

# Transportation Alternatives (TA) Set-Aside Design Assistance—NV5 Related Services

## Overview

# NV5

**NV5, Inc.** (NV5) is a nationwide, professional and technical consulting firm and is ranked 34th in the Engineering News Record listing of top 500 A/E design firms. The northeast infrastructure team (*formerly The RBA Group*)

is headquartered in Parsippany, NJ and has multiple offices in the northeast, including New York, NY and Philadelphia, PA. We are a multidiscipline firm of professionals dedicated to designs that enhance quality of life. Core specialties include bicycle/pedestrian planning and design, recreational planning and design, landscape architecture and streetscape design, highway and traffic design, transportation planning, structural and bridge design, site design, utility design services, environmental permitting and processing services, hydraulics / hydrology and construction management. We have provided design services for various counties and municipalities throughout New Jersey, and other major transportation agencies including NJDOT, NJTA, NJTPA, NJ TRANSIT, PANY&NJ, DRJTBC, NYSDOT, NYCDOT, and NYCDDC, as well as nonprofit organizations.

**NV5** includes seasoned professionals, experienced in a broad range of transportation enhancement and transportation alternative settings. We are nationally and locally recognized, and are providing Transportation Alternative and Safe Routes to School (SRTS) Design Assistance throughout NJ.



*NV5 is a full service multidiscipline firm. Below are some specific TA services:*

## Complete Streets

- Context Sensitive Design/Solutions
- Policy Plans
- Implementation & Training
- Multimodal Design
- Transit Access
- Smart Streets (Technology/Infrastructure)

## Pedestrian Safety

- ADA Capability (Sidewalks, Intersection Devices)/Bump Outs/Signal Upgrades
- Crosswalks (High Visibility, Colored/Textured, In-pavement Lighting)
- Safe Routes to School
- Lighting
- Pedestrian Bridges/Tunnels
- Traffic Calming/Road Diets/Speed Tables
- Signals (HAWK, Flashing Beacons, etc.)

## Roadway/Traffic Improvements

- Pavement and Drainage Improvements
- Widening/Reconstruction
- Intersection/Signal Design/Traffic Regulation
- MUTCD Signing / Striping
- Roadside Safety
- Utility Design

## Bicycle

## Accommodation (On Road/Off Road)

- Pavement Markings/Sharrows (shared lane markings)
- Dedicated Bike Lanes
- Parking / Racks
- Signing
- Trails & Greenways, Rail-Trails

## Streetscape Design

- Gateways/Decorative Treatments
- Pedestrian Plazas
- Decorative Street Furniture, Parklets
- Art / Cultural Elements
- Wayfinding Signage
- Landscape (Green Infrastructure)

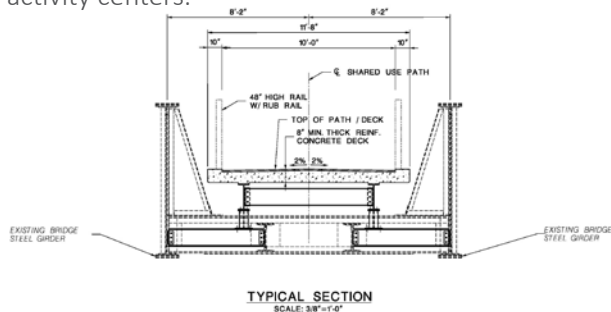
## Environmental

- Assessment/NEPA Documentation/Technical Studies
- Water Resources, Hydrology & Hydraulics, Flood Plain Restoration/Management
- Green Stormwater Infrastructure Design
- Ecology, Permitting
- Cultural Resources including Archeology
- Hazardous Materials

## NYS&W Bicycle & Pedestrian Path Client: County of Morris



NV5 is currently nearing completion of Final Design services, having completed Planning and Conceptual Design efforts, for the proposed 4.8-mile shared-use path, located in Passaic and Morris counties that will serve as a transportation and recreation link for local residents, commuters and visitors. The northern 4.1 miles of the path will consist of a 10' wide paved section which will be located within the abandoned NYS&W Railroad ROW. The southern 0.7-mile section of the path will be located adjacent to, but outside of, railroad ROW and will consist of paved sections and boardwalk sections within environmentally sensitive areas. Connections from the path to local attractors and destinations will be provided, and include Pequannock Valley Park, Pequannock Town Hall, Mt. View Train Station and other local downtown services and residential neighborhoods. This project will provide: a safe, accessible, convenient bicycle/pedestrian facility for residents; intermodal connectivity to public transit (rail and bus); transportation choices for all types of users and improved multi-modal access to surrounding land uses and activity centers.



