

OBJEKTI: PUSETE SHKARKIMI
KONSTRUKTOR: AGIM SERANAJ

OBJECT: WASHOUT CHAMBER
STRUCTURAL ENG.: AGIM SERANAJ

PROJEKTI KONSTRUKTIV

TABELA E FLETEVE

NR. I FLETES	EMERTIMI I FLETES
K-01	SHENIME TEKNIKE DHE KONSTRUKTIVE
K-02	PLANI I THEMELEVE, KUOTA -1.40. PAMJET E MUREVE B/A
K-03	PLLAKE E THEMELIT (zgara e poshtme dhe e sipërme)
K-04	MURI B/A 1, 2, A DHE B
K-05	PLANI I STRUKTURAVE KUOTA +0.60
K-06	ARMIMI I SOLETES KUOTA +0.60

DETAILED PROJECT

TABLE OF CONTENT

Page no.	PAGE TITLE
K-01	TECHNICAL AND STRUCTURAL NOTES
K-02	FOUNDATION PLAN, LEVEL -1.40. RC WALLS VIEW
K-03	FOUNDATION REINFORCEMENT (lower and upper reinforcements)
K-04	RC WALL 1, 2, A AND B
K-05	STRUCTURAL PLAN LEVEL +0.60
K-06	SLAB REINFORCEMENT LEVEL +0.60

DESIGN STANDARTS AND APPLIED LOADS:

- 1-

Design Codes - Albanian Code KTP 89 and Eurocode.
- 2-

The structure's lifetime - 50 years.
- 3-

The software used for calculations is SAP2000 V14
- 4-

Applied loads:

a)

Dead loads (G)
 - Structure's self weight
 - Dead loads on roofs
 - Dead loads of sloping cement layer
 - Dead loads of plastering layers
 - Dead loads of tiling and cement layers of floors
 - Dead loads of earth (terrain)

b)

Live loads (P)
 - Underneath water pressure
 - Water pressure
 - Service loads

c)

Seismic loads

STANDARTET E PROJEKTIMIT DHE NGARKESAT E APLIKUARA:

- 1-

Kodet projektimit - Kodi Shqipitar KTP 89 dhe Eurocode.
- 2-

Jetegjatesia e struktures - 50 vjet.
- 3-

Programi i perdorur per llogaritje - SAP2000 V14
- 4-

Ngarkesat e aplikuara:

a)

Ngarkesat e perhereshme (G)
 - Pesha e struktures
 - Ngarkesa mi solete
 - Ngarkesa e shtreses se cimentos
 - Ngarkesa e shtreses sesuvaimit
 - Ngarkesa e pllakave dhe strukturave te cimentos
 - Ngarkesa e tokes

b)

Forcat e jashteme (P)
 - Presioni i ujerave nentokesore
 - Presioni i ujit
 - Ngarkesa e sherbimit

c)

Ngarkesa sizmike

KUSHTET GJEOLOGO-INXHINIERIKE

Ne baze te raportit gjeologo-inxhinierik te hartuar nga ing. Gjon Leka ne Tetor 2017, strukturat jane llogaritur te mbeshtetura ne shtresen gjeologjike Nr. 2 me keto te dhena:

Perberja granulometrike		
Fraksioni argjilor	<0.002 mm	28.70 %
Fraksioni pluhuror	0.002-0.05 mm	49.60 %
Fraksioni rere	>0.05 mm	21.70 %

Pesha volumore ne gjendje natyrale	$\Delta = 2.0 \text{ T/m}^3$
Kendi I ferkimit te brendshem	$\varphi = 25^\circ$
Kohezion	$C = 0.35 \text{ kg/cm}^2$
Moduli i deformacionit	$E13 = 200 \text{ kg/cm}^2$
Ngarkesa e lejuar ne shtypje	$\sigma = 2.0 \text{ kg/cm}^2$

Gjate realizimit te punimeve konstruktive detyrimisht te perdoren pervec projektit konstruktiv edhe projekti arkitektonik dhe teknologjik me qellimin e evitimit te gabimeve te mundshme ne zbatim.

Gjate realizimit te germimit te themeleve te merren masa per ruajtjen e qendrueshmerise se skarpatave, ne konsultim me konstruktorin dhe gjeologun.

Ne rastet e vendosjes se tabanit te themeleve ne shtresa gjeologjike te dobeta, duhet te realizohet perforcimi i tabanit pasi te jete hequr shtresa e dobet.

Me perfundimin e germimit, duhet te plotesohet proces-verbali i tabanit te themelit me prezence te konstruktorit dhe gjeologut. Vetem pasi te jete plotesuar ky proces-verbal do te vazhdohet me realizimin e shtreses me zhavor te ngjeshur.

Ne rast se gjate zbatimit ndryshohen kuotat e sistemimit, detyrimisht duhen njoftuar projektuesit per reflektimet e nevojshme per mos cenimin e kushteve te punes se themelit.

Te realizohen te gjitha detajet konstruktive te dhena ne projekt duke u respektuar kushtet teknike te zbatimit.

Gjate realizimit te strukturave te lihen vrimat e instalimeve te tubave duke zbatuar detajet perforcuese te armimit te tyre.

1. Betoni i perdorur te jete i klases C 20/25, klasa e ekspozimit XD2.
2. Hekuri qe do te perdoret te jete i tipit S 500.
3. Shtresa mbrojtese te mos jete me e vogel se vlera e treguar ne secilen flete te projektit.
4. Per shufrat me gjatesi variabel ne tabelte eshte marre gjatesia mesatare e tyre.
5. Ne rast mosperputhjeje te dimensioneve te behen verifikimet me dimensionet e arkitektures dhe te behen konsultime me grupin e projektimit.
6. Betoni i varfer i te jete i klases C12/15.
7. Zhavori i perdorur te jete i ruluar CBR=50%.
8. Toka natyrale poshte shtreses te zhavorit te ngjishet deri ne CBR=30%.
9. Grepate stafave te inkastrohen ne beton duke i kthyer me kend 35°(45°).

During the execution of the work must be consulted the architectural and technological drawings besides structural drawings in order to avoid any possible mistake.

During the excavation for the foundation must be taken care of slope stability, consulting both structural and geological engineers.

If during the execution of the work is found loose layer for supporting the foundation, the treatment of these layers must be applied, by replacing it.

The real condition of foundation supporting layer must be documented by site engineers and signed by structural and geological engineers. After this documentation is completed, the execution work can continue with the gravel layer.

If case of changing the foundation and/or surrounding terrain levels, the structural engineer must be notified in order to make the appropriate modifications.

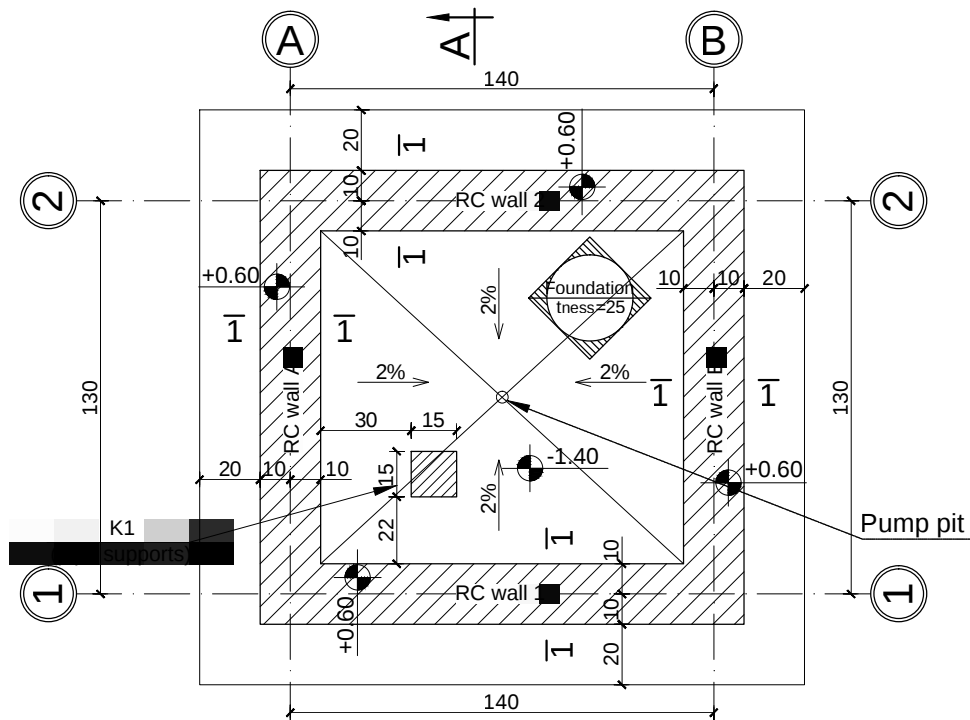
All given structural details must be realized in accordance with executorial code requirements.

During the execution work pay attention to the pipe holes and apply correctly the details of opening reinforcements.

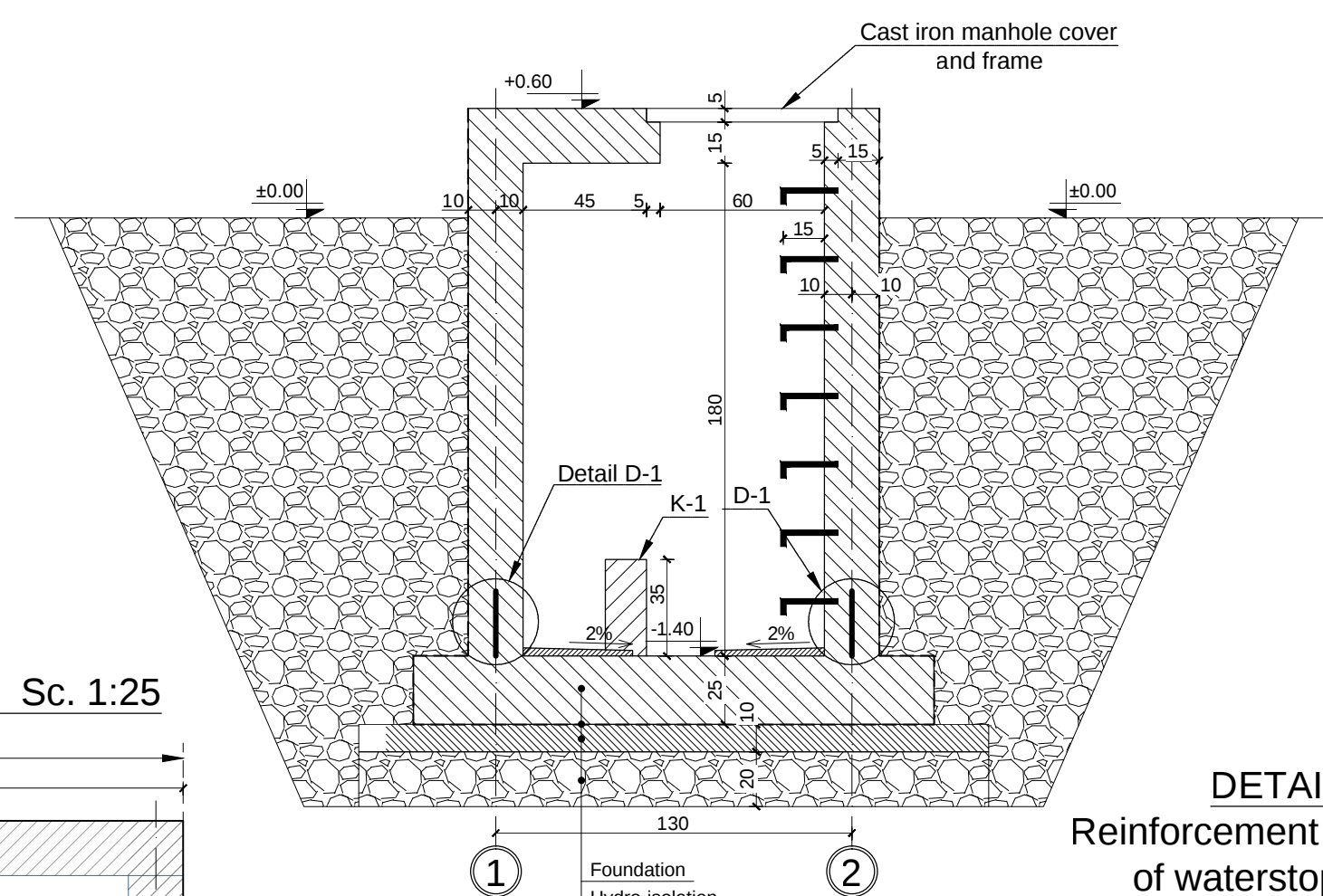
1. Concrete class should be C20/25, exposition class XD2.
2. Steel class should be S 500.
3. The concrete cover layer of the reinforcement shall not be less than the value showed on project pages.
4. For steel bars with variabel length for quantity is taken the average length.
5. In case of inconsistency of dimensions should verify them with architecture dimensions and should consult with project design team.
6. Lean concrete layer under plate should be C12/15.
7. Gravel should be compress by roller until CBR=50%.
8. Natural land under gravel layer should be compressed until CBR=30%.
- 9.The hooks of all stirrups must be bent (anchored) in concrete under a bent angle of 35°(45°).

PROJECT: Rural Water Supply 3 - BMZ ID 2020 61 695 / Ujesjellesi Rural 3 - BMZ ID 2020 61 695 PROJEKTI: CONSULTING SERVICES FOR PROJECT PREPARATION AND FEASIBILITY STUDIES FOR CONSTRUCTION/RECONSTRUCTION OF WATER SUPPLY SYSTEMS IN RURAL AREAS SHERBIME KONSULENCE PER PERGATITJEN E PROJEKTEVE DHE STUDIMEVE TE FIZIBILITETIT PER NDERTIMIN/RINDERTIMIN E RRJETIT TE UJESJELLESIT NE ZONAT RURALE	CLIENT: KLIENTI:  ALBANIAN DEVELOPMENT FUND FONDI SHQIPTAR I ZHVILLIMIT	ENGINEER: INXHINIER:  CES Consulting Engineers Salzgitter GmbH	Sub - Consultant: 	FUNDING: FINANCUESI:   			SCALE: SHKALLA: 1 : 50
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					01	DRAFT	OCTOBER 2018 FILE NAME: EMRI DOK: RWSIII-013.2QEP-DWG-WS-WO-Structural.dwg
					No. Rev	DESCRIPTION OF REVISION	DWG No.: NR. VIZATIMIT: RWSIII-013.2QEP-DWG-WS-WOC-STR-002

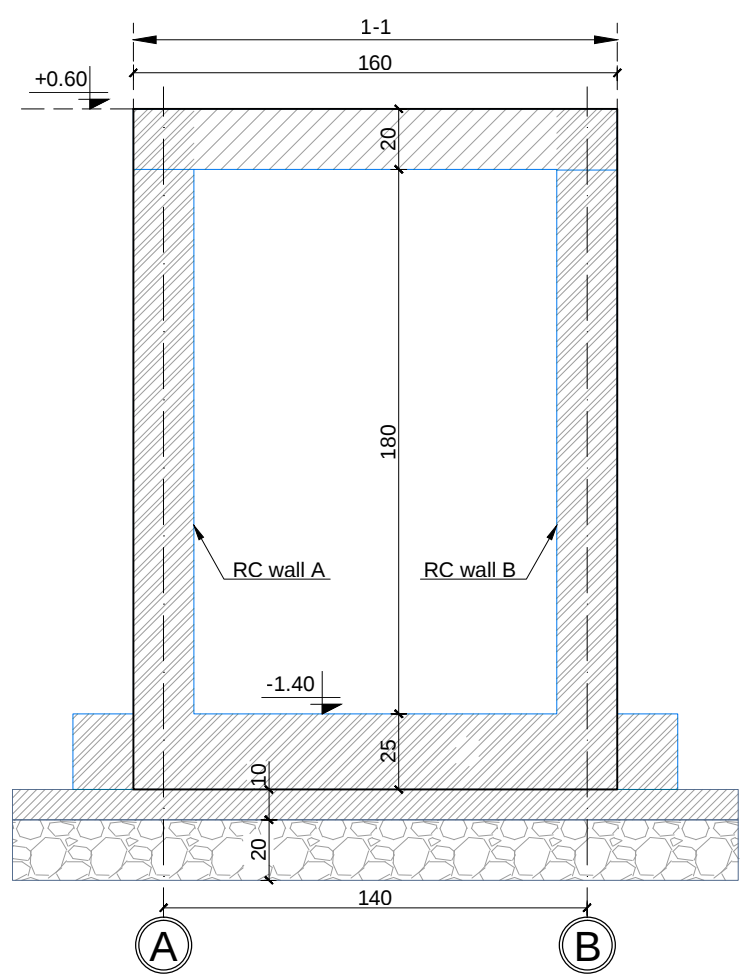
FOUNDATION PLAN LEVEL -1.40, Sc. 1:25



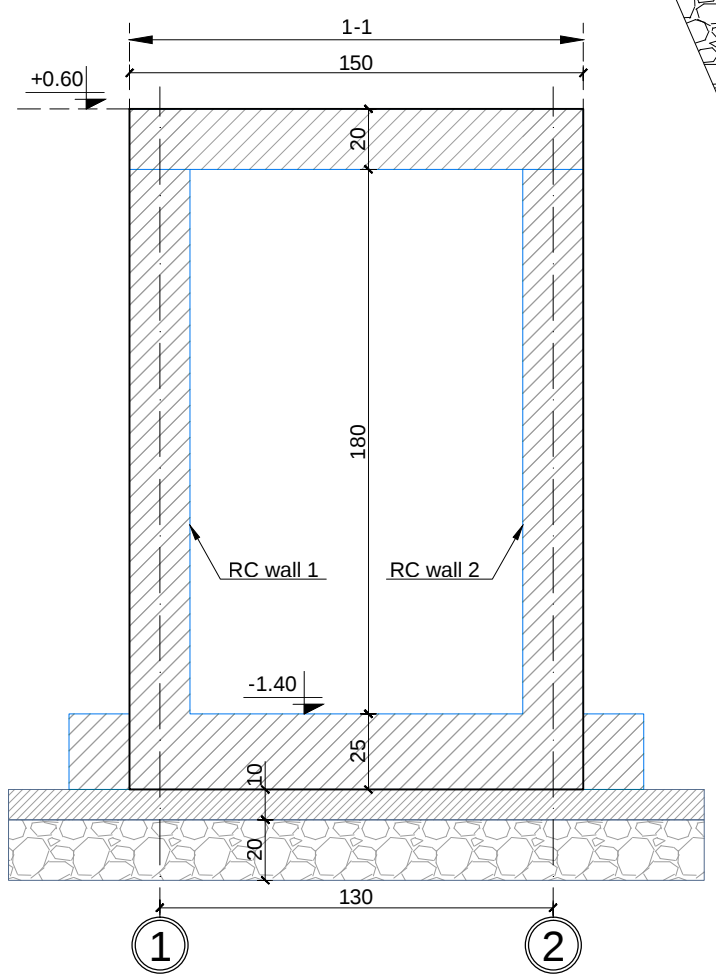
SECTION A-A, Sc. 1:25



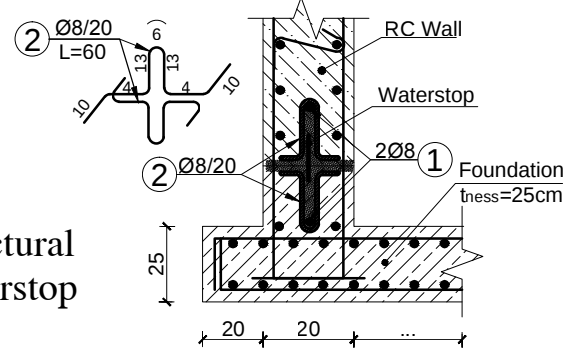
RC wall 1 & 2 Sc. 1:25



RC wall A & B Sc. 1:25



DETAIL D-1
Reinforcement for protection
of waterstop, Sc.1:25

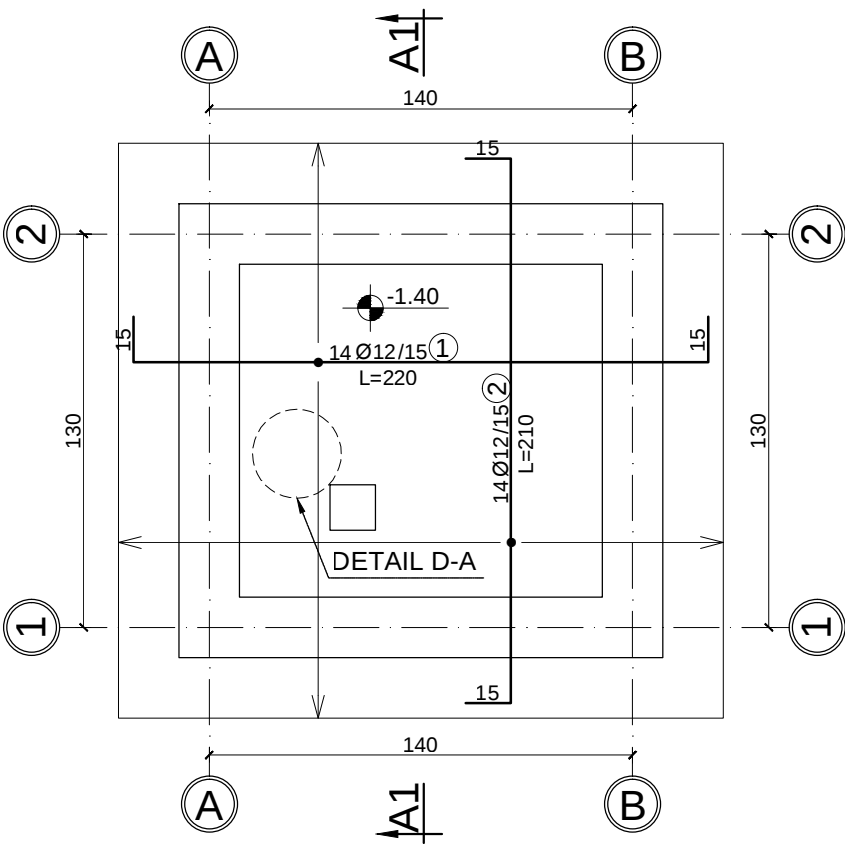


NOTE:
Refer to architectural
project for Waterstop
position.

