

DOWDS

Dowds

4 Parkway, Ballymena
Co. Antrim, BT43 5ET

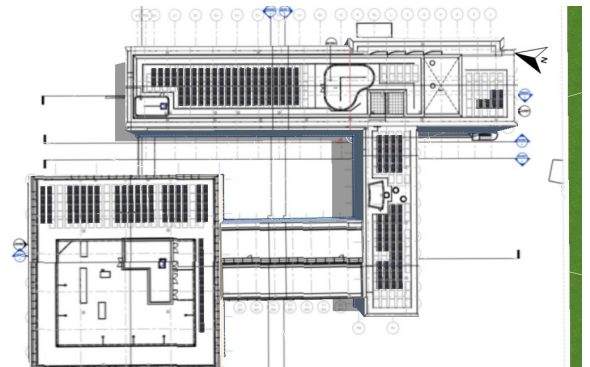
Project Name: Haringey Civic Centre
Offer no.: T0184

24/03/2026

Your PV system from Dowds

Address of Installation

Haringey Civic Centre N22 9SB



Project Description:
Roof Mounted PV

Project Overview

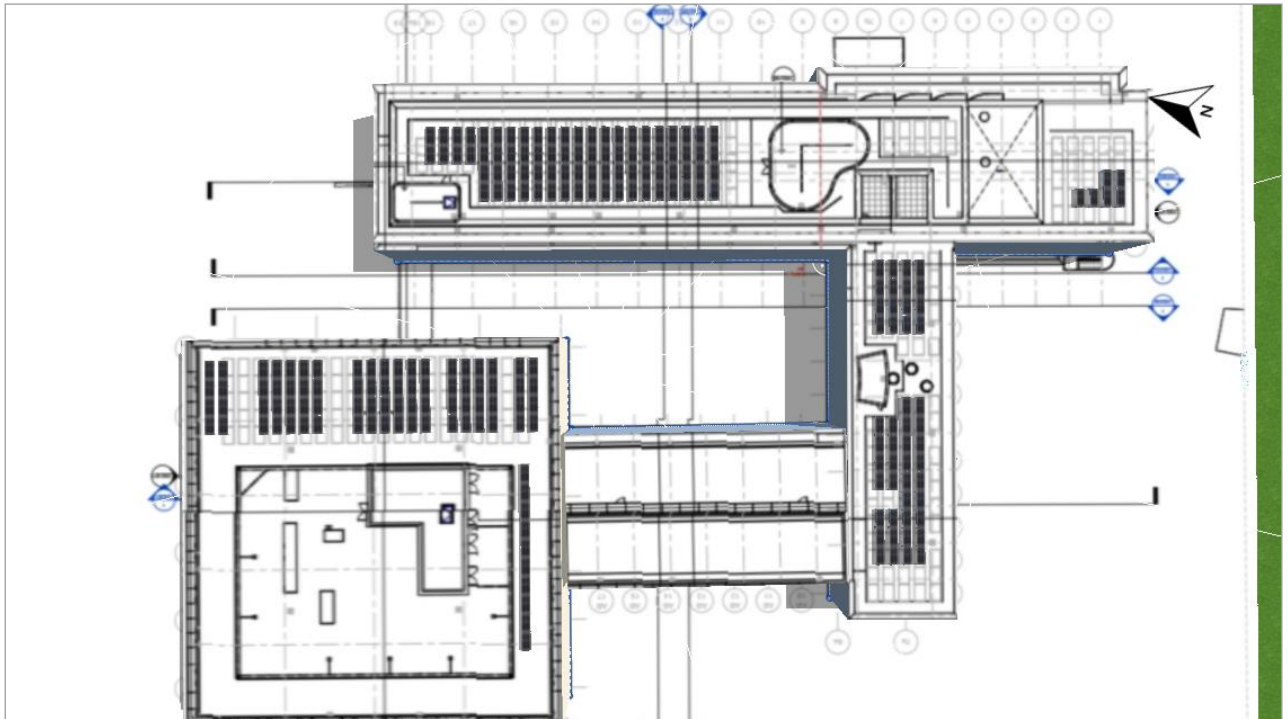


Figure: Overview Image, 3D Design

PV System

3D, Grid-connected PV System

Climate Data	London, GBR (2001 - 2020)
Values source	Meteonorm 8.2(i)
PV Generator Output	110 kWp
PV Generator Surface	530.2 m ²
Number of PV Modules	220
Number of Inverters	3

