

**Workshop Public Meeting**  
**Bluefield City Hall**

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**WV Department of Transportation**  
**Division of Highways**  
**State Project S328-BLU/E-1.00**  
**Federal Project BR-0160(001)D**

**Martin Luther King, Jr. Bridge Replacement**  
**Mercer County**  
**Monday, October 17, 2011**

# **Martin Luther King, Jr. Bridge Replacement**

## **STATE PROJECT S328-BLU/E-1.00**

### **FEDERAL PROJECT BR-0160(001)D**

The existing bridge was built in 1966 by an unknown contractor and currently has a sufficiency rating of 31.3. The bridge is owned by the City of Bluefield. The West Virginia Division of Highways (WVDOH), by way of agreement, inspects the bridge and has established an agreement to use federal bridge replacement funds to replace the bridge. The existing bridge is posted for a 15 ton weight limit and considered to be structurally deficient and functionally obsolete.

The purpose of the project is to build a new bridge providing the most suitable and economically feasible alignment, while providing proper railroad clearances. The study has evaluated 5 different alternatives and a no-build alternative. The preferred alternative is #2. Below is a detailed description of all five alternatives. A matrix is attached to this handout detailing the alternatives.

**Alternative #1**- provides a new bridge at its current location with a new three-span bridge estimated to be 175 feet in length, 28 foot clear width, and 20 foot approach slabs. The bridge consists of two 12-foot lanes, 2-foot curb and gutter, and two 5-foot sidewalks. The grade will be raised to meet a minimum vertical railroad clearance of 23 feet above the rails. New piers will be placed in their existing locations. The grade of various streets and driveways will need to be raised to intersect with the new bridge approaches. The intersections will be controlled as they are now. Temporary construction easements are required for right of way. Retaining walls will be constructed on each side of the tracks and intergraded into the abutments. A new retaining wall will be constructed on each side of Mercer Street along the south end of the bridge to avoid encroachment on the gas station and adjacent property. Utility relocations will be significant. Traffic will use the existing street system for a detour during construction. Total estimated cost for alternative 1 is \$6,461,000.

**Alternative #2 (Preferred)** - consists of placing a new bridge at its current location with a new single-span bridge estimated to be 147 feet in length and a 28 foot clear width. This will eliminate the piers between the tracks but requires the abutments to be moved closer to the tracks. The bridge will consist of two 12-foot lanes, 2-foot curb and gutter and two 5-foot sidewalks. The grade of the new bridge will be steeper in order to provide minimum vertical railroad clearance. The grade of Pulaski and Roanoke Streets will be raised as well. The intersections will be controlled as they are now. Right of way requirements consist of temporary construction easements for the wider bridge. Retaining walls on each side of the railroad tracks will only need to be reconstructed at the bridge abutments. A new retaining wall will be constructed on each side of Mercer Street along the south end of the bridge to avoid encroachment on the gas station and adjacent property. Utility relocations will be significant. Traffic will use the existing street system for a detour during construction. Estimated total cost for alternative 2 is \$6,180,800.

**Alternative #3-** consists of placing a new bridge on a skewed alignment east of its current location and will have steeper vertical grades than the existing bridge. The grade of the new bridge will be raised to meet the minimum vertical railroad clearance of 23 feet. The new bridge will be 175 feet long with a 28 foot clear width. The bridge consists of two 12-foot lanes, 2-foot curb and gutters, and two 5-foot sidewalks. Two piers are needed between the tracks. The grades of Pulaski and Roanoke Streets will be raised. The intersection north of the bridge will be controlled as it is now, but a new signal will be placed at the intersection created by the new bridge. The existing signalized intersection will remain in place. Right of way requires permanent and temporary construction easements. The gas station will be directly impacted and the new alignment will impact properties on the north side of the new bridge. The higher grades of the surrounding roads will require the acquisition of adjacent property. The grade difference between the parking lot northeast of the existing intersection and Roanoke Street will not allow access to Roanoke Street. This may cause the acquisition of the adjacent apartment building. Retaining walls on each side of the railroad tracks will need to be reconstructed and intergraded into the abutments. Utility impacts will be significant. Traffic will be maintained on the existing bridge. Estimated total cost for alternative 3 is \$8,862,000.

**Alternative #4-** consists of placing a new bridge in its current location using stage construction, while maintaining the existing structure for traffic. Using staged construction will result in an alignment shift. Alternative 4 proposes a new single-span bridge estimated to be 147 feet in length and having a 30 foot clear width. The bridge will have two 12-foot lanes, two 3-foot curb and gutter sections, and two 5-foot sidewalks. This will eliminated the need for piers, but will move the abutments closer to the railroad tracks. The grade of the new bridge will be steeper to meet the minimum railroad clearance. Due to the alignment shift, the grade on Pulaski Street will need to be raised and will cause impacts to the adjacent sidewalk and properties north of the road. The grade on Roanoke Street will also be raised. The intersections will be controlled as they currently are. Right of way requirements include temporary easements. The retaining wall on the north side of the railroad tracks will be increased and intergraded into the new abutments. A retaining wall will be constructed on each side of Mercer Street along the south end of the bridge to avoid encroachments on the gas station and adjacent properties. Utility relocations will be significant. Estimated total cost for alternative 4 is \$7,163,300.

**Alternative #5-** consists of renovating the existing bridge which maintains the existing typical section and the bridge remains functionally obsolete and also remains posted at its current weight restriction plus still considered structurally deficient. Rehabilitation will lengthen the life of the bridge 15 to 20 years in its current condition. Abutment #1 and Pier #1 will need full replacement and a new retaining wall. Traffic will use the existing street system for a detour during construction. Estimated total cost for alternative 5 is \$6,240,800.

**No-Build Alternative-** Due to the deteriorating condition of the bridge, the No-Build alternative will eventually result in the permanent closure of the bridge to traffic. Due to

the high volume of traffic and location of this bridge, permanent closure is not feasible or recommended.

