

## Designing Healthier, Happier Lifestyles for Missouri

### **BACKGROUND**

Access Engineering, LLC (Access) is a civil engineering firm dedicated to improving infrastructure to promote healthier, happier lifestyles for our community. Our name is our mission statement:

**Access to connectivity. Access to productivity. Access to opportunity.**

Marie Dennis, PE, founded the firm in September 2000. With both private and public sector work experience, Ms. Dennis sought to create a private consulting firm with a focus on benefiting the public. Each member of the Access team is committed to providing innovative, high-quality infrastructure solutions that best benefit the community. Access has extensive experience providing comprehensive professional services throughout each phase of a project. Our full services consulting approach allows for seamless transitions between conceptual, preliminary design, right of way, final design, and construction phase services.

### **COMMITMENT TO DIVERSITY**

Access is committed to maintaining a diverse workforce in order to adequately reflect the diverse community we serve. Access is a DBE/WBE - Certified firm, but we believe diversity extends well beyond a certification. We believe that diversity in backgrounds, personalities, and ideas provides an elevated platform for us to maximize ingenuity, and provide the most innovative solutions. Diversity is not a percentage goal for us, it is a strategy for success. Access is comprised of 6% minority and 76% women professionals.

### **ADVANCED TECHNOLOGY**

Access uses state of the art technology and the most up to date software to produce efficient, quality designs. GeoAnalytics are utilized in planning and scoping phases and support our clients with asset tracking. Construction plans are produced by CADD specialists on MicroStation based Civil Design software, such as PowerGEOPAK, or on AutoCAD Civil 3D using client design standards.

### **CLIENT SATISFACTION**

Typical clients include government agencies such as DOT's, Sewer Districts, Municipalities, Parks Districts, Transit Agencies, Neighborhood Associations, businesses and individuals. We hold our client relationships in the highest regard and pride ourselves on maintaining a superior reputation in performance and service to our clients. Access continues to earn repeat business with clients who are happy with our high quality work and customized flexibility in service.

### **PRODUCTION & QUALITY MANAGEMENT**

Access follows a Quality Management Plan, customized for each project. The Project Manager determines the quality-related deliverables based on client requirements and project complexity. The Quality Manager ensures all procedures are followed accurately. Access also has a refined process of production management, ensuring our team is not over-allocated so project schedules can be met. Production workload is evaluated on a weekly basis.

### **ACCESS AT A GLANCE**

- In our **20th** year serving our community
- Over **200** projects completed in Missouri with construction budgets ranging from **\$5,000** to nearly **\$30,000,000**
- Refined **workload versus capacity analysis** process accurately forecasts availability
- Access can **mobilize quickly** and **execute projects efficiently**
- Access's work is comprised of **90% repeat clients**

Roadway Design

Stormwater/Drainage  
Facilities

Sanitary Sewers

Stream Bank  
Stabilization

Non-Motorized Facilities  
- Trails

Bike/Ped Facilities

Accessibility Design

Traffic Signal Design/  
Optimization

Construction  
Management

Traffic Studies

Site Design

Access Management

Signing & Striping

Water quality (BMP's and  
Detention)

Traffic Control Plans

Permitting

Public Engagement

Cost Estimating

Process Design



**Comprehensive Roadway  
and  
Bike/Pedestrian Design**



**Roadway Reconstruction  
and  
Safety Improvements**



**Design through  
Construction  
Management Services**

### **Olive and Lindbergh Interchange (STP 4922(604))**

Access is the Prime Consultant for this interchange reconstruction project, which is a pivotal infrastructure improvement and the first step in the implementation of the 39N Master Plan. Access wrote the federal funding application, which was awarded and allows the interchange to be built. The goal of the 39N District is to solidify St. Louis as the Agri-Tech Hub of the world. Design and reconstruction of the Route 67 (Lindbergh Blvd) and Route 340 (Olive Blvd) will provide the opportunity for economic development and improved traffic operations and safety. It also allows for the transition of a collector road (Old Olive) into a complete street. The project includes the construction of roadway, accessible sidewalks and sidepath, signals, bridge modifications, drainage improvements, detention, signing, and pavement markings. Access is also under contract as Construction Manager for this project that MoDOT has identified as "Regionally Significant." - **Roadway Design, Construction Inspection**

### **Grant Road Improvements (DP/STP/FLAP-5401(719))**

Access was the Prime Consultant responsible for the Grant Road widening and resurfacing project. Access managed and designed improvements to this well-known roadway, which provides access to the historic Grant's Farm and the Ulysses S. Grant National Historic Site. Improvements included resurfacing, a lane addition, pavement analysis, lighting, attraction signing, safety improvements, green infrastructure and beautification. Access identified the funding sources, wrote grant applications, developed construction documents and performed construction management services for the project. Access managed communications between stakeholders, which was paramount to the success of this complex project. Construction management tasks were executed through the MoDOT LPA process and included bidding, concrete testing, asphalt testing, inspection, submittal reviews, daily diaries, payment requests, punch list inspections and project closeout. - **Roadway Design, Construction Inspection**

