

# **2019 STATEMENT OF QUALIFICATIONS**

PROFESSIONAL SURVEYING & RIGHT-OF-WAY, ENGINEERING AND ENVIRONMENTAL SERVICES







smartservices-inc.com

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#### FIRM HISTORY AND OVERVIEW



# **SMART SERVICES, INC.**

is a woman owned professional consulting firm providing surveying and right-of-way, traffic engineering and data collection, and environmental services. We have extensive experience with state agencies, counties, townships, cities, and villages, and our lead professionals in each area have over 20 years of experience in their field. The company has DBE, State of Ohio EDGE, and City of Columbus FBE certification. From our two locations, we offer a wide range of services and utilize the latest equipment and technology to meet the needs of our clients and deliver projects on time and on budget.

#### **HISTORY**

Smart Surveying, Inc. was established in 1996 by Brian D. Smart, PS, to provide surveying services to the Central Ohio area. In the fall of 2011, majority ownership was sold to Kathleen Krock, a former ODOT bridge design engineer, and the name changed to Smart Services, Inc. to reflect the broader range of services offered.

#### SURVEYING & RIGHT-OF-WAY

Mr. Smart, a registered surveyor in Ohio and Arizona, is the Vice President of Smart Services and the Director of Survey and Right of Way Services. His years of experience with construction staking, ALTA, mortgage, topographic and boundary surveys provide the foundation of the company. Mr. Smart is assisted by the firm's Survey Manager, Samuel Stiltner, PS. Mr. Stiltner manages the day-to-day survey operations of the company. Together they provide high quality surveying and right of way services, while meeting your DBE and EDGE goal needs.

#### TRAFFIC ENGINEERING AND DATA COLLECTION

In 2013, Smart Services acquired Traffic Engineering Services Inc. (TES). TES was founded by Gerald L. Wilcox, P.E., P.T.O.E. in 1986 to provide quality traffic and transportation engineering services. That tradition is carried on by Smart Services Inc. today. Todd Stanhope, P.E., P.T.O.E. began his career in 1995 at TES and is responsible for the Traffic Engineering division at Smart Services. Mr. Wilcox continues to provide his expertise in a consulting capacity to our engineering staff. Smart Services has the resources to perform a full range of traffic engineering, traffic counts, and transportation planning services.

# **ENVIRONMENTAL SERVICES**

With the addition of Mitchel Strain in 2014, Smart Services expanded to offer environmental services. Mr. Strain has many years of experience with all aspects of the National Environmental Policy Act (NEPA) compliance including preparation of Environmental Assessments (EA), Environmental Impact Statements (EIS), Categorical Exclusions (CE) and other NEPA documentation. Mr. Strain's particular expertise is in wetland science, including delineation, creation, and restoration of wetlands for mitigation and wildlife habitat, Clean water Act Section 404 and 401 permitting, and design of constructed wetland treatment systems.

#### **PROFESSIONAL SERVICES & EQUIPMENT**



SMART SERVICES, INC. is a Central Ohio professional consulting firm providing surveying and right-of-way, traffic engineering and data collection, and environmental and permitting services. The company has DBE, State of Ohio EDGE, and City of Columbus FBE certification. We offer a wide range of services and utilize the latest equipment and technology to meet the needs of our clients.

SURVEYING		
SERVICES	EQUIPMENT/SOFTWARE	
Construction & Final Site Staking	Trimble SX10 Total Scanning Station	
ALTA, Mortgage, Topographic, & Boundary Surveys	Trimble S7 Robotic DR Plus Total Station	
FEMA Flood Mapping & Elevation Certificates	Trimble R8 GPS System	
Bathymetric Surveys	Trimble R10 GPS System	
Engineering, Route, & As Built Surveys	ODOT VRS Compatible Equipment	
Project Survey Control	Optical Levels	
CAD & GIS Services: Basemapping, Right of Way Plan Development, GIS Mapping	Microsoft Products	
Right of Way Plan Development – Limited & Complex	AutoCAD Civil3D, MicroStation	

#### TRAFFIC ENGINEERING AND DATA COLLECTION

SERVICES	EQUIPMENT/SOFTWARE
Traffic Operations & Design	(12) Miovision Cameras
Traffic Signal Design & Optimization	(25) Solid State Tube Counters
Traffic Impact and Access studies	(4) Jamar Radar Units
Traffic Counts	(9) Count Boards
Transportation Planning	Synchro
Interchange Justification/Modification Studies	SimTraffic
Safety Studies	HCS 2010
Non - Complex Roadway Design	SIDRA

#### TRAFFIC ENGINEERING AND DATA COLLECTION

NEPA DOCUMENTATION

ENVIRONMENTAL ASSESSMENTS(EA), ENVIRONMENTAL IMPACT STATEMENTS(EIS), & CATEGORICAL EXCLUSIONS(CE),

Baseline Biological Assessments, Habitat Evaluation Procedure (HEP) Analyses, Threatened & Endangered Species Surveys & Critical Habitat Assessments

**Ecological Surveys** 

Delineation, Creation, and Restoration of Wetlands for Mitigation and Wildlife Habitat

Clean Water Act Section 404 and 401 Permitting

Wetland Treatment System Design

Soil Evaluations

Waterway Permitting

**Environmental Documentation** 

Regulatory Coordination

Bicycle Facilities and Enhancement Design

TRU TRAFFIC

#### **QUALITY ASSURANCE PROGRAM**



# **Quality Assurance / Quality Control**

QA/QC starts with the proposal stage and is carried out through project completion. At the proposal stage, we talk with the Client and develop a clear scope of services. This allows for accurate understanding of the deliverable, knowing that it meets the Client's expectations. Once a project is awarded we evaluate the skills and experience of our staff and assign tasks accordingly. Our assigned project manager regularly communicates with the Client during the project, keeping abreast of issues, budget, and timeline. Once a project is completed we follow up with our Client to see that expectations were met. By nature of our professional disciplines, we are often in the role as a subconsultant. To maintain our relationships with the prime consultants, we must meet project deadlines – and that is why many of our clients become repeat clients. We also work with developers who have very stringent time requirements.