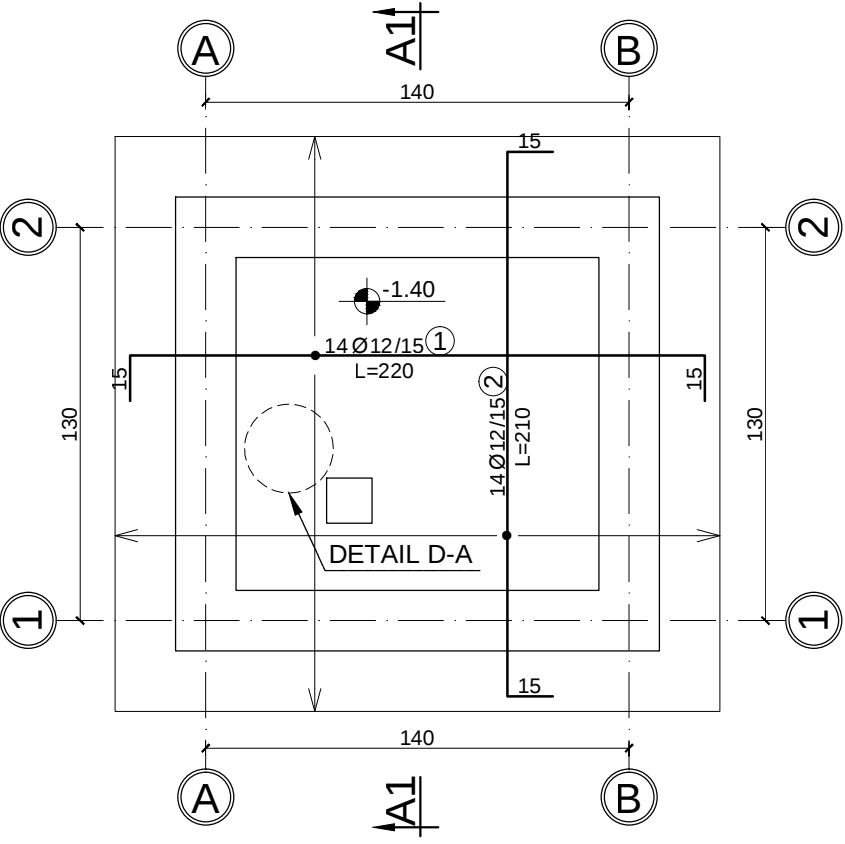
TABELA E SPECIFIKIMIT TE ARMATURES / TABLE OF REINFORCEMENT									
Lloji Type	Sasia Pieces	Poz. Element	d	l (cm)	cope quantity	L (m)	Pesha/nj weight/unit	Pesha / Weight	TOTAL/ TOTAL
D-1	1	1	8	1200	1	12.00	0.395	4.74	4.74
		2	8	60	54	32.40	0.395	12.78	12.78

CONCRETE: C20/25
STEEL: S500
CONCRETE COVER: a=4cm

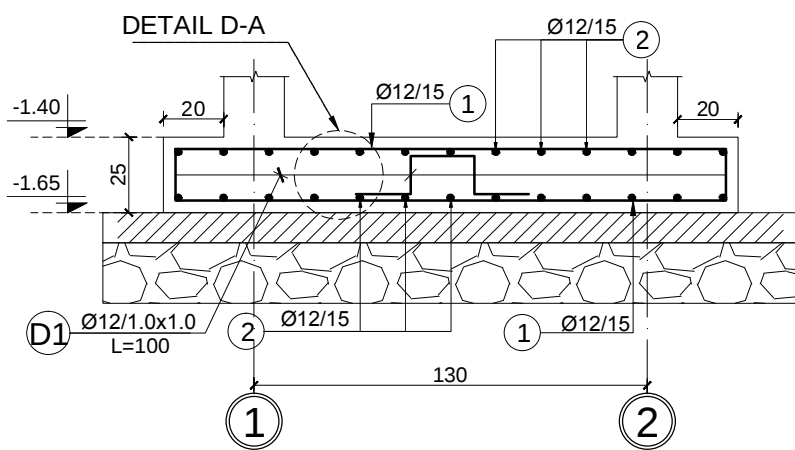
FOUNDATION LOWER REINFORCEMENT
LEVEL -1.40 , Sc. 1:25



FOUNDATION UPPER REINFORCEMENT
LEVEL -1.40, Sc. 1:25



SECTION A1-A1, Sc. 1:25



DETAIL D-A, Sc. 1:25

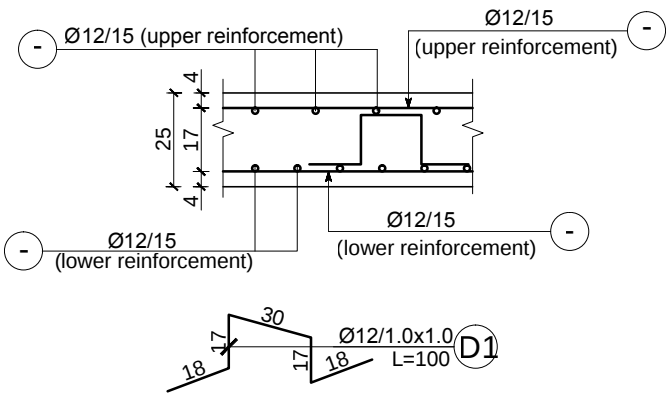
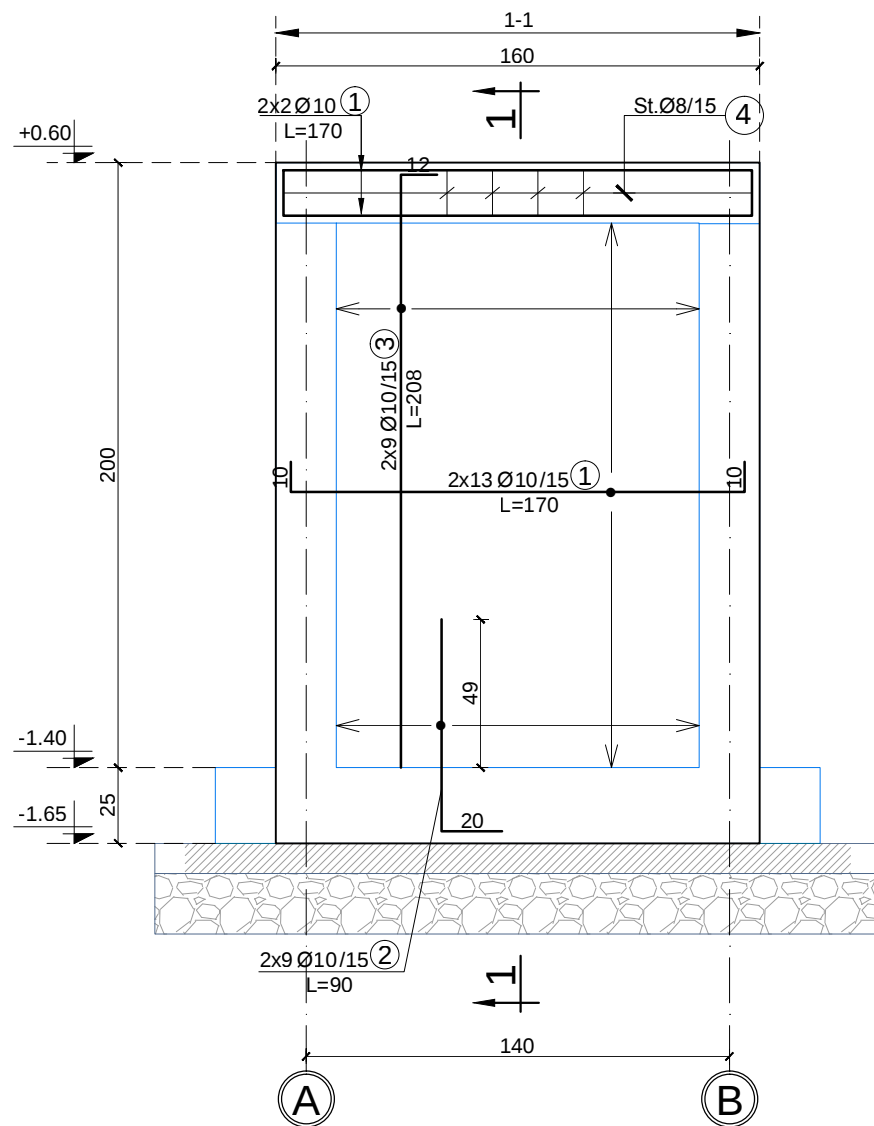


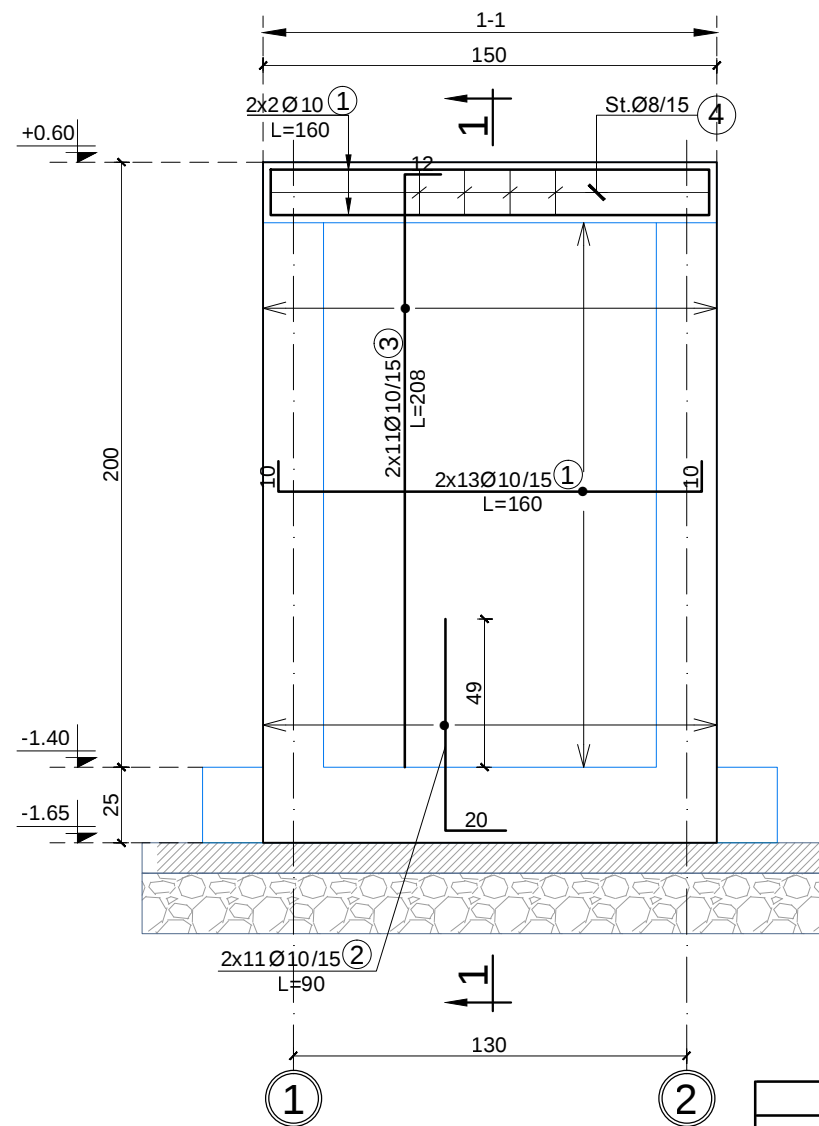
TABELA E SPECIFIKIMIT TE ARMATURES / TABLE OF REINFORCEMENT									
Lloji Type	Sasia Pieces	Poz. Element	d	l (cm)	cope quantity	L (m)	Pesha/nj weight/unit	Pesha / Weight	TOTAL/ TOTAL
Pllaka e themelit / Foundation (zg. e poshtme / lower reinforcement)	1	1	12	220	14	30.8	0.888	27.34	27.34
		2	12	210	14	29.4	0.888	26.10	26.10
		D1	12	100	5	5.0	0.888	4.44	4.44
									57.89
(zg. e sipërme / upper reinforcement)	1	1	12	220	14	30.8	0.888	27.34	27.34
		2	12	210	14	29.4	0.888	26.10	26.10
									53.45

CONCRETE: C20/25
STEEL: S500
CONCRETE COVER: a=4cm

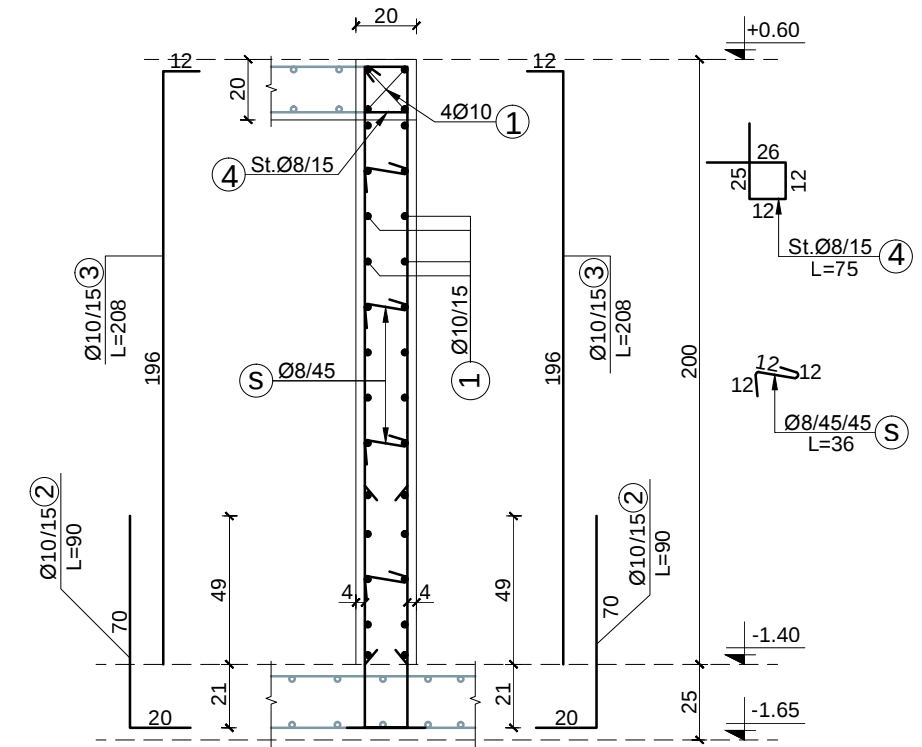
RC wall 1 & 2 Sc. 1:25



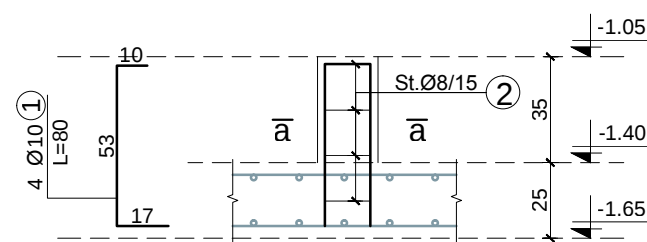
RC wall A & B Sc. 1:25



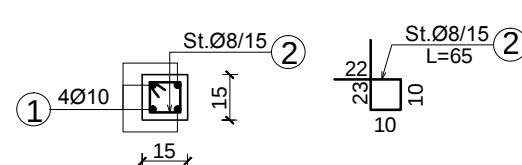
Section 1-1, sc. 1:25



K1 - pipe support Sc. 1:25



Section 1-1, sc. 1:25



CONCRETE: C20/25

STEEL: S500

CONCRETE COVER: a=4cm

TABELA E SPECIFIKIMIT TE ARMATURES / TABLE OF REINFORCEMENT

Lloji Type	Sasia Pieces	Poz. Element	d	l (cm)	cope quantity	L (m)	Pesha/nj weight/unit	Pesha / Weight	TOTAL/ TOTAL
RC wall 1 & 2	2	1	10	170	30	51.00	0.617	31.44	62.89
		2	10	90	18	16.20	0.617	9.99	19.98
		3	10	208	18	37.44	0.617	23.08	46.17
		4	8	75	9	6.75	0.395	2.66	5.33
		s	8	36	13	4.68	0.395	1.85	3.69
		138.05							
RC wall A & B	2	1	10	160	30	48.00	0.617	25.59	59.19
		2	10	90	22	19.80	0.617	12.21	24.41
		3	10	208	22	45.76	0.617	28.21	56.43
		4	8	75	8	6.00	0.395	2.37	4.74
		s	8	36	13	4.68	0.395	1.85	3.69
		148.46							
K1-pipe support	1	1	10	80	4	3.20	0.617	1.97	3.95
		2	8	65	4	2.60	0.395	1.03	2.05
		6.00							

