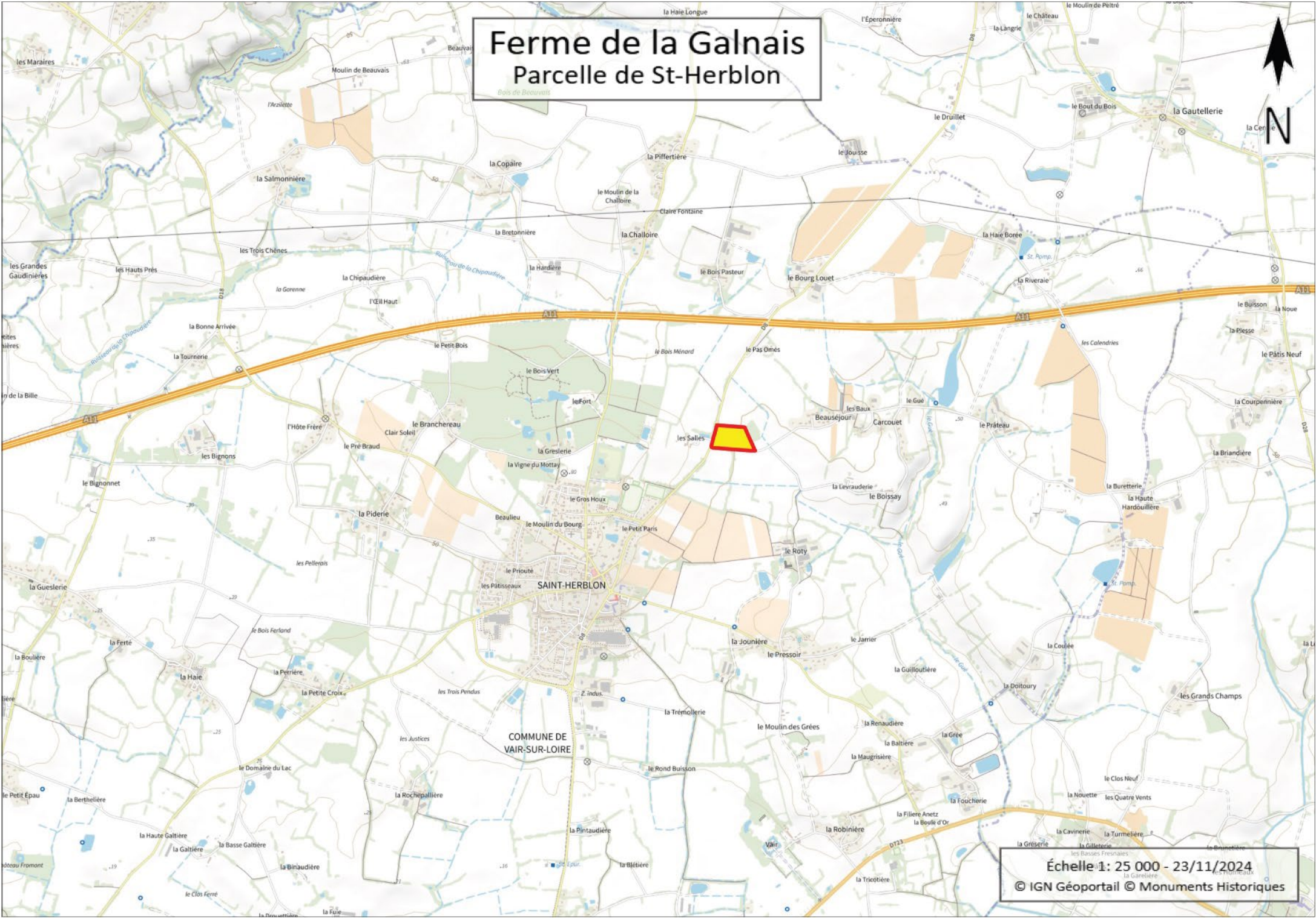
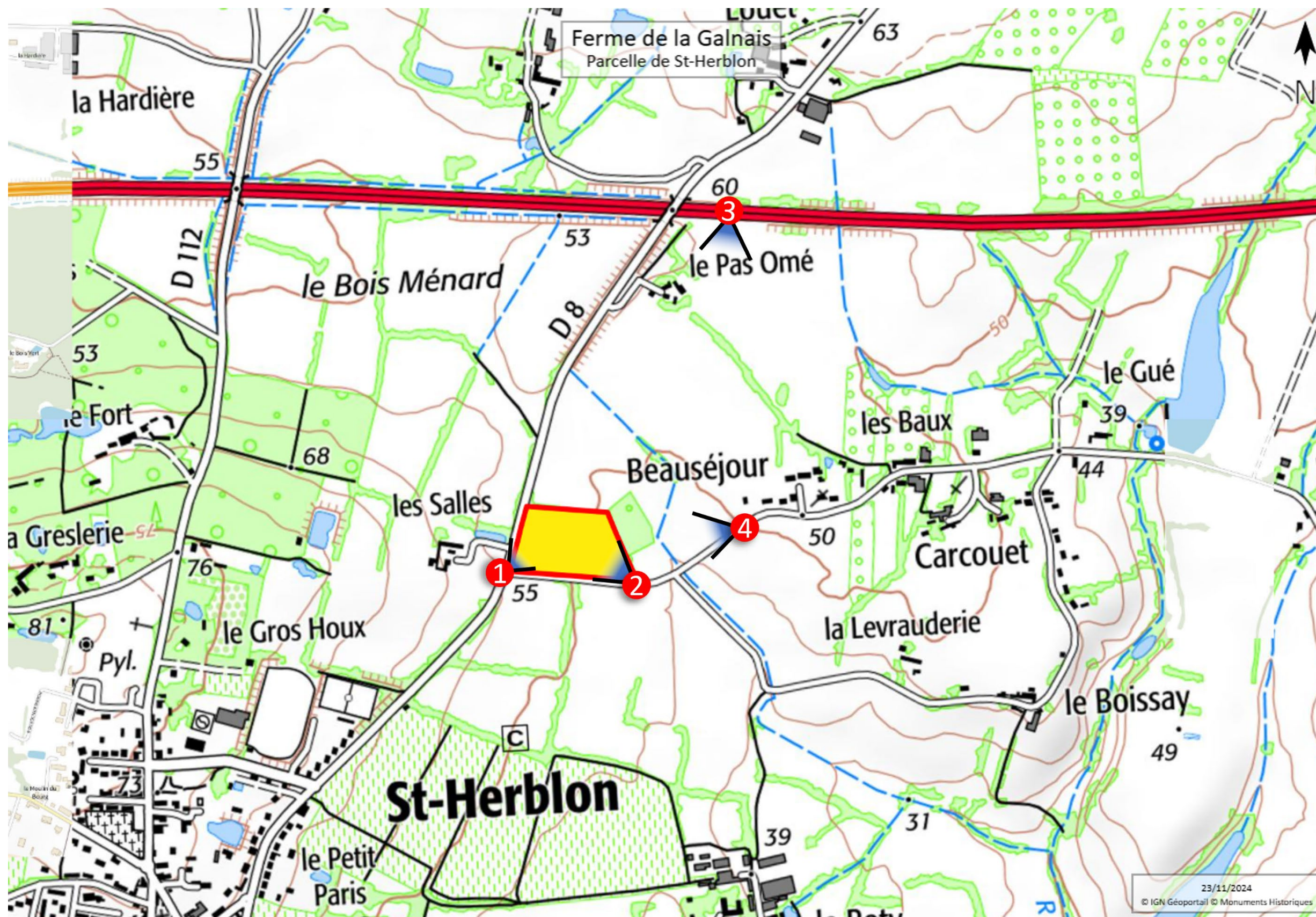


