### **City of Fayetteville Staff Review Form**

2019-0843

**Legistar File ID** 

12/17/2019

City Council Meeting Date - Agenda Item Only N/A for Non-Agenda Item

Wade Abernathy	11/27/2019	FACILITIES MANAGEMENT (140)
Submitted By	Submitted Date	Division / Department

### **Action Recommendation:**

A RESOLUTION TO APPROVE A RFQ 19-01CONTRACT WITH OLSSON INC.,FOR ENGINEERING SERVICES FOR A PARKING DECK FOR CULTURAL ARTS CORRIDOR REPLACEMENT PARKING IN THE AMOUNT OF \$634,100 AND APPROVE A PROJECT CONTINGENCY IN THE AMOUNT OF \$64,000 AND APPROVE A BUDGET ADJUSTEMENT.

### **Budget Impact:**

4608.860.7820-5860.02	4608 - Art	s Project 2	2019 Bond		
Account Number		Fund Arts Corridor 2019 Bonds			
46080.7820 - Arts Corridor, Parking	g Arts Coi				
Project Number	P	roject Tit	le		
Budgeted Item? Yes	Current Budget	\$	20,141,051.00		
	Funds Obligated		503,262.05		
	Current Balance	\$	19,637,788.95		
<b>Does item have a cost?</b> Yes	Item Cost	\$	698,100.00		
Budget Adjustment Attached? Yes	Budget Adjustment	\$	-		
	Remaining Budget	\$	18,939,688.95		
urchase Order Number:	Previous Ordinance o	r Resolutio	V201803		
hange Order Number:	Approval Date:				

**Comments:** 

**Original Contract Number:** 



### CITY COUNCIL MEMO

### **MEETING OF DECEMBER 17, 2019**

TO: Mayor and City Council

**THRU:** Don Marr, Chief of Staff

Paul Becker, Chief Financial Officer

Peter Nierengarten, Environmental Director

**FROM:** Wade Abernathy, Facilities and Building Project Manager

**DATE:** 11/27/2019

SUBJECT: RFQ-19-01, Selection 17 Contract with Olsson Inc., for Engineering Services for a Parking Deck for Cultural Arts Corridor Replacement Parking.

### **RECOMMENDATION:**

Staff Recommends approval of a Contract with Olsson Inc., for Engineering Services for a Parking deck for Cultural Arts Corridor Replacement Parking in the amount of \$634,100 a project contingency in the amount of \$63,400 and a budget adjustment.

### **BACKGROUND:**

In April 2019, Fayetteville voters approved question 8 on the bond initiative for the new cultural arts corridor. The mayor and council committed that replacement parking would be included as a part of that project, and such parking would be completed prior to the commencement of the phase 2 civic plaza.

Phase 1 Bonds allocated \$20,016,970 for the CAC and replacement parking.

### DISCUSSION:

In May of 2019, the selection committee shortlisted Engineering firms for the CAC replacement parking deck.

In September of 2019, The Selection committee meeting selected Olsson Inc., for the Engineering Services for the Parking Deck.

1. The project scope generally includes site selection and design of a parking deck with approximately 400 spaces initially, with a design that allows for future expansion. In addition, the scope currently includes a liner building. Scope and fee is based on a 5,000 square-foot liner building. Scope also includes evaluation of two (2) potential sites. Fees for work associated with the liner building and the site evaluation are itemized separately and may be omitted if the City of Fayetteville decides to omit those scopes.

The project is a Fast Track Delivery Method with a schedule of 15 months completion.

- 1. Submit draft deliverables for Phase 1A Site Selection:
  - o 30 calendar days after NTP.
- 2. Submit draft deliverables for Phase 1B Preliminary Design:
  - 30 Calendar days after site is selected by CITY OF FAYETTEVILLE
- 3. Submit draft deliverables for Schematic Design:
  - 30 Calendar days after approval of Preliminary Design by CITY OF FAYETTEVILLE
- 4. Submit draft deliverables for Design Development:
  - 45 Calendar days after approval of Schematic Design by CITY OF FAYETTEVILLE
- 5. Submit draft deliverables for Construction Documents:
  - 45 Calendar days after approval of Design Development by CITY OF FAYETTEVILLE

### **BUDGET/STAFF IMPACT:**

Funding from this item will be from the 2019 Bond referendum question 8. Phase 1 includes 20,016,970 for the phase 1 of the CAC and the Parking Deck. A project contingency of \$64,000 (10%) will be included.

### **Attachments:**

Contract, including Appendix A-E



# CONTRACT FOR PROFESSIONAL ENGINEERING SERVICES FOR THE CONSTRUCTION OF A NEW DOWNTOWN PARKING DECK

Vendor: Olsson, Inc.

THIS AGREEMENT is executed this	day of	, 2019, by and between the <b>City o</b> f
Fayetteville acting by and through	its Mayor (hereinafter call	ed CITY OF FAYETTEVILLE or CITY) and Olsson, Inc
(hereinafter called ENGINEER or Olsse	on).	

CITY OF FAYETTEVILLE from time to time requires professional ARCHITECTURAL and Engineering services in connection with the evaluation, design, construction drawings, bidding, and/or construction observation of capital improvement projects. Therefore, **City** and **OLSSON** in consideration of their mutual covenants agree as follows:

**OLSSON** shall serve as the professional engineering consultant to the CITY in those assignments to which this Agreement applies and shall give consultation and advice to CITY OF FAYETTEVILLE during the performance of services defined in the scope of work. All services shall be performed under the direction of a licensed engineer registered in the State of Arkansas and qualified in the particular field.

### 1. Contracted parties:

- **a.** This agreement shall be binding between all parties. Fees for architectural services shall be provided as identified in appendices.
- 2. Entire Agreement and Exhibits: This Agreement sets forth the entire agreement and understanding between the parties on the subject matter of this Agreement. Parties shall not be bound by any conditions, definitions, representations or warranties with respect to the subject matter of this Agreement other than those as expressly provided herein.
  - a. Appendices included under this agreement include the following:
    - i. Appendix A: Scope of Services
    - ii. Appendix B: OLSSON Design Fee and Project Timeline
    - iii. Appendix C: RFQ 19-01, Engineering and Architectural Services
    - iv. Appendix D: Olsson's Response to RFQ 19-01
    - v. Appendix E: Olsson's current Certificate of Insurance
  - b. This agreement may be modified only by a duly executed written instrument signed by the **CITY** and **Olsson**.
- **3. Notices:** Any notice required under this Agreement shall be in writing, address to the appropriate party at the following addresses:
  - a. City of Fayetteville: Attention: Mayor Lioneld Jordan, 113 W. Mountain, Fayetteville, AR 72701
  - b. Olsson: Attention: Brad B. Hammond, 302 E. Millsap, Fayetteville, AR 72703

### 4. Fees, Expenses, and Payments:

- a. The maximum not-to-exceed amount authorized for this agreement is **\$634,100.00**, which includes the reimbursable allocation shown below. Fees shall be paid to the **OLSSON** as described in Appendix B.
  - i. Reimbursable Items (as defined in Appendix A and B): \$3,000.
- b. **OLSSON** shall track, log and report hours and expenses directly related to this Agreement. Invoices shall be itemized by phase. Invoice and payment requests shall not exceed the percentage for work completed as defined by Appendix B.

- c. Payment Terms: All invoices are payable upon approval and due within thirty (30) calendar days. If a portion of an invoice or statement is disputed by CITY, the undisputed portion shall be paid. CITY OF FAYETTEVILLE shall advise **OLSSON** in writing of the basis for any disputed portion of any invoice. CITY shall make reasonable effort to pay invoices within 30 calendar days of date the invoice is approved.
- d. Monthly invoices for each calendar month shall be submitted to CITY OF FAYETTEVILLE or such parties as CITY OF FAYETTEVILLE may designate for professional services consistent with **OLSSON's** normal billing schedule. Once established, the billing schedule shall be maintained throughout the duration of the Project. Invoices shall be made in accordance with a format to be developed by **OLSSON** and approved by CITY OF FAYETTEVILLE. Applications for payment shall be accompanied each month by the updated project schedule as the basis for determining the value earned as the work is accomplished. Final payment for professional services shall be made upon CITY OF FAYETTEVILLE'S approval and acceptance with the satisfactory completion of professional services for the Project.
- e. Final Payment: Upon satisfactory completion of the work performed under this Agreement, as a condition before final payment under this Agreement, or as a termination settlement under this Agreement, OLSSON shall execute and deliver to CITY OF FAYETTEVILLE a release of all claims against CITY OF FAYETTEVILLE arising under or by virtue of this Agreement, except claims which are specifically exempted by OLSSON to be set forth therein.
  - i. Unless otherwise provided in this Agreement or by State law or otherwise expressly agreed to by the parties to this Agreement, final payment under this Agreement or settlement upon termination of this Agreement shall not constitute a waiver of CITY OF FAYETTEVILLE claims against **OLSSON** or sureties under this Agreement.
- 5. Notices: Any notice required to be given under this Agreement to either party to the other shall be sufficient if addressed and mailed, certified mail, postage paid, delivery, fax or e-mail (receipt confirmed), or overnight courier.
- **6. Jurisdiction**: Legal jurisdiction to resolve any disputes shall be Arkansas with Arkansas law applying to the case.
- 7. **Venue**: Venue for all legal disputes shall be Washington County, Arkansas.
- **8. Freedom of Information Act:** City of Fayetteville contracts and documents prepared while performing city contractual work are subject to the Arkansas Freedom of Information Act. If a Freedom of Information Act request is presented to the City of Fayetteville, the engineer will do everything possible to provide the documents in a prompt and timely manner as prescribed in the Arkansas Freedom of Information Act (A.C.A. 25-19-101 et. Seq.). Only legally authorized photo coping costs pursuant to the FOIA may be assessed for this compliance.
- 9. Changes in Scope or Price: Changes, modifications, or amendments in scope, price or fees to this contract shall not be allowed without a prior formal contract amendment approved by the Mayor and the City Council in advance of the change in scope, cost or fees.
- **10. Omissions by the Engineer:** If **OLSSON** fails to include or omits an item from the Contract Documents, which was fully anticipated to be included in the Project, thereby necessitating the need for a Change Order, **OLSSON** will not receive a fee for work associated with the Change Order.
- 11. Insurance: OLSSON shall furnish a certificate of insurance addressed to the City of Fayetteville, showing coverages for the following insurance which shall be maintained throughout the term of this agreement. Any work sublet to major subconsultants including MEP, Structural, and Civil, OLSSON shall require the subconsultant to provide the insurance identified. In case any employee engaged in work on the project under this contract is not protected under Worker's Compensation Insurance, OLSSON shall provide and shall cause each Subcontractor to provide adequate insurance for the protection of such of his employees as are not otherwise protected.

- a. **OLSSON** shall provide to the City certificates as evidence of the specified insurance presented in Appendix E within ten (10) calendar days of the date of this agreement and upon each renewal coverage. The City shall be listed as additional insured entity.
- b. Subconsultants not identified as major subconsultants shall maintain reasonable insurance including but not limited to worker's compensation, auto as applicable, general liability, errors and omissions, etc.
- 12. Professional Responsibility: OLSSON will exercise reasonable skill, care, and diligence in the performance of services and will carry out its responsibilities in accordance with customarily accepted professional practices. CITY OF FAYETTEVILLE will promptly report to OLSSON any defects or suspected defects in services of which CITY OF FAYETTEVILLE becomes aware, so OLSSON can take measures to minimize the consequences of such a defect. CITY OF FAYETTEVILLE retains all remedies to recover for its damages caused by any negligence of OLSSON.

### 13. Responsibility of the City of Fayetteville

- a. CITY OF FAYETTEVILLE shall, within a reasonable time, so as not to delay the services of OLSSON:
  - i. Provide full information as to the requirements for the Project.
  - ii. Assist **OLSSON** by placing at **OLSSON**'s disposal all available information pertinent to the assignment including previous reports and any other data relative thereto.
  - iii. Assist **OLSSON** in obtaining access to property reasonably necessary for **OLSSON** to perform its services under this Agreement.
  - iv. Examine all studies, reports, sketches, cost opinions, proposals, and other documents presented by **OLSSON** and render in writing decisions pertaining thereto.
  - v. Review all documents and provide written comments to **OLSSON** in a timely manner.
  - vi. The City of Fayetteville Facilities Director is the project representative with respect to the services to be performed under this Agreement. The Facilities Director shall have complete authority to transmit instructions, receive information, interpret and define policies and decisions with respect to materials, equipment, elements and systems to be used in the Project, and other matters pertinent to the services covered by this Agreement.
- 14. Cost Opinions and Projections: Cost opinions and projections prepared by the OLSSON relating to construction costs and schedules, operation and maintenance costs, equipment characteristics and performance, cost estimating, and operating results are based on OLSSON's experience, qualifications, and judgment as a design professional. Since OLSSON has no control over weather, cost and availability of labor, material and equipment, labor productivity, construction Contractors' procedures and methods, unavoidable delays, construction Contractors' methods of determining prices, economic conditions, competitive bidding or market conditions, and other factors affecting such cost opinions or projections, OLSSON does not guarantee that actual rates, costs, performance, schedules, and related items will not vary from cost opinions and projections prepared by OLSSON.
- **15. Period of Service:** This Agreement will become effective upon the first written notice by CITY OF FAYETTEVILLE authorizing services hereunder.
  - a. The provisions of this Agreement have been agreed to in anticipation of the orderly progress of the Project through completion of the services stated in the Agreement. **OLSSON** will proceed with providing the authorized services immediately upon receipt of written authorization from

CITY OF FAYETTEVILLE. Said authorization shall include the scope of the services authorized and the time in which the services are to be completed. The anticipated schedule for this project is included as an Appendix.

### 16. Termination:

- a. This Agreement may be terminated in whole or in part in writing by either party in the event of substantial failure by the other party to fulfill its obligations under this Agreement through no fault of the terminating party, provided that no termination may be effected unless the other party is given:
  - i. Not less than ten (10) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate,
  - ii. An opportunity for consultation with the terminating party prior to termination.
- b. This Agreement may be terminated in whole or in part in writing by CITY OF FAYETTEVILLE for its convenience, provided that **OLSSON** is given:
  - i. Not less than ten (10) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate,
  - ii. An opportunity for consultation with the terminating party prior to termination.
- c. If termination for default is effected by CITY OF FAYETTEVILLE, an equitable adjustment in the price provided for in this Agreement shall be made, but
  - i. No amount shall be allowed for anticipated profit on unperformed services or other work,
  - ii. Any payment due to **OLSSON** at the time of termination may be adjusted to cover any additional costs to CITY OF FAYETTEVILLE because of **OLSSON**'s default.
- d. If termination for default is effected by **OLSSON**, or if termination for convenience is effected by CITY OF FAYETTEVILLE, the equitable adjustment shall include a reasonable profit for services or other work performed. The equitable adjustment for any termination shall provide for payment to **OLSSON** for services rendered and expenses incurred prior to the termination, in addition to termination settlement costs reasonably incurred by **OLSSON** relating to commitments which had become firm prior to the termination.
- e. Upon receipt of a termination action, **OLSSON** shall:
  - i. Promptly discontinue all affected work (unless the notice directs otherwise),
  - ii. Deliver or otherwise make available to CITY OF FAYETTEVILLE all data, drawings, specifications, reports, estimates, summaries and such other information and materials as may have been accumulated by **OLSSON** in performing this Agreement, whether completed or in process.
- f. Upon termination under sections above CITY OF FAYETTEVILLE may take over the work and may award another party an agreement to complete the work under this Agreement.
- g. If, after termination for failure of **OLSSON** to fulfill contractual obligations, it is determined that **OLSSON** had not failed to fulfill contractual obligations, the termination shall be deemed to have been for the convenience of CITY OF FAYETTEVILLE. In such event, adjustments of the agreement price shall be made as provided in this agreement.

### 17. Delays

a. In the event the services of OLSSON are suspended or delayed by CITY OF FAYETTEVILLE or by other events beyond OLSSON's reasonable control, OLSSON shall be entitled to additional compensation and time for reasonable documented costs actually incurred by OLSSON in temporarily closing down or delaying the Project. b. In the event the services are suspended or delayed by **Olsson**, City shall be entitled to compensation for its reasonable costs incurred in temporarily closing down or delaying the project. The City does not agree to waive its right to claim (in addition to direct damages) special, indirect, or consequential damages, whether such liability arises in breach of contract or warranty, tort (including negligence), strict or statutory liability, or any other cause of action.

### 18. Rights and Benefits

a. **OLSSON**'s services shall be performed solely for the benefit of CITY OF FAYETTEVILLE and not for the benefit of any other persons or entities.

### 19. Dispute Resolution

- **a.** Scope of Paragraph: The procedures of this Paragraph shall apply to any and all disputes between CITY OF FAYETTEVILLE and **OLSSON** which arise from, or in any way are related to, this Agreement, including, but not limited to the interpretation of this Agreement, the enforcement of its terms, any acts, errors, or omissions of CITY OF FAYETTEVILLE or **OLSSON** in the performance of this Agreement, and disputes concerning payment.
- **b.** Exhaustion of Remedies Required: No action may be filed unless the parties first negotiate. If timely Notice is given as described in this agreement, but an action is initiated prior to exhaustion of these procedures, such action shall be stayed, upon application by either party to a court of proper jurisdiction, until the procedures in this agreement have been complied with.

### c. Notice of Dispute

- i. For disputes arising prior to the making of final payment promptly after the occurrence of any incident, action, or failure to act upon which a claim is based, the party seeking relief shall serve the other party with a written Notice.
- ii. For disputes arising within one year after the making of final payment, CITY OF FAYETTEVILLE shall give **OLSSON** written Notice at the address listed in this agreement within thirty (30) calendar days after occurrence of any incident, accident, or first observance of defect or damage. In both instances, the Notice shall specify the nature and amount of relief sought, the reason relief should be granted, and the appropriate portions of this Agreement that authorize the relief requested.
- iii. Negotiation: Within seven (7) calendar days of receipt of the Notice, the Project Managers for CITY OF FAYETTEVILLE and **OLSSON** shall confer in an effort to resolve the dispute. If the dispute cannot be resolved at that level, then, upon written request of either side, the matter shall be referred to the President of **OLSSON** and the Mayor of CITY OF FAYETTEVILLE or his designee. These officers shall meet at the Project Site or such other location as is agreed upon within 30 calendar days of the written request to resolve the dispute.
- **20. Sufficient Funds**: The CITY represents it has have sufficient funds or the means of obtaining funds to remit payment to **OLSSON** for services rendered by **OLSSON**.

### 21. Publications:

a. Recognizing the importance of professional development on the part of OLSSON's employees and the importance of OLSSON's public relations, OLSSON may prepare publications, such as technical papers, articles for periodicals, promotional materials, and press releases, in electronic or other format, pertaining to OLSSON's services for the Project. Such publications will be provided to CITY OF FAYETTEVILLE in draft form for CITY OF FAYETTEVILLE's advance review. CITY OF FAYETTEVILLE shall review such drafts promptly and provide CITY OF FAYETTEVILLE's comments to OLSSON, CITY OF FAYETTEVILLE may require deletion of proprietary data or confidential information from such publications, but otherwise CITY OF FAYETTEVILLE will not unreasonably withhold approval. Approved

materials may be used in a variety of situations and do not require additional review or approval for each use. The cost of **OLSSON**'s activities pertaining to any such publication shall be for **OLSSON**'s account.

### 22. Indemnification:

a. OLSSON agrees to indemnify, defend and hold harmless the CITY OF FAYETTEVILLE for any loss caused by negligence and from and against any and all loss where loss is caused or incurred or alleged to be caused or incurred in whole or in part as a result of the negligence or other actionable fault of the OLSSON, or their employees, agents, Subcontractors, sub consultant and Suppliers of the OLSSON.

### 23. Ownership of Documents:

- **a.** All documents provided by CITY OF FAYETTEVILLE including original drawings, CAD drawings, estimates, field notes, and project data are and remain the property of CITY OF FAYETTEVILLE. **Olsson** may retain reproduced copies of drawings and copies of other documents.
- b. Engineering and architectural documents, computer models, drawings, specifications and other hard copy or electronic media prepared by OLSSON as part of the Services shall become the property of CITY OF FAYETTEVILLE when OLSSON has been compensated for all Services rendered, provided, however, that OLSSON shall have an unrestricted perpetual license right to their use. OLSSON shall, however, retain its rights in its standard drawings details, specifications, databases, computer software, and other proprietary property. Rights to intellectual property developed, utilized, or modified in the performance of the Services shall remain the property of OLSSON.
- c. Any files delivered in electronic medium may not work on systems and software different than those with which they were originally produced. Olsson makes no warranty as to the compatibility of these files with any other system or software. Because of the potential degradation of electronic medium over time, in the event of a conflict between the sealed original drawings/hard copies and the electronic files, the sealed drawings/hard copies will govern.

### 24. Additional Responsibilities of OLSSON:

- a. Review, approval, or acceptance of design drawings, specifications, reports and other services furnished hereunder by CITY shall not in any way relieve OLSSON of responsibility for the technical adequacy of the work. Review, approval or acceptance of, or payment for any of the services by CITY shall not be construed as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement.
- b. OLSSON shall be and shall remain liable, in accordance with applicable law, for all damages to CITY OF FAYETTEVILLE caused by OLSSON's negligent performance, except beyond the OLSSON normal standard of care, of any of the services furnished under this Agreement, and except for errors, omissions or other deficiencies to the extent attributable to CITY OF FAYETTEVILLE or CITY OF FAYETTEVILLE-furnished data.
- c. OLSSON's obligations under this clause are in addition to OLSSON's other express or implied assurances under this Agreement or State law and in no way diminish any other rights that CITY OF FAYETTEVILLE may have against OLSSON for faulty materials, equipment, or work.
- d. Deliverables for Record Documents or "as-builts" shall be defined as the following. **OLSSON** will provide one set of Drawings in digital (PDF) format that includes final revisions formalized by **OLSSON** through the

course of the Work. Field revisions as supplied by the CMAR to **OLSSON** at close out shall be included as part of **OLSSON's** "As-Builts". **OLSSON** will also provide AutoCAD compatible (DWG) vector format digital background files of a project site plan, floor plans and ceiling plans.

### 25. Audit and Access to Records:

- a. OLSSON shall maintain books, records, documents and other evidence directly pertinent to performance on work under this Agreement in accordance with generally accepted accounting principles and practices consistently applied in effect on the date of execution of this Agreement.
- b. OLSSON shall also maintain the financial information and data used by OLSSON in the preparation of support of the cost submission required for any negotiated agreement or change order and send to CITY OF FAYETTEVILLE a copy of the cost summary submitted. CITY OF FAYETTEVILLE, or any of their authorized representatives shall have access to all such books, records, documents and other evidence for the purpose of inspection, audit and copying during normal business hours. OLSSON will provide proper facilities for such access and inspection.
- c. Records shall be maintained and made available during performance on assisted work under this Agreement and until three years from the date of final payment for the project. In addition, those records which relate to any controversy arising out of such performance, or to costs or items to which an audit exception has been taken, shall be maintained and made available until three years after the date of resolution of such appeal, litigation, claim or exception.
- **d.** This right of access clause (with respect to financial records) applies to:
  - i. Negotiated prime agreements:
  - ii. Negotiated change orders or agreement amendments in excess of \$10,000 affecting the price of any formally advertised, competitively awarded, fixed price agreement:
  - iii. Agreements or purchase orders under any agreement other than a formally advertised, competitively awarded, fixed price agreement. However, this right of access does not apply to a prime agreement, lower tier sub agreement or purchase order awarded after effective price competition, except:
    - 1. With respect to record pertaining directly to sub agreement performance, excluding any financial records of **OLSSON**;
    - 2. If there is any indication that fraud, gross abuse or corrupt practices may be involved;
    - 3. If the sub agreement is terminated for default or for convenience.

### 26. Covenant Against Contingent Fees:

a. OLSSON warrants that no person or selling agency has been employed or retained to solicit or secure this Agreement upon an agreement of understanding for a commission, percentage, brokerage or continent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by OLSSON for the purpose of securing business. For breach or violation of this warranty, CITY OF FAYETTEVILLE shall have the right to annul this Agreement without liability or at its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

### 27. Gratuities:

- a. If CITY OF FAYETTEVILLE finds after a notice and hearing that OLSSON or any of OLSSON's agents or representatives, offered or gave gratuities (in the form of entertainment, gifts or otherwise) to any official, employee or agent of CITY OF FAYETTEVILLE, or related third party contractor associated with this project, in an attempt to secure an agreement or favorable treatment in awarding, amending or making any determinations related to the performance of this Agreement, CITY OF FAYETTEVILLE may, by written notice to OLSSON terminate this Agreement. CITY OF FAYETTEVILLE may also pursue other rights and remedies that the law or this Agreement provides. However, the existence of the facts on which CITY OF FAYETTEVILLE bases such finding shall be in issue and may be reviewed in proceedings under the Remedies clause of this Agreement.
- b. The CITY may pursue the same remedies against OLSSON as it could pursue in the event of a breach of the Agreement by OLSSON. As a penalty, in addition to any other damages to which it may be entitled by law, CITY OF FAYETTEVILLE may pursue exemplary damages in an amount, as determined by CITY, which shall be not less than three nor more than ten times the costs OLSSON incurs in providing any such gratuities to any such officer or employee.

### 28. Clarification and Understanding of all parties:

- **a.** The citizens of Fayetteville voted to authorize the Fayetteville City Council to issue bonds to fund this project.
- **b.** All parties agree and acknowledge that all funds derived from the City's sale of the bonds may only be spent or used for purposes authorized by the City voters and applicable state law.
- c. The City of Fayetteville intends to prominently display a bronze or comparable material plaque or other means of display inside the main lobby or other designated area stating, "The City of Fayetteville thanks the citizens and taxpayers of Fayetteville for their over \$XX million investment for the *project name and year*". Wording shall be finalized with the CITY prior to procuring the plaque.
- **29. Equal Employment Opportunity**: The parties hereby incorporate by reference the Equal Employment Opportunity Clause required under 41 C.F.R. § 60-1.4, 41 C.F.R. § 60-300.5(a), and 41 C.F.R. § 60-741.5(a), if applicable.
  - a. Engineer shall abide by the requirements of 41 CFR §§ 60-1.4(a), 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities and prohibit discrimination against all individuals based on their race, color, religion, sex, sexual orientation, gender identity, or national origin. Moreover, these regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, protected veteran status or disability.
  - b. Engineer and subconsultants certify that they do not maintain segregated facilities or permit their employees to perform services at locations where segregated facilities are maintained, as required by 41 CFR 60-1.8.

authorized officer have made and executed this Agreement as of the day and year first above written.

CITY OF FAYETTEVILLE, ARKANSAS

OLSSON, INC.

By:
By:
LIONELD JORDAN, MAYOR

ATTEST:

By:
Lisa Branson, Deputy City Clerk

Date Signed:
Date Signed:

END OF AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES

IN WITNESS WHEREOF, CITY OF FAYETTEVILLE, ARKANSAS by and through its Mayor, and OLSSON, INC., by its

### APPENDIX A – SCOPE OF SERVICES

## PROFESSIONAL ENGINEERING SERVICES FOR THE CONSTRUCTION OF A DOWNTOWN PARKING DECK

### 1. Project Information & Requirements

- 1. OLSSON and its sub consultants that comprise the project team shall provide applicable Engineering services, including but not limited to surveying, engineering and landscape architecture to the City for the schematic design, design development, construction drawings, construction administration and ancillary services, including services to prepare necessary documents for permitting approval through the Large Scale Development process, necessary to construct a to construct a Civic Plaza on the existing parking lot located at the corner of Dickson Street and West Avenue as part of a voter-approved Cultural Arts Corridor project and to include approximately 400 spaces to achieve a net gain of parking spaces compared to the existing. This necessitates parking to be replaced prior to the construction of the Civic Plaza. It is the desire of the City to build a parking deck that would achieve a net gain of approximately 325 parking spaces in the downtown Fayetteville area. Depending upon the site selected, Olsson understands that the size of the parking deck will need approximately 400 spaces to achieve the net gain required.
- 2. The project scope generally includes site selection and design of a parking deck with approximately 400 spaces initially, with a design that allows for future expansion. In addition, the scope currently includes a liner building. Scope and fee is based on a 4,500 square-foot liner building. Scope also includes evaluation of two (2) potential sites. Fees for work associated with the liner building and the site evaluation are itemized separately and may be omitted if the CITY OF FAYETTEVILLE decides to omit the liner building and site evaluation from the scope.
- 3. The Scope of Work encompasses six (6) Phases for the overall outcome of a fast-track designed parking deck in downtown Fayetteville and described associated services. Phases will consist of the following categories: Phase 1, Site Selection and Preliminary Design; Phase 2, Schematic Design & Project Development; Phase 3, Construction Documents; Phase 4, Bidding; Phase 5, Construction Administration Services; and Phase 6, Project Closeout
- a. The new facility shall achieve a minimum standard of LEED Certification as designated by the U.S. Green Building Council (USGBC) with a minimum certification of Silver, as required by the City.
- b. The procurement method for the construction will be Construction Manager at Risk. The CMAR will be selected in the early schematic design phase by the City of Fayetteville.

- c. The project team, including all engineering and architectural disciplines, are hereby identified as the following:
  - i. Architect Services: Not Included To Be Procured by City of Fayetteville
  - ii. Parking Deck Consultant: Walker Consultants
  - iii. Mechanical, Electrical & Plumbing Engineering Services: Olsson
  - iv. **Structural Engineering**: Walker (Superstructure); Olsson (Foundation)
  - v. Civil Engineering & Landscape Architecture: Olsson
  - vi. ADA: Site Civil (Olsson)

### 2. City Responsibilities:

- a. Right of entry to the properties
- b. Adjacent property owner notifications and public meeting notices.
- c. Previous available surveys, reports, etc.
- d. Paying all plan review fees and advertising costs.
- e. Furnishing all permits and providing permit review fees.
- f. Provide base map drawing based upon city planimetric showing contours, structures, right-of-way, property lines, easements, and all utilities including private sewer service connections.
- g. Procure third-party Architect to provide all architectural services and renderings.

### 3. Exclusions:

- a. For clarification, the proposed scope of services does not include the following but will be considered as extra work as directed by the City in advanced writing for an additional agreed upon by the City and OLSSON:
  - i. All architectural design, including architectural renderings, as architectural design services will be provided by a separate consultant procured directly by the City.
  - ii. Utility relocation design other than water and sewer.
  - iii. Vehicular counts of existing traffic and traffic studies.
  - iv. Other exclusions listed in scope below
- 4. <u>Scope of Work</u>: OLSSON shall provide a suitable staff to complete the necessary surveys, to perform detailed design, to prepare plans and specifications, to provide needed services during the bid phase, and to provide other services as may be directed by the CITY OF FAYETTEVILLE. The staff shall consist of surveyors, engineers, technicians, inspectors and other assistants as may be necessary to carry on the work in an efficient and expeditious manner. OLSSON will provide the following services:
  - a. Phase 1A: Site Selection (if required)

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- i. Attend public presentations and input meetings: Olsson will attend public presentations and input meetings to solicit feedback and answer questions about the project. For budgeting purposes, Olsson has assumed two (2) public presentations and input meetings. Meetings required beyond those identified will be considered as an additional service and invoiced hourly in accordance with Olsson's standard hourly rates after approved change order is executed between all parties.
- ii. Site/Utility Investigation Analysis: Olsson shall visit the site for the purposes of verifying existing conditions for an alternative site considered (analysis for one site will be performed as described below.) Olsson shall also identify and evaluate the capacity of existing site utilities. The report will contain an inventory and mapping of existing utilities, written statements regarding the presence and available capacity of utilities, and an analysis of regulatory impacts.
- iii. Site Feasibility Report and Conceptual Site Plan(s): Olsson will develop multiple Conceptual Site Plans to present optimum locations for all improvements for the two (2) sites considered. Olsson will prepare the Site Feasibility Report in close coordination with the City to summarize the topography, utilities, potential geotechnical challenges, environmental, traffic, orientation, and neighborhood character. Olsson will prepare a Preliminary Project Schedule to outline realistic timeframes for design and construction.
- iv. Site Selection: Olsson will attend and participate in up to two (2) Site Selection meetings with the City. At these meetings, the findings of the Site/Utility Investigation Analysis and the Site Feasibility Report/Conceptual Site Plans will be reviewed, and a site will be selected by the CITY OF FAYETTEVILLE.
- v. Contract Deliverables: Five (5) bound copies of Site Feasibility Report.

### b. Phase 1B: Preliminary Design

- i. Comply with City of Fayetteville development, building and fire codes.
- ii. Prepare and submit three (3) sets of spatial needs program of spaces and adjacencies layout for review and approval. Each spatial plan shall include basic information such as sizes, space requirements, workflows, activities and special uses.
- iii. Attend and participate in Project Pre-Design Meetings: Olsson will attend and participate in up to two (2) Project Pre-Design Meetings with the City. At this meeting, Scope of Work will be reviewed. Olsson will also assist in the development of the Project Directory, help establish the Project Meeting schedule, and review all project procedures.

- iv. Programming the Project: Olsson will meet with the City to review, ascertain and establish applicable requirements of the Project as well as conduct interviews with key personnel identified by the City.
- v. Site/Utility Investigation Analysis: Olsson shall visit the site for the purposes of verifying existing conditions. Olsson shall also identify and evaluate the capacity of existing site utilities. The report will contain an inventory and mapping of existing utilities, written statements regarding the presence and available capacity of utilities, and an analysis of regulatory impacts.
- vi. Attend additional public presentations and input meetings: Olsson will attend public presentations and input meetings to solicit feedback and answer questions about the project. For budgeting purposes, Olsson has assumed two (2) public presentations and input meetings. Meetings required beyond those identified will be considered as an additional service and invoiced hourly in accordance with Olsson's standard hourly rates.
- vii. Phase I Environmental Site Assessment (ESA): Olsson will complete a Phase I ESA for the two sites. The Phase I ESA will be prepared in accordance with the purpose, provisions, scope and limitations of the "all appropriate inquiry" standards and practices set forth in (1) 40 C.F.R. Part 312 and (2) the "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process", ASTM Standard E 1527-13 both of which are incorporated herein by this reference. Only the Client shall be entitled to rely on the Documents provided in the performance of the Phase I ESA Services. The Documents relate solely to the Services for which Olsson has been retained and shall not be used or relied upon by the Client or any third party for any variation or extension of the Services, any other project or any other purpose without the express written consent of the Client and Olsson. All parties are subject to the same General Provisions as agreed to in the contract under which these services will be completed. The ESA will include the following scope items:

### 1. Records Review

- a. Purchase an environmental database report (i.e. EDR, HIG, GeoSearch, etc.) to obtain historical information related to each Assessment Property.
- b. Review of physical setting sources related to the Assessment Properties
- c. Review of federal, state, tribal and local environmental records related to the Assessment and adjoining properties
- d. Review of historical information related to the Assessment Properties obtained from environmental database report.

### **2.** Site Reconnaissance

- a. Conduct a visual walk-through of the Assessment Properties and facilities
- b. Document visual site setting and land use of Assessment Properties

- c. Visual inspection of adjoining properties from property lines of Assessment Properties and public right of ways
- d. Document site reconnaissance with photographs

### **3.** Interviews

- a. Interview current landowner, occupant, facility manager(s), and others as applicable and available.
- b. Interview local government officials

### **4.** Evaluation

- a. Tier 1 Vapor Encroachment Screening (VES) in general accordance with ASTM Standard E 2600-15 "Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions."
- b. Prepare the Phase I ESA Report for each Property summarizing the findings, opinions, and conclusions of the Environmental Professional.
- c. Submittal of the Phase I ESA Report for each Property in PDF format within 28 business days.
- d. If Recognized Environmental Conditions (RECs) or Controlled Recognized Environmental Conditions (CRECs) are identified in the Phase I ESA Report, Olsson will issue a recommendation letter to the Client.

### **5.** Assumptions

- a. User questionnaires, owner questionnaires, and title commitment (including a search for environmental liens and activity and use limitations for the assessment properties) will be returned to Olsson within approximately 1 week after NTP.
- b. The assessment properties are accessible within approximately 1 week after NTP.
- c. Third parties identified on the Client's user questionnaire requesting reliance will not be included as Users but will be provided reliance in the Report contingent to the General Provisions.
- d. If Client requests additional Users of the ESA, additional user questionnaires must be provided to Olsson from the third parties within approximately 1 week after NTP. Inclusion of additional Users will be provided in the Report contingent to the General Provisions.
- e. Any third-party reliance requested after issuance of the Report will be provided contingent to the General Provisions.

### **6.** Task Limitations

 a. In conducting the ESA, Olsson will not investigate certain matters, even preliminarily, which are considered to be beyond the scope of a Phase I ESA as listed in ASTM E 1527-13.

- b. Sampling and analysis, and business environmental risk evaluation are not included.
- c. In conducting the ESA, Olsson will review regulatory records and historical sources which are "reasonably ascertainable" as mandated by ASTM Practice E 1527-13. Generally, the standard considers information sources to be reasonable ascertainable if they can be obtained without extraordinary effort or delay. It is possible, therefore, that Olsson's research, while fully appropriate and in compliance with the ASTM Practice, fails to indicate the existence of important information which may alter the conclusions presented in this report. Olsson cannot and does not accept responsibility for failure to consider information which was not "reasonably ascertainable" at the time the assessment was conducted.
- d. The conclusions presented in this report will be qualified and limited by the fact that certain indicators of the presence of hazardous materials may have been latent at the time of the site reconnaissance. Olsson cannot and does not accept responsibility for latent conditions, which may, subsequent to the site reconnaissance, become apparent in light of changed circumstances.
- viii. Surveying: Olsson will provide a topographic and boundary survey for the selected site.
- ix. Preliminary Project Budget/Cost Estimate: Based on the information above, Olsson will provide information to the Construction Manager at Risk (CMAR) to develop a Preliminary Budget for the project. This Budget will be used to guide subsequent design and engineering efforts in order to identify possible discrepancies between the Construction Budget and the funds available for the project. Construct Cost Estimating will be the responsibility of the CMAR.
- x. Contract Deliverables: Five (5) bound copies of Program Analysis, Phase 1 Environmental Site Assessment, Traffic Narrative five (5) sets of Conceptual Site Plans for new building and deck.

### c. Phase 2: Schematic Design & Design Development

i. Site Visitation & Evaluation: Olsson shall perform a detailed site evaluation, to more fully define matters of egress (during construction and afterward), access (especially for the handicapped), routing of utilities, programmatic relationships between new and existing site structures and components and identify any special features which might affect project scope, design, cost, or schedule. Consideration shall be given to Project phasing and site access during construction of each phase to maintain the minimal disruption to the downtown area.

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- ii. Design Approval Process: Olsson will assist the CITY OF FAYETTEVILLE in taking the final design through the City's required avenues for project approval (e.g. Large Scale Development Process), including:
  - 1. Creation of LSD Sheets from design plans
  - 2. Preparation of Tree Preservation and Site Analysis Plan
  - **3.** Coordination of submissions to planning office and Planning Commission
  - **4.** Preparation and submittal of a drainage report meeting city ordinances
  - 5. Prepare documents and coordinate rezoning
  - 6. Olsson will attend meetings to coordinate design elements with city staff and elected commissions. For budgeting purposes, Olsson has assumed the following for meetings with a maximum of two attendees. Meetings required beyond those identified may be considered as an additional service and invoiced hourly in accordance with Olsson's standard hourly rates.

Conceptual Meeting with City Staff
 Attend Technical Plat Review with City Staff
 Attend Planning Commission Meeting
 1 each
 1 each

- iii. Prepare Schematic Drawings: Based upon information gathered during the Site Selection and Preliminary Design Phase, and building upon the conceptual Site Plans previously submitted, Olsson shall prepare Schematic Site Plans, Elevations, and Sections, showing the key architectural and engineering features of the proposed construction and/or renovations and the key relationships between the new and existing facilities. Olsson will coordinate with the architect selected by the CITY OF FAYETTEVILLE for architectural plans.
- iv. Prepare Outline Specifications: Olsson will prepare an outline of specifications, including each of the major materials, systems, and assemblies required for the project, in sufficient detail to enable them to be budgeted by the CMAR. Olsson will coordinate with the CMAR to identify items that may have a significant impact on the estimate.
- v. Schematic Phase Construction Cost Estimate: Working from the Preliminary Budget developed during the Program Phase, the Schematic Design, and the Outline Specs, Olsson will provide documents to CMAR to develop a Schematic Construction Cost Estimate.
- vi. Project Schedule: Utilizing a Fast Track concept, Olsson will assist the CMAR to prepare a Project Schedule based upon all information known to date.
- vii. Present the Schematic Design: Olsson will assist with presentation of the Schematic Site Plan Design to the key stakeholders of the project. Their comments and suggestions will help guide development of the design. The Site Plan will conform, to the extent practicable, to applicable zoning and

- land development ordinances as well as City and State regulations. Any recommended waivers or variances will be identified for discussion with the local planning/zoning board.
- viii. Contract Deliverables: Five (5) sets of Schematic Drawings; Three (3) sets of Outline Specifications, with Cost Estimates and Schedules.
- ix. Geotechnical Evaluation: Olsson will prepare a boring location plan and prepare a geotechnical evaluation of select portions of the site. The geotechnical evaluation shall be based upon Programming and Schematic data generated by the Project team, and will including the following items, assumptions, and disclaimers:

### 1. Drilling Services

- a. Olsson will contact Arkansas One Call to locate underground utilities. To ensure the safety of the crew on site, Owner must inform Olsson of the location of all private utilities and private utility service connections. The cost of locating private utility lines and private service connections is the Owner's responsibility. Olsson is not responsible or liable for damage to any private utilities or private service connections.
- All boring locations must be readily accessible. Any fees
  resulting from the use of mud-matting or clearing
  operations to achieve access to boring locations is Owner's
  responsibility and not included in this scope of work.
  Olsson cannot perform field work until access to boring
  locations is satisfactory to Olsson.
- c. Drilling equipment may cause disturbance to natural surroundings including but not limited to soil indentations, concrete cracking, and damage to underground sprinkler systems. Olsson will not be liable or responsible for any site disturbance that may occur as a result of bringing equipment on site. The Owner accepts full responsibility for site disturbance.
- d. Olsson proposes to use a truck-mounted drill rig to complete the following soil test borings for the geotechnical exploration:
  - i. Ten (10) soil test borings to the depth of practical auger refusal using standard drilling methods, with an additional 10 feet of NQ rock coring in each boring.
  - ii. Fee is based on ten (10) borings. Additional borings, if necessary and approved by the City of Fayetteville, may be provided as an additional service for \$1,100.00 per boring.

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- e. The soil borings will be advanced to the depths proposed using auger drilling and rock coring techniques. This proposal is based on a total auger drilling footage of up to 200 linear feet and a total rock coring footage of 100 linear feet.
- f. Split spoon and thin-walled samples shall be collected from the soil test borings.
- g. Olsson will obtain groundwater levels in the test borings at the time of drilling and upon completion of the drilling operations.

### 2. Geotechnical Services

- a. Laboratory Services: At our laboratory, unconfined compressive strength, moisture content, and in-place unit weight tests will be performed on representative portions of selected thin-walled tube samples. Moisture content tests will be performed on all samples. Atterberg limits tests will also be performed upon representative samples of typical subsurface conditions encountered across this site.
- b. Evaluation and Geotechnical Report: A geotechnical engineering report will be prepared under the direction of a registered professional engineer based on the findings of the field and laboratory programs. The report will include a boring location plan, computer-generated boring logs, results of the laboratory testing program and a description of the surface and subsurface conditions encountered at the site. In addition, the report will present our opinions and recommendations regarding the following items:
  - i. Generalized geotechnical site preparation concerns addressing fill subgrade preparation, earthwork placement, fill compaction criteria, excavatability of any bedrock, and suitability of on-site materials for use as structural fill
    - Recommended foundation design parameters, including bearing pressures and depths
    - 2. Anticipated total and differential settlement of structural elements
    - 3. Floor slab and pavement subgrade preparation
    - 4. Generalized subsurface drainage requirements for fill, building, and pavement areas

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- 5. Seismic site coefficient per the International Building Code
- x. Confirm Utility Availability: Olsson will establish utility loads for the Project. If those loads exceed the capacity of the services within the existing site, additional capacity will have to be arranged with the respective utility companies. In that case, Olsson will prepare load letters, requesting commitments for the requested service enhancements. Scope does not include the design of off-site utility improvements.
- xi. Prepare Design Development Drawings: Based upon information gathered during the previous phases, Olsson shall prepare Design Development Drawings. In addition to indicating new work, Olsson will also indicate the work required on any of the existing structures or features, if they are to remain for budgetary purposes. Design Development Drawings will include the following:
  - 1. Civil Design Development Drawings, including civil site design layout and grading plan, utility layout, and landscape plan.
  - 2. Structural Design Development Drawings for the Parking Deck, including preliminary foundation plans, joint locations and structural details.
  - **3.** Structural Design Development Drawings for the Liner Building, including preliminary sections and foundation plan.
  - **4.** Mechanical, Electrical and Plumbing Design Development Drawings, including
    - a. A photometric plan for garage parking lighting and other exterior lighting for sidewalks or adjacent exterior areas that are associated with the parking garage.
      - i. Photometrics of interior spaces intended for occupancy i.e. offices, retail spaces, other leasable spaces, are not included.
      - ii. Olsson shall coordinate with Walker design concepts for final fixture selections and foot-candle levels
      - iii. The lighting layout should be reviewed by all necessary parties including the Client. The Reviewers will relay any necessary lighting layout modifications, clarification in standard(s), etc.
    - b. A schematic lighting controls plan for the parking garage lighting to indicate the intended lighting controls including a sequence of operations.
    - c. New electrical service equipment located on plans and preliminary one-line diagram for new electrical service.
    - d. Mechanical HVAC will identify potential requirements for elevator shafts, lobbies or other enclosed spaces in the parking garage.

- e. Mechanical will evaluate and make recommendations for potential shafts and HVAC systems for mixed-use retail on first floor
- f. Schematic layout for plumbing systems and approximate services sizes and locations.
- g. Preliminary specifications and equipment schedules.
- **5.** Mechanical, Electrical and Plumbing Design Drawings for the Liner Building (White Box Commercial Space), including:
  - a. Provide provisions with new electrical service designed for Deck for future service and power for mixed-use retail on first floor. Design will include empty conduits to each space and final design completed by each Tenant's design group.
  - b. Mechanical will evaluate and make recommendations for potential shafts and HVAC systems for mixed-use retail on first floor
  - c. Preliminary specifications and equipment schedules.
- xii. Coordinate Design Development Cost Estimate: Olsson will coordinate with the CMAR for the CMAR's development of the Design Development Cost Estimate based on the Design Development Documents provided to the CMAR. Potential cost-saving measures and/or bid alternates will be identified and quantified. Where costs can be reduced through modifications in the schedule or scope of work, such modifications will be brought to the attention of the City.
- xiii. Prepare Updated Schedule: Olsson will coordinate with the CMAR to update the project schedule, including the time required constructing the permanent improvements, time required to construct the temporary structures, and time necessary for review and approval of City and State Agencies.
- xiv. Present Design Development Design: Olsson will present the Design Development in up to two (2) public meetings.
- xv. Contract Deliverables: Five (5) sets of Design Development Drawings, with updated Cost Estimates and Schedules.

