ATTACHMENT C

PROJECT MANAGEMENT ENGINEERING SERVICES

CITY OF TOPEKA

OCTOBER 7, 2021

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www.benesch.com

October 7, 2021

CITY OF TOPEKA
Division of Contracts & Procurement
215 SE 7th Street, Room 60
Topeka, KS 66603

123 SE 6th Avenue, Suite 200
Topeka, KS 66603

RE: ON-CALL PROFESSIONAL SERVICES FOR PROJECT MANAGEMENT ENGINEERING SERVICES

Dear Selection Committee,

As a full-service engineering firm **Alfred Benesch & Company (Benesch)** is excited to offer the City of Topeka (Public Works, Engineering Division) project management engineering services - with disciplines ranging from **civil, traffic, environmental, structural, mechanical and electrical services**. Benesch has successfully provided these services in the past for clients in Kansas and across the United States.

For over 75 years, Benesch has been providing on-call civil and structural engineering services to many municipalities, counties and State of Kansas agencies. Some of this experience has even been within the City of Topeka on the grounds of the Capitol building while working for the Kansas Division of Facilities Management. Members of our staff have also served in an on-call capacity for the City of Topeka Utilities Department completing stormwater review. Within these reviews, access to Citiworks was granted and managed to assist with development reviews. Benesch staff has firsthand knowledge of the City's use of this software. This on-call experience can be leveraged to benefit the City of Topeka for similar on-call services. As a former city engineer himself, Brad Johnson, understands the challenges facing City staff and has a unique ability to look at projects through the "City's eyes".

Since opening our Topeka office location, just over a year ago, we have successfully completed many engineering assignments for the Public Works Department. Benesch employees that work in our Topeka office have a combined 33 years of experience in working for the City, while at Benesch and previously at other firms. These staff members live and work in the City and therefore have a vested interest in the quality and value of services provided. Benesch would like to again demonstrate our continued commitment to being a true partner with the City of Topeka. We pride ourselves on being more than technical engineers. We are consultants, protecting our clients' interests through the full life cycle of a project.

We appreciate this opportunity to submit our proposal and assist you with project management engineering services. Please contact us should you have any questions or comments regarding our proposal.

Brad Johnson, PE
E: bjohnson@benesch.com
P: (785) 408-9413

MEETING OBLIGATIONS TO CITY

Benesch makes the following statements with respect to this contract:

A. Benesch is the prime contractor for the project. No subcontractors will be utilized for this project.

B. Benesch is a licensed corporation.

C. No attempt has been made or will be made to induce any other person or firm to submit or not to submit a proposal.

D. Benesch does not discriminate in employment practices with regard to race, color, religion, age (except as provided by law), sex, marital status, political affiliation, national origin, or disability.

E. No cost or pricing information has been included in the transmittal letter or the technical proposal. Pricing proposal has been submitted as a separate document, per RFP.

F. Benesch has no interest, direct or indirect, which would conflict with the performance of services under this contract and shall not employ, in the performance of this contract, any person having a conflict.

G. Robert Krewson, Kansas Division Manager, is authorized to make decisions as to pricing quoted and has not participated, and will not participate, in any action contrary to the above statements.

H. Benesch is not associated with any parent, affiliate, or subsidiary organization, either formally or informally, in supplying any service or furnishing any supplies or equipment to the vendor which would relate to the performance of this contract.

I. Vendor agrees that any lost or reduced federal matching money resulting from contractor's failure to meet the requirements of the contract shall be accompanied by reductions in City payments to contractor.

J. The vendor has not been retained, nor has it retained a person to solicit or secure a City contract on an agreement or understanding for a commission, percentage, brokerage, or contingent fee.

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COMPANY BACKGROUND

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Who We Are

Alfred Benesch & Company (Benesch) is a multi-disciplined engineering and professional services firm, started in 1946. Now, with 40 offices across 19 states, Benesch has successfully completed thousands of design and engineering projects throughout the US and is ranked #112 among the Top 500 Design Firms in the country by *Engineering News Record.*

Our services range from initial planning and feasibility studies through construction management. We have designed complex highway interchanges, new commuter railway systems and major river bridges; planned multi-use recreation centers, hospital and educational complexes and miles of recreation trails and greenway space; inspected thousands of highway and railroad bridges, ADA and pedestrian design; overseen the construction of miles of interstate work; and managed the renovations of train stations, airport facilities, schools and intermodal rail yards and transportation systems for state, county and municipal entities.

Our clients include federal, state and municipal agencies, contractors, private developers, corporations, hospitals, architectural firms and a variety of civic institutions.

What We Do

- Civil
- Construction
- Environmental
- Mechanical & Electrical
- Project Administration & Management
- Structural

Software Knowledge

Through a stormwater on-call with previous employers, our staff has firsthand working knowledge of Citiworks. Completing plan reviews, comment generation and distribution was managed through the City's Citiworks system for stormwater development projects. The system was also used for permit approvals, conditional approvals and denials with comments.

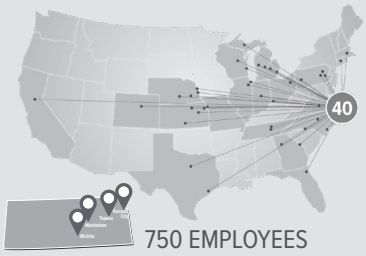
Bluebeam Studio Software

Benesch utilizes Bluebeam Studio, a platform similar to Adobe Acrobat with additional key functions. It keeps projects on track from start to finish and keeps teams on the same page throughout the design process, helps move the project forward during construction and preserves important project data through completion and beyond. Benesch utilizes Bluebeam to ensure our team is in sync and gets the job done right—anytime, anywhere.

Bluebeam Studio sessions were also used for compilation and management of comments through the stormwater on-call for which Benesch staff participated in. The real power of the software is in managing the reviews, comments and facilitating multiple simultaneous reviewers.

ENR TOP 500 DESIGN FIRMS #112

ENRMidwest #15 Top Design Firms 2021



750 EMPLOYEES
40 LOCATIONS
4 IN KANSAS
19 STATES | **1 TEAM**

Familiarity with Topeka

Several past, current and ongoing projects demonstrate our familiarity with the City of Topeka standards, codes and processes. This combined with Benesch's and staff's on-call experiences create an ideal framework for providing on-call services to the City of Topeka for project management engineering services. The following City of Topeka project sampling underscores the value-added services provided by Benesch:

Utilities:

- Shunga Streambank Stabilization
- SW 29th & Jewell Drainage Study & Design
- SE 24th & Massachusetts Drainage Study
- SW 25th Street Drainage Study
- 7th & Quincy BMP Study & Design
- Topeka Stormwater Master Plan
- SW 17th Street Stormwater System Assessment
- SW Westport Waterline Design
- Meier Industrial Waterline Design
- Eastgate Drainage Study

Public Works:

- SW 17th St & Westport Dr Design
- 29th & Kansas Improvements
- 6th Avenue Corridor Study
- 8th Avenue Corridor Diet Study
- Kansas Avenue Corridor Study
- 7th & Quincy Study & Design
- Biennial Bridge Inspection and Asset Management Plan
- Pavement Maint. Crack Seal Bid Documents
- Traffic Engineering On-Call
- 8th Avenue Road Diet Design

BENESCH DIFFERENTIATORS:

Our diverse team includes engineers, landscape architects, inspectors, asset management professionals, sustainability professionals, public involvement specialists and construction staff. With 750 professional staff, Benesch provides the resources and experience to be your full-service partner. We will meet or exceed the City of Topeka's expectations through our steadfast commitment with the following benefits:

Brad Johnson, PE, Experienced City Engineer:
As a former city engineer, Brad Johnson is uniquely qualified to serve in the role of on-call project manager for the City of Topeka. He fully understands the issues and challenges facing communities and the tightrope that the City employees must walk between budget challenges, citizen and public perception and efficient and logical design and construction. These issues don't always align and proper navigation of these issues is of utmost importance for the success of a project.

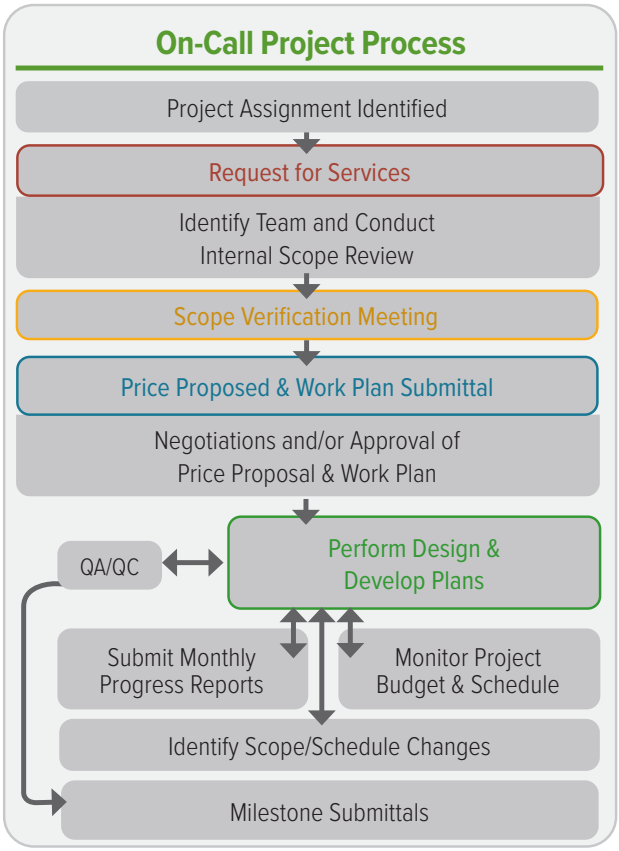
Brad will be your point of contact. His process of project assignment is illustrated in the on-call flowchart on the right.

On-call Experience:
A significant portion of our work is through municipal on-call contracts. We understand the importance of scoping to place the right level experience for the projects involved and having the flexibility within our staff to meet project needs. As a testament to this, is our success in winning repeat contracts on our municipal on-call contracts.

Know all, be all for the City of Topeka:
With Brad Johnson's city engineer background knowledge as well as Citiworks experience, you can rest assured knowing Brad will easily transition into the City's project management engineering services role. Each of the Benesch team members were selected for this project with their extensive experience in mind to fulfill the City's needs.

All of our team members shown on the organizational chart are within an hour of Topeka with half of them right here in Topeka.

The chart and brief summaries below outline Benesch's simple, yet effective, approach to managing on-call project services. This approach also allows us to track numerous concurrent projects and maintain schedules with efficiency and control. We can state with confidence our ability to meet contract, time and budget requirements agreed upon for each assignment.



Key Steps in the On-Call Process

Request for Services
Immediately following a service request, the Benesch project manager leading that line of service will set up a meeting or phone conference with Topeka staff to discuss project scope, schedule and staff availability.

Scope Verification Meeting
Once the appropriate staff and the Local Project Manager have been identified, the newly formed project team meets to verify scope.

