

## SALIENT FEATURES

### General Information

Project Name:	Jaalidhunga Rural Solar Drinking Water Project
District:	Ramechhap
VDC:	Dimpokhari
Ward no:	4
Name of villages served:	Jatte
Road Head:	Kathmandu Dhulikhel - Khairne; 82 km all weather road + Khairne-Galva; 23 km fair weather road
Distance from road head to site:	3 km, 30 min walks

### Design Information

No. of households:	29
Present population:	224
Total water demand:	7075 lpcd
Tap post distance from distribution tank:	110 m
Pipe line length (Transmission):	674 m
Total Head	235 m
Autonomy days:	1.5 days
Electrical cable length:	70 m

### Water Source Information

Name of source:	Jalidhunga kholsa
Type of source:	Spring
Source quality:	Drinkable directly
Date of discharge measurement:	2015-01-03 (2071/09/19)
Method of measurement:	Bucket method
Measured discharge:	0.45 lps

Safe yield: 0.40 lps

## Structure Information

### Civil Structure (Stone Masonry)

Intake:	1no
Filter:	1no
Collection tank with pump house:	1no, 10 m <sup>3</sup>
Distribution tank:	1no, 15 m <sup>3</sup>
Tap stand:	1no
No. of thrust block:	6 nos

### Pipe Line

HDPE Pipe 40mm 10kg/cm <sup>2</sup> :	424m
HDPE pipe 16mm (10kg/cm <sup>2</sup> ):	110m
GI pipe medium duty 1.5":	250m

### Electro-mechanical (estimated)

Capacity of Solar Array (WP) :	As required
Pump:	Any Pump/s that can lift water demand of 7075 liter per day at head of 235 m
Distance between solar array and pump:	70m
Lightning Arrestor:	As required
Surge Protector:	As required
Grounding:	As required
Circuit Breaker:	As required
Cable size (3% voltage drop):	As Required