Annexe 3 - Un plan de situation au 1/25 000 ; L’emprise maximale du projet est la parcelle jaune délimité par le liserait rouge



Annexe 4 - Au minimum, 2 photographies datées de la zone d'implantation, avec une localisation cartographique des prises de vue, l'une devant permettre de situer le projet dans l'environnement proche et l'autre de le situer dans le paysage lointain







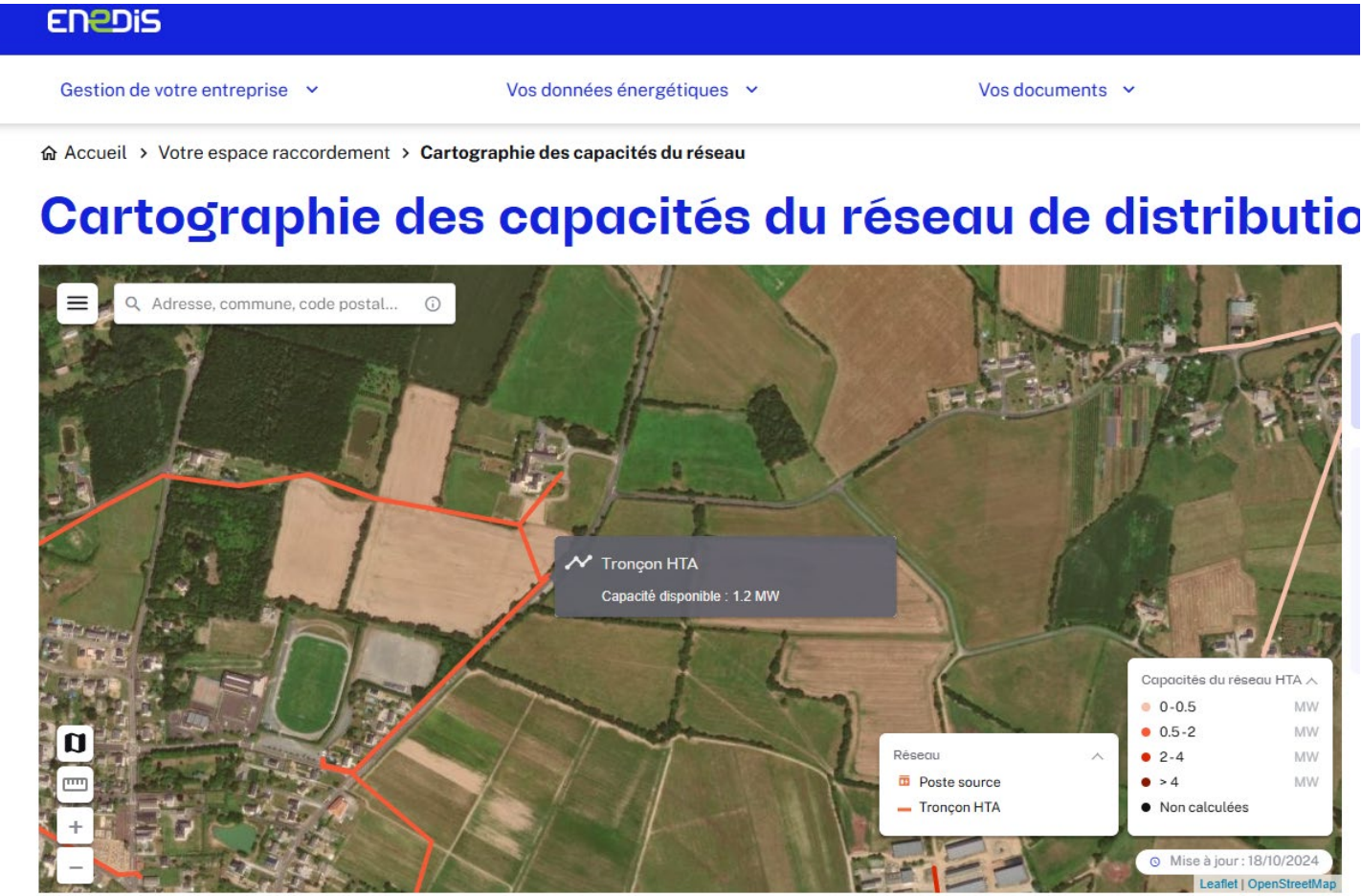
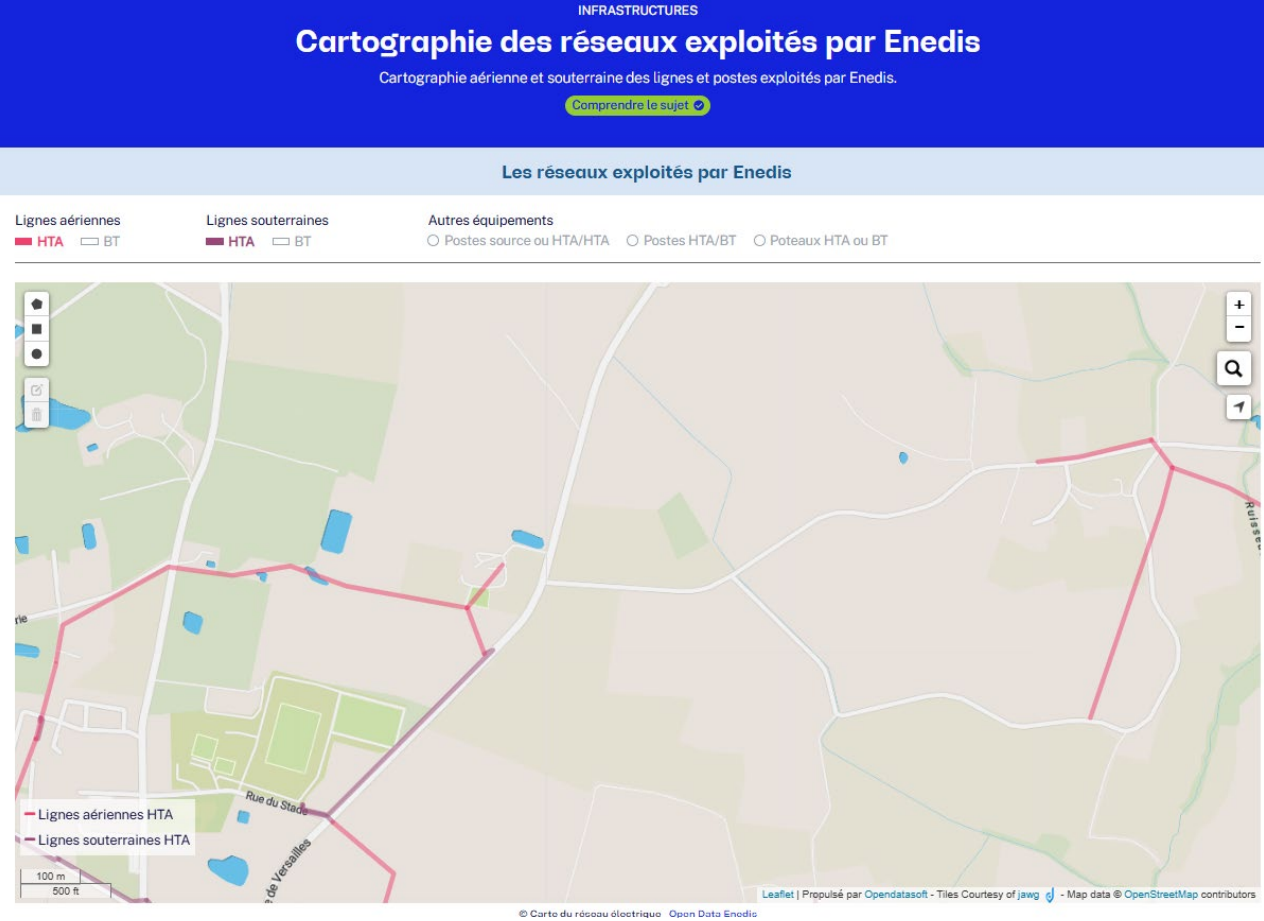
2 septembre 2021



