

# **MITIK 299 Corp.**

## **Business Plan**

**Contact: Chief Gary Knott, Ernie Harper, Virginia Harper,  
Bobby Knott and Luke Harper  
(204) 457-2343 (Band office)  
(204) 290-7571 (cell for Ernie Harper)  
Email: [h31n73@gmail.com](mailto:h31n73@gmail.com)**

**Shirley Thompson, Jerome Harper, Diana Fernandez,  
Jingwen  
(204) 291-8413**

## TABLE OF CONTENTS

<b>1. EXECUTIVE SUMMARY .....</b>	<b>3</b>
<b>2. COMPANY DESCRIPTION .....</b>	<b>4</b>
2.1 MISSION STATEMENT .....	4
2.3 OBJECTIVES .....	5
2.4 MANAGEMENT STRUCTURE .....	6
2.4.1 THE OWNERSHIP STRUCTURE .....	6
2.4.2 THE INTERNAL MANAGEMENT TEAM .....	7
2.4.3 EXTERNAL MANAGEMENT RESOURCES.....	10
2.4.4 PROFESSIONAL SERVICES .....	10
2.4.5 THE ADVISORY BOARD .....	10
2.4.6 HUMAN RESOURCES NEEDS IN THE BUSINESS PLAN.....	11
<b>3. OPERATIONAL PLAN: TABLE OF FOREST MANAGEMENT AND OPERATION TO HOUSING .....</b>	<b>12</b>
3.1 REGIONAL FORESTER WAIVING ALL FEES AND GRANTED ALL PERMITS.....	13
3.2 LOG SUPPLY .....	14
3.3 LOGGING OPERATION .....	14
3.4 FELLING .....	15
3.5 DEBARKING .....	15
3.6 SAWING SITE .....	16
3.7 POWER SUPPLY .....	16
3.7.1 POWER REQUIREMENTS .....	16
3.7.2 MILL SELECTION.....	17
3.7.3 WATER SUPPLY .....	17
3.8 SORTING.....	18
3.9 SAWING .....	18
3.10 GRADING.....	18
3.11 DRYING.....	18
3.11.1 NATURAL AIR DRYING.....	19
3.11.2 KILN DRYING.....	19
<b>4. PRODUCTS.....</b>	<b>19</b>
4.1.1 PRIMARY PRODUCT: HOUSING & STICK WALL.....	19
4.1.2 SECONDARY PRODUCTS .....	20
4.2 BY-PRODUCTS .....	21
4.2.1 WASTE DISPOSAL.....	22
4.2.2 REMOVAL OF BY-PRODUCTS .....	22
<b>5. PERSONNEL.....</b>	<b>22</b>
5.1 PERSONNEL REQUIREMENTS/ OPERATING PERSONNEL.....	22
5.2 ADMINISTRATION .....	23
<b>6. MARKETING PLAN.....</b>	<b>23</b>
6.1 THE 4Ps.....	24
6.1.1 PRICE.....	24
6.1.2 PROMOTION.....	24
6.1.3 PRODUCT.....	25
6.1.4 PLACE .....	25
<b>7. MANAGEMENT SUMMARY .....</b>	<b>25</b>
<b>8. SALES/ BUDGET .....</b>	<b>25</b>
<b>9. CONCLUSION.....</b>	<b>27</b>
<b>REFERENCES.....</b>	<b>ERROR! BOOKMARK NOT DEFINED.</b>

## 1. Executive Summary

Mitik 299 is a First Nation Housing and Sawmill not-for-profit registered company. Mitik 299 Corp. is linked to innovation and knowledge networks to deliver not only the next generation of sustainable housing but a seven-generation residential building system that designs and builds with and for First Nations, particularly its own community, Wasagamack. Local wood that meets structural code requirements will be used to build housing in their remote community under a new cost-effective process of logging, grading and building of houses with local people gaining new building skills. Using local resources for housing will result in more durable and affordable houses that are culturally appropriate, providing both jobs and quality houses in a community where both are badly needed.

Wasagamack First Nation has a substantial need/market demand for housing and rebuilding its community using local resources and local labour. The federal government has committed to invest in First Nation housing, to combat the health and social costs of overcrowding. Wasagamack housing situation is considered one of the worst housing situations in all of Canada. The only question is:

Will First Nation people benefit by better housing and jobs in the spirit of reconciliation or will the status quo continue to short-change First Nation people?

A sizeable investment in a labour force of 20 to 25 workers has already started as of October 2018 with a 15-month course that trains Wasagamack workers in a holistic course, called Boreal Home Builders. Boreal Home Builders covers every part of a housing/logging operation from logging, maintaining small motors (chainsaws, forestry, sawmilling, carpentry, plumbing and house building in 2018-2019). Although a small sawmill has been operating in the community for years the addition of a business plan, a business model for using lumber and wood in housing and incorporation of this business is needed for it to be sustainable. By the sawmill expanding to incorporate a housing construction business and renting its purchased equipment Mitik 299 Corp. is expected to provide an excellent return on investment and be prepared to make money the first year after receiving start-up funds. Mitik 299 Corp. has many in-kind contributions for this proposal amounting to a \$583,390 (or as much as 1,923,900) investment by Wasagamack First Nation, University of Manitoba and others -- the Community Futures Inc. ask is approximately one-fifth or 20% of the total investment at \$215,500. In less than one year this company is deemed to be profitable due to many positive supports this business has to make it a model of success in the first few years, by the Wasagamack First Nation and being part of a partnership grant for educational programming called Mino Bimaadiziwin Partnership. The in-kind contributions include an operable sawmill (LT40 WoodMizer), a greater than \$350,000/yr investment in worker training (Boreal Home Builders) and a memorandum of understanding with the Housing Manager and Chief and Council to build two houses in 2018 with CMHC funding or Trudeau house funding. As well, the wood and timber permit fees for crown land nearby the reserve, is considered the best wood in the province of Manitoba for housing being old growth and sizeable, have been waived. Bruce Holmes, Regional Forester for Sustainable Development in the Manitoba Government considers the wood supply in Island Lake comparable to Duck Mountain's, which he considers the best in the country.

Products of the sawmill and housing construction business will include:

- Production of high-quality stick wall, timber frame and log houses
- Secondary wood product manufacturing (furniture, insulation of curly wood and wood chips, trim, wood siding)
- Displacement of current imports of wood materials

## **2. Company Description**

Mitik 299 Corp. is a company under the Development Corporation of the Wasagamack First Nation. The board of directors of Mitik 299 Corp. are composed of key people in the Wasagamack community with skills in budgeting, business, human resources and training. The board will consist of the chief, employment training director, chief-executive-officer (CEO), councillor, as well as the housing manager. This board will consult regularly with its advisory group and with the Housing program in Manitoba. Mitik 299 Corp. will increase the capacity of Indigenous communities to take advantage of the future opportunities for First Nation housing, forestry and wood product sectors. Federal announcements of funding for innovative housing to solve the First Nation housing crisis holds great promise. This company can meet the housing needs of the community for 300 houses and provides a model for an incorporated sawmill and housing construction business for all of northern Manitoba.

### **2.1 Mission Statement**

By meeting the needs of Wasagamack First Nation and other northern and First Nation communities for quality lumber and housing, Mitik 299 Corp. will inject capital and integrate housing objectives with other social and economic activities to make housing a source of community healing and economic renewal in Wasagamack First Nation and provide a model for other First Nation communities.

### **2.2 The need: end the housing shortage.**

The poor condition and shortage of housing is causing a crisis in First Nations (FNs) across Canada but particularly in the FN reserves of Island Lake, Manitoba. James Anaya, Special Rapporteur on the Rights of Indigenous Peoples, reported in July 2014 that housing in Canada's Indigenous communities "has reached a crisis level" (Anaya cited in The Interim Report of the SCAP, 2015, p. 5). Many homes on reserves are in substandard condition, require major renovations or replacement to meet standards. Chief David McDougall from Island Lake calls the housing situation a "ticking time bomb" with 1,500 houses on the waiting list for the cluster of four reserves, including Wasagamack and Garden Hill FNs. The Chief documented 23 people living in a two-bedroom home where "they had to take turns sleeping" (Puxley, 2016).

Wasagamack's challenges stem from being a fly-in community, thus making non-local materials difficult and expensive to transport on winter ice roads, permafrost causing foundations to shift and walls to crack (SCAP, 2015). Furthermore, CMHC rules not providing mortgages for First Nations in third party preventing the construction of new homes. The shortage of livable housing units has resulted in overcrowding and homelessness. Some homes need significant repairs and may not meet current building code requirements, resulting in unsafe and/or unhealthy conditions. Homes needing major repair tip the scale at 83%; this housing crisis results in average of 5 people in each house (Statistics Canada, 2017) but, in some cases, as many as 23. The Royal Commission on Aboriginal Peoples (RCAP) states:

Injection of capital and the integration of housing objectives with other social and economic activities in Aboriginal communities will create a synergistic effect, making housing a source of community healing and economic renewal (Canada Royal Commission on Aboriginal Peoples, 1996c, p. 341).

