



Prifysgol Cymru
Y Drindod Dewi Sant
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Trinity Saint David

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Student name: Daliborka Petrovic

Student ID: 2414750

Lecture name: Sukhpreet Grewal

Part A: Presentation



1. Introduction

Severe flooding in July 2025 across the West Midlands caused major damage to roads, bridges and transport systems. The River Severn exceeded safe levels and flooded several towns including Worcester, Shrewsbury and Kidderminster

2. Description

This project rebuilds and strengthens the main transport corridor connecting Worcester, Shrewsbury and Kidderminster. It includes road reconstruction, bridge repairs, improved drainage and flood-resilient infrastructure

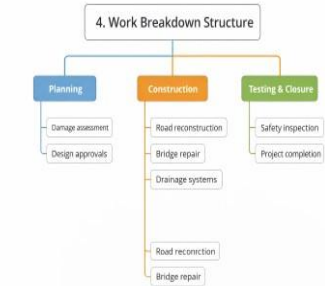
3. Scope

In Scope: road reconstruction, bridge strengthening, flood barriers, drainage upgrades, monitoring sensors. **Out of Scope:** housing reconstruction, insurance compensation, long-term regional flood defence schemes.

Flood-Resilient Transport Corridor Reconstruction Project

Location: Worcester – Shrewsbury – Kidderminster

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7. Stakeholders

Local councils, Environment Agency, transport authorities, contractors, local businesses, residents and emergency services

8. Resource Allocation

Human: Project manager, engineers, construction teams. Financial: Estimated budget £220 million. Technical: Construction equipment, sensors, drainage systems.

5. Quad Chart

Problem: Flood damage disrupted transport

Objective: Restore resilient transport infrastructure..

Approach: Rebuild roads, bridges and flood systems

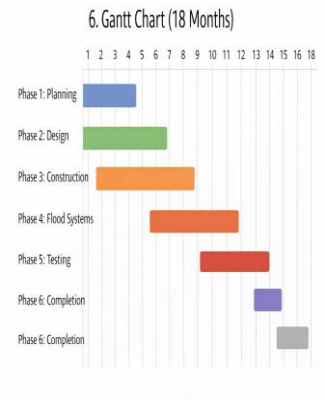
Benefits: Safer communities and reliable transport

9. Risk Analysis

Extreme weather delays Budget overruns Supply chain disruptions Environmental impacts Mitigation includes planning buffers and cost monitoring.

10. Conclusion

The project rebuilds flood-damaged infrastructure and improves transport resilience to protect communities and businesses in the West Midlands from future flooding events.



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BBC (2025) Flood warnings across West Midlands. Environment Agency (2024) Flood risk management for River Severn. Kerzner, H. (2022) Project Management: A Systems Approach.

Part B: Reflection on Feedback

The feedback I received from both my tutor and peers highlighted several strengths in my project, while also identifying important areas for improvement. Overall, the feedback was useful in helping me critically evaluate my work and understand how to enhance the quality of my final project management plan.

One of the main strengths identified was the clear structure of my poster and the logical organisation of content. My use of project management tools such as the Work Breakdown Structure (WBS), Gantt chart, and Quad Chart was positively received, as these helped to communicate the project in a structured and professional way. In particular, the Quad Chart was highlighted as an effective way of summarising the key aspects of the project, including the problem, objectives, approach, and benefits. This confirmed that I have a good foundational understanding of project management techniques and how to apply them.

However, the feedback also pointed out several weaknesses. A key issue was that my work was too descriptive and lacked critical depth. While I was able to outline the main components of the project, I did not fully justify my decisions or provide detailed analysis. For example, in the risk analysis section, I identified general risks such as weather delays and budget overruns, but I did not assess their likelihood or impact in a structured way. This made the analysis less effective and limited its practical value.

Another area for improvement was the lack of detailed and data-driven content. Feedback suggested that I should include more realistic information, such as cost estimates, timelines, and measurable outcomes, to make the project more credible. Additionally, the presentation of the poster was considered too text-heavy, which reduced readability. This highlighted the importance of balancing content with clear and concise visual communication.

During the presentation day, I also experienced an unexpected situation that contributed to my learning. I arrived prepared but felt slightly nervous, which is normal in a presentation setting. However, there were technical difficulties with the recording system, which created uncertainty and increased anxiety among the group. Despite attempts by the IT staff to resolve the issue, we had to change classrooms multiple times, and the problem persisted. As a result, only some students were able to present on the day, while others, including myself, had to present the following week.

