

**BRIDGE IT NZ**



# Customised Forestry **bridges**



We are specialists in small to medium bridge projects, building bridges between six and fifty metres for clients who need an experienced team to manage the complete project. With over 300 bridging projects successfully completed, we ensure you get the right bridge for your needs. Drawing on our expertise and collaborating closely with you, we deliver customised solutions to meet the specific infrastructure needs of the forestry sector.

Time sensitive harvest operations and complex site requirements are challenges we have the experience to tackle. Whether you need a permanent, relocatable, low level submersible or temporary bridge, we offer a range of bridge types that are completely customised to your unique situation.

All our bridges meet HN-HO-72 bridge loading standard and are designed for heavy capacity - accommodating overload machinery such as skids and haulers. We're adept at varying our designs to ensure compliance with Local District Council Resource Consent parameters or NES PF permitted activity.



Choosing which river crossing structure is best for your needs depends on a range of variables. Bridges and culverts both allow you to cross waterways unimpeded, but their upfront cost, ongoing maintenance, environmental impact, and long-term suitability can be vastly different from one another.

On the surface culverts can appear to be more cost effective in the short term. However, the risk of debris blockages, blow outs and impacts during flood events can cause disruption and increase your liability. If your water flow is high some or all of the time, our recommendation is to install a bridge.

**A single span bridge has a range of benefits:**

- Ideal for rivers that have a large and variable water flow
- Can cope with steep riverbed gradients and fast moving water

- Allows full channel capacity and debris clearance in extreme flood events
- Causes minimal disturbance so good for ecologically-sensitive riverbeds and unstable banks
- No barrier to fish passage
- Low ongoing maintenance
- Provides all weather access (unless submersible)
- Reduces erosion risk as it does not change the channel capacity
- Little or no modifications are required to riverbeds or banks

## Forestry Bridges

### Steel Beam with Timber Deck

HN-HO-72 clear spans: 7m - 35m+,  
Typical depth: 910mm - 1800mm

**Benefits**

- Long beams can be transported to site in sections and spliced on site so access is less critical
- Flexible design - variety of spans, widths and depths can be made to work in with road grades and alignments
- All superstructure components can be prefabricated off site
- Can often be installed without cranes
- Can be designed for disassembly and relocation – spreading cost of bridge over multiple harvests



### Pre-stressed Concrete Beams

HN-HO-72 clear spans 8m - 12m, Typical depth: 425mm - 850mm

**Benefits**

- Simple installation
- Relatively low production costs

## Steel Beam with Concrete Deck

HN-HO-72 clear spans: 7m - 50m+,

Typical depth: 625mm - 1700mm

### Benefits

- Long beams can be transported to site in sections and spliced on site so access is less critical
- Flexible design – variety of spans, widths and depths can be made to work in with road grades and alignments
- All superstructure components can be prefabricated off site
- Can often be installed without cranes
- Composite action of steel and concrete means a shallower depth beam can be used (compared to steel beam and timber deck bridges)
- Ideal for longer spans
- Cost effective - longer span bridges can reduce requirements for retaining and have increased life span due to the concrete deck



## Temporary Bridge

HN-HO-72, 6m and 12m

### Benefits

- Short span temporary bridges are available for rental
- Ideal for smaller harvest lots where you don't want to outlay money on capital assets



## Low Level Concrete - Submersible

HN-HO-72 clear spans: 0m - 12m, Typical depth: 350mm

### Benefit

- Simple installation
- Robust units
- Low profile
- Adaptable to different crossing widths and alignments
- Designed to allow for debris and hydraulic loads
- Can be relocatable in some cases
- Can be installed at low levels to avoid need for building consent
- Can be used (site dependent) in replace of a larger span bridge, which requires to clear flood heights, making it a more cost-effective solution

- Seen as a favourable solution by local Councils (compared to culverts) as the bridge is designed to maintain flow and fish passage and considered a relatively low risk from a flood hazard perspective

### Considerations

- Generally over top multiple times per year
- Appropriate for sites with good rock layer (not erodible soil type)
- Appropriate for low catchment areas
- If high catchment area - is there appropriate area for spillway
- Approaches are likely to wash out in flood event

## Choosing a professionally designed bridge is a cost effective investment

- An environmentally sensitive solution preferred by councils
- Built to last and withstand extreme weather
- Requires less ongoing maintenance
- Simple consenting and year round installation

## What our clients are saying

### Juken NZ Ltd - Patrick Bethel

JNL chose to deal with Bridge It NZ because their solution was effective, economic and the best environmental decision. Pat says the company's advice, service, execution and delivery was excellent.

*"We were delayed a couple of times along the way because of COVID-19. But Bridge It NZ were great at communicating with us. The situation was difficult, but they were easy to deal with and very forthcoming with what was going on."*

### Aratu Forests Ltd - Andy Costello

*"Thanks to the efforts of people like you who have supported us through this project we have been able to provide safe access to the forest for the dozens of people whose workplace it will be over the coming years."*

### PF Olsen Ltd - Rob Daunton

*"Thank you for the excellent service you provided in building the bridge for us near Tokomaru Bay."*





Contact us today to discuss your bridging needs for your upcoming harvest  
[www.bridgeitnz.co.nz](http://www.bridgeitnz.co.nz) | Phone 0800 222 189

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