PROJECT: Rural Water Supply 3 - BMZ ID 2020 61 695 / Ujesjellesi Rural 3 - BMZ ID 2020 61 695
 PROJEKTI: CONSULTING SERVICES FOR PROJECT PREPARATION AND FEASIBILITY STUDIES FOR CONSTRUCTION/RECONSTRUCTION OF WATER SUPPLY SYSTEMS IN RURAL AREAS
 SHERBIME KONSULENCE PER PERGATITJEN E PROJEKTEVE DHE STUDIMEVE TE FIZIBILITETIT PER NDERTIMIN/RINDERTIMIN E RRJETIT TE UJESJELLESIT NE ZONAT RURALE

TITLE:
TITULLI: RC WALL 1, 2, A AND B
MURI B/A 1, 2, A DHE B

CLIENT:
KLIENTI:



ALBANIAN DEVELOPMENT FUND
FONDI SHQIPTAR I ZHVILLIMIT

FUNDING:
FINANCUESI:



KFW

ENGINEER: INXHINIER:

CES
Consulting Engineers
Salzgitter GmbH

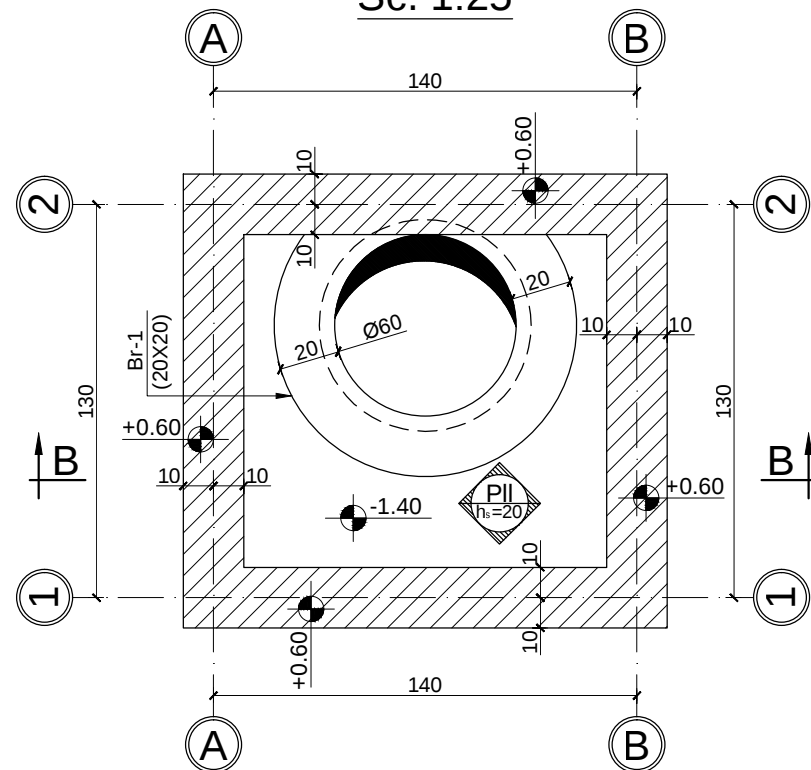
Sub - Consultant:



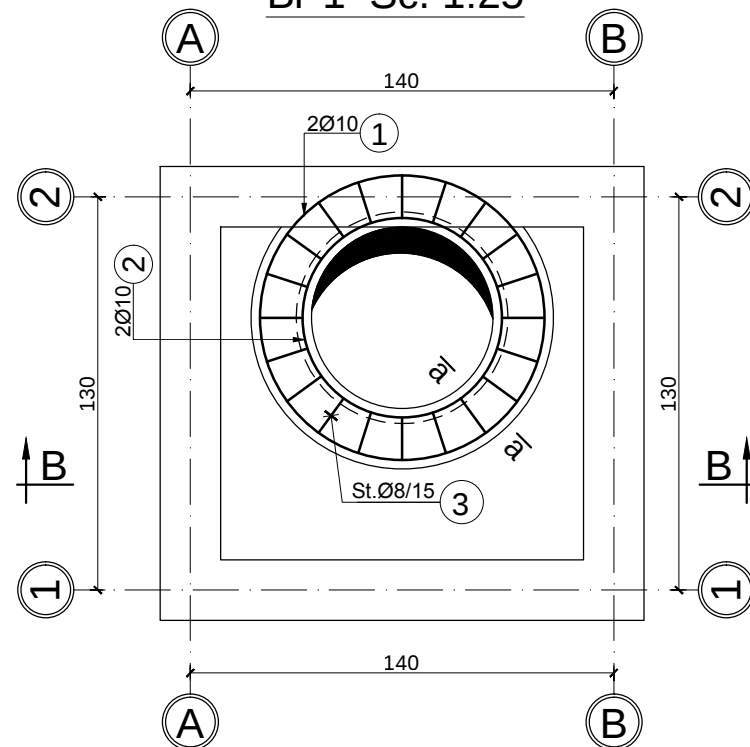
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01	DRAFT	OCTOBER 2018	FILE NAME: EMRI DOK: RWSIII-013.2QEP-DWG-WS-WO-Structural.dwg
No. Rev	DESCRIPTION OF REVISION	DATE	DWG No.: NR. VIZATIMIT: RWSIII-013.2QEP-DWG-WS-WOC-STR-005

SCALE: SHKALLA: 1 : 50

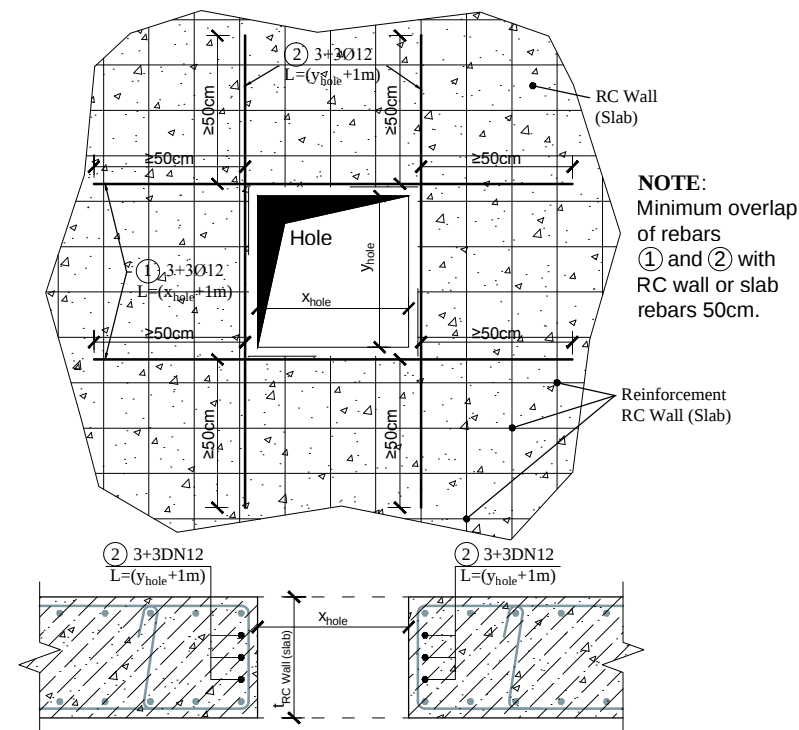
STRUCTURAL PLAN LEVEL +0.60, Sc. 1:25



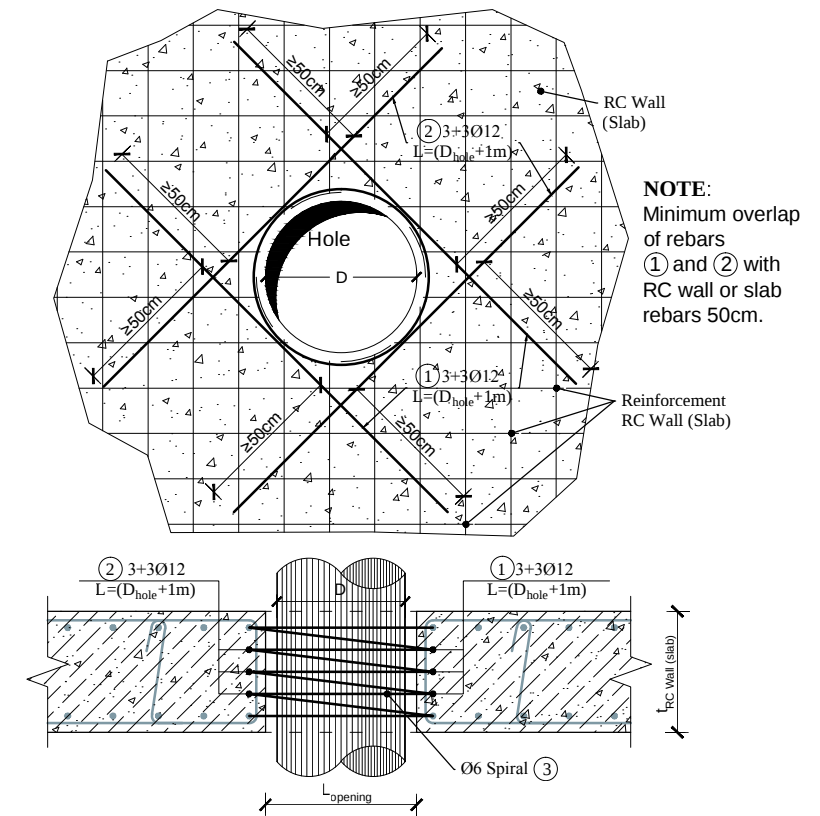
Br-1 Sc. 1:25



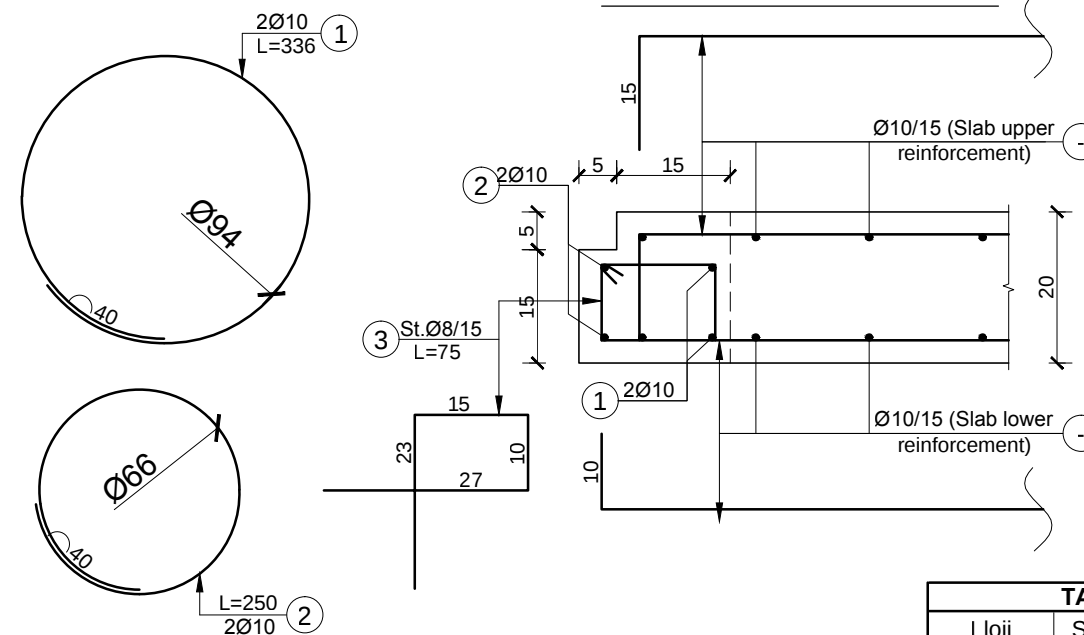
TYPICAL DETAIL OF OPENINGS (RECTANGULAR HOLE), Sc. 1:25



TYPICAL DETAIL OF OPENINGS (CIRCULAR HOLE), Sc. 1:25



Section a-a sc. 1:10



NOTE!
Refer to architectural project for the
positioning and dimensions of openings.

CONCRETE: C20/25
STEEL: S500
CONCRETE COVER: a=2.5cm

NOTE:
1. Sections B-B is displayed on page K-06.

TABELA E SPECIFIKIMIT TE ARMATURES / TABLE OF REINFORCEMENT									
Lloji Type	Sasia Pieces	Poz. Element	d	l (cm)	cope quantity	L (m)	Pesha/nj weight/unit	Pesha / Weight	TOTALI/ TOTAL
Br-1	1	1	10	336	2	6.72	0.617	4.14	4.14
		2	10	250	2	5.00	0.617	3.08	3.08
		3	8	75	20	15.00	0.395	5.92	5.92
									13.14

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TITLE:
TITULLI: STRUCTURAL PLAN LEVEL +0.60
PLANI I STRUKTURAVE KUOTA +0.60

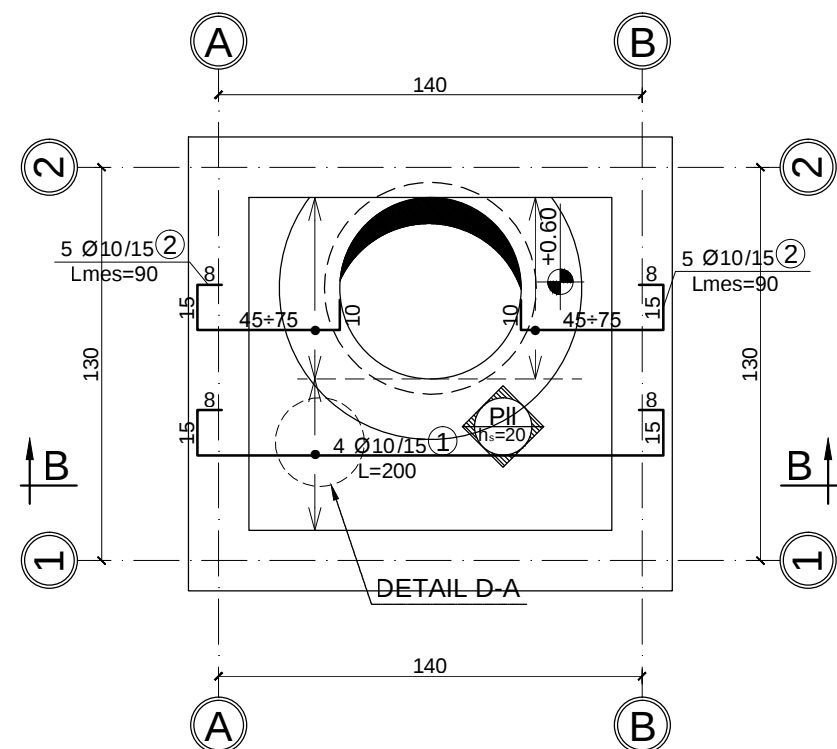
CLIENT:
KLIENTI: ALBANIAN DEVELOPMENT FUND
FONDI SHQIPTAR I ZHVILLIMIT

FUNDING:
FINANCUESI:   

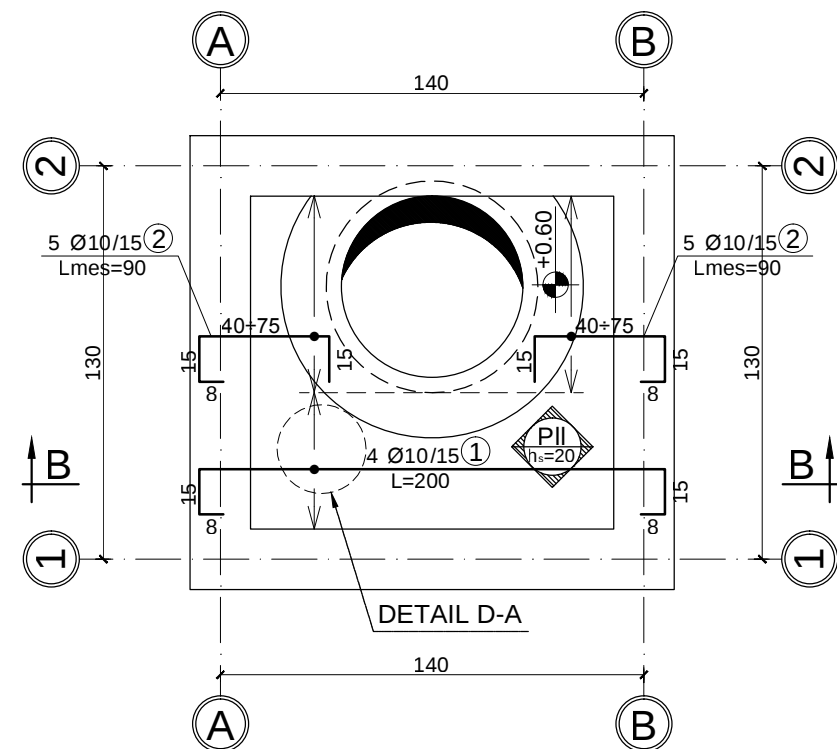
ENGINEER: INXHINIER:
 CES
Consulting Engineers
Salzgitter GmbH
Sub - Consultant:


No. Rev	DESCRIPTION OF REVISION	DATE	SCALE: SHKALLA: 1 : 50
02	FINAL	DECEMBER 2018	DATE: APPROVAL DATE:  OCTOBER 2018 DECEMBER 2018
01	DRAFT	OCTOBER 2018	FILE NAME: EMRI DOK: RWSIII-013.2QEP-DWG-WS-WO-Structural.dwg
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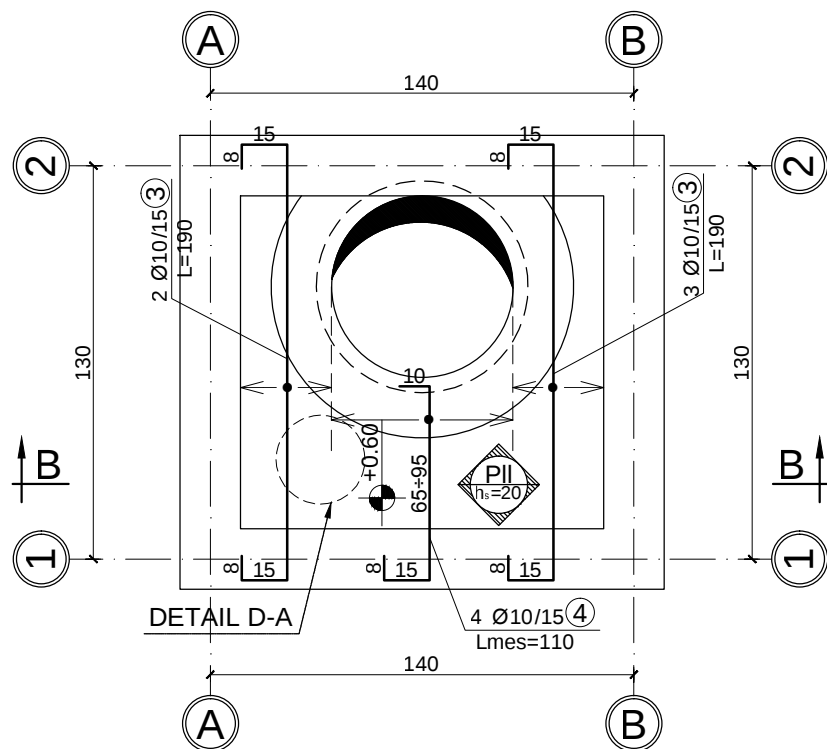
SLAB LEVEL +0.60 (lower reinforcement, direction 1), Sc. 1:25



