

**TOWN OF GIBBONS
MUNICIPAL PLANNING COMMISSION
AGENDA
TO BE HELD MAY 28, 2025, AT 6:30 PM
AT THE MUNICIPAL OFFICE**

- 1.0 CALL TO ORDER
- 2.0 ADOPTION OF THE AGENDA
- 3.0 ADOPTION OF THE MINUTES
- 4.0 OLD BUSINESS
- 5.0 NEW BUSINESS
 - 5.1 Permit Number: 25-D0018
Legal Description: Plan 752 1277, Block 1, Lot 56
5432 – 51 Street, Gibbons, AB
Land Use District: R-1 Single Family Residential District
Proposed Development: Install Roof Top Solar System
 - 5.2 Permit Number: 25-D0019
Legal Description: Plan 022 6718, Block 3, Lot 2A
5115 41 Street, Gibbons, AB
Land Use District: M-1 Industrial District
Proposed Development: Install a 25' X 40' Modular Building
- 6.0 NEXT MPC MEETING – June 28, 2025 (tentatively)
- 7.0 ADJOURNMENT

MUNICIPAL PLANNING COMMISSION (MPC)
REQUEST FOR DECISION

Proposed Development: Install Roof Top Solar System

Subject Site: Lot 56, Block 1, Plan 752 1277 - 5432 – 51 Street, Gibbons, AB
Zoning: R-1 Single Family Residential
Permit Number: 25-D0018

Application Information

An application for the installation of a residential flush mount roof mounted solar panel system was received by the planning department and deemed complete on May 14, 2025. The proposed development is a discretionary use in the R-1 Single Family District and as such has come to the MPC for a decision.

Section 2.21 of the Land Use Bylaw 8-06 requires that the roof mounted solar panels be located in a manner such that light reflection does not negatively impact adjacent properties.

Recommendation

That the Municipal Planning Commission approve the application for the installation of a residential flush mount roof mounted solar panel system to be located at 5432 – 51 Street - Lot 56, Block 1, Plan 752 1277, Gibbons, AB with the following conditions:

1. The roof mounted solar panels be located in a manner such that light reflection does not negatively impact adjacent properties.
2. Any future development or change in use will require a new permit application.
3. The approved development is for residential use only, any commercial use will require a new permit application.
4. All development must comply with all regulations and requirements of the Town of Gibbons Land Use Bylaw, the Alberta Safety Codes Act, and all other relevant legislation.
5. A person applying for, or in possession of a valid Development Permit is not relieved from full responsibility for ascertaining and complying with or carrying out development in accordance with the conditions of any covenant, caveat, easements, or other instrument effecting the building or the land.

Submitted By:



Susan Gingell,
Development Officer

24 MODULES - SYSTEM SIZE STC (10.800KW DC / 9.216KWAC)
5432 51 ST, GIBBONS, AB T0A 1N0, CANADA (53.8351934, -113.3260718)

- (24) LONGI SOLAR LR7-54HGBB-450M (450W) MODULES
- (12) AP SYSTEM DS3-L (240V) MICRO INVERTERS
- 2X BRANCHES OF 12 MODULE X 6 MICROINVERTER CONNECTED IN PARALLEL