#### **Insurance**

Smart Services, Inc. maintains general (public) liability, automobile liability, and professional liability insurance through Hoffmann & Associates. A custom certificate of insurance can be issued based on project requirements.

#### Communication

Frequent and clear communication between us and the Client assures everyone is on the same page from proposal stage to completion of your project. Smart Services' assigned project manager will clearly and succinctly provide the Client a detailed update of the project progress and outstanding issues regularly. We know it is our Client's desire to have their projects considered a priority, and we accomplish this by being engaged in the project while keeping track of the project deadline, budget, and outstanding issues or concerns.

# **Technology**

Our firm is committed to utilizing the best available technology to help our employees do their jobs efficiently and effectively. Our employees are encouraged to investigate use of new technologies to improve our work product or to improve efficiency. Smart Services contracts with AlphaLink to maintain constant access to the internet as well as Green Light Technology Solutions to trouble shoot IT issues so that our workflow remains uninterrupted.

# **Innovative Approach & Cost Containment**

Our structure has built-in factors that allow us to meet deadlines and contain costs. Some of these are as follows:

- Our staff is qualified to do the job and we constantly communicate to prevent cost overruns.
  Overruns typically occur when staff is not properly trained, there is a lack of communication, or the
  scope of work is not clearly defined. Smart Services provides continuing education opportunities
  to its employees and encourages participation in related professional organizations so that they
  may provide the best service to our clients. Each division leader at Smart Services has at least
  twenty years of experience. This enables us to deliver an excellent product to our clients as well
  as provide leadership and guidance to our younger professionals.
- Smart Services uses Ajera, a sophisticated project management and accounting system. Weekly staff meetings are held to review project budgets, progress and staffing.
- All field crews are supplied with tablets and/or field books and are required to log project information to supplement the information collected electronically. Logs are reviewed by division leaders to ensure quality and accuracy.

#### **ODOT PREQUALIFICATIONS**



# **Survey and Right of Way**

Brian Smart, PS and Samuel Stiltner, PS, are prequalified with ODOT to perform:

- Limited R/W Plan Development
- Complex R/W Plan Development

# **Traffic Engineering and Data Collection**

Todd Stanhope, PE, PTOE is prequalified with ODOT to perform:

- Non-Complex Roadway Design
- Safety Studies
- Basic Traffic Signal Design
- Traffic Signal System Design
- Interchange Justification/Modification Study
- Bicycle Facilities and Enhancement Design

#### **Environmental Services**

Mitchel Strain, PWS, CPSS, CPSC is prequalified with ODOT to perform:

- Environmental Document Preparation-CE
- Environmental Document Preparation-Section 4(f)
- Ecological Surveys
- Stream and Wetland Mitigation
- Waterway Permits
- ESA Screening, Phase 1 ESA & Phase 2 ESA



# We stand behind our work and are proud of our success in meeting project deadlines and budgets.

Many of our clients are repeat clients which is a testament to our ability to complete projects to the satisfaction of our clients. Smart Services has never had a contract terminated or a claim against the firm. Below is a brief list of individuals and firms with whom we have worked that may be contacted as a reference.

Tom Warner Owner - Advanced Civil Design, Inc. 614-428-7750

Tina Wawszkiewicz Traffic Engineer - City of Dublin 614-410-4636

**Jared Knerr County Engineer - Licking County** 740-670-5280

**Dan Blechschmidt Traffic Engineer - City of Columbus** 614-645-1694

**Lori Duguid Associate Vice-President - Michael Baker Int.** 614-538-7604

**Pete Nix Engineering Program Manager - TetraTech Inc.** 614-289-0117

Katie Zehnder Ohio Office Leader - HNTB Ohio, Inc. 614-228-1007

Robert Riley Chief Deputy Engineer - Delaware County Engineer 740-833-2431

Patricia Wetzel Traffic Engineer - ODOT - District 9 740-774-8983

Ryan Bollo Traffic Engineer - City of Columbus 614-645-3946

Ron Bonnette Senior Engineer - ADR & Associates 740-345-1921



# **Church Street Storm Sewer Trunk Line Replacement**

#### Newark, Ohio

In 2015 the City of Newark, Ohio replaced a storm sewer trunk line along Church Street through the intersection at 30th Street. Smart Services Inc. and ADR & Associates teamed to provide engineering and design plans for a signal modification at the intersection and surveying and right of way services. Smart Services prepared a boundary and topo basemap for use in design showing all located features, existing utilities, one-foot contours, the existing right-of-way with centerline alignment, and adjacent property lines and owners. The Smart Services field staff located existing right-of-way and property lines, existing roadway with cross sections at 50' intervals as well



as intersection detail, existing visible utilities along with line locations based on utility plans, other existing above ground features, fronts of existing houses/buildings along the route, and ground shots to generate one-foot contours. Horizontal and vertical control points were established as well as elevations along the path of the proposed drainage. Smart Services provided legal descriptions and right of way plans for proposed right-of-way takes and proposed easements as requested for the \$2M project.

# **UIRF Sidewalks and Roadway 2017**

#### **City of Columbus**

As a subconsultant to Strand Associates, Smart Services completed the surveying services for the City's Urban Infrastructure Recovery Fund (UIRF) project which included establishment of project control, benchmarks, and reference points; topographic survey and base mapping; and determination of property lines, ownership and right-of-way encroachments at seven locations throughout Columbus. Smart Services also provided right-of-way plans for the project.

# Route Survey for Sidewalk Improvements, McCutcheon Road (3200 lineal feet) and Reed Road (4500 lineal feet)

#### Columbus, Ohio

A topographic survey was completed for design of sidewalks, curb ramps, and traffic signal accommodations and included location of all visible improvements, utilities, contours, boundary lines, right-of-way determination, and horizontal and vertical control for the \$1.4M project. Mr. Smart directed and reviewed field work (QA/QC), performed office calculations and research, reviewed drafting, and performed survey control calculations based on ODOT project control specifications.

# **LIC-SR16-18.20 Eastbound Exit Ramp Improvements**

#### Newark, Ohio

Smart Services provided the topographic survey, basemapping and right of way services for the Newark, Ohio project. The exit ramp was widened in 2017 to accommodate a right turn lane onto Church Street.