This experience highlighted the importance of contingency planning and adaptability, which are key aspects of project management. It showed me that even when a project is well-prepared, external risks such as technical failures can still impact delivery. In future, I would consider how to plan for such uncertainties, for example by having backup options or being mentally prepared to adapt to changes.

Based on the feedback and this experience, I will make several improvements in my final project management plan. I will adopt a more critical approach by justifying my decisions and linking them to project management frameworks. I will also enhance my risk analysis by using a structured risk matrix and providing clearer mitigation strategies. In addition, I will include more detailed and realistic data, particularly in budgeting and resource allocation.

Finally, I will improve the clarity of my presentation by reducing unnecessary text and focusing on key points. Overall, this process has helped me recognise the importance of both critical thinking and adaptability in successful project management.

PART C: PROJECT MANAGEMENT PLAN

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Severn Transport Corridor Emergency Reconstruction Project.

1. Introduction

In July 2025, the West Midlands experienced severe flooding following prolonged and intense rainfall caused by an unusual Atlantic weather system. The River Severn exceeded critical levels and breached its flood defences, resulting in widespread damage across towns including Worcester, Shrewsbury, and Kidderminster. Transport infrastructure was significantly impacted, with roads submerged, bridges weakened, and drainage systems overwhelmed. This led to major disruption in the movement of goods, emergency services, and the general public.

Effective restoration of transport infrastructure is essential for economic recovery, public safety, and community resilience. This Project Management Plan (PMP) outlines a structured and systematic approach to delivering the Severn Transport Corridor Emergency

Reconstruction Project (STCERP). The project aims to restore the principal transport corridor within a timeframe of 4–6 weeks using established project management methodologies.

The plan incorporates key concepts such as scope management, scheduling, stakeholder engagement, risk analysis, and resource allocation. It aligns with recognised frameworks such as the Project Management Institute (PMI) guidelines and demonstrates the application of theory to a real-world disaster recovery scenario

2. Project Description

The Severn Transport Corridor Emergency Reconstruction Project is an urgent infrastructure recovery initiative designed to restore critical transport links damaged by flooding. The project focuses on the reconstruction and rehabilitation of key roadways, bridges, and associated infrastructure to ensure safe and efficient transportation.

Project Objectives:

- Restore the primary transport corridor connecting Worcester, Shrewsbury, and Kidderminster
- Ensure safe and reliable access for emergency services
- Re-establish supply chain routes for goods and services
- Improve resilience of infrastructure against future flooding

Key Deliverables:

- Fully operational road network
- Repaired and structurally sound bridges
- Functional drainage systems
- Temporary traffic management systems during construction

The project will adopt a fast-track construction approach, allowing overlapping phases such as procurement and construction to reduce completion time. This approach is particularly suitable for emergency situations where rapid response is critical.

3. Project Scope:

Scope management is essential to ensure that the project remains focused and avoids unnecessary expansion.

In Scope:

- Reconstruction of damaged sections of the main transport corridor
- Structural repair and reinforcement of bridges
- Restoration and improvement of drainage systems
- Installation of temporary traffic diversions
- Coordination with utility providers for infrastructure restoration

Out of Scope:

- Reconstruction of residential or commercial properties
- Development of new infrastructure outside the main corridor
- Long-term flood defence projects (handled separately by government agencies)

