

# On the Road

## ON THE RELIEF ROUTE-S.R.1

### Route 7 to U.S. Route 113

Issue 10

Summer 1992

## PUNCHEON RUN ALTERNATIVE SELECTED

### Year-long public process yields a scaled-back solution

Following nearly a year of intensive community involvement and technical study, the Delaware Department of Transportation recently recommended a scaled-back version of the Puncheon Run connector as the highway link between the Relief Route/Dover bypass and south US Route 13.

The proposal calls for a limited-access highway between Lafferty Lane and the Webbs Lane vicinity. This highway will connect to US Route 13 just north of Webbs Lane. Route 13 from this point

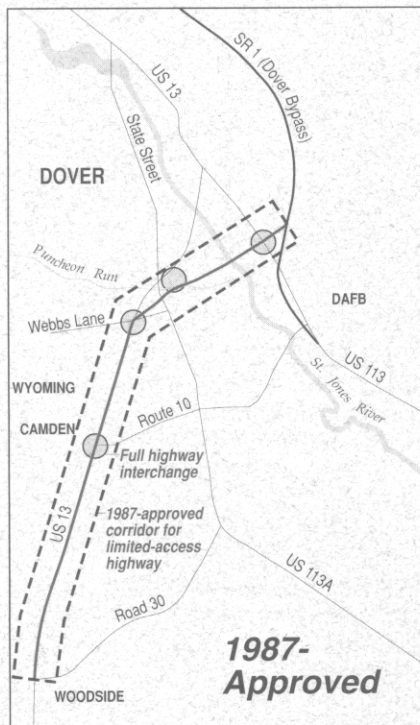
south to Woodside will remain essentially as it is today. Detailed design will be developed in upcoming months. In the future, DelDOT may add extra lanes along the median of Route 13 (within the roadway's existing right-of-way), to accommodate increases in traffic volumes.

DelDOT made its long-awaited decision after conducting the last of a series of well-attended public workshops used to garner community input in the process of reevaluating alternatives. More than 400 people attended DelDOT's fourth public workshop on July 30th to review seven final alternatives under consideration. With "Scorecards of Impacts" in hand—itemizing the impacts of each of the seven alternatives—a record 82 percent of attendees took time to identify their preferred alternatives and to write comments and suggestions, frequently citing the importance of moving the project forward in a timely manner.

One of two new options presented at the workshop was the "Modified Puncheon Run 2" alternative; it was designed to minimize impacts on businesses in the Route 13 and Webbs Lane vicinity while maintaining an adequate level of service for traffic projected through the year 2010. DelDOT will now begin the design phase of this segment of the Relief Route project using this alternative.

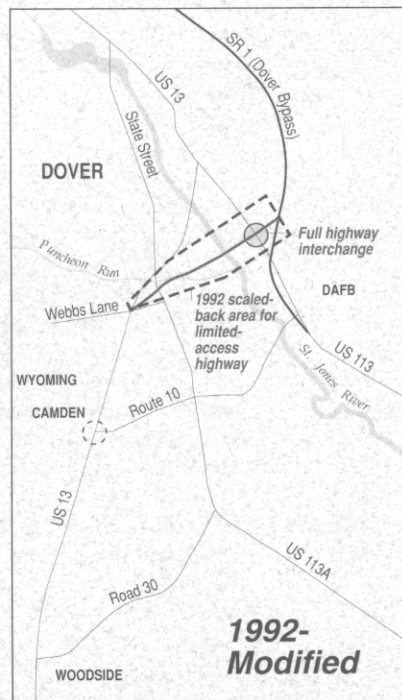
At a late-August press conference, Ray Harbeson, DelDOT's chief highway engineer, expressed great satisfaction with the results of the year-long process: "We've reached a good, workable compromise. In 1987 we committed to performing a comprehensive reevaluation

("Puncheon Run" continues on page 4)



**Above:** The 1987-approved plan called for a limited-access connection between the Webbs Lane vicinity and SR 1, plus the upgrade of US Rt 13 to a limited-access highway with service roads south to Woodside.

**Right:** The 1992-modified plan has a limited-access connection from the Webbs Lane vicinity to SR 1, but improves US Rt 13 south to Woodside only within its existing right of way, maintaining property access.



Delaware Department of Transportation

Mark A. McNulty  
Acting Secretary

On the Road is published periodically by the Delaware Department of Transportation and is the official newsletter of SR 1, the US Route 13 Relief Route.

#### ATTENTION DOVER-AREA RESIDENTS AND BUSINESSES

Notices of the Design Public Hearing for the Puncheon Run segment will appear in early 1993 in local newspapers and will be sent to people on the SR 1 mailing list. On the Road recipients are requested to submit names and addresses of friends and neighbors interested in joining the mailing list to:

*On the Road*  
c/o KFS, Inc.  
219 N. Broad Street  
9th Floor  
Phila., PA 19107

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# Mile STONES



*Piles and footings are the first concrete evidence of the new C&D Canal bridge, now well underway.*

• **TYBOUTS CORNER SEGMENT: First to open**

The northernmost section of the Relief Route—southbound from I-95 to US Route 13 at Tybouts Corner—opened to traffic this summer. Local motorists, as well as travellers from out-of-state heading to Dover and the resort areas, are using this new roadway. Continued use of this section is expected to relieve traffic congestion on the New Castle-area portion of US Route 13 and on the portion of Route 7 from I-95 to US Route 13.

