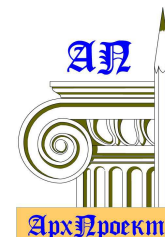


ҶУМҲУРИИ ТОҶИКИСТОН -- REPUBLIC OF TAJIKISTAN

Private Buisnessman Aslam Pochoev



72-2014-RFQ-UNDP-CP-KUL-LITACA-@

PROJECT WORKING DESIGN

*Construction of 5 additional classrooms in secondary school N 49 of
Choilobkamar village, Chubek jamoat, Hamadoni district.*

ALBUM - III

CC - Construction Concept

Kulob - 2014



PROJECT WORKING DESIGN

*Construction of 5 additional classrooms in secondary school N 49 of
Choilobkamar village, Chubek jamoat, Hamadoni district.*

<i>Album- I</i>	<i>AP - Architectural-planing solution</i>
<i>Album II</i>	<i>ГП - General plans</i>
<i>Album III</i>	<i>КЖ - Constraction Concept</i>
<i>Album IV</i>	<i>ОВ - Heating and Ventilation</i>
<i>Album V</i>	<i>ЭО - Electric illumination and Fire alarm</i>

LIST OF WORKING DESIGN OF THE MAIN SET

Sheet	Name	note
1	Cover sheet 1	
2	Cover sheet 2	
3	General data	CC-1
4	План грунтовой подушке	CC-2
5	Foundation plan.	CC-3
6	Section 1-1, 2-2 & mesh foundation CФ-1 и CФ-2	CC-4
7	Outlets KФ-1, Assemblies & parts, section A-A и Б-Б	CC-5
8	Outlets KФ-2 Specification & material consumption.	CC-6
9	Plan of reinforcement of walls	CC-7
10	Sweep of walls in axis A	CC-8
11	Sweep of walls in axis Г	CC-9
12	Section of wall reinforced & core CГ и Cм-1, Cм-2, Cм-3.	CC-10
13	Arrangment plan of jumpers & monolithic beams	CC-11
14	Sweep of walls in axis A	CC-12
15	Sweep of walls in axis Г	CC-13
16	Reinforcement of jumpers Прм-1, Прм-2, Прм-3	CC-14
17	Reinforcement of jumpers Прм-4, Прм-5, БМ-1	CC-15
18	Reinforcement of jumpers Бм-2, 3 & Specifications	CC-16
19	Formwork drawing slabs on the point +3, 150	CC-17
20	Reinforcement of the floor slab on the point. +3, 150	CC-18
21	Roofing plan	CC-19
22	Section 1-1. nodes "A".	CC-20
23	Nodes "Б" & "В". Specifications	CC-21
24	Metal ladder, Specifications	CC-22
25	Dormer windows. Specifications	CC-23
26	Roof metal fencing H=0,6m	CC-24
27	Metal funels	CC-25
28		CC-26
29		CC-27
30		CC-28

Common data

1. Rated temperature of external air -13°
2. Velocity head of air for II air according to SNiP 2.01.07-85 - 38 kg/m²
3. Weight of snow cower for II snow area according to SNiP 2.01.07-85 - 70,0 kgs/m²
4. seismicity of construction site - 7 points

Construction part

According to the task of designing a draft Construction of 5 additional classrooms in high school # 49? Choiobkamar village, Chubek jamoat, Hamadoni distict. One-story restangular building with the size in axis 15,0x25,2 m.

- Foundation - Bend monolithic reinforced concrete.

Otmostka - 1,5m width. concrete cl. B7.5.

- Walls - made from burnt bricks t=380mm, and strengthening of reinforced concrete columns, vertically fiber reinforced mesh Ø5Bp-I through 700mm.

- Overlaps - monolithic reinforced concrete.

- Roof - Wooden

- Roofing - Metal tile painted in dry.

- Roofing desided to wooden structures on the rafter system with wooden crate - 300mm & covered with roofing metal tile. For the protection of wooden structure, elements, parts from rotting and fire impregnated with a solution of phosphorus-acidic ammonium and silfur acid in a proportion 1:1.

With roof slopes less than 30% or 15% rebate should make lying and doble coat with putty Surikovii. the magnitude of bending sheet for a recumbent falz -15mm, standing falz- 20mm.

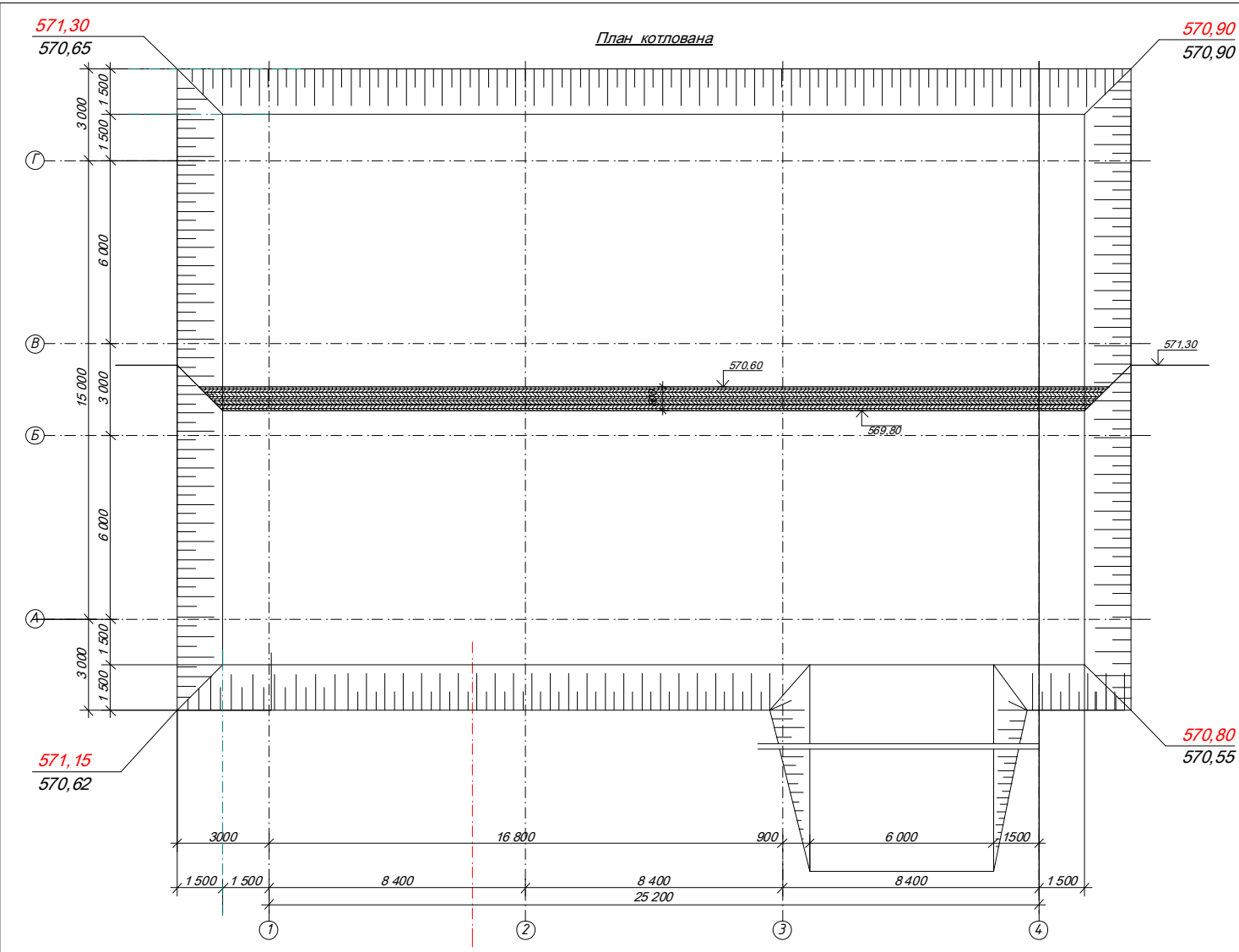
- Warmth-keeping jacket - sintering gravel 150mm. γ= 550 kg/m

Project has been developed in accordance with the prevailing rules and norms and ensure a safe and explosion fire safe in opereration of the structures

Senior Engiheer

M. Shamsov

						72-2014-RFQ-UNDP-CP-KUL-LITACA-@	CC		
						Construction of 5 additional classrooms in secondary school N 49 of Choiobkamar village, Chubek jamoat, Hamadoni district.			
dim.	Q-ty	Page	№ doc.	Signature	Data				
						Architectural-planing solution	Stage	Page	Pages
GIP		M. Shamsov					WD	1	
						General data	Private Buisnessman		
Developed		A. Pochoev					Aslam Pochoev		
Checked		M. Shamsov					License XT-23 №0000060		



GENERAL INSTRUCTION

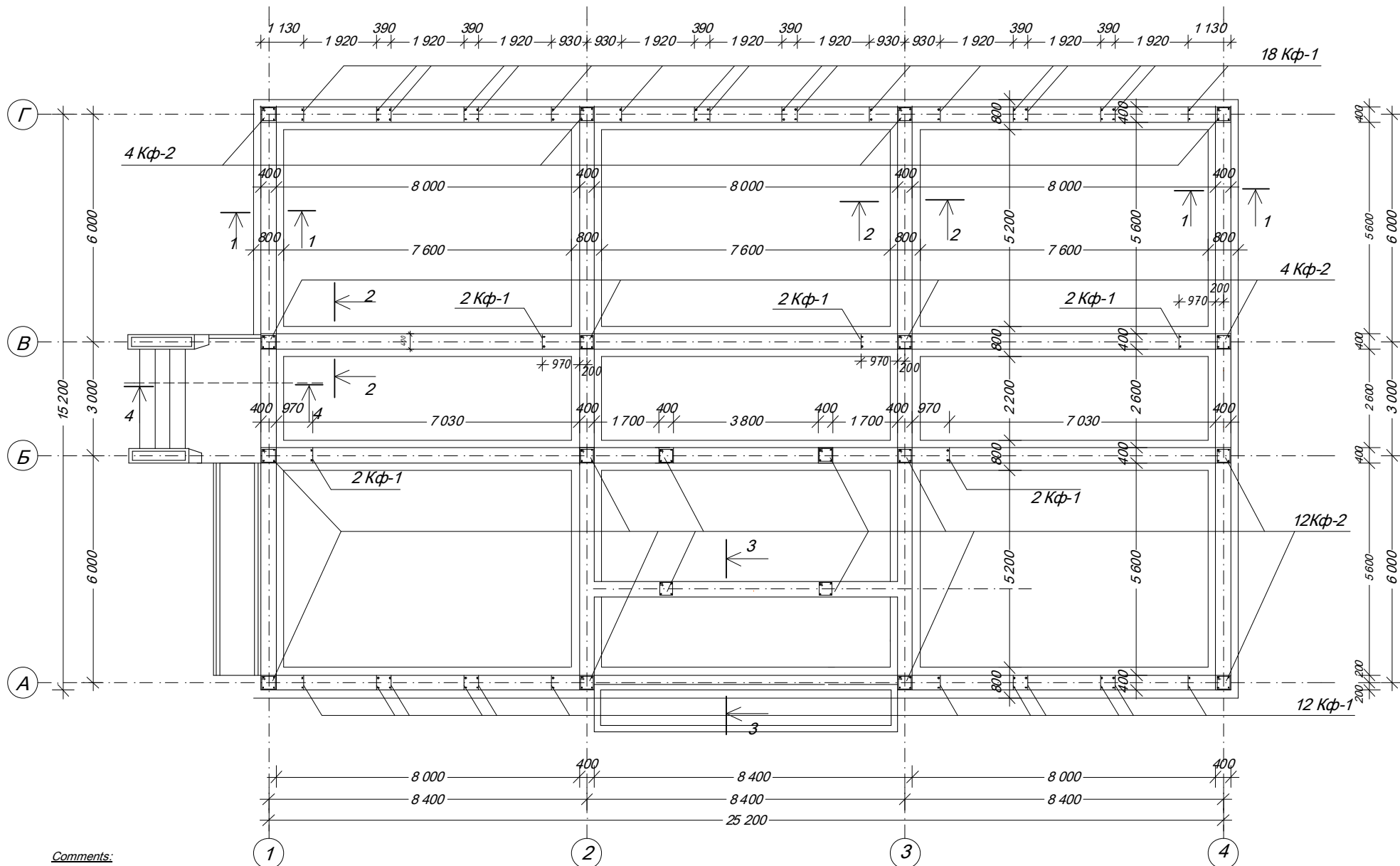
1. The construction site is composed of clayey soils, II type for the manifestation of subsidence properties. Water table is at a depth of 8 m.
2. Partial elimination of subsiding soil properties (according to the requirements of paragraphs 3.12, 3.13 SNIP 2.02.01-83 "Foundations of buildings and structures") is produced by small-permeable screen device, a thickness of 0.80 m., Of local soil optimum moisture content $W = 0,211$ and water protection measures.
3. Laying the ground produced layers not exceeding 20 cm., With self-propelled rolling rollers weighing 10 tons., With the number of penetrations 8-10. Soil density in the dry state at the lower end of the packed bed and the entire thickness of pad must be at least 1.7 t/m³, and backfilling foundations sinuses is not less than 1.6 t/m³.
4. To avoid penetration of precipitation to the surrounding area in the trenches, the latter to protect the shaft height of 30 cm.
5. Quality control is carried out technical inspection of the customer and building organization. Only after the conclusion of the relevant inspection permitted further production work.
6. When work guided by the requirements of SNIP 3.02.01-87 "earthworks, bases and foundations."
7. Seismicity of the construction site - 7 points.
8. Over 0,000 reference mark adopted floor 1st floor, corresponding to an absolute mark - 571,750 on the general plan.

