armaturii							Total	Reinforcement type / Clasa armaturii		Steel type		Total		
	A-I			A-III					A-III		16Д				
	ГОСТ 5781-82*								ГОСТ 5781-82*		ГОСТ 103-76**				
	Ø6	Ø10	Ø25	Total	Ø10	Ø12	Ø14		Total	Ø16	Total	-20			Total
ZG-1	32,7	99,0	23,4	155,1	210,7	81,0	237,8	529,5	684,6	7,2	7,2	34,2	34,2	41,4	726,0

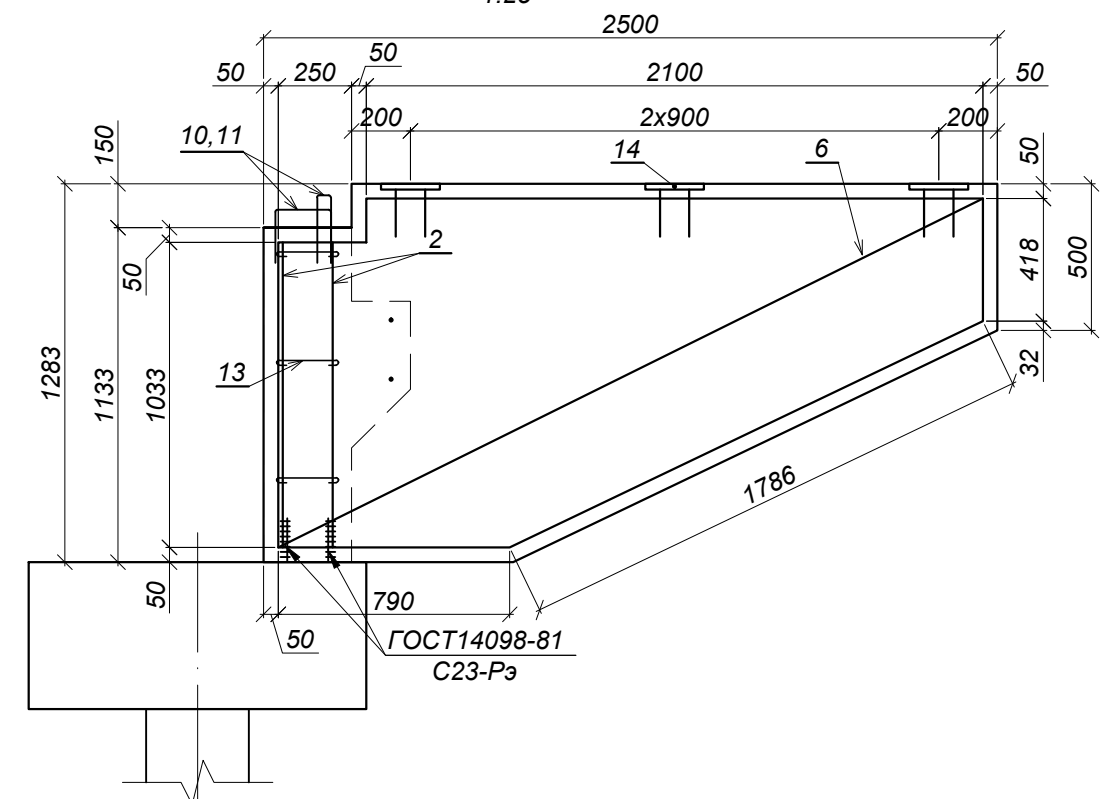
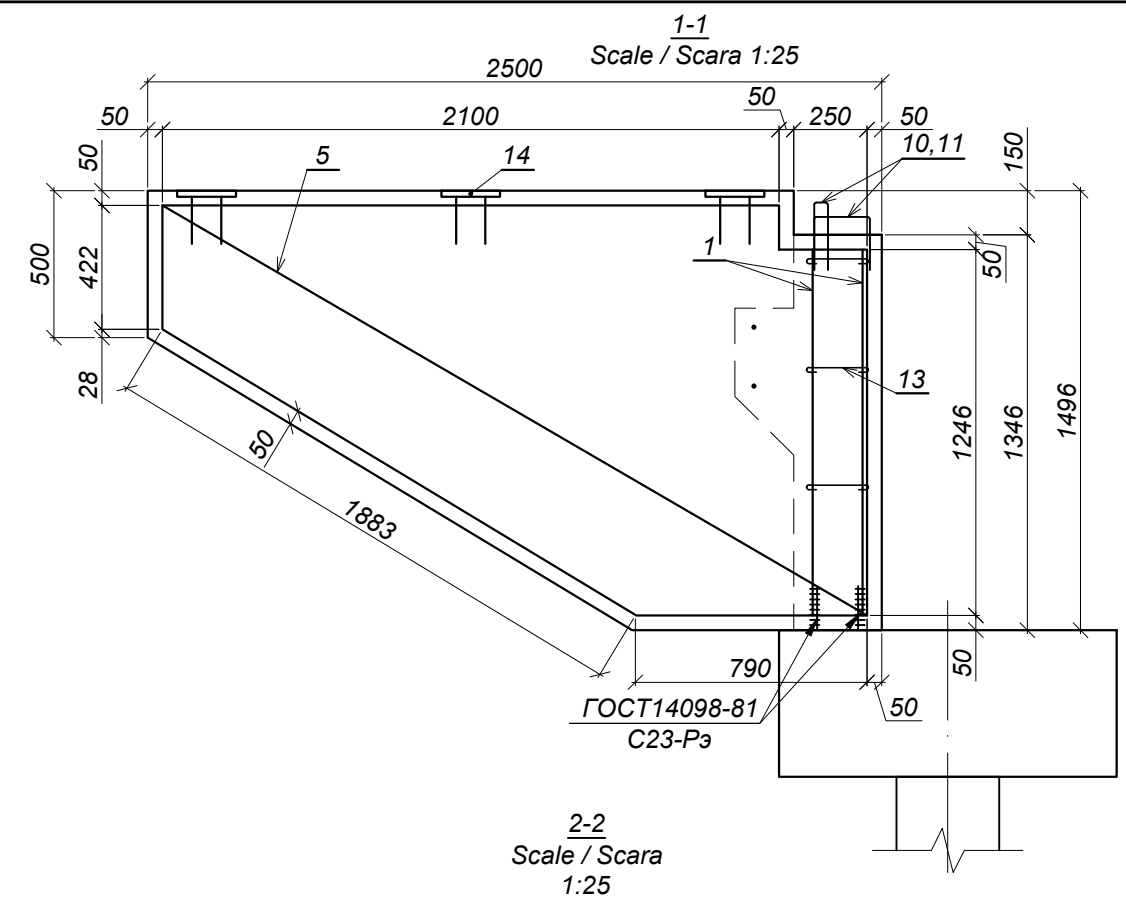


World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector		Programme Support		Project		
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012
		Designed	A.Cecan		Scale	
Universcons	Drawing title Bridge.Pod, Km 33 + 339 Protection wall PW-1. Reinforcement scheme Zid de gardă ZG-1. Schema de armare	Checked	N.Tcaci		Drawing ZG-P-1	
		Control STAS	L.Pozdirca			



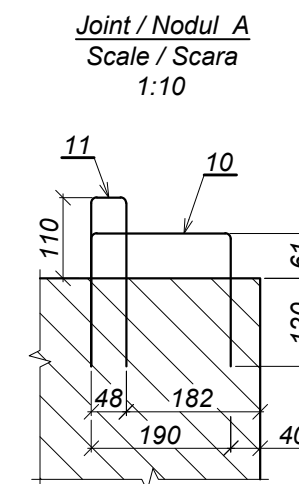
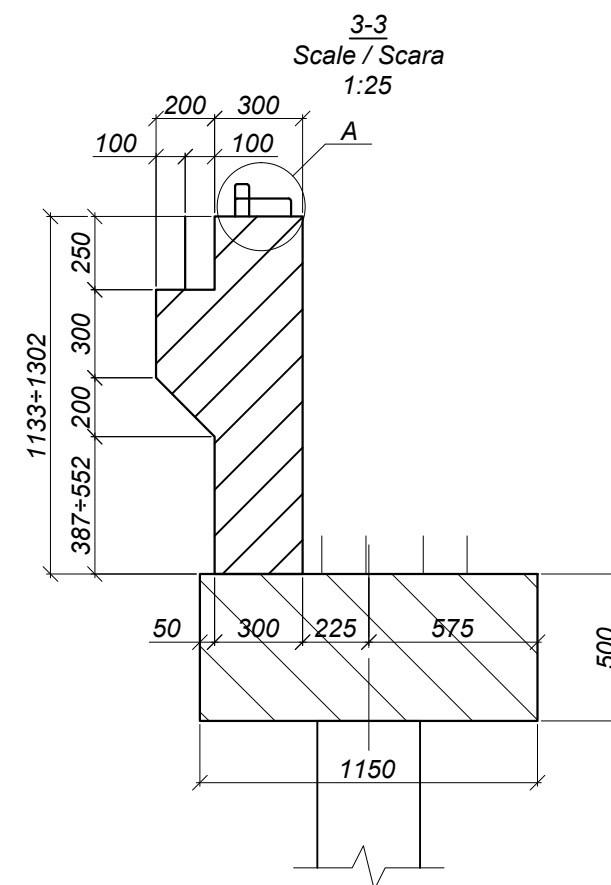
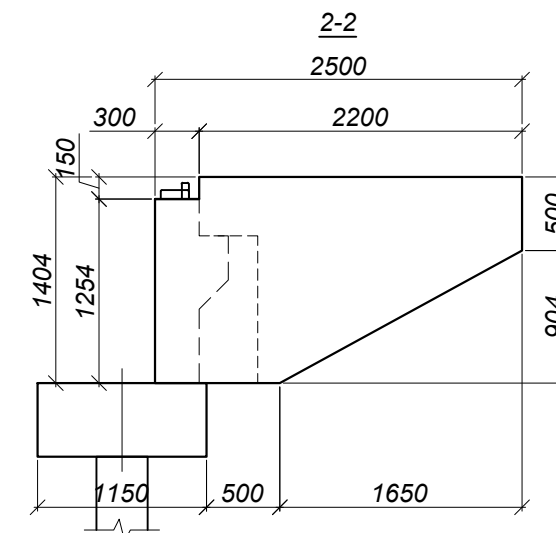
Tabel of parts / Tabela Pieselor	
Poz.	Draft / Eschiz
8	
10	
11	
12	
13	

**Note / Notă:**  
1. *Protection layer / Strat de protecție - 50 mm*



World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support Project				
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012
		Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km 33 + 339</i> <i>Protection wall PW-1. Reinforcement scheme</i> <i>Zid de gardă ZG-1. Schema de armare</i>	Checked	N.Tcaci		Drawing ZG-P-2	
		Control STAS	L.Pozdirca			





Quantity of steel per one element / Consumul de metal pentru un element, kg

Element type / Marca elementulu	Reinforcement parts / Piese de armare									Embedded parts / Piese înglobate					Total weight / Greutate totală
	Reinforcement type / Clasa armaturii								Total	Reinforcement type / Clasa armaturii		Steel type		Total	
	A-I				A-III					A-III		16Д			
	ГОСТ 5781-82*									ГОСТ 5781-82*		ГОСТ 103-76**			
	Ø6	Ø10	Ø25	Total	Ø10	Ø12	Ø14	Total		Ø16	Total	-20	Total		
ZG-2	32,7	99,0	23,4	155,1	205,9	81,0	233,2	520,1	675,2	7,2	7,2	34,2	34,2	41,4	716,6

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012	
		Designed	A.Cecan		Scale		
	Drawing title <i>Bridge.Pod, Km 33 + 339</i> <i>Protection wall PW-2 / Zid de gardă ZG-2</i>	Checked	N.Tcaci		Drawing  ZG-P-3		
		Control STAS	L.Pozdirca				



List of executive drawings of the main set. Lista seturilor de bază a planșelor de execuție

Number Indicativ	Item / Denumirea	Note Notă
2012/045D	Bridge / Lucrări de artă	

List of executive drawings of the main set. Lista planșelor de execuție a setului de bază 2012/045D

Drawing Planșa	Item / Denumirea	Note Notă
1	General data / Date generale	
2	Bridge general view. Front view / Dispoziție generală a podului. Fațada.	
3	Bridge general view. Layout / Dispoziția generală a podului. Planul	
4	Bridge general view. Section 1-1 / Dispoziția generală a podului. Secțiunea 1-1	
5	General view of the abutment 1 / Dispoziția generală a culeei 1	
6	General view of the abutment 2 / Dispoziția generală a culeei 2	
7	Approach to bridge at abutment 1 and 2 / Racordarea podului cu drumul la culeea 1 și 2	
8	Consolidation of the riverbed, slopes and shoulders / Consolidarea albiei, taluzurilor și acostamentelor	
9	Superstructure. Joint SJ-1 / Suprastructura.Nodul SN-1	
10	Superstructure. Joint SJ-2 / Suprastructura.Nodul SN-2	
11	Collar beam CB-1 / Rigla R-1	
12	Collar beam CB-1. Reinforcement scheme / Rigla R-1. Schema de armare	
13	Protection wall PW-1 / Zid de gardă ZG-1	
14	Protection wall PW-1. Reinforcement scheme / Zid de gardă ZG-1. Schema de armare	
15	Expansion joint ALGAFLEX T 80 / Rost de dilatație ALGAFLEX T80	
16	Guardrailing / Parapet de siguranță a circulației vehiculelor	
17	Pedestrian guardrail / Parapet de siguranță pietonal	
18	Connection joint between approach slabs MJ-7 / Nodul de îmbinare a plăcilor de racordare NM-7	
19	Backstairs / Scară de serviciu	
20	Seating bearing parts of abutment / Cuzineții culeei	
21	Bearing pads of pile / Cuzineții pileii	

List of reference documents / Lista documentelor de referință și anexate

Document Number Indicativ	Item / Denumirea	Note Notă
	<u>Documente de referință</u>	
Серия 3.503.1-81 Выпуски 1-1, 3-1	Пролетные строения сборные ж. б. длиной 12, 15, 18, 21, 24 и 33м из балок таврового сечения с предварительно напрягаемой арматурой для мостов и путепроводов	Pedestrian guardrail / Parapet de siguranță și pietonal
Серия 3.503.1-101 Выпуск 0, 1	Изоляция проезжей части, перекрытие деформационных швов ж. б. строений длиной до 33м автодорожных мостов и путепроводов	Bridgeway parts / Elementele căii podului
ALGA Bearing and Expansion Joints	Expansion joints ALGAFLEX T instalation Procedure, 10.10.2005	Joint filling elements / Elemente de acoperire a rostrurilor
Серия 3.501-156 Выпуски 0, 1	Укрепление русел, конусов и откосов насыпи у малых и средних мостов и водопропускных труб.	Surface protection / Protecția suprafețelor
ВСН 24-88	Технические правила ремонта и содержания автомобильных дорог	Reinforced concrete repair / Reparația betonului armat
ВСН 32-81	Инструкция по устройству гидроизоляции конструкций мостов и труб на железных, автомобильных и городских дорогах	Waterproofing of concrete surfaces / Izolarea suprafețelor de beton
СНУП 3.06.04-91	Мосты и трубы	Bridge, culvert works / Executarea lucrărilor

Note / Notă:

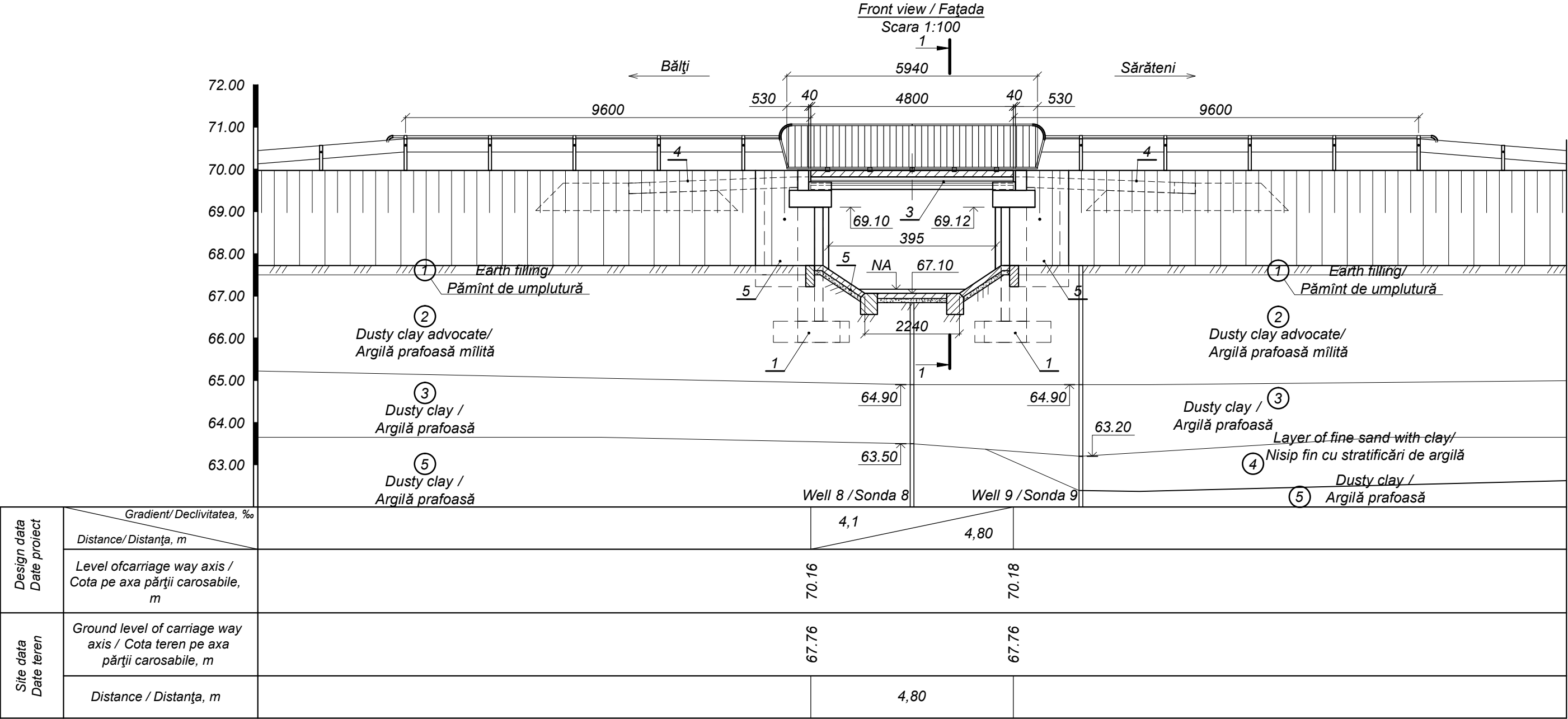
- Design norms / Normele de proiectare: СНУП 2.05.03-84 "Мосты и Трубы", СНУП 2.05.02-85\* "Автомобильные дороги".
- Road category / Categoria drumului auto - III. Bridge width / Gabaritul podului G-14,40+2x0,75 m.
- Reference loading / Sarcina de calcul: A11 și HK-80.
- Reference seismicity of construction / Seismicitatea de calcul a construcției - 7 grade.
- Baltic Sea reference level system. As base is taken Rp37-70.835 at PC368+767, (kilometer stone- placed on right side shoulder, direction after stakes) / Sistem de cote Baltic. Drept bază servesc reperul Rp 37 - 70.835 la PC368+767, (borna de marcare a kilometrajului, amplasată pe acostament din partea dreaptă, direcție după pichetare).
- Decisive phases for checking and acceptance of repair works / Fazele determinante de verificare și recepție a lucrărilor de reparație:
  - Transmission of center line references, location and bench marks / Predarea trasării, amplasamentului și a bornelor de reper;
  - Infrastructure repair / Reparația infrastructurii (abutment /culeea 1, abutment / culeea 2);
  - Superstructure and bridge way works / Execuția suprastructurii și căii podului;
  - Approach to bridge works / Execuția racordării podului cu terasamentul.
- Type of works, determined as hidden works shall be checked and accepted with the record of verification results in Reports of quality check / Genul de lucrări determinate ca lucrări ascunse ce urmează a fi verificate și recepționate cu consemnarea rezultatelor verificării în procese verbale de verificare a calității:
  - Determination and positioning of road center lines and elements / Trasarea și poziționarea axelor și elementelor;
  - Bases and footings / Temeliile și fundațiile;
  - Inspection of materials, semifabricates and parts at entrances / Examinarea materialelor, semifabricatelor și elementelor la intrare;
  - Reinforcement and concrete of parts, formworks / Armarea și betonarea elementelor, cofrajele;
  - Welding of metal parts / Sudarea elementelor metalice.

The design is elaborated in accordance with the standards and requirements existing design rules / Proiectul este elaborat în conformitate cu cerințele normelor și regulilor în construcții în vigoare

Chief engineer /  
Inginer șef proiect compartiment

A. Cekan

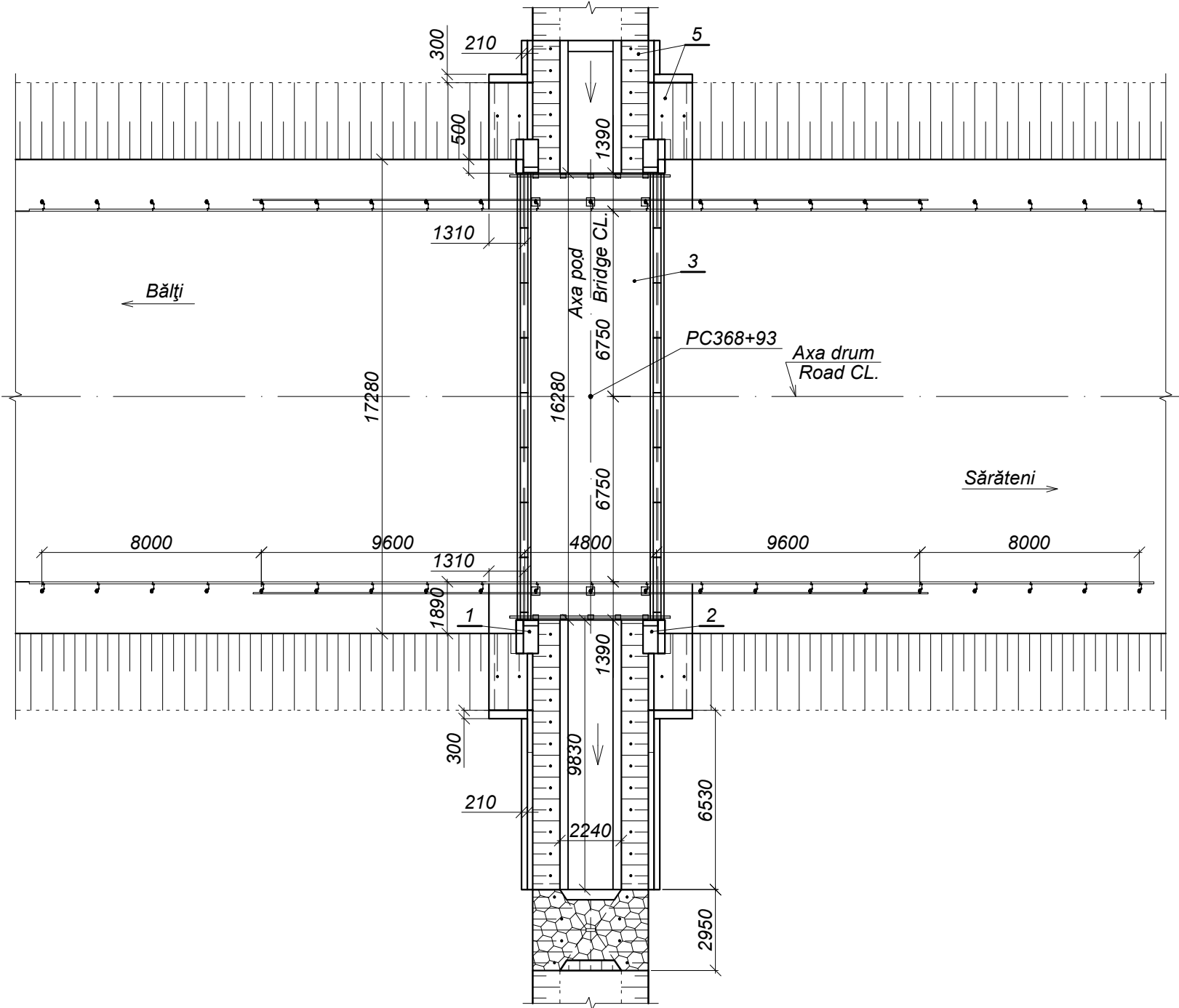
World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme		Support	Project				
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012	
		Designed	A.Cecan		Scale		
Universcons	Drawing title <i>Bridge.Pod, Km 36 + 893</i> <i>General data / Date generale</i>	Checked	N.Tcaci		Drawing DG-P-1		
		Control STAS	L.Pozdirca				



- 1 Abutmen 1 / Culeea 1
- 3 Superstructure and bridge way/ Suprastructura și calea podului
- 4 Approach to bridge at abutment 1 and 2 / Racordarea podului cu drumul la culeea 1 și 2
- 5 Consolidation of the riverbed, slopes and shoulders / Consolidarea albiei, taluzurilor și acostamentelor

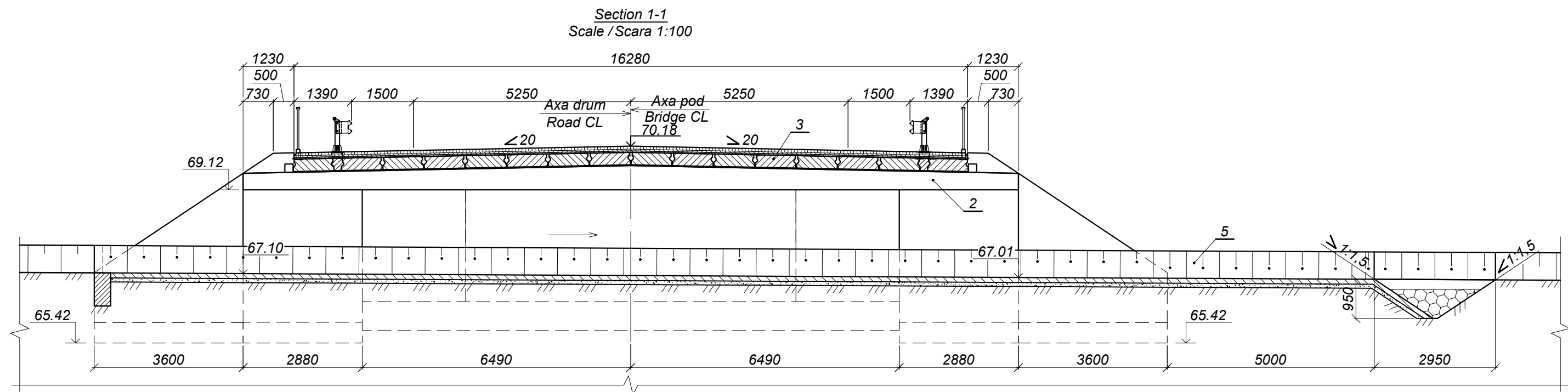
World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme		Support		Project			
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012	
		Designed	A.Cecan		Scale		
Universcons	Drawing title <i>Bridge.Pod, Km36+893</i> <i>Bridge general view. Front view /</i> <i>Dispoziție generală a podului. Fațada.</i>	Checked	N.Tcaci		Drawing F-P-1		
		Control STAS	L.Pozdirca				

Layout / Planul  
Scara 1:200



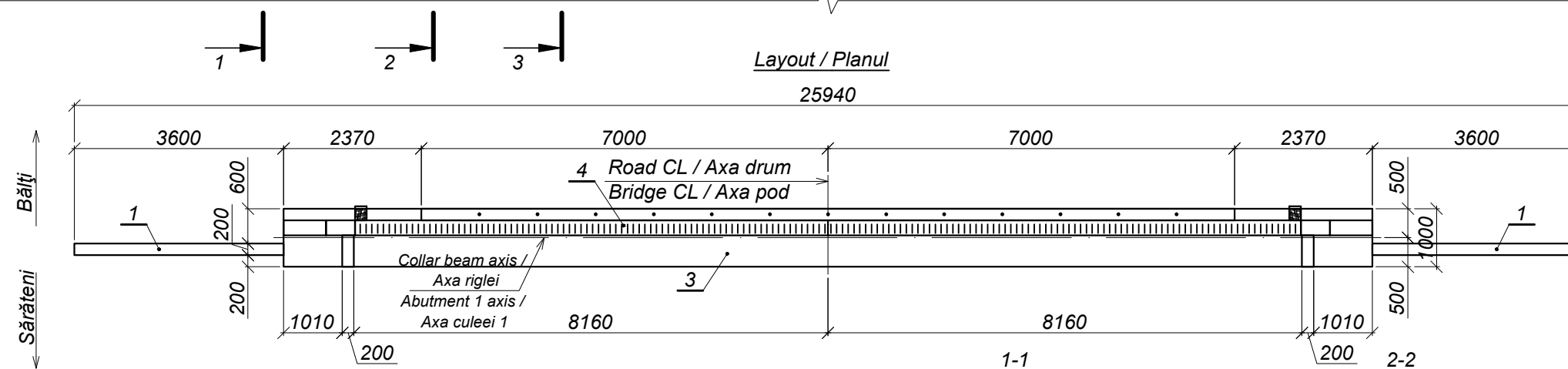
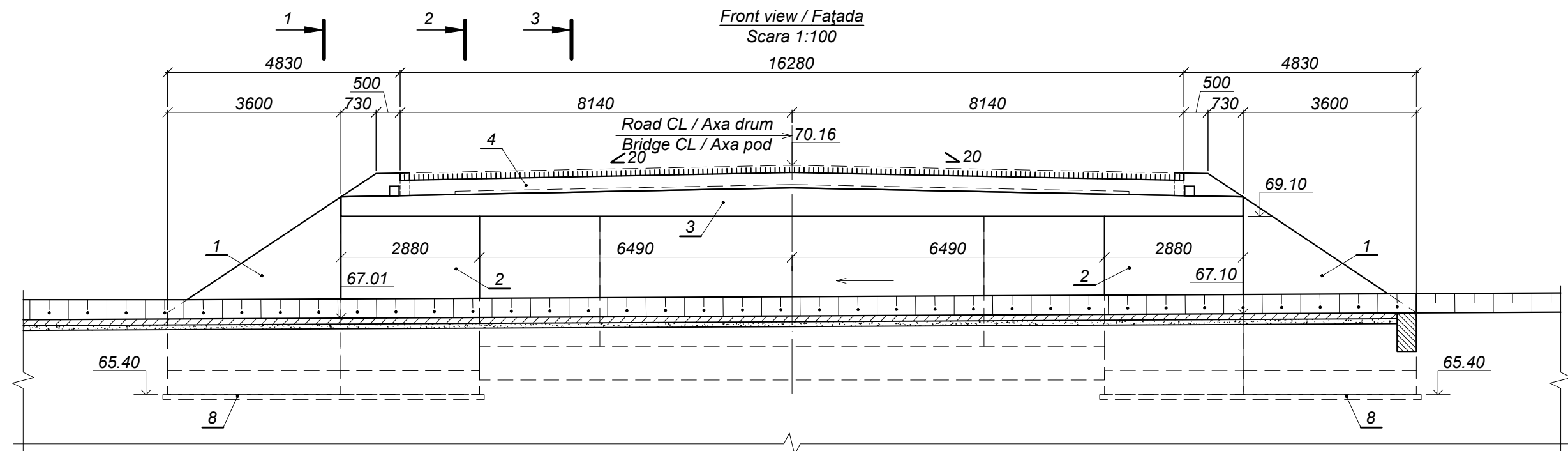
- 1 Abutmen 1 / Culeea 1
- 2 Abutmen 2 / Culeea 2
- 3 Superstructure and bridge way/ Suprastructura și calea podului
- 5 Consolidation of the riverbed, slopes and shoulders / Consolidarea albiei, taluzurilor și acostamentelor

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support Project				
Roughton International  Universcons	Rehabilitation of R14 Road Balti-Saratenii  Drawing title <i>Bridge.Pod, Km 36 + 893</i> <i>General View / Dispoziție generală</i> <i>Layout / Plan</i>	ISP	S.Bogza		Date	04.2012
		Designed	A.Cecan		Scale	
		Checked	N.Tcaci		Drawing P-P-1	
		Control STAS	L.Pozdirca			

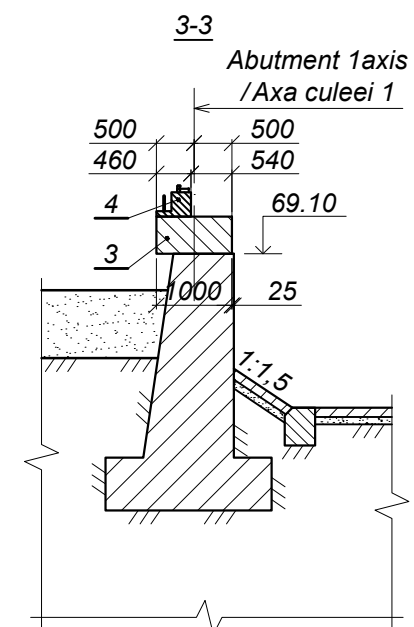
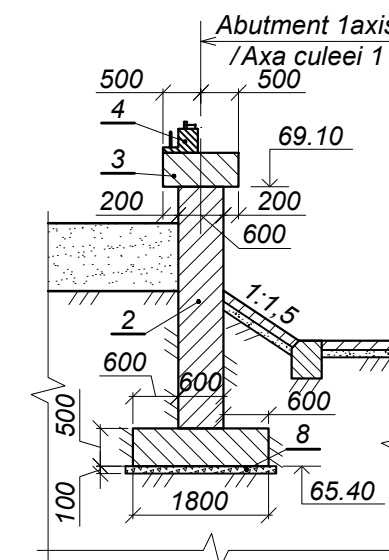
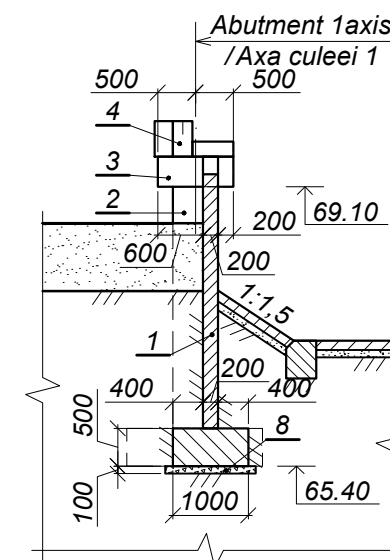


- 2 Abutmen 2 / Culeea 2
- 3 Superstructure and bridge way/ Suprastructura și calea podului
- 5 Consolidation of the riverbed, slopes and shoulders / Consolidarea albiei, taluzurilor și acostamentelor

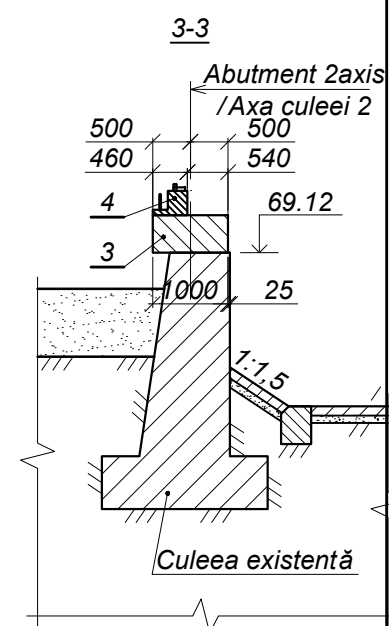
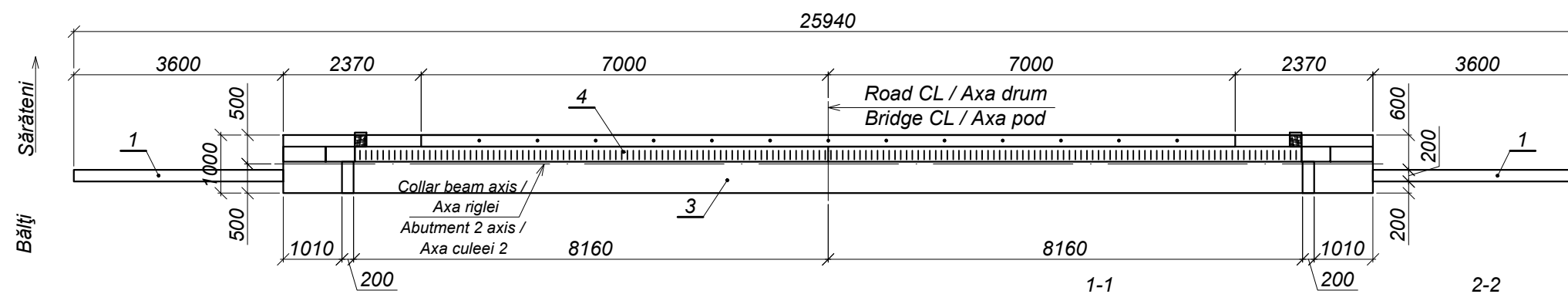
World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support Project				
Roughton International  Universcons	Rehabilitation of R14 Road Balti-Saratenii Drawing title <i>Bridge.Pod, Km 36 + 893</i> <i>General View / Dispoziție generală</i> <i>Section 1-1 / Secțiunea 1-1</i>	ISP	S.Bogza		Date	04.2012
		Designed	A.Cecan		Scale	
		Checked	N.Tcaci		Drawing S-P-1	
		Control STAS	L.Pozdirca			



- 1 Wing MJ-4 / Aripa NM-4,
- 2 Block MJ-5 / Blocul NM-5,
- 3 Coller beam / Rigla R-1
- 4 Protection woll / Zid de gardă ZG-1
- 5 Connectors / Conectori,
- 6 Waterproofing / Hidroizolarea suprafețelor din bitum filerizat în două straturi
- 8 Base courses of crushed granite / Pat de piatră spartă din granit, h=100

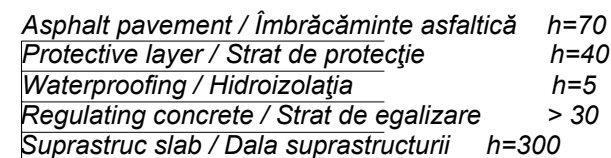
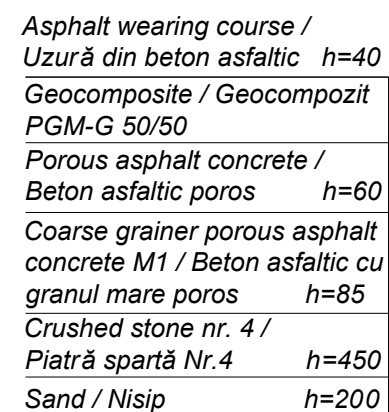


World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
	Road	Sector	Programme	Support	Project	
Roughton International	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza	Date	04.2012
Universcons	Drawing title <i>Bridge.Pod, Km36+893</i> <i>General view of abutment 1, /</i> <i>Dispoziția generală a culeei 1</i>		Designed	A.Cecan	Scale	
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			Control STAS	L.Pozdirca		



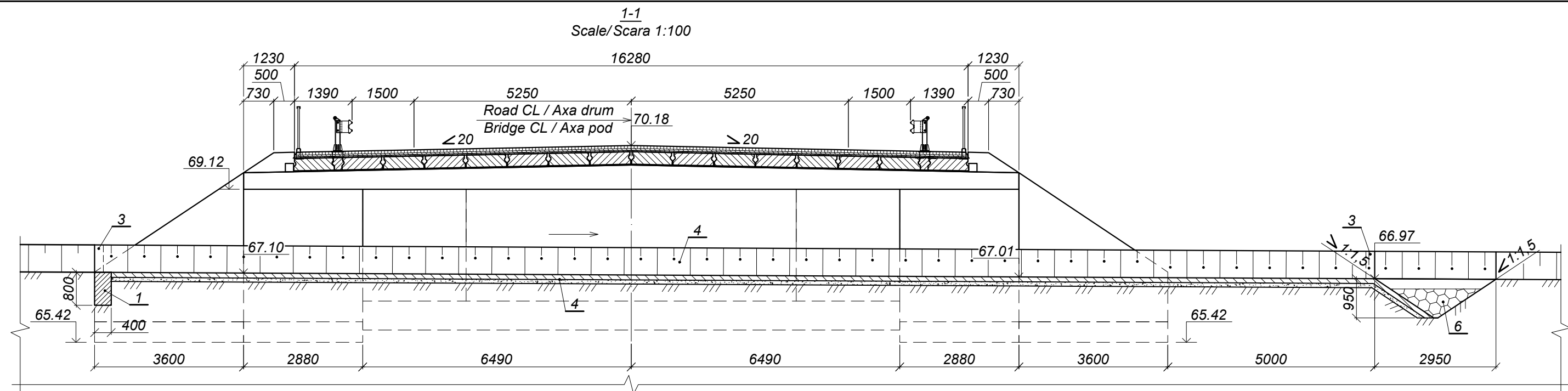
World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support	Project			
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012
		Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km36+893</i> <i>General view of abutment 2, /</i> <i>Dispoziția generală a culeei 2</i>	Checked	N.Tcaci		Drawing  C-P-2	
		Control STAS	L.Pozdirca			



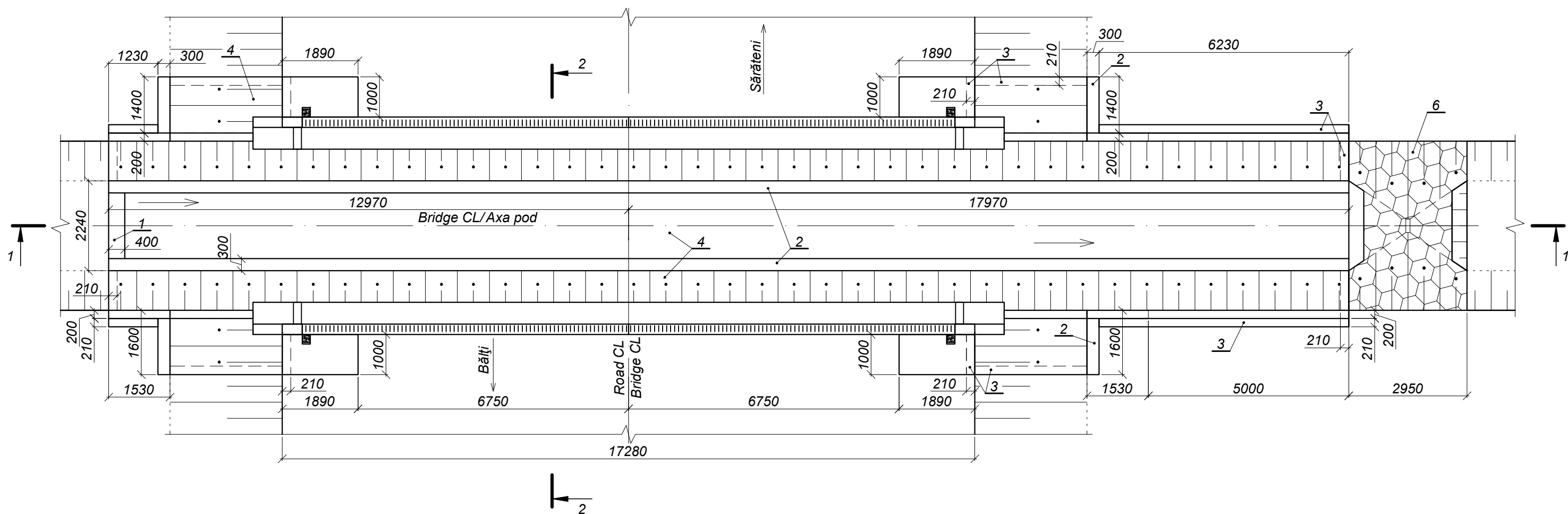


- 1 Deck slab / Dala de racordare П400.98.25-TAIII
- 2 Connection joint between approach slabs / Nodul de îmbinare a plăcilor de racordare
- 3 Waterproofing of approach elements / Hidroizolarea elementelor de racordare
- 4 Crushed stone / Piatră spartă M 400
- 5 Sand with gravel mix/ Amestec de nisip cu pietris

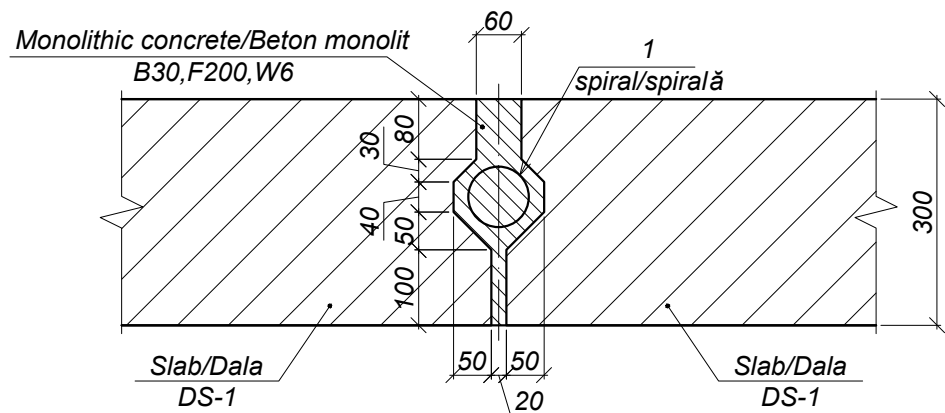
World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme		Support Project					
Roughton International  Universcons	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012	
		Designed	A.Cecan		Scale		
	Drawing title <i>Bridge.Pod, Km36+893</i> <i>Approach to bridge at abutment</i> <i>Racordarea podului cu drumul</i>	Checked	N.Tcaci		Drawing  RP-P-1		
		Control STAS	L.Pozdirca				



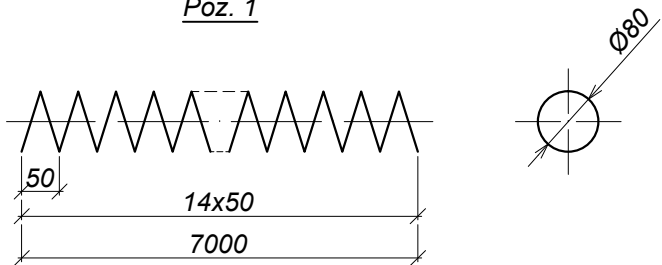
Layout / Planul  
(Bridge way and superstructure conventionally not shown) /  
(Calea podului și suprastructura convențional nu sunt arătate)



World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support Project				
Roughton International	Rehabilitation of R14 Road Balti-Sarateni	ISP	S.Bogza		Date	04.2012
Universcons	Drawing title <i>Bridge.Pod, Km36+893</i> <i>Consolidation of the riverbed and shoulders</i> <i>/ Consolidarea albiei și acostamentelor</i>	Designed	A.Cecan		Scale	
		Checked	N.Tcaci		Drawing CAA-P-1	
		Control STAS	L.Pozdirca			



Poz. 1



Specification / Specificația

Format	Zona	Position / Pozitia	Document Number / Indicativ	Name / Denumirea	Quantity / Cantitatea	Note / Notă
				<u>Parts / Piese</u>		
				Ø3 B-I ГОСТ 6727-80*		
FP		1		l=3600	5	0,2 kg
				<u>Materials / Materiale</u>		
			ГОСТ 26633-91*	Concrete cl.B25, F200, W6 / Beton cl.B25, F200, W6		0,08 m³

Note/Notă:  
1. Scale/Scara 1:10.

