

Terms of Reference (ToR)

FOR SUPPLYING STEEL BASIN/COUNTER FOR HSRP, NUWAKOT

Project Title	Health System Recovery Project, Nuwakot
Type of project	Health
Location	Bidur-04, Nuwakot
Name of the company/firm	External company/firm/supplier
Deadline of Bid submission	31 st August, 2018
Anticipated completion of project	30 th September, 2018

1.0 GENERAL INTRODUCTION

Good Neighbors International (GNI) Nepal has been working in Nepal since 2002 with the objective of improving lives of the poor people especially children through education, child protection, and income generating activities, health, WASH, and disaster risk reduction. GNI Nepal has been operating its activities in 20 districts.

GNI Nepal with support from the Korea International Cooperation Agency (KOICA) has been implementing Health System Recovery Project (HSRP) in two Municipalities and five Rural Municipalities of Nuwakot District since December 2015 with the major objective of improving the health status and psychosocial well-being of community members through post-disaster recovery. In total, 10 former VDCs of Nuwakot (Belkot, Charghare, Duipipal, Ghyangphedi, Likhu, Okharpauwa, Panchakanya, Ratmate, Suryamati and Thaprek) are the working areas of HSRP.

One of the major objectives of the project is to recover and making functional health facilities to strengthen the quality health services. Ten health posts district are being constructed in Nuwakot under KOICA fund. As some of health posts have been completed and handed over to HFOMC/DPHO and other are near to complete. GNI Nepal/HSRP Nuwakot has responsibility to supply required medical equipment and furniture.



2.0 OBJECTIVES

There is a need to supply a steel basin/counter at Sluice room of HP building which was missed in original estimation of HP building construction. The objective of this assignment is to supply and install steel counter in Sluice Room of newly constructed HP building.

3.0 SCOPE OF THE WORK

Selected firm/company/supplier is expected to deliver the following;

- 1. Manufacture steel basin/counter as per specified design and specification and dimensions of basin as per site conditions.
- 2. Physical Verification and getting approval of basin/counter from representative of GNI
- 3. Supply 10 steel counters/basins- One steel basin/counter to each health post with necessary fittings as detailed in the design drawing.
- 4. Provide maintenance and after sales services if required

The specifications and design is mentioned in 'Basic and Detailed Drawings'.

4.0 BIDDING DOCUMENTS

The Scope of Work, Bidding Procedures and Contract Terms are described in TOR. The bidder is expected to examine the bidding Documents, including TOR. Failure to furnish all information required by the Bidding Documents or submission of a Bid not substantially responsive to the Bidding Documents in every aspect may result in the rejection of the Bid.

5. PREPARATION OF BID

5.1 Language of Bid

The bid prepared by the bidder, and all correspondence and documents relating to the Bid exchanged by the bidder and the purchaser, shall be written either in English or Nepali Language.

5.2 Documents Comprising the Bid

The Bid prepared and submitted by the Bidder shall comprise the following components:

Bid Form & other Schedules (STRICTLY AS PER FORMAT) and Technical Data Sheets completed as per Technical Specification.

5.3 Bid Price

5.3.1 Bidders shall quote for the entire scope of supply with a breakdown of prices for individual items. The total Bid price shall also cover all the supplier's obligations mentioned in or reasonably



to be inferred from the bidding documents in respect of design, supply, transportation to site, all in accordance with the requirement of bidding documents. The bidder shall complete the appropriate price schedules included herein, stating the unit price for each item & total price.

- 5.3.2 The prices offered shall be inclusive of all costs as well as duties, Taxes and during execution of the supply work, break up of price constituents, should be there.
- 5.4.5 Prices quoted by the bidder shall be "Firm" and not subject to any price adjustment during the performance of the contract. A bid submitted with an adjustable price quotation will be treated as non-responsive and rejected.

5.4 Bid Currencies

Prices shall be quoted in only Nepalese Rupees both in numbers and in words.

5.5 Period of Validity of Bid

- 5.5.1 Bids shall remain valid for 365 days from the date of opening of the bid.
- 5.6.2 The purchaser may solicit the bidder's consent to an extension of the period of bid validity. The request and the responses thereto shall be made in writing by Fax/e-mail.

5.7 Format and Signing of Bid

- 5.7.1 The original copy of the bid shall be typed or written in indelible ink and shall be signed by the bidder or a person or persons duly authorized to sign on behalf of the bidder. Such authorization shall be indicated by written power-of-Attorney accompanying the bid.
- 5.7.2 The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the bidder, in which case such corrections shall be initialed by the person or persons signing the bid.

6.0 SUBMISSION OF BIDS

6.1 Sealing and Marking of Bid

6.1.1 Bid submission: Original Copy (hard copies) of all the Bid Documents shall be sealed and submitted to the Purchaser before the closing time for submission of the bid.

All the envelopes should bear the Name and Address of the Bidder and marking for the Original Copy. The envelopes should be super scribed with "Bid for supplying Steel counter/basin for HSRP, Nuwakot".

6.1.2 The Bidder has the option of sending the bids in person. Bids submitted by Telex/Telegram/Fax will not be accepted.

Each Bidder shall submit only one Bid either by itself, or as a partner in a Joint Venture. A Bidder who submits or participates in more than one Bid will cause all those Bids to be rejected.



6.2 Late Bids

Any Bid received by GNI-Nepal/ HSRP Nuwakot after the deadline for submission of Bids will be declared "Late" or "Rejected" and will not be included in further selection process.

7.0 EVALUATION OF BID

7.1 Process to be Confidential

Information relating to the examination, clarification, evaluation and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process. Any effort by a Bidder to influence the Purchaser's processing of Bids or award decisions may result in the rejection of the Bidder's Bid.

7.2 Clarification of Bids

To assist in the examination, evaluation and comparison of Bids, the Purchaser may, at its discretion, ask the Bidder for a clarification of its Bid. All responses to requests for clarification shall be in writing and no change in the price or substance of the Bid shall be sought, offered or permitted.

8.0 PRELIMINARY EXAMINATION OF BIDS / RESPONSIVENESS

- 8.1 Purchaser will examine the Bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the Bids are generally in order.
- 8.2 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price per item that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price per item will be corrected. If there is a discrepancy between the Total Amount and the sum of the total price per item, the sum of the total price per item shall prevail and the Total Amount will be corrected.
- 8.3 Prior to the detailed evaluation, Purchaser will determine the substantial responsiveness of each Bid to the Bidding documents including production capability and acceptable quality of the Goods offered. A substantially responsive Bid is one, which conforms to all the terms and conditions of the Bidding Documents without material deviation.
- 8.4 A Bid determined as not substantially responsive will be rejected by the Purchaser.

9.0 EVALUATION AND COMPARISON OF BIDS

The evaluation of Bids shall be done based on the delivered cost competitiveness basis and bidder's experiences in similar supplies.



10. 0 PROCESS TO AWARD THE CONTRACT

10.1 CONTACTING THE PURCHASER

10.1.1 From the time of Bid opening to the time of contract award, if any Bidder wishes to contact the Purchaser on any matter related to the Bid, it should do so in writing.

10.1.2 Any effort by a Bidder to influence the Purchaser and / or in the Purchaser's decisions in respect of Bid evaluation, Bid comparison or Contract Award, will result in the rejection of the Bidder's Bid.

11.0 THE PURCHASER'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS

The Purchaser reserves the right to accept or reject any Bid at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Purchaser's action.

12.0 THE PURCHASER'S RIGHT TO VARY QUANTITIES

The Purchaser reserves the right to vary the quantity i.e. increase or decrease the numbers/ quantities without any change in terms and conditions during the execution of the Order.

13.0 LETTER OF INTENT/ NOTIFICATION OF AWARD

The letter of intent / Notification of award shall be issued to the successful Bidder whose bids have been considered responsive, techno-commercially acceptable and evaluated to be the lowest. The successful Bidder shall be required to furnish a letter of acceptance within 5 days of issue of the letter of intent /Notification of Award by Purchaser.

14.0 DURATION

The successful bidder should start working in the scope of works immediately after signing the agreement. The supplier should supply and install steel counter/ basin within 15 days of purchase order.

15.0 BUDGET AND MODE OF PAYMENT

The successful supplier shall submit budget sheet with detailed breakdown including applicable taxes at the time of proposal submission.

- a. The payment shall be made to the bank account of the company/firm
- b. The payment shall be made through Account Payee cheque.



HSRP project Office shall release 25% of the agreed amount as an advance upon signing the agreement. Upon delivery of all ordered materials in proper condition and quality and upon receipt of bills/invoices, the project office shall release the remaining amount.

16.0 GENERAL QUALIFICATION OF THE FIRM

All public, private and non-governmental organization/ firms/company registered under the authorized agency of the government of Nepal having the proven experience in the related field are eligible to submit the Bid.

The company/firm with expertise as outlined below

- a) Proven knowledge and experience of the work in relevant areas
- b) Ability to maintaining transparency and accountability
- c) Company/firm/supplier should have PAN, Company registration, VAT registration and Tax clearance certificates etc.

17.0 RESPONSIBILITIES OF THE COMPANY/FIRM

The company/firm will be responsible to accomplish the task outlined in this ToR and ensure the delivery of outputs stated above within the agreed budget and timeline.

18.0 RESPONSIBILITIES OF GNI Nepal/ HSRP PROJECT OFFICE Nuwakot

Remaining within the policies and practices of organizations involved in process, its primary responsibility is to help company/firm to achieve the objective of this TOR.

19.0 DOCUMENTS TO BE SUBMITTED BY THE BIDDER

- a. A copy of company/firm registration
- b. A copy of Tax clearance certificate(latest)
- c. VAT and PAN registration
- d. Audit Report (latest)
- e. Organization's profile
- f. Statements and documents, if any, acknowledging the individual and/or company's capability for carrying out the similar kind of services
- g. Testimonials/ References
- h. Any other relevant documents



20.0 MANAGEMENT OF THE WORK

The selected company/firm shall manage the assignment and be accountable for the timely delivery of the expected quality service. The selected company/firm shall perform task in coordination with HSRP, Nuwakot.

21.0 TERMINATION OF THE CONTRACT

The agreement, if the company/firm commits a breach in the performance or observance of any of its obligations under this ToR. The company/firm shall be notified in written form seven days prior to the termination of the agreement.

22.0 CONFIDENTIALITY

During the performance of the assignment or any time after expiry or termination of the agreement, the company/firm shall not disclose to any person or otherwise make use of any confidential information which the company/firm has obtained or may obtain in the course of the project to the consortium, the respondents or otherwise.

23.0 HOW TO SUBMIT THE PROPOSAL/BID

The proposal/bid should reach the address below via courier or hand delivery by the 31 August, 2018, 17 hrs (Local Time). Please, enclose the proposal in an envelope, **do seal** and mark it with "ITB for Supplying Steel Counter/Basin for HSRP, Nuwakot" and send to:

Health System Recovery Project

Good Neighbors International Nepal Bidur- 4, Nuwakot

Good Neighbors International Nepal

Ekantakuna-13, Lalitpur GPO Box 8975, EPC 1605 Kathmandu, Nepal



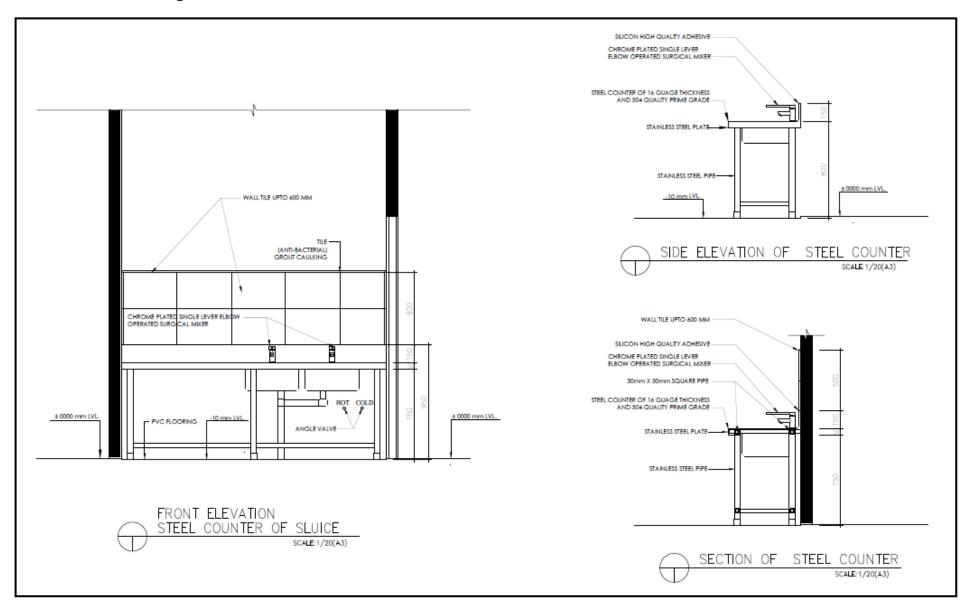
Or

Annex 1: List of Health Posts

S.N.	Name of Health Post	Rural/Municipality	VDC (former)	Estimated travel time (vehicle)- from Bidur	Road condition
1	Charghare HP	Bidur Municipality-12	Charghare	1 hour	Off road
2	Ratmate HP	Belkotgadhi Municipality-7	Ratmate	1 hour	Black topped
3	Panchakanya 1	Panchakanya R. Municipality-3	Panchakanya	3 hours	Off road
4	Belkot HP	Belkotgadhi Municipality-11	Belkot	1.5 hour	Black topped
5	Sisdol HP	Kakani R. Municipality-1	Okharpauwa	3 hours	Black topped
6	Sallemaidan HP	Shivapuri R. Municipality-3	Likhu	3 hours	Off road
7	Panchakanya HP	Panchakanya R. Municipality-3	Panchakanya	3 hours	Off road
8	Thaprek HP	Panchakanya R. Municipality-4	Thaprek	3 hours	Off road
9	Ghyangfedi HP	Dupcheshwor R. Municipality-1	Ghyangfedi	4 hours	Off road
10	Suryamati HP	Likhu Rural Municipality-3	Suryamati	1 hour	Semi-off road



Annex 2 Architectural Design of Steel Basin







Health System Recovery Project, Nuwakot Bidding form

Name of firm:

CNI	Daytiaulaya	Required	Size (LxBxH)	Considerations	Rate (Inc	lusive of taxes)	Domonico
SN	Particulars	quantity	Size (LXBXII)	Specifications	In figure	In words	Remarks
1	Steel Basin/Counter	10	2200 x 600 x 800 + 150 (It may vary depending upon site locations. (0-5)% from designed dimensions)	As per detailed design drawing In Post Disaster Reconstruction of Health Post Buildings Nuwakot, Nepal Basic and Detailed Drawings			
2	Delivery cost	10 health posts					



Post Disaster Reconstruction of Health Post Buildings Nuwakot, Nepal Basic and Detailed Drawings