WARNING!

All engineering communications (OB, EC, EL, gas, telecommunications, and others.), Located on the territory of the projected building will be moved outside the construction site. Before digging the pit and dismantling of these communications need to call representatives of the services with aim of harmonizing transference and ensure the safe and normal operation.

Breaks between the end of the development foundation pit, the device ground pillows and construction of the foundation is not allowed. If occurred break in this technology, before you start the next work to analyze the state of the natural soil in the pit, or already erected dirt pillows and only after receipt of the design data to continue working.

						72-2014-RFQ-UNDP-CP-KUL-LITACA-@	CC		
						Construction of 5 additional classrooms in secondary school N 49 of Choiobkamar village, Chubek jamoat, Hamadoni district.			
dm.	Q-ty	Page	We doc	Signature	Data	Architectural-planning solution	Stage	Page	Pages
	GIP	M. Shamsov					WD	2	
						Plan of cottovana	Private Buissnessman Aslam Pochoev License XT-23 №0000060		
Developed	A. Pochoev								
Checked	M. Shamsov								



Comments:

1. This sheet is considered from CC-2 and CC-6
2. The mark. 0,000 to take the floor level of the first floor.
3. Building at landing terrain produce according to the stekeout of the general plan
4. Horizontal insulation on point -0,020 make from cement grout with the composition 1:2
5. Otmotka - concrete 1200mm width.
6. Fiber reinforced foundation must be uninterrupted throughout the length.
7. Side sureface foundation in contact with the ground paste over waterproofing bitumen mastic on a first coat of the cutback bitumen.

						72-2014-RFQ-UNDP-CP-KUL-LITACA-@	CC		
						Construction of 5 additional classrooms in secondary school N 49 of Choiobkamar village, Chubek jamoat, Hamadoni district.			
dim.	Q-ty	Page	№ doc.	Signature	Data	Architectural-planing solution	Stage	Page	Pages
GIP		M. Shamsov					WD	3	
Developed	A. Pochoev					Foundation plan M 1:100	Private Buisnessman Aslam Pochoev License XT-23 №00000060		
Checked	M. Shamsov								

insulation out of
ent and sand
e composition 1:2
nm

600
-0,600
300
400
100

400

Cp-1

Hydroinsulation
coat - 2 layers

Cp-2

1,200

1,300

-1,400

100 200 400 200 100

800

Section 1-1

Concrete
preparation B-3.5

(A 1)
(I 4)

Hydroinsulation out of cement and sand mixture composition 1:2
t = 20mm

400

200

0,000

900

400

100

Cφ-1

Hydroinsulation coat - 2 layers Cφ-2

-1,300

-1,400

Concrete preparation B-3,5

100 200 400 200 100

800

Section 2-2

Б 2

Б 3

Technical drawing showing a cross-section of a foundation and wall assembly. The drawing includes the following details:

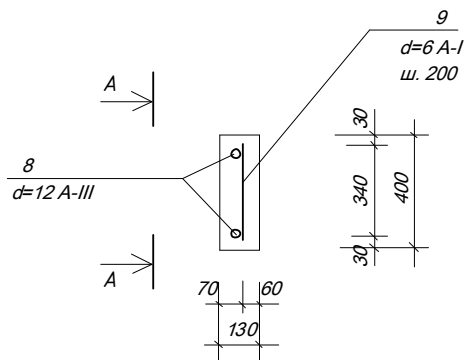
- Foundation and Wall Structure:** The foundation is shown with a stepped profile on the left and a vertical wall on the right. The wall has a brickwork section at the top.
- Dimensions:**
 - Horizontal dimensions: 300, 300, 300, 400, 100, 200, 400, 200, 100 (total 800).
 - Vertical dimensions: 150, 150, 150, 600, 300, 400, 100, 200, 1,300.
- Elevation Markers:** -0,600, -0,050, 0,000, -1,400.
- Labels and Materials:**
 - Concrete preparation B-3,5
 - Hydroinsulation coat - 2 layers
 - Hydroinsulation out of cement and sand mixture composition 1:2 $\approx$ 20mm
 - Cφ-1
 - Cφ-2
- Section Markers:** Section 3-3, A.

Technical drawing of a mesh Cp-2. The drawing shows a grid of reinforcement bars. The horizontal dimension is labeled as $140 \times 5 = 700$ and the total width is 760 . The vertical dimension is labeled as $200 \times 4 = 800$ and the total height is 1000 . The reinforcement bars are labeled as $d=12$ A-III. The mesh is labeled as mesh Cp-2. The drawing includes a detail view of a corner joint, showing the reinforcement bars and the mesh label.

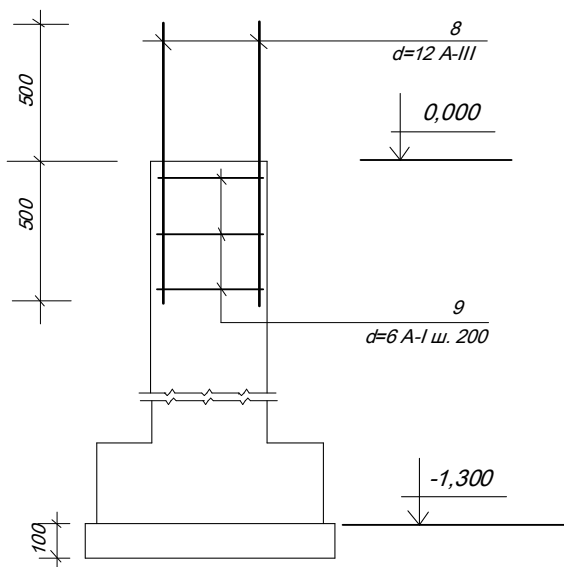
Figure 10.10 shows the reinforcement layout for a rectangular slab. The slab has a width of 1000 mm and a depth of 360 mm. The reinforcement consists of 6 A-I bars in the top layer (labeled 2) and 16 A-III bars in the bottom layer (labeled 1). The bars are spaced at 120 mm intervals. The bottom layer bars are labeled $d=16$ A-III.

						72-2014-RFQ-UNDP-CP-KUL-LITACA-@					CC
						Construction of 5 additional classrooms in secondary school N 49 of Choilobkamar village, Chubek jamoat, Hamadoni district.					
dim.	Q-ty	Page	№ doc.	Signature	Data						
						Architectural-planing solution		Stage	Page	Pages	
								WD	4		
						Section 1-1, 2-2 & mesh foundation Cφ-1 и Cφ-2		Private Buisnessman Aslam Pochoev License XT-23 №0000060			
Developed		A. Pochoev									
Checked		M. Shamsov									

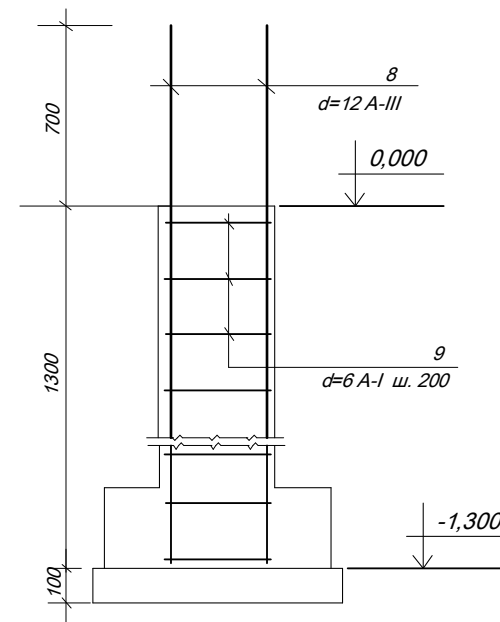
Outlet Kp-1



A - A



Б - Б



NOTE:

1. This sheet is considered from CC-3 and CC-8

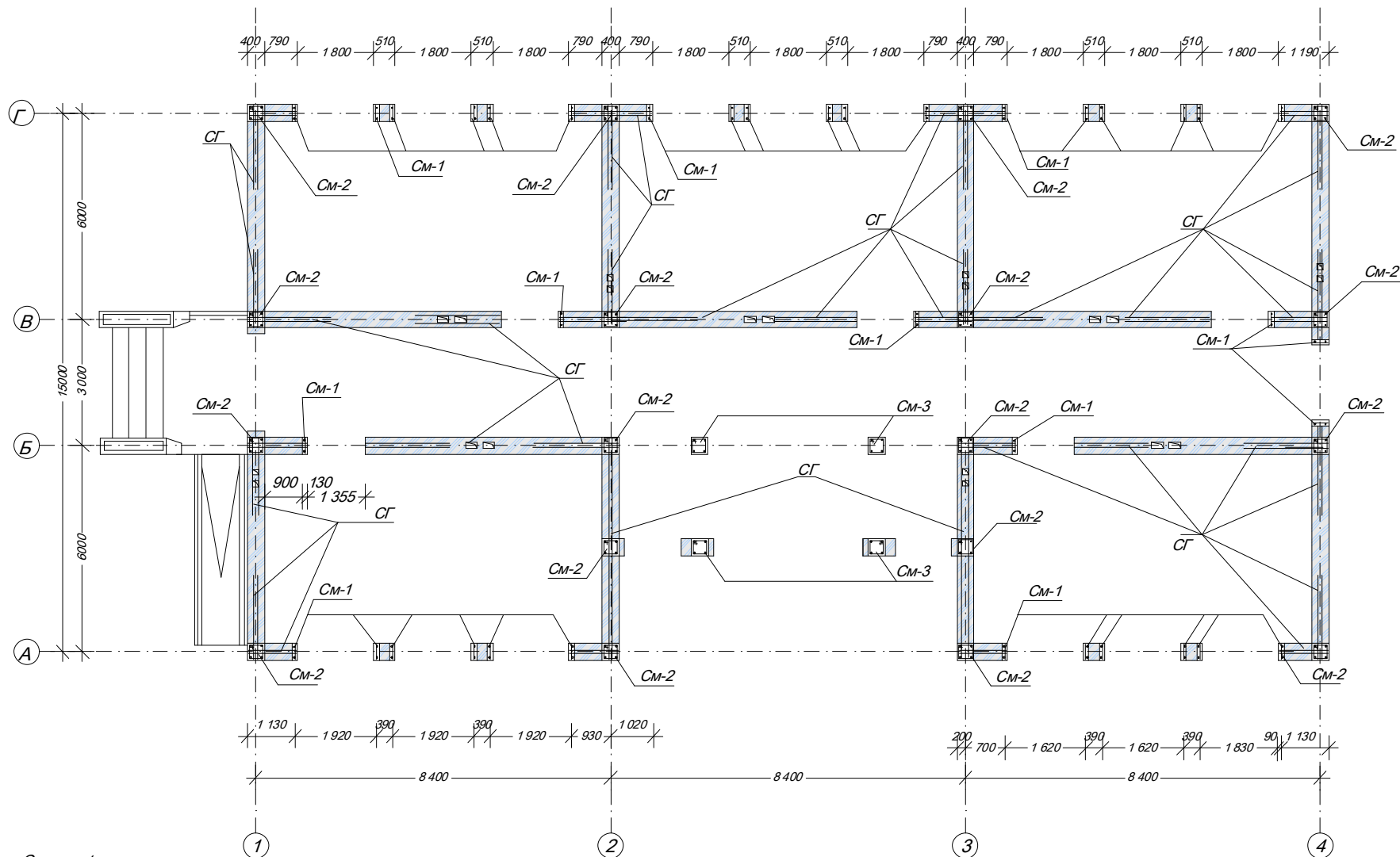
						72-2014 -RFQ-UNDP-CP-KUL-LITACA-@	CC		
						Construction of 5 additional classrooms in secondary school N 49 of Choiobkamar village, Chubek jamoat, Hamadoni district.			
dim.	Q-ty	Page	№ doc.	Signature	Data				
GIP	M. Shamsov					Architectural-planing solution	Stage	Page	Pages
							WD	5	
						Outlets Kq-1, Assemblies & parts, section A-A и Б-Б	Private Buisnessman		
Developed	A. Pochoev						Aslam Pochoev		
Checked	M. Shamsov						License XT-23 №0000060		



Specification for one unit

[illegible]

