

PJM 1400 Project Planning
Signature Assignment - Course Case Study Simulation
For Learners Interested in **Construction**
FOR STUDENTS

Overview

This document outlines the deliverables and artifacts for the Case Study simulation that will serve as the signature assignment for this course.

Deliverables

- Requirements Elicitation plan + Scope statement due Module 3 Sunday at 11:59 PM ET
- WBS with Control Accounts, Planning Packages, Work Packages, and Activities due Module 4 at 11:59 PM ET
- Gantt chart on Miro/Figma with an overview of estimation technique due Module 7 at 11:59 PM
- Budget with an overview of cost planning technique(s) used due Module 10 at 11:59 PM
- Final project plan presentation due Module 12 at 11:59 PM

Case Study Overview: Construction Project

Introduction: Thank you for accepting the Project Manager position for the "Green Future Office Complex" project. In this role, you will report directly to the Program Manager. Our organization, Green Future Constructions, is spearheading this ambitious project aimed at creating a state-of-the-art office complex that aligns with our commitment to sustainability and innovation.

Strategic Objectives: The project's strategic objectives are to construct an eco-friendly office complex that minimizes environmental impact while providing modern facilities to businesses. It aims to achieve LEED Platinum certification, become a model for sustainable construction, and support the local economy by creating jobs.

Stakeholders: The key stakeholders include:

- **Influential Stakeholders:**
 - The Local Government: Providing partial funding and necessary permits.
 - Investors: Major financial contributors expecting a good return on investment.
- **Less Influential Stakeholders:**
 - Future Tenants: Businesses and organizations that will lease office space.
 - Local Community: Residents and small businesses in the vicinity.

Planned Deliverables: The project will deliver a fully functional office complex consisting of five buildings, each equipped with eco-friendly technologies like solar panels and green roofs. Key deliverables include:

1. Detailed architectural and engineering plans.
2. Construction of the office complex in compliance with LEED standards.
3. Installation of energy-efficient systems.
4. Landscaping and development of surrounding areas.

Acceptance Criteria: The final project deliverable will be considered acceptable if it:

- Achieves LEED Platinum certification.
- Meets all local construction and environmental regulations.
- Is completed within the allocated budget and timeline.
- Receives positive feedback from at least 80% of the stakeholders.

Geographic Location: The project is located in Springfield, a rapidly growing urban area known for its commitment to sustainable development.

Overall Budget: The project has an allocated budget of \$250 million, which includes construction costs, professional fees, contingency funds, and post-construction expenses.

Expected Length of the Project: The project is expected to be completed within 36 months from the commencement date.

Exclusions: The project will not cover:

- Operation and maintenance of the office complex post-construction.
- Interior design and fit-out of individual office spaces.
- Transportation infrastructure outside the immediate vicinity of the complex.

Module 1 Project Documents: Stakeholder Engagement and Requirements Elicitation

Stakeholder Engagement Table

Stakeholder Name	Stakeholder Position	Hours Allocated to Requirements Elicitation
David Johnson	City Planner, Local Government	2.5
Sarah Chen	Financial Advisor, Investor Group	1.5
Michael Roberts	CEO, Green Future Constructions	3
Aisha Patel	Sustainability Expert, Environmental Consultant	2
Emily Torres	Small Business Owner, Future Tenant #1	0.5
John Kim	Corporate Facilities Manager, Future Tenant #2	1
Luisa Garcia	Director, Local Nonprofit	1.5
Rachel Smith	Construction Law Specialist, Legal Advisor	2
Kevin Lee	Procurement Manager, Green Future Constructions	1
Olivia Wang	Marketing Director, Green Future Constructions	1
Brian Thompson	Site Supervisor, Construction Site Management	2

Project Requirements

1. **LEED Platinum Certification:** The project must achieve LEED Platinum certification.
2. **Modern Architectural Design:** The design should reflect contemporary architectural aesthetics and functionality.
3. **Budget Adherence:** The project must stay within the \$250 million budget.
4. **Timeline Compliance:** Completion within the 36-month timeframe is mandatory.
5. **Local Regulation Compliance:** All constructions must adhere to local regulations.
6. **Solar Panel Installation:** High-efficiency solar panels are to be installed on all buildings.
7. **Green Roofing Systems:** The implementation of green roofs is required for environmental benefits.
8. **Energy-efficient HVAC Systems:** Installation of advanced, energy-efficient HVAC systems.
9. **Sustainable Material Use:** Utilization of eco-friendly and locally sourced materials.

10. **Community Engagement:** Strategies for community involvement must be developed.
11. **Waste Reduction Plan:** The project must include a waste reduction and recycling strategy.
12. **Accessibility Features:** The complex should be fully accessible to individuals with disabilities.
13. **Public Transport Connectivity:** The complex must be easily accessible by public transport.