The purpose of this informational workshop public meeting from 4:00 p.m. to 7:00 p.m. is to afford participants an opportunity to ask questions and state their views and opinions on the bridge replacement project. Your **comments are important**: comment sheets will be provided at the workshop and one is attached to this handout; they can be dropped in a comment box at the workshop, or mailed to:

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

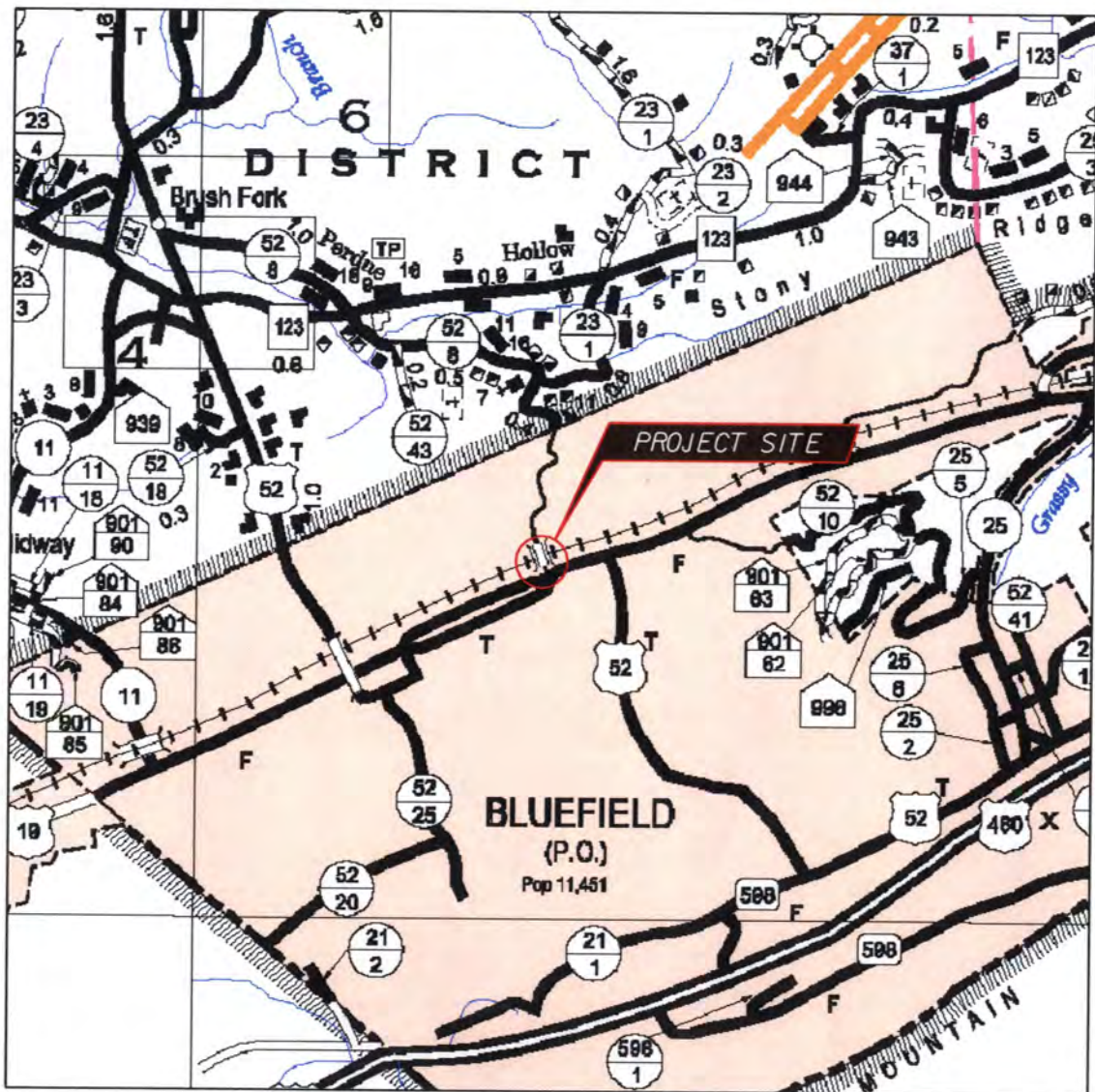
Any additional questions or comments can be sent to Sondra Mullins ([Sondra.L.Mullins@wv.gov](mailto:Sondra.L.Mullins@wv.gov)) or Traci Cummings ([Traci.L.Cummings@wv.gov](mailto:Traci.L.Cummings@wv.gov)) or visit the WVDOH Website at [www.transportation.wv.gov](http://www.transportation.wv.gov) for project information and the opportunity to comment on the project. **Comments are due by Thursday, November 17, 2011.**

