

**ENVIRONMENTAL ASSESSMENT  
REGISTRATION DOCUMENT**

**TIMBERLAND GOLF RESORT**

Atec Industries Inc.  
Pasadena, NL  
A0L 1K0

Prepared by:  
Newfoundland & Labrador Consulting Engineers Ltd.  
& Atec Industries Inc.  
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## TABLE OF CONTENTS

1.	NAME OF UNDERTAKING.....	3
2.	PROPONENT.....	3
3.	THE UNDERTAKING.....	4
4.	DESCRIPTION OF THE UNDERTAKING.....	4
5.	OCCUPATIONS ANTICIPATED DURING CONSTRUCTION & OPERATIONS.....	13
6.	APPROVALS AND PERMITS FOR THE UNDERTAKING.....	14
7.	SCHEDULE FOR INITIAL CONSTRUCTION.....	15
8.	FUNDING.....	15
9.	SITE LOCATION PLAN.....	Schedule One
10.	CONCEPT PLAN.....	Schedule Two
11.	WATER SUPPLY & DISTRIBUTION PRELIMINARY CONCEPT PLAN.....	Schedule Three

**1. NAME OF UNDERTAKING:**

Timberland Golf Resort

**2. PROPONENT**

**2.1 Name of Corporation**

Atec Industries Inc.

**2.2 Address**

18 Carroll Ave.  
Pasadena, NL  
A0L1K0

**2.3 Chief Executive Officer**

Name: Mr. Brian Pike  
Official Title: Chief Executive Officer  
Telephone No. (709) 686-5375

**2.4 Principal Contact Person for purposes of environmental assessment:**

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### **3. THE UNDERTAKING**

#### **3.1 Nature of the Undertaking**

The development is comprised of an 18 hole championship golf course, a driving range, an integrated residential component, walking/ski trails and access to the present system of snowmobile trails. The development will be located on approximately 717 acres of land to the east of the Town of Pasadena along the south side of the Trans Canada Highway.

#### **3.2 Purpose/Rationale/Need for the Undertaking**

The tourism industry in Newfoundland and Labrador is based upon our natural and cultural resources. Tourism in Western Newfoundland has experienced unprecedented growth in the past decade with a demand for recreational facilities and associated executive housing expected to continue for years to come.

Golf has become a major recreational activity worldwide. The concept of integrating residential lots within a golf course has been used all across North America for many years. This concept will provide a special attraction to many who are seeking a quality life-style and will relocate to the region.

The development will complement and be complemented by the many other attractions within the region including Marble Mountain, Gros Morne National Park, other golf courses, hotels and RV Parks, the snowmobile trail system, and Outfitting operators. The golf course component will go a long way to making Western Newfoundland a “golfing destination” for many tourists.

The project will provide new opportunities for the business sector and is in keeping with the approved planned use of this land.

### **4. DESCRIPTION OF THE UNDERTAKING**

#### **4.1 Geographical Location**

The Timberland Golf Resort will be located on the south side of the Trans Canada Highway, east of the Town of Pasadena. It will occupy approximately 104.5 hectares of land presently owned by Island Farms Ltd and 193 hectares of crown land. Access to the site will be via the exit 13 south-east service road extension constructed by Works, Services and Transportation during the reconstruction of the Trans Canada Highway, east of Pasadena. The general location is outlined on the attached Concept Plan and Topographical Map.

#### **4.2 Physical Features**

##### **4.2.1 Major Physical Features of the Undertaking**

The proposed undertaking consists of a golf course, roads, utilities, a club house/pro shop, walking trails, and residential building lots.

#### **4.2.1.1 Golf Course**

An 18-hole golf course as illustrated on the attached concept plan will be constructed. The golf course will utilize water from Deer Lake for drinking and for the irrigation system. More specifically, the course will include:

- (A) 18 holes with tees, fairways, bunkers, greens, etc.
- (B) a practice driving range
- (C) a practice putting green
- (D) a Club house and pro shop
- (E) a paved parking lot
- (F) a network of country style roads with paved and gravel surfaces for maintenance equipment, golf carts and golfers
- (G) bridges for foot and cart traffic
- (H) an underground irrigation system

#### **4.2.1.2 Roads**

Roads will be constructed throughout the development as outlined on the attached concept plan and will be graded to Parks Canada standard. All roads and parking lots servicing the golf course, the residential and commercial lots and the main access road will be topped with a 100 mm layer of class A base material and 50 mm hot mix surface course asphalt. The existing access road will be paved to the Department of Works Services and Transportation specifications.

