

**BOARD OF SUPERVISORS
FINANCE/GOVERNMENT OPERATIONS AND
ECONOMIC DEVELOPMENT COMMITTEE
ACTION ITEM**

SUBJECT: **AWARD AUTHORITY INCREASE/Roadway and Civil Design Services for the Route 7 and Route 690 Interchange**

ELECTION DISTRICT: Blue Ridge

CRITICAL ACTION DATE: November 15, 2016

STAFF CONTACTS: Greg Barnes, Transportation and Capital Infrastructure
Joe Kroboth, III, Transportation and Capital Infrastructure
Mike Angel, Finance and Procurement

PURPOSE: To increase the award authority of the roadway and civil design services for the Route 7 and Route 690 interchange.

RECOMMENDATIONS: Staff recommends that the Finance/Government Operations and Economic Development Committee (FGOEDC) authorize the Purchasing Agent to increase the award authority for the consulting services for Roadway and Civil Design Services for the Route 7 and Route 690 Interchange contract by \$2,668,056, for a new contract award authority amount of \$3,665,456.

BACKGROUND: On January 2, 2013 the Board of Supervisors (Board) authorized the Purchasing Agent to award a contract for the Roadway and Civil Design Services for the Route 7 and Route 690 Interchange to Dewberry Consultants, LLC in the estimated amount of \$997,400. The scope of this contract included the preparation of an Interchange Justification Report (IJR) and the preparation and submittal of 30% design plans for the proposed interchange. The IJR was submitted to the Virginia Department of Transportation (VDOT) and subsequently approved on June 1, 2015. The submittal of 30% design plans took place on September 14, 2015 with comments being received from the Town of Purcellville (Town) and VDOT.

Prior to the approval of the IJR, the Purcellville Town Council endorsed Alternative 1 that places the proposed interchange at the existing Route 690 overpass on November 26, 2013. Likewise, the Board also endorsed the Alternative 1 design at its December 4, 2013 Business Meeting. Alternative 2, which was not considered a viable option by either the Board or the Town, which proposed placing the interchange approximately a half mile to the west of the existing Route 690

overpass. This alternative would have been more costly and would have had a greater impact on environmental features and surrounding properties.

The proposed increase would provide for the completion of the design of the project. The original Request for Proposal No. QQ-01747 provided a disclaimer that would allow staff to proceed to full design and completion of the project, if so approved by the Board. In order to complete the design, the proposed contract amendment will provide the following services:

- Additional Field Surveys and Platting;
- Geotechnical Analysis and Design;
- Environmental Analysis and Permitting;
- Stormwater/Erosion Sediment Control Design and Virginia Stormwater Management Program (VSMP) Compliance;
- Public Meeting Support;
- Roadway Design;
- Traffic Signal Design, Speed Studies;
- Hydraulic and Hydrologic Analysis for Bridge Design;
- Value Engineering Support;
- Utility Design, Bridge and Retaining Wall Design;
- Bidding and Construction Support Services, Virginia Water Protection Monitoring and Reporting; and
- Street Acceptance Assistance into the State maintenance program.

ISSUES:

Rationale for Improvement (Access to Woodgrove High School and Congestion Prevention): The existing road network around Purcellville does not provide easy accessibility to the north side of Town from the Route 7 bypass. Additionally, the completion of Woodgrove High School on the north end of Town further added to the concern of the increased traffic that would have to travel through Town streets in order to access the school. A study performed in 2012 showed an additional interchange on the North side of Town had the potential to not only greatly reduce traffic travelling through the Town, but also reduce traffic and congestion at the existing Route 7/Route 287 interchange.

Rationale for Increase in Contract (Major Structural Design Changes): Due to the various issues associated with the site, extensive structural design will be required. Upon completion of a detailed survey of the bridge, it was discovered that the existing Route 690 bridge overpass did not have the mandated 16ft. 6in. minimum vertical clearance over Route 7. Widening of this bridge is needed in order to accommodate the proposed interchange. The widening of the bridge will further decrease the vertical clearance over Route 7. While it may be possible to obtain a design exception for this issue, the proposed contract amendment encompasses the design of a replacement structure to meet Federal and State clearance criteria.

In addition to possibly replacing the existing Route 690 overpass, two existing bridges along Route 7 to the west of the proposed interchange will need to be widened in order to accommodate the acceleration and deceleration lanes associated with the interchange. These bridges span the South Fork of the Catoctin Creek, and will not only require structural design, but will require a detailed hydraulic/hydrologic analysis in order to obtain design approval from the County, the Town, as well as VDOT and Federal agencies.

Furthermore, the southwest quadrant of the interchange will require the design and construction of a retaining wall to avoid an existing wetlands mitigation area and to significantly reduce impacts to the South Fork of the Catoctin Creek. While the design of these structures is extensive and can be costly to construct, impacts to environmentally sensitive areas and adjacent properties are minimized significantly with the proposed design.

FISCAL IMPACT: The original award to complete the IJR and prepare 30% design plans was in the amount of \$997,400. Contract amendment No. 1, dated November 15, 2014 provided a credit to the County in the amount of \$45,256.00 for a portion of the Cultural Resources Investigation for Alternative 2 that did not need to be performed. The proposed contract amendment would increase the contract by \$2,713,312. This proposed amendment combined with the first amendment would make the new value of the contract \$3,665,456.

