



# 15<sup>th</sup> International Geography Olympiad

Québec City, Canada

31 July – 6 August, 2018

## FIELDWORK EXERCISE 1

### TASK 1A

Student Number

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## Fieldwork Site Context

The area you are in, Charlevoix, is remarkable both geographically and historically. Geographically, you are on the north shore of the St. Lawrence River, a key access point into Canada from the 1600s until today. The region was designated a World Biosphere Reserve by UNESCO in 1989. The area's elevation ranges from 0-1150m above mean sea level, and is characterized by rolling hills, Canadian Shield (old metamorphic bedrock), river ecosystems, estuarine tidal marshes and mud flats, mixed forest, boreal forest, and alpine tundra.

Key faunal species include beluga whale and blue whale, wolf, caribou, moose, and cougar.

Historically, this was one of the first areas settled in Canada. The economy was originally water-based (coastal navigation, fisheries). Today the economy is based on tourism and agro-forestry.

The diversity of land uses and the varied topography has resulted in an appealing landscape for artists. This area is famous as an arts community and celebrates and supports a unique and rich visual arts heritage. Recently the city of Baie-Saint-Paul adopted a policy aimed at promoting its rich heritage and setting guidelines for its cultural development. It also adopted and put into action a sustainable development policy. This series of initiatives earned it the title of Cultural Capital of Canada.

The City of Baie-Saint-Paul initiated a landscape plan this year. The goal of the plan is to identify local landscapes that are valued by the citizens, understand the landscape qualities that are appealing, and define specific goals and outcomes to ensure sustainable development of their landscapes. The first steps in developing the plan are:

1. consultation with citizens through a survey, and
2. development of an initial landscape plan.

The City sent out a survey to the citizens asking them to identify:

1. their favourite landscapes,
2. the landscapes which best represent the area, and
3. aspects of the landscape that are disliked.

Today as part of the Fieldwork Test, you will explore two of these landscapes:

1. The Boisé du Quai (coastal area), deemed the most favourite area, and the third most representative of the area, and
2. Downtown Baie-Saint-Paul, deemed the second favourite area, and was voted the most representative landscape of the area.

These two areas were also identified as important viewpoints in the area, indicating their uniqueness and value to citizens and tourists.

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**Location: Baie St. Paul City Centre**

Time duration: 90 minutes total

Marks: 16

Instructions:

1. You will have 15 minutes to read the introduction to this exercise on **page 4 and read through the task entirely before starting**. You will only have one chance to move through the city, and will need to be aware of the type of data you need to collect.
2. You will have 75 minutes to explore the streets of the city centre indicated on **Map A1** and complete the tasks. You will have to move quickly, but be careful along and when crossing the streets.
3. Remember no phones are allowed to be used, and you are not allowed to go into businesses to ask for help with the exercise. This means you must check in with the volunteers on the streets who will let you know the time.
4. Before beginning, ensure your student number is written on the top of every page.
5. If you need help during the activity, look for one of the volunteers stationed around the fieldwork area. You will be able to see where they are located by looking for a smiley face 😊 on **Map A1**.
6. In an emergency, please go to either of the check-in areas or have someone call Julie at 1(418) 575-9403 or Maxwell at 1 (581) 984-6807.

# Task 1A

## Introduction:

In addition to the beautiful physical landscapes, the citizens here also appreciate aspects of human geography, particularly how their unique culture and values create a special type of urban landscape. In a recent survey, Baie-Saint-Paul citizens voted the downtown area as the most representative landscape of their region, and also one of their favourites. The local history of art is a key element of the cultural heritage of the city, and forms the basis of the tourism industry.

Your task is:

- to explore the downtown area by following the route drawn in red on **Map A1**
- to complete an inventory of cultural heritage that reflects the art and historical culture that is so important to this city. (**Map A2 – on a separate sheet**)
- to identify the areas that are not attractive and so reduce a tourist’s appreciation of the city’s culture and landscape. (**Map A3**).

