

November 15, 2013

Mr. Kenny Voss, PE  
Local Programs Administrator  
Missouri Department of Transportation – Central Office  
105 W. Capitol Avenue  
Jefferson City, MO 65102

**Re: Letter of Interest – Roadway Design  
LPA On-Call Professional Services  
Grove Design PI3033**

Dear Mr. Voss:

Grove Design Group LLC (Grove Design) is pleased to submit this Letter of Interest to provide local public agencies with professional engineering design services for roadway projects throughout the State of Missouri. Grove Design maintains a comprehensive project organization with elements necessary for complete, smooth, and successful roadway design projects. Our firm brings the necessary technical skills and experience to provide timely and cost effective design solutions, ongoing communication, and excellent customer service. For these reasons, we request local public agencies (LPA) consider Grove Design when selecting a firm to provide design phase services for roadway projects.

### **General Experience of Firm**

Grove Design works with municipalities and other local agencies, providing roadway design solutions tailored to constrained budgets and timetables while offering extraordinary service. So that we may meet or exceed project DBE requirements and deliver land survey, traffic, geotechnical, materials testing, landscape architecture, and other specialty project needs, we have long-established relationships with teaming partners with similar firm philosophies. We strive to match the best sub-consultant to each project.

As a firm established in June of 2012, we have completed studies and cost analyses for the cities of Town & Country and Fenton, and are nearing the completion of roadway designs for the cities of University City, Creve Coeur, and Wildwood. Descriptions and details of these projects and others are listed below and in our firm brochure.

#### **Graeser Road Resurfacing and ADA Improvements - City of Creve Coeur**



Grove Design is providing engineering design and construction services for the federally funded Graeser Road Resurfacing Project in the City of Creve Coeur. Improvements include mill and overlay of approximately 1.3 miles of two-lane urban collector roadway including modifications to ADA facilities at intersections and cross streets, curb and gutter repair, full depth subgrade repair, and ADA retrofits of existing residential driveway entrances and sidewalks. Design scheduled for completion in February 2014 with construction following in the summer. Contact Creve Coeur City Engineer Matt Wohlberg at (314) 442-2084.

#### **Manchester Road Resurfacing and Bike Lanes - City of Wildwood**

Grove Design is providing design phase services for the federally funded 2.8-mile roadway widening and resurfacing of Manchester Road from Missouri Route 100 east to Route 109 in the City of Wildwood. Improvements include the addition of shoulders, pavement resurfacing, stormwater ditches, and a dedicated bicycle lane. Project design scheduled for completion in the first half of 2014. Contact City of Wildwood Director of Public Works/City Engineer Ryan Thomas at (636) 405-2041.



#### **Bicycle Facilities Improvements - City of University City**

Grove Design is providing engineering services in the design and construction phases of the federally funded Bicycle Facilities Project in the City of University City - the City's first such project. Improvements include on-street bicycle facilities and signage along Canton Ave, Old Bonhomme Rd, and Jackson Ave, along with pavement markings to functionally convert a traffic circle to a roundabout. Field reconnaissance was performed using bicycles to gain a better understanding of the needs of cyclists. Coordination with key stakeholders including the School District of University City and St. Louis County Department of Highways and Traffic was necessary to facilitate roadway improvements. Project design scheduled for completion in December 2013 with construction in the spring of 2014. Contact City of University City Senior Project Manager Megan Fuhler at (314) 505-8565.

## Past Performance

The table below summarizes Grove Design's past record of performance with respect to schedules and budgets in the design and construction phases for roadway projects.