Inadequate housing on reserve is linked to negative health impacts for both children and adults in addition to the destructive social impacts. A high incidence of mold growth exists in “the dilapidated housing that characterizes much of the shelter available to the Indigenous people of Canada” (Optis, Shaw, Stephenson and Wild, 2012, p. 14). Inadequacies and overcrowding of on-reserve housing are linked to higher incidence rates of: hepatitis (Jin and Martin, 2003), acute rheumatic fever (Gordon et al., 2015), asthma (IHC, 2003) and tuberculosis (Clark and Ribben, 2000; Clark et al., 2002; Lancombe et al., 2011 Smeja and Brassard, 2000). Tuberculosis, a major public health problem for Canadian FN communities, is 9 times more prevalent in these communities than in Canada as a whole (IHC, 2003).

The shortage of on-reserve housing causes migration to larger urban centres and exacerbates young women’s and girls’ vulnerability to sex trade work and trafficking, particularly since affordable housing in urban centres to people without a rental history is difficult to access (Beavis, Klos, Carter and Douchant, 1997; Collins, 2010; Geisler and George, 2006; Peters and Robillard, 2009; Westerfelt and Yellow Bird, 1999; Zerger, 2014). Some people with inadequate on-reserve shelter have ended up homeless in Winnipeg and other cities (Brandon and Peters, 2015, p. 7). Linking the social and health impacts of the housing crisis on reserves will raise awareness about FN housing and promote the sharing of solutions.

## **2.2 Objectives**

The Mitik 299 Corp. in Wasagamack First Nation will be a business that offers the following products, services and employment training:

- Provide apprenticeship and non-apprenticeship training programs for the trades of carpentry, plumbing and electrical, as well as heavy equipment operator and sawmilling;
- Production of durable homes using different wood building techniques including stick wall homes, timber frame homes and log homes appropriate to the environment and community; and,
- Secondary wood product manufacturing (furniture, insulation of curly wood, wood chips, trim, wood siding, panelling, wood flooring, rental of skidder).

Mitik 299 Corp. hopes to have more than 50 to 60% (60 to 70% by volume) of the home building materials be local by using wood siding for exteriors, wood paneling for interiors (instead of dry wall which is prone to mould), insulation (curly wood or wood chips) with double walls, as well as furnishings in the house be local.

Many ready-to-move (RTM) stick-wall housing and log home businesses exist in Southern Manitoba but no sawmill and housing corporations exist in the north and no Aboriginal housing incorporated businesses in Island Lake or the East-side of Lake Winnipeg. Mitik 299 Corp. will differentiate itself by being the face of First Nation logging and housing.

Mitik 299 Corp. will differentiate itself by focusing on housing and sawmill development in First Nation market in remote communities. We are trying for next

generation sustainable homes that may have some modular aspects to be built within the large steel sawmill/housing building – so that the housing industry can work full year. Some housing designs have been developed that are culturally appropriate, with Sundial Passive Solar Inc and Indigenous Development Support Services and are affordable under CMHC funding rules with considerable savings from the \$220,000/home (with appliances and furniture) going back to the loggers, sawyers, construction workers, business (5 to 10% will be going towards business upgrades of equipment, building and designs and for contingencies, such as repairs and oil).

With a timber and wood permit to harvest the provincial forest near to Wasagamack on the nearby islands, winter road and on the reserve, Mitik 299 Corp. will be able to log the local forest and not have to ship wood products up on winter roads, there will be considerable savings to building homes. As well, this housing company will provide a more sustainable product by designing homes to suit the cold climate and employing local people. We plan to develop wood products that are highly marketable such as curly wood insulation, lumber, siding, panelling, tables, chairs, beds and flooring.

### **2.3 Management plan and structure**

The Management plan and structure section for Mitik 299 Corp. is broken down into the following sections:

1. Ownership Structure
2. Internal Management Team
3. External Management Resources
4. Human Resources Needs

#### **2.3.1 The Ownership Structure**

This company is structured as a legal non-profit organization. This non-profit organization is created with the intention to not make personal profits to any of the directors. Mitik 299 Corp. is formed for non-commercial purposes to perform the important community work of developing housing in the community and providing funding back to the community for further housing and training to build capacity of Wasagamack First Nation. Any profit will be used to further the goal, or undertaking of the organization, to build a sustainable sawmill and housing corporation and build better and more housing in the community and to train and employ Wasagamack workers in the building trades and also to create local architects, planners and interior designers. After expenses and training payments, any profits will not be used by the individuals involved for their own personal financial gain but for building a housing industry that provides jobs and housing for the communities.

This corporation is already registered and is being Incorporated under The Corporations Act of Manitoba. Incorporation creates a legal entity for the organization and board members and supervisors who are involved with it providing the following advantages, as follows:

**1. Limited Liability:** The board members and supervisors are involved in the corporation are not normally responsible for the legal and financial obligations of the corporation with some exceptions to this general rule.

**2. Title to Property:** The corporation will own the sawmill steel building and the sawmill under its corporate name, allowing the membership of the corporation to change if people retire, the legal ownership of the property will remain undisturbed by the corporation.

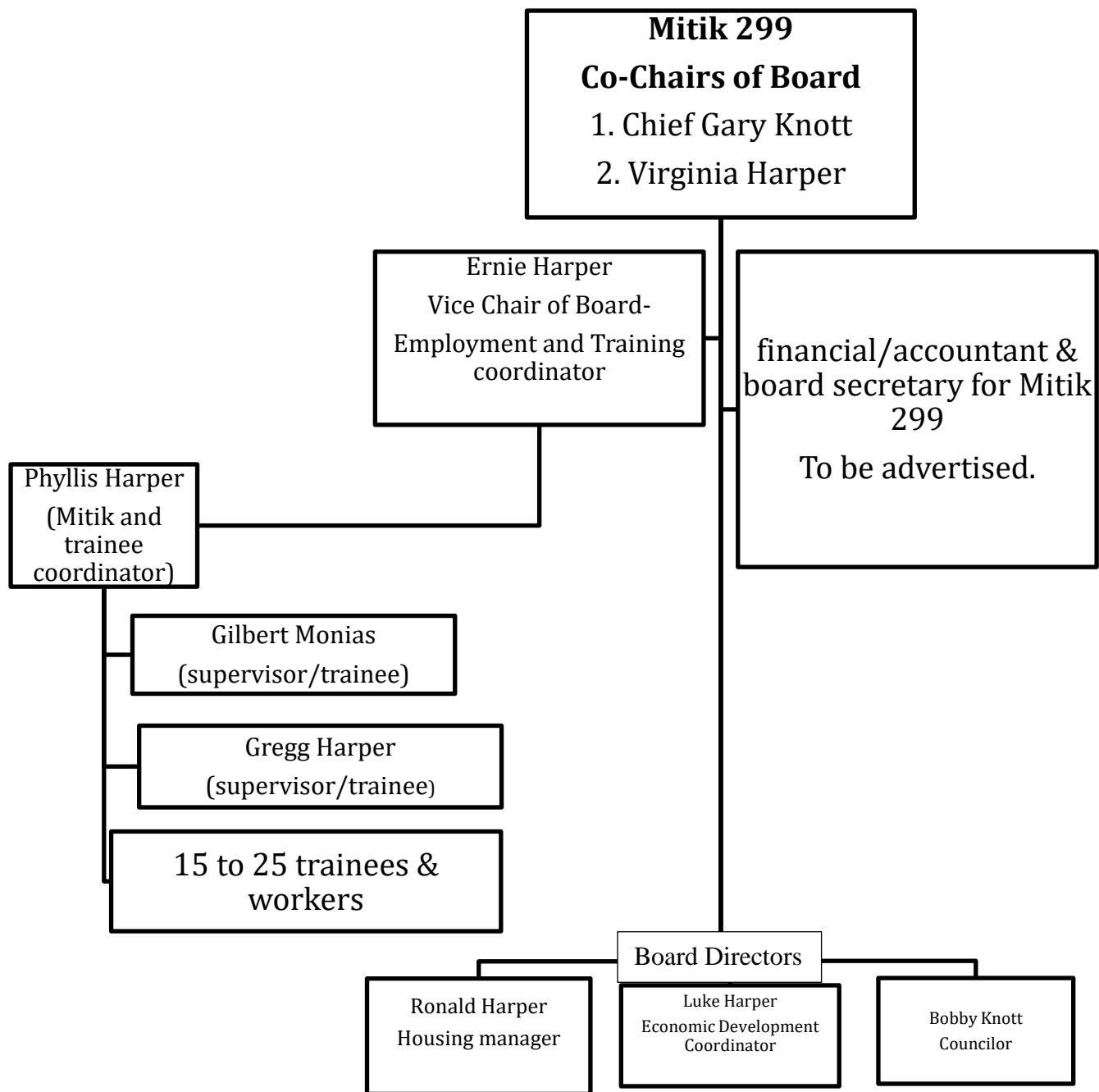
**3. Continued Existence:** The existence of a corporation is expected to continue for the long-term and does not depend on the continued involvement of its individual members or directors. The corporation has a long-term game plan to build houses for a decade or more.