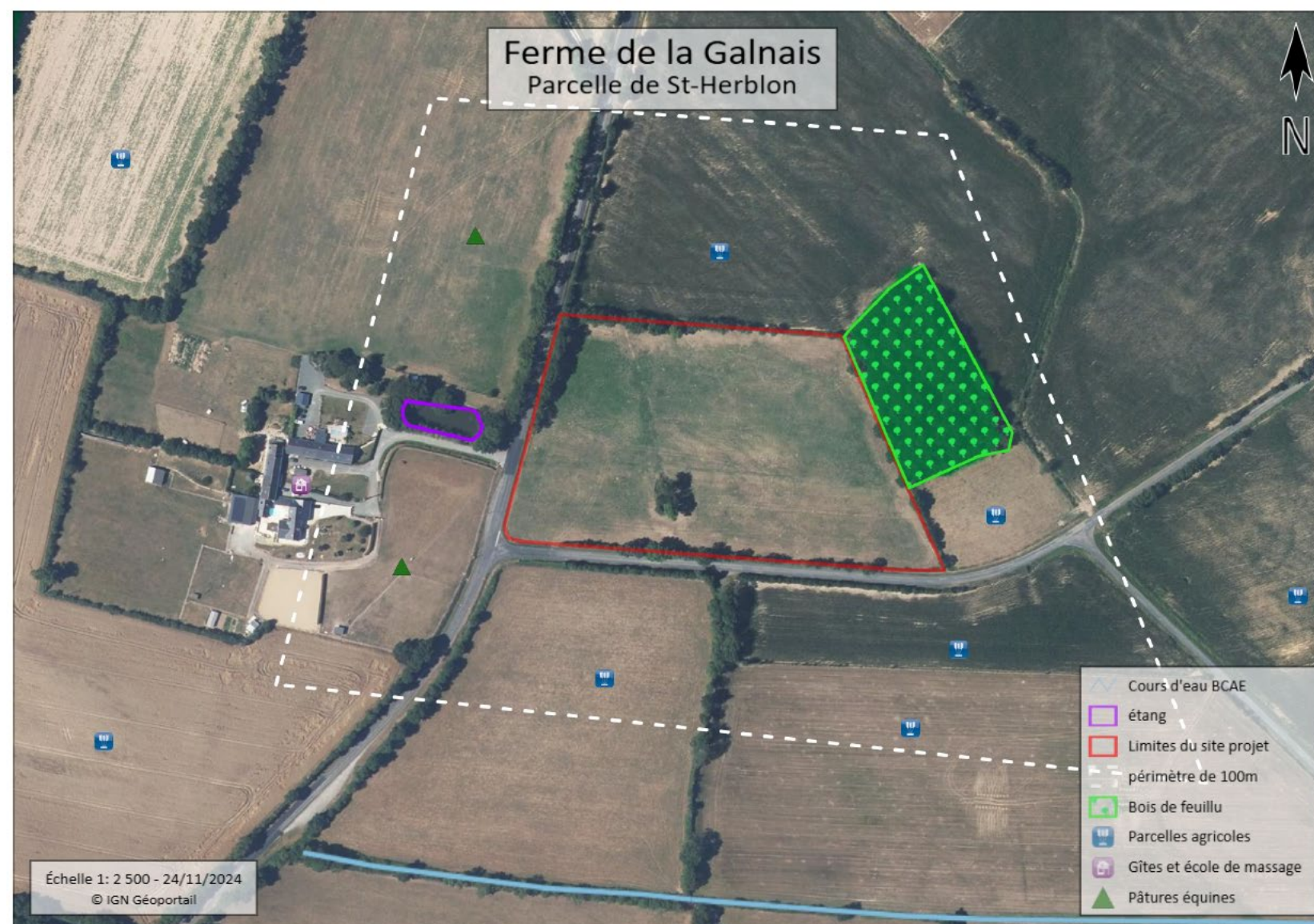


Annexe 5 - Un plan du projet ou, pour les travaux, ouvrages ou aménagements visés aux catégories 5° a), 6°a), b) et c), 7°a), 9°a),10°,11°a), b), 12°, 13°, 22°, 32°, 33°, 34°, 35°, 36, 37°, 38°, 43° a) et b) de l'annexe à l'article R. 122-2 du code de l'environnement un projet de tracé ou une enveloppe de tracé

