The Diamond Creek Bridge

Introduction

Those of us who were so fortunate as to know many of the first settlers of Chase will recall that they were given to facts rather than fancy. The open spaces held the community spirit in check. The lonely trails of the Indians and the paths made by the wild herds were slowly beaten into double-rutted roads. Bridges there were none and in flood time only the high prairie road was open. This isolation made for self-reliance and little concert of action. William C. Austin, 1872-1944

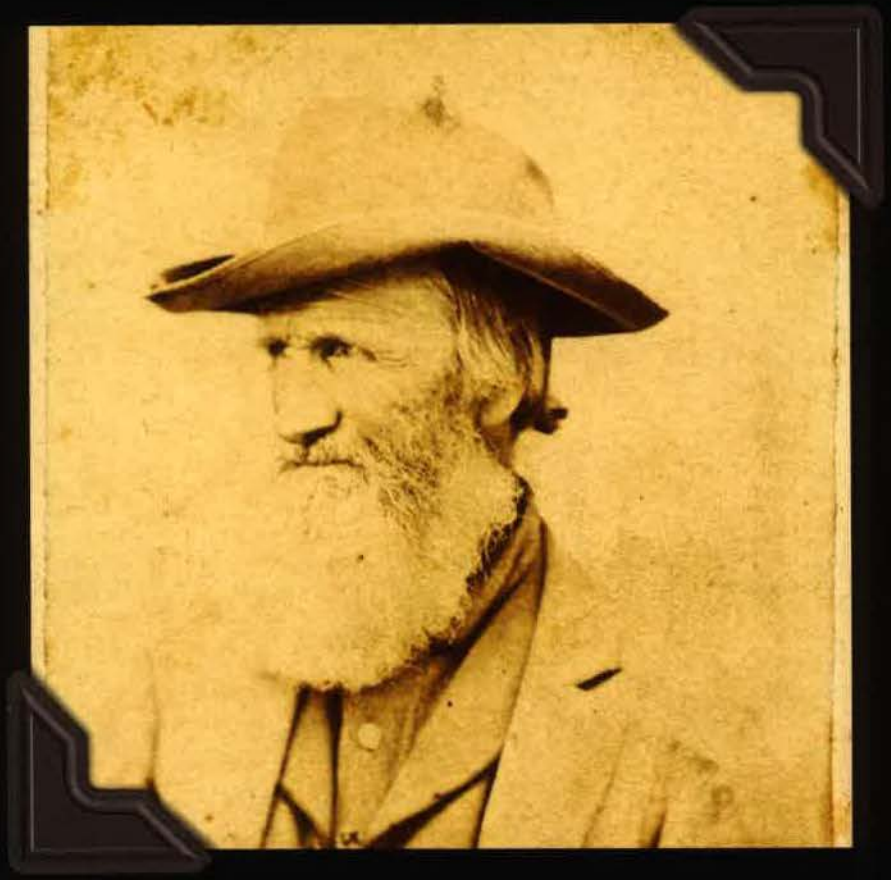
Bridging the Divide

This is a story about a bridge - a bridge that was built by local hands, with local stone, by local design. But no bridge is local. For millennia, trails and roads have followed waterways, forded by crossings and bridges that connected all kinds of people -Plains Indians, explorers, traders, immigrants, ranchers, and tourists to places - cities, towns and rural outposts. These were people who might not have agreed on much - but if they could agree on one thing, it would be this bridge. This is a story about a bridge that tells the story of Chase County and belongs to locals, displaced locals, and travelers alike.

If you look at a map of Chase County, Kansas, the age-old paths are clear. The Indian trade routes that followed the Cottonwood River gave way to the legendary trail that connected a growing nations cities to international markets in Santa Fe. Following the Civil War, the Atchison, Topeka and Santa Fe Railroad, which roughly followed the path of the Santa Fe Trail, connected the state's first Euro-American cities along the Missouri River to the Flint Hills communities of Emporia and Strong City before angling southwest to Newton and Dodge City, where it drew the Texas cattle that would feed the growing cities of the industrial age.

In 1859, George and Thomas Evans settled near the place where the Cottonwood River and Diamond Creek met, about three and a half miles west of present-day Strong City. Before the Evans's, this was a junction on the Kaw Trail. From 1859 until the railroad came and named it Neva Station, it was known as Evans Junction. But it was Neva that stuck and Neva that lent its name to the ancient limestone made from the detritus of the Permian inland sea whose waters first cut the banks of the Cottonwood River and Diamond Creek.

By the time the Diamond Creek Bridge was built in the waning years of the nineteenth century, this was already an ancient crossing and was a well-known route for local farmers and ranchers. In just a few short years, Kansans would begin replacing their horses and buggies with cars and tractors. But the bridge remained. People followed water, trails followed rivers, railroads followed trails and highways followed railroads. For a hundred twenty years, the Diamond Creek Bridge stood witness as the Kaw people, long-since removed to Indian Territory, were nearly obliterated, as their white successors re-learned that Chase County was blessed with some of the world's richest grassland, and as freighters moving goods from Kansas City to points west traded wagons for train cars and eighteen-wheeled trucks.



History of Diamond Creek Township

A Prairie Oasis

The Indian name for this place has been lost to history. But the place we know as Diamond Creek was christened three decades before white settlers arrived. In 1825, eager to facilitate trade with newly liberated Mexico, the U. S. Government commissioned George C. Sibley to survey the road to the northern provincial capital of Santa Fe and negotiate Indian treaties to help ensure the safe passage of freighters along the Santa Fe Trail. Over the span of a two-year expedition between Missouri and Santa Fe, Sibley and his men named many landmarks, with a particular emphasis on crossings and water sources. In August 1825, a member of the expedition called Old Ben Jones found a spring in the prairie that gushed enough excellent, clear, cold water to supply an army. Sibley wrote about a legendary fountain in the Arabian Desert called The Diamond of the Desert. Sibley would christen this one "The Diamond of the Plain." Over time, The Diamond of the Plain became known as Diamond Springs. The creek that ran from it was Diamond Springs Creek, later shortened to Diamond Creek.

With its ties to the Santa Fe Trail, it is not surprising that the Diamond Creek valley was home to the county's first Euro-American settlers. Seth Hays was hired to man a trading post on the Kaw Reservation at what would become Council Grove in 1847. Among his enterprises was securing a government contract to provide the Indians with beef. During a drought in 1854, Hays reportedly sent a Kaw scout to find prairie hay to sustain his herds. After finding good grass in the valley of Diamond Creek, Hays ordered his men to build a log cabin and move his cattle herd there. In 1856, he preempted 160 acres for his Cottonwood Ranche in what is now Diamond Creek Township. It wouldn't be long before these rich prairies, which had long sustained the continents largest land mammal, would be known as cattle country.

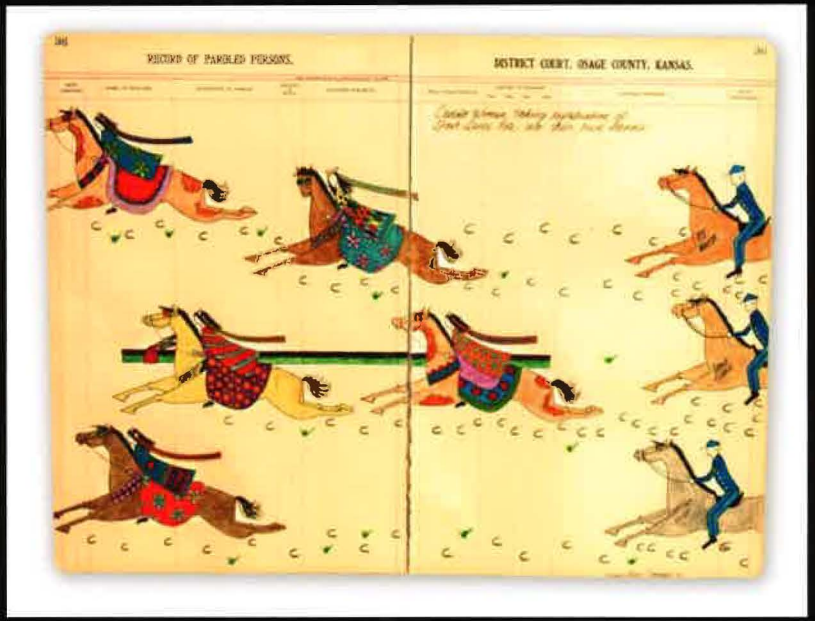
Diamond Creek Township was established by the Chase County Board of Supervisors in March 1860, by which time it was home to 188 people. It was a melting pot of immigrants from Ireland, England, Scotland, and Germany - and westward pioneers who hailed from New York, Vermont, Pennsylvania, Wisconsin, Illinois, Indiana, Kentucky, Tennessee, Missouri, Virginia, and Ohio. At least one, Ernest Hegwer (whose surname was somehow the basis for the town name of Hymer), was born on the Atlantic voyage from Germany to America - depriving him of a native country.