#### **2.4.2 The Internal Management Team**

This section identifies who's going to have responsibility for each category, and profile that person's skills in the board of directors to the company. The board members possess all the skills to provide expertise and capacity in the basic business roles of: Sales, Marketing, Administration, Production, Human Resources and Research and Development.

Mitik 299 Corp. board will have weekly or biweekly meetings for the first few months until the infrastructure and materials are all shipped up and the steel building are in place and functional and the students are able to sawmill. After the two houses have started and the carpentry program is underway meetings may be able to be less frequent but will occur at least monthly. At these meetings, the budget, the overall operations , training status, attendance records and production will be reviewed at least monthly and any corrective action required will be noted and shared with the supervisors and chief and council. Mitik 299 Corp. has many supports and resources being part of the First Nation and working with Employment & Training to obtain the University of Manitoba training allowance. As well, the supervisors will meet with Employment Training staff (Phyllis and Ernie) once per week to discuss future operations and training.

The people on the board of directors include the following key people: Chief Gary Knott and Virginia Harper (CEO) as the co-Chairs of the Board of Directors, as well as five Board of Directors (members) –with Ernie Harper as Vice-Chair (Employment training co-ordinator), Bobby Knott (Wasagamack First Nation Band Councillor), Ronald Harper (housing manager) and Luke Harper (Community Economic Development coordinator).



The board members are the people in the key positions with the right skills and position to direct this business over the long haul, as shown below for each person:

- Virginia Harper is the Chief Executive Officer for the Wasagamack Band. She has forty years of proposal writing, marketing and accounting skills. Virginia will ensure the accounting is being done properly and that supports are in place from the First Nation accounting office to assist this enterprise in the first few years to support the manager.
- Ernie Harper is the Employment Training Coordinator and has a college education in management and administration. He has human resources,



accounting training, proposal writing and budgeting skills. Ernie will apply for funding dollars for employment training to build an effective trades workforce. Ernie with Phyllis Harper will develop training and education programs to ensure that trades training results in sufficient and highly professional electrical, plumbing and carpenter red seal (highest apprenticeship status that takes at least four years) as well as architects and planners. Ernie will also correspond with Shirley Thompson and the advisory team on Research and Development and training issues.

- Ronald Harper has been housing manager for the Wasagamack First Nation for thirty years and has been requested to manage the teacherage buildings as well. He has the ability and interest to provide housing contracts to ensure that Wasagamack's funding for housing is used best through Mitik 299 Corp. by using local materials and knows about houses to approve new designs by Mitik 299 Corp. for building in this community by Mitik 299 Corp. for CMHC, teacherage and other funding sources that he can subcontract to some degree to Wazikamang Nahkaway Inc., and grow this business over time as it proves its capacity to provide better housing. Ronald will also correspond with Shirley Thompson and the advisory team on Research and Development.
- Bobby Knott is a councillor with Wasagamack First Nation in charge of housing and infrastructure and has been for more than five terms in a row. Bobby will provide ways of ensuring Mitik 299 Corp. by meeting the community needs for housing and training. Bobby Knott will provide consultation with the community through his band activities and represent Mitik 299 Corp. to ensure it is meeting the housing and training needs and providing good value to the community.
- Luke Harper is the coordinator of Economic Development at Wasagamack First Nation. He has a college business education and will help with funding and direction from the economic development.

By having people with accounting, human resource, budgeting, proposal writing, marketing, housing, construction, planning, management and public consultation. These people have the skills required to direct and ensure success of this enterprise and the networks to ensure that this business obtains contracts to build houses and can deliver on these contracts. These board members are all employed by Wasagamack First Nation and each person holds an aspect of this work in their job description. As a result, there will be no compensation directly to the board members as this focus is part of their existing job description. Each department will fulfill their job duties of providing training grounds and job opportunities for Employment Training and for the Housing Department and Economic Development department.

### **Management and Supervisors for Mitik 299**

As well as the board a management team will be created including the training and company coordinator -- Phyllis Harper, the supervisor and trainer - Gilbert Monias, and the trainer and operations manager – Greg Harper, as well as the financial/accounting and board secretary half-time person – TBD.

The Training and Mitik 299 Corp. Coordinator is now a part-time position but this funding will allow this position to become full-time. The management team will not have any funding from the project initially but in the second year, the salaries of the

supervisor and manager will be paid by the company and although many workers will continue to be paid by an employment training allowance as is currently provided, particularly for those who graduated with level 1 carpentry apprenticeship, some carpentry labourers who graduated from the Boreal Home program who do not want to continue towards apprenticeship may be hired. The training program to be a red seal trades person takes four or five years with carpentry experience requirements a workforce of many highly skilled tradespeople of 10 to 25 will result, with 5 to 10 labourers. As well, the business presently accepts wood and pays piece meal for wood and may continue to provide this service to the community members to allow all people to have an income from this business.

### **2.4.3 External Management Resources**

To be at the leading edge of sustainable housing and renewable energy in housing, the board of directors and supervisors will consult with external management resources. External management resources have agreed to provide expertise and include both:

1. Professional Services
2. Advisory Board.

### **2.4.4 Professional Services**

The following companies will provide external professional advisors to provide a "web" of advice and support outside the internal management team that will be invaluable in making management decisions and ensure this business is a success. Accountants, Lawyers and business advisors are available at the following organizations:

Island Lake Tribal Council, 338 Broadway, Winnipeg, MB R3C 0T3  
Phone: (204) 982-3300 Contact: Norman Wood Email: [vincentnwood@gmail.com](mailto:vincentnwood@gmail.com)

BDO Canada LLP- Winnipeg, 200 Graham Ave, Suite 700, Winnipeg, MB R3C 4L5  
Phone 204-956-7200 Fax: 204-926-7201 Contact: Brent Simms  
Phone: (204)-926-7590 Email: [Bsimmms@BDO.ca](mailto:Bsimmms@BDO.ca)

Mino Bimaadiziwin Partnership  
70 Dysart Rd., Winnipeg, MB R2V 1B8  
Phone: 204-291-8413 Contact: Shirley Thompson Email: [S.thompson@umanitoba.ca](mailto:S.thompson@umanitoba.ca)

Indigenous Development Support Services  
Call (204) 226-9698 Contact: Laurel Gardiner Email: [Laurel.Gardiner@outlook.com](mailto:Laurel.Gardiner@outlook.com)  
[m.me/idssmb.ca](http://m.me/idssmb.ca)

### **2.4.5 The Advisory Board**

An Advisory Board will provide a management think tank. These advisory members of the board will provide additional advice to ensure a good business that is sustainable and keep on the leading edge of housing technology. The advisory board will include:

1. Dr. Shirley Thompson, Sustainability Professor, University of Manitoba.
2. Lancelot Coar, Architect Professor, University of Manitoba
3. Shauna Mallory-Hill, Architect Professor, University of Manitoba
4. Laurel Gardiner, Principal, Indigenous Development Support Services
5. Eric Bjornson, Sundial Building Performance Inc.

#### **2.4.6 Human Resources Needs in the Business Plan**

The specific human resources we need are:

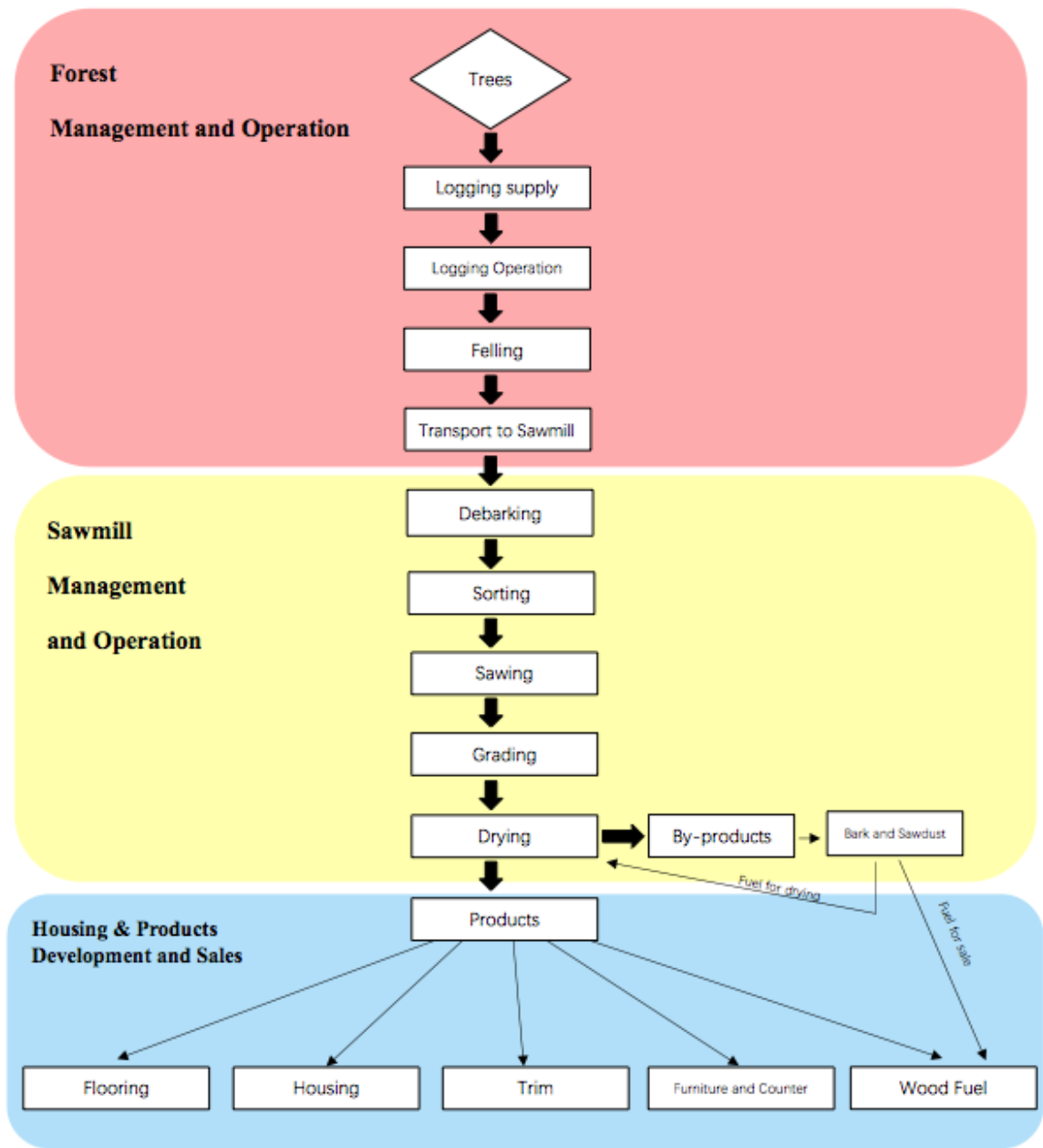
- for the first year we have in place 15-25 trainees (currently 23 but all may not pass requirements of attendance and grades) and two supervisors as well as the Employment Training coordinator.
- For the second and future years we expect to put in place 10-15 trainees in the second year of apprenticeship and 5 to 10 labourers to build housing with manager and supervisor.

The specific skills these people need are:

At least 20 of these trainees or workers require home building and renovations skills including : framing, blueprint reading, foundation pouring, math skills, carpentry tools, sawing, carpentry, tools safety for each equipment, chainsaw safety, sawmill safety certificates with experience and sustainable logging course (Boreal Home Builders certificate).

### 3. Operational Plan: Table of Forest Management and Operation to Housing

#### OVERALL MANAGEMENT AND OPERATION



### 3.1 Regional Forester waiving all fees and granted all permits

Bruce Holmes, Regional Forester of Manitoba Sustainable Development has promised in writing to: “assist the communities in developing a practical Forest Plan for a harvest of timber.” See Appendix A. He also promised to help forestry instructors teaching the “Boreal Home Builders Program.” Manitoba Sustainable Development has agreed to waive all fees, according to Bruce Holmes stating:” Manitoba Sustainable Development waives all Stumpage dues for timber harvested, as this timber is for community benefits” (Holmes, 2018). The work permit and timber permit have been granted without charge, with Bruce Holmes stating: “Manitoba Sustainable Development will provide a Work Permit and Timber Permit at no cost to the Island Lake Communities”. This was provided and is provided in Figure 2. Bruce Holmes also mentioned that the Sustainable Harvest is no concern with lots of timber with only 1% of the annual allowable cut being cut for this project. Bruce Holmes’s letter is dated August 8th, 2018.

Wasagamack First Nation territory has excellent timber resources. Most of the land is covered by old growth forests, which is considered the finest quality of wood for housing and furniture. The community is surrounded by forest, which means resources are nearby, reducing transportation costs. Local trained labour funded, through employment training, will reduce labour costs

What's more, a majority of the species (spruces) have small knots and provide long sections of evident straight grain. The majority of the structural products come from a spruce-pine-fir (SPF) grouping, which has the following advantages for structural applications:

- straight grain
- good workability
- lightweight
- moderate strength
- small knots
- holds nails and screws well

Wood has further good properties of being mould resistant and durable.

This enterprise will make houses and furniture from black spruce and jack pine. Black spruce, a medium-sized coniferous tree and jack pine, a cold-tolerant native species populate the traditional territory of Wasagamack with most being over 50 years (and many being over 100 years).

The dominant coniferous species in the boreal shield are black spruce, jack pine, white spruce, tamarack and balsam fir but in Wasagamack’s territory spruce and pine dominate. As well, the most common deciduous species are trembling aspen, white birch and balsam poplar. Presently, trembling aspen is in high demand for insulation materials in Europe and could be in Canada with its many excellent properties for insulation: Aspen insulation has the following features: diffuses moisture to prevent mould, has low thermal conductivity from 0.037W/mK to 0.05W/mK and has excellent fire resistance.

The business will sell lumber, trim, furniture and finished houses. The primary customer is the Wasagamack First Nation housing office. Wasagamack band office, through Island Lake Tribal Council, receives mortgage funding from Canadian Mortgage and Housing Corporation (CMHC) housing and renovations and other First Nations for CMHC. This funding at \$220,000 Canadian must complete the house with electrical and water/sewage (may require cisterns) as well as appliances and furnishings. As well, 300,000 is provided for each house in six duplexes. To generate more business, secondary customers will include construction companies working in the Wasagamack area on projects, furniture and do-it-yourself people (DIY) in this remote fly-in area. This corporation will endeavor to sell value-added products such as trim for export as well to be shipped out in winter for companies doing back-haul.

The University of Manitoba, Indigenous Support Service (IDSS) and Sundial Building Performance Inc. will develop a preliminary open-source net-zero passive solar housing design, which maximizes the use of local materials including timber and domestic wood-fibre insulation. The design will be for a next generation building to meet the energy efficiencies of the future and environmental design.

### **3.2 Log supply**

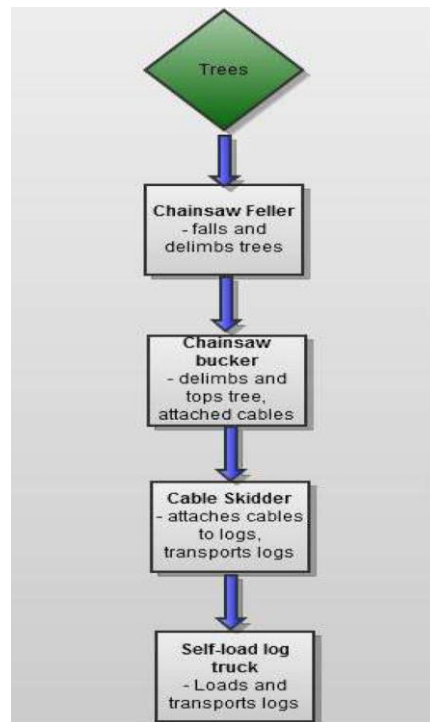
The sustainability of logging and forestry in the area was considered to provide sufficient for the current 2 to 10 houses built per year, considering teacherage builds and also Canadian Mortgage and Housing Company (CMHC) housing, which will be the amount for the first few years. The forest would remain sustainable with the use of more wood as the business grows from 2 houses in its first year to 10 or up to 40 houses/yr in future years to gear up to meet the need in the community. This business would also provide furniture for those houses and for other houses as well as biomass.

The goal of this company, after starting with a few houses for the first few years, is to build at least ten houses per year. Framing lumber used for a home can be estimated at about seven board feet (FBM) / ft<sup>2</sup>. According to our marketing objectives, ten houses would consume about 150,000 to 20,000 board feet, some of which will be off-grade and unusable for framing. Thus, from the projected harvest for 5 to 20 houses at 300 to 1600 trees (60 to 80 trees equal one house) annually, the actual volume of timber harvest is estimated to be between 450 cubic metres and 2,400 cubic metres. The Annual Allowable Harvest in FMU 90 is 263,720 cubic metre (1973 inventory) and so the community could do as much as 2000 houses per year and still be within the allowable cut. Consulting with experts, we found that a sustained log supply of about 150,000 board feet will sustain the renewable resource of the forest in Wasagamack 's traditional territory and not require a considerable distance to travel to obtain logs.

