Business Case for centennial college progress campus parking lot striping and signaling

Group 8

**Vasireddy, Narasimha Rao**

## Gajula, Sravya Keerthana

## Igwe, Chinazam

## Perera, Muhandiramge Chanuka

## Rojas Ramirez, Jose

**Meeting minute**

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| --- | --- |
| **Project name** | **Meeting date** |
| Capstone Project | 05/25/23 |
| **Meeting place** | **Duration** |
| Microsoft Teams | 30 min (19:00-19:30) |
| **Meeting Purpose** |
| Weekly follow up meeting |

**In attendance**

|  |  |  |
| --- | --- | --- |
| Gajula, Sravya Keerthana (SG) | Igwe, Chinazam (CI) | Perera, Muhandiramge (MP) |
| Rojas Ramirez, Jose (JR) | Vasireddy, Narasimha (NV) |  |

**Agenda**

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| --- | --- |
| **Discussed item** | **Owner** |
| Overall Touch Point 1 feedback  | JR |
| It was agreed that that the person responsible for the minute will alternate every week and will be other than de group lead | ALL |
| JR suggested a new date and time for the weekly meetings. However, it was only agreed to change the date of the next meeting | ALL |

**Takeaways**

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| **Action item** | **Owner** |
| Fishbone diagram and comparative analysis | JR |
| Minute template | JR |
| Research about Business Case for next meeting | ALL |

**Meeting Minute**

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| --- | --- |
| **Project name** | **Meeting date** |
| Capstone Project | 05/31/23 |
| **Meeting place** | **Duration** |
| Microsoft Teams | 30 min (20:30-21:30) |
| **Meeting Purpose** |
| Weekly follow up meeting |

**In attendance**

|  |  |  |
| --- | --- | --- |
| Gajula, Sravya Keerthana (SG) | Igwe, Chinazam (CI) | Perera, Muhandiramge (MP) |
| Rojas Ramirez, Jose (JR) | Vasireddy, Narasimha (NV) |  |

**Agenda**

|  |  |
| --- | --- |
| **Discussed item** | **Owner** |
| Discussed about the Business case and divide the tasks | ALL |
| SWOT analysis was used in this business case | ALL |
| Discussed about the template | ALL |

**Next meeting**

|  |  |
| --- | --- |
| **Project name** | **Meeting date** |
| Capstone Project | 06/08/23 |
| **Meeting place** | **Meeting Purpose** |
| Microsoft Teams | Project Business Case discussion |

**Business Case**

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| 1. **Introduction/ Background**

Centennial college campus is always busy with Students, instructors, and staff continuously transiting the walkways and parking lots. However, the campus's traffic markings and signaling have gotten worse over time, which has caused several issues. Confusion, safety concerns, and compliance issues have been caused by faded road markings, inaccurate markings, and a lack of appropriate markings and signals. To promote safety, improve traffic flow, and give drivers clear instructions, these problems must be addressed as soon as possible. |
| **2.0 Business Objective**1. To improve security, lower accidents, and establish a safe environment for all campus users.2. To enhance traffic flow, decrease congestion, and build a more effective transportation system on campus, it is necessary to put in place clear and visible road markings and signals.3. To prevent penalties or legal problems and to ensure compliance with rules and standards.4. To improve reputation and campus experience5. To optimize parking space utilization and parking efficiency to decrease time spent looking for parking and maximize the use of available parking spaces. |
| **3.0 Current Situation and Problem/Opportunity Statement**The parking lot striping and signaling system on the college campus faces several issues, including faded road markings, incorrect markings, lack of proper markings, safety concerns, and compliance issues. These issues can lead to accidents, inefficient traffic flow, and potential harm to drivers and pedestrians. A comprehensive project to update the system can avoid unnecessary penalties, improve traffic flow, safety, and ensure compliance, creating a more efficient and user-friendly campus environment. |
| **4.0 Critical Assumption and Constraints**Assumptions:1. Approvals and permits should first be obtained.
2. Resources are available for the project’s completion.
3. Suppliers of necessary materials will deliver on agreed dates and terms.
4. Weather conditions should be considered when beginning and ending the project as rain and snow will ruin paint work.

Constraints:1. The project should be done in a manner that does not constrain normal school activities and other construction projects, i.e. the A block construction
2. The project scope is limited to agree upon areas.
3. The project must be done with available budget and resources.
4. All safety regulations and guidelines must be followed.

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| **5.0 Analysis of Option and Recommendation**Analysis:After careful considerations we are left with these options1. A complete renovation of the roads and markings

Which would involve a complete teardown and redo of all roads and markings, signs, and signals, etc.1. A partial renovation of the roads

A more focused approach that targets areas of concern such as the road connecting the bus park to the Ann Buller learning center allowing for more efficient use of resources1. A bandage approaches.

These involve quick fixes of critical areas causing the most issues.1. A maintenance approaches.

This requires constant maintenance which involves a team that conducts frequent inspections and follow up projects to address issues to halt the deterioration of the roads and striping.Recommendation:The approach recommended based on budget, scope, time, and other factors will be the Partial renovation approach. The approach allows for targeted fixes in critical areas of the school while accounting for our constraints, it addresses safety concerns, will not disrupt operations, and optimizes resource usage. |
|  |
| **6.0 Preliminary Project Requirements**1. Conduct a thorough assessment and mapping of the existing campus traffic markings and signaling.
2. Develop a detailed plan for updating the identified areas, including striping, signage, and any necessary changes to ensure compliance and safety.
3. Coordinate with relevant stakeholders, including college authorities, contractors, and suppliers, to ensure smooth execution of the project.
4. Secure necessary permits and approvals from local authorities and management for any modifications or additions to the existing infrastructure.
5. Allocate resources for the project execution, considering factors such as surface preparation, painting, and quality assurance.
6. It is necessary to inform all staff and students of the project plan, its start and end date and any areas to avoid avoiding issues and possible injuries.
 |
| **7.0 Budget Estimate and Financial Analysis**Total budget allocation for this project is CAD 20000 Total car park length = 435mTotal car park width = 100mArea of the car park = 43500 Square metersNormal parking space area for one vehicle = 2.8 meters by 4.8 metersTotal number of parking spaces = 3594Total number of parallel lines = 3594\*2 = 7188Length of parallel lines = 7188 meters Length of perpendicular lines = 2920 metersTotal length of lines to be covered = 10108 meters / 33163 feetPrice per feet = CAD 0.50Cost Estimation for lines = CAD 16581Cost Estimation for others (No parking, Disability parking signs Etc.) = CAD 2000Miscellaneous = CAD 1419Total Cost for the Project = CAD 20000 |
| **8.0 Schedule Estimate**Schedule for this project will be two weeks starting from 01st of June to 14th June 2023 |
| **9.0 Potential Risks**1/ Weather could be a huge risk for the project. Unpredictable weather can make the delay the project.2/ Day to day traffic can be a risk drag the schedule of the project.3/ Insufficient time allocated for the surface preparation.4/ Health and safety hazard when working with chemical materials.5/ Additional surfaces to paint or repair during the project.6/ Quality issues pop up after the painting work is done. |
| **10.0 Exhibits**Exhibit A: Financial Analysis |