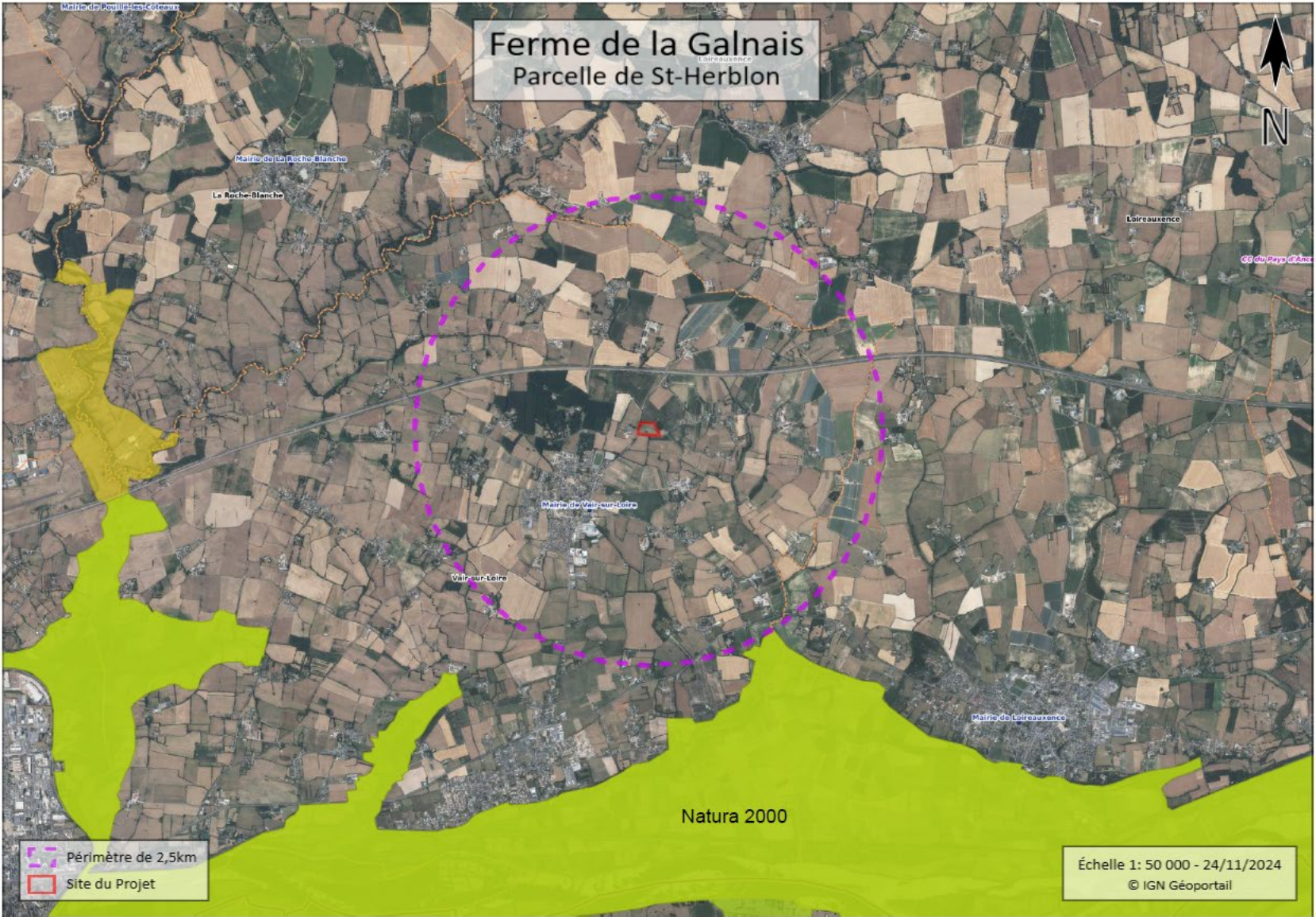




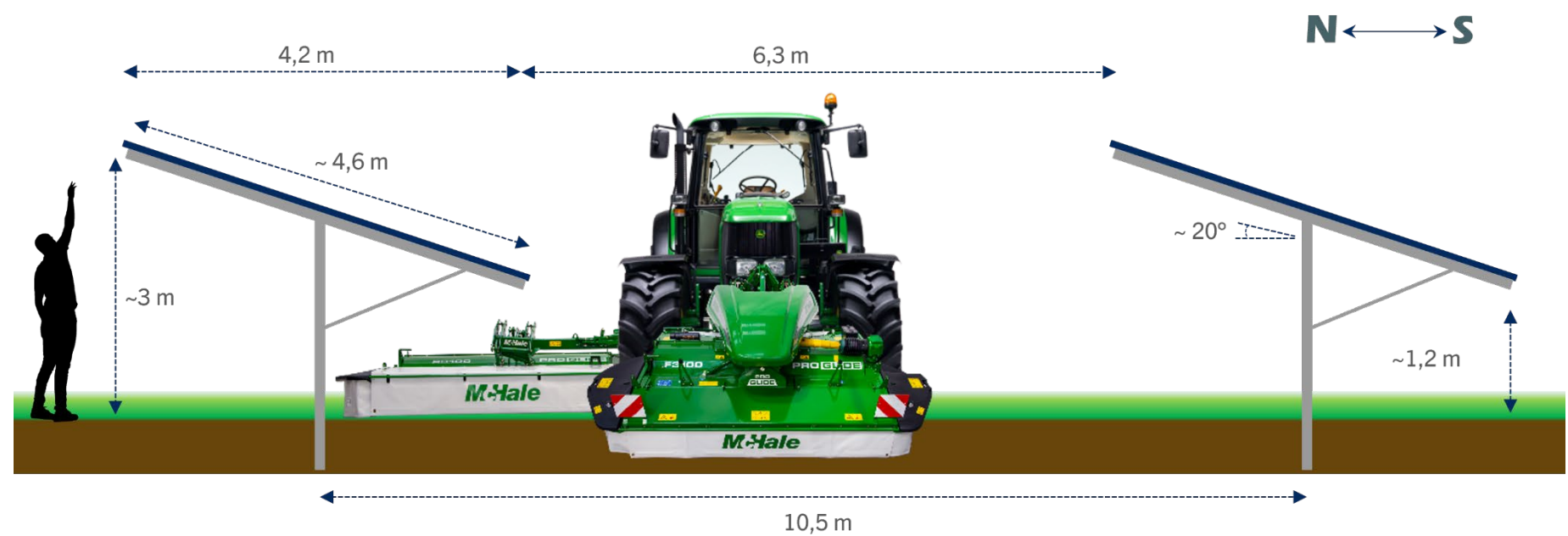
Annexe 6 - Sauf pour les travaux, ouvrages ou aménagements visés aux 5° a), 6°a), b) et c), 7° a), 9°a), 10°, 11°a), b), 12°, 13°, 22°, 32°, 33°, 34°, 35°, 36, 37°, 38°, 43° a) et b) de l'annexe à l'article R. 122-2 du code de l'environnement : plan des abords du projet (100 mètres au minimum) pouvant prendre la forme de photos aériennes datées et complétées si nécessaire selon les évolutions récentes, à une échelle comprise entre 1/2 000 et 1/5 000. Ce plan devra préciser l'affectation des constructions et terrains avoisinants ainsi que les canaux, plans d'eau et cours d'eau



Annexe 7 - Si le projet est situé dans un site Natura 2000, un plan de situation détaillé du projet par rapport à ce site. Dans les autres cas, une carte permettant de localiser le projet par rapport aux sites Natura 2000 sur lesquels le projet est susceptible d’avoir des effets



Annexe 8 – Coupe transversale de l’installation agrivoltaïque utilisant des tables monopieu



DEEP BLUE 3.0

Mono

550W MBB Bifacial Mono PERC
Half-cell Double Glass Module
JAM72D30 525-550/MB/1500V Series