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme		Support Project					
Roughton International	Rehabilitation of R14 Road Balti-Saratenii		ISP	S.Bogza		Date	04.2012
			Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km36+893 Superstructure. Joint SJ-1 / Suprastructura.Nodul SN-1</i>		Checked	N.Tcaci		Drawing SN-P-1	
			Control STAS	L.Pozdirca			

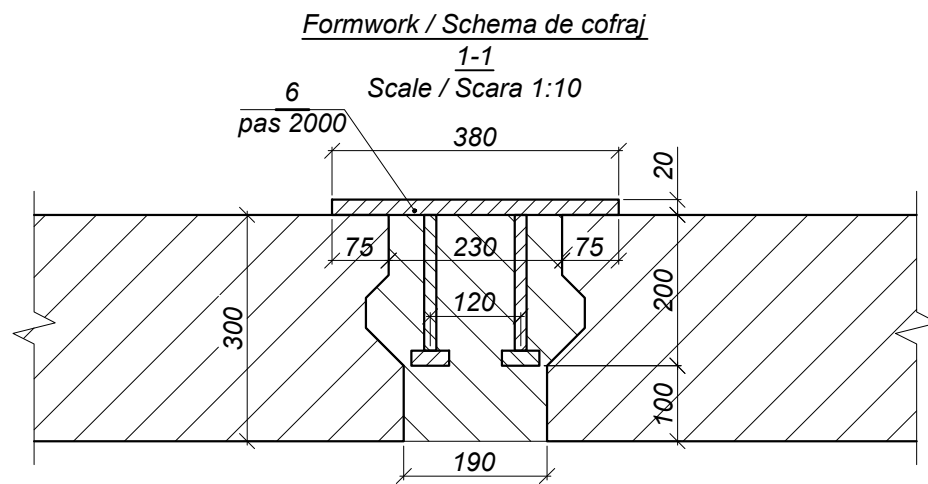
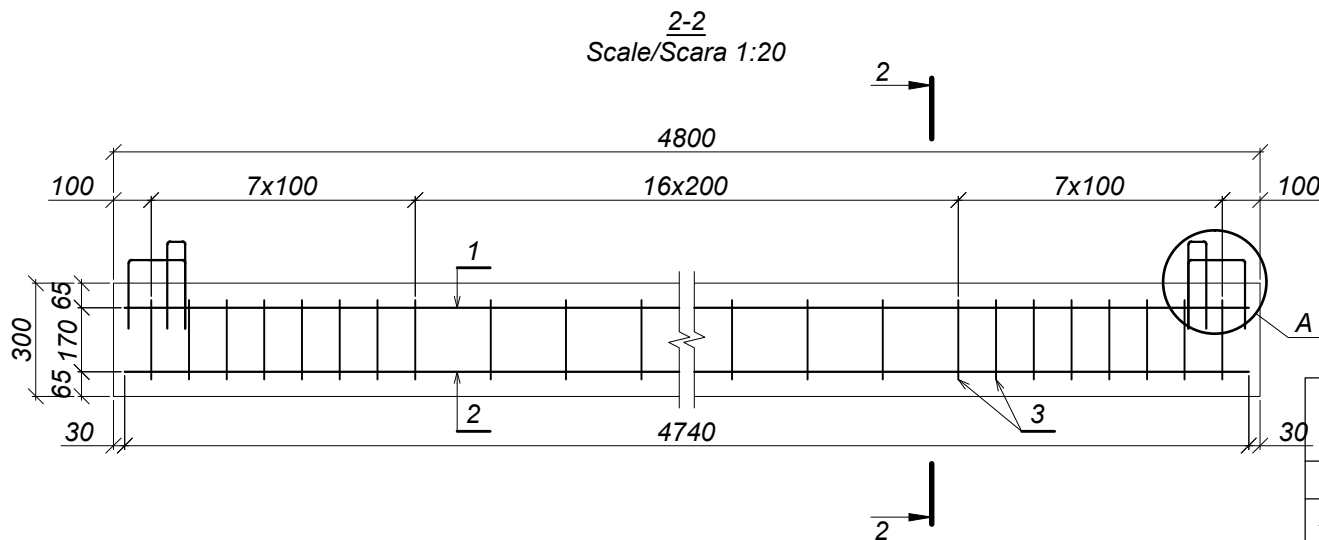
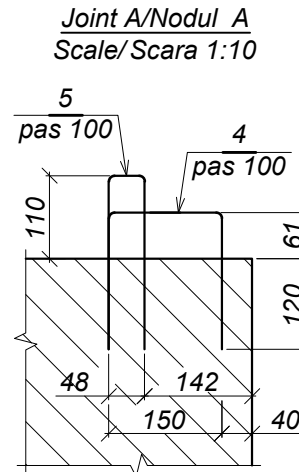
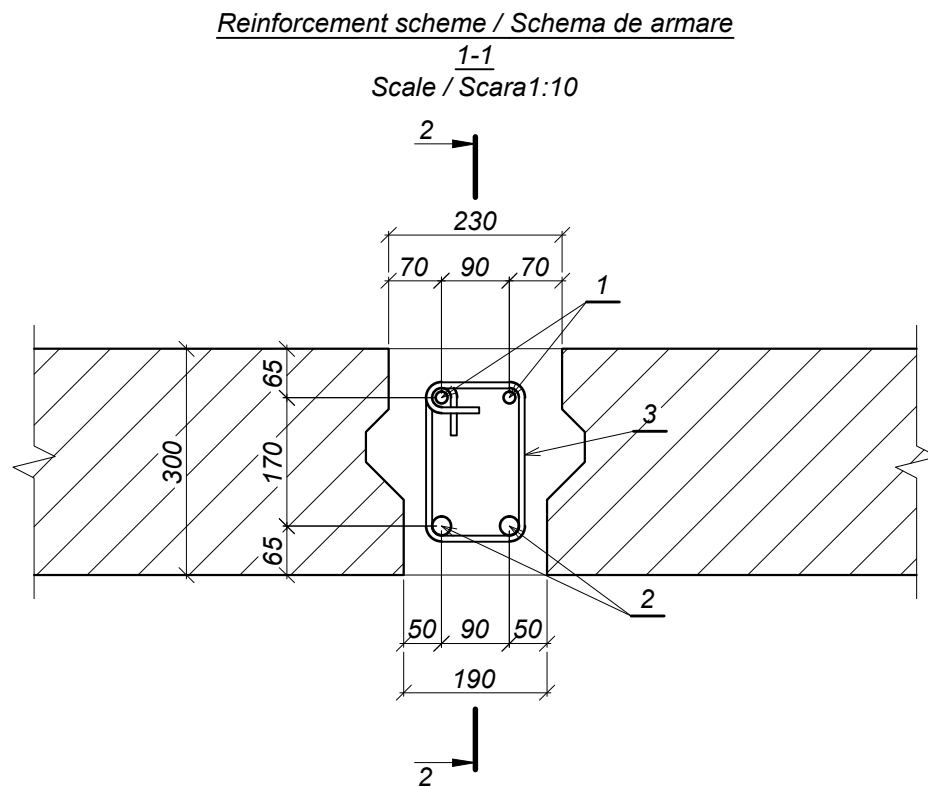


Table of elements. Tabela pieselor

Pos./ Poz.	Draft / Schiță
3	
4	
5	



Specification / Specificația

Format	Zona	Position / Poziția	Document Number / Indicativ	Name / Denumirea	Quantity / Cantitatea	Note / Notă
<b>Parts / Piese</b>						
A-III-16 GOCT 5781-82* 25Г2С GOCT 5781-82*						
FP		1		l=4740	2	7,5 kg
A-III-25 GOCT 5781-82* 25Г2С GOCT 5781-82*						
FP		2		l=4740	2	18,3 kg
A-I-8 GOCT 5781-82* Cm3пc3 GOCT 380-94						
FP		3		l=780	31	0,3 kg
A-I-10 GOCT 5781-82* Cm3пc3 GOCT 380-94						
FP		4		l=510	4	0,3 kg
FP		5		l=510	4	0,3 kg
A4		6	2012/045D - 00.07.00	Piesă înglobată PÎ-1	3	30,3 kg
<b>Materials / Materiale</b>						
GOCT 26633-91*						Concrete cl.B25, F200, W6 / Beton cl.B25, F200, W6
						0,33 m³

Quantity of steel per one element / Consumul de metal pentru un element, kg

Element type / Marca elementulu	Reinforcement parts / Piese de armare							Embedded parts / Piese înglobate					Total weight / Greutate totală
	Reinforcement type / Clasa armaturii							Reinforcement type / Clasa armaturii		Steel type			
	A-I			A-III				A-III		16Д			
	ГОСТ 5781-82*							ГОСТ 5781-82*		ГОСТ 103-76**			
	Ø8	Ø10	Total	Ø16	Ø25	Total		Total	Ø16	Total	-20		
NM-2	9,3	2,4	11,7	15,0	36,6	51,6	63,3	9,6	9,6	81,3	81,3	90,9	154,2

World Bank

Republic of Moldova

Ministry of Transport and Road Industry  
State Road Administration

Road Sector Programme Support Project

Roughton International

Rehabilitation of R14 Road  
Balti-Saratenii

ISP

S.Bogza

Date

04.2012

Designed

A.Cecan

Scale

Universcons

Drawing title *Bridge.Pod, Km36+893*  
*Superstructure. Joint SJ-2 /*  
*Suprastructura. Nodul SN-2*

Checked

N.Tcaci

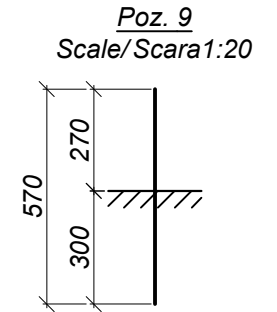
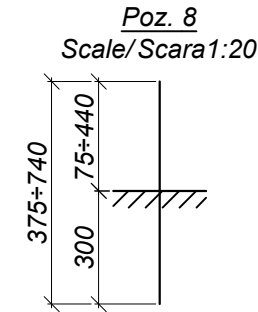
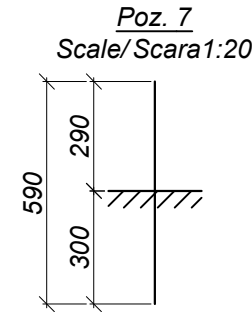
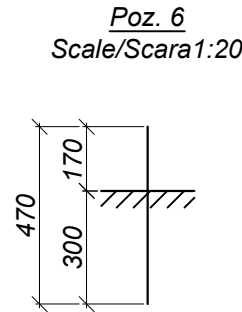
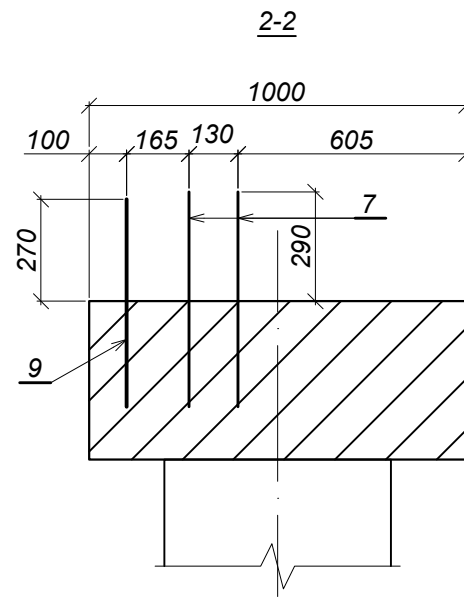
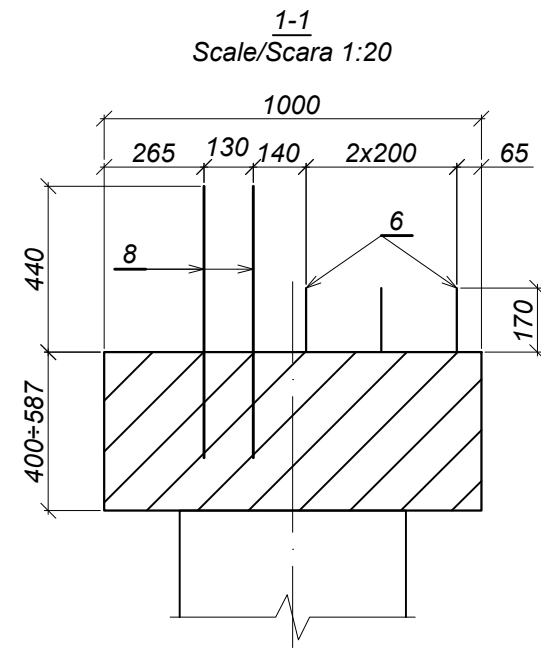
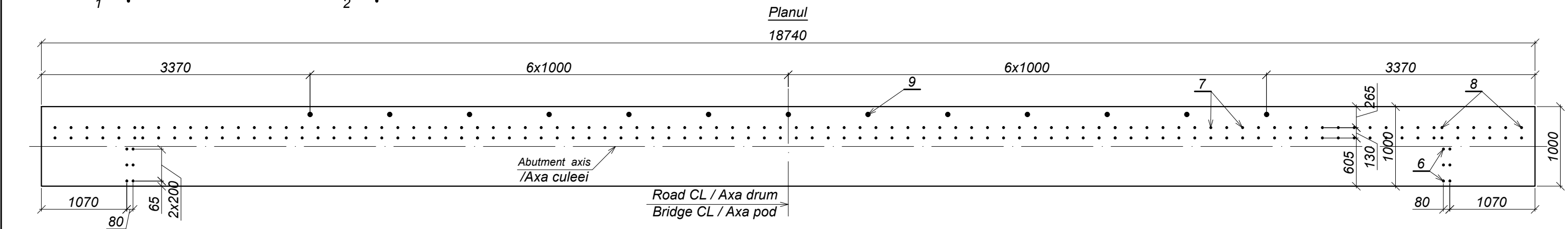
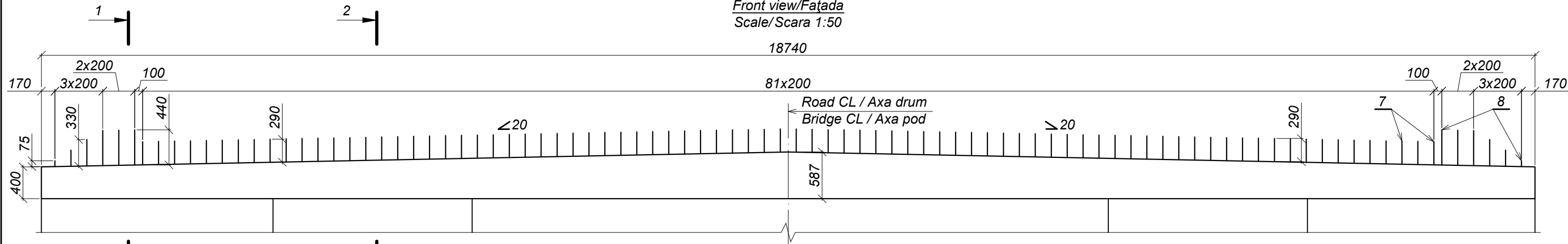
Drawing

SN-P-2

Control STAS

L.Pozdirca

Formwork/ Schema de cofraj  
Front view/Fațada  
Scale/Scara 1:50

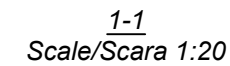


Quantity of steel per one element / Consumul de metal pentru un element, kg

Element type / Marca elementulu	Reinforcement parts / Piese de armare								Total weight / Greutate totală
	Reinforcement type / Clasa armaturii								
	A-I				A-III				
	ГОСТ 5781-82*								
	Ø6	Ø8	Ø10	Ø25	Total	Ø14	Ø20	Total	
R-1	197,4	-	46,0	28,6	272,0	141,2	553,2	694,4	966,4

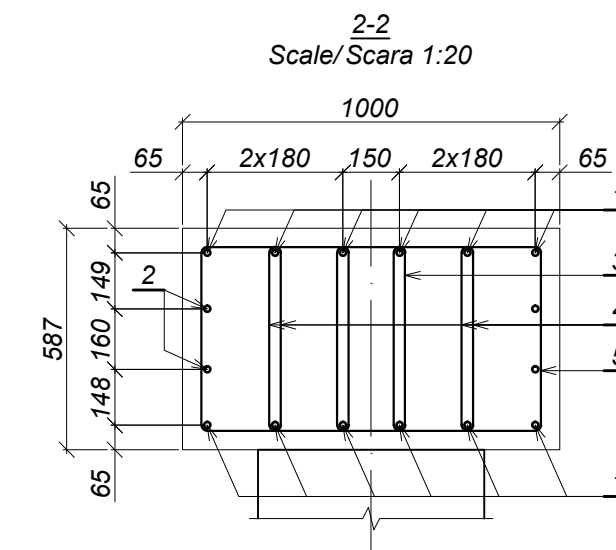
World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support	Project			
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.201
		Designed	A.Cecan		Scale	
Universcons	Drawing title <i>Bridge.Pod, Km36+893</i> <i>Collar beam CB- 1 / Rigla R-1</i>	Checked	N.Tcaci		Drawing R-P-1	
		Control STAS	L.Pozdirca			

Scale / Scara 1:50



Pos./ Poz.	Draft / Schiță
3	
4	
5	

Format	Zona	Position / Pozitia	Document Number / Indicativ	Name / Denumirea	Quantity / Cantitatea	Note / Notă
				<u>Parts / Piese</u>		
FP		1		<u>A-III-20</u> ГОСТ 5781-82*, l=18640 25Г2С ГОСТ 5781-82*	12	46,1 kg
FP		2		<u>A-I-10</u> ГОСТ 5781-82*, l=18640 Cm3nc3 ГОСТ 380-94	4	11,5 kg
				<u>A-I-6</u> ГОСТ 5781-82* Cm3nc3 ГОСТ 380-94		
FP		3		$I_{med}=1330$	94	0,3 kg
FP		4		$I_{med}=1390$	376	0,3 kg
FP		5		$I_{med}=2770$	94	0,6 kg
				<u>A-III-14</u> ГОСТ 5781-82* 25Г2С ГОСТ 5781-82*		
FP		6		$I=470$	12	0,6 kg
FP		7		$I=590$	164	0,7 kg
FP		8		$I_{med}=620$	24	0,8 kg
FP		9		<u>A-I-25</u> ГОСТ 5781-82*, l=570 Cm3nc3 ГОСТ 380-94	13	2,2 kg
				<u>Materials / Materiale</u>		
			ГОСТ 26633-91*	Concrete cl.B25, F200, W6 / Beton cl.B25, F200, W6		9,26 m³

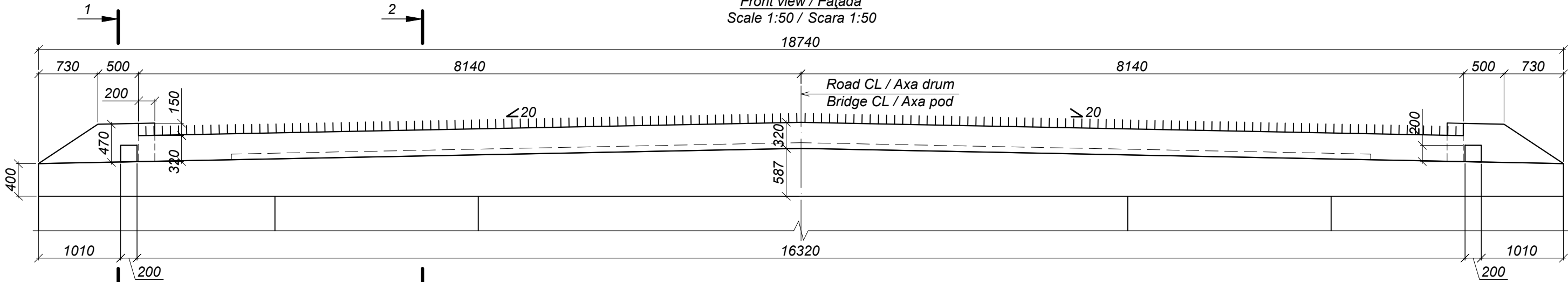


	R-P-2
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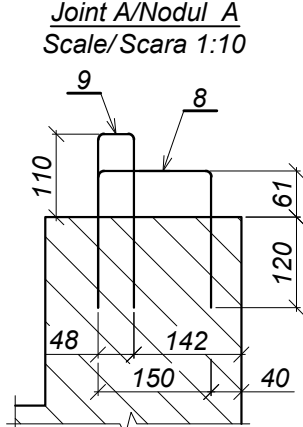
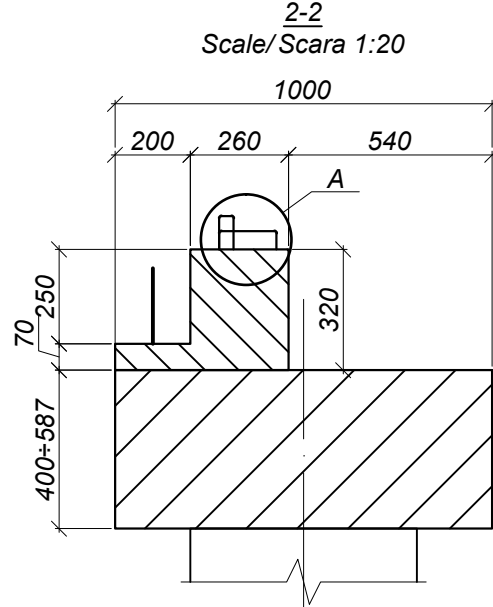
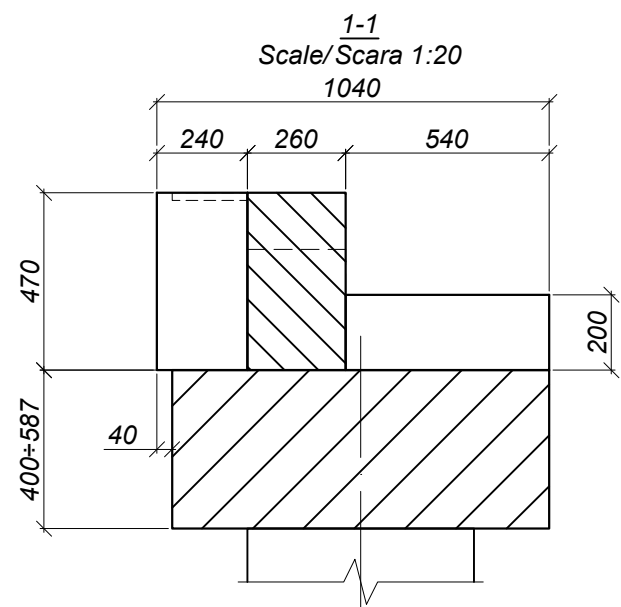
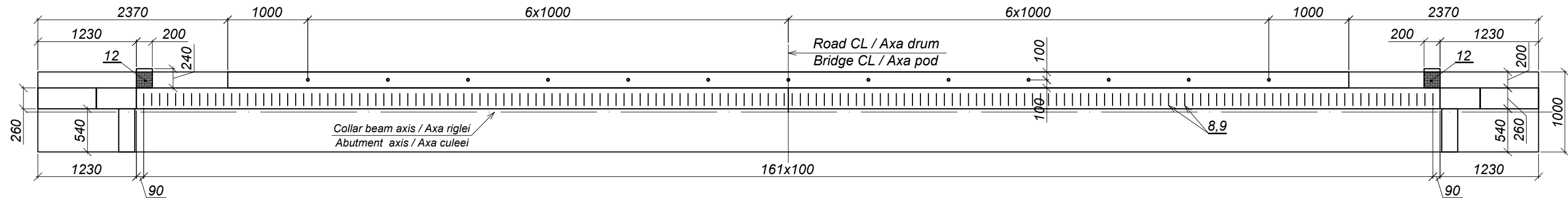
Formwork / Schema de cofraj

Front view / Fațada

Scale 1:50 / Scara 1:50



Planul



Quantity of steel per one element / Consumul de metal pentru un element, kg

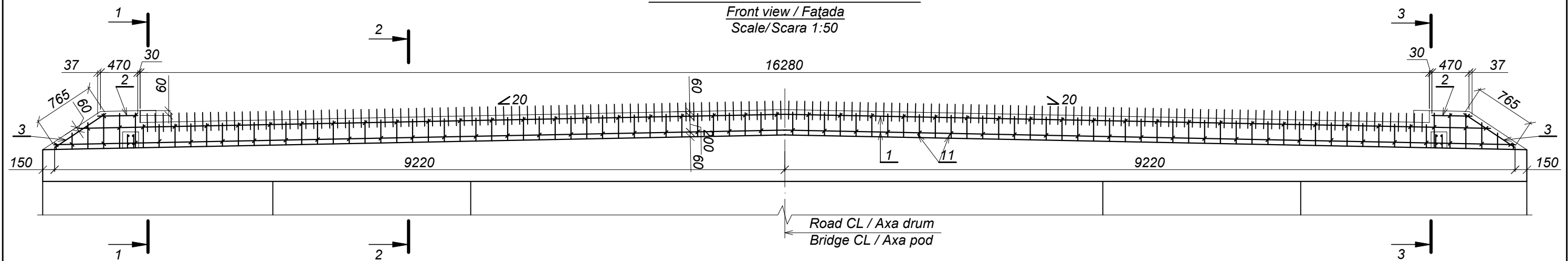
Element type / Marca elementulu	Reinforcement parts / Piese de armare						Embedded parts / Piese înglobate					Total weight / Greutate totală
	Reinforcement type / Clasa armaturii						Reinforcement type / Clasa armaturii		Steel type			
	A-I		A-III				A-III		16Д			
	ГОСТ 5781-82*						ГОСТ 5781-82*		ГОСТ 103-76**			
	Ø6	Ø10	Total	Ø12	Total		Total	Ø16	Total	-20		
ZG-1	7,9	97,2	105,1	82,0	82,0	187,1	2,4	2,4	12,6	12,6	15,0	202,1

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
		Road Sector Programme Support Project				
Roughton International  Universcons	Rehabilitation of R14 Road Balti-Saratenii  Drawing title Bridge.Pod, Km36+893 Protection wall PW-1 / Zid de gardă ZG-1	ISP	S.Bogza		Date	04.2012
		Designed	A.Cecan		Scale	
		Checked	N.Tcaci		Drawing ZG-P-1	
		Control STAS	L.Pozdirca			

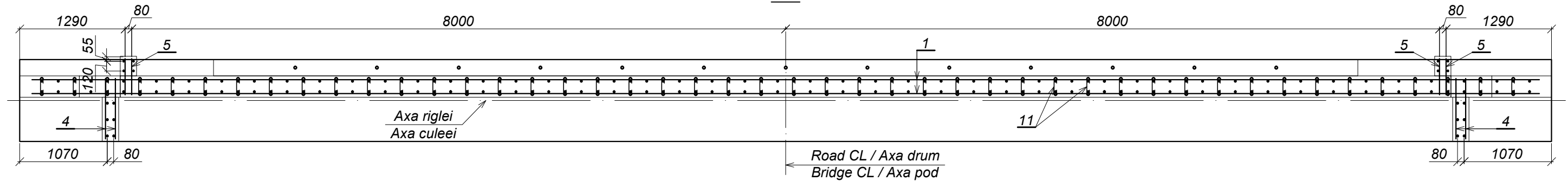
# Reinforcement scheme / Schema de armare

Front view / Fațada

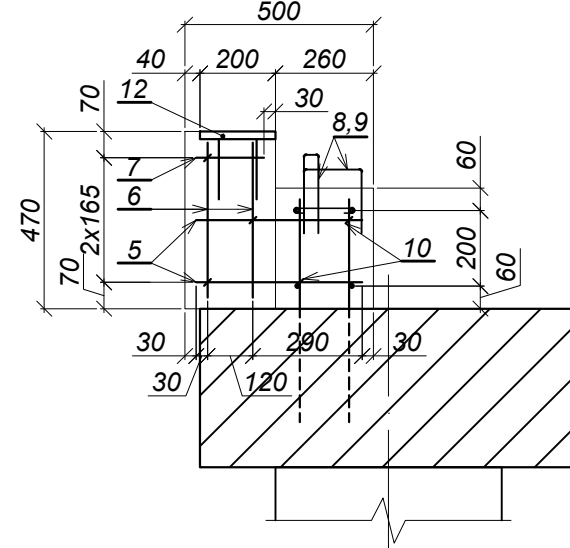
Scale/Scara 1:50



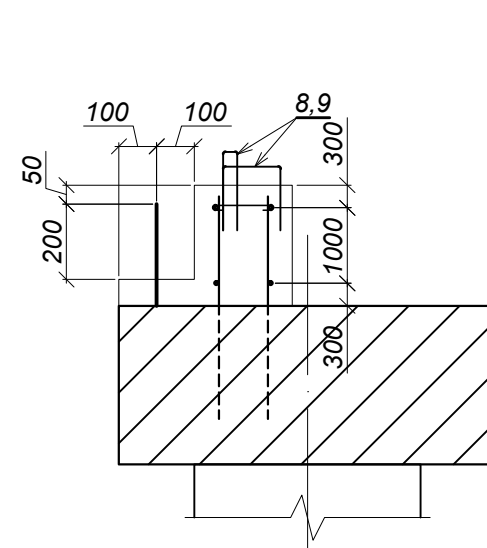
Plan



1-1  
Scale/Scara 1:20



2-2  
Scale/Scara 1:20



3-3  
Scale/Scara 1:20

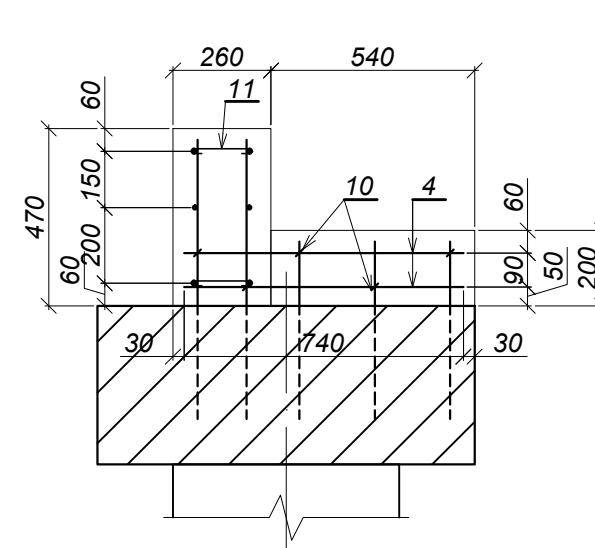


Table of elements. Tabela pieselor

Pos./ Poz.	Draft / Schiță
8	
9	
10	
11	

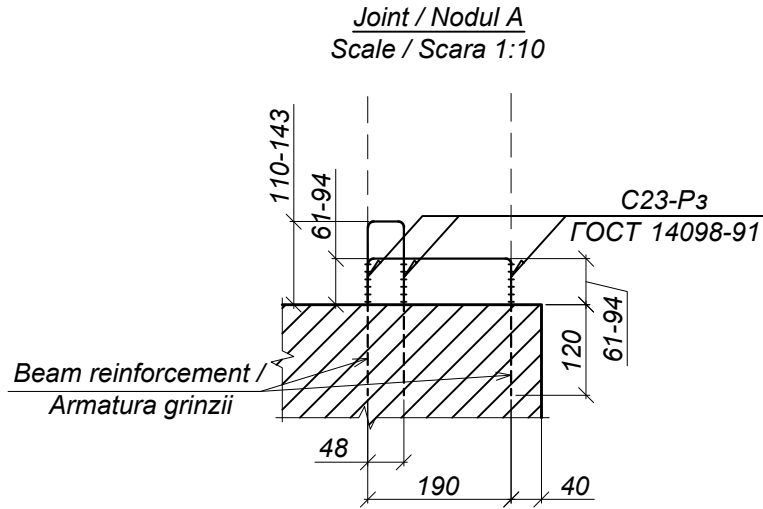
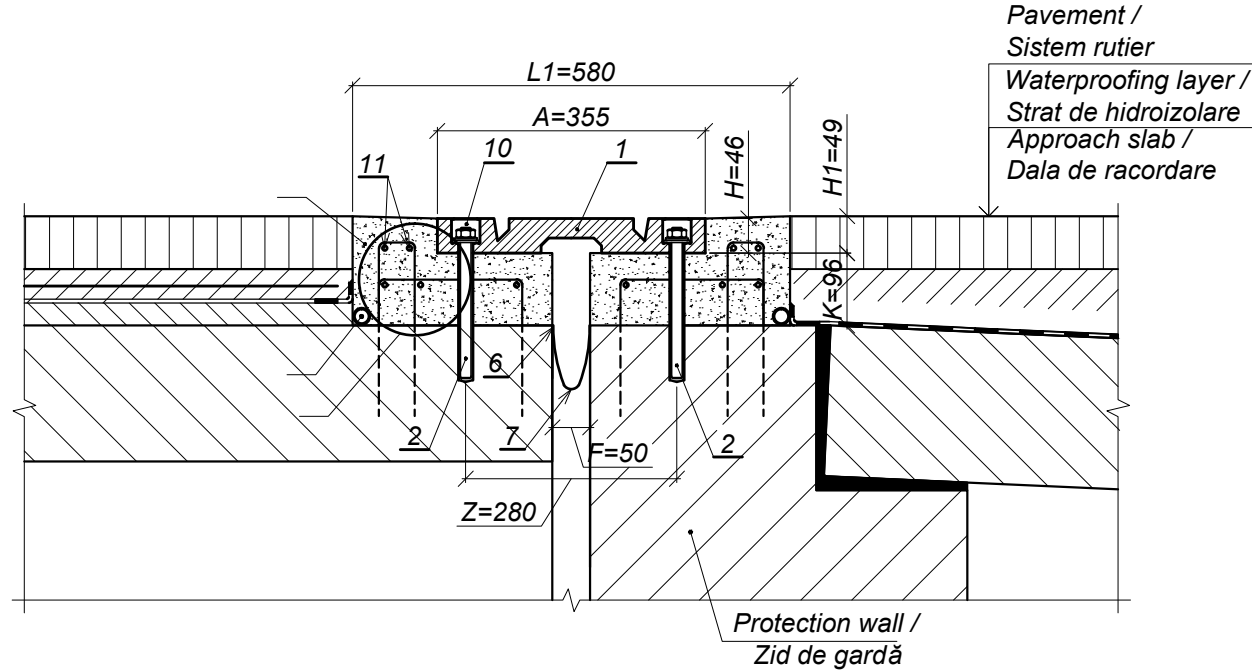
Note / Notă:

1. Protection layer / Stratul de protecție - 50 mm.

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road      Sector      Programme      Support      Project							
Roughton International  Universcons	Rehabilitation of R14 Road Balti-Saratenii  Drawing title <i>Bridge.Pod, Km36+893</i> <i>Protection wall PW-1. Reinforcement scheme</i> <i>Zid de gardă ZG-1. Schema de armare</i>	ISP	S.Bogza		Date	04.2012	
		Designed	A.Cecan		Scale		
		Checked	N.Tcaci		Drawing ZG-P-2		
		Control STAS	L.Pozdirca				



Expansion joint with elastomeric covering part ALGAFLEX T80 /  
Rost de dilatație cu element de acoperire elastomerică ALGAFLEX T80  
Scale / Scara 1:10

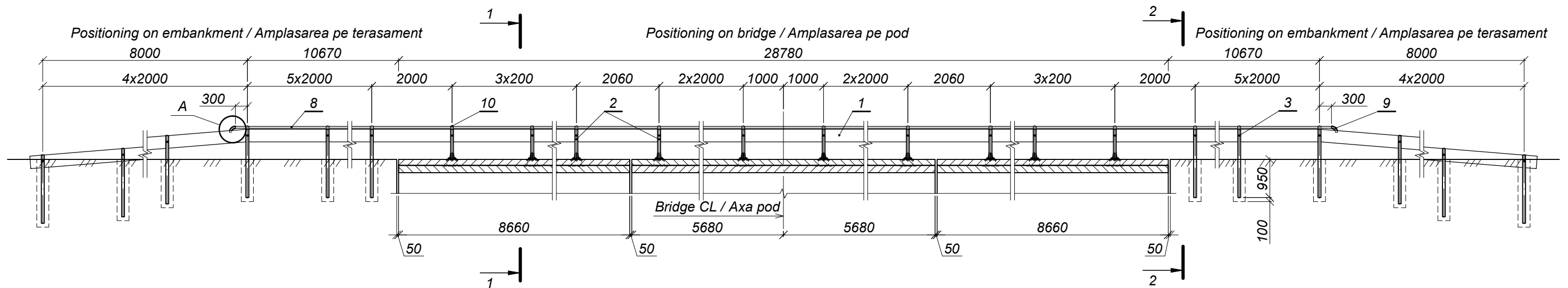


Specification / Specificația			
Format	Zona	Position / Poziția	
			Expansion joint / Rost de dilatație ALGAFLEX T80
			ALGAFLEX T80 Kit / Set ALGAFLEX T80
			Expansion joint kit parts / Piesele rostului din setul ALGAFLEX T80
		1	CNR 10018 Reinforced rubber covering / Placa de acoperire din cauciuc armat ALGAFLEX-GOMMA 355x46x2000
		2	UNI EN 10083/1 Chemical anchor / Bulon de ancorare (C40 + DACROMET 320)
		3	UNI 6592 Oval washer, washer / Șaibă de bulon (R40 / R60 + DACROMET 320)
		4	UNI 5588 Nut / Piulița bulonului (Cl. 6S + DACROMET 320)
		5	ALGA 668-M1029 Levelling mortar / Beton polimeric (Tigigrount 102FR)
		6	ALGA 668-M1029 Epoxy adhesive / Clei epoxid (Tigigrount T01)
		7	ALGA 668-M1029 Flashing (rubber) / Membrană din cauciuc (Tigitec - E) 200x3x17180
		8	ALGA 668-M1029 Epoxy resin / Clei epoxid (Tigiepox Grount)
		9	ALGA 668-M1029 PVC drainage pipe (sheathed) / Țeavă de drenaj din polimeri (PVC Ø20)
		10	ALGA 668-M1029 Filled recess / Material de sigilare (Tigitar A)
			Parts from local materials / Piesele rostului din materiale locale
			A-I-10 GOCT 5781-82* Cm3пс3 GOCT 380-94
		11	Reinforcement rod l=17120

- Note / Notă:
- Length of position 11 implies the need to splice reinforcement bars by welding according to the type of splicing / Lungimea poziției 11 include necesitatea îmbinării barelor de armatură prin sudare conform tipului de îmbinare C23-P3 GOCT 14098-91.
  - Beam reinforcement is bent depending on road's gradient / Armatura grinzii se îndoaie în dependență de declivitatea drumului.
  - Total quantity of steel for one expansion joint : 106.0 kg / Consumul total de metal pentru un rost: 106,0 kg.
  - The project provides the covering of the expansion joint with elements from ALGAFLEX kit, produced by italian company "ALGA SPA" and used for bridge repair works / Proiectul prevede acoperirea rostului de dilatație cu elemente din setul ALGAFLEX produs de firma italiană "ALGA SPA" și utilizate la reparația podurilor.
  - Contrator, with approval of Beneficiary and Designer can suggest another similar construction for joint covering / Antreprenorul, cu acordul Beneficiarului și Proiectantului, poate propune o altă construcție similară de acoperire a rostului.

