

## Arkansas Tuberculosis Sanatorium Historic District



**Booneville, Logan County, Arkansas**

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### **Intro**

Hi, my name is Shelle Stormoe, and I work for the Arkansas Historic Preservation Program, which is one of 8 agencies in the Department of Arkansas Heritage. Our agency works to document and preserve the state's historic and cultural resources. I'd like to welcome you to the Arkansas Tuberculosis Sanatorium Historic District and thank the Booneville Historical Preservation Society & Arkansas Tuberculosis Sanatorium Museum for hosting this event and for inviting me back to lead the tour. Recognize Vanessa Wyrick, Jim Biggs, Ken Berg, Jeff Gonyea. Photos allowed, but none including clients at BHDC. This tour is worth 2 hours of HSW (Health, Safety, and Welfare) continuing education credit through the American Institute of Architects. If you are interested in getting this credit, please see me after the tour and I will take care of it for you.

The Arkansas Tuberculosis Sanatorium Historic District is one of the largest historic districts in Arkansas, encompassing nearly 900 acres on Pott's Ridge, also

known as “The Hill.” The district was listed in the National Register of Historic Places in 2006 with national significance for its association with the nationwide fight against tuberculosis throughout much of the 20<sup>th</sup> century and for its excellent collection of Art Deco, Craftsman, and Colonial Revival-style buildings.

There are 76 resources within the district boundary, 68 of which are contributing to the historic significance of the district (89.4%). The NC resources have either been altered or were built within the past 50 years.

National significance for a property is difficult to prove, so it’s relatively rare. However, the AR TB Sanatorium was the largest and best facility of its kind in the United States by 1940, and it served as a model for TB treatment facilities in neighboring states as well as abroad (at least one in Italy). The AR Sanatorium was completely self-sufficient, including patient treatment buildings for adults and children, housing for employees and their families, a dairy, water treatment plant, water towers, fire station, laundry, ice plant, bakery, post office (1927-1968), and movie-theater. Gardens, orchards, and vineyards were planted in the open areas around the sanatorium, and the sanatorium even owned 1,000 acres of land 7 miles southeast of Booneville on Hwy. 10 for more cattle (land purchased in 1935 and given to city of Booneville in 1973). It was in operation from 1910 until 1973, and the Booneville Human Development Center has occupied the campus since the sanatorium closed in 1973. \*\*The BHDC is a residential treatment facility for adults with developmental disabilities. The BHDC currently serves 127 clients and employs 311 staff. It is one of 5 state-managed training facilities for adults with developmental disabilities—other facilities in Arkadelphia, Conway, Jonesboro, and Warren.

### **History of Tuberculosis**

TB is a disease characterized by a persistent cough that is worse in the morning (sometimes producing blood), chest pain, lack of breath, fever & night sweats, fatigue, weight loss, and symptoms of pneumonia. TB is a contagious disease spread through the air like the common cold. When infected people cough,

sneeze, talk, or spit, they propel TB germs into the air. Evidence of the disease was found in the mummified body of the Egyptian Prince of Ammon, dating to 1000 BC, and the Greek physician Hippocrates (460-375 BC), widely known as the Father of Medicine, studied a disease called “consumption.” The disease has had many names over the years, including “consumption, wasting disease, graveyard cough, King’s Evil (lymph-node TB; supposedly treated & healed by the King’s touch), and the White Plague (b/c people with TB are pale). The word “tuberculosis” was coined in the late 1700s by Frenchman Gaspard Laurent Bayle.