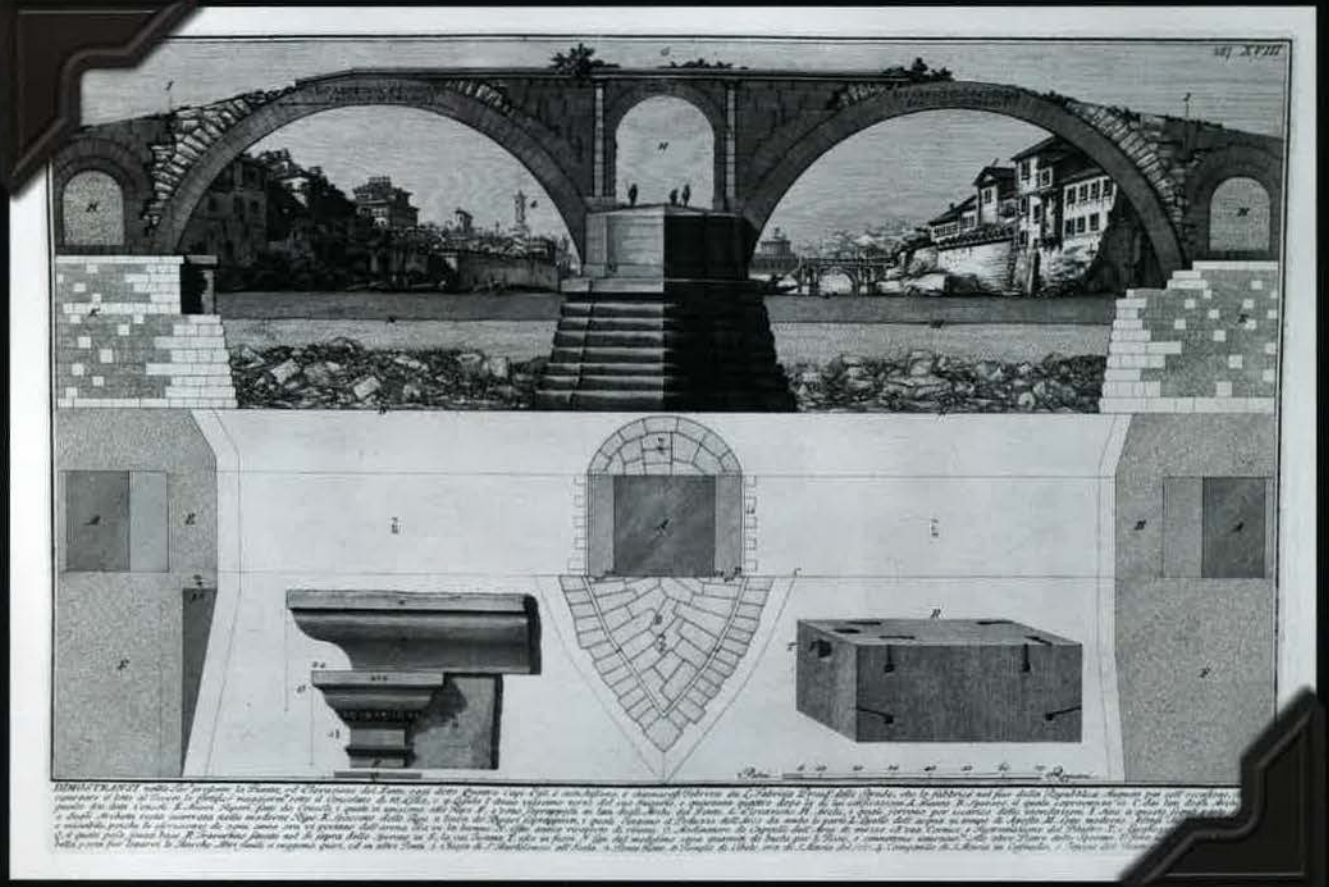
By 1880, the population had doubled and Diamond Creek Township was home to 470 souls, more than twice today's population - with familiar names like Drummond, McDowell, and Talkington. Most made their living as farmers/stock raisers. A few worked for the railroad. But it's worth noting a few exceptions. John McDowell was a

stone cutter born in Scotland and SJ Murphey was a stonemason born in Pennsylvania. The township was also home to Stephen N. Wood, town president of Elmdale, which is still the township's largest town, and Josh Shipman, the County Treasurer.

Chase County is a place with strong ties to its creek valleys. If you ask someone who lives in rural Chase County where they live, they'll likely respond with Middle Creek, Bloody Creek, Sharps Creek, or the Verdigris. Diamond Creek is no exception. Even today, when you pull off of U. S. Highway 50 onto Diamond Creek Road, you'll find that lists the names of those who live there. Most who made their homes in the county's rich bottomlands, including along the banks of Diamond Creek, were farmers; but as the railroad steamed its way across the prairie, the uplands gave way to stock raising and ranching.

The township's random collection of winding roads owes to the industry and faith of its pioneers. In the early days, all it took for the county to build a road was a petition signed by twelve landowners. Everyone in the county would have known of the fate of William Shaft, who apparently drowned in an attempt to cross Diamond Creek 1858. And conditions likely hadn't improved in the 1860s. As soon as the fog of Civil War lifted, residents of Diamond Creek petitioned the county for a bridge. That is how the road crossing Diamond Creek came to be improved and maintained by the county - and how this culturally diverse place, named after an oasis in the Arabian Desert, took the first step toward building the stone-arch bridge that would serve the community for almost 125 years.





History of Masonry Arch Bridges

An Age-Old Tradition

The men who built the Diamond Creek Bridge were part of an age-old tradition of masonry construction that stretched back to their ancestors' old-world homelands. Masonry arches and vaults - typically constructed of adobe brick, fired brick, or stone from igneous or metamorphic material - have been used for bridging spaces for several thousands of years. They were incorporated into structures all around the world carrying roads, water and railways over obstacles ranging from streams and large rivers to modest gulleys and deep gorges.

The technique of choice for Chase County's bridge builders was stone-arch construction. An arch is a curved structure that spans an elevated space and may or may not support the weight above it. And while arches may be synonymous with vaults, a vault may be distinguished as a continuous arch forming a roof. Masonry arches are made up of wedge-shaped blocks, called voussoirs, arranged vertically in a curved configuration, that hold each other firmly in place and prevent each other from slipping. The voussoirs at the top - the crown of the arch (those flanking the central keystone) - convert the downward pressure laterally, along the curve of the arch to the supports at each end. The stone arch relies on the interdependence of its parts and will not stand until each is in place.

Excavations have revealed that barrel vaults with a span of more than one meter were already in use at least 5,000 years ago in Mesopotamic burial chambers. And the first-known vault found in the royal grave of Ur dates to around 4,000 B.C. The Sumerians are known to have used the arch, made of wedge-shaped bricks, which they baked and used above doorways as early as 3,000 B.C.; and it is believed that this technology made its way to the Greeks and Romans from Babylonia via the Sumerians. And while the Greeks were familiar with the stone arch, they preferred more linear types of architecture, and as a result used stone arches less frequently.

A major step forward in masonry arch bridge development was made by the Etruscans who lived in current-day Tuscany and Umbria regions of Italy and flourished from around 700 to the 4th Century B.C. They are credited with inventing the wedge stone arch, which allowed for a better shape of the arch versus ashlar, or dressed stones, which are uniform on all sides. However, the Etruscans were unfamiliar with mortar, which meant the placing of stones in terms of adjustment of joints towards the circle center was primarily of a low quality (Proske 37).

With the fall of the Roman Empire (ca. 476 A.D.) and the impending bleak period known commonly as the Dark Ages (ca. 476. A.D. to 1340s A.D.), the building of stone-arch bridges in this and many parts of world came to a near halt or resulted in only low-quality structures, many of which were subsequently destroyed due to conflict and war. In this time of civil unrest, waterways and steep valleys were seen as natural boundaries between warring neighbors, thus discouraging bridge building of any type.

One exception during this time was the Old London Bridge, begun in 1176 A.D. Before that time, the Thames had been spanned by a timber bridge which had been repeatedly destroyed by flood and fire. Because many people were living in houses built on the bridge, these disasters took such a serious toll on human life that finally a stone bridge was seen as imperative. The decision was apparently a good one, as the replacement stone arch bridge was in service for 600 years before being replaced in 1824.

The Renaissance (ca. 14th to 17th century) saw a flourishing of artistic expression, borrowing once again from the Romans, which was applied to stone arch bridges throughout Europe and elsewhere. Spurred by the growth of cities, these bridges benefited from improvements in technology which allowed for gentler inclines for pedestrians and carriages.

In the American Colonies, one of the earliest stone-arch bridge examples is the Frankford Avenue Bridge, built in 1697 as part of the Kings Road linking Philadelphia to cities to the north. It is credited with being the oldest stone bridge in the United States to still be in use.

The 18th century witnessed the perfection of the masonry arch bridge but also the introduction of iron as a competitor, which caused a decline in stone arch bridge building. That said, stone arch bridges continued to be built during the nineteenth century, particularly in areas where good stone was available.