**This project will be processed as a Categorical Exclusion to clear the Environmental (NEPA) requirement.**



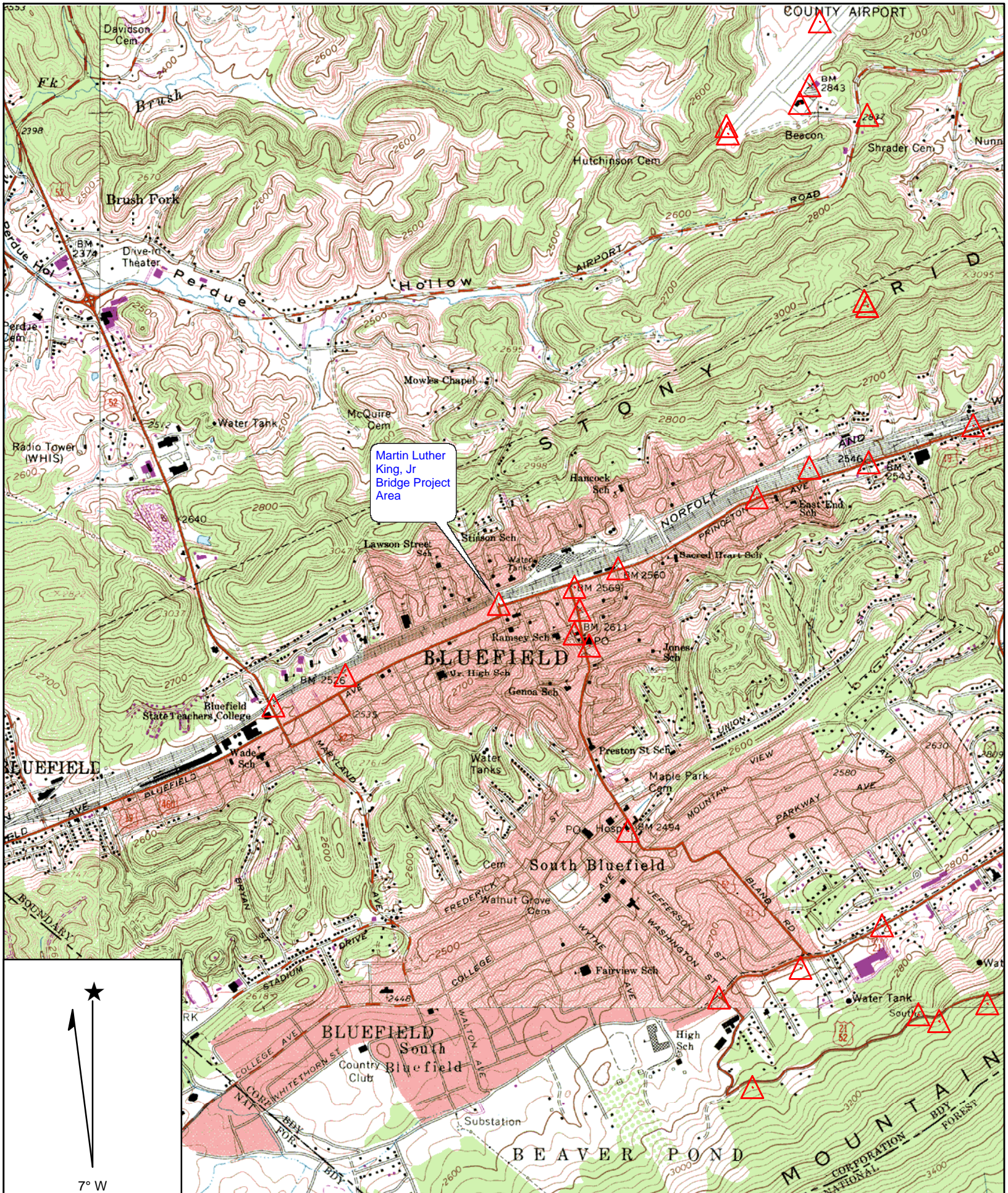


BRIDGE REPLACEMENT STUDY  
MARTIN LUTHER KING JR. BRIDGE  
STATE PROJECT NO. S328-BLUE-1  
MERCER COUNTY



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ENGINEERING DIVISION  
AUGUST 2011



