

856

(Oct. 1990)  
United States Department of the Interior  
National Park Service



**NATIONAL REGISTER OF HISTORIC PLACES  
REGISTRATION FORM**

**1. NAME OF PROPERTY**

**HISTORIC NAME:** Plano Station, Texas Electric Railway  
**OTHER NAME/SITE NUMBER:** The Interurban Museum

**2. LOCATION**

**STREET & NUMBER:** 901 E. 15<sup>th</sup> Street  
**CITY OR TOWN:** Plano  
**STATE:** Texas      **CODE:** TX      **COUNTY:** Collin  
**NOT FOR PUBLICATION:** N/A  
**VICINITY:** N/A  
**CODE:** 085      **ZIP CODE:** 75074

**3. STATE/FEDERAL AGENCY CERTIFICATION**

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this ( nomination) ( request for determination of eligibility) meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property ( meets) ( does not meet) the National Register criteria. I recommend that this property be considered significant ( nationally) ( statewide) ( locally). ( See continuation sheet for additional comments.)

*[Handwritten Signature]*

6.23.05  
Date

Signature of certifying official  
State Historic Preservation Officer, Texas Historical Commission  
State or Federal agency and bureau

In my opinion, the property  meets  does not meet the National Register criteria. ( See continuation sheet for additional comments.)

Signature of commenting or other official  
Date  
State or Federal agency and bureau

**4. NATIONAL PARK SERVICE CERTIFICATION**

I hereby certify that this property is:

- entered in the National Register  
    See continuation sheet.
- determined eligible for the National Register  
    See continuation sheet
- determined not eligible for the National Register
- removed from the National Register
- other (explain): \_\_\_\_\_

*[Handwritten Signature]*  
Signature of the Keeper  
**Edson H. Beall**  
Date of Action  
**8/10/05**

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**5. CLASSIFICATION**

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**OWNERSHIP OF PROPERTY:** Public

**CATEGORY OF PROPERTY:** Building

<b>NUMBER OF RESOURCES WITHIN PROPERTY:</b>	<b>CONTRIBUTING</b>	<b>NONCONTRIBUTING</b>
	1	0 BUILDINGS
	0	0 SITES
	1	1 STRUCTURES
	0	0 OBJECTS
	2	1 TOTAL

**NUMBER OF CONTRIBUTING RESOURCES PREVIOUSLY LISTED IN THE NATIONAL REGISTER:** 0

**NAME OF RELATED MULTIPLE PROPERTY LISTING:** N/A

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**6. FUNCTION OR USE**

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**HISTORIC FUNCTIONS:** TRANSPORTATION/rail-related

**CURRENT FUNCTIONS:** RECREATION AND CULTURE/museum

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**7. DESCRIPTION**

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**ARCHITECTURAL CLASSIFICATION:** MISSION REVIVAL

**MATERIALS:** FOUNDATION BRICK  
WALLS BRICK  
ROOF ASPHALT  
OTHER GLASS, METAL, WOOD

**NARRATIVE DESCRIPTION** (see continuation sheets 7-5 through 7-8).

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Plano Station, Texas Electric Railway  
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The Plano Station of the Texas Electric Railway is located at 901 East 15<sup>th</sup> Street, just west of the historic commercial section of Plano in Collin County, Texas. This brick and frame building with a brick tower served as a combination passenger and freight depot, and has recently been rehabilitated as a transportation museum. Much of the original historic material of the station remains, and museum exhibits explain the history of the interurban rail lines in north Texas and the technology that made them possible. The building is the only restored example of an interurban station in the region, where the interurban was a primary mode of transportation in the early twentieth century. A restored rail car, which once served the Texas Traction Company and Texas Electric Railway line, has been placed adjacent to the station along the former interurban rail alignment.

### Setting

Plano is in southwestern Collin County, Texas, approximately 20 miles north of Dallas. The property is situated on the north side of 15<sup>th</sup> Street, originally named Mechanic Street, which continues to serve as a major east-west artery through the city. Surrounding the station is Haggard Park, public land donated to the city in 1928 by Emma Bishop in honor of her parents, C.S. and N.K. Haggard. Historic churches, school buildings, and dwellings are nearby, and the historic commercial core of Plano lies a few blocks east. Landmark properties and historical markers in the vicinity include The Plano National Bank/I.O.O.F. Building (1001 E. 15<sup>th</sup> Street, built 1896, Recorded Texas Historic Landmark 1993), First Christian Church of Plano (1501 Avenue H, 1993 marker), Shiloh Baptist Church (1310 Avenue I, 1988 marker), and the Plano Cemetery (H Place and 12<sup>th</sup> Street, 1980 marker). The 1891 Ammie Wilson House (1900 W. 15<sup>th</sup> Street) was listed in the National Register of Historic Places in 1978, and is currently the only NRHP property in Plano.

In December 2002 Plano became a stop on the Dallas Area Rapid Transit (DART) light rail line, which runs along the historic Houston and Texas Central rail line. The passenger station is located just east of the interurban station, at the eastern edge of Haggard Park. Recent additions to the park include an outdoor amphitheater and water features, playground equipment, walkways, and a work of kinetic art that recalls the rail history of Plano. Concrete paths trace the former alignment of the interurban tracks through the park, leading north and then east from the station. To the north of Haggard Park is a historic residential neighborhood that has been designated a local historic district, and to the west are church property and a 1924 school and 1935 gymnasium. The WPA-built gym has been rehabilitated as a community theater and art gallery. The Plano Station of the Texas Electric Railway was designed and built in 1907-08 by Fred A. Jones Company of Dallas, with Stone and Webster of Boston as consulting engineers. The building sits on the original site, one-half block from the Houston and Texas Central rail line, and was key to the development of the commercial district. Electric rail transportation in the region contributed to economic growth and significant social changes over a forty-year period.

### Exterior description

The exterior facade is composed of brick and wood siding, with the passenger/ticket office portion consisting of wood siding and the substation of brick. A wood shingle roof covers the wooden structure and the tower with

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lightning arrestors atop both of these roofs. The substation has a flat surface roof that was recently tarred and graveled. Scuppers and downspouts are period restoration. The underside of the roof overhang is constructed of bead board. Some components of the external electrical system remain on the tower.

On the west side of the building are one entry door to the passenger station, Texas Historical Commission and City of Plano historical markers, a single wood frame window, two sets of double windows, and one set of double doors used for employee access to the substation. Parked adjacent to the substation and an integral part of the museum is Car #360 built in 1911 by the American Car Company of St. Louis and converted in 1914 to a Rail Post Office (RPO) car. The car has recently been re-roofed and repainted with a partial interior restoration completed.

The south side of the building includes three single wood windows with wood framed screens, bead board underneath the roof overhang, restoration of a portion of the passenger station lost in a prior fire and two signs suspended from the roof overhang identifying "Plano" and "Texas Electric Railway: The Quickest Way." The east facade includes one wood frame window with screen, double doors providing easy delivery/removal of baggage between this railway and the steam railroad just to the east, the tower structure containing fragments of a painted sign from when the building housed a sign shop, and two single wood frame windows located on the substation portion.

The north side is wood siding with double doors that used to lead to a metal shed for freight and baggage express. This feature was introduced in 1913 as a means to generate additional income to sustain financial viability. A small covered porch protects the doors from rainwater. This porch was designed and approved by the City of Plano Heritage Commission for compatibility.

