The FORESTRY CHRONICLE

VOL. XX

DECEMBER, 1944

No. 4

NIPIGON FOREST VILLAGE

A PROSPECTUS

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A FOREST settlement project based upon the co-ordinated development of a forest products industry, hunting and fishing lodge with outlying cabins, subsistence farming and horticulture, handicraft shops and finished woodwork, probably also fur-farming, commercial fishing, and perhaps a quarry—all these activities to be integrated and administered by an executive board and a manager, with marketing of production handled by a Forest Products (Producer) Co-operative Association.

LOCATION

In Thunder Bay District of Ontario, being a peninsula containing some 74 square miles of forest land and water, on the south shore of Lake Nipigon, between the Nipigon River and South Bay of Lake Nipigon. The main village, lodge, handicraft shops and arable land would be at the shore of Lake Nipigon about 14 miles north of Cameron Falls, 40 minutes' drive by car from the Trans-Canada Highway, and about 135 miles in total dis-

[EDITOR'S NOTE: We have prevailed upon Mr. A. J. Auden to permit us to publish, in its entirety, his prospectus for a co-operative forest community—Nipigon Forest Village.

The local Rehabilitation and Reconstruction Committee at the Head of the Lakes had submitted a general outline of the possibilities of forest settlement, if all resources were to be co-ordinated, to the Wallace sub-committee on Natural Resources at Ottawa and the prospectus, as written, was primarily drafted to illustrate how the principles of sound forest colonization on the multiple-use-of-resources basis could be applied to a specific area.

It is our opinion that Mr. Auden's project is an outstanding contribution to forestry progress in Canada for he has by-passed strategy and tactics and commenced a long over-due offensive. Moreover it is a timely and valuable follow-up to the paper by Mr. E. Menard in the June issue. In our interchange of correspondence Mr. Auden pointed out that his prospectus is still in draft form and suggested that it might be condensed and that offhand calculation as to income, earnings and costs should be eliminated. While fully appreciating his feelings in this regard, we are assuming the responsibility of disregarding his wishes in the interest of informing our members about this project.]

tance from the United States Border at Pigeon River (See Maps—Appendices 1 and 2). This location is chosen as being ideal in regard to accessibility, resources, and tourist attractions, as well as for its exceptionally good natural protection from forest fires.

PURPOSE AND LONG-TERM OBJECTIVE

1. To provide a permanent, stable, high-standard rural livelihood for not less than 25 families at the outset, with potential and rapid growth of the community to one supporting in comfort at least 75 families, probably more, chiefly depending upon the success of the development of the tourist facilities, also, particularly, the wood-working shops, handicrafts, and other marketing of end-products, rather than of primary production in unfinished form. In addition, much casual employment to single men would be provided as the project grew in scope.

2. To show by actual demonstration what can be done by community enterprise, with sympathetic co-operation of Government authorities, to create new jobs, where no jobs previously existed, by the co-ordinated use of all the natural resources available in any reasonably well selected area of forest land.

3. To show by actual demonstration that the practice of true forestry, on intensively managed woodlots, is feasible and will definitely provide for sustained yield far in excess of present growth and in such manner that each properly-laid-out family woodlot of appropriate size will provide a far better living to one family, than will most of the usual 160 acre agricultural homesteads, provided the annual wood crop is taken on sound silvicultural principles, and is marketed in its most lucrative form; much of it, including material not now readily saleable, being fabricated and sold right on the spot.

4. To provide a fully developed tourist service to United States sportsmen, with an abundant offering of services, accommodation and, most particularly, a full variety of game.

5. This could and should be made a project for the placement of Veterans of the Canadian Forces. As such, the placement of Veterans on forest homesteads should, and almost certainly could, be accepted by the Department of Pensions and National Health as a Veterans' Land Act Settlement project.

6. Another feature of this project is that it is not greatly competitive with existing projects and the products and services sold will directly or indirectly add to the country's export trade.

DEVELOPMENT BY PRIVATE ENTERPRISE, CHARTER RIGHTS, TENURE, ETC.

In the firm belief that a project of this kind will depend for its success upon the resourcefulness, initiative, constructive imagination, and untiring effort of its sponsors and management, all applied in a practical way, with extremely wide scope for development of any and all activities that will enlarge on a sustained yield basis the production of values from available natural resources, it is strongly urged that this first project be placed in the hands of private enterprise to develop.

It is a completely new departure, so far as Crown Lands in Ontario

are concerned. For this very reason the success of the first experimental project will depend very largely upon freedom of action—not freedom to exploit people or resources, but freedom to build up for people, out of resources, the widest possible markets for their labour and their production, and, by diversification of enterprise, continuously enhance their standard of living and amenities of life.

Therefore, the originator of this particular project proposes that a stock company be formed, to be financed with Government assistance but to be owned and operated (subject to Government supervision and right of expropriation for cause) by the working partners of such company.

This company, to be known as "Nipigon Forest Village" would be given a franchise by the Provincial Government, granting it the exclusive right to the full use of the proposed area and all natural resources thereon, for the purpose of colonization and development of industries for the marketing of those resources. In consideration of such franchise, and as a limiting factor in the franchise, the Nipigon Forest Village would be required to allocate, as quickly as markets and living accommodations could be made available, forest homesteads throughout the area to a specified maximum number of forest settlers, each of whom would, under some few restrictions described later on, become independent homestead owners after a stated period of residence.

The franchise should specify that homestead settlement be completed within a period of not more than 10 years and that, upon completion of homestead settlement, the Nipigon Forest Village would become an industrial enterprise only, owning (subject to repayment of all borrowed funds) its tourist lodge, workshops and handicraft factories, fishing, quarries, its holdings in the Forest Products Co-operative Association, and any other such enterprises founded and developed by Nipigon Forest Village funds, including also as a commercial forest, managed on a sustained yield basis, a maximum of 20 per cent of the total area covered by the franchise, being that part of the area not suitable for forest homestead settlement. Working partners of Nipigon Forest Village, residing permanently within the area, would be regarded as settlers entitled to a forest homestead unit the same as all others.

In other words, the Government, instead of its past practice of locating homestead settlers in somewhat haphazard fashion and then leaving it up to the scattered settlers to organize the marketing of their own individual production and labour, in this case turns over to a private company of working partners (who are also the first settlers) the job of locating these settlers and of simultaneously creating marketing facilities and living amenities whereby settlers can provide themselves with a proper livelihood; and in return for carrying out this settlement project gives this company a franchise to own and operate any and all industrial enterprises founded for the purpose of utilizing the resources of the area to be settled.

PERSONNEL AND ADMINISTRATIVE ORGANIZATION REQUIRED

The activities and enterprises developed by and for the residents of this

forest village would be shaped, over a period of years, by the resources of the land, water and soil at hand, and particularly by the resourcefulness and skills of the residents. Development must be step by step, under able guidance and sound business management, with great emphasis upon organized marketing. This could best be achieved by a carefully chosen staff or Board of Management (consisting of the several working-partner-superintendents with a manager as chairman) to provide leadership and co-ordinated production and effort. The Organization Chart attached (appendix 3) shows what is thought to be the proper executive. If this project became, at least in good part, a Provincial Government sponsored undertaking, then there should also be a representative of the Department of Lands and Forests on the Directorate. In brief, the administrative staff, all working members of the community, should consist of:

A Manager, an Extension project forester from the Dept. of Lands & Forests, and seven (7) Superintendents, viz: Superintendents in charge of (1) Tourist Lodge and Catering; (2) Fisheries, Fur-farming, etc.; (3) Logging and Construction; (4) Agriculture, Horticulture, Livestock and Nursery; (5) Aeroplane ferry and service base, Boats, Tractors, Trucks and Mechanical maintenance; (6) Co-operative Association, also Secretary-Treasurer and Accountant for the enterprise as a whole; and (7) Woodworking and handicraft shops.

If a full-time resident Extension Forester was not appointed by the Government, then an eighth Superintendent—Forester in charge of woodlot management and applied silviculture—would be necessary, and should be Assistant Manager of the enterprise.

GENERAL DEVELOPMENT PLAN

Financing and type of incorporation are dealt with separately later in this outline, as several methods should be considered.

In general, this is a group enterprise project, sponsored and directed by an incorporated company, consisting of 8 to 10 working partners, who should also be at least part-owners or shareholders, working not on salary, but as profit sharers; together with forest homestead settlers, marketing their products through the Co-operative Association; and, in addition, as many wage-earners employed in logging, fishing, guiding, shop-work, etc., as the industries developed by the Board of Management could support. The working partners (Board of Management) would each share upon an agreed basis, (or pro-rata to shares held, if a stock company is formed):

(a) The net profit or loss of the Lodge, the craft shops, fishing and other similar enterprises;

(b) 50 per cent of the Co-operative Association's annual net profits—in lieu of a management fee;

provided that adequate sinking fund was first set aside annually to retire all loans or funded debt within 20 years. In addition, the resident working partners would each be entitled to one standard-size forest homestead and garden plot.

2. The forest homestead settlers would each receive (in trust) a forest homestead unit of land, consisting of a woodlot, a cleared farm or garden plot, and probably also a house lot in the forest village. This homestead would, with some restrictions as to time and proper use, eventually become the property of the settler. Preferably the annual forest crop and also surplus field crop should be sold to the Co-operative Association, which in turn would be responsible for organized marketing of same. The spread between the Co-op's price to the settler and the price obtained by the Co-op. from the ultimate consumer would constitute Co-op. profit, 50 per cent of which would be distributed annually to all settler-members, pro rata to the dollar volume of business handled for each. The other 50 per cent would constitute the management fee of Nipigon Forest Village and also recompense for creation of markets by Nipigon Forest Village through its tourist and wood-factory enterprise.

In addition, homesteaders would receive preference in all wage-earning work developed by the Nipigon Forest Village Board of Management and/or for other interests. This would include guiding, shop and craft work, logging on the community forest and on woodlots other than their own, transportation of forest products by and for the Co-op., fire protection, fishing launch service for tourists, etc. The large annual river drive on Nipigon River would provide full employment from spring to fall for many settler residents. Forest homesteaders would not be limited in any way other than the following definite requirements:

- (a) Absentee ownership of homesteads will not be permitted.
- (b) Homesteaders must manage their woodlot on a silvicultural basis and cut only trees marked or designated by the Project Forester, harvesting therefrom an annual forest crop and selling that crop exclusively to the Co-op., at a standard uniform price, to be set annually on the basis of district values.
- (c) They must pay school and other community taxes or assessments of that nature, including Government stumpage and other charges, if any.
- (d) Their residence must be located either (and preferably) within the village boundaries (i.e., on their house lot or portion of arable land) or upon their woodlot, but not elsewhere in the community territory except with the prior approval of the Board of Management of Nipigon Forest Village.
- (e) Permanent right and tenure to homesteads should not be absolute, but should be specified rights, subject to cancellation for non-residence and for unauthorized or improper cutting, for deliberate damage to any existing natural resources, and these restricted rights should in any event not accrue for a minimum of 7 years. (A uniform basis of evaluation for taking over permanent improvements constructed by settlers evicted for cause or wishing to leave of their own accord would have to be devised).
- (f) Right of way through forest homestead woodlots must be reserved permanently for logging and tourist travel purposes, as well as to give

free access to lakes and streams. Road locations should receive prior sanction of the Project Forester.