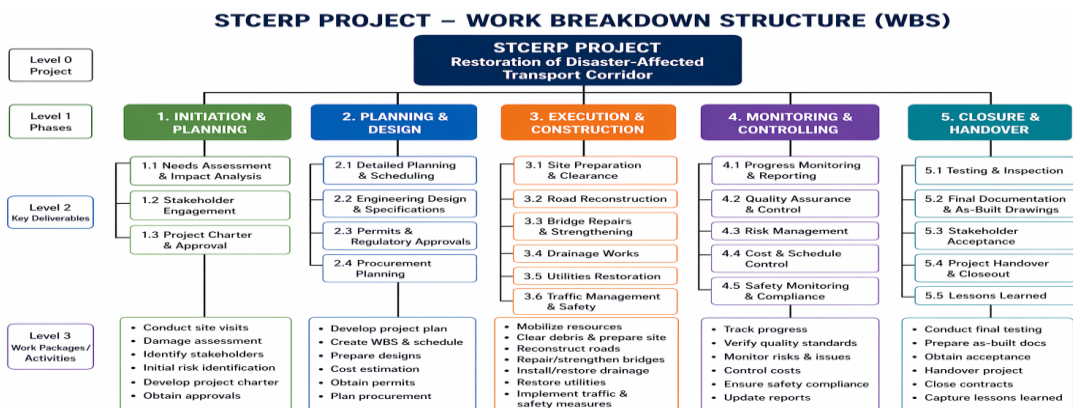
Restrictions

- The project is subject to a strict timeline of 4–6 weeks.
- Financial resources are limited, requiring careful budget management.
- There is an ongoing risk of adverse weather conditions, which may impact progress.

Expectations

- Emergency funding will be readily accessible when required.
- Skilled labour and necessary equipment will be available and can be mobilized promptly.
- Weather conditions will remain sufficiently stable to allow reconstruction activities to proceed without major disruptions.

4. Work Breakdown Structure (WBS)



The Work Breakdown Structure (WBS) is a key project management tool that breaks the STCERP Project into smaller, more manageable parts. By structuring the project into major phases—Initiation, Planning, Execution, Monitoring & Controlling, and Closure—it ensures that every stage of the project is clearly defined and properly organized.

This approach improves clarity by outlining the full scope of work in detail, helping to avoid confusion and prevent scope creep. Each activity and sub-activity is clearly specified, which makes it easier to assign duties and establish accountability among team members. As a result, teamwork and communication between stakeholders are strengthened.

The WBS also supports effective time management. By dividing the project into individual tasks, it allows for better sequencing of activities, identification of dependencies, and development of accurate timelines. This makes it easier to monitor progress and ensure that project milestones are achieved as planned.

In terms of budgeting, the WBS enables more accurate cost estimation and resource allocation. Since each component can be evaluated separately, project managers can better control spending and track financial performance, reducing the risk of exceeding the budget.

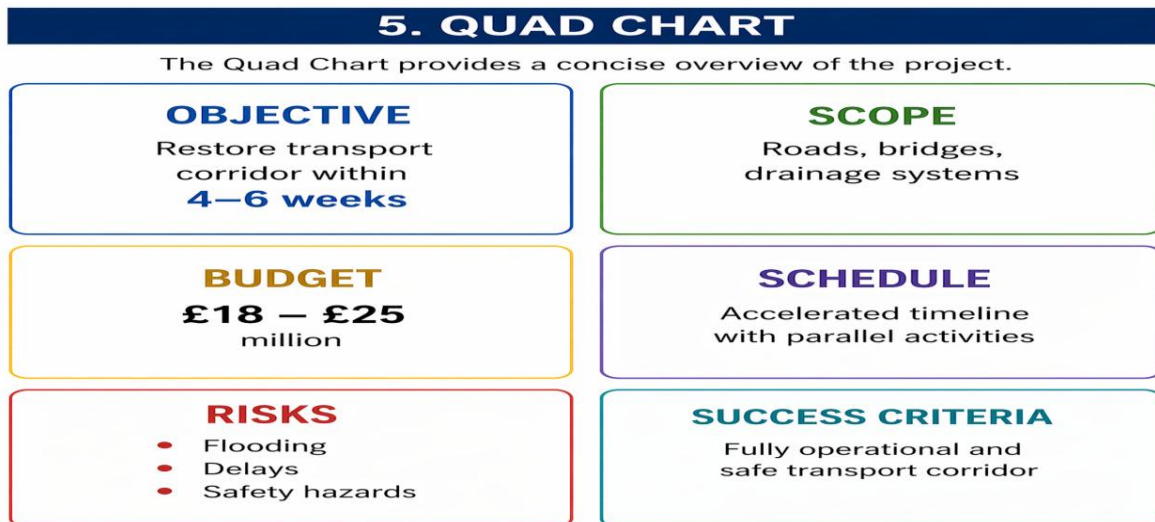
Additionally, the WBS contributes to risk management by helping identify potential issues at an early stage. This allows for timely planning of mitigation measures and ongoing monitoring throughout the project. It also supports quality control by ensuring that each deliverable meets the required standards.

