



General Notes

NOTE

1. All dimensions are in meters unless stated otherwise.
2. The project is a preliminary design and is subject to change without notice.
3. The project is a preliminary design and is subject to change without notice.



NATIONAL AGRICULTURAL WATER CHAIN DEVELOPMENT PROJECT (NAWCDP)

SIAYA COUNTY

DRAWING TITLE:

KOGONKA IRRIGATION SCHEME PLOTS & PIPELINES

SUBMITTED BY:

1. James Ojwangi
2. James Ojwangi
3. Kevin Ojwangi

DESIGNED BY:

1. Mark Ojwangi
2. James Ojwangi
3. Kevin Ojwangi

CHECKED & APPROVED BY:

No.	Reviewer/Name	Date
1		
2		
3		

Project Name and Address

NATIONAL AGRICULTURAL WATER CHAIN DEVELOPMENT PROJECT (NAWCDP)

SIAYA COUNTY

Project Name and Address

KOGONKA IRRIGATION PROJECT NORTH DRYDA WARD SIAYA COUNTY

Project Name and Address

KOGONKA IRRIGATION PROJECT NORTH DRYDA WARD SIAYA COUNTY

Project Name and Address

KOGONKA IRRIGATION PROJECT NORTH DRYDA WARD SIAYA COUNTY





Reservoir Tank

1. NOTES
2. All dimensions are in meters unless otherwise stated.
3. All levels are to existing ground unless otherwise stated.
4. The proposed works are as shown on the drawing unless otherwise directed.



NATIONAL AGRICULTURAL VALUE CHAIN DEVELOPMENT PROJECT

(NANCDP)

SIAYA COUNTY

DRAWING TITLE:
KOGONGA IRRIGATION SCHEME
PLOTS & PIPELINES

DESIGNED BY:

1. James Oguni
2. James Oguni
3. Oluwalanle Oguni
4. Kevin Oguni

DESIGNED BY:
James Oguni
James Oguni
Kevin Oguni
Kevin Oguni
A.A. ODI

CHECKED & APPROVED BY:
[Signature]
[Signature]
[Signature]
[Signature]
[Signature]

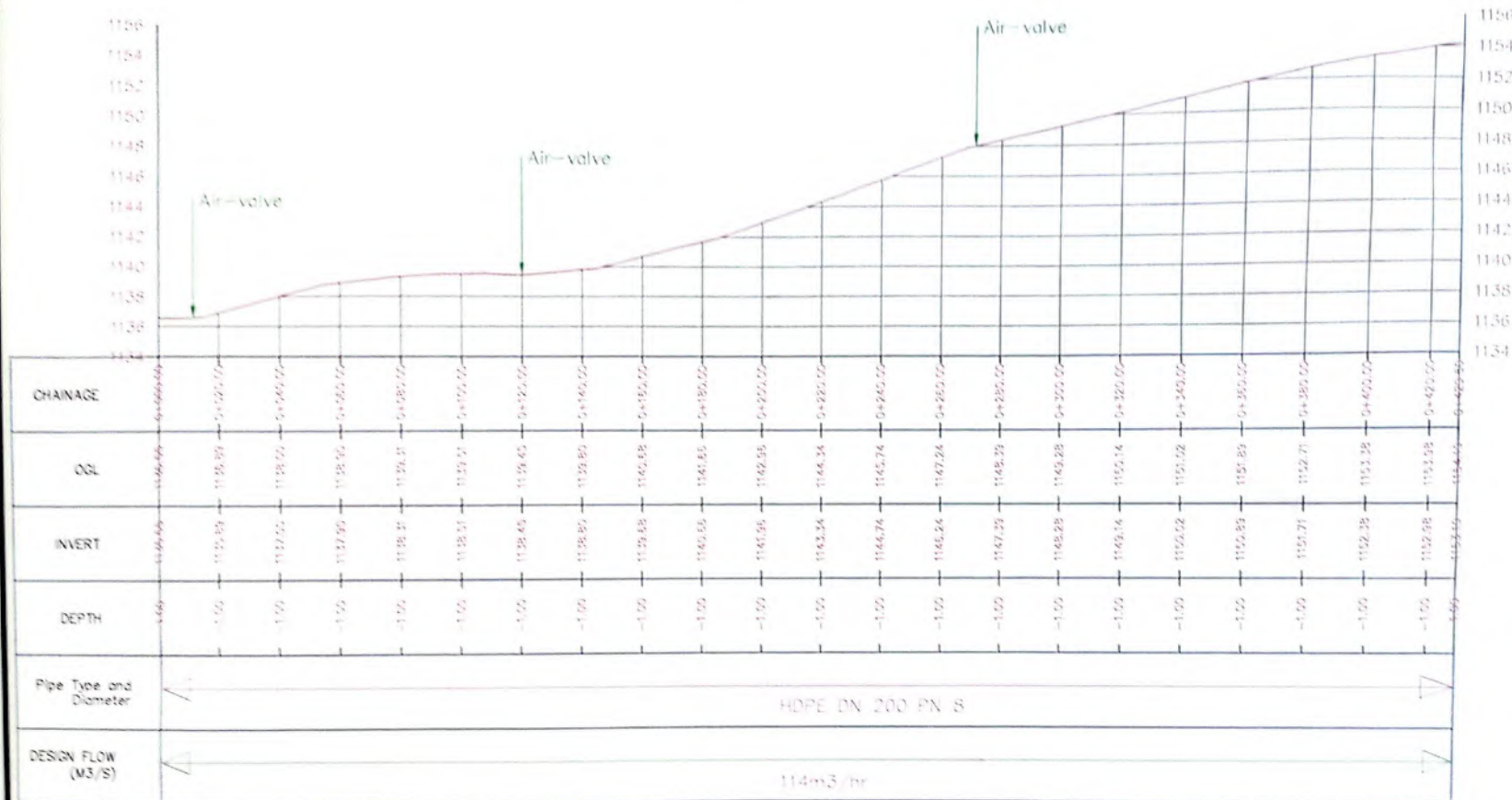
No.	Revision/Date	Date
1		

Project Name and Location:
NATIONAL AGRICULTURAL VALUE CHAIN DEVELOPMENT PROJECT
(NANCDP)
SIAYA COUNTY

Project Name and Location:
KOGONGA IRRIGATION PROJECT
NORTH DYOMA WARD
SIAYA COUNTY

Project	Revision/Date	Date
1		

RIISING MAIN PROFILE



General Notes

NOTES

1. All dimensions are in meters unless stated otherwise.
2. All levels are in meters and coordinates in UTM unless stated otherwise.
3. The pipeline invert levels are as shown in drawings unless otherwise directed.



NATIONAL AGRICULTURAL VALUE CHAIN
DEVELOPMENT PROJECT
(NAVCOP)
SIAYA COUNTY

DRAWING TITLE:
KINANGA IRRIGATION SCHEME
PIPELINE PROFILES

SURVEYED BY:

1. James Oponji
2. Mark Ogola
3. Daniel Charles
4. Kevin Odiro

DESIGNED BY:

1. Mark Ogola
2. Daniel Charles
3. Kevin Odiro

CHECKED/REVIEWED BY:

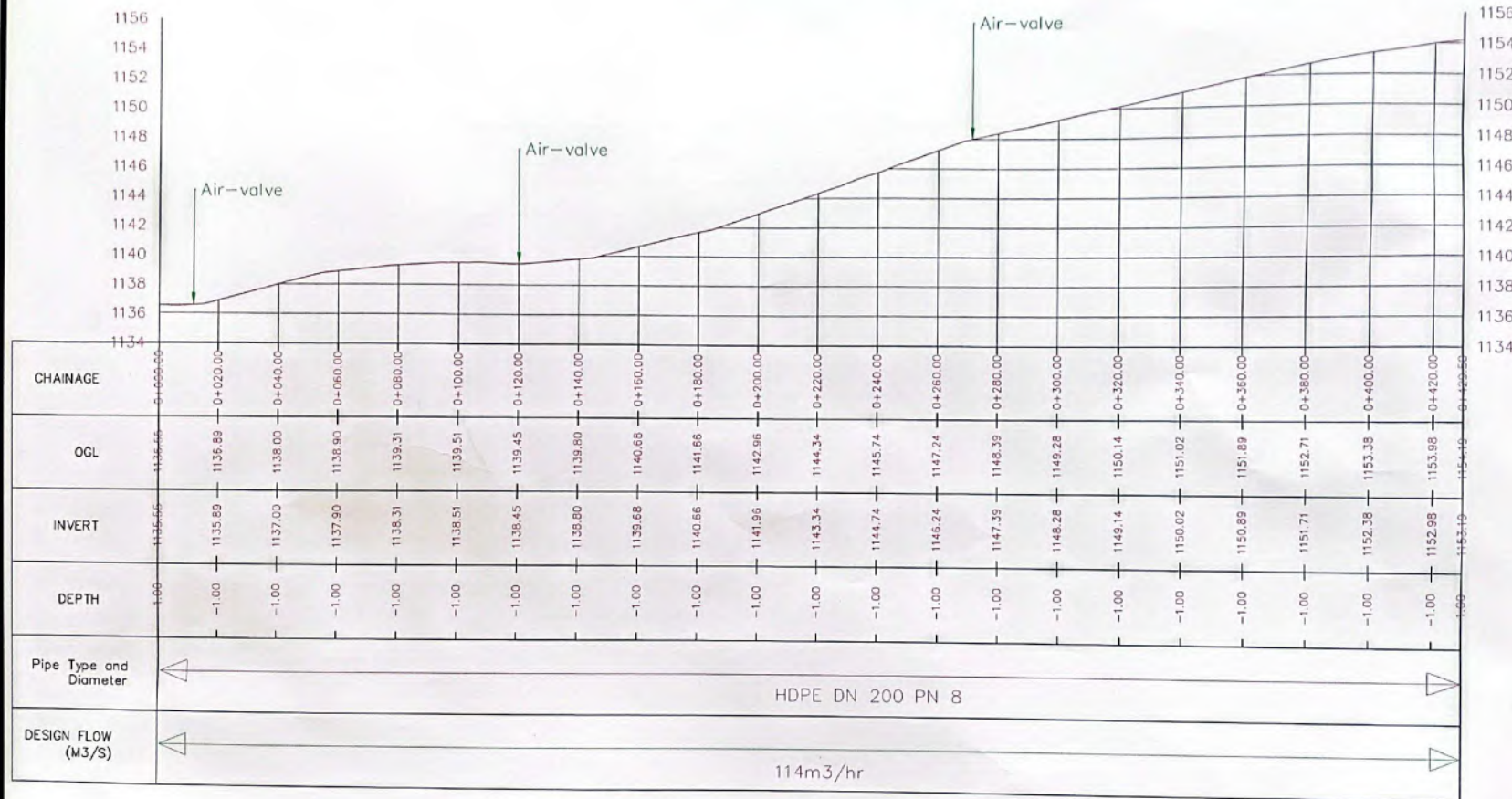
No.	Revision/Issue	Date

Project Name and Address
NATIONAL AGRICULTURAL VALUE CHAIN
DEVELOPMENT PROJECT
(NAVCOP)
SIAYA COUNTY

Project Name and Address
KINANGA IRRIGATION PROJECT
NORTH UYOMA WARD
SIAYA COUNTY

Project	Sheet
KINANGA IRRIGATION SCHEME	2
Date	06.04.2024
Drawn	
Project	IN 11

RISING MAIN PROFILE



General Notes

NOTES

1. All elevations are in meters unless stated otherwise.
2. All levels are in meters and coordinates in UTM unless stated otherwise.
3. The pipeline layout is as shown in drawings unless otherwise directed.

NATIONAL AGRICULTURAL VALUE CHAIN
DEVELOPMENT PROJECT
(NAVCDP)

SIAYA COUNTY

DRAWING TITLE:

KOGONGA IRRIGATION SCHEME

PIPELINE PROFILES

SURVEYED BY:

1. James Openji
2. Mark Ogola
3. Olang' Charles
4. Kevin Obiero

DESIGNED BY:

1. Mark Ogola
2. James Openji
3. Kevin Obiero

CHECKED/REVIEWED BY:

DATE: 06.03.2020

No.	Revision/Issue	Date

Project Name and Address

NATIONAL AGRICULTURAL VALUE CHAIN
DEVELOPMENT PROJECT
(NAVCDP)

SIAYA COUNTY

Project Name and Address

KOGONGA IRRIGATION PROJECT
NORTH UYOMA WARD
SIAYA COUNTY

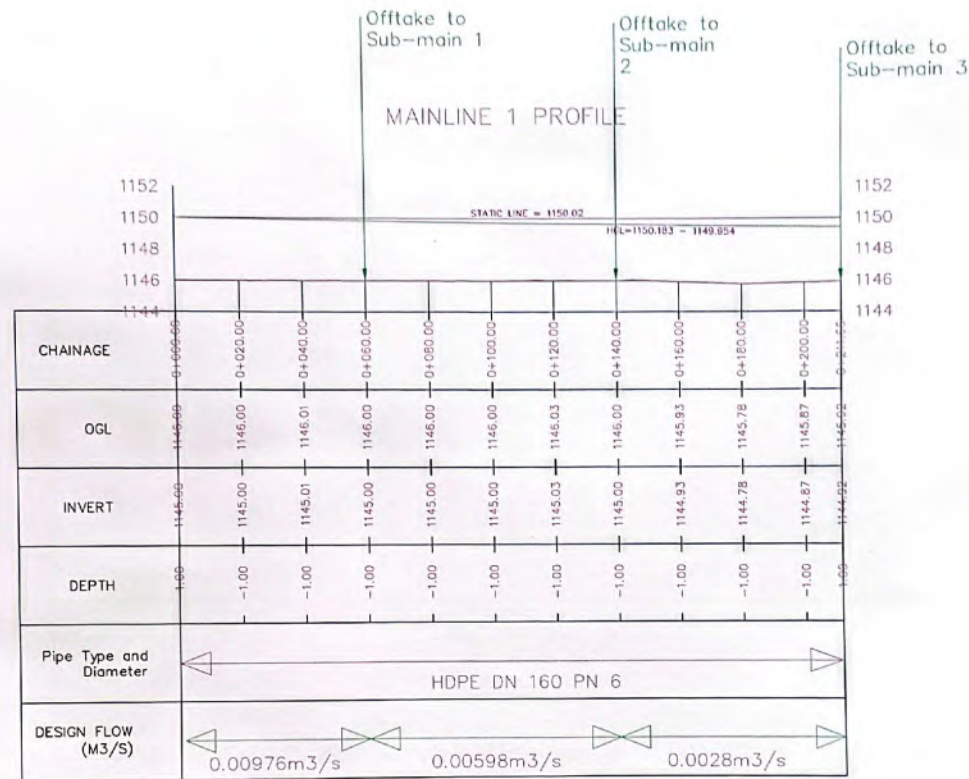
Project	Date
KOGONGA IRRIGATION SCHEME	06.03.2020

Scale

PRINT IN A1

Page

2



General Notes

NOTES

1. All dimensions are in meters unless stated otherwise.
2. All levels are to center and elevation in UTM unless stated otherwise.
3. The pipeline invert level is as shown in drawings unless otherwise directed.



