**DUTCH HILL ROAD TIMBER BRIDGE, Crawford County, Pennsylvania**

**Type:** Stress-laminated deck  
**County:** Crawford  
**Owner:** City of Titusville  
**Built in:** 1992  
**Engineer:** Northwest Engineering, Inc.  
**Spans over:** Hammond Run Creek  
**Bridge length:** 26'-0 1/2"  
**Roadway width:** 28'-0"

**Directions:** From Titusville, south on PA 8, .5 miles to the intersection of PA 8 and Dutch Hill Road. Left turn onto Dutch Hill Road. The bridge site is 200 feet from the intersection of Dutch Hill Road and PA 8.
## GEOMETRY

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Spans:</td>
<td>1</td>
</tr>
<tr>
<td>Out-to-out length:</td>
<td>26'-0 1/2”</td>
</tr>
<tr>
<td>Center-of-bearing length:</td>
<td>24'-0”</td>
</tr>
<tr>
<td>Skew:</td>
<td>15 degrees</td>
</tr>
<tr>
<td>Number of lanes:</td>
<td>2</td>
</tr>
<tr>
<td>Out-to-out width:</td>
<td>30'-0”</td>
</tr>
<tr>
<td>Curb-to-curb width:</td>
<td>28'-0”</td>
</tr>
<tr>
<td>Superstructure square footage:</td>
<td>780</td>
</tr>
<tr>
<td>Design load:</td>
<td>AASHTO HS-25 and ML-80</td>
</tr>
<tr>
<td>Design by:</td>
<td>Northwest Engineering, Inc.</td>
</tr>
<tr>
<td>Abutment material:</td>
<td>Timber pile</td>
</tr>
<tr>
<td>Total wood quantity:</td>
<td>13,200 bf</td>
</tr>
<tr>
<td>Total steel quantity:</td>
<td>2324 lbs</td>
</tr>
</tbody>
</table>

## MATERIAL

### DECK
- **Material:** Wood
- **Grade:** Structural no. 1 or better
- **Species:** Red maple*
- **Sizes used:** 2” x 15”
- **Quantity:** 11,700 bf
- **Preservative treatment:** Creosote
- **Specification:** AWPA C1-84
- **White oak facia boards**

### BEAMS/STRINGERS (none)

### GUIDERAIL CURB
- **Material:** Wood
- **Grade:** Structural no. 2 or better
- **Size:** 6” x 12”
- **Quantity:** 325 bf
- **Preservative Treatment:** Creosote

### GUIDERAIL
- **Material:** Wood
- **Grade:** Structural no. 2 or better
- **Size:** (2) 8” x 8”
- **Quantity:** 800 bf
- **Preservative treatment:** Creosote

### GUIDERAIL POSTS
- **Material:** Wood
- **Grade:** Structural no. 2 or better
- **Sizes used:** 10” x 12”
- **Quantity:** 375 bf
- **Preservative treatment:** Creosote
- **Specification:** AWPA C1-84

### STRESSING STEEL
- **Grade:** ASTM A722
- **Bar Diameter:** 1”
- **Coating:** Galvanized
- **Quantity:** 2324 lbs
- **Bearing plate size:** 12” x 14” x 1”

## FUNDING SOURCES:
USDA Forest Service: $7,000; Balance of funding from the Pennsylvania Department of Transportation local funds.

## LOCAL CONTACT:
City Manager
City of Titusville
107 North Franklin St.
Titusville, PA 16354
Phone: 814-827-5302

Information provided by The Pennsylvania Department of Transportation and derived from plans for Dutch Hill Road bridge crossing Hammond Run Creek.

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Federal Grant Identifier: NA-89-0224

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Northeastern Area State and Private Forestry
The National Wood In Transportation Program