# **BEL-70-19.17 Interstate Rehabilitation Project**

#### **Belmont County, Ohio**

Smart Services provided the construction staking for the District 11 project as a subconsultant to Lash Paving during the 2016 construction season.

# Topographic Survey, ODNR, North Reservoir of the Portage Lakes

#### Akron, Ohio

The Portage Lakes, a series of lakes south of Akron, were created as part of this network of water supply reservoirs. The North Reservoir has 165 surface acres with a 10-foot average depth. As a subconsultant, Smart Services completed a preliminary survey on an approximately 30-acre site for the feasibility study for the dam and spillway improvements. Services included providing a basemap of existing utilities, GIS parcel lines, roadway profile, embankment profile and cross section, bathymetry, and horizontal and vertical control. Smart Services is teamed with prime consultant Tetra Tech to complete the survey portion of their ongoing dam and spillway design project.



# Springfield Air National Guard Base Topographic Survey

#### Springfield, Ohio

In 2018, Smart Services completed a topographic survey of the Springfield Ohio Air National Guard Base Building 151 as a subconsultant to Tetra Tech. Mr. Stiltner was the project manager and the project included project control, contours and elevations (digital surface model of the existing ground to generate one-foot contours and establish existing finished floor elevations at entry locations), drainage features, planimetric features, utilities and landscaping.

# **BRO-68-30.72, PID 93801**

#### **ODOT District 9**

The purpose of the project was to provide capacity improvements at the WB and EB ramp terminals at S.R. 32 and U.S. 68. The project was a design/build contract to restripe the US 68 bridge over SR 32 and to build left turn lanes, make radius improvements, and install traffic signals at the ramp interchanges. As part of the Design/Build Team, Smart Services' scope included surveying and the design of two traffic signals. Construction was completed in 2015.



# LIC-TR66-0055, LIC-TR228-0450, LIC-CR210-0190 **Bridge Replacement Surveys**

#### **Licking County, Ohio**

In 2017, Smart Services completed the survey tasks for the bridge replacement projects as a subconsultant to ADR & Associates for the Licking County Engineer's Office. Smart Services currently has a master services agreement with the Licking County Engineer for survey and right of way services.



# **Newark Interceptor Siphon Optimization Project**

#### City of Newark, Ohio

Smart Services, as a subconsultant to Hazen and Sawyer, Inc., is currently providing surveying services for the City of Newark project. The project involves a field survey of junction chambers, pump stations and siphons as well as the laser scanning of the inside of fourteen Combined Sewer Overflow (CSO) structures to provide dimensions and elevations for CSO upgrades.

# The Energy Cooperative On-Call Right-of-Way Staking

#### **Licking County, Ohio**

The Energy Cooperative is a not-for-profit energy enterprise that provides cooperative services for rural Ohio residents, including electric, gas and propane services. Smart Services has provided on-call Right of Way staking services for the Newark, Ohio based company since 2014.

# Village of Beverly Waterline Replacement Improvements Beverly, Ohio & Lauretta Drive Waterline Improvements

#### Steubenville, Ohio

A control survey was performed to establish site control. Construction staking of the proposed waterlines and an as-built survey of the constructed waterlines were performed for the \$1M projects. Topographic survey of the roadway was performed within the project corridor, including location of roadway and private improvements, utilities, drainage features, contours, and cross sections. Surveying was also provided for improvements to a lift station in 2016 and waste water treatment plant in 2017.

# **Elevation Survey for FEMA Flood Mapping,**

# **Licking County, Ohio**

As a subconsultant to ADR & Associates, Smart Services established existing elevations on several sites throughout the county for Base Flood Elevation determinations. As part of our services we researched bench mark data, determined appropriate datum, and performed GPS static and RTK observations, completed quality control, and acquired field data of cross-sections and bridge elevations.

# **Local Bridge Survey Projects**

#### **City of Newark Bridges**

- Cherry Valley Road for Gannett Fleming
- Church Street Bridge, Newark, Ohio for ADR & Associates
- Ohio Street Bridge for Burgess and Niple
- Manning Street Bridge for Burgess and Niple

#### **Licking County Bridges**

- TWP-320, TWP- 303, TWP-7 and LIC-CR128-0.97 for Gannett Fleming
- CR 203-3400 and CR-4000 for ADR & Associates
- 30th Street Storm Sewer & Roadway, Newark, Ohio for ADR & Associates
- York Road Emergency Bridge Replacement for ADR & Associates





# HAS-CR51-5.51 Right of Way Plans, PID 99473

In 2017, Smart Services completed Preliminary and Final Right-of-Way plan development submittal packages for RETTEW Associates for the bridge replacement project over the Gennessee & Wyoming Rail Line.

# Aberdeen Drive Waterline Improvement Project (5100 lineal feet),

#### Steubenville, Ohio

In 2015, as a subconsultant to ADR and Associates, Smart Services provided surveying services for the waterline improvement project. Smart Services completed a topographic survey, established site control for construction, determined existing roadway alignments and established right of way for the project.

# **Construction Staking, OSU Warner Library**

#### Newark, Ohio

Smart Services completed Construction Staking of the \$20 Million OSU Warner Library and Student Center. Smart Services was responsible for the highly accurate layout of 121 support column locations, foundations, sidewalks and parking areas.



# **Survey and Construction Staking for Site Development**

#### **Licking County Library**

- Main Library Renovation for Robertson Construction
- OSU Newark Maintenance Facility
- Etna Elementary
- Johnstown Elementary
- Hinderer Honda

#### For ADR & Associates

- Newark City Schools White Field Improvements
- Licking County Park District Canoe Launch
- Middleton Senior Living, Granville
- Kendal at Granville
- Village Roots

#### **For Summit Construction**

Chillicothe Elementary School

#### For RW Setterlin

- COTA Easton Transit Center
- McKinley Ave Phase 3A
- Krieger Court CNG Facility

#### For Granville Village Exempted School District

 Granville High/Middle School Campus Mapping

#### For Warren Local Schools

 Warren High/ Middle School Campus Mapping

#### For Nuway Inc.

- Johnstown Elementary Early Site Development
- Johnstown High School Early Site Development





# VAR - D10 - General Engineering Services ER 2018-3

Smart Services is on the Tetra Tech team to provide General Engineering Services on a task order basis in District 10 to assist the District in preparation of plans and related documents for Emergency Flood Event Projects (Landslides). The work includes survey, detailed plan preparation, preparation of right of way plans, geotechnical, and completion of selected environmental documents. Smart Services provides surveying and preparation of right of way plans as well as any needed environmental services.