Plan of reinforcement of walls M 1:100

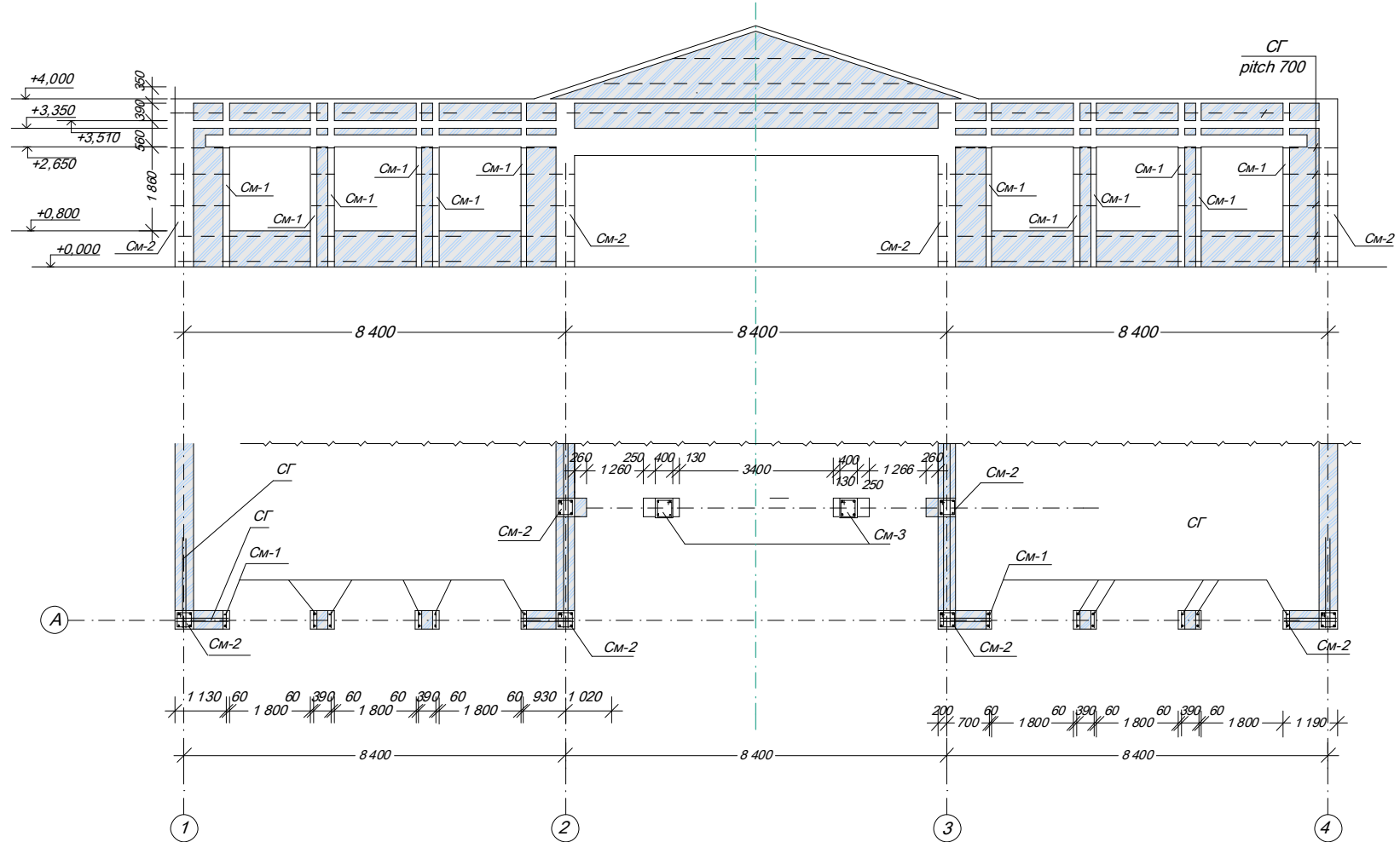


Comments:

- Walls - made from burnt bricks $t=380\text{mm}$, M 75
Brickworks with mortar M50
masonry category - II
Normative grip masonry $180\text{ KPA} > R_p = 120\text{ KPA}$ (120kgs/sm^2)
- Concreting cores is performed after the bricklaying.
- Horizontal mesh is put on first floor after the second course of masonry bricks, dale after 700mm bricklaying
- During the execution of works see the portion of (H&V, W&C)

						72-2014 -RFQ-UNDP-CP-KUL -LITACA-@	CC		
						Construction of 5 additional classrooms in secondary school N 49 of Choiobkamar village, Chubek jamoat, Hamadoni district.			
dim.	Q-ty	Page	№ doc.	Signature	Data	Architectural-planing solution	Stage	Page	Pages
GIP		M. Shamsov					WD	7	
Developed	A. Pochoev						Plan of reinforcement of walls M 1:100	Private Buisnessman Aslam Pochoev License XT-23 №00000060	
Checked	M. Shamsov								

Sweep of walls in axis A

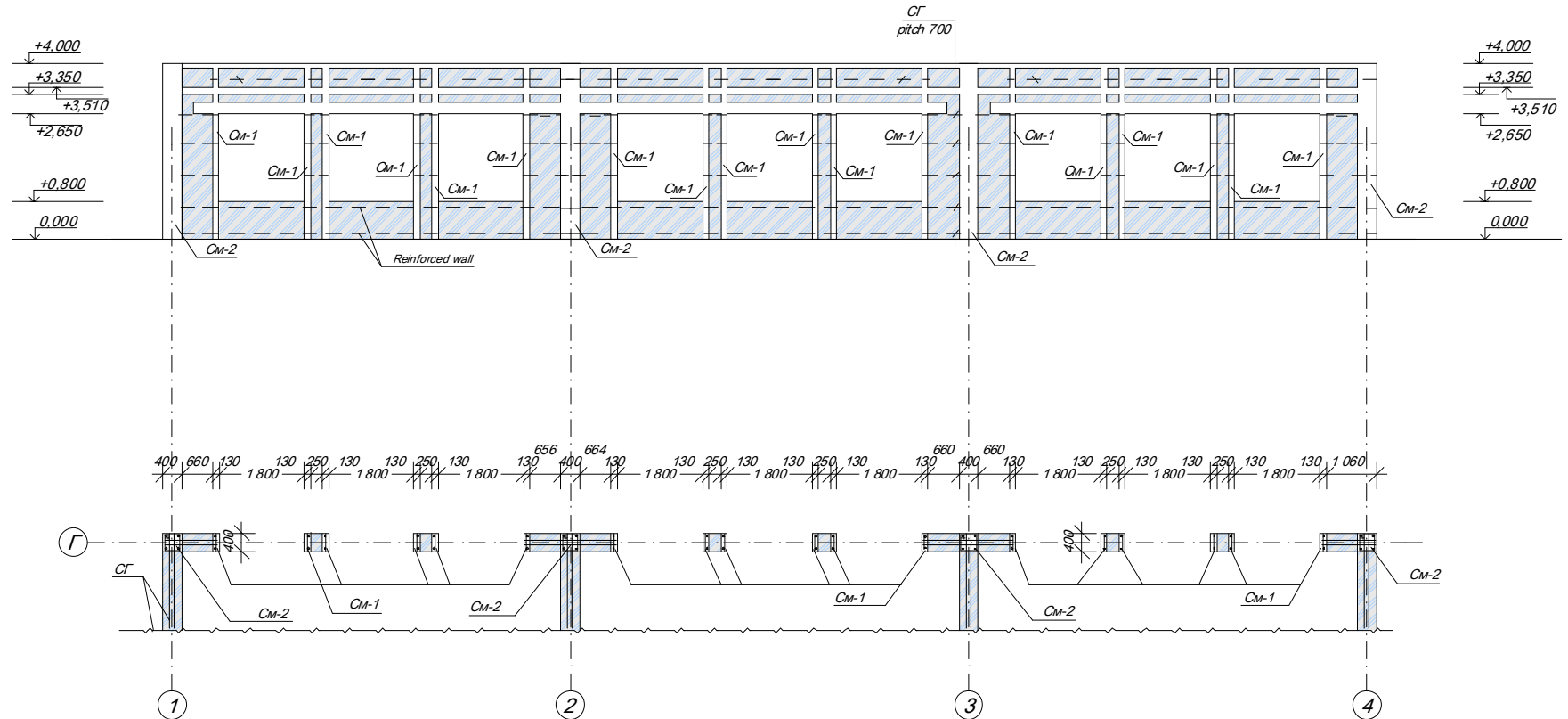


Comments:

- Walls - made from burnt bricks $t=380\text{mm}$, M 75
Brickworks with mortar M50
masonry category - II
Normative grip brick masonry 180 KPA $>R_p=120\text{ KPA}$ (120kgs/sm²)
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- During the execution of works see the portion of (H&V, W&C)

						72-2014-RFQ-UNDP-CP-KUL-LITACA-@				CC		
						Construction of 5 additional classrooms in secondary school N 49 of Choilobkamar village, Chubek jamoat, Hamadoni district.						
dim.	Q-ty	Page	№ doc.	Signature	Data	Architectural-planing solution				Stage	Page	Pages
GIP		M. Shamsov								WD	8	
						Sweep of walls in axis A				Private Buisnessman Aslam Pochoev License XT-23 №0000060		
Developed		A. Pochoev										
Checked		M. Shamsov										

Sweep of walls in axis Γ



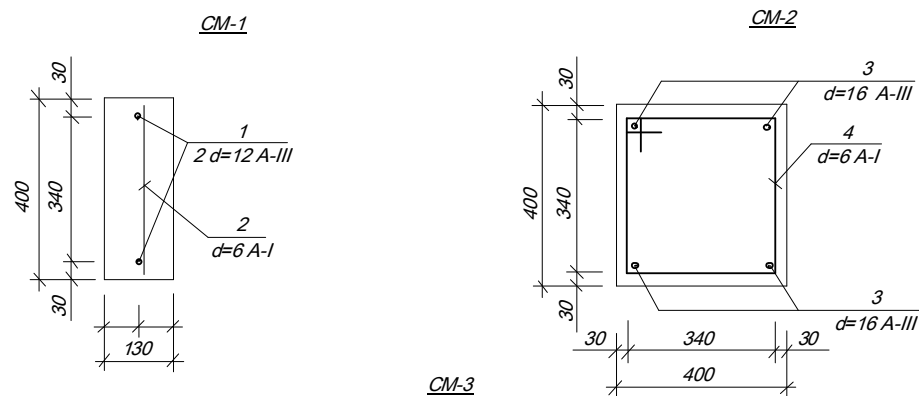
Comments:

1. Walls - made from burnt bricks $t=380\text{mm}$, M 75
Brickworks with mortar M50
masonry category - II
Normative grip brick masonry 180 KPA $>R_p \geq 120\text{ KPA}$ (120kgs/sm²)
2. Concreting cores is performed after the bricklaying.
3. Horizontal mesh is put on first floor after the second course of masonry bricks, dale after 700mm bricklaying
4. During the execution of works see the portion of (H&V, W&C)

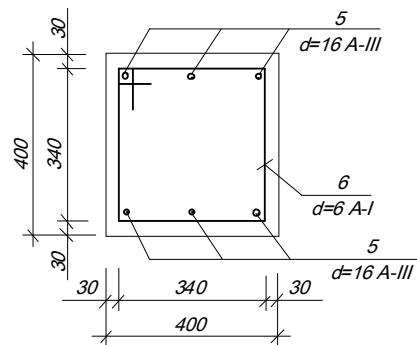
						72-2014-RFQ-UNDP-CP-KUL-LITACA-@				CC		
						Construction of 5 additional classrooms in secondary school N 49 of Choilobkamar village, Chubek jamoat, Hamadoni district.						
dim.	Q-ty	Page	№ doc.	Signature	Data	Architectural-planing solution				Stage	Page	Pages
GIP		M. Shamsov								WD	9	
						Sweep of walls in axis Γ				Private Buisnessman Aslam Pochoev License XT-23 №0000060		
Developed		A. Pochoev										
Checked		M. Shamsov										

Specification for one unit

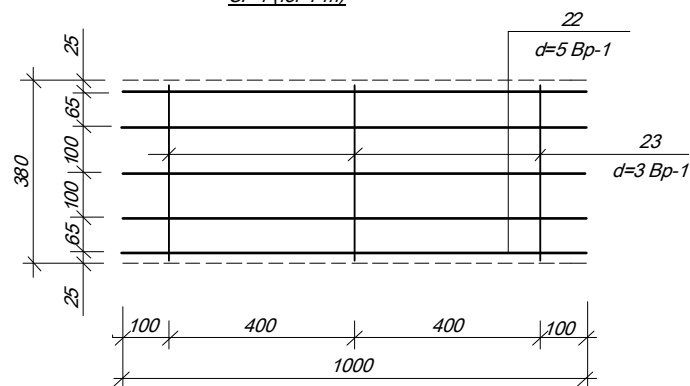
Type of pos.	Designation	Description	Q-ty	Weight meas. unit, m	Remarks
		Core CM			
		CM-1 Kc-1(1m.)	144,30 m		
1		12 A-III L=1000	2	1.78	
2		6 A-I L=360	5	0.4	2.18 kg
		Total weight armature 314,57kg, Concrete cl. B12,5 - 7,5m ³			
		CM-2 KC-2 (1m.)	66,60 m		
3		16 A-III L=1000	4	3,56	
4		6 A-I L=1430	5	1.6	5.16 kg
		Total weight armature 343,66kg, Concrete cl. B12,5 - 10,66m ³			
		CM-3 KC-3 (1m.)	12,00 m		
5		16 A-III L=1000	10	15.8	
6		6 A-I L=1430	5	1.6	17.40 kg
		Total weight armature 208,80kg, Concrete cl. B15 - 1,92m ³			
		Metal mesh CF-1 (1m.)			800.00 m
		5 Bp-I L=1000	5	0.77	
		3 Bp-I L=370	5	0.10	



CM-3



CF-1 (for 1 m)