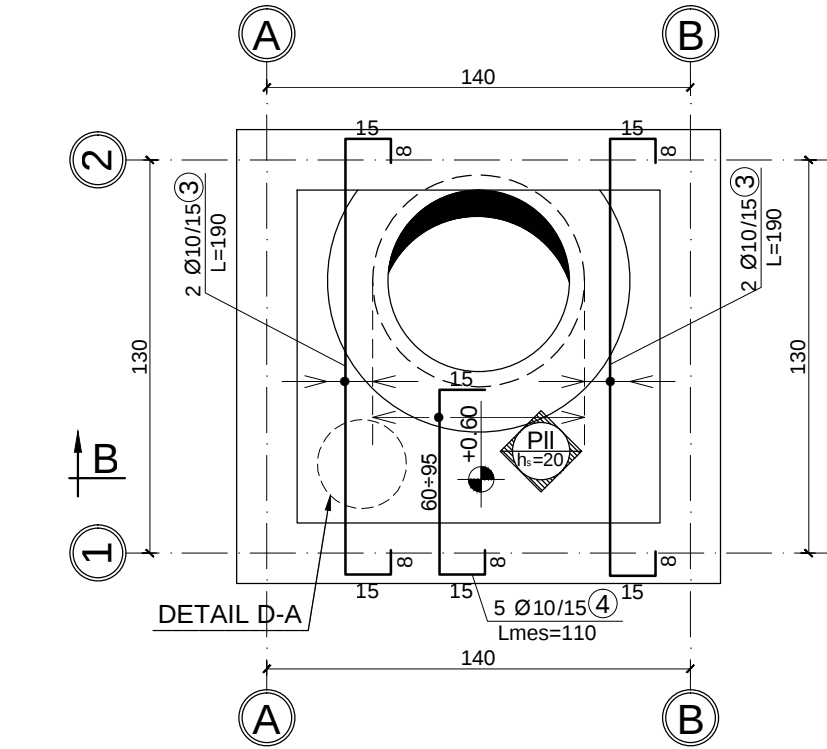
SLAB LEVEL +0.60 (upper reinforcement, direction 1), Sc. 1:25



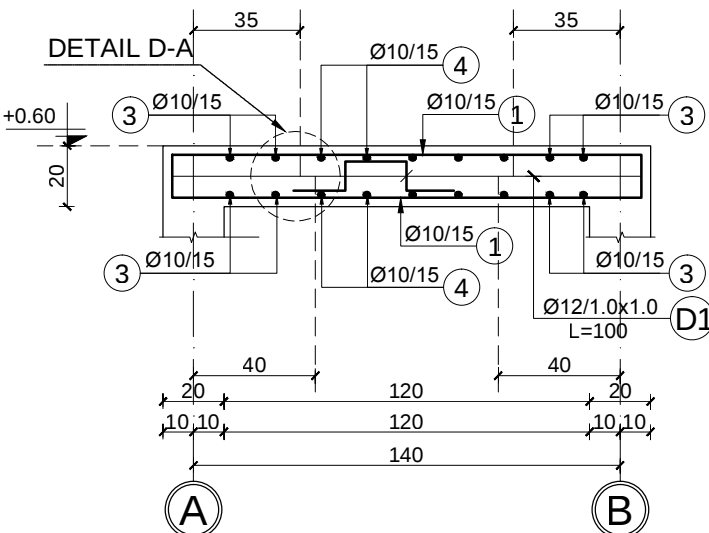
SLAB LEVEL +0.60 (lower reinforcement, direction 2), Sc. 1:25



SLAB LEVEL +0.60 (upper reinforcement, direction 2), Sc. 1:25



SECTION B-B Sc. 1:25



DETAIL D-A sc. 1:25

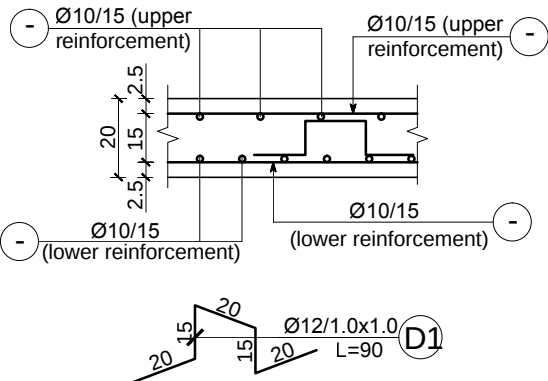
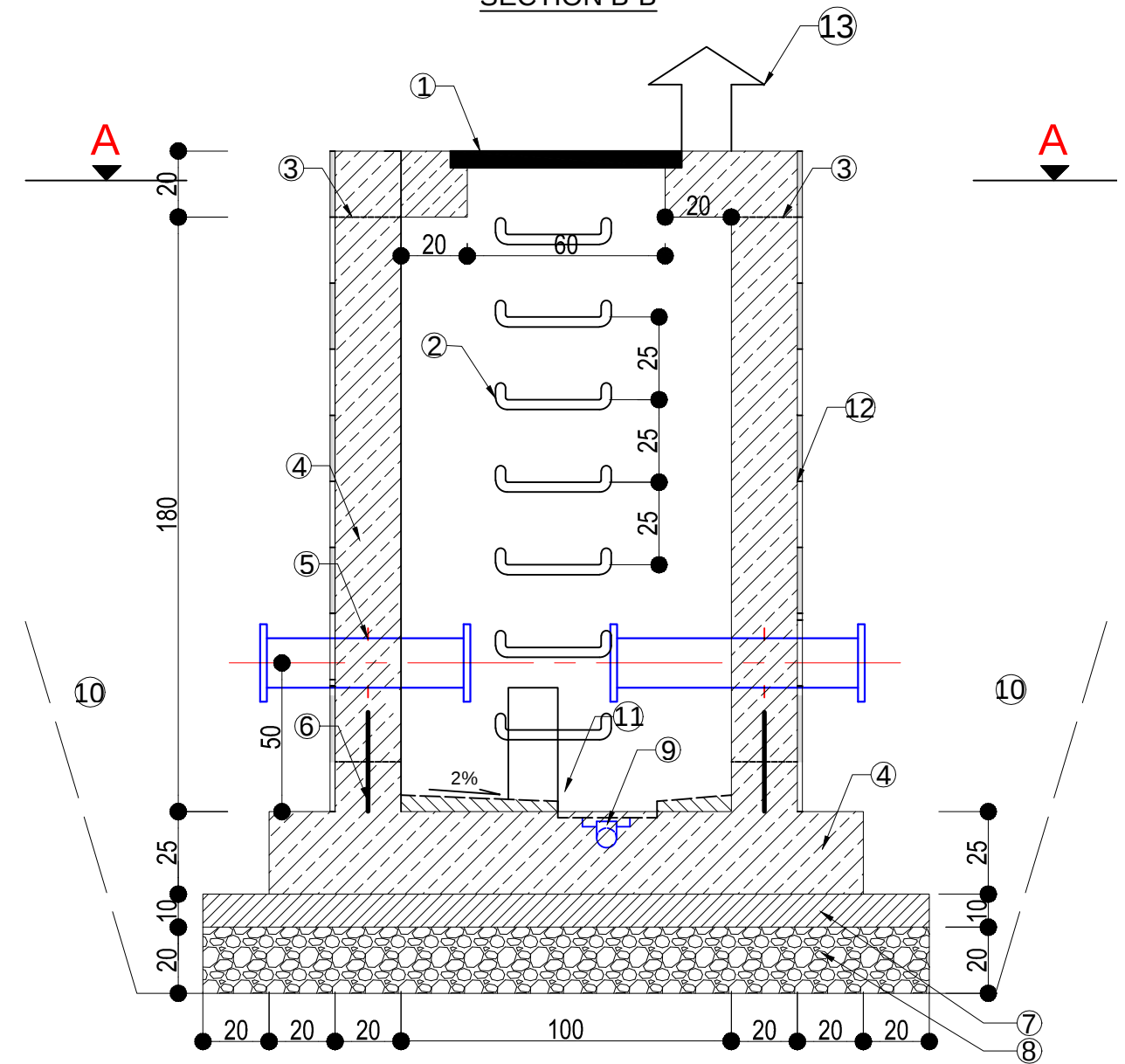
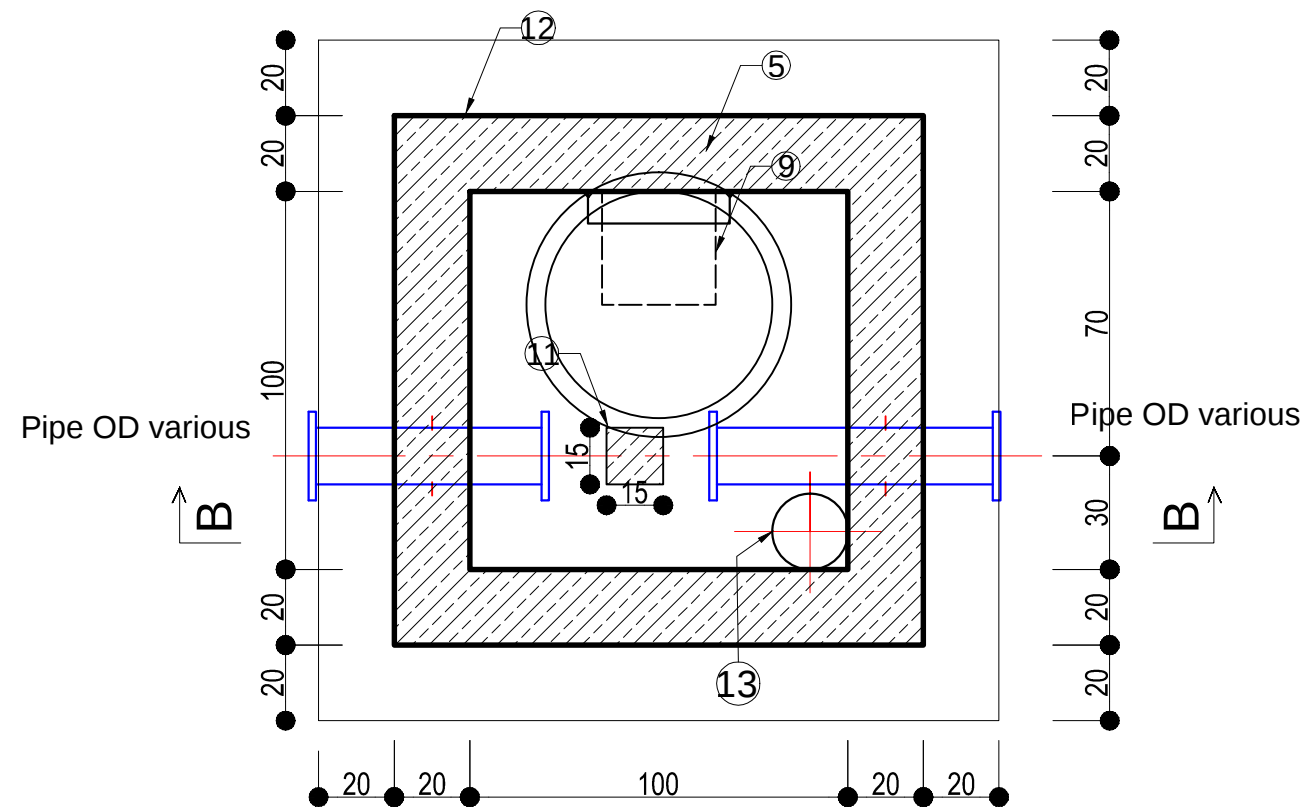


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Lloji Type	Sasia Pieces	Poz. Element	d	l (cm)	cope quantity	L (m)	Pesha/nj weight/unit	Pesha / Weight	TOTAL/ TOTAL
Slab level +0.60 (lower reinforcement)	1	1	10	200	4	8.00	0.617	4.93	4.93
		2	10	*90	10	9.00	0.617	5.55	5.55
		3	10	190	5	9.50	0.617	5.86	5.86
		4	10	*110	4	4.40	0.617	2.71	2.71
		D1	12	100	3	3.00	0.888	2.66	2.66
	(*) - gjatesi mesatare / average length								21.71
Slab level +0.60 (upper reinforcement)	1	1	10	200	4	8.00	0.617	4.93	4.93
		2	10	*90	10	9.00	0.617	5.55	5.55
		3	10	190	4	7.60	0.617	4.69	4.69
		4	10	*110	5	5.50	0.617	3.39	3.39
	(*) - gjatesi mesatare / average length								18.56

CONCRETE: C20/25
STEEL: S500
CONCRETE COVER: a=2.5cm

PLAN AND SECTION OF AIR VALVE CHAMBER PLANIMETRI DHE PRERJE PUSETA AJRIMIT



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TITLE:
TITULLI: PLAN AND SECTION OF AIR VALVE CHAMBER
PLANIMETRI DHE PRERJE PUSETA AJRIMIT

CLIENT:	
KLIENTI:	



ALBANIAN DEVELOPMENT FUND
FONDI SHQIPTAR I ZHVILLIMIT

FUNDING:	
FINANCUESI:	



KFW

ENGINEER: INXHINIER:



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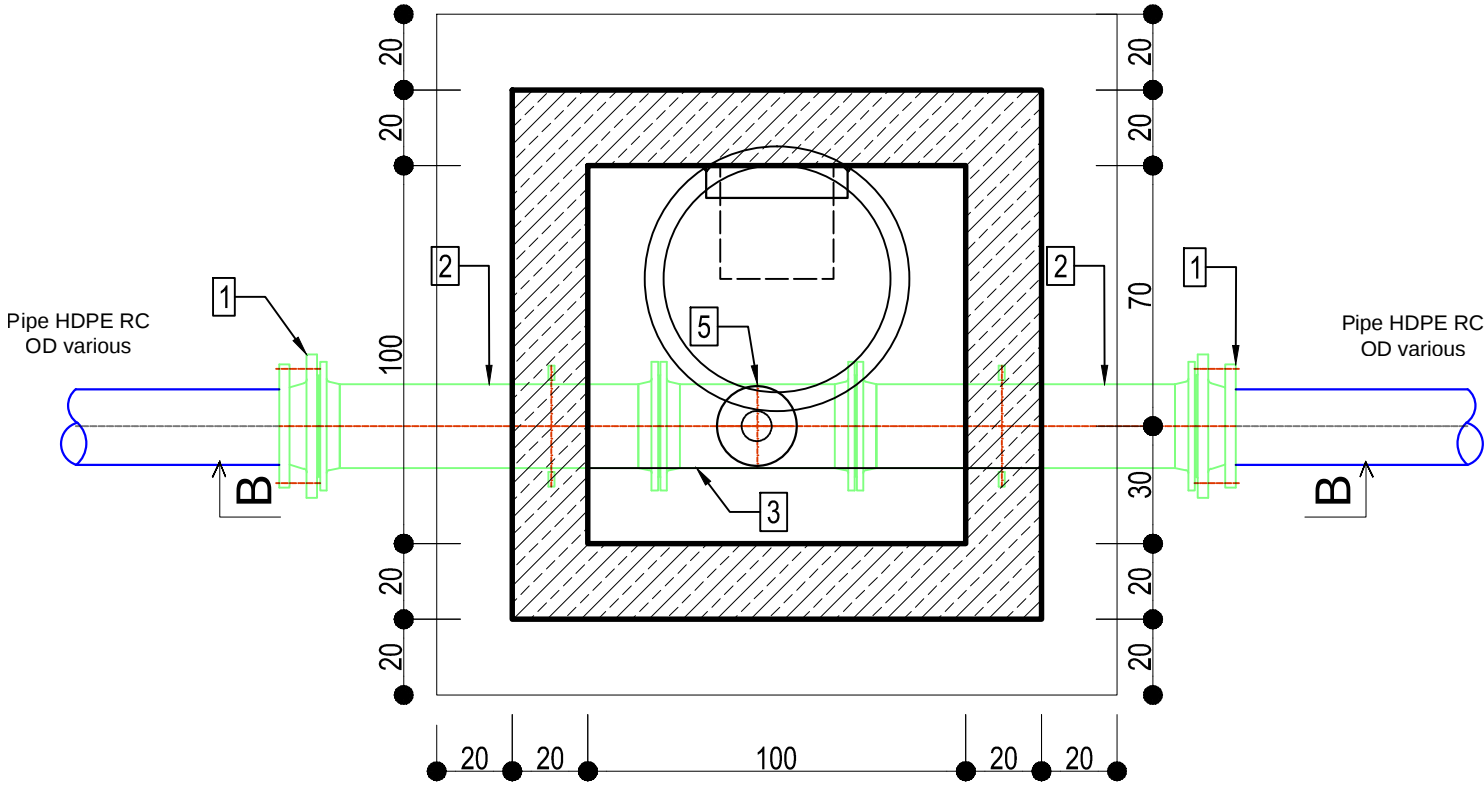
Sub - Consultant:



			SCALE: SHKALLA:	1:20
02	FINAL	DECEMBER 2018	DATE: APPROVAL DATE:	 OCTOBER 2018 DECEMBER 2018
01	DRAFT	OCTOBER 2018	FILE NAME: EMRI DOK:	RWSIII-013.2QEP-DWG-WS-AVC.dwg
No. Rev	DESCRIPTION OF REVISION	DATE	DWG No.: Nr. VIZATIMIT:	RWSIII-013.2QEP-DWG-WS-AVC-01

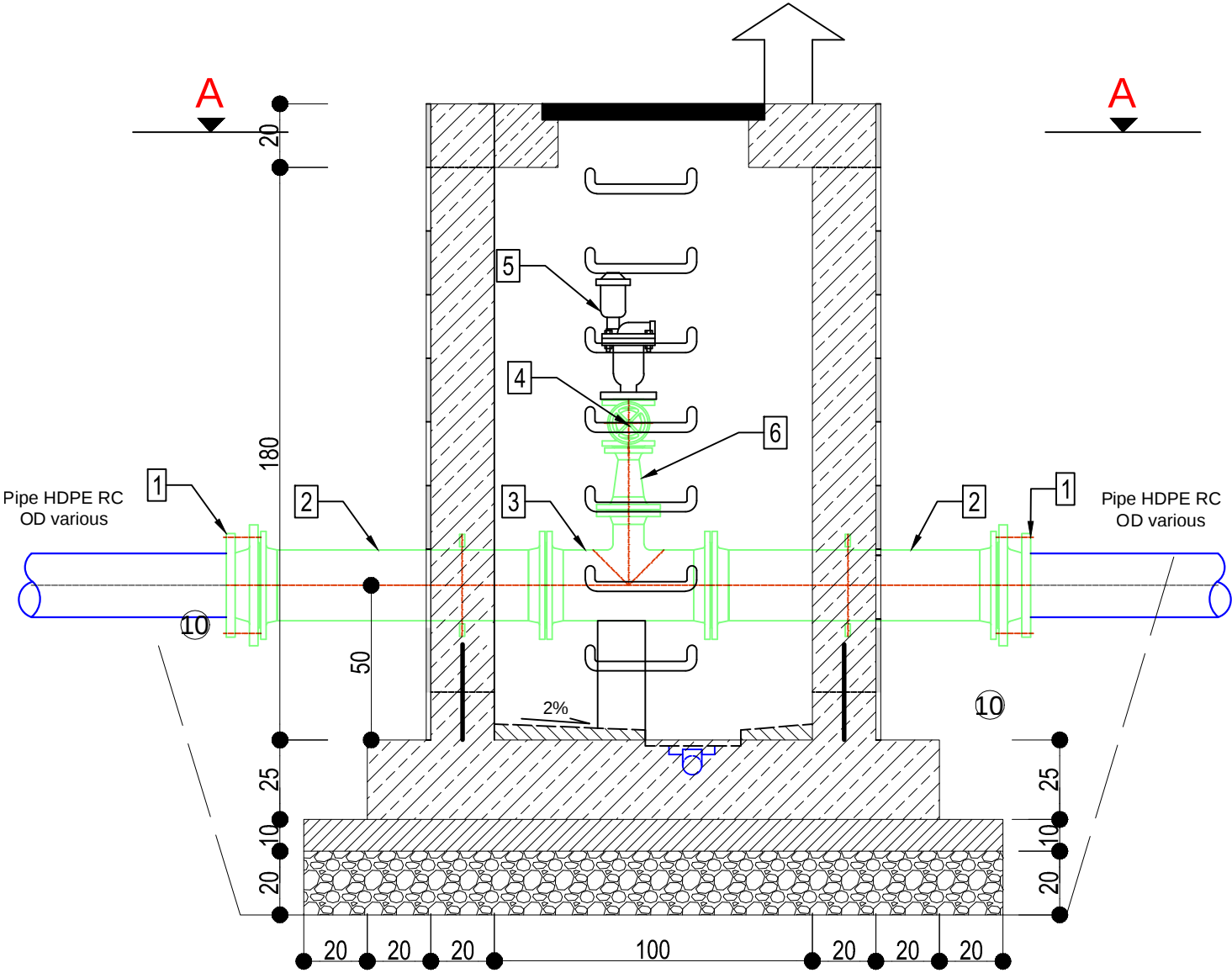
PIPE AND FITTINGS OF AIR VALVE CHAMBER
TUBA DHE RAKORDERI NE Puseten e AJRIMIT