(g) Commercial fishing rights on inland waters (other than Lake Nipigon itself) bordering upon forest homesteads should be reserved for the community benefit under Nipigon Forest Village direction, and development through fish propagation. Later on it might be possible to provide one or perhaps two "lake homesteads" for commercial fisherman settlers, engaged not only in propagating and catching fish for the market, but also in propagating game-fish for stocking tourist lakes. There is likewise at least one potential muskrat farm homestead.

(h) All mining, quarry, sand and gravel rights would be reserved for community development by the Nipigon Forest Village.

(i) While hunting, and fishing for recreation would not be denied the settler, there should be some provision whereby no woodlot homestead could be posted to prevent free access by properly licensed sportsmen during open season.

While these restrictions, limiting outright ownership of forest homesteads may at first seem unduly limiting, they are absolutely essential for protection of the community as a whole, and indeed for the long-term interest of the individual settler, hence also in the national interest. Moreover, the homesteader would not be excluded from developing side-line activities such as a hunting cabin on his woodlot, tourist cabins on his village lot, home-crafts for sale at his own or the Nipigon Forest Village Co-op. Store; in fact he would be encouraged and assisted in developing any activity that would fit into and enlarge the co-ordinated enterprises of the community, without at the same time dissipating or spoiling the productivity of the area.

GENERAL OUTLINE OF INDIGENOUS RESOURCES, AND PROPOSED UTILIZATION THEREOF

The known resources (and others may be discovered) are as follows:

Timber—all native species, in healthy condition, largely on good forest soil;

Arable Land—clay loam at village site, sufficient for 6-8 acres per family;

Fish—two large lakes and twenty-five others, also Lake Nipigon itself, and a stream admirably suited for constructing breeding ponds;

Wild-life, scenery, ski-hills and good swimming;

Aeroplane and marine harbours;

Limestone deposit, also sand, gravel, perhaps building rock;

Muskrat colonies and suitable waters for breeding same;

Water-power for 100-250 h.p. hydro-electric generator, 2 sites within 3 and 8 miles of village if required—also for ram-pumped water supply if needed. Hydro-Electric Commission plant 15 miles away;

Wild-rice, celery and other aquatic nursery stock.

Muskegs—probably suitable for peat-moss or other purposes.

Natural fire protection on 3 sides.

Nipigon River annual drive.

Timber. Present on this area are practically all native species of softwood and hardwood timber. Spruce, poplar, birch, and balsam predominate in the order listed and together comprise 90 per cent or more of the forest. Jack pine occurs in a few stands and as widely-scattered trees. There is a little cedar, also a very few red or Norway pine and ash. Roughly speaking about 70 per cent of the entire forest is at or near maturity, the remainder being ten to forty year old even-aged burn, and stunted growth on rock or acid swamp. The entire area constitutes one of the best opportunities (except for a few rock ridges and muskegs) for applied silviculture that could be found anywhere in this general region. Growth at present is slow—perhaps 14 cubic feet of spruce and balsam only per acre, perhaps less, though probably rather more, and certainly capable of being rapidly increased under management.

Because it will take more than one year, probably about 3 years, to develop to profitable fruition the tourist trade, handicrafts, wood-factory and other projects, timber will have to constitute almost the only source of livelihood and Nipigon Forest Village earnings for about the first three years. By that time, the pressure for income from wood will to an increasing extent be relieved by other developed sources of income.

Even preliminary calculations show that the entire area will yield annually for ever at least 5,000 cords of spruce and balsam pulpwood, plus an equal volume of hardwoods and other species. Moreover, the preponderance of mature timber, taken into account by technical formula for calculating the allowable annual cut, will probably require a somewhat higher annual production than the 10,000 cords of softwood and hardwood suggested. Forest studies of growth and stand tables will be necessary to establish this accurately.

During the first 2 or 3 years of development, there will be added to this 10,000 cord annual crop, the material removed in land clearing and road construction work, but such material will almost certainly be required for production of lumber and construction material for home building, school, store, lodge, cabins, etc. Even so, forest cropping must be distributed, not centralized, and thus cannot proceed faster than all-weather roads can be constructed to tap all forest stands and managed woodlots.

However, along these general lines, it is quite safe to calculate that from the first year on, 5,000 cords of pulpwood and 5,000 cords other wood products can be removed, over and above any material removed in land clearing and road building.

The estimated 5,000 cords annual crop of pulpwood, being already a part of the Great Lakes Paper Company Concession, should be marketed (by the Co-op.) to that company, if it wants it and will offer the going district price. Most of the other 5,000 cords of miscellaneous species will be needed for the first year to build up a lumber stockyard of air-dried lumber and dimension stock, to be used in the Nipigon Forest Village wood-

factory and handicraft shops, as well as for future housing, boat-building, etc. Spruce and balsam should not be used exclusively for pulpwood if required for the community's shops, crafts, and other projects, but the Great Lakes Paper Company should always have first option on the purchase of all pulpwood produced, while Nipigon Forest Village should always have first option upon the disposal of all other forest products produced.

Thus, the annual timber income is estimated to be the equivalent of about \$50,000 net in terms of labour and, of this, about \$25,000 may have to come out of working capital the first year, in the form of lumber inventory, and also wood cut, but unhailed pending construction of roads to the woodlots first operated.

In general, the bulk of the spruce and balsam will be marketed as pulpwood, the hardwoods and miscellaneous species manufactured in the Nipigon Forest Village shops into finished products for retail and wholesale marketing as cabinets, furniture, toys, etc., mostly to chain-stores, whose buyers will be encouraged to visit the Lodge for fishing and hunting, and incidentally to view the Nipigon Forest Village "sample rooms" of handicrafts and shop work (see under Tourists).

The size of the homestead woodlots must be determined by further forest growth studies and stand tables, but would have to be sufficient to provide a minimum of 100 cords of softwoods, and in addition, some miscellaneous hardwoods annually. The size of the woodlot will be somewhere between 400 and 600 acres, depending upon the size of the supplementary community forest areas required to balance the annual production of the project. Thus the 74 square miles of land and water enclosed within the project area are expected to provide for from 35 to 50 homestead woodlots.

Arable Land for Farm or Garden Produce. Aerial photographs and general field observation indicate that there is a suitable area of about 350 acres or more of agricultural soil, (now forested) less than a mile from the best location for the main hunting and fishing Lodge, and which will also be traversed by the main motor road from Cameron Falls to the Lodge.

At the time of writing, the requisite soils analysis has not been made but there is little doubt that arable soil of reasonably good quality (clay-loam at least in part) exists sufficient for about 6-8 acres each for about 50 families and fortunately this is located ideally in respect to other proposed activities. (See Map, Appendix No. 2). Moreover there are several other smaller patches of arable soil, which could be cleared later on, as gravelled logging roads reach them and to the extent that the future growth of this project required.

Crops grown would be chiefly those marketable to adjacent lumber camps. These would include potatoes, root crops, cabbage, etc., also some hay, mostly for winter feed for settlers' own horses and other livestock. In addition, some horticulture, nursery stock, small fruits, and perhaps pure-strain seed crops would be encouraged, the last-named because cross-pollination could be avoided in this locality. Quality rather than quantity, from

these small holdings of arable land, would probably obtain the best financial results to the settler owner.

Nipigon Forest Village would clear the required area with its tractor-bulldozer during the first few months, dividing up the land into plots of a pre-determined size, utilizing the timber removed therefrom as the initial source of lumber for houses, Lodge, cabins, shops and other construction.

The homestead settler would take over his unit of arable land ready-cleared, at the same time as he obtained his forest woodlot and village house-lot. He would have to build his own house, outbuildings and fences. Even though done by machinery and on mass production basis, this land clearing by Nipigon Forest Village would be quite an expensive drain on capital. It is suggested that some arrangement to bring such clearing under the scheme of payments or loans to settlers (Veterans, probably) by the Government would be most desirable, particularly since the gross income to Nipigon Forest Village for the first year would be negligible, if any, and not great even for the second year.

As there is a limestone deposit only eight miles away, and within the project area, it is not unlikely that some of this can be utilized to neutralize excessive acidity if such condition is found to exist in any marked degree in some of the soils otherwise suitable for cultivation. However, forest cover types indicate that such treatment may not be necessary on the area proposed for initial clearing.

Commercial Fishing. While MacDiarmid is the developed centre for commercial fishing on Lake Nipigon, there would seem to be no good reason for preventing settlers of this project from obtaining one or two licenses for Lake Nipigon fishing in summer time. This would provide for basing one or two sizeable fishing tugs at the Nipigon Forest Village lake base, for use by visitors as required. In addition, it would provide summer employment to those engaged in commercial fishing on inland lakes in the project area during the winter. There are very good whitefish in Lake Hannah and probably also in Oskawe Lake and others. It is believed that a quite limited amount of commercial fishing on lakes within the project area, as well as on Lake Nipigon, might be developed, without in any way conflicting with the establishment and maintenance of game-fish for visitors.

Recreational Values. (a) *Fishing*—Nipigon River is already world renowned as the home of the speckled trout. South Bay, where the Main Lodge will be located, is the best spot on Lake Nipigon for speckled trout fishing. Hamilton Pool, Split Rock, Victoria Rapids, Miners' Rapids, Virgin Falls, Pine Portage, White Chutes are all favourite fishing spots on the Nipigon River. These would all be brought within 30 minutes' driving time by car from the Lodge, with gravelled road all the way, constructed by Nipigon Forest Village to serve the dual purpose of tourist service and wood transportation. In addition, Nipigon Forest Village would build outlying fishing cabins at all the above listed points, so that sportsmen could rent these for a period of days.

However, half a mile east of the Lodge location is Oskawe Lake about 1,800 acres in area. This lake, heavily stocked with small-mouthed bass, would be one of the chief attractions. It appears to have all the physical properties required for bass. There are also numerous other smaller lakes equally suitable for the various species of native game-fish. Just 10 miles south is Purdom Lake (outside the project area) which contains bass, and Black Sturgeon Lake, 30 miles west, is well known for its bass fishing.

Heavy stocking of Oskawe Lake and probably a dozen others is visualized, preferably with Government supplied stock. South Bay, of Lake Nipigon, should have been constantly re-stocked with speckled trout for many years past, and this would be necessary. South Bay Creek, forming the west boundary of the project area, is a series of pools which appear to resemble the Dorion fish-hatchery stream and could, therefore, perhaps be operated by Nipigon Forest Village as a continuous source of speckled trout stock for South Bay and even other parts of Lake Nipigon, no transportation of any kind being needed.

Then for the amateur fisherman, there are lake trout on Lake Nipigon and abundant Northern pike and pickerel fishing in inland creeks and lakes.

Great emphasis must be placed upon the need for continuous re-stocking for the establishment and maintenance of variety as well as quantity of game-fish.

(b) *Scenery*—Even the most prosaic traveller will ever afterwards recall with a thrill the sight of certain stretches of Nipigon River, near Split Rock and White Chutes, and will return year after year to re-experience a mid-summer sunset or a boat trip by moonlight on Lake Nipigon on a still, clear evening.

To the real woods-lover, there is no more attractive spot than this project area.