## Transportation Alternatives Program Design Assistance (TAP)



Multiple Projects For LPAs Through NJDOT Local Aid And Economic Development Using Federal Aid Highway Program Funds For 2016 Grant Recipients NV5 has been selected by LPAs throughout NJ to provide Design Assistance Services for Preliminary Design, Final Design and Construction Support for the Federally Funded TAP project grants listed below. Services include Multi-Use Trail design, streetscape and landscape architecture, signing and striping, intersection improvements, bicycle compatibility improvements, pedestrian safety, pedestrian bridges, ADA curb ramps, driveway apron improvements, intersection and signal design, pedestrian scale lighting, cultural resources, technical environmental studies, environmental permitting, public outreach, preparation of contract plans, specifications and cost estimates (PS&E) as well as construction support:

- Morris County Park Commission: Patriots' Path on Great Morristown Greenway (approx. 1-mile trail)
- City of Passaic: Market Streetscape Enhancement Project
- Toms River Township: Ortleigh Beach Streetscape and Gateway Treatment Project along Rt. 35 and gateways to Ortleigh Beach
- Town of Morristown: MLK Promenade Transit Connection Streetscape, pedestrian safety improvements
- Raritan Borough: Pedestrian Improvements from the NJ Transit Rail Station to the Riverfront
- Pennington Borough: Downtown Streetscape Improvements within Historic District
- NJDEP: Waterloo Road Amphibian Passage System (Byram Township)
- NJDEP: Multi-year trail and Morris Canal Improvements at Historic Waterloo Village (Byram Township)



## Safe Routes to School (SRTS) Design Assistance

Multiple Projects For LPAs Through NJDOT Local Aid And Economic Development Using Federal Aid Highway Program Funds For 2016 Grant Recipients NV5 has been selected by LPAs throughout NJ to provide Assistance Services for Preliminary Design, Final Design and Construction Support for the Federally Funded SRTS project grants listed below. Services to include: Pedestrian safety, sidewalk and ADA curb ramps, signing and striping, intersection improvements, bicycle compatibility improvements, utility coordination including RR crossings, environmental permitting, public outreach, and preparation of contract plans, specifications and cost estimates (PS&E) as well as construction support:

- Pemberton Township: SRTS improvements for roadways near Busansky/Emmons Schools
- Somerville Borough: SRTS improvements along Veteran's Memorial Drive East
- New Providence Borough: SRTS improvements for roadways near Allen W. Roberts School
- Highland Park Borough: SRTS improvements for roadways near Irving School and Bartle School
- Village of Ridgewood: SRTS improvement for roadways near Benjamin Franklin Middle School



## Complete Streets (CS)—Comprehensive Program Support Services

**Client: New Jersey Department of Transportation**



NV5 prepared CS program support documents for NJDOT. NV5 also helped NJDOT refine the Capital Project Delivery Process and made recommendations to the associated Activity Descriptions and Guidelines (Concept and Design phases) to implement the CS policy. NV5 instructs NJDOT, agency, county and municipal staff on implementing CS.

## Delaware River Trail - Philadelphia

**Client: Delaware River Waterfront Corporation**



NV5 prepared a Master Plan and Preliminary Design Report for a five-mile section of the proposed Delaware River Trail between Pier 72 South/Mifflin Street and Lehigh Avenue in Central Philadelphia, PA. This effort led to preparation of Final Design drawings for, and construction of, the first phase of the trail, the Penn Street Trail section. The solution along this part of

the route called for design of a clever ‘urban’ side-path alongside Delaware Avenue and Penn Street. The project also created underutilized roadway space into a new pedestrian plaza and featured sustainable storm-water management (rain gardens) and solar powered trail lighting, green infrastructure, and smart technologies.

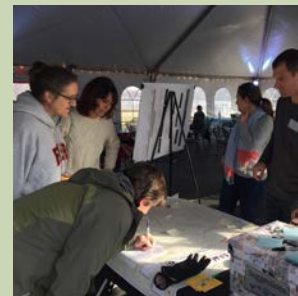
## Route 35 Reconstruction MP 4.0-9.0 (Superstorm Sandy Emergency Contract)

**Client: New Jersey Department of Transportation**



NV5 provided final design and construction support services for a 5-mile section of Route 35, involving pavement replacement, new corridor-wide drainage system (over 30 outfalls) and replacement/ upgrades to 19 signalized intersections, significant sidewalk improvements, enhanced crosswalks, bike lanes, parking improvements, and over 800 ADA-compliant curb ramp installations, which were constructed in accordance with NJDOT American Disabilities Act policies.

## Camden County Trail Projects



### Camden Greenways Circuit Trails Plan

**Client: New Jersey Department of Transportation**

NV5 facilitated the update to the Camden Greenways Circuit Trails Plan with Cooper’s Ferry Partnership. Working under our NJDOT Term Agreement through the Bicycle and Pedestrian Local Planning Assistance Program, NV5 assessed existing conditions and opportunities for new links for the GreenWay throughout all Camden neighborhoods.

