NPS Form-10-900	OMB No_10024-0018
United States Department of the Interior 23	RECEIVED 2280
National Park Service 239	
National Register of Historic Places	MAR 1 1 2009
Registration Form	NAT. REGISTER OF HISTORIC PLACES
This form is for use in nominating or requesting determination for individual properties and districts. <i>Register of Historic Places Registration Form</i> (National Register Bulletin 16A). Complete each item the information requested. If an item does not apply to the property being documented, enter ``N/A' classification, materials and areas of significance, enter only categories and subcategories from the items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer,	See instruction AL/PARK SERVICE the National by marking ``x" in the appropriate box or by entering ' for ``not applicable." For functions, architectural e instructions. Place additional entries and narrative
1. Name of Property	
historic name Enid Terminal Grain Elevators Historic District	
other names/site number	
2. Location	
street & number <u>Near East Willow Rd, N. 16th St., N. 10th Street &</u>	k N. Van Buren St.
city or town <u>Enid</u>	[N/A] not for publication [N/A] vicinity
state Oklahoma code OK county Garfield code	<u>047</u> zip code <u>73701</u>
3. State/Federal Agency Certification	
Historic Places and meets the procedural and professional requirements set forth in a meets does not meet the National Register criteria. I recommend that this proposed statewide does not meet the National Register criteria. I recommend that this proposed statewide does not meet the National Register criteria. I recommend that this proposed statewide does not meet the National Register criteria. I recommend that this proposed statewide does not meet the National Register criteria. I recommend that this proposed statewide does not meet the National Register criteria. I recommend that this proposed statewide does not meet the National Register criteria. I recommend that this proposed statewide does not meet the National Register criteria. I recommend that this proposed statewide does not meet the National Register criteria. I recommend that this proposed statewide does not meet the National Register criteria. I recommend that this proposed statewide does not meet the National Register criteria. I recommend that this proposed statewide does not meet the National Register criteria. I recommend that this proposed statewide does not meet the National Register criteria. I recommend that this proposed statewide does not meet the National Register criteria. I recommend that this proposed statewide does not meet the National Register criteria. I recommend that this proposed statewide does not meet the National Register criteria. I recommend that this proposed statewide does not meet the National Register criteria. I recommend that this proposed statewide does not meet the National Register criteria. I recommend that this proposed statewide does not meet the National Register criteria. I recommend that this proposed statewide does not meet the National Register criteria. I recommend that the National Register criteria. I recommen	perty be considered significant \Box nationally
In my opinion, the property i meets i does not meet the National Register criteri (See continuation sheet for additional comments.)	a.
Signature of certifying official/Title	Date
State or Federal agency and bureau	
4. National Park Service Certification	
4. National Park Service Certification I hereby certify that the property is: I entered in the National Register See continuation sheet. determined eligible for 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 See continuation sheet.	Beal Date of Action 4.20.09

See continuation sheet.

Garfield County, Oklahoma

County/State

5. Classification

Ownership of Property (Check as many boxes as apply)

- [X] private
- [] public-local
- [] public-State
- [] public-Federal
- [] building(s) [X] district [] site [] structure [] object

(Check only one box)

Category of Property

Number of Resources within Property

(Do not count previously listed	resources.)	
Contributing	Noncontributing	
•	•	
0	0	buildings

0	0	sites
8	0	structures
0	0	
0	0	objects
8	0	Total

Name of related multiple property listing.

(Enter "N/A" if property is not part of a multiple property listing.)

Grain Storage and Processing Facilities in Western Oklahoma, 1889-1950

0

Number of contributing resources

previously listed in the National Register.

6. Function or Use

Historic Function

(Enter categories from instructions)

AGRICULTURE/SUBSISTENCE:

storage

Current Functions

(Enter categories from instructions)

AGRICULTURE/SUBSISTENCE:

storage

VACANT/NOT IN USE

7. Description

Architectural Classification

(Enter categories from instructions)

OTHER: Concrete Terminal Grain Elevator

Materials

(Enter categories from instructions)

foundation	CONCRETE	
walls	CONCRETE	
roof	CONCRETE	
other		

.

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets.)

8. Statement of Significance

Applicable National Register Criteria

(Mark ``x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- [X] 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.
- [X] 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 values, 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

(Mark ``x" in all the boxes that apply.)

Property is:

- [] A owned by a religious institution or used for religious purposes.
- [] B removed from its original location.
- [] C a birthplace or grave.
- [] D a cemetery.
- [] E a reconstructed building, object, or structure.
- [] F a commemorative property.
- [] G less than 50 years of age or achieved significance within the past 50 years.

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

Bibliography

(Cite the books, articles and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):

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 Buildings Surve
- ¥___

recorded by Historic American Engineering Record

Areas of Significance

(Enter categories from instructions)

AGRICULTURE	
ECONOMICS	
ARCHITECTURE	
ENGINEERING	

Periods of Significance

<u>1925-1959</u>

Significant Dates

1925

1946

1953-1954

Significant Person(s)

(Complete if Criterion B is marked above).

<u>N/A</u>

Cultural Affiliation

N/A

Architect/Builder

Jones-Hettelsater Construction Company Chalmers and Borton Construction Company

Primary location of additional data:

State Historic Preservation Office

- Other State Agency
- Federal Agency Local Government
- University
- Other

Name of repository: Oklahoma Historical Society

10. Geographical Data

Acreage of Property 100 Acres MOL

UTM References

(Place additional UTM references on a continuation sheet.)

1.	14 Zone	602240 Easting	4031470 Northing	(NAD27)
2.	14 Zone	602430 Easting	4031270 Northing	
3.	14 Zone	602780 Easting	4030520 Northing	
4.	14 Zone	602500 Easting	4030300 Northing	[X] See continuation sheet

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title Cynthia Savage, Architectural Historian, for the City of Enid

organization Architectural Resources & Community Heritage Consulting date August 2008

street & number 346 County Road 1230

telephone 405-459-6200

zip code 73079

city or town Pocasset

state OK

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A USGS map (7.5 or 15 minute series) indicating the property's location. A Sketch map for historic districts and properties having large acreage or numerous resources.

Property Owner

(Complete this item at the request of SHPO or FPO.)

name See Attached List

street & number		telephone
city or town	state	zip code

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.

Estimated Burden Statement: Public reporting burden for this form is estimated to range from approximately 18 hours to 36 hours depending on several factors including, but not limited to, how much documentation may already exist on the type of property being nominated and whether the property is being nominated as part of a Multiple Property Documentation Form. In most cases, it is estimated to average 36 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form to meet minimum National Register documentation requirements. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, 1849 C St., NW, Washington, DC 20240.

Photographs

Representative black and white photographs of the property.

Additional Items

(Check with the SHPO or FPO for any additional items)

National Register of Historic Places Continuation Sheet

Section number 7_ Page 1_

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

DESCRIPTION

Beginning with the construction of the Enid Terminal Elevator in1925, the city of Enid, Garfield County, Oklahoma, began to lay claim to the title of "Wheat Capital of Oklahoma." While Enid was auspiciously located in productive agricultural country in north central Oklahoma since the end of the nineteenth century, the presence of the terminal elevators beginning in 1925 were largely responsible for the acclamation of "Wheat Capital." These concrete giants not only set records for grain storage but also centered Oklahoma's wheat market in Enid for decades.

There are three types of grain elevators: terminal, country and processing. Terminal elevators were designed to hold immense quantities of wheat which was then distributed to local, regional and worldwide markets. As such, these elevators dwarf the other types of other elevators, as well as every other type of construction in the area. Wheat was transported to Enid's terminal elevators from numerous country elevators across the state, as well as from country elevators in other nearby states. The country elevators were essentially the same as the terminal elevator but, designed to hold only local yield, were significantly smaller than the terminal elevators. As indicated by their name, processing grain elevators typically handled only local or regional yields so they typically did not require the storage capacity of the terminal elevators. While a multitude of smaller country and processing type elevators were constructed across the state of Oklahoma, and particularly in the western portion of the state, the building of terminal elevators was largely restricted to the Enid vicinity. This nomination is strictly for terminal type elevators.

Eight terminal elevators are included within this nomination. Only one of Enid's extant, historic, terminal elevators is not included in the district; the W.B. Johnston Terminal Elevator, located northeast of the Oklahoma Wheat Pool Terminal Elevator, has been surrounded by modern metal buildings and storage tanks so that the integrity of the historic elevator has been compromised. The two extant elevators in Enid with adjacent milling facilities are also not included in the nomination because these elevators lack historic integrity due primarily to adjacent new construction. Additionally, of the two elevators with mills, only the 1928 Pillsbury Milling Elevator would be considered a terminal elevator. The historic W. B. Johnston Grain Elevator and Mill is not of sufficient size to be merit terminal elevator status. The W.B. Johnston Grain Elevator and Mill is a separate property from the W.B. Johnston Terminal Elevator with the grain elevator/mill located in the 400 block of West Chestnut Avenue, putting it in proximity to the southwestern most terminal elevator, the Enid Terminal Elevator.

All eight of the nominated elevators are constructed of reinforced concrete. Beginning in the 1920s, concrete became the preferred material for grain storage facilities as it was affordable, fire-proof, water-proof and the smooth walls prevented grain from getting stuck in cracks and then rotting. Concrete bins were also relatively rodent and bird proof; insect infestations were also minimized, although if the grain was wet when stored, the type of construction material would not be able to prevent insect manifestation.

National Register of Historic Places Continuation Sheet

Section number 7 Page 2

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

Construction of Enid's terminal elevators occurred relatively rapidly over a twenty-eight year period. Three of the existing elevators were built in the late 1920s as increasing use of mechanized harvesting implements, namely tractor-pulled and self-propelled combines, shortened the delay in getting the wheat out of the field and to market than previous methods of threshing had allowed. The Enid Terminal Elevator was constructed in 1925; the Southwest Terminal Elevator was built in 1926; and, the General Mills Elevator was erected in 1929. One year later, construction of the Oklahoma Wheat Pool Terminal Elevator was initiated. This was followed in 1931 by construction of the Union Equity Co-Operative Exchange's first real terminal elevator, Elevator A. Previously, a small cribbed (wood) elevator on the same site was utilized by the Co-Operative Exchange. While various additions were added to the existing elevators over the next fifteen or so years, no new terminal elevators were constructed in Enid until near the end of World War II. The Union Equity Co-Operative Exchange's Elevator B, a pioneer in elevator design with hexagonal bins, was commenced in 1946 on a trial basis. Proving itself sound, the elevator was significantly expanded over the next four years. Thinking to finally satisfy demand with construction of a terminal elevator of unprecedented size in Enid, the Union Equity Co-Operative Exchange undertook construction of what it believed to be the final terminal elevator, Elevator Z, in 1949-1951. However, with demand continuing to rise, the Union Equity Co-Operative Exchange undertook the last construction project of a terminal elevator in Enid, Elevator Y, in 1953-1954.

Grain elevators have four basic components: unloading sheds, headhouse, gallery and bins. The grain is transported from the field to the elevator by truck or by train. It is then unloaded in a pit in the unloading shed from which it is conveyed via a controlled passage or gateway to a central "boot." From the boot, the grain is moved to the headhouse and from there distributed to scale bins for weighing, to preselected bins for storage or to rail cars for immediate transportation. Terminal elevators have more elaborate headhouses then country or processing elevators. In addition to the distributors, terminal elevators have scales and the elevator manager's control station in the headhouse. From the headhouse, the grain is moved into bins by a long conveyor belt located in the gallery. The gallery extends the length of the bins on the top side of the elevator. As the grain reaches the appropriate bin, the grain is thrown off the conveyor belt located in the bottom, or basement, of the elevator moves the grain out of the storage bins into waiting rail cars. The headhouses, gallery and basements of the grain elevators have numerous, industrial-style, metal, pivot windows to prevent accumulation of dust inside. Without an adequate means of release, the build-up of dust can lead to a catastrophic explosion in the elevator.