(c) *Wild-life*—Deer are quite plentiful, moose fairly numerous, muskrat common in appropriate places. Bears are almost too much in evidence near Virgin Falls. Otters have often been seen at White Chutes. Ruffed grouse and spruce hens can be found quite easily. Several hundred Mallard duck, Goldeneye, Mergansers, and a few Gadwall breed in the project area annually. Blue-bills, Scoters and a few other species of ducks stop over each fall on several of the lakes. Geese have been seen to rest there, but usually pass overhead in the fall and spring in skeins of several hundred strong.

(d) *Miscellaneous*—Good ski-trails and slopes are possible within two miles of the Lodge. Good swimming for village residents and Lodge guests on Oskawe Lake is assured, even if Lake Nipigon waters are cold.

(e) *General*—It is considered almost certain that no special restrictions on hunting and fishing by residents would need to be imposed in order to ensure a plentiful supply of game for visiting sportsmen. Settlers could quickly be shown the real cash value of game in terms of tourist revenue and would almost certainly bring about a rapid increase in wild-life population, by conservation and increased food supply. Fish propagation, wild

rice and other aquatic plant cultivation for duck, muskrat and fish food, as well as increased stocking of forest young growth by silviculture, would all achieve this, as would the trapping of wolves and foxes.

Aeroplane Base and Marine Harbour. The Lodge site lies within a few hundred yards of an excellent protected harbour on Lake Nipigon on the one side, with Oskawe Lake providing an inland aeroplane base for float-equipped planes of any size, on days when Lake Nipigon might be too rough for a landing. A dry landing field for land based helicopters or planes could be made if required but would take up valuable land near the village.

As this project developed and if the tourist business could stand further expansion, Nipigon Forest Village would consider operating an air ferry service once weekly on specified days to such cities as Chicago, Milwaukee, Minneapolis, etc., picking up and returning groups of Lodge guests by appointment.

Boat service, garage, hangar and other mechanic service would be provided by Nipigon Forest Village as part of the project, so that United States visitors could have their needs in this line looked after, whether arriving by car or by air or maintaining their own launch on Lake Nipigon. An effort would be made by Nipigon Forest Village to build its facilities into a recognized marine and air base for visitors to the Nipigon District in general.

Limestone—As there happens to be a limestone deposit on the project area, this resource would be kept in mind for development in any and every way, if economically possible. It might prove very handy as a local fertilizer for field crops and also for lime-loving aquatic nursery stock.

This is not regarded as a major resource and its development would be held in abeyance till needed, to conserve capital investment.

Musk rats and Fur-Breeding. As there are several small muskrat colonies, it is thought that muskrat breeding might be feasible and profitable, as a sideline for one or two settlers interested in it, or else as an ambitious fur-farming project, in conjunction with other fur-farming such as mink or foxes.

Fish and vegetable foods for fur-farming would be available in plenty and such project might well be worth while as a secondary development after the main industrial combination of forestry-farming-fishing and tourist trade had been given a good start.

Water-Power. The amount of electric power required would be quite small, until wood and craft shops had started to produce in volume, but it seems possible that about 250 h.p., perhaps more, would be required within 3 to 5 years.

(a) For a privately owned, low-cost water power generator, there is a perfect site, with ample water behind it, a short distance below Elizabeth Lake, about 8 miles from the Village and Lodge site.

(b) Another site, requiring some rock-cut, would be to deepen the present over-flow from Lake Nipigon to Lake Hannah and install either

a water-wheel or a small hydro-generator, probably at the end of a short penstock. This is only 4 miles from the Village.

(c) A stationary Diesel engine might prove to be the proper power plant for initial development, and pending growth of power requirements in the shops. Such engine, properly selected in the first place, would be useful as a stand-by emergency generator, or could become the power-plant of a good-sized tourist launch.

(d) Cameron Falls of the Hydro-Electric Power Commission is only 15 miles away, but extension of a power-line would probably result in delivered power cost too high to be considered.

Suggestions (a) and (b) above are most meritorious as a final solution, but a qualified engineer's analysis would be needed to determine which of these four proposals would provide the maximum power likely to be needed, at the lowest annual cost, consistent also with low capital outlay.

Water supply for the village and Lodge would not present any physical difficulties. It is believed that a hydraulic ram, on Oskawe Creek or South Bay Creek would be feasible and comparatively inexpensive. This might be installed by Nipigon Forest Village with service to the Village at reasonable cost.

Aquatic Nursery Stock. Although this can be made a profitable business, and a good deal of stock, such as wild rice, wild celery, etc., is native to the project area, it is one potentially valuable resource, development of which will probably be deferred until the bulk of initial development work has been done.

Muskegs. The project area is singularly free from extensive muskegs and barren swamps. There are about 300 acres of muskeg, mostly in 3 swamps, the largest of which covers 120 acres, south of Bonner Lake. It seems likely that these can be turned to good account when in need of additional sources of income to support a growing community. However, muskegs would be one of the last jobs of utilization to be tackled.

Fire Protection. There is a natural barrier to fires on 3 sides, and on part of the fourth. Lake Nipigon and Nipigon River on the North and East, also half of the West boundary, make this one of the few areas of forest in the country that can hardly be reached by outside fires. South Bay Creek, and the proposed motor road from Cameron Falls complete the circle of protection from attack from the outside.

Government work on fire protection might be made a permanent source of income to a number of homestead settlers or members of their families who preferred to harvest their wood crop in the winter and become full-time rangers or tower-men in the summer. This would be mutually beneficial in that a source of steady, seasonal experienced rangers is badly needed to augment the District's full-time ranger force.

Nipigon River Drive—A Valuable Resource. This is a complete drive of nearly all the wood produced annually from Lake Nipigon watershed. It starts in late April and continues into October. Over 100 men are

employed annually. This annual drive will provide, each and every year forever, a major opportunity to settlers of Nipigon Forest Village to earn substantial wages to supplement homestead income, while at the same time they need never be more than one hour's journey from their homes. In fact, many of them could, using their own cars, and the roads to be built for tourist and wood transport purposes, live at home and drive 4-6 miles to work daily throughout the summer. About 50 per cent of the driving work is done within the project area, and the other 50 per cent only 15 miles away at Cameron Falls.

Due to the diversified production by many different industries controlling limits on Lake Nipigon and due especially to the extent of the wood resources involved, this river drive will be one of the surest and steadiest sources of annual income from wages, for an indefinitely prolonged number of years in the future. Again, the presence of resident river drivers, available for this highly seasonal job, will be of greatest benefit to industry, particularly those dependent upon timely, efficient driving of wood from Nipigon River.

COMMUNITY ENTERPRISES

The aim of Nipigon Forest Village is a co-ordinated development to attain maximum value, use and conservation of the above listed resources. The activities of this community, once the establishment of forest homesteads was well under way, must, for best results, be closely co-ordinated. For this reason an administrative and industrial enterprise is practically essential.

The three primary sources of income for all residents will always be wood, tourist trade, and soil crops in this order. Income from wood can be raised two or three-fold where wood is processed into finished articles right at home. Here is where the tourist business will, in the long run, bring its greatest, though indirect, returns to the community. It can be made the chief sales promotion agency for obtaining orders for wood-working and handicraft shops.

Thus the chain of inter-relationships between all the activities involved in full use of all available resources, arranges itself something like this: (See organization chart, Appendix No. 3)

A. Natural resources of soil, water, topography, etc., exist, but are now lying idle.

B. Nipigon Forest Village (a) assembles a small group of specially qualified men, whose training and knowledge are needed to develop, use, conserve and market those resources. (b) obtains or supplies finances to: 1. make initial surveys and plans; 2. buy equipment and build structures; 3. create proper living conditions. (c) selects and locates forest homestead settlers, then helps them to organize their efforts and production in the best long-term interest of themselves and the community.

C. The homestead settlers (a) harvest the primary raw products of soil and water, providing, first, for the needs of themselves and their livestock and, secondly, a substantial surplus for sale. (b) considerably enhance the at-

tractions of the area to tourists by: 1. providing guide and boat service; 2. providing additional cabin accommodation; 3. provide labour to propagate and stock the area with fish and game; 4. provide handicraft merchandise. (c) become a source of resident skilled labour for community shops and for other industry in adjacent district.

D. Nipigon Forest Village creates and improves markets for settlers' primary production, and to do this (1) founds an organized marketing agency, the Forests Products Co-operative Association. (2) creates a tourist business by building a main Lodge and providing full-service facilities such as boats, cabins, roads, docks, etc., and by stocking the area with fish and game—also by organized and sustained advertising. (3) endeavours to build up a tourist clientele, chiefly from amongst the purchasing agents and executives of chain-stores, furniture and housing businesses, etc., thereby bringing the customer to the salesman, rather than sending the salesman and his samples out to seek customers. By this means, it seems probable that wood-working and handicraft shops can build up a good trade. It should be easy to sell a man who has just caught a 7 lb. speckled trout! It is also cheaper to bring the customer to view your samples right at your door, at his expense and your profit, than to send a salesman out at your expense to entertain the customer in someone else's catering establishment. (4) builds and installs the requisite industrial plant and machinery, and operates same, whereby production of processed products becomes an increasingly large factor in community welfare and growth. (5) stands ever ready to seize upon and develop any new activity or manufactured article which will expand the use of existing resources and/or increase the volume of wage earning activities that can be introduced through diversified local industry.

The importance of thus co-ordinating and harmonizing all the diverse productive activities into a unified scheme for enlarging and enhancing carefully organized market outlets, cannot be over-emphasized. It is a practical solution for overcoming most of the primary causes of failures experienced in past endeavours at colonization projects. By turning over this vitally important responsibility to private enterprise, in the manner herein proposed, the job is given to qualified men whose own well-being is entirely dependent upon the measure of success they achieve in carrying out this responsibility, while at the same time the utmost freedom of initiative is encouraged, a sustained follow-up effort is automatic, and a medium for unifying the productive efforts of all residents is built right into the project from the very outset. Under such conditions, and given honesty and sincerity of purpose of those administering Nipigon Forest Village (or its equivalent), the project could hardly fail to achieve a resounding success.

Once proven feasible, extension of the general principles to other project areas would quickly follow, thus showing the way to:

1. improved forestry practice and resources development;
2. expansion and improvement of tourist business;
3. decentralization of industry and increased exports;

4. a new type of high-standard rural life where none is now possible, or at least attractive;
5. the two greatest social needs of this nation; firstly, a better balance between rural and urban populations and industries, in areas not primarily agricultural; and secondly, stability of employment in the several highly seasonal occupations of logging, fishing, tourist trade and agriculture.

The principle involved is simple, though it has been obscured for many years by reason of the fact that today our various resources of forest, agriculture, fishing, mining, water-power, municipalities, tourist trade, manufacture, etc., are more or less hermetically sealed off, each from the other, by different state departments and authorities, making simultaneous co-ordinated use most difficult, and practically unheard of. Yet the entire North American continent, and half the world besides, was in the first place successfully colonized by applying exactly the same basic principle as herein proposed—by private enterprise, bending to its needs and to the needs of the individual, any and all resources found on the area, without having to switch laboriously from one Government authority to another (since few Government Departments then existed) accordingly as the matter in hand involved a different natural resource or social problem. The Project here outlined is no more than the old, tried and true, procedure applied with modern methods to a specific area, under conditions prevailing today.