Lastly, the WBS provides a strong basis for measuring performance and reporting progress. It helps track efficiency and project outcomes using relevant indicators. During the final phase, it ensures that all deliverables are completed, verified, and documented, while also capturing important lessons for future projects.

In summary, the WBS is essential for guiding the STCERP Project to successful completion by ensuring it stays on schedule, within budget, aligned with scope, and meets quality expectations.

5. Quad Chart

The Quad Chart provides a concise overview of the project.



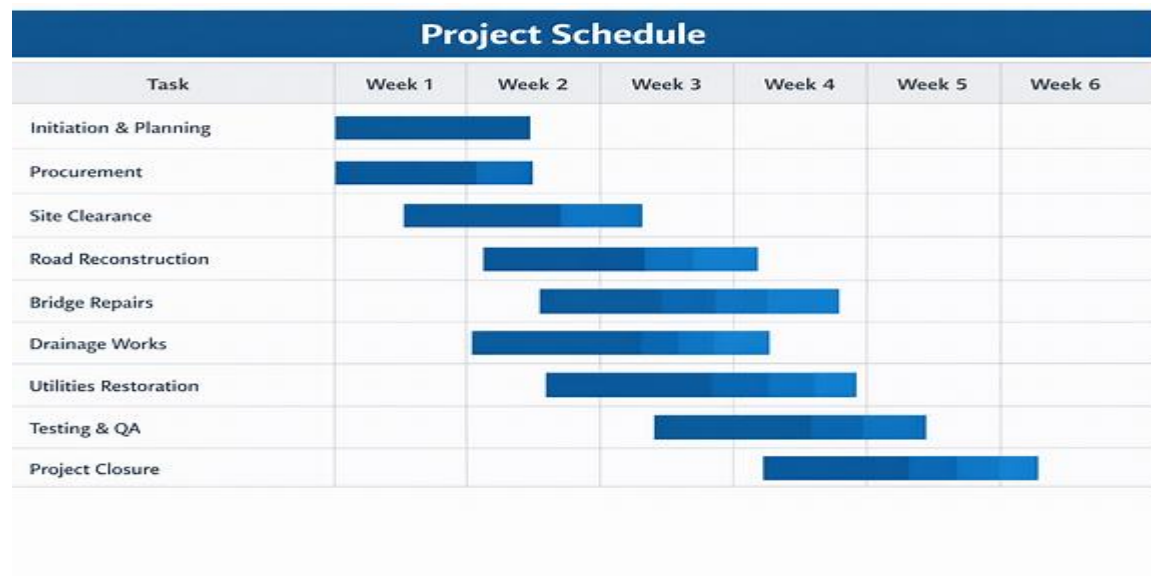
The Quad Chart provides a clear and concise snapshot of the STCERP Project by highlighting its key elements in a simplified format. It outlines the main objective of restoring the transport corridor within a tight 4–6 week timeframe, while defining the scope to include roads, bridges, and drainage systems.

It also presents the estimated budget range of £18–25 million and emphasizes an accelerated schedule that relies on parallel activities to meet deadlines. Potential risks such as flooding, delays, and safety hazards are identified to ensure preparedness and mitigation planning.

Finally, the success criteria are clearly defined, focusing on delivering a fully operational and safe transport corridor. Overall, the Quad Chart serves as an effective communication tool for quickly conveying essential project information to stakeholders and decision-makers.

6. Gantt Chart (Project Schedule)

The Gantt chart illustrates the project timeline and task dependencies



The Gantt chart offers a comprehensive visual outline of the project timeline across six weeks, showing the order of tasks, their durations, and how they overlap. It demonstrates a well-planned schedule that improves efficiency by allowing several activities to run simultaneously instead of one after another.

The project starts with Initiation & Planning in the first week, followed closely by Procurement and Site Clearance. This early coordination ensures that initial preparations are completed quickly, enabling major construction activities—such as Road Reconstruction, Bridge Repairs, and Drainage Works—to begin in Weeks 2 and 3 without delays.

An important aspect of the schedule is the critical path, which includes Site Clearance → Road Reconstruction → Testing & QA → Project Closure. These tasks are crucial to the project's completion, meaning any delay in them would directly affect the overall timeline. Identifying this path helps project managers focus attention and resources where they are most needed.

The chart also highlights effective coordination between different project activities. While core construction work is underway, Utilities Restoration is carried out in parallel, followed by Testing & Quality Assurance in the later stages. This overlap helps maintain steady progress and avoids unnecessary delays.

