TEXAS MILITARY DEPARTMENT
Texas Army National Guard
Post Office Box 5218
Austin, Texas 78763-5218

REPLY TO ATTENTION OF

December 11, 2018

Construction and Facilities Management Office

File No. SKETCH FILE 35
TARRANT County
SEE PLAT IN STATE REAL PROPERTY SK. No. 3
Date Filed: 04/16/2019
George P. Bush, Commissioner
By: K. Schreiber

Honorable George P. Bush, Texas Land Commissioner
Attn: Mr. Mark Neugebauer, RPLS, LSLS
Director of Surveying
Texas General Land Office
1700 North Congress Avenue
Austin, Texas 78701-1495

Subject: Survey Report on a retracement of the George McCloud Survey No. 61 (Rob. B-488), A-1090, William G. King Survey No. 61 (Rob. 3-624), A-900, Thomas Chubb Survey No. 63 (Rob. 3-625), A-327, Peter Dikeman Survey No. 64 (Rob. 3-627), A-427, James J. Box Survey (Rob. 3-3127), A-174, P.H. Pope Survey (Rob. 3-4231), A-1231, Napoleon Oldham Survey (Rob. 3-4700), A-1192, and the J.P. Smith Survey (School-1710), A-1845, Tarrant County, Texas, about 17 miles N 29 deg. W from Fort Worth, Texas, the County Seat of Tarrant.

I performed a retracement survey on the ground of the captioned lands in Tarrant County, Texas, and furnish this report and plat in conjunction with the survey of present-day Eagle Mountain Lake Training Area (hereinafter referred to as EML) provided in a separate report and plat. The purpose of my survey was to retrace a 2001 survey of EML done by Austin J. Bedford, RPLS No. 4132 for the Texas Military Department and to retrace original patent survey lines located in and around EML and attempt to locate their corners as originally set when land certificates from the Public Domain were issued to settlers coming into this area. Specifically, the east and south boundary lines of EML were called to run with some of the patent survey lines and precipitated the need for the original survey retracement.

ORIGINAL PATENT SURVEYS, TARRANT COUNTY, TEXAS

This project began with a working sketch I made using Texas General Land Office field notes of original patent surveys in and around EML (Tarrant and Wise Counties). Present-day EML is located within the following surveys:

- William G. King Survey No. 62 (Rob. 3-624), A-900.

95394

- Thomas Chubb Survey No. 63 (Rob. 3-325), A-327.
- Peter Dikeman Survey No. 64 (Rob. 3-627), A-427.
- Jacob Wilcox Survey No. 65 (Rob. S-222), A-1700.
- Don Thomas Flores Survey No. 69 (Rob. 2-345), A-505.
- James J. Box Survey (Rob. 3-3127), A-174.
- P.H. Pope Survey (Rob. 3-4231), A-1231.
- Hiram M. Thompson Survey (Rob. D-891), A-1556.
- Section 31, M.E.P. & P. R.R. Co. Survey (Rob. S-1670), A-1937.
- J.W. Dewees Survey (Rob. S-2269) A-1926.
- J.P. Smith Survey (School-2757), A-1942.

Surveys located outside the perimeter boundary of EML are listed clockwise from north thus:

To the North

- Thomas Harvey Survey (Fan. P-166), A-821.
- C.R. Huff Survey (Fan. P-164), A-1967.
- M.E.P.&P. RR. CO. Survey (Rob. S-1669), A-1124.

To the East

- D.B. Bennett Survey (Rob. 3-3513), A-91.
- Napoleon Oldham Survey (Rob. 3-4700), A-1192.
- John C. Weaver Survey (Rob. 3-5054), A-1665.
- Hiram M. Thompson Survey (Rob. D-891), A-1556.
- Section 25, T.&P. RR.CO. Survey (Rob. S-1903), A-1574.
- Section 26, T.&P.RR. CO. Survey (Rob. S-1903), A-1574.
- Section 27, T.&P.RR. CO. Survey (Rob. S-1904), A-1573.
- J.P. Smith Survey (School-1710), A-1845.
- G.G. Young Survey (School-1720), A-1848 (W 1/4 Sec. 26).
- Volney Hall Survey (Rob. S-2316), A-1905.
- A.L. Ray Survey (School-4189), A-1883 (Fraction Sec. 24).
- Volney Hall Survey (School-4049), A-1880 (E 1/2 Sec. 26).

To the South

- Jacob Wilcox Survey No. 60 (Rob. S-231), A-1722.
- George McCloud Survey No. 61 (Rob. B-488), A-1090.
- Jonathan S. Lee Survey (Rob. 3-2387), A-949.
- Moses Townsend Survey (Rob. D-1131), A-1551.
- Dempsey S. Holt Survey (School-1029), A-1793 (Fraction Sec. 28).

To the West

- Don Thomas Flores Survey (Rob. 2-650), A-508.
- J.G. Helms Survey (Rob. P-15), A-807.
- David M. Davis Survey (Rob. S-560), A-446.

EARLY LAND HISTORY

Before statehood, the Republic of Texas was divided into several large land districts. Prior to the creation of Tarrant and Wise Counties, surveys of the Public Domain in this area were made under the Robertson and Denton Land Districts. The following surveys made under these land districts were the subject of my retracement:

- Under the Robertson Land District, Deputy Surveyor Richard Beall made the following surveys on 4 October 1851: Jacob Wilcox Survey No. 60, A-1722, George McCloud Survey No. 61, A-1090, William G. King Survey No. 62, A-900, Thomas Chubb Survey No. 63, A-327, Peter Dikeman Survey No. 64, A-427, Jacob Wilcox Survey No. 65, A-1700, and the Don Thomas Flores Survey No. 69, A-505.
- Under the Denton Land District, Deputy Surveyor F. Wilcox made the following surveys: James J. Box Survey, A-174 on 30 March 1857, P.H. Pope Survey, A-1231 on 18 January 1858, and the Napoleon Oldham Survey, A-1192 on 1 March 1858.
- Under the Denton Land District, Deputy Surveyor Jno. P. Smith made a correction survey of the Don Thomas Flores Survey No. 69 on 7 May 1858. On 8 May 1858, Deputy Surveyor A.M. Keen made a corrected survey of the Thomas Chubb Survey No. 63.

When Tarrant County was formed, county surveyors made the following surveys pertaining to my retracement:

- W.L. Lively made corrected surveys of the James J. Box Survey, A-174 on 26 November 1859 and the Napoleon Oldham Survey, A-1192 on 12 May 1859.
- W.A. Darter surveyed Section 31, M.E.P. & P. R.R. Co. Survey, A-1937 on 14 May 1874.
- Lionel S. Leversedge surveyed the J.P. Smith Survey, A-1845 on 20 December 1878.
- W.G. Finley made a corrected survey of Section 31, M.E.P. & P. R.R. Co. Survey on 27-28 October 1882.
- G.M. Williams surveyed the J.W. Dewees Survey, A-1926 on 29 March 1882 and the J.P. Smith Survey, A-1942 on 22 November 1883.
- J.W. Tyler made a corrected survey of the J.W. Dewees Survey, A-1926 on 10 September 1887.