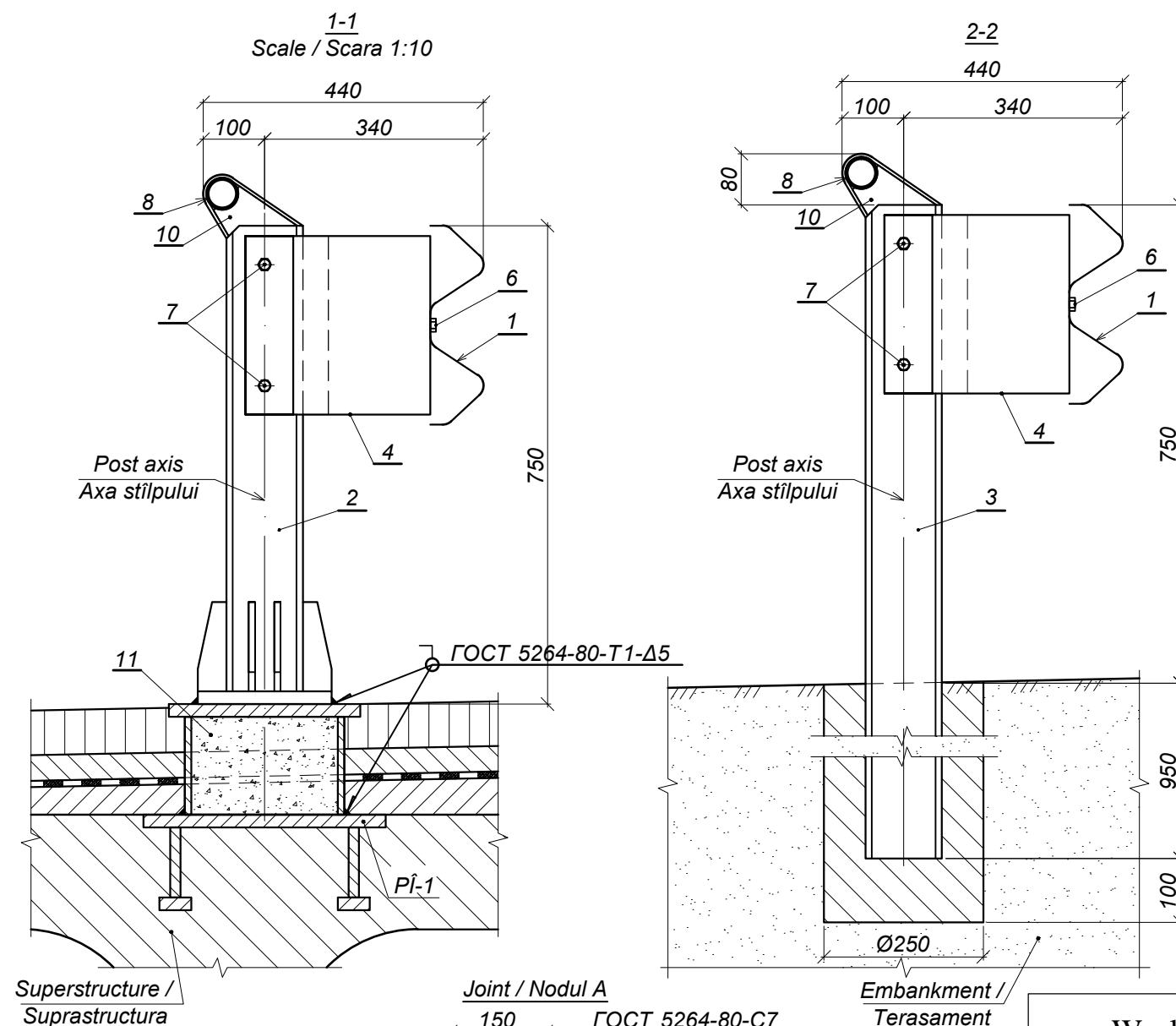
World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support Project				
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012
		Designed	A.Cecan		Scale	
Universcons	Drawing title For all bridges / Pentru toate podurile Expansion joint ALGAFLEX T80 / Rost de dilatație ALGAFLEX T80	Checked	N.Tcaci		Drawing RD-P-1	
		Control STAS	L.Pozdirca			

Front view / Fațada  
Scale / Scara 1:100



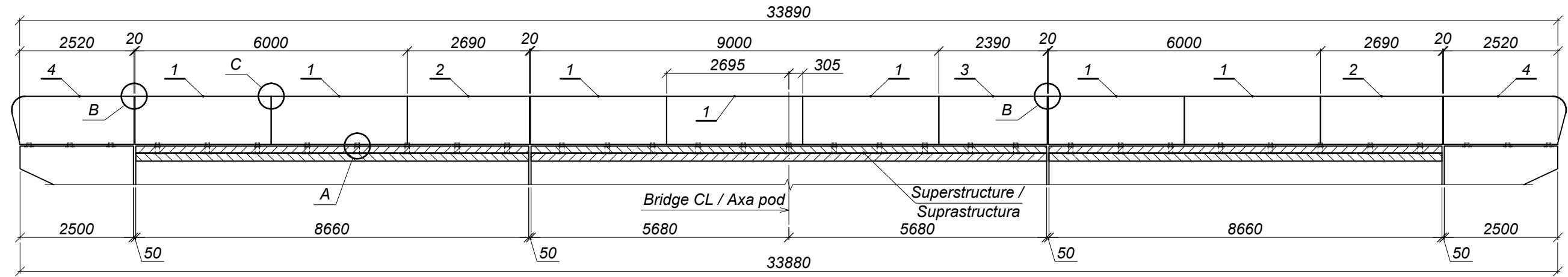
Specification / Specificația

Format	Zona	Position / Poziția	Document Number / Indicativ	Name / Denumirea
				<u>Assembly pieces / Elemente de asamblare</u>
FP		1	ГОСТ 8240-89	W-beam profile / Profil lisă CB-2, l=6320
FP		2	2009/032D - 00.21.00 ГОСТ 8240-89	Rail post / Stîlpul parapeului CM*
FP		3	2009/032D - 00.22.00 ГОСТ 8240-89	Rail post / Stîlpul parapeului CD-3*
FP		4	Pr. tip Seria 3.503.1-81.3-1-10, Ediția 3-1	Offset block / Amortizator KA
FP		5	Pr. tip Seria 3.503.1-81.3-1-12, Ediția 3-1	Reflecting element / Reflector UC-1
FP		6	Pr. tip Seria 3.503.1-81.3-1-12, Ediția 3-1	Bolt / Bolt M16x45. Nut / Piuliță M16. Washer / Șaibă 20
FP		7	Pr. tip Seria 3.503.1-81.3-1-12, Ediția 3-1	Bolt / Bolt M16x30. Nut / Piuliță M16. Washer / Șaibă 16
FP		8	ГОСТ 8732-78*	Steel tube / Țeavă de metal Ø50, δ=2,5, l=50720. Cm3nc ГОСТ 8731-87
FP		9	ГОСТ 8732-78*	Steel tube / Țeavă de metal Ø50, δ=2,5, l=200. Cm3nc ГОСТ 8731-87
A4		10	2009/032D - 00.23.00	Tube attachment element / Element de fixare a țevii
A4		11	2009/032D - 00.19.00	Base plate / Soclul parapeului de siguranță Scl-1
				<u>Materials / Materiale</u>
			ГОСТ 26633-91*	Concrete / Beton cl. B20, F200, W4

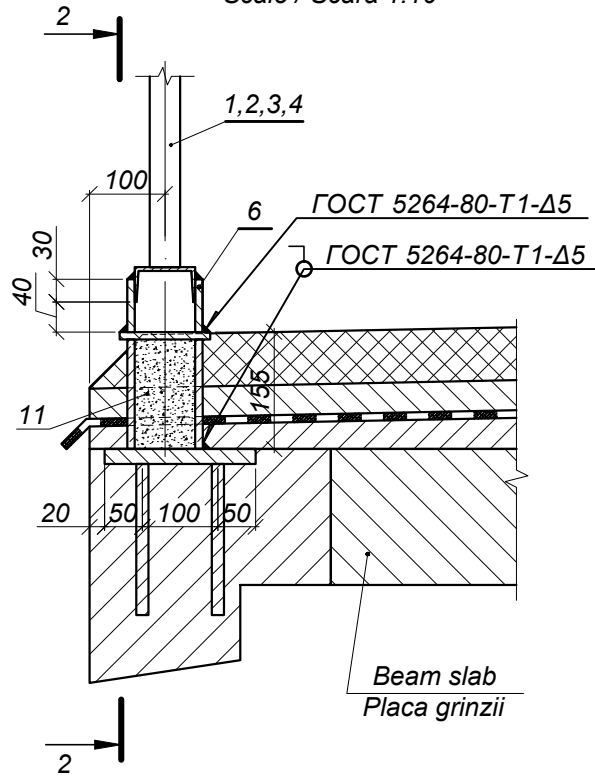


World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration			
Road Sector Programme		Support Project			
Roughton International Universcons	Rehabilitation of R14 Road Balti-Saratenii Drawing title For all bridges / Pentru toate podurile Guardrailing / Parapet de siguranță a circulației vehiculelor	ISP	S.Bogza	Date	04.2012
		Designed	A.Cecan	Scale	
		Checked	N.Tcaci	Drawing PSCV-P-1	
		Control STAS	L.Pozdirca		

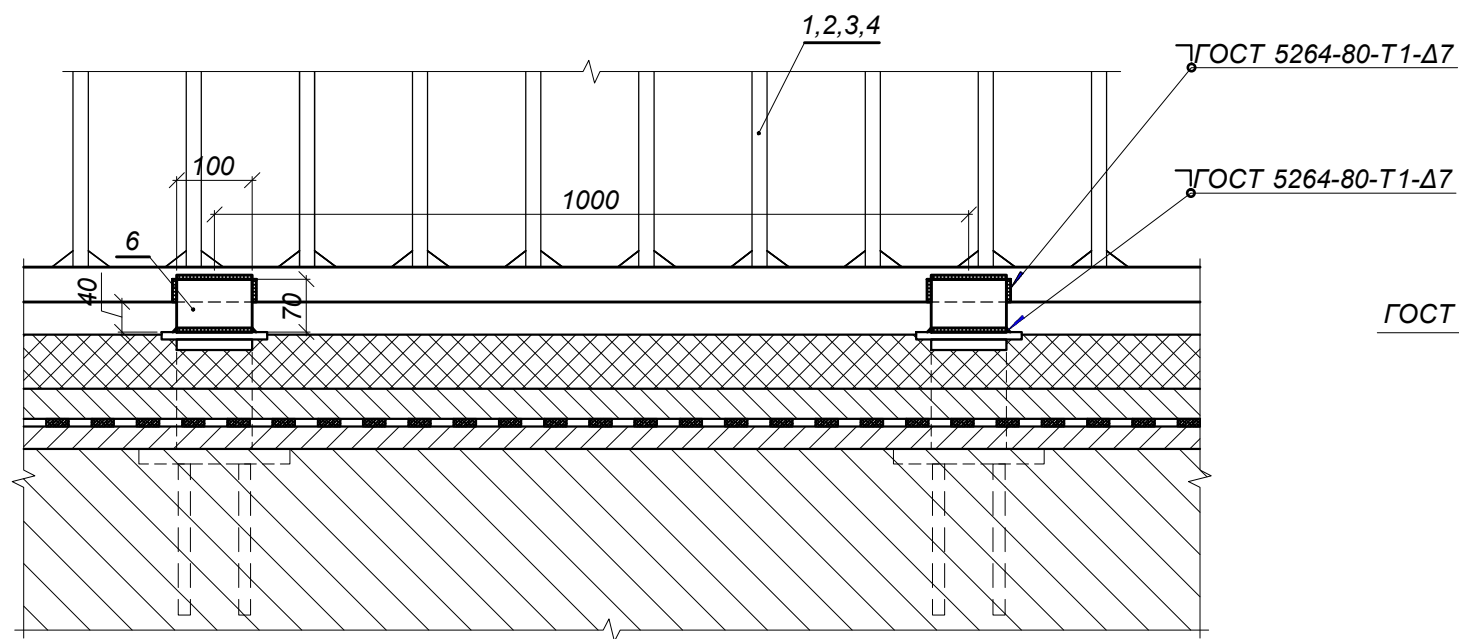
Front view / Fațada  
Scale / Scara 1:100



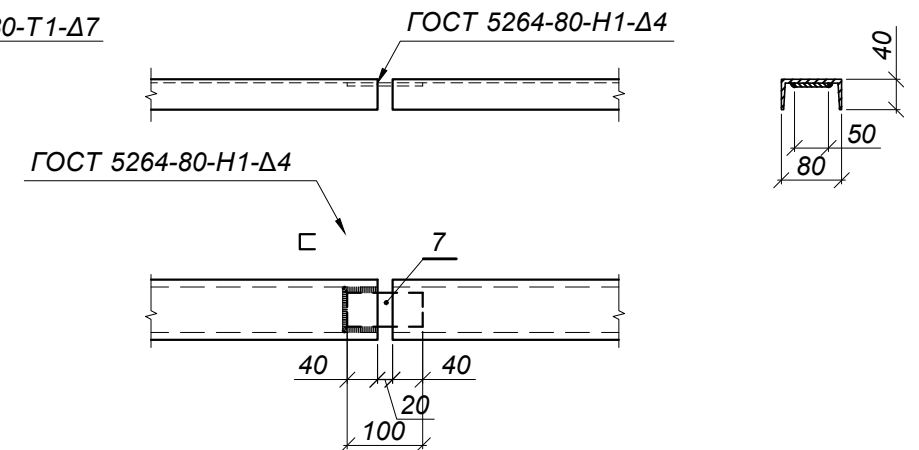
Joint A / Nodul A  
Scale / Scara 1:10



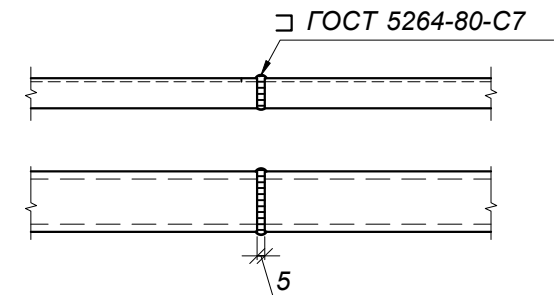
2-2



Joint B / Nodul B  
Scale / Scara 1:10



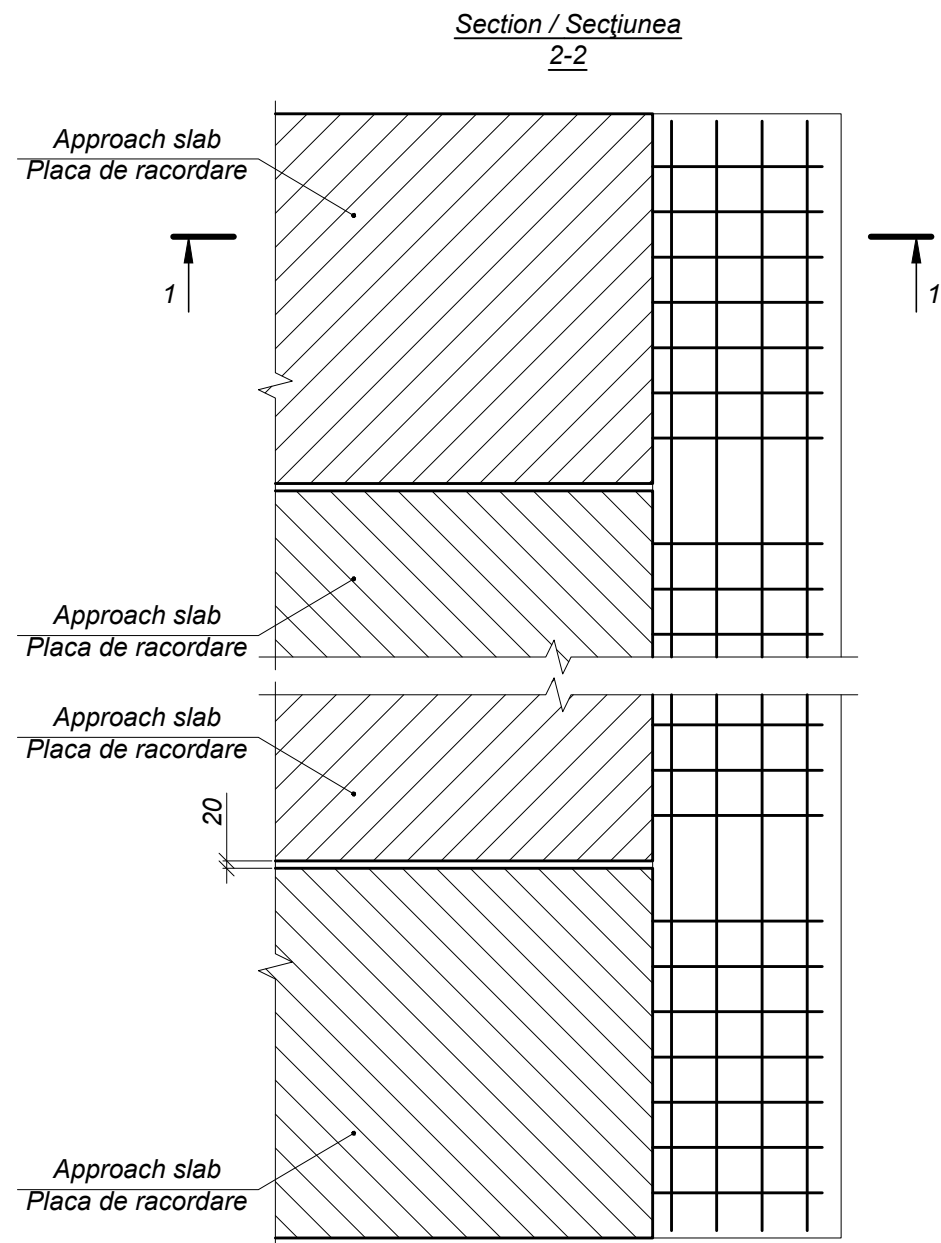
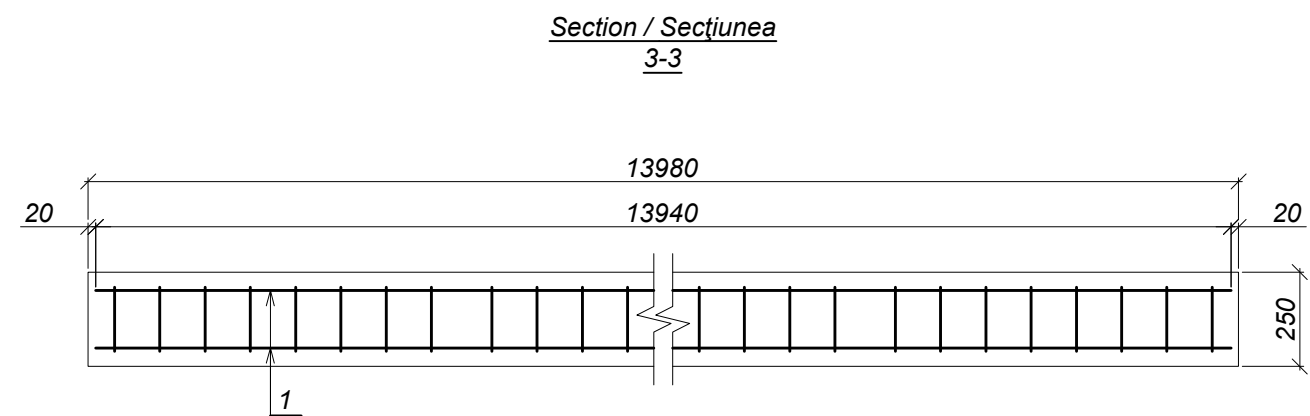
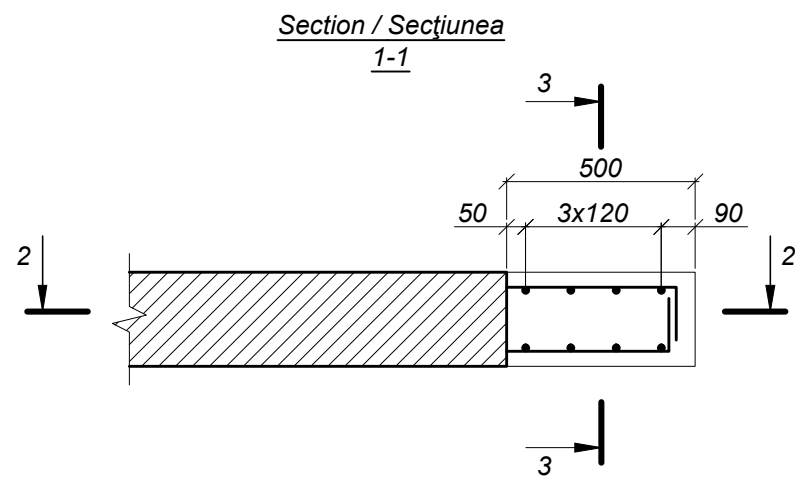
Joint C / Nodul C  
Joints between pedestrian guardrail sections /  
Rostul între panourile parapetului pietonal  
Scale 1:10



Specificația

Position / Pozitia	Document Number / Indicativ	Name / Denumirea
		<u>Assembly pieces /</u> <u>Elemente de asamblare</u>
1	2012/032D - 00.24.00	Pedestrian guardrail section Panoul parapetului pietonal SP-1
2	2012/032D - 00.24.00 - 01	Pedestrian guardrail section Panoul parapetului pietonal SP-2
3	2012/032D - 00.24.00 - 02	Pedestrian guardrail section Panoul parapetului pietonal SP-3
4	2012/032D - 00.24.00 - 03	Pedestrian guardrail section Panoul parapetului pietonal SP-4
5	2012/032D - 00.24.00	Base plate Soclul parapetului pietonal Scl-2
		<u>Parts/Piese</u>
6		Б-ПН-10x70x100, ГОСТ19903-74, 16Д ГОСТ 6713-91
7		Б-ПН-10x50x100, ГОСТ19903-74, 16Д ГОСТ 6713-91

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road      Sector      Programme      Support      Project							
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012	
		Designed	A.Cecan		Scale		
Universcons	Drawing title <i>For all bridges / Pentru toate podurile</i> <i>Pedestrian guardrail /</i> <i>Parapet de siguranță pietonal</i>	Checked	N.Tcaci		Drawing PSP-P-1		
		Control STAS	L.Pozdirca				

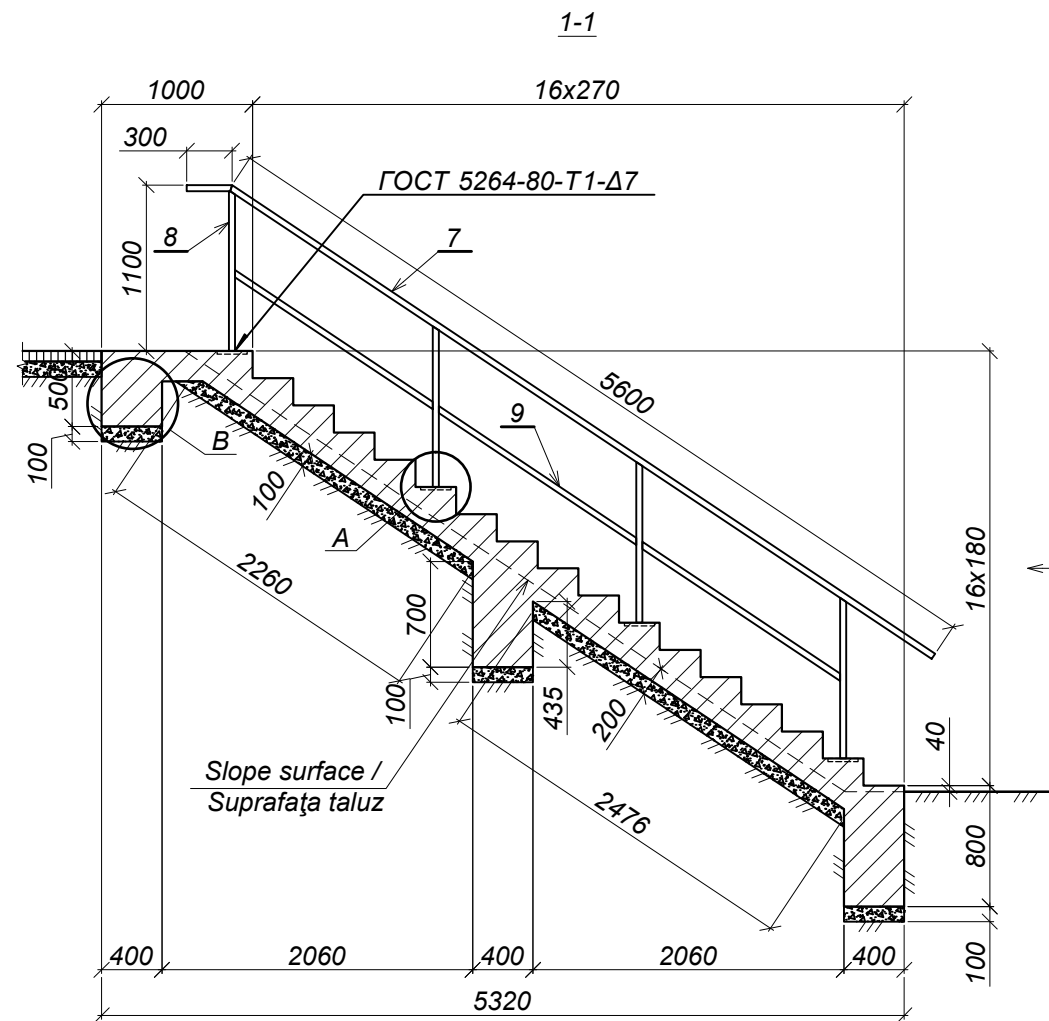


Specification / Specificația

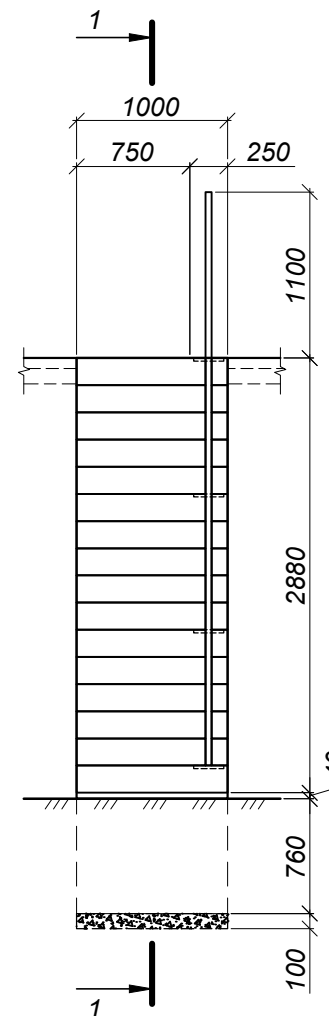
Format	Zona	Position / Pozitia	Document Number / Indicativ	Name / Denumirea	Quantity / Cantitatea	Note / Notă
				Elements / Piese		
FP		1		A-III-18 ГOCT 5781-82* 25Г2С ГOCT 5781-82*		
				Reinforcement rod l=13940	8	27,9 kg
				Materials / Materiale		
			ГOCT 26633-91*	Concrete / Beton cl. B30, F200, W6		1,75 m³

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme		Support		Project			
Roughton International  Universcons	Rehabilitation of R14 Road Balti-Saratenii  Drawing title <i>For all bridges / Pentru toate podurile</i> <i>Connection joint between approach slabs</i> <i>Nodul de îmbinare a plăcilor de racordare</i>	ISP	S.Bogza		Date	04.2012	
		Designed	A.Cecan		Scale		
		Checked	N.Tcaci		Drawing  NIPR-P-1		
		Control STAS	L.Pozdirca				

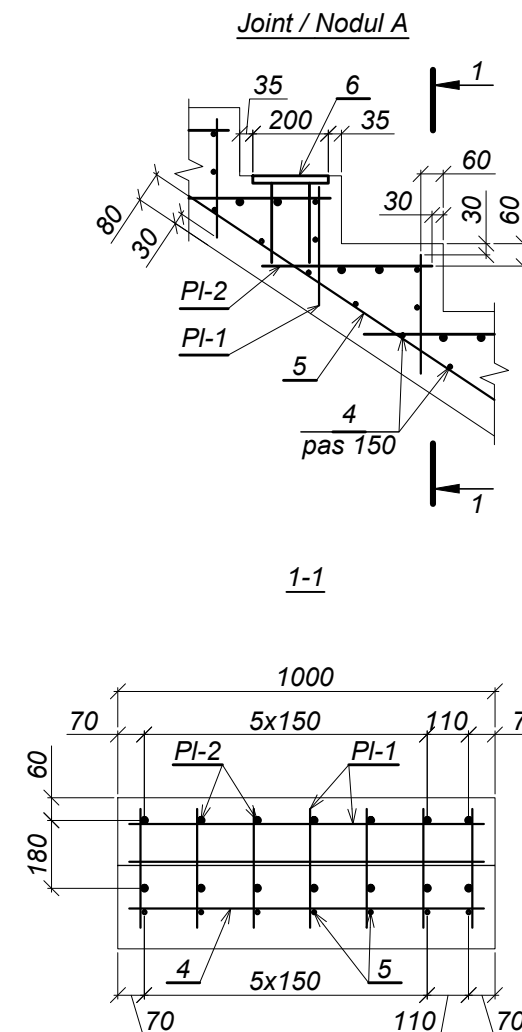
Formwork / Schema de cofraj  
Scale / Scara 1:50



View / Vederea A



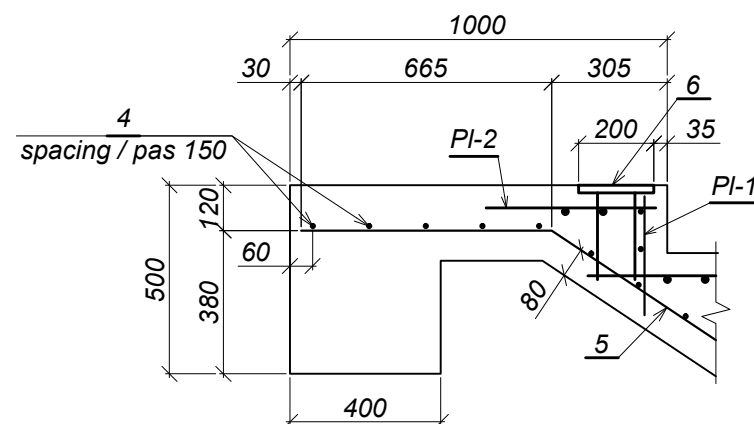
Reinforcement scheme / Schema de armare  
Scale / Scara 1:20



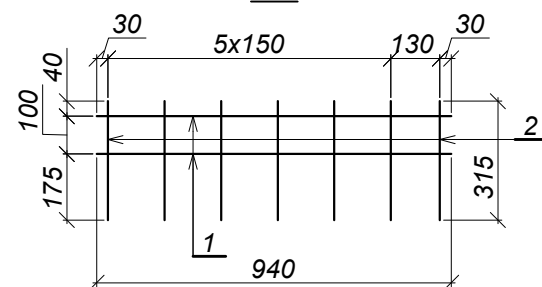
*Specification / Specificația*

Position / Pozitia	Name / Denumirea
	<i>Grid / Plasa PI-1</i>
	<i>A-III-12 GOCT 5781-82* 25Г2С GOCT 5781-82*</i>
1	<i>Reinforcement rod l=940</i>
2	<i>Reinforcement rod l=315</i>
	<i>Grid / Plasa PI-2</i>
	<i>A-III-12 GOCT 5781-82* 25Г2С GOCT 5781-82*</i>
1	<i>Reinforcement rod l=940</i>
3	<i>Reinforcement rod l=450</i>
	<i><u>Parts / Piese</u></i>
	<i>A-III-12 GOCT 5781-82* 25Г2С GOCT 5781-82*</i>
4	<i>Reinforcement rod l=940</i>
5	<i>Reinforcement rod l=6190</i>
6	<i>Embedded base plate 3 / Piesa PÎ-3</i>
	<i><u>Railing / Parapet</u></i>
7	<i>Tube / Țeavă Ø50, δ=2,5, GOCT8732-78, l=5900</i>
8	<i>Tube / Țeavă Ø50, δ=2,5, GOCT8732-78, l=1060</i>
9	<i>Tube / Țeavă Ø50, δ=2,5, GOCT8732-78, l=1600</i>
	<i><u>Materials / Materiale</u></i>
	<i>Concrete / Beton cl.B30, F200, W6</i>
	<i>Granit crushed stone / Piatră spartă de granit</i>

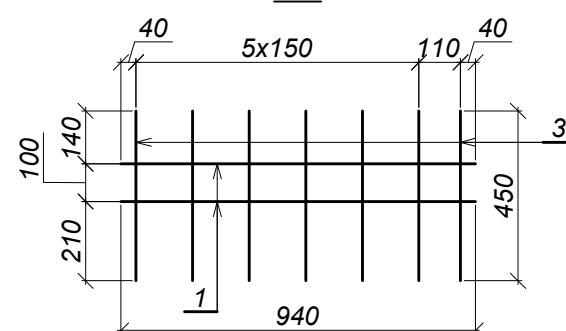
Joint / Nodul B



PI-1

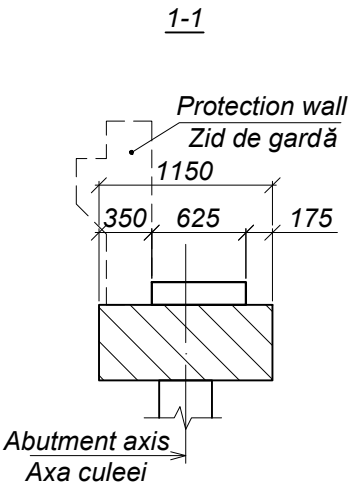
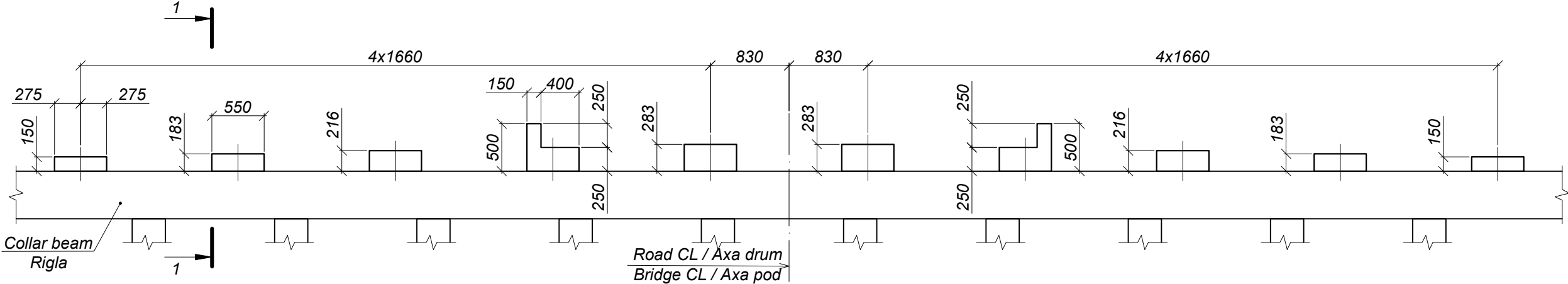


PI-2

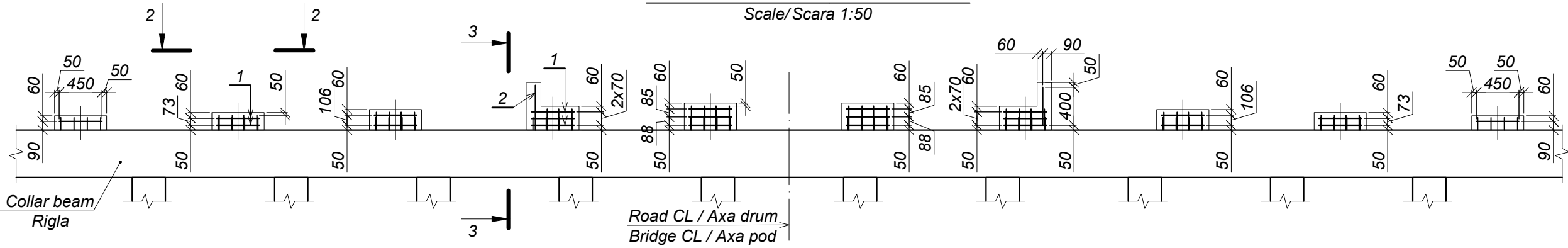


World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support Project				
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012
		Designed	A.Cecan		Scale	
Universcons	Drawing title <i>For all bridges / Pentru toate podurile Backstairs / Scară de serviciu</i>	Checked	N.Tcaci		Drawing SS-P-1	
		Control STAS	L.Pozdirca			

Formwork layout / Schema de cofraj  
(protection wall is not shown)/(zidul de gardă convențional nu este arătat)  
Scale/Scara 1:50



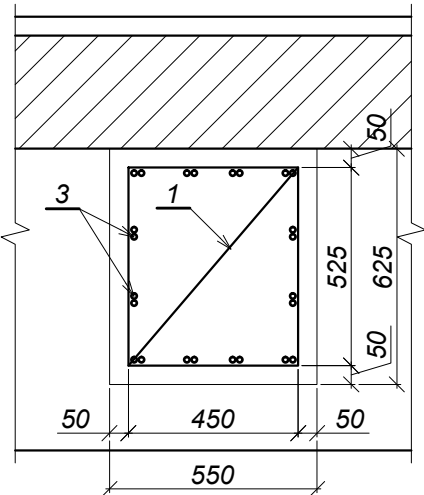
Reinforcement scheme/ Schema de armare  
Scale/Scara 1:50



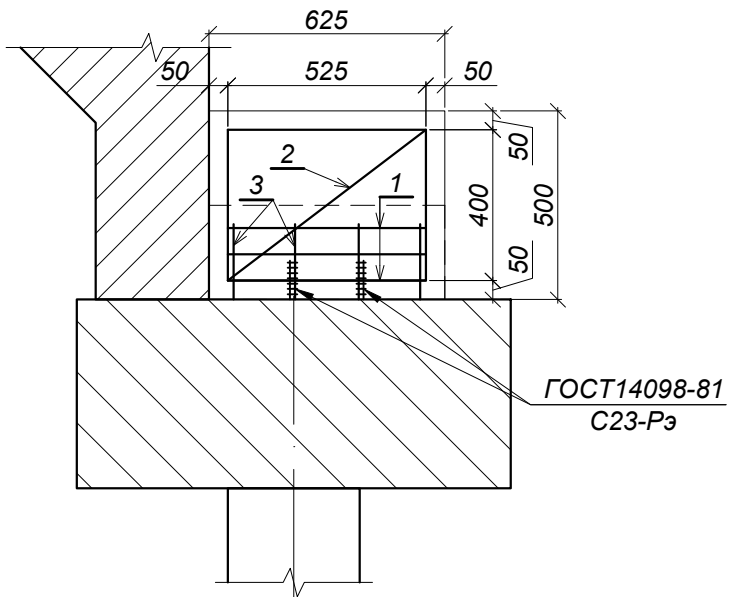
Specification / Specificația

Format	Zona	Position / Poziția	Document Number / Indicativ	Name / Denumirea
				Assembly elements Elemente de asamblare
FP		1	ГОСТ23279-85	Steel grid 4C 8 A-I-100 Plasă de oțel 4C 8 A-I-100 52,5x45
FP		2	ГОСТ23279-85	Steel grid 4C 8 A-I-100 Plasă de oțel 4C 8 A-I-100 52,5x40
FP		3		A-III-14 ГОСТ 5781-82* ,l <sub>med</sub> =185 25Г2С ГОСТ 5781-82*
				Materials/Materiale
			ГОСТ 26633-91*	Concrete/Beton cl.B25, F200, W6

2-2  
Scale/Scara 1:20

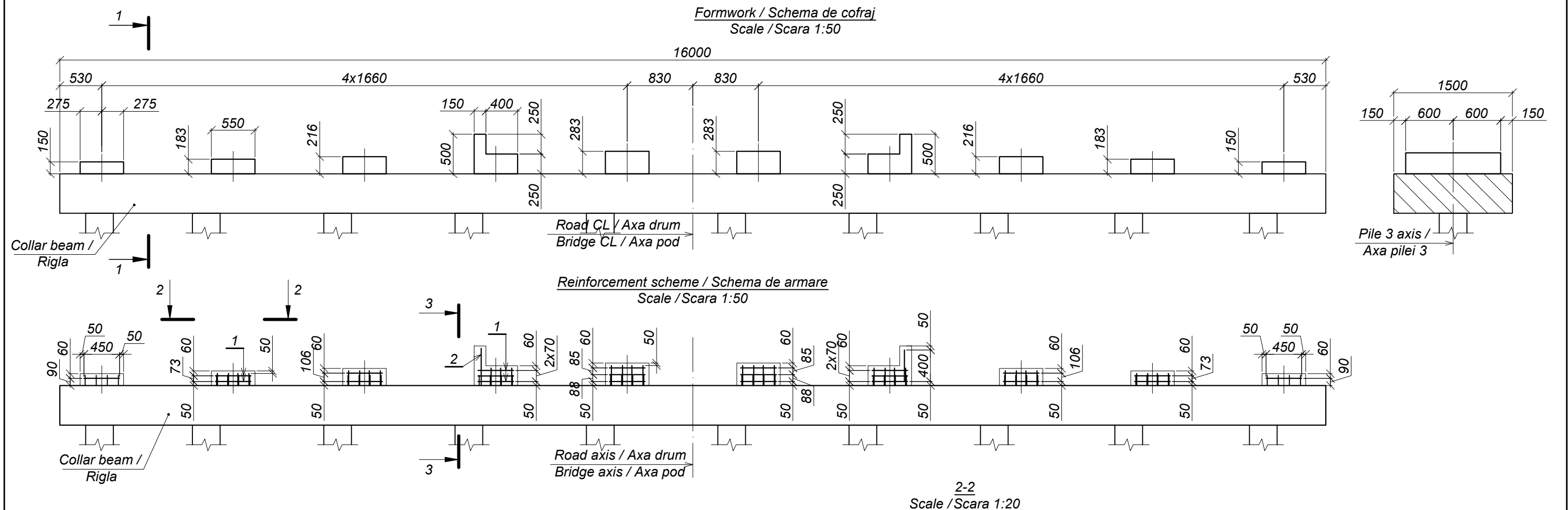


3-3  
Scale/Scara 1:20



Note/Notă:  
1. Protection layer/Stratul de protecție - 50 mm.

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
	Road	Sector	Programme	Support	Project	
Roughton International	Rehabilitation of R14 Road		ISP	S.Bogza	Date	04.2012
Universcons	Balti-Saratenii		Designed	A.Cecan	Scale	
	Drawing title For all bridges / Pentru toate podurile		Checked	N.Tcaci	Drawing CC-P-1	
	Seating bearing parts of abutment		Control STAS	L.Pozdirca		
Cuzineții culeei						



Specification / Specificația

Format	Zona Position / Poziția	Document Number / Indicativ	Name / Denumirea	Quantity / Cantitatea	Note / Notă
<b>Assembly elements</b> <i>Elemente de asamblare</i>					
FP	1	ГОСТ23279-85	Steel grid 4C <i>Plasă de oțel 4C</i> 8 A-I-100 110x45	22	0,50 m <sup>2</sup> 4,0 kg
FP	2	ГОСТ23279-85	Steel grid 4C <i>Plasă de oțel 4C</i> 8 A-I-100 110x40	2	0,44 m <sup>2</sup> 3,5 kg
FP	3		A-III-14 ГОСТ 5781-82* <i>25Г2С ГОСТ 5781-82*</i> ,l <sub>med</sub> =185	160	0,2 kg
<b>Materials / Materiale</b>					
		ГОСТ 26633-91*	Concrete cl.B25, F200, W6 / <i>Beton cl.B25, F200, W6</i>		1,52 m <sup>3</sup>

Quantity of steel per one element / Consumul de metal pentru un element, kg

Element type / Marca elementul	Reinforcement parts / Piese de armare					Total weight / Greutate totală
	Reinforcement type / Clasa armaturii					
	A-I		A-III			
	ГОСТ 5781-82*					
	Ø8	Total	Ø14	Total		
Bearing pads of pile/ Cuzineții pilei 3	95,0	95,0	32,0	32,0	127,0	127,0

Note / Notă:  
1. Protection layer / Strat de protecție - 50 mm

World Bank	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme		Support Project					
Roughton International	Rehabilitation of R14 Road Balti-Saratenii	ISP	S.Bogza		Date	04.2012	
		Designed	A.Cecan		Scale		
Universcons	Drawing title <i>For all bridges / Pentru toate podurile</i> <i>Bearing pads of pile / Cuzineții pilei</i>	Checked	N.Tcaci		Drawing CP-P-1		
		Control STAS	L.Pozdirca				



List of drawings / Lista desenelor			
Index Indicativ	Name Denumirea	Drawings Planse	Index Marcarea
2009/032 D	Execution drawings. Landslips. Desene de execuție. Alunecări de teren		

**LIST OF BASIC SETS OF DRAWINGS FOR LANDSLIP PREVENTIVE WORKS**  
**LISTA DESENELOR SETULUI -AT**

Drawing Planșa	Name Denumirea	Drawings Planse	Index Marcarea
1	General data Date generale	1	DG-AT
	<b>1. Sector PC 276+50 - PC 277+00</b>		
2	Cross section PC 276+60 Profil transversal PC 276+60	1	PT-AT
	<b>2. Sector PC 278+40 - PC 284+60</b>		
3	Road plan PC278+00 -PC284+60 Sc. 1:500 Plan traseu PC278+00 -PC284+60 Sc. 1:500	1	P-AT
4	Cross sections PC 279+40 -PC 282+00 Profile transversale PC 279+40 -PC 282+00	1-7	PT-AT
5	Longitudinal profile of the structure PC 279+32-PC 282+01 Profil longitudinal al construcției PC 279+32-PC 282+01	1	PL-AT
6	Bored piles Ø1.20m; L=10.0m; L=8.0m. Cage 1-3 Piloți forajți Ø1.20m; L=10.0m; L=8.0m. Carcasa 1-3	1	PF-AT
7	Specification of bored piles Ø1.20m, L=10.0m, L=8.0m Specificația piloților forajți Ø1.20m, L=10.0m, L=8.0m	1	SPF-AT
8	In -Situ Connecting Slab RM -1 / Radier monolit RM -1	1	RM-AT
9	In -Situ Connecting Slab RM -1 / Radier monolit RM -1	1	RM-AT
10	Plan of the roundabout, entrance to construction site PC 278+00 - PC284+60 Plan drum ocolire, acces la șantier de construcție PC 278+00 - PC284+60	1	PDO-AT
11	Cross sections on site PC 279+00 - PC 282+00 Profile transversale pe șantier PC 279+00 - PC 282+00	1-3	PTS-AT
	<b>3. Sector PC 295+00 - PC 299+60</b>	1	
12	Road plan 295+00-PC 296+80 Sc. 1:500 Plan traseu PC 295+00-PC 296+80 Sc. 1:500	1	P-AT
13	Road plan PCPC 296+80-PC 298+60 Sc. 1:500 Plan traseu PC PC 296+80-PC 298+60 Sc. 1:500	1	P-AT
14	Cross sections PC 295+55- PC 299+00 Profile transversale PC 295+55- PC 299+00	1-4	PT-AT
15	Longitudinal profile of the structure PC 295+33-PC 295+81 Profil longitudinal al construcției PC 295+33-PC 295+81	1	PL-AT

16	Bored piles Ø1.20m; L=12.0m; L=11.0m; Cage 1-3 Piloți forajți Ø1.20m; L=12.0m; L=11.0m; Carcasa 1-3	1	PF-AT
17	Bored piles Ø1.20m; L=12.0m; L=11.0m; Specification Piloți forajți Ø1.20m; L=12.0m; L=11.0m; Specificația	1	PF-AT
18	In -Situ Connecting Slab RM -1; (RM -2) PC 295+33-PC 295+81 Radier monolit RM -1; (RM -2) PC 295+33-PC 295+81	1	RM-AT
19	Plan of entrance and construction site PC 294+76 - PC 295+89 Plan acces și șantier de construcție PC 294+76 - PC 295+89	1	PA-AT-1
	<b>4. Sectorul PC 328+00 - PC 333+24</b>		
20	Road plan PC 329+55- PC 333+67 Plan traseu PC 329+55- PC 333+67	1	P-AT
21	Cross sections PC 330+00-PC 333+00 Profile transversale PC 330+00-PC 333+00	1-4	PT-AT
22	Longitudinal profile of the drain PC 329+90-PC 330+77 Profil longitudinal al drenajului PC 329+90-PC 330+77	1	PLD-DA
23	Construction of drains and wells Construcția drenajelor și fântânilor	1	CDFT-AT
24	Culvert outlet , (right) PC 330+78 Gură de evacuare , (dreapta) PC 330+78	1	GE-AT

**Normative documents used in draft elaboration**  
**Documente normative utilizate la elaborarea proiectului**

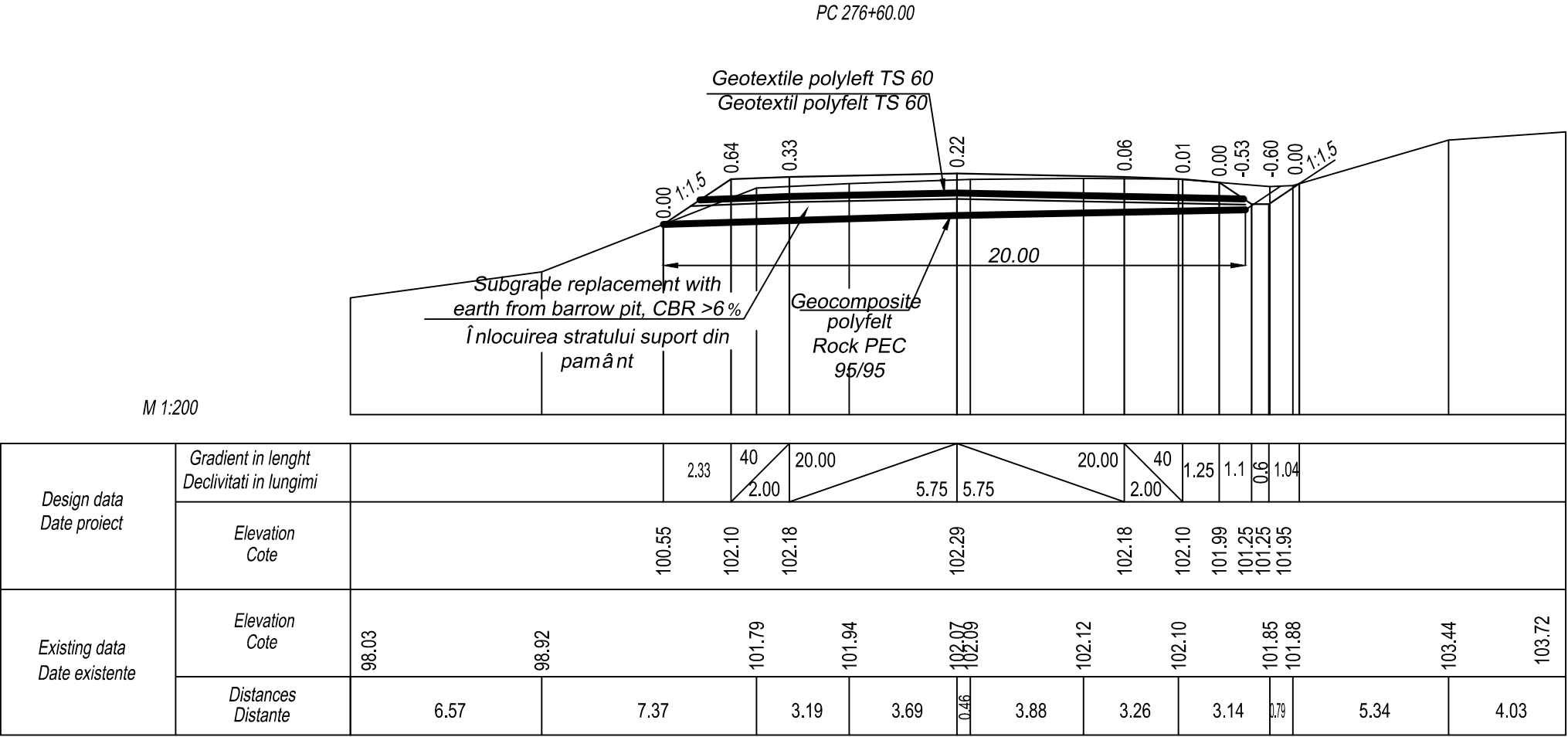
Indicativ	Denumirea	Notă
SNIP 2.07.01-89	"Urbanism, sistematizarea și amenajarea teritoriilor."	
SNIP 2.05.02-85	"Drumuri auto. Norme de proiectare."	
SNIP 2.05.02-85	"Drumuri auto. Reguli pentru execuția lucrărilor."	
Типовой проект 503-0-48-87	Земляное полотно автомобильных дорог общего пользования.	
Типовой проект 3.503-71/81	Дорожные одежды автомобильных дорог общего пользования.	
Proiect tip 503-07-02	"Podețe tubulare cu deschiderea 1.0; 1.2; 1.4; 1.6"	
Типовой проект 503-09-7.84	Водоотводные сооружения на автомобильных дорогах общей сети союза ССР.	
Типовой проект 501-0-46	Укрепление русел и откосов насыпей у водопропускных труб.	
Гост 6665-91	Камни бетонные и железобетонные бортовые.	

