Project Design Phase
Proposed Solution

Date	17 February 2026
Team ID	LTVIP2026TMIDS88973
Project Name	Civil Engineering Insight Studio
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in the proposed solution template.

S.No.	Parameter	Description
1	**Problem Statement (Problem to be solved)**	Civil engineering projects often face poor communication, scattered data, manual monitoring, and delayed decision-making. Engineers and project managers struggle to manage drawings, reports, and site updates efficiently, which leads to project delays, cost overruns, safety risks, and reduced productivity.
2	**Idea / Solution Description**	Civil Engineering Insight Studio is an AI-powered platform that collects, analyzes, and manages construction and project data in one centralized system. It provides real-time monitoring, smart insights, voice and text updates from sites, and intelligent decision support to improve project planning, execution, and management.
3	**Novelty / Uniqueness**	The solution integrates artificial intelligence, real-time data analysis, and centralized dashboards specifically for civil engineering projects. Unlike traditional project management tools, it provides intelligent insights, automated report analysis, predictive alerts, and smart decision-making support tailored for construction and infrastructure projects.
4	**Social Impact / Customer Satisfaction**	The solution improves construction quality, safety, and efficiency. It reduces project delays and costs while enhancing communication among engineers and workers. It supports smart infrastructure development and increases customer satisfaction by making project management faster, safer, and more reliable.
5	**Business Model (Revenue Model)**	Revenue can be generated through subscription plans for construction companies, licensing to infrastructure firms and government agencies, premium analytics features, enterprise solutions, training services, and partnerships with construction and engineering software providers.
6	**Scalability of the Solution**	The solution is highly scalable as it is AI and cloud-based. It can be used by construction companies worldwide, adapted to different types of civil engineering projects (buildings, roads, bridges, smart cities), and integrated with existing engineering and project management tools. As more users join, the AI system becomes more accurate and efficient.