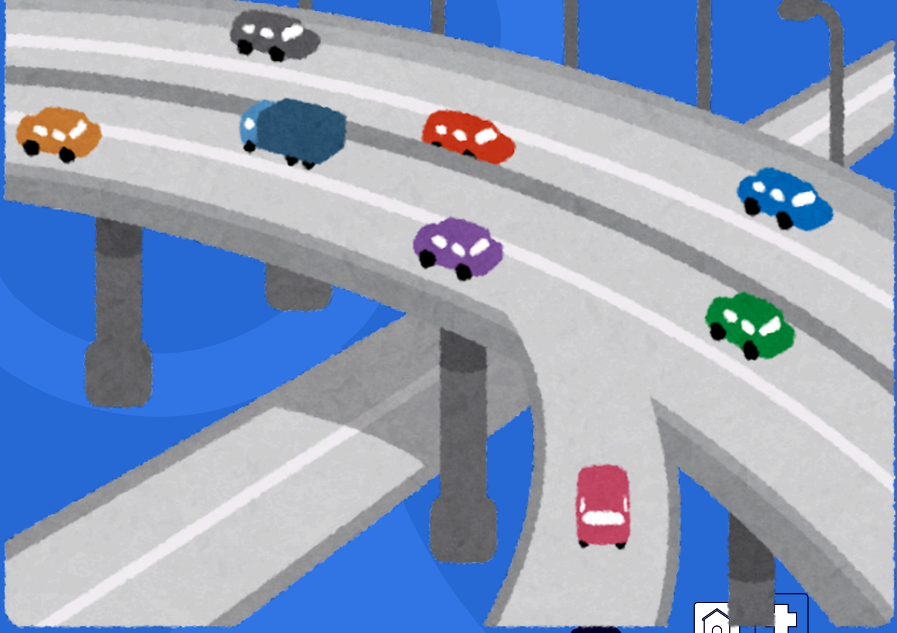


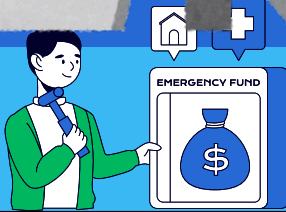
Reopening Of The Highway in Worcester



INTRODUCTION

The Intensive rainfall caused by the atlantic weather have caused severe damage to the Highways resulting in closures. This has caused Drastic traffic on the main roads. Several complaints have been recieved form residents

QUAD CHART



Purpose - Reduce Traffic - Reopen Highways - Ensure public safety	Customers - Councils - Government - Road Users
End Result - Highway Useable - Safe journey for all	Measures - No complaints - Reduced traffic

STAKEHOLDER ANALYSIS

STAKEHOLD ER	ROLE	INFLUEN CE	IMPACT	STRATEGY
Local Council	Responsible for reopening	High	High	Hold daily briefing and have decision making authority
Local residents	Affected by closure	Low	High	Receive info via public announcement
Contractor s	Carry out repair work	High	High	Carry out daily tasks

RACI MATRIX

RESPONSIBLE - Does the work
ACCOUNTABLE - Final decision maker
CONSULTED- Provides input
INFORMED-Kept updated

STAKEHOLDER	Damage Assesment	Public communication	Drainage
Local Council	A	A	C
Local residents	I	I	I
Contractors	R	I	R

RISK ASSESSMENT

Description	Impact	Risk Level	Mitigation
Poor communication	Medium	Medium	Daily meetings, shared updates
Road structure weakness	High	High	Conduct full inspections prior Reopening
Ongoing weather conditions	Medium	High	Monitor Forecasts- Delay reopening if necessary

WORK BREAKDOWN STRUCTURE



GANTT CHART

Tasks	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
Projec t										
Dama ge										
Traffic manag										
Site cleara										
Repair s										
Safety inspec										
Final appro										

PRICE BREAKDOWN

- Project management and planning £40,000- £80,000.
 - Damage assessment £40,00- £100,000
 - Site clearance £60,000 - £150,000
 - Traffic management £25,000- £60,000
 - Repair and restoration £300,000- £900,00.
 - Safety inspections and testing £20,000 - £50,000
 - Environmental management £15,000- £40,000
 - Unexpected costs 10- 15% of the total budget
 - Money funded via the local council, who receives the money via tax from the public allocated for emergency responses.
 - The council benefits from this as the economy will be stable
 - Legally, under the Highway Act 1980, councils are required to maintain safe roads
- Total £490,000 - £1,350,000**



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Lecturer Name: Rexon Nting

Session: February 2026 Term

Graham Gibbs developed a model highly used for reflective writing as it establishes a clear structure. The model called “Reflective Cycle” is what I will be using today. We were asked to create a poster based on the information provided in the assessment brief and include what we had learnt in lesson. We would then need to present it in week 6, this was a solo task. There were three projects provided, and we had to choose one, I chose “Reopening of the Highway”.