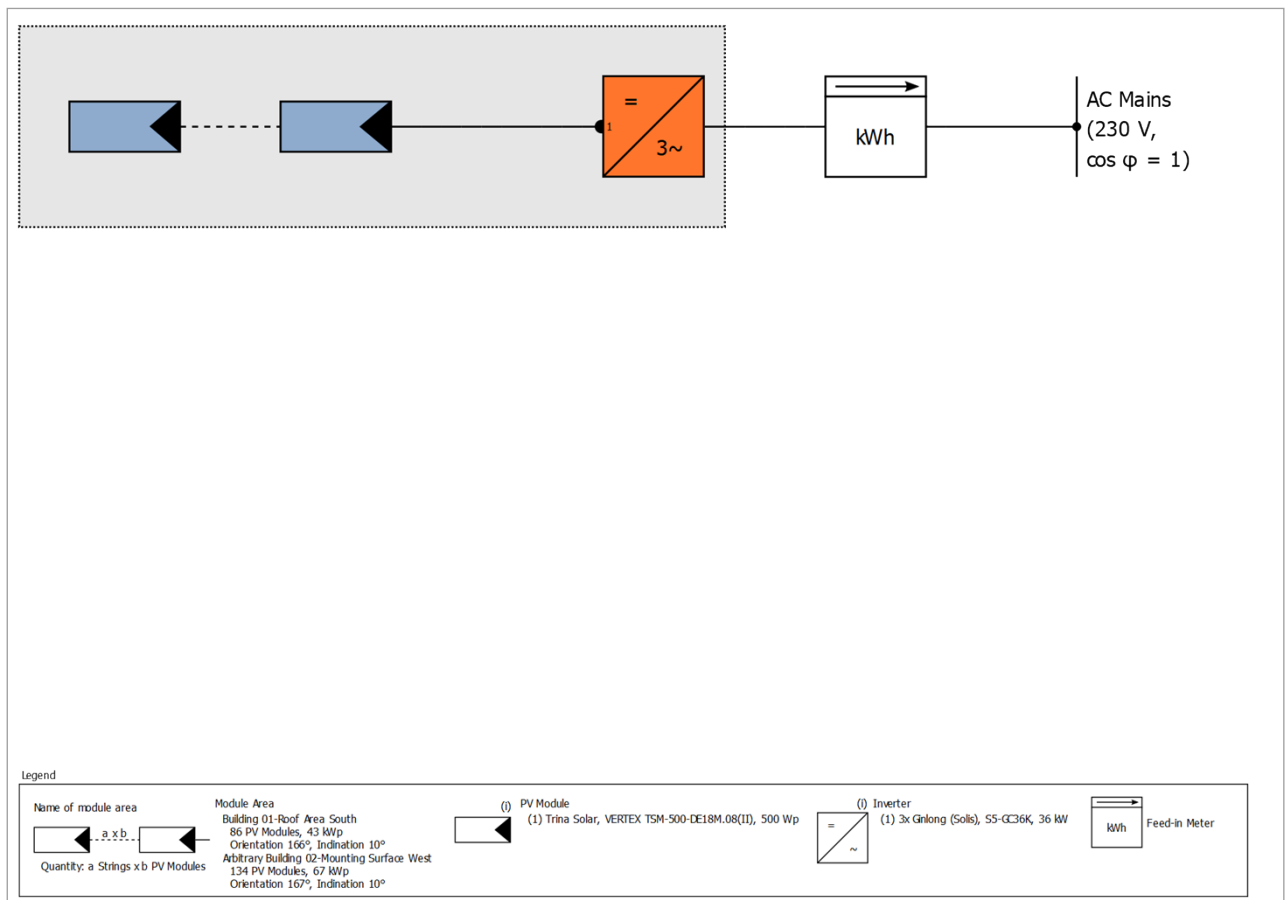


Figure: Schematic diagram

Production Forecast

Production Forecast

PV Generator Output	110.00 kWp
Spec. Annual Yield	970.59 kWh/kWp
Performance Ratio (PR)	92.07 %
Yield Reduction due to Shading	2.0 %
Grid Export	106,805 kWh/Year
Grid Export in the first year (incl. module degradation)	106,805 kWh/Year
Standby Consumption (Inverter)	40 kWh/Year
CO ₂ Emissions avoided	50,180 kg / year

The results have been calculated with a mathematical model calculation from Valentin Software GmbH (PV*SOL algorithms). The actual yields from the solar power system may differ as a result of weather variations, the efficiency of the modules and inverter, and other factors.

Set-up of the System

Overview

System Data

Type of System	3D, Grid-connected PV System
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Climate Data

Location	London, GBR (2001 - 2020)
Values source	Meteonorm 8.2(i)
Data resolution	1 h
Simulation models used:	
- Diffuse Irradiation onto Horizontal Plane	Hofmann
- Irradiance onto tilted surface	Hay & Davies

Module Areas

1. Module Area - Building 01-Roof Area South

PV Generator, 1. Module Area - Building 01-Roof Area South

Name	Building 01-Roof Area South
PV Modules	86 x VERTEX TSM-500-DE18M.08(II) (v1)
Manufacturer	Trina Solar
Inclination	10 °
Orientation	South 166 °
Installation Type	Mounted - Roof
PV Generator Surface	207.3 m ²

