Subject: FW: Blue Heron Solar Project
Attachments: 2024-11-04 Blue Heron Solar - Notification Package (Email).pdf

From: Samantha Brown <sbrown@sabrenergyconsulting.com>
Sent: November 7, 2024 7:59 AM
To: Shelly Armstrong <sarmstrong@flagstaff.ab.ca>; Wanja Nordin <wnordin@flagstaff.ab.ca>
Cc: Aida Prellezo Tezanos <aprellezo@gransolar.com>
Subject: Blue Heron Solar Project

Good morning,

We are reaching out today to introduce the proposed Blue Heron Solar Project and the developer, Gransolar. The attached newsletter was mailed out yesterday to all stakeholders within 800m of the Project, as well as industry and agencies such as Flagstaff County. This initial outreach kicks off our stakeholder engagement program for the Project and we will be reaching out to stakeholder to discuss the project, answer questions and address any concerns that may arise over the next few months.

Once you've had a chance to review, we are happy to come meet with you to discuss the project and any questions you may have. Engagement with and input from the Count are critical for the development of the project. Over the coming weeks, Gransolar is undertaking technical studies such as a noise impact assessment and solar glare hazard analysis. Additionally, Gransolar has completed environmental surveys since spring this year and will be making a submission to Alberta Environment and Protected Areas for review, likely by the end of this year. Gransolar will also develop a site specific emergency response plan, which we would be seeking comment on by the County.

Please let us know once you have had a chance to review and if you'd like to arrange a meeting, provide some availability.

Thank you!

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BLUE HERON SOLAR PROJECT
NEWSLETTER #1 - NOVEMBER 2024

Gransolar Group is developing the Blue Heron Solar Project in your area. We are committed to engaging landowners, public stakeholders and members of the local community and we look forward to discussing the Project with you.

ABOUT GRANSOLAR

Founded in 2005 and headquartered in Madrid, Spain, Gransolar Group is a vertically integrated solar PV and battery storage company offering manufacturing, consulting, construction and development services, with projects spanning 28 countries and over 1,500 employees worldwide with offices in 11 countries. Gransolar Group has an experienced management team with deep technical knowledge and industry expertise. Within the United States, Gransolar Group has extensive experience with a portfolio of over 3.5 GW of solar PV and BESS projects, progressing through key development milestone.

This project will be the first solar project our company develops in Canada, after successfully developing over 29 GW in other countries such as United States, Australia and several countries in Europe.

ABOUT THE PROJECT

The Blue Heron Solar Project (the Project) is being developed by Gransolar Development Canada (Gransolar or the Proponent). The Project began development in early 2024 and includes approximately 1,004 fenced acres of land located approximately 11.5 km east of the Village of Alliance, Alberta, in Flagstaff County. The Project is located on privately owned, cultivated land. The Project area has a strong solar resource, characteristic of Alberta, and will generate clean energy over its 30+ year lifetime.

The Project will consist of up to 200 megawatts ac (MWac) of solar capacity with a 200MW/400 megawatt-hour (MWh) battery energy storage system (BESS), charging from the solar facility. Based on the preliminary design, the solar facility includes approximately 415,000 solar photovoltaic modules installed on a single-axis tracking system, 53 inverter/transformer stations, an electrical collection system, internal access roads and the construction of a Project substation to connect to the Alberta Interconnected Electric System (AIES).

IN THIS NEWSLETTER:

INSERTS:

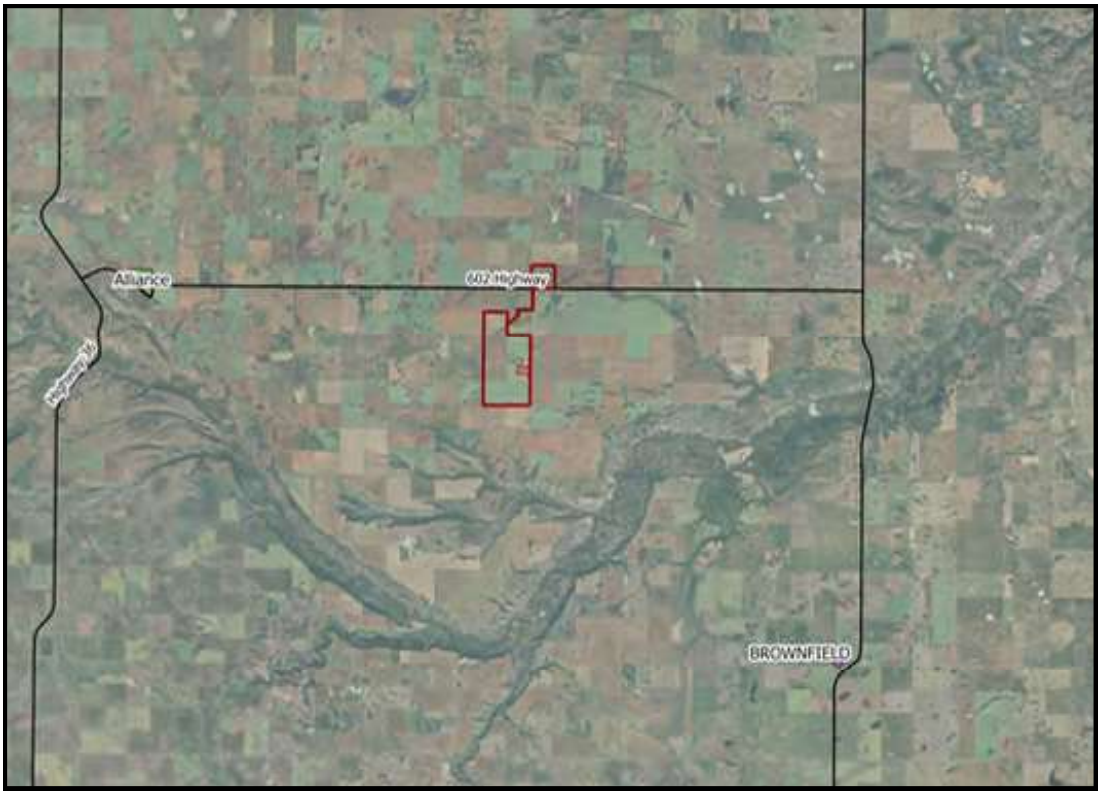
- Preliminary Project Layout
- Preliminary BESS Layout
- Glare Map
- AUC Brochure