### **Interior description: Ticket Office / Passenger Waiting Area**

This portion of the building was restored to the original architectural design interpreted from a photograph taken approximately 1909 and compared to a later one taken in 1948 that showed the original roof line on the brick wall separating the ticket office and passenger waiting area from the substation. Two public bathrooms were included in the interior renovation as well as the removal of wooden partitions that had isolated ticket agents from the passengers. The floor is hardwood pine, and walls are wood bead board, as is the ceiling. Two sets of wooden double doors are located directly opposite one another on the east and west walls. We believe these doors would have allowed baggage from both the interurban and the Houston and Texas Central Railroad (original rail bed approximately 100 yards to the east) to be brought into the building.

Two entry doors, one on the south side and one on the west side, provided access to the building. This area has one window on the east wall, three on the south wall, and one on the west wall. All windows are wood frame and single pane with wood frame screens. The foundation is pier and beam with crawl space underneath entered through a trap door near the restrooms.

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Displays in the passenger area include a map of the Interurban Railways of North Texas, and a large photo of Texas Electric Railway employees used to glean information needed in the renovation process. Nine panels of text and photographs hang in this room and provide an overview of Plano's early history. Rail transportation and agriculture are two of the key components contributing to economic development. The original employee work area is sectioned off from the remainder of the room by a wooden counter and railing. Plans to relocate current office equipment to another area are under consideration. When this occurs, original office furniture and other equipment will be installed to provide a more accurate interpretation of what might have been in place.

### **Interior description: Substation Room**

The back room (north end of building) was used as a substation for the electrical power supplied to the overhead line. This room, accessible only to employees, housed a rotary converter that converted alternating current to direct current to power the cars on the north end of the line from Dallas to Denison. The main power plant producing this current was located in McKinney, Texas (12 miles north). Other substations were situated about every ten to fifteen miles, but the Plano substation is the only restored example on the line.

This room has three walls (east, south, and west) of original brick, three course in depth, with steel ceiling trusses, and wood ceiling, with the north wall built of wallboard and concrete foundation. Double wooden doors including the original metal threshold are located on both the west and the north walls. Doors on the west wall were used for emergency relocation of equipment into the substation. Remnants of rail ties and spikes were uncovered during the recent renovation of Haggard Park. Doors on the north side led to a metal shed used for freight service. A set of double wood frame windows, single pane and of original design, is located on either side of the double doors previously mentioned. An original metal fire door hangs from an overhead support on the south wall. The west wall has a single wood framed window identical to the two pairs on the west wall. Additionally this wall contains two narrow doorways leading to the adjoining tower. Between the two doorways are six openings through which electrical power lines passed to the rotary converter. Doorways and six openings have Roman arches of original design. The tower on the east side of the building is two-story with openings at the roof where the high voltage electrical lines entered the building bringing incoming power.

Today the substation portion of the Interurban building contains text panels with photographs depicting the need for mass transportation and the development of electric interurban cars, the westward movement of rail companies through the United States, and the technology used to create the system. A diorama illustrating the rural countryside found throughout the North Texas region conveys the isolation of farming families prior to the coming of electric rail transportation. Artifacts displayed in cases include meters used to test car motors, telephones used to dispatch orders, clothing, equipment from the system as well as stock certificates, minutes from company board meetings and other company documents.

Two new displays have been recently added. These are a model of a rotary converter, a key element of system operation and an O scale electric train layout using a single track system with sidings to allow rail cars headed in opposite direction to pass safely. The five components of the rail track system are grouped into one area and a small display showing the overhead wire and trolley wheel are also included. Information on company founder

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Mr. J.F. Strickland is incorporated into the overall story. The tower room contains a photo gallery of various stops along the line.

**Description of Car 360**

Texas Electric Railway Car 360, manufactured in 1911 by the American Car Company of St. Louis and originally numbered Car 11, served the Texas Electric Railway line from Dallas to Denison, including Plano. The car measures 56 feet 10 inches long by 9 feet wide by 12 feet 9 inches high. Car 11 weighed 85,180 pounds, accommodated 62 passengers and was outfitted with 4GE73 Motors and 27MCB3X Brill trucks. In 1914, Car 11 was renumbered to 360 and outfitted as a Rail Post Office (RPO) car. It is the last remaining example of a Texas Electric R.P.O. car, and remained in service until the system ceased operation in 1948.

The exterior was recently re-roofed with appropriate canvas material. The exterior was repainted and lettering redone to match historic photographs. The catwalk on the roof was restored, and headlights were made functional. Interior restoration has been ongoing since the car was moved next to the interurban station in 1985. Original plans were used to restore materials and finishes as closely as possible. Three original double seat frames were re-upholstered. Original window frames and shades were replaced. Original smoking section signage and match strike plates in the front section were restored. At the front, the motorman chair, bell, and most interior wood is original. A historic sign indicating segregated sections in the middle compartment for White and Colored passengers remains, while replica advertising cards were installed. The mail compartment has sorting bins, package bins and sorting tables. Most doors have their original hardware. A new shelter for the rail car was recently built. It is a noncontributing element in this nomination. The rail car is aligned west of the interurban station, along the former alignment of the rail tracks. Visitors looking through the front windshield of the motorman's section can look across 15<sup>th</sup> Street up Avenue I, formerly Interurban Avenue, and easily picture the former grade of the interurban rail line as it ran a few blocks west of the steam railroad.

**Changes since 1908**

After Texas Electric ceased operations on December 31, 1948 the building was used as a sign shop and also a bicycle and lawnmower repair business. In the late 1980s the City of Plano acquired the property, intending to rehabilitate the building for Convention and Visitors Bureau offices. Restoration of the building returned the physical structure to original design. In 1990 the Texas Historical Commission designated the interurban station a Recorded Texas Historic Landmark. The building has also been designated a City of Plano landmark structure. The City of Plano owns the building, and the Plano Conservancy has operated the Interurban Museum since 2000.

**Table of resources, Plano Interurban Station**

Built	Function	Category	Status
1907-08	Interurban station	BUILDING	C
1910	Car 11 / Car 360	STRUCTURE	C
2000	Car shelter	STRUCTURE	NC

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**8. STATEMENT OF SIGNIFICANCE**

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**APPLICABLE NATIONAL REGISTER CRITERIA**

- A** PROPERTY IS ASSOCIATED WITH EVENTS THAT HAVE MADE A SIGNIFICANT CONTRIBUTION TO THE BROAD PATTERNS OF OUR HISTORY.
- B** PROPERTY IS ASSOCIATED WITH THE LIVES OF PERSONS SIGNIFICANT IN OUR PAST.
- C** PROPERTY EMBODIES THE DISTINCTIVE CHARACTERISTICS OF A TYPE, PERIOD, OR METHOD OF CONSTRUCTION OR REPRESENTS THE WORK OF A MASTER, OR POSSESSES HIGH ARTISTIC VALUE, OR REPRESENTS A SIGNIFICANT AND DISTINGUISHABLE ENTITY WHOSE COMPONENTS LACK INDIVIDUAL DISTINCTION.
- D** PROPERTY HAS YIELDED, OR IS LIKELY TO YIELD, INFORMATION IMPORTANT IN PREHISTORY OR HISTORY.

