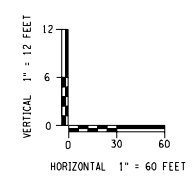
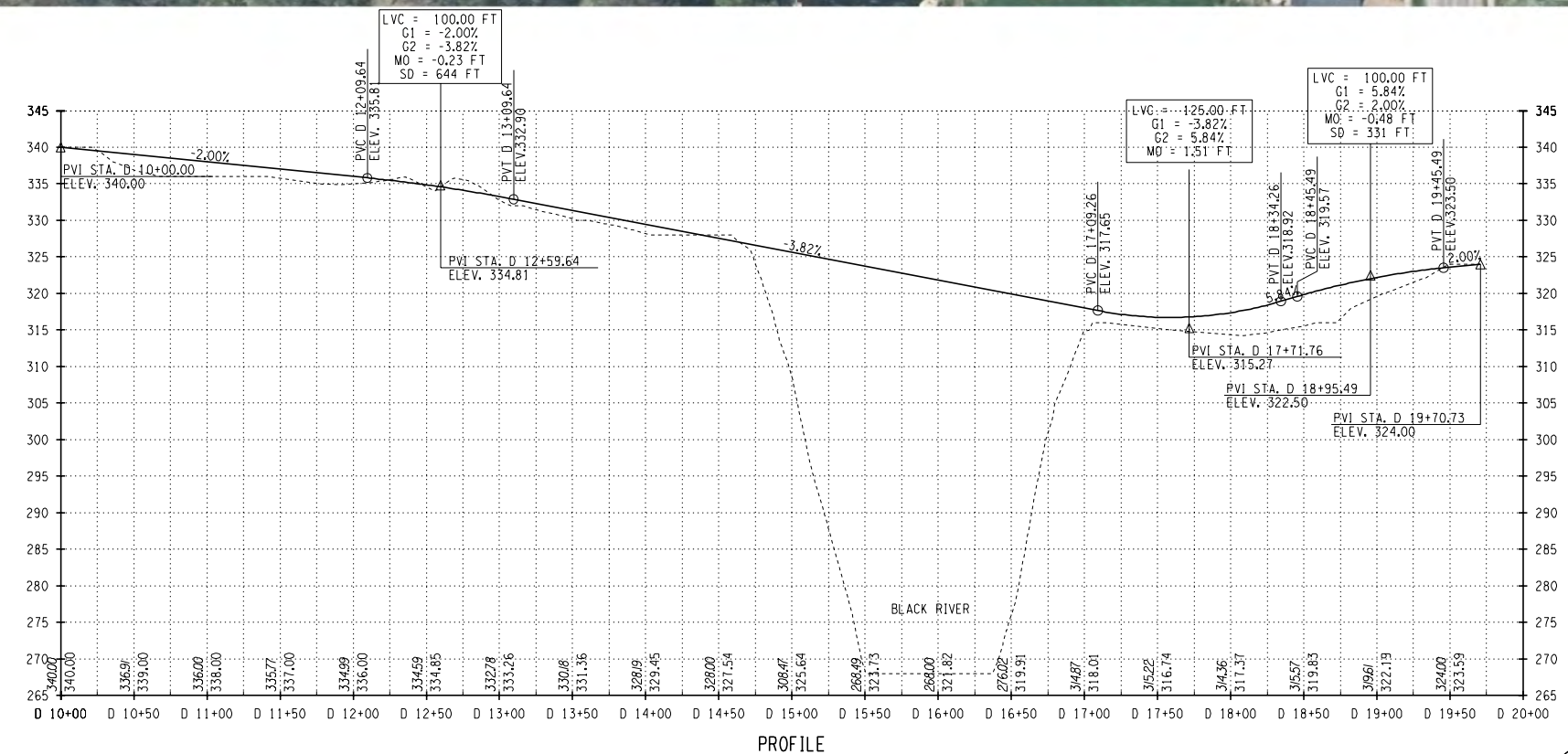
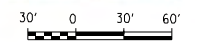


Department of Transportation

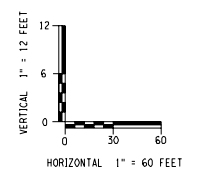
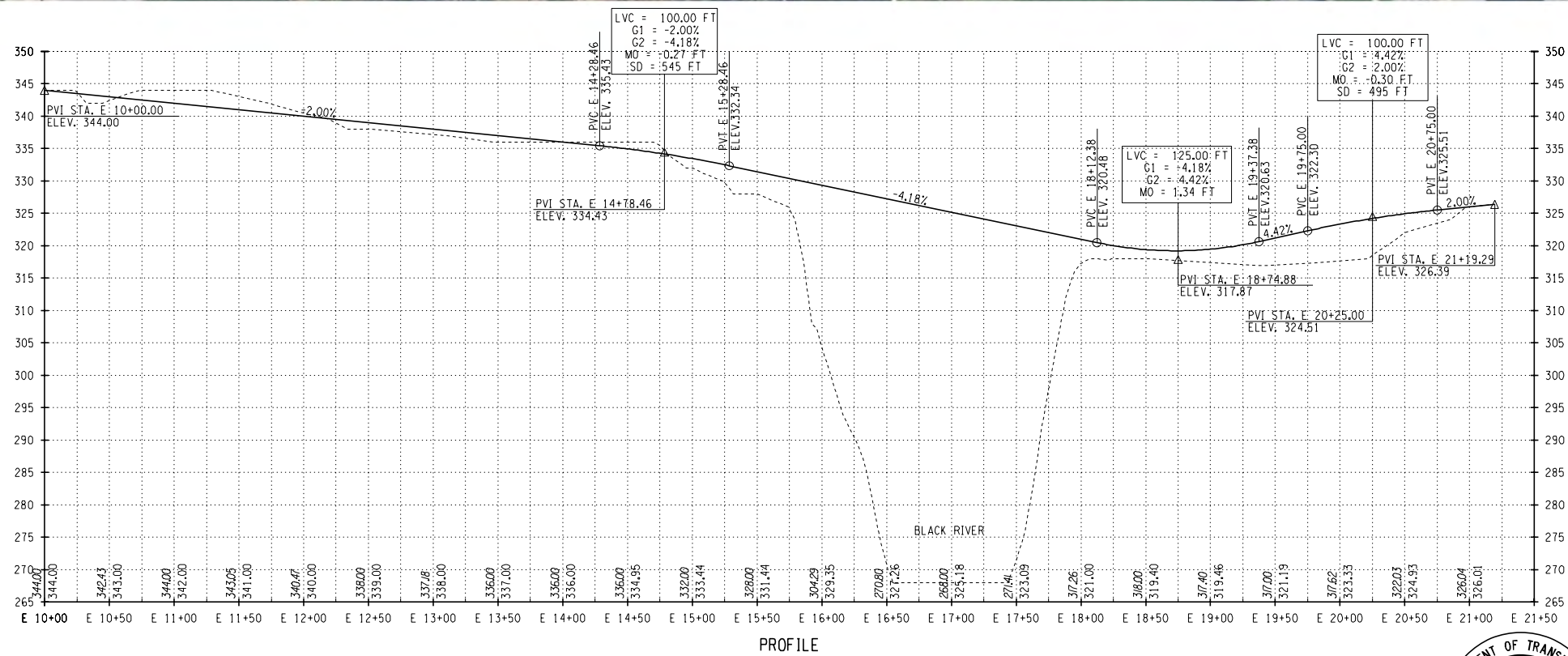
BROWNVILLE BRIDGE REPLACEMENT STUDY ALTERNATIVE C



UNITED STATES
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION



BROWNVILLE BRIDGE REPLACEMENT STUDY ALTERNATIVE D

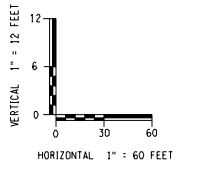
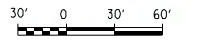
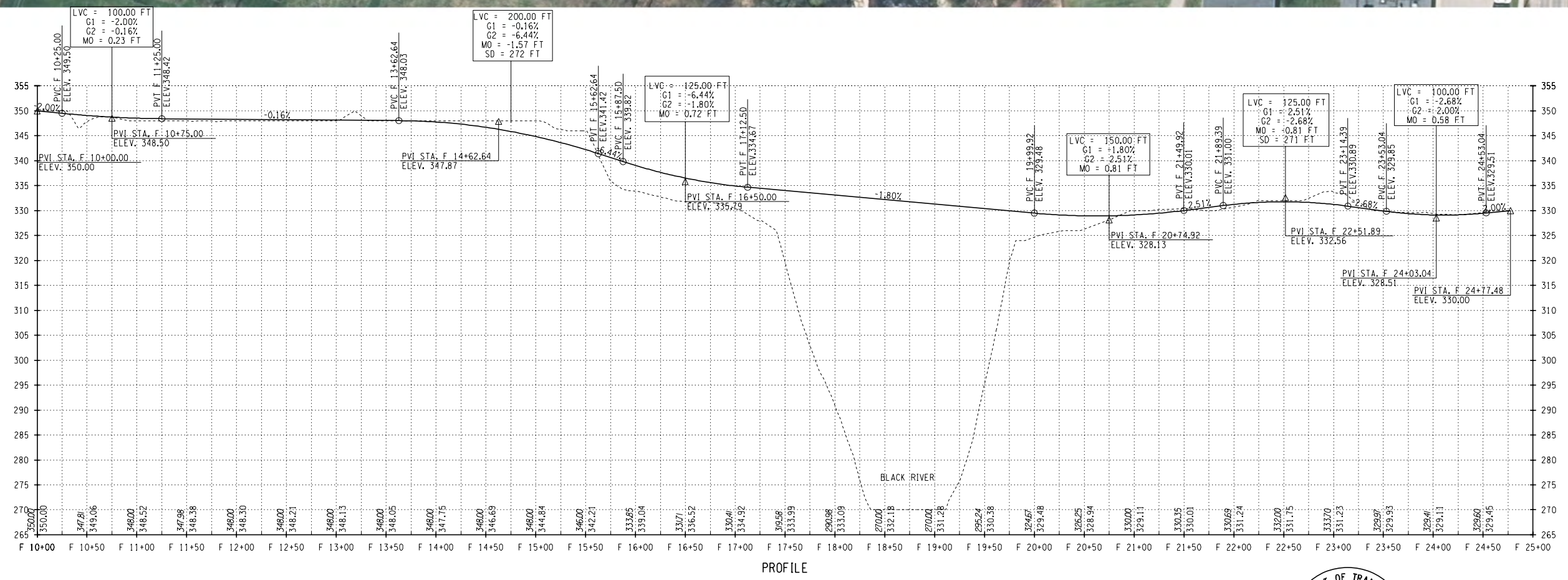


Department of
Transportation

BROWNVILLE BRIDGE REPLACEMENT STUDY ALTERNATIVE E



UNITED STATES
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION



Department of Transportation

BROWNVILLE BRIDGE REPLACEMENT STUDY ALTERNATIVE F



**UNITED STATES DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION**

Attachment C: Completed Evaluation Matrix for Secondary Screening of Alternatives

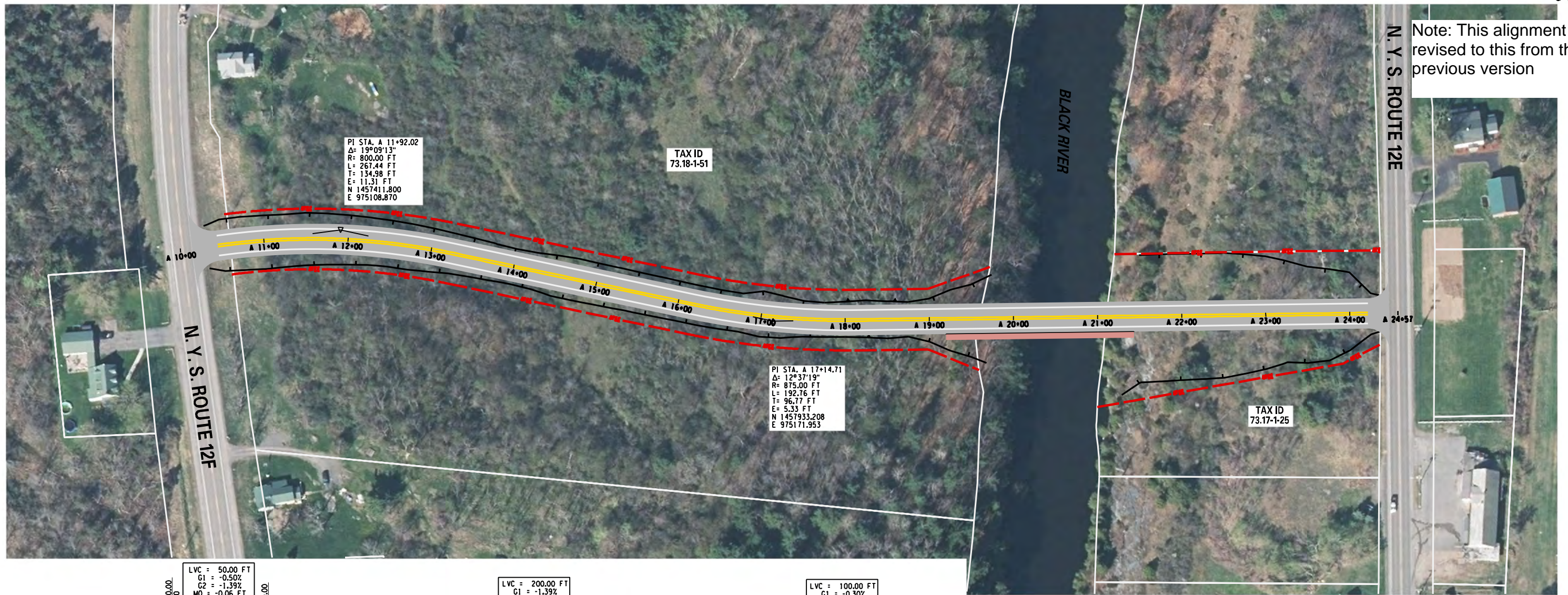
Category	Criteria	Alternative A	Alternative B	Alternative C	Existing	Alternative D	Alternative DE	Alternative E	Alternative F
Location/ Footprint	Bridge avoids or minimizes impact to school zone								
	Bridge approaches minimize the number and nature of private land needed to acquire								
	Bridge and bridge approaches minimize number and nature of land owners impacted								
	Existing bridge traffic can remain open while new bridge is constructed								
	Location minimizes non-standard geometric design features (i.e. avoid steep slopes, areas of limited site distance).								
Safety/ Operations	Bridge approaches do <u>not</u> result in new traffic issues at either the north or south landing								
	Travel distance across Black River is <u>not</u> greatly increased from existing conditions								
	Bridge accommodates existing primary truck routes								