PRIVACY STATEMENT

Collected personal information will be protected under the provincial *Personal Information Protection Act*. As part of the regulatory process for new generation projects and transmission lines, the Proponent may be required to provide your personal information to the Alberta Utilities Commission (AUC).

PROJECT LOCATION

The proposed Project is located approximately 11.5 km east of the Village of Alliance, as shown below.



PROJECT BENEFITS

Gransolar is committed to making a positive social impact for the communities in which we work. We strive to be a good neighbour, and work closely with the community to identify areas of opportunity and concern. Our community engagement will continue throughout the Project phases, including construction and operation.

The Project will have many community benefits, including the following:

- **Local Employment:** The Project will create up to 200 full-time jobs during construction, creating opportunities for local individuals and businesses. During operations, the Project will provide four permanent full-time jobs.
- **Local Economic Boost:** Local businesses will experience increased activity due to the spin-off opportunities created by the Project during development, construction, and operations.
- **Property Taxes:** The Project will pay annual property taxes to the County, resulting in financial benefits to the community.
- **Clean Energy Generation:** The Project will generate emissions-free electricity for approximately 99,000 homes.

PROJECT INFRASTRUCTURE

SOLAR PV MODULES

Bifacial PV modules have been proposed for installation at the Project. A bifacial module is a double-sided module that transforms sunlight into electrical energy on both its top and bottom sides. They are different from mono-facial modules which only use one side for solar energy production. Bifacial modules are capable of producing more power per module and typically have higher efficiency than mono-facial modules, resulting in less land usage for the same or greater power output. Local weather conditions in Alberta are well suited to bifacial technology as there is substantial snow cover on the ground, which will boost production during the winter months. One of the benefits of using bifacial modules in Alberta is that sunlight is reflected from the surface of snow-covered land, which can generate electricity from the underside of the panel.

GROUND MOUNTING SYSTEMS

The Proponent intends to install the PV modules on single-axis tracker systems which follow the path of the sun to produce additional electricity.

INVERTER/TRANSFORMER STATIONS

Inverters are electrical devices that change direct current (dc) to alternating current (ac). Transformers are electrical equipment that increase or decrease the voltage of electricity. The Project will use inverter/transformer stations to change the dc electricity from the solar PV modules to ac electricity and increase the voltage.

INTERCONNECTION

The Proponent proposes connecting the Project to the AIES through an existing 240-kilovolt (kV) transmission line that runs between the Project lands. Gransolar will construct and temporarily operate the interconnection facilities to connect the Project to the grid, which is subject to a separate regulatory process with the Alberta Electric System Operator (AESO).

OTHER INFRASTRUCTURE

The inverter/transformer stations in the Project will be connected through 34.5 kV underground collector lines that connect to the Project substation. The Project substation will contain one high voltage transformer. In order to transport materials during the construction stage and to access the Project equipment for regular maintenance during operations, the Project will require the construction of new access paths, and where possible, the upgrade of existing roads in the area to minimize disturbance.

BATTERY ENERGY STORAGE SYSTEM

The BESS will be located adjacent to the Project substation. The collocated battery storage configuration will store energy and enable increased integration of renewables with the electric grid. The Proponent expects a total of 116 BESS containers and 58 inverter/transformer skids. Please refer to the BESS Frequently Asked Questions page and enclosed site layout for additional details.