Project & Owner	Design/ Construction Completion	Type & Length	Estimated/Actual Costs		Estimated/ Actual Design Schedule	Project Elements
			Design	Construction		
<b>Topping Road Programming Study</b> Town & Country MO	March 2013 N/A	Resurfacing & Trail 1.5 mi	\$25,000 \$25,000	N/A	6 months 6 months	<b>Roadway Rehabilitation</b> Pedestrian Enhancements Stormwater
<b>Pertinent Staff &amp; Roles:</b> Aaron R. Terry, Project Manager						
<b>Contact Information:</b> City of Town & Country, Craig Wilde, Director of Public Works, (314) 432-6606						
<b>Graeser Road Resurfacing and ADA Improvements</b> Creve Coeur, MO	Feb 2014 (est) 2014 (est)	Roadway Resurfacing 1.3 mi	\$50,667 In Progress	\$725,000 In Design	5 months 10 months (est) <sup>1</sup>	<b>STP/Federally Funded Roadway Resurfacing</b> Pedestrian Enhancements Stormwater
<b>Pertinent Staff &amp; Roles:</b> David A. Ellermann, Project Manager						
<b>Contact Information:</b> City of Creve Coeur, Matt Wohlberg, City Engineer, (314) 442-2084						
<b>Manchester Road Resurfacing and Bike Lanes</b> Wildwood, MO	Early 2014 (est) 2015 (est)	Resurfacing & Widening 2.8 mi	\$99,800 In progress	\$1,650,000 In Design	10 months 10 months (est)	<b>STP/Federally Funded Roadway Widening</b> Stormwater
<b>Pertinent Staff &amp; Roles:</b> David A. Ellermann, Project Manager						
<b>Contact Information:</b> City of Wildwood, Ryan Thomas, Director of Public Works/City Engineer, (636) 405-2041						

I. Schedule extended due to unplanned right of way acquisition.

## Qualifications of Personnel

Our group consists of municipal engineers successfully employing creative solutions to fit the hard-to-solve problems local agencies face on an ongoing basis. We are experienced individuals having produced and managed municipal design and construction projects for roadway, pedestrian, and stormwater improvements throughout our careers. Our comprehensive familiarity with the intricacies of municipal engineering allows us to meet clients' needs and the needs of project stakeholders, ranging from residents and business owners to elected officials and service providers. Our team brings qualified engineering professionals to provide excellent design products at each submittal throughout the life of the project.

### **Aaron R. Terry, PE, CFM, PMP, Principal & Project Manager**

Aaron entered into municipal engineering during a public works internship in his hometown of Elizabethtown, Kentucky. Since that time, he enjoyed a short tenure with a land development firm before spending three years as a designer at the district level with the Kentucky Transportation Cabinet. After leaving KYTC, Aaron moved to the private consulting sector, working on such projects as the reconfiguration of the Last Missouri Exit and sixth street on-ramp necessary for the construction of the new Busch Stadium. He has been involved in the design and management of over thirty roadway design projects ranging from small mill and overlay projects to multi-mile roadway reconstruction projects, and enjoys working on projects of all sizes. *In addition to providing project management, Aaron offers technical support, oversees Grove Design's Quality Management Plan for technical deliverables, and provides assurance that the Client receives the best possible customer service.*

### **David A. Ellermann, PE, Project Manager**

David's experience in engineering began with the Illinois Department of Transportation as a Co-op Engineer Technician serving three, nine-month tours in the construction division with District 8. He gained valuable field experience that has translated to better design and engineering decisions during plan production that result in construction efficiencies and savings for the client. After graduating from university, David has spent the last 20 years designing and managing roadway and stormwater related projects from writing technical specifications for resurfacing projects to \$20 million interchange projects. He is detail oriented and enjoys collaboration between the client, permitting agencies, and stakeholders. *David provides project management and leadership to ensure projects remain on schedule and budget.*

### **Benjamin M. Niesen, PE, ENV SP, Principal & Design Engineer**

Ben began his career working as a seasonal construction inspector for the Missouri Department of Transportation District 9, influencing his decision to become a civil engineer. He then worked for two private consulting firms managing design projects for private development and roadway projects. Ben spent three years managing capital improvement projects for the City of Chesterfield, including Appalachian Trail Roadway Reconstruction and North Outer 40 Widening projects providing engineering design and construction phase services. At Chesterfield, Ben developed a strong understanding of the municipal public works project process from conception to completion. *Ben serves as a Design Engineer and Technical Lead, assisting David and Aaron with project design and ensuring technically sound deliverables.*