	Bridge location does not greatly impact origin/ destination characteristics of existing bridge								
	Bridge and bridge approaches minimize the need for Non-Standard Design Features								
	Bridge location reduces crash potential								
	Bridge location improves existing geometrics								
	Improves bicycle and pedestrian accommodations								
Environmental	Bridge and bridge approaches avoid or minimize impact to significant natural features, including wetlands and other sensitive areas								
	Bridge and bridge approaches avoid or minimize impact to significant historical or cultural resources								
	Bridge approaches avoid steep slopes								
Multi-Modal Opportunities	Bridge provides areas for public overlook/ viewing								

	Improves connectivity between Watertown and tourist areas northwest of Watertown								
Tourism and Economic Development	Bridge continues to support and promote Brownville business district								
	Bridge conforms to larger regional tourism and economic development vision								
	Impacts major employers (i.e. school, paper mill)								
Cost and Performance	Meets roadway owner (NYSDOT) preference to optimize capital construction, operating, and maintenance costs								
	Meets NYSDOT's Operational Needs								
	Estimated Total Project Cost								

Attachment D: Cross-Sections and Detailed Project Information for Alternatives A, DE, and E

Note: This alignment was revised to this from the previous version

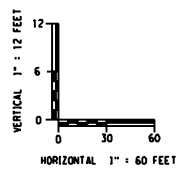
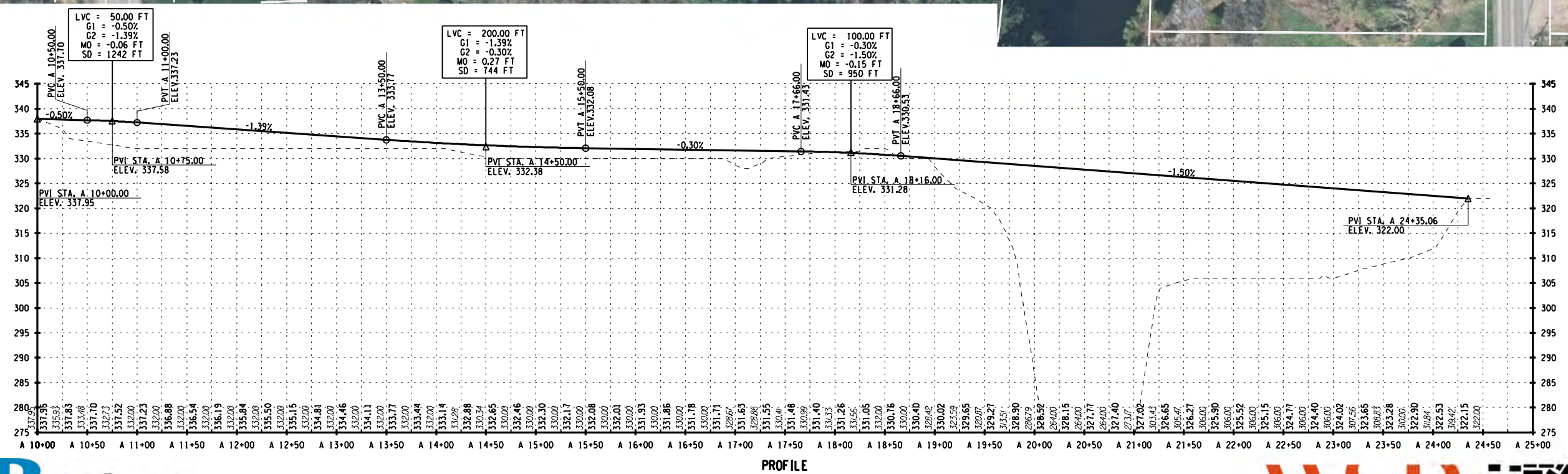


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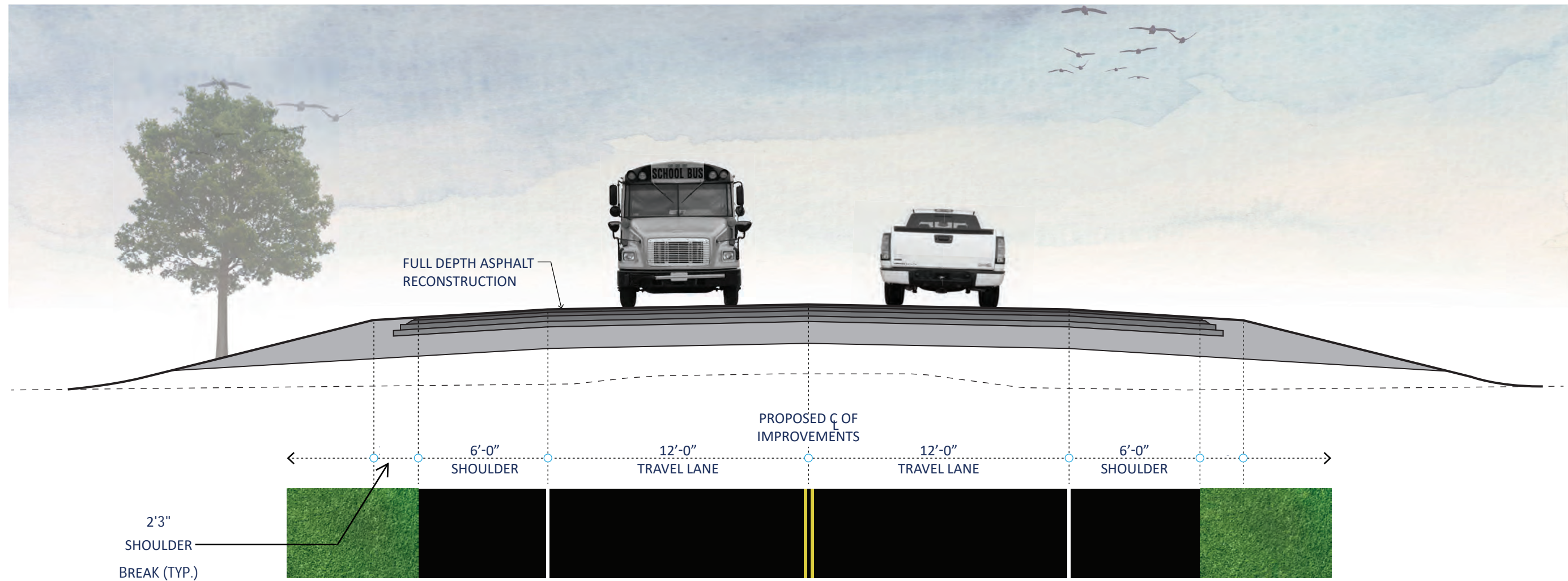


Barton & Loguidice

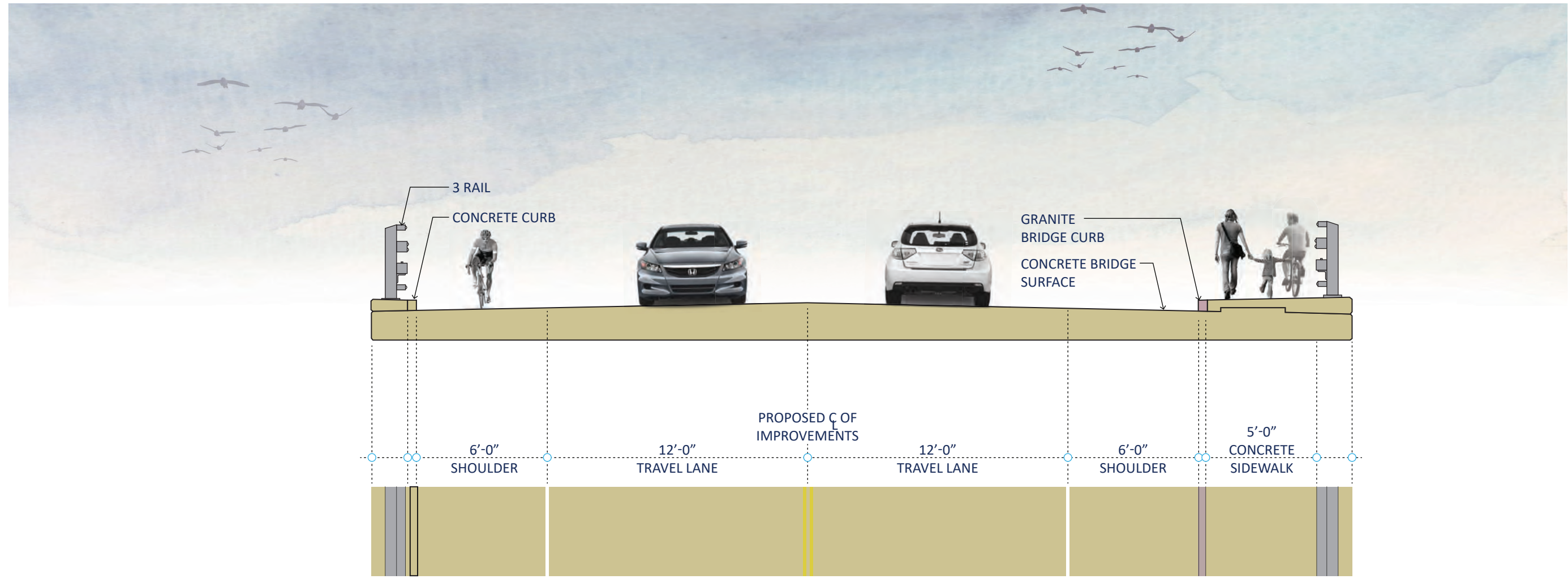
**BROWNVILLE BRIDGE REPLACEMENT STUDY
 ALTERNATIVE A**



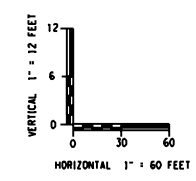
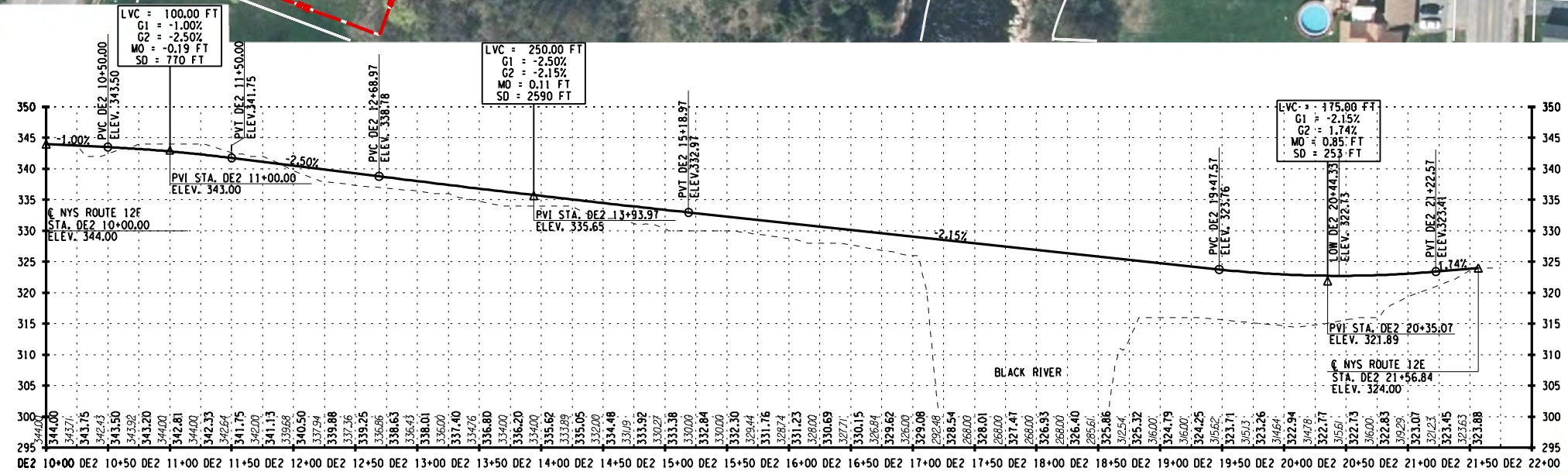
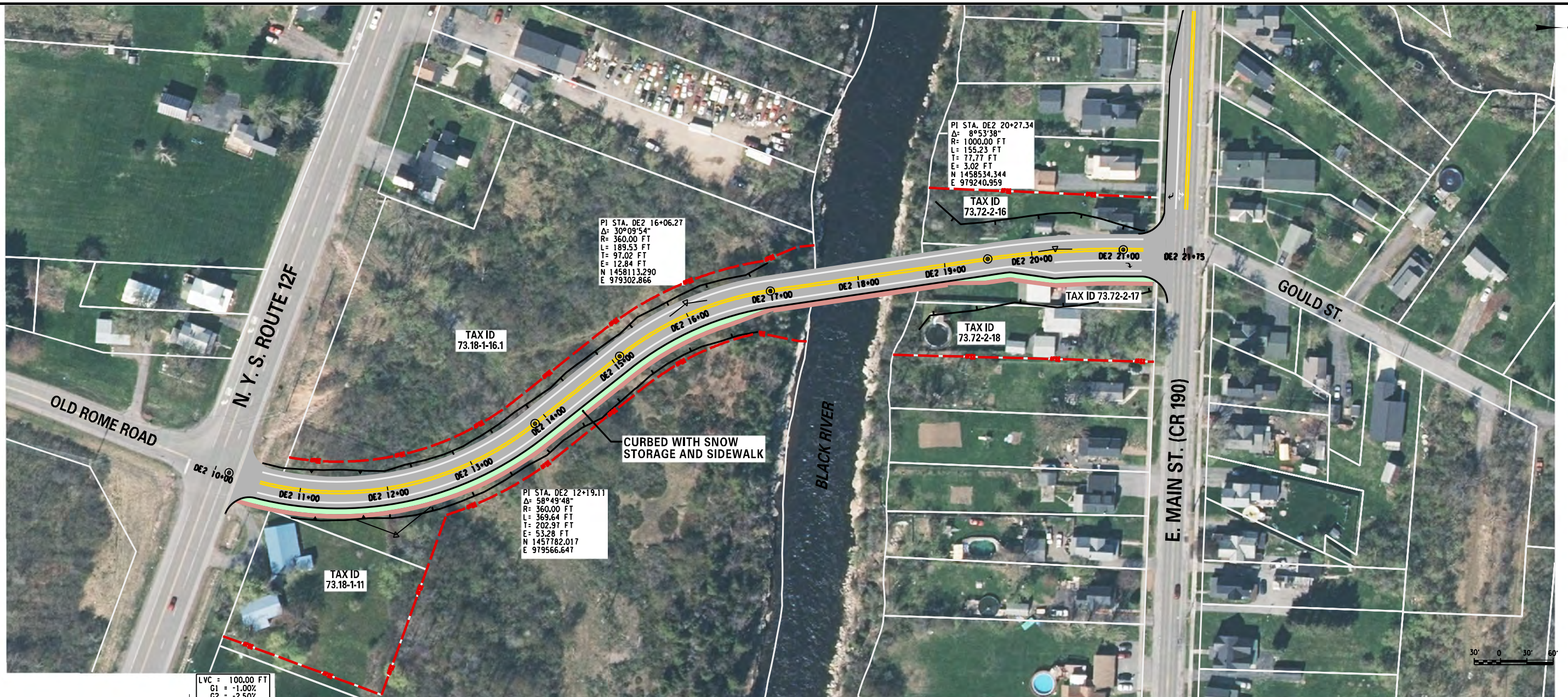
**HIGHLAND
 PLANNING**