Price Proposal & Work Plan Submittal
Once an agreed upon budget, scope and schedule are confirmed, each assignment is tracked independently.

Perform Project Management Duties
Benesch will coordinate all aspects of the project under Topeka's direction or its assigned Project Manager.

On-Call Experience

Benesch has and continues to serve as on-call engineers for many clients across Kansas, the greater Midwest and throughout the nation. Our local staff has decades of experience partnering with Kansas communities in a variety of on-call roles. During this time our staff has served as extensions and auxiliary support of our client's staff, both in the field and office, providing assistance on small maintenance projects to multi-million-dollar transportation enhancements. Benesch staff is accustomed to working under on-call agreements, which require schedule flexibility, proactive communication, effective planning and multiple skill sets. The information shown in this table represents the on-call partnerships of Benesch's Kansas Division.

Client	Roadway / Street Design	Structural Engineering	Traffic/Transportation Planning	Civil Engineering	Environmental Design	Mechanical & Electrical	Construction Design	Project Admin & Management	Other Technical Areas
Merriam Drainage District		●			●	●		●	●
Bayer CropScience		●			●	●		●	●
Hallmark Corporation		●						●	●
Kansas City, Missouri		●			●		●	●	●
Johnson County Public Works Department	●			●				●	●
KS Department of Transportation	●	●	●	●	●	●	●	●	●
UG/WYCO	●	●	●	●	●	●	●	●	●
Fairfax Drainage District					●	●		●	●
Kaw Valley Drainage District					●	●		●	●
Kansas Division of Facility Management		●				●		●	●
KS Department of Energy		●				●		●	●
Kansas Dept. of Wildlife, Parks & Tourism				●	●	●	●	●	●
Leavenworth County Public Works Dept.	●	●	●	●	●	●	●	●	●
Parkville, MO			●	●	●			●	●
KS Adjutant General's Dept.	●	●		●		●		●	●
Kansas Dept. of Aging & Disability Services		●				●		●	●
Overland Park On-Call Review	●		●	●				●	●
Airports in Clay Center, Beloit, Augusta, Ellsworth, Norton & Concordia				●			●	●	●
Missouri Department of Transportation	●	●	●	●	●	●	●	●	●
Manhattan, Kansas	●	●	●	●	●		●	●	●
Lansing, Kansas			●	●	●		●	●	●
Jewell County, Kansas		●						●	●
Johnson County Wastewater		●			●			●	●

WHY THE BENESCH TEAM?

We are a FULL-SERVICE team with the depth of resources to handle any assignment. Our collaborative approach provides appropriate project management for projects of any size and complexity. We are an integrated partner working diligently to accommodate the interests of all project stakeholders. Through open discussion, proactive communication and timely documentation and deliverables, you'll see us working tirelessly to ensure your projects are delivered on time and within budget, in a safe manner.

Our team members have FAMILIARITY with the area. Highly qualified individuals with established relationships make for a much smoother process. In addition, working alongside a team that has already earned your trust can be a real differentiator.

We have the SCHEDULE AND CAPACITY necessary to handle multiple, concurrent assignments and the expertise to address any challenge you might encounter. Our project team will commit the necessary time and resources to meet or exceed timelines of on-call engineering or management projects. We have identified a large number of staff who could be called upon to complete assignments awarded. We will make sure that the identified project team is committed to Topeka from beginning to end without sacrificing any other commitments. All staffing obligations are maintained in a database to ensure we do not over-commit.

Ultimately, the Benesch team is prepared to deliver what you need, when you need it.

PROJECT UNDERSTANDING

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PROJECT UNDERSTANDING

To supplement the current engineering staff for the City of Topeka Engineering Division of the Public Works Department, the City is seeking Project Management Engineering Services assistance through consultant contracts. This is a result of several unfilled vacancies that exist within the Engineering Division. The successful firms will fulfill Project Management duties ranging from conceptual phase services through construction and project closeout.

Project Managers will need to have a full understanding of City of Topeka processes for public infrastructure projects. These processes include: project planning and RFP generation; procurement processes; consultant contracting processes, scoping and scheduling; plan development and reviews; environmental permitting requirements and coordination; public information and input; bidding; award; contractor contracting; construction inspection, administration and management; as-builts and project closeout. These services could also include consulting with other departments or divisions for other engineering related issues the City faces.

Administration and management of projects with the various City of Topeka software will also be an important role for the Project Management services including Citiworks, Eclipse Project Portfolio Management and SeeClickFix programs. It is understood that frequent visits to City offices are likely to update projects through access to the various software listed. Benesch proposes to run the work through one of two Topeka Project Managers, **Brad Johnson for design related services and Wade Heim for construction related services.** These individuals both reside in the Topeka, Kansas office and can be on-site immediately. Depending on the scope, these two individuals will pull in the various discipline leads as necessary for plan reviews, needed expertise and availability. **The personnel noted in Benesch's response are all either in the Topeka Benesch Office or the Kansas City, Kansas office which is 50 minutes away, and all are Kansas Licensed Engineers by the Kansas State Board of Technical Professions.**

The services provided will ultimately be defined by the scope of the project and the remaining work to be done if contracted after the project has already started. This may also dictate the correct experience, expertise or background needed for a specific project. This will be vetted by Brad Johnson or Wade Heim as to the best staff suited for the project and may in fact include multiple people with overall oversight and management from Brad. As a former City Engineer, Brad has been on the City's side of the table and will ensure that the right person/team is provided to assist with the management of the City of Topeka projects.

Benesch brings a local presence with access to local expertise that can be brought to the City of Topeka projects.

Furthermore, with a growing Topeka staff (and hiring more), **the Benesch team is intimately familiar with City of Topeka Engineering requirements and have over 33 years of combined direct City of Topeka experience.** Our Topeka Project Management Staff (Brad Johnson, Wade Heim and Michael Stewart) all have well established credentials and ongoing relationships with City of Topeka Engineering Division staff.

BRAD JOHNSON, PE

- As a former City Engineer, Brad understands the challenges facing the City and can bring the right support staff/expertise to the project at the right time.
- Brad has managed several city engineering on-calls previously in other surrounding municipalities including Iola, Osage City, Valley Falls, Silver Lake and Hiawatha.
- Brad is well-versed at use of Citiworks for management of plan reviews and comments for site development projects given his management of a previous stormwater on-call agreement with Topeka Department of Utilities whereby access and downloads with Citiworks was expected.

WADE HEIM, PE

- Wade manages all of the Kansas Division Construction Inspectors and oversees construction administration. Wade has vast experience with inspection and construction management of municipal infrastructure, working with KDOT requirements and specifications and navigating reporting requirements on those projects.
- Wade is right here in Topeka and can bring necessary construction management resources and experience to the City of Topeka Engineering construction inspection staff as needed.

MISCELLANEOUS

- On-call contracts are very common for Benesch as evidenced by our matrix of on-call agreements and services.
- Benesch uses Bluebeam Studio reviews frequently and consistently to facilitate and manage simultaneous reviews.
- No firm is closer to the City offices than Benesch's Topeka office, and all of our noted project managers and discipline leads are within a 50 minute drive.

STATEMENT OF QUALIFICATIONS AND EXPERIENCE

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CIVIL ENGINEERING

WHY BENESCH? Expertise, Responsiveness, Personal Investment, Trust, Proximity, Commitment. Transportation engineering (planning, design and inspection) is a core Benesch discipline. As a result, we leverage local and national experience, best practices and firm-wide knowledge on every transportation project we serve as your partner. That expertise and commitment to quality is why Benesch is routinely recognized as an industry leader in roadway and bridge design.

Beyond expertise, what distinguishes Benesch from others, is our track record of responsiveness and personal investment. These two qualities are fundamental to any on-call partnership. The projects we serve directly impact our family, friends and community. Our proximity also allows Benesch to respond immediately. When you need someone on site quickly, we want to be your first phone call. We have demonstrated and are committed to responding quickly and efficiently to any project need.

BICYCLE, PEDESTRIAN & RECREATION FACILITIES

With an ever-increasing demand for bicycle, pedestrian and recreation amenities, Benesch can help you achieve your vision. Our team is experienced in designing mixed-use paths, bike lanes, recreational trail systems, pedestrian structures and parks in both urban and rural settings.

Whether you're looking to convert an old rail corridor into a bike path, merge an existing trail connection with a new one, build a pedestrian bridge or park or develop a play area, field or court, we bring you an award-winning team of experts who specialize in accessibility, structural design, geometrics, hydraulics, environmental issues and more to make your project a reality. We understand bicycle and pedestrian design code requirements, including the new National Association of City Transportation Officials (NACTO) Urban Design Guide. We have worked extensively with various federal, state and municipal agencies. In addition, our solutions center on sustainability. We are familiar with Consumer Project Safety Commission guidelines and are certified by the National Recreation and Park Commission as playground safety inspectors. We weigh different design alternatives such as recyclable materials to ensure your project is built to last, while preserving surrounding natural and historic elements.

COMPLETE STREETS

At Benesch, our roadway solutions go beyond the standard. We provide the whole infrastructure package to produce complete streets, which means we understand how to balance corridor needs, finding innovative ways for cars, bicycles, pedestrians and public transit vehicles to safely and effectively share the road. From ADA compliance upgrades to roundabouts, our team evaluates the best possible design alternatives to fit the needs of your community. Our construction staff participates in the design process to ensure constructibility, enabling us to create complete street concepts that can built.

DRONE TOPOGRAPHIC DATA

Benesch has also used drone topographic data collection to supplement traditional topographic survey to more efficiently capture pavement information and details as well as other infrastructure in high traffic areas such as SW 17th Street at Wanamaker Road. Implementing this supplemental topo data collection saved time, minimized traffic impact and also ultimately increased safety as it minimized the time survey crews had to be in the street and intersection.

SW 17th Street & Wanamaker Road 2021 Drone Image

Beyond expertise, what distinguishes Benesch from others, is our track record of responsiveness and personal investment. These two qualities are fundamental to any on-call partnership. Benesch has employees that have provided service to the City of Topeka for decades. These committed individuals take pride in their work. Project updates by the project manager keep lines of communication open, ensuring work is progressing in the right direction. Project managers work closely with staff to understand and meet project schedules.

Benesch understands the challenges faced by local agencies. We have leaders in our Topeka office that have experienced the challenges working in the public sector regarding program delivery. As other agencies have looked to the consulting industry to assist with delivering their program, we have been at the table helping clients address issues and concerns associated with this workflow. We understand that your roadway and streets program includes a mix of projects strategically programmed to accomplish asset preservation and capital improvements. We understand the importance of optimizing project budgets, ensuring that taxpayers receive the greatest return on their investment dollars.

Serving as an Extension of Your Staff. People and relationships matter. Our team has served Topeka for decades, earning your trust. We pledge to continue to perform in a manner deserving of that trust.