**Note** – there is a large area to walk around, you must move quickly, but be safe and respectful of the citizens and visitors to Baie-St-Paul. **Cross only at crosswalks and watch for cars at all intersections.**

- 1) On your walk, **observe and map** your observations on **Map A2** (separate sheet).  
You will need to decide what symbols you will use. You may label and annotate your map.

### Mark the following features on your map:

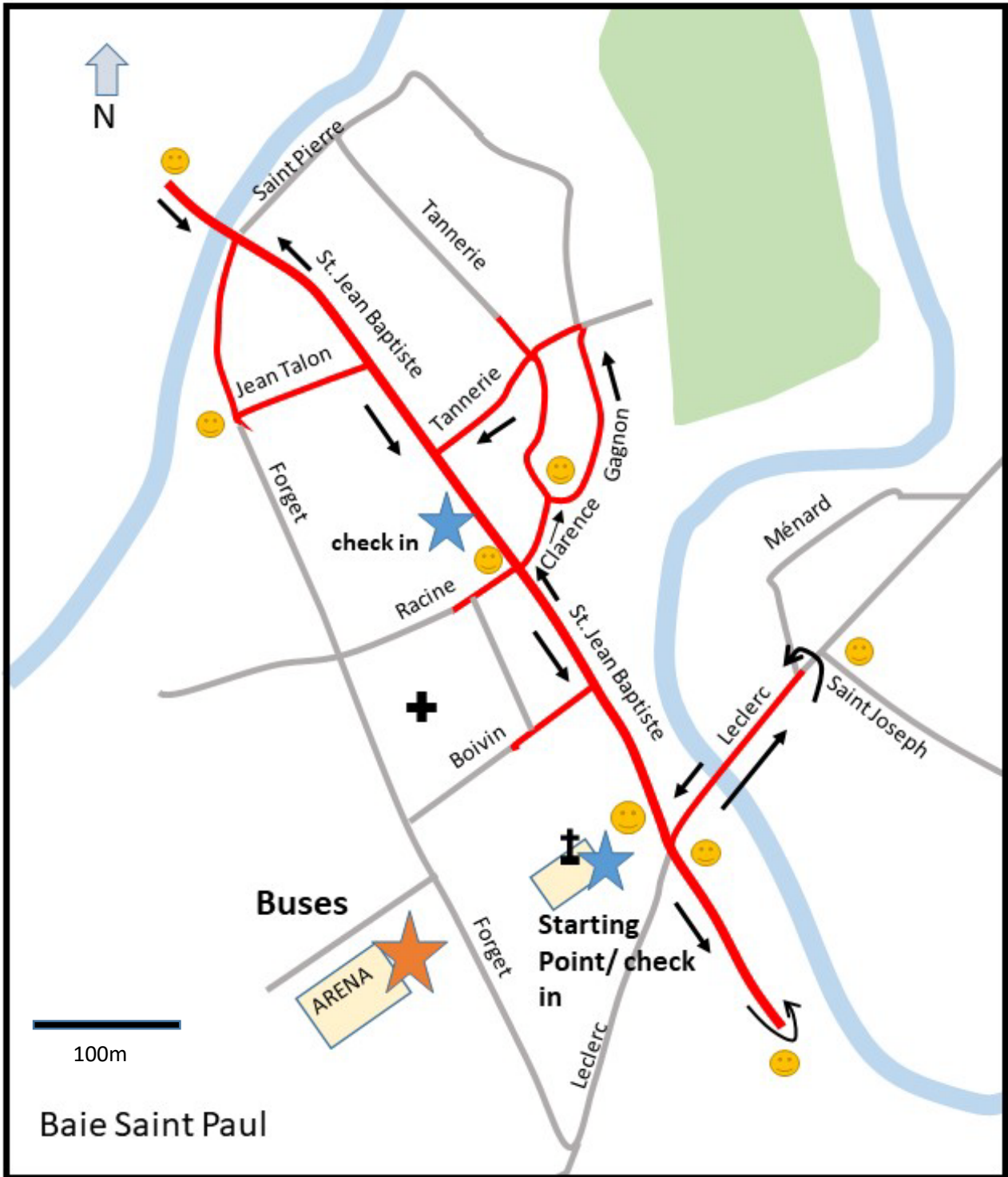


Example of a statue of a landscape artist

- Statues** (busts) that celebrate a particular landscape artist
  - Indicate the **location** of the statue only (not the artist’s name)
- Other **features** or elements that reflect the **art** culture of the city
  - Indicate location and type of feature.
  - List the types of features you observe in **Table A1**
- Other **features** or elements that reflect the **history** of the city
  - Indicate location and indicate type of feature.