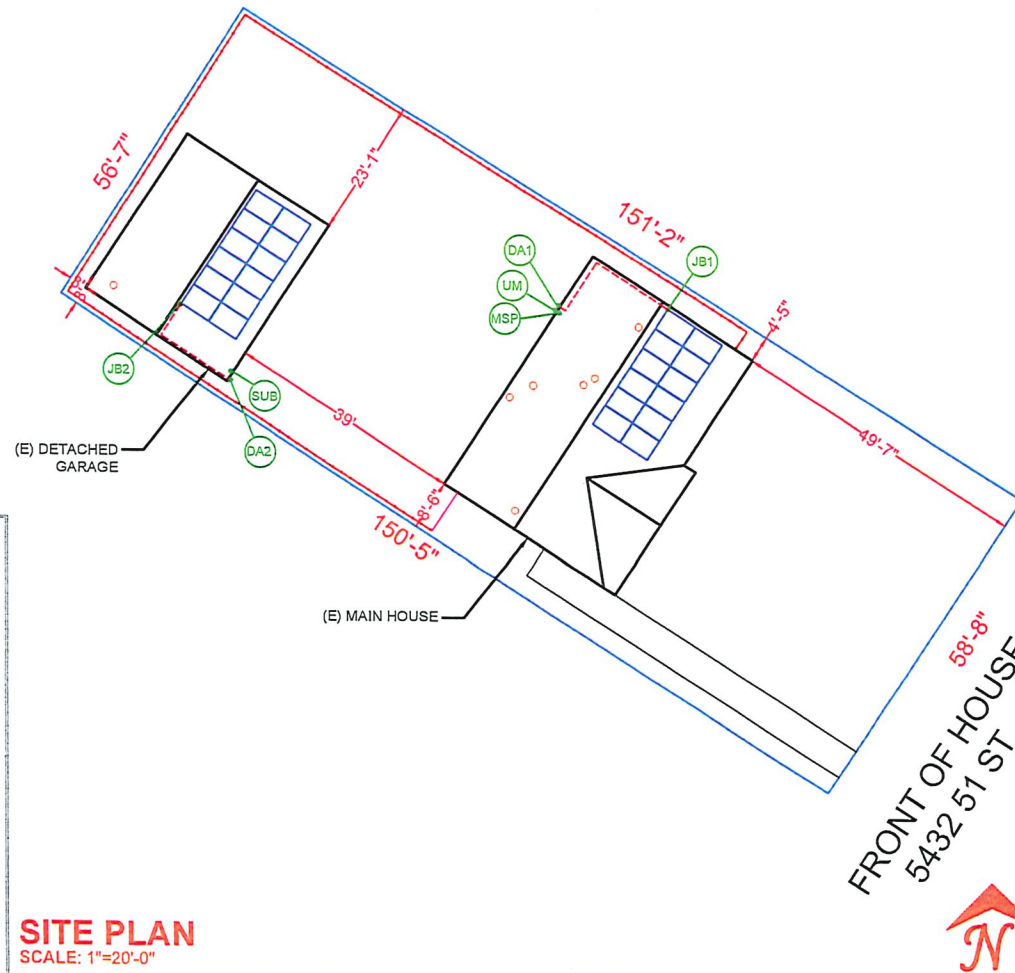
THIS PROJECT SHALL COMPLY WITH THE FOLLOWING CODE

- NATIONAL BUILDING CODE – 2023 ALBERTA EDITION (NBC(AE))
- CSA C22.1-21 CANADIAN ELECTRICAL CODE (25TH EDITION)

ALL OTHER ORDINANCES ADOPTED BY THE LOCAL GOVERNING AGENCIES

- 1) ALL PANELS, SWITCHES, ETC. SHALL HAVE SUFFICIENT GUTTER SPACE AND LUGS IN COMPLIANCE WITH UL REQUIREMENTS TO ACCOMMODATE CONDUCTORS SHOWN.
- 2) THIS SYSTEM WILL NOT BE INTERCONNECTED UNTIL APPROVAL FROM THE LOCAL JURISDICTION AND UTILITY IS OBTAINED.
- 3) ALL EXTERIOR ELECTRICAL DEVICES AND EQUIPMENT INCLUDING THOSE THAT ARE EXPOSED TO OUTSIDE ENVIRONMENT SHALL BE WEATHERPROOF AND SHALL BE LISTED BY 'UL' FOR THE TYPE OF APPLICATION AND 'UL' LABEL SHALL APPEAR ON ALL ELECTRICAL EQUIPMENT.
- 4) WIRING METHOD SHALL BE EMT ABOVE GROUND MOUNTED IN CONCEALED SPACES (UNLESS APPROVED OTHERWISE) AND SCHEDULED-40 PVC FOR BELOW GROUND INSTALLATIONS UNLESS NOTED OTHERWISE.
- 5) OSHA APPROVED FALL PROTECTION SHALL BE USED ON ALL PORTIONS OF THE ARRAY SHALL BE SECURED IN PRIOR TO REQUESTING INSPECTION.
- 6) IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSTALL A SUPPLEMENTAL GROUNDING ELECTRODE CONDUCTOR IF NECESSARY.