Typical of grain elevators, Enid's terminal elevators, were located adjacent to or in the railroad right-ofway. As such, they are situated on unplatted plots of land and have complicated legal descriptions. Additionally, because many of the elevators were not located on city streets, not all of the elevators have recorded street addresses. Therefore, the UTMs for each elevator is the most precise, verifiable means of locating the elevators.

National Register of Historic Places Continuation Sheet

Section number 7 Page 3

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

The area around the elevators largely consists of railroad tracks and agricultural fields. Due to the distance between the resources and the possibility of including land owned by a variety of non-elevator owners, compounded by the complex legal descriptions, the typical method of drawing boundaries around the greatest concentration of resources was not employed. The individual elevator UTMs are the boundaries for the district.

Only the elevators themselves are included in the Enid Terminal Elevator Historic District. While some of the elevators had small, unattached, support buildings, these are not included because they do not contribute to the significance or understanding of the district. The support buildings at the grain elevator include garages, small offices and warehouse type buildings, many of which either lack historic integrity or are of insufficient age to be considered contributing resources. The support buildings are typically small in scale, particularly as compared to the immense elevators; are frequently of indeterminate age; and, are generally utilitarian architecture of little merit. Many of the grain elevator companies had offices in various buildings in downtown Enid or, as in the case of Union Equity Co-Operative Exchange, built a separate off-site office building away from the elevators expressly as a corporate headquarters.

All of the eight elevators included in the district are contributing resources, being both present during the district's period of significance and retaining their historic integrity. Many of the elevators have been added on to; however, most of the additions occurred during the period of significance and, thus, do not adversely impact the properties' integrity. Additionally, the addition of storage facilities was oftentimes planned as part of the original construction. The addition or modification of covered unloading truck or rail facilities was also common. Functional in design and built of concrete, the structures were not conducive to other types of modifications.

With the exception of the first terminal elevator constructed, the terminal elevators were erected on the north edge of Enid in relative proximity to each other. The earliest elevator, the Enid Terminal Elevator, was built to the southwest of the others, near the junction of multiple railroad lines and directly west of other early elevator and milling facilities. Grain elevators, particularly terminal ones, were dependent on the railroads to transport grain. As such, the location of the first terminal elevator was auspicious but quickly restricted by other types of town development. In general, the area immediately around the Enid Terminal Elevator is industrial in character, including a large, modern concrete overpass to the direct southwest. However, to the north of the elevator, across a small field that has a couple of commercial buildings on the northwest edge, is a residential area. A wide stretch of multiple tracks forms a physical and visual barrier on the south. To the east of the elevator, the area is also constrained by railroad tracks with residential development in the distance.

The remaining elevators are located in a more open setting that is a mix of industrial and agricultural. Four of the elevators are clustered near the Saint Louis and San Francisco Railroad tracks (now Burlington Northern), on the north side. A fifth is situated a short distance away to the northeast, along

National Register of Historic Places Continuation Sheet

Section number 7 Page 4

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

a set of siding tracks which connect to the main line to the south. The final two elevators, Union Equity Co-Operative Exchange Elevators Y and Z, were the last ones constructed and, presumably due space restrictions, were located about a half mile to the north. A branch of United States Highway 64, also known as East Willow Road, extends east-west just to the south of Elevators Y and Z and serves as a physical barrier between the other elevators.

Below is the list of the contributing elevators with brief descriptions. The list is organized geographically, rather than chronologically. This arrangement is more logical and facilitates easy identification of each resource. This same methodology was applied to the UTMs recorded on the accompanying USGS and district maps, as well as the photographs. The list begins with the elevators on the far north side of Enid, the Union Equity Co-Operative Exchange's Elevators Z (#1) and Y (#2), and progresses south. Starting on the east side, the next elevator is the Oklahoma Wheat Pool Terminal Elevator (#3), than heading southwest is the Union Equity Co-Operative Exchange Elevator B (#4). To the southwest of this is the General Mills Terminal Elevator (#5), northwest of this and directly west of the Union Equity Co-Operative Exchange Elevator A (#6). To the southwest of this and directly west of the General Mills Terminal Elevator is the Southwest Terminal Elevator (#7). More than a mile to the southwest of this is the Enid Terminal Elevator (#8).

CONTRIBUTING RESOURCES:

1. Union Equity Co-Operative Exchange Elevator Z. Constructed: 1949-1951. Builder: Chalmers and Borton Construction Company of Hutchinson, Kansas. See photographs #1 and #2. Elevator Z has no recorded street address. This reinforced concrete terminal elevator had an initial reported capacity of 7 million bushels. At the end of construction in 1951, the total capacity had risen to 15.3 million bushels. The elevator is located in close proximity to the Union Equity Co-Operative Exchange Elevator Y. The two meld together to form a highly visible entity to the west of 16th Street and north of State Highway 64 (also called East Willow Road). The elevator measures roughly 1000 feet wide by 145 feet long. As with the Union Equity Elevators Y and B, the design of Elevator Z's bins is hexagonal. The hexagonal, or bee-hive, design of the bins gives the structure its distinctive, Modern, folded plate design along the north and south elevations. The east and west elevations are flat with no visual indications of the separation of space on the interior. The concrete headhouse is rectangular and towers over the bins in excess of 100 feet high. The headhouse is located on the east side of the structure with the bins stretching to the west. Along the upper walls of the headhouse are symmetrical, multiple, metal, threepane, pivot windows. Between the upper windows of the headhouse on the south side are three painted, green, connected, hexagonal shapes between two shafts of wheat. This was the symbol utilized by the Union Equity Co-Operative Exchange as the hexagonal bin design was pioneered by the company. On the west side, in large painted letters, is the word "Equity." The rectangular gallery running the length of the bins has metal, pivot windows matching those in the headhouse. On the south side of the headhouse is an attached, enclosed, corrugated, sheet metal, unloading shed for rail cars. A smaller, more recent, metal, enclosed, truck unloading shed is attached on the south side of

National Register of Historic Places Continuation Sheet

Section number 7 Page 5

Enid Terminal Grain Elevators Historic District Name of Property <u>Garfield County, Oklahoma</u> County/State

the rail unloading shed. The truck shed has metal rolling doors on the east and west sides and a pedestrian, metal, slab door on the south side. Various enclosed conveyors are attached between the truck shed, rail shed and elevator to convey the grain into the elevator. Extending through the unloading shed is a branch set of railroad tracks which connects to the main lines to the north and south.

2. Union Equity Co-Operative Exchange Elevator Y. Constructed: 1953-1954. See photographs #1 and #3. As with its neighboring elevator, Elevator Y has no recorded street address. This reinforced concrete terminal elevator was the world's largest grain elevator when it was completed with a capacity of 16.3 million bushels. Elevator Y is basically a mirror image of Elevator Z, although there are slight differences between the two. The elevator has been painted white to match the other elevators owned/built by the Union Equity Co-Operative Exchange. The headhouse of Elevator Y is located on the west side with the hexagonal bins extending in a line to the east. Although having a slightly larger capacity than Elevator Z, Elevator Y roughly measures the same 1000 feet long by 145 feet wide as Elevator Z. The north and south elevations are visually sharply rippled, indicative of the hexagonal pattern of interior bins. The east and west elevations are smooth with no evidence of interior space division. The fenestration pattern in the headhouse is slightly different with Elevator Y having more windows towards the upper middle section. The metal, pivot windows also appear to be a smidgen smaller than those in Elevator Z. The wide gallery extends the length of the bins and is barely visible on the east end. Metal pivot windows are rhythmically located along the north and south sides of the gallery. To facilitate simultaneous movement of the grain through both elevators, Elevator Y's unloading shed is located on the north side, opposite that of Elevator Z. The metal shed has various attachments extending from the shed to the elevator. A set of side tracks extends along the immediate north side of the elevator with another set of tracks located to the north.

3. Oklahoma Wheat Pool Terminal Elevator; also known as Farmers' National Grain Corporation Elevator and Continental Grain Company Elevator. Constructed: 1930; addition 1935. Builder: Jones-Hettelsater Construction Company of Kansas City, Missouri. See photographs #4, #5 and #6. Street address: 1801 North 16th Street. The Oklahoma Wheat Pool Terminal Elevator had an original capacity of 1 million bushels. The 1935 addition to the reinforced concrete structure more than doubled the capacity to 2.1 million bushels. The elevator is located south of East Willow Road on North 16th Street. Generally, the unpainted, reinforced concrete elevator is surrounded by agricultural fields with the Union Equity Co-Operative Exchange Elevators B and A to the southwest. The Oklahoma Wheat Pool Terminal Elevator has a central headhouse with the original, round, 1930 bins extending to the north. The 1935 addition, consisting of larger round bins, extends to the south. The elevator measures approximately 450 feet long by 66 feet wide. The structure has matching, metal, pivot windows throughout the headhouse, gallery and bottom part of the bins. Also along the lower part of the 1930 section of bins are numerous, round, covered openings. In the center of the symmetrical windows on the east and west sides of the headhouse is the faded, painted, vertical word "Continental." Unlike the Union Equity Exchange Elevators which remained under original ownership until the 1990s, the Oklahoma Wheat Pool Terminal Elevator changed hands many times beginning as

National Register of Historic Places Continuation Sheet

Section number 7 Page 6

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

early as 1931. The pattern of the round bins gives all four elevations an undulating pattern that is character-defining. Interestingly, the pattern between the original bins and the 1935 bins is not identical. On the north end, the 1930 bins appear to consist of five equal size storage areas; notably, the 1930 Sanborn Fire Insurance Map indicates only three interior bins with semicircular projections covering the space between the bins and creating the visual illusion of five bins. On the south end of the elevator, the 1935 bins reveal clearly the internal arrangement of three bins with no caps between the bins. The gallery on the north side is fairly wide, spanning about four of the five visible circular elements. The north gallery also has smaller windows consistently placed on the side elevations. The south side gallery is considerably narrower, appearing to span only the center bin of the three bins comprising the width of the elevator. The south gallery also has only nine, large, metal, pivot windows along the side elevations, about one-third the number of windows as on the north side. On the east side of the elevator, is the large, attached, railcar unloading shed. The metal shed has three bays with track running through each one. Still in place on the north side are components of the winch system used to move the railcars when loading and unloading. Connected to the unloading shed by a chain link fence is the remnants of the overflow system which would have allowed surplus grain to be piled on the ground. The pipe connecting the overflow system to the elevator is now gone but the short metal skirt to contain the spread of the grain and other parts remains in place. On the west side of the 1930 bins is a corrugated metal truck unloading shed with a shed roof and rolling overhead door. Attached to the unloading shed on the west side is a small, rectangular, concrete block, flat roofed addition. The addition has a large, multi-paned, metal window and a single, metal, slab door with a small square light on the north side. A matching window and a single, paneled, wood door is located on the west side.

4. Union Equity Co-Operative Exchange Elevator B. Constructed: 1946-1949. Design Inspiration: E.N. Puckett, General Manager, Union Equity Co-Operative Exchange; Builder: Chalmers and Borton Company of Hutchinson, Kansas. See photographs #4, #7 and #8. This elevator does not have a recorded street address. The elevator is located southwest of the Oklahoma Wheat Pool Terminal Elevator and directly east of Union Equity Co-Operative Exchange Elevator A. Construction began on Elevator B in early 1946 with the first portion in use for wheat harvest that year. Two subsequent additions brought the capacity of the elevator to 11 million bushels by 1949. This is the first identified terminal elevator to utilize the hexagonal bin design. The elevator measures about 1400 feet long by 90 feet wide. According to newspaper reports, the headhouse was 240 feet high and the bins measured 140 feet high. Like all the Union Equity elevators, Elevator B has been white washed. The reinforced concrete elevator has a central, towering headhouse with metal pivot windows. At the top of the headhouse is a metal railing surrounding various metal pieces of equipment. Below the first set of windows from the top on the north and south sides is the painted logo of the Union Equity Co-Operative Exchange. A short section of hexagonal bins extend west from the headhouse with a longer section of hexagonal bins extending to the east. The west side of bins is visually divided into three equal sections. The east portion of bins appears to consist of five equal sections. The east and west elevations of the elevator are flat with the north elevations exhibiting the distinctive folded plate pattern of the interior hexagonal bins. Along the bottom side of the bins, are multiple, metal, pivot windows.

