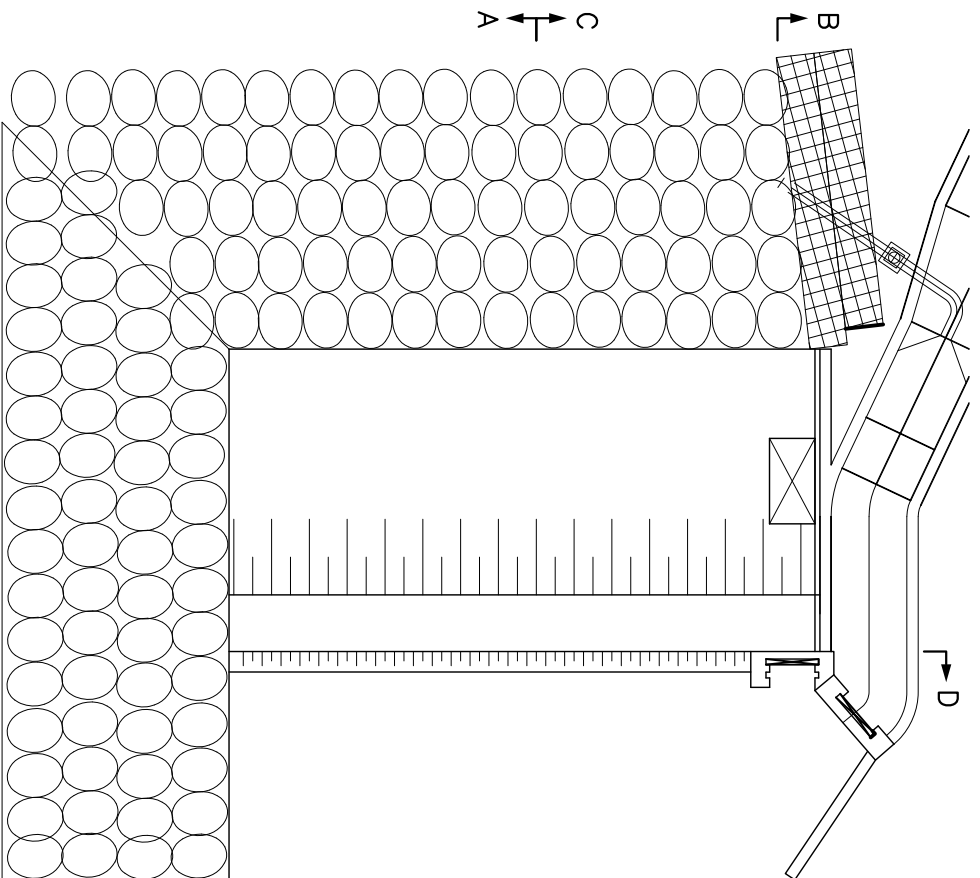
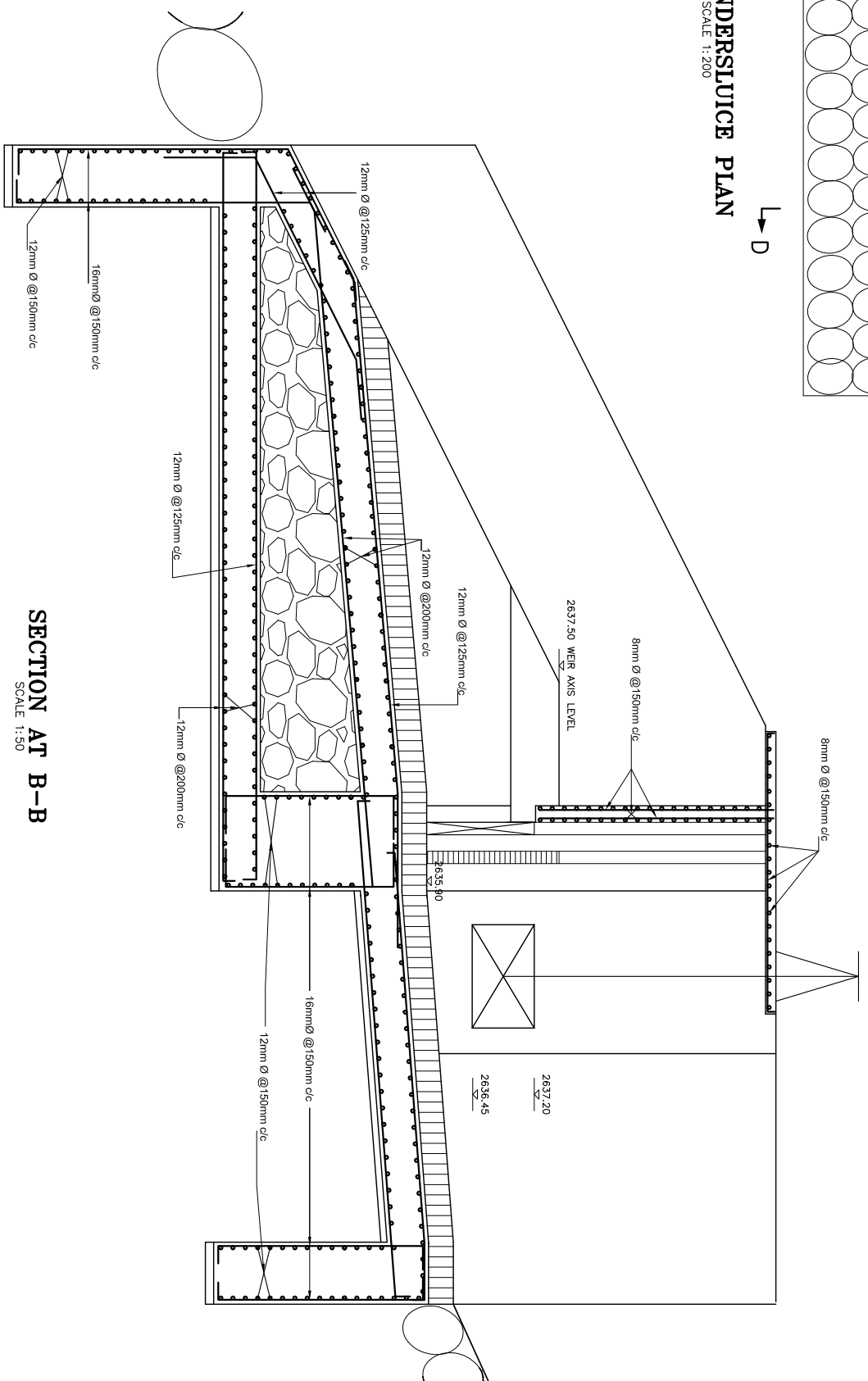


ANNEX A

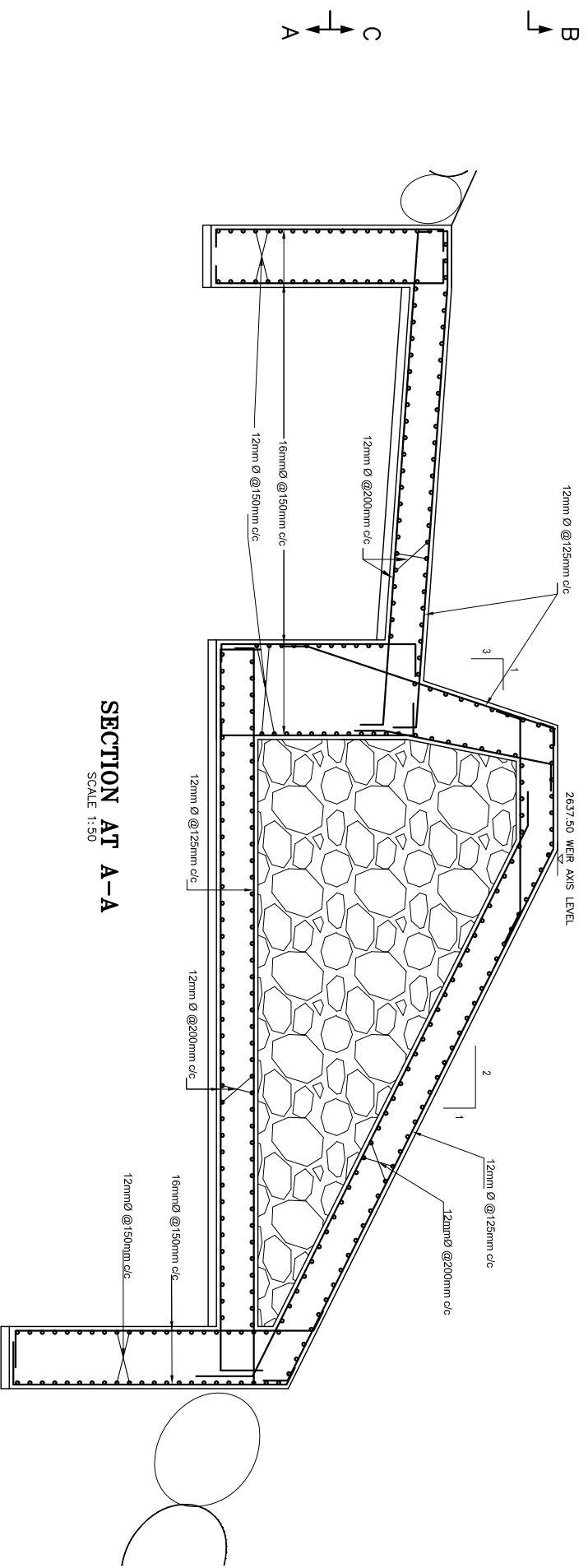
STRUCTURAL DRAWINGS



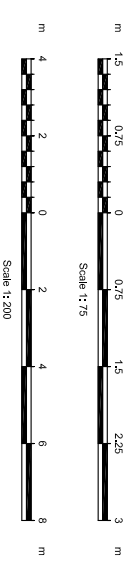
WEIR & UNDERSLUICE PLAN
SCALE 1:200



SECTION AT A-A
SCALE 1:50



SECTION AT B-B
SCALE 1:50



NOTES:

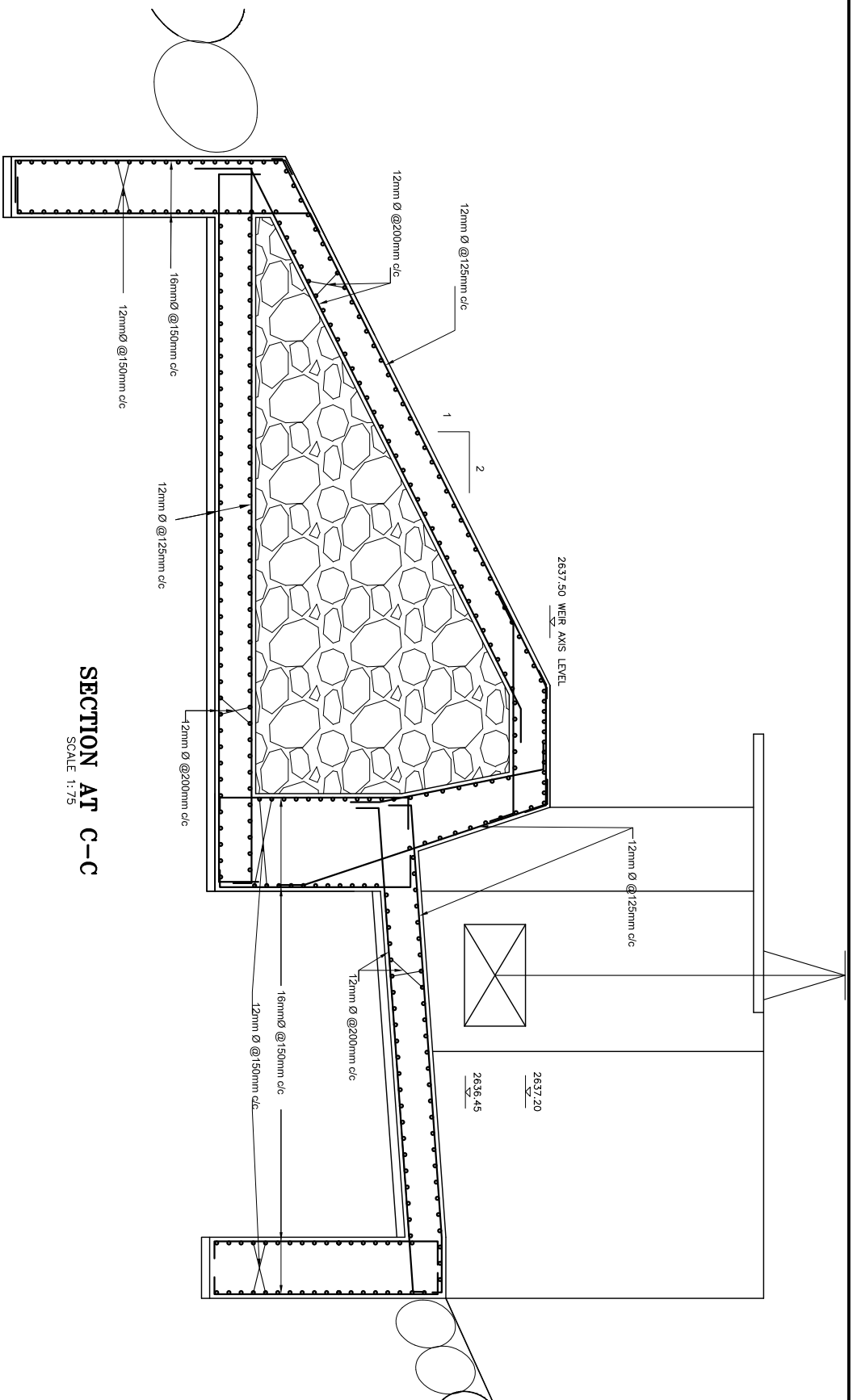
1. All co-ordinates are in meter with reference to GPS, levels are in m above mean sea level and dimensions are in meter unless specified.
2. Concrete grades
M20 – Structural Concrete (1:1.5:3)
M10 – 75mm blinding concrete (1:3:6)
3. Excavation lines will be confirmed as per site condition.
Backfilling should be done with non-cohesive material and well compacted to the satisfaction of the Engineer.
- 4.