### **3.3 Logging operation**

The logging operating system we will use is a motor-manual harvesting (MMH) based on felling and processing with chainsaws, cable skidding logs to the roadside, and loading onto a self-loading log truck. The MMH system offers lower harvesting costs. It also provides greater employment opportunities than a mechanical harvesting system, and requires less capital investment and thus allow easier access to a potential market. The MMH system is coherent with our mission to provide employment and economic development opportunities. The literature supports the application of the

motor-manual harvesting and thinning operations findings of higher employment levels (worker-day/m<sup>3</sup>) and lower capital costs (Lortz, 1997; Meek et al., 1999; Phillips, 1997).



### 3.4 Felling

Most tree felling is done with chainsaws. Two cuts are made near the base, one on each side, to control the direction the tree will fall. Once the tree is harvested, the limbs are trimmed off with chainsaws, and the tree is cut into convenient lengths for transportation. Selected trees in an area are visually inspected and marked as being ready to be cut down or felled.

If the terrain is relatively level, diesel-powered tractors, called skidders, are used to drag the fallen tree sections to a cleared area for easy loading. The logs are then loaded on trucks using wheeled log loaders. Trucks make their way down the graded road and on their way to the lumber mill.

### 3.5 Debarking

After the trees are felled, and they are brought to the area where they will be processed, the logs are left to soak for about 20 minutes. Sometimes the trees are moved by a river and won't have to be pre-soaked. Either way, soaking removes mud and makes the bark softer and easier to remove. When they're finished soaking, the trees go through a "debarker." Debarkers come in many different varieties from hydraulic to specialized saws. These machines chew off the bark of a tree exceptionally quick and often need less than 10 seconds to shave the log bare. After they have been shaved, the logs move on to the next step.

### 3.6 Sawing Site

This sawmill site is near the Wasagamack First Nation band office and docks. Since the costs of loading logs onto trucks or into a river and offloading to storage at a sawmill are independent of distance travelled, this is an ideal location.

The terrain at this location is reasonably level and gently sloping to facilitate drainage, and the sub-soil is small, well-drained sandy gravel able to sustain wheel loads from a logging truck and fork-lift trucks. Traditionally the sawmill has been used in three seasons and been left outside. A steel building is absolutely critical for working in the winter to sawmill and also to protect the sawmill equipment from damage.

### 3.7 Power Supply

An essential difference between traditional and modern sawmilling practice is the amount of power applied to the sawing process. By using more electrical power to the saw teeth running at the correct speed, more lumber can be produced in a given period without increasing the workforce.

A reliable and adequate power supply is available through the use of electricity at the sawmill operations at 220 V. Although this power is obtainable the steel building would be required to install electricity with shut off valves for safety.

#### 3.7.1 Power requirements

Sufficient power must be obtained to power the following equipment and we are working with an electrician who previously worked for Manitoba Hydro who will ensure that all standards are met to get approved by Manitoba Hydro:

Log haul	7 - 10 kw
Log deck (if powered)	4 - 7 kw
Head saw	75 -150 kw
Carriage drive	7 - 10 kw
Log turners	4 - 7 kw
Setworks	2 - 4 kw
Main rollcase	4 - 8 kw
Transfer tables (chains)	10 - 15 kw
Edger infeed or resaw infeed	5 - 8 kw
Edger (two-saw)	10 - 20 kw
Resaw	15 - 20 kw
Edger outfeed or resaw outfeed	4 - 8 kw




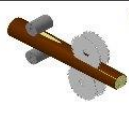
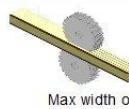
Sorting chains	4 - 8 kw
Trim saw	4 - 8 kw
Sawdust conveyor	1 - 2 kw
Edging and slab conveyor	3 - 5 kw

### 3.7.2 Mill selection

We consulted different experts to consider what sawmills are most appropriate for this location, considering: mobile or portable sawmills, semi-permanent sawmills or permanent sawmills.

Permanent sawmills are comprised of conventional units of head saw, carriage, resaw, edger and trim saw with roll cases, transfer tables and refuse conveyors, all mounted on steel and timber supports on concrete or treated timber foundations.

LT40 is the present equipment and will do for the first few years with small repairs required and buying replacement new blades to ensure continuous operation. However, in the third or fourth year with growth of the industry it would be recommended to buy an additional LTPS-260X. This would benefit for the development of Wasagamack First Nation housing company. With an input of this magnitude, a resaw is added to share the load with the headrig, and more trimming and sorting capacity is provided. Furthermore, log handling into the mill, log cleaning, removal of finished products and by-products must keep pace with the production capabilities of the mill machinery. Generally, more power is applied to the head saw, resaw and edges to obtain faster cutting speeds than those used in semi-permanent mills.

Model	Specification (please inquire for details)	Feeding speed Power of motors	Details
LTPS-260X Log Gang/Rip sawing machine  Length: 20 ft (6.3 m) Width: 6 ft (1.7 m) Height: 7 ft (2.1 m) Weight: 11025lb (5 ton)	Min top - Max butt log diameter range: <b>5½ - 13¼" (140-340 mm)</b>  Min log length: 10ft (3m)  Dia of saw blades: 17¼" (450 mm)  Sawing frequency: 2025 rpm	12, 19, 26,40 ft/min (4, 6, 8, 12 m/min)  Sawing motor:  2 x 40HP (2 x 30KW)	 <b>1<sup>st</sup> pass: Log Gang mill</b> Max saw blades: 2 x 8 Max height of the saw-cut: 12¾" (325mm) Max width of the saw cut: 11 ¾" (300mm)   <b>2<sup>nd</sup> pass: Multiple Rip saw</b> Max saw blades: 2 x 10 Max height of the saw-cut: 10½" (260mm) Max width of the saw cut: 11 ¾" (300mm)

(Woodlandia, 2018).

### 3.7.3 Water Supply

Two fire-fighting trucks are available in the community. The fire station is within 5 kilometers from the sawmill site and the lake is within 500 M for pumping water from the lake to stop a forest fire.

### **3.8 Sorting**

Once the trees have been debarked, they are sorted into large and small logs. The saws and exact method will differ depending on the size of the trees, but the end result is similar. There are different levels of intensity of sorting. Sorting of the logs will be determined by sort by thickness, width, length, grade and species. Sorting by species of trees allows different production runs for each group, facilitating the selection of appropriate saw teeth, feed speed and cut sizes. The sawing of each species group is consequently carried out with a high degree of efficiency.

### **3.9 Sawing**

Each tree is cut into 7 or 8 long pieces of wood. Larger pieces will often go through a resaw where they are cut into halves to make narrower lengths. At this point, these lengths of wood will then be cut further to make the assortment of standard lengths and widths suitable for our customers and product lines. Within each species group, the characteristics of density, strength, colour, drying and end-user will be similar to simplify processing and marketing.

### **3.10 Grading**

A log harvesting industry grading for structural lumber has been organized to be carried out for spring of 2019 for structural lumber. Canadian dimension lumber is manufactured to confirm the grading rules meet Canadian requirements. Each piece of lumber is inspected to determine its grade, and a stamp is applied to indicate the assigned grade, the mill of origin, a green or dry moisture content at a time of manufacture, the species or species groups, and the grading authority. (Canadian Wood Council, 2018).

Lumber has traditionally been graded by visual inspection. The grade of a given piece of lumber is based on visual observation of such characteristics as a slope of grain and the location of knots. Most softwood lumber is assigned either an appearance grade or a structural grade based on a visual review by a lumber grader. Based on the correlation between appearance and strength, lumber graders are trained to assign a strength grade to lumber based on appearance criteria such as the presence, size and location of knots, the slope of the grain relative to the long axis and several others.

We have made arrangement to have Mr. Wu from The Pas inspect and grade and teach the Employment training students how to grade in March 2019 and will do as required in future years. As well a number of Island Lake people have their grading license.

### **3.11 Drying**

Drying will be done to:

- i. Reduce the weight of lumber.
- ii. Stabilize the lumber dimensions for grading for structural lumber.
- iii. Develop desirable colour or strength characteristics.

Drying can be accomplished by natural air drying or forced drying in heated or refrigerated kilns

### **3.11.1 Natural air drying**

To obtain optimum drying results, species will be sorted into groups with similar drying characteristics.

- Air drying: Capital cost, is not required for kilns and heaters, the added flexibility allows different species to be dried separately, and the process can be easily controlled by local personnel. Lumber that does not need to be at a low moisture content, air drying is generally sufficient to meet the requirements of most applications.
- Dry Storage: Forklift trucks are available, but also manual labour will allow the stacking of the dry lumber.