SECTION A-A



- | | | |
|---|---|------|
| ① | FLANGED ADAPTER / FLLANXE ADAPTOR | 2 No |
| ② | DOUBLE FLANGED DI PIPE WITH PUDDLE / TUB ME FLLANXHA L=1000 | 2No |
| ③ | TEE FLANGED REDUCER/REDUKSION | 1 No |
| ④ | GATE VALVE DN50 /SARACINESKE | 1 No |
| ⑤ | AIR VALVE / AJRUES DN 50 | 1 No |
| ⑥ | FLANGED REDUCER /REDUKSION DN 80/50 | 1 No |

SECTION B-B



PROJECT: Rural Water Supply 3 - BMZ ID 2020 61 695 / Ujesjellesi Rural 3 - BMZ ID 2020 61 695
PROJEKTI: CONSULTING SERVICES FOR PROJECT PREPARATION AND FEASIBILITY STUDIES FOR CONSTRUCTION/RECONSTRUCTION OF WATER SUPPLY SYSTEMS IN RURAL AREAS
SHERBIME KONSULENCE PER PERGATITJEN E PROJEKTEVE DHE STUDIMEVE TE FIZIBILITETIT PER NDERTIMIN/RINDERTIMIN E RRJETIT TE UJESJELLESIT NE ZONAT RURALE

TITLE: PIPE AND FITTINGS OF AIR VALVE CHAMBER
TUBA DHE RAKORDERI NE Puseten e AJRIMIT

CLIENT:
KLIENTI:



ALBANIAN DEVELOPMENT FUND
FONDI SHQIPTAR I ZHVILLIMIT

FUNDING:
FINANCUESI:



KFW

ENGINEER: INXHINIER:



CES
Consulting Engineers
Salzgitter GmbH

Sub - Consultant:



02

FINAL

DECEMBER
2018

SCALE:
SHKALLA:

1:20

DATE:

APPROVAL DATE:

FILE NAME:

EMRI DOK:

DWG No.:

Nr. VIZATIMIT:

OCTOBER 2018

OCTOBER 2018

RWSIII-013.2QEP-DWG-WS-AVC.dwg

RWSIII-013.2QEP-DWG-WS-AVC-MECH-02

No.
Rev

DESCRIPTION OF REVISION

DATE

OBJEKTI: PUSETE AJRIMI
KONSTRUKTOR: AGIM SERANAJ

OBJECT: AIR VALVE CHAMBER
STRUCTURAL ENG.: AGIM SERANAJ

PROJEKTI KONSTRUKTIV

TABELA E FLETEVE

NR. I FLETES	EMERTIMI I FLETES
K-01	SHENIME TEKNIKE DHE KONSTRUKTIVE
K-02	PLANI I THEMELEVE, KUOTA -1.40. PAMJET E MUREVE B/A
K-03	PLLAKA E THEMELIT (zgara e poshtme dhe e siperme)
K-04	MURI B/A 1, 2, A DHE B
K-05	PLANI I STRUKTURAVE KUOTA +0.60
K-06	ARMIMI I SOLETES KUOTA +0.60

DETAILED PROJECT

TABLE OF CONTENT

Page no.	PAGE TITLE
K-01	TECHNICAL AND STRUCTURAL NOTES
K-02	FOUNDATION PLAN, LEVEL -1.40. RC WALLS VIEW
K-03	FOUNDATION REINFORCEMENT (lower and upper reinforcements)
K-04	RC WALL 1, 2, A AND B
K-05	STRUCTURAL PLAN LEVEL +0.60
K-06	SLAB REINFORCEMENT LEVEL +0.60

DESIGN STANDARTS AND APPLIED LOADS:

- 1- Design Codes - Albanian Code KTP 89 and Eurocode.
- 2- The structure's lifetime - 50 years.
- 3- The software used for calculations is SAP2000 V14
- 4- Applied loads:

a) Dead loads (G)
 - Structure's self weight
 - Dead loads on roofs
 - Dead loads of sloping cement layer
 - Dead loads of plastering layers
 - Dead loads of tiling and cement layers of floors
 - Dead loads of earth (terrain)

b) Live loads (P)
 - Underneath water pressure
 - Water pressure
 - Service loads

c) Seismic loads

STANDARTET E PROJEKTIMIT DHE NGARKESAT E APLIKUARA:

- 1- Kodet projektimit - Kodi Shqipitar KTP 89 dhe Eurocode.
- 2- Jetegjatesia e struktures - 50 vjet.
- 3- Programi i perdorur per llogaritje - SAP2000 V14
- 4- Ngarkesat e aplikuara:

a) Ngarkesat e perhereshme (G)
 - Pesha e struktures
 - Ngarkesa mi solete
 - Ngarkesa e shtreses se cimentos
 - Ngarkesa e shtreses sesuvaimit
 - Ngarkesa e pllakave dhe strukturave te cimentos
 - Ngarkesa e tokes

b) Forcat e jashteme (P)
 - Presioni i ujerave nentokesore
 - Presioni i ujit
 - Ngarkesa e sherbimit

c) Ngarkesa sizmike

Gjate realizimit te punimeve konstruktive detyrimisht te perdoren pervec projektit konstruktiv edhe projekti arkitektonik dhe teknologjik me qellimin e evitimit te gabimeve te mundshme ne zbatim.

Gjate realizimit te germimit te themeleve te merren masa per ruajtjen e qendrueshmerise se skarpatave, ne konsultim me konstruktorin dhe gjeologun.

Ne rastet e vendosjes se tabanit te themeleve ne shtresa gjeologjike te dobeta, duhet te realizohet perforcimi i tabanit pasi te jete hequr shtresa e dobet.

Me perfundimin e germimit, duhet te plotesohet proces-verbali i tabanit te themelit me prezence te konstruktorit dhe gjeologut. Vetem pasi te jete plotesuar ky proces-verbal do te vazhdohet me realizimin e shtreses me zhavor te ngjeshur.

Ne rast se gjate zbatimit ndryshohen kuotat e sistemimit, detyrimisht duhen njoftuar projektuesit per reflektimet e nevojshme per mos cenimin e kushteve te punes se themelit.

Te realizohen te gjitha detajet konstruktive te dhena ne projekt duke u respektuar kushtet teknike te zbatimit.

Gjate realizimit te strukturave te lihen vrimat e instalimeve te tubave duke zbatuar detajet perforcuese te armimit te tyre.

1. Betoni i perdorur te jete i klases C 20/25, klasa e ekspozimit XD2.
2. Hekuri qe do te perdoret te jete i tipit S 500.
3. Shtresa mbrojtese te mos jete me e vogel se vlera e treguar ne secilen flete te projektit.
4. Per shuftrat me gjatesi variabel ne tablete eshte marre gjatesia mesatare e tyre.
5. Ne rast mosperputhjeje te dimensioneve te behen verifikimet me dimensionet e arkitektures dhe te behen konsultime me grupin e projektimit.
6. Betoni i varfer i te jete i klases C12/15.
7. Zhavori i perdorur te jete i ruluar CBR=50%.
8. Toka natyrale poshte shtreses te zhavorit te ngjishet deri ne CBR=30%.
9. Grepat e stafave te inkastrohen ne beton duke i kthyer me kend 35°(45°).

TECHNICAL NOTES:

During the execution of the work must be consulted the architectural and technological drawings besides structural drawings in order to avoid any possible mistake.

During the excavation for the foundation must be taken care of slope stability, consulting both structural and geological engineers.

If during the execution of the work is found loose layer for supporting the foundation, the treatment of these layers must be applied, by replacing it.

The real condition of foundation supporting layer must be documented by site engineers and signed by structural and geological engineers. After this documentation is completed, the execution work can continue with the gravel layer.

If case of changing the foundation and/or surrounding terrain levels, the structural engineer must be notified in order to make the appropriate modifications.

All given structural details must be realized in accordance with executional code requirements.

During the execution work pay attention to the pipe holes and apply correctly the details of opening reinforcements.

1. Concrete class should be C20/25, exposition class XD2.
2. Steel class should be S 500.
3. The concrete cover layer of the reinforcement shall not be less than the value showed on project pages.
4. For steel bars with variabel length for quantity is taken the average length.
5. In case of inconsistency of dimensions should verify them with architecture dimensions and should consult with project design team.
6. Lean concrete layer under plate should be C12/15.
7. Gravel should be compress by roller until CBR=50%.
8. Natural land under gravel layer should be compressed until CBR=30%.
- 9.The hooks of all stirrups must be bent (anchored) in concrete under a bent angle of 35°(45°).

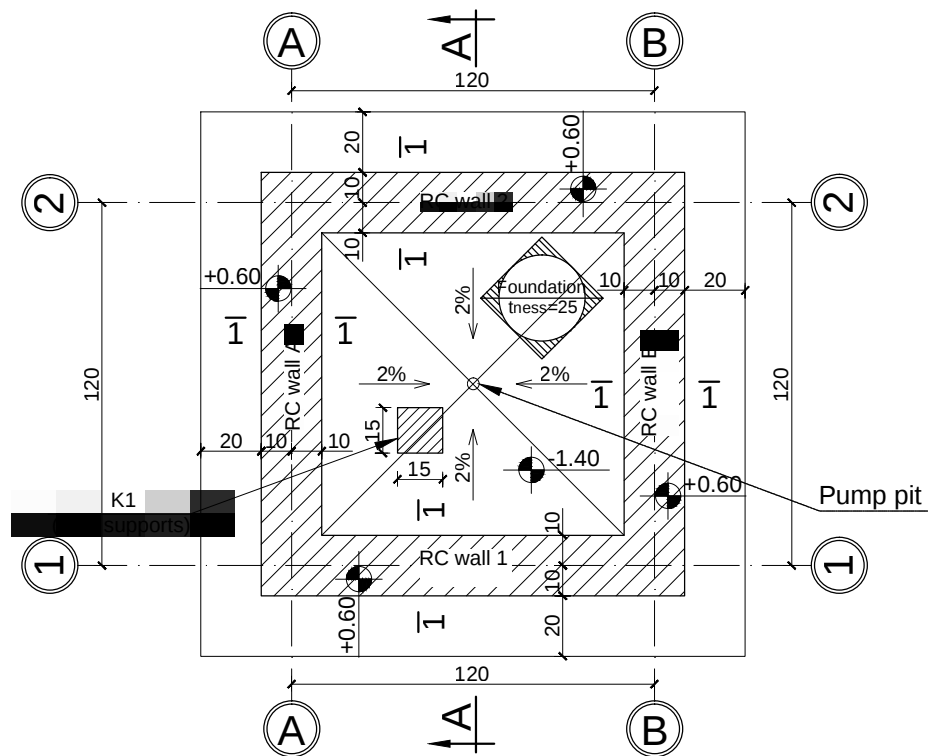
KUSHTET GJEOLOGO-INXHINIERIKE

Ne baze te raportit gjeologo-inxhinierik te hartuar nga ing. Gjon Leka ne Tetor 2017, strukturat jane llogaritur te mbeshtetura ne shtresen gjeologjike Nr. 2 me keto te dhena:

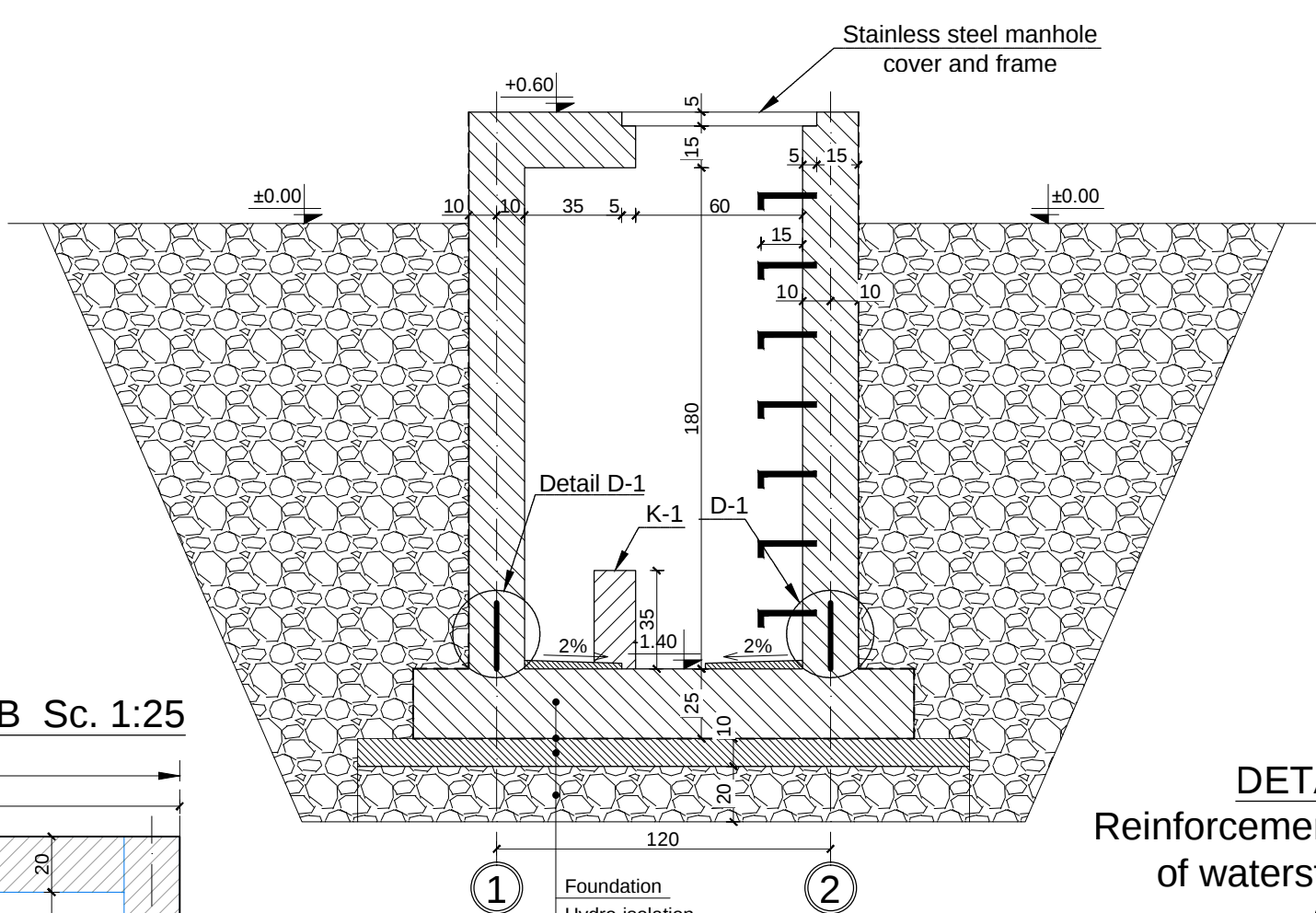
Perberja granulometrike		
Fraksioni argjilor	<0.002 mm	28.70 %
Fraksioni pluhuror	0.002-0.05 mm	49.60 %
Fraksioni rere	>0.05 mm	21.70 %
Pesha volumore ne gjendje natyrale	Δ = 2.0 T/m3	
Kendi I ferkimit te brendshem	φ = 25°	
Kohezion	C = 0.35 kg/cm2	
Moduli i deformacionit	E13 = 200 kg/cm2	
Ngarkesa e lejuar ne shtypje	σ = 2.0 kg/cm2	

PROJECT: Rural Water Supply 3 - BMZ ID 2020 61 695 / Ujesjellesi Rural 3 - BMZ ID 2020 61 695 PROJEKTI: CONSULTING SERVICES FOR PROJECT PREPARATION AND FEASIBILITY STUDIES FOR CONSTRUCTION/RECONSTRUCTION OF WATER SUPPLY SYSTEMS IN RURAL AREAS SHERBIME KONSULENCE PER PERGATITJEN E PROJEKTEVE DHE STUDIMEVE TE FIZIBILITETIT PER NDERTIMIN/RINDERTIMIN E RRJETIT TE UJESJELLESIT NE ZONAT RURALE	CLIENT: KLIENTI: ALBANIAN DEVELOPMENT FUND FONDI SHQIPTAR I ZHVILLIMIT	ENGINEER: INXHINIER: CES Consulting Engineers Salzgitter GmbH Sub - Consultant: 			SCALE: SHKALLA:1 : 50
			02	FINAL	DECEMBER 2018 DATE:OCTOBER 2018 APPROVAL DATE: 
			01	DRAFT	OCTOBER 2018 FILE NAME:RWSIII-013.2QEP-DWG-WS-AVC-STR.dwg EMRI DOK:
			No. Rev	DESCRIPTION OF REVISION	DATE DWG No.:RWSIII-013.2QEP-DWG-WS-AVC-STR-01 Nr. VIZATIMIT:

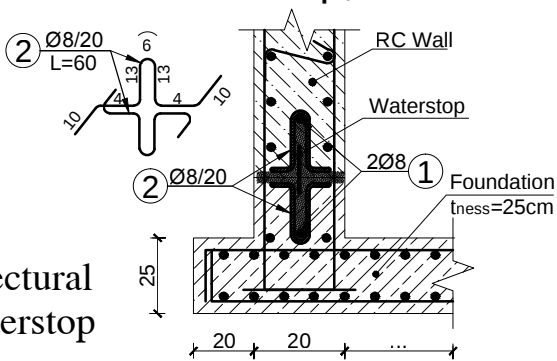
FOUNDATION PLAN LEVEL -1.40, Sc. 1:25



SECTION A-A, Sc. 1:25

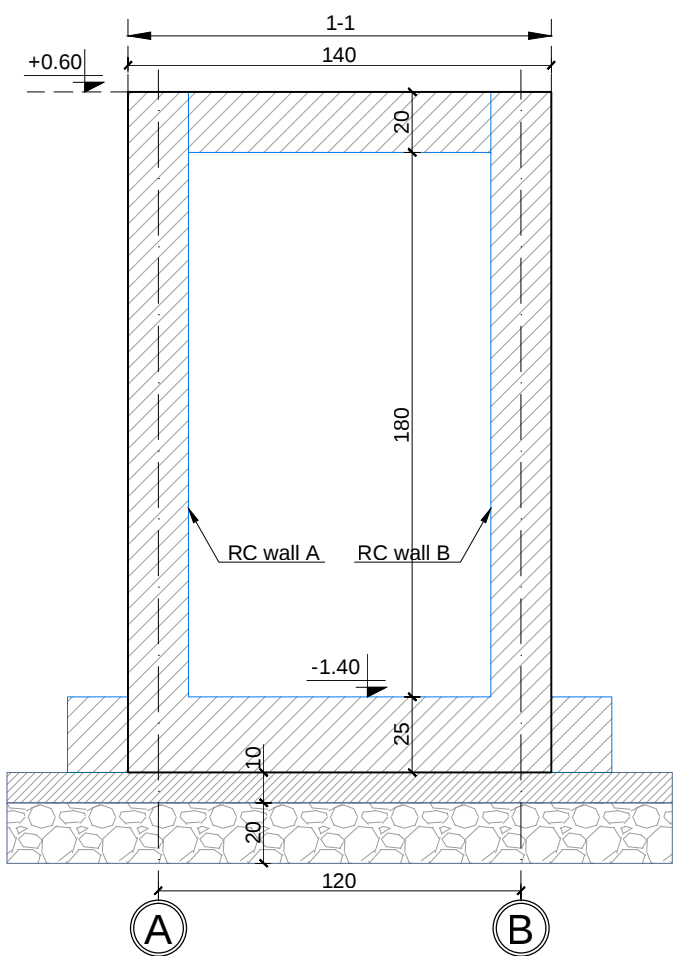


DETAIL D-1
Reinforcement for protection
of waterstop, Sc.1:25



NOTE:
Refer to architectural
project for Waterstop
position.