26 October 2017





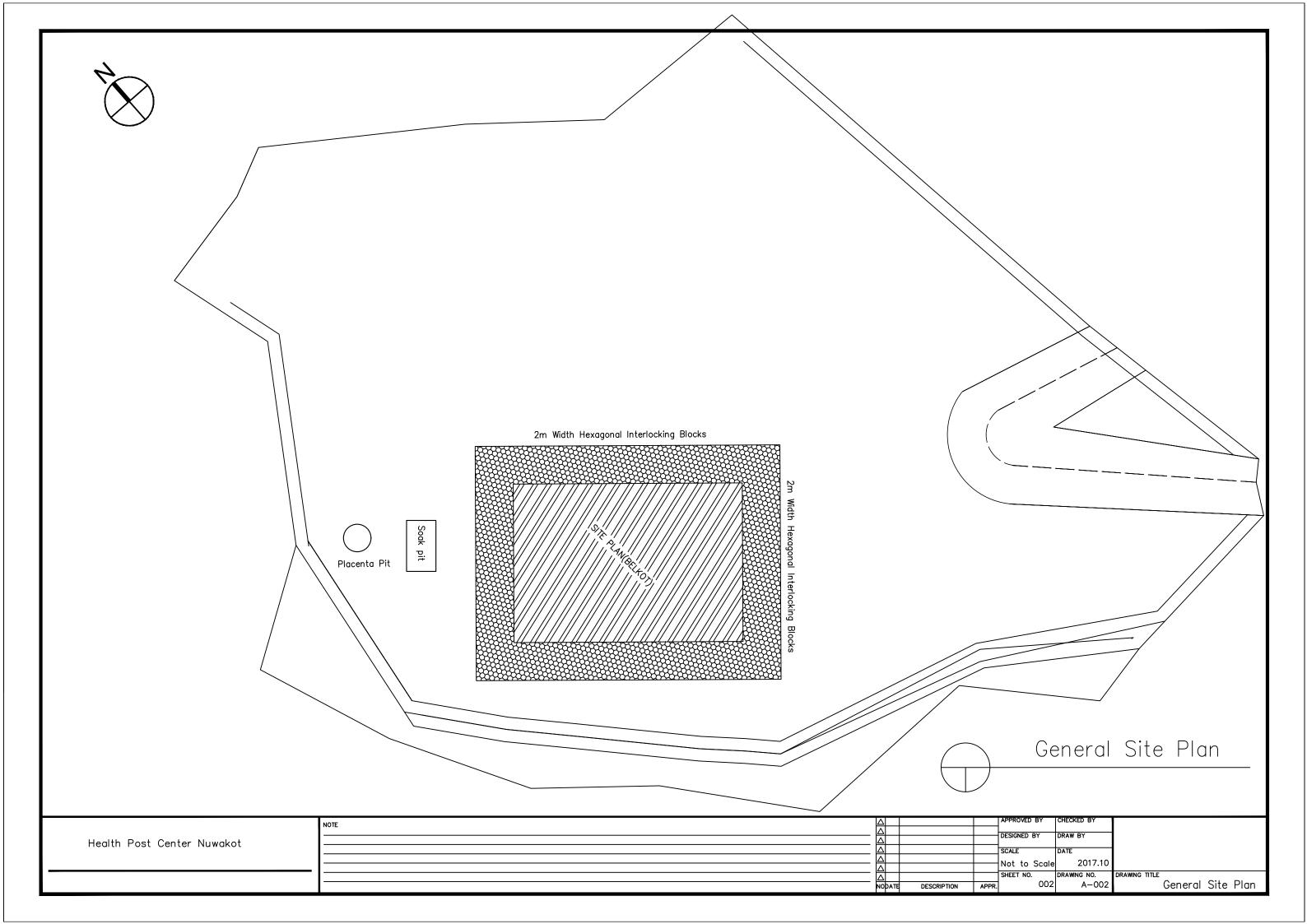
■ Finishing Materials Table

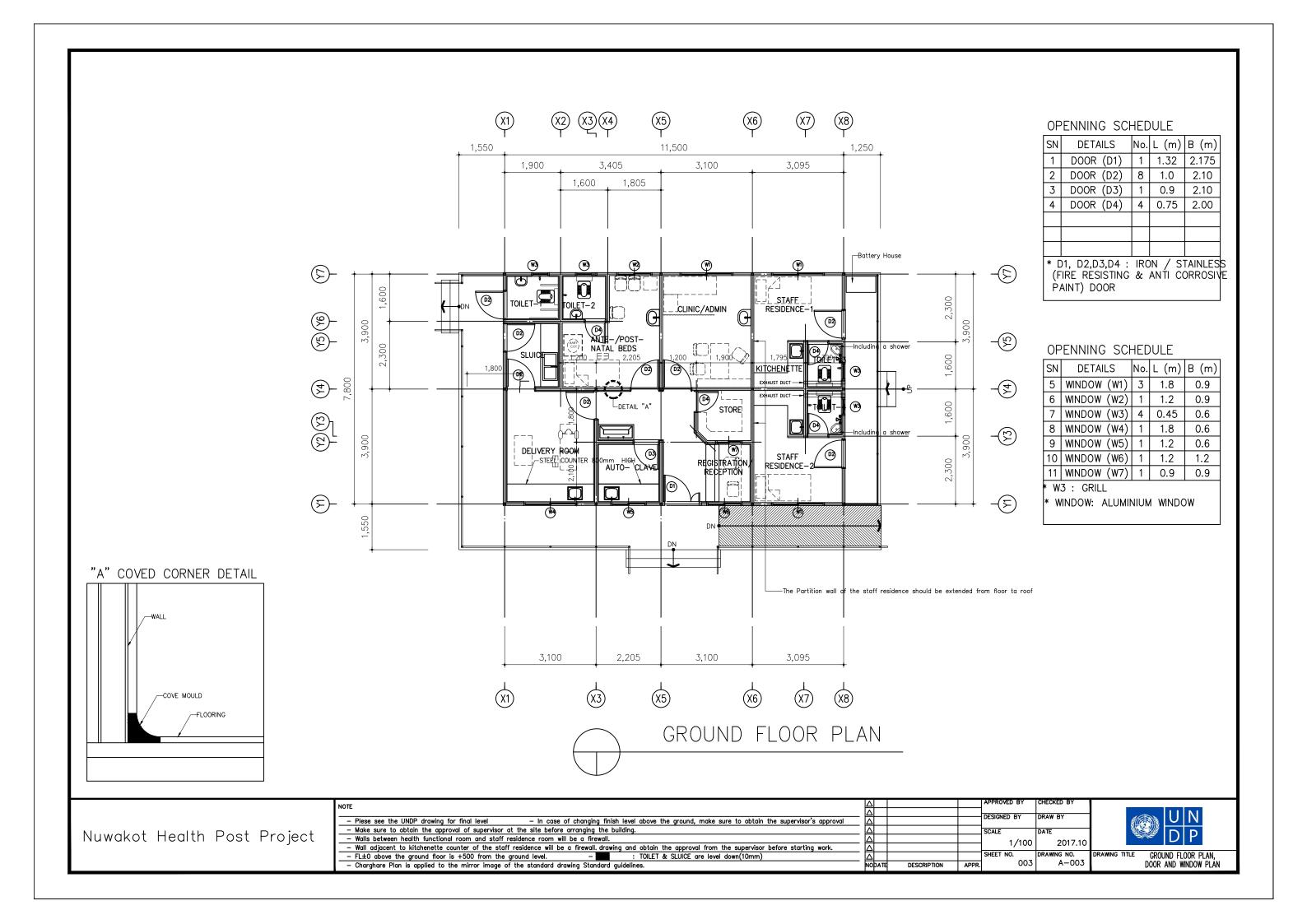
			Floor				Baseboard			Wall		Ceiling						
Room NO.	Room Name	Based on	Finish	Detail No.	Remark	Based on	Finish	Detail No.	Remark	Based on	Finish Detail.	Remark	Based on	Finish	Detail. No.	Ceiling Height	Remark	Remarks
101	REGISTRATION/ RECEPTION	Cement mortar	Floor Tile			-	Tile		-	Glass wool	Tile	H=1,365	'ST'L - 20*20*1.6	Gypsum boards		2,300		
102	STORE	Cement mortar	PCC Punning			-	-		-	Glass wool	Paint		'ST'L - 20*20*1.6	Gypsum boards		2,300		,
103	AUTO- CLAVE	Cement mortar	PVC Flooring (Welded Joint)			-	Coved corner		-	Glass wool	Tile	H=1,550	'ST'L - 20*20*1.6	Gypsum boards		2,300		
104	CLINIC/ADMIN	Cement mortar	PVC Flooring (Welded Joint)			-	Coved corner		-	Glass wool	Paint		'ST'L - 20*20*1.6	Gypsum boards		2,300		,
105	ANTE-/POST- NATAL BEDS	Cement mortar	PVC Flooring (Welded Joint)			_	Coved corner		-	Glass wool	Paint		'ST'L - 20*20*1.6	Gypsum boards		2,300		
105–1	TOILET-2	Penetration equation liquid water/ gradient mortar	Floor Tile			-	Tile		-	Glass wool	Tile	H=1,500	'ST'L - 20*20*1.6	Gypsum boards		2,300		
106	DELIVERY ROOM	Cement mortar	PVC Flooring (Welded Joint)			_	Tile Anti Bacterial Tile Grout (Epoxy Based)		-	Glass wool	(T) Antibacterial Paint (B) Antibacterial Tile	H=1,550	'ST'L - 20*20*1.6	PVC Ceiling		2,300		
107	SLUICE	Cement mortar	PVC Flooring (Welded Joint)			_	Tile Anti Bacterial Tile Grout (Epoxy Based)		-	Glass wool	(T) Antibacterial Paint (B) Antibacterial Tile	H=1,550	'ST'L - 20*20*1.6	Gypsum boards		2,300		
108	TOILET-1	Penetration equation liquid water/ gradient mortar	Floor Tile			_	Tile		-	Glass wool	Tile	H=1,500	'ST'L - 20*20*1.6	Gypsum boards		2,300		
201	STAFF RESIDENCE-1	Cement mortar	PVC Flooring (Welded Joint)			-	-		-	Glass wool	Paint		'ST'L - 20*20*1.6	Gypsum boards		2,300		
201–1	TOILET-3	Penetration equation liquid water/ gradient mortar	Floor Tile			_	Tile		-	Glass wool	Tile	H=2,000	'ST'L - 20*20*1.6	Gypsum boards		2,300		
202	STAFF RESIDENCE-2	Cement mortar	PVC Flooring (Welded Joint)			_	-		-	Glass wool	Paint		'ST'L - 20*20*1.6	Gypsum boards		2,300		
202-2	TOILET-4	Penetration equation liquid water/ gradient mortar	Floor tile	-		-	Tile	-	-	Glass wool	Tile	H=2,000	'ST'L - 20*20*1.6	Gypsum Board		2,300		
	Passage and Ramp	White Cement Mortar	Terazzo															,

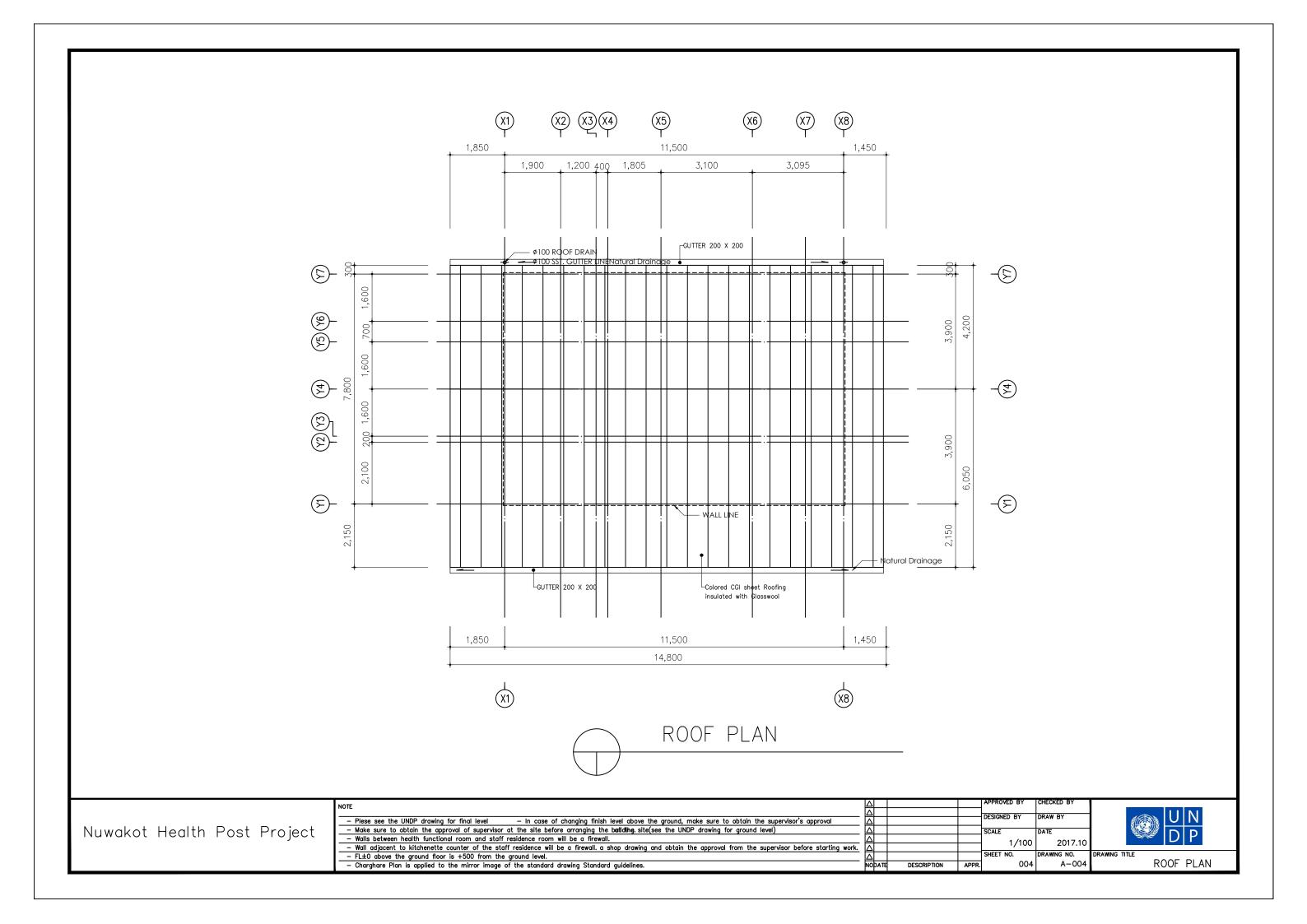
NOTE Please refer to the "Standard Guidelines for Post-Disaster Reconstruction of Health Buildings"

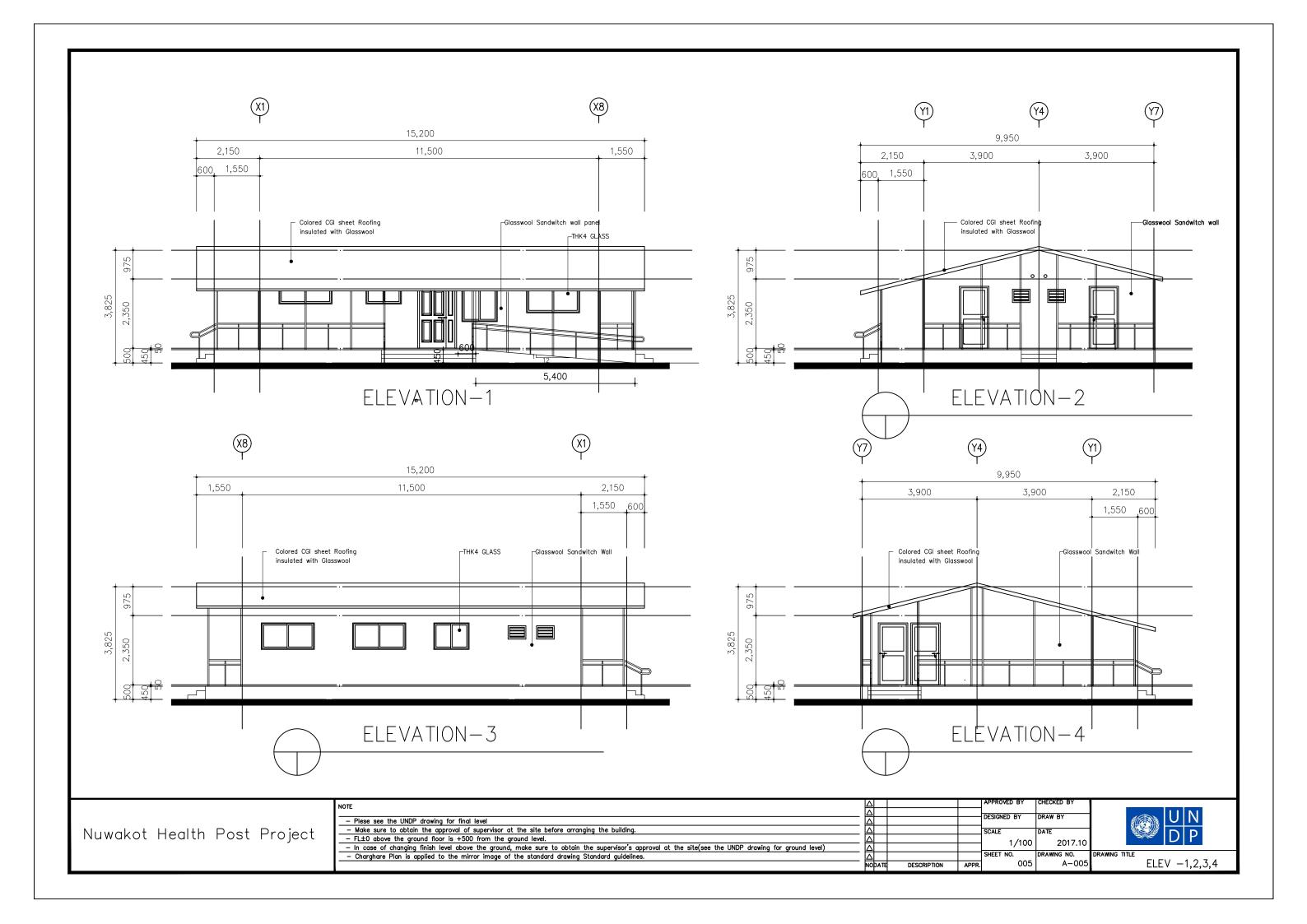
							\equiv
	NOTE			\neg	APPROVED BY	CHECKED BY	Г
	NOTE.			\neg		ļ	1
					DESIGNED BY	DRAW BY	ı
		Δ			SCALE	DATE	1
Nuwakot Health Post Project		Δ			NONE	2017.10	ı
		Δ					L
						DRAWING NO.	DI
		NODAT	T DESCRIPTION	ADDD	1 0011	A-001	

