

Carl Richard Corse, P.E.

117 Kuethe Drive
Annapolis, Maryland 21403

Professional Standing

Maryland Professional Engineer #25825

North Carolina Professional Engineer #031275

Member and Associate Co-Chairman of Environmental Committee, Maryland Aggregates Association

Accepted as an Expert in General Civil Engineering, Prince George's County Zoning Hearing Examiner, 2002

Accepted as an Expert in General Civil Engineering, Baltimore County Zoning Hearing Examiner, 2005

Accepted as an Expert in General Civil Engineering, Anne Arundel County Zoning Hearing Examiner, 2009

Professional Experience

- August 2008 – Present **Operations Manager, ATCS, P.L.C.**
Responsible for procurement and management of general civil engineering services contracts to land development clients, institutions, municipalities, and aggregate companies for Annapolis branch office
- May 2003 – May 2008 **Vice-President and Principal, CNA, Inc.**
Procuring and managing water resource and environmental services contracts to land development clients, institutions, municipalities, and aggregate companies; Principal in charge of all engineering operations in a 75-person consulting firm.
- May 1996 – May 2003 **Associate and Director of Industry and Environment Services Division, Morris & Ritchie Associates, Inc.**
Established, staffed and managed specialty division providing services to aggregate companies and water resource and environmental services to land development clients and institutions and municipalities.
Project Manager, Water Resources, Morris & Ritchie Associates, Inc.
Management and Design of varied industrial, commercial, residential, and public infrastructure projects throughout Mid-Atlantic region.
Project Engineer, Water Resources, Morris & Ritchie Associates, Inc.
Design of varied industrial, commercial, residential, and public infrastructure projects throughout Mid-Atlantic region.

Awards and Published Papers

Presidential Scholarship Award Recipient, Pennsylvania Asphalt Pavement Association, 1995-1996

John L. Rumpf Award Recipient, Temple University, 1996

Who's Who Among Students in American Universities & Colleges, Temple University, 1994-1995

Society of American Military Engineers Award Recipient, 1993-1994

Transportation Design Award, American Society of Civil Engineers, Temple University, 1996

Case Study: Erosion and Sediment Control For Surface Mine Reclamation, International Erosion Control Association, Proceedings of Conference 29, 1998.

Academic Background

- Bachelor of Science in Engineering, Temple University, 1996 Magna Cum Laude
- Floodplain Analysis Course (HEC-RAS), Pennsylvania State University, 1997
 - Advanced Hydrology Course, State Highway Administration, 1998
 - Fluvial Geomorphology for Engineers, Wildland Hydrology, 1999
 - River Morphology and Applications, Wildland Hydrology, 2000

Project Experience

SELECT COMMERCIAL DEVELOPMENT PROJECTS

FedEx Ground Distribution Center, White Marsh, Maryland - Project manager for development of 16-acre regional trucking facility. Responsibilities included oversight of grading, utility design, storm water management, and coordination of geo-technical analysis and foundation design for building on pile system. (2002)

AAI Corporation, Building 111 Improvements, Cockeysville, Maryland - Project Engineer/Manager for improvements to an existing building for use in renovating light rail cars. Responsibilities include site improvements for rail test and transfer track, road design, hazardous materials storage facility design, storm drain and utility layout, and coordination with overall pertinent storm water management strategy. (2002)

Texas Quarry Reclamation Parkway Village LTD., Cockeysville, Maryland - Project Engineer responsible for ongoing design and coordination of reclamation of former calcium carbonate surface mine facility. Reclamation includes remediation of former quarry pits using surcharge consolidation strategies, erosion and sediment control, mass grading, templates for rock blasting, and a regional storm water management facility with a 196-acre drainage area. Project also involves the design of an offline shallow marsh facility, a 400 LF reach of stream restoration/relocation, revegetation designs for 3,000 LF of stream through an existing operations area, and cost analysis and feasibility studies for multiple land use strategies. (1999)

White Marsh Sand and Gravel for Redland Genstar, Inc. D.B.A. Lafarge Corporation, White Marsh, Maryland - Project Manager and Engineer for reclamation and development of 300+ acre processing and wash pond areas along White Marsh Run. Reclamation activities included large scale mass grading, stream crossing permits, accelerated primary consolidation of wash pond fines using vertical wick technology, stream restoration, CSX Bridge modifications, 11-sq mile watershed modeling. Development phase included site plans and engineering documents for Fed Ex Distribution Facility, CarMax Superstore, GM Allison Transmission Plant, and other pad site developments. (2002)

