

## **Chapter 3. Analysis**

### **Introduction**

This chapter presents the existing condition of the Nicodemus Township and Townsite. The analysis includes an evaluation of the NHS buildings and site analysis. Evaluation of site history, potential archeological resources, topography and slope, site arrangement, circulation, traffic and parking, vegetation, views, existing water bodies and utilities are included in the site analysis.

### **NHS Building Analysis**

The NHS buildings are those buildings and sites included in the Nicodemus National Historic Site: St. Francis Hotel, First Baptist Church, A.M.E. Church, Township Hall and Nicodemus District No. 1 Schoolhouse. These buildings were analyzed through on-site observations. Additional information provided in the 2002 Historic Structures Report (2002 HSR), and the 2010 Historic Structures Report Update (2010 Update) was also reviewed. Characteristics such as material use, fenestration, square footage, building form and overall height and proximity to the street and adjacent structures were analyzed. Building sketches (Figures 7 and 8 Building Analysis Diagrams) of the existing NHS buildings were created to analyze their square footages and determine each building's capacity to accommodate select portions of the building program.

The following are character-defining traits of the Nicodemus NHS buildings.

- The primary construction material is limestone, which was quarried locally. Some buildings received a coat of stucco over the limestone at a later date. Photographs taken prior to 1950 reveal the buildings without stucco.
- Simple massing. All the structures are single story with an average height of twenty-three feet, with the exception of the St. Francis Hotel which is one and one-half stories.
- The roofs are single or cross gable with an average roof pitch of 8:12. Shed roofs extend the gables of the St. Francis Hotel. The exception is the Nicodemus School which has a hipped roof. Wood shingles are the primary roofing type. Roof overhangs are an average of one foot on all sides.
- The common type of fenestration is rectangular, wood double-hung windows, spaced evenly. The exception is the Township Hall which has large, metal multi-light windows.
- The average square footage is approximately 1,700 square feet. The Township Hall is the largest building at 3,600 square feet.



*St. Francis Hotel*



*First Baptist Church*

- The buildings are generally set close to the street with an average setback of sixteen feet. The Nicodemus School is the exception with a setback of over 150 feet, typical of a school yard's spatial requirements.
- With the exception of the St. Francis Hotel and First Baptist Church, the buildings are symmetrical in shape and proportion.
- The Nicodemus School differs from the building type of the other NHS buildings. It is of wood construction with a hipped roof, and is set on a much larger site. Frame construction, similar to that of the school, was utilized throughout the community most commonly in house construction.