Storm runoff from roadways will be controlled and directed through a combination of shallow swales and ditches. Appropriately sized culverts will be provided at all road and driveway crossings.

#### **4.2.1.3 Utilities**

##### **(i) Electrical/Telephone/Cable TV**

Newfoundland Power will install all electrical services. Aliant will install all telephone services. The resort will reserve utility easements and provide land for substations, switching, satellite receivers, etc. as required.

##### **(ii) Water**

Domestic and irrigation water will be sourced from Deer Lake which is located approximately 200 m west of the Trans Canada Highway/ access road intersection.

The water supply and distribution system will consist of the following;

1. Intake structure consisting of polyethylene piping that will be submerged and secured to allow for maximum low water levels and protection from ice cover.
2. A pump house will be provided near the shores of Deer Lake to provide a boosted water pressure for delivery to site which is approximately 100 m above the lake water level. Pumping will be sized to accommodate daily domestic and irrigation demands.
3. Water transmission and distribution lines will be designed and constructed to handle the delivery of water to the resort. Consideration will be given to splitting the domestic and irrigation flows at site in conjunction with the provision of storage of peak water quantities. The distribution system will be fitted with isolation valves and fire hydrants and mains will be looped whenever possible to maintain circulation in low flow areas.
4. Water treatment will be provided either at the pump house location or at site, depending on the splitting of domestic and irrigation flows. A minimum treatment of screening and disinfection will be provided. Upon further water quality analysis, if required additional treatment processes will be implemented to ensure that all potable water meets the Canadian Drinking Water Quality Guidelines.
5. Water storage will be considered for peak water demands to minimize water main and pump sizing. On-site water hazards will be sized to provide water storage for night time watering of fairways and greens. Domestic water storage will also be considered to allow for non-continuous pumping, peak flow/fire flow containment and contact time for the disinfection process.

All systems associated with the water supply and delivery will be designed and constructed in accordance with the Department of Environment and Conservation standards and guidelines. In addition, the system will make provision for immediate or future connections to adjacent properties that would like to access this water supply.

### **(iii) Sanitary Sewerage and Storm Water**

The resort will be serviced with separate lot disposal systems from either of:

1. Traditional septic tanks with distribution and disposal fields,
2. Engineered Wetlands,
3. BioGreen technology, or
4. any other system or systems that the Engineer may deem appropriate.

All systems will be designed by a Professional Engineer, licensed to practice in this Province and approved by authorities prior to installation. Standard inspections during construction will be provided.

Storm Water will be controlled by planned site grading, ditching, culverts, bridges, French drains, settling ponds, etc. A storm water management plan will be designed and implemented as part of the Environmental Plan. This plan will focus on preventing any negative effect on the environment and will aim to utilize the storm water to the maxim benefit of the environment and the resort.

#### **4.2.1.4 Walking/Crossing Country Skiing**

A network of walking trails will be constructed within the developed areas of the resort. These trails will be accessible and amenable to people of all abilities and ages including seniors and the disabled.

#### **4.2.1.5 Club House/Pro Shop**

The Club House/Pro Shop will be an 800 m<sup>2</sup> two-story building of authentic post and beam design structure or compatible thereto. The first floor (basement) will contain the pro shop, a locker room, shower rooms, washrooms, offices, etc. with a ground level entrance facing northwest. The second floor (main floor) will contain an open concept great room, lounge, dining area, washrooms, wrap around deck, and kitchen. The main entrance to the second floor will be ground level facing southeast. Stone from the Fisher hill quarry will be widely used in the finishing of the Club House/Pro Shop and the landscaping.

#### **4.2.1.6 Residential Building Lots**

The residential component will be integrated within the golf course. Lots will be a minimum of 4000 sq meters and will be serviced with metered water and on-site approved wastewater disposal systems.

A Corporation will be established to maintain services for the residents and each resident shall be a shareholder in this corporation. The shareholders shall elect the board and executive who will set maintenance standards and budgets.

### **4.2.2 Area to be affected by the Undertaking**

The development area is within the planning area of the Town of Pasadena. The front portion of the undertaking is in a Tourism/Recreation-Comprehensive Development Area (TR-CDA). The rear portion of the development is in a rural zone (R). The development complies with the general intent of the policies of Town of Pasadena Municipal Plan. The Town of Pasadena has agreed to proceed in the process of engaging its town planner to provide the required changes to the town plan to facilitate this development awaiting direction from the developer. The developer will be giving direction to proceed upon completion of the environmental assessment process.