NIPIGON FOREST VILLAGE ENTERPRISES—A BRIEF OUTLINE OF PROCEDURE

This organization would have 3 primary functions and responsibilities:

- (a) To do all the initial planning, surveys, financing, and performance of development work required to bring about all the conditions whereby forest settlement can proceed on a sound basis;
- (b) To find and establish forest homestead settlers;
- (c) To ensure that marketing outlets are at all times available for community production and labour, in the most valuable form and expanding with the growth of the community.

The Initial Steps. Details involved in (a) above can hardly be carried very far until:

- (a) the Company has received its charter and obtained its finances and franchise rights to the project area. The charter and the franchise would probably involve only the Ontario Government. The financing might involve dealings with the Ontario Government, the Federal Department of Pensions and National Health, the new Industrial Development Bank, private capital, or any combination of these.
- (b) at least the Manager, Secretary-Treasurer, Tourist Lodge Superintendent, Logging and Construction Superintendent, and the Forester Superintendent are available on a full time permanent basis. The other four Superintendents need not be available at the outset,

although their early appearance will be desirable in view of the plans and surveys required for their spheres of work.

- (c) the initial equipment required for construction has been purchased and moved on to the village site.

These preliminary steps would take about 3-4 months, starting from scratch, so that if, as would be most desirable, field construction and development work were to be begun about June 1, 1946, the start of the whole project must be in January or February, 1946. This would be necessary so that a tractor bull-dozer, a dump truck, concrete-mixer, saw-mill, building materials, etc., could be moved in to the South Bay Lodge site from MacDiarmid over the ice, probably in March, thus permitting lumber sawing (hence lumber drying) to start almost immediately, and Lodge construction to be under way in the spring. Meanwhile motor-road construction from the Cameron Falls end could not start until late June or early July, after the ground had dried sufficiently. Otherwise, if everything waited for the motor-road to be put through, requiring a minimum of 60 days, preferably in July and August, the whole project would be delayed, and settlement could not start at the very earliest until 1947, so that the tourist season and winter wood-crop of 1946 would be almost entirely lost as a source of income.

The Lodge or some of its cabins at one end, and the motor road at the other, would be the first construction work started, the former upon completion, providing temporary accommodation to personnel engaged in getting the project under way.

It is believed that a start in January, 1946, would enable the first tourist customer to be cared for in September, and the first homestead settler to move in to his own house about November 1, 1946, in time to harvest his first winter's wood crop, although his first field crop would not mature until 1947 harvest.

Choice of Settlers. The method used to find suitable settlers would depend very largely upon whether the project was to be a Veteran's Land settlement scheme, or immigrant colonization. Either would be sound and satisfactory, preferably a combination of the two.

As a matter of fact, the Superintendents should in any event be Veterans, in which case they would be chosen from applications received in answer to a carefully written descriptive folder, circulated as soon as possible among the R.C.A.F., Navy and Army forces at home and abroad through Col. Beecroft's Rehabilitation Branch of the Dept. Pensions & National Health in Ottawa (See Appendix 4 for detailed outline of qualifications and hobbies needed for the jobs in question). If all homesteads were to become Veteran Land Act placements (which would greatly ease the financing of this project) the same procedure would apply.

However, the success of this community might be very greatly enhanced by including among the homestead owners some forest-bred European immigrants highly skilled in wood-work and handicrafts. It is suggested that

one of the surest ways to choose and place the right type of immigrant settler would be to work very closely with an organization such as the Department of Colonization and Agriculture of Canadian National Railways, which will in any event provide the railway service for this community, from Cameron Falls and MacDiarmid.

Marketing. The formation of a Forest Products (Producer) Co-operative Association would be the first step and organizational work would be the responsibility of the Nipigon Forest Village Secretary-Treasurer. In return for providing a building and working capital and management of this undertaking, Nipigon Forest Village should own a substantial equity in the Association, membership in which would be open to all community residents.

This Co-op. would buy for cash all wood-products produced, taking delivery on the main truck-roads and would then itself handle the transportation to the final purchaser, using settler trucks, teams and labour to do so. In this way every woodlot owner would get an even break, no matter whether his lot was near or far from the Co-op's delivery point. This is important to avoid endless friction and odious comparison as to relative value of woodlots. For the same reason, the Co-op., or Nipigon Forest Village must control and operate a community forest, so that if, for silvicultural reasons, the Forester refuses one settler permission to cut as much pulpwood as his neighbour, the difference can be made up by allotting additional cutting in the community forest. Only thus can Nature's disorderliness be offset without causing over-cutting of some managed woodlots, or a lot of hard feelings.

Co-op. will sell its wood products wholesale to the Paper Company, the Nipigon Forest Village wood factories, and elsewhere at prices no less than obtainable from other Thunder Bay District operators. A sample of the membership agreement of a well-established Forest Products Co-op. at Cass Lake, Minn., U.S.A., is attached (Appendix No. 5).

The second most important market provided by Nipigon Forest Village will be the tourist business. This will be built up around Nipigon Forest Village's own Lodge and outlying cabins, spreading thus to the settlers' own tourist enterprises and services. Nipigon Forest Village will initiate and sustain a really ambitious advertising effort, involving an annual expenditure of perhaps \$2,500 until the project is well established, maintaining all contacts made, utilizing every conceivable means of obtaining free advertising and the co-operation of service clubs, gun and fishing clubs, Provincial Government agencies, contributions to periodicals, direct mail contacts, personal visits and talks to United States agencies, etc. This advertising and public relations work should be the responsibility of the Manager of Nipigon Forest Village and must be given the efforts its importance deserves. As time goes on, it will become an extremely valuable sales promotion scheme for the industrial output of the community.

Nipigon Forest Village will also, to increase tourist trade, see to it that

fish and game are plentiful and varied, spending an annual appropriation on stocking involved, and dealing with Government authorities to obtain fish for placement.

The third and, perhaps in the long-run, biggest market outlet provided by Nipigon Forest Village will be its industrial enterprises, such as wood-working, handicrafts, fish, quarry and other enterprises. It is confidently expected that in ten years, these can be built up to a point where 50 per cent or more of the community income is derived therefrom.

The above is a very brief outline of Nipigon Forest Village activities as presently visualized. It is a type of work and the fulfilment of an essential need which is almost impossible for settlers as individuals to do. It takes in a field far beyond what could be expected of a civil servant, trained under rigid regulations to perform on limited function. It implies the application of free and private enterprise, under management of someone with not a few qualifications and with wide experience in many different subjects, such as forestry, agriculture, building and road construction, merchandising, wild-life, business law and business finance, logging, mechanical engineering and in addition a thorough knowledge of local and regional markets, conditions, practices, etc. It is the one job not readily adapted to Veteran rehabilitation.

HOMESTEAD SETTLERS' ACTIVITIES AND ENTERPRISES

While estimates as to probable annual cut of wood, size of farm plot, etc., must await further detailed field study, one thing can be stated with absolute assurance right now.

Every settler, and probably one or two members of his family besides, will be absolutely sure of profitable employment 12 months in each year, if he wishes to have it. His second year's income will break down into something like this:

5 months	wood harvest own lot and community forest	\$600
2½ "	soil crops, own needs, plus—	\$250
4½ "	wages—	
	guiding)	
	river driving)	
	fishing) about \$4.00 per day	\$450
	factory work average	
	Tourist cabins and boat rentals—est.....	\$150
	Team and truck rentals—est.	\$150

Total estimated for year when once established—cash \$1600

To earn this estimated cash income, the homesteader need never move more than 40 minutes car trip from his home. It would be a bit hazardous to estimate income for the first year, as this would depend entirely upon the time of the year activities started and also upon the speed with which Nipigon Forest Village could build up a tourist clientele, construct all-weather roads to homestead woodlots, and clear farm land ready for seeding. The first year's cash income would probably range from \$300 to \$1200 depending upon these factors. The above estimates are for cash

income, to which must be added homegrown food, firewood and no rent except interest on money borrowed for home building and furnishing, with few taxes except for school.

ROADS

1. **Main Motor Road.** This road runs $14\frac{3}{4}$ miles from Cameron Falls to Lodge site. The first $1\frac{3}{4}$ miles north from Cameron Falls has already been bulldozed and partially gravelled and is used by visiting tourist fishermen who drive their cars to a point on Lake Jessie above the logs being sluiced over Cameron Dam. This road was constructed by Abitibi Power & Paper Co. solely to enable motorist fishermen to avoid delays in getting up river when wood blocked the narrows above Cameron Falls. Some comparatively minor improvement to this $1\frac{3}{4}$ mile stretch is needed.

The remaining 13 miles would be all new construction. The suggested location, (see Map, Appendix No. 2), is probably the best and involves also the cheapest construction. Nevertheless, further field surveys would be needed. The old South Bay portage railway, formerly used as a light railway track from Cameron Falls to South Bay, can be used only in part, if at all, as its location was chosen for low grades rather than for dry, well-drained soil. The proposed new location for a motor road includes about 2 miles of this old right-of-way, used in Canadian National Railway main line construction days.

When the map of Lake Nipigon country is studied, along with field observation of the means of free access by road to Lake Nipigon, it is immediately noted that the motor road here proposed is beyond any question one of the best approaches to the whole of Lake Nipigon that could be conceived. The surprising thing is that this road was not built years ago by the Northern Development Branch of the Ontario Department of Highways. There is no doubt at all that this road should be one of the very first "forest truck roads" to be constructed under new plans by the Ontario Government for making Crown Lands accessible, thus effecting improved forest utilization, improved fire protection and wide use of forest land.

Actually the motor road should not end at South Bay, but should continue at least another 11 miles to McIntyre Bay, where there is an Indian Reservation, a surveyed township with many patented lots, a saw-mill, boat and snow-shoe factory, etc. McIntyre Bay is practically land-locked, with a mile wide entrance, and about 100 square miles of water surrounded by very fine scenery and forest.

Thus it is assumed that the $14\frac{3}{4}$ mile motor road to South Bay, traversing the proposed project area for a distance of eight miles (remaining distance is through the surveyed township of Purdon, passing by several long-patented Veteran lots) would be built at public expense by the Ontario Government.

No more useful road through Crown forest land could be found in the whole Thunder Bay District. Without such road the project herein

proposed cannot be instigated. With a good gravel road built, a forest community of 50-100 families becomes possible, and the entire south shore of Lake Nipigon becomes accessible, inviting much more extensive development than this particular project covers.

2. Project Area Roads. These roads are required for tourist travel the wood transportation. To service homestead woodlots under management, and also to provide ready car travel by tourists and community residents to all parts of the project area, at least 38 miles, probably 45 miles of all-weather motor road must be built throughout the project area, approximately as indicated on Map, Appendix No. 2.

The average cost of this road construction will be at least \$1,500 per mile, more if gravel pits cannot be found in good locations. Thus, if Nipigon Forest Village has to bear the entire burden of this road work, it will be faced with a cost of about \$60,000 for all-weather roads alone. Even by charging up to 50 cents per cord against gravel road construction, it would take 12-14 years to pay for this and far too much working capital would be tied up meanwhile.

Good silviculture, and extension of homestead woodlots more than a short distance from the village, will not be possible until these all-weather roads are built.