NATIONAL AGRICULTURAL VALUE CHAIN
DEVELOPMENT PROJECT
(NAVCDP)

SIAYA COUNTY

DRAWING TITLE:
KOGONGA IRRIGATION SCHEME
PIPELINE PROFILES

SURVEYED BY:

1. James Oponji
2. Mark Ogola
3. Olang' Charles
4. Kevin Obiero

DESIGNED BY:

1. Mark Ogola
2. James Oponji
3. Kevin Obiero

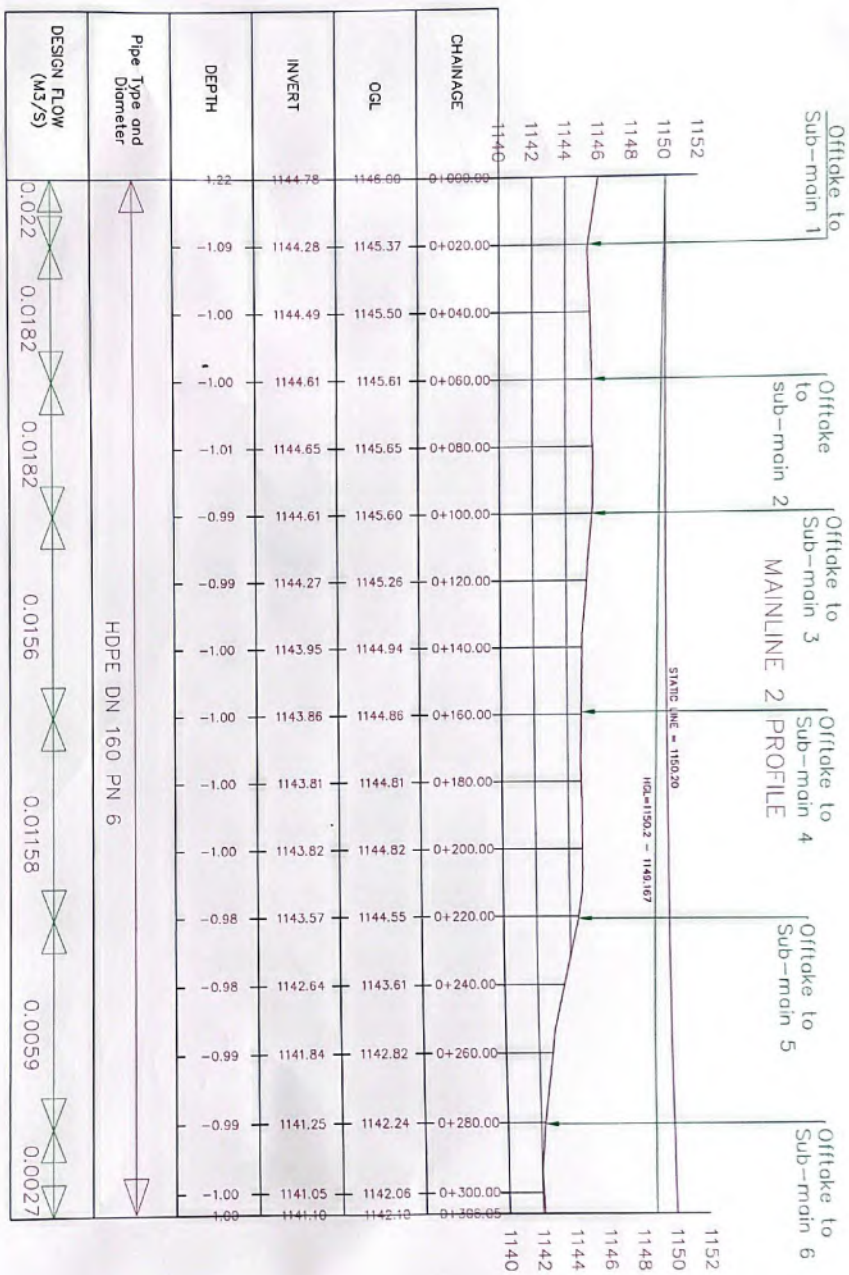


No. Revision/Issue Date

File Name and Address:
NATIONAL AGRICULTURAL VALUE CHAIN
DEVELOPMENT PROJECT
(NAVCDP)
SIAYA COUNTY

Project Name and Address:
KOGONGA IRRIGATION PROJECT
NORTH UVOMA WARD
SIAYA COUNTY

Project:
KOGONGA IRRIGATION PROJECT
Date: 04.08.2023
Scale: 1:1000
Sheet: 3



General Notes

NOTES

1. All dimensions are to be in meters unless stated otherwise.
2. All levels are to meters and coordinates to UTM unless stated otherwise.
3. All materials and workmanship shall conform to the standards specified in the Bill of Materials and the relevant specifications.
4. The design is for a gravity system.



NATIONAL AGRICULTURAL VALUE CHAIN

DEVELOPMENT PROJECT

(NAACP)

SAVA COUNTY

DRAWING TITLE:
KOGONGA IRRIGATION SCHEME
PIPELINE PROFILES

SUPERVISOR BY:

DESIGNED BY:

1. James Oprel

2. James Oprel

3. Olang Charles

4. Kevin Oprel

5. Kevin Oprel

6. Kevin Oprel

7. Kevin Oprel

8. Kevin Oprel

9. Kevin Oprel

10. Kevin Oprel

11. Kevin Oprel

12. Kevin Oprel

13. Kevin Oprel

14. Kevin Oprel

15. Kevin Oprel

16. Kevin Oprel

17. Kevin Oprel

18. Kevin Oprel

19. Kevin Oprel

20. Kevin Oprel

21. Kevin Oprel

22. Kevin Oprel

23. Kevin Oprel

24. Kevin Oprel

25. Kevin Oprel

26. Kevin Oprel

27. Kevin Oprel

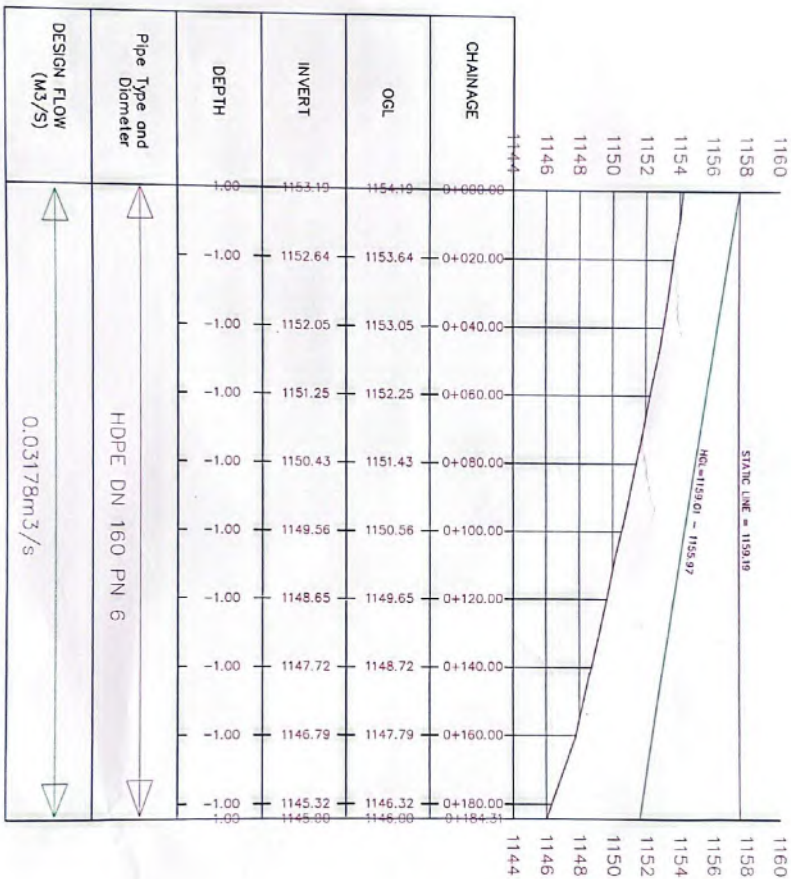
28. Kevin Oprel

29. Kevin Oprel

30. Kevin Oprel

Project Name and Address	Sheet
KOGONGA IRRIGATION PROJECT NORTH UYOMA WARD SAVA COUNTY	4

MAINLINE PROFILE



NOTES
 1. All dimensions are in meters unless stated otherwise.
 2. The profile is based on the existing ground level.
 3. The pipeline invert levels are as shown in the drawing unless otherwise directed.



NATIONAL AGRICULTURAL VALUE CHAIN DEVELOPMENT PROJECT
 (NAVCOP)
 SIAYA COUNTY

DRAWING TITLE:
 KODONGA IRRIGATION SCHEME
 PIPELINE PROFILES

SURVEYED BY:
 1. James Ojola
 2. Mark Ojola
 3. Oding Charles
 4. Kevin Ojola

DESIGNED BY:
 1. Mark Ojola
 2. James Ojola
 3. Kevin Ojola

APPROVED BY:
 (Signature)

NO.
PROVIDER/NAME
DATE

Project Name and Address
 NATIONAL AGRICULTURAL VALUE CHAIN DEVELOPMENT PROJECT
 (NAVCOP)
 SIAYA COUNTY

Project Name and Address
 KODONGA IRRIGATION PROJECT
 NORTH UTOPIA WARD
 SIAYA COUNTY

Project Name and Address
 KODONGA IRRIGATION PROJECT
 NORTH UTOPIA WARD
 SIAYA COUNTY

Project Name and Address
 KODONGA IRRIGATION PROJECT
 NORTH UTOPIA WARD
 SIAYA COUNTY

Project Name and Address
 KODONGA IRRIGATION PROJECT
 NORTH UTOPIA WARD
 SIAYA COUNTY

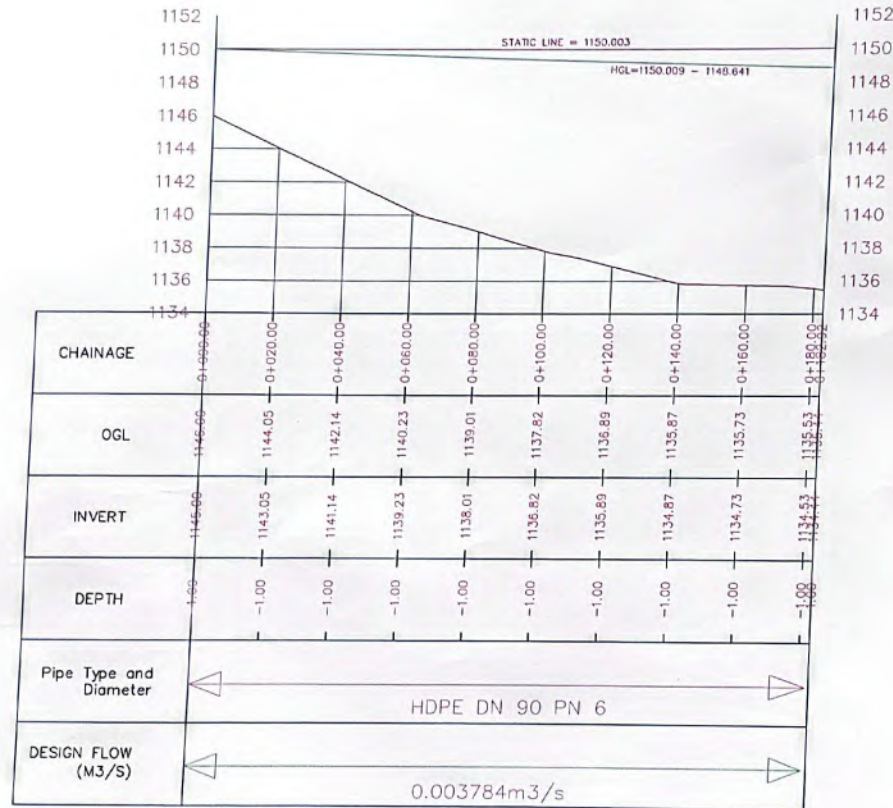
Project Name and Address
 KODONGA IRRIGATION PROJECT
 NORTH UTOPIA WARD
 SIAYA COUNTY

Project Name and Address
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 NORTH UTOPIA WARD
 SIAYA COUNTY

Project Name and Address
 KODONGA IRRIGATION PROJECT
 NORTH UTOPIA WARD
 SIAYA COUNTY

Project Name and Address
 KODONGA IRRIGATION PROJECT
 NORTH UTOPIA WARD
 SIAYA COUNTY

SM 1 MN 1 PROFILE



General Notes

NOTES

1. All dimensions are in meters unless stated otherwise.
2. All levels are in meters and coordinates in UTM unless stated otherwise.
3. The pipeline invert levels are as shown in drawings unless otherwise directed.