TYPICAL ROAD SECTION
 FULL DEPTH RECONSTRUCTION SECTION
 N.T.S.
 ALTERNATIVE A



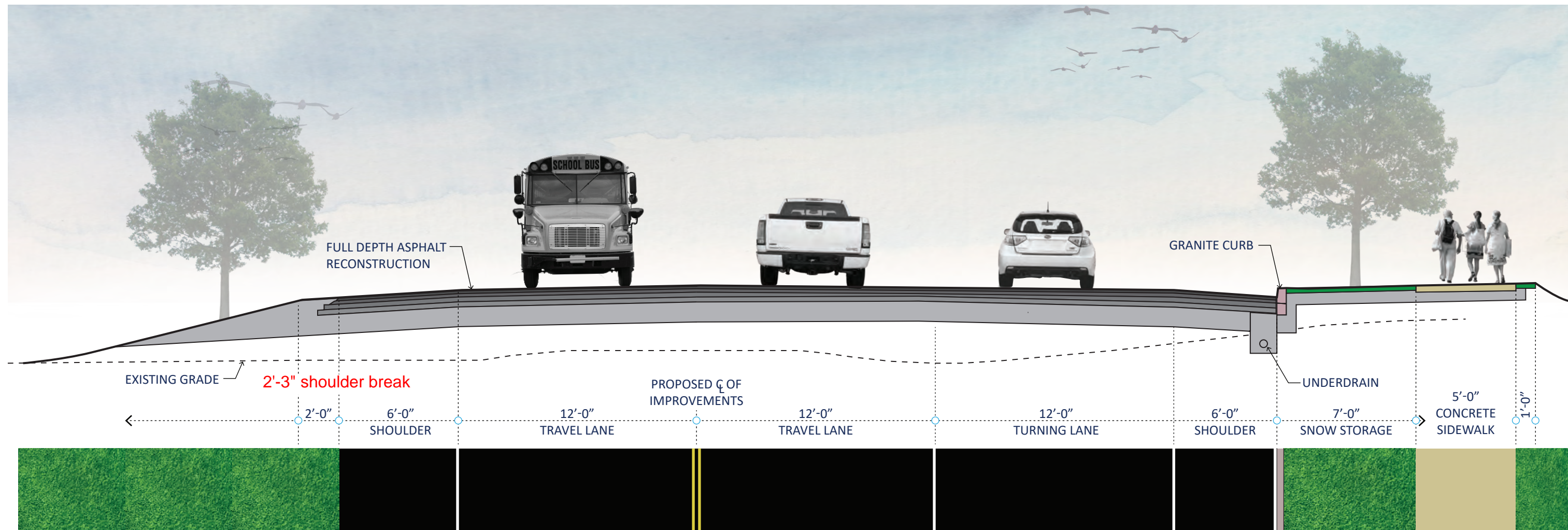
**TYPICAL BRIDGE SECTION
 FULL DEPTH RECONSTRUCTION
 N.T.S.
 ALTERNATIVE A**



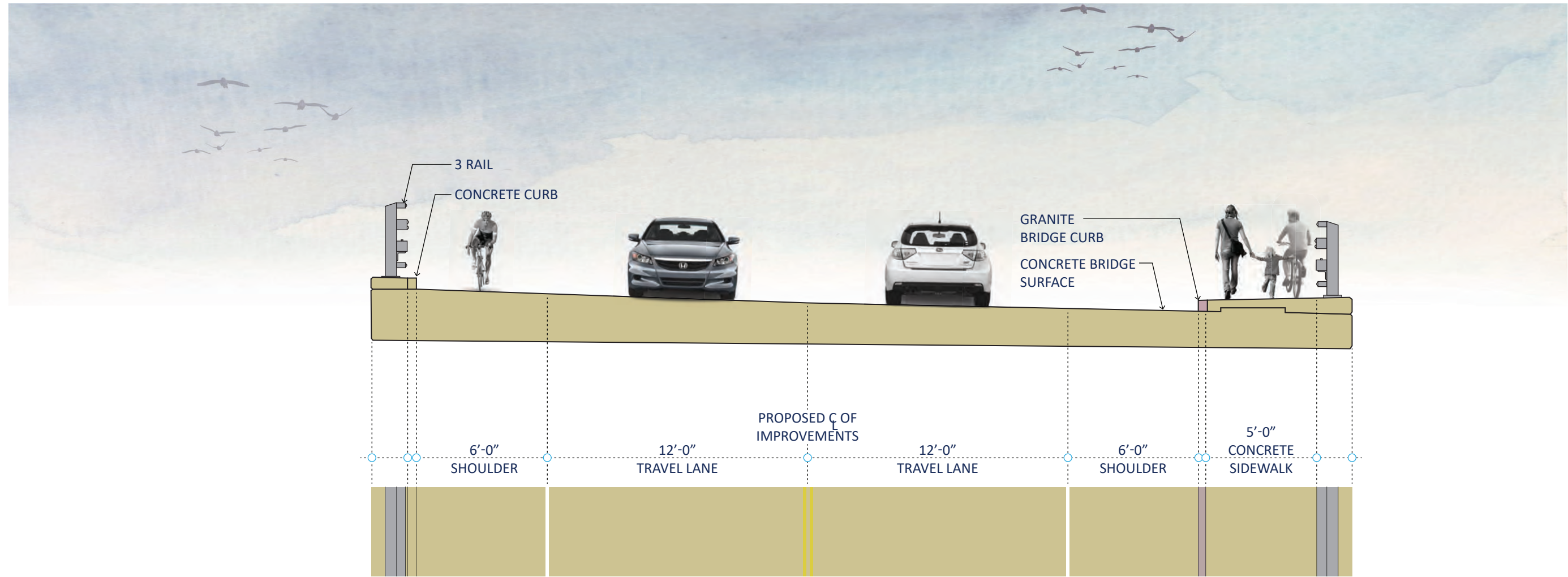
Barton & Loguidice

**BROWNVILLE BRIDGE REPLACEMENT STUDY
 ALTERNATIVE DE**

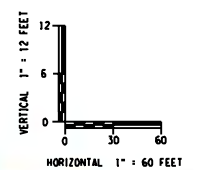
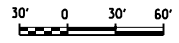
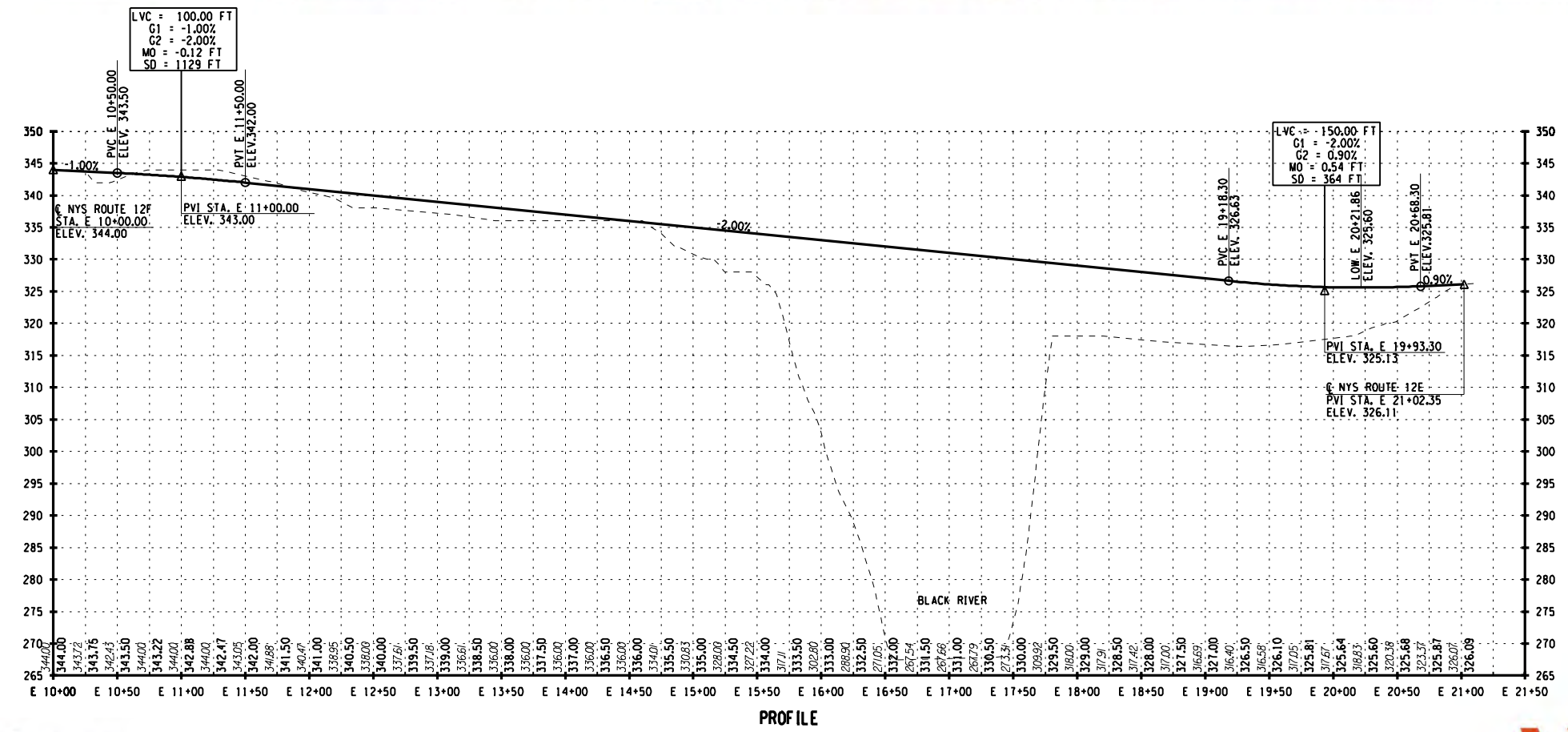
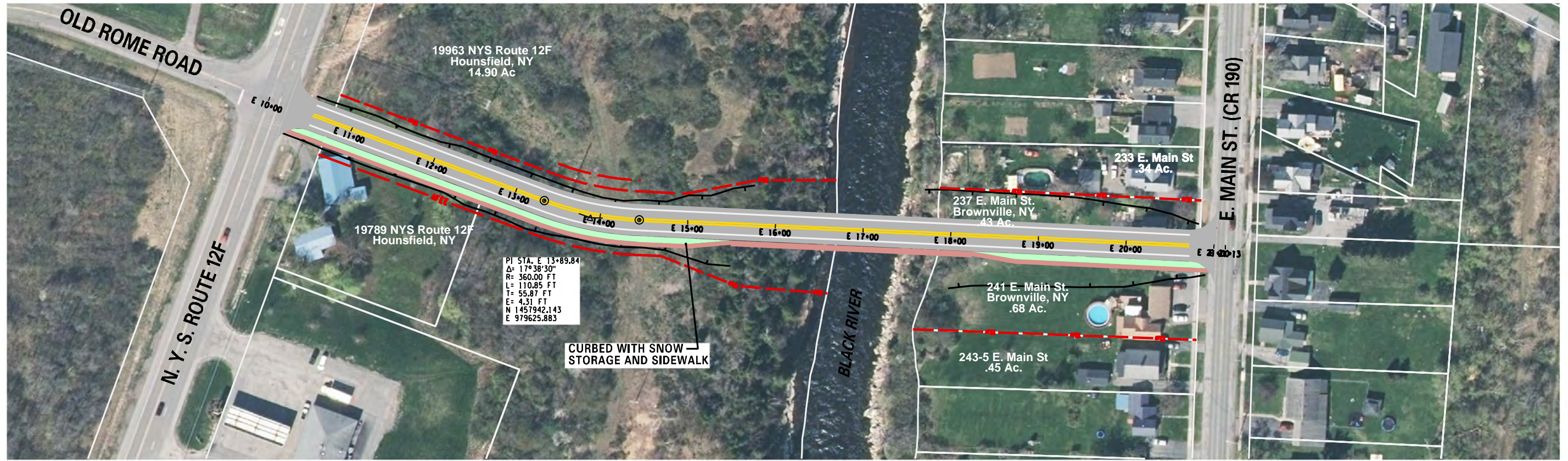