National Register of Historic Places Continuation Sheet

Section number 7 Page 7

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

On the north side of the headhouse is the corrugated metal unloading shed that does not appear to be in use any longer. The unloading shed is still connected to the headhouse via various pipes and accouterments. On the south side, there is another corrugated metal, unloading shed. A photograph in the 1970 <u>Polk's Enid (Garfield County) City Directory</u> shows that this shed was in place at that time. To the west of the south shed, is an uncovered spout for unloading wheat from the elevator. The gallery on both the east side and west sides spans nearly the width of the bins. The north and south sides of the gallery are functionally ornamented with numerous, equal-sized, metal, pivot windows.

5. General Mills Terminal Elevator; also known as Elevator of General Grain Company. Constructed: 1929. See photographs #11 and #12. According to the Garfield County Assessor records, this elevator is located at 1702 North 10th Street. The elevator is situated south of the Union Equity's Elevators A and B and to the direct east of a large, modern, front-gabled, metal warehouse building that fronts onto North 10th Street. The elevator has not been used in some time with numerous windows in the headhouse being broken. The General Mills Elevator measures about 575 feet long by 72 feet wide. The unpainted reinforced concrete elevator has round bins typical of its period of construction. The bins are all located to the west of the towering headhouse. The upper part of the headhouse has numerous, symmetrical, paired, metal, pivot windows. The wide, rectangular gallery spans nearly all three bins visible on the west end. Extending from the gallery, down much of the center bin, is a metal ladder. The ladder has been cut off so it no longer reaches the ground. The gallery windows are set in sets of three on the west end and sets of three, four and five along the north and south sides. Off the south side of the headhouse is a triple, concrete, unloading shed with a flat roof. The unloading shed has three unequal-sized bays and various pipes and bins connecting the shed to the elevator. A low guardrail skirts the edge of the elevator from the unloading shed. Two sets of railroad tracks are still visible in the grass, extending into the two southernmost bays.

6. Union Equity Co-Operative Exchange Elevator A. Constructed: 1931; additions 1935, 1940, 1941 and 1942. See photograph #4, #9 and #10. This elevator has no recorded street address. The elevator is situated off of North 10th Street, between the railroad tracks and the vacated portion of East Hemlock Avenue. Elevator A is situated to the direct west of Union Equity Elevator B and northwest of the General Mills Terminal Elevator. The reinforced concrete elevator is basically two large elevators located side-by-side; however, the structure has always been addressed in the singular as Union Equity Elevator A. The elevator had an initial capacity of about 500,000 bushels of grain. The first addition in 1935 increased the elevator's capacity by 700,000 bushels. In 1940, a 2,000,000 bushel addition was added, followed the next year by a 3,250,000 bushel addition. A final addition to Elevator A was erected in 1942, increasing the capacity of the elevator by 1,250,000. Total, at the end of construction, Elevator A had a capacity of 7,650,000 bushels of grain. The reinforced concrete structure measures roughly 875 feet long by 156 feet wide. The space separating the two parts of the elevator contributes to the overall width of the elevator. Two headhouses are located towards the west side with both having a small section of bins on the far west end. The north headhouse is taller than the south and the two are connected by a catwalk. Mimicking the bins they cover, the south gallery is much narrower than the north. Both galleries have multiple metal windows for ventilation. The south

National Register of Historic Places Continuation Sheet

Section number 7 Page 8

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

section of the elevator has an unusual rectangular projection on the extreme west end that includes a spout on the lower side for apparently loading grain from the elevator into trucks. On the west end of the south elevation is an unloading shed. This fairly modern metal shed has railroad tracks extending through it and various metal pipe and bins connecting it to the elevator. The south side of the elevator is narrow than the north. A larger corrugated metal unloading shed is located on the north side of the elevator. This shed connects to a modern metal shed situated over a far set of railroad tracks. Multiple sets of tracks extend between the older shed and the new north shed.

7. Southwest Terminal Elevator; also known as Feuguay and Salina Terminal Elevator. Constructed: 1926-1927. See photographs #13 and #14. This elevator has no recorded street address. The Southwest Terminal Elevator is located west of North 10th Street between two branches of railroad tracks. The elevator is located almost directly west of the General Mills Terminal Elevator and southwest of the Union Equity Co-Operative Exchange Elevator A. The Southwest Terminal Elevator is angled to align with the railroad tracks which contrasts with the straight placement of the four elevators located to the east between North 10th and North 16th Streets. The Southwest Terminal Elevator had an original capacity of about half a million bushels which was expanded by the same the following year. The reinforced concrete elevator measures around 394 feet long by 65 feet wide. Typical of the period of construction, the bins are circular. The headhouse is located between two sets of equal length bins. The metal, center pivot windows in the headhouse are relatively few in number. unlike in some of the later elevators. Equal-sized galleries extend the length of both sections of bins with paired windows running the length and a single set on the ends. On the north side of the headhouse is a double bay, concrete, flat-roofed, unloading shed. The shed bays have been obstructed by a fence and abundant vegetation covers in remaining trackage. Although rusty, various pipes and small bins remain in place on the top of the unloading shed. On the south side, a large, metal warehouse of indeterminate age has been added. The gabled-roof, corrugated metal warehouse was likely used to accommodate overflow grain as a metal auguring system connects the warehouse to the elevator. The warehouse addition is connected to the elevator via a metal auger.

8. Enid Terminal Elevator. Constructed 1925-1926; first addition 1931; second addition unknown. Builder: Jones-Hettelsater Construction Company of Kansas City, Missouri. See photographs #15 and #16. Street Address: 1015 North Van Buren Street. This unpainted reinforced concrete structure is located relatively by itself just to the east of the modern Van Buren Street overpass. Van Buren Street also serves as United States Highway 81 and, thus, is a major north-south thoroughfare through Enid. The elevator is situated south of West Birch Avenue, west of North Madison Street and north and east of West Chestnut Avenue. The elevator measures about 594 feet long by 60 feet wide. The Enid Terminal Elevator has a central headhouse that is connected to the circular bins on either side via the gallery. The headhouse does not directly abut the bins as on the other elevators. Similarly, a large set of round bins is connected to the original southwest bins and a narrower but longer set of bins is connected on the northeast side. The headhouse has a scattering of metal, center pivot windows. Between the windows on the upper west side of the headhouse is a painted logo and sign for Goodpasture, Inc. Below the name of the company, its location is specified as Enid. A small

OMB No. 1024-0018 (Expires 1-31-2009)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 9

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

headhouse is located on the easternmost section of bins. The galleries on both sides have equalspaced, metal, pivot windows. Off the northeast addition of concrete bins are two large, modern, metal tanks. The conical metal tanks are attached to the elevator by a metal conveyor. Clearly not part of the historic structure, the metal tanks do not impact the ability of the elevator to convey its significance because they are set at a distance, have differentiated building material and, although comparable in height, do not obstruct the historic structure.

National Register of Historic Places Continuation Sheet

Section number 8 Page 10

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

SIGNIFICANCE

The Enid Terminal Grain Elevators Historic District is eligible for the National Register of Historic Places under Criterion A for its association with economics and agriculture. The elevators contributed significantly to the local economic well-being of Enid, providing not only jobs but a relatively stable industry that was connected to a variety of other businesses and industries, most notably the railroads. The grain elevators also importantly centered the state wheat market in Enid for most of the twentieth century. On an agricultural basis, the terminal grain elevators had a crucial role in moving Oklahoma wheat to regional, national and international markets. Oklahoma wheat was, and remains, a primary convertible asset needed by the farmer to pay farm operating costs; thus, the storage, sale and transportation of wheat is critical to not only farmers but to all connected persons from bankers to implement dealers. Under Criterion C, the district has architectural and engineering significance as a unique collection of concrete terminal elevators. Nowhere else in the state was there a grouping of terminal elevators such as that found in Enid.

Although terminal elevators were not included as an identified property type, the Enid Terminal Grain Elevators Historic District is associated with the multiple property listing "Grain Storage and Processing Facilities in Western Oklahoma." The country and processing elevators identified in the multiple property document, along with the terminal elevators, were all important components of the movement of grain from farm to market. The historic context associated with the multiple property listing "Grain Storage and Processing Facilities in Western Oklahoma, 1889-1950" ably covers the development of the grain industry in Oklahoma of which the terminal elevators were a critical part beginning in 1925. The terminal elevators were not included in the multiple property submission because these giant structures were restricted to the single town of Enid and previous multi-county studies had centered on the country and processing elevators.

The Enid Terminal Grain Elevators Historic District is nominated at the state level of significance for its the critical role it played in the maturation of Oklahoma's grain industry, as well as the architectural and engineering significance of the elevators. The terminal elevators were crucial to the growth of the state's grain industry. For nearly a century, wheat has been a dominant agricultural commodity in Oklahoma and the ability to store mass quantities of the grain was critical for the farmer and grain dealer alike, particularly during the mid-twentieth-century. From an engineering and architectural standpoint, the terminal elevators constitute some of the most immense, functional, emblematic and sophisticated construction in the state.

The period of significance for the district extends from 1925 to 1959. The first year of significance, 1925, coincides with the construction of the first terminal elevator in Enid, the Enid Terminal Elevator. The phase 1946-1949 is noted as a significant date because that was the period of construction for the first terminal elevator in Enid that had hexagonal bins. Attributed to E.N. Puckett, long-time manager of the Union Equity Co-Operative Exchange, this design was a significant innovation in elevator design. The period of 1953-1954 is also noted as that was when the Union Equity Co-Operative Exchange

National Register of Historic Places Continuation Sheet

Section number <u>8</u> Page <u>11</u>

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

constructed the then-largest terminal elevator in the world, Elevator Y. The last year of significance for the district, 1959, corresponds to the National Register's current fifty-year mark. While elevator construction never again was as prevalent in Enid as between 1925 and 1958, the elevators continued to play an important role in the Enid economy, in the Oklahoma grain industry and as architectural and engineering symbols for at least three more decades. While several of the elevators closed in the late 1980s for various reasons, several subsequently re-opened and are still in operation today; thus, only the passage of time will allow for an accurate evaluation of the significance of the elevators during the latter decades of the twentieth century.

HISTORIC BACKGROUND

Located in north central Oklahoma, the town of Enid came into being following the mid-September 1893 Cherokee Strip Land Run which opened the area to non-Native American settlement. A station also named Enid had been previously established by the Chicago, Rock Island and Pacific Railway Company (Rock Island). However, at the time of the land opening, it was realized that the area planned for the town had already been allotted to some Cherokee Indians. As such, the Secretary of the Interior ordered that the townsite, the seat of the newly created Garfield County, be moved three miles to the south of the existing railroad station. Accordingly, the government land office, county courthouse and post office were established in the community to the south. Town development was slowed, however, as for nearly a year the rail company refused to recognize this change and did not stop in "South Enid." Rail transportation was crucial for town development in the late nineteenth century, not only for bringing settlers in but also the goods and supplies necessary to build a thriving community. The rivalry quickly became bitter between "North Enid" and South Enid, finally requiring a Presidential proclamation that upheld South Enid as the county seat. One year to the date after the Cherokee Strip was opened to non-Native American settlement, a freight and ticket office opened in South Enid. With rail connections secured, South Enid flourished, becoming the present-day city of Enid.¹

As with much of western Oklahoma, agriculture was an economic mainstay from the town's earliest days. The initial harvests of 1894, 1895 and 1896 were disappointing due to drought, causing many settlers to move on in search of more profitable endeavors. Plentiful rain in 1897 finally resulted in a abundant harvest which allowed wheat prices to shoot up to \$1 a bushel. Over the next six years, two railway companies, the Atchison, Topeka and Santa Fe Railway Company (Santa Fe) and Saint Louis-San Francisco Railway Company (Frisco), financed the building of rail tracks through Enid, giving the community three rail connections. Importantly, this also laid "...the foundation for what (Enid) later became – the wheat and milling center for northwestern Oklahoma." Subsequently, the Frisco also made Enid a division point for their line, resulting in the construction of a large machine and car repair

¹ <u>The WPA Guide to 1930s Oklahoma</u>, (Lawrence, Kansas: University Press of Kansas, 1986), 137-138.