Early treatments for TB were painful and often harmful for patients, but it was all part of the evolution of modern medicine. Doctors were trying desperately to find a cure for this deadly disease, and any therapy that might provide positive results was touted as the cure-all for TB. Beginning in the early 1800s, doctors prescribed a bleeding regimen, a near-starvation diet, bed rest, and “medical migrations” where the afflicted would seek an area with plenty of sun and nice weather. In the U.S., this meant heading west in search of a dry, hot climate. Altitude therapy was used briefly, where the patient would be taken up in a hot air balloon (to breathe the “pure atmosphere free of germs”). A company in Austria even sold bottled air at very high prices—it was to be opened in your room right before bedtime. Codfish oil was often prescribed to patients b/c it contained Vitamins A & D. Inhalation therapy, where patients would inhale pure gases like oxygen, nitrogen, carbon dioxide, and nitrous oxide, was also used (poor patients inhaled the breath of healthy animals instead; usually horses, cows & sheep). In advanced cases of TB, doctors often permitted the use of laudanum as a pain killer and sedative. Various cocktails of chemicals like gold, mercury, and silver were injected or ingested as well.

Lung collapse therapy (artificial pneumothorax) became the mainstay of TB treatment in the 1920s, allowing the lung to be “at rest” and heal itself. Oxygen, and sometimes nitrogen, was then injected into the lung cavity. Some doctors even inserted small spheres (used golf balls) or sponges into the space between the chest wall and the outer layer of the lung to keep the lung collapsed, which often caused further infection.

Along the same lines, removal of the phrenic nerve, which runs from your spinal cord to your diaphragm, was also a popular practice. The idea was to paralyze the diaphragm, which contracts and allows the lungs to expand, so that the lungs would be further immobilized.

The pulmonary resection, which was the removal of the diseased portion of the lung, was first performed at the AR TB Sanatorium in October 1954.

But the “age of heroic surgery” was epitomized in the thoracoplasty. This was a major surgery and one of the riskiest operations. A thoracoplasty is the removal of part of the chest wall (ribs & muscles), allowing that part of the chest to sink in and collapse the underlying lung. Some doctors recommended this surgery up until the early 1960s.

Chemotherapy treatment and antibiotics were developed in the mid-20<sup>th</sup> century to fight TB. We still don’t have a cure for TB. The antibiotics isoniazid and rifampin are used today to treat TB, and chemotherapy is also used to treat drug resistant cases. One-third of the world’s population is currently infected with the TB bacillus, and 10 % of those people will develop TB during their lifetime.

Treatments used here at the AR TB Sanatorium included bed rest, fresh air, controlled diet, lung collapse therapy, phrenic nerve operation, pulmonary resection, thoracoplasty, chemotherapy, and antibiotics. This was a state of the art facility.

### **History of AR TB Sanatorium**

The sanatorium concept really took off in the second half of the 19<sup>th</sup> century based on the concept of “isolation of the infected from other potential victims.” [“sanatorium” means “to cure” and “sanatarium” means “health”—use “sanatorium” more often] The first sanatorium in the U.S. was built outside of Saranac Lake, NY, in 1884 by NY doctor Edward Livingston Trudeau. Prior to 1900,

most sanatoria were private facilities, which charged a lot of money, so most people were treated at home. However, around the turn of the 20<sup>th</sup> century, there was a shift toward the creation of state-run facilities. AR was one of the first southern states to build a sanatorium.

The AR TB Association was formed in 1908 and immediately pushed for a bill to create a state tuberculosis sanatorium in AR. The bill was prepared by State Senator Kie Oldham of Pulaski County, who suffered from TB. Oldham had met fellow TB patients Judge Joseph M. Hill, who was from Ft. Smith and had served as the Chief Justice of the AR Supreme Court before his illness forced him to retire, and Dr. C. P. Meriwether, who was from LR, while he was in Arizona taking the cure for TB. These three men were instrumental in getting the bill passed. Act 378 was approved by Gov. George Donaghey in May 1909, and \$50,000 was appropriated for the establishment of a state sanatorium and \$30,000 for two years of maintenance. However, there was a lack of funds, so they had to wait until the next fiscal year to begin work on the facility.