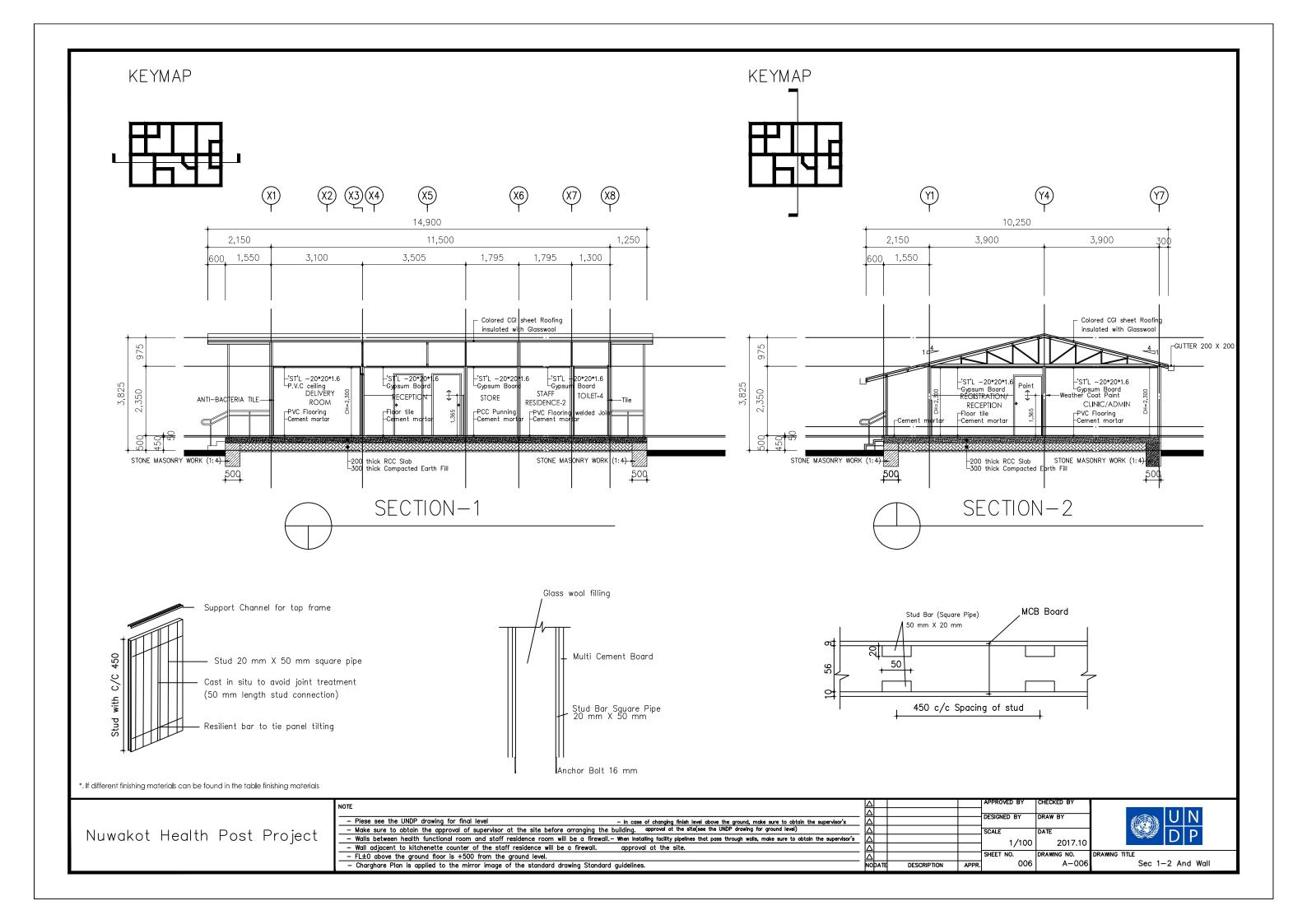
Finishing Materials Table

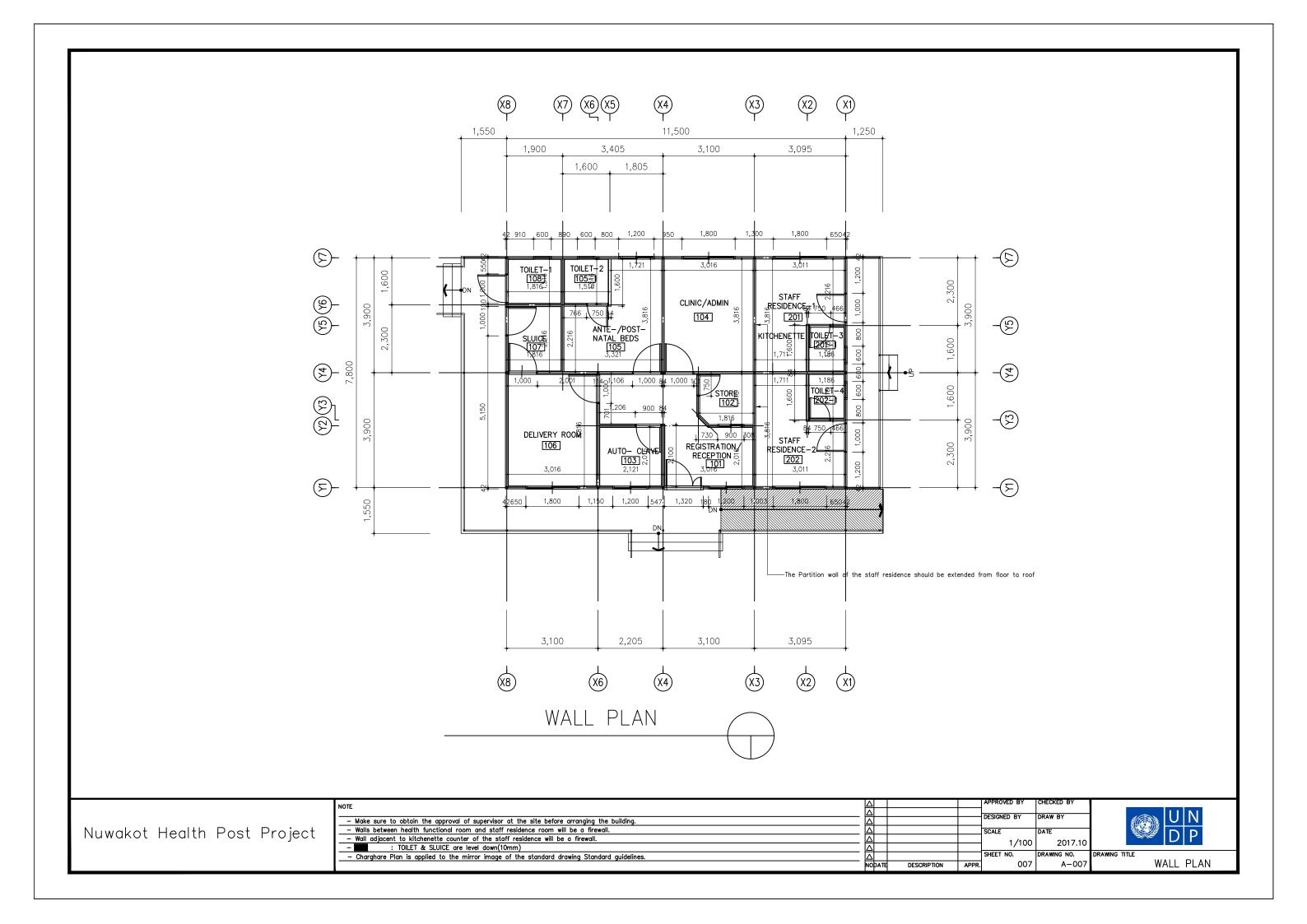


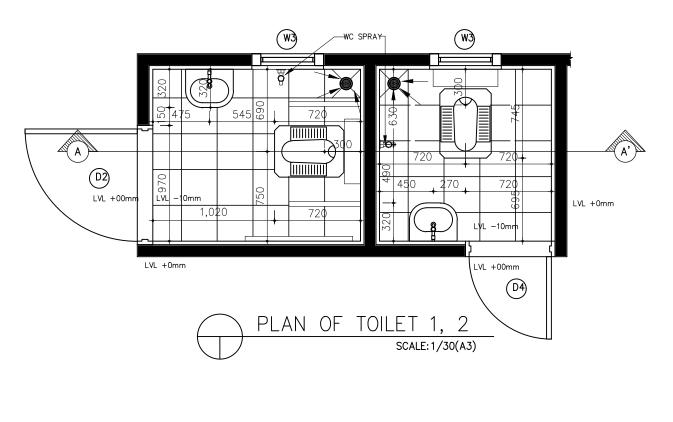


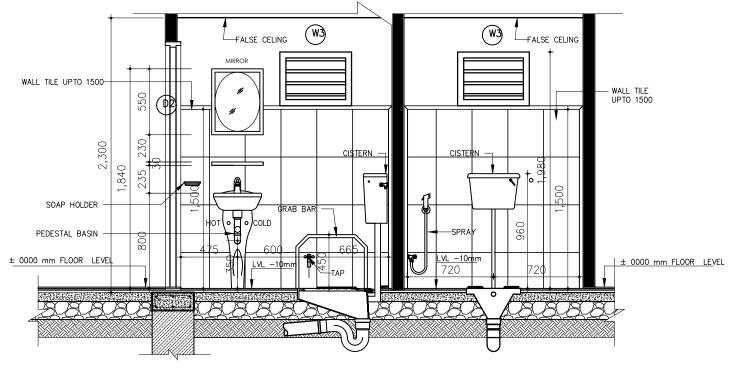


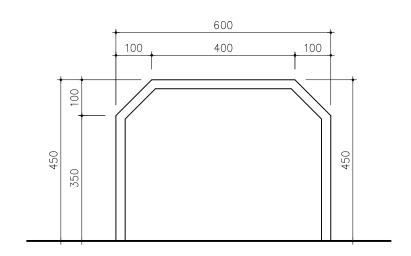




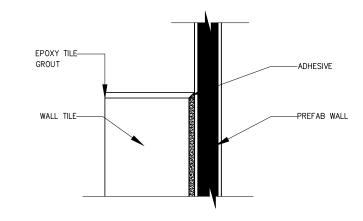












DETAIL AT JOINT OF TILES SCALE: 1/10(A3)



— Plese see the UNDP drawing for final level

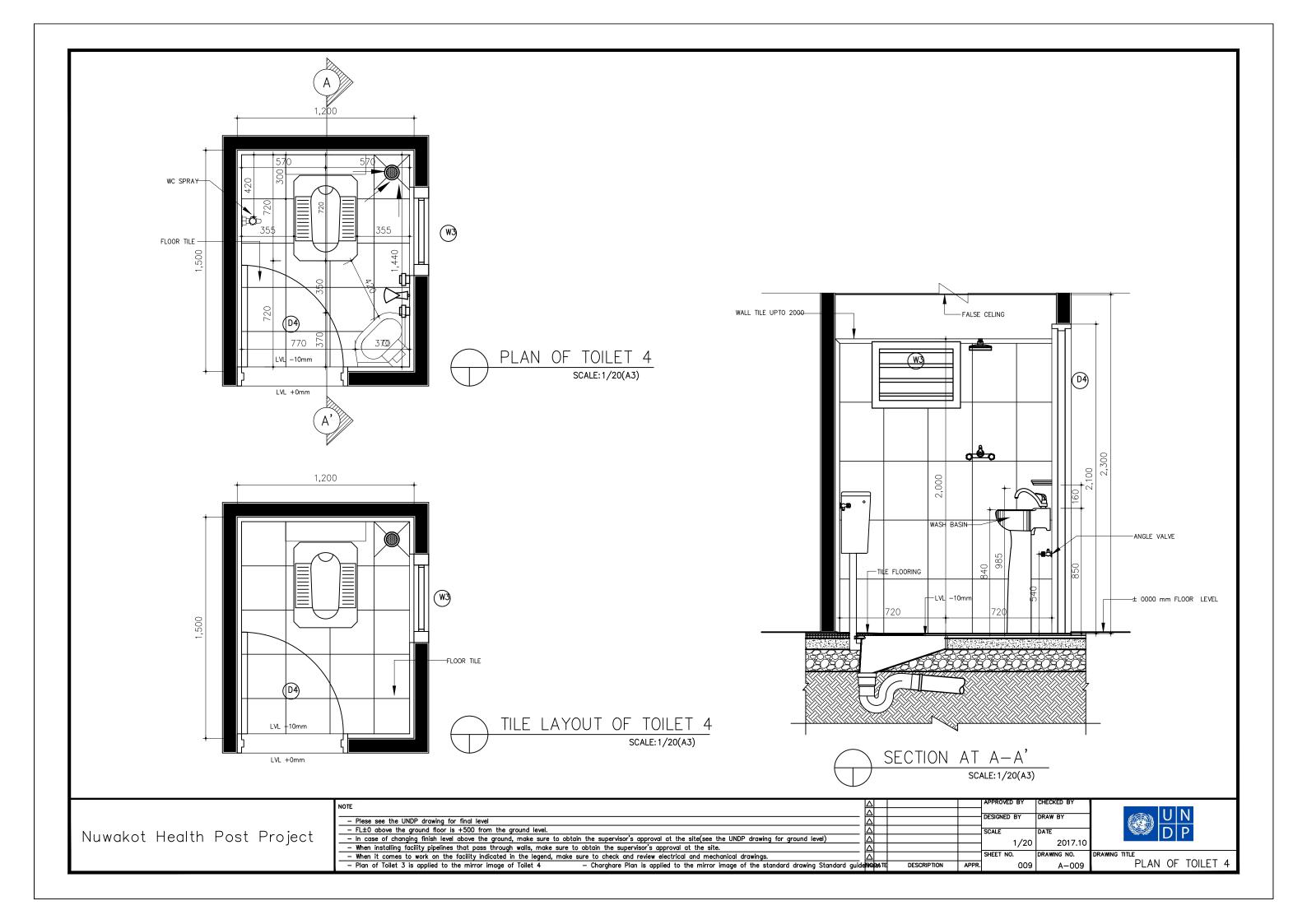
FL±0 above the ground floor is +500 from the ground level.

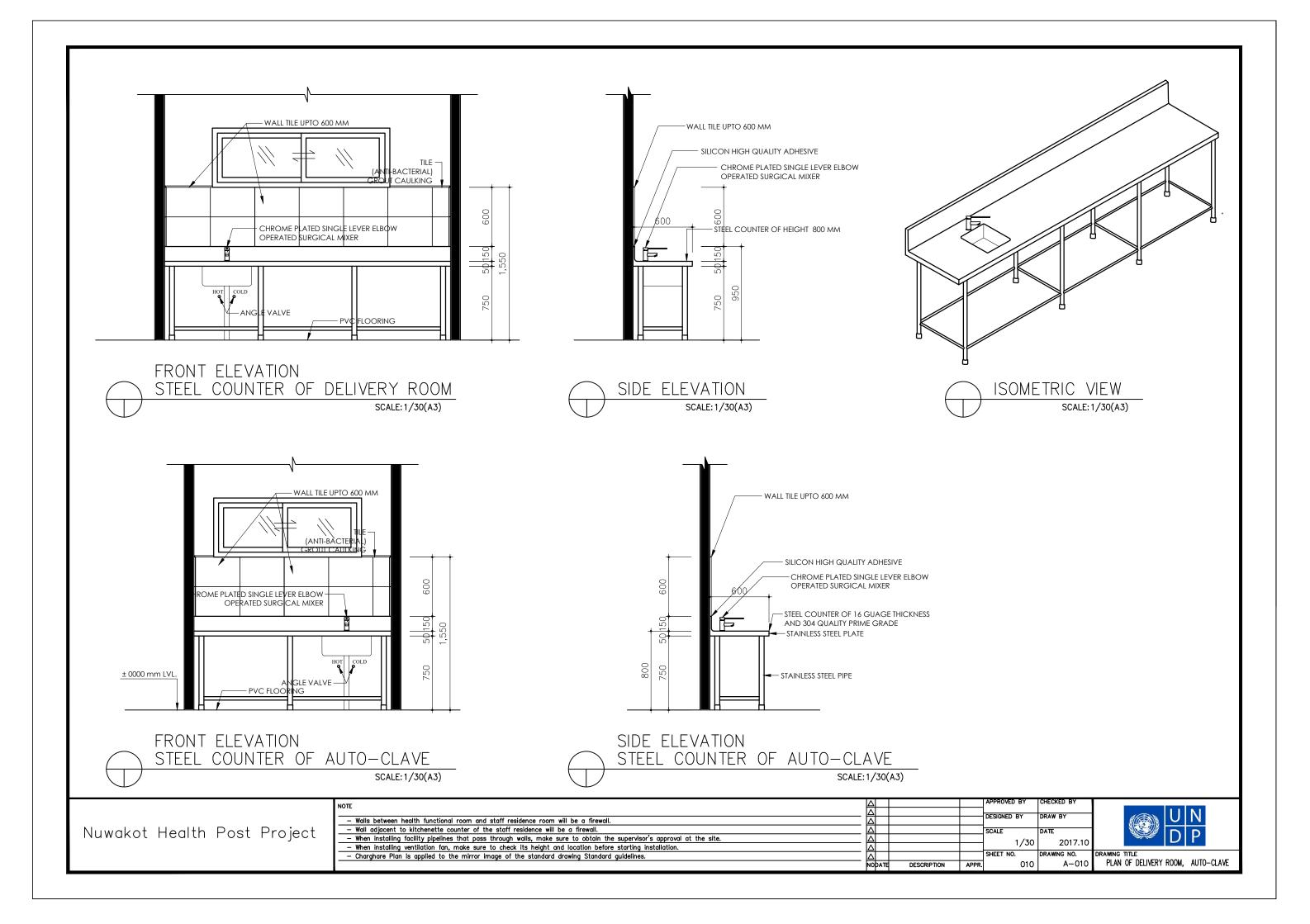
SECTION AT A-A'