## Familiarity/Capability

In the last five years, our staff - while at Grove Design and previous firms - have successfully completed over twenty federally funded projects for various cities and local governments including Chesterfield, Clayton, Creve Coeur, Fenton, Maryland Heights, and Wildwood. With projects funded through FHWA, all plans, specifications and construction cost estimates must be submitted to MoDOT for review through the Local Roads Division. This includes right-of-way plans, preliminary design plans, and final design plans. MoDOT must approve all plans at multiple points throughout the project life span for the project to progress on schedule. Grove Design personnel have extensive knowledge of the LPA process, including ongoing revisions to the LPA manual. Grove Design typically begins STP projects by meeting with the MoDOT liaison engineer to discuss MoDOT's view of the project and to ensure the project goals for the regional planning organization, the Local Agency, and MoDOT are in alignment. This typically reduces review comments and project delays.

Quality and Schedule are paramount to Grove Design's core philosophies on federally funded projects. To that end, we have developed a quality manual focused heavily on planning, document control, and plan review. Our quality control and project management plans are centered around and reference the Recommendations and Checklists for Ensuring Quality Infrastructure Projects authored by the American Public Works Association (APWA) Kansas City Metropolitan Chapter, the American Council of Engineering Companies (ACEC) of Missouri, and ACEC of Kansas. Prior to all plan submittals, a thorough review of the agreed upon design criteria, the improvement plan checklist, and the overall consistency of the submittal package will be completed by the Quality Lead. This process is designed to minimize plan ambiguities, increase customer satisfaction, and reduce plan review time.

## Accessibility

Grove Design employs the use of a web-based project management information system to facilitate communication, file sharing, and schedule management with the LPA, other team members, and the Public (on a project-by-project basis). Use of such collaboration software allows us to store crucial project information in a central location, ensuring easy access for all project team members and increasing productivity and understanding.

Clients have come to expect Grove Design's skillful management of roadway projects, ongoing communication, responsiveness, attention to detail, and exceptional service. This record of responsiveness to our clients' needs is exemplified through our clients' desire to choose Grove Design personnel to assist them repeatedly with multiple projects. The following testimonials from municipal clients that have chosen to work with David, Aaron, and Ben on several projects affirms our firm's accessibility and we encourage you to contact them as their words may prove more valuable than ours.

*I had the pleasure of working with Mr. Terry on a federally-funded sidewalk project for the City of O'Fallon. Mr. Terry's extensive knowledge of all aspects of a project and his ability to apply sound engineering practice with common sense is beyond impressive. I look forward to working on the next project with Mr. Terry and Grove Design.*

**Dan Buesse, PE, PTOE, Project Manager, City of O'Fallon Missouri - (636) 379-5492**

*"It was my pleasure to work alongside Ben Niesen at the City of Chesterfield. Working with a municipal government, Ben was able to view projects from the owner's perspective and as such, has an appreciation for not only the initial cost, but ongoing operational impacts. I was continuously impressed with Ben's desire to tackle new technologies and identify innovative solutions."*

**Mike Geisel, PE, Director of Public Services, City of Chesterfield, Missouri - (636) 537-4762**

*"Mr. Terry is one of the most effective engineers that I have worked with. Not only is he current on design practices and various jurisdictional requirements, he is able to apply common sense to determine solutions to complex problems. This has been evident on the projects we have worked together on which have ranged from roadway reconstruction to a variety of storm water improvement projects."*

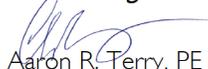
**Anne C. Lamitola, PE, Director of Public Works, City of Ladue, Missouri - (314) 993-5665**

## Why Grove Design

Grove Design understands and embraces the crucial elements necessary to successfully usher local government roadway design projects to completion, with the goal of exceeding Clients' expectations. We strive to deliver quality deliverables for every facet of the project and provide continuous and complete communication between involved parties. Founded on the belief that our clients deserve the best customer service, we pride ourselves on our communication and *it is our mission to make each project more important to us than it is to our clients.* If you would like to discuss our representative projects and services further, or have any questions, please contact me at (314) 514-4237 or email [aterry@grovedesigngroup.com](mailto:aterry@grovedesigngroup.com).

