



I. RECORD OF DECISION



Maryland Department of Transportation
State Highway Administration

Parris N. Glendening
Governor
John D. Porcari
Secretary
Parker F. Williams
Administrator

MEMORANDUM

TO: Mr. Douglas H. Simmons, Director
Office of Planning and
Preliminary Engineering

FROM: Cynthia D. Simpson
Deputy Director
Office of Planning and
Preliminary Engineering

DATE: June 24, 2002

SUBJECT: Project Number MO 830A11
MD 355 Montrose Road/Randolph Road Intersection Improvement Study
Montgomery County

Selection of Alternate for Design – Administrator’s Review

On Monday, June 24, 2002, a meeting was held at the State Highway Administration (SHA) headquarter building, to present the team’s Recommended Alternative for the proposed MD 355 Montrose Road/Randolph Road Intersection Improvement Study to the SHA Administrator.

The following members were in attendance:

Mr. Parker F. Williams	SHA, Administrator	(410) 545-0400
Mr. Neil J. Pedersen	SHA, Deputy Administrator	(410) 545-0411
Mr. Douglas H. Simmons	SHA, Director, OPPE	(410) 545-0412
Ms. Cynthia D. Simpson	SHA, Project Planning Division	(410) 545-8500
Mr. Jim Wynn	SHA, Project Planning Division	(410) 545-8520
Mr. Joe Harrison	SHA, Project Planning Division	(410) 545-8506
Mr. Joe Finkle	SHA, Project Planning Division	(410) 545-5580
Mr. Joe Kresslein	SHA, Project Planning Division	(410) 545-8550
Ms. Carmeletta T. Harris	SHA, Project Planning Division	(410) 545-8522
Mr. Ruel Manuel	SHA, Project Planning Division	(410) 545-8544
Ms. Jamaica Kennon	SHA, Project Planning Division	(410) 545-8512

My telephone number is _____

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Ms. Heather Amick	SHA, Project Planning Division	(410) 545-8526
Ms. Mona Sutton	SHA, Travel Forecasting, PPD	(410) 545-5643
Mr. Glen Smith	SHA, RIPD	(410) 545-5675
Mr. Terrance Hancock	SHA, RIPD	(410) 545-5675
Mr. Ken Briggs	SHA, OHD	(410) 545-8761
Mr. Eric Marabello	SHA, OHD	(410) 545-8770
Ms. Kelly Nash	SHA, Office of Bridge Design	(410) 545-8074
Mr. Douglas Mills	SHA, District 3 R/W	(301) 513-7470
Mr. Max Azizi	FHWA	(410) 962-4342
Mr. Matt Storck	STV for District 3	(410) 944-9112
Mr. Bob Simpson	Montgomery County DPW&T	(240) 777-7193
Mr. Shahriar Etemadi	M-NCPPC	(301) 495-2168
Mr. Ronald Rye	Wilson T. Ballard Company	(410) 363-0150
Mr. John Webster	Wilson T. Ballard Company	(410) 363-0150
Ms. Allysha Nelson	McCormick Taylor & Associates	(410) 662-7400

Overview

Ms. Carmeletta Harris introduced the project and provided a brief discussion relating to the project’s status. The alternates retained for Stage II Study were presented to the general public at a Location/Design Public Hearing held at the Richard Montgomery High School in Rockville, Montgomery County on December 3, 2001. The Alternates presented at the Public Hearing were as follows:

- Alternate 1: No-Build
- Alternate 2: Single-Point Urban Diamond Interchange
- Alternate 3: At-Grade Intersection with Option B1
- Alternate 9: Randolph Road under MD 355 with Option B1 and Option B1 Modified

Alternate 1 – No-Build:

The No-Build Alternate would not provide any significant improvements to the MD 355-Montrose Road/Randolph Road intersection since no highway construction would occur. Any improvements would occur as part of normal maintenance and safety operations. Alternate 1 would not provide additional roadway capacity, nor would it address the existing safety concerns.