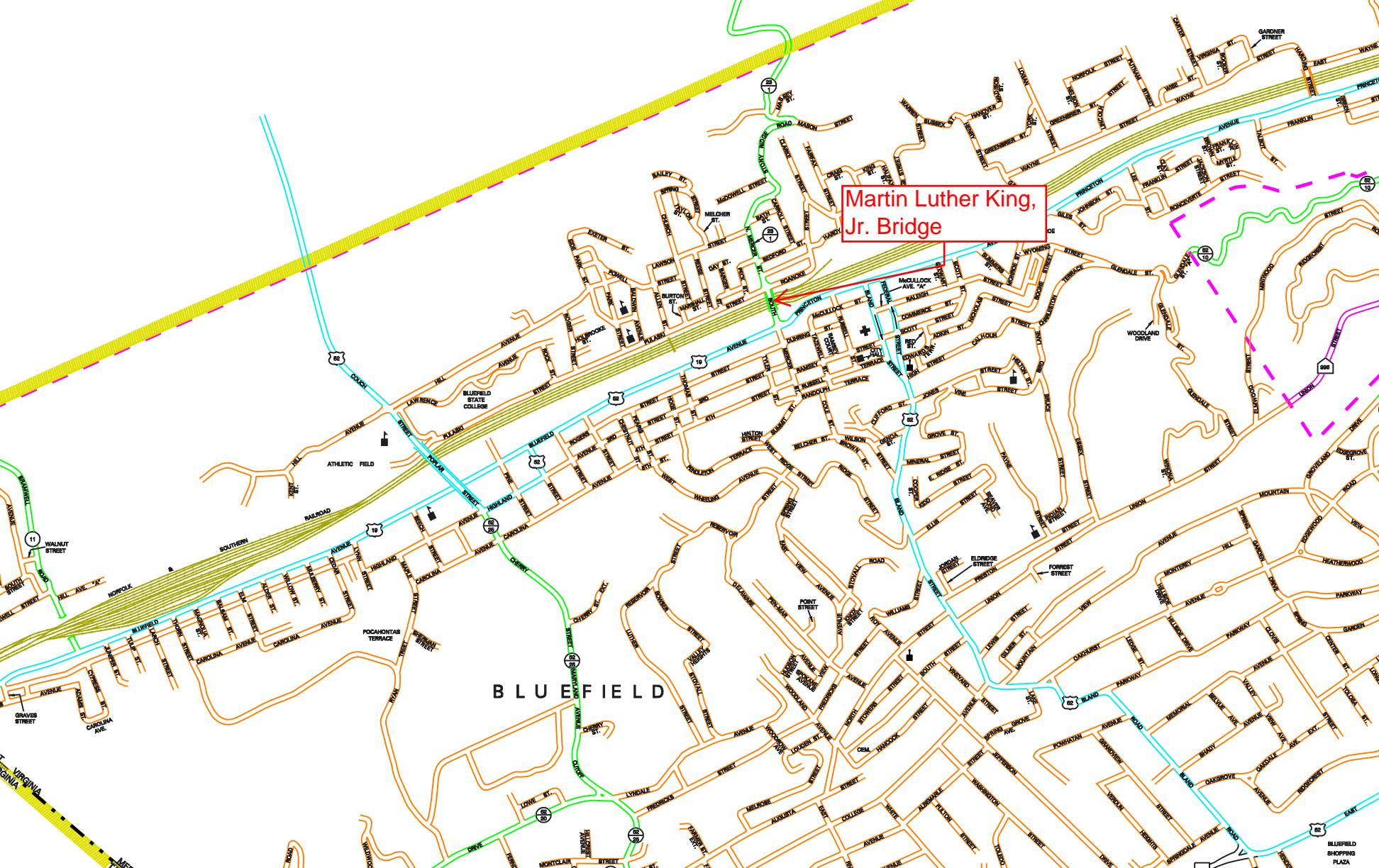


Martin Luther King, Jr Bridge Project Area

Name: BLUEFIELD  
 Date: 9/28/2011  
 Scale: 1 inch equals 2000 feet

Location: 17 0479928 E 4124749 N  
 Caption: Martin Luther King, Jr. Bridge  
 Mercer County





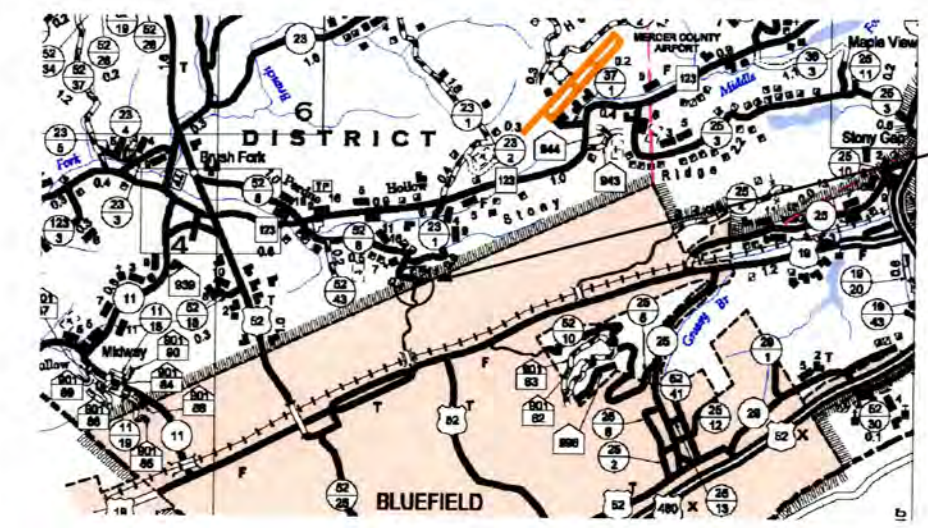
Martin Luther King, Jr. Bridge

BLUEFIELD

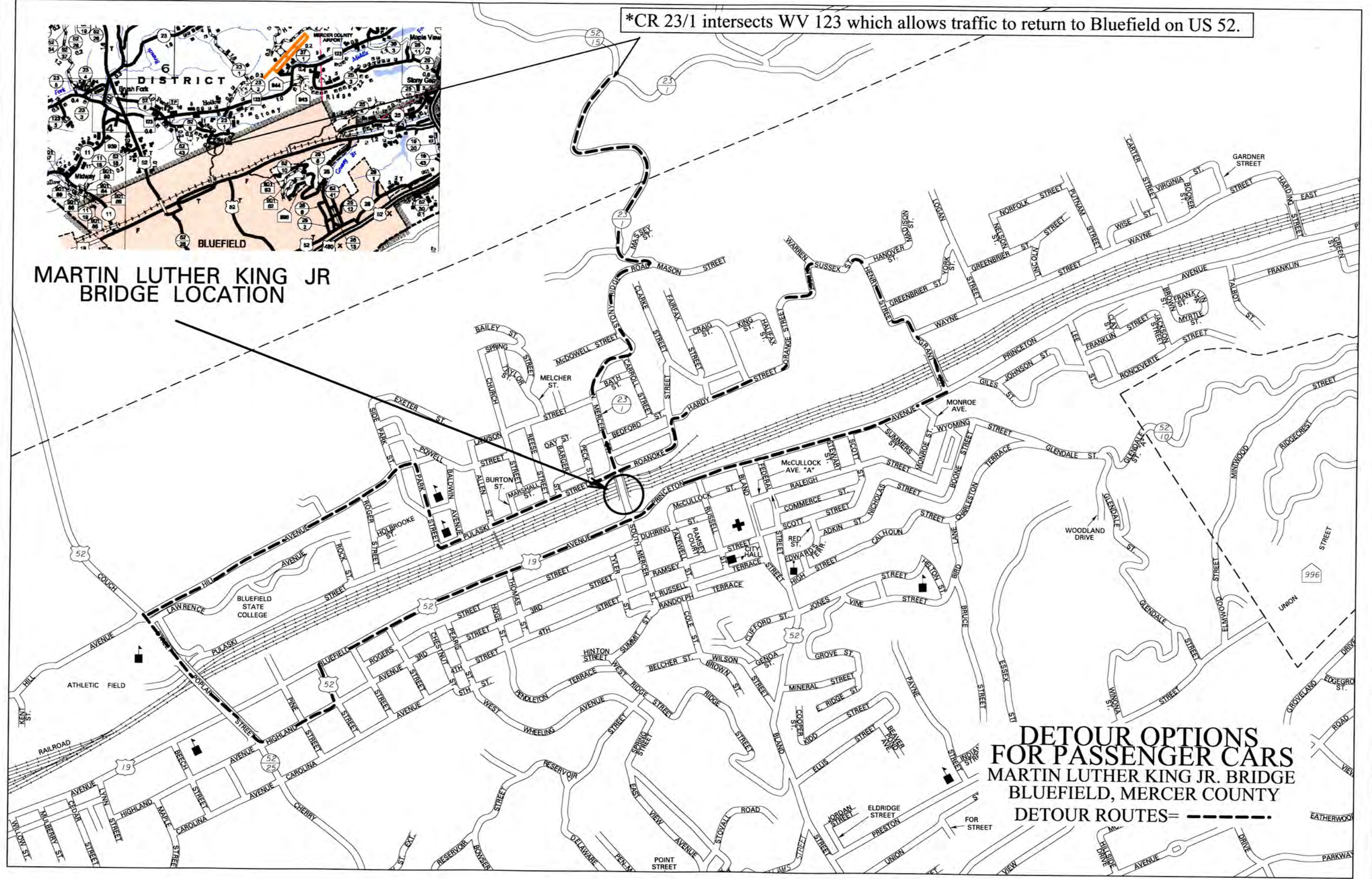
BLUEFIELD SHOPPING PLAZA



\*CR 23/1 intersects WV 123 which allows traffic to return to Bluefield on US 52.