National Register of Historic Places Continuation Sheet

Section number 8 Page 12

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

shops.²

Until the 1920s, trade, shipping and agriculture were the fundamentals of Enid's economy. In addition to grain, live stock, poultry feed, eggs and dairy products were popular cash crops. The discovery of oil in the nearby Three Sands Field in 1921 and the Crescent Pool in 1926 further diversified Enid's economy, particularly with the subsequent construction of two refineries in the Enid vicinity. By the early 1930s, the three rail companies in Enid operated ten lines, two more than any other city in the state. Enid was also located on three United States highways, 60, 64 and 81. At the time, Enid enjoyed a trade area of 50 miles and a wholesale area of 100 miles in which an estimated 150,000 and 750,000 persons respectively lived.³

In 1941, as part of the military war readiness preparations, an Army Air Corps Basic Flying School was located south of Enid by the federal government. Mothballed for several years after the end of World War II, the base was reactivated in 1948 to accommodate increasing international tensions. The air field was quickly touted "...as one of the most important training fields in the Air Force's plans of the future." Renamed Vance Air Force Base in 1949, the military base continues to play an important role in Enid's economic well-being to the present day.⁴

By the turn-of-the-twentieth-century, Enid claimed a respectable population of 3,444. When Oklahoma entered the Union in 1907, Enid's populace had nearly tripled to reach 10,087 citizens. Three years later, the official census recorded 13,799 residents in Enid. Modest growth brought the number of persons residing in Enid to 16,576 by 1920. Aided by the opening of oil interests in the area, as well as expanded grain concerns, Enid's population jumped by nearly 10,000 during the Roaring Twenties to reach 26,399 in 1930. Gaining only slightly over the ensuing decade, around 28,052 persons claimed Enid as home in 1940. Spurred by the designation of a federal air field, as well as post-war developments, Enid grew by nearly 8,000 residents to reach a total population of 36,017 in 1950. Growth slowed again during the 1950s, as by 1960 the city's population had only expanded to reach 38,859.⁵

HISTORIC SIGNIFICANCE

As discussed in "Grain Storage and Processing Facilities in Western Oklahoma, 1889-1950," the

http://digital.library.okstate.edu/encyclopedia/entries/E/EN006.html, retrieved 9 August 2008.

² Ibid., 138-139.

³ Ibid., 138-139. See also <u>Polk's Enid (Garfield County, Okla.) City Directory</u>, 1933, (Kansas City, Missouri: R.L. Polk & Company), 11-12.

⁴ Gary L. Brown, "Enid," <u>Encyclopedia of Oklahoma History and Culture</u>,

⁵ <u>The Daily Oklahoman</u>, (Oklahoma City, Oklahoma), 28 July 1940. See also <u>Polk's Enid (Garfield</u> <u>County, Okla.) City Directory</u>, 1954 VI-VII and 1965 VII.

National Register of Historic Places Continuation Sheet

Section number <u>8</u> Page <u>13</u>

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

movement of grain to markets was crucial not only for Oklahoma to fully develop its agricultural potential but also for local farmers to exist at more than a subsistence level. Although experiencing good harvests through the first decade and a half of the twentieth century, Oklahoma did not become one of the major wheat producing states in the nation until 1914. The ability to meet international demands during World War I further enhanced Oklahoma's position as a wheat producing state. In 1919, a record setting harvest of 66 million bushels overwhelmed the 17.5 million storage capacity of the state's 866 elevators. Although falling by nearly twenty million bushels, the average harvest of 48 million bushels produced between 1920 and 1940 continued to put pressure on Oklahoma's storage capacity.⁶

Grain elevators in Western Oklahoma operated under three basic types of ownership: independent, line and co-operative. Independent elevators were typically owned by individuals or a family that resided in the same town. Line elevators were "…one of several elevators situated along one or more rail lines that were owned by a single entity that also operated a terminal elevator and was a member of the grain and feed dealers association." The W.B. Johnston Grain Company and the Feuquay Grain Company, both of Enid, were among "…the more notable firms that operated…" line elevators. Co-Operative elevators were owned by a consortium of primarily farmers. While membership in the cooperatives was open with each member receiving one vote, the co-operatives were typically operated by agribusiness men. Co-operative-owned elevators in Enid included the Oklahoma Wheat Pool Terminal Elevator and the four terminal elevators of the Union Equity Co-Operative Exchange. By 1937, farmers' co-operatives handled thirty-six percent of the Oklahoma wheat harvest with most of that wheat "…then sent to market through a cooperative terminal elevator in Enid, the Union Equity Exchange."

Beginning in the 1920s, a wave of elevator construction swept western Oklahoma. The ability to store the wheat was crucial as otherwise the farmer was forced to sell their crop as it was harvested. With an abundant supply of grain available during harvest, the price per bushel was lower; thus, giving the farmer a lower return on their investment which caused significant financial hardship for the farmer, their family and others relying on them. Further compounding this price crisis was a 25 year decline in wheat prices that began in 1920. Given these circumstances, "...farmers hoped to minimize their losses by holding new crops off the market until well after harvest when prices usually increased." To do this, new larger grain elevators were necessary.⁸

By 1924, Enid had become one of the largest grain markets in Oklahoma and was "...fast...becoming

⁶ George O. Carney, MPD Form "Grain Storage and Processing Facilities in Western Oklahoma," (available Oklahoma State Historic Preservation Office, Oklahoma Historical Society, Oklahoma History Center, Oklahoma City, Oklahoma, 1999), E 9-10,

⁷ Ibid., E-12-13.

⁸ Ibid., E-10.

National Register of Historic Places Continuation Sheet

Section number <u>8</u> Page <u>14</u>

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

a competitor of other grain centers in the southwest." Enid enjoyed two advantages over other Oklahoma communities: it was in the "…center of the richest agricultural region of the state…" and it already had ten rail lines able to seamlessly distribute the grain regionally and internationally. In response to the growing demand, both the Rock Island and Frisco augmented their facilities in Enid in the early 1920s. The Rock Island added the North End yards to increase the switching and storage tracks in Enid and the Frisco built 5,700 feet of siding to handle the increased traffic.⁹

The 1918 federal Grain Standard Act also helped solidify Enid's position in the grain market. The Grain Standard Act required an inspection of all grain by a certified federal inspector before it was placed in interstate traffic. A federal grain inspection office was correspondingly established at Enid, which "…had a disastrous effect on the large grain centers like Chicago and Kansas City…". As in general with the grain dealers and traders, the federal grain inspection office was located in various buildings in downtown Enid. Since all federal tests were the same, the grain inspected at Enid was then ready for shipment anywhere there was a market so there was no longer a need to utilize the larger city markets. Grain dealers in Enid quickly capitalized on this new situation and began to increase the volume of grain shipped through Enid. In 1921, nearly 3,600 cars of wheat were handled by Enid grain dealers. Two years later, the total climbed to 4,500 cars and it was projected that 1924 would see "…at least 10,000 cars" of wheat being shipped in Enid.¹⁰

The one thing Enid lacked in 1924 was a terminal elevator. Several private companies had enlarged their storage facilities but this was still not sufficient to handle the grain at the level the dealers were striving for. Although "Several firms in Enid from time to time have worked toward building a terminal elevator...," none had yet been successful.¹¹

In early October 1925, Cecil Munn, Enid Terminal Elevator Company manager, announced the construction of Enid's first terminal elevator. The elevator was financed by businessmen from Dallas, Texas. The construction contract was slated to be awarded in early December 1925. The first unit of the million dollar facility was to be ready to accept grain by June 1, 1926. A second 500,000 bushel unit was to be done the following year. The Frisco Railroad was to lay trackage for fifty cars, the daily unloading capacity. The elevator had a loading capacity of seventy-five cars and was to employ twenty-five men. The storage facility was aptly named the Enid Terminal Elevator. According to the daily state newspaper, the Enid Terminal Elevator was "...the only structure of its kind in Oklahoma." The nearest comparable elevators were located out-of-state in Wichita, Kansas, and Dallas, Texas.¹²

The Enid Terminal Elevator was constructed by the Jones-Hettelsater Construction Company of

⁹ <u>The Daily Oklahoman</u>, 21 September 1924.

¹⁰ Ibid.

¹¹ Ibid.

¹² Ibid., 5 October 1925 and 30 November 1925.

National Register of Historic Places Continuation Sheet

Section number 8 Page 15

Enid Terminal Grain Elevators Historic District Name of Property <u>Garfield County, Oklahoma</u> County/State

Kansas City, Missouri, using cement from the Oklahoma Portland Cement Company. Both units of the elevator, consisting of 85 bins for a total storage capacity of 1,000,000 bushels, were completed by May 1927. The elevator was noted as the largest and most modern in Oklahoma. The headhouse rose 190 feet above ground, double the size of any building in Enid's central business district. Local aviators quickly began using the elevator as a navigational tool. Seeking to capitalize on the structure's unusual size, the Chamber of Commerce purchased a "...giant rotating spotlight atop (the elevators) headhouse to advertise the city." The Oklahoma Gas and Electric Company quickly agreed to power the light for free. The light was first turned on on August 28, 1926.¹³

In mid-1926, a second company announced construction of a terminal elevator. This new company, the Southwest Terminal Elevator Company of Enid, had bonds guaranteed by the Enid Milling Company, also of Enid. The president of the Enid Milling Company was J.W. Maney and the secretary was John Maney. The Maneys were well-known in grain and milling circles, also owning enterprises in Oklahoma City and El Reno. The Southwest Terminal Elevator was to have a headhouse capacity of one million bushels and over half a million bushel storage capacity. The estimated price of the structure, attached machinery and equipment was \$178,900. An additional \$12,000 was to be spent on railroad tracks and \$3,000 on an office building. The twenty-three acre site at the junction of the Rock Island, Frisco and Santa Fe tracks cost the company \$25,000. At the outset of construction, it was announced that the elevator was "...to be increased as required by increased business." The first unit of the elevator was completed by September 1926. Just six months later, the company commenced construction on a half million bushel addition. The addition was slated for completion by June 1, 1927 to accommodate the 1927 wheat harvest.¹⁴

Wheat harvest for the year 1927 was underway just days after the Enid Terminal Elevator was completed. As the harvest turned out, it was a record setting year for the distribution of wheat to international markets. Grandfield, Oklahoma, farmer Wesley Cox harvested the first wheat around June 1 which was then "...rushed to the Enid Terminal Elevator company's million-bushel plant..." in Enid. Cecil Munn, manager of the Enid Terminal Elevator, then rushed a small sack to New York via airmail. The sack of wheat was then sent on to London, England. This event marked "...the earliest time in history of the world that new wheat will reach London. The wheat will reach London before the harvest is in full swing in Oklahoma."¹⁵

Already by March 1928, Enid was noted as "...the wheat storage center for Oklahoma..." with the "...largest grain storage capacity of any city in the state." At that time, both the Enid Terminal Elevator and Southwest Terminal Elevator were operating with a million-plus bushel capacity each. Other

¹³ Ibid., 23 May 1927. See also Blake Gumprecht, "Giants on the Plains: Grain Elevators and the Making of Enid, Oklahoma," <u>Great Plains Quarterly</u>, 18 (Fall 1998), 311.