In addition to the physical aspects of this development, the resort will have a positive social and economic impact on the Town of Pasadena and the region. It will provide employment opportunities as well as business opportunities during the construction and operational phases of the undertaking. It will attract new people to the area with an interest in starting their own businesses further promoting continued growth in the region.

Many interest groups including municipal leaders, tourism operators, environmental groups, etc. have expressed a strong desire to preserve the integrity of the views for tourism traffic through the Humber Valley from Steady Brook to Deer Lake. This Undertaking will complement the objectives of these groups and preserve the natural views.

Corner Brook Pulp and Paper (CBPP) presently hold the timber rights of the Crown land portion of the Undertaking. An agreement will be implemented regarding timber suitable for pulp and paper production that has to be removed to facilitate the undertaking including fiber from land held by Island Farms Inc. to make up for any shortfall in fiber removed from CBPP timber holdings as a result of selective cutting, thereby having no negative effect on the available fiber resource of the mill.

### **Maps and Concept Plans**

A 1:50,000-scale site location map outlining the three areas of land required for the undertaking is enclosed as Schedule "1".

The concept plan enclosed as Schedule "2" depicts the general layout of the undertaking showing the location of the roadways, the golf course, the clubhouse/proshop and residential lots.

The water supply & distribution preliminary concept plan is enclosed as and Schedule "3".

#### **4.2.4 Description of physical and biological environments potentially affected by the project.**

##### **4.2.4.1 Geology**

According to local geologist John Tuach, the development site is predominantly underlain by red and gray sandstone with pebble and cobble conglomerate of the Carboniferous (Visean) North Brook Formation of the Deer Lake Group. The higher ground in the eastern part of the property is underlain by ultramafic and gabbroic rocks of the Ordovician Glover Formation. These units are separated by a steep-dipping north-trending fault. The Proponent foresees no negative impact on the landscape or mineral production capability of the area.

##### **4.2.4.2 Vegetation**

The site is predominantly boreal forest with some small areas of bogs and marsh. The area was clear cut in the mid nineties. There is an old abandoned sawmill located in the area of hole #18 on the concept plan. The site has a general mix of local trees dominated by balsam fir and black spruce. Natural forest regeneration has occurred over the property and the Proponent foresees minimal impact on vegetation.

##### **4.2.4.3 Fish and Fish Habitat**

Small brook trout are present in the brook that crosses the land. The project should have no significant negative impact on these trout.

##### **4.2.4.4 Mammals and Furbearers**

The proposed development is located in Moose/Bear Hunting Area #7. Moose, Black Bear, Snowshoe hare and rabbits frequent the property to a limited degree. Again, because of the



nature of the undertaking, there should be minimal impact in this regard.

#### **4.2.4.5 Human Activities**

The project area is presently accessible by a service road, which was constructed by the Department of Works, Services and Transportation during the recent TCH reconstruction near Pasadena. Island Farms Inc. is presently farming a small part of the property. The forest within the development area of the undertaking has previously been harvested and a power transmission line owned by Deer Lake Power Company passes through the property. There will be no more hunting in the development area but the increase in recreational activity will more than compensate for this.

### **4.3 Construction**

#### **4.3.1 Construction Period**

Phase one construction is scheduled to commence in June of 2006 on phase one. During this year, the roads, easements, and golf course will be grubbed. Topographical and legal surveys will then be completed and site drainage will be controlled.

Construction during the years 2006 will consist of the completion of the golf course, the clubhouse, the water system and some residential lots.

Construction during the year 2008 will consist of paving the roads, further residential lot development and some residential construction which will continue at a market-dictated rate.

Phase two construction will begin in 2007 or as markets dictate with a four year construction schedule generally along the lines of phase one.

#### **4.3.2 Potential Sources of Pollutants during construction**

Potential pollutants during the construction phase are:

1. dust
2. fuel and oils
3. sewage
4. silt and sediment
5. solid waste
6. noise
7. fertilizers
8. pesticides
9. smoke from brush fires

*Mitigation measures are discussed below under the operations stage.*

#### **4.3.3 Potential Resource Conflicts**

#### **4.3.3.1 Vegetation**

Natural vegetation cover is an important integrated component of the overall development. CBPP presently holds the timber rights of the Crown land portion of the Undertaking. The proponent hopes to reach an agreement with CBPP regarding timber suitable for pulp and paper production that has to be removed. The agreement contemplates providing fiber from land held by Island Farms Inc. to make up for any shortfall in fiber removed from CBPP timber holdings and selective cutting. This should minimize any negative effect on the available fiber resource of the mill.