Consequently, Nipigon Forest Village should be given some assistance in this matter. For instance, the Hydro-Electric Power Commission Dam at Virgin Falls is very badly isolated now, but the construction of an 11-mile gravel road from the proposed Nipigon Forest Village to Virgin Falls, coupled with the above described 14¾ miles of Government main motor road from Cameron Falls, would link the Virgin Falls dam to the administrative office and resident employee community at Cameron Falls. Flow control and gate manipulation at Virgin Falls would then be much improved. Maintenance crews could be driven to the dam in only 40 minutes from Cameron Falls. The Hydro-Electric Power Commission would benefit tremendously by this road and should, therefore, contribute about \$15,000 towards its construction.

Again the same principle that is now applied to agricultural settlement, whereby the homesteader must clear 2 acres of land annually, might be applied to the forest homestead settler. He will receive his 6-8 acres of arable land ready-cleared, but the desirability of requiring him to surface with gravel, say ¼ mile of road each year, after it had been bulldozed out and graded in readiness by Nipigon Forest Village, might be given careful thought. Under such plan, the settler, who would live in the village and probably drive out to his woodlot daily by car, might be required in lieu of land clearing, to do the gravel surfacing of a maximum of 1½ miles of road during the first six years of residence, and at a rate of not less than ¼ mile per year, it being understood that such work would be done on any part of the project area road system, accordingly as Nipigon Forest Village proceeded to break out and grade right-of-way. Once such road

system was completed, each homestead would be required to maintain (as to gravel surface) that part of the road which traversed his own wood lot, up to a maximum of 1 mile of road maintenance annually.

Even with financial assistance from the Hydro-Electric Power Commission, and a type of statutory labour or homestead patent labour requirement, it is still believed that some further assistance will have to be given to avoid the necessity for over-capitalizing Nipigon Forest Village both as to fixed investment and working capital, solely for the purpose of making it possible for Nipigon Forest Village to build this \$60,000 worth of roads, all of which should be completed and in use by the third or fourth year.

The Provincial Government, and to a lesser extent, the Great Lakes Paper Company will both benefit substantially from these roads, and it is felt that the only solution will be for all beneficiaries to contribute some part of the cost. It is suggested that an equitable basis would be for the cost of all-weather internal roads (other than the settlers' statutory labour contribution) to be shared equally by Nipigon Forest Village, the Provincial Government, and the Great Lakes Paper Company—that is to say, each of these three parties should contribute 33 1/3c per dollar of total expenditure, other than settler labour for surface gravelling, or, perhaps more equitably 25c-50c-25c.

Some such plan for joint contribution towards the cost of internal road construction thoroughly worked out, would enable the construction of a complete internal road system with the least possible expenditure of time and money.

There is only one other alternative, if the rapid development of this project were not to be held up, and this would involve annual grants by the Ontario Government to Nipigon Forest Village, sufficient to pay say half the cost of 10 miles of gravelled road—say \$7,500 per year—either that, or have all roads built by the Department of Highways, totalling some 55 miles including the main motor road.

This road problem is really the biggest difficulty in the entire project, because intensive forest and resources management is physically impossible until at least one-half mile of gravelled road, per square mile of forest land has been built. In European forests, the average varies from one lineal mile to two miles of all-weather road per square mile of forest.

In addition to the above-mentioned beneficiaries of this entire road system, those using the Nipigon River for driving should not be overlooked. It would be very advantageous to have the Main Drive Camp at Cameron Falls linked to White Chutes and Virgin Falls drive camps, and all in turn serviced by the residents on the project area. A contribution of \$10,000, chargeable to river tolls would seem to be in order.

FINANCING OF PROJECT

There will be two types of financing needed, viz.,
Homestead settlers financing—homes, equipment, stock;

Nipigon Forest Village financing (a) fixed capital investment, buildings and equipment.
(b) working capital.

A. Settlers. Settlers will need money for:

1. Storey and half house, with basement furnace, chemical toilet, running water and wired for electricity	\$3,000
2. Outbuildings, barn	1,000
3. Equipment—team, sleigh, tools, seeds, plough, etc. . .	1,200
4. Living expenses first two months	300
	<hr/>
	\$5,500
5. Payment to Nipigon Forest Village for land clearing (est. 5 acres)	500
	<hr/>
	\$6,000

If all settlers are Veterans, established under the Veteran's Land Act, their financing would thus be covered under the loans then available. The \$500 for land clearing would be paid by the Government directly to Nipigon Forest Village but would be part of the debt assumed by the settler, repayable directly to the Government over a 20-year period.

B. Nipigon Forest Village. Nipigon Forest Village will require, in order to carry out the services expected of it and for creation of settlers' markets through tourist trade and factories:

1. Operating equipment—road building, logging, power plant, etc. (see Appendix 6)	\$35,000
2. Plant & structures, Main Lodge fully equipped, factories, office, garage, boat house, etc. (see Appendix 7)	40,000
3. Working capital—road building, land clearing, wages and salaries, inventories, etc.	75,000
	<hr/>
	Total \$150,000

While this investment may at first sight seem large, it is in fact the extreme minimum required, if all the services outlined are to be provided the settlers, the roads built, a tourist trade built up, and if financial stringency is not to create a situation whereby over-cutting of forests would be the only way of raising essential cash. Moreover, lack of adequate capital will slow up progress in development quicker than will anything else.

It appears that this capital can properly and most logically be raised thus:

1. Long-term loan, secured by mortgage on plant and equipment to an amount equal to estimated initial cost	\$75,000
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2. Outright grant from Provincial Government, for value to be rendered:
 - (a) to settlers
 - (b) to Hydro-Electric Power Commission
 - (c) to development of Tourist Industry
 - (d) demonstration project, pointing to way of much increased rural development \$25,000
 3. Nipigon Forest Village Partner-shareholders—private Capital subscribed — Manager, \$5000; 8 Superintendents, partners @ \$2500. each \$25,000
 4. Short-term loans—Great Lakes Paper Co., for pulpwood to be delivered,
Chartered banks, secured by Inventories \$25,000
-
- \$150,000

With reference to (1) above, this loan 3 per cent and repayable in fixed annual amounts over a 20-year period, would require annually \$6,000. The new Industrial Development Bank would appear to have been created for just such purpose.

No. 2 above could, of course, be a loan instead of a gift, in which case an additional annual payment of principal and interest would be \$2,000. However, there is no question at all but that the Ontario Government would, in the long run, receive full value for this initial grant, and some later contribution for road building, namely, at least \$60,000 worth of gravel road (\$15,000 of it directly valuable to Hydro) and an outlay in tourist advertising expected to amount to well over \$5,000 within the first 3 years, and a substantial amount annually thereafter. Moreover, true forestry cannot be practiced for nothing and, by making silviculture possible, Government stumpage from this area will in the long-run be multiplied many-fold. Again, by helping to make this project possible, there would be created for the Department of Lands and Forests what amounts to a practical experimental forest, or "pilot" unit of forest treatment suitable for the District, and of forest industry, which could have very considerable value to the Province. This project area could, as will be discussed later, play a most important part in Ranger School training, by providing a demonstration area of practical logging, applied silviculture, and multiple-use of resources. This \$25,000 subsidy will, in effect, be needed chiefly to pay salaries to the Board of Management for the first 12-18 months, during which time little or no income is available from profit earnings, as will be shown later.

With reference to No. 3 above, it is naturally expected that those individuals who take on the responsibility of this project, and finally emerge as owners of a substantial enterprise dependent upon Crown Resources, must show their good intentions and also their confidence by providing all the capital they can, from their own resources.

There is, however, a danger in requiring too much private capital to be invested at the outset. It might result in control of policy getting into the wrong hands. It might mean that financial pressure was brought to bear by non-resident investors, to a point where the management of the project was forced to think first of dividends from profits earned, rather than of slow but sure progress towards the full fruition of the project plan some 6 to 10 years from its start.

Moreover, the Board of Management must consist of men who are specialists in their own field, and such men as are required are seldom overly-well endowed with capital. Even the suggested \$2,500 (Manager—\$5,000) may be a barrier to the choice of the best available men, unless all or most are Veterans and can obtain a loan under the Veteran's Land Act sufficient to include this \$2,500 stock subscription in lieu of using it for outbuildings and equipment.

No. 4 above would be mostly normal financial practice, that is to say, credit notes to be liquidated from inventories and renewed as required. As an annual production of some 5,000 cords of pulpwood for the account of Great Lakes Paper Company would be assured with first deliveries not less than 18 months from the start, this Company would almost certainly assist in financing, by advances on account.

It would also be expected that, as one means of reducing the investment in equipment and machinery to the amount estimated, most or all of these needs could be obtained in the form of used military stores, by purchase at reasonable cost from War Assets Corporation, or by whatever other means is provided by the Dominion Government for use of war materials for Veteran Rehabilitation projects.

NIPIGON FOREST VILLAGE CAPITAL STRUCTURE

A private company is proposed, with security issue as follows:

	Authorized	Subscribed
Funded Debt (50% of all finances)		
75—3% Debentures—par value \$1,000		
(with 20 year amortization clause)	\$75,000	
Issued to Industrial Development Bank as		
Security for loan		\$75,000
Common Stock		
1500 shares, par value \$100	\$150,000	
Sold to working partners—		
Manager	50 shares	
8 Superintendents at 25 shares		
each	200 shares	
	250 shares	\$25,000
Total	\$225,000	\$100,000

To the \$100,000 thus raised at the time of incorporation would be added the

proposed Provincial Government subsidy or road grant of \$25,000 and short-term bank or private loan of \$25,000. Thus, on this plan, Nipigon Forest Village starts with \$150,000 cash and 1,250 shares of unissued Common Stock.

Provision should somehow be made in the Company by-laws whereby selling or transfer of issued or of unissued Common Stock must not be done in such way that control of Nipigon Forest Village policy passes from resident to non-resident owners, unless the Charter or Franchise of Nipigon Forest Village can be so framed as to exclude all possibility of improper exploitation of resources or people on the project area.

At the same time, provision must be made whereby any original partner-stockholder's current equity in the Company can be established in terms of shares held, and can be liquidated for cash, in the event of death or retirement, in which case the remaining shareholders should have first option to purchase, rather than a non-resident of the community.

These matters are, of course, beyond the scope of this outline, being the job of government or corporation lawyers. Incidentally, as one means of maintaining for itself a high degree of control during the first 2 or 3 years, or formative period, the Ontario Government might itself acquire 250 voting but non-participating shares in lieu of an outright subsidy of \$25,000, on the understanding that at the end of a set period, and provided a specified progress had been made (say establishment of 25 homesteads and completion of the Virgin Falls road) these shares would be re-sold to the Company for a specified nominal sum. This would leave 1,000 shares for issuance to take care of contingencies, expansion, or additional resident partners, also for stock dividends to be issued to equal the retirement of the debentures, if desired.

NIPIGON FOREST VILLAGE EARNINGS

For the first 12 months it may as well be accepted right now that Nipigon Forest Village earnings could not begin to cover operating expenses, let alone fixed charges, depreciation, non-profit services such as road building, current inventories and deferred expense. That is why an absolute minimum of \$75,000 working capital is needed.