**CRITERIA CONSIDERATIONS:** N/A

**AREAS OF SIGNIFICANCE:** TRANSPORTATION

**PERIOD OF SIGNIFICANCE:** 1908-1948

**SIGNIFICANT DATES:** 1908

**SIGNIFICANT PERSON:** N/A

**CULTURAL AFFILIATION:** N/A

**ARCHITECT/BUILDER:** Fred A. Jones Company, Dallas; Stone and Webster, Boston, consulting engineers.

**NARRATIVE STATEMENT OF SIGNIFICANCE** (see continuation sheets 8-9 through 8-14).

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**9. MAJOR BIBLIOGRAPHIC REFERENCES**

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**BIBLIOGRAPHY** (see continuation sheet 9-15).

**PREVIOUS DOCUMENTATION ON FILE (NPS):** N/A

- preliminary determination of individual listing (36 CFR 67) has been requested.
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey #
- recorded by Historic American Engineering Record #

**PRIMARY LOCATION OF ADDITIONAL DATA:**

- State historic preservation office (*Texas Historical Commission*)
- Other state agency
- Federal agency
- Local government
- University
- Other -- Specify Repository

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In the early twentieth century, the establishment of interurban lines radiating out from Dallas resulted in significant trade growth and economic prosperity for surrounding rural villages and towns. Utilizing technological developments in electric motors and circuitry, interurban lines facilitated trade and transportation, contributing to the regional influence of Dallas and the growth of its satellite cities. After the interurbans were abandoned, much of the right-of-way was used for new highways, which fueled major population increases in suburban locales in the postwar period. At the peak of interurban development, passenger and freight stations were established at regular intervals, and more than 200 miles of track operated in the Dallas area. The 1907-08 interurban station at Plano, built for the Texas Traction Company that became part of the Texas Electric Railway system, is now one of a handful of surviving stations and exhibits the most architectural and historic integrity. Car 360, originally Car 11 on the Texas Traction line, dates from 1911 and has been restored beside the brick station in Plano on the site of the former interurban tracks. The station and car are nominated for listing in the National Register of Historic Places under Criterion A in the area of Transportation at the local level of significance.

### Development of Plano

The community of Plano originated in the early 1840s, with many early settlers migrating from Kentucky and Tennessee to the Blackland Prairie of Collin County. Initial efforts to settle the area were halted by Indian attacks until 1844. In 1846, William Foreman bought Peter's Colony land from Sanford Beck and settled a half-mile northeast of Plano. Plano's birth was due in part to the enterprises of the Foreman family. Mr. Foreman erected a sawmill and gristmill that would be in demand by his neighbors. Later a store and gin were added and these facilities attracted other settlers to the area. Brothers Joseph, Daniel and Samuel Klepper took up their headrights in 1847 at the present site of the city of Plano. Silas Harrington, his brother Alfred and Dr. Henry Dye came to settle in 1848. Mail service was established around 1850 and William Foreman's home became the unofficial post office. The scattered settlements had now become a closer community and Dr. Dye felt the need for a proper name and he dispatched to Washington D.C., an application requesting the name of Fillmore, in honor of the President of the United States. The name Fillmore was rejected and the name Foreman was suggested but declined by William Foreman. Dr. Dye, determined to have a community with a recognized name suggested Plano. He understood the word *plano* to mean "plain" in Spanish, to describe the surrounding terrain. Postal authorities approved the name, which more accurately means "flat", and Foreman served as the first postmaster.<sup>1</sup>

Although raising livestock was the principal business in the county, more and more of the populace began farming the rich black soil. Churches and schools were built and local business began to prosper. In the closing years of the 1850s growth was steady, but this halted with the arrival of the Civil War. From 1861-1864, the growth of Plano was at a standstill. With the completion of the Houston and Texas Central Railroad in 1872, the city was on its way to new growth. By 1874 the population numbered over 500. Plano was the first depot by rail entering Collin County by the south. The city was incorporated in June 1873, and the town's first official mayor

<sup>1</sup> "Plano, Texas."

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was C.J.E. Kellner. Fires in the business district destroyed the original buildings that were constructed with the coming of the railroad; the oldest structure in the district was the only building to survive the fire of 1881 in which 51 wooden buildings were destroyed, comprising the entire business district. Modern brick buildings replaced the destroyed buildings, and Plano flourished as a trade center. Throughout much of the twentieth century Plano relied on surrounding farms and ranches for its livelihood. In 1960 the population was 3,695, but in the following decades the growth of the Dallas-Fort Worth Metroplex and the success of several large high-technology firms and other businesses began to make their influence felt on the local economy. Plano welcomed newcomers and became one of the fastest-growing cities in Texas and the United States. In 2000 the population in Plano topped 222,030.<sup>2</sup>

### **Electromagnetic technology**

Electric motors operate on the principle of electromagnetic induction. British physicist Michael Faraday (1791-1867) demonstrated in the 1830s that an electric current can be induced by moving an electrical conductor through the lines of force of a magnetic field. An electrical generator utilizes this principle to convert mechanical energy into electrical energy. An electric motor employs the reverse application of this principle to convert electrical energy back into mechanical energy. The most common type of motor for electric railways was the direct current (DC) series motor, in which the armature and field are wired in series. As the load increases the field strength increases, thus adjusting itself to the varying effort required to propel a train over a line of changing curvature and grades.

Drawing on previous experiments, Frank Sprague, a former assistant of Thomas Edison, successfully electrified a twelve mile streetcar line in Richmond, Virginia in 1888. By the end of the following year, 200 electric streetcar systems were either in operation or under construction in the United States, more than half actually equipped by Sprague and more than 90 percent based on his patents. By 1893 the first interurban was built between Portland and Oregon City, Oregon. Sprague fathered not only the first practical trolley system but also the modern subway and elevated trains, automatic train safety controls and high speed electric elevators. Sprague connected his cars to the power supply with overhead wires and a pole on the car roof. At the top of the pole was a small wheel that ran along the wire. This wheel, a descendant of a little four wheeled wagon called a trolley which connected an earlier car to the wires, was named trolley. Earlier, designers had tried conducting current through the rails but there were too many hazards.

Before Sprague's improvements, electric car inventors faced a thorny dilemma. If the heavy motors were not spring mounted between the wheels, they might be shaken to pieces; if they were, gear mesh was not reliable. Sprague worked out a system of "wheelbarrow" suspension, in which one part of each engine was attached to the axle, keeping the gears in alignment, and the other part of the engine spring-mounted to the frame to absorb jolts. In 1897 Sprague also provided electric railways with a device known as a multiple unit control which made it possible to hook up a string of self-propelled cars operable with a single set of controls. Sprague's

<sup>2</sup> City of Plano website, <http://www.planotx.org/history/history.html>, accessed March 14, 2005; "Plano, Texas."

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system allowed a train of any number of cars to be operated from a single control point thus giving the train the performance of a single car.

City streetcars operated on 600 volt direct current. When the wire was extended over many miles there was a severe voltage drop as resistance increased. Most early interurbans generated their own power from a main power station such as the one that was located in McKinney. The main power station produced high voltage alternating currents (AC) capable of supplying electricity for 200 miles of line. The top wire of the trolley lines carried this AC current to several substations along the route, such as the one in Plano. There it was converted to the 600 volt DC necessary to run the car motors. Substations could convert alternating current into direct current by means of synchronous converters, mercury rectifiers, or motor-generator sets.<sup>3</sup> The interurban substation's main piece of equipment was a rotary converter.

### Rotary Converter

Mechanical engineer Benjamin Garver Lamme (1864-1924) pioneered the design of the rotary converter. As an employee of the Western Electric Company in the early 1890s, Lamme designed AC generators, induction motors and rotary converters for the first electric generators at Niagara Falls. Lamme's rotary converter incorporated an AC motor with a DC generator in the same unit. About 1895, rotary converters were first used to convert AC to DC to run streetcars. Men such as Frank J. Sprague incorporated this technology into their designs and by the turn of the century, local electric railways, or interurbans, were flourishing throughout the United States.