### d. Phase 3: Construction Documents

- i. Utility Availability: Olsson will submit confirmation letters from any utilities for which such letters have not already been furnished and identify required utility upgrades, if any. Olsson will also submit required site design calculations, including drainage design computations, by this time.
- ii. Prepare Construction Drawings: Olsson will prepare the required Construction Documents, including the following:
  - 1. Civil Site Drawings, including site plan, demolition plan, grading plan, erosion control plan and SWPPP, dry utility plan, wet utility

- plan, paving/sidewalk/dimensioning plan, storm sewer plan, site details.
- 2. Landscape Drawings.
- **3.** Structural Drawings, including deck superstructure and foundation design and details.
- **4.** Structural Drawings for the Liner Building, including foundation plan, roof framing plan, building sections, and details.
- **5.** Mechanical, Electrical and Plumbing Drawings for the Deck, including:
  - a. Interior and exterior lighting plans for the parking garage.
  - b. Lighting controls with daylight harvesting and occupancy sensor dimming to 50% levels for energy reduction.
     Lighting control system assumed to be a lighting relay panel or network distributed (DLM or equal) arrangement
  - c. Provide power connections to lighting, gate controllers, elevators, HVAC and other miscellaneous power for the parking garage area.
  - d. Provide conduits and backboxes for security equipment. Security system to be designed by others and power and conduit requirements shall be provided to Olsson for coordination.
  - e. Conduit rough-in for communications and telephone Demarc. Conduits for telephone and network cabling to access gates and revenue machines as required. Wiring designed by others.
  - f. Design for new HVAC as required.
  - g. Olsson assumes parking garage is classified as open with no mechanical ventilation required of parking garage deck levels
  - h. Sanitary sewer and storm sewer piping systems. Coordinate with Walker for area drain locations.
  - i. Design of oil/sand interceptor for sanitary sewer system.
  - j. Design of domestic water service entrance for maintenance hose bibbs and irrigation system (if required).
  - k. Fire alarm designed for NFPA requirements. Contractor to provide final design and drawings.
  - I. Dry pipe standpipe fire protection system and wet system performance specification for areas with limited area freeze protection coverage. Contractor to provide final design and drawings.
  - m. Full details and equipment schedules shall be included on the drawings.
- **6.** Mechanical, Electrical and Plumbing Drawings for the Liner Building (White Box Commercial Space), including:

- a. Interior lighting plans for leasable tenant spaces.
- b. Leasable tenant spaces shall be designed with minimal lighting and egress lighting as required by code with final lighting design provided by each Tenant design group.
- c. Conduits for telephone and network cabling to leasable tenant spaces. Wiring designed by others.
- d. Water service for parking garage to include provisions for future service for mixed-use retail on first floor. Design will include stub-ins to each space and final design completed by each Tenant's design group.
- e. Fire alarm designed for NFPA requirements. Contractor to provide final design and drawings.
- f. Dry pipe standpipe fire protection system and wet system performance specification for areas with limited area freeze protection coverage. Contractor to provide final design and drawings.
- g. Full details and equipment schedules shall be included on the drawings.
- h. 5000 SF of leasable tenant space to be white box design only.
- iii. Specifications: Olsson will complete the Specifications in accordance with project requirements. Olsson will coordinate with the City's General Conditions, requirements and Bid Document requirements. All documents will be integrated into the Project Manual of Specifications.
- iv. Assist with Final Construction Cost Estimate: Olsson will provide information to CMAR for the Construction Cost Estimate that will be prepared based on the Construction Documents. Bid Alternates will be clearly identified, and their descriptions will be finalized for inclusion in the Bid Form.
- v. Coordinate Final Updated Construction Schedule: Olsson will Coordinate with CMAR on aspects for the construction schedule, including: A bidding/award period coordinated with the City Purchasing Agent to allow for the procurement of long lead time items, inclusion of appropriate allowances for the construction and demolition of work, and coordination with the specifics of the calendar year.
- vi. Present Final Design: Olsson will present the Design in up to two (2) public meetings and/or to parties having jurisdiction over the Project.
- vii. Respond to Plan Review Comments: Proposer will be requested to respond, in writing, to all comments received from parties having regulatory jurisdiction over the project or parts thereof.
- viii. Contract Deliverables: Provide paper and electronic plans as required for Building Safety, Planning Commission, internal review; final cost estimates & schedules; with one (1) copy of all information in PDF format on CD.

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- ix. Exclusions: The following items are excluded from the current scope of work:
  - 1. Off-site public improvements such as public roads, sanitary sewer, water extensions, or stormwater systems.
  - 2. Traffic impact studies
  - **3.** Environmental permitting, cultural and/or biological surveys are excluded except for SWPPP permitting.
  - 4. No permitting or application fees are included for City of Fayetteville planning or permit fees. Olsson assumes that the City of Fayetteville will handle these fees internally. Review fees for the Arkansas Department of Health and Arkansas Department of Environmental Quality are included as reimbursable expenses. No other permitting or application fees are included.
  - 5. Segmental Retaining Walls: Olsson has assumed that segmental retaining walls may be required for the grading and construction of this site. If deemed required, top of wall elevations on any proposed retaining walls will be provided, but actual wall design and structural wall design shall be provided by the contractor in the form of shop drawings. Client acknowledges that Olsson is not responsible for the structural design of the walls and any reviews related to the shop drawings are solely related to the location and height of the walls with no review being provided and no liability incurred related to the structural design or global stability of the walls.

### **6.** MFP Exclusions:

- a. Mechanical and electrical engineering of the tenant spaces beyond what is described above.
- b. Design of lightning protection system.
- c. HVAC design for future mixed-use retail on first floor
- d. Opinions of Probable Costs
- e. Commissioning services
- f. Professional services made necessary by default of Contractor or by major defects in Contractor's work, in performance of Client's construction contract
- g. Formal life-cycle studies cost for alternate building systems
- h. Arc flash study and labeling
- i. Consultation for replacement of work damaged by fire or other causes during construction
- j. Revisions to drawings, specifications, or other documents that were previously approved
- k. Fire alarm, fire suppression, and fire sprinkler design.
  Olsson shall provide performance specifications and
  general layout only. Contractor shall be responsible for

- creating and submitting drawings to City for permitting and approval.
- I. Consultation for Contractor work not in compliance with Olsson's construction documents
- m. Generate As-built drawings
- x. Prepare complete Construction Documents/Plans and Specifications and submit three (3) sets to City staff, and electronic versions as necessary, for Code and general review and approval as well as Construction Manager and City for cost analyses. (90% plan review).
- xi. Attend follow up meetings with City Development Services and Fire Marshall.
- xii. Complete Platting and record Plat.
- xiii. Complete final coordination with private utilities and service providers.
- xiv. Prepare and submit three (3) complete sets of Construction Documents, and electronic versions as necessary, including 90% written responses, Specifications and schedule to:
  - 1. City of Fayetteville Development Services for review and approval (100% plan review)
- xv. Correct plans to reflect issues noted by Review for Permits, inclusive of any necessary redesign prompted from the permit process.
- xvi. Construction Documents/Plans, Specifications and Project Drawings shall be routed through the City of Fayetteville Development Services, Planning, Engineering, Building Safety, Fire Marshal, and Urban Forestry for required approvals.

### e. Phase 4: Bidding Services

- i. Coordinate with City Purchasing Division to ensure all procedures followed for this phase meet state laws and City of Fayetteville Policies.
- ii. Assist Construction Manager at Risk and City Purchasing Division in reproduction and dissemination of bid sets (project manual and stamped drawings) to the City [PM (1), Purchasing (1) and interested bidders]. Documents should be made available to any interested party electronically at no cost.
- iii. This project is being funded through bond funds, which are tied to strict deadlines. City will communicate expense deadlines with OLSSON as OLSSON develops, finalizes, and modifies the project schedule. The City reserves the right to require OLSSON to prepare individual trade packages for bidding to expedite the construction and project progress.
- iv. Coordinate with Construction Manager and City Purchasing Division in the distribution of plans to interested bidders.
  - **1.** Distribution of all documents shall be done through the City of Fayetteville Purchasing Division only.

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- 2. City of Fayetteville Purchasing shall be responsible for maintaining an accurate record of plan holder's and provide an updated listing to all interested parties in a timely manner.
- 3. OLSSON to prepare documents for distribution by City Purchasing.
- v. Coordinate with Construction Manager and City Purchasing Division during pre-bid meeting and attend the Bid Opening.
- vi. Coordinate with Construction Manager and City Purchasing Division during any process involving Request for Information (RFI).
- vii. Any addenda shall be provided to the Purchasing Division for review and approval **in advance** of issuance. Bidders, interested parties, and plan holders shall receive all information included in an addendum at the time of issuance.
- viii. Bid opening shall be held at the City of Fayetteville Administration Building, City Hall, at a time and date coordinated in advance with the City Purchasing Division.
- ix. Assist with design of Bid Proposal
- x. Coordinate with City and CMAR to develop a Value Engineering list as needed.

### f. Phase 5: Construction Administration

- i. Put forth diligent and fiscally responsible efforts to ensure the project will be completed on time and within budget
- ii. Facilitate Pre-Construction meeting and conduct regular as jointly determined by City, CMAR, and OLSSON owner, architect, and contractor (OAC) progress meetings.
- iii. Provide Construction Administration.
  - 1. Review, log and approve submittals, shop drawings, Request for Information etc.
  - 2. Review Construction Schedule; efficiently track and manage progress
  - **3.** Review Construction Materials Testing reports.
  - **4.** Review and approve applications for payment.
  - **5.** Coordinate with CMAR on all Request for Change Proposals, Change Orders, etc. including maintaining a log of all such documents.
  - **6.** Provide direction for questions and concerns from the Construction Manager in resolution of problems.
  - **7.** Civil Engineer to provide inspections for public infrastructure work via additional services and formal contract amendment.
- iv. City intends to provide regular construction administration services. OLSSON shall provide field services, OAC progress meetings, and progress payment review and assistance on a monthly basis, as required by project demands, or otherwise needed.
- v. OLSSON's Construction Administrator to conduct a monthly site visit on a mutually determined schedule after consultation with the City and

Construction Manager, including observation of structural concrete placement, underground piping installation and inspections, structural steel, mechanical/electrical/plumbing cover-up, masonry installation, ceiling cover-ups, roofing, etc.

- 1. Provide site visit report to City of Fayetteville Facilities Management Division and CMAR at least one (1) time per month.
- vi. Conduct Substantial Completion Inspection, coordinate with CMAR to create punch list, substantiate that items noted are completed, and issue Substantial Completion Certificate.
- vii. City of Fayetteville Facilities Management Division and CMAR shall be notified to attend all on-site meetings, review and approve all pay requests, and change order review prior to Mayor's approval.
- viii. Special Inspections, to be considered with formal contract amendment:
  - 1. Recent code language contains references to "Special Inspections" for various parts of the construction process. The industry is currently meeting these requirements by assigning responsibilities to various Consultants involved in the Construction Industry (Commissioning Agents, Materials Testing Lab, Fire Protection and Smoke Evaluation Consultants, Mechanical and Structural Engineers and Architects). Since these inspections are new to the industry, each jurisdiction has their own interpretation as to how "Special Inspections" are accomplished beyond Standard Construction Administration Activities and what party should be responsible for them. The Design Team will work with the appropriate jurisdiction during the Design Phase of the Project to identify requirements and responsibilities. Many of these inspections may be performed as part of Standard CA services but some may require Additional Services Fees from the Design Team or outside Consultants. These "Special Inspections" must be identified prior to the start of construction in order to be performed at the appropriate time prior to receiving a "Certificate of Occupancy."

### g. Phase 6: Project Close Out

- i. Provide Warranty Administration Services during the entire Warranty Period. OLSSON to issue Warranty Reports and review items after the Contractor has notified the City that these items are complete.
- ii. Provide support services as needed during the project close out process.
- iii. Obtain and review close out submittal from the contractor for completeness before transmitting to the City which include but are not limited to:
  - 1. Contractor's red lines and as-built notes
  - **2.** Warranty information
  - **3.** Release of Liens
  - 4. Consent of surety

Professional Engineering Services – Downtown Parking Deck

- **5.** Material Safety Data Sheet (MSDS)
- **6.** Operating Manuals
- **7.** Start up and testing reports
- **8.** Building commissioner report
- 9. Review As-Built record drawings (in hard copy and digital format)
- **10.** Systems training, including video and audio
- iv. Issue Final Completion and Acceptance letter to the City recommending acceptance.
- v. Coordinate with the City and CMAR during an 11-month and 22-month project walk-through to identify any warranty issues which need to be resolved prior to the warranty close out period between the City and CMAR or City and third-party system suppliers.

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### APPENDIX B – DESIGN FEES & PROJECT TIMELINE

# PROFESSIONAL ENGINEERING SERVICES FOR THE CONSTRUCTION OF A DOWNTOWN PARKING DECK

- A. In consideration of the performance of the foregoing services by OLSSON, the CITY OF FAYETTEVILLE shall pay to OLSSON compensation as follows:
  - a. Compensation for Phases 1 through 4 shall be paid to OLSSON on a lump-sum basis for the amounts listed below, plus reimbursable expenses in accordance with the attached reimbursable expense schedule.

Phase	Description	
1B	Preliminary Design	\$ 65,300
2	Schematic Design & Design Development	\$ 194,100
3	Construction Documents	\$ 221,900
4	Bidding and Contract Award	\$ 15,600
Subtotal		\$ 496,900
Enhance	d/Additional Services	
Section	Description	
1A	Site Selection	\$ 34,500
1B	Phase I Environmental Assessment	\$ 5,700
1B	Topographic Survey (Selected Site Only)	\$ 6,200
1B	Boundary Survey (Selected Site Only)	\$ 7,100
2	Geotechnical Investigation and Report	\$ 15,800
2	Liner Building Schematic Development	\$ 3,900
2	Liner Building Design Development	\$ 15,700
3	Liner Building Construction Documents	\$ 45,300
Subtotal		\$ 134,200
Estimate	ed Expenses	\$3,000
Total		\$ 634,100

- b. Compensation for Phase 5 (Construction Administration Services) and Phase 6 (Project Closeout) will be determined through an amendment to this contract after Phase 4 is complete.
- B. Project Design Schedule
  - a. OLSSON shall begin work under this Agreement within two (2) working days of a Notice to Proceed (NTP) and shall complete the work described in Section A2 above in accordance with the schedule below.
    - i. Submit draft deliverables for Site Selection:
      - 1. 30 calendar days after NTP.
    - ii. Submit draft deliverables for Preliminary Design:
      - 1. 30 Calendar days after site is selected by CITY OF FAYETTEVILLE
    - iii. Submit draft deliverables for Schematic Design:
      - 30 Calendar days after approval of Preliminary Design by CITY OF FAYETTEVILLE
    - iv. Submit draft deliverables for Design Development:
      - 1. 45 Calendar days after approval of Schematic Design by CITY OF FAYETTEVILLE
    - v. Submit draft deliverables for Construction Documents:
      - 1. Site Utility & Grading package within 30 calendar days after approval of Design Development by CITY OF FAYETTEVILLE
      - 2. 60 Calendar days after approval of Design Development by CITY OF FAYETTEVILLE
- C. OLSSON Labor Billing Rate Schedule for 2019

### **OLSSON BILLING RATE SCHEDULE**

### **2019 LABOR RATES**

<u>Description</u>	<u>R</u>	ang	<u>je</u>	
Principal	109	-	381	
Project Manager	103	-	189	
Project Professional	94	-	168	
Assistant Professional	47	-	143	
Designer	84	-	178	
CAD Operator	32	-	116	
Survey	43	-	171	
Construction Services	40	-	189	
Administrative/Clerical	29	_	130	

### Note:

- Special Services not included in above categories will be provided on a Special Labor Rate Schedule
- 2. Rates subject to change based upon updates to Billing Rates for upcoming year.

Page **2** of **3**, Last Updated: 11/26/2019

D. OLSSON Reimbursable Expense Schedule for 2019, applicable to Olsson and subconsultants outside of Northwest Arkansas.

### REIMBURSABLE EXPENSE SCHEDULE

The expenses incurred by Olsson or Olsson's independent professional associates or consultants directly or indirectly in connection with the Project shall be included in periodic billing as follows:

Classification	Cost
Automobiles (Personal Vehicle) Suburban's and Pick-Ups Automobiles (Olsson Vehicle)	\$0.58/mile* \$0.75/mile* \$85.00/day
Other Travel or Lodging Cost	GSA Per Deim
Meals	GSA Per Diem
Printing and Duplication including Mylars and Linens In-House Outside	Actual Cost Actual Cost+10%
Postage & Shipping Charges for Project Related Materials including Express Mail and Special Delivery	Actual Cost
Film and Photo Developing Telephone and Fax Transmissions Miscellaneous Materials & Supplies Applicable to this Project Copies of Deeds, Easements or other Project Related Documents Fees for Applications or Permits Sub-Consultants Taxes Levied on Services and Reimbursable Expenses	Actual Cost+10% Actual Cost+10% Actual Cost+10% Actual Cost+10% Actual Cost+10% Actual Cost+10% Actual Cost

<sup>\*</sup>Rates consistent with the IRS Mileage Rate Reimbursement Guidelines (Subject to Change).

Page **3** of **3**, Last Updated: 11/26/2019



City of Fayetteville, AR Purchasing Division, Room 306 113 W. Mountain Street Fayetteville, AR 72701 Phone: 479-575-8220

TDD (Telecommunication Device for the Deaf): 479.521.1316

### **RFQ (REQUEST FOR QUALIFICATION)**

**REQUEST FOR QUALIFICATION:** RFQ 19-01, Engineering & Architectural Services

DEADLINE: Wednesday, January 23, 2019 prior to 2:00:00 PM, local time

**DELIVERY LOCATION:** Room 306 – 113 W. Mountain, Fayetteville, AR 72701

PURCHASING AGENT: Les McGaugh, <a href="mailto:lmcgaugh@fayetteville-ar.gov">lmcgaugh@fayetteville-ar.gov</a>

DATE OF ISSUE AND ADVERTISEMENT: Wednesday, January 02, 2019 and January 09, 2019

# REQUEST FOR STATEMENT OF QUALIFICATION RFQ 19-01, Engineering and Architectural Services

It is the intent for the accepted responses to this solicitation to be considered for all engineering and architectural selections for 2019.

Additional selections may be made from this solicitation if the City passes the bonds in 2019.

The City reserves the right to issue a separate RFQ at any time for any job specific engineering and/or architectural selection.

Submittals shall be submitted in sealed envelopes labeled with the solicitation number, solicitation name, and the name and address of the firm.

All statements of qualification shall be submitted in accordance with the attached City of Fayetteville specifications and documents attached hereto. Each Proposer is required to fill in every blank and shall supply all information requested; failure to do so may be used as basis of rejection. Any bid, proposal, or statements of qualification will be rejected that violates or conflicts with state, local, or federal laws, ordinances, or policies.

The undersigned hereby offers to furnish & deliver the articles or services as specified, at the prices & terms stated herein, and in strict accordance with the specifications and general conditions of submitting, all of which are made a part of this offer. This offer is not subject to withdrawal unless upon mutual written agreement by the Proposer/Bidder and City Purchasing Manager.

City of Fayetteville, AR RFQ 19-01, Engineering & Architectural Services Page 1 of 16

# Services

RFQ 19-01, Engineering and Architectural Services

Request for Statement of Qualifications

City of Fayetteville, Arkansas

The City of Fayetteville, Arkansas, is requesting statements of qualifications from firms interested in providing

engineering, architectural, & land surveying services for 2019 street, drainage, bridge, water & sewer, trails, parks and

other projects.

To be considered, statements of qualification shall be received at the City Administration Building, City Hall, Purchasing –

Room 306, 113 West Mountain, Fayetteville, Arkansas before Wednesday, January 23, 2019 prior to 2:00:00 PM, local

time. No late submittals will be accepted. Submittals will not be accepted at a later date.

Forms & addendums can be downloaded from the City's web site at <a href="http://fayetteville-ar.gov/bids">http://fayetteville-ar.gov/bids</a>. All questions

regarding the process should be directed to Les McGaugh at <a href="mailto:lmcgaugh@fayetteville-ar.gov">lmcgaugh@fayetteville-ar.gov</a> or (479)575-8220.

Statements of qualification submitted shall be qualified to do business and licensed in accordance with all applicable laws

of the state and local governments where the project is located.

Pursuant to Arkansas Code Annotated §22-9-203 The City of Favetteville encourages all qualified small, minority and

women business enterprises to bid on and receive contracts for goods, services, and construction. Also, City of

Fayetteville encourages all general contractors to subcontract portions of their contract to qualified small, minority and

women business enterprises.

The City of Fayetteville reserves the right to reject any or all proposals and to waive irregularities therein, and all

Proposers shall agree that such rejection shall be without liability on the part of the City of Fayetteville for any damage or

claim brought by any Proposer because of such rejections, nor shall the Proposers seek any recourse of any kind against

the City of Fayetteville because of such rejections. The filing of any Proposal in response to this invitation shall constitute

an agreement of the Proposer to these conditions.

CITY OF FAYETTEVILLE, ARKANSAS

By: Les McGaugh

Title: Purchasing Agent

Title. Fulcilasing Agent

Ad date: 01/02/19 & 01/09/19

City of Fayetteville, AR

RFQ 19-01, Engineering & Architectural Services

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SECTION C: Signature Submittal	125
SECTION D: Summary Form	- 14

City's REContract Appendix

CITY Appendix

# 1. SUBMISSION OF A STATEMENT OF QUALIFICATION SHALL INCLUDE:

- **a.** A written narrative describing the method or manner in which the Proposer proposes to satisfy requirements of this RFQ in the most cost effective manner. The term Proposer shall be in reference to a firm or individual responding to this solicitation. The term proposal is used in this documents as equal to statement of qualification.
- **b.** A description of the Proposer's experience in providing the same or similar services as outlined in the RFQ. This description should include the names of the person(s) who will provide the services, their qualifications, and the years of experience in performing this type of work. Also, include the reference information requested in this RFQ.
- **c.** Statement should be no more than twenty five (25) pages; single sided, standard, readable, print on standard 8.5x11 papers. Proposers are also allowed to submit a three (3) page (maximum) executive summary. The following items will not count toward the page limitations: appendix, cover sheet, 3-page executive summary, resumes (resumes shall be no more than 1 page per person), and forms provided by the City for completion.
- d. All Proposers shall submit one (1) paper copy of their statement of qualification as well as one (1) electronic copy on a properly labeled CD or other electronic media device. The electronic copy submitted should be submitted as a SINGLE FILE in format acceptable to Adobe in a save able format. Files contained on the CD or electronic media shall not be restricted against saving or printing. The electronic copy shall be identical to the original papers submitted. Electronic copies shall not be submitted via e-mail to City employees by the Proposer.
- **e.** Proposals will be reviewed following the stated deadline, as shown on the cover sheet of this document. Only the names of Proposer's will be available after the deadline until a contract has been awarded by the Fayetteville City Council. All interested parties understand proposal documents will not be available until after a valid contract has been executed and at that time only for the intended selection.
- **f.** Proposers shall submit a statement of qualification based on documentation published by the Fayetteville Purchasing Division.
- g. Proposals shall be enclosed in sealed envelopes or packages addressed to the City of Fayetteville, Purchasing Division, Room 306, 113 W. Mountain, Fayetteville, AR 72701. The name, address of the firm and Bid, RFP, or RFQ number shall be on the outside of the packaging as well as on any packages enclosed in shipping containers or boxes.
- **h.** Proposals must follow the format of the RFQ. Proposers should structure their responses to follow the sequence of the RFQ, if provided.
- i. Proposers shall have experience in work of the same or similar nature, and must provide references that will satisfy the City of Fayetteville. Proposer may furnish a reference list of clients for whom they have performed similar services and must provide information as requested in this document.
- j. Proposer is advised that exceptions to any of the terms contained in this RFQ or the attached service agreement must be identified in its response to the RFQ. Failure to do so may lead the City to declare any such term non-negotiable. Proposer's desire to take exception to a non-negotiable term will not disqualify it from consideration for award.
- **k.** Local time shall be defined as the time in Fayetteville, Arkansas on the due date of the deadline. Documents shall be received before the deadline time as shown by the atomic clock located in the Purchasing Division Office.

# 2. WRITTEN REQUESTS FOR INTERPRETATIONS OR CLARIFICATION:

No oral interpretations will be made to any firms as to the meaning of specifications or any other contract documents. All questions pertaining to the terms and conditions or scope of work of this proposal must be sent in writing via e-

mail to the Purchasing Department. Responses to questions may be handled as an addendum if the response would provide clarification to the requirements of the proposal. All such addenda shall become part of the contract documents. The City will not be responsible for any other explanation or interpretation of the proposed RFQ made or given prior to the award of the contract.

# 3. RIGHTS OF CITY OF FAYETTEVILLE IN THIS PROCESS:

In addition to all other rights of the City of Fayetteville, under state law, the City specifically reserves the following:

- **a.** The City of Fayetteville reserves the right to rank firms and negotiate with the highest-ranking firm. Negotiation with an individual Proposer does not require negotiation with others.
- **b.** The City of Fayetteville reserves the right to select the proposal that it believes will serve the best interest of the City.
- **c.** The City of Fayetteville reserves the right to accept or reject any or all proposals.
- **d.** The City of Fayetteville reserves the right to cancel the entire request.
- **e.** The City of Fayetteville reserves the right to remedy or waive technical or immaterial errors in the request for statements of qualification or resulting submittal.
- **f.** The City of Fayetteville reserves the right to request any necessary clarifications, additional information, or proposal data without changing the terms of the proposal.
- **g.** The City of Fayetteville reserves the right to make selection of the Proposer to perform the services required on the basis of the original proposals without negotiation.
- h. The City of Fayetteville intends on utilizing the received proposals for applicable 2019 engineering, architectural, and land surveying projects. Projects believed to be under \$20,000 by the City will be selected by the Department/Division head in accordance with the presented selection criteria in this RFQ. Projects expected to exceed \$20,000 shall be voted on by the selection committee and any related contract exceeding \$20,000 shall require formal authorization by the Fayetteville City Council.

# 4. **EVALUATION CRITERIA:**

The evaluation criterion defines the factors that will be used by the selection committee to evaluate and score responsive, responsible and qualified proposals. Proposers shall include sufficient information to allow the selection committee to thoroughly evaluate and score proposals. Each proposal submitted shall be evaluated and ranked by a selection committee. The contract will be awarded to the most qualified Proposer, per the evaluation criteria listed in this RFQ. Proposers are not guaranteed to be ranked.

# 5. COSTS INCURRED BY PROPOSERS:

All expenses involved with the preparation and submission of proposals to the City, or any work performed in connection therewith, shall be borne solely by the Proposer(s). No payment will be made for any responses received, or for any other effort required of, or made by, the Proposer(s) prior to contract commencement.

# 6. ORAL PRESENTATION:

An oral presentation and/or interview may be requested of any firm, at the selection committee's discretion.

# 7. CONFLICT OF INTEREST:

- **a.** The Proposer represents that it presently has no interest and shall acquire no interest, either direct or indirect, which would conflict in any manner with the performance or services required hereunder, as provided in City of Fayetteville Code Section 34.26 titled "Limited Authority of City Employee to Provide Services to the City".
- b. The Proposer shall promptly notify Les McGaugh, City Purchasing Agent, in writing, of all potential conflicts of interest for any prospective business association, interest, or other circumstance which may influence or appear to influence the Proposer's judgment or quality of services being provided. Such written notification shall identify the prospective business association, interest or circumstance, the nature of which the Proposer may undertake

and request an opinion to the City as to whether the association, interest or circumstance would, in the opinion of the City, constitute a conflict of interest if entered into by the Proposer. The City agrees to communicate with the Proposer its opinion via e-mail or first-class mail within thirty days of receipt of notification.

# 8. WITHDRAWAL OF PROPOSAL:

A proposal may be withdrawn at any time.

# 9. LATE PROPOSAL OR MODIFICATIONS:

- a. Proposal and modifications received after the time set for the proposal submittal shall not be considered. Modifications in writing received prior to the deadline will be accepted. The City will not be responsible for misdirected bids. Proposers should call the Purchasing Division at (479) 575-8220 to insure receipt of their submittal documents prior to opening time and date listed.
- **b.** The time set for the deadline shall be local time for Fayetteville, AR on the date listed. All proposals shall be received in the Purchasing Division BEFORE the deadline stated. The official clock to determine local time shall be the atomic clock located in the Purchasing Division, Room 306 of City Hall, 113 W. Mountain, Fayetteville, AR.

# 10. LOCAL, STATE, AND FEDERAL COMPLIANCE REQUIREMENTS:

- a. The laws of the State of Arkansas apply to any purchase made under this request for statements of qualification. Proposers shall comply with all local, state, and federal directives, orders and laws as applicable to this proposal and subsequent contract(s) including but not limited to Equal Employment Opportunity (EEO), Disadvantaged Business Enterprises (DBE), & OSHA as applicable to this contract.
- b. Pursuant to Arkansas Code Annotated §22-9-203 The City of Fayetteville encourages all *qualified* small, minority and women business enterprises to bid on and receive contracts for goods, services, and construction. Also, City of Fayetteville encourages all general contractors to subcontract portions of their contract to *qualified* small, minority and women business enterprises.

# 11. COLLUSION:

The Proposer, by affixing his or her signature to this proposal, agrees to the following: "Proposer certifies that his proposal is made without previous understanding, agreement, or connection with any person, firm or corporation making a proposal for the same item(s) and/or services and is in all respects fair, without outside control, collusion, fraud, or otherwise illegal action."

# 12. RIGHT TO AUDIT, FOIA, AND JURISDICITON:

- **a.** The City of Fayetteville reserves the privilege of auditing a vendor's records as such records relate to purchases between the City and said vendor.
- **b.** Freedom of Information Act: City contracts and documents prepared while performing City contractual work are subject to the Arkansas Freedom of Information Act. If a Freedom of Information Act request is presented to the City of Fayetteville, the (Contractor) will do everything possible to provide the documents in a prompt and timely manner as prescribed in the Arkansas Freedom of Information Act (A.C.A. §25-19-101 et. seq.). Only legally authorized photocopying costs pursuant to the FOIA may be assessed for this compliance.
- c. Legal jurisdiction to resolve any disputes shall be Arkansas with Arkansas law applying to the case.

# 13. CITY INDEMNIFICATION:

The successful Proposer(s) agrees to indemnify the City and hold it harmless from and against all claims, liability, loss, damage or expense, including but not limited to counsel fees, arising from or by reason of any actual or claimed trademark, patent or copyright infringement or litigation based thereon, with respect to the services or any part thereof covered by this order, and such obligation shall survive acceptance of the services and payment thereof by the City.

# 14. VARIANCE FROM STANDARD TERMS & CONDITIONS:

City of Fayetteville, AR RFQ 19-01, Engineering & Architectural Services Page 7 of 16 All standard terms and conditions stated in this request for statements of qualification apply to this contract except as specifically stated in the subsequent sections of this document, which take precedence, and should be fully understood by Proposers prior to submitting a proposal on this requirement.

# 15. ADA REQUIREMENT FOR PUBLIC NOTICES & TRANSLATION:

Persons with disabilities requiring reasonable accommodation to participate in this proceeding/event, should call 479.521.1316 (telecommunications device for the deaf), not later than seven days prior to the deadline. Persons needing translation of this document shall contact the City of Fayetteville, Purchasing Division, immediately.

# 16. PAYMENTS AND INVOICING:

The Proposer must specify in their proposal the exact company name and address which must be the same as invoices submitted for payment as a result of award of this RFQ. Further, the successful Proposer is responsible for immediately notifying the Purchasing Division of any company name change, which would cause invoicing to change from the name used at the time of the original RFQ. Payment will be made within thirty days of invoice received. The City of Fayetteville is very credit worthy and will not pay any interest or penalty for untimely payments. Payments can be processed through Proposer's acceptance of Visa at no additional costs to the City for expedited payment processing. The City will not agree to allow any increase in hourly rates by the contract without PRIOR Fayetteville City Council approval.

# 17. CANCELLATION:

- **a.** The City reserves the right to cancel this contract without cause by giving thirty (30) days prior notice to the Contractor in writing of the intention to cancel or with cause if at any time the Contractor fails to fulfill or abide by any of the terms or conditions specified.
- **b.** Failure of the contractor to comply with any of the provisions of the contract shall be considered a material breach of contract and shall be cause for immediate termination of the contract at the discretion of the City of Fayetteville.
- **c.** In addition to all other legal remedies available to the City of Fayetteville, the City reserves the right to cancel and obtain from another source, any items and/or services which have not been delivered within the period of time from the date of order as determined by the City of Fayetteville.
- **d.** In the event sufficient budgeted funds are not available for a new fiscal period, the City shall notify the vendor of such occurrence and contract shall terminate of the last day of the current fiscal period without penalty or expense to the City.

# 18. ASSIGNMENT, SUBCONTRACTING, CORPORATE ACQUISITIONS AND/OR MERGERS:

- **a.** The Contractor shall perform this contract. No assignment of subcontracting shall be allowed without prior written consent of the City. If a Proposer intends to subcontract a portion of this work, the Proposer shall disclose such intent in the proposal submitted as a result of this RFQ.
- b. In the event of a corporate acquisition and/or merger, the Contractor shall provide written notice to the City within thirty (30) calendar days of Contractor's notice of such action or upon the occurrence of said action, whichever occurs first. The right to terminate this contract, which shall not be unreasonably exercised by the City, shall include, but not be limited to, instances in which a corporate acquisition and/or merger represent a conflict of interest or are contrary to any local, state, or federal laws. Action by the City awarding a proposal to a firm that has disclosed its intent to assign or subcontract in its response to the RFQ, without exception shall constitute approval for purpose of this Agreement.

# 19. NON-EXCLUSIVE CONTRACT:

Award of this RFQ shall impose no obligation on the City to utilize the vendor for all work of this type, which may develop during the contract period. This is not an exclusive contract. The City specifically reserves the right to concurrently contract with other companies for similar work if it deems such an action to be in the City's best interest. In the case of multiple-phase contracts, this provision shall apply separately to each item.

# 20. ADDITIONAL REQUIREMENTS:

The City reserves the right to request additional services relating to this RFQ from the Proposer. When approved by the City as an amendment to the contract and authorized in writing prior to work, the Contractor shall provide such additional requirements as may become necessary.

# 21. SERVICES AGREEMENT:

A written agreement, in substantially the form attached, incorporating the RFQ and the successful proposal will be prepared by the City, signed by the successful Proposer and presented to the City of Fayetteville for approval and signature of the Mayor.

# 22. INTEGRITY OF STATEMENT OF QUALIFICATION (RFQ) DOCUMENTS:

Proposers shall use the original RFQ form(s) provided by the Purchasing Division and enter information only in the spaces where a response is requested. Proposers may use an attachment as an addendum to the RFQ form(s) if sufficient space is not available on the original form for the Proposer to enter a complete response. Any modifications or alterations to the original RFQ documents by the Proposer, whether intentional or otherwise, will constitute grounds for rejection of such RFQ response. Any such modifications or alterations a Proposer wishes to propose shall be clearly stated in the Proposer's RFQ response and presented in the form of an addendum to the original RFQ documents.

# 23. LOBBYING:

Lobbying or communicating with selection committee members, City of Fayetteville employees, or elected officials regarding request for proposals, request for qualifications, bids or contracts, during the pendency of bid protest, by the bidder/proposer/protestor or any member of the bidder's/proposer's/protestor's staff, and agent of the bidder/proposer/protestor, or any person employed by any legal entity affiliated with or representing an organization that is responding to the request for proposal, request for qualification, bid or contract, or has a pending bid protest is strictly prohibited either upon advertisement or on a date established by the City of Fayetteville and shall be prohibited until either an award is final or the protest is finally resolved by the City of Fayetteville; provided, however, nothing herein shall prohibit a prospective/bidder/proposer from contacting the Purchasing Division to address situations such as clarification and/or questions related to the procurement process. For purposes of this provision lobbying activities or communication shall include but not be limited to, influencing or attempting to influence action or non-action in connection with any request for proposal, request for qualification, bid or contract through direct or indirect oral or written communication or an attempt to obtain goodwill of persons and/or entities specified in this provision. Such actions may cause any request for proposal, request for qualification, bid or contract to be rejected.

# 24. DEBARRED ENTITIES:

By submitting a statement of qualification, vendor states submitting entity is not a debarred contractor with the federal, any state, or local government

# 25. OTHER GENERAL CONDITIONS:

- **a.** Proposers shall provide the City with proposals signed by an employee having legal authority to submit proposals on behalf of the Proposer. The entire cost of preparing and providing responses shall be borne by the Proposer.
- **b.** The City reserves the right to request any additional information it deems necessary from any or all Proposers after the submission deadline.
- c. The request for statement of qualification is not to be construed as an offer, a contract, or a commitment of any kind; nor does it commit the city to pay for any costs incurred by Proposer in preparation. It shall be clearly understood that any costs incurred by the Proposer in responding to this request for statements of qualification is at the Proposer's own risk and expense as a cost of doing business. The City of Fayetteville shall not be liable for reimbursement to the Proposer for any expense so incurred, regardless of whether or not the proposal is accepted.

- **d.** If products, components, or services other than those described in this bid document are proposed, the Proposer must include complete descriptive literature for each. All requests for additional information must be received within five working days following the request.
- e. Any uncertainties shall be brought to the attention to Les McGaugh immediately via telephone (479.575.8220) or e-mail (<a href="mailto:lmcgaugh@fayetteville-ar.gov">lmcgaugh@fayetteville-ar.gov</a>). It is the intent and goal of the City of Fayetteville Purchasing Division to provide documents providing a clear and accurate understanding of the scope of work to be completed and/or goods to be provided. We encourage all interested parties to ask questions to enable all Proposers to be on equal terms.
- f. Any inquiries or requests for explanation in regard to the City's requirements should be made promptly to Les McGaugh, City of Fayetteville, Purchasing Agent via e-mail (<a href="mailto:lmcgaugh@fayetteville-ar.gov">lmcgaugh@fayetteville-ar.gov</a>) or telephone (479.575.8220). No oral interpretation or clarifications will be given as to the meaning of any part of this request for statements of qualification. All questions, clarifications, and requests, together with answers, if any, will be provided to all firms via written addendum. Names of firms submitting any questions, clarifications, or requests will not be disclosed until after a contract is in place.
- **g.** At the discretion of the City, one or more firms may be asked for more detailed information before final ranking of the firms, which may also include oral interviews.
- h. Any information provided herein is intended to assist the Proposer in the preparation of proposals necessary to properly respond to this RFQ. The RFQ is designed to provide qualified Proposers with sufficient basic information to submit proposals meeting minimum specifications and/or test requirements, but is not intended to limit a RFQ's content or to exclude any relevant or essential data.
- i. Proposers irrevocably consent that any legal action or proceeding against it under, arising out of or in any manner relating to this Contract shall be controlled by Arkansas law. Proposer hereby expressly and irrevocably waives any claim or defense in any said action or proceeding based on any alleged lack of jurisdiction or improper venue or any similar basis.
- j. The successful Proposer shall not assign the whole or any part of this Contract or any monies due or to become due hereunder without written consent of City of Fayetteville. In case the successful Proposer assigns all or any part of any monies due or to become due under this Contract, the Instrument of assignment shall contain a clause substantially to the effect that is agreed that the right of the assignee in and to any monies due or to become due to the successful Proposer shall be subject to prior liens of all persons, firms, and corporations for services rendered or materials supplied for the performance of the services called for in this contract.
- k. The successful Proposer's attention is directed to the fact that all applicable Federal and State laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over the services shall apply to the contract throughout, and they will be deemed to be included in the contract as though written out in full herein. The successful Proposer shall keep himself/herself fully informed of all laws, ordinances and regulations of the Federal, State, and municipal governments or authorities in any manner affecting those engaged or employed in providing these services or in any way affecting the conduct of the services and of all orders and decrees of bodies or tribunals having any jurisdiction or authority over same. If any discrepancy or inconsistency should be discovered in these Contract Documents or in the specifications herein referred to, in relation to any such law, ordinance, regulation, order or decree, s/he shall herewith report the same in writing to City of Fayetteville.

# 26. <u>INSURANCE:</u>

**a.** Any project selected under this RFQ shall require professional liability insurance in the amount of \$1 million US dollars, at minimum. Such Certificate of Insurance shall list the City as an additional insured and not be required unless firm is selected.

# 27. SELECTION CRITERIA:

The evaluation criterion below defines the factors which will be used by the selection committee to evaluate and score responsive, responsible and qualified proposals. The evaluation factors are as follows:

- 1. **30 Points** Specialized experience and technical competence of the firm with respect to the type of professional services required
- 2. **25 Points** Capacity and capability of the firm the perform the work in question including specialized services, within the time limitations fixed for the completion of the project
- 3. **25 Points** Past record of performance of the firm with respect to such factors as control of costs, quality of work, and ability to meet schedules and deadlines
- 4. 20 Points Firm's proximity to and familiarity with the area in which the project is located

\*\*Note: Price shall not be a considered factor used to select a vendor. In the event the City is not able to negotiate a successful contract with the selected vendor, the City reserves the right to cease negotiations with J's REPORTER APPENDIX such selected vendor and proceed on to the next selected vendor. Statements of Qualification/Proposals shall NOT include prices, hourly fees, consulting rates, etc. of any kind.

# City of Fayetteville RFQ 19-01, Engineering and Architectural Services SECTION B: Vendor References

The following information is required from all firms so all statements o	f qualification may be reviewed and properly evaluated:
COMPANY NAME:	
NUMBER OF YEARS IN BUSINESS:HOW LONG I	N PRESENT LOCATION:
TOTAL NUMBER OF CURRENT EMPLOYEES: FULL	TIME PART TIME
NUMBER OF EMPLOYEES PLANNED FOR THIS CONTRACT: F	FULL TIME PART TIME
PLEASE LIST FOUR (4) REFERENCES THAT YOU HAVE PREVIOUSLY PERF YEARS (All fields must be completed):	ORMED CONTRACT SERVICES FOR WITHIN THE PAST FIVE (5)
1COMPANY NAME	2. COMPANY NAME
CITY, STATE, ZIP	CITY, STATE, ZIP
CONTACT PERSON	CONTACT PERSON
TELEPHONE	TELEPHONE
FAX NUMBER	FAX NUMBER
E-MAIL ADDRESS	E-MAIL ADDRESS
3COMPANY NAME	4COMPANY NAME
CITY, STATE, ZIP	CITY, STATE, ZIP
CONTACT PERSON	CONTACT PERSON
TELEPHONE	TELEPHONE
FAX NUMBER	FAX NUMBER
E-MAIL ADDRESS	E-MAIL ADDRESS

City of Fayetteville, AR RFQ 19-01, Engineering & Architectural Services Page 12 of 16

City of Fayetteville RFQ 19-01, Engineering and Architectural Services SECTION C: Signature Submittal
1. Disclosure Information
Proposer must disclose any possible conflict of interest with the City of Fayetteville, including, but not limite

Proposer must disclose any possible conflict of interest with the City of Fayetteville, including, but not limited to, any relationship with any City of Fayetteville employee. Proposer response must disclose if a known relationship exists between any principal or employee of your firm and any City of Fayetteville employee or elected City of Fayetteville official.

If, to your knowledge, no relationship exists, this should also be stated in your response. Failure to disclose such a relationship may result in cancellation of a purchase and/or contract as a result of your response. This form must be completed and returned in order for your bid/proposal to be eligible for consideration.

1) NO KNOWN P	ELATIONSHIP EXISTS				
1) NO KNOWN K	ELATIONSHIP EXISTS				
2) RELATIONSHIP	EXISTS (Please explain):	illo	40		
I certify that; as an officer of this of the information provided herein ar	e accurate and true; and my	organization sha	It comply v		
Equal Opportunity and Non-Discrir	nination requirements and co	onditions of emp	loyment.		
		0			
2. Additional Information		$\mathcal{O}_{\mathcal{K}}$			
2. Additional Information  At the discretion of the City, one o firms, which may also include oral mail address, and phone number (proclarification or interview via telephone).	interviews. NOTE: Each Propo preferably a cell phone numbe	ser shall submit	to the City	a primary contact nai	ne, e-
At the discretion of the City, one o firms, which may also include oral mail address, and phone number (p	interviews. NOTE: Each Propo preferably a cell phone numbe	ser shall submit	to the City	a primary contact nai	ne, e-
At the discretion of the City, one of firms, which may also include oral mail address, and phone number (proclarification or interview via telephone)	interviews. NOTE: Each Propo preferably a cell phone numbe	ser shall submit	to the City	a primary contact nai	ne, e-
At the discretion of the City, one of firms, which may also include oral mail address, and phone number (proclarification or interview via telephone number of Firm:	interviews. NOTE: Each Propo preferably a cell phone number one.	ser shall submit	to the City selection	a primary contact nai	ne, e-
At the discretion of the City, one of firms, which may also include oral mail address, and phone number (proclarification or interview via telephone Name of Firm:  Name of Primary Contact:	interviews. NOTE: Each Propo preferably a cell phone number one.	ser shall submit	to the City v selection	a primary contact nai	ne, e-

**3.** Please acknowledge receipt of addenda for this invitation to bid, request for proposal, or request for qualification by signing and dating below. All addendums are hereby made a part of the bid or RFQ documents to the same extent as though it were originally included therein. Proposers/Bidders should indicate their receipt of same in the appropriate blank listed herein. Failure to do so may subject vendor to disqualification.

ADDENDUM NO.	SIGNATURE AND PRINTED NAME	DATE ACKNOWLEDGED

**4.** As an interested party on this project, you are required to provide debarment/suspension certification indicating in compliance with the below Federal Executive Order. Certification can be done by completing and signing this form.

Federal Executive Order (E.O.) 12549 "Debarment and Suspension" requires that all contractors receiving individual awards, using federal funds, and all sub-recipients certify that the organization and its principals are not debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal department or agency from doing business with the Federal Government.

**5.** Signature certifies that neither you nor your principal is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.

Questions regarding this form should be directed to the City of Fayetteville Purchasing Division.

NAME:	
COMPANY:	66,914
PHYSICAL ADDRESS:	ill ell
MAILING ADDRESS:	100 00°
PHONE:	FAX:
E-MAIL:	20°
Signed by :	
SIGNATURE:	
PRINTED NAME :	
TITLE:	
DATE:	

# City of Fayetteville

RFQ 19-01, Engineering and Architectural Services

SECTION E: 2019 Annual Statement of Qualifications Summary Form

ATTENTION: This form shall be completed and returned with EACH SUBMITTED Statement of Qualification. The City will utilize the selection marked by each firm to correspond with the scope of work for each project.

NAME OF FII	RM:	
SUMMARY S Proposer sha qualification	ould provide summary information on this form by che	cking the areas of expertise based on experience and
This form m	ust be completed and returned in order for your proposal	to be eligible for consideration.
	Airport	Parks: Strategic Planning
	Architecture	Parks: Campground Planning
	Bridges	Parks: Land Dedication Fees Consultant
	Civil/Structural Design	Parks: Aquatics Consultant
	Construction Management	Storm Water Management
	Drainage Design, Analysis, & Planning	Street Intersection Improvements/Design
	Electrical	Structural Design
	Environmental Analysis, Remediation, & Permitting	Structural Design: Emph in Fire Stations
	Environmental Water Services	Structural Design: Emph in Police Stations
	Floodplain Services	Surveying
	GIS Mapping	Sustainability Design
	Geotechnical Engineering	Testing Services: Soil/Materials
	Hydraulics	Traffic Studies
	Hydrology	Value Engineering
	Interior Design	Wastewater Design
	Landscape Architecture	Wastewater Management
	Master Planning: City/Government	Wastewater Modeling
	Master Planning: Parks	Wastewater Rate Studies
	Master Planning: Streets	Wastewater SSES
	Master Planning: Wastewater	Water Rate Studies
	Master Planning: Water	Water Design
	Mechanical	Water Management
	Natural Resource Planning	Water Modeling:
	Parking Decks	Water Quality Monitoring
	Parking Decks with mixed use	Wetlands

City of Fayetteville, AR RFQ 19-01, Engineering & Architectural Services Page 15 of 16

Other:	Other:
Other:	Other:
2.) PLEASE FILL OUT THE SECTION BELOW AND SUBMIT T	HIS FORM WITH YOUR STATEMENT OF QUALIFICATIONS:
a) I, as an officer of this organization, or per the at	tached letter of authorization, am duly authorized to certify the
information provided herein are accurate and tr	
Name of Firm	
Printed Name	avices
Signature	5
S.B. Ideal C	
Title	
Data	000
Date	
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City's Proconting	







# STATEMENT OF QUALIFICATIONS

For Engineering and Architecture Services

RFQ 19-01 | Janurary 23, 2019



January 23, 2019

olsson

Mr. Les McGaugh, Purchasing Agent City of Fayetteville Purchasing Division, Room 306 113 W. Mountain Fayetteville, AR 72701

RE: RFQ 19-01, Statement of Qualifications for Engineering, Architecture, and Survey Services

Dear Mr. McGaugh and selection committee members:

Olsson can do everything you need and much more --- ALL IN-HOUSE. The services requested by the City of Fayetteville are EXACTLY what Olsson performs on a daily basis for numerous municipalities throughout the Midwest. Municipal engineering is the cornerstone of our firm. In particular, our Fayetteville office has been providing municipal engineering services since 1946 to Fayetteville and throughout Northwest Arkansas ~ that's 73 years of experience and knowledge of the local infrastructure. On January 15, 2018, Olsson acquired the Fayetteville office of McGoodwin Williams & Yates Inc. (MWY).

In addition to our Fayetteville office, Olsson has nearby offices in Springfield and Joplin and three more in the Kansas City metropolitan area. Most of your requested engineering services will be provided by our Fayetteville office, where we have 25 professionals who offer a wide range of engineering, planning, surveying, and construction administration services. These staff members are supported by 29 offices that employ nearly 1,100 staff members.

When it comes to selecting the right consultant for the job, familiarity, resources, location, and experience are important factors. Living and working in Fayetteville gives our employees a local understanding of the area's needs and requirements. In addition, our teams in Missouri have work experience in Northwest Arkansas and are comprised of more than 110 professional engineers, landscape architects, and land surveyors.

We are also pleased to offer the services Ochsner Hare & Hare, the Olsson Studio, a landscape architecture and planning design studio within Olsson. The Olsson Studio is an industry leader in landscape architectural design, land planning, community and neighborhood redevelopment, parks and recreation, urban and regional planning, destination retail and entertainment design.

As requested, we have provided one paper and one electronic copy of our 25-page Statement of Qualifications along with the requested forms and resumes. Please see the following Executive Summary for details on our familiarity and record of performance regarding our firm's past and current projects within Fayetteville. We have also provided an Appendix for your use to review detailed information regarding specific project services. With the expanded services in many areas, such as parks/trails planning, transportation services, streetscaping/landscaping, geotechnical, construction management and more, we felt it pertinent to provide this resource for your convenience.