# **Survey for Recent Landslide Projects**

- Village of Bellaire, Robinson Avenue
- Martins Ferry, 8th Street
- MOE-CR81-0.25, 1.55, 2.07, & 2.87
- MOE-CR12-11.10
- MOE-TR999-0.33
- MOE-536-2.84 (PID 107936)
- MRG-CR3-4.30 (PID 108546)
- MRG-CR2A-0.48 (PID 106387)
- MRG-CR2 Stockport
- PER-155-06.42
- MOE-CR43-07.40
- MOE-CR43-07.50



#### TRAFFIC ENGINEERING & DATA COLLECTION PROJECTS



# **ODOT District 4 Safety Study Counts**

In 2016, Smart Services conducted turning movement counts as a subconsultant to Parsons Brinckerhoff for safety studies in various locations throughout ODOT District 4. Field work was completed using MioVision cameras.

# **Miami University Traffic Counts**

#### City of Oxford, Butler County, Ohio

In 2016, Smart Services performed traffic counts as a subconsultant to Michael Baker International throughout the campus to be used in a traffic study. 13-Hour Turning Movement Counts were performed at 18 intersections. Counts included classification of vehicles (Cars, Trucks, and Bicycles on Road) and pedestrians/bicycles were counted in the crosswalks. This project also included pedestrian counts at multiple mid-block pedestrian crossings on the campus.

# **Brent Spence Bridge Traffic Count Studies**

#### Cincinnati, Ohio

In 2015, Smart Services conducted turning movement counts for 19 intersections in Covington, Kentucky; 8 intersections in Newport, Kentucky; and 17 intersections in downtown Cincinnati, Ohio. Our services included classification and recordation of pedestrian volumes. The studies were part of the Brent Spence Bridge replacement project. Smart Services completed the field work for the 44 intersections within  $1 \frac{1}{2}$  weeks using a combination of manual traffic count equipment and video cameras to collect the data.



# **Sawmill Road & Snouffer Road Intersection Analysis**

#### Columbus, Ohio

In 2016, as a subconsultant to CH2M Hill, Smart Services conducted turning movement counts at the Sawmill Road & I-270 (SPUI) interchange. Weekday-Saturday turning movement counts were also performed at multiple signalized intersections with classification of vehicles and pedestrians counted. Weekday-Saturday inbound and outbound volumes were taken at 7 unsignalized intersections as well.



# **MORPC Regional Model Validation Task Order**

#### Columbus, Ohio

Smart Services provided traffic counting services for the Mid-Ohio Regional Planning Commission, completing 10 task orders under the extended contract through 2017. Over 600 counts were performed and included vehicle volume counts, classification counts, and turning movement counts.

# Morse Road Traffic Counts for EMH&T

#### City of Columbus, Franklin County, Ohio

In 2017, counts were taken in the Morse Road Study area near Easton Loop, Stelzer Road, Cherry Bottom Road and the I-270 ramps. One-week link counts were provided at one location and link counts for a weekday were provided at 8 locations.

#### **TRAFFIC ENGINEERING & DATA COLLECTION PROJECTS**



# **Cannon Drive Area Counts for TransAssociates, Inc.**

#### City of Columbus, Franklin County, Ohio

In 2017, Twelve-Hour (7 AM to 7 PM) turning movement counts at six intersections and ramps along Cannon Drive at the Ohio State University were performed. Classification of vehicles (Cars, Trucks, bicycles on road) and pedestrians/bicycles in the crosswalks were included.

# **Dublin 161-33-Post-Frantz Intersection Study for Parsons Brinckerhoff**

#### City of Dublin, Franklin County, Ohio

Some of these counts were taken within an active work zone which required coordination in the field with the contractor as to where cameras could be mounted. In 2016, turning movement counts were taken at 5 signalized intersections with multiple approach counts. Link counts were taken on all eight ramps at the I-270 & US 33/SR 161 interchange with classification of vehicles.

# **Traffic Signal Design, Village of Coldwater**

#### **Mercer County, Ohio**

Smart Services is producing construction plans to ODOT standards as part of a planned street light project where the Village of Coldwater is planning to upgrade the existing traffic signal at 2nd Street (SR 118) & Vine Street. The signal design will be mast arms with luminaires and match to the extent possible the existing signal installations at 2nd Street (SR 118) & Main Street (SR 219) and Main Street (SR 219) & Market Street. Accessible pedestrian signals will be incorporated into the signal design.



In addition, construction plans will be produced to modify the signal at 2nd Street (SR 118) & Main Street (SR 219) to include Accessible Pedestrian Signals (APS). To accomplish this, four additional pushbutton locations will be established as part of the signal modification. Counts were obtained with MioVision cameras and a signal warrant analysis was performed.

# **JEF-43-7.42**

#### Wintersville, Ohio

Construction plans were prepared for two new traffic signals on SR 43 at Two Ridge Road and SR 646. The project also included modification to the two existing traffic signals at the US 22 & SR 43. The signals were interconnected with the existing signals at the US 22 & SR 43 interchange and an on-street master installed so a closed loop system was established.



# FRA-62-9.07 (Harrisburg Pike) Safety Study

#### Columbus, Ohio

As part of the study corridor with 6 signalized intersections, machine and manual turning movement counts were collected. Speed delay runs were performed and 344 crashes were plotted on diagrams. Recommendations for improvements were made to reduce the number of crashes and were incorporated into a plan that determined the benefits of interconnecting the signals.