• **C&D CANAL BRIDGE: Built from the ends toward the middle**

Construction work on the new bridge across the C&D Canal is visibly well underway. Trucks are carrying fill material along the southbound shoulder of Route 13 from the Roberts borrow pit just off-site to the southern bank of the canal. As this earth work progresses, concrete piles are being driven, establishing the bridge's structure. Since the bridge is being built from the ends toward the middle, sections will be fabricated off-site and brought to the site on barges. These bridge sections will then be lifted from the shore and set in place. Recchi America, Inc., a subsidiary of an Italian firm, leads the construction effort with local firm James Julian, Inc., performing the earth work.

• **ODESSA/TOWNSEND SEGMENT: Design submission**

DelDOT will submit in September the final design materials to the Federal Highway Administration (FHWA) for design approval of the segment between Scott Run and K485, just north of Smyrna. The Design Hearing Report, which summarizes the comments made at the Odessa Public Hearing held in February of this year, is part of this submission. FHWA approval is required in order for DelDOT to apply for a permit under Section 404 of the Clean Water Act, allowing construction activity to take place within designated wetland areas. With the 404 permit in hand, DelDOT can then proceed with construction.

• **SMYRNA BYPASS: Bridges nearing completion**

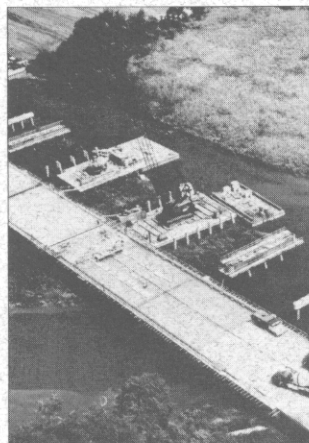
Work on the Duck Creek Bridge, one of several structures along the Smyrna Bypass, is nearing completion. Concrete decking was recently poured in place. In addition, deck construction of the US Route 13 overpass north of the Smyrna rest stop may be finished by early fall. Finishing touches to the Road 12 bridge are complete and the bridge is now open to limited traffic. And, mainline roadway construction is moving ahead; much of the base materials have been set in place.

• **TOLL PLAZAS: Dover-area facility now under construction**

PKF Mark III recently began construction of the mainline toll plaza near White Oak Road as part of the Dover Bypass. This toll facility contract is the first to proceed of the project's six toll facilities, including two along the mainline and four at on/off ramps. The other mainline toll will be located south of the new C&D Canal bridge. Ramp tolls will be located at the following interchanges: Denneys Road, south of Smyrna, Boyd's Corner, and Odessa. Toll collection will be performed both manually and mechanically—manually at attended plazas, mechanically at unattended plazas, or a combination at attended plazas. DelDOT expects the mainline tolls to be one dollar, and ramp tolls to be 50 cents at Denneys Road and 25 cents at south of Smyrna.

• **DOVER AIR FORCE BASE SEGMENT: Recycling fly-ash**

DelDOT is using "fly-ash," a by-product of the process of generating electricity from coal, in the innovative construction of the approaches for the SR 1 overpass of US Route 113. The fly-ash—obtained from Delmarva Power & Light Company—replaces a portion of the soil DelDOT normally uses and reduces the amount of purchased borrow material. DelDOT is considering the option of fly-ash at other construction sites along the Relief Route. ■



*The Duck Creek Bridge is nearly complete; a new concrete deck was recently poured in place.*



*DelDOT is using recycled fly-ash (visible in lower right of photo) to construct the DAFB segment.*

# 1 *ne* PERSPECTIVE

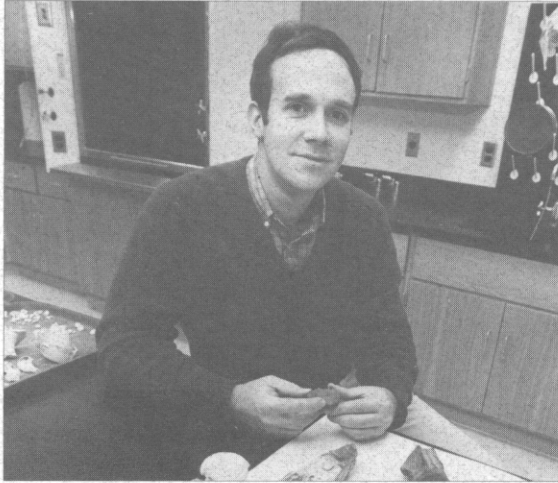


Photo: University of Delaware/Robert Cohen

**OTR.** *Is the geologists' work in the Relief Route project area a relatively recent occurrence?*

**KWR.** No, not at all. The Delaware Geological Survey (DGS) has been working in cooperation with DelDOT throughout the construction of SR 1. We also work with other state agencies, such as the Delaware Department of Natural Resources (DNREC), whenever excavation work is involved. One of DGS's responsibilities is to make geological maps of Delaware that identify areas we believe have a high probability of containing fossils. Then when we are notified by state agencies of construction or excavation work, we consult our maps and determine whether we should investigate.