The interurban railway through Plano, like most other electric railways, ran on DC electricity. A main power station generated electricity and distributed this electricity as high voltage AC. The power had to be converted at substations, such as Plano, for use by the interurban system. Railway electrification became possible in the late 1800s when an efficient means of distributing power was developed. High voltage AC could be transmitted over great distances with little loss of power. Alternating current could easily be "stepped down" or reduced by transformers at substations.

However, electric trains ran better with DC motors. They provided greater performance and speed control than AC motors. Two smaller horsepower DC motors, located under the car within each wheel set, provided power to the car. The direct current also powered electric lights, electric heat and the air brake compressor for the car. A speed controller located inside the cab of the car enabled the motorman to adjust the speed of travel. The rotary converter solved the problem of using AC power to run DC motors. In substations, such as the one in Plano, the transformer first "stepped down" high voltage AC, then the rotary converter changed the AC to 600 volts DC for line distribution.

Starting at the power station, high voltage alternating current was generated and distributed via power lines to the substation. At the substation, the AC voltage was reduced or stepped down by a transformer. After the

<sup>3</sup> Pender and Del Mar, Power Stations and Substations, 13-60, Electric Traction 17-02-17-03.

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transformer reduced or stepped down the alternating current, an alternating current motor turned a common shaft starting the rotary converter producing 600 volts direct current to power the interurban system. The interurban cars drew power from an overhead wire that received its DC current from a carrier wire that was fed from the substation.

### Texas Traction Company and Texas Electric Railway

Rail transportation was a key component to the development and growth of the North Texas region. Beginning in 1872 with the Houston and Texas Central Railroad, people could access the Texas frontier, goods could be shipped to the newly settled territory, and local crops could be shipped for distribution to other parts of the country. Later the electric interurban railway provided passenger service between rural communities that could not be met by existing steam railroad service. At its peak the electric interurban industry in Texas totaled nearly 500 miles of track, the second largest mileage of states west of the Mississippi River. Seventy percent of the mileage was in the Dallas-Fort Worth area.<sup>4</sup>

The idea of the interurban originated in April 1903, and on September 1, 1906, J.S. Heard and J.F. Strickland signed papers in Boston for the building of the line. McKinney was to get the powerhouse and at least four miles of street railways. Contracts were awarded on September 16, 1906, and the Texas Traction Company was chartered on the 25<sup>th</sup>. The first dirt was broken at Choctaw Bayou south of Sherman on October 31, but actual construction started on November 6, 1906.<sup>5</sup>

T.E. Craig of the General Electric Company was named supervisor in laying the track, constructing the powerhouse and drilling a deep well. Equipment, consisting of powerhouse machinery, five substations and fifteen cars were purchased in November 1906 for \$250,000, and in January 1907 twenty acres were purchased from the Berry homestead for a powerhouse site. Grading the roadbed from the powerhouse site to East Fork started February 7, 1907. The first cars through McKinney were construction cars pulled by mules on December 20, 1907. The first car over the line under power was on June 30, 1908, and on the next day the Texas Traction Company went into regular operation.<sup>6</sup>

Preliminary surveys for the interurban route through Plano took place as early as August 1905.<sup>7</sup> In April 1907, Mrs. Eli Foreman deeded a strip of land to the City of Plano for the use of the Texas Traction Company. Two car loads of mules and one car loaded with graders' outfits arrived at Plano from Baird, Texas later that month to begin construction.<sup>8</sup> The first train stopped in Plano on April 30, 1908, and regular service was in operation on July 1 of the same year.<sup>9</sup>

<sup>4</sup> "Electric Interurban Railways."

<sup>5</sup> "Brief History of the Dallas-Sherman Interurban" by Roy F. Hall, Texas Historical Commission files.

<sup>6</sup> Ibid.

<sup>7</sup> "Surveyors near Plano," *Dallas Morning News*, August 13, 1905.

<sup>8</sup> "To Begin Interurban," *Dallas Morning News*, April 25, 1907.

<sup>9</sup> "Texas Electric Railway Station."

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Plano was one of several substations on the line from Denison to Dallas. The design, based on plans provided by the Fred A. Jones Company of Dallas and Stone and Webster consulting engineers of Boston, most closely resembles Mission Revival architecture, with a corner tower extension with a broad overhang, and a low-set passenger depot affixed to a more vertically exaggerated brick substation and freight depot section. The main power plant for the Plano station was located in McKinney, approximately near the current northwest corner of US Highway 380 and State Highway 5. Vickery, Plano, Van Alstyne and Sherman served as locations for additional substations where alternating current was converted to direct current to power the trolley line. Plano's interurban substation is the only remaining example on the entire line. Electricity, the wonder of the age, propelled the cars at speeds up to 60 miles per hour. An overhead electric wire system carried the power. A Western Electric dispatching system was installed along the line. Stationary telephones, allowing for easy communication, were installed at the main power plant, at each station and substation and in small wooden booths near strategically located sidings. Sidings enabled one car to pass the other along a single track line.

The system operated by electricity and orders and dispatches were communicated via telephone. The availability of these two utilities greatly impacted the daily lives of surrounding communities, making available service earlier than other regions of the United States. Easy accessibility enabled area farming families to leave the outlying countryside and travel to small towns and larger cities for recreation, employment and travel in general.

J.F. Strickland chartered the Texas Electric Railway Company in 1916 through a series of mergers and acquisitions of various lines beginning as early as 1901. Effective January 1, 1917, the Texas Electric Railway operated three routes out of Dallas, with one north to Denison, one southeast to Corsicana, and one south to Waco. With a length of 226 miles, the Texas Electric Railway was the longest interurban system in the South.<sup>10</sup> The passenger cars usually ran as single units except in rush periods. Texas Electric tracks were built on private right-of-way to the highest and most modern standards but used Dallas streetcar tracks to reach terminal in downtown Dallas. Cars were capable of speeds up to 60 miles per hour but usually ran between 40 and 50 miles per hour. Passenger cars ran hourly between 6 a.m. and midnight, and two daily freight deliveries brought mail, produce and railway express packages. Up to 180 passengers could be carried on a single train.<sup>11</sup> Normal operating equipment for the line was 22 passenger cars, ten express cars, ten work and freight cars, 19 express trail cars, five box cars, five flat cars, three locomotives and two welding and materials cars.<sup>12</sup>

The impact of interurban travel dramatically altered rural life, ending the isolation of distant communities. Mail, salesmen, and products were brought to the area via the interurban car, and rural residents were provided the means to travel to the big city. As the automobile became more accessible to the general population, passenger totals began to decline, presenting a serious economic factor to the ongoing viability of the company. To offset the loss of passenger revenue, the company managers began to concentrate on freight traffic. While

<sup>10</sup> "Texas Electric Railway."

<sup>11</sup> "Allen Station of the Texas Electric Railway."

<sup>12</sup> "Texas Electric Railway Station."

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## National Register of Historic Places Continuation Sheet

Section 8 Page 14

Plano Station, Texas Electric Railway  
Plano, Collin County, Texas

the Texas Electric Railway was able to compete successfully for a time for both interstate and intrastate freight traffic, revenues did not meet expenses. After World War II, passenger numbers continued to decrease with the end of gasoline rationing, the development of road systems nationwide, and the feeling of prosperity spreading across the country.

