



**PLANNING & ZONING COMMISSION ZOOM MEETING**  
**Monday January 16, 2023**  
**6:00 P.M.**

**Zoom Information:**

Meeting ID: 672 468 5877

Passcode: 50124

Dial In: 312-626-6799

**AGENDA**

1. Roll Call
2. Motion to approve the minutes from the December 19, 2022 Planning & Zoning Commission Meeting.
3. Public Comments (5-minutes limit for items not on this agenda)
4. Business Items
  - a. Blue Sky Estates Final Plat
  - b. The Landing Final Plat
  - c. 120 South Preliminary Plat
5. Informational Items for Planning & Zoning Consideration/Input
  - a. Council Action Update
    - i. Heinen Residential Subdivision--Passed
    - ii. Site Plan Review Ordinance--Passed
    - iii. PUD Ordinance Update— "limited industrial" clarification--Passed
6. Planning and Zoning Commission Comments
  - a. Next meeting is **Tuesday** February 27, 2023 via Zoom.
7. Adjournment

For more information on this and other agenda items, please call the City Clerk's Office at 515-597-2561 or visit the Clerk's Office, City Administration Building at 515 N. Main Ave. Agendas are available to the public at the City Clerk's Office on Friday morning preceding Monday's Planning & Zoning Commission meeting. Citizens can also request to receive meeting notices and agendas by email by calling the Clerk's Office or sending their request via email.

# **Huxley Planning & Zoning Commission Minutes**

## **December 19, 2022**

Chairman Roger Bierbaum called the Zoom meeting to order at 5:57 P.M.

**ROLL CALL:** Bierbaum, Murphy, Patterson, Frantz, Schonhorst, Mosher present. Ebel absent.

**CITY STAFF PRESENT:** Amy Kaplan- Zoning Clerk, Jolene Lettow-City Clerk.

**CONSULTANTS PRESENT:** Forrest Aldrich, City Engineer

**MINUTES APPROVAL:** Motion by Mosher, second by Patterson to approve the minutes from the November 21, 2022 meeting. 6 Aye. 0 Nay. MCU.

**PUBLIC COMMENTS:** None.

### **BUSINESS ITEMS:**

*Recommendation to Council on Heinen Residential Subdivision-* City engineer and city staff reviewed the site plan and found it acceptable. Murphy questioned if curb and gutter was required? It was discussed and determined that curb and gutter should not be required as this subdivision is outside of city limits. Motion by Bierbaum, second by Murphy to recommend approval of the Heinen Residential Subdivision to City Council but note the following:

- 1) This development is not consistent with the Comprehensive Plan which states this area is to be medium to high density residential housing.
- 2) Curb and gutter should not be required even though Blue Sky Estates has it.

Bierbaum, Murphy, Patterson, Frantz, Mosher, Schonhorst voted yes. MCU.

*Recommendation to Council on Site Plan Review Ordinance--* Motion by Patterson, second by Murphy to recommend approval of the Site Plan Review Ordinance to City Council. Bierbaum, Murphy, Patterson, Mosher, Frantz, Schonhorst voted yes. MCU.

*Recommendation to Council on PUD Ordinance Update- "Limited Industrial" Clarification-* Motion by Mosher, second by Frantz to recommend approval of the PUD ordinance language to Council as proposed by the City Attorney. Bierbaum, Murphy, Patterson, Mosher, Frantz, voted yes. Schonhorst abstained. Motion carried 5 Ayes, 1 abstain.

### **INFORMATIONAL ITEMS FOR PLANNING & ZONING CONSIDERATION/INPUT:**

- *Council Action Update:* Kaplan gave a re-cap of the action taken at the city council meetings on topics that were discussed at last month's Planning & Zoning meeting.

### **PLANNING AND ZONING COMMISSION COMMENTS:**

- Next meeting will be on January 16, 2023 via Zoom.
- Mosher asked about the City Administrator search. Lettow indicated that the search is underway and the hope is to have a candidate hired by the end of February.
- Murphy strongly stated the importance of getting the Comprehensive Plan updated.

**ADJOURNMENT:** Motion – Schonhorst, second- Frantz to adjourn meeting at 6:52 P.M. 6 ayes, 0 nays. MCU.

---

Amy Kaplan, Zoning Clerk

---

Roger Bierbaum, Chairman

---

Date of Approval

**Blue Sky  
Estates  
Final Plat**



**VEENSTRA & KIMM INC.**

3000 Westown Parkway  
West Des Moines, Iowa 50266

515.225.8000 // 800.241.8000  
www.v-k.net

January 12, 2023

Amy Kaplan  
City of Huxley  
515 N. Main Avenue  
Huxley, Iowa 50124

HUXLEY, IOWA  
BLUE SKY ESTATES PLAT 1  
FINAL PLAT

We have reviewed the revised final plat for Blue Sky Estates Plat 1 and find it acceptable with the understanding the following items are completed before the plat is filed with the County:

1. Backyard drainage elevations and slopes will be provided once construction has been completed.
1. Final plat attachments as described in City Ordinance 166.31 are submitted to the City and approved by City staff.
2. A four-year maintenance bond for the public portion of the development is provided once construction has been completed.
3. As constructed plans in electronic pdf format are provided once construction has been completed.
4. GIS coordinates for all as constructed manholes, valve boxes, curb boxes, hydrants and cleanouts in AutoCad format are provided once construction has been completed.
5. A performance bond in the amount of \$1.5 million is provided to cover the cost of the work not yet completed.

Brent Culp  
January 12, 2023  
Page 2

If you have any questions or comments, please contact us at 515-225-8000.

VEENSTRA & KIMM, INC.



Forrest S. Aldrich, P.E.