WIRE RUN THROUGH ATTIC



SITE PLAN

SCALE: 1"=20'-0"

PV-1	COVER PAGE
PV-2	ROOF PLAN WITH MODULES
PV-3	ATTACHMENT DETAIL
PV-4	SINGLE LINE DIAGRAM
PV-5	WIRING CALCULATION
PV-6	PLACARDS
PV-7+	EQUIPMENT SPECIFICATION

ARRAY LOCATION(S)

HOUSE PHOTO
SCALE: NTS



VICINITY MAP

SCALE: NTS



CONTRACTOR: Boreal Connected Homes Ltd. (18132)
ADDRESS: 5808 143 AVE NW, EDMONTON, AB T5A 1K3, CANADA
PHONE: +17805042277
CONTRACTOR LICENSE #: 387014484-002
ELECTRICAL LICENSE #:
EMAIL ID #: jordan@myboreal.com

DESCRIPTION	DATE	REV

SIGNATURE & SEAL

GEMMA CYPHER-GALLANT
5432 51 ST, GIBBONS, AB T0A 1N0,
CANADA
APN: N/A PHONE: +17806907802
EMAIL: gallant44@outlook.com

COVER PAGE

ANSI B
11" X 17"

PV-1

MODULE AREA & WEIGHT CALCULATIONS

PANEL TYPES (COUNT, AREA, WEIGHT):

- (24) LONGI SOLAR LR7-54HGB-450M (450W) (70.65" x 44.5", 52.0 LB)
- (12) AP SYSTEM DS3-L (240V) (5.7 LB)
- MOUNTING SYSTEM WEIGHT/MODULE: 1.5 LB
- TOTAL ROOF AREA: 1460 SF

ROOF PLANE #1:
ATTACHMENT COUNT: 28
MOUNTING SYSTEM WEIGHT/MODULE: 1.5 LB
MOUNTING SYSTEM WEIGHT: (12) 1.5 = 18

ROOF PLANE #2:
ATTACHMENT COUNT: 28
MOUNTING SYSTEM WEIGHT/MODULE: 1.5 LB
MOUNTING SYSTEM WEIGHT: (12) 1.5 = 18

- NEW PANELS:
- MAIN HOUSE TOTAL AREA: (12) 70.65" x 44.5" = 393 SF
 - GARAGE TOTAL AREA: (12) 70.65" x 44.5" = 393 SF
 - TOTAL WEIGHT: (24) 52 + (12) 5.7 + (24) 1.5 = 1460 LB
 - WEIGHT PER CONNECTION: 1460 LB / 254 = 5.75 LB
 - DISTRIBUTED LOAD: 1460 LB / 293 SF = 5.0%
 - ROOF AREA COVERED: 293 SF / 1460 SF = 19.81%

EQUIPMENT	QTY	DESCRIPTION
SOLAR PV MODULES	24	LONGI SOLAR LR7-54HGB-450M (450W)
MICRO INVERTERS	12	AP SYSTEM DS3-L (240V)
JUNCTION BOX (AC)	2	JUNCTION BOX 600V, NEMA 3R UL LISTED
AC DISCONNECT	1	PV VISIBLE LOCKABLE LABELED DISCONNECT (RBA FUSED 125A/240VAC)
AC DISCONNECT	1	PV VISIBLE LOCKABLE LABELED DISCONNECT (DIA UNFUSED 125A/240VAC)
ATTACHMENTS	58	ROOF TECH INC. - RT-MINI II
RAIL	10	KINETIC SOLAR RACKING - KRAPID1-JCCF
RAIL SPLICES	8	RAIL SPLICES
MID CLAMPS	48	MID CLAMPS
END CLAMPS	18	END CLAMPS
GROUNDING LUG	4	GROUNDING LUG

ROOF DESCRIPTION TABLE							
ROOF PLANE	ROOF PITCH	ROOF AZIMUTH	ROOF MATERIAL	TRUSS SIZE	TRUSS SPACING	ATTACHMENT SPACING	MODULES (PITCH)
#1	18°	123°	ASPHALT SHINGLE	2" x 4"	16" O.C.	48" O.C.	12 (18°)
#2	18°	123°	ASPHALT SHINGLE	2" x 4"	24" O.C.	48" O.C.	12 (18°)

ROOF ACCESS POINT

SHALL BE LOCATED IN AREAS THAT DO NOT REQUIRE THE PLACEMENT OF GROUND LADDERS OVER OPENINGS SUCH AS WINDOWS OR DOORS, AND LOCATED AT STRONG POINTS OF BUILDING CONSTRUCTION IN LOCATIONS WHERE THE ACCESS POINT DOES NOT CONFLICT WITH OVERHEAD OBSTRUCTIONS SUCH AS TREE LIMBS, WIRES OR SIGNS.