Introduction

Assembled with 11BB bifacial PERCUM cells and half-cell configuration, these double glass modules have the capability of converting the incident light from the rear side together with the front side into electricity, providing higher output power, lower temperature coefficient, less shading loss, as well as enhanced tolerance for mechanical loading.



Higher output power



More reliable, more stable
power generation



Less shading effect

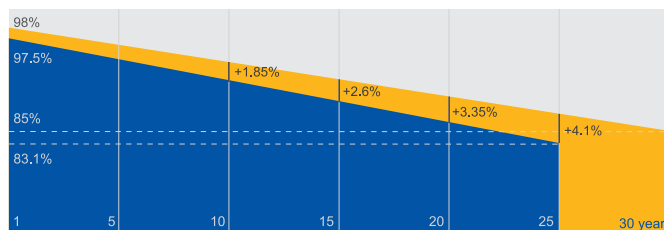


Lower temperature coefficient

Superior Warranty

- 12-year product warranty
- 30-year linear power output warranty

0.45% Annual Degradation
Over 30 years



■ Bifacial double glass module linear power warranty

■ Standard module linear power warranty

Comprehensive Certificates

- IEC 61215, IEC 61730
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- ISO 45001: 2018 Occupational health and safety management systems



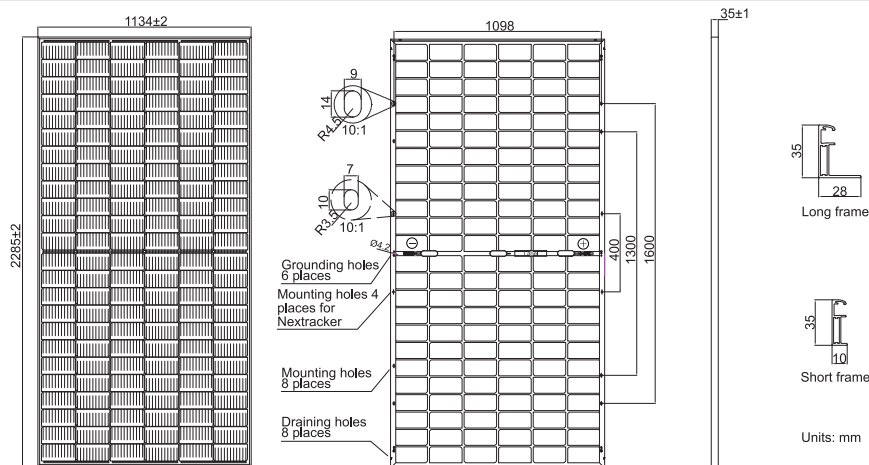
JA SOLAR

www.jasolar.com

Specifications subject to technical changes and tests.
JA Solar reserves the right of final interpretation.
Shanghai JA Solar Technology Co., Ltd.



