

ENGINEERING DRAWINGS

FOR

ENGINEERING DESIGN OF WASH FACILITIES ACROSS BORNO, ADAMAWA AND
YOBE (BAY) STATES

Service Contract No: YOL SC 14

GANYE - GANGARASO WATER SCHEME

CLIENT:



USAID/MERCY CORPS

CONSULTANTS:



KONSADEM ASSOCIATES LTD

Engineers & Consultants

30, Onireke Layout,

P.M. B. 5478, Ibadan, NIGERIA.

E-mail: konsadem@gmail.com

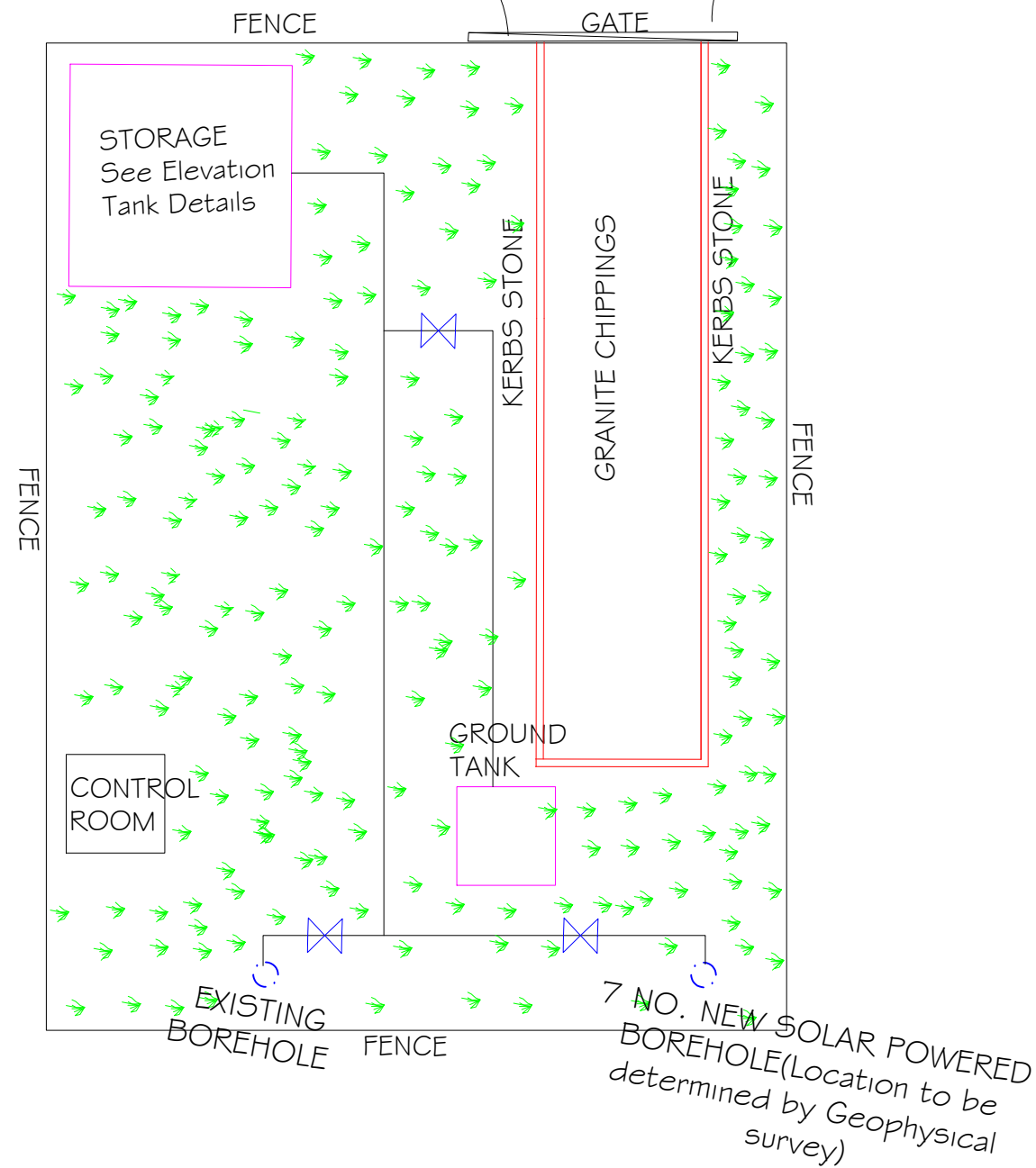
2ML CONSULTING NIGERIA LTD

Office 8, B1-Close Off 69(A) Road

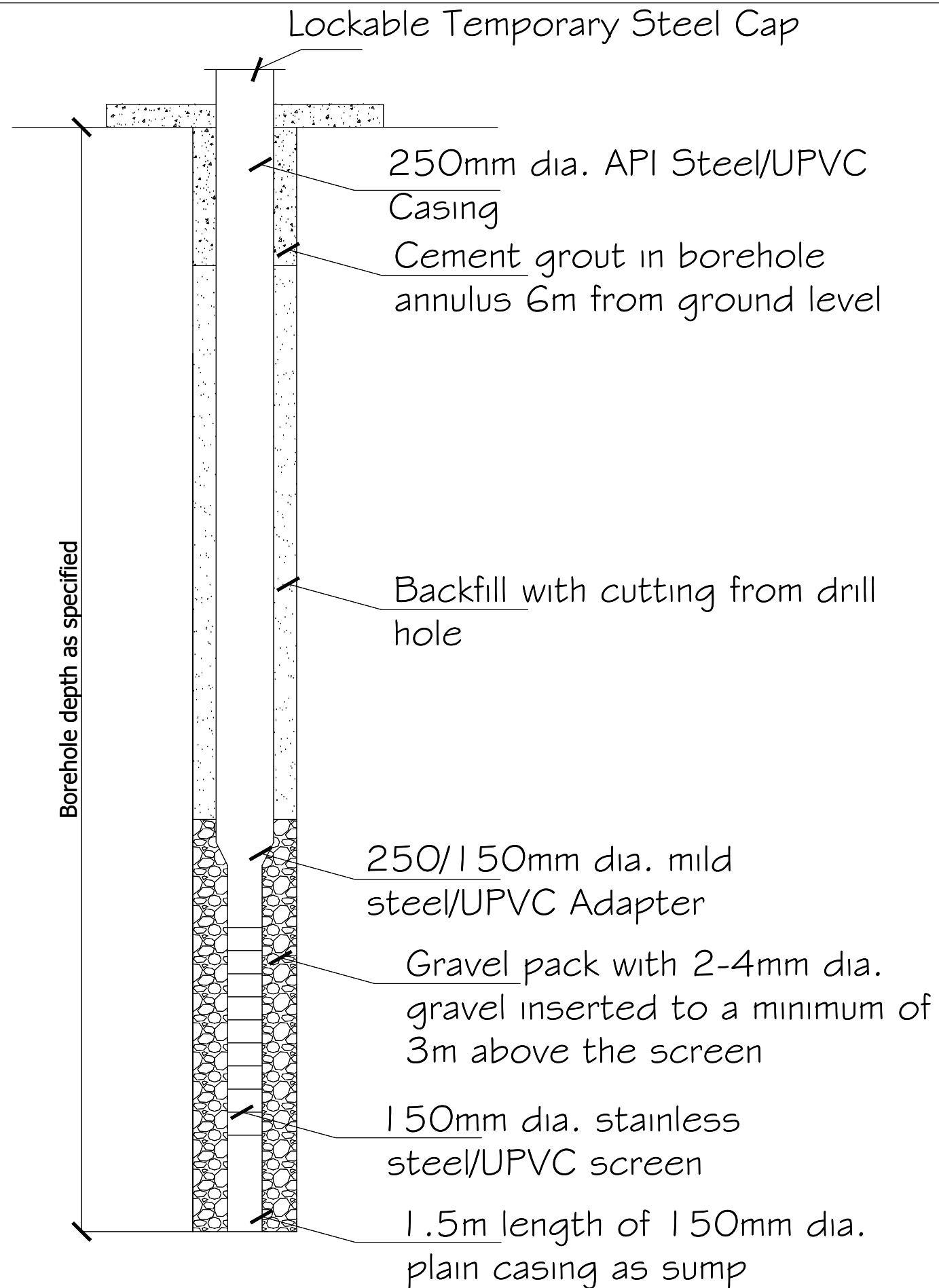
Gwarinpa Abuja,

MAY, 2021.

