

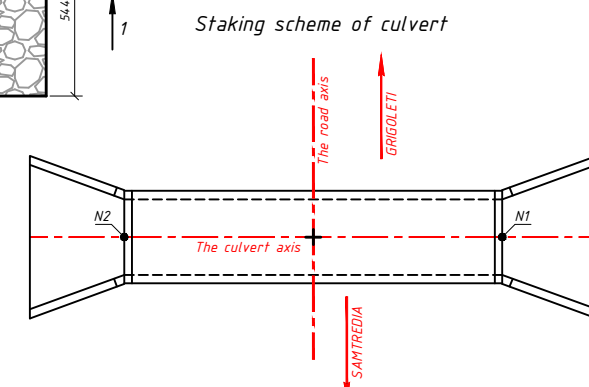
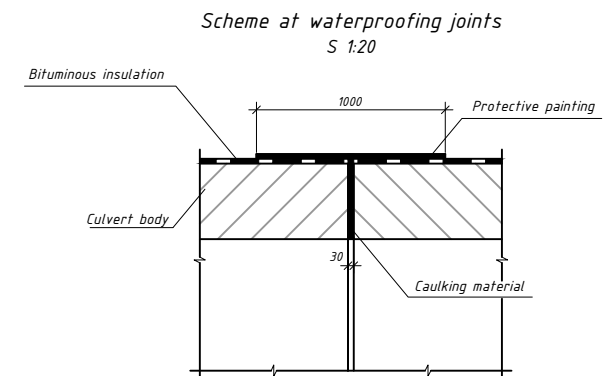
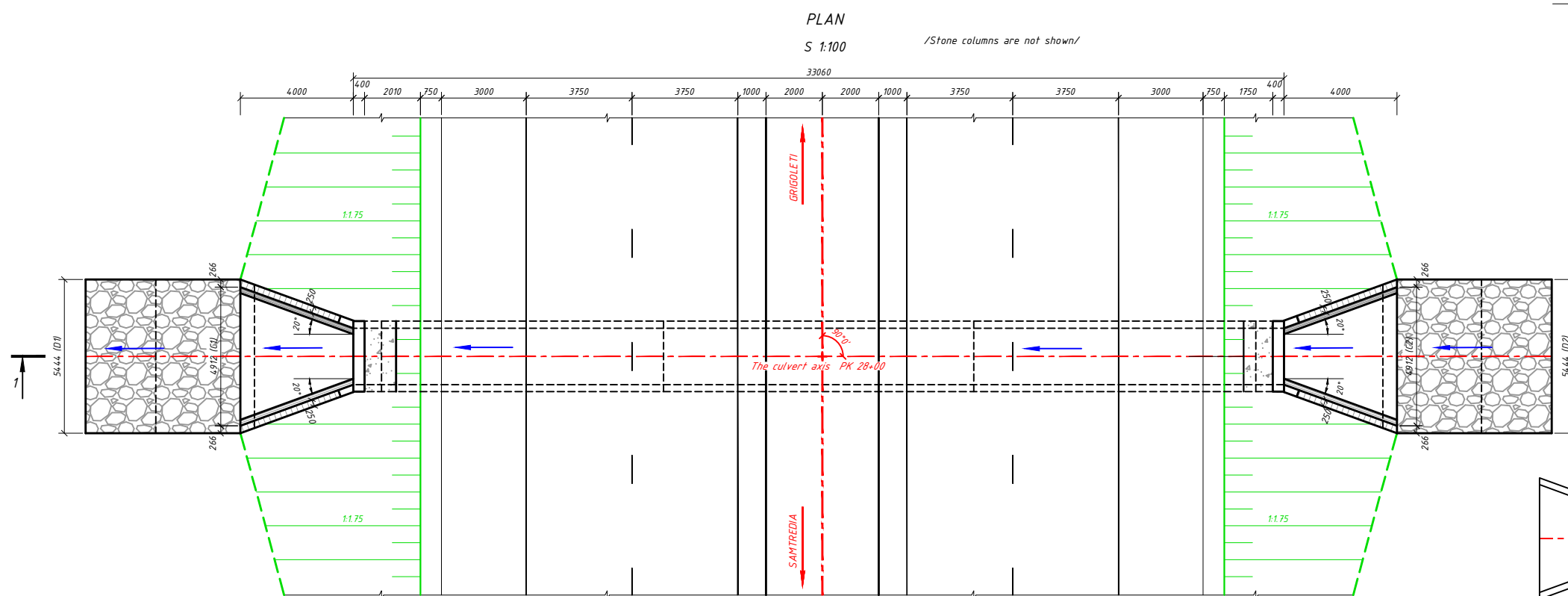