### History of Car 360

Car 360 was manufactured in 1911 for the Texas Traction Company, and was originally numbered as Car 11. In 1914 the car was modified to carry U.S. mail and renumbered. The car remained in service as a passenger and mail car until the system closed on December 31, 1948. After that the car served as a tool shed and workshop on the farm of Hermon Cook, Sr. near Waxahachie. The car was subsequently donated to the City of Plano and moved next to the interurban station in 1985. Restoration since that time has brought the car back to its circa 1948 appearance. It is the last remaining example of a Texas Electric Railway post office car, and its siting adjacent to the restored interurban station gives continuity of location and setting and helps convey a sense of time and place.

### Conclusion

The Plano Station of the Texas Electric Railway is a rare surviving example of an early twentieth century building type that was once ubiquitous throughout north Texas along interurban rail lines that radiated out from Dallas. Its current function as a transportation museum helps educate the public regarding the history of past technology and the origins of growth in the community. The adjacent restored rail car, which ran on the line through Plano contemporary with the operation of the interurban, enhances the ability to visualize the historic setting and function of the property. They are the only examples of a restored interurban station and restored rail interurban rail car extant in the region. The station and rail car possess integrity of location, setting, design, materials, workmanship, feeling and association to a high degree.

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National Park Service

**National Register of Historic Places  
Continuation Sheet**

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Plano Station, Texas Electric Railway  
Plano, Collin County, Texas

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"Texas Electric Railway Station (Plano)," Texas Historical Commission files.

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**10. GEOGRAPHICAL DATA**

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**ACREAGE OF PROPERTY:** approximately 0.76 acres

<b>UTM REFERENCES</b>	<u>Zone</u>	<u>Easting</u>	<u>Northing</u>
	14	714840	3655640

**VERBAL BOUNDARY DESCRIPTION:** Block 2, Railroad Addition to the City of Plano, Collin County, Texas, and 40 feet adjoining on western boundary in former Interurban Avenue (Avenue I) right-of-way.

**BOUNDARY JUSTIFICATION:** The boundaries encompass property historically associated with the site.

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**11. FORM PREPARED BY** (with assistance from Bob Brinkman, historian, Texas Historical Commission)

---

**NAME/TITLE:** Maggie Sprague

**ORGANIZATION:** The Plano Conservancy

**DATE:** March 7, 2005

**STREET & NUMBER:** P.O. Box 861810

**TELEPHONE:** (972) 941-2117

**CITY OR TOWN:** Plano

**STATE:** Texas

**ZIP CODE:** 75074

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**ADDITIONAL DOCUMENTATION**

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**CONTINUATION SHEETS** (see continuation sheets FIGURE-18 through FIGURE-21)

**MAPS** (see continuation sheets MAP-16 through MAP-17 and topographic map)

**PHOTOGRAPHS** (see continuation sheet PHOTO-22)

**ADDITIONAL ITEMS**

---

**PROPERTY OWNER**

---

**NAME:** City of Plano, ATTN: Don Wendell, Parks and Recreation Department

**STREET & NUMBER:** P.O. Box 860358

**TELEPHONE:** (972) 941-7250

**CITY OR TOWN:** Plano

**STATE:** Texas

**ZIP CODE:** 75086

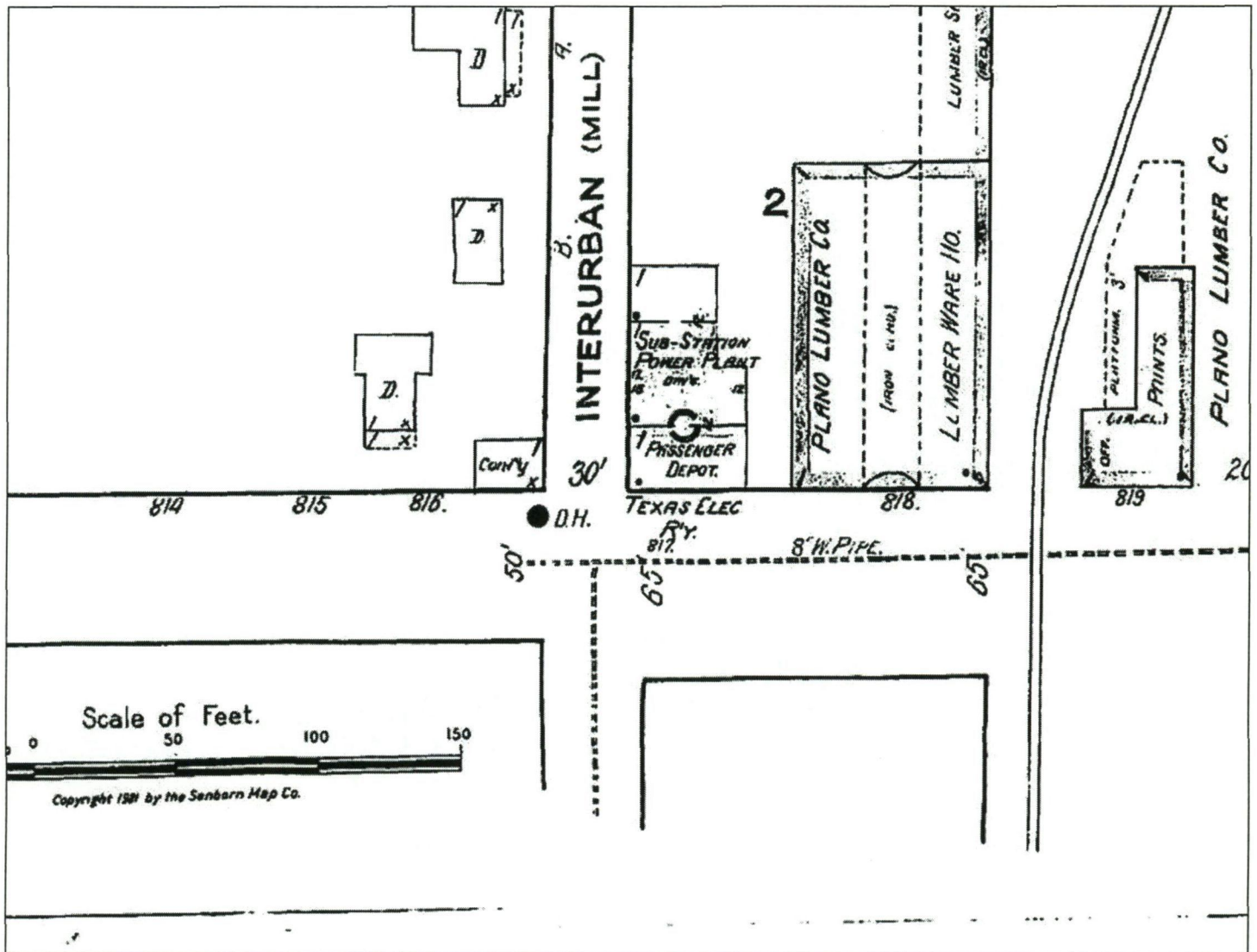
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National Park Service

# National Register of Historic Places Continuation Sheet

Section MAP Page 16

Plano Station, Texas Electric Railway  
Plano, Collin County, Texas

Sanborn Fire Insurance Company map of Plano, Texas, April 1921, sheet 5. North at top.