### MARTIN LUTHER KING JR BRIDGE LOCATION






**DETOUR OPTIONS  
FOR PASSENGER CARS  
MARTIN LUTHER KING JR. BRIDGE  
BLUEFIELD, MERCER COUNTY  
DETOUR ROUTES= - - - - -**

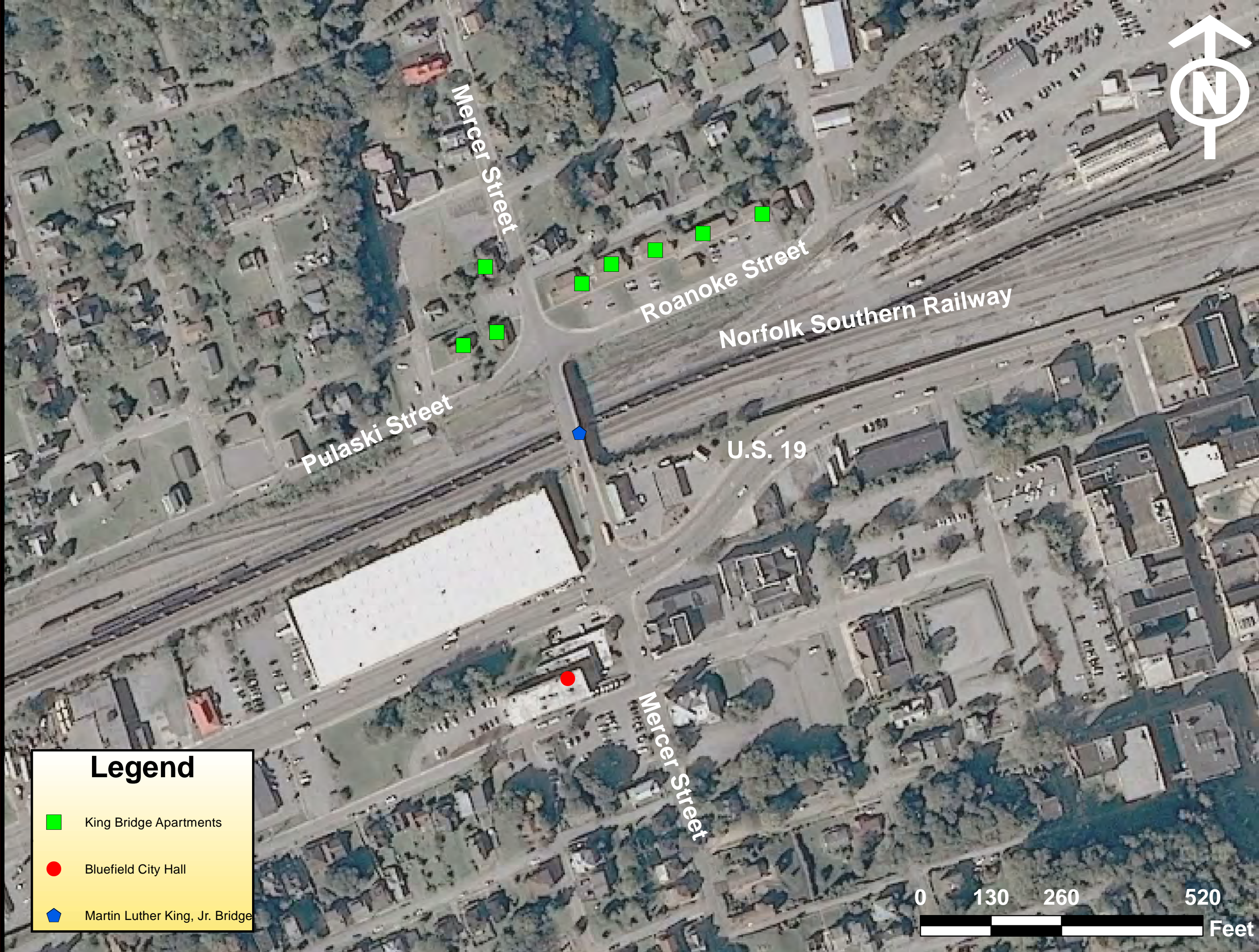


**Martin Luther King, Jr. Bridge**  
**Mercer County**  
**S328-BLU/E-1.00**  
**BR-0160(001)D**

West Virginia Division of Highways  
Engineering Division  
Environmental Section  
Randy Epperly  
September 27, 2011

**Legend**

-  King Bridge Apartments
-  Bluefield City Hall
-  Martin Luther King, Jr. Bridge