Rev.	Amendment	By	Ckd.	Rec.	App.	Date

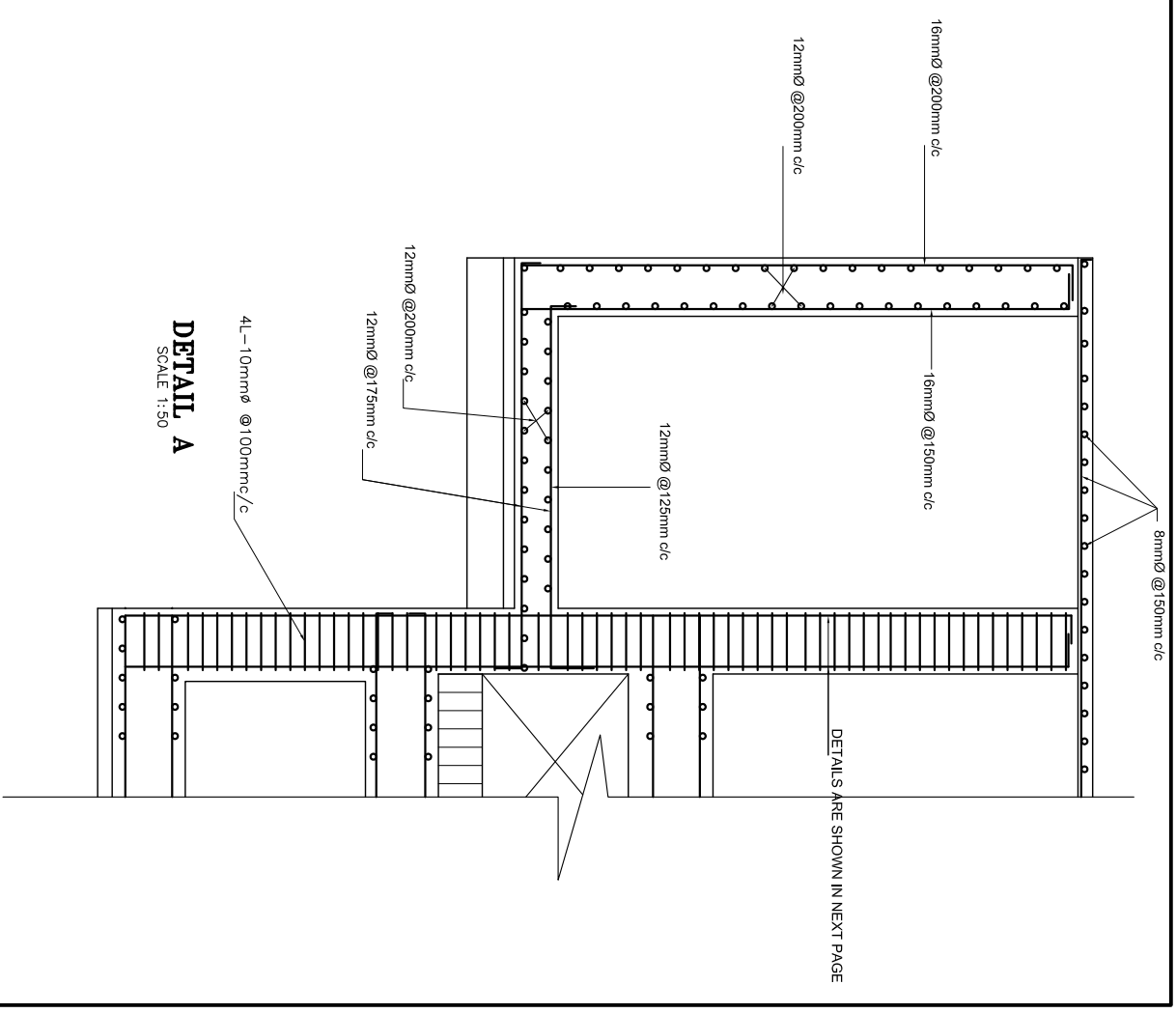
AAKHE KHOLA MINI HYDRO USER COMMITTEE		Name	By	Ckd.	Rec.	App.	Date
AAKHE KHOLA MINI HYDROPOWER PROJECT		Designed:	M. K. Bista				
		Drawn:	M. K. Bista				
		Checked:	N. Singh				
		Recommended:	B. Singh				
		Approved:	N. P. Adhikari				

Alternative Energy Promotion Centre (AEPCC)		Date:	Scale
South Asia Sub-regional Economic Cooperation – Power Expansion Project (SASEC/AEP)		NOV 2019	AS SHOWN
Khartoum, Lalpur, Nepal			
Tel: +9771-5539390, 5539391			
Email: saeec@nepc.gov.np			

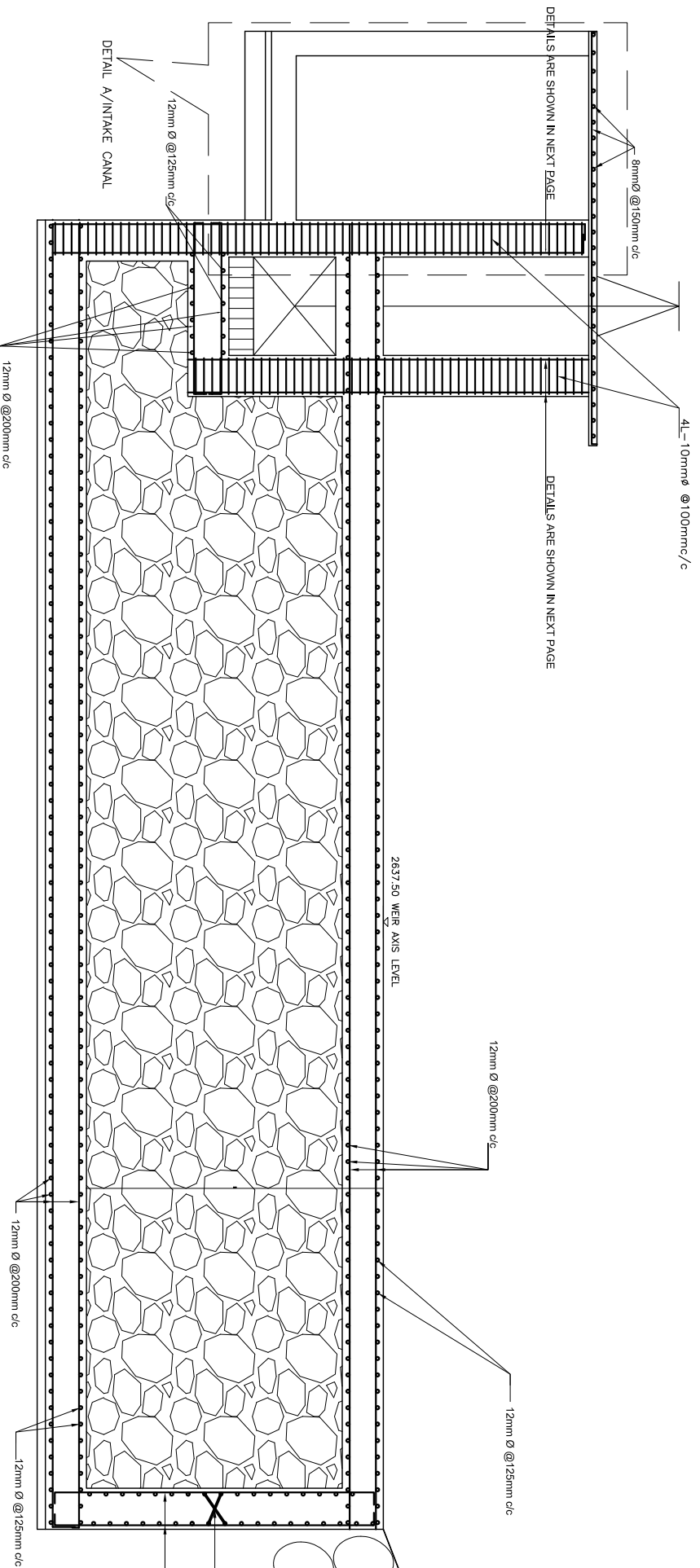
Drawing No.	AKMHP/DED-10C-01	Revision
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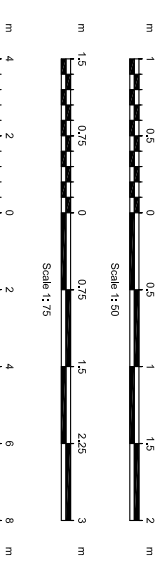
SECTION AT C-C
SCALE 1:75



DETAIL A
SCALE 1:50



SECTION AT D-D
SCALE 1:75



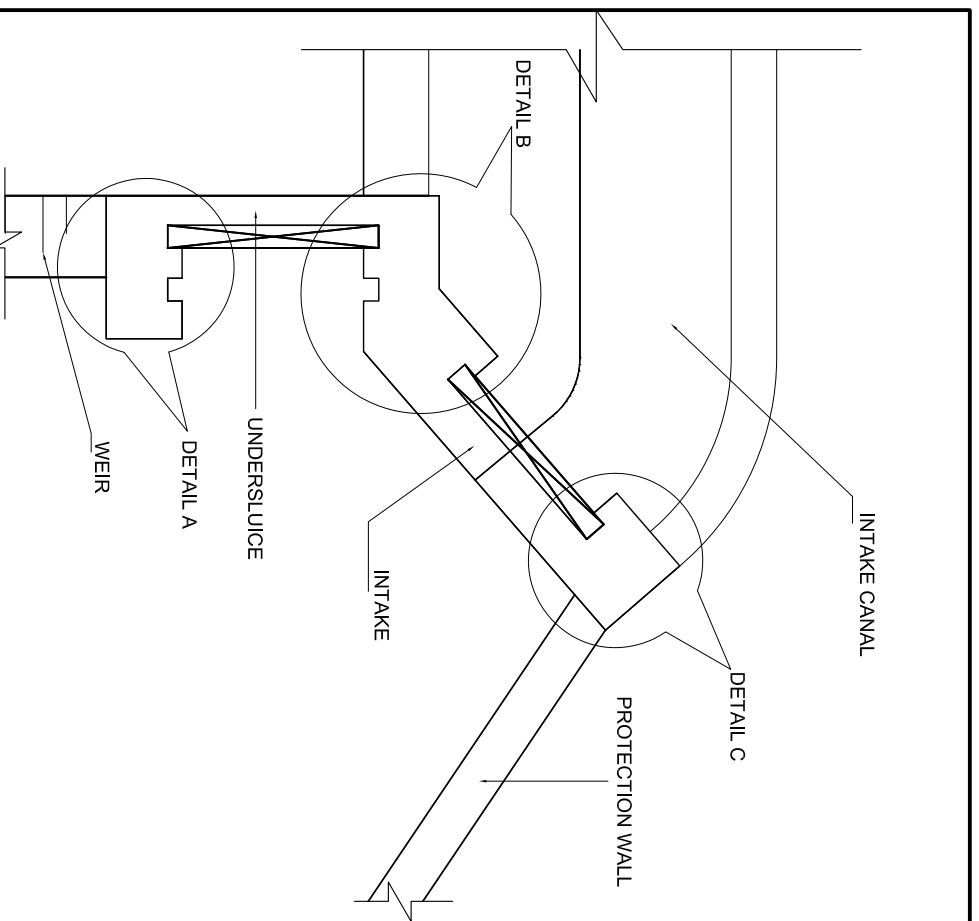
NOTES:

1. All co-ordinates are in meter with reference to GPS, levels are in m above mean sea level and dimensions are in meter unless specified.
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M20 - Structural Concrete (1:1.5:3)
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- 3.
- 4.

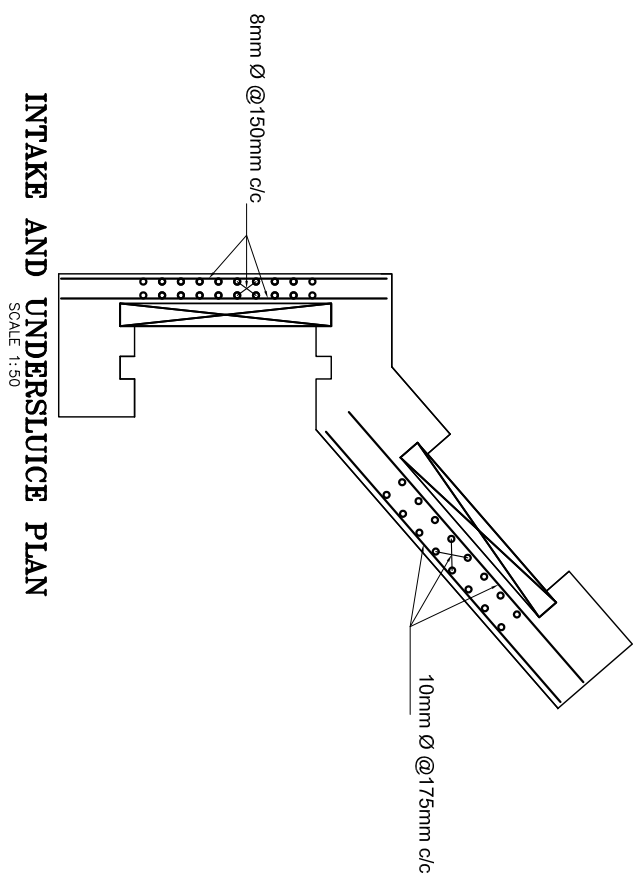
Rev.	Amendment	By	Ckd.	Rec.	App.

AAKHE KHOLA MINI HYDRO USER COMMITTEE		Name	
AAKHE KHOLA MINI HYDROPOWER PROJECT		Designed:	M. K. Bista
		Drawn:	M. K. Bista
		Checked:	N. Singh
		Recommended:	B. Singh
		Approved:	N. P. Ashkari

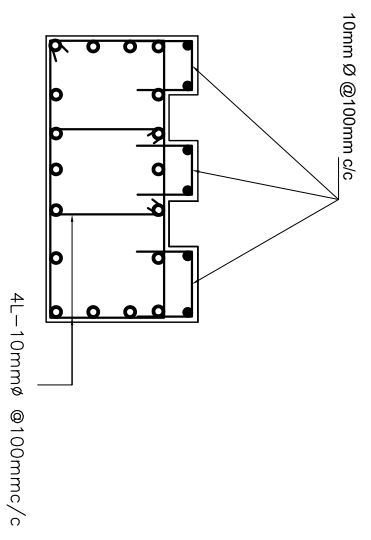
Alternative Energy Promotion Centre (APEC)		Date:	NOV 2019
South Asia Sub-regional Economic Cooperation - Power Expansion Project (SASEC/AEP)		Scale	AS SHOWN
Kharidar, Lalpur, Nepal Tel: +9771-5539390, 5539391 Email: sasec@nepc.gov.np		Drawing No.	AKMHP/DED-10C-02
		Revision	