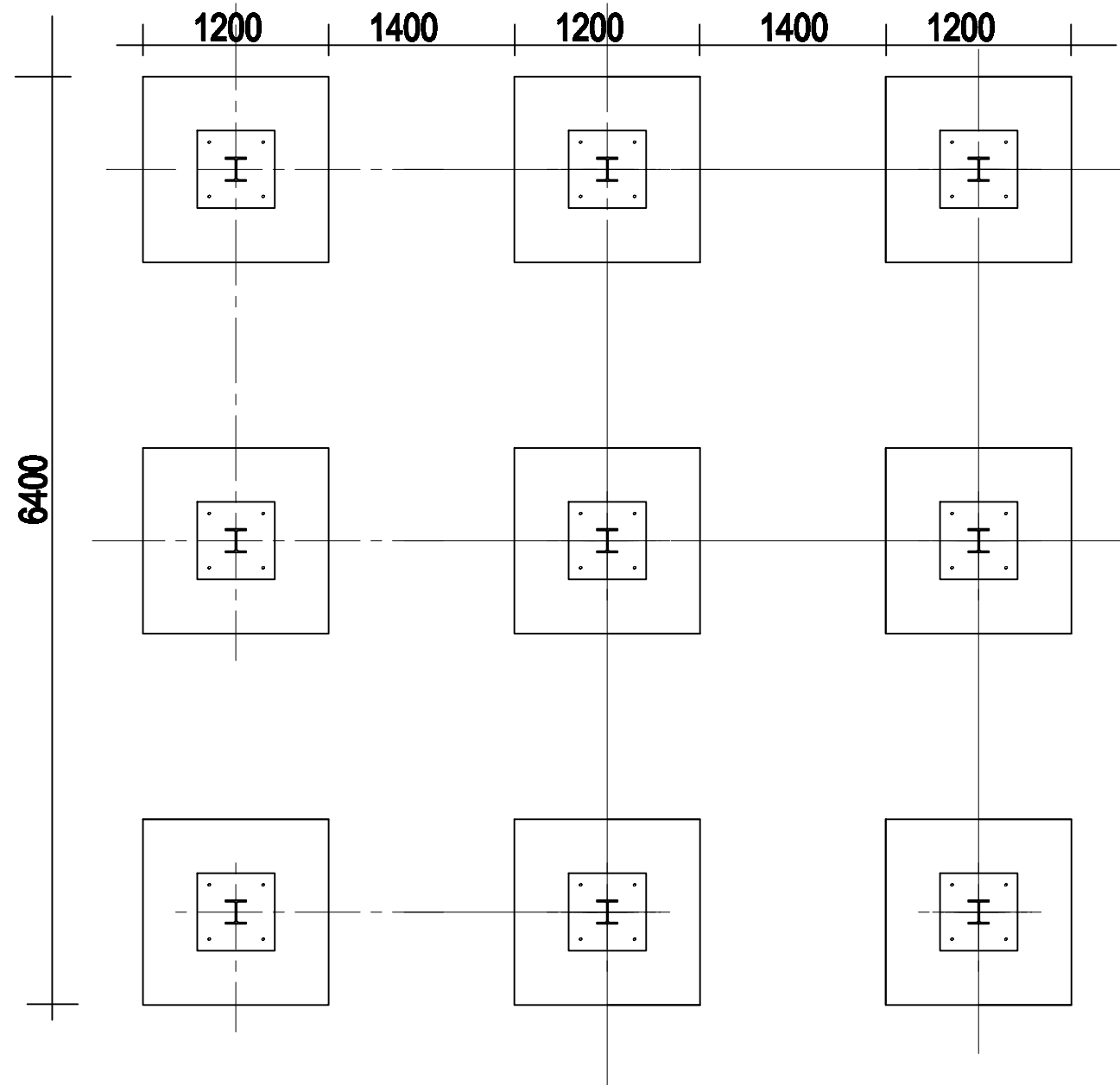
GANGARASO WATER SCHEME



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	CONSULTANT	KONSADEM ASSOCIATES LTD Engineers & Consultants 30, Onireke Layout, P.M. B. 5478, Ibadan, NIGERIA. E-mail:konsadem@gmail.com	2ML CONSULTING NIGERIA LTD Office 8, B1-Close Off 69(A) Road Gwarinpa Abuja.	ENGINEERING DESIGN OF WASH FACILITIES ACROSS BORNO, ADAMAWA AND YOBE (BAY) STATES Service Contract No:YOL SC 14	GANYE	GANGARASO WATER SCHEME	Drawn : Damola	
			STATE		SCHEME LAYOUT	Traced :		
			ADAMAWA		DRAWING NO.	Checked :	Engr Soji	
					BB/TP/O2	Date :	MAY 2021	
					SCALE	Ref. No:	USAID/BAYAD-GAN	



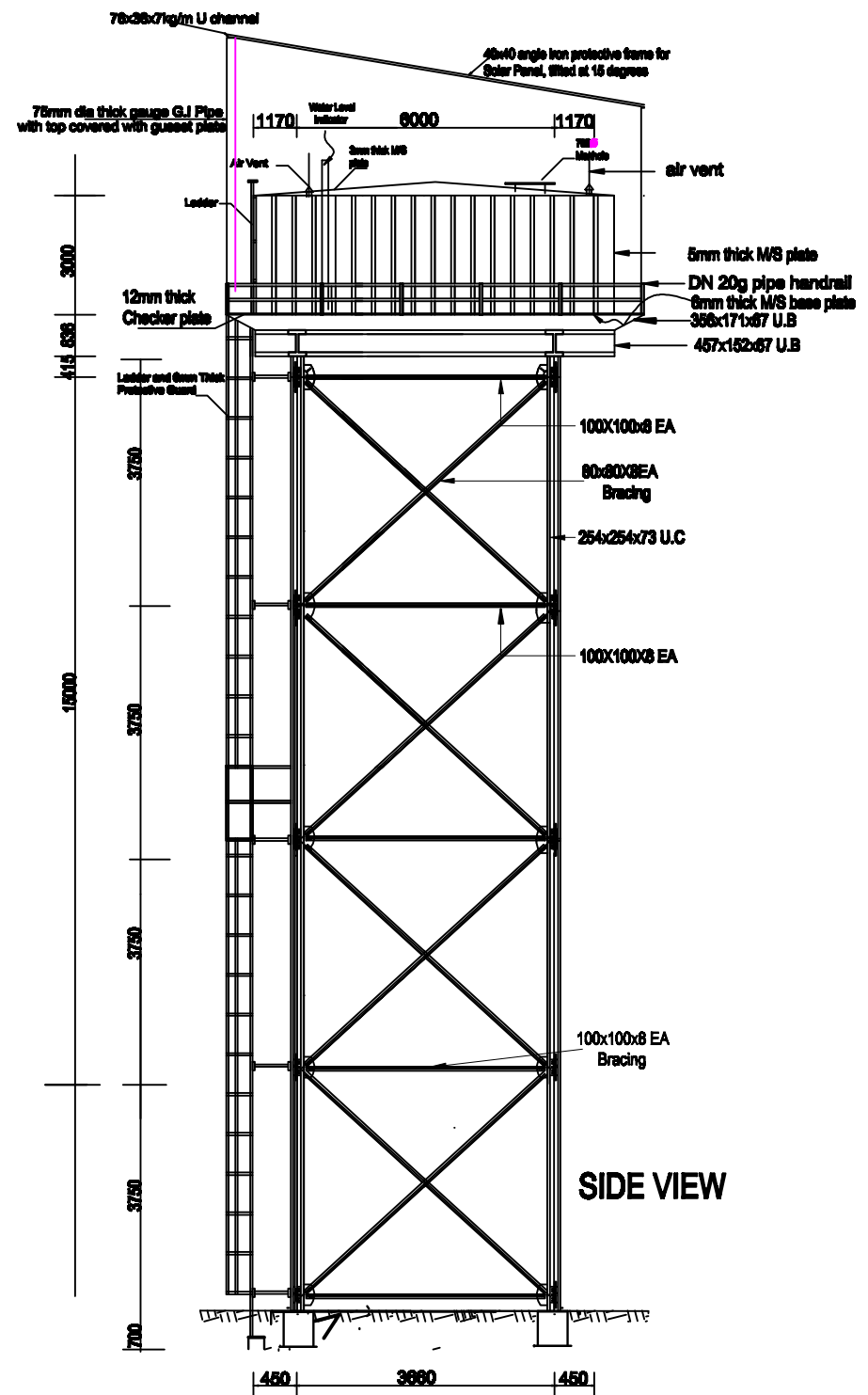
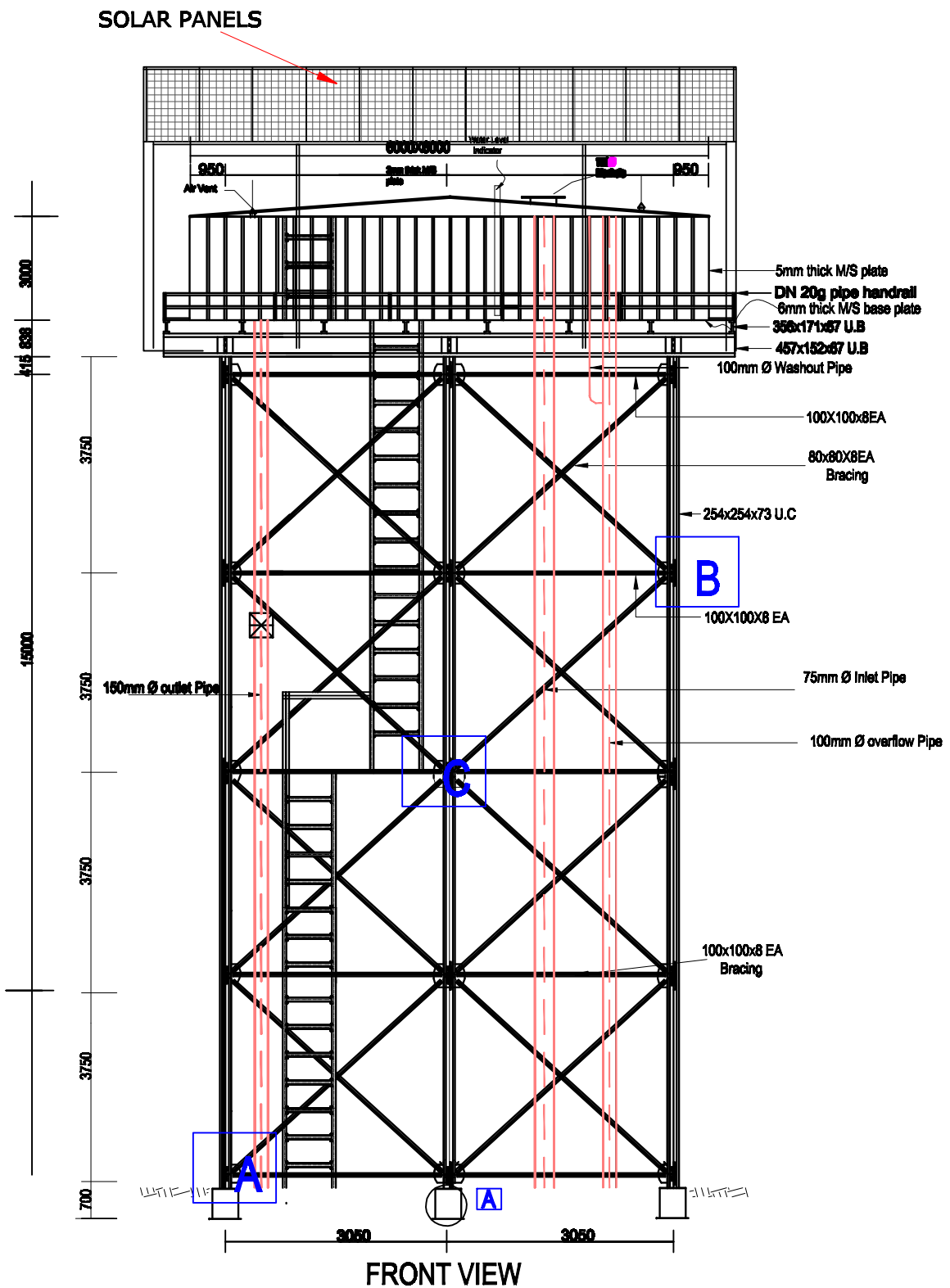
Mark : Date : Made by : Revision	CLIENT:	USAID/MERCY CORPS	PROJECT	SMALL TOWN	DRAWING TITLE	Designed:	Engr Soji	STAMP
	CONSULTANT	KONSADEM ASSOCIATES LTD Engineers & Consultants 30, Onireke Layout, P.M. B. 5478, Ibadan, NIGERIA. E-mail: konsadem@gmail.com	ZML CONSULTING NIGERIA LTD Office 8, B1-Close Off 69(A) Road Gwarinpa Abuja.	ENGINEERING DESIGN OF WASH FACILITIES ACROSS BORNO, ADAMAWA AND YOBE (BAY) STATES Service Contract No: YOL SC 14	GANYE	GANGARASO WATER SCHEME	Drawn : Damola	
			STATE		BOREHOLE DETAILS	Checked:	Engr Soji	
			ADAMAWA		DRAWING NO.	Date:	MAY 2021	
					BB/TP/O I	SCALE		Ref. No: USAID/BAY/AD-GAN