# LOCATION MAP

## MARTIN LUTHER KING JR. BRIDGE

### STATE PROJECT NO. S328-BLUE-1

### MERCER COUNTY



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ENGINEERING DIVISION





MERCER STREET

ROANOKE STREET

EXISTING BRIDGE

RR ROADWAY

MERCER STREET

JANPAK SUPPLY SOLUTIONS

1 STORY BRICK APT

PARKING LOT

PARKING LOT

158

162

163

160

161

152

157

156

155

153

154

737

GAS STATION/ 1 STORY BRICK

GAS CANOPY

1 STY GARAGE

SHED  
ABOVE  
GROUND  
TANK

743

739

NO  
PR  
MA  
EX  
TH

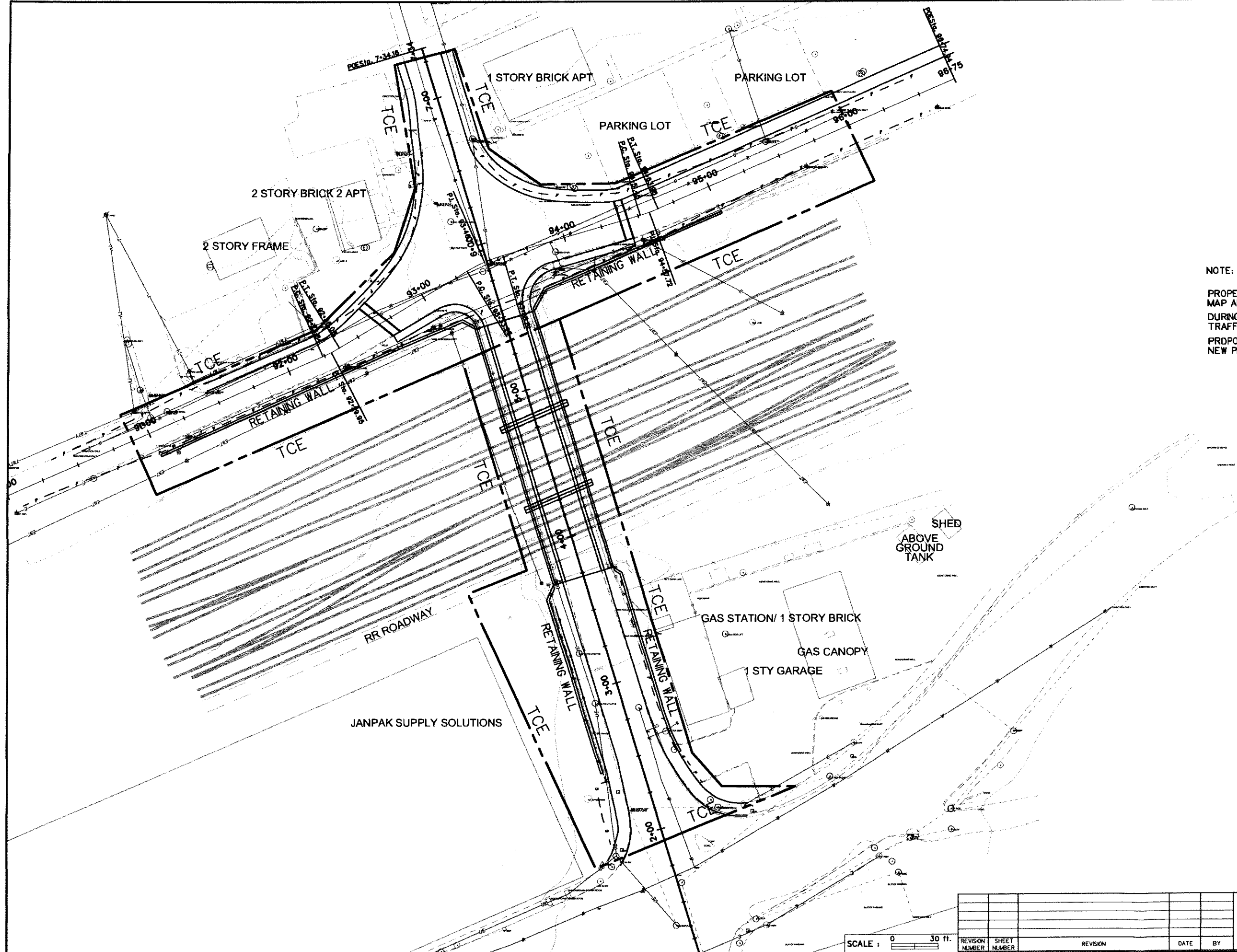


Public Road Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	10	S328- BLUE 1			MERCER		

FIGURE 6  
NEW BRIDGE



NOTE:  
 PROPERTY INFORMATION DERIVED FROM MERCER COUNTY TAX  
 MAP AND AVAILABLE DEEDS.  
 DURING CONSTRUCTION EXISTING BRIDGE WILL BE CLOSED AND  
 TRAFFIC MUST USE OTHER EXISTING ROUTES FOR DETOUR.  
 PROPOSED STRUCTURE IS A THREE-SPAN BRIDGE.  
 NEW PIERS ARE PLACED IN SAME LOCATION AS EXISTING PIERS.



