

## UNDP Afghanistan

### Site Assessment Data

#### Provision of Electricity and Hot Water Systems to Health Facilities in the Western Region

Date: 3-feb-22

Name of Health Facility, Type	Seyah Woshan BHC
Village, Province, District	Qalae-e Agha village, Guzarah district, Herat Province
Name, phone number of contract person	Dr. Mohammad Haziq, 0728300253
Assessment Conducted by (UNDP Field Engineer)	Eng. Ebadullah Momand
Distance from Herat, type of road to the health facility	18 Km Asphalt road from Herat City to HF
GPS Point (Coordinates)	34.23512° N, 62.27857° E
Review and recommendation of project manager	

S/N	Description	Field Data
1	Existing Power Source (Generator, Solar etc.) and its capacity in kW	Connected to the city electricity grid.
2	Number of rooms in the facility	Totally 16 Rooms, 8 Bathrooms, 1 beg Hall, Corridor
3	Existing house wiring? Number of power points	Have wiring inside the building but some parts need to be replaced and some should be maintenance, Four bathroom outside of the main building have electrical conduits but don't have wiring.
4	Total electrical load <ul style="list-style-type: none"> <li>- Total number of light bulbs- total Watt</li> <li>- Refrigerator, heater - total Watt</li> <li>- Any other equipment – total Watt</li> </ul> <i>(Use a separate sheet, if required)</i>	Total Existing Bulbs: 12 Nos. Refrigerators: 2 Water boiler:2, Not active need to maintenance Warmer: 1 Water heater:1 Exam Light (movable):1 Electric balance:1  Birth room need 4 new sockets and switch, don't have fuse in join box

		Vaccine room need new wiring. See more details Annex A
5	Cables, wiring, conduits, Junction box etc. require maintenance/replacement. If yes, prepare a BoQ.	Junction boxes, Electric switch boards are deteriorated and need to be replaced, fuse box are failed need to be replaced. Electricity connected without fuses. 4 toilet don't have wiring. Need it.
6	Existing streetlight in the compound?	Don't have street light. Need it.
7	Total number of staff	8 personals ( 1 MD, 1 Midwife,1 supervisor CHS, 2 vaccinator, 2 guards)
8	Average number of patients per day	90 Patients per day
9	Existing water supply facility, existing plumbing system	HF Have water supply facility, taking water from village water pipe scheme. Have plumbing system, but need to replace some equipment's (Basin Mixers,). 4 bathroom are not connected to water tank.
10	Existing water boiler? Provide detail (type, capacity, year of installations, lifespan etc.)	HF Have 2 water boiler, but need to repairing. 80 lit, 2008.
11	Functional Water well in the facility. Water depth in the well. Water depth from the surface	Hand pump water well (Bore hole) with 6 inch diameter, 30 meter depth, 10 meter water depth in the well, and 20 meter water depth from surface. Have Hand pump as well. water
12	Capacity of water tank. Insulated or not? Tank height from the surface	3000 liter, not insulated. Tank height is 8 meter from the surface. One additional remove able water tank is being on the ground in the yard of clinic have 3000 liter water capacity, its uses only for hand washing and ablution.
13	Type of the existing Structure (RCC/load bearing walls)	RCC
14	Type of existing roof (Petch or Flat)	RCC flat roof
15	If the roof is Petch, how many solar panels can be installed on the south face of the Petch roof?	No

16	If the roof is flat concrete, how many solar panels could be installed toward the south face?	Have Enough area (13X10) m the long side is East west  See Roof plan for details. Annex B
17	Does the existing roof is fit for installation of Solar System or Required Maintenance/repairing works?	Yes, Need to Isogram
18	If above answer is yes, prepare BoQ and estimation for the repairing/upgrading	
19	Distance from roof to existing main panel board	20 m
20	Dimension of existing building in m. (Use a separate paper for a sketch)	Length: 22.5 m                      Width: 17.5 m
21	Are there any technical obstacles/challenges to affect the installation and implement of the solar system as planned? If yes, provide detailed information, recommendation, BoQ along with photos.	No
22	Is there access to the roof for installations of solar panels	Don't have stable stairs, uses very unstable wooden ladder. Need to .....for installation of solar panels.
23	Take photos of the facility showing a bird eye view, structures, wirings, existing electrical system and roof	See Annex C

Surveyors' Comment:

# Annex A: Existing electrical appliances load calculation

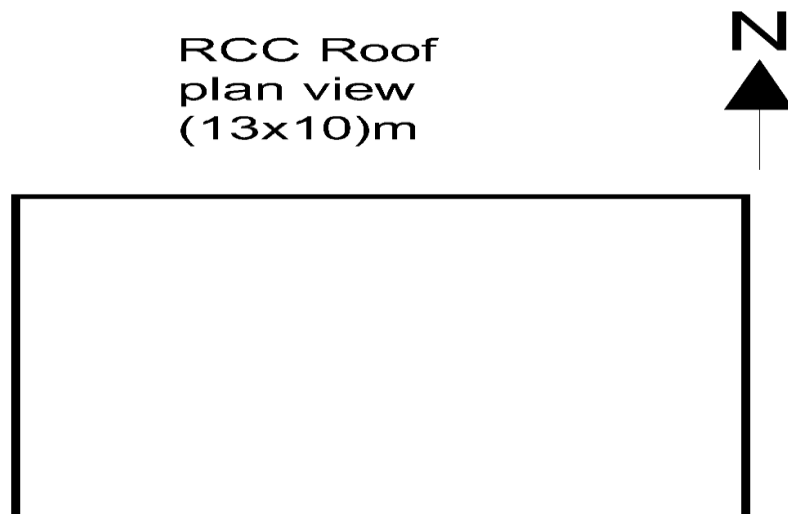
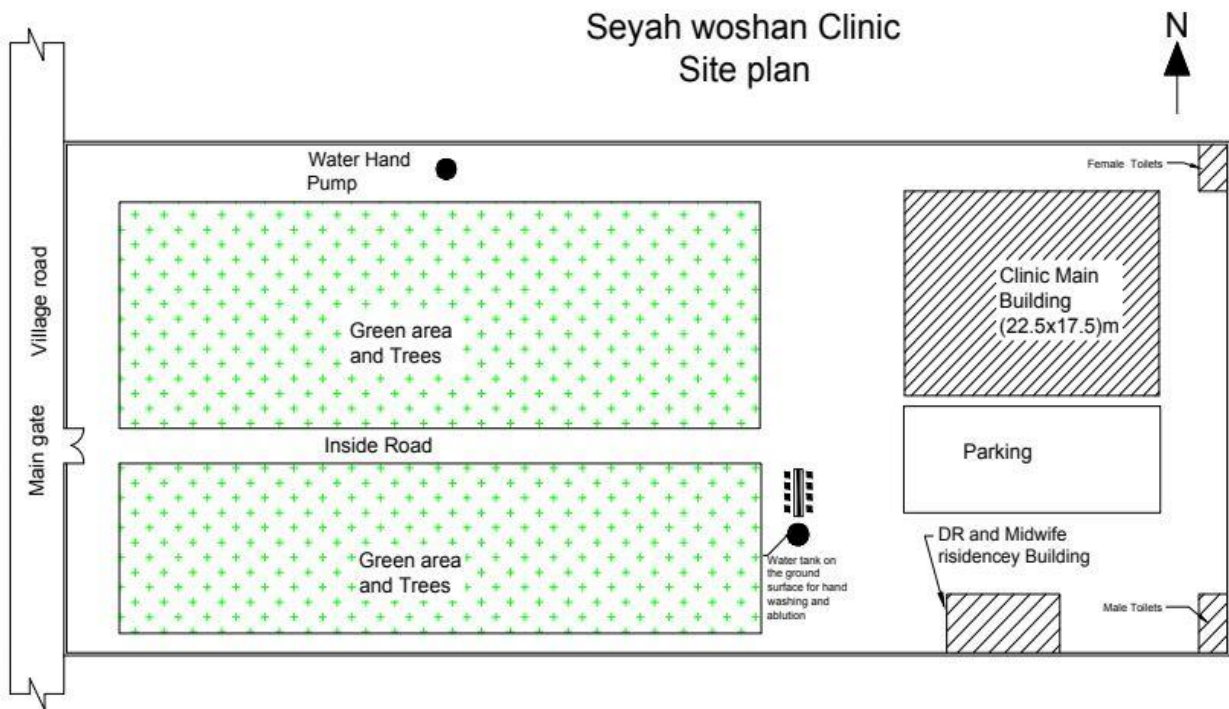
Seyah woshan clinic exciting electrical equipment and energy consumption								
No	Equipment	Existing QTY	Power (watts)	Total Power (Watts)	Hours used per day	Energy used (watt-hours)	KW-Hr per day	Remarks
1	Bulbs	12	15	180				Need to replace
2	Refrigerators	2	300	600				At present use gas refrigerator
3	Water Boiler	2	1500	3000				Not functional Need to maintenance
4	Warmer	1	1500	1500				
5	Auto Clave	0	0	0				Use gas Autoclave
6	LCD	1	80	80				
7	Exam light( Movable)	1	65	65				Used in Birth room
8	Fans	5	100	500				
9	Street light	0	100	0				
10	Heater (stove)	0	0	0				
10	Total			5925				

# Annex A2: Needed electricity load assessment

Seyh woshan BH clinic- Guzarah district Needed electrical appliances load assessment								
No	Equipment	QNY	Power (watts)	Total Power (Watts)	Hours used per day	Energy used (watt-hours)	KW-Hr per day	Remarks
1	Bulbs	41	15	615				
2	Refrigerators	1	300	300				
3	Water Boiler	1	1500	1500				
4	Warmer	1	1500	1500				
5	Auto Clave	1	1000	1000				

6	LCD	1	80	80				
7	Exam light	1	65	65				
8	Fans	20	100	2000				
9	Street light	1	100	100				
10	Total			7160				

Annex B:



Annex C: Photos





