

# SECTION CORNER RECORD

# NW 600-1100

## BOONE COUNTY SURVEYOR'S OFFICE

State Plane grid coordinates NAD83 (2011):

Corner 1: North: 1777459.54 East: 3066634.15 (U.S. survey feet)

Corner 2: North: 1777459.72 East: 3066609.07 (U.S. survey feet)

Corner 1: Harrison, 4" disk 'Section Corner', 1" below grade

Corner 2: Harrison, 4" disk 'Section Corner', flush with grade

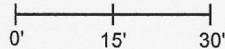
Indiana tie card references:

IN02\_T20NR2W31\_80 IN02\_T20NR2W32\_72

IN02\_T19NR2W06\_08 IN02\_T19NR2W05\_00

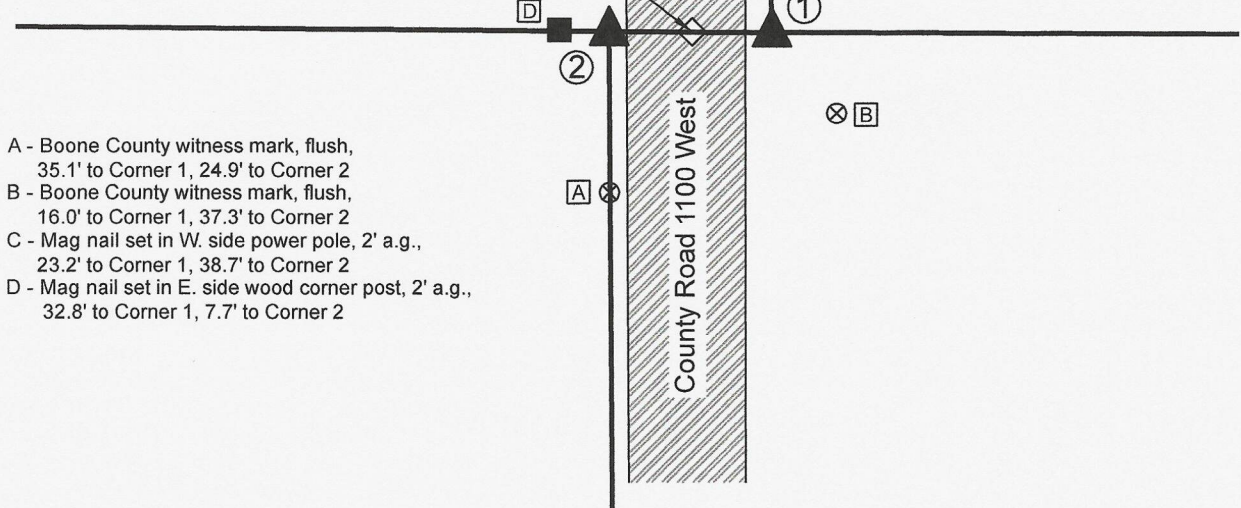
### CORNER WITNESS DETAIL

SCALE 1" = 30'

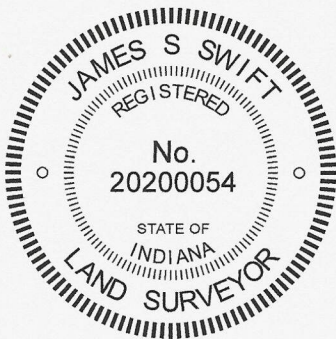


- ① S.E. Corner, Section 31  
S.W. Corner, Section 32  
T 20 N, R 2 W  
Harrison Monument Set
- ② N.W. Corner, Section 5  
N.E. Corner, Section 6  
T 19 N, R 2 W  
Harrison Monument Set  
Distance between monuments:  
38 links = 25.08'

POSITION OF BOTH CORNERS AS SHOWN ON BCS TIE CARD DATED 10/6/1971. RAILROAD SPIKE OVER RAIL, 12.2' WEST OF CORNER 1. PREVIOUS POSITION NOT HELD



- A - Boone County witness mark, flush, 35.1' to Corner 1, 24.9' to Corner 2
- B - Boone County witness mark, flush, 16.0' to Corner 1, 37.3' to Corner 2
- C - Mag nail set in W. side power pole, 2' a.g., 23.2' to Corner 1, 38.7' to Corner 2
- D - Mag nail set in E. side wood corner post, 2' a.g., 32.8' to Corner 1, 7.7' to Corner 2



*Carol Cunningham*  
 Carol Cunningham, County Surveyor

*James S. Swift*  
 James S. Swift, IN LS 20200054

October 18, 2023 (Revised December 18, 2024)  
 (Sheet 1 of 2)

Sugar Creek Township

Section 31 T20N, R2W	Section 32 T20N, R2W
Section 6 T19N, R2W	Section 5 T19N, R2W

# SECTION CORNER RECORD

NW 600-1100

## BOONE COUNTY SURVEYOR'S OFFICE

### WRITTEN DOCUMENTATION

The Harrison monument marking Corner 1 was set at a calculated position. The position of Corner 2 was set on the line connecting Corner 1 with the south quarter corner of Section 31 (See BCS Corner NW 600-1150) at a distance of 25.08 feet (38 links).