MECHANICAL DIAGRAMS



Remark: customized frame color and cable length available upon request

SPECIFICATIONS

Cell	Mono
Weight	31.6kg±3%
Dimensions	2285±2mm×1134±2mm×35±1mm
Cable Cross Section Size	4mm ² (IEC), 12 AWG(UL)
No. of cells	144(6×24)
Junction Box	IP68, 3 diodes
Connector	Genuine MC4-EVO2 QC 4.10-35/45
Cable Length (Including Connector)	Portrait:300mm(+)/400mm(-); Landscape:1300mm(+)/1300mm(-)
Front Glass/Back Glass	2.0mm/2.0mm
Country of Manufacturer	China/Vietnam

ELECTRICAL PARAMETERS AT STC

TYPE	JAM72D30 -525/MB/1500V	JAM72D30 -530/MB/1500V	JAM72D30 -535/MB/1500V	JAM72D30 -540/MB/1500V	JAM72D30 -545/MB/1500V	JAM72D30 -550/MB/1500V
Rated Maximum Power(P _{max}) [W]	525	530	535	540	545	550
Open Circuit Voltage(V _{oc}) [V]	49.15	49.30	49.45	49.60	49.75	49.90
Maximum Power Voltage(V _{mp}) [V]	41.15	41.31	41.47	41.64	41.80	41.96
Short Circuit Current(I _{sc}) [A]	13.65	13.72	13.79	13.86	13.93	14.00
Maximum Power Current(I _{mp}) [A]	12.76	12.83	12.90	12.97	13.04	13.11
Module Efficiency [%]	20.3	20.5	20.6	20.8	21.0	21.2
Power Tolerance	0~+5W					
Temperature Coefficient of I _{sc} (α _{Isc})	+0.045%/°C					
Temperature Coefficient of V _{oc} (β _{Voc})	-0.275%/°C					
Temperature Coefficient of P _{max} (γ _{Pmp})	-0.350%/°C					
STC	Irradiance 1000W/m ² , cell temperature 25°C, AM1.5G					

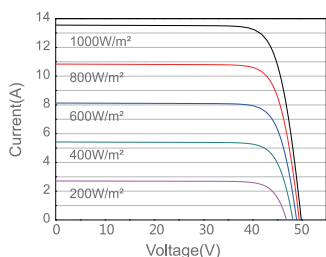
Remark: Electrical data in this catalog do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types.
Measurement tolerance at STC: P_{max} ±3 %, V_{oc} ±3% and I_{sc} ±4%.

ELECTRICAL CHARACTERISTICS WITH 10% SOLAR IRRADIATION RATIO

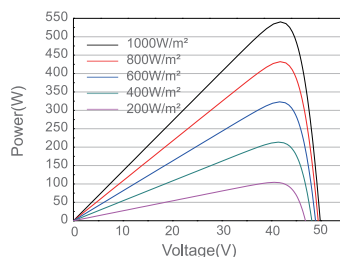
TYPE	JAM72D30 -525/MB	JAM72D30 -530/MB	JAM72D30 -535/MB	JAM72D30 -540/MB	JAM72D30 -545/MB	JAM72D30 -550/MB	Maximum System Voltage	1500V DC
Rated Max Power(Pmax) [W]	562	567	572	578	583	589	Operating Temperature	-40℃~+85℃
Open Circuit Voltage(Voc) [V]	49.54	49.67	49.80	49.93	50.03	50.21	Maximum Series Fuse Rating	30A
Max Power Voltage(Vmp) [V]	41.14	41.31	41.47	41.65	41.78	41.95	Maximum Static Load,Front* Maximum Static Load,Back*	3600Pa, 1.5 1600Pa, 1.5
Short Circuit Current(Isc) [A]	14.61	14.68	14.76	14.83	14.91	14.98	NOCT	45±2℃
Max Power Current(Imp) [A]	13.65	13.73	13.80	13.88	13.95	14.03	Bifaciality**	70%±10%
Irradiation Ratio(rear/front)	10%						Fire Performance	UL Type 29
*For NexTracker installations, Maximum Static Load, Front is 2400Pa while Maximum Static Load, Back is 2400Pa.								

CHARACTERISTICS

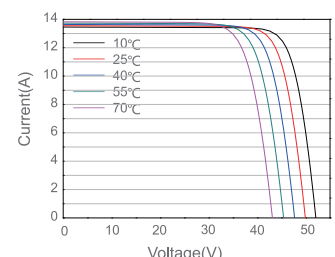
Current-Voltage Curve JAM72D30-540/MB/1500V