*Nicodemus School*



*AME Church*

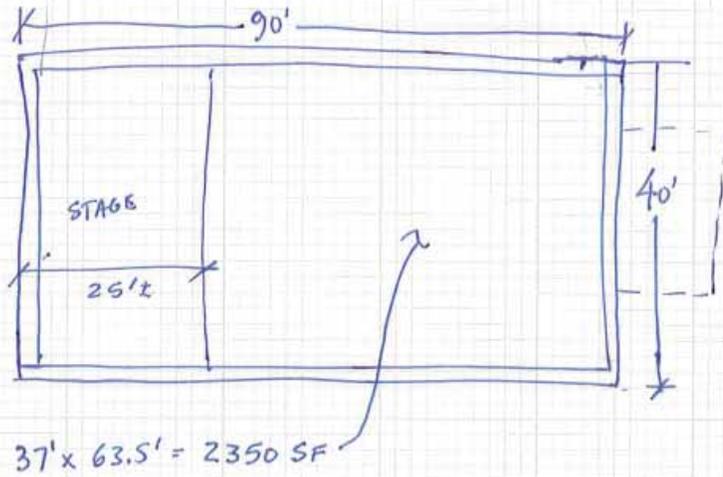


*Township Hall*

- **AME Church** is typical of the building character of the Nicodemus NHS buildings. The building is built of limestone walls, is rectangular in plan, and has a gabled roof with a pitch of approximately 8:12.
- **Township Hall** is very similar to the construction of the AME Church, only on a much larger scale. The Township Hall is more than double the square footage of the AME Church. Both exemplify the common building character of the NHS buildings.
- **Nicodemus School** varies significantly in character from the other four NHS buildings. Although the square footage is similar, the construction type is not. The Nicodemus School is a wood framed structure with wood siding, square in plan with a hipped roof and open, elevated entry porch.
- **First Baptist Church** is a one story structure, T-shaped in plan, with intersecting gable roofs. The interior is an open plan with the kitchen opening into the main sanctuary space. The exterior walls are limestone masonry covered with a stucco finish.
- **St Francis Hotel** is a one and a half story structure with one story shed roof additions across the north and south facades. The original portions of the building are constructed of limestone masonry, while the additions were constructed with light wood framing.