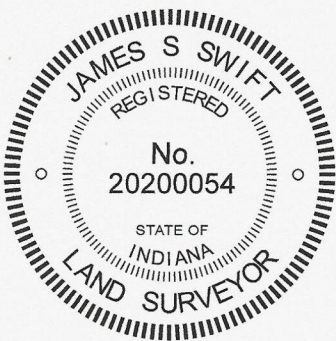
Corner 1 was established in 1819 as part of the original survey of the perimeter of Townships 19 and 20 North, Range 2 West. Corner 2 was established in 1829, 38 links west of Corner 1.

A BCS record with no date, but clearly made prior to 1892, states, with respect to Corner 1, "Reest. by intersection of lines. Set rock +. 12.14.16. Rock cor Sects 5 & 6 West 38 [links]." A BCS record of September 11, 1912 states, with respect to Corner 2, "Reestablished by intersection of lines. Set rock 10x10x16 + from which Rock corner sections 31 and 32, 20-2W bears E 38 [links]."

A BCS tie card dated October 6, 1971 shows Corner 2 as being located in the center of the N-S road and states "No stone. RRR put in." The 1971 tie card makes no mention of the double corner. A railroad spike in the approximate center of County Road 1100 West has been visible in recent years, presumably over the rail set in 1971. This monument is known to have been held to mark both corners.

During analysis of the corners on the township line between T20N and T19N, R2W, it became clearly evident that the railroad spike in the center of the road does not work well with any of the direct or accessory evidence of corners to the east or west, both per the geometry of the found evidence and the original federal dimensions for the township line offsets. Analysis of various posts to the east and west indicated that the railroad spike does not mark either corner, but is situated between the positions of the two old corners. The fact is noted that no jog exists in the road at this corner, whereas a jog of 25 feet east-west would be expected. However, it is also noted that, at approximately 1200 feet south of the corner, County Road 1100 West crosses an abrupt change in grade, leaving the relatively flat plain to the south, and beginning the descent into the Sugar Creek basin. At this change in grade, the road also bends slightly toward the northeast. It was further observed that by prolonging a line which represents the center of the road, as it exists from the east quarter corner of Section 6 to the point of grade change, the prolonged line intersects the township line on the west edge of the road at a position which works well with the various evidence along the township line, if held as Corner 2. Placing Corner 1 at a position 38 links further east also works well with the evidence along the township line.

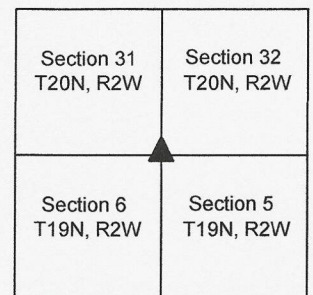
Per this analysis, it is evident that whenever the current configuration of the road was established, rather than placing an abrupt jog in the road at the township line, the jog was smoothed out, beginning with the angle point in the road at the top of the hill, 1200 feet south of the corner. With this information in hand, on December 15, 2022, excavation was performed at both corners, on each side of the road, with the expectation that the record stones would be found at 38 links apart. However, on that date, we discovered old, buried metal culvert pipes, oriented N-S, in both of the positions where we expected to find the stones. Clearly, the stones, if present in those positions, would have been removed during installation of the culvert pipes. We did find a rock which closely matched the record dimensions for the stone called for at Corner 1, but it was situated haphazardly, amidst other rocks, and if it was the rock set to mark the corner, it appeared to no longer be in the position as set. Fragments of a wood stake were also found in the immediate vicinity of the expected position for Corner 1, but could not be verified as reliable evidence of the corner, and would have post-dated the installation of the culvert. As the County Surveyor tie card from 1971 appeared to call the position of the railroad spike as Corner 2, we felt it appropriate to excavate the road in that position. However, due to the advanced season and imminent onset of winter weather, we opted to not excavate such a large hole in the road on that date and decided to wait until the 2023 excavation season. We revisited the corner on October 12, 2023, when we excavated around the railroad spike. As expected, excavation revealed a railroad rail found at 8 inches deep, below the railroad spike. Excavation of a 5-foot N-S by 5-foot E-W area centered on the spike and rail did not reveal further evidence. Excavation was performed to the bottom of the road bed, at 17 inches deep. The 1971 tie card is not accepted as being an accurate representation of the corners, as the monument set at that time does not work well with any other evidence of original lines and corners found and does not address the double corner, evidently relying solely on the position of the road as it crosses the township line as being evidence of the closing corner. Though the 1971 tie card represents prima facie evidence, the found evidence and relative geometry of the two corners being 38 links apart, proves it wrong. The position of Corner 1 was established in-line with the railroad spike and rail, being also in-line with an old wood corner post west of the road and fragments of fence found on the east side of the road, at a position 38 links (25.08 feet) west of the point where the prolongation of the center of the road to the south, before it goes over the hill, intersects the line defined by said spike, post, and fence fragments. A Harrison monument was set at this position on October 12, 2023. A Harrison monument was set at Corner 2, 38 links west of Corner 1 on December 9, 2024, after we had found the stones marking the quarter corners to the west. The railroad spike and rail, both removed during excavation, had been 12.2 feet west of Corner 1. Future surveys in the area should take into account the fact that the spike and rail have been held as marking both of the corners in the past.