SELECT INDUSTRIAL DEVELOPMENT PROJECTS

Maryland Portable Concrete, Riverside Concrete Batch Plant, Aberdeen, Maryland - Project Engineer for the preparation of a Storm Water Pollution Prevention Plan for compliance with NPDES requirements. Project included mapping of the site and operations, material categorization and inventories, and concept sediment control revisions. (2006)

Bladensburg Terminal for Aggregate Industries-Mid Atlantic, Bladensburg, Maryland - Project Manager and Engineer of Record for design of concrete and asphalt batch plants, upgrading of rail spurs and unloading systems, and utilities and road frontage improvements. (2008)

I.W. Jenkins Property for T.C. Simons, Inc., Joppa, Maryland - Project Manager and Engineer for the ongoing permitting of a surface mine and material stockpile/processing area. Elements include preparation of the Storm Water Pollution Prevention Plan, surface mine permit renewals, and erosion and sediment control inspection and improvement recommendations. (1998)

Millennium Inorganic Chemicals, Inc., Francis Scott Key Bridge Facility, Baltimore, Maryland - Project Engineer for the ongoing operation of a stockpile and wetland mitigation area. Elements included renewal of permits and plans with Baltimore City and coordination of wetland inspections and reporting. (2001)

SELECT RESTORATION/RETROFIT/REDEVELOPMENT PROJECTS

Elkton Raceway Improvements for the Town of Elkton Department of Public Works, Elkton, Maryland - Project Manager and Engineer for analysis and design of a surface water intake system for a 4 mgd water treatment plant. Project included floodplain impact permitting, design of a concrete, multi-cell intake structure

with gates and filter screens, sediment control design, and construction oversight. Project included the use of Porta-Dam structure for construction dewatering of existing canal. (1998)

Cherry Grove Stream Enhancement and Bridge Design, City of Annapolis, Maryland - Project Manager and designer of a stream enhancement design for a portion of Upper Spa Creek at Cherry Grove Road. Designs included channel dimension modifications, grade control, bio-engineered stream bank stabilization, landscape architecture, bridge specifications and design, and a storm drain headwall and outfall stilling basin. (1999)

Lilly Run Flood Abatement, Town of Havre De Grace, Maryland - Project Manager and Engineer for storm drain improvements and stream valley modifications to reduce flooding throughout the Town. Design included storm drain retrofits and modifications, stream channel regrading, and extensive hydraulic analyses. (1997)

Porter Drive Stream Valley Enhancement, City of Annapolis, Maryland - Project Manager and Designer for the restoration of approximately six (6) acres of degraded stream valley along Weems Creek in the Admiral Heights Community. Design includes incised channel restoration, rubble dump removal, stream valley grading and re-vegetation, and permitting and community interface. (2003)

Keorner Place Regional Storm Water Management - Kernersville, North Carolina - Project Manager and Engineer-of-Record for the design and permitting of a regional water quality and quantity management facility. Design included a weir wall outfall structure and various wetland marsh zones. Facility was part of a quantity control strategy for downstream restoration. (2005)

Woodlawn High School Storm Water Management Retrofit, Baltimore County DEPRM, Maryland - Project Manager for the design of a bio-retention facility retrofit for portions of Woodlawn High School. Design includes floodplain impacts, facility design, permitting, and educational coordination for future maintenance and teaching with students of the school. (2002)

Navy-Marine Corps Stadium Enhancement Project, City of Annapolis and NAAA, Maryland - Project Manager and Coordinator for this partnership enhancement project for the Stadium grounds along Taylor Avenue in Annapolis. Project includes storm water management retrofits for parking and stadium areas, entrance improvements, and a 1.25-mile perimeter recreational trail system and landscaped buffer. (2004)

White Marsh Run Stream Valley Restoration, Baltimore County and Redland Genstar, Inc., White Marsh, Maryland - Project Engineer for an ongoing stream/floodplain restoration including floodplain encroachment analysis, culvert design through existing railroad embankment, floodplain grading and wetland creation, water quality design, stream relocation design, erosion and sediment control. Involved in obtaining numerous waterway construction permits for floodplain fills, stream relocation, and bridge channel design. (2007)