FSA:rsb  
45277

cc: Jolene Lettow, City of Huxley (email)  
Jeff Peterson, City of Huxley (email)  
Brent Culp, Snyder & Associates (email)  
Don Van Houweling (email)





**SNYDER & ASSOCIATES**

Project No: 121.0211.01

Sheet 2 of 3

**SNYDER & ASSOCIATES, INC.**

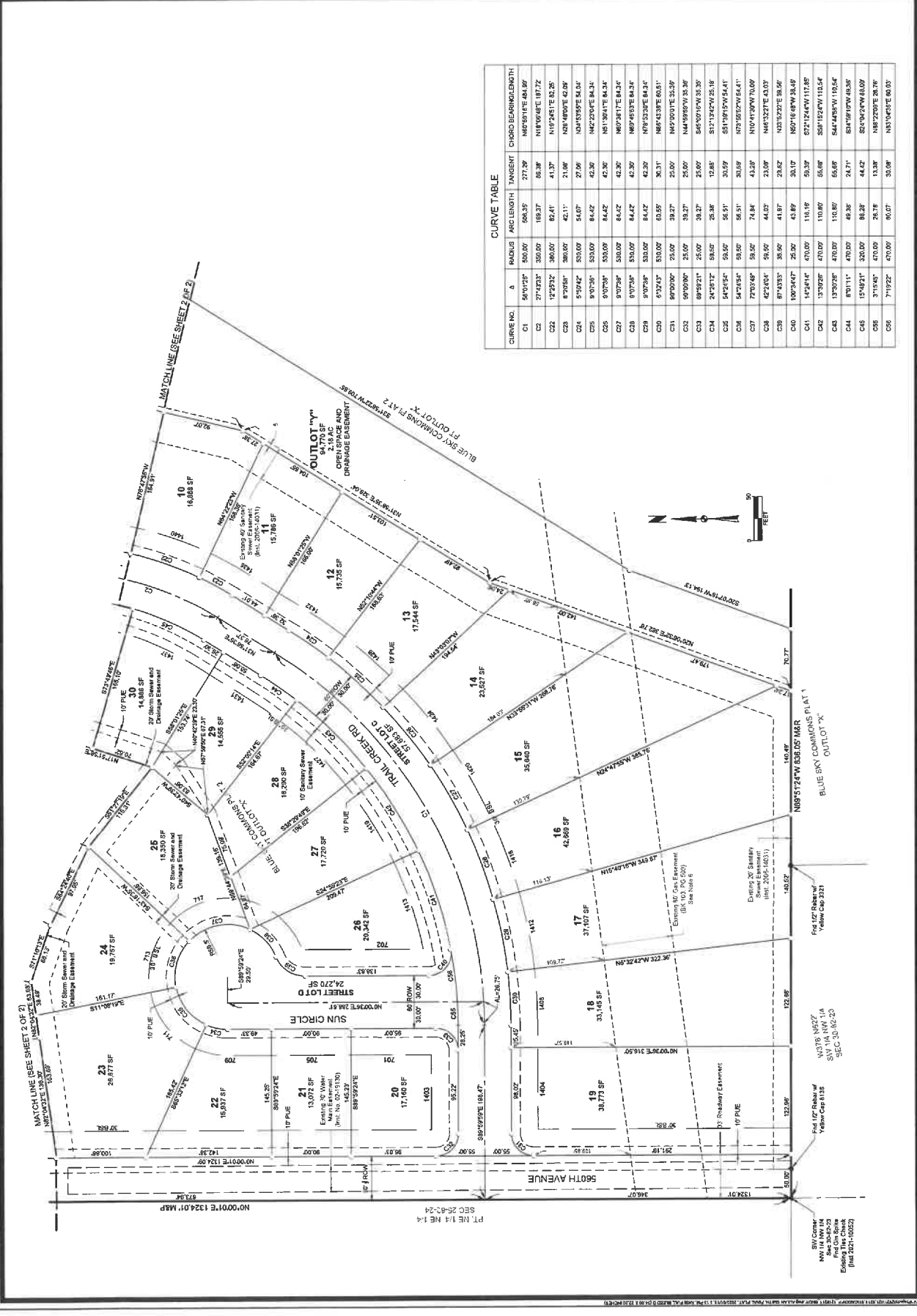
HUXLEY, IOWA

**FINAL PLAT**

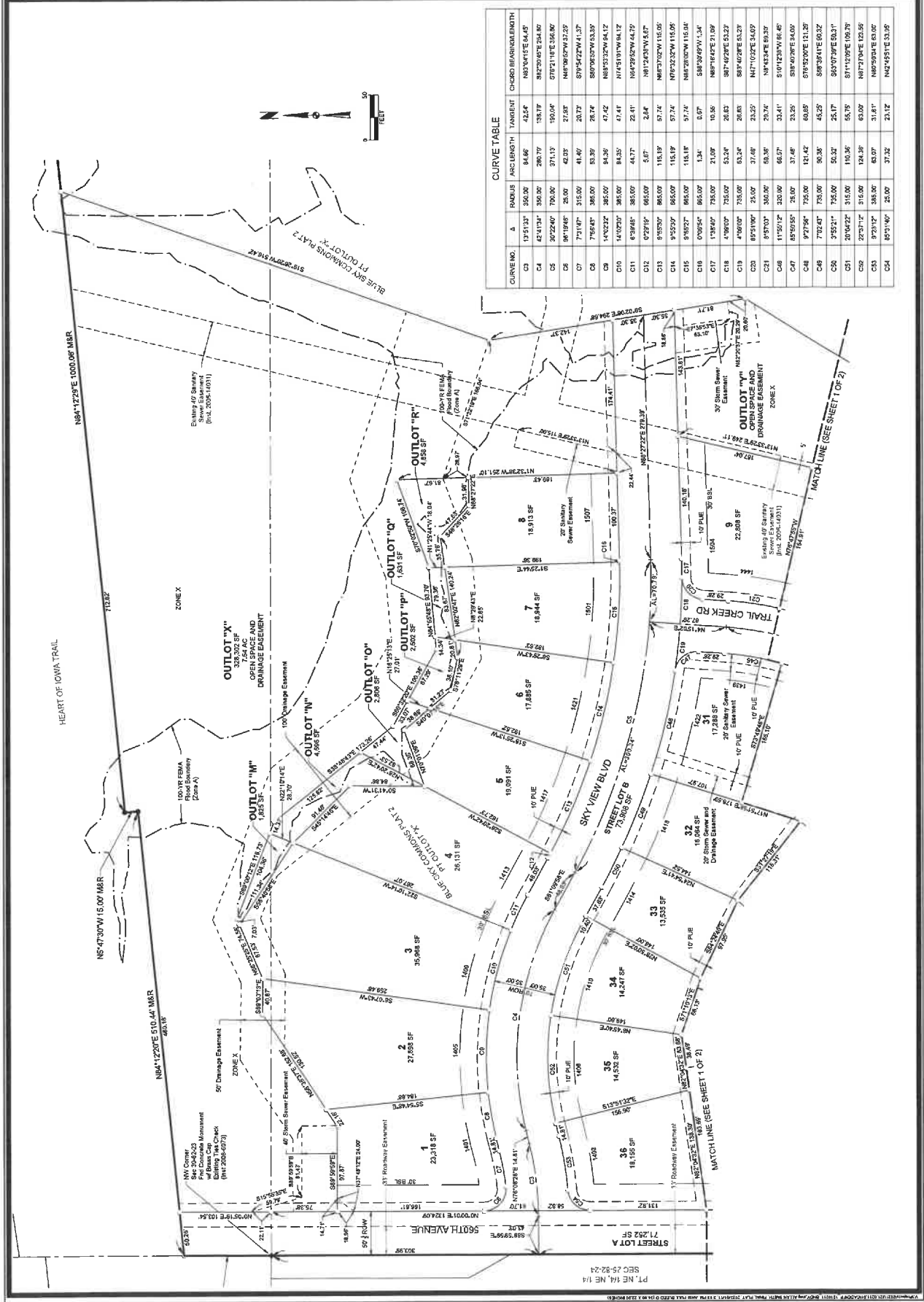
**BLUE SKY ESTATES PLAT 1**

|   |                            |         |     |
|---|----------------------------|---------|-----|
| 2 | REVIEWED PER CITY COMMENTS | 1-12-23 | MWS |
| 1 | STREET NAMES AND ADDRESSES | 12-9-22 | MWS |
| 1 | REVISION                   |         |     |
| 1 | DATE                       |         |     |
| 1 | SCALE: 1" = 50'            |         |     |
| 1 | DATE: 8-12-2022            |         |     |
| 1 | PROJECT: 820-230-10        |         |     |
| 1 | PROJECT: 121.0211.01       |         |     |

Sheet 2 of 3



| CURVE NO. | A       | RADIUS  | ARC LENGTH | TANGENT | CHORD BEARING/LENGTH |
|-----------|---------|---------|------------|---------|----------------------|
| C1        | 50.00'  | 500.00' | 500.00'    | 277.29' | N89°50'15"E 484.89'  |
| C2        | 274.43' | 300.00' | 169.37'    | 68.38'  | N10°06'48"E 187.72'  |
| C3        | 127.52' | 300.00' | 62.41'     | 41.37'  | N10°24'51"E 82.26'   |
| C4        | 87.95'  | 300.00' | 42.11'     | 21.66'  | N24°48'09"E 42.09'   |
| C5        | 57.92'  | 300.00' | 27.69'     | 13.85'  | N45°15'59"E 54.01'   |
| C6        | 37.90'  | 300.00' | 17.42'     | 8.42'   | N62°23'05"E 84.34'   |
| C7        | 27.90'  | 300.00' | 12.86'     | 6.30'   | N80°38'17"E 84.34'   |
| C8        | 17.90'  | 300.00' | 8.42'      | 4.30'   | N89°48'33"E 84.34'   |
| C9        | 7.90'   | 300.00' | 4.30'      | 2.30'   | N89°53'30"E 84.34'   |
| C10       | 2.90'   | 300.00' | 0.85'      | 0.31'   | N89°45'30"E 60.81'   |
| C11       | 89.00'  | 25.00'  | 39.27'     | 25.00'  | N49°50'15"E 35.39'   |
| C12       | 89.00'  | 25.00'  | 39.27'     | 25.00'  | N49°50'15"E 35.39'   |
| C13       | 89.00'  | 25.00'  | 39.27'     | 25.00'  | N49°50'15"E 35.39'   |
| C14       | 24.28'  | 58.00'  | 25.38'     | 12.88'  | S17°12'42"W 25.18'   |
| C15       | 54.21'  | 58.00'  | 25.38'     | 12.88'  | S51°18'15"W 54.41'   |
| C16       | 54.21'  | 58.00'  | 25.38'     | 12.88'  | N73°56'52"W 54.41'   |
| C17       | 72.93'  | 58.00'  | 25.38'     | 12.88'  | N10°41'30"W 70.09'   |
| C18       | 42.24'  | 58.00'  | 25.38'     | 12.88'  | N43°32'27"E 43.03'   |
| C19       | 87.43'  | 58.00'  | 25.38'     | 12.88'  | N35°52'37"E 35.56'   |
| C20       | 100.34' | 25.00'  | 43.89'     | 25.00'  | N50°16'48"W 34.49'   |
| C21       | 142.44' | 40.00'  | 118.18'    | 53.39'  | S71°12'44"W 117.89'  |
| C22       | 137.92' | 40.00'  | 110.87'    | 56.69'  | S51°16'24"W 110.54'  |
| C23       | 137.92' | 40.00'  | 110.87'    | 56.69'  | S44°48'11"W 110.44'  |
| C24       | 87.91'  | 43.00'  | 48.38'     | 24.71'  | S34°49'10"W 43.38'   |
| C25       | 15.48'  | 25.00'  | 86.28'     | 44.42'  | S2°19'24"W 83.09'    |
| C26       | 37.95'  | 40.00'  | 26.76'     | 13.88'  | N88°22'05"E 26.76'   |
| C27       | 77.92'  | 40.00'  | 90.07'     | 33.08'  | N43°10'43"E 80.03'   |



| CURVE NO. | A         | RADIUS  | ARC LENGTH | TANGENT             | CHORD BEARING | CHORD LENGTH |
