

Informational Workshop Public Meeting

Dunbar Toll Bridge Sidewalk Project

Kanawha County, WV



**West Virginia Department of Transportation
Division of Highways in cooperation with the Federal
Highway Administration**

**State Project U320-25/47-0.00
Federal Project TEA-2011(065)D**



**Bridgeview Elementary School
5100 Ohio Street
South Charleston, WV
Monday, December 2, 2013
4:00pm to 7:00pm**

Dunbar Toll Bridge Sidewalk Project
STATE PROJECT U320-25/47-0.00
FEDERAL PROJECT TEA-2011(065)D

WORKSHOP PURPOSE

The purpose of this Informational Workshop Public Meeting is to provide information on the proposed Dunbar Toll Bridge Project in Kanawha County and how you can provide your comments. The workshop is intended to be informal to maximize the interaction between the citizens and project team.

We encourage you to examine the project maps and displays, discuss the project with the members of our project team who are here today, and complete the enclosed comment sheet.

WORKSHOP FORMAT

The WVDOH procedures for public workshops are established to ensure meaningful citizen input in the development for proposed projects, in compliance with all applicable regulations and requirements. This informational workshop public meeting is from 4:00pm to 7:00pm and there will be **NO FORMAL PRESENTATION**.

Registration

If you have not already printed your name and address on the registration sheet, please remember to do so before you leave. Additional copies of this handout and the comment sheet are available at the registration table. The WVDOH welcomes your comments on the project; therefore, please feel free to write comments as you visit other displays around the room. You can drop the completed sheet in the Comment Box; return it to any WVDOH representative at the meeting, or mail it to the WVDOH at the address below or on the WVDOH Website at <http://go.wv.gov/dotcomment>, under Engineering Projects/ Dunbar Toll Bridge.

Environmental Studies

Representatives from the WVDOH are here today to discuss the environmental study process. Maps depicting the proposed project location are available for viewing. This project will be processed as a Programmatic Categorical Exclusion (CE) to clear the environmental National Environmental Policy Act (NEPA) requirement.

Engineering

Representatives from the WVDOH and consulting firm HNTB are available to discuss the location and preliminary design of the project area. These representatives also have information regarding the area studied for the project.

Right-of-Way

WVDOH Right-of-Way representatives are available to answer your questions regarding any right-of-way acquisitions.

PROJECT DESCRIPTION

The Dunbar Toll Bridge was built in 1953 by the American Bridge Company and was designed by Hazelet and Erdal. It is a 1,384 foot long riveted, steel, thru truss. There are 3 approach spans on each side that are steel multi-girder. The bridge has a clear width of 28 feet. There is a 5 foot sidewalk on the west side with a 10 inch curb. The bridge has a silhouette posting for weight. Bridge renovations were conducted in 1977, 1980, and 2007 including deck repairs, expansion joint repairs, support modifications, and gusset plate repairs. The bridge is eligible for the National Register of Historic Places.

Three design concepts were studied for the Dunbar end of the bridge and two concepts for the South Charleston end. Both South Charleston concepts have three options.

- **Dunbar Concept #1** is the **preferred alternative** for the Dunbar end. It involves reconstructing the existing concrete stairs and will include a ramp adjacent to 10th Street (see picture below). The new ramp will have two runs of approximately 25 feet long with a landing between and handrails as required by ADA standards. A 5 foot wide pedestrian path will be constructed from the southern ramp and then cross under the bridge into Dunbar Village Shopping Center. Pedestrians intending to utilize the sidewalk will be required to cross 10th Street at this location. The canopy over the existing stairs will be repaired or replaced. The existing sidewalk south of the proposed ramp will be replaced. Consideration will be given to coordinating light standards with the City of Dunbar's Streetscape Project, which is currently in the design phase.



Proposed ramp on Dunbar side as shown in June 2013 design study

- **Dunbar Concept #2** maintains the existing stairs and replaces the existing sidewalk from the first approach span to near Grosscup Avenue. This will result in an ADA compliant path to the mid-block crossing of 10th Street between Grosscup and West Virginia Avenues. The existing handrail will be replaced. Lighting will be removed and replaced. The canopy over the stairs will be repaired or replaced.
- **Dunbar Concept #3** is a combination of Concepts #1 & #2. It will reconstruct the stairs and construct a ramp across from West Virginia Avenue, in addition to a new mid-block crossing on 10th Street. This option includes sidewalk reconstruction, curb ramp installation, lighting renovation, signing and pavement markings, and canopy replacement similar to Concepts #1 and #2.