TYPICAL ROAD SECTION
 FULL DEPTH RECONSTRUCTION SECTION
 N.T.S.
 ALTERNATIVES DE



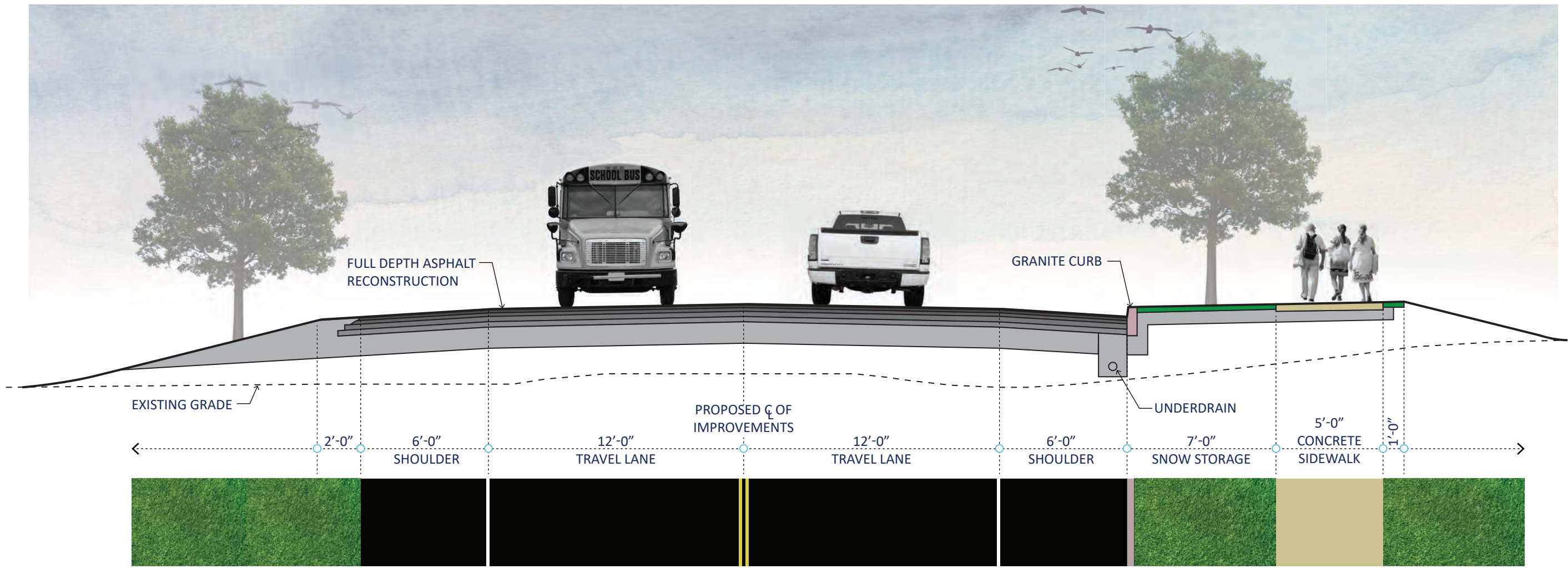
**TYPICAL BRIDGE SECTION
FULL DEPTH RECONSTRUCTION**
N.T.S.
ALTERNATIVE DE



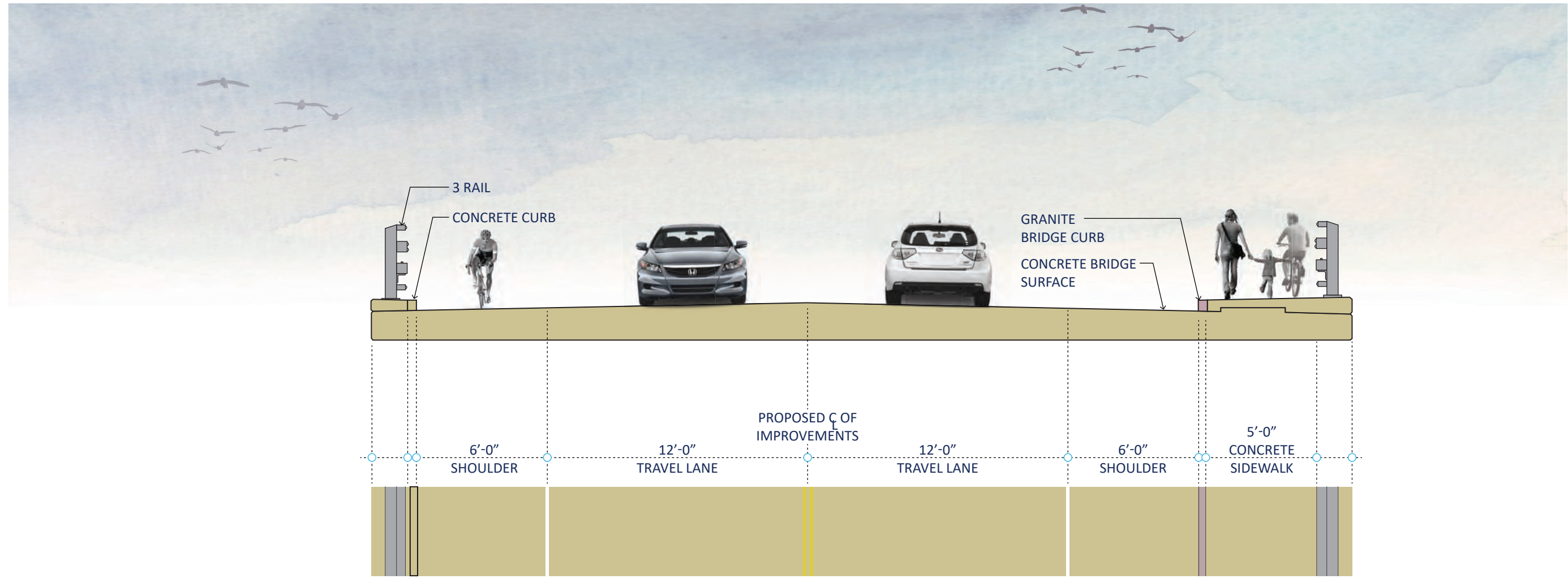
Barton & Loguidice

BROWNVILLE BRIDGE REPLACEMENT STUDY ALTERNATIVE E





TYPICAL ROAD SECTION
 FULL DEPTH RECONSTRUCTION SECTION
 N.T.S
 ALTERNATIVE E



**TYPICAL BRIDGE SECTION
FULL DEPTH RECONSTRUCTION**
N.T.S.
ALTERNATIVE E

Attachment E: Traffic Analysis

As part of the NYSDOT Brownville Bridge replacement project, a focused traffic analysis to identify potential traffic impacts of the proposed bridge alternates was conducted. Recently, the original traffic analysis was updated to reflect the final three alternatives that have resulted from the design location process. The proposed project would construct a two-lane bridge connecting NY 12E with NY 12F over the Black River. The original alternative locations of A1, A2, A3, B, DE1, and DE2 have been reduced to three options; Alt. A, Alt. E and Alt. DE2. For the purposes of this traffic analysis, the alternatives result in three (3) intersecting street scenarios, in addition to the existing/no new-build scenario.

As per the previous study, the traffic analysis used existing available traffic data to support the alternative bridge location traffic analysis. An existing conditions and alternate bridge location peak hour intersection operations analysis was conducted using the available existing traffic volumes. No future traffic volume projections were identified as part of the analysis. Existing intersection turning movement data was redistributed along the adjacent roadway network for each alternative bridge location and compared to existing conditions to determine overall impacts to the traffic operations along the roadway network.

The following intersections were included in the analysis:

- NY 12E (E. Main Street) with Bridge Street (existing Brownville Bridge);
- NY 12F with Bridge Street (existing Brownville Bridge);
- NY 12E (E. Main Street) with Washington Street;
- NY 12E (E. Main Street) with Brown Boulevard; and
- New Bridge intersections along NY 12E and NY 12F.

New intersections created by the alternative bridge locations were analyzed to include existing intersecting roadways where applicable.

Methodology and Assumptions

The proposed Brownville Bridge traffic analysis was conducted incorporating a distribution assumption for each proposed bridge location. For bridge alternative locations E and DE2, it was assumed that 100% of the existing bridge crossing volume would be redirected to the new bridge locations. For bridge alternative location A, it was assumed that 90% of the existing bridge crossing volume would be redirected to the new bridge locations. The reduction was to account for the more western location of the alignment moving further away from the center of Brownville and the predominate northeastward directional orientation of the existing traffic movements.

Traffic distribution patterns from the local roadways of Brown Boulevard and Washington Street in Brownville were also assumed to support the redirection of traffic to the new alternative bridge locations. Based on existing traffic turning movements, it was assumed that 60% of the traffic along Brown Boulevard is destined for the Brownville Bridge. Similarly, 90% of the traffic along Washington Street was assumed to be destined for the Brownville Bridge. These distribution assumptions were the basis for the redirection of traffic to the alternative bridge locations. Consistent with the assumptions noted previously, traffic volumes redirected to the bridge Alternative A location was reduced due to the proximity of the bridge away from the center of Brownville. Revised traffic destination assumptions from Brown Boulevard were assumed to be 50% and Washington Street 70% for bridge alternative location A.

The alternative bridge location intersection analysis was conducted with an initial assumption that the new intersections would be unsignalized. The inclusion of turning lanes into the proposed geometry was determined by matching existing lane configurations at the existing intersections. Where analysis indicated that operating conditions would be improved by the inclusion of left or right turning lanes, the assumption was noted and analyzed. Signalization of the intersection was analyzed where LOS conditions in an unsignalized condition were found to be unacceptable. No traffic signal warrant analysis was conducted as part of this analysis effort. Recommendations on locations for potential signalization were noted where applicable.

The existing signalized intersection of NY 12E with Washington Street was assumed to remain as a signalized intersection and was analyzed as such.

The future year analysis was conducted using a 0.5% per year traffic growth assumption. Future year analysis was conducted for a 20-year forecast condition.

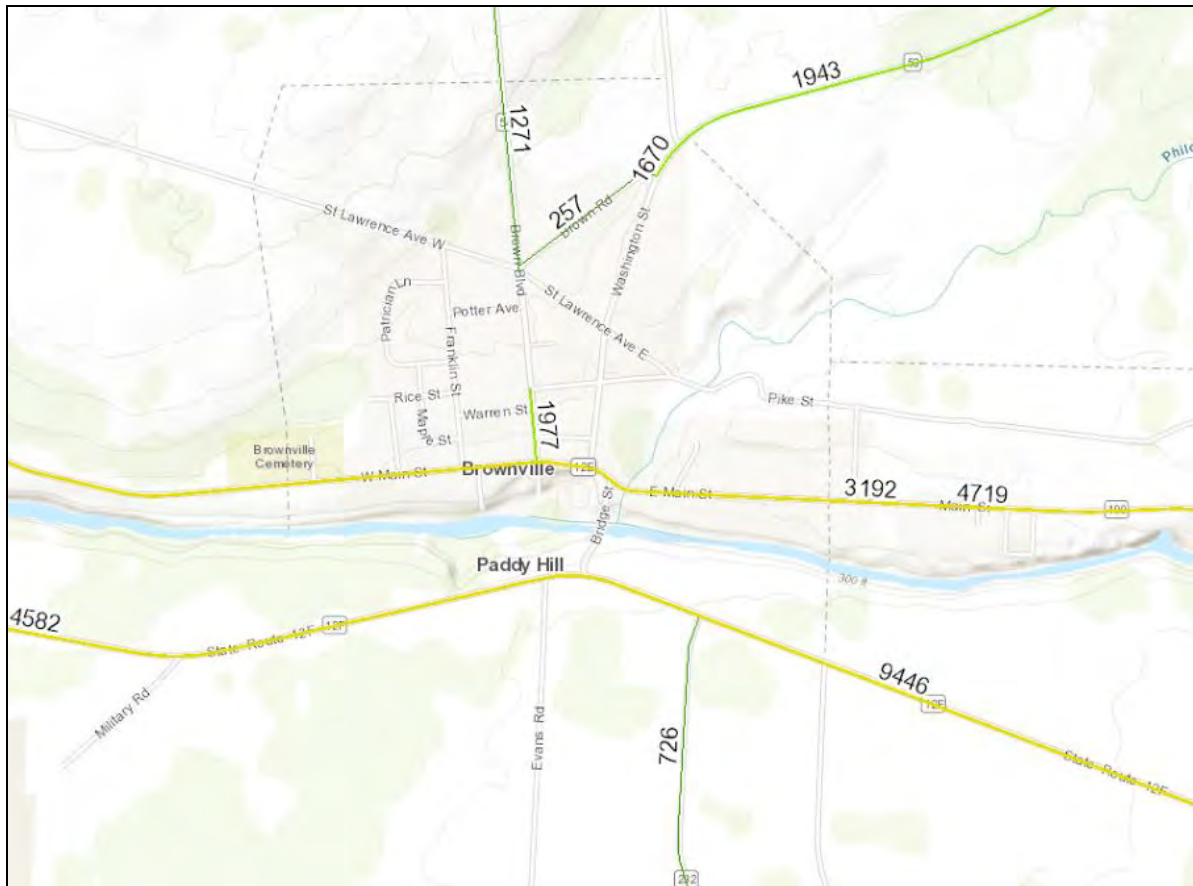
Existing Roadway Network and Volumes

An illustration of the existing roadway network and the Average Daily Traffic (ADT) volumes on the roadways are indicated in **Figure 1**.

This traffic analysis utilized existing available intersection traffic volume information obtained from the New York State Department of Transportation (NYSDOT). Peak period traffic counts at the four existing intersections was conducted in May of 2017. AM and PM turning movement counts were obtained at the intersections along with truck and heavy vehicle count summaries. The analysis of the roadway network intersections was conducted using the SYNCHRO traffic simulation and analysis program.

Average Daily Traffic counts (ADT) were also obtained from the NYSDOT Traffic Data Viewer. A summary of the ADT of the main roadways in the study area is shown in **Table 1**. As indicated, NY 12F east of the existing Brownville Bridge location was found to have the highest daily traffic volumes in the study area. The existing Brownville Bridge (Bridge Street) was found to have ADT volumes close to 7,000 vehicles per day.

Figure 1: Alternate Brownville Bridge Locations and Intersections of Analysis



Source: NYSDOT Traffic Data Viewer Nov 2018

Table 1: Existing Average Daily Traffic Volumes of Study Area Roadways

ROADWAY	Average Daily Traffic Volume
	Veh/Day
NY 12E (Main Street)	5,650
NY 12F (west of bridge)	4,600
NY 12F (east of bridge)	9,500
Bridge Street	6,950
CR 190 (E. Main Street)	3,200
Washington Street	1,950
Brown Blvd.	2,000
Old Rome Road	750

Source: NYSDOT Traffic Data Viewer

Findings and Recommendations

Results of the intersection analysis are summarized in **Table 2** at the end of this memo.

Existing Conditions

All of the intersections evaluated as part of this analysis were found to operate with acceptable overall levels of service (LOS) A, B, or C during the typical existing weekday AM and PM peak periods. Northbound traffic operations on Bridge Street approaching the traffic signal at NY 12E (E. Main Street) were found to be in the LOS D range during the PM peak period.

Bridge Alternative Location A

Existing Volumes

Under bridge alternative location A, the existing intersections of NY 12E (E. Main Street) with Brown Boulevard and Washington Street would operate at LOS A or B conditions in the AM and PM peak periods. This improved operation of the NY 12E (E. Main Street) intersection with Washington Street is the result of the traffic volume diversion on NY 12F to the new bridge location east of Washington Street, thus reducing the through traffic volumes on NY 12E through Brownville.

The new intersection of NY 12E with the bridge under alternative A would operate with acceptable LOS conditions of A and B in the AM and PM Peak periods, respectively. These operating conditions would occur with only single lane approaches to an unsignalized intersection. The inclusion of a westbound left turn lane, an eastbound right turn lane, and/or a northbound right turn lane would serve to further improve the LOS operating conditions.

A new unsignalized intersection of NY 12F with the bridge under alternative A would operate with acceptable LOS conditions of A in both the AM and PM Peak periods. These operating conditions would occur with a single lane southbound approach, a single lane westbound approach, and a single lane eastbound approach (no left turn lane) into an unsignalized intersection. The inclusion of a signal at the intersection with a similar lane configuration would improve the operating conditions of the intersection to a LOS B in both the AM and PM peak periods. Additional capacity and safety improvements could be obtained by adding an eastbound left turn lane.