**OTR.** *DelDOT has also been working with archaeologists during this phase of the project. How does your work as geologists differ from the work being conducted by the archaeologists?*

**KWR.** Simply stated, archaeologists deal with the remains of past human life and activities, at both the historic and prehistoric level. Geologists are concerned with the history of the earth, the remains of past life, and the natural processes that have shaped the earth. Also, archaeologists are required by federal regulation to be part of the project and have the authority to halt or delay the project if significant remains are found. Geologists, however, have no such authority and view these projects as great opportunities to investigate probable findings sites.

**OTR.** *A past issue of On the Road mistakenly attributed significant findings in Smyrna to archaeologists when in fact it was a geologic team made up of DGS with the Smithsonian Institution and various specialists which made the discovery. Can you tell us more about this find?*

*"One Perspective" is a regular feature of On the Road and is intended to provide readers with a behind-the-scenes view of activities associated with planning, design, and construction of SR 1, the US Route 13 Relief Route.*

*For this issue, "One Perspective" focuses on geologic issues with the help of Kelvin W. Ramsey, PhD, an associate scientist with the Delaware Geological Survey at the University of Delaware. Dr. Ramsey has been involved in geologic investigations at numerous excavation sites in the Relief Route project area and is a member of the team that recently discovered 17.5-million-year-old fossils at a wetlands mitigation site near Smyrna.*

**KWR.** The find near Smyrna is the most significant discovery on the East Coast north of Florida of vertebrate fossils at present. It is significant because both land and marine animals were found together. This has led us to believe that the site—now about 50 miles from the Atlantic Ocean—was once part of the shoreline. Also significant is the age of these fossils, about 17.5 million years old.

**OTR.** *What types of vertebrate fossils has the team uncovered?*

**KWR.** We are still analyzing our fossil collection, but so far have discovered the remains of two species of small horses, a small rhinoceros, and several species of rodents, land tortoises, snakes, and salamanders. We have also found the teeth of 12 to 15 species of sharks. The team of paleontolo-

*("One Perspective" continues on page 4)*

*Delaware Geological Survey geologists in the field examine the varied layers of sediment at the Smyrna site. Sediment types are mostly sand and clay mixtures.*



Photo: Kelvin W. Ramsey

## DID YOU KNOW?

- Oyster shells discovered at the Smyrna site are the oldest recorded find of the modern oyster, the same type you would find in the Delaware Bay today.

- The climate of Delaware 17.5 million years ago is very much like the climate of northern Florida today. In fact, the vegetation was so lush that forests existed up to the shoreline instead of the marshes we have today.

- The small horses and rhinoceros existed much like our modern deer. They inhabited the forests and browsed for food from trees and shrubs. It was not until the existence of grasslands did these animals become larger.

("Puncheon Run" continued from page 1)

of alternatives for the location of this connection. Over the course of the year—during which four public workshops were conducted, attracting more than 1,300 people—DelDOT performed this reevaluation and developed an alternative which accommodates projected traffic volumes, minimizes negative impacts on the natural environment, local businesses, residential and agricultural areas, and costs the least to construct."

DelDOT is now working on detailed design drawings of the this segment. These drawings are a major component of the information to be presented at the Design Public Hearing scheduled for spring 1993. Soon after the hearing, DelDOT will apply to the Federal Highway Administration for design approval, and then proceed to the construction phase of the project. Assuming approvals are granted, this segment of the Relief Route could be open to traffic in 1998. ■

("One Perspective" continued from page 3)

gists from the Smithsonian is studying the bones and sharks' teeth while a leading mollusk specialist from the Virginia Museum of Natural History in Martinsville is studying the various shells discovered.

*OTR. What other responsibilities does DGS have on this project?*

**KWR.** The DGS team, made up of geologists and hydrogeologists, is busy describing the sedimentary layers at the Smyrna-area discovery site and their relationship to each other. We are also concerned with the relationship of the fossils we found to these sedimentary layers which helps us to understand better the geologic structure of this part of Delaware. And a better understanding of Delaware's geologic structure will certainly help in the future planning of other projects like the Relief Route. ■

#### TO OUR READERS:

The State of Delaware and the consultant team are committed to continuing the citizen-input process during the design and construction phases of the project. We invite you to write us with questions or comments regarding *On the Road* or to arrange for a presentation to bring your group up to date on the Relief Route. To receive your free copy of *On the Road* as well as other mailings related to the project, please write or call us with your request.

## FOR MORE INFORMATION

#### CONTACT DeIDOT

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Dover, DE 19903

- Public Information: contact Michele Ackles, Manager of Public Relations, at 302-739-4313
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- Environmental Issues: contact Joe Wutka, Location Studies Engineer, at 302-739-4642
- Right-of-Way Acquisition and Relocation: contact Ira White, Project Acquisitions Manager, at 302-739-2776

#### Or CONTACT THE CONSULTANT TEAM

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*On the Road*

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