Alternate 2 – Single Point Urban Diamond Interchange:

This alternate separates traffic movement by carrying through traffic on MD 355 over the Montrose Road/Randolph Road intersection on a bridge.

With this alternate, there will be a single signalized intersection beneath the bridge where the ramps coming off and going to MD 355 and through traffic for Montrose/Randolph Roads converge. Old Old Georgetown Road north of Montrose Road will be closed resulting in a “T” intersection. The cost for this alternate is \$93 million dollars. An advantage of Alternate 2 is that it provides a cleaner connection with the proposed Montrose Parkway (west) because of the 3-way intersection.



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The disadvantages of this alternate are that it eliminates full access to Mid-Pike Plaza on MD 355; eliminates access to the Mervis Building along MD 355 (access will be provided on relocated Randolph Road); requires large retaining walls; and create a weave condition between the ramp to southbound MD 355 and the right turn to MD 187 (Old Georgetown Road).

Alternate 3 – At-Grade Signalized Intersection:

Alternate 3 would be similar to the existing signalized intersection. Road widening would be included to provide additional through and/or turning lanes on each intersection approach. Slip ramps located east of the intersection with Chapman Avenue would tie into the existing Randolph Road intersection with Nebel Street. The cost for this alternate is \$76 million dollars.

The advantage of Alternate 3 is that it creates no change in access along MD 355 and it is the least costly of any build alternate.

The disadvantages of Alternate 3 are that it has a greater impact to the park & ride facility, it is the least pedestrian friendly (due to the number of lanes pedestrians would have to cross), it provides the worst (E/F) LOS improvement, and it has the highest vehicle queuing for the projected 2020 traffic.

Alternate 9 – Randolph Road Under:

Alternate 9 was developed as a result of Focus Group comments. With this alternate, through traffic on MD 355 would travel over Randolph Road on a bridge. Slip ramps located east of the intersection with Chapman Avenue would tie into the existing Randolph Road intersection with Nebel Street. Southbound MD 355 would connect with Montrose and Randolph Roads via Old Old Georgetown Road. This alternate cost \$ 84 million dollars.

****Note:** Based on additional cost and comments received from highway design and an increase in the contingencies applied to each category, Alternate 9 will increase to \$101 million dollars. Alternate 2 and Alternate 3 would increase as well via a more detailed analysis from highway design and an increase in the contingencies applied to each category.

The advantages Alternate 9-Randolph Road Under are that it includes no change in access along MD 355, it has the least impact to the park & ride facility of all build alternates, and it is the most pedestrian-friendly of all the alternatives. The proposed intersections have the least crossing distance across the roadway at major intersections and also offer medians to create a pedestrian refuge space.

The disadvantage of Alternate 9-Randolph Road Under is that the ramp to southbound MD 355 from Montrose/Randolph Road is directionally counter-intuitive. The ramp's geometry initially heads north before turning south and merging to southbound MD 355.



Option B1:

Option B-1 proposes to relocate Randolph Road to the Montrose Parkway right-of-way from Chapman Avenue to a point east of the CSX railroad tracks and tie in at the existing Randolph Road/Parklawn Drive intersection. This option can be applied to all of the build alternates.

Option B1 Modified:

Option B-1 Modified provides additional access to properties located south of Relocated Randolph Road with a connection from the Randolph Road/Chapman Avenue intersection to eastbound Randolph Road. This connection would form the eastbound approach to the four-leg intersection at the Randolph Road/Nebel Street intersection. The westbound departure from the intersection would form a loop ramp connecting to eastbound Relocated Randolph Road. An acceleration lane would be provided across the bridge over the CSX tracks. The connector roadway east of the CSX tracks between Randolph Road and Relocated Randolph Road would remain as proposed under Option B-1.

Option B1 Modified has the potential to reduce traffic over the CSX railroad crossing, due to the close proximity to the proposed bridge over CSX, the ramp associated with this option yield a 9 percent grade and a sharp degree of curvature.