#### TRAFFIC ENGINEERING & DATA COLLECTION PROJECTS



# **OLEN Site Expansion Traffic Study, OLEN Corp. and City of Columbus,**

#### Columbus OH

In 2014, Smart Services and ADR & Associates teamed to develop a traffic study and recommend intersection improvements for the City of Columbus on behalf of the OLEN Corporation for the approximately mile long corridor of U.S. 23 centered about the intersection of U.S. 23 and Rathmell Road in the City of Columbus due to a large expansion of the OLEN Corporation



aggregate facility. The traffic study included analyzing existing and future conditions at the U.S. 23 and Rathmell Road intersection and at a new separate intersection. The results of the traffic study led to the conclusion that a new entrance/exit intersection located ½ mile south of Rathmell Road for the new limestone plant facility would operate the best at the location. The firms completed the preliminary intersection design which included layout of turn lanes, radius returns, basic pavement markings, entrance location, sizing, drainage, and a conceptual span wire traffic signal layout. The project also included producing engineering layouts, signal warrant justifications, and construction cost estimations. Smart Services also provided right-of-way and surveying services for the project. This project was an example of our ability to work in collaboration with a private corporation and a public agency as part of a team that completed a project to the satisfaction of both entities.

#### **West Lane Avenue Sidewalks**

#### Columbus, OH

Construction plans were prepared for new traffic signal installations at the SR 315 ramps and Lane Avenue. The project also included a modification to the traffic signal at Lane Avenue and Kenny Road to add pedestrian signals and a westbound dual left turn phase.





#### **East State Street**

#### Athens, Ohio

The project included 7 signals as part of the installation of a closed loop system on E. State Street in the City of Athens. Time of day and traffic responsive plans were developed and entered the timing into the controllers and artery drive-throughs were performed to evaluate the different timing plans and were used as the basis of the final recommendation to run the system traffic responsive. A report outlined the procedures used to arrive at the recommended timing.



#### **MER-127-13.33**

#### Celina, Ohio

Construction plans were prepared for six traffic signals for an ODOT-let project. The signal installation utilized mast arms with decorative poles and bases. Timing plans were developed for signal coordination.

#### **ENVIRONMENTAL PROJECTS**



# **Coughlin Crossing, Delaware Development, LTD**

#### **Delaware County, Ohio**

Smart Services was asked to facilitate the environmental processes for the planned development. Historical structures and wetlands are present on the site. Smart Services provided the following services and is currently waiting for permit approval from the Corp of Engineers:

- Wetland Bank Coordination
- MOA Coordination and Compilation
- Threatened and Endangered Species
- PCN Documentation and Preparation
- NHPA Collection and Reporting
- Isolated Wetland Application Preparation
- Pre- and Post-Submittal Coordination



# Phase 1 Environmental Site Assessment, Licking County Board of Commissioners

#### Newark, Ohio

Smart Services completed a Phase I Environmental Site Assessment (ESA) for the Licking County Board of Commissioners at a site in the downtown business district in Newark, Ohio for an expansion of county facilities.

#### **Wetland Delineation**

#### **Clermont and Brown Counties, Ohio**

Smart Services recently completed a Waters of the U.S. (WOUS), including wetlands, delineation for the development of a proposed plan to develop the proposed 600-acre Nestlewood Solar development for Tetra Tech, Inc. located along Vandament Road, Tate Township, Clermont/Brown Counties, Ohio. The purpose of the delineation for the Site was to facilitate future development by identifying WOUS, including wetlands, which might require permitting under the federal CWA. The majority of the non-agricultural portion of the Site is wooded, with 61.3 acres considered jurisdictional forested or scrub/shrub wetland habitat and classified as Category 2 wetland. Emergent wetland was limited to 0.7 acres and was considered Category 1 wetland.



# **Jefferson County Trails Implementation Guidelines**

#### Jefferson County, Ohio

Smart Services provided guidance in the preparation of the environmental guidelines section as a subconsultant to ADR & Associates. The handbook was prepared for the Brooke, Hancock & Jefferson Metropolitan Planning Commission as a guide for the development of greenways, bikeways and trails in Jefferson County.

# **Proctor Center Wetland Mitigation Bank**

#### London, Ohio

Smart Services provided the wetland delineation, assessment and report for the Proctor Center in London, Ohio and created a conceptual mitigation plan as well. The firm will continue to provide assistance with plans to create a wetland mitigation bank.

#### **OWNERSHIP & MANAGEMENT**





**KATHLEEN KROCK** 

#### **President**

#### **Education**

BS in Civil Engineering, The Ohio State University, 1988

#### **Affiliations**

American Society of Highway Engineers

# **Professional Experience**

Ms. Krock began her career at ODOT in 1988 where her work experience included 15 years as a project and bridge design engineer at ODOT District 5. Duties while in the District 5 Bridge Maintenance Department included bridge analysis, coordinating with bridge inspectors, and working with ODOT bridge crews for in-house replacement of smaller state route bridges. After transferring to the Bridge Design Department, she led design teams on various projects including steel girder bridges, prestressed concrete box beam bridges, reinforced concrete slab bridges, and precast box culverts.

Ms. Krock became the majority owner of Smart Services, Inc. in 2011 after the acquisition of Smart Surveying, a land surveying firm based in Newark, Ohio. Her functions include financial management, fiscal responsibility, business representation, project planning and management, marketing, and community and public involvement. Ms. Krock assures implementation of Smart Services' quality control procedures and performs quality assurance reviews on Smart Services' projects. Her combination of experiences assures that all Smart Services projects will be successfully completed in a timely and cost-effective manner. Ms. Krock has acquired the State of Ohio EDGE certification and the City of Columbus FBE certification as well as DBE certification for the firm.

# **Recent Representative Projects**

**ODOT District 6, MAR-23-10.63, PID 25597** – This \$4M project was awarded by ODOT in 2016. Ms. Krock served as the project manager for Smart Services who was working as a subconsultant to Strand Associates and Pennoni, Inc. This was the first official mentoring project to be sold by ODOT as part of their EDGE development program. Smart Services worked with the prime consultant to deliver design plans for the rehabilitation of 15 bridges in District 6. Construction was completed in 2018.