*Carol Cunningham*  
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Carol Cunningham, County Surveyor

*James S. Swift*  
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James S. Swift, IN LS 20200054  
October 18, 2023 (Revised December 18, 2024)  
(Sheet 2 of 2)

Sugar Creek Township



# SECTION CORNER RECORD

# NW 600-1150

## BOONE COUNTY SURVEYOR'S OFFICE

State Plane grid coordinates NAD83 (2011):

North: 1777477.26 East: 3063989.72 (U.S. survey feet)

North: 1777477.13 East: 3063964.42 (U.S. survey feet)

Corner 1: Harrison, 4" disk 'Section Corner', 3" above grade

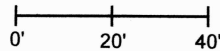
Corner 2: Harrison, 4" disk 'Section Corner', 3" above grade

Indiana tie card references:

IN02\_T20NR2W31\_76 IN02\_T19NR2W06\_04

### CORNER WITNESS DETAIL

SCALE 1" = 40'



A - 13" diameter maple tree, north side, 3' a.g.,

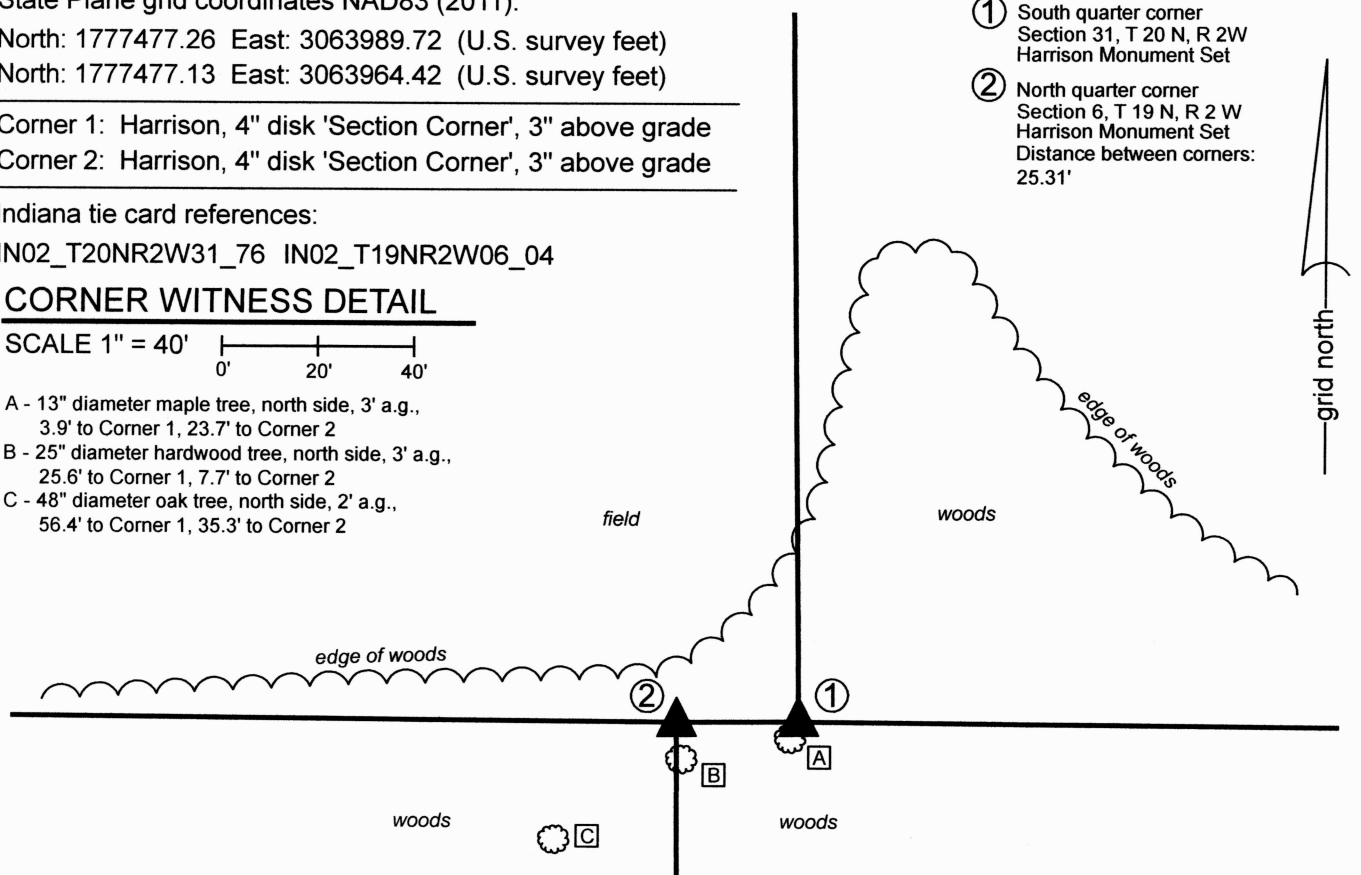
3.9' to Corner 1, 23.7' to Corner 2

B - 25" diameter hardwood tree, north side, 3' a.g.,

25.6' to Corner 1, 7.7' to Corner 2

C - 48" diameter oak tree, north side, 2' a.g.,

56.4' to Corner 1, 35.3' to Corner 2



- ① South quarter corner  
Section 31, T 20 N, R 2W  
Harrison Monument Set
- ② North quarter corner  
Section 6, T 19 N, R 2 W  
Harrison Monument Set  
Distance between corners:  
25.31'

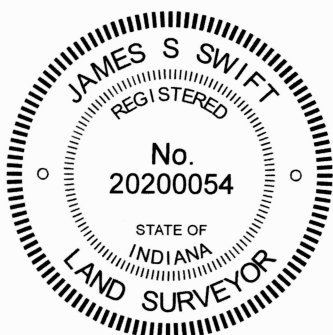
The Harrison monuments were set in place of stones found.