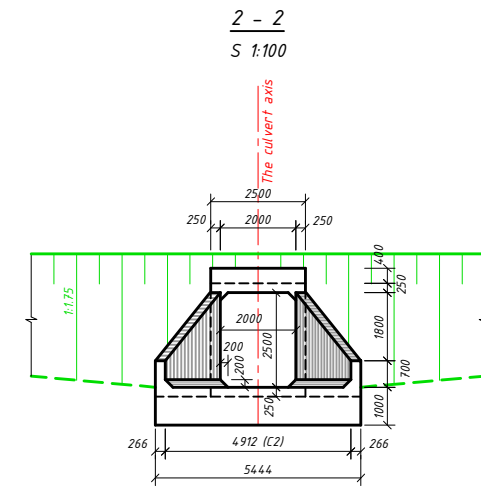
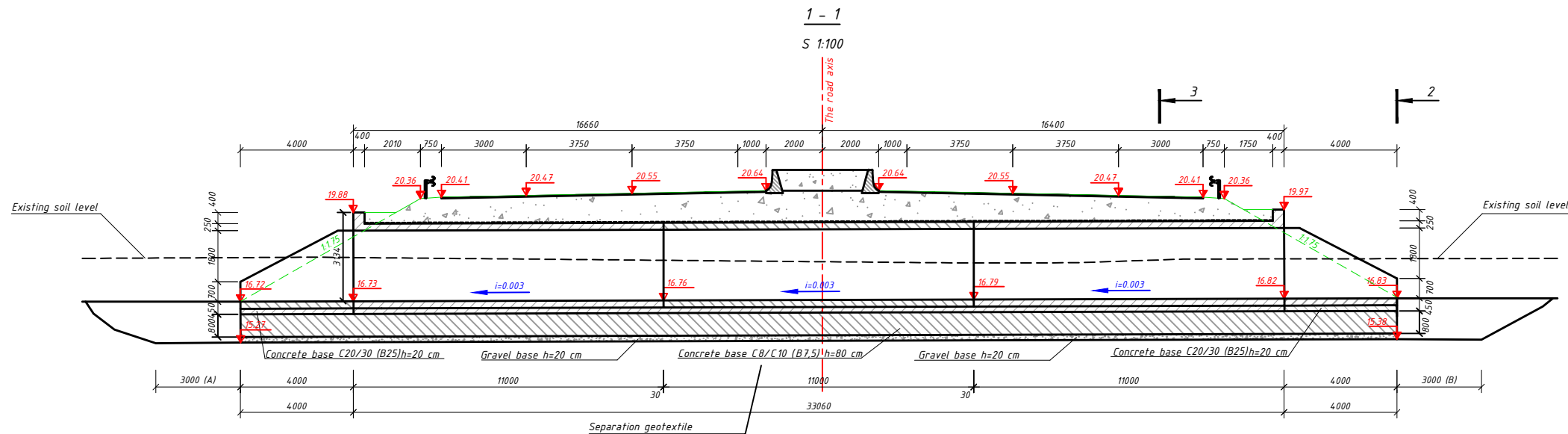
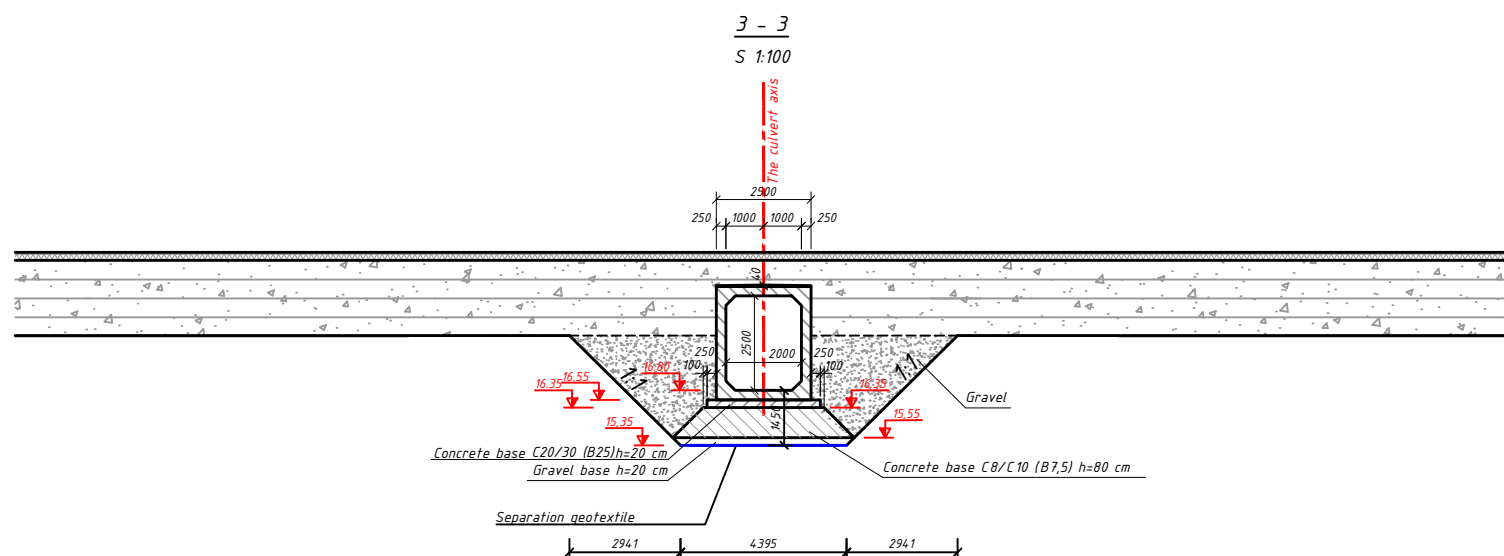