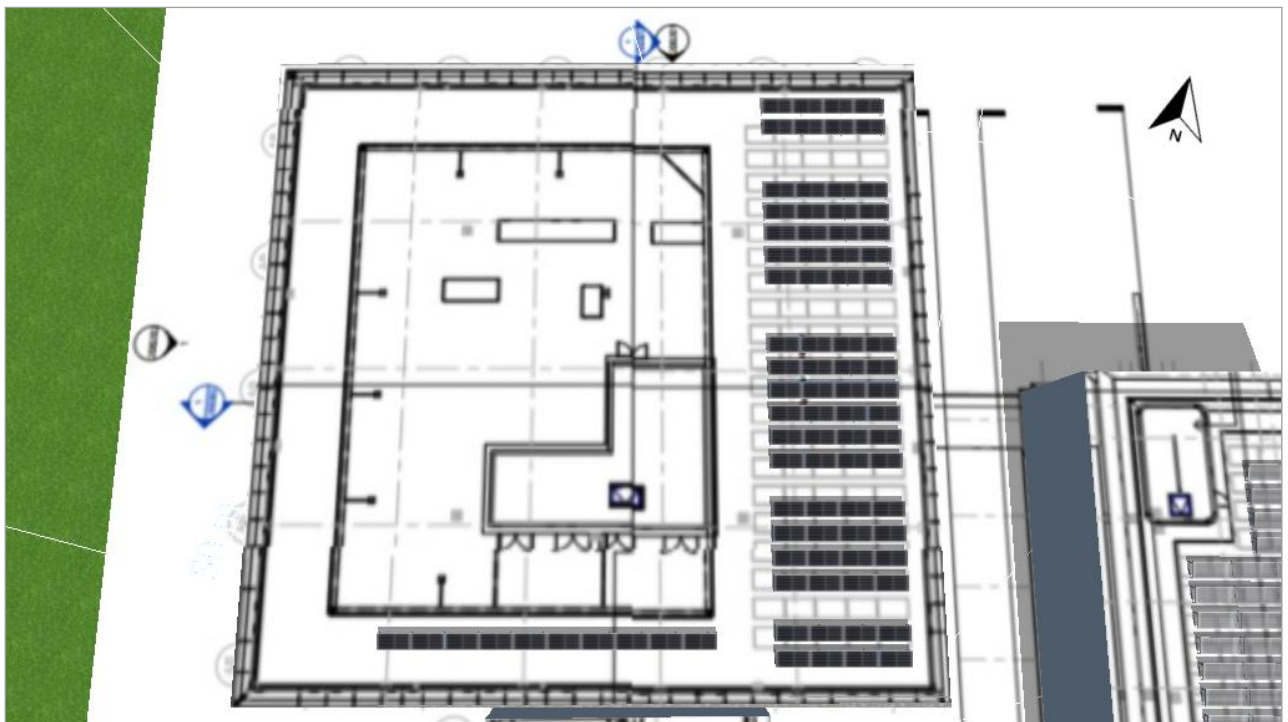


Figure: 1. Module Area - Building 01-Roof Area South

2. Module Area - Arbitrary Building 02-Mounting Surface West

PV Generator, 2. Module Area - Arbitrary Building 02-Mounting Surface West

Name	Arbitrary Building 02-Mounting Surface West
PV Modules	134 x VERTEX TSM-500-DE18M.08(II) (v1)
Manufacturer	Trina Solar
Inclination	10 °
Orientation	South 167 °
Installation Type	Mounted - Roof
PV Generator Surface	322.9 m²

