

Clinton County

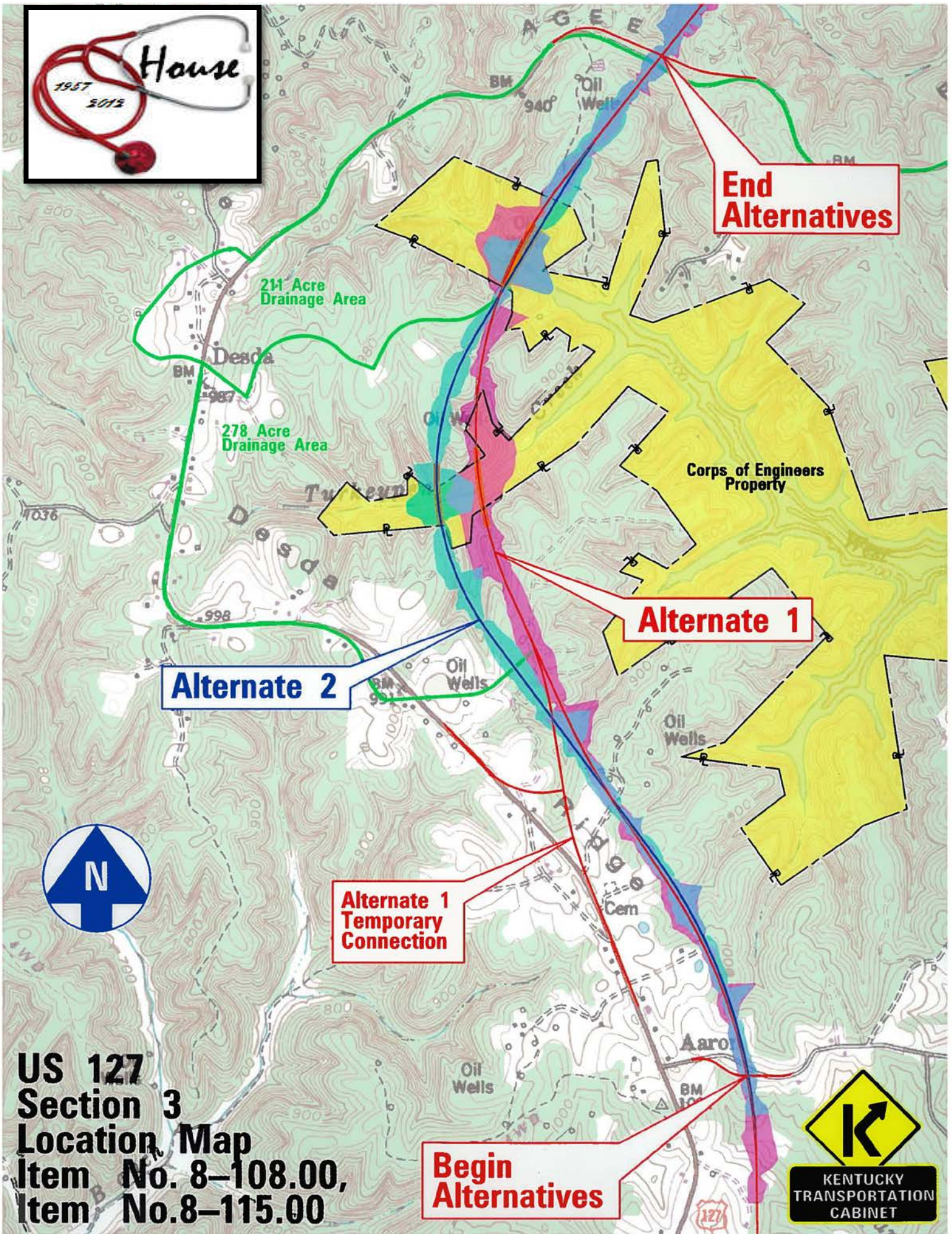
US 127 - Section 3

Item No. 8-108.00, 8-115.00



February 8, 2012





End Alternatives

211 Acre Drainage Area

278 Acre Drainage Area

Corps of Engineers Property

Alternate 1

Alternate 2

Alternate 1 Temporary Connection

Begin Alternatives

**US 127
Section 3
Location Map
Item No. 8-108.00,
Item No. 8-115.00**



Response TO Proposal FOR Personal Service Contract

CLINTON COUNTY-US127-ITEM NO. 8-108.00 & 8-115.00 SECTION 3



<p>Firm Name: <u>House Inc.</u></p> <p>Firm Address: <u>1957 Doctors Lane</u> <u>Lexington, KY 40505</u></p> <p>Telephone: <u>(859) 491-1363</u></p> <p>Contact Name: <u>Chris Taub, PE, PLS</u></p> <p>E-Mail Address: <u>chris@houseinc.com</u></p> <p>Location of Offices(s) where work is to be Performed: <u>Lexington, Kentucky</u></p>	<p>Project No./ <u>8-108.00 & 8-115.00</u></p> <p>County: <u>Clinton</u></p> <p>Procurement Bulletin: <u>2012-07</u></p> <p>Advertisement Date: <u>January 10, 2012</u></p> <p>Response Due Date: <u>February 8, 2012</u></p>
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I certify that the information included within this document is, to the best of my knowledge, correct as of the date indicated below:

I certify that **House Inc.** is currently registered by the Commonwealth of Kentucky in accordance with KRS 322.060 to perform the engineering services needed for this project, and our Kentucky Registration Number is 219.

I certify to the best of my knowledge, **House Inc.** does not have a conflict of interest regarding any financial or other personal interest in this project and/or any financial or other personal interest in any real property that may be acquired for this project.

I certify that to the best of my knowledge and belief, **House Inc.** and/or its Principals is (are) not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any state or Federal Agency."

SUBMITTED BY: Christopher Taub, PE, PLS

TITLE: President

Christopher Taub
Signature

February 8, 2012
Date



RESPONSE TO ANNOUNCEMENT FOR ENGINEERING AND RELATED SERVICES

Firm Name: Roswell Engineering, PLLC

Firm Address: 1717 Green Man Circle
Suite # 713
Lexington, KY 40511

Contact Name: Michael Guerin, PE

E-Mail Address: michael@ros-engineering.com

Location of Office(s) where work will be performed: Lexington, KY

Project No./ County: US 127, 8-108.00, 8-115.00 (Section 3)
Clinton

Advertisement Date: January 10, 2012

Response Due Date: February 8, 2012

I certify that the information included within this document is, to the best of my knowledge, correct as of the date indicated below:

I certify that Roswell Engineering, PLLC is currently registered by the Commonwealth of Kentucky in accordance with KRS 322.060 to perform the engineering services needed for this project, and our Kentucky Registration Number is 2282.

I certify that Roswell Engineering, PLLC personnel have no financial or other personal interest in this project and no financial or personal interest in any real property that may be acquired for this project.

I certify that, to the best of my knowledge and belief, Roswell Engineering, PLLC principals, officers, directors, owners, partners, and person having primary management or supervisory responsibilities are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any State or Federal Agency.

SUBMITTED BY: Michael Guerin



Signature

TITLE: President

February 8, 2012

Date

SERVICES INCLUDED IN PREQUALIFICATION CATEGORIES:

House Inc. and Roswell Engineering will be performing the following services advertised for this project. After each service listed, please indicate your firm's status of prequalification as follows: "Prequalified" (P), "Submitted and Pending" (SP), and/or "Prequalification Not Required" (NR).

ROADWAY DESIGN

✓ Rural Roadway Design (P)

✓ Surveying (P)

STRUCTURE DESIGN

✓ Spans < 500 feet (P)



PRIME CONSULTANT

SERVICE

EMPLOYEE NAME

LOCATION

House Inc.

Rural Roadway Design

Gregory House, PE
Robert Chase, PE, AVS

Lexington, KY

House Inc.

Surveying

Michael Tritter, PE, PLS

Lexington, KY

House Inc.