TANK FOOTING PLAN VIEW

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	CONSULTANT	 KONSADEM ASSOCIATES LTD Engineers & Consultants 25, Oshoro Layout, P.M. B. 5476, Ibadan, NIGERIA. E-mail: konsadem@gmail.com		ENGINEERING DESIGN OF WASH FACILITIES ACROSS BORNO, ADAMAWA AND YOBE (BAY) STATES Service Contract No: YOL SC 14	GANGARASO SANGASSUMI	GANGARASO ELEVATED STORAGE TANK 100 Cu.m) TANK FOOTING DETAILS	Drawn: Damola Traced: Checked: Engr Soji Date: MAY 2021	
				STATE		DRAWING NO. SCALE	Ref. No:	
				ADAMAWA		BB/BD/O I	USAID/BAY/BU-00	

NOTE:
Soil bearing capacity is to be determined by contractor on site for the foundation of tower.



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CONSULTANT: **KONSADEM ASSOCIATES LTD**
Engineers & Consultants
50, Onitsha Layout,
P.M. B. 6478, Ibadan, NIGERIA.
E-mail: konsadem@gmail.com

ZML CONSULTING NIGERIA LTD
Office 8, B1-Class Off 69(A) Road
Gwarinpa Abuja.

PROJECT: **ENGINEERING DESIGN OF WASH FACILITIES ACROSS BORNO, ADAMAWA AND YOBE (BAY) STATES**
Service Contract No: YOL SC 14

STATE: ADAMAWA

SMALL TOWN: GANGARASO SANGASSUMI

DRAWING TITLE: GANGARASO ELEVATED STORAGE TANK 100 Cu.m) TANK VIEWS AND ELEVATION

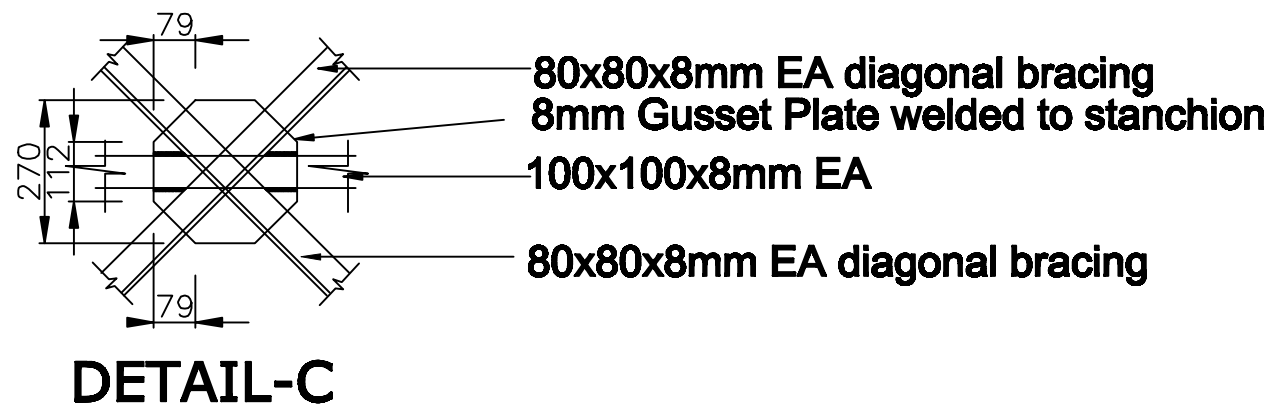
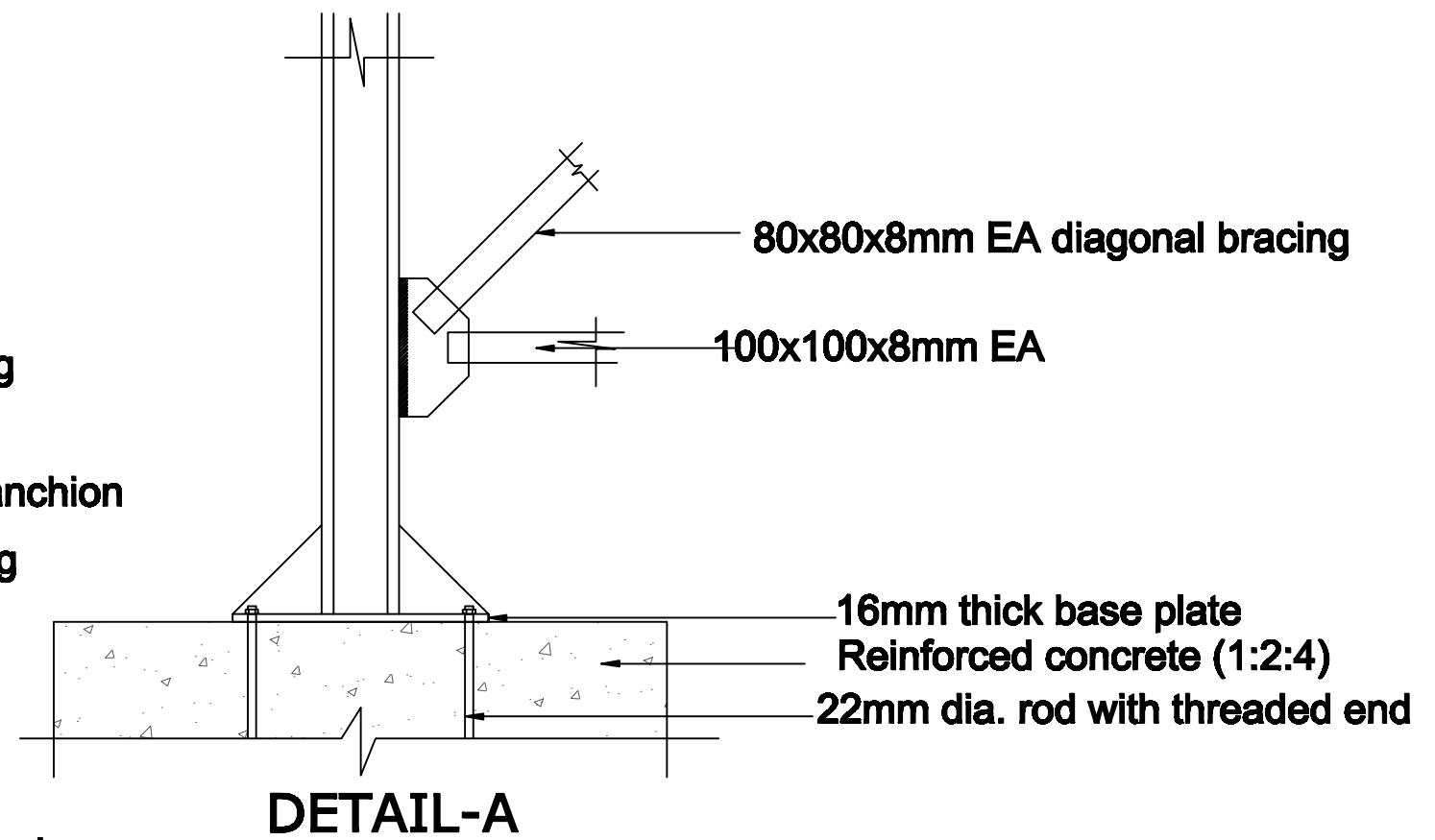
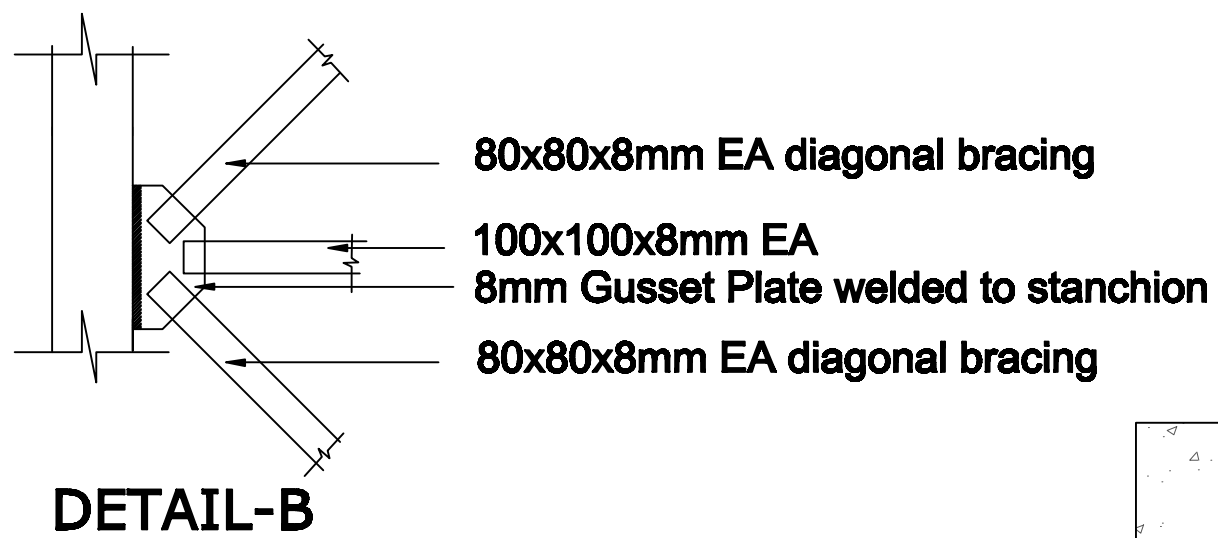
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SCALE:

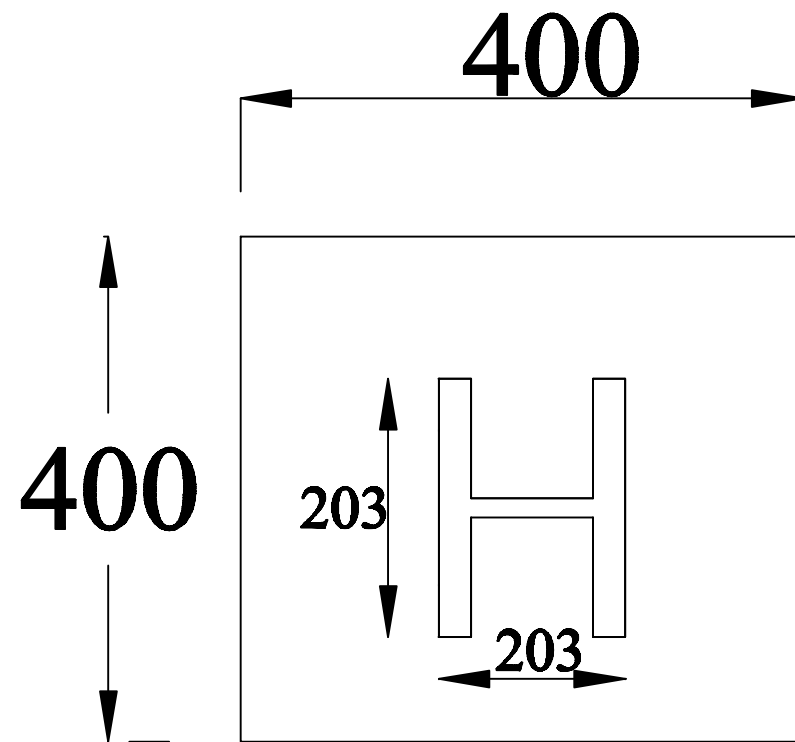
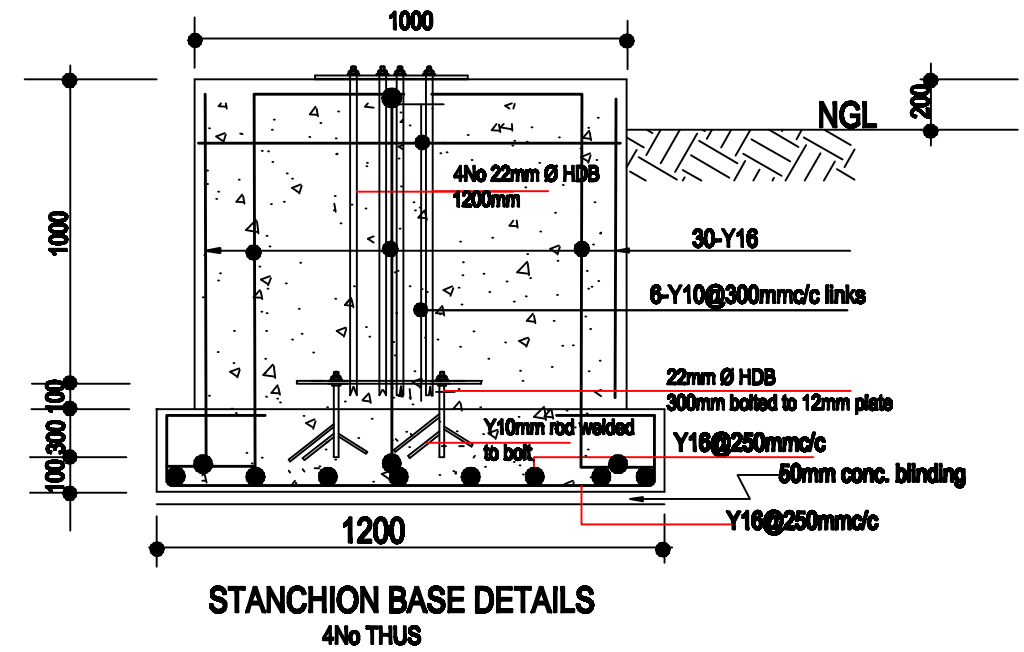
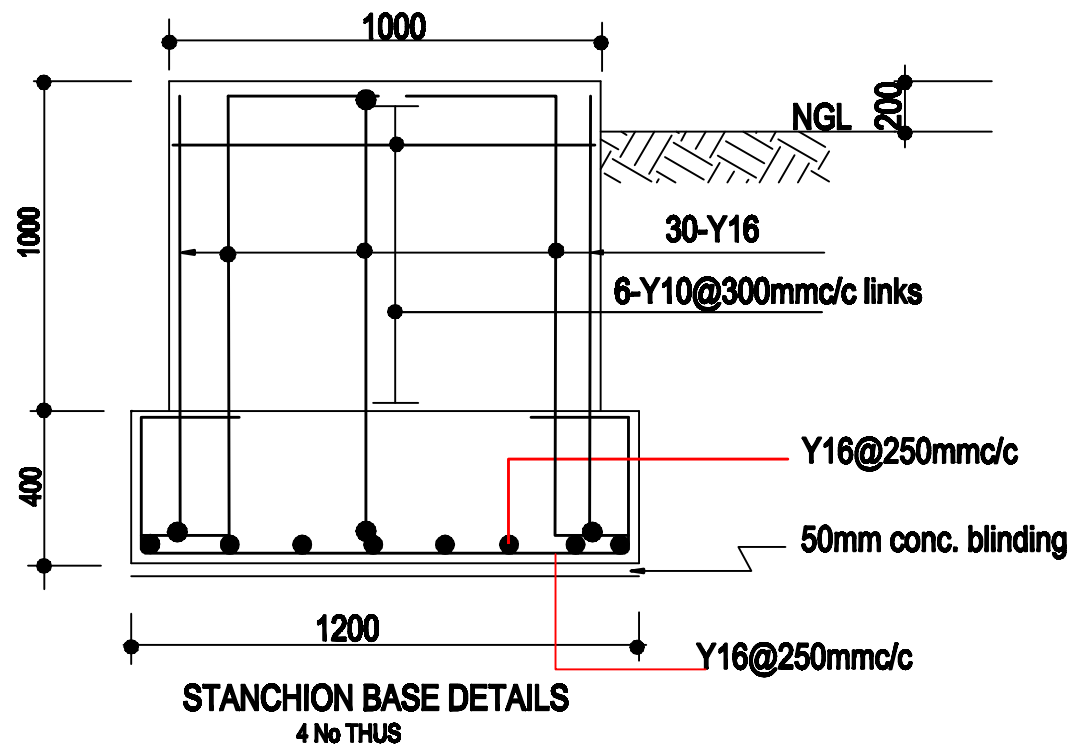
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Drawn: Damola
Traced:
Checked: Engr Soji
Date: MAY 2021

