

PREPARED BY: \*BLACK HAWK COUNTY ENGINEERS OFFICE  
316 E. FIFTH STREET, ROOM 211 WATERLOO, IOWA 50703

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SLSI 9-94  
BHCO 03-09

UNITED STATES PUBLIC LAND SURVEY CORNER CERTIFICATE OF  
Land Survey Monuments situated in Section 21, Township 87 N, Range 11 W, of the Fifth Principal Meridian, BLACK HAWK County, Iowa.  
Previously recorded in File Book N/A, Page N/A, in County Recorder's Office.

(Show reason for preparing this certificate): The corner monument has been Replaced or Modified, per Ia. Code 355.11(1)(c)  
(Evidence and detailed procedures used in establishing the corner position(s) and monumentation found or placed.)

Monument Description and Remarks: **N.E. CORNER:**  
NO CURRENT LAND CORNER CERT. ON RECORD, WITH RECORD TIES PER BHCO, ENG. HIST. TIES DATED 11-03-1980 (DENOTED AS SET "STUBBY"). PRIOR TO H.M.A. RESURFACING PROJ. (#LFM-1111--7X-07), FOUND 5/8" REBAR FLUSH w/ EXIST. A.C.C. PVMT. & TEMP. REF. CORNER PER RTK GPS. RESURF. PROJECT MILLED -2" EXIST. A.C.C., AND RESURF. w/+4.5" H.M.A. (2.5" INT. & 2" SURF.). "FAINT" MAGNETIC SOUNDING REMAINED AFTER RESURFACING, & RESET CORNER w/ 5/8"x±6"L. (#5) REBAR LOCATED @ ±0.70' SOUTH OF C.L. H.M.A. JOINT. DEFL. (CORNER) ANGLE DENOTED FOR SECTION LINE TO E./W. PER COGO OF RTK GPS MEAS. CORNERS (AS OBSERVED). CORNER HEREIN REF. (AS PREV. FOUND) ALSO UTILIZED IN RIGHT-OF-WAY ACQUISITION PLAT, PER B.H. CO. RECORDER FILE 2011-010035.

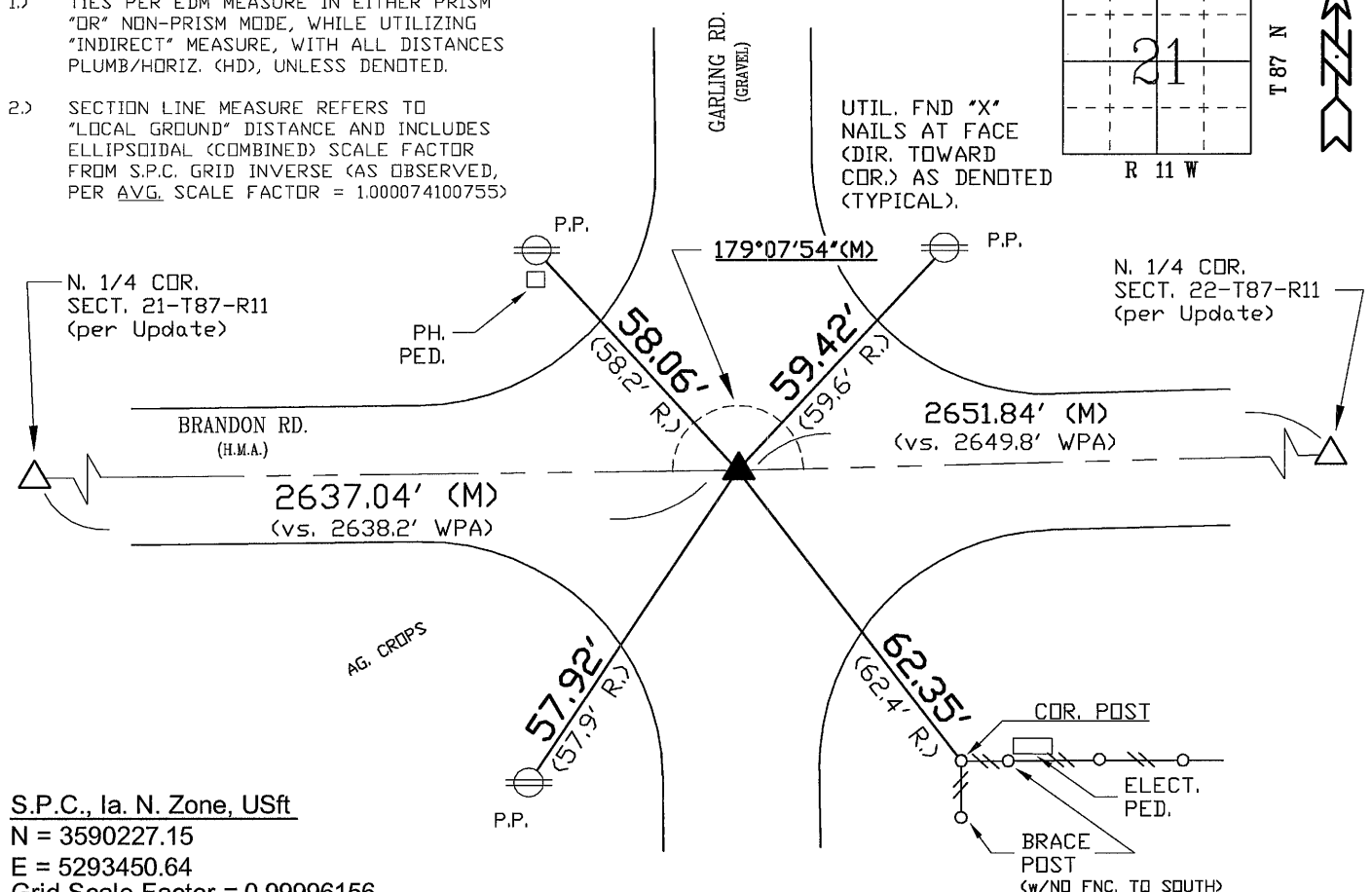
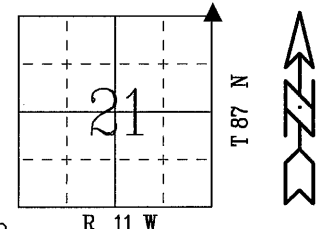
### PLAN VIEW