Very truly yours,

*Grove Design Group LLC*



Aaron R. Terry, PE  
Principal-in-Charge

## Firm Description

Grove Design Group LLC was established in 2012 and is owned and operated by Aaron R. Terry and Benjamin M. Niesen. The firm is licensed in Missouri (E-2012015272) and located in the City of St. Louis, serving as an infrastructure consultant providing study, design, and construction phase services for roadways, bicycle and pedestrian facilities, storm water, and streetscapes while focusing on the unique needs of local governments. Please visit [grovedesigngroup.com](http://grovedesigngroup.com) for additional information.

Our group consists of municipal engineers successfully employing creative solutions to fit the hard-to-solve problems local agencies face on an ongoing basis. We are experienced individuals having produced and managed municipal design and construction projects for roadway, pedestrian, and stormwater improvements throughout our careers. Our comprehensive familiarity with the intricacies of municipal engineering allows us to meet your needs and the needs of project stakeholders, ranging from residents and business owners to elected officials and service providers. Grove Design builds relationships with clients and review agencies to facilitate project understanding and regulations. Our knowledge of these needs and requirements improves delivery time and project efficiency while reducing resubmittals.

## Types of Roadway Design Services Offered

- New Construction
- Roadway Reconstruction/Widening
- Pavement Rehabilitation
- Mill & Overlay
- Curb & Gutter / Retaining Walls
- Sidewalks, Streetscapes, & Lighting
- ADA Compliant Infrastructure
- Pedestrian Access Routes
- Pervious Pavements
- Bicycle Facilities
- Stormwater



Appalachian Trail, Chesterfield, December 2012  
(Designed by Grove team members while at other firms)

- Phase II Water Quality
- Railroad Coordination
- Railroad Grade Crossings
- Alignment Studies
- Grant Applications
- Permitting
- Construction Plans & Specifications
- Contract Administration
- Construction Management
- Federally Funded Projects
- EnVision™ Rating System

## Grove Design Team

### Aaron R. Terry, PE, CFM, PMP, Principal & Project Manager

Registrations: Professional Engineer, Missouri (License #2009019954), Illinois, Montana, and Nevada

Technical Interests: Aaron's experience and technical interests lie in the following areas: road design, bridges, culverts, stormwater, water quality best management practices, sanitary sewers, trails, ADA, construction management, flood studies, and surveying.

Aaron has over fourteen years' experience in the design and management of civil engineering projects with additional expertise in construction inspection and materials testing. Throughout his career, he has worked closely with local public agencies and MoDOT's LPA staff to ensure the success of a multitude of federally and locally funded projects. *In addition to providing project management, Aaron offers technical support, oversees Grove Design's Quality Management Plan for technical deliverables, and provides assurance that the Client receives the best possible customer service.*

### David A. Ellermann, PE, Project Manager

Registrations: Professional Engineer, Missouri (License #29440), Illinois, Washington, and Indiana

Technical Interests: David's experience and technical interests lie in the following areas: roadway design, conceptual studies, multi-use trails, ADA compliance, stormwater, water quality best management practices, sanitary sewers, and surveying.

David is a skilled senior design engineer with over twenty years of civil engineering design and project management experience, including storm water; channel restoration; sanitary; and all aspects of municipal, rural, and major urban road and interstate design. He has successfully completed projects from the conceptual phase through final design including: surveys, utility coordination, public involvement, right of way, permitting, preliminary and final construction plans, bid documents, cost estimating, and field inspection. *David provides project management and leadership to ensure projects remain on schedule and budget.*

### Benjamin M. Niesen, PE, ENV SP, Principal & Design Engineer

Registrations: Professional Engineer, Missouri (License #2010000851)

Technical Interests: Ben's experience and technical interests lie in the following areas: bicycle infrastructure, pedestrian facilities, road design, planning studies, capital improvement project management, and ADA compliance.