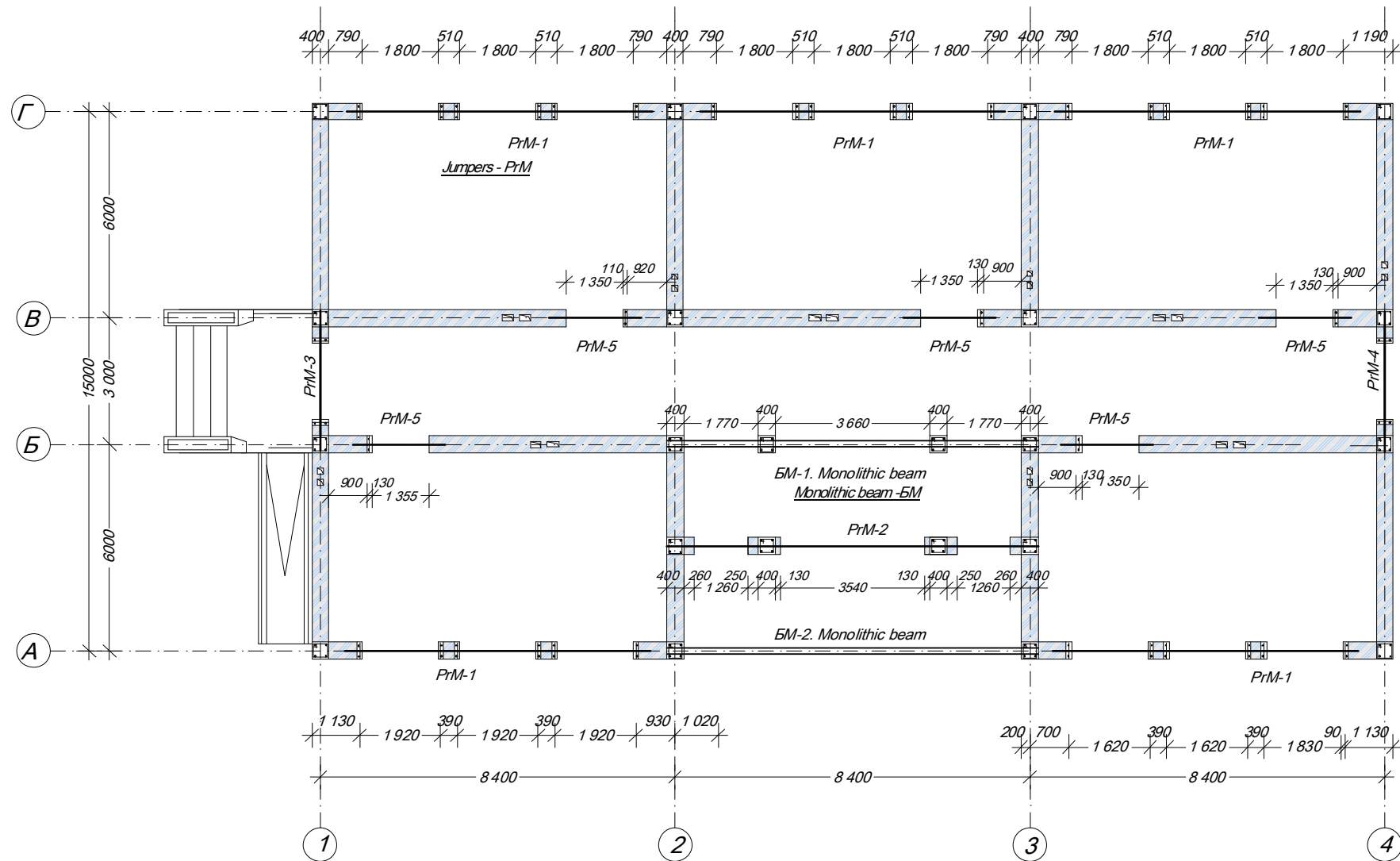


Comments:

1. This sheet is considered from CC-2 and CC-6

						72-2014-RFQ-UNDP-CP-KUL-LITACA-@	CC
						Construction of 5 additional classrooms in secondary school N 49 of Choilobkamar village, Chubek jamoat, Hamadoni district.	
dim.	Q-ty	Page	№ doc.	Signature	Data		
	GIP	M. Shamsov				Architectural-planing solution	Stage WD
							Page 10
						Reinforcement of wall & core CF II CM-1, CM-2, CM-3.	Pages
Developed	A. Pochoev						Private Buisnessman Aslam Pochoev
Checked	M. Shamsov						License XT-23 №0000060

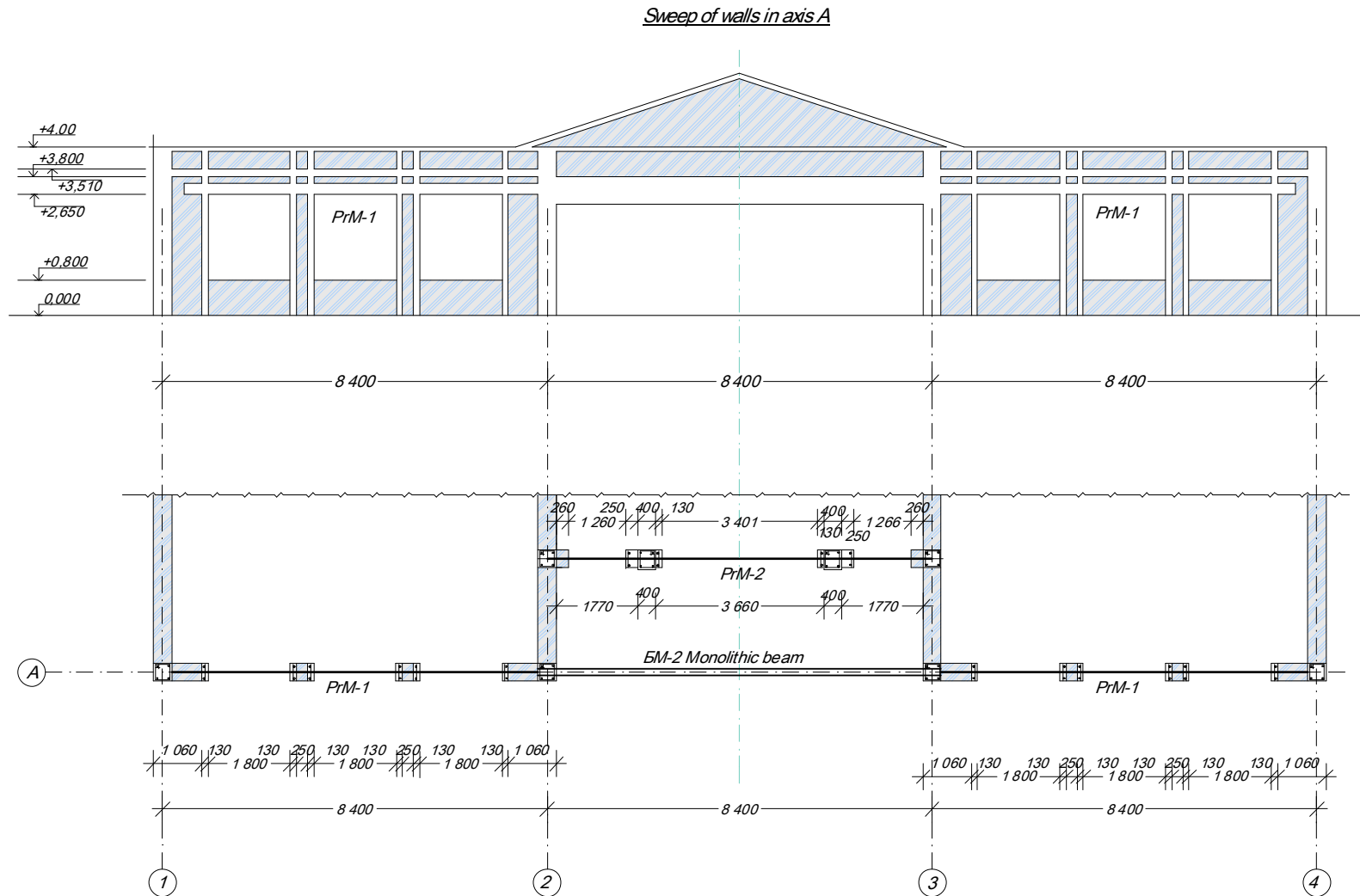
Arrangement plan of jumpers & monolithic beams M 1:100



Comments

- Walls - made from burnt bricks $t=380\text{mm}$, M 75
Brickworks with mortar M50
masonry category - II
Normative grip brick masonry 180 KPA $>R_p=120\text{ KPA}$ (120kgs/sm^2)
- Concreting cores is performed after the bricklaying.
- Horizontal mesh is put on first floor after the second course of masonry bricks, dale after 700mm bricklaying
- During the execution of works see the portion of (H&V, W&C)

						72-2014-RFQ-UNDP-CP-KUL-LITACA-@	CC		
						Construction of 5 additional classrooms in secondary school N 49 of Choiobkamar village, Chubek jamoat, Hamadoni district.			
dim.	Q-ty	Page	№ doc.	Signature	Data				
GIP	M. Shamsov					Architectural-planing solution	Stage	Page	Pages
							WD	11	
Developed	A. Pochoev					Arrangment plan of jumpers & monolithic beams M 1:100	Private Buisnessman Aslam Pochoev License XT-23 №0000060		
Checked	M. Shamsov								

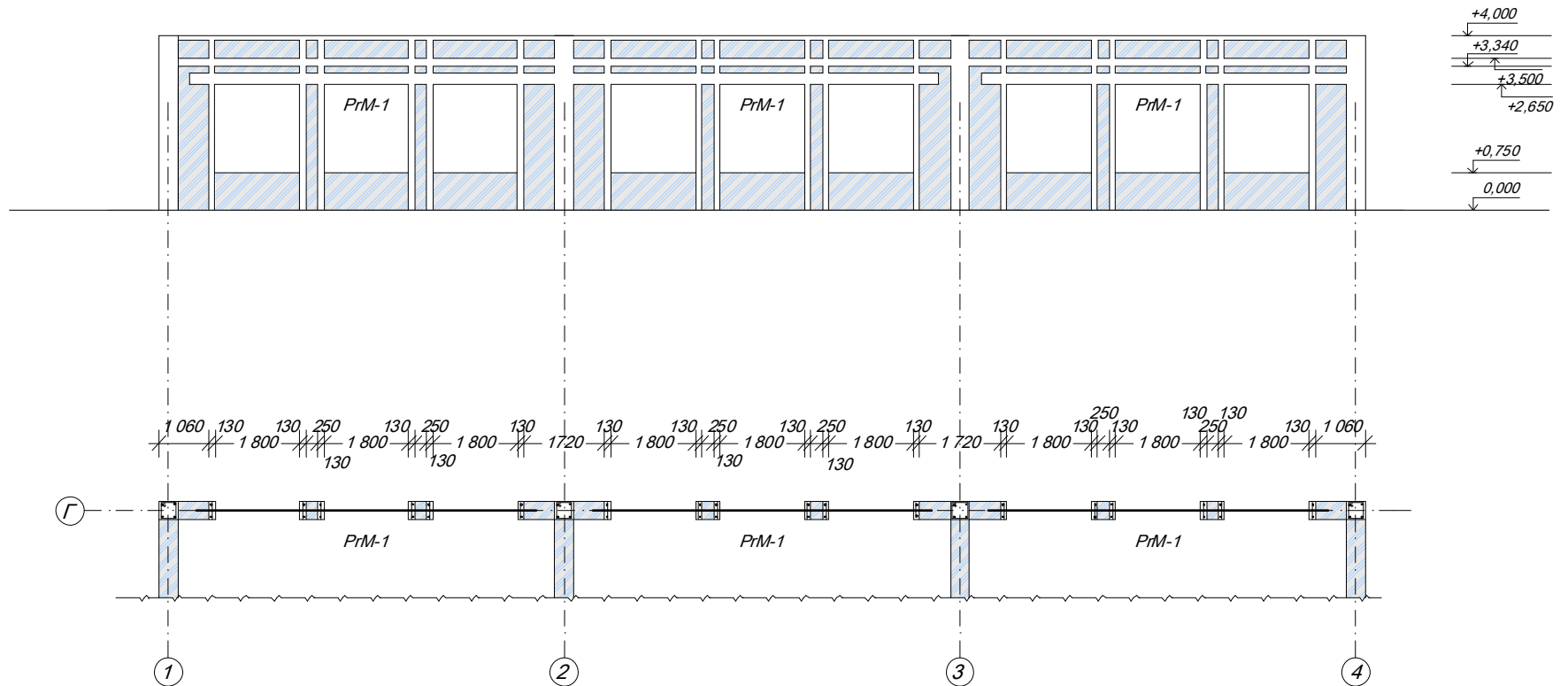


Comments

- Walls - made from burnt bricks $t=380\text{mm}$, M 75
Brickworks with mortar M50
masonry category - II
Normative grip brick masonry $180\text{ KPA} > R_p = 120\text{ KPA}$ (120kgs/sm^2)
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						72-2014-RFQ-UNDP-CP-KUL-LITACA-@	CC		
						Construction of 5 additional classrooms in secondary school N 49 of Choiobkamar village, Chubek jamoat, Hamadoni district.			
dim.	Q-ty	Page	№ doc.	Signature	Data				
						Architectural-planing solution	Stage	Page	Pages
GIP		M. Shamsov					WD	12	
						Sweep of walls in axis A	Private Buisnessman Aslam Pochoev License XT-23 №0000060		
Developed		A. Pochoev							
Checked		M. Shamsov							

Sweep of walls in axis Γ

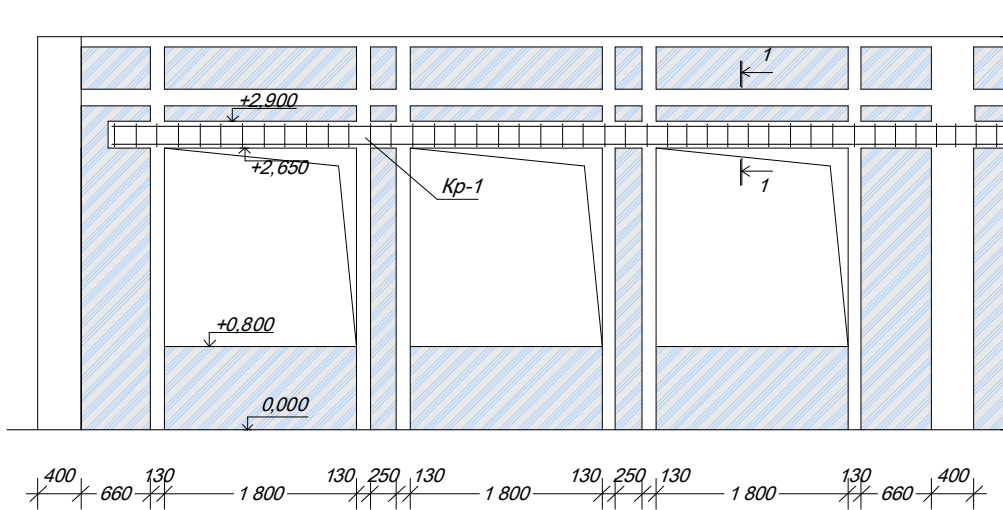


Comments

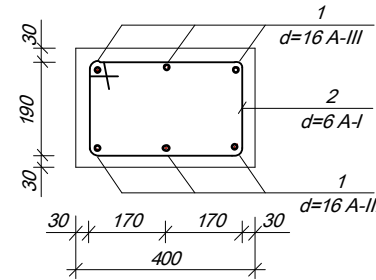
1. Walls - made from burnt bricks $t=380\text{mm}$, M 75
Brickworks with mortar M50
masonry category - II
Normative grip brick masonry $180\text{ KPA} > R_p \geq 120\text{ KPA}$ (120kgs/sm^2)
2. Concreting cores is performed after the bricklaying.
3. Horizontal mesh is put on first floor after the second course of masonry bricks, dale after 700mm bricklaying
4. During the execution of works see the portion of (H&V, W&C)