INTAKE AND UNDERSLUICE PLAN
SCALE 1:50

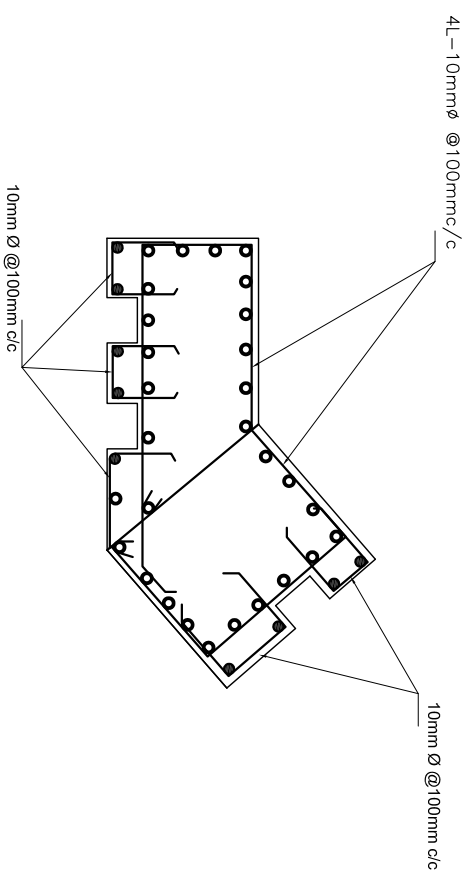


INTAKE AND UNDERSLUICE PLAN
SCALE 1:50



DETAIL A
SCALE 1:50

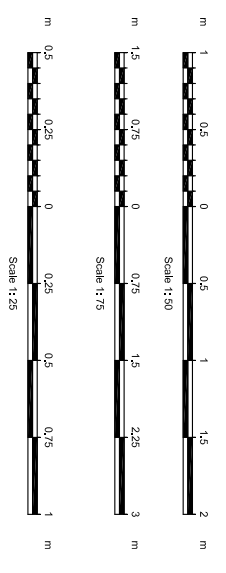
- 18 -16mm Ø
- 6 -12mm Ø



DETAIL B
SCALE 1:25

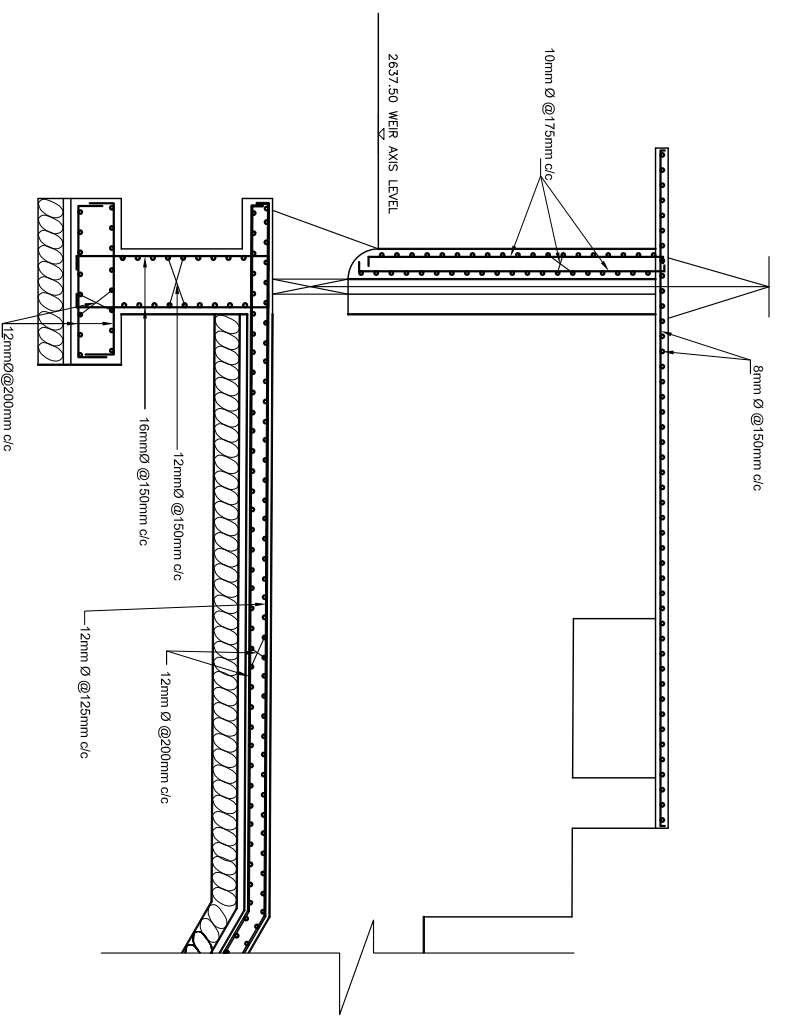
- 34 -16mm Ø
- 9 -12mm Ø

DETAIL C
SCALE 1:50

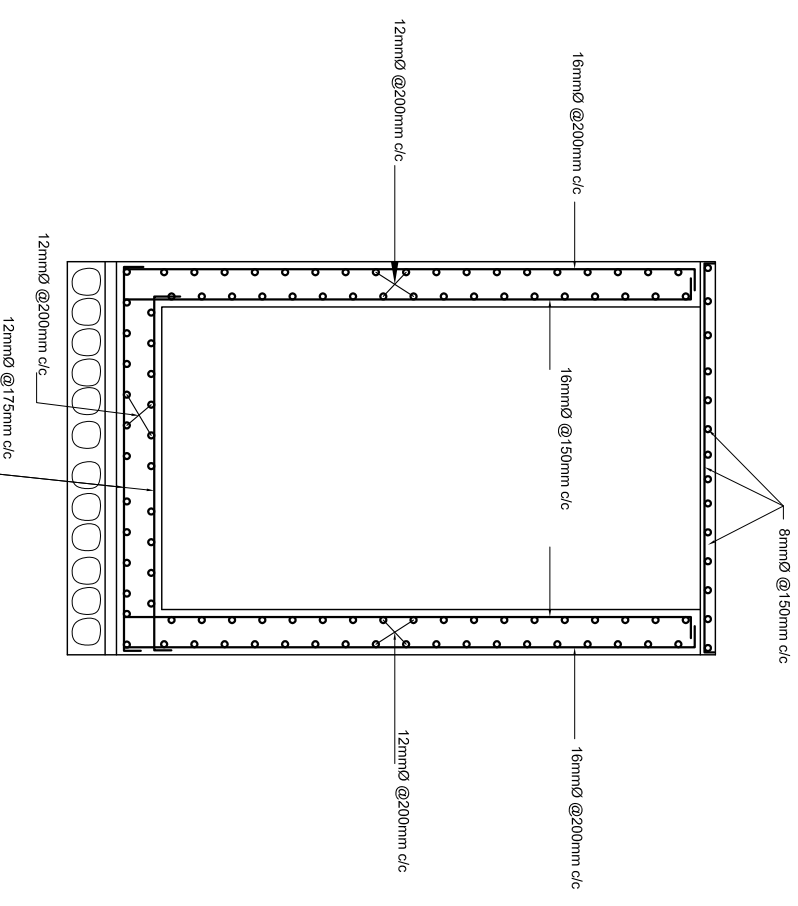


NOTES:

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- 4.



INTAKE PROFILE
SCALE 1:75

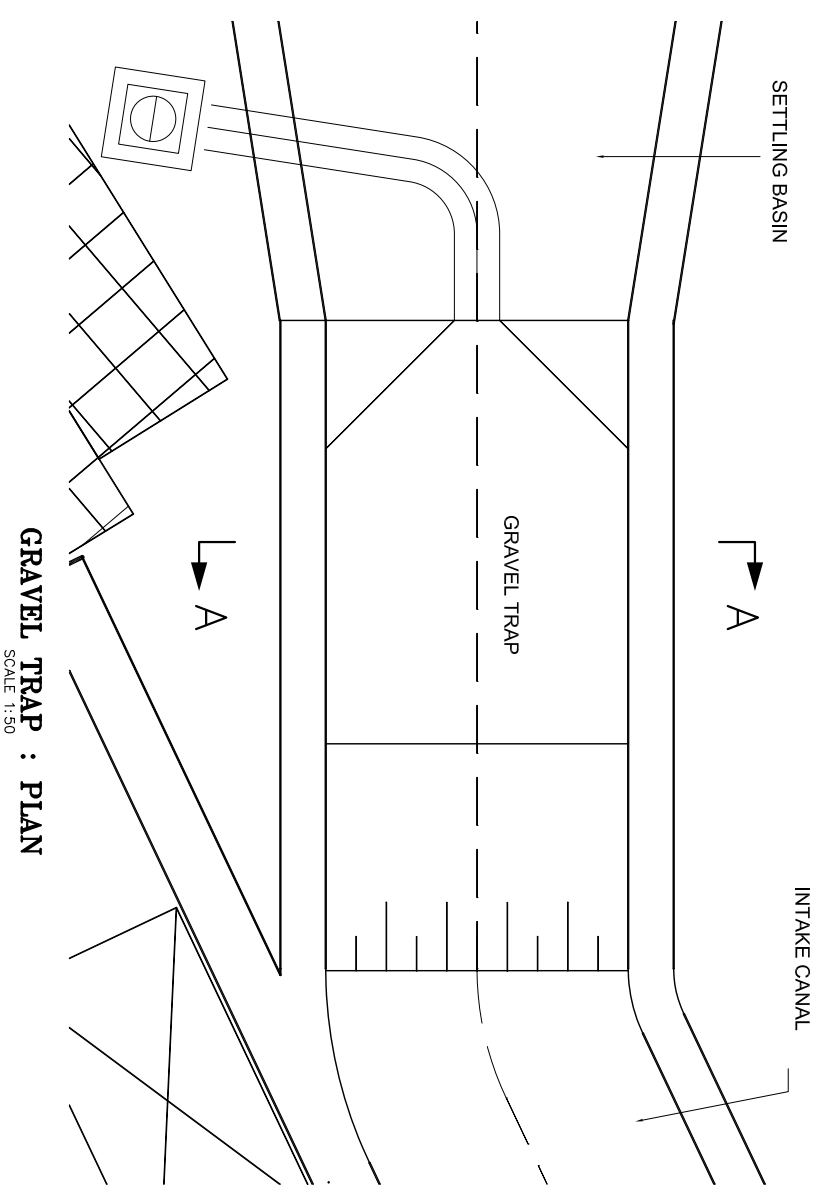


INTAKE CANAL SECTION
SCALE 1:50

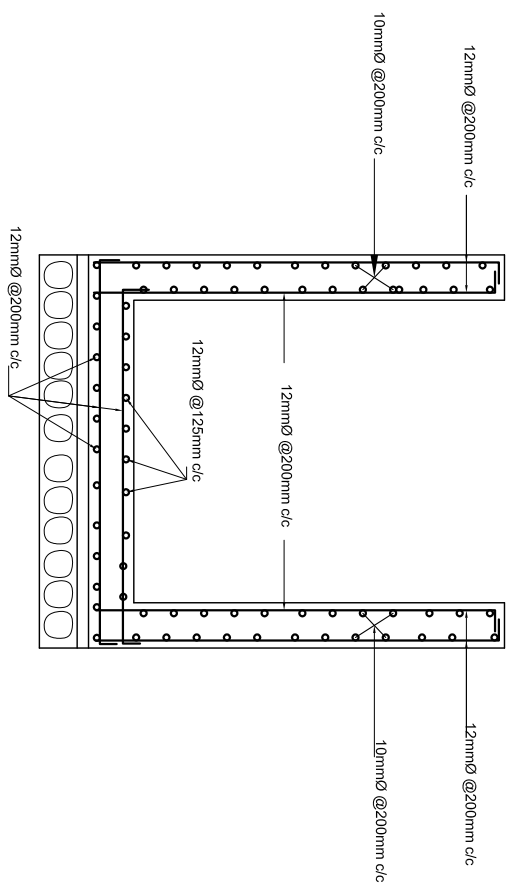
Rev.	Amendment	By	Ckd.	Rec.	App.	Date

AAKHE KHOLA MINI HYDRO USER COMMITTEE		Name	
AAKHE KHOLA MINI HYDROPOWER PROJECT		Designed:	M. K. Bista
		Drawn:	M. K. Bista
		Checked:	N. Singh
		Recommended:	B. Singh
		Approved:	N. P. Adhikari

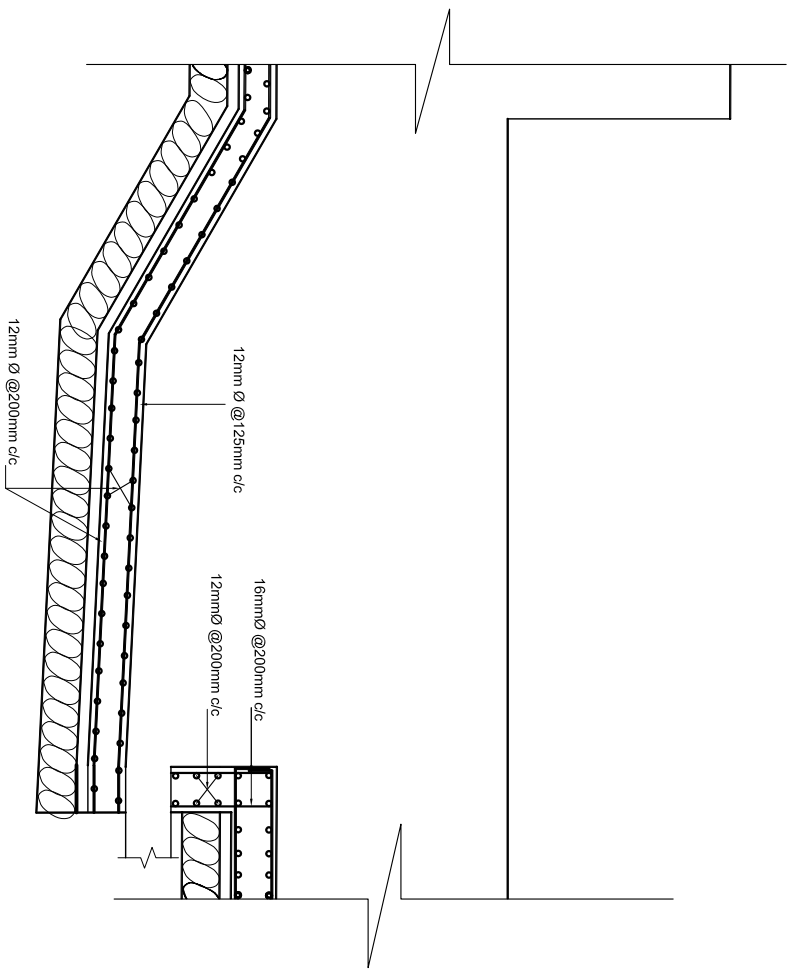
Alternative Energy Promotion Centre (AEP/C)		Date:	NOV 2019	Scale	AS SHOWN
South Asia Sub-regional Economic Cooperation - Power Expansion Project (SASEC/AEB)		Drawing No.	AKMHP/DED-15C-01	Revision	
Khimdur, Lalpur, Nepal Tel: +9771-5539390, 5539391 Email: sasec@nepc.gov.np					