An Integrated Approach. In order to streamline projects, avoid confusion, and promote effective and efficient solutions, our transportation team employs an approach that considers drainage, traffic, ROW and utilities as critical components of roadway design. This is no more evident than with roadway and stormwater/drainage design such as the 7th & Quincy intersection. The same Benesch team designs both elements, because they are interdependent and need to be developed concurrently. Benesch brings this holistic mindset and approach to all our assignments.

Understanding Expectations. Throughout decades of partnerships, we respond to emergency needs after accidents, floods and disasters.

Anticipating Transportation Needs. Benesch has developed dozens of conceptual, feasibility, environmental and engineering studies for Topeka. We have planners on staff and appreciate that budgets, schedules and community support all originate with planning. We are dedicated to providing Topeka with effective, efficient and defensible plans of action.

Familiarity with Transportation Network. As indicated, our staff has decades of experience and knowledge of Topeka's transportation network. Our staff has been a part of dozens of street corridor projects scattered throughout the community.

Relationships Matter. Benesch has established relationships with City engineering staff. We maintain these relationships thorough project coordination and communication.

Shared Vision of City's Comprehensive Plan. We work hand-in-hand with your staff to ensure each project is both individually successful and contributes to a greater overall vision. Because we engage with multiple departments, we have the opportunity to serve as a conduit for City's plans and visions. We are committed to serving engineering needs today, while considering synergies and strategies that contribute to future Topeka needs.

THE BENESCH DIFFERENCE

EXPERTISE

RESPONSIVENESS

PERSONAL INVESTMENT

TRUST

PROXIMITY

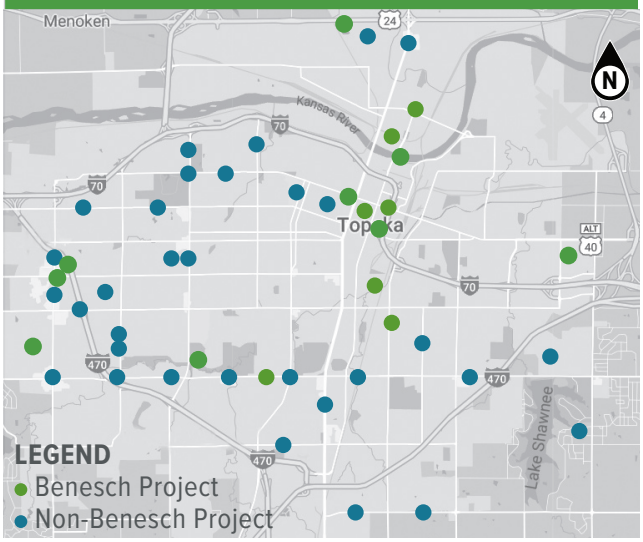
COMMITMENT

Liaison to KDOT. Benesch will serve as a liaison between the City and KDOT when applicable. We have provided KDOT engineering design for over 50 years. We have a complete understanding of their expectations, standards and procedures. Our established relationships will streamline any KDOT coordination; while our commitment is to effectively present and support Topeka objectives.

Value Engineering. Needs, desires and constraints exist on every project. Our value engineering approach and certified CVS and VMA professionals are committed to helping Topeka maximize the return on your infrastructure investments.

TOPEKA EXPERIENCE

This map highlights our team's combined project experience across Topeka. The green dots indicate Benesch experience and the blue dots indicate team member experience gained prior to joining Benesch. These projects include pavement repair and reconstruction, traffic studies, traffic signals, storm sewer inspection and rehabilitation, stream stabilization, waterline design and drainage studies.



TRAFFIC ENGINEERING

THE BENESCH APPROACH TO TRAFFIC ENGINEERING

Benesch is excited about the opportunity to assist the City of Topeka with on-call traffic engineering services. With several traffic engineering technical experts on staff, Benesch offers both depth and breadth when it comes to staff and experience. We have completed a number of complex, high profile traffic design projects. In addition, our traffic team provides a variety of traffic engineering study services, including data collection, traffic analysis and safety studies. **Examples of these right here in Topeka include: 6th Avenue Corridor Study, 8th Avenue Corridor Study, Kansas Avenue Corridor Study, 7th & Quincy Intersection Analysis and Traffic Engineering On-call contract for development reviews which is currently being contracted.**

Our project manager will ensure you have the right person from our team working on any tasks you assign to us, will proactively check in with you to make sure we are meeting your needs and see that any issues which arise are resolved efficiently. We aim to minimize surprises and assist the City in proactive planning efforts. Our transportation professionals have the resources and experience to provide comprehensive solutions to your traffic needs. We look forward to working closely with Topeka staff to continue building upon the trusted, professional relationships we have established.

TRAFFIC ENGINEERING STUDIES

While the types of traffic engineering studies vary, reliable data is always necessary. An accurate study utilizes specific methods and approaches to collect the data necessary to produce meaningful findings. Following is a brief summary of the approaches currently used by Benesch traffic engineers.

Data Collection: Data collection serves as the foundation to any traffic engineering study. Benesch has the following traffic data collection tools available to collect traffic counts:

JAMAR tube counters (TRAX Apollyon) can collect 24-hour or multi-day roadway segment counts, including vehicle classifications, gaps, and speeds including the 85th percentile speed.

JAMAR Blackcat radar counters are used to obtain 24-hour traffic counts, 85th percentile speeds and vehicle classification.

Miovision video cameras can be used to collect turning movement counts, pedestrian/bicycle counts, and roadway segment counts with minimal human effort. Using the camera will provide a video record of the study intersection during the count.

Turning movement count boards (Jamar TDC Ultra)

Travel time data collection suite can be used for travel time runs.

Hand-held radar gun for collecting spots speeds.

StreetLight Data Benesch has been utilizing StreetLight Data during the COVID-19 pandemic to obtain pre-COVID traffic volumes for corridor studies. In addition to obtaining turning movement counts, origin-destination information can be obtained from the data.

Traffic Analysis: Depending on the project task, an assortment of software analysis tools will be used to evaluate an intersection or corridor. Benesch utilizes the following software packages in conducting traffic engineering studies:

- Highway Capacity Software
- Synchro/SimTraffic S
- IDRA
- VISSIM
- PTV VISTRO
- Autoturn
- TNM Software
- StreetLight Data

Safety Studies: Intersections with high crash numbers have been the focus of several Benesch safety study projects. One such study was conducted in Lincoln, Nebraska at the intersection of 66th Street & Fremont Street where there was a high crash trend. Benesch completed an alternative analysis of the intersection which determined that visibility issues due to mature trees and their shadows were obstructing sight distance. Benesch recommended construction of a mini roundabout to improve intersection visibility and minimize property impacts.

TRAFFIC IMPACT STUDY PEER REVIEWS

Jim Jussel completed numerous peer reviews while at another firm in Kansas City. He also served as the Spring Hill, Kansas Traffic Engineer and reviewed development plans and traffic impact studies (TIS) completed by other consultants. While at his previous firm, Jim also served as project manager for the Kansas City, Missouri Capital Improvements Management Department. He managed consulting firms which were completing eleven traffic signal improvement projects.

DESIGN PROCESS

Benesch begins each traffic design project by evaluating the existing system and surrounding area to ensure that the elements of a new design blend seamlessly with its surroundings. Our project staff is skilled at identifying utility conflicts and other potential issues early in the design process. By doing so, we are able to mitigate obstacles and make design provisions accordingly. We understand that keeping your project on schedule is important. With Benesch, you get a proven track record of delivering on an accelerated schedule.

AREAS OF EXPERTISE & INNOVATION

Traffic Impact Studies

Origin and Destination Studies

New and Modernized Signal Design

Highway Operational Analysis

Traffic Simulation

Safety Studies

Access Management Studies

Gap Analysis

Traffic Signal Coordination and Timing

Signal Timing

Intersection Analyses

Corridor Progression Analysis

Level of Service Analysis

Traffic Data Collection

Maintenance of Traffic Plans

Existing condition base files are essential in producing an accurate and high-quality design. While Benesch can provide traditional topographic survey, designing a traffic signal or street lighting network typically does not require complex survey. Benesch often develops our base file using a drone flight technology. A drone survey can capture the vertical components of a base file. Identifying the location of overhead power lines is just one example of the benefit of drone surveys.

TRAFFIC SIGNAL DESIGN

The design of traffic signals is another Benesch specialty. In designing five traffic signals along the 25th Street corridor in Fargo, North Dakota, Benesch closely coordinated with both the City of Fargo and the North Dakota Department of Transportation (NDDOT). Three signals were designed per City of Fargo standards and specifications, including fiber interconnect and surveillance cameras. Two I-94 ramp intersections were designed per NDDOT standards with video detection. This signal design connected the signal system to the NDDOT District office.

COMPLETE STREETS DESIGN

Multimodal components have become important aspects of corridor projects throughout the Midwest. Additional modes of travel include pedestrian and bicycle accommodations as well as transit. Jim Jussel was involved in the 24th Street Road Diet project in Omaha, Nebraska which evaluated the conversion of a four-lane undivided corridor to a three-lane section with on-street bike lanes. In looking to promote a more pedestrian friendly environment, the Overland Park Planning Department had Jim study a potential lane reduction to College Boulevard in order to determine traffic operations impacts if the six-lane corridor was reduced to four-lane divided corridor.

ROUNDABOUT DESIGN

As roundabouts gain emphasis throughout the country, Benesch is conducting corridor studies to evaluate operations and benefits a roundabout would bring an existing corridor or intersection. Most recently, Jim Jussel was involved in designing the US-24/K-13 and US-24/K-113 roundabouts. Jim's most recently completed project is Nebraska DOT's Lincoln South Beltway roundabout on Saltillo Road/S. 14th Street.

WHY BENESCH? Expertise, Responsiveness, Personal Investment, Trust, Proximity, Commitment.
Benesch provides the City with substantial local, regional and national environmental consulting experience. Our team includes environmental scientists and specialists providing the full suite of environmental services including wetland delineations, permitting, mitigation site suitability reviews, mitigation site design, mitigation site monitoring, CEs, section 4(f) reviews, endangered species surveys, phase I and phase II environmental site evaluations.

BENESCH APPROACH TO ENVIRONMENTAL COMPLIANCE

Our team will take a comprehensive approach towards the completion of every environmental project assigned. We have the ability to focus on small details while not losing focus on the "big picture" essential for effective project management. Our blend of environmental experience in urban and rural settings will allow us to anticipate, meet and exceed standards, procedures and specifications.

This combination of Benesch's experience, knowledge and seasoned project team enable us to efficiently provide NEPA and other permitting services to the City of Topeka for all their public works projects. Our ability to quickly understand key project issues and develop innovative and effective solutions makes Benesch an excellent choice for your projects.

Benesch has a long history of providing quality NEPA documentation for transportation projects including Environmental Assessments, Environmental Impact Statements and Categorical Exclusions. We also offer a full range of supporting environmental services, including wetland consulting, noise studies, hazardous materials experience, floodplain permitting, hydrologic and hydraulic modeling, bridge design, traffic studies, engineering, railroad experience, bridge inspections, value engineering, and much more.