In the final phase, Testing & QA ensures that all work meets required standards before moving into Project Closure. The closure stage, including final checks and handover, is scheduled toward the end to ensure everything is completed properly and on time.

Overall, the Gantt chart presents a tightly managed schedule designed to meet the strict 4–6 week deadline. By combining overlapping tasks, clear dependencies, and a focus on critical activities, it supports timely project delivery while maintaining efficiency, quality, and safety.

Critical Path

The critical path is the sequence of key activities that determines the minimum time required to complete the project. If any task within this sequence is delayed, it will directly impact the overall project completion date.

Critical Path for the Project:

Site Clearance → Road Reconstruction → Testing & QA → Project Closure (Handover)

Explanation

Site Clearance

This is the initial step that prepares the work area. Construction activities cannot begin until this stage is finished.

Road Reconstruction

A major activity that follows site clearance. It is one of the most time-consuming and vital parts of the project.

Testing & Quality Assurance (QA)

After construction, this phase ensures that all work meets the required safety and quality standards.

Project Closure (Handover)

The final stage where the completed project is reviewed, approved, and handed over.

Key Points

These activities are interdependent and must follow a fixed sequence.

They have little to no flexibility (float), meaning delays cannot be easily absorbed.

Careful monitoring and proper resource allocation are essential to avoid schedule overruns.

Summary

The critical path identifies the most crucial set of tasks that must be completed on time to meet the project deadline. Effective management of these activities is essential to ensure the project is delivered within the planned 4–6 week timeframe.

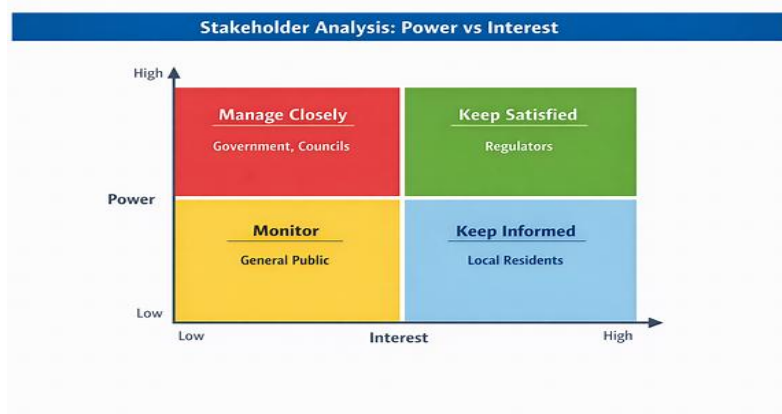
7. Stakeholder Involvement

Stakeholder engagement is critical for project success, particularly in emergency situations

Key Stakeholders:

- Local Councils (decision-making and coordination)
- Environment Agency (flood risk management)
- Department for Transport (funding and oversight)
- Contractors (project execution)
- Emergency Services (priority access requirements)
- Local Communities (affected population)

Stakeholder Analysis (Power vs Interest):



Communication Plan:

- Daily meetings during initial stages
- Weekly progress reports
- Public updates via media and local authorities

Takeaway:

Consistent, transparent communication aligns stakeholders, minimizes resistance, and accelerates decision-making — vital for effective emergency response and recovery.

Stakeholder Involvement

Strong stakeholder engagement is the backbone of effective emergency project delivery. When communication channels are open and consistent, decision-makers, responders, and affected communities can act in concert rather than in isolation. Transparent dialogue builds trust, clarifies expectations, and ensures that every stakeholder understands both the urgency and the shared objectives of recovery efforts.

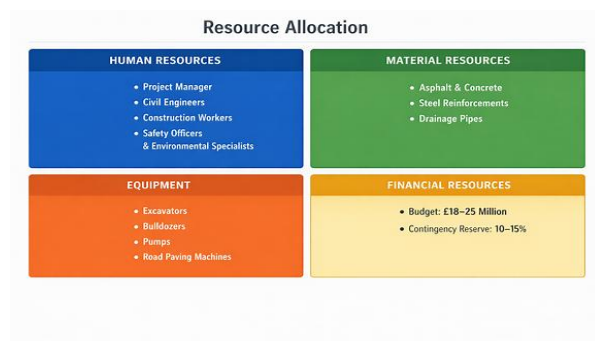
By maintaining daily coordination in the early stages and structured weekly updates thereafter, project teams can anticipate concerns, align priorities, and adapt quickly to emerging

challenges. Public updates through local authorities and media reinforce accountability and demonstrate progress, reducing misinformation and resistance.