A BCS record of December 23, 1873 listed under Section 31, T20N, R2W states, "F - Reestablished from tree and stump, set a rock 10.8.5 marked +."

A record of December 22-23, 1873 listed under Section 6, T19N, R2W states, "F - Section 31 Reest from tree. Set Rock 10.8.5 +. B of this Section Reest 38 links West. Set Rock 9.6.5 +." In these records, 'F' denotes Corner 1 and 'B' denotes Corner 2.

Both rocks were found undisturbed on November 19, 2024. During reconnaissance, the stones were not visible and minimal other above-ground evidence was observed in the vicinity of the corners. However, fragments of existing fence were observed slightly east of the corners and reliable evidence of the adjacent quarter-quarter corners to the west was observed in the form of two old corner posts located 38 links apart. Holding the fragments of fence to determine the north-south position and holding a distance of 20.05 chains (multiplied by a standard scale factor of 1.00415) from the corner posts to the west to determine the east-west position, we were able to compute locations for the stones which enabled us to find them with probes. The distance of 20.05 chains is noted in the 1873 record for Section 31. The stones were found at almost exactly the computed positions. Both stones appeared undisturbed, as found. The stone at Corner 1 was 3 inches deep. This stone was 10 inches tall by 5 inches east-west by 8 inches north-south. A distinct chiseled + mark was found on the sloping top of the stone near the north edge. The stone was found amidst fragments of wire which appeared to be part of an old east-west fence. The stone at Corner 2 was found near the surface, being approximately 1 inch deep. This stone had a distinct chiseled + mark on the top, center, and measured 9 inches tall by 7 inches east-west by 5 inches north-south. Given the obvious marks on the stones, the matching dimensions to the records, and the fact that we found them exactly where we expected them to be, based on the information in the 1873 record and the available evidence, there is no question that these are the monuments set in 1873 and were found in the positions as placed at that time. Both stones were removed and replaced with Harrison monuments on November 19, 2024.

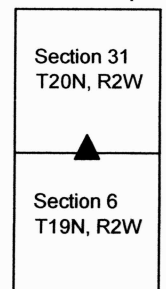
Corner 1 was originally established as a wood post in 1819. Corner 2 is not an original federal corner.



*Carol Cunningham*  
Carol Cunningham, County Surveyor

*James S. Swift*  
James S. Swift, IN LS 20200054  
December 4, 2024

Sugar Creek  
Township



# SECTION CORNER RECORD

NW 600-1200

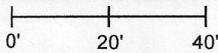
## BOONE COUNTY SURVEYOR'S OFFICE

State Plane grid coordinates NAD83 (2011):  
 North: 1777484.88 East: 3061133.77 (U.S. survey feet)

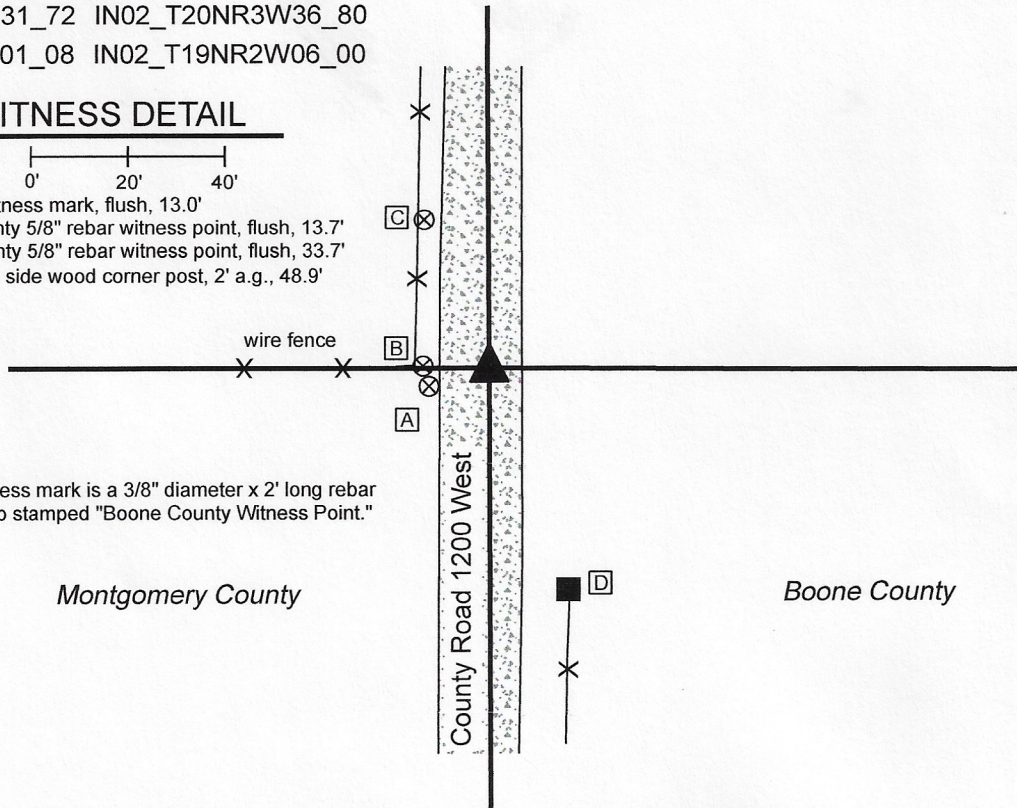
Type of monument: Harrison, 4" disk 'Section Corner'  
 Depth: Six inches below adjacent road surface