Ref. No: USAID/BAY/BU-00

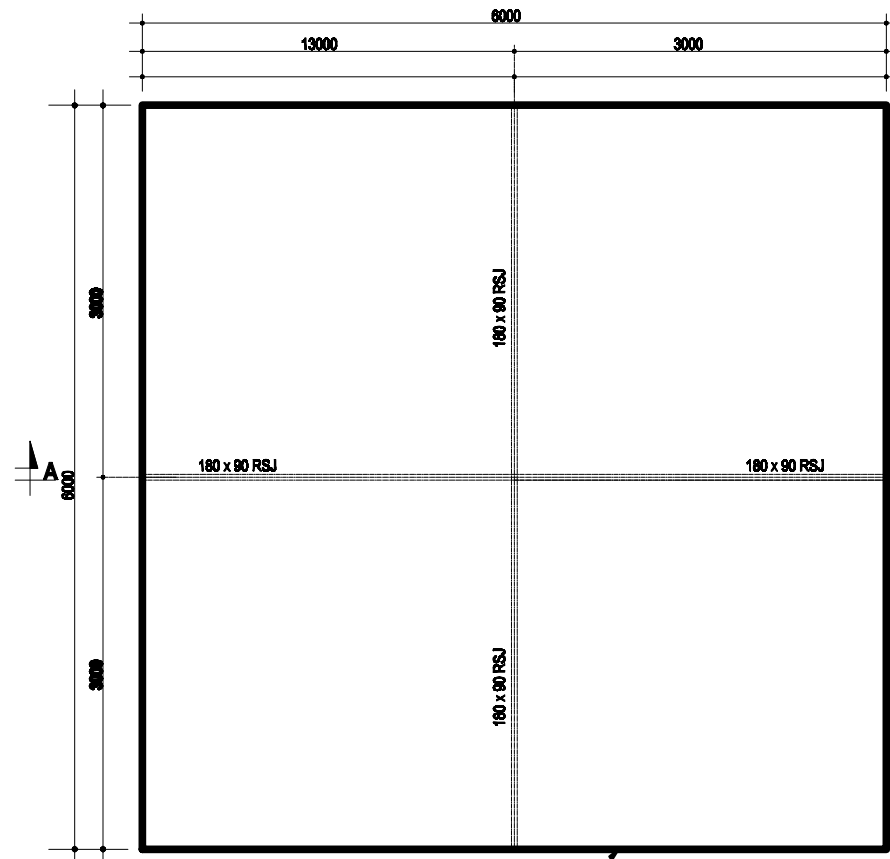
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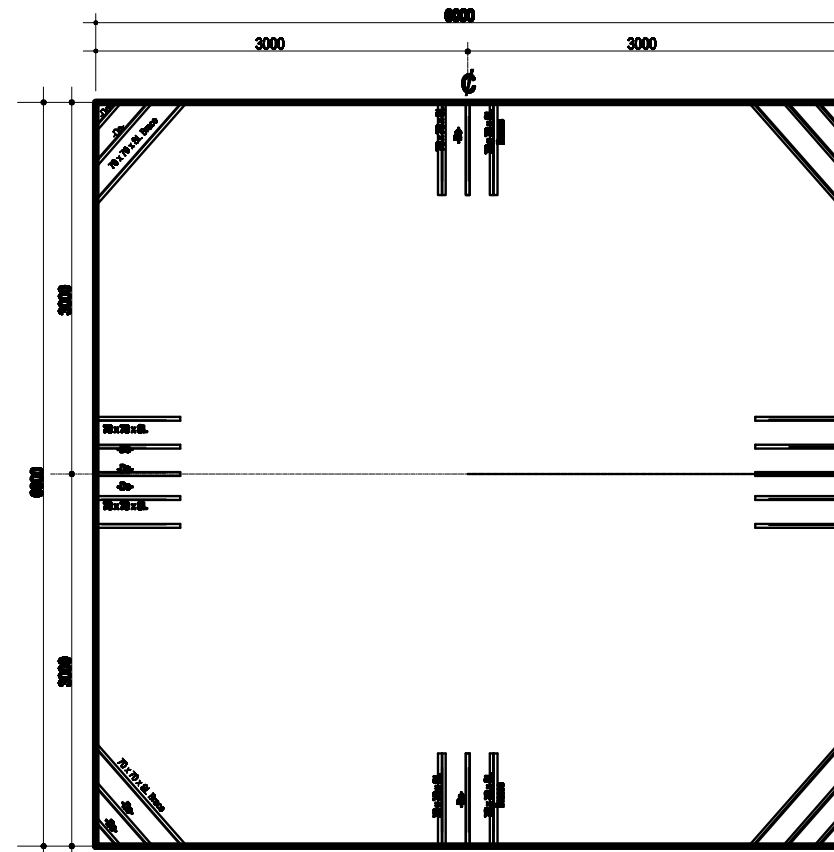
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	CONSULTANT	 KONSADEM ASSOCIATES LTD Engineers & Consultants 25, Oshoro Layout, P.M. B. 5476, Ibadan, NIGERIA. E-mail: konsadem@gmail.com	2ML CONSULTING NIGERIA LTD Office 5, 51-Clase Off 89(A) Road Gweriye Abaja,	ENGINEERING DESIGN OF WASH FACILITIES ACROSS BORNO, ADAMAWA AND YOBE (BAY) STATES Service Contract No: YOL SC 14	GANGARASO SANGASSUMI	GANGARASO ELEVATED STORAGE TANK 100 Cu.m) TANK DETAILS	
			STATE		DRAWING NO.	SCALE	Ref. No:
			ADAMAWA		BB/BD/03		USAID/BAY/BU-00



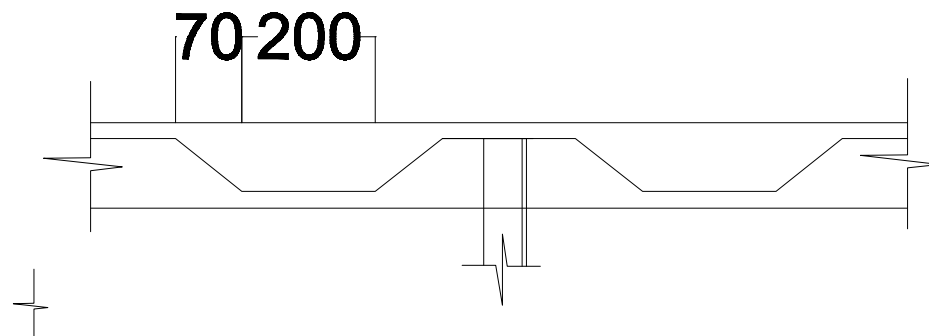
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	CONSULTANT	KONSADEM ASSOCIATES LTD Engineers & Consultants 36, Oretoro Layout, P.M. B. 5478, Ibadan, NIGERIA. E-mail: konsadem@gmail.com	ZML CONSULTING NIGERIA LTD Office 8, 81-Class Off (8/A) Road Owerri/Abeja.	GANGARASO SANGASSUMI	GANGARASO ELEVATED STORAGE TANK (100 Cu.m) FOOTING DETAILS	Drawn : Damola Traced : Checked : Engr Soji Date : MAY 2021	
			STATE		DRAWING NO.	SCALE	Ref. No:
			ADAMAWA		BB/BD/04		USAID/BAYBU-00



PLAN OF WELDED STEEL TANK
SHOWING INTERNAL PARTITIONING



PLAN SHOWING INTERNAL BRACES



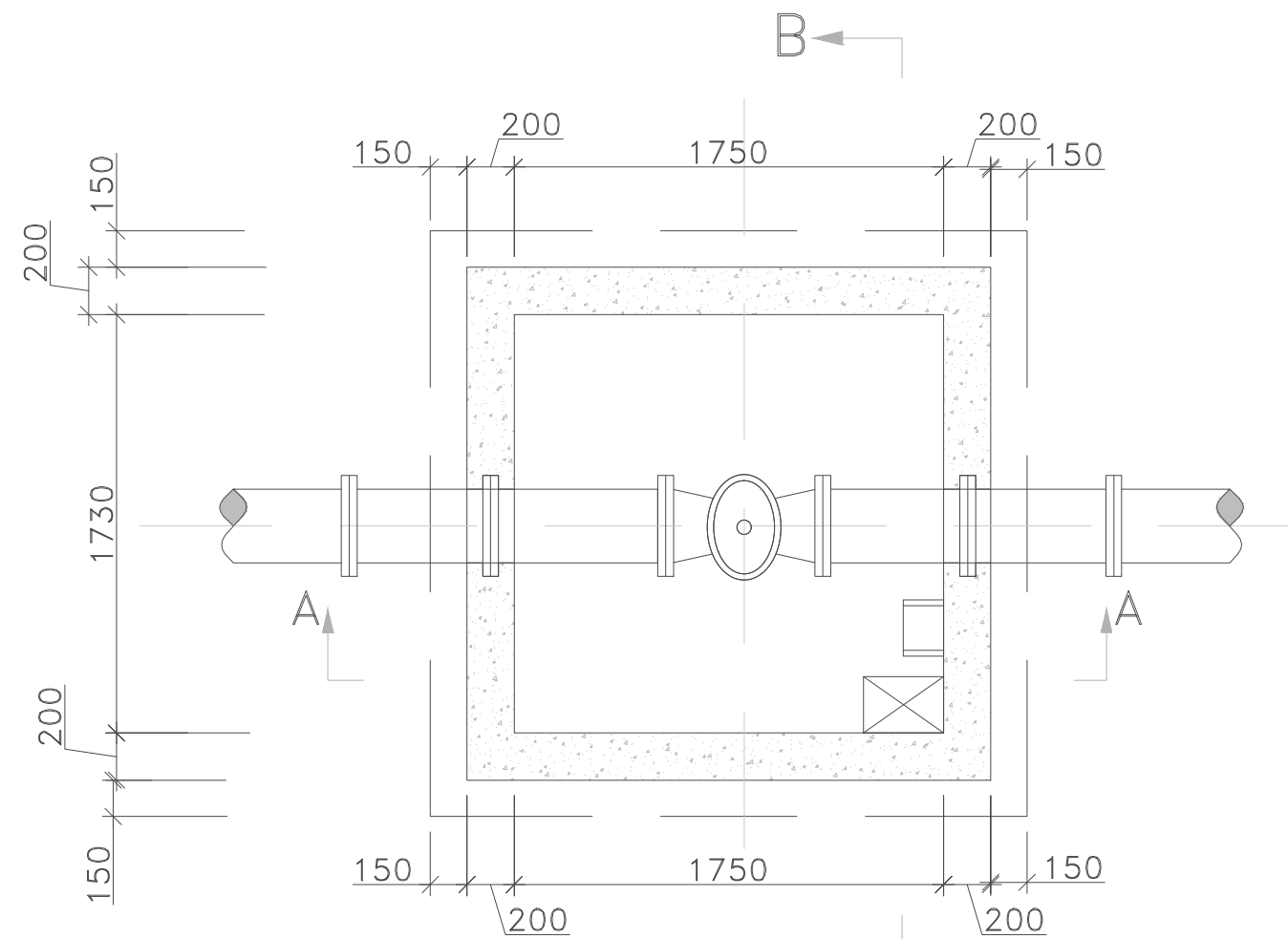
NOTES

1. CONCRETE GRADE = 25
2. STEEL GRADE = 43
3. SOIL BEARING CAPACITY(ASSUMED) = 100KN/m²
4. WIND LOADING CONDITIONS = 40m/s²
5. ELECTRODE: A for 3.10/4.00mm
5mm thick fillet weld on body panels
10mm thick butt welding on base.