It should be noted that the oldest surveys are the Jacob Wilcox Survey No. 60, George McCloud Survey No. 61, William G. King Survey No. 62, Thomas Chubb Survey No. 63, and the Peter Dikeman Survey No. 64, and were made on 4 October 1851 by Deputy Surveyor

Richard Beall. The first survey, No. 60, was made by virtue of a Republic of Texas land scrip for 640 acres. By sequence, Survey 61 calls to begin at the northeast corner of Survey 60. Surveys 62 and 63 begins at the northeast corner of Survey 61. Survey 64 begins at the northeast corner of Survey 62. The common corner of Surveys 61, 62 and 63 was called to be on the north bank of "Dunbar's Creek". In September 1865, two Anglo residents by the names of Smith and Wright were attacked near Dunbar's Creek by 15 mounted Native American Indians (tribal affiliation unknown). After the attack, Dunbar's Creek was referred to as "Indian Creek", as noted in the field notes of the J.P. Smith Survey A-1942 by Tarrant County Deputy Surveyor G.M. Williams, whose northwest corner is called to be southwest corner of Survey 63. In 1983, a Texas state historical sign titled "The 1865 Indian Creek Raid" commemorating this event was placed on the west side of County Road 1220 and is located about 380 varas southwest of the northwest corner of the Peter Dikeman Survey and shown on my plat.

The next oldest survey is the James J. Box Survey. The original survey made by F. Wilcox on 30 March 1857 began 375 varas from the northeast corner of a survey made for J. Pricket, which does not show up in the GLO land grant search. The corrected survey made by W.L. Lively on 26 November 1859 ties the Box Survey to the Thomas Chubb Survey, beginning at Chubb's southeast corner.

The following surveys in order of seniority are tied to the Thomas Chubb Survey:

- The P.H. Pope Survey made by F. Wilcox on 18 January 1858 begins at the northwest corner of the Thomas Chubb Survey.
- The Napoleon Oldham Survey as originally surveyed by F. Wilcox on 1 March 1858 begins "*475 varas north of the S.E. corner of T. Acres Survey*" [presumed to be the Hiram Thompson Survey, A-1556] and runs counterclockwise, south, east, north and west with 950 varas on four sides. The corrected survey made by W.L. Lively on 12 May 1859 ties the beginning point to the Thomas Chubb Survey "*beginning 190 varas east and 347 varas North of the North East Corner of Thos. Chubb 320 acre Survey*" and runs the perimeter same as the original survey and changes the four sides of the survey to 950-4/10 varas each.
- The J.P. Smith Survey, A-1845 made by Lionel S. Leversedge on 20 December 1878 calls to begin at the northeast corner of the Thomas Chubb Survey.

SURVEYING ON THE GROUND

I commenced fieldwork on 21 January 2014 assisted by Mark Hinojosa and completed the survey of EML on 28 November 2018. Bearings and coordinates based on the Texas Coordinate System, Lambert conic grid projection, NAD 83 (CONUS) Texas North Central Zone 4202. The primary control stations were positioned by static satellite observations and post-processed in a least squares network adjustment constrained in latitude, longitude and ellipsoid height to CORS Stations TXDE and TXSG (NAD 83 (2011) epoch 2010.00). Combined grid scale factor is 0.999841478. Grid distances were raised to ground distances after computing a ground scale factor of 1.000158472 from the geodetic position of Station 500 (32°58'42.27468"N, 097°28'18.12363"W, ellipsoid height 667.912 feet, orthometric height 760.00 feet), which was purposely set near the center of the survey making this a local coordinate system. Bearings shown are Lambert grid unless referencing a patent bearing call. Mean convergence angle is (+) 0°33'37" (grid to geodetic)[1]. NAVD 88 orthometric heights were derived from the GEOID12A (CONUS) gravity model. Distances shown are in varas with U.S. Survey Foot in parentheses.

Locating the George McCloud and John J. Box Surveys, and the common line of the William G. King and Thomas Chubb Surveys

Beginning with the oldest surveys by Richard Beall in 1851 and by F. Wilcox in 1858, I examined aerial imagery and found in the center of EML traces of squared-off fenced tree lines in the approximate location of the four-corner intersection common with the William King, Thomas Chubb, Peter Dikeman, and P.H. Pope Surveys. The surveys made by Richard Beall at this intersecting corner called for a stake witnessed by a post oak "*S 71 W 230 vs*" and a post oak "*S 77 W 250 vs*". The location of these witness trees is now in a large stand of trees. This corner was also called to be the northwest corner of a 235.5-acre tract of land described in a deed to G.W. Duke in Vol. 527 Pg. 193 D.R.T.C.T. located within EML whose southeast corner is common with the found southeast corner of EML and its southwest corner is common with the southwest corner of the Chubb Survey. I located remains of an east-west ancient barb wire fence on the ground along a hackberry tree line near said four-corner intersection that appeared to be a fence of occupation and traced it back west to where the fence ended at a hole that looked like a missing fence post next to a dead tree stump. From that location, I made a search for the two post oak witness trees and found a 12-inch dead post oak South 71°20' West 234.8 varas and a 15-inch dead post oak stump South 79°30' West 249.4 varas, which nearly matched the original. At said missing fence post hole, I set a 1-inch diameter steel bar in a mound of rocks witnessed by four-foot-tall orange Carsonite witness post for the reconstructed common intersecting corner of the King, Chubb, Dikeman, and Pope Surveys, and used it as a point of reference from which

[1] A horizontal Laplace correction of 3.46 arc-seconds was computed at Station 500 using DEFLEC12A. I decided that the correction was insignificant for the purpose of this survey, therefore, geodetic bearings are considered "true" bearings.

to search for other original patent corners. My intent was to locate the four-corner intersection on the south boundary line of EML common with the King, Chubb, George McCloud and J.P. Smith Surveys, which was called by surveyor Richard Beall to be on the north bank of Dunbar's [Indian] Creek.

To locate this corner, I intended to reconstruct east line of the McCloud Survey which came about while surveying the T.J. Elkins Ranch Property[2] (Instrument No. D205388759, D.R.T.C.T.) in conjunction with the EML survey. In the field notes of the McCloud Survey, Deputy Surveyor Richard Beall begins at a mound of rocks for the northeast corner of the Jacob Wilcox Survey No. 60 (no call for witness trees). This rock mound has long since been destroyed and is located at the east end of Dido-Hicks Road, presumably when the Tarrant County Highway Department paved the road. "*Thence North 1340 varas to Dunbar's Creek [Indian Creek] at 1344 varas...*" he set a stake in the north bank of said creek. At this corner, Beall witnessed a walnut "*N 82 E 13 vs*" and a bur oak "*N 32 W 10 vs*". I made a wide-radius search for the stake and did not find it. This immediate area appeared to have been cleared away for many years and is now a grass meadow. In the T.J Elkins Ranch deed, one of the corners on his north boundary line was called to be "an iron *in the east line of the McCloud Survey and 10-5/10 varas from its northeast corner*". I found an old 1-inch iron rod on the north bank of Indian Creek about 10 varas south of this point fitting the T.J. Elkins Ranch north boundary line call and moved from that point 10.5 varas north and searched for Beall's witness trees per his calls but nothing fit. From this location, I found a 40-inch bur oak South 89°35' West 13.6 varas and a 20-inch walnut South 18°45' East 12.2 varas. The 40-inch bur oak I tied had grown around several strands of old "H.B. Scutt Arrow Plate" barbwire that was oriented east-west indicating there may have been a fence of occupation along the common patent line of the McCloud, King, Chubb and J.P. Smith Surveys (Fig. 1).