To maintain the integrity of the natural landscape the undertaking will provide for a conservation area extending south east of the development area.

#### **4.3.3.2 Fish and Fish Habitat**

Small brook trout are present in the brook that crosses the parcel of land presently owned by Island Farms Inc. but not in sufficient numbers or size to support any recreational fishing. The construction of the proposed lakes will expand and improve the habitat for the brook trout.

#### **4.3.3.3 Mammals and Furbearers**

There will be minimal displacement of some mammals and furbearers but the conservation area of the undertaking will provide protected habitat.

#### **4.3.3.4 Human Activities**

There may be some minimal conflict with members of the local population that have used the area for moose hunting and trapping of snowshoe hare however a lot of this activity occurs on the private property of Island Farms Inc.

There will be extra demand on human resources and business services within the region as a result of this undertaking, which will have a positive economic benefit on the local economy.

A power transmission line owned by Deer Lake Power Company passes through the property. Planning and construction of the road crossing the transmission line and any other activities will be done with the involvement of Deer Lake Power Company.

## **4.4 Operations**

### **4.4.1 Description of the Operation**

#### **4.4.1.1 Golf Course**

The golf course is the main component of the resort. It will be an eighteen-hole championship course complete with a clubhouse/pro shop and it will be open to the general public. It will operate from mid May to late October. Facilities for cross-country skiing, snowmobiling, and hiking will be readily available and adjacent to the golf course for the enjoyment of the residents and visitors to the resort. The clubhouse will be open year round to compliment these activities.

Fees, rates and memberships have not been determined.

#### **4.4.1.2 Residential**

The development has a residential component integrated within the golf course. The property owners will be responsible for constructing their homes. Permits will have to be obtained from the Town of Pasadena in accordance with the Town's development regulations.

The residents will become the sole owners of Timberland Golf Resort Inc. (to be incorporated). Timberland Golf Resort Inc. will have the full authority and responsibility to provide and maintain the services and info structure for the operations of the resort including the golf course and setting and collection of fees. This authority will be secured through covenant agreements included as part of all deeds of conveyance.

Residents will not be permitted to remove trees or other vegetation cover without the approval of the resident association.

#### **4.4.1.3 Period of Operation**

The resort will operate year round for some activities and seasonally for other activities and will be a permanent facility.

### **4.4.2 Potential Sources of Pollutants during the operation phase**

Potential sources of pollutants during the operational phase are:

1. silt and sediment
2. dust
3. solid waste
4. fuel and oils
5. engine emissions
6. noise
7. sewage
8. fertilizers
9. pesticides

#### **4.4.3 Mitigation Measures (for both the construction and the operational stages)**

The environmental plan developed during the construction phase will be maintained during the operational stage of the development. The plan will be updated on an ongoing basis addressing any additional environmental concerns that may arise.

##### **4.4.3.1 Silt and Sediment**

Drainage, settling ponds, and vegetation cover will be maintained to ensure that silt and sediment do not enter directly into any body of water. Work in sensitive areas will only take place during favorable weather conditions.

##### **4.4.3.2 Dust**

All roads and parking lots servicing the golf course, the residential lots and the main access road will be topped with a 100 mm layer of class A base material and a 50 mm hot mix surface course asphalt pavement. The existing access road will be paved to highway design specifications. Water and calcium chloride will be used as a preventive measure on gravel roads during construction to minimize the creation of dust.

##### **4.4.3.3 Solid Waste**

Solid waste will be collected on a regular basis and after recycling, will be taken to an approved solid waste disposal site. Recycling and reduction of waste generated will be an integral part of the facility operations plan.

##### **4.4.3.4 Fuel and Oils**

All fuels and oils will be transported, handled and stored in approved containers as required by government. Refilling will only take place in areas where a spill would have a minimum impact on the environment. Cleanup equipment, tools and supplies will be maintained on site at all times. In the event that a spill does occur, cleanup will be immediate and the contaminants will be disposed in accordance with legislation. Repairs and refueling of equipment will not be permitted within 30 meters of any water body. All fuel and oil leaks will be repaired immediately.