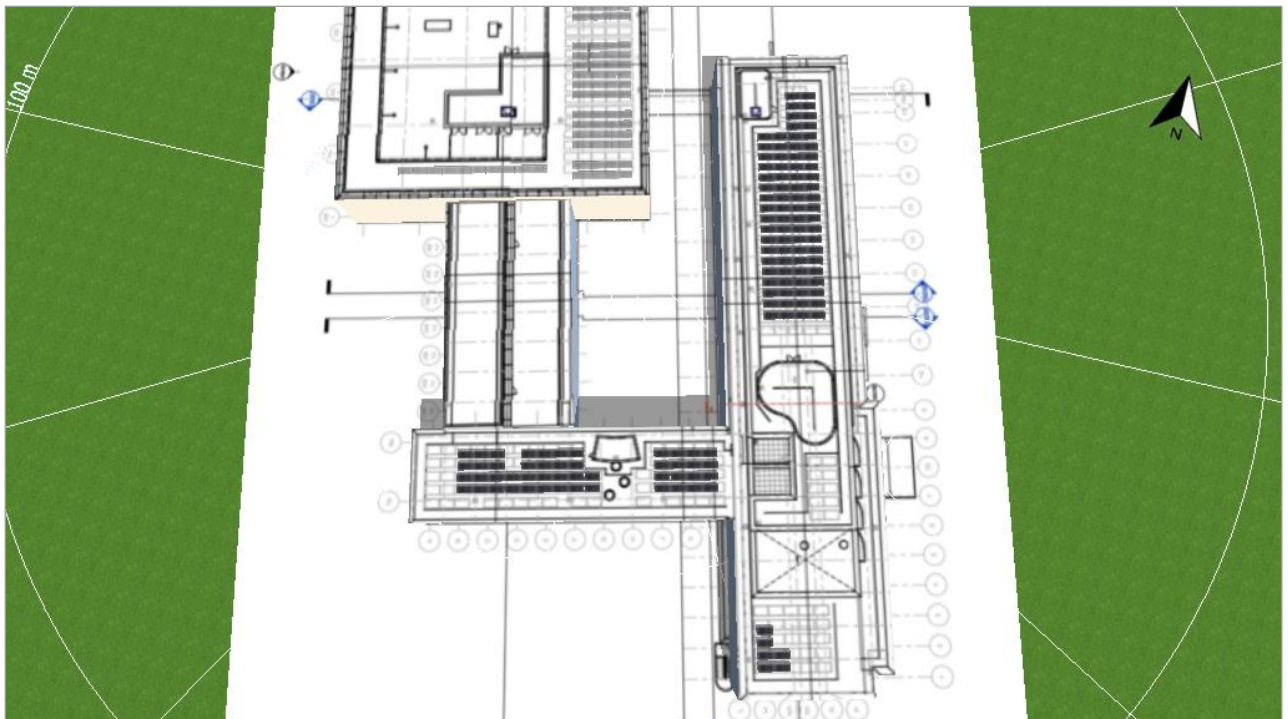


Figure: 2. Module Area - Arbitrary Building 02-Mounting Surface West

Horizon Line, 3D Design

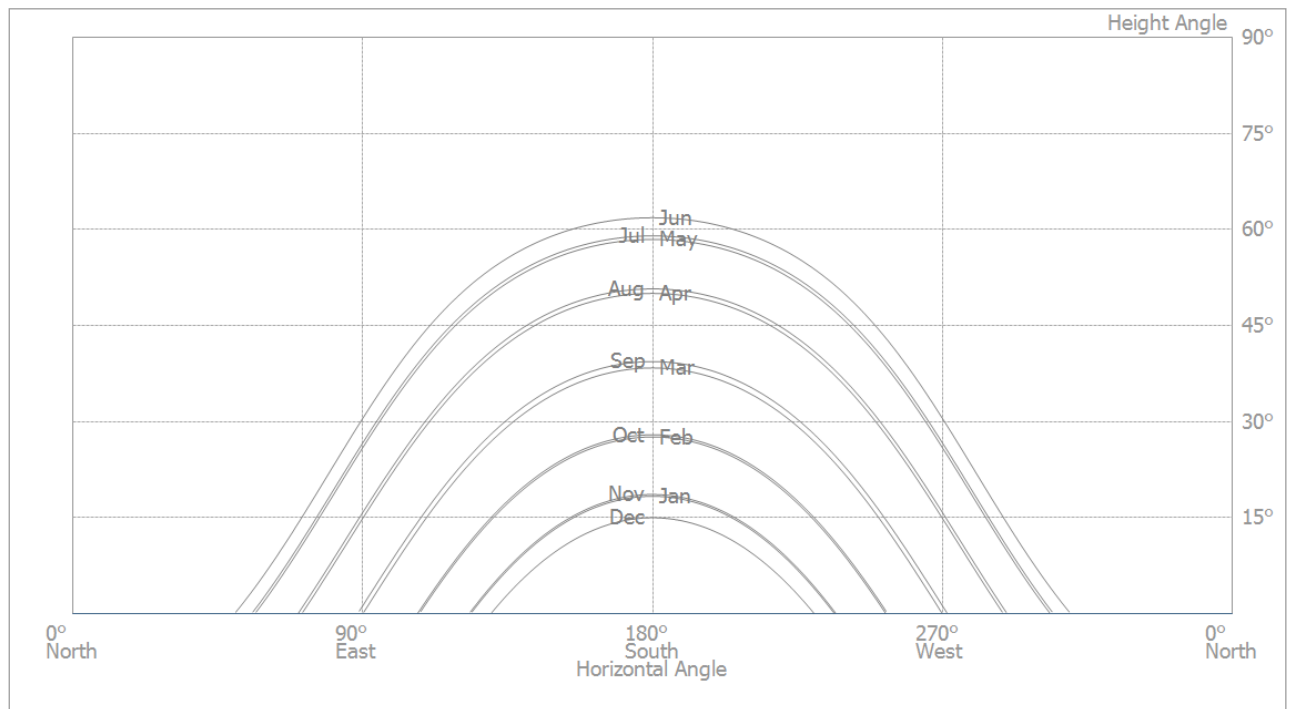


Figure: Horizon (3D Design)

Inverter configuration

Configuration 1

Module Area	Building 01-Roof Area South
Inverter 1	
Model	S5-GC36K (v2)
Manufacturer	Ginlong (Solis)
Quantity	1
Sizing Factor	119.4 %
Configuration	MPP 1: 2 x 14
	MPP 2: 2 x 11
	MPP 3: 2 x 11
	MPP 4: 1 x 14

Configuration 2

Module Area	Arbitrary Building 02-Mounting Surface West
Inverter 1	
Model	S5-GC36K (v2)
Manufacturer	Ginlong (Solis)
Quantity	2
Sizing Factor	93.1 %
Configuration	MPP 1: 1 x 19
	MPP 2: 1 x 16
	MPP 3: 1 x 16
	MPP 4: 1 x 16

AC Mains

AC Mains

Number of Phases	3
Mains voltage between phase and neutral	230 V
Displacement Power Factor (cos phi)	+/- 1

Simulation Results

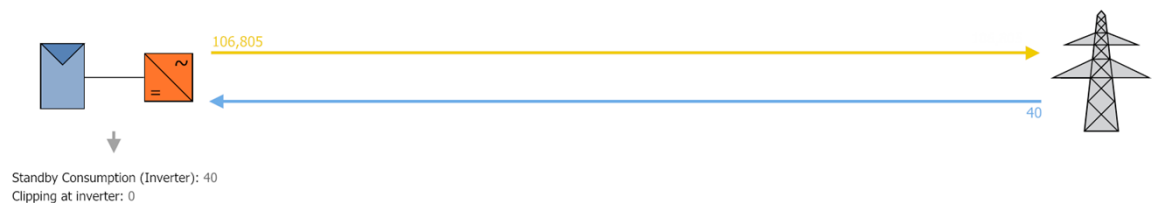
Results Total System

PV System

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Energy Flow Graph

Project: Haringey Civic Centre



All values in kWh
Small deviations in the totals can occur due to rounding
created with PV*SOL