After completing the requirements gathering, the following requirements were determined to be of high priority:

1. The product shall achieve LEED Platinum certification.
2. The product shall adhere to a total budget not exceeding \$250 million.
3. The product shall be completed within a timeframe of 36 months.
4. The product shall comply with all local construction and environmental regulations.
5. The product shall incorporate energy-efficient solar panels in its design.
6. The product shall include green roofing systems for all buildings.
7. The product shall utilize advanced, energy-efficient HVAC systems.
8. The product shall be constructed using sustainable materials sourced locally where possible.
9. The product shall feature modern and innovative architectural designs.
10. The product shall incorporate waste reduction and recycling strategies during construction.
11. The product shall be fully accessible to individuals with disabilities.
12. The product shall facilitate easy access to public transportation.
13. The product shall include a comprehensive landscaping plan that enhances the local environment.
14. The product shall implement a water conservation system, including rainwater harvesting.
15. The product shall include a smart building management system to optimize energy usage.
16. The product shall provide ample parking space with electric vehicle charging stations.
17. The product shall have a designated area for community events and activities.
18. The product shall ensure high-speed internet connectivity throughout the complex.
19. The product shall include a health and wellness center for occupants.
20. The product shall incorporate advanced security and surveillance systems.

Module 5 Project Documents: Communications and Policy

Email from Human Resources to Project Manager:

Email from Human Resources to Project Manager

Subject: Assignment of Human Resources to Green Future Office Complex Project

Dear PM,

I hope this email finds you well. As part of our ongoing commitment to the success of the Green Future Office Complex project, we are pleased to inform you of the assignment of new team members to assist in this endeavor.

Full-time Resources:

1. **Anna Martinez** - Senior Architect
2. **Mark Robinson** - Construction Engineer
3. **Linda Wu** - Environmental Specialist
4. **Carlos Hernandez** - Project Accountant
5. **Rachel Kim** - Health and Safety Officer

These individuals will be dedicating 35 hours per week to the project.

Part-time Resource:

1. **Samuel Lee** - Legal Advisor
 - Samuel will be contributing 20 hours per week to provide legal guidance and ensure compliance with regulations.

Please ensure that these team members are integrated into the project and briefed on their respective roles and responsibilities. Should you have any questions or require further assistance, do not hesitate to reach out.

Best regards,
Rachel Cruz
Human Resources Assistant

Email from Legal and Risk Team:

Subject: Potential Legal and Risk Issues Impacting Project Schedule

Dear PM,

As part of our ongoing review of the Green Future Office Complex project, we have identified several potential issues that could impact the project schedule:

1. **Permitting Delays:** There may be delays in obtaining construction permits from local authorities, impacting the project start date.
2. **Environmental Regulation Changes:** Potential changes in environmental regulations could require modifications to project plans, leading to delays.
3. **Supply Chain Risks:** Given current global uncertainties, there might be delays in the supply of key construction materials.
4. **Legal Disputes:** The possibility of legal disputes with contractors or suppliers could result in project interruptions.
5. **Risk of Litigation:** Environmental groups may raise concerns or legal challenges regarding the project's impact, leading to potential delays.

We recommend incorporating contingency plans to mitigate these risks. Please feel free to reach out for any legal advice or further clarification.

Best regards,
Legal and Risk Department

Human Resource Policy: Human Resource Policy: Working Conditions for Employees

Full-Time Employees:

- Defined as employees working 35 hours per week.
- Entitled to a 60-minute break for every 6 hours of work in a day.

Part-Time Employees:

- Defined as employees working 20 hours per week.

This policy is designed to ensure a healthy work-life balance and maintain high productivity levels among all team members. Please ensure adherence to these guidelines.

Module 9 Project Documents: Budget and Salary Overview

Total Project Budget: \$250 Million

- Construction Costs: \$180 Million
- Professional Fees: \$30 Million
- Contingency Funds: \$20 Million
- Post-Construction Expenses: \$10 Million
- Staffing Costs: \$10 Million (included in Professional Fees)

Staff Salary and Benefits Table

Name	Position	Base Salaries (Annual)	Fringe Benefits
Anna Martinez	Senior Architect	\$90,000	Health insurance, 401(k) plan, 4 weeks paid vacation
Mark Robinson	Construction Engineer	\$85,000	Health insurance, 401(k) plan, 3 weeks paid vacation
Linda Wu	Environmental Specialist	\$75,000	Health insurance, 401(k) plan, 3 weeks paid vacation
Carlos Hernandez	Project Accountant	\$70,000	Health insurance, 401(k) plan, 3 weeks paid vacation
Rachel Kim	Health and Safety Officer	\$65,000	Health insurance, 401(k) plan, 2 weeks paid vacation
Samuel Lee	Legal Advisor (Part-Time)	\$50,000 (Pro-rated)	Health insurance (partial), 401(k) plan

Note: Fringe benefits include standard benefits provided to full-time employees, with adjusted benefits for the part-time position.