Table of coordinates

N1	N2
1	2
X=4668772.507	X=4668743.325
Y=278640.657	Y=278656.066

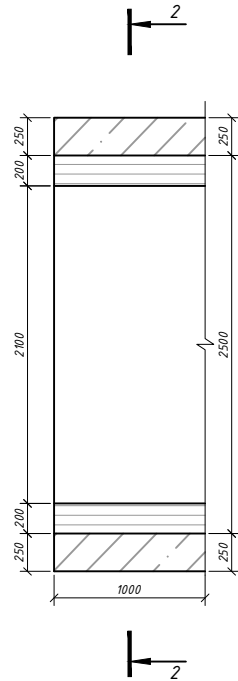
Table of design data on pipes

№ n/n	Sites, PK+ Micse положения, PK +	The angle of intersection with the road deg. °	Input headroom, left / right	Opening pipe, m	Slant pipe, %	Length, m		Options trays/building, m						Signs, m						Remarks
						without inlet and outlet, m	with inlet and outlet, m	D1	D2	A	B	C1	C2	tray input headroom	tray output headroom	brow (right)	brow (left)	top input headroom	top output headroom	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	28+00	90°0'	right	2,00x2,50	3	33,060	41,060	5,444	5,444	3,00	3,00	4,912	4,912	16,82	16,73	20,36	20,36	19,97	19,88	Drainage channel

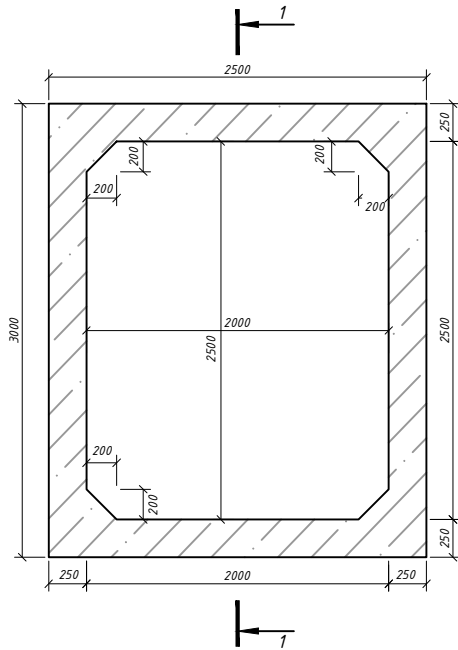


E-60-00-WD-01-H1-HP.01-P1				Construction of the road Samtredia - Grigoleti km 0 +000 - km 11 +500				
  	Engineer	R.Harlander						
  								
