



Section through a pylon leg between the bottom and the first stay anchor.

at a deck joint in span 11. The post-tensioning consisted of nine tendons each with seven 0.6-in.-diameter strands evenly distributed across the deck.

### Finishing Touches

Late in the project development, the city of Eugene secured additional funding through the American Reinvestment and Recovery Act (ARRA), which led to the installation of energy-efficient LED luminaires to replace the planned incandescent bulbs.

In addition to the energy-efficient luminaires, the ARRA funds allowed

additional aesthetic touches to be added, including red LED rope lights on the deck edge and top stay of the main spans that make the bridge a strong visual experience day and night, pushing the bridge toward “landmark” status within the community.

In November 2010, the Delta Ponds Pedestrian Bridge opened for use. Long awaited by the public, the bridge was instantly appreciated for its graceful form and

has become a beacon for bicyclists and pedestrians, adding to Eugene’s reputation for accommodating environmentally friendly commuting options.

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Daytime closures on Delta Highway were out of the question, so crews erected the precast concrete pylon tower and placed the precast deck panels at night.



Placing the main span topping slab on the precast panels. The longitudinal post-tensioning ducts can be seen between the curbs of the precast panels.

## AESTHETICS COMMENTARY

by Frederick Gottemoeller



This bridge is an excellent example of how a community can get more use out of a favored and well-loved park. The alignment itself reminds one of a stroll through the woods. It curves around obstacles and over conflicting uses like a meandering park walkway, but in the air.

On its way it creates a dramatic landmark for the community and the park. The tower and cable planes impose an easily understood geometric silhouette on the sky. The tower’s arms are simple, thin rectangular prisms. The angle of the tower’s arms is well chosen. The tower recalls the triumphant “Touchdown” gesture well known in football. Bracing of the arms at their base is achieved not by thickening the arms, but by thin triangular walls, leaving a V-shaped slot that preserves the view through the tower. The arms end equally well, with a simple diagonal slice.

The semi-harp stay pattern is also well chosen. The stays create a fascinating moiré pattern of interacting lines that shift and change as drivers move under the bridge. The red color brings out the pattern on both sunny and cloudy days. The lighting of the upper stay preserves the bridge’s memorable image at night.

Finally, the short spans on the approach allow the thin deck of the cable-supported span to continue unchanged to the abutment, giving the whole structure a unified appearance. Short spans allow thin columns. Even though there are many of them, their thinness and their simple shape means that the views through the bridge are not significantly interrupted. Designers often assume that long spans are better for appearance. That is true in many cases, but this is not one of them. Plus, the economy of the short spans has allowed the community to obtain a signature bridge at a remarkably low price.