NATIONAL AGRICULTURAL VALUE CHAIN
DEVELOPMENT PROJECT
(NAVCDP)
SIAYA COUNTY

DRAWING TITLE:
KOGONGA IRRIGATION SCHEME
PIPELINE PROFILES

SURVEYED BY:

1. James Openji
2. Mark Ogola
3. Olang' Charles
4. Kevin Othman

DESIGNED BY:

1. Mark Ogola
2. James Openji
3. Kevin Othman

CHECKED & APPROVED BY:

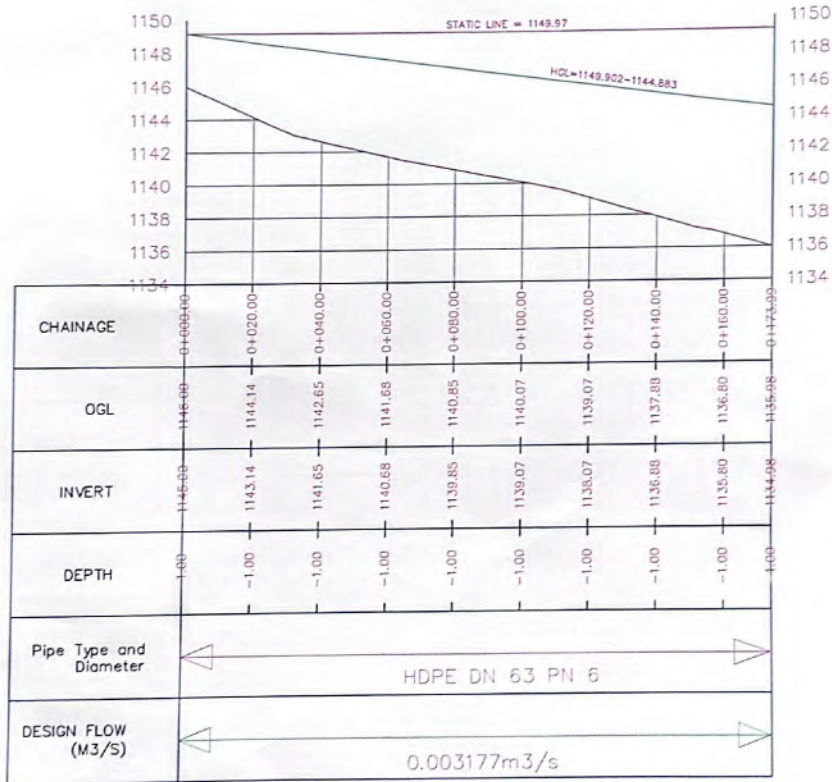
No.	Revision/Issue	Date

Firm Name and Address
NATIONAL AGRICULTURAL VALUE CHAIN
DEVELOPMENT PROJECT
(NAVCDP)
SIAYA COUNTY

Project Name and Address
KOGONGA IRRIGATION PROJECT
NORTH UYOMA WARD
SIAYA COUNTY

Project KOGONGA IRRIGATION SCHEME	Sheet 6
Date 06.10.2018	
Scale PRINT IN A1	

SM 2 MN 1 PROFILE



General Notes

NOTES

1. All dimensions are to narrow unless stated otherwise.
2. All bolts are in metric and tightened to UTM unless stated otherwise.
3. The pipeline insert bolts are as shown in drawings unless otherwise directed.



NATIONAL AGRICULTURAL VALUE CHAIN

DEVELOPMENT PROJECT

(NAVCDP)

SIAYA COUNTY

DRAWING TITLE:

KOGONGA IRRIGATION SCHEME

PIPELINE PROFILES

SURVEYED BY:

1. James Ogenji
2. Mark Ogola
3. Olang' Charles
4. Kevin Oluoch

DESIGNED BY:

1. Mark Ogola
2. James Openji
3. Kevin Othman

CHECKED & APPROVED BY:



Form Name and Address

NATIONAL AGRICULTURAL VALUE CHAIN

DEVELOPMENT PROJECT

(NAVCEP)

SLAYA COUNTY

Project Name and Address

KIDGONGA IRRIGATION PROJECT

NORTH UYOMA WARD

SIAYA COUNTY

74

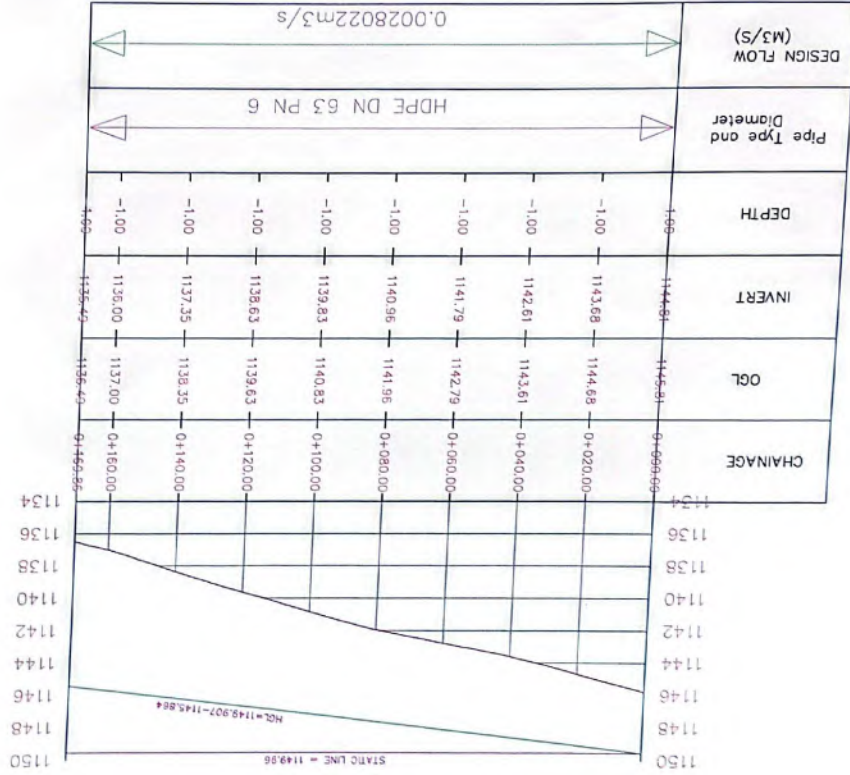
STUDY DESIGN

Editor

04.01.2020

7

SM 3 ML 1 PROFILE



Project Name and Location

KOGONGA IRRIGATION PROJECT

NORTH UYOMA WARD

SIAYA COUNTY

Client Name and Address

NATIONAL AGRICULTURAL VALUE CHAIN

DEVELOPMENT PROJECT

(NAACDP)

SIAYA COUNTY

Revision/Issue

NO.

DATE

DESIGNED BY:

1. James Opendi

2. Mark Opendi

3. Charles Opendi

CHECKED AND APPROVED BY:

1. Kevin Opendi

2. James Opendi

3. Mark Opendi

DRAWING TITLE:

KOGONGA IRRIGATION SCHEME

PIPELINE PROFILES

General Notes

1. All dimensions are in meters unless stated otherwise.

2. All works are to be done and completed in accordance with the relevant standards.

3. The project shall be completed by the end of the year 2024.

Project Name and Location

KOGONGA IRRIGATION PROJECT

NORTH UYOMA WARD

SIAYA COUNTY

Client Name and Address

NATIONAL AGRICULTURAL VALUE CHAIN

DEVELOPMENT PROJECT

(NAACDP)

SIAYA COUNTY

Revision/Issue

NO.

DATE

DESIGNED BY:

1. James Opendi

2. Mark Opendi

3. Charles Opendi

CHECKED AND APPROVED BY:

1. Kevin Opendi

2. James Opendi

3. Mark Opendi

DRAWING TITLE:

KOGONGA IRRIGATION SCHEME

PIPELINE PROFILES

General Notes

1. All dimensions are in meters unless stated otherwise.

2. All works are to be done and completed in accordance with the relevant standards.

3. The project shall be completed by the end of the year 2024.

Project Name and Location

KOGONGA IRRIGATION PROJECT

NORTH UYOMA WARD

SIAYA COUNTY

Client Name and Address

NATIONAL AGRICULTURAL VALUE CHAIN

DEVELOPMENT PROJECT

(NAACDP)

SIAYA COUNTY

Revision/Issue

NO.

DATE

DESIGNED BY:

1. James Opendi

2. Mark Opendi

3. Charles Opendi

CHECKED AND APPROVED BY:

1. Kevin Opendi

2. James Opendi

3. Mark Opendi

DRAWING TITLE:

KOGONGA IRRIGATION SCHEME

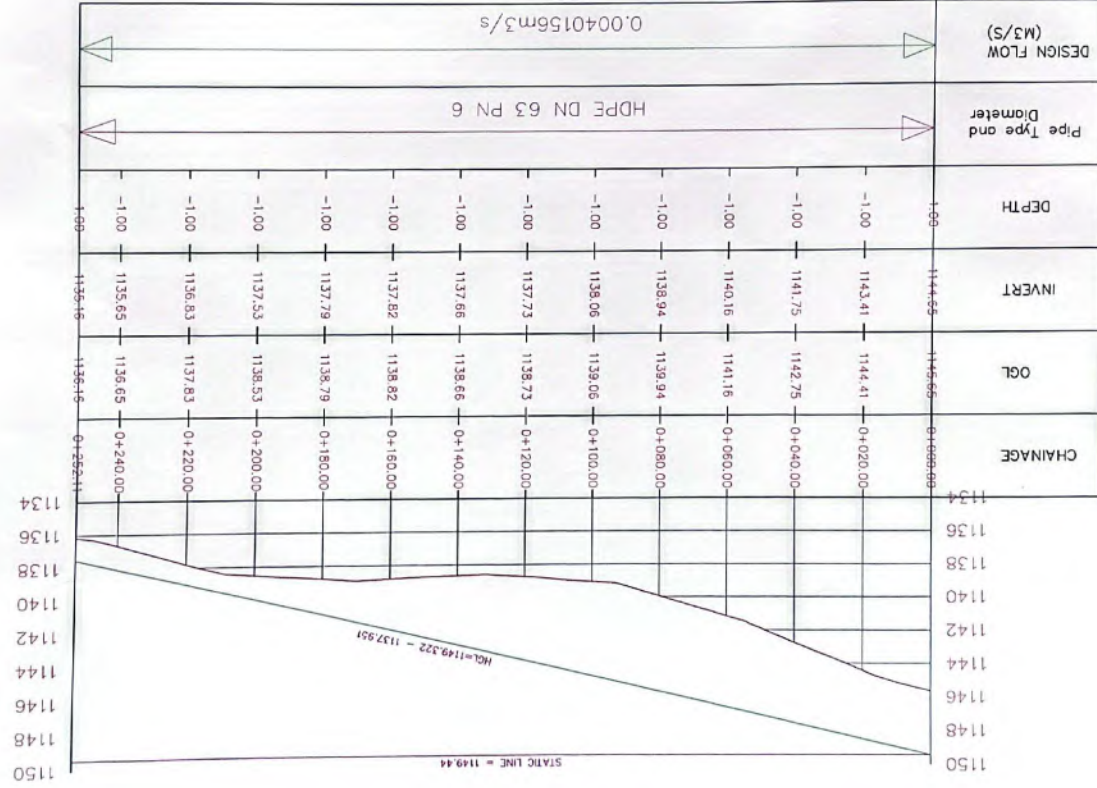
PIPELINE PROFILES

General Notes

1. All dimensions are in meters unless stated otherwise.

2. All works are to be done and completed in accordance with the relevant standards.

3. The project shall be completed by the end of the year 2024.



Project Name and Address
KOGONGA IRRIGATION PROJECT
NORTH UYOOMA WARD
SIAYA COUNTY

Project Name and Address
NATIONAL AGRICULTURAL VALUE CHAIN
DEVELOPMENT PROJECT
(NAVCDF)
SIAYA COUNTY

Revision/Issue
No.
Date
By
Checked By
Approved By

DESIGNED BY:
1. Mark Ogila
2. James Opiji
3. Kevin Othman
4. Mark Ogila
5. James Opiji
6. Kevin Othman

SUPERVED BY:
1. Mark Ogila
2. James Opiji
3. Kevin Othman
4. Mark Ogila
5. James Opiji
6. Kevin Othman