Bath Branch Stream Valley Restoration, Winston-Salem, North Carolina - Engineer of record for 600-acre downtown redevelopment project including three regional stormwater facilities, stream valley restoration using natural channel designs, and utility infrastructure for Wake Forest Bio-Med Research Park. (2008)

Lake Hills Dam Breach and Valley Restoration, Forsyth County, North Carolina - Engineer of record for the removal of an existing flood control lake and dam and restoration of the upstream and downstream valley. Project involves canal design for relocated lake, watershed hydrology and hydraulics, and stream restoration construction documents and specifications. (2009)

Big Creek Stream Valley Restoration, Forsyth County, North Carolina - Engineer of record for extensive stream restoration project in association with Dave Rosgen's Wildland Hydrology Stream Restoration courses. Project includes watershed hydrology and hydraulics, culvert designs, and sediment capturing basins. Construction drawings were prepared for use by Dave Rosgen in Level IV Natural Channel Design training. (2010)

Bulle Rock Resort and Conference Center - Stream Relocation, Blenheim LLC, Havre de Grace Maryland - Project Engineer for the design of 660 LF of stream channel relocation around an existing farm

pond. Tasks included geomorphic assessments of upper and lower reaches, soil loss and sediment transport calculations, reference reach investigations, channel and floodplain design, permit acquisition, and biological enhancement requirements due to endangered species habitat. (1999)

Panther Branch Stream Restoration, Baltimore County, Hereford, Maryland - Project Manager for Priority III restoration of approximately 400 LF of headwaters of Panther Branch fed by a regional storm water management facility. Design included the transformation of an incised channel into a stable step-pool-riffle system by raising the invert and widening the floodprone area. (2000)

SELECT STORMWATER MANAGEMENT PROJECTS

Havre de Grace Stack and Store for Freidman Company, Havre de Grace, Maryland - Project Engineer responsible for design of storm water quality and quantity management facility for remote storage facility. Project included analysis of watershed to adjacent stream, floodplain analysis, and outfall designs to minimize existing flooding situation. (1998)

FedEx Ground Distribution Center -- Baltimore -- White Marsh, Maryland -- Project Manager for 11-acre wash pond retrofit for regional water quality treatment for multiple commercial developments. Project included dam safety analyses, joint permitting, and outfall design for interface with adjacent stream systems. (2002)

Helping Hand's Ministries Church and Community Center, Churchville, Maryland - Project Engineer responsible for the design of storm water quality and quantity management facility for church and community center. Sized storm drain systems and designed erosion and sediment control measures required to receive the necessary permits for construction. (1999)

North Crossing Residential Development for Ausherman Corporation, Frederick, Maryland - Project Engineer responsible for performing floodplain analysis and coordinated review with City of Frederick and Maryland Department of the Environment for 2,000 LF of Opossum Creek. (1998)

The Fields at Perry Hall Residential Development for Southern Land, Perry Hall, Maryland -- Project Engineer responsible for performing a hydrology and hydraulic analysis of a four-channel network of unnamed tributaries to the Bird River, including the modeling of culverts at Interstate 95, Joppa Road, and MD Route 7. (2001)

Rock Glenn Residential and Commercial Developments for DBB, LLC, Aberdeen, Maryland -- Project Manager and Engineer-of-Record for a multi-phase development encompassing 200+ acres along the CSX Corridor on newly-annexed land in Aberdeen, Maryland. Projects included extensive public road networks and associated storm drain systems, floodplain analyses and impact mitigation, storm water management and sediment control, and culvert and bottomless arch crossing design and permitting. (2007)

SELECT AGGREGATE PRODUCER PROJECTS - MINING AND RECLAMATION

Bradshaw Mine Reclamation for Redland Genstar, Inc., Joppa, Maryland - Project Manager responsible for design and coordination of mass grading operation and shallow marsh creation for previously mined site adjacent to Gunpowder Falls River. Performed grading designs, coordinated surveys and construction stakeout, and acted as construction liaison to client. (1998)

Merritt Brandywine Sand and Gravel for Aggregate Industries-Mid Atlantic, Brandywine, Maryland -- Project Manager and Engineer for the design and permitting of two permanent wash basins and associated sediment controls. Project includes the future abandonment and reclamation of the in-stream wash process and the permitting of wash plants and material storage areas. (1997)