In the U.S. in the late 19th and early 20th centuries, stone-arch bridge construction picked up somewhat, spurred in large part by the City Beautiful Movement which focused on providing beautification and monumental grandeur in cities. Another minor surge occurred during the 1930s in the U.S. when the country was shrouded over by The Great Depression. As a direct result, the government established the Works Project Administration (Federal Works Agency) to help offset massive unemployment. The program included, among many other things, labor-intensive public works initiatives to build, update and repair roads and bridges throughout the country. In the 8-year period from 1935 to 1943, the WPA constructed 78,000 new bridges and viaducts and improved more than 46,000 others, of which about one-third were stone structures.

While masonry arch bridges have almost entirely been replaced by concrete and steel as the materials of choice in modern bridge construction, the tradition of building with stone is still kept alive by professionals and enthusiasts. The beauty and the ease with which stone arch bridges fit within the landscape, not to mention their tremendous durability, are key drivers of their prolonged interest among builders and in many communities throughout the world.

MASONRY ARCH BRIDGES IN KANSAS

Prairie Pragmatism

For hundreds of years, people moved across the Kansas landscape, crossing streams and rivers when and where they were lowest to reach their destinations. Alternatively, as found in eye-witness accounts from the 1850s, fallen trees, pole and plank bridges or corduroy bridges (rows of logs laid on a perpendicular to the direction of a road or streambed) were employed. In one account, members of the Leavenworth and Pike's Peak Express Company, a stagecoach and express line operating between Leavenworth and the Rocky Mountain gold region, were pleasantly surprised to find a wooden bridge built across a dangerous ford of Walnut Creek, where previously a bouco or coracle - a leather-covered canoe made of willow rods - had been employed.

Unlike the stagecoach and express companies, early Kansas squatters and settlers seldom traveled more than ten miles to market, which was reflected in the local road network. Indeed most of the roads extended fewer than twenty miles. However, as immigration and settlement increased as well as the market economy, so did the need for all-weather crossings. During the 1860s and 1870s, several groups settled in Kansas, including the Bohemians/Czech, Volga Germans (German-speaking Russians), Germans, Swedes, Danes, Norwegians, Scots, and the English. Longer-established Americans from the East and South also made their way to Kansas. And naturally each group brought its own masonry tradition.

By the late 19th and early 20th century, small communities began to compete for survival; and bridges were key to their success. With good bridges available to them, farmers, for example, had easier access to markets, including getting their grain to millers and, later, elevators along railway lines where train cars then took the grain on to larger markets.

And given the lack of sufficient trees for building in many areas, stone proved a good choice. Sedimentary rock is the most common rock in Kansas - a large percentage of which is limestone. When the perhistoric seas dried up, the layers of accumulated dead flora and fauna manifested themselves in large slabs of rock, stretching for hundreds of miles in every direction. In North Central Kansas, for example, there are approximately three million acres of limestone beds which includes much of the Flint and Smoky Hills areas. As a result, many landowners in Kansas had their own quarries. Local craftsmen, including the homesteaders themselves, busied themselves quarrying the limestone beds sometimes found only inches below the top soil to make fenceposts, houses, businesses, churches, caves, sidewalks, hitching posts, clotheslines, watering troughs, wells, cellars as well as bridges and culverts.

The Bridge Builders

All Politics is Local

In the 19th and early 20th centuries, the construction and maintenance of roads in Kansas was a local responsibility. The first commissioned masonry arch bridges were built during the 1880s, including the Clements Stone Arch Bridge over the Cottonwood River in Chase County in 1886. And while native limestone bridges could be more expensive to build than other bridge types, the durability of the stone, which meant fewer repairs, justified the cost in many cases. Likewise, by using stone, contractors could put money back in local economies by employing local quarry owners, laborers and stonemasons. This made stone a popular option with local communities and boards who were tasked with approving and funding construction projects.

Bridge builder Walter Sharp is credited with constructing more than 100 stone arch bridges in the state by 1904, most of them in Butler, Cowley and Greenwood counties. He was a strong proponent of stone arch bridges due to their strength and ability to withstand floodwaters. During his heyday, Sharp estimated that stone bridges cost 10% more than metal bridges. That said, contractors utilizing steel would often lower their bids by $100-$500 when they knew they were competing against stone contractors, making Sharps calculation a bit misleading.

Other prominent bridge builders included C.C. Jamison and A. Methany. Jamison began his career as a contractor and builder at the age of twenty-four, his first work being a forty-foot stone arch bridge across Dry Creek between Bruno and Augusta around 1883. It is estimated that he built some fifty county bridges in Butler County and 200 township bridges. Jamison also built the only Butler County stone-arch bridge listed on the National Register of Historic Places, Pole Cat Creek Bridge, south of Douglass, in 1910.

Cowley County, still home to 17 bridges built between 1890 and 1935 ranging from single to triple arches, refers to itself as the Stone Bridge Capital of Kansas. The bulk of them were built between 1900 and 1910, several of which are credited to Walter Sharp as well as Jerry Hammon, a contractor and builder in Udall. Hammon was awarded the contract to build the Stewart Creek Bridge in 1904. It is interesting to note that the 1900 census lists Hammon as a laborer, while in 1910 it refers to him as a stonemason. Hammon's work on bridges and culverts took him as far afield as Oklahoma to oversee projects.

Once the need for a bridge was determined, builders were then tasked with finding the right stone source and for having it quarried. The tools used in the quarrying and shaping process were simple and included: feathers and wedges (plugs); stone drills and bits of various sizes; chisels; stone hammers; slips and scrapers; and scribers. Most of the tools were made at home forges or in local blacksmith shops.

The quarrymen created the giant slabs by drilling holes about 4 or 5 feet deep into the rock, roughly 9 to 12 feet apart along a line marked for splitting. Next, feathers and wedges were placed in the holes. An ancient technique, feathers, which are wider at the bottom, and tapered and curved at the top, are placed in the hole, one on each side. Next, the wedge or plug is placed between the feather's narrow end down. Tapping each of the wedges lightly with a stone hammer then forces the feathers outward, splitting the stone slabs or blocks along the line of drilled holes. Typically the rough quarried stone would be carried to the site to be cut before the stones were set. Mortar (as well as plaster) was created from slaked lime, which involved burning broken pieces of limestone in crude kilns along creek banks, which produced lime powder.

The men working as stonemasons and quarrymen during the late 19th and early 20th centuries in Kansas were not necessarily working full time in this occupation. For some, working in quarries or on bridge projects was something done to supplement an existing income or was used to fill periods of unemployment. Sidney Holder, an ex-slave, brought his family to Marion, Kansas in 1882 where he took odd jobs, including helping to build the Mud Creek Bridge located on Marion's main street in 1883, before he settled into more permanent work. According to Holder, he was part of the Hoops & Lewis gang who were employed to build the double arched stone bridge.

And while bridge building increased after 1900, fewer and fewer were pure stone arch bridges. Builders throughout the country were experimenting with new materials, including reinforced concrete and steel; Walter Sharp was embracing both in some of his works by 1904. The scale of Sharp's business and the shift in materials he was using is revealed in a 1907 article from the Weekly Republican Traveler, which reported that he was granted seven bridge building projects in Cowley County, only one of which was partially made of stone - the Silver Creek Bridge. This bridge was constructed with stone abutments and a reinforced concrete superstructure; the reason given in the article for using stone at all in the Silver Creek Bridge was that it was cheaper than reinforced concrete at that place and of fine quality.

Despite this trend to use other materials, there were exceptions, including Esch's Spur Bridge (a.k.a. Kirks Bridge) spanning Grouse Creek, near Dexter in Cowley County. Built in 1913 by Walter Sharp, this nearly 180 foot long, triple stone arch bridge is still in use today. The aforementioned Pole Cat Creek Bridge, built in 1910 by C.C. Jamison, was also built entirely of stone, as was the Pawnee River Tributary Bridge in Ness County built around 1928. Pride in stone arch bridges and their role in supporting local economies was still being touted as late as 1921 when the Wichita Daily Eagle ran a full-page article dedicated to Cowley County's stone-arch bridges. The article boasts that these structures will last a thousand years and are more sightly than bridges constructed of other material. Sharp, who features prominently in the article, also encourages the county to leverage local gravel resources for building more roads to connect Kansas towns to larger cities.