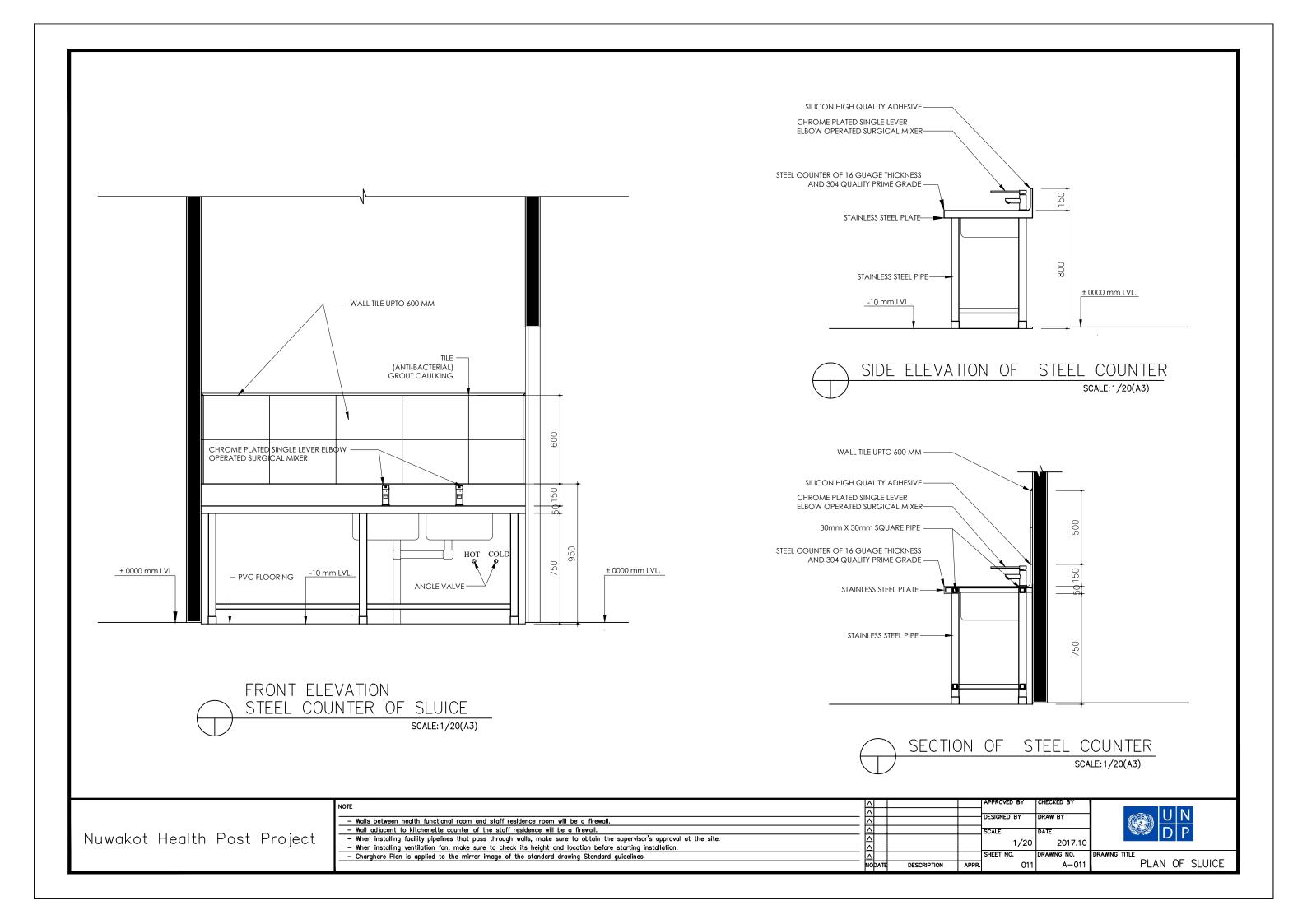
In case of changing finish level above the ground, make sure to obtain the supervisor's approval at the site(see the UNDP drawing for ground level)
 When installing facility pipelines that pass through walls, make sure to obtain the supervisor's approval at the site.
 When it comes to work on the facility indicated in the legend, make sure to check and review electrical and mechanical drawings.
 Charghare Plan is applied to the mirror image of the standard drawing Standard guidelines.

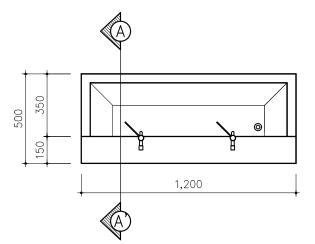
	Δ				APPROVED BY	CHECKED BY	Ī
_	Δ				DESIGNED BY	DRAW BY	
	Δ				DESIGNED BT	DRAW DI	
_	Δ				SCALE	DATE	
_	Δ				1/10,30	2017.10	
	Δ						L
_	Δ				SHEET NO.	DRAWING NO.	ľ
_	NO	DATE	DESCRIPTION	APPR.	800	A-008	





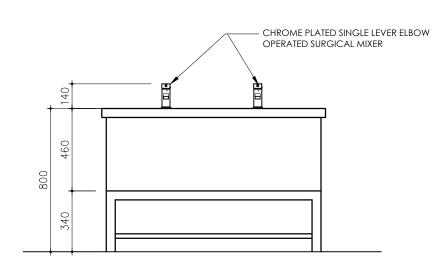




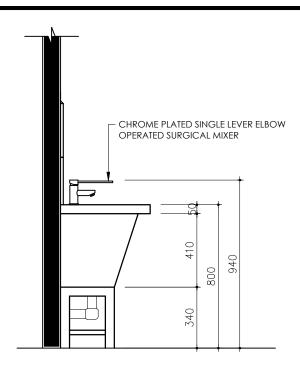


THE SPALSH MADE OF 304 QWALITY PRIME GRADE OF STAINLESS STEEL OF 16 GUAGE THICKNESS STAINLESS STEEL SINK , INNER SIZE 1200X500X525MM AND AND SINK MIXER WITH STAND ALL COMPLETE SET.

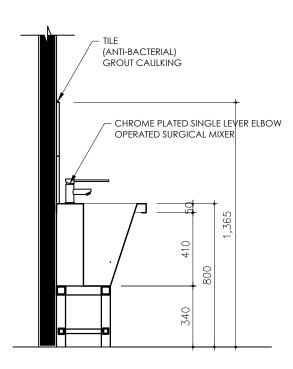














Elbow Operating Tap is applicable for Delivery Room and Scrub Sink

Nuwakot Health Post Project

- Walls between health functional room and staff residence room will be a firewall.

- Wall adjacent to kitchenette counter of the staff residence will be a firewall.

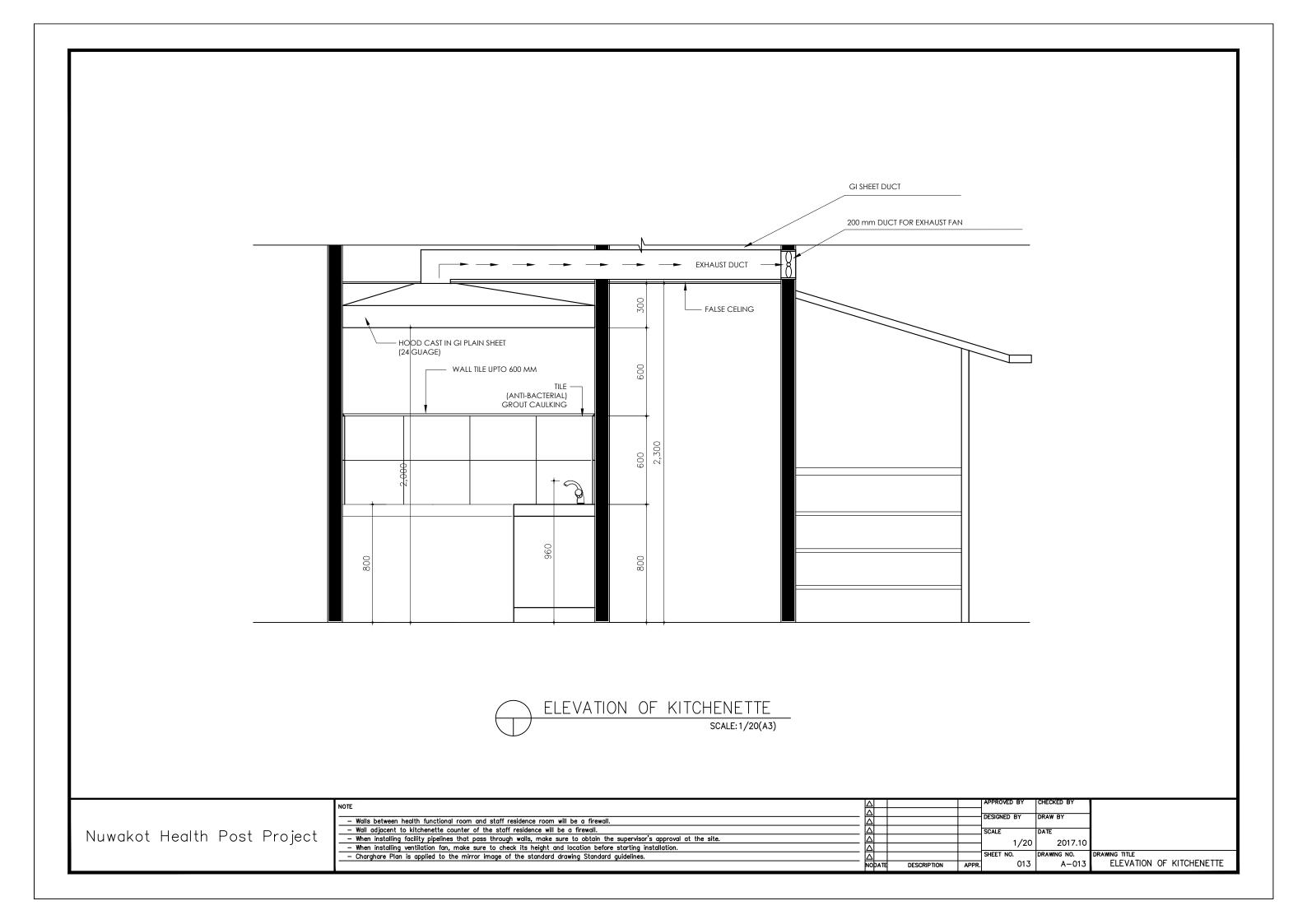
When installing facility pipelines that pass through walls, make sure to obtain the supervisor's approval at the site.
 When installing ventilation fan, make sure to check its height and location before starting installation.

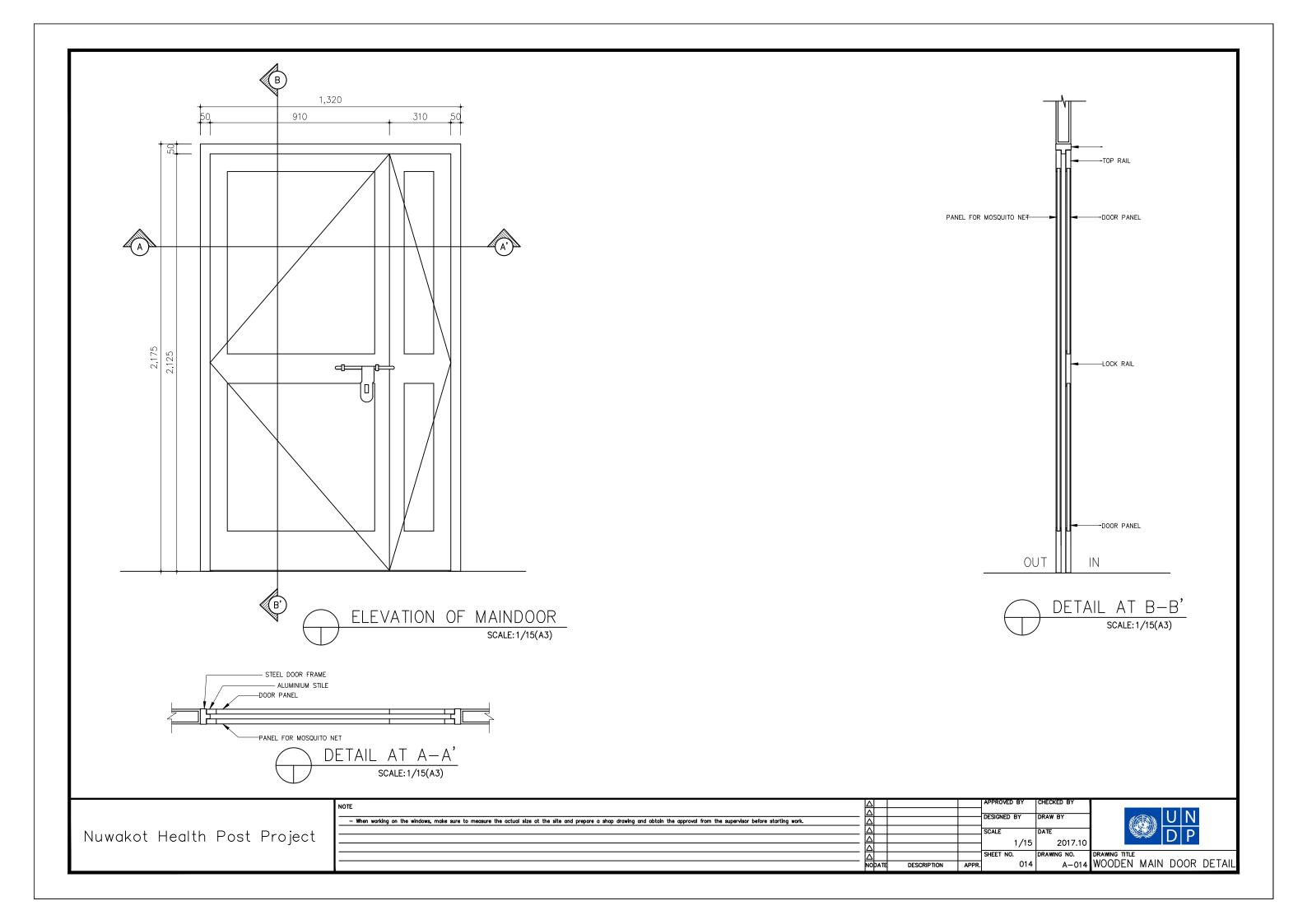
- Charghare Plan is applied to the mirror image of the standard drawing Standard guidelines

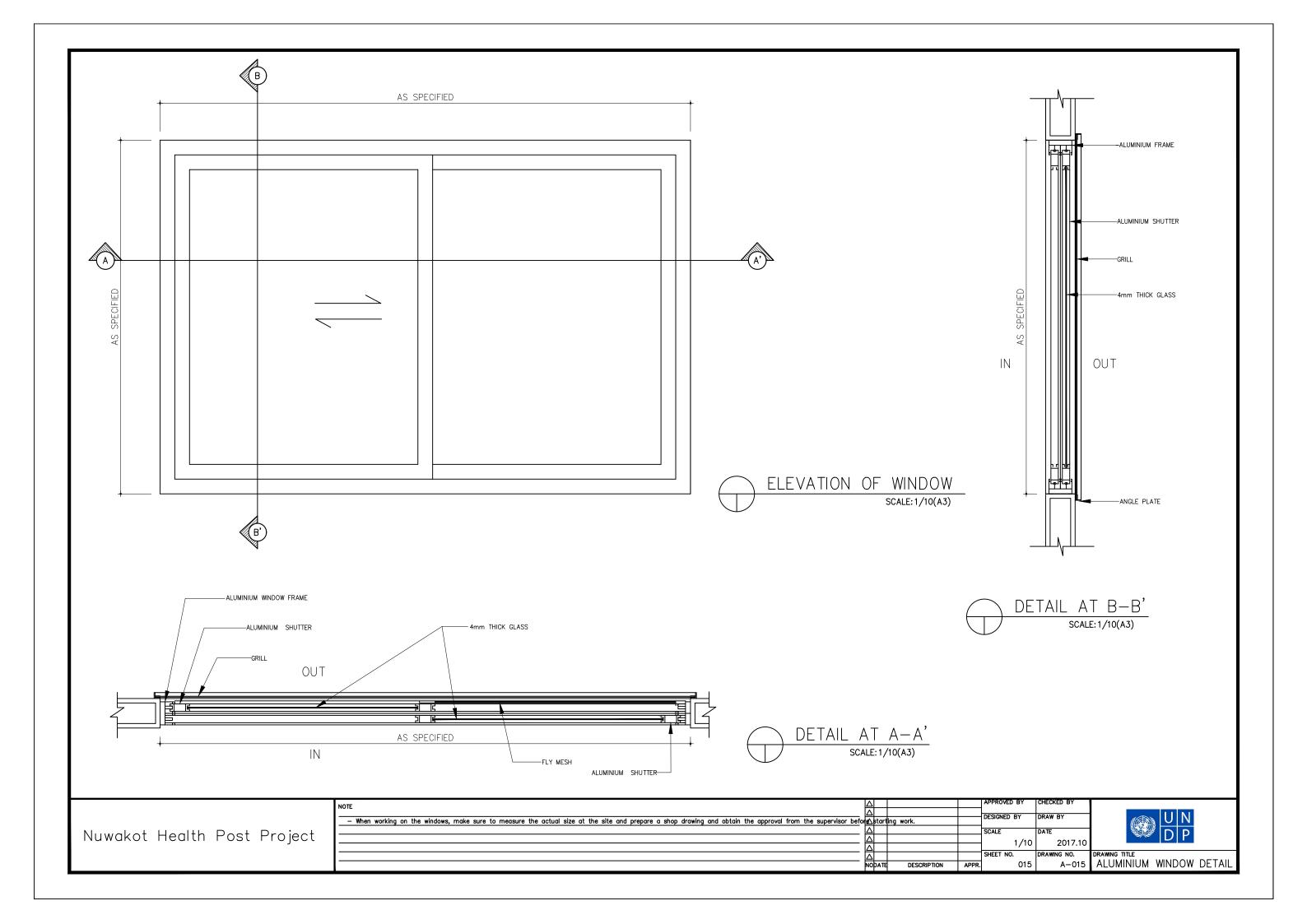
SCALE 1/20 2017.10 012 A-012 DESCRIPTION