In the meantime, the state had to find a suitable location for the sanatorium. The facility needed about 1,000 acres, and the City of Booneville offered to donate 973 acres of land for the sanatorium, which the state accepted. The site was perfect for a sanatorium because of its mountainous terrain away from the city where the air would be fresher, supposedly bringing relief from the disease. The first buildings constructed at the sanatorium were of wood-frame construction and included an administration building, ward building, male and female cottages, and several tent houses with low walls and large flaps that were hinged at the top so they could be propped open to allow air flow through the buildings (fresh air and bed rest was the treatment at that time). The only surviving building from this period is a portion of the original Administration Bldg., which was incorporated into the current Commons Building between 1938-1940. Dr. John Shibley was the first head of the State Sanatorium, and the first patient was admitted on August 2, 1910. It was not long before patients were being turned away b/c there was no room to house them in the 88-bed facility.

In order to accommodate the increasing number of patients around the state, additional buildings were needed. In 1913, the legislature appropriated \$15,000 for a 24-bed hospital for the “far advanced cases.” It was named Kie Oldham Hall after the senator who worked so hard to establish the sanatorium (and died from TB in 1911). Oldham Hall burned in 1926, but it was rebuilt and served as the sanatorium’s principal hospital-type building until 1930. This building is no longer extant, but it was across from the current Commons Bldg (near the new water tower).

Construction on the sanatorium grounds continued between 1915 and 1927, including the 24-bed Echols Hall, a \$21,000 water plant, and a \$12,000 dairy. The dairy had 21 cows that provided milk for the 114 patients living at the sanatorium. The Masonic Building for children with TB was dedicated in 1924, and the Kelley Building, which was originally known as the Occupational Therapy Bldg., was built in 1927. However, the facility was still growing, accepting an average of 400 patients each year.

Patient life in the sanatorium was strictly controlled. Former patients have remarked that “every day was like a Tuesday,” meaning that every day was just routine. By 1925, patients at the sanatorium spent most of their day resting or reclining outside, and they ate a diet of milk and eggs to combat the weight loss that accompanied the disease. \*\*Newest fad treatment at the sanatorium in 1928 was the sauerkraut diet where patients ate nothing but kraut juice and water, which acted as a laxative and allowed the organs “to rest and recuperate.”

\*\*Worthy of note here: The AR TB Sanatorium in Booneville only accepted white patients. Gov. Thomas McRae authorized a TB sanatorium for African-Americans in 1923, but funds were not appropriated for it until 1929 when Gov. Harvey Parnell set aside \$54,000 for the construction of a facility in Alexander, southwest of LR. At the time, the TB survival rate for blacks was only 25%. The sanatorium was named in honor of Gov. McRae, and in 1930, the Thomas C. McRae Sanatorium opened its doors. McRae was the first institution of its type in the country staffed entirely by blacks. The sanatorium operated until 1968, and then

housed the Alexander Human Development Center, which was closed in June 2011. Some of the complex remains, including patient wards, an administrative building, and maintenance buildings. [not NR-listed b/c of alterations]

The AR TB Sanatorium became so overcrowded during the 1930s that the WPA began constructing portable cottages for counties to house and care for their own TB patients. A solution to the overcrowding problem came in 1935-36. The Wildcat Mountain Sub-Hospital was located about five miles east of Ft. Smith and had been built by the gov't as a county camp for transients. The gov't had abandoned it, and since the sanatorium needed more space, the WPA renovated and converted the buildings for use as an overflow facility for the sanatorium. It was completed by 1937 and greatly helped fight TB in AR by providing more beds for patients. It was used until 1958 when the sanatorium board determined that it was no longer economical to operate (b/c of reduction in # of patients).

The most significant building boom here at the sanatorium occurred between 1938 and 1940. Senators Lee Nichols of Booneville and Leo E. Nyberg of Helena, who was himself suffering from TB and a patient at the sanatorium, fought for the passage of the Nichols-Nyberg Act, which would provide \$1.2 million for an extensive building program at the sanatorium. The Public Works Administration (PWA) gave the sanatorium a grant for almost \$950,000 to supplement the construction. This building campaign increased the number of patient beds from 640 to 1,200. It was also the largest PWA project in AR, both in monetary value and in the # of buildings (32 bldgs.). Many of the buildings you see here today were constructed during this time—Nyberg Building, Admin. Building, Nurse's Home, Maintenance Building (power plant), Hamp Williams, Commons Building, guinea pig piggery, and twelve employee cottages.