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

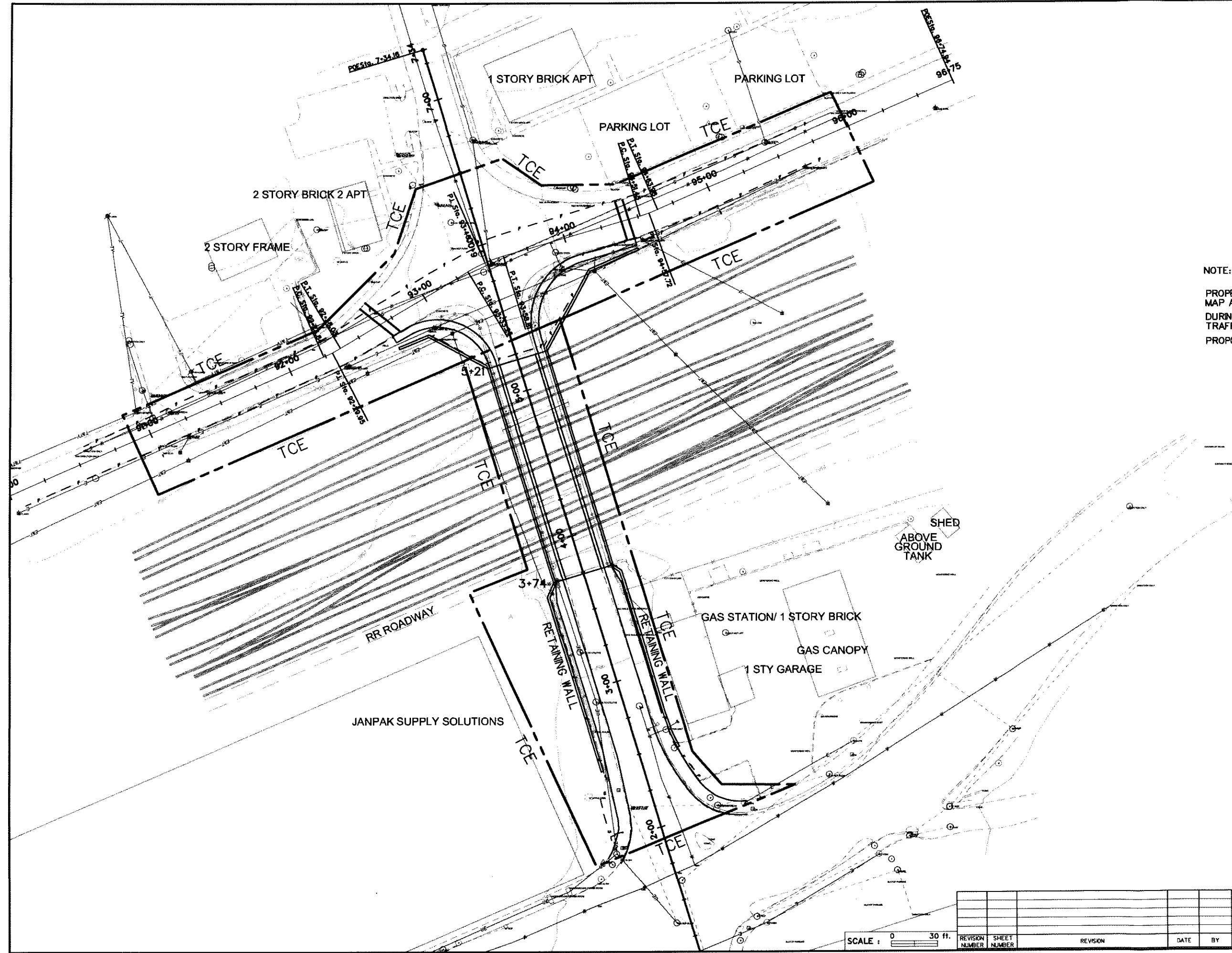
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**ALT 1 PLAN SHEET**

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
	10	S328- BLUE 1			MERCER		

FIGURE 8  
NEW BRIDGE



NOTE:  
PROPERTY INFORMATION DERIVED FROM MERCER COUNTY TAX MAP AND AVAILABLE DEEDS.  
DURING CONSTRUCTION EXISTING BRIDGE WILL BE CLOSED AND TRAFFIC MUST USE OTHER EXISTING ROUTES FOR DETOUR.  
PROPOSED STRUCTURE IS A SINGLE-SPAN BRIDGE.