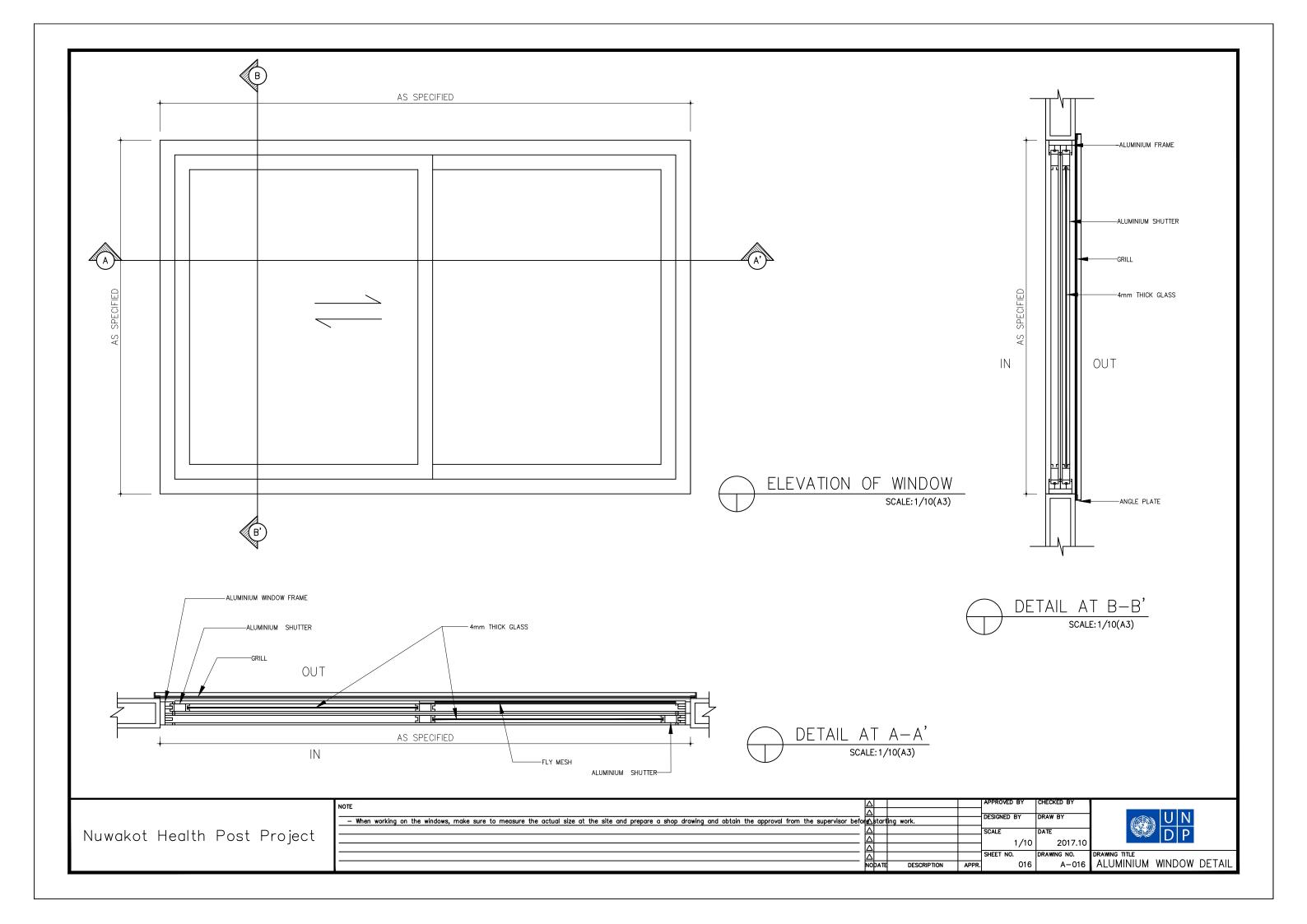


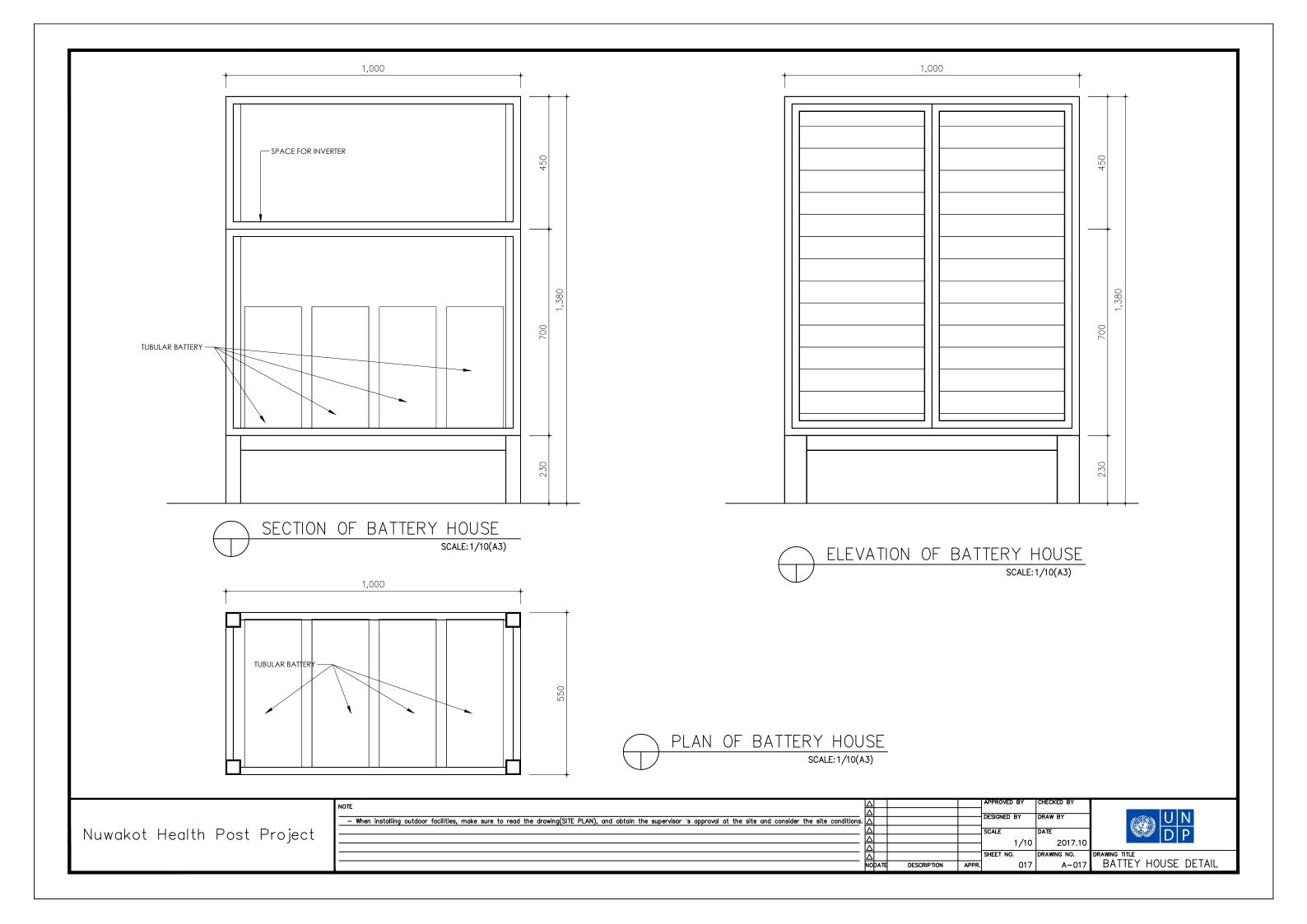
STAINLESS STEEL SCRUB SINK

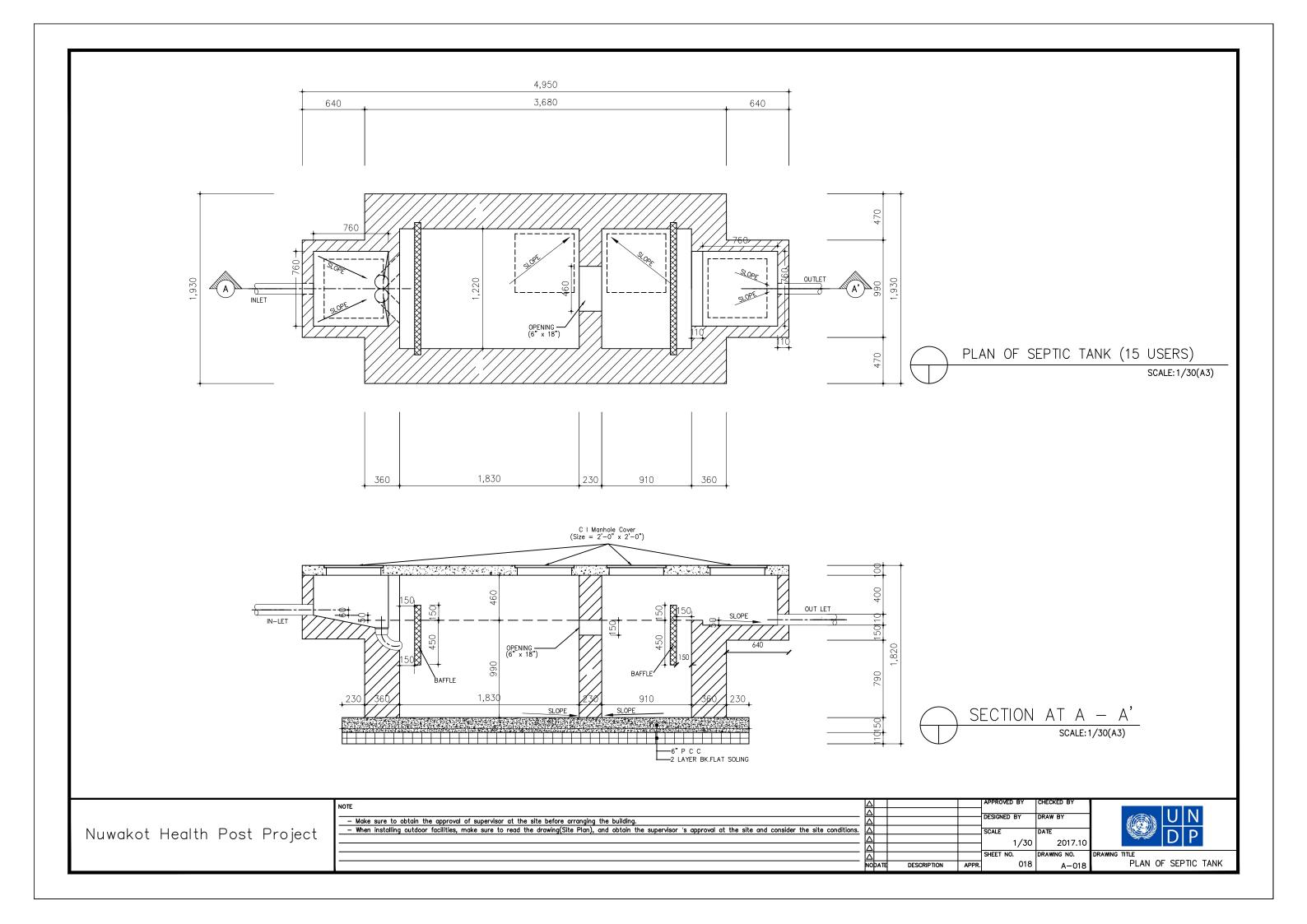


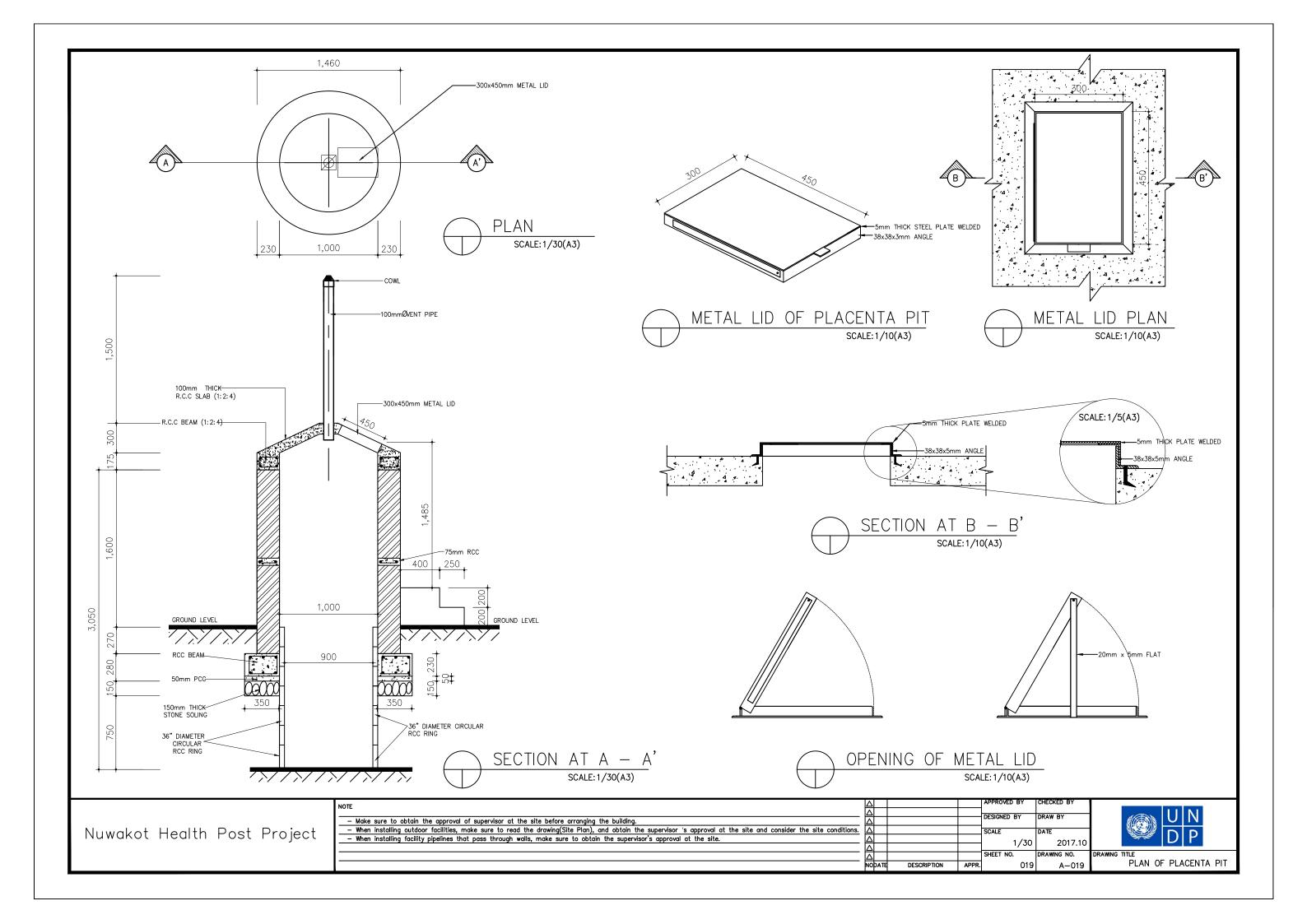


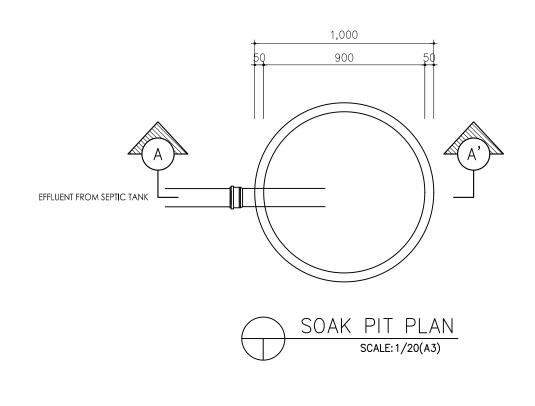


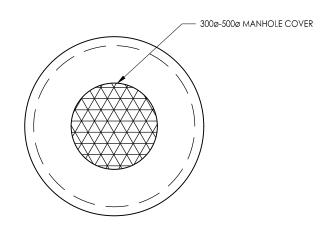




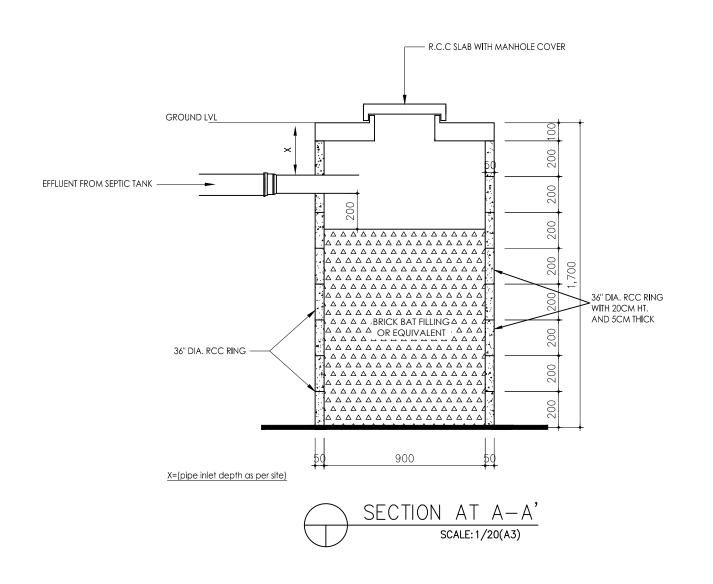










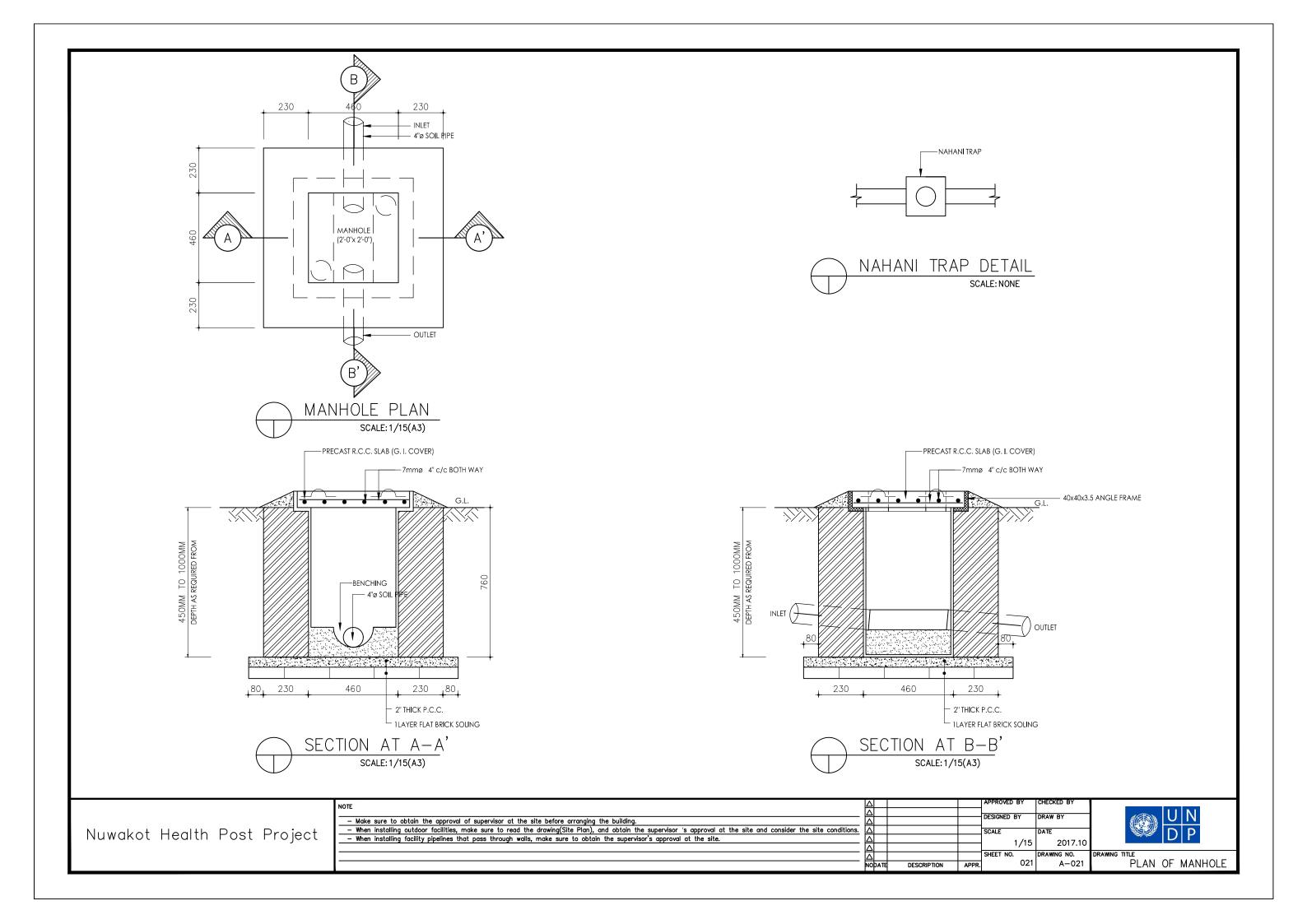


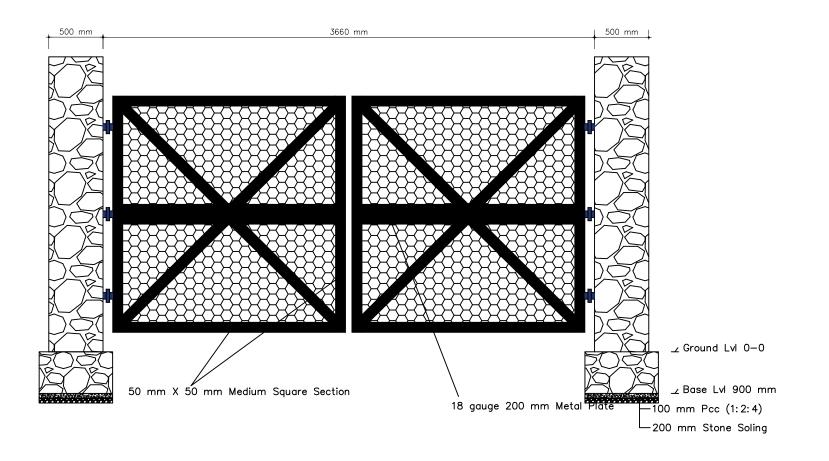
Make sure to obtain the approval of supervisor at the site before arranging the building.
 When installing outdoor facilities, make sure to read the drawing(Site Plan), and obtain the supervisor is approval at the site and consider the site conditions

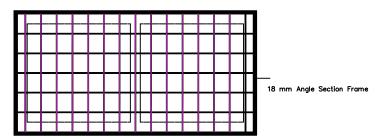
— When installing facility pipelines that pass through walls, make sure to obtain the supervisor's approval at the site.

	Δ				APPROVED	BY	CHECKED BY	Г
_	Δ				DESIGNED	DV.	DRAW BY	ı
	Δ				DESIGNED	ы	DRAW BI	ı
s.	Δ				SCALE		DATE	ı