Steve Roth, PE, will serve as Benesch's designated Environmental Lead. Steve has experience preparing numerous environmental permitting and coordination services on transportation projects throughout Kansas and the Midwest.

AREAS OF EXPERTISE & INNOVATION

National Environmental Protection Act (NEPA)

Noise Studies

Wetland Delineation, Mitigation and Permitting

Hazardous Waste

404 Permitting

Environmental Site Assessments

Threatened and Endangered Species

Stream Observation Permitting (KDWR)

Historical Documentation

SECTION 404 PERMITTING AND WETLAND SERVICES

Benesch is experienced in obtaining Nationwide and Individual Clean Water Act Section 404 permits for a variety of transportation related projects.

WHY BENESCH? Expertise, Responsiveness, Personal Investment, Trust, Proximity, Commitment. Structural engineering (planning, design and inspection) is a core Benesch discipline. As a result, we leverage local and national experience, best practices and firm-wide knowledge on every structural project we serve as your partner. That expertise and commitment to quality is why Benesch is routinely recognized as an industry leader.

THE BENESCH APPROACH TO STRUCTURAL ENGINEERING

A Benesch Partnership is founded on three fundamental principles – **responsiveness, quality and value.** Our goal is to provide Topeka with effective, efficient structural solutions. To meet this objective, we begin by engaging with City staff, listening to understand project constraints, needs and desires. As your project partner, we will be both a technical resource and a trusted steward of City investments. We appreciate that practicality is key.

Provide Proven Solutions | Experience is the best teacher, and Benesch has plenty of it. Our staff has hundreds of years of combined experience in applicable structural and construction projects. In addition to drawing upon prior, proven solutions utilized by the City, Benesch has worked with KDOT extensively, developing details which have been incorporated into KDOT standard plans. We have also created standardized steel and concrete plan details utilized by counties across Kansas. Our proven solutions save time and resources while also building a track record of reduced maintenance and recognition through project awards.

Benesch Advantage: Benesch is a proven partner that will streamline coordination, deliver on time and provide reliable, defendable solutions.

Consider Lifecycle Costs | Historical bridge inspection data supports the conclusion that upfront construction costs constitute less than half of the total lifecycle costs of maintaining and operating a structure. Providing solutions that incorporate considerations for reducing future maintenance investments is essential. Benesch does this with a team that includes APWA Certified Asset Management Professionals and NHI Bridge Inspectors.

Benesch Advantage: Our team leverages the knowledge of field inspections, asset planning, cost estimating and risk mitigation to provide you with efficient solutions for the present and future. Benesch will minimize lifecycle costs for the City.

Control Upfront Costs | Practical design and value engineering (VE) are fundamental to any engineering project. Benesch invests in training our engineers in VE principles to ensure this mindset shapes each project. Our staff includes several SAVE VP/VE Professionals. We ensure project functions are clearly defined, so that we can properly identify project needs, desires and constraints. The goal is to prevent artificial project challenges all too often caused by the disagreement between needs and desires.

Benesch Advantage: Benesch will develop solutions that leverage local resources and contractor capabilities, take advantage of standardization and streamline design plan production, resulting in saved time and money.

Maximize Return on Investment | In order to address present day needs without sacrificing future demands, your engineering partner must provide solutions that maximize return-on-investment (ROI). This can be accomplished through designs that provide long operational lives, minimal maintenance and accommodations for future needs.

Benesch Advantage: Benesch incorporates asset management principles into our designs. Our solutions will produce operational lives of 50+ years. Benesch designs will accommodate heavier loads and ADT demands while also standing up to scour.

Prioritize Practicality | Whether hydraulically designing for the most appropriate storm event, utilizing plan details proven to work in similar applications, tailoring the design for ADT needs or applying engineering judgment regarding DOT guidelines, multiple project decisions can be made to infuse practicality and sensibility.

Benesch Advantage: Benesch is a partner who wants to provide solutions that works best for the City, which means we will tailor designs to meet your specific needs. We will avoid reinventing the wheel, which in turn will save time and resources.

INNOVATIVE APPROACHES

Asset Management Tools

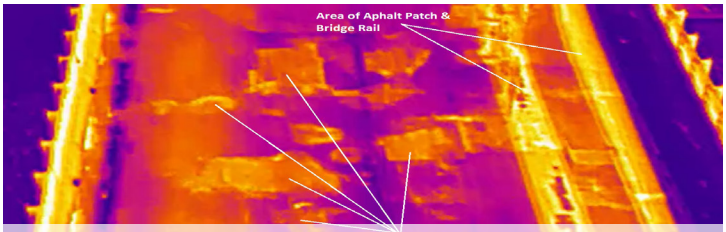
Asset management, particularly forecasting individual assets and network conditions, continues to grow in significance for Topeka and other communities. Benesch has developed electronic, Excel-based tools that aid owners in leveraging collected condition data towards asset planning. Automated decision matrices driven by logic-based VBA coding establishes weighted bridge priorities, warranted action plans (repairs, rehabs, replacements, etc), associated project costs, and network condition graphs. Based on user provided budgets, annual Capital Improvement Plans (CIP) are developed listing bridge projects. Forecasting applications incorporate both deterioration and planned maintenance, rehabilitation, and replacement actions. This allows owners to visualize projected conditional status of an individual bridge or the entire network within a CIP 10-year window.

3-D Structural Modeling & 2-D H&H Analysis

Efficient hydrologic and hydraulic analysis is fundamental to achieving effective and economical replacement solutions. Benesch has provided both traditional 1D modeling and the more comprehensive 2D hydraulic modeling for bridge projects. Notable differences in velocity magnitudes and direction do occur between 2D and 1D models near embankments, waterway confluence points, substructure elements and other anomalies not represented well in channel sections. The primary culprit for this difference is the foundational assumption in 1D analysis that flow is entirely perpendicular to the specified cross section. This underestimates velocities that impact scour, riprap and substructure design. Our team provides expertise necessary to address sites including: (a) Combined Asymmetric Floodplain(s), (b) Multiple Structures & Openings in Studied Area, (c) Existing River Meandering (Primary & Tributaries), (d) Various Confluences of Tributaries in Floodplain, (e) Inherent Constriction of Main and Overflow Bridges, and (f) Skewed Substructure Elements.

Drone Thermal Scans

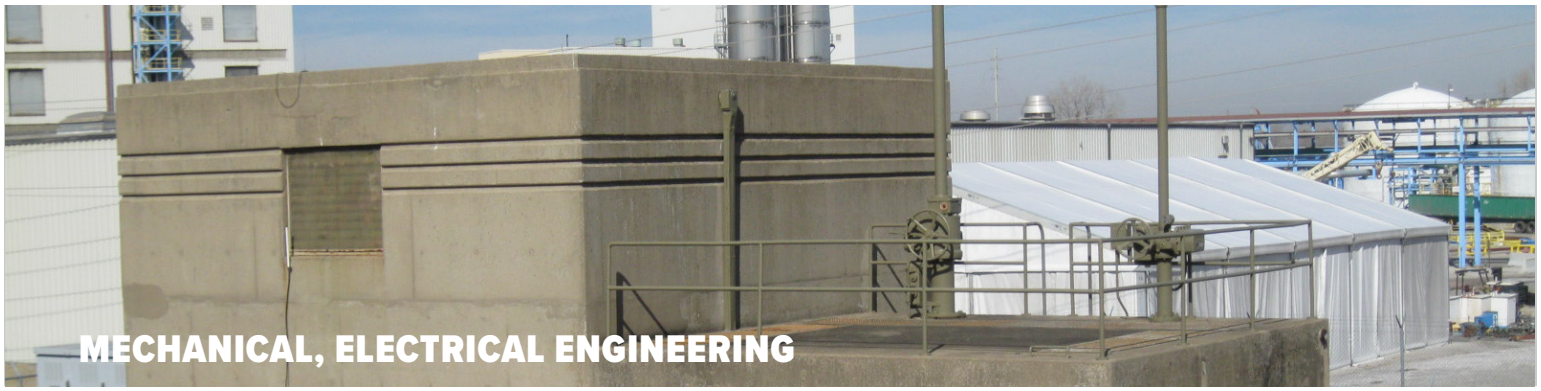
Benesch utilizes both optical and thermal imaging drones to evaluate bridge deck surfacing. Thermal Drone Imaging Technology identifies delamination on top of the bridge deck. This process, which Benesch has used in Wichita, multiple Kansas Counties, and for DOTs, has been validated using traditional chaining and sounding methods. Drone usage provides several benefits – speed, safety and quantification. All information is GPS referenced, quantities are calculated from the imagery deliverables, and it minimizes impacts to motorists. The data is then processed with Pix4D software and analyzed by our team of structure engineers to further evaluate the bridge deck conditions.



Thermal Drone Imaging Example of a Bridge Deck

Value Engineering

Any project will benefit from a value planning/engineering review, however the more complex the project the higher likelihood that additional "project value" is able to be identified and realized. Federal funded projects, in excess of $40 Million require VP/VE reviews following the SAVE International process employed by Benesch. The VE process has the side benefits of ensuring stakeholders are on the same page, the project needs, desires, and constraints are clearly defined, and that the cost-benefit of decision making is documented. The result is a defendable decision-making process that increases project value.



MECHANICAL, ELECTRICAL ENGINEERING

Benesch provides mechanical, electrical, plumbing and civil design services including conceptual and detailed design for a wide variety of projects. We also retain personnel who provide construction inspection and shop drawing review services. Many of our completed projects have involved repair or renovation of existing facilities and systems. Examples include HVAC system upgrades, electrical repairs, underground storage tanks, office renovation, sewer repair, water supply system upgrades, and parking lot improvements. We have also engineered designs for new construction on the following types of projects: military specialty-use facilities, correctional institutions, wastewater treatment plants, parking garages and telecommunication centers.

From feasibility studies and planning to operations and maintenance, our trained professionals can handle any phase of your project. Our MEP team is anchored by experts in each discipline with experience in new development projects as well as renovation or expansion work.

Benesch is unique in that we have experience on a wide variety of projects, making us ideally suited for on-call contracts. We have found the key to successful performance on these contracts is to give the same amount of attention and detail to each small project as would be given to a larger project.

For over 25 years, Benesch has successfully performed on-call engineering services for many public and private clients such as the Unified Government of Wyandotte County/Kansas City, Kansas, Bayer Corporation, the Fairfax Drainage District and Hallmark. In addition, Benesch has held MEP on-call contracts with several State of Kansas departments and agencies including the Office of Facilities and Property Management, the University of Kansas Medical Center, the Kansas Adjutant General's Department, the Kansas Department of Wildlife, Parks & Tourism and the Kansas Department for Aging and Disability Services.

Many of our projects involve the renovation of existing facilities, their systems and equipment. These typically small projects have presented many unique challenges such as construction staging and maintaining operations of building systems while work is being completed. Benesch has a successful performance record on small projects of this type. Our project experience that we have listed in Part G demonstrates our ability to evaluate existing systems, present effective solutions and perform the work while the building remains in operation.