### **Administration Building:**

The Administration Bldg. was built in 1940 with \$35,795 in PWA funds. It originally housed the bank and all administrative offices for the sanatorium, including the superintendent's office. BHDC currently uses it as their Human Resources Building. The building is designed in the Art Deco style with a fieldstone

foundation, buff brick walls, and a flat roof with concrete coping. Geometric designs are featured in the coping, decorative medallions, and the decorative grille on the transom window.

### **Nurse's Home:**

The Nurse's Home was also part of the big PWA project between 1938 and 1940 and had a 120-person capacity. It was designed in the Colonial Revival style with a fieldstone foundation and buff brick walls. The building features Colonial Revival characteristics with its symmetrical layout, dormer windows, and elaborate door surrounds with pediments supported by pilasters. The building is now used by BHDC as a men's dormitory. Two of the employee dormitories behind the Nurse's Home were also built in the Colonial Revival style at the same time.

### **Employee Housing:**

You can see several of the white cottages that were constructed by the PWA between 1938 and 1940. They were built to serve as housing for sanatorium employees and their families. Now, some of them serve as housing for employees of the BHDC, and I believe some are used as independent living facilities for clients as well. They are simple Craftsman-style buildings with fieldstone foundations.

### **Nyberg Building:**

Was named after State Senator Leo E. Nyberg of Helena, who fought for the passage of the Nichols-Nyberg Act in 1938 to provide \$ to the sanatorium for a large building campaign, and who died of TB on March 7, 1940, just four months before the dedication ceremony. The Nyberg Building was designed in the Art Deco style by the architectural firms of Haralson & Mott of Ft. Smith and Erhart & Eichenbaum of LR, who also designed the other buildings constructed between 1938 and 1940. The Nyberg Building features a fieldstone foundation and a buff brick exterior. The building has a decorative cast stone door surround with



geometric and floral patterns. There are some mythological designs on the tops of the pilasters on the central block—one side shows a man/warrior stabbing a dragon—could be interpreted as fending off TB. The building also boasts decorative grillework.

Ground was broken for this building on Oct. 17, 1938, and it was completed by February 1940. It cost \$725,000 to construct. The building is exactly 528 feet or 1/10 of a mile long and 50 feet wide. The building's 6-story central block is flanked by two 5-story wings. It has a floor area of more than 140,000 square feet and contained 523 patient beds. The patient rooms are small and are set up as suites with a bathroom in between two patient rooms. This building housed the sanatorium's morgue on the first floor, and there also used to be a cafeteria on the first floor. X-ray and lab departments were located here as well. State prisoners with TB were also sent to the sanatorium, and they were kept in cells on the 6<sup>th</sup> floor of the Nyberg Bldg. Only half of the building's second floor is currently in use by the BHDC. That portion of the building houses the BHDC administrative offices. The Nyberg Building is supposedly very haunted. Several paranormal groups have investigated the building.

Point out Nyberg plaque in foyer and PWA plaque on stairs.

### **Plant/Management Building:**

The Plant/Management Building or the Power Plant was completed by October 1939. The plant had a furnace with a smokestack and three large boilers on its lower level (boilers now gone), which powered a steam heat system for the sanatorium. Tunnels for the steam ducts were dug by hand and still run underground connecting many of the major buildings on the campus. You can see the entrance to the tunnels from inside this building. At one time, there was a laundry in this building, and the ice plant was here for a time as well.

According to Jim Biggs (who lived here from 1942 to 1956), there were large vats in the floor to form 200 lb. ice blocks, which were stored in a walk-in freezer and

loaded onto trucks from the rear loading dock. These big blocks were cut up to make 20-50 lb. blocks of ice for each cottage (ice box on back porch). In addition, 2 quarts of milk and 1 quart of cream were delivered every other day. You'd put your dirty laundry out on the front porch in a basket and they would pick it up once a week to wash it at the laundry.

This building also features minimal Art Deco detailing and glass block windows. It is currently used as the maintenance building for BHDC.