During the survey of the T.J. Elkins Ranch, I had reconstructed the beginning point described in his deed which was called to be the southeast corner of the McCloud Survey. This point also shares the beginning point described in the E.A. Oliver Family Trust deed and called to be the northeast corner of the Jacob Wilcox Survey No. 60. Here, I set a 1/2-inch iron rod for the patent corner by common reputation and from which the east line of the McCloud Survey runs North 00°51'02" East 1357.938 varas to the old 1-inch iron rod found on the north bank of Indian Creek.

[2] The T.J. Elkins Ranch was surveyed in 1958 by Brookes Baker Surveyors (Garey Gilley, RPLS, LSLS, personal communication on 4 October 2018). The ranch came out of 1532.5 acres of land described in a deed to Julia Putman et al. filed 14 November 1914 and recorded in Vol. 449 Pg. 632, D.R.T.C.T.

Figure 1. 40-inch bur oak witness tree with Scutt Arrow Plate barb wire through trunk found on the north bank of Indian Creek.

From a point 10.5 varas north of said 1-inch iron rod found on the north bank of Indian Creek, I ran easterly on or near the south line of the Chubb Survey crossing Indian Creek at about 245 varas and continued along an old barbwire fence passing the present southeast corner of EML and continued the called total distance of 1344 varas in the Chubb Survey, to a point on the west side of a north-south gravel road. Richard Beall's field notes called for a "*Mound of rock from which a Spanish oak bears S 14 W 33 vs and another bears S 32 E 32-1/2 vs*". I made a wide-radius search of the area and did not find the mound of rock and nothing that matched his witness ties. I continued easterly on this line crossing the gravel road and about 18 varas east of the road, I found a circle of rocks with remains of an old broken wood stake in the center that appeared to be conspicuously out of place from any other rocks around the immediate area. I marked that location with a wooden lath believing this to be the southeast corner of the Chubb Survey (Fig. 2).

Figure 2. Found circle of rocks for the SE corner of the Thomas Chubb Survey.

This corner is also described as the beginning point of the James J. Box Survey in the corrected survey by W.L. Lively on 26 November 1859. I continued easterly on same line for the called distance of 250.4 varas to search for the northeast corner of the Box Survey and arrived a point in an open field on the top of a hill. Here, Lively calls for a "*Rock on the side of a Road from which a Live Oak 5 ins bs S60W 130 varas*". The original survey made by F. Wilcox on 30 March 1857 calls for a "*Mound of Rock*" at this corner. I did not find a road at this location. I made a wide-area search for the corner and did not find any rocks. The field has long since been cultivated, and I presumed the corner had been destroyed from the clearing of rocks for cattle grazing. I set up a pocket transit with non-magnetic tripod over this point and set the current magnetic declination and laid off the called bearing and sighted a large live oak in the distance. On this bearing, I chained the called distance of 130 varas and came up about 28 varas short of the tree. It was a 30-inch live oak on the south side of a rock escarpment and I found evidence of an old squared blaze in the tree facing the corner (Fig. 3). Interestingly, the corrected survey called for the 5-inch live oak witness tree, and I'm not sure if W.L. Lively actually blazed such a small tree, but the 30-inch live oak I found was the only one near that bearing line.

Figure 3. 30-inch post oak tree sighted in the distance believed to be the original witness tree for the NE corner of the James J. Box Survey, where pocket transit is approximately located.

Returning to the circle of rocks I believed was the southeast corner of the Chubb Survey, I back-traced this line west the called distance of 700 varas in W.L. Lively's 1859 corrected field notes to search for the northwest corner of the Box Survey. It called for a mound of rocks and a 10-inch Spanish oak "*S 88-1/2 E 18 vs.*" and a four-inch Spanish oak "*S 63 E 20 vs*". The name for Spanish oaks was typically the vernacular of that era but in fact, the common name is southern red oak. After an exhaustive search for these trees, I did not find any Spanish/red oaks at this location. I searched about 13.5 varas further east and found an old mound of rocks that looked man-made on the upper south side of a hill and about 1-1/2 varas north of the old barb wire fence (Fig. 4). The original field notes by F. Wilcox in 1857 calls for a mound of rocks and "*Live Oak 14 in brs South 8° W. 20-4/10 Do. One 6 in bears North 88. East 21.vrs*". I witnessed a 24-inch red oak South 02°38' East 13 varas and an 18-inch live oak North 83°49' East 16 varas. I accepted this to be the northwest corner of the James Box Survey and set a railroad spike in the center of the rock mound. I returned to the circle of rocks I believed to be the southeast corner of the Thomas Chubb Survey and set a railroad spike in the center of the circle and accepted this to be its patent corner (refer to Fig. 2).

Figure 4. Found rock mound on side of hill for NW corner of the James J. Box Survey.

I constructed a line from the found northwest corner of the James Box Survey through the found southeast corner of the Chubb Survey on course of North 89°23'56" East and allowed the north line of the Box Survey to take its patent call of 950.400 varas to its northeast corner where I set a 1/2-inch iron rod. From this corner, the 30-inch live oak (refer to Fig. 3) is South 62° West 158.3 varas.

From the northeast corner of the Box Survey, I searched for the southeast corner, where the corrected field notes done by W.L. Lively in 1859 calls to run "*South 950-4/10 varas to a Rock on the side of a large hill*". The original field notes of F. Wilcox in 1857 calls this corner to be a "*Large flat Rock*". On original course of South (South 00°33'37" East-grid) 939.838 varas, I found a large flat limestone rock protruding out of the ground on the northwest side of this hill. Having come up short in distance, I searched further south and tied in other rocks—none of them were "large flat rocks"—but nothing fit. I also searched for the two southwesterly corners of the G.G. Young Survey A-1848 but did not find anything close to the patent calls. I accepted the large flat rock as the southeast corner of the Pope Survey (Fig. 5).

I was unsuccessful in finding a mound of rock called for the southwest corner of the Box Survey because it was in a cultivated field that undergoes tilling each year. I constructed the west line of the Box Survey from its found northwest corner on original course of South (South 00°33'37" East-grid) and gave it the called distance of 950.400 varas. From the delineations on my plat, the quantity of land in the James J. Box Survey, A-174 is 159.11 acres, 0.89 acre less than its patented 160 acres.