PROJECT STUDIES

Environment:
The Proponent initiated field studies in April 2024 which included the following:

- Wildlife surveys, including breeding bird, spring and fall bird migration, raptor nests and sharp-tailed grouse
- Vegetation studies
- Desktop wetland delineation and field verification
- Land Use and Habitat mapping
- Desktop and field studies for soil quality

The results of these field studies will be compiled and analyzed in a third-party report. The report will be provided to Alberta Environment and Protected Areas (AEPA) for review in December 2024. AEPA will issue a Renewable Energy Wildlife Referral Report following their review (anticipated in Q2 2025). The Proponent is committed to consulting with AEPA to understand any potential concerns it may have and will incorporate AEPA's feedback. The Proponent will continue to work with AEPA throughout the development, construction, and operations of the Project, and ensure that environmental surveys are kept up to date per AEPA guidelines.

Historical resources:
The Project expects to receive Historical Resources Act approval in March 2024 from Alberta Culture.

Noise:
A noise impact assessment (NIA) for the proposed layout as per AUC Rule 012, Noise Control is underway, and is expected to be complete by the end of November 2024. This detailed NIA shall confirm that the Project is noise compliant for all evaluated residences within 1.5km of the Project. A copy of the NIA will also be included in the application for the AUC.

Glare: A glare assessment has been completed for the Project to assess potential for glare at aerodromes, nearby residences and along local roads. The assessment modeled five ground transportation route paths (Range Road 115, Range Road 120, Range Road 121, Township Road 400, and Highway 602). Additionally, seven residences were located within 800m of the Project. No aerodromes were located within 4km of the Project. A glare impact map outlining the assessment results is included in this package and a copy of the Solar Glare Hazard Assessment Report will be included in the application to the AUC. Potential mitigation options exist if glare is experienced, such as changing the resting angle, or increasing the height of the arrays.

Emissions Modelling: As part of the Project's emergency response plan, air emissions modelling will be undertaken for the BESS equipment. A copy of this assessment will be available upon request.

WHO IS THE AUC?

The Alberta Utilities Commission (AUC) is a quasi-judicial independent agency established by the Government of Alberta, responsible to ensure that the delivery of Alberta's utility service takes place in a manner that is fair, responsible and in the public interest.

They regulate investor-owned natural gas, electric and water utilities, and certain municipally owned electric utilities to ensure that customers receive safe and reliable service at just and reasonable rates. The AUC ensures that electric facilities are built, operated and decommissioned in an efficient and environmentally responsible way. The AUC also provides regulatory oversight of issues related to the development and operation of the wholesale electricity market in Alberta as well as the retail gas and electricity markets in the province. For more information visit www.auc.ab.ca or refer to the enclosed brochure.

PRELIMINARY PROJECT SCHEDULE

Notification to stakeholders – November 2024
Public Consultation – Ongoing
Tentative Public Open House – Q1 2025
AEPA Submission – November 2024
Anticipated AEPA Referral Report - Q1 2025
Anticipated AUC Submission – March 2025
Anticipated AUC Approval – July 2025
Municipal Permitting – July 2025 to September 2025
Construction Commencement (if approved) – Q4 2026
Construction Completion - Q2 2028

To learn more about the AUC application and review process, please contact:
Alberta Utilities Commission (AUC)
Phone: (780) 427-4903
Toll-Free by dialing 310-000 before the number
Email: consumer-relations@auc.ab.ca

NEXT STEPS

Gransolar is committed to meaningful engagement with all stakeholders in the Project. Following this newsletter, we will be contacting nearby landowners, occupants and residents to gather feedback and hosting a community open house, expected in Q1 2025. We intend to file a solar power plant application with the AUC in March 2025. We are committed to sharing information about the Project and working with the public to ensure that we hear and address stakeholder input and concerns. We encourage stakeholders to participate throughout this process and to contact us if you have any questions or concerns about the Project. We will incorporate a summary of stakeholder comments into the application that we submit to the AUC. We have included an AUC brochure titled "Participating in the AUC's independent review process" with this newsletter.

CONTACT US

If you have any questions about the Project, or to arrange a personal consultation, please contact:

Samantha Brown
SABR Energy Consulting Inc.
P: (587) 434-7547
E: sbrown@sabrenergyconsulting.com

COMMON QUESTIONS

Siting Considerations

Key criteria considered when siting a solar project include:

- Good solar resource
- Proximity to existing transmission line with capacity and cost-effective interconnection
- Contiguous land parcel on non-high productivity agricultural land
- Good road access
- Away from high traffic areas
- Few residences in area
- Relatively flat, cultivated land for buildability and to avoid environmental concerns on prairie/grassland
- Willing landowners to host the Project

Following the AUC's moratorium on renewable energy projects, the Government of Alberta announced forthcoming new rules that will be applied to these projects. As the legislation has not yet been released, this information is based on our interpretation of the announcement made by the Government of Alberta on February 28, 2024.

Decommissioning and Reclamation Security

The Government of Alberta announced that some form of security will be required for future projects and indicated this security could be posted either with the landowner or with the Government. For the Blue Heron Solar Project, an option to lease agreement has been executed with the landowner which includes provisions for reclamation of the site at the end of the lease period. Provisions for providing financial security for these reclamation costs will be provided prior to the start of construction.