In order to provide ADA accessibility from the **South Charleston end of the bridge to MacCorkle Avenue** is to extend the sidewalk beyond the staircase by widening span nine of the bridge and extending the sidewalk down the departure ramp. A temporary signal will be used during construction. Three options have been studied for widening the approach span deck:

- **Option 1** is a cantilever deck extension and the **preferred option**. This involves cutting the deck along the centerline of the first interior girder. The deck will then be removed including the curb and railing. The proposed deck will be widened the superstructure by 4 feet 7 inches. The deck will be a cantilever design requiring no additional superstructure elements. The existing handrail, made of channel sections and angles, can be reused or replicated to maintain historical features.

- **Option 2** is a cantilever deck slab extension with bracket supports. This uses prefabricated steel brackets fastened onto the span nine fascia girder to support the deck extension. The brackets will be fabricated to match the existing brackets in the main truss span of the bridge. Spacing of the brackets will match the spacing of the railing posts to mimic the main span configuration.
- **Option 3** is a cantilever deck slab extension with additional support girder. Instead of brackets this option uses an extra girder along with work and materials needed for Option 1. The additional girder is offset 3 feet 6 inches outside of the existing girder. A pier column extension is also needed to carry the girder load on the pier eight cantilever. Abutment B will also need to be extended.

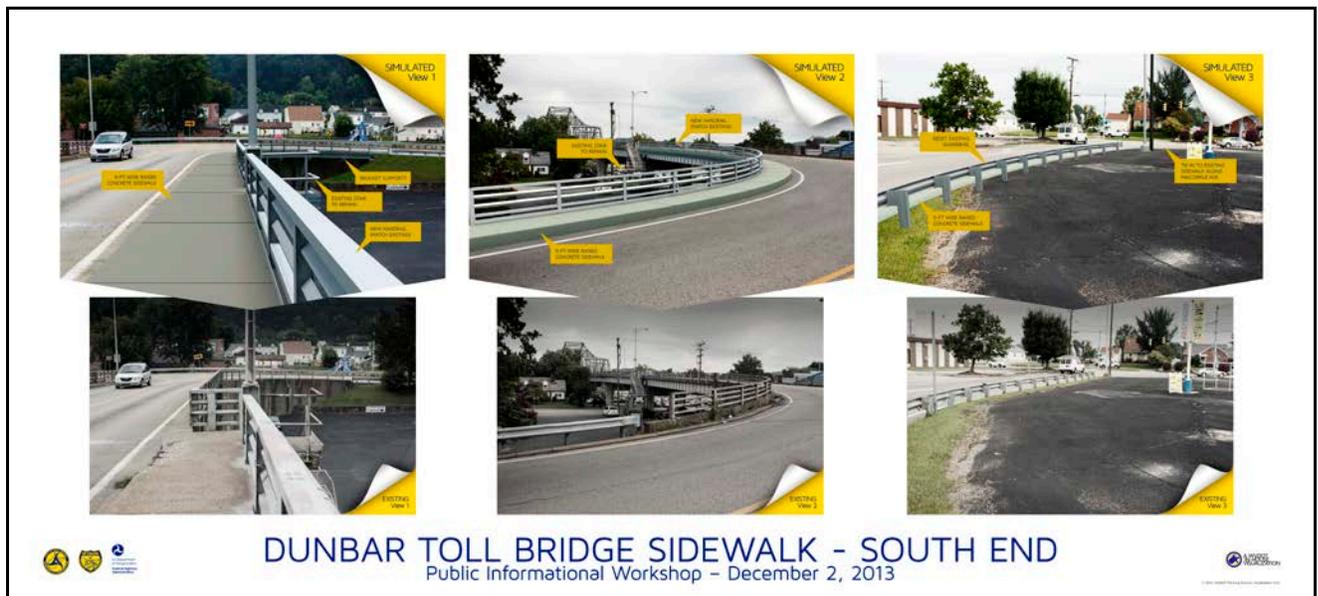
Three concepts were studied for the South Charleston approach to evaluate options to construct a sidewalk from the bridge abutment to the end of the departure ramp. The sidewalk beyond the abutment retaining wall will be situated so that the curb matches the location of the existing curb. This will require guardrail removal on the inside of the ramp. The 5 foot sidewalk will have an ADA compliant handrail up to the point the departure ramp grade approaches that of the elevation of MacCorkle Avenue.

The 3 concepts for installing sidewalk adjacent to the abutment retaining wall are:

- **Relocate the roadway.** This option reduces the existing roadway width in the first departure ramp curve to allow space to install a sidewalk to continue down the ramp to MacCorkle Avenue. Under current configuration the departure ramp transitions from 14 feet to 28 feet. By modifying the ramp curvature the traveled lane can be pushed to the outside of the curve and placing the sidewalk on the inside of the curve. This option increases the difficulty of trucks negotiating the first departure ramp curve.
- **Cantilever extension.** This is the **preferred option** and uses cantilever brackets off of the exterior face of the existing retaining wall to carry the proposed sidewalk. The wall modifications will run 100 feet. The cantilever bracket will match the rest of the structure brackets using built up members. The railing system will be reused or replaced to match existing conditions. The brackets will be aligned with the railing posts for consistency with the rest of the bridge. Approximately 1.5 feet will be removed from the top of the existing retaining wall to accommodate the proposed sidewalk at the current grade.

