

SALIENT FEATURES OF THE PROJECT

General Information

Project Name:	Thulodhara Rural Solar Drinking Water Project
District:	Ramechhap
VDC:	Daduwa
Ward no:	9
Name of villages served:	Kholakharka
Road Head:	Kathmandu-Mude- Deurali- Kholakharka 144 km all weather
Distance from road head to site:	Near site

Design Information

No. of households:	34
Present population:	186
Visitors Flow per day	20
Total water demand:	10464lpcd
Pipe Length (Distribution):	150m
Pipeline length (Transmission):	240 m
Total Head:	90 m
Autonomy days:	1.5 days
Electrical cable length:	220 m

Water Source Information

Name of source:	Panichaur Thulodhara
Type of source:	Stream
Source quality:	Drinkable directly

Date of discharge measurement:	2014-12-24(2071/09/09)
Method of measurement:	Bucket method
Measured discharge:	0.30 lps
Safe yield:	0.25 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 50mm 10kg/cm ² :	120m
HDPE pipe 25 mm (10kg/cm ²):	150m
GI pipe medium duty 2":	120m

Electro-mechanical (estimated)

Capacity of Solar Array (WP) :	As required
Pump:	Any Pump/s that can lift water demand of 10464 liter per day at head of 90 m
Distance between solar array and pump:	220m
Lightning Arrestor:	As required
Surge Protector:	As required
Grounding:	As required
Circuit Breaker:	As required
Cable size (3% voltage drop):	As Required