Structure Design

Henry Dobson, PE, PLS
Travis Brennan, PE, PLS

Lexington, KY

SERVICES NOT INCLUDED IN PREQUALIFICATION CATEGORIES:

PRIME CONSULTANT	SERVICE	EMPLOYEE NAME	LOCATION
House Inc.	Urban Roadway Design	Gregory House, PE Robert Chase, PE, AVS	Lexington, KY
House Inc.	Capacity Analysis	Gregory House, PE	Lexington, KY
House Inc.	CORSIM/TSS Analysis	Gregory House, PE	Lexington, KY
Roswell Engineering	Hydraulic and Drainage Analysis	Michael Guerin, PE, LSIT	Lexington, KY
House Inc.	Technical Reporting Writing	Lawrence Kutner, PE	Lexington, KY
House Inc.	Digital Terrain Modeling	Ron Simpson James Wilson	Lexington, KY
House Inc.	Congestion Management	Gregory House, PE	Lexington, KY
House Inc.	Signing Plans	Allison Cameron, EIT	Lexington, KY
House Inc.	Right of Way Property Review	Lucas Douglas, PE	Lexington, KY
House Inc.	CADD Plan Production	Robert Chase, PE	Lexington, KY
House Inc.	Inventory Existing Conditions	Michael Tritter, PE, PLS	Lexington, KY
House Inc.	Quality Control Reviews	Lawrence Kutner, PE	Lexington, KY
House Inc.	Deficiency Study	Michael Tritter, PE, PLS	Lexington, KY
House Inc.	Construction Cost Estimating	Gregory House, PE	Lexington, KY
House Inc.	Public Participation	Jeffrey Cole, PE, PLS	Lexington, KY
House Inc.	Constructability Reviews	Lawrence Kutner, PE	Lexington, KY
KYTC	Photogrammetry	Kentucky Transportation Cabinet	Frankfort, KY
KYTC	Environmental	Kentucky Transportation Cabinet	Frankfort, KY
KYTC	Geotechnical Engineering	Kentucky Transportation Cabinet	Frankfort, KY
KYTC	Geotechnical Laboratory Drilling	Kentucky Transportation Cabinet	Frankfort, KY

PROJECT TEAM ORGANIZATIONAL CHART



The **House** Project Team will provide the highest quality engineering design for this Clinton County project. In addition to the team shown above, a full staff of engineers, designers, and technicians are committed to the successful completion of this project.





GREGORY HOUSE, PE



Mr. House has served as Project Manager for several rural and urban highway projects for the Kentucky Transportation Cabinet including the roadway approaches for the new Tennessee River Bridge in Paducah on US 60 and extension of the Wendell Ford Expressway on the northeast side of Owensboro, both currently under construction and the new roadway providing improved access to the expansive Fidelity Investments campus in Kenton County near I-75, which is complete and open to traffic. Mr. House was also involved in the development of the digital terrain models, identification of project alternates, and geometric layouts for the interchanges and intersections, including a roundabout for the Kenton County project. Mr. House is proficient in traffic analysis, traffic simulation and pavement design.

HOME OFFICE ADDRESS

House Inc.
1957 Doctors Lane
Lexington, Kentucky 40505

EDUCATION AND EXPERIENCE

University of Kentucky
BSCE, 1997

PROFESSIONAL REGISTRATIONS

PE- Kentucky, #23096, 2003

TECHNICAL TRAINING

MicroStation/InRoads V8i Training
A-E-C Project Management Seminar
Traffic Management Plan Training
Transport Estimator Training (2005)

Thinking Beyond the Pavement
Context-Sensitive Design Workshop
Roundabout: Planning and Design
Traffic Impact Study Training
CORSIM Seminar
Highway Capacity Analysis Seminar
KTC Partnering Workshop (1998-2010)

Mr. House has been involved in the following projects:

- **US 60 (OWENSBORO BYPASS), DAVIESS COUNTY, KENTUCKY:**

Project Engineer/Manager – Responsible for the developing Phase I and Phase II plans for a five-mile extension of the Owensboro Bypass. Phase I activities included participation in citizens committee meetings to develop alignments. Phase II activities include development of right of way and construction plans. The project includes two new interchanges and modifications to an existing interchange. Project broken into two construction section, and work is underway on one section.

Dates: 2000-present

Agency: KYTC (District #2)

- **I-75, LAUREL COUNTY, KENTUCKY:**

Project Engineer/Manager – Responsible for property research and defining existing and proposed right of way using KYCOGO for KY 80 and KY 192-I-75 interchanges near London, Kentucky. Completed traffic modeling using CORSIM to simulate traffic on the final design. Project complete and open to traffic.

Dates: 1998-2000

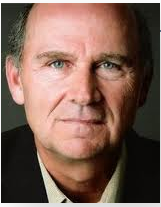
Agency: KYTC (District #11)

- **I-75, MADISON COUNTY, KENTUCKY:**

Project Engineer/Manager – Developed digital terrain and CORSIM simulation for reconstruction of KY 627 Interchange. Evaluated five alternates and through a three-step screening process, selected a conventional diamond interchange as the “best fit” for traffic mix, existing traffic flow constraints and future traffic requirements. Phase I design complete.

Dates: 2010-present

Agency: KYTC (District #7)



RON SIMPSON

Mr. Simpson has extensive experience with alignment design, grades, hydraulics and storm sewer design, cross sections, quantity and cost estimating and plan production using MicroStation. Ron has been responsible for the plan production and preparation of both Phase I and Phase II Design Projects, and has performed alternate alignment studies on well over 100 miles of proposed highways in both urban and rural areas.

EDUCATION AND EXPERIENCE

Lexington Vocational School Drafting, 1965

47 Years Transportation Experience

TECHNICAL TRAINING

- Micro Station Training
- InRoads Training
- FHWA Highway Drainage Workshop
- KY COGO
- InRoads/Select CADD

- **KY 313, HARDIN-MEADE COUNTIES, KENTUCKY:**
Highway Designer – Responsible for developing alternate alignments, grades and cross sections with InRoads design software for this 14.4 Mile Phase I Design Project. Estimated quantities for construction cost, developed construction limits and right-of-way limits for preliminary right-of-way plans. (2000-2009; KYTC District #4)
- **KY 17 (MADISON PIKE), KENTON COUNTY, KENTUCKY:**
Highway Designer – Responsible for developing Phase I studies of alternate alignments and grades using terrain model and InRoads design software for 7 miles of primary highway. Alternates were modeled and adjusted to provide the most feasible solution. Earthwork quantities were developed from the model. Mr. Simpson was also responsible for quantity estimates for construction cost. (1995; KYTC District #6)
- **KY 35, GALLATIN COUNTY, KENTUCKY:**
Designer – Responsible for developing Phase II Design Plans for 1.7 miles of KY 35. Responsibilities included final horizontal and vertical alignments with super elevation design, drainage design, drainage folder preparation, maintenance of traffic plans, construction quantity calculation and cost estimates. This project demonstrates familiarity with final design and construction plan preparation. (1995; KYTC District #6)



JAMES WILSON

Mr. Wilson has 25 years of experience in the engineering field. He has extensive experience in the development of alignments and plans for the Kentucky Transportation Cabinet. He has been involved in all facets of project design including terrain modeling, alignment design, drainage details, traffic phasing, right of way and preliminary and final plan development.

EDUCATION AND EXPERIENCE

Attended Eastern Kentucky University and University of Kentucky

TECHNICAL TRAINING

-KYTC Partnering Confs.

- Thinking Beyond the Pavement
- MicroStation InRoads
- Converting MDL to SelectCAD V8
- Subsurface Utility Engineering

- **US 60 (OWENSBORO BYPASS), DAVIESS COUNTY, KENTUCKY:**
Highway Designer – Responsible for preparing Phase II roadway and right of way plans as well as estimating quantities for construction, updating the aerial digital terrain model with field shot data and preparing aerial photo exhibits for public meetings. This project is approximately five miles in length, beginning on the north side of the KY 54 interchange and runs northeasterly ending approximately 2000' north of the US 60 and KY 2830 intersection. (2004-present; KYTC District #2)
- **US 41 (PEMBROKE TO HOPKINSVILLE ROAD), CHRISTIAN COUNTY, KENTUCKY:**
Project Manager/Designer – Developed preliminary plans with five alternates in a tight footprint with a project corridor littered with environmental, historical, archaeological and economic facilities. Also responsible for the Phase II roadway and right of way plans. The project is approximately four miles in length, beginning 1000' southeast of the US 41 and John rivers Road interchange and runs northwesterly ending at US 41 and Casky Lane intersection. (2000-2004; KYTC District #2)
- **US 68 (WIDENING) CHRISTIAN COUNTY, KENTUCKY:**
Highway Designer – Responsible for developing the preliminary line and grade, joint inspection, right of way and final plans. In addition, Mr. Wilson coordinated tie downs and construction phasing with other consulting engineers. (1992-1995; KYTC District #2)



Michael Guerin, PE, LSIT

Leading the project team as Principal-in-Charge would be Michael Guerin, PE, whose career includes a wide array of experience ranging from the public sector to private sector. Michael is responsible for the overall management of the firm including all the projects within the firm. His experience includes project management, highway design, storm sewer systems, sanitary sewer systems, water distribution systems, flood plain analysis, design of large and small residential and commercial sites, in-fill redevelopment projects and production of plans and contract documents.

