



## Project Management Team (PMT) and Project Leadership

The Project Management Team (PMT), a multi-agency stakeholder team, oversees the Hoover Dam Bypass project. The PMT is led by the Central Federal Lands Division of the Federal Highway Administration (FHWA). The PMT consists of the Arizona and Nevada Departments of Transportation, the U.S. Bureau of Reclamation, the National Park Service, and the Western Area Power Administration. This Team has been and continues to be committed to working together to advance the Hoover Dam Bypass Project as quickly as possible and complete this much needed alternative route around Hoover Dam.

**Nevada Department of Transportation  
National Park Service,  
Lake Mead National Recreation Area**

**Federal Highway Administration**  
Arizona Division • Nevada Division  
Central Federal Lands Highway Division

**Design Team**  
HDR Engineering  
Sverdrup Civil  
T.Y. Lin International

**Environmental Impact Study Consultant**  
CH2M HILL

**Arizona Department of Transportation  
U.S. Bureau of Reclamation,  
Lower Colorado Region  
Western Area Power Administration**

**Contractors**  
R. E. Monks Construction  
Vastco Inc.  
Edward Kraemer & Sons, Inc.  
Obayashi Corporation  
PSM Construction USA, Inc.



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# HOOVER DAM BYPASS UPDATE

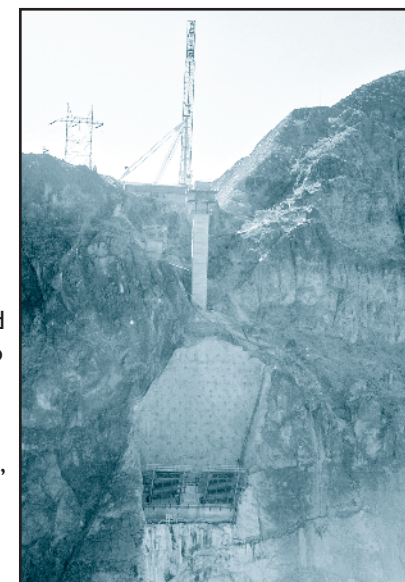
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## Colorado River Bridge Project Resumes Full Construction

### Aggressive Site Work Underway While Replacement Highline System is Fabricated

Work continues on the Hoover Dam Bypass project while a new highline system is fabricated. The joint venture partnership of Obayashi Corporation and PSM Construction USA, Inc. has implemented measures to continue work despite the significant delay caused when the two highline tower cranes, located on opposite sides of the Colorado River Bridge, fell unexpectedly during a windstorm last fall.

In order to resume construction, the contractor has employed two state-of-the-art interim cranes to shoulder the work of the highline system. The Manitowac 2250 has a 330-ton



The S70 Derrick crane is located behind the bridge abutment on the Arizona side of the bridge. Below the crane on the canyon wall is one of the pier columns, and the excavation and footing at the Arizona end of the arch.

capacity with a 320-foot boom and is located on the Nevada side of the bridge. The S70 Derrick crane with a 135-ton capacity and a 330-foot boom was placed behind the bridge abutment on the Arizona side of the bridge. There are very few of these cranes in existence. They were shipped from across the country, with portions coming from as far away as Scotland, specifically for this project. The equipment has made possible the construction of columns, pier caps, box girders, and the initial arch segments.

The new highline system is currently being designed and fabricated for delivery beginning in August. It will be operational in late 2007. While constructing

a new highline system is critical to the efficient completion of this project, it has resulted in a revision of the overall schedule with completion of the bridge in mid-2010 and the opening of the Bypass in late 2010.

*"As the contractor, we count it a privilege and an honor to work on this monumental structure and we are committed to its successful completion. Our goals are to build the bridge with high quality and with 'Safety First' as our motto."*

— Jim Stevens, Project Sponsor  
Obayashi Corporation and PSM Construction USA, Inc.

The \$240 million Hoover Dam Bypass project was conceived to address a number of traffic congestion and safety issues related to the function of highway U.S. 93 and its crossing of Hoover Dam. The roadway is the primary route for commerce and travel between Phoenix and Las Vegas, with more than 17,000 vehicles using this section of highway each day. The accident rate in the bypass area is three times higher than the rest of U.S. 93.

## Arch Construction Begins

### Initial Segments Underway

By the end of July, the first segments at the ends of each arch will be complete. These initial portions are being constructed in segments conventionally by pouring concrete in incremental sections. When complete, the two arches will contain a total of 106 individual segments, 53 in each arch. Work on remaining portions of the arch will begin once the contractor's highline is reactivated. Construction of the twin-rib arch, the longest in the Western Hemisphere, will take approximately 18 months.

Watch for more detailed arch construction information in future newsletters.



The Manitowac 2250 crane is located on the Nevada side of the bridge and is being used to construct pier caps and columns.

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Visit our website:  
[www.hooverdambypass.org](http://www.hooverdambypass.org)

Commercial vehicle restrictions are still in effect for travel across the Hoover Dam. If you have questions about these restrictions, please call the Hoover Dam Restriction Hotline at 1-888-248-1259.