Weed and Vegetation Management

Gransolar understands the importance of controlling weeds and vegetation on the Project lands as keeping weeds and vegetation well managed helps ensure smooth operation of a solar project, minimizing costs, and avoiding growth that impacts equipment and could even shade solar panels. As part of the AUC application, Gransolar will develop a weed management plan within the environmental protection plan. Gransolar is required to follow the Weed Control Act and ensure that noxious weeds are controlled. We also understand that there are nuisance weeds locally that are of concern to stakeholders, and we intend to apply best management practices to control nuisance weeds as well.

BATTERY ENERGY STORAGE SYSTEM

The Project is designed to incorporate 200 MW/400 MWh of battery energy storage, charging from the solar facility. The collocated hybrid solar with storage project configuration enables the integration of renewables with the electric grid, maximizing the use of the transmission infrastructure and lowering the associated costs for consumers. The BESS will be located adjacent to the substation, as indicated on the enclosed site plan. The BESS includes inverters housed within the battery units, as well as medium voltage transformers, to change the current and voltage of electricity as needed. The BESS is a containerized solution designed to meet and exceed National Fire Protection Agency (NFPA) 855 requirements. Energy storage represents a safe and reliable application in the evolution of the energy mix in Alberta.

BATTERY ENERGY STORAGE SYSTEM - FAQS

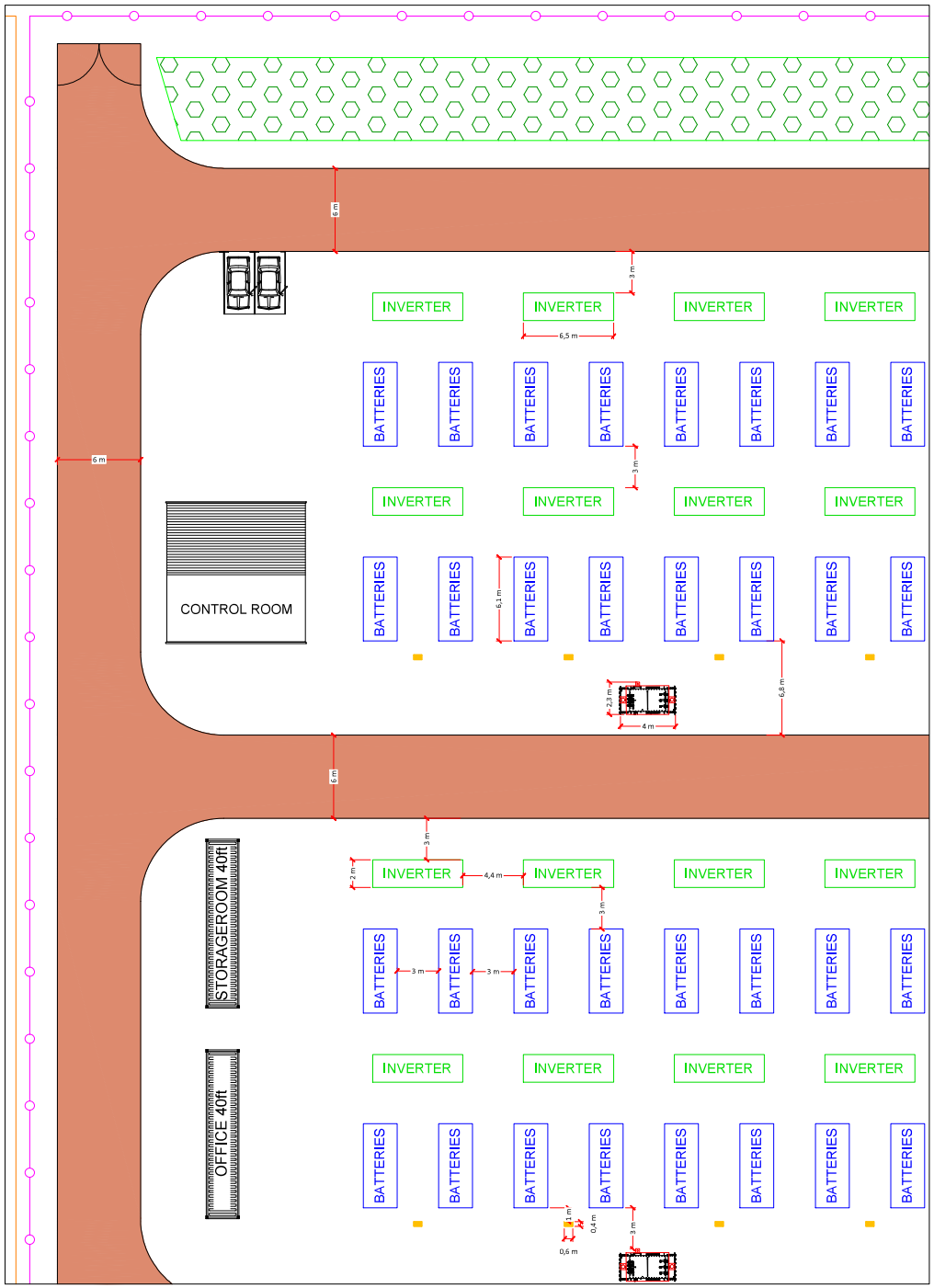
What is a Battery Energy Storage System?
A BESS stores energy and discharges it at times when it is most needed. Stored energy enables a more reliable grid and a greater supply of renewable energy to the grid.