The design is elaborated in accordance with the standards and requirements of the design rules in law  
 Proiectul este elaborat în conformitate cu cerințele normelor și regulilor în construcții în vigoare

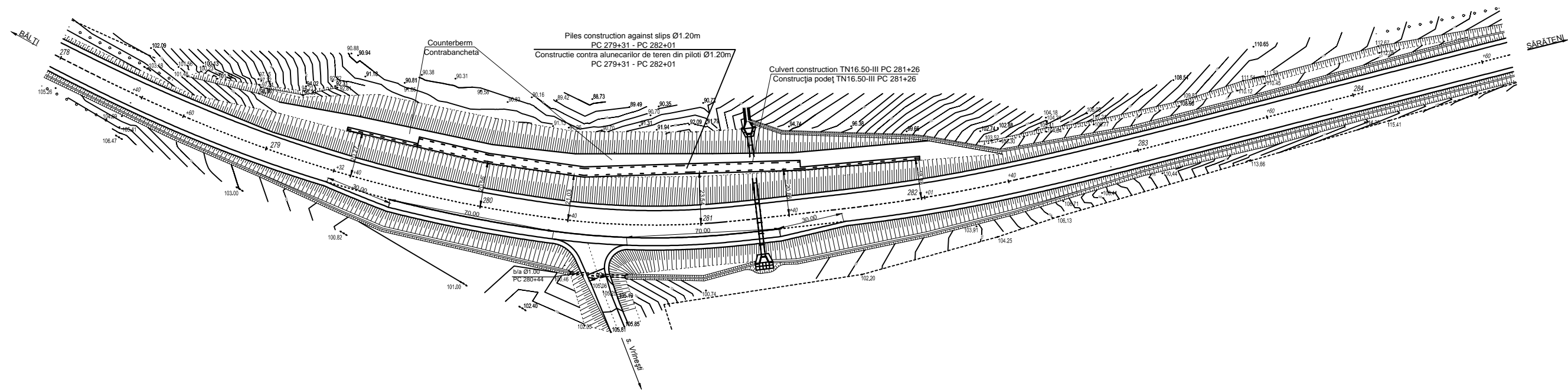
Chief engineer / Ingener Șef Proiect
 S. Bogza

EBRD		Republic of Moldova		Ministry of Transport and Road Industry State Road Administration			
		Road	Sector	Programme	Support	Project	
Roughton International  Universcons		Rehabilitation of R14 Road Bălți-Sărăteni		ISP	S.Bogza	Date	03.2012
				Designed	A.Gonciaruc	Scale	
				Checked	N.Tcaci	Drawing DG-AT-1	
				Control STAS	L.Pozdirca		





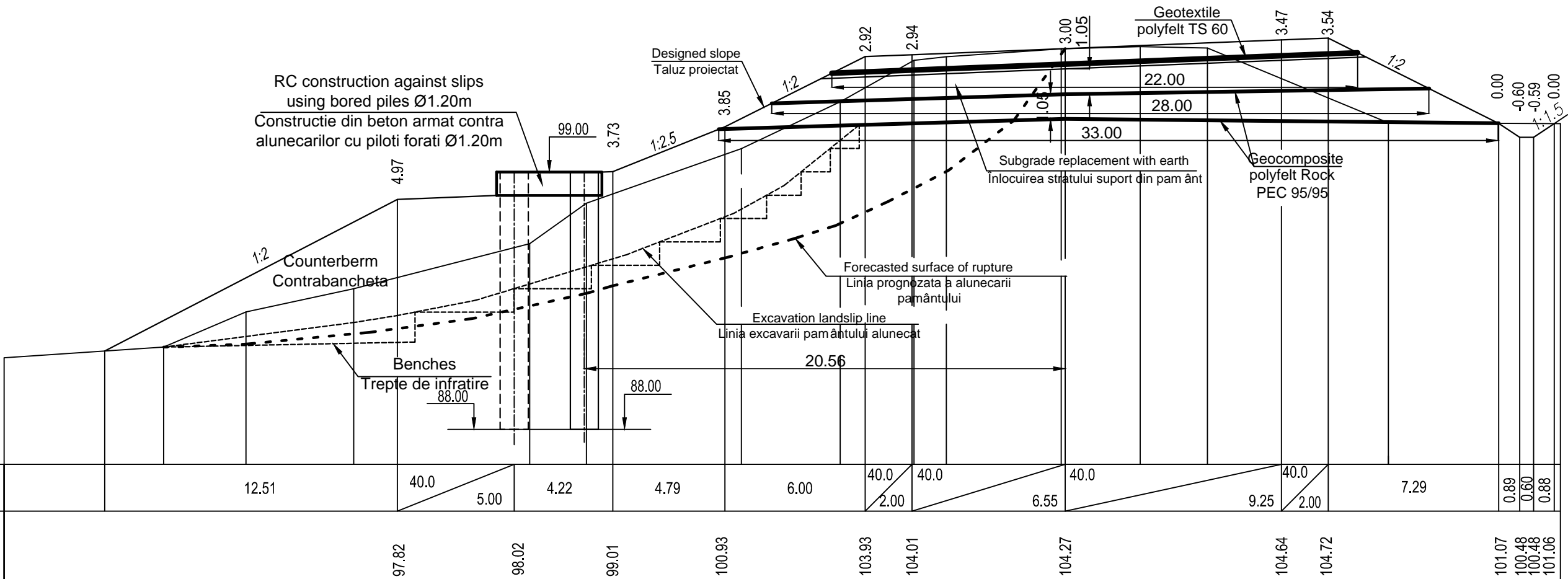
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Road Sector Programme Support Project						
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
		Designed	A.Gonciaruc		Scale	1:200
	Drawing title  Cross section PC 276+60 Profil transversal PC 276+60	Checked	N.Tcaci		Drawing PT-AT-1	
		Control STAS	L.Pozdirca			



EBRD		Republic of Moldova		Ministry of Transport and Road Industry			
		Road	Sector	Programme	Support	State Road Administration	
Roughton International		Rehabilitation of R14 Road		ISP	S.Bogza	Date	03.2012
Universcons		Bălți-Sărăteni		Designed	A.Gonciaruc	Scale	1:1000
		Drawing title		Checked	N.Tcaci	Drawing	
		Road plan PC 278+00 - PC284+60		Control	L.Pozdirca	PT-AT-1	
		Plan drum PC 278+00 - PC284+60		Control STAS			



M 1:200

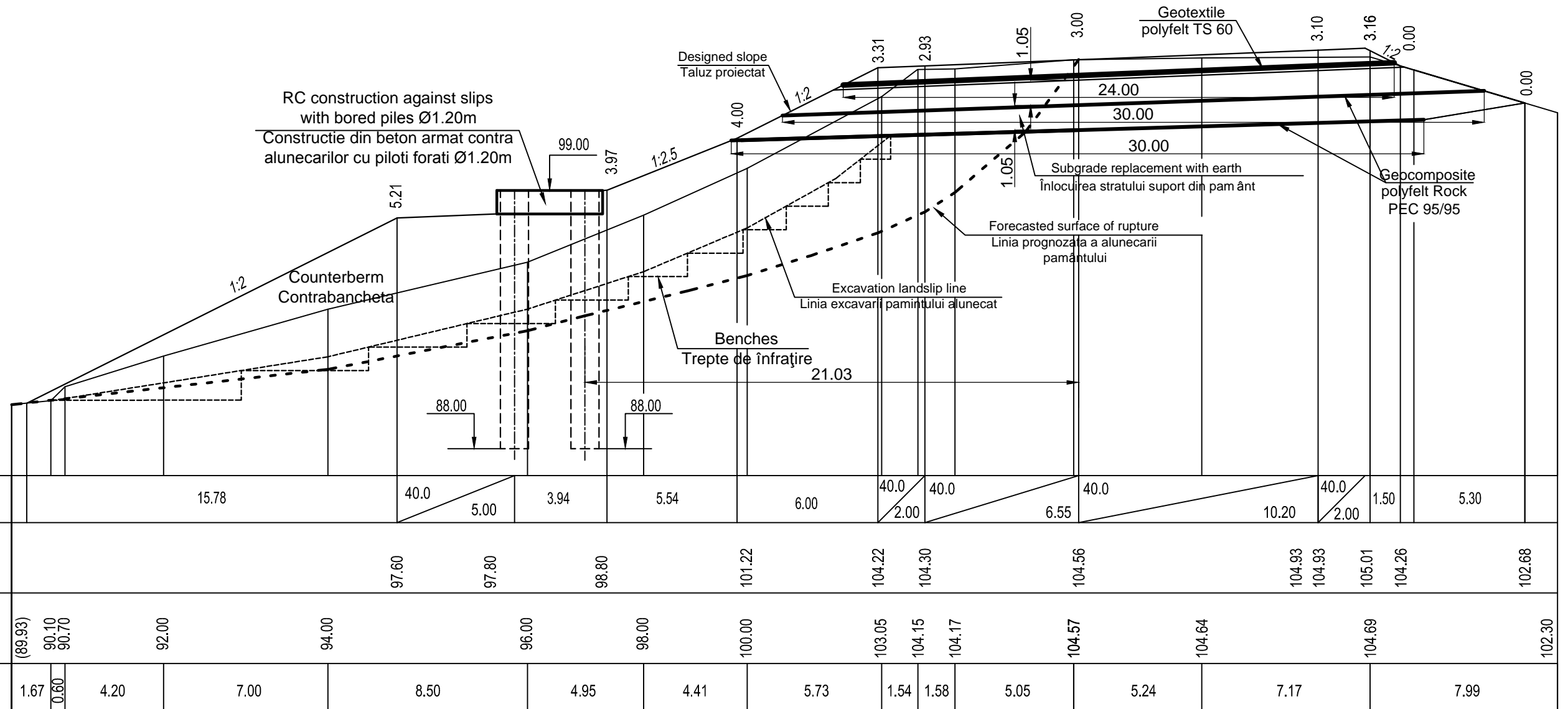


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	Elevation Cote	97.82 98.02 99.01 100.93 103.93 104.01 104.27 104.64 104.72 101.07 100.48 100.48 101.06															
Existing data Date existente	Elevation Cote	(91.06)	91.50	93.00	94.00	95.92	97.65	100.00	102.00	103.77	103.93	104.27	104.36	104.29	101.10	101.13	
	Distances Distanțe	6.82	3.52	4.61	7.52	2.43	6.62	4.23	3.16	1.38	4.92	3.37	2.88	7.74	7.35		

PC 280+00.00

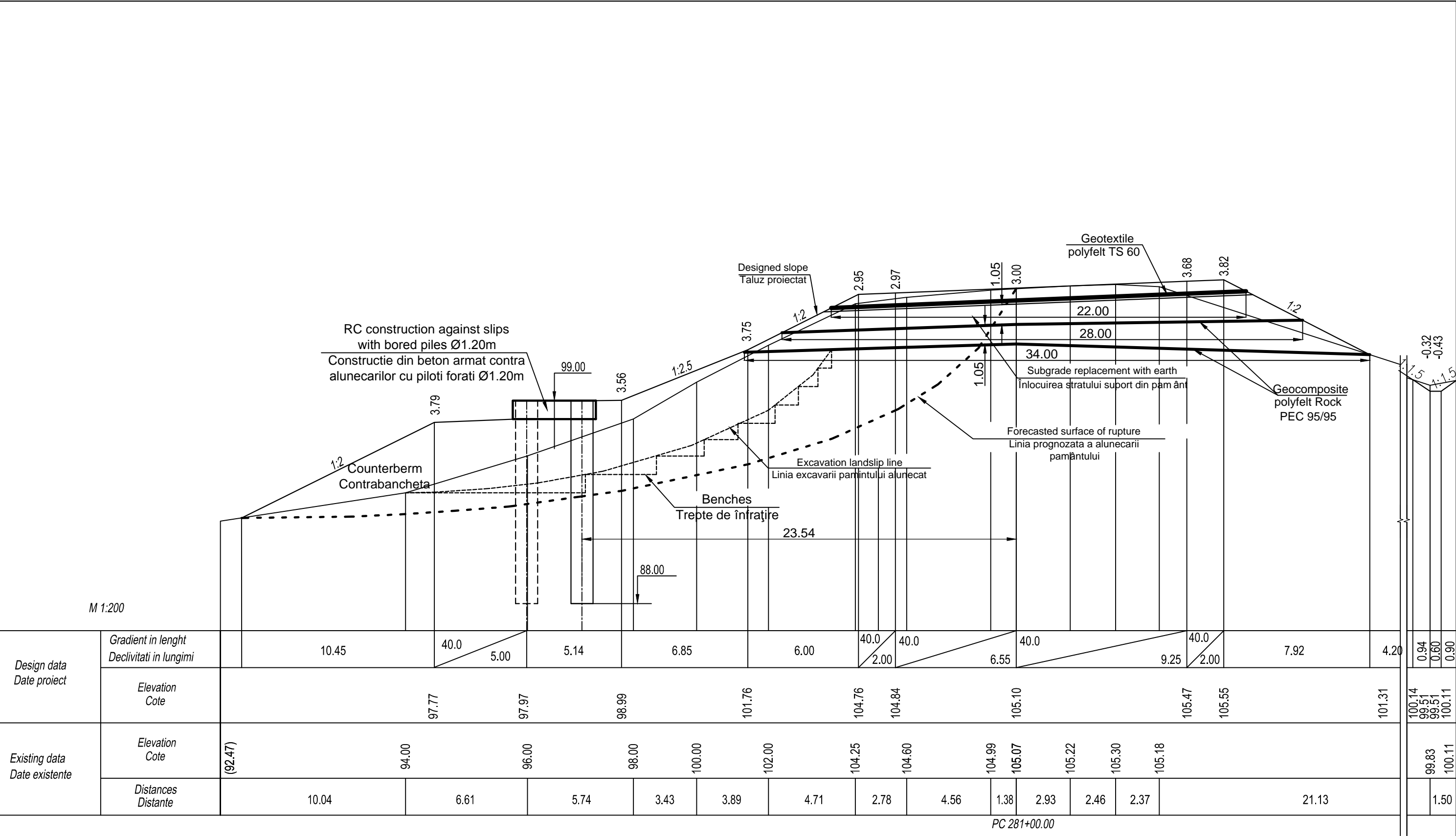
EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni		ISP	S.Bogza		Date	03.2012
			Designed	A.Gonciaruc		Scale	1:200
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			Control STAS	L.Pozdirca			

M 1:200



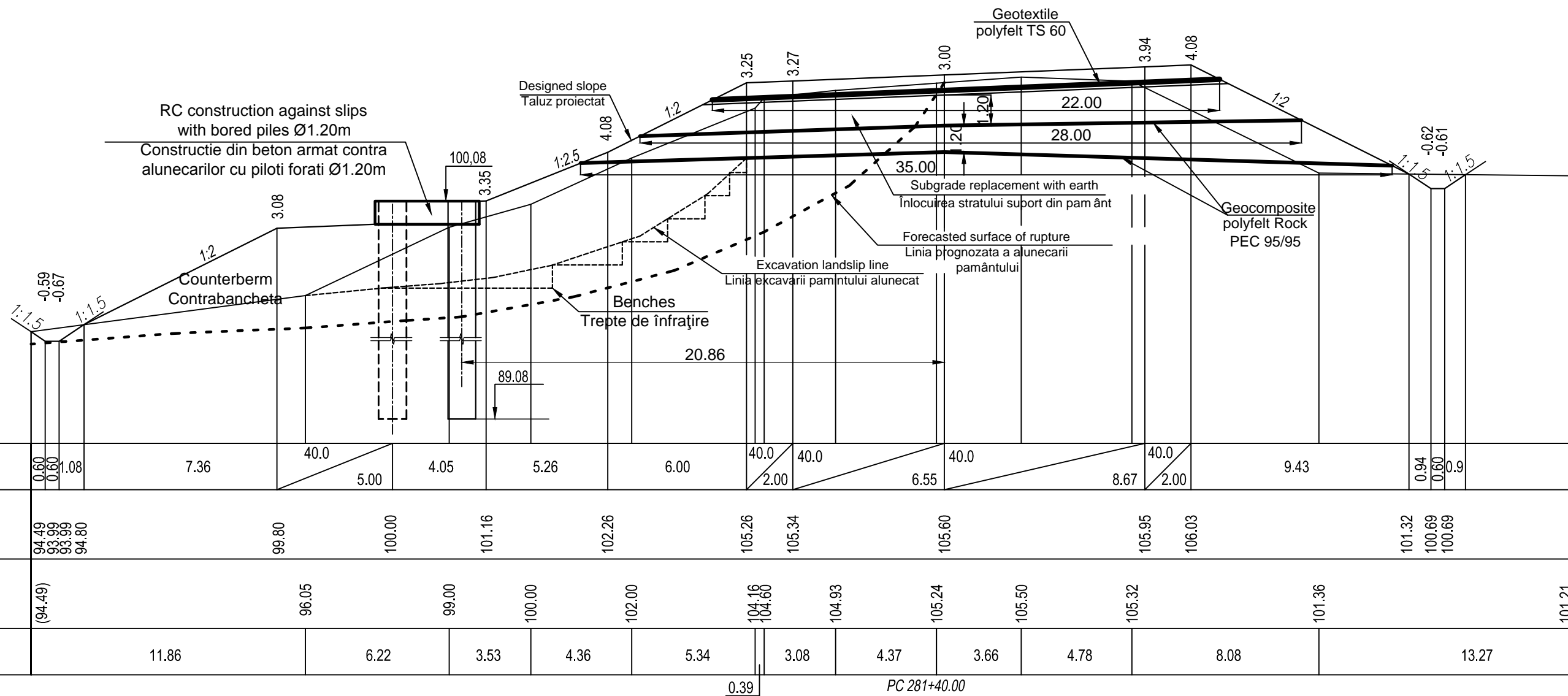
PC 280+40.00

EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni		ISP	S.Bogza		Date	03.2012
			Designed	A.Gonciaruc		Scale	1:200
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			Control STAS	L.Pozdirca			



EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
		Designed	A.Gonciaruc		Scale	1:200
	Drawing title Cross Section of Earthwork Profile Transversale Terasamente PC 281+00	Checked	N.Tcaci		Drawing PT-AT-4	
		Control STAS	L.Pozdirca			

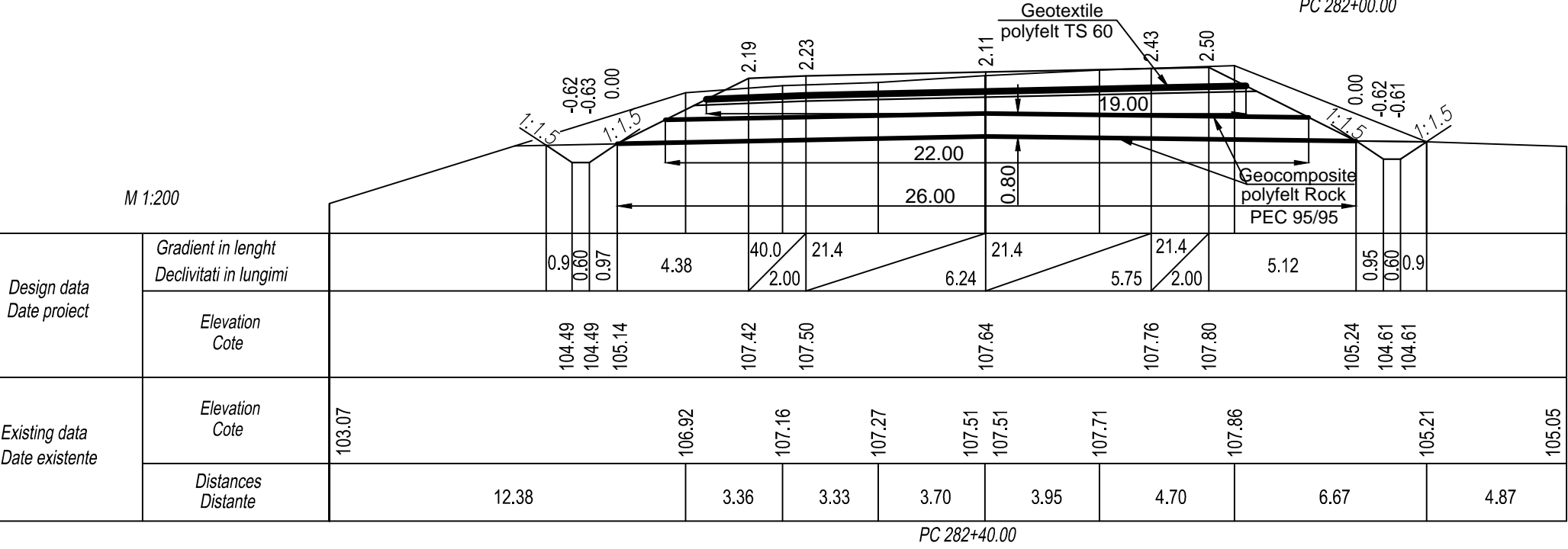
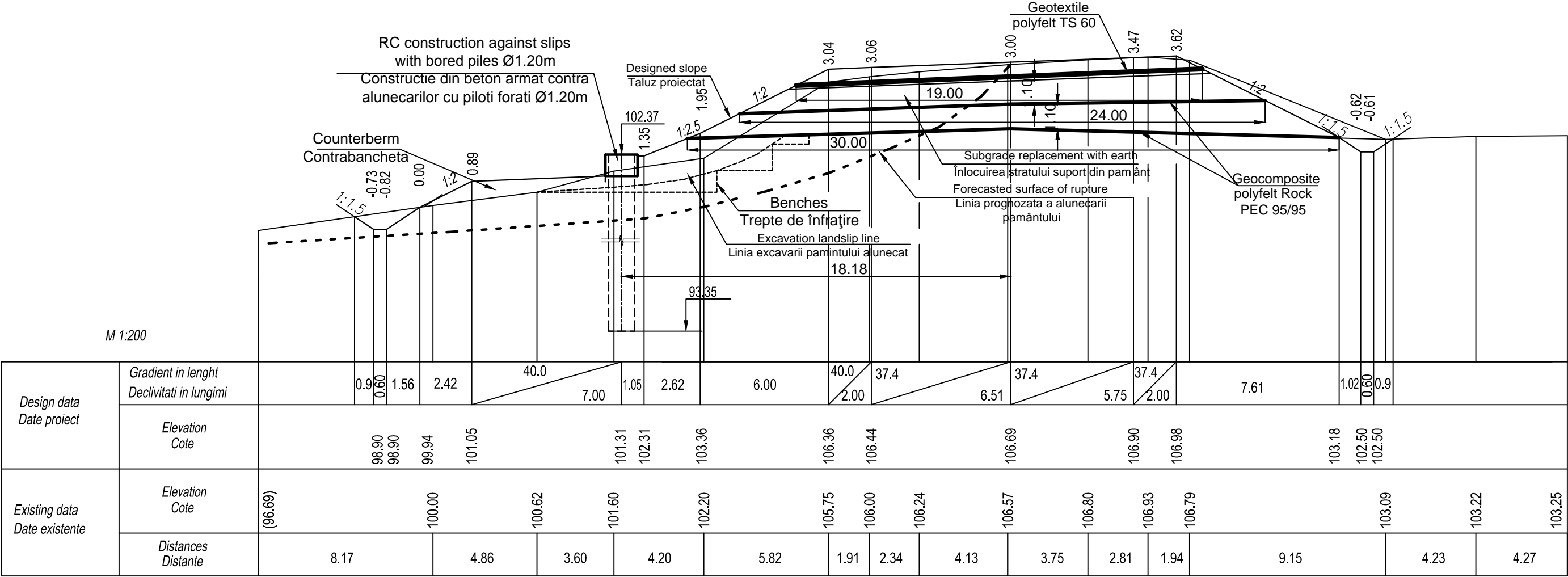
M 1:200



Design data Date proiect	Gradient in lenght Declivitati in lungimi	0.60	0.60	1.08	7.36	40.0	5.00	4.05	5.26	6.00	40.0	40.0	6.55	40.0	8.67	2.00	9.43	0.94	0.60	0.9
	Elevation Cote	94.49	93.99	93.99	94.80	99.80	100.00	101.16	102.26	105.26	105.34	105.60	105.95	106.03	101.32	100.69	100.69			
Existing data Date existente	Elevation Cote	(94.49)				96.05		99.00	100.00	102.00	104.16	104.60	104.93	105.24	105.50	105.32		101.36		101.21
	Distances Distanțe				11.86		6.22	3.53	4.36	5.34	3.08	4.37	3.66	4.78		8.08		13.27		

0.39 PC 281+40.00

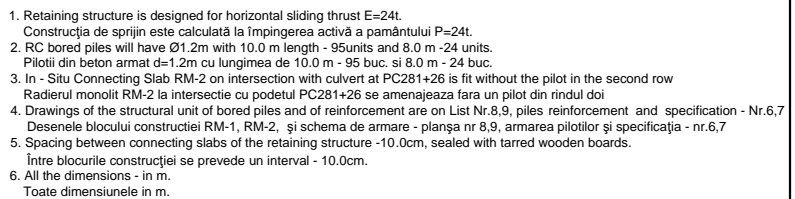
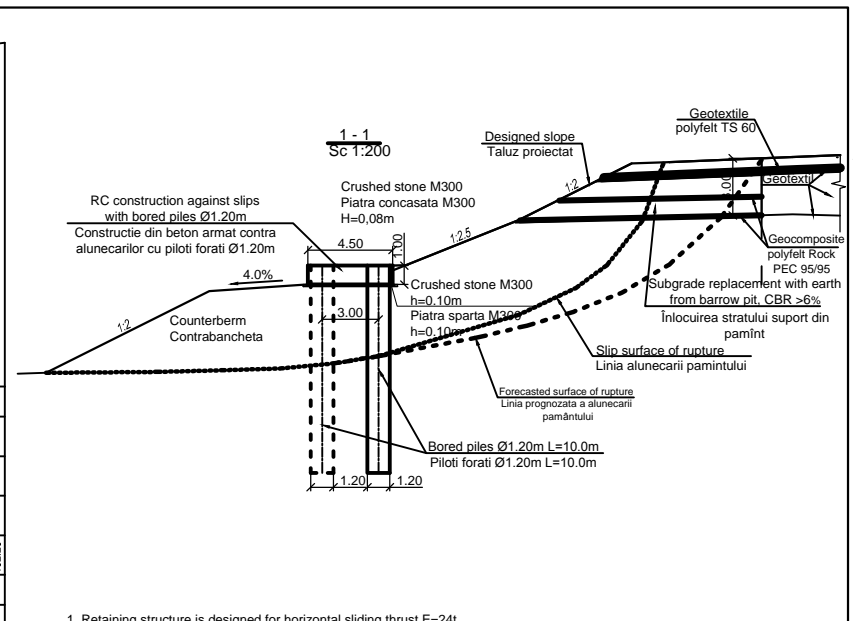
EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
Universcons		Designed	A.Gonciaruc		Scale	1:200
	Drawing title Cross Section of Earthwork Profile Transversale Terasamente PC 281+40	Checked	N.Tcaci		Drawing PT-AT-5	
		Control STAS	L.Pozdirca			



EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
Universcons		Designed	A.Gonciaruc		Scale	1:200	
		Drawing title Cross Section of Earthwork Profile Transversale Terasamente PC 282+00-PC 282+40	Checked	N.Tcaci		Drawing PT-AT-6	
			Control STAS	L.Pozdirca			



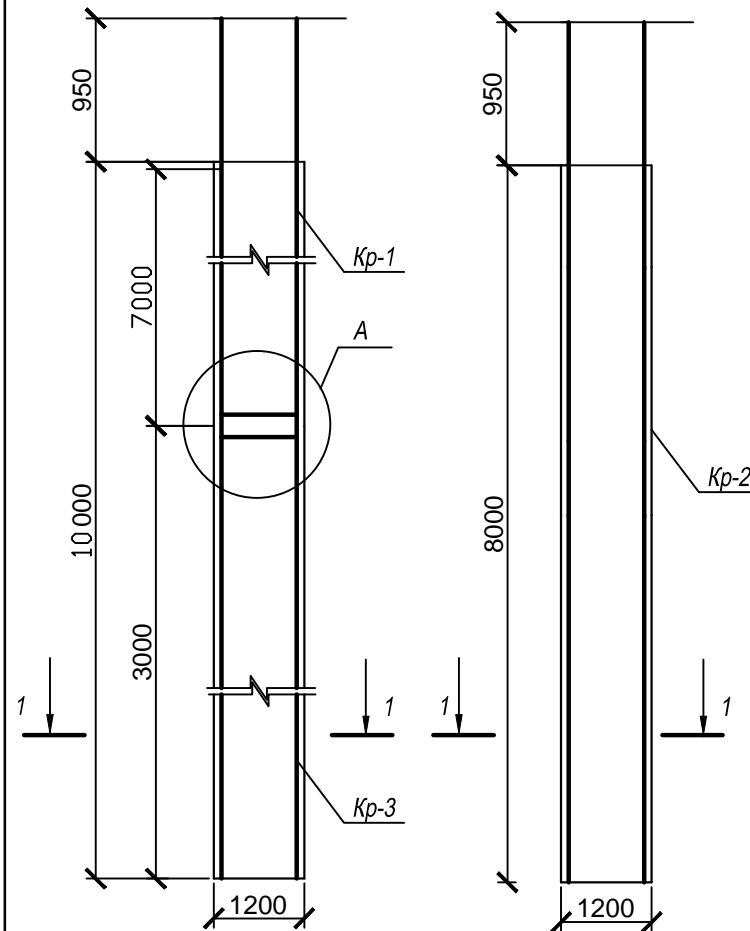




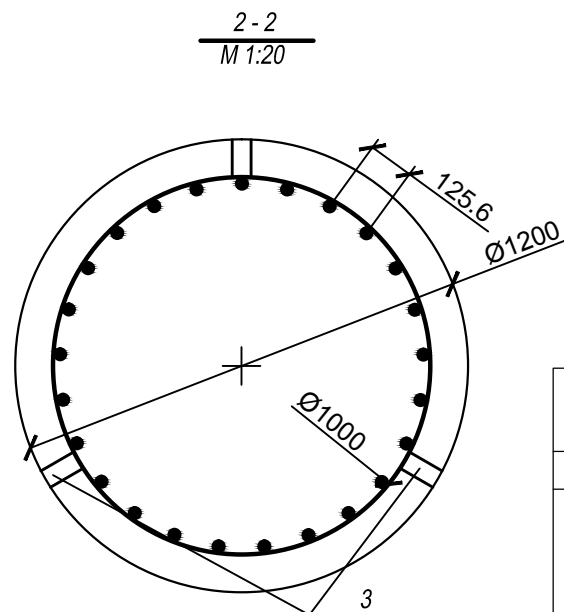
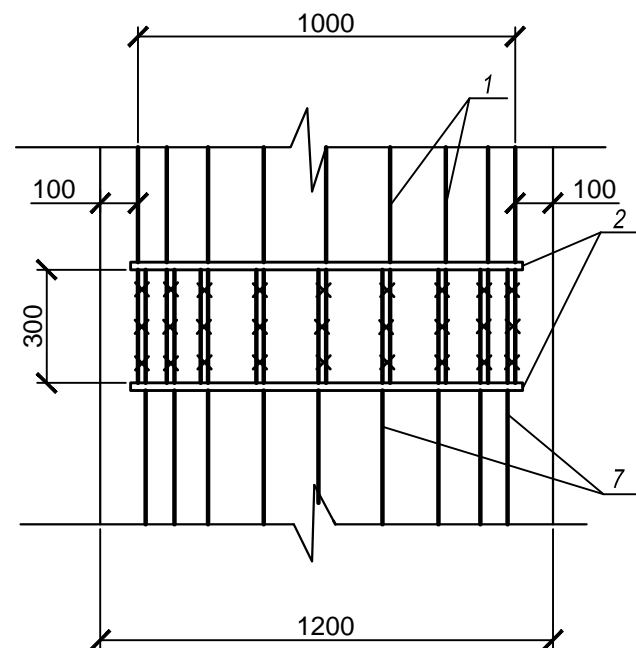
EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
	Road Sector	Programme	Support	Project		
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza	Date	03.2012	
Univercons	Drawing title Longitudinal profile of construction Profile longitudinal al construcției PC279+32 - PC282+01	Designed Checked Control STAS	A.Goncariuc L.Tcaci L.Pozdircia	Scale	1:500	
				Drawing	PL-AT-1	

Bored piles L=10.0m, (95 units)  
Piloți forati L=10.0m, (95buc.)

Bored piles L=8.0m, (24 units)  
Piloți forati L=8.0m, (24buc.)

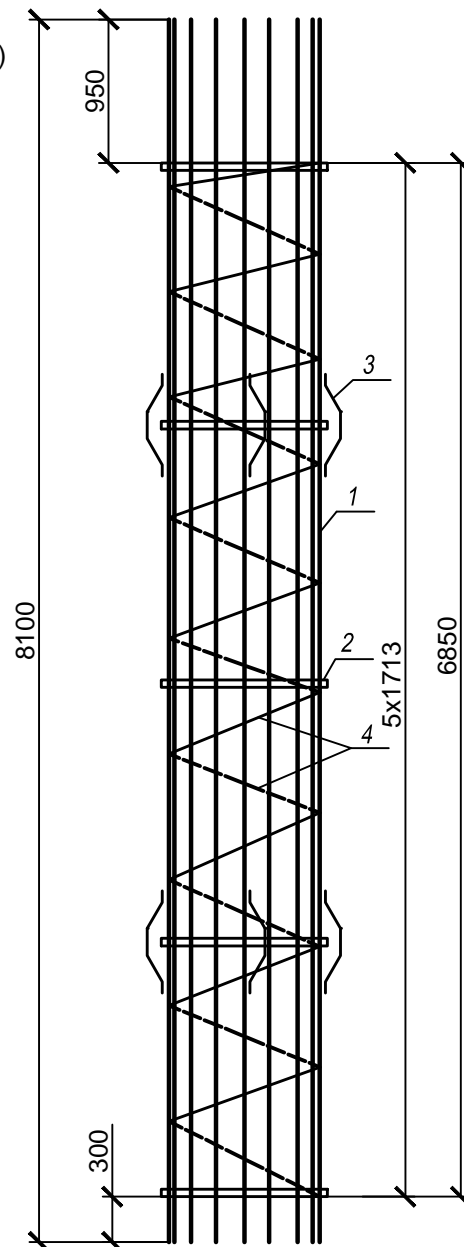


Joint / Nod A  
M 1:20

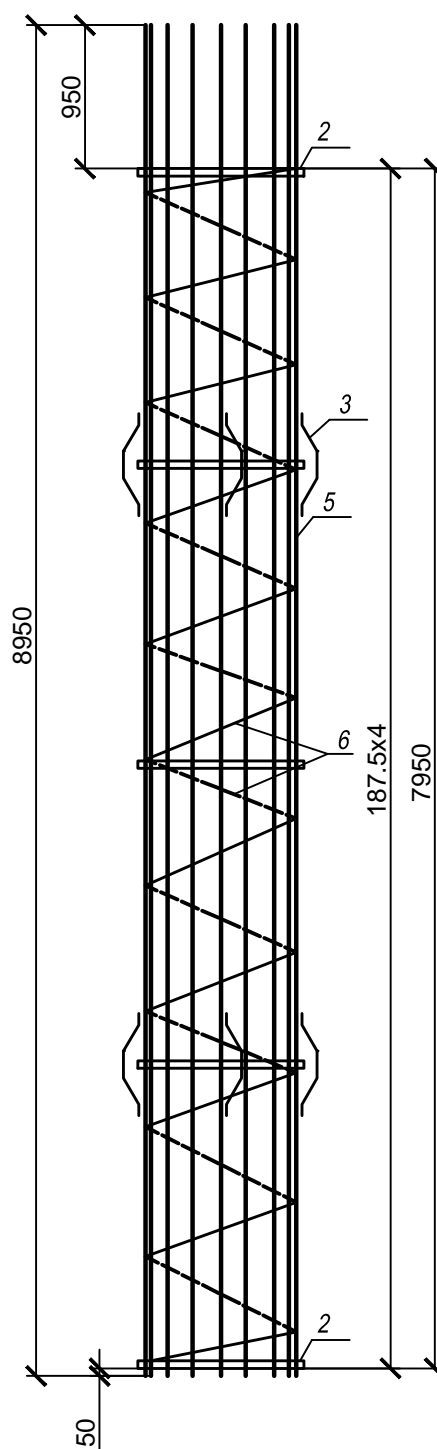


2-2  
M 1:20

Cage - 1  
Carcasa - 1  
Sc 1:50



Cage - 2  
Carcasa - 2  
Sc 1:50



Cage - 3  
Carcasa - 3  
Sc 1:50

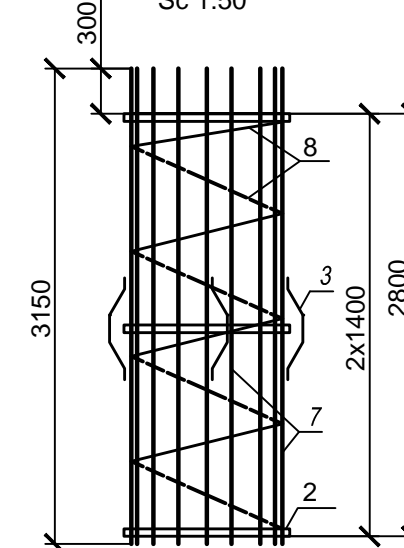


Table of elements  
Tabela pieselor

Poz	Draft / Schiță
1	8100
2	120
3	75 180 75 100 200 200
4	35x200 1000
5	8950
6	40x200 1000
7	3150
8	14 x200 1000

1.Cages will be jointed by welding according to GOST -14098-91.C23-P3.  
Îmbinarea carcaselor se va efectua prin sudare in conformitate cu cerintele GOST 14098-91-C23-P3;

2.Bored piles L=10.0m - 95 units.; Bored piles L=8.0m - 24units.;  
Piloți forati L=10.0m, 95 buc.; piloți forati L=8.0m 24 buc.;

3.All dimensions -in mm.  
Toate dimensiunile in mm.

EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration			
Road Sector Programme		Support Project			
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza	Date	03.2012
Universcons	Drawing title Bored piles. Cage. Piloți forati Ø1.20m L=10.0m, L=8.0m. Carcasa 1-3	Designed	A.Gonciaruc	Scale	
		Checked	N.Tcaci	Drawing PF-AT-1	
		Control STAS	L.Pozdirca		

Quantities for Bored Piles:L-10.0m, L-8.0m  
Specificatia pilotilor forati:L-10.0m, L-8.0m

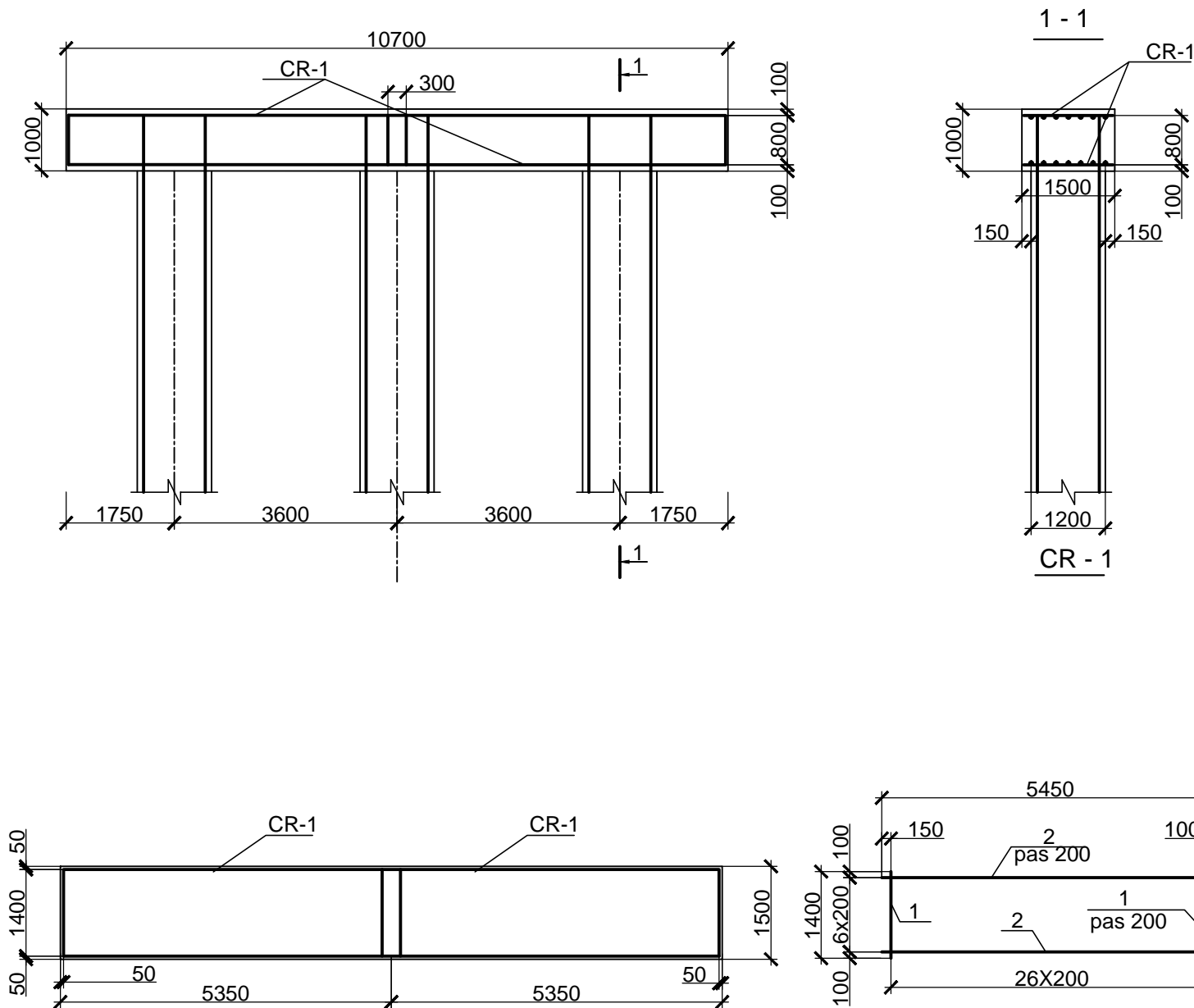
Format	Zone	Position	Reference Indicativ	Item Denumirea	Quant. Cant.	Weight,kg Masa, kg	Note Nota
			Bored piles L=10.0m, Piloti forati L=10.0m,		95	1547.4	
				Cage - 1 Carcasa - 1	1	1102.5	
			STAS 5781-82*	Reinforcement Piese de armare			
	1			Ø 28 A III I-8100	25	39.12	
	4			Ø 8 AI I-109900	1	43,41	
			STAS 103-76*	Assembly elements Piese de asamblare			
	2			-50x10 I-3260	5	12,78	
	3			-50x10 I-730	6	2,86	
				Cage - 3 Carcasa - 3	1	444.8	
			STAS 5781-82*	Reinforcement Piese de armare			
	7			Ø 28 A III I-3150	25	15.22	
	8			Ø 8 AI I-43960		17,37	
			STAS 103-76*	Assembly elements Piese de asamblare			
	2			-50x10 I-3260	3	12,78	
	3			-50x10 I-730	3	2,86	
			STAS 26633-91	Materials: Concrete B25 F100 Material: Beton B25 F100	1	11.3 m3	
			Bored piles L=8.0m Piloti forati L=8.0m		24	1211.5	
				Cage - 2 Carcasa - 2	1	1211.4	
			STAS 5781-82*	Reinforcement Piese de armare			
	5			Ø 25 A III I-8950	25	43.23	
	6			Ø 8 AI I-125600	1	49.61	
			STAS 103-76*	Assembly elements Piese de asamblare			
	2			-50x10 I-3260	5	12,78	
	3			-50x10 I-730	6	2,86	
			STAS 26633-91	Materials: Concrete B25 F100 Material: Beton B25 F100	1	9.04 m3	

Use of Steel per element,kg  
Consumul de metal pentru un element, kg

Element Type Marca elementului	Reinforcement Piese de armare				Assembly elements Piese de asamblare			Total Greutatea totala	
	Reinforcement Type Armatura de clasa			Total	Steel Type Marca metalului		Total		
	AI		AIII						
	STAS 5781-82*				STAS 103-76*				
	Ø8	Result Rezultat	Ø28		Result Rezultat	-50x10			Result Rezultat
Bored piles L=10.0m; Piloti forati L=10.0m;	60.8	60.8	1358.5	1358.5	1419.3	128.1	128.1	128.1	1547.4
Bored piles L=8.0m; Piloti forati L=8.0m;	49.6	49.6	1080.8	1080.8	1130.4	81.1	81.1	81.1	1211.5

EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
		Designed	A.Gonciaruc		Scale	
	Drawing title Quantities for Bored Piles Specificația piloților forai Ø1.20m L=10.0m, L=8.0m	Checked	N.Tcaci		Drawing SPF-AT-1	
		Control STAS	L.Pozdirca			

In-Situ Connecting Slab RM - 1  
Radier monolit RM - 1



Quantities for in-situ connecting slab  
Specificatia pentru radier monolit RM - 1

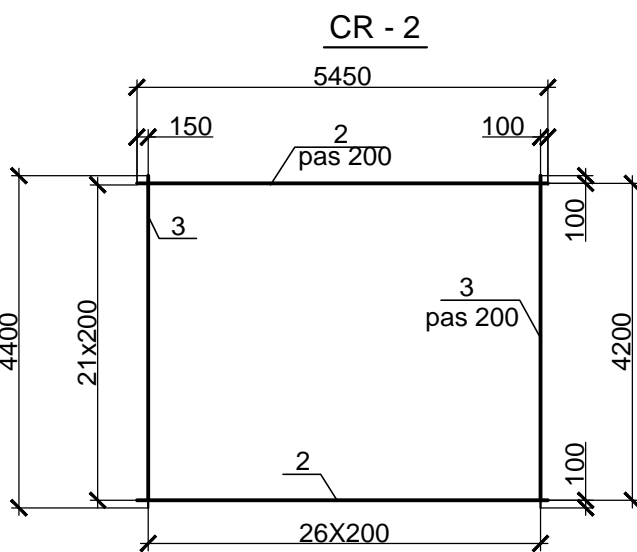
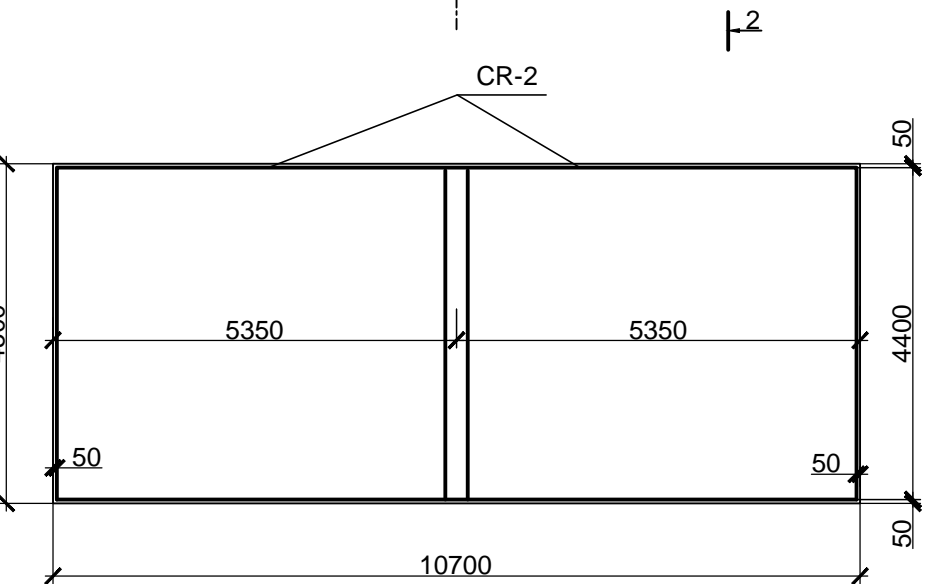
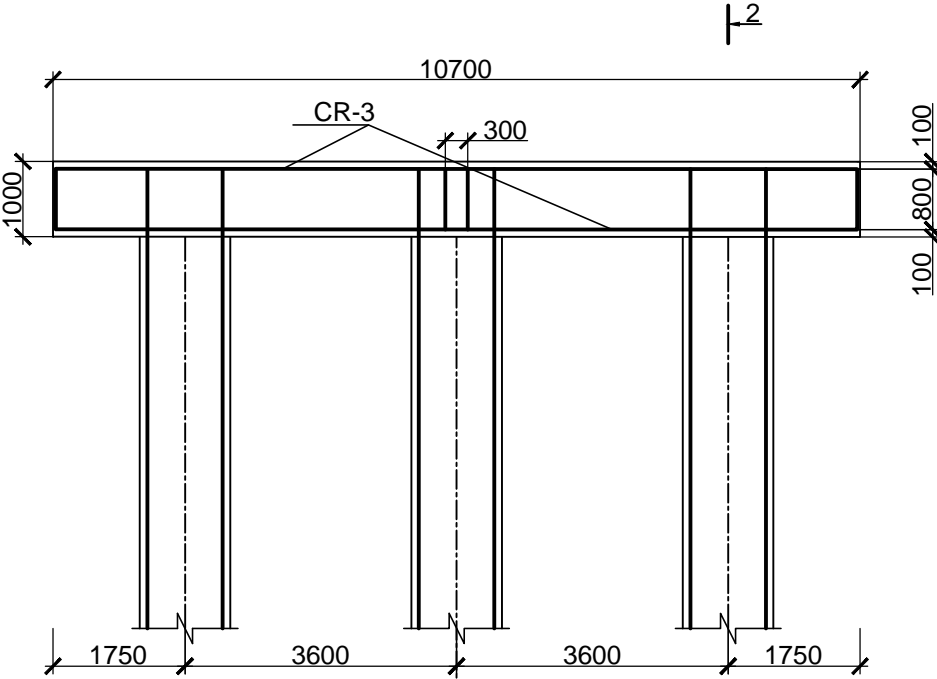
Format	Zone/Zona	Position/Pozitia	Reference Indicativ	Item Denumirea	Quantity Cantitatea	Wheight, kg Masa, kg	Note Nota
				RM - 1	9	168.9	
			STAS 5781 - 82*	Reinforcement Piese de armare			
				Reinforcement Cage - 1 Carcasa CR - 1	4	42.22	
		1		Ø12AIII L - 1400	27	1.25	
		2		Ø6 AI L - 5450	7	1.21	
			STAS 26633-91	Material			
				Concrete B25 F100 W2 Beton B25 F100 W2		16.05	

Use of Steel per Element, kg  
Consumul de metal pentru un element, kg

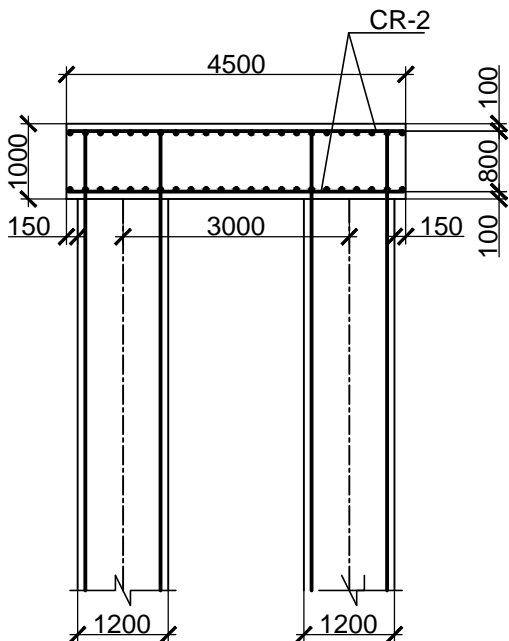
Element Type Marca elementului	Reinforcement Piese de armare			Total Weight Greutatea totala
	Reinforcement Type Armatura de clasa		Total	
	AI	AIII		
	STAS 5781 - 82*			
	Ø6	Ø12		
RM - 1	33.9	135.0	168.9	168.9

EBRD	Republic of Moldova		Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project							
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni		ISP	S.Bogza		Date	03.2012
Universcons			Designed	A.Gonciaruc		Scale	
	Drawing title Connecting Slab RM - 2 Radier monolit RM- 2	Checked	N.Tcaci		Drawing RM-AT-1		
		Control STAS	L.Pozdirca				

In-Situ Connecting Slab RM - 2  
Radier monolit RM - 2



2 - 2



Quantities for in-situ connecting slab  
Specificatia pentru radier monolit RM - 2

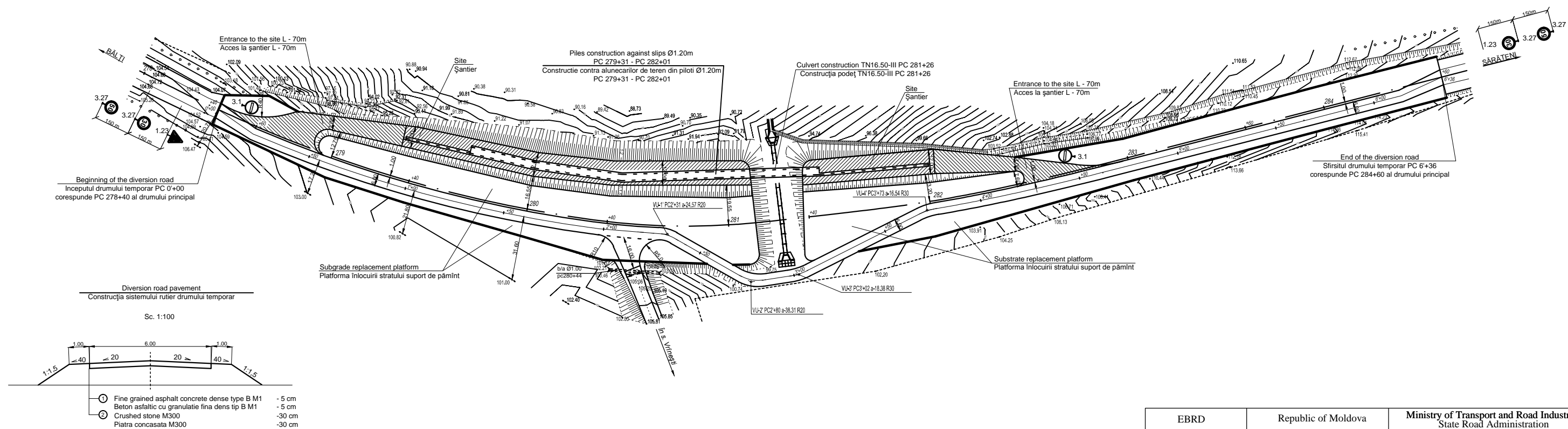
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				RM - 2	13	769.5	
			STAS 5781 - 82*	Reinforcement Piese de armare			
				Reinforcement Cage - 2 Carcasa CR - 2	4	192.37	
		3		Ø14 AIII L - 4400	27	5.32	
		2		Ø6 AI L - 5450	22	1.21	
			STAS 26633-91	Material			
				Concrete B25 F100 W2 Beton B25 F100 W2		48.15	

Use of Steel per Element, kg  
Consumul de metal pentru un element, kg

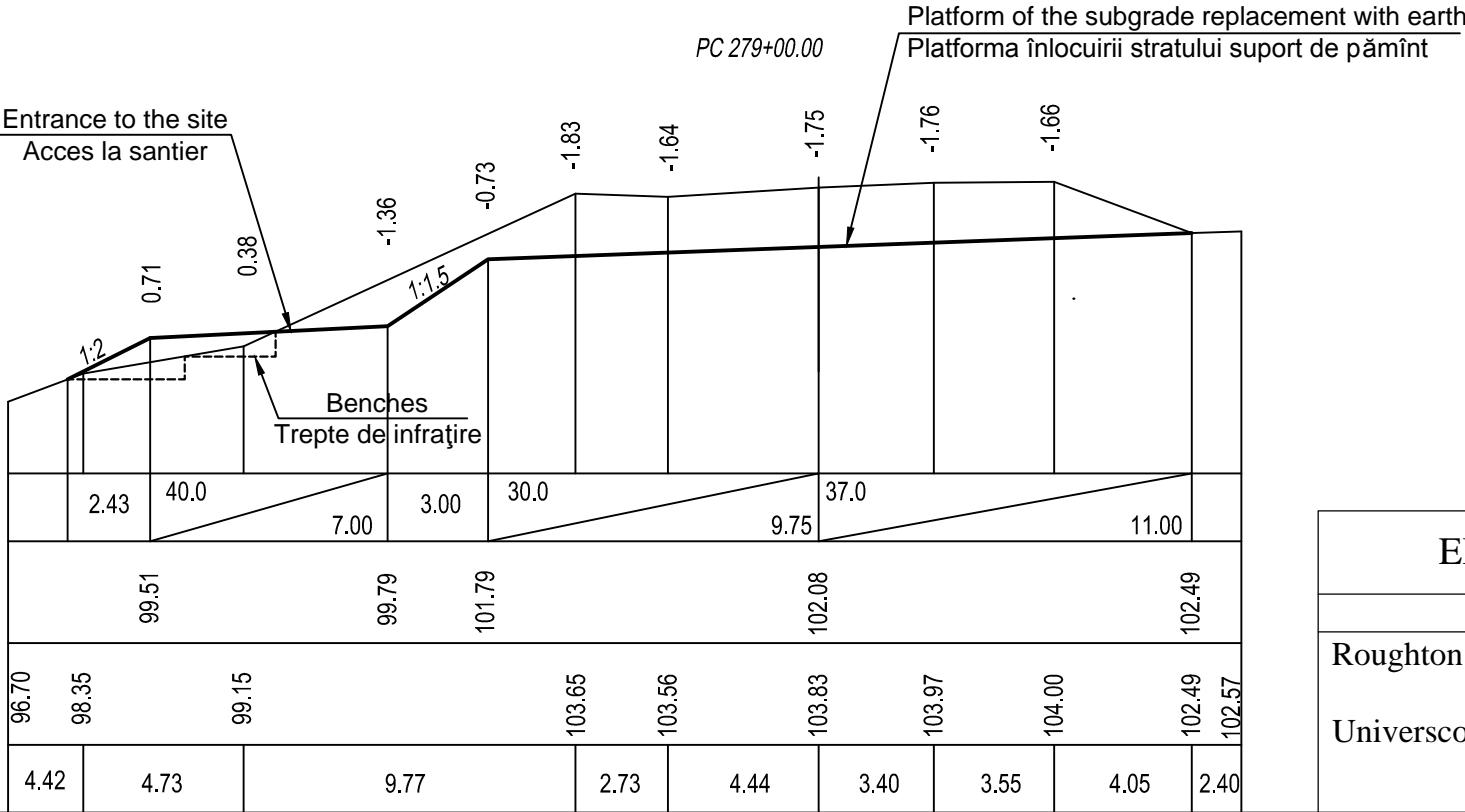
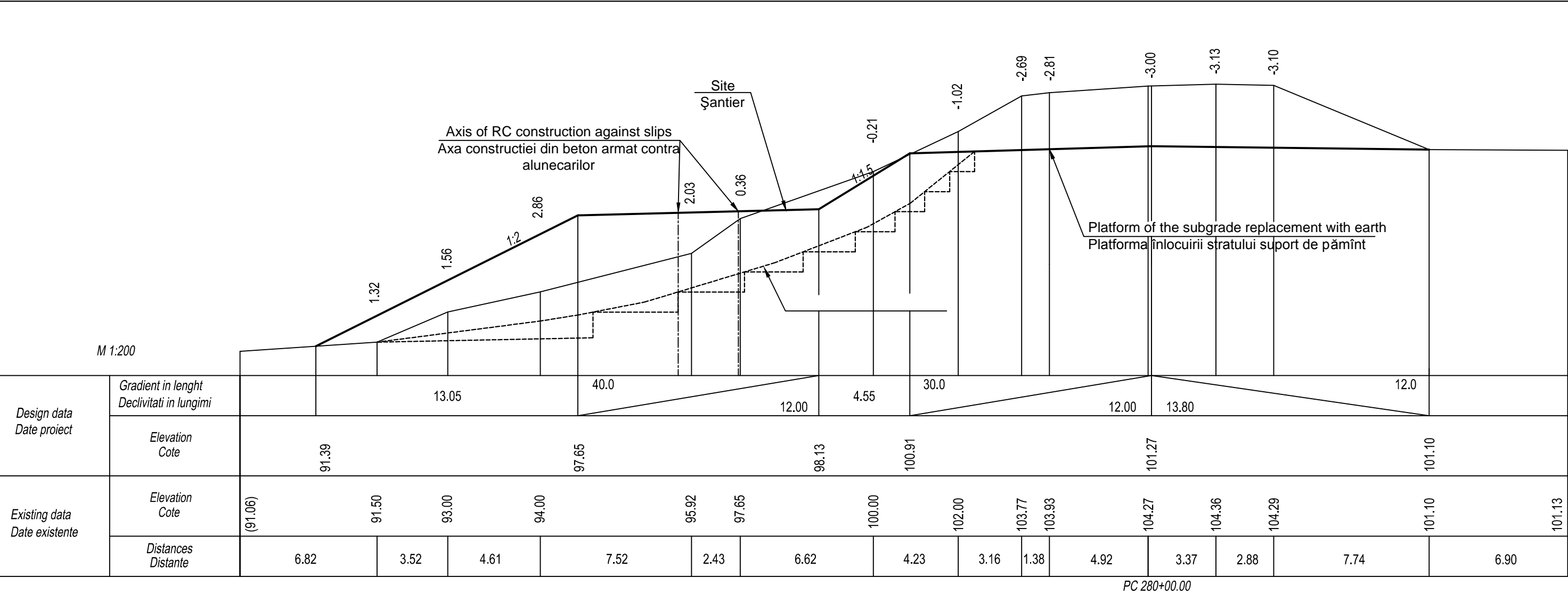
Element Type Marca elementului	Reinforcement Piese de armare				Total	Total Weight Greutatea totala
	Reinforcement Type Armatura de clasa					
	AI		AIII			
	STAS 5781 - 82*					
	Ø6	Result Rezultat	Ø14	Result Rezultat		
RM - 2	194.5	194.5	575.0	575.0	769.5	769.5

- 1.Cages will be jointed by welding according to GOST 14098-91-C-P3  
Îmbinarea carcaselor se va efectua prin sudare in conformitate cu cerințele GOST 14098-91-C23-P3;
- 2.Cages for Piles - see drawing Nr.12, 13  
Carcasele pilotilor foaia Nr.12, 13
- 3.All the dimensions - in mm.  
Toate dimensiunile in mm.

EBRD	Republic of Moldova		Ministry of Transport and Road Industry State Road Administration				
Road		Sector	Programme	Support	Project		
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni		ISP	S.Bogza		Date	03.2012
Universcons	Drawing title Connecting Slab RM - 2 Radier monolit RM- 2		Designed	A.Gonciaruc		Scale	
			Checked	N.Tcaci		Drawing RM-AT-2	
			Control STAS	L.Pozdirca			



EBRD		Republic of Moldova		Ministry of Transport and Road Industry		
		Road	Sector	Programme	Support	State Road Administration
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni			ISP	S.Bogza	Date
				Designed	A.Gonciaruc	Scale
Universcons	Drawing title		Plan of the diversion road	Checked	N.Tcaci	Drawing
			Plan drum de ocolire	Control STAS	L.Pozdirca	
			PC 278+(0)-PC284+(6)			



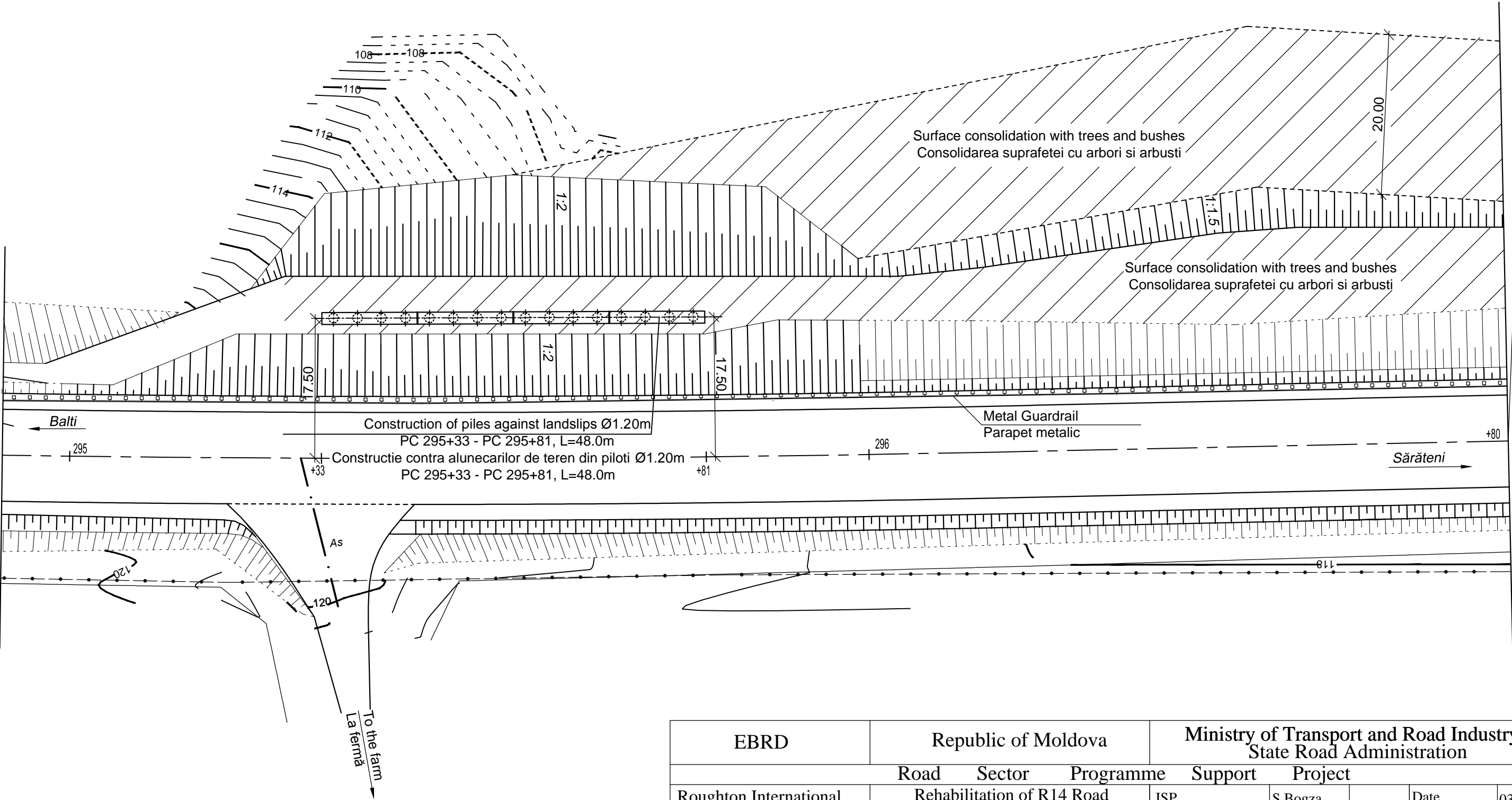
EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme		Support Project					
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni		ISP	S.Bogza		Date	03.2012
			Designed	A.Gonciaruc		Scale	1:200
	Drawing title Cross Sections On The Site Profile Transversale Pe Santier PC 279+00 - PC 280+00		Checked	N.Tcaci		Drawing PTS-AT-1	
			Control STAS	L.Pozdirca			



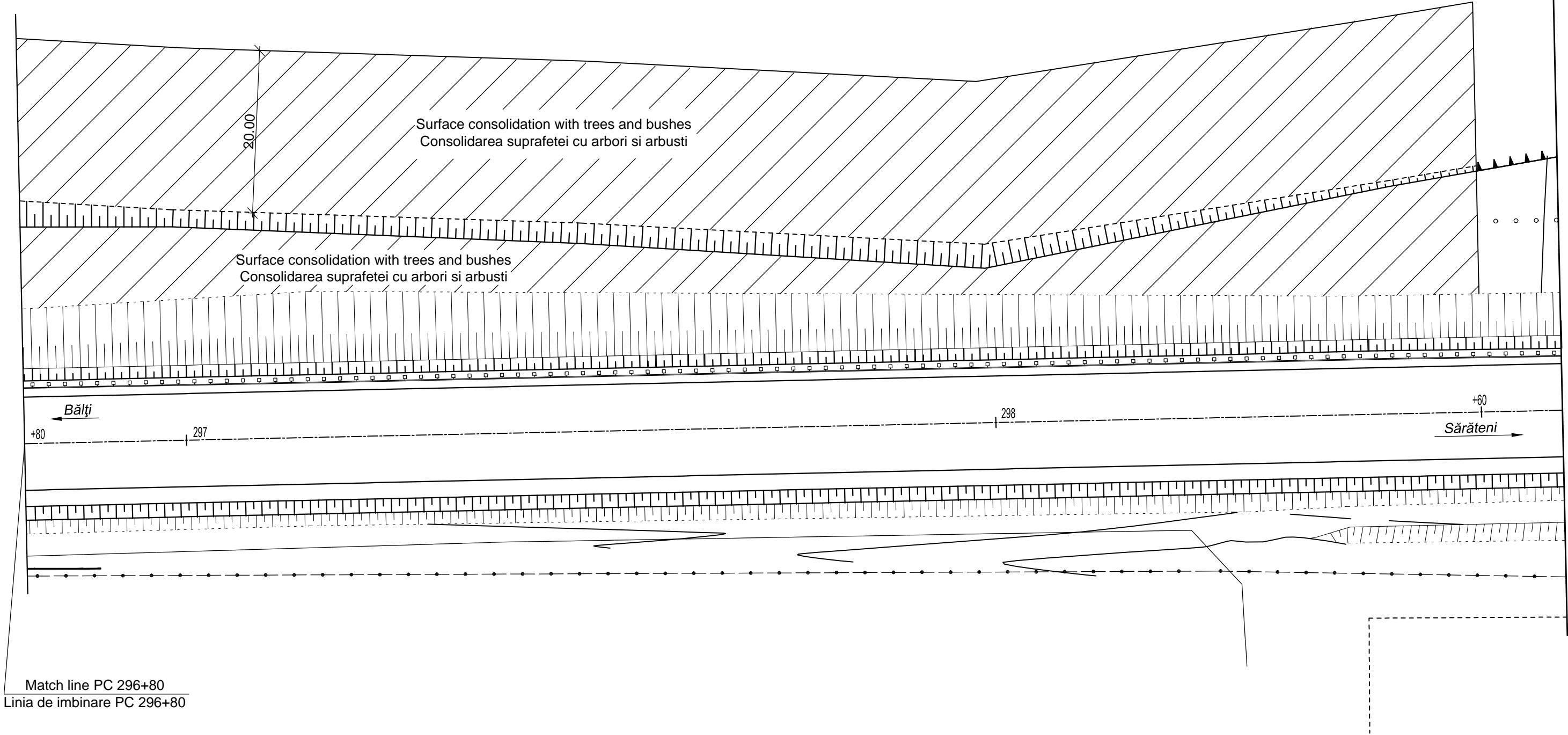




Match line PC 296+80  
Linia de imbinare PC 296+80

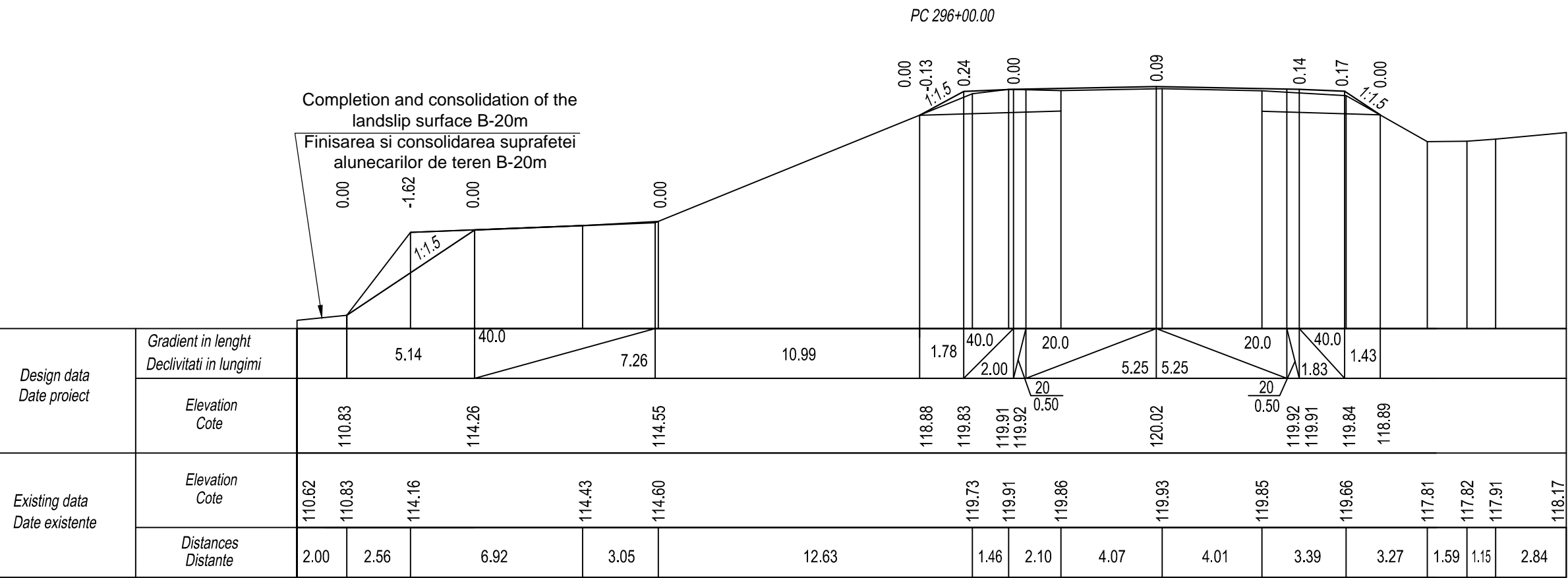
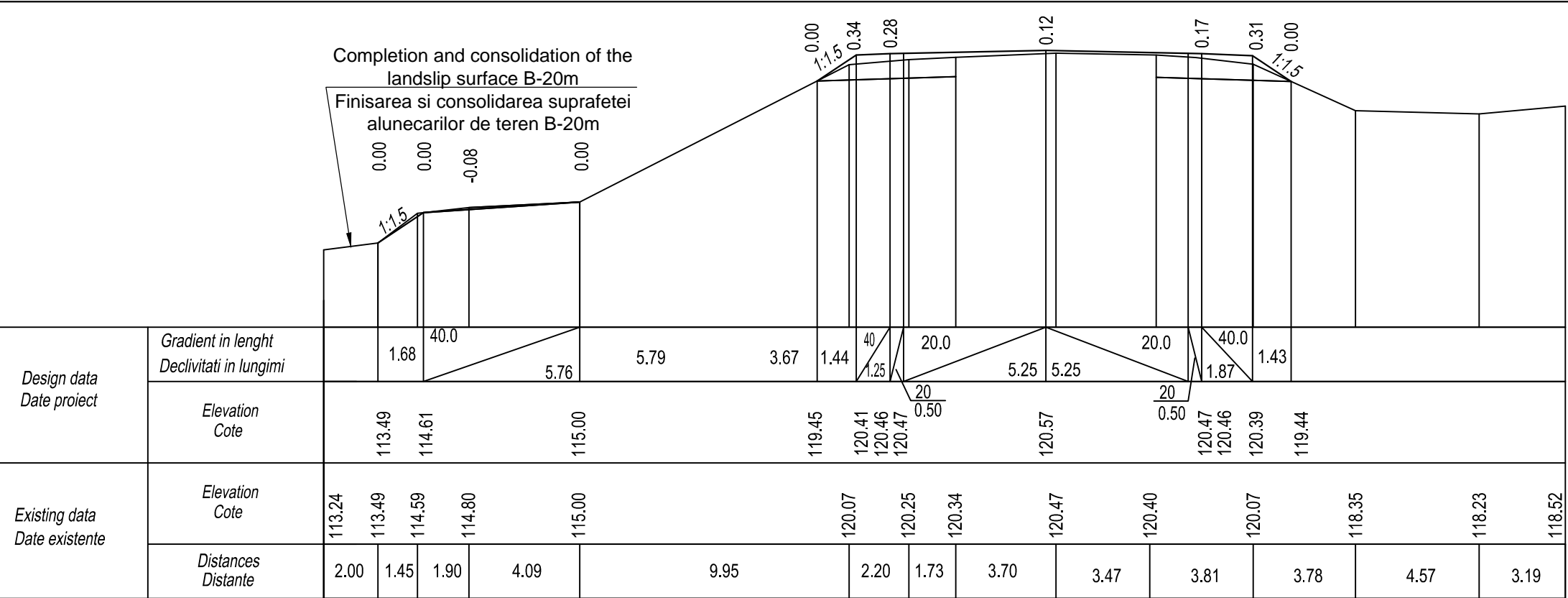


EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni  Road plan PC 295+00-PC 296+80 Plan traseu PC 295+00-PC 296+80	ISP	S.Bogza		Date	03.2012
		Designed	A.Gonciaruc		Scale	1:500
		Checked	N.Tcaci		Drawing PT-AT-1	
		Control STAS	L.Pozdirca			

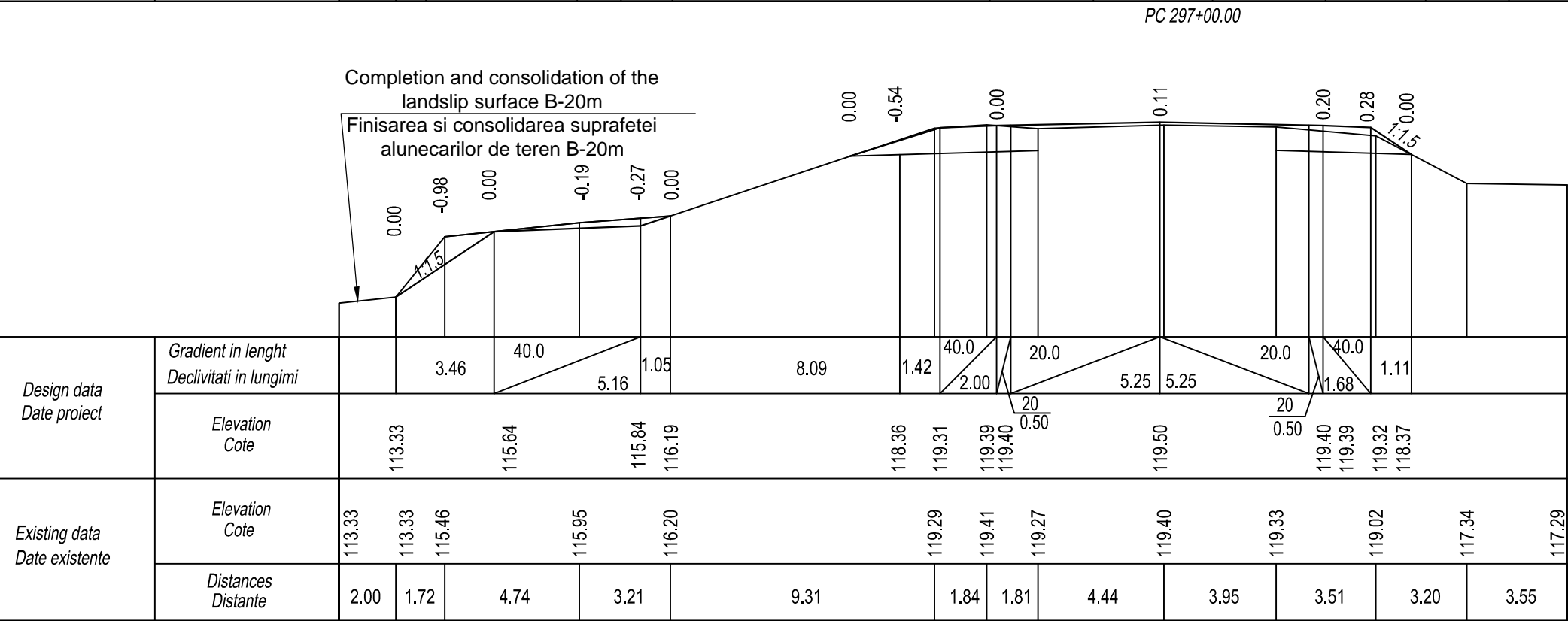
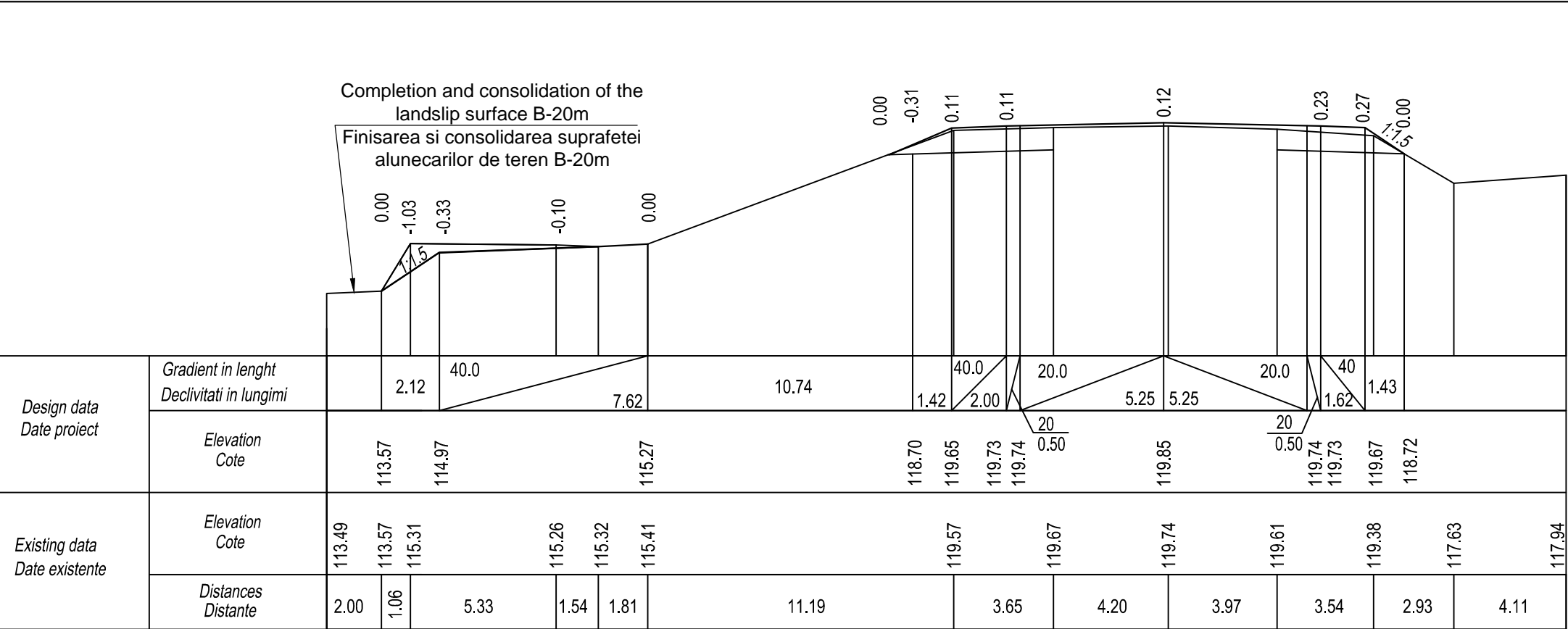


EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road      Sector      Programme      Support      Project							
Roughton International TRL Blizzard Universcons	Rehabilitation of R14 Road Bălți-Sărăteni		ISP	S.Bogza		Date	12.2007
			Designed	A.Gonciaruc		Scale	1:500
	Drawing title Road plan PC 296+80-PC 298+60 Plan traseu PC 296+80-PC 298+60		Checked	N.Tcaci		Drawing PD-DA-2	
			Control STAS	L.Pozdirca			





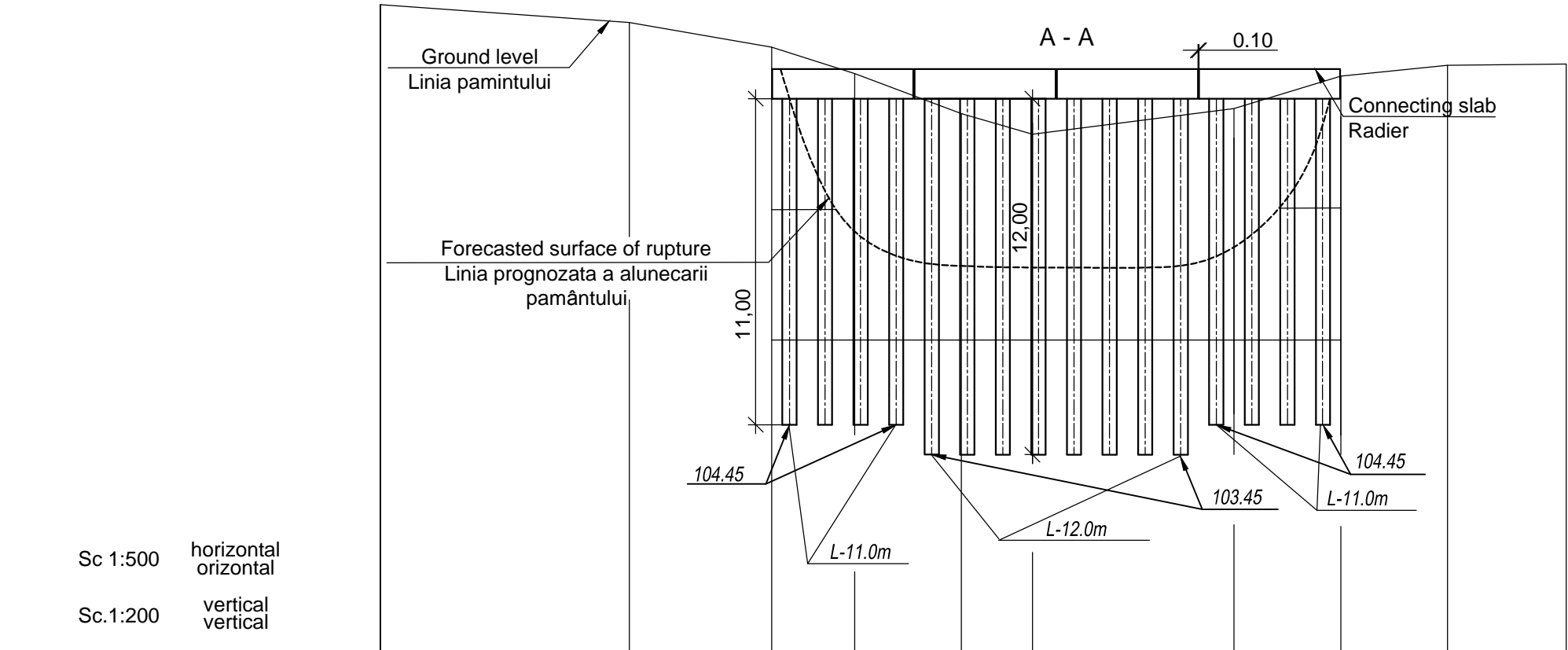
EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme		Support Project					
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni		ISP	S.Bogza		Date	03.2012
			Designed	A.Gonciaruc		Scale	1:200
	Drawing title Cross Section of Earthwork Profile Transversale Terasamente PC 296+00 - PC 296+60		Checked	N.Tcaci		Drawing PT-AT-2	
			Control STAS	L.Pozdirca			



EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme		Support Project					
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
		Designed	A.Gonciaruc		Scale	1:200	
	Drawing title Cross Section of Earthwork Profile Transversale Terasamente PC 297+00 - PC 297+60	Checked	N.Tcaci		Drawing PT-AT-3		
		Control STAS	L.Pozdirca				

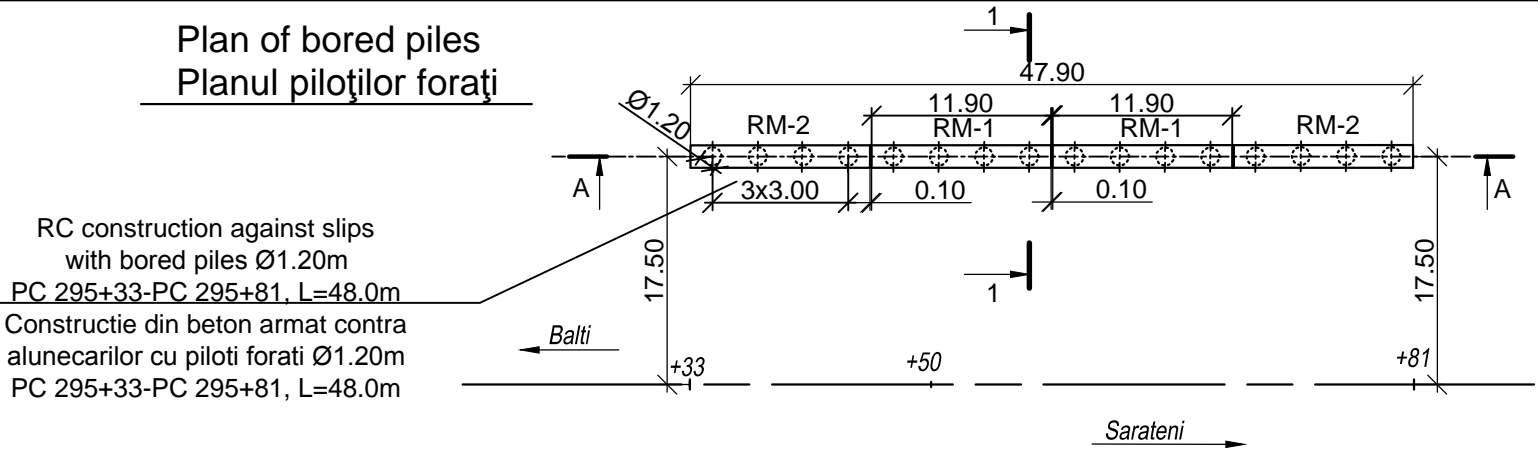




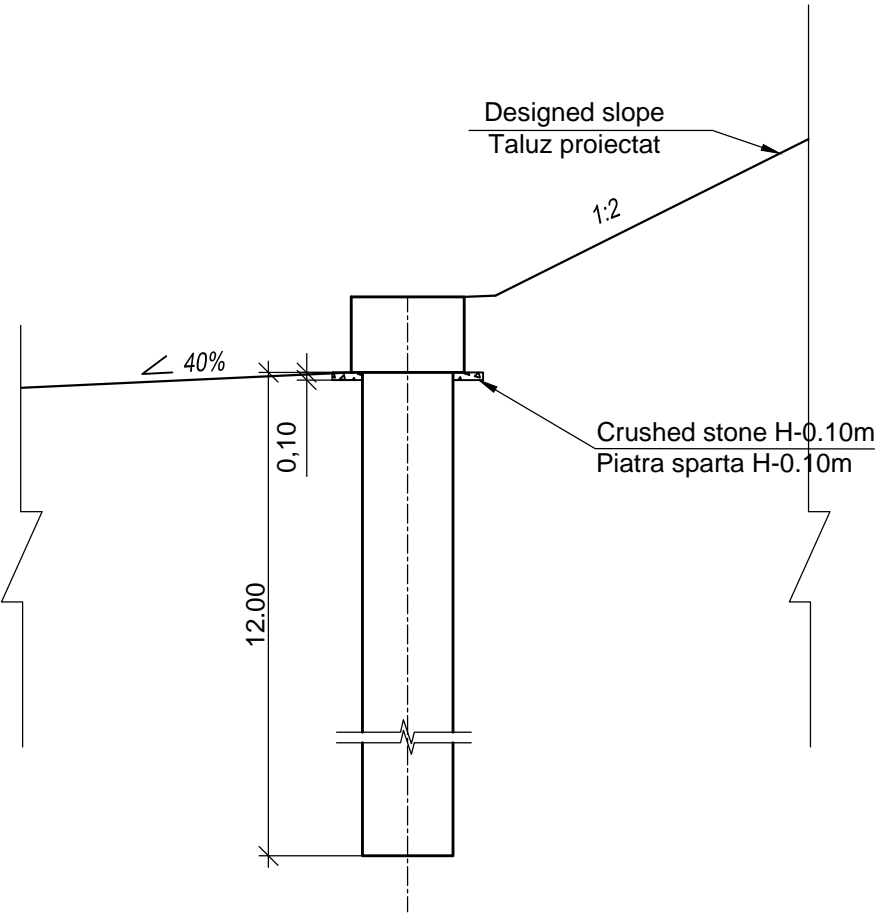


Design data Date proiectate	Gradients and distances Distanțe și declivități			0	0	0	0				
				12.00	12.00	12.00	11.90				
	Connecting Slab Level(Top) Cota radierului de sus	116.45		116.45	116.45	116.45	116.45	116.45			
Existing data Date existente	Connecting Slab Level(base) Cota radierului de jos	115.45		115.45	115.45	115.45	115.45	115.45			
	Existing Ground Levels Cote existente	118.65	118.02	117.19	116.30	114.95	114.24	115.12	116.21	116.58	116.62
	Distances, m Distanța, m	21.00	12.00	7.00	10.00	5.00	17.00	9.00	9.00	10.00	
Chainage	Pichet	295		+33		+50	+55	+72	+81	+89	+99

Plan of bored piles  
Planul piloților forți



1 - 1  
M 1:100



- Retaining structure is designed for horizontal sliding thrust E=14.0t.  
Construcția de sprijin este calculată la împingerea activă a pamântului P=14.0t.
- RC bored piles will have Ø1.2m with 10.0 m length - 95units and 8.0 m - 24 units.  
Piloții din beton armat d=1.2m cu lungimea de 10.0 m - 95 buc. și 8.0 m - 24 buc.
- Drawings of the structural unit of bored piles and of reinforcement are on List Nr.8,9, piles reinforcement and specification - Nr.6,7  
Desenele blocului construcției RM-1, RM-2, și schema de armare - planșa nr 8,9, armarea piloților și specificația - nr.6,7
- Spacing between connecting slabs of the retaining structure -10.0cm, sealed with tarred wooden boards.  
Între blocurile construcției se prevede un interval - 10.0cm.
- All the dimensions - in m.  
Toate dimensiunile in m.

