BUILDING NEW BRIDGES

www.eco-span.com

PRETEK GROUP
THE PROCESS
Accelerate your small bridge project with a long-lasting, economical, custom-designed modular arch system.

1. Project Assessment
PreTek’s application designers provide alternatives and technical support to ensure that all goals are met in the most economical way.

2. Design
The structure is designed for appropriate code, loading and geometry requirements as defined by the owner and engineer of record. Drawings and calculations are sealed by a professional engineer.

3. Casting
The precast arch system is plant-produced per ASTM C1504 at facilities approved by the National Precast Concrete Association (NPCA) and/or the American Concrete Pipe Association (ACPA).

4. Foundations/Site Work
While precast components are manufactured off-site, the contractor performs the site work, reducing overall construction time.

5. Transportation/Installation
Precast components arrive on flatbed trailers, ready for installation. The modular system, including precast concrete headwalls and wingwalls, is set in place, often in a matter of hours.

6. Finished Structure
After grouting, joint seal, backfill and paving, the structure is ready for traffic. The new arch bridge is durable, economical and aesthetic.
BURIED ARCHES: part culvert, part bridge—all value!

Buried arch bridges are an effective hybrid between culverts and conventional bridges because they combine the strongest features of each structure to offer several unique advantages:

- In smaller streams, arch spans up to 84’ eliminate the need for piers, which often cause sedimentation and debris build-up in the channel. These problems may lead to increased maintenance costs, risk of flooding and scour problems due to higher velocity.
- The open bottom allows a natural stream bed to be maintained, even during construction, which streamlines the permit process.
- Ride quality is improved and there is no need for approach slabs. The arch shape provides a gradual transition on and off the structure.
- Bridge deck maintenance and freezing are eliminated because there is no bridge deck. Pavement may be continuous across the bridge for optimum ride quality.
- Utilities can typically be buried in the fill over the arch.
- Long service life plus minimal maintenance equals lower life cycle cost.

Instant Design™

Fast, free, custom estimates and designs

It’s the most advanced online design tool for precast concrete three-sided structures. Receive budget pricing, product application drawings and more.

Features

- Basic drawings and details are typically available in 30 minutes or less. Budget pricing provided within one business day after review by one of our design professionals.
- Drawings are ideal for inclusion in type/size/location studies, permit applications, proposals and project meetings. More detailed drawings including foundation designs may be developed quickly based on information provided by the user.

Start your project today at

www.eco-span.com

* Long service life plus minimal maintenance equals lower life cycle cost.
## VERSA™ SERIES

### Multiple-Radius

<table>
<thead>
<tr>
<th>WATERWAY</th>
<th>VM33</th>
<th>VM38</th>
<th>VM41</th>
<th>VM44</th>
<th>VM55</th>
<th>VM60</th>
<th>VM66</th>
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<tbody>
<tr>
<td>SPAN</td>
<td>14' 1'-5 1/2&quot;</td>
<td>13' 1'-5 1/2&quot;</td>
<td>13' 1'-5 1/2&quot;</td>
<td>13' 1'-5 1/2&quot;</td>
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<td>13' 1'-5 1/2&quot;</td>
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<tr>
<td>RISE</td>
<td>14-1'-0&quot;</td>
<td>13'-0&quot;</td>
<td>13'-0&quot;</td>
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### Single-Radius

<table>
<thead>
<tr>
<th>WATERWAY</th>
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<th>VS37T</th>
<th>VS42T</th>
<th>VS48T</th>
<th>VS54T</th>
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### Nominal Bridge Unit Length:

- VM17-VM33: 8'-0"
- VM33-VM48: 6'-0"
- VM55-VM66: 4'-0"
- VM48T-VM54T: 18'-0"

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</table>

### Nominal Bridge Unit Length:

- VS8-VS30: 8'-0"
- VS37T- VS42T: 18'-0"
- VS48T- VS54T: 18'-0"

**"T" DESIGNATION DENOTES TWIN-LEAF INSTALLATION**
**ANCHOR WALL SYSTEM**

Time-saving hybrid cantilever precast concrete wall

**Advantages**

- Rigid, cantilever design on concrete foundations works well around culverts and streams.
- May be designed to resist bridge rail impact and highway or railroad surcharge.
- Heights up to 20' with no straps—minimal interference with utilities.
- Easily accommodates form liner finishes and complex alignments.
- Large pieces minimize installation time.
- Less concrete and less excavation compared to L-shaped or traditional cantilever walls.
- Temporary bracing is typically not required.
- May be designed for various backfill types.
- Foundations may be precast or cast-in-place.