EDUCATION

- » University of Kentucky, M.S. Civil Engineering (2005)
- » University of Kentucky, B.S. Civil Engineering (1997)
- » Sharjah College (UAE), Diploma in Electronic Engineering (1995)

EXPERIENCE – 12 YEARS

PROFESSIONAL REGISTRATIONS

PE – KY 43423

PROFESSIONAL AFFILIATIONS

- » National Society of Professional Engineers (NSPE)
- » Kentucky Society of Professional Engineers (KSPE)
- » American Society of Civil Engineers (ASCE)

SPECIALIZED TRAINING

- » Traffic Impact Study Training 2011
- » KYTC Partnering Conference 2010
- » KSPE Annual Conference 2010, 2011
- » Designing Streets for Pedestrian Safety, 2009
- » Designing Streets for Bicycle Safety, 2009
- » Water Professional Conference 2010
- » Thinking Beyond the Pavement, 2004
- » MicroStation V8 Upgrade Training, 2003
- » Planning and Design of Service Interchanges in Urban and Suburban Areas, 2001
- » Introduction to the MUTCD, 2001
- » Fundamentals of Geometric Design, 2001
- » SED-CAD 4 Training Course, 1999
- » Designing of Pumping Stations 2010

PROFESSIONAL EXPERIENCE

I-65/KY-222 Interchange, Hardin County, Ky – Project Engineer (Sub-Consultant) for design of a Single Point Urban diamond Interchange (SPUI) for the interchange of I-65 with KY-222 near Glendale, Kentucky; Responsible for drainage analyses for approximately two miles of KY-222, including development of pipe sections and culvert drainage situation folders, drainage analysis for entrance pipes, design of roadside ditches, preparation of the erosion control plan, and assembly of drainage folders.

US-460, Pike County, Ky – Assisted in roadway design, storm sewer design, culvert design, erosion control, retention basins and energy dissipater modeling, ditch analysis, calculation of quantities, and plan, profile and cross section preparation for 15 miles of four-lane roadway.

US-119, Pike County, Ky – Assisted in the design and development of plans and profiles, cross sections, drainage and grade development for 3.5 miles of four lane rural arterial.

CR-5369 (Elkhorn Creek Bridge), Pike County, Ky – Assisted with bridge replacement and roadway alignment on Mountain Branch Camp road over Elkhorn Creek; responsibilities included line and grade, drainage, erosion control, plans, profiles, cross sections, utilities, calculation of quantities, maintenance of traffic plans, and R/W estimates.

US-68, Mason County, Ky – Assisted in roadway design of 11.5 miles of rural arterial; responsible for accident analysis within the roadway corridor, traffic analysis of proposed interchanges and intersections, geometric design of line and grade (including railroad crossing), several interchange designs, typical sections, super elevation transitions, pavement development, culvert design, storm sewer design, ditch analysis, erosion control, pavement development sheets.

I-65, Hart, Barren and Edmonson Counties, Ky - Developed preliminary drainage design (with emphasis on sink holes in the karst formations) for 7 miles of six-lane rural interstate; designed dual drainage systems to separate roadway runoff for offsite runoff; designed and modeled retention basins to establish the existing and proposed ponding elevation calculation of sinkholes; developed cost estimates; developed plans and profiles.

Water Street Project, Richmond, KY – Project engineer for the stormwater analysis and design of the entire trunk storm and sanitary sewer systems for this 240 downtown watershed. The stormwater analysis and design is being conducted by utilizing SWMM and HEC-RAS.



MICHAEL TRITTER, PE, PLS



Mr. Tritter has supervised all construction surveying for several highway projects in Kentucky. He has experience in the design and preparation of construction plans for highway projects in Kentucky and Tennessee, has been the Project Manager for numerous Pavement Rehabilitation Projects on major Interstates and primary roads in Kentucky, and also has extensive experience in property surveying, including preparing plats and legal descriptions.

HOME OFFICE ADDRESS

House Inc.
1957 Doctors Lane
Lexington, Kentucky 40505

EDUCATION AND EXPERIENCE

University of Kentucky
BSCE, 1973

PROFESSIONAL REGISTRATIONS

PE- Kentucky, #10395, 1977
PLS- Kentucky, #2068, 1977

TECHNICAL TRAINING

MicroStation Training
KYCOGO Training
Highway Capacity Analysis Seminar

InRoads Training
KYTC Partnering Workshop
Thinking Beyond the Pavement
Transport Estimator Training (2005)
Roadside Design guide (2006)
Traffic Management Plan (2008)
GPS Surveying

Mr. Tritter has been involved in the following projects:

- **KY550 & KY 160 BRIDGE REPLACEMENT PROJECT – KNOTT CO., KENTUCKY**

Project Manager: Responsible for Phase I & Phase II design for the replacement of an existing two-lane bridge on a major two-lane state primary road in the City of Hindman. Also included was reconstruction of the KY 550 and KY 160 intersection, which required new traffic signals and pedestrian controllers. Additional traffic capacity at the intersection was gained by widening the bridge to three lanes and providing a dedicated right turn at the intersection onto KY 160 eastbound toward the Knott County High School. The existing bridge abutments were retained and modified for use with the new bridge. All exposed surfaces on the new portions of the bridge substructure and superstructure were made to appear similar to wet stone masonry by the use of form liners. Community input to the development of plans for the project was obtained by numerous meeting of project team members with the local Community Development Initiative (CDI) Team.

Dates: 2000-2003

Agency: KTC (District #12)

- **WATTS DRIVE (CR 1376), LETCHER CO., KENTUCKY:**

Project Manager: Responsible for Phase I and Phase II design for the replacement of an existing single lane bridge and approaches on a rural local road in the Ulvah community of Letcher County. The project included preparation of plans and estimates for three alternates during Phase I design. The selected alternate was to replace the existing bridge with a new PCIB bridge at the same location. A detailed Traffic Control Plan was maintained during construction. Public information meeting was held at a local church. Right of way and final construction plans were also prepared.

Dates: 2005-2010

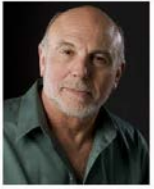
Agency: KYTC (District #12)

- **I-65 PAVEMENT REHABILITATION – JEFFERSON CO., KENTUCKY**

Project Manager: Responsible for preparing roadway plans for rehabilitating 3.4 miles of I-65 from Fern Valley Road through the Watterson Expressway Interchange, which handles 164,000 vehicles a day. Project included removal of existing concrete pavement and replacement with asphalt pavement and stabilization of subgrade. Traffic maintained through project using lane reductions but limited to maximum day closures. A detailed maintenance of plans with special notes, phasing details, and special bedding requirements was included for this 10-lane interstate section.

Dates: 2009

Agency: KTC (District #5)



HENRY DOBSON, PE, PLS

Mr. Dobson has 56 years of experience in engineering and structural design. He has been responsible for engineering design and project management of a wide range of structural projects throughout Kentucky.