WPA
Stone Bridge
Revival

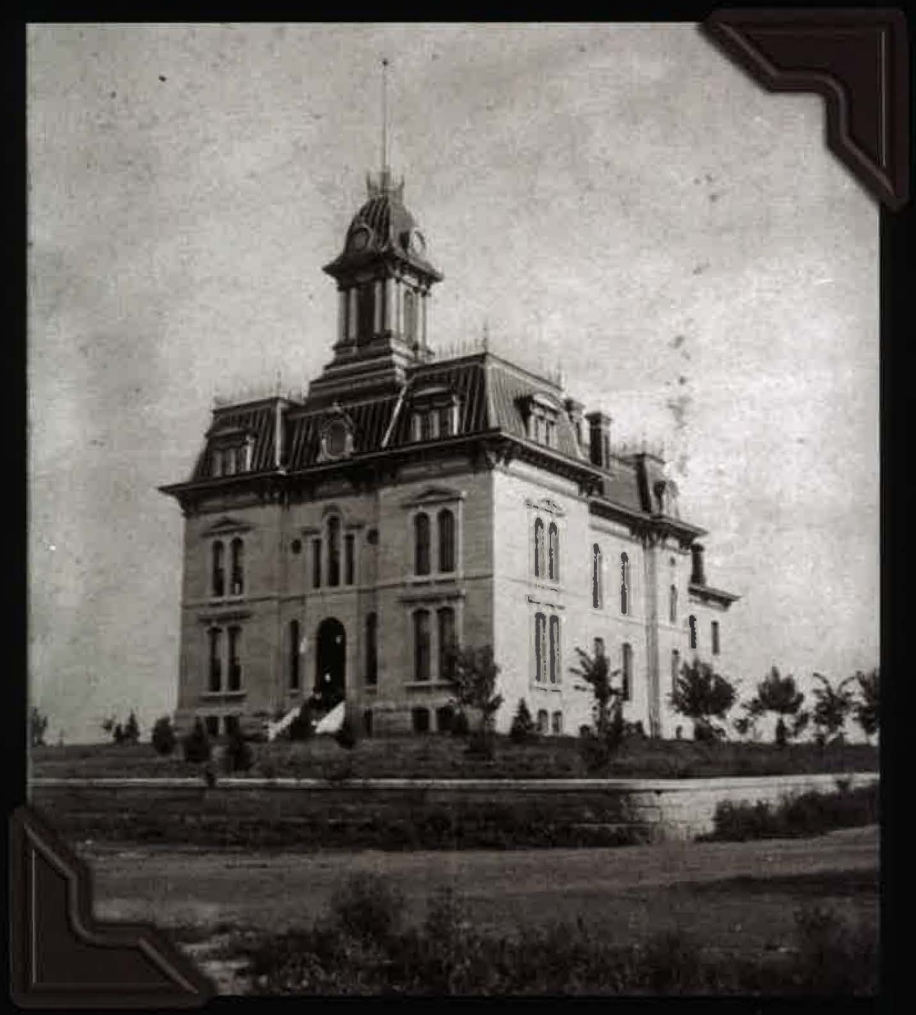
Just as stone-arch bridge building was breathing its last in Kansas, an unlikely event occurred to resuscitate it: the Great Depression. The grim circumstances were compounded in 1933 when drought and wind decimated the land. Thankfully, the WPA stepped in to fund road and highway projects. The goal of the transportation-related projects was to help provide rural residents with better roads and to give people improved access to larger markets for goods and services. Given that Kansas had only passed a law that would allow for state funding of roads in 1920, and then another in 1929 to support the building and maintenance of a system of cross-state highways, the state admittedly had a lot of catching up to do. Clarence Nevins, Kansas WPA administrator noted that in June 1939 around 33,000 Kansans were on the WPA rolls, of which more than 47 percent were employed on highway or road projects. During this time, 567 bridges were built, including several stone-arch bridges, and more than 11,000 culverts.

In the 1930s, several counties employed local men to build new stone arch bridges. These included the Fletcher Stone Arch Bridge in Ellis County where local masons were hired for the construction and the stone was quarried from an adjacent pasture. The four-arch bridge measures 156 feet in length and is 29 feet wide. A plaque on the south end of the bridge marks the WPA project and honors the workers. It was listed in the National Register of Historic Places in 2001.

In Phillips County, the Phillipsburg City Park was the recipient of several stone structures, including two stone-arch bridges built by the WPA in 1936.

The single stone-arch Beaver Creek Bridge in Barton County, built in 1941, is another WPA supported project. It measures 25 feet wide from curb to curb and 20 feet long. Then-Barton County Engineer, Harry Hunsley II, designed many of the county's bridges including the Beaver Creek Bridge. Hunsley's son noted that the stone was generally quarried within a mile of the project. Further, he explained that the limestone ledges were cleared of overburden by use of mules or horses pulling a drag or what was referred to as a tumble bug. Once cleaned, the surface of the stone was drilled manually with a star drill creating holes evenly spaced about 12 inches apart. The holes were then filled with water and allowed to freeze overnight, which created seams in the stone and allowed the men to break out the rock using pry bars specifically made for this task. Next, the stone was either cut to the size needed at the quarry or hauled to the building site in 8 to 10 foot lengths by a wagon. Getting it on the undercarriage of the wagon required the use of a block and tackle, along with tremendous physical labor.

While the Great Depression breathed into stone-arch bridge building into the mid-1940s, this period marked the end of new stone arch bridge construction in Kansas. Increased traffic loads and the need for wider bridges to accommodate large agricultural equipment has put these bridges under threat with more and more being replaced or falling into disrepair. Despite this situation, local tourism boards, historians and residents continue to rally for their upkeep and use.



Early Stone Construction in Chase County

Chase County has a long tradition of masonry construction reaching back to the earliest days of white settlement. The county's oldest-known extant limestone building, the William and Jane Shaft House northeast of Clements, was built in 1857, four years before Kansas was admitted to the Union. The vernacular Greek Revival-style home was built from stone quarried on nearby Spring Creek.

Although other early settlers constructed buildings of locally quarried stone, it was not until the arrival of the railroad in the 1870s that Cottonwood Limestone would reach commercial acclaim. One project would set the county on a new trajectory: the construction of the Chase County Courthouse. The construction of one of the states most-recognizable and beloved buildings was funded by a $40,000 bond issue that narrowly passed 301 to 237 votes on August 16, 1871. They voted in support of a design by Lawrence architect John G. Haskell. Haskell, whose family came to Kansas with the New England Emigrant Aid Company, was acquainted with Cottonwood Falls founder and fellow free-stater Samuel N. Wood by 1859 when he advertised in Woods Cottonwood Falls newspaper, the Kansas Press.

Leavenworth contractor James Bannon hired Scottish immigrant John Emslie for the masonry work. In December 1871, Emslie declared that "the stone he is now getting out of the quarry on spring creek surpasses the stone he has seen in this state, not excepting the renowned Manhattan stone." Bannon and Emslie brought a small colony of workmen to Chase County, including German-born stonecutter Nicolas Rettiger and seven of his sons and sons-in-law.

Among the new proponents for Cottonwood limestone was courthouse architect John Haskell. Haskell, who had specified Geary County limestone in his design for the first phase of the Kansas Statehouse, switched to Cottonwood Limestone for the other wings. Like the Geary County stone, Cottonwood limestone was easily quarried. But, the local paper boasted, "it had acquired a flinty tenacity from exposure that defies the action of time and weather."

With Haskell's endorsement, the contractors who came to build the courthouse stayed and developed the county's stone industry. In 1873, the Santa Fe Railroad built a spur line to the Cottonwood stone quarries and, besides the Statehouse, the stone had been used for the state normal school at Emporia, the court-house and jail at Leavenworth, also at Great Bend, the state blind asylum at Olathe, and several private buildings in Topeka, Lawrence, Leavenworth, Atchison, Kansas City and Wichita.

Ironically, the project that cemented Cottonwood Falls' place as county seat would have a greater impact on rival town Strong City. Between 1870 and 1880, the county's population tripled from 1975 to 6081. Of the 6081, 923 lived in Cottonwood Falls - while Cottonwood Station (now Strong City), which wasn't even established until 1871, boasted 1350. In his 1883 history of the state, Cutler remarked that "Cottonwood station, now Strong, is the objective railroad point in the county and Strong is a prosperous and rapidly growing city. In all directions around it are inexhaustible quarries of the best of building stone. Here are [the] establishments that furnish employment to hundreds of men."

Among the county's many stone-related employers were John Emslie, the Rettiger Brothers, Pat Norton, Tweedale and Parker, and L. P. Santy. Limestone drew others to the County, including Barney Lantry, a New York native who arrived from Prairie du Chien, Wisconsin in 1877 to fulfill quarrying contracts with the Santa Fe Railroad. To meet demand during the 1880s real estate boom, the stone companies brought workers from all over the world to Chase County. In 1880, there were forty Chase County residents engaged as masons, stonecutters and contractors. Immigrants Ireland, France, England, Scotland, and Germany worked alongside American-born workers from New England and the South, including freed slaves.

For two decades, this slew of contractors competed to provide stone and labor for the construction of stone-arch bridges to cross the county's creeks, previously forded by low-water crossings, as well as wood and iron bridges. Among them were the Stout Run Bridge (1882) on the road that connected Strong City to Emporia (now Highway 50), Silver Creek Bridge (1885), and Clements Stone Arch Bridge (1886).

When the 1880s economic boom busted, these contractors broadened their markets to surrounding western states. For instance, David Rettiger - known for constructing the Spring Hill Ranch Main House (1878), Chase County National Bank (1882), Lower Fox Creek School (1882) and St. Anthony's Catholic Church (1890) - scored the stone contract for the Montezuma Hotel, a Las Vegas hot springs resort commissioned by the Santa Fe railroad and designed by nationally acclaimed architects Burnham and Root.