"NOT TO SCALE"

BHco Hist. Ties: BK. #1000 p.21 T87-R11  
FIELD BOOK: Ties per Topcon 7003i #Z0115

(Show a minimum of three reference ties to durable physical objects, relevant monuments and physical conditions that will enable recovery of the corner.)

- 1.) TIES PER EDM MEASURE IN EITHER PRISM "OR" NON-PRISM MODE, WHILE UTILIZING "INDIRECT" MEASURE, WITH ALL DISTANCES PLUMB/HORIZ. (HD), UNLESS DENOTED.
- 2.) SECTION LINE MEASURE REFERS TO "LOCAL GROUND" DISTANCE AND INCLUDES ELLIPSOIDAL (COMBINED) SCALE FACTOR FROM S.P.C. GRID INVERSE (AS OBSERVED, PER AVG. SCALE FACTOR = 1.000074100755)



S.P.C., Ia. N. Zone, USft  
N = 3590227.15  
E = 5293450.64  
Grid Scale Factor = 0.99996156  
Convergence = 0° 55' 59"  
(NAD83-2007 "BHco07", RTK Obs.)

FIELD SURVEY: G.T. & L.G. 06/07/11  
PREPARED BY: S.S. & G.T. 10/18/11

### CERTIFICATION



I hereby certify that this land surveying document was prepared and the related survey work was performed by me or under my direct personal supervision and that I am a duly licensed Land Surveyor under the laws of the State of Iowa.

*Geoffrey Allen Tinker* 10/18/2011  
Geoffrey Allen Tinker (date)

License Number 15748

My license renewal date is December 31, 2012

Pages or sheets covered by this seal:

This Land Corner Certificate Only.

### LIST CORNERS TO BE INDEXED

Corner	Section -	Township -	Range
N.E. Cor.	21	87 N	11 W
N.W. Cor.	22	87 N	11 W
S.E. Cor.	16	87 N	11 W
S.W. Cor.	15	87 N	11 W

### INDEX OF ABBREVIATIONS

(M) = "Measured" Dimension  
(P) = "Platted" Dimension  
(R) = "Record" Dimension  
(C) = "Calculated" Dimension  
(IGS) = Iowa Geodetic Survey  
(WPA) = Works Progress Admin. Survey  
"G" = per George Miller Survey (BHco Surveyor 1858-1860)  
"B" = per John Ball Survey (BHco Surveyor 1866-1891)  
"N" = per Nathan Barber Survey (BHco Surveyor 1908-1931)  
"NP" = Reflectorless EDM Meas.  
"MLM" = Indirect Measure  
"CM" = Concrete Monument  
"SM" = Survey Marker Spike/Tag  
"PK" = PK/MAG Nail Brand Style