Should you have any questions or require additional information, please call me at 479.443.3404 or email me at bhammond@olsson.com.

Sincerely,

# City of Fayetteville RFQ 19-01, Engineering and Architectural Services **SECTION B: Vendor References** The following information is required from all firms so all statements of qualification may be reviewed and properly evaluated: COMPANY NAME: Olsson NUMBER OF YEARS IN BUSINESS: 63 HOW LONG IN PRESENT LOCATION: 9 TOTAL NUMBER OF CURRENT EMPLOYEES: 1,109 FULL TIME 974 PART TIME 135 NUMBER OF EMPLOYEES PLANNED FOR THIS CONTRACT: N/A FULL TIME N/A PART TIME PLEASE LIST FOUR (4) REFERENCES THAT YOU HAVE PREVIOUSLY PERFORMED CONTRACT SERVICES FOR WITHIN THE PAST FIVE (5) YEARS (All fields must be completed): 1. City of Fayetteville 2 City of Rogers **COMPANY NAME** COMPANY NAME Fayetteville, Arkansas 72701 Rogers, Arkansas 72756 CITY, STATE, ZIP CITY, STATE, ZIP Tim Nyander Lance Jobe, PE CONTACT PERSON CONTACT PERSON 479.575.8390 479.621.1186 **TELEPHONE TELEPHONE** 479.684.4730 479.986.6896 **FAX NUMBER FAX NUMBER** tnyander@fayetteville-ar.gov ljobe@rogersark.org E-MAIL ADDRESS E-MAIL ADDRESS 3. Clarksville Light and Water Company 4. City of Springdale, Arkansas COMPANY NAME Clarksville, Arkansas Springdale, Arkasas 72764 CITY, STATE, ZIP CITY, STATE, ZIP John Lester, General Manager Rick Pulvirenti CONTACT PERSON **CONTACT PERSON** 479.754.3148 479.751.5751 **TELEPHONE** TELEPHONE 479.754.1901 479.750.4039 **FAX NUMBER FAX NUMBER** john.lester@clarksvillelightwater.com rpulvirenti@springdalewater.com E-MAIL ADDRESS E-MAIL ADDRESS

City of Fayetteville, AR RFQ 19-01, Engineering & Architectural Services Page 12 of 16

City of Fayetteville RFQ 19-01, Engineering and Architectural Services SECTION C: Signature Submittal
1. Disclosure Information
Proposer must disclose any possible conflict of interest with the City of Fayetteville, including, but not limited to, any relationship with any City of Fayetteville employee. Proposer response must disclose if a known relationship exists between any principal or employee of your firm and any City of Fayetteville employee or elected City of Fayetteville official.
If, to your knowledge, no relationship exists, this should also be stated in your response. Failure to disclose such a relationship may result in cancellation of a purchase and/or contract as a result of your response. This form must be completed and returned in order for your bid/proposal to be eligible for consideration.
PLEASE CHECK ONE OF THE FOLLOWING TWO OPTIONS, AS IT APPROPRIATELY APPLIES TO YOUR FIRM:
X 1) NO KNOWN BELATIONSHIP EVISTS

I certify that; as an officer of this organization, or per the attached letter of authorization, am duly authorized to certify the information provided herein are accurate and true; and my organization shall comply with all State and Federal Equal Opportunity and Non-Discrimination requirements and conditions of employment.

# 2. Additional Information

At the discretion of the City, one or more firms may be asked for more detailed information before final ranking of the firms, which may also include oral interviews. NOTE: Each Proposer shall submit to the City a primary contact name, e-mail address, and phone number (preferably a cell phone number) where the City selection committee can call for clarification or interview via telephone.

Name of Firm: Olsson	
Name of Primary Contact: Brad B. Hammond	
Title of Primary Contact: Team Leader	
Phone#1 (cell preferred): 479.957.1691	Phone#2: 479.443.3404
E-Mail Address: bhammond@olsson.com	

**3.** Please acknowledge receipt of addenda for this invitation to bid, request for proposal, or request for qualification by signing and dating below. All addendums are hereby made a part of the bid or RFQ documents to the same extent as though it were originally included therein. Proposers/Bidders should indicate their receipt of same in the appropriate blank listed herein. Failure to do so may subject vendor to disqualification.

City of Fayetteville, AR RFQ 19-01, Engineering & Architectural Services Page 13 of 16

ADDENDUM NO.	SIGNATURE AND PRINTED NAME	DATE ACKNOWLEDGED	
Addendum 1	Brad B. Hammond Bud & Hard	1.23.2019	

**4.** As an interested party on this project, you are required to provide debarment/suspension certification indicating in compliance with the below Federal Executive Order. Certification can be done by completing and signing this form.

Federal Executive Order (E.O.) 12549 "Debarment and Suspension" requires that all contractors receiving individual awards, using federal funds, and all sub-recipients certify that the organization and its principals are not debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal department or agency from doing business with the Federal Government.

**5.** Signature certifies that neither you nor your principal is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.

Questions regarding this form should be directed to the City of Fayetteville Purchasing Division.

NAME: Brad B. Hammond
COMPANY: Olsson
PHYSICAL ADDRESS: 302 E. Millsap Fayetteville, Arkansas 72703
MAILING ADDRESS:302 E. Millsap Fayetteville, Arkansas 72703
PHONE: 479.443.3404 FAX: 479.443.4340
E-MAIL: bhammond@olsson.com
Signed by:
SIGNATURE: Drad D Hours
PRINTED NAME : Brad B. Hammond
TITLE: Team Leader
DATE: 1.23.19

# City of Fayetteville

NAME OF FIRM: Olsson

RFQ 19-01, Engineering and Architectural Services

SECTION E: 2019 Annual Statement of Qualifications Summary Form

ATTENTION: This form shall be completed and returned with EACH SUBMITTED Statement of Qualification. The City will utilize the selection marked by each firm to correspond with the scope of work for each project.

SUMMARY ST. Proposer show qualifications.	uld provide summary information on this form by	checking the a	reas of expertise based on experience and
This form mus	t be completed and returned in order for your prop	osal to be eligib	le for consideration.
X	Airport	X	Parks: Strategic Planning
	Architecture	X	Parks: Campground Planning
X	Bridges	X	Parks: Land Dedication Fees Consultant
X	Civil/Structural Design	X	Parks: Aquatics Consultant
X	Construction Management	X	Storm Water Management
X	Drainage Design, Analysis, & Planning	X	Street Intersection Improvements/Design
X	Electrical	X	Structural Design
X	Environmental Analysis, Remediation, & Permitting	X	Structural Design: Emph in Fire Stations
X	Environmental Water Services	X	Structural Design: Emph in Police Stations
X	Floodplain Services	X	Surveying
X	GIS Mapping	X	Sustainability Design
X	Geotechnical Engineering	X	Testing Services: Soil/Materials
X	Hydraulics	X	Traffic Studies
X	Hydrology		Value Engineering
	Interior Design	X	Wastewater Design
X	Landscape Architecture	X	Wastewater Management
X	Master Planning: City/Government	X	Wastewater Modeling
X	Master Planning: Parks	X	Wastewater Rate Studies
X	Master Planning: Streets	X	Wastewater SSES
X	Master Planning: Wastewater	X	Water Rate Studies
X	Master Planning: Water	X	Water Design
X	Mechanical	X	Water Management
X	Natural Resource Planning	X	Water Modeling:
X	Parking Decks	X	Water Quality Monitoring
X	Parking Decks with mixed use	X	Wetlands

City of Fayetteville, AR RFQ 19-01, Engineering & Architectural Services Page 15 of 16

Other:	Other:
Other:	Other:
2.) PLEASE FILL OUT THE SECTION BELOW AND SUE	BMIT THIS FORM WITH YOUR STATEMENT OF QUALIFICATIONS:
	the attached letter of authorization, am duly authorized to certify the
Olsson	
Name of Firm	
Brad B. Hammond	
Printed Name  Signature	
Team Leader	
Title	
1 23 10	

Date

# CONTENTS

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Statement of Qualficiations7	'-20
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# EXECUTIVE SUMMARY

# **Cover Letter**

Olsson is local and can provide all the services in-house. With more than 1,100 professional staff members, we can tackle any problem you may have with our diverse staff and services.

# **Firm Overview**

Olsson has nearly 30 offices across eight states and offers a comprehensive list of services that includes planning & design, engineering, field services, environmental and technology -- ALL IN-HOUSE. The majority of services will be provided by our 25-member team in Fayetteville, with support as-needed by offices in Springfield, Joplin and Kansas City, along with specialized expertise from any other of our offices, depending upon the city's need.

# **General Experience**

Olsson was founded on providing municipal engineering services - the cornerstone of what we do. Locally, our Fayetteville office staff members have been serving municipalities and water districts in Arkansas for over 70 years, including many projects within the City of Fayetteville.

# **Familiarity with Fayetteville**

Our Fayetteville staff has been a part of designing infrastructure for the City of Fayetteville for over seven decades. As a hometown firm, the staff is personally vested in the sustainable design of every facet of the city's infrastructure.

# **Location/Proximity**

Our Fayetteville office is minutes from Fayetteville's municipal offices. In addition, we have nearby offices that include three in the Kansas City metropolitan area, one in Joplin, Missouri and another in Springfield.

# Some of Our Most Recent Projects within the City of Fayetteville Include:

- Maple Street and Bike Path Improvements
- Dinsmore Trail Water Main Replacement
- Water Master Plan Update
- East Fayetteville Water System Improvements
- Township Pressure Plan Improvements
- Stormwater Feasibility Study (In association with Jacobs)
- Fayetteville Arts Corridor Civil Site (In association with Nelson Byrd Woltz Landscape Architects)
- Fayetteville Peace Fountain Repairs
- MLK Boulevard Sidewalk and Parking Improvements
- · Beechwood Remote Parking Lot
- Solid Waste Transfer Facility Expansion
- West Side Wastewater Treatment Plant
- Woolsey Wet Prairie Survey, Hydraulic Contouring
- Broyles Road Improvements
- Washington County Parking Deck
- Clinton House Museum Structural Analysis

In addition to a long-history of projects for the City of Fayetteville, Olsson serves as an On-Call engineering firm for the University of Arkansas, which often requires coordination with the city. These include improvements for street, utilities, drainage, parking, pedestrian, structural, survey, site-planning, storm water and a host of other projects.

As well, our firm has completed numerous projects for Washington County for site planning, architectural, parking, roads, bridges, utilities and other projects often done in coordination with the City of Fayetteville.







# EXECUTIVE SUMMARY

# Staff Experience and Capability

Olsson has sufficient staff resources to provide the City of Fayetteville with experienced team members for any project. With more than 1,100 staff members, we provide a full range of engineering services.

# Appropriate Project Staffing

Olsson analyzes the project at hand to see that the appropriate staff, with the necessary expertise, will be assigned to the project. The ability to expand the project team to provide additional expertise as-needed, is a valuable asset we offer. Occasionally unforeseen issues arise on a project, however, with our in-house experts we are prepared to address these situations quickly.

Olsson is available to begin working on the City of Fayetteville's projects immediately. In addition, our staff is available 24/7.

# **Municipal Engineering**

Our firm was founded on providing municipal services with a solid reputation. In 2018, over 91 percent of Olsson's total revenue came from repeat clients, with most of the work coming from public municipalities

# **Water and Wastewater**

Our Fayetteville office is known for exceptional results in the area of water and wastewater infrastructure. Having designed many aspects of both systems within Fayetteville, including the West Side Wastewater Treatment Plant completed in 2009, our team has a valuable historical knowledge of Fayetteville's water and wastewater systems. Olsson works with many municipalities to ensure water resources are adequate and water quality is clean and safe. Because we aren't siloed, we find solutions across teams and disciplines to

provide solutions for water and wastewater systems that are technically, economically, and environmentally sustainable, and socially acceptable.

Our capabilities include studies and analysis, planning, collection, treatment, transmission, master planning, hydraulic modeling, and biosolids management.

# Construction Management and Materials Testing Services

Olsson is the ONLY FIRM in the area that can provide a COMPREHENSIVE SUITE of services including construction administration, observation, easement acquisition, and construction materials testing. By packaging most or all of these services, we can provide added value to the City of Fayetteville by reducing the need for duplicate personnel or subcontractors. Plus, Olsson's testing lab is located in our Fayetteville office.

# **Design Studio**

Ochsner Hare & Hare, the Olsson Studio, is an industry leader in landscape architectural design, land planning, community and neighborhood redevelopment, parks and recreation, urban and regional planning, destination retail and entertainment design, and real estate development planning. As one company, Ochsner Hare & Hare and Olsson offer a full spectrum of services.

# **Transportation**

Olsson works both the public and private sectors to bring our expertise to all modes of transportation—including vehicular, freight, pedestrian, bicycle, and transit. Our engineers and planners work throughout the country, creating practical solutions that get people and goods moving.



# EXECUTIVE SUMMARY

# **Service Areas**

# **Transportation**

- · Roadway Design
- Traffic/ITS
- Transit
- · Transportation Planning
- · Bridge Structural
- Railroad Services
- Airport Consulting

# **Water Resources**

- · Floodplain Conservation and Water Quality Design
- · Hydrologic and Hydraulic Analysis and Modeling
- Lake Restoration and Stream Stabilization
- Green Stormwater BMPs and Drainage Design
- · Dams and Reservoirs

# Water | Wastewater

- Treatment Plants and Pumping Stations
- · Sanitary Sewer Collection Systems
- Water Supply and Storage
- System Modeling and Master Planning
- Rate Studies and CIP Planning
- · Trenchless Technologies and Rehabilitation

# **Civil Infrastructure**

- · Site Civil Master Planning and Design
- · Environmental Studies and Permitting
- · Floodplain Design and Management
- Highway, Street, Road, Paving, and Bridge Design
- · Parks, Recreational Facilities, and Trails
- Power Generation
- · Sanitary Sewer Collection Systems
- Streetscape and Sports Fields Lighting
- Survey and Construction Services
- Traffic Engineering and Corridor Studies
- Water and Wastewater Treatment Plants
- Water Supply and Storage
- Turnkey Land Development Services

Please see the Executive Summary with the Appendix for detailed project examples representing these service areas.

# **Field Services**

- Construction Services
- · Geotechnical Investigation
- · Non-Destructive Testing
- · Special Inspections
- Surveying Services

# **Landscape Architecture and Urban Planning**

- · Urban Planning and Site Design
- · Downtown and Community Revitalization
- · Recreation and Open Space Planning
- · Park Planning and Design
- · Comprehensive Master Planning and Design
- Campus and Commercial Master Planning and Design
- · Trails Master Planning and Design
- · Theme and Identity Design
- · Streetscape Design
- · Landscape and Irrigation Design
- · LEED Design Services

# **Environmental Resources and Compliance**

- · Air Permitting, Modeling, and Compliance
- · Groundwater Studies
- Soil and Water Assessments and Remediation
- Wetland Permitting and Restoration
- NEPA Documentation
- Endangered Species and Habitat Studies
- Environmental Inspections
- · Oil and Gas Permitting and Compliance
- Safety and Industrial Hygiene Services
- Due Diligence/Phase I and II Environmental Site Assessments

# **Building Services**

- · Audits, Conservation, and Sustainability
- · Electrical Power and Lighting
- · Fire Protection/Life Safety
- LEED Design and Certification
- Mechanical HVAC
- Plumbing
- Structural

# **Technology**

- Process Automation
- · Telecommunication Design
- SCADA
- Software Development
- · Technology Field Services

# **Public Involvement**

- · Public Meetings/Focus Groups
- Surveys and Interviews
- Fact Sheets and Mailings
- · News Releases and Media Plans
- · Project Website

# FIRM OVERVIEW olsson



# OLSSON QUALIFICATIONS

We're Olsson, a nationally-recognized, employeeowned engineering and design firm with a rich history of success. Founded in 1956 on the very mindset that drives us today, we exist to improve communities, like yours, making it more sustainable, better connected, and more efficient. Simply put, we exist to leave the world better than we found it.

Though our philosophy hasn't changed since John E. Olsson opened our doors many years ago, we have certainly evolved, adding dozens of offices across eight states and developing a comprehensive list of services to best serve a comprehensive list of markets. We achieved Top 100 engineering firm status in 2018 (No. 98 on Engineering News-Record's Top 500 Design Firms national list), proving that tenacity, teamwork and a philanthropic mindset is indeed a winning combination.

# TYPE OF SERVICES QUALIFIED TO PERFORM AND ASSISTANCE EXPECTED

Team based and purpose driven, we have more than 1,000 team members in nearly 30 offices across eight states and offer a comprehensive list of services: planning & design, engineering, field services, environmental and technology.



# **Firm Contact Information**



# CORPORATE OFFICE:

# LINCOLN, NEBRASKA

1111 Lincoln Mall, Suite 111 Lincoln, NE 68508 TEL 402.474.6311

# LOCAL NORTHWEST ARKANSAS OFFICE:

# **FAYETTEVILLE, ARKANSAS**

Contact: Brad Hammond, PE EMAIL: bhammond@olsson.com 302 East Millsap Road Fayetteville, AR 72709 TEL 479.443.3404

\* In January 2018 Olsson acquired McGoodwin, Williams & Yates Inc. of Fayetteville.

# **NEARBY BRANCH OFFICES:**

# SPRINGFIELD. MISSOURI

Contact: Ron Mersch

EMAIL: rmersch@olsson.com

550 St. Louis Street Springfield, MO 65806 TEL 417.890.8802

# **JOPLIN, MISSOURI**

702 South Main Street Joplin, MO 64801 TEL 417.781.0643

# **Year of Firm Establishment**

Established in 1956, Olsson became an employee-owned corporation on October 1, 1970. Previous firm names include John E. Olsson (3/9/1956); Olsson & Burroughs (1958); Clark, Enersen, Olsson, Burroughs, & Thomsen (1962); John E. Olsson & Associates (10/2/1970); and Olsson, Inc. (11/1/1973).

Olsson offers comprehensive design solutions for public and private infrastructure projects. We specialize in complex projects that involve many disciplines, including municipal, water, wastewater, transportation and roadway design, land development, environmental resources and compliance, landscape architecture and urban planning, field services, and building services.

We are a successful engineering firm, but we offer so much more than just engineering. We help clients find solutions for many different situations, from community planning and funding to public involvement.

We have the professional resources to draw upon at a moment's notice. With these specialized disciplines working together as a cohesive unit, you receive the most comprehensive service at the best value for your dollar.

We put a great deal of thought and energy into trying to do the right thing for our clients, the public, and our profession in general. This takes a thoughtful combination of innovative thinking, sound engineering/scientific methods, and common sense.

Olsson is a full-service consulting firm with nearly 1,100 professional staff members offering the expertise to help you meet your goals. Our Joplin/Springfield, Missouri, office consists of 64 professionals who are supported with the resources of 26 offices that are all available for your projects, when needed.

# Firm's State of Arkansas Registration

## ARKANSAS PROFESSIONAL REGISTRATION

Certificate of Authorization - 1010





## WATER

- · Clarksville, AR, Water Treatment Plant
- Fayetteville, AR Water Master Plan Update
- · Beaver Water District Master Plan, Lowell, AR
- Clarksville, AR, Piney Bay Raw Water Intake System
- Scranton, AR, Highway 109 Arkansas River Bridge Suspended Waterline



### WASTEWATER

- Fayetteville, AR West Side Wastwater Treatment Plant
- Jonesboro, AR Wastewater Treatment Facilities Evaluation
- Jonesboro, AR East Side Wastewater Treatment Plant Improvements
- Jonesboro Midtown Interceptor Collection System Improvements
- Jonesboro West Side WWTP Preliminary Design
- · Batesville, AR, Collection System Upgrade
- Batesville, AR, Moving Bed Bio-Reactor Wastewater Treatment Plant
- Sprindale, AR Spring Creek Lift Station



# **ELECTRIC TRANSMISSION & DISTRIBUTION**

- Valentine, NE, Generation & Transmission
- La Vista, NE, OPPD La Vista 69V Transmission Relocation
- Miami OK,\_Substation No. 2 Upgrade



## **FIBER**

- Kansas City MO\_Citywide Fiber Master Plan
- Kansas City, MO\_Park Hill School District Fiber Network
- Oklahoma Department of Transportation On-Call Fiber and Information Technology Services
- Nationwide, Unite Private Network Fiber Services
- Various Iowa Department of Transportation Fiber Services



# **STORMWATER**

- Belton, MO, Stormwater Master Plan
- Springfield, MO, Ravenwood South Subdivision Stormwater Improvements
- Springfield, MO, Jordan Creek Renewal
- Springfield, MO, South Creek Channel Restorations
- Springfield, MO, West Meadows Trail and Stream Restoration





- · Rogers, AR, Monte Ne Boulevard
- · Rogers, AR, Bellview Road
- Rogers, AR, Pauline Whitaker Parkway
- Springfield, MO\_Route 65 & Battlefield Interchange
- Branson, MO, Bass Pro Route 86 & Ridgedale Roundabout (Top of the Rock/Big Cedar Lodge)
- Joplin, MO, Mercy Hospital Road Improvements

## **TRAFFIC**

- Kansas City, MO, On-Call Traffic Engineering Services
- Missouri Department of Transportation, On-Call Traffic Engineering
- Missouri Department of Transportation, Transportation
   Systems, Management and Operations
- · Olathe, KS, On-Call Traffic
- Raymore MO, On-Call Traffic

## **STREETSCAPE**

- Springfield, MO, Main Avenue and College Street Streetscapes
- Sedalia, MO, Downtown Gateway Streetscape
- Kansas City, MO Vivion Road Streetscape
- Mission, KS\_Johnson Drive Streetscape
- Olathe KS, Santa Fe Street Streetscape

# **STRUCTURAL - BRIDGES**

- Washington County, AR Courthouse Parking Deck
- Anderson MO\_Bridge Inspections
- Madison MO\_Route Z and Route CC
- Overland Park KS\_Monitor Square
- Raytown, MO\_83rd Street Bridge
- Sedalia MO\_Washington Street Bridge



# **STRUCTURAL - BUILDINGS**

- Fayetteville, AR Solid Waste Transfer Facility
- Beaver Water District Administration Center
- Fayetteville, AR West Side WWTP Operations Center
- Joplin, MO, Surgical Demolition Project
- Kansas City MO, Mid-Continent Public Library Bond Issue Improvements
- Sedalia MO, Structural Components of Wastewater System Improvements



# **GOVERNMENT/COMMUNITY BUILDINGS**

- Springfield, MO, Clean Water Services Building
- Joplin, MO, Public Training Facility
- Christian County, MO, Justice Center Expansion
- Joplin, MO, Public Library
- Republic MO, City Hall/Municipal Center Site Feasibility Study



# **PARKS & RECREATION**

- · Rogers, AR, Mt. Hebron Park
- Hunstville, AR, Withrow Springs State Park
- West Fork, AR, Devil's Den State Park
- · Belton, MO, Memorial Park
- Branson, MO, Ballparks of America
- Kansas City, MO, Hospital Hill Park
- Lee's Summit, MO Downtown Outdoor Space
- · Midwest City OK, Original Mile Park



# **ENVIRONMENTAL**

- Springfield, MO, West Meadows Stream Restoration\_Brownfields
- Joplin MO\_Mercy Joplin Replacement Hospital Environmental Assessment
- Joplin MO\_Mercy Joplin Replacement Hospital Remediation Needs
- Joplin, MO, 32nd and Central City Interchange Environmental Assessment
- Kansas Department of Health and Environmental Services-On Call Services



- Joplin, MO, Mercy Joplin Replacement Hospital Geotechnical Services
- Olathe, KS, John Deere Marketing & Sales Headquarters
- Riverside, MO, Horizons Business Park
- Aurora, MO, Missouri Army National Guard Sink Hole & Motor Pool Parking Analysis
- Des Moines, IA, Kemin Industries Campus



# MECHANICAL/ELECTRICAL/PLUMBING

- Edgerton, KS, Big Bull Creek Maintenance & Park Police Facility
- Leawood, KS, City Hall Fiber Design
- Olathe KS, Johnson County Sheriff's Training Center
- St. Peters MO, St. Peters Justice Center



# **TECHNOLOGY**

- Process Automation
- Telecommunication Design
- SCADA
- Software Development
- Technology Field Services



## **HYDROLOGY**

- Monett, MO, Well-head Protection Study and Model
- Orchard and Cozad, NE, Hydrogeologic Canal Evaluations
- Jackson, WY, Upper Snake River Watershed Study
- Norfolk and Wahoo, NE, Voluntary Integrated Water Management Plans



# **RIGHT-OF-WAY ACQUISITIONS**

- Joplin, MO, 20th Street Improvements , Right of Way Negotiations
- Joplin, MO, Main Street Sidewalks Improvements, Right of Way Negotiations
- Joplin, MO, Main Street Transit Improvements, Right of Way Negotiations
- Joplin, MO, Main Street Stormwater Improvements, Right of Way Negotiations
- Ozark, MO, Sanitary Sewer Improvements-Right of Way Acquisition

# **MASTER PLANNING**

- Altoona, IA, City Hall Master Plan
- Lincoln, NE, Railroad Transportation District 33rd and Cornhusker
- Manhattan, KS, Aggieville Vision to Reality Master Planning
- · Salina KS, Downtown Salina
- Wichita KS, Buffalo Park Master Plan



# LAND SURVEYING

Land surveying is usually a component of our engineering projects, therefore, it is not typical to break out land surveying for a single project page. Below are a couple, recent stand-alone surveying projects.

- Schell City, MO, Ducks Unlimited Conservation Wetland Surveying
- State of Kansas, Confidential Client Wind Farm Project

# **CONSTRUCTION INSPECTION/MATERIALS TESTING**

- Pittsburg, KS, South Water Tower and Northeast Industrial Park Water Tower Blasting and Painting
- Joplin, MO, Replacement Hospital
- Branson, MO\_Branson 76 Revitalization
- Joplin MO\_Maiden Lane Capacity Improvements
- · Springfield, MO, Aspen Heights Student Housing



# **Unsolicited Services**

# LANDSCAPE ARCHITECTURE

- Ames, IA, Webfilings (Workiva) Headquarters
- Kansas City MO, Cliff Drive Recreational Improvements
- Overland Park KS, Shawnee Mission Health Blue Valley Campus
- · Overland Park, KS, Prairiefire
- The Colony, TX, Grandscape Mixed Use Development









## **ECONOMIC DEVELOPMENT**

- Belton MO, Markey Business Park
- Carthage MO, Industrial Park Redevelopment
- Pryor Creek OK, Mid-America Industrial Park Igloo Valley Master Plan
- Warrensburg MO, Brady Commerce Park

# **SCADA**

- Kansas City, KS, Board of Public Utilities On-Call SCADA Services
- Crete, NE, SCADA System Upgrades
- Minden, NE, SCADA System Upgrades
- Richmond, MO, Wastewater System On-Call SCADA Services
- Sedalia, MO, SCADA Systems Commissioning Services

# **AIRPORTS**

- Ainsworth, NE, Regional Airport
- Tarkio, MO, Gould Peterson Municipal Airport
- North Platte, NE, Regional Airport
- Wayne, NE, Municipal Airport

# RENEWABLE ENERGY

These renewable energy projects are confidential in nature, therefore, we are unable to highlight any of our projects.

Headquartered in the heart of the richest wind resource area in the country, Olsson has made a commitment to cement our foothold as a leading engineering firm in the renewable energy industry. Olsson has offices throughout the Great Plains, working to support projects in the U.S. Olsson's experience in our seven practices - environmental services, site/civil engineering, field services, survey, water and wastewater, facilities, and transportation - have supported over 300 wind and solar projects, and have included projects developed by major renewable energy players ranked by the American Wind Energy Association and other trade associations. Olsson is committed to the renewable energy industry in many ways, including memberships, sponsorships, planning committees, speakers, legislative support, to name a few; on a local and national level.

# **RAIL/QUIET ZONES**

- Edgerton KS, Logistics Park Intermodal Quiet Zone
- Hastings NE, Burlington Northern Santa Fe Railroad Quiet Zone Safety Study
- Kingsville and Knob Noster MO, Missouri Department of Transportation Sidings Improvements
- Riverside MO, Burlington Northern Santa Fe Railroad Quiet Zone Implementation
- Various Locations, Kansas Department of Transportation On-Call Railroad Bridge Inspections

# SERVICE APPROACH

# **Data Gathering Methods**

Olsson understands that we are evaluated on our ability to deliver projects on time and within budget, and we pride ourselves on our ability to perform. Olsson is dedicated and strongly committed to providing quality services for every project. During the scoping process, our team develops a thorough understanding of the project requirements to ensure that all aspects of the project are addressed during design. If an unforeseen issue arises, resulting in the need for additional scope items, the situation will be discussed immediately with the client before beginning any work.

At Olsson, the quality of our professional services receives the highest priority with not only our management, but with all of our staff. To ensure that the client is receiving the level of quality desired and that our firm's quality standards are being met throughout the course of the work, we have developed a quality control program with two primary areas of emphasis: quality service and technical quality. We believe quality service consists of effectively communicating throughout the project and collaborating with the client. The following items will help ensure quality service:

# **Key Client Liaison**

We believe it is critical that one key person is identified as the primary contact for each client. Brad Hammond, PE, serves as the Fayetteville Team Leader, while a dedicated project manager and team members will be selected as appropriate for any projects for which we are selected.

# **Custom-Tailored Services**

Initially, we would meet with the client to discuss items such as billings, frequency of contact/communication, progress reports, and contractual matters. It is important that we develop a complete understanding of your desires regarding these matters so that we can tailor our services to meet your needs.

# **Project Plan**

We will collaborate with the client to develop a detailed plan for the project. This plan will contain the following minimum elements:

- A written understanding of the unique aspects of the project, the client's concerns, and the technical and sensitive issues.
- A project schedule that is mutually agreed upon by our team and the client in MS Project format or another mutually agreed upon format.
- · The team assigned to work on the project.

# OVER 91% OF OLSSON'S WORK IN 2018 CAME FROM REPEAT CLIENTS

# **Past Performance**

Municipal engineering is what we do, and Olsson clearly understands public policy and procedures, as well as our duty to act as a good steward of the city's funds. Olsson truly works as an extension of the city staff, and we take this role seriously and act responsibly.

# **Qualifications of Personnel**

Olsson has a corporate internal training program, utilizing a combination of internal experts and outside resources, covering a wide range of topics. These include project management, safety, quality management, ethics, legal contracts, leadership and managerial skills, the competitive proposal process, handling conflict, computer aided design, financial and business acumen, and public speaking and presentations. These trainings are supplemented by ondemand content from three online training providers.

# **Firmwide Staffing Capabilities**

SERVICE CATEGORY	NUMBER OF STAFF
Administrative	199
Biologist	13
CADD Technician	121
Civil Engineer	125
Computer Programmer	5
Construction Manager/Inspector	58
Ecologist	2
Electrical Engineer	20
Environmental Scientist	27
Foundation/Geotechnical Engineer	11
Geographic Information Specialist	3
Geologist	8
Hydrologist	2
Land Surveyor	95
Landscape Architect	26
Mechanical Engineer	17
Other Employees	95
Planner: Urban/Regional	5
Sanitary Engineer	20
Structural Engineer	25
Technician/Analyst	191
Transportation Engineer	70
Water Resources Engineer	30
TOTAL EMPLOYEES	1,168

# **Fayetteville Office Staffing**

SERVICE CATEGORY	NUMBER OF STAFF
Administrative	3
Engineer	13
CADD	2
Architectural Design	1
Survey	1
Construction Inspection	3
Other	1
TOTAL EMPLOYEES	24









# **Continual Communication**

We believe it is critical to keep open lines of communication with the client. As stated above, we will schedule meetings as part of the project plan. As part of those meetings, we will seek continual feedback regarding the client's satisfaction with our services. In addition, we make a strong commitment to communicate with the client in a timely manner regarding any changes in the project, and to consult with the client regarding progress and modifications.

# **Project Review**

Project reviews will be incorporated into the schedule at

the outset of the project. A reviewer will be identified as part of the initial team. The reviewer will not be directly involved in the project design, but will have related technical background and experience. The review will include the following elements:

- The project is carefully reviewed by a senior designer, project manager, or appropriate team experienced in the design required, with all changes and questions noted.
- All work elements identified by the reviewer(s) as needing additional consideration are back-checked by the original individual or team. All changes and questions arising during the review process must be resolved and agreed upon by all involved.
- All documents generated during the project are reviewed to ensure all changes have been made before transmittal and permanent filing.
- All design elements are reviewed for conformance to applicable regulations and agency standards.
- The quality control reviewer for overall conformance to the design contract and the firm's quality standards reviews all project elements.

# **Project Follow-up**

At project closeout, we intend to meet with the client to solicit feedback regarding your satisfaction with the overall project and our services. Part of effective communication is asking for honest feedback regarding what is going well and what can be improved. We intend to keep an open dialogue with the client so that we maintain a superior level of quality service.

# **Evaluation Techniques**

As a service organization, our successful client service is a direct function of our ability to develop and follow a well-defined quality control and assurance program. The Quality Control Plan (QCP) establishes procedures and responsibilities for all project team members. Implementing this plan will accomplish the following:

- Provide complete, high-quality design documents in accordance with client standards.
- Ensure that all calculations, plans, and documents are independently reviewed, checked, and back-checked, in accordance with good design practice.
- Provide independent checks of all drawings showing different work in the same area to prevent discrepancies.
- Ensure that reports clearly and effectively portray the intent of the design.

- At key milestones during project development, Olsson will conduct in-house technical reviews of the project.
   The technical review will evaluate and verify the overall design concept of the project. At a minimum, the review should ensure the following:
  - That the design process is adequate to achieve the stated goals
  - That the viable alternatives have been evaluated
  - The practicality and constructability of the selected design
  - That all legal and physical restraints have been considered
  - That the design theory, concepts, and project layout are logical
  - That the technical specifications are comprehensive

The client manager and the project manager will be responsible for managing this QCP. They will coordinate and audit quality control procedures for work produced by both Olsson and our sub-consultants and will ensure that independent checks are made for all work products. Weekly project meetings will be held with key staff members to review project development as an important part of the QCP. Continuing attention by all levels of management will ensure that a QCP is not only clearly identified, but that it is faithfully followed. In addition, they will be

responsible for organizing and conducting a peer review of concepts developed during the early stages of the project to ensure design optimization.

# Outside Consultants Retained As-Needed to Meet Client Needs

Because we are multidisciplinary, we rarely institute teaming arrangements. For any project, our incentive to team with other firms is to reduce costs, to mitigate project risks, to bring a familiar face in front of the client, or to further specialize our skills. In this way, the client receives the same or better service, at lower overall risk. The need to respond to a rapidly changing environment and service a diverse infrastructure has encouraged applying subcontracting to successfully complete projects within budget, on time, and to the complete satisfaction of the client.

When a firm subcontracts part of a project, that firm is responsible for the quality, cost, and timeliness of the work. With this team, rest assured that Olsson will keep accurate records and ensure each team member fulfills the assigned role in a timely manner. As an example of our ability to manage projects with multiple teams, Olsson was recently teamed with Black & Veatch and CH2M Hill to complete the City of Springfield, Missouri's sanitary sewer overflow (SSO) control program that needed to be executed over a period of several years. The overall investment the city needed to make to address its sanitary sewer overflow issues was estimated to approach \$500 million. Olsson's Water/Wastewater team installed





#### **Quality Control**

As a service organization, our successful client service is a direct function of our ability to develop and follow a well-defined quality control and assurance program. The Quality Control Plan (QCP) establishes procedures and responsibilities for all project team members. Implementation of this plan provides:

- Complete, high-quality design documents in accordance with client standards
- Calculations, plans and documents that are independently reviewed, checked, and back- checked, in accordance with good design practice
- Independent checks of all drawings
- Reports that clearly and effectively portray the intent of the design

At key milestones during the project development, Olsson will conduct in-house technical reviews of the project. Our project manager is responsible for implementing the quality control plan.

#### **Project Management**

Olsson's project management approach is based on solid planning, responsive client service, experienced professional staff, effective communication, design, and project cost control, and quality control. This approach results in client satisfaction, constructible designs, and overall cost effectiveness.

Solid project management and communication are the keys to project success. Olsson will use a variety of tools to communicate with the City's project manager. Meeting minutes will be prepared and distributed within two business days of all meetings. Records of telephone conversations with outside parties will also be documented and distributed. Monthly progress reports will be prepared to document the work accomplished during the previous month, work planned for the upcoming month, and any outstanding issues, decisions, and information needed to move forward with the project. Important action- required items will be given high priority to keep the project moving forward in a timely manner.

At the start of a project, Olsson's project manager will prepare a Project Management Plan (PMP).

The PMP communicates work assignments, project scope, budget and schedule to all team members and shares information that has been gathered while preparing the proposal for the project. The PMP includes:

- Project scope, budgets, and goals
- Project schedule showing tasks, project milestones, constraints, and critical path elements
- Staff and subconsultant assignments
- Client and team member contact information, lines of communication, and forms of communication
- Permitting requirements
- Work breakdown structure and budgets
- Deliverables
- Technical criteria
- · QA/QC plan and reviewers

The PMP will be distributed to all team members at the team kick-off meeting. At that meeting, potential/unique opportunities are discussed and information relating to the project is exchanged.

Olsson uses Microsoft Project for project scheduling. We will provide your project manager a schedule at the beginning of each on-call project assignment and will update the schedule monthly.

#### **Construction Budget Maintenance**

Preparing construction cost opinions is a crucial step in planning, funding, and executing the project design.

Understanding local bidding competitiveness, availability of materials and subcontractors, and seasonal fluctuations is important in preparing cost opinions.

Olsson has much experience using value-engineering techniques to bring construction costs back in line with the expected funding. During the Preliminary Design Phase, a reality check on the budgeted construction cost will be made. Unit costs from recent bid tabulations, our in-house data, and data from UDFCD and CDOT will be used to develop conceptual level opinions of probable cost.

As the design progresses, the opinion of cost will be updated and refined. If it appears that construction costs are going to exceed the available budget, we will identify the reasons and review methods to reduce the project costs with the City's project manager.



## QUALIFICATIONS OF PERSONNEL

**Organizational Chart of Key Personnel** 

#### CITY OF FAYETTEVILLE, ARKANSAS

**TEAM LEADER BRAD B. HAMMOND, PE** 

#### LOCAL TEAM

**Civil Engineers** 

Brad B. Hammond, PE

Jim Ulmer, PE, BCEE

Chris Hall, PE Jim Vetter, PE

Chris Dougherty, PE

Chris Brackett, PE Craig Hardin, PE

**Civil Engineers** 

Erin Needham, Ph.D., El, LEED AP

Jeff Richards, PE John Cartwright, El

Alan Caster, El

Andrew Stengel, El

**Field Services** 

Charlie Watson Paul Bradley

Jeff Windham

#### SUPPORT SERVICES

**Fiber** 

David Hoelzel

**Environmental** 

Aaron Ball, CPRM

**Technology Process Capabilities** 

Warren Humphrey, PE\*

**Geotechnical Investigation** 

James Landrum, PE\*

**SCADA** 

Warren Humphrey, PE

**Electric Transmission/Distribution Construction Inspection/** 

Rusty Hartmann, PE\*

**Structural - Bridges** 

Grant Luckenbill, PE\*

**Structural - Buildings** 

Adam Christensen, PE\*

**Landscape Architecture** 

Jane Earnhart, PLA, LEED® GA

GIS

Jason Witzke

**Hydrology** 

Jim Schneider, PhD

**Transportatioin** 

Reid Catt, PE, PTOE, LEED AP\*

Mechanical/Electrical /Plumbing

Cory Wilson, PE\*

**Materials Testing** 

Bryan Johnson, PE\*

Nick Calton

**Master Planning** 

Ken Boone

**Economic Development** 

Courtney Dunbar, CECD, EDFP, AICP

**Airports** 

Kelly Fincannon, PE

Renewable Energy

John O'Connor, CEcD

**Rail/Quiet Zones** 

Reid Catt, PE, PTOE, LEEP® AP\*

**Government/Community Buildings** 

Jared Rasmussen, PE\*

\* Service Leader

# RESUMES olsson



## BRAD HAMMOND, PE

#### **Team Leader**

#### **EXPERIENCE SUMMARY**

Brad brings confident leadership to the project table that makes him an effective team member trusted by Olsson clients. He excels in many aspects of civil engineering, particularly within the water and transportation markets.

As a team leader, Brad strives to build project teams that do more than serve each client's engineering needs, but that also creates a foundation of trust and knowledge that Olsson will be responsive, innovative, and a true partner.

Brad specializes in civil site design, roadways, bridges, parking facilities, master planning, and water and wastewater system design projects. His negotiating skills and keen understanding of state and federal regulations have saved clients both time and money.

With an eye to continued improvement of our country's infrastructure, Brad is active in local, state and national organizations, including serving in numerous leadership positions, for organizations representing the engineering industry.



#### **EDUCATION**

- Master, Business Administration, University of Arkansas
- BS, Civil Engineering, University of Arkansas

#### PROFESSIONAL REGISTRATIONS

• Professional Engineer - AR, OK, MO

#### OLSSON EXPERIENCE

• 2018 to Present

#### OVERALL EXPERIENCE

• 1992 to Present



## JIM ULMER, PE, BCEE

#### **Technical Leader**

#### **EXPERIENCE SUMMARY**

Jim has built his career with an emphasis in design of water and wastewater systems. In particular, his knowledge of regulatory issues is a highly valued aspect for the Olsson team.

He has developed and maintains a respected relationship with various state agencies involved in the permitting and review of plans and specifications for projects affecting the water quality within the state. He serves the Olsson team as client liaison with the Arkansas Department of Environmental Quality and the Environmental Protection Agency (EPA) Region VI. Because of his relationships with these regulatory agencies, he is highly effective in the navigation of permitting and funding of construction projects.

Among his accomplishments, Jim provided guidance to secure both the first American Recovery and Reinvestment Act (ARRA) funding within the state of Arkansas, and he helped secure ARRA funding for over \$12 million for the innovative design of a moving bed bio reactor wastewater treatment plant, the first of its kind in Arkansas and the largest, at the time of construction, in the nation.



BS, Civil Engineering, University of Arkansas

#### PROFESSIONAL REGISTRATIONS

- Professional Engineer AR
- Board Certified Environmental Engineer (BCEE)

#### **OLSSON EXPERIENCE**

· 2018 to Present

#### OVERALL EXPERIENCE

• 1970 to Present





## JIM VETTER, PE

#### PROJECT ENGINEER

#### **EXPERIENCE SUMMARY**

Jim specializes in the design of water and wastewater systems, hydraulic modeling and master planning. He is known and respected for his attention to detail. He makes it a priority to not just work with a client, but to be "in sync" with each client's needs, project challenges and vision for the future.

The end product for any project Jim has helped design, is most assuredly thoroughly vetted to create not only solutions, but cost savings, efficiency and be a showcase for a job well done.

Jim is adept with preliminary engineering reports, drainage reports, developing construction drawings and specifications, bidding projects, administering construction contracts and development of Operations and Maintenance Manuals. He has developed hydraulic water models, longrange master plans, plans and specifications for water treatment facilities (including the use of Ozone), water storage tanks, fluoride-feed facilities, conducted sludge studies, and sewer improvements.

#### **EDUCATION**

 BS, Civil Engineering, University of Arkansas

#### PROFESSIONAL REGISTRATIONS

· Professional Engineer - AR

#### **OLSSON EXPERIENCE**

• 2018 to Present

#### OVERALL EXPERIENCE

• 2007 to Present





## CHRIS BRACKETT, PE, CFM

#### **Project Manager**

#### **EXPERIENCE SUMMARY**

Chris is focused on developing clear solutions that improve communities and are flexible to meet each client's changing needs. Specializing in the market areas of transportation, land and facilities, and water, Chris excels in seeing the big picture of how infrastructure impacts individuals and communities as a whole.

Chris has been responsible for the design of major roadway infrastructure within one of the fastest growing metro areas of the country. The combination of his passion for roadway design, along with his expertise in stormwater managment and land development, makes Chris a trusted go-to engineer for complicated projects that need critical thinking.

His ability to earn client trust, and deliver fast, accurate project assessments has manifested in Chris also providing on-call services for various clients involving plan development review for commercial and residential expansion.

#### **EDUCATION**

 BS, Civil Engineering, University of Arkansas

#### PROFESSIONAL REGISTRATIONS

- · Professional Engineer AR
- · Certified Flood Plain Manager

#### OLSSON EXPERIENCE

• 2018 to Present

#### OVERALL EXPERIENCE

• 1995 to Present





## CHRIS HALL, PE

#### **Project Manager**

#### **EXPERIENCE SUMMARY**

Chris has earned a reputation as being a trusted champion for clients who turn to his his skills time and time again. His enthusiasm for exploring alternative solutions to challenging issues has resulted in innovative and award-winning designs.

He especially excels in the design of water and wastewater systems, with an emphasis in modeling water distribution and wastewater collection systems. His eye for detail and high standards for thoroughness has resulted in cost-savings for clients as well as pinpointed future problematic issues that can be addressed pro-actively rather than reacatively to create a more sustainable infrastructure.

Chris has lead the Olsson team in the design of water transmission systems through exceedingly challenging terrain serving remote mountainous areas. As well, his knowledge of hydrology has been instrumental in post-flood mitigation of numerous waterways and state recreation facilities.

#### **EDUCATION**

 BS, Civil Engineering, University of Arkansas

#### PROFESSIONAL REGISTRATIONS

• Professional Engineer: AR, MO

#### OLSSON EXPERIENCE

• 2018 to Present

#### OVERALL EXPERIENCE

• 1999 to Present





## CHRIS DOUGHERTY, PE

#### **Project Manager**

#### **EXPERIENCE SUMMARY**

Erin is a highly-honored graduate of the University of Arkasnas who brings an addded level of dimension to the Olsson team. She has focused her education and career path in the application of advanced water and wastewater technologies and the ever-increasing need to incorporate sustainable desing practices.

Her application of the advanced studies in the area of water and sustainability has been valuable to the Olsson water team and its clients for the development of long-range water system plans, water treatment facility upgrades, water storage and distributution systems and treatment process adjustments.

In addition, Erin is active within organizations representing the water industry having published numerous research papers and as a presenter. Her emphasis on sustainabily is enhanced also by her certification as LEED Accredited Professional (Leadership in Energy and Environmental Design)...

#### **EDUCATION**

- Ph.D. Civil Engineering, University of Arkansas
- M.S. Civil Engineering, University of
- Arkansas
- B.S. Civil Engineering / Sustainability Minor, University of Arkansas

#### PROFESSIONAL REGISTRATIONS

· Engineering Intern - AR

#### OLSSON EXPERIENCE

• 2018 to Present

#### OVERALL EXPERIENCE

2017 to Present





## CRAIG HARDIN, PE

#### **SENIOR ENGINEER**

#### **EXPERIENCE SUMMARY**

Craig's area of focus is structural design. He has extensive experience with structural engineering for water and wastewater structures, bridges, parking facilities, and general structures of timber, steel, masonry, and reinforced concrete.

He is adept at preparing preliminary engineering reports, and drainage reports, developing construction drawings and specifications, bidding projects, and administering construction contracts.

Craig has also provided design services for repairs and modifications to state park facilities, including historic structures.

#### **EDUCATION**

 BS, Civil Engineering, University of Arkansas

#### PROFESSIONAL REGISTRATIONS

• Professional Engineer - AR

#### **OLSSON EXPERIENCE**

• 2018 to Present

#### OVERALL EXPERIENCE

• 2003 to Present





## ERIN NEEDHAM, PH.D., EI

#### **Assistant Engineer**

#### **EXPERIENCE SUMMARY**

Erin is a highly-honored graduate of the University of Arkasnas who brings an addded level of dimension to the Olsson team. She has focused her education and career path in the application of advanced water and wastewater technologies and the ever-increasing need to incorporate sustainable desing practices.

Her application of the advanced studies in the area of water and sustainability has been valuable to the Olsson water team and its clients for the development of long-range water system plans, water treatment facility upgrades, water storage and distributution systems and treatment process adjustments.

In additon, Erin is active within organizations representing the water industry having published numerous research papers and as a presenter. Her emphasis on sustainabily is enhanced also by her certification as LEED Accredited Professional (Leadership in Energy and Environmental Design)..

#### EDUCATION

- Ph.D. Civil Engineering, University of Arkansas
- M.S. Civil Engineering, University of
- Arkansas
- B.S. Civil Engineering / Sustainability Minor, University of Arkansas

#### PROFESSIONAL REGISTRATIONS

· Engineering Intern - AR

#### **OLSSON EXPERIENCE**

• 2018 to Present

#### OVERALL EXPERIENCE

• 2017 to Present





## **CHARLIE WATSON**

#### **Construction Observation Coordinator**

#### **EXPERIENCE SUMMARY**

Charlie provides construction observation coordination for which he oversees scheduling observation personnel, serving as liaison for observation events with clients, engineers, project managers, contractors, or any other involved party.