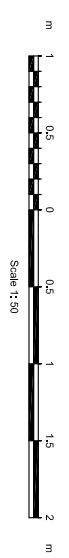
GRAVEL TRAP : PLAN
SCALE 1:50



SECTION AT A-A
SCALE 1:50



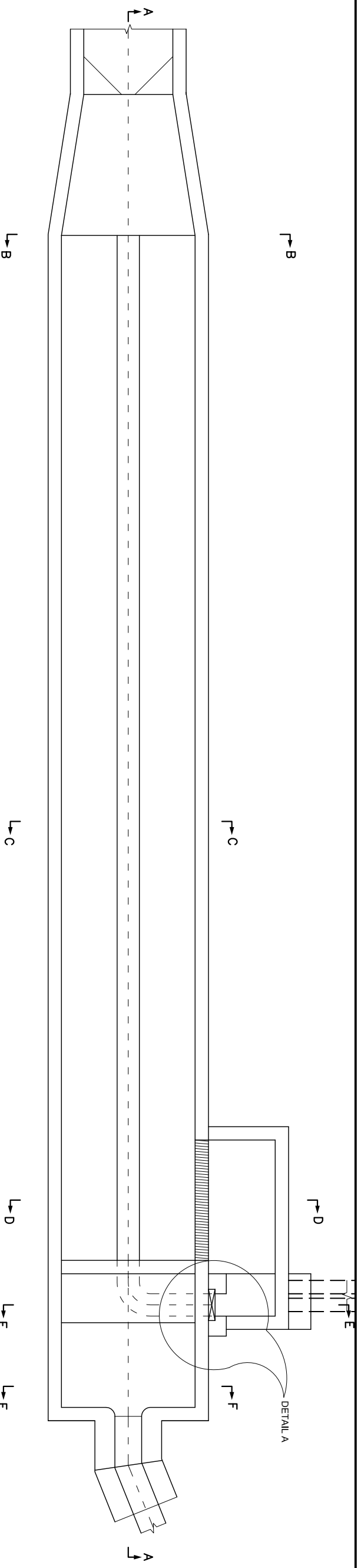
GRAVEL TRAP : PROFILE
SCALE 1:50



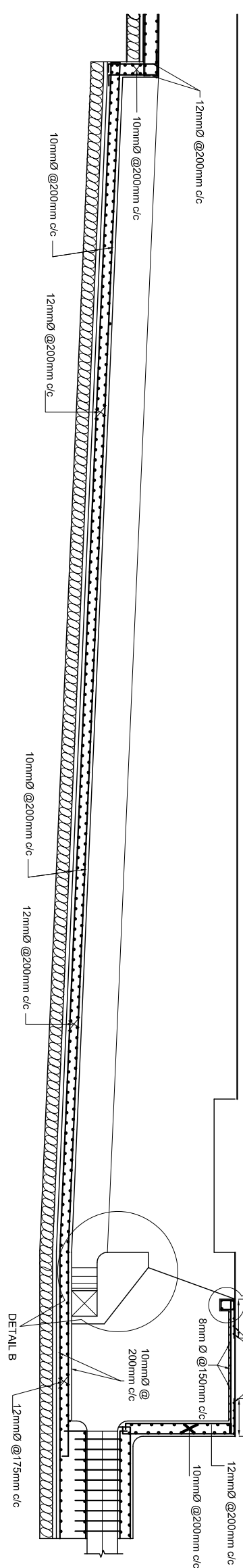
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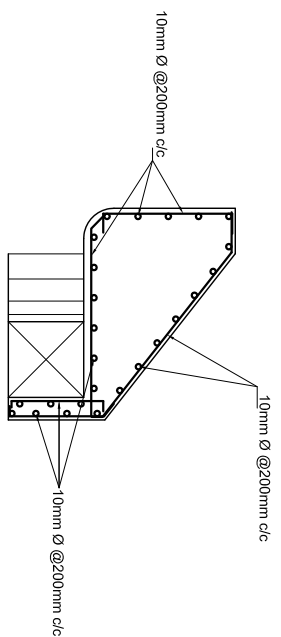
Amendment		By	Ckd.	Rec.	App.
AANKHE KHOLA MINI HYDRO USER COMMITTEE		Name			
AANKHE KHOLA MINI HYDROPOWER PROJECT		Designed:	M. K. Bista		
		Drawn:	M. K. Bista		
		Checked:	N. Singh		
		Recommended:	B. Singh		
		Approved:	N. P. Adhikari		
HEADWORKS					
GRAVEL TRAP					
PLAN AND SECTION					
SHEET 1 OF 1					
Alternative Energy Promotion Centre (AEP/C)		Date:	Scale		
South Asia Sub-regional Economic Cooperation – Power Expansion Project (SASEC/AOB)		NOV 2019	AS SHOWN		
Khimdur, Lalitpur, Nepal Tel: +9771-5539390, 5539391 Email: sasec@aepc.gov.np		Drawing No.	AKMHP/DED-20C-01		
				Revision	



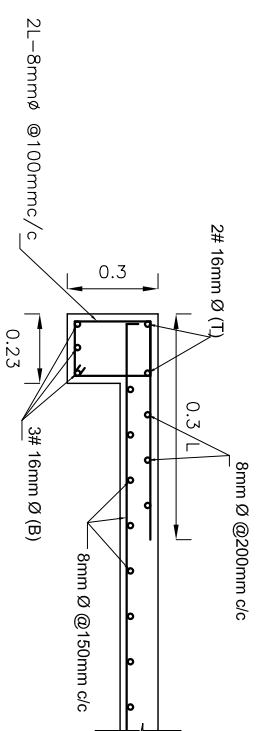
SETTLING BASIN : PLAN
SCALE 1:100



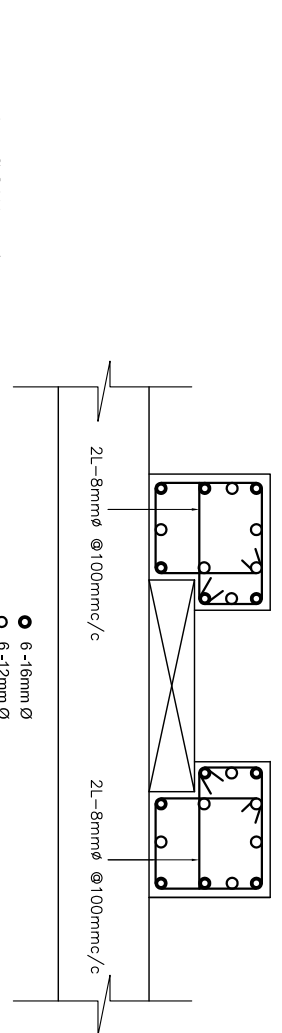
SECTION AT A-A
SCALE 1:100



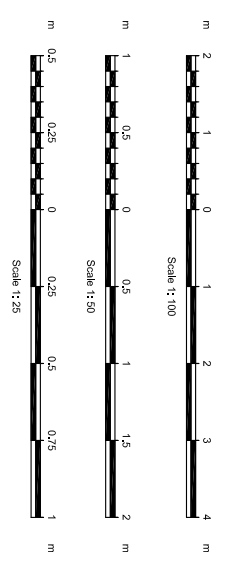
DETAIL AT B
SCALE 1:50



DETAIL AT C
SCALE 1:25



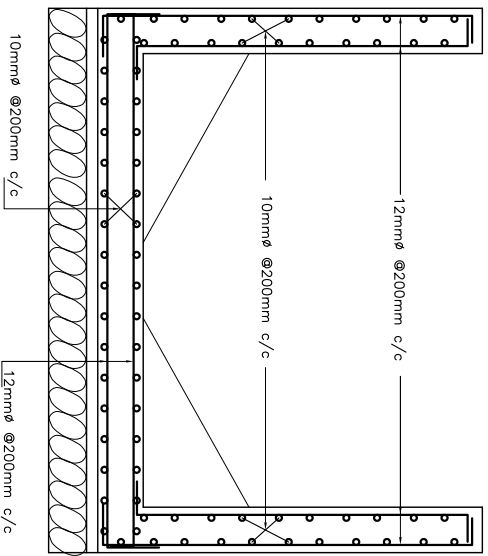
DETAIL AT A
SCALE 1:50



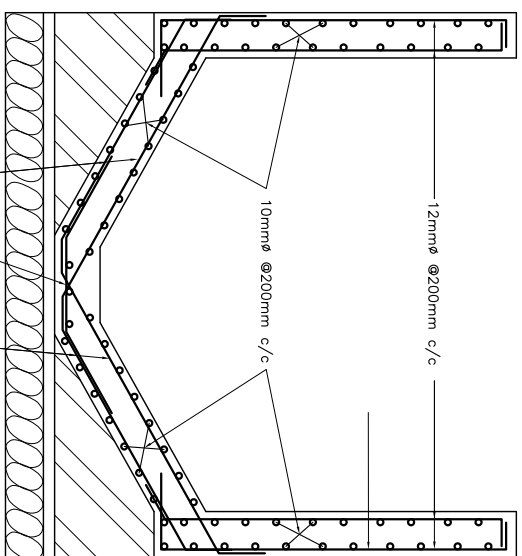
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 - M10 – 75mm binding concrete (1:3:6)
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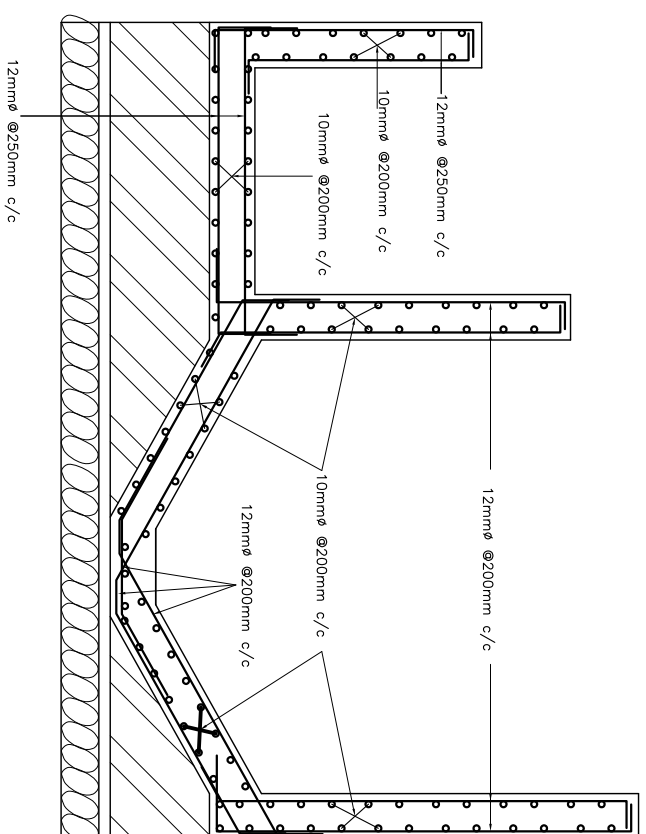
Amendment		By	Ckd.	Rec.	App.
AAKHE KHOLA MINI HYDRO USER COMMITTEE		Name			
AAKHE KHOLA MINI HYDROPOWER PROJECT		Designed:	M. K. Bista		
HEADWORKS		Drawn:	M. K. Bista		
SETTLING BASIN		Checked:	N. Singh		
PLAN AND SECTION		Recommended:	B. Singh		
SHEET 1 OF 2		Approved:	N. P. Adhikari		
Alternative Energy Promotion Centre (APEC)					
South Asia Sub-regional Economic Cooperation – Power Expansion Project (SASEC/AEB)					
Kharipur, Lalitpur, Nepal					
Tel: +9771-5539390, 5539391					
Email: sasec@nepc.gov.np					
Drawing No.	Scale	Date:			
AKMHP/DED-25C-01	AS SHOWN	NOV 2019			
					Revision



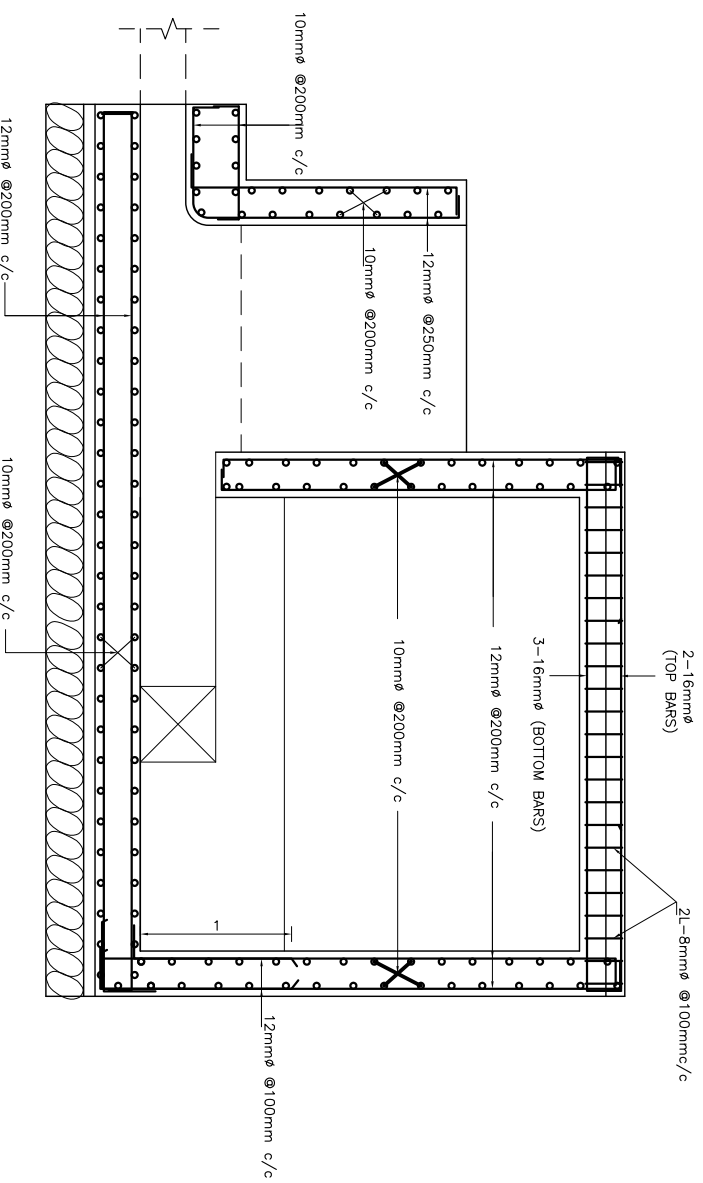
SECTION AT B-B
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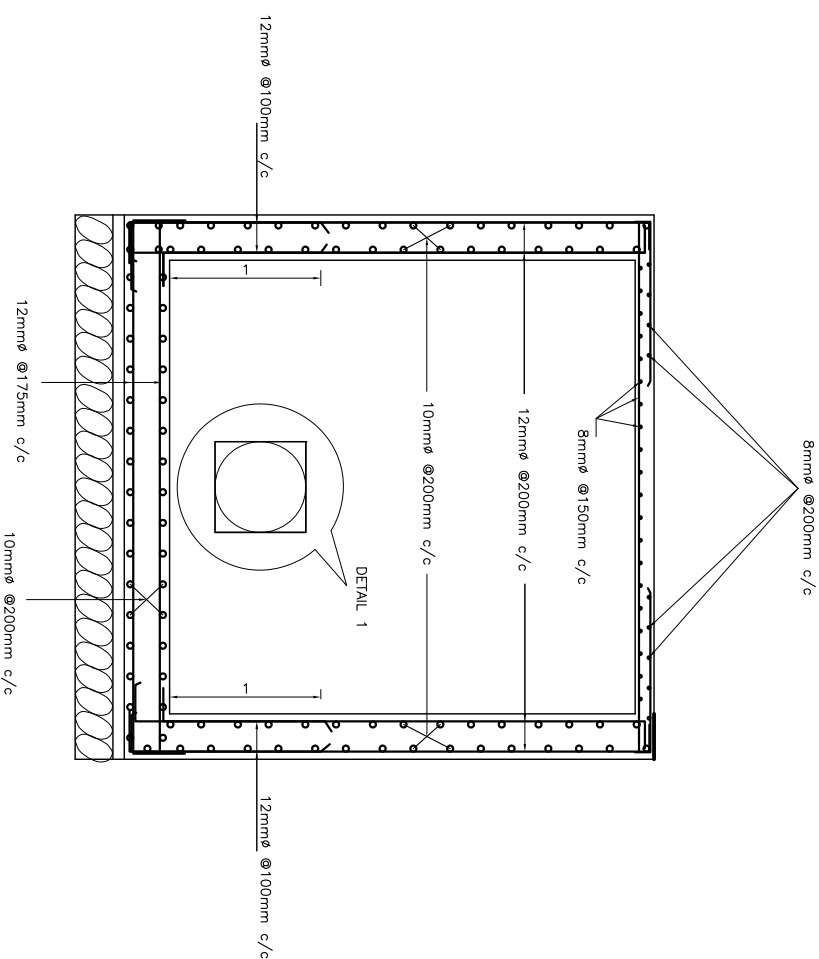
SECTION AT C-C
SCALE 1:50