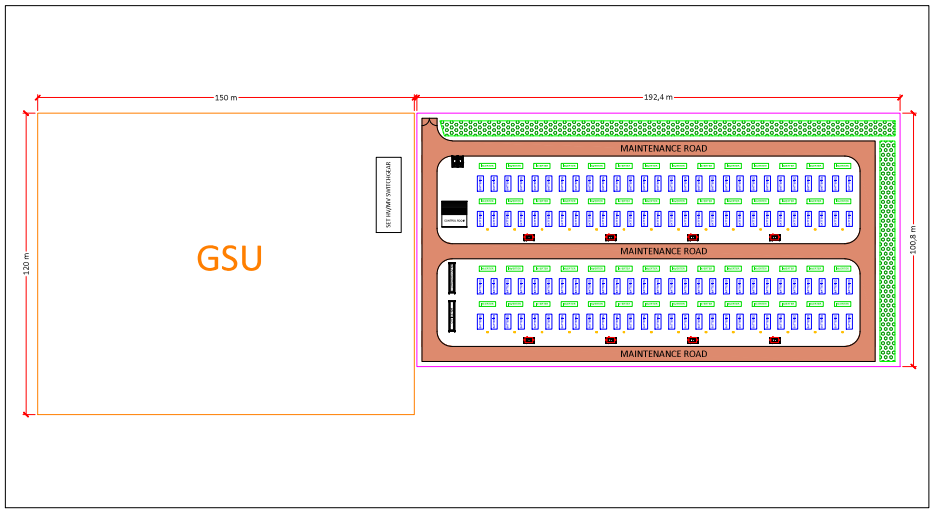
What type of batteries are used?
The proposed BESS consists of lithium-ion batteries, which are the same batteries used to charge smart phones and electric cars. This battery technology has been proven to be stable and reliable.

What safety measures are in place for the batteries?
The proposed BESS will be self-contained units placed on concrete pads. Each battery contains internal temperature control, cooling systems, and electrical safety systems which enable it to automatically shut down if is not performing as expected. BESS-specific emergency response information will be included in the Project's site-specific emergency response plan.

What happens to the batteries after operation ends?
The Proponent will remove all above-ground infrastructure, and rehabilitate the site when the Project ceases to operate. After removal, most of the material in the batteries is reclaimed or recycled.

What will the BESS look like?
Each container is a standard 20 foot container (length 6.1m / width 2.5m / height 2.9m). For comparison, a regulation basketball hoop stands 10 feet tall. A total of 58 inverter/transformer skids are expected and each skid measures 16.5m x 2m. The overall footprint of the BESS area is 192.4m x 100.8m. The details of each BESS, including the number of storage units, the associated inverter/transformer stations, and arrangement of the components, are shown on the enclosed site layout.





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- [x] INFORMATION ONLY
- [ ] APPROVAL
- [ ] QUOTATION PURCHASING
- [ ] CONSTRUCTION
- [ ] AS BUILT