He has extensive experience in maintaining warranty schedules on construction projects, assisting in plans and specifications review, assisting with writing paint specifications He provides the Olsson team with confident submittal review, spread sheets, partial pay estimates, computer-aided drafting (CAD), correspondence, reports, and all aspects of project site construction observation.

He communicates directly with the client and construction contractor throughout each project to ensure all designs to construction requirements are met.

#### **EDUCATION**

- · Trench Safety Training
- · Confined Space Entry Training
- Northwest Technical Institute AutoCAD
- Arkansas Environmental Academy Basic Motor Control Circuits

#### **OLSSON EXPERIENCE**

• 2018 to Present

#### OVERALL EXPERIENCE

• 1994 to Present





## NICK CALTON

#### **Construction Materials Testing Assistant Manager**

#### **EXPERIENCE SUMMARY**

Nick investigates the pieces of a project with construction materials testing and special inspection services. His experience includes construction in deep and shallow foundations, mass grading, roadway subgrades, as well as asphalt and concrete placement. Nick also assists with construction administration and observation of state-funded roadway projects.

Nick is extremely responsive to clients, both internal and external. He employs an entrepreneurial spirit, always willing to look for opportunities others miss. He looks to prevent mistakes before they happen, and doesn't compromise his results for anyone.

#### CERTIFICATIONS/TRAINING

- ACI Concrete Field Technician Level I
- MoDOT Soil Density Technician
- MoDOT Base Rock Field Technician
- MoDOT Bituminous Field Technical
- MoDOT Plasticity
- MoDOT Aggregate Field Technician
- MoDOT Concrete Strength Field Technician
- MoDOT Concrete Field Technician
- MoDOT Asphalt Field Technician
- Class A Commercial Driver's License
- OSHA Ten Card
- CPR, First Aid, and AED Certification
- Crowder College Vo-Tech Program 2-Year Auto Collision Certificate

#### **OLSSON EXPERIENCE**

• 2014 to Present

#### OVERALL EXPERIENCE

• 2010 to Present





#### PROFESSIONAL REGISTRATIONS

• Professional Land Surveyor - AR, OK

#### OLSSON EXPERIENCE

• 2018 to Present

#### OVERALL EXPERIENCE

• 1971 to Present

## GARY DENZER, PLS

#### SENIOR SURVEYOR

#### **EXPERIENCE SUMMARY**

Gary has headed the Olsson survey team for the route selection for hundreds of miles of water and sewer utility lines through all types of terrain, determining right-of-way and easements, utilities relocation, civil site survey and mapping.

As well, he coordinates with local and state agencies and with affected landowners as necessary and is adept in working with legal land descriptions.

His responsibilities have included preparing reports and legal descriptions of surveyed properties, verifying the accuracy of survey data, preparing property descriptions and legal documentation, and communicating directly with property owners and municipal and state agencies.

He breadth of expertise includes survey services for roadways, stormwater drainage and bridges as well as for site civil projects.





## JANE EARNHART, PLA, ASLA, LEED GA

#### **Senior Landscape Architect**

#### **EXPERIENCE SUMMARY**

I coordinate projects for clients, and break our work down into tasks that we can complete efficiently and effectively to achieve our clients' goals. I strive to look at issues from multiple perspectives to develop win-win solutions for all stakeholders.

As a result of the 2011 tornado in Joplin, Missouri, the majority of the urban forest was destroyed, or damaged to the extent that tree removal was required for public safety. When Olsson prepared designs for the community streetscapes and CDBG surface projects we included the reestablishment their urban forest with diverse tree species for a sustainable future. My role at Olsson includes the education of our staff, clients, stakeholders, and others on the needs of our urban forest to help them appropriately preserve, protect and replace trees.

I bring my listening skills, willingness to ask in-depth questions to clarify client needs, and a desire to mentor others -- to work each day, allowing our organization to grow. The results? Inspired people, amazing designs, and projects with purpose.

#### EDUCATION

 BA, Landscape Architecture, Kansas State University

#### PROFESSIONAL REGISTRATIONS

 Landscape Architect: MO, KS, IL, OK, and AR

#### CERTIFICATIONS/TRAINING

- MO Department of Transportation, Local Public Agency Basic Training, Level 1, October 2016
- · LEED Green Associate

#### **OLSSON EXPERIENCE**

• 2010 to Present

#### OVFRAII FXPFRIFNCF

• 1986 to Present





#### INL

**OLSSON EXPERIENCE** 

• BS, Civil Engineering, University

PROFESSIONAL REGISTRATIONS
 Professional Engineer: MO, KS,

of Nebraska-Lincoln

**EDUCATION** 

• 1987 to Present

#### OVERALL EXPERIENCE

• 1987 to Present

## MIKE MILIUS, PE

#### **Industry Expert**

#### **EXPERIENCE SUMMARY**

Mike is the Industry Expert for Olsson's Water Practice team. His responsibilities include managing large multi-disciplinary projects, including water/wastewater system improvements and water/wastewater pumping and treatment facilities. Mike has prepared reports and studies, conceptual designs, final designs, plans, and specifications for various water and wastewater projects. He is involved in designing, installing, and starting-up of Supervisory Control and Data Acquisition (SCADA) systems and starting-up of pumping and treatment systems. Additionally, Mike is involved with all aspects of project design including specifications, pre-selection of equipment, bidding, construction phase administration, construction services management, construction staking, testing, and quantity computations.





## TODD FREDERICKSEN, PE, PTOE

#### **Vice President / Traffic Team Leader**

#### **EXPERIENCE SUMMARY**

Todd has experience in the areas of traffic and transportation engineering and Intelligent Transportation Systems (ITS) specifically communication systems planning and design and project management. Project work Todd has completed includes planning and designing field devices for ITS deployments, traffic signal systems and communication designs, developing conceptual geometric layouts, conducting operational capacity analyses of signalized intersections, conducting traffic and safety studies, performing simulation modeling, designing pavement marking and signing, controlling traffic, and designing traffic signals. His computer experience includes Vissim, Synchro, SimTraffic, Highway Capacity Software (HCS), AutoCAD, and MicroStation.

#### **EDUCATION**

 BS, Civil Engineering, University of Nebraska-Lincoln

#### PROFESSIONAL REGISTRATIONS

 Professional Engineer: KS, MO, CO, AZ, OK, USA

#### **OLSSON EXPERIENCE**

• 2000 to Present

#### OVERALL EXPERIENCE

• 2000 to Present





## AARON BALL, CPRM

#### **Senior Scientist**

#### **EXPERIENCE SUMMARY**

Strategy and environmental know-how are what Aaron brings to each project he is involved in. He skillfully executes projects from concept to completion, and frequently is the technical expertise in environmental scope planning and cost estimating. Aaron looks at a project holistically, and with an environmental focus. As a veteran to the environmental industry, he is sought after for his biology experience, and is commonly acting Project Manager.

Many of the projects Aaron is involved in require his acute understanding of encompassing and adhering to federal and state regulatory acts and permitting requirements—including, environmental impact statements and assessments under the National Environmental Policy Act (NEPA); wetland delineations, stream assessments, nationwide and individual permits under the Clean Water Act Section 404; and biological assessments, agency consultation, threatened and endangered species review under the Endangered Species Act.

Aaron has worked on public and private projects throughout the United States—his practice has no boundaries. As a skillful leader for Olsson, Aaron's proficiency in project management and client rapport position him to excel at meeting internal and external project goals efficiently.



#### **EDUCATION**

 BS, Environmental Biology, Emporia State University

#### CERTIFICATIONS/TRAINING

- Certified Professional in Range Management (CPRM)
- USACE Wetland Delineation
- Accredited Carbon Offset Lead Verifier
- NRCS NEPA Training in Biological Assessments
   (BA), Environmental Impact
   Statements (EIS), Findings of No Significant Impact (FONSI), and Categorical Exclusions (CE)
- Comprehensive Nutrient Management Planning
- · NRCS Conservation Planning
- · NRCS Technical Service Provider
- National Incident Management System (NIMS) (FEMA)
- ArcGIS 10.6.1

#### OLSSON EXPERIENCE

· 2014 to Present

#### OVERALL EXPERIENCE

• 2002 to Present



#### **EDUCATION**

- BS, Civil Engineering, Purdue University
- MS, Civil Engineering, Purdue University

#### PROFESSIONAL REGISTRATIONS

 Professional Engineer: CO, IA, KS, MO, NE, TX

#### **OLSSON EXPERIENCE**

• 2010 to Present

#### OVERALL EXPERIENCE

• 1994 to Present

## JAMES Landrum, Pe

#### **Geotechnical - Field Operations Leader**

#### **EXPERIENCE SUMMARY**

James has worked on a variety of projects, including bridges, roadways, schools, industrial and commercial buildings, dams, and retaining structures. He has worked for a wide range of clients, including DOTs and municipalities. He has designed temporary and permanent shoring systems, performed analyses for earth dams, embankments and native slopes, performed seepage analyses for levees, and developed remedial measures for failed slopes. James prepares fee estimates, negotiated contracts and managed budgets. He is versed in a variety of geotechnical engineering software applications.

James is responsible for client development and serves as a client manager, coordinating geotechnical projects between several offices. Completing geotechnical reports requires close coordination with other disciplines and other firms. He directs staff engineers in completion of assignments.





#### **EDUCATION**

 Bachelor of Landscape Architecture, Kansas State University

#### OLSSON EXPERIENCE

• 2014 to Present

#### OVERALL EXPERIENCE

• 1992 to Present

## KEN Boone

#### Vice President/Team Leader

#### **EXPERIENCE SUMMARY**

Ken heads Ochsner Hare & Hare, the Olsson Studio, overseeing its design endeavors. He collaborates with clients to foster creativity in master planning, site design, landscape architecture, and transportation planning projects.

His work has included community planning, urban planning, redevelopment and revitalization planning, commercial, institutional, campus, hospital, and corporate landscape design, park design, residential landscape design, planting design, and irrigation design.





## ADAM CHRISTENSEN, PE

#### **Structural Team Leader**

#### **EXPERIENCE SUMMARY**

Adam has extensive structural engineering experience in the areas of educational, municipal, commercial, and industrial structures. Equally versed in providing pure architecture as well as industrial efficiency, he has a passion for buildings, and he strives to realize the client's design intent through innovative and cost effective structural solutions.

Adam is responsible for team management, project management, and marketing of local and national clients for all building/vertical structures based projects. His design insight, team based approach, and commitment to client service have won him numerous repeat clients.

#### EDUCATION

- MAE, Architectural Engineering, University of Nebraska-Lincoln
- BSAE, University of Nebraska-Omaha

#### PROFESSIONAL REGISTRATIONS

Professional Engineer:
 NE, KS, IA, LA, SC, MI, TX, WV, OH

#### **OLSSON EXPERIENCE**

• 2002 to Present

#### OVERALL EXPERIENCE

2002 to Present





## COURTNEY DUNBAR, CECD, EDFP, AICP

#### **Program Leader | Industrial**

#### **EXPERIENCE SUMMARY**

Courtney has combined career experiences in economic development, community planning, and project funding. In her current role, she is actively engaged in industrial site planning, site selection, site certification, economic analysis, and community planning. She has written many community plans focused on developing vital, innovative communities that entice economic growth and redevelopment, and address funding strategies. Her career has centered on industrial and base-company development. She is a sought after speaker nationally on topics related to economic development site preparedness.

Courtney's career has also focused on primary development, community planning, and finance. During her tenure as the eastern field representative for the Nebraska Department of Economic Development, she served as the statewide manager for industrial site evaluations and as the advisor to agency management on siting and funding speculative industrial park projects. She evaluated and recommended placement of over \$5 million in CDBG and Workforce Training Funding. Courtney's comprehensive expertise in economic planning, development analysis, industrial infrastructure requirements, and project finance uniquely positions her as a qualified industrial site development partner.

#### **EDUCATION**

- Master of Community & Regional Planning, Social & Economic Emphases, University of Nebraska-Lincoln
- BA, Political Science
   with Emphasis in Public
   Administration, University of
   Nebraska-Lincoln

#### CERTIFICATIONS/TRAINING

- American Institute of Certified Planner (AICP)
- Certified Economic and Community Developer (CEcD) (International Economic Development Council)
- Economic Development Finance Professional (EDFP) (National Development Council)
- Certified Business Retention and Expansion Professional (Business Retention /Expansion International)
- Certified Community
   Development Block Grant
   Administrator (Nebraska
   Department of Economic
   Development)

#### **OLSSON EXPERIENCE**

· 2010 to Present

#### OVERALL EXPERIENCE

• 1997 to Present



# LICENSURES & INSURANCE













Agencies | Online Services | State Directory



License Date: 19-Dec-07 Expiration Date: 31-Dec-19



Type: EI Number: 8238





#### CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 12/18/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).										
	DUCER		ONTACT ME: Molly Harmon							
SilverStone Group					PHONE (A/C, No, Ext): 402.964.5598 FAX (A/C, No): 402.557.6325					
11516 Miracle Hills Drive Suite 100					E-MAIL ADDRESS: mharmon@ssgi.com					
Omaha NE 68154					INSURER(S) AFFORDING COVERAGE NAI					
					INSURER A : Travelers Ind. Co. Of America				25666	
INSURED 5761					INSURER B : Charter Oak Fire Ins. Co.				25615	
Olsson, Inc.				INSURER C: Travelers Property Casualty Co. of America					36161	
P.O. Box 84608 402-474-6311				INSURER D : Phoenix Insurance Company					25623	
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CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.										
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	CLAIMS-MADE X OCCUR						PREMISES (Ea occurrence)	\$ 100,0	00	
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							PERSONAL & ADV INJURY	\$ 1,000	,000	
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В	AUTOMOBILE LIABILITY		P-810-1E019141	1/1/2019	1/1/2020	COMBINED SINGLE LIMIT (Ea accident)	\$1,000,000			
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	OWNED SCHEDULED AUTOS						BODILY INJURY (Per accident)	\$		
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	ANYPROPRIETOR/PARTNER/EXECUTIVE	N/A					E.L. EACH ACCIDENT	\$1,000	,000	
	(Mandatory in NH)	N/A					E.L. DISEASE - EA EMPLOYEE	\$1,000	,000	
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT	\$ 1,000	,000	
Е	Professional/Pollution Liability Claims Made		EON G25589993 006		1/1/2019	1/1/2020	PL Each Claim PL Aggregate	\$5,00		
	Claims Made						PL Ded Per Claim	\$5,00 \$350,		
	CRIPTION OF OPERATIONS / LOCATIONS / VEHIC	LES (A	ACORD 101, Additional Remarks Schedu	le, may be	attached if more	space is require	ed)			
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					SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE					
					THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.					
					ACCULATION THE POLICE INCOMO.					
Proof of Insurance				AUTUODITED DEDDEGENTATIVE						

AUTHORIZED REPRESENTATIVE
Jul Oldudge

#### **OLSSON DIVERSITY POLICY**

Olsson Associates is committed to fostering, cultivating and preserving a culture of diversity and inclusion. Our human capital is the most valuable asset we have. The collective sum of the individual differences, life experiences, knowledge, inventiveness, innovation, self-expression, unique capabilities and talent that our employees invest in their work represents a significant part of not only our culture, but our reputation and company's achievement as well.

We embrace and encourage our employees' differences in age, color, disability, ethnicity, family or marital status, gender identity or expression, language, national origin, physical and mental ability, political affiliation, race, religion, sexual orientation, socio-economic status, veteran status, and other characteristics that make our employees unique.

Olsson Associates' diversity initiatives are applicable – but not limited – to our practices and policies on recruitment and selection; compensation and benefits; professional development and training; promotions; transfers; social and recreational programs; layoffs; terminations; and the ongoing development of a work environment built on the premise of gender and diversity equity that encourages and enforces:

- Respectful communication and cooperation between all employees
- Teamwork and employee participation, permitting the representation of all groups and employee perspectives
- Work/life balance through flexible work schedules to accommodate employees' varying needs
- Employer and employee contributions to the communities we serve to promote a greater understanding and respect for the diversity

All employees of Olsson Associates have a responsibility to treat others with dignity and respect at all times. All employees are expected to exhibit conduct that reflects inclusion during work, at work functions on or off the work site, and at all other company-sponsored and participative events.

Any employee found to have exhibited any inappropriate conduct or behavior against others may be subject to disciplinary action.

Employees who believe they have been subjected to any kind of discrimination that conflicts with the company's diversity policy and initiatives should seek assistance from a supervisor or an HR representative.

## APPENDIX

olsson

DRINKING WATER WASTEWATER

ELECTRIC TRANSMISSION & DISTRIBUTION

FIBER / NETWORK PLANNING

**STORMWATER** 

## **DRINKING WATER**

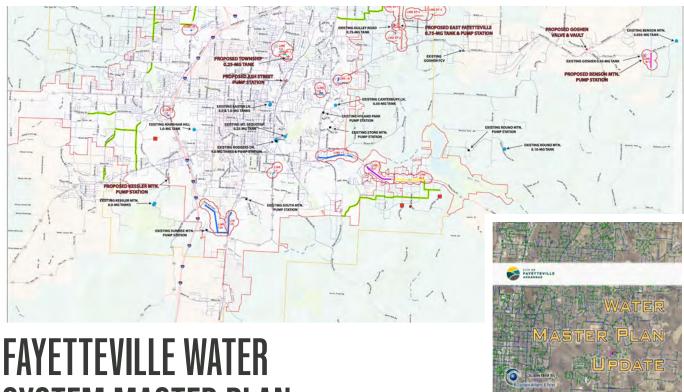
#### Next time you drink a glass of water, thank a water engineer.

We work with many municipalities to ensure water resources are adequate and water quality is clean and safe. Because we aren't siloed, we find solutions across teams and disciplines to provide solutions for water systems that are technically, economically, and environmentally sustainable, and socially acceptable.

We've engineered well fields that provide safe drinking water for communities, tested water supplies, monitored pollutants, engineered solutions to provide drinking water for thousands of people, designed a constructed wetland to help remove dangerous contaminants from an aquifer, and much more.

As you can see, no detail goes unnoticed, so you can have a clean, safe, refreshing glass of water whenever you're thirsty.





## SYSTEM MASTER PLAN

#### Fayetteville, Arkansas

#### WATER STORAGE AND DISTRIBUTION FOR 20-YEAR **DESIGN HORIZON**

Working with Olsson City of Fayetteville is investing in capital improvements to its water system for future growth. Olsson completed an update of Fayetteville Water Master Plan including updating the city's hydraulic water model, population and usage projections, water quality analysis, fire-flow analysis, and an evaluation of additional water transmission supply lines from Beaver Water District.

Olsson has worked with the City of Fayetteville periodically to provide detailed updates to the city's water master plan, which was originally completed in 1996. The updates identify and model new facilities added since the previous study, identify weak points within the existing distribution and transmission facilities, and identify additional improvements required to meet projected 20-year water needs.

Our successful history with the city continues as, following this most recent study, Olsson is now providing design services for the water storage tanks and extensive water line improvements as part of the Master Plan's Phase I recommended capital

#### DATES

2017

#### SERVICES

- Engineering
- Survey

#### MARKETS

Water

#### PROJECT REFERENCE

Jim Beavers, Utilities Engineer Water and Sewer Operations 479.444.3452 jbeavers@fayetteville-ar.gov

#### PROJECT PROFILE

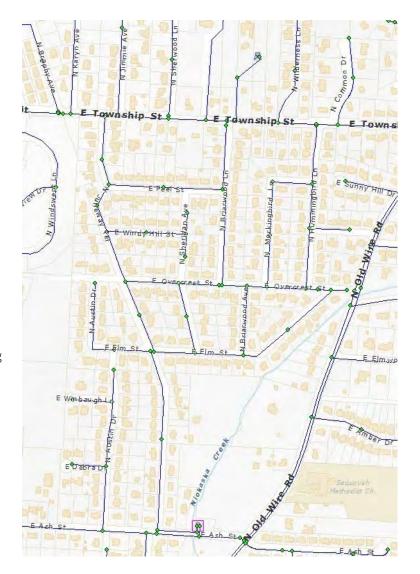
improvements to meet future growth through 2037. Improvements to the water storage and transmission system underway include:

East Fayetteville Improvements

- 0.75-MG Elevated Water Storage Tank
- Booster Pump Station
- 9,000 linear feet of 18-inch Transmission Line
- 9,100 linear feet of 12-inch Water Line
- 8,900 linear feet of 8-inch Water Line
- Altitude Value & Vault
- Rehabilitation of City's Existing Pressure Sustaining Valves and Pressure Reducing Valves

Township Improvements

- 0.25-million gallon Elevated Water Storage Tank
- Booster Pump Station
- 4,000 linear feet of 12-inch Water Line
- 1,000 linear feet of 8-inch Water Line
- Dismantling of existing 70,000 Gallon Elevated Water Storage Tank





# BEAVER WATER DISTRICT

#### Lowell, Arkansas

### DUAL WATER TREATMENT PLANTS PROVIDE WATER TO MORE THAN 360.000 RESIDENTS

Beaver Water District (BWD) supplies water to more an 360,000 customers in Northwest Arkansas. MWY\* Olsson has provided engineering services for the entire system since the district's inception, including the two water treatment plants utilized by BWD.

The Joe M. Steele Water Treatment Plant was constructed in the late 1960s as a 10- MGD facility and expanded in 1972 to 35- MGD and later in 1976 to 50-MGD. The Joe M. Steele original plant and subsequent expansions were designed by MWY\* Olsson. The facilities include treated water pumping stations to the cities of Fayetteville, Springdale, Rogers and Bentonville.

The Hardy W. Croxton Water Treatment Plant as designed by MWY\* Olsson in 1992. It was constructed to operate in parallel with the existing Joe M. Steele plant.

Both facilities have been upgraded as needed with the total combined capacity, of both the Joe M. Steele Plant and the Hardy Croxton Plant currently at 140-MGD.

### **DATES** 2015

#### SERVICES

- · Engineering
- · Planning and Design
- · Field Services

#### MARKETS

- · Land and Facilities
- Water

#### PROJECT REFERENCE

Lane Crider
Chief Executive Officer
479.754.3148
Icrider@bwdh2o.org

The plants are backed up by two 2-megawatt diesel powered generators providing emergency back-up power for a 20-year planning period.

A Chlorine Dioxide Treatment Facility was completed in 2013. This facility lessens the formation of chlorinated disinfection byproducts, as required by the Environmental Protection Agency's Stage 2 Disinfectants and Disinfection By-Products Rule.





# SUSPENDED WATER TRANSMISSION LINE

#### Logan County, Arkansas

1.6 MILES OF WATERLINE SUSPENDED ON HIGHWAY 109 BRIDGE OVER ARKANSAS RIVER IS KEY TO NEW WATER SOURCE

Scranton, Arkansas leaders were faced with the dilemma of finding an additional water source for its residents and local industry employing over 5,000 area workers. With its water supply already failing to meet the growing demand, finding a solution was at the critical level. Scranton officials turned to Olsson to vet out the most viable and cost-efficient options for a long-term solution.

The most advantageous option was for Scranton to purchase additional water from Clarksville Light and Water Company (CLW) in the neighboring town. The challenge was conveyance of that water across wide expanse of the Arkansas river that divides the two towns.

The challenge created and exciting opportunity for us to work side by side with the staff of both towns to design a suspended water line from the Hwy 109 bridge, a span of 1.6 miles. Olsson's engineers and environmental experts worked with federal and state government agencies, including the U.S. Coast Guard

DATES & COST 2015 / \$4.4 Million

#### **SERVICES**

Water Transmission

#### MARKETS

Water

#### PROJECT REFERENCE

Mayor David Corbitt 803 Main Street Scranton, AR 72863 479.938.7846 cityofscranton@centurylink.net

#### PROJECT PROFILE -

and the Arkansas Department of Transportation for permitting and special wildlife considerations.

The project as a whole involved approximately six miles of 12-inch and 16-inch waterlines including the section suspended from the Highway 109 Bridge. As well, one booster pump station and a 0.66-million-gallon water storage tank rounded out project.

With innovative thinking and collaboration with neighboring towns, Scranton's water needs will be met the for the next 20 years.





# CLARKSVILLE WATER TREATMENT PLANT

### Clarksville, Arkansas

# WTP USES OZONE INJECTION SYSTEM TO TREAT ARKANSAS RIVER WATER - RAW WATER DRINKING SOURCE

The Clarksville Light & Water Company (CL&W) faced challenges with both capacity and regulatory issues of its water treatment system. A new large uses, the City of Scranton, was under contract to begin taking water from CL&W, and CL&W had been placed in the "Bin 2" for the Long term 2 Enhanced Surface Water Treatment Rule (LT2) by the Arkansas Department of Health due to Cryptosporidium levels present in the source water. Utilities placed in Bin 2 must implement enhanced treatment measures to achieve 90% removal of Cryptosporidium. CL&W was needed to upgrade the existing treatment plant to meet both needs.

The project began and ended with clear communication and teamwork. Olsson's engineers engaged the CL&W staff and operators as members of the design team and began a preliminary study to identify and analyze alternatives to address the regulatory and capacity issues.

The recommendation to expand the treatment plant capacity from 12 to 16 mgd was determined to be the



### SERVICES

Water Treatment

### MARKETS

Water

### PROJECT REFERENCE

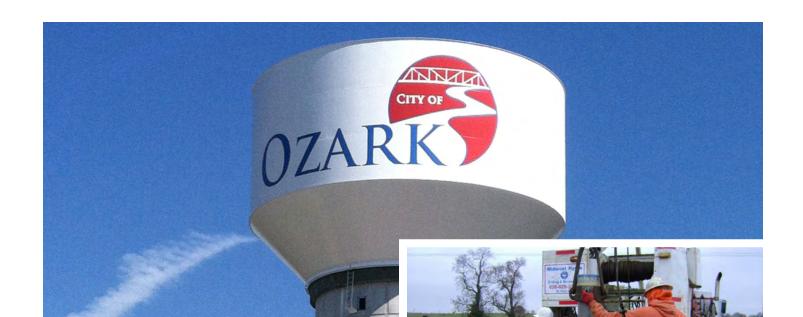
### John Lester

General Manager 479.754.3148 john.lester@clarksvillelightwater.com right choice to accommodate both immediate demands and projects demands for a 20 year period. Design goals also included making the plant easily expandable to the ultimate capacity of 24 mgd in the future.

### Major components included:

- A new 150,000-gallon pre-ozone contact facility for disinfection of cryptosporidium and other organisms. The project was the first in Arkansas to use ozone for Bin 2 LT2 compliance. The facility was also the first municipal water project in the nation to use the HyDOZ ozone injection system.
- Four new dual media filters with 33-inch depth granular activated carbon (GAC), pipe gallery, backwash clearwell, clarifier flow division structure, filter flow division structure, and a new finished water meter station and modifications to the existing plant.
- Alternative Negotiated Purchasing method allowed by Arkansas law for projects exceeding \$2 million, Using this qualifications-based process, a Construction Manager (CM) was selected during the design process. With the CM as a member of the design team, alternatives were identified and quickly analyzed for cost, resulting in final economical design providing a significant cost savings to the utility.





# WATER SYSTEM SUPPLY AND STORAGE IMPROVEMENTS

### Ozark, Missouri

The City of Ozark selected Olsson to implement water improvements throughout their entire water system to address deficiencies in their water supply, storage, and distribution system. The base improvements were phased into three separate design and construction projects to address deficiencies in multiple pressure zones.

Phase 1 – Fremont Road Water Improvements – This phase included additional water supply and storage in the north pressure zone. This project included the construction of a new 1,100 gallon per minute water supply well, masonry block wellhouse, and a 1,000,000-gallon composite elevated water storage tank. The well was drilled to a total depth of 1,600 feet and is equipped with a submersible pump with a 175-horsepower submersible motor. Gas chlorination for disinfection along with a standby diesel-powered generator is also provided. The storage tank was of the composite type and will minimize future maintenance costs associated with re-painting.

Phase 2 – Becky Lane Tank – This phase covered the addition of new elevated storage in the south pressure

### DATES

2012 - 2018

### SERVICES

- Civil
- Special Inspections
- · Materials Testing
- Surveying

### **MARKETS**

Water

### PROJECT REFERENCE

#### John McCart

Environmental Resource Coordinator 417.581.1702 jmccart@ozarkmissouri.org

zone. The project included the construction of a new 1,000,000-gallon composite elevated water storage tank and the decommissioning of a 150,000-gallon multi-leg elevated water storage tank along with a 500,000-gallon ground storage tank and booster pumping station. This project also included water distribution improvements to enhance the water flow capabilities.

Phase 3 – 17th Street Water Improvements - This phase included additional water supply, storage, and distribution extension in the south pressure zone. This project included the construction of a new 1,100 gallon per minute water supply well, wellhouse, and a 750,000-gallon composite elevated water storage tank. The well was drilled to a total depth of 1,600 feet and is equipped with a submersible pump and motor. Gas chlorination for disinfection along with a standby diesel power generator is provided. The storage tank will be of the composite type and will minimize future maintenance cost associated with re-painting.

Phase 4 – Central Zone Water Improvements – This phase covers several key water improvements that will expand the coverage of the Central pressure zone by providing new water supply, storage, and distribution improvements. The existing 300,000-gallon elevated water storage tank at Walmart will be relocated to the Finley Valley development, a new

water supply well will be drilled in the Finley Valley Development, Well No. 1 will be abandoned, Tower No. 1 and the Fasco Tank will be decommissioned, several pressure-reducing stations will be eliminated, and the distribution system will be expanded to the west and connected to the Finley Valley development creating an expanded central pressure zone.







# HIGH POINT Water tank

### Nixa, Missouri

Olsson provided a preliminary feasibility analysis, a detailed design, and construction phase services for a 1.0 million-gallon, composite-type, elevated water storage tank.

The preliminary feasibility analysis was conducted to determine the most economically feasible water storage option for the City. The analysis included the evaluation of several types of elevated storage tank options, including single pedestal, fluted, multilegged, and composite style tanks. In addition to elevated storage, ground storage with a booster pump station was also evaluated. Both welded steel and pre-stressed concrete ground storage tanks, as well as various types of booster pumping systems were included in the evaluation. The study included a discussion of the short- and long-term operation and maintenance requirements of each tank option, the initial capital cost, the long-term maintenance costs, the annual operational cost associated with the ground storage/booster pumping, and an advantage/ disadvantage comparison of each water supply option. The results of the study indicated that the ground storage/booster pump station option had the more attractive initial capital and long-term operation and

# **DATES** 2010 - 2013

### SERVICES

Civil

- Special Inspections
- Surveying

### MARKETS

Water

· Government - Local

### PROJECT REFERENCE

Mr. Milton Dickensheet, PE

Water Superintendent 417.725.2353 mdickensheet@nixa.com maintenance (O&M) costs; however, the City of Nixa selected to implement the elevated storage tank option due to ease of operation and consistency throughout the existing water distribution system. Due to the selection of the elevated storage tank option by the City, Olsson recommended the composite style, elevated tank for its lower long-term O&M costs, as compared to the other elevated tank options.

The detailed design involved coordinating geotechnical evaluations, developing detailed construction documents and project specifications, assisting with front-end documents, assisting with advertising and bidding, and evaluating and recommending the construction contractor.

Full construction phase services were provided, including reviewing shop drawings, coordinating with the contractor, coordinating materials testing, providing periodic site observation/inspection, testing the quality of coating systems, and coordinating construction of the overall project.





# CITY UTILITIES MILL STREET WATER TOWER REPAINTING AND INSPECTION

### Springfield, Missouri

City Utilities (CU) of Springfield contracted with Olsson for the renovation of the Mill Street 250,000-gallon elevated water tank. Olsson developed tank modification and interior and exterior coating system specifications and performed quality control inspection during construction for the repainting of the tank. Specifications accounted for the potential of elevated lead levels in the existing coatings by specifying lead-paint-specific blasting media and containment/disposal methods of the waste debris. Olsson met with CU staff to discuss coating options, developed bid specifications for the tank modifications and coating systems to be used, as well as established performance criteria for each stage of the process such as blasted-metal surface profile and dry film thicknesses (DFT) for each coat of paint applied. The tank is located in a high-traffic location, causing tank "curtaining" to be necessary, from a blast-containment standpoint and to protect nearby facilities and traffic. Olsson provided quality control inspection during the construction phase, which included blast profile evaluation, interior wet-sponge holiday testing, visual inspection of the tank modifications, and DFT testing of the new interior and exterior paint coatings with a special gauge.





### DATES

2013 - 2014

### **SERVICES**

Civil

- Special Inspections
- · Materials Testing

### **MARKETS**

Water

· Government - Local

### PROJECT REFERENCE

### Cody Marshall, PE

Engineer 417.864.1988 cody.marshall@cityutilities.net

## WASTEWATER

## The protection of the public health and the environment depends on the condition of our water.

And so does our quality of life.

Aging infrastructure, population growth, and regulatory changes drive capital improvements to water and wastewater facilities. If these issues are left unaddressed, these substandard facilities can threaten the safety of this valuable resource.

Olsson offers clients a full spectrum of wastewater engineering services, including a complete line of planning, design, permitting, and construction phase services. We're experts in chemical, physical, and biological processes and the compliance issues associated with regulatory requirements of the wastewater industry.

Maintaining water quality is our top concern, and we can respond to a broad range of your project requirements in a timely and cost-efficient manner.

Our wastewater system capabilities include analysis and planning, collection, water treatment, engineering studies, transmission, master planning, and biosolids management.





# **WEST SIDE WWTP**

### Fayetteville, Arkansas

### WASTEWATER TREATMENT MEETS STRINGENT EFFLUENT LIMITS

Olsson engineers designed the new 10 million gallons per day (mgd) Fayetteville West Side Wastewater Treatment Plant that was built to meet some of the most stringent effluent limits ever set in Arkansas.

The design accommodated a historic commitment from Fayetteville to the state of Oklahoma to implement discharge limits more stringent than those set by the Arkansas Department of Environmental Quality (ADEQ). The plant's effluent discharges into Goose Creek, which is a tributary of the Illinois River that flows to Oklahoma.

The new facility can treat 10 MGD on an annual average basis and up to almost 48 MGD of peak-hour flows. The plant uses a highly advanced biological system that relieson natural, rather than chemical, treatment processes and has successfully met the demands of multiple state, federal, and local agencies.

The major units include fine screens, grit and scum removal units, a three-stage biological nutrient removal process, final clarifiers, deep-bed filters, ultraviolet disinfection, and post-oxygenation.

The project consisted of 38 structures and an adjoining

### DATES

2008

### SFRVICES

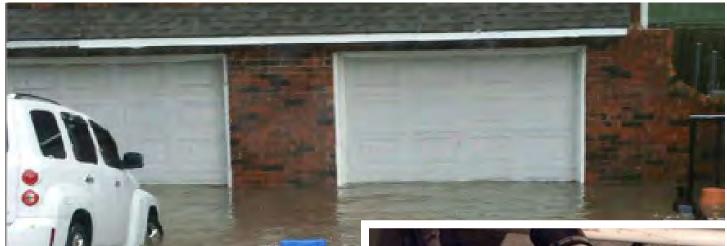
- Engineering
- · Planning and Design
- · Field Services

### MARKETS

Water

### PROJECT REFERENCE

Tim Nyander, Utilities Director Water and Sewer Operations 479.575.8318 tnyander@fayetteville-ar.gov



# LINE CREEK-ROCK CREEK INFLOW/ INFILTRATION REDUCTION

### Kansas City, Missouri

Olsson provided engineering services to design a public inflow and infiltration (I/I) reduction project in Kansas City's Basin Area 3, Line Creek-Rock Creek. This project was associated with the Federal Consent Decree regarding the City of Kansas City, Missouri, Overflow Control Plan. This project involved a review of Closed Circuit Television (CCTV) inspection data, manhole inspection data, smoke testing data, and field investigations to gather the necessary sanitary sewer collection system information to identify and quantify structural deficiencies, and develop rehabilitation recommendations to reduce I/I flows and the occurrence of basement backups in the sanitary sewer collection system. Engineering services provided included data analysis, design, bidding, and construction phase services for these collection system rehabilitation projects. Project was completed in the Fall of 2018.



### DATES

2017 - 2018

### SERVICES

· Civil

· Special Inspections

### MARKETS

Water

### PROJECT REFERENCE

**Kirk Rome, PE**Distribution Systems Manager

816.513.0368 kirk.rome@kcmo.org



# BLUE RIVER SOUTH, AREA 3, COLLECTION SYSTEM REHABILITATION AND I/I REDUCTION

### Kansas City, Missouri

Olsson was selected to provide professional engineering services for the public inflow and infiltration (I/I) reduction project in Kansas City's Basin Area 3, Blue River South. This project is associated with the Federal Consent Decree and Kansas City's CSO Long-Term Control Plan, referred to as the "Smart Sewer Program". The project area has a target of 45% reduction in peak flow for the 5-year, 24-hour duration storm event.

The primary focus for this project is rehabilitation that is cost-effective in terms of I/I flow reduction in the public sector, specifically, manhole and pipe assets. Olsson's basic scope of services included field investigations and inspection data analysis for approximately 110,000 LF of sewer line sizes 8-inch to 42-inch diameter and 500 manholes for the



### **DATES** 2015-2018

### SERVICES

Civil

· Special Inspections

### **MARKETS**

Water

### PROJECT REFERENCE

Khoa Nguyen, PE

Project Manager 816.513.0446

khoa.nguyen@kcmo.org

### PROJECT PROFILE -

identification and I/I flow assignment to conventional I/I defects, such as manhole frame, cover and wall leaks and pipe defects contributing I/I. Actual wastewater flow and rainfall data from 6 meters and 2 gauges were analyzed to quantify and project total I/I flows for the design event and allocate the portion of total flow observed defects in the city-owned manhole and pipe asset classes. I/I defect flow assignment was combined with an analysis of actual monitoring data to determine allocation of monitored and projected flows to conventional manhole and pipe assets.

The Olsson Team was able to provide additional value to the Smart Sewer program by providing peer review and expertise to refining defect flow assignment procedures. This resulted in increased accuracy of I/I allocation to public asset classes and recognition of total I/I removal for achieving program I/I reduction goals – a key to "adaptive management."

The recommended implementation plan included approximately \$3.1M of prioritized rehabilitation to approximately 20,000 LF of public sector pipe and manholes for a cost-effectiveness of \$3.72/gpd I/I removed. Rehabilitation included a high reliance on 'trenchless' rehabilitation to manholes, sewer mains and lateral connections. Olsson provided construction documents and construction phase engineering and resident project representative (RPR) services. Construction was completed in August 2018.





# WASTEWATER SYSTEM IMPROVEMENTS

### Sedalia, Missouri

The City of Sedalia, Missouri was required to achieve regulatory compliance for their existing wastewater treatment facility, and they needed to do so within a seven-year deadline and a tight budget. To meet regulatory compliance, a plan needed to be created including a correction of overflows and backups in the collection system, and bypasses at the wastewater treatment facilities, by June of 2016.

To complete this project, multiple pieces needed to be examined and put together. This included a UV disinfection addition to three wastewater treatment facilities, four contracts for collection system rehabilitation, two contracts for relief sewer construction, and two contracts for equalization storage and pumping facilities. Olsson was chosen to complete these tasks using program development; rate study; collection system data collection and analysis; permit assistance; and design, bidding, and construction phase services.

Olsson exceeded client expectations by delivering the project on schedule and within initial funding/affordability goals. Olsson performed hydraulic modeling of the collection system, supported determination of affordable "level of service" for

### DATES

2009 - 2016

### **SERVICES**

Civil

- Special Inspections
- Surveying

### MARKETS

- Wastewater
- · Government Local

### PROJECT REFERENCE

Brenda Ardrey, PE

Director of Public Works 660.827.3000 bardrey@cityofsedalia.com the collection system, and cost-effective combination of relief sewer capacity, equalization storage, and I/I reduction. We also provided guidance to leverage the collection system condition assessment and establish asset renewal program.

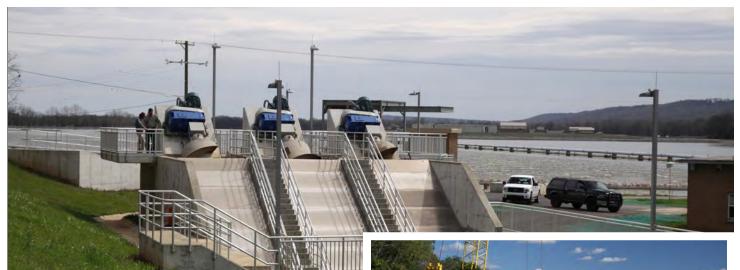
This project was unique because Olsson was able to identify an opportunity to revise/correct WWTP permit requirements for metals, resulting in dramatic savings to the substantial industrial base for the city.

The results of this project are proving to be positive for the community. The city has reported a reduction in wet weather overflows and/or sewer backups following the completion of this project.





RFQ 19-01 Statement of Qualifications 2019 /66



# COLLECTION SYSTEM UPGRADE

### **Batesville**, Arkansas

#### **COST SAVINGS AND ENERGY UPGRADES.**

The City of Batesville was in desperate need of an upgrade to the city's wastewater treatment plant and collection system. When they began to plan for the project, they choose Olsson's talented wastewater engineers as their partner.

We broke out the project into three phases to maximize the city's funding. The first phase focused on the gravity sewer tunnel, the gravity sewer, and a screw-pump lift station to service the city's wastewater treatment facility.

We diligently designed thousands of linear feet of 30-inch through 60-inch gravity sewers. We skillfully designed through a road and stream crossing. Additionally, our resourceful team added a screw pump lift station features 90-inch diameter screws capable of conveying up to 45 million gallons per day.

The depth of the sewer ranges from 20 feet to 85 feet through portions of the tunnel. Most of the installation was in rock, some of which exhibits compressive strength approaching 25,000 pounds per square inch.

The results, we eliminated a less-efficient lift station and a force main. Replacing this less efficient lift station with a gravity sewer tunnel resulted in projected energy savings of \$90,000 per year.



### DATES

2016 - 2017

### SERVICES

Wastewater

### MARKETS

Water

### PROJECT REFERENCE

### **Damon Johnson**

City Engineer 870.698.2400 Ext 208 cityengineer@cityofbatesville.com





### **Batesville, Arkansas**

### WWTP DESIGN USES INNOVATIVE TECHNOLOGY TO SOLVE CRITICAL CAPACITY AND EFFLUENT ISSUES

The Batesville Wastewater Treatment Plant design was recognized by the EPA as a GREEN Project under the American Recovery and Reinvestment Act (ARRA) of 2009, and was noted as one of "100 Recovery Projects That Are Changing America."

Batesville's new wastewater treatment system uses the unique technology of Moving Bed Bio-Reactor (MBBR). MBBR is a specialized hybrid treatment system which employs aspects of both activated sludge and fixed film treatment strategies, using free-floating media in an aerated basin. Bacteria which metabolize and reduce pollutants attach to these moving media elements, which serve to provide a large protected surface area for the attached biofilm. This allows for an increased solids inventory in a smaller unit footprint, making this technology ideal for other facilities with lagoon systems or with limited land available for expansion.

Furthermore, the MBBR technology also lends itself to a cost-effective and very rapid means of expansion. The Batesville WWTP was designed to accommodate



### SERVICES

Wastewater

### MARKETS

Water

### PROJECT REFERENCE

Daman Johnson, PE City Engineer 870.698.2400 Ext 208 cityengineer@cityofbatesville.org a near-instantaneous expansion of treatment capacity from 9.0 MGD to 10.8 MGD with the simple addition of carrier media to the MBBR Basin. Where most expansion projects come at a high price and long timelines, the MBBR technology allows for greater flexibility of both time and cost.

The MBBR process is a self-sustaining system that does not require periodic wasting of mixed liquor or the recycle of return activated sludge (RAS) flow like traditional activated sludge treatment processes. Solids are removed in the DAF units and recirculated back into the lagoon system for further digestion. This recirculation and long-term biosolids treatment strategy minimizes the ultimate

volume of biosolids to be disposed and eliminated the need for additional biosolids treatment facilities in the project. Biosolids are periodically removed from the Batesville lagoon cells and distributed by land application as a beneficial reuse practice.

After a period of acclimation, the Batesville MBBR system achieved and continues to maintain effluent results far below the permitted discharge criteria and has demonstrated excellent and effective pollutant removal during cold weather and the highest influent ammonia levels recorded.



# **ELECTRIC TRANSMISSION & DISTRIBUTION**

## At Olsson, we specialize in utility and industrial electrical systems—and we don't use the term specialize lightly.

Our engineers and technicians excel at designing new electrical systems as well as conducting system studies/ evaluations, developing cost analyses, and supporting construction to provide purposeful solutions for our clients. We offer a wide array of value-added services that can take your project from conception to completion, including surveying services, route evaluations, geotechnical studies, line designs, and construction monitoring and testing.

These solutions have helped substation, transmission, and distribution developers and owners provide efficient, flexible, and reliable systems for their customers and communities at competitive rates for more than 50 years. Sound good?





# DISTRIBUTION CONVERSION

### Valentine, Nebraska

### **VOLTAGE CONVERSION AND REBUILD.**

Olsson was asked by the City of Valentine to design a voltage conversion and line rebuilds of some of their electrical facilities. We designed a conversion of all remaining 4.16kV circuits to 12.47kV. These conversions included insulation upgrades, arrester replacements, transformer replacements, and fuse replacements.

Olsson also designed a line rebuild of an existing 34.5kV subtransmission line that tied into an existing NPPD substation; the line was approximately 1.6 miles in length and comprised of wood pole construction. Further, Olsson designed line rebuilds of existing 4.16kV lines in the voltage conversion areas as required based on age and condition.

Olsson was also tasked with preparing preliminary estimates for the city's use in securing financing, developing material specifications for the main electrical components, preparing bidding documents for all contracts associated with the project, and construction observation.

### DATES

2018-2019

### **SFRVICES**

- Survey
- · Electrical Engineering

### MARKETS

Power

### PROJECT REFERENCE

#### **Justin Holmes**

Electrical Supervisor 402.376.1757 jholmes@cityofvalentine.com





# OPPD LA VISTA 69KV TRANSMISSION RELOCATION

### La Vista, Nebraska

### REROUTING POWER DUE TO DEVELOPMENT.

With the redevelopment of City Centre, OPPD was asked by the City of La Vista to reroute an urban 69kV transmission line. Olsson's Power team investigated OPPD's options. The existing 69kV transmission line was removed and over two miles of new 69kV line was constructed. The new alignment had minor tweeks along the way after conversations with OPPD and landowners.

We created a full method 4 PLS-CADD model of the new Line 26 from substation to substation. This model provided survey data, sagged-in wires, notes, and annotations (as necessary).

Olsson worked closely with the FAA (due to airport proximity), the City of La Vista, NDOT, and BNSF throughout the permitting process. The new line is anticipated to be in service at the end of 2018 with the project close-out being completed in the first quarter of 2019.

### DATES

2017 - 2019

### **SFRVICES**

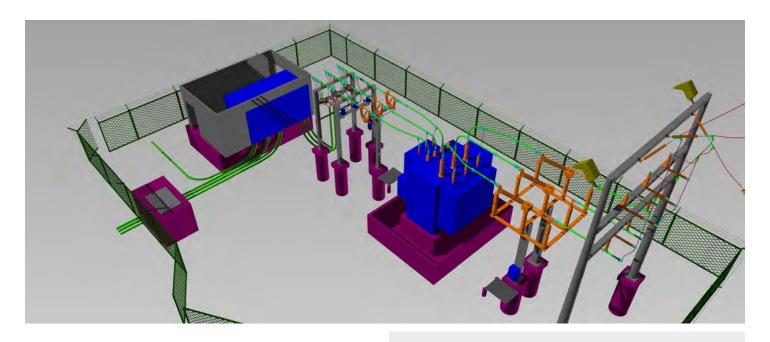
- Survey
- Geotechnical Engineering
- · Electrical Engineering
- Structural Engineering
- Environmental
   Planning & Permitting

### MARKETS

Power

### PROJECT REFERENCE

Dannie Buelt OPPD 402.636.2551 ddbuelt@oppd.com



# SUBSTATION NO. 2 UPGRADE

### Miami, Oklahoma

### POWER TRANSFORMER UPGRADES TO IMPROVE CITY SERVICES.

Working as the on-call engineer for the City of Miami, Olsson replaced two 69-13.2 kV power transformers and installed outdoor circuit breakers and steel structures to replace existing indoor switchgear. Olsson's role included equipment specification and procurement for transformers, circuit breakers, and control house with relay panels; design and construction documents for structures, foundations, grounding, protection and control, lighting and lightning protection, and construction services.

### DATES

2018

### **SERVICES**

- · Electrical Engineering
- Surveying

### MARKETS

Power

### PROJECT REFERENCE

Tyler Cline Public Utilities Director 918-542-4104

tcline@miamiokla.net

# FIBER / NETWORK PLANNING

## The demand for data is near insatiable, and we know how crucial it is for your wireless systems to be up and running 24/7.

Our telecommunications team is adept when it comes to the design of wireless infrastructure and systems. We'll work closely with you to engineer the system you need that will keep you connected today and well into the future.

You'll benefit from our expertise in providing services for licensed and unlicensed wireless LANs, small cell networks, Wi-Fi design, and much more.