  - List the types of features you observe in **Table A1**
- Businesses** that reflect the art culture or heritage of the city
  - Indicate location of business
  - List the types of features you observe in **Table A1**

You will be able to use this map in the written part of the fieldwork exercise to help you remember what you are seeing today.

## MAP A1: Route (in red) and volunteer stations 😊



- Please move in the direction of the arrows and stay on the red route
- Report to either check-in at the designated time

**Table A1 Types of features relating to cultural heritage (art and history) observed (5 marks)**

Your map reference (number and/or symbol)	Type of feature (eg statue)
	<i>statue</i>

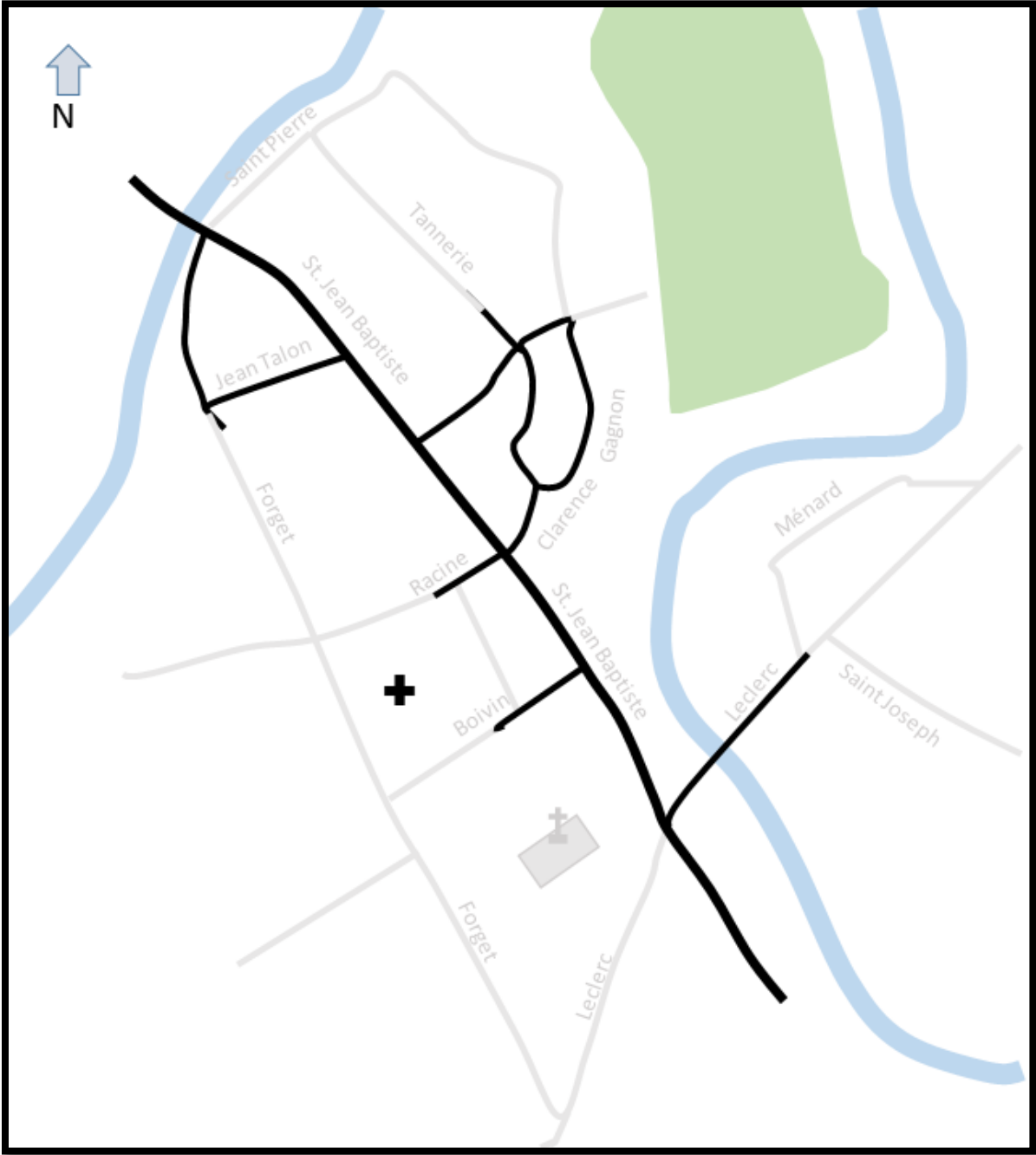
- 2) Identify three **spaces** or features that are not attractive, and could reduce a tourist’s appreciation of the city’s cultural landscape. Describe these areas in **Table A2**. Record the location of each of these three areas on **Map A3**. (6 marks)