Figure: Energy flow

Plans and parts list
Circuit Diagram

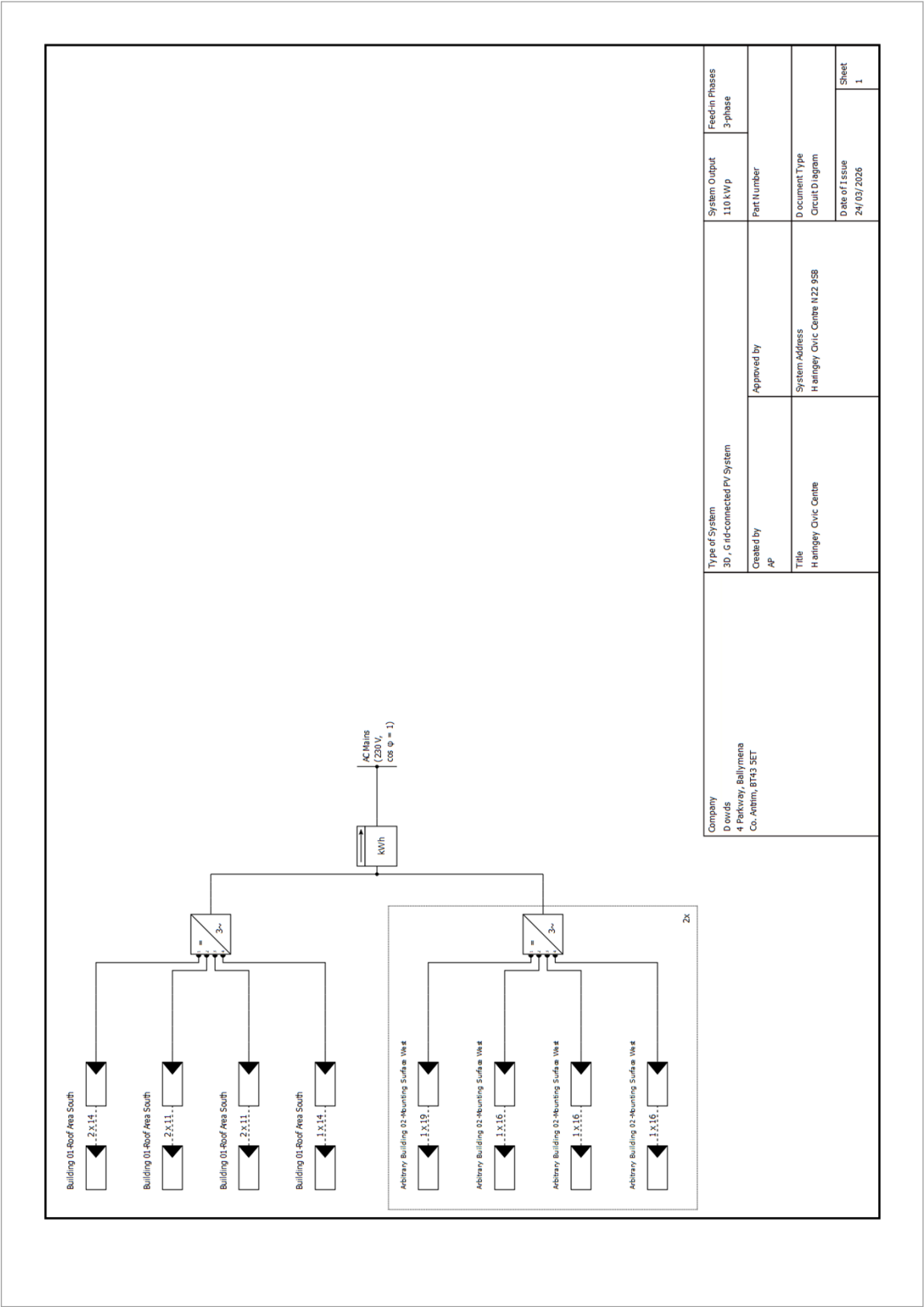


Figure: Circuit Diagram

Overview plan