RC wall 1 & 2 Sc. 1:25



RC wall A & B Sc. 1:25

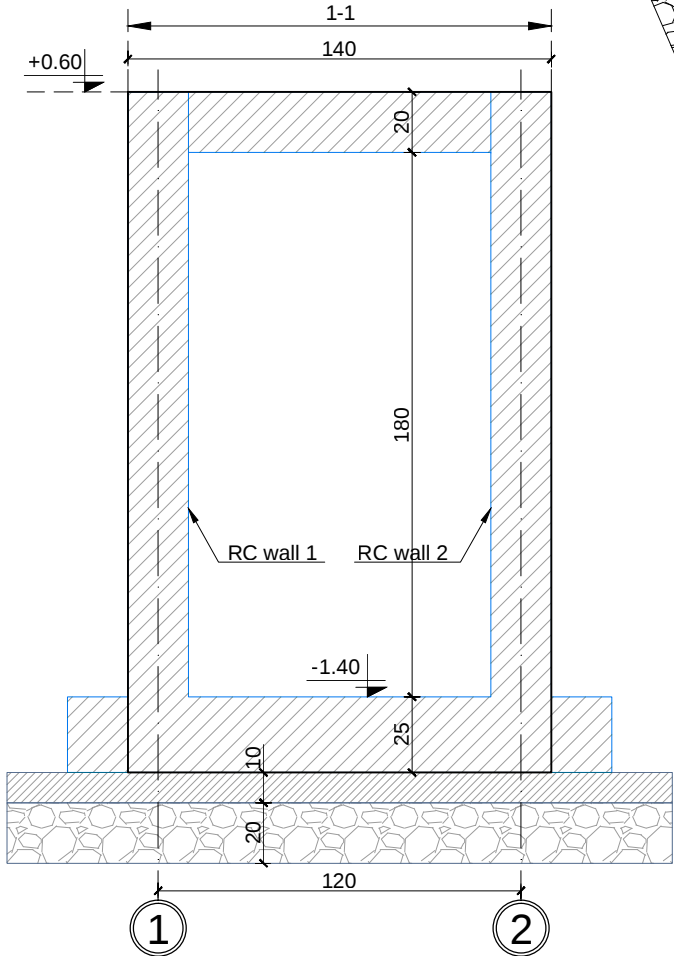


TABELA E SPECIFIKIMIT TE ARMATURES / TABLE OF REINFORCEMENT									
Lloji Type	Sasia Pieces	Poz. Element	d	l (cm)	cope quantity	L (m)	Pesha/nj weight/unit	Pesha / Weight	TOTALI/ TOTAL
D-1	1	1	8	1200	1	12.00	0.395	4.74	4.74
		2	8	60	48	28.80	0.395	11.36	11.36
									16.10

CONCRETE: C20/25
STEEL: S500
CONCRETE COVER: a=4cm

PROJECT: Rural Water Supply 3 - BMZ ID 2020 61 695 / Ujesjellesi Rural 3 - BMZ ID 2020 61 695
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TITLE:
TITULLI: FOUNDATION PLAN, LEVEL -1.40 . RC WALLS VIEW
PLANI I THEMELEVE, KUOTA -1.40 . PAMJET E MUREVE B/A

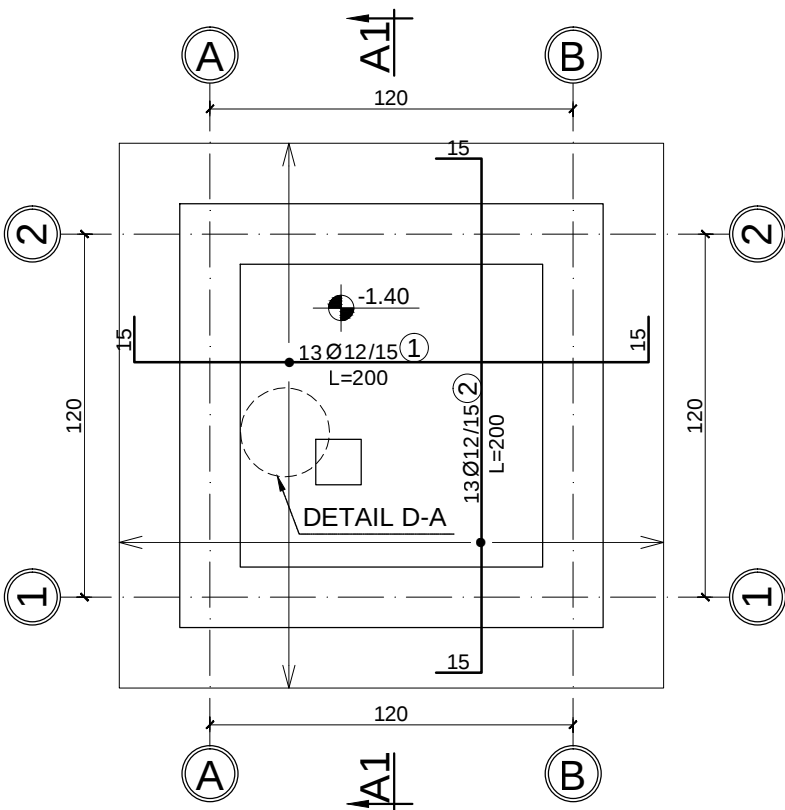
CLIENT:
KLIENTI: ALBANIAN DEVELOPMENT FUND
FONDI SHQIPTAR I ZHVILLIMIT

FUNDING:
FINANCUESI:   

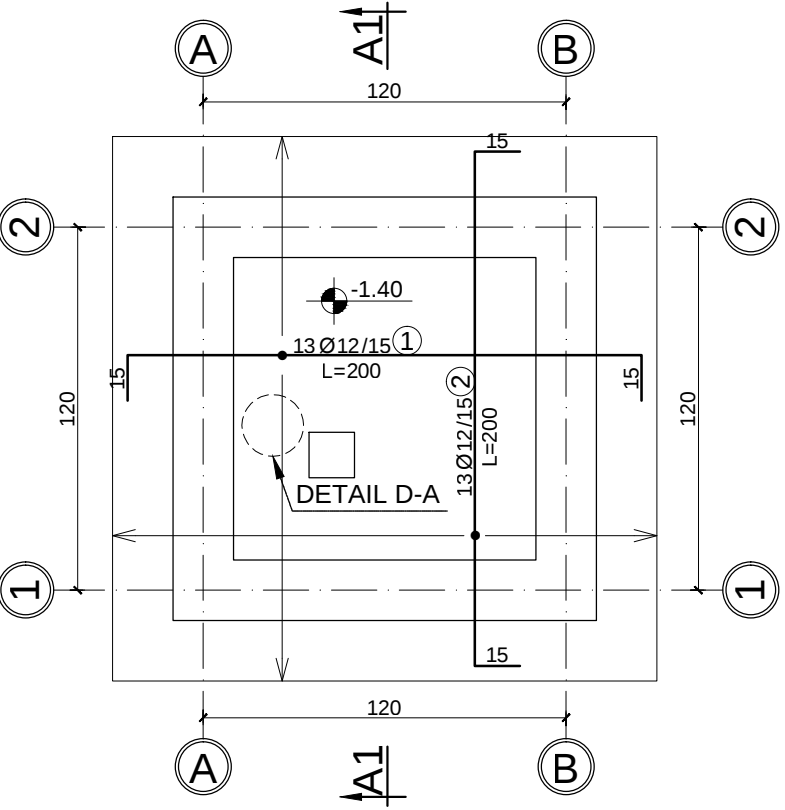
ENGINEER: INXHINIER:
 **CES**
Consulting Engineers
Salzgitter GmbH
Sub - Consultant:


No. Rev	DESCRIPTION OF REVISION	DATE	SCALE: SHKALLA: 1 : 25
02	FINAL	DECEMBER 2018	DATE: APPROVAL DATE:  OCTOBER 2018 DECEMBER 2018
01	DRAFT	OCTOBER 2018	FILE NAME: EMRI DOK: RWSIII-013.2QEP-DWG-WS-AVC-STR.dwg
			DWG No.: Nr. VIZATIMIT: RWSIII-013.2QEP-DWG-WS-AVC-STR-02

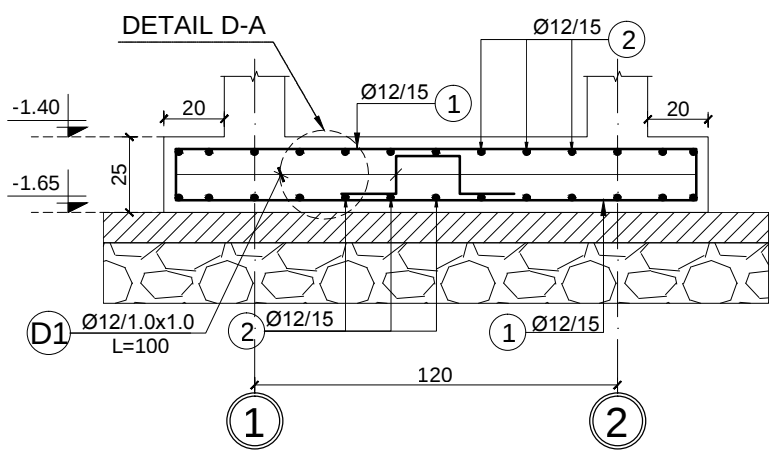
FOUNDATION LOWER REINFORCEMENT
LEVEL -1.40 , Sc. 1:25



FOUNDATION UPPER REINFORCEMENT
LEVEL -1.40, Sc. 1:25



SECTION A1-A1, Sc. 1:25



DETAIL D-A, Sc. 1:25

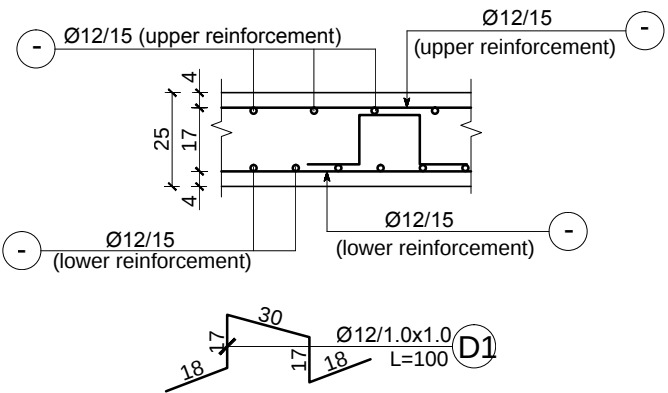
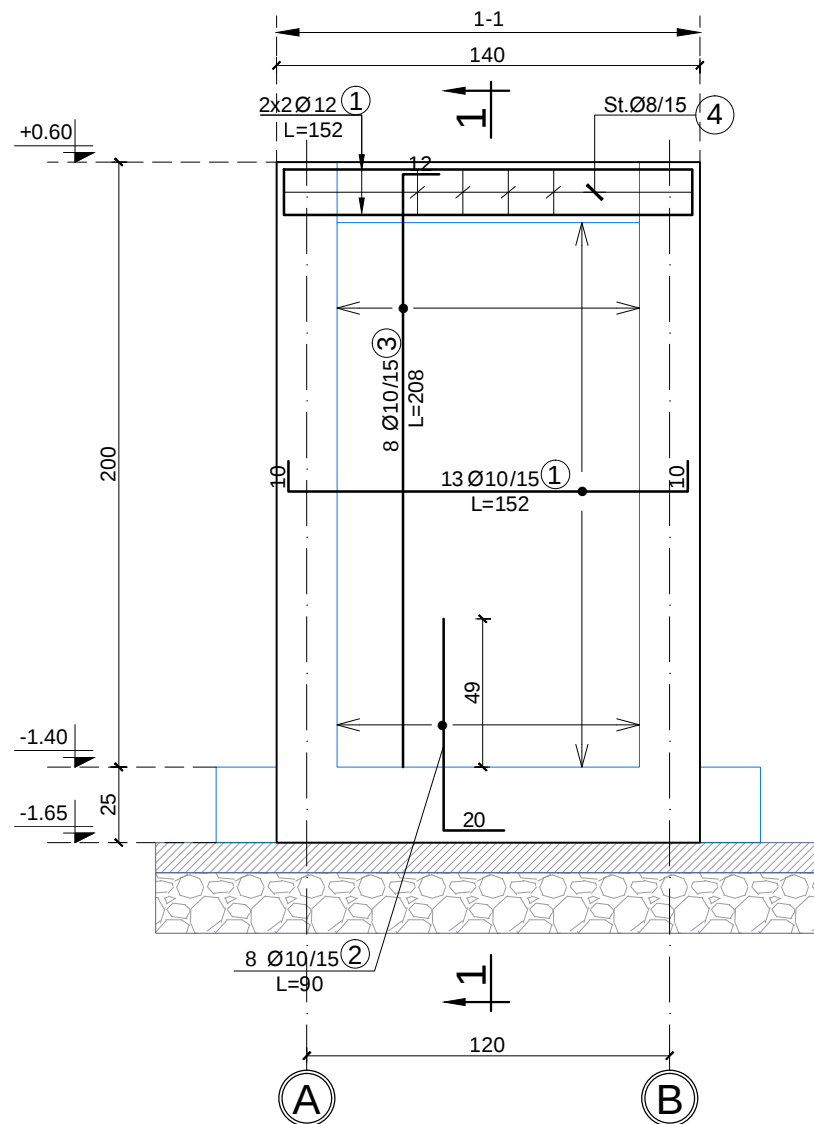


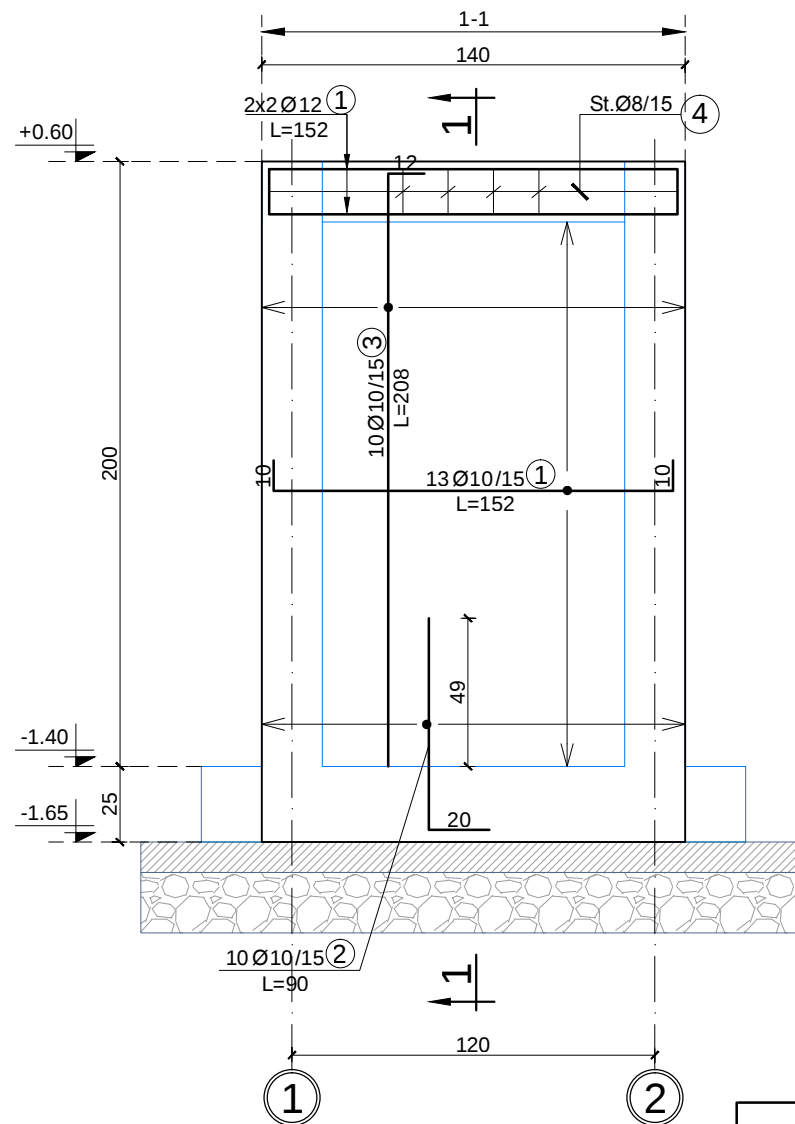
TABELA E SPECIFIKIMIT TE ARMATURES / TABLE OF REINFORCEMENT									
Lloji Type	Sasia Pieces	Poz. Element	d	l (cm)	cope quantity	L (m)	Pesha/nj weight/unit	Pesha / Weight	TOTALI/ TOTAL
Pllaka e themelit / Foundation (zg. e poshtme / lower reinforcement)	1	1	12	200	13	26.0	0.888	23.08	23.08
		2	12	200	13	26.0	0.888	23.08	23.08
		D1	12	100	4	4.0	0.888	3.55	3.55
									49.72
(zg. e sipërme / upper reinforcement)	1	1	12	200	13	26.0	0.888	23.08	23.08
		2	12	200	13	26.0	0.888	23.08	23.08
									46.17