¹⁴ Ibid., 27 June 1926 and 11 March 1927.

¹⁵ Ibid., 6 June 1927.

National Register of Historic Places Continuation Sheet

Section number 8 Page 16

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

elevators in Enid included the Enid Milling Company with a 200,000 bushel capacity; the Geis-Price Elevator with a 60,000 bushel capacity; the W.B. Johnston Grain Company with a 25,000 bushel capacity; and the Great Plains Mill and Elevator Company with a 20,000 bushel capacity. Further centering the grain trade in Enid was the plans announced by the Pillsbury Flour Mills Company in late March 1928 to erect a new flour mill in Enid with a capacity of over 3,500 barrels daily. The mill was also to have a million bushel storage facility. The first unit of the Pillsbury Enid mill was in use by mid-September 1928. In early January 1928, the company announced plans to erect another million bushel elevator in Enid and double the capacity of the company's milling plant.¹⁶

At the same time that work was announced on the new Pillsbury elevator, General Mills Incorporated of Minneapolis, Minnesota, announced plans to build a two million bushel terminal elevator in Enid. The General Mills Terminal Elevator was to be located east of the Southwest Terminal Elevator so it too would be near the junction of Enid's three railroads. At the same time, the railway companies were busy adding nine miles of siding specifically to accommodate wheat trains. The General Mills Terminal Elevator was estimated to cost \$600,000 and was nearly complete at the end of May 1929, just in time for the start of the 1929 wheat harvest. Judging from a photograph published in the daily state newspaper, the bins of the elevator were complete but work remained to be done on the headhouse.¹⁷

With the number of railcars of wheat needing inspection increasing from 3,597 in 1921 to nearly 15,000 in 1928, two federal grain inspectors were in Enid at the start of the 1929 wheat harvest. The increase in wheat was attributed to the "Widespread use of the combine as a wheat harvesting device...". Use of mechanized harvesting methods eliminated the delay of threshing which allowed "...nearly all of the annual wheat crop..." to be ready for market within a few weeks.¹⁸

Another event of note in 1929 was the October formation of the Farmers' National Grain Corporation. The corporation was formed under the federal farm board using the provisions of the Capper-Volstead Marketing Act. This act required that: membership be made up of agricultural producers; the association be operated for the mutual benefit of its members; the association do more business with members than non-members; and, the association either followed the principle of one vote per member or else dividends on capital stock were limited to eight percent. The Farmers' National Grain Corporation, representing twenty-six farmer-owned grain marketing associations, was incorporated in the state of Delaware. An organizing committee of sixteen chose three men to file the papers: Sydney J. Cottington of Stanhope, Iowa; Clarence Huff of Salina, Kansas; and, John Manley of Enid. Stock in the cooperative organization could only be subscribed by farmer elevator associations, farmer-owned grain sales agencies and growers' grain pools. At a minimum, a \$100 share was given for each 2,000 bushels of all grains handled by the association. The establishment of the Farmers' National Grain

¹⁶ Ibid., 26 March 1928, 16 September 1928, 11 January 1929.

¹⁷ Ibid., 14 January 1929, 27 May 1929 and 2 April 1930.

¹⁸ Ibid., 27 May 1929.

National Register of Historic Places Continuation Sheet

Section number 8_ Page 17_

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

Corporation was "The first large scale effort of the farm board to organize individual farmer-owned marketing organizations into national sales associations...".¹⁹

Three months after the Farmers' National Grain Corporation was formed, a contract was let to the Jones-Hettelsater Construction Company of Kansas City for the construction of the fifth terminal elevator in Enid. The elevator was to have an initial capacity of one million bushels but the headhouse was to have a capacity of four million bushels to handle future expansion. The elevator was owned by the Oklahoma Wheat Pool Elevator Corporation, a subsidiary of the Oklahoma Wheat Growers' Association. The Oklahoma Wheat Growers' Association was a unit of the Farmers National Grain Corporation. The Oklahoma Wheat Pool Elevator was situated "...on a 20-acre site on the Frisco, Santa Fe and Rock Island railroads between General Mills, Inc., and the Champlin Refining Company."²⁰

The Oklahoma Wheat Pool Elevator was estimated to cost \$365,000, making it Enid's anticipated "...outstanding building project for 1930...". Unfortunately, in May 1930, a construction worker working on the elevator fell one hundred feet from the top of one of the concrete bins to the ground. Dying instantly, W. B. Poasley was "believed to have lost his footing when a nail in a piece of moving lumber caught in one of his gloves."²¹

Also under construction in 1930 was the first Union Equity Exchange Co-Operative Elevator. The Union Equity Co-Operative Exchange Elevator Company was incorporated in Oklahoma in 1929. This incorporation brought together the Union Equity Exchange, incorporated three years prior under the Warehouse and Marketing Laws of Texas, and the Farmers Co-Operative Grain Dealers Association of Oklahoma. The Union Equity Exchange was a farming cooperative organization founded by members having elevators in the Texas towns of Perryton, Spearman, Darrouzett and Brooker. The Farmers Co-Operative Grain Dealers Association of Oklahoma was also a farming cooperative organization that in early 1929 "...decided to provide a cooperative grain sales agency through which their membership could market their grain on a voluntary basis." Mutually agreeing that the area could not support two competitive organizations, a plan was formed in which the Union Equity Exchange became the authorized Cooperative Grain Sales Agency for the Farmers Co-Operative Grain Dealers Association of Oklahoma. The Union Equity Exchange than "...invited all farmer-owned cooperative elevators and equities who were operating in conformity with the provisions of the Capper-Volstead Act to become members on the basis of \$20.00 for each active member of their organization." With a capacity of only 100,000 bushels, the Union Equity Exchange Co-Operative Elevator's first cribbed elevator was relatively small and, notably, was not constructed of concrete. However, continuing an Enid terminal elevator trend, the Union Equity Exchange Co-Operative Elevator was located near the General Mills

¹⁹ Ibid., 30 October 1929.

²⁰ Ibid., 1 February 1930.

²¹ Ibid., 2 April 1930.

National Register of Historic Places Continuation Sheet

Section number <u>8</u> Page <u>18</u>

Enid Terminal Grain Elevators Historic District Name of Property <u>Garfield County, Oklahoma</u> County/State

Elevator, between the Southwest Terminal Elevator and the Oklahoma Wheat Pool Elevator.²²

Completion of the above projects increased Enid's overall grain storage capacity to eight million bushels. This would tie Enid with Wichita, Kansas in second place for grain storage capacity in the southwest United States. In early 1930, Wichita already had a capacity of eight million bushels. At the time, Fort Worth, Texas, led the southwest in grain storage with a capacity of 10,665,000 bushels.

Enid's "...pre-eminence as a wheat storage center..." was not completely due to the abundant production of the surrounding agricultural fields. The acquisition of wheat produced in the fields of the Texas panhandle contributed significantly to Enid's claim as a wheat center. Of course, wheat was not the only agricultural commodity raised in Garfield County. Forty-seven percent of the county's agricultural income came from other crops, including dairy products and livestock. Poultry and eggs were also important as Enid for years also "...claimed to be the largest primary poultry and egg market in the country."²³

In April 1931, Cecil Munn, president of the Enid Terminal Elevator Company, announced the letting of a contract to the Jones-Hettelsater Company of Kansas City for a million bushel addition to the elevator. The addition was to be completed by July 1, 1931. Munn, responsible for Enid's first terminal elevator, stated at the time that he had "...perfect confidence in Enid as the coming grain center of the southwest." Even with the Enid Terminal Elevator addition, Enid maintained its ranking of third in the southwest for wheat storage. With a total capacity of nine million bushels, elevators in Enid included the 2.5 million bushel Pillsbury Flour Mills; the 2 million bushel Enid Terminal Elevator; the 2 million bushel General Grain Company Terminal Elevator (previously known as the General Mills Terminal Elevator); the 1 million bushel Oklahoma Wheat Pool Terminal Corporation Elevator; the 1 million bushel Southwest Terminal Elevator; the 100,000 bushel Union Equity Co-Operative Exchange Elevator; and, a combined 400,000 bushels from area cereal mills and poultry feed plants.²⁴

Despite some initial worries whether their wood elevator would be filled, the Union Equity Co-Operative Exchange handled more than 6 million bushels of wheat in 1931 alone. As a result, the Co-Operative commenced work on a 430,000 bushel elevator in 1931. Located to the immediate east of their original cribbed elevator, the new elevator was constructed of concrete with round bins. Relatively small compared to the other elevators of the time, there was "...little suggestion when the initial 430,000-bushel unit was built that it would eventually become part of the largest grain storage facility in

²² Ibid., 23 May 1930. See also "History and By-Laws of the Union Equity Co-Operative Exchange, Enid, Oklahoma, 1926-1946," (Available Western History Collections, University of Oklahoma, Norman, Oklahoma), 5.

²³ Ibid., 2 April 1930.

²⁴ Ibid., 23 April 1931 and 10 May 1931.

National Register of Historic Places Continuation Sheet

Section number 8 Page 19

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

Enid."25

Also in 1931, the Farmers' National Grain Corporation purchased the common stock of the Oklahoma Wheat Pool Elevator Corporation and of the Oklahoma Wheat Pool Terminal Corporation. Both of these corporations were subsidiaries of the Oklahoma Wheat Growers Association. The Oklahoma Wheat Pool Elevator Corporation owned or leased 192 country elevators in Oklahoma and Texas. The Oklahoma Wheat Pool Terminal Corporation owned and operated the then 1.5 million bushel terminal elevator in Enid. John Manley of Enid, general manager of the Oklahoma Wheat Growers Association, was named general manager of both properties. The take-over of the Oklahoma Wheat Pool corporations was virtually complete less than three weeks after it was announced.²⁶

In 1933, as the Great Depression continued to incapacitate much of the nation, President Franklin D. Roosevelt signed the Agricultural Adjustment Act (AAA) to aid farmers. Farmers were in desperate need of relief as overproduction, drought and declining prices left them with few options. The Commodity Credit Corporation (CCC) was created as part of the AAA. The CCC provided loans to farmers with the loans being backed up by price guarantees. Basically, if the market price of the crop was under the government-established minimum and the farmer had borrowed money from the CCC, the CCC would buy the farmer's crop. The CCC quickly became the biggest wheat buyer in the world because the government-guaranteed price for wheat was regularly higher than the market price. Because the CCC then required storage facilities for their purchased wheat, pressure to build larger and better terminal elevators continued to escalate. Notably, the Union Equity Co-Operative Exchange, as well as other co-operatives, were a major beneficiary of this program. At times, more than half the wheat in the Union Equity Co-Operative Exchange elevators was reportedly government-owned.²⁷

With demand for storage space only increasing, the Farmers' National Grain Corporation initiated construction of a million bushel addition to the former Oklahoma Wheat Pool Terminal Elevator in 1935. Work started in early April 1935 and was to be completed by June of the same year. At the same time, the Union Equity Co-Operative Exchange had a 700,000 bushel addition under construction to increase the size of their 1931 Elevator A.²⁸

In 1937, the W.B. Johnston Grain Company of Enid constructed a \$75,000 elevator. This was auspicious timing as the 1937 crop was termed a "bumper" after a disappointing harvest the previous year. At the end of September 1937, it was estimated one-third of that year's Oklahoma wheat crop went to market via the terminal elevators at Enid. According to the newspaper, "This was the greatest

²⁵ Gumprecht, "Giants on the Plains," 314-315.

²⁶ Daily Oklahoman, 14 August 1931 and 4 September 1931.

²⁷ Gumprecht, "Giants on the Plains," 314.

²⁸ Daily Oklahoman, 14 April 1935.