### **Masonic Building:**

TB did not spare children, and the sanatorium needed a place to house its young patients. In 1922 Judge Hill suggested that the Belle Point Lodge of Free and Accepted Masons of Ft. Smith erect a building for the care of children at the sanatorium. The Masonic Order constructed a 24-bed building at the cost of \$57,000; it was dedicated in 1924. The building served as a residential facility and grammar school for the children. The Masonic Building was later enlarged and expanded with state funds, and was located on the site of this parking lot (no longer extant). On the 100<sup>th</sup> anniversary of the Belle Point Lodge in 1948, they again gave money to the sanatorium for the construction of a school and recreation building. This is the current Masonic Building you see today. It is now a freestanding building, but it was once connected to the other building, forming an "L-shape."

According to Richard Myers, who was a patient at the sanatorium as a child in the late 1940s and early 1950s, the Masonic Building housed infants up to children in 8<sup>th</sup> grade. Boys and girls were not allowed to interact at all. The 1<sup>st</sup> through 4<sup>th</sup> grade students went to school in the morning, and the 5<sup>th</sup> through 8<sup>th</sup> grade students went in the afternoon. School mostly consisted of reading or being read to, and resembled a babysitting service more than an actual classroom.

Ornamentation on the building is minimal, except for the stone door surround featuring the Masonic emblem and the words "Wisdom is Strength."

Now the Masonic Building is used by BHDC clients to weave and loom their rugs and placemats. BHDC clients engage in several pre-vocational training projects, which include rug making and recycling. Rug making starts by having clients clean rings of scrap material that come from a sock factory in Georgia. They are dyed different colors and used to make rugs. These rugs are sold here at BHDC and at area craft fairs, and all of the money goes into the client account for them to buy personal items. It does not benefit the facility directly at all.

**Water tanks: one on right says “1907” in cement footing**

**Fire Station:**

The fire station was completed in 1959. It provided yet another level of self-sufficiency when it was completed. The station still operates as a volunteer fire department for the area. Even though the sanatorium technically did not have a fire station until 1959, they had a fire truck parked in a garage behind the Stone Building down the hill. The original 1942 LaFrance fire truck is parked in front of the Arkansas Tuberculosis Sanatorium Museum, which opened in September 2010.

**Judge Joseph M. Hill Building:**

Was named after Judge Joseph M. Hill, who had worked to get the legislature to create a state sanatorium in 1909 and who had been the chairman of the AR TB Sanatorium Commission from its creation in 1909 until his death in 1950 (with exception of 4-year period from 1941-45). The advent of antibiotics made sanatoria obsolete beginning in the early 1950s. Doctors began sending patients home with antibiotics instead of admitting them to the hospital for TB. Therefore, construction at the AR Sanatorium had slowed significantly by the 1960s. And the Judge Hill Building would be the last major building constructed on the grounds; it was built in 1963 as a surgery/intensive care unit at a cost of about \$700,000 and was funded by money in the sanatorium’s operations fund. The building was

constructed on the site of Meriwether Hall (built in late 1920s) and two employee cottages. Meriwether Hall was destroyed, and the cottages were relocated to Nature Lane. Now Judge Hill is used as a medical treatment area for BHDC.

### **Point out guinea pig piggery & Stone Bldg.**

Guinea pig piggery—constructed by PWA during big building campaign. Completed by December 1939. Tests were conducted on guinea pigs to try to find better treatments for TB. This went on for many years. In the early years, doctors would subject guinea pigs to the sputum of a patient to determine if he/she were still sick. If the guinea pig didn't develop any disease, then you were thought to be on the right track, too.

Stone Building—Built by the WPA between 1934-36. It was used as a shop, a laundry facility, and later as a storeroom for canned food. It is currently used by BHDC's recycling program.

Point out direction of Dairy—had a dairy by 1926, but built new dairy barn, bull barn, hay barn & silo during PWA project between 1938-1940.