Contact: James Hise, PE, Project Manager, Strand Associates, 614-835-0460

**ODOT District 9, LAW-141-16.18, PID 91413** – Ms. Krock was the project manager for Smart Services as a subconsultant to ADR & Associates to provide surveying and design plans for the replacement of a deficient bridge in District 9. Construction of the \$1.3M project was completed in 2017.

Contact: Ronald Bonnette, PE, PS, Senior Engineer, ADR & Associates, 740-345-1921

**ODOT District 9, PIK-552-00.00, PID 97243** – Ms. Krock was the project manager for Smart Services to provide surveying and design plans for the replacement of two deficient culverts and the resurfacing of SR 552 in District 9. Construction of the \$990K project was completed in 2018.

Contact: Tom Lefchik, PE, Project Manager, ODOT D-9, 740-773-2691

#### **OWNERSHIP & MANAGEMENT**





**BRIAN SMART, PS** 

**Vice - President** 

#### **Education**

The Ohio State University, Civil Engineering/ Surveying

Department of Defense Mapping School Surveying Training for U.S Army Reserves

#### **Registrations**

Surveyor Ohio # 7611 Arizona # 29890

# **Affiliations**

Professional Land Surveyors of Ohio

National Society of Professional Surveyors

#### **Certifications**

ODOT Right-of-Way

# **Professional Experience**

Mr. Smart founded Smart Surveying (Smart Services, Inc.) in 1996 and after the firm was acquired in 2011 assumed the dual role of Vice-President and Director of Survey and Right of Way. Mr. Smart has extensive experience throughout Ohio with boundary and topographic surveys, construction and right-of-way staking, ALTA/ACSM Land Title surveys, route surveys, large scale mapping, bathymetric surveys, control surveys, and GPS surveying. Mr. Smart is extremely proficient at courthouse research, locating difficult to find monuments, and resolving challenging boundaries. He has a proven track record of managing or assisting with managing the survey tasks on numerous ODOT, ODOT LPA, and Municipal roadway, sidewalk, bridge, bikeway, storm water, sanitary sewer, waterline, and right-of-way, design projects. He has directed and managed subconsultants and team members, and cooperated with the efforts of prime consultants. Mr. Smart has taken and successfully completed ODOT's Right-of-Way Development Training Course. He is a veteran of the U.S. Army Reserves and served overseas during the Persian Gulf War.

# **Recent Representative Projects**

#### NiSource Gas Pipeline Relocation Project, Columbus, Ohio

Mr. Smart and Smart Services, Inc. worked under a service agreement with NTH Consultants to provide surveying services for multiple NiSource projects to relocate gas pipelines in downtown Columbus along I-70. Smart Services established site control for construction, established property lines and right of way, completed topographic, utility & as-built surveys, and completed basemapping. Projects included I-70 Phase 4A, I-70 Champion Avenue, & NiSource Colfax IP District Station #1 & #2. Contact: Pat Nortz, PE, formerly with NTH Consultants, 216-276-6354

# Cistern Inspection Project for ODOT District 9, Fayetteville, Ohio, PID 97683 Mr. Smart oversaw the mapping and inspection of 9 underground cisterns located at various locations under US 50 & US 68 in Fayetteville. All the cisterns were located, sized and mapped. Smart Services designed and built a device that allowed for an initial video inspection inside the cisterns which gave the owner a clearer picture of the condition of the cisterns. Additional videos were produced for future reference by ODOT. Contact: Dave Beekman, PE, Project Manager, ODOT D-9, 740-773-2691

# LIC -Thornwood Crossing, (LIC-CR128-0.97) PID 87642

Mr. Smart is the project manager for Smart Services as a subconsultant to Gannett Fleming for surveying and right of way services for the Cherry Valley Road Bridge Replacement Project. This \$13M project will eliminate the bridge at the hazardous curve on Cherry Valley Road and will divert traffic from the new Cherry Valley road interchange onto Thornwood Crossing across the proposed bridge over Raccoon Creek and through a proposed roundabout.

Contact: Matt O'Donnell PE, Project Manager, Gannett Fleming, 614-794-9424

#### **KEY PERSONNEL - SURVEY & RIGHT OF WAY**





SAMUEL STILTNER, PS

#### Survey Manager

#### **Education**

BS in Surveying and Mapping, University of Akron, 2004

#### Registration

Surveyor, Ohio # 8364

#### **Certifications**

OSHA: 40-Hour AZWOPER;10-Hour Construction; 8-Hour Confined Space

**ODOT Right of Way** 

Railroad Worker Safety Trainings – Multiple Rail Clients SafeLandUSA

# **Affiliations**

Professional Land Surveyors of Ohio

National Society of Professional Surveyors

# **Professional Experience**

Mr. Stiltner joined Smart Services in 2016 and brings extensive experience in surveying and department management to the firm. He has worked on a variety of projects, for public and private clients throughout Ohio, related to Transportation, Water & Waste Water, Environmental, Right-of-Way, Land Boundary, Industrial, and Utilities. Mr. Stiltner has successfully brought many projects to completion, under a variety of scopes, schedules, and budgetary constraints, through effective collaboration with team members and clients. Through his client specific training, Mr. Stiltner has also received several OSHA-Related and Client-specific training certifications, granting him the proper clearances to work on many unique and challenging projects.

# **Recent Representative Projects**

#### Springfield Air National Guard Base Topographic Survey

Smart Services completed a topographic survey of the Springfield Ohio Air National Guard Base Building 151 as a subconsultant to Tetra Tech. Mr. Stiltner was the project manager and the project included project control and basemapping of contours and elevations (digital surface model of the existing ground to generate one-foot contours and establish existing finished floor elevations at entry locations), drainage features, planimetric features, utilities and landscaping.

Contact: John Ramsey, Project Manager, Tetra Tech, Inc., 502-584-5555

#### Districts 4 & 11 Survey and Right of Way Task Order, PID 97698

Mr. Stiltner is the project manager as a subconsultant to Thomas Fok & Associates for the ODOT District 4 & 11 survey task order. Mr. Stiltner recently completed the following projects as part of the task order:

- Right of way plans for the SUM-162/162D-2.21/0.00 (PID 103171) \$1.3M intersection improvement project.
- Survey tasks for the ATB 307 (PID 106705) \$1.1M culvert project which consisted of multiple culverts on SR307 and included setting project control and completing the basemapping and drainage surveys.