National Register of Historic Places Continuation Sheet

Section number 8 Page 20

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

movement of grain locally in more than five years, and much of it was from the bumper crop harvested within the northern Oklahoma grain belt." Grain dealers estimated that 12.5 million bushels of grain remained in storage in Enid for the autumn and winter markets. Many farmers were holding their grain, hoping for a better price. However, much of the harvest was put on the market when the price reached \$1.10 a bushel. Dealers also reported "...that some of the wheat passing through the Enid terminal system (that) year found its way into export markets – the first year in several that wheat (had) been exported from the state." With prices and the harvest up, as well as "The evident need of more storage in Enid...," rumors abounded concerning construction of a new two million bushel elevator before the 1938 harvest rolled around; however, this time an elevator failed to materialize.²⁹

The following year, an increased movement of wheat was reported; however, grain men "…hastened to say that these figures did not indicate that Oklahoma had a larger crop than usual." Rather, the train cars carried larger volume because the grain was not as heavy as usual and it did not have as high protein or moisture content. Despite disappointments in quality, the "Speedy handling of the 1938 wheat..." crop was attributed to the establishment of a terminal committee in Enid. The committee was comprised of representatives of the storage and milling interests, the combined railroads and a representative of the Association of American Railroads. As a result of the committee's efforts, "…railroad sidings were kept virtually free of "dead" cars and wheat passed more rapidly into storage and to its destination at other centers." Notably, that year, Enid was exceeded in total storage capacity only by Fort Worth, Texas. Enid's wheat market was extending "…to the southwestern tip of Oklahoma, the far western panhandle and nearby points in Texas, and eastward as far as the grain belt extends."³⁰

By April 1939, Enid was claiming the title of "Oklahoma's "Queen Wheat City."" The 1938 harvest set a Depression-era record of 14,185 train loads of wheat moving through Enid's terminal elevators. Although still too early to fully assess the results, part of the harvest boon was attributed to the 1936-1937 program to get farmers to grow varieties of wheat to test which would yield the best and most high-grade wheat. The Oklahoma Farm Wheat Improvement Program continued through 1940 with positive results. As a result of the improved harvests, the Union Equity Co-Operative Exchange, also a participant in the wheat improvement campaign, undertook construction of a two million bushel addition to their Elevator A in 1940. The addition to the elevator brought Enid's total storage facilities to 14.5 million bushels, maintaining the community's ranking of third in the southwest. Completed in time to be filled with the 1940 harvest, the addition consisted of "…the series of concrete tanks to the left of the tanks bearing the word "Equity."³¹

In order to accommodate the loading and unloading of wheat, the railroads also continuously expanded

²⁹ Ibid., 26 September 1937.

³⁰ Ibid., 25 September 1938.

³¹ Ibid., 23 April 1939, 18 February 1940 and 22 September 1940.

National Register of Historic Places Continuation Sheet

Section number <u>8</u> Page <u>21</u>

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

their trackage in Enid. In 1941 alone, the railroads combined spent a projected \$65,000 on increasing facilities to handle 384 additional freight cars during harvest. The Santa Fe added 6,000 feet of new track on the north side of Enid "...to serve the larger elevators." The Frisco was working on 8,700 feet of trackage on the southwest part of town to handle 200 more cars of wheat. The Rock Island was engaged in extending yard lines to the new two million bushel Union Equity Co-Operative Exchange elevator addition. Despite these efforts, however, the 1941 harvest faced a crisis as rail cars for wheat harvest were reduced in order to meet national defense demands. A special committee was organized to tackle the issue of finding room for the 1941 crop. Although effort was being made to clear the terminal elevators of the 1940 harvest, it was believed the terminal elevators would be overwhelmed during harvest, causing the wheat to be stored on the ground and hindering its movement to market. In addition to inadequate farm and country elevator storage facilities, the concentration of railcars on the east coast was seen as the major problems.³²

In early May 1942, the Union Equity Co-Operative Exchange announced plans to construct a 1.3 million bushel addition to their Elevator A. This addition boosted Enid's storage space to around 17.75 million bushels and was forecast to be "...a boon to the grain industry this season in handling the 1942 harvest." Further construction of terminal elevators was restricted by the War Production Board ruling that fire-proof storage construction was out until after the war. With railroads still strained by war-related transportation of raw materials and finished munitions to and from factories, shippers were warned that all grain cars would have to be done through consignments "...with a definite commitment that they will be unloaded immediately." In order to meet this requirement, the Oklahoma Grain Committee set up a permit system that required country elevators to have a permit to ship a carload of grain to a defined unloading point.³³

For the first time in its almost twenty year history, at the end of June 1942, the "…Oklahoma wheat belt terminal…refused to accept any more of the newly-harvest grain crop…". With the elevators and storage rooms "glutted," Enid's livestock pavilion was rented by an unspecified grain company with immediate plans to begin filling the facility with old crop wheat. The only wheat being accepted by the elevators was that which the elevators had previously made commitments to accept. Any other grain was turned down until storage space was available. Reportedly, in other areas wheat was piling up on the ground with still other farmers setting up emergency storage bins. However, Mother Nature stepped in to bring harvest to a standstill with enough rain to keep farmers out of the field when the threshing was only about half completed. Through the rest of the war years, a lack of rail cars, as well as manpower and storage limitations, continued to hamper the movement of wheat from farm to country elevator to terminal elevator to market.³⁴

³² Ibid., 27 April 1941 and 11 May 1941.

³³ Ibid., 8 May 1942 and 31 May 1942.

³⁴ Ibid., 30 June 1942.

National Register of Historic Places Continuation Sheet

Section number 8 Page 22

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

The end of the war not only relieved some of the transportation issues but also freed up material for fire-proof construction of badly need grain storage facilities. Additionally, the cease in fighting created a significant international market as war-torn Europe was sorely in need of grain. With materials still under restrictions by civilian production administration boards, grain elevators projects fell under the category of "essential to increased production or preservation of food." The Union Equity Co-Operative Exchange, however, took elevator construction one step further with the building of a new 4.5 million bushel elevator with a unique bin design. The 140-feet-high bins were to be hexagonal in shape. rather than the typical circular, making the design similar to a beehive. Puckett, general manager of the Union Equity Co-Operative Exchange, reportedly got the idea for the unusual elevator design from a hotel bathroom floor. The bins were to be of uniform size, would require less space and would "...practically eliminate "choke-ups" in transferring grain." The elevator was to have the latest in handling machinery which was "... expected to cut the maintenance and grain handling cost to a new low." The elevator was also to have a 60-foot railroad car dumper, capable of handling any railcar then rolling on American lines. The headhouse was to extend 240 feet high and to have a capacity of 60.000 bushels an hour. Two units of the elevator were expected to be complete by the end of June 1946. W.P. Snyder, general superintendent for the Chalmers and Borton Company of Hutchinson, Kansas, announced that these units would have a capacity of 2.6 million bushels and would be used to handle portions of the 1946 harvest.³⁵

In July 1947, one of the 204 bins in the Union Equity's new Elevator B ripped a thirty foot gash at the seam and spilt 18,000 bushels of grain on the ground. The cause of the rip was not immediately known by representatives of the Chalmers and Borton Company. Just over a month later, a second hole poured wheat on the ground, although not as much as the original rip which was then nearly repaired. The grain company officials "…refused to comment" on what was causing the bins to give way.³⁶

Also of interest in 1947 was the sale of the Enid Terminal Elevator Company's Oklahoma interests to the Lathrop Grain Corporation of Kansas City, Kansas. The two million bushel Enid Terminal Elevator in Enid was included in the deal, as well as the gathering units at Cleo Springs and Cropper. The principal stockholder in the Enid center was the Pearlstone Mill and Elevator Company of Dallas, Texas; however, the Uhlman Grain Company had been leasing all three units with that agreement remaining in effect until 1950.³⁷

A railroad embargo in 1948 caused the piling of wheat in numerous places. The railway companies refused to take the wheat until they were assured that adequate storage space existed to unload the wheat immediately at their destination. While this was more of a problem for the Oklahoma panhandle

³⁵ Ibid., 24 April 1946, 13 October 1946 and 28 April 1950.

³⁶ Ibid., 19 August 1947.

³⁷ Ibid., 18 July 1947.

National Register of Historic Places Continuation Sheet

Section number <u>8</u> Page <u>23</u>

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

counties, which often shipped their wheat to Hutchinson, Kansas, the Enid terminal elevators were also impacted. However, Enid grain men quickly reverted to the permit system employed during the war years which allowed the Enid elevators to rapidly break the rail jam. Within days, according to R.A. McClintock, chairman of Enid's board of trade traffic committee, Enid was able to move out as much grain as it was receiving each day. Notably, the elevators in Enid were then receiving grain from Texas, Kansas, the Panhandle and even some from Nebraska.³⁸

As in years previous, the Enid elevators also participated in the 1948 program to transport grain overseas to feed needy persons. Known as the Will Rogers Memorial Train, participants donated free terminal storage, book work, rail freight, port handling and shipping. E.N. Puckett, head of the Union Equity Co-Operative Exchange, was executive vice chairman of the Oklahoma Committee on Famine Relief. The committee worked in cooperation with a Christian rural overseas program which distributed the food and other relief supplies.³⁹

By 1949, Enid ranked sixth in the United States in terms of terminal elevator storage capacity. At that time, Enid elevators were able to store 28,349,000 bushels of wheat. A survey of facilities nationwide was undertaken by the Enid Chamber of Commerce after it determined that the Union Equity Co-Operative Exchange was the world's largest single storage elevator. While Enid stored only wheat, the other points in the survey stored corn, oats, rye and wheat. The point was also made that "All of the cities outranking Enid are on lakes or rivers where they are connected with water transportation service." Enid, of course, was landlocked in north central Oklahoma.⁴⁰

In late July 1949, nine men were hurt when a steel truss collapsed as they worked on a new train shed at the Union Equity Co-Operative Exchange Elevator A. The workmen were pouring cement on the roof which, in addition to the steel trusses, was reinforced by woven wire. The eight men working on that section of the roof fell forty feet into wet cement. Four other men were on another section of the train shed roof that did not collapse. A ninth man standing on the ground received a broken arm from a piece of falling steel. Although several men were seriously injured in the accident, there were no fatalities. Work resumed on the 120 foot by 60 foot train shed within a few days.⁴¹

Two months later, Union Equity Co-Operative Exchange let a contract for construction of a three million dollar elevator with the largest storage capacity in the world at one location. Chalmers and Borton Construction Company of Hutchinson, Kansas, received the contract for the seven million bushel elevator that was to be built about less than one mile north of the existing Union Equity Co-Operative Exchange facilities. As with the Union Equity Co-Operative Exchange Elevator B, the new elevator,

³⁸ Ibid., 20 July 1948.

³⁹ Ibid., 29 August 1948.

⁴⁰ Ibid., 20 June 1949.

⁴¹ Ibid., 27 July 1949.