|-----------|-----------|---------|------------|---------------------|---------------|--------------|
| C1        | 131.13'   | 84.66'  | 42.54'     | N87°41'51"E 64.66'  | 131.13'       | 131.13'      |
| C2        | 42°41'51" | 350.00' | 280.77'    | N87°41'51"E 280.77' | 42°41'51"     | 42°41'51"    |
| C3        | 30°22'40" | 700.00' | 371.13'    | N87°41'51"E 371.13' | 30°22'40"     | 30°22'40"    |
| C4        | 96°18'46" | 25.00'  | 42.25'     | N87°41'51"E 42.25'  | 96°18'46"     | 96°18'46"    |
| C5        | 7°11'47"  | 315.00' | 41.40'     | N87°41'51"E 41.40'  | 7°11'47"      | 7°11'47"     |
| C6        | 79°24'31" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 79°24'31"     | 79°24'31"    |
| C7        | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C8        | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C9        | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C10       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C11       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C12       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C13       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C14       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C15       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C16       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C17       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C18       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C19       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C20       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C21       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C22       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C23       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C24       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C25       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C26       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C27       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C28       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C29       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C30       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C31       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C32       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C33       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |
| C34       | 14°32'22" | 365.00' | 53.30'     | N87°41'51"E 53.30'  | 14°32'22"     | 14°32'22"    |

# **The Landing**

## **Final Plat**



**VEENSTRA & KIMM INC.**

3000 Westown Parkway  
West Des Moines, Iowa 50266

515.225.8000 // 800.241.8000  
www.v-k.net

January 12, 2023

Amy Kaplan  
City of Huxley  
515 N. Main Avenue  
Huxley, Iowa 50124

HUXLEY, IOWA  
NORTH PRAIRIE VIEW DEVELOPMENT PLAT 2  
FINAL PLAT

We have reviewed the final plat North Prairie View Development Plat 2 and find it acceptable with the understanding the following items are completed before the plat is filed with the County:

1. Final plat attachments as described in City Ordinance 166.31 are submitted to the City and approved by City staff.
2. A four-year maintenance bond for the public portion of the sanitary sewer is provided.
3. As constructed plans in electronic pdf format are provided.
4. GIS coordinates for all as constructed manholes, valve boxes, curb boxes, hydrants and cleanouts in AutoCad format.