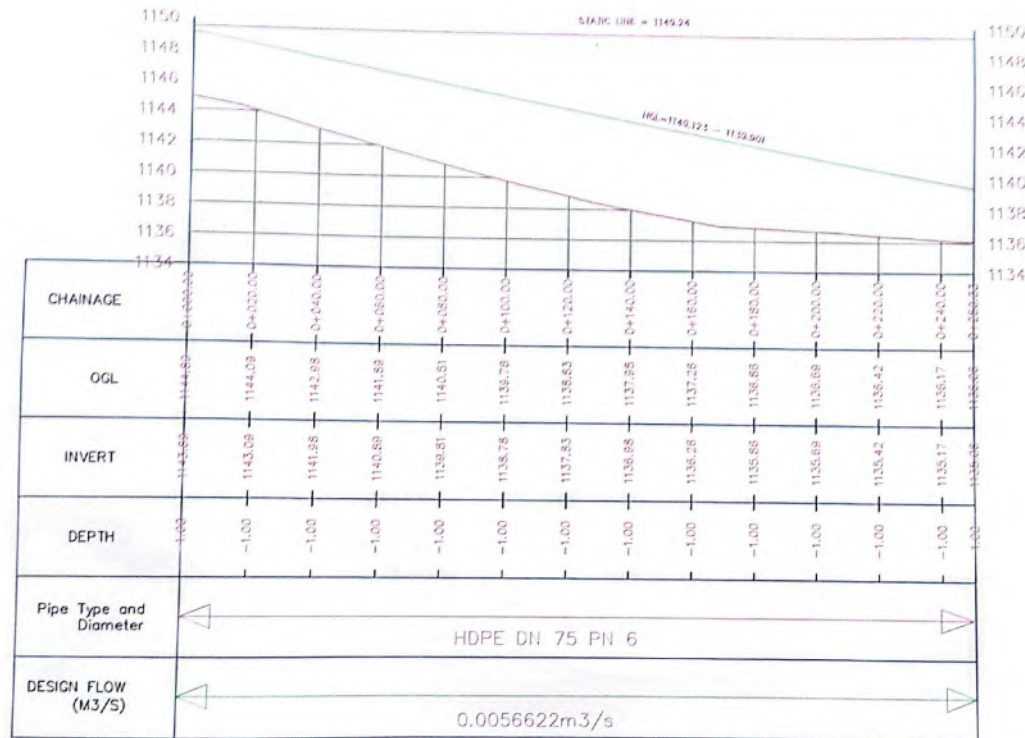
DRAWING TITLE:
KOGONGA IRRIGATION SCHEME
PIPELINE PROFILES

**SIAYA COUNTY
(NAVCDF)
DEVELOPMENT PROJECT
NATIONAL AGRICULTURAL VALUE CHAIN**

NOTES
1. All dimensions are in meters unless stated otherwise.
2. All work is to be done in accordance with the relevant standards.
3. The profile shown is a schematic and not a final design.
4. The profile shown is a schematic and not a final design.

Scale: 1:100

SM 4 ML 2 PROFILE



General Notes

1. All measurements are to center of main channel.
2. All work is to be done in accordance with the relevant standards.
3. The piping shall be as per the relevant standards.

NATIONAL AGRICULTURAL VALLEY CHAIN
DEVELOPMENT PROJECT (NAVCOP)
SIAYA COUNTY

DRAWING TITLE:
KOGONGA IRRIGATION MAINLINE
PIPELINE PROFILES

SURVEYED BY:
1. James Opari
2. Mark Ogola
3. George Charles
4. Kevin Othman

DESIGNED BY:
1. Mark Ogola
2. James Opari
3. Kevin Othman

CHECKED & APPROVED BY:
[Signature]

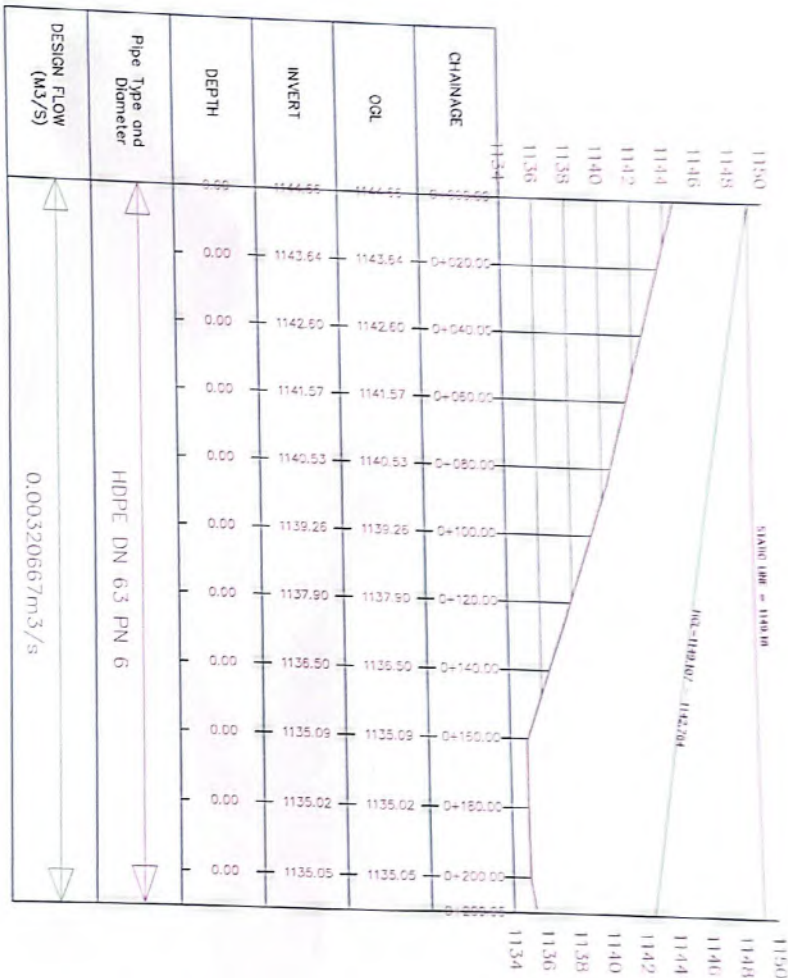
No.	Revision/Issue	Date

For Name and Address:
NATIONAL AGRICULTURAL VALLEY CHAIN
DEVELOPMENT PROJECT (NAVCOP)
SIAYA COUNTY

Project Name and Address:
KOGONGA IRRIGATION PROJECT
NORTH UYOMA WARD
SIAYA COUNTY

Project	Sheet
KOGONGA IRRIGATION PROJECT	11
Date: 04.01.2018	
Scale: 1:100	

SM 5 MN 2 PROFILE



NOTES
 1. All dimensions are to centre unless noted otherwise.
 2. All works are to be carried out in accordance with the relevant standards and specifications.
 3. The proposed works are to be carried out in accordance with the relevant standards and specifications.



NATIONAL AGRICULTURAL EXTENSION AND ADVISORY DIRECTORATE (NAEAD)

(KAMPALA)

NAEAD

DRAWING TITLE

PROPOSED PROFILE

APPROVED BY:

1. James Oryemba
 2. Daniel Oryemba
 3. Kevin Oryemba

DESIGNED BY:
 1. James Oryemba
 2. Daniel Oryemba
 3. Kevin Oryemba

CHECKED BY:
 1. James Oryemba
 2. Daniel Oryemba
 3. Kevin Oryemba

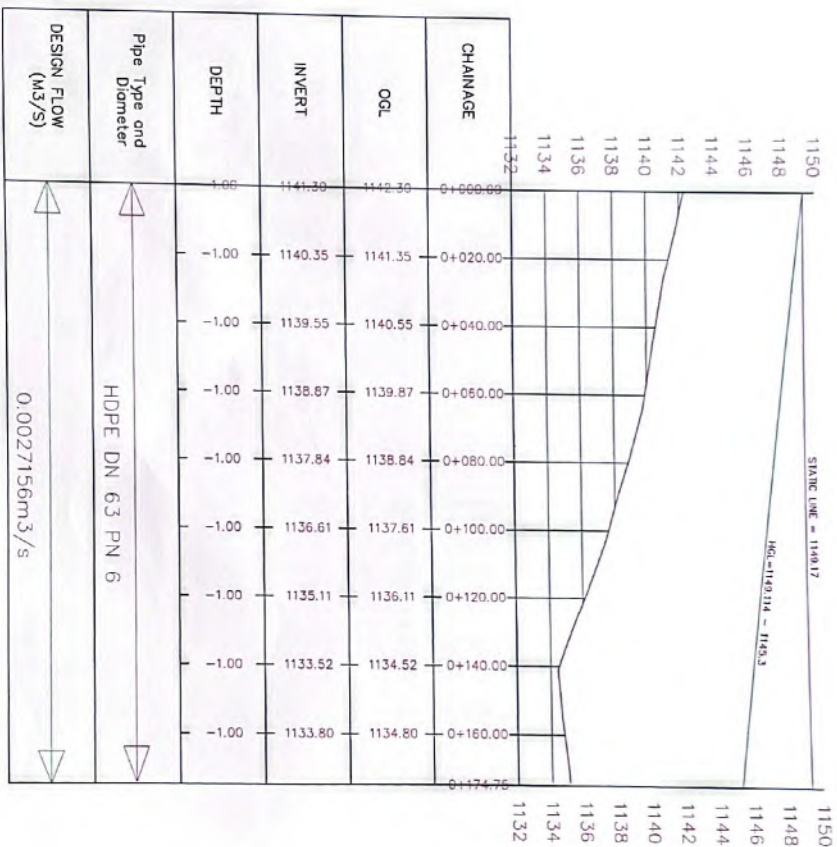
DATE: / /

Project Name and Address
 NATIONAL AGRICULTURAL EXTENSION AND ADVISORY DIRECTORATE (NAEAD)
 KAMPALA

Project Name and Address
 KAMPALA IRRIGATION PROJECT
 NORTH IYDIA WARD
 KAMPALA DISTRICT

Project Name and Address
 KAMPALA IRRIGATION PROJECT
 NORTH IYDIA WARD
 KAMPALA DISTRICT

SM 6 ML 2 PROFILE



NOTES:
1. All dimensions are in meters unless
2. All levels are in meters and coordinates
3. The pipeline invert levels are as shown
in drawings unless otherwise directed



NATIONAL AGRICULTURAL VALUE CHAIN
DEVELOPMENT PROJECT
(NAVCDDP)
SIAYA COUNTY

DRAWING TITLE:
KOGONKA IRRIGATION
SCHEME
PIPELINE PROFILES

DESIGNED BY:
1. James Oguni
2. Mark Ogola
3. Kevin Othman

APPROVED BY:
1. Mark Ogola
2. James Oguni
3. Kevin Othman

CHECKED/REVISED BY:
1. Mark Ogola
2. James Oguni
3. Kevin Othman

No. _____
Revision/Status _____
Date _____

Project Name and Address:
NATIONAL AGRICULTURAL VALUE CHAIN
DEVELOPMENT PROJECT
(NAVCDDP)
SIAYA COUNTY

Project Name and Address:
KOGONKA IRRIGATION PROJECT
NORTH DUDIA WARD
SIAYA COUNTY

Project
SIAYA COUNTY
Date
13
Page
13

33N383VC	DATE	APPROVAL	NO

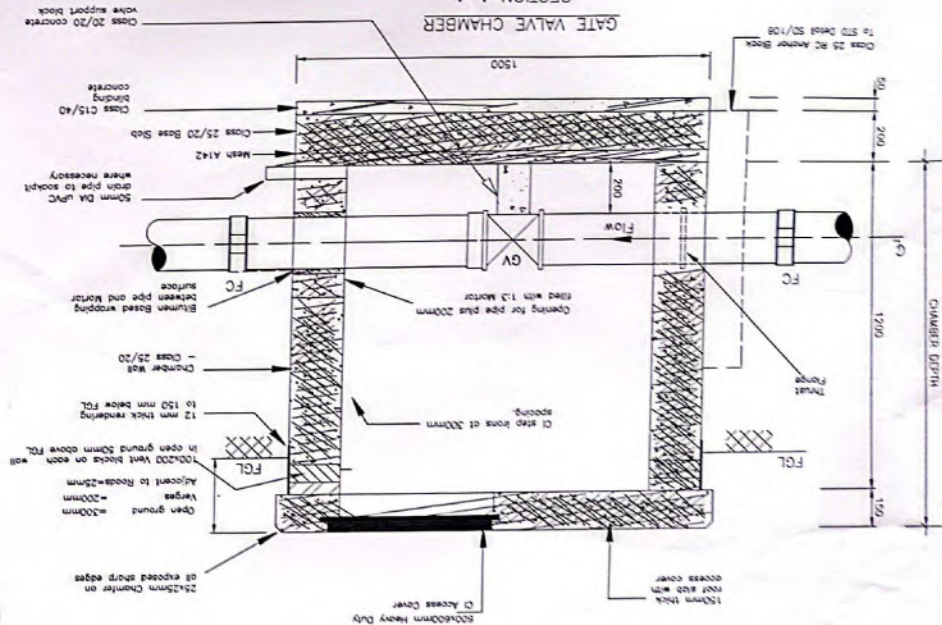
KOYUNDI KONGGA
IRRIGATION PROJECT
SIAYA COUNTY

GATE VALVE CHAMBERS
DETAILS

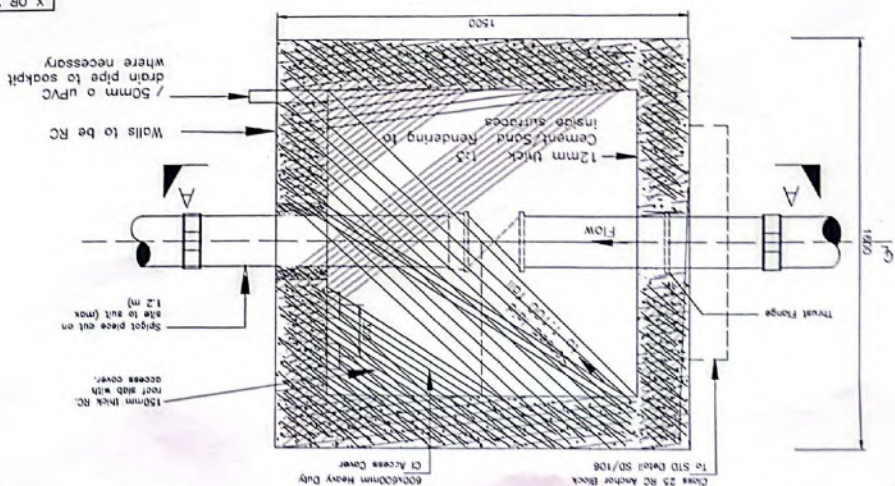
Sheet No.