Figure 2: Bridge Alternative A Roadway Lane Configurations

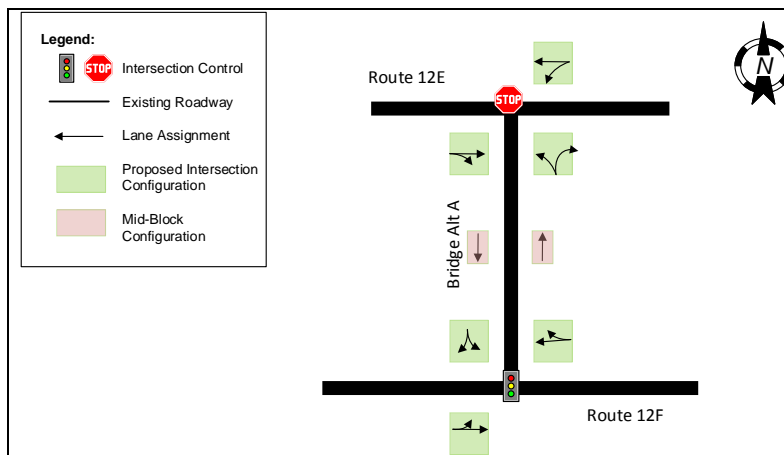


Figure 3 illustrates the location of bridge alternative A.

Figure 3: Bridge Alternative A



Bridge Alternative Location DE2

Existing Volumes

Under bridge alternative location DE2, the existing intersections of NY 12E (E. Main Street) with Brown Boulevard and Washington Street would operate at LOS A or B conditions in the AM and PM peak periods. The operating conditions of these intersections would be similar to the existing conditions since the bridge orientated traffic would utilize NY 12E through these intersections in a related manner.

The new intersection of the bridge under alternative DE2 with NY 12E would be located at Gould Road and create a new four-legged intersection. Investigating this intersection operation as an unsignalized four-way stop control condition with single lane approaches found acceptable LOS conditions of A in the AM peak period, but at a deteriorating LOS D in the PM peak periods. The northbound bridge approach to the new intersection would be anticipated to operate at a deteriorating LOS F in the PM peak with the single lane approach. The inclusion of an eastbound right turn lane and a northbound left turn lanes would serve to increase the LOS operating conditions to a LOS A in the AM Peak and LOS B in the PM Peak. Inclusion of a signal at the intersection could serve to provide similar LOS operating conditions, however, increased delay per vehicle would result with the inclusion of a traffic signal during off-peak hours.

The new intersection of the bridge under alternative DE2 with NY 12F would align with Old Rome State Road, creating a new four-legged intersection. An unsignalized (four-way stop control) intersection would operate with acceptable LOS conditions of A and C in the AM and PM peak periods, respectfully, however; the southbound bridge approach to the new intersection would be anticipated to operate at a deteriorated LOS of D in the AM peak and E in the PM peak period. These operating conditions would occur with a single lane southbound approach, a double lane westbound approach (with right lane turned into right turn lane at intersection), and a single eastbound thru lane (no left turn lane) and right turn lane drop at the intersection as per existing conditions. Investigating the operation of the intersection for two-way stop control on the approaches to NY 12F with free-flow conditions along NY 12F increased the delay on the bridge approach roadway as compared to the four-way stop control creating unacceptable delay and operating conditions.

The inclusion of a signal at the intersection of NY 12F with the bridge roadway and Old Rome Road assuming the lane configuration noted above would improve the operating conditions of the intersection to a LOS B in both the AM and PM peak periods. The operating conditions of the bridge approach during the heavier AM peak would be an acceptable LOS B. Additional capacity and safety improvements could be obtained by adding a northbound and southbound left turn lane.

A summary of the noted roadway lane confirmations for the Bridge Alternative DE is shown in **Figure 4**.

Figure 4: Bridge Alternative DE2 Roadway Lane Configurations

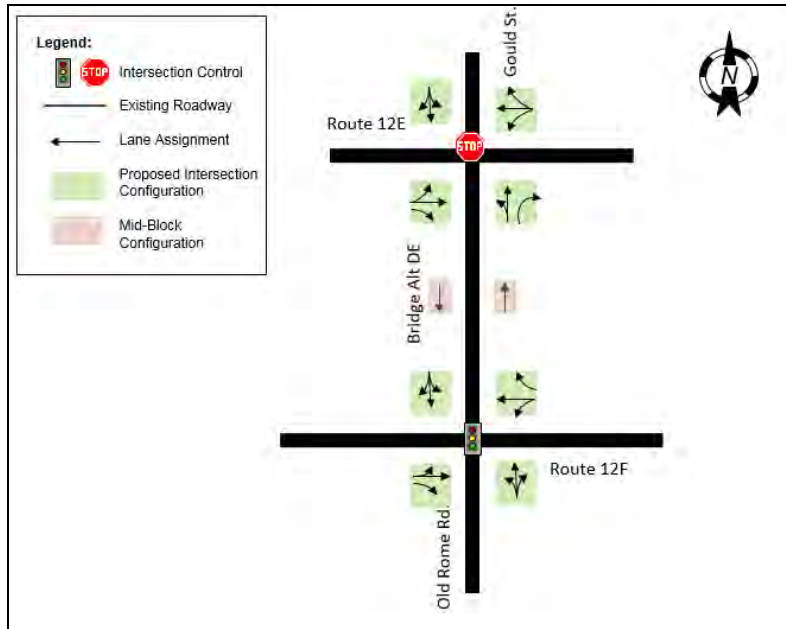
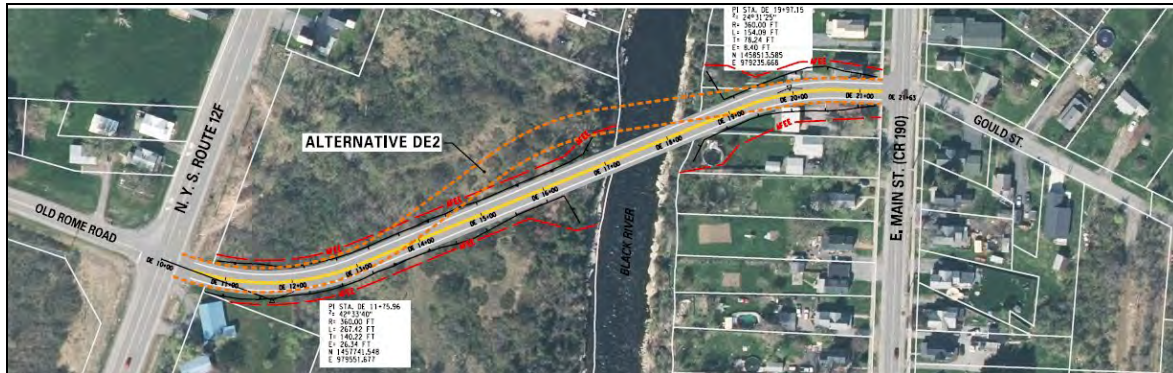


Figure 5 portrays the bridge alternatives DE2.

Figure 5: Bridge Alternatives DE2



Bridge Alternative Location E

Existing Volumes

Under bridge alternative location E, the existing intersections of NY 12E (E. Main Street) with Brown Boulevard and Washington Street would operate at LOS A or B conditions in the AM and PM peak periods. The operating conditions of these intersections would be similar to the existing conditions since the bridge orientated traffic would utilize NY 12E through these intersections in a related manner.

A new intersection of the bridge under alternative E with NY 12E would be east of Gould Road and would operate as an independent intersection. This intersection would be located closer to the General Brown School zone, potentially resulting in more school zone conflicts than in the other alternatives. Further, the intersection would be a 3-legged intersection, with the bridge road approach terminating at NY 12E across from an existing residence, resulting in headlight glare for that residence not experienced in other alternatives.

Investigating this intersection operations as an unsignalized three-way stop control condition with single lane approaches found acceptable LOS conditions of A in the AM peak period, but at a deteriorated LOS C in the PM peak period, however; the northbound bridge approach to the new intersection would be anticipated to operate at a deteriorated LOS F in the PM peak with the single lane approach. The inclusion of an eastbound right turn lane and a northbound left turn lanes was found to provide improved LOS A operating conditions in the PM peak. The northbound bridge approach to the intersection would be anticipated to operate at an acceptable LOS C in the PM peak with the inclusion of the turning lane. The intersection would operate at a LOS A in the AM peak under the additional turn lane configuration with a three-way stop control. The inclusion of a traffic signal operation was found to provide acceptable LOS operating conditions with only single lane approaches at the intersection. Increased delay per vehicle would result with the inclusion of a traffic signal and single lane approaches at the intersection as compared to the improved stop-control configuration.

The new intersection of the bridge under alternative E with NY 12F would align with Old Rome State Road, creating a new four-legged intersection. An unsignalized (four-way stop control) intersection would operate with acceptable LOS conditions of A and C in the AM and PM peak periods, respectfully. A single-lane southbound bridge approach to the new intersection would be anticipated to operate a deteriorated LOS of D and E in the AM and PM peak periods respectively. These operating conditions would occur with a single lane southbound approach, a double lane westbound approach (with right lane turned into right turn lane at intersection), and a single eastbound thru lane (no left turn lane) and right turn lane drop at the intersection as per existing conditions. Investigating the operation of the intersection for two-way stop control on the approaches to NY 12F with free-flow conditions along NY 12F increased the delay on the bridge approach roadway as compared to the four-way stop control creating unacceptable delay and operating conditions.

The inclusion of a signal at the intersection of NY 12F with the bridge roadway and Old Rome Road assuming the lane configuration noted above would improve the operating conditions of the intersection to a LOS B in both the AM and PM peak periods. Additional capacity and safety improvements could be obtained by adding a northbound and southbound left turn lane.

A summary of the noted roadway lane confirmations for the Bridge Alternative E is shown in **Figure 6**.

Figure 6: Bridge Alternative E Roadway Lane Configurations

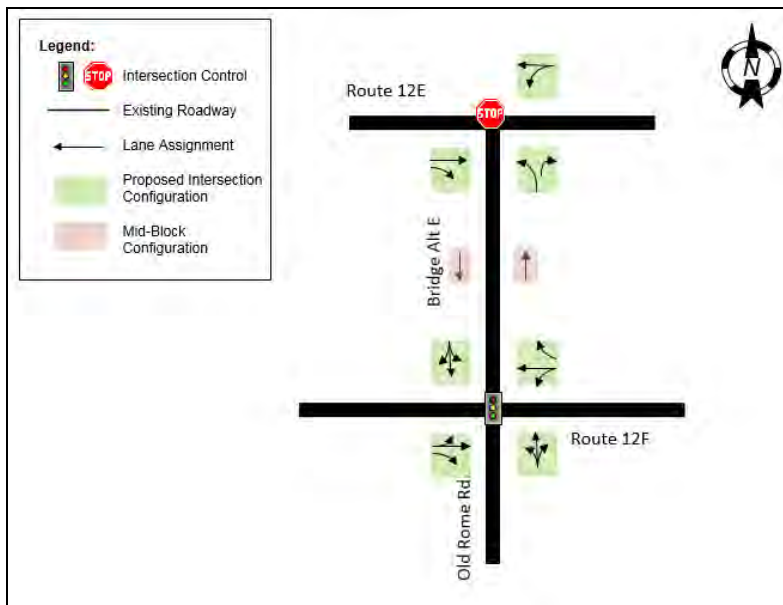
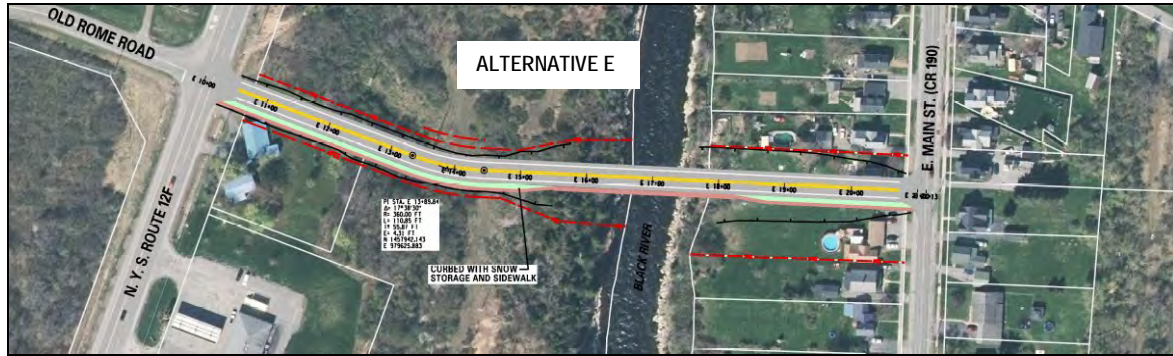


Figure 7 portrays the bridge alternative E.

Figure 7: Bridge Alternative E



A summary of the intersection operations under existing conditions and with the configurations as detailed under the bridge alternative locations for the AM and PM peak periods is shown in Table 2.

Table 2: Intersection Operation Summary – Traffic Levels of Service (LOS) Existing Volumes

Intersection	Existing Conditions		Type	Bridge Alternative Intersection LOS Conditions *					
				Alternative A		Alternative DE2		Alternatives E	
	AM Peak	PM Peak		AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
NY 12E (E. Main St.) & bridge (existing or proposed)	A	B	Signal (exist)/ Unsignalized (proposed)	A	B	A	B	A	A
EB	A	A		A	A	A	A	A	A
WB	A	B		A	A	A	A	A	B
NB	B	D		B	C	A	C	A	C
NY 12E (E. Main St.) & Washington St.	B	C	Signal	A	B	B	B	B	B
EB	C	B		B	B	B	B	B	B
WB	B	C		B	B	B	C	B	C
SB	A	B		A	A	B	A	B	A
NY 12E (E. Main St.) & Brown Blvd.	A	A	Unsignalized	A	A	A	A	A	A
EB	A	A		A	A	A	A	A	A
WB	A	A		A	A	A	A	A	A
SB	B	B		B	B	B	B	B	B
NY 12F & bridge (existing or proposed)	A	A	Unsignalized (exist.)/ Signalized (proposed)	B	B	B	B	B	A
EB	A	A		B	A	B	B	B	A
WB	A	A		B	B	B	B	B	A
SB	C	C		A	B	A	A	A	A
NB	-	-		-	-	A	A	A	A
LEVEL OF SERVICE LOS		Signalized Average Delay			Unsignalized Average Delay				
A		0.0 – 10.0 seconds/vehicle			0.0 – 10.0 seconds/vehicle				
B		10.1 – 20.0 seconds/vehicle			10.1 – 15.0 seconds/vehicle				
C		20.1 – 35.0 seconds/vehicle			15.1 – 25.0 seconds/vehicle				
D		35.1 – 55.0 seconds/vehicle			25.1 – 35.0 seconds/vehicle				
E		55.1 – 80.0 seconds/vehicle			35.1 – 50.0 seconds/vehicle				
F		>80.0 seconds/vehicle			>50.0 seconds/vehicle				

* - With Intersection Lane Configuration Improvements

Future Conditions (+20 Year) Design Analysis

To support preliminary design efforts and ensure acceptable traffic operating conditions, a future year analysis was conducted for the alternative bridge alignment intersections with NY 12E and MY 12F. The analysis was conducted for a 20-year horizon using a 0.5% per year traffic volume increase. Results of the analysis are summarized in the following sections.