Contact: Frank Snyder, PS, Project Manager, Thomas Fok & Assoc., 330-799-1501

#### Kirkersville Feeder Canal Improvements, Millersport, Ohio

Mr. Stiltner was the project manager for the ongoing project to complete channel improvements at the Kirkersville Canal. Mr. Stiltner provided field surveying, bathymetric surveying and base mapping services for the Ohio Department of Natural Resources project located near Buckeye Lake in Millersport, Ohio. Recent work also included the staking of adjacent properties and the provision of exhibits to aid in property acquisition along the canal.

Contact: James Hilovsky, PE, Project Manager, ODNR Division of Engineering, 614-265-6967



TODD STANHOPE, PE, PTOE

Director of Traffic Engineering

#### **Education**

BS Civil Engineering, Purdue University 1995

# ODOT Traffic Academy:

- · IJS/IMS
- · Traffic Signals
- Safety Studies
- Highway Lighting

N.E. Roundabout Design Workshop

Columbus Wheelchair Ramp Training

# **Registrations**

Ohio Professional Engineer #64507 Professional Traffic Operations Engineer

# **Affiliations**

ASHE I.T.E.

# **Professional Experience**

Mr. Stanhope began his career at Traffic Engineering Services (TES) after receiving his degree from Purdue University in 1995 with a primary focus on traffic engineering and transportation planning. Smart Services acquired TES in 2013 and Mr. Stanhope became the Director of the Traffic Engineering division of Smart Services. He is skilled in all phases of traffic engineering including traffic design, signal operations, traffic studies, safety studies and transportation planning. Mr. Stanhope has been involved in the design of over 70 traffic signals. He has also been the primary author of hundreds of traffic impact and access studies. Mr. Stanhope has a proven track record of providing excellent leadership and project management, and routinely works with local and state agencies and as a subconsultant to large consulting firms.

# **Recent Representative Projects**

CTSS Phases B, C, D & E Signal Warrant Studies, Columbus, Ohio

Since 2007 Mr. Stanhope has assessed signal warrants for the City of Columbus as a sub-consultant to the engineering firm HNTB, Inc. At approximately 700 locations in Phases B, C, D & E he identified locations where counts were needed for warrant studies and organized performance of traffic counts, formal warrant studies, and Signal Removal Decision Process - Stage I reports. Phase E was recently completed, and the team has been chosen by the City of Columbus for Phase F.

Contact: Matt Graf, PE, Project Manager, HNTB Ohio, 614-228-1007

#### BRO-68-30.72, PID 93801, ODOT District 9

The \$2M project provided capacity improvements at the ramp terminals at S.R. 32 and U.S. 68. The project was a design/build contract to restripe the US 68 bridge over SR 32 and to build left turn lanes, make radius improvements, and install traffic signals at the ramp interchanges. Smart Services' scope included the design of two traffic signals, and provision of coordination timing and evaluation for four intersections during six time periods. The timing plans were produced using Synchro and drive-throughs were performed with a Sony Action Cam which records GPS coordinates. These coordinates were imported into TruTraffic, the data summarized, and time-space diagrams presented in a final report. Mr. Stanhope presented this project at the Ohio Transportation Engineer's Conference in 2016.

Contact: Patricia Wetzel, PE, Traffic Engineer, ODOT D-9, 740-774-8983

# Intersection of Gemini Place & Solstice Pkwy, Columbus, Ohio

Mr. Stanhope designed a new traffic signal at the intersection of Gemini Place & Solstice Pkwy. which included a signal controller that included adaptive control firmware, mast arm pole structures, mast arms and appropriate signal wiring/conduit. Eight pedestrian heads were installed to serve each leg of the intersection along with four pedestrian pushbuttons to cross the east and west legs of this intersection. Video detection units were provided for all four legs.

Contact: Joe Thomas, Vice-President, Metro Development, 614-540-2400

#### **KEY PERSONNEL - ENVIRONMENTAL SERVICES**





MITCHEL STRAIN, PWS, CPSS, CPSC

Director of Environmental Services

#### **Education**

MS Soil Science 1992 University of New Hampshire

BS Geology 1983 State University of New York at Cortland

#### **ODOT Training:**

- Ecological Survey
- •Environmental Documentation (CEs & 4f/6f)
- •Environmental Site Assessment (Phase 1 & 2)
- •Wetland & Stream Mitigation

#### **Certifications**

Wetland Scientist Soil Scientist Soil Classifier

# **Professional Experience**

Mr. Strain joined Smart Services in 2014 as the Director of Environmental Services. Since beginning his career in 1983 Mr. Strain has developed extensive knowledge of all aspects of the National Environmental Policy Act (NEPA) including preparation of Environmental Assessments (EA), Environmental Impact Statements (EIS), Categorical Exclusions (CE) and other NEPA documentation, baseline biological assessments, and Habitat Evaluation Procedure (HEP) analyses; threatened and endangered species surveys and critical habitat assessments; wetland and stream evaluations; cultural resource investigations; and vegetative community surveys. Mr. Strain's expertise is in wetland science, including delineation, creation, and restoration of wetlands for mitigation and wildlife habitat, Clean water Act Section 404 and 401 permitting, and design of constructed wetland treatment systems.

# **Recent Representative Projects**

**ODOT Statewide Mitigation Credit/In-Lieu Fee Services Task Order, PID 103864** Smart Services was selected as the consultant to facilitate, on the behalf of ODOT, the acquisition of stream, wetland, or other types of environmental mitigation credits at approved mitigation banks and/or in-lieu fee programs. The need for said credits is to satisfy ODOT mitigation obligations resulting from Clean Water Act, Endangered Species Act, or other state or federal mitigation requirements. *Contact: Matt Perlick, Asst. Admin., ODOT Environmental Services 614-466-1937* 

# University of Notre Dame / NiSource Pipeline, St. Joseph County, Indiana

Mr. Strain prepared permit applications and documentation for submittal to the United States Army Corps of Engineers (USACE), Detroit District, and Indiana Department of Environmental Management (IDEM), pursuant to the requirements of CWA Sections 404 and 401 and the Indiana Isolated Wetland Permit Program. Project impacts met Nationwide Permit (NWP) No.12, Utility Line Activities and only required Pre-discharge Notification (PCN) and a general permit known as an Isolated Wetland General Permit (IWGP).