### **3.11.2 Kiln Drying**

Before being put in the kiln to dry, panel and block wood would be placed in between each row of lumber to ensure that the moisture content to evaporate from outdoor temperature. To ensure quality wood for structural wood, at least one week after sawmilling, the wood will be dried. The drying process (Kiln Dried) is a process to reduce the moisture content on the wood about 12 to 15%. All species of wood must be dried. Softwood will easily crack in the process of drying quickly. Kiln dry process need two to four weeks, depending on species of wood, panel thickness, and room drying capacity. The right equipment can minimize the risk of being broken and warped wood. This process is the critical manufacturing process for furniture.

## **4. Products**

### **4.1.1 Primary Product: Housing & Stick wall**

#### ✓ Timber Frame Homes

Timber frame homes are built from large wood posts and beams that form the structural support of the house and require no interior load-bearing walls. The timbers are joined by connecting a mortise (hole) on the end of one timber with a corresponding tenon (tongue) that fits precisely and tightly. Mortise-and-tenon joinery can be cut to accommodate different angles, complexities and design of a timber frame.

In true timber framing, the joints are secured with wooden pegs – no metal fasteners will be used in the construction the huge – whereas metal fasteners and nails are used in post-and-beam construction. In either method, once the timbers are erected, the walls, often structural insulated panels or SIPs, are put into place, enclosing the home on the outside but leaving the beauty of the timber framing exposed on the interior. The wall panels can be finished with any exterior material, including wood, siding, stone and brick.

Materials are prepared by milled timbers, those created by sawmill machine, will be uniform in appearance and tend to be a little less expensive.

#### ✓ Log Homes

The selected log home designs will include horizontal logs interlocked at the corners by notching. Logs may be round, squared or hewn to other shapes. Milled log homes employ a variety of profiles which are usually specified by the customer:

- D-shape logs: round on the outside and flat inside
- Full-round logs: fully round inside and out
- Square logs: flat inside and out, and may be milled with a groove which could be chinked. When dealing with milled logs, chinking is a personal preference and not

required to seal a house; however, a log house will eventually leak if it is not properly sealed.

Nearly every profiled log features an integral tongue and groove milled into the top and bottom of the log; this aids in stacking, and reduces the need for chinking. Wood is not airtight and so caulking or chinking will improve energy efficiency.

The designs will be developed and stamped for local lumber through the boreal home builders' program as we are working with different architects and builders.

Provided \$150,000 of the \$220,000 for home materials to finish it with supervisors and Boreal Home builders training and apprentices for carpentry, plumbing, electrical and local wood we expect to finish it with appliances and materials for \$170,000 to \$180,000, providing a profit of \$40,000 to \$50,000/house which in the future will cover labour for supervisors of trainees and manager.

In 2019 we are designated and approved to build two houses, which will provide a profit of \$80,000 to \$100,000.

**Total profit = \$90,000.00/yr**

#### **4.1.2 Secondary products**

##### ✓ Paneling, Siding and Flooring

Solid wood paneling, siding and flooring is milled from a single piece of timber that is kiln or air dried before sawing. Depending on the desired look of the floor, the timber can be cut in three ways: flat-sawn, quarter-sawn, and rift-sawn. The timber is cut to the desired dimensions and either packed unfinished for a site-finished installation. It can be provided tongue and groove.

Panels \$3/sq. foot x 1200 sq. feet = \$3600

Flooring \$3/sq. foot x 1200 feet = \$3600

Siding \$2/sq. foot (uninstalled) x 1200 sq. feet = \$2400

**Total = \$9,600/yr**

##### ✓ Furniture and Counters

The wood result of hewing is known as logwood, from which the furniture making process is started. The logwood will be distributed to the sawmill. In the millet area, split boards disjointed according to the thickness and type of wood for easy arrangement in kiln dry. Splitting and cutting process is the first of the component process. Here, the wood is cut and split according to size product that was needed with a cutter saw. Small blocks of wood are then sent to plane machine to get final result with a smooth surface without line saw. After planing, the component is moved to a drilling machine or pen machine to get construction.

= 10 tables and chairs at \$150 = \$1500

= 50 picnic tables at \$50 = \$2500

= 5 couches/beds at \$300 with cushion = \$1500

= 50 bed frames at \$200 = \$10,000

= 25 bunk bed frames at \$250 = \$7500

**Total from furniture = \$23,000/yr**

##### ✓ Trim

Trim will provide a good high quality product to sell and ship back on backhaul trucks at \$2 to 4 or \$ 8 to 10/board feet/m.

= 3000 board feet x \$3/ linear foot

**Total from Trim = \$9,000/yr**

✓ Rental of Skidder with grapple hook

We will purchase a used skidder with a grapple hook and rent out when not in use for logs. At \$384/hr rental by construction companies and for winter road construction we would plan to rent out for 20 to 40 hours per week for 6 months per year as we only need it during winter logging season.

= 10 hrs x 4 weeks x 4 months x \$384/hr

**Total from rental of skidder= \$368,640/yr**

### **Total Sales expected per year for first years**

<b>Item for sale/yr</b>	<b>Purchase price (\$)</b>	<b>Cost to produce/manage/ market/ship (\$)</b>	<b>Expected profit (\$)</b>
Houses (2 the first year)	440,000	360,000	90,000
Paneling, siding, flooring	9,600	3,200	6,400
Furniture	23,000	15,000	8,000
Trim	9,000	3,000	6,000
Skidder	368,640	60,000	308,640
<b>TOTAL</b>	<b>890,240</b>	<b>411,200</b>	<b>449040</b>

NOTE: as labour is paid by the Boreal Home Builder's Experts training and the only cost is tools, gas, paint/varnish, nails, repair, management and equipment/building replacement and upgrades. We have a large need to reinvest and replace equipment and upgrade the portable sawmill from gas to electrical and permanent in future years. This applies to all the items except the house which will have many other electrical wiring, plumbing materials, sinks, bathtubs, roofing and appliances and other costs required for it as well as shipping costs.

#### **4.2 By-products**

By-products produced by the sawmill operations include:

- i. Fuel from bark and residual wood
- ii. Sawdust.
- iii. Slabs.
- iv. Edgings.
- v. Trim ends.
- vi. Broken logs, limbs, etc.

The dry bark is often a valuable source of domestic fuel. The wet bark can be piled in a suitable location and allowed to dry for fuel. The bark will be used as kiln fuel be sold or given away as fuel. Sawdust is also a valuable fuel for domestic or industrial use, provided that it is not too wet. Some species produce sawdust suitable for use as agricultural mulch or animal bedding to be used by the farm which is planned for establishment there. Slabs, edgings, trim ends, and broken logs are a potential source of raw materials for small secondary or home industries.

#### **4.2.1 Waste Disposal**

Sawmill by-products will be used economically to burn in people's fireplaces as wood logs. Controlled burning may be necessary to reduce fire hazards and minimize environmental impact. Simple, natural draft burners are available for this purpose.

#### **4.2.2 Removal of By-products**

Sawdust beneath the headrig, resaw and edger for delivery to a single sawdust storage area. Small slabs, edgings, trim ends, and broken pieces will be removed from the operating flow on a low-level conveyor and delivered to a separate area. From there they can be sold off the site, cut up for fuel or sent for chipping if desired. Storage of water will be done in the sawmill area for fire-fighting. The communities Fire Department will be called in to controlled burn.

### **5. Personnel**

#### **5.1 Personnel Requirements/ Operating Personnel**

A post-secondary education/training program is in place to pay workers and provide supervision of workers. In order to smoothly operate the sawmill, trainees are enrolled in the Boreal Home Builders program for the 15-month post-secondary program to determine how to perform all the essential functions efficiently. Supervisors will ensure that trainees are aware of their responsibility for all the physical operations involved in receiving, sorting and handling the logs; in sawing the wood into finished lumber; in managing the lumber for sorting, drying and preparation for sale; in maintaining the sawmill machinery, building in right operating conditions and in keeping the site secure and in low fire hazard condition.

In the community, skilled personnel will be available with the appropriate training and experience. For example, a Red seal Carpenter (Larry Harper, Wasagamack) and a head sawyer (Gilbert Monias and Wayne Harper) have been identified to ensure an effect expending, who has been sawing for years now and built log housing. Wayne Harper has the train-the-trainer chainsaw certificate. All trainees and workers will have had to pass the chainsaw safety course.

Gilbert Monias has worked with Employment and Training and will supervise the training of the students with hands on work experience. Trainees will have at least 15 months of training and experience in work being performed, but still subject to supervision and further training. After taking the Boreal Home Builder's Program, the graduates will be capable of being edger operator, trim saw operator, log wood, manage forest and build housing by different techniques including stick frame, timber frame and logging. Further-apprenticeship positions will be funded to allow workers to get their red seal in carpentry. This apprenticeship training provides 4 years of training to reach red seal.