EDUCATION AND EXPERIENCE

University of Kentucky
BSCE, 1953; MSCE, 1954

PROFESSIONAL REGISTRATIONS

PE- Kentucky, #3309, 1957
PLS- Kentucky, #1429

TECHNICAL TRAINING

LRFD for Highway Bridge Sub
and Superstructures
Bracing of Steel Structures
KYTC Partnering Workshops
Prestressed Concrete Bridge
Design
Dendrology
Steel Bridge Forum

- **US 27 SOMERSET NORTHERN BYPASS, PULASKI CO., KY:**

Project Manager – Project involved three bridges:

1) WB 40'-98'-98'- 40' – Prestressed concrete I-beam type 4 bridge over relocated US 27, skewed 25° and flared; 2) EB 40'-98'-98'-40' – Prestressed concrete I-beam type 4 bridge over US 27, skewed 25°; 3) 62'-156'-146'-146'-146'-84' – Prestressed concrete I-beam bridge over Ramp 5 Somerset North Bypass and Ramp 7 at Clifty Road. KTC (District #8)

- **KY 371 BUTTERMILK PIKE OVER CINCINNATI-SOUTHERN RAILROAD, KENTON CO., KY:**

Project Manager – Responsible for project management and design of steel beam superstructure and RC substructure widening for the bridge carrying KY 371 over Cs Railroad. The existing three-span, 52.5'-75'-52.5' crossing on a 9°-25' skew was widened approximately 20' using steel beam sections similar to the existing structure. This structure was an assignment on House's 2006-2007 Statewide Structural Contract and completed on a "fast-track" schedule (approximately 75 days from notice to Proceed). (Division of Structural Design & District #6)

- **I-65 WIDENING, WARREN CO., KY**

Project Manager – Project involved four bridges:

1) 180'-250'-180' – Composite welded steel plate girder over Barren river, skewed 45°; 2) 41'-6"-50'-6"- 50'-6"-41'-6" – Type 2 prestressed concrete I-beam bridge over Porter road, skewed 11°, 58'; 3) 50'-90'-9"-90'-9"-50' – Spread prestressed box beam bridge over KY 446, skewed 32°, 2', curved and flared; 4) 37'-6"-83'-83'-37'-6" – Spread prestressed box beam bridge over I-65 at Bristow Road, skewed 6°, 52'. KTC (District #3)



TRAVIS BRENNAN, PE, PLS

Mr. Brennan has extensive experience as a structural engineer with over 34 years of project experience in both design and construction of transportation structures. His responsibilities have included project managements, design supervision, design performance and review of designs/detailing of structures, including the hydraulic designs of wet structures, substructure and superstructure for both concrete and steel Construction.

EDUCATION AND EXPERIENCE

Kentucky State University
Lexington Community
College – ASCE, 1981
University of Kentucky

PROFESSIONAL REGISTRATIONS

PE – Kentucky, # 13577, 1983
PE – W. Virginia, #9579, 1984
PE – Georgia, #33096
PLS – Kentucky, #2448, 1981
PLS – W. Virginia, #1862, 1996

TECHNICAL TRAINING

LRFD for highway Bridge
Substructures
LRFD for Highway Bridge
Superstructures
Blast Design & Analysis for
Bridge Structures
Risk Management for
Terrorist Threats to Bridges
PCI Bridge Design (PCI)
Advances in Str. Steel Design
Cost Effective Steel Bridges
Flood Plain Hydraulics

- **CYNTHIANA BYPASS (US 27 RELOCATED), HARRISON COUNTY, KENTUCKY:**

Project Manager – Responsible for design and project management of multiple bridges (both steel and concrete) and the box culverts over a project length of 4.1 miles. The project contains three bridges and five box culverts with one major crossing of the South Fork of Licking River. (2000-2004; KTC District #6)

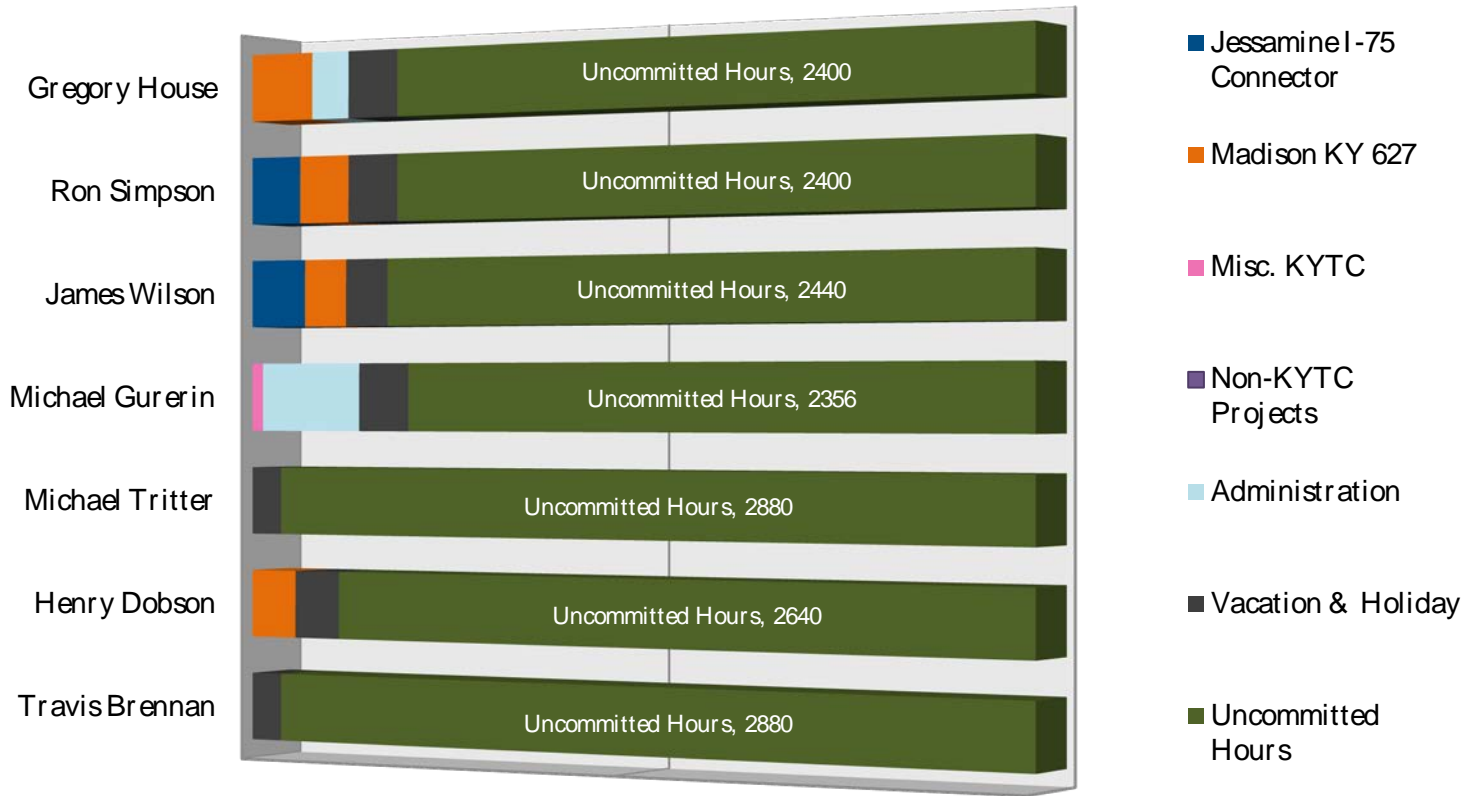
- **US 25, BOONE COUNTY, KENTUCKY:**

Project Engineer – Responsible for design of a new railway bridge relocated in Boone County. Construction of a temporary sheet pile retaining wall was designed to maintain the ballast and embankment construction until half of the structure was completed. Traffic was then transferred to the new bridge, and the balance of the structure was completed.. (1997; KTC District #6)