As I was presenting, I felt extremely nervous, I am a shy person and don’t enjoy presenting in front of crowds. Due to my nervousness, I felt myself rushing through my presentation and talking at a faster pace than needed or expected. All my mental notes and practice that I did were completely forgotten about. I felt very tense and my heart was beating faster than usual. I knew I should’ve taken a deep breath and closed my eyes but didn’t as I did not want to be seen as dramatic or embarrassed.

I feel as though I did well in my presentation despite my nervousness. The Lecturer gave me constructive feedback, and I also gave myself some feedback. Some things my Lecturer said went well was that he could see I understood the assignment and what was asked of me meaning I had read the brief very well. He saw I Incorporated different theories and models that I had learned in lesson and out of lesson. He was surprised I used RACI Matrix which was when I told him I learnt it from my other module. He praised me for using outside learning which surprised me as I was initially unsure whether to use it or not because it wasn’t mentioned in any of this module’s lessons. He also said it was a good thing for everyone’s presentations to be a little different. On the other hand, he said I had missed the breakdown of the money: How and where. This could’ve been done verbally if it couldn’t fit on the page. I also needed to include the financial benefit, when does the project start and end and how to check the quality measures are met.

The lecturer said if I had attended more lectures, I would’ve been more confident and I agree. My personal notes would be that I wasn’t meant to read from the poster so much and based off the feedback he gave to my peers I was meant to include a specific location in the midlands.

Next time I will breathe through my presentation to avoid a fast heart rate and rushed speech. I have learnt that attendance is not only important for learning but also for confidence when it comes to tasks such as these. I did miss some important details and they would’ve been included if I participated more. By practicing presenting this would improve my public speaking skill massively.



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Introduction

This Project management plan will conclude of the necessary steps, precautions and relevant information needed to Reopen the Highway in Worcester. Intense rainfall caused detrimental flooding across all West Midlands. The Highway has severely been affected by these weather condition and is completely shut to the public. The flooding has caused safety risks to the public and has caused extensive damage. Drastic traffic has been caused on the main roads and several complaints have been received from residents. This Plan will define the objectives, responsibilities, risk assessments and how to guide the project to a safe and full reopening.

Scope

The scope of the project will ensure all necessary work is clearly identified and managed affectively while avoiding unnecessary work of the project. All the following tasks are within the scope of the project.

Damage assessments need to be conducted, this would include full inspections of road surfaces, drainage systems and surrounding infrastructure. Structural safety evaluations will be carried out by qualified engineers. Hazards such as debris and weakened foundations would need to be identified. All the tasks listed above is to ensure the safety of the public.

Site Clearance would include removal of mud, fallen trees, branches on the road and other flood related debris. Drainage systems would also need to be cleared to prevent clogged pipes and further flooding. Environmental regulations would need to be followed when disposing of waste materials safely.

Road surfaces will be damaged e.g. potholes, cracks etc. Road marking, Road signs and lighting are included in the scope, without them the repaired highway would not meet the Uk safety standards.

Safety measures always need to be monitored and implemented during the repair works and after the reopening. Temporary safety controls will be followed through, during the project this could include temporary traffic lights. Final safety inspections and quality checks will be carried out.

The traffic during repairs needs to be controlled. Diversion routes, temporary traffic lights, temporary road closures will be implemented. Alongside the use of temporary signs and barriers. The highway will also be reopened gradually to manage traffic flow.

Stakeholder communication is crucial in this project, poor communication will have a detrimental effect with the success rate. There needs to be communication with the public regarding the closures and reopening timelines. Coordination with local authority, contractors need to be maintained, and the relevant stakeholders would require regular updates.

The following activities are out of scope and not included in the project:

Major redesign or upgrading the highway beyond the preflood condition, Construction of new infrastructure unrelated to flood damage and maintenance not caused directly by the flood.

Work Breakdown Structure

The Work breakdown structure (WBS) is used to break a project down and make it more manageable. It makes it easier to plan and organise the project by dividing it into sections and individual tasks. This is in a hierarchy format and is shown two ways below.