Ultimately, proactive engagement transforms potential conflict into collaboration — enabling faster approvals, smoother logistics, and stronger community support. In high-pressure recovery contexts, this alignment between power and interest is not just beneficial; it is the decisive factor that turns a plan into successful action.

8. Allocation of Resources

Efficient resource allocation is essential for timely delivery.



Summary — Allocation of Resources

Effective resource allocation is central to delivering the project on schedule. Skilled personnel provide leadership, technical judgement, and on-site capability, while high-quality materials and reliable equipment ensure that construction activities progress efficiently. The project’s financial framework — including a defined budget and contingency allowance — supports stability and adaptability throughout delivery.

Human Resources: The project manager coordinates overall direction, supported by engineers, construction teams, safety officers, and environmental specialists who ensure technical accuracy, safe operations, and regulatory compliance.

Material Resources: Core construction materials such as asphalt, concrete, steel, and drainage components form the backbone of durable and resilient infrastructure.

Equipment: Machinery including excavators, bulldozers, pumps, and paving equipment accelerates work and maintains consistent output quality.

Financial Resources: A funding range of £18–25 million, supplemented by a 10–15% contingency, provides the financial flexibility needed to manage risks and unforeseen conditions.

Reframed Takeaway:

Coordinating people, materials, machinery, and funding in a structured way enhances efficiency, reduces delays, and maintains safety and environmental standards. This integrated approach strengthens the project’s ability to meet its six-week recovery target with confidence and control.

9. Risk Analysis

Risk management is crucial due to the uncertain environment.

Risk Response Strategies:

- Avoidance
- Mitigation
- Transfer (insurance)
- Acceptance (low-level risks)

Continuous monitoring ensures proactive management

Risk	Probability	Impact	Mitigation
Further flooding	High	Very High	Temporary barriers, monitoring
Supply delays	Medium	High	Multiple suppliers
Structural failure	Medium	Very High	Engineering inspections
Health & safety issues	Medium	High	PPE and training

Summary — Risk Analysis

Managing risk is essential in a rapidly changing recovery environment. The project is exposed to several key threats, each requiring targeted actions to protect safety, maintain progress, and control costs.

Further Flooding: Rated high in likelihood with very high impact; addressed through temporary flood-protection measures and continuous monitoring.

Supply Delays: Medium probability and high impact; mitigated by securing multiple suppliers to reduce dependency.

Structural Failure: Medium probability but very high impact; managed through thorough engineering inspections and strict quality checks.

Health & Safety Issues: Medium probability and high impact; controlled through proper PPE, training, and adherence to safety protocols.

Risk Response Approaches:

The project applies a combination of avoidance, mitigation, risk transfer (insurance), and acceptance for lower-level risks.

Reframed Takeaway

Ongoing monitoring and flexible response strategies enable early detection of emerging issues and support effective decision-making. This structured approach enhances project resilience and helps maintain momentum toward achieving the six-week recovery target.

10. Conclusion

The Severn Transport Corridor Emergency Reconstruction Project delivers a coordinated and well-structured response to the extensive flood-related damage affecting critical infrastructure. By applying recognised project management practices, the programme sets out a clear pathway for restoring essential transport connections within a tight delivery window while maintaining high standards of safety, quality, and long-term resilience.

The project's strength lies in its integrated approach. Effective risk management, strong stakeholder engagement, and strategic resource allocation work together to support informed decision-making and steady progress throughout the reconstruction effort. This alignment not only improves operational efficiency but also enhances the project's ability to adapt to evolving conditions in a challenging emergency environment.

Incorporating resilience measures—such as improved drainage, reinforced structures, and future-proofing interventions—ensures that the corridor is better equipped to withstand future extreme weather events. These enhancements extend the value of the project beyond immediate recovery, contributing to long-term sustainability and regional preparedness.

Overall, the project provides a robust model for emergency infrastructure recovery, balancing urgency with strategic planning and immediate restoration with future resilience. It demonstrates how rapid reconstruction can be achieved without compromising quality or long-term performance.

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