If you have any questions or comments, please contact us at 515-225-8000.

VEENSTRA & KIMM, INC.

A handwritten signature in blue ink that reads "Forrest Aldrich".

Forrest S. Aldrich

FSA:rsb  
45229-061

cc: Jolene Lettow, City of Huxley (e-mail)  
Jeff Peterson, City of Huxley (e-mail)  
Chris Gardner, Bella Homes (e-mail)  
Adam Schoeppner, Niles Associates, Inc. (e-mail)

COUNTY: STORY COUNTY, IOWA CITY: HUXLEY  
LOCATION:  
NORTHON PROPIRE VIEW PLAT 2 LOT 1 & OUTLOT "A"  
SECTION 28, TWP 62 S RANGE 9 W  
PARCEL # OF PARCELS TOTAL IN NE 1/4  
PROPRIETOR: MR STORACE, LC  
PROPERTY NUMBER  
REQUESTED BY: PO BOX 74  
HUXLEY, IOWA 50724  
PHONE: (515) 401-6915  
SURVEY COMPANY: THAREN J. HELGERTSON, PLS #18330  
RETURN TO: THAREN J. HELGERTSON  
P.O. BOX 74  
1250 SW STATE STREET, SUITE A  
HUXLEY, IOWA 50023 PH (515) 95-0071

[illegible]

1. The south line of Lot 1, NORTH PRAIRIE VIEW DEVELOPMENT, is assumed to bear South 44 degrees 50 minutes 25 seconds West.
2. The side line within Zone X with areas of minimal flood hazard, as shown on the Flood Insurance Rate Map Community Panel Number 19169 CD200 F, with an effective date of January 15, 2021.

**Soak Regulations:**

- Front Yard Setback - 25 feet
- Rear Yard Setback - 25 feet
- Side Yard Setback - 0 feet unless abutting residential lot

I HEREBY CERTIFY THAT THIS LAND SURVEYING DOCUMENT WAS PREPARED AND THE  
RELATED SURVEY WORKS WERE PERFORMED BY ME OR UNDER MY CLOSE PERSONAL  
SUPERVISION AND THAT I AM A DULY LICENSED LAND SURVEYOR UNDER THE LAWS OF THE  
STATE OF IOWA.  
*[Signature]*  
DATE \_\_\_\_\_  
SURVEY ONLY

THOMAS H. HARRISON, L.S. NO. 18630  
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2022

18630  
IOWA PROFESSIONAL SURVEYOR  
T. HARRISON

1. Top of rim of existing sanitary manhole, located on the southeasterly line of Lot 1, NORTH PRAIRIE VIEW DEVELOPMENT PLAT 2, at the west edge of the concrete sidewalk, approximately 18 southeasterly of the easterly corner of said lot 1. Elevation = 101.458 (NAVD83)
2. Cut "X" on top of the concrete curb at the north corner of the driveway parking lot, approximately 58 feet southeasterly of Benchmark #1 along the existing sidewalk. Elevation = 101.807 (NAVD83)

|        |                                                                      |
|--------|----------------------------------------------------------------------|
| ▲      | Found section corner monument as noted                               |
| ●      | Found monument 5/8" IR with yellow cap #17758 unless otherwise noted |
| ○      | Sat monument 5/8" IR with red cap #18530 unless otherwise noted      |
| IP     | Round iron rebar (outside diameter)                                  |
| P.U.E. | Round iron pipe (outside diameter)                                   |
| (R)    | Public Utility Easement                                              |
|        | Record dimension                                                     |
|        | Lot Address                                                          |
|        | (1234)                                                               |

| CURVE TABLE |        |         |         |                |
|-------------|--------|---------|---------|----------------|
| Curve #     | Length | Radius  | Delta   | Chord Distance |
| C1          | 40.11  | 130.007 | 114.007 | 40.007         |
| C2          | 50.24  | 107.007 | 107.007 | 50.007         |
| C3          | 59.34  | 93.007  | 103.007 | 50.007         |
| C4          | 67.38  | 82.007  | 97.007  | 50.007         |
| C5          | 74.38  | 73.007  | 90.007  | 50.007         |
| C6          | 80.38  | 66.007  | 83.007  | 50.007         |
| C7          | 85.38  | 60.007  | 77.007  | 50.007         |
| C8          | 89.38  | 55.007  | 72.007  | 50.007         |
| C9          | 92.38  | 51.007  | 68.007  | 50.007         |
| C10         | 94.38  | 47.007  | 64.007  | 50.007         |
| C11         | 95.38  | 44.007  | 61.007  | 50.007         |
| C12         | 96.38  | 41.007  | 58.007  | 50.007         |
| C13         | 97.38  | 38.007  | 55.007  | 50.007         |
| C14         | 98.38  | 35.007  | 52.007  | 50.007         |
| C15         | 99.38  | 32.007  | 49.007  | 50.007         |
| C16         | 100.38 | 30.007  | 47.007  | 50.007         |
| C17         | 101.38 | 28.007  | 45.007  | 50.007         |
| C18         | 102.38 | 26.007  | 43.007  | 50.007         |
| C19         | 103.38 | 24.007  | 41.007  | 50.007         |
| C20         | 104.38 | 22.007  | 39.007  | 50.007         |
| C21         | 105.38 | 20.007  | 37.007  | 50.007         |
| C22         | 106.38 | 18.007  | 35.007  | 50.007         |
| C23         | 107.38 | 16.007  | 33.007  | 50.007         |
| C24         | 108.38 | 14.007  | 31.007  | 50.007         |
| C25         | 109.38 | 12.007  | 29.007  | 50.007         |
| C26         | 110.38 | 10.007  | 27.007  | 50.007         |
| C27         | 111.38 | 8.007   | 25.007  | 50.007         |
| C28         | 112.38 | 6.007   | 23.007  | 50.007         |
| C29         | 113.38 | 4.007   | 21.007  | 50.007         |
| C30         | 114.38 | 2.007   | 19.007  | 50.007         |

**120 South  
Preliminary  
Plat**



**VEENSTRA & KIMM INC.**

3000 Westown Parkway  
West Des Moines, Iowa 50266

515.225.8000 // 800.241.8000  
www.v-k.net

January 13, 2023

Amy Kaplan  
City of Huxley  
515 N. Main Avenue  
Huxley, Iowa 50124

HUXLEY, IOWA  
120 SOUTH  
PRELIMINARY PLAT

We have reviewed the revised preliminary plat for 120 South and offer the following comments:

1. It should be noted the trail along Main Avenue and Anthem Drive is proposed to be 8' wide.
2. The hammerhead type turnarounds at the west end of Anthem Drive and at the south end of Main Avenue need to be hard surfaced and extend on both sides of the street.
3. The sanitary sewer flows generated from the development are still being reviewed and will need further discussions with the developer's engineer.
4. The drinking water demands from the development are still being reviewed and will need further discussions with the developer's engineer.

