


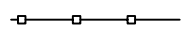




















1. TOTAL FENCED AREA: 309.01 ha
2. TOTAL FENCE LENGTH: 19.4 km
3. TOTAL SITE ROAD LENGTH: 20.5 km
4. TOTAL AC COLLECTOR SYSTEM LENGTH: 48.4 km
5. FOR THE PURPOSE OF THIS LAYOUT, THE GROUND COVERAGE RATIO (GCR) HAS BEEN CALCULATED AS:
$$\text{GCR} = \frac{\text{MODULE LENGTH}}{\text{PITCH}}$$
6. DIMENSIONS:
 - SUBSTATION AREA: 130 x 110 m
 - TEMPORARY LAYDOWN AREAS: 75 x 75 m
7. THIS LAYOUT HAS BEEN DEVELOPED BASED ON GEO-REFERENCED WETLAND AND CONSTRAINT FILES PROVIDED BY THE CLIENT.
8. ALL CLASS I AND II WETLANDS ARE ASSUMED BUILDABLE AREA. ALL CLASS III AND ABOVE ARE ASSUMED NON-BUILDABLE AREA.
9. A 30m ROW HAS BEEN RESERVED ALONG THE EAST FENCE LINE NORTH OF THE SUBSTATION TO ACCOMMODATE FOR A POTENTIAL NEW TRANSMISSION LINE.
10. THE CURRENT DESIGN IS PRELIMINARY AND MAY NOT BE OPTIMIZED. A DETAILED PVSYST REPORT CAN BE COMPLETED ON THE CURRENT DESIGN.



PV SYSTEM	
PARAMETER	DESCRIPTION
PITCH SPACING	8.0 m
RACKING TYPE	FIXED TILT
NO. OF 2 IN PORTRAIT x 26 TABLES	8,786
MODULE QUANTITY (655W)	456,872
MODULE TYPE (BIFACIAL)	LONGI LR8-66HYD (655W)
MODULE ORIENTATION	PORTRAIT
MODULE TILT ANGLE	30 °
AC COLLECTOR SYSTEM (kV)	34.5
NO. OF U/G AC COLLECTOR FEEDERS	13
INVERTER TYPE	SMA MVPS SC4600-S2
INVERTER QUANTITY	67
STRING LENGTH	26 MODULES
DC CAPACITY (MWdc)	299.3
AC INVERTER CAPACITY (MWac)	308.2 (2.7% OVERBUILD)
AC GRID LIMIT (MVA)	300
DC/AC RATIO	0.99
GROUND COVERAGE RATIO	59.8%

LEGEND	
DETAIL	DESCRIPTION
	PV TABLE - FT (2 x 26 MODULES)
	AC COLLECTOR SYSTEM (U/G)
	DUGOUT
	FENCELINE
	INVERTER / TRANSFORMER SKID
	LAYDOWN AREAS
	MUNICIPAL ROADS + HIGHWAYS (EXISTING)
	SETBACKS (ROADS, OH & UG UTILITIES)
	PIPELINE
	RESIDENCE SETBACK
	SITE ACCESS
	SITE ROADS (NEW)
	SUBSTATION
	TOP OF BREAK SETBACK (100m)
	UTILITY - DISTRIBUTION LINE (EXISTING)
	UTILITY - TRANSMISSION LINE (EXISTING)
	WETLANDS (CLASS III)
	WETLANDS (CLASS IV)
	WETLANDS (CLASS V)
	WELL HEAD SETBACK

SCALE: 1:9000				
SUBSTATION COORDINATES: 52.419058, -111.049992				
AB	FOR COMMENTS	H. YAZDANPANAH	H. YAZDANPANAH	2025-04-25
AA	FOR COMMENTS	H. YAZDANPANAH	H. YAZDANPANAH	2025-04-22
REV	DESCRIPTION	VERIFIED BY	APPROVED BY	DATE
REVISIONS				

FOR COMMENTS
NOT TO BE USED FOR CONSTRUCTION

	PROJECT: EASTERVALE SOLAR PROJECT			
	TITLE: ELECTRICAL SOLAR PV PLANT GENERAL ARRANGEMENT PRELIMINARY SITE PLAN			
	DESIGNED BY: E.MAZE	DRAFTED BY: E. MAZE		
	VERIFIED BY: H. YAZDANPANAH	APPROVED BY: H. YAZDANPANAH		
	SCALE: 1:9000	DATE: 2025-04-22		
	DRAWING No.: 7431003-000000-47-D20-0004	SHEET: 01	SIZE: A1	REV: AB