**Table A2 Three examples of spaces that do not fit Baie-Saint-Paul’s theme of cultural or art heritage.**

Space	What is the current function of this space
1	
2	
3	

3) 3. On **Map A3**, draw the boundary between the tourist and residential areas. Use a dashed line to indicate the boundary. (Example -----) (5 marks)

**MAP A3: Location of 3 not attractive spaces and boundary between tourist and residential areas**



Hand in this booklet to a check point (MAP 1A) at the designated time







## FIELDWORK EXERCISE 1

### General Instructions

- **Before you start any field work task, read the instructions carefully and follow all instructions.**
- Phones and cameras are NOT allowed on this day, and will be confiscated if found. We will be taking photos and will offer those to you at the end of iGeo.
- It is important if you usually carry medication you must bring this with you at all times during the day. At times, we will be far from the buses and anything you want to access, you should have with you.
- **The test is individual.**
- At no point will you be working together in a group.

#### FIELDWORK INSTRUCTIONS:

**The fieldwork exercise consists of two parts, A and B, and they are at different sites.**

**Part A** will be in an urban environment, and you will need to be careful when crossing streets and working in crowded areas. All students will gather at one central location and be given common instruction. The work is done individually and you may work and walk at your own pace. There is a lot of area to cover, so be efficient with your time. Volunteers will be stationed along the route to ensure you stay in the fieldwork area and to address any problems that may occur. **YOU are responsible for your timing.** Bring a watch if you have one. You may also ask the volunteers for the time, and how much time is left. At the end of 75 minutes, you will be required to **check-in** at the start point or one other check point which will be identified on your instructions.

**Part B** will take place in a natural area that has uneven terrain, tripping hazards and could be wet. Please be careful at all times. You will have 75 minutes to walk around the site. **YOU are responsible for your timing.** Bring a watch if you have one. You may also ask the volunteers for the time, and how much time is left.

#### SCHEDULE:

You will start with either **Part A** or **Part B in the morning**. After lunch you will switch and go to the other site. After the second site, all participants will then return back to Universite Laval.

**You are responsible for your timing in the exercises.** There will be volunteers around the field sites to help keep you on track, but you are responsible for returning to the meeting points at the correct time. A characteristic of a good field worker is the ability to stay focused and efficient in data collection, and therefore, that is part of the Fieldwork Exercise.