But Chase County reaped the benefit of their honed craft with the construction of the Diamond Creek Bridge (1897), Fox Creek Bridge (1898), and Bazaar Stone Arch Bridge (1898). Although contractors continued to build local stone buildings in the early twentieth century such as the Strong City Opera House (1900) and Cottonwood Falls Grade School (1904), the deaths of three pioneer stone contractors (Emslie, Rettiger and Lantry) in the 1890s, coupled with the development of steel and reinforced concrete construction, signaled the end of Chase County's stone-arch bridge heyday.

The Diamond Creek Bridge

One of a Kind

When William C. Shaft left Council Grove on the morning of April 9, 1858 to make the treacherous 30-mile journey back to his home on Silver Creek, the torrential rainfall had already begun. By the time he reached Diamond Spring Creek, just eight miles from the home he shared with his wife and nine children, its banks had widened to over 100 feet and, according to the news reports, "very broad, deep and rapid, and dangerous to cross." When his horse was found the next day running loose just three miles from home, the community was concerned. When dragging the creek failed to produce the body of the wealthy, energetic, and active family man, their worst fears were confirmed. Because Mr. Shaft, who carried a revolver with him, had fielded several threats in the prior months, his family was sure that "he [had] been made way with by evil-disposed persons." Although the mystery of his death was never solved, most could agree on one thing: crossing Diamond Creek before a bridge was built was dangerous business.

Despite the concerns for safety, the county would have to wait for a bridge at Diamond Creek. At the time of William C. Shaft's death, Kansas Territory was in the throes of a border war. In 1857, the year the Shafts arrived in Chase County, the pro-slavery faction had put forth the Lecompton Constitution. A month after his mysterious disappearance, five free-staters were massacred at Marais des Cygnes in Linn County. Although Kansas had settled the issue of slavery in a fourth constitutional convention in 1859, it was just the beginning of the Civil War that would mire the nation for another six years.

By the time the residents of Diamond Creek petitioned the county for a new bridge in 1869, the Shaft incident was a distant memory. During the war, pro-slavery guerillas had murdered a man named Howell and severely wounded his wife at Diamond Springs before U. S. Marshal McDowell's men captured the desperadoes at the crossing of the Cottonwood on the Santa Fe road (believed to be Diamond Creek crossing). And the county was by then reeling from the 1869 murder of Civil War Veteran Henry Hegwer, who was shot at his home on Diamond Creek.

The history of the first bridge at Diamond Creek crossing is as murky as the water on the fateful day Shaft's horse was found. We know the first bridge was built by the county between 1869 and 1873 for $190. Given the timing of the petition and the cost, it is likely that the bridge was built of wood.

A bond issue for a more-permanent bridge at Diamond Creek had passed by November 1888; but by then the state's economy had flipped from boom to bust. Based on news accounts, the Diamond Creek Bridge was originally planned as an iron bridge; but economic circumstances forced the county to reconsider. After a barrage of lobbying by the local stone industry in support of local labor and native materials, the county decided that the bridge would be stone.

On January 30, 1896, the financial turmoil was finally lifting and the county clerk advertised for bids to build a double-arch stone bridge at what was then known as the Harris/Drummond crossing of Diamond Creek. After the new double-arch stone bridge over the Cottonwood at the Foreman crossing was washed away in a flood in May 1896, it was decided that the arches were entirely too small and the piers inadequate to sustain the arches. In early August, the newspaper announced that "the Diamond creek bridge will be built a single stone arch, forty-five feet span and took soundings at the Drummond crossing on Diamond creek to see if they could [support] a suitable foundation for a stone arch bridge." By October, the commission had ordered that the bridge be of two arches.

Forced to repair the flood-damaged Foreman bridge, the Rettiger Brothers got a late start on the bridge over Diamond Creek. The county commissioners visited the bridge at least twice in November 1896. And by this time, a new batch of commissioners was about to take office. Clearly frustrated by the lack of progress, the newly elected commission ordered that "no more money be paid on the Diamond creek bridge until same was completed." A week later, the Chase County Leader reported that work on the bridge had been "stopped due to the cold snap." It's hard to say if this was a reference to the weather or to the relationship between the new commission and the contractors.

Although work had resumed by early February, there were other setbacks. The community was dismayed to learn that Barbara MacKenzie, the wife of Scottish stone cutter Alex MacKenzie, who was working on the Diamond Creek bridge, attempted suicide in their temporary lodgings at the Elmdale Hotel by stabbing herself in the throat with a pair of shears. Work continued after her husband sent her to a Topeka hospital by train. Spring finally brought progress. In late March 1897, the Leader proclaimed that the stone work was completed and "the filling in will be commenced in a week or two."

The Drummonds, who like many of the stonemasons were natives of Scotland, joined their neighbors for a picnic near the bridge to celebrate both the Fourth of July and a safer crossing for local farmers and ranchers. Access to markets had become increasingly important as Kansans shifted from subsistence to cash-crop farmers after the grasshopper plague of 1873. To ensure the maintenance of the road over time, the commission decided in October 1897 to "leave the grading of the bridge to the Commissioner of the 3rd district, Trustee of Diamond creek township and the County Surveyor." When all was said and done, the Diamond Creek Bridge had cost the county the equivalent of $1 million in today's dollars to complete.

Road maintenance and improvements remained a focus after the turn of the century, especially as farmers gained access to gas-powered cars and tractors. In 1908, President Roosevelt, who had spent time ranching in the West in the 1880s, expressed concern that electrification and cheap transportation in the nations urban centers were leaving rural Americans in the dust. His Country Life Commission, which published a study in 1909, focused on the importance of good roads to rural communities:

The demand for good highways is general among the farmers of the entire United States. Education and good roads are the two needs most frequently mentioned in the hearings. Highways that are usable at all times of the year are now imperative not only for the marketing of produce, but for the elevation of the social and intellectual status of the

open country and the improvement of health by insuring better medical and surgical attendance. The advantages are so well understood that arguments for better roads are not necessary here. Our respondents are now concerned largely with the methods of organizing and financing the work. With only unimportant exceptions, the farmers who have expressed themselves to us on this question consider that the Federal Government is fairly under obligation to aid in the work. We hold that the development of a fully serviceable highway system is a matter of national concern, coordinate with the development of waterways and the conservation of our native resources. It is absolutely essential to our internal development. We suggest that the United States Government establish a highway engineering service, or equivalent organization, to be at the call of the States in working out effective and economical highway systems.

Rural Kansans were falling even farther behind than folks in other states because the Kansas constitution forbade state-financed improvements. As good roads became increasingly essential to economic well-being, counties and townships bore an ever-expanding burden for maintaining them. Somehow, despite the constitutional limitations, the state's good-roads advocates managed to organize to create a new multi-county auto touring route, a highway dubbed the New Santa Fe Trail, later U. S. Highway 50.

The effort to build what would become Highway 50 began in 1910 when Hutchinson boosters cobbled together a series of roads that stretched from Newton to the border of Colorado, a popular destination for a growing number of auto tourists. Soon, boosters had mapped a route that connected Newton to Kansas City. When the Touring Club of America incorporated the alignment into its own coast-to-coast route in October, 1910, the New Santa Fe Trail became the Kansas segment of a highway stretching from New York to Los Angeles.

Although the Hodges Rock Road Law of 1909 eased the process for petitioning counties and townships for improved roads, a state highway system would remain elusive until 1920 when the Good Roads Amendment to the states constitution finally enabled state-funded infrastructure projects. With the amendment, Kansas became the last state in the Union to establish a state highway program, and the last state to receive federal funds to support improvements.

But between the establishment of the New Santa Fe Trail in 1910 and the Good Roads Amendment in 1920, the state's progressive citizens found creative ways to keep Kansans out of the mud. With its famous brand of self-reliance that resisted concert of action, it was the efforts of individuals, aided by good old-fashioned peer pressure, that got the ball rolling on Chase County's stretch of the new highway. In mid-June 1910, the New Santa Fe Trail Association adopted a resolution approving a route that would pass through the Chase County communities of Cedar Point, Clements, Elmdale, Strong City, Cottonwood Falls and Saffordville.

By early July, the Chase County Leader was recognizing individual contributions to the project:

...that part of the trail looked after by the Drummonds, Woods, Blacksheres, Gigers, Shafts and others, is already a highway to be pointed to with pride by those who do the work The time is not coming, but has already arrived when a community as well as a farmers prosperity is judged by the condition of the roads.

Within a month of establishing the route, the New Santa Fe Trail Association had permission from Bell Telephone Company to post signs marking the road on telephone poles. And the newly minted highway, which the Drummonds so faithfully maintained, passed over one of the few points of interest identified on the first-known AAA map of the highway: the Diamond Creek Bridge. It wasn't long before the women of Chase County had marked every stream and all points of interest in the county with blue and white signs. Four of these identified places along Diamond Creek.

After passage of the Good Roads Amendment, the New Santa Fe Trail was designated as a U. S. Highway, known as Highway 50S (Highway 50N is now Highway 56). By 1932, Highway 50S had been surfaced with bitumen from the county's eastern border to Strong City, paved from Strong City to Cottonwood Falls, and graveled from Cottonwood Falls to the Marion County border. But federally funded relief projects allowed for continued improvements, including work on the Diamond Creek Bridge.