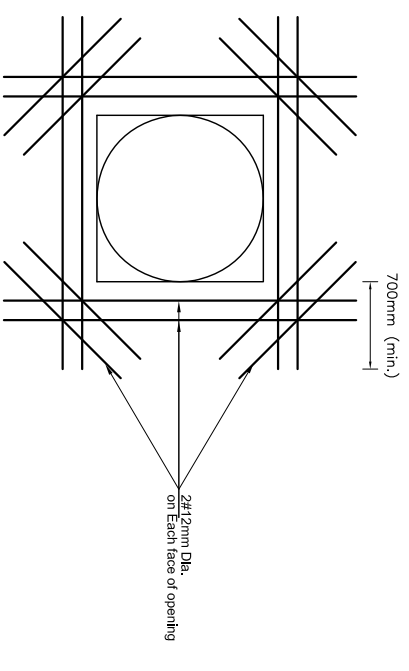
SECTION AT D-D
SCALE 1:50



SECTION AT E-E
SCALE 1:50



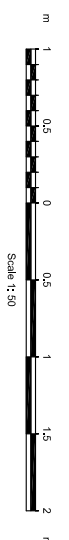
SECTION AT F-F
SCALE 1:50



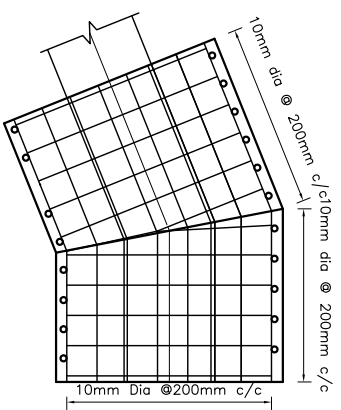
DETAIL AT 1
SCALE 1:50

NOTES:

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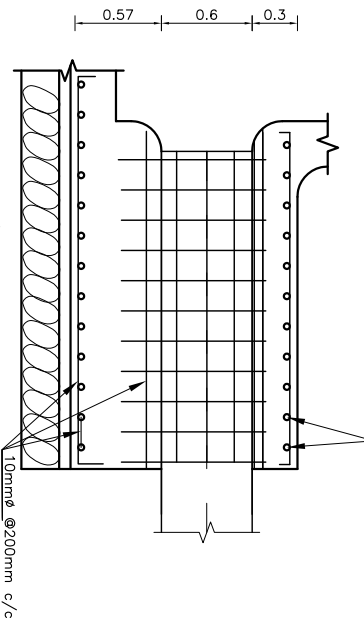


Amendment		By	Ckd.	Rec.	App.
AAKHE KHOLA MINI HYDRO USER COMMITTEE		Name			
AAKHE KHOLA MINI HYDROPOWER PROJECT		Designed:	M. K. Bista		
HEADWORKS		Drawn:	M. K. Bista		
SETTLING BASIN		Checked:	N. Singh		
SECTIONS AND DETAILS		Recommended:	B. Singh		
SHEET 2 OF 2		Approved:	N. P. Adhikari		
Alternative Energy Promotion Centre (AEPCC)		Date:	NOV 2019	Scale	AS SHOWN
South Asia Sub-regional Economic Cooperation - Power Expansion Project (SASEC/AEB)		Drawing No.	AKMHP/DED-25C-02		Revision
Khimdur, Lalitpur, Nepal					
Tel: +9771-5539390, 5539391					
Email: saeec@nepc.gov.np					



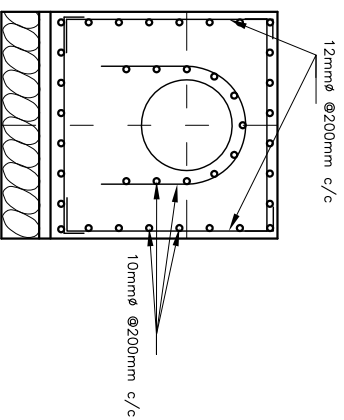
ANCHOR BLOCK (HAB01): PLAN

SCALE: 1:50



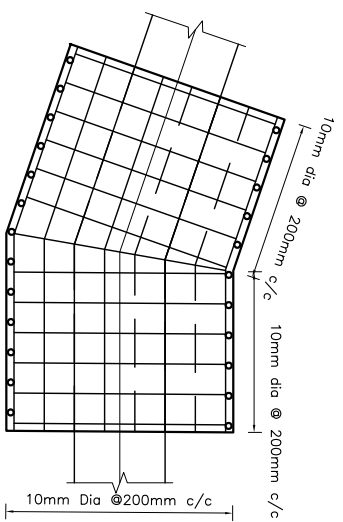
SECTION AT X-X

SCALE: 1:50



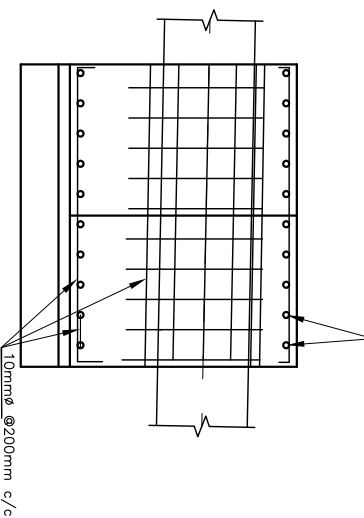
SECTION AT Y-Y

SCALE: 1:50



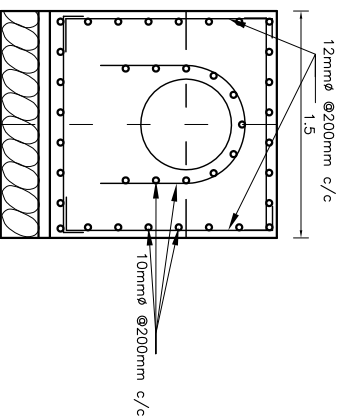
ANCHOR BLOCK (HAB03): PLAN

SCALE: 1:50



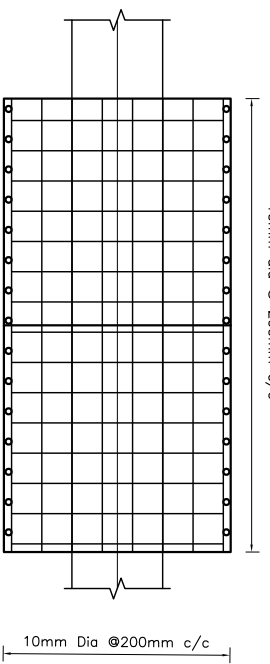
SECTION AT X-X

SCALE: 1:50



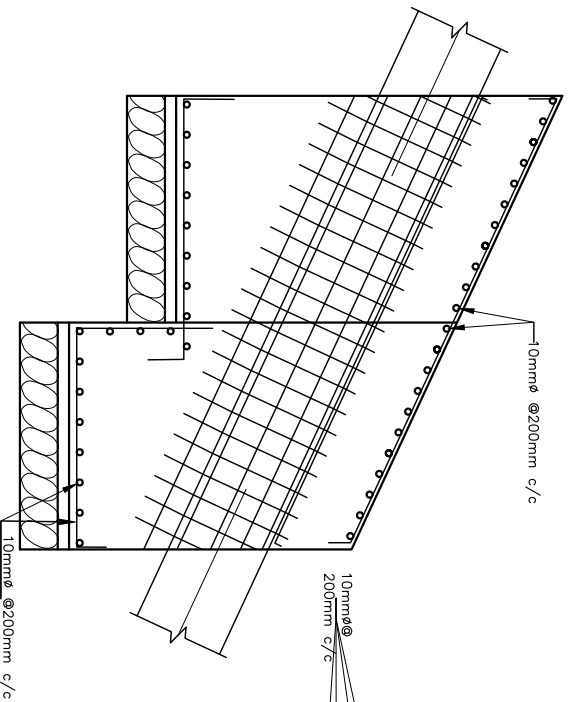
SECTION AT Y-Y

SCALE: 1:50



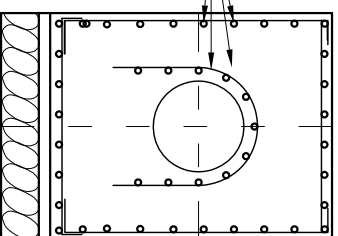
ANCHOR BLOCK (VAB11): PLAN

SCALE: 1:50



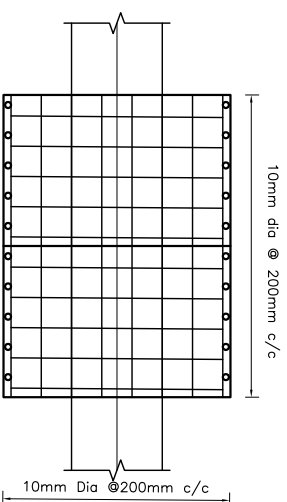
SECTION AT X-X

SCALE: 1:50



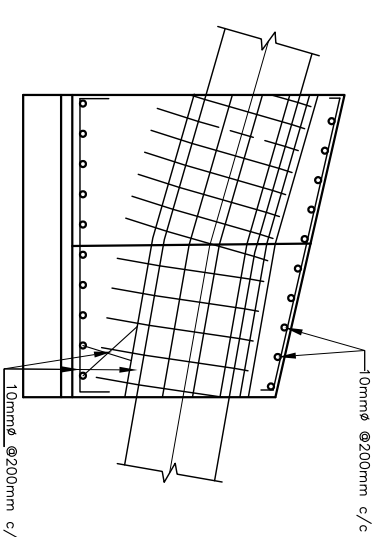
SECTION AT Y-Y

SCALE: 1:50



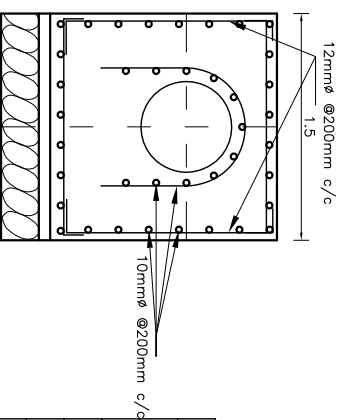
ANCHOR BLOCK (VAB07): PLAN

SCALE: 1:50



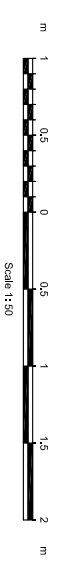
SECTION AT X-X

SCALE: 1:50



SECTION AT Y-Y

SCALE: 1:50



Scale 1:50

NOTES:

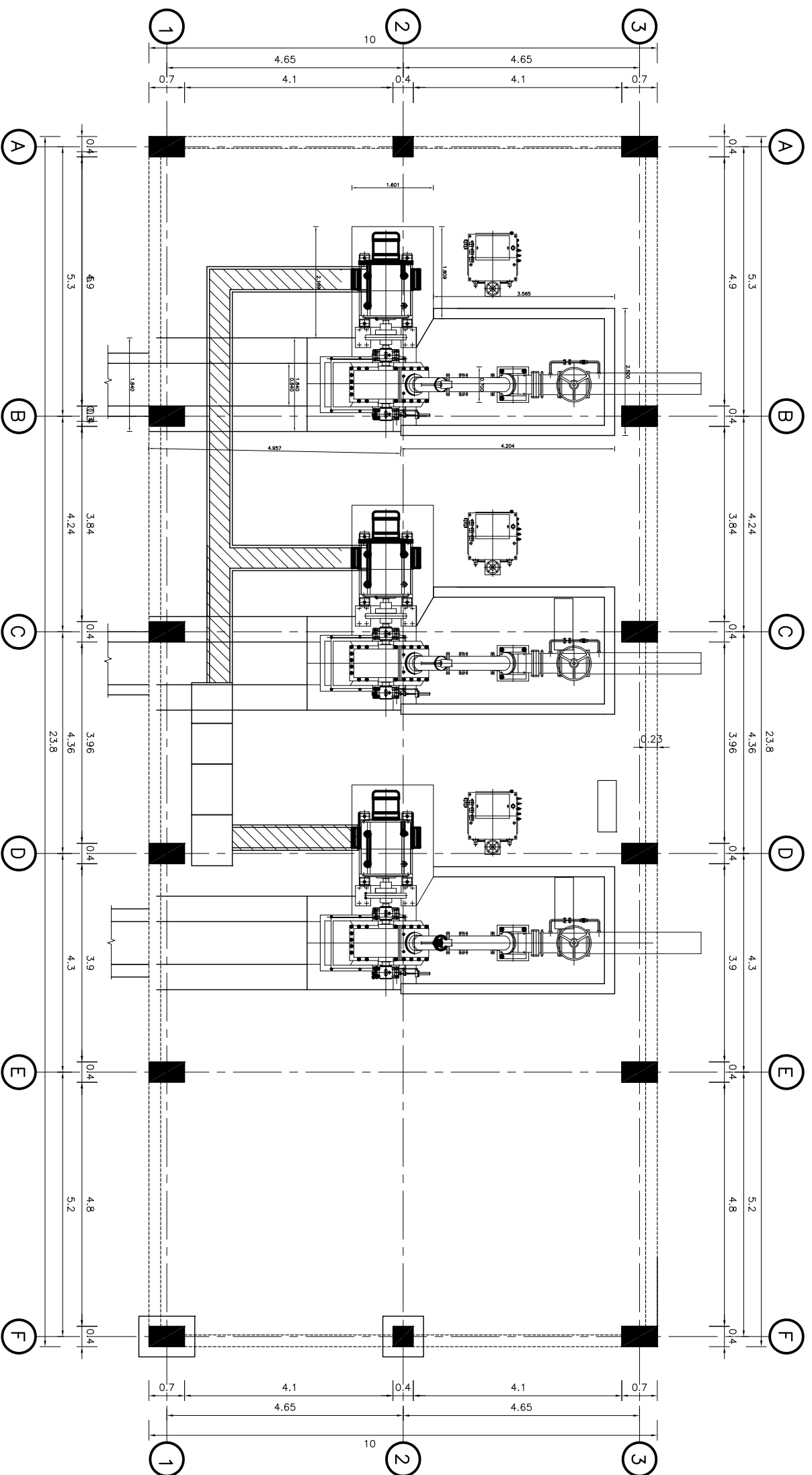
1. All co-ordinates are in meter with reference to GPS, levels are in m above mean sea level and dimensions are in meter unless specified.
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Amendment		By	Ckd.	Rec.	App.
ANKHE KHOLA MINI HYDRO USER COMMITTEE					
ANKHE KHOLA MINI HYDROPOWER PROJECT					
Designed:	M. K. Bista	Name			Date
Drawn:	M. K. Bista				
Checked:	N. Singh				
Recommended:	B. Singh				
Approved:	N. P. Adhikari				

