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FALL

2011

History of Current Innerbelt Bridge

The first “Central Viaduct” was demolished in 1941. At the end of World War II, the energy and innovation that had been dedicated to the war effort was redirected toward domestic products. Automobiles were again produced for civilian use. With that came the need for more lanes of pavement to carry the growing traffic.

During the late 1940s and early 1950s, numerous planning commissions and county engineering offices were charged with coordinating regional freeways, along with developing a new bridge over the Cuyahoga River. In 1953 the City of Cleveland retained Howard, Needles, Tammen and Bergendoff to prepare the plans for the new Central Viaduct, and related freeway interchanges, between Fairfield Avenue and East 22nd Street. While the name of the design firm may not sound familiar to our readers, they are the four men who founded HNTB, which is the firm designing the new I-90 westbound Innerbelt Bridge.

When the bridge opened in 1959, with a construction cost of \$8.13 million, it was the widest bridge ever built in Ohio. With eight lanes, the bridge is 116 feet wide. This bridge was an integral part of the planned freeway system that included “The Innerbelt”, a name that continues in use today. The freeway plan included the corridors for State Route 176 (the Jennings Freeway), I-77 (the Willow Freeway) and I-90 (the Northwest Freeway).



CONSTRUCTION Connection

Info & Updates for the Innerbelt Bridge Project



After piles are driven approximately 150 feet into the soil, the tops are surrounded by a shallow concrete “mudmat” that provides a base for the footer or foundation (top image). Heavy metal forms are bolted together and carefully braced. An intricate web of rebar is installed inside the form, preparing for the concrete that will be poured into the foundation (above image).

Construction Progress Report

If you are a regular I-90 motorist in downtown Cleveland, you’ve probably noticed the changing highway lanes. The Traffic Changes article on Page 3 spells out the details of the I-90 work completed and what’s in store for the remainder of 2011. Crews have finished half of the work for the I-71 south bridge over Starkweather Avenue. We’ve demolished the Cold Storage Building and we’ve begun to build new roadways in the Flats-Eastbank, to provide access between E 14th/ E 9th and the industrial properties on West Third Street, Canal Road and Commercial Road.

But what else has been happening on the project? Crews are now working on all 10 of the bridge pier sites for the east bank of the river. There are a total of 14 bridge piers; four are on the west

bank and 10 are on the east bank. They are numbered, beginning with #1 at the top of the Tremont Bluff, south of Abbey Avenue, and ending with #14, across the street from the Western Reserve Fire Museum on Central Viaduct Way. All photos in this newsletter are various stages of pier construction.



Once the concrete has cured and reached strength, the metal forms are removed and the dirt is backfilled around the foundations.



Continue Work on I-90 Bridges over E 9th, I-77 ramp & E 14th

Continue Work on I-71 Bridge over Starkweather

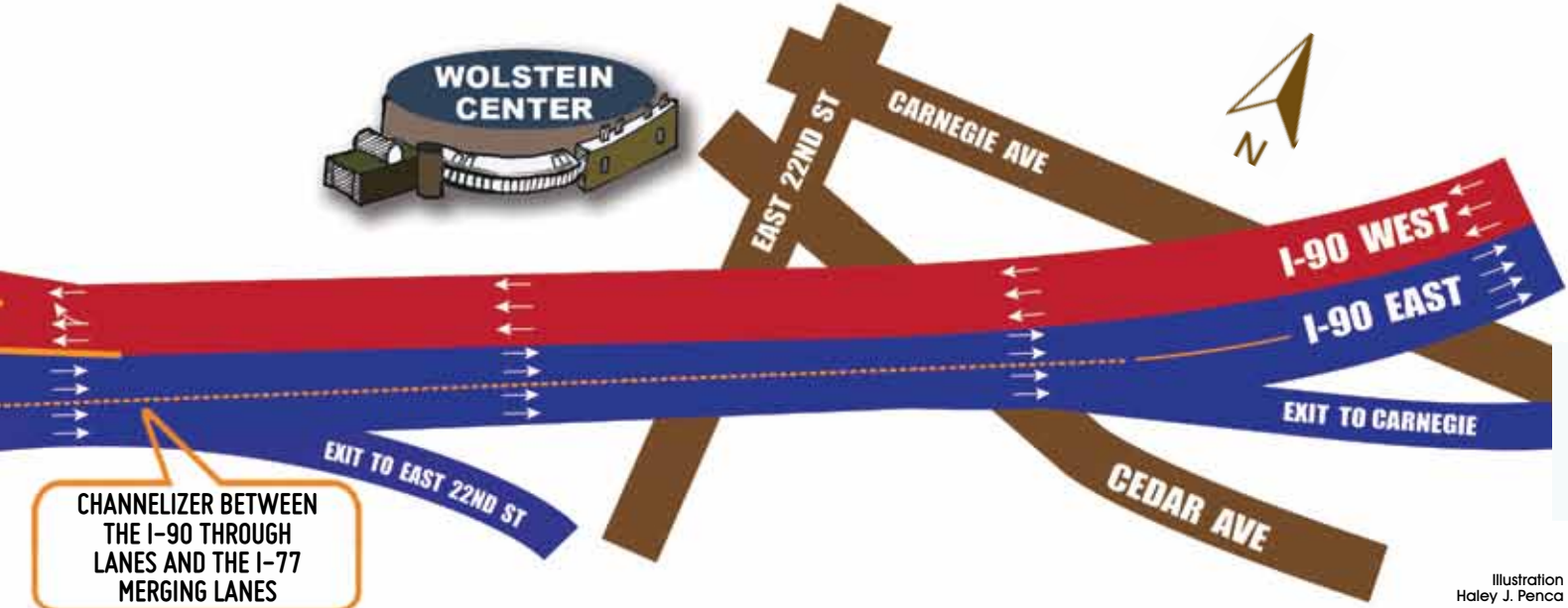
Continue Work on New Roadways: E 9th Extension, Broadway, Commercial Road & Canal Road