						72-2014-RFQ-UNDP-CP-KUL-LITACA-@				CC	
						Construction of 5 additional classrooms in secondary school N 49 of Choiobkamar village, Chubek jamoat, Hamadoni district.					
dim.	Q-ty	Page	№ doc.	Signature	Data	Architectural-planing solution			Stage	Page	Pages
GIP		M. Shamsov							WD	13	
						Sweep of walls in axis Г			Private Buisnessman Aslam Pochoev License XT-23 №0000060		
Developed		A. Pochoev									
Checked		M. Shamsov									

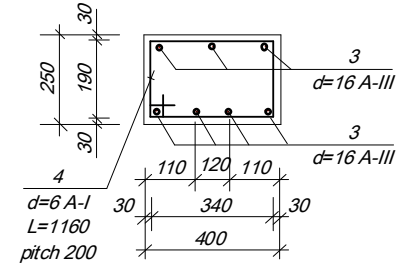
Reinforcement of jumpers PrM-1



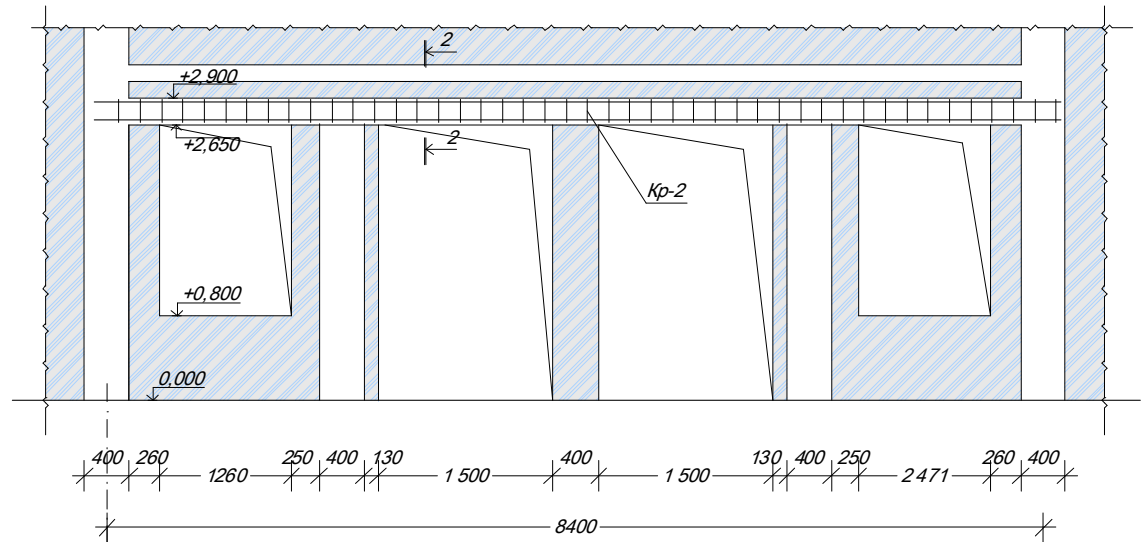
PrM-1 (1-1) KPr-1



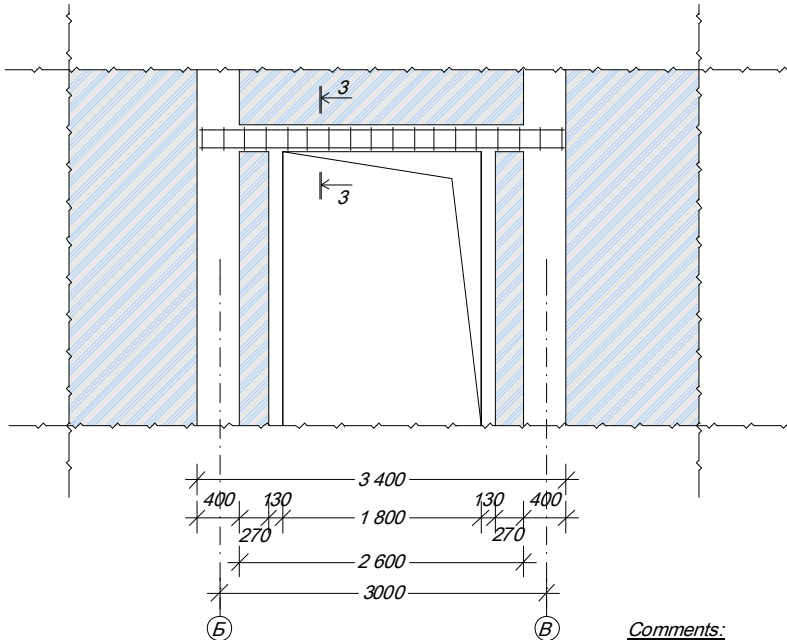
PrM-2 (2-2) KPr-2



Reinforcement of jumpers PrM-2



Reinforcement of jumpers PrM-4

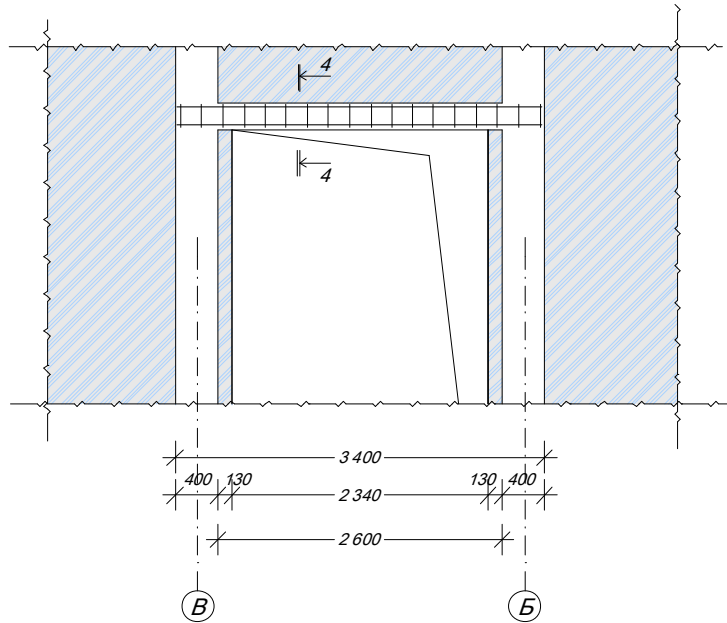


Comments:

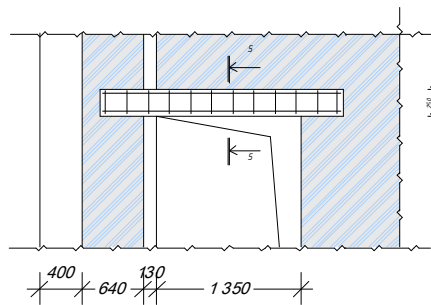
1. This sheet is considered from CC-2 and CC-6

						72-2014 -RFQ-UNDP-CP-KUL-LITACA-@	CC		
						Construction of 5 additional classrooms in secondary school N 49 of Cholibkamar village, Chubek jamoat, Hamadoni district.			
dim.	Q-ty	Page	№ doc.	Signature	Data				
						Architectural-planing solution	Stage	Page	Pages
GIP		M. Shamsov					WD	14	
						Reinforcement of jumpers PrM-1, PrM-2 & PrM-3	Private Buisnessman Aslam Pochoev License XT-23 №0000060		
Developed		A. Pochoev							
Checked		M. Shamsov							

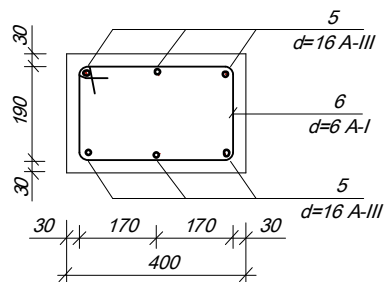
Reinforcement of jumpers PrM-3



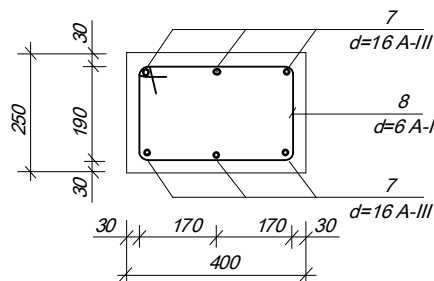
Reinforcement of jumpers PrM-5



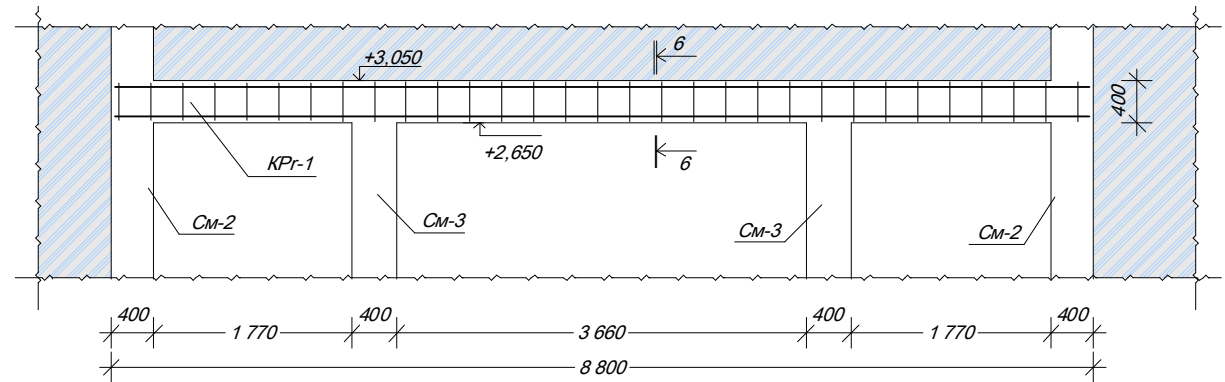
PrM-3 (3-3) KPr-3



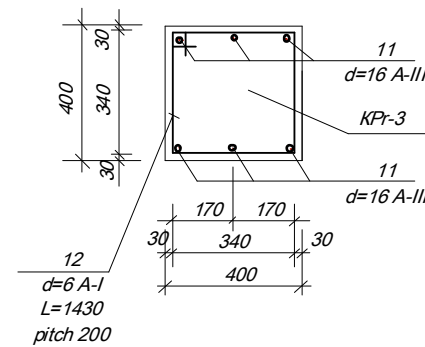
PrM-4 (4-4) KPr-4



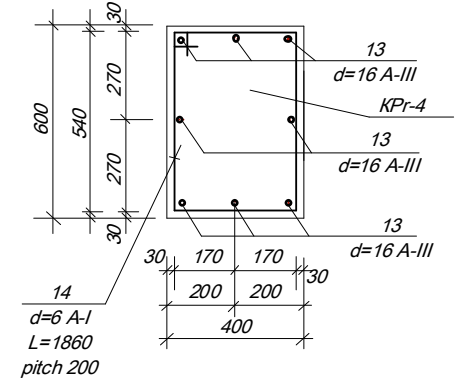
БМ-1 Monolithic beam



БМ-1 (section 6-6) и (section 7-7)



БМ-2 (section 8-8)

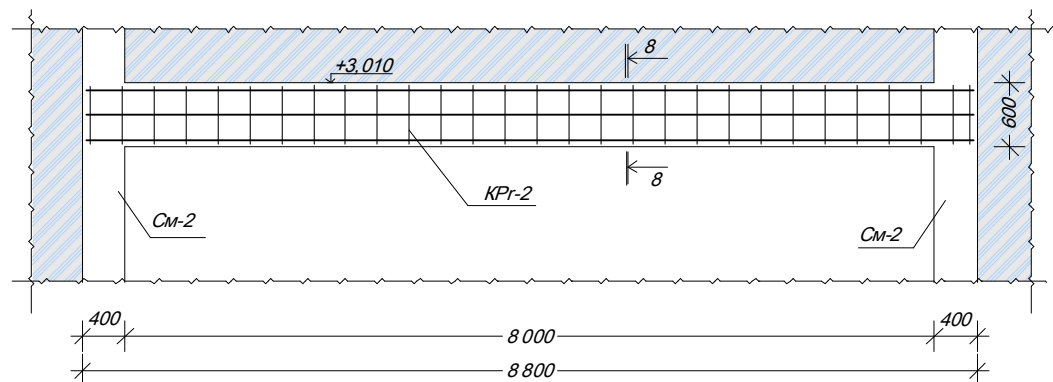


Comments:

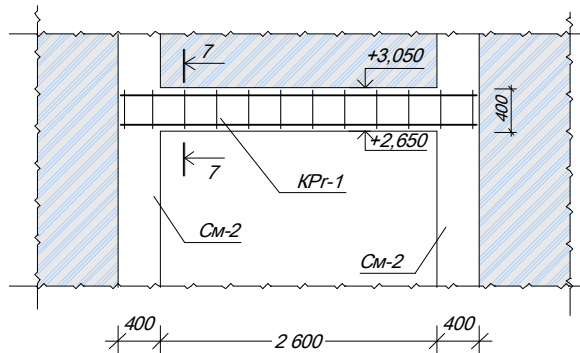
1. This sheet is considered from CC-2 and CC-6

						72-2014 -RFQ-UNDP-CP-KUL-LITACA-@				CC		
						Construction of 5 additional classrooms in secondary school N 49 of Choiobkamar village, Chubek jamoat, Hamadoni district.						
dim.	Q-ty	Page	№ doc.	Signature	Data	Architectural-planing solution				Stage	Page	Pages
GIP		M. Shamsov								WD	15	
						reinforcement of jumper PrM-4, PrM-5 & БМ-1				Private Buisnessman		
Developed		A. Pochoev								Aslam Pochoev		
Checked		M. Shamsov								License XT-23 №0000060		

БМ-2 Monolithic beam



БМ-3 Monolithic beam



БМ Monolithic beam
Specification for one unit

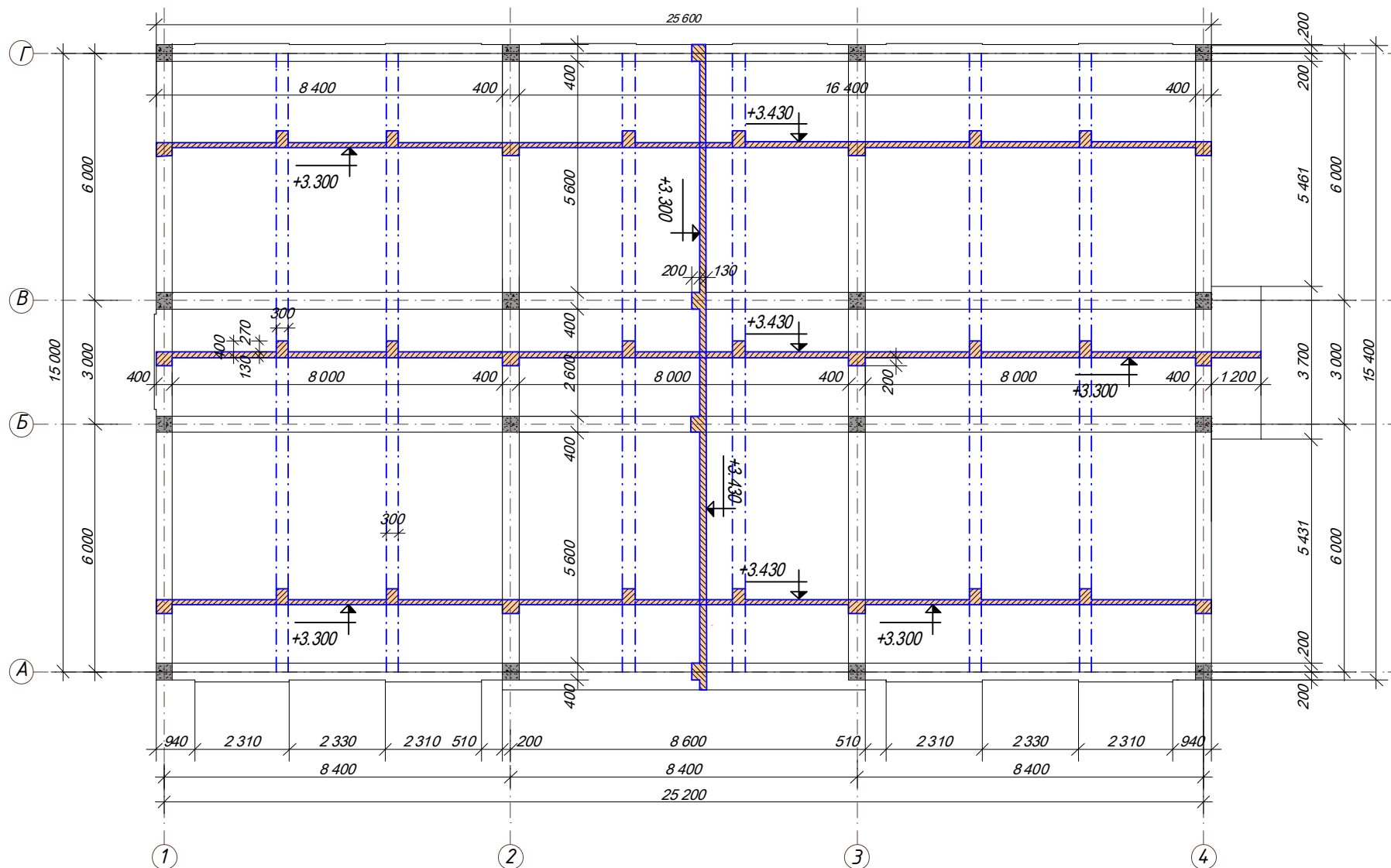
Type of pos.	Designation	Description	Q-ty	Weight meas. unit, m	Remarks
		Monolithic beam			
		БМ - 1 (1m), KPr-3	8,800 m		
11		16 A-III L=1000	6	9.48	
12		6 A-I L=1430	5	1.6	11.08
		Total weight armature 97,50kg, Concrete cl. B15 - 1,41m³			
13		БМ-2(1m.), KPr-4	8,800 m		
14		16 A-III L=1000	8	12.64	
		6 A-I L=1860	5	2.05	14.69
		Total weight armature 129,27kg, Concrete cl. B15 - 2,11m³			

Jumpers - Specification for one unit

Type of pos.	Designation	Description	Q-ty	Weight meas. unit, m	Remarks
		Jumper PrM			
		PrM-1 (1m.)	33,00 m		
1		16 A-III L=1000	6	9.48	
2		6 A-I L=1160	5	1.3	10.78
		Total weight armature 355,74kg, Concrete cl. B15 - 3,3m³			
		ПрМ-2 (1пм.)	8,80 п.м		
3		16 A-III L=1000	7	11,06	
4		6 A-I L=1160	5	1.3	12.36
		Total weight armature 108,77kg, Concrete cl. B15 - 0,88m³			
		ПрМ-3 и 4 (1пм.)	5,00 п.м		
5		16 A-III L=1000	6	9.48	
6		6 A-I L=1160	5	1.3	10.78
		Total weight armature 53,90kg, Concrete cl. B15 - 0,50m³			
		ПрМ-5 (1пм.)	8,5 п.м		
7		16 A-III L=1000	6	9.48	
8		6 A-I L=1160	5	1.3	10.78
		Total weight armature 91,63kg, Concrete cl. B15 - 0,85m³			

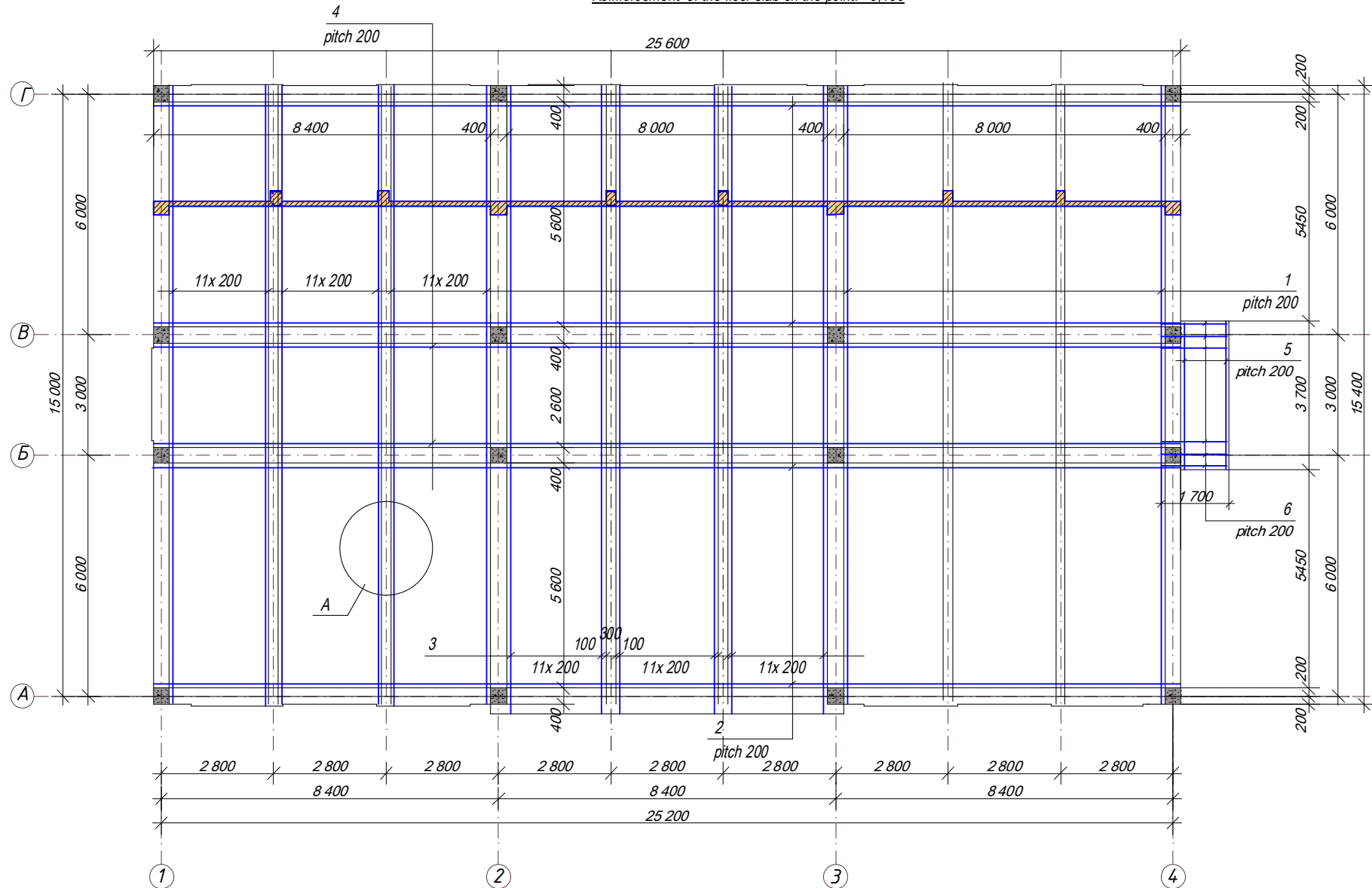
						72-2014-RFQ-UNDP-CP-KUL-LITACA-@	CC		
						Construction of 5 additional classrooms in secondary school N 49 of Choiobkamar village, Chubek jamoat, Hamadoni district.			
dim.	Q-ty	Page	№ doc.	Signature	Data	Architectural-planing solution	Stage	Page	Pages
GIP		M. Shamsov					WD	16	
						Reinforcement of Monolithic beams БМ- 2, 3 & Specifications	Private Buissnessman		
Developed		A. Pochoev					Aslam Pochoev		
Checked		M. Shamsov					License XT-23 №0000060		

Formwork drawing slabs on the point +3,130



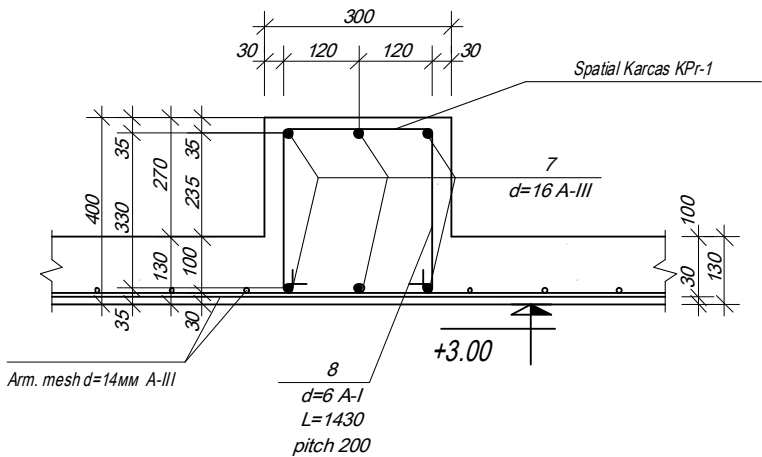
						72-2014 -RFQ-UNDP-CP-KUL-LITACA-@	CC		
						Construction of 5 additional classrooms in secondary school N 49 of Choiobkamar village, Chubek jamoat, Hamadoni district.			
dim.	Q-ty	Page	№ doc.	Signature	Data	Architectural-planing solution	Stage	Page	Pages
GIP	M. Shamsov						WD	17	
Developed	A. Pochoev					Formwork drawing slabs on the point +3,130	Private Buisnessman Aslam Pochoev License XT-23 №0000060		
Checked	M. Shamsov								

Reinforcement of the floor slab on the point. +3,150



						72-2014-RFQ-UNDP-CP-KUL-LITACA-@				CC	
						Construction of 5 additional classrooms in secondary school N 49 of Choiobkamar village, Chubek jamoat, Hamadoni district.					
dim.	Q-ty	Page	№ doc.	Signature	Data						
GIP		M. Shamsov				Architectural-planing solution			Stage	Page	Pages
									WD	18	
Developed		A. Pochoev				Reinforcement of the floor slab on the point. +3,150			Private Buisnessman		
Checked		M. Shamsov							Aslam Pochoev		
									License XT-23 №00000060		

Node "A" Beam Bm-1.1



Comments

- 1.Armature length in specifications is given with account of surplus on armature joints along the length.
- 2.Welding joints armatures to perform the E-type electrodes 42A to GOST9467-75.
- 3.Bolt welded joints along the length tj perform with distance of not less 1 m.
- 4.Without welding joints lapped armatures to perform L = 400mm. with distance at least 1m.
- 5.Ensuring the design position of reinforcing mesh made using metal products.
- 6.Concrete cover of armature layer is performed by installation of concrete talches in framework.
- 7.When performing work on the construction of monolithic slab in the slab using a set of drawings of "EI" s, VC.
- 8.The thickness of the slab 130mm.
- 9The thickness of the protective layer 20mm.