- Parallel retaining wall.** This option constructs a retaining wall parallel to the existing wall to support the new sidewalk. The proposed wall will be offset approximately 2 feet to 3 feet 3 inches from the exterior face of the retaining wall and will extend approximately 100 feet. Backfill material will be required between the existing and proposed walls. Three variations of retaining walls have been considered: soldier piles and lagging, MSE wall, and reinforced concrete. Soldier piles and lagging walls are recommended.

Below is the rendering of the proposed work on the South Charleston side. The new railing will match the existing railing, with the exception of having an ADA required extra plate at the very bottom. The rest of the railing will remain as is.



The **preferred alternative** consists of:

- Dunbar Concept #1B
- South Charleston Bridge Concept#1 (Deck Slab Extension)
- South Charleston Approach Concept #2 (Retaining Wall Brackets)
- Project Right of Way and Easements
- Utility Relocation
- Bridge Handrail Horizontal Safety Element

Total estimated right of way and construction cost of the preferred alternative is **\$1.1 million**.

CURRENT PROJECT SCHEDULE

Public Information Workshop.....December 2, 2013

Public Meeting Comments Due By.....January 2, 2014

**Programmatic Categorical Exclusion Approved by
FHWA.....February 2014**

Expected Construction Start Date.....Fall 2014

***Dates are subject to change**

COMMENTS

Please send written comments on or before Thursday, January 2, 2014 to:

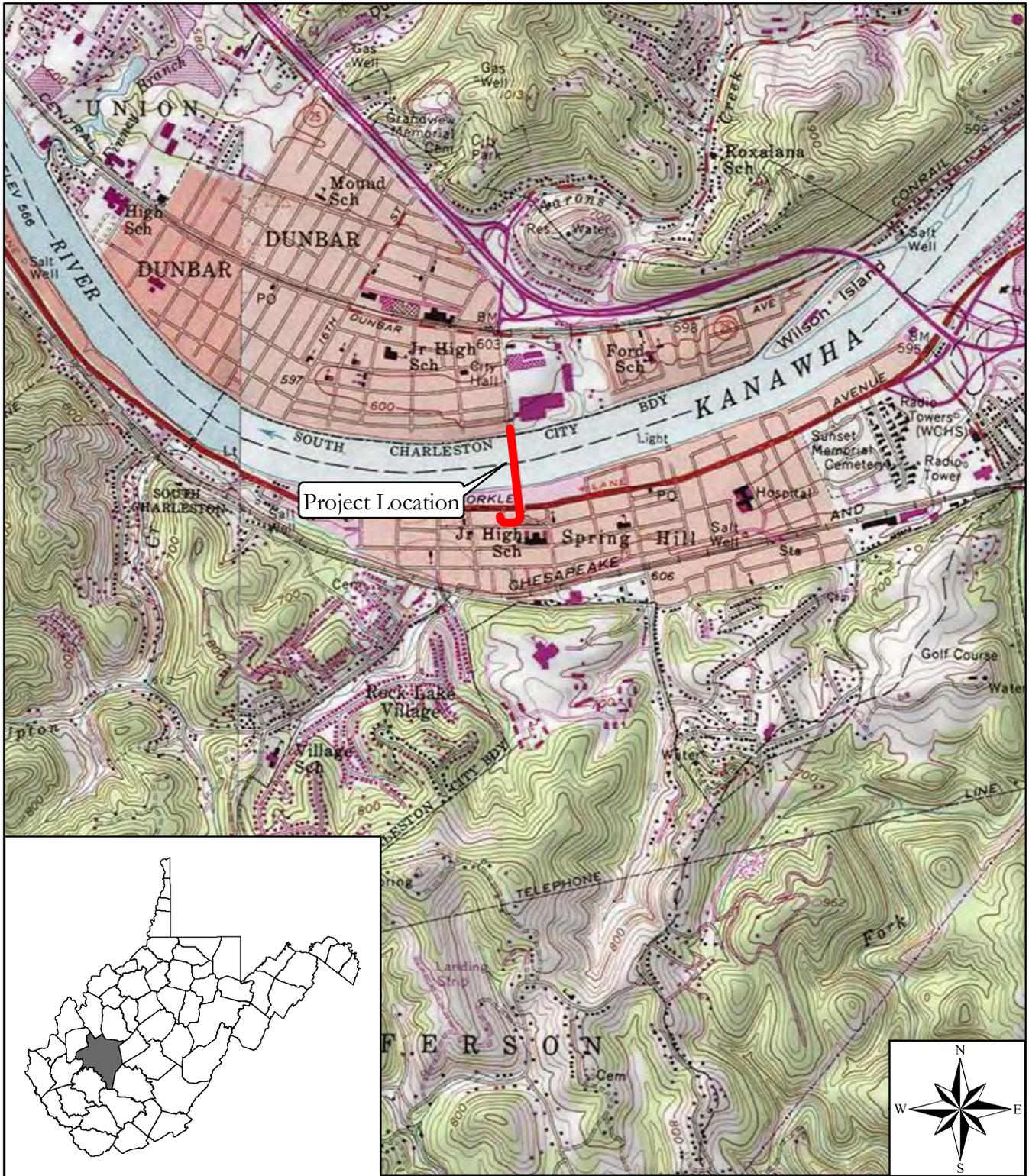
**Mr. David P. Bodnar, P.E., Acting Director, Engineering Division
West Virginia Division of Highways
Capital Complex Building Five, Room 317
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430**