1. Highway Reopening Project

1.1 Project initiation

- Define objectives- establish the goal which is to reopen the flood damaged highway
- Identify stakeholders
- Develop project plan- Create timelines, budgets and risk plans

This ensures the project is organised and ready to respond effectively to the flood damage.

1.2 Damage assessment

- Inspect road surface- Identify cracks, potholes or washed out or sections due to the flood
- Check drainage systems- Identify blockage or failures that could cause further flooding
- Identify hazards- Look for any unsafe areas they could harm the public or workers

Repair decisions depend on the accurate assessment provided so it is crucial its completed correctly otherwise the overall project may fail or be delayed.

1.3 Site Clearance

- Clear mud and water
- Unblock drainage- Ensure water can flow properly to prevent further damage
- Remove debris

With improper clearance the repair work cannot begin safely nor efficiently

1.4 Communication and Stakeholders

- Report progress- Track against time and budget
- Provide public updates- Inform Road users about closures and progress
- Liaise with authorities

Effective communication reduces confusion, public frustration and delays

1.5 Repair and restoration

- Repair road surface- Use asphalt or concrete
- Reinstate road features- Add Road markings, signage and lighting affected by the flooding
- Repair structures

This is the main construction phase of the project and physically restores the highway to a safe and useable condition.

1.6 Safety and Quality Assurance

- Implement safety measures- Use PPE, safety zones and site rules
- Conduct ongoing inspections- check quality during repairs
- Perform final safety checks

This ensures highway is safe before reopening to the public and all work meets the UK road safety standards.



Quad Chart

A Quad Chart is a summary of the project, and each section has a specific purpose. There are four sections: Purpose, Stakeholders, result and measures of success. The purpose explains why the project exists and then main outcome for the work. Stakeholders include the key people or groups that are involved or affected by the project. The result describes what the finished product should look like once the project is completed successfully. Finally measures of success meaning how the projects success will be judged.

The Quad chart is easy to read as it is simple and structured and ensures everyone has a shared understanding of the project goals and highlights the key information without overwhelming detail. On the other hand, it lacks detailed information that some stakeholders may want to see at first glance. Some important information may be left out due to the limited space in the chart. This chart is not detailed enough and must be followed with other models.

PURPOSE	CUSTOMERS
- Reduce Traffic - Reopen Highways - Ensure Public Safety	- Council - Government - Road users

RESULT	MEASURES OF SUCCESS
- Highway usable - Safe journey for all	- No complaints - Reduced traffic

Gantt Chart

This chart specifically shows the timeline of a project, this includes: what tasks need to be completed, when they happen, which tasks depend and overlap on each other etc. This chart is highly useful as it helps organise the work into clear stages and improves time management and delays. The table below breaks down the ten-week project.

Project planning and stakeholder setup will take place during weeks 1-2. During this stage communication is established with the stakeholders and roles are assigned. The plan and scope is established before physical work begins. Damage assessment is completed during weeks 2-3, this is when evaluations and inspections of the damage is conducted by engineers. This would include the conditions and what repairs are required before reopening. Weeks 3-4 would conclude of traffic management planning and site clearance. Traffic management means to create diversion routes and road closures, safety measures for the public and temporary control measures are prepared. Site clearance consists of clearing flood debris, the drainage systems and the site being safe for repair work. Week 4-7 is when the repairs will take place. All road surfaces that are damaged will be repaired or rebuilt; road markings and signs will also be restored. This the longest and most important phase. After the repairs are completed (weeks 7-8) Safety inspections will be carried out to ensure the road meets all safety standards, this is conducted by engineers. The final weeks of the project (8-10) is when the highway is reopened, and final documentation is completed.

Tasks	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
Project planning										
Damage assessment										
Traffic management										
Site clearance										
Repairs										
Safety inspection										
Final approvals										

Stakeholders Involvement

A stakeholder analysis is identifying all the individuals involved or affected by the project. This is critical to the success of the project because reopening of the highway requires coordination between multiple groups with different roles and responsibilities. This assesses their level of interest, influence and impact on the project. Communication and engagement are key with stakeholders in this project and needs to be managed effectively. The analysis is important because it helps identify who is involved in the project, prioritise communication and engagement strategies and reduce risks that may be caused by poor coordination or misunderstandings.