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## Colorado River Bridge, officially designated the Mike O'Callaghan-Pat Tillman Memorial Bridge

The bridge portion of the Hoover Dam Bypass project has been officially named by the United States Congress as the "Mike O'Callaghan-Pat Tillman Memorial Bridge". The name honors two prominent local citizens who dedicated themselves to public service and the greater good.

Mike O'Callaghan was a longtime Nevadan and former Governor who also served as a prominent community leader and businessman. After he left office, he became the executive editor

of the Las Vegas Sun, a position he held for 25 years. He died in March 2004 at the age of 74.

Pat Tillman graduated Summa Cum Laude from Arizona State University where he was one of the University football team's leading defensive players. He later played professional football for the Arizona Cardinals before he joined the Army in 2002. Tillman was killed in Afghanistan during Operation Enduring Freedom in April 2004 at the age of 27.

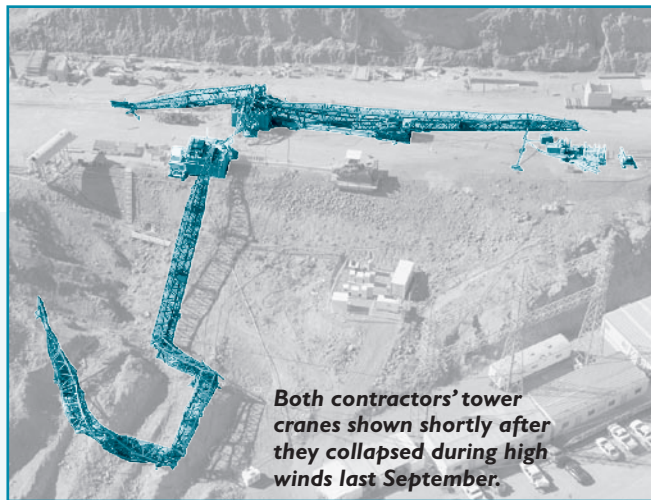
## Highline System Essential for Bridge Construction

The highline system is a critical part of the overall project, because it will allow materials to be delivered out over the canyon while work is underway on the 1,900-foot-long Colorado River Bridge. Here's how it works: Two tower cranes are built on opposite sides of the canyon, forming dual highlines. Once the highlines are erected, the entire length of the bridge becomes accessible to the crane hook for delivery of materials used in the main arch crossing, columns, and the superstructure.

The contractor, a joint venture team of Obayashi Corporation and PSM Construction USA, Inc., is working to design, procure, and fabricate a new highline system. Both firms are leaders in construction of this magnitude and bring years of valuable experience to the project. The replacement highline is expected to be operational in late 2007. The multi-agency project management team has worked closely with the joint venture contractor team to minimize impacts to the schedule and the traveling public, and is focused on completion of this highly important project.

## Investigation Continues of Tower Collapse

The investigation continues into the contractors' highline tower cranes collapse. Wind speeds of up to 55 mph were recorded at the site prior to the contractors' tower failure. Numerous parties were involved in development, reconditioning, and operation of the contractors' original cable crane system – including suppliers, subcontractors, fabricators, engineers, and insurers - and each has been asked to contribute to the investigation effort. At this time, it appears that the refurbished Nevada South tower failed initially and so it is the focus of the ongoing investigations. Once the Nevada South tower failed, support cables to the adjoining towers were compromised, which caused the remaining towers to fall. The contractor team is continuing their investigation to determine the actual point of failure and underlying cause related to the Nevada South tower's failure.



Prior to the unexpected collapse of the contractors' highline delivery system, all aspects of the multi-year project were proceeding on schedule. Today, the majority of the Bypass project has been completed on time and on budget.

While the joint venture and multi-agency project management team are disappointed by the delay, everyone is working together to advance the project as aggressively as possible in order to achieve the new completion date.