QUALITY CONTROL

When it comes to quality, our bottom-line objectives are to control project costs for our clients while allowing us to deliver high-quality, value-added results, as promised.

Benesch will provide the City of Topeka with the highest quality engineering services available. Quality management and continuity of the work will be assigned to a single Project Manager who will be responsible for the oversight of all projects under this contract. Kirby Demott, PE will serve as your MEP Lead throughout the design and construction of any resulting projects.

ON-CALL APPROACH

One benefit of working with the Benesch team is our ability to quickly turn around task order requests. Typical turn-around time for us to scope and initiate a project with our clients is within a few days for simpler endeavors. For complicated projects with multiple subconsultants, we can generally turn around a scope and fee within a week's time. In addition, we often complete emergency projects for clients on accelerated schedules with great success.

Providing the City with exactly what they need or want is our highest priority. Before beginning each project, our Project Manager will meet with your staff to obtain a thorough understanding of what is needed. The City will be provided copies of all preliminary submittals during design so that comments may be incorporated into the final design. Our project managers take ownership of each project, realizing that the outcome is a direct reflection on their skills and efforts.

EMERGENCY RESPONSE

In emergency situations, timing is everything. At Benesch, we pride ourselves on our problem-solving abilities, even when under pressure to deliver quickly. This spring, Benesch worked with the Osawatomie State Hospital to develop a ward specifically for treating COVID-19 patients.

The project was designed and constructed in just a matter of weeks. We also responded to an urgent request from the hospital to investigate and replace chilled water lines which had failed. Benesch's team assembled and developed plans quickly to ensure the contractor could complete the work before warmer weather arrived.

CONSTRUCTION MANAGEMENT Expertise, Personal Investment, Proximity.

While we are locally based, we offer a national perspective and best practices. With staff that have managed programs from both private and public perspectives, Benesch is confident we have the expertise and experience to integrate best practices and arrive at solutions quicker than others.

Benesch can represent your best interests from start to finish. From planning, permitting and site preparation to design and construction, our team of in-house engineers and certified planning, inspection and scheduling professionals can provide you with the information, guidance and oversight you need to make informed project decisions. We can also assist with the coordination of all utilities, local stakeholders and agencies to make sure the construction of your project stays on the right track.

At Benesch, we proactively facilitate progress through careful review, cost control, and risk and schedule management. Our team solely represents your interests, ensuring your project is efficiently constructed per design standards. We can make recommendations on engineering, design and scope, contract issues, budget, schedule and more. In addition, we help drive the construction process by providing leadership and oversight of all project activities and team members, including architects, engineers and consultants. We also monitor and critically analyze contractor activities and progress reports to ensure they meet contractual obligations.

Think of us as your eyes and ears in the field. Whichever phase your project is in, Benesch provides you with critical management and decision support services essential to achieving your project goals.

Other areas of expertise:

- Claim Avoidance
- Constructability Reviews
- Cost Control
- Quality Monitoring
- Risk Management
- Schedule Management
- Submittals and RFI Management
- Value Engineering

We believe strongly in quality at Benesch, but we also believe that QA checks need to happen at the right time, by technically proficient staff, to the appropriate level of detail for each particular milestone. As automated design continues to grow and develop, our approach to quality control needs to be nimble and comprehensive to ensure that the right checks are happening at the right time.

Comprehensive Project Management Applications | As a local firm with 75 years of experience, Benesch will bring an appreciation for the City's vision to all our assignments. Our team approaches each task and project with a bigger picture in mind. That includes accountability for developing, evaluating and maintaining budgets and schedules. We understand this expectation.

Proactive Leadership | Our project managers will work closely with City staff to understand and identify potential schedule and budget risks. Our goal is project success, thus we must understand and even participate in developing funding mechanisms, budgets, schedules and scope. This requires experience and trusted relationships, a track record of effective communications and, often, an owner's perspective.

Focus on Quality | Quality does not happen by accident. Our leaders are committed to it and work hard to achieve it. They have high standards and do not accept anything less. Benesch's reputation is based upon the delivery of high quality results. To ensure this occurs each and every time, Benesch utilizes its own Total Quality Engineering Program, which establishes, shapes and ensures that quality control and quality assurance occur on every service we provide.

Project Specific Quality Management Plan | Our quality control program provides online planning and tracking to help us ensure consistency and compliance.

PQMP: Each project at Benesch, regardless of size, begins a customized Project Quality Management Plan (PQMP). Our online tool provides assistance through a series of templates that serve as the basis for each PQMP. Each PQMP includes a plan for identifying project deliverables to be checked, at what milestone they will be checked, and how it will be checked.

Who, What, When and How (3WH): The PQMP creator automatically creates a tracking database called the 3WH Tracker. The 3WH includes required QC tasks that need to be completed before a deliverable is allowed to be sent to the client. The QC checker e-signs tasks and the QA reviewer is required to sign off that they have personally confirmed work has been completed and documented. Our Corporate Director of Quality Management monitors this database to ensure that all projects comply with this policy.

MANAGEMENT AND STAFFING SUMMARY

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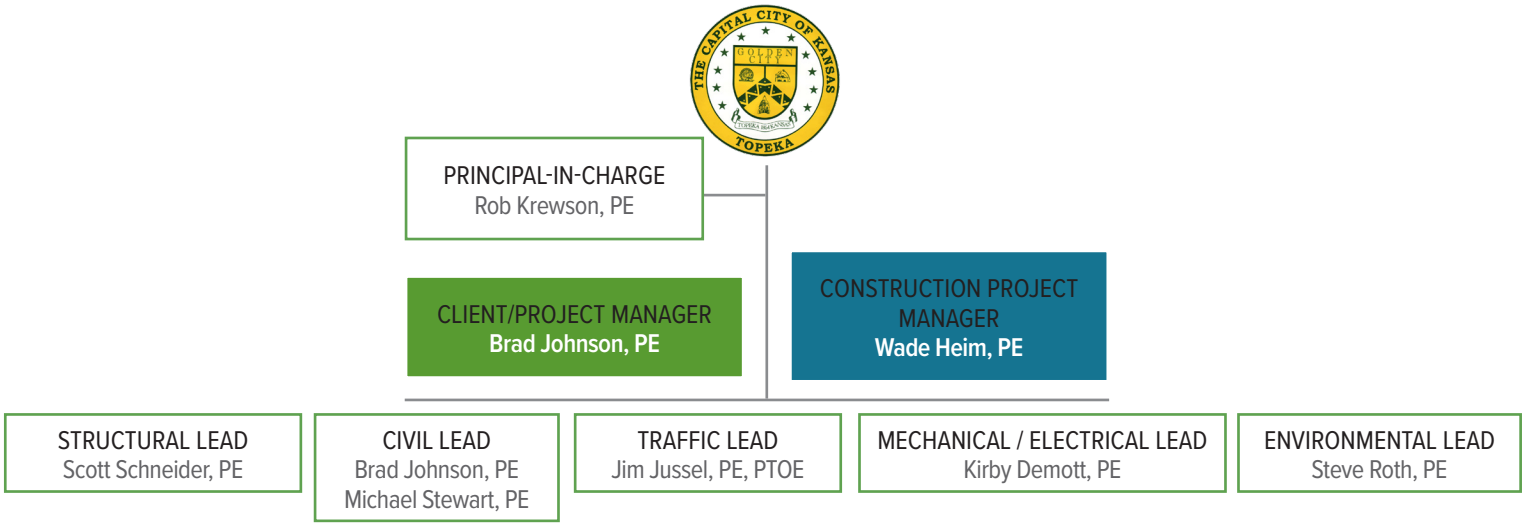
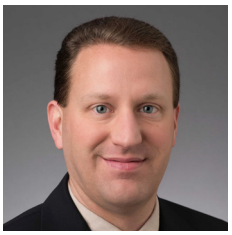
MANAGEMENT AND STAFFING Expertise, Personal Investment, Proximity.

While we are locally based, we offer a national perspective and best practices. With staff that have managed programs from both private and public perspectives, Benesch is confident we have the expertise and experience to integrate best practices and arrive at solutions quicker than others.



Brad Johnson, PE // Location: Topeka, KS // Years of Experience: 25
Project Manager | Civil Lead

Brad has over 25 years of municipal engineering, project management and design experience that includes transportation systems, storm drainage systems, utility systems and private development engineering. He has a diverse background and has spent significant time in both the private sector and public sector and has managed various multi-discipline projects throughout his career. Brad spent five years with the City of Salina as City Engineer. Having spent the last 15 years of his career in Topeka, Brad has a firm grasp of the project delivery requirements and expectations of City Staff. Brad has served in an on-call capacity for many municipalities over his career including serving as On-Call City Engineer for Iola, Silver Lake, Osage City, Hiawatha and Valley Falls. He was also the contract manager and project manager for a recent assignment with the City for on-call stormwater reviews.



Rob Krewson, PE // Location: Kansas City, KS // Years of Experience: 25
Principal-in-Charge

As Principal-in-Charge, Rob will leverage 25 years of applicable transportation management and design experience on dozens of civil, municipal, interstate and structural projects throughout Kansas and Missouri to ensure the proper staff and resources are dedicated to your project to deliver on time, within budget and at a quality level meeting your expectations. His broad experience in design and plan preparation, as well as construction engineering, allows him to guide and position staff for success.

Wade Heim, PE // Location: Topeka, KS // Years of Experience: 15
Construction Project Manager

Wade's role on Benesch's construction management projects have included technical design, pavement evaluation and design, site observation and testing, coordination and public involvement/outreach. Wade serves state and local public agencies and private clients by providing construction management, engineering design and project management on private, local and state level projects which also includes several federal-funded projects. Construction management on municipal facilities have also included water and wastewater treatment facilities.

Scott Schneider, PE // Location: Kansas City, KS // Years of Experience: 31
Structural Lead
With over 31 years of experience, Scott is an experienced bridge engineer with demonstrated success in the design and plan preparation of conventional highway bridges and transportation related structures. Scott possesses excellent communication skills and has the experience of teaming with multiple disciplines on large highway interchange projects and smaller bridge replacement projects.

Michael Stewart, PE // Location: Topeka, KS // Years of Experience: 18
Civil Support
Michael has 18 years of experience that includes project management, roadway design and construction administration. He's well-versed in all elements of roadway design, including horizontal alignments, cross sections, intersection geometrics, traffic control, cost estimation, technical specification writing, QC reviews and Civil-3D Software.

Jim Jussel, PE, PTOE // Location: Kansas City, KS // Years of Experience: 26
Traffic Lead
Jim will lead traffic engineering and transportation planning services. He has over 26 years of experience of which 19 were spent in Kansas. Jim has provided multiple corridor studies in Kansas, Missouri, Nebraska, Nevada and North Dakota. He has completed a variety of traffic engineering studies and has designed intersection improvements that include traffic signals, roundabouts and geometric lane improvements. Jim has also recently completed corridor and road diet studies in Topeka on 8th Avenue, 6th Avenue and North Kansas Avenue.