SHEET 1 OF 1

Alternative Energy Promotion Centre (AEPCC)
South Asia Sub-regional Economic Cooperation – Power
Expansion Project (SASEC/AEP)
Khimtiar, Laligur, Nepal
Tel: +9771-5539390, 5539391
Email: sasec@aepcc.gov.np

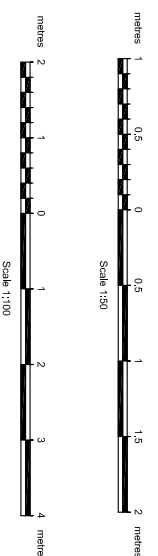
Drawing No.	Scale	AS SHOWN	Revision
AKMHP/DED-30C-01	AS SHOWN		



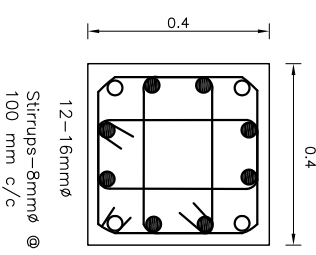
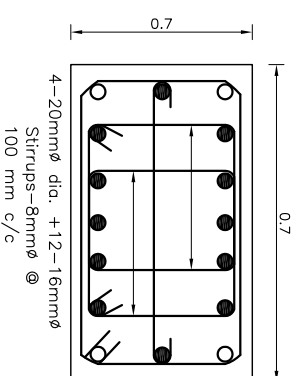
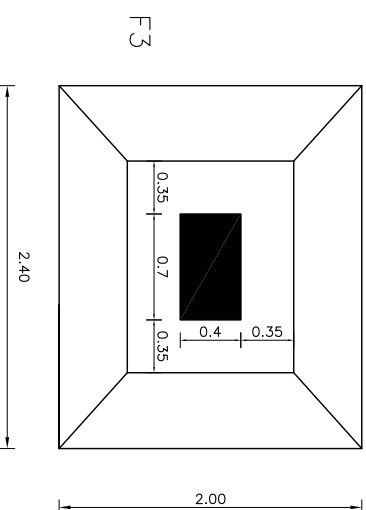
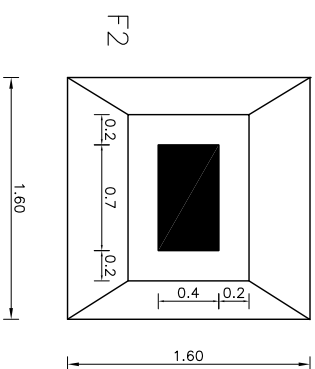
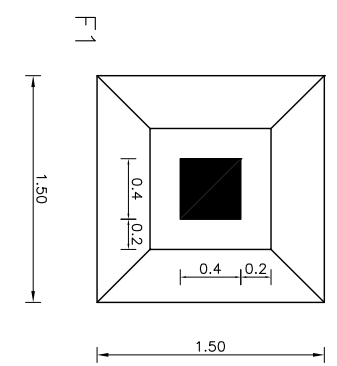
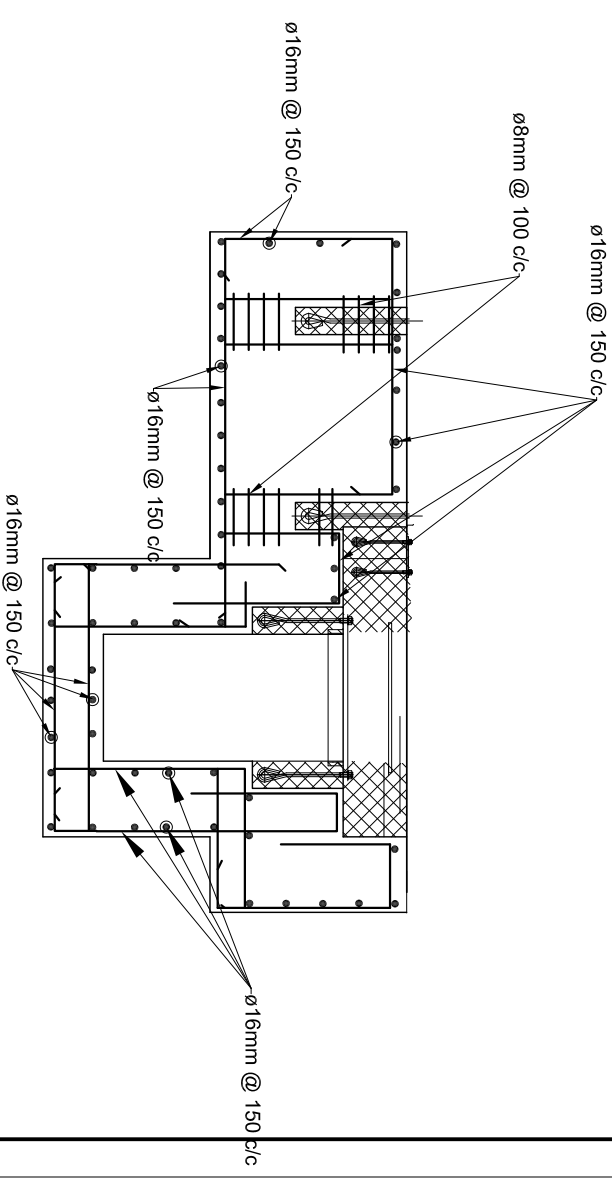
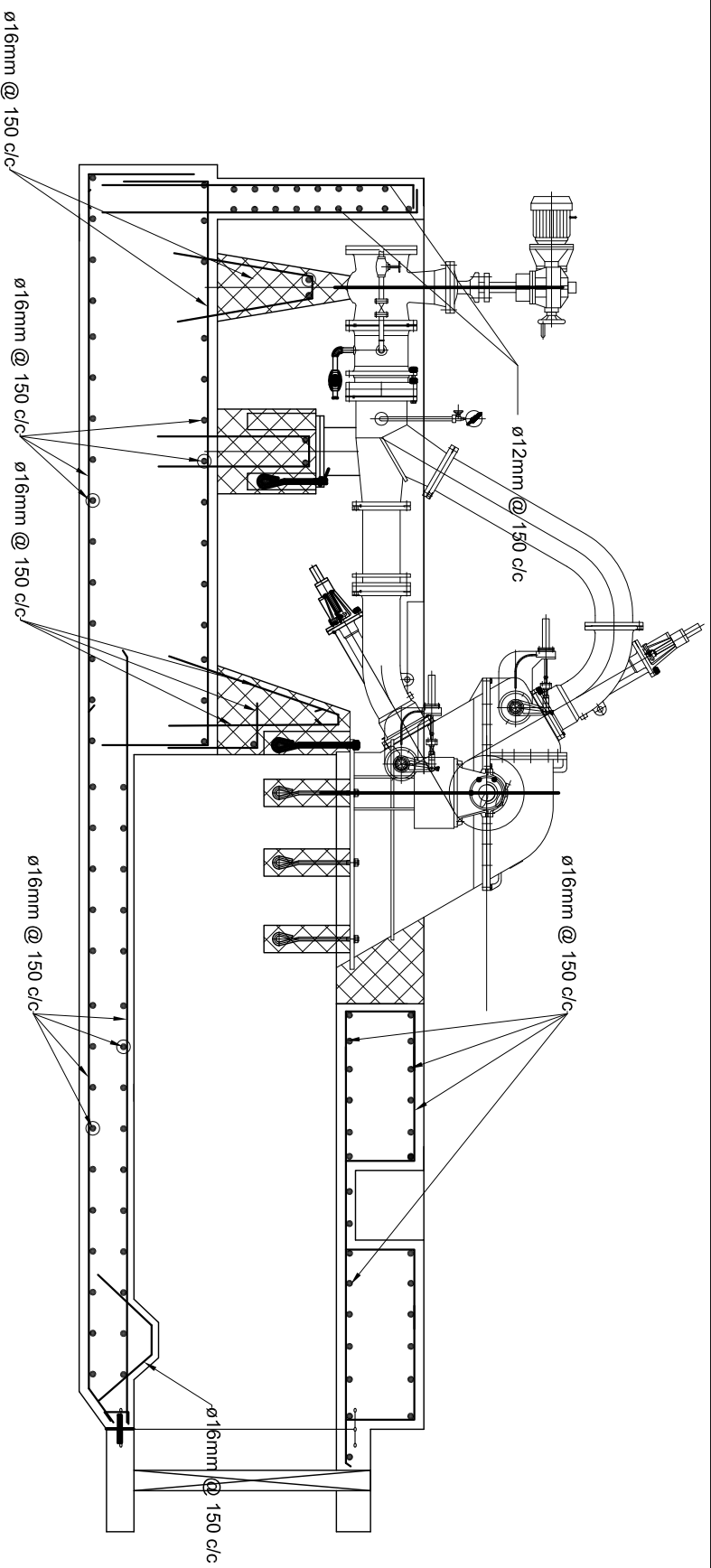
POWERHOUSE : PLAN
SCALE 1:100

NOTES:

1. SBC has been assumed as 150 KN/m².
2. Grade of Concrete is M20 for all Structure works.
3. Brickwork in wall should be in 1:6 cement mortar.
4. Grade of Steel is Fe500.
5. Clear cover for:
 - foundation = 50mm
 - column = 40mm
 - beam = 25mm
6. All the welds in trusses should be well penetrated.



Rev.	Amendment	By	Ckd.	Rec.	Date
<p>ANKHE KHOLA MINI HYDRO USER COMMITTEE ANKHE KHOLA MINI HYDROPOWER PROJECT</p> <p>POWERHOUSE GENERAL PLAN</p> <p>SHEET 1 OF 1</p>					
<p>Alternative Energy Promotion Centre (AERC) South Asia Sub-regional Economic Cooperation – Power Expansion Project (SASEC/AEP) Khumbar, Lalitpur, Nepal Tel: +9771-5539390, 5539391 Email: sasec@epc.gov.np</p>		<p>Designed: M. K. Bista Drawn: M. K. Bista Checked: N. Singh Recommended: B. Singh Approved: N. P. Adhikari</p>		<p>Date: NOV 2019 Scale: AS SHOWN</p>	
<p>Drawing No. AKMHP/DED-35P-01</p>				<p>Revision</p>	



COLUMN DETAILS (C2)

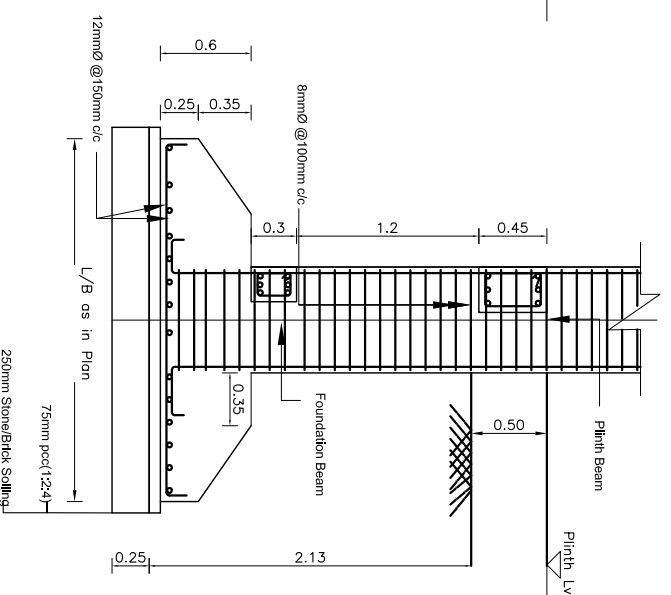
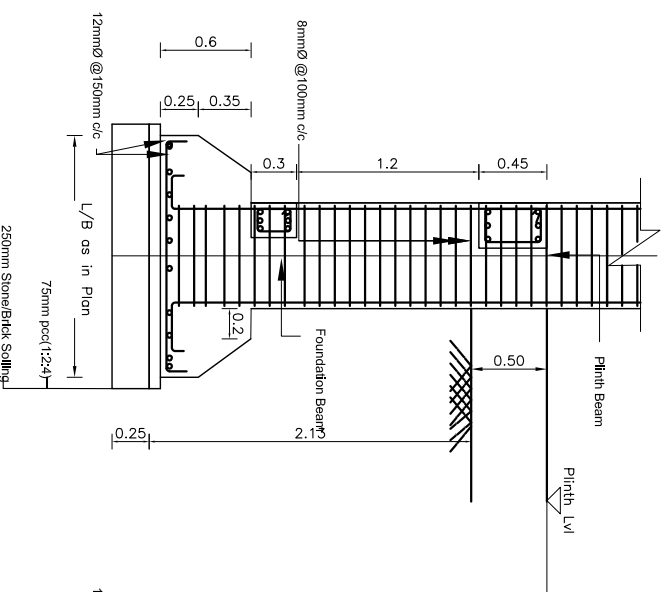
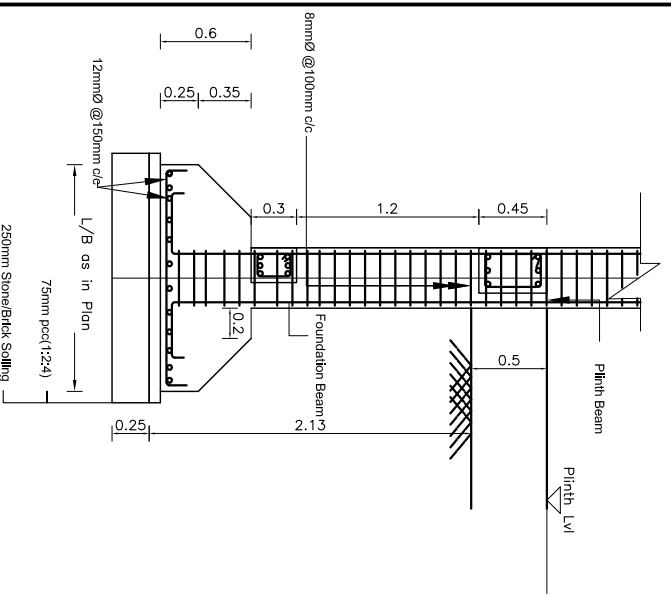
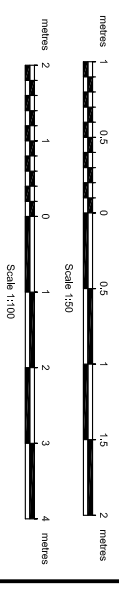
COLUMN DETAILS (C1)

SCALE 1:50

SCALE 1:50

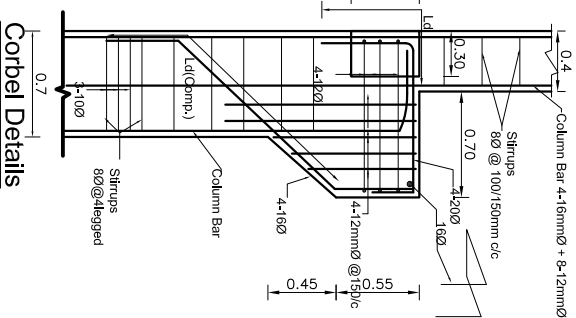
NOTES:

1. SBC has been assumed as 150 KN/m².
2. Grade of Concrete is M20 for all Structure works.
3. Brickwork in wall should be in 1:6 cement mortar.
4. Grade of Steel is Fe500.
5. Clear cover for:
foundation = 50mm
column = 40mm
beam = 25mm
6. All the welds in trusses should be well penetrated.