## Revised Schedule

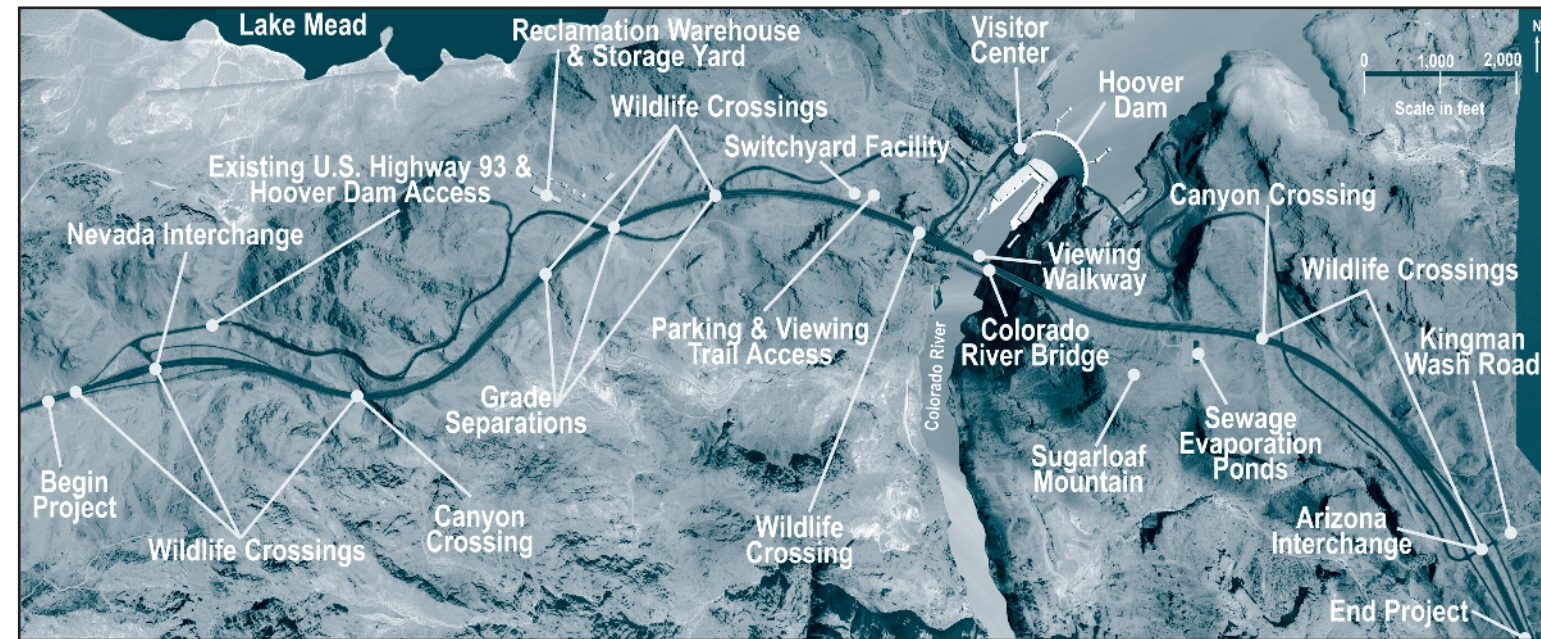
A revised schedule for completion of the Hoover Dam Bypass project is being finalized. While still under development, the overall schedule and opening of the bypass will be delayed about two years until late 2010. There are a number of alternatives under consideration that could shorten the schedule by a few months.

The project team looks forward to completing the Hoover Dam Bypass. The project will reduce congestion, improve highway safety, and provide security to dam operations and visitors.

Project Schedule	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Begin Design	◆									
Preliminary Design		■								
Final Design			■							
Transmission Relocation Phase 1				■						
Arizona Approach					■					
Transmission Relocation Phase 2						■				
Nevada Approach							■			
Colorado River Bridge								■		
Paving									■	
Open to Traffic										◆

## The Hoover Dam Bypass Project – an Overview

### A Vital Link for Trade, Travel and Tourism



Hoover Dam Bypass Project Components

When the \$240 million Hoover Dam Bypass is complete in 2010, more than 17,000 cars, trucks and other vehicles will travel on a wider, safer and less congested U.S. 93 across the Colorado River. Likewise, visitors to the Hoover Dam will experience improved access and parking, a trail and pedestrian plaza, and a walkway for enjoying the views of the majestic Hoover Dam and Lake Mead. The Bypass, with its many benefits, has been a major focus for the Federal Highway Administration, the states of Arizona and Nevada, and the U.S. Bureau of Reclamation for more than a decade.

The original U.S. 93, which was constructed in 1936, crosses Hoover Dam and serves as the:

- Designated CANAMEX Corridor – the commercial route related to the North American Free Trade Agreement
- Major commercial route between the states of Arizona, Nevada, and Utah, and
- Primary route for travel between Phoenix and Las Vegas – two of the fastest growing cities in the United States

By developing an alternate crossing of the river near Hoover Dam, car and truck traffic passing through will be removed from the top of the dam. This will eliminate frequent congestion resulting in gridlock and improve safety by eliminating the extensive pedestrian/vehicular interface that exists on and near the dam. This new route, the Hoover Dam Bypass, will also eliminate the problems with the existing highway – sharp turns, narrow lanes, inadequate shoulders, poor sight distance, and low travel speeds that exacerbate the severe congestion and safety deficiencies.

The new Hoover Dam Bypass will include approximately 3.5 miles of new four-lane highway and a 1,900 foot-long bridge over the Colorado River about 1,500 feet south of the dam, and ties into existing U.S. 93 on the east and west. The bridge portion of the Hoover Dam Bypass project has been officially designated by the United States Congress as the "Mike O'Callaghan-Pat Tillman Memorial Bridge." The bridge's name honors two prominent local citizens who dedicated themselves to public service and the greater good.

## Four Phases of Construction

- **Arizona Approach** – \$21.5 million project completed in December 2004 by joint venture contractors R.E. Monks Construction and Vastco, Inc.
- **Nevada Approach** – \$30.1 million project completed in November 2005 by contractor Edward Kraemer & Sons, Inc.
- **Colorado River Bridge** – \$114 million project, currently 55% complete and expected to be fully constructed in mid-2010, joint venture contractors Obayashi Corporation and PSM Construction USA, Inc.
- **Final roadway surfacing** with the Bypass open to traffic in late 2010.