REV.	DESCRIPTION	DATE	BY	APPR	EPC	CLNT
A1	FIRST LAYOUT	AUG-2023	JRC	CRA		

ENGINEERING: ISE
EPC CONTRACTOR: E22
CLIENT: GRS

PROJECT: BESS-USA-200MW/400MWh BYD

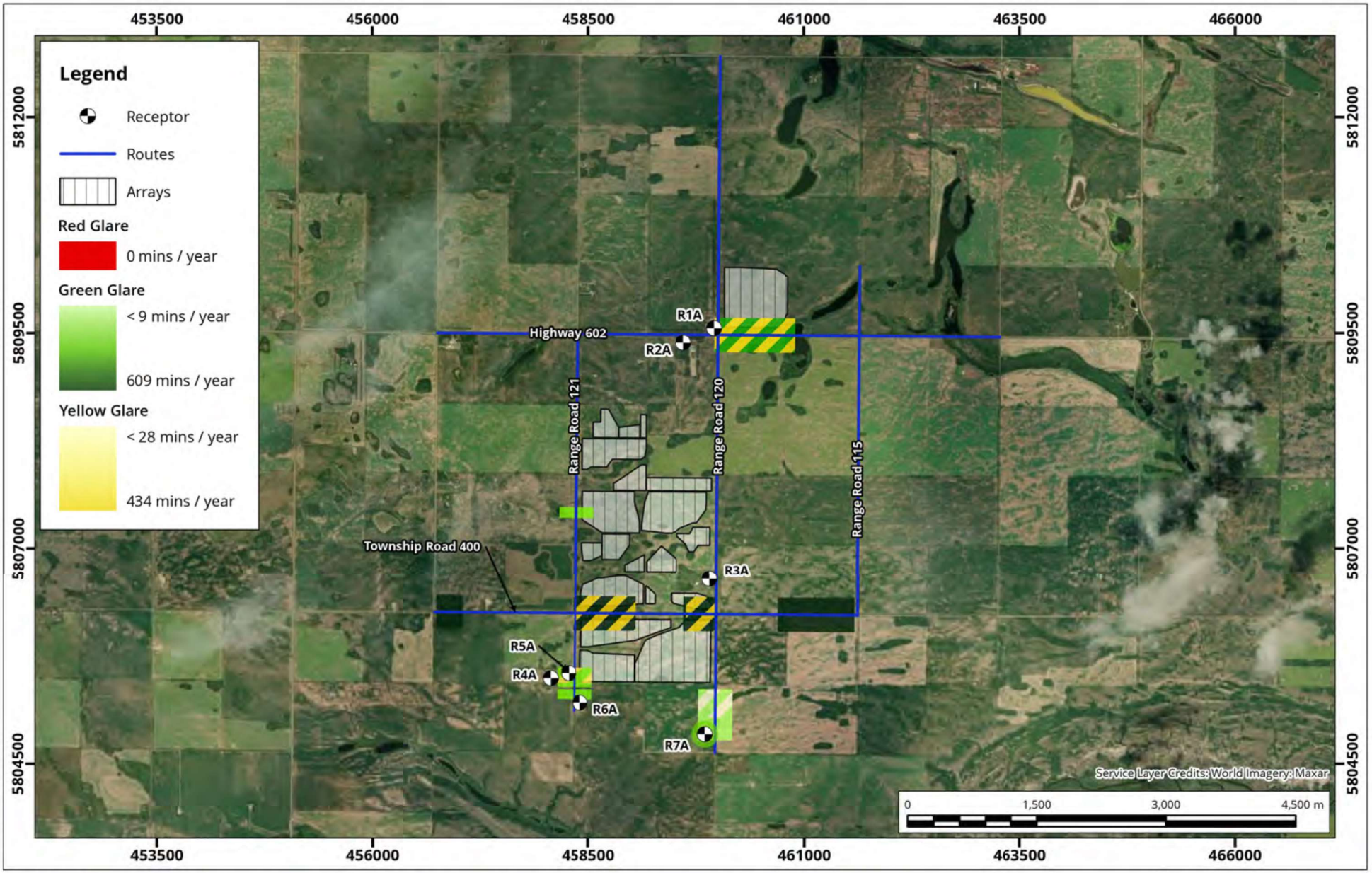
SHEET TITLE:

REFERENCE:

PAPER SIZE: A1: 840 x 594 mm.

DRAWING Nº:

THIS PRELIMINARY DESIGN IS FOR REVIEW ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION



Solar Glare Assessment Overview - Car Drivers and First Floors of Dwellings

Receptors, Site Orientation, and Routes Assessed

Predicted Annual Minutes of Glare at Resting Angle of PV Array = 3°

Map Projection: NAD 1983 UTM Zone 12N

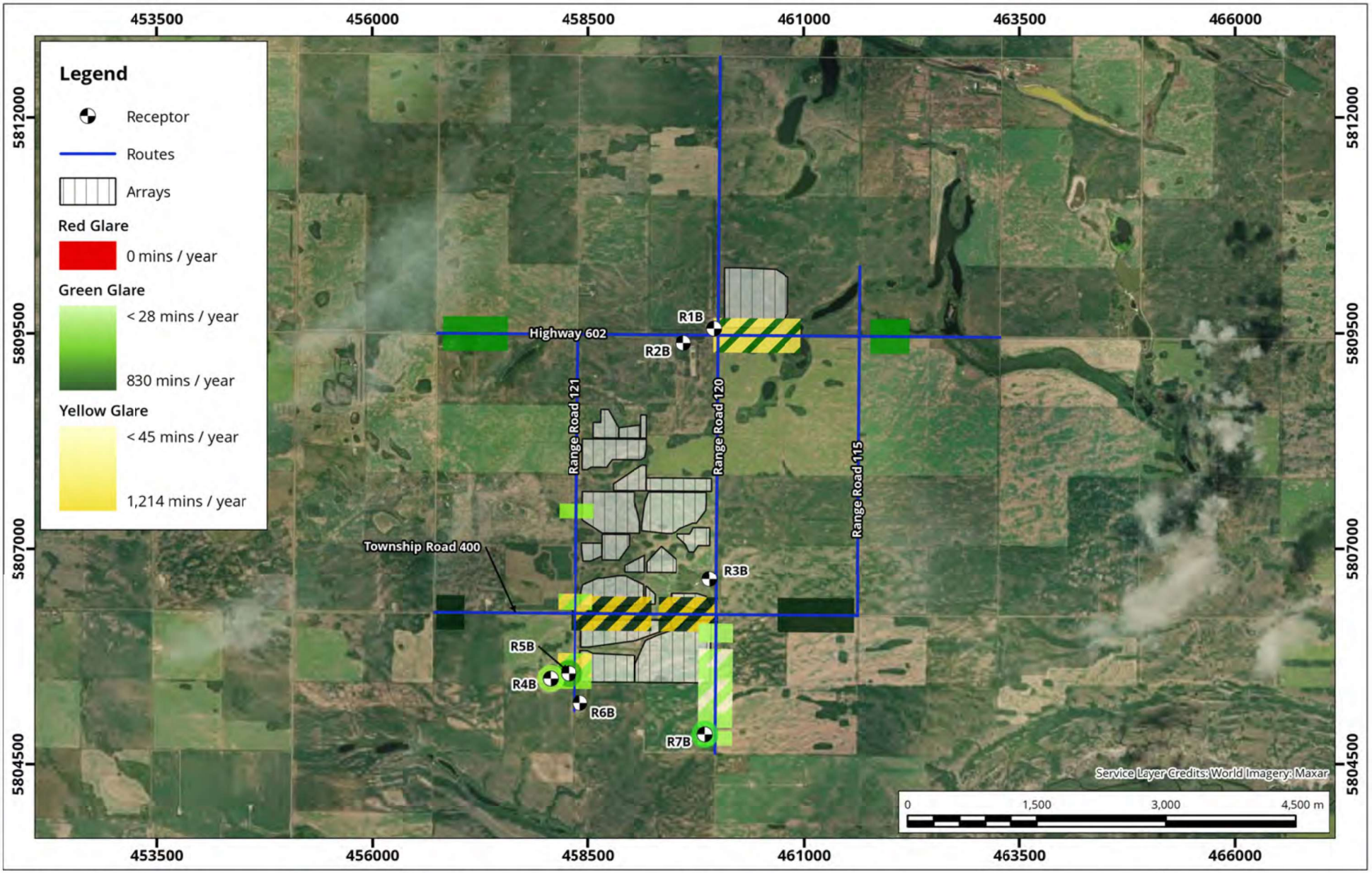
Gransolar | Blue Heron - Flagstaff County, AB

True North

Project #: 2505943

Drawn by: RCL	Figure: 3
Approx. Scale:	1:62,000
Date Revised:	Oct 31, 2024

Map Document: C:\GIS\2505943_BlueHeron\P2505943_BlueHeron.aprx



Solar Glare Assessment Overview - Truck Drivers and Second Floor of Dwellings

Receptors, Site Orientation, and Routes Assessed

Predicted Annual Minutes of Glare at Resting Angle of PV Array = 3°

Map Projection: NAD 1983 UTM Zone 12N

Gransolar | Blue Heron - Flagstaff County, AB

True North

Project #: 2505943

Drawn by: RCL	Figure: 4
Approx. Scale:	1:62,000
Date Revised:	Oct 31, 2024

Map Document: C:\GIS\2505943_BlueHeron\P2505943_BlueHeron.aprx

AUC
Alberta Utilities Commission

Participating in the AUC's independent review process to consider facility applications

www.auc.ab.ca

The AUC regulatory review process to consider facility applications for utility projects

The AUC uses an established process to review social, economic and environmental impacts of facility projects to decide if approval of a project is in the public interest.

The AUC considers applications requesting approval of the need for transmission development and facilities applications seeking approval to construct, operate, alter and decommission electric and natural gas facilities. Applications, as specified in AUC Rule 007, are required for:

- The need for transmission upgrades.
- The route and location of transmission facilities.
- The siting of power plants.
- The construction of a battery storage system.
- The designation of an industrial system.
- The need for and siting of natural gas utility pipelines.

Sometimes the Alberta Electric System Operator's needs identification document application is considered together with a facility application in a single proceeding; sometimes separate proceedings are held to consider each application.

Application review process

Application review process

Step 1: Public consultation prior to applying to the AUC

An applicant seeking approval of a proposed utility development project is required to engage in a participant involvement program prior to filing an application with the AUC. The public involvement program involves consultation with persons whose rights may be directly and adversely affected by the proposed project so that concerns may be raised, addressed and, if possible, resolved.

The application guidelines and requirements for facility applications can be found in AUC Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines*.

Potentially affected parties are strongly encouraged to participate in the public consultation, also called a participant involvement program. Early, active and ongoing discussions with an applicant may lead to greater influence on project planning and what is submitted to the AUC for approval.

Step 2: Application filed to the AUC

When the applicant has concluded its consultation with potentially affected parties and the participant involvement requirements have been completed, the applicant files its application through the AUC online public filing system, called the eFiling System.

AUC staff members review each application submitted to verify that all of the application requirements in Rule 007 have been met before an application is deemed complete. If all of the required information is not provided, the application may be closed or missing information will be requested of the applicant. Rule 007 specifies, among other requirements, that applicants must submit the results of a public involvement program in its application that includes information about how applicants consulted and notified stakeholders and Indigenous groups and identifies any unresolved objections and concerns about the project.