	Proj.Manag.	O.Valuikin	11.14	Highway		Stage	Sheet	Sheets
	Checked by	M.Gorobinskaya	11.14	Section PK 20+00 - PK 30+00		WD	1	3
	Exec. by	M.Voroshilov	11.14	Culvert. Opening 2,00x2,50m PK28+00		 "Road Building "Altcom" LLC		

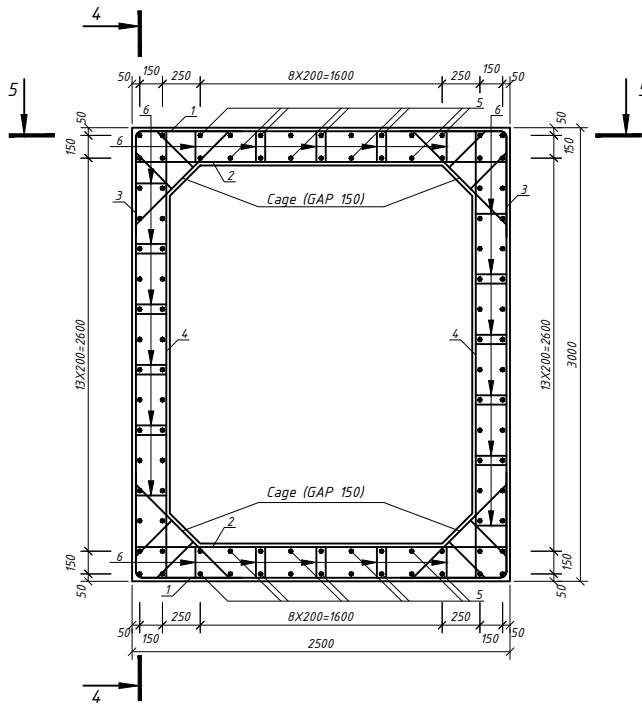
1 - 1
S 1:25



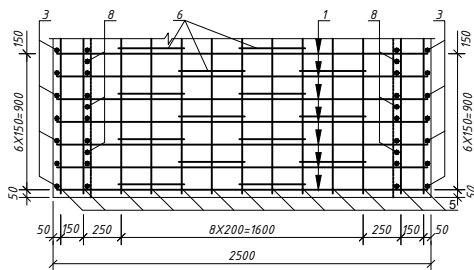
2 - 2
S 1:25



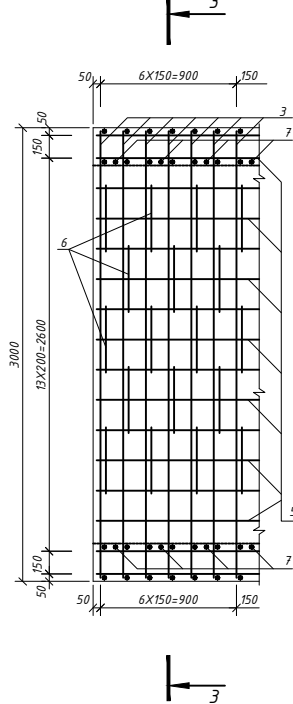
3 - 3
S 1:25



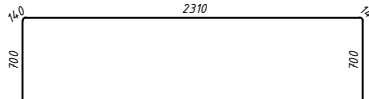