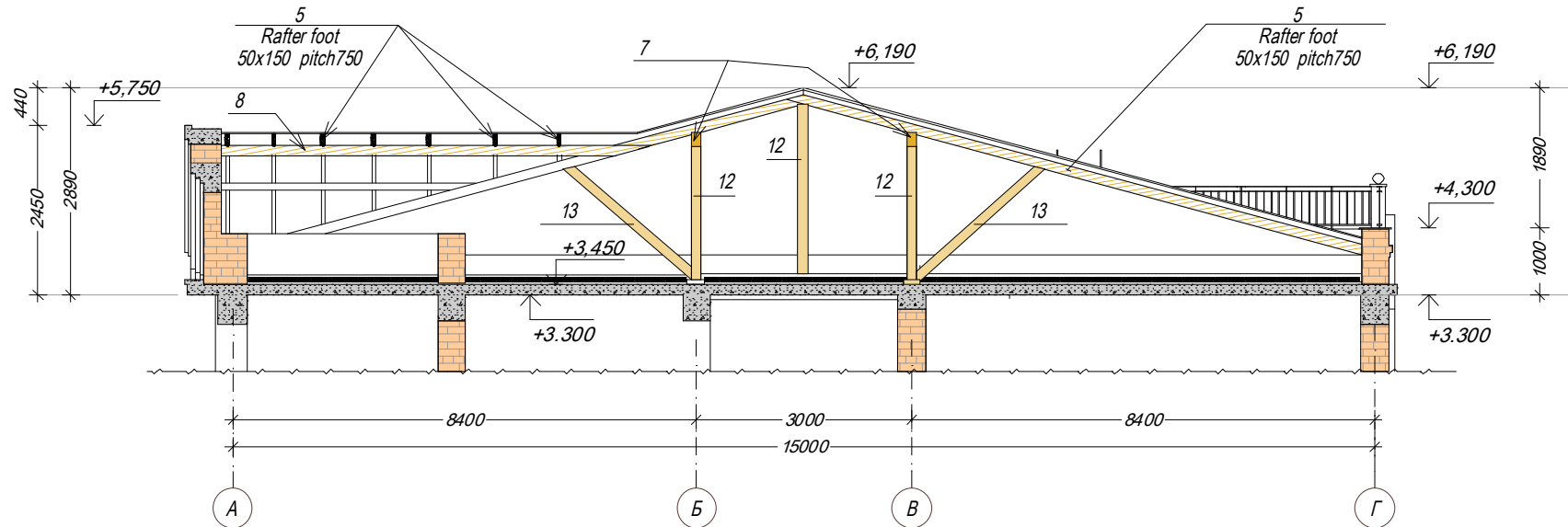
Specification for one unit

Type of pos.	Designation	Description	Q-ty	Weight meas. unit, m	Remarks
Armature mesh					
1		Ø 14 A-III L= 15400	80	1232.0m	1490.72kg
2		Ø 14 A-III L= 25200	54	1360.80m	1646.81kg
3		Ø 14 A-III L= 16200	40	648.0m	782.87kg
4		Ø 14 A-III L= 26400	26	686.40m	830.06kg
				3927.20m	4750,46kg
Total weight armature 4750,46kg, Concrete d. B15 - 52,00m³					
5		Ø 12 A-III L= 3700	6	22.2m	19.71kg
6		Ø 12 A-III L= 1800	19	34.20m	30.37kg
				56,40m	50,08kg
Beam Bm-1.1 (for one unite)					
5		Ø 16 A-III L= 15800	6	94.80m	782.87kg
6		Ø 6 A-III L= 1430	53	75.79m	16.82kg
				Total weight armature 799,69kg, Concrete cl. B15 - 1,70m³	

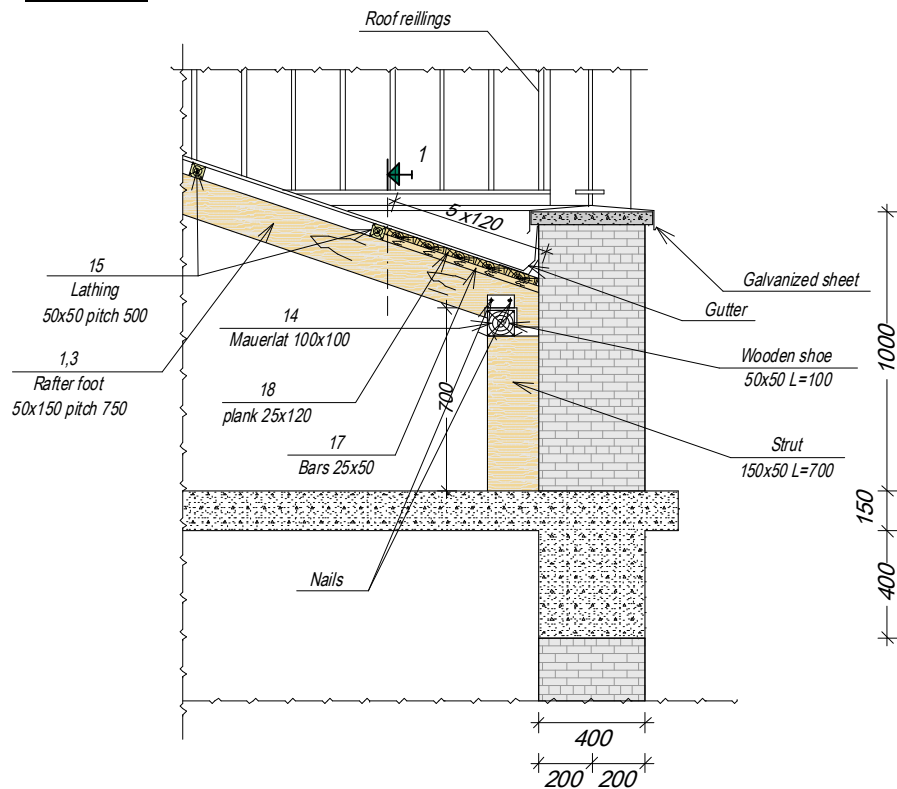
						72-2014-RFQ-UNDP-CP-KUL-LITACA-@				CC	
						Construction of 5 additional classrooms in secondary school N 49 of Choiobkamar village, Chubek jamoat, Hamadoni district.					
dim.	Q-ty	Page	№ doc.	Signature	Data	Architectural-planing solution			Stage	Page	Pages
GIP		M. Shamsov			WD				19		
						Node "A" & details, materiall consumption			Private Buisnessman		
Developed		A. Pochoev			Aslam Pochoev						
Checked		M. Shamsov							License XT-23 №00000060		

						72-2014-RFQ-UNDP-CP-KUL-LITACA-@	CC		
						Construction of 5 additional classrooms in secondary school N 49 of Cholibkamar village, Chubek jamoat, Hamadoni district.			
dim.	Q-ty	Page	№ doc.	Signature	Data				
						Architectural-planing solution	Stage	Page	Pages
GIP	M. Shamsov						WD	20	
						Plan of rafters	Private Buisnessman Aslam Pochoev License XT-23 №0000060		
Developed	A. Pochoev								
Checked	M. Shamsov								

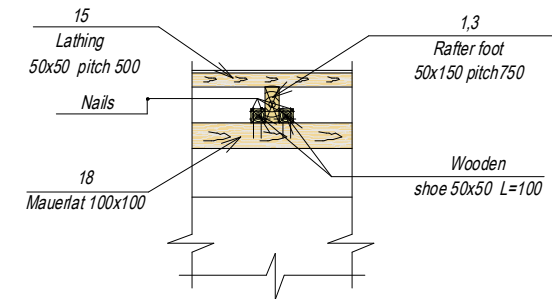
Section 1-1.



Node "A"

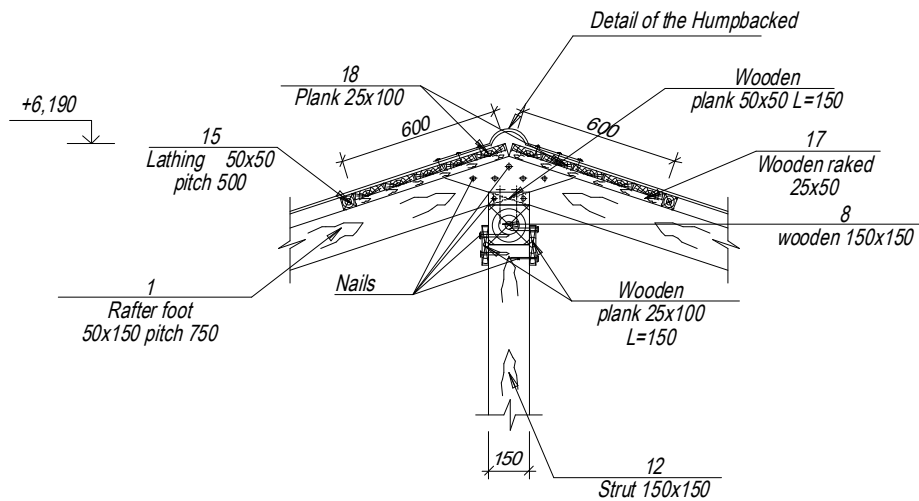
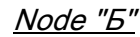


1-1

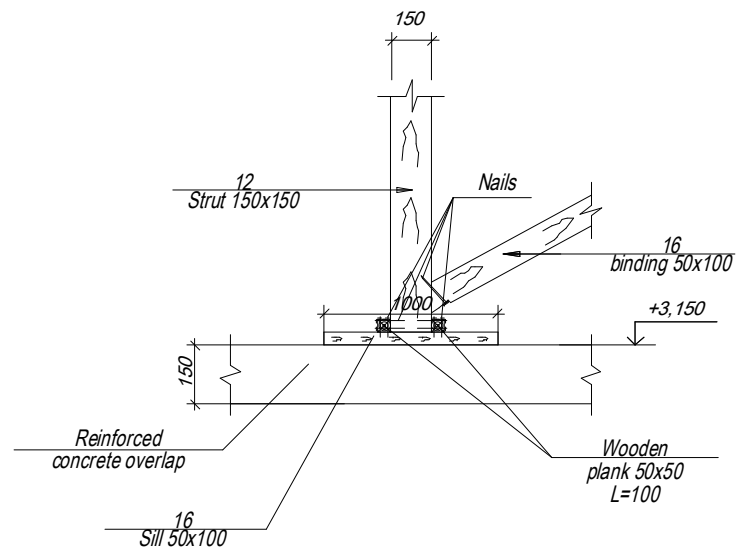


						72-2014-RFQ-UNDP-CP-KUL-LITACA-@	CC		
						Construction of 5 additional classrooms in secondary school N 49 of Choiobkamar village, Chubek jamoat, Hamadoni district.			
dim.	Q-ty	Page	№ doc.	Signature	Data				
GIP		M. Shamsov				Architectural-planing solution	Stage	Page	Pages
							WD	21	
						Section 1-1. Node "A". cross section 1-1.	Private Buisnessman Aslam Pochoev License XT-23 №00000060		
Developed		A. Pochoev							
Checked		M. Shamsov							

Roof wooden elements specifications



Node "B"

[illegible]

Type of pos.	Designation	Description	Q-ty	Weight meas. unit, m	Remarks
	Fire escape PL-1.(for 1 unit)		1	unit	
1	Rectangular pipe GOST 8645-68	63x32x2,5 L=9850	2	48,56	97.12
2	Rectangular pipe GOST 8645-68	40x30x4 L=600	25	2,208	55.20
3	Rectangular pipe GOST 8645-68	50x40x4 L=600	1	2,320	2.320
4	steel strip	4x75 L=300	8	1,284	17.98

*Welding work carried out in accordance with the requirements of SNIP 2-23-81 * "Steel structures" and SNIP 3.03.01-81 "Support and walling." The degree of surface cleaning of steel structures of oxides (before application of protective coating) is not less than 2 according to GOST 9.402-80.*

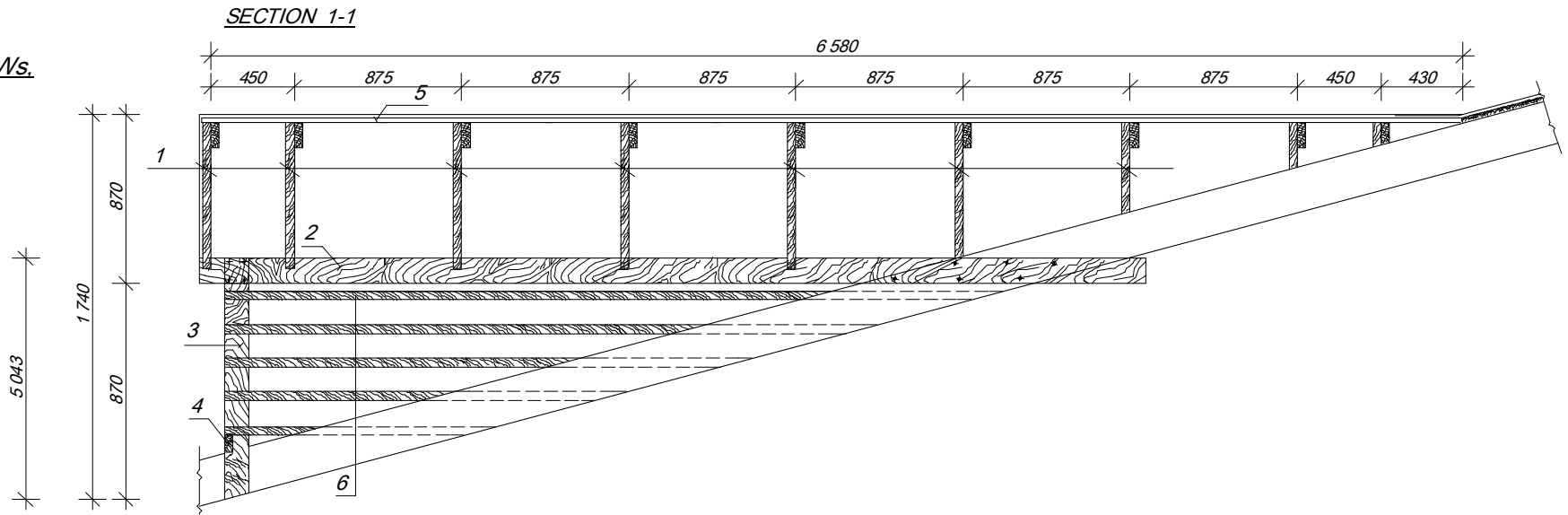
Electrode type -E46A GOST 9467-75 *.