Kirby Demott, PE // Location: Kansas City, KS // Years of Experience: 37
Mechanical / Electrical Lead
Kirby serves as Benesch's MEP Department Leader and project manager on projects involving design of HVAC, plumbing and other mechanical systems. He is responsible for overseeing the performance of contracts from proposal to design and through construction. This includes preparation of design drawings, specifications and cost estimates. Kirby works closely with other design team members to ensure a comprehensive and well-coordinated design package. Kirby has a broad base of industrial and commercial engineering experience, including both new construction and renovations.

Steve Roth, PE // Location: Kansas City, KS // Years of Experience: 24
Environmental / Permitting
Steve has over 24 years of experience as a design engineer and project manager on transportation and municipal projects. Many of these project such as roadway reconstruction and widening, culvert replacement, streamway stabilization, and others have required extensive permitting with local, state and national agencies. The key to success in obtaining permits, is engaging with the permitting agency early in the design process. Given the lengthy permit review period that some permits require, by engaging early with the permitters, Steve is able to minimize or completely eliminate any delays to the design schedule caused by the permitting agency.

Benesch's Topeka Team

Our Topeka Office staff have long track records of working directly with the City of Topeka Public Works and Utilities Departments, executing engineering projects and bringing them to a successful bid letting. This includes over 20 projects in the last year and several dozen more while Benesch staff were with previous employers.

Our Team is also currently in the contracting stage of performing Traffic Engineering On-Call Services for the Public Works Department. This will include providing technical reviews and comments for private development projects as well as other consulting projects. It is expected that this assignment will begin in the next few weeks as signed contracts are received.

PROJECT TEAM RESUMES

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Brad Johnson, PE

Project & Program Manager

Brad Johnson has over 25 years of municipal engineering, project management and design experience that includes transportation systems, storm drainage systems, utility systems, and private development engineering. He has a diverse background and has spent significant time in both the private sector and public sector and has managed various multi-discipline projects throughout his career. His experience includes conducting public information meetings, and preparation/ coordination of Federal, State, and Local environmental permitting applications. He has also represented many small municipalities over his career as an On-Call City Engineer including Osage City, Valley Falls, Silver Lake, Hiawatha and Iola.

City of Topeka, KS - Stormwater Plan Reviews*

Project Manager: Brad was the Project Manager for with an on-call contract with the City of Topeka to review stormwater plan reviews of submitted plats, site plan reviews, and building permits to ensure that approved plans met all City of Topeka Design Standards and associated Municipal Codes and Policies. Written comments were prepared for each plan review and provided to City Staff. Regular meetings occurred with City staff and occasionally design consultants to discuss the plan reviews and comments provided. Access was made available to Citiworks to download development plan submittals and upload of comments. Bluebeam Studio was used to manage and collect comments.

City of Topeka, KS - Kansas Avenue (Morse St. to Soldier St.)

Project Manager: Involved the design of Kansas Avenue from Morse St. to Soldier St. including full depth asphalt pavement replacement, new concrete intersections at Morse St. and Paramore St., and new pedestrian push button signals with interconnections between the two signalized intersections at Morse St. and Paramore St. Duties also included management and coordination of completion of a waterline relocation with another consultant from Morse St. to St. John St. The bid schedule necessitated the need to split the project over two construction seasons with multiple phases of traffic control to allow Kansas Avenue to be open to through traffic throughout the duration of construction.

City of Topeka, KS - SW 17th Street, I470 to Wanamaker and Westport

Project Manager: Brad is currently managing the full road improvement services on 17th Street from Wanamaker Road to I-470 and Westport Drive from 17th Street to Wanamaker Road due to pavement deterioration beyond the point of partial or full-depth joint repair methods. Pedestrian and bicycle accommodations are important to the Topeka community, Benesch replaced failing sidewalk panels and noncompliant ramps with ADA accessibility. The project also includes the design of a new storm sewer system and water line replacement.

UG of Wyandotte County & Kansas City, KS - On-call MS4 Program Management

Project Engineer: Through an on-call contract, Brad assisted with rewrites of the UG's Post Construction BMP and Erosion and Sediment Control Ordinances. As a part of the overall ongoing MS4 Program Management work, Benesch was tasked with the review and update to the stormwater ordinances related to illicit discharge detection and elimination, Post Construction BMP's, and Erosion and Sediment Control.

City of Topeka - Biennial Bridge Inspection and Asset Management Plan

Project Manager: Brad is currently managing the Biennial Bridge Inspection and Asset Management Plan project, including Topeka's 101 bridge, which continues efforts in asset management planning (AMP) services to the City of Topeka. Brad is overseeing development of standardized procedures, preparation of asset management plans, data collection tool creation, built GIS interface platforms and data collection.

Education
BS, Civil Engineering, Kansas State University

Years of Experience: 25

Registrations and Certifications
Professional Engineer:
Kansas (16495)

** Denotes projects completed with another firm*

Brad served as City Engineer for the City of Salina, Kansas for five years where he managed a street capital improvement program, and prioritized projects based on available funding. He has extensive experience with stormwater design projects and specifically with Topeka Stormwater.

He currently serves as a Senior Project Manager and is tasked with growing a presence within the Topeka, Kansas market for Benesch.

Brad is also well-versed in managing projects through the City's Citiworks system.

REFERENCES:

Braxton Copley, Director of Utilities
City of Topeka
bcopley@topeka.org
(785) 368-2527

Brian Faust
City of Leavenworth
brian.faust@firstcity.org
(913) 684-0356

Rob Krewson, PE

Principal-in-Charge

As Principal-in-Charge, Rob will leverage 25 years of applicable civil and municipal engineering improvement projects throughout Kansas and Missouri to ensure the proper staff and resources are dedicated to your project to deliver on time, within budget and at a quality level meeting your expectations. His broad experience in design and plan preparation, as well as construction engineering, allows him to guide and position staff for success.

City of Overland Park, KS - On-Demand Traffic Engineering Services

Principal-in-Charge: Rob provided technical oversight and quality control assurance for review of significant traffic impact studies for large mixed-use developments and review of developer funded public improvement plan submittals. Services also included providing support for the City's TIS Guidelines and coordination with City staff on a number of traffic related items.

City of Olathe, KS - 135th Street & Pflumm Road

Principal-in-Charge: Project involved designing the intersection using both Olathe and Overland Park design standards. Signal modification design was completed using Overland Park standard details but with Olathe black pole specifications. The design includes developing interconnect plan to Greenwood Street and modifying the existing street lighting circuits located with the median.

Cities of Lansing & Leavenworth, KS - K-7 & Eisenhower Road

Principal-in-Charge: The design involved developing multiple concepts to evaluate widening on the east, widening on the west and both sides. The preferred alternative was to widen on the west side of K-7. The project included the design of a new traffic signal per City of Leavenworth standards and coordination with Operation Green Light. Rob serves as the primary point of contact, provides quality control/assurance, and provides technical oversight of Benesch's services.

KDOT - 18th Street Bridge Replacement Study, Kansas City, KS

Project Principal: Provided oversight for efforts to coordinate with the key stakeholders who have influence or authority on the solution for the 18th Street Bridge, including the Unified Government WyCo/KCK, KC Terminal Railway, USACE, Kaw Valley Drainage District, and adjacent business and neighborhood groups. After establishing criteria and constraints, the team developed high-level design concepts and conducted a screening process based on criteria and evaluation factors developed with KDOT, including cost of construction and maintenance, construction phasing, traffic and safety, environmental constraints and right-of-way impacts. The final evaluation led to the identification of a preferred alternative.

Kansas City, MO - Streetcar Main Street Extension

Project Principal and Technical Lead: Rob led Benesch's ongoing services supporting the City, the Streetcar Authority and RideKC with technical support during the design and construction phases of this $370 million project to extend the City's Streetcar line from Union Station to the Plaza and UMKC (3.2 miles). Services included plan review, comment tracking, management support, field staffing for utility and construction observation.

City of Salina, KS - Downtown Streetscape Improvements *

Project Manager and Design Lead: Preliminary, final design and construction drawings for streetscape improvements to four blocks of Santa Fe Avenue which is the City's "Main Street". Project included extensive public involvement and innovative design solutions to enhance the look and functionality of the City's downtown area.

Education
MBA, Baker University

BS, Civil Engineering, University of Missouri - Science & Technology (MoS&T)

Years of Experience: 25

Registrations and Certifications
Professional Engineer:
Kansas (16299)
Missouri (2006000103)
Colorado (47429)

Volunteer: Planning Commissioner for City of Overland Park, KS

** Denotes projects completed with another firm*

Rob acts as Principal-in-Charge for all of our recent Kansas On-Call Contracts including:

- Unified Government of Wyandotte County/KCK
- Overland Park On-Demand Traffic
- Manhattan, KS - Engineering On-Call
- Kansas City, MO - Structural On-Call
- Independence, MO - Engineering On-Call
- Clay County, MO - Engineering On-Call
- KCATA - Engineering IDIQ On-Call
- KDOT - As-Needed Construction
- KDWPT - Civil/Structural On-Call
- KDADS - MEP On-Call
- MoDOT - NW District, Bridge Division, SW District On-Call
- Ottawa Airport - 5-Yr On-Call
  Junction City Airport - 5-Yr On-Call
- Butler, MO Airport - 5-Yr On-Call

REFERENCES:

Mark Montgomery, PE
KCMO
mark.montgomery@kcmo.org
(816) 513-2761

Dan Stack, PE
City of Salina
dan.stack@salina.org
(785) 309-5725

Wade Heim, PE

Construction Project Manager

Wade Heim is Benesch's Construction Group Manager with a main focus on CM services for state and local agencies. Many of his projects involve KDOT oversight and federal funding. His excellent people skills and broad experience with multi-million-dollar projects, coupled with the required training and certifications, have proven to be a successful combination. His involvement with project audits at both the state and federal levels has given him a solid understanding of the key issues and documentation required for KDOT projects.

Miami County, KS - Culvert Replacements

Construction Manager: Benesch provided construction management and testing at the site of eight culverts, from just north of the K-149/US-56 junction to just south of the K-149/K-4 junction in Morris County, Kansas. Benesch provided management and inspection of grading, the RCBs, asphalt pavement and seeding.

KDWPT - Woodson County State Fishing Lake-Outlet Tower Repairs

Construction Manager: Through our on-call with KDWPT, Benesch provided consultation on repairs to the Fishing Lake outlet tower. The dam, classified as size-class "4," hazard-class "A" (low hazard), is located on a tributary of Sandy Creek. It was constructed in the 1930s. While some repairs had been made to the tower since its construction, there were multiple issues needing to be addressed: (1) replacement of cast iron pipe (CIP) outlet; (2) repair to the outlet tower; and (3) outlet tower valve rehabilitation.