5 - 5
S 1:25



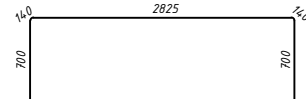
4 - 4
S 1:25



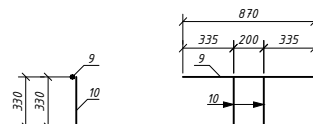
Position N1



Position N3



Cage - 1

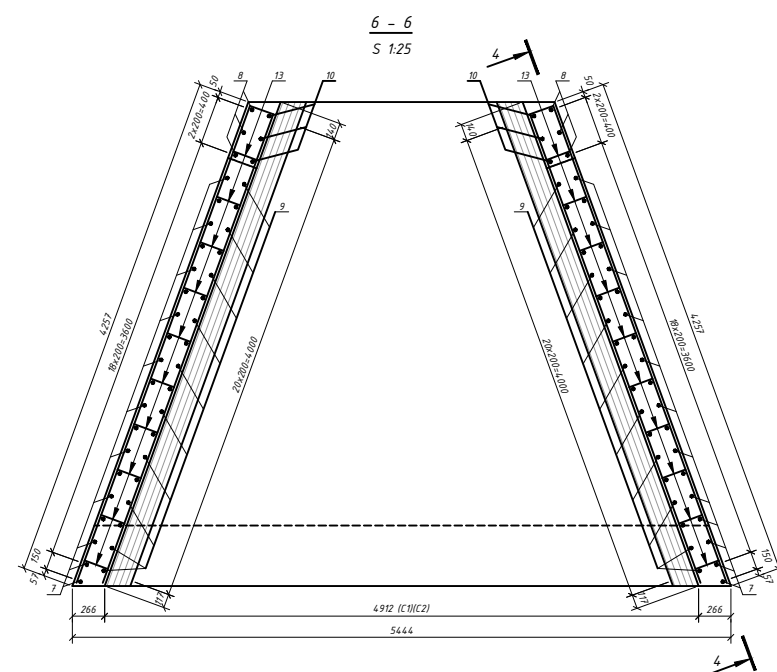
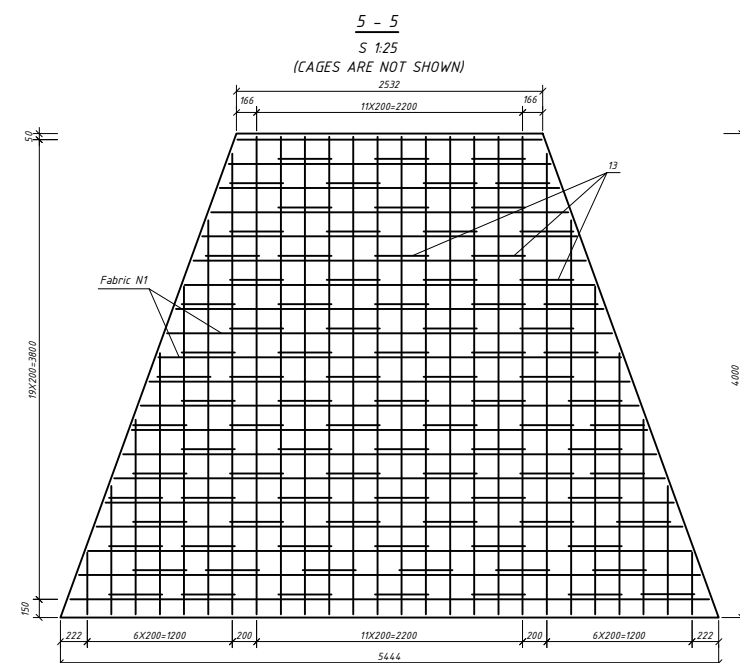
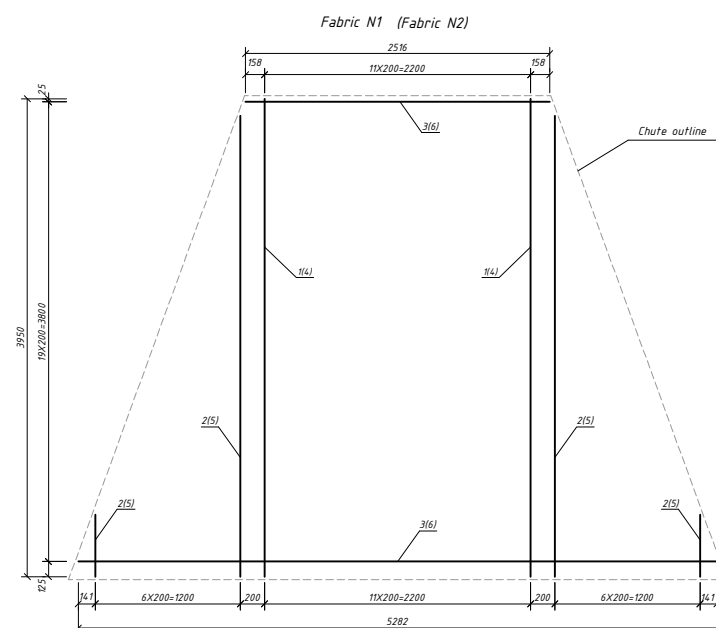
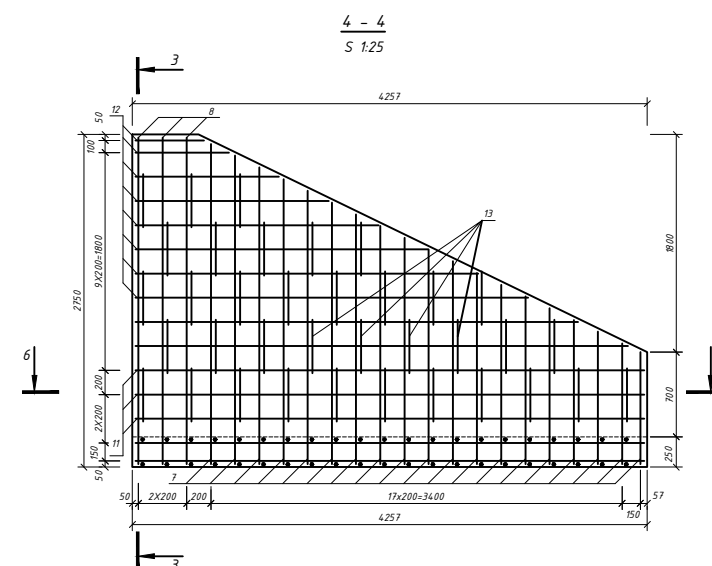
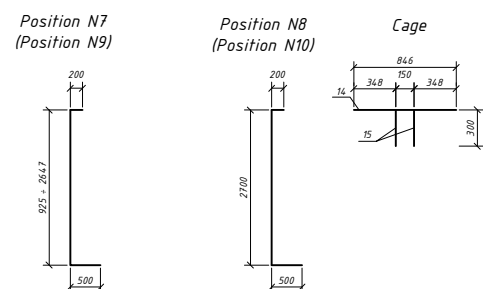
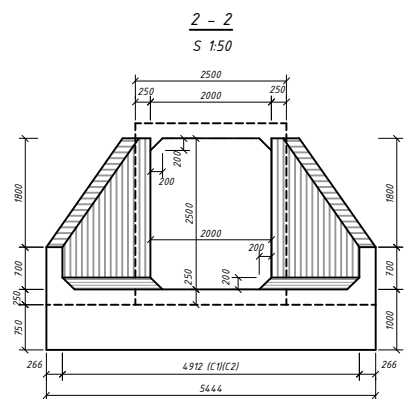