#### **Training Schedule for Boreal Home Builder's Program**

Training Schedule for Boreal Home Building Program, 2018-2019																					
Month	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC			
			Phase 1: Forestry (7 months)							Phase 2: Construction (8 months)											
MOUs & Select & Train Instructors																					
Trainee Selection & Assessment																					
• Upgrading 1 • Intro Small Engines																					
Module 1: Forestry • Chainsaw Operators • Wilderness FA																					
• Intro Forestry Mgmt • Harvesting Plan • Harvesting • Harvesting																					
Module 2 • Sawmilling • Lumber Grading																					
Into to Carpentry • Upgrading 2 • Construction Safety																					
• Apprenticeship 1 Challenge Prep • Basic Home Maintenance • House Construction Course (Shop/Classroom) • Hands on Practical Training (Worksite) as houses are built																					
Career Development			Small Engines Technician	Natural Resources Technician				Facilities Basic Maintenance		MCSO Foundat	MCSO Framing	Plumbing Fundamentals	Electrical Fundamentals	Carpentry Fundamentals							
Possible Businesses or Employment			Small Motors Shop	Line Clearing	Log Sales	Lumber & Value Added		Home Repair Service	General Contracting business or specialty businesses such as roofing, painting/drywalling, furniture and cabinetry, plumbing, electrical, etc.												

This Boreal Home Builder Program will fund the workers, and Employment Training will or IDSS will fund the supervisors for operations out of the employment and training budget for the first year and provide some funding in future years if further apprenticeship training occurs.

## 5.2 Administration

The manager and board team have the responsibility for the marketing, management and administrative functions which would include the following duties:

- i. Financing and accounting
- ii. Acquisition of logs through appropriative model  
(e.g.: Co-operative buying from local people at fixed price).
- iii. Marketing of finished lumber.
- iv. General management of operations.
- v. Record keeping.
- vi. Timekeeping.
- vii. Payroll.
- viii. Human resources
- ix. Public relations.

Some staff members will be required to perform more than one or all of the above functions.

## 6. Marketing Plan

Develop the Memorandum of Understanding and financial agreement with Wasagamack First Nation chief and council and Island Lake Tribal Council to commit to buy the local lumber from the sawmill to meet all the timber, wood, trim, furniture and other siding needs for the CMHC houses. A grader will be brought in to allow this wood to be used for structural lumber.

- Work with the ILTC CMHC person to obtain enhance CMHC funding for on-reserve First Nation houses to produce better quality, culturally appropriate homes for Wasagamack First Nation and provide timber and wood products or St. Theresa and Red Sucker Lake First Nations in Island Lake.
- Establish connections with major national and regional retailers that may purchase bulk orders of wood trim directly from Wasagamack First Nation sawmill business.
- Produce lumber and finished materials for renovations.
  - Supply contractors with lumbers and buildings from different business organization in/around Wasagamack

## **6.1 The 4Ps**

### **6.1.1 Price**

Our lower cost allows us to lower the price of our products for improved quantity. We use the motor-manual harvesting (MMH) system offers lower harvesting costs and provides greater employment opportunities. There is a significant capital cost and operating cost advantage. Thus, the low-price strategy is possible for the First Nation corporation, and it allows easier access to a potential market. We can build a house and equip it well below the average CMHC funding for housing of \$220,000 while providing a better product and better employment opportunities. Also, as Wasagamack has been nationally recognized by the federal government as having some of the worst housing situation in Canada, further funding for 6 “Trudeau duplexes” at \$300,000 each house since 2018. These “Trudeau houses” are expected to be provided for the foreseeable future as the shortfall of houses to meet population needs in the community’s numbers 300 houses. There is also the opportunity to build 18 teacherages, which will be built in the next few years, which are required for the new school. The other on-going need is to provide wood for renovations and to provide renovation capability, which this sawmill and housing corporation could provide.

### **6.1.2 Promotion**

The primary customers in Wasagamack First Nation housing department and Wasagamack Band to supply the six CMHC houses and six Trudeau houses with timber products and house-building and the Wasagamack Education Authority for teacherages. Island Lake Tribal Council (administers CMHC funding), and with the purpose of generating more business, its secondary customers include construction companies working in the area on projects, furniture, packaging and joinery industries, timber retailers and DIY companies and individuals in this remote fly-in area. To achieve this goal, we will use the following promotional mix:

- Community/Chief and council regular updates of success and training through radio/television and also regular visits and workshops
- Social media marketing
- Content marketing
- Email marketing

The sawmill business intends to create an extensive marketing campaign that will ensure maximum visibility to the cause of First Nation housing and its success through a website, YouTube videos, press releases and journal articles.

This local sawmill operation will be a good news story to show how First Nations can successful dealing with the housing crisis and combat low youth employment



rate/high poverty. Local sawmills with housing corporations will be shown to provide suitable quality housing and jobs. This good news story will be shared through different films available on YouTube and journal articles assisted by Dr. Thompson at the University of Manitoba as well as mass media (Facebook, Twitter, etc.).

### **6.1.3 Product**

The First Nation Corporation will provide quality products, but also innovates to provide more value to our customers and capture more of the market.

At present, the following main categories of First Nation-owned Corporation products are:

- Production of timber frame houses, log homes and stick-wall homes.
- Secondary wood product manufacturing (furniture, insulation of curly wood and wood chips)
- Displacement of current imports of wood materials

### **6.1.4 Place**

We primarily serve Wasagamack First Nation with the sawmill and housing warehouse located in Wasagamack First Nation but also will be trying to provide wood materials to other Island Lake communities and have the ILTC approve us for selling to St. Theresa in particular which is close by.

## **7. Management Summary**

Professional management will be guided by the Board of Directors working with the supervisors in consultation with the external management team from ILTC, BDO and Mino Bimaadiziwin Partnership and the advisory team, previously discussed in 2.3. Please refer to 2.3 for the detailed discussion. Other experts will be regularly consulted on technical matters related to forestry, such as expert grader, Mr. Wu and the FP Innovations' Peter Sigardson. As well, for housing design we will gain advice from University of Manitoba architects Lancelot Coar and Shauna Mallory Hill as well as Eric Bjornson from Sundial Building Performance to ensure that the designs meet all requirements.

## **8. Sales/ budget**

There are a lot of products to sell from the sawmill and equipment to allow a good profit. The most profit will come from rental of skidder equipment to province for winter road, which is much in demand and has very high per hour fees. Also some furniture, siding and trim materials will be produced to test the market and provide income. CMHC provides mortgage funding for two to five houses per year at \$245,000/house. The number of houses is expected to increase in the future with more focus on reconciliation and realizing the harm that was done by not only residential school but under housing.

The budget developed below shows the Wasagamack First Nation is able to contribute valuable resources to build the house, and the band will provide their sawmill, warehouse and \$100,000 in materials for housing to build two houses this year. This will test our housing product and concept at no cost or risk but not result in much profit the first year.

**Table 8.1: Mitik 299 Corp. Budget for 2019**

Project Activities	(1) Funding from other sources (minimum 15%)		(2) CRED	(3) Total estimated project cost
	In Kind	Cash		
Training of workers (training allowance) Mino Bimaadiziwin partnership and design/expert work	200,000	250,000	0	450,000
Training of workers (Welfare/EI supplement for trainees (special arrangement made with INAC for this training)	0	300,000	0	300,000
Supervision (two workers full-time) and assistant coordinator (one worker full-time) of trainee/employment training workers	0	122000	0	122,000
Trainers and experts for workers by ATI/IDSS (electrical, plumbers to train and finish housing) and insurance for trainees	120000	0	0	120,000
Board of directors' guidance and meetings including Employment training coordinator	0	546,000	0	546,000
Housing materials (plumbing, roofing, electrical, nails, screws, machines, foundation, etc.)	0	100,000	0	100,000
Accounting provision by Band	0	10400	0	10,400
Existing Sawmill equipment and chainsaws owned by Band	40000	0	0	400,000
Steel building for sawmill and modular house building inside during winter	0	0	65000	65,000
Edger/trimmer sawmill equipment	0	0	18000	18,000
Electrical installation into steel building and set piles or concrete pillars	0	0	30000	30,000
Dryer building materials and heater	0	0	5000	5,000
Grapple Skidder	0	0	50000	50,000
Operating, incorporation costs, tools and management costs for start-up (chainsaws, carpentry tools required, computer & accounting system books)	0	20000	27500	47,500
License/Insurance for skidder, vehicle and sawmill (note trainees are covered by ATI insurance)	0	0	12000	120,000
Shipping fee for equipment on one truck bed	0	0	8000	8,000
<b>Total</b>	<b>\$575,500.00</b>	<b>1,348,400</b>	<b>215500</b>	<b>\$2,139,400.00</b>

The total requested for start-up for Mitik 299 Corp. of \$215,500 is a small portion of what Wasagamack First Nation, IDSS, and Boreal Home Builders/University of Manitoba are investing. With others investing up to \$1,92390 for the first year, we will use the smaller number of \$583,390 in our calculations and cashflow to better see the importance of the Community Futures Inc at one-third or almost 30% of the total investment (although less than 10% of estimated investment if all other sources are considered). A profitable statement can be reached in less than one year due to many positive supports this business has to make it a model of success in the first few years, being part of Wasagmaack First Nation and a partnership grant for educational programming called Mino Bimaadiziwin Partnership.