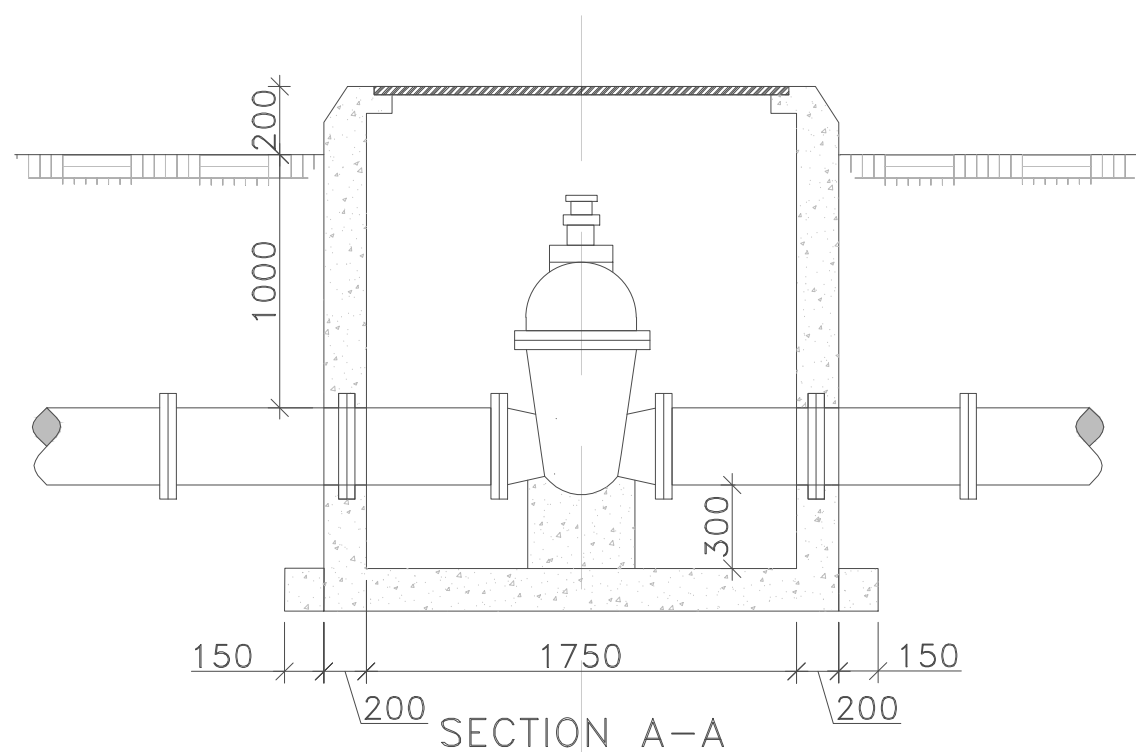
PAINTING

- a. Internal section of tank with 1 coat of epoxy primer followed by 2 coats asphaltine paint.
- b. External surface of tank including the access ladder and ventilation beams with red oxide base followed by 2 coats of HR aluminum paint (5200)

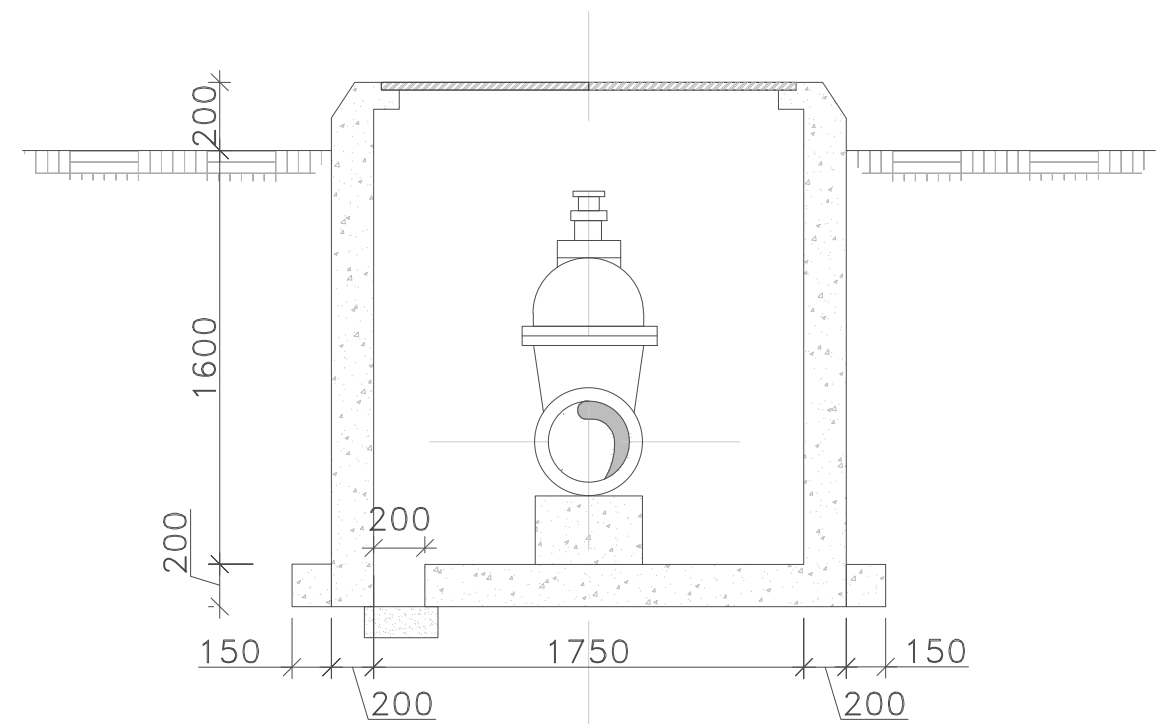
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	CONSULTANT	KONSADEM ASSOCIATES LTD Engineers & Consultants 30, Onitsha Layout, P.M. B. 8478, Ibadan, NIGERIA. E-mail: konsadem@gmail.com		ZML CONSULTING NIGERIA LTD Office 8, 85-Clase Off 89(A) Road Gwarinpa Abuja.	GANGARASO SANGASSUMI	GANGARASO ELEVATED STORAGE TANK 100 Cu.m) WATER TANK DETAILS	Drawn : Damola Traced : Checked : Engr Soji Date : MAY 2021	
				STATE		DRAWING NO. SCALE	Ref. No:	
				ADAMAWA		BB/BD/05	USAID/BAY/BU-00	



PLAN GATE VALVE IN FULL SIZE BOX



SECTION A-A



SECTION B-B

Mark :	Date :	Made by :	Revision

CLIENT:	USAID/MERCY CORPS
CONSULTANT	KONSADEM ASSOCIATES LTD Engineers & Consultants 30, Onireke Layout, P.M. B. 5478, Ibadan, NIGERIA. E-mail: konsadem@gmail.com
	ZML CONSULTING NIGERIA LTD Office 8, B1-Close Off 69(A) Road Gwarinpa Abuja.

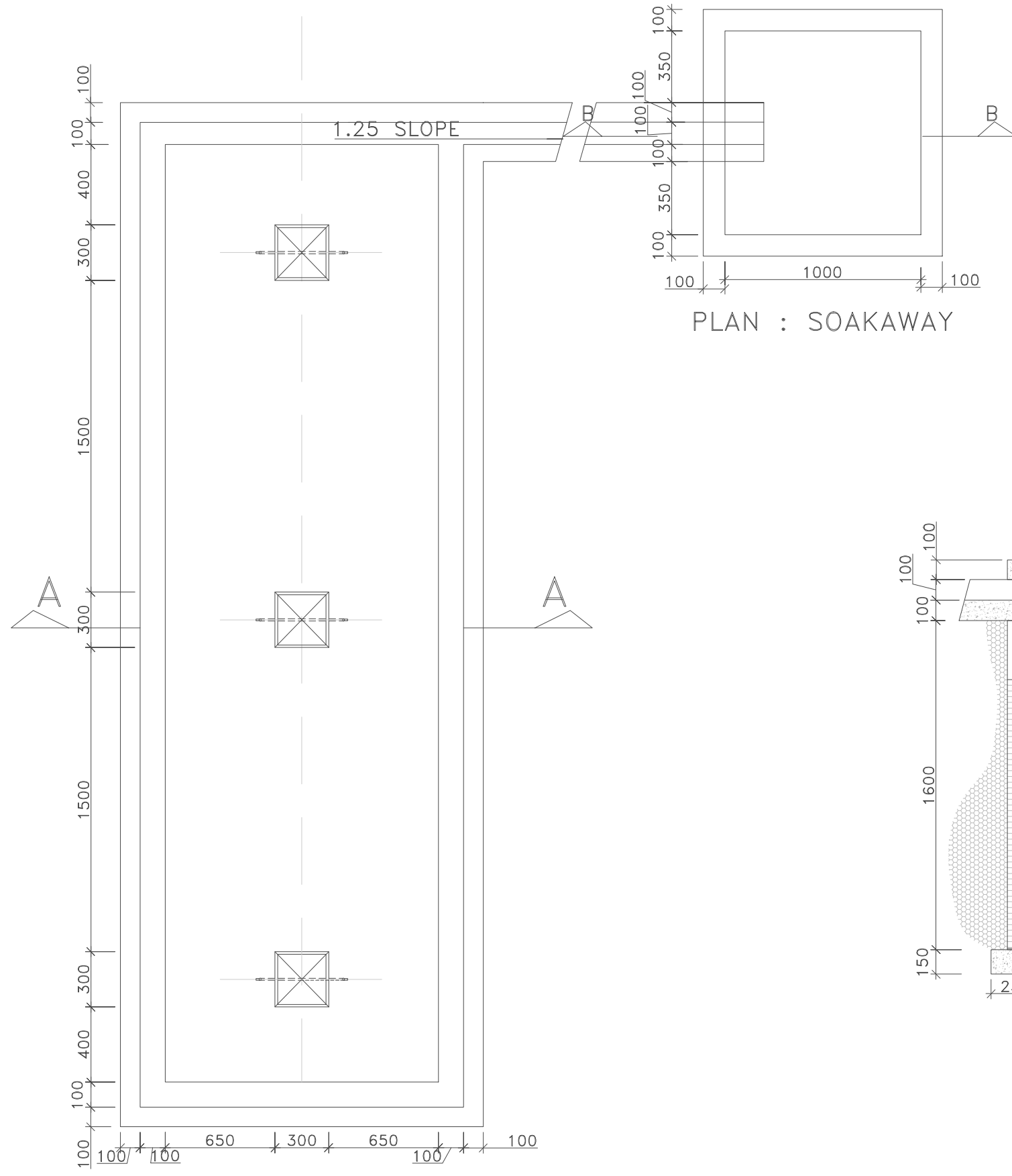


PROJECT	ENGINEERING DESIGN OF WASH FACILITIES ACROSS BORNO, ADAMAWA AND YOBE (BAY) STATES Service Contract No: YOL SC 14
STATE	ADAMAWA