DESIGN CRITERIA

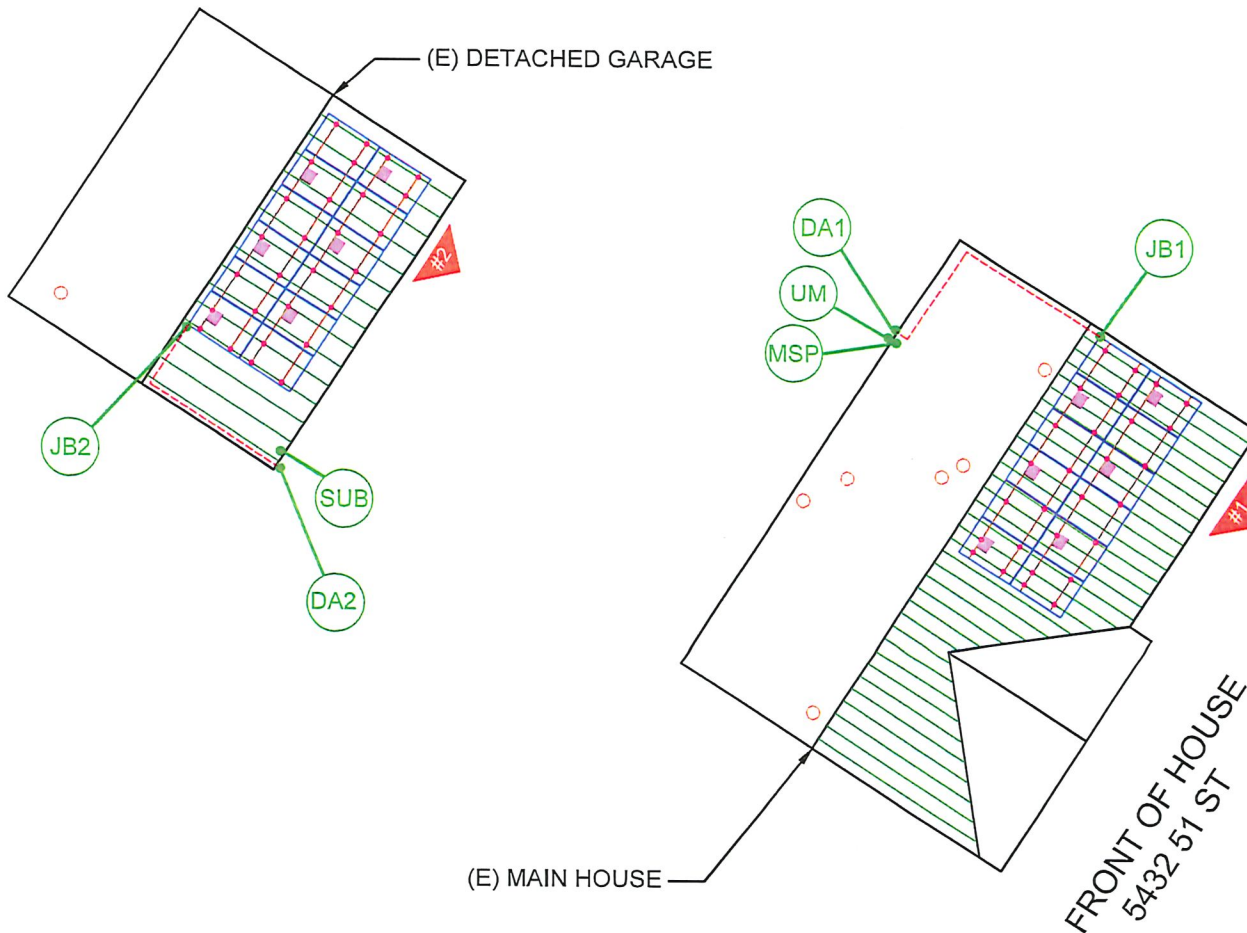
- EXPOSURE CATEGORY = C
- WIND LOAD = 35 UPH
- SNOW LOAD = 5 PSF

LEGEND

- OBSTRUCTION
- NEW PV MODULE
- FIRE SETBACK
- OPTIMIZER
- MICRO-INVERTER
- ROOF ATTACHMENT
- ROOF ACCESS POINT
- DRIVEWAY
- CONDUIT
- DIMENSIONS
- PROPERTY LINE
- RAFTER/TRUSS
- RAIL
- FENCE
- GATE
- JB2 AC JUNCTION BOX (NEW)
- MSP MAIN SERVICE PANEL (EXISTING, 125A)
- JB1 AC JUNCTION BOX (NEW)
- DA1 AC DISCONNECT FUSED (NEW)
- DA2 AC DISCONNECT FUSED (NEW)
- MSP UTILITY METER (NEW)
- UM SUB PANEL (EXISTING, 100A)