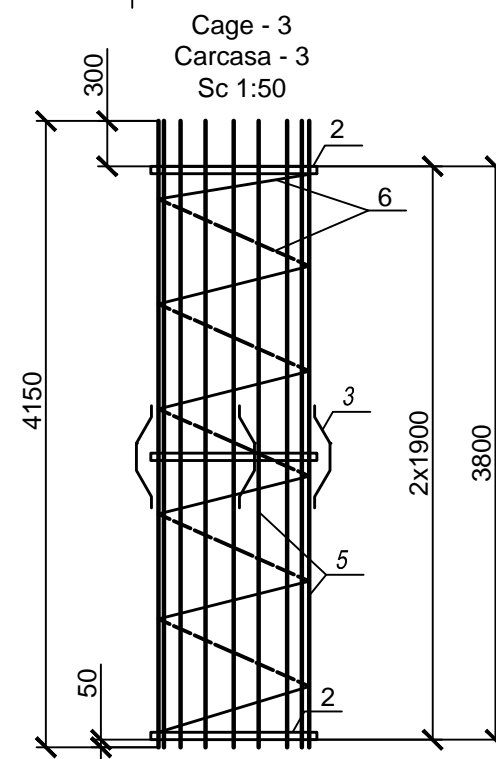
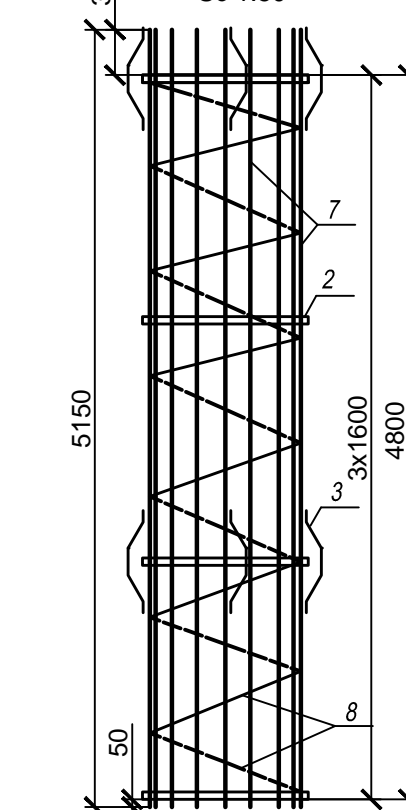
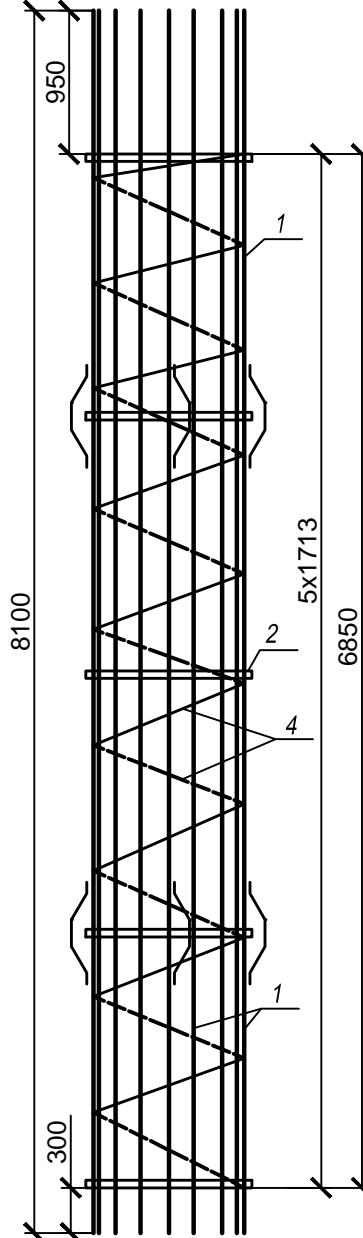
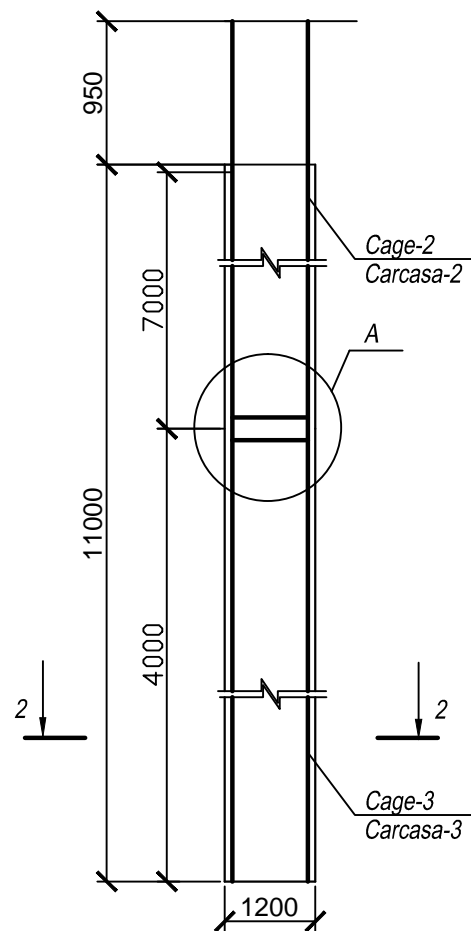
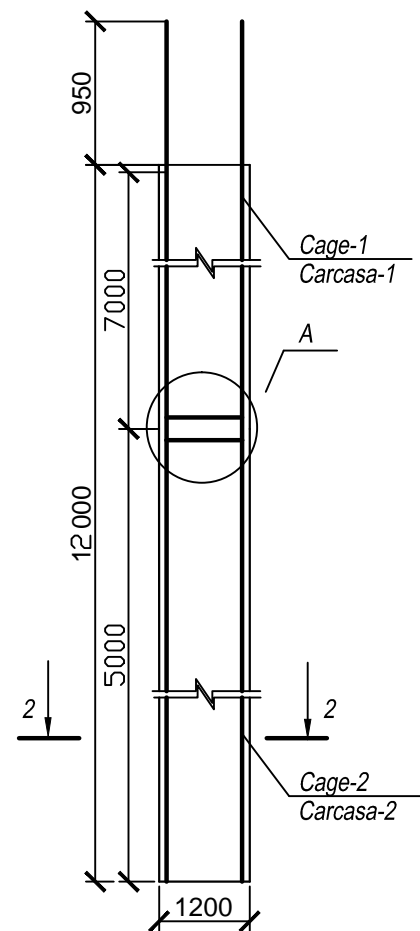
EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme		Support	Project			
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni  Drawing titleLongitudinal profile of construction Profil longitudinal al construcției PC 295+33-PC 295+81	ISP	S.Bogza		Date	03.2012
Universcons		Designed	A.Gonciaruc		Scale	1:500
		Checked	N.Tcaci		Drawing PL-AT-1	
		Control STAS	L.Pozdirca			

Bored piles L=12.0m, RM-1 (8 units)  
Piloti forati L=12.0m, RM-1 (8buc.)

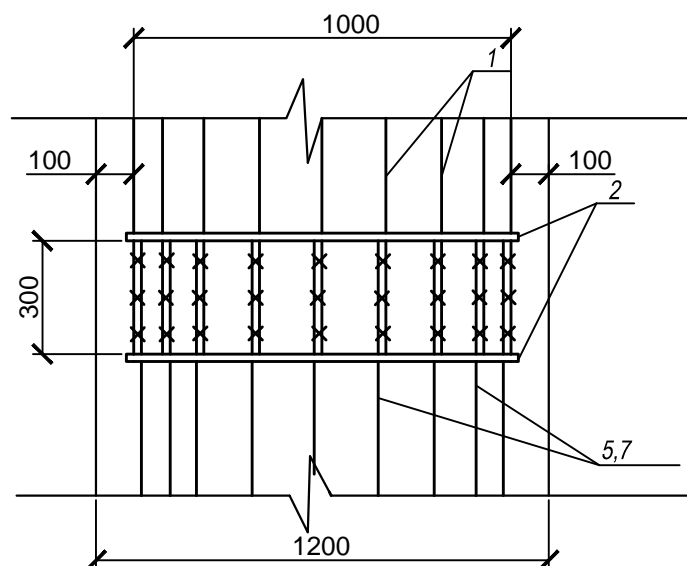
Bored piles L=11.0m, RM-2 (8 units)  
Piloti forati L=11.0m, RM-2 (8buc.)

Cage - 1  
Carcasa - 1  
Sc 1:50

Cage - 2  
Carcasa - 2  
Sc 1:50



Joint / Nod A  
M 1:20



2-2  
M 1:20

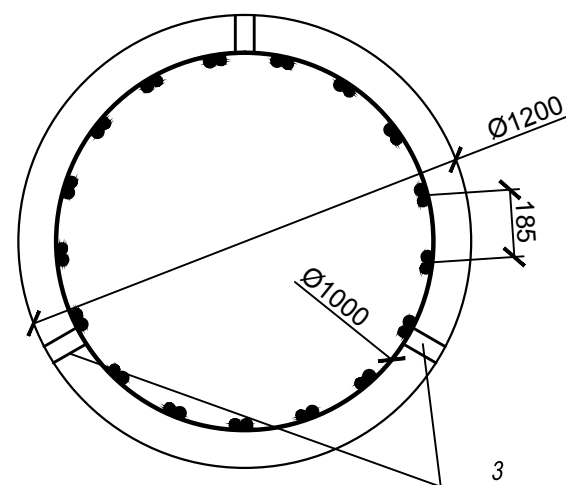


Table of elements  
Tabela pieselor

Pozitia	Draft / Schiță
1	8100
2	120
3	75 180 75 100
4	35x200 1000
5	4150
6	19x200 1000
7	5150
8	24x200 1000

- Cages will be jointed by welding according to GOST -14098-91.C23-P3.  
Îmbinarea carcaselor se va efectua prin sudare in conformitate cu cerintele GOST 14098-91-C23-P3;
- Bored piles L=12.0m, (RM-1) - 8units.; Bored piles L=11.0m, (RM-2) 8units.;  
Piloti forati L=12.0m, (RM-1) - 8buc.; piloti forati L=11.0m, (RM-2) 8buc.;
- All dimensions -in mm.  
Toate dimensiunile in mm.

EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
Universcons		Designed	A.Gonciaruc		Scale	
		Checked	N.Tcaci		Drawing	
		Control STAS	L.Pozdirca		PF-AT-1	

Quantities for Bored Piles:L-12.0m, L-11.0m, RM-1(RM-2) Specificatia pilotilor forati:L-12.0m, L-11.0m, RM-1(RM-2)							
Format	Zone	Position	Reference Indicativ	Item Denumirea	Cant.	Masa, kg	Nota
			Bored piles L=12.0m, (RM-1) Piloti forati L=12.0m, (RM-1)		8	2597.2	
				Cage - 1 Carcasa - 1		1454.6	
			ГОCT 5781-82*	Reinforcement Piese de armare			
	1			Ø 28 A III I-8100	34	39.12	
	4			Ø 8 AI I-109900	1	43,41	
			ГОCT 103-76*	Assembly elements Piese de asamblare			
	2			-50x10 I-3260	5	12,78	
	3			-50x10 I-730	6	2,86	
				Cage - 2 Carcasa - 2		1142.6	
				Reinforcement Piese de armare			
	7			Ø 28 A III I-5150	34	24.87	
	8			Ø 8 AI I-75360	1	29,77	
				Assembly elements Piese de asamblare			
	2			-50x10 I-3260	4	12,78	
	3			-50x10 I-730	6	2,86	
			ГОCT 26633-91	Materials: Concrete B25 F100 Material: Beton B25 F100	1	13.6m3	
			Bored piles L=11.0m, (RM-2) Piloti forati L=11.0m, (RM-2)		8	2206.5	
				Cage - 1 Carcasa - 1		1454.6	
			ГОCT 5781-82*	Reinforcement Piese de armare			
	1			Ø 28 A III I-8100	34	39.12	
	4			Ø 8 AI I-109900	1	43,41	
			ГОCT 103-76*				
	2			-50x10 I-3260	5	12,78	
	3			-50x10 I-730	6	2,86	
				Cage - 3 Carcasa - 3		751.9	
			ГОCT 5781-82*	Reinforcement Piese de armare			
	5			Ø 28 A III I-4150	34	20.04	

	6			Ø 8 AI I-59660	1	23.57	
			ГОСТ 103-76*	Assembly elements Piese de asamblare			
	2			-50x10 I-3260	3	12,78	
	3			-50x10 I-730	3	2,86	
			ГОСТ 26633-91	Materials: Concrete B25 F100 Material: Beton B25 F100	1	12,4m3	

Use of Steel per element,kg  
Consumul de metal pentru un element, kg

Element Type Marca elementului	Reinforcement Piese de armare					Assembly elements Piese de asamblare			Total Weight Greutatea totala
	Reinforcement Type Armatura de clasa				Total	Steel Type Marca metalului		Total	
	AI		AIII						
	STAS 5781-82*					STAS 103-76*			
	Ø8	Result Rezultat	Ø28	Result Rezultat		-50x10	Result Rezultat		
Bored piles L=12.0m;(RM-1) Piloti forati L=12.0m;(RM-1)	73.2	73.2	2374.6	2374.6	2447.8	149.4	149.4	149.4	2597.2
Bored piles L=11.0m;(RM-2) Piloti forati L=11.0m;(RM-2)	67.0	67.0	2011.5	2011.5	2078.5	128.0	128.0	128.0	2206.5

EBRD	Republic of Moldova		Ministry of Transport and Road Industry State Road Administration				
Road		Sector	Programme	Support	Project		
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni		ISP	S.Bogza		Date	03.2012
			Designed	A.Gonciaruc		Scale	
	Drawing title Quantities for Bored Piles Specificația piloților forăți Ø1.20m L=12.0m, L=11.0m		Checked	N.Tcaci		Drawing SPF-AT-1	
			Control STAS	L.Pozdirca			

In - Situ Connecting Slab RM - 1 ; (RM - 2)  
Radier monolit RM - 1; (RM - 2)

Quantities for in-situ connecting slab RM - 1 (RM-2)  
Specificația pentru radier monolit RM - 1 (RM-2)

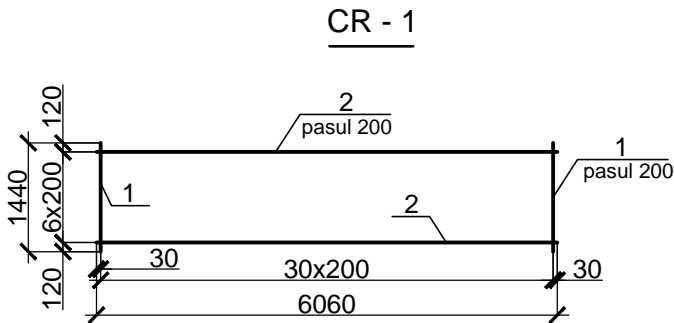
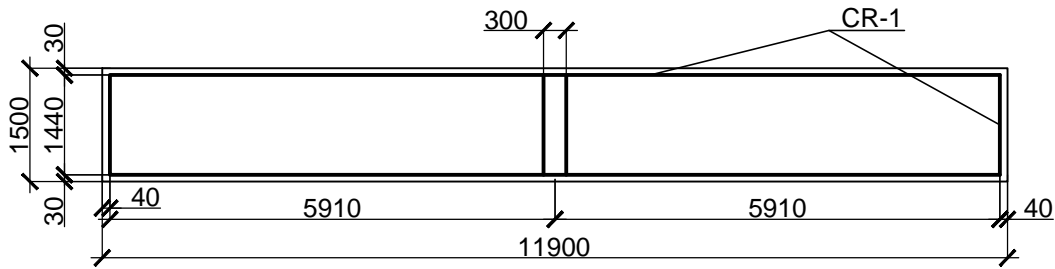
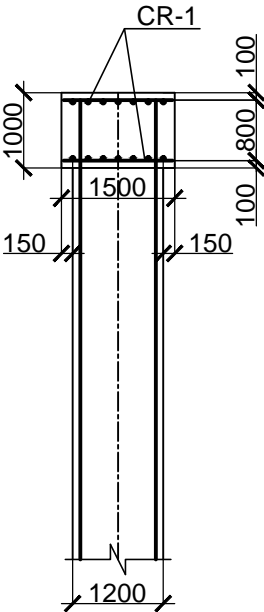
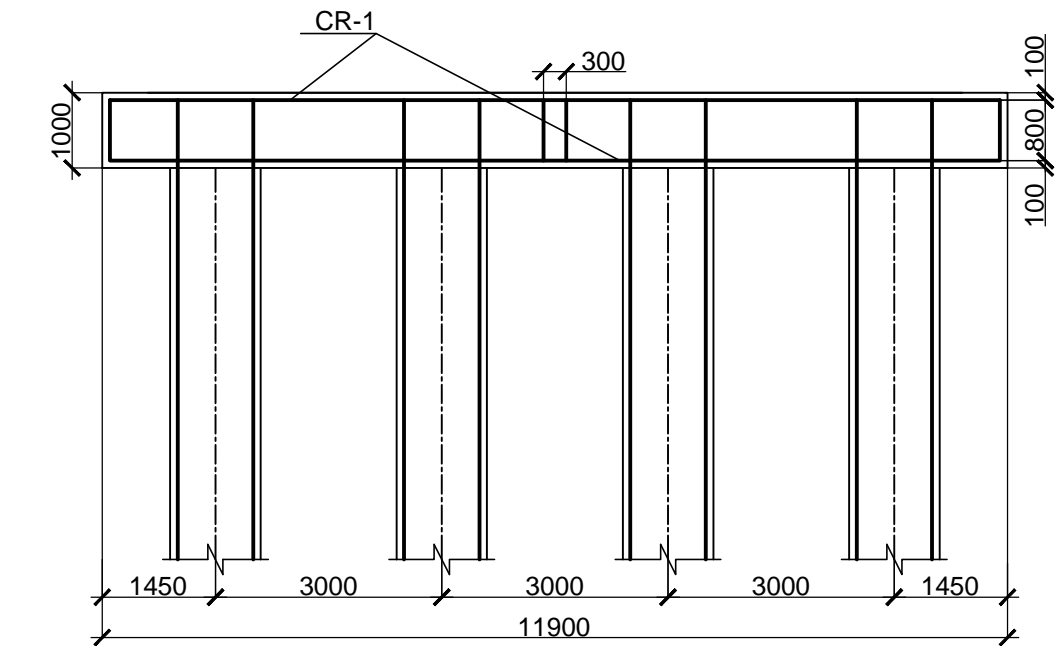
Format	Zone/Zona	Position/Pozitia	Reference Indicativ	Item Denumirea	Quantity Cantitatea	Wheight, kg Masa, kg	Note Nota
				RM - 2	9	196.6	
			STAS 5781 - 82*	Reinforcement Piese de armare			
				Reinforcement Cage - 1 Carcasa CR - 1	4	49.15	
		1		Ø12 AIII L - 1400	31	1.28	
		2		Ø6 AI L - 6060	7	1.35	
			STAS 26633-91	Material			
				Concrete B25 F100 W2 Beton B25 F100 W2		17.85	

Use of Steel per Element, kg  
Consumul de metal pentru un element, kg

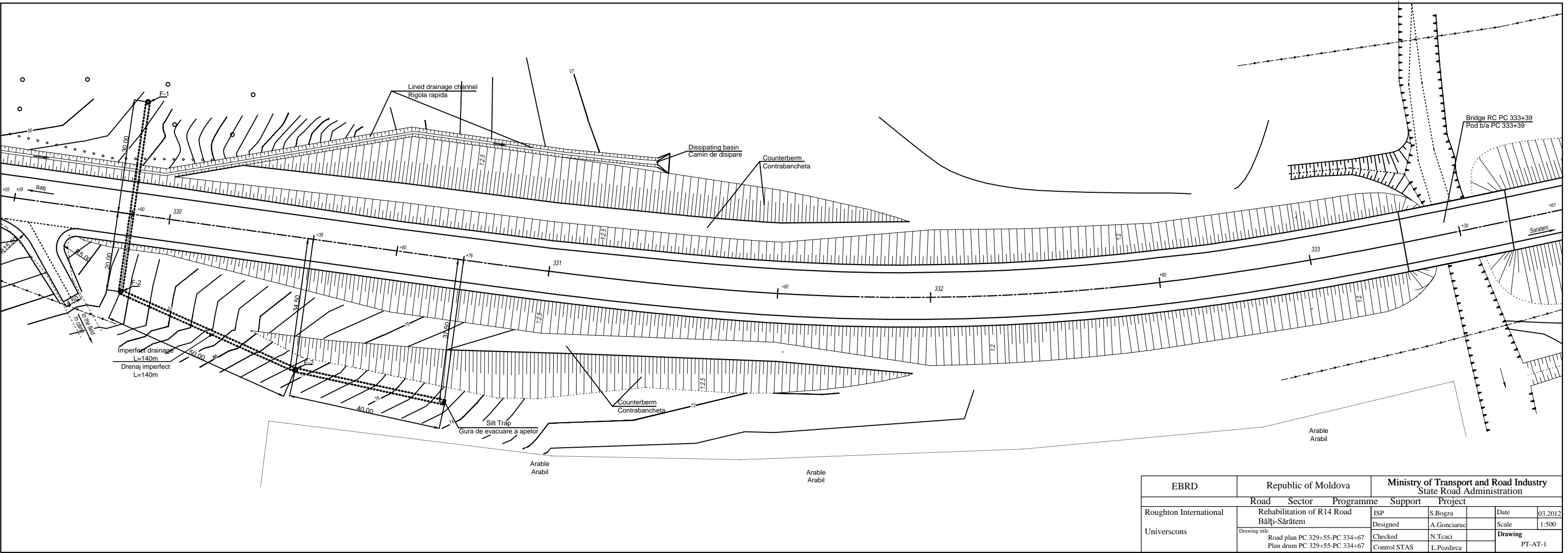
Element Type Marca elementului	Reinforcement Piese de armare				Total	Total Weight Greutatea totala
	Reinforcement Type Armatura de clasa					
	AI		AIII			
	STAS 5781 - 82*					
	Ø6	Result Rezultat	Ø12	Result Rezultat		
RM - 1; (RM - 2)	37.80	37.80	158.8	158.8	196.6	196.6

- 1.Cages will be jointed by welding according to GOST 14098-91-C-P3  
Îmbinarea carcaselor se va efectua prin sudare in conformitate cu cerințele GOST 14098-91-C23-P3;
- 2.Cages for Piles - see drawing Nr. 27, 28  
Carcasele pilotilor foaia Nr.27, 28
- 3.All the dimensions - in mm.  
Toate dimensiunile in mm.

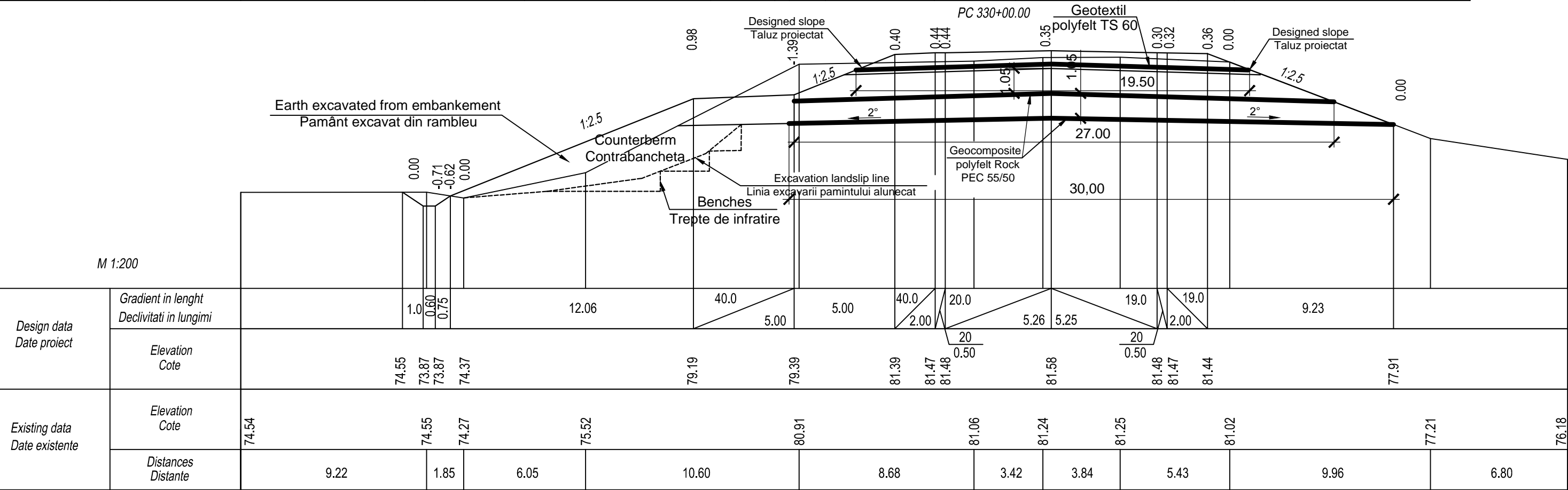
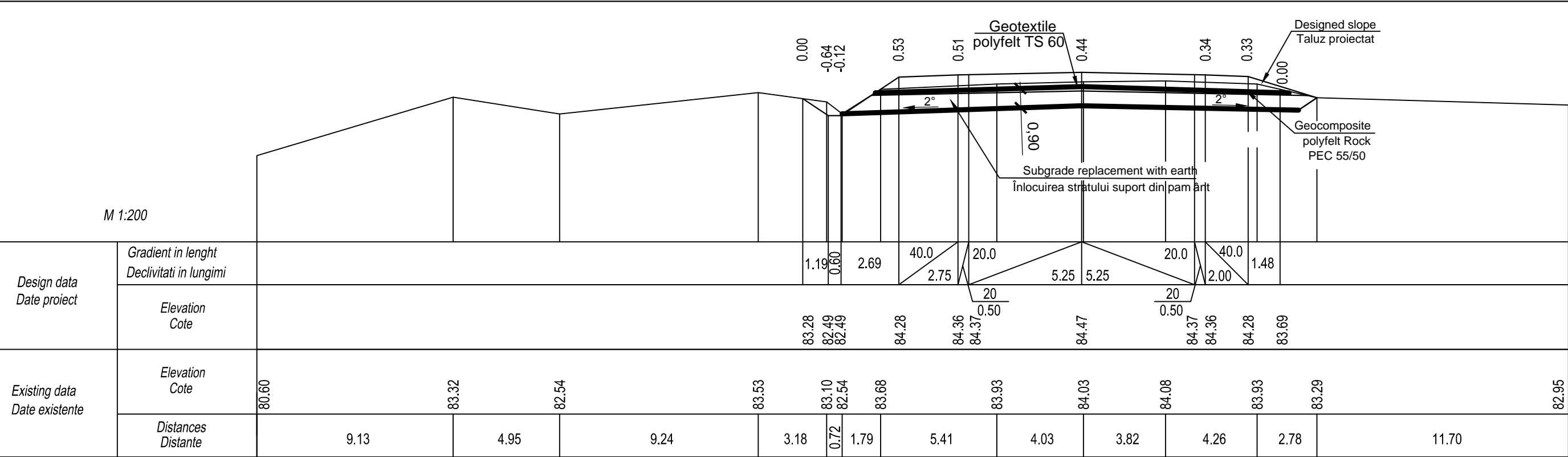
EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
Universcons	Drawing titleConnecting Slab RM - 1; (RM - 2 ) Radier monolit RM- 1; (RM - 2 ) PC295+33-295+81	Designed	A.Gonciaruc		Scale	
		Checked	N.Tcaci		Drawing RM-AT-1	
		Control STAS	L.Pozdirca			



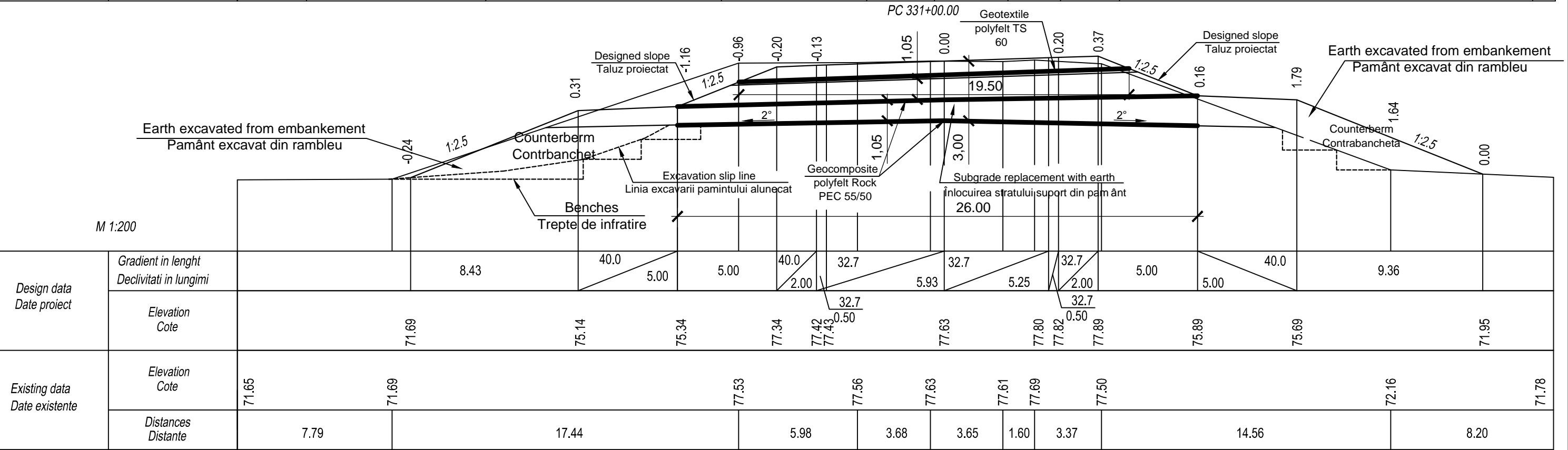
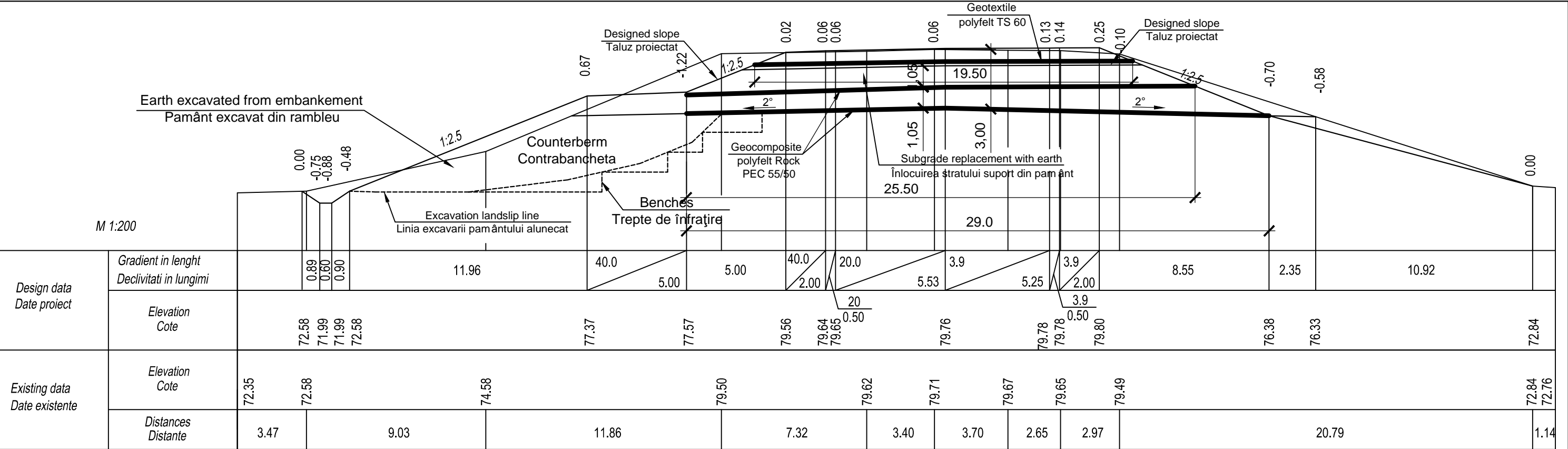




EBRD		Republic of Moldova		Ministry of Transport and Road Industry State Road Administration			
		Road	Sector	Programme	Support	Project	
Roughton International	Rehabilitation of R14 Road			ISP	S.Bogza	Date	03.2012
	Bălți-Sărăteni			Designed	A.Gonciaruc	Scale	1:500
Universcons	Drawing title	Road plan PC 329+55-PC 334+67			Checked	N.Tcaci	Drawing
		Plan drum PC 329+55-PC 334+67			Control STAS	L.Pozdirca	
					PT-AT-1		

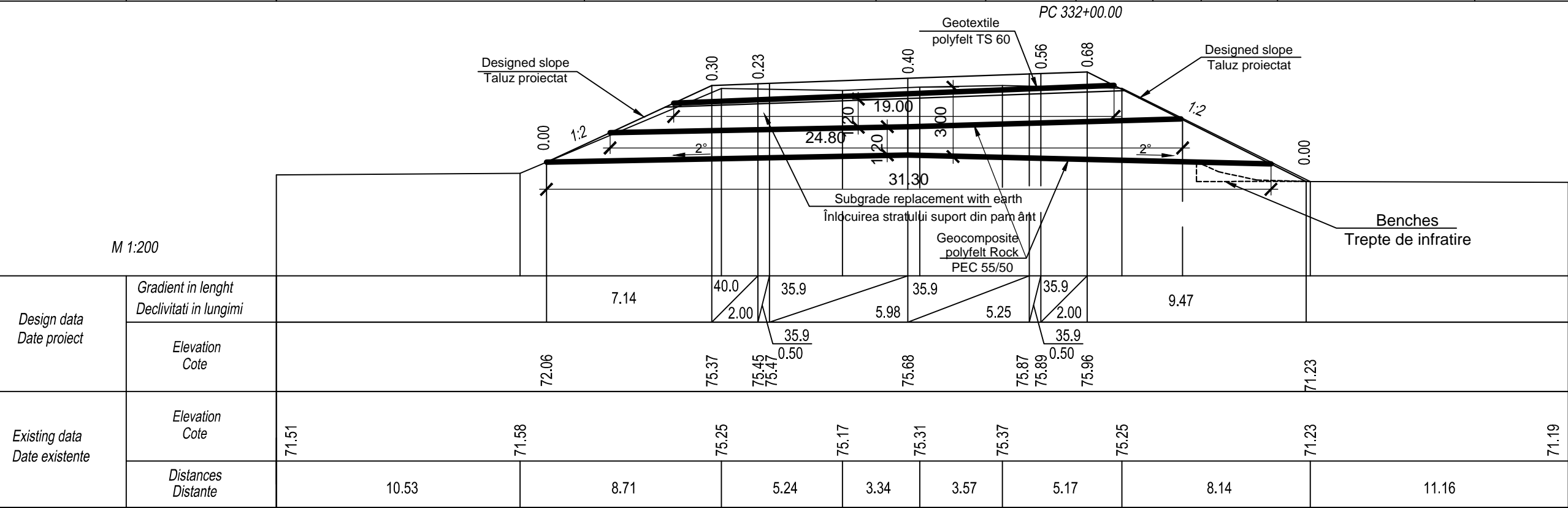
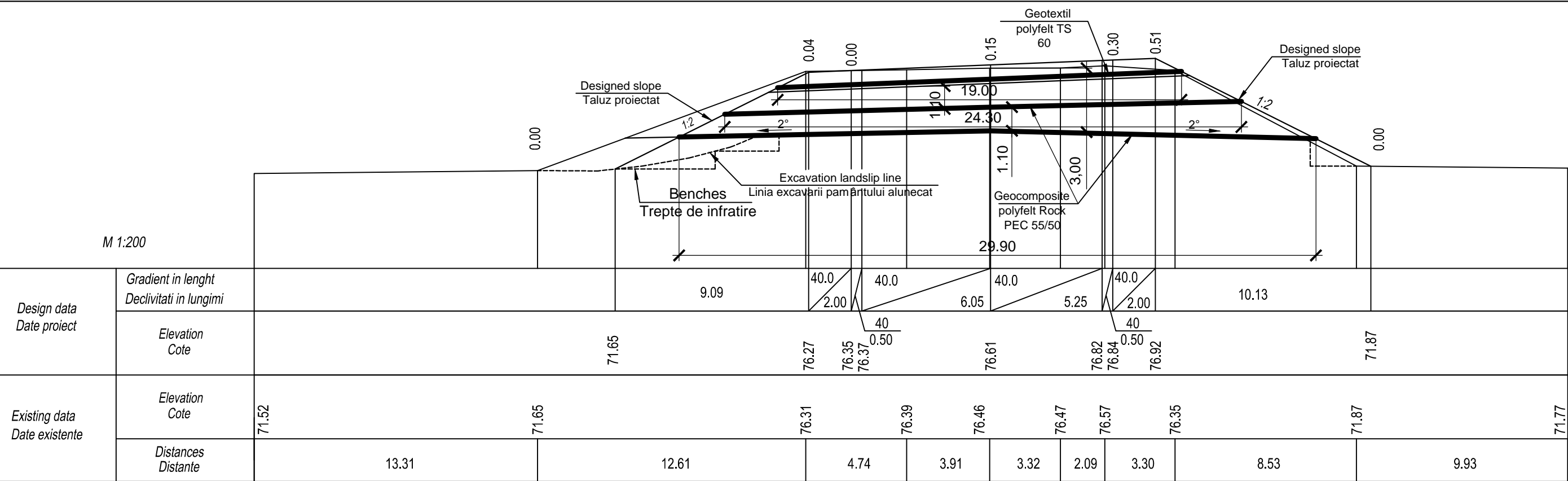


EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012	
		Designed	A.Gonciaruc		Scale	1:200	
	Drawing title Cross Section of Earthwork Profile Transversale Terasamente PC 330+00 - PC 330+60	Checked	N.Tcaci		Drawing PT-AT-1		
		Control STAS	L.Pozdirca				