SMALL TOWN	GANYE
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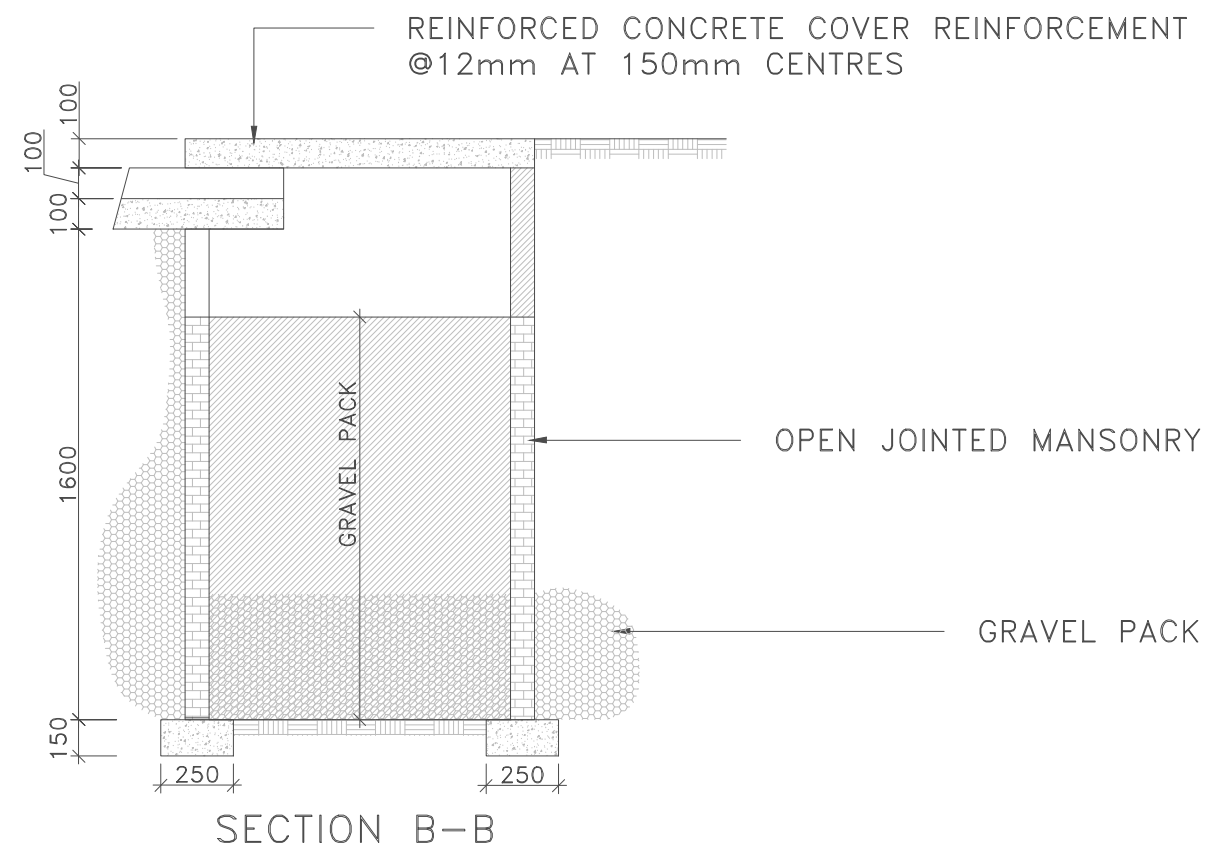
DRAWING TITLE	GANGARASO WATER SCHEME
	TYPICAL GATE VALVE DETAILS
DRAWING NO.	BB/TP/03
SCALE	

Designed:	Engr Soji	STAMP
Drawn :	Damola	
Traced :		
Checked :	Engr Soji	
Date :	MAY 2021	
Ref. No:	USAID/BAY/AD-GAN	



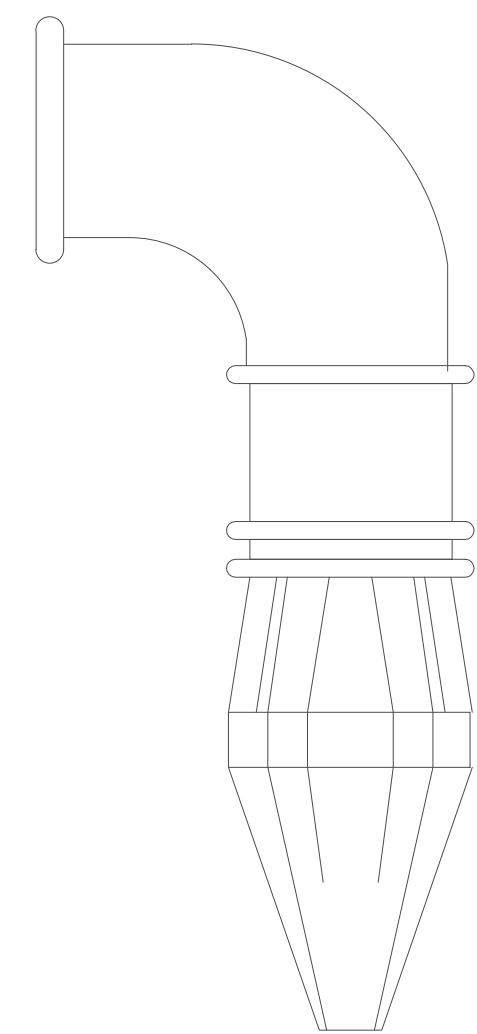
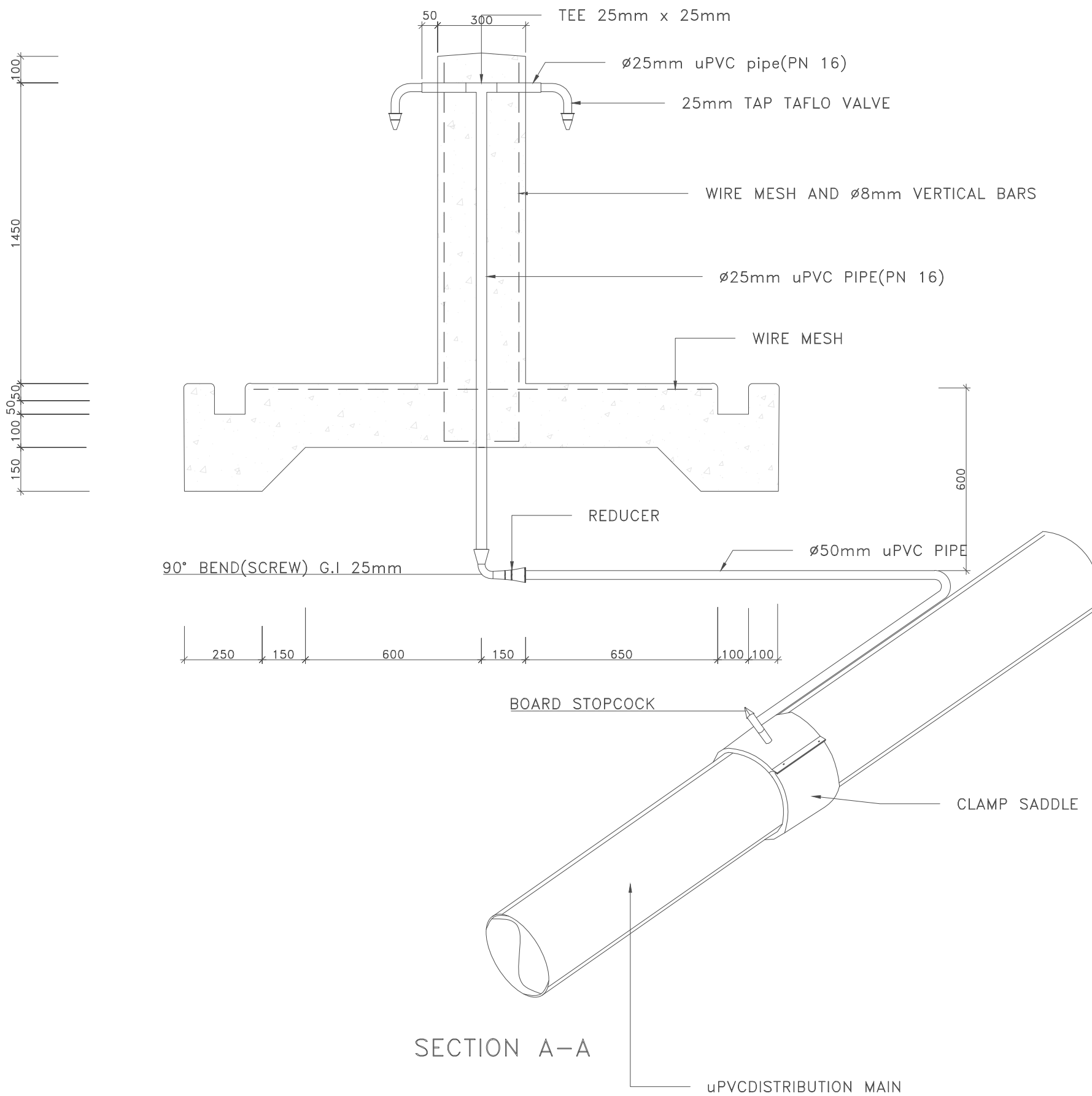
PLAN : SOAKAWAY