Ben has eleven years of civil engineering design, construction inspection & materials testing, and public sector project management experience. He managed capital improvement projects for the City of Chesterfield, including roadway concept design and project planning. At Chesterfield, Ben developed a strong understanding of the municipal public works project process from conception to completion. Before his time in the public sector, Ben managed the design of private developments, roadways, and stormwater projects in the private sector. *Ben serves as a Design Engineer and Technical Lead, assisting David and Aaron with project design and ensuring technically sound deliverables.*

## Representative Projects - Roadway

### **Topping Road Programming Study - City of Town & Country**

In 2013, Grove Design completed a planning study and federal grant application for improvements to Topping Road in the City of Town and Country. Proposed improvements spanned the 1.5 mile length of Topping Road from Manchester Road (Hwy 100) to Clayton Road. The City desired to preserve the roadway through resurfacing and provide a new 8-foot wide pedestrian path to serve as a link to the popular Clayton Road Trail. The project culminated with an STP-S New Project Application and opinions of probable cost for design, right of way, and construction phases. Contact Town & Country Director of Public Works Craig Wilde at (314) 432-6606.

### **Graeser Road Resurfacing and ADA Improvements - City of Creve Coeur**



Grove Design is providing engineering design and construction services for the federally funded Graeser Road Resurfacing Project in the City of Creve Coeur. Improvements include mill and overlay of approximately 1.3 miles of two-lane urban collector roadway including modifications to ADA facilities at intersections and cross streets, curb and gutter repair, full depth subgrade repair, and ADA retrofits of existing residential driveway entrances and sidewalks. Design scheduled for completion in February 2014. Contact Creve Coeur City Engineer Matt Wohlberg at (314) 442-2084.

### **Bicycle Facilities Improvements - City of University City**

Grove Design is providing engineering services in the design and construction phases of the federally funded Bicycle Facilities Project in the City of University City - the City's first such project. Improvements include on-street bicycle facilities and signage along Canton Ave, Old Bonhomme Rd, and Jackson Ave, along with pavement markings to functionally convert a traffic circle to a roundabout. Field reconnaissance was performed using bicycles to gain a better understanding of the needs of cyclists. Coordination with key stakeholders including the School District of University City and St. Louis County Department of Highways and Traffic was necessary to facilitate roadway improvements. Project design scheduled for completion in December 2013 with construction in the spring of 2014. Contact City of University City Senior Project Manager Megan Fuhler at (314) 505-8565.

### **Manchester Road Resurfacing and Bike Lanes - City of Wildwood**

Grove Design is providing design phase services for the federally funded 2.8-mile roadway widening and resurfacing of Manchester Road from Missouri Route 100 east to Route 109 in the City of Wildwood. Improvements include the addition of shoulders, pavement resurfacing, stormwater ditches, and a dedicated bicycle lane. Project design scheduled for completion in the first half of 2014. Contact City of Wildwood Director of Public Works/City Engineer Ryan Thomas at (636) 405-2041.



### **Old Gravois Road Grant Application Support - City of Fenton**

Grove Design worked closely with the City of Fenton to prepare a cost analysis and opinion of probable construction cost (OPC), design schematics, and phasing options for Old Gravois Road from Missouri 141 to Water Street. The OPC was used in the federal grant application, which received funding for fiscal year 2015 through the St. Louis region's metropolitan planning organization, East-West Gateway Council of Governments. Contact Fenton Project Manager Dan Howard at (636) 349-8110.

### **Sappington Barracks - City of Sunset Hills**



While with a previous firm, Aaron was the project manager responsible for this design project stretching approximately 2,000 feet from Gravois Road to Oleander Drive. Project scope included roadway reconstruction and widening, sidewalk and curb ramp construction, intersection adjustments and warping, stormwater swales as water quality devices, storm sewer, and driveway approaches. Aaron was responsible for project production, budget, and schedule during the design phase which was completed in 2010. Contact Ladue Director of Public Works, formerly Sunset Hills Public Works Director, Anne Lamitola at (314) 993-5665.

### **Appalachian Trail Street Reconstruction Phase I - City of Chesterfield**

At a previous firm, Aaron was the design project manager responsible for the reconstruction of 3,800 linear feet of Appalachian Trail between Olive Boulevard to Beaver Creek Road. The project scope included roadway, sidewalk and curb ramp reconstruction, intersection enhancements, water quality devices, and landscaping. Project plans and specifications conformed to MoDOT LPA, City, and MSD requirements. While with the City of Chesterfield, Ben was the city's project manager and person of responsible charge. Aaron and Ben worked together on Appalachian Trail Street Reconstruction project and obtained authority to advertise within twelve months from the execution of the Engineering Services Contract, which included right of way plans. Appalachian Trail was federally funded with construction completed in 2012. Contact Chesterfield Director of Public Services Michael Geisel at (636) 537-4762.