Indiana tie card references:  
 IN02\_T20NR2W31\_72 IN02\_T20NR3W36\_80  
 IN02\_T19NR3W01\_08 IN02\_T19NR2W06\_00

### CORNER WITNESS DETAIL

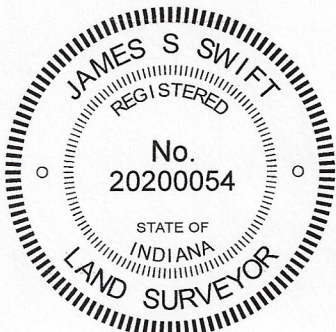
SCALE 1" = 40'  


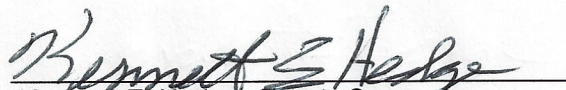
- A - Boone County witness mark, flush, 13.0'
- B - Montgomery county 5/8" rebar witness point, flush, 13.7'
- C - Montgomery county 5/8" rebar witness point, flush, 33.7'
- C - Mag nail set in N. side wood corner post, 2' a.g., 48.9'

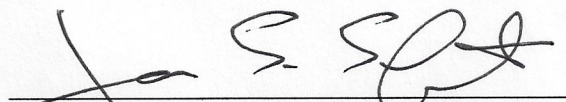


Boone County witness mark is a 3/8" diameter x 2' long rebar bearing a metal cap stamped "Boone County Witness Point."

The Harrison monument was set in place of a rebar found. A BCS record of December 22-23, 1873 states, with respect to this corner, "Rock that was set as from stump." This is interpreted to mean that a stone was found on that date which correlated with the distance tie to the stump of one of the original bearing trees witnessing the corner. No recent BCS tie cards were found referencing the corner. A section corner dossier dated April 12, 2011 provided by the Montgomery County Surveyor shows the corner as a 5/8 inch by 30 inch rebar with aluminum cap set in place of a stone found at 0.7 foot deep in the road. The dossier states that prior to excavation in 2011, a rebar with aluminum cap was found 0.63 foot north and 0.58 foot east of the position of the stone. The dossier indicates that several prior surveys had previously held the capped rebar as marking the corner. No dimensions were given for the found stone. The rebar called in the dossier was found in good condition, evidently undisturbed at 8 inches deep in the road. The position of the Montgomery County corner fits well with local evidence, being in the approximate center of the county road and in line with a fence to the west. It also fits well with the relative positions of proximate corners and works well with the recorded closing distance for the final half mile of the range line between T19N, R2W and T19N, R3W. The Montgomery County corner was held and the aluminum capped rebar was replaced with a Harrison monument on March 4, 2020. Being a township corner, this corner represents a common corner with no offset.



  
 Kenneth E. Hedge, County Surveyor

  
 James S. Swift, IN LS 20200054  
 April 1, 2020

Franklin Township  
 Montgomery County

Sugar Creek Township  
 Boone County

Section 36 T20N, R3W	Section 31 T20N, R2W
Section 1 T19N, R3W	Section 6 T19N, R2W

# SECTION CORNER RECORD

# NW 650-1100

## BOONE COUNTY SURVEYOR'S OFFICE

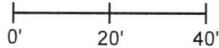
State Plane grid coordinates NAD83 (2011):  
North: 1780124.10 East: 3066588.66 (U.S. survey feet)

Type of monument: Harrison, 4" disk 'Section Corner'  
Depth: One inch below adjacent road surface