Many guaranteed sources of income (housing and skidder rental by winter road provincial funding) so that the first year will produce housing and other materials and also profit. This first year's profit of \$449,040 is largely from renting out the skidder but just the house building is expected to return this amount the first year. This was assured us as a solid business investment. If start-up costs are provided this business will be self-sustaining and allow the second-year development at the same scale but under its own cashflow (with CMHC housing of another two houses) until it scales up in the third or fourth year to try to double these amounts in five or six years when more housing funding becomes available or people's prosperity and capacity creates the ability for people to build their own homes. The important aspect is to provide good quality housing to ensure that Wasagamack First Nation and Island Lake Tribal Council CMHC analyst buy their housing through this business.

**Table 8.2: Total Sales expected per year for Mitik 299 Corp. in 2019**

<b>Item for sale/yr</b>	<b>Purchase price (\$)</b>	<b>Cost to produce/ manage/market/ship (\$)</b>	<b>Expected profit(\$)</b>
2 Houses in year 1	440,000	360,000	80,000
Paneling, siding, flooring	9,600	3,200	6,400
Furniture	23,000	15,000	8,000
Trim	9,000	3,000	6,000
Skidder/grapple hook	368,640	60,000	308,640
<b>TOTAL</b>	<b>\$890,240</b>	<b>\$441,200</b>	<b>\$449,040</b>

NOTE: As labour is paid by the Boreal Home Builder's Experts training and the only cost is tools, gas, paint/varnish, nails, repair, management and equipment/building replacement and upgrades. We have a large need to reinvest and replace equipment and upgrade the portable sawmill from gas to electrical and permanent in future years. This applies to all the items except the house which will have many other electrical wiring, plumbing materials, sinks, bathtubs, roofing and appliances and other costs required for it as well as shipping costs.

\*\* This full funding will not be provided in 2018 as they are providing other supports that are very valuable for the Boreal Home Builders and the sawmill/shed with \$100,000 in shipped materials for housing development guaranteed. However, in the future with funding this is the expected profit.

## 8.1 Income statement

The income statement was prepared for 2019 but will be prepared to forecast for the next three to five years. The first year Mitik 299 Corp. is expected to provide a net income of \$46,441 as calculated in table 8.3 and summarized in table 8.4 and graph 8.1. The net sales are calculated as \$665,920 and gross margin is \$224,720 with total expenses of \$178,279.

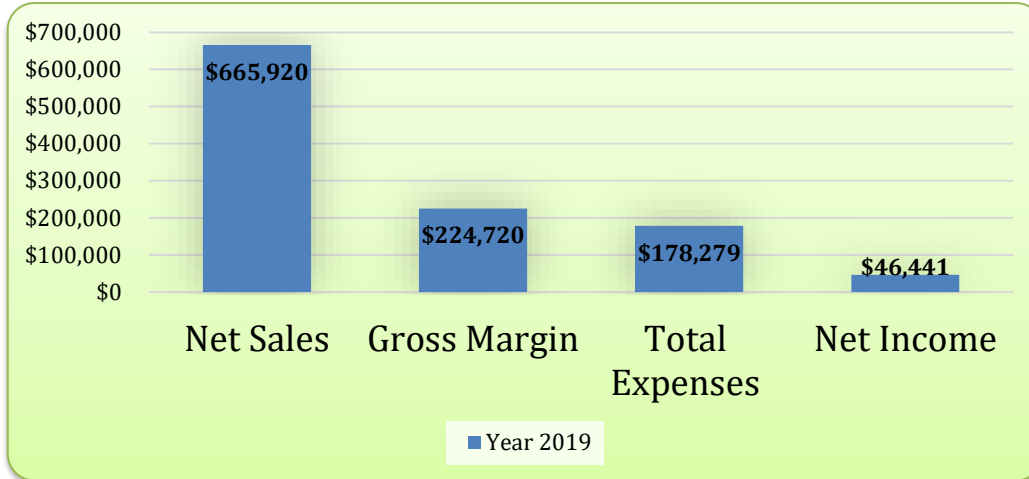
**Table 8.3: Income statement for 2019 for Wazikamang Nahkaway Inc.**

<b>REVENUE</b>	
<b>Gross Revenue</b>	<b>2019</b>
Two Houses (\$220,000x2)	\$440,000
Panels, Flooring & Siding	\$9,600
Furniture Sales	\$23,000
Trim (3000 board feet x \$3/ linear foot)	\$9,000
Used Skidder Rental Income (10 hrs x 4 weeks x 4 months x \$384/hr)	\$184,320
<b>(Less: Returns &amp; Allowances)</b>	\$0
<b>Net Sales</b>	<b>\$665,920</b>
<b>Cost of Goods Sold</b>	
<b>Beginning Inventory</b>	\$0
Materials & Labor for Building Two Houses	\$360,000
Paneling, siding, flooring	\$3,200
Furniture Materials	\$15,000
Trim	\$3,000
Skidder Purchase	\$60,000
<b>(Less Ending Inventory)</b>	\$0
<b>Cost of Goods Sold</b>	<b>\$441,200</b>
<b>Gross Margin</b>	<b>\$224,720</b>
<b>OPERATING EXPENSES</b>	
Accounting Fees	\$2,400
Instructors/supervisor Remuneration	\$120,000
Supervisor Fees	\$21,600
Fuel Expense (Woodmizer/skidder)	\$8,000
Fuel Expense and repair (Vehicle)	\$6,279
Transportation Cost for Equipment (Winter Road)	\$8,000
Insurance for sawmill equipment and facilities	\$12,000
<b>Total Operating Expenses</b>	<b>\$178,279</b>
<b>Operating Income</b>	<b>\$46,441</b>
Interest Expense	\$0
<b>Net Profit Before Taxes</b>	<b>\$46,441</b>
Less All Income Taxes	\$0
<b>Net Income</b>	<b>\$46,441</b>

**Table 8.3 : Income statement for 2019 for Wazikamang Nahkaway**

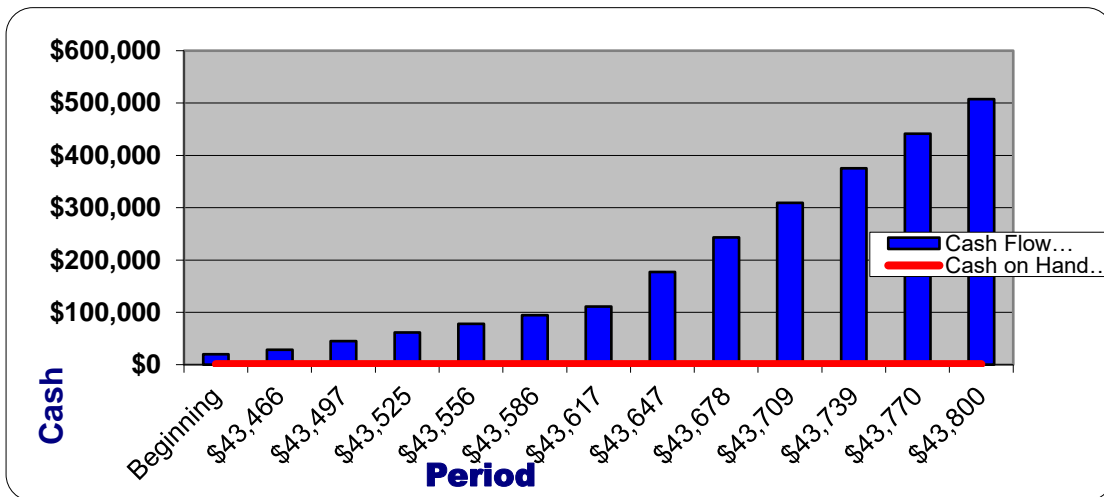
Year	2019
Net Sales	\$665,920
Gross Margin	\$224,720
Total Expenses	\$178,279

**Graph 8.1: Income statement for 2019 for Wazikamang Nahkaway Inc.**



See appendix for detailed spreadsheet for Cashflow projections. This is presently only available for 2019 but will be available for a 3 to 5-year period. Cash flow is a steady build as people are paid through the project.

**Graph 8.2: Cash Flow Projection for 2019 for Wazikamang Nahkaway Inc.**



## 9. Conclusion

Mitik 299 Corp. is not only meeting a critical social need but is also a profitable business idea due to focusing on a critical need that has funding available. In addition, the many supports in the community and through the Mino Bimaadiziwin partnership show committed partners for the long term (at least five years until this business is established). A provision of start-up costs by Community Futures. Mitik 299 Corp. is needed and is a great investment to allow local people to benefit from better housing, jobs and capital generation in the community.