Accokeek Road Mine and Wash Plant Site for Aggregate Industries-Mid Atlantic, Brandywine, Maryland -- Project Manager, Civil Engineer, and expert testimony for the preparation of Site Plans for applications for two Special Exceptions to mine and wash material in a 680-acre residentially-zoned area. Project included analyses and design of mining exhibits, wash plant layouts, concept sediment control and

storm water management, floodplain analysis, tree conservation plans, various exhibits, and community interface and coordination. (2008)

Mason Dixon Sand and Gravel, Perryville Mine for York Building Products Company, Inc., Perryville, Maryland – Project Manager and Engineer for the ongoing permitting and operation of a 130-acre surface mine. Elements include continuing permit modifications, sediment control design, wash pond embankment analyses, and reclamation design. (2002)

Rosedale Asphalt Plant for Redland Genstar, Inc. D.B.A. Lafarge Corporation, Baltimore, Maryland – Project Manager for ongoing operations along Baltimore Beltway. Elements included Storm Water Pollution Prevention Plans, wetland mitigation, and storm water and sediment control design. (2008)

Mason Dixon Sand and Gravel, Shockley Mine for York Building Products Company, Inc., Perryville, Maryland – Project Manager and Engineer for the permitting of a new 130-acre surface mine. Project included erosion and sediment control, mine and reclamation plan preparation, and design and construction oversight of a conveyor culvert under an adjacent state highway. (2001)

Medford Quarry for Redland Genstar, Inc. D.B.A. Lafarge Corporation, Carroll County, Maryland – Project Manager and Engineer of Record for permitting and mine planning services including site plans for new entrance and Scale House, stream relocations for mine pit expansion, hydraulic modeling of surrounding culvert systems, and mine plan and erosion and sediment control updates. (2008)

Mason Dixon Sand and Gravel, Belvedere Mine for York Building Products Company, Inc., Perryville, Maryland – Project Manager and Engineer for the ongoing permitting and operation of a 410-acre surface mine. Elements include continuing mining modifications, sediment control design, large wash pond design and construction coordination, process water sampling, and future expansion planning. (2002)

Texas Quarry for Redland Genstar, Inc. D.B.A. Lafarge Corporation, Cockeysville, Maryland – Project Manager and Engineer for the ongoing permitting and operation of a 490-acre limestone quarry. Elements include mitigation designs for wetland and floodplain impacts, permit modifications, sediment control design, overburden grading, water quality design, and revegetation plans. (2008)

Chase Masonry Sand Mine for Redland Genstar, Inc. D.B.A. Lafarge Corporation, Chase, Maryland – Project Manager and Engineer for the ongoing permitting and operation of a 366-acre surface mine. Elements include mining and reclamation plan preparation, continuing mining modifications, sediment control design, and reclamation grading. (2007)

Frederick Quarry for Redland Genstar, Inc. D.B.A. Lafarge Corporation, Frederick, Maryland – Project Manager and Engineer for the ongoing permitting and operation of a 715-acre rock quarry. Elements include mining and reclamation plan preparation, continuing mining modifications, sediment control design, analyses of operations facilities, concept entrance improvements, overburden storage grading, and reclamation grading for the construction of a Maryland Transit Authority rail station. (2006)

Martin O'Malley
Governor
Robert W. Bennett
Comptroller
Thomas P. Hoyer
House Speaker

LICENSE, REGISTRATION, OR CERTIFICATION

State of Maryland

DEPARTMENT OF LABOR, LICENSING AND REGULATION
STATE BOARD FOR PROFESSIONAL ENGINEERS

CERTIFIES THAT
CARL RICHARD CORSE

IS AN AUTHORIZED PROFESSIONAL ENGINEER

LIC. REG. CERT. NO.	EXPIRATION DATE	FIELD / STATE	CATEGORY	
25825	02-02-2011	N/A	05	3787562

WHERE REQUIRED BY LAW THIS MUST BE CONSPICUOUSLY DISPLAYED IN OFFICE TO WHICH IT APPLIES

LICENSE, REGISTRATION, OR CERTIFICATION

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STATE BOARD FOR PROFESSIONAL ENGINEERS
500 N. CALVERT STREET, BALTIMORE, MD 21202-3651

CARL RICHARD CORSE
117 KUETHE DRIVE

ANNAPOLIS MD 21403

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DEPARTMENT OF LABOR, LICENSING AND REGULATION
STATE BOARD FOR PROFESSIONAL ENGINEERS

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