*Nicodemus School*



90  
 -1.5  
 ---  
 88.5  
 -25  
 ---  
 63.5

TOWNSHIP HALL

ADMIN WILL FIT  
 INTERP. WILL NOT FIT W/ EVERYTHING  
 INTERP. WILL FIT LESS THE INTERP. AREA / EXHIBIT



NOTHING WILL FIT  
 W/OUT GUTTING WALLS

HOTEL

Figure 7. Building Analysis Diagrams

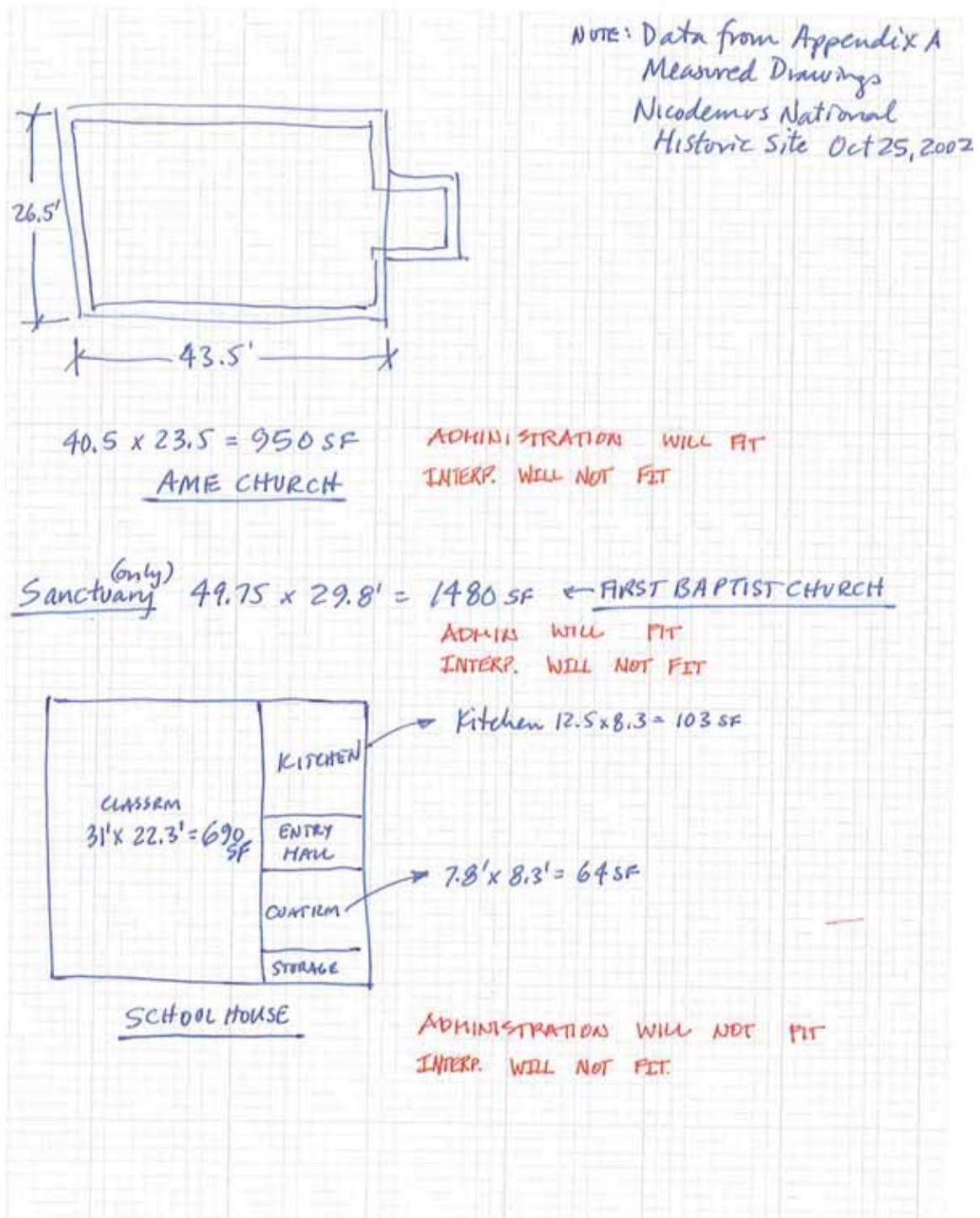


Figure 8. Building Analysis Diagrams



*General Store along Washington Avenue, circa 1885*



*Early homesteaders, date unknown*

## Site Analysis

The following is an overview of existing site-related characteristics and features that occur in the Nicodemus Township and Townsite including site history, potential archeological resources, topography and slope, site arrangement, circulation, traffic and parking, vegetation, views, existing water bodies and utilities. The site analysis plans illustrates these features (Figure 9. Site Analysis-Township and Figure 10. Site Analysis-Townsite) Utilities are illustrated in Figure 14. Existing Utilities Diagram-Townsite.

### Site History

Nicodemus was established by African Americans during the Reconstruction Period following the Civil War. The town of Nicodemus is symbolic of the pioneer spirit of people formerly enslaved, who dared to leave the only region they had been familiar with to seek personal freedom and the opportunity to develop their talents and capabilities. Established on homesteaded land and named after a legendary slave, the town of Nicodemus was officially founded on September 17, 1877. It is the only remaining Western town of those established by African Americans during the Reconstruction Period.

### Potential Archeological Resources

The only known archeological survey on record with the Kansas State Historical Society was conducted in 1992 for the Nicodemus Township. A Phase II archeological field survey was also conducted along Highway 24 near the Townsite. Potential archeological resources were identified through the HABS (Historic American Buildings Survey) maps shown in the CLR and provided in the Appendix (Appendix E. Nicodemus HABS/CLR Maps).

Most of the Townsite will likely have an abundance of archeological resources and any potential visitor center site will require archeological investigations prior to any disturbance. Potential archeological resources associated with the Townsite are likely to be associated with former buildings and other landscape features. These archeological resources have not been thoroughly documented and therefore resources have been lost to removal, relocation or demolition.

Areas of the study area are identified as having known archeological resources, most notably Areas 3, 10, and 13 as noted in the CLR, and therefore need extra consideration archeologically.<sup>5</sup>

- Area 3:           Block bound by South and Washington Avenues, Third and Fourth Streets
- Williams grocery store, includes commercial building (property appears 1879-1888); open land to the east of the First Baptist Church
  - Wilson general store/Sayers general store, includes commercial building property appears 1879-1888); open land to the east of First Baptist Church
  - Miscellaneous auxiliary buildings possibly associated with these commercial buildings

5           See Appendix E. Nicodemus HABS Maps; NPS, *Cultural Landscape Report*, 149-168.



*Evergreen Windbreak*



*Shade Trees in Roadside Park*

- Area 10: Block bound by Washington and Adams Avenues, Third and Fourth Streets
- Henries Merchandise store, commercial building (property appears in 1879-1888); middle of northern half of area, adjacent to Washington Avenue.
- Area 13: Block bound by Madison Avenue and edge of Townsite, Fourth and Fifth Streets
- Potential for miscellaneous outbuildings

#### Topographic / Slope Analysis

The Township topography is relatively flat to gently rolling. Elevations range from 1,950 feet above sea level along the South Fork Solomon River to 2,250 feet. The Township ranges from riparian corridors to gently rolling slopes with chalky cliffs present in some locations.