Bridge Alternative Location DE2 - Future Volumes

The new intersection of the bridge under alternative DE2 with NY 12E would be located at Gould Road and create a new four-legged intersection. The intersection configuration includes single lane approaches with the inclusion of an eastbound right turn lane and a northbound left turn lane was assumed for the future condition. Investigating this intersection operation for future conditions as an unsignalized four-way stop control condition retained the acceptable LOS conditions of A in the AM peak period and LOS B in the PM peak period. The heavy AM peak eastbound movement at the intersection along NY 12E would operate at an acceptable LOS A. The heavy PM peak northbound movements from the bridge to the new intersection would operate at an acceptable LOS C. Investigating the queuing conditions at the intersection found the following requirements for the length of the auxiliary turn lanes:

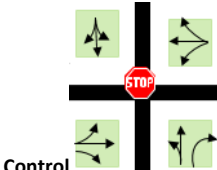

- Bridge Alt D/E Northbound Channelized Right Turn Lane – 100 feet
- NY 12E Eastbound Right Turn Lane – 150 feet

The new intersection of the bridge under alternative DE2 with NY 12F would align with Old Rome State Road, creating a new four-legged intersection. The intersection configuration including a single lane southbound approach, a double lane westbound approach (with right lane turned into right turn lane at intersection), and a single eastbound thru lane (no left turn lane) and right turn lane drop at the intersection as per existing conditions was assumed. Investigating this intersection operation for future conditions as a signalized operation found acceptable LOS conditions of A in the AM peak period and LOS B in the PM peak period.

A plan view of the noted roadway lane confirmations and auxiliary turning lane length recommendations for Bridge Alternative DE is shown in a separate attachment.

A summary of the intersection operations under the future year conditions for bridge Alternative D/E is shown in **Table 3**. The table indicates the levels of service for the AM and PM peak periods for the recommended intersection configuration along with supporting information on the alternative design options investigated but not recommended.

Table 3: Future Year Intersection Operation Summary – Bridge Alternative D/E

Intersection	Bridge Alternative D/E Intersection LOS Conditions Future Year (+20) Conditions Analysis								
	Recommended Configuration			Design Options (Not Recommended)					
	AM Peak	PM Peak	Operation / Layout	AM Peak	PM Peak	Operation / Layout	AM Peak	PM Peak	Operation / Layout
NY 12E (E. Main St.) & bridge)	A	B	Four-Way Stop  Control	A	D	Stop Control / Single Lane Approach	B	B	Signal Control / Single Lane Approach
EB	A (162' Queue)	C		B	C		B (166' Queue)	B	
WB	A	A		A	C		B	B	
SB	A	B		A	B		A	A	
NB	A	C (198' Queue)		B	E		A	B (270' Queue)	
NY 12F & bridge	B	B	Signal 	B	B	Two-Way N/S Stop Control	-		
EB	B	B		A	A				
WB	B	B		A	A				
SB	A	A		D	E				
NB	A	A		C	B				

Bridge Alternative Location E - Future Volumes

The new intersection of the bridge under alternative E with NY 12E would be located east of Gould Road and would operate as a new independent three-legged intersection. The intersection configuration includes single lane approaches with the inclusion of an eastbound right turn lane and a northbound left turn lane was assumed for the future condition. Investigating this intersection operation for future conditions as an unsignalized three-way stop control condition retained the acceptable LOS conditions of A in the AM peak period and LOS B in the PM peak period. The heavy AM peak eastbound movement at the intersection along NY 12E would operate at an acceptable LOS A. The heavy PM peak northbound movements from the bridge to the new intersection would operate at an acceptable LOS C. Investigating the queuing conditions at the intersection found the following requirements for the length of the auxiliary turn lanes:



- Bridge Alt D/E Northbound Channelized Right Turn Lane – 100 feet
- NY 12E Eastbound Right Turn Lane – 150 feet

The new intersection of the bridge under alternative DE2 with NY 12F would align with Old Rome State Road, creating a new four-legged intersection. The intersection configuration including a single lane southbound approach, a double lane westbound approach (with right lane turned into right turn lane at intersection), and a single eastbound thru lane (no left turn lane) and right turn lane drop at the intersection as per existing conditions was assumed. Investigating this intersection operation for future conditions as a signalized operation found acceptable LOS conditions of B in the AM peak period and LOS B in the PM peak period.

A plan view of the noted roadway lane confirmations and auxiliary turning lane length recommendations for Bridge Alternative E is shown in a separate attachment. It should be noted that the turning lane length recommendations for Alternative E and Alternative DE are the same. This is due to the similar traffic volumes anticipated at the intersections between the two bridge location alternatives.

A summary of the intersection operations under the future year conditions for bridge Alternative E is shown in **Table 4**. The table indicates the levels of service for the AM and PM peak periods for the recommended intersection configuration along with supporting information on the alternative design options investigated but not recommended.

Table 4: Future Year Intersection Operation Summary – Bridge Alternative E

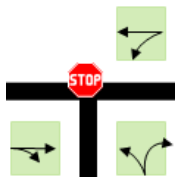
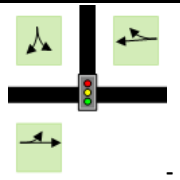
Intersection	Bridge Alternative E Intersection LOS Conditions Future Year (+20) Conditions Analysis									<i>Bridge Alternative Location A - Future Volumes Under future</i>
	Recommended Configuration			Design Options (Not Recommended)						
	AM Peak	PM Peak	Operation / Layout	AM Peak	PM Peak	Operation / Layout	AM Peak	PM Peak	Operation / Layout	
NY 12E (E. Main St.) & bridge)	A	B	Three-Way Stop Control 	A	D	Stop Control / Single Lane Approach	B	B	Signal Control / Single Lane Approach	
EB	B (112' Queue)	A		C	C		B (185' Queue)	B		
WB	A	B		A	C		A	B		
SB	-	-		-	-		-	-		
NB	B	C (179' Queue)		B	D		A	B (200' Queue)		
NY 12F & bridge	B	B	Signal 	B	B	Two-Way N/S Stop Control	-			
EB	B	B		A	A					
WB	B	B		A	A					
SB	A	A		D	E					
NB	A	A		C	B					

conditions, the new intersection of NY 12E with the bridge under alternative A would operate with acceptable LOS conditions of A and B in the AM and PM Peak periods, respectively. These operating conditions would occur with only single lane approaches to an unsignalized intersection. The operations assume a one-way stop condition for the bridge approach with free-flow for the NY 12E eastbound and westbound traffic. The inclusion of a westbound left turn lane, an eastbound right turn lane, and/or a northbound right turn lane would serve to further improve the LOS operating conditions.

A new signalized intersection of NY 12F with the bridge under alternative A under future conditions would operate with acceptable LOS conditions of A in the AM Peak and B in the PM Peak period. Additional capacity and safety improvements could be obtained by adding an eastbound left turn lane.

A summary of the intersection operations under the future year conditions for bridge Alternative A is shown in **Table 5**.

Table 5: Future Year Intersection Operation Summary – Bridge Alternative E

Intersection	Bridge Alternative A Intersection LOS Conditions Future Year (+20) Conditions Analysis			
	Analyzed Configuration			
	AM Peak	PM Peak	Operation	Layout
NY 12E (E. Main St.) & bridge	A	B	One-Way (NB) Stop Control /Single Lane Approach	
EB	A	A		
WB	A	A		
NB	B	D		
NY 12F & bridge	B	B	Signal	
EB	B	B		
WB	B	C		
SB	A	B		

Conclusion

Overall, intersection overall operations under the alternative bridge alignments would be expected to be similar to existing intersection operating conditions. This assumes intersection improvements at the intersections of Route 12E and Route 12F with the new bridge roadway.

Alternative location A would reduce the amount of through traffic along NY 12E (E. Main Street) through Brownville and through the existing intersections of Brown Boulevard and Washington Street. Alternative location DE2 and E would be anticipated to retain similar traffic conditions along NY 12E through Brownville and the intersections of Brown Boulevard and Washington Street.

The new bridge intersection with NY 12E would operate at acceptable conditions as an all-way stop control unsignalized intersections on all approaches under all alternatives. The installation of a northbound left turn lane and an eastbound right turn lane at the intersection under alternatives DE2 and E would be required to provide acceptable operational conditions at the intersection during the peak hour periods.

The new bridge intersections with NY 12F under alternative DE2 and E was found to experience deteriorated operating conditions as an unsignalized intersection during the peak periods. The installation of a traffic signal at the intersection along with an eastbound and westbound right turn lane would be anticipated to provide acceptable operations conditions in both the AM and PM peak periods. A traffic signal installation at the new bridge intersection with Route 12F under Alternative A would provide acceptable operating conditions without the need for the additional turn lanes.

A roundabout alignment at the southern intersection of the bridge with NY 12F was investigated and found to provide efficient operating conditions in the PM peak hour. This intersection configuration could be used to reduce off-peak delay times for the traffic volumes traveling through the intersection. A properly designed roundabout with appropriate deflection would be expected to reduce travel speeds along the roadway during off-peak periods as an integrated traffic calming type operation.

Acceptable intersection operations would result at the existing intersections of Route 12E with Washington St. and Route 12E with Brown Blvd. under all bridge alternative locations in the AM and PM peak periods.



























Future year analysis for a +20-year design horizon was conducted for the bridge intersections with NY 12E and NY 12F. The analysis was conducted for bridge alternative locations DE and E. The analysis found acceptable intersection operations at both intersections under both alignment options in the future conditions. The analysis assumed a traffic signal installation at the intersection with NY 12F along with a similar lane configuration along NY 12F as with the existing bridge intersection. The analysis assumed an eastbound right turn lane and northbound channelized right turn lane at the intersection with NY 12E. A queuing analysis intersection found similar requirements for the length of the auxiliary turn lanes between the two alternatives which are summarized as follows:























- Bridge Alt D/E Northbound Channelized Right Turn Lane – 100 feet
- NY 12E Eastbound Right Turn Lane – 150 feet

Alternatives Eliminated as a Result of this Traffic Assessment

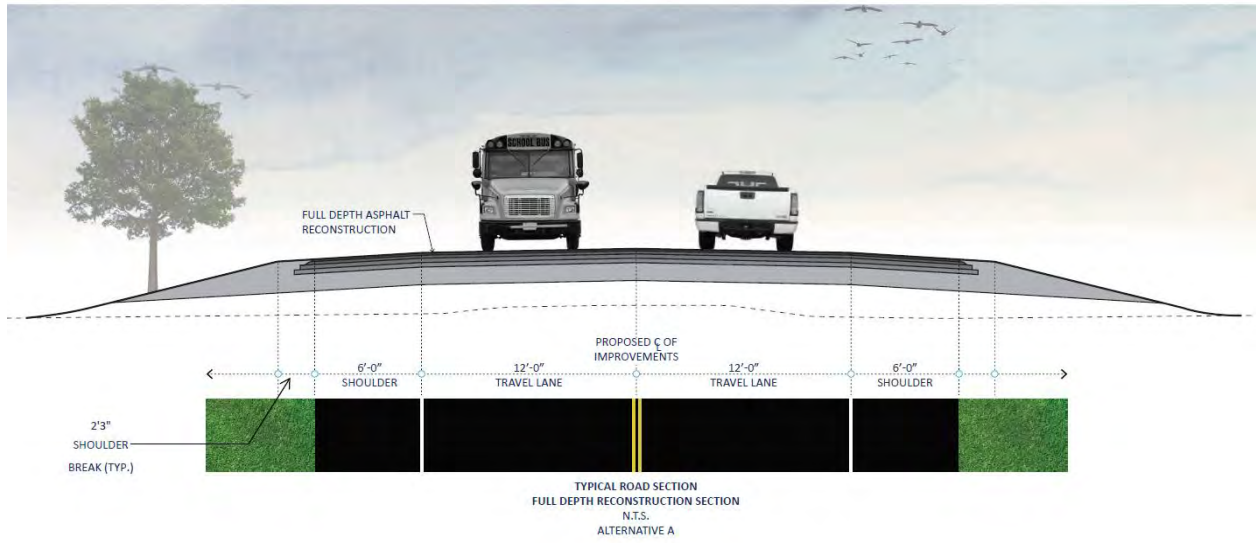
As described previously, Alternative E would result in a new 3-legged intersection with NY 12E, east of Gould Road. This intersection would be located closer to the General Brown School zone, potentially resulting in more school zone conflicts than would result in the other alternatives. Further, the intersection would be a 3-legged intersection, with the bridge road approach terminating at NY 12E across from an existing residence, resulting in headlight glare for residential properties not experienced in other alternatives. Finally, Alternative E would impact a Home Business located on NY 12E, which is preferred to be avoided. ***For these reasons, Alternative E is thus eliminated from further consideration; Alternatives A and DE2 are advanced for further consideration.***