_	Δ					1/20	2017.10	ı
	Δ		1					L
_	Δ				SHEET NO.		DRAWING NO.	D
_	NO	DATE	DESCRIPTION	APPR.		020	A-020	

PLAN OF SOAK PIT





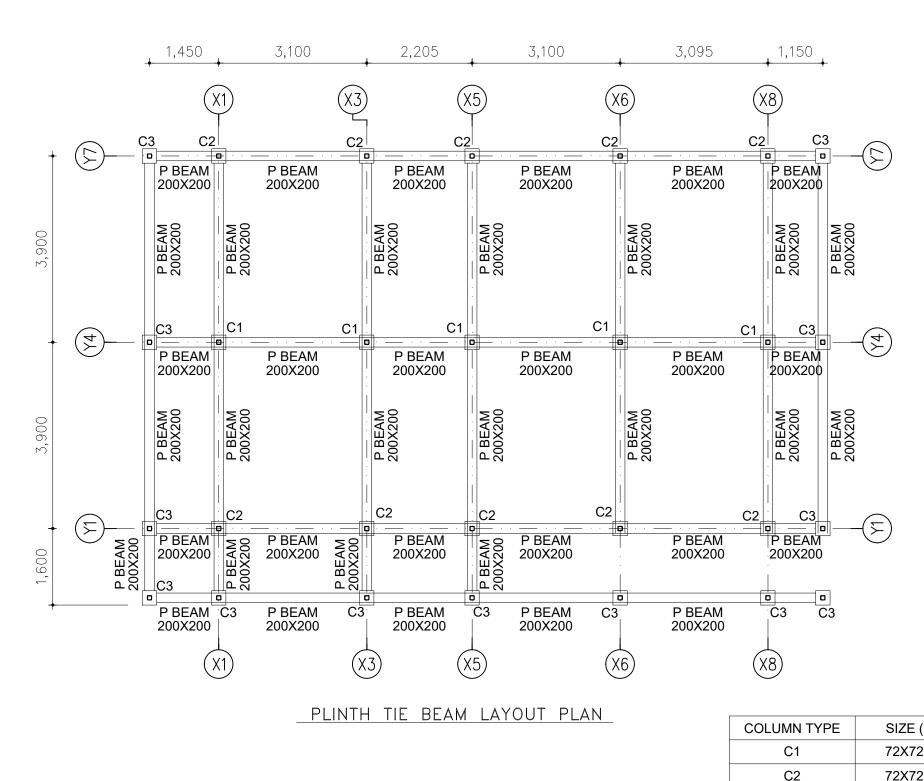


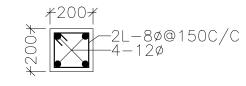
Gate and Grill Details

10 mm Square Bars grill Horizontal Spacing 100 mm C/C Vertical Spacing 150 mm C/C

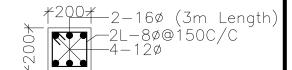
Gate and Window Grill Details

NOTE	Δ			APPROVED BY	CHECKED BY
NOTE .	Δ			DECIONED DV	DD AW DV
	Δ			DESIGNED BY	DRAW BY
	Δ			SCALE	DATE
	4			1/20	2017.10
	Δ			,	
	Δ				DRAWING NO.
	NODATE	DESCRIPTION	APPR.	022	A-022





BEAM SECTION

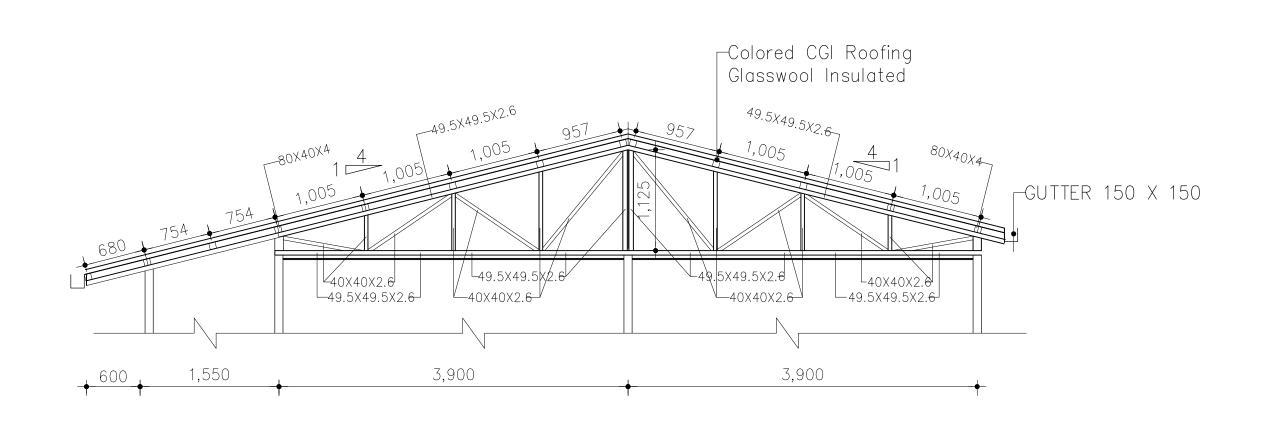


TIE BEAM SECTION (COLUMN CONNECTION PART)

COLUMN TYPE	SIZE (mm)
C1	72X72X4.8
C2	72X72X4.0
C3	72X72X3.2

_	МО	DATE	DESCRIPTION	APPR.	023	S-001	ı
					SHEET NO.	DRAWING NO.	C
_					1/100	2017.10	L
							ı
					SCALE	DATE	ı
					DESIGNED BY	DRAW BT	ı
					DESIGNED BY	DRAW BY	ı
	Δ				APPROVED BY	CHECKED BY	Г