Stakeholder	Role	Influence	Impact	Strategy
Local Council	Control funding and final decisions	Very High	Very High	Hold daily briefings
Residents	Affected by closure	Low	High	Receive information via public announcements
Contractors	Conduct repair works	High	High	Carry out daily tasks
Engineering consultants	Provide assessments	High	High	Determine what repairs are needed

A RACI Matrix will help define each stakeholder's responsibilities. The Local Council is accountable for most tasks as they own the project and approve of key decisions. Engineers and contractors are mostly responsible for the physical repair work and technical assessment. The public is kept informed throughout the project to maintain safety awareness. Traffic management teams are responsible for ensuring safe routes and controlling road usage.

R=Responsible A=Accountable C=Consulted I=Informed

Stakeholder	Damage assessment	Site clearance	Traffic management	Repair and restoration	Final approval and reopening
Local Council	C	I	C	I	A
Engineers	R	C	C	C	C
Contractors	I	R	C	R	C
Public	I	I	I	I	I
Traffic teams	I	C	R	C	C

Clear and defined roles will ensure everyone will stay focused on their own tasks and responsibilities. However if the coordination is too complex it can lead to delays and

communication issues. Miscommunication could slow down critical stages in the project. Priorities may be conflicted, some contractors could be focused on speed whilst other prioritise safety and quality. Dependence on one group or individual can affect the whole time line this could include late engineering response or contractor issues. The public are heavily impacted by the closures but have very little control over decision. They can only have somewhat of control when in a large group but as an individual there is no impact on the project.

Allocation of resources

Resources need to be monitored to ensure the project is kept within budget. The budget for this project is £490,000 - £1,350,000. Project management and planning will cost between £40,000- £80,000. This includes project manager salary and admin costs, documentation and reporting and initial meetings. Damage assessment includes reports and analysis, safety testing and equipment use and the salary of the engineers. This is such a wide range as the amount of workers are not established yet, £40,00-£100,000. Site clearance will cost between £60,000 - £150,000. This is from the debris removal, heavy machinery, waste disposal fee and salaries. Traffic management will require £25,000- £60,000. This is to pay traffic control staff, diversion route setup and temporary signage and barriers. The largest cost area is the repair and restoration stage which will cost £300,000- £900,00. This includes road resurfacing, drainage system restoration, road markings etc. Safety inspections and testing is £20,000 - £50,000 this will cover the certification costs Final inspections etc. Environmental management would cost £15,000- £40,000 to cover the impact assessment, environmental protection measures and waste management compliance. Finally unexpected costs which could begin from emergency works, equipment breakdowns, weather delays and hidden damage. This is 10- 15% of the total budget. This money is funded via the local council, who receives the money via tax from the public allocated for emergency responses. The council benefits from this as the economy will be stable, this allows businesses and commuters to function normally and prevent financial losses in the area. Legally, under the Highway Act 1980, councils are required to maintain safe roads, participation in this project ensures they meet these obligations.

Risk Analysis

This analysis identifies potential problems that could affect the project and the outcome, it evaluates how serious it is and how they will be managed. High risk factors are the most critical because it can delay the project or make the highway unsafe. These factors require close monitoring and strict control measures. Medium risks can slow the progress but are manageable with good planning and backup options. Low risks still need to be considered but have less impact on the overall project.

Risk	Likelihood	Impact	Risk level	Mitigation
Hidden damage	Medium	High	High	Conduct detailed inspections, contingency budget
Equipment breakdown	Medium	Medium	Medium	Regular maintenance and backup equipment available
Health and safety incidents	Low	High	High	Enforce PPE, site safety rules and staff training
Traffic management failure	Low	High	Medium	Clear signage, regular monitoring and adequate staff
Poor communication	Medium	Medium	Medium	Regular meetings and clear reporting systems

Conclusion

In conclusion, the project management plan for reopening the highway after a flood demonstrates the importance of using structured tools and models to manage the project. The scope defines the boundaries of the work meanwhile the Work Breakdown Structure and Gantt chart ensure the project is in manageable tasks and provide a clear timeline for completion. When used together it ensures the project is organised, efficient and successful.

The Quad chart offers an overview of the project, highlighting the purpose, stakeholders, result and measures of success, whilst the stakeholder analysis and RACI Matrix show how the individuals or groups that are involved such as the local authority, engineers, contractors and his ensured that roles were clearly the public and are essential in the project.

In addition, the cost breakdown demonstrate how financial and physical resource are distributed across the project, whilst the risk assessment identifies potential challenges such as weather, structural damage, delays along with strategies to manage them.

Overall the combination of these project management tools ensures the highway can reopen safely, efficiently and within budget. The project not only restores essential transport infrastructure but also supports public safety and economic stability showing the value of effective planning and coordination in responding to the emergency.

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