Continue Work on New Bridge over RTA tracks, on E 9th Extension

Excavate Tremont Bluff between Abbey Avenue & River

Continue Building Piers for Main Bridge

FALL/WINTER 2011



CHANNELIZER BETWEEN THE I-90 THROUGH LANES AND THE I-77 MERGING LANES

Illustration Haley J. Penca



This pier is now ready for the pier cap form to be set on top, bridging between the two legs of the pier.

Traffic Changes

In mid-August, crews completed redecking the first two lanes of pavement for the I-90 bridges over E 9th Street, the I-77 south ramp and E 14th Street. Westbound I-90 traffic has been moved onto the new pavement. Crews are now working in the middle of I-90, between the current eastbound and westbound traffic lanes.

Coming Soon!

In late September the middle section of the bridge pavement will be completed and the work will move to the far south lanes of these bridges. Beginning with this final phase of the work, the I-90 eastbound exit for E 9th Street will



be closed for about 60 days. During that closure, access to downtown from I-90 east will be available using the Broadway, Ontario or Chester exits. While the E 9th Street exit is closed, it will be even more important to remember to Opt for the Alternate! Using I-490 and I-77 will provide a much better route

into downtown, with exits off I-77 providing easy access to Carnegie, E 22nd, E 14th and E 9th.

Remainder of 2011 Construction Season

Throughout this phase of bridge work, I-90 will continue to have two (2) lanes for eastbound traffic and two (2) lanes for westbound traffic. The ramps between I-90 and I-77 will continue to be two lanes as well. Day time lane closures on E 9th, the I-77 south ramp and E 14th are likely. Night time full closures of E 9th and/or E 14th under I-90 will also be required.

These lane closures, or full street closures, are required when bridge work overhead could be hazardous to motorists traveling on the streets below. The project is on-schedule for completing this year's I-90 bridge work on, or about, December 1, as of the newsletter distribution date in late September.

Once this downtown bridge work is complete, all restrictions in the eastbound direction are expected to be removed. In early December I-90 east will be reopened to three lanes and the ramps to E 22nd Street and Carnegie Avenue will again be accessible from I-90 east.

Innerbelt Info Available on Social Media

We need to provide information to many different audiences in order to keep our community informed about project activities and traffic impacts. In addition to the traditional newsletters, press releases, hotline calls and project website, we now offer this information on a number of popular social media platforms:

- **Facebook** – search for Cleveland’s Innerbelt Bridge
- **Flickr photostream** – Innerbelt
- **Twitter** – @ODOT_Innerbelt

These tools make it easy for us to post photos of construction, answer questions from fans and send out urgent traffic changes to interested parties. We invite you to check them out, and “Like” us, if you like what you see.

HOW TO STAY IN TOUCH

- ▷ Visit our website at www.Innerbelt.org. You can subscribe to our email list on our homepage.
- ▷ Email us at Info@Innerbelt.org
- ▷ Call the Project Hotline at (216) 344-0069 (toll free (855) 803-5280).

▷ You can find us on

facebook

by searching “Cleveland’s Innerbelt Bridge”

▷ You can follow us on

twitter

@ODOT_Innerbelt

Sustainability Reducing Environmental Impacts Today and Tomorrow

The Innerbelt project is committed to achieving sustainability goals in seven categories, collectively referred to as the *Green 7*.

GREEN 7

1. Energy and Energy Efficiency
2. Community Environment
3. Green Building
4. Waste Reduction and Recycling
5. Green Project Administration
6. Materials and Resources
7. Construction Practices

Here are some of the ways we are accomplishing these goals:

- By using construction vehicles with greater load-carrying capacity, we have documented savings of more than 21,000 gallons of diesel fuel – or enough to power a big-rig from Cleveland to Salt Lake City and back 30 times!
- By reducing the fuel usage during earth-moving, we have saved more than 200 metric tons of CO2 emissions. We save fuel by using newer, more

efficient vehicles and by balancing the soil needed with the soil removed. We avoid trucking vast quantities over long distances by planning how to use our own excess dirt to fill the areas that need dirt.

- All of our design and construction staff members are located in pre-existing buildings that are very near the project. These existing buildings were not remodeled with new materials and have been upgraded with efficient lighting and HVAC improvements. No new buildings were constructed for temporary office use, and most team members are less than a mile from the jobsite. ODOT project staff members are located in the same building, reducing the need for team members to drive to meetings.
- The demolition debris from the project is processed, sorted and more than half of all materials are recycled. For example, we have recycled more than 2,500,000 pounds of steel. Yes, that’s MILLIONS of pounds – or about the weight of 600 average-size sedans! We’ll feature more good news in future newsletters.

TOTAL SAVINGS TO DATE

Diesel Fuel	21,879	gallons
Emissions	258	metric tons
Recycling	39,866	cubic yards
Recycled Steel	2,552,375	pounds
Potable Water	9,080,400	gallons