Power-Voltage Curve JAM72D30-540/MB/1500V



Current-Voltage Curve JAM72D30-540/MB/1500V



Annexe 10

SUN2000-215KTL-H0

Smart String Inverter



9
MPP Trackers



Max. Efficiency
 $\geq 99.0\%$



Smart String-Level
Disconnecter



Smart I-V Curve
Diagnosis Supported



MBUS
Supported



Fuse Free
Design

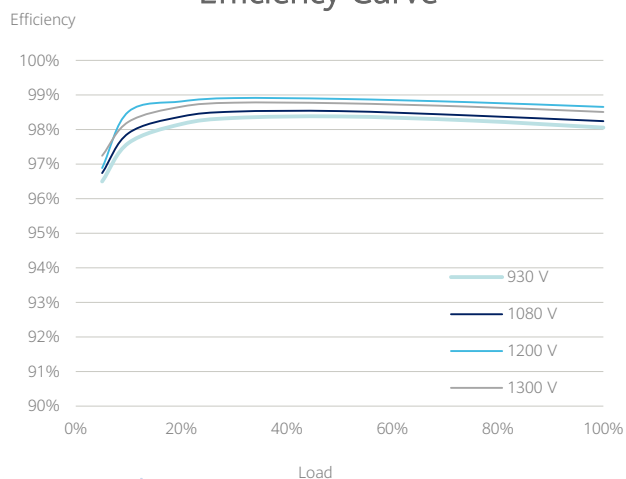


Surge Arresters for
DC & AC

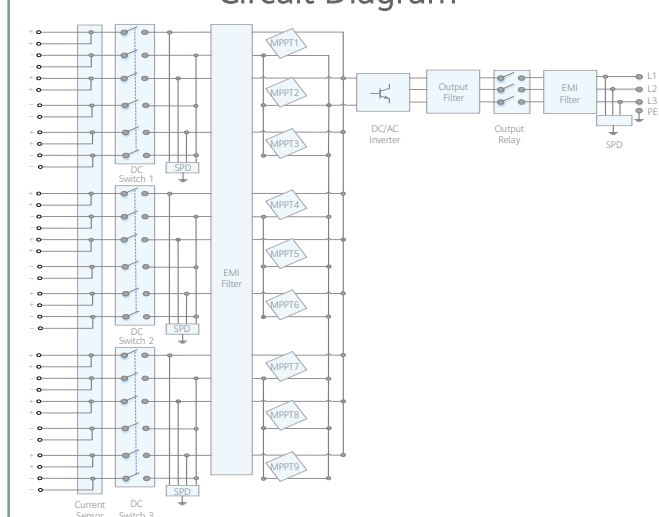


IP66
Protection

Efficiency Curve



Circuit Diagram



Technical Specifications

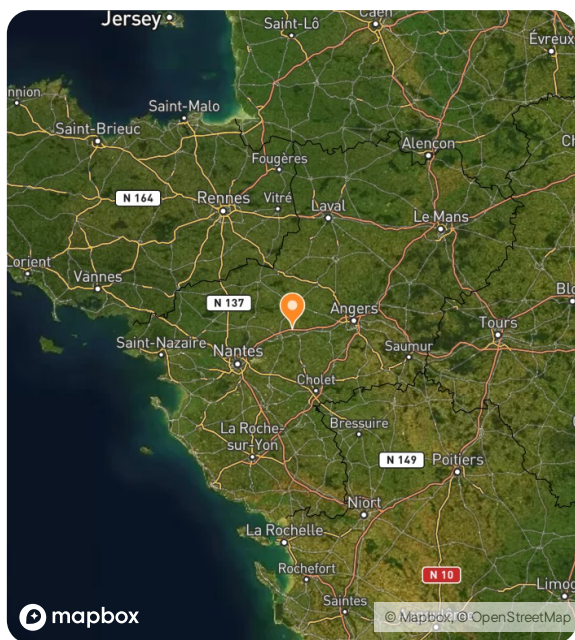
Efficiency	
Max. Efficiency	99.00%
European Efficiency	98.80%
Input	
Max. Input Voltage	1,500 V
Max. Current per MPPT	30 A
Max. Short Circuit Current per MPPT	50 A
Start Voltage	550 V
MPPT Operating Voltage Range	500 V ~ 1,500 V
Nominal Input Voltage	1,080 V
Number of Inputs	18
Number of MPP Trackers	9
Output	
Nominal AC Active Power	200,000 W
Max. AC Apparent Power	215,000 VA
Max. AC Active Power ($\cos\phi=1$)	215,000 W
Nominal Output Voltage	800 V, 3W + PE
Rated AC Grid Frequency	50 Hz / 60 Hz
Nominal Output Current	144.4 A
Max. Output Current	155.2 A
Adjustable Power Factor Range	0.8 LG ... 0.8 LD
Max. Total Harmonic Distortion	< 3%
Protection	
Input-side Disconnection Device	Yes
Anti-islanding Protection	Yes
AC Overcurrent Protection	Yes
DC Reverse-polarity Protection	Yes
PV-array String Fault Monitoring	Yes
DC Surge Arrester	Type II
AC Surge Arrester	Type II
DC Insulation Resistance Detection	Yes
Residual Current Monitoring Unit	Yes
Communication	
Display	LED Indicators, WLAN + APP
USB	Yes
MBUS	Yes
RS485	Yes
General	
Dimensions (W x H x D)	1,035 x 700 x 365 mm (40.7 x 27.6 x 14.4 inch)
Weight (with mounting plate)	≤86 kg (189.6 lb.)
Operating Temperature Range	-25°C ~ 60°C (-13°F ~ 140°F)
Cooling Method	Smart Air Cooling
Max. Operating Altitude without Derating	4,000 m (13,123 ft.)
Relative Humidity	0 ~ 100%
DC Connector	Staubli MC4 EVO2
AC Connector	Waterproof Connector + OT/DT Terminal
Protection Degree	IP66
Topology	Transformerless

Vair-sur-Loire, Loire-Atlantique, France

Latitude : 47.4148° Longitude : -1.0863°

Mise à jour de l'analyse : 24 novembre 2024

Carte



Visualisation du site



Informations sur le site

Système photovoltaïque

Capacité installée - DC	Production spécifique
985.60 kWp	1,275 kWh/kWp
Capacité installée - AC nominal	Variabilité annuelle
800 kWac	35.91 MWh
Production annuelle initiale (P50)	Rapport DC/AC du système
1.26 GWh	1.23
P90	Nombre de tables
1.20 GWh	64
Nombre de panneaux	Nombre d'onduleurs
1,792	4

Données géographiques

Zone incluse	Zone exclue
2.43ha	1.25ha
Zone nette	Zone couverte
1.18ha	0.43ha

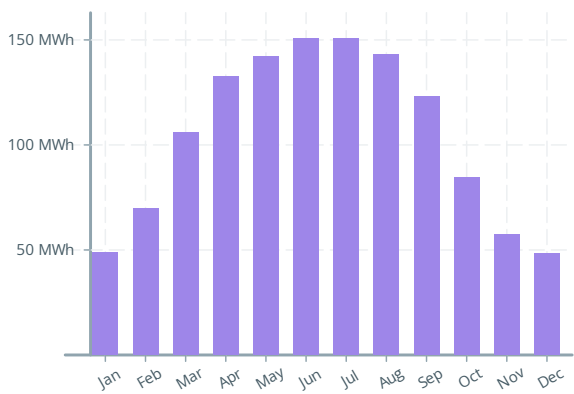
Méthodes de calcul

Système PV	Source de données de rayonnement
PV_LIB	CMSAF (SARAH 2.1)
Modèle de transposition	Source de données climatiques
Hay/Davies	ERA5
Type de données de rayonnement	
Time Series	