### **Route 30 J-Turns and Acceleration Lane**

Access is the Prime Consultant responsible for safety improvements on Route 30 at Rivermont Trail, which accesses Cedar Springs Elementary School in House Springs, Missouri. The project was identified as a result of high severity crash incidents. Safety improvements include construction of an acceleration lane at Local Hillsboro Road and J-Turns at Scottsdale Road. Access analyzed crash data, traffic volumes, geometrics and circulation patterns, then developed concept plans and construction documents for the improvements. The project also included lighting and drainage improvements. - **Roadway Design**

### **Route 67 Intersection Improvements at Victoria Road**

Access was part of a team to design intersection improvements along Route 67 in Jefferson County, Missouri. Access was tasked to complete design of an intersection at Victoria Road to provide a new median acceleration lane for northbound traffic. Tasks included drainage, roadway design, turn lane improvements, advanced-warning beacon relocation, traffic handling, signing, retaining wall need analysis and erosion control. The project included widening into a narrow expressway median. The relocation of guard cable and median drainage presented design challenges. Intersection sight distance was of concern as the intersection is located at the point of curvature in the roadway alignment. Access was able to design a solution that not only provided safety and adequate sight distance but could also be constructed within existing right of way without the need for costly wall construction. - **Roadway Design**

### **Route 21 Mackenzie Ridge Intersection**

Access was part of a team to design intersection improvements along Route 21 in Jefferson County, Missouri. Access designed improvements to the intersection at Mackenzie Ridge to provide a new left-turn lane for southbound traffic. Tasks included drainage, roadway design, turn lane improvements, traffic handling, signing, and erosion control. An additional project solution provided widening the two-lane highway to the outside shoulder. Access was able to design a solution that not only provided safety and adequate sight distance but also is able to be constructed within existing right of way without the need for costly land acquisition. - **Roadway Design**





**Signal Timing  
and Optimization**



**Traffic and Pedestrian  
Signal Design**



**Accessibility Audits and  
Improvements**

### **Maupin Street Phase II Improvements**

Access was responsible for providing construction phase services for the Maupin Street Improvements located in the City of New Haven, Missouri. The City of New Haven owned project consisted of the construction of approximately 400 linear feet of asphalt milling and resurfacing and approximately 1,600 linear feet of new full depth asphalt pavement. Access's role in the project consisted of inspection and quantity tabulations. Daily construction reports were completed detailing site conditions and work performed. - **Construction Inspection**

### **Fogerty Park Improvements**

Access was Prime Consultant responsible for Fogerty Park Phase II improvements in University City, Missouri. The project was funded through a Municipal Park Grant, which required the design and construction to be completed on a short time line. The project included an accessible 8' wide trail, a splash pad, lighting, bioretention and sidewalks. Access was also responsible for construction phase oversight services, which included assistance with bidding, inspections, and submittals review. - **Construction Inspection**

### **Route 100 Study**

Access was the Prime Consultant on this MoDOT project responsible for the study of the Route 100 in the City of Wildwood, Missouri. The project was identified to improve safety on the corridor from County Line to Route 109. Access analyzed crash data, traffic volumes, geometrics and signal warrants, then developed concept plans. Conceptual improvements were identified utilizing FHWA Proven Safety Countermeasures and include the addition of left turn lanes, traffic signals and J-Turns/RCUT intersections. - **Traffic Engineering & TEAP**

### **340/I-55 Signal Optimization**

Access is on the project team for this MoDOT signal optimization project on Route 340 and at select interchanges along Interstate 55. Access is responsible for estimating existing traffic volumes by performing tube counts on mainline and video data collection at intersections. Access is also completing signal optimization tasks for the project, which include Synchro modeling, traffic observations and delay studies. - **Traffic Engineering & TEAP**

### **Route 100 Des Peres Traffic Impact Study - M1 Bancshares**

Access prepared the study to identify potential traffic impacts associated with this proposed bank. The overall purpose of this study was to predict the number of trips anticipated to be generated by the business, the distribution of those trips, and the level of impact the business would have on adjacent roads. Existing traffic data acquired from MoDOT was enhanced with additional counts to validate the data and determine movement distribution. Crash data was also reviewed and analyzed to determine if additional safety improvements were recommended. - **Traffic Engineering & TEAP**

### **I-55 at McNutt Traffic Impact Study**

Access analyzed the potential impacts of a proposed roundabout improvement at an existing intersection at this interchange. The project was part of the City of Herculaneum's efforts to improve access along McNutt for future commercial development. The analysis included impacts to local roads and I-55 exit ramps. Counts were performed, trip generation due to future developments was assessed, and the improvements were modeled utilizing Sidra Intersection. - **Traffic Engineering & TEAP**