Accounts of the bridge project, which employed 20 men in 1933, boasted that the Diamond Creek Bridge was the most important. By 1936, Highway 50S had been paved from Strong City to Clover Cliff Ranch; and by 1938, it was paved from Strong City through the western border of Reno County.

Following a series of floods in the 1940s and early 1950s that forced closures of Highway 50 and damaged bridges, Chase Countians organized water conservation districts (including Diamond Creek watershed) and federal agencies began making plans to build dams and flood-control projects. At some point, Highway 50 was rerouted; the stretch of road that crossed Diamond Creek was renamed 225 Road; and maintenance of both the road and bridge reverted to the county.

No longer maintained as part of U. S. Highway 50, the Diamond Creek Bridge began to deteriorate. It was threatened with demolition by 1995, when ESU folklorist Jim Hoy wrote about it in his syndicated column, Plains Folk. In 2009, the Kansas Preservation Alliance identified both the Diamond Creek and Clements Stone Arch Bridges as among the state's most endangered historic resources. Diamond Creek Bridge was demolished in December 2017.

Diamond Creek Bridge Timeline

1856
Seth Hays pre-empts 160 acres for his Cottonwood Ranche in Diamond Township (Chase County Sketches)

1858
William C. Shaft dies while returning home to Clements from Council Grove. The authorities conclude that he drowned at Diamond Creek crossing. The family suspects foul play.

1869
Citizens petition for bridges across the Cottonwood River at Cottonwood Falls, Middle Creek, Diamond Creek and Fox Creek (Chase County Leader, 10 February 1869)

1877
Carney and Lantry purchased 80 acres of land west of the Fox Creek bridge for a stone quarry. They have the contract for building the abutments to the Diamond Creek bridge, and have just completed a similar job on the Neosho river bridge. (Chase County Leader, 7 September 1877)

1888
First recorded reference of a Diamond Creek Bridge bond. (Chase County Leader, 8 November 1888)

1892
Commissioners Kirker and Peck went to Hymer Monday to examine the site of the proposed bridge across Diamond creek. (this is farther north than the Diamond Creek Bridge) (Strong City Derrick, 11 February 1892)

In the matter of Diamond creek bridge at Hymer, the Board orders that $100 of Diamond creek's donation be remitted back to township. (Strong City Derrick, 17 November 1892)

1895
As county commissioners make decisions about new bridges, an anonymous news contributor makes a case for stone-arch bridges as superior to wooden or iron bridges. "The best is always the cheapest, is true of a bride as well as an article of commerce." Stone bridges, he argued, were ideal because they combined local material and local labor. (The News-Courant, 25 April 1895)

1896
County Clerk advertises for bids for a double arch stone bridge at the Harris/Drummond crossing of Diamond creek. (Chase County Leader, 30 January 1896)

The new double arch stone bridge over the Cottonwood at the Foreman crossing was washed away by the flood The flood of Friday demonstrated that the arches were entirely too small and the piers inadequate to sustain the arches under an ordinary flood from the South Fork and the Cottonwood combined. The water was within three feet of the top of the arches when they collapsed. (Chase County Leader, 28 May 1896)

The Diamond creek bridge will be built a single stone arch, forty-five feet span. No iron bridge to be built as was supposed. (Chase County Leader, 6 August 1896)

The commissioners took soundings at the Drummond crossing on Diamond creek last Wednesday to see if they could [support] a suitable foundation for a stone arch bridge. (Strong City Derrick, 7 August 1896)

The stone bridge across Diamond creek, at the Harris ford, was ordered to be of two arches. (Chase County Courant, 22 October 1896)

The commissioners will meet Friday, November 20, to view the Foreman bridge and to inspect the grading. They will also look after the Diamond creek bridge. (Strong City Derrick, 13 November 1896)

The commission visited the work in progress on the Diamond creek bridge. (Chase County Leader, 26 November 1896)

1897
A new commission ordered that no more money be paid on the Diamond creek bridge until same was completed. (Strong City Derrick, 22 January 1897)

The cold snap stopped work on the Diamond creek bridge for a few days. (Chase County Leader, 28 January 1897)

Barbara MacKenzie, the wife of Scottish stone cutter Alex MacKenzie, who was working on the Diamond Creek bridge, attempts suicide in their temporary lodgings at Elmdale by stabbing herself in the throat with a pair of shears. She was hospitalized in Topeka while work continued on the bridge. (Chase County Leader, 4 February 1897; Strong City Derrick, 5 February 1897)

The stone work on the Diamond creek bridge is completed and the filling in will be commenced in a week or two. (Chase County Leader, 25 March 1897)

The Diamond Creek bridge is celebrated by a Fourth of July picnic in Drummond Bros. grove on July 3. (Chase County Leader, 1 July 1897)

Grading at the Diamond creek bridge left to the Commissioner of the 3rd district, Trustee of Diamond creek township and County Surveyor. (The Courant, 14 October 1897)

1899
David Rettiger dies at his home in Strong City at the age of 50. (Chase County Leader, 22 September 1899)

1909
The Hodges Rock Road Law eases the process for petitioning counties and townships for improved roads.

1910
The New Santa Fe Trail Association passes a resolution that the route will pass through the Chase County communities of Cedar Point, Clements, Elmdale, Strong City, Cottonwood Falls and Saffordville. (Chase County Leader, 21 June 1910)

That part of the Trail looked after by the Drummonds, Woods, Blacksheres, Giger, Shafts and others, is already a highway to be pointed to with pride by those who do the work .. The time is not coming, but has already arrived when a community as well as a farmers prosperity is judged by the condition of the roads. (Chase County Leader, 5 July 1910)

Bell Telephone Company gives the New Santa Fe Trail Association permission to post signs on telephone poles. (Chase County Leader, 12 July 1910)

AAA and Hutchinson's Taylor Motor Company publish a map of the New Santa Fe Trail. One of the few points of interest identified on the map on the graded dirt road from Emporia to Elmdale is the Diamond Creek Bridge.

1930s
Federal relief workers pave U. S. Highway 50S and make improvements to the Diamond Creek Bridge.

1940
The women of Chase County mark points of interest in the county, including four markers along Diamond Creek (Chase County Historical Sketches, 401)

1995
Jim Hoy's syndicated column Plains Folk explores the history. (Council Grove Republican, 8 September 1995)

2009
Kansas Preservation Alliance identifies Diamond Creek Bridge and Clements Stone Arch Bridge on its list of endangered historic resources.

2017
Diamond Creek Bridge is demolished, leaving Clements stone-arch bridge as the county's only multiple-span stone-arch bridge.

Saving the Last Great Stone-Arch Bridge

Clements Bridge

The demolition of the Diamond Creek Bridge left only one multi-span stone-arch bridge in Chase County, the Clements Stone Arch Bridge. Like the Diamond Creek Bridge, the Clements Stone Arch Bridge is in a remote location on an abandoned county road. Despite the strikes against it, this picturesque bridge has a broad constituency. (In fact, the bridge makes a cameo on the cover of the state's bridge management manual.) Many people in Chase County and beyond are concerned about its uncertain future. Unfortunately, however, the county has had no strategy for the bridge's long-term preservation.

Preservation of stone-arch bridges, especially those that no longer function as parts of maintained roads, is a challenge for any county. But it is an even greater challenge for a county that is maintaining an infrastructure built for seven times its current population. Understanding that the county's funds are limited, below are recommendations for a step-by-step process for documenting, maintaining and preserving the Clements Stone Arch Bridge without placing a great financial burden on the county:

1. Assemble a volunteer team of preservation consultants, engineers, masonry specialists and stakeholders to document and evaluate the bridge.

2. Host a public meeting/charrette to discuss options. Stakeholders might include the Chase County Historical Society, Kansas Preservation Alliance, Strong City Preservation Alliance, and residents of Diamond Creek.

3. Obtain permission from adjacent property owners and schedule a volunteer clean-up crew to clear limbs, encroaching trees, and vegetation upstream to improve water flow. This may require participants to sign a liability waiver.

4. Obtain a Resolution of Support from the Chase County Commission in support of grant applications.

5. Secure pledges from private/corporate donors for $50,000-$100,000 to match grant funding for bridge repairs.

6. Apply for a Transportation Alternatives grant to fund repairs to the bridge and make it safely accessible to the public.

7. Using Federal Highway Administration's bridge preservation guide and other available stone-arch bridge manuals to develop a maintenance plan for the bridge.

Masonry Construction Timeline

1856
Seth Hays pre-empts 160 acres for Cottonwood Ranche in Diamond Twshp (Chase Co. Sketches)

1857
William and Jane Shaft House built of local stone quarried northeast of Clements. (NRHP nomination)

1859
Chase County officially organized

1860
Chase County Population: 893

1869
Citizens petition for bridges across the Cottonwood River at Cottonwood Falls, Middle Creek, Diamond Creek and Fox Creek. If carried, the prosperity of the whole county will be greatly augmented. Nothing tells of the enterprise of a people more than good bridges. (Chase County Leader, 10 February 1869; Emporia Weekly News-Democrat, 22 January 1869)

1870
Chase County Population: 1975

Falls Township votes $10,000 in bonds for a bridge at Cottonwood Falls (This was an iron bridge with wood decking, Chase County Leader, 18 June 1870)

PT Lawless, the largest landowner in Diamond Creek township, builds 1000 rods of stone fence in 3 months.