Value Engineering:

Alternate 9: Randolph Road under MD 355 with Option B1 and Option B1 Modified was the team's recommended alternate at the Director's Review Meeting held on February 20, 2002. The Director concurred with the recommendation, however due to the high cost of the project a suggestion was made to perform Value Engineering (VE).

VE activities were held the week of April 22, 2002 to April 26, 2002. The purpose of the VE study is twofold; reduce the overall cost and enhance the value of the project. VE activities brainstormed over 60 possible options; four VE options were selected and studied in detailed. Mr. John Webster reviewed the four VE options. The options are as follows:

Option 1 – B1 Shifted North:

Option 1 - B1 Shifted North is similar to the current design (Alternate 9 with Option B1 and Option B1 Modified). The reversing curves are shifted to the north and east and Parklawn Drive is realigned to the east in order to save more properties along existing Randolph Road. Right-of-Way savings is approximately \$13 million dollars.

Option 1-B1 Shifted North requires Relocated Randolph Road be extended to connect directly with the Eastern Montrose Parkway either at-grade or grade separated. Adding the Montgomery County eastern Montrose Parkway project connection to Relocated Randolph Road creates a sharp dogleg in order to avoid any additional property takes. The eastern Montrose Parkway project would also require significant roadway reconstruction and maintenance of traffic issues.

This option was dropped due to the impacts to the apartment community just east of the U-Haul property. The impact requires the relocation of the apartment access.



Option 4 – B1 Shifted South:

Option 4 - B1 shifted south is similar to the current design (Alternate 9 with Option B1 and Option B1 Modified). The reversing curves are shifted to the south and west and Parklawn Drive is realigned to the east in order to save more properties along the west side of Parklawn Drive. Option 4 - B1 Shifted South Option would have almost the same connection into Eastern Montrose Parkway as the current design with little reconstruction or maintenance of traffic.

This option decreases the right-of-way cost by approximately \$16.9 million dollars, and does not present a drastic change from the previous team recommended alternate (Alternate 9 with Option B1 and Option B1 Modified).

Option 33 – Roundabout at Chapman/Maple Avenue:

Option 33 – Roundabout at Chapman/Maple Avenue places an elongated roundabout, similar to the Towson roundabout, at Chapman / Maple Avenue and has slip ramps on either side of Relocated Randolph Road connecting Nebel Street to the roundabout.

This option was dropped due to the unacceptable Level of Service (LOS) in both the AM and PM peak periods and there are not enough gaps for the side road traffic to enter the roundabout, thus resulting in long delays. The heavy volume of traffic from the northbound MD 355 ramp to eastbound Relocated Randolph Road causes queuing at the roundabout. There are two properties that will be impacted under this design. The Option requires an additional cost of \$163,923 dollars.

Option 51 – One Way Pair at Parklawn Drive:

Option 51 - One Way Pair has westbound Relocated Randolph Road aligned along the Montrose Parkway corridor from Parklawn Drive to the CSX crossing. Eastbound Relocated Randolph Road diverges from westbound just east of the CSX tracks and connects into existing Randolph Road just west of Parklawn Drive.

The segment of existing Parklawn Drive between existing Randolph Road and westbound Relocated Randolph Road would be one way heading north. Southbound Parklawn Drive would proceed on westbound Relocated Randolph Road for a short distance before connecting into eastbound Relocated Randolph Road through a ramp, creating a one way pair with traffic signals at the following locations: existing Randolph Road at Parklawn Drive, existing Parklawn Drive at westbound Relocated Randolph Road, and southbound Relocated Parklawn Drive at eastbound Relocated Randolph Road.

The One Way Pair Option could work with Montgomery County’s Eastern Montrose Parkway, but would require that the Montgomery County’s Eastern Montrose Parkway be at-grade with Parklawn Drive, and that Parklawn Drive be widened to handle the additional lanes needed, which may impact the businesses along Parklawn Drive. Due to the Montgomery County’s Eastern Montrose Parkway, the intersection at existing Randolph Road and Parklawn Drive will worsen, as more



vehicles will make a left from eastbound Randolph Road to northbound Parklawn Drive to access the Montgomery County Eastern Montrose Parkway. The Montgomery County Eastern Montrose Parkway connection would require moderate reconstruction and maintenance of traffic. The design speed for this roadway is 30 mph. The cost saving for this option is approximately \$25 million dollars.