	Steel specification for 1 meter						Steel specification for 1 section (11 m)			Steel specification for 3 section (33 m)		
	Position	Sketch, mm	Diameter or section, mm	Length, mm	Quantity, unit	Total length, m	Length, mm	Quantity, unit	Total length, m	Length, mm	Quantity, unit	Total length, m
Separate bars	1	Is given on drawing	14A-III	3 990	14	55,860	3 990	154	614,460	3 990	462	1 843,380
	2	2450	18A-III	2 450	14	34,300	2 450	154	377,300	2 450	462	1 131,900
	3	Is given on drawing	14A-III	4 505	14	63,070	4 505	154	693,770	4 505	462	2 081,310
	4	2950	14A-III	2 950	14	41,300	2 950	154	454,300	2 950	462	1 362,900
	5	1000	14A-III	1 000	100	100,000	10 950	100	1 095,000	10 950	300	3 285,000
	6	272 172 522	10A-III	1 388	64	88,832	1 388	704	977,152	1 388	2 112	2 931,456
	7	2450	18A-III	2 450	8	19,600	2 450	88	215,600	2 450	264	646,800
	8	2950	14A-III	2 950	6	17,700	2 950	66	194,700	2 950	198	584,100
C 128 un1	9	870	12A-III	870	28	24,360	870	308	267,960	870	924	803,880
	10	330	12A-III	330	56	18,480	330	616	203,280	330	1 848	609,840