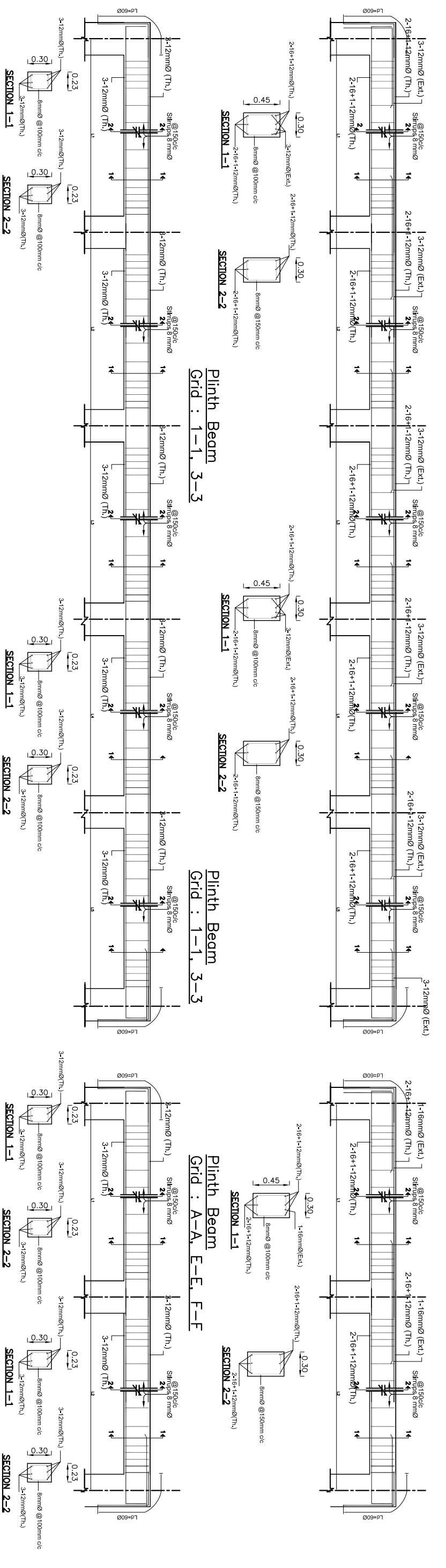
ISOLATED FOUNDATION DETAIL (TYP.)

SCALE 1:50



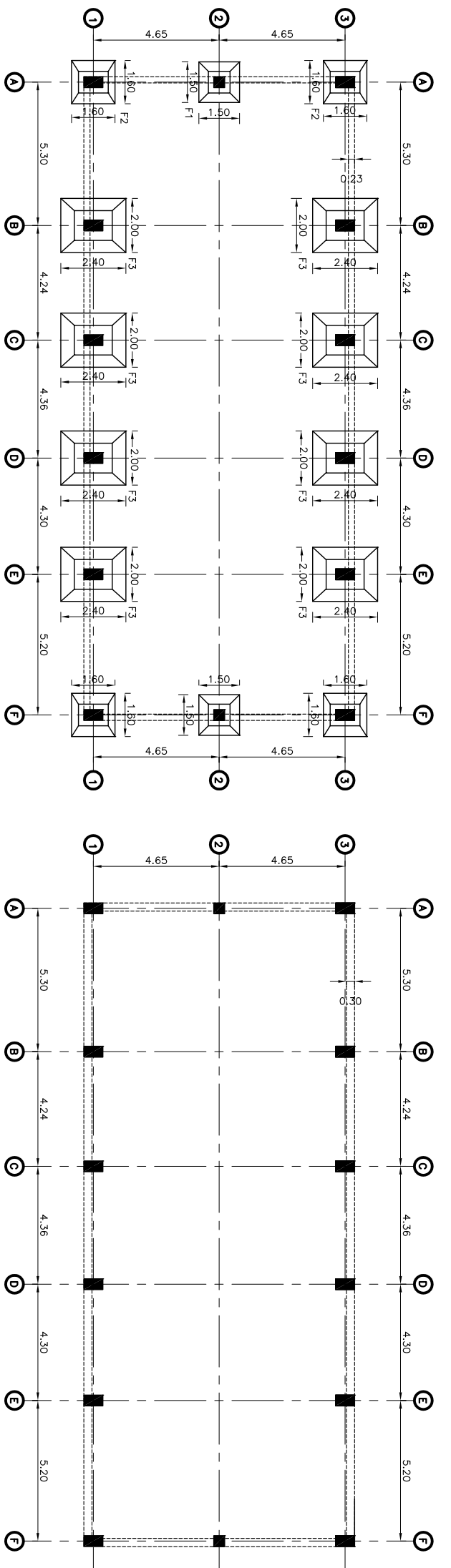
Rev.	Amendment	Name	Initials	Date

ANKHE KHOLA MINI HYDRO USER COMMITTEE ANKHE KHOLA MINI HYDROPOWER PROJECT		Designed: M. K. Bisio Drawn: M. K. Bisio Checked: N. Singh Recommended: B. Singh Approved: N. P. Adhikari
Alternative Energy Promotion Centre (AEP/C) South Asia Sub-regional Economic Cooperation Project - Power Expansion Project (SASEP/ABP) Rumar, Lampur, Nepal Tel: +8771-5539390, 5539391 Email: sasep@nepc.gov.np		Date: NOV 2019 Drawing No. AKMHP/DED-35P-02
SHEET 1 OF 1 POWERHOUSE FOUNDATION/COLUMNS PLAN AND SECTIONS		Scale AS SHOWN Revision



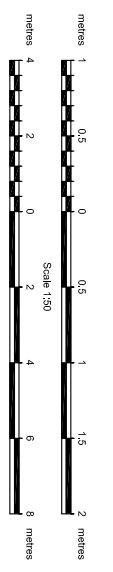
Foundation Beam
Grid : 1-1, 3-3
FOUNDATION BEAM
SCALE 1:50

Foundation Beam
Grid : A-A, E-E, F-F
FOUNDATION BEAM
SCALE 1:50



FOUNDATION LAYOUT PLAN
SCALE 1:200

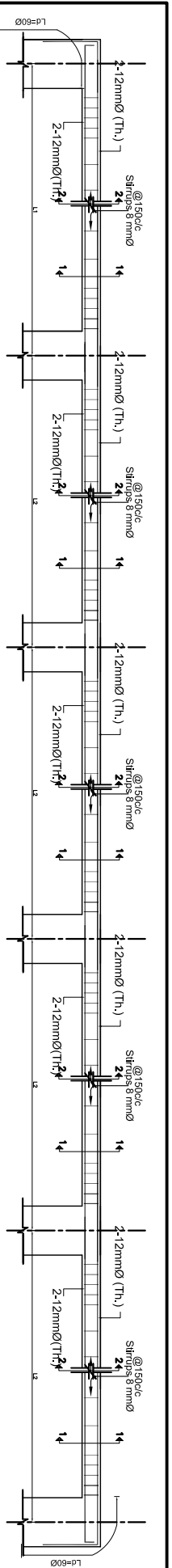
PLINTH BEAM LAYOUT PLAN
SCALE 1:200



NOTES:

1. SBC has been assumed as 150 KN/m².
2. Grade of Concrete is M20 for all Structure works.
3. Brickwork in wall should be in 1:6 cement mortar.
4. Grade of Steel is Fe500.
5. Clear cover for:
foundation = 50mm
column = 40mm
beam = 25mm
6. All the welds in trusses should be well penetrated.

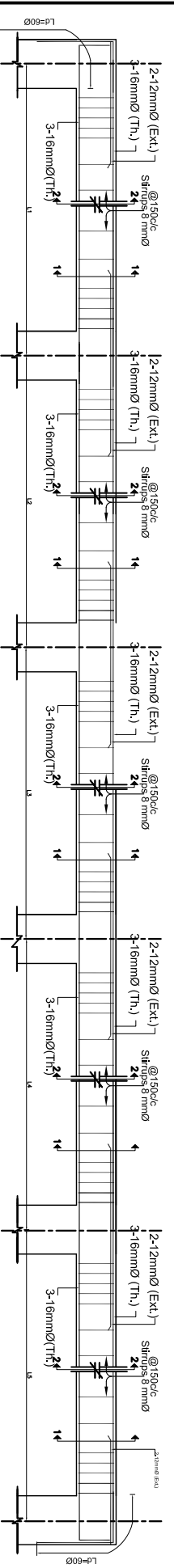
Rev.		Amendment		By		Ckd.		Rec.		App.	
AANKHE KHOLA MINI HYDRO USER COMMITTEE		AANKHE KHOLA MINI HYDROPOWER PROJECT		Name		Initials		Date			
Designed:		M. K. Bisla		Drawn:		M. K. Bisla		Checked:		N. Singh	
Recommended:		B. Singh		Approved:		N. P. Adhikari		Date:		NOV 2019	
Project Name:		POWERHOUSE PLINTH/TIE BEAM PLAN AND SECTIONS		SHEET		1 OF 1		Scale		AS SHOWN	
Client:		Alternative Energy Promotion Centre (AEPCC)		Drawing No.		AKMHP/DED-35P-03		Revision			
Address:		South Asia Sub-regional Economic Cooperation - Power Expansion Project (SASEC/ADB)		Date:		NOV 2019		Scale		AS SHOWN	
Contact:		Kumilior, Lalpur, Nepal Tel: +9771-5539390, 5539391 Email: sasec@epcc.gov.np		Drawing No.		AKMHP/DED-35P-03		Revision			