DRAWING TO SCALE IN 1/2" SIZE

VALVE CHAMBER
SECTION A-A
SCALE 1:20



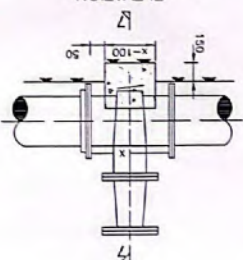
PLAN OF CHAMBER



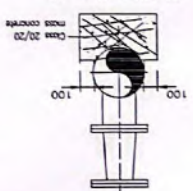
CHAMBER DIMENSIONS

X OR Y	(mm)
A	1200
B	1500
C	1800
D	2100
E	2500
F	3000

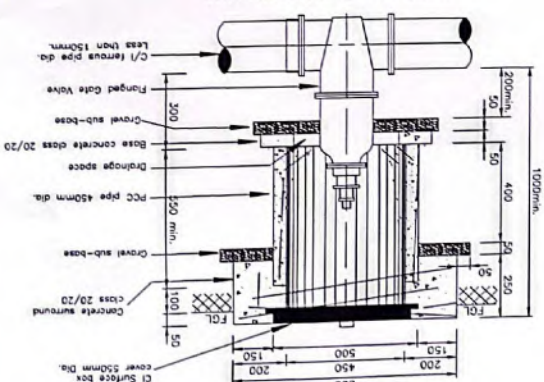
ELEVATION
Gate Valve Support Block



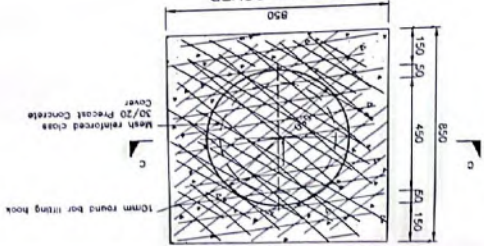
Section 7 - 7



GATE VALVE SURFACE BOX
SECTION C-C
SCALE 1:20



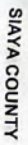
PLAN OF COVER



MAIN SIZE (mm)	GATE VALVE DIAMETER (mm)
100	150
150	200
200	250
250	300
300	350
400	400
500	450
600	500
700	600
800	600

1. All dimensions are in mm unless otherwise stated
2. Where the Chamber wall is used for anchorage, this restraining to be according to Drawing SD/06.
3. Chamber wall to be backfilled with thickness with 300mm thick granular fill around walls
4. Where the chamber is along footpath in built up areas, the cover may be flushed with the footpath

NOTES

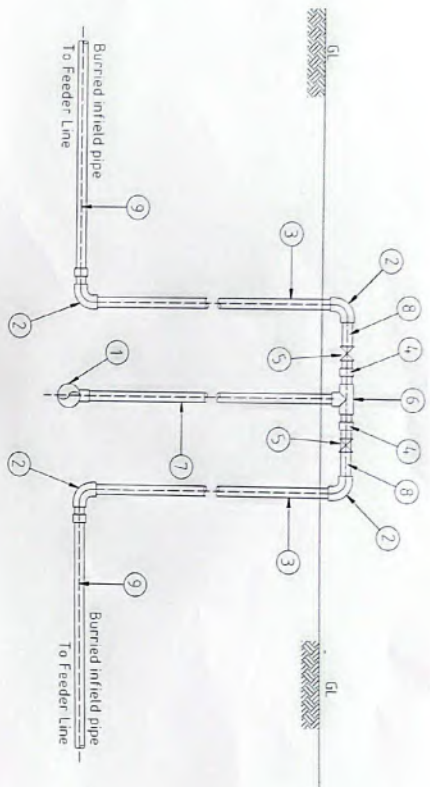


NATIONAL AGRICULTURAL VALUE CHAIN
DEVELOPMENT PROJECT (NAVCDP)
SIAYA COUNTY

[illegible]

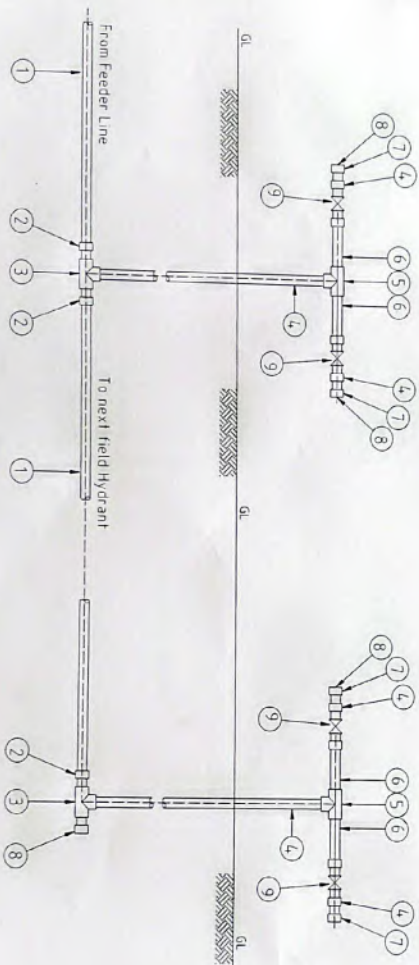
PROJECT TITLE: KOYUNDI KOGONGA IRRIGATION PROJECT
SIAYA COUNTY

DRAWING TITLE: INFIELD SYSTEM		Drawing No. 1 of 1	
Project: JAMES O'NEILL		Sheet No. 1 of 1	
Client: MARY O'DOLA		Date: 11/11/2011	
Drawn by: J. O'NEILL		Checked by: J. O'NEILL	



PLOT HYDRANT

- ## KEY
- 1 90 x 50mm dia tee
 - 2 50mm dia HDPE elbow
 - 3 50mm dia HDPE riser (0.75m long)
 - 4 50mm dia Union
 - 5 50mm dia ball valve with coupling
 - 6 50mm dia Equal HDPE tee
 - 7 63mm dia riser from Maniline
 - 8 50mm dia spigot
 - 9 50mm dia HDPE pipe

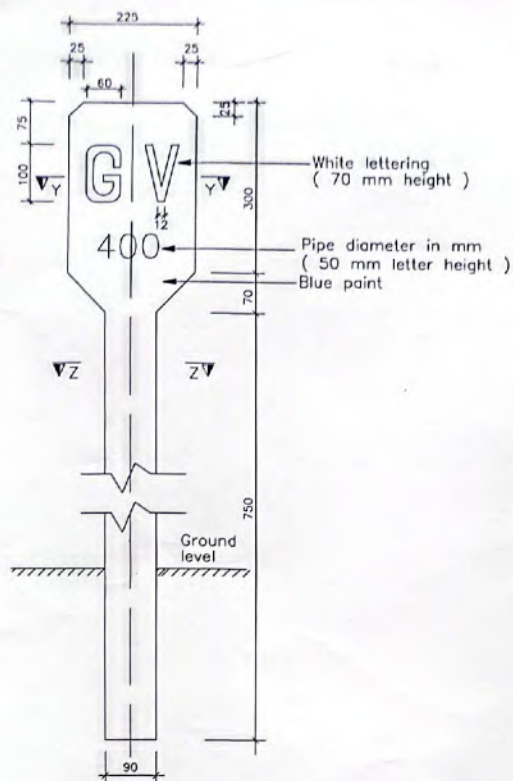


KEY

- 1 50mm dia PV-C-U pipe
- 2 GI/PVC-U adaptor
- 3 50x50mm dia GI Tee
- 4 50mm dia GI riser (0.75m long)
- 5 50mm dia GI equal Tee
- 6 50mm dia GI piece (0.1m long)
- 7 50mm dia GI end caps to be connected to HDPE/rubber-PVC-U pipe
- 8 50mm dia GI end cap
- 9 50mm dia gate valve

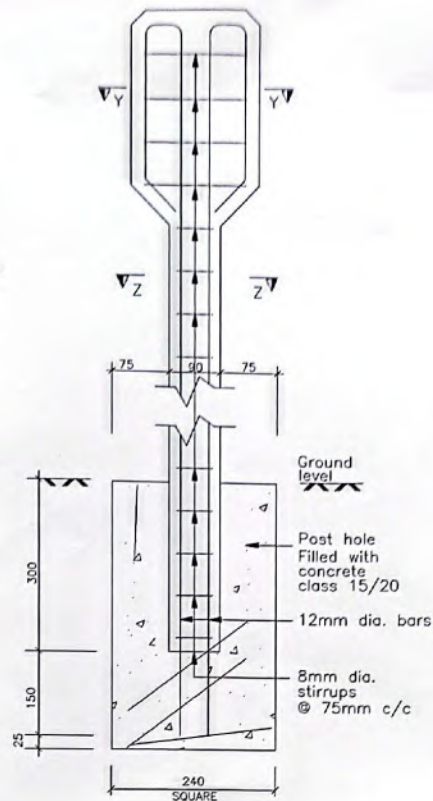


NOTES



GATE VALVE INDICATOR POST

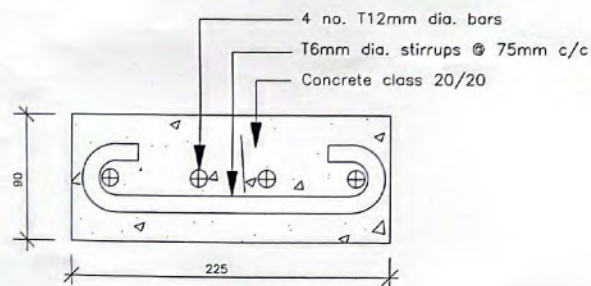
SCALE 1:10



INDICATOR POST REINFORCEMENT

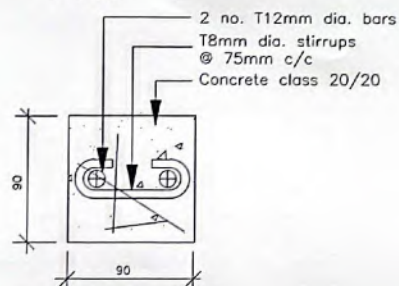
DETAILS

SCALE 1:10



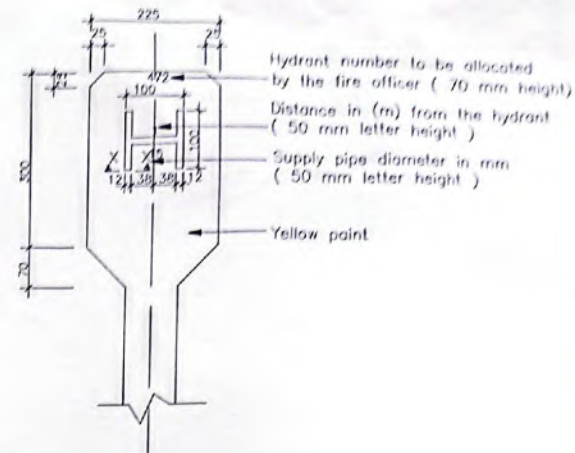
SECTION Y-Y

SCALE 1:4



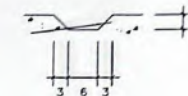
SECTION Z-Z

SCALE 1:4



FIRE HYDRANT POST

SCALE 1:10



SECTION X-X

N.T.S.

NOTES

- All dimensions are in mm unless otherwise stated.
- Details for indicator posts to be as per the following table unless otherwise stated.
- All indicator posts except fire hydrant posts to be painted with 2 coats blue oil based paint and lettering to engineer's approval.
- Water posts to be positioned in safe locations where possible against boundary of road reserve.