Moreover, the Management and staff must have income, so Nipigon Forest Village will have to pay them a minimum annual salary until net profits reach a point where adequate share dividends are possible. Their homesteads will not provide much, if any, income, because for several years their primary duties will be full-time jobs, and they must hire others to work their homesteads. Such annual salary roll would be \$23,200.00 at \$2,500.00 per year for the Superintendents and \$4,200.00 for the Manager, and the right men could hardly be obtained for less.

Without going into too much detail in this outline, it is estimated that for the first 2 years there will be a substantial deficit, as it will take that long to get well into production. Meanwhile some 350 acres of forest land must

be cleared, at least 15-20 miles of road built, tourist advertising well under way, an inventory of lumber in the drying yard built up, settlers paid for wood cut but not delivered, payrolls for miscellaneous survey and field work met, also for office, Lodge, shop and travelling expense. Thus a working capital sum of \$75,000 is not any too high and the first year's annual statement of income and expenditures will look something like this:

Nipigon Forest Village

EXPENDITURES	FIRST YEAR	INCOME
Capital Investment in Plant	\$ 75,000	Nil
Land Clearing—250 acres at \$100	25,000	Vet. Land Act Payment at \$500 per homestead ... \$25,000
Road Building—N. F. V. share, 33% of 10 mi. at \$1,500	5,000	Chge. 50c per cd. against wood produced \$ 2,500
Inventories on hand		
Lumber $\frac{1}{2}$ million F.B.M. at \$20	10,000	
Misc.	5,000	
Pulpwood produced and sold to Great Lakes Paper Co. (Incl. 50 cts. per cd. to roads)	22,500	Great Lakes Paper Co. pay- ment for wood delivered \$25,000
Tourist Lodge — operating (3 months only)	2,500	30 guest weeks at \$60 (opened too late in Fall) 1,800
General Expense—Adver- tising, fish culture, sur- veys, field work	3,500	
Office, Travel & Freight- ing	4,000	
Board of Management — 1 year min. salary	23,200	
Total for year	\$175,700	\$54,300
Add—Fixed charges		
Debenture & Sinking Fund	\$ 6,000	
Interest on other loan (6 mos.)	600	

Depreciation	—	(Defer until 4th year then write off \$7,500 per year or 10%.)
Total	\$182,300	
Income	54,300	
Net Cash Outlay	\$128,000	

This would leave about \$22,000 cash in bank to start off the second year, even assuming that the \$25,000 short term loan was renewed immediately. Probably, working capital should be increased to \$100,000 at the outset either by increasing the long-term, debenture-secured loan to \$100,000 or by additional assistance from the Provincial Government. Such added assistance early in the second year might even be essential, as for the first 3 months of the second year, the wood-crop must be financed and there would be little or no other income until later in the year, while road building must again start in early summer.

Thus, at the end of the first year, the balance sheet will read something like this (assuming Ontario Government Grant, not loan):

Assets		Liabilities	
Plant & structures at cost	\$75,000	3% debentures outstanding	\$71,250
Inventory — Lumber	10,000	250 shares Common Stock	
Inventory — Misc.	5,000	issued (par value	
Cash in Bank	22,000	\$25,000)	18,250*
Deferred charges — Road		Short term loans (renewed)	25,000
work (to be written off			
against wood produced			
from second year on) ...	2,500		
	<u>\$114,500</u>		<u>\$114,500</u>

*Loss of \$6,750.

However, by the end of the third year, with reasonable success, Nipigon Forest Village is expected to be able to show a gross profit sufficient to cover fixed charges, and Board of Management remuneration, amounting to \$29,300 annually for the first 3 years (and \$36,700 thereafter when depreciation is added).

Estimate of Gross Profit Earnings	Years		
	2nd	3rd	5th
Wood produced from community forest & unsettled wood lots at \$1.00 per cord	\$ 5,000	\$ 4,000	\$ 2,000
Forest Products Co-op. 50% of profit on gross business of \$75,000 and up	3,750	5,000	5,000
Tourist Lodge and Trade			
2nd Year 150 guest weeks at \$15 net	2,250		
3rd Year 400 guest weeks at \$20		8,000	
5th Year 600 guest weeks at \$25			15,000

Factory & Handicraft Sales

2nd Year output of 1,500 M/D at 5.00 ..	7,500		
3rd Year output of 4,000 M/D at 5.00 ..		20,000	
5th Year output of 6,000 M/D at 5.00 ..			30,000
Miscellaneous — airbase, service garage		1,000	3,000

	\$18,500	\$38,000	\$55,000
Indicated net profit or loss after all charges and payments of Board of Management minimum salaries	10,800	8,700	18,300
5 year record (loss)	(loss)		
1st year	6,750	(Incl. Prov. subsidy of \$25,000)	
	(loss)		
2nd year	10,800		
	(loss)		
3rd year	8,700		
	(profit)		
4th year	13,500	(average 3rd & 5th year)	
	(profit)		
5th year	18,300		
	(profit)		

Total Est. Net Profit 5 year period	\$22,090		
Average for 5 years	\$ 4,418	per year or \$17.65	
		per share on 250	
		shares issued.	

Actually most of \$22,000 would have been turned back into Capital Account for expansion of plant, because estimated profit earnings from the fifth year on, at around \$20,000, after all charges, including minimum salaries to Board of Management, will only be possible if by that time sufficient tourist trade and factory work have been built up considerably beyond the capacity of the plant and structures allowed for in the estimates of initial capital investment. Thus from the fifth or sixth year onwards a substantial sum must be re-invested in additional tourist accommodation and factory machinery, and this sum must be earnings ploughed back into plant and structures. So Nipigon Forest Village partner-stockholders will not attain the get-rich-quick class at any time, though their equity will undoubtedly enlarge greatly in value after the fifth year, always assuming that their efforts to create industry have been successful.

Thus it can readily be seen that not until the third year is it likely that annual gross profits earned will have reached a figure sufficient to provide without loss for project area development and for reasonable remuneration for the Board of Management, after taking care of debt retirement and depreciation. Assuming that fixed charges and salaries (in the form of advances on unearned profit) are taken care of during this initial period out

of working capital, and that depreciation charges are deferred until the fourth year, there will still be a deficit of about \$20,000 by the end of the second year, somewhat reduced in the third year, and not wiped out (including deferred depreciation) until the fifth year—even provided earnings estimates can be achieved and no serious economic set-backs occur.

Estimate of Fifth Year Operations—Joint Operations Nipigon Forest Village and Settlers

Investment in Project—	
50 settlers, at \$6,000	\$300,000
Nipigon Forest Village—Capital Investment	\$ 75,000
Public & Private Funds—roads, tourist accommodation, game breeding, etc.	\$100,000
Nipigon Forest Village Inventories and Working Capital	\$ 25,000
	<hr/>
Total Investment	\$500,000
Annual Gross Income—	
Settlers 50 at \$1,600	\$ 80,000
Nipigon Forest Village—gross, after deducting settlers' payments and wages, included above	\$ 55,000
	<hr/>
Total Income	\$135,000

As this is about 27 per cent of Capital Investment, there would be reasonable assurance of complete amortization of Capital Investment well within 20 years.

In brief, this enterprise fulfills an essential and worthy purpose, can only be managed and administered by a group of qualified and experienced residents and will be a comparatively slow starter, so far as showing proper financial returns is concerned. If not adequately financed at the start, it cannot carry through to completion, thus endangering the fate of the whole community.

It is quite possible that some further Government assistance may be needed in the second year of operation, either as a loan or as a subsidy similar to that required the first year. This will all depend upon how quickly the whole project can be developed to a point where normal production is reached and all road construction finished, and upon arrangements that can be worked out for financing a complete internal all-weather road system.

Even so, it should not be hard to find 8 or 9 public-spirited enthusiasts, with sufficient self-confidence and enterprise, as well as specialized qualifications, to tackle this for the long-pull attractions, not overlooking the much greater satisfaction of contributing constructively to the public and national interest, in a field of endeavour that has for years laid dormant for lack of courage, capital, and imagination. If such men can be found, then surely adequate financing can be arranged in a manner such as suggested rather than to make this a 100 per cent state enterprise operated by conscientious but

uninspired civil servants, with resulting cost to the public purse far in excess of that here estimated, if past history is any guide, and with the ever-present danger of political interference.

SUBSIDIARY ACTIVITIES AND VALUES OBTAINABLE FROM PROJECT

The hunting and fishing season starts about June 1 and ends about November 25 at latest—say 27 weeks maximum, including early speckled trout fishing and late big game hunting. Thus the Main Lodge and cabin rentals would be a seasonal affair unless other customers could be found in the off-season.

Once the managed woodlot homestead and community forest were under cultivation, there would be provided for demonstration on commercial scale a great many phases of forest practice, applied elementary silviculture, working plans, logging, transportation, brush disposal, thinnings, road construction and location, wild-life management, and so forth. There would also be good accommodation for visitors, up to say 50 in number, and a catering staff on hand. What better place could be envisaged than this for a 1-month Ranger School or even Forestry field course? Perhaps the period November 20 to December 20 could be reserved annually for Lodge and cabin accommodation for a visiting group of Ranger School students.

There would be another suitable 2-3 month period from say February 1 to April 30 when hauling was under way and when fish and fur breeding activities were at an interesting stage.

This Province needs more than one Ranger School. Above all, it must have experimental and demonstration forests in all parts of the Province because what suits the eastern forests does not necessarily suit western forest types, similar in superficial appearance as these may appear.

Another means of prolonging the Lodge season would be to put on weekend and Christmas ski-parties, and in normal times there is quite a demand already for such recreational service.

Again, Fish, Game, and Gun Clubs, even from Minnesota, might be persuaded to hold their conventions and annual dinners, although this may be a bit too difficult in view of the numbers that generally attend these particular types of conventions. Within the project area, or adjacent to it, would be an ideal place for locating a Summer Boys' Camp.

CROWN STUMPAGE

While it is thought that, even on settlers' woodlot homesteads, wood cut should be assessed Crown Stumpage in some manner, a completely new approach should be made when considering this matter.

In the first place, silvicultural practice may in some cases cost more to carry out than is normally charged for stumpage. Some type of annual rebate should be arranged for expenditures on silvicultural practice, thus offering real inducement to settlers to carry the application of silviculture, under the personal direction of the project forester, just as far as economically possible.

In the second place, the proposed development of wood-working plant and wood handicraft work will certainly bring about production of an extremely varied assortment of bolts, logs, poles, tree-lengths, possibly roots and crooked staves, rods and what-not. The present Scalers' Manual does not cover a lot of these. Arbitrarily set stumpage rates that result in wide deviation in cost per unit of finished production will create a grave handicap to good silviculture, good logging, accurate cost estimates and factory output sales quotations, etc.

These matters require very careful open-minded thought, to work out some basis that will always result in the stumpage cost holding to a proper proportion of market valuation, no matter how markets fluctuate or in what form the wood is produced and what is manufactured from it. A straight 10 per cent charge or stumpage tax applied in exactly the same manner as the Dominion Sales Tax, upon all raw wood sales would be a simple, effective, and extremely equitable means of meeting this problem in a manner that would avoid the absurdity of imposing an unimaginative, inflexible application of the present Crown Timber Act, based upon precedent set by conditions nearly half a century ago. The tax, based upon annual audit of Co-op. books, and factory purchases of raw material, could be set at say 20 per cent of value f.o.b. trucks and cars at shipping point or ice landings, less a 10 per cent rebate for certified silvicultural practice.