National Register of Historic Places Continuation Sheet

Section number 8 Page 24

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

designated Elevator Z, was to be of the hexagonal-bin-type. The first unit of the elevator was to be complete by June 1950 as the Enid elevators were filled to capacity in 1949 with some wheat being shipped to other points and some, such as in nearby Watonga, being stored on the ground due to lack of space.⁴²

Elevator Z was dedicated in early May 1951. From its 7 million bushel beginning, the elevator had by then grown to 15.3 million bushels. This raised the total Union Equity storage capacity to 33.75 million bushels. However, insufficient storage continued to plague the next several wheat harvests. In 1953, Enid had a total of ten elevators. However, between nine of them, there was only space for about 6.5 million bushels of the 1953 harvest. The majority of the space, 5.5 million bushels, was at the Union Equity Co-Operative Exchange Elevator Z. Notably, the Pillsbury elevator was not releasing its amount of available space although it was known at the start of harvest that the elevator was sixty percent full with the 1952 harvest.⁴³

Although the Union Equity Co-Operative Exchange had not expected to build another elevator, hence the appellation of the letter Z to the 1949-1951 elevator, in August 1953 Ed Puckett announced construction of an elevator that would again top the world storage capacity. Construction of the 16 million bushel elevator, Elevator Y, would begin as soon as the architects worked out the details and was expected to be finished in time for the 1954 harvest. The new 5 million dollar elevator would boost Enid's wheat storage capacity to more than 60 million bushels. In turn, this would raise Enid's standing as a grain storage center to third in the United States. In building the new elevator, the Union Equity Co-Operative Exchange applied for a United States Department of Agriculture (USDA) program that guaranteed grain for storage in new elevators. The W.B. Johnston Company of Enid also applied for the program, indicating it would add a 2 million bushel addition to their facilities. The USDA program was established to encourage the building of additional grain storage facilities by providing payments to the elevators if occupancy of the new structure fell below a certain level. The USDA initially accepted enough elevators to increase total nationwide capacity by nearly 65 million bushels. Of these applications, the Union Equity Co-Operative Exchange was twice as big as any other in the country.⁴⁴

Work on both the Union Equity Co-Operative Exchange and W.B. Johnston Grain Company elevators was underway by late January 1954. At the time, "...an unheralded building boom (was) underway in..." Oklahoma to increase the grain storage capacity of the state by one-third. The boom was pushed by the expectation of a bountiful 1954 harvest that could result in a significant lack of storage space. According to early forecasts, upwards of 31 million bushels of wheat would be without adequate storage. While individual farmers were also working to solve the problem, "The spectacular boom,..., (was) at the elevators." The elevator explosion was expected to add 30 million bushels of storage

⁴² Ibid., 22 September 1949.

⁴³ Ibid., 8 May 1951 and 12 June 1953.

⁴⁴ Ibid., 21 August 1953 and 12 October 1953.

National Register of Historic Places Continuation Sheet

Section number 8 Page 25

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

capacity to Oklahoma's existing 98 million bushel capacity. With the ongoing projects in Enid, that community would have nearly half of the state's total 128 million bushel capacity. An additional thirty-five to forty co-operative elevators were adding to their plants, increasing capacity for a total of about 9 million bushels. Independent grain men were adding another 9 million bushels of capacity, with the projects generally ranging in size from 200,000 to 400,000 bushels.⁴⁵

By early 1954, the first stage of work at the Union Equity Co-Operative Exchange's Elevator Y was nearing completion. Plans, however, had already been made to further expand Elevator Y in time for the 1955 harvest. It was hoped that this would push Enid's storage capacity past that of Kansas City, then ranked second in the nation with a 62,897,000 storage capacity. Minneapolis was leading the nation with a capacity of 90 million bushels. A total of six grain firms were operating elevators in Enid at the time. The Union Equity Co-Operative Exchange led the city with a 46 million bushel capacity. Other operators in Enid included the W.B. Johnston Grain Company, General Mills, Pillsbury, Continental Grain, Salina Terminal and the Enid Elevator Corporation. The Continental Grain Corporation terminal elevator. The Salina Terminal company was utilizing the former Southwest Terminal Elevator and the Enid Elevator Corporation was operating the original Enid Terminal Elevator. A photograph of Enid's skyline was dominated by the elevators on the northeast side of town, rivaling downtown Enid for prominence.⁴⁶

In the 1950s, wheat farmers were "...probably the largest block of farmers in Oklahoma utilizing a coordinated marketing program through a single organization." The organization was the Farmers Co-Operative Grain Dealers Association of Oklahoma which was headquartered in Enid. The Union Equity Co-Operative Exchange had served as the grain dealers association's sales agency since 1929. In 1954, the Farmers Co-Operative Grain Dealers Association of Oklahoma had 92 locally-owned and – controlled elevator association members who operated 135 cooperative elevators. The association represented more than 35,000 Oklahoma farmers.⁴⁷

By 1956, Elevator Y had reached a 16.3 million bushel capacity, making it "...the largest conventional type elevator in the world." Within a year, however, Enid slipped to fourth in the nation in terms of storage capacity with the ability to store 64,627,000 bushels of grain. Continuing to set Enid apart from the other grain storage centers was the fact that ninety percent of Enid's storage space was devoted solely to wheat. Additionally, on its own, the Union Equity Co-Operative Exchange would place eighth in the nation with a capacity of 50.3 million bushels. To give an idea of size, approximately ten miles of 42-inch-wide rubber conveyor belting moved the grain through the Co-Operative Exchange's facilities.⁴⁸

⁴⁵ Ibid., 24 January 1954 and 28 February 1954.

⁴⁶ Ibid., 9 May 1954.

⁴⁷ Ibid., 7 November 1954.

⁴⁸ Ibid., 7 October 1956. See also Enid (Oklahoma) Morning News, 2 October 1957.

National Register of Historic Places Continuation Sheet

Section number 8 Page 26

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

In March 1958, the W.B. Johnston Grain Company announced the construction one final elevator in Enid. The new \$200,000 elevator would have a capacity of one million bushels and would measure 100 feet long by 500 feet wide. The elevator would increase the Johnston Grain Company's total capacity to 5.5 million bushels and Enid's capacity to over 66 million bushels.⁴⁹

Beginning in the early 1960s, Enid grain men turned their attention from expanding their storage facilities to bettering the quality of wheat grown in Oklahoma. However, as driven by field and market conditions, the storage capacity of the city continued to modestly grow. The reported total storage capacity for the city stood at 68,577,000 bushels in 1960. Two years later, Garfield County boasted a total storage capacity of almost 75 million bushels, allowing it to be classified as the state's grain storage and handling center. By 1970, the city claimed the title of Wheat Capital of the United States of America. Maintaining that classification for many years, Enid had a total grain storage capacity of 80 million bushels in 1987. The city was then still widely acknowledged as "...a trucking and rail hub for shipping the grain to ports for international distribution."⁵⁰

By the mid-1960s, the long-term storage of wheat had become less important as a source of income. Instead, the exporting of grain was becoming the focus of many operations. This change had occurred fairly rapidly as in 1959, for example, grain storage accounted for 80 percent of the Union Equity Co-Operative Exchange's gross earning. Four years later, the percentage of storage earnings had dropped to 49 percent. At the time, it was estimated that the Union Equity Co-Operative Exchange was exporting 15 to 20 million bushels of wheat. Most of the wheat was being grown on Oklahoma farms and was transported to ships via the terminal elevators in Enid. This trend continued to escalate for the next several decades. By 1975, more than 85 percent of the wheat handled by the Union Equity Co-Operative Exchange was exported. This was common as the state newspaper reported at the time that:

Exports are the lifeblood of the Oklahoma farmer. Two out of three bushels of wheat grown in the United States are exported. However, since Oklahoma is so strategically located to the Gulf, a much higher percent of Oklahoma grain is placed in export channels.⁵¹

The movement of grain via the Enid terminal elevators continued fairly steadily through the late 1980s. At that time, the terminal elevators experienced a major crisis with several shutting down. Contributing to this over the long-term was the overexpansion of farming operations during the booming years of the 1970s which was exacerbated by the 1980 grain embargo and the nationwide economic slump of the

⁴⁹ Ibid., 29 March 1958.

⁵⁰ Ibid., 10 January 1960, 24 June 1962 and 9 November 1987.

⁵¹ Ibid., 15 May 1963 and 29 June 1975.

National Register of Historic Places Continuation Sheet

Section number 8 Page 27

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

early 1980s. In the summer of 1989, several of the elevators, including Union Equity Co-Operative Exchange Elevators A and B and the Oklahoma Wheat Pool Terminal Elevator, then operated by New York-based Continental, were closed ostensibly due to low crop yields because of drought. The rapid movement of grain in the export market, as well as changes in federal farm programs, also contributed to declines in grain storage revenue. This was the beginning of the end for the Union Equity Co-Operative Exchange which three years later was bought out by Farmland Industries. However, by 1997-1998, crop yields had again swung upwards with many of the elevators, including Union Equity Co-Operative Exchange Elevator B, coming back on-line to handle the overflowing wheat. Although several of the elevators appear to have not been used during the 2007 harvest or for several harvests in recent years, the majority were either in use or stood ready to handle wheat as of late May 2008. As such, only the passage of time will determine if the events of 1989 actually marked the end of the Enid Terminal Grain Elevators reign or if the role they played in the Oklahoma grain industry and Enid economy continued to be significant in the twenty-first century.⁵²

Handling much of Oklahoma's wheat harvest, the terminal elevators at Enid were critical to Oklahoma's agricultural development. Wheat has long been a primary cash crop for farmers, particularly across western Oklahoma. The ability to store and market this product to regional and international buyers was crucial for farmers, and others dependent on agricultural for their livelihood, to prosper. The expansive impact of the terminal elevators is partially revealed in the 1946 statement of Union Equity Co-Operative Exchange Manager's expression of thanks in the company's by-laws and history. Puckett eloquently articulated his

Appreciation a million times to the 20,000 or more farmers who have been so faithful in their cooperation with the local organizations; to the 500 or more members of local Boards of Directors who have rendered their communities such faithful cooperative service; to the 100 or more managers who have so loyally supported the cooperative cause; to the Union Equity Co-Operative Exchange Board of Directors who have so diligently outlined the policies of the organization; to our office and terminal employees who have rendered such wonderful service and have so diligently and cautiously handled the affairs of the organization; to the Auditor; Grain Inspectors, Chemists, and Grain Supervisor who have rendered us such good, prompt service; to the railroads and their employees who have so efficiently and promptly moved our wheat from the country elevators to the central organization, and from the central organization to the mills and for export; to the many Bankers that have so promptly and efficiently handled our financial problems; to the terminal elevator operators, mills and exporters with whom we have had the pleasure of trading so much; to the bakers who have converted the

⁵² Enid (Oklahoma) News and Eagle, 20 November 1989. See also <u>The Daily Oklahoman</u>, 31 July 1989, 9 May 1990, 10 May 1991, 8 March 1991, 4 April 1992

National Register of Historic Places Continuation Sheet

Section number 8 Page 28

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

products of our good wheat into so many good things to eat and to all of their millions of customers; to the telephone operators and maintenance crews who have so faithfully and efficiently handled our long distance and local calls.⁵³

In sum, the Enid elevators contributed significantly to Enid and Garfield County's economic well-being. For most of its existence, agriculture, particularly wheat, was the backbone of Enid's development. The town thrived, in large part, by providing services and goods to the surrounding farmers. Among these important services was the ability to move their grain to market in a timely fashioned that allowed the farmer the greatest return possible. In addition to the impact of the annual elevator payroll, there was a significant ripple effect as evident in the paragraph above. The improvements to the local infrastructure were also notable. Through the years, the railroads improved their facilities to speedily handle the wheat at harvest but this was also useful during the other nine months of the year. The maintenance of highways and improvements to county roads was also a by-product of the grain trade. Additionally, the elevators, and in particular the Union Equity Co-Operative Exchange, topped the county's tax list. The Union Equity Co-Operative Exchange took the county's top taxpayer spot in 1949 when it paid \$99,000. Six years later, following construction of its new facilities, the organization paid \$160,000 in taxes.⁵⁴

ARCHITECTURAL AND ENGINEERING SIGNIFICANCE

The architectural and engineering significance of the Enid Terminal Grain Elevator Historic District lies not only in the individual significance of the included structures but also the collective impact of them. Nowhere else in the state of Oklahoma is there such a collection of elevators. As discussed in the multiple property document, grain elevators "...have considerable architectural significance." The elevators "...are indeed what Robert Riley has called "honest expression(s) of material and function." They also "...symbolize a regional landscape, culture and history." Finally, elevators are "...succinctly, "a part and essence of a place," without which western Oklahoma would lose much of its visual distinctiveness."⁵⁵

From the first construction of a terminal elevator in Enid, these large distinctive structures have landmarked the local community. Indeed,

Since that time, Enid's elevators have been pictured on postcards and in gradeschool textbooks. They have been written about in travel guides and popular magazines. They have played a central role in literature produced to promote both the city and the state. What the Golden Gate Bridge is to San Francisco or

⁵³ History and By-laws, 52.