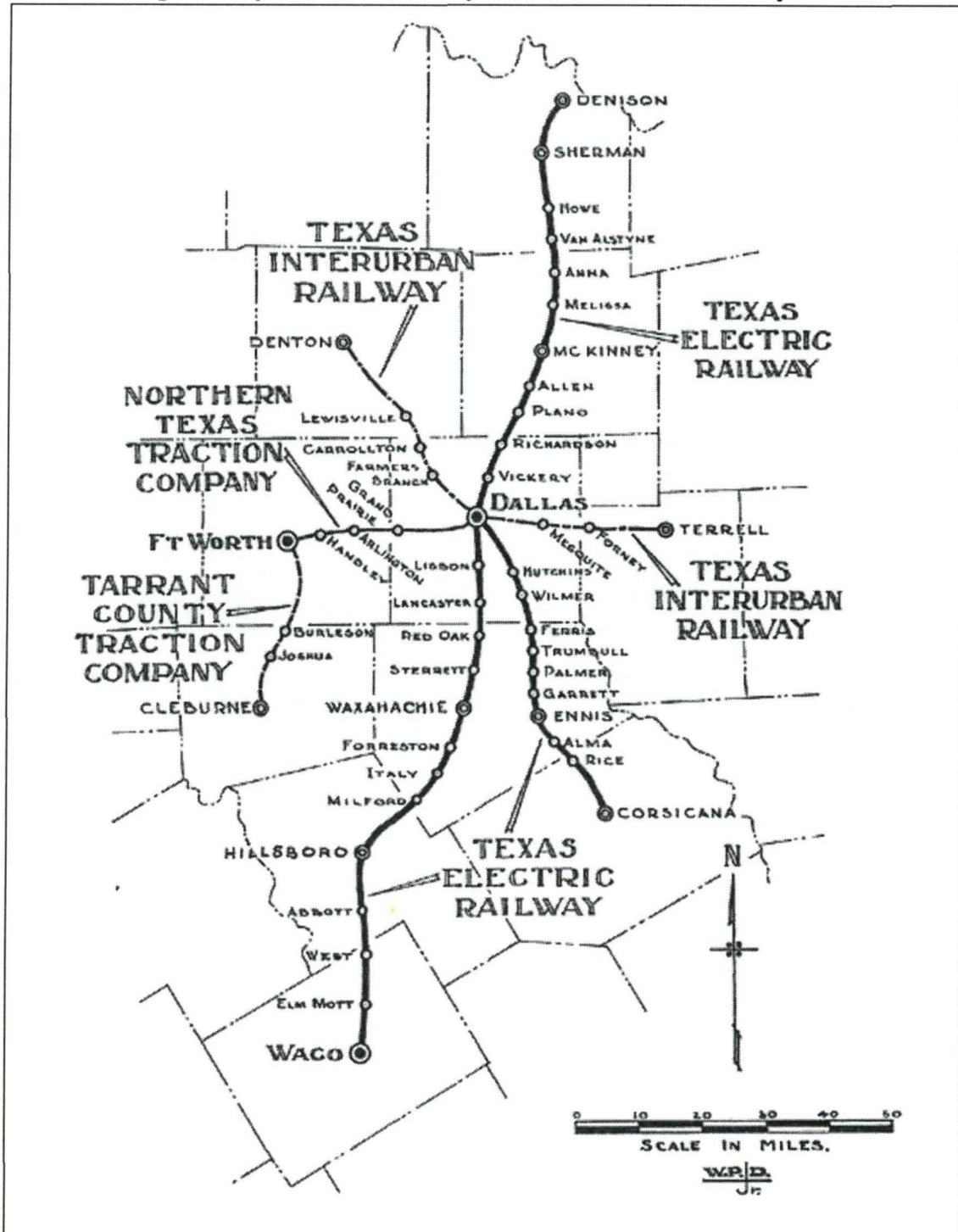
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# National Register of Historic Places Continuation Sheet

Section MAP Page 17

Plano Station, Texas Electric Railway  
Plano, Collin County, Texas

Map of early twentieth century north Texas interurban systems.



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## National Register of Historic Places Continuation Sheet

Section FIGURE Page 18

Plano Station, Texas Electric Railway  
Plano, Collin County, Texas

Figure 1. Plano station, Texas Electric Railway, circa 1909. Southwest oblique view.



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## National Register of Historic Places Continuation Sheet

Section FIGURE Page 19

Plano Station, Texas Electric Railway  
Plano, Collin County, Texas

**Figure 2. West elevation of Plano interurban station, circa 1930. Camera facing north.**



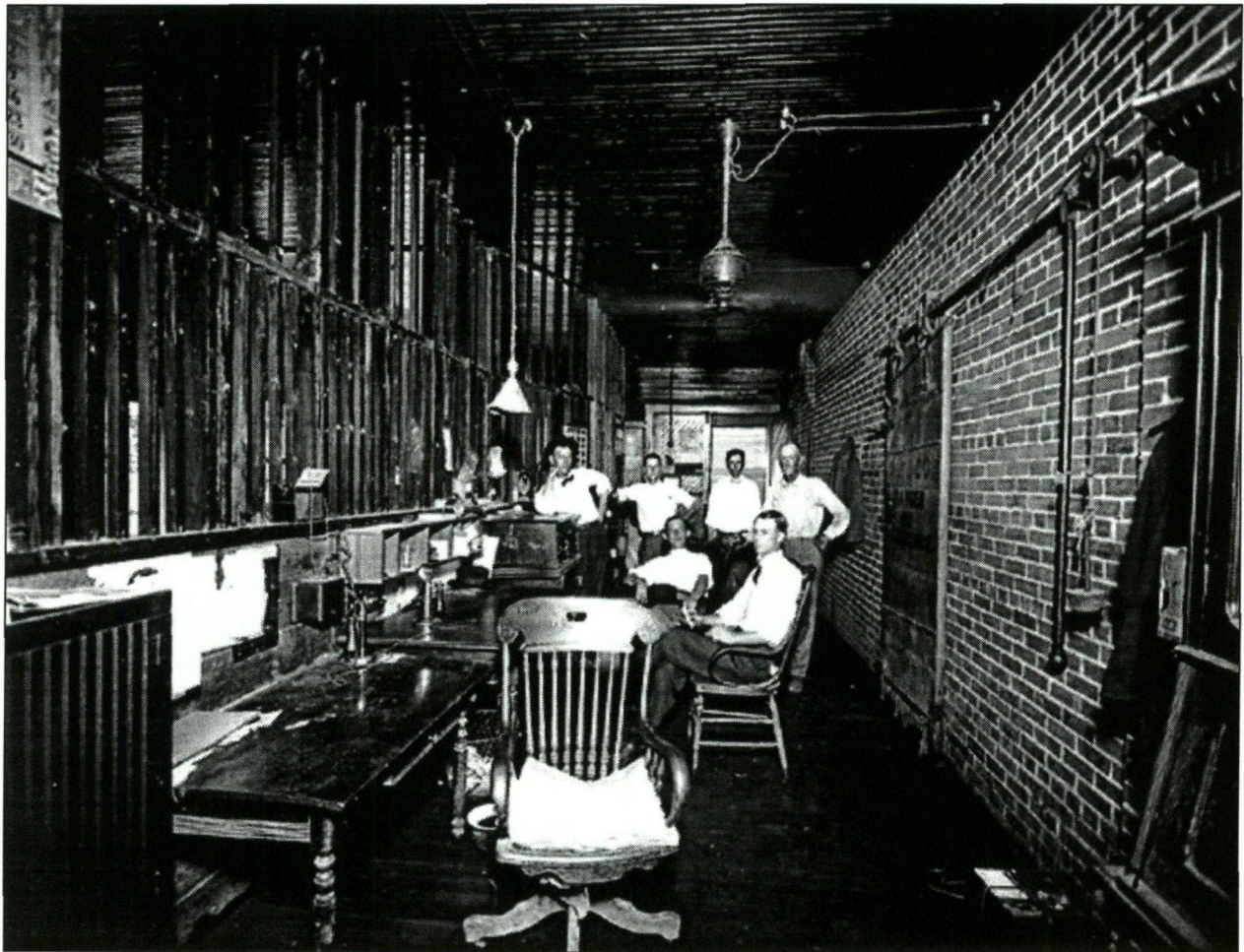
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National Park Service