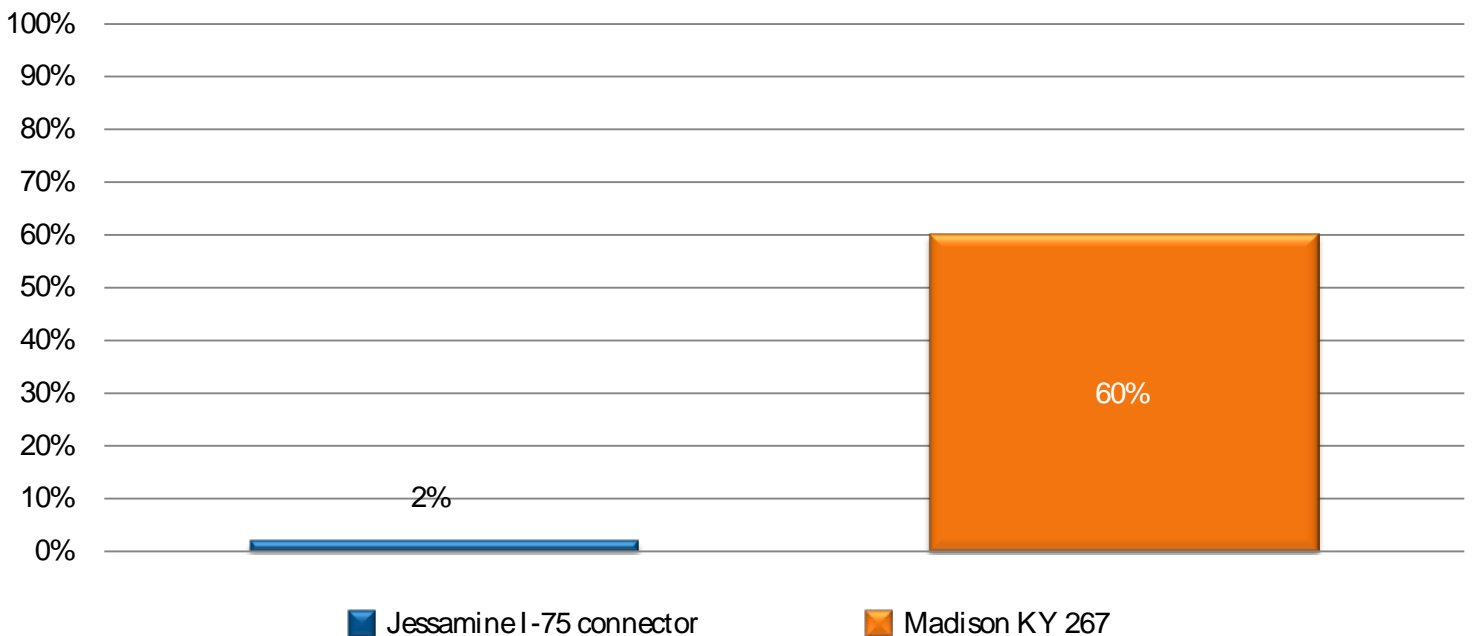
- **KY 695, CHRISTIAN COUNTY, KENTUCKY:**

Project Manager – Responsible for design and project management for replacing an existing steel railway bridge over KY 695. The new bridge consisted of a 65-foot clear span with a through girder system. The girders consisted of welded steel plates allowing for a single track and adequate clearance for railway workers to pass on each side. (1999; US Army COE- Louisville District)

AVAILABLE TEAM WORKLOAD CAPACITY OVER NEXT 18 MONTHS



HOUSE PROJECT COMPLETION



SUMMARY OF PROJECT DESCRIPTIONS AND KEY PERSONNEL ASSIGNMENTS

Project Description (include project status)	Fee Status	Fee	% Complete	Fee Balance
I - KYTC CONTRACTS AS PRIME				
KY 123 Widening in Some County (includes orig. contract \$1,000,000) (CM #1 \$95,000 - Add new approach) (CM #2 \$135,000 - Extend project termini)	Negotiated Fee House - Prime Subconsultants	\$1,230,000 \$865,000 \$365,000	55% 35%	\$389,250 \$237,250
KY 456 Reconstruction in some other Co. Replace Bridge and Approaches of the Creek New I-99 Interchange @ KY 9999	Negotiated Fee House - Prime Subconsultants	\$750,000 \$275,000 \$635,000	20% 10%	\$600,000 \$247,500
Statewide Drainage Letter Agreement 1 - US 01 Study Letter Agreement 2 - KY 999 retention Letter Agreement 3 - My street floods project	Upset Limit House - Prime House - Prime House - Prime	\$500,000 \$50,000 \$30,000 \$60,000	90% 50% 10%	\$5,000 \$15,000 \$54,000
Right of Way Contracts US Hwy 1 - Right of Way Appraisals (*Note 1)	Negotiated Fee ABC Prime Subconsultants	\$250,000 \$200,000 \$50,000	80% 50%	\$40,000 \$25,000
KY 789 - Right of Way Services	Negotiated Fee ABC Prime Subconsultants	\$175,000 \$125,000 \$50,000	55% 20%	\$56,250 \$40,000
The following completed projects are being held pending final submission:				
KY xxx Widening	Total Fee	\$725,000	95%	\$36,250
US xx Reconstruction	Total Fee	\$485,000	95%	\$24,250
KY xx Spot Improvements	Total Fee	\$325,000	95%	\$16,250
Co. Rte xxxx Bridge over a creek	Total Fee	\$215,000	95%	\$10,750
Never Build Road in Godforsaken County	Total Fee	\$825,000	95%	\$41,250
Explanatory Notes if needed:				
* Note 1 - The personnel assigned to this project are trained right of professionals they do not work on highway design projects				
Project Description (include project status)	Fee Status Team Members	Fee	% Complete	Fee Balance
II - DESIGN CONTRACTS AS SUBCONSULTANT				
Replace Bridge over Trouble Creek - Structures	Negotiated Fee	\$45,000	38%	\$27,900
Overtop Road Drainage Study	Negotiated Fee	\$25,000	80%	\$5,000
CR 1111 - Bridge Rehabilitation	Negotiated Fee	\$17,500	0%	\$17,500
US 111 Environmental Services (*Note 2)	Negotiated Fee House Subconsultants	\$300,000 \$200,000 \$100,000	60% 50%	\$80,000 \$50,000
KY 1234 Stream Restoration	Negotiated Fee	\$85,000	20%	\$68,000
US 321 Geotechnical Services (*Note 3)	Negotiated Fee House Subconsultants	\$150,000 \$115,000 \$35,000	35 0	\$74,750 \$35,000
Explanatory Notes if needed:				
* Note 2 - The personnel working on KY 111 will not be involved on the proposed project				
* Note 3 - The Geotech Personnel working on US 321 will not be involved in the proposed project				

KENTON COUNTY, KENTUCKY KY 1072 (FIDELITY CONNECTOR)



State Kentucky	Dates 2001-2007	House Project Manager Chris Taub, PE, PLS
Agency Kentucky Department of Transportation- District No. 6	Road Classification Rural Local	House Project Manager Gregory House, PE
Project and/or Route Name KY 1972 (Fidelity Connector)	Length 1.9 miles	KTC Project Rating 96 points
	Type of Improvement New Facility	

Project Description

This project was introduced to provide a new connector from KY 17 just north of I-275 to the Fidelity Investments Campus in Covington, KY. Prior to the opening of the new connector, the campus was accessed only by Magellan Way from KY 16. Once Fidelity announced plans of expansion, it was determined a secondary route was needed to accommodate the added traffic from the anticipated 1,500 new jobs. House was responsible for Phase I and Phase II design.

The goal of this route was to bring traffic from KY 17 to either the existing campus on Magellan Way or the new Office Building No. 3 on Crosby Parkway. The connection was accomplished with three routes; one from KY 17 midway up the hill, then one to Magellan Way and one to Crosby Parkway all connected in the middle with a roundabout.

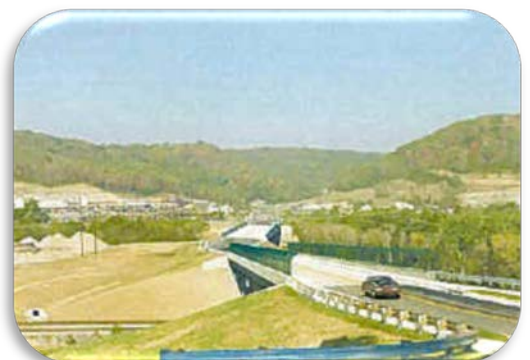


SIMILARITIES TO CURRENT PROJECT

- Light mountainous terrain
- Sensitive drainage design issues

The success of a roundabout is similar to that of a real estate, location, location, location. This situation was ideal due to the majority of the traffic using the facility on a daily basis and the simple operation of a one-lane roundabout with two-lane approaches. The design also allowed the intersection to blend into the rural mountain setting and provide a gateway for entering the campus.

To maintain the natural feel of the road, the ditch drainage was designed to use TRM (Turf Reinforced Mat) along with a drop box/ storm sewer system to avoid the rock channel lining normally used on steep grades.



KENTON COUNTY, KENTUCKY KY 17 (MADISON PIKE)



State Kentucky	Dates 1995-2001	House Project Manager Chris Taub, PE, PLS
Agency Kentucky Department of Transportation- District No. 6	Road Classification Rural Arterial	House Project Manager Lucas Douglas, PE, PLA
Project and/or Route Name KY 17 - Madison Pike	Length 7.0 miles	KTC Project Rating 94 points
	Type of Improvement New Facility	

Project Description

The project consisted of Phase I and Phase II Design by **House Inc.** KY 17 is a major connector between southern Kenton County and the business districts of northern Kentucky. The region along existing KY 17 is highly concentrated with residential and business development. The study area also has numerous potential historic sites, archaeological sites, two major stream crossings and other environmentally sensitive areas. In order to consider these environmental issues in the Phase I design process, environmental baseline studies were begun early in the project and study alignments were based on the early environmental work.