Unified Government of Wyandotte County - Bridge #66 and #220 Construction Services

Construction Manager: As part of the overall bridge asset management services Benesch provides the UG, our team designed and inspected two structures in Wyandotte County to determine the necessary repairs. Bridge #66, which carries Kansas Avenue over Turkey Creek, is a prestressed double-tee design. Following completion of the design, Benesch oversaw the construction repairs to the deck, barriers, new gabion walls along the channel and substructure modifications. Structure #220 was an undersized RCB that required replacement. A larger multi-cell structure was constructed along a new alignment. Roadway upgrades, new inlets, roadway pipes and gabion walls along the channel were also constructed. Considerable coordination was required for multiple utilities, traffic control and easement challenges.

KDOT - Union Pacific Rail Realignment for K-18 Highway

Construction Engineer: Coordinated the realignment of UPRR tracks in response to KDOT's relocation of the adjacent K-18 Highway. Benesch managed the project's construction, which entailed realigning over two miles of track. In addition to the new track, Benesch was the resident project representative for the construction of three bridge structures, responsible for all inspection, field tests and lab testing as well as geotechnical work for this project.

City of Manhattan, KS - K-18/K-113 Diverging Diamond Interchange (DDI)

Construction Engineer: Provided management and oversight of field staff for the construction of a new diverging diamond interchange at K-18 and K-113 in Manhattan. This LPA project was administered through the Wamego KDOT office in District 1. Major items of work as part of the new interchange included asphalt pavement, traffic signals, concrete barrier wall, concrete medians, and signage/striping.

City of Lansing, KS - DeSoto Road Improvements

Construction Engineer: Provided management and oversight of field staff for the reconstruction of DeSoto Road in Lansing. This LPA project was administered through the Bonner Springs KDOT office in District 1. Major items of work as part of the project included precast RCBs, retaining walls, storm sewer, asphalt pavement, traffic signals, concrete medians, multi-use trail and signage/striping.

Education

BS, Civil Engineering with Construction Emphasis, Kansas State University

Years of Experience: 15

Registrations and Certifications

Professional Engineer:

Kansas (22046)

KDOT Certified Inspector (# 3236):
- Basic Inspection
- Concrete Field Inspection
- Asphalt Paving Inspection
- Structures

Troxler Nuclear Gauge Certification

Wade has managed the following on-call contracts:

- KDOT LPA
- KDOT Inspection
- Kansas Department of Wildlife and Parks
- City of Manhattan
- Unified Government of KCK/WYCO
- Airports - Concordia, Ellsworth, Clay Center, Ottawa, Hays, Great Bend, Parsons

REFERENCES:

Matt Mackeprang
KDOT, District 1 Area 5
matt.mackeprang@ks.gov
(785) 456-2353

Amy Lange
City of Concordia
citymanager@concordiaks.org
(785) 243-2670

Michael Stewart, PE

Civil Engineer

Mr. Stewart has 18 years of experience that includes project management, roadway design and construction administration. He's well-versed in all elements of Roadway Design, including horizontal alignments, cross sections, intersection geometrics, traffic control, cost estimation, technical specification writing, QC Reviews and Civil-3D Software.

City of Topeka, KS - SW 17th Street, I470 to Wanamaker and Westport

Assistant Project Manager: Mike is assisting the full road improvement services on 17th Street from Wanamaker Road to I-470 and Westport Drive from 17th Street to Wanamaker Road due to pavement deterioration beyond the point of partial or full-depth joint repair methods. Pedestrian and bicycle accommodations are important to the Topeka community, Benesch replaced failing sidewalk panels and noncompliant ramps with ADA accessibility, and introduced a shared use path. The project also includes the design of a new storm sewer system and water line replacement.

City of Topeka - SE 7th & Quincy Traffic Study & Design

Assistant Project Manager: This project brings together various engineering disciplines to enhance the quality of life for all Topekans that use this downtown intersection. A traffic study was completed showing a road diet for the stretch of Quincy from 6th to 8th is appropriate. The road diet will consist of converting the existing five-lane corridor (with limited on-street parking) to a three-lane segment with parking and bike lanes on both sides of the street. Additionally, the traffic study concluded that the traffic signal can be removed and the intersection can safely be converted to stop-control. Various concepts were explored to optimize bicycle convenience, safety, and parking accommodations. For added pedestrian safety, the intersection will be retrofitted with bulb-outs to facilitate safer crossing and enhance aesthetics. The bulb-outs introduce the opportunity to incorporate stormwater quality BMP's in this area of the city surrounded by ample amounts of impervious downtown development. The bulb-outs and the new BMP's require significant stormwater upgrades to the existing underground system. The project will construct coincidently with a separate waterline replacement and mill/overlay project. The projects are coordinated and will bid as one package.

City of Topeka - S 29th & Kansas Intersection

Project Manager: This project involved full depth pavement replacement of the north leg of the intersection, along with a mill/overlay of the remaining part of the intersection. The existing median in the north leg, along the with the existing pavement will be replaced with new concrete non-reinforced dowel jointed pavement. Benesch evaluated the sidewalk ramps and determined them to be in good condition and fair ADA compliance, therefore they were not replaced with the project. Perhaps the biggest challenge with this project was the full closure of Kansas Avenue for a period of about a month. Kanas Avenue is a crucial arterial for many commuters. Care was taken to develop the best detour route available, as well as providing temporary crosswalks to keep pedestrian access available at all times. An incentive of $1,000 a day was included in the contract to encourage the contractor to open this critical intersection as soon as possible, lessoning the burden on the community.

City of Topeka - Pavement Maintenance Crack Seal Program

Project Manager: This project involved planning a four-year cycle for crack sealing the asphalt streets throughout the City of Topeka. Street preservation is an important goal for a city with so many lane miles to maintain. The City contracted previously to have PCI values for the entire street inventory updated. Bid documents were prepared for crack sealing the southeast quarter of the city in 2021. Each segment of street within the southeast quadrant was sorted by PCI range so that quantities could be developed for various conditions of pavement. This allows the bidding contractors to apply different unit prices for the various conditions of street. Color coded maps were developed and included in the bid documents to supplement the street lists. These segments of streets will be micro-surfaced in a project to follow in 2022, then the cycle will repeat for the northeast quadrant later that year, followed by the northwest, then southwest quadrants in subsequent future years.

Education
BS, Civil Engineering, Kansas State University

Years of Experience: 18

Registrations and Certifications
Professional Engineer:
Kansas (20084)
Missouri (2015018580)

** Denotes projects completed with another firm*

Michael has a long history working with the City of Topeka. Including projects in every region of City. He grew up here and lives here now. "It's great to see my past projects and benefit from them on a daily basis, but even more satisfying is knowing these projects improve the quality of life for my friends and neighbors."

REFERENCES:

Brian Faust
City of Leavenworth
brian.faust@firstcity.org
(913) 684-0356

David Lee
Franklin County
dlee@franklincoks.org
(785) 229-3550

Jeff Hunt
Deputy Director of Public Works
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(785) 251-6081

Jim Jussel, PE, PTOE

Traffic Engineer

Jim has 26 years of experience as a professional traffic operations engineer. His project experience includes traffic impact studies, pedestrian safety studies, traffic signal design, roundabout analysis and design, roadway design, street lighting and intersection geometric improvements. His experience also includes integrating traffic calming measures in traffic design and creating pavement marking and signing plans.

City of Topeka - 6th Avenue Corridor Study

Project Manager: The corridor study of 6th Avenue from SW Topeka Boulevard east to SE Branner Trafficway evaluated existing traffic conditions and alternative roadway sections to provide the addition of bike lanes and preservation of on-street parking. Leading the study, Mr. Jussel determined that the conversion of the five-lane roadway to a three-lane section would still operate with acceptable levels of service with additional recommended enhancements, including traffic signal interconnect and improved vehicle detection. The study included a sensitivity analysis to determine how the three-lane section would operate with additional traffic from potential I-70 closures.

City of Topeka - 8th Avenue Corridor Study

Project Manager: Completed corridor studies for both 8th Avenue, from SW Topeka Boulevard to SE Quincy Street, and Kansas Avenue from 1st Street north to Gordon Street. Detailed traffic analysis was completed to evaluate the existing conditions and a proposed three-lane section for 8th Avenue. The 8th Avenue corridor study included pavement marking alternatives to implement on-street bike lanes. The Kansas Avenue corridor study evaluated existing traffic conditions and the proposed improvements identified in the Topeka Fast-Track Bike Plan Study. Kansas Avenue study included the development of typical sections and pavement marking alternatives to enhance bike and pedestrian traffic across the Kansas Avenue bridge.

City of Overland Park, KS - Traffic Impact Study Peer Review

Project Manager: Completed the review of the traffic studies two large mixed-use developments proposed in Overland Park. Jim assisted planning staff by provided a detailed technical review of the consultants traffic analysis files. The review also included assisting City staff in determine the maximum amount of square footage the existing street system can support.

Cities of Lansing & Leavenworth, KS - K-7 & Eisenhower Road

Project Manager: Design of intersection improvements for K-7 and Eisenhower Road which is located on the border of Lansing and Leavenworth, KS. The design involved developing multiple concepts to evaluate widening on the east, widening on the west and both sides. The preferred alternative was to widen on the west side of K-7. The project included the design of a new traffic signal per City of Leavenworth standards and coordination with Operation Green Light.

City of Kansas City, MO - Front Street Corridor Improvements

Traffic Engineer: Completed a study and traffic analysis of Front Street, from I-35 to Universal Avenue, a highly industrialized route lacking adequate vehicle and pedestrian capacity. Study findings recommended design improvements such as pavement replacement, intersection improvements and new traffic signals, new curb and gutter, sidewalks and trails and signing and lighting. Design included reconfiguration of the Chouteau Trafficway and Universal Avenue intersections, a railroad grade separation at Kansas Avenue and sidewalks added to give pedestrian walkability to the route.

Education

BS Civil Engineering,
University of Nebraska-Lincoln

Associate Degree Architectural Drafting, Southeast Community College

Years of Experience: 26

Registrations and Certifications

Professional Engineer:
- Colorado (56107)
- Florida (96339)
- Missouri (2000173303)
- North Dakota (PE-7526)
- Indiana (11900677)
- Kansas (15605)
- North Carolina (42989)
- Nebraska (E-13531)
- Texas (138124)

NCEES

Professional Traffic Operations Engineer, National, 2003

IMSA certified in Work Zone Traffic Control Safety and Roadway Lighting Specialist Level 1

Jim's City of Topeka experience includes the following projects:

- 6th Avenue Corridor Study
- 8th Avenue Corridor Study
- North Kansas Avenue Corridor Study
- 7th & Quincy Intersection Analysis

REFERENCE:

Tony Meyers
Overland Park
tony.meyers@opkansas.org
(913) 895-6036

Kristina Ericksen, P.E., PTOE
Former City of Topeka Traffic Engineer
Kansas Turnpike Authority
KEricksen@ksturnpike.com
(785) 274-3655

Scott Schneider, PE

Structural Lead

With over 31 years of experience, Scott is an experienced bridge engineer with demonstrated success in the design and plan preparation of conventional highway bridges and transportation related structures. Scott possesses excellent communication skills and has the experience of teaming with multiple disciplines on large highway interchange projects and smaller bridge replacement projects.