### **Parkwood Lane / Doddridge Avenue Reconstruction - City of Maryland Heights**

While with another firm, David was project manager for engineering and design services for reconstruction and widening of Doddridge Avenue/Parkwood Lane, from Hollycrest Drive to Old St. Charles Road. The Parkwood Lane & Doddridge Avenue project completes the reconstruction of the north-south minor arterial connection from Dorsett Avenue to Old St. Charles Road in Bridgeton. Parkwood Lane serves several subdivisions - one containing over 600 homes, two elementary schools, a large church, two senior living centers, and Parkwood Park.

Improvements included upgraded two and three-lane sections of approximately 3,050 linear feet of roadway, concrete pavement, sidewalks, and an enclosed drainage system.

Horizontal and vertical alignment changes reduced steep grades and improved sight distance. This project was one of the first linear projects designed under the then-new NPDES Phase II stormwater requirements regulated by MSD and included three hydrodynamic separators and associated bypass structures, and under-pavement detention. David was responsible for overall project design, production, budget, and schedule of the project through preliminary plans. He provided coordination with sub-consultants, day-to-day direction of project personnel, and maintained frequent communication with the client. This project was federally funded and completed in 2008. Contact Maryland Heights Engineering Manager L.G. Loos at (314) 291-6550.



### **U.S. Route 54 Highway Design Services - Missouri Department of Transportation District 5**



While with another consulting firm, David acted as project manager and lead design engineer. As part of a larger project, this section of the Route 54 improvements consisted of one mile of four-lane expressway, including an innovative One-Way Couple/Split Diamond Interchange (construction value estimated at \$20M). Context-sensitive solutions called for modification of the original design in order to reduce the footprint of the facility and decrease the impacts to the environment and right of way. The original four-lane divided section was modified by decreasing the median width through the addition of median barriers. Guardrail was added and the "barn-roofed" side slopes were removed in favor of a constant slope, also reducing the length required for cross-road culverts.

Project components included: preliminary plans, right of way plans, bridge survey reports, MSE retaining walls, enclosed drainage systems, large cross-road culverts, and complex construction phasing. Due to changes within the overall project, the schedule for this section was successfully accelerated by six months. Contact MoDOT Local Programs Administrator Kenny Voss at (573) 526-2924.

### **Clayton Road Resurfacing & Pedestrian Enhancements, Phases I & II - City of Town & Country**

While at another firm, Aaron was project manager for Phase I of the federally funded improvements along Clayton Road, which included structural roadway resurfacing and new multi-use path separate from the roadway. Aaron was also project manager for Phase II until his departure from that firm to establish Grove Design. The projects began just east of Old Woods Mill Road and traversed east to the eastern City limits. Phase I was approximately 1.2 miles long and Phase II approximately 1.5 miles long. The range of improvements included a resurfaced roadway, pedestrian bridge, solar powered rapid flashing beacons at pedestrian crossings, improved intersection crossings, improved bus stops, water quality swales, and decorative concrete walls. Aaron managed the development of traffic studies, prepared design plans, and acquired design approval from MSD and MoDOT LPA. Construction was completed in 2013. Contact Town and Country Director of Public Works, Craig Wilde at (314) 432-6606.



### **Elbring Drive, North Florissant Road to Village Limits - Village of Calverton Park**



While with another firm, Aaron managed the design and construction phases for the widening of a ¼ mile length of Elbring Drive west of N. Florissant Road. With the addition of rolled curbs, on-street parking was made possible, eliminating the need for individual parking pads. This allowed existing inlets and storm sewers to be reused, thereby minimizing project costs. Aaron was responsible for project production, budget, and schedule during design and construction phases. Project completed in 2007.