ROOF PLAN WITH MODULES

SCALE: 3/32" = 1'-0"



PREPARED BY BOREAL CONNECTED HOMES.
ORIGINAL DRAWN DATE :04-10-2025

WIRE RUN THROUGH ATTIC



CONTRACTOR: Boreal Connected Homes Ltd. (18132)
ADDRESS: 5858 143 AVE NW, EDMONTON, AB T5A 1G3, CANADA
PHONE: +17805042277
CONTRACTOR LICENSE #: 387514484-002
ELECTRICAL LICENSE #: 0144110 #1
EMAIL ID #: jordan@myboreal.com

REVISIONS

DESCRIPTION	DATE	REV

SIGNATURE & SEAL



HOMEOWNER INFO

GEMMA CYPHER-GALLANT
5432 51 ST, GIBBONS, AB T0A 1N0,
CANADA
APN: N/A PHONE: +17806907802
EMAIL: gallant44@outlook.com

SHEET NAME

ROOF PLAN
WITH MODULES

SHEET SIZE

ANSI B
11" X 17"

SHEET NUMBER

PV-2

Hi-MO 7

LR7-54HGBB 440~460M

- Suitable for the Distribution Market
- Advanced HPDC cell technology delivers superior module efficiency and power
- High bifaciality and excellent power temperature coefficient achieves high energy yield
- LONGi lifecycle quality ensures long-term performance



Complete System and Product Certifications
IEC 61215, IEC 61730, UL 61730
ISO 9001:2015 ISO Quality Management System
ISO 14001:2015 ISO Environment Management System
ISO 45001:2018 Occupational Health and Safety
IEC 62941 Guideline for module design qualification and type approval

LONGi

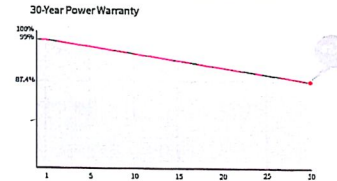


Hi-MO 7

LR7-54HGBB 440~460M

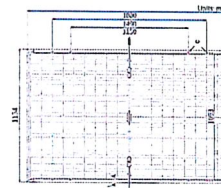
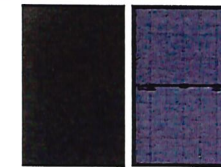
22.5% MAX MODULE EFFICIENCY
0~3% POWER TOLERANCE
<1% FIRST YEAR POWER DEGRADATION
0.4% YEAR 2-30 POWER DEGRADATION
HALF-CELL
Lower operating temperature

Additional Value



Mechanical Parameters

Cell Orientation	10B (6×18)
Junction Box	IP68
Output Cable	4mm ² , +400, -200mm/±1400mm length can be customized
Glass	Dual glass, 2.0+1.6mm semi-tempered glass
Frame	Anodized aluminum alloy frame
Weight	23.6kg
Dimension	1800×1134×30mm
Packaging	36pcs per pallet / 216pcs per 20' GP / 864pcs per 40' HC



Electrical Characteristics

	STC: AM1.5 1000W/m ² 25°C		NOCT: AM1.5 800W/m ² 20°C 1m/s		Test uncertainty for Pmax ±2%	
Model Type	LR7-54HGBB-440M	LR7-54HGBB-455M	LR7-54HGBB-450M	LR7-54HGBB-455M	LR7-54HGBB-460M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT
Max Power (Pmax/W)	440	334.9	445	338.8	450	350
Open Circuit Voltage (Voc/V)	39.30	37.35	39.50	37.54	39.90	37.92
Short Circuit Current (Isc/A)	14.23	11.43	14.30	11.49	14.45	11.61
Voltage at Maximum Power (Vmp/V)	32.82	31.19	33.02	31.38	33.22	31.76
Current at Maximum Power (Imp/A)	13.41	11.19	13.48	10.80	13.55	10.91
Module Efficiency (%)	21.6	21.8	22.0	22.3	22.5	

Electrical characteristics with different rear side power gain (reference to 450W front)

Pmax/W	Voc/V	Isc/A	Vmp/V	Imp/A	Pmax/gain
473	39.70	15.09	33.22	14.22	5%
495	39.70	15.81	33.22	14.90	10%
518	39.80	16.53	33.32	15.58	15%
540	39.80	17.25	33.32	16.26	20%
563	39.80	17.96	33.32	16.93	25%