### **Chapel:**

The chapel was originally constructed in 1926 as an office. Beginning in 1940, it housed the patients' 14,000-volume library and the editorial office of the monthly *Sanatorium Outlook*. It is one of the few remaining buildings on the campus with a stucco veneer. Most of the buildings constructed on the campus between 1920 and 1935 used tile with a stucco veneer or fieldstone construction (many of them now gone). The fieldstone addition on the rear of the building was built by the WPA in 1935. It is now used as a chapel for clients at BHDC. Regular church services are held here as well.

**Hamp Williams Building:**

Named after State Senator Hamp Williams of Hot Springs, who was one of the original sanatorium board members, serving from 1909 until his death in 1931. The 120-bed dormitory for female ambulatory patients cost \$124,831 to construct. It was also part of the PWA building campaign, completed in April 1940. It, too, was designed in the Art Deco style with a fieldstone foundation, buff brick walls, brick pilasters, glass block windows, and minimal detailing in the concrete coping. The building is now used for pre-vocational training at BHDC.

**Commons Building:**

The Commons Building actually sits on the site of the old Administration Building, which was constructed shortly after the sanatorium opened. And a portion of the old Administration Bldg. still exists, but it was drastically altered in the 1930s and early 1940s as they added an ice and refrigeration plant and a bakery onto a portion of the original building between 1934-36, and subsequently incorporated that building into the design for the current Commons Building, which was completed by the PWA in April 1940. Commons housed kitchen facilities, four of the five dining rooms on campus (had segregated dining rooms; doctors and employees ate in different areas than patients/male & female patients did not eat together either), a general store, newsstand, post office, barber shop, and an auditorium (movies were shown here). Today, the building serves a similar purpose, housing the kitchen, dining room, canteen, recreation room, and auditorium. Jim Biggs' mother worked in the kitchen here for over 50 years, and the dining room is named after her. The building is designed in the Art Deco style with some floral detailing above the front door and windows. The building also features some glass block windows.

**Doctor's Row**

Row of white cottages where doctors lived. When Jim was growing up, it was Dr. Nowlin, Dr. Dickey, and Dr. Howe. Dr. Ralph R. Nowlin was a good friend of the

fourth superintendent, Dr. Jesse D. Riley, and came from Texas to be his assistant. Nowlin arrived in 1930 and worked at the sanatorium until his death in 1953.

Point out Jim's old house at end of Nature Lane. He never lived in it when it was moved down there...formerly on site of Judge Hill Building.

### **Kelley Building**

The Kelley Building was built in 1927 and has a 1957 addition. The original portion of the Kelley Building is stuccoed with a side-gabled roof (back portion). The building was first known as the Occupational Therapy Building, and was used for OT therapy as that treatment came out in the early 1920s. It involved patients enjoying some activity from their beds, like knitting, crocheting, or embroidery to pass the time, release tension, or be able to support themselves financially. The Kelley Building was a gift to the sanatorium, but it was kept secret for 10 years. Mr. Harry E. Kelley of Ft. Smith gave money to construct the building for OT therapy. However, after 10 years, OT therapy had been abandoned, so the building was being converted into a patients' building (it had housed the library in the interim—presumably before it moved to the current Chapel). Kelley Building now used for pre-vocational training for clients at BHDC.

### **Look down the hill to left and see Rock Apartments:**

Built by the WPA in 1936 to serve as employee housing and accommodations for families of critically-ill patients. Now serves as housing for clients at BHDC.

### **Closing**

As I said earlier, the advent of antibiotics rendered the sanatorium treatment virtually obsolete beginning in some locations in the 1950s and 1960s. Operations here were significantly scaled back during the 1960s. In fact, there was only an average of 374 beds occupied during 1965. However, the AR Sanatorium probably stayed open longer than normal for a combination of different factors, including

the high cost of drugs (when they first came out) and the state's higher percentage of people at the poverty level—couldn't afford any other treatment and had a tendency to contract TB b/c of lack of education.

The sanatorium campus was transferred to the Arkansas Dept. of Health in February 1973 by an act of the AR Legislature. The AR TB Sanatorium officially closed its doors on June 30, 1973, and when it closed it was estimated that 70,000 patients had passed through its doors. BHDC has been here since July 1973.