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**ALT 2 PLAN SHEET**

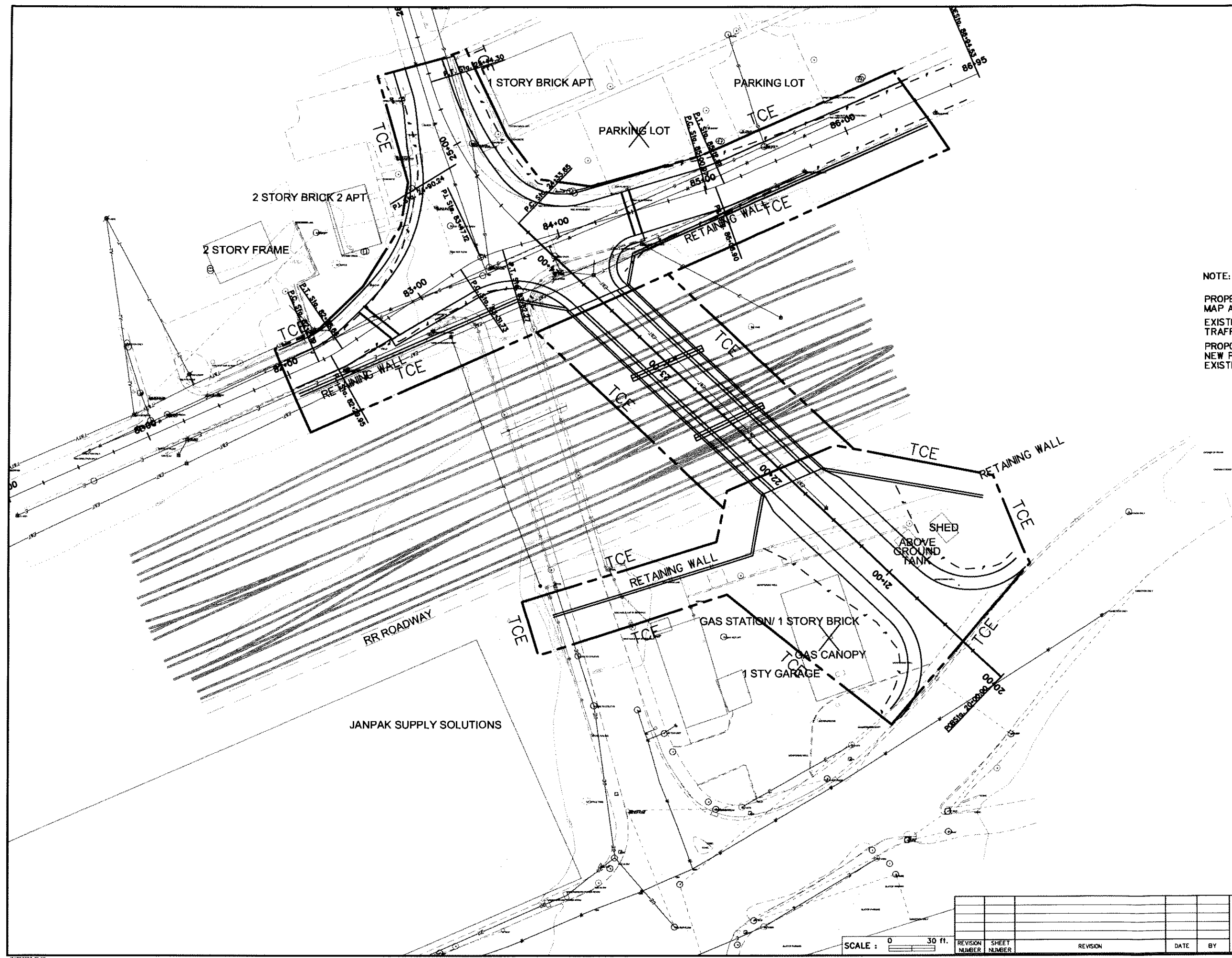


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
	10	S32B- BLUE 1			MERCER		

FIGURE 10  
NEW BRIDGE



NOTE:  
 PROPERTY INFORMATION DERIVED FROM MERCER COUNTY TAX  
 MAP AND AVAILABLE DEEDS.  
 EXISTING BRIDGE WILL BE USED TO MAINTAIN  
 TRAFFIC DURING CONSTRUCTION.  
 PROPOSED STRUCTURE IS A THREE-SPAN BRIDGE.  
 NEW PIERS ARE PLACED IN BETWEEN SAME TRACKS AS  
 EXISTING PIERS.



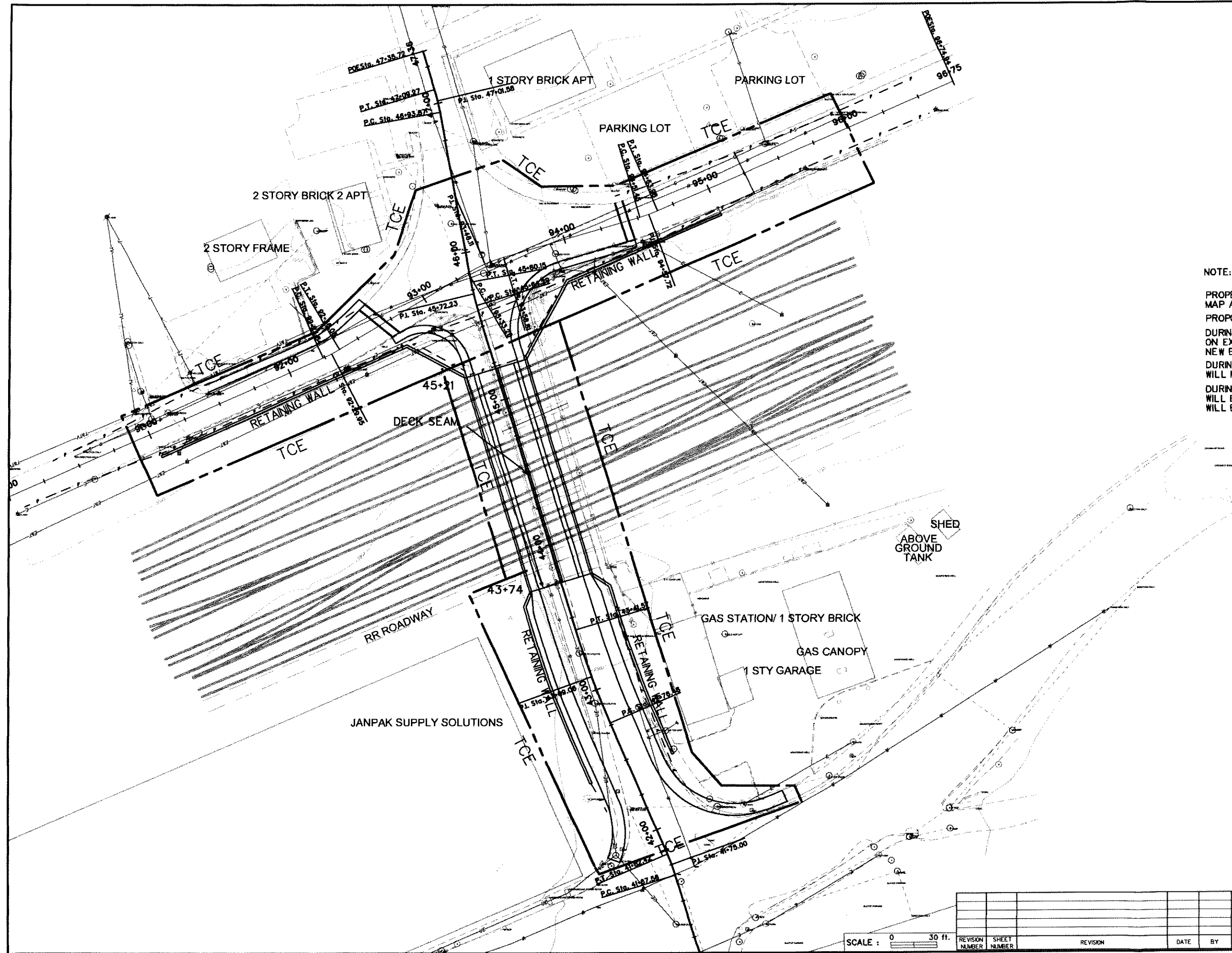
SCALE : 0 30 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**ALT 3 PLAN SHEET**

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
	10	S328- BLUE 1			MERCER		

FIGURE 12  
NEW BRIDGE



**NOTE:**

PROPERTY INFORMATION DERIVED FROM MERCER COUNTY TAX MAP AND AVAILABLE DEEDS.

PROPOSED STRUCTURE IS A SINGLE-SPAN BRIDGE.

DURING STAGE 1 OF CONSTRUCTION, TRAFFIC IS MAINTAINED ON EXISTING BRIDGE WHILE A 22.5 FEET WIDE SECTION OF NEW BRIDGE DECK IS CONSTRUCTED TO THE WEST.

DURING STAGE 2 OF CONSTRUCTION THE NEW BRIDGE WILL MAINTAIN TWO LANES OF TRAFFIC.

DURING STAGE 2 OF CONSTRUCTION, EXISTING BRIDGE WILL BE DEMOLISHED AND REMAINDER OF NEW BRIDGE WILL BE COMPLETED.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**ALT 4 PLAN SHEET**