### Camden Greenway Trail Design Guide

**Client: Cooper’s Ferry Partnership**

NV5 developed a technical design resource of bicycle and pedestrian facilities appropriate for buildout of the Camden GreenWay Network. This document serves as a resource for developers, so that as new projects and proposals emerge, they will include appropriate facilities that will incrementally complete the Camden Greenway Network.

### Cross Camden County Trail Planning and Design

**Client: Camden County**

NV5 conducted a Feasibility Study for the roughly 33 mile Cross Camden County Trail to create the “backbone” of Camden County’s trails network, which will connect the Camden Waterfront and Atlantic County. We are currently advancing the preliminary and final engineering design of approximately 22 miles of this route, which will be performed in phases.

### Camden Active Trail Network

**Client: New Jersey Department of Transportation**

Through support from the NJDOT as part of the On-Call Bicycle and Planning Assistance, NV5 developed a preliminary network of trails throughout the City of Camden and the surrounding area.

## East Coast Greenway Northeastern New Jersey Route Location Study

**Client: New Jersey Department of Transportation & East Coast Greenway Alliance**

**East Coast Greenway.** NV5 has collaborated with local communities, counties and state agencies for over a decade to achieve the design and construction of the East Coast Greenway trail system that traverses New Jersey as part of this overall 2600-mile trail, connecting cities from Maine to Florida. NV5 efforts included a route location for a 5-county shared use path and trail proposed as a northern New Jersey extension of the East Coast Greenway.



## Morris Canal Greenway Corridor Study

**Client: North Jersey Transportation Planning Authority (NJTPA)**



NV5 led the routing study across New Jersey which includes projects now being advanced in Essex County, Warren County and Jersey City.



## Patriot's Path Footbridge

**Client: Morris County Park Commission**

NV5 provided engineering services for the construction of a footbridge spanning the Whippany River, connecting portions of bicycle/pedestrian trails through Morris County parklands. NV5 responsibilities included field survey, structural engineering, foundation design, soil erosion control permits and trail design for approximately 1500 feet of trail approaches.



## NJDOT Environmental and Drainage, Hydrologic and Hydraulic (H&H) Task Order Contract Assignments (over 21 years)

**Client: New Jersey Department of Transportation**

Environmental tasks include: technical studies and screenings, including air quality, ecology, hazardous waste, noise, socioeconomics/land use, cultural resources, as well as CEDs, EAs, EISs, Section 4(f) documents and EO-215 EISs. Services also include wetland delineations, environmental permitting and regulatory agency coordination (NJDEP, ACOE, SHPO and Green Acres). Drainage/H&H tasks include: stormwater collection and control facilities to address water quantity, quality and recharge (extended detention basins, infiltration/recharge basins, stormwater wetlands, wet ponds, bioretention basins, linear swales, MTDs, etc.), flood abatement and H&H services for bridge/culvert replacements (with T&E species crossing), scour analyses, stream stabilization and green infrastructure facilities.



## Lake Shenandoah Wetlands Mitigation Ocean County Park, Lakewood, NJ

**Client: New Jersey Department of Transportation**

Wetlands mitigation was required as part of NV5's Route 37, Section 8G dualization project. NV5 prepared the design plans for this mitigation project involving approximately ten acres, which consisted of wetlands creation and wetlands enhancement areas. Additional site improvements included timber walkways, access trails, two floating fishing docks, a boat access tie-up dock, park benches, and bicycle racks.