**Project Information and Comment Sheets can be found online at our
web page:**

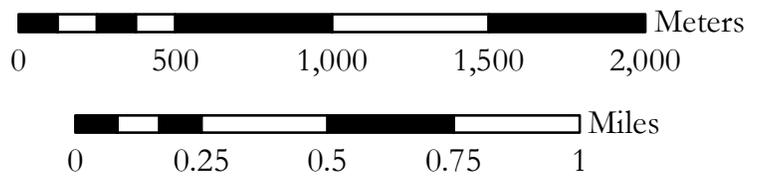
<http://go.wv.gov/dotcomment>

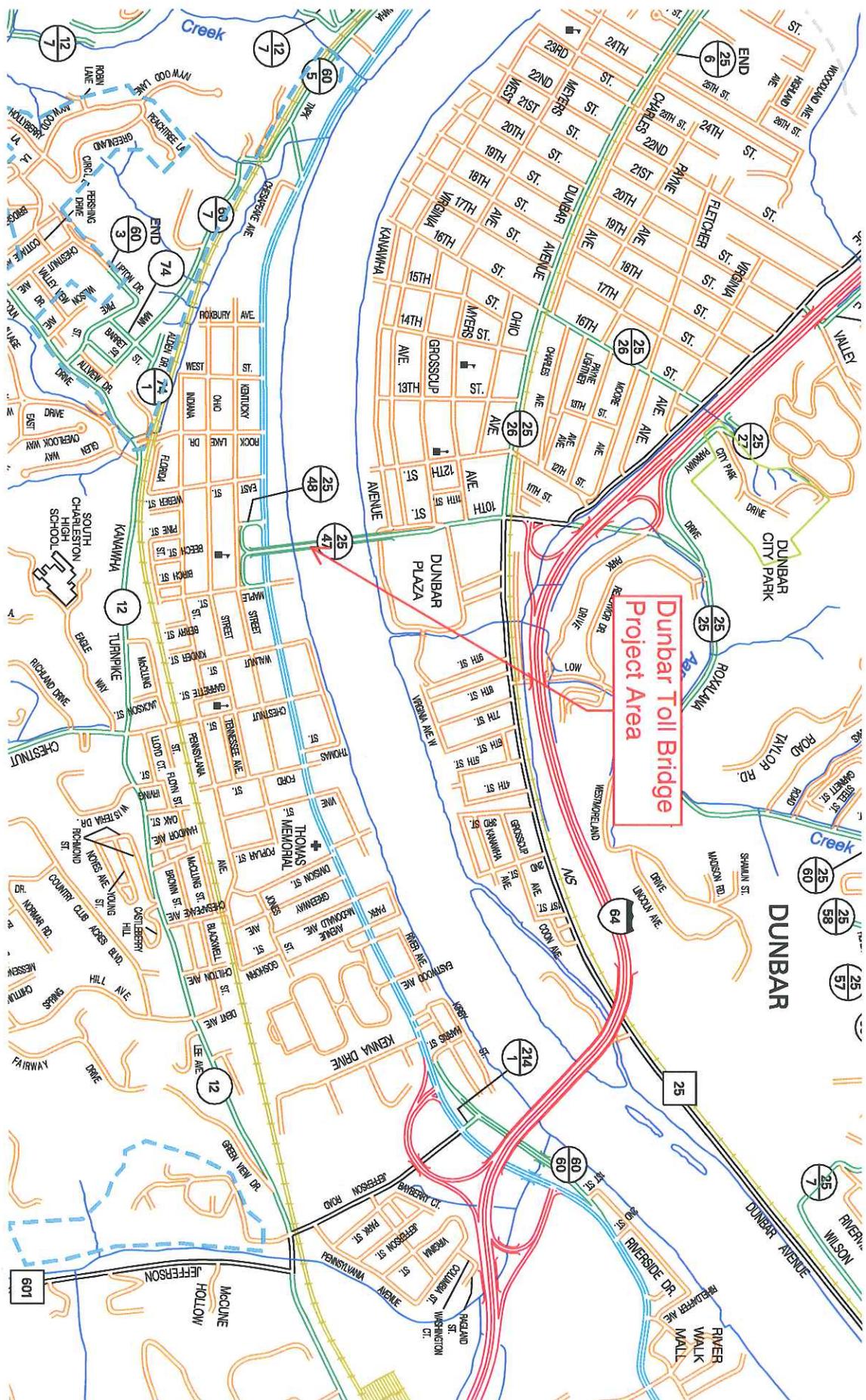
**Click on “Comment on Engineering Project”, then “Open”,
And then click on “Dunbar Toll Bridge”.**