## Representative Roadway Design Projects Managed by Grove Design Staff

Project Name	Client	Project Type	Funding Source
Graeser Road Resurfacing and ADA Improvements	City of Creve Coeur	Roadway Resurfacing/Pedestrian ADA Improvements	Federal
Old Gravois Road Grant Application Support	City of Fenton	Concept OPC/Pedestrian/Stormwater/Grant Assistance <sup>2</sup>	Local
Topping Road Programming Study	City of Town & Country	Concept Study/Alternative Assessment/Grant Application/OPC	Local
Bicycle Facilities Improvements	City of University City	Roadway/Bicycle Facility Striping & Signage	Federal
Manchester Road Resurfacing and Bike Lanes	City of Wildwood	Roadway Widening/Overlay/Bicycle Lanes	Federal
Appalachian Trail Street Reconstruction - Phase I <sup>1</sup>	City of Chesterfield	Roadway/Geometrics/Pedestrian/Stormwater/Water Quality	Federal
Chesterfield Parkway East - Pedestrian Bridge <sup>1</sup>	City of Chesterfield	Grant Application/Pedestrian/Bicycle/Bridge	Local
Edison Avenue Resurfacing and Bike Lanes <sup>1</sup>	City of Chesterfield	Roadway Resurfacing/Bicycle Lanes	Federal
South Greentrails Drive - Concept <sup>1</sup>	City of Chesterfield	Concept Phase/Grant Application <sup>2</sup> /Roadway/Stormwater	Local
Timberlake Manor Bridge Replacement <sup>1</sup>	City of Chesterfield	Concept Phase/Grant Application <sup>2</sup> /Bridge/Roadway	Local
I 0 N Central - Streetscape Grant Application Assistance <sup>1</sup>	City of Clayton	Grant Application/Streetscape/Pedestrian/OPC	Local
Central Business District Pedestrian Enhancements <sup>1</sup>	City of Clayton	Streetscape/Pedestrian ADA Improvements	Local
Conway Road Resurfacing <sup>1</sup>	City of Creve Coeur	Roadway Resurfacing/Construction Specifications	Federal
N. New Ballas Road Improvements <sup>1</sup>	City of Creve Coeur	Roadway Resurfacing/Construction Specifications	Federal
Olive Boulevard Street Lighting <sup>1</sup>	City of Creve Coeur	Roadway Lighting/Aesthetic Improvements	Federal
Spoede Road Resurfacing <sup>1</sup>	City of Creve Coeur	Roadway Resurfacing/Pedestrian ADA Improvements	Federal
Old Highway 141 Roadway Widening <sup>1</sup>	City of Fenton	Roadway/Bridge/Creek Hydraulics	Federal
Parkwood Lane/Doddridge Ave Reconstruction <sup>1</sup>	City of Maryland Heights	Water Quality/Stormwater/Roadway Reconstruction	Federal
Sappington Barracks Road Improvements <sup>1</sup>	City of Sunset Hills	Roadway/Pedestrian ADA Improvements/Stormwater	Local
Oak Street Reconstruction <sup>1</sup>	City of Webster Groves	Roadway/Stormwater/Water Quality	Federal
Old Business Highway 61 Roadway Widening <sup>1</sup>	City of Wentzville	Roadway/Sidewalks/Roundabout/Signals/Stormwater	Federal
Route 100 MTIA (Route T to Route 47) <sup>1</sup>	MoDOT, D6	Concept Study/Alternatives Analysis/Public Involvement/OPC	State
Route 40/61 Corridor Upgrade St. Charles County <sup>1</sup>	MoDOT, D6	Interchange Study/Alternative Analysis/Preliminary & R/W Plans	State
Route 54 Bypass <sup>1</sup>	MoDOT, D5	Roadway/Interchange/Stormwater	State
Hanley Road Corridor Study (I-64 to Laclede Station Rd) <sup>1</sup>	St. Louis County H&T	Concept Study/Alternative Assessment/Geometrics	Local
Elbring Drive Roadway Widening <sup>1</sup>	Village of Calverton Park	Roadway Widening/Stormwater/Construction Management	Local

<sup>1</sup> Representative projects managed by Grove Design staff prior to the formation of Grove Design.

<sup>2</sup> Grant application accepted for federal funding.