Operating Parameters

Operating Temperature	-40°C ~ +85°C
Maximum System Voltage	DC1500V (IEC/UL)
Maximum Series Fuse Rating	30A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Bifaciality	80±10%
Fire Rating	UL Type 3B IEC Class C

Mechanical Loading

Front Side Maximum Static Loading (e.g. snow, wind)	5400Pa
Rear Side Maximum Static Loading (e.g. wind)	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

Temperature Ratings (STC)

Temperature Coefficient of Isc	+0.045%/°C
Temperature Coefficient of Voc	-0.230%/°C
Temperature Coefficient of Pmax	-0.280%/°C

LONGi

No.8369 Shangyuan Road, Xi'an Economic And Technological Development Zone, Xi'an, Shaanxi, China.
Web: www.longi.com

Specifications included in this datasheet are subject to change without notice. LONGi reserves the right of final interpretation. (20240124)en/010 DG



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ADDRESS: 5808 140 AVE NW, EDMONTON, AB T6A 1N0, CANADA
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REVISIONS

DESCRIPTION	DATE	REV

SIGNATURE & SEAL

HOMEOWNER INFO

GEMMA CYPHER-GALLANT
5432 51 ST, GIBBONS, AB T0A 1N0,
CANADA
APN: N/A PHONE: +17806907802
EMAIL: gallant44@outlook.com

SHEET NAME

EQUIPMENT
SPECIFICATION

SHEET SIZE

ANSI B
11" X 17"

SHEET NUMBER

PV-7



Verification Letter

08-May-2025

Re: **GEMMA CYPHER-GALLANT**
5432 51 ST, GIBBONS, AB T0A 1N0,
CANADA

To: **BOREAL CONNECTED HOMES**

This Letter intends to address the adequacy of existing trusses to support the additional panel and rail system at the above address for both House and Garage as shown on the drawings.

SEGEN personnel did not perform an in-person site inspection. Alternatively, photos of the existing roof trusses were provided to SEGEN Engineering by BOREAL crew for review.

Engineering Summary

Based on information provided, roof trusses are spaced at the max of 24" on-center and top chord members are minimum 2x4 in size, The existing roof trusses are considered adequate to support loads and wind uplift caused by new panels on rail systems.
There were no requests made by SEGEN Engineering for modifications to the existing roof trusses during panel installation.

Should you have any questions, do not hesitate to contact us.

Sincerely,



George Amin, P.Eng

Structural Engineer
SEGEN Engineering
APEGA Permit# 12023

MUNICIPAL PLANNING COMMISSION (MPC)
REQUEST FOR DECISION

Proposed Development: **Install 25' X 40' Modular Building on Blocks**

Subject Site: Lot 2A, Block 3, Plan 022 6718 – 5115 - 41 Street, Gibbons, AB
Zoning: M-1 – Industrial District
Permit Number: 25-D0019

Application Information

An application for the installation of a 25' X 40' Modular Building on blocks was received by the planning department and deemed complete on May 22, 2025. The general contractor services is a discretionary use in the M-1 – Industrial District, as such the proposed development has come to the MPC for consideration.

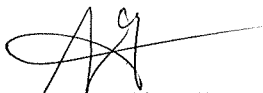
The Land Use Bylaw 8-06 defines "**general contractor service**" as a development used for the provision of building construction, landscaping, concrete, electrical, excavation, drilling, heating, plumbing, paving, road construction, sewer or similar services of a construction nature which require on-site storage space for materials, construction equipment or vehicles normally associated with the contractor service. Any sales, display, office or technical support service areas shall be accessory to the principal use only.

