Bridge_GAD User Manual

Software: Bridge_GAD
Version: 2.0.0
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License: Open Engineering Utility (Educational Use)

Introduction

Bridge_GAD is an automated tool for **Bridge General Arrangement Drawing (GAD) generation**, developed to assist engineers, designers, and students in quickly preparing standard bridge layout drawings.

It simplifies: - Superstructure and substructure parameter inputs - Span geometry generation - Abutment, pier, and bearing detail configuration - Export of computed layouts to CAD formats

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System Requirements

- Windows 10 or later (64-bit)
- Minimum 4 GB RAM
- Python not required (standalone .exe)
- Optional: AutoCAD for DWG viewing

Installation

1. Download `Bridge_GAD_Setup.exe` from GitHub Releases
2. Run the installer and follow on-screen instructions.
3. Launch Bridge_GAD from Desktop or Start Menu.

Graphical User Interface (GUI)

Upon launch, the splash screen appears with project credits.

Main Modules

- **Input Panel:** Define bridge geometry and loading parameters

- **Analysis Engine:** Performs structural computation

- **Output Tab:** Exports results and drawings

Menubar
- **File → Open/Save Project**
- **Help → About**
- **Help → Check for Updates**

Command-Line Mode (Optional)

If you prefer terminal usage, you can run:

```
Bridge_GAD.exe --input project.json --output results/
```

Updating

The application automatically checks for new versions from GitHub. You can also check manually via **Help → Check for Updates**.

Credits

Developed and maintained by
Er. Rajkumar Singh Chauhan, Retd. Addl. Chief Engineer, PWD Rajasthan
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