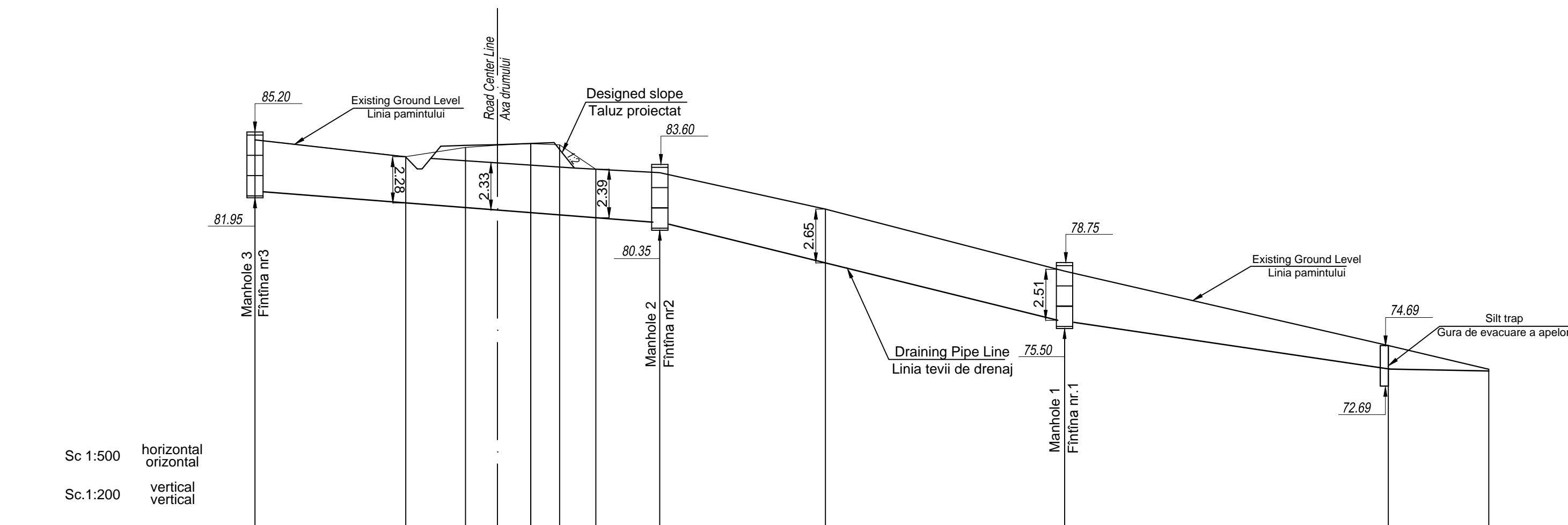
PC 331+60.00									
EBRD		Republic of Moldova			Ministry of Transport and Road Industry State Road Administration				
		Road	Sector	Programme	Support	Project			
Roughton International		Rehabilitation of R14 Road Bălți-Sărăteni			ISP	S.Bogza		Date	03.2012
Universcons		Drawing title Cross Section of Earthwork Profile Transversale Terasamente PC 331+00 - PC 331+60			Designed	A.Gonciaruc		Scale	1:200
					Checked	N.Tcaci		Drawing PT-AT-2	
					Control STAS	L.Pozdirca			





EBRD		Republic of Moldova		Ministry of Transport and Road Industry State Road Administration			
		Road		Sector		Programme	
Roughton International		Rehabilitation of R14 Road		ISP		S.Bogza	
Universcons		Bălți-Sărăteni		Designed		A.Gonciaruc	
		Drawing title		Cross Section of Earthwork		Date	
				Profile Transversale Terasamente		Scale	
		PC 332+00 - PC 332+60		Checked		N.Tcaci	
				Control STAS		L.Pozdirca	
						Drawing	
						PT-AT-3	

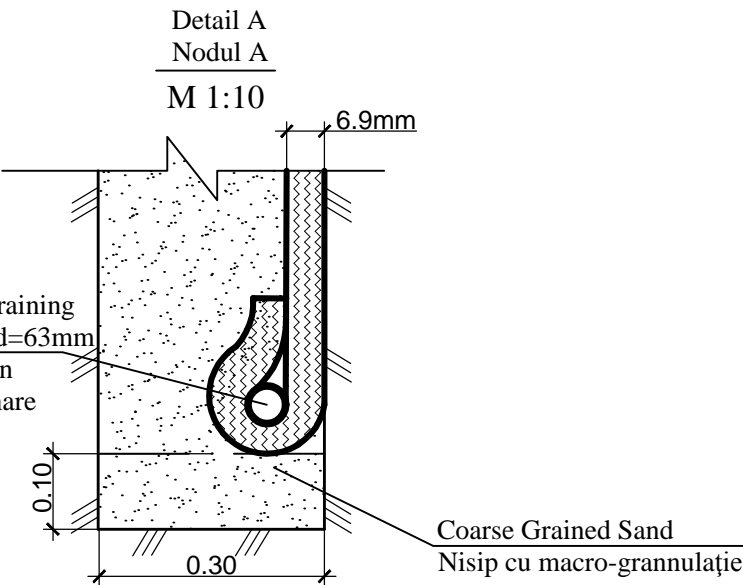
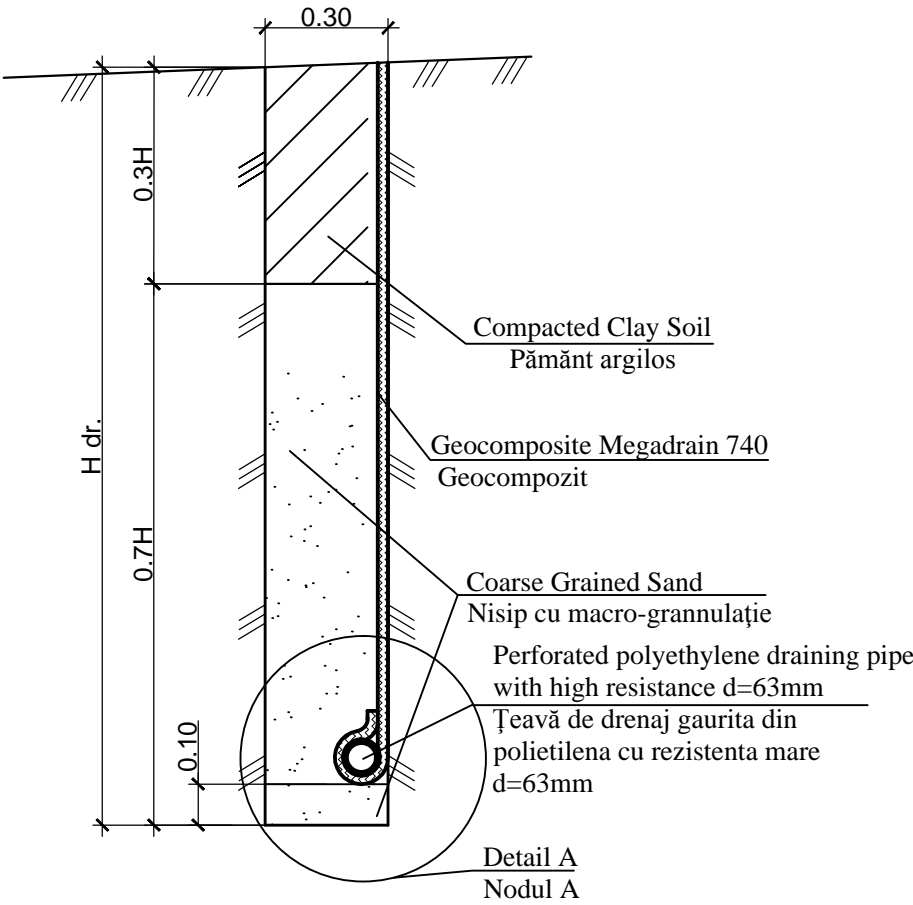




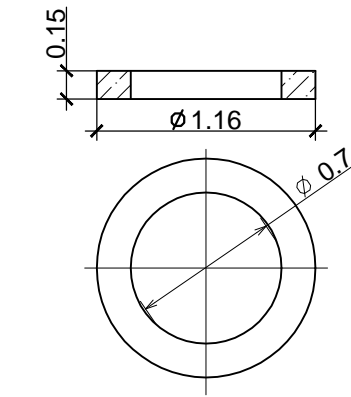
Design data Date proiectate	Gradient in lenght Declivitati in lungimi	30								95								57								5					
	Pipe level Cota tevii	80.75 80.65								75.90 75.80								73.49								73.43					
	Top drain Level Cota drenajului de sus	83.33 83.44 83.55 83.45 83.33								81.50								78.34								74.69 73.50					
Existing data Date existente	Ground level Cote teren	83.19								81.50								78.34								74.69 73.50					
	Distances, m Distanta, m	18.15		7.92	3.93	4.10	3.50	4.70	7.70	20.31		29.69				40.00								12.40							
Chainage	Pichete	329+90										330+38										330+77									

EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration					
Road Sector Programme Support Project							
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni		ISP	S.Bogza		Date	03.2012
			Designed	A.Gonciaruc		Scale	1:500
	Drawing title Longitudinal profile of drain Profil longitudinal al drenajului PC 329+90-330+77		Checked	N.Tcaci		Drawing PLD-AT-1	
			Control STAS	L.Pozdirca			

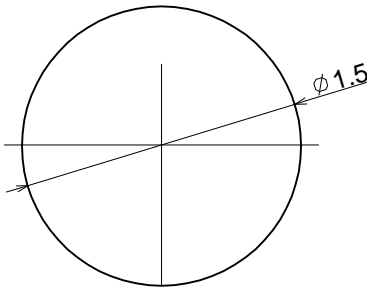
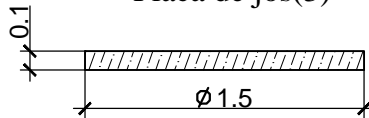
Drain Construction Using Geotextile  
Construcția drenajului cu folosirea geocompozitului



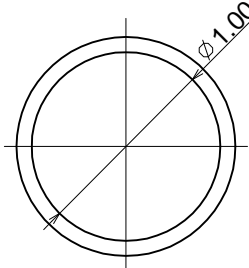
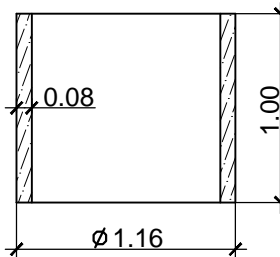
Slab(1)  
Placă(1)



Bottom Slab(3)  
Placa de jos(3)

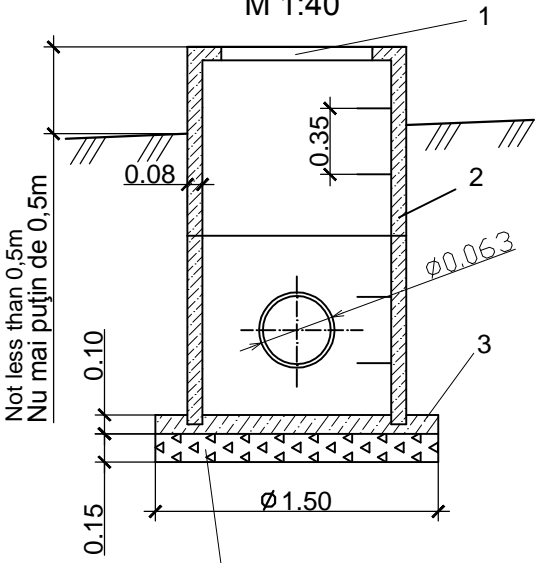


Ring (2)  
Inel (2)

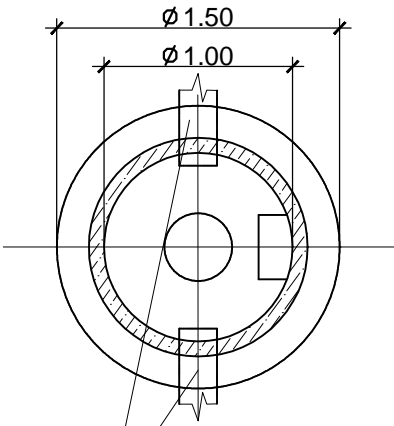


Manhole  
Cămin de vizitare

M 1:40



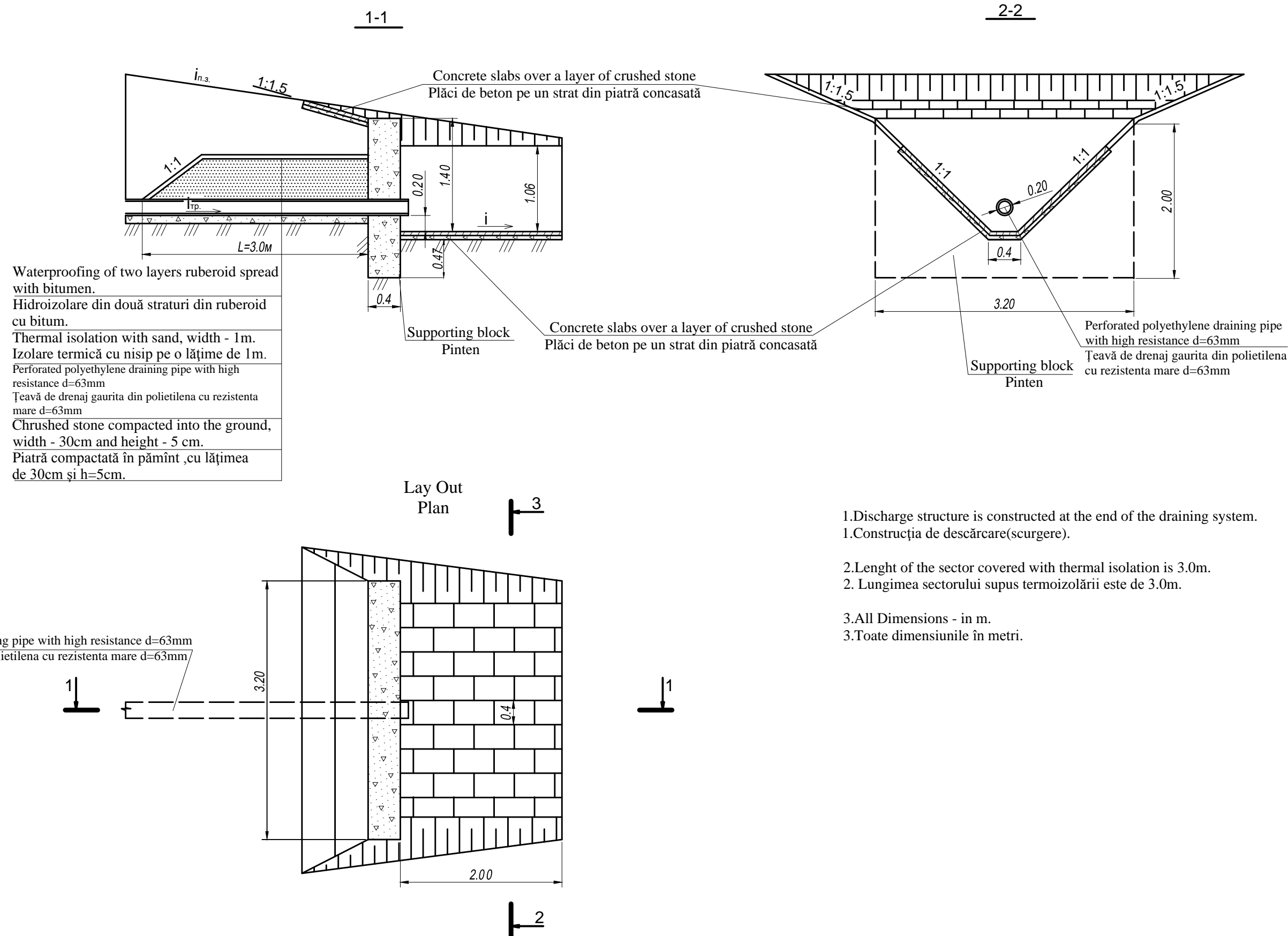
Crushed Stone Bedding M300  
Pat din piatră concasată M300



Perforated polyethylene draining pipe with high resistance d=63mm  
Țeavă de drenaj gaurita din polietilena cu rezistența mare d=63mm

- Manholes are used to supervise the way drains and pipes work.  
1. Căminele de vizitare se folosesc pentru a duce controlul asupra funcționării drenajelor și țevelor de evacuare a apelor.
- Manholes are constructed in places where the plan and horizontal profile of drains changes, where the pipe diameters change and on even sectors at an interval of 50-75m.  
2. Căminele de vizitare se construiesc în locurile de schimbare a planului și profilului longitudinal al drenajelor, schimbărilor diametrelor țevelor și pe sectoarele drepte la un interval de 50-75m.
- All Dimensions - in m.  
3. Toate dimensiunile în metri

EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road Sector Programme Support Project						
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni	ISP	S.Bogza		Date	03.2012
		Designed	A.Gonciaruc		Scale	
	Drawing title  Drain Construction Construcția drenajului și fântânilor	Checked	N.Tcaci		Drawing  CDF-AT-1	
		Control STAS	L.Pozdirca			



1.Discharge structure is constructed at the end of the draining system.  
1.Construcția de descărcare(surgere).

2.Lenght of the sector covered with thermal isolation is 3.0m.  
2. Lungimea sectorului supus termoizolării este de 3.0m.

3.All Dimensions - in m.  
3.Toate dimensiunile în metri.

EBRD	Republic of Moldova	Ministry of Transport and Road Industry State Road Administration				
Road      Sector      Programme      Support      Project						
Roughton International  Universcons	Rehabilitation of R14 Road Bălți-Sărăteni  Drawing title Silt trap, (right) Gură de evacuare ,(dreapta) PC 330+78	ISP	S.Bogza		Date	03.2012
		Designed	A.Gonciaruc		Scale	
		Checked	N.Tcaci		Drawing GE-AT-1	
		Control STAS	L.Pozdirca			

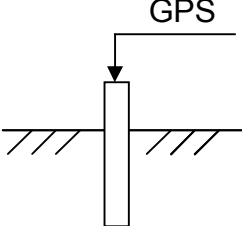
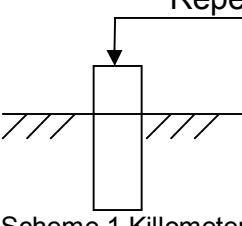
**Sheets by chainages**

Nr. Drawing	Name	Page
<b>1</b>	<b>2</b>	<b>4</b>
<b>Road</b>		
1	Sheets by chainages	
2	List of benchmarks	
3	Road Geometrical Elements	
4	List of existing bridges and culverts	
5	List of Existing and Desidned Kerbs	
6	List of designed lined side drains	
7	List of Lined Existing drains	
8	Pavement Quantities	
9	List of chutes on the slope	
10	Side roads construction	
11	Property accesses	
12	List of sidewalks	
13	List of junctions lane ,bus laybys	
14	List of Existing and Designed guardrails	
15	List of road signs	
16	List of marker posts	

## List of benchmarks

### Lista punctelor de reper

Rehabilitation of Road Bălți - Sărăteni km 26+600 - km 38+300  
Reabilitarea drumului auto Bălți - Sărăteni km 26+600 - km 38+300

Nr.	Km	PC +	Nr. Rp	X	Y	Level of benchmark Cota reperului, m	Distance (lin.m) between benchmark and road axis,m Distanța reperului de la axă, m		Scheme of benchmark  Schema reperului
							RHS dreapta	LHS stînga	
1	2	3	4	5	6	7	8	9	10
									
1.	11	107+85,16	GPS1	289493,406	166736,562	141,412	12,40	-	Scheme 1 Steel bar Schema 1 Armătură
									
2.	12	111+56,24	11	289218,138	166985,400	141,727	13,65	-	Scheme 1 Kilometer post Schema 2 Bornă kilometrică
3.	12	111+82,97	GPS2	289214,653	167021,237	141,828	-	10,32	See scheme Vezi schema 1
4.	13	121+43,11	12	288490,311	167651,799	178,964	9,42	-	See scheme2 Vezi schema 2
5.	14	131+25,31	13	287799,865	168333,484	179,530	11,11	-	
6.	15	142+32,22	14	287392,342	169303,246	193,905	11,34	-	
7.	16	152+67,19	15	286443,788	169701,473	182,705	11,19	-	
8.	17	162+96,24	16	285560,316	170228,805	165,137	11,97	-	
9.	18	173+33,39	17	284677,780	170773,992	160,606	11,25	-	
10.	19	183+61,12	18	283799,665	171307,378	166,467	12,45	-	
11.	20	193+24,61	19	282973,764	171803,601	156,258	11,22	-	
12.	21	201+49,15	20	282264,047	172222,976	155,316	10,96	-	
13.	22	213+87,39	21	281235,856	172908,137	152,438	11,04	-	
14.	23	225+78,91	22	280384,534	173741,041	151,177	10,18	-	
15.	24	236+16,84	23	279687,804	174511,793	124,369	12,78	-	
16.	25	244+67,29	24	279136,677	175159,453	95,283	10,12	-	
17.	26	252+75,41	25	278611,301	175761,052	92,002	12,03	-	
18.	27	261+57,62	26	278437,193	176626,349	89,736	11,44	-	
19.	28	279+15,56	28	277364,608	177877,322	104,873	7,86	-	
20.	29	289+24,18	29	277042,273	178824,349	127,015	9,61	-	
21.	30	299+43,75	30	276876,883	179830,077	119,913	8,98	-	
22.	31	309+58,86	31	276707,037	180829,163	115,607	10,03	-	
23.	32	319+31,77	32	276365,800	181717,400	109,388	8,01	-	
24.	33	329+76,48	33	275854,258	182585,743	86,184	8,46	-	
25.	34	339+21,41	34	276289,157	183401,047	82,294	6,85	-	
26.	35	349+29,67	35	275973,958	184354,543	81,517	7,74	-	
27.	36	359+71,60	36	275630,312	185338,654	78,800	8,80	-	
28.	37	368+78,52	37	275333,997	186195,308	70,835	7,55	-	

29	38	378+74,91	38	275186,621	187173,431	75,664	7,80	-
30	39	389+10,69	39	274637,305	187954,242	68,845	12,40	-
31	40	398+95,71	40	274102,347	188754,840	65,866	8,67	-
32	41	402+89,89	GPS3	273944,786	189115,719	65,550	6,98	-
33	41	408+93,95	41	273698,823	189667,899	74,196	7,79	-
34	42	419+62,28	42	273262,448	190643,042	69,866	11,76	-
35	43	429+05,96	43	272959,125	191533,662	78,077	8,44	-
36	44	439+06,76	44	272745,997	192511,826	66,846	8,94	-
37	45	449+01,33	45	272534,244	193483,251	58.505	9,57	-
38	46	458+96,95	46	272321,700	194456,309	69,371	8,47	-
39	47	468+96,64	47	271984,052	195385,707	59,131	9,23	-
40	48	479+20,81	48	271725,246	196374,975	66,801	7,13	-
41	49	489+15,73	49	271401,460	197306,694	71,282	9,43	-
42	52	512+69,24	51	270382,466	199428,185	67,024	9,76	-
43	52	519+90,65	52	270070,763	200079,286	57,144	9,48	-
44	54	531+83,12	53	269556,442	201154,632	62,456	9,14	-
45	55	549+61,95	55	269339,990	202902,763	55,895	9,98	-
46	56	559+54,69	56	269056,573	203854,587	50,263	8,48	-
47	57	569+48,74	57	268645,574	204744,521	47,767	8,32	-
48	58	579+14,99	58	267952,514	205376,726	56,265	9,41	-
49	59	589+29,48	59	267546,233	206306,998	46,660	8,54	-
50	60	599+49,62	60	266969,925	207142,820	45,650	8,39	-
51	61	609+13,42	61	266819,333	208076,154	54,029	16,30	-
52	62	619+14,86	62	266932,277	209071,724	56,098	9,07	-
53	63	629+11,16	63	267046,008	210061,250	50,736	9,93	-
54	65	649+08,40	65	266969,643	211990,504	45,929	11,90	-
55	66	658+65,69	66	266498,299	212802,983	46,389	8,73	-
56	67	665+77,32	GPS4	266380.396	213504.586	45,987	-	9,13
57	67	666+16,28	67	266351,418	213539,072	47,505	12,53	-



**ROAD GEOMETRICAL ELEMENTS**  
**ELEMENTELE GEOMETRICE ALE TRASEULUI**

ANGELS UNGHIURI					CURVES CURBE													Alignments ALINIAMENTE		Azimut	Coordinates Coordonate, m	
Number angels Nr. unghi	Angle vertex poziție vârful unghi		Angle degree Mărimă unghi		R, m	L1, m	L2, m	T1, m	T2, m	Lenth of Linking Lungime racordarei, m	Lenth of circular curve Lungim arc de cerc,m	B, m	D, m	Beginning of linking Început racordare, PC +	Beginning of circular curve Început arc de cerc, PC +	End of circular curve Sfârșit arc de cerc, PC +	End of linking Sfârșit racordare,PC +	Distance Distanța între VU, m	Lunghime aliniament,m		Y	X
	PC+	km	RHS stînga	RHS dreapta																		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Ît	107+84.00	11	0°0'0.0"																		289502,65	166744,95
																		700,21	700,21	SE:42°19.8'		
VU1	114+84.21	11		0°9'43.9"	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	114+84.21	114+84.21	114+84.21	114+84.21				288984,99	167216,47
																		886,05	795,47	SE:42°10.0'		
VU2	123+70.26	12		15°41'17.1"	330,00	90,00	90,00	90,58	90,58	180,36	0,36	4,15	0,79	122+79.68	123+69.68	123+70.04	124+60.04				288328,26	167811,26
																		199,97	23,74	SE:26°28.7'		
VU3	125+69.43	13	20°37'28.0"		250,00	80,00	80,00	85,65	85,65	169,99	9,99	5,19	1,30	124+83.78	125+63.78	125+73.78	126+53.78				288149,27	167900,42
																		470,28	161,33	SE:47°6.2'		
VU4	130+38.41	13	28°35'28.1"		640,00	120,00	120,00	223,30	223,30	439,37	199,37	21,42	7,24	128+15.11	129+35.11	131+34.47	132+54.47				287829,16	168244,94
																		839,47	492,14	SE:75°41.7'		
VU5	138+70.63	14		13°15'26.6"	550,00	120,00	120,00	124,02	124,02	247,26	7,26	4,80	0,78	137+46.61	138+66.61	138+73.88	139+93.88				287621,74	169058,38
																		264,79	48,33	SE:62°26.2'		
VU6	141+34.65	14		50°57'23.6"	130,00	60,00	60,00	92,44	92,44	175,62	55,62	15,28	9,27	140+42.21	141+2.21	141+57.82	142+17.82				287499,21	169293,11
																		185,52	24,88	SE:11°28.8'		
VU7	143+10.90	14	3°48'39.4"		2050,00	0,00	0,00	68,20	68,20	136,35	136,35	1,13	0,05	142+42.70	142+42.70	143+79.06	143+79.06				287317,40	169330,04
																		453,16	317,27	SE:15°17.5'		
VU8	147+64.01	15	15°59'17.0"		250,00	65,00	65,00	67,69	67,69	134,76	4,76	3,16	0,62	146+96.32	147+61.32	147+66.08	148+31.08				286880,29	169449,55
																		768,47	700,78	SE:31°16.8'		
VU9	155+31.87	16		0°31'51.8"	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	155+31.87	155+31.87	155+31.87	155+31.87				286223,52	169848,55
																		728,94	728,94	SE:30°44.9'		
VU10	162+60.81	16		0°17'46.0"	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	162+60.81	162+60.81	162+60.81	162+60.81				285597,05	170221,24
																		439,40	387,65	SE:30°27.1'		
VU11	167+0.20	17	1°58'34.7"		3000,00	0,00	0,00	51,74	51,74	103,48	103,48	0,45	0,01	166+48.46	166+48.46	167+51.94	167+51.94				285218,27	170443,93
																		923,29	674,87	SE:32°25.7'		
VU12	176+23.48	18		1°30'8.5"	15000,00	0,00	0,00	196,67	196,67	393,32	393,32	1,29	0,02	174+26.81	174+26.81	178+20.12	178+20.12				284438,96	170939,04
																		1990,23	1793,56	SE:30°55.6'		
VU13	196+13.69	20		0°34'44.4"	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	196+13.69	196+13.69	196+13.69	196+13.69				282731,68	171961,89
																		586,32	586,32	SE:30°20.8'		
VU14	202+0.00	20	0°11'04"		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	202+0.00	202+0.00	202+0.00	202+0.00				282225,70	172258,13
																		903,96	765,24	SE:30°32.2'		
VU15	211+3.96	21	13°47'38.0"		650,00	120,00	120,00	138,72	138,72	276,49	36,49	5,67	0,95	209+65.24	210+85.24	211+21.73	212+41.73				281447,12	172717,41
																		1649,23	1441,46	SE:44°19.8'		
VU16	227+52.24	23	3°51'30.1"		2050,00	0,00	0,00	69,05	69,05	138,05	138,05	1,16	0,05	226+83.19	226+83.19	228+21.24	228+21.24				280267,38	173869,89
																		554,77	485,72	SE:48°11.3'		
VU17	233+6.96	23	1°38'32.1"		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	233+6.96	233+6.96	233+6.96	233+6.96				279897,53	174283,38
																		394,18	394,18	SV:49°49.9'		
VU18	237+1.14	24		0°31'23.6"	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	237+1.14	237+1.14	237+1.14	237+1.14				279643,27	174584,59
																		266,90	266,90	SE:49°18.5'		
VU19	239+68.04	24	0°6'39.6"		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	239+68.04	239+68.04	239+68.04	239+68.04				279469,25	174786,96

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
																		661,94	575,48	SE:49°25.1'		
VU20	246+29.97	25		8°22'32.2"	600,00	85,00	85,00	86,46	86,46	172,71	2,71	2,11	0,22	245+43.51	246+28.51	246+31.22	247+16.22				279038,64	175289,69
																		513,93	280,84	SE:41°2.6'		
VU21	251+43.69	25	37°18'37.8"		300,00	90,00	90,00	146,63	146,63	285,36	105,36	17,82	7,90	249+97.06	250+87.06	251+92.42	252+82.42				278651,02	175627,15
																		514,97	368,34	SE:78°21.2'		
VU22	256+50.76	26	0°26'3.0"		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	256+50.76	256+50.76	256+50.76	256+50.76				278547,07	176131,52
																		1041,46	927,09	SE:78°47.3'		
VU23	266+92.22	27		25°1'46.5"	320,00	90,00	45,00	114,37	95,45	207,29	72,29	8,47	2,53	265+77.85	266+67.85	267+40.15	267+85.15				278344,56	177153,10
																		171,32	0,44	SE:53°45.5'		
VU24	268+61.01	27		20°21'39.7"	280,00	45,00	90,00	75,43	92,86	167,00	32,00	5,26	1,29	267+85.58	268+30.58	268+62.59	269+52.59				278243,28	177291,27
																		672,21	579,34	SE:33°23.8'		
VU25	275+31.93	28	0°24'1.9"		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	275+31.93	275+31.93	275+31.93	275+31.93				277682,07	177661,28
																		384,84	210,66	SE:33°47.9'		
VU26	279+16.77	28	20°39'54.2"		640,00	120,00	0,00	174,18	119,34	290,83	170,83	11,03	2,69	277+42.59	278+62.59	280+33.42	280+33.42				277362,27	177875,36
																		162,27	0,21	SE:54°27.8'		
VU27	280+76.35	28	14°10'18.7"		340,00	0,00	30,00	42,71	56,83	99,10	69,10	2,67	0,44	280+33.63	280+33.63	281+2.73	281+32.73				277267,95	178007,40
																		142,62	15,58	SE:68°38.1'		
VU28	282+18.53	28	7°54'24.3"		600,00	45,00	120,00	70,22	95,27	165,30	0,30	2,03	0,19	281+48.31	281+93.31	281+93.61	283+13.61				277216,00	178140,22
																		1176,29	859,10	SE:76°32.5'		
VU29	293+94.63	29	7°34'48.2"		3350,00	0,00	0,00	221,92	221,92	443,20	443,20	7,34	0,65	291+72.71	291+72.71	296+15.90	296+15.90				276942,24	179284,21
																		804,43	465,42	SE:84°7.3'		
VU30	301+98.41	30		5°15'28.1"	2550,00	0,00	0,00	117,08	117,08	234,00	234,00	2,69	0,16	300+81.32	300+81.32	303+15.33	303+15.33				276859,86	180084,41
																		332,11	215,02	SE:78°51.9'		
VU31	305+30.35	31	0°30'13.1"		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	305+30.35	305+30.35	305+30.35	305+30.35				276795,72	180410,26
																		662,08	565,03	SE:79°22.1'		
VU32	311+92.43	31		1°35'19.0"	7000,00	0,00	0,00	97,05	97,05	194,09	194,09	0,67	0,01	310+95.38	310+95.38	312+89.46	312+89.46				276673,57	181060,98
																		416,49	29,64	SE:77°46.8'		
VU33	316+8.90	32		27°44'27.9"	930,00	120,00	120,00	289,80	289,80	570,28	330,28	28,60	9,31	313+19.11	314+39.11	317+69.39	318+89.39				276585,41	181468,03
																		1049,37	572,56	SE:50°2.3'		
VU34	326+48.96	33	15°30'4.8"		950,00	120,00	0,00	187,02	131,66	317,02	197,02	9,08	1,66	324+61.94	325+81.94	327+78.97	327+78.97				275911,43	182272,34
																		216,73	4,82	SE:65°32.4'		
VU35	328+64.03	33	43°58'39.8"		195,00	0,00	70,00	80,25	112,62	184,67	114,67	15,87	8,19	327+83.79	327+83.79	328+98.46	329+68.46				275821,69	182469,62
																		359,27	89,80	NE:70°29.0'		
VU36	332+15.11	33	19°56'22.5"		550,00	120,00	120,00	156,85	156,85	311,41	71,41	9,54	2,29	330+58.26	331+78.26	332+49.67	333+69.67				275941,72	182808,25
																		642,08	209,29	NE:50°32.6'		
VU37	338+54.90	34		58°47'57.0"	400,00	100,00	100,00	275,95	275,95	510,50	310,50	60,32	41,39	335+78.96	336+78.96	339+89.45	340+89.45				276349,76	183304,00
																		766,04	490,10	SE:70°39.5'		
VU38	345+79.55	35	0°9'53.3"		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	345+79.55	345+79.55	345+79.55	345+79.55				276096,04	184026,80
																		2647,49	2525,77	SE:70°49.4'		
VU39	372+27.04	37	18°4'44.6"		450,00	100,00	100,00	121,72	121,72	241,99	41,99	6,60	1,44	371+05.32	372+5.32	372+47.31	373+47.31				275226,36	186527,37
																		472,53	247,36	SE:88°54.1'		
VU40	376+98.13	38		4°21'37.4"	1500,00	100,00	0,00	103,46	60,76	164,15	64,15	1,23	0,06	375+94.67	376+94.67	377+58.82	377+58.82				275217,30	186999,82
																		244,13	0,02	SE:84°32.5'		
VU41	379+42.20	38		18°48'28.3"	1100,00	0,00	100,00	183,36	231,07	411,09	311,09	15,18	3,34	377+58.84	377+58.84	380+69.92	381+69.92				275194,08	187242,85
																		691,87	370,94	SE:65°44.0'		
VU42	386+30.73	39		43°16'58.1"	150,00	60,00	60,00	89,87	89,87	173,31	53,31	12,45	6,43	385+40.86	386+0.86	386+54.17	387+14.17				274909,73	187873,59
																		204,97	62,98	SE:22°27.0'		
VU43	388+29.27	40		12°31'42.6"	250,00	50,00	45,00	52,12	50,34	102,17	7,17	1,88	0,29	387+77.15	388+27.15	388+34.32	388+79.32				274720,30	187951,86
																		101,78	0,84	SE:9°55.3'		
VU44	389+30.76	40	23°0'7.2"		150,00	40,00	40,00	50,60	50,60	100,22	20,22	3,53	0,98	388+80.16	389+20.16	389+40.38	389+80.38				274620,04	187969,40
																		268,25	82,86	SE:32°55.4'		
VU45	391+98.02	40	33°13'3.2"		300,00	90,00	90,00	134,79	134,79	263,93	83,93	14,23	5,64	390+63.24	391+53.24	392+37.17	393+27.17				274394,88	188115,19
																		1107,62	972,84	SE:66°8.5'		
VU46	403+0.00	40	0°3'0.5"		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	403+0.00	403+0.00	403+0.00	403+0.00				273946,87	189128,17
																		1414,42	1414,42	SE:66°5.0'		

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
VU47	417+14.42	42	0°5'20.5"		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	417+14.42	417+14.42	417+14.42	417+14.42				273373,45	190421,14
																		803,82	730,32	SE:66°10.3'		
VU48	425+18.24	43	11°41'30.7"		400,00	65,00	65,00	73,49	73,49	146,62	16,62	2,53	0,36	424+44.75	425+9.75	425+26.37	425+91.37				273048,72	191156,44
																		614,56	541,06	SE:77°51.8'		
VU49	431+32.44	43		0°8'31.7"	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	431+32.44	431+32.44	431+32.44	431+32.44				272919,52	191757,27
																		2089,11	2089,11	SE:77°43.3'		
VU50	452+21.54	45		0°8'0.3"	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	452+21.54	452+21.54	452+21.54	452+21.54				272475,26	193798,59
																		1184,67	1080,74	SE:77°35.3'		
VU51	464+6.21	47		15°19'33.0"	400,00	100,00	100,00	103,93	103,93	206,99	6,99	4,65	0,87	463+2.28	464+2.28	464+9.27	465+9.27				272220,64	194955,57
																		683,76	414,57	SE:62°15.8'		
VU52	470+89.10	47	15°57'47.0"		750,00	120,00	120,00	165,26	165,26	328,96	88,96	8,14	1,56	469+23.84	470+43.84	471+32.80	472+52.80				271902,40	195560,76
																		1307,48	978,73	SE:78°13.5'		
VU53	483+95.02	48		13°52'24.4"	850,00	120,00	120,00	163,49	163,49	325,82	85,82	6,98	1,16	482+31.53	483+51.53	484+37.35	485+57.35				271635,60	196840,73
																		2906,15	2742,66	SE:64°21.1'		
VU54	513+0.00	51	0°3'0.7"		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	513+0.00	513+0.00	513+0.00	513+0.00				270377,72	199460,54
																		2071,88	1966,57	SE:64°24.8'		
VU55	533+71.88	53	15°42'50.6"		400,00	100,00	100,00	105,32	105,32	209,70	9,70	4,84	0,93	532+66.57	533+66.57	533+76.27	534+76.27				269482,92	201329,24
																		797,21	599,59	SE:80°7.6'		
VU56	541+68.17	54	11°59'16.8"		450,00	90,00	90,00	92,31	92,31	184,15	4,15	3,23	0,47	540+75.86	541+65.86	541+70.01	542+60.01				269346,23	202114,65
																		714,05	540,28	NE:87°53.1'		
VU57	548+81.75	55		18°46'10.4"	250,00	80,00	80,00	81,46	81,46	161,90	1,90	4,47	1,02	548+0.29	548+80.29	548+82.19	549+62.19				269372,59	202828,21
																		1607,41	1452,07	SE:73°20.7'		
VU58	564+88.14	57		17°38'8.3"	250,00	70,00	70,00	73,89	73,89	146,95	6,95	3,82	0,82	564+14.25	564+84.25	564+91.20	565+61.20				268911,91	204368,20
																		319,06	245,18	SE:55°42.6'		
VU59	568+6.38	57	0°7'37.0"		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	568+6.38	568+6.38	568+6.38	568+6.38				268732,15	204631,81
																		300,84	300,84	SE:55°50.2'		
VU60	571+7.22	57	0°56'28.7"		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	571+7.22	571+7.22	571+7.22	571+7.22				268563,22	204880,74
																		330,50	153,67	SE:56°46.7'		
VU61	574+37.73	57		35°6'29.6"	400,00	100,00	100,00	176,84	176,84	345,10	145,10	20,63	8,57	572+60.89	573+60.89	575+5.99	576+5.99				268382,14	205157,23
																		426,87	100,14	SE:21°40.2'		
VU62	578+56.02	58	44°54'8.7"		265,00	80,00	80,00	149,89	149,89	287,68	127,68	22,82	12,10	577+6.13	577+86.13	579+13.81	579+93.81				267985,44	205314,85
																		1141,25	917,27	SE:66°34.4'		
VU63	589+85.18	59		17°43'44.1"	250,00	70,00	70,00	74,09	74,09	147,36	7,36	3,85	0,83	589+11.08	589+81.08	589+88.44	590+58.44				267531,69	206362,02
																		461,36	282,56	SE:48°50.6'		
VU64	594+45.71	59	11°20'54.9"		550,00	100,00	100,00	104,71	104,71	208,94	8,94	3,47	0,48	593+41.00	594+41.00	594+49.93	595+49.93				267228,07	206709,39
																		904,08	436,21	SE:60°11.5'		
VU65	603+49.31	60	35°22'35.7"		950,00	120,00	120,00	363,16	363,16	706,57	466,57	47,80	19,76	599+86.14	601+6.14	605+72.71	606+92.71				266778,65	207493,86
																		767,67	404,50	NE:84°25.9'		
VU66	610+97.21	61	0°32'23.0"		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	610+97.21	610+97.21	610+97.21	610+97.21				266853,15	208257,90
																		605,45	605,45	NE:83°53.5'		
VU67	617+2.66	62	0°20'16.7"		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	617+2.66	617+2.66	617+2.66	617+2.66				266917,58	208859,91
																		738,19	738,19	NE:83°33.2'		
VU68	624+40.86	62	0°17'25.6"		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	624+40.86	624+40.86	624+40.86	624+40.86				267000,46	209593,44
																		964,64	964,64	NE:83°15.8'		
VU69	634+5.50	63		0°5'19.2"	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	634+5.50	634+5.50	634+5.50	634+5.50				267113,62	210551,42
																		1179,57	654,68	NE:83°21.1'		
VU70	645+85.35	65		50°38'53.0"	1000,00	100,00	100,00	523,40	523,40	983,98	783,98	106,77	62,83	640+61.94	641+61.94	649+45.92	650+45.92				267250,22	211723,34
																		820,79	131,32	SE:46°0.0'		
VU71	653+43.31	65	17°26'27.8"		700,00	120,00	85,00	166,06	151,36	315,58	110,58	8,84	1,84	651+77.24	652+97.24	654+7.83	654+92.83				266680,05	212313,77
																		283,22	12,36	SE:63°26.5'		
VU72	656+24.69	66	15°30'39.2"		550,00	85,00	120,00	119,50	133,00	251,39	46,39	5,91	1,11	655+5.19	655+90.19	656+36.58	657+56.58				266553,42	212567,10
																		744,58	611,58	SE:78°57.1'		
VU73	663+68.16	66	0°8'59.9"		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	663+68.16	663+68.16	663+68.16	663+68.16				266410,73	213297,88
																		297,57	297,57	SE:79°6.1'		
St	666+65.73	67	0°0'0.0"																		266354,48	213590,08

**List of existing bridges and culverts**  
**Lista podurilor si podețelor existente**

Nr.	PC+	Data about bridges and culverts Date despre poduri si podețe	Length Lungimea,m l	Note Notă
1	269+06	<b>RC Bridge</b> <b>Pod beton armat</b>	28,25	
2	273+32	RC Beton armat Ø 1,5	26,81	
2	281+26	RC Beton armat Ø 1,5	35,45	
3	300+91	<b>RC Bridge</b> <b>Pod beton armat</b>	33,56	
4	318+77	RC Beton armat Ø 1,0	19,36	
5	330+84	RC Beton armat 2xØ 0,8	45,60	
6	333+39	<b>RC Bridge</b> <b>Pod beton armat</b>	28,16	
7	342+73	RC Beton armat 2xØ 1,0	15,12	
8	349+11	RC Beton armat 2xØ 1,0	15,65	
9	354+86	RC Beton armat Ø 1,0	21,59	
10	368+93	<b>RC Bridge</b> <b>Pod beton armat</b>	4,00	
11	375+38	RC Beton armat Ø 1,0	15,22	
12	378+03	RC Beton armat Ø 1,0	14,97	
13	382+32	RC Beton armat Ø 1,0	15,28	

**List of Existing end Designed Kerbs**  
**Lista bordurelor existente si proiectate**

Nr	Location Poziție PC+		Length Lungimea	Existing Existent		Designed Proiectat		Note Notă
	LHS stînga	RHS Dreapta	m	LHS Stînga	RHS Dreapta	LHS Stînga	RHS Dreapta	9
1	315+73-316+83		227	227				PECO
2	343+43-343+66		20			40		s.Grigareuca
3		343+96-346+59	237				474,0	s.Grigareuca
4	349+08-349+43		35			70		s.Grigareuca
5	352+37-355+01		258			516		s.Grigareuca
6	355+57-356+13		45	45		90		s.Grigareuca
7		370+27-370+34	7				14,0	s.Copaceni
8	371+82-373+14		129			258		s.Copaceni
9		374+62-374+79	17		17			s.Copaceni
10	379+64-379+92		14	14				s.Copaceni
11	380+54-380+96		42			84		s.Copaceni
<b>Total</b>			<b>1031</b>	<b>286</b>	<b>17</b>	<b>1058</b>	<b>488</b>	

## List of designed lined side drains

## Lista șanțurilor proiectate

№	Side drain Șanț de pământ			C C side drain I<5% Șanț din beton monolit I<5%			C C drain i>5% Șanțul pentru apă rapidă din beton monolit i>5%		
	LHS Stînga	RHS Dreapta	Length Lungime, ml	LHS Stînga	RHS Dreapta	Length Lungime, ml	LHS Stînga	RHS Dreapta	Length Lungime, ml
	PC+	PC+		PC+	PC+		PC+	PC+	
1	2	3	4	5	6	7	8	9	10
33	266+00-267+00		100						
34		271+00-272+20	120						
35					276+00-277+00	100			
36		277+00-279+00	200						
37					279+00-280+44	144			
38					280+67-281+26	59			
39								281+26-282+00	74
40							281+26-283+00		224
41					282+00-284+60	260			
42				283+00-285+12		212			
43		287+32-289+00	168						
44	288+06-289+00		94						
45	320+00-328+02		802						
46									
47							329+66-331+25		159
48	340+00-342+73		273						
49				342+73-364+19		2146			
50					355+58-359+85	427			
51				364+29-366+25		196			
52					366+30-368+00	170			
53	370+00-372+50		250						
54				372+50-378+85		635			
55					380+25-389+75	950			
56				380+60-383+00		240			
Total			2007			5539			457