Remark:
1. Armature adopted in accordance with GOST 5781-82
"Hot-rolled steel for reinforcement of ferroconcrete
structures. Specifications"

Selection armature for 1 m			Selection armature for 1 section (11 m)		Selection armature for 3 section (33 m)	
Ø mm and steel grade	The total length, m	Weight, kg	The total length, m	Weight, kg	The total length, m	Weight, kg
10 A-III	88,832	54,809	977,152	602,903	2 931,456	1 808,708
12 A-III	42,840	38,042	471,240	418,461	1 413,720	1 255,383
14 A-III	277,930	336,295	3 052,230	3 693,198	9 156,690	11 078,595
18 A-III	53,900	107,800	592,900	1 185,800	1 778,700	3 557,400
Total:						
A-III		536,947		5 900,362		17 701,087
Binding wire 2%		10,74	-	118,01	-	354,02

E-60-00-WD-01-H.1-HP.01-P1				Construction of the road Santredia - Grigoleti km 0 +000 - km 11 +500			
Engineer	DAVID YATES			Highway. Section PK 20+00 - PK 30+00	Stage	Sheet	Sheets
Proj.Manag.	O.Valuikin	11.14			WD	2	3
Checked by	M.Gorobinskaya	11.14					
Exec. by	M.Voroshilov	11.14					
Culvert: Opening 2,00x2,50m PK28+00				"Road Building "Altcom" LLC			



	Steel specification for one head						Steel specification for two heads		
	Position	Sketch, mm	Diameter or section, mm	Length, mm	Quantity, unit	Total length, m	Length, mm	Quantity, unit	Total length, m
Fabric #1 (1 unit)	1		12A-III	3 950	12	4,74,00	3 950	24	94,800
	2		12A-III	L _{214x} =2 161	14	30,254	L _{214x} =2 161	28	60,508
	3		14A-III	L _{214x} =3 899	20	77,980	L _{214x} =3 899	40	155,960
Fabric #2 (1 unit)	4		12A-III	3 950	12	4,74,00	3 950	24	94,800
	5		12A-III	L _{214x} =2 161	14	30,254	L _{214x} =2 161	28	60,508
	6		18A-III	L _{214x} =3 899	20	77,980	L _{214x} =3 899	40	155,960
Separate bars	7		18A-III	L _{214x} =2 486	38	94,458	L _{214x} =2 486	76	188,936
	8		18A-III	3 400	6	20,400	3 400	12	40,800
	9		14A-III	L _{214x} =2 486	36	89,496	L _{214x} =2 486	72	178,992
	10		14A-III	3 400	6	20,400	3 400	12	40,800
	11		12A-III	4 207	12	50,484	4 207	24	100,968
	12		12A-III	L _{214x} =2 320	40	92,800	L _{214x} =2 320	80	185,600
	13		10A-III	1 516	166	251,656	1 516	332	503,312
	14		14A-III	846	42	35,532	846	84	71,064
C (4,2 un)	15		14A-III	300	84	25,200	300	168	50,400

Selection armature for one head			Selection armature for two heads	
<i>B</i> mm and steel grade	The total length, m	Weight, kg	The total length, m	Weight, kg
10 A-III	251,656	155,272	503,312	310,544
12 A-III	248,592	265,150	597,184	530,299
14 A-III	248,608	300,816	497,216	601,631
16 A-III	192,848	365,696	385,696	771,392
Total:				
A-III		1 106,933	2 212,066	
Binding wire 2X		22,14	44,28	

Remark:
1. Armature adopted in accordance with GOST 5781-82 "Hot-rolled steel for reinforcement of ferroconcrete structures. Specifications"

E-60-00-WD-01-H1-HP-01-P1				Construction of the road Samtredia - Grigolati km 0 +000 - km 11 +500			
 Engineer DAVID YATES							
 Project Manager O. Valuikin 11.14				Highway Section PK 20+00 - PK 30+00			
Checked by M. Gorobishvili 11.14				Stage Sheet Sheets WD 3 3			
Exec. by M. Voroshilov 11.14				Culvert: Opening 2,00x2,50m PK28+00			
"Road Building "Altcom" LLC							

Формат A4x10