Figure: Overview plan

Dimensioning Plan

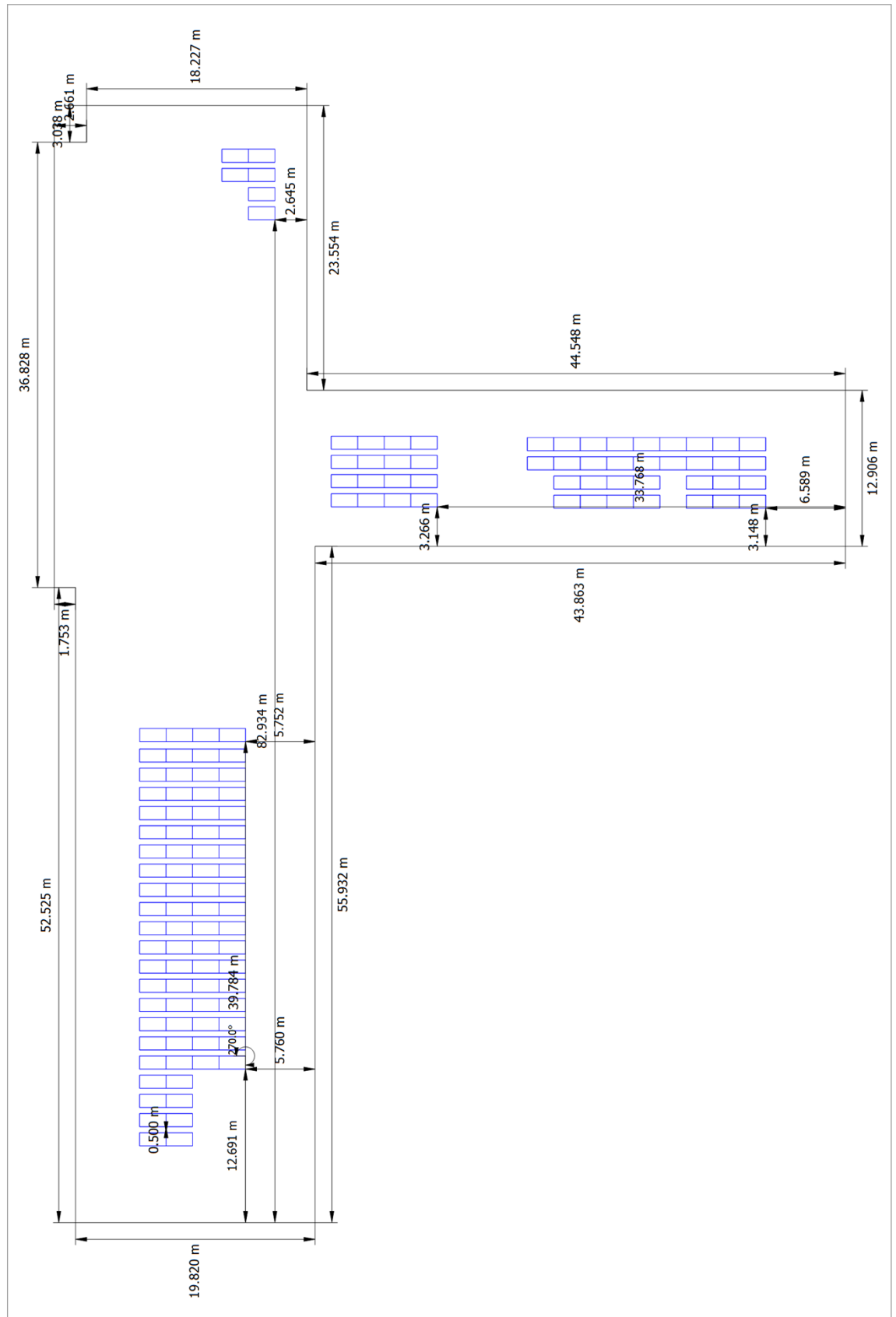


Figure: Arbitrary Building 02 - Mounting Surface West