Attachment F: Revised Evaluation Matrix for Alternatives A and DE

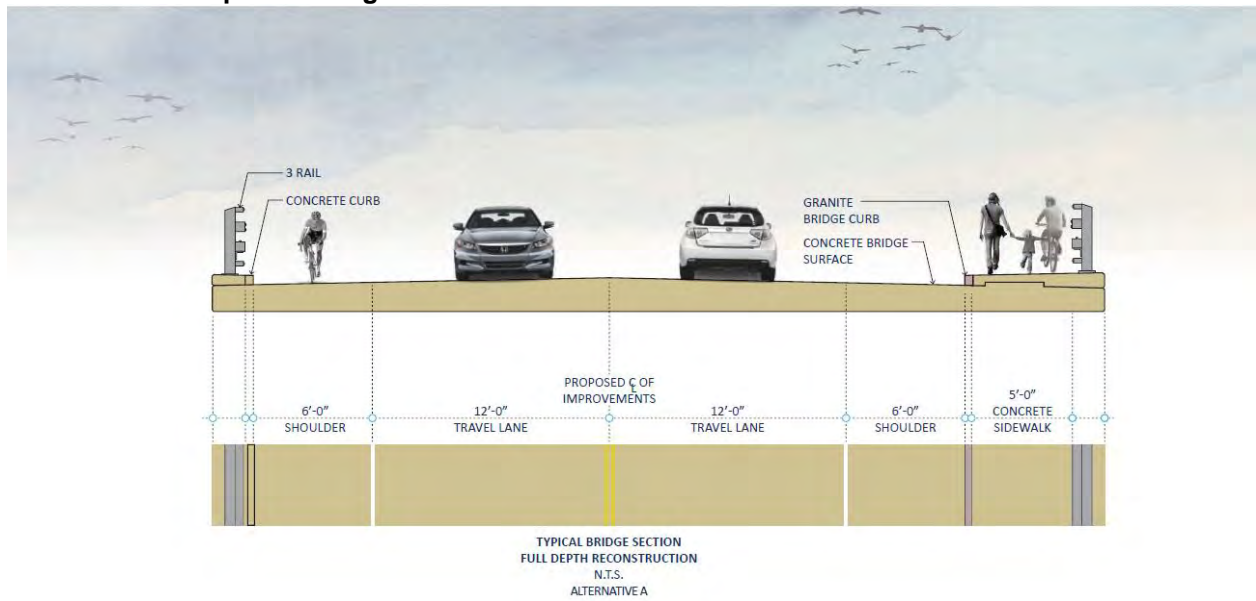
Category	Criteria	Alternative A	Alternative DE
Location/ Footprint	Bridge avoids or minimizes impact to school zone		
	Bridge approaches minimize the number and nature of private land needed to acquire		
	Bridge and bridge approaches minimize number and nature of land owners impacted		
	Existing bridge traffic can remain open while new bridge is constructed		
	Location minimizes non-standard geometric design features (i.e. avoid steep slopes, areas of limited site distance).		
Safety/ Operations	Bridge approaches do <u>not</u> result in new traffic issues at either the north or south landing		
	Travel distance across Black River is <u>not</u> greatly increased from existing conditions		
	Bridge accommodates existing primary truck routes		
	Bridge location does not greatly impact origin/destination characteristics of existing bridge		
	Bridge and bridge approaches minimize the need for Non-Standard Design Features		
	Bridge location reduces crash potential		
	Bridge location improves existing geometrics		
	Improves bicycle and pedestrian accommodations		

Environmental	Bridge and bridge approaches avoid or minimize impact to significant natural features, including wetlands and other sensitive areas		
	Bridge and bridge approaches avoid or minimize impact to significant historical or cultural resources		
	Bridge approaches avoid steep slopes		
Multi-Modal Opportunities	Bridge provides areas for public overlook/ viewing		
	Improves connectivity between Watertown and tourist areas northwest of Watertown		
Tourism and Economic Development	Bridge continues to support and promote Brownville business district		
	Bridge conforms to larger regional tourism and economic development vision		
	Impacts major employers (i.e. school, paper mill)		
Cost and Performance	Meets roadway owner (NYSDOT) preference to optimize capital construction, operating, and maintenance costs		
	Meets NYSDOT's Operational Needs		
	Estimated Total Project Cost		

Alternative A Proposed Roadway Cross-Section



Alternative A Proposed Bridge Cross-Section



Attachment G: Public Comment

Stakeholder Workshop – Daytime Session

Watertown-Jefferson County Area Transportation Council
Brownville Bridge Planning Study
January 31, 2018
American Legion, Village of Brownville
2:30 – 4:00 pm



Overview

On Wednesday, January 31st, 2018 the Watertown-Jefferson County Area Transportation Council (WJCTC), the region's Metropolitan Planning Organization, hosted a stakeholder workshop at the Village of Brownville American Legion from 2:30 to 4:00 pm. The purpose of the workshop was to share information about the planning study and obtain community feedback about the replacement and possible relocation of the bridge over the Black River in Brownville, NY. The workshop was attended by public officials, agency staff and members of the community. A full list of attendees is available in Appendix A.

Workshop Format

Representatives of the MPO and the consultant team provided a brief presentation about the project background, scope, and timeline.

Keith Ewald, a Project Manager with Barton & Loguidice, described that the purpose of the project, which is to study replacement and possible relocation of the bridge over the Black River in Brownville. He described the project's scope (contractual and geographical) and the project's outcome. Susan Hopkins with Highland Planning then described community engagement efforts to date, future opportunities for engagement and a timeline for the project. See Appendix C for a copy of the full presentation. A brief Q&A session was held prior to the start of the discussion. During the Q&A, participants asked about the timeline for construction as well as the possibility of the current bridge's weight limit being lowered in the near future for safety reasons.

The project team responded that the construction timeline is dependent upon the final recommendations and other factors and could be in the range of three to five years. Representatives of WTCTC noted that the need for a decrease in the bridge's weight limit has not yet been identified in annual safety inspections. However, it was noted that the bridge's current sufficiency rating is acceptable for safe and structurally sound passage for passenger and commercial vehicles.

Susan Hopkins explained the meaning of the term "evaluation criteria" and the role the community would play in helping shape those criteria. Attendees were then engaged in a discussion of the following questions:

- What do you like most about the Brownville bridge in its current location? What do you like least?
- What are your biggest concerns about this project?
- What are the greatest opportunities?
- What should we avoid?
- What are the most important factors the planning and design team should consider when identifying and evaluating potential new locations for a river crossing?



A copy of the presentation slides can be found in Appendix B. Below is a summary of feedback received during the discussion.

Summary of Feedback

A summary of the feedback received at the daytime workshop is below.

Positive aspects of the existing bridge:

- “Nothing;”
- Central location;
- Views of the River.

Negative aspects of the existing bridge:

- Traffic is a major concern especially at peak travel hours; creates challenges for emergency vehicles that need to be able to respond in a timely manner;
- Tractor trailers sometimes get stuck and the current configuration generally heightens risk to safety of Neenah employees;
- Traffic signal lights are confusing and can create safety problems when drivers speed up to make it through the intersection before the light turns red.
- The geometry and vertical profile of the approach from Route 12F to the bridge, particularly during winter months, creates a very hazardous pass down to the bridge due to weather conditions, steep grades, and less than ideal sight lines.

Concerns about the project:

- Lengthy replacement time resulting in having current bridge being out of commission before new one is usable;
- Safety of current structure;
 - [Note: representatives of WJCTC and NYSDOT noted that regular inspections have found that the bridge is safe to cross.]

Opportunities:

- Neenah may be able to expand operations which would be a positive step for local employment;
- Better amenities for pedestrians and cyclists and accommodation or encouragement of recreational activities like white-water rafting;
- Utility connections;
 - [Note: representatives of WJCTC and NYSDOT noted that the bridge can be designed to include requested utility connections as long as those utility connections currently exist on the bridge.]

Other considerations:

- Current location is central, which is important for emergency services;
- Avoid industry;
- Complete streets treatment; tie in to possible future river trails;
- If located too far east, it will create conflicts with school during pick-up and drop-off times;
 - Chief of Police Larry Jobson (Village of Glen Park) noted that he had observed 82 private vehicles picking up students at Brownville Elementary School in one day.

- The cost in revenue of removing properties from the tax roll should be considered;
- Bridge should be kept close to current location to avoid negative impacts on commerce;
- A bridge located west of downtown Brownville would cause drivers to bypass the businesses located downtown and could negatively impact the village;
- New location should line up with an intersection;
- If new bridge has sidewalks rather than just emergency pedestrian exits (like current bridge) local government will become responsible for clearing snow and other maintenance costs which can be significant.

Possible locations:

- Old Rome State Road (Paddy Hill) / Gould Street (Village of Brownville)
- Storehouse Street (Village of Brownville)
- Brown Boulevard (Village of Brownville)
- Floral Drive (Town of Watertown)

Other project related materials can be found at: <http://www.wjctc.org>.

Stakeholder Workshop – Evening Session

Watertown-Jefferson County Area Transportation Council
Brownville Bridge Planning Study
January 31, 2018
American Legion, Village of Brownville
6:00-7:30 pm



Overview

On Wednesday, January 31st, 2018 the Watertown-Jefferson County Area Transportation Council (WJCTC), the region's Metropolitan Planning Organization, hosted a stakeholder workshop at the Village of Brownville American Legion from 6:00-7:30 pm. The purpose of the workshop was to share information about the planning study and obtain community feedback about the replacement and possible relocation of the bridge over the Black River in Brownville, NY. The workshop was attended by public officials, agency staff and members of the community. A full list of attendees is available in Appendix A.

Workshop Format

Representatives of the MPO and the consultant team provided a brief presentation about the project background, scope, and timeline. Keith Ewald (Barton & Loguidice) described that the purpose of the project, which is to study replacement and possible relocation of the bridge over the Black River in Brownville. He described the project's scope (contractual and geographical) and the project's outcome. Susan Hopkins (Highland Planning) then described efforts to engage the community to date, future opportunities for engagement and a timeline of the project. See Appendix C for a copy of the full presentation.

During the Q&A session, participants asked for clarification of project boundary, the timeframe of the project, possible changes to vehicle routes, the level of community impact on the decision, and who would ultimately make the decision about the placement of the bridge.

Representatives of the WTCTC and the consultant team noted that the project boundary includes the area shown in the map (see Appendix C) and areas west of the existing bridge. The boundary does not extend very far west of the existing bridge due to proximity with the Route 180 crossing in the Town of Dexter. The timeframe of the planning process is approximately eight months, with an anticipated report on recommendations due in late summer or early fall 2018. Keith reiterated that this a planning study only. Design and construction phases would be considered different projects that will occur after the planning study is completed. NYSDOT Region 7 will select a preferred alternative based upon the findings and recommendations from the planning study, which will include numerous opportunities for public input. The WJCTC is managing the current phase of the project. WJCTC membership includes NYSDOT and local municipalities.

Susan Hopkins explained the meaning of the term "evaluation criteria" and the role the community would play in helping shape those criteria. Attendees were then engaged in a discussion of the following questions:

- What do you like most about the Brownville bridge in its current location? What do you like least?

- What are your biggest concerns about this project?
- What are the greatest opportunities?
- What should we avoid?
- What are the most important factors the planning and design team should consider when identifying and evaluating potential new locations for a river crossing?

Summary of Feedback

A summary of the feedback received at the evening workshop is below.

Positive aspects of the existing bridge:

- Located away from school zone;
- Has nice views of the waterfall on the Black River;
- Centrally located for efficient travel between destinations;
- Boon to local businesses.

Negative aspects of the existing bridge:

- Scary to cross;
- Steep approach and blind corner in Paddy Hill;
- Traffic congestion;
- Tractor trailers reversing into road from adjacent industry;
- Challenges for emergency vehicles that these conditions result in.

Concerns about the project:

- Taking of private property through eminent domain and how that is reimbursed;
 - [Note: Keith Ewald explained that an independent appraisal of the property is made and the owner is then offered fair market value on the property with some room for negotiation.]
- Increasing traffic near school zone that is already congested and dangerous during pick-up and drop-off hours.

Opportunities:

- Could have benefits for local tourism based on fishing and rafting;
- Smoother flow of traffic;
- No dangerous curves or steep grades;
- Fewer or no traffic signals;
- If the bridge remains in the current location, grades and curves could conceivably be made less extreme.

Other considerations:

- Take as few properties as possible;
- Avoid school zone;
- Ensure sufficient setback from homes;
- Properties taken off tax rolls and resulting population loss that could increase tax burden for other residents;
- If new location is too far west it will bypass businesses; bad for commerce;

- Emergency services like fire protection in Paddy Hill needs to be accommodated;
- There is a high school to the west so if bridge is located too far in one direction or another school zones become an issue;
- Appearance or aesthetic of bridge;
- Keeping bridge in current location would avoid taking property ;
 - A participant asked for a show of hands of attendees who would prefer to just keep the bridge in the current location. Roughly 8 – 10 people agreed. Others noted that this would result in the lack of any crossing of the Black River between the Town of Dexter and the City of Watertown for several months to years.
- Impacted property owners should be notified before the rest of the public.

Possible locations:

- Old Rome State Road (Paddy Hill) / Gould Street (Village of Brownville);
- Brownville Cemetery (west end of Village of Brownville);
- Village of Glen Park;
- Floral Drive (Town of Watertown);
- Between General Brown Elementary School and Neenah mill (Village of Brownville);
- Storehouse Street (Village of Brownville).

Other project related materials can be found at: <http://www.wjctc.org>.

Appendix A: Attendees

Public Open House – Meeting Summary

Watertown-Jefferson County Area Transportation Council
Brownville Bridge Planning Study
May 10, 2018
General Brown Junior-Senior High



Overview

On Thursday May 10, 2018 the Watertown-Jefferson County Area Transportation Council (WJCTC), the region's Metropolitan Planning Organization, hosted an open house at the General Brown Junior-Senior High School. The purpose of the open house was to share information about previous input received and seek feedback on six potential locations for a bridge over the Black River in Brownville, NY, which would replace the existing bridge.

This document contains a summary of feedback received at the open house.

Open House Format

Representatives of the MPO and the consultant team provided a brief presentation about the project background, scope, and timeline, as well as an overview of the initial six options. There were six stations set up around the room. Each station included a map showing one of the potential options. Maps showing the potential locations can be viewed at the project website: <http://www.wjctc.org/projects/proposed-projects/item/14-rt-12e-brownville-black-river-bridge.html>.

A copy of the presentation slides can be found on the project website. Below is a summary of feedback received during the discussion.

Summary of Feedback

A summary of the feedback received is below.

Existing Bridge

- Keep the existing bridge. Just repair and update. New fancy bridges would take away from historic Brownville.

Alternative A

- Most traffic would bypass the village businesses
- Not good
- Safety issue.
- This directs traffic past the ice cream stand with cars parked along the road
- Brownville residents would have to backtrack to homes from the foot of the bridge on 12E.

- Will there be a study to evaluate impact to businesses?
- Possibly the fastest option?

Alternative B

- Ice cream shop has heavy parking on both sides of the street
- This idea is not good. Why have the bridge come out in front of someone's house/? Bridge road should connect to a road on both sides of the bridge.
- This option will increase traffic congestion on 12F all year long. Also this cuts our property in half- not a fan.
- The approach from 12E is tight between the houses there.
- Can't take away land that our birds and animals call home. We enjoy watching them in our backyard.

Alternative C

- Should straighten out to go behind M&K
- Thought Option C should go straight behind M&K Garage

Alternative D

- This option lines up with Gould, which ends in a barnyard. Makes more sense this way. Paddy Hill road is already wide here.

Alternative D/E

- Lining up with Gould Street is good. Lining up with a house is not good.
- Lining up with Gould Street does not make much sense. Gould Street ends in a barnyard
- But a good thing: 12F is already wide here and has two turning lanes available.

Alternative E

- This can work, but it does come out right across from a home. Lights and traffic in front of the home is probably not desirable for homeowners.

Alternative F

- Provides direct route between Floral Drive and Brownville
- Excellent choice
- This makes sense to connect Arsenal Street to Brownville using Floral drive
- Too close to the school
- Coming out by school seems difficult, but 12E is a school zone with reduced speed anyway...
- Adds a lot of traffic near the school
- Don't put it near the school
- Do not like that this forces everyone to drive past the school – slow area with congestions

Additional Comments*

- Bridges build in the middle of residential area with homes on each side doesn't seem to make sense.
- The Brown bats are environmentally protected.