Dunbar Toll Bridge Project S320-25/47-0.00



Kanawha County
Charleston West
7.5' Topographic Quadrangle







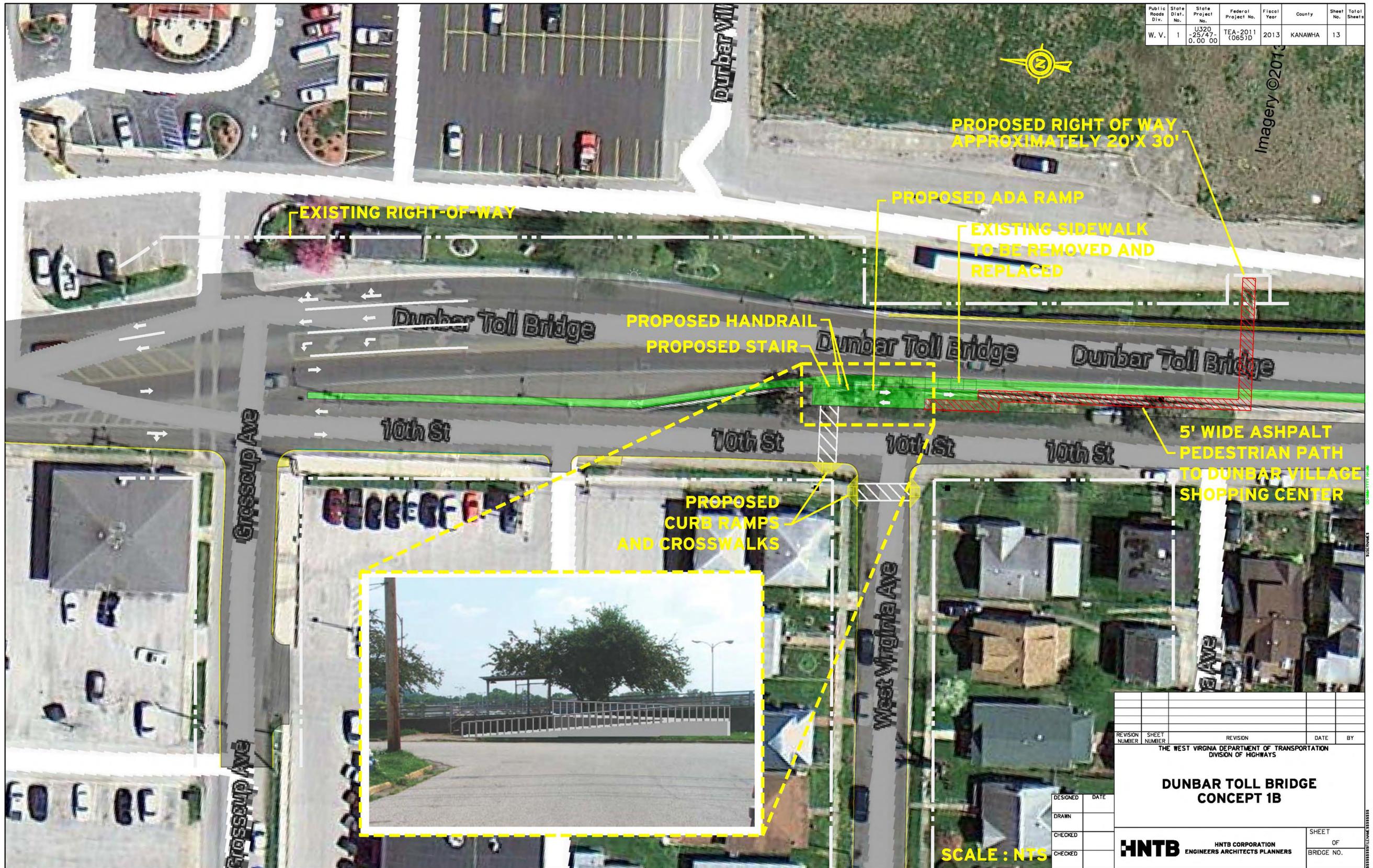
DUNBAR TOLL BRIDGE SIDEWALK - SOUTH END

Public Informational Workshop - December 2, 2013



DUNBAR END SIDEWALK REVISIONS

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	1	US20-25/47-0.00 00	TEA-2011 (065)D	2013	KANAWHA	13	