The stormwater drainage plans are being reviewed separately.

If you have any questions or comments, please contact us at 515-225-8000.

VEENSTRA & KIMM, INC.

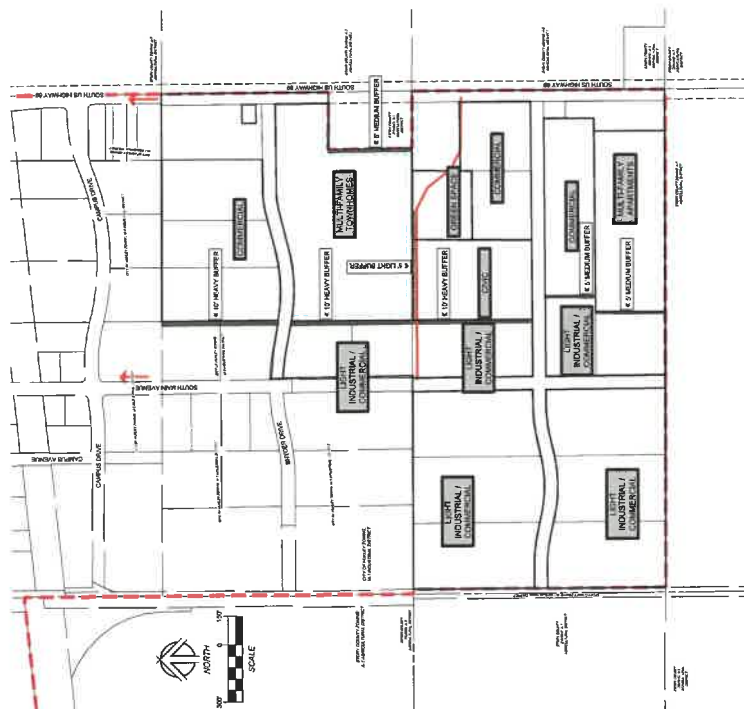
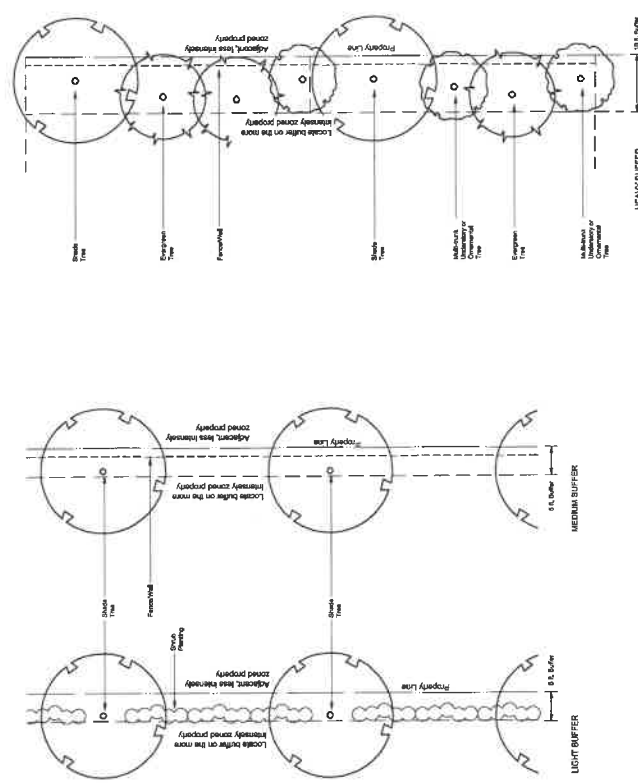
Forrest S. Aldrich

FSA:rsb

45229-079

cc: Chris Gardner (e-mail)  
Adam Schoeppner, Niles Associates, Inc. (e-mail)  
Jeff Peterson, City of Huxley (e-mail)  
Keith Vitzthum, City of Huxley (e-mail)  
Mat Kahler, City of Huxley (e-mail)  
A.J. Stumpfer, City of Huxley (e-mail)  
Jolene Lettow, City of Huxley (e-mail)