Eleven alternate alignments, totaling over 70 miles, were developed for detailed analysis and consideration. Over 200 separate properties were involved in various alternative alignments. These alternates were evaluated for environmental impacts, construction costs, relocation and utility costs. Information meetings were held with District 6, local Government officials, and citizen groups. This Public Involvement Program allowed the maximum input to provide a feasible alternative solution in an area with numerous environmental and neighborhood concerns.

House completed Phase II design for roadway and bridge plans in three construction sections. Final plans included two bridges over Banklick Creek, a four-span 80' high bridge over Fowler Creek and a three-span bridge over a branch of Fowler Creek. An approximate 1400' section of Hands Pike was reconstructed.



SIMILARITY TO CURRENT PROJECT

- Terrain restraints
- Sensitive drainage issues
- Deep cuts
- Tail bridges

BREATHITT COUNTY, KENTUCKY KY 15



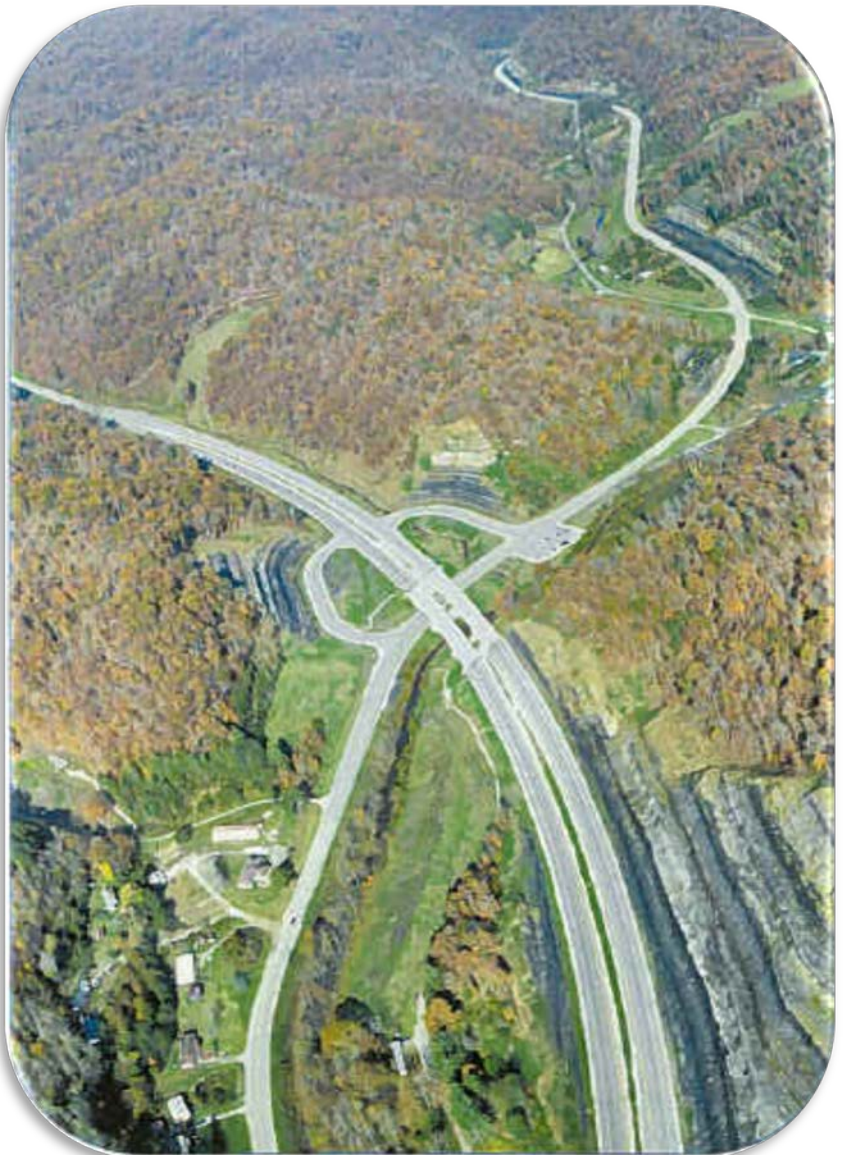
State Kentucky	Dates 1997-present	Type of Improvement Relocation
Agency Kentucky Department of Transportation- District No. 10	Road Classification Rural Arterial	House Project Manager Chris Taub, PE, PLS Jeffrey Cole, PE, PLS
Project and/or Route Name KY 15	Length 13 miles	Firm's Project Manager Richard Hall, PE

Project Description

This project consisted of Phase I and Phase II Design by **House Inc.** following the basic corridor established by an earlier 40 mile scoping study report from Campton to Hazard prepared by **House Inc.** Digital terrain modeling was utilized in conjunction with MicroStation software to develop four alternative horizontal and vertical alignments through mountainous terrain around the city of Jackson. A "Preferred Alignment" was developed through extensive public input and engineering study.

Project included major considerations for the design of river crossings to avoid or minimize floodplain impacts, the design of access to provide "reasonable access" to abutting properties, and avoidance of sensitive environmental areas. Access was managed through partial control of access with an interchange included at KY 205.

Project broken into four construction sections for funding purposes: two sections have been completed and opened to traffic; and the two remaining sections are currently under construction.



SIMILARITY TO CURRENT PROJECT

- Major Reconstruction in Mountainous Terrain
 - Significant bridge cost issues
-

HARDIN & MEADE COUNTIES, KENTUCKY KY 313



State Kentucky	Dates 2006-2010	Type of Improvement Relocation
Agency Kentucky Department of Transportation- District No. 4	Road Classification Rural Arterial	House Project Manager Lawrence Kutner, PE
Project and/or Route Name KY 313	Length 7.8 miles	Approximate Construction Costs \$37,000,000

Project Description

The project involved Phase II Design For KY 313 from the intersection of KY 313 and KY 1500 in Vine Grove to the US 60 – KY 144 intersection at Hog Wallow. House Inc. completed Planning and Phase I Design/Environmental work for KY 313 from KY 1500 in vine Gove to Brandenburg and was awarded Phase II Design for this section. The project is approximately 7.8 mile in length.

The project area included the small rural community of Flaherty, several farms with row crops and livestock, a number of rural residential subdivisions, and an elementary school that is currently undergoing a building expansion. Drainage within the project area is almost wholly controlled by the extensive karst system.

Public involvement tailored to the project included a public mailing to affected property owners of possible minor alignment changes to avoid recent rural residential developments and a right of way information meeting in advance of the right of way work. **House** prepared exhibits for the public mailing and handouts, exhibits and Power Point presentation for the information meeting.

Drainage was unique due to the sink holes and other karst features along the project corridor. Enhanced mitigation measures, including special erosion control features and replacement of storage volume, were required. **House** constructed a full final digital terrain model with proposed contours of the project. This model aided in showing project impacts to the public and in defining areas that required special attention for drainage and erosion control. The right of way plans and construction plans were completed in three section to facilitate acquisition of right of way and beginning construction on the earliest possible schedule. All three sections currently under construction.



SIMILARITIES TO CURRENT PROJECT

- Significant karst drainage issues including wellhead protection area.



SIMILAR PROJECT

LYNDALE DRIVE/ EDGEWOOD ROAD STORMWATER STUDY Edgewood, Kentucky

CLIENT:

The Northern Kentucky Sanitation District No. 1

SERVICES PROVIDED:

Surveying & Stormwater Analysis

Roswell Engineering recently completed a stormwater analysis in the Lyndale Drive / Edgewood Road Subdivision for SD1. Our services included a large due diligence effort that included the distribution of 60 resident questionnaires of which 29 responded. All of the existing stormwater structures were located and identified by Roswell Engineer's field crews. A continuous **SWMM** stormwater model was created for the 208 acre watershed was created to analyze the existing conditions as well as proposed alternative solutions to mitigate flooding.