The Townsite is set slightly lower than the surrounding agricultural land giving it a distinct geographical presence. The Townsite is an agricultural community set on a relatively flat slope of a three percent gradient. The land primarily slopes to the nearby South Fork Solomon River to the south and southeast. A portion of the western edge of the Townsite drains southwest to Spring Creek. Topographic analysis is based on review of USGS mapping (Appendix F).

#### Site Arrangement

The Nicodemus NHL is composed of a grid of streets with several small buildings dispersed throughout the Townsite (Figure 11. Site Arrangement-Townsite). The buildings include several residences, Nicodemus Housing Authority complex known as the “Villas,” Nicodemus Historical Society, Priscilla Art Club, and the numerous NHS outbuildings and trailers. Masonic Hall monument, Roadside Park, Township Park, Kansas historical marker sign, park sign, a rest stop in Roadside Park are also elements of the Townsite. The grid of streets has numbered streets, oriented north south, and east west avenues named for U.S. Presidents.

The Nicodemus NHS is composed of five discontinuous properties containing some of the oldest surviving structures within the Townsite. These are the First Baptist Church, Township Hall, African Methodist Episcopal Church, St. Francis Hotel, and the Nicodemus School. Some buildings are in severe physical deterioration. This are discussed in the NHS building analysis section.

#### Circulation, Traffic and Parking

U.S. Highway 24 is the primary access route to and within the Township. U.S. Highway 24 runs east-west along the northern edge of the Townsite. Typically, roads in the County are aggregate surfacing with an edge to edge width of 26 feet. Many of the local roads are in poor condition and outlying Township sites may only be accessible by unpaved dirt roads.



*View to Townsite from the west along Highway 24*



*View west to Townsite along US Highway 24*

The Townsite is the only area in the county with some asphalt roads that have curb and gutter improvements. Informal on-street parking occurs along the shoulders of road and parallel parking occurs along the curb-edged paved roads. There are no crosswalks in the Townsite. Pedestrian sidewalks occur at the Nicodemus Housing Authority complex, First Baptist Church and Township Hall. According to the town plat, right-of-way corridors within the Townsite are either sixty feet in width, or eighty feet in width with twenty foot-wide alleys.

The regulatory agency for roads and drainage within the Townsite and Township is Graham County (Gary Hyde 785.216.0886). Although there is not a formal review process or fees, county staff indicated they would review drawings at the request of the county commissioners. Once a preferred alternative is determined, county staff will visit the site and provide comments.

#### Vegetation

This area of Kansas was once dominated by shortgrass and mixed-grass prairie communities before the settlement of the Township. There are still some areas of these field grasses that have not been impacted by agriculture including field edges, and fallow fields. Trees are scarce throughout the Townsite and Township due to low rainfall and the predominance of open agricultural land. The larger vegetation in the Township includes riparian vegetation that primarily exists at the drainages, streams and along the South Fork Solomon River. The Township agricultural land includes cropland, hayfields, pasture fields, a characteristic that has been present since the late nineteenth century.

In the Townsite, vegetation primarily includes grassy and agricultural fields, and trees associated with residences and buildings. Large shade trees occur at Township Hall and lines of smaller shade and ornamental trees line its north and west property boundaries. Two large Arborvitae trees flank the Township Hall entrance. Lawns are found at Township Hall, Roadside Park and Township Park. A wind break of evergreen trees defines the north edge of Township Park and low spreading junipers surround the Masonic Hall Monument.

#### Views

The views from U.S. Highway 24 into the Townsite are primarily open and afford long views of the countryside. The agricultural lands provide little tree cover to obstruct views. Geographical landforms such as knolls and plateaus are readily visible, and municipal water towers serve as locating elements.

The Townsite is visible from U.S. Highway 24 from approximately a quarter-mile away as approached from both the east and west. The water tower is the tallest visible feature and can easily be seen. No structures, fences or large vegetation block the views between the NHS buildings. These unobstructed views retain the open character of the agricultural lands that define the Nicodemus setting.