## LANDSCAPE BUFFER REQUIREMENTS

- HEAVY BUFFER**
1. **Buffer Capacity:** The buffer's capacity to resist a change in pH upon the addition of a strong acid or base. It is determined by the concentration of the buffer components and the pH of the solution.
2. **Buffer Range:** The pH range over which the buffer is effective. It is typically one pH unit above and below the pKa of the weak acid component.
3. **Buffer Components:** A weak acid and its conjugate base, or a weak base and its conjugate acid. The buffer capacity is maximized when the concentrations of the two components are equal.
4. **Buffer Preparation:** The buffer is prepared by mixing a known volume of a stock solution of the weak acid with a known volume of a stock solution of the conjugate base. The final pH is adjusted to the desired value.
5. **Buffer Storage:** The buffer should be stored in a clean, dark glass bottle at room temperature. It should be protected from light and air to prevent degradation.
6. **Buffer Use:** The buffer is used to maintain a constant pH in a reaction mixture. It is added to the reaction mixture before the reaction begins.
7. **Buffer Limitations:** The buffer is not effective at pH values outside its buffer range. It is also not effective at high concentrations of strong acids or bases.
8. **Buffer Safety:**
- a. **Wear Protective Gear:** Always wear safety glasses and gloves when handling the buffer.
- b. **Label the Bottle:** The buffer bottle should be clearly labeled with the name of the buffer and its concentration.
- c. **Store Properly:** The buffer should be stored in a cool, dark place, away from direct sunlight.
- d. **Dispose Properly:** The buffer should be disposed of according to the local regulations for chemical waste.
9. **Buffer Troubleshooting:**
- a. **Check the pH:** If the pH of the buffer is not as expected, check the concentrations of the components and the pH of the stock solutions.
- b. **Check the Volume:** If the volume of the buffer is not as expected, check the volumes of the stock solutions and the final volume of the buffer.
- c. **Check the Temperature:** The pH of the buffer can change with temperature. Make sure the buffer is at the correct temperature when you measure the pH.
- d. **Check the Storage:** If the buffer has been stored for a long time, it may have degraded. Check the pH and the appearance of the buffer.
10. **Buffer Conclusion:** The buffer is a crucial component in many chemical reactions. It helps to maintain a constant pH, which is essential for the reaction to proceed as expected. By following the steps outlined above, you can prepare and use a buffer effectively.
- MEDIUM BUFFER**
1. **Buffer Capacity:** The buffer's capacity to resist a change in pH upon the addition of a strong acid or base. It is determined by the concentration of the buffer components and the pH of the solution.
2. **Buffer Range:** The pH range over which the buffer is effective. It is typically one pH unit above and below the pKa of the weak acid component.
3. **Buffer Components:** A weak acid and its conjugate base, or a weak base and its conjugate acid. The buffer capacity is maximized when the concentrations of the two components are equal.
4. **Buffer Preparation:** The buffer is prepared by mixing a known volume of a stock solution of the weak acid with a known volume of a stock solution of the conjugate base. The final pH is adjusted to the desired value.
5. **Buffer Storage:** The buffer should be stored in a clean, dark glass bottle at room temperature. It should be protected from light and air to prevent degradation.
6. **Buffer Use:** The buffer is used to maintain a constant pH in a reaction mixture. It is added to the reaction mixture before the reaction begins.
7. **Buffer Limitations:** The buffer is not effective at pH values outside its buffer range. It is also not effective at high concentrations of strong acids or bases.
8. **Buffer Safety:**
- a. **Wear Protective Gear:** Always wear safety glasses and gloves when handling the buffer.
- b. **Label the Bottle:** The buffer bottle should be clearly labeled with the name of the buffer and its concentration.
- c. **Store Properly:** The buffer should be stored in a cool, dark place, away from direct sunlight.
- d. **Dispose Properly:** The buffer should be disposed of according to the local regulations for chemical waste.
9. **Buffer Troubleshooting:**
- a. **Check the pH:** If the pH of the buffer is not as expected, check the concentrations of the components and the pH of the stock solutions.
- b. **Check the Volume:** If the volume of the buffer is not as expected, check the volumes of the stock solutions and the final volume of the buffer.
- c. **Check the Temperature:** The pH of the buffer can change with temperature. Make sure the buffer is at the correct temperature when you measure the pH.
- d. **Check the Storage:** If the buffer has been stored for a long time, it may have degraded. Check the pH and the appearance of the buffer.
10. **Buffer Conclusion:** The buffer is a crucial component in many chemical reactions. It helps to maintain a constant pH, which is essential for the reaction to proceed as expected. By following the steps outlined above, you can prepare and use a buffer effectively.
- LIGHT BUFFER**
1. **Buffer Capacity:** The buffer's capacity to resist a change in pH upon the addition of a strong acid or base. It is determined by the concentration of the buffer components and the pH of the solution.
2. **Buffer Range:** The pH range over which the buffer is effective. It is typically one pH unit above and below the pKa of the weak acid component.
3. **Buffer Components:** A weak acid and its conjugate base, or a weak base and its conjugate acid. The buffer capacity is maximized when the concentrations of the two components are equal.
4. **Buffer Preparation:** The buffer is prepared by mixing a known volume of a stock solution of the weak acid with a known volume of a stock solution of the conjugate base. The final pH is adjusted to the desired value.
5. **Buffer Storage:** The buffer should be stored in a clean, dark glass bottle at room temperature. It should be protected from light and air to prevent degradation.
6. **Buffer Use:** The buffer is used to maintain a constant pH in a reaction mixture. It is added to the reaction mixture before the reaction begins.
7. **Buffer Limitations:** The buffer is not effective at pH values outside its buffer range. It is also not effective at high concentrations of strong acids or bases.
8. **Buffer Safety:**
- a. **Wear Protective Gear:** Always wear safety glasses and gloves when handling the buffer.
- b. **Label the Bottle:** The buffer bottle should be clearly labeled with the name of the buffer and its concentration.
- c. **Store Properly:** The buffer should be stored in a cool, dark place, away from direct sunlight.
- d. **Dispose Properly:** The buffer should be disposed of according to the local regulations for chemical waste.
9. **Buffer Troubleshooting:**
- a. **Check the pH:** If the pH of the buffer is not as expected, check the concentrations of the components and the pH of the stock solutions.
- b. **Check the Volume:** If the volume of the buffer is not as expected, check the volumes of the stock solutions and the final volume of the buffer.
- c. **Check the Temperature:** The pH of the buffer can change with temperature. Make sure the buffer is at the correct temperature when you measure the pH.
- d. **Check the Storage:** If the buffer has been stored for a long time, it may have degraded. Check the pH and the appearance of the buffer.
10. **Buffer Conclusion:** The buffer is a crucial component in many chemical reactions. It helps to maintain a constant pH, which is essential for the reaction to proceed as expected. By following the steps outlined above, you can prepare and use a buffer effectively.

[illegible]

1. Land Area: 118.84 acres
2. Proposed Zoning: R-5 Plat
3. South Main Avenue and F

are classified as minor  
with a minimum 6-inch thick  
base.