CONCRETE: C20/25
STEEL: S500
CONCRETE COVER: a=4cm

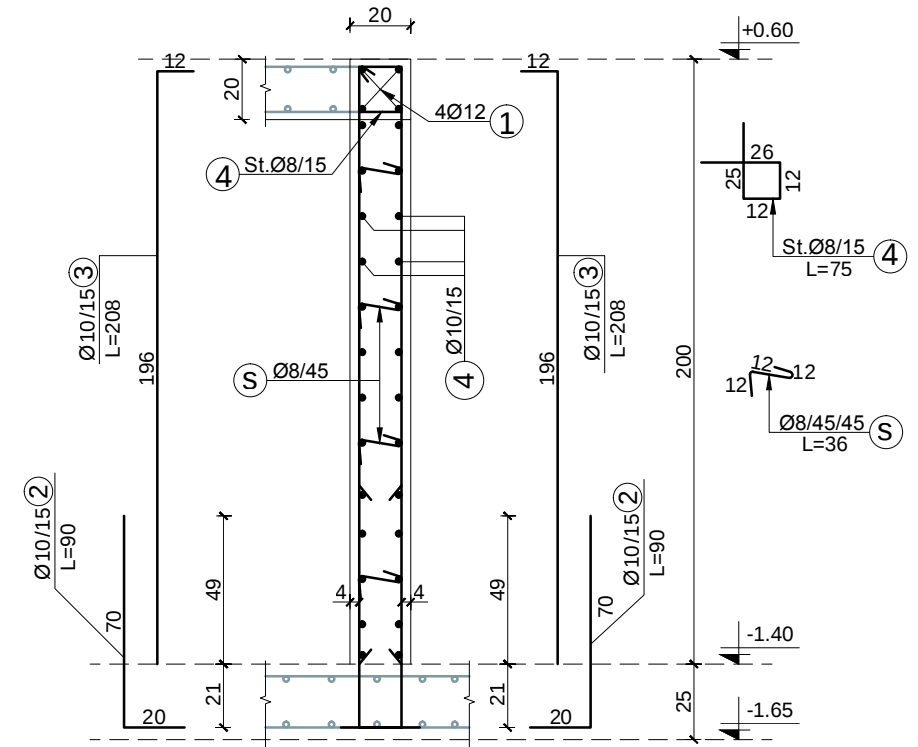
RC wall 1 & 2 Sc. 1:25



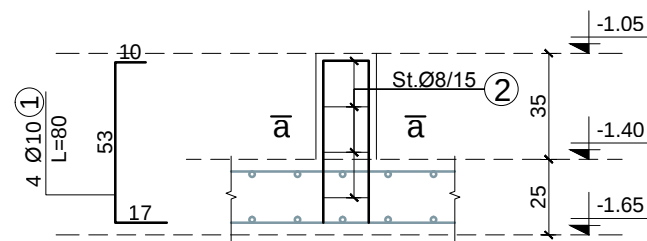
RC wall A & B Sc. 1:25



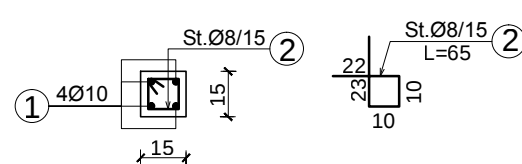
Section 1-1, sc. 1:25



K1 - pipe support Sc. 1:25



Section 1-1, sc. 1:25



CONCRETE: C20/25

STEEL: S500

CONCRETE COVER: a=4cm

TABELA E SPECIFIKIMIT TE ARMATURES / TABLE OF REINFORCEMENT

Lloji Type	Sasia Pieces	Poz. Element	d	l (cm)	cope quantity	L (m)	Pesha/nj weight/unit	Pesha / Weight	TOTALI/ TOTAL
RC wall 1 & 2	2	1	10	152	17	25.84	0.617	15.93	31.86
		2	10	90	8	7.20	0.617	4.44	8.88
		3	10	208	8	16.64	0.617	10.26	20.52
		4	8	75	8	6.00	0.395	2.37	4.74
		s	8	36	13	4.68	0.395	1.85	3.69
									69.69
RC wall A & B	2	1	10	152	17	25.84	0.617	15.93	31.86
		2	10	90	10	9.00	0.617	5.55	11.10
		3	10	208	10	20.80	0.617	12.82	25.65
		4	8	75	8	6.00	0.395	2.37	4.74
		s	8	36	13	4.68	0.395	1.85	3.69
									77.04
K1-pipe support	1	1	10	80	4	3.20	0.617	1.97	3.95
		2	8	65	4	2.60	0.395	1.03	2.05
									6.00

PROJECT: Rural Water Supply 3 - BMZ ID 2020 61 695 / Ujesjellesit Rural 3 - BMZ ID 2020 61 695
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TITLE:
TITULLI: RC WALL 1, 2, A AND B
MURI B/A 1, 2, A DHE B

CLIENT:
KLIENTI:



ALBANIAN DEVELOPMENT FUND
FONDI SHQIPTAR I ZHVILLIMIT

FUNDING:
FINANCUESI:



KFW

ENGINEER: INXHINIER:

CES
Consulting Engineers
Salzgitter GmbH

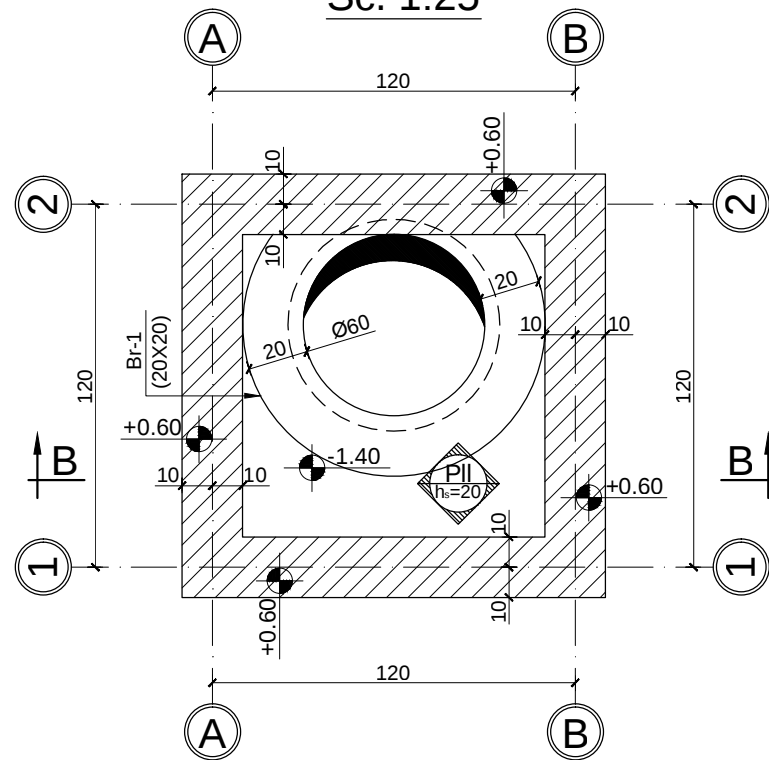
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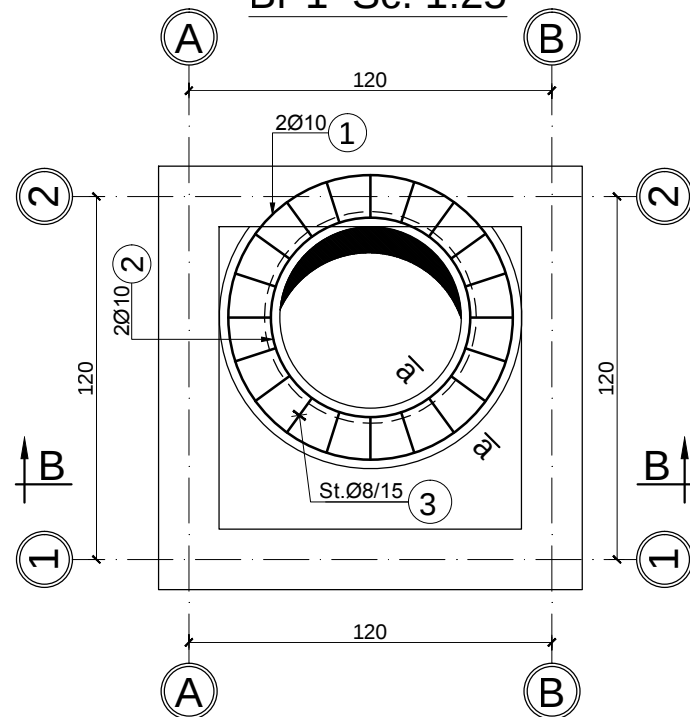
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01	DRAFT	OCTOBER 2018	FILE NAME: EMRI DOK: RWSIII-013.2QEP-DWG-WS-AVC-STR.dwg	
No. Rev	DESCRIPTION OF REVISION	DATE	DWG No.: Nr. VIZATIMIT: RWSIII-013.2QEP-DWG-WS-AVC-STR-04	

SCALE:
SHKALLA: 1 : 25

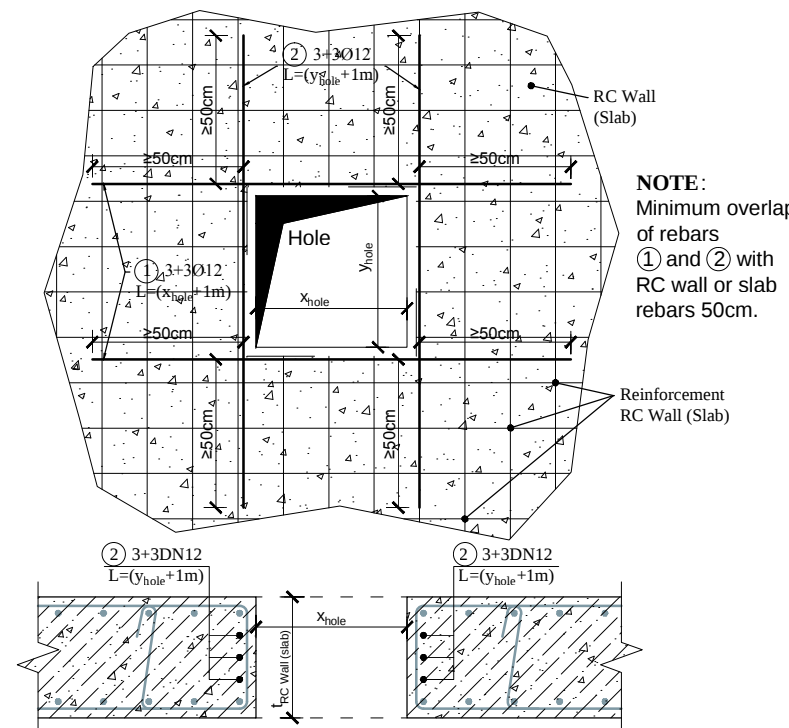
STRUCTURAL PLAN LEVEL +0.60,
Sc. 1:25



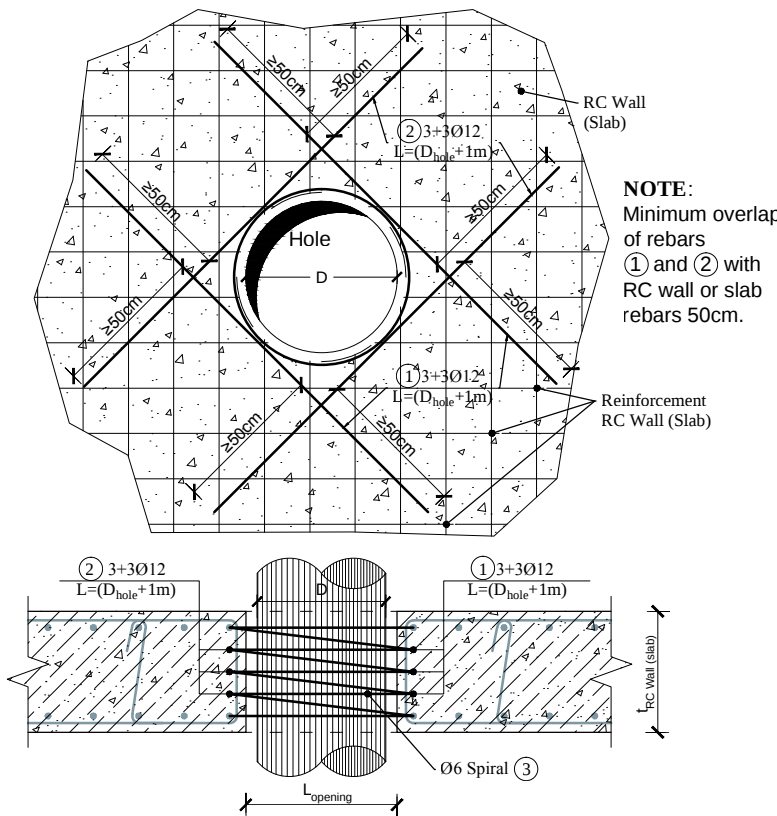
Br-1 Sc. 1:25



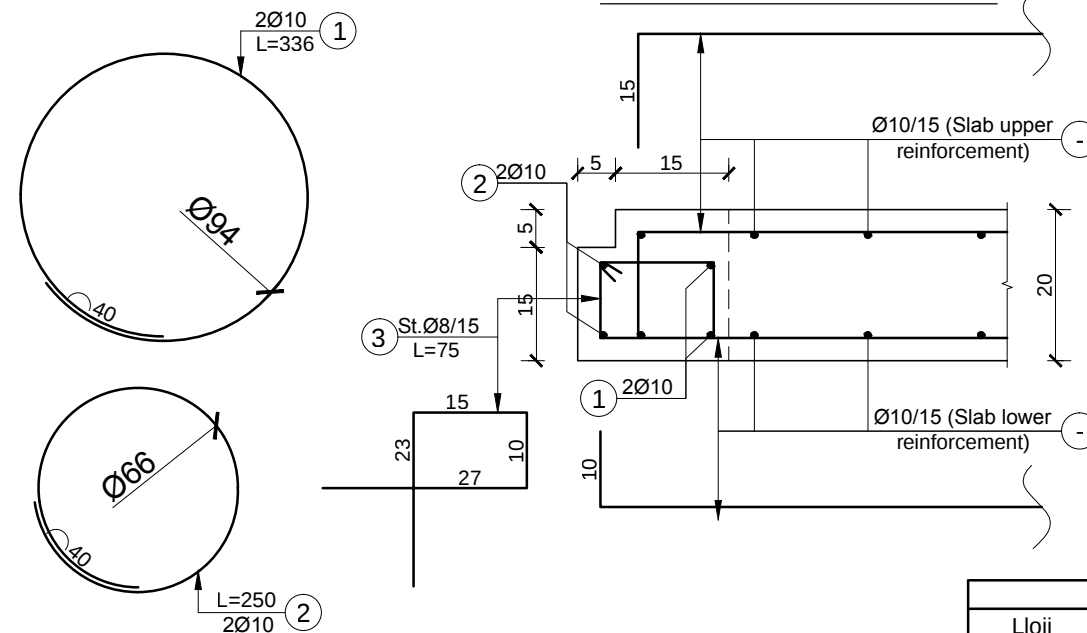
TYPICAL DETAIL OF OPENINGS
(RECTANGULAR HOLE), Sc. 1:25



TYPICAL DETAIL OF OPENINGS
(CIRCULAR HOLE), Sc. 1:25



Section a-a sc. 1:10



NOTE!
Refer to architectural project for the
positioning and dimensions of openings.

CONCRETE: C20/25
STEEL: S500
CONCRETE COVER: a=2.5cm

NOTE:
1. Sections B-B is displayed on page K-##.

TABELA E SPECIFIKIMIT TE ARMATURES / TABLE OF REINFORCEMENT									
Lloji Type	Sasia Pieces	Poz. Element	d	l (cm)	cope quantity	L (m)	Pesha/nj weight/unit	Pesha / Weight	TOTALI/ TOTAL
Br-1	1	1	10	336	2	6.72	0.617	4.14	4.14
		2	10	250	2	5.00	0.617	3.08	3.08
		3	8	75	20	15.00	0.395	5.92	5.92
									13.14

PROJECT: Rural Water Supply 3 - BMZ ID 2020 61 695 / Ujesjellesi Rural 3 - BMZ ID 2020 61 695
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E RRJETIT TE UJESJELLESIT NE ZONAT RURALE

TITLE:
TITULLI: STRUCTURAL PLAN LEVEL +0.60
PLANI I STRUKTURAVE KUOTA +0.60

CLIENT:
KLIENTI:



ALBANIAN DEVELOPMENT FUND
FONDI SHQIPTAR I ZHVILLIMIT

FUNDING:
FINANCUES:



KFW

ENGINEER: INXHINIER:



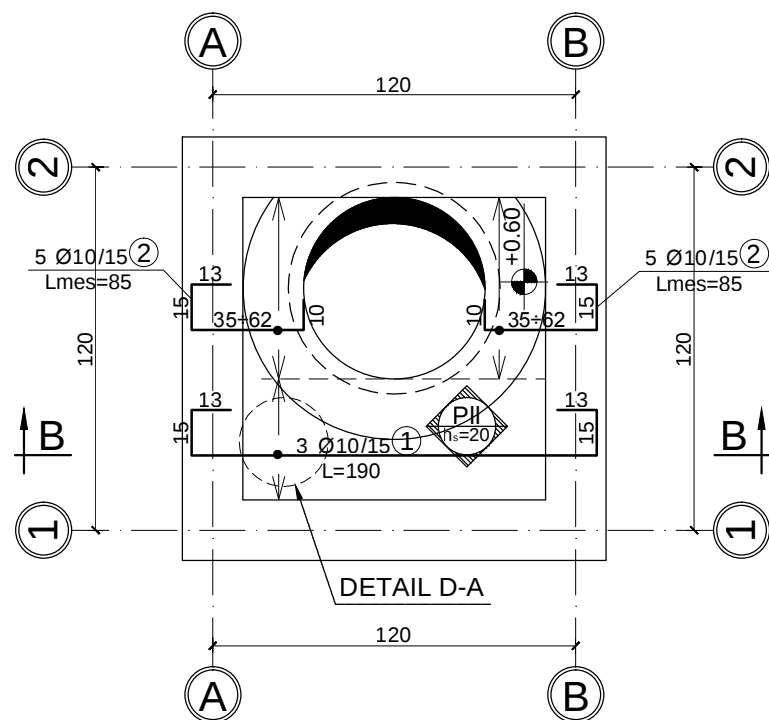
CES
Consulting Engineers
Salzgitter GmbH

Sub - Consultant:

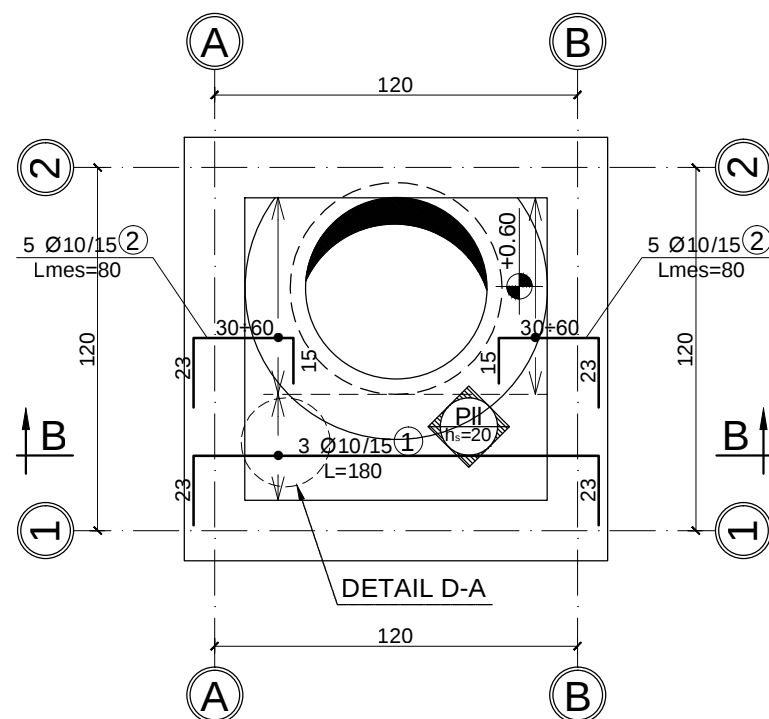


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01	DRAFT	OCTOBER 2018	FILE NAME: EMRI DOK:	RWSIII-013.2QEP-DWG-WS-AVC-STR.dwg
			DWG No.: Nr. VIZATIMIT:	RWSIII-013.2QEP-DWG-WS-AVC-STR-05