FOR	USE
gate valve	GV
air valve	AV
manhole	MD
fire hydrant	HT
water main	WM
bulk meter	BM



DRAWING NO. 12345, A2 SIZE



SIAYA COUNTY



NATIONAL AGRICULTURAL VALUE CHAIN
DEVELOPMENT PROJECT (NAVCOP)
SIAYA COUNTY

No.	APPROVAL	DATE	REFERENCE
1			
2			
3			
4			
5			

PROJECT TITLE
KOYUNDI KOGONGA IRRIGATION
PROJECT
SIAYA COUNTY

TITLE OF DRAWING
STANDARD DETAILS - MARKER POSTS
DETAILS

DWG No. Sheet No.
1 of 1

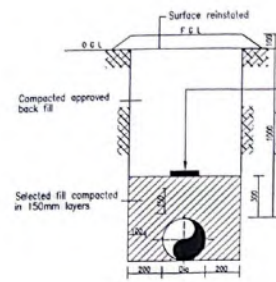
DESIGNED BY	MARK OCUA	DATE	MARCH 2023
CHECKED BY	MARK OCUA	DATE	MARCH 2023
APPROVED BY		DATE	MARCH 2023

TEE SYMBOL	LINE VALVE ON 200 AND BELOW ON 250 AND ABOVE SYMBOL	DIAMETER CHANGES (Without SV) FITTINGS SYMBOL	FERROUS PIPELINE BENDS SYMBOL						
TEE SYMBOL	AIR VALVE VERTICAL TEE FITTINGS DAW or SAV	DIAMETER CHANGES (With SV) FITTINGS SYMBOL	uPVC PIPELINE BENDS SYMBOL						
LINE VALVE (Large diameter Steel pipes) DATE VALVE DIA. <table><tr><td>DN 250</td></tr><tr><td>DN 300</td></tr><tr><td>DN 400</td></tr><tr><td>DN 500</td></tr><tr><td>DN 600</td></tr><tr><td>DN 700</td></tr></table> 500 mm long double Spigot piece DATE VALVE CHAMBER (DIMENSIONS TO BE STATED IN EACH CASE) FITTINGS SYMBOL	DN 250	DN 300	DN 400	DN 500	DN 600	DN 700	END CAP SYMBOL	WASHOUT TYPE 1 (SEE DRG. C/ST/04) TYPE 2 (SEE DRG. C/ST/04) TYPE 3 (SEE DRG. C/ST/04) SYMBOL	
DN 250									
DN 300									
DN 400									
DN 500									
DN 600									
DN 700									
PIRE HYDRANT DN 80 BRANCH TEE (VERTICAL) SYMBOL									

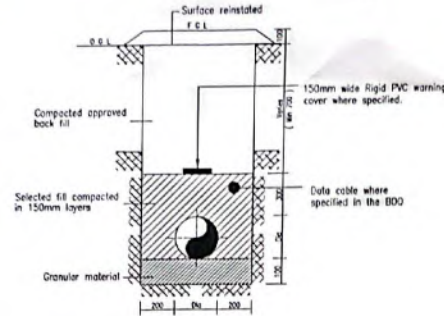
NOTES

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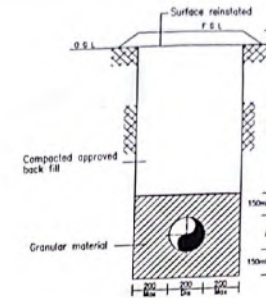




Typical Trench
1:20

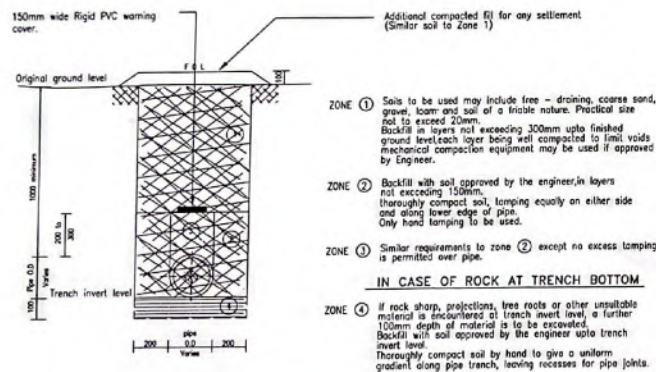


Trench in Rock
1:20



Pipe Bedding Detail in Black Cotton Soil
1:20

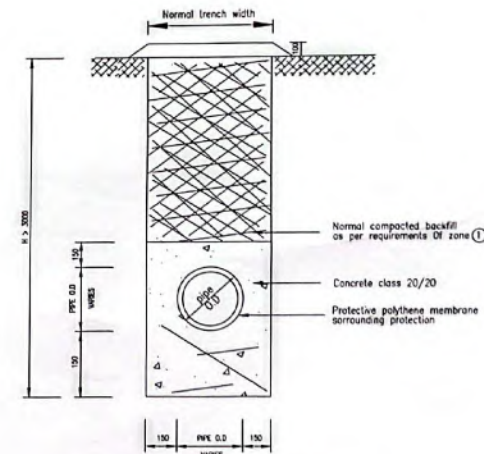
STEEL MAIN TRENCH DETAILS



TYPICAL TRENCH FOR uPVC PIPES

- Additional compacted fill for any settlement (Similar soil to Zone 1)
- ZONE ① Soils to be used may include free - draining, coarse sand, gravel, loam and soil of a friable nature. Practical size not to exceed 20mm. Backfill in layers not exceeding 300mm upto finished ground level each layer being well compacted to limit voids. Mechanical compaction equipment may be used if approved by Engineer.
- ZONE ② Backfill with soil approved by the engineer, in layers not exceeding 150mm, thoroughly compact soil, tamping equally on either side and along lower edge of pipe. Only hand tamping to be used.
- ZONE ③ Similar requirements to zone ② except no excess tamping is permitted over pipe.
- IN CASE OF ROCK AT TRENCH BOTTOM**
- ZONE ④ If rock sharp, projections, tree roots or other unsuitable material is encountered at trench invert level, a further 100mm depth of material is to be excavated. Backfill with soil approved by the engineer upto trench invert level. Thoroughly compact soil by hand to give a uniform gradient along pipe trench, leaving recesses for pipe joints.

uPVC MAIN TRENCH DETAILS



CONCRETE PROTECTION TO uPVC PIPES
LAID AT DEPTHS GREATER THAN 3.0m

NOTES

1. All dimensions are in mm unless otherwise stated.
2. All pipes to be laid with a minimum cover of 1m and minimum slope of 1:500.
3. Trench side slope to be at contractor's discretion depending on stability of excavated surfaces and ensuring safety of labour at work. However site to be measured based on nominal trench width.
4. Granular material to be approved by the engineer and shall not have any grains of size greater than 10mm and fines less than 0.05mm.
5. For purposes of trench backfilling all excavated trenches with coral material at the bed shall be considered as rock.



DRAWING NO. SCALE 1:40 SIZE



SIAYA COUNTY



NATIONAL AGRICULTURAL VALUE CHAIN
DEVELOPMENT PROJECT (NAVCDP)

SIAYA COUNTY

No.	APPROVAL	DATE	REFERENCE

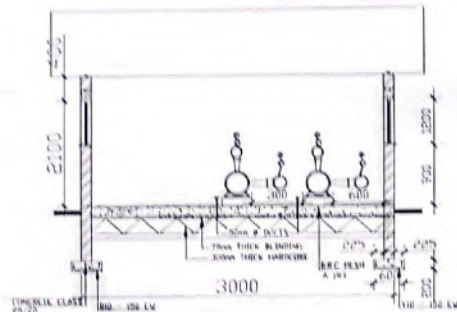
PROJECT TITLE:
KOYUNDI KOGONGA IRRIGATION
PROJECT
SIAYA COUNTY

TITLE OF DRAWING:
TYPICAL PIPE TRENCH BACKFILLING
DETAILS

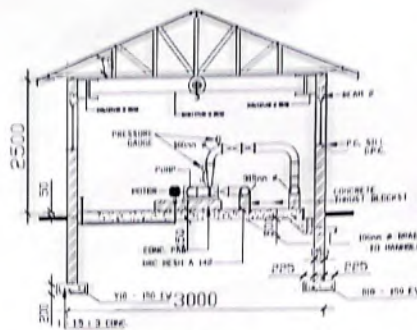
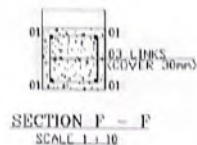
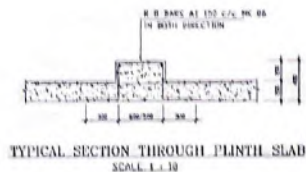
DWG. No.

Sheet No.
1 of 1

Designed KEVIN OBENLE 11 MARCH 2025	Checked MARK OGOLA MARCH 2025	Approved MARCH 2025



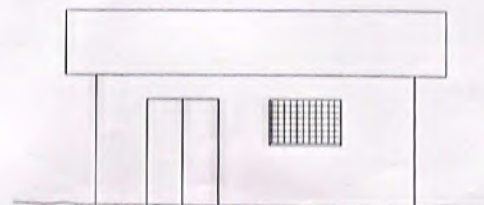
SECTION A - A



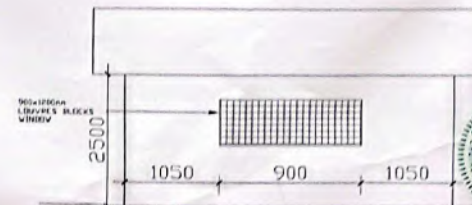
SECTION C - C

NOTES (INTAKE PUMP HOUSE):

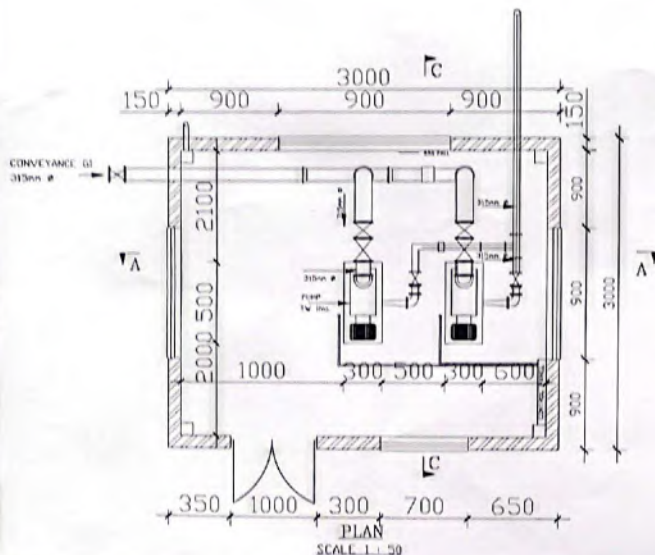
1. CONTRACTOR SHALL INSTALL TWO (2) PUMPS THAT MEET THE DESIGN REQUIREMENTS SPECIFIED IN PUMPS SPECIFICATIONS. THE CONTRACTOR SHALL COMPLETE ALL FINAL DESIGN OF PROPOSED PIPEWORK, PROPOSED DRAWINGS ARE SCHEMATIC AND THE CONTRACTOR SHALL PROPOSE THE MOST EFFICIENT INSTALLATION BASED ON THE PUMPS CHOSEN.
2. CONTRACTOR RESPONSIBLE TO INSTALL ALL ANY TEMPORARY PIPEWORKS DURING THE INSTALLATION OF THE PUMPS TO ENSURE THE SYSTEM REMAINS OPERATIONAL DURING CONSTRUCTION.
3. CONTRACTOR SHALL INSTALL ALL ELECTRICAL WIRE TO PROPERLY CONNECT THE PUMPS/MOTORS TO THE SOLAR PANELS AT THE PUMP HOUSE BUILDING. ALL ELECTRICAL WIRING SHALL CONFORM WITH INSTALLED SOLAR PANELS STANDARDS.
4. CONTRACTOR SHALL INSTALL 150mm X 150mm DEEP DRAINAGE CHANNEL WITH METAL GRATE COVER.
5. CONTRACTOR SHALL INSTALL THRUST BLOCKS FOR ALL PIPES INSTALLED IN THE PUMP HOUSE.
6. CONTRACTOR SHALL APPLY A 1:3 CEMENT-SAND MORTAR TO INTERIOR AND EXTERIOR WALLS. CONTRACTOR SHALL PAINT ALL WALLS WITH AN APPROVED UNDERCOAT FOLLOWED BY TWO LAYERS OF APPROVED IVORY COLOR WASHABLE ACRYLIC INTERIOR/EXTERIOR PAINT.
7. FINAL PIPEWORK LAYOUT AND ALIGNMENT WITHIN THE INTAKE BUILDING SHALL BE BASED ON THE CHOSEN PUMP SETS AND CONFIRMED WITH THE ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL FITTING, BENDS, REDUCERS, AIR RELEASE, CONTROLS AND OTHER ASSOCIATED PIPEWORK MATERIALS AS SPECIFIED IN THE SCOPE OF WORK.



FRONT ELEVATION
SCALE 1:1.50



REAR ELEVATION
SCALE 1:1.50



PLAN
SCALE 1:1.50

ROOF DETAILS

Roof must be finished 0.5% slope
Minimum 100mm
Minimum 100mm
Minimum 100mm
Minimum 100mm
Minimum 100mm
Minimum 100mm

NOTES:

1. This drawing shall be read in conjunction with all relevant drawings.
2. All levels and dimensions must be checked on site before commencing any work and if any discrepancy is reported to the Engineer immediately.
3. Cover to main bars to be as follows: with an equal face = 40mm
lower face = 25mm
upper face = 40mm
side = 15mm
bottom = 25mm
4. Reinforcement "R" denotes high tensile square twisted bars to relevant BS.
5. Reinforcement "R" denotes round mild steel bars to relevant BS.
6. Contractor shall take at least 30 cube tests for each day of concreting and shall furnish the engineer with 7th and 28th day strength results.
7. Concrete to be of 28mm grade of following mix and strength of

Mix	1 Day	28 Days
Class 40	16.6N/mm ²	40N/mm ²
Class 30	20.0N/mm ²	30N/mm ²
Class 25	16.6N/mm ²	25N/mm ²
Class 15	14.0N/mm ²	21N/mm ²

Contractor shall provide the details of preliminary test cube results for the above class of concrete before starting actual concrete work.

9. All dimensions must be verified before cutting of bars.
10. All reinforcement must be inspected by structural engineer before starting actual concrete work.
11. All excavation must be approved by the engineer before blinding is laid any areas of weak ground shall be excavated to the depth required by the engineer and shall be backfilled with mass concrete.
12. All concrete for blinding shall be class 10/20.
13. All concrete for thrust blocks and stools shall be class 20/20.
14. All reinforced concrete shall be class 25/25 water tight.
15. All exposed mild steel shall be hot dip galvanized.
16. Only figured dimensions to be taken from this drawing.
17. All horizontal surfaces shall be steel trowled at casting.
18. Details of pump arrangement to be provided by supplier.
19. All pipework to be steel with flanges to appropriate hp approved by the Engineer.
20. All pumps to be fitted with pressure gauge (P) on suction and delivery side.
21. Plinth size and pipework arrangement may alter with approval of the Engineer to suit machinery provided.