Figure 5. Found large flat limestone rock on northwest side of hill for SE corner of the James J. Box Survey. Image on the left is facing north. Image on the right is facing west.

From the found southeast corner of the Chubb Survey, I projected a line South 89°23'56" West through the found northwest corner of the Box Survey to a point intersecting the reconstructed east line of the McCloud Survey of North 00°51'02" East 1368.065 varas [North 1344 varas-call], which ended up being 10.127 varas north of Elkins' 1-inch iron rod found on the north bank of Indian Creek and 0.375 vara short of Elkins' tie to McCloud's northeast corner. I set a three-foot long by three-inch diameter wooden tent stake and piled a mound of rocks around the stake I took out of Indian Creek (Fig. 6) and accepted this as the reconstructed common corner of the McCloud, King, Chubb Surveys and the J.P. Smith Survey A-1942 (SW fractional part of Section 30 of the Memphis & El Paso Railroad Company surveyed by G.M. Williams 22 November 1883). G.M. Williams' field notes calls for a stone at this point with the same witness trees called by Beall. From this four-corner point of intersection, the reconstructed patent line of the Chubb, Box and J.P. Smith Surveys runs North 89°23'56" East, passing the found northeast corner of the Box Survey at 681.548 varas [684 varas-call per G.M. Williams' 1883 survey], and continuing for a total distance of 1368.079 varas to the found southeast corner of the Chubb Survey [East 1344 varas-call]. And, from same four-corner point of intersection, the reconstructed patent line of the King and Chubb Surveys is North 01°07'54" West 1411.236 varas [call: North 1344 varas-A-900] to the 1-inch diameter steel bar set in rock mound for the common corners of the Chubb, King, Dikeman and Pope Surveys. This line is notably long by

Figure 6. Reconstructed corner common with the George McCloud, Wm. G. King, Thomas Chubb and J.P. Smith Surveys, which is a point of intersection on the south boundary line of EML. The T.J. Elkins' found 1-inch iron rod on the north bank of Indian Creek is seen in the background to the south.

67.236 varas; however, the west line call of the 235-1/2-acre tract in the deed to G.W. Duke in Vol. 527 Pg. 193 is the west line of the Chubb Survey, and runs a total distance of 1405 varas.

The reconstructed south line of the William King Survey common with the north line of the George McCloud Survey was run westerly from the wooden tent stake set in rock mound on north bank of Indian Creek (refer to Fig. 6) on a course of South 89°14'17" West parallel with and 10.127 varas north of the found north boundary line of the T.J. Elkins Ranch where it intersected the reconstructed west line of the King and McCloud Surveys at 1383.000 varas, which is a point near the centerline of Morris-Dido-Newark Road. Richard Beall's 1851 field notes of these two surveys calls to be West 1344 varas. The distance of this line seen on the plat in GLO file No. 1720 made by G.M. Williams shows it to be 1388 varas. I chose the distance of 1383.000 varas based on the deed to G.W. Duke in Vol. 442 Pg. 161 where the south boundary line of Duke's "First Tract" and "Third Tract" runs with the south line of the King Survey the combined distances of 1121 varas and 262 varas. It was the best evidence I could find since the

original patent corner of the King Survey was taken out when Morris-Dido-Newark Road was built. The significance of the separation of this survey line and the north boundary line of the T.J. Elkins Ranch Property is not readily seen here but said north line of the Elkins tract was called to run parallel with and "*10-1/2 varas south of the north line of the G. McCloud Survey*", and in my survey of the perimeter boundary of EML, I found a 1.106-acre sliver of land remaining in G.W. Duke's "Second Tract" (Vol. 442 Pg. 161) between the south line of EML and the north boundary line of the Elkins tract.

Referring back to the T.J. Elkins Ranch, I reconstructed the south line of the George McCloud Survey from the 1/2-inch iron rod I set at Elkins' beginning point (the accepted southeast corner of the McCloud Survey) South 89°28'14" West 1358.899 varas [East 1344 varas-patent call] with the reconstructed south boundary line of Elkins and set a 1/2-inch iron rod for corner on the west side of Morris-Dido-Newark Road, which was called to be the southwest corner of the McCloud Survey in the T.J. Elkins Ranch deed and in the north line of the James Wilcox Survey No. 60 in the E.A. Oliver Family Trust deed. This patent corner has long since been destroyed due to the construction of Morris-Dido-Newark Road. I relied on the field notes in the T.J. Elkins Ranch deed for the construction of the McCloud Survey as the best available evidence—given the fact that the well-established firm of Brookes Baker Surveyors with licensed state land surveyors under their employment—had set the corners of the Elkins ranch in 1958 and located the patent lines during their survey. Having reconstructed the east-west patent lines of the William King and George McCloud Surveys, the west line of the McCloud Survey runs South 00°09'25" East 1362.085 varas. From the delineations on my plat, the quantity of land in the McCloud Survey No. 61, A-1090 is 331.44 acres, 11.44 acres in excess of its patented 320 acres.

Locating the William G. King and Peter Dikeman Surveys

I found a survey plat in GLO File No. 1720 of a corrected survey of the G.G. Young Survey, Abstract No. 1848 made by G.M. Williams on 13 May 1884 showing excess in distances in the above-mentioned surveys (Fig. 7). A note on the plat made by Williams shows a clouded line around a caption that reads, "*Figures indicate length of lines as found by measurements on ground.*" You will also see from this sketch by Williams that there is an eastward deflection of the common line of the King and Chubb Surveys and the common line of the McCloud and the J.P. Smith Surveys to the four-corner intersection on the north bank of Indian Creek.

From the set 1-inch diameter steel bar in mound of rock at the four-corner intersection common with the William King, Thomas Chubb, Peter Dikeman, and P.H. Pope Surveys, I embarked to find the northwest corner of the King Survey. I calculated this corner based on the distance of 1361 varas shown on the plat made by G.M. Williams in GLO File No. 1720 (Fig. 7) and found the point to be right on the west side of an old abandoned roadbed located west of Morris-Dido-Newark Road on the International Church of The Word of Faith property.