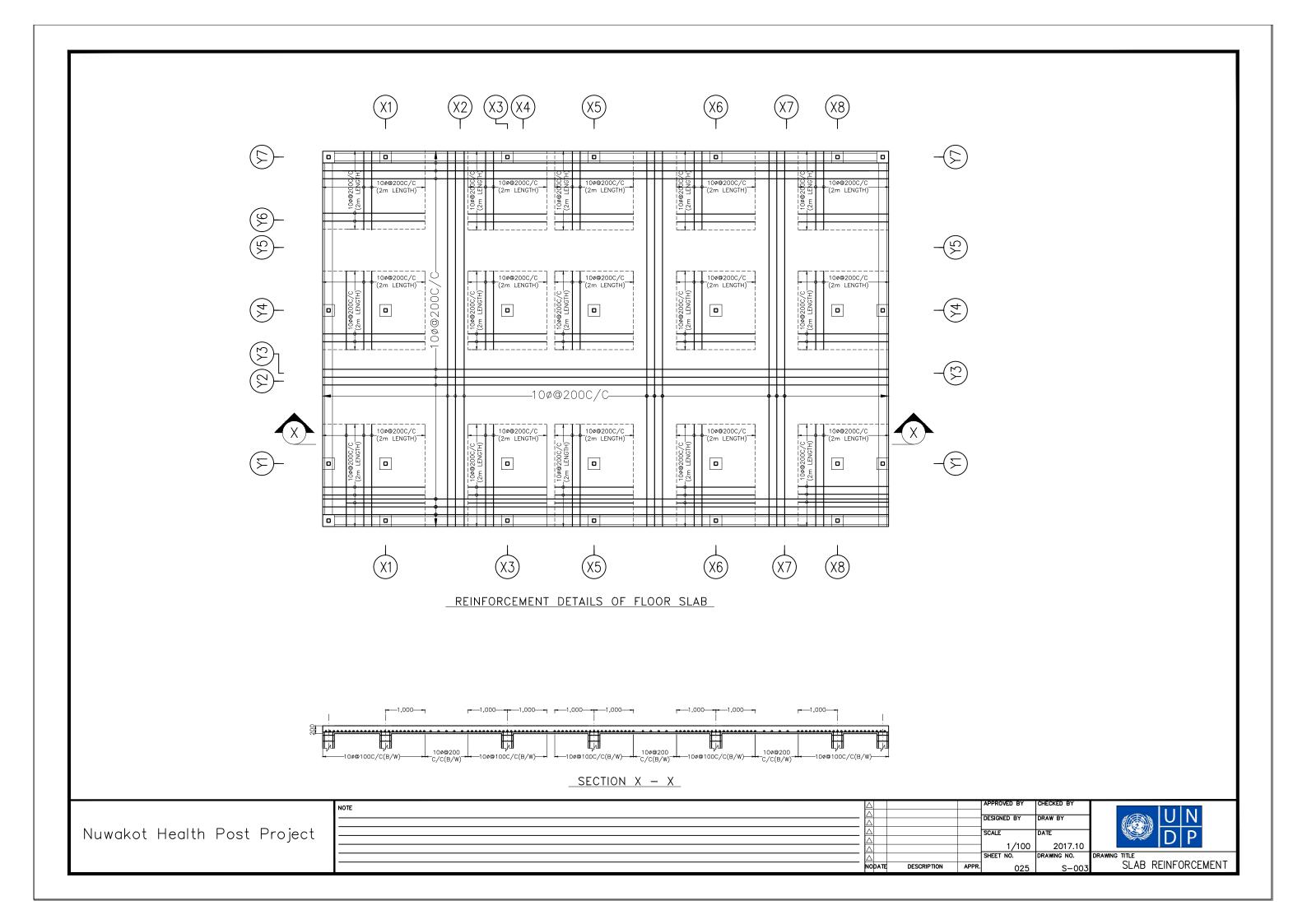
DETAILS OF TRUSS

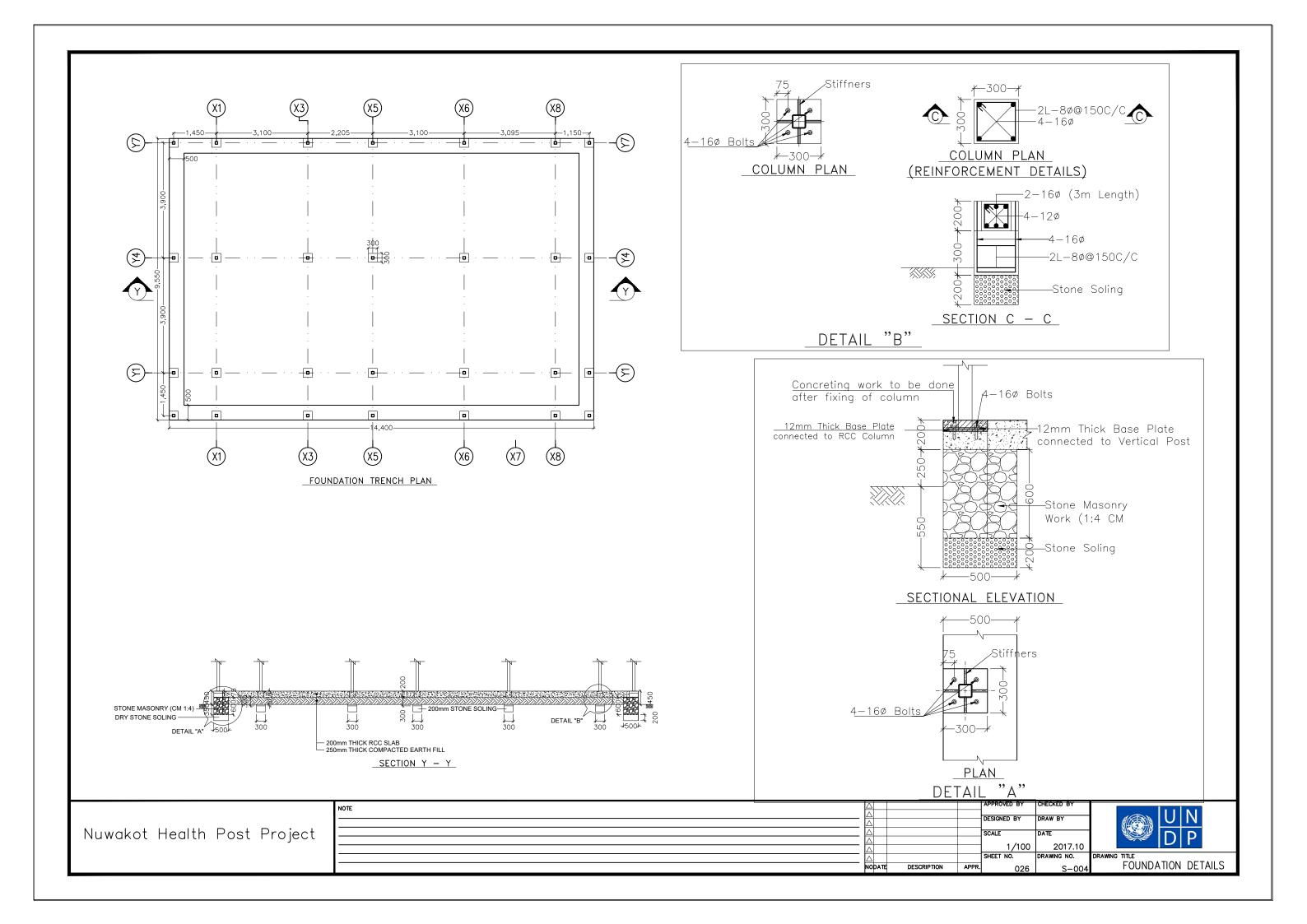
STRUCTURE	SIZE	REMARKS
COLUMNS	72X72X4.8mm	
COLUMNS	72X72X4.0mm	
COLUMNS	72X72X3.2mm	
RAFTER AND TIE OF TRUSS	49.5X49.5X2.6mm	
STRUT OF TRUSS	40X40X2.6mm	
PURLINS	80X40X4.0mm	
PURLINS AND ROOF JOIST	80X40X3.2mm	
WIND BRACING	16mm Dia Rod	

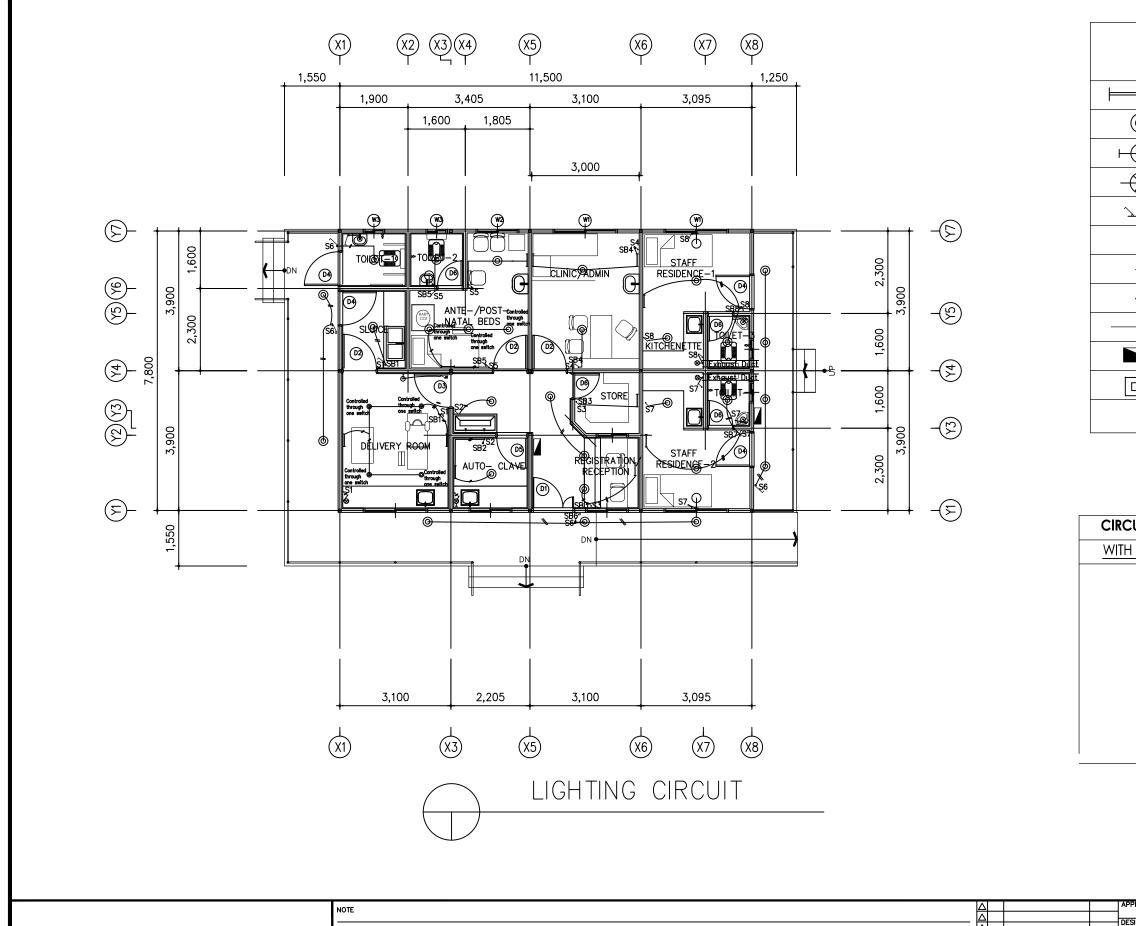
Nuwakot Health Post Project

	Δ				APPROVED BY	CHECKED BY	
	Δ				DESIGNED BY	DRAW BY	
_	Δ				DESIGNED BY	DRAW DI	
	\triangle				SCALE	DATE	
_	\triangle				1/100	2017.10	
	Δ				1/100	2017.10	
	Δ				SHEET NO.	DRAWING NO.	DR
	NOD.	ATE	DESCRIPTION	APPR.	024	S-002	

TRUSS DETAILS





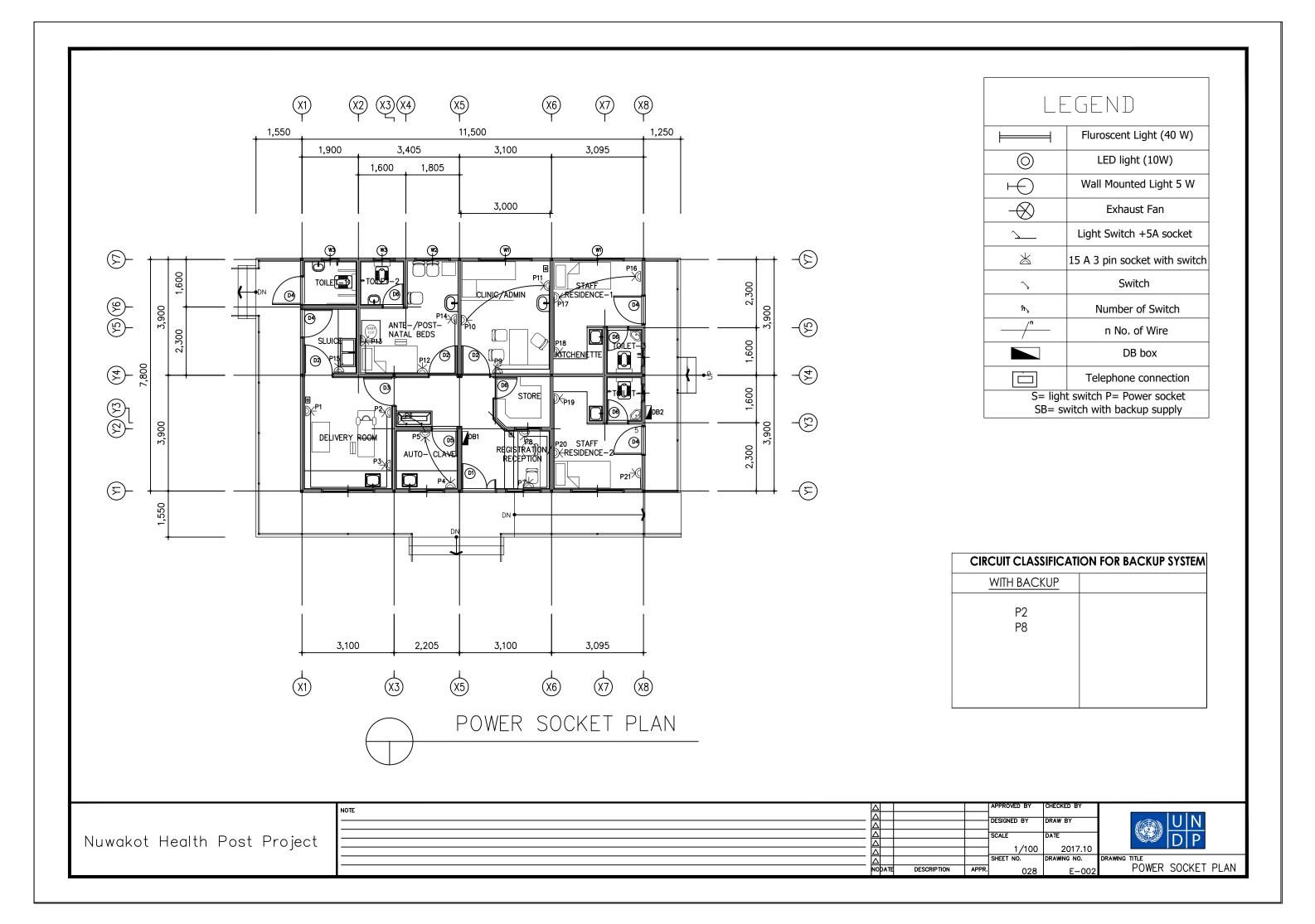


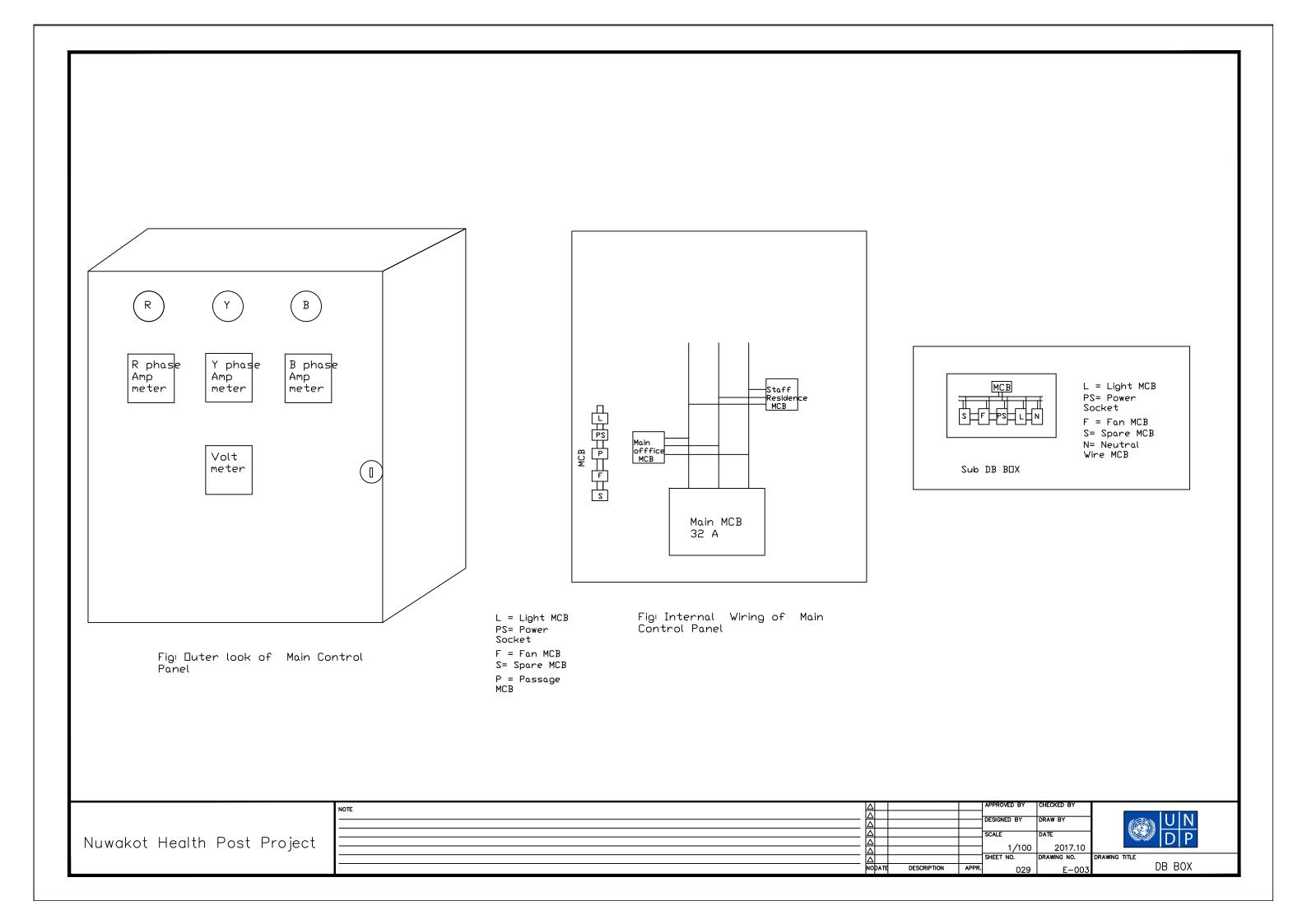
LEGEND							
 	Fluroscent Light (40 W)						
0	LED light (10W)						
\vdash	Wall Mounted Light 5 W						
	Exhaust Fan						
`	Light Switch +5A socket						
\sim	15 A 3 pin socket with switch						
``	Switch						
ħ _s	Number of Switch						
	n No. of Wire						
	DB box						
	Telephone connection						
S= light switch P= Power socket SB= switch with backup supply							