Incidentally, serious consideration might well be given to a general Province-wide application of this suggested stumpage tax principle in lieu of the present widely-used method of setting variable stumpage rates which result in enormous inequalities and are very largely responsible for bad, incomplete and frequently wasteful utilization, as well as restricting sound forest development. Under present practice, stumpage costs vary, in terms of per cent of market value of product, from about $2\frac{1}{2}$ per cent to 30 per cent (or more in times of depression) simply because the rates set ignore practically all the variables of unit measurement, delivery point and fluctuations in market values. The effect is to put industry and timber marketability into a sort of strait-jacket, narrowly confined to practices and markets that originated two generations ago.

SOME DANGERS AND DRAW-BACKS

No preliminary outline or prospectus of a project of this kind would be complete without some reference to the hazards, difficulties and future set-backs that may prove detrimental.

A great many ordinary difficulties will, of course, be encountered, arising out of the frailties of human nature, out of the forces and mutations of Nature herself, and out of national and international economic trends as yet far in the future. It is in the overcoming of this sort of troubles that the human spirit thrives, and without which dry rot sets in.

There are, however, several other points to be considered, which, in order of importance would seem to be:

1. Hasty and improper choice of suitable homestead settlers, and of Nipigon Forest Village staff;
2. Inadequate or too burdensome financing;
3. Budworm infestation;
4. Flooding of substantial areas within project area, as and when a third power plant is built in Nipigon River.

Choice of Settlers and Nipigon Forest Village Staff. This is a matter within the control of those sponsoring and instigating the project. So long as it is fully recognized that this particular and initial move can do more to spoil or, conversely, to insure for all time the success of the project, then the danger is not great. However, staff appointments and settler selection are, when once made, more or less permanent; affect every person resident in the community; and, if unwisely done, will be inviting calamity, resulting in direct and immediate harm to possibly 200 individuals, and a much more important indirect effect upon Canada by retarding the development of thousands of other similar enterprises.

Actually, the essentiality of choosing the "round peg for the round hole" on this kind of project is so obvious and so fundamental that it ought not to be necessary to mention it. The fact is, unfortunately, that neglect of this need in past settlement and colonization schemes has caused more grief and failure than any other short-coming. Therefore, the danger exists. It is to eliminate all likelihood of misfits that the writer proposes the plan of procedure outlined in principle herein.

Inadequate or too burdensome financing. This is, of course the mill-stone that drags down to defeat very many worthy, valuable and constructive enterprises. While this outline has dealt with financing rather fully, the writer is inclined to think that the Nipigon Forest Village capital of \$150,000, together with settler (Veteran) loans of \$6,000, will barely carry through to the end of the development period in the third year. The settlers will be all right, provided they have a market created for them. But the road building, the fish and game stocking, tourist advertising and other such non-profit activities and construction required from Nipigon Forest Village may be too heavy a drain, and it is quite probable that another \$25,000 may have to be borrowed or begged in the second year, with perhaps a smaller sum in the third year. After that the whole project will be well on its own feet and able to stand any ordinary set-back. It is far better to over-finance, or rather to start with more than enough cash, than to try to get by on a shoe-string and trust to borrowing later on when the enterprise is in trouble. If this project is developed, the Government should be prepared to stand behind it throughout the second and third years, ready to arrange either an additional loan or a subsidy, upon proof of need and proof of value for expenditures already incurred.

Budworm is already present on this project area, though little, if any, real damage had been done up to mid-summer, 1943. It is an ever-present

threat, but this particular forest does not contain a very high percentage of old white spruce, balsam, or jack-pine. It is mostly thrifty, virile growth of black and white spruce. Actually the presence of budworm is one reason why this project ought to be instigated at the very earliest possible moment, thus creating opportunity to salvage, if damage gets too extensive, and by good silviculture to minimize possible future damage.

Even if all the balsam, and most of the over-mature white spruce were to be destroyed within the next five years, there would be little likelihood of this one misfortune affecting the long-term outlook for community welfare. It might require heavier cutting of soft woods in the woodlots for the first five years, followed by lighter cutting of softwoods and concentration on the hardwoods in the next half of the decade, but such action would not necessarily be detrimental to earnings or to long-term productivity of the homestead woodlots. Moreover, it is confidently predicted that by the end of five years, Nipigon Forest Village would have created a home market for hard woods, nearly as great in volume and probably greater in value when manufactured than for spruce and balsam.

Flooding. Flooding of the Nipigon River, by construction of a new hydro-electric power plant below Pine Rapids, and utilizing all the head obtainable between that point and Virgin Falls, is distinctly a possibility, if not a probability. Should the Steep Rock Iron enterprise locate a smelter at the Lakehead, this might require more electric power than is presently available on the Nipigon system. Any other new large industrial enterprise might do the same. If this dam is built, and backs up the water to the foot of Virgin Falls, at least 10 per cent, probably rather more, of the project area would be flooded.

No doubt in time, the large lake area created could be turned to good account, for fish production. But some of the homestead woodlots and perhaps roads, would be flooded out. In this eventuality, the resident community would be one of the best means of ensuring complete utilization of timber to be flooded, and would also provide a useful source of construction labour and skills for building the dam. Moreover, the community motor road from Cameron Falls to the Village, and the Nipigon Forest Village truck road from the village to the foot of Pine Portage, would be of real, even essential service to the dam project.

But some homesteads, and at least 10 per cent of the annual wood crop, would be destroyed.

To discount this possibility (or probability) it is strongly recommended that an area of 10-15 square miles lying immediately west of the proposed village site, and bordering the west boundary of the project area, as well as South Bay, be reserved in its present natural condition, for future inclusion within the project area. This would permit re-allocation of homestead woodlots in the event of flooding and/or of fire loss, and would in any event permit future community expansion, if some years hence this potential dam site was finally discarded as a source of extra hydro-electric power.

CONCLUSION—SPECIAL NOTE

This preliminary outline of a specific project of Community Settlement has been compiled from data available to the writer—that is to say, from a careful study of vertical aerial photographs, a forest type map sketched from the air, and incidental acquaintance with some parts of the area from field visits over the past few years. There is no field survey data, of the proper kind, available. However, enough first-hand knowledge was available to insure the general correctness of statements made herein, provided that the need for much more detailed field surveys is recognized and provided it is realized that some proposals will require amendment after further field study. For instance, the suggested village lay-out may have to be changed, though not the site.

INDEX MAP SHOWING LOCATION OF NIPIGON FOREST PROJECT AND MAIN U.S. CITIES WITHIN 4 HOURS

SCALE: 475 miles = 1 inch

Income producing activities - earned profit used to pay for other services rendered by the Department.
Income producing activities - profit available for retirement of debt and for share dividends.

APPENDIX No. 4

OUTLINE OF QUALIFICATIONS, SKILLS, HOBBIES, AND
EXPERIENCE REQUIRED FOR NIPIGON FOREST VILLAGE

There are 8 branches or Departments involved in the enterprise, each requiring a Superintendent, or rather an administrative promoter, as follows:

Forest management;
Logging and construction;
Wood-working and other shop manufacture;
Mechanical—land, water, air and shop equipment and machinery;
Tourist Lodge and catering;
Agriculture, horticulture, livestock;
Wild-life—fish and fur breeding;
Accounting and merchandising—Sec. treasurer.

Also Manager—in charge.

The qualifications, necessary for full success, which all these men should have, in some degree, may be sub-divided into:

- (a) Primary qualifications of temperament, background, personality, etc.;
- (b) Hobbies and side-line interests;
- (c) Special qualifications, pertaining to skills and experience in a particular subject.

Primary Qualifications. (a) All of those who join this enterprise must certainly be people who have a real love of forest, soil, and out-door living—people who from experience *really* prefer country life with reasonably good amenities, to city life—in other words, people who, given the necessary means to make themselves and their families comfortable in the country, choose to live there, and are actually sorry for those who have to live in cities. This almost rules out from the start, anyone who has not at sometime or another lived in the country. This would apply more or less to the wives as well as the husbands.

(b) The type of men wanted would be those who can be described, wholly or in part, as adaptable, versatile, enterprising, imaginative (but practical), full of eager initiative, good at team-work and not easily daunted—people who bring to mind the phrases “esprit de corps” and “joie de vivre”. (Sounds a bit Arcadian, doesn't it?—but actually the best men for these jobs would be those who are not afraid of life, and of earning a living, and who, therefore, incline away from the safe, cautious, humdrum, dignified jobs that end in a deep rut and engender an unwarranted sense of self-importance when nearing the top of the heap).

(c) The above two kinds of qualifications almost automatically imply physical fitness and a good physical constitution.

(d) Previous supervisory work of a responsible nature, whether in civilian or military life, while not essential, would be greatly preferred.

Hobbies and Interests. In addition to the primary qualifications needed, it seems certain that considerable scope will be offered for exercising numerous hobbies, or side-line interests and abilities. Some of the hobbies most likely to come in handy and find constructive application are:

Art in any form—particularly commercial art, design, architecture, modeling;

Photography—stills and motion picture;

Horticulture and landscape gardening;

Fish, fur, bee, game-bird and animal culture and husbandry;

Carpentry, joinery, handicrafts, of any kind;

Chemistry, electricity, hydraulics, mechanics—any kind;

Writing and journalism;

Skiing (instructions and location) and any other outdoor sports;

Flying, boating (any kind) and boat building;

Education, social service, job training, boys' camps, etc.;

Breeding and training of pointers, spaniels, retrievers.

These hobbies and interests will find full scope for expression, if possessed by any or all of the Nipigon Forest Village Staff and/or their wives. The same also applies to the homestead settlers and any other village residents.

Special Qualifications. (Other than Manager, requirements for whom have already been outlined on page 31 of the report).

1. *Forester* (a) should have a University degree in Forestry. (b) Should be primarily interested in, and with good experience in practical silviculture, forest management, and forest engineering, rather than in the research end. Must be able to gain goodwill and respect of the settlers while at the same time directing their logging activities. First need for this is to be a thoroughly good bushman; second need is to be able to lead, rather than drive.

2. *Construction and logging superintendent.* Preferably someone who has supervised numerous types of general contracting work, involving portable saw-milling, timber and log construction, carpentry, excavations, concrete footings and walls, rigging and hoisting, road construction, docks, piling, hauling with team, tractor and truck power, housing, water systems—all of which are probably more important and worthwhile than former experience in logging and camp administration, though this would be most valuable. However, anyone who has handled general contracting in undeveloped country, using modern mechanical units, would be more suitable than one whose only experience was in logging operations. Should have some knowledge of job cost estimates, practical engineering and structural design.

3. *Factory superintendent.* Should have been a factory superintendent or foreman and have thorough working knowledge of wood-working machinery, cabinet and furniture making, plant layout, machine and power installation and maintenance, wood finishing; preferably some former contacts with the furniture, cabinet and wooden toy and souvenir trade—able to make job cost

and material estimates; might have to develop other subsidiary shop work using metals, in combination with wood, or alone.