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# MAP A2

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Student number





# 15<sup>th</sup> International Geography Olympiad

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## FIELDWORK EXERCISE 1

### TASK 1B

Student Number

1	5				
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## Fieldwork Site Context

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**Location: Boisé du Quai**

Time duration: 90 minutes total

Marks: 20

**Instructions:**

1. You will have 15 minutes to read the introduction to this exercise on **page 4 and read through the task entirely before starting.**
2. You will have 75 minutes to explore the area around Boisé du Quai indicated on **Map B1** and complete the tasks. You will have to move quickly, but be careful on the uneven terrain and be careful near the water.
3. Before beginning, ensure your student number is written on the top of every page.
4. Remember no phones are allowed, and you are to work on this exercise individually.
5. If you need any help please find one of the volunteers stationed around the site.
6. In an emergency, please see a volunteer and/or go to the Ecohouse near the buses or call Julie at 1(418) 575-9403 or Maxwell 1 (581) 984-6807.

## Task 1B

### Introduction:

The local landscape is very important to the citizens and to the tourists of Baie-Saint-Paul. The citizens have said:

- this area is their favourite landscape
- they love access to the river
- they want to both protect and develop this important landscape.

1. Explore the area, keeping within the area indicated on **Map B1** and answer the following questions:
  - a. Identify, outline, and label on **MAP B1** the seven main **land cover/vegetation** types for the areas which are numbered on the map (consider both terrestrial and aquatic environments). Add these to **Table B1**.
  - b. Complete the table below (**Table B1**) to describe:
    - i. how each area is currently being used by people or wildlife
    - ii. the value of the area to the environment or to people (7 marks)

**Table B1 Land cover and Land use**

Area on Map B1	Land cover/ Vegetation type	Current land use or purpose (if any)	Value
eg.	<i>grass</i>	<i>School field</i>	<i>Human recreation</i>
1			
2			
3			
4			
5			
6			
7			





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2. Observe any signs of damage or disturbance to this environment and answer the following questions:
- i. On **Map B2** mark any areas of damage or disturbance to this environment. (2 marks)
  - ii. **Annotate** the map to describe what the damage is, **and** whether it is due to natural or human disturbance. (4 marks)
  - iii. **Identify and list** on **Table B2**, any natural conditions or human interventions that minimize erosion at this site. (2 marks)

**Table B2 Natural conditions and human interventions that minimize erosion at this site**

Natural	Human



Map B2: Disturbance Areas

1	5				
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3.

a. What evidence do you see that this area is an estuary? (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

b. What marks the boundary between terrestrial and aquatic landscapes here? (1mark)

\_\_\_\_\_

c. Suggest reasons why a beach has formed at this location (2 mark)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Hand in this booklet as you get back on the bus.**





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## FIELDWORK EXERCISE 2

Student Number

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## General Instructions

Students schooled in English will have 2 hours to write this test.

Students not schooled in English will be provided with 20 extra minutes.

There is a section relating to each of the two field work areas explored.

Read the documents provided for each section, which provide good context for your answers.

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## TASK 1: Baie-Saint-Paul

### Instructions

1. Based on your results from **Table A1**, create 4-6 categories that represent the cultural heritage that you found in the town. Please keep the statues as a separate category. List the categories in **Table C1** and indicate which features belong in each class or category. (6 marks)

**Table C1: Categories of cultural heritage**

Category	Features included in category
Artist statues	Artist statues

2. Using your rough map from the fieldwork (**Map A2**) and the classification from the **Table C1** (above), create a **neat map** on the template (**Map C1 separate sheet**). (10 marks)

Use colours and/or symbols as appropriate.

