

SALIENT FEATURES OF THE PROJECT

General Information

Project Name:	Besitole Rural Solar Drinking Water Project
District:	Ramechhap
VDC:	Pinkhuri
Ward no:	1
Name of villages served:	Besitole
Road Head:	Kathmandu-Dhulikhel- Sitkha- Pinkhuri Besitole 103 km all weather
Distance from road head to site:	Near site

Design Information

No. of households:	30
Present population:	168
Total water demand:	9450 lpcd
Pipe Length (Distribution):	80m
Pipeline length (Transmission):	480 m
Total Head:	160 m
Autonomy days:	1.5 days
Electrical cable length:	100 m

Water Source Information

Name of source:	lampate besitole Khola
Type of source:	Stream
Source quality:	Drinkable directly
Date of discharge measurement:	2014-12-26(2071/09/11)

Method of measurement:	Bucket method
Measured discharge:	0.20 lps
Safe yield:	0.18 lps

Structure Information

Civil Structure (Stone Masonry)

Intake:	1no
Filter:	1no
Collection tank with pump house:	1no, 8 m ³
Distribution tank:	1no, 15 m ³
Tap stand:	1no
No. of thrust block:	10 nos

Pipe Line

HDPE Pipe 40mm 10kg/cm ² :	250m (Transmission)
HDPE pipe 25 mm (10kg/cm ²):	80m (Distribution)
GI pipe medium duty 1.5":	230m (Transmission)

Electro-mechanical (estimated)

Capacity of Solar Array (WP) :	As required
Pump:	Any Pump/s that can lift water demand of 9450 liter per day at head of 160 m
Distance between solar array and pump:	100m
Lightning Arrestor:	As required
Surge Protector:	As required
Grounding:	As required
Circuit Breaker:	As required
Cable size (3% voltage drop):	As Required