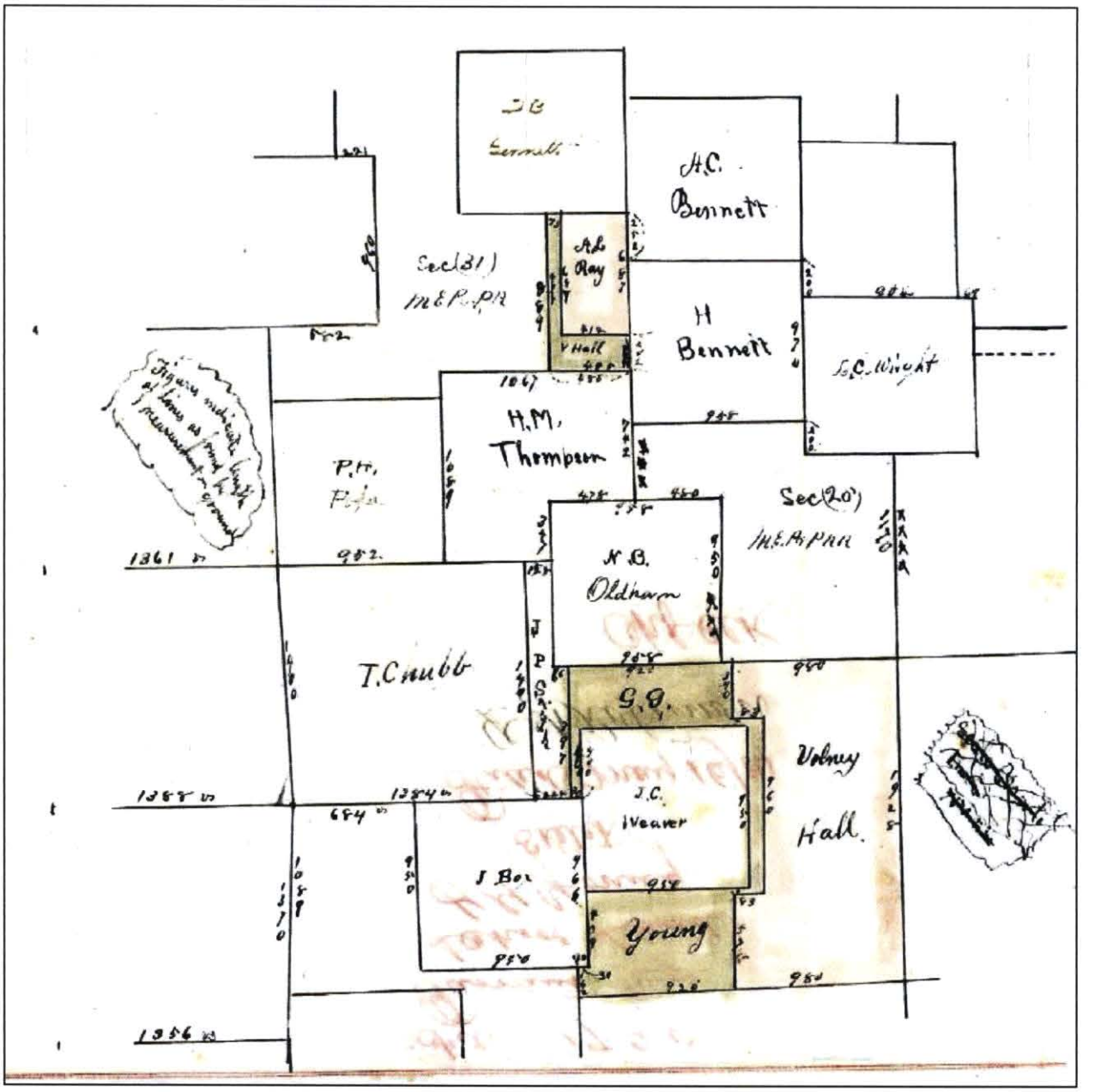

Figure 7. GLO File No. 1720 sketch made by G.M. Williams showing excess in distances of various original surveys.

In the field notes of the King Survey made by Richard Beall, he gives a call of West 1344 varas to a stake and witnesses a post oak "*N 12 E 10 vs and another bears N 60 E 6-1/2 vs*". I made a wide-radius search in an area that has been cultivated and showed signs of excavation. I was unable to find this corner and witness trees; however, since there are notable differences in the calls of the field notes by Richard Beall's 1851 surveys and those found on the survey plat in GLO file No. 1720 made by G.M. Williams in 1884, I decided to reconstruct the north line of the William King Survey by its original course of West (South 89°26'23" West-grid) and the

distance of 1361.000 varas per G.M. Williams' plat to King's northwest corner. The distance of 1361 varas is also recited in a substitute trustee's deed from A. Gant et ux. to First Trust Joint Stock Land Bank of Chicago filed on 5 September 1935 and recorded in Vol. 1269 Pg. 30 D.R.T.C.T. out of the Peter Dikeman Survey known as "Second Tract". Although the tract calls for 200 acres, the metes and bounds description runs around the entire perimeter of the Dikeman Survey thus: "*S with line of said Dikeman Sur. 1394 vrs...E 1361 vrs to E line of Dikeman Sur. And W line of P.H. Pope Sur...N with E line of Dikeman Sur. And W line of said Pope Sur...1394 vrs...W with N line of Dikeman Sur. 1361 vrs. To place of beginning*". This tract shows up in the old Master Card Assessor's abstract of real property in Tarrant County for the Peter Dikeman Survey (Fig. 8). I felt this was the best available evidence for reconstructing the King and Dikeman Surveys.

From William King's reconstructed northwest corner, I constructed a line South 00°14'24" East 1416.067 varas to King's reconstructed southwest corner. From the delineations on my plat, the quantity of land in the William G. King Survey No. 62, A-900 is 343.55 acres, 23.55 acres in excess of its patented 320 acres.