- Any of the homes in this area will lose property value as soon as you announce the location of the bridge. We who are targeted but not displaced would be lucky to sell our houses.
- Why are we worried about lining up with Gould Street? It's a dead end street and has no significant value with only seven houses occupied on it. People are worried about traffic build up where the bridge is now. It's been that way for many years. Now the traffic will build up on 12E in front of the homes who are already affected by the line ups every day.
- Storehouse Road would be a better location. It's a short distance from the three business we have in the Village.
- Williams Street is a good location. Not far from the current bridge. It will bring in traffic possibly from Jodi's.
- Place it in Downtown village area to help businesses.
- Bridge location near the school would create traffic problems. Bridge location near existing or west of existing could help businesses. Can existing bridge remain for emergency access? If bridge is aligned with intersecting roads, traffic may increase on through streets like Floral.
- Alternative B would exacerbate traffic at the ice cream stand (Jodi's) creating a lot of congestion—and at times it has been hazardous getting home. Alternative F is better, which connects to Floral Drive to Brownville and actually connects to Arsenal Street. Downfall of that plan is being so close to the school. Alternative C is promising if it goes behind (further west) of M&K Rentals. This would be a more straight roadway that will impact traffic patterns less than some other Alternatives.

*Note: some comments are summarized or abbreviated from the original in order to protect privacy of property owners

















Public Open House – Meeting Summary

Watertown-Jefferson County Area Transportation Council
Brownville Bridge Planning Study
November 1, 2018
General Brown Junior-Senior High



Overview

On Thursday November 1, 2018 the Watertown-Jefferson County Area Transportation Council (WJCTC), the region's Metropolitan Planning Organization, hosted an open house at the General Brown Junior-Senior High School. The purpose of the open house was to share information about previous input received and seek feedback on three potential locations for a bridge over the Black River in Brownville, NY, which would replace the existing bridge.

This document contains a summary of feedback received at the open house.

Open House Format

Representatives of the MPO and the consultant team provided a brief presentation about the project background, scope, and timeline, as well as an overview of the initial three remaining options. Stations around the room included a rollout map of the project area and maps and renderings of each of the three alternatives. Maps showing the potential locations can be viewed at the project website: <http://www.wjctc.org/projects/proposed-projects/item/14-rt-12e-brownville-black-river-bridge.html>.

A copy of the presentation slides can be found on the project website. Below is a summary of feedback received during the discussion.



Comments Received

Copies of comments received at the meeting from members of the public are included below. Identifying information has been removed from images for privacy purposes.

Alternative A:

Community members noted they like this option to the extent that it appears to impact fewer property owners than other options and may improve congestion. Chief concerns among community members about Alternative A are that it will not be convenient to the village or residents who want to travel east—and that it will bypass the village, which may have a deleterious effect on business.

Alternative DE-2:

Community members noted elements they like most about this option is that it is close to the existing bridge, keeps traffic going through the village, and connects to existing streets in the village. Community members noted they did not like that the option is not in a straight line across the river (but instead curves) and that it may impact more private property than other options.

Alternative E:

Community members like that this option is closest to Route 81, is a straight line across the river, and will be good for traffic flow because it aligns with Old Rome Road. Some participants noted they did not like the potential impacts to property owners.

Appendix A: Detailed Comments

Note: For summary purposes only. Official comments with names and addresses of respondents submitted under separate cover.

Alternative A:	
<p>What do you like most about this option?</p> <ul style="list-style-type: none"> • I do not like this option. • It's not upsetting residents, it would encourage explanation of housing and possibly businesses • Keeps the traffic out of the residential area. They entire reason u put in an alternate route to Watertown • Nothing • Will require less homes be taken. • Less congestion & fewer residents • Appears to impact the current homes the least. Further into town. • It's great for those who are heading west from the bridge. • It's in a new location. • Nothing. • No property owners will need to be relocated. Less cost for the State. • nothing • You have to take no house • Less car congestion 	<p>What do you like least?</p> <ul style="list-style-type: none"> • This option is far away from homes and businesses in Brownville and Glen Park. It would be inconvenient for residents and travelers and could lead to less business. It also would have an increased negative environmental impact because it covers a large area of forest. It is also a longer stretch of road to build than the other options. • Its farther out of town and a longer drive to get to Watertown • Nothing • Location to far out of village! • Too far west. I think it will push more traffic through Glen Park. I don't think Brownville residents will back track to use this bridge. • Too far out of the way past the village and looks like a longer connector road • For those of us who live east of the current bridge, this will force us to drive through the cluster that is downtown Brownville. It's tight between the Legion and Stewarts, especially when the pizza shop is busy. Traffic is already crazy in that section and this will further compound that issue. • It's too far from current bridge • It's too far from old bridge. It's not a very direct route. • It takes me farther away from city/I81 access. I would end up taking Rt12E when going to Watertown. • Too far from center of village for Brownville area residents. May send more traffic on Main Street past elementary school as residents head to

	<p>Watertown. No turning lanes on Rt 12F.</p> <ul style="list-style-type: none"> • Takes away from village usage people bypass and go Dexter from 12F • It bypasses the Village of Brownville. • This road would bypass all of the village of Brownville • It's outside the village and no traffic to the business area • Avoids the Village of Brownville, which may impact businesses. • Too far between roads, would have to clear a lot of forest.
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Alternative DE-2

<p>What do you like most about this option?</p> <ul style="list-style-type: none"> • I like that this option is close to the original bridge location and closer to Watertown. It is conveniently located near a gas station and intersects conveniently with other roads. It leads into Brownville and would be convenient for residents. Since it goes into town, it would be good for businesses to bring travelers through town. It's also not too long of a road and impacts less forest. • Nothing • This alternative has a turning lane both ways. It takes some of the traffic away from Patty Hill. With a traffic light it could stop some of the accidents or close calls. If traffic is backed up it will cause less problems for people. It would help the time it takes for people to get out of their drive ways. • Lines up with existing intersections. • Close to current location • Very close to homes with children, greatly increased traffic. Creates 2 4 way intersections. Increased accident risk. • It is close to the current location and will pretty much keep the current flow of 	<p>Least?</p> <ul style="list-style-type: none"> • I don't see many significant negatives. • It's in residential area and doesn't need to be. Bringing too much traffic in causing a safety concern when you have families walking the village all the time kids going to school in the morning and that's when the traffic is the worst already • The curve • South side of The Black River is a little too "curvey". • More closer residents & not a straight shot across from one road to the other. Close to curve by the mill. • My only concern with this option is cross traffic on 12F - but if there is a traffic signal at the intersection, it would most likely eliminate any hazards. • It's not straight across river. • Nothing that I can discern from this photograph. • Too close to the paper mill curve. traffic back up will be a major problem • Nothing • Loss private property (homes).
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<p>traffic.</p> <ul style="list-style-type: none"> • Close to bridge • This is the best route. It connects to other roadways. It much closer to the current bridge. • 1: that it connects to Old Rome State Rd. 2: it allows me to continue using 12F as access to the city. • Provides good access to and from Brownville for village residents. Provides potential for Gould Street to be extended in the future to accommodate traffic flow. Good traffic flow because of alignment with Rome State Road. Longer access road to village will accomodate more traffic at peak times. Existing turning lanes. • most practicle, narrow part of river, meets 2 different intersections closer to village. My first option • This is the option that makes sense for traffic flow with lining up Old Rome State Rd. and Gould St • That it is in line with a cross street nothing • Keeps traffic through Village for businesses. • Connects right to old Rome Road 	
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Alternative E

<p>What do you like most about this option?</p> <ul style="list-style-type: none"> • This option is the straightest and shortest and takes up the least amount of wooded land. The location on 12F is also close to the original bridge and convenient to the gas station. It is close to town, which is good for residents and businesses. • Nothing I'm sure if a bridge was getting put in right near your house driving down your property value u would say hell no also • Same as DE-2 . It does not have the curve. • Makes the most sense! Least amount of 	<p>Least?</p> <ul style="list-style-type: none"> • It is not as close to the center of town as alternative DE and thus potentially less convenient. • It's almost directly across from my house. My house is probably the closest to the street on the main drag. And having traffic sitting in front of my house all the time at a traffic light my wife already has enough trouble backing out of our driveway because this road is already busy enough. Do what u need to if I can't sell my house I'll just make it the eye sore of the village so everyone that comes across that bridge has to look at it. Ridiculous that I'm going to have to
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<p>disruption to existing property owners!</p> <ul style="list-style-type: none"> • Most direct route • Pretty straight shot across and away from the curve by the mill (better sight distance). Closer to Rt 81. Less residences impacted. • Directly impacts existing homes with children, safety risk. Ends closer to the school and could increase traffic around drop off/pick up times. • The straight line from 12F to CR190. • This is the most direct route. It is straight across the river and into Old Rome Road. This is a great road sigh less land needed. • As with D/E, it maintains my usualroute to the city from Glen Park. • Good traffic flow because of alignment with Rome State Road. Good access to and from Brownville for village residents. Existing turning lanes. • my second best option • perfect location. straight thru road • It is still in the village and is straight and still lines up with a cross street • Most straightforward 	<p>look out my window and see traffic sitting in front of my house all the time that's all I have to say GOOD DAY SIR !!!</p> <ul style="list-style-type: none"> • Not sure. Seems like the best option. • Are property owners at 239 Main St willing sellers? • I think it would be annoying to be the houses directly across from the new road as headlights would surely be shining in windows at night. • There is nothing I don't like about it. • Nothing. • Nothing • Traffic against Old Rome Road could be difficult if turning left
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Other Comments:

- Given the three alternatives I see two as reasonable and one as not. If the point is to have a "link" to the village, then Alt A seems pointless. I realize it might cost the least but doesn't serve what I consider the purpose. Other alternatives impact more people, understood. If a connection across the river "needs" to be maintained, it should be into the village it is supposed to serve.
- Alternative DE (1)
- One concerned re Alternative A would be the route the Brownville Fire Department would have to take. Seems it would be too far out of the way, only to come back on 12F to service our Paddy Hill area. Thanks
- Concern on Alternative A is people, especially motorcylrces and pickups and muscle cars use the section of road from the culvert where the road narrows, as a drag strip, making the town very hazardous, especially at night. There would need to be a traffic light installed on Route 12F (no one pays attention to the signs). We think option DE2 will be the best option of those presented.

Where DE-2 connects in Brownville will intersect with an existing dead end street. This will let local residents exist without headlights shining into their home from the intersection.

- Prefer Alternative DE-2. Existing turn lanes is good. Alternative A does not have turning lanes currently. Would take traffic away from business and residential areas in Paddy Hill.
- If bridge at A, I would likely go all the way to Dexter bridge instead. DE & E are better for access to Brownville businesses (like Stewarts) and seem far enough away from the elementary school.



MEMORANDUM
Department of Transportation

TO: D. W. Hart, Project Development Supervisor, RPPM Office, Region 7

FROM: J. D. Kucharski, Regional Geotechnical Engineer, Region 7 *JDK*

SUBJECT: PIN 7780.09
Route 971H over the Black River
BIN 3338900
Village of Brownville, Jefferson County
Preliminary Geotechnical Evaluation

DATE: March 30, 2011

The following is a preliminary geotechnical evaluation for the proposed bridge replacement. The structure carrying Route 971H over the Black River consists of a one-span steel truss structure.

Records/Plan Review

- Record plans show the bridge on continuous spread footings on vertical rock conditions on the north side and on setback ground area on the south side; existing abutment faces are shown below supported on rock ledge (SH 9439, 1953). The foundation area on the north side is shown as seamed ledge rock, pointed and pressure grouted and the east end shown squared off and stepped with reinforced concrete doweled into the rock face. The south abutment is shown with possible earth or rock bearing surface. Both sides show backwall areas pressure grouted. An existing building is in close proximity to the northwest side.
- Bridge rehabilitation record plans show abutment modifications including new headers and excavation and backfill (5 in) (D250562, 1985). Approach pavement surface treatments were performed.
- The following are noted from the bridge inspection records (2002-2010): rock gorge condition, rock streamed and high velocity water, no fascia dropline readings recorded; wingwall area distress on the south side; erosion conditions on the south abutment slope; moderate deteriorations of backwall and stem on the north side; abutment joints with deck spalled and cracked conditions; approach pavements exhibiting transverse cracking, longitudinal, map cracking, settlement at edge of travel lane. Based on Winbolts Structural Details, abutment footings on both sides are supported on rock.

Preliminary Subsurface Conditions

- Boring log records were not found available. Record plans did not indicate subsurface exploration work performed.
- Based on geologic mapping information, surficial deposits are bedrock; mapped bedrock shown is Black River Group.
- Record plans indicate the following:

- Rock supporting the north abutment with rock face crossing east end; concrete section doweled into rock on the east end; vertical rock conditions; design capacity is not shown
- Rock or earth support for the south abutment, foundation doweled into rock if encountered; design capacity is not shown; setback from face of existing abutment
- Rock cut level for the north side bridge seat; existing stone abutment cut down shown on the south side
- Rock behind north abutment backwall; rock or earth behind south abutment backwall
- Pressure grouting in the foundation (north side) and backwall areas (both sides)
- Existing abutment faces are shown below supported on rock ledge at depth \pm 28-30 ft below the bridge

Field Survey

Field visit on January 19, 2011 noted the following: vertical rock conditions on the north side; possible native soil, fill and/or underlying shallow rock surface on the south side; abutment area slope erosion on the southeast side; proximity of structures, especially to the northwest side; rock slopes on the southeast side of the highway; some pavement distress evident including cracking along joints. Snow cover was present during this time.

Recommendations

The preliminary geotechnical considerations are as follows:

- Record plans show rock bearing material, vertical rock conditions, pressure grouted areas, doweling into rock and setback on the south side. Possible earth bearing material is also shown on the south side. Distress conditions of slope and wingwall area on the south side have been recorded. GEB evaluation is recommended for proposed foundations, retaining structures and possible rock treatments.
- Proposed fill slope gradients are recommended at 1:2 (V:H) maximum. Slope treatments may be recommended for slope erosions.
- Proximity to structures and surcharge conditions may be considered.
- Approach work may consider proximity of bedrock, potential earth/rock transitions. Soil borings for evaluation may be considered. Site drainage improvements may be addressed including the closed drainage system.
- Boring log records were not found available. For soil borings and rock core needs, drilling work is scheduled for Spring 2012 for the current PSE date of April 10, 2014.

If there are any questions and/or additional information is needed, please contact Julian Kucharski at 785-7470 or Maria Janoyan at 265-1536.

MTJ:JDK

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 Geotech File