⁵⁴ <u>Daily Oklahoman</u>, 29 November 1955.

⁵⁵ MPD "Grain Storage," E-17.

National Register of Historic Places Continuation Sheet

Section number <u>8</u> Page <u>29</u>

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

the Gateway Arch is to St. Louis, grain elevators are to Enid – the standard view of the town. No matter what the source, if a single image of Enid is presented, it is usually its grain facilities.⁵⁶

From an engineering standpoint, the Enid terminal elevators are also significant. In contrast to the more prevalent country elevator, the terminal elevators were larger and more mechanically sophisticated. The monumental size and distinctive technology of the terminal elevators sets them apart from any other type of construction in Enid and the state of Oklahoma. In addition to the ability to store the wheat, the terminal elevators also had the capacity to sort and clean grain. As noted during construction of the various elevators, the handling machinery was typically of the latest design and innovation. This not only facilitated movement of the grain but also allowed for dramatic increases in capacity. The amount of storage and handling space steadily increased from the original 500,000 bushels of the Enid Terminal Elevator to the 16 million bushel capacity of Union Equity Co-Operative Exchange Elevator Y.⁵⁷

Notably, terminal elevators "...were built by engineers rather than local builders and for this reason they are generally unique in plan." This is evidenced in the Enid terminal grain elevators by the different arrangements of elevator components. While each elevator contains the same essential elements, the size, shape and placement of the elements is distinctive. As noted in the MPD, "...the new concrete structures required the talents of contractors and engineers trained in the nuances of industrial construction." The slip-form technology used to cast the massive "walls" in-place obviously required specialized training and experience.⁵⁸

Chalmers and Borton of Hutchinson, Kansas, was "One of the more successful firms doing that kind of technical construction in Oklahoma." In addition to being the identified builders of the 1940s-1950s Union Equity Co-Operative Exchange Elevators B and Z, and the likely builders of the Union Equity Co-Operative Exchange Elevators A and Y, Chalmers and Borton constructed twenty-two other elevators in Oklahoma in the 1930s alone. Continuing in business to the present time, now under the name of Borton, Inc., the company was also responsible for construction of the world's longest elevator. Located in their home city of Hutchinson, Kansas, the Farmers Cooperative Commission Company Elevator was completed in 1961 at a final capacity of 18.2 million bushels. The elevator was started in 1952 and utilized the hexagonal bin design pioneered by the firm at Enid's Union Equity Co-Operative

⁵⁶ Gumprecht, "Giants on the Plains," 318.

⁵⁷ Lisa Mahar-Keplinger, <u>Grain Elevators</u>, (New York, New York: Princeton Architectural Press, 1993), 13.

⁵⁸ MPD, "Grain Storage," E-10.

National Register of Historic Places Continuation Sheet

Section number <u>8</u> Page <u>30</u>

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

Exchange Elevator B.⁵⁹

Jones-Hettelsater Construction Company of Kansas City, Missouri, is the other identified company that constructed terminal facilities in Enid. Established in 1920 by Anton R. Hettelsater and E.N. Jones, the firm constructed both the Enid Terminal Elevator and the Oklahoma Wheat Pool Elevator. The Jones-Hettelsater Construction Company also constructed in Oklahoma at least one other elevator in El Reno and a flour mill in Jefferson. Additionally, the company was responsible for the Lake and Rail Elevator in Buffalo, New York. As noted in the Historic American Engineering Record (HAER) documentation for the Lake and Rail Elevator, the Jones-Hettelsater Construction Company had their own design team. Credited with the design of the Lake and Rail Elevator, built in the late 1920s, the company itself was possibly responsible for the design of the elevators constructed in Enid. Jones passed away in 1937 and the company subsequently changed its name, possibly accounting for the lack of information concerning the construction of elevators in the middle decades of the twentieth century. Nonetheless, as noted in Anton R. Hettelsater's obituary, published in The Kansas City Star on September 28, 1969, Hettelsater was a "pioneer in the engineering and construction of grain elevators and feed mills."

The progression of terminal elevator design in Enid is also noteworthy. When the Enid Terminal Elevator was constructed in 1926, it was deemed the latest in modern concrete elevator construction. Twenty-five years later, a new design of bin design was pioneered in Enid. The use of a hexagonal design "...fundamentally alter(ed) the nature of grain elevator design." Circular bins required that each bin be built independently with wasted space between the rows of adjacent bins. Puckett's idea to use a honeycomb pattern for the bins not only made more efficient use of space but also gave the elevators a distinctive Modern, folded plate appearance. By the mid-1960s, hexagonal shaped bins of a uniform size had become standard for grain elevator design nationwide.⁶⁰

Overall, the Enid Terminal Grain Elevators Historic District is the only collection of terminal elevators of this magnitude in the state of Oklahoma. The elevators are without parallel and remain as some of the most distinctive and recognizable architectural and engineering feats in the community and state. Historically, the terminal elevators were also crucial not only to Enid's economic well-being but also the state's agricultural development. Neither Enid nor Oklahoma would be where they are today if the terminal elevators had not been erected.

⁵⁹ Ibid., E-10.

⁶⁰ Ibid., 316. See also Peter Golob and Graham Ferrell, <u>Crop-Post Harvest</u>, (Wiley-Blackwell, 2002).

National Register of Historic Places Continuation Sheet

Section number 9 Page 31

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

BIBLIOGRAPHY

Brown, Gary L. "Enid." <u>Encyclopedia of Oklahoma History and Culture</u>. <u>http://digital.library.okstate.edu/encyclopedia/entries/E/EN006.html</u>, retrieved 9 August 2008.

Carney, George O. Multiple Property Document "Grain Storage and Processing Facilities in Western Oklahoma." Available Oklahoma State Historic Preservation Office, Oklahoma Historical Society, Oklahoma History Center, Oklahoma City, Oklahoma, 1999.

<u>The Daily Oklahoman</u>. Oklahoma City, Oklahoma. 21 September 1924; 5 October 1925; 30 November 1925; 27 June 1926; 11 March 1927; 23 May 1927; 6 June 1927; 26 March 1928;

30 November 1925, 27 June 1926, 11 March 1927, 23 May 1927, 8 June 1927, 28 March 1928, 16 September 1928; 11 January 1929; 14 January 1929; 27 May 1929; 27 May 1929;
30 October 1929; 1 February 1930; 2 April 1930; 23 May 1930; 23 April 1931; 10 May 1931;
14 August 1931; 4 September 1931; 14 April 1935; 26 September 1937; 25 September 1938;
23 April 1939; 18 February 1940; 28 July 1940; 22 September 1940; 27 April 1941;
11 May 1941; 8 May 1942; 31 May 1942; 30 June 1942; 24 April 1946; 13 October 1946;
18 July 1947; 19 August 1947; 20 July 1948; 29 August 1948; 20 June 1949; 27 July 1949;
22 September 1949; 28 April 1950; 8 May 1951; 12 June 1953; 21 August 1953;
12 October 1953; 24 January 1954; 28 February 1954; 9 May 1954; 7 November 1954;
29 November 1955; 7 October 1956; 29 March 1958; 10 January 1969; 24 June 1962;
15 May 1963; 29 June 1975; 31 July 1989; 9 May 1990; 8 March 1991; 10 May 1991;
and, 4 April 1992.

Enid (Oklahoma) Morning News, 2 October 1957.

Enid (Oklahoma) News and Eagle. 20 November 1989.

Golob, Peter, etal. Crop Post-Harvest: Science and Technology. Wiley-Blackwell, 2002.

"History and By-Laws of the Union Equity Co-Operative Exchange, Enid, Oklahoma, 1926-1946." Available Western History Collections, University of Oklahoma, Norman, Oklahoma.

Gumprecht, Blake. "Giants on the Plains: Grain Elevators and the Making of Enid, Oklahoma." <u>Great Plains Quarterly</u>, 18 (Fall 1998), 305-325.

Mahar-Keplinger, Lisa. Grain Elevators. New York, New York: Princeton Architectural Press, 1993.

Polk's Enid (Garfield County, Okla.) City Directory. Kansas City, Missouri: R.L. Polk & Company. 1933-1965 and 1970. Available Enid Public Library, Enid, Oklahoma.

National Register of Historic Places Continuation Sheet

Section number 9 Page 32

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

Sande, Theodore Anton. <u>Industrial Archeology: A New Look at the American Heritage</u>. Brattleboro, Vermont: The Stephen Greene Press, 1976.

The WPA Guide to 1930s Oklahoma. Lawrence, Kansas: University Press of Kansas, 1986.

National Register of Historic Places Continuation Sheet

Section number <u>10</u> Page <u>33</u>

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

UTMs Continued:

No.	Zone	Easting	Northing
5.	14	602250	4030140
6.	14	602070	4030270
7.	14	601750	4030180
8.	14	599720	4029530

GEOGRAPHICAL DATA

VERBAL BOUNDARY DESCRIPTION

The boundaries for the eight properties included in the Enid Terminal Grain Elevator Historic District are the UTM points listed on page 9 and above for each grain elevator. Due to the long, narrow, rectangular shape of the elevators, only one UTM point is used for each elevator.

BOUNDARY JUSTIFICATION

The Enid Terminal Grain Elevator Historic District is a discontiguous district that consists of only the eight terminal grain elevator structures, including any accessories directly attached to the elevator but not any of the outbuildings located in proximity to the elevator. The outbuildings lack historic significance, are of indeterminate ages and, overall, do not contribute to an understanding of the district.

Unlike a commercial or residential district, the Enid Terminal Grain Elevator Historic District is not composed of adjacent resources. The elevators are scattered over three sections on the north side of Enid. Five of the eight elevators are located in the north half of Section 5, Township 22 North, Range 6 West. Two of the elevators are situated in the southeast quarter of Section 32, Township 23 North, Range 6 West. The remaining elevator is located in the southwest quarter of Section 6, Township 22 North, Range 6 West.

The area between the elevators is largely undeveloped, although there are a variety of railroad tracks and roads. Due to the distance between the elevators, the likelihood of including land owned by nonelevator entities and the lack of significance for the intervening spaces, boundaries were not drawn around the resources to create a large district area. Additionally, because the elevators were historically located near or in the railroad right-of-way, the land was not divided into the usual lots, blocks or other legal parcels. The legal descriptions obtained from the Garfield County Assessor's Office for each resource are not readily understandable and are not consistent between the elevators. As such, the UTMs are the most precise, logical means of locating the structures.

National Register of Historic Places Continuation Sheet

Section number _____ Page _____34___

Enid Terminal Grain Elevators Historic District Name of Property Garfield County, Oklahoma County/State

PHOTOGRAPH LOG

The following information pertains to all photograph numbers except as noted:

Photographer: Cynthia Savage Date of Photographs: 25 May 2008 Negatives: TIFF Files

Photo No.	Photographic Information
1	Union Equity Co-Operative Exchange Elevators Z & Y; looking SW
2	Union Equity Co-Operative Exchange Elevator Z; looking NW
3	Union Equity Co-Operative Exchange Elevator Y; looking NE
4	Oklahoma Wheat Pool Terminal Elevator, Union Equity Exchange Co-Operative
	Elevators B and A; looking SW
5	Oklahoma Wheat Pool Terminal Elevator; looking SW
6	Oklahoma Wheat Pool Terminal Elevator; looking NE
7	Union Equity Co-Operative Exchange Elevator B; looking SW
8	Union Equity Co-Operative Exchange Elevator B; looking NE
9	Union Equity Co-Operative Exchange Elevator A; looking SW
10	Union Equity Co-Operative Exchange Elevator A; looking NE
11	General Mills Terminal Elevator; looking SW
12	General Mills Terminal Elevator; looking NE
13	Southwest Terminal Elevator; looking SW
14	Southwest Terminal Elevator; looking NE
15	Enid Terminal Elevator; looking NE
16	Enid Terminal Elevator; looking SE