SIAYA COUNTY



NATIONAL AGRICULTURAL VALUE CHAIN
DEVELOPMENT PROJECT (NAVCDP)
SIAYA COUNTY

No.	APPROVAL	DATE	REFERENCE

PROJECT TITLE:
KOYUNDI KOGONGA IRRIGATION
PROJECT
SIAYA COUNTY

TITLE OF DRAWING:
PUMP HOUSE

DWG. No.

Sheet No.
1 of 1

Designed	Drawn	Checked	Approved	Date
MARK OGOLA	MARK OGOLA	MARK OGOLA	MARK OGOLA	MARCH 2025



NAACDP
NATIONAL AGRICULTURAL VALUE
CHAIN DEVELOPMENT PROJECT

WAVCDP
RICULTURAL VALUE
DEVELOPMENT PROJECT

二

NALGCP	COUNTY	COMMUNITY
CONTRIBUTION:	CONTRIBUTION:	CONTRIBUTION:

UNITED STATES
DEPARTMENT OF JUSTICE

CONSULTING	CONSULTING	STRUCTURE
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CONSUMERS

	CONTRACTOR	CONTACT
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327

NEPAL JUDICE

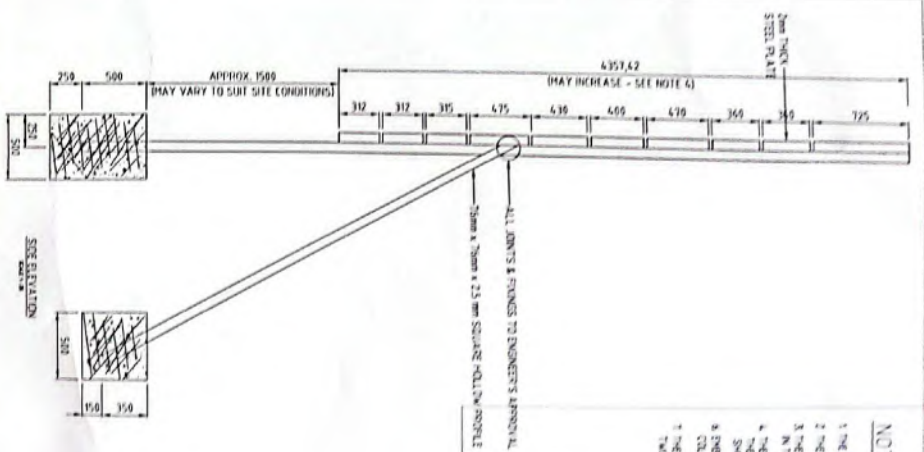
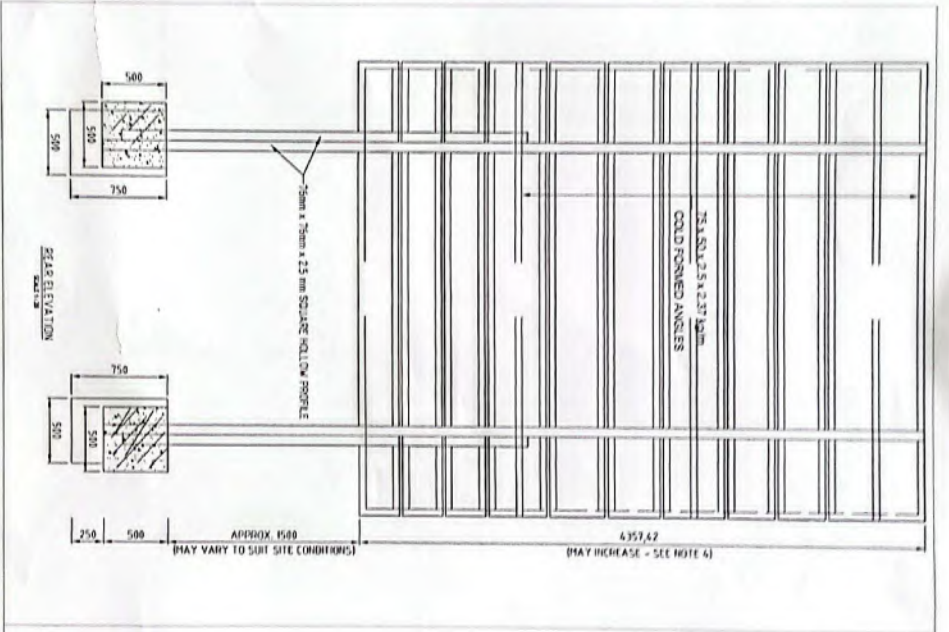
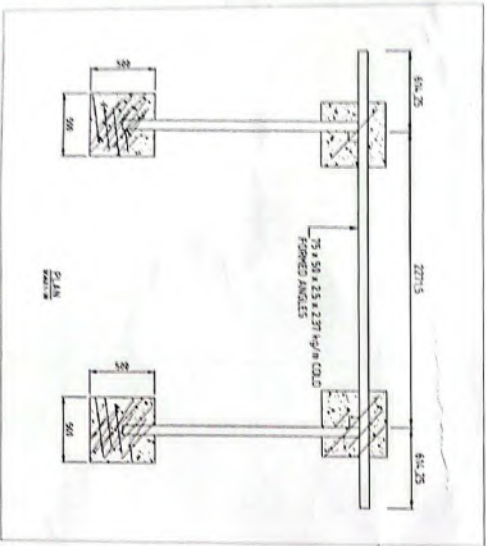
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	COMPLETION DATE:
	COMMENCEMENT DATE:

[illegible]

1

2202 LEE ET AL.

[illegible]

.....

DEVELOPMENT PROJECT (NAVCDP)

SIAYA COUNTY

PROJECT TITLE:

KOYUNDI KOGONGA IRRIGATION
PROJECT

SIAYA COUNTY

CLAIMS

SIGN BOARD

23

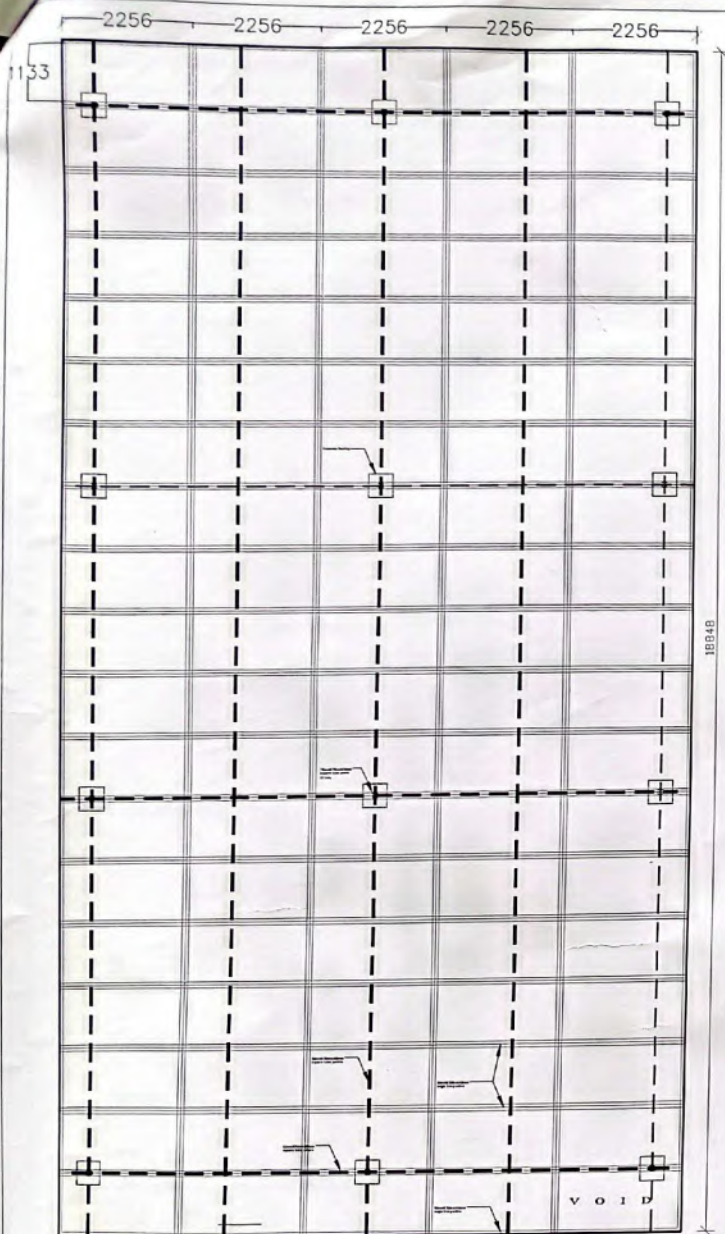
Screen

4.05

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Case

1

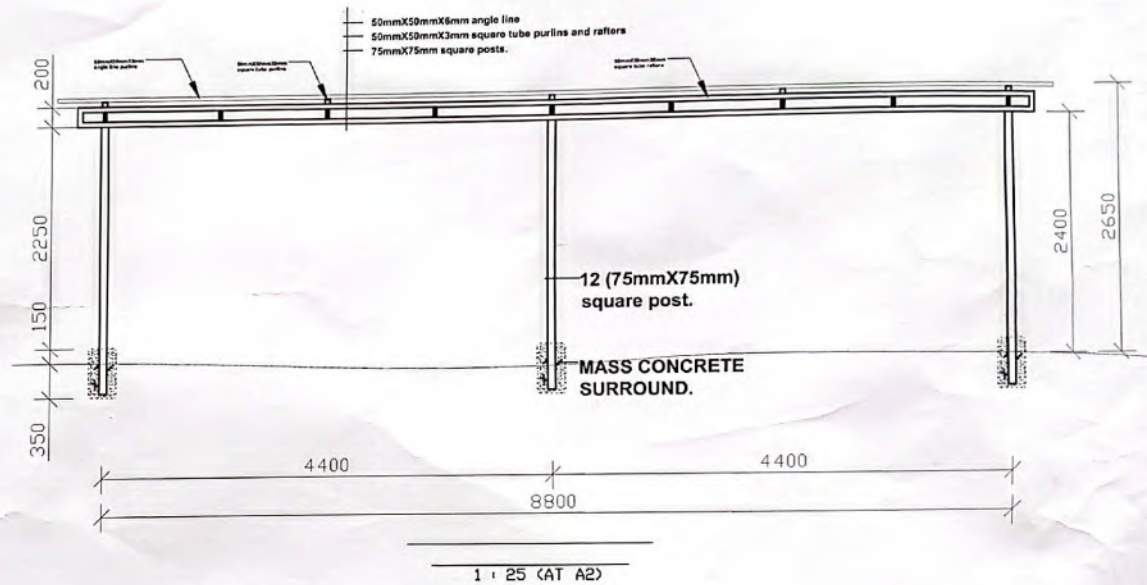


NOTES

Panel size : 2256 x 1133 x 35

Length : 33900mm

Width : 26059mm



DRAWING TO SCALE IN A2 SIZE



SIAYA COUNTY

NATIONAL AGRICULTURAL VALUE CHAIN
DEVELOPMENT PROJECT (NAVCDP)
SIAYA COUNTY

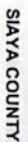
No.	APPROVAL	DATE	REFERENCE

PROJECT TITLE:
KOYUNDI KOGONGA IRRIGATION
PROJECT
SIAYA COUNTY

TITLE OF DRAWING
SOLAR PANEL STAND
PLAN AND ELEVATION

Dwg. No. Sheet No.
1 of 1

Designed: JAMES OGOLA	Date: MARCH 2025
Drawn: MARK OGOLA	Date: MARCH 2025
Checked:	Date: MARCH 2025
Approved:	Date: MARCH 2025



NAVCDP

NATIONAL AGRICULTURAL VALUE CHAIN
DEVELOPMENT PROJECT (NAVCDP)
SIAYA COUNTY

No.	APPROVAL	DATE	REFERENCE
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PROJECT TITLE:

SIAYA COUNTY
PROJECT
KOGONGA IRRIGATION

TITLE OF DRAWING:

**SIAYA IRRIGATION PROJECT
AIR VALVE CHAMBERS DETAILS**

1

RECEIVED



DRAINING: 8" x 12" SIZE

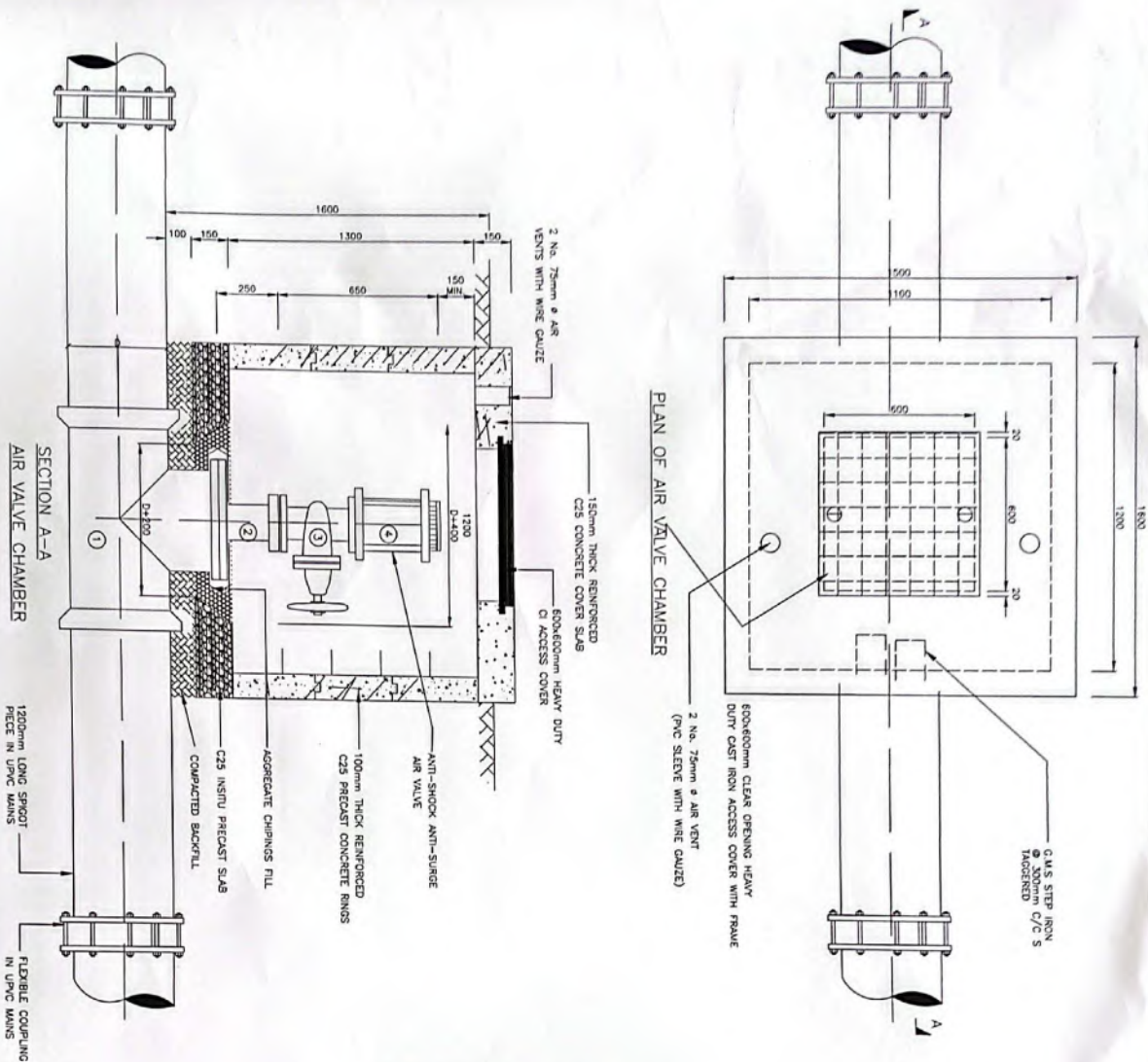
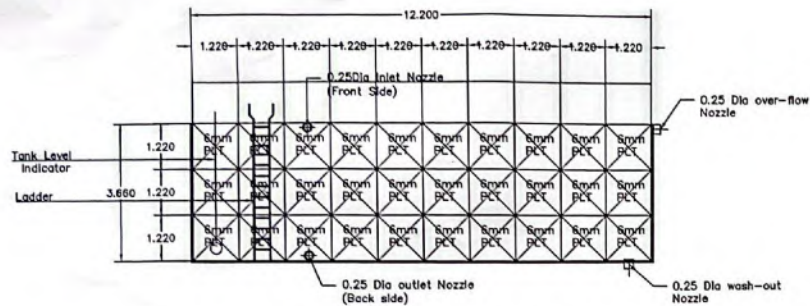


TABLE OF AIR VALVE BRANCH AND FITTINGS

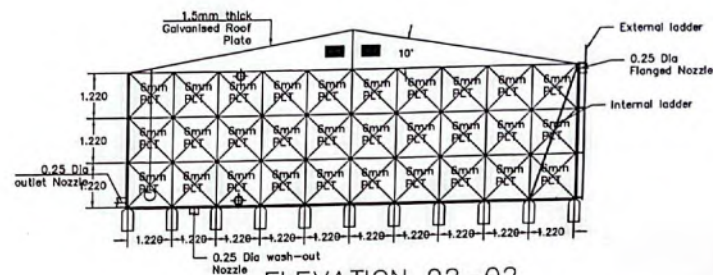
MAIN SIZE (mm)	AIR VALVE BRANCH ø (mm)	AIR VALVE TEE (1)		FLANGED REDUCER (2)		VALVE (3)		AIR VALVE (4)	
		100/50	50x25	50x25	25	25	25		
100	25		150x50						
150	50		50x50						
200	50		100x50						
250	80		250x150	150x80	80	80			
300	80		300x150	150x80	80	80			
350	80		350x150	150x80	80	80			
400	100		400x200	200x100	100	100			
450	100		450x200	200x100	100	100			
500	100		500x250	250x100	100	100			
600	150		600x350	350x150	150	150			
700	150		700x350	350x150	150	150			
800	200		800x400	400x200	200	200			
900	200		900x450	450x200	200	200			

MOTIFS

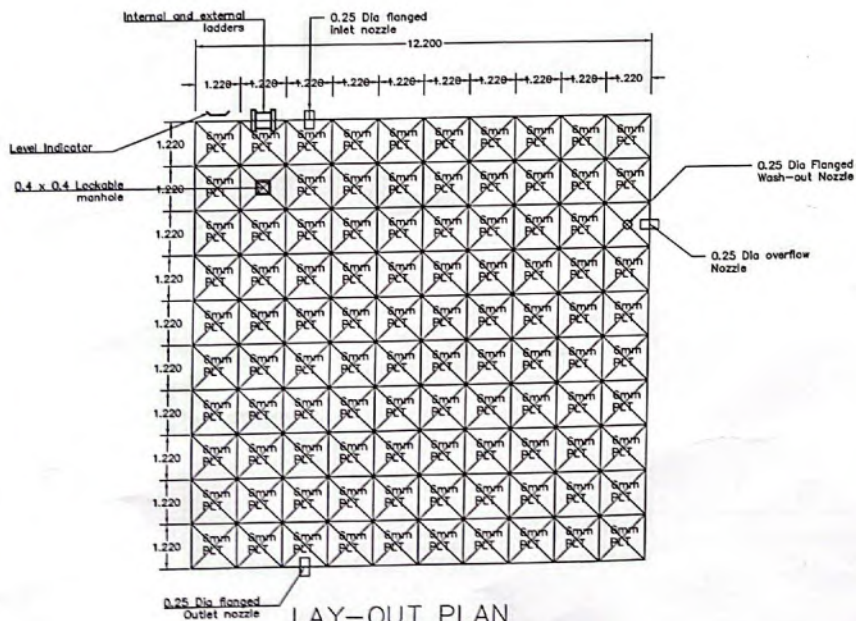
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED
2. ALL MESH REINFORCEMENT SHOULD CONFORM TO BS 4453
3. ALL FITTINGS TO BE DOCTILE IRON TO PN10 AND FLANGES TO BS 4594 PN10
4. STEP IRONS ARE ONLY REQUIRED WHERE CHAMBER IS DEEPER THAN 1000mm DEEP
5. CHAMBER TO BE BACKFILLED WITH 500mm THICK GRANULAR FILL
6. ACCESS COVERS TO BE CAST IRON
7. PRECAST CONCRETE TO BE CLASS 30/10



ELEVATION 01-01



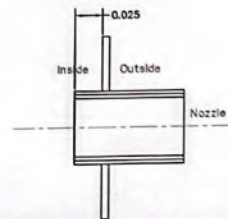
ELEVATION 02-02



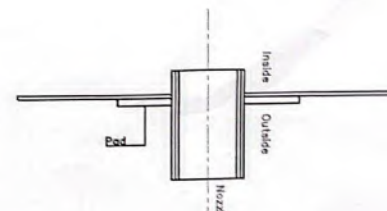
LAY-OUT PLAN

Notes

1. All structural steel work to be grade 43C
2. All steel work shall be hot dipped galvanised iron
3. All shop welds to be 6mm fillet weld U.O.N
4. All bolts are galvanised Grade 4.6 and 8.8
5. All section sizes to be specified on drawing
6. This drawing to be read in conjunction with all other relevant drawings
7. This drawing is not to be scaled
8. Only written dimensions to be followed.



INLET-OUT-LET AND OVER-FLOW
TYPICAL WELDING



WASH-OUT
TYPICAL WELDING

General Notes

- NOTES
1. All dimensions are in meters unless otherwise stated
 2. All levels are in meters and coordinates are in UTM unless stated otherwise
 3. The pipeline invert levels are as shown in drawings unless otherwise directed



NATIONAL AGRICULTURAL VALUE CHAIN
DEVELOPMENT PROJECT
(NAVCDP)

SIAYA COUNTY

DRAWING TITLE:
PROPOSED 544M³ STEEL TANK

SURVEYED BY:

1. James Oponji
2. Mark Ogola
3. Olang' Charles
4. Kevin Othman

DESIGNED BY:

1. Mark Ogola
2. James Oponji
3. Kevin Othman

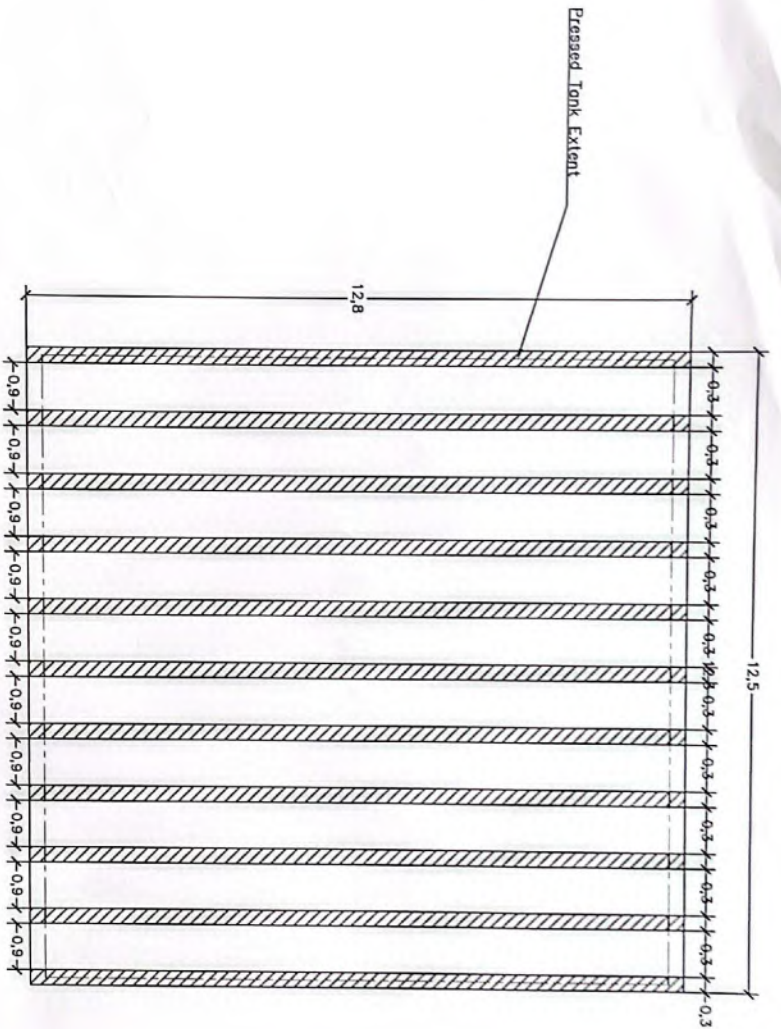


No. Revision/Issue Date

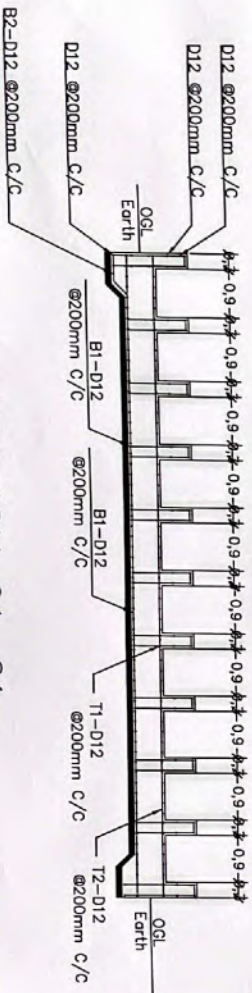
For Name and Address
NATIONAL AGRICULTURAL VALUE CHAIN
DEVELOPMENT PROJECT
(NAVCDP)
SIAYA COUNTY

Project Name and Address
KOGONGA IRRIGATION PROJECT
NORTH UYOMA WARD
SIAYA COUNTY

Project
KOGONGA IRRIGATION PROJECT
Date
04.03.2020
Scale
1:1000
Sheet
2 of 2



LAY-OUT PLAN



SECTION 01-01

NOTES
1. All dimensions are in meters unless otherwise specified.
2. All reinforcement is to be provided in accordance with the design.
3. The design is for a maximum water level of 1.5m above the ground level.
4. The design is for a maximum wind speed of 100 km/h.



NATIONAL IRRIGATION AUTHORITY
DEVELOPMENT PROJECT
(NIA/DCP)
SIAYA COUNTY

DRAWING TITLE:
STEEL TANK FOUNDATION
(544M3)

SURVEYED BY:

1. James Oguni
2. Mark Oguni
3. Oding Charles
4. Kevin Oguni

DESIGNED BY:
Mark Oguni
James Oguni
Kevin Oguni

CHECKED BY:
Mark Oguni
James Oguni
Kevin Oguni

REVISION/ISSUE

PROJECT NAME AND ADDRESS
NATIONAL AGRICULTURAL VALUE CHAIN
DEVELOPMENT PROJECT
(NAACDP)
SIAYA COUNTY

PROJECT NAME AND ADDRESS
KOCONGA IRRIGATION PROJECT
NORTH UYOYA WARD
SIAYA COUNTY

PROJECT LOCATION SHOWN
DATE: 24.12.2019
SCALE: 1:1000
SHEET 1 OF 1

BOOK OF DRAWINGS

KOGONGA-KOYUNDI IRRIGATION SCHEME



COUNTY GOVERNMENT OF SIAYA