Step 3: Public notice

When the AUC receives an application it is assigned a proceeding number and the AUC generally mails a notice of application directly to those who live, operate a business or occupy land in the project area who may be directly and adversely affected if the AUC approves the application. The notice initiates the opportunity for formal intervention in the proceeding to consider an application or applications. The notice of application will also set out important dates and information about where to find the application and other items being considered. The five-digit eFiling System proceeding number in the notice is the most efficient way to find information about a proposed project through the AUC website.

Step 4: Public submissions to the AUC

Prior to the submission deadline provided in the notice, formal submissions of outstanding concerns and unresolved objections about a project may be submitted to the AUC. To submit a concern, participants will need to register to participate in the proceeding, which involves providing a brief written statement called a statement of intent to participate. Submissions are filed electronically through the eFiling System. The information filed becomes part of the public record and is an important part of the process to ensure that outstanding concerns are heard, understood and considered.

The AUC uses the information gathered through statement of intent to participate submissions to decide whether to hold a hearing on the application(s). The AUC must hold a hearing if a concerned person can demonstrate that they have rights that may be directly or adversely affected by the AUC's decision on the application. Such a person is said to have standing before the AUC. If the AUC decides to hold a hearing, the AUC will provide further opportunities for participants with standing to ask the applicant questions on the public record and present their position on the application either in writing or in person. Hearings may

be held in writing, in person or virtually through web-conference software.

AUC eFiling System

The eFiling System is the online tool that the AUC uses to manage applications and submissions in its proceeding-based review. The eFiling System gives access to all public documents associated with an application. The system is also used to submit your concerns and provide input to the AUC and can be used to monitor related proceeding filings. Those who do not have access to the internet can send submissions, evidence and other material by mail and the AUC will upload the submission on their behalf.

Step 5: Consultation and negotiation (if applicable)

The AUC supports efforts to reach a mutually agreeable outcome among the applicant and affected parties. The AUC encourages the applicant and those who have filed a statement of intent to participate to continue to attempt to resolve any outstanding issues. If all concerns can be satisfactorily resolved this may eliminate the need for a formal hearing. However, if there continues to be unresolved issues, those matters will typically be addressed in an AUC hearing.

Step 6: The public hearing process

The AUC will issue a notice of hearing if a person with standing continues to have legitimate unresolved concerns with the application. The notice of hearing will provide a hearing date and location, or specify if the hearing will be held in writing or virtually. When the AUC holds a public hearing, registered parties are given the opportunity to express their views directly to a panel of Commission members. Any member of the public can listen to an in-person or virtual oral hearing. An oral public hearing operates similar to a court proceeding.

Participants in a hearing can either represent themselves or be represented by a lawyer. In addition, participants may hire experts to assist in preparing and presenting evidence to support their position.

Cost assistance

A person determined by the AUC to have standing or a local intervener can apply for reimbursement of reasonable costs. Those who hire a lawyer or technical experts must be aware that while reimbursement for the costs of legal and technical assistance is available under AUC Rule 009: *Rules on Local Intervener Costs*, recovery of costs is subject to the AUC's assessment of the value of the contribution provided by the lawyer and technical experts in assisting the AUC to understand the specifics of the case. It is also subject to the AUC's published scale of costs.

People with similar interests and positions are expected and encouraged to work together to ensure that expenditures for legal or technical assistance are minimized and costs are not duplicated.

Step 7: The decision

The AUC's goal is to issue its written decision no more than 90 days after the close of record. The AUC can approve, or deny an application and can also make its approval conditional upon terms or conditions. AUC decisions are publicly available through the AUC website at www.auc.ab.ca.

Step 8: Opportunity to appeal

An applicant or participant in a proceeding may formally ask the Court of Appeal of Alberta for permission to appeal an AUC decision. An application for permission to appeal must be filed within 30 days from the date the decision is issued.

An applicant or participant in a proceeding can also ask the AUC to review its decision. An application to review a decision must be filed within 60 days from the date the decision is issued and satisfy the limited grounds described in AUC Rule 016: *Review of Commission Decisions*.

Step 9: Construction, operation and compliance

An applicant that receives approval to build and operate a facility from the AUC is expected to follow through on any commitments it has made to parties and must adhere to any conditions that were set out in that approval. If concerns about compliance with approval conditions and post-construction operations cannot be resolved with the applicant, they can be brought to the AUC's attention for consideration. The AUC has significant compliance and enforcement powers for all approved applications. Additional information is available on the AUC website.

Updated March 2022

The Alberta Utilities Commission is an independent, quasi-judicial agency of the government of Alberta that ensures the delivery of Alberta's utility services take place in a manner that is fair, responsible and in the public interest.

We are committed to ensuring that Albertans whose rights may be directly and adversely affected by a utility development project are informed of the application and have the opportunity to have their concerns heard, understood and considered.

AUC
Alberta Utilities Commission

Contact us

Phone: 310-4AUC
1-833-511-4282 (outside Alberta)
info@auc.ab.ca
www.auc.ab.ca

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Calgary, Alberta T2P 0G5