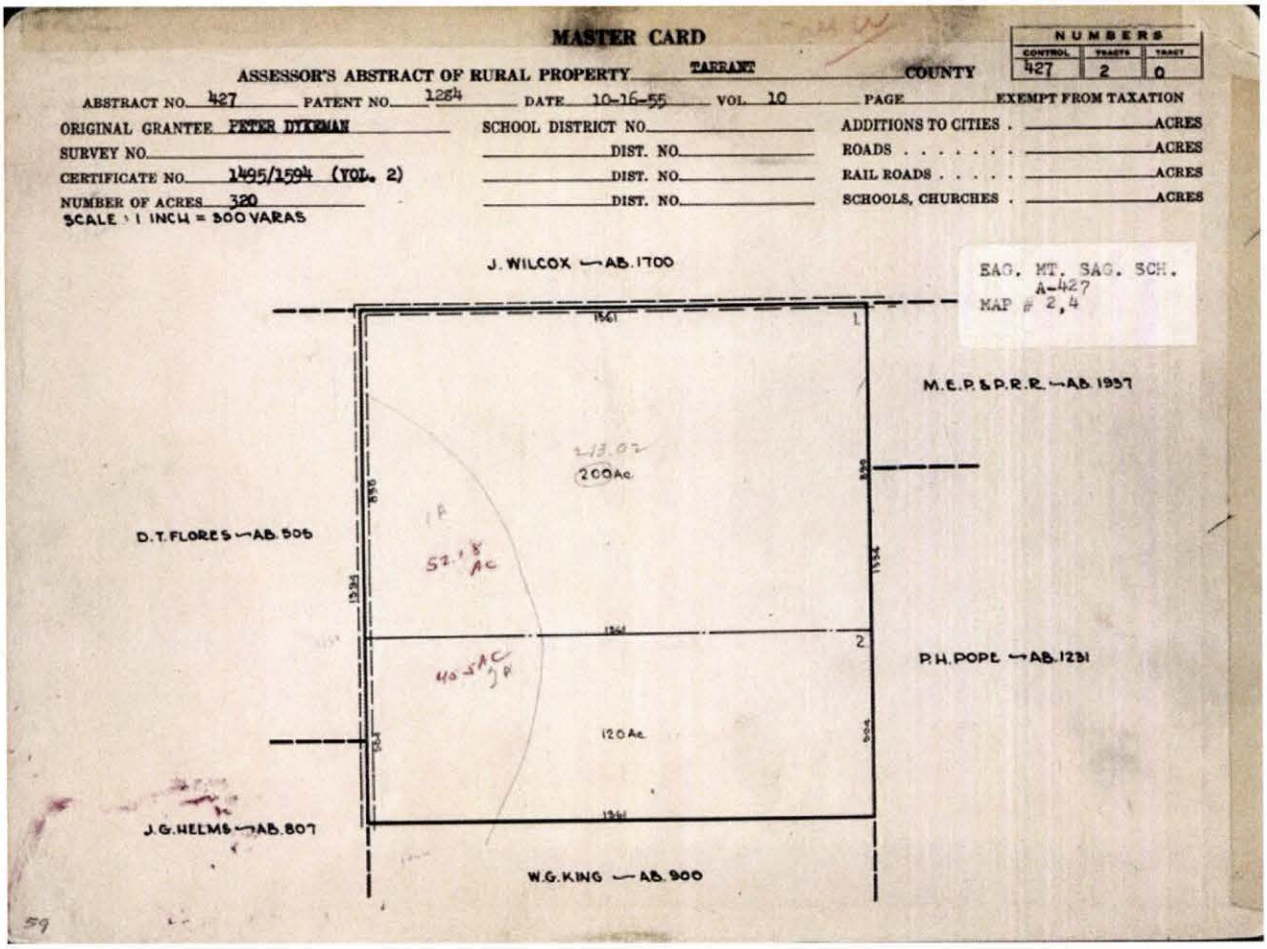

Figure 8. Master Card of Assessor's abstract of real property showing the Peter Dikeman Survey.

To locate the north line of the Peter Dikeman Survey, common with the south line of the Jacob Wilcox Survey No. 65 and the reentrant west line of the M.E.P. & P. R.R. Co. Survey No. 31, I ran the called course of North 1344 varas from said reconstructed intersecting corner of the King, Chubb, Dikeman, and Pope Surveys, and made a wide-radius search for a mound of rocks called in Richard Beall's field notes but no rocks were found in the vicinity. I extended my search the full 1394 varas as called in the substitute trustee's deed from A. Gant et ux. to First Trust Joint Stock Land Bank of Chicago and did not find any rocks. This area is located in a large shallow drainage basin in an open field. It is likely that the rocks were displaced by storm water runoff and cattle grazing over the years. From this point I ran a course of East following the Jacob Wilcox Survey No. 65 south line and the patent call of 555 varas per the corrected field notes of the Section 31 M.E.P. & P. R.R. Co. Survey made by W.G. Hirley on 27-28 October 1882 where he calls for a stone in prairie for the southeast corner of the Jacob Wilcox Survey No. 65. I made a wide-radius search in what was in fact, an open field of grass in a prairie and did not find a stone in this vicinity. I made a wide-radius search for the northeast corner of the Jacob Wilcox Survey No. 65 which Richard Beall's filed notes called for a stone mound but did not find this corner. The area had a network of old sidewalks and concrete building pads that were built on the EML base during World War-II and I believe this corner was destroyed.

The northwest corner of the Peter Dikeman Survey and its accessories were gone. At this location, Richard Beall calls for a "*stake from which a P. Oak Bears S 1 E 23 vs and another bears S 31 E 25 vs*". The corner ended up on the northwest side of Morris-Dido-Newark Road in a grass turf lot on the International Church of the Word of Faith property.

I reconstructed the Peter Dikeman Survey thus: From said reconstructed intersecting corner of the King, Chubb, Dikeman, and Pope Surveys, original course of North (North 00°33'37" West-grid) 1394.000 varas to the northeast corner; Thence on original course of West (South 89°26'23" West-grid) a distance of 1361.000 varas to the northwest corner, a 22-inch post oak bears South 25°24' East 91.5 varas; Thence on original course of South (South 00°33'37" East-grid) 1394.000 varas to the reconstructed northeast corner of the William King Survey. From the delineations on my plat, the quantity of land in the Peter Dikeman Survey No. 64, A-427 is 336.07 acres, 16.07 acres in excess of its patented 320 acres.

Locating the northeast corner of the Thomas Chubb Survey by surveying the Napoleon Oldham and J.P. Smith Surveys

The 1851 field notes of the Chubb Survey by Richard Beall and the corrected field notes made by A.M. Keen on 8 May 1858 show this corner to be a mound of rock witnessed by a "*live oak S 54 W 36-1/2 vs. and another S 25 W 35-1/2 vs*". The J.P. Smith Survey, A-1845 surveyed by Lionel S. Leversedge on 20 December 1878 calls to begin at the northeast corner of the Chubb Survey (no mention of a monument), bearing witness to a "*Live Oak mkd H S 25° W 38*

varas s do. S 31-1/2° W 39 varas". My first attempt to find this corner was to calculate a point by intersecting a line from said reconstructed four-corners of the King, Chubb, Dikeman, and Pope Surveys on course of East (North 89°26'23" East-grid) and a line from the found southeast corner of the Chubb Survey on original course of North (North 00°33'37" West-grid). At this location, I made a wide-radius search and did not find anything that would appear to be a rock mound. There was a dirt road running through this area and signs of disturbed ground for a gas lease site. I set up the pocket transit with non-magnetic tripod over this point which was in an open grassy field and laid off the called bearings and distances for the witness trees but did not find the trees. I sighted a cluster of live oak about South 32° West and chained the called distances but arrived about 20 varas short of the cluster. I looked for "H" marks on the live oaks or any resemblance of a hack or blaze but did not find any. I took shots around the dripline of the live oak cluster and calculated a point center mass of the trees for reference.