City of Topeka, KS - SW 17th Street, I470 to Wanamaker and Westport

Structural Engineer: Assisted with coordination and design of I-470 bridge approach slab replacement on the project. Overall project includes full road improvement services on 17th Street from Wanamaker Road to I-470 and Westport Drive from 17th Street to Wanamaker Road due to pavement deterioration beyond the point of partial or full-depth joint repair methods. Pedestrian and bicycle accommodations are important to the Topeka community, Benesch replaced failing sidewalk panels and noncompliant ramps with ADA accessibility. The project also includes the design of a new storm sewer system and water line replacement.

KDOT - K-177 Shoulder Widening Phase B

Structural Engineer: Managing the preliminary and final design and plan completion for two bridges on this shoulder widening project to be constructed in 2024.

KDOT - US 54 Discovery Phase Bridge Replacement

Structural Engineer: Involved in the development of bridge replacement concepts for the US 54 bridge over the Walnut River.

KTA - 2021 RCB Replacements 141.6 and 141.9

Structural Engineer: Managing the preliminary and final design and plan completion for two box culverts.

City of Manhattan, KS - Casement Drive Reconstruction

Structural Engineer: Managing the preliminary and final design and plan completion for two box culverts.

Arkansas City, Kansas - Kansas Avenue over BNSF Railway *

Structural Engineer: Managed final design and plan preparation for a three-span prestressed concrete beam bridge over BNSF Railway. Construction substantially completed in 2011.

County of Leavenworth, KS - On-Call Engineering Services *

Structural Engineer: Provided review of bridge plans for county projects. Reviewed inspection reports of drainage structures on routes used for proposed haul roads of private developers.

City of Kansas City, MO On-Call, Beardsley Road Bridge Repair *

Project Engineer: Managed the design and detail completion for the repair plans of this fire damaged structure.

Robinson Street Improvements, Norman, Oklahoma*

Structural Engineer: Managed the final design and details for a steel rolled beam railroad bridge over Robinson Street and four cast-in-place concrete retaining walls. This project eliminate an at grade crossing between BNSF Railway and US 77 (Robinson Street).

City of Overland Park, KS - Quivira Road, 159th Street to 179th Street*

Structural Engineer: Managed final design and plan completion for a pair of four-span prestressed concrete beam bridges over Coffee Creek, a pair of three-span reinforced concrete haunched slab bridges over Coffee Creek Tributary and a double cell box culvert bridge.

Education
Bachelor of Science in Civil Engineering, University of Kansas
Years of Experience: 31

Registrations and Certifications
Professional Engineer:
Kansas, (13574)

American Society of Civil Engineering (ASCE), Member

** Denotes projects completed with another firm.*

Scott's has extensive experience working with multiple disciplines. His City of Topeka experience includes SW 17th Street, I470 to Wanamaker and Westport.

REFERENCE:
Tony Rome
Project Manager
City of Overland Park
tony.rome@opkansas.org
(913) 895-6001

Kirby Demott, PE

MEP Lead

Mr. Demott is the MEP Group Leader and serves as our project manager on projects involving design of HVAC, plumbing and other mechanical systems. As such, he is responsible for overseeing the performance of various contracts from proposal to design, and through construction. This includes preparation of design drawings, specifications, and cost estimates. Kirby works closely with other design team members to ensure a comprehensive and well-coordinated design package.

Unified Government of Wyandotte County - MEP On-Call Experience

Project Engineer: Benesch has a long-standing relationship with the Unified Government of Wyandotte County/Kansas City, Kansas facilities. Many of our projects have involved renovation of existing facilities, sites' systems and equipment. These projects present many unique challenges like construction staging and maintaining operations of infrastructure during construction. Benesch's successful performance record on projects of this type– project experience demonstrates our ability to evaluate existing systems, present effective solutions and perform work while buildings remain in operation.

Kansas Department of Aging and Disability Services (KDADS) - On-Call MEP

Project Manager: Included on-call services for the Kansas Department of Aging and Disability Services. Benesch provided mechanical, electrical and plumbing engineering services on many small projects. Duties under this contract included design services, bidding services, budgetary and final cost estimating, and construction observation. Projects completed at Parsons State Hospital & Training Center included upgraded Electrical Switchgear; Sewage Grinder Installation; Exterior Campus Lighting Study; Cottage HVAC Upgrade - Phase I; Cottage HVAC Upgrade - Phase II; Campus-wide PA System Replacement; Water Main Valve and Condensate Receiver Replacement; Rewire Cottages, Phases 1-4; Sewage Lift Pump Replacement, Three Cottages; and Blowdown Heat Exchanger and Various Mechanical Improvements. Projects completed at Osawatomie State Hospital included Biddle Laboratory HVAC Upgrade; Water Quality Study; Natural Gas Regulator Station Replacement; Site Utility Plan; and Chilled Water Line Insulation Replacement and Condensate Pump Installation.

State of Kansas - Docking State Office Building Cooling Tower, Topeka, KS

Project Manager: Benesch was selected to perform a study of the cooling towers serving the chilled water system for the Docking State Office Building in Topeka. As a result of that study it was recommended that the existing towers be replaced with a new custom concrete cooling tower structure. Benesch was able to perform all of the civil, structural, mechanical, and electrical engineering for this project in-house. The structure was designed to be a 3-cell tower that could be expanded to 5-cells in the future. Benesch was responsible for the design services, budgetary and final cost estimating, bidding services, administering contractor pay requests and change orders, and construction observation.

Kansas Division of Facilities Management – MEP On-Call

Project Manager/Lead Mechanical Engineer: For nine years Benesch has provided mechanical, electrical and plumbing engineering service to the Division of Facilities Management utilizing a State of Kansas on-call contract. These were typically small projects (less than 250K), mostly within buildings located on the Capitol building grounds in Topeka. Projects in the Landon State Office Building included new emergency generator switchgear, an electrical redundancy study, a UPS replacement, and a new exhaust system for the emergency generators. Improvements to the Curtis Building included new air conditioning for a server room, and a new sidewalk snow melt system. Upgrades to the Judicial Center included new a new HVAC unit for an IT room, and fire sprinkler head relocations in areas being remodeled. Lastly, in the Docking State Office Building we designed new electrical switchgear, and in the Statehouse a new UPS was specified.

Education
BS, Mechanical Engineering Technology, Kansas State University

Years of Experience: 37

Registrations and Certifications
Professional Engineer:
Kansas (12753)
Colorado (50176)
Nebraska (15665

Kirby has a long history of MEP on-call experience including the following clients:

- Unified Government of Wyandotte County/Kansas City, Kansas Facilities
- Kansas Department of Aging and Disability Services (KDADS)
- Kansas Department of Wildlife, Parks and Tourism (KDWPT)
- State of Kansas

REFERENCES:

John Golightley
Kansas State Hospital Commission
John.Golightley2@ks.gov
(785) 296-3772

John Kelly
UG Buildings & Logistics
jkelly@wycokck.org
(913) 486-2461

Steve Roth, PE

Environmental/Permitting Public Infrastructure

Steve's experience includes the rehabilitation or reconstruction of municipal streets and parkways, in addition to his experience in the design of urban and rural highways and interchanges. Many of these projects have included multiple permitting elements such as; KDHE NOIs, USACE 404-Nationwide and Individual Permits, as well as other local or statewide permits. For the design aspect of these projects, he has developed horizontal and vertical alignments; completed hydrologic analyses of culverts and bridges; produced cross sections; developed pavement marking, erosion control, and lighting; calculated construction quantities; coordinated utility relocations; and developed construction estimates. His experience includes new construction, reconstruction and rehabilitation projects for both urban and rural settings.

Fairfax Drainage District - On-Call Engineering Consultant

District Engineer of Record: Benesch has continuously provided engineering assistance to the Fairfax Drainage District since 1983. During this time, Benesch has been involved in the expansion of the levee relief well system, rehabilitation of multiple storm water and relief well pump stations, coordination with the USACE on behalf of the District, manpower and inspection services during the flood of 1993, prepared Levee Certification documentation per FEMA guidelines, and many other projects. To assist the District in prioritizing internal drainage improvements, Benesch has developed a GIS system and InfoWorks hydraulic model that assist the District in determining the impacts of development.

Unified Government - MS4 Program Management Services

Environmental Permitting/Project Engineer: Benesch has acted as an extension of staff in the development and execution of the Stormwater Management Plan for the Unified Government of Wyandotte County / Kansas City, Kansas since 2010. In addition to assisting staff in multiple compliance activities, Benesch has performed multiple studies to identify, analyze and reduce sources of potential water pollution within the County. These efforts have also included identifying and developing strategies to protect and enhance existing streams.

State Avenue, 47th to 69th Street

Project Manager: State Avenue is a four lane major arterial roadway running east-west in Kansas City, Kansas. It is designated as US-24 Highway with an Average Annual Daily Traffic count of 13,900 vehicles. The purpose of the project was to make major improvements between 47th Street, just west of the I-635 interchange, to 69th Street, east of the Turner Diagonal. Beyond the typical mill and overlay project, the City also elected to make several improvements within the roadway of State Avenue to enhance its appearance. This led to the removal of the existing concrete medians and their replacement with landscaped medians. The landscaped medians include zoned irrigation systems, under drain systems, engineered curbing, and retaining walls for the protection of both vehicle traffic and the plantings.

City of Kansas City, Kansas - North 29th Street Reconstruction

Project Manager. 29th Street in Kansas City, Kansas, between Minnesota and Nebraska Avenue required two distinct types of design. First, storm run-off onto 29th Street between Minnesota and State Avenue collected into a low area directly in front of a local small business. To provide positive drainage away from the business, the roadway profile had to be lowered two feet along this section of 29th Street. In addition, sidewalks were able to be accommodated, even with the significant change in grade. The section of 29th Street between State Avenue and Nebraska Avenue is within a residential neighborhood.

Education
BS, Civil Engineering,
University of Kansas

Years of Experience: 24

Registrations and Certifications
Professional Engineer:

- Kansas (16797)
- Missouri (PE-2005000037)
- North Carolina (43401)

Professional Affiliations
American Public Works Association – Kansas

Steve has a long history of on-call experience including the following clients:

- Unified Government of Wyandotte County
- Fairfax Drainage District
- Johnson County Public Works
- Kansas Dept of Wildlife and Parks
- City of Parkville, MO
- City of Manhattan, KS

REFERENCES:

Joe Barnes
UG of Wyandotte
jbarnes@wycokck.org
(913) 573-5700

Steve Dailey
Fairfax Drainage District
spdailey@sbcglobal.net
(913) 321-2260

Brett Blackburn
KDWPT
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(785) 296-8404


benesch