PLAN : PUBLIC STAND POST



SECTION B-B

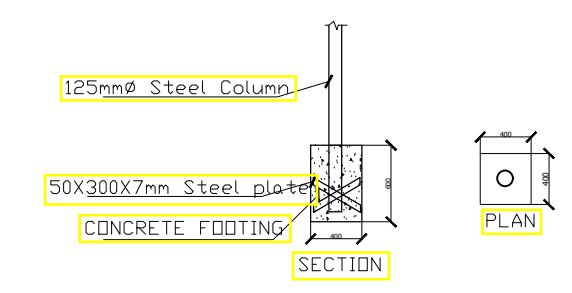
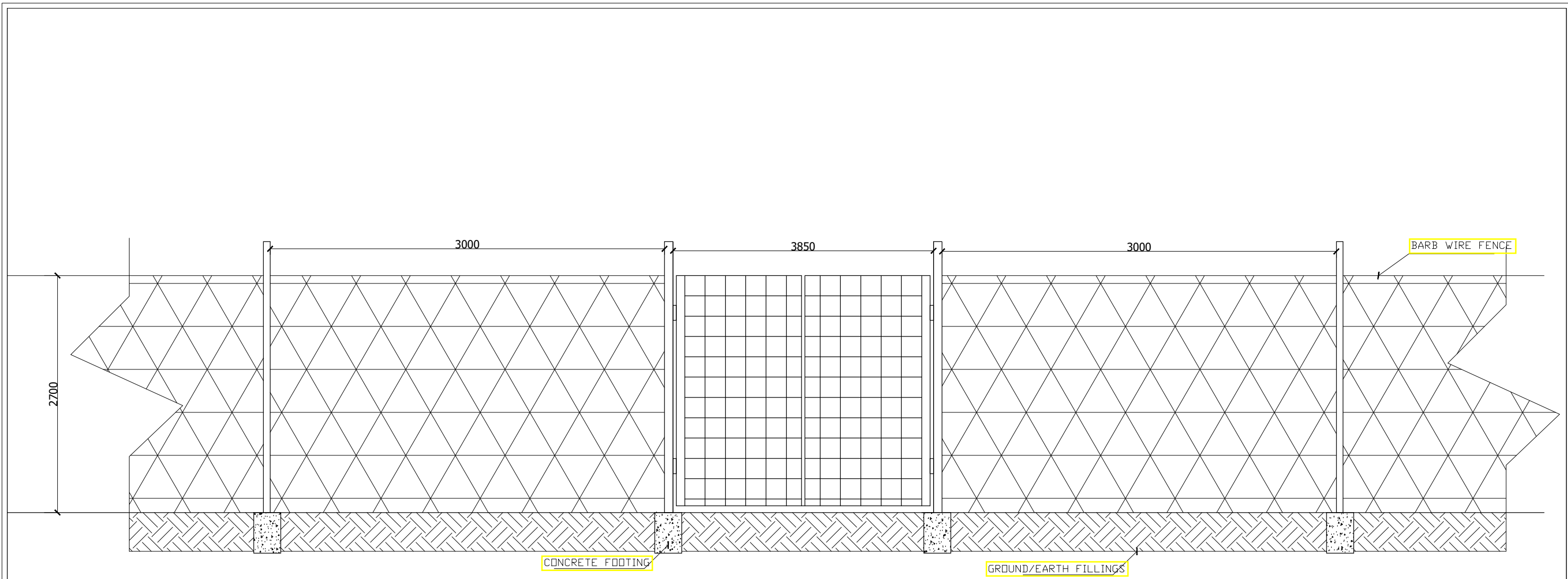
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	CONSULTANT	KONSADEM ASSOCIATES LTD <i>Engineers & Consultants</i> 30, Onireke Layout, P.M. B. 5478, Ibadan, NIGERIA. E-mail: konsadem@gmail.com		2ML CONSULTING NIGERIA LTD <i>Office 8, B1-Close Off 69(A) Road</i> Gwarinpa Abuja.	GANYE	GANGARASO WATER SCHEME TYPICAL PUBLIC STAND POST DETAILS	Drawn : Damola Traced : Checked : Engr Soji Date : MAY 2021	
				STATE		DRAWING NO.	Ref. No:	
				ADAMAWA		BB/TP/O4	USAID/BAY/AD-GAN	



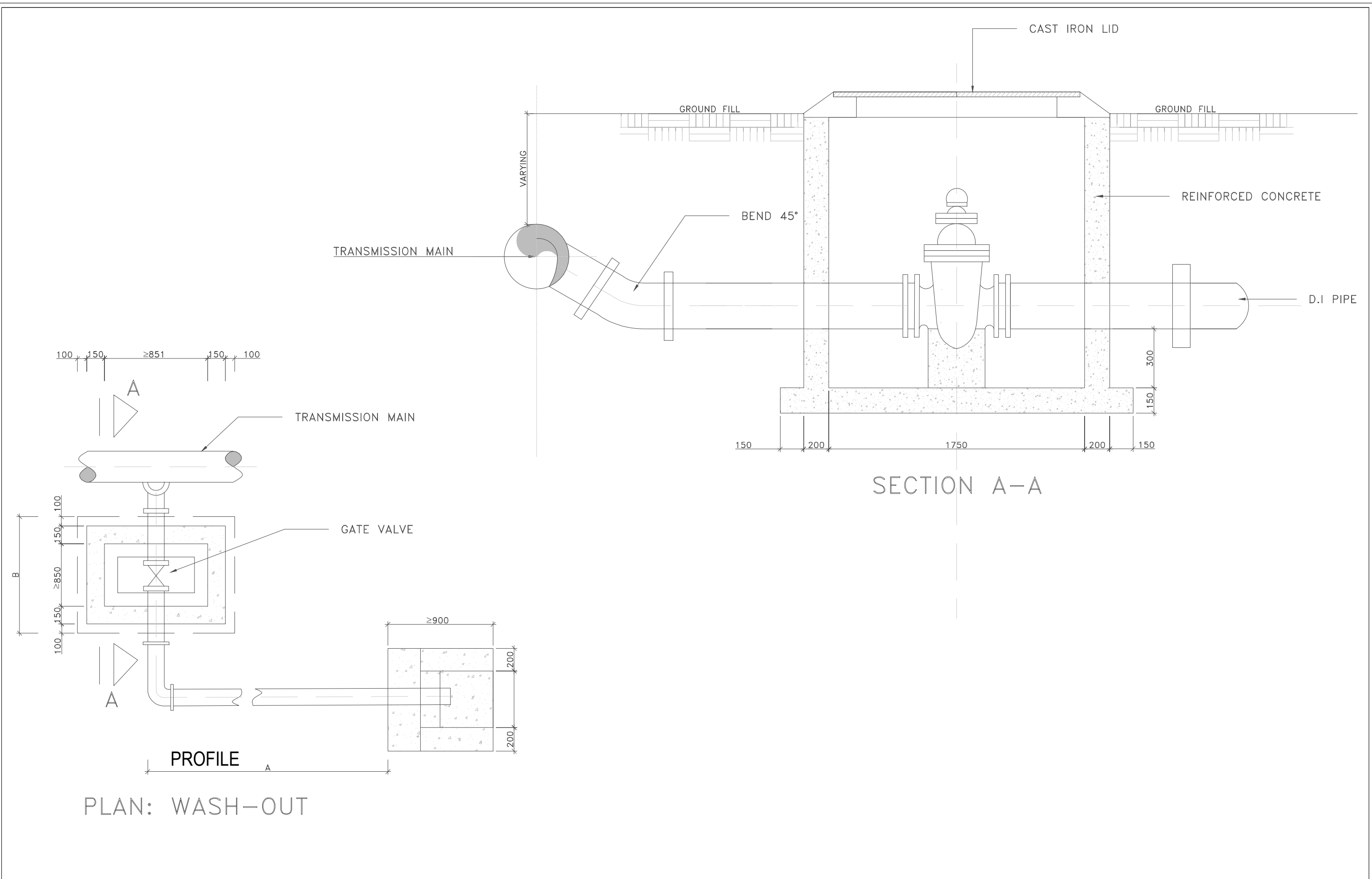
TAFLO TABLOT VALVE

SECTION A-A

Mark : Date : Made by : Revision	CLIENT:	USAID/MERCY CORPS		PROJECT	SMALL TOWN	DRAWING TITLE	Designed: Engr Soji	STAMP
	CONSULTANT	KONSADEM ASSOCIATES LTD Engineers & Consultants 30, Onireke Layout, P.M. B. 5478, Ibadan, NIGERIA. E-mail: konsadem@gmail.com		2ML CONSULTING NIGERIA LTD Office 8, B1-Close Off 69(A) Road Gwarinpa Abuja.	GANYE	GANGARASO WATER SCHEME TYPICAL PUBLIC STAND POST DETAILS	Drawn : Damola Traced : Checked : Engr Soji Date : MAY 2021	
				STATE		DRAWING NO.	SCALE	Ref. No:
				ADAMAWA		BB/TP/05		USAID/BAY/AD-GAN



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			STATE		DRAWING NO.	SCALE	Ref. No:
			ADAMAWA		BB/TP/06		USAID/BAY/AD-GAN



PLAN: WASH-OUT

Mark : Date : Made by : Revision	CLIENT:	USAID/MERCY CORPS		PROJECT	SMALL TOWN	DRAWING TITLE	Designed:	Engr Soji	STAMP
	CONSULTANT	KONSADEM ASSOCIATES LTD Engineers & Consultants 30, Onireke Layout, P.M. B. 5478, Ibadan, NIGERIA. E-mail:konsadem@gmail.com		2ML CONSULTING NIGERIA LTD Office 8, B1-Close Off 69(A) Road Gwarinpa Abuja,	GANYE	GANGARASO WATER SCHEME TYPICAL WASHOUT DETAILS	Drawn : Damola Checked : Engr Soji Date : MAY 2021		
				STATE		DRAWING NO.	SCALE	Ref. No:	
				ADAMAWA		BB/TP/07		USAID/BAY/AD-GAN	