I decided I would have to locate the Napoleon Oldham and J.P. Smith Surveys to reconstruct the northeast corner of the Chubb Survey. Using aerial imagery, I located fence lines that appeared to follow the patent survey lines and I referenced the fence corners as points to search for corners. The field notes of the Napoleon Oldham Survey, J.P. Smith Survey, G.G. Young Survey, A-1848, and the John Weaver Survey, A- 1665 called for cardinal directions in their boundary lines; however, compared with the fence lines in the aerial imagery the lines running from south to north appeared to deflect more than one degree to the east. I first began a search for the southeast corner on the Napoleon Oldham Survey, which appeared to be about 75 varas due east of the found northeast corner of the T.J. Elkins Ranch. The corrected field notes of the Oldham Survey made by W.L. Lively on 12 May 1859 called for the southeast corner to be a "*rock, an elm 12 inches bears N 88 E 5 varas*". I searched this location and found a lone, old rock standing vertical out of the ground about 6.8 varas east of a wood fence corner post and 0.7 vara south of an east-west barb wire fence (Fig. 9). There were two cedar elms in the approximate location as called for in Lively's field notes. The closest one was North 74° East 6.8 varas from the rock. From there I ran northerly along a barbwire fence I took to be a fence of occupation on or near the patent survey line and searched for the northeast corner of the J.P. Smith Survey its patent distance of 607 varas and found a gas pipeline had been put in at this location and I presumed the corner was destroyed. I continued north on said line to search for the northeast corner of the Oldham Survey the called distance of 347 varas, passing an ancient barb wire fence at about 22.5 varas, and continued northerly on said line following this fence to its end and found an old rock mound that looked prominent and man-made between two ancient fence corner posts (Fig. 10). The found rock mound was North 00°53'33" East 942.224 varas from Oldham's southwest corner. The corrected field notes made by W.L. Lively calls for a "*rock in prairie*". I accepted this to be the northwest corner of the Oldham Survey, and the west line was 8.176 varas short of the patent distance of 950.4 varas.

Figure 9. Old rock found for SW corner of the Napoleon Oldham Survey A-1192.

Figure 10. Old rock pile found in ancient barb wire fence for NW corner of A-1192.

From the southwest corner of the Napoleon Oldham Survey, I ran easterly along the barb wire fence and found a pile of rocks by itself on the east bank of a small branch bearing North 89°59'24" East 92.484 varas from Oldham's southwest corner. The field notes for A-1845 calls for a stake at this corner; however, the field notes for the G.G. Young Survey, A-1848 calls this the beginning corner of that survey at a pile of rocks. I searched for a "*rock in prairie*" for the southeast corner of the Oldham Survey per the corrected field notes made by W.L. Lively and found a large rock in an earth mound by itself bearing North 89°59'24" East 959.962 varas from Oldham's southwest corner, 0.7 vara north of the barb wire fence. Although Lively gives the call of "*East 950-4/10 varas*", this rock was only 1.962 varas longer than the distance shown on the sketch made by G.M. Williams in GLO File No. 1720, and I accepted the rock as the southeast corner of the Oldham Survey (Fig. 11).

Figure 11. Found rock in earth mound for southeast corner of the Napoleon Oldham Survey A-1192.

I calculated a point on original course of North (North 00°33'37" West-grid) 950.4 varas from the southeast corner of the Oldham Survey to search for Oldham's northeast corner, called to be a rock by W.L. Lively. I made a wide-area search for this corner and found a rock in an earth

mound north 00°45'51" East 967.525 varas from Oldham's southeast corner (Fig. 12). Although this rock was 17.125 varas past the patent distance of 950.4 varas, it was the only large-sized rock in the area, and was very close to being on line, so I accepted this to be the northeast corner of the Oldham Survey. Looking at my plat, the found patent lines of the Napoleon Oldham Survey takes on a rhomboid shape, with the west and north lines significantly skewed. From the delineations on my plat, the quantity of land in the Napoleon Oldham Survey, A-1192 is 162.17 acres, 2.17 acres in excess of its patented 160 acres.

Figure 12. Found rock in earth mound for northeast corner of the Napoleon Oldham Survey A-1192

For the J.P. Smith Survey, A-1845, I accepted the found pile of rocks on the east bank of a small branch as its most easterly northeast corner per the field notes for the G.G. Young Survey, A-1848 made by Lionel S. Leversedge on 23 December 1878 and corrected survey by G.M. Williams on 13 May 1884, which was a fractional part of Section 30 of the M.E.P. & P. R.R. Co. Survey. To reconstruct the southeast corner, I constructed a line from said found rock pile on course of South (South 00°33'37" East-grid) and intersected the found common line of the Thomas Chubb and James J. Box Surveys on course of North 89°23'56" East. This made the

most southerly line of the J.P. Smith Survey 229.158 varas in distance, 15.158 varas longer than the called distance of 214 varas. The sketch made by G.M. Williams in GLO File No. 1720 shows this distance to be 224 varas. The reconstructed east line of the J.P. Smith Survey common with the west line of the G.G. Young Survey, A-1848 is 805.666 varas, 5.666 varas longer than its called distance of 800 varas. The found distance of 92.484 varas at the inner ell corner of the J.P. Smith Survey was considerably longer than its call of 63 varas; however, when Lionel S. Leversedge made this survey, he called for a stake at the most easterly northeast corner instead of a pile of rocks that he calls to be the beginning point at the northwest corner of the G.G. Young Survey he surveyed on 23 December 1878, just three days after he surveyed the J.P. Smith Survey. From said northwest corner, Leversedge ran "*East 887 varas to the S.E. cor of N.B. Oldham*". The distance between these found corners on my survey is 867.478 varas, 19.522 varas short. From the delineations on my plat, the quantity of land in the J.P. Smith Survey, A-1845 is 47.17 acres, 2.17 acres in excess of its patented 45 acres.

Having found the corners of the Napoleon Oldham and J.P. Smith Surveys, I decided to reconstruct the northeast corner of the Thomas Chubb Survey based off the west line of the Oldham Survey and the closing call of the J.P. Smith Survey. The corner was constructed by a line from the set 1-inch diameter steel bar in mound of rock at the four-corner intersection common with the William King, Thomas Chubb, Peter Dikeman, and P.H. Pope Surveys on course of East (North 89°26'23" East-grid) intersecting the found west line of the Oldham Survey. From that point, I set a 1/2-iron rod the called closing course and distance in the J.P. Smith Survey of West (South 89°26'23" West-grid) 144.000 varas and witnessed the aforementioned clump of live oak South 32°West 56.7 varas. From the railroad spike set in the found circle of rocks for the southeast corner of the Chubb Survey, I constructed a line North 00°14'09" West 1410.214 varas to the 1/2-iron rod set for the reconstructed northeast corner of the Chubb Survey. This line surveyed by Richard Beall on 4 October 1851 and resurveyed by A.M. Keen on 8 May 1858 was "*North 1344 vs*". The west line of the J.P. Smith Survey made by Lionel S. Leversedge on 20 December 1878 called run "*S 1/4 W 1407 varas*". My reconstructed line is only 3.214 varas longer, and if you convert the grid bearing of North 00°14'09" West to a "true" bearing, it is North 00°19'23" East, which is only 04'23" bearing difference from Leversedge's reciprocal bearing of North 00°15'East. From the delineations on my plat, the quantity of land in the Thomas Chubb Survey No. 63, A-327 is 344.62 acres, 24.62 acres in excess of its patented 320 acres.