## National Register of Historic Places Continuation Sheet

Section FIGURE Page 20

Plano Station, Texas Electric Railway  
Plano, Collin County, Texas

**Figure 3. Interior photograph of Plano interurban station, circa 1930. Camera facing west.**



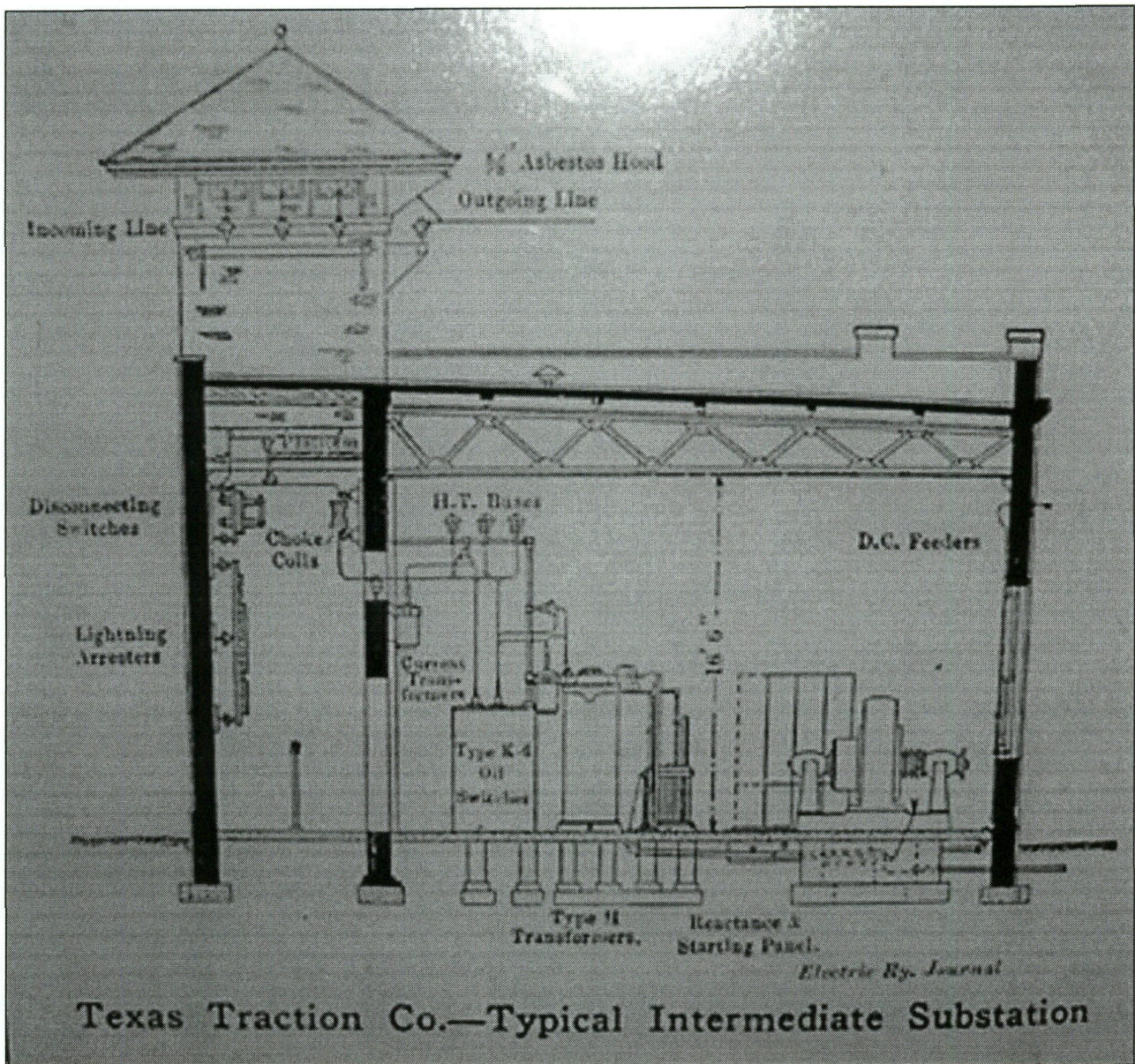
United States Department of the Interior  
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# National Register of Historic Places Continuation Sheet

Section FIGURE Page 21

Plano Station, Texas Electric Railway  
Plano, Collin County, Texas

Figure 4. Schematic view of Texas Traction Company substation.



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## National Register of Historic Places Continuation Sheet

Section PHOTO Page 22

Plano Station, Texas Electric Railway  
Plano, Collin County, Texas

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### PHOTOGRAPHIC INVENTORY

**Plano Station, Texas Electric Railway  
901 E. 15<sup>th</sup> Street  
Plano, Collin County, Texas  
Photographs by Bob Brinkman, January 2005  
Negatives in Texas Historical Commission files.**

Photograph 1 of 5  
Southwest oblique  
Camera facing northeast

Photograph 2 of 5  
East elevation  
Camera facing west

Photograph 3 of 5  
Interior view  
Camera facing northeast

Photograph 4 of 5  
Car 360 southwest oblique  
Camera facing northeast

Photograph 5 of 5  
Car 360 interior view  
Camera facing north

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES  
EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY NAME: Plano Station, Texas Electric Railway

MULTIPLE NAME:

STATE & COUNTY: TEXAS, Collin

DATE RECEIVED: 6/27/05      DATE OF PENDING LIST: 7/25/05  
DATE OF 16TH DAY: 8/09/05      DATE OF 45TH DAY: 8/10/05  
DATE OF WEEKLY LIST:

REFERENCE NUMBER: 05000856

REASONS FOR REVIEW:

APPEAL: N    DATA PROBLEM: N    LANDSCAPE: N    LESS THAN 50 YEARS: N  
OTHER: N    PDIL: N    PERIOD: N    PROGRAM UNAPPROVED: N  
REQUEST: N    SAMPLE: N    SLR DRAFT: N    NATIONAL: N

COMMENT WAIVER: N

ACCEPT     RETURN     REJECT    8/10/05 DATE

ABSTRACT/SUMMARY COMMENTS:

Entered in the  
National Register

RECOM./CRITERIA \_\_\_\_\_

REVIEWER \_\_\_\_\_ DISCIPLINE \_\_\_\_\_

TELEPHONE \_\_\_\_\_ DATE \_\_\_\_\_

DOCUMENTATION see attached comments Y/N see attached SLR Y/N

If a nomination is returned to the nominating authority, the nomination is no longer under consideration by the NPS.