### We design the superhighway for your information.

We know how important your telecommunications network is to your business. Information is the new currency, and any disruption in your network can have a major impact on the bottom line.

At Olsson, we design, configure, and plan your network infrastructure to keep the information flowing in the most effective manner possible. Our goal is to make sure your network works as planned and meets your specifications.

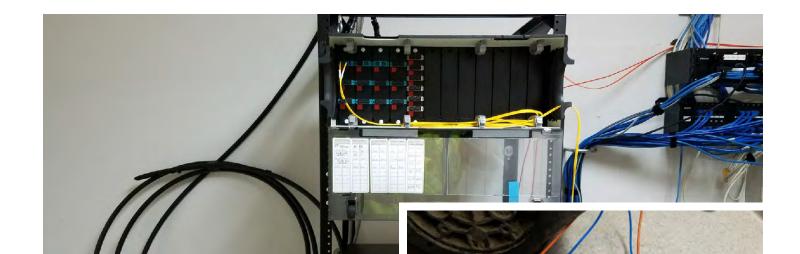
We also tailor each process according to the needs of each project. Our solutions include the following:

Optical Planning – We deliver a full suite of optical networking design services that is cost-effective and innovative to connect you faster and more efficiently.

Optical Testing Review – After fiber optic cable is installed, we review optical tests for OTDR and OLTS to confirm the cable was installed properly.

Copper – For some short-distance, high-bandwidth communication, we use copper wiring because it's the most cost-effective solution.





# CITY-WIDE FIBER PLAN

### Kansas City, Missouri

CENTRALIZING A LARGE METROPOLITAN'S FIBER AT A TREMENDOUS COST SAVINGS.

The City of Kansas City was facing a serious dilemma. In the past, the city was hands off with its internal department's choice of fiber network installations and lease agreements. Therefore, various departments had implemented fiber across the city for their various projects, covering 320 square miles. With demand growth and locations that require network connection to perform their duties and share information back to city, administrators saw a need to centralize and unify its network. The city developed a plan to identify ways to reduce cost by installing its own fiber or with other organizations through partnership agreements. The objective was to integrate and expand its fiber network footprint in order to provide robust infrastructure for city's services at a reduced cost.

Our technology team met all the requirements the city was looking for in a consultant to tackle this job. Olsson created a strategic plan for implementing a roadmap to guide network infrastructure deployment, service offerings, and maintenance of infrastructure assets. We were able to quickly understand the existing conditions, assess the needs of the involved stakeholders, and identify barriers to success.



### SERVICES

• Fiber Optics

### **MARKETS**

• Telecommunications

### PROJECT REFERENCE

### **Chris Lockey**

Senior Engineering Technician 816.513.1313 chris\_lockey@kcmo.org

### PROJECT PROFILE -

This plan provided guidance in the following areas:

- · Program administration
- Funding approach
- Maximize use of existing infrastructure
- · New infrastructure
- Ongoing maintenance
- Implement a roadmap for additional strategic partnerships

Once we laid out the plan, the savings we found were remarkable. Our team discovered a \$792,952 in annual lease savings by centralizing their fiber. With an increase maintenance cost of \$225,000, the total net savings was \$567,952 for the city.





# PARK HILL SCHOOL DISTRICT FIBER NETWORK

### Kansas City, Missouri

### **CUTTING COSTS WITH A CENTRALIZED NETWORK.**

The Park Hill School District faced the challenge of increasing their technological capacity without increasing their staff or financial resources. Our analysis of the existing technology showed the school district's current infrastructure was obstructing growth. The Olsson technology team's proposed answer: centralize communications. In other words, turn each of the school's separate networks into one local network.

The district received an E-rate grant to build out a private fiber network. In order to accomplish this, they needed to pursue costly easement acquisition along with permitting of the right-of-way. We came up with a clever solution—a partnership between Park Hill School District and the City of Kansas City, Missouri (KCMO) to share infrastructure. This win-win situation allowed the school district to share their infrastructure with KCMO while the city provided their public right-of-way for use.

Since its inception, the Park Hill School District's centralized network has allowed the IT department to increase reliability of the network and responsiveness in technology operations. The district expects to start seeing savings on WAN connections after a two-and-a-half-year period.



### **DATES** 2015

### SERVICES

 Outside Plant Fiber Optics

### MARKETS

· Telecommunications

### PROJECT REFERENCE

### **Ryan Kucharo**

IT Manager 816.359.4050 kucharor@parkhill.k12.mo.us



# ODOT ON-CALL FIBER, ITS, AND TELECOMMUNICATIONS

### Statewide, Oklahoma

### RESPONSIVE, ALL-INCLUSIVE TRANSPORTATION TECHNOLOGY SERVICE.

Olsson is managing and providing the following activities and services that may include, but not limited to: design plans, field and location survey, utility coordination, geotechnical studies, traffic analysis, preliminary engineering, plan reviews, attend scoping and Plan in Hand meetings, and preparation of construction and PS&E Plans at various locations for telecommunications and fiber optic routes and communication infrastructure to connect various devices and facilities across the state in accordance with current ODOT or OTA practices.

Olsson is also performing a Service Level I, II and III, telecommunications; for the following to include but not limited to DMS, CCTV, RWIS, traffic signals, interconnects and fiber optic Inspection which may include construction survey, construction inspection, construction materials acceptance testing and project audit and clerical services. Responsibilities include the following:

### DATES

2018 - 2020

### **SERVICES**

- Outside Plant Fiber Optics
- · Traffic Engineering

### MARKETS

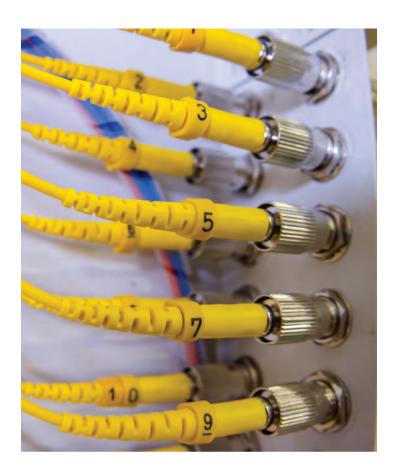
- Telecommunications
- Transportation

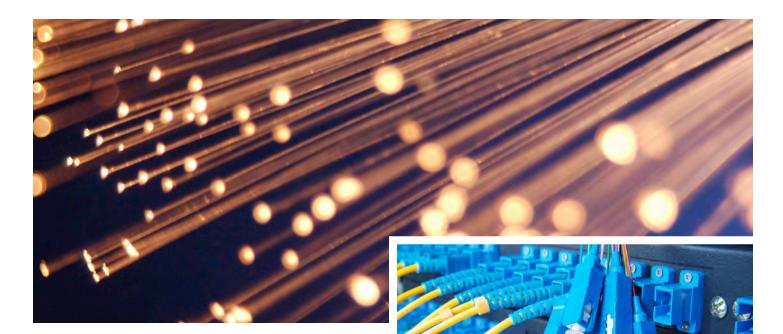
### PROJECT REFERENCE

#### **Alan Stevenson**

ITS/Fiber Manager 405.521.6460 astevenson@odot.org

- Monitor and document daily fiber optic construction progress;
- Maintain construction files related to telecommunication and fiber optic work to department standards;
- Conduct construction survey or produce accurate measurements of completed ITS and Fiber optic work required for project audit;
- Perform material sampling and testing as required for contract compliance;
- Recommend approved quantities of telecommunication and fiber optic work for progressive estimate payments to the contractor;
- Verify and document the correct placement of other relocated utilities required to complete the ITS and fiber optic work;
- Review and evaluate contractor's shop drawings or modification requests and make recommendations to the Resident Engineer for acceptance; and
- Monitor ITS and fiber optic construction for compliance with specifications and regulations.





# UNITE PRIVATE NETWORKS FIBER SERVICES

### **Nationwide**

### **CONNECTING BUSINESSES NETWORKS.**

Olsson provides design of fiber-based Ethernet service to all kinds businesses. We do numerous projects for UPN, from small building entries to large fiber outside plant (OSP) installations. Design work includes conduit and fiber routing, utility investigation, pull box and splice enclosure placement, building entry infrastructure layout, and terminations. Typical projects include coordinating with UPN and business and/or building owners or management. Designing backbone fiber includes installing both underground and aerial fiber as well as coordinating with permitting agencies for approval and national fiber carriers for duct connections.

### DATES

2008 - ongoing

### **SERVICES**

· Systems Engineering

### MARKETS

• Telecommunications

### PROJECT REFERENCE

### **Shanon Morris**

Regional Vice President 402.802.9747 shanon.morris@upnfiber.com



# IDOT VARIOUS FIBER AND ITS SERVICES

### Statewide, Iowa

### A CLOSE PARTNERSHIP FOR OVER A DECADE OF INNOVATIVE SOLUTIONS.

Olsson has been providing end-to-end ITS and fiber services to Iowa DOT over the past decade. Projects range from planning, design, construction administration to integration. We have a history of responsiveness, quality, and continuous innovation that have made us a trusted partner.

We work closely alongside Iowa DOT staff to develop a detailed RFP for deployment of a statewide Advanced Transportation Management System (ATMS) software solution, referred to by the Iowa DOT as SIMS (Statewide ITS Management System). Our expert engineers developed software functional requirements to support the RFP process and developed performance specifications for servers, network hardware, and system interoperability. Olsson staff assisted Iowa DOT in evaluating the RFP responses and participated in interviews and in the final selection process, which included a hybrid decision matrix comprising both qualifications and overall cost.

We have recently kicked off a new project to assist lowa DOT with the development of their Traffic

### DATES

2009 - 2018

### SERVICES

- Outside Plant Fiber Optics
- · Traffic Engineering
- Traffic Management
   Systems

### MARKETS

- · Telecommunications
- Transportation

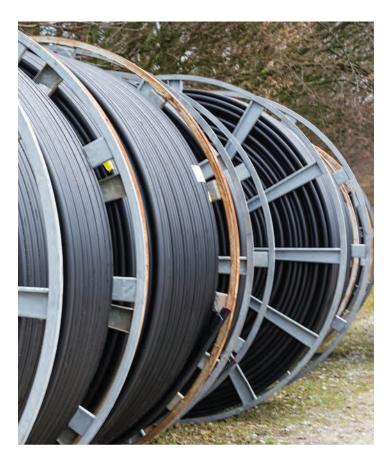
### PROJECT REFERENCE

### **Donna Matulac**

Assistant Director 515.239.1192 donna.matulac@iowadot.us Systems Maintenance & Operations (TSM&O) plan. We are specifically tasked with developing two Service Layer Plans that are part of the overall TSM&O program. These are the ITS Strategic Plan, and the Communications System Strategic Plan. Work on these plans is beginning during the summer of 2016 and is expected to be completed before the summer of 2017.

Our team designed fiber networks, installation, and integration services for a high-bandwidth redundant network spanning 150 miles from Ames to Des Moines to Iowa City to Cedar Rapids. This was done using a combination of new Iowa DOT Fiber from Ames to Ankeny, and existing legacy fiber through a partnership agreement from Ankeny to Cedar Rapids. The fiber is being used to connect the Iowa DOT internal network, the ITS network, and to provide raw internet to rest areas. Because nearly 100 miles of this consists of only two individual fiber strands, carrier-grade technology including Shortest Path Bridging (SPB) and Dense Wave Division Multiplexing (DWDM) - is being used to create a 10 Gbps redundant ring backbone on a single fiber, while using the second fiber for 1 Gbps device and facility access. Olsson assisted with the installation, turn-up, and testing of the network.

Through our work with the Iowa DOT, members of the Olsson team have developed excellent relationships with many Iowa DOT personnel, and we have learned many of the Iowa DOT's internal processes. Over time these things have served to simplify and expedite required tasks, and have lessened the amount of oversight required by Iowa DOT personnel.



# **STORMWATER**

# The way we manage stormwater in urban environments has changed significantly over the last decade.

Managing urban stormwater runoff can be messy. But done right, stormwater systems are a valuable amenity. That has been a guiding principle for our approach to stormwater management. At Olsson, the solutions we develop deliver multiple benefits to our clients, such as reduced flooding, improved stream health and water quality, and citizen acceptance.

We evaluate the needs of clients and then custom design innovative stormwater solutions in the most efficient, cost-effective way possible.

Our stormwater services include designing combined and separate sewer systems, water quality monitoring and permitting, hydrologic analysis, detention and water quality best management practices, municipal stormwater master planning, drainage design, and more.





# STORMWATER MASTER PLAN

### Belton, Missouri

Olsson was hired by the City of Belton to complete a Stormwater Master Plan, including an analysis of natural drainage systems in undeveloped watersheds within and surrounding the City and urban, engineered storm drainage systems in the existing developed areas. The project included analysis and watershed planning for the Oil Creek, East Creek, West Fork East Creek, and Big Blue River watersheds. Olsson developed models for existing and ultimate development conditions. The plan included proposed water quality, stream stability and flood control management measures to offset impacts of existing and proposed development and address areas of concern.

The Master Plan provides the city a comprehensive action plan that includes:

- Prioritized capital improvements plan
- · Maintenance action plan and budget
- Future regional planning recommendations
- Recommended integrations with other City infrastructure and parks plans
- Updates to the city's MS4 permit for NPDES compliance through MDNR



### DATES

2011 - 2014

### SERVICES

Civil

### MARKETS

Stormwater

· Master Planning

### PROJECT REFERENCE

#### **leff Fisher**

Public Works Director 816.331.4331 Jfisher@belton.org Through the Master Plan, the Olsson team:

- Conducted public engagement efforts including open-house meetings; city-wide stormwater surveys to residents; development of educational flyers for public distribution, and presentations to City Council and Planning Commission.
- Evaluated and identified critical risk areas requiring flood reduction, stream stabilization and water quality protection for key resources in the project GIS map and database.
- Analyzed potential water quality concerns and developed a Water Quality Model that calculated pollutant loads for the 11 primary stream networks within the city under existing and proposed conditions. From this information, the Olsson team prepared a list of recommended best management practices (BMPs) used for the water quality model with expected percent reduction in pollutant load for each BMP.
- Evaluated potential costs and benefits of retrofitting existing detention basins for enhanced flood
  control, water quality and stream erosion benefits.
  Olsson reviewed the feasibility of implementing
  regional water quality facilities (wetlands, ponds,
  etc.) to mitigate existing or possible future upstream
  development impacts where existing natural stream
  conditions allow.
- Completed a stream network rapid geomorphic assessment and recommendations for stream management measures based on a benefit cost analysis to protect infrastructure and buildings. The study area encompasses approximately 20 miles of streams and storm sewer outfall channels within the city limits.
- Developed future planning and prevention measures, including:
  - Conservation overlay zoning districts with incentives for environmentally sensitive design techniques
  - Revised stream buffer requirements
  - Watershed-based stormwater detention criteria for new private development
  - · Regional detention opportunities in

- future new development areas
- Stormwater quality management ordinance and criteria
- · Floodplain management policy recommendations
- Conducted a city-wide storm drainage system inventory and completed a GIS database of the system for the city. The effort included field locating over 48 miles of storm pipe and 1,800 storm structures and detention basins, and completing condition assessment of all structures. The field data was entered into the GIS database where condition assessments are linked to each structure for future use by the city. Included in this deliverable are recommended locations requiring immediate and frequent maintenance actions.
- Completed detailed hydrology and hydraulic analyses of the entire storm drainage network, from major floodplains to minor pipe systems.
   FEMA effective floodplain data was reviewed and compared against current topographic information and hydrologic modeling, and significant discrepancies were identified for potential FIRM mapping changes. Olsson developed a nonregulatory future conditions floodplain layer using HEC-GeoRAS that city staff utilizes to evaluate floodplain impacts of future development. Detailed hydrologic and hydraulic modeling of the engineered drainage system above the regulatory floodplain was completed using XP-SWMM software.
- Recommended 30 stormwater capital improvement projects and prioritized these projects using a costbenefit scoring system.
- Provided recommendations for funding mechanisms including a stormwater utility, sales tax measures, grant programs and bonding.

The Olsson team also conducted a detailed review of the city's MS4 permit, five-year plan and related ordinances. Olsson recommended improvements, revisions, and future actions for achieving and maintaining permit compliance through the State of Missouri within the six minimum control measures, and continues to provide ongoing support in the development of necessary ordinances, MS4 permit updates, and municipal practices.



# RAVENWOOD SOUTH SUBDIVISION STORMWATER IMPROVEMENTS

### Springfield, Missouri

Olsson was selected by the City of Springfield to develop design plans for an initial phase of stormwater improvements to be constructed within the Ravenwood South Subdivision. The project consisted of a new detention basin within Lake Springfield Park, enlargement of an existing detention basin near East Carleton Street, and drainage improvements near the intersection of South Charleston Avenue and East Carleton Street.

This project followed a study completed by Olsson in 2014 which evaluated 7,500 lineal feet of Ravenwood Creek from Lake Springfield to the west side of South Charleston Avenue within the Ravenwood South Subdivision. The study developed conceptual recommendations for stabilization and conveyance improvements within the fully developed residential neighborhood to address ongoing erosion and flooding concerns along the reach.



### DATES

2013 2015

### SERVICES

Civil

### MARKETS

Stormwater

Government

### PROJECT REFERENCE

### Chris Dunnaway, PE

Principal Engineer 417.864.1876 cdunnaway@springfieldmo.gov

### PROJECT PROFILE

In order to minimize impact on private property and to maximize the benefit to all affected properties, this phase of improvements primarily focused on providing additional detention storage within the project area. The detention improvements are anticipated to reduce flows up to 40% downstream of the project. Water quality measures such as extended detention, native plantings, and natural channel lining were incorporated into the project to provide additional water quality benefit to Lake Springfield directly downstream of this area.

A second phase of design is currently underway to provide channel improvements for approximately 1,500 feet between Nottingham Street and the newly enlarged detention basin. This phase of improvements will create a geomorphically stable stream to resolve erosion problems as well as provide increased flood protection for the adjacent homeowners. Additional future phases of design are anticipated to address the remaining recommendations as outlined in the concept study.

The project cost was \$800,000. Design was completed in January 2015 with construction's completion in December 2015.





RFQ 19-01 Statement of Qualifications / 87



# JORDAN CREEK RENEWAL

### Springfield, Missouri

Downtown Springfield has faced flooding challenges for decades from Jordan Creek. The Creek has been confined to an underground system, in an effort to control it. The City of Springfield, Missouri—recognizing the potential economic development opportunities—now seeks to daylight Jordan Creek. The City is quick to point out the multiple benefits of this project, including improved water quality. Currently, Jordan Creek is listed on Missouri Department of Natural Resources' 303d list, as it does not meet set forth water quality standards and adequate water pollution controls have not been required.

To address these issues, the City of Springfield contracted with Olsson and its design studio, Ochsner Hare & Hare, to complete a phased Jordan Creek daylighting project through downtown Springfield. The second phase of the project will specifically focus on the southeast corner of Phelps Street and Boonville Avenue, as it is soon to be developed. The project is made possible through grant funding from Housing and Urban Development.



### DATES

2017 - Present

### SERVICES

Civil

· Master Planning

### MARKETS

Stormwater

Government

### PROJECT REFERENCE

### Chris Dunnaway, PE

Principal Engineer 417.864.1876 cdunnaway@springfieldmo.gov



# SOUTH CREEK CHANNEL RESTORATION

#### Springfield, Missouri

The South Creek Channel project in Springfield, Missouri, was a one-mile, concrete-lined urban channel that runs through a highly developed area. Seeking to restore the concrete-lined channel back to a more natural stream way, the city selected Olsson to design improvements within the project limits. The objectives of the project were two-fold and required a delicate balance: improve the water quality and aquatic habitat while also providing flood reduction in the area. Ancillary benefits of the project included improving the aesthetics and enhancing the recreation trail that runs along the channel.

The design challenges were considerable. South Creek has been channelized and straightened and provides a low level of ecological habitat and water quality. The reach also has large, multiple cell box culverts located at crossings with city streets and a recreational walking and biking trail that is adjacent to the channel within the stream corridor. Additionally, the project was partially funded through an Environmental Protection Agency (EPA) Section 319 Grant requiring the city to meet the project goals



#### DATES

2014 - 2015

#### SERVICES

Civil

· Master Planning

#### MARKETS

Stormwater

Government

#### PROJECT REFERENCE

#### Chris Dunnaway, PE

Principal Engineer 417.864.1876 cdunnaway@springfieldmo.gov

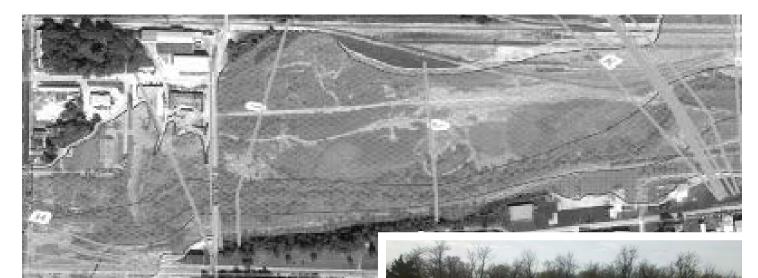
#### PROJECT PROFILE

established through the grant application process. The project also involved several stakeholders, including the James River Basin Partnership, Ozark Greenways, and the City of Springfield.

The design team's approach to habitat restoration projects is to promote a particular stage of ecological succession. Through resource inventories, engineering analysis, and city and stakeholder feedback, Olsson determined the most appropriate stage of development for the design was to provide the most sustainable project possible. Unique design features were incorporated into the design including: Newbury weirs, hard wood log weirs, habitat boulders, and low-flow channels cut through the floor of the existing reinforced concrete boxes (RCBs). Native vegetation and wetland plantings were utilized to restore the project area upon completion of the project. It cost \$144,702 and was complete in November 2015.





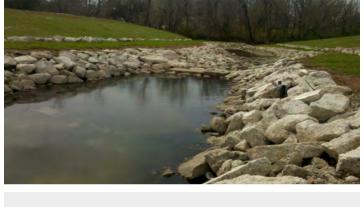


# WEST MEADOWS TRAIL AND STREAM RESTORATION

#### Springfield, Missouri

The project consisted of 2,900 feet of hard surface greenway trail from Fort Avenue to 400 feet west of Main Avenue. The access drive and parking lot for a local business at 319 N. Main Avenue provided an accessible hardsurface connection between the end of the trail and Main Avenue. The trail extended through open space being developed as woodland, prairie, and wetland as recommended for the West Meadows within the Jordan Valley Concept Plan adopted by City Council in February 2010.

The trail utilized the existing low water crossing near Fort Street and generally followed the haul road route currently being used by the contractor working on the West Meadows brown field clean up. The project included one stream crossing of Jordan Creek and one at grade railroad crossing. It is our understanding that Burlington Northern Santa Fe Railroad has agreed to grant a license for trail to cross the railroad in a manner that meets current standards for a pedestrian crossing and the City will provide Olsson the necessary information.



#### DATES

2013 - 2014

#### SERVICES

Civil

· Master Planning

#### MARKETS

Stormwater

Government

#### PROJECT REFERENCE

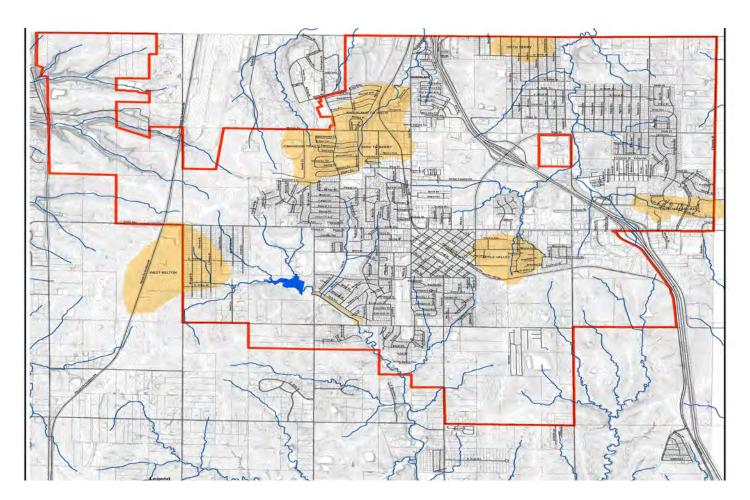
#### Chris Dunnaway, PE

Principal Engineer 417.864.1876 cdunnaway@springfieldmo.gov In conjunction with an environmental cleanup that was sponsored by an Environmental Protection Agency Brownfields Program grant, Olsson was contracted by Terracon, Inc., to complete a stream restoration project through the site. The parcel was located on the north bank of Jordan Creek and the east side of Fort Street in an area generally known as West Meadows.

Previously, the stream was directed to a roadside ditch. Olsson recreated a natural pool-riffle sequence through the Brownfield remediation site. This process involved excavating 17 feet of waste concrete and construction rubble. Usable rocks and concrete rubble were retained on site and used during the stream restoration. Olsson personnel trained the contractor to build a natural channel system during a two-day workshop on site. The woody vegetation planting phase was completed in the fall of 2014.

During cleanup and excavation, Olsson discovered

what was most likely the historical Fulbright Spring. This spring was a significant water source for the first Springfield homesteaders. But, after the Burlington Northern Santa Fe rail yard construction, the spring was thought to have been lost. The City of Springfield is thrilled to be able to incorporate one of Springfield's original springs into its plans for Jordan Valley. Plans for the spring include serving as a water feature in the West Meadows green space portion of the multi-year Renew Jordan Creek initiative.



# **APPENDIX**

olsson

**STREETS** 

**TRAFFIC** 

**STREETSCAPES** 

STRUCTURAL - BRIDGES

STRUCTURAL - BUILDINGS

PARKS AND RECREATION

## STREETS/HIGHWAYS

#### Whether it's a daily commute or a leisurely drive, we want you to enjoy the ride.

At Olsson, we create innovative solutions to improve traffic flow and drivers' dispositions on roadways nationwide.

We are your go-to resource for traditional services like traffic operations, pedestrian circulation studies, and roadway and intersection improvement/design. We also work with more specialized projects including citywide safety studies, signal system improvements, complete streets, and evaluating and designing Intelligent Transportation Systems.

Our expertise and advanced technology help us maintain large-scale data collection and state-of-the-art traffic engineering and transportation planning software. That means we're able to serve your needs from study and planning services through to conceptual and final design.

Our experience-rich portfolio runs the gamut from rural highways to scenic byways, urban roadways to roundabouts, and interstate systems to interchanges to intersections. And let's not forget bicycle and pedestrian trails. We are proud of the work we do.

We design safe and efficient roadways, and we help communities realize long-term goals. We deliver the right-sized project on schedule and on budget while never losing sight of our respect for the environment.





# MONTE NE ROAD

#### Rogers, Arkansas

### PROJECT SETS EXAMPLE FOR WATER CONSERVATION AND ENVIRONMENTAL STEWARDSHIP

The Monte Ne Realignment project transformed transportation on the east side of Rogers, providing a new, safe gateway for residents to access the revitalized downtown business district.

Where there was once a winding, narrow two-lane road with four hairpin turns, oddly-configured intersections, and no sidewalks; there is now a landscaped four-lane boulevard with safer and efficient roundabout intersections, sidewalks for pedestrians, and a side-path for bicycles.

As one of the premiere routes for the city's downtown access, aesthetics, safety, and smooth traffic flow was imperative to the city. Officials selected the opportunity to realign the two-lane street into a four-lane boulevard in alignment with the existing Razorback Greenway trails. Incorporating specialty lighting and two roundabouts with architectural centerpieces were also key components for the project.

In addition to decreasing traffic congestion, the Monte Ne arterial is providing direct economic benefits for the downtown business district with improved access from the east side of town.



#### DATES 2018

#### SERVICES

- Planning & Design
- Engineering
- Field Services

#### MARKETS

Transportation

#### PROJECT REFERENCE

Lance Jobe, PE
Office of Planning &
Transportation
479.621.1186
ljobe@rogersark.org

#### PROJECT PROFILE

The Olsson team was excited to partner with the City of Rogers to not only meet the many design challenges, but to be a part of the city's visionary process.

The Monte Ne Boulevard project involved almost one mile of realignment and improvements along with improvements to secondary streets, and Razorback Greenway pedestrian/cycling trails.

#### Project Elements:

- Realigning/improving approximately 4,000 linear feet of Monte Northeast Road into a boulevard parkway
- Improving approximately 1,800 linear feet of First Street into a major collector
- Improving miscellaneous secondary streets
- Designing two single-lane roundabout intersections
- Improving sidewalks and lighting on the parkway
- Constructing a trail/tunnel near the First Street intersection
- Incorporating low-impact development principles for stormwater management
- Incorporating parking and pedestrian & bike trails
- Design of a new, wider and improved railroad crossing
- Making improvements to Maple Grove Park
- Providing Construction Observation









# ROUTE 65 & BATTLEFIELD INTERCHANGE

#### Springfield, Missouri

### REDUCING ACCIDENTS AND IMPROVING TRAFFIC FLOW

There's a reason the diverging diamond interchange (DDI) has been named one of the top engineering innovations: It reduces traffic congestion by up to 60 percent. We implemented this very design with MoDOT at Battlefield Road and Route 65 in Springfield to improve capacity.

We collaborated with Hanson Professional Services and TREKK Design Group to help prepare plans, which included converting the interchange to a DDI, replacing an existing bridge, designing drainage systems, placing traffic signs and signals, and constructing auxiliary lanes. We also upgraded the roadway from two to three lanes in each direction, providing added traffic capacity and functionality.

Our attention to detail made the construction phase easy for drivers. We developed two solutions to promote smooth access: wider, full-depth shoulders on Route 65 to use as temporary lanes, and a temporary DDI. The latter allowed for efficient left-turn movements, which greatly reduced delays compared to traditional alternatives.

#### DATES

2013 - 2015

#### SERVICES

Traffic Management
 Systems

· Civil Engineering

#### MARKETS

· Highways & Streets

#### PROJECT REFERENCE

#### **Stacy Reese**

Project Manager 417.895.7600 stacy.reese@modot.mo.gov

#### AWARDS

Best Use of Innovation (Small Project) - Mid-America Association of Transportation Officials



# BASS PRO ROUTE 86 & RIDGEDALE ROUNDABOUT

#### Branson, Missouri

Bass Pro Shops hired Olsson to provide engineering design services for a new roundabout intersection and grand entrance to Big Cedar Lodge and Top of the Rock Golf Course. The project is located in Taney County, Missouri, at the intersection of Route 86 and Ridgedale Road.

The project required a fast-track schedule in order to be completed and ready for the Big Cedar Legends of Golf Tournament April 24-26. The roundabout and entrance was completed from design to substantial completion in less than six months. Olsson began the design process by preparing conceptual design and coordination with Missouri Department of Transportation (MoDOT). Olsson worked hand-in-hand with MoDOT staff to determine a way to expedite the design process and begin construction as quickly as possible to meet the deadline.

Olsson prepared a Grading & Drainage Package for approval and bidding in order to initiate construction. Once the contractor was under contract and had begun the grading activities, Olsson prepared the



#### DATES

2014 - 2015

#### SERVICES

- Transportation
   Planning
- Civil
- Site Design

#### MARKETS

- Transportation
- Commercial

#### PROJECT REFERENCE

#### **Tom Jowett**

Vice President of Design & Development 417.873.5000 tjowett@basspro.com

Final Paving Package. The final design package was for Signing and Lighting. This phased strategy allowed for the construction to be completed in 20 weeks.

Olsson assisted Bass Pro Shops in the incorporation of aesthetic enhancements for the project. The splitter islands and truck aprons included slate texture and color tinting to give a natural stone look. The overtracking and approach areas for the private exit roads from Big Cedar Lodge and Top of the Rock were constructed with tinted concrete and natural cobblestones. The project included decorative landscaping, street lighting, and sign posts. Traffic analysis services were also provided by the Olsson team.

Bass Pro Shops requested our assistance in reviewing the needs for entry gate facilities into the resort and golf course. Olsson analyzed projected traffic volumes and compared them to service rates for various types of visitor interfaces including face-to-face and gate controlled applications. This information helped educate Bass Pro Shops in their decision for the final configuration of the resort entry.

Olsson also provided construction coordination services throughout the duration of construction. These services included issuance of design packages, review of contractor submittals, management of quantity changes and change orders, and frequent design changes directed by the owner.







## **TUDOR ROAD**

#### Lee's Summit, Missouri

#### A NEW CONNECTION IN LEE'S SUMMIT

Good engineering is all about making connections and for decades, the city of Lee's Summit knew the connection of Tudor Road from Main Street to Douglas Street would increase area development and traffic flow.

When we were brought on for engineering and surveying services, our team faced a few challenges in need of smart solutions. The project involved crossing a Union Pacific railroad track, crossing a creek bed, and avoiding an electrical substation. Additionally, it was crucial to avoid disrupting traffic around a local high school when widening part of Tudor Road. Our engineers easily managed the challenges, designing and obtaining permits for a 90-foot-long bridge to cross the rail tracks without encroaching on Union Pacific's right-of-way. We also helped coordinate major power line relocation to eliminate conflicts with the bridge. Portions of the project were accelerated, helping the city to deliver on its promise to citizens that this project was a high priority.

The 3,800-foot-long arterial (high-capacity) roadway opened ahead of schedule, featuring enhancements such as LED street lighting, decorative railings and stone-form liners, and multi-use pathways. The city quickly saw previously stagnant properties along the roadway begin to flourish—connecting people to businesses, entertainment, and a thriving community.



#### DATES

2011 - 2017

#### SERVICES

- · Civil Engineering
- Field Services
- Structural Engineering
- Technology

#### MARKETS

- Highways & Streets
- Local Government
- Bridges
- Stormwater

#### PROJECT REFERENCE

#### **Scott Ward**

Project Manager 816. 969.1800 scott.ward@cityofls.net



# MARKEY PARKWAY & TOWN CENTER DRIVE

#### Belton, Missouri

This project included survey, design, and preparation of construction drawings and specifications for arterial and collector roadways in Belton, specifically Markey Parkway and Town Center Drive. The scope of work included coordinating street lights, designing traffic signal, designing storm drainage, controlling erosion, controlling work zone traffic, landscaping medians, implementing permanent signing and pavement markings, and designing overpass aesthetics.

The new roadway alignment impacted an existing detention pond that was in disrepair. The pond had developed wetland vegetation around the perimeter and therefore required protection during construction to conform with MDNR and COE 404 permitting requirements. In addition to protecting and restoring the existing pond and wetland vegetation, the Olsson team developed a creative solution that utilized the existing detention basin and floodplain area to create a regional dry detention basin. This design allowed for a smaller roadway culvert to create the restricted flows, thereby reducing costs on the overall project.

Phase III of Markey Parkway connects Mullen Road to Y-Hwy/163rd Street. The project also included the extension of Towne Center Drive to a new intersection with Markey Parkway. Both roads were opened at a ribbon cutting ceremony on April 2, 2015.

#### DATES 2013 - 2015

#### SERVICES

TransportationPlanning

#### Civil

#### MARKETS

Transportation

#### Government

#### PROJECT REFERENCE

#### Zachary Matteo, PE

City Engineer 816.331.4331 zmatteo@belton.org



# JOPLIN MERCY ROADWAY IMPROVEMENTS

#### Joplin, MO

### TORNADO RECOVERY FOR JOPLIN MERCY HOSPITAL INTERCHANGE, ROADWAY AND ROUNDABOUTS

As a result of the EF-5 tornado that hit the City of Joplin on May 22, 2011, Olsson was hired by Mercy Health Systems to provide civil engineering design services, as well as geotechnical investigation services, environmental permitting with the U.S. Army Corps of Engineers, land surveying, special inspections and materials testing, and FEMA (NEPA) process compliance services for the new replacement hospital.

The new hospital required a significant amount of infrastructure improvements, including reconstructing the perimeter roadways of Missouri Route 86, 50th Street, Indiana Avenue, and the adjacent Interstate 44 interchange.

Due to the various governing jurisdictions (City of Joplin, MoDOT, Village of Leawood, and Village of Shoal Creek Drive), two different traffic studies were prepared - one for the municipalities and one for MoDOT. The proximity and influence of the new hospital traffic introduced to the I-44 interchange required an Access Justification Report (AJR) to be prepared for coordination and approval with the Federal Highway Administration (FHWA).

#### DATES

2011 - 2018

#### **SFRVICES**

- Environmental Planning & Permitting
- Civil Engineering
- Geotechnical
- Surveying
- Special Inspections
- Materials Testing

#### MARKETS

- · Highways & Streets
- Water

Healthcare

#### PROJECT REFERENCE

#### **Chad Zickefoose**

Project Manager (MoDOT) 417.895.7638

## **TRAFFIC**

#### Traffic management systems help you arrive safely and on time.

Freeways, city streets, and transit networks all work together to get people and goods to their destinations safely and efficiently.

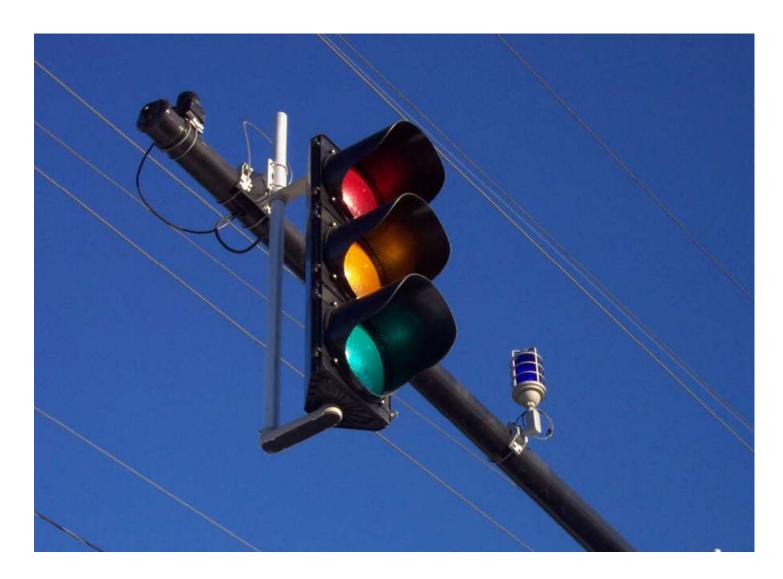
Traffic signal systems coordinate signal timings along our busiest corridors.

Transit systems help transport people efficiently in the urban core.

Freeway systems constantly monitor traffic conditions and provide information to help drivers stay safe and save time.

Lean budgets and technological advancements make effective design, management, and operation of these systems increasingly critical. At Olsson, we help our partners optimize their traffic management systems, providing technologically advanced yet practical solutions.

Our clients include municipalities, metropolitan planning organizations, state departments of transportation, transit agencies, and federal agencies.





# ON-CALL TRAFFIC ENGINEERING

#### Kansas City, Missouri

#### MANAGING TRAFFIC FOR A LARGE METRO.

Under this contract, Olsson provided signal timings analysis and Traffic Operations Center Design Inspection. We completed a parking, traffic circulation, and signal timing analysis relating to the construction of the Sprint Center in downtown Kansas City, Missouri. The City of Kansas City retained Olsson to inventory existing parking facilities and parking facilities under construction — and to assess the availability of that parking for Sprint Center events.

Olsson refined a travel model for the downtown area and used the model to determine traffic patterns to and from scheduled events. Olsson assigned traffic to parking facilities that serve events throughout downtown. The resulting traffic volumes were then used as inputs to develop specialized signal timing plans for event traffic.

The results of Olsson's efforts were smooth traffic flows and parking opportunities that supported a positive downtown experience. A post-analysis was completed after the Sprint Center's opening in the fall of 2007. The analysis verified the accuracy of Olsson's parking, traffic, and signal timing analysis.

#### DATES

2010 - ongoing

#### SERVICES

Traffic Management
 Systems

Transportation
 Planning

#### MARKETS

Highways & Streets

#### PROJECT REFERENCE

#### Wei Sun

Traffic Engineer 816.513.2627 wei\_sun@kcmo.org Olsson worked closely with the KCMO Public Works
Department and the KCMO IT Department to complete
an evaluation and final design plans and specifications
for the new Traffic Operations Center located in the
existing traffic signal maintenance facility on Municipal
Avenue in the City of Kansas City, Missouri. The
evaluation recommended electronics equipment and
facility needs to help prepare the design plans for the
facility. Final design plans and coordination included the
following:

- Design of Traffic Operations Center (TOC)
   equipment, including work stations, computers,
   servers, video management software, video
   wall matrix, and communication paths
- Bandwidth requirements for connectivity to KCMO City Hall, OGL, and KC Scout
- Design communications including redundant communication paths to the facility
- Center to center connectivity to Operation Greenlight (OGL)
- Integrate and coordinate public works maintenance radio system within TOC
- Coordinate building needs with Architect
- All TOC improvements integrated with building architectural design package







# ON-CALL TRAFFIC ENGINEERING MISSOURI DEPARTMENT OF TRANSPORTATION

#### **Statewide**

#### **ACTING AS AN EXTENSION FOR DOT STAFF.**

Olsson has completed several Memorandum of Understanding projects for MoDOT throughout the state. Projects in the Kansas City district have included developing a Synchro Model with more than 500 traffic signals and timing for the entire district. The project included an operational manual procedure for making revisions to the master model by several traffic engineers. Monitored and reviewed an after study completed by an outsider to determine the operational benefit of installing adaptive control along Route 291. Other local projects have included signal timing plans and signal modifications and ramp improvements. Additionally, Olsson created an ITS project architecture and communication project plan for the Joplin area.

#### DATES

2009 - 2018

#### SERVICES

- Traffic Management
   Systems
- Transportation
   Planning

#### MARKETS

Highways & Streets

#### PROJECT REFERENCE

#### **Mark Lewis**

Distric Engineer 573.751.2447 mark.lewis@modot.mo.gov

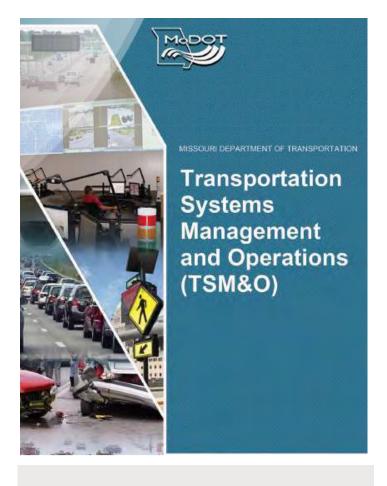
# TRANSPORTATION SYSTEMS MANAGEMENT AND OPERATIONS (TSM&O)

#### **Statewide**

#### **ACTING AS AN EXTENSION FOR DOT STAFF.**

Olsson served as the prime consultant for the development of Missouri's Statewide Transportation Systems Management and Operations (TSM&O) program plan. The project developed a plan to integrate consideration of TSM&O more fully into MoDOT's organization and culture. The end goal of these efforts is that MoDOT as a whole understands and considers TSM&O strategies in all planning, project development, operations, and maintenance efforts and initiatives. The plan provides the background, establish the mission, vision and goals, and define the process and tasks that will help mainstream operations strategies into MoDOT's general toolbox for transportation improvement.

The areas of focus for the plan included Traffic Incident Management, Work Zone Management, Intelligent Transportation Systems, and integration into the overall planning process. The plan also addressed workforce development, performance measures, and looking ahead to future development and expansion of the TSM&O program.



#### DATES

2015 - 2018

#### SERVICES

- Traffic Management
   Systems
- Transportation
   Planning

#### MARKETS

· Highways & Streets

#### PROJECT REFERENCE

#### **Alex Waxman**

Distric Wide Engineer 314.275.1500 alex.wassman@modot.mo.gov



# ON-CALL TRAFFIC ENGINEERING

#### Olathe, Kansas

### WORKING AS AN EXTENSION OF MUNICPAL STAFF TO SOLVE TRAFFIC CHALLENGES.

Olsson worked with the City of Olathe for a decade completing on-call traffic engineering projects. The majority of the projects include signal designs, but has included a range of projects, such as concept and safety studies and communications and ITS device design. Olsson updated the city's Traffic Specifications and Design Criteria and reviewed and updated their lighting standards. Our traffic experts were provided an office at city hall to serve as an extension to city staff for study and plan review. Olsson attended council meetings and provided updates on trafficrelated topics.

#### DATES

2005 - 2015

#### SERVICES

- Traffic Management
   Systems
- Traffic Engineering

#### MARKETS

Highways & Streets

#### PROJECT REFERENCE

#### **Therese Vink**

Project Manager 913.971.9032, tvink@olathks.org Transportation Planning



# ON-CALL TRAFFIC ENGINEERING

#### Raymore, Missouri

TRAFFIC STUDIES, INTERSECTION DESIGN, PEDESTRIAN CONFIGURATIONS.

The primary objectives of this project are to improve the capacity, reduce congestion and delay, and improve the overall operations at two signalized intersections in Raymore, Missouri. Signal timings, clearance intervals, and pedestrian walk times will be updated. The scopes of these tasks are detailed below.

Olsson will complete signal observations at two intersections during the morning, midday, and evening peak periods. The two intersections are as follows:

- Route 58 and Route J
- · Lucy Webb Road at Foxridge Drive

Olsson will follow the Missouri Department of Transportation's (MoDOT) electronic program guide signal timing policy to calculate new clearance intervals and pedestrian timing for each signal. To aid in these calculations, the following data will be collected:

- · Posted speed limit
- Type of left-turn phasing
- Approach grade (measured in the field)
- Intersection width (measured in the field)
- · Length of pedestrian crosswalk
- · Additional walk length (push button to curb)
- · Lane configuration



#### SERVICES

2015 - 2018

- Traffic Management
   Systems
- Transportation
   Planning

#### MARKETS

Highways & Streets

#### PROJECT REFERENCE

#### **Mike Krass**

Director of Public Works 816.331.0488 mkrass@raymore.com

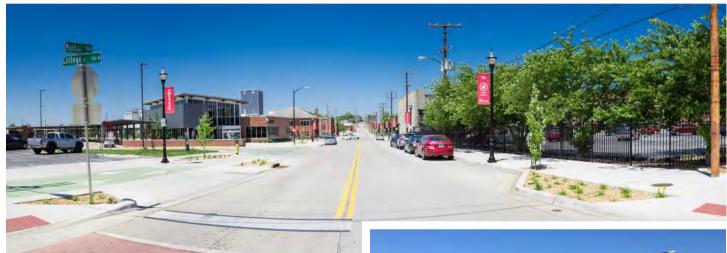
# **STREETSCAPE**

#### It's like the icing on a cake.

Streetscape improvements help make community streets complete by enhancing the area's economic viability, attractiveness, and environmental health. They can increase the environmental sustainability by decreasing automobile dependency, minimizing traffic and congestion, and reducing carbon emissions. Landscaping beautification encourages the enrichment of biodiversity in a community.

Olsson's landscape architects are on the front lines of implementing complete streets projects for our clients. By adding elements such as increased tree canopy coverage, innovative stormwater management practices, bicycle and pedestrian trails, and public gathering spaces, corridors can be enhanced to attract citizens to that area.





# MAIN AVENUE AND COLLEGE STREET STREETSCAPES

#### Springfield, Missouri

The City of Springfield selected Olsson to complete the design of streetscape improvements for College Street Streetscape Phase 1 between Market Avenue and the Grant Avenue, a distance of approximately 750 LF, as well as the Main Avenue Streetscape Phase 1 from College Street to the railroad right-of-way, a distance of approximately 500 LF. These projects tie into the new concept for the Main Avenue bridge and Jordan Creek storm drainage as well as the intersection improvements at Grant and College.

The Main Avenue project consisted of the following:

- Maintain two lanes of vehicular travel
- · Switch angled parking to parallel parking
- Create off-street bike lane
- Create larger sidewalk areas for gathering space (mini plaza)
- Add landscape pockets and rain gardens
- · Add irrigation infrastructure and tree wells
- · Add pedestrian lighting
- · Coordinated with adjacent site grading constraints



#### DATES

2013 - 2018

#### **SERVICES**

- Ladscape Architecture
- Transportation
   Planning
- Surveying

#### MARKETS

- Land & Facilities
- Government

#### PROJECT REFERENCE

#### Chris Dunnaway, PE

Principal Engineer 417.864.1930

cdunnaway@springfieldmo.gov

#### PROJECT PROFILE

- Collaborated with city to develop special details for rain gardens and tree root zone structural support
- Stormwater system modifications
- Sanitary sewer system modifications

The College Street project consisted of the following:

- Maintain vehicular lanes and parking as they exist
- Widened sidewalks rather than keeping current configuration
- · Add pedestrian lighting
- Stormwater system modifications

Construction Completed:

2016 (Main Avenue)

2018 (College Street)







# DOWNTOWN GATEWAY STREETSCAPE

#### Sedalia, Missouri

The City of Sedalia expressed the need for a major gateway element to enhance the identity of Sedalia's Central Business and Cultural District located in the heart of the city. The proposed gateway, located at the intersection of Ohio Street and US Highway 50, will incorporate architectural elements that are reflective of the vibrant and unique historic nature of Sedalia's downtown.

Ochsner, Hare, and Hare, the Olsson Studio, provided initial conceptual design and presentation graphics for city approval. Currently gateway design development plans and construction documents are being developed in coordination with city staff.