DESIGNED	DATE		
DRAWN			
CHECKED			
CHECKED			

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

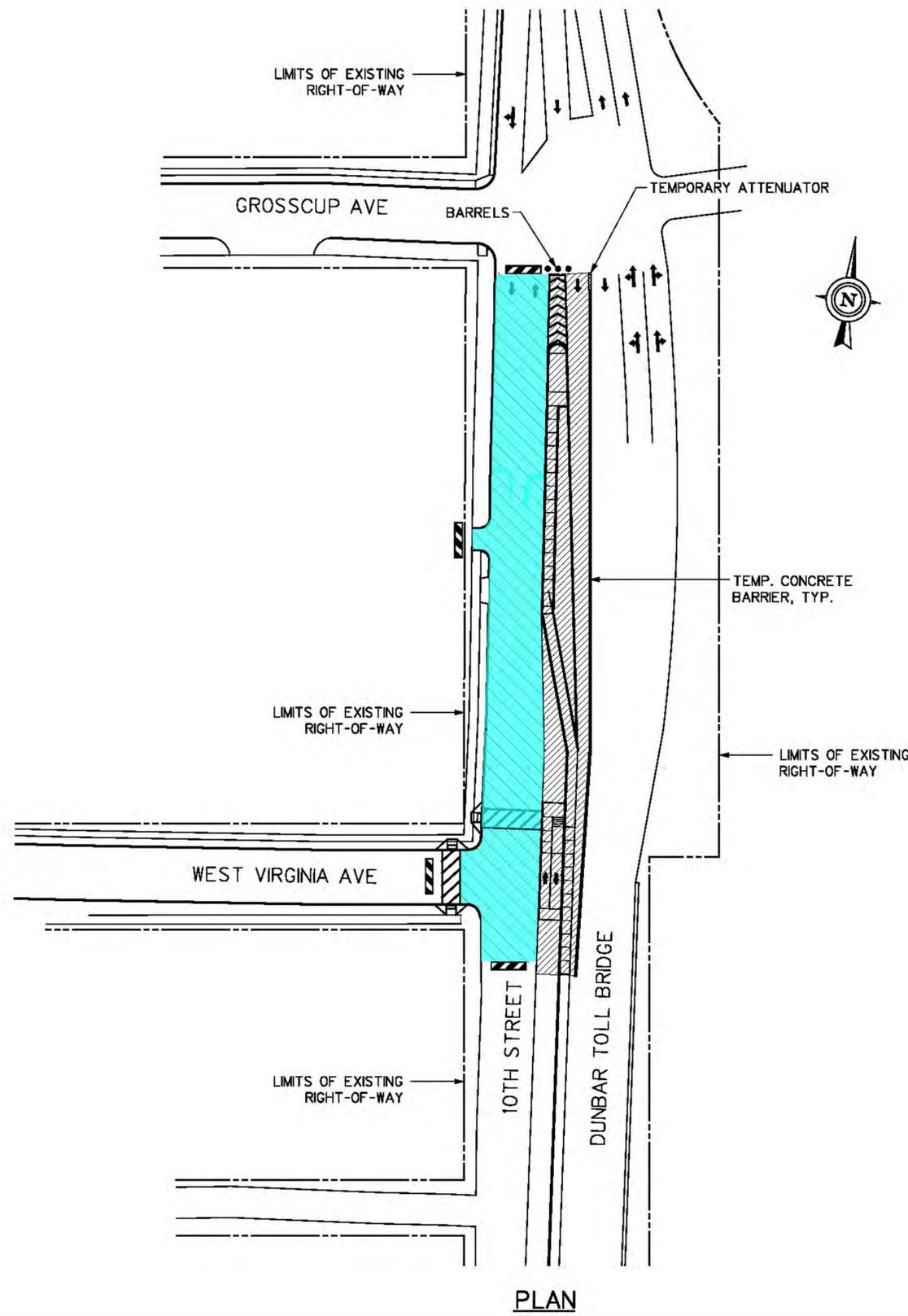
**DUNBAR TOLL BRIDGE
CONCEPT 1B**

HNTB	HNTB CORPORATION ENGINEERS ARCHITECTS PLANNERS	SHEET OF BRIDGE NO.
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DUNBAR END TEMPORARY TRAFFIC CONTROL

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	1	U320-25/47-0.00 00	TEA-2011 (0651D)	2013	KANAWHA	16	