Your map should include:

- a. Artist Statues
- b. types and locations of other features and businesses that highlight the art and historical theme of tourism in this town (based on your classification)
- c. a legend or key
- d. a scale shown as a ratio (eg. 1:20)

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3. The citizens of Baie-Saint-Paul have stated how important the appearance and the cultural heritage of their town is to them. They say it is the basis of tourism in the area. (3 marks)

On the map you have drawn, **Map C1**, delineate the zones of cultural heritage landscape that could help inform tourists or town planners of the status of the cultural landscape. Include the following zones:

- A. The **CORE AREA**- rich cultural landscape (high density of features or art heritage elements),
  - B. The **PERIPHERY AREA** - Moderate cultural landscape (moderate density of features or art heritage elements),
  - C. Areas requiring immediate attention (this should include the three areas you identified on the trip yesterday).
4. The citizens' responses to the landscape survey are shown in **Tables C3, C4 and C5 on page 6**.

Using these citizens' survey responses as a basis, suggest one way in which each of the spaces you identified in question 3C could be improved. Write your answers in the boxes below (3 marks)

Area description	Suggested improvement



1	5				
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5. The people of Baie-Saint-Paul would like to expand the CORE area of cultural heritage in the centre of the city.

Choose one area you have marked as PERIPHERY on your map that would be the best area to expand into, and label it "1".

**Explain** what developments would need to happen for it to become part of the CORE. (2 marks)

Area Description: \_\_\_\_\_

Developments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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**Survey results: General Landscapes**

Table C2. Aspects of the landscape citizens enjoy the most

Viewpoints especially of the river and city buildings
the River Gouffre and the St. Lawrence River
The agricultural character of the area

Table C3: Aspects of the landscape that citizens least appreciate

transmission (power) lines
highway
deterioration of natural environments
deforestation
Industrial areas

Table C4. Features that citizens want to protect or enhance

Proximity and access to water bodies
views
Valley and mountains
Beaches, wetlands, marshes
Heritage buildings
Agricultural land between the river and urban area

Table C5: Citizens' priorities for action

Landscaping and planting trees
The preservation of forest environments
The conservation of heritage buildings
The attractiveness of neighbourhoods
Improve access to the river and water bodies (marsh, river, waterfalls) through trail construction

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**Table C6: Survey responses about Boisé du Quai**

Strengths	Proximity and access to the St. Lawrence River Beach is accessible Wetlands and marshes Agricultural areas that extend to the river
Weaknesses	Presence of industrial infrastructure Bank and shoreline erosion Alteration of the dunes
Recommendations	<ul style="list-style-type: none"> <li>• Improve access to the river and water bodies (marsh, river, waterfalls) through trail construction</li> <li>• Use agricultural wasteland for the establishment of garden communities</li> <li>• Undertake stabilization works on the banks and dunes</li> <li>• Encourage farmland use to keep openings in the landscape and the diversity of fields and forests</li> <li>• Limit the height of buildings and planting in order to keep the main visual lines in the direction of the downtown and River</li> <li>• Limit commercial display in quantity, height, and in area</li> <li>• Limit resort development</li> </ul>

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## TASK 2: Boisé du Quai – Bay Area

This task is worth 20 marks.

### Instructions

The Bay area is the favourite landscape of the citizens of Baie-Saint-Paul. They want to develop the recreation facilities and increase protection of the area.

**Read** the responses to the survey in **Tables C2, C3, C4, C5 and C6 (pages 6 and 7)**.

Consider the citizens' responses to the survey, and your own knowledge about the different environments at this site.

1. **Design** a land use plan for the Boisé du Quai area on the template map provided (**Map C2 on a separate sheet**) with the following considerations:
  - a. It must reflect the goals of the community in both development and protection.
  - b. It must allow people easily to access all the different landscapes at the site.
  - c. It must include a heavy use recreational space.
  - d. It must indicate which areas are most sensitive and need to be protected.

Sketch the features that your plan will include onto the template map (**Map C2**).

2. **Annotate** your suggestions to justify your choices. No additional text or writing is permitted.

**END OF THE TEST**

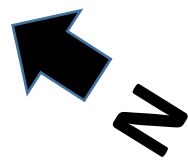
# MAP C1

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Student number



# MAP C2



100m