#### DATES

2014 - 2015

#### SERVICES

- Landscape
   Architecture
- Master Planning

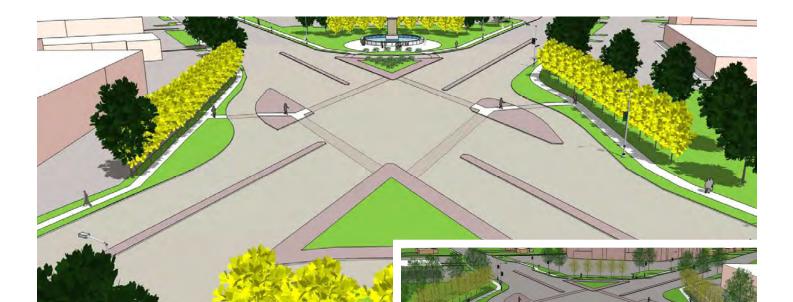
#### MARKETS

- Government
- Land & Facilities

#### PROJECT REFERENCE

#### **Abby McMullin**

Project Manager 660.826.8618 amcmullin@ess-inc.com



# VIVION ROAD STREETSCAPE

#### Kansas City, Missouri

#### KANSAS CITY'S MODEL STREETSCAPE PLAN

The Northland Neighborhoods, Inc. hired Ochsner Hare & Hare, the Olsson Studio, to complete a Vivion Road Streetscape Plan. The study area boundaries are from Gladstone/Kansas City city limits to Claycomo/Kansas City city limits and generally one block on either side of Vivion Road. In certain key locations, the boundary is expanded to include a larger area where it is desirable from a project development standpoint.

As part of this project, the Olsson Studio developed a streetscape standard within the study area that creates aesthetically pleasing elements that serve to promote multi-modal transportation use. This plan will be adopted by the City of Kansas City, Missouri, as the guiding document for future streetscape design and construction within the corridor.

This project is a citizen-based planning process that includes public workshops designed to review draft planning process information, obtain public input, and to share information throughout the development of the plan. We provided an inventory of existing streetscape conditions that include sidewalks, lighting, signage, screening, street furniture and amenities, public art, landscaping, gateways and transitions, intersection improvements, and a plan to integrate into the KCATA transit system.

#### DATES

2016 - Present

#### SERVICES

- Civil Engineering
- Surveying

### Landscape Architecture

#### MARKETS

Highways & Streets

#### PROJECT REFERENCE

#### Ed Linnebur

Director of Housing ed\_linnebur@nni.org



# JOHNSON DRIVE STREETSCAPE

#### Mission, Kansas

#### AN AWARD-WINNING DOWNTOWN STREETSCAPE

As part of our on-call contract with the City of Mission, Olsson enhanced an integral piece of the city's downtown district, Johnson Drive. We designed the improved pavement asphalt and curbs, relocated utilities, and reconstructed all infrastructure on the half-mile stretch of road from Lamar to Nall Avenue.

From design to construction, we achieved our goal of providing a safer, more walkable area. We equipped the streets with new lighting and crossings, ADA-compliant sidewalk ramps, and stormwater improvements. In addition, we amplified the aesthetic of the streetscape with varied pavement materials and new decorative fixtures.

By making these changes, Olsson brought new life to the surrounding businesses and properties. This project won APWA Transportation Project of the Year in 2016.

#### DATES

2010 - 2013

#### SERVICES

- Landscape Architecture
- Geotechnical
- Surveying
- Civil Engineering

#### MARKETS

- Commercial
- Stormwater
- Highways & Streets

#### PROJECT REFERENCE

#### **Martin Rivarola**

Director of Community Development 913.676.8357







# SANTA FE STREETSCAPE

#### Olathe, Kansas

#### THE GATEWAY TO DOWNTOWN OLATHE

Downtown Olathe is home to many government entities, including Olathe City Hall, Court Services, Johnson County District Courthouse, and Johnson County Treasurer. With a contractor, Olsson initiated the first phase of the Envision Olathe Downtown Plan by improving the central Santa Fe Street, beginning at Kansas City Road to west of the BNSF Railway.

We emphasized an authentic street identity through the design process. Building upon the existing downtown, we established character that fit Olathe while preserving nearby neighborhoods. This character can be seen in the fully reconstructed roadway, raised-brick Cherry Street intersection, and three adjacent pocket parks with fountains, gazing pools, and local artwork.

Additionally, we designed the streetscape to encourage the use of alternative modes of transportation. The area is oriented towards pedestrians, giving them a safe and accessible area to roam.

We strengthened downtown's connections, both visually and functionally, with the new Santa Fe Streetscape. The area only continues to improve, with the city's plans extending years into the future.

#### DATES

2012 - 2013

#### SERVICES

- Civil Engineering
- Surveying
- Landscape Architecture

#### MARKETS

Highways & Streets

#### PROJECT REFERENCE

#### Mark Dombrowski

O'Donnell & Sons Vice President 913.681.2155 mark@odonnell-sons.com

# STRUCTURAL - BRIDGES

## Whether preserving existing infrastructure or designing new, Olsson delivers expert bridge solutions.

Every bridge is a unique engineering challenge. At Olsson, we understand the importance of bridges within our greater infrastructure, and we also understand the need to deliver high-value solutions to budget-conscious communities. This requires balancing cost-effective alternatives with the needs of modern construction and the desire for aesthetic design.

By partnering with bridge owners, we develop a clear strategy. By applying technical excellence, we implement thoughtful design. understand the impact of modern research and technology when it comes to delivering innovative projects. It's a team effort. Our bridge professionals work closely with national engineering, design, and technical experts in other disciplines here at Olsson. All are essential to successful bridge design.

We have extensive experience with a wide array of bridges, both simple and complex. We believe maintaining a forward-thinking outlook is a must, and our engineers understand the impact of modern research and technology when it comes to delivering innovative projects. It's a team effort. Our bridge professionals work closely with national engineering, design, and technical experts in other disciplines here at Olsson. All are essential to successful bridge design.





# MAIN STREET BRIDGE INSPECTION

#### Anderson, Missouri

#### **INVESTIGATING SAFE STRUCTURAL IMPROVEMENTS.**

McDonald County received record rainfall on April 30th, 2017, which contributed to flash flooding that overtopped the Main Street Bridge by several feet. With public safety on the line, the city needed qualified engineers for bridge and underwater investigations to determine the damage. Enter Olsson. We identified settlement of the approach pavement and lowering of the stream bed below the bridge. We also discovered that there had been approximately six feet of channel contraction scour, several feet of scour at the abutment footings, and undermining of one footing at the intermediate bent. We recommended the bridge close immediatlely. Then we went to work calculting the repairs to provide sustainable and safe improvements to the bridge. We provided the city a few alternatives that were also presented to FEMA.

Olsson is currently assisting the city with obtaining funding to either remove the structure, or reopen this crossing through a structural rehabilitation in 2018.

#### DATES

2011 - 2013

#### SERVICES

- · Civil Engineering
- Structural Engineering
- Geotechnical
- Surveying

#### MARKETS

- Bridges
- Stormwater

#### PROJECT REFERENCE

#### **John Sellers**

Mayor City of Anderson 417.845.6463 acityhall@olemac.net



# ROUTE Z OVER SALINE CREEK AND ROUTE CC OVER TRACE CREEK

#### Madison County, Missouri

#### **COORDINATING TWO BRIDGE REPLACEMENTS.**

Olsson was the preferred engineer for two bridge replacements on Route Z and Route CC over streams in Madison County. This project was tricky as it involved replacing the bridge over Trace Creek and another over Saline Creek, simutaneously. With our capacity, Olsson bridge engineers were able to fulfill the task. Working closely with MoDOT we coordinated the design that had the bridges quickly back in service. The new bridges consisted of a one-span prestressed NU-girder bridge and a three-span, prestressed concrete spread box beam bridge. The span arrangements were 92 feet and 28'-38'-28' at a 25-degree skew, respectively.

## **DATES** 2017 - 2018

#### SERVICES

- Civil Engineering
- · Structural Engineering
- Geotechnical
- Surveying

#### MARKETS

Bridges

#### PROJECT REFERENCE

Pete Berry, PE

Project Manager 417.469.6242 pete.berry@modot.mo.gov



# MONITOR SQUARE BRIDGE

#### Overland Park, Kansas

### REPLACING A DEFICIENT BOX CULVERT WITH A NEW BRIDGE

In 2017, Olsson completed bridge design and flood control work for the Monitor Square subdivision within the Federal Emergency Management Agency (FEMA) regulatory floodplain. The project stretched across a half-mile of a Indian Creek tributary and benefited the City of Overland Park, one of our key clients.

To replace a hydraulically-deficient box culvert, we designed a new 89-foot NU-girder bridge. This design also accommodated four traffic lanes with dedicated pedestrian sidewalks on 103rd Street over the creek. Our roadway engineers reconstructed the immediate approaches to raise the profile to provide sufficient clearance. Additionally, we were able to improve horizontal sight distances to an adjacent intersection and improve drainage at the ends of the new bridge. Additional Olsson services included surveying, environmental reviews and permitting, hydrological and hydraulic analysis, channel design, geotechnical investigation, and public involvement.

The winning construction bid for this project came in just under our estimates and was funded through the Johnson County Stormwater Management Program and the Stormwater Management Advisory Council (SMAC). Construction was complete in January 2017.

#### DATES

2011 - 2017

#### SERVICES

- · Civil Engineering
- Geotechnical
- Hydrogeology
- Surveying

#### MARKETS

- Stormwater
- Bridges

Highways & Streets

#### PROJECT REFERENCE

#### **Lorraine Basalo**

Civil Engineer 913.742.6236

lorraine.basalo@opkansas.org



# 83RD STREET BRIDGE

#### Raytown, Missouri

### REPLACING WORN INFRASTRUCTURE OVER WHITE OAK BRANCH

A bridge supports more than just vehicles, bicyclists, and pedestrians—it supports an entire community. That is why our bridge experts are always looking for the best solutions to close the gap between where we are currently and where we want to go.

Because the five-span 83rd Street Bridge over White Oak Branch was old and worn out, we jumped in and designed a resource-efficient replacement. Our experts inspected the existing bridge and retaining walls along the approaches, prepared and presented a preliminary engineering study for repairs and replacement options to the Board of Aldermen, prepared construction bid documents, and provided construction inspection and engineering services. Storm drainage improvements were installed along the approaches to reduce roadway flooding. The existing approach retaining walls were rehabilitated and lengthened.

The new 133-foot bridge was partially built using federal funding and contains two lanes of traffic, striped bike lanes, and a pedestrian sidewalk. Since the bridge is located close to Raytown South High School, the new structure handles buses, vehicles, bicycles, and students on foot. The ribbon cutting was held on August 1, 2018, minimizing impacts to the school traffic. This project created a safe transportation environment that will support the community for decades to come.

#### DATES

2016 - 2018

#### SERVICES

- Structural Engineering
- Geotechnical

#### MARKETS

Bridges

- Construction
   Management
- Highways & Streets
- Stormwater

#### PROJECT REFERENCE

#### **Jason Hanson**

City Engineer 816.737.6000 jasonh@raytown.mo.us



# WASHINGTON AVENUE VIADUCT OVER UPRR TRACKS

#### Sedalia, Missouri

#### REPAIRING AN IMPORTANT LINK IN A COMMUNITY.

The City of Sedalia was forced to close the Washington Avenue Bridge to all traffic due to inspections and the evaluation of the condition of the viaduct. The city council then decided to pursue plans to rehabilitate the existing structure.

Olsson was working closely with the city on other projects. The city was extremely happy with their performance and hired our structural engineers to redesign the bridge. We provided a long-lasting design by adding deck drains, using higher-strength steels, and heavier sections to increase the load rating of the repaired structure.

We incorporated a new pedestrian walkway as an added feature to accommodate multimodal travelers.

Our positive working relationships with the agencies involved helped expedite approvals for the city. We worked closely with Union Pacific Railroad (UPRR), attended city council meetings, and included the Missouri Department of Transportation into plan review for comments.



#### DATES

2011 - 2013

#### SERVICES

- · Civil Engineering
- · Structural Engineering
- Geotechnical
- Surveying

#### MARKETS

- Bridges
- Stormwater

#### PROJECT REFERENCE

#### **Brenda Ardrey**

Public Works Director 660.827.3000 bardrey@cityofsedalia.com

## STRUCTURAL - BUILDINGS

#### If a structure were a body, we'd give it strong bones. Simply put, a structure that's safe, stable, and cost-efficient.

Olsson provides building structural engineering and design services including commercial and retail buildings, manufacturing and industrial plants, institutional facilities, airport hangars, and multifamily residential facilities. We also provide building inspection and forensic investigation services.

We have extensive experience in a wide array of bridges including steel girders, prestressed concrete girders, and concrete slab bridges. Our structural services also include bridge design, inspections, restoration and enhancements, load ratings, and more.

We're passionate about our work and serve our clients well by coordinating the wide range of expertise necessary for every project.

With in-house comprehensive engineering and design resources, we offer a full range of services for any type of structural need.





# JOPLIN SURGICAL BUILDING DEMOLITION

#### Joplin, Missouri

#### **PLANNING FOR THE FUTURE**

After determining the building was unable to be repaired, the City of Joplin needed to demolish the surgical building which was damaged by the 2011 EF-5 tornado. Through our on-call services agreement with the City of Joplin, Olsson's structural engineers provided a thorough structural building assessment which ultimately deemed the structure to be unsafe, thus, the need to be demolished.

## **DATES** 2015

#### SERVICES

- Structural Engineering
- Survey

Civil Engineering

#### MARKETS

- Government
- Land & Facilities

#### PROJECT REFERENCE

#### **Troy Bolander**

Planning & Development Director 417.624.0820 TBolande@joplinmo.org



### MID-CONTINENT PUBLIC LIBRARY IMPROVEMENTS

### Kansas City, Missouri

### **PLANNING FOR THE FUTURE**

Mid Continent Public Library (MCPL) is the largest library system in the Kansas City Metro Area. Funded by the passage of Proposition L in 2016, MCPL is investing \$113 million dollars into enhancing all 31 existing branches and constructing two new locations. Of the 31 existing branches, MCPL will be replacing four with new buildings, expanding three with substantial building additions and renovating all 24 others. While the upgrades at each branch vary based on individual community needs and the building's current condition, the improvements will help ensure that branches serve the needs of modern library users. Olsson is currently providing site civil and structural evaluations for the Kearney and Antioch Branch Libraries.

### DATES

2018 - Present

### SERVICES

- Structural Engineering
- Survey
- Geotechnical
- Drilling

### MARKETS

- Government
- Land & Facilities

### PROJECT REFERENCE

### Steven V. Potter

Library Director and CEO 816.836.5200 spotter@mymcpl.org

- Civil Engineering
- Traffic Management
   Systems



# STRUCTURAL COMPONENTS FOR WASTEWATER SYSTEM IMPROVEMENTS

### Sedalia, Missouri

Photo previous to construction.

### IMPROVING A CITY'S WATER FLOW.

The City of Sedalia, Missouri, was required to achieve regulatory compliance for their existing wastewater treatment facility, and they needed to do so with a tight budget and a seven-year deadline. To meet regulatory compliance, the plan needed to include a correction of overflows and backups in the collection system, and bypasses at the wastewater treatment facilities, all by June of 2016.

To complete this project, multiple pieces needed to be examined and put together. This included a UV disinfection facility addition to three wastewater treatment facilities, four contracts for collection system rehabilitation, two contracts for relief sewer construction, and two contracts for equalization storage and pumping facilities. Olsson was chosen to complete these tasks using program development; rate study; collection system data collection and

### DATES

2011-Present

### SERVICES

- Structural Engineering
- Geotechnical

### Civil Engineering

### MARKETS

Water

### PROJECT REFERENCE

### **Gary Edwards**

City Administrator, City of Sedalia 660.827.3000

analysis; permit assistance; and design, bidding, and construction phase services.

Olsson exceeded client expectations by delivering the project on schedule and within initial funding/ affordability goals. Olsson performed hydraulic modeling of the collection system, supported determination of affordable "level of service" for the collection system, and provided a cost-effective combination of relief sewer capacity, equalization storage, and I/I reduction. We also provided guidance to leverage the collection system condition assessment and establish an asset renewal program.

This project was unique because Olsson identified an opportunity to revise/correct wastewater treatment plant (WWTP) permit requirements for metals, resulting in dramatic savings to the substantial industrial base for the city.

The results of this project are proving to be positive for the community. The city has reported a reduction in wet weather overflows and/or sewer backups following the project's completion.



### PARKS & RECREATION

### Play ball or just play.

Ochsner Hare & Hare, the Olsson Studio, is an industry leader in park and trail planning, sports, and recreational development and design.

Park and recreation design is an evolving field and we are part of its history. We know what's already been done because we've been there. We know what's on the horizon, and we know what has staying power.

As a trusted partner, we can advise on all aspects of a project because we understand how all the pieces fit together from the field, to the grandstand, to lighting and concessions, to open spaces and trail design. We look at our clients' wants and needs. Then we bring ideas, innovation, and excitement to the project, and customize the design to give them something that is uniquely their own.

Our landscape architects work closely and collaboratively with our clients to guide projects from the initial vision through design, development, and implementation. Ultimately, our landscape architects ensure that every project's form and function is thoughtfully integrated with beauty and style.





### **MEMORIAL PARK**

### Belton, Missouri

### PLANNING FOR A HISTORIC PARK'S NEW LOOK

The historic Memorial Park was once a trailblazer in parks design, being one of the first in the Kansas City area to provide outdoor lighting for recreational ball fields. However, over the years, the park was in dire need of updates. With the overwhelming support of its citizens, Belton Parks & Recreation moved to improve the park with \$4.5 million in renovations.

The Olsson Studio developed a new site plan to highlight the existing features of Memorial Park and provide a new complex to better meet the community's needs. Our plan accounted for new softball/baseball fields for city league play and weekend tournaments, new concessions, an aquatic center, a farmer's market area, trails, and a depot along the train tracks to connect to downtown Belton. At the center of the plan was Memorial Station. The community venue is a frequent gathering place for weddings and special events such as "Community Days," a three-day annual summer event.

Memorial Park now boasts brand-new amenities, and it all began with the Olsson Studio's master plan. Along with master planning, the Olsson Studio provided site analysis and worked on design development and construction documents, which were completed in summer 2011.



### DATES

2010 - 2011

### SERVICES

Site Design

Master Planning

### MARKETS

· Sports & Recreation

### PROJECT REFERENCE

### **Brian Welborn**

Belton Parks & Recreation Director 816.348.7400 brianw@beltonparks.org



### BALLPARKS OF AMERICA

### Branson, Missouri

### THE ULTIMATE YOUTH BASEBALL EXPERIENCE

The Branson, Missouri, Planning and Zoning
Commission approved a special permit for Ballparks
of America's developer to build a \$24 million youth
baseball complex, constructed at the Factory
Merchants Branson Mall, commonly referred to as
the Red Roof Mall. The City of Branson created the
ultimate youth baseball experience by implementing
a one-of-a-kind facility. The project features 16 ball
diamonds that are replicas of famous fields like
Busch Stadium, Wrigley Field, Tiger Stadium, and
Fenway Park. The existing structures at the mall were
repurposed for team dormitories, restaurants, retail,
and entertainment purposes. The facility hosts events
that draw between 400 and 600 families a week.

The project was divided into several phases, the first of which called for developing five fields and repurposing existing buildings on-site. Our firm provided all site civil engineering, landscape design, specialty lighting design, survey, utility design, and construction administration. The initial construction for the project began in late 2015 and its opening game was on July 7, 2016.



### DATES

2014 - 2016

### SERVICES

- · Civil Engineering
- Surveying
- Landscape Architecture

### MARKETS

· Sports & Recreation

### PROJECT REFERENCE

### **Craig Hutson**

CFO

847.800.9691

craig@ballparksofamerica.com



### HOSPITAL HILL PARK

### Kansas City, Missouri

### A PARK TO PERFECTLY BLEND WITH DOWNTOWN KC

The 3.5-acre Hospital Hill Park resides in the heart of downtown Kansas City, overlooking the picturesque skyline. Situated near city landmarks like the World War I Museum, Crown Center, and Union Station, Hospital Hill Park is a central zone that has been frequented for over a century. Therefore, the city needed an updated park that fit in among its neighboring buildings. Ochsner Hare & Hare, the Olsson Studio, provided conceptual design services, bid assistance, and construction administration for the remodel.

The Olsson Studio designed the park to promote activity and amusement. Elements of the park include an active walking trail, exercise equipment, basketball court, decorative lighting, tables, benches, shelters, and trellis. We also incorporated color-changing, programmed LED light poles into the monumentation design. This way, the park can be enjoyed and identified even after dark.

Hospital Hill Park is now open, inviting neighborhood residents and employees of the nearby hospital and offices to enjoy fresh air and exercise.



### DATES

2008 - 2012

### SERVICES

- Site Design
- Landscape Architecture
- Construction
   Management

### MARKETS

· Sports & Recreation

### PROJECT REFERENCE

### **Mark McHenry**

KCMO Parks Director 816.513.7504 mark.mchenry@kcmo.org



### DOWNTOWN OUTDOOR PERFORMANCE AND FESTIVAL SPACE

### Lee's Summit, Missouri

### CAPITALIZING ON OPPORTUNITY TO BUILD CULTURAL AND CREATIVE SPACES

In an effort to establish the City of Lee's Summit's reputation as a destination for arts and culture, Ochsner Hare & Hare, the Olsson Studio, developed event space programming elements for a performing arts campus and farmers market. This created

The project included gathering input from stakeholders; planning for event space, circulation patterns, and pedestrian areas; programming session, design charrette, completing presentation level master plan that defines the outdoor space; holding public open houses, and estimating the cost for development. Design was complete in 2018, and construction is soon to follow.

### DATES

2016 - 2018

### SERVICES

- Site Design
- Civil Engineering
- Survey
- Master Planning

### MARKETS

· Sports & Recreation

### PROJECT REFERENCE

### **Nick Edwards**

Director of Administration 816.969.1000 nick.edwards@cityofls.net



### **ORIGINAL MILE PARK**

### Midwest City, Oklahoma

### A PARK SPACE TO REVITALIZE MIDWEST CITY'S FIRST NEIGHBORHOOD

Ochsner Hare & Hare, the Olsson Studio, developed the master plan for the Midwest City Original Mile Park and Civic Plaza project. The project was for the central hub of the Original Mile, a post war award-winning model community that is the heart of Midwest City. The park and civic space was developed as the civic heart of the development and connects to the Town Center Retail Lifestyle Center to the south.

The program includes permanent performance stage, temporary performance stage, flexible parking/ plaza space with bollard control, restrooms, splash pad, plaza, pavilions, toddler playground, adventure playground, stream playground, dog parks, open play field, specialty lighting, as well as redevelopment for townhome living and parking.

The project has received overwhelming support and has been approved by the city council. Next steps include design development and construction documentation and construction.

### DATES

### 2017

### SERVICES

- Site Design
- Master Planning
- Construction
   Management

### MARKETS

· Sports & Recreation

### PROJECT REFERENCE

### **Billy Harless, AICP**

City of Midwest City Community Development Director 405.739.1228 bharless@midwestcityok.org

GOVERNMENT & COMMUNITY BUILDINGS

ENVIRONMENTAL

RIGHT-OF-WAY ACQUISITIONS

MASTER PLANNING

APPENDIX

**SURVEYING** 

CONSTRUCTION INSPECTION & MATERIALS TESTING

olsson

LANDSCAPE ARCHITECTURE

**ECONOMIC DEVELOPMENT** 

**SCADA** 

**AIRPORTS** 

RENEWABLE ENERGY

RAIL/QUIET ZONES

### **GOVERNMENT/COMMUNITY BUILDINGS**

### Our work will leave a long-lasting, positive impression on your community.

We fulfill that promise to all our land development, commercial development, and facilities clients. It's why we've been in business for more than 60 years.

Not only do we design our projects well, but we also make sure they look good. Our aesthetically pleasing projects minimize the impact on the environment, and we also design them to respect existing land uses, available infrastructure, and government regulations and ordinances.

Olsson provides multidisciplinary design services for mixed-use, commercial, and residential land development. We also provide development for industrial, sports and recreation, education, data centers, and healthcare projects.

We want the communities who hire us to gain the maximum value from our projects, and we work hard to provide them the highest possible return on their investment.





### CLEAN WATER SERVICES BUILDING

### Springfield, Missouri

Olsson was retained by the City of Springfield and Sapp Design Associates Architects to provide civil engineering services for the City of Springfield's Clean Water Operations Facility at 755 North Franklin Avenue. The project consisted of a 12,000-square-foot LEED-certified building that serves as a home to the City of Springfield Environmental Services, Clean Water Services Division.

The facility also provides office space and bathroom amenities for the Recycling Center, which is located south of the facility. Olsson's services included site storm design, site grading plans, pervious concrete with underground storage, sediment and erosion control design, site planting review, and construction administration. Construction of the Clean Water Services building was completed in spring of 2016, and the project construction cost was approximately \$3 million.



### DATES

2013 - 2016

### **SERVICES**

- Civil
- Surveying
- Landscape
   Architecture

### **MARKETS**

- Government
- Land & Facilities

### PROJECT REFERENCE

James C. Stufflebeam, AIA, NCARB

Vice President 417.877.9600 stufflebeam@sdaarchitects.com



### JOPLIN PUBLIC TRAINING FACILITY

### Joplin, Missouri

After the May 22, 2011 Joplin Tornado, FEMA temporary housing units were constructed on land just south of the Joplin Regional Airport. Olsson provided site design services for these temporary housing parks. Once the area was no longer needed for temporary housing, the City decided to use the land to build a Public Training Facilty for Fire and Police training. The site needed resdesigned for the new use. Because of Olsson 's familiarity with the land, the utilities and existing conditions, the city selected Olsson to redesign the site for its new use. The city then amended Olsson's design contract to include construction phase and Resident Project Representative services. The Public Training Facility will provide several types of training mediums. These include driving courses, staged auto accident assessments, S.W.A.T. and K9 obstacle courses, burn props, fire training tower, flamable liquids and gas extinction pads and collapse rescue props.

Since the engineering and architecture contracts are separate, coordination with other design professionals was critical to the overall project success.

### **DATES**2013 - 2015

### **SERVICES**

Civil

### Special Inspections

Construction
 Management

### **MARKETS**

Government

### Land & Facilties

### PROJECT REFERENCE

**Troy Bolander, PE**Public Works Director
417.624.0820 ext. 510
TBolande@joplinmo.org



## CHRISTIAN COUNTY JUSTICE CENTER EXPANSION

### **Christian County, Missouri**

Olsson was selected as a subconsultant to Paragon Architecture, partnered with Treanor Architects in December 2016, for the Christian County Justice Center expansion. The project entails a significant, \$11-million addition to the judicial center complex. The 14-month long construction period will result in more courtrooms, circuit court offices, prosecuting attorneys offices, and juvenile center offices. Although this project is referred to as an expansion, the new building will not be connected to the current one, and will in fact be located to the south.

Services provided by Olsson included site/civil engineering design, landscape architecture and land surveying. Project is currently under construction.

The expansion is anticipated to be completed by Spring of 2019.

### DATES

2016 - 2019

### **SERVICES**

Civil

- Landscape
   Architecture
- Surveying

### MARKETS

Government

Land & Facilities

### PROJECT REFERENCE

### **Brad Erwin, AIA**

Project Architect 417.885.0002

erwin@paragon-architecture.com



### JOPLIN PUBLIC LIBRARY

### Joplin, Missouri

An EDA grant for \$25 million was awarded to Joplin to construct a new public library. Awarded funding was based on the redevelopment needs after the 2011 tornado that destroyed nearly a third of the city. The Planning and Neighborhood Development department needed a trusted engineer to design site infrastructure. The design would need to be sensitive to increased vehicle, pedestrian and bicycle traffic, storm water runoff and quality as well as aesthetic needs in landscape architecture.

Joplin chose the Olsson team to complete the site design tasks, construction obersation and materials testing, as well as surveying services. The nearly nine acre site required vehicle, pedestrian, and bicycle accommodations and innovative storm drainage for flood protection and water quality.

Features of this project include the following: parking islands with permeable rain traps to reduce storm runoff and increase water quality; trail and sidewalk connectivity for easy pedestrian and bicycle access; and plans for a future electric charging station for electric/hybrid vehicles.



### DATES

2015 - 2017

### SERVICES

- Civil
- Special Inspections
- Materials Testing
- Surveying
- Geotechnical
- Construction
   Inspection

### MARKETS

Local

Commercial

### PROJECT REFERENCE

### **Tony Robyn**

Assistant Director of Planning 417.624.0820 trobyn@joplinmo.org



# REPUBLIC CITY HALL - MUNICIPAL CENTER SITE FEASIBILITY STUDY

### Republic, Missouri

Olsson was hired as a subconsultant to H Design Group to perform a feasibility evaluation of four different potential sites for possible construction of new municipal facilities for the City of Republic, Missouri.

The primary objectives of this study included the following: gathering information to identify and prioritize the key site factors that are most important to the city; performing an economic and demographic study on each site to analyze the impact both on the proposed facility and on existing neighboring businesses/residences; developing conceptual designs for each site and facility layout, using a "charrette" approach; developing cost estimates for each location; and preparing a final feasibility report.

Olsson provided site/civil engineering consulting services for the various components of this process. The final feasibility report was completed in March 2016.

### **DATES** 2015 - 2016

### **SERVICES**

Civil

### MARKETS

Government

· Land & Facilities

### PROJECT REFERENCE

### **Brent Stevens**

Principal 417.887.6595 brent@hdesigngroup.com

### ENVIRONMENTAL

### We design innovative solutions that balance the needs of our clients and the benefits to the environment.

Olsson's Environmental team conducts all manner of environmental management services within Olsson and for a wide variety of clients. While serving clients with expert environmental management knowledge and experience, our Environmental team is also an integral component of the overall engineering design process, supporting Olsson's engineering teams with environmental compliance, permitting, and site assessment and remediation support. Our environmental engineering team is made up of experts in biology, ecology, geology, hydrogeology, meteorology, and natural resources who resolve past environmental conflicts and prevent future problems from taking place.

We help private and public entities navigate and proactively comply with complicated and ever-evolving regulatory processes, regulations, and permitting requirements at the local, state, and federal levels. Our environmental engineers and natural resources experts provide technically sound, environmentally aware, and economically justified solutions that are cost-effective and sustainable.

Our approach to environmental engineering works, as evidenced by the projects we've completed: wetlands that improve surface water quality; remediated urban sites that can now be safely and economically redeveloped; restored habitats for threatened and endangered species; well fields that provide safe drinking water; and successful environmental regulatory compliance for our wide range of public and private clients.





### WEST MEADOWS STREAM RESTORATION

### Springfield, Missouri

### STREAM RESTORATION BENEFITS THE ENVIRONMENT & COMMUNITY.

In conjunction with an environmental cleanup that was sponsored by an Environmental Protection Agency Brownfields Program grant, Olsson was contracted to complete a stream restoration project.

Previously, the stream was directed to a roadside ditch. Olsson recreated a natural pool-riffle sequence through the Brownfield remediation site. This process involved excavating 17 feet of waste concrete and construction rubble. Usable rocks and concrete rubble were retained on site and used during the stream restoration.

During cleanup and excavation, Olsson discovered what was most likely the historical Fulbright Spring. This spring was a significant water source for the first Springfield homesteaders. But, after the Burlington Northern Santa Fe Railyard construction, the spring was thought to have been lost. The City of Springfield is thrilled to be able to incorporate one of Springfield's original springs into its plans for Jordan Valley. Plans for the spring include serving as a water feature in the West Meadows green space portion of the multi-year Renew Jordan Creek initiative.

### DATES

2012 - 2013

### **SERVICES**

- Landscape Architecture
- Construction
   Management
- Environmental

### Planning & Permitting

- Hydrogeology
- Remediation

### MARKETS

Groundwater

### PROJECT REFERENCE

### **Chris Dunnaway**

Principal Engineer 417.864.1876 cdunnaway@springfieldmo.gov



### MERCY HEALTH SYSTEMS JOPLIN REPLACEMENT HOSPITAL

### Joplin, Missouri

### ENVIRONMENTAL ASSESSMENTS FIND SOLID GROUND AFTER A DISASTER.

FEMA worked with partners at the local, state, and federal level to coordinate the response to the devastating tornado that struck Joplin, Jasper County, Missouri, on May 22, 2011. The included coordination with Olsson and other consultants to quickly recover a town and it's needed infrastructure from such devastation. The tornado was a massive EF5 multiple vortex tornado with winds over 200 mph.

According to the local branch of the American Red Cross, approximately 25 percent of the City of Joplin was destroyed. Mercy Hospital Joplin (formerly known as St. John's Regional Medical Center), a 367-bed facility serving Joplin and the regional area, was devastated beyond repair by the tornado.

Shortly after the tornado, a temporary, 60-bed field hospital was erected using temporary fabric shelters, allowing the hospital to provide some emergency

### DATES

### **SERVICES**

2011-2013

- Site Design
- · Civil Engineering
- Geotechnical
- · Materials Testing
- Special Inspections
- Surveying

### MARKETS

- Federal
- State
- Local
- · Highways & Streets

Construction
 Management

John's Regional Medical Center, Tornado Destruction

- Environmental Planning & Permitting
- Remediation
- Groundwater
- Stormwater
- Healthcare

### PROJECT REFERENCE

### John R. Farnen

Executive Director Mercy Strategic Projects 314.628.3494 John.Farnen@Mercy.Net and other medical services to the community. Olsson was retained by Mercy Joplin Hospital to complete an Environmental Assessment for a proposed new location. Under the National Environmental Policy Act (NEPA), FEMA is required to review the proposed action and possible alternative solutions.

Two alternatives were evaluated in an environmental assessment. Under the "No-Action" alternative, the hospital would not be rebuilt. The second option lead Mercy and the City of Joplin to fulfill the urgent need of rebuilding the hospital to provide the necessary level of medical and health care services to the people of Joplin and the surrounding area.

The purpose of this project was to help Mercy Hospital Joplin construct a new medical facility so healthcare professionals could continue to provide vital medical and health related services and facilities to the residents of Joplin and the surrounding region and to relieve the burden that the loss of the hospital has placed on the remaining medical facilities in the region.

The environmental assessment found that the proposed action alternative would have no significant adverse impact on the human environment. A Finding of No Significant Impact (FONSI) was signed, and the proposed construction at a new location was allowed to proceed. Olsson's ability to quickly react and assemble a team of not only environmentalist, but other specialists across the firm, made the work that was accomplished in Joplin something for our firm to be proud in.





## MERCY HEALTH SYSTEMS REMEDIATION EFFORTS

### Joplin, Missouri

### **QUICK RESPONSE TO REMEDIATE.**

During construction of the new St. John's Mercy Hospital in Joplin, Missouri, the presence of strong gasoline vapors were detected during excavation of trenches for storm sewer infrastructure.

Olsson was providing construction oversight services for Mercy Health Systems, and upon discovery of the gasoline vapors, including concentrations exceeding flash points, immediately called on the Olsson environmental staff to assess site conditions and determine the most expedient point of response.

Olsson environmental team members arrived on site within hours of the report to assess site conditions. A former gasoline station had been present on the Mercy site that had never had leaks reported during its time of operation, nor after closing in the late 1990's. Soil conditions consisted of interbedded layers of sand and gravelly clays, with potential sub-surface conduits to surface water drainages and a nearby pristine water source. The reconstruction of the adjacent road was scheduled to occur within the next 2 weeks to restore traffic and access to an adjacent school.

### **DATES** 2012–2013

### SERVICES

- · Site Design
- · Civil Engineering
- Materials Testing
- Special Inspections
- Construction

### MARKETS

- Federal
- State
- Local

- Management
- Environmental Planning & Permitting
- Remediation
- · Highways & Streets
- Stormwater
- Healthcare

### PROJECT REFERENCE

### John R. Farnen

Executive Director Mercy Strategic Projects 314.628.3494 John.Farnen@Mercy.Net Olsson's environmental team immediately coordinated with a remediation contractor to initiate soil sampling and soil removal for special disposal and/or remediation to protect the nearby water resources. The following day, the remediation team was on site and began excavation of soils where strong gasoline vapors had been detected, and near the location of former underground storage tanks.

As soil was removed, samples were collected for on-site vapor analysis to determine the presence of gasoline and organic vapors and the need for possible further soil removal. Samples were also collected for laboratory analyses to determine concentrations of gasoline range organics remaining in the soil when vapors were below a State of Missouri action level.

Within 2 days, the primary source of contamination had been removed and backfilled with clean soil to allow the continuation of road re-construction, with a full investigation of the extent of remaining contamination in the soil and possibly in groundwater planned for later in the fall.





## 32ND STREET & CENTRAL CITY INTERCHANGE

### Joplin, Missouri

### ADHERING TO NEPA & STATE REGULATIONS FOR CONTINUED IMPROVEMENT.

Olsson worked with the City of Joplin in the engineering design for a new interchange at the intersection of 32nd Street and Central City Road in southwest Joplin; an area of new and rapid development. The engineering design involved the conversion of an existing stoplight at this busy intersection to a traffic-calming circle, and widening of both 32nd Street and Central City Roads approximately one-quarter to one-half mile from the intersection. Olsson followed environmental regulations and documentation processes required by the National Environmental Policy Act (NEPA) and the State of Missouri to complete the assessment of the project site.

In completing this environmental documentation, Olsson conducted preliminary assessments for potentially hazardous waste site or hazardous waste generators, led wetland and stream delineations and U.S. Army Corps of Engineers consultations, reviewed and surveyed threatened and endangered

### DATES

2017-2018

### SERVICES

- Environmental Planning & Permitting
- Hydrogeology

### MARKETS

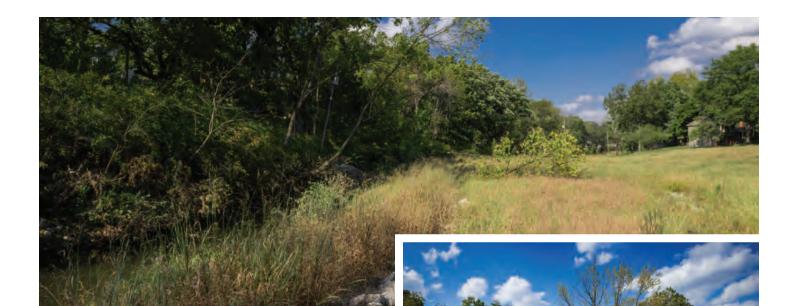
- Highways & Streets
- Federal

### PROJECT REFERENCE

### **David Hertzberg, PE**

City of Joplin Public Works Director 417.624.0820 Dhertzbe@joplinmo.org species and migratory birds, and conducted cultural resource consultations, and social/economic impact reviews. The successfully completed environmental documentation packet provided the information necessary to demonstrate that possible impacts resulting from the construction of the rebuilt intersection would be minimal, paving the way for obtaining all permits necessary for the project and continued development in the southwest corner of Joplin that will continue to create new opportunities in the city.





# ON-CALL SERVICES FOR KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT

### State of Kansas

### **ON-CALL PROJECTS OF ALL SIZES & SCOPE.**

Olsson is a current indefinite delivery/indefinite quantity contract holder with the Kansas Department of Health and Environment (KDHE) for environmental services. The services conducted under this contract include primarily hazardous, toxic, and radioactive waste assessment, investigation and characterization, remedial design, and remedial action oversight.

Projects typically include Phase I and Phase II environmental site assessments, contaminated site investigations, groundwater monitoring, and remedial design and remedial action oversight. Olsson is a valued on-call environmental team because of our diverse capabilities. Any environmental project that KDHE has, Olsson is prepared to handle in a timely and budget conscious manner, and with proactive planning.

### **DATES** 2016–2018

### SERVICES

- Environmental Planning & Permitting
- Remediation

### MARKETS

State

### PROJECT REFERENCE

### **Seth Mettling**

Brownfields Coordinator Bureau of Environmental Remediation 785.296.5519 seth.mettling@ks.gov

- Special Inspections
- · Materials Testing

Groundwater

### GEOTECHNICAL

### It's what lies beneath that tells the whole story.

So, we dig right in, exploring the subsurface soils, bedrock, and groundwater conditions on the project site to determine the best practices for site development for your proposed project.

At Olsson, our team of in-house experts offers a full spectrum of investigative services for your projects, from roller coasters to hydroelectric power plants. We can handle small to large-scale horizontal and vertical construction—from roadways, bridges, and dams, to convenience stores, multistory office buildings, retaining walls, and high-rise hospitals. There's truly no project we can't tackle.





### MERCY HEALTH REPLACEMENT HOSPITAL

### Joplin, Missouri

As a result of the EF-5 tornado that hit the City of Joplin on May 22, 2011, Olsson was hired by Mercy Health Systems and the project architect to provide site/ civil engineering design, geotechnical investigation services, environmental permitting, surveying, special inspections and materials testing, and FEMA compliance services for the new replacement hospital.

The new hospital was developed on 120 acres. The new hospital is comprised of 424 beds, Level I trauma, medical surgery, critical care, women's and children's care, behavioral health, and rehabilitation, amongst other services.

Olsson's Special Inspections and Materials Testing teams provided ongoing services throughout construction. The teams provided subsurface investigation for the site, including design parameters for retaining walls and deep foundations. Olsson also helped design rock anchors for foundation walls.

### DATES

2012 - 2015

### SERVICES

- Special Inspections
- Materials Testing
- Geotechnical
- · Civil Engineering

### **MARKETS**

- Healthcare
- Land & Facilities

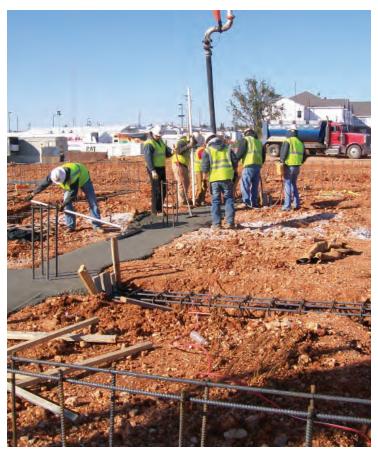
### PROJECT REFERENCE

### John R. Farnen

Executive Director 314.628.3494 John.Farnen@Mercy.Net

### PROJECT PROFILE

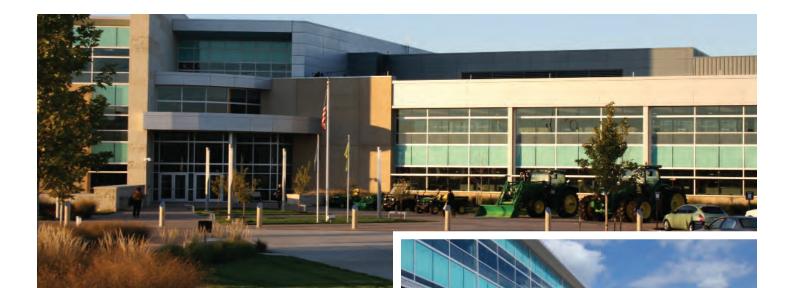
The 800,000-square-foot steel framed complex included an eight-story patient tower on drilled pier foundations. Olsson conducted steel frame SidePlate blast/seismic resistant steel testing. The building required extensive nondestructive testing, including magnetic particle and ultra sonic testing of complete joint penetration welds. Olsson also conducted testing for fill foundations, reinforced concrete, masonry, and structural steel.











## JOHN DEERE MARKETING & SALES HEADQUARTERS

### Olathe, Kansas

John Deere has a proven record of providing highquality equipment for the agricultural industry, as well as commercial, residential and construction industry customers. In designing this project in Olathe, Kansas, Olsson worked with John Deere to continue the company's tradition of excellence.

This 126,150-square-foot building was designed to house the John Deere North America Marketing and Sales Facility. In working with John Deere on the design of a new building in Olathe, Kansas, Olsson helped the company continue its tradition of excellence. The building, which sits on 17 acres, reflects Deere and the Company's commitment to the environment.

It is LEED®-registered with the U.S. Green Building Council and has earned a Gold rating.

Some noteworthy aspects of the project include:

### DATES

2010 - 2013

### **SERVICES**

- Civil
- Geotechnical
- Landscape
   Architecture
- Surveying

### **MARKETS**

· Land & Facilities

### PROJECT REFERENCE

### **Tom Park**

John Deere USA Planner 919.804.2813

### PROJECT PROFILE

- Extensive daylighting in the building.
- Use of recycled site and building materials.
- Use of bioswales and bioretention ponds to control stormwater quality and quantity.
- Protection of existing trees.
- Use of native and drought-tolerant plant species in the landscaping plan.
- Reduction of landscaping irrigation by 50 percent.

Olsson provided development consultation, civil design, landscape architecture, geotechnical services, surveying, and LEED® consultation services on the project. Integrating the native landscaping, using bioswales and ponds, and using regional material in the vast amount of open space combine to create a beautiful setting on the Kansas prairie, in keeping with the kind of quality that John Deere has demonstrated through the years.







### HORIZONS BUSINESS PARK

### Riverside, Missouri

Horizons, a 260-acre site at Interstate 635 and Missouri 9, is a park-like setting that is to be home for a projected 5,900 jobs over the next generation. The site encompasses 2.6 million square feet of total building area. The site include 25 acres of lakes, three miles of tree-lined canals, and land set aside for public use and recreational purposes that is projected to connect to the Missouri River Trail. The site will be constructed over the next 20 years, with a total estimated private investment of over \$300 million.

Olsson serves as the developer's engineer on this project. Analysis and design of the business park's infrastructure is being led by Olsson's municipal team. Other services being provided include land development, geotechnical engineering, surveying, and construction services.



### DATES

2012 - Present

### SERVICES

- Geotechnical
- Special Inspections
- Materials Testing

### MARKETS

- Land & Facilities
- Commercial

### PROJECT REFERENCE

### **Chad Meyer**

Project Manager 816.888.7380 cmeyer@northpointkc.com



# MISSOURI ARMY NATIONAL GUARD SINK HOLE & MOTOR POOL PARKING ANALYSIS

### Aurora, Missouri

Olsson evaluated the sink hole using geotechnical investigation, made recommendations, evaluated any additional structures currently affected by the sink hole, and provided recommendations for protecting on-site structures from the sink hole.

### DATES

2013 - 2014

### **SERVICES**

Geotechnical

### **MARKETS**

- Government
- Land & Facilities

### PROJECT REFERENCE

### **Chris Pritchard**

Military Project Manager 573.638.9861 Chris.Pritchard4.nfg@mail.mil



### KEMIN INDUSTRIES CAMPUS

### Des Moines, Iowa

### **DES MOINES HEADQUARTERS TRIPLES IN SIZE**

Kemin Industries, a local ingredient manufacturer, moved to expand their headquarters in Des Moines. Ochsner Hare & Hare, the Olsson Studio, along with Kemin Industries and FEH Architects, developed a master plan and executed construction documents for the major expansion.

Services included master planning and conceptual design, design development, construction documents, and construction administration for the project landscape architecture work. This also included landscape design, irrigation design, hardscape design, plaza and patio design, water feature design, and signage and monumentation design.

The a portion of the building and its outdoor patio face an expansive courtyard, which the Studio designed. In its center lies a pond with a programmed water feature.

The \$120 million building employs 2,500 people and has plenty of room to expand by over 200 people in the future.

### DATES

2014 - 2017

### SERVICES

- Landscape Architecture
- · Site Design
- Master Planning

### **MARKETS**

Commercial

### PROJECT REFERENCE

### **Denny Sharp**

President 515.288.2000 dennys@fehdm.com

### ARCHITECTURAL

### It's more than just interesting and creative work.

The nature of Olsson's municipal work often calls for architectural design of various facilities from office space and operations facilities to maintenance structures.

To create of more efficient team and a more cohesive design for our clients, Olsson offers in-house architecture services. Our team specializes in municipal structures and has become known for providing creative design solutions with both functionality and aesthetic appeal. As well, with an eye toward sustainable design, several of members of Olsson's staff have become LEED certified. We are prepared to work with you to find sustainable design solutions that are feasible in terms of cost and long-term effect.

If a larger project requires the services of an architectural firm, Olsson will team with Paragon Architecture for its successful completion. Paragon Architecture's collaborative process guides and informs everyone involved from project conception past completion. They strive not only to enrich every community with quality design, but to do so through innovative thinking and focused expertise. They apply focused expertise and a collaborative team design process to co-create enhanced spaces for users. "Focused Expertise" means that they have invested their time and energy into specific markets and industries and partner with others to bring world class knowledge to their clients. "Collaborative Team Design" is just as much a part of their product as our finished design. Paragon believes that the best product for their client requires their knowledge and experience combined with their own. Paragon Architecture not only focus on delivering a great design, but ensuring that the process they utilize to reach the final product is focused on quality and exceeds their clients' needs.





## ADMINISTRATION CENTER SETS GREEN EXAMPLE

### Lowell, Arkansas

WITH THE NEED TO EXPAND ITS

ADMINISTRATION FACILITIES, BEAVER WATER
DISTRICT (BWD) DECIDED TO SHOOT FOR
"GREEN" AND ENDED UP WITH "GOLD"

Clean drinking water for 250,000-plus Northwest Arkansas residents. Water conservation is the most cost-effective and environmentally sound way to reduce the demand for water. With this in mind, Beaver Water District sought to apply Low-Impact-Development aspects in order to be better stewards of the environment as well as to help educate the public about sound environmental practices.