LEGEND

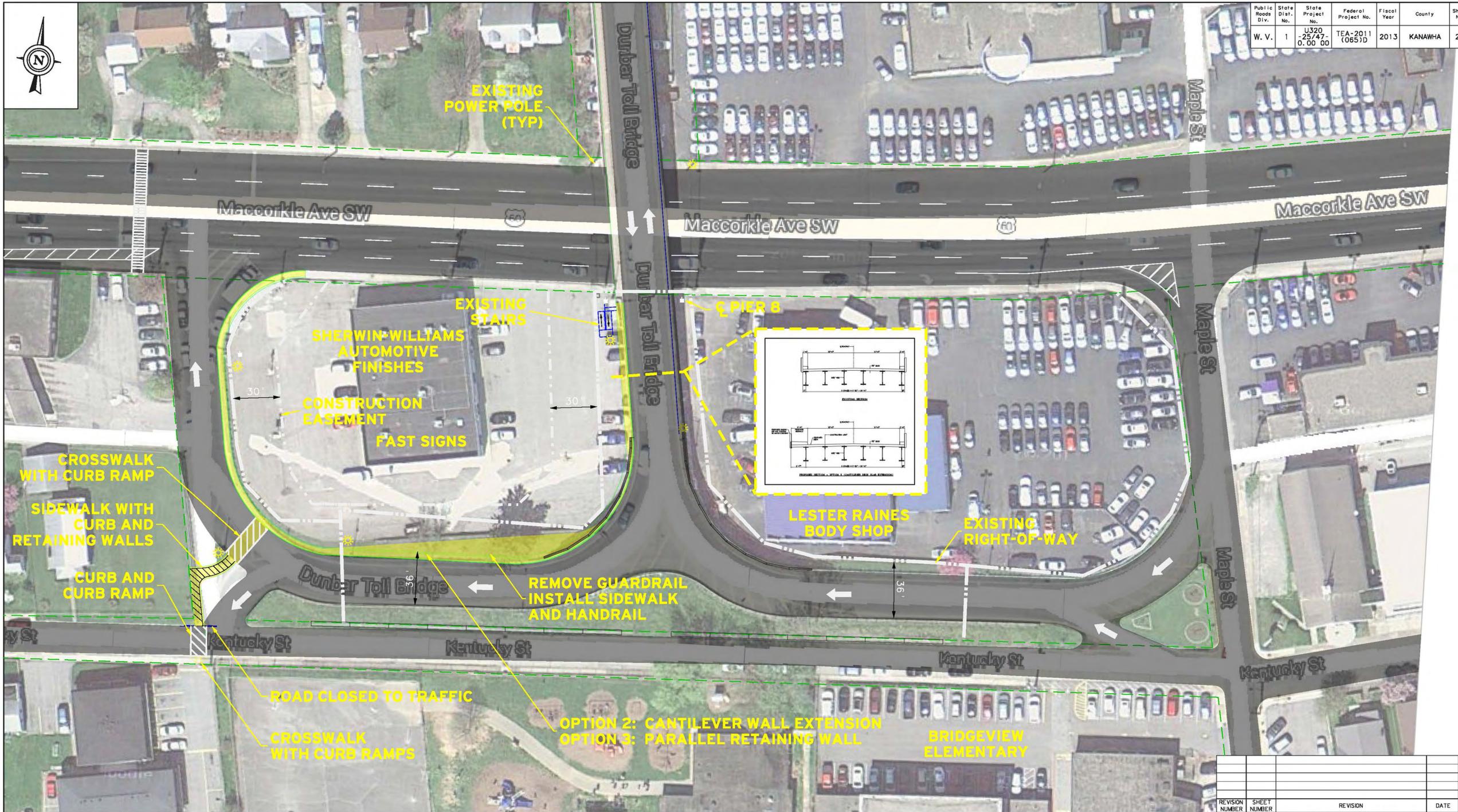
- STAGING AREA (CLOSED DURING CONSTRUCTION)
- WORK ZONE
- ROAD CLOSED SIGN & BARRICADE

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS				
DUNBAR TOLL BRIDGE DUNBAR END				
DESIGNED	DATE			
DRAWN				
CHECKED				
CHECKED				
HNTB HNTB CORPORATION ENGINEERS ARCHITECTS PLANNERS				SHEET OF BRIDGE NO.



SOUTH CHARLESTON END SIDEWALK ADDITIONS

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	1	U320-25/47-0.00.00	TEA-2011 (065)D	2013	KANAWHA	28	



LEGEND

CONSTRUCTION LIMITS

DESIGNED	DATE
DRAWN	
CHECKED	
CHECKED	

SCALE : NTS

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS				
BRIDGE EXTENSION OPTION 1 DEPARTURE RAMP OPTION 2 OR 3				
HNTB HNTB CORPORATION ENGINEERS ARCHITECTS PLANNERS				SHEET OF BRIDGE NO.