Recommendation

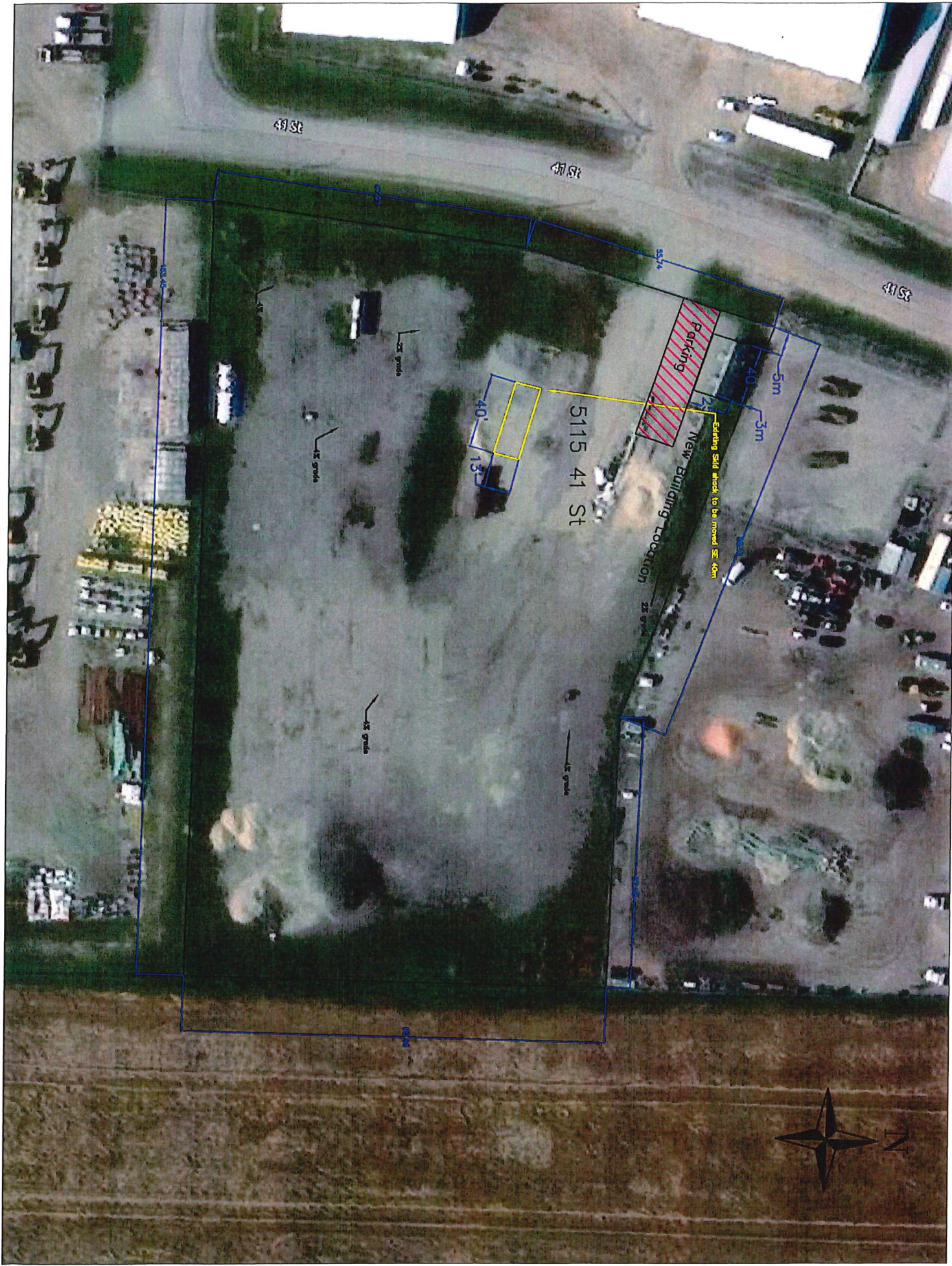
That the Municipal Planning Commission approve the application for a 25' X 40' Modular Building on blocks to be located at 5115 - 41 Street - Lot 2A, Block 3, Plan 022 6718 Gibbons, AB with the following conditions:

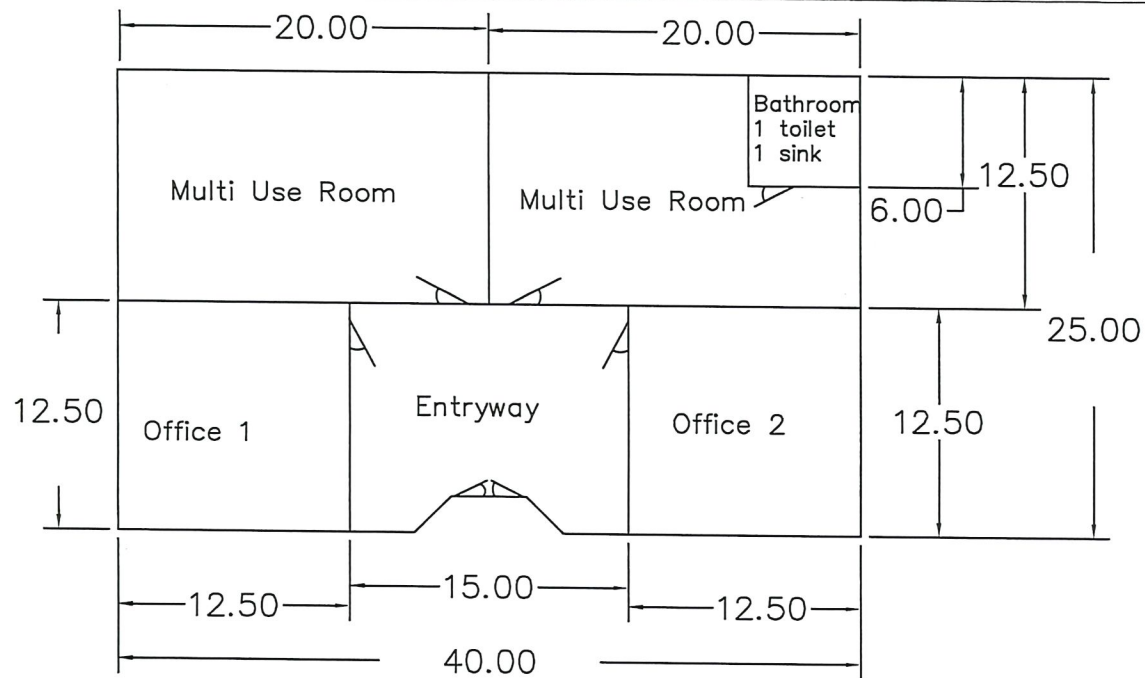
1. All development must be in accordance with the approved site plan.
2. All loading and off-loading shall be done within the property.
3. Any future development will require a new permit application.
4. A person applying for, or in possession of a valid Development Permit is not relieved from full responsibility for ascertaining and complying with or carrying out development in accordance with the conditions of any covenant, caveat, easements, or other instrument effecting the building or the land.
5. All development must comply with all regulations and requirements of the Town of Gibbons Land Use Bylaw, the Alberta Safety Codes Act, and all other relevant legislation.

Submitted By:

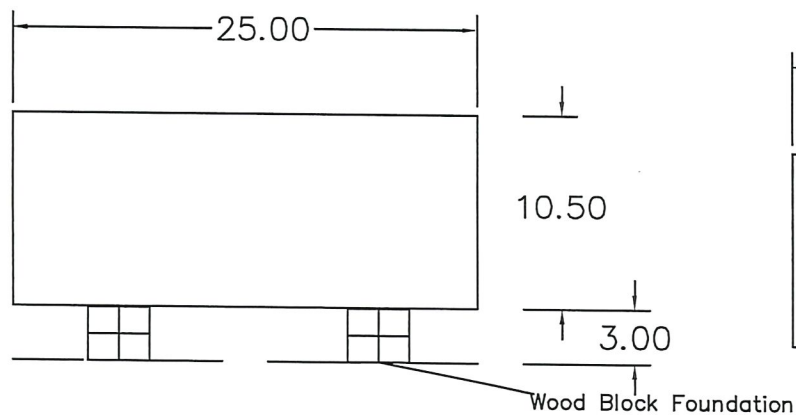


Susan Gingell,
Development Officer

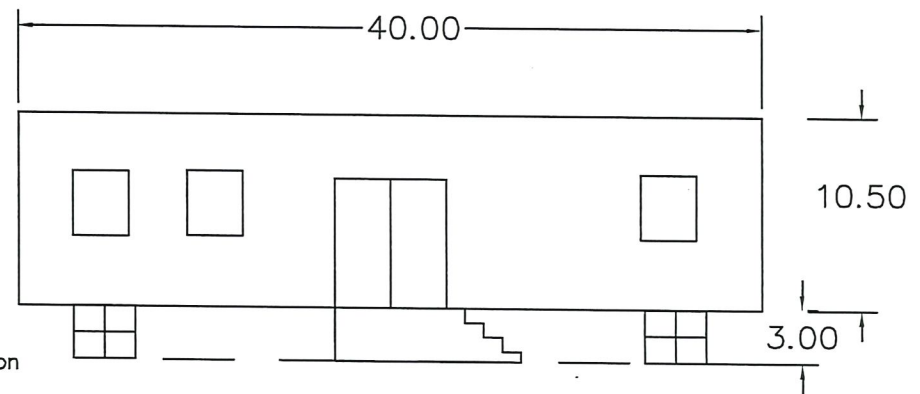




All Dimensions in Feet



Elevation Side



Elevation Entryway