The BWD Administration Center is a roughly 13,500 S.F. building situated on a 10-acre site. The building includes high efficiency electrical, lighting, plumbing, and HVAC systems, recycled materials, materials of local origin, and sustainable building materials. It was designed and constructed in accordance to the U.S. Green Building Councils LEED guidelines and subsequently achieved the highest status as LEED GOLD.

### **DATES** 2015

### **SERVICES**

· Planning and Design

### MARKETS

Land and Facilities

### PROJECT REFERENCE

Lane Crider Chief Executive Officer 479.754.3148 lcrider@bwdh2o.org The design included attention to open common space as well as daylight, views, and interior comforts systems. The building was fully commissioned.

The design team participated in the LEED charrette process and worked with the BWD staff to integrate the design needs of each discipline while maintaining the overall project schedule. The Olsson team also provided civil engineering design services and construction administration.

Tremendous effort was made to utilize sustainable materials that were produced within a 500-mile radius in-as-much as possible.

Examples of sustainable features utilized include:

The use of natural lighting and installation of motion detectors for lighting control

A geo-thermal heating/cooling system

Recycled materials throughout

Water-saving fixtures

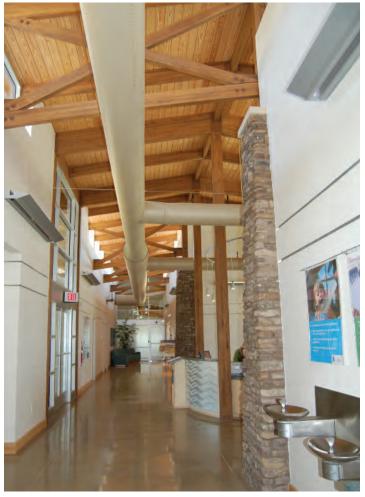
A man-made water feature utilizing recycled water from the adjacent water plant

The design provides functional and effective office space, gives employees a stimulating and healthy work environment and also serves as an educational facility for water resource conservation.

The new Center sets an example of how aesthetically pleasing architecture, cost-effective methods, recycled material and sustainable design can make an immediate and long-term positive impact on the planet.

Public educational events and tours are regularly conducted at the new facility, teaching that sustainable, low-impact development is practical, cost-effective and aesthetically pleasing.

The new facility serves as tangible proof of Beaver Water District's ideals for conservation and environmental stewardship.







## FAYETTEVILLE SOLID WASTE TRANSFER STATION

### Fayetteville, Arkansas

### LOW-IMPACT-DEVELOPMENT IN LINE WITH CITY'S GOAL FOR "GREEN" DEVELOPMENT

The expansion of the city's Recycling and Trash Solid Waste Transfer Station involved a full remodel of the existing 2,800 square foot office building and the design of an additional 5,500 square foot space.

The city's goal for this project was to design the new building to meet the U.S. Green Building Council's LEED Silver standard with Low-Impact-Development (LID) site design, energy and water use efficient design, and compliance with the city's resolution for "green" buildings. Among these features the design focused on energy and water efficiency and LID treatment of storm waters. Additionally, odor control in the office space was addressed.

Olsson's team provided architectural, structural and civil site design. In addition, the team's project engineer, as a LEED Accredited Professional, provided LEED management for the overall project as it progressed through the construction phase.

### DATES

2017

### **SERVICES**

· Planning and Design

### **MARKETS**

Land and Facilities

### PROJECT REFERENCE

Wade Abernathy 479.575.8663 wabernathy@fayetteville-ar.gov



## WEST SIDE WWTP OPERATIONS BUILDING

### Fayetteville, Arkansas

### WASTEWATER OPERATIONS BUILDING BLENDS WITH NEIGHBORHOOD HOMES

The Operation's Building, as part of the design of Fayetteville's new Westside Wastewater Treatment Plant, was designed by members of the Olsson team with features to blend in with the adjacent future residential areas. To facilitate this theme, the exterior of the buildings are masonry and horizontal metal panels and low profile hipped roofs all of earthy neutral colors.

The 5250 square foot building houses office space, the plant's control center, process laboratory, staff locker rooms, restrooms /showers, and a break room. Also included is a multi-purpose room that is a part of, but can be isolated from, the break room. This room can be configured for media presentations, public meetings and events, and staff meetings.

The Control Room houses the computer equipment and monitors for the plant from which signals can be monitored and controlled.

## **DATES** 2008

· Planning and Design

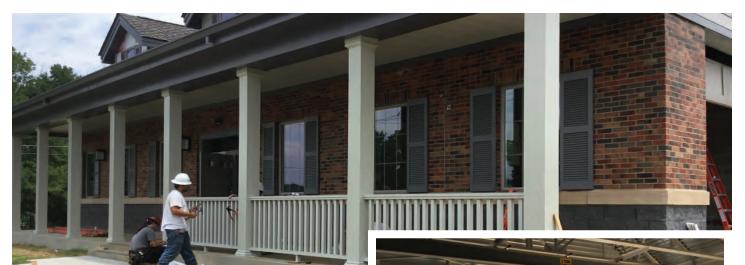
### MARKETS

**SERVICES** 

Water

### PROJECT REFERENCE

Jim Beavers Water and Sewer Operations 479.575.8318 jbeavers@fayetteville-ar.gov



## SPRING CREEK LIFT STATION

### Springdale, Arkansas

## BLENDING FORM WITH FUNCTION TO MEET INFRASTRUCTURE NEEDS

The Spring Creek Lift Station is was designed to blend with the structures of the surrounding neighborhood, with a rural home architectural facade. The design features include a block and brick exterior, a large front porch, and dormers.

One of the goals of the Olsson design team is to provide necessary infrastructure, such as wastewater lift stations, in a way that does not detract from the value of community. Creating an architectural facade, that upon first glance appears to be a house or barn for example, allows for improved neighborhood value.

Working closely with the engineering team and with the client, Olsson's architectural designers were able to create a design that would appropriately house the lift station equipment, but not detract from aesthetic value of the neighborhood.



### DATES

2018

### **SERVICES**

· Planning and Design

### **MARKETS**

Water

### PROJECT REFERENCE

Rick Pulvirenti Springdale Water Utilities 479.751.5751 rpulvirenti@springdalewater.com



## WITHROW SPRINGS STATE PARK BATH HOUSE

### **Huntsville, Arkansas**

### **BATHHOUSE FACILITY BLENDS FORM AND FUNCTION**

The design of a new bathhouse was one of the highlighted components of overall campground improvements to Withrow Springs State Park.

The project required the design of a new section of campgrounds within the existing park, and a new restroom and bathhouse facility. Also included in this project were improvements to the water and sewer facilities and site development.

Providing both site planning and architectural services for this project, our team worked closely with staff representing the Arkansas Department of Parks and Tourism. The goal was to create an inviting and usable public space for this much-visited state park.

This particular project showcases how our in-house architecture department streamlines the design process in tandem with site civil design.



### **SERVICES**

· Planning and Design

### MARKETS

· Land and Facilities

### PROJECT REFERENCE

John Lester General Manager 479.754.3148 john.lester@clarksvillelightwater.com







































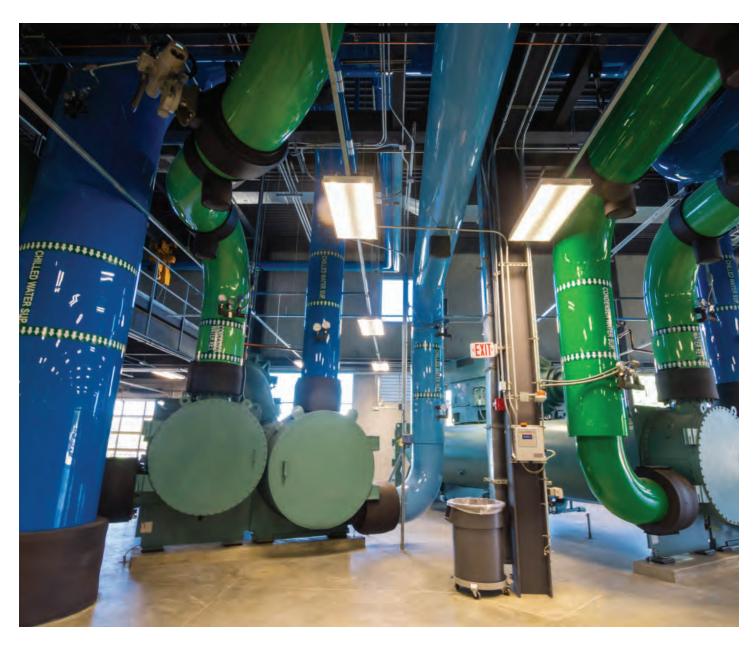
## MECHANICAL/ELECTRICAL/PLUMBING

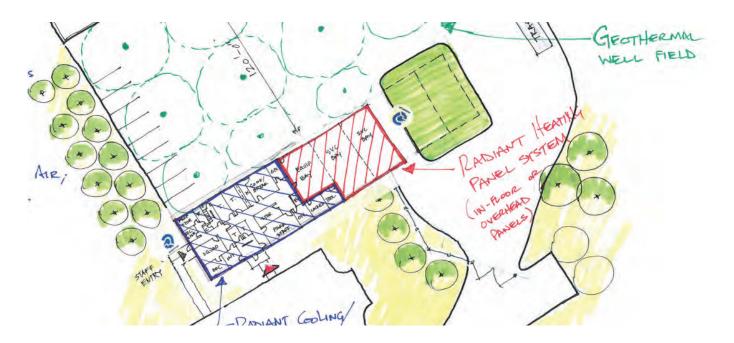
### A building's operating environment should be safe, effective, and sustainable.

A building designed with sustainable mechanical and electrical design concepts can reduce energy consumption by as much as 50 percent, with little or no effect on the cost of construction. That's why we, as responsible stewards of our environment, help clients incorporate creative real-world sustainable design concepts that will produce true cost savings and reduce energy and material resource consumption.

At Olsson, we provide HVAC, plumbing, and fire protection design services for the following types of projects: commercial, data center, healthcare, industrial, laboratory, pharmaceutical, municipal, military, school, and thermal energy.

Whether it's a new build or retrofit, we work with our clients to create an environment that incorporates the highest level of technology and sustainable design that will meet their goals.





# BIG BULL CREEK MAINTENANCE & PARK POLICE FACILITY

### **Edgerton, Kansas**

### A CORNER LOT PROJECT THAT IMPACTS THE BLOCK.

Olsson's civil and electrical engineers worked alongside an architect on this project and helped create a seamless process in the development of the new facility. Olsson's responsibilities include preparing preliminary and final design plans. Our services include civil design, permitting, survey, MEP, geotechnical, and stormwater design. Our team also provided construction administration services—seeing the project all the way through. This project is part of the new \$6M park design project for the Big Bull Creek Park.

## **DATES** 2016–2017

### SERVICES

- · Civil Engineering
- Electrical Engineering
- Mechanical Engineering
- · Structural Engineering
- Geotechnical
- Surveying
- Construction
   Management

### MARKETS

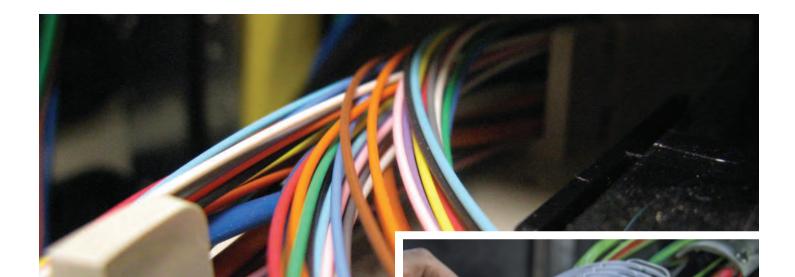
- Local
- Stormwater

### Industrial

### PROJECT REFERENCE

### **Cliff Middleton**

Planning & Development Manager 913.438.7275 cliff.middleton.joco.gov.org



## CITY HALL & JUSTICE CENTER FIBER DESIGN

### Leawood, Kansas

#### PREPARING FOR NETWORK GROWTH.

Fostering connectivity and advancement, Olsson took part in designing the first phase of the City of Leawood's fiber network. This phase was implemented between Leawood City Hall and the New Justice Center. Phase I of the communications network included a fiber ring to provide network redundancy to ensure network availability for the City of Leawood and allow expansion of the network in the future. The project consisted of the multiple phases that involved:

#### **DATA COLLECTION**

Facilities and corridors proposed for the fiber installation were assessed. Olsson coordinated with Johnson County to obtain GIS and AIMS mapping, then identified topographic features and utility locates. After gathering information, preliminary plans for utility coordination were determined and coordinated with the city.

## **DATES** 2012–2013

### SERVICES

- Community Planning
- · Electrical Engineering

### **MARKETS**

- State
- Network Planning

### PROJECT REFERENCE

David Ley, PE
Director of Public Works
City of Leawood
913.663.9131
davidl@leawood.org

- · Systems Engineering
- Geographic
   Information Systems

#### **PRELIMINARY PLANS**

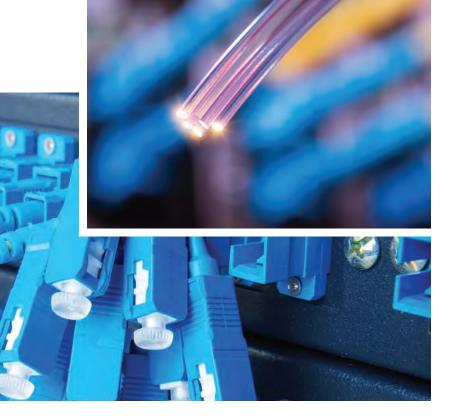
Olsson completed the communications design, which included duct sizing, routing, fiber sizing, pull box locates, and slack locates. The design included fiber termination in fiber distribution units, and splicing and branch cables required to connect to the City of Overland Park fiber facilities.

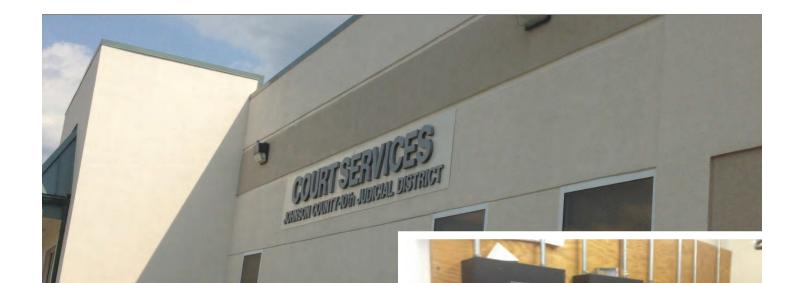
### **FINAL PLANS**

Final plans were submitted with detailed quantities, connections, and cost estimates. The plans included an overall network diagram, a communications plan sheet, a building entry plan sheet, fiber splicing details, and traffic control sheets.

## BIDDING & CONSTRUCTION ADMINISTRATION SERVICES

Olsson prepared the project bidding manual with technical specifications and attended the preconstruction meeting. After construction began, Olsson provided a weekly inspection check for the five-week construction duration.





## JOHNSON COUNTY SHERIFF'S TRAINING CENTER

### Olathe, Kansas

### STRUCTURE ASSESSMENT & REPURPOSING

This project consists of a proposed 16,500-square foot remodel. The building previously served as the Johnson County Youth Court Services Building. The area has been repurposed as the Sheriff's Training Center, which includes training rooms, storage areas, offices, a break room, locker rooms, and meeting rooms. Olsson was hired to provide the mechanical/electrical assessment for the building systems to determine whether the existing infrastructure can be expanded or newly designed.

## **DATES** 2013–2014

### SERVICES

- · Civil Engineering
- Electrical Engineering

### MARKETS

Local

### PROJECT REFERENCE

### **Daniel Wehmueller**

Facilities Management 913.715.1161 daniel.wehmueller@ jocogov.org

- Mechanical Engineering
- Structural Engineering
- Sports & Recreation



## ST. PETERS JUSTICE CENTER

St. Peters, Missouri

### POWERED UP FOR RESPONSE.

Olsson teamed with an architect and the City to design, construct, and complete this justice center (courtroom, council chambers, police department, and emergency operations).

The center contains a full central plant providing 250 tons of cooling and 900 MBH (British thermal units expressed in thousands) of heating. The plant to has frictionless centrifugal chillers and high-efficiency modular boilers. It also has variable air volume air handling systems and air to air heat recovery equipment.

The center is powered by underground volts, four-wire electrical service, and has a generator providing emergency power. Olsson also equipped the center with voice evacuation fire alarms and technology systems design—including communications, telephone and data, security access, and security surveillance.



### DATES

2007-2010

### SERVICES

- Mechanical Engineering
- · Electrical Engineering
- · Civil Engineering
- Landscape
   Architecture

### MARKETS

- Federal Government
- Data Centers

### PROJECT REFERENCE

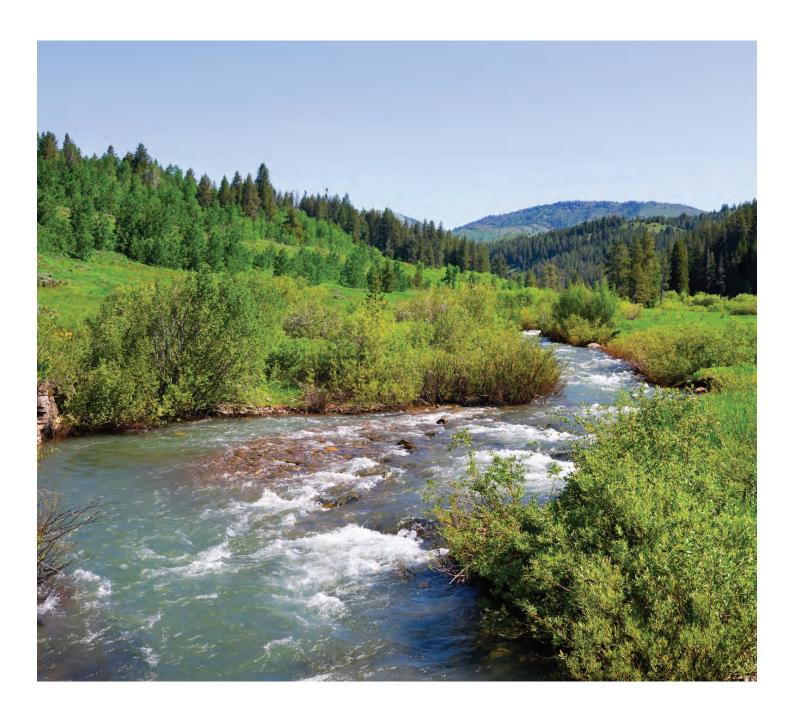
### **Chris Birkenmaier**

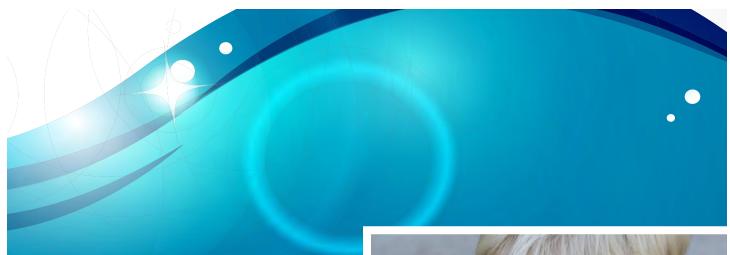
Hoefer-Wysocki Architects 816.777.3611 chris.birkenmaier@hoeferwysocki.com

## HYDROLOGY

### Without water, there would be no life on earth.

The supply of water available for our use is limited by nature. Although there is plenty of water on earth, it is not always in the right place, at the right time and of the right quality. Adding to the problem is the increasing evidence that chemical wastes improperly discarded yesterday are showing up in our water supplies today. Hydrology has evolved as a science in response to the need to understand the complex water systems of the Earth and help solve water problems. Olsson's hydrologists play a vital role in finding solutions to water problems, and interesting and challenging careers are available to those who choose to study hydrology.





## WELL-HEAD PROTECTION STUDY & MODEL

### Monett, Missouri

The City of Monett has implemented a temporary stay on the ability of landowners in the city to drill new water supply wells while they evaluate the potential harm new wells might have on the city's existing water supply wells. Olsson was hired to construct and calibrate a groundwater model of the city limits and surrounding areas. The study was finalized in July 2016. The groundwater model provided a tool that could evaluate the relative impacts of new well development on the City's existing wells so that city officials could make informed decisions regarding any limitations they may impose in the future.

The groundwater model development utilized the best available scientific data and information and the U.S. Geological Survey modeling software MODFLOW, the industry standard. Following construction of the model with these data sets the model was calibrated to real-world observed conditions such as water level and/or aquifer discharge to rivers and/or springs. Model calibration included a steady state calibration to determine initial steady state conditions and a



### DATES

2016 - 2018

### SERVICES

Drinking Water

### **MARKETS**

Water

### PROJECT REFERENCE

Skip Schaller, PE

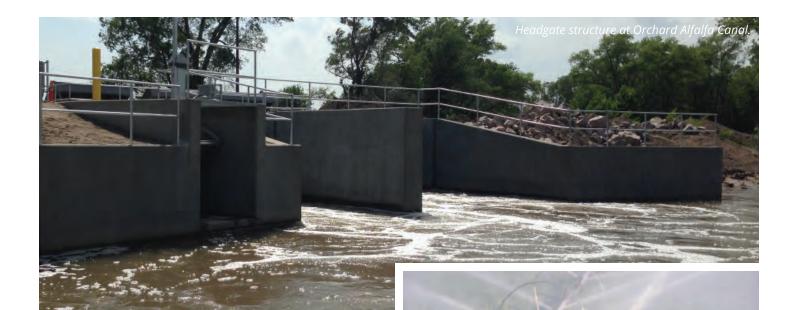
Utilities Superintendent 471.235.3300 Skip.Schaller@cityofmonett.com

### PROJECT PROFILE

transient calibration to ensure the model is properly calibrated to changes in aquifer stress over time.

Olsson used the model to delineate the wellhead protection area(s) by using reverse particle tracking for each of the cities active water supply wells. The results obtained from these runs were used to delineate the wellhead protection area(s) that will be presented to the city in the form of a map. This task also includes the generation of a report documenting the methods utilized in the analysis and the results. The model will also provide the City with a long-term water management tool for other evaluations such as the siting of additional water wells, or the relative benefits of water conservation on the aquifer.





## HYDROGEOLOGIC CANAL EVALUATIONS

### CENTRAL PLATTE NRD

### Orchard and Cozad, Nebraska

The Central Platte Natural Resources District (NRD) partnered with several irrigation districts in Dawson County to optimize their canal systems. A primary goal of this project is to maximize groundwater recharge along these canals, potentially including new recharge structures.

Our team conducted a hydrogeological study of the area to help the NRD evaluate potential recharge locations and track the benefits of recharge activities in the district. This included a detailed evaluation of hydrogeologic conditions such as depth to water table, soil properties, transmissivity of the principle aquifer, aquifer saturated thickness, bedrock geology, geologic cross-sections, and potential recharge locations.

We also designed and calibrated a groundwater model in the area near the three canals managed by the Central Platte NRD.



### **SERVICES**

2015 - 2016

- Environmental Permitting & Planning
- Hydrogeology
- Civil Engineering

### MARKETS

- Groundwater
- Stormwater



## UPPER SNAKE RIVER WATERSHED STUDY

### Jackson, Wyoming

### HELPING PROTECT OUR NATURAL RESOURCES & IMPROVE COMMUNITIES FOR YEARS TO COME.

The 2,771-square-mile Snake River watershed is one of the most iconic landscapes of the American West. Millions of tourists visit the Grand Teton and Yellowstone National Parks every year. Preserving the largest natural ecosystem in the lower 48 states is paramount to both the wild and human residents of the area. To ensure that this watershed continues to function as well as possible, the Wyoming Water Development Commission engaged our expertise for a Level I watershed survey.

Tourists come to experience the Wild West by seeing the natural beauty and the historic ranches that still share the landscape. These ranches work to coexist within the watershed by maintaining sustainable water and natural resources management practices. Many of the water conveyance systems are more than 100 years old, in disrepair, and in need of improvements to minimize further impacts to the natural environment.

Our team of geologists and engineers collaborated with Steady Stream Hydrology Inc. and Ron E. Vore, Ph.D., to evaluate the area, which included irrigated land, rangeland, wetlands, and streams.



### DATES

2015 - 2017

### **SERVICES**

- Master Planning
- · Site Design
- Environmental Permitting & Planning
- · Civil Engineering
- Hydrogeology

### MARKETS

- Government
- Groundwater
- Stormwater

### PROJECT PROFILE

Our completed study showed opportunities for improvements in the watershed's irrigation systems, livestock/wildlife upland watering sites, fire suppression water storage systems, stream channel condition and stability, among others.

As the prime consultant, Olsson was responsible for leading the watershed study and serving as the project geologist and engineer of record. Our team also coordinated and led public meetings every two months to inform the public and agency representatives that live in the watershed. In addition, we worked with the local fire department to engage the ranchers and land owners in the northern portions of the watershed. After several meetings, it became clear that landowners in this part of the state had distinct concerns they wanted to address through the project. For example, these individuals brought up the need for a rural fire protection water supply. At this time, the fire suppression water supply projects were not eligible for WWDC SWPP funds.

Our team described this and other relevant findings in the final report. As a result, the WWDC revised its eligibility criteria for SWPP funding, which helps more private and public land stewards in the area acquire funding. With the proposed improvements, the Upper Snake River watershed's natural wonders will continue to thrive, keeping the wildlife—and the tourists—returning for centuries to come.





# VOLUNTARY INTEGRATED WATER MANAGEMENT PLANS

LOWER ELKHORN & LOWER PLATTE NORTH NRDS

### Norfolk and Wahoo, Nebraska

The citizens of the Lower Elkhorn and Lower Platte North Natural Resources Districts (NRDs) depend on abundant, clean water for domestic, agricultural, and industrial uses. With the floods of 2011 and the drought of 2012, the NRDs recognized the need to engage in water management planning and therefore voluntarily initiated an Integrated Management Planning Process (IMP) in collaboration with the Nebraska Department of Natural Resources (NDNR).

Traditionally, the NRDs in the state focus on groundwater while the NDNR is concerned with surface water, which means they operate under different regulatory frameworks. Both the Lower Elkhorn and Lower Platte North NRDs felt that a partnership with the NDNR would result in a more holistic management approach that recognized hydrologic connections between surface and groundwater.

### DATES

2013 - Present

### **SERVICES**

- Master Planning
- Environmental Permitting & Planning
- Hydrogeology

### MARKETS

- Government
- Groundwater
- Stormwater

The NRDs partnered with Olsson to complete a comprehensive planning process and study that included the following components:

- Water inventory study and literature review for each district
- Establish stakeholder advisory committee and facilitate meetings in each district
- Draft future management plan for balancing water supply and use for the long term

In order to make informed decisions about future water management actions, our team needed to understand the current state of water use in each district. Thus, we performed an extensive review of existing research and literature for the area. This included the study of current geophysical surveys conducted by the Eastern Nebraska Water Resources Assessment (ENWRA) project, which provided insight into the complex nature of glacial and alluvial deposits across the districts. As part of our initial study we also identified and mapped current infrastructure such as irrigation canals, wells, and reservoirs.

During this time, we developed a stakeholder involvement plan to engage residents and landowners in the integrated management planning process. We wanted to get honest feedback about the issues facing the people that lived and worked in these districts as well as ideas about how to solve those problems.

Our team summarized findings from public meetings as well as our recommendations for integrated water management and water controls in the IMP, which was officially approved by the Lower Elkhorn NRD board in September of this year.



## RIGHT-OF-WAY ACQUISITIONS

### Acquiring public right-of-way can be a tough road to travel

Progress requires communication—sharing the whole story, not just the pieces. It's about honesty, divulging the facts, and treating others as true equals. Communication, at its finest, is what makes right-of-way negotiations successful for all parties involved. To excel in communication, the right personnel must take the lead—that's where Olsson comes in. We are ready to bring the respective communicative leader and team to the table for the public entity to provide right-of-way negotiations.

Olsson has been serving municipalities throughout its ever-expanding infrastructure and has dedicated right-of-way negotiators ready to assist with right-of-way negotiations.





## 20TH STREET SIDEWALK IMPROVEMENT PROJECT

### Joplin, Missouri

### A NEED FOR NEGOTIATIONS.

This project has been recently completed with the negotiation and acquisition of 36 easements. The acquisition of easements was for the purpose of constructing new sidewalks and entrances on both sides of a main arterial roadway. Residential and commercial properties were affected by the new pedestrian and biking improvement. This project was funded by a Community Development and Block Grant and Olsson complied with federal requirements in the right of way acquisition process.

### DATES

2016-2017

### **SERVICES**

- TransportationPlanning
- · Civil Engineering

### **MARKETS**

Highways & Streets

### PROJECT REFERENCE

### **Dan Johnson**

- Construction
   Management
- Local



## MAIN STREET SIDEWALK IMPROVEMENT PROJECT

### Joplin, Missouri

## COMMUNICATION AND ORGANIZATION MAKE RIGHT OF WAY NEGOTIATIONS SUCCEED.

This particular project enhanced the beauty of the major portion of a main arterial highway with new sidewalks, curbing, street lighting, and storm water improvements and major street intersection upgrades. Approximately 100 business owners were contacted for the acquisition of right of way along with permanent and temporary construction easements. This project won Olsson's prestigious "Project of Distinction Award" for engineering and design.



### DATES

2016-2017

### **SERVICES**

- Transportation Planning
- · Civil Engineering

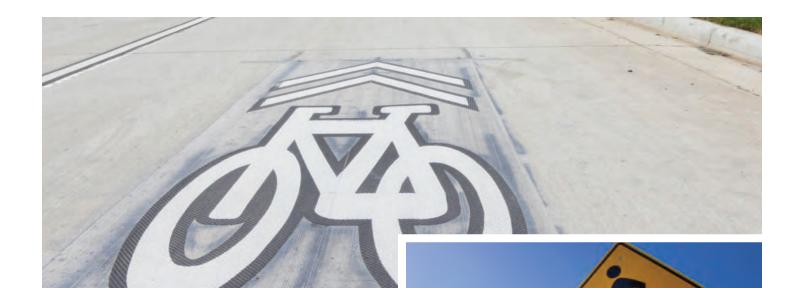
### MARKETS

- Highways & Streets
- Local

### PROJECT REFERENCE

### **Dan Johnson**

- · Electrical Engineering
- Construction
   Management
- Stormwater



## 20TH STREET TRANSIT PROJECT

### Joplin, Missouri

### **RIGHT OF WAY DESIGN FOR BICYCLING & WALKING**

Paved pedestrian and bikeways were constructed on right of way consisting of 17 parcels. Approximately 65% of the project was located in floodway and floodplain zones. This project was unique due to commercial development transitioning in the project area. Olsson designed the multiuse trail on both sides of the roadway corridor to encourage walking and biking along the commercial zoned area.

### DATES

2013-2014

### SERVICES

- TransportationPlanning
- Civil Engineering

### MARKETS

- Highways & Streets
- Local

### PROJECT REFERENCE

### Dan Johnson

- Site Design
- Construction
   Management
- Sports & Recreation



## MAIN STREET WATER PROJECT

### Joplin, Missouri

### SMOOTH HANDLING OF ACQUISITIONS WITH COMMERCIAL PROPERTIES.

Six business properties were affected by the construction of this underground stormwater sewer project. The project was unique due to two commercial properties being located within the acquisition areas. An underground water drainage area was being constructed in high traffic areas of a McDonald's parking lot, and a major gas station that was negotiated with during acquisition was having a subsurface drainage easement designed and constructed near underground gas tanks. Olsson's negotiator was heavily involved in all coordination and communication efforts—keeping the project going at a steady pace, and proactively answering questions and concerns of the property owners.

### DATES

2016-2017

### **SERVICES**

- Transportation Planning
- Civil Engineering

### **MARKETS**

- Highways & Streets
- Local

### PROJECT REFERENCE

### Dan Johnson

- Construction
   Management
- Surveying
- Stormwater
- Commercial



## RIGHT-OF-WAY ACQUISITIONS FOR SANITARY SEWER IMPROVEMENTS

### Ozark, Missouri

### WORKING TOGETHER FOR UPGRADES THROUGHOUT.

Sixteen sewer easements were acquired for the construction of a major gravity sewer line from Route 65 in the City of Ozark and traversing across the City to a connection along Route NN highway. This was accomplished with the coordination and cooperation of the Public Works Department and Olsson negotiator. Working with business and residential owners this project modified and upgraded the City's sewer system.

### DATES

2017-2018

### **SERVICES**

- TransportationPlanning
- · Site Design
- · Civil Engineering
- Surveying
- Construction
   Management

### **MARKETS**

- · Highways & Streets
- Stormwater

### PROJECT REFERENCE

### John McCart

Environmental Resource Coordinator 417.581.2407 jmccart@ozarkmissouri.org

## **MASTER PLANNING**

### Every great master plan starts with a blank slate.

Ochsner, Hare & Hare, the Olsson Studio, is a landscape architecture and planning entity within Olsson. Rooted in a 100-year legacy, the Olsson Studio is committed to creatively engaging clients, helping define visions, and making those visions a reality.

Communities experience constant growth, innovation, and change, and a Comprehensive Master Plan (CMP) serves as a guiding force during these times. A CMP grounds a community by physically safeguarding its values and commitments and brings the community together as it navigates the challenges of different approaches to attaining a shared vision. As a city continues to grow and develop, a CMP update is a critical step to ensuring future developments align with the community's goals.

With the Olsson Studio's experience in developing master plans, including land use, transportation, storm water, and utilities (water, wastewater, electricity, fiber, etc.) – combined with our genuine commitment to community engagement – positions us to create a plan for your city.

At Olsson, we'll adeptly take your vision and turn it into the possible. Our entire team—including our landscape architects, design studio, environmental and geotechnical teams, engineers, traffic experts, and others—collaborates to create a realistic first look designed to stir excitement and stakeholder support.

Whether you're looking to create an office campus or a retail destination, a residential subdivision or a park, the master plan we design for you will lay the groundwork for a successful project. Let us bring your vision to life.





## ALTOONA CITY CENTER MASTER PLAN

### Altoona, Iowa

### AS ALTOONA GREW, SO DID ITS NEED FOR EXPANDED AND UPDATED CITY FACILITIES

Altoona's population more than doubled in 20 years, and by 2018, it was time for change. Olsson and Ochsner Hare & Hare, the Olsson Studio, reviewed the city's 170-acre city center property and conceptualized how it could grow and improve with a master plan.

The Studio's 20-year master plan blends Altoona's existing infrastructure with new facilities. We proposed a 91,000 square-foot joint city hall and police station as the district's latest building. In the plan, we designed around current buildings, like the community center, fire station, wastewater plant, water facility, and aquatic center. Additionally, we designed the landscape, hardscape, parking, and a trails system.

The Olsson Studio realized the potential of Altoona's city center, and changes are already happening with the new city hall and police station. With the upcoming modernized facilities, city staff will no longer be separated or suffer in cramped buildings. Business will be conducted much more efficiently, with all personnel in one spacious building.

### DATES

2018 - 2020

### **SERVICES**

- Landscape Architecture
- Surveying
- Geotechnical
- Master Planning
- · Civil Engineering
- Construction
   Management

### MARKETS

- Land & Facilities
- Local Government

### PROJECT REFERENCE

### Jon Hanson

City Engineer 515.967.5136 jhanson@altoona-iowa.com



## NORTH 33RD AND CORNHUSKER SUB-AREA PLAN

### Lincoln, Nebraska

### DEVELOPING A LONG-TERM VISION AND IDENTITY RELATED TO LINCOLN'S UNIQUE NEEDS

The Lincoln/Lancaster County Railroad Transportation District (RTSD) is leading the charge in making transportation safer and less congested in the 33rd and Cornhusker area. Olsson is contributing to this three-phase project in all stages - Planning, Environmental, and Preliminary Engineering. As part of the Planning phase, we explored the potential of modifying transportation alignments with a subarea plan. This plan examined the optimal mix of land uses in the area as well as along the Cornhusker Highway corridor from approximately I-180 to 56th Street (L-55X).

Part of creating sub-area plans involve re-evaluating transportation alignments from PEL Study; developing conceptual roadway, sidewalk, and trail alignments; and revising the comprehensive plan and zoning map as necessary. In addition, entryway corridor aesthetic considerations such as landscaping, lighting, screening, setbacks, and plantings will be developed. The overall goal is to develop a long-term vision and identity for this area to optimize economic and development opportunities.



## **DATES** 2017

### SERVICES

Planning & Design

· Civil Engineering

### **MARKETS**

· Land & Facilities

### PROJECT REFERENCE

Roger Figard, PE Executive Director, RTSD 402.441.7711 rfigard@lincoln.ne.gov



## AGGIEVILLE VISION TO REALITY MASTER PLAN

### Manhattan, Kansas

### A THOROUGH ANALYSIS FOR THE IMPROVEMENT NEEDS OF AGGIEVILLE

The economic vitality of the Aggieville district depends on its efficiency to accommodate visitors and consumers. The City of Manhattan led an initiative to further develop Aggieville into a vibrant mixeduse attraction that offers diverse shopping, dining, entertainment, and residential opportunities. Some challenges present in Aggieville were insufficient parking/access, aged utilities, and outdated visual appeal. To better understand the magnitude of Aggieville's needs and improvement costs, the city hired Olsson to provide an infrastructure analysis.

Our team modeled traffic, studied land-use, and completed a parking study to determine connectivity, circulation, and access to the area. To address the concerns of the aged utilities, we conducted a utility/stormwater infrastructure analysis. We presented These findings were presented in a report to the City of Manhattan and will provide sensible recommendations for Aggieville going forward. In addition, Olsson provided public involvement to build community consensus in improvement efforts. These efforts included holding charrettes and developing a steering committee comprised of the Manhattan Chamber of Commerce, Aggieville Business Association, Kansas State University, and more.

### PROJECT OWNER/CLIENT

City of Manhattan, Kansas

## **DATES** 2018

#### 2010

SERVICES

- · Planning & Design
- · Civil Engineering

### MARKETS

- Transportation
- Water

### PROJECT REFERENCE

### **Jason Hilgers**

Deputy City Administrator 785.587.2412 hilgers@cityofmhk.com Community Planning



## SALINA DOWNTOWN REVITALIZATION

### Salina, Kansas

### AN AWARD-WINNING NEW DOWNTOWN

Downtown Salina has strong regional assets, from its historical architecture and locally-owned businesses, to its longstanding community events and programs and vibrant art scene. But downtown Salina also had a problem - the lack of a unified vision for the community.

Ochsner Hare & Hare, the Olsson Studio (the Olsson Studio), designed a plan for an improved downtown. The Studio created the entire plan, along with analyzing existing conditions and demographics; mapping; writing narrative text; designing graphics and 3D models; formatting the plan document; and leading public outreach.

Soon after the plan was finalized, implementation began. Because of the Olsson Studio's robust community engagement, community excitement and momentum surrounding the project was strong. The sessions allowed stakeholders and community members to offer input and feedback, allowing them to see their opinions could affect real change. Afterwards, we adjusted our design plans accordingly.

With construction expected to be complete in 2020, this project, winner of the APA 2017 Outstanding Plan Award, will enhance downtown Salina's sense of place, safety, and functionality.



### DATES

2015 - 2017

### SERVICES

- Master Planning
- · Site Design
- · Civil Engineering

### **MARKETS**

- Land & Facilities
- Transportation

### PROJECT REFERENCE

#### **Don Boos**

Client Liaison 785.825.2221 donaldb@bluebeacon.com



## BUFFALO PARK Master Plan

### Wichita, Kansas

## BRINGING IN NEW AMENITIES FOR WICHITA PARK GUESTS TO ENJOY

To reinvigorate the aging Buffalo Park, the City of Wichita Parks and Recreation staff and Ocshner Hare & Hare, the Olsson Studio, worked together with community members to prepare a master plan.

The design addresses the conversion of a large leaking retention pond into a smaller, more manageable area with a bicycle "pump track" and fishing pond in a native prairie setting. The plan also includes a new shelter and restroom facility, a 1-mile loop running trail, and splash pad/interactive fountain area. The design addresses current functional issues with the park, including access and parking through the addition of 80+ parking stalls, bus parking, and new entry sign. The Olsson Studio provided conceptual design and design development services for hardscape, amenity and landscape, and finalized construction documents.

The park's \$1.65 million of new amenities opened in 2016, with the splash pad ready for summer visitors.





### DATES

2013 - 2016

### SERVICES

- Master Planning
- Landscape Architecture
- Construction
   Management

### MARKETS

· Sports & Recreation

### PROJECT REFERENCE

### **Larry Hoetmer**

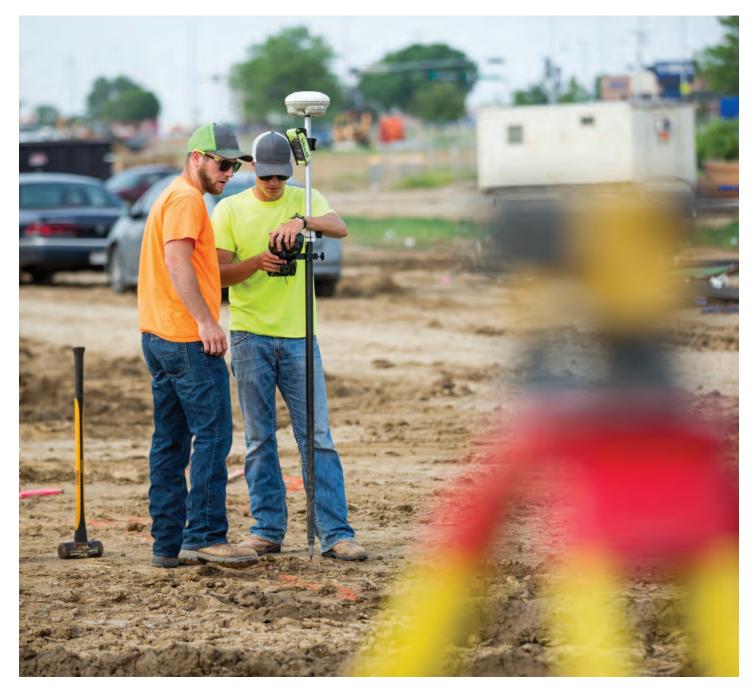
City of Wichita Parks & Recreation 316.268.4331 lhoetmer@wichita.gov

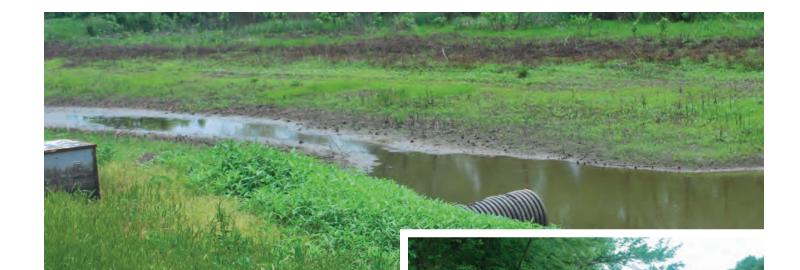
## LAND SURVEYING

### Need a field survey? Look no further.

With more than 90 experts in offices throughout the country, we have the bandwidth to complete your project with local, responsive resources. From simple boundary surveys to more complex ones—think utilities, roadways, renewable energy projects, and large commercial and residential developments—we've got it covered.

We not only bring experience to every project, we also bring the latest technology tools. Our team employs AutoCAD with Civil 3D software and MicroStation V8, as well as GPS equipment, total stations, electronic field books, drones and 3-D scanning.





# DUCKS UNLIMITED CONSERVATION WETLAND SURVEYING

### Shell City, Missouri

Olsson was selected by Ducks Unlimited to provide a topographic survey for the Schell Osage Conservation Area property. The purpose for the topographic surveys was to provide an accurate base map that represented how surface water flowed across the site.

The survey was used to design and ultimately construct their wetland restoration. Ducks Unlimited requested the survey to collect sufficient data to: provide a TIN surface in Civil 3D 2015 format to generate 0.5 foot contours according to National Mapping Standards; provide the topographic survey in NAD 83, Missouri State Plane Coordinates, units US Survey feet, and the Vertical Datum on NAVD88; provide a minimum of three semi-permanent control points in a location not likely to be disturbed. The control points will be used during monitoring of the project site as well as horizontal and vertical control during construction; and locate and map all visible features including but not limited to swales, ditches, fences, edge of agriculture fields, edge of wooded areas, field tiles, culverts, water control structures, utilities, roads, river banks and any other features that impact surface drainage.

### DATES

2016 - 2018

### SERVICES

Surveying

### **MARKETS**

· Land & Facilities

### PROJECT REFERENCE

### **Kerry Scott, PE**

Project Manager 308.383.8075 kscott@ducks.org



## CONFIDENTIAL CLIENT WIND PROJECT

### **State of Kansas**

Olsson is providing professional surveying services for 50,000 acres of utility locations. Surveying services include providing section corners, boundary locations, and base mapping.



### DATES

2017 - Present

### **SERVICES**

Surveying

### MARKETS

• Land & Facilities

· Renewable Energy

## CONSTRUCTION INSPECTION/MATERIALS TESTING

## At Olsson, we believe no detail is too small, especially when it comes to our clients' projects.

Our experienced Special Inspections team performs a wide variety of specific code-mandated inspections of structural elements that take us from the field to the lab.

We conduct inspections in accordance with IBC Chapter 17 code requirements, including but not limited to soils, reinforced concrete, masonry, structural steel, spray-applied fireproofing, NDT, and wood framing. And our team of inspectors is experienced and certified in accordance with the International Code Council.



## SOUTH WATER TOWER AND NORTHEAST INDUSTRIAL PARK WATER TOWER BLASTING AND PAINTING

### Pittsburg, Kansas

Olsson was contracted to provide professional water engineering services for the South Water Tower and the Northeast Industrial Park Water Tower for the City of Pittsburg, Kansas. Work includes the sandblasting and re-painting of the interior and exterior of the water tower, as well as performing specified tank modifications. The South Tower requires special lead-based paint abatement efforts be specified to ensure compliance with hazardous material regulations. Olsson is providing design, bidding, construction administration, and construction inspection services during the project.

South Tower (750,000-gallon multi-leg tank) - Both the interior and exterior of the South Tower are being blasted down to bare metal and re-painted. Due to the presence of lead in the tower's exterior coating, Class 1A containment is specified for use during surface preparation. Along with tenting the tank to contain blast particles, the contractor will incorporate a lead-sequestering additive with the blast media to prevent subsequent leaching of lead ions, allowing the spent media to be landfilled as non-hazardous.

Surface preparation of the tower's exterior is being performed in accordance with SSPC-SP6. The new exterior coating system includes a zinc-based primer with a dry film thickness (DFT) of 2.5-3.5 mils followed by an acrylic polyurethane intermediate coat with a DFT of 3.0-4.0 mils. The finish coat is fluoropolymer polyurethane (HydroFlon) with a DFT of 2.0-3.0 mils. The tank's logo will be the same type of coating as the finish coat with a DFT of 4.0-6.0 mils. The total DFT of the exterior coating system will be 7.5-10.5 mils.



### DATES

2017 - 2018

### **SERVICES**

Civil

• Special Inspections

### MARKETS

Water

### PROJECT REFERENCE

#### **Matt Bacon**

Director of Public Utilities 620.240.5138 matt.bacon@pittks.org Surface preparation of the tower's interior is being performed in accordance with SSPC-SP10. The new interior coating system includes a zinc-based primer with a dry film thickness (DFT) of 2.5-3.5 mils. The interior primer coating will be followed by two coats of epoxy-based paint, each with a DFT of 4.0-6.0 mils. The total DFT of the interior coating system will be 10.5-15.5 mils. The tower's cathodic protection will not be needed with a zinc primer and will be removed.

A new frost-proof vent with an insect screen will be installed on the South Tower roof. The tower's overflow pipe discharge will be fitted with a duck bill type valve following removal of the existing flap gate. The areas of deteriorated grout along the foundation will be repaired.

#### Industrial Tower (250,000-gallon multi-leg tank) -

The Industrial Tower's current exterior coating system consists of a lead-based paint primer, a urethane intermediate coat, and an acrylic finish coat. The acrylic finish coat was applied in 2005 and was at the end of its useful life with little adhesion left. With the intermediate urethane coat still in good condition and the total exterior DFT approximately 13 mils, Olsson recommends that the acrylic finish coat be removed and the tower be overcoated (on top of the intermediate urethane).

Surface preparation of the exterior of the tank consists of a high-pressure water blast to remove

chalk, loose paint, and other contaminants. This action removes most, if not all, of the existing acrylic finish coat, leaving the well-adhered urethane coat exposed. This process will not disturb the lead-based primer; therefore, no containment is necessary.

The tower will be overcoated with a Tnemec Series 118 primer (6.0-8.0 mils DFT) followed by a Tnemec Series 1074U finish coat (2.0-3.0 DFT). This coating system encapsulates the tower and will provide better quality than the coating applied in 2005.