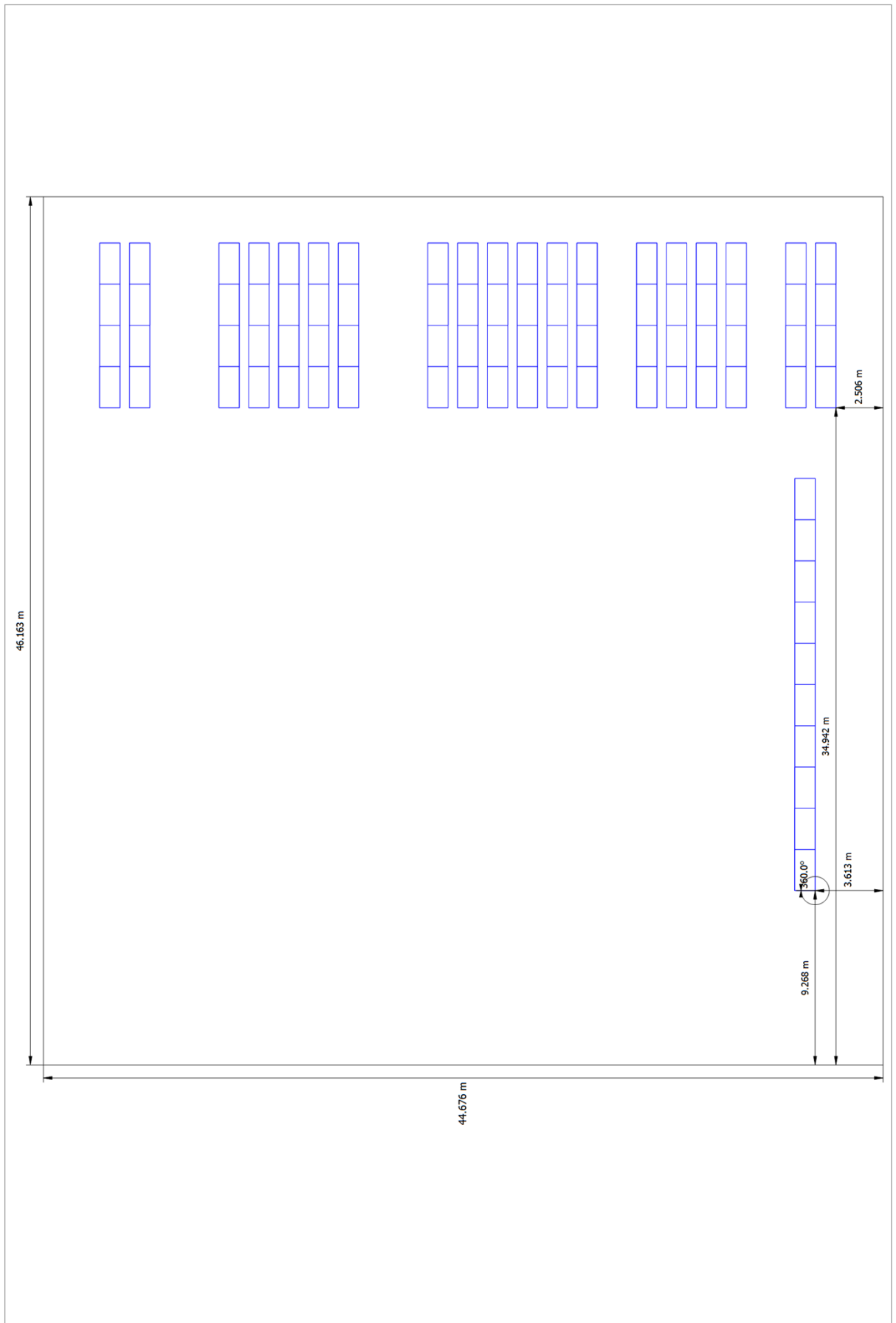


Figure: Building 01 - Roof Area South

Screenshots, 3D Design Environment

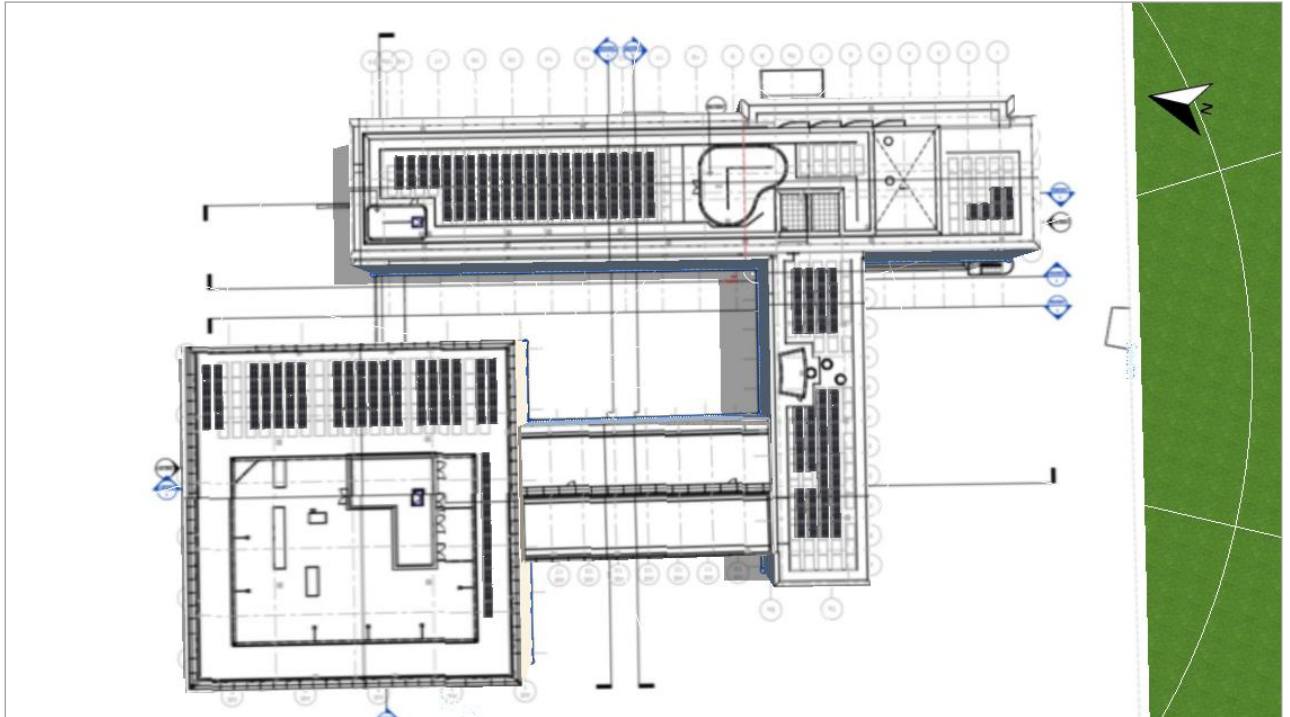