1871
A $10,000 iron railroad bridge across Middle Creek being built. (Chase County Leader)

S. N. Wood has contracted with the King Bridge Company to put in another Iron Bridge over the Cottonwood river, on the section line, in the east of town, and will open a street, one hundred feet wide, from the Depot, on section line, intersecting the Bazaar road on the south side of town. This will make the handsomest street in the place. (This was the beginning of Cottonwood Street, Chase County Leader, 4 May 1871)

Cedar Point passes bonds for and builds an iron bridge that was 110 long.

Rettiger Brothers and Jno. Enslie move from Leavenworth to Chase County to build the Courthouse. Their families remain in Chase County. (Chase County Leader, 1 December 1871)

Mr. Emslie, stone mason on the courthouse, says the stone he is now getting out of the quarry on spring creek surpasses any stone he has seen in this state, not excepting the renowned Manhattan stone. The county challenges the world for building stone. (Chase County Leader, 22 December 1871)

1872
Stone for the Normal school at Emporia (now ESU) will be taken from the quarries at Cottonwood.

John Emslie is getting out large stones for the Capitol at Topeka. Each stone weighs more than 13,000 pounds.

1873
John Emslie takes first premium for Chase county building stone at the State Fair at Topeka.

Chase County Courthouse completed for $41,000. It was built of limestone quarried on the Cottonwood Falls town site.

The railroad builds a spur line to the stone quarries. This is a major step in cementing Chase County's stone industry.

1874
Stone is being shipped from Chase County for a new courthouse in St. Joseph, MO.

Emslie has the contract for 500 cars of cut stone for the Atchison bridge. He will have work for 50 hands all winter.

Sam Bennett is fencing 2000 acres of pasture between Ellinor and Safford with stone.

Auld, Fiske and Emslie shipped 150 carloads of stone in the last month. They are shipping 10 loads a day now.

"Through the energy of Mr. Emslie the Cottonwood stone has gained its wide reputation, and he is not only building up a lucrative trade for himself but is furnishing work to a large number of men." (Chase County Leader, 12 November 1874)

1876
Rettiger Brothers start their steam stone sawmill. (Chase County Leader, 14 July 1876)

In August, 30 carloads of cattle and 90 carloads of stone were shipped from Strong City.

1877
William Rettiger gets the contract for furnishing stone for the new insane asylum at Topeka.

Barney Lantry arrives in Strong City from Prairie du Chien, Wisconsin.

Carney and Lantry purchased 80 acres of land west of the Fox Creek bridge for a stone quarry. They are contractors and have the contract for building the abutments to the Diamond Creek bridge, and have just completed a similar job on the Neosho river bridge. (Chase County Leader, 7 September 1877)

Bridge construction becomes a major issue in local elections.

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Carney and Lantry purchased 80 acres of land west of the Fox Creek bridge for a stone quarry. They are contractors and have the contract for building the abutments to the Diamond Creek bridge, and have just completed a similar job on the Neosho river bridge. (Chase County Leader, 7 September 1877)

Bridge construction becomes a major issue in local elections.

1878
Barney Lantry awarded the contract for the bridge across the Kaw River at Topeka. Rettiger Brothers will cut the stone.

Barney Lantry ships 20 carloads of stone daily.

Barney Lantry is running a stone train from Strong City to Newton. He employs the train crews and the Santa Fe furnishes the engine and cars.

The Lantry Brothers, Barney and Charles, buy a tract of land a half mile

west of Cottonwood Station. They will build ten derricks and a mile of siding. Last month 100 cars of heavy dimension stone were shipped from their quarry and 120 cars of riprap stone. Messrs Lantry have the contract for all the culvert and bridge masonry on the A. T. & S. F. Ry. (Chase County Leader, 27 June 1878)

1879
Rettiger Brothers have the contract for the new stone business building for the Hildebrand Bros.

Emslie and Rettiger are awarded the contract for the stone work on the west wing of the Kansas State capitol. (Chase County Leader, 5 June 1879)

In July, the Lantry Brothers ship 241 cars of stone.

St. Anthonys Church in Strong City is dedicated.

1880
Chase County Population: 6085

1882
Tweedale and Parker awarded $193,864 contract for masonry for the main part of the Kansas Statehouse. The stone will be taken from the Alexander quarry east of Strong City.

SF Jones Ranch (Spring Hill Ranch) boasts 7000 acres surrounded by 25 miles of stone fence five feet high.

Road supervisor Henry Judd builds a stone-arched bridge at Stouts ravine on the road to Emporia. (This road later became Highway 50. This is the earliest documentation of the Stout Run bridge.) (Strong City Independent, 19 May 1882)

1883
States first steam-powered stone drill installed at Lantry quarry. It drills 75 feet per day. (Chase County Leader, 25 January 1883)

Barney Lantry has completed 19 miles of stone fence on his farm. SF Jones has completed 45 miles of stone fence on his ranch. (Chase County Leader, 14 June 1883)

1884
NJ (Nelson) Swayze, a speculator living in Cottonwood Falls, and WA Parker have invented a machine for dressing stone that will do the work of 50 men. (Chase County Leader, 21 February 1884)

Santy and Hammill install an engine at Clements that will run two sets of saws for making paving stone.

1885
The Cottonwood River floods at Clements (Chase County Courant, 18 May 1885)

Silver Creek Bridge built by D. Hamill. (Chase County Leader, 24 September 1885)

Chase County Leader encourages voters to approve a bridge at Clements after the Cottonwood River was unfordable for two-thirds of the past season. (Chase County Leader, 22 October 1885)

1886
Board of County Commissioners awards contract for Clements stone-arch bridge to LP Santy of Clements for $12,000. (Chase County Leader, 9 September 1886)

LP Santy & Co. are pushing the work on the stone bridge (at Clements), with the utmost vigor.
(Chase County Courant, 7 October 1886)

The abutments and pier of the Clements stone bridge are completed and work stopped for the winter. (Chase County Leader, 2 December 1886)

Santy and Hamill are furnishing the stone for the Chicago, Milwauke [sic] & St. Paul bridge near Kansas City. They shipped 80 cars of stone last week and will ship 100 this week. (Chase County Leader, 2 December 1886)

1888
First recorded reference of Diamond Creek Bridge bond. (Chase County Leader, 8 November 1888)

1889
A bill was prepared and will be presented to the legislature by Mr. Maule, empowering the county commissioners to appropriate money for a stone bridge over Cedar creek, to cost about $5,000. There is no bridge over Cedar and it is badly needed. (Strong City Derrick, 17 January 1889)

March 1, 1889 bill authorizing Chase County Commissioners to build bridges in the county passes unanimously in the State House of Representatives.

A called meeting of the Board of Commissioners was held Monday to consider the Foreman bridge matter. Rettiger & Co. notified the Board that they would rebuild the bridge according to contract at their own expense. This put the Board to thinking and they concluded that they did not want the bridge rebuilt as per the contract and hence the called meeting. It is now arranged that three arches are to be built; the south arch to be raised eight feet,

the second or middle arch to be raised 6 feet higher than the contract, and the north arch to be 1 1/2 feet lower than the middle arch. The additional arch is to be only 30-feet span. It is also now arranged that the Diamond creek bridge will be built a single stone arch, 45-feet span. No iron bridge to be built as was supposed. (Chase County Leader, 6 August 1896)

1890
First public reference to Diamond Creek Bridge bond. (Strong City Derrick, 20 November 1890)

1891
Rettiger Bros. awarded contract to rebuild north abutment of Cottonwood River Bridge at Strong City. (Strong City Derrick, 30 April 1891)

County takes bids for a stone arch bridge across Buck creek. (Strong City Derrick, 1891)

1892
Commissioners Kirker and Peck went to Hymer Monday to examine the site of the proposed bridge across Diamond creek. (Strong City Derrick, 11 February 1892)

Rettiger Bros. awarded contract for stone on St. Louis water works reservoirs. [They] had already selected a location near St. Louis, to which the largest stone cutting machine will be shipped this week. One machine will be left at the quarry south of the river, which will be operated to some extent the coming season. (Derrick, 1892)

In the matter of Diamond creek bridge at Hymer, the Board orders that $100 of Diamond creeks donation be remitted back to township. (Strong City Derrick, 17 November 1892)

1894
Walter Sharp, of Marion, was awarded a contract to build a double arch stone bridge across Cedar, near Wonsivu [sic], for $575, and a single arch culvert across Peyton creek for $250. (Chase County Leader, 11 January 1894)

County Commission authorizes double-arch stone bridge across South Fork at Evans crossing with proposal from Bazaar Township to contribute $200 toward the bridge.
(Chase County Leader, 19 April 1894)

Commission awards contract for double arch stone bridge at Evans crossing of South Fork to JL McDowell for $1175. (Chase County Leader, 12 July 1894)