PLANO STATION, TEXAS ELECTRIC RAILWAY

901 E. 15<sup>TH</sup> STREET

PLANO, COLLIN COUNTY, TEXAS

PHOTO 1 OF 5



PLANO STATION, TEXAS ELECTRIC RAILWAY

901 E. 15<sup>TH</sup> STREET

PLANO, COLLIN COUNTY, TEXAS

PHOTO 2 OF 5



PLANO STATION, TEXAS ELECTRIC RAILWAY

901 E. 15<sup>TH</sup> STREET

PLANO, COLLIN COUNTY, TEXAS

PHOTO 3 OF 5



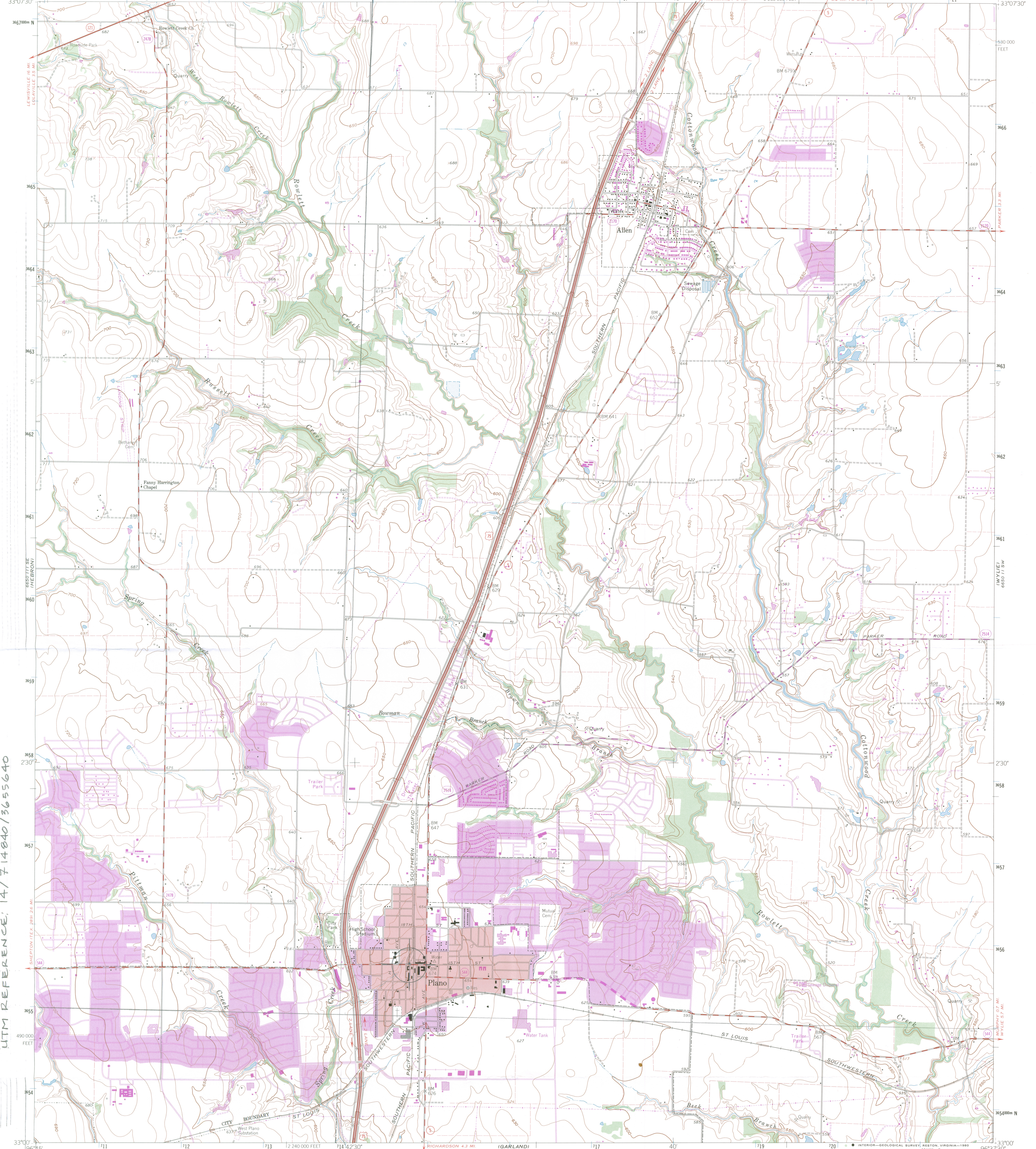
PLANO STATION, TEXAS ELECTRIC RAILWAY  
901 E. 15<sup>TH</sup> STREET  
PLANO, COLLIN COUNTY, TEXAS

PHOTO 4 OF 5



PLANO STATION, TEXAS ELECTRIC RAILWAY  
901 E. 15TH STREET  
PLANO, COLLIN COUNTY, TEXAS

PHOTO 5 OF 5



PLANO STATION, TEXAS ELECTRIC RAILWAY  
 901 E. 15TH STREET  
 PLANO, COLLIN CO., TEXAS  
 UTM REFERENCE: 14/714840/3655640

Mapped, edited, and published by the Geological Survey  
 Control by USGS and USC&GS  
 Topography from aerial photographs by photogrammetric methods  
 Aerial photographs taken 1957. Field check 1960  
 Polyconic projection. 1927 North American datum  
 10,000-foot grid based on Texas coordinate system,  
 north central zone  
 1000-meter Universal Transverse Mercator grid ticks,  
 zone 14, shown in blue  
 Red tint indicates area in which only landmark buildings are shown  
 Fine red dashed lines indicate selected fence and field lines  
 where generally visible on aerial photographs  
 This information is unchecked  
 To place on the predicted North American Datum 1983  
 move the projection lines 10 meters south and  
 26 meters east as shown by dashed corner ticks

Revisions shown in purple compiled from photographs  
 taken 1968 and 1973. This information not field checked  
 Purple tint indicates extension of urban areas

UTM GRID AND 1973 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

1°16' 23 MILS  
 8" 142 MILS

SCALE 1:24 000  
 1000 0 1000 2000 3000 4000 5000 6000 7000 FEET  
 1 KILOMETER

CONTOUR INTERVAL 10 FEET  
 NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS  
 FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092  
 A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ROAD CLASSIFICATION  
 Heavy-duty ——— Light-duty ———  
 Medium-duty ——— Unimproved dirt ———  
 U.S. Route ——— State Route ———

PLANO, TEX.  
 N3300-W9637.5/7.5  
 1960  
 PHOTOREVISED 1968 AND 1973  
 DMA 6650 II SW-SERIES V882

3396-212



**TEXAS  
HISTORICAL  
COMMISSION**

Rick Perry • *Governor*  
John L. Nau, III • *Chairman*  
F. Lawrence Oaks • *Executive Director*

*The State Agency for Historic Preservation*



TO: Keeper  
National Register of Historic Places

FROM: Gregory W. Smith, National Register Coordinator  
Texas Historical Commission

RE: Plano Station, Texas Electric Railway, Plano, Collin County, Texas

DATE: June 17, 2005

The following materials are submitted regarding: Plano Station, Texas Electric Railway, Plano, Collin County, Texas

<input checked="" type="checkbox"/>	Original National Register of Historic Places form
<input type="checkbox"/>	Resubmitted nomination
<input type="checkbox"/>	Multiple Property nomination form
<input checked="" type="checkbox"/>	Photographs
<input checked="" type="checkbox"/>	USGS map
<input type="checkbox"/>	Correspondence
<input type="checkbox"/>	Other:

COMMENTS:

SHPO requests substantive review

The enclosed owner objections (do ) (do not ) constitute a majority of property owners

Other \_\_\_\_\_