



Carl D. Silver Parkway, Fredericksburg , Virginia

ATCS provided roadway design and civil engineering services from the initial alignment studies through the submission of construction documents for the Carl D. Silver Parkway in the City of Fredericksburg . This roadway consisted of two phases with the following elements:

- 6000 LF of four lane closed section roadway with a varying width MS-2 raised grass median.
- 2900 LF of six lane closed section roadway also with a MS-2 raised grass median
- 1110 feet of two lane closed section roadway
- Approximately 16,000 feet of waterlines
- Approximately 4400 feet of sanitary sewer
- Approximately 10,400 LF of storm sewer
- 9 way utility duct bank
- 6 stormwater management basins
- 4 bioretention filters design for low impact development
- 211 LF of 16 foot wide by 5 foot high Con-Span for a significant water crossing.

The roadway was designed to VDOT standards and was accepted into the VDOT state system of highways. Profiles included sight distance investigations to ensure that proper standards and clearances were met. Superelevation was designed in accordance with the latest VDOT TC-5 standards. The project also featured VDOT approved pavement structures and signing and marking plans in accordance with VDOT standards.

The preparation of the construction plans followed the policies included in the VDOT Road Design Manual, Instructional and Informational Memorandums, VDOT Road and Bridge Standards and the VDOT construction specifications. The project also featured multiphase erosion and sediment control plans meeting DCR requirements with specifically designed sediment basins and other E&S control measures. Maintenance-of-traffic concerns were minor since this was a new road. To prepare final construction plans, a detailed and thorough roadway alignment study was first performed. This study led to the final alignment that was eventually built and also led to the creation of final construction documents.