Commission appropriates an additional $200 to Cedar Township to complete repairs on bridge at Wonsivu [sic]. (Chase County Leader, 12 July 1894)

County advertises for bids on a single-arch stone bridge at Stout Ravine on the road to Emporia.
(Strong City Derrick, 21 July 1894)

David Biggham completes Stout Run bridge, which the Strong City newspaper calls the best and strongest rubble arch bridge yet built in Chase County. (Strong City Derrick, 3 November 1894)

1895
Chase County Population: 8456

As the county decides on new bridges, an anonymous news contributor makes a case for stone-arch bridges as superior to wooden or iron. "The best is always the cheapest, is true of a bride as well as an article of commerce." Stone bridges, he argued, were ideal because they combined local material and local labor. (The News-Courant, 25 April 1895)

The county commission reviews many bids for iron and six for stone bridges. The board decides to accept Rettigers bid for stone arch bridges at Foremans crossing and state road crossing. (The Courant, 6 June 1895)

1896
County Clerk advertises for bids for a double arch stone bridge at the Harris/Drummond crossing of Diamond creek. (Chase County Leader, 30 January 1896)

The new double arch stone bridge over the Cottonwood at the Foreman crossing was washed away by the flood last Saturday morning. The bridge as provided for in the original contract was completed and paid for, but the commissioners had entered into a new contract with the builders, Rettiger Bros. & Co., to erect an additional arch of 30 feet on the north end and that was in an unfinished condition when the north arch and everything above the spring of the arches fell into the river ... the flood of Friday demonstrated that the arches were entirely too small and the piers inadequate to sustain the arches under ordinary flood from the South Fork and Cottonwood combined. The water was within three feet of the top of the arches when they collapsed. (Chase County Leader, 28 May 1896)

The county commission ordered that the Diamond creek bridge be of two arches. (Chase County Courant, 22 October 1896)

Amidst the throes of an economic crisis, an editorial chides the county for lavish expenditure on bridges in order of petition instead of by greatest need. The arch stone bridge near Bazaar should have been deferred until all necessary bridges across the Cottonwood were built. (Chase County Courant, 12 November 1896)

The board of county commissioners will meet Friday, November 20, to view the Foreman bridge and to inspect the grading. They will also look after the Diamond creek bridge. (Strong City Derrick, 13 November 1896)

1897
It was ordered that no more money be paid on the Diamond creek bridge until same was completed. This was the first act of a new incoming Board of County Commissioners. (Strong City Derrick, 22 January 1897)

$400 was given to Diamond Creek township to repair the bridge on Middle creek. (Strong City Derrick, 22 January 1897)

John Emslie, called the Father of Strong City, dies at his home. (Chase County Leader, 23 January 1897)

The cold snap stopped work on the Diamond creek bridge for a few days. (Chase County Leader, 28 January 1897)

The stone work on the Diamond creek bridge is completed and the filling in will be commenced in a week or two. (Chase County Leader, 25 March 1897)

There will be a Fourth of July picnic ... near the Diamond Creek bridge, on the 3d of July. Everyone is cordially invited to attend. Come with well-filled baskets and have a good time. (Chase County Leader, 1 July 1897)

County Clerk advertises for bids for a single arch stone bridge at Fox Creek crossing. (Chase County Courant, 19 August 1897)

The grading at the Diamond creek bridge was left to the Commissioner of the 3rd district, Trustee of Diamond creek township and the County Surveyor. (The Courant, 14 October 1897)

1898
Bazaar Stone Arch Bridge, an asymmetrical triple arch, completed (it was demolished in 1983)

1899
David Rettiger dies at his home in Strong City at the age of 50.
(Chase County Leader, 22 September 1899)

1900
Chase County Population: 8286

1905
Clements Merchant M. E. Hunt, who was born in Bridgewater, NY and moved to Chase County in 1865, dies. His obituary identifies the construction of the Clements stone arch bridge as his crowning achievement. (Chase County Leader, 19 December 1905)

1906
Fred Smethers and Sam Houston have been hauling steel to repair the Diamond Creek bridge. Trustee Smethers of Diamond Creek township has saved the county $189 by doing the work on the ... bridge with a force of home men. Say, boys, lets vote for him again. (Strong City Herald, 6 April 1906)

1907
County Clerk Penny and Commissioners Allen and Evans went to Peyton creek Tuesday to inspect the stone bridge near John Martin's place which caved in ... last week. It will be replaced by a new steel span bridge built on a stone abutment. Wm. Beach was given the contract to put in the stone work and the Blodgett Bridge Co. of KC will furnish the bridge. (Chase County Leader, 22 March 1907)

1908
At W. P. Brickells north of Saffordville one wing of his barn was unroofed and the hail was very severe. Most all the streams were bank full or overflowing. Just east of R. C. Campbell's on Middle creek, a three arch stone bridge was washed out by the high water.
(News-Courant, 14 May 1908)

1910
Chase County Population: 7532

Do not fail to attend the meeting Saturday, June 25th, to complete the organization of the Chase County Auto and Good Roads Club. Now that the New Santa Fe Trail is practically assured if Chase county can produce the goods, the Good Road, it is up to us now to complete the organization, the Agitation Period having passed and get to work in dead earnest. Come out and help. (Chase County Leader, 17 June 1910)

The New Santa Fe Trail Association passes a resolution that the route will pass through Cedar Point, Clements, Elmdale, Strong City, Cottonwood Falls and Saffordville.
(Chase County Leader, 21 June 1910)

That part of the Trail looked after by the Drummonds, Woods, Blacksheres, Giger, Shafts and others, is already a highway to be pointed to with pride by those who do the work .. The time is not coming, but has already arrived when a community as well as a farmers prosperity is judged by the condition of the roads. (Chase County Leader, 5 July 1910)

Bell Telephone Company gives the New Santa Fe Trail Association permission to post signs on telephone poles. (Chase County Leader, 12 July 1910)

1911
The commissioners visited and inspected the new cement bridge across Crocker creek at Matfield (Chase County Leader, 30 November 1911)

1913
County commission establishes a levy for the maintenance of county roads. (Chase County Leader, 16 January 1913)

John Mann is completing a new building on the corner of Main and Broadway for the New Santa Fe Trail Garage, to be operated by Wolfram and Son. (Chase County Leader, 22 April 1915)

Schools along New Santa Fe Trail dismissed on May 9 so students can greet good roads boosters and the Governor touring the route between Hutchinson and Kansas City. (Chase County Leader, 1 May 1913)

A. J. Beverlin has been engaged in putting in a fill at the Prather bridge where the motor cycle accident occurred. Another bridge that needs attention is the stone bridge across Diamond Creek. Mr. Beverlin has cleared the road up over the Osage hill to our east township lines of rocks by taking a hand rake and cleaning the stones away as neatly as if it were a garden. When the State dates for working the roads comes it will not be Mr. Beverlins roads that need attention. (Chase County Leader, 24 July 1913)

1914
Commission awards contract for a reinforced concrete bridge across the Cottonwood River to Missouri Valley Bridge and Iron Company of Leavenworth, KS for $13,700 in June 1914. They cancelled the contract in July 1914 and re-hired the company in August 1914. The work was completed and accepted by the commission on December 17, 1914. (Chase County Leader, 11 June 1914; 16 July 1914; 6 August 1914; 13 August 1914; 27 August 1914; 15 October 1914; 24 December, 1914)

1915
The carpenters are working on the Diamond Creek bridge west of Hymer. (Chase County Leader, 28 December 1915)

The Board agreed that if the city of Saffordville would furnish the stone and put them on the New Santa Fe Trail in that city the county would furnish the crusher and crush the stone. (News-Courant, 15 April 1915)

1917
Commission approves partial payment of $3765 to Central Bridge Co for work on the Diamond Creek Bridge. (The News-Courant, 15 November 1917)

Work has commenced on the Clements stone arch bridge. It will be rapidly pushed to completion. (News-Courant, 26 July 1917)

Mr. Lantry has the contract for the bridge across the Kaw at Topeka. Rettiger Brothers doing the cutting. (News-Courant, 14 February 1918)

1920
Chase County Population: 14,188

1923
William Shaft, Jr. commits suicide. His body is found under a pile of large stones in an abandoned quarry near his home. (This is likely the quarry from which the Shaft home's stone was taken.) (Chase County News, 12 January 1923)

1924
The county received a carload of bridge flooring last week which is now being distributed to various points in the county. According to County Engineer Lamb, new floors will be put in the following bridges: The Elmdale bridge; Poor Farm bridge; Diamond Creek bridge; South Fork bridge near Matfield Green; Mercer bridge near Matfield Green; and two different bridges near Saffordville. (Chase County Leader, 4 March 1924)

1926
New planking is being installed on Diamond Creek bridge south of the Rockland school. The stringers are also being straightened and some braces are being put on. The work is being done by the county. (Elmdale News, 25 February 1926)

Charles Hayden and Heron Strauhs have been working on the Diamond Creek bridge which was damaged by the recent high water. They have been building a retainer wall on the east side of the road. The road will be widened. (Elmdale News, 30 September 1926)

Chase County
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