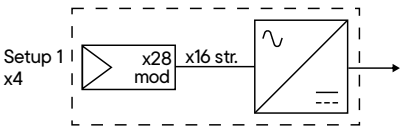
Données de rayonnement

GHI annuelle	DNI annuelle
1,292.92 kWh/m²	1,291.59 kWh/m²
DHI annuelle	Irradiance annuelle PoA
618.03 kWh/m²	1,470.07 kWh/m²

Production mensuelle



Single line diagram



System information

	Setup 1
Inverters	4
Modules	1,792
Strings	64
DC/AC ratio	1.23
Strings per inverter	16
Modules per string	28

Module

Module	JASolar550 (JAM72D30)
Module rated power	550 W

Inverter

Inverter	SUN2000-215KTL-H0
Inputs per inverter	18
Number of MPPTs	9
Inverter rated power	200 kVA

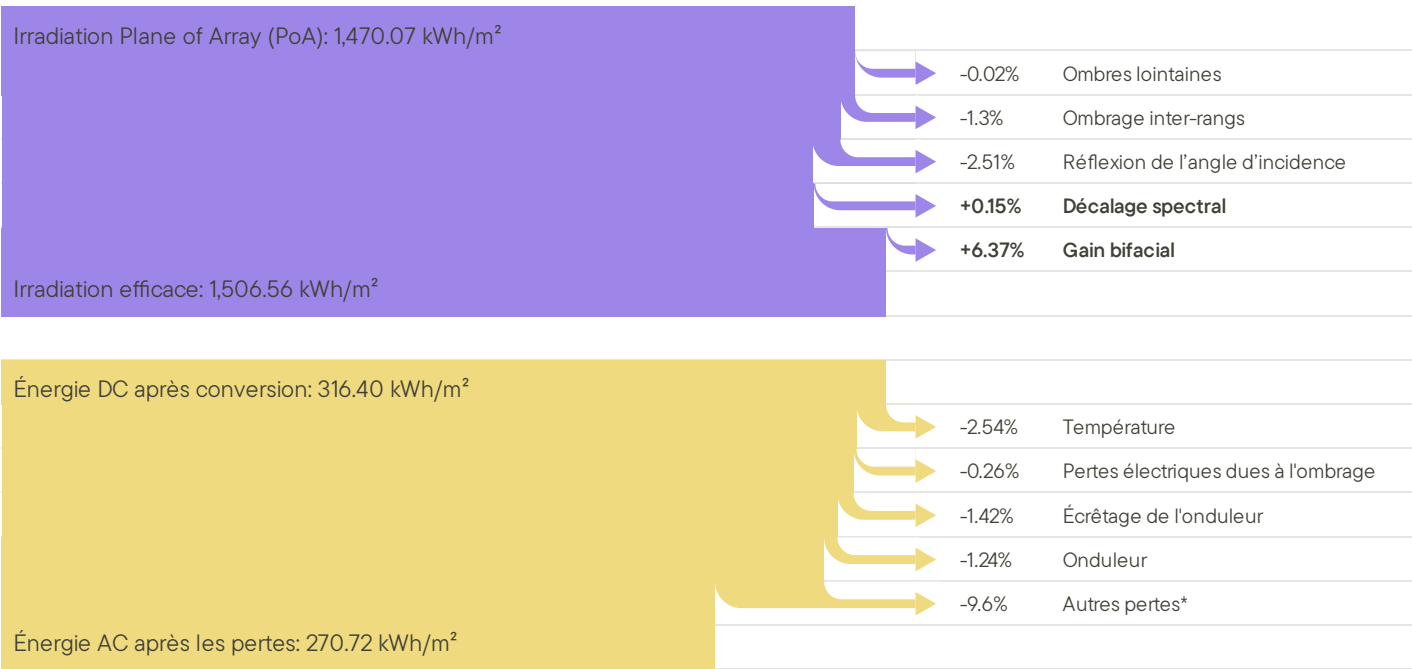
Annexe 11

Carte thermique horaire (kWh)

Les valeurs représentent la journée moyenne pour chacun des mois.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
0-1	0	0	0	0	0	0	0	0	0	0	0	0
1-2	0	0	0	0	0	0	0	0	0	0	0	0
2-3	0	0	0	0	0	0	0	0	0	0	0	0
3-4	0	0	0	0	0	0	0	0	0	0	0	0
4-5	0	0	0	0	0	0	0	0	0	0	0	0
5-6	0	0	0	0	3	9	3	0	0	0	0	0
6-7	0	0	0	9	38	51	41	16	1	0	0	0
7-8	0	0	9	66	114	130	112	76	38	5	0	0
8-9	0	15	90	202	241	257	239	203	167	82	14	0
9-10	36	126	234	353	365	384	362	343	319	209	113	39
10-11	146	245	346	461	455	481	459	449	432	299	219	157
11-12	232	335	425	518	492	517	497	511	511	384	302	251
12-13	278	376	461	533	508	544	527	541	524	398	330	299
13-14	287	367	452	520	514	551	540	539	536	402	316	297
14-15	257	357	441	506	500	528	517	537	510	364	280	258
15-16	205	298	383	458	457	510	499	486	426	289	209	186
16-17	119	230	314	384	390	432	435	410	338	211	111	64
17-18	19	114	199	266	277	325	331	295	216	81	12	2
18-19	0	11	66	127	162	199	202	157	77	5	0	0
19-20	0	0	3	22	55	83	83	44	5	0	0	0
20-21	0	0	0	0	8	21	19	4	0	0	0	0
21-22	0	0	0	0	0	0	0	0	0	0	0	0
22-23	0	0	0	0	0	0	0	0	0	0	0	0
23-0	0	0	0	0	0	0	0	0	0	0	0	0

Gains et pertes



Pour les descriptions des pertes, voir [Sources de données et méthodologie](#)

*Les autres pertes comprennent les pertes liées aux entrées de l'utilisateur. Voir "Postulats" ci-dessous pour chaque perte et sa valeur.