

Fort Chipewyan Duplex - Owner Requirements Summary

Site Information

Description

Location	Fort Chipewyan, Alberta
Address	113B McDermot Avenue, Fort Chipewyan, Alberta, TOP 1B0
Zoning	Hamlet Residential (RM of Wood Buffalo)
Legal Description	113B, Lot 7, Block 3, Plan 5642 NY
Lot Dimensions	See Plot Plan - 113B in project file
Lot Area	See Plot Plan - 113B in project file
General Lot/Site Description	Existing residential site, surrounded by trees, within a compound that includes 2 other Parks Canada houses & a shop building
Site History	Residential site, single family house previously located at 113B recently demolished.

Existing Utilities

Water	Some/all utilities exist onsite. Capacity needs to be confirmed. Municipal (connection was brought to surface and capped when previous house was demolished).
Sanitary	Municipal (connection was brought to surface and capped when previous house was demolished)
Electrical	ATCO Electric (25% from solar power farm; 75% diesel generator) - assume connection near property line or closest pole
Fuel (eg. Diesel, propane)	Propane will be installed for this duplex
Communications - Internet	Yes (assume connection near property line or closest box/pole)
Communications - Telephone	Yes (assume connection near property line or closest box/pole)
Communications - Cable TV	Yes (assume connection near property line or closest box/pole)

Existing Survey

Survey report will be available. See Plot Plan - 113B for general layout
A single family home with a full concrete basement was recently demolished in this spot. Typical soil conditions in the area. Geotechnical report will be available.

Geotechnical Conditions

Owner/Functional Requirements for Development

Overall Building		Tiered Requirement Goals
Type of Housing	Duplex	Required
Single vs. Multi-Storey Preference	Two-storey preferred	Preferred
Size/Area (square footage)	approximately 1040m ² building area available (see Plot Plan for more information)	
Unit size	each unit of the duplex to have between 84-102 sq m interior floor area	
Accessibility	Duplex does not need to be designed and built to be fully accessible. Preference for wider exterior door openings and wider corridors for potential future changes.	
Building Foundation		
Duplex foundation	concrete crawl space	Required.
Building Envelope		
Roof	Durable, low maintenance, fire resistant, cost effective material. Metal is preferred.	
Siding	Durable, low maintenance, fire resistant, cost effective material. Metal or cementitious siding is preferred.	
Windows	High-efficiency as required to meet energy efficiency goals, mix of operable and fixed as per applicable building codes, use and energy goals.	
Doors	High-efficiency as required to meet energy efficiency goals. Screen doors required for exterior doors. Locks on doors as per code (exterior and bathroom, additional locking doors to be identified if required)	
Energy Efficiency	Net-zero if possible OR Net-zero ready	Preferred
Thermal Energy Demand Intensity (TEDI)	≤ 60 kWh/(m ² •year)	Required
Mechanical Energy Use Intensity (MEUI)	≤ 120 kWh/(m ² •year)	Preferred
Airtightness (Air Changes per Hour at 50 Pa Pressure Differential)	≤ 1	Required
Structural		
Framing/Wall Assemblies	Preference is modular and/or pre-fabricated assemblies.	
Mechanical Systems		
Heating	Energy efficient heating equipment. Propane Furnace preferred, but Boiler system is an acceptable option. Equipment must be a type that can be maintained with local employees or contractors. Service and repair must be available in the community or a reasonable distance from the community. Include an exterior red light that should light up if the furnace is not working.	Heating system Required. High efficiency is preferred
Cooling/AC	Options to be discussed. May not be included	If Possible
Back-up System #1	Options to be discussed. Potentially a wood stove.	If Possible
Back-up System #2	n/a	
Energy recovery Ventilator or Heat Recovery Ventilator	High efficiency , simple maintainance preferred	Required

Electrical Systems		
Service Capacity	As required by code and unit load requirements. Assumed 200 amp (each unit)	Required
Back-up System	Sub-panel with connection for external (PCA supplied) generator. Sub-Panel to include life safety and other critical components	If Possible
Solar Power	Optional: Options to be provided for solar power including roof mounted solar panels, tied directly into the grid. System sized to match modelled annual electricity consumption. If cost prohibitive, then building should be made solar power ready	If Possible
Surge Protection		Preferred
Ceiling Fans		Preferred
General Building Material/Finishing Preferences		Tiered Requirement Goals
Flooring	Durable, low maintenance and cost effective material such as laminate or vinyl.	Preferred
Walls	Drywall and painted.	Preferred
Countertops	Durable, low maintenance and cost effective.	Preferred
Cabinets	Standard residential construction, extend to ceiling with crown moulding. Alternatives acceptable.	Preferred
Bedrooms		
Number of Bedrooms	2 + 1 "flex" room (den/optional bedroom). Preference for flex room to be located on the main floor.	2 bedrooms are Required, Flex room Preferred
Minimum Size (square feet)	should be as large as is practical to allow for a bed*, dresser, optional desk, and room to move around. * Bed size as per Tiered Requirement Goals	At least one bedroom sized for a double bed is required. A queen sized bed in one or both bedrooms is preferred.
Closet and size	Typical size	Required
Bathrooms		
Preferred Number of Bathrooms	One bathroom dedicated to each bedroom (not required to be ensuite but preferred), these are required to be located on the same floor as the bedrooms and to have a sink, toilet, bathtub/shower combination. If both are ensuite or on the second floor, a third washroom with sink and toilet only is required on the ground floor.	Required as per description.
Minimum Size (square feet)	as large as required	
Kitchen Appliances		
Stove/Range	Standard, single family residential size, electric.	Required
Range Hood/Exhaust	Standard, single family residential size, electric.	Required
Refrigerator	Standard, single family residential size, electric.	Required
Dishwasher	Standard, single family residential size, electric.	Required
Deep Freeze	Standard, single family residential size, electric.	Required
Microwave	Standard, single family residential size, electric.	Required
Laundry Appliances		
Washer	Standard, single family residential size, electric. Preferred on second floor or near bedrooms in a closet	Required
Dryer	Standard, single family residential size, electric. Condensing dryer preferred to reduce wall penetrations. Preferred on second floor or near bedrooms in a closet	Required

Additional Rooms Required		
Entrance/Vestibule/Mud Room	with storage for jackets and footwear	Required
Pantry (off kitchen)		Preferred
Storage	cold storage on exterior. No access required from within the house.	Preferred
Security		
Alarm System	Not Required	
Exterior		
Parking	Yes, one per unit. Gravel parking pads. Electrified for block heaters	Required
EV Charging Station	Yes, one per unit.	Preferred
Deck	Required. Deck to be covered.	Required
Fence	Options to be discussed. Materials should be durable and low maintenance. Chain link preferred	Preferred
Landscaping	Options to be discussed. Grading, topsoil, and seeding is required. A walk way from front doors to driveway is required. Poured concrete if possible concrete pavers or slabs acceptable.	Required as per description.