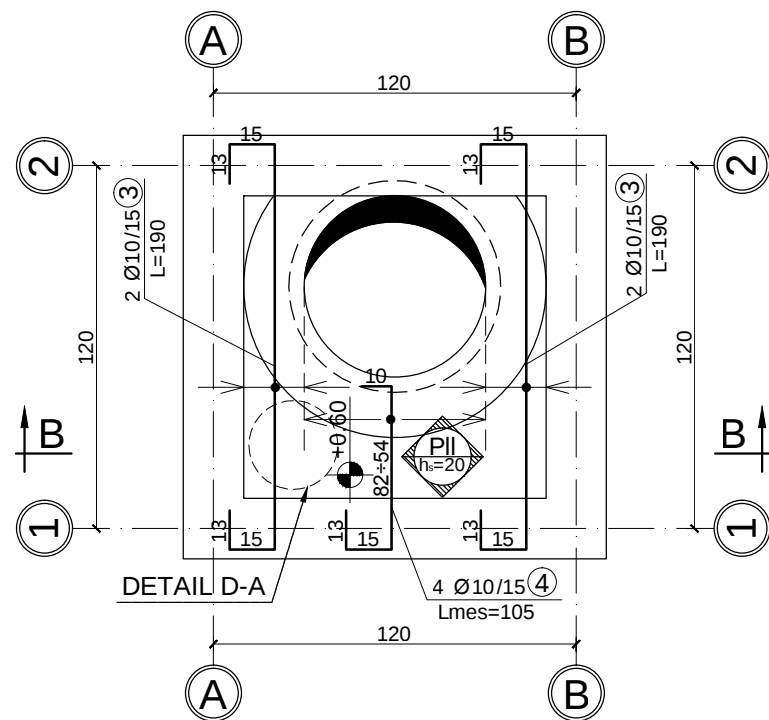
SLAB LEVEL +0.60 (lower reinforcement, direction 1), Sc. 1:25



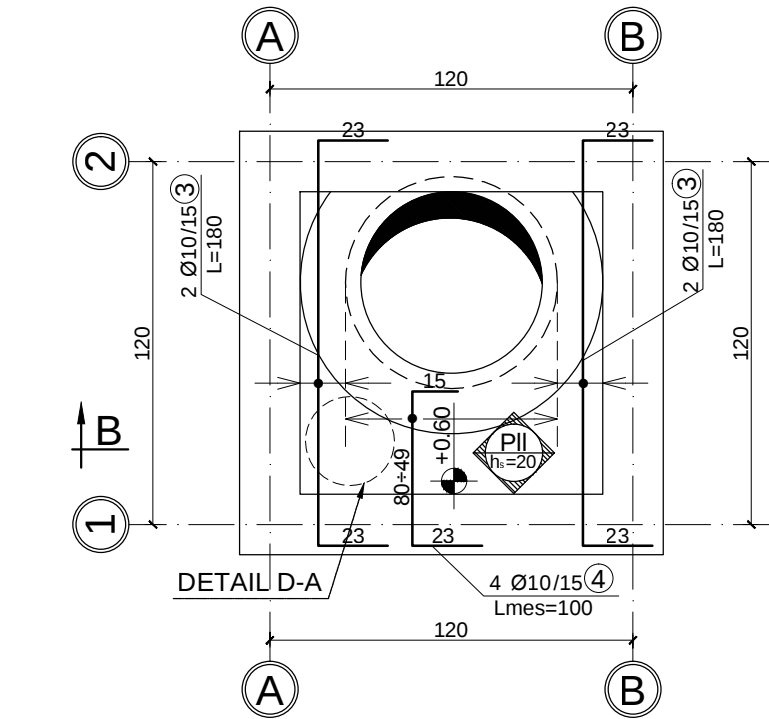
SLAB LEVEL +0.60 (upper reinforcement, direction 1), Sc. 1:25



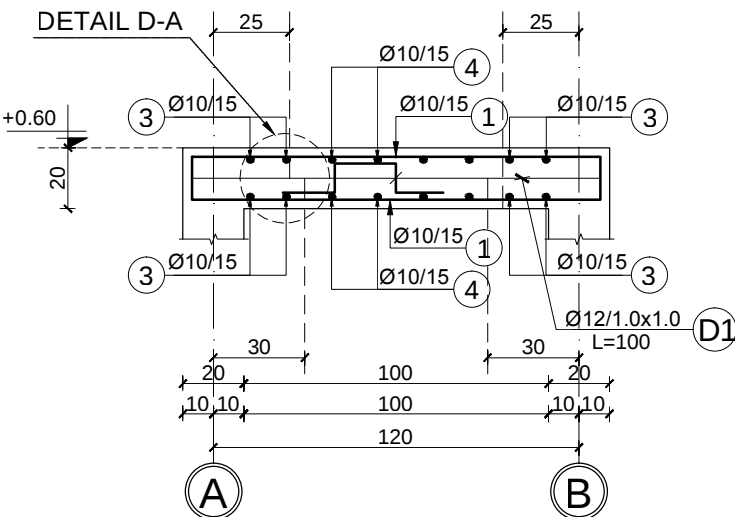
SLAB LEVEL +0.60 (lower reinforcement, direction 2), Sc. 1:25



SLAB LEVEL +0.60 (upper reinforcement, direction 2), Sc. 1:25



SECTION B-B Sc. 1:25



DETAIL D-A sc. 1:25

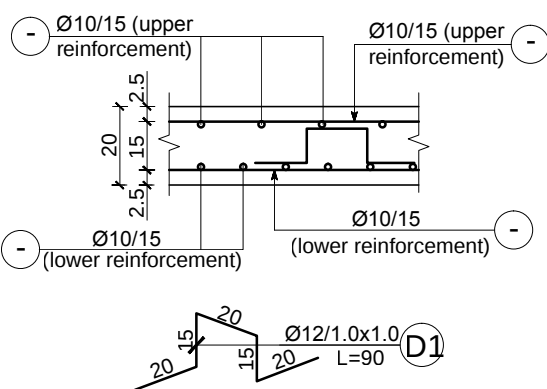


TABELA E SPECIFIKIMIT TE ARMATURES / TABLE OF REINFORCEMENT									
Lloji Type	Sasia Pieces	Poz. Element	d	l (cm)	cope quantity	L (m)	Pesha/nj weight/unit	Pesha / Weight	TOTAL/ TOTAL
Slab level +0.60 (lower reinforcement)	1	1	10	190	3	5.70	0.617	3.51	3.51
		2	10	*85	10	8.50	0.617	5.24	5.24
		3	10	190	4	7.60	0.617	4.69	4.69
		4	10	*105	4	4.20	0.617	2.59	2.59
		D1	12	100	3	3.00	0.888	2.66	2.66
	(*) - gjatesi mesatare / average length								
Slab level +0.60 (upper reinforcement)	1	1	10	180	3	5.40	0.617	3.33	3.33
		2	10	*80	10	8.00	0.617	4.93	4.93
		3	10	180	4	7.20	0.617	4.44	4.44
		4	10	*100	4	4.00	0.617	2.47	2.47
	(*) - gjatesi mesatare / average length								

CONCRETE: C20/25

STEEL: S500

CONCRETE COVER: a=2.5cm

PROJECT: Rural Water Supply 3 - BMZ ID 2020 61 695 / Ujesjellesi Rural 3 - BMZ ID 2020 61 695
PROJEKTI: CONSULTING SERVICES FOR PROJECT PREPARATION AND FEASIBILITY STUDIES FOR CONSTRUCTION/RECONSTRUCTION OF WATER SUPPLY SYSTEMS IN RURAL AREAS
SHERBIME KONSULENCE PER PERGATITJEN E PROJEKTEVE DHE STUDIMEVE TE FIZIBILITETIT PER NDERTIMIN/RINDERTIMIN E RRJETIT TE UJESJELLESIT NE ZONAT RURALE

TITLE:
TITULLI: SLAB REINFORCEMENT LEVEL +0.60
ARMIMI I SOLETES KUOTA +0.60

CLIENT:
KLIENTI:



ALBANIAN DEVELOPMENT FUND
FONDI SHQIPTAR I ZHVILLIMIT

FUNDING:
FINANCUES:



KFW

ENGINEER: INXHINIER:



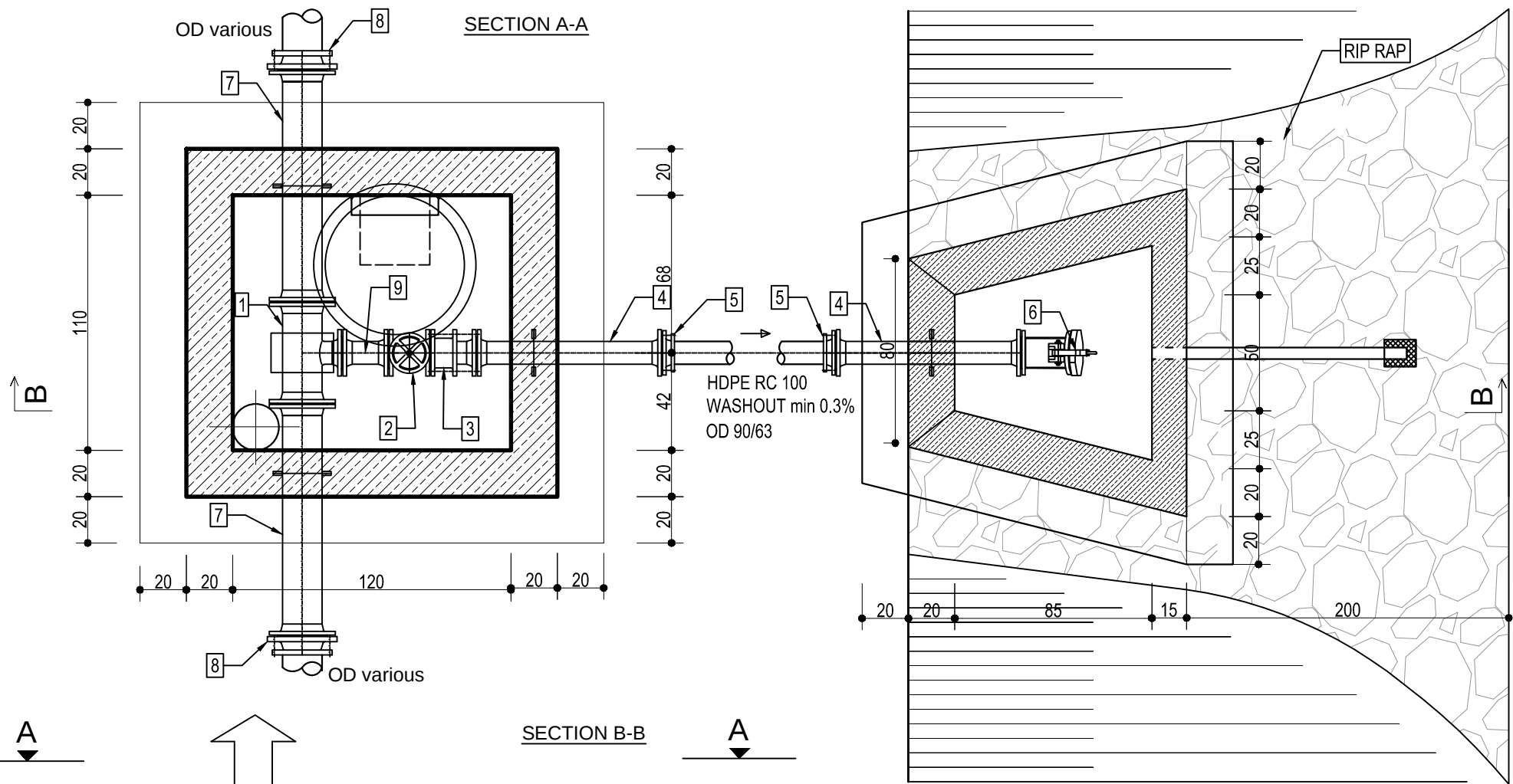
CES
Consulting Engineers
Salzgitter GmbH

Sub - Consultant:



No. Rev	DESCRIPTION OF REVISION	DATE	SCALE: SHKALLA:	1 : 25
02	FINAL	DECEMBER 2018	DATE: APPROVAL DATE:	OCTOBER 2018 DECEMBER 2018
01	DRAFT	OCTOBER 2018	FILE NAME: EMRI DOK:	RWSIII-013.2QEP-DWG-WS-AVC-STR.dwg
			DWG No.: Nr. VIZATIMIT:	RWSIII-013.2QEP-DWG-WS-AVC-STR-06

PIPE AND FITTINGS OF WASHOUT MANHOLE
TUBA DHE RAKORDERI NE Puseten E SHKARKIMIT

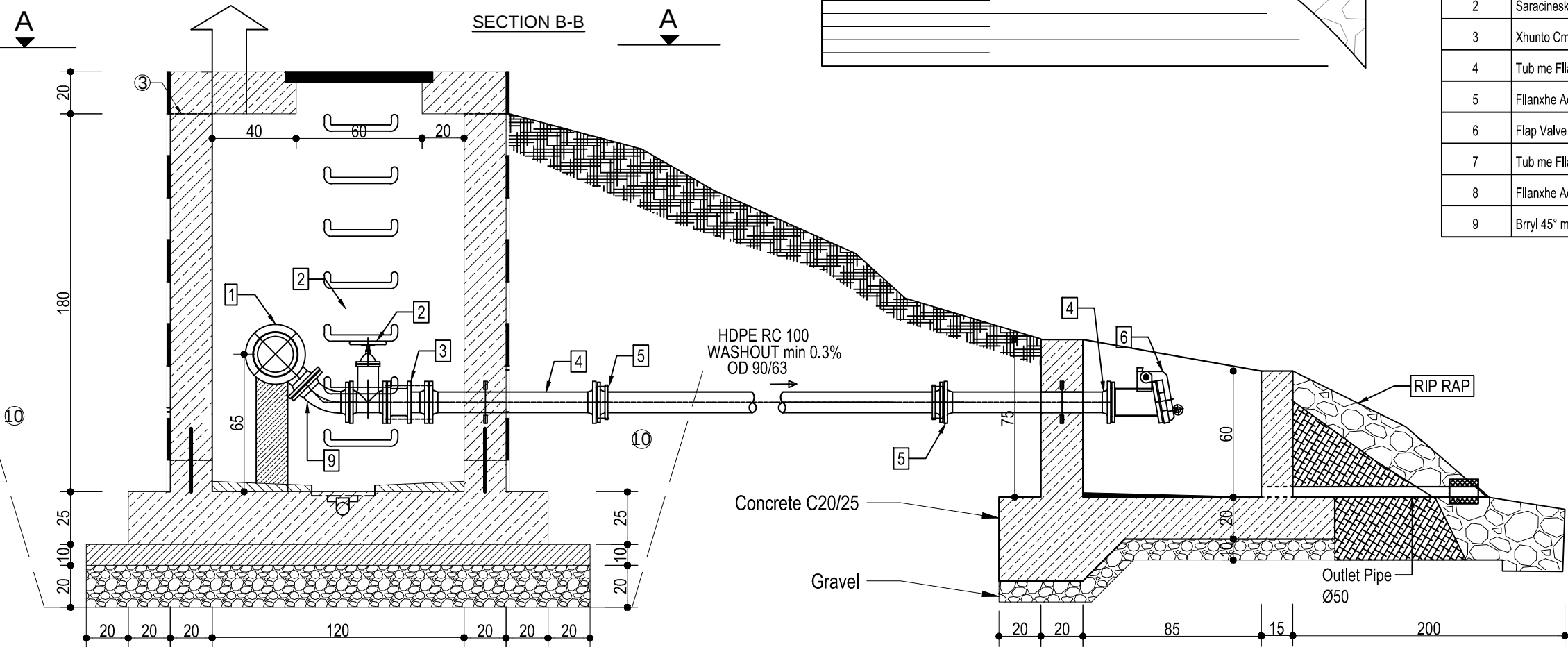


List of Fittings

Position	Description	Diameter	Length	Max. Pressure	Unit	Quantity
[-]	[-]	[mm]	[mm]	[bar]	[-]	[-]
1	All Flanged Tee Reducer (T)	var	var	10/16	PC	1
2	Valve Short With Hand Wheel	80/50	200	10/16	PC	1
3	PAF-L (self-restrained dismantling joint)	80/50	190	10/16	PC	1
4	Double Flange Pipe with Puddle	80/50	1000	10/16	PC	2
5	Flange Adaptor	80/50	-	10/16	PC	2
6	Flap Valve	80/50	-	10	PC	1
7	Double Flange Pipe with Puddle	var	var	10/16	PC	2
8	Flange Adaptor	var	-	10/16	PC	2
9	Double Flanged Bend 45° (Q)	80/50	-	10/16	PC	1

Tabela e Rakorderive

Position	Description	Diameter	Length	Max. Pressure	Unit	Quantity
[-]	[-]	[mm]	[mm]	[bar]	[-]	[-]
1	Tee Reduktuese me Fllanxha	var	var	10/16	PC	1
2	Saracinesk me Volant	80/50	200	10/16	PC	1
3	Xhunto Cmontimi me Fllanxha	80/50	190	10/16	PC	1
4	Tub me Fllanxha per inkastrim ne mur	80/50	1000	10/16	PC	2
5	Fllanxhe Adaptor	80/50	-	10/16	PC	2
6	Flap Valve	80/50	-	10	PC	1
7	Tub me Fllanxha per inkastrim ne mur	var	var	10/16	PC	2
8	Fllanxhe Adaptor	var	-	10/16	PC	2
9	Brryl 45° me fllanxha (Q)	80/50	-	10/16	PC	1



PROJECT: Rural Water Supply 3 - BMZ ID 2020 61 695 / Ujesjellesi Rural 3 - BMZ ID 2020 61 695
PROJEKTI: CONSULTING SERVICES FOR PROJECT PREPARATION AND FEASIBILITY STUDIES FOR CONSTRUCTION/RECONSTRUCTION OF WATER SUPPLY SYSTEMS IN RURAL AREAS
SHERBIME KONSULENCE PER PERGATITJEN E PROJEKTEVE DHE STUDIMEVE TE FIZIBILITETIT PER NDERTIMIN/RINDERTIMIN E RRJETIT TE UJESJELLESIT NE ZONAT RURALE
TITULLI: PIPE AND FITTINGS OF WASHOUT MANHOLE
TUBA DHE RAKORDERI NE Puseten E SHKARKIMIT

CLIENT: KLIENTI:
FUNDING: FINANCIUESI:
ALBANIAN DEVELOPMENT FUND
FONDI SHQIPTAR I ZHVILLIMIT
bashkëpunimi gjerman
DEUTSCHE ZUSAMMENARBEIT
KFW

ENGINEER: INXHIINIER:
Sub - Consultant:
CES
Consulting Engineers
Salzgitter GmbH
SE

			SCALE: SHKALLA: 1 : 25
02	FINAL	DECEMBER 2018	DATE: APPROVAL DATE: <i>[Signature]</i> OCTOBER 2018 DECEMBER 2018
01	DRAFT	OCTOBER 2018	FILE NAME: EMRI DOK: RWSIII-013.2QEP-DWG-WS-WO.dwg
No. Rev	DESCRIPTION OF REVISION	DATE	DWG No.: Nr. VIZATIMIT: RWSIII-013.2QEP-DWG-WS-WO-MECH-02