Good penetration, density and uniformity of the deposited metal play a major role in obtaining high endurance limit.

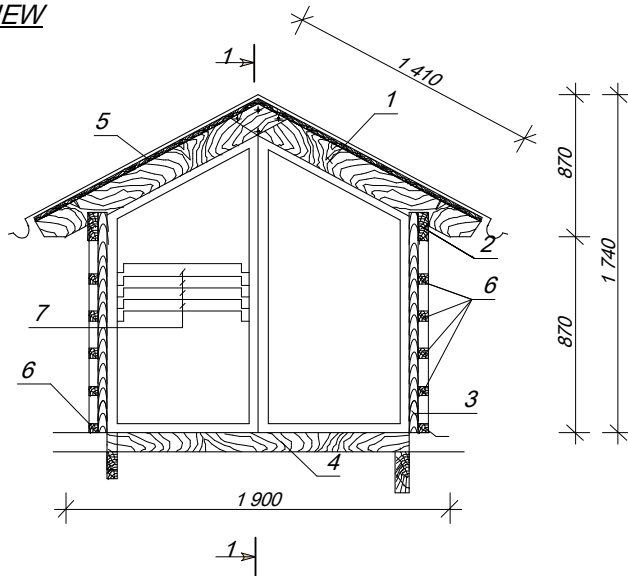
Structural corrosion protection made in accordance with the requirements of SNIP 2.03.11-85 "Protecting structural corrosion. Metal structures are covered with paint coatings
- Group I of Annex 15, 2 coats of enamel PF-115 in accordance with GOST 6465-76, with a total thickness of 55 microns. by primer PF-GOST 18186-79 020po.

						72-2014-RFQ-UNDP-CP-KUL-LITACA-@				CC	
						Construction of 5 additional classrooms in secondary school N 49 of Choilobkamar village, Chubek jamoat, Hamadoni district.					
dim.	Q-ty	Page	№ doc.	Signature	Data						
GIP		M. Shamsov				Architectural-planing solution			Stage	Page	Pages
									WD	23	
Developed		A. Pochoev				Fire escape. Specification			Private Buisnessman Aslam Pochoev License XT-23 №00000060		
Checked		M. Shamsov									

DORMER WINDOWS.



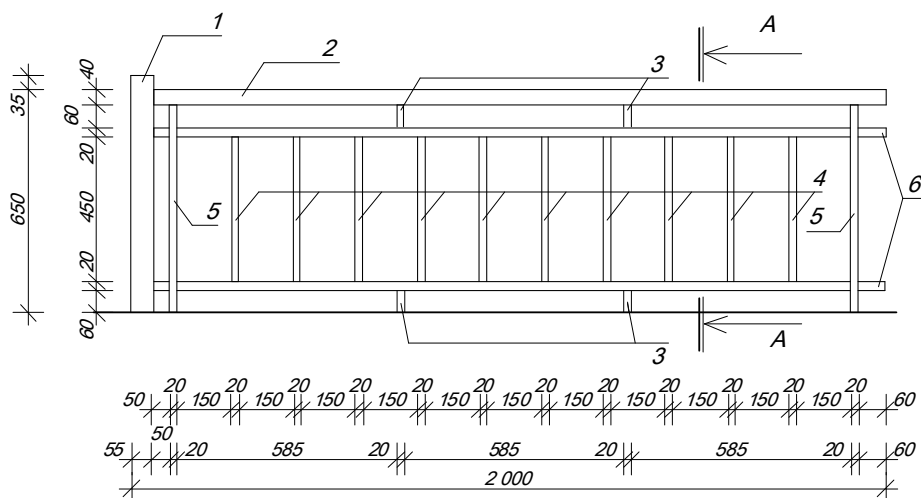
FRONT VIEW



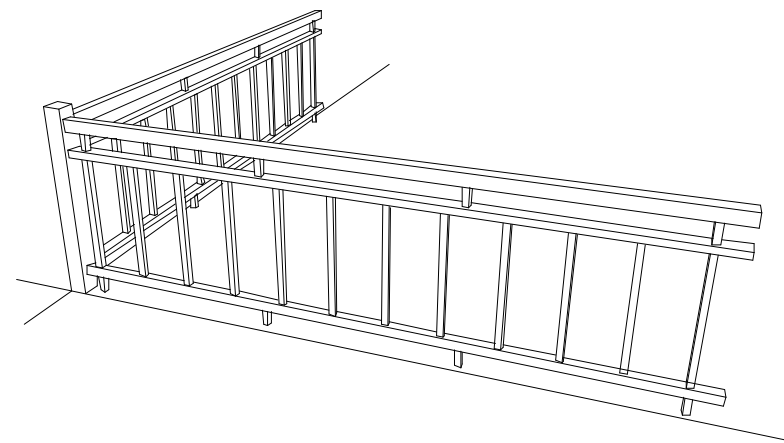
Type of pos.	Name	section B-h	Length m	Q-ty unite	Volume m3	Remarks
1	Rafters	150x50	1,41	16	0,0106	0,17
2	Runs	150x50	4,950	2	0,0372	0,0745
3	strut	150x50	1,260	2	0,0095	0,019
4	Rigel dormer	100x50	1,550	1	0,008	0,008
5	Planks	150x25	8,00	18	0,03	0,54
6	Bruski	50x50	Lcp=2,76	10	0,0069	0,069
					Итого:	0,881m3
	galvanized steel					14,96m2
7	wooden blinds-10mm				0,076	

						72-2014-RFQ-UNDP-CP-KUL-LITACA-@	CC
						Construction of 5 additional classrooms in secondary school N 49 of Choilobkamar village, Chubek jamoat, Hamadoni district.	
dim.	Q-ty	Page	№ doc.	Signature	Data		
	GIP	M. Shamsov				Architectural-planing solution	Stage WD
							Page 24
							Pages
Developed	A. Pochoev					Dormer windows, Specifications	Private Buisnessman Aslam Pochoev License XT-23 №0000060
Checked	M. Shamsov						

Roof metal reilling



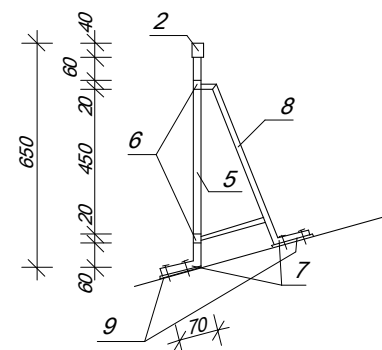
perspective roof railing



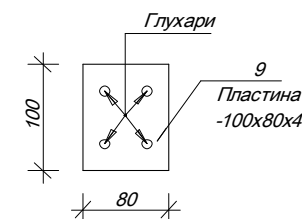
Roof metal reilling h=0.6m for one section

Type of pos.	Name	section b-h	Length m	Q-ty unite	Volume m3	Remarks
1	Rectangular pipe GOST 8645-68	50x50x2,5mm L=685	un.	1	2.32	
2	Rectangular pipe GOST 8645-68	40x40x2,5mm L=2000	un.	1	5.46	
3	Rectangular pipe GOST 8645-68	20x20x2,5mm L=60	un.	4	0.36	
4	Rectangular pipe GOST 8645-68	20x20x2,5mm L=450	un.	10	6.40	
5	Rectangular pipe GOST 8645-68	20x20x2,5mm L=610	un.	2	6.15	
6	Rectangular pipe GOST 8645-68	20x20x2,5mm L=2000	un.	2	5.68	
7	Rectangular pipe GOST 8645-68	20x20x2,5mm L=70	un.	4	0.400	
8	Rectangular pipe GOST 8645-68	20x20x2,5mm L=500	un.	2	1.42	
9	plate	- 100 x80 x4mm	un.	6	1.50	
Total weight for one section			29,7 кг			

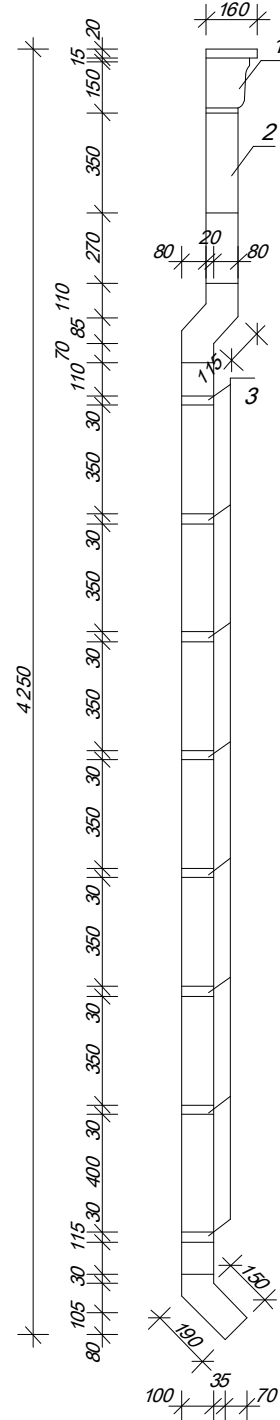
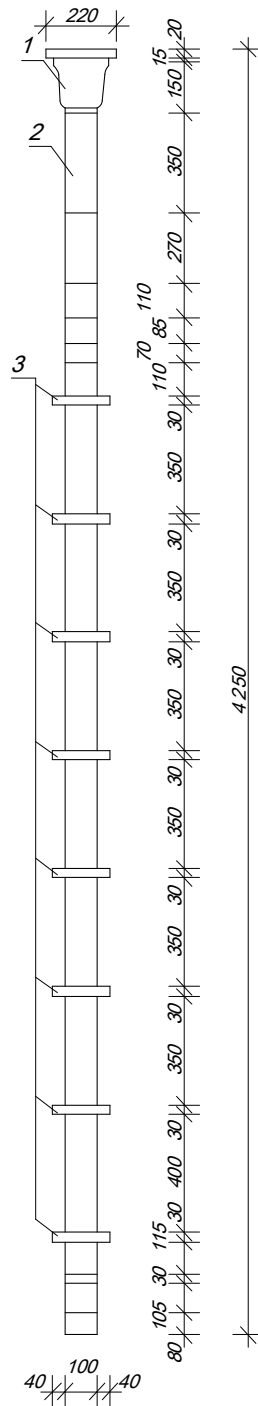
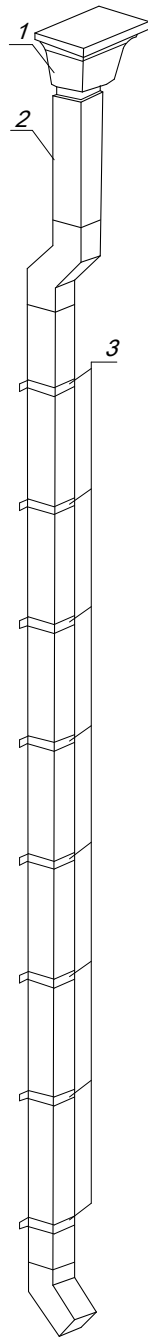
Section A-A



Pos. 9



							72-2014-RFQ-UNDP-CP-KUL-LITACA-@				CC	
							Construction of 5 additional classrooms in secondary school N 49 of Choiobkamar village, Chubek jamoat, Hamadoni district.					
dim.	Q-ty	Page	№ doc.	Signature	Data		Architectural-planing solution			Stage	Page	Pages
										WD	25	
GIP		M. Shamsov					Roof reilling			Private Buisnessman		
						Aslam Pochoev						
						License XT-23 №0000060						
Developed		A. Pochoev										
Checked		M. Shamsov										



						72-2014-RFQ-UNDP-CP-KUL-LITACA-@				CC		
						Construction of 5 additional classrooms in secondary school N 49 of Choiobkamar village, Chubek jamoat, Hamadoni district.						
dim.	Q-ty	Page	№ doc.	Signature	Data	Architectural-planing solution				Stage	Page	Pages
GIP		M. Shamsov								WD	26	
						Водосточная труба				Private Buisnessman		
Developed		A. Pochoev								Aslam Pochoev		
Checked		M. Shamsov								License XT-23 №0000060		