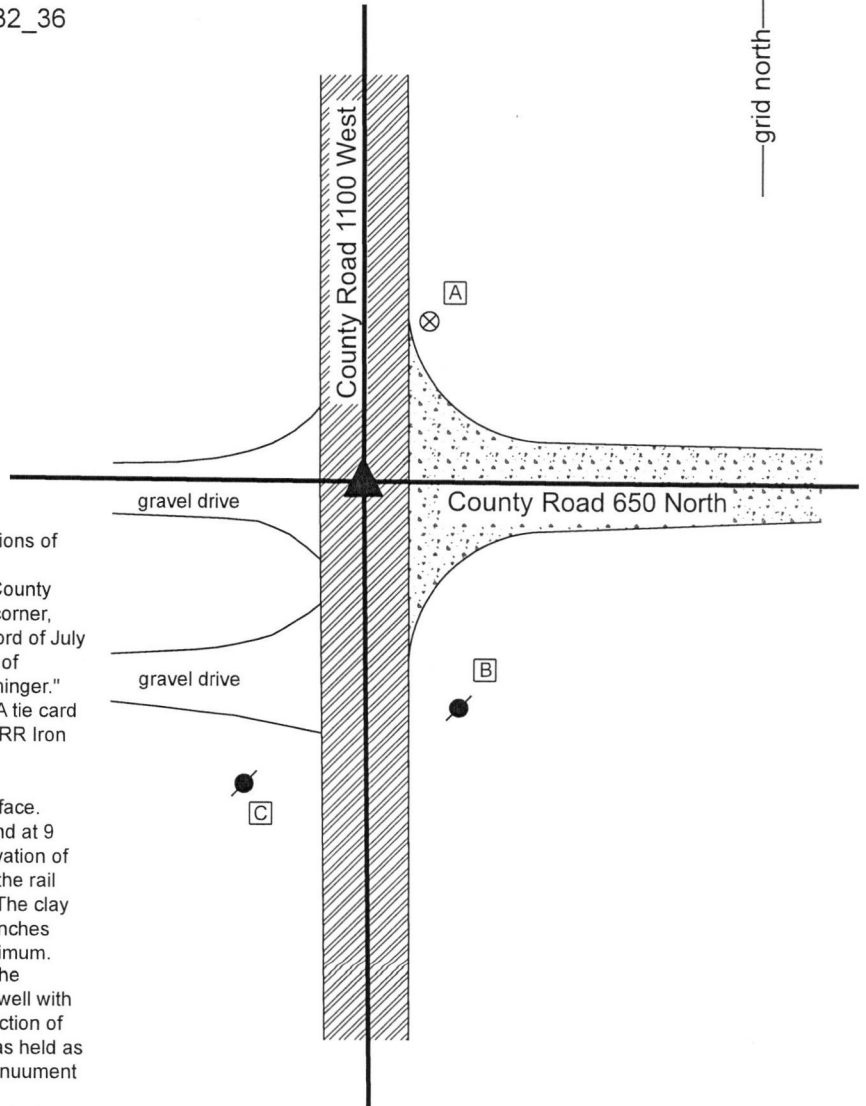
Indiana tie card references:  
IN02\_T20NR2W31\_44 IN02\_T20NR2W32\_36

### CORNER WITNESS DETAIL

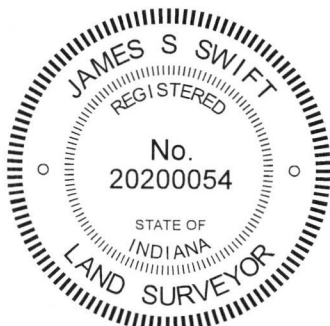
SCALE 1" = 40'



- A - Boone County witness mark, flush, 35.9'
- B - Mag nail set in N.W. side power pole, 2' a.g., 49.9'
- C - Mag nail set in N.E. side power pole, 2' a.g., 65.9'



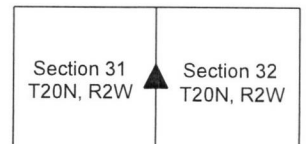
The Harrison monument was set in place of vertical sections of rebar and railroad rail found.  
 A BCS record of April 24, 1858 attributed to the Boone County Surveyor named Ensminger states, with respect to this corner, "Reest. from old wit trees. Set Rock 17.21." A BCS record of July 9, 1867 states "Reest. by Ensminger" and a BCS record of September 19, 1910 states "Found rock set by Mr. Ensminger." A BCS tie card dated July 26, 1971 states, "No stone." A tie card dated October 13, 1977 states "By State Highway Eng. RR Iron Found."  
 This corner was excavated on August 30, 2018. Prior to excavation, a 5/8 inch rebar was found flush with the surface. Excavation revealed a vertical section of railroad rail found at 9 inches, directly below the top of the rebar. Further excavation of an area extending 2.5 feet in all cardinal directions from the rail and rebar did not reveal further evidence of the corner. The clay layer below the bottom of the road bed was found at 16 inches deep. Excavation was performed to 20 inches deep minimum. The rail is believed to have been set in association with the creation of the 1971 tie card. The position of the rail fits well with the local evidence of the corner in the form of the intersection of the approximate centers of the county roads. The rail was held as marking the corner and was replaced with a Harrison monument set in the same position.  
 This corner was originally established as a wood post in 1822.



*Kenneth E. Hedge*  
 Kenneth E. Hedge, County Surveyor

*James S. Swift*  
 James S. Swift, IN LS 20200054  
 September 5, 2018

Sugar Creek Township



# SECTION CORNER RECORD

NW 650-1200

## BOONE COUNTY SURVEYOR'S OFFICE

State Plane grid coordinates NAD83 (2011):

North: 1780129.26 East: 3061116.18 (U.S. survey feet)

Type of monument: Harrison, 4" disk 'Section Corner'

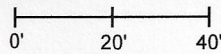
Depth: Six inches below adjacent road surface

Indiana tie card references:

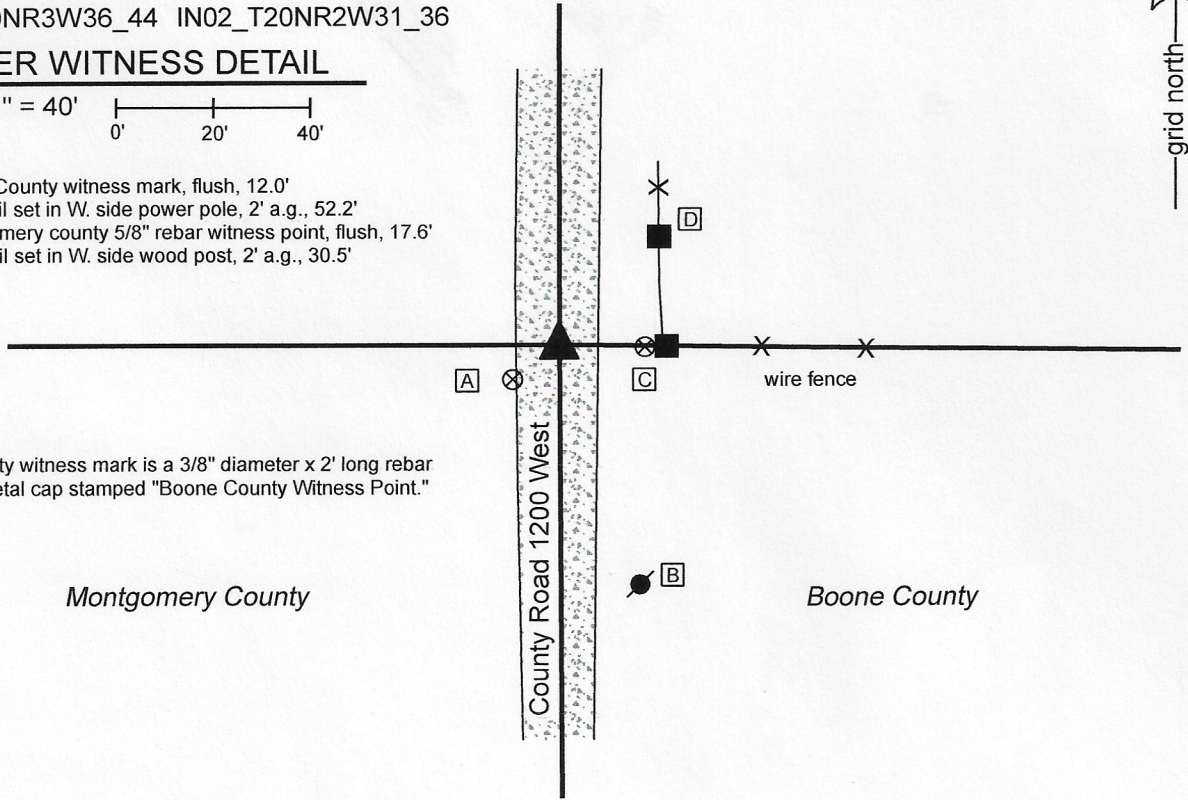
IN02\_T20NR3W36\_44 IN02\_T20NR2W31\_36

### CORNER WITNESS DETAIL

SCALE 1" = 40'



- A - Boone County witness mark, flush, 12.0'
- B - Mag nail set in W. side power pole, 2' a.g., 52.2'
- C - Montgomery county 5/8" rebar witness point, flush, 17.6'
- D - Mag nail set in W. side wood post, 2' a.g., 30.5'



Boone County witness mark is a 3/8" diameter x 2' long rebar bearing a metal cap stamped "Boone County Witness Point."

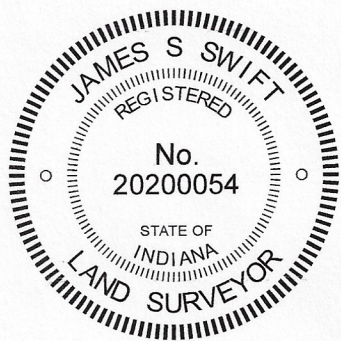
Montgomery County

Boone County

The Harrison monument was set in place of a rebar found.

A BCS record of September 19, 1910 states, with respect to this corner, "Rock found here as shown by Mont. Co. records..." No recent BCS tie cards were found referencing this corner. A section corner dossier provided by the Montgomery County Surveyor's Office dated April 12, 2011 shows the corner as a stone found 0.4 foot below grade, replaced by a 5/8 inch x 30 inch long rebar. The dossier states that prior to excavation in 2011, an uncapped rebar was found 0.29 foot south and 2.28 feet east of the found stone. The dossier calls for two previous surveys which held an iron pin or rebar as the corner. No dimensions were given for the found stone. The Montgomery County rebar was found in good condition, evidently undisturbed. The rebar in place of stone fits well with local evidence being in the approximate center of the county road and opposite a wood post on the east side of the road and fits well with the relative positions of proximate corners. The Montgomery County rebar was held as marking the corner and was replaced with a Harrison monument on March 4, 2020.

It is noted that though this corner falls on a range line, the corners for the adjacent sections represent a common corner with no offset due to the presence of the west line of the Thorntown Reserve to the east and the practice by the federal subdividing surveyors of 1822 of not establishing closing corners on the range line



*Kenneth E. Hedge*  
 Kenneth E. Hedge, County Surveyor

*James S. Swift*  
 James S. Swift, IN LS 20200054

April 1, 2020

Franklin Township  
 Montgomery County

Sugar Creek Township  
 Boone County

Section 36 T20N, R3W	Section 31 T20N, R2W
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# SECTION CORNER RECORD

NW 700-1200

## BOONE COUNTY SURVEYOR'S OFFICE

State Plane grid coordinates NAD83 (2011):

North: 1782772.12 East: 3061108.91 (U.S. survey feet)

Type of monument: Iron pin in concrete

Depth: Four inches below adjacent road surface

Indiana tie card references:

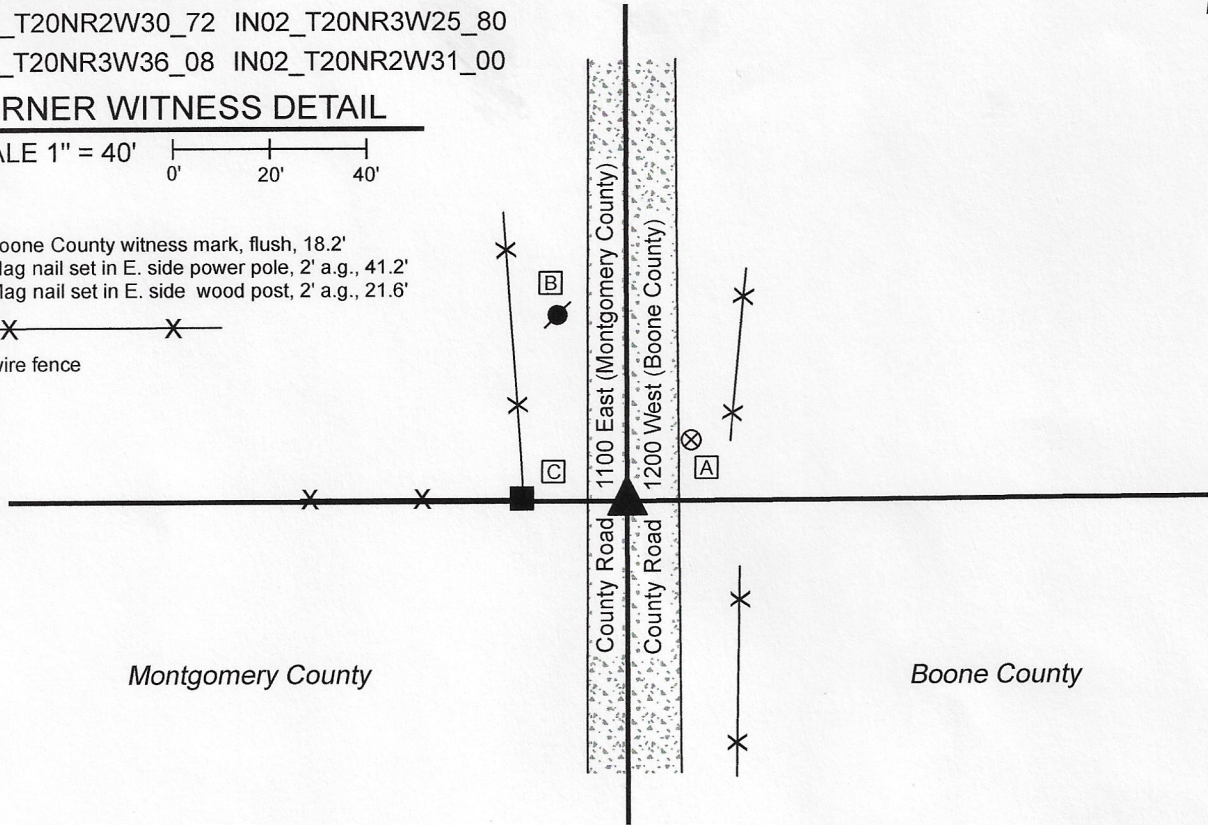
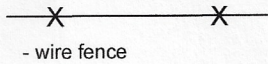
IN02\_T20NR2W30\_72 IN02\_T20NR3W25\_80

IN02\_T20NR3W36\_08 IN02\_T20NR2W31\_00

### CORNER WITNESS DETAIL

SCALE 1" = 40'

- A - Boone County witness mark, flush, 18.2'
- B - Mag nail set in E. side power pole, 2' a.g., 41.2'
- C - Mag nail set in E. side wood post, 2' a.g., 21.6'

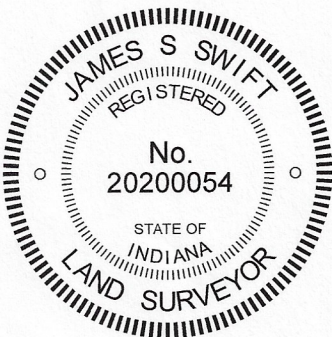


The iron pin in concrete was found and held as marking the corner.

No specific descriptions of this corner were found in the BCS Surveyor's Record beyond the original establishment of the corner as a wood post in 1819 and subsequent holding of the corner in 1822.

The iron pin in concrete is shown as marking the corner on a Section Corner Dossier provided by the Office of the Montgomery County Surveyor dated March 13, 2011. This document references a previous record of July 29, 1985 which shows a stone found at the corner and an additional record of July 27, 1989 which shows the stone as having been replaced by an iron pin in concrete, evidently during a bridge improvement project. The Section Corner Dossier states that excavation was performed in 2011 but no additional subsurface monuments were found. It is accepted that the iron pin in concrete replaced the stone found and held as marking the corner in 1985. The monument was left in place, as found.

It is noted that, though this corner is on a range line, there is no offset and the corners for Montgomery and Boone Counties represent a common corner. This is due to the presence of the east line of the Thorntown Reserve to the east and the fact that the federal subdivision survey of T20N, R2W in 1822 held the standard corner and surveyed east from that corner.



*Kenneth E. Hedge*  
 Kenneth E. Hedge, County Surveyor

*James S. Swift*  
 James S. Swift, IN LS 20200054  
 August 19, 2020

Sugar Creek Township Montgomery County      Sugar Creek Township Boone County

Section 25 T20N, R3W	Section 30 T20N, R2W
Section 36 T20N, R3W	Section 31 T20N, R2W