With the blasting and painting of the South Tower constituting the base bid for this project, Olsson recommends that surface preparation and re-coating of the Industrial Tower's exterior be bid as an alternate. The city will decide if they want to accept this alternate bid along with various tank modifications to the Industrial Tower (a new frost-proof vent with insect screen and Saf-T-Climb equipment added to the exterior ladders). In addition, Olsson recommends that the areas of deteriorated grout along the foundation be repaired.

Cost: \$754,400

Date of Completion: South Tower – August 15, 2018; Industrial Tower, November 2018





## MERCY HEALTH REPLACEMENT HOSPITAL

#### Joplin, Missouri

As a result of the EF-5 tornado that hit the City of Joplin on May 22, 2011, Olsson was hired by Mercy Health Systems and the project architect to provide site/ civil engineering design, geotechnical investigation services, environmental permitting, surveying, special inspections and materials testing, and FEMA compliance services for the new replacement hospital.

The new hospital was developed on 120 acres. The new hospital is comprised of 424 beds, Level I trauma, medical surgery, critical care, women's and children's care, behavioral health, and rehabilitation, amongst other services.

Olsson's Special Inspections and Materials Testing teams provided ongoing services throughout construction. The teams provided subsurface investigation for the site, including design parameters for retaining walls and deep foundations. Olsson also helped design rock anchors for foundation walls.

#### DATES

2012 - 2015

#### SERVICES

- Special Inspections
- · Materials Testing
- Geotechnical
- · Civil Engineering

#### **MARKETS**

- Healthcare
- · Land & Facilities

#### PROJECT REFERENCE

#### John R. Farnen

Executive Director 314.628.3494 John.Farnen@Mercy.Net

#### PROJECT PROFILE

The 800,000-square-foot steel framed complex included an eight-story patient tower on drilled pier foundations. Olsson conducted steel frame SidePlate blast/seismic resistant steel testing. The building required extensive nondestructive testing, including magnetic particle and ultra sonic testing of complete joint penetration welds. Olsson also conducted testing for fill foundations, reinforced concrete, masonry, and structural steel.











## BRANSON 76 REVITALIZATION

#### Branson, Missouri

An estimated 8.5 million visitors drive or walk through Branson's Spirit of 76 Country Boulevard corridor each year. The 5-mile "strip," which is home to theaters and tourist attractions, is undergoing a massive transformation. After years of constant traffic and entertainment, the Spirit of 76 needed some extreme changes.

Olsson was originally hired to manage the construction phases of the project, which began in August 2016. A month later, the city noticed Olsson's professionalism and handed the entire project over for us to manage – both its design and its construction. The project consists of four basic Olsson services: water transmission, resurfacing, entertainment technology, and duct banks.

The Branson 76 Revitalization project is all about innovation, and one of the ways we are doing this is through underground conduits to bring down the overhead utility cables and run them through the duct banks. The process will eliminate power poles along the corridor and create a more

# AVAST VERVIEW AND A STATE OF THE STATE OF TH

#### DATES

2016 - 2024

#### SERVICES

- Landscape Architecture
- Civil

#### **MARKETS**

Local

- Construction
   Inspection
- Materials Testing
- Transportation
- Commercial

#### PROJECT REFERENCE

#### **Stanley Dobbins**

City Administrator 417.334.3345 sdobbins@bransonmo.gov

#### PROJECT PROFILE

aesthetic appeal. Olsson is also working with the utility companies to help the city recover costs of building the duct banks. Entertainment technology includes some amenities for tourists, such as light or water features, audio, and way-finding.

Once complete, the new Highway 76 will be easier for pedestrians and drivers to use and experience. Currently, the streetscape work has been placed on hold, while the CID work continues to be provided by Olsson. Project is in progress. Estimated construction cost is \$100M+.











## MAIDEN LANE CAPACITY IMPROVEMENTS FROM 7TH STREET TO 30TH STREET

#### Joplin, Missouri

Olsson performed full-time management, administration, and construction inspection of the Tiger Grant-funded Maiden Lane project, utilizing a full-service mobile testing laboratory. This project consisted of resurfacing a two-mile stretch of roadway on Maiden Lane from 7th to 9th Streets and resurfacing and widening the street from a four-lane to a five-lane facility between 9th and 30th Streets. Street elements such as bike lanes, sidewalks, and transit stops were incorporated into the design.

In addition to management, administration and construction administration, Olsson also provided land surveying, roadway design, railroad coordination, and right of way services that included securing right-of-way appraisals, reviewing appraisals, and negotiating services. Project was completed in April 2016.

#### NATES

2014 - 2016

#### **SERVICES**

Special Inspections

· Materials Testing

#### **MARKETS**

Highways & Streets

Government - Local

#### PROJECT REFERENCE

#### **Troy Bolander**

Planning & Development Director 417.624.0820 TBolande@joplinmo.org



## ASPEN HEIGHTS STUDENT HOUSING

#### Springfield, Missouri

Olsson was hired by Aspen Heights, an Austin, Texas, based developer. Aspen Heights currently has 14 off-campus student housing developments near universities across the country. Olsson was contracted to provide construction inspection and materials testing services for the construction of this \$38.3 million multifamily student housing development.

The overall development included approximately 172,000 square-feet of living space in a total of four five-level student housing structures, consisting of 166 units with 564 beds. Parking was accommodated with a two-level parking garage that contains approximately 480 stalls. The development also included an outdoor pool and a 6,000-square-foot clubhouse with a fitness room and computer room.

The 4.4-acre development is located at the southwest corner of St. Louis Street and South Hampton Avenue in Springfield, Missouri. The development was completed and ready for occupancy for the fall 2016 school semester.

#### DATES

2014 - 2016

#### SERVICES

- · Civil Engineering
- Geotechnical
- Special Inspections
- Materials Testing

#### **MARKETS**

Residential

#### PROJECT REFERENCE

#### T.C. Selman

Vice President of Pre-Construction 512.369.3030 tselman@myaspenheights.com

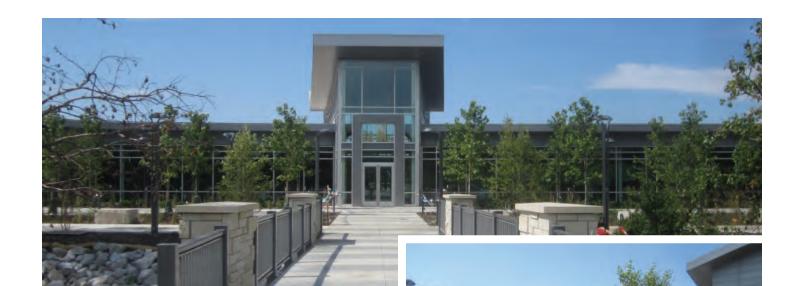
## LANDSCAPE ARCHITECTURE

#### Simply put, landscape architecture is placemaking.

We're all about creating places for people to live, work, and play. Olsson's team of landscape architects understands the interplay between great landscapes and activated hardscapes, stunning lighting, and beautiful amenities, and how these elements combine to make great places.

From parks and urban plazas, to streetscapes and trails, we understand the delicate balance between form, function, and beauty. We'll collaborate with you through every phase—from master planning to putting the right plant in the right place. When it comes to improving your community, every detail matters.





## WORKIVA HEADQUARTERS

#### Ames, Iowa

#### **IOWA RIVALS SILICON VALLEY WITH WORKIVA HQ**

Workiva, formerly WebFilings LLC, is located within the lowa State University Research Campus. This innovative, technology-based corporation competes for employees against other similar companies such as Google, PayPal, and Amazon. Ochsner Hare & Hare, the Olsson Studio, worked with FEH Design to provide master planning, sustainable site design, and landscape architecture to attract new talent to the American heartland.

The corporation's site features include an outdoor dining terrace and grand entry approach, sculptural water features, vegetative bioswales to slow and cleanse stormwater runoff, a half-mile-long recreational trail that connects to the adjacent city trail network, 7.3 acres of unified native prairie and oak savannah, and an employee-operated vegetable garden. To simplify project processes, our team coordinated with the City of Ames and lowa State University throughout.

#### DATES

2012 - 2014

#### **SERVICES**

• Landscape Architecture

#### MARKETS

Commercial

- · Site Design
- Master Planning



## CLIFF DRIVE RECREATIONAL IMPROVEMENTS

#### Kansas City, Missouri

### RENEWING THE SCENIC PATHWAY THROUGH A DOWNTOWN PARK

Cliff Drive, located in the 10,000-acre Kessler Park, was a key component of the City of Kansas City's 1893 Plan for Parks and Boulevards that was spearheaded by landscape architect George Kessler and intended to guide Kansas City's urban growth. Ochsner Hare & Hare, the Olsson Studio, renovated elements of the historical scenic byway through improvements to the existing trail system walkways, stone walls andstaircases within the 120 year old park.

Along with Dubois Consultants, the Olsson Studio designed hardscape and amenity improvements to the existing trail system. We included new limestone staircases, some of which accommodated 50- and 60-foot vertical drops, concrete trails, limestone walls, ornamental fences, and guard rails.

#### DATES

2014 - 2016

#### **SERVICES**

• Landscape Architecture

#### **MARKETS**

· Sports & Recreation

#### PROJECT REFERENCE

#### Ajamu Webster

Dubois Consultants CEO 816.333.7700 awebster@duboisengrs.com



## SHAWNEE MISSION HEALTH BLUE VALLEY

#### Overland Park, Kansas

#### **EXPANDING SHAWNEE MISSION HEALTH SOUTH**

Starting out as a one-story, 65-bed community hospital, Shawnee Mission Medical Center was just a small, local infirmary. 50 years later, it has evolved into a world-class health network with several campuses around the Kansas City area. Because of our vast healthcare engineering experience, Shawnee Mission Health's architect chose Olsson to help with the hospital's expansion to southern Johnson County in the desirable Bluhawk location.

Several Olsson teams joined together to perform civil engineering, field services, environmental permitting, and landscape design for the 200-bed hospital, emergency room, imaging center, and medical office building. We also conducted a traffic impact study, which included traffic volume counts, trip generation, pedestrian movements, and capacity analyses.

Ochsner Hare & Hare, the Olsson Studio (the Olsson Studio) prepared the schematics for site entries, roads, parking lots, pedestrian circulation, building entries, and open space. Working with the architect, the Olsson Studio developed the plans, swiftly moving the design into construction documents. The campus opened in February 2017 and has ample room to expand in the future, if desired.

#### DATES

2014 - 2017

#### SERVICES

- Landscape Architecture
- Surveying

- Site Design
- Civil Engineering
- Field Services

#### **MARKETS**

Healthcare

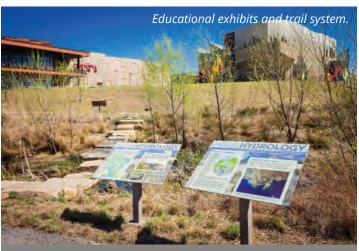
Transportation

#### PROJECT REFERENCE

#### Samuel Beckman

Principal, ACI Boland Architects 816.763.9600 sbeckman@aciboland.com





## **PRAIRIEFIRE**

#### **Overland Park, Kansas**

#### AN EDUCATIONAL, COLORFUL MIXED-USE CENTER

Rising tall with glinting stained glass, the Museum at Prairiefire is the signature building of Prairiefire. Merrill Companies, Olsson, and Ochsner Hare & Hare, the Olsson Studio, joined forces with the world-renowned American Museum of Natural History to create this cultural cornerstone in Overland Park. The museum is the first continuous venue outside of New York to bring traveling exhibitions. Prairiefire also encompasses retail, dining, offices, apartments, and a movie theatre.

Ochsner Hare & Hare performed site planning and landscape design for the museum. We integrated water-efficient native plant materials to relate to the museum's architecture and to contribute to the museum's LEED certification. Additionally, we used the angular nature of its architecture to design the plaza hardscape and interpretive signage.

The Museum of Prairiefire's mission is to promote knowledge of the natural world, and our Olsson team guided designs with this message in mind. After completing an Individual Section 404 Permit, we designed several open spaces that emphasized sustainability and adhered to our mitigation plan. The wetland includes a butterfly garden, an internal trail system, and an educational plaza.

The development has brought hundreds of thousands of visitors since opening in 2014, treating guests to entertainment and scientific spectacles.



### **DATES** 2007 - 2014

#### SERVICES

- Landscape Architecture
- Special Inspections
- Environmental
- Civil Engineering

#### **MARKETS**

Commercial

#### PROJECT REFERENCE

Fred L. Merrill, Jr.

President 913.338.3800 fred@merrillcompanies.com



## GRANDSCAPE

#### The Colony, Texas

#### THE NEW TEXAS HOTSPOT

Grandscape is one of the newest and largest mixeduse real estate developments in the country. Located in Dallas suburb The Colony, the project is poised for success with locals and visitors alike. Olsson helped generate this success by providing civil engineering and landscape architecture services.

Sprawling over 400 acres, Grandscape is its own destination "city" with apartments, a resort hotel, unique restaurants, and an assortment of shops and communal areas. Grandscape attracted some of the largest names in retail to helm the development, with Nebraska Furniture Mart serving as the anchor. Additional tenants are slated to arrive through 2020.

Our mission was to beautify the space with a modern style that makes Grandscape a must-visit attraction. We designed an inviting dual-level retail oasis, The Grotto, to join with Grandscape's Lifestyle Center as a central communal area. We designed an inviting, peaceful courtyard with fountains, seating, and foliage. Construction cost for this project is approximately \$2 billion, and Olsson's fees are around \$4 million.

For patrons, Grandscape will be more than simply a day of shopping and eating - the center's unique features crafted by Olsson will bring them back time and again.



#### DATES

2016 - Present

#### SERVICES

- Landscape Architecture
- Site Design
- · Civil Engineering
- Surveying

#### **MARKETS**

- Commercial
- Transportation

#### PROJECT REFERENCE

#### **Michelle Evers**

Project Manager 972.668.2022 michelle.evers@nfm.com

## ECONOMIC DEVELOPMENT

## Whether providing initial master planning and financial analysis or advising through the life of a project, we'll provide a solution to meet your needs.

Economic development is a critical component that drives economic growth in our economy, creating high wage jobs and facilitating an improved quality of life. Olsson offers a group of highly experienced consultants with a wide variety of experience in planning, engineering, real estate, marketing, and finance to serve your unique needs. Our development consultants include a group of experienced professionals with formal training and real world experience in real estate development who can provide a more in-depth real estate consulting service to our clients. We can tailor this service to meet the unique solutions needed by a wide variety of clients; whether they be land owners looking for guidance on how to develop their property, to small developers looking for an extension of their services, to providing Owner's Representative services to clients.

We are highly networked with regional and national clients through Olsson's geographic footprint, allowing us to facilitate introductions and relationships with our local clientele. Our "match-making" allows for a unique approach to foster creative solutions with land owners, developers, corporations, banks, home-builders, brokers, and other professionals to help solve complex real estate development problems.





## MARKEY BUSINESS PARK

#### Belton, Missouri

#### **PLANNING FOR THE FUTURE**

The Markey Business Park site is about 121 acres and has plenty of room for development. The property is naturally divided into two sections, with the existing waterway and tree line being the main natural dividing line. Efforts were needed to preserve this waterway and existing vegetation to reduce environmental impacts. Olsson created three master plan options for the Markey Business Park. The differences between the three layouts revolved around the street configuration and the potential building sizes, layouts, and proposed uses.

There is a sanitary sewer line that runs along the west edge of the existing waterway on the site, along with an overhead power and natural gas line that run along the far north edge of the property. We found in all of these plans that these utilities will not need to be relocated for the sites development.

All of the concepts allow for great site circulation and visibility. The biggest difference in each option is the number of buildings and areas allotted for the assessed industry targets.

#### DATES

2013-2014

#### **SERVICES**

- Geographic Information Systems
- Master Planning

#### MARKETS

· Land & Facilities



## CARTHAGE INDUSTRIAL PARK REDEVELOPMENT

#### Carthage, Missouri

#### **PLANNING FOR THE FUTURE**

Olsson created three master plans for the Carthage Industrial Park. The concepts used primarily undeveloped land and varied based on the number of buildings and the areas allotted for the assessed industry targets.

Carthage Industrial Park covers over 675 acres, with over 550 acres of greenfield space. The conceptual plans use most of this available area for development; however, there are existing wetlands, drainage ways, and utilities affecting about 127 acres. There is no current restriction on developing within these wetlands or riverine, however additional permits are required.

The site is divided into four areas by the existing drainage ways and utilities which provides convenient access that all the targeted industries would require. The concepts are designed for flexible development. The proposed building layouts can be easily rearranged to accommodate large or smaller users. To keep costs down, the plans avoided crossing utility lines as much as possible.

#### DATES

2018-Present

#### **SERVICES**

• Geographic Information Systems

Master Planning

#### **MARKETS**

· Land & Facilities



# MIDAMERICA INDUSTRIAL PARK/IGLOO VALLEY MASTER PLAN

#### Pryor, Oklahoma

#### **PLANNING FOR THE FUTURE**

In the summer of 2013, Olsson was contracted to assist the MidAmerica Industrial Park and Oklahoma Ordinance Works Authority with industrial site preparedness planning of the 410 acre Armin Road tract within the nearly 10,000 acre industrial park. Olsson provided this MidAmerica Industrial Park with due diligence and site diligence summary information, creation of high quality maps, development of comprehensive site inventory, a master plan, and more. At the conclusion of the planning effort, the project team was able to provide the MidAmerica Industrial Park and Oklahoma Ordinance Works Authority with a precise inventory of the industrial park assets and tract master plans. The intent of the project output was to allow for future adjustments to the site master plan. Following the submission of project materials, a potential developer desired to see how the site could accommodate their specific needs. The Olsson team and MidAmerica staff were able to update the diligence materials and master plan layout in a matter of hours.

#### DATES

2013-Present

#### **SERVICES**

 Geographic Information Systems Master Planning

#### MARKETS

Land & Facilities





## BRADY COMMERCE PARK

#### Warrensburg, Missouri

#### PLANNING FOR THE FUTURE

Brady Commerce Park is comprised of about 603 acres. A Dollar Tree distribution site had reserved 119 of those acres in the northwest corner, leaving 446 available acres east of Highway 13 and 38 available acres west of Highway 13. Olsson created three master plans for the area, where differences between the three plans revolve around the street configuration and the potential building sizes, layouts, and proposed uses. The plans use most of the available area for development; however, there is an existing floodplain that affects approximately 168 acres of the site. Efforts were taken to locate detention cells in line with natural environmental features and to place the cells between development areas to serve as addition buffers between users.

The proposed building layouts from each of the can be easily rearranged to accommodate mega-users who would require larger buildings or who would require modifications to the road infrastructure without hindering the site's traffic flow and visibility. All layouts are designed with respect to existing and future infrastructure.



### **DATES** 2017

#### **SERVICES**

- Geographic Information Systems
- Master Planning

#### MARKETS

Land & Facilities

## **SCADA**

#### It is not a specific technology, but a type of application.

Supervisory control and data acquisition (SCADA) is a system of software and hardware elements that allows industrial organizations to control industrial processes locally or at remote locations; monitor, gather, and process real-time data; directly interact with devices such as sensors, valves, pumps, motors, and more through human-machine interface (HMI) software; or record events into a log file.

SCADA systems are crucial for water and wastewater treatment plants, as well as industrial organizations, since they help to maintain efficiency, process data for smarter decisions, and communicate system issues to help mitigate downtime.





# BOARD OF PUBLIC UTILITIES SCADA ON-CALL

#### Kansas City, Kansas

#### **SCADA LEGACY.**

We have been involved in every SCADA-related project at this water plant since it was built in 1999-2000. Projects include:

- Initial control system programming and startup, Foxboro I/A System.
- New horizontal collector well controls, Foxboro I/A System.
- New Actiflo basin controls, Foxboro I/A System.
- Control System Upgrade Study, Foxboro I/A vs. Allen-Bradley PLC and HMI.
- Control System Replacement Design, Allen-Bradley ControlLogix and Wonderware System Platform.
- Multi-phase control system replacement programming and startup.

#### DATES

1999 - 2015

#### **SERVICES**

 Utility and Industrial Automation

#### **MARKETS**

Wastewater

#### PROJECT REFERENCE

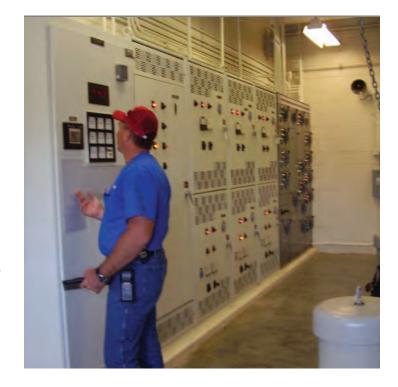
#### **Durward Johnson**

Board of Public Utilities 913.573.9270 djohnson@bpu.com

#### System Architecture Overview

- PLC's and Wonderware applications communicate over a Moxa TurboRing fiber network.
- Seven redundant ControlLogix processor/ communication chassis and Ethernet I/O racks.
- Three Hewlett-Packard rack mounted servers running VMWare ESXi 4.1 Hypervisor.
- Physical servers host nine virtual machines running Windows 2008 R2 Server.
- Sixteen Arista thin clients provide terminal server sessions (Remote Desktop) for operator displays located around the plant.

Olsson participated in a design-bid-build arrangement to complete Phase 1 of the project on time and on budget in 2011. Phase 2 was completed in 2012 with a similar arrangement and was equally successful. The third and final phase was completed in 2013.





## **SCADA UPGRADES**

#### Crete, Nebraska

#### LONG-TERM WASTEWATER SUPPORT.

Olsson works closely with the City of Crete to design, program, and commission SCADA systems. Projects have included the following:

- Wastewater Treatment Plant SCADA replacement, Allen-Bradley SLC 5/05 and MicroLogix 1500 programmable controllers and Intellution iFIX operator interface software.
- Integrate wastewater treatment plant, water treatment plants, water wells, lift stations, power plant, and electric substations to centralized municipal SCADA system. The system communicates via a city-wide fiber optic network.
- Upgrade municipal SCADA hardware to virtual environment using VMWare ESX.
   SCADA virtual servers run on dual redundant physical hosts. SCADA graphics clients connect using Windows Remote Desktop.

Olsson and the City of Crete have provisioned VPN access to the system for remote troubleshooting and long-term support.

We programmed the startup services for a new SBR wastewater facility. The plant controls were be integrated in to the existing municipal SCADA architecture.

#### DATES

2001 - 2012

#### **SERVICES**

 Utility and Industrial Automation

#### **MARKETS**

Wastewater

#### PROJECT REFERENCE

#### **Tom Ourada**

Public Works Director 402.826.4313 tom.ourada@crete.ne.gov



## **SCADA UPGRADES**

#### Minden, Nebraska

#### **HELPING CITY'S INTERFACE SOFTWARE.**

Olsson provided engineering design, programming, construction administration, and system commissioning for the City of Minden, Nebraska's water, wastewater, and electrical SCADA. We worked with the contractor and a local telecom provider to install a wireless Ethernet network between facilities for SCADA HMI network connectivity. This system includes the following features:

- SCADA Server HMI with three SCADA HMI client workstations.
- Wireless data radio communications to three wells, seven lift stations, two water towers, and two electrical substations.
- Complete Water Treatment Plant automation including control of wells, filter effluent flow, chemical feed, filter backwash, and high service.
- Complete SBR Wastewater
   Treatment Plant automation
- Addition of new intelligent electrical meters on feeder breakers at the two electrical substations.

The system was designed and implemented with Allen-Bradley CompactLogix programmable controllers, PowerLogic ION intelligent meters, and Iconics Genesis32 operator interface software.

#### DATES

2010

#### **SERVICES**

 Utility and Industrial Automation

#### **MARKETS**

Wastewater

#### PROJECT REFERENCE

#### **Matthew Cederburg**

City Administrator 402.832.1820 MCederburg@ mindennebraska.org



## WASTEWATER SYSTEM SCADA ON-CALL

#### Richmond, Missouri

#### **AUTOMATION TECHNOLOGY.**

Olsson provided engineering design, programming, construction administration, and system commissioning for a SCADA system at a new wastewater treatment plant. This system includes the following features:

- The new wastewater treatment plant is automated using a two-basin Sequencing Batch Reactor process. Includes Dissolved Oxygen control using three aeration blowers.
- Two wastewater lift stations are automated, with connection to the master via cellular modem and 900-MHz Ethernet radios.
- The system was designed using Allen-Bradley CompactLogix programmable controllers and Wonderware System Platform operator interface software.

#### DATES

2010 - 2017

#### **SERVICES**

 Utility and Industrial Automation

#### **MARKETS**

Wastewater

#### PROJECT REFERENCE

#### **Ron Brohammer**

City Administrator 816.776.5304 rbrohammer@ cityofrichmondmo.org



## SCADA SYSTEMS COMMISSIONING

#### Sedalia, Missouri

#### **UPGRADES FOR MAXIMUM EFFICIENCY.**

Low efficiency of three wastewater systems brought Olsson into the picture. We have local talent that does programming and system commissioning for SCADA systems, so Sedalia was eager to get us on board. We did the following:

- Upgraded or installed new Allen-Bradley SLC systems, sludge blowers, and mixers.
- Added an automatic Dissolved Oxygen (DO) control to the wastewater treatment process.
- Designed new grit blowers and a motorized stormwater diversion gate were automated.
- Automated an influent pump station.

The system was designed using Allen-Bradley programmable controllers and Wonderware System Platform operator interface software.

#### DATES

2009 - 2012

#### **SFRVICES**

 Utility and Industrial Automation

#### MARKETS

Wastewater

#### PROJECT REFERENCE

#### **Brenda Ardrey**

Public Works Director 660.827.3000 bardrey@cityofsedalia.com

## **AIRPORTS**

#### Engineering on the ground helps others take to the sky.

We bring expertise to airport planning, design, and construction.

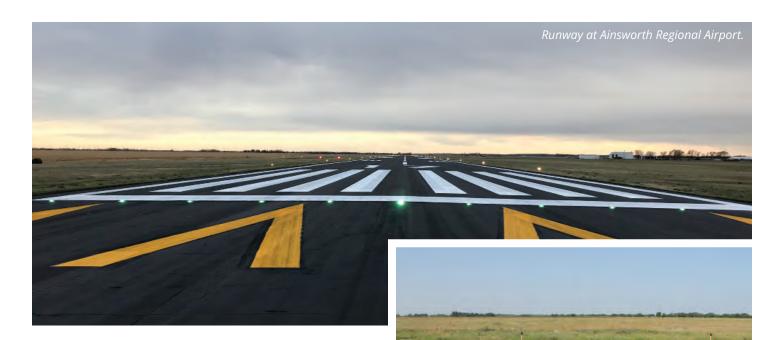
Olsson's diverse in-house resources include airport engineers and planners, electrical engineers with experience in runway and taxiway lighting, structural engineers who design hangars, and environmental scientists proficient in the permitting process.

We make it a point to be involved. Our ties to state aviation associations and state agencies help us remain in the know and at the forefront of airport issues.

We're also active users of general aviation ourselves, so we have a thorough understanding of the airport system and Federal Aviation Administration (FAA) requirements. We are here to help you navigate the process and ease your administrative burden.

Our services range from planning, land acquisition, design, construction observation, and testing, to administrative matters, such as funding applications and disadvantaged business enterprise programs.





## AINSWORTH REGIONAL AIRPORT

#### Alnsworth, Nebraska

### INNOVATIVE DESIGNS EQUAL COST SAVINGS FOR AINSWORTH.

The Ainsworth Regional Airport is a former World War II airbase. The buildings and aircraft may have changed, but the historical significance of the place is still intact. That's why Olsson was eager to partner with the Ainsworth Airport Authority for restoration efforts at the airport.

While the original 1942 concrete pavement is overlaid with asphalt, some of the runways showed signs of distress, including reflective cracking from the concrete pavement below, thermal cracking caused by weather and environmental factors, and heaving or blow-ups caused by the underlying concrete. Olsson's in-house geotechnical team investigated a variety of pavement options.

Based on our life-cycle cost analysis, Olsson recommended complete removal of the existing asphalt surface while keeping the underlying concrete in place, and a new three-inch asphaltic concrete overlay for the full runway length and width (5,500 ft by 75 f). Our design included special relief joints and placement of an armor coat between the old concrete and the new asphalt to mitigate reflective cracking.

#### DATES

2012 - Present

#### SERVICES

- Geotechnical
- Electrical Engineering

Taxiway A at Ainsworth Regional Airport

- · Civil Engineering
- Surveying
- · Materials Testing

#### MARKETS

Aviation

- Construction
   Management
- Structural Engineering

#### PROJECT REFERENCE

#### **Lance Schipporeit**

Airport Manager, Ainsworth Regional Airport 402.387.1491

#### PROJECT PROFILE

During the construction phase, it was determined that the armor coat between the old concrete and new asphalt was not going to perform as intended. Olsson worked with the Ainsworth Airport Authority and contractor to find a more economical approach to completing construction.

As a result of our innovative design and attention to detail throughout the entire process, the Runway 13/31 project was awarded the "Quality in Construction Award" by the National Asphalt Paving Association (NAPA) in 2014.

Four years later Runways 17/35 and 13/31 asphalt surfaces were treated with a coal tar emulsion. As part of this project, we worked with the Airport Authority and contractor to complete the crack repair and surface treatment of the remaining asphalt portions of the airport that were not funded under this project. True to form, construction was completed four percent under budget.







## GOULD PETERSON MUNICIPAL AIRPORT

#### Tarkio, Missouri

### EXPERTISE, QUALITY, AND PROACTIVE FUNDING HELP US STAND OUT IN TARKIO.

The City of Tarkio has collaborated with Olsson on airport improvement projects since 2013. Recently, we designed a new runway lighting system and electrical vault for Gould Peterson Municipal Airport.

Our first priority was analysis of the existing electrical vault. Our in-house electrical team determined that the existing structure did not meet code, so we helped the city evaluate the costs and benefits of renovation versus new construction. Based on our analysis, the city chose to construct a new electrical vault. To meet the new FAA requirements for both a bullet-resistant and fire-resistant building, we selected split face concrete masonry block for the building exterior.

In 2018, Olsson began updating the Airport Layout Plan (ALP) to meet FAA requirements. Not only was the previous ALP outdated, but the airport also needed to address its non-standard combination of relocated and displaced thresholds. An Environmental Checklist was part of the planning process. To complete the checklist, we conducted a wetland delineation and floodplain assessment. We also prepared a Historical/Cultural Survey.

#### DATES

2013 - Present

#### SERVICES

Environmental Planning & Permitting

Storage hangar at Gould Peterson Municipal Airport.

- · Electrical Engineering
- Civil Engineering
- Surveying

#### MARKETS

Aviation

- Master Planning
- Site Design
- Structural Engineering

#### PROJECT REFERENCE

#### **Becky Jones**

City of Tarkio 660.736.4821

#### PROJECT PROFILE -

With our guidance, the city applied for Supplemental Appropriation funding, which requires adherence to strict deadlines. Frequent coordination with the FAA, MoDOT, and other administrative organizations allowed Olsson to keep the project ahead of schedule.

Future projects at Gould Peterson Municipal Airport may include:

- · Hangar area development
- · Runway extension and widening
- · Land acquisition
- Airport navigational aids
- · Pavement rehabilitation



## NORTH PLATTE REGIONAL AIRPORT

#### North Platte, Nebraska

### LONG-TERM COMMITMENT BRINGS RESULTS TO NORTH PLATTE.

Since 2004, Olsson has been involved in 15 projects totaling over \$13 million at the North Platte Regional Airport. In 2014, we were re-selected for the next five-year contract. This airport has significant business jet traffic along with commuter airline service and three air cargo carriers.

Phasing of construction has been a key component of every project. The airport has just one taxiway from both runways to the apron, requiring unique solutions and careful coordination with the airport, tenants, and FAA. The airport has never been closed due to construction during our tenure.

After years of focusing exclusively on improving the runways and taxiways at the airport (including a historic whitetopping project for Runway 17/35 that involved one of the first applications of thermoplastic markings in the FAA Central Region), we expanded our scope of work by helping the airport authority acquire an Aircraft Rescue and Fire Fighting (ARFF) vehicle and expand the existing ARFF building and fire station located on the airport grounds.



#### DATES

2004 - Present

#### SERVICES

- Geotechnical
- · Electrical Engineering
- · Civil Engineering
- Surveying
- · Materials Testing

#### MARKETS

Aviation

- Construction
   Management
- Structural Engineering

#### PROJECT REFERENCE

#### **Cherie Bodeman**

North Platte Regional Airport 308.532.1900

#### PROJECT PROFILE

Not only did we help the airport get full funding for a Class IV ARFF vehicle, we were also able to get funding for seven sets of ARFF Personal Protective Equipment (PPE) as well as miscellaneous fire fighting rescue tools, all of which will be delivered in 2019.

In anticipation of the airport's new ARFF vehicle, we wrote a comprehensive design report to justify expanding the existing ARFF building. Our main goal was to create a larger bay for the airport's new ARFF vehicle, so we began by removing the existing storage building adjacent to the current ARFF building. We designed a firewall between the new addition and existing building as well as two doors to connect the two facilities. The rest of the addition was designed to match the brick exterior of the existing building and includes radiant heat and a fire sprinkler system.

In 2017, our team designed a new 27,500 ft wildlife fence that replaced an existing fence. The aging fence was a combination of high tensile strand electrified wire fence, chain-link, and wood.

Early in the design phase, we collaborated with the airport's wildlife biologist to eliminate the need for a fence skirt, which reduced project costs by more than 10 percent. We analyzed wood posts versus steel posts and designed an 8 ft woven wire fence with barbed wire outrigger. Bids were 33 percent below the original estimate and the final construction costs were another 5 percent below bids.

Our commitment to North Platte has made all the difference for this hometown airport and the residents that rely airport staff to keep the community safe.





## WAYNE MUNICIPAL AIRPORT

STAN MORRIS FIELD

#### Wayne, Nebraska

### QUALITY SERVICE CLOSE TO HOME IS WHAT MATTERS TO WAYNE.

Due to our responsive, high-quality service, the Wayne Airport Authority has re-selected Olsson for three consecutive five-year terms. We have provided planning, design, bidding and construction phase services for six projects, including an environmental assessment, totaling almost \$9 million in costs.

Our most recent projects include the following:

- Construct partial parallel taxiways to Runway 18/36 and Runway 5/23
- Install Medium Intensity Taxiway Lights (MITL) and guidance signs on both taxiways
- Reconstruct three T-hangar taxilanes

In 2017, we designed the two partial parallel taxiways to Runway 18/36 and Runway 5/23, which are currently under construction. Prior to the design, Olsson prepared an Environmental Assessment (EA) for a full parallel taxiway. To help the airport meet tight FAA schedules, we completed the assessment in just six months, including a public hearing.



#### DATES

2006 - Present

#### SERVICES

- Master Planning
- Geotechnical
- Electrical Engineering
- Civil Engineering
- Surveying
- · Materials Testing

#### **MARKETS**

Aviation

- Construction
   Management
- Environmental Planning
- Structural Engineering
- Mechanical Engineering

#### PROJECT REFERENCE

#### Tom Becker

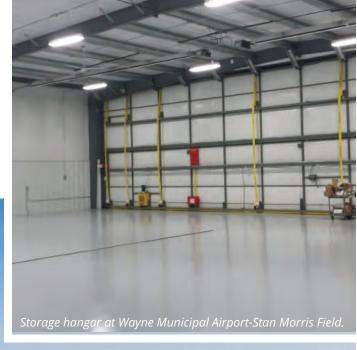
Airport Manager 402.841.0659 In addition to providing environmental services, we called on our in-house geotechnical, surveying, pavement, and electrical specialists for all of the projects listed above.

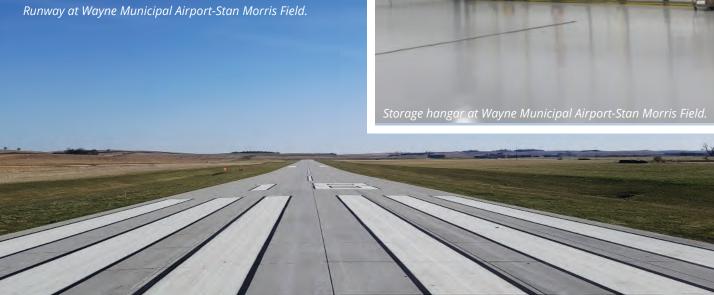
For example, our geotechnical experts investigated the existing soil conditions and recommended a cement-treated subgrade as the most cost-effective solution. Our pavement specialists analyzed several pavement designs and determined that concrete pavement had the lowest life-cycle cost. Finally, our electrical team evaluated the existing electrical system and designed new LED lights and signs. Because LED lights require less power, our design made use of existing regulators, which reduced project costs.

A key part of the taxiway design was meeting the FAA's complex curve requirements for fillets. We used an intricate layout and joint pattern to address the acute angles at the runway intersection. The complexity of design combined with the airport's desire to minimize disruption to runway traffic, led us to develop a construction phasing plan.

Prior to these projects our team completed a new storage hangar and terminal building at the airport. We also undertook a major paving project in 2011 that included whitetopping of the primary runway, reconstruction of the crosswind runway and connector taxiways, and reconstruction of the aircraft parking apron.

Wayne selected Olsson for quality, and we've exceeded expectations.





## RENEWABLE ENERGY

## As more and more wind turbines and solar panels dot the landscape, one thing is abundantly clear: renewable energy is in demand now more than ever.

At Olsson, we have the renewable energy solutions to help energy providers, like you, meet these demands. With a team of renewable energy experts and professional consulting services, we can carry your wind energy and solar projects through the regulatory process from site selection to post-construction operation. The secret to our success? Personalized project management emphasizing clear and constant communication with the stakeholder, including the developer and regulatory agencies.

We have completed utility-scale solar projects in the Midwest and throughout the United States, and our wind energy projects are visible coast to coast.

Headquartered in the heart of the richest wind resource area in the country, Olsson has made a commitment to cement our foothold as a leading engineering firm in the renewable energy industry. Olsson has offices throughout the Great Plains, working to support projects in the U.S. Olsson's experience in our seven practices - environmental services, site/civil engineering, field services, survey, water and wastewater, facilities, and transportation - have supported over 300 wind and solar projects, and have included projects developed by major renewable energy players ranked by the American Wind Energy Association and other trade associations. Olsson is committed to the renewable energy industry in many ways, including memberships, sponsorships, planning committees, speakers, legislative support, to name a few; on a local and national level.

THESE RENEWABLE ENERGY PROJECTS ARE CONFIDENTIAL IN NATURE, THEREFORE, WE ARE UNABLE TO HIGHLIGHT ANY OF OUR PROJECTS.



## **RAIL/QUIET ZONES**

## We provide design and consulting services to safely maintain and expand rail networks across America.

When you work with Olsson on a rail project, you're working with a national team of railroad experts who have performed substantial design work across the United States involving a wide array of railroad infrastructure.

We've gained a wide breadth and depth of knowledge through our extensive experience with both public and private clients including railroads, industrial park developers, industries, governmental entities, and more.

We're a one-stop shop that can address all rail-related needs, including bridge and other structural design, civil/track design, hydrologic/hydraulic evaluations, geotechnical exploration and evaluations, surveying, utilities coordination/relocation, permitting, construction-phase services, emergency response services, public projects review, and technical support of litigation cases.

If there's an emergency, our experts are available 24/7 to respond and help restore rail track services quickly. We can provide emergency permitting services and assist in developing plans for replacement structures.

We're committed to providing high-quality services to successfully complete any size project.

- Track Design
- · Quiet Zones
- Hydrologic and Hydraulic Investigations
- Permitting and Compliance
- · Geotechnical Engineering
- Environmental Services
- Emergency Response Services

- Survey and Construction Observation/Management
- Track Inspection
- At-Grade Crossing Safety Analysis
- · Structural Design and Load Rating
- Site Due Diligence and Master Planning
- · Utility Coordination/Real Estate





## LOGISTICS PARK INTERMODAL QUIET ZONE

#### **Edgerton, Kansas**

The Logistics Park turned the small community of Edgerton into a rapidly booming town. The new intermodal business park became one of the fastest-growing in the country, attracting cargo-filled trains and thousands of trucks daily. The residents of Edgerton were concerned about the traffic, the development, and the noise from the new rail intermodal. This provided Olsson an opportunity to help the community.

With former BNSF employees on staff, we were able contribute quiet zone expertise. There were a couple crossing intersections that needed attention. At the Nelson Street crossing, access to Edgerton City Lake was essential and complicated, because the dam ran along side of the street. We were able to configure a design with a slight diversion away from Nelson Street to the east of the crossing. The city hall, library, and post office are within two blocks of the Nelson Street crossing. The new intersection provided a buffer for the reduction of locomotive horn noise in town. The second intersection provided access to the Johnson County Parks and Recreation Mildale Farm. Olsson found a better route and relocated the access outside of the city limits. Both of the new configurations significantly improved the quality of life for residents and visitors by reducing rail commotion.



### **DATES** 2011

#### SERVICES

Transportation Planning

#### **MARKETS**

Rail

#### PROJECT REFERENCE

#### **Beth Linn**

City Manager 913.893.6231



## BNSF QUIET ZONE SAFETY STUDY

#### Hastings, Nebraska

#### INNOVATIVE APPROACH TO RAIL DESIGN.

Quiet zones and rail grade separations are a specialty for Olsson's railroad engineers. And having these experts right in the city's backyard was a plus. We were tasked with evaluating safety measures to allow for Quiet Zone applications for twelve crossings. The safety measures that were reviewed included crossing closures, one-way street pairing, grade separations, medians, and wayside horn systems. The median installation options included street approach widening, signal relocations, curb and gutter, sidewalks, and crossing surface widening. These were all completed with successful results for the city.

Our innovative approach for the four crossings near the central business district included extended the existing one-way street system far enough to the south to include four railroad crossings within the one-way system. This creative idea alleviated the need for street widening and the installation of medians. The only cost incurred for the one-way crossings was lengthening the existing gates and removing the signal system on the departure side. This was a big cost savings for the City of Hastings.

#### DATES

2009

#### **SERVICES**

Transportation Planning

#### MARKETS

Rail

#### PROJECT REFERENCE

#### Joe Patterson

City Administrator 402.461.2309 jpatterson@cityofhastings.org



## MODOT SIDINGS IMPROVEMENTS

#### Kingsville and Knob Noster, Missouri

**ALLEVIATING RAIL CONGESTION.** 

The Kansas City-St. Louis railroad corridor, known as the Missouri River Runner route, currently hosts two daily state-supported passenger round trips. This existing Union Pacific Railroad (UPRR) mainline is experiencing congestion resulting in delays to Amtrak service. The Kingsville and Knob Noster sidings were identified as potential areas that could improve Amtrak reliability and freight flow.

Missouri Department of Transportation (MoDOT) recieved Federal Railroad Administration (FRA) High-Speed Intercity Passenger Rail Program funds from the American Recovery and Reinvestment Act (ARRA).

With the funding MoDOT chose Olsson to conduct an extensive alternatives evaluation for both areas to identify the preferred locations. Close coordination with MoDOT and UPRR was critical. Our experts were able to design the needed improvements consisting of two miles of grading, drainage, and bridge upgrades.

#### DATES 2014

#### **SERVICES**

- TransportationPlanning
- Surveying
- Hydrogeology
- Environmental Planning & Permitting
- · Civil Engineeering
- Structural Engineering

#### **MARKETS**

- Rail
- Federal
- Bridges

#### PROJECT REFERENCE

#### **Troy Hughs**

Passenger Rail Project Manager 573.751.7690 troy.hughes@modot.mo.gov



## BNSF QUIET ZONE IMPLEMENTATION

#### Riverside, Missouri

### NAVIGATING TRICKY PUBLIC TO PRIVATE RAIL IMPROVEMENTS.

Olsson worked as the City of Riverside's on-call engineer. The city soon realized Olsson was a comprehensive consultant when they needed quiet zone implementation. The city engineer asked if we could coordinate and manage the implementation of two quiet zones, and we did.

One is in operation and included aspects not previously addressed by the Federal Rail Administratrion. It is a public crossing into a park, sand plant, and riverboat casino. It was converted to a private crossing providing access to the sand plant, with a new grade separation to give access to the park and casino. Addressing the conversion of a public to private required an innovative approach to assure the crossing would only be used for sand plant traffic. We designed medians and a gate that will be locked during non-operational hours. The second crossing was in conjunction with a street widening. We designed approach grade improvements, medians, and widened the crossing surface to accommodate the quiet zone improvements.



#### **SERVICES**

TransportationPlanning

#### **MARKETS**

Rail

#### PROJECT REFERENCE

#### **Mike Duffy**

Community Development Director 816.741.3993 mduffy@Riversidemo.com



## ON-CALL RAILROAD BRIDGE INSPECTIONS FOR KDOT

#### Statewide, Kansas

#### **ENSURING SAFETY FOR STATE-OWNED RAILWAYS.**

As rail bridges are repaired, their structural integrity is a concern. Kansas Department of Transportation trusted Olsson's structural railroad engineers to inspect 43 railroad bridge repairs. These bridges ran along the Nebraska Kansas Colorado (NKC) Railway from Cedar Bluffs, Nebraska, to St. Francis, Kansas. The total length of the bridges was 4,310 linear feet. Typical bridge repairs consisted of cap replacements, stringer replacements or adding stringer reinforcements, tie replacements, and bulkhead repairs or replacements.

#### DATES

2010 - 2013

#### **SERVICES**

- Civil Engineeering
- Structural Engineering

#### MARKETS

- Rail
- State
- Bridges

#### PROJECT REFERENCE

#### John Rosacker

Rail/Freigh Analyst 785.296.0342 Rosacker@ksdot.org





#### CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 11/22/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

	-				
PRODUCER		CONTACT NAME: Molly Harmon			
SilverStone Group 11516 Miracle Hills Drive Suite 100		PHONE (A/C, No, Ext): 402-964-5598 FAX (A/C, No): 402		7-6325	
		E-MAIL ADDRESS: mharmon@ssgi.com			
Omaha NE 68154		INSURER(S) AFFORDING COVERAGE		NAIC#	
		INSURER A: Charter Oak Fire Ins. Co.		25615	
NSURED	5761	INSURER B: Travelers Ind. Co. Of America		25666	
Olsson, Inc. 302 East Millsap Road		INSURER c: Travelers Property Casualty Co. of An	36161		
Fayetteville AR 72703		INSURER D: Phoenix Insurance Company		25623	
•		INSURER E : ACE AMERICAN INSURANCE COMF	PANY	22667	
		INSURER F:			
COVERAGES	CERTIFICATE NUMBER: 1064570032	REVISION NUI	MBER:		

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	1					EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.  INSR   POLICY EFF   POLICY EXP						
	NSR LTR TYPE OF INSURANCE		INSD		POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS				
В	X	COMMERCIAL GENERAL LIABILITY			P-630-8D707184	1/1/2019	1/1/2020	EACH OCCURRENCE	\$1,000,000			
		CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 100,000			
								MED EXP (Any one person)	\$ 5,000			
								PERSONAL & ADV INJURY	\$ 1,000,000			
	GEN	N'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	\$ 2,000,000			
		POLICY X PRO- JECT LOC						PRODUCTS - COMP/OP AGG	\$ 2,000,000			
		OTHER:							\$			
Α	AUT	TOMOBILE LIABILITY			P-810-2L645724	1/1/2019	1/1/2020	COMBINED SINGLE LIMIT (Ea accident)	\$1,000,000			
	Х	ANY AUTO						BODILY INJURY (Per person)	\$			
		OWNED SCHEDULED AUTOS ONLY						BODILY INJURY (Per accident)	\$			
	Х	HIRED X NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	\$			
									\$			
С	Х	UMBRELLA LIAB X OCCUR			PSM-CUP-9H235899	1/1/2019	1/1/2020	EACH OCCURRENCE	\$ 10,000,000			
		EXCESS LIAB CLAIMS-MADE						AGGREGATE	\$ 10,000,000			
		DED RETENTION\$							\$			
		RKERS COMPENSATION DEMPLOYERS' LIABILITY			UB-9H987803-18-43	1/1/2019	1/1/2020	X PER OTH- STATUTE ER				
	ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)		RIETOR/PARTNER/EXECUTIVE N/A N/A (n NH)			E.L. EACH ACCIDENT	\$1,000,000					
							E.L. DISEASE - EA EMPLOYEE	\$ 1,000,000				
	If yes, describe under DESCRIPTION OF OPERATIONS below							E.L. DISEASE - POLICY LIMIT	\$ 1,000,000			
Е		fessional Liability ms Made			EON G25589993 006	1/1/2019	1/1/2020	PL Each Claim PL Aggregate PL Ded Per Claim	\$5,000,000 \$5,000,000 \$350,000			

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
All Carriers listed above have AM Best Ratings of A++XV.
RE: any and all projects.

CERTIFICATE HOLDER	CANCELLATION				
City of Fayetteville, Arkansas 113 W Mountain Street	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.				
Favetteville AR 72701	AUTHORIZED REPRESENTATIVE				
	Ju alandge				