Locating the P.H. Pope Survey

The field notes of the P.H. Pope Survey made by F. Wilcox on 18 January 1858 calls to begin at the northwest corner of the Thomas Chubb Survey; "*Thence East 950 vs to a mound of rocks one rock marked P.H.P. from which a bur Oak 14 in bs S 31 E 22 vs. Thence North 950 vs to a*

rock on the west side of a branch. Thence West 950 vs to a rock... Thence South 950 vs to the Place of Beginning Barrings [sic] marked X [two hacks above and below]". I searched for the southeast corner by running easterly from said reconstructed intersecting corner of the King, Chubb, Dikeman, and Pope Surveys the called distance of 950 varas to point in a low-lying area on the west bank of Moss Branch that showed signs of where water washed the top of bank over the years. The site was in dense forest with heavy timber fallings and several large piles of dirt that appeared to be spoil from military excavation on EML. I made a wide-radius search of this area and was unable to find the rock mound and witness tree.

To locate the northwest corner, I made a wide-radius search for the called for rock 950 varas north of said reconstructed intersecting corner of the King, Chubb, Dikeman, and Pope Surveys in an open field of grass on a hill sloping down to the west toward an existing pond and the closest rocks were about 108 varas to the south, so nothing fit. From there, I ran original course of East (North 89°26'23" East-grid) for 950 varas to search for the northeast corner where I found a large rock on the top of the west bank of Moss Branch, a tributary of Indian Creek, which was 7.1 varas north of its called for location (Fig 13). This rock is right on the west edge of the top of bank of Moss Branch and, from examining the creek bed and west bank, it is sandstone all the way up to top of bank. To me, it seems that the bed and bank probably remained nearly in the same location as it was in 1858, and unlikely that movement of water has eroded this bank to any large extent. I accepted this to be the northeast corner of the P.H. Pope Survey and constructed a line from this rock by its original course of West (South 89°26'23" West-grid) 955.750 varas where it intersected the line from said reconstructed four-corners of the King, Chubb, Dikeman, and Pope Surveys on course of North (North 00°33'37" West-grid) 957.103 varas. I constructed the east line of the P.H. Pope Survey from the large rock found on the top west bank of Moss Branch on course of South (South 00°33'37" East-grid) 957.103 varas, intersecting the reconstructed north line of the Thomas Chubb Survey, from which a 48-inch bur oak bears South 28°26' West 69.9 varas and a 24-inch red oak in a barb wire fence bears South 03°05' East 43.4 varas. From the delineations on my plat, the quantity of land in the P.H. Pope Survey, A-1231 is 162.04 acres, 2.04 acres in excess of its patented 160 acres.

Figure 13. Found rock on top of west bank of Moss Branch for NE corner of the P.H. Pope Survey.

CONCLUSION

This report is furnished with reference to a retracement survey on the ground of the indicated patent surveys made by me under my supervision from 21 January 2014 to 28 November 2018. A plat of this survey showing the construction of the captioned surveys is furnished herewith. A list of these surveys and their found acreage therein follows:

Abstract No.	GLO File No.	Acreage	Ptd. Acreage	Survey
174	3127	159.11	160	James J. Box
327	625	344.62	320	Thomas Chubb
427	627	336.07	320	Peter Dikeman
900	624	353.55	320	William G. King
1090	488	331.44	320	George McCloud
1192	4700	162.17	160	Napoleon Oldham
1231	4231	162.04	160	P.H. Pope
1845	1710	47.17	45	J.P. Smith

Seven original surveys were found to have excess acreage within their patented boundaries. Of these seven, the George McCloud Survey No. 61, A-1090, William G. King Survey No. 62, A-900, Thomas Chubb Survey No. 63, A-327, and the P.H. Pope Survey, A-1231 have Indian Creek and its tributaries Fox Branch and Moss Branch running through them. I have observed Indian Creek and these tributaries for nearly five years and there is flowing water year-round. The next task will be a reconnaissance of Indian Creek from its mouth at the 649-foot pool elevation of Eagle Mountain Lake, which is near the most northerly northwest corner of the T.J. Elkins Ranch Property, and up the meanders of the creek to the northeast corner of the P.H. Pope Survey to determine if Indian Creek meets the "30-Foot Rule" and retains an average width of thirty feet from the mouth up per the Republic of Texas Act of December 14, 1837. If this reconnaissance reveals a "~~navigable-in fact~~" "navigable-by-statute" watercourse, the acreage of the mineral estate within the bed of Indian Creek will be determined—either by survey of the centerline or gradient boundary survey—riparian ownership can only claim title for up to the patented acreage, and the State retains ownership of the remaining excess in accordance with Article 5414a. Section 2, Vernon's Civil Statutes, and placed in the Permanent School Fund.

A legal review is needed to determine the State's rights to the mineral estate within the bed of Indian Creek because present-day Eagle Mountain Lake Training Area is out of the original 2477.73 acres described in a Quit Claim Deed with Indenture from the United States of America to the State of Texas recorded in Vol. 3213 Pg. 365 D.R.T.C.T. for the use and benefit of the Texas National Guard of the State of Texas. There is a clause in this deed which states: "*...all minerals, including but not limited to oil and gas, in the lands herein conveyed...over, across and under the lands and properties described herein...are excepted from this conveyance and reserved to the Government* [United States]". However, when Texas joined the Union, she did so by treaty, and retained sovereign rights to the Public Domain, so this becomes a significant issue for land lawyers to decide.

Respectfully submitted,

David A. Rolbiecki
Registered Professional Land Surveyor No. 5919
Licensed State Land Surveyor, State of Texas

TEXAS MILITARY DEPARTMENT
Texas Army National Guard
Post Office Box 5218
Austin, Texas 78763-5218

January 30, 2020

REPLY TO
ATTENTION OF

Construction and Facilities Management Office

Honorable George P. Bush, Texas Land Commissioner
Attn: Mr. Mark Neugebauer, RPLS, LSLS
Director of Surveying
Texas General Land Office
1700 North Congress Avenue
Austin, Texas 78701-1495

Subject: corrections to the survey of the Eagle Mountain Lake Texas National Guard Training Area, Tarrant and Wise County, Texas, in GLO Tarrant County Sketch File 35 and Tarrant County State Real Property Sketches No. 3 & 4.

Dear Mr. Neugebauer: I wish to point out some minor corrections to be made on the surveys and report of the Eagle Mountain Lake Texas National Guard Training Area to-wit:

1. **Tarrant County Sketch File 35**: "Survey report on a retracement of A-1090 (McCloud), A-900 (King), A-327 (Chubb), A-427 (Dikeman), A-174 (Box), A-1231 (Pope), A-1192 (Oldham), and A-1845 (Smith)". The wording in last sentence in the second to last paragraph on page 24 of 24 pages should be changed from "navigable-in fact" to "***navigable-by-statute***".

2. **Tarrant County State Real Property Sketches No. 3 & 4**: The shown found boundary line between the NBL of Tarrant County and the SBL of Wise County near the upper right of the two survey plats reads "FROM SWC WISE CO. TO NWC TARRANT CO. - N89°29'40"W 16017.732 vrs (44499.27')". It should read "***FROM SEC WISE CO. TO NWC TARRANT CO. - N89°29'40"W 16017.732 vrs (44499.27')***".

Very Resp'y,

David A. Rolbiecki
Registered Professional Land Surveyor No. 5919
Licensed State Land Surveyor,
State of Texas