The One Way Pair Option was dropped due to several issues. Some of the movements to access businesses are circuitous. This option may raise NEPA segmentation issues. Queuing on westbound Relocated Randolph Road in the AM and eastbound PM could extend over 1000 feet. The westbound lanes that cross over the CSX bridge would need to be widened from 2 to 3 lanes.

From the signalized intersection at Relocated Randolph Road and Parklawn Drive to the signalized intersection of Braxfield Court and Parklawn Drive is a distance of 350 feet; in addition, another signalized intersection exist 350 feet beyond the second signalized intersection at Wilkens Avenue and Parklawn Drive. The county prefers the distance between signalized intersections be at least 600 feet apart.

Thinking Beyond the Pavement:

Ms. Allysha Nelson presented “Thinking Beyond the Pavement” concepts as well as identified Park and Ride mitigation sites for the recommended alternate. She stated that the pedestrian and bicycle The One Way Pair Option could work with Montgomery County’s Eastern Montrose Parkway, but would require that the Montgomery County’s Eastern Montrose Parkway be at-grade with Parklawn Drive, and that Parklawn Drive be widened to handle the additional lanes needed, which may impact the businesses along Parklawn Drive. Due to the Montgomery County’s Eastern Montrose Parkway, the intersection at existing Randolph Road and Parklawn Drive will worsen, as more vehicles will make a left from eastbound Randolph Road to northbound safety for Option 4 - B1 Shifted South is similar to Alternate 9 with Option B1 and Option B1 Modified. Sidewalks and bikeways will be provided to coincide with the proposed Montgomery County Montrose Parkway cross-section (bikeways on the north side and sidewalk on the south side of the roadway).

It is recommended that some sidewalks be omitted in some segments of the project to divert pedestrians from unsafe crossing conditions. A sidewalk is not recommended along eastbound Relocated Randolph Road between Maple Avenue and the Nebel Street connector due to pedestrian conflict points (at unsignalized access points). It is also recommended that the sidewalk along southbound MD 355 have additional pedestrian safety measures added at the crossing of the ramp from Montrose Road to MD 355 south bound. Safety measures can include a raised crosswalk and pedestrian scale stop signs. Additionally, the area in front of the Montrose School has maximum ADA compliant slopes which requires ADA ramps with landings and handrails.



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Ms. Nelson reviewed the impacts at the existing park and ride and possible mitigation measures to provide additional parking. There are three potential locations for a new park and ride lot; however, none of which are large enough to accommodate approximately 350 impacted spaces. The three locations are all on state owned property and are located in close proximity to the existing park and ride area. The three locations include the remaining parking lot area at the Mid Pike Plaza that is on state property, the triangular space between existing Montrose Road and the proposed access ramp to southbound MD 355 and the parking lot area on state property that is part of the Montrose Crossing Shopping Center. It is recommended to use the Mid Pike Plaza parking area in conjunction with either the Montrose Crossing Shopping Center or with a new parking lot developed in the triangular space. Agreements will need to be discussed with the current tenants of the site and with Montgomery County.

Ms. Nelson reviewed the landscape improvements to the Montrose School, which included a terraced retaining wall and moving the sidewalk closer to the school to provide better access.

Team Recommendations

Ms. Carmeletta Harris presented the recommended Alternate to the Administrator. These included proceeding with Alternate 9 Randolph Road under MD 355 with Option 4 B1 shifted south and Option B1 Modified.

Discussion

Questions and answers ensued with several statements resulting. Mr. Doug Simmons indicated that the project has support from the Montgomery County Council and T&E committee.

