

SUCCESS STORY

1. NAME OF WORK:-

Construction of Major Bridge at village Birwadi on Birwadi Walan Sandoshi Road SH 102 Taluka- Mahad, Dist-Raigad.

Transformation of Rural Connectivity through Major Bridge over the Kal River on Birwadi Walan Sandoshi Road SH 102, Tal-Mahad, Dist-Raigad

2. BACKGROUND / PROBLEM STATEMENT:-

The village of Birwadi is located along the Birwadi - Walan - Sandoshi Road (SH-102) in Mahad Taluka, where a river/nallah crossing had long posed a serious connectivity challenge. Before implementation of the project, the absence of a permanent bridge caused frequent disruption of traffic, especially during the monsoon season, when water levels rose sharply and made the crossing unsafe or completely inaccessible.

Residents of Birwadi and surrounding villages such as Walan, Sandoshi, nearby habitations, and interior settlements faced major difficulties in accessing markets, educational institutions, healthcare facilities, and government services. During heavy rainfall, the road link was often cut off, forcing commuters to take long detours or postpone travel entirely.

This situation resulted in increased travel time, higher transportation costs, and serious safety risks, particularly for students, farmers, senior citizens, and emergency services. Construction of a major bridge at Birwadi was therefore essential to ensure uninterrupted connectivity, reduce travel distance, improve safety, and support socio-economic development in the region.

Key Issues Identified:-

- Lack of All-Weather Connectivity**

Absence of a permanent bridge caused traffic disruption and isolation during monsoon and emergencies.

- Frequent Traffic Interruptions**

Seasonal flooding and waterlogging made the existing crossing unreliable and unsafe.

- Safety Concerns**

Risky river crossing posed danger to pedestrians, students, elderly citizens, and patients.

- Educational Difficulties**

Students faced irregular attendance due to unsafe and unreliable access to schools and colleges.

- Limited Access to Healthcare and Markets**

Delayed access to hospitals, weekly markets, and essential services affected daily life.

- Hindered Socio-Economic Development**

Poor road connectivity restricted trade, agricultural transport, employment opportunities, and regional growth.

Due to these issues, **local villagers, farmers, and students were severely impacted**. The project was necessary to enhance mobility, ensure inclusive development, strengthen regional connectivity, and reduce risk to human life.

3. PROJECT OVERVIEW:-

Construction of Major Bridge at village Birwadi on Birwadi–Walan–Sandoshi Road (SH-102), Taluka Mahad, District Raigad

- **Location:** Near Birwadi Village, Taluka Mahad, District Raigad
- **Implementing Agency:** Public Works Department
- **Project Cost:** As sanctioned
- **Time Period:** As approved
- **Funding Source:** State Government / NABARD Loan Assistance
- **Bridge Type:** Major Bridge
- **Carriageway Width:** As per SH standards
- **Foundation & Structure:** Open foundation, piers and abutments, bearings, expansion joints, deck slab, and safety railings as per approved design.

4. CHALLENGES FACED:-

During execution, the project encountered several challenges:

- **Monsoon and Seasonal Constraints**

Heavy rainfall and sudden rise in water levels restricted working days, delayed construction activities, and required enhanced safety measures.

- **Traffic Management on State Highway**

As the road is part of SH-102, maintaining smooth traffic flow during construction demanded careful planning and coordination.

- **Material Transportation and Site Accessibility**

Transportation of construction materials and machinery to the site was challenging due to weather conditions and limited working windows.

5. INNOVATIVE SOLUTIONS / ACTION TAKEN:-

To overcome these challenges, the following measures were adopted:

- **Monsoon-Oriented Work Planning**

Critical river-related works were executed during non-monsoon periods, while protective arrangements and safety protocols were implemented during the rainy season.

- **Phased Construction and Traffic Management**

Construction was carried out in planned phases to ensure minimal disruption to traffic on SH-102.

- **Efficient Logistics and Resource Utilization**

Material supply schedules were optimized and locally available resources were used wherever feasible to reduce delays.

6. IMPLEMENTATION PROCESS:-

- **Planning:**

Detailed surveys, design approvals, and realistic scheduling with competent authority approvals.

- **Execution:**

Mechanized construction with adherence to timelines and safety standards.

- **Monitoring:**

Regular site inspections, coordination meetings, and progress reviews.

- **Quality Control:**

Material testing and strict compliance with IRC, MoRTH, and departmental specifications.

7. RESULT & IMPACT:-

The project delivered significant and measurable outcomes:

- **Improved Connectivity and Traffic Flow**

The bridge has ensured uninterrupted connectivity on SH-102, benefiting Birwadi and surrounding villages.

- **Enhanced Safety and Year-Round Accessibility**

All-weather access has eliminated risks associated with seasonal flooding and unsafe crossings.

- **Positive Impact on Education and Healthcare**

Students, patients, and emergency services now enjoy faster and safer access to schools, colleges, and hospitals.

- **Boost to Local Economy and Agriculture**

Improved transport has facilitated movement of agricultural produce, goods, and labour, supporting local economic growth.

- **Strengthened State Highway Infrastructure**

The bridge has added a durable and strategic asset to SH-102, supporting long-term regional development.

8. BENEFICIARY FEEDBACK / HUMAN ANGLE:-

Local residents, farmers, students, and elderly citizens have expressed satisfaction and relief after completion of the bridge. What was earlier a risky and uncertain crossing, especially during monsoon has now become a **safe, smooth, and reliable route**, improving daily life and access to essential services.

9. CONCLUSION:-

The construction of the **Major Bridge at Birwadi on Birwadi–Walan–Sandoshi Road (SH-102)** has successfully resolved a critical connectivity issue in Mahad Taluka. Through effective planning, timely execution, and coordinated efforts, the project has delivered a robust infrastructure asset with long-term social and economic benefits.

The bridge now serves as a vital link in the regional road network, ensuring safe, year-round connectivity and contributing positively to the development of Raigad district.

VARIOUS STAGES OF CONSTRUCTION

BEFORE EXECUTION



WHILE EXECUTION



AFTER COMPLETION