WATER STREET STORM AND SANITARY IMPROVEMENTS PROJECT Richmond, Kentucky

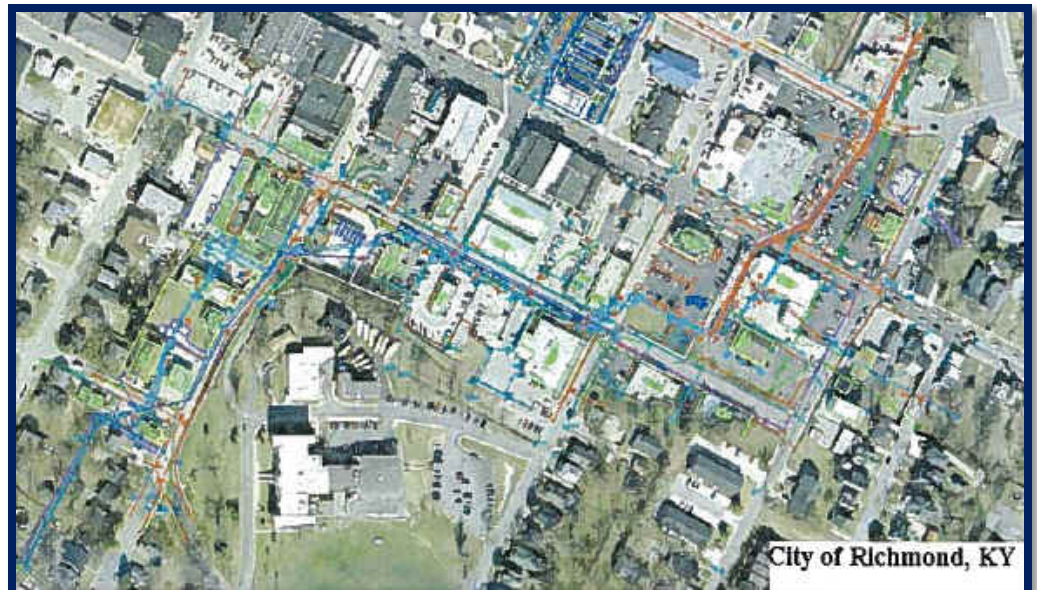
CLIENT:

City of Richmond

SERVICES PROVIDED:

Stormwater Analysis, Engineering Design, & Construction Administration

The Water Street Storm Sewer is in the heart of Richmond, KY. This system is approximately 2900 feet long. The Sewer begins at the intersection of University Drive and Summit Street. The Storm Sewer then traverses underneath several streets, buildings, parking lots and eventually drains into a ditch located on East Irvine Street between N. Collins Street and N. Madison Avenue. The total drainage area to the outfall is approximately 240Ac. The stormwater analysis and design is being conducted by utilizing **SWMM** and **HEC-RAS**. Parts of the sanitary sewer were constructed several decades ago with portions of possibly being over a century old. The existing system is dilapidated over the years. The existing sanitary sewer is an 18" Clay line and the city experiences severe sanitary sewer overflow due to infiltration of water into the system. This sewer shed is approximately 240acres with an approximate population of 8,000 people. There are several building/structures that were constructed above the Sanitary Sewer. Inevitable growth through the decades has increased the sewer flow into the system. The service life of the materials used in the construction has been expended and said material are rapidly deteriorating. Lack of smooth transitions between the various pipe sections, has encumbered the efficiency and the capacity of the system. The above-described factors have combined to render the existing system inadequate causing sanitary sewer overflows during storm events throughout Water Street. A 24" ductile iron sewer is proposed for the water shed. Design includes construction plans for the new system and bypass pumping plans during construction.



Section 3

November 14, 2011 was an important milestone in advancing needed improvements to US 127 between the Jamestown Bypass and KY 90. FHWA's approval of the FONSI and the decision reflected in that document about the location and desired roadway allowed final design to begin. House is pleased to respond to the request for Phase II Design Services for Section 3 of that project, approximately 2.37 miles between Aaron Ridge Road and a crossing of existing US 127 south of the Clinton – Russell County line. The ending point serves as a common terminus for Section 2 and Section 3. We have reviewed the documents provided and are prepared to supply the District 8 Project Team with right of way and construction plans that honor the decision and commitments in the environmental document and provide for a stable roadway along Lake Cumberland with emphasis on cost to ensure the continued viability of this project.



PROJECT APPROACH

Phase II Design essentially involves the development of details for the alignment and roadway selected in Phase I Design to acquire the needed right of way and easements and then construct the new road. It is easy to see after reviewing the preliminary work and information provided that the primary emphasis of Phase II Design must be on how the selected roadway can be fine-tuned to provide the most economical and best fit into the existing lake landscape. Much of the alignment falls within Corps-owned property, and all of the drainage is into the lake water shed. While the cost issue of bridge versus culvert and fill is important for two tributaries to the lake – Turkeypen Creek and upper end of the West Fork of Indian Creek – even that issue is dependent upon how the new road fits into the rugged terrain. **Our project approach, therefore, is focused on using our best terrain modelers to identify “alignment adjustment[s]...**



[that are] advantageous to the Department” and respecting the decision made through the environmental process about where and what to build.

Changes are always likely during final design as additional information is obtained, geotechnical investigations completed, and final grading plans are prepared. For this project, the need for prudent and feasible changes to the Phase I Design alignment are essential to develop right of way and construction details for a project that involves removing trees, opening deep cuts and placing high fills or tall bridges in the Lake Cumberland watershed. Minimizing the impact of this construction is not only essential from the environmental perspective but critical from a cost standpoint. Terrain modeling and visualizations to depict

how the Phase I Design fits and how changes reduce undesirable results will be used as a significant tool to transform the project in a better project.

Earthwork, structures, and pavement are the three major cost items for the US 127 Project between KY 90 and the Jamestown Bypass. For this project (Section 3), the selection of an alignment in Phase I Design in close proximity to Lake Cumberland and through Corps of Engineers' property (fee simple) magnifies the importance of refining the line and grade to reduce the overall footprint of the project. **Phase II Design can be summed up in two simple tasks – find the right balance of horizontal alignment and vertical profile and decide if culverts and embankments can be substituted for the bridge crossings of two Lake Cumberland tributary streams.**

The rugged terrain around the edge of Lake Cumberland results in 200' – 300' changes in elevation from the ridge lines to the creek and small streams flowing into the Indian Creek fork of Lake Cumberland. While the project crosses near the upper end of these creeks and streams, critical lake elevations such as 723 (summer pool elevation) and 760 (flood control elevation) are significant in resolving the issue of fill versus bridge.

After receipt of the updated mapping, our initial focus for Phase II Design will be on the two tasks noted previously – (1) refined line and grade and (2) culvert/fill in lieu of bridges. In preparing our response to the project advertisement, we used the information provided on the Phase I Design alignment and undertook a preliminary evaluation to “define” the range and potential impact of refinements to the line and grade. The table below provides some information from that preliminary work. Alternate 1 is the Phase I Design Alignment, and Alternate 2 is a possible change, involving a shift to move away from the lake. Both are based on using bridges for the two lake tributary crossings. Alternates 1A and 2A use culverts and fill in place of bridges. Alternate 1B involved a 25-foot change in the profile through the two tributary crossings to evaluate potential value in reducing bridge lengths.

Alternate	Height	Phase I Design Bridge Length	Excavation (CY)	Embankment (CY)	Bridge Length Or Culvert Length (2.5:1)
Alternate 1	158' / 202'	860' / 770'	1,102,000	2,319,000	140' / 1250'
Alternate 1A	158' / 202'	-----	1,102,000	5,440,000	960' / 1080'
Alternate 1B	133' / 177'	N/A	2,274,000	1,141,000	1275' / 1125'
Alternate 2	146' / 177'	N/A	1,971,000	742,000	750' / 740'
Alternate 2A	146' / 177'	N/A	1,971,000	2,456,000	790' / 950'

The last column included in the table is an evaluation of the impact of 2.5:1 slopes if required in the high fill areas around the lake. For the purposes of our preliminary evaluation, the “difference” or “changes” for these refinements to the alignment will be used to identify the most likely refinements to the line and grade during Phase II Design. Bridge lengths are reduced about 10% by a 25-foot reduction in the grade and about 40-50% by a shift in the horizontal alignment. A shift in the horizontal alignment has much less value in reducing the length of culverts – 10-18%.

From our analysis, it is clear a change in both the horizontal and vertical alignment is needed and would be beneficial in providing a more balanced grade, reducing the depth of cuts and fills, and increasing the opportunities for **reducing project costs**. The scope of this analysis provides an important measure of possible changes to the horizontal and vertical alignments, in the range of 20' -40' for the grade and shifts in the horizontal alignment up to as much as 200'.