The Administrator questioned what is the initial project cost prior to the VE study; Mr. John Webster and Ms. Carmeletta Harris indicated that Alternate 9 with Option B1 and B1 Modified cost over \$101M. Mr. Doug Simmons noted to the Administrator that the right-of-way cost exceeds construction cost for this project. The right-of-way is among the list of factors for the VE study along with consideration for possibly closing the CSX crossing.

The Administrator asked the county staff the cost of the proposed Montgomery County Montrose Parkway. Mr. Bob Simpson of Montgomery County Department of Public Works and Transportation (MC DPW&T) stated that the proposed 1.25 mile long Montrose Parkway (West) cost approximately \$60 M. The Administrator followed up and questioned the county which project has more priority (Montgomery County Montrose Parkway or MD 355 Intersection Improvement). Mr. Bob Simpson indicated the Montrose Parkway is their priority over the MD 355 Intersection project. He also noted that the county had envisioned the projects would be closely coordinated in construction to limit traffic disturbance and possibly save SHA reconstruction cost of the western tie-in. Mr. John Webster concurred and added that there is a cost saving of approximately \$4 M



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from right-of-way and construction if Montrose Parkway is in place before construction of MD 355 project begins. Bob Simpson added that the proposed Montrose Parkway is funded up to East MD Jefferson Street, the County will construct the last segment to Old Old Georgetown to tie into the MD 355 – Montrose Road/Randolph Road project once SHA has funded it's project for construction.

Mr. Doug Simmons asked Mr. Webster to indicate what will be left in the State maintenance system once the project is completed. Mr. John Webster noted that virtually the entire relocated

Randolph Road would be transferred to the County with the exception of the access ramps at the intersection of MD 355, which will remain in SHA's ownership.

The Administrator queried what are the Elected Official views concerning the MD 355 Montrose Road/Randolph Road project; Mr. Neil Pedersen stated that all elected officials are in favor of the proposed improvement.

The Administrator queried where on the county's priority is MD 355 Intersection Improvement. Mr. Bob Simpson noted that in terms of secondary roadway improvements, MD 355 is second to the MD 29 improvements.

Mr. Doug Simmons mentioned that a staging of the project was also studied due to the high cost of the project. Ms. Carmeletta Harris provided the cost estimate for the two stages of the project. Stage 1 is from Montrose Road to Chapman Avenue, and Stage 2 is from Chapman Avenue to Parklawn Drive. The overall cost for Stage 1 is approximately \$41 M, and for Stage 2 is approximately \$64 M. These cost estimates does not account any of the VE option. The Administrator inquired if the project is divided in stages which stage is a priority to the county; Bob Simpson noted that it is a close call between the two stages, however, Stage 1 is preferred before Stage 2. He also noted that if the project is built in stages, the county would ask the state to maintain ownership of relocated Randolph Road until the entire proposed alternate is completed.

The Administrator queried whether there are any community impacts since the alignment has change as a result of the VE. Mr. Neil Pedersen noted that there are no community impacts, mostly commercial takes. The Administrator asked what commercial properties were saved as a result of the VE study. Mr. John Webster noted that a Storage Building company, an office building, a nail salon, liquor store and the Brandon Importers warehouse are all saved as a result of the VE. The Administrator questioned whether there is a possibility of reselling acquired properties. Mr. John Webster noted that the Alignment basically bisects the land and is not a good option.



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Team Recommendation

The Final Team Recommendation for the project includes: **Alternate 9 Randolph Road under MD 355 with Option B1 shifted to the south and Option B1 Modified.** The Administrator concurs with the team recommendation.

I concur that the above accurately represents decisions made by the Administrator at the June 24, 2002 Alternative Recommendation Meeting, Alternate 9 with Option 4 – B1 shifted south and Option B1 Modified was presented and selected for the MD 355 Montrose Road/Randolph Road Intersection Improvement Study.

Concurrence:

A handwritten signature in black ink, appearing to read 'Douglas H. Simmons', is written over a horizontal line. The signature is stylized and cursive.

Douglas H. Simmons, Director
Office of Planning and Preliminary Engineering

7/17/02
Date

cc: Attendees
Project Team