As part of the FY 2013 Capital Improvement Program (CIP) the Board of Supervisors appropriated \$1,500,000 of Fund Balance for the engineering and design of the proposed interchange at Route 7 and Route 690. The Adopted FY 2017 CIP (Attachment 1) provided an additional \$4,000,000 in funding using General Obligation Bonds, bringing the project budget to \$5,500,000. The current available balance in the project is \$4,502,600. A sufficient balance exists for the recommended contract increase. Planned appropriations between FY 2018 and FY 2021 include an additional \$4,000,000 in General Obligation Bonds, \$5,100,000 in Local Tax Funding, \$10,000,000 in State Revenue Sharing, and \$10,000,000 in NVTA 30% Local Funding. These planned appropriations would bring the total project budget to \$34,600,000 by FY 2021.

ALTERNATIVES:

1. Authorize the Purchasing Agent to increase the award authority for the Consultant Services for Roadway and Civil Design Services for the Route 7 and Route 690 Interchange contract by \$2,668,056 for a new contract award authority amount of \$3,665,456.
2. Do not recommend this award authority increase and direct staff how to proceed.

DRAFT MOTIONS:

1. I move that the Finance/Government Operations and Economic Development Committee authorize the Purchasing Agent to increase award authority for the consulting services for Roadway and Civil Design Services for the Route 7 and Route 690 Interchange contract by \$2,668,056, for a new contract award authority amount of \$3,665,456.

OR

2. I move an alternate motion.

ATTACHMENTS:

1. Adopted FY2017 Budget – Route 7/690 Interchange



Route 7 / Route 690 Interchange

Project Description – C00196

This project provides for the preliminary design (30%), surveys, environmental and geotechnical due diligence, Interchange Justification Report (IJR) and construction of an interchange at Route 7 and Route 690 just west of the Town of Purcellville. The reports and design will be coordinated with VDOT, the Federal Highway Administration (FHWA), the Town of Purcellville and local residents. FHWA involvement is required since Route 7 in this vicinity is part of the National Highway System (NHS) and is a limited access road.

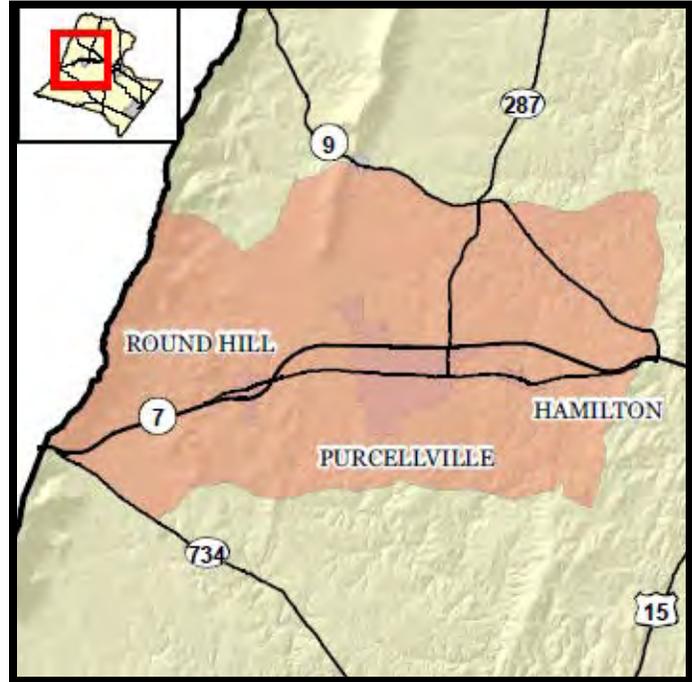
This project is being designed and constructed to VDOT standards and will be included in the VDOT system for road maintenance.

Current Status

The Interchange Justification Report (IJR) was approved by VDOT in June 2015 and preliminary (30%) design is complete.

Funding Plan

This project is funded using local tax funding, general obligation bonds, State Revenue Sharing, and NVTA 30% local funds. State Revenue Sharing funds are applied for and awarded on a competitive basis. All proposed uses of State Revenue Sharing funding on County road projects are subject to award of the funding by VDOT. All proposed uses of NVTA 30% local funding are subject to funding allocation to the County by NVTA. The general obligation bonds will be scheduled for placement on the November 2016 referendum.



	Prior							6 Year	Future	Project
Capital (\$ in 1000s)	Alloc.	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total	FY's	Total
Right of Way & Utilities	-	-	2,000	2,000	-	-	-	4,000	-	4,000
Preliminary Engineering	1,500	4,000	-	-	-	-	-	4,000	-	5,500
Construction	-	-	-	-	15,100	10,000	-	25,100	-	25,100
Payment to Town	-	-	-	-	-	-	-	-	-	-
Total Cost	1,500	4,000	2,000	2,000	15,100	10,000	-	33,100	-	34,600
Local Tax Funding	-	-	-	-	-	-	-	-	-	-
Local Tax Funding - Roads	-	-	-	-	5,100	-	-	5,100	-	5,100
Fund Balance	1,500	-	-	-	-	-	-	-	-	1,500
General Obligation Bonds	-	4,000	2,000	2,000	-	-	-	8,000	-	8,000
Lease Revenue Financing	-	-	-	-	-	-	-	-	-	-
Proffers (Cash)	-	-	-	-	-	-	-	-	-	-
State Capital Assistance	-	-	-	-	-	-	-	-	-	-
RSTP	-	-	-	-	-	-	-	-	-	-
Revenue Sharing	-	-	-	-	5,000	5,000	-	10,000	-	10,000
NVTA 70% (Regional)	-	-	-	-	-	-	-	-	-	-
NVTA 30% (Local)	-	-	-	-	5,000	5,000	-	10,000	-	10,000
Total Financing	1,500	4,000	2,000	2,000	15,100	10,000	-	33,100	-	34,600
Operating Impact (\$ in 1000s)		FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total		
Debt Service		70	277	270	263	256	249	1,385		
Total Impact		70	277	270	263	256	249	1,385		