While it appears the most economical decision about the culvert-fill versus bridge is clearly in favor of the culvert and fill option, **House** proposes a more detailed review of this item early in Phase II Design after an initial coordination with the local Corps of Engineers' Office. We propose that representation from the Nashville Office be requested and the meeting be held in the Somerset Corps office to allow for both an office and field review of these situations. **Significant fill into the Lake Cumberland watershed and within Corps-owned property is an important project issue that must be thoroughly coordinated before finalizing the decision.** Through this early exchange of information about the two options, we believe consensus for the best one can be achieved.



While refinements to the line and grade and selecting either fills with culverts or bridges have a major impact on two of the three cost items – earthwork and structures – there is less influence on the pavement cost, other than in the amount of pavement replaced by bridges. There are, however, two items important on this issue. First, there is likely to be sufficient rock for a rock subgrade; and second, a temporary connection to existing US 127 north of the Aaron Ridge Road Intersection is proposed. There appears to be little benefit in providing the temporary connection and also paving more than 4,000 feet of the new road from this connection south of Aaron Ridge Road. We suggest surfacing plans for the 4,000-foot section be deferred. At a minimum, the grade could be constructed through the subgrade in the Section 3 plans.

One of the most effective ways to reduce paving costs would be to reduce the paved width of the shoulders. But, having recently driven the US 127 corridor between Frankfort and KY 90 a number of times, we believe a reduced paved shoulder may not be a prudent choice for the project. **It is important to note that this is a two-lane facility on right of way that is not designed to accommodate a four-lane facility in the future. For consistency, and for the likely traffic that can be expected (including boat traffic and truck traffic), constructing 8' paved shoulders is recommended.** However in the truck climbing lanes, we do strongly recommend reducing the shoulder design (4') and amount of paved shoulder (2') and adding a pull-off area either at the top or bottom of the grade.



OTHER DESIGN ISSUES

A number of other project issues will be important in the development of this project in accordance with current Department policies and procedures. These include coordination (with Section 2 and the Corps of Engineers), access, structure design, utilities, and schedule.

Coordination is always important for projects broken into multiple design sections, but more so for this project because of the rugged terrain and likely cost benefit of slight shifts in the horizontal alignment and changes in the grade that reduce the height of fills and project cost. The common point for this project and the adjacent one (section 2) is the crossing of existing US 127. Because the high probability for some slight change in either the horizontal or vertical alignment or both, **House** proposes to work with the Project Manager to establish a coordination mechanism with the adjacent project. By exchanging possible changes early, and throughout the project as necessary, both projects can advance with confidence that they will fit at this critical juncture.

In addition to the coordination with the adjacent project, we also recommend a coordination mechanism and schedule be included with the local Corps of Engineers' Office. We met with Resource Manager Brant Norris in the Somerset Office to gain a better understanding of Corps' requirements for development around the lake. While a highway project does not fit into the standard criteria set by the Corps for residential developments adjacent to the lake, the goals of their criteria in limiting impacts to the lake are important. This project encroaches within fee simple property acquired by the Corps and for which easements will need to be obtained to build the US 127 project. Information was obtained on those corps properties. **Excavation, fills, and tree cutting will be involved and detailed surveying will be required to tie the project to the Corps' property boundaries.** Coordination on the real estate issue as well as Section 404 permits for any fill placed below ordinary highwater will be required due to the fairly substantial involvement in Corps-owned property. **House** proposes to maintain contact with the local Corps office as an important step to gain consensus locally on how the project can best fit within those properties and minimize impacts to Lake Cumberland.

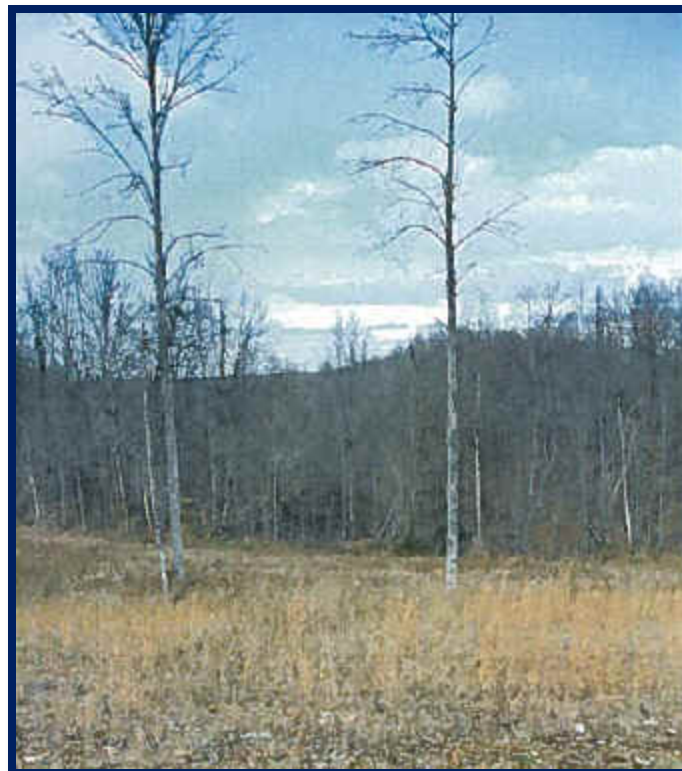
Access is typically an important issue during Phase II Design, especially in the development of right of way plans. However for this project, the proposed road for much of the alignment essentially serves as a border around the lake and access requirements are most significant along the west side, at points where the US 127 grade allows for entrances to be constructed. Access to a couple of knobs near the southern end of the project will have to be considered. A decision about the

use of partial control of access may not be a significant factor for this project due to the location constraints on access, and we believe will not be an important factor in developing the Phase II Design plans.

Structure Design was noted as being an item that could be included through contract modification. **House** has an experienced structure design staff available for the project and that will be used in preparing the Advance Situation folders for the project. Regardless of the decision about culvert-fill versus bridges for the two lake tributary crossings, the structures involved are substantial from a structural design perspective. As noted in the table provided earlier, the bridges will range from 150' to 200' in height and the culverts will be designed for embankments in the 150' – 200' range. Our staff has the experience necessary for providing the required designs for either option.

Utility relocations are not a major design issue, but identification of existing overhead and any underground utilities will be important in refining the alignment and avoiding relocations. The presence of numerous gas wells within the area also makes it important to accurately locate all active wells and lines leading to and from those facilities. Identifying any abandoned or closed wells will also be important as we learned on one of our projects in Meade County. Since surveying will be performed by our in-house staff, Mr. Tritter who has vast experience with these types of issues will provide the needed oversight to avoid problems in producing right of way plans and on construction.

Schedule is important for any project but will require special attention due to coordination requirements with the adjacent project, possible refinements in the line and grade, and coordination recommended around with local Corps office in Somerset. A schedule developed around the specific milestones identified in the bulletin supplemented to include the items noted above will be provided as part of the negotiation process. We have staff available to meet the dates provided for in the bulletin.



DBE REQUIREMENTS

Roswell Engineering, PLLC is included on our Design Team to address DBE requirements but more importantly provide an important service – developing drainage plans that will address normal runoff design requirements with special attention to the planned construction within the Lake Cumberland watershed.

Roswell Engineering is prequalified for Rural Roadway Design, Urban Roadway Design, and Surveying and has considerable experience in the design of both rural and urban drainage systems. Section 3 of the US 127 Project will require consideration for specially-designed detention basins as a means of controlling sediment-laden runoff during the construction of drainage structures and embankments within the tributaries feeding into Lake Cumberland. **Roswell's** experience in the design of urban ponding basins will therefore prove invaluable in the design of this project.

HOUSE PROJECT TEAM

The best team for a project is one with experienced, trained personnel familiar with the specific requirements of that project. We have reviewed the information provided on the project and walked the rugged terrain. ***This project is all about using terrain modeling to refine the preliminary line and grade and provide the best and most economical fit within the rugged Lake Cumberland landscape.*** Gregory House will lead our design team as Project Manager. Ron Simpson and James Wilson will assist Gregory in refining the horizontal and vertical alignments and create the terrain model for the project that can and should be constructed. These three core members of our design team have the commensurate experience with using terrain modeling as a tool to develop right of way and construction details. They have project experience with terrain that is similar and even more rugged and understand how features must be addressed to avoid undesirable and unnecessary impacts. We have staff prepared and immediately available to finalize this project and move it forward to construction.