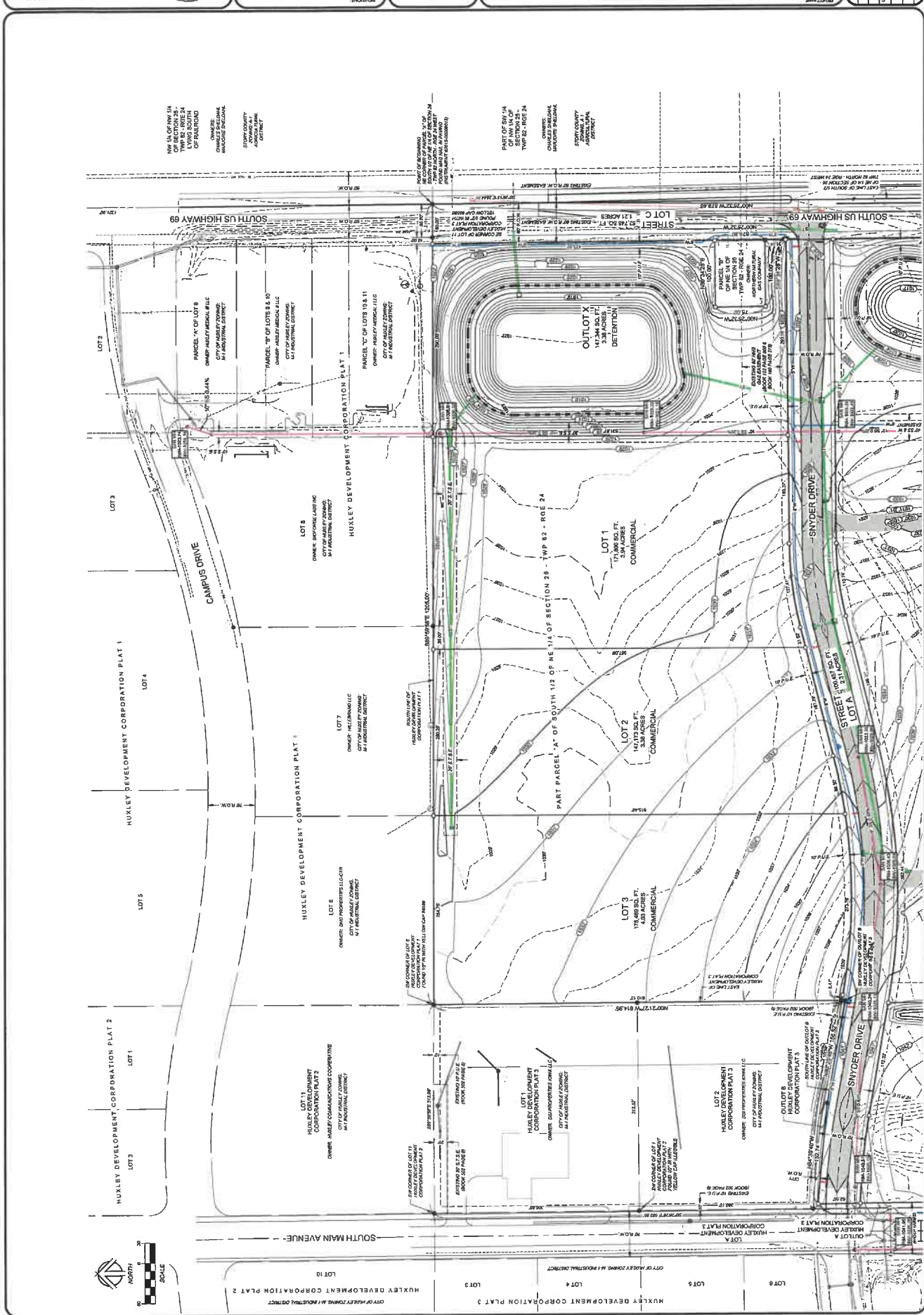
That part of Parcel "A" of the South Half of the Northeast Quarter of Section 26, Township 82 North, Range 24 West of the 5th P.M., Story County, Iowa, as shown on the plat of survey recorded as S&Ls 181 Page 08 with the Story County Recorder's Office; AND that part of the North Half of the Southwest Quarter of said Section 26, and being more particularly described as follows:

[illegible]

**NILTES ASSOCIATES**  
1803 SW MAGAZINE ROAD  
AGREENT, IOWA 50023-2656  
(515) 966-0121 phone • (515) 965-0322  
Civil Engineering • Land Surveying  
Landscape Architecture

[illegible]

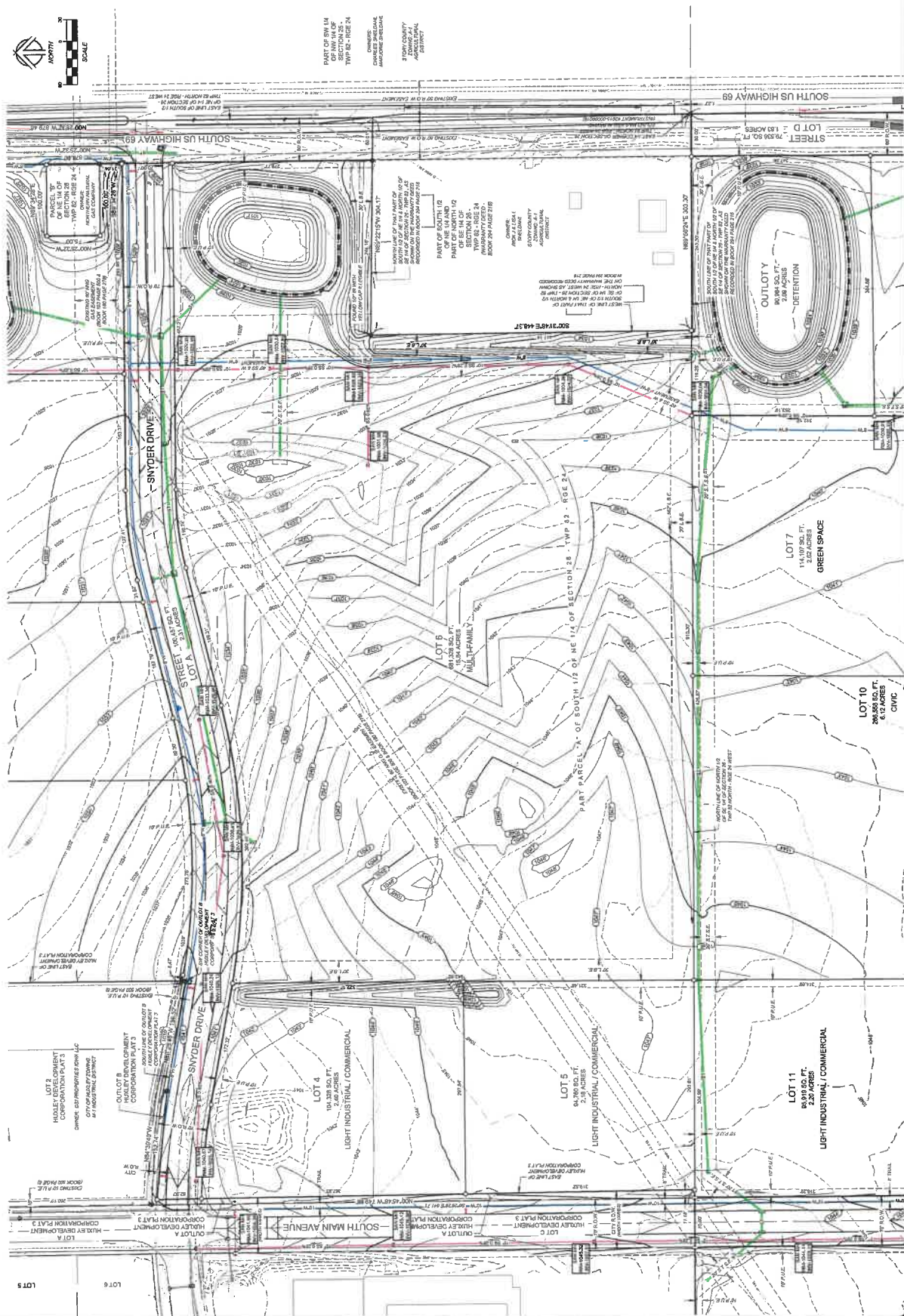
|      |          |
|------|----------|
| DATE | 22069    |
| TIME | 01172000 |
| WAVE | AD3      |
| MODE | JPN      |
| WAVE | 24 X 30  |
| MODE | PP-1     |
| WAVE | 9/s      |