4. *Mechanical Superintendent.* Would take charge of all mechanical maintenance work, whether on tractors, trucks, launches, outboards, power-plant, pumps, etc. As visualized would also be an aero-engineer, probably with pilot's license. Anyone who had a responsible job of mechanical maintenance and operation at an air-base or seaplane base or on an aircraft carrier, especially if an aero-engineer and pilot, would be ideal. Will have to develop a regular aeroplane, marine and land service base, giving commercial service for profit, and maintenance service to all Nipigon Forest Village mechanical units.

5. *Superintendent in charge tourist business and Main Lodge.* Would be responsible for entire administration of the Main Lodge as well as for allied activities such as guide and boat service, reservations and travel service, visitor lists and follow-up contacts, conventions, ski-parties and all organized catering for the public. Should have operated a hotel or tourist business before, or at least have had experience in such work. Since a very great deal depends upon the success of tourist service and tourist trade promotion, both financially and indirectly as a handicrafts and factory sales promotion scheme, this job requires a man of proven experience and ability.

6. *Agricultural Superintendent.* Preferably a graduate of Ontario Agricultural College, or with similar professional training. Must have a wide knowledge and experience of intensive truck gardening and "small holding" farming, as well as some knowledge of soil chemistry, seed growing, and preferably a good horticulturist and landscape gardener. This job will be one requiring a combination of knowledge, skill and resourcefulness to promote, from resources and talent found to be present, those soil, seed and livestock crops most useful and profitable to the project as a whole, and in view of available or potential markets.

7. *Wild-life Superintendent.* While this job is a spending, rather than an earning one, and is largely a service department for the tourist business, it is also a very important one, which through development of commercial fish breeding, aquatic nursery stock production, and fur farming could be made self-supporting, or even a good profit earner. It would involve a good elementary knowledge of biology, and wild life breeding, as well as practical experience along the lines suggested. It involves close contact with visiting sportsmen.

8. *Secretary-treasurer and Forest Products Co-op. Manager.* This job cannot be handled by one without a fairly wide experience and knowledge of office management, purchasing, merchandising, accounting and cost accounting. Probably experience in this work for a firm engaged in general construction and building, or diversified logging operations would prove most valuable. It is definitely a key job, offering much greater scope for self-expression and initiative than this type of work usually permits. It would entail complete building from the ground up of:

- (a) Accounting system for Nipigon Forest Village;
- (b) The Forest Products Co-op. Assoc. (Producer);
- (c) Purchasing) perhaps by organizing another consumer
- (d) Merchandising) Co-op. and General Store.
- (e) Perhaps organizing a homestead owners' Credit Union, either in combination with a Consumer Co-op. or as a separate entity.

9. *General.* Perhaps here is a good time to point out that there are many other jobs, full or part-time, indicated as necessary to carry out all the work of these departments. There would seem to be good reason to suppose that the wives or other family members would also find plenty to do. Moreover, the community would need services such as school teaching, village nurse, postmistress, hostess or housekeeper for Lodge, general storekeeper, switch-board operator, journalist.

Consideration might be given to establishing a school and church forest equal to, say, two wood-lots, the income from which would help to provide for school and church revenues.

APPENDIX No. 5

CASS LAKE FOREST PRODUCTS COOPERATIVE ASSOCIATION OF CASS LAKE, MINNESOTA

Membership Agreement

AGREEMENT, Made thisday of, 1942, by and between Cass Lake Forest Products Cooperative Association, a corporation organized and existing under the Laws of the State of Minnesota (hereinafter called the association) and of (hereinafter called the member).

WITNESSETH, In consideration of the mutual covenants hereinafter contained, the parties agree as follows:

THE MEMBER AGREES:

1. That during the period of this agreement he will sell and deliver to the Association all forest products which he shall at any time cut or produce for sale purposes.
2. That he will purchase and pay for in cash within thirty (30) days, one share of capital stock at its par value of (\$.....) or that he agrees that the cost of one share of capital stock can be deducted from any credits due.
3. That he will accept one (1) per cent of the amounts due him for forest products in capital stock of the association in accordance with Article VII, Section 3 of the By-laws.
4. That in the production of forest products he will comply with the forestry practice designated by the agency from whom the products are purchased, or, in case the products are cut from the member's lands, to adhere to forestry practices recommended by the Association.

5. That he will accept the Association grading and measurements of all products which he produces for sale purposes as a final basis for settlement.
6. That the title to all products produced by him for sale purposes, shall pass to the Association immediately as specified in the delivery contract.
7. That upon passage of title to such products to the Association, it shall be permitted to exercise any and every right of ownership.

THE ASSOCIATION AGREES:

1. That during the period of this agreement it will purchase from the member all forest products which he shall produce for sale purposes. If the Association cannot advantageously dispose of the member's products it will inform the member in writing and give him permission to sell such products on his own account.
2. That it will exercise its best efforts to market the products which are purchased hereunder, along with those of other members, in the most advantageous form, at the best prices and upon the best terms obtainable.
3. That upon receipt of the proceeds of the sale of such products or prior to the receipt of the proceeds, if approved by the directors, payment shall be made in full for the member's products after the following deductions have been made: (1) a stock retaining fee of one (1) per cent of the gross value of the sale, (2) advances made to member on such products and (3) interest charges for advances, (4) amounts estimated to be necessary to enable the association to make payments of the instalments of principal and interest on any capital loans which it may have obtained from Governmental agencies or otherwise, (5) provide for operative expenses of the Association.
4. That upon request of the member it will so far as it is financially able to do so to make advances to the member not to exceed 75 per cent of the value of the product at the given stage of production.
5. That it will publish periodically prices it will pay for forest products at given delivery points.

THE MEMBER AND THE ASSOCIATION MUTUALLY AGREE:

1. That this agreement shall become effective immediately upon its acceptance by the Association and shall be in full force for a period of five (5) years; that at the end of said period this agreement shall automatically continue in existence from year to year with either party having the right to cancel the same at the end of any one-year period by notifying the other party in writing not less than thirty (30) days prior to the close of such fiscal year.
2. That inasmuch as this agreement is one of a series of similar agreements signed by individual members of the association and dependent for its value upon the adherence of each and all of the members to each and all of said agreements, the member shall pay to the Asso-

ciation for all forest products cut or produced by him for sale purposes during the period of this agreement a sum equivalent to one-fifth (1/5) the sale value of a product which a member shall sell or deliver or market elsewhere than with the Association; and the latter may take appropriate legal steps to prevent or check such breach of this agreement.

IN WITNESS WHEREOF, the parties hereto have executed this agreement this day of 19.....

Witness: Member Signature:

Witness: Address

by

for the CASS LAKE FOREST PRODUCTS
COOPERATIVE ASSOCIATION

APPENDIX No. 6

NIPIGON FOREST VILLAGE MACHINERY AND EQUIPMENT— INITIAL CAPITAL INVESTMENT

A partial list of essential equipment initially required for Nipigon Forest Village operations and development work follows. The list includes a great deal of machinery that should be obtainable from surplus military stores, either by purchase from War Assets Corporation or by assignment through some other Dominion Government Department.

The requirements, if purchased new, at current market prices would far exceed the \$35,000 total appropriation allotted herein for the purpose, but there will be a great deal of used military equipment available after the war, in good condition and presumably at about half price, and it is here assumed that those items marked "x" can be so obtained:

	<i>Estimated Cost</i>
x One heavy duty (RD-8 type) tractor equipped with bull-dozer, rooter, brush-clearer, and winch	\$ 7,500
x One medium tractor (D-4 type) with dozer shovel, bull-dozer, winch and power take-off	5,000
One logging sulky (more required later)	1,200
x 2 trucks, with dump box—3 or 4 ton	2,000
10 heavy logging sleighs (more later—home built)	1,000
x 1 station wagon	700
x 1 ½ ton express truck	500
?x 1 Saw-mill — portable — ball bearing, 15M. capacity, with refuse conveyor	1,500
?x 1 planer & edger with milling attachments	1,000
1 Otaco rubber-tyred wagon—4 ton capacity	500
x 1 cement mixer—gas motor	300
x 1 scow or landing barge—steel—20-40 ton capacity	1,000

NIPIGON FOREST VILLAGE—AUDEN

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x 1 stationary Diesel power plant & generator—60 h.p.—110 voltage 20 k.w.	1,500
x 1 tractor plow, 1 truck plow, 1 grader	1,500
x 1 portable arc-welder—gas driven	750
x 1 Navy or R.C.A.F. crash-boat or power launch	5,000
x Machine, blacksmith and garage shop and misc. equipment	4,050

Total, mostly estimated at about half-price, assuming used military stores \$35,000

Depending upon the prices asked for the above, this project could also use an assortment of universal carriers, jeeps, half-track trucks and wagons, etc.

APPENDIX NO. 7

NIPIGON FOREST VILLAGE—PERMANENT PLANT AND STRUCTURES — CAPITAL ACCOUNT

Estimates of cost of buildings, assuming that timber and lumber needs are obtained locally, from trees removed in clearing, sawn and utilized free of dues, and with Nipigon Forest Village staff labour not charged in.

Main hunting and fishing Tourist Lodge—76' x 30', with kitchen annex 30' x 26'—2 storey, 12 bed rooms, lounge, dining room, basement 70' x 30'—fitted for Nipigon Forest Village office and for Convention Hall (See Appendix No. 9)	\$20,000
Furnishings for above—initial (incl. military stores)	4,000
Canoes, outboards (military stores)	1,000
Office equipment—typewriter, multigraph, adding machine, etc. ..	2,000
Woodworking shop, and factory—full equipped	5,000
Boathouse and docks (initial)	1,500
Lumber shed, paint shop, and storage (initial)	1,500
Fishing cabins, 6 (initial)	1,500
Water system and tank, and quick freeze plant (?)	2,500
Garage and shop (initial)	1,000

Total \$40,000

SUGGESTED TYPE OF HOUSE FOR VILLAGE RESIDENTS

OVERALL DIMENSIONS
30' x 20'

OVERALL DIMENSIONS
22' x 26'

APPENDIX No. 10

DOMINION GOVERNMENT REHABILITATION
AND RECONSTRUCTION COMMITTEESUB-COMMITTEE ON CONSERVATION AND DEVELOPMENT OF NATURAL
RESOURCES

FINAL REPORT ON FORESTS AND FOREST INDUSTRIES

Clauses in report which are applicable to, and would be implemented
by this project*General*

Para. 1 (i) Re-organized manufacturing processes to effect multiple use of resources.

1 (u) Relationship of forest and tourist trade.

Recommendations.

A-3-(f) Setting up of short training course in woodlot management. This project both needs such training course and could be adapted to provide such training course.

A-4-(f) Financial Aid to Provinces to set up just such projects is recommended.

B-19 Surplus mechanized units from Army and Air Force equipment should be made available for such projects.

B-21-b, c, d Need for appropriate action to develop markets, stabilize tenure of forest holdings, reduction in anomalies of stumpage rates.

B-21-(f) Recommends state action to extend marketing facilities, subsidies to help and put industries on a multiple-product basis, using all raw materials available on forest holdings.

B-21-(h) Recommends forest colonies, proper land use.

B-21-(j) Recommends projects which correlate recreational values of forest with industrial uses.

C-23 Recommends selection by Provincial authorities of units of forest industry to be considered in the light of a planned natural resources development, these to be considered essential and given a 99 years lease provided multiple-use guaranteed and effected.