Contact: Pat Nortz, PE, Project Manager, formerly with NTH, 216-276-6354

# East Reservoir Dam Improvements, Portage Lakes State Park, Summit County, Ohio

Mr. Strain provided Section 404 permit coordination and documentation and the drafting of PCN documents for USACE as a subconsultant to TetraTech on the \$40M Ohio Department of Natural Resources project.

Contact: Pete Nix, PE, Project Manager, Tetra Tech, 614-289-0112

# Wetland Permit Coordination,

#### **Clermont County Department of Economic Development**

Mr. Strain provided wetland permit coordination and documentation for the South Afton Commerce Park in Clermont County. He also prepared the necessary permits for submittal to the USACE and Ohio Environmental Protection Agency. *Contact: Andy Kuchta, Director, Clermont County CIC*, 513-732-7150

#### SUPPORT PERSONNEL



#### Patrick Wilson, PE Project Engineer



Mr. Wilson joined Smart Services in 2013 and is a project engineer on right-of-way, traffic and bridge projects. His previous experience includes time with the Licking County Engineer's Office where he assisted in the load rating and inventory of bridges. He has a BS in Civil Engineering from The Ohio State University and worked for 7 years in the Ohio State Information Technology Services Department. Mr. Wilson has assumed a variety of engineering duties at Smart Services. He has been involved in plan preparation for a variety of right of way, roadway, bridge, culvert and traffic projects. He has also prepared

basemaps in MicroStation for design projects and has worked with our survey crews in performing topographic and boundary surveys. Mr. Wilson has also performed hundreds of traffic counts and has been responsible for post processing traffic count data and reviewing data for accuracy and has assisted the lead traffic engineer with the design of many traffic signals. He recently completed the plan preparation of the PIK-552-00.00 culvert and roadway plans and the MAR-23-10.63 bridge plans. Mr. Wilson is also ODOT prequalified as a Complex Right of Way designer.

# **Taylor Schoepf**Civil Engineering/Survey Intern

Mr. Schoepf graduated in 2016 with a BS in Civil Engineering and a minor in Surveying from The Ohio State University and worked as an intern for 3 years before joining the firm full time. He is responsible for the field and office work associated with our Trimble SX10 Total Scanning Station. With Mr. Schoepf's background in Civil Engineering and Surveying he is valuable in combining an understanding of the design needs of a project while providing excellent survey services to our clients.



**Nick Mason**Design Technician



Mr. Mason joined the firm in September 2018. He offers support to our professional surveyors and engineers utilizing AutoCad and Civil3D. Mr. Mason attended The Ohio State University and graduated with honors from Central Ohio Technical College with an associate degree in Civil Engineering and Architectural Design.

Mr. Dixon is a versatile member of the Smart Services team. Mr. Dixon received his BS in Environmental Science from The Ohio State University. He joined Smart Services in 2014 and has worked in field data acquisition and as a survey crew leader. Mr. Dixon also works with our environmental specialist in preparing environmental assessments and provides survey services for the firm's environmental projects. He is highly capable in the use of Trimble S7 Robotic DR Plus Total Station, R8 GPS System and AutoCad.

**Kyle Dixon**Field Crew Leader



#### SUPPORT PERSONNEL



#### James Watts Field Crew Leader



Mr. Watts began his career with Smart Surveying and joined Smart Services in 2011 with considerable experience in field data acquisition. He has developed innovative approaches to solving complex issues in the field and has extensive experience throughout Ohio with boundary and topographic surveys, construction and right-of-way staking, ALTA/ACSM Land Title surveys, route surveys, large scale mapping, bathymetric surveys, and control surveys. He has a proven track record of completing survey tasks on numerous ODOT, ODOT LPA, and Municipal projects.

Ryan Jacquot Survey Technician

Mr. Jacquot joined Smart Services in 2018. He has a bachelor's degree in Communication Technology from The Ohio State University. Mr. Jacquot provides support to our surveyors and engineers as well assists in the office with the preparation of business development materials for the firm.



# **Gerald Wilcox, P.E., P.T.O.E.**

# **Traffic Engineer**

Mr. Wilcox has decades of experience in traffic engineering and transportation planning. He graduated from Ohio Northern University with a degree in Civil Engineering in 1964 and has managed thousands of projects over his career in all phases of traffic engineering and transportation planning from data collection to long range comprehensive planning. Mr. Wilcox formed Traffic Engineering Services, Inc. (TES) in 1986. He was responsible for the design of over 100 traffic signals, prepared numerous traffic studies and has collected or supervised the collection of hundreds of traffic counts. In 2013, Smart Services acquired TES. Mr. Wilcox continues to work for Smart Services and his experience is primarily utilized for study development and Quality Control reviews. He serves as a valued advisor to the younger engineers at Smart Services.

# Albert Abel

# **Construction Inspector / Traffic Field Crew**

Mr. Abel joined Smart Services in 2015. In 2016, Mr. Abel provided inspection services as part of the ODOT District 6 Construction Inspection Task Order on the US-23 Interchange project and in 2017 provided inspection services for a variety of projects, including MAD-70-8.62 and FRA-3-21.17. He retired in 2013 from ODOT District 5 where he was a bridge specialist responsible for the inspection of the district's bridges. Mr. Abel supports the Smart Services Traffic Engineering Division by deploying traffic counting equipment with our field crews and providing Quality Control of traffic counts.

# **Curtis Smart**

#### Title Research / Traffic Field Crew

Mr. Smart worked previously with Smart Surveying and joined Smart Services in 2013. He is experienced in acquiring record documents for boundary and route surveys and has attended the ODOT Training Class in Acquisition 101 Parts A, B, and C – April 2014, and is prequalified with ODOT for Title Research.

#### **SMART SERVICES ORGANIZATION**