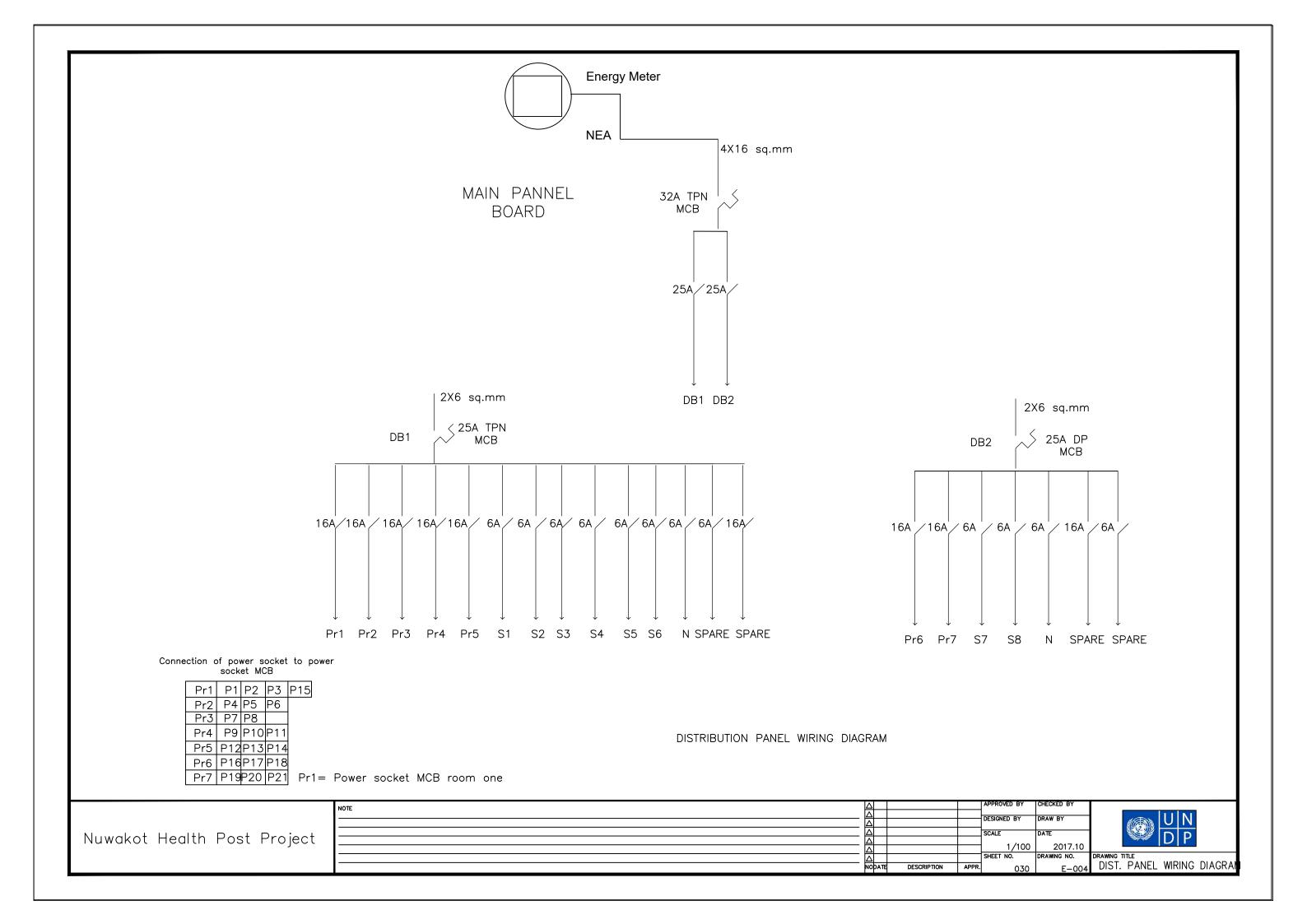
I FOR BACKUP SYSTEM

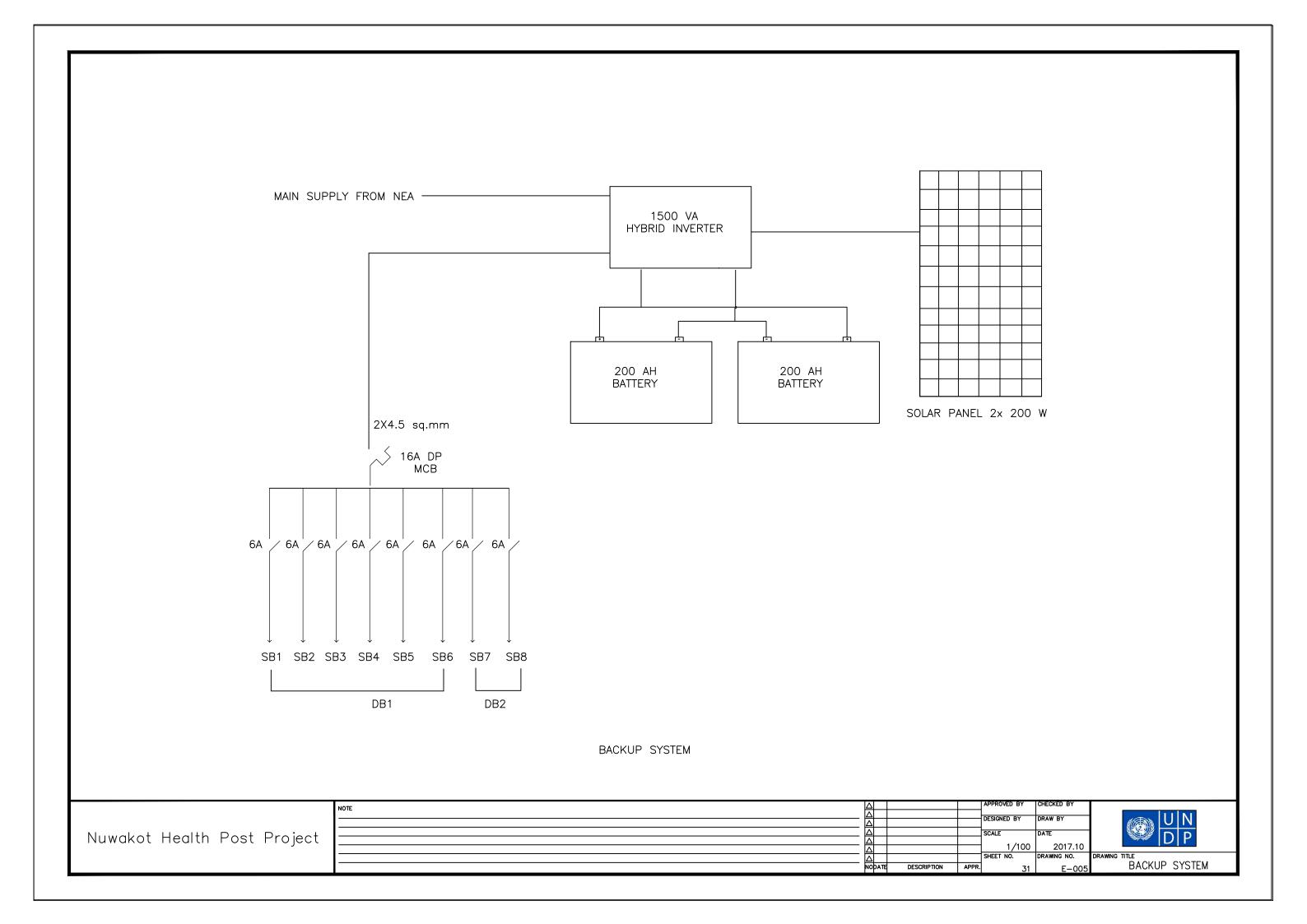
Δ				APPROVED BY	CHECKED BY	
\triangle				DESIGNED BY	DRAW BY	
Δ				DESIGNED BY	DRAW BI	
 ᡌ				SCALE	DATE	
 ᡌ				4 /400	001740	
Δ				1/100	2017.10	
囜				SHEET NO.	DRAWING NO.	DR.
ΝО	DATE	DESCRIPTION	APPR.	27	E-001	

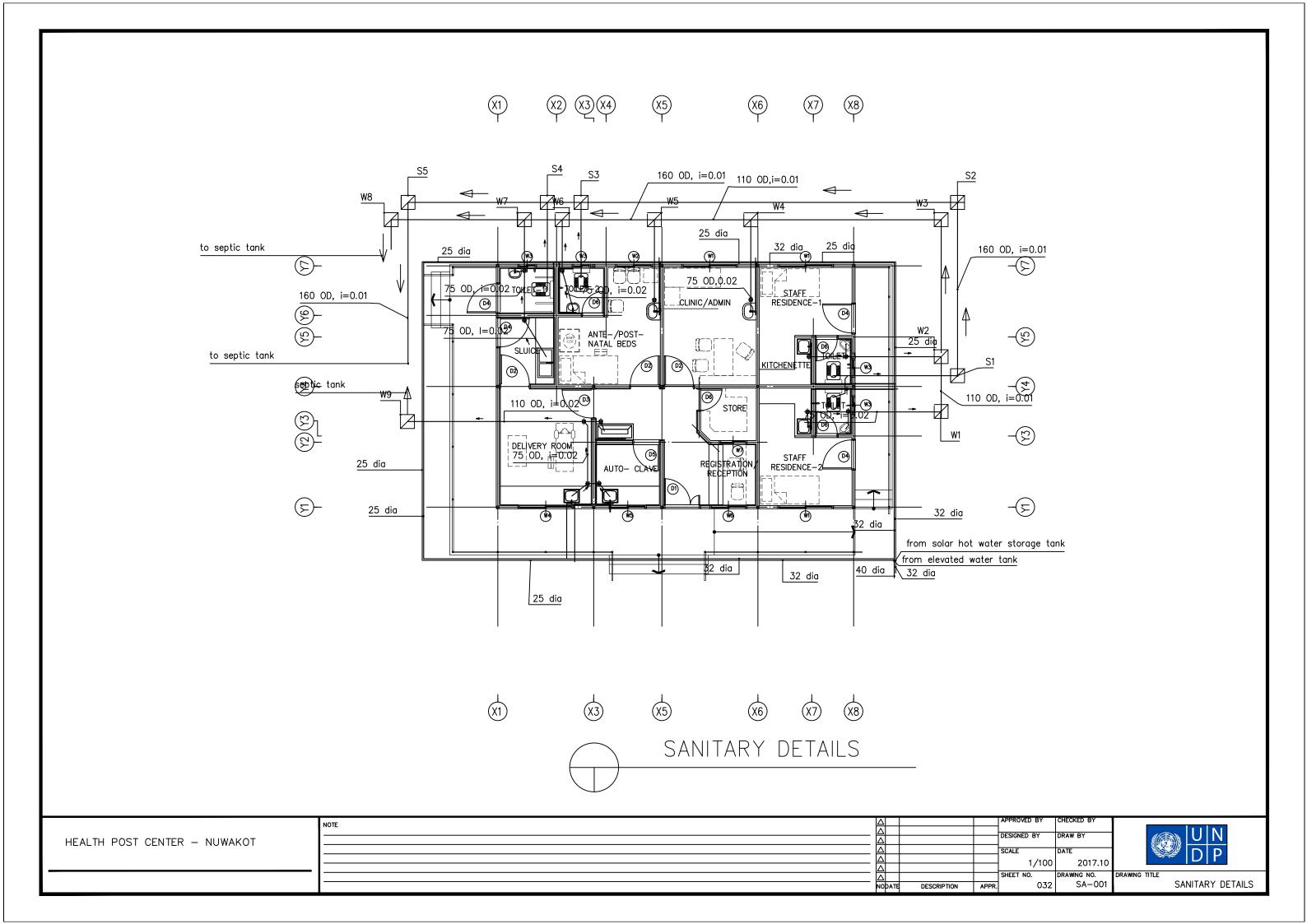


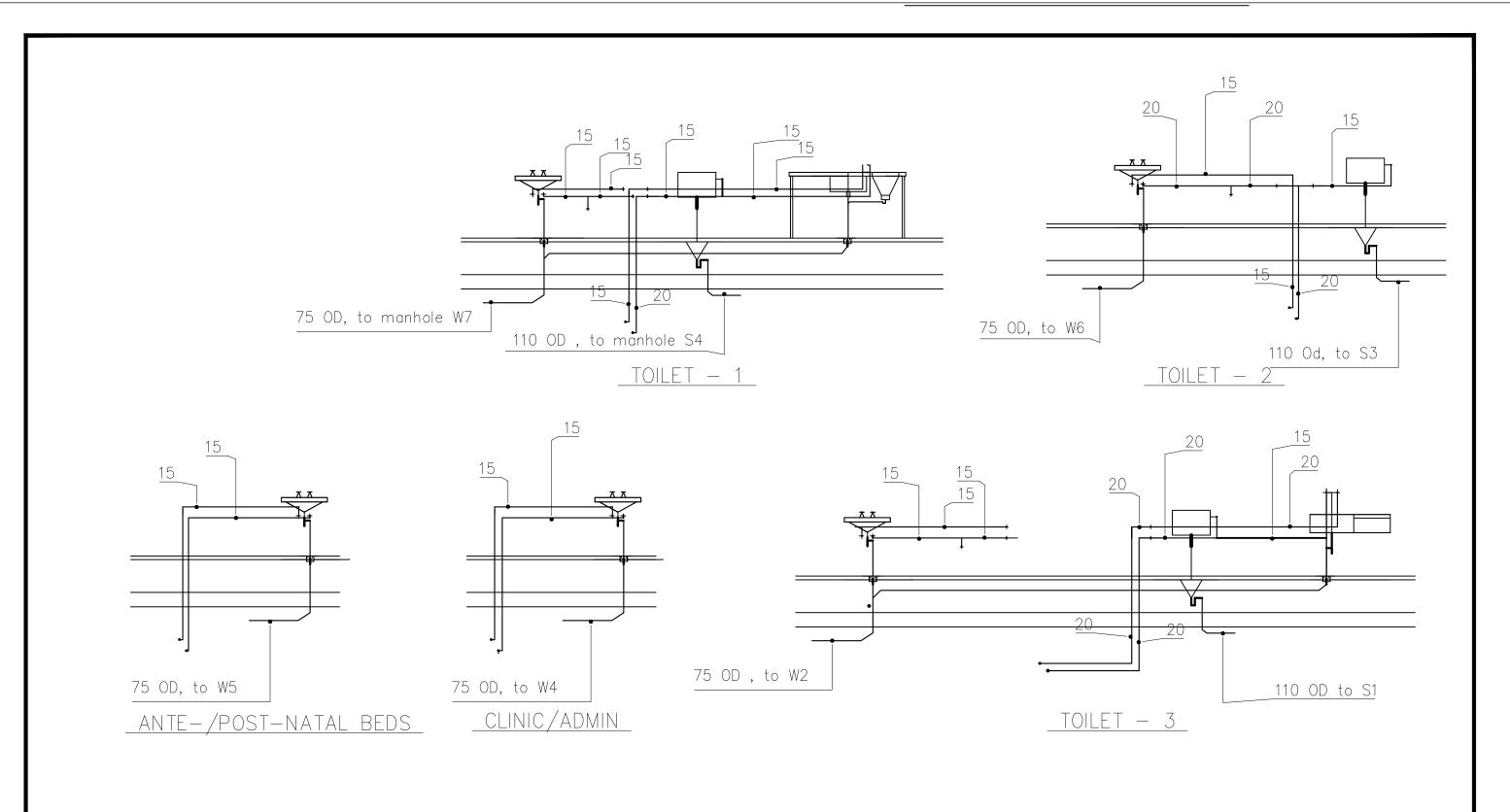












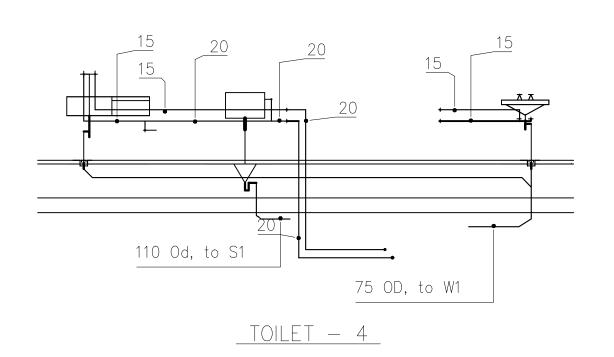
Schematic drawing of pipeline all dimension are in mm,

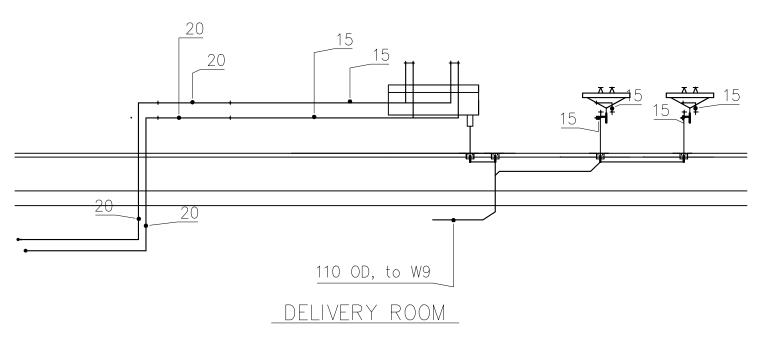
HEALTH POST CENTER - NUWAKOT

	NOTE	Δ	Ε
		\triangle	Ē
		\triangle	Ē
		\triangle	Ī
		Δ	Γ
_		\triangle	Ε
		Δ	Γ
		NODATE	Г

	Δ						APPRO\	ED BY	CHECK	ED BY
	Δ						DESIGNE	D RY	DRAW	RY
	Δ				_		DEGIGIAL		DIVA	٥.
	4	$ldsymbol{ldsymbol{ldsymbol{eta}}}$			_		SCALE		DATE	
	A				_			1/50		2017.10
_	À	_			_		SHEET		DDAW	NG NO.
	Δ						SHEET	033		
	NO	ÞATE	DESCR	RIPTION		APPR.		033		SA-002







Schematic drawing of pipeline all dimension are in mm,