##### **4.4.3.5 Engine Emissions**

Equipment will be limited to units that meet the Canadian emission standard guidelines. It will be serviced and tuned as per the manufacturer's specifications.

##### **4.4.3.6 Noise**

Wildlife in this area has become accustomed to the limited noise that will be created during both stages of the undertaking from other activities in the area.

#### **4.4.3.7 Sewage**

The resort will be serviced with decentralized sewerage treatment and disposal systems in accordance with legislation and policy guidelines. Either traditional septic tanks with a distribution and disposal fields or units utilizing engineered wetlands or other accepted technologies are contemplated.

Site grading, ditching, culverts, bridges, French drains and settling ponds will control storm water. The object will be to utilize the storm water to the maxim benefit of the environment and the resort.

#### **4.4.3.8 Fertilizers**

Fertilizer applications rates will be determined by an analysis of soil nutrient values and plant requirements to insure that over fertilizing does not occur. All use of fertilizers will be within government legislation and guidelines.

#### **4.4.3.9 Pesticides**

The first line of defense in pest control will be good culture habits to minimize the use of pesticides. Pesticides will be transported, stored, and applied as per Government regulations and in accordance with the manufacturer's directions. Licensed pesticide applicators only will be engaged for this operation.

### **5. OCCUPATIONS ANTICIPATED DURING CONSTRUCTION AND OPERATIONS**

#### **5.1 Construction**

<b>Number of persons</b>	<b>Job title</b>
<b>1</b>	<b>General Manager</b>
<b>1</b>	<b>Golf Course Architects</b>
<b>2</b>	<b>Project Manager</b>
<b>1</b>	<b>Accountant</b>
<b>1</b>	<b>Bookkeeper</b>
<b>2</b>	<b>Civil Engineer</b>
<b>1</b>	<b>Mechanical Engineer</b>
<b>1</b>	<b>Electrical Engineer</b>
<b>2</b>	<b>Landscape Architects</b>
<b>1</b>	<b>Surveyors</b>
<b>2</b>	<b>Green Keepers</b>
<b>2</b>	<b>Carpenter Supervisors</b>
<b>2</b>	<b>Construction Supervisors</b>
<b>6</b>	<b>Electricians</b>
<b>4</b>	<b>Linesmen</b>

4	Plumbers
30	Carpenters
8	Cabinet Makers
10	Bricklayers
2	Cement Finishers
10	Plasterers, drywall installers
10	Roofers
8	Insulators
10	Painters
10	Truck Drivers
12	Heavy Equipment Operators
1	Pest Controllers
14	Laborers

## 5.2 Operations

2	General Managers
2	Accountants
2	Bookkeepers
1	Secretaries
8	Landscape Specialists
1	Instructors in Golf
1	Chefs
2	Cooks
6	Sales Clerks
4	Cleaners
2	Pest Controllers
1	Laborers
2	Heavy Equipment Operators
1	Electricians
2	Painters
1	Truck Drivers

## 6. APPROVALS AND PERMITS FOR THE UNDERTAKING

The main permits, approvals and authorizations required and the issuing authorities are as follows:

- 6.1 Minister of Environment and Lands; *approval of the undertaking.*
- 6.2 Water Resources Division, Department of Environment and Labor;  
*Small brook crossings, construction site drainage, culvert installation, water course alteration, water supply and distribution.*
- 6.3 Engineering Services, Department of Government Services and Lands;  
*National Building Code of Canada, National Fire Code of Canada, water supply greater*

*then 4,500 liters per day*

- 6.4 Operations Division, Department of Government Services and Lands  
*Building Accessibility Design Registration, Inspection and approval of sewer disposal systems, Temporary fuel storage, Food and beverage establishment license*
- 6.5 Customer Services, Department of Government Services and Lands  
*Crown Lands Application and approval, Protected Road Zoning and Development Control Regulations development approvals, Approval to erect private signs, and electrical Permits*
- 6.6 Town of Pasadena  
*Zoning amendments, Development Permit and Building Permits*
- 6.7 Department of Forest Resources and Agro foods  
*Permits to burn and Operating Permit/Fire Season*
- 6.8 Department of Fisheries and Oceans Canada  
*Authorization for works or undertakings affecting fish habitat*

## **7. SCHEDULE FOR INITIAL CONSTRUCTION**

The proponent plans to commence construction in June 2006. It is important that this undertaking receive release from the environmental assessment process by November, 2005.

## **8. FUNDING**

Funding is being provided by private investments.

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Date

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Signature of Chief Executive Officer