Figure: Screenshot02

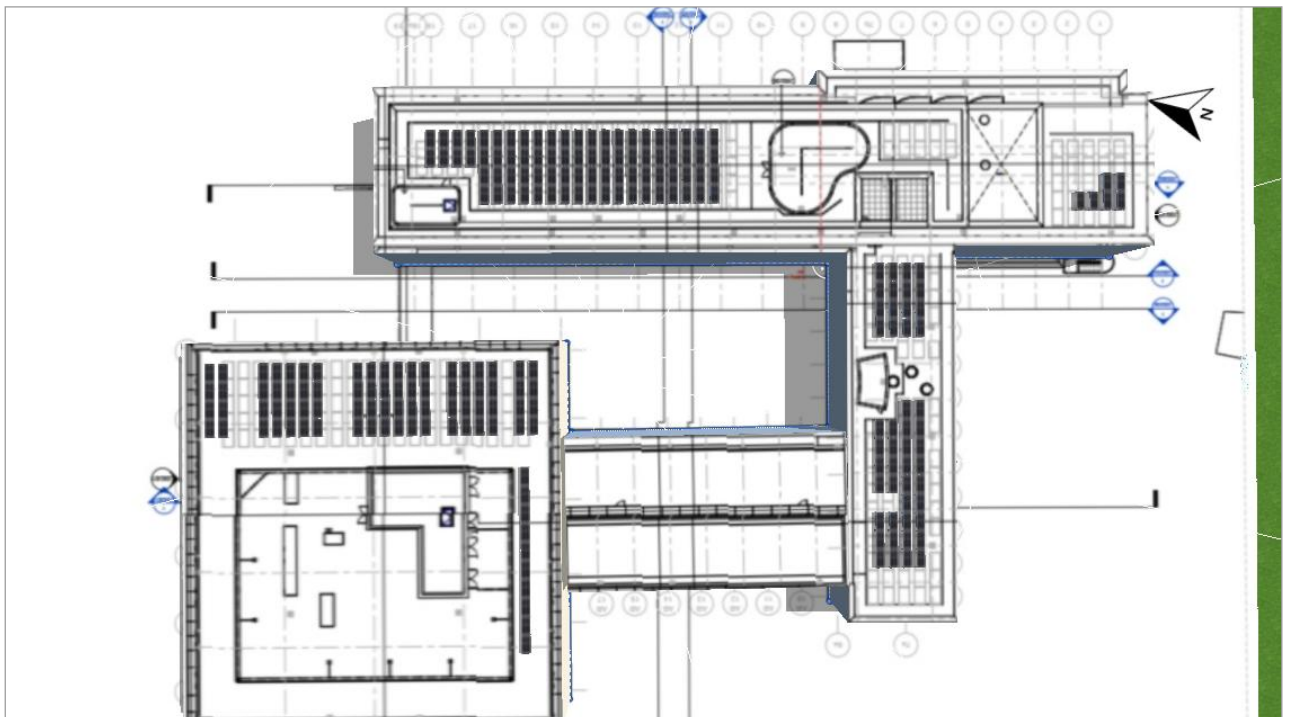


Figure: Screenshot03

Shading

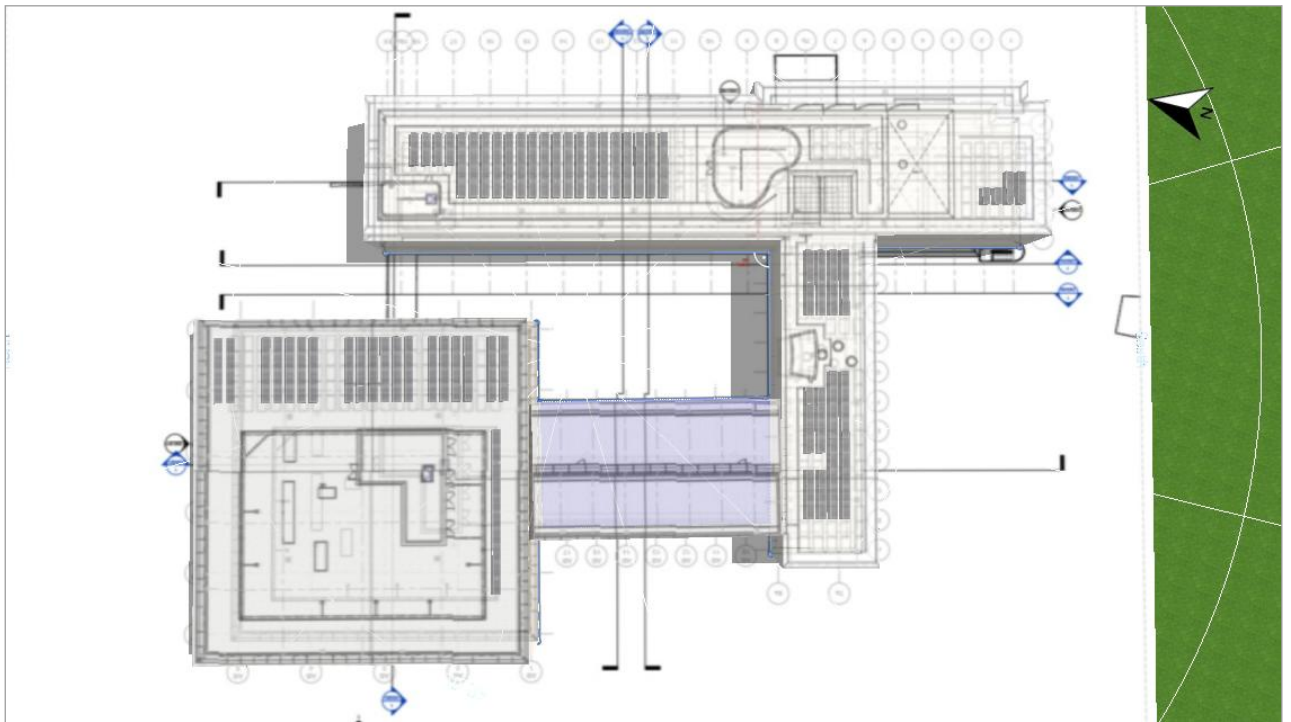


Figure: Screenshot01