### **Principia Traffic Impact Study**

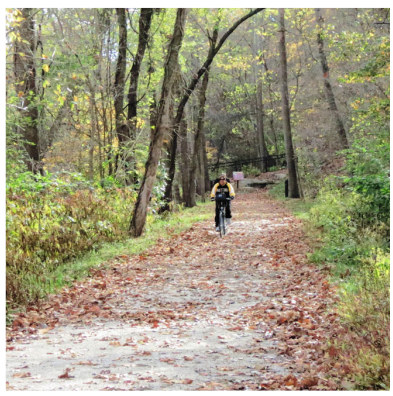
Access conducted a traffic impact study for Principia School in the City of Town and Country identifying the traffic impacts along Clayton Road associated with replacing the Boy's Field House with a larger facility and adding multi-sport athletic fields. Access reviewed existing conditions and accident reports, then performed traffic counts and trip generation to complete the study. - **Traffic Engineering & TEAP**

### **St. Clair TEAP Application Sign Inventory**

This project provided the City of St. Clair with a comprehensive, current sign inventory for all local roads utilizing GIS mapping technology. Access assisted the City with the TEAP application with the goal of developing a database to assist the City with the maintenance of its sign inventory. - **Traffic Engineering & TEAP**



**Leader in Missouri Bicycle  
and Pedestrian Facility  
Design**



**Prime Consultant on  
Many Local Trail  
Projects**



**Comprehensive Design  
and Construction Services  
for Trail and Sidewalk  
Projects**

### **Mississippi River Greenway Seed Project Park Connection**

Access was the Prime Consultant for the seed project that originated from the Mississippi Greenway Master Plan. Access wrote a successful Green Infrastructure Grant for the project. It was the first grant selected for award through Metropolitan St. Louis Sewer District/EPA Pilot Program, however the grant was declined due to right of way issues. The seed project connects two parks, Bellerive Park and Sr. Marie Charles Park, in the Carondelet neighborhood. Funding was provided through a partnership between the City of St. Louis Parks Division and Great Rivers Greenway. The project included reconstruction of Elwood Street with a Union Pacific Railroad crossing and construction of a system of switchbacks to create cohesiveness between the parks and provide a direct connection to the future Mississippi River Greenway facility on Broadway. Historic preservation was an important element of the project. Design elements included reuse of stone materials on site, green infrastructure, retaining walls, accessibility, roadway, utilities, stormwater management, lighting, and landscaping. - **Trails & Sidewalks**

### **Al Foster Memorial Trail Extension**

Access was the Prime Consultant responsible for the award-winning design of this extension to the Al Foster Memorial Trail. The project consisted of a 12-foot wide trail constructed along abandoned railroad right of way adjacent to the Meramec River to provide an attractive and sustainable trail extension in the City of Wildwood, Missouri. Access implemented several historic preservation elements in this unique design. Vintage 1850's railroad structures were repaired and/or retrofitted for use along the alignment. Materials from abandoned structures were reused for trail improvements, providing an attractive, sustainable, green solution. The project also included a new 193-foot bridge, a stone arch culvert rehabilitated with liner plate, a path providing river access and resting areas throughout the alignment. Access also provided construction administration services for this project, including shop drawing review, construction staking and responding to requests for information. This project won the American Council of Engineering Companies (ACEC) Missouri Honor Award for the unique design application and successful implementation. - **Trails & Sidewalks**

### **MetroLink Station Design and Construction: Cortex/Boyle Avenue**

This project constructed a new MetroLink Station and the first section of the Chouteau Greenway. The greenway trail will eventually connect Forest Park to the Gateway Arch. The project also included the extension of the Central West End Station platform. Access Engineering was civil engineer of record for the project. Services included stormwater management, green infrastructure, accessibility, roadway, and greenway design, in addition to coordination of the work with adjacent developments being constructed at the same time. The project introduced a distinct set of accessibility, scheduling, and constructability challenges, as it is located in the Cortex innovation District. The light-rail stop is located on the east side of Boyle Avenue between the existing Central West End and Grand stations. It is part of a \$15.4-million project to update transportation options surrounding the St. Louis tech hub. The station marks Metro Transit's first construction project built with both private and public funding. A \$10.3-million grant TIGER grant provided the bulk of the funding. The rest came from the City of St. Louis, Great Rivers Greenway and private partners, including BJC HealthCare, Washington University and Cortex. - **Trails & Sidewalks**

### **Derhake at Robinwood Elementary Pedestrian Signal (STP-5595(615))**

Access was the Prime Consultant for this LPA project, which replaced the pedestrian signal on Derhake Road at Robinwood Elementary School in the City of Florissant, Missouri. The purpose of the project was to construct a pedestrian actuated signal and pedestrian crossing that complies with AASHTO, MUTCD and ADA standards. The project required relocation of an existing crosswalk to provide accessible access to the school entrance, which resulted in sidewalk reconstruction and other accessible accommodations. Access was also responsible for construction management services, which included bidding, concrete testing, inspection, submittals review, daily diaries, payment requests, punch list inspections and project closeout. - **Construction Inspection, Trails & Sidewalks**