|                |            |
|----------------|------------|
| and no.        | 22059      |
| DATE           | 01/12/2003 |
| ISSUED BY      | ADJ        |
| DESIGNED BY    | JPH        |
| 0-001<br>PAGE  | 24" X 36"  |
| 0-003<br>TITLE | PP-3       |
| 0-007<br>NO    | 5/8        |

120 SOUTH MASTERPLAN  
HUGLEY, IOWA  
PRELIMINARY PLAT

**NILES ASSOCIATES**  
1933 SW MILWAUKEE BLVD  
AGGRAENT, IOWA 50023-2565  
(515) 966-0123 phone • (515) 966-3322 fax  
Civil Engineering • Land Surveying  
Landscape Architecture

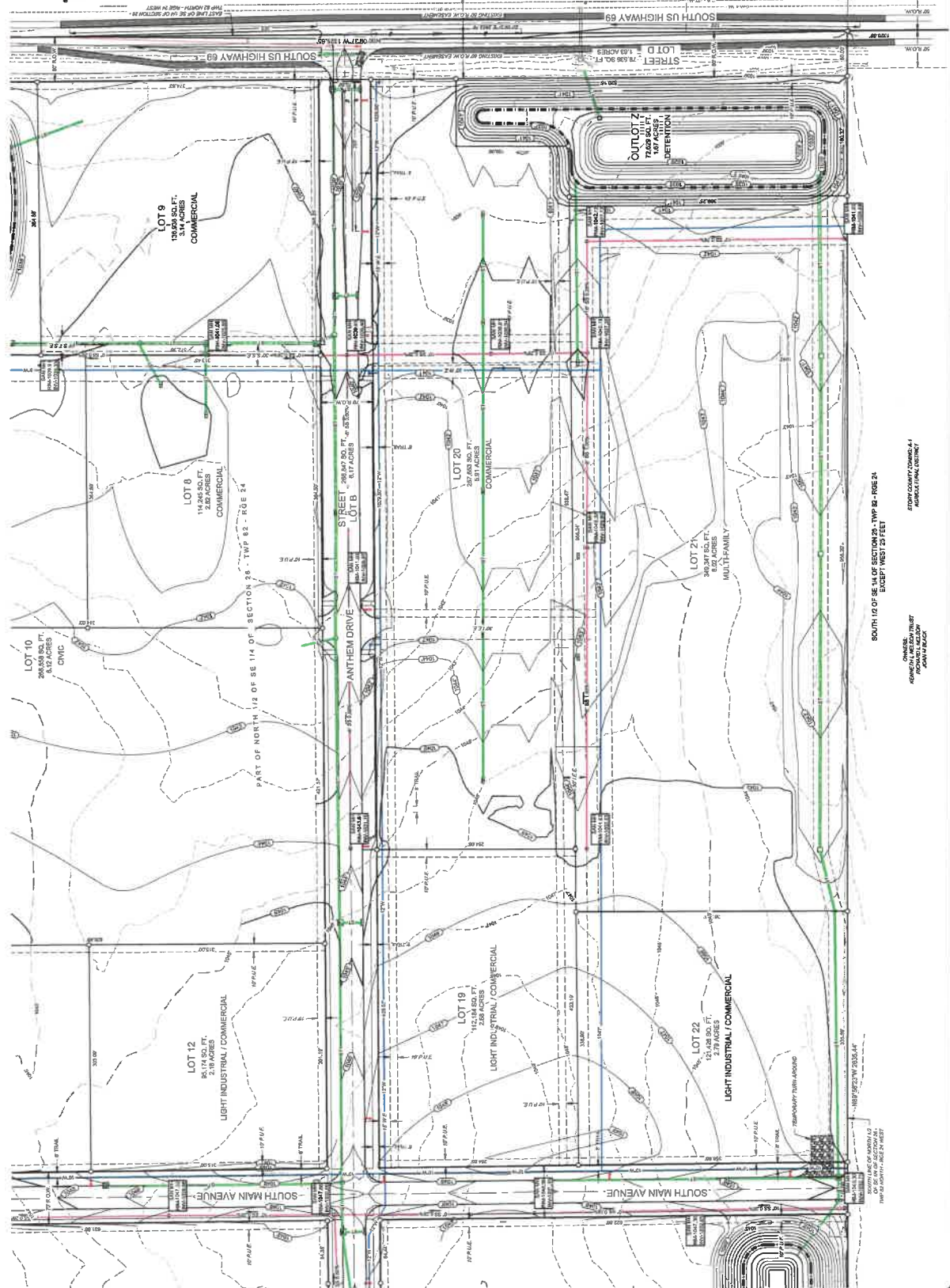
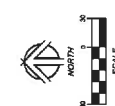


|             |                      |
|-------------|----------------------|
| DATE        | 2/20/2018            |
| BY          | W. J. KIM            |
| CHECKED BY  | W. J. KIM            |
| SCALE       | 1" = 40'             |
| PROJECT NO. | 120 SOUTH MASTERPLAN |
| CLIENT      | W. J. KIM            |
| DESIGNER    | W. J. KIM            |
| CONTRACTOR  | W. J. KIM            |
| OWNER       | W. J. KIM            |

PRELIMINARY PLAN  
120 SOUTH MASTERPLAN  
W. J. KIM

120 SOUTH MASTERPLAN  
W. J. KIM

120 SOUTH MASTERPLAN  
W. J. KIM



SOUTH 1/2 OF SE 1/4 OF SECTION 25 - TWP 22 - RGE 24  
SHEET FIRST OF TWO

OWNER: W. J. KIM  
DESIGNER: W. J. KIM  
CONTRACTOR: W. J. KIM  
OWNER: W. J. KIM