*South Fork Solomon River*



*Spring Creek*

### Existing Water Bodies

Major waterways in the Township include the South Fork Solomon River and Spring Creek which generally flow from east to west. The South Fork Solomon River is south of the Townsite and Spring Creek is to the west. Both are fed by numerous tributaries which typically run from north to south.

Southwest of the Townsite, in a grove of cottonwood trees along the banks of the South Fork Solomon River is an area referred to as Scrugg's Grove where many annual celebrations took place.<sup>6</sup>

Currently, water quality treatment or detention is not provided for any of the buildings within the Nicodemus Townsite. A small drainage runs south from the southeast portion of the Townsite.

### Wells

The regulatory agencies for Nicodemus NHS are Rural Water District No. 3, located in Rooks County, and the State of Kansas. The District reviews public systems, defined as serving a minimum of 25 people per day for a minimum of 60 days per year or a minimum of ten (10) service connections. Water rights would need to be secured by the applicant. Requirements for a new well include locating it a minimum of 50 feet from a septic system and 100 feet from a leach field.

Following test holes, Kansas Department of Health and Environment samples for water quality for a \$1,000 fee. If water quality is acceptable, a permit application can be submitted to the District with plans and specifications for the well system. No review fee is required. A final inspection follows construction. On-going reporting includes two (2) samples per month to the State of Kansas.

### Stormwater Facilities

There are no known stormwater facilities within the Townsite or the Township. Based on conversations with Gary Hyde, Graham County Road & Bridge, drainage is typically conveyed in roadside ditches. There currently is not a water quality treatment nor a stormwater detention facility provided for any of the buildings within the Nicodemus Townsite. A small drainage runs south from the southeast portion of the Townsite. Neither water quality nor detention are required.

To comply with current NPS policy for sustainability and LEED certification, some method of water quality will be required for a new visitor contact station or visitor center. The U.S. Department of Agriculture allows rainwater harvesting for domestic and other small uses. Non-domestic or larger use, 15 acre-feet per year, requires an appropriation permit.

6 *Nicodemus National Historic Site Cultural Landscape Report*, 69.

### Electric and Phone Service

Local electrical service is supplied by Prairie Land Electric, who provided color coded maps for this study indicating locations of transmission and distribution lines in the area surrounding the Townsite. Telephone lines are indicated on the 1979 water system maps, prepared by John W Smith Consulting. Other telephone lines are known to exist however mapping of locations other than on the water map is unavailable, based on conversations with Rural Telephone. Rural Telephone is the primary telephone/fiber optic provider to the area.

### Water

Existing water system maps from 1979 prepared by John W Smith Consulting in Hays, Kansas were provided by the Township. A color coded map of the overall system is provided in the Appendix (Appendix H. Water System Improvements). The Townsite is served by a mixture of 6-inch and 8-inch main water lines supplied by a well and standpipe located in the northwest part of the town. Several intersections within the Townsite have fire hydrants, see Figure 14. Existing Utilities Diagram-Townsite, for further information.

### Fire Suppression

The responding fire department is the Bogue Fire Department (FD) in the City of Bogue, Kansas, five miles to the east of Nicodemus Townsite. An existing fire station is located within the Townsite, possibly used to respond to grass fires but the Bogue FD responds to structure fires.

### Sanitary

An existing sewage lagoon is located west of the Nicodemus Housing Authority complex and serves only this development. No drawings or maps of the system have been located to date. It is possible that this information is located in Esther Clark's office in the Nicodemus Housing Authority complex (785.839.4484). Repeated efforts to review this information have been unsuccessful.

The Townsite is served by individual septic systems. Discharge from any new septic system is required to be located a minimum of 50 feet from any water body. If a septic system was required, Graham County is the reviewing agency. A data sheet, standard form provided by Graham County, is required to be completed and submitted to the County indicating use and operation of the facility. Permitting fees are \$300. A licensed contractor on the County pre-approval list is required to install any new septic systems.

### Floodplain

A FEMA Flood Control Map is not available. However, the Townsite is presumed to be outside of the 100-year floodplain based on the distance to the South Fork Solomon River and the elevation change indicated on USGS mapping .