SECTION 1-1

SECTION 2-2

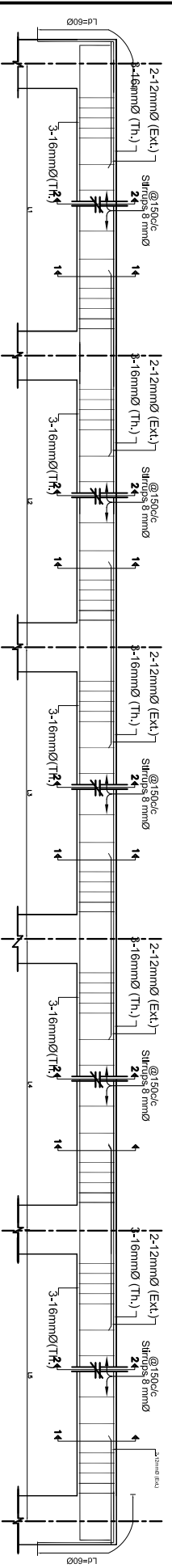
Roof Beam
Grid : 1-1, 3-3



SECTION 1-1

SECTION 2-2

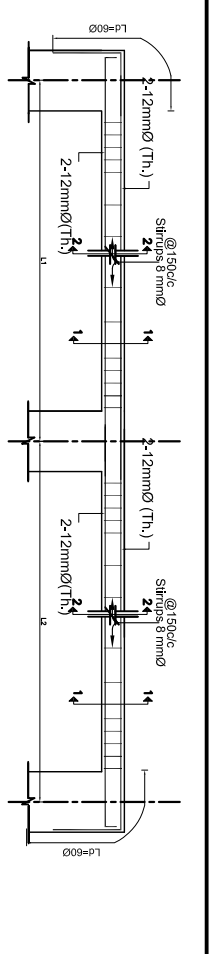
Roof Beam
Grid : 1-1, 3-3



SECTION 1-1

SECTION 2-2

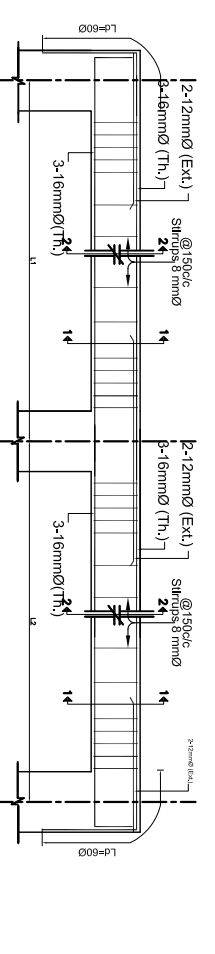
Roof Beam
Grid : 1-1, 3-3



SECTION 1-1

SECTION 2-2

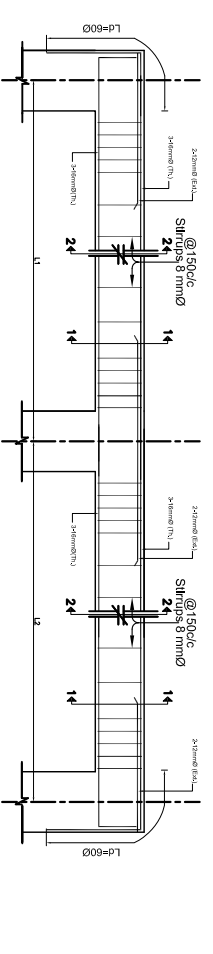
Roof Beam
Grid : A-A, E-E, F-F



SECTION 1-1

SECTION 2-2

Roof Beam
Grid : A-A, E-E, F-F



SECTION 1-1

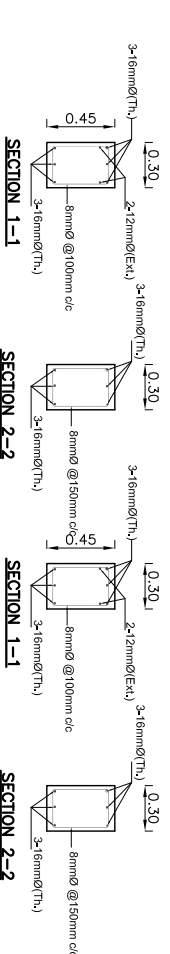
SECTION 2-2

Roof Beam
Grid : A-A, E-E, F-F

Corbel Beam
Grid : 1-1, 3-3



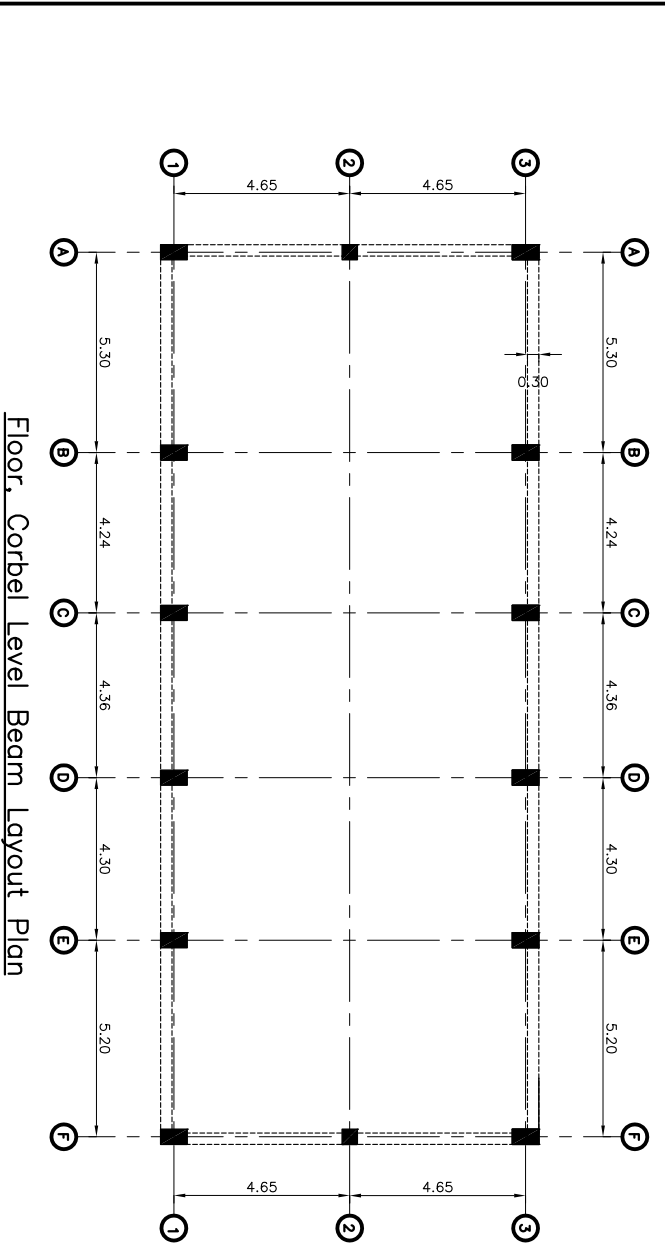
Mid Beam
Grid : 1-1, 3-3



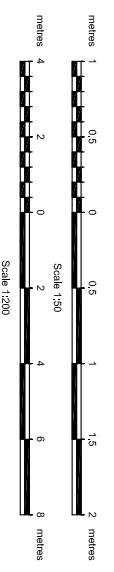
Mid Beam
Grid : A-A, E-E, F-F

FLOOR BEAM LAYOUT PLAN

SCALE 1:50



Floor, Corbel Level Beam Layout Plan



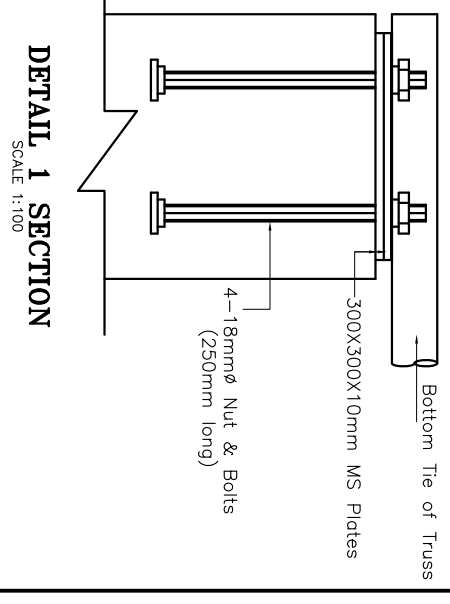
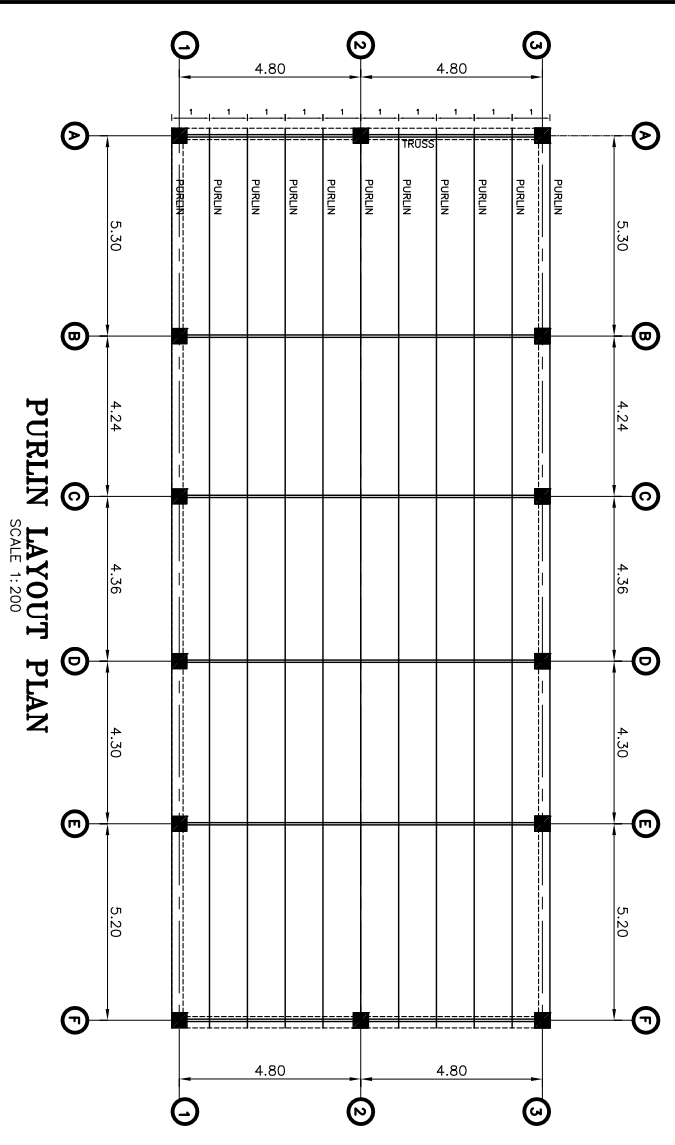
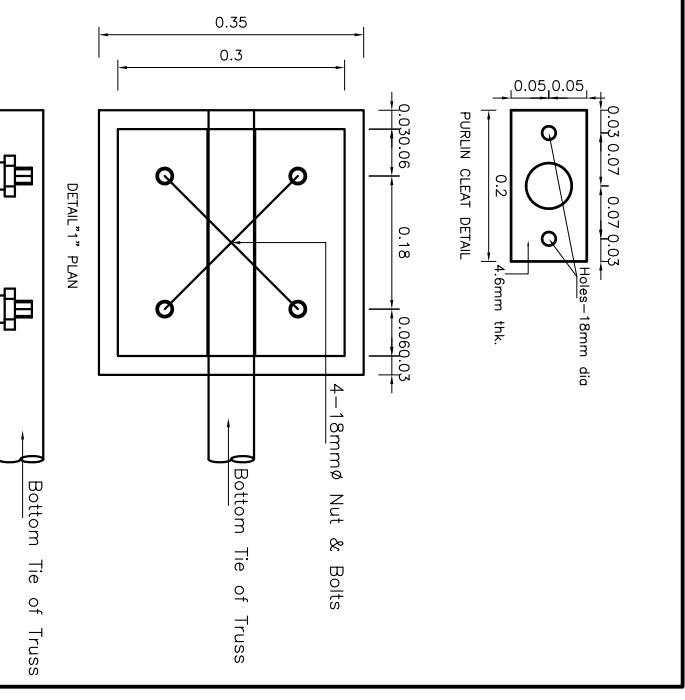
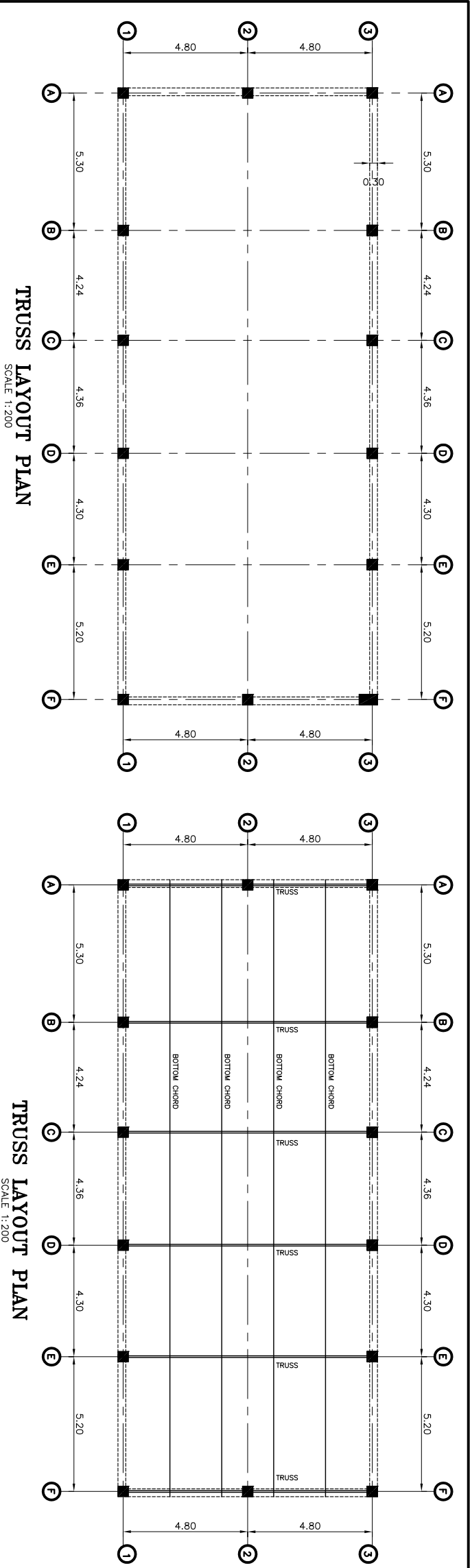
- NOTES:**
- SBC has been assumed as 150 KN/m².
 - Grade of Concrete is M20 for all Structure works.
 - Brickwork in wall should be in 1:6 cement mortar.
 - Grade of Steel is Fe500.
 - Clear cover for:
foundation = 50mm
column = 40mm
beam = 25mm
 - All the welds in trusses should be well penetrated.

Rev.	Amendment	By	Okd.	Rec.	App.	Date
	ANKHE KHOLA MINI HYDRO USER COMMITTEE					
	ANKHE KHOLA MINI HYDROPOWER PROJECT					

POWERHOUSE FLOOR BEAM PLAN AND SECTIONS		SHEET 1 OF 1	
Alternative Energy Promotion Centre (AEPCC)			
South Asia Sub-regional Economic Cooperation - Power Expansion Project (SASEC/AEP)			
Kumilar, Lalpur, Nepal			
Tel: +9771-5539390, 5539391			
Email: sasec@nepc.gov.np			

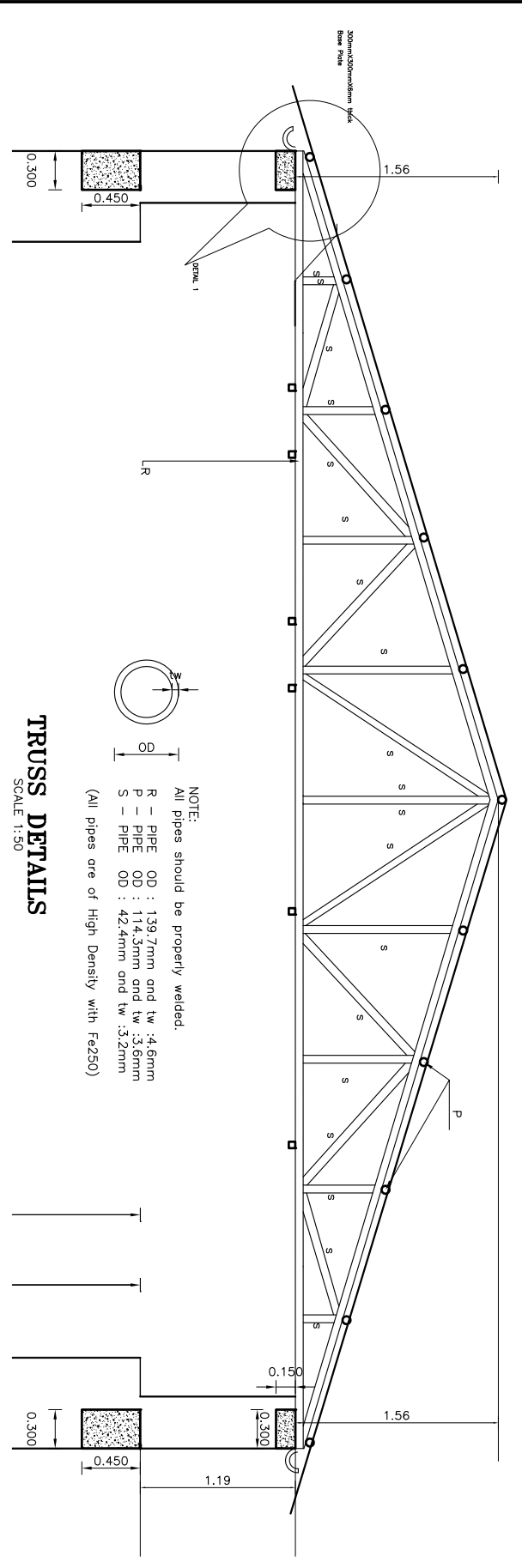
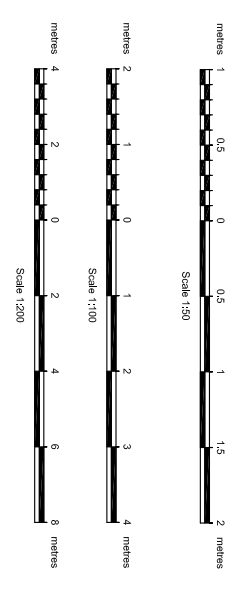
Designed:	M. K. Bisoi	Name	M. K. Bisoi
Drawn:	M. K. Bisoi	Initials	M. K. Bisoi
Checked:	N. Singh		
Recommended:	B. Singh		
Approved:	N. P. Adhikari		

Date:	NOV 2019	Scale:	AS SHOWN
Drawing No.:	AKMHP/DED-35P-04	Revision:	



NOTES:

1. SBC has been assumed as 150 KN/m².
2. Grade of Concrete is M20 for all Structure works.
3. Brickwork in wall should be in 1:6 cement mortar.
4. Grade of Steel is Fe500.
5. Clear cover for:
foundation = 50mm
column = 40mm
beam = 25mm
6. All the welds in trusses should be well penetrated.



- NOTE:**
All pipes should be properly welded.
- R - PIPE OD : 139.7mm and tw : 4.6mm
 - P - PIPE OD : 114.3mm and tw : 3.6mm
 - S - PIPE OD : 42.4mm and tw : 3.2mm
- (All pipes are of High Density with Fe250)

TRUSS DETAILS
SCALE 1:50

Alternative Energy Promotion Centre (AEPCC)		Date: NOV 2019		Scale: AS SHOWN	
South Asia Sub-regional Economic Cooperation - Power Expansion Project (SASEC/AEB)		Drawing No. AKWHP/DED-35P-05		Revision	
Kumilpur, Lalpur, Nepal Tel: +9771-5539390, 5539391 Email: sasec@nepc.gov.np		Name: M. K. Bisla		Date	
AANKHE KHOLA MINI HYDROPOWER PROJECT		By: M. K. Bisla		App.	
POWERHOUSE TRUSS PLAND AND SECTIONS		Checked: N. Singh		Date	
SHEET 1 OF 1		Recommended: B. Singh		Date	
Approved: N. P. Adhikari		By: N. P. Adhikari		Date	
Rev. Amendment		Name: AANKHE KHOLA MINI HYDRO USER COMMITTEE		Date	
Rev. Amendment		Name: M. K. Bisla		Date	
Rev. Amendment		Name: M. K. Bisla		Date	
Rev. Amendment		Name: N. Singh		Date	
Rev. Amendment		Name: N. P. Adhikari		Date	