**List of Lined Existing drains**  
**Lista șanțurilor existente din beton ciment**

Nr.	Location of the lines drains Amplasarea șanțului din beton- ciment		Length Lungimea, ml	Note Notă
	LHS Stînga PC+	RHS Dreapta PC+		
1	2	3	4	5
1		282+80-287+32	452	Silty / Împotmolit 20%
2	285+12-288+06		294	Silty/ Împotmolit 80%
3	328+02-329+66		164	Silty / Împotmolit 60%
	<b>Total</b>		<b>910</b>	

## PAVEMENT QUANTITIES VOLUMELE SISTEMULUI RUTIER

Nr.	PC +	PC +	Length Lungime, m	Existing pavement Sistem rutier existent			Designed pavement Sistem rutier proiectat																Structure of pavement Construcția sistemul rutier																							
				width Latimea, m			width Latimea, m	Passing lane Banda de incadrare, m	widwnwd roadway surface in curve Suprafața lărgirii părții carosabile in viraj, mp	Area total Suprafața totala ( fara supralărgirii in viraj), mp	Wearing course surface +widening at turn Suprafața stratului de egalizare + lărgirii in viraj, mp	new pavement surface +widwnwd curve Suprafata sistemului rutier nou + lărgirii in viraj, mp	Average thickness of regulating layer H med, a stratului de egalizare, cm	Surfaces of asphalt stabilized with bitume Amorsarea suprafețelor de asfalt existente cu bitum 0,3l/mp, t	Regulating with fine grained porous asphalt Egalizare cu beton asfaltic poros, t	Reinforcement Ranforsare						Permeable sand layer Strat drenat din nisip, H=20 cm, mc	Subgrade crushed stone Strat de fundație din piatra concasată de calcar M600 H-22,5cm , mp			Subgrade crushed stone Strat de fundație din piatra concasată de granit M1000 H-22,5cm , mp			Surfaces of granit crushed stone stabilized with bitum Amorsarea suprafețelor din amestecuri de piatra concasată de granit cu bitum 0,6l/mp, t	Course graniner asphalt concret Beton asfaltic cu granulație mare poros M1 h=8,5cm, t	Surfaces of gravel stabilized with bitume Amorsarea suprafețelor din criblura anrobata cu bitum 0,3l/mp, t	Fine porous asphalt concrete Beton asfaltic cu granulație fina poros M1 h=6cm, t	Surfaces of asphalt stabilized with bitum Amorsarea suprafețelor de asfalt cu bitum 0,3l/mp, t	Fine graniner asphalt concret Beton asfaltic cu granulație fina Tip A M1 h=4cm, t												
																LHS Stinga, m	RHS Drepta, m	Total	LHS Stinga, m	RHS Drepta, m	Total		LHS Stinga, m	RHS Drepta, m	Total	Lower layer Strat de josh-H-12,5	Top layer Strat de sus H- 10cm								Lower layer Strat de josh-H-12,5	Top layer Strat de sus H- 10cm										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56		
1	266+00	266+20	20	8,39	7,98	16,37	Ia	7,00	7,00	0,50	0,50			150	150	300	150	150	300				7,0	0,09	62,8																		0,09	29,2		
2	266+20	266+30	10	7,58	7,95	15,53		7,00	7,00	0,50	0,50					75	75	150	75	75	150						0,05	24,4																0,05	14,6	
3	266+30	266+40	10	7,58	7,95	15,53		7,00	7,00	0,50	0,50					75	75	150	75	75	150						0,05	24,4																0,05	14,6	
4	266+40	266+60	20	7,58	7,95	15,53		7,00	7,00	0,50	0,50					133	133	265	133	133	265						0,08	110,1																	0,08	25,8
5	266+60	266+80	20	7,49	7,31	14,80	VI	5,25	5,25	0,50	0,50	125,8		144	144	288	144	144	288				13,50	0,09	90,4																			0,09	28,1	
6	266+80	267+00	20	5,22	7,17	12,39		5,25	5,25	0,50	0,50					133	133	265	104	133	237	28			28		0,07	74,3																0,07	25,8	
7	267+00	267+20	20	5,01	5,90	10,91		5,25	5,25	0,50	0,50					121	121	242	100	118	218	21		3	23		0,12	121,5																	0,12	44,8
8	267+20	267+60	40	4,75	4,94	9,69		5,25	5,25	0,50	0,50					230	230	460	190	198	388	40		32	72		0,08	83,1																		0,08
9	267+60	267+85	25	4,39	4,41	8,80		5,25	5,25	0,50	0,50			144	144	288	110	110	265	34	34	148	13,50	0,03	27,6																				0,03	11,2
10	267+85	267+95	10	4,39	4,41	8,80		5,25	5,25	0,50	0,50					58	58	115	44	44	88	14		13	27		0,07	69,0																0,07	28,0	
11	267+95	268+20	25	4,39	4,41	8,80		5,25	5,25	0,50	0,50					144	144	288	110	110	220	34		34	68		0,05	54,5																	0,05	22,4
12	268+20	268+40	20	3,87	4,83	8,70		5,25	5,25	0,50	0,50					115	115	230	77	97	174	38		18	56		0,05	56,2																	0,05	22,4
13	268+40	268+60	20	4,22	4,75	8,97	VIII	5,25	5,25	0,50	0,50			115	115	230	84	95	179	31	20	51		0,06	60,4																			0,06	22,4	
14	268+60	268+80	20	5,40	4,23	9,63		5,25	5,25	0,50	0,50					115	115	230	108	85	193	7	30	147																			0,07	22,4		
15	268+80	268+92	12			0,00		5,25	5,25	0,50	0,50					69	69	138			0	69	69	138																				0,04	13,4	
16	268+92	269+20	28	pod																																										
17	269+20	270+20	100			0,00	VIII	5,25	5,25	0,50	0,50			575	575	1150			0	575	575	1150																								
18	270+20	270+60	40	3,96	3,56	7,52		5,25	5,25	0,50	0,50					230	230	460	158	142	301	72	88	159		0,09	67,4	28,2	0,09																	
19	270+60	271+80	120	3,99	3,44	7,43		5,25	5,25	0,50	0,50					690	690	1380	479	413	892	211	277	488		0,27	155,4	83,7	0,27																	
20	271+80	273+20	140	4,20	3,89	8,09		5,25	5,25	0,50	0,50					805	805	1610	588	545	1133	217	260	477		0,34	197,4	106,4	0,34																	
21	273+20	273+80	60	4,14	4,25	8,39	VI	5,25	5,25	0,50	0,50			345	345	690	248	255	503	97	90	187		0,15	87,7	47,3	0,15																			
22	273+80	274+00	20	3,90	4,08	7,98		5,25	5,25	0,50	0,50					115	115	230	78	82	160	37	33	70		0,05	27,8	15,0	0,05																	
23	274+00	275+60	160	3,90	4,08	7,98		5,25	5,25	0,50	0,50					920	920	1840	624	653	1277	296	267	563		0,38	316,6	119,9	0,38																	
24	275+60	276+00	40	3,70	4,12	7,82		5,25	5,25	0,50	0,50					230	230	460	148	165	313	82	65	147		0,09	72,7	29,4	0,09																	
25	276+00	276+50	50	3,70	4,12	7,82	VIII	5,25	5,25	0,50	0,50			288	288	575	185	206	391	103	82	184		0,12	90,8	36,7	0,12																			
26	276+50	277+00	50	3,70	4,12	7,82		5,25	5,25	0,50	0,50					288	288	575		0	288	288	575																							
27	277+00	277+20	20	3,47	4,36	7,83		5,25	5,25	0,50	0,50					115	115	230	69	87	157	46	28	73		0,05	39,5	14,7	0,05																	
28	277+20	277+60	40	3,70	3,73	7,43		5,25	5,25	0,50	0,50					230	230	460	148	149	297	82	81	163		0,09	48,4	27,9	0,09																	
29	277+60	278+20	60	3,75	3,94	7,69	VI	5,25	5,25	0,50	0,50			345	345	690	225	236	461	120	109	229		0,14	75,1	43,3	0,14																			
30	278+20	278+40	20	3,22	4,19	7,41		5,25	5,25	0,50	0,50					115	115	230	64	84	148	51	31	82		0,04	24,1	13,9	0,04																	
31	278+40	278+60	20	3,22	4,19	7,41		5,25	5,25	0,50	0,50					115	115	230			115	115	230																							
32	278+60	279+00	40	4,00	4,00	8,00		5,25	5,25	0,50	0,50					230	230	460				230	230	460																						
33	279+00	279+25	25	3,90	3,90	7,80		5,25	5,25	0,50	0,50			144	144	288				144	144	288																								
34	279+25	279+50	25	3,80	3,80	7,60		5,25	5,25	0,50	0,50					144	144	288				144	144	288																						
35	279+50	280+00	50	3,70	3,70	7,40		5,25	5,25	0,50	0,50					288	288	575				288	288	575																						
36	280+00	280+34	34	3,70	3,70	7,40		5,25	5,25	0,50	0,50					196	196	391				196	196	576																						
37	280+34	281+00	66	3,90	3,90	7,80	VIII	5,25	5,25	0,50	0,50			380	380	759				380	380	759																								
38	281+00	281+25	25	4,10	4,10	8,20		5,25	5,25	0,50	0,50					144	144	288				144	144	288																						
39	281+25	281+40	15	4,00	4,00	8,00		5,25	5,25	0,50	0,50					86	86	173				86	86	269																						
40	281+40	282+00	60	4,10	4,10	8,20		5,25	5,25	0,50	0,50					345	345	690				345	345	690																						
41	282+00	282+25	25	4,90	4,90	9,80		5,25	5,25																																					



	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
55	290+20	290+50	30	4,26	6,90	11,16	II	5,25	5,25	0,50	0,50			173	173	345	128	173	300	45		45	6,00	0,09	42,3							30,3	9,6	7,7	0,9	9,6	7,7	0,9	0,04	8,9	0,01	6,3	0,10	33,6
56	290+50	291+00	50	9,96	6,95	16,91		5,25	5,25	0,50	0,50			288	288	575	288	288	575					0,17	80,9																	0,17	56,0	
57	291+00	291+15	15	9,40	6,87	16,27	5,25	5,25	0,50	0,50			86	86	173	86	86	173				0,05		24,3																	0,05	16,8		
58	291+15	291+40	25	8,60	6,86	15,46	5,25	5,25	0,50	0,50			144	144	288	144	144	288				0,09		40,5																	0,09	28,0		
59	291+40	291+60	20	7,35	6,74	14,09	5,25	5,25	0,50	0,50			115	115	230	115	115	230				0,07		32,4																	0,07	22,4		
60	291+60	292+20	60	6,70	6,69	13,39	5,25	5,25	0,50	0,50			345	345	690	345	345	690				0,21		97,1																0,21	67,2			
61	292+20	292+40	20	7,28	7,08	14,36	V	5,25	5,25	0,50	0,50			115	115	230	115	115	230					0,07	32,4																0,07	22,4		
62	292+40	292+60	20	7,85	7,30	15,15	5,25	5,25	0,50	0,50			115	115	230	115	115	230				0,07		44,4																0,07	22,4			
63	292+60	292+80	20	7,74	6,87	14,61	5,25	5,25	0,50	0,50			115	115	230	115	115	230				0,07		32,4																0,07	22,4			
64	292+80	293+00	20	7,40	6,13	13,53	5,25	5,25	0,50	0,50			115	115	230	115	115	230				0,07		32,4																0,07	22,4			
65	293+00	293+20	20	7,30	5,47	12,77	5,25	5,25	0,50	0,50			115	115	230	115	109	224			6	6		0,07	31,6							28,5	4,3	3,5	0,4	4,3	3,5	0,4	0,02	1,1	0,002	0,8	0,07	22,4
66	293+20	293+40	20	6,91	4,98	11,89	5,25	5,25	0,50	0,50			115	115	230	115	100	215			15	15	0,06	30,2							30,7	5,9	4,7	0,6	5,9	4,7	0,6	0,02	3,1	0,005	2,2	0,07	22,4	
67	293+40	293+60	20	5,82	4,60	10,42	5,25	5,25	0,50	0,50			115	115	230	115	92	207			23	23	0,06	29,1							32,3	7,1	5,7	0,7	7,1	5,7	0,7	0,03	4,6	0,007	3,2	0,07	22,4	
68	293+60	294+20	60	4,50	4,21	8,71	5,25	5,25	0,50	0,50			345	345	690	270	253	523	75	92	167	0,16	73,5							118,7	36,8	29,4	3,5	36,8	29,4	3,5	0,14	33,3	0,050	23,6	0,21	67,2		
69	294+20	295+20	100	4,14	3,63	7,77	5,25	5,25	0,50	0,50			575	575	1150	414	363	777	161	212	373	0,23	109,3							218,5	76,1	60,9	7,2	76,1	60,9	7,2	0,29	74,3	0,112	52,5	0,35	112,0		
70	295+20	295+40	20	3,75	4,34	8,10	5,25	5,25	0,50	0,50			115	115	230	75	87	162	40	28	68	0,05	22,8							42,3	14,2	11,4	1,4	14,2	11,4	1,4	0,05	13,6	0,020	9,6	0,07	22,4		
71	295+40	295+60	20	3,46	4,57	8,03	5,25	5,25	0,50	0,50			115	115	230	69	91	161	46	24	69	0,05	22,6							42,6	14,4	11,5	1,4	14,4	11,5	1,4	0,05	13,8	0,021	9,8	0,07	22,4		
72	295+60	296+00	40	3,35	4,07	7,42	5,25	5,25	0,50	0,50			230	230	460	134	163	297	96	67	163	0,09	41,8							90,5	32,6	26,1	3,1	32,6	26,1	3,1	0,12	32,5	0,049	23,0	0,14	44,8		
73	296+00	297+00	100	3,73	4,01	7,74	5,25	5,25	0,50	0,50			575	575	1150	373	401	774	202	174	376	0,23	100,8	72,7	0,23					219,1	76,5	61,2	7,3	76,5	61,2	7,3	0,29	74,9	0,113	52,9	0,35	112,0		
74	297+00	297+80	80	4,17	4,13	8,30	5,25	5,25	0,50	0,50			460	460	920	334	330	664	126	130	256	0,20	77,9	62,3	0,20					165,4	54,2	43,3	5,2	54,2	43,3	5,2	0,21	51,0	0,077	36,0	0,28	89,6		
75	297+80	299+20	140	3,96	3,99	7,95	5,25	5,25	0,50	0,50			805	805	1610	554	559	1113	251	246	497	0,33	130,6	104,5	0,33					300,3	102,5	82,0	9,8	102,5	82,0	9,8	0,39	99,0	0,149	69,9	0,48	156,8		
76	299+20	300+00	80	3,70	4,05	7,75	5,25	5,25	0,50	0,50			460	460	920	296	324	620	164	136	300	0,19	72,7	58,2	0,19					175,1	61,1	48,9	5,8	61,1	48,9	5,8	0,23	59,8	0,090	42,2	0,28	89,6		
77	300+00	300+10	10	3,70	4,05	7,75	5,25	5,25	0,50	0,50			58	58	115	37	41	78	21	17	38	0,02	9,1																					

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
142	333+00	333+24	24	3,90	3,90	7,80	VI	5,25	5,25	0,50	0,50	103,1		138	138	276				138	138	276	6,5								93,5	47,6	38,1	4,5	47,6	38,1	4,5	0,18	55,0	0,08	38,8	0,08	26,9		
143	333+24	333+52	28		pod									0	0	0																													
144	333+52	334+00	48	3,60	3,60	7,20		5,25	5,25	0,50	0,50			276	276	552						276		276	705								220,6	119,4	95,5	11,4	119,4	95,5	11,4	0,45	140,5	0,21	99,2	0,17	53,8
145	334+00	334+25	25	3,50	3,50	7,00		5,25	5,25	0,50	0,50			144	144	288						144		144	288								97,4	49,6	39,7	4,7	49,6	39,7	4,7	0,19	57,3	0,09	40,5	0,09	28,0
146	334+25	335+20	95	3,20	3,20	6,40		5,25	5,25	0,50	0,50			546	546	1093						546		546	1093								369,9	188,5	150,8	18,0	188,5	150,8	18,0	0,72	217,6	0,33	153,7	0,33	106,4
147	335+20	335+60	40	3,77	3,49	7,26		5,25	5,25	0,50	0,50			230	230	460	151	140	290	79	90	170		0,09	57,3								91,9	33,6	26,9	3,2	33,6	26,9	3,2	0,13	33,8	0,05	23,9	0,14	44,8
148	335+60	336+20	60	3,91	3,92	7,83		5,25	5,25	0,50	0,50		205,2	345	345	690	235	235	470	110	110	220		0,14	71,6								130,3	45,1	36,1	4,3	45,1	36,1	4,3	0,17	43,9	0,07	31,0	0,21	67,2
149	336+20	336+50	30	3,53	4,24	7,77		5,25	5,25	0,50	0,50			173	173	345	106	127	233	67	45	112		0,07	35,5								65,5	22,8	18,3	2,2	22,8	18,3	2,2	0,09	22,3	0,03	15,7	0,10	33,6
150	336+50	340+50	400	5,37	4,76	10,13		5,25	5,25	0,50	0,50			2300	2300	4600	2148	1904	4052	152	396	548		1,22	617,5								666,2	155,6	124,5	14,8	155,6	124,5	14,8	0,59	109,2	0,16	77,1	1,38	448,0
151	340+50	340+89	39	3,62	4,68	8,30		5,25	5,25	0,50	0,50			224	224	449	141	183	324	83	42	330		0,10	49,3								125,8	58,7	47,0	5,6	58,7	47,0	5,6	0,22	65,7	0,10	46,4	0,13	43,7
152	340+89	341+60	71	3,72	4,47	8,19		5,25	5,25	0,50	0,50			408	408	817	264	317	581	144	91	235		0,17	88,6								148,5	49,3	39,5	4,7	49,3	39,5	4,7	0,19	46,8	0,07	33,1	0,24	79,5
153	341+60	342+40	80	3,44	3,96	7,40		5,25	5,25	0,50	0,50			460	460	920	275	317	592	185	143	328		0,18	90,2								181,3	65,5	52,4	6,2	65,5	52,4	6,2	0,25	65,3	0,10	46,1	0,28	89,6
154	342+40	342+80	40	3,61	3,42	7,03	5,25	5,25	0,50	0,50		230	230	460	144	137	281	86	93	179	0,08	55,9							93,9	35,1	28,1	3,3	35,1	28,1	3,3	0,13	35,6	0,05	25,2	0,14	44,8				
155	342+80	343+00	20	3,84	3,12	6,96	5,25	5,25	0,50	0,50		115	115	230	77	62	139	38	53	91	0,04	21,2							47,3	17,8	14,2	1,7	17,8	14,2	1,7	0,07	18,1	0,03	12,8	0,07	22,4				
156	343+00	343+40	40	4,13	3,16	7,29	5,25	5,25	0,50	0,50		230	230	460	165	126	292	65	104	168	0,09	44,4							91,6	33,5	26,8	3,2	33,5	26,8	3,2	0,13	33,5	0,05	23,7	0,14	44,8				
157	343+40	344+20	80	3,87	3,47	7,34	5,25	5,25	0,50	0,50		460	460	920	310	278	587	150	182	333	0,18	89,5							182,3	66,3	53,0	6,3	66,3	53,0	6,3	0,25	66,3	0,10	46,8	0,28	89,6				
158	344+20	344+80	60	3,62	3,46	7,08	5,25	5,25	0,50	0,50		345	345	690	217	208	425	128	137	265	0,13	64,7							140,2	52,2	41,7	5,0	52,2	41,7	5,0	0,20	52,8	0,08	37,3	0,21	67,2				
159	344+80	345+00	20	3,91	3,50	7,41	5,25	5,25	0,50	0,50		115	115	230	78	70	148	37	45	82	0,04	22,6							45,3	16,3	13,1	1,6	16,3	13,1	1,6	0,06	16,3	0,02	11,5	0,07	22,4				
160	345+20	345+20	20	3,64	3,55	7,18	5,25	5,25	0,50	0,50		115	115	230	73	71	144	42	44	86	0,04	21,9							46,3	17,1	13,6	1,6	17,1	13,6	1,6	0,06	17,2	0,03	12,1	0,07	22,4				
161	345+20	345+60	40	3,14	3,51	6,65	5,25	5,25	0,50	0,50		230	230	460	126	140	266	104	90	194	0,08	40,5							97,2	37,5	30,0	3,6	37,5	30,0	3,6	0,14	38,6	0,06	27,3	0,14	44,8				
162	347+00	346+00	40	3,04	3,31	6,35	5,25	5,25	0,50	0,50		230	230	460	122	132	254	108	98	206	0,08	38,7							99,9	39,4	31,5	3,8	39,4	31,5	3,8	0,15	41,0	0,06	29,0	0,14	44,8				
163	346+00	346+40	40	3,54	3,09	6,63	5,25	5,25	0,50	0,50		230	230	460	142	124	265	88	106	195	0,08	40,4							97,4	37,6	30,1	3,6	37,6	30,1	3,6	0,14	38,8	0,06	27,4	0,14	44,8				
164	346+40	346+80	40	3,81	3,43	7,24	5,25	5,25	0,50	0,50		230	230	460	152	137	290	78	93	170	0,09	44,1							92,0	33,8	27,0	3,2	33,8	27,0	3,2	0,13	33,9	0,05	24,0	0,14	44,8				
165	346+80	348+20	40	3,57	3,37	6,94	5,25	5,25	0,50	0,50		230	230	460	143	135	278	87	95	182	0,08	42,3							94,7	35,7	28,5	3,4	35,7	28,5	3,4	0,14	36,3	0,05	25,7	0,14	44,8				
166	348+20	348+80	60	3,02	3,60	6,62	5,25																																						

## List of chutes on the slope

## Lista cascadelor pe taluz

Nr.	Designed Proiectat			
	LHS Stînga PC+	RHS Dreapta PC+	Length Lungimea	Dissipating basin for chuts Cămin de disipare pentru cascadi
1	2	3	4	5
1	270+00		14,0	1
2		270+00	13,0	1
3	270+40		14,0	1
4		270+40	6,5	1
5	270+80		18,0	1
6		270+80	3,5	1
7	271+40		10,0	1
8	274+50		10,0	1
9		274+50	2,0	1
10	275+15		11,0	1
11		275+15	9,0	1
12	275+80		12,0	1
13		275+80	8,5	1
14	276+40		10,0	1
15		276+40	3,0	
16	278+80		8,0	1
17	279+33		24,0	1
18	280+00		30,0	1
19	280+60		40,0	1
20	281+15		26,0	1
21	281+70		20,0	
22	282+25		13,5	
23	282+76		8,0	
24		282+76	7,0	
25	283+45		4,0	
26		283+45	1,0	

Nr.	Designed Proiectat			
	LHS Stînga PC+	RHS Dreapta PC+	Length Lungimea	Dissipating basin for chuts Cămin de disipare pentru cascadi
1	2	3	4	5
26		283+45	1,0	
27	284+10		3,0	
28		284+10	1,0	
29	284+75		3,5	
30		284+75	1,0	
31	285+35		3,5	1
32		285+35	1,0	
33	323+90		1,0	1
34		323+90	5,5	1
35	324+40		1,0	1
36		324+40	6,0	1
37	324+91		2,0	1
38		324+91	6,0	1
39	329+05		1,5	
40	329+50		1,5	
41	329+95		2,5	
42		330+20	20	1
43	330+30		18	
44		330+90	26	1
45	330+90		23	
46	331+25		22	
47	331+60		19	1
48	332+15		9,5	1
49	332+60		9,0	1
50	333+00		7,2	1
<b>Total</b>			<b>520</b>	<b>32,0</b>

**Side roads construction**  
**Amenajarea drumurilor laterale**

Nr.	Location Amplasarea		Type of cross road Tipul drumului de intersecție (tipul ombrăcămintei rutiere existente)	Cross angle Unghi de intersecție	Excavarea pamintului cu autogrederul cu împingere la 30m, pământ gr. III, mc	Area,type of designed pavement, sq m Suprafața , tip ombrăcăminte rutieră proiectat, mp				Culvert Podeț				Note Notă		
	LHS stînga	RHS dreaptă				Tip I	Tip II	Tip III	Tip IV	Existing Existent		Designed Proiectat				
										Ø, m	L, m	Ø, m	L, m			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
1	266+04		Asphalt concrete Beton asphaltic	2		Volumes are specified in list of part								Sîngerei		
2	268+35			91		Volumele sunt prevazute in liste aparte								Sîngerei		
3		280+44		62			276				1,0	25,0			s. Vrînești, se demoleaza	
4		295+31		77		228									Fermă	
5	301+60		Crushed stone Piatră spartă	82	31		76	20	60					Sîngerei		
6		306+04	Asphalt concrete Beton asphaltic	95		417								s. Berejeni		
7	306+25		Crushed stone Piatră spartă	87			180							Sîngerei		
8		329+59	Earth Pămînt	51	63			83	60					În cîmp		
9	337+18		Asphalt concrete Beton asphaltic	33		Volumes are specified in list of part Volumele sunt prevazute in liste aparte								Sîngerei		
10	338+09			132												Sîngerei
11	338+49			55												Sîngerei
12	339+40			142												Sîngerei
13	345+93		Crushed stone Piatră spartă	109	43		63	84		1,0	10,2	1,0	5,0	Stradă		



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
43	381+71		Beton asfaltic	102		103				1,0	5,0	1,0	10,0	Stradă
44		381+75	Crushed stone Piatră spartă	92	40		58	79				1,0	10,0	Stradă
45	382+58		Asphalt concrete Beton asfaltic	96		104						1,0	10,0	Stradă
<b>Total</b>					<b>1307</b>	<b>1288</b>	<b>2136</b>	<b>2481</b>	<b>120</b>	<b>7</b>	<b>70</b>	<b>13</b>	<b>130</b>	

Foundation of crushed stone stabilized with bitume

**Notă:** Amorsarea fundatiei din piatra sparta cu bitum -0,6 l/m2

30701

Lower layer of asphalt stabilized with bitume

Amorsarea stratului de jos din asfalt cu bitum -0,3 l/m2

30702

**Tip I**

Fine graniner asphalt concret

Beton asfaltic cu granulație fină Tip A M I

-4cm

30801

Levelling with fine grained porous asphalt concrete

Egalizare cu beton asfaltic cu granulație fina poros M I Hmed - 3cm

30501

**Tip II**

Fine graniner asphalt concret

Beton asfaltic cu granulație fină dens tip A M I

-4cm

30801

Coarse grained porous asphalt concret of coarse grained crushed ston

Beton asfaltic cu granulație mare poros din pietriș cu granulație mare tip M I -6cm

30805

Piatra sparta/Crushed stone

-15cm

30602

**Tip III**

Fine graniner asphalt concret

Beton asfaltic cu granulație fină dens tip A M I

-4cm

30801

Course graniner asphalt concret

Beton asfaltic cu granulație mare poros M I

-6cm

30805

Crushed stone/Piatra sparta

-25cm

30602

Coarse grained sand / Nisip cu granulație mare(ПГС)

-15cm

30601

**Tip IV**

Crushed stone

Piatră concasată M 300 -20cm

30602

Coarse grained sand

Nisip cu granulație mare(ПГС) -15cm

30601

**Property accesses**  
**Întrări în curți**

Nr.	Existing Existente			Designed Proiectat			Earth work Lucrări de pământ			Surfaces of pavement Suprafața sistemului rutier		Bridge dal concrete Podeț, dală din beton			Property accesses Acces in curti				Note Nota
	LHS Stînga	RHS Dreapta	Length Lungimea, ml	LHS Stînga	RHS Dreapta	Length Lungimea, ml	Earth excavation s Excavarea pămîntului cu exc.0,65 in carier	Level Surfaces wiith bulldozer Planificarea cu buldozer pînă la 30m	Backfilk of embankment with roller Compactarea terasamentului cu rulou	Type tip1	Type tip2	Existing Existente	Designed ProiectatØ,6m.	Dal concrete dala din beton, buc/m3	Type Tip I	Type Tip II	Type Tip III	Type Tip IV	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
s. Grigoreuca																			
1	343+41		8,2							29				2			1		
2	343+60		7,9							28				2			1		
3					343+76	6,3					23				1				
4					343+94	6,4					23				1				
5	344+01		7,5							27				2			1		
6					344+12	5,7					21				1				
7					344+68	5,5					20				1				
8					344+98	6,8					24				1				
9					345+34	6,9					25				1				
10	346+31		10,7							36		6,0					1		
11					346+83	6,6					24				1				
12				346+93		6,6					24			2			1		
13				347+23		7,3					26			2			1		
14				347+51		6,7					24			2			1		
15					347+65	5,7					21				1				
16				348+37		7,2					26			2			1		
17				349+64		7,8					28			2			1		
18					349+81	5,8	6,0	6,0	6,0		21				1				
19				349+99		8,4					29			2			1		
20					350+76	8,0	10,0	10,0	10,0		28				1				
21				350+82		9,7					33			2			1		
22					351+11	7,5	12,0	12,0	12,0		27				1				
23				351+12		10,2					34			2			1		

## Rehabilitation of R 14 Road Bălți - Sărăteni, km 26,6 - 38,3

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
24				351+17		10,2					34			2			1		
25				352+12		9,7					33			2			1		
26					352+41	3,3					11				1				
27				353+89		10,0					34			2			1		
28					354+01	8,8	20,0	20,0	20,0		30				1				
29				354+69		10,7					36			2			1		
30					355+89	8,9					29			2			1		
31					355+95	8,8					30			2			1		
32					356+24	8,5					30			2			1		
33					356+56	8,9					31			2			1		
34					356+75	9,7					34			2			1		
35					357+38	8,2					28			2			1		
36				357+50		12,3					41			2			1		
37					357+68	8,5					29			2			1		
38				357+79		12,2					41			2			1		
39					357+97	8,3	12,0	12,0	12,0		29			2			1		
40				357+98		11,1					37			2			1		
41					358+50	8,4	12,0	12,0	12,0		29			2			1		
42				358+51		11,2					38			2			1		
43					358+71	8,1	12,0	12,0	12,0		28			2			1		
44				358+75		11,2					38			2			1		
45					358+83	8,4	12,0	12,0	12,0		29			2			1		
46					359+20	8,1	20,0	20,0	20,0		28			2			1		
47					359+49	8,2	16,0	16,0	16,0		28			2			1		
48				359+62		10,3					35			2			1		
49					360+24	9,1	18,0	18,0	18,0		31				1				
50					360+70	8,3	20,0	20,0	20,0		29				1				
51				360+71		8,5					29			2			1		
52					361+19	7,7	18,0	18,0	18,0		27				1				
53				361+25		8,5					30			2			1		
54				361+46		8,4					29			2			1		
55				361+79		8,9					31			2			1		
56					361+80	8,4	18,0	18,0	18,0		29				1				
57					362+24	7,7	12,0	12,0	12,0		27				1				
58					362+55	8,0	8,0	8,0	8,0		28				1				
59				362+87		9,4					32			2			1		
60					363+12	7,6					27				1				
61					363+49	7,5					26				1				



## Rehabilitation of R 14 Road Bălți - Sărăteni, km 26,6 - 38,3

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
62				363+59		8,9					31			2			1		
63					363+79	8,0					28				1				
64					364+03	7,0					25				1				
<b>s. Copaceni</b>																			
1					370+25	10,3	12,0	12,0	12,0		35				1				
2					370+96	9,7	9,0	9,0	9,0		33				1				
3					371+24	8,5	20,0	20,0	20,0		30				1				
4					371+58	7,5	22,0	22,0	22,0		26				1				
5	371+80		15,8								52	10,0				1			
6					372+07	9,1	35,0	35,0	35,0		31				1				
7					372+41	9,5	37,0	37,0	37,0		32				1				
8				372+70		10,0					34	10,0				1			
9					373+37	6,8	16,0	16,0	16,0		24				1				
10				373+39		8,8					31			2			1		
11					373+68	7,3	14,0	14,0	14,0		26				1				
12				373+98		8,0					28			2			1		
13					373+99	7,6	18,0	18,0	18,0		27				1				
14					374+32	7,7	19,0	19,0	19,0		27				1				
15				374+45		7,5					26			2			1		
16					374+56	7,8	26,0	26,0	26,0		27				1				
17				374+81		7,4					26			2			1		
18				374+88		7,5					26			2			1		
19					375+14	8,6	21,0	21,0	21,0		30				1				
20				375+18		7,7					27			2			1		
21				375+57		7,4					26			2			1		
22				375+94		7,2					26			2			1		
23					376+03	7,3	18,0	18,0	18,0		26				1				
24				376+50		7,7					27			2			1		
25					376+52	7,0	12,0	12,0	12,0		25				1				
26					376+75	6,9	9,0	9,0	9,0		25				1				
27					376+88	7,0	8,0	8,0	8,0		25				1				
28				377+18		8,4					28			2			1		
29				377+23		8,4					28			2			1		

## Rehabilitation of R 14 Road Bălți - Sărăteni, km 26,6 - 38,3

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
30					377+27	6,9	12,0	12,0	12,0		25				1				
31					377+45	7,1	11,0	11,0	11,0		25				1				
32					377+84	7,1	17,0	17,0	17,0		25				1				
33					378+25	8,2	16,0	16,0	16,0		29				1				
34				378+65		6,4					23			2			1		
35				379+36		5,1					19				1				
36				379+63		5,7					21				1				
37					380+78	6,5	7,0	7,0	7,0		24			2			1		
38					381+14	6,8	4,0	4,0	4,0		25			2			1		
39					381+28	7,0	5,0	5,0	5,0		25			2			1		
40					381+61	6,4	6,0	6,0	6,0		23			2			1		
41					382+67	7,7	7,0	7,0	7,0		27			2			1		
42					383+00	7,8					27			2			1		
Total							607	607	607	120	2882	26		116	45	2	59	0	

**Tip 1**

Fine grained dense asphalt

Beton asfaltic cu granulatie fina dens Tip B M1

- 4cm

**Tip 2**

Fine grained dense asphalt

Beton asfaltic cu granulatie fina dens Tip B M1

Piatra concasata M 300/ crushed stone

Nisip/Sand

- 4cm

- 15cm

- 10cm

**List of sidewalk**  
**Lista trotuarelor**

Nr.crt.	Location Amplasare PC+		Length Lungimea	Width Lățimea trotuarelor, m	Area Suprafața trotuarului	Note Nota
	LHS stînga	RHS dreapta	m	m	m <sup>2</sup>	
1	343+43-343+66		20	1,00	20	s.Grigareuca
2		343+96-346+59	237	1,00	237	s.Grigareuca
3	349+08-349+43		35	1,00	35	s.Grigareuca
4	352+37-355+01		258	1,00	258	s.Grigareuca
5	355+57-356+13		45	1,00	45	s.Grigareuca
6		370+27-370+34	7	1,00	7	s.Copaceni
7	371+82-373+14		129	1,00	129	s.Copaceni
8	380+54-380+96		42	1,00	42	s.Copaceni
<b>Total</b>			<b>773</b>		<b>773</b>	

## List of junctions lane

## Lista benzilor de accelerare-frînare

Nr.	Location of junctions lane Amplasarea benzilor de accelerare-frînare				Type of lane, length Tipul benzii, lungimea trecerii	Type of existing pavement Tipul îmbrăcăminte rutiere		Note Nota
	Existing Existente		Designed Proiectate			TIP I	TIP II	
	LHS Stînga PC+	RHS Dreapta PC+	LHS Stînga PC+	RHS Dreapta PC+				
1	2	3	4	5	6	7	8	9
1	-	-	-	279+30-281+65	Frinare - Accelerare 30/30	-	730	s.Vrinesti
2	289+49-292+00	-	-	-	Frinare - Accelerare 20/30	456	336	PECO
3	-	-	-	304+85-307+30	Frinare - Accelerare 30/30	249	503	s.Berejeni
4	-	-	313+30-318+15	-	Frinare - Accelerare 30/30	661	672	PECO,cafenea
5				337+50-340+15	Frinare - Accelerare 30/30	116	560	PECO
6	-	-	354+65-357+20	-	Frinare - Accelerare 30/30	118	665	s.Grigarauca
7	-	-	378+75-380+80	-	Frinare - Accelerare 30/30	80	456	s.Grigarauca
	Total					1680	3922	

## Tip I

Fine grained asphalt type A M1 / Beton asfaltic cu granulație fină Tip A M I

-4cm

Levelling with fine grained porous asphalt concrete M1

Egalizare cu beton asfaltic cu granulație fina poros M I - Hmed

- 4cm

## Tip II

Fine grained asphalt type A M1 / Beton asfaltic cu granulație fină Tip A M I

-4cm

Coarse fine grained asphalt concrete M1 / Beton asfaltic cu granulație fina poros M I

-6cm

Coarse grained porous asphalt concrete M1 / Beton asfaltic cu granulație mare poros M I

-8,5cm

Base of crushed stone and granit mix

Fundatie din amestecuri din piatra concasata și piatră de granit (22,5+22,5)

-45cm

Coarse grained sand / Nisip cu granulație mare(ПГС)

-20cm

**List of Existing and Designed guardrails**  
**Lista parapetelor de protectie existente si proiectate**

Nr.	Type of guardrails Tipul parapetelor	Existing guardrail Parapet existent			Designed guardrail Parapet metalic proiectat			Note Notă
		LHS Stînga PC+	RHS Dreapta PC+	Length Lungimea, m	LHS Stînga PC+	RHS Dreapta PC+	Length Lungimea, m	
1	2	3	4	5	6	7	8	9
1	metallic	268+76-276+89		813	268+67-276+89		822	
2	metallic		268+92-270+69	177		268+76-270+69	193	
3	metallic		272+34-275+73	339		272+34-275+73	339	
4	stîlpi	279+99-282+12			278+50-283+00		450	
5	metallic		279+02-280+43	141		279+02-280+43	166	
6	metallic		280+79-282+61	182		280+60-282+61	216	
7	metallic		290+88-291+55	67		289+50-291+56	206	
8	metallic	293+93-300+73		680	293+93-300+73		680	
9	metallic		300+22-300+73	51		300+22-300+73	51	
10	metallic	301+07-301+25		18	301+06-301+50		44	
11	metallic		301+07-302+72	165		301+06-302+80	174	
12	metallic					310+00-314+50	450	
13	metallic					323+50-328+50	500	
14	stîlpi		329+81-330+25			329+81-330+25	44	
15	metallic		330+25-333+24	299		330+25-333+24	299	
16	metallic		333+53-334+41	88		333+53-337+00	347	
17	metallic	332+22-333+24		102	330+50-333+25		275	
18	metallic	333+53-334+46		93	333+53-334+75		122	
<b>Total</b>				<b>3215</b>			<b>5378</b>	

**List of road signs**  
**Lista indicatoarelor rutiere proiectate**

Nr.	PC+		Existing Existente	Quantities number Cantitatea buc.	Designed Proiectate	Quantities number Cantitatea buc.	D	A	B	B H	B H	B H	B H	km stone Borna chilometrica	Note Notă
	Forward direction Sens direct	Backward direction Sens opus	Nr. după STAS		STAS		700	900	700	700x350	900x600	2250x500	2200x500	5.78.2	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1		266+76			5.6	1					1				Drum lateral Singerei
2		266+87			2.2	1			1						Drum lateral Singerei
3		266+91			4.2.3; 6.24.3	2	1			1					
4		267+03	2.1	1											drum lat demontat
5		267+13	1.33	1											Demontat
6		267+39	Reclamă												
7	267+49				4.1.1	1	1								
8		267+49	2.1	1				1							
9		267+57	5.61.2	1									1		Drum lateral Singerei
10		267+79			2.1	1		1							Drum lateral Singerei
11		268+46			4.1.1	1	1								Drum lateral Singerei
12		268+49			2.1	1		1							Drum lateral Singerei
13		268+89	5.61.2	1									1		
14	269+60				1.14.2	1		1							
15	270+00				5.78.2	1								1	Borna
16		270+64	2.3; 6.15.1	2					2						
17	276+70		1.12.2	1				1							
18	277+67		1.7.2	1				1							
19	279+30		5.39.1	1					1						
20	280+00				5.78.2	1								1	Borna
21	280+22		5.61.2	1									1		
22	280+44		2.1	1				1							Drum lateral
23		280+71			5.61.2	1							1		
24		283+56	1.7.3	1				1							
25		284+00			1.12.1	1		1							
26		289+00			1.14.1	1		1							
27	289+78				5.15	1					1				
28	290+00				5.78.2	1								1	Borna
29		290+17	4.1.2; 2.2	2											Demontat
30		290+64	4.1.1	1			1								
31		290+69	Reclamă												
32		290+99			3.1	1	1								
33		291+29			5.15	1					1				
34	293+79				1.7.2	1		1							
35		294+00			3.23; 5.15	2	1		1						
36	295+29				2.1	1		1							Drum lateral
37		296+76			1.7.3	1		1							
38	300+00				5.78.2	1								1	Borna
39	300+00				1.7.3	1		1							
40		301+60			2.1	1		1							Drum lateral
41		303+23			1.7.2	1		1							
42	304+49				1.7.1	1		1							
43	304+90				5.39.1	1			1						
44	305+76		5.61.2	1									1		
45	306+04				2.1	1		1							Drum lateral
46		306+25			2.1	1		1							Drum lateral
47	307+00				5.40.1	1			1						
48		307+99			1.7.1	1		1							
49	310+00				5.78.2	1								1	Borna
50		313+60			5.40.1	1			1						
51	314+49				5.15; 5.20	2					2				
52		314+70			2.1	1		1							benzinarie
53		314+85	3.1	1			1								benzinarie
54		315+00			4.2.3; 6.24.3	2	1			1					benzinarie
55		315+74			4.1.6; 2.2	2	1		1						benzinarie
56		316+80			3.1; 4.2.3; 6.24.3	3	2			1					benzinarie
57		317+36			5.15; 5.20	2					2				
58		318+15			5.39.1	1			1						
59	320+00				5.78.2	1								1	Borna
60	320+00				3.23; 1.14.1	2	1	1							
61	323+50				1.12.2	1		1							
62	328+06				1.7.2	1		1							
63	328+57		1.33	1								1			
64	329+59				2.1	1		1							Drum lateral
65	330+00				5.78.2	1								1	Borna
66		330+94			1.12.1; 1.7.3	2		2							
67		334+50			3.23; 1.14.2	2	1	1							
68	336+94				5.29	1					1				
69		337+24			4.1.2; 2.1	2	1	1							Drum lateral
70		337+81	4.2.3	1			1								Drum lateral
71		337+81			6.24.3	1				1					
72		337+85	5.61.2	1									1		Drum lateral
73		337+95	2.1	1				1							
74	338+08		5.61.2	1									1		
75		338+28	Reclamă												
76	338+30				5.15	1					1				
77		338+62	4.2.3	1			1								
78		338+62			6.24.3	1				1					
79	338+65				4.2.3; 6.24.3	2	1			1					benzinarie
80		338+98			4.2.3; 6.24.3	2	1			1					
81	339+00				3.1	1	1								benzinarie
82	339+13				4.1.1; 2.1	2	1	1							benzinarie
83	339+40				5.6	1					1				



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
175	380+22				2.1	1		1							Drum lateral
176		380+80			5.40.1	1			1						
177	381+00				2.3	1			1						
178		381+35			1.20	1		1							
179		381+71			2.1	1		1							Drum lateral
180	381+75				2.1	1		1							Drum lateral
181		382+27			2.3	1			1						
182		382+58			2.1	1		1							Drum lateral
Total				39		176	20	81	53	7	16	1	16	12	194



**List of marker posts**  
**Lista stîlpilor de dirijare**

Nr.	PC+	Marker posts according STAS,units Stilpi de dirijare dupa STAS, buc.			Note Notă
		LHS Stinga	RHS Dreapta	Total	
1	2	3	4	5	6
1	265+78-267+85		11	11	R320
2	269+06				RC bridge - guardrails Pod beton armat - parapet
3	273+32				RC - guardrails Beton armat Ø 1,5 - parapet
4	280+34-281+33				R340-guardrail R340-parapet
5	280+44				side road - guardrail drum lateral - parapet
6	281+26				RC - guardrails Beton armat Ø 1,6 TN - parapet
7	295+31	6	6	12	side road / drum lateral
8	296+00-299+00		6	6	H=2,0
9	300+90				RC bridge - guardrails Pod beton armat - parapet
10	301+60	3	6	9	side road / drum lateral
11	306+04	9	9	18	side road / drum lateral
12	306+25	6	6	12	side road / drum lateral
13	318+76	3	3	6	RC / Beton armat Ø 1,0
14	326+77	3		3	RC / Beton armat Ø 1,0
15	327+84-329+68	10	1	11	R195
16	329+59	3	6	9	side road / drum lateral
17	330+58-333+70				R550-guardrail R550-parapet
18	330+83				RC - guardrails Beton armat 2xØ 0,8 - parapet
19	333+39				RC bridge - guardrails Pod beton armat - parapet
20	335+79-340+89	7	3	10	R400
21	337+18	15		15	side road / drum lateral
22	342+73	3	3	6	RC / Beton armat 2xTN120
23	349+11	3	3	6	RC / Beton armat Ø 1,0
24	354+75	3	3	6	RC / Beton armat Ø 1,0
25	359+90	9	9	18	side road / drum lateral
26	368+93	6	6	12	RC bridge Pod beton armat
27	375+38	3	3	6	RC / Beton armat Ø 1,0
28	378+02	3	3	6	RC / Beton armat Ø 1,0
29	382+31	3	3	6	RC / Beton armat Ø 1,0
<b>Total</b>		<b>98</b>	<b>90</b>	<b>188</b>	