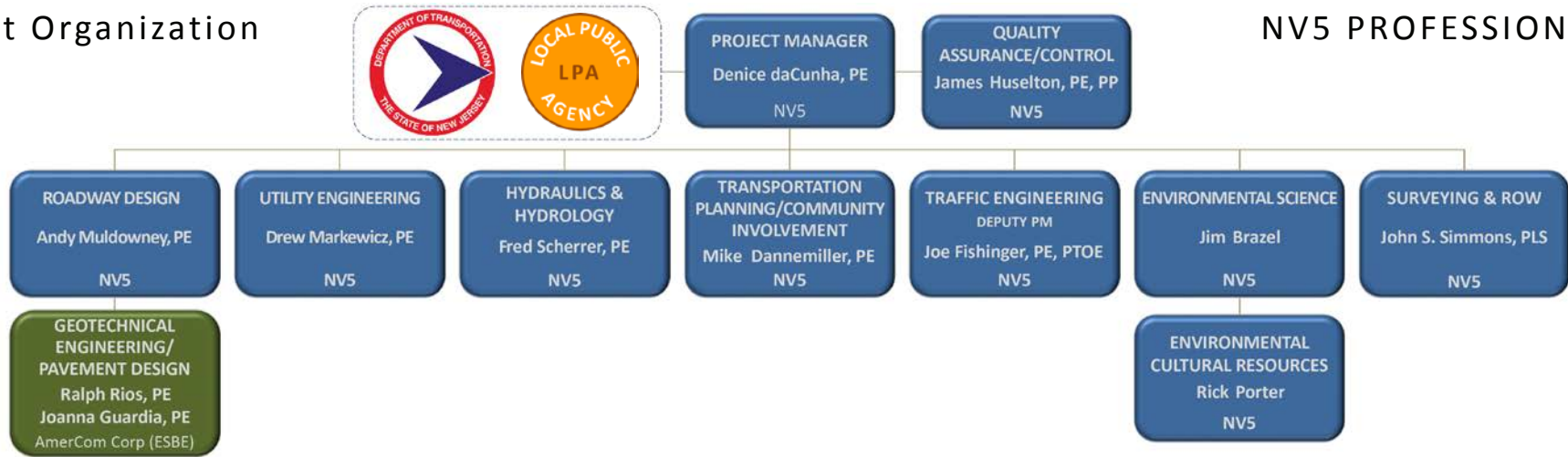
## Bridge Street Stockton Streetscape

**Client: New Jersey Department of Transportation, Borough of Stockton**

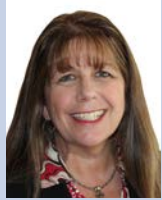
NV5 provided all landscape architecture and streetscape design services for this \$2 million project which is the connector roadway between the Route 29 Scenic Byway and Delaware River. Because Bridge Street crosses the D&R State Park and Canal, all design elements required approval from the NJ State Historic Preservation Office (SHPO). Streetscape improvements included: new blue stone curb and sidewalks, period lighting, street trees, ornamental plantings, bicycle trail crossing design and historic signage.

*2010 Hunterdon County Planning and Design Award*

## Project Organization



## NV5 PROFESSIONAL STAFF



**Denice daCunha, PE—Project Manager**

Direct: 973.946.5624

Denice is a Professional Engineer with over 32 years of experience at NV5, in the design and management of numerous highway, bridge and traffic engineering assignments. Her experience includes managing NJDOT projects throughout all design phases: conceptual, preliminary, final design and construction support. Projects have included Transportation Alternatives, SRTS, ADA compliance, bicycle and pedestrian improvements, signal upgrades, signing/ striping, community outreach, etc. She has completed Rutgers CAIT Federal-Aid Responsible Charge and Federal Grant Management training. Several of Denice's projects have been recognized with awards from the American Planning Association, Engineers Council of NJ, NJ Concrete Association, Federal Highway Administration, and NJDOT Value Engineering.



**Michael Dannemiller, PE—Transportation Planning/Community Involvement**

Mike has been planning and designing bicycle and pedestrian projects for the last 28 years. He has developed plans and designs for enhancing bicycle and pedestrian accommodation from New England to Florida to Oregon. He has also developed and presented training sessions on Safe Routes to School and senior mobility, Complete Streets, Traffic Calming, bicycle and pedestrian planning and design. Mike is trained by the Federal Highway Administration, the Association of Pedestrian and Bicycle Professionals and the National Complete Streets Coalition for facilitating Safe Routes to School and Complete Streets workshops; and serves as an Advisor to the New Jersey East Coast Greenway Committee and the September 11th National Memorial Trail Alliance.

## PROFESSIONAL MEMBERSHIPS OF NV5 PERSONNEL INCLUDE:



## SUMMARY STATEMENT

NV5 is well-equipped to develop multi-modal designs to create and enhance safe, walkable, Complete Streets that both enhance safety and promote a sense of place unique to each that will meet the needs of all transportation users and providers. Particularly relevant is our over 21 years of involvement with pedestrian, bicycle, traffic calming, urban design, context-sensitive design, trail design and Complete Streets projects in New Jersey. In general, our recent development of statewide pedestrian, bicycle, school zone and safety guides, our local and national Complete Streets-related training qualifications, and our experience with transportation and land use projects in New Jersey, demonstrate our unique qualifications. Specific factors that enhance NV5's ability to accomplish the goals of Transportation Alternative projects include:

- Our Team's Local Public Agency (LPA) experience on Design Assistance projects and Federal Aid requirements.
- Our Key Staff Members provided assistance to the NJDOT in the development of NJ's top-ranked Complete Streets Policy and Implementation Program, and authored the NJ State Bicycle & Pedestrian Master Plan and NJDOT Pedestrian and Bicycle Safety Action Plans.
- Our Key Staff Members served as NJDOT Training Course Instructors, and as instructors for the original NJTPA Walkable Community Workshops. Instructors are recognized nationally by the National Complete Streets Coalition and National Center for Safe Routes to School and have facilitated numerous workshops throughout the northeast.