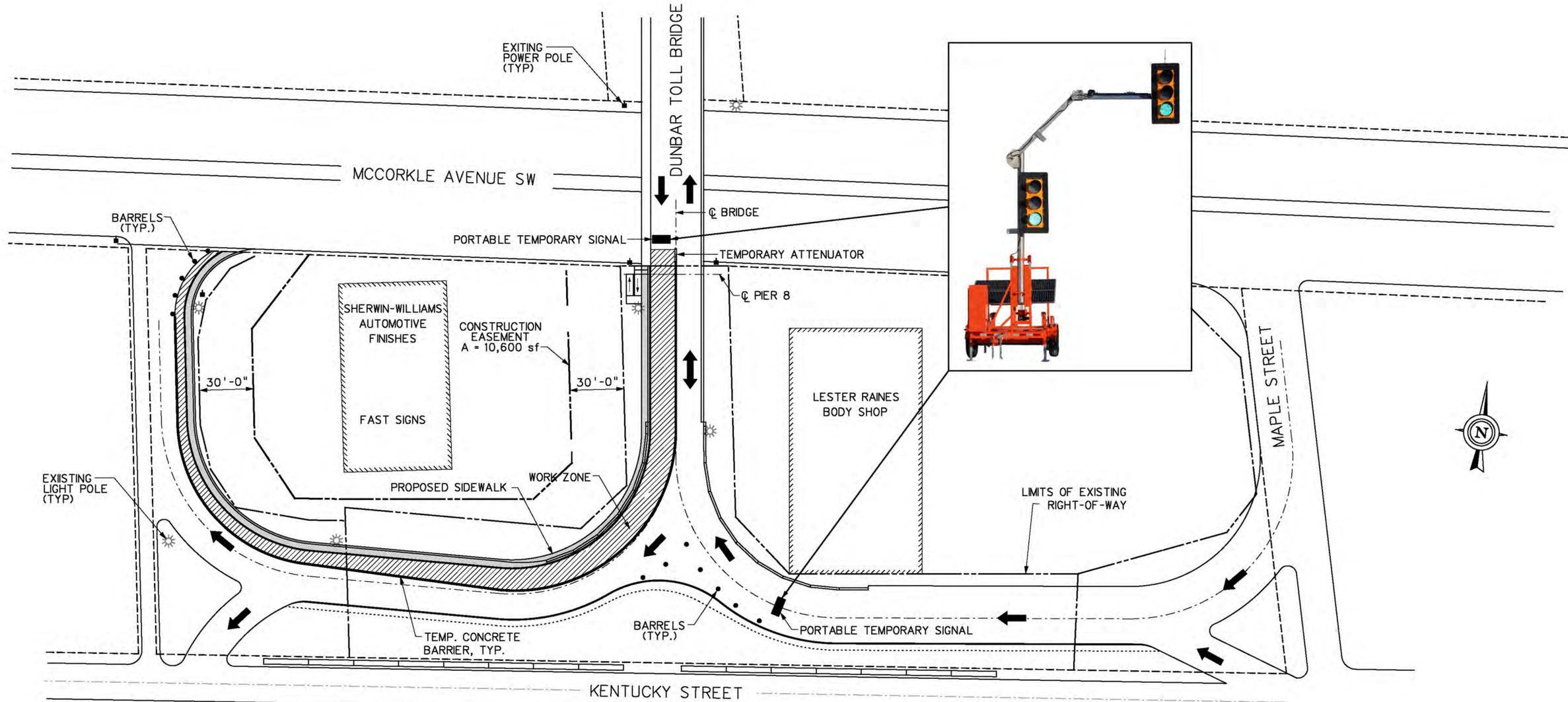


Dunbar Toll Bridge



SOUTH CHARLESTON END TEMPORARY TRAFFIC CONTROL

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	1	1320-25/47-0.00 00	TEA-2011 (0657D)	2013	KANAWHA	29	



LEGEND

	WORK ZONE
	PROPOSED SIDEWALK

PLAN

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**DUNBAR TOLL BRIDGE
SOUTH CHARLESTON END**

DESIGNED	DATE
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HNTB HNTB CORPORATION
ENGINEERS ARCHITECTS PLANNERS

SHEET	OF
BRIDGE NO.	

DATE:

Mr. David P. Bodnar, P.E.
Acting Director, Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5, Room 317
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: Monday, December 2, 2013
LOCATION: Bridgeview Elementary School
SUBJECT: INFORMATIONAL WORKSHOP PUBLIC MEETING
PROJECT: Dunbar Toll Bridge Project
U320-25/47-0.00
TEA-2011(065)D
Kanawha County

COMMENTS DUE BY Thursday, January 2, 2014

Please consider the following comments:

(Please print the following information)

NAME:

ADDRESS:

ORGANIZATION (IF ANY):

How did you hear about the Informational Workshop Public Meeting?

Project Information and Comment Sheets

Can be found online at our WVDOH Website at <http://go.wv.gov/dotcomment>.

Under Engineering Projects, Open, and then click Dunbar Toll Bridge.