

aschwartz  
Nov 30, 2022 9:41 am  
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| LEGEND |                            |  |                           |
|--------|----------------------------|--|---------------------------|
|        | Existing Section Line      |  | Proposed Right-of-Way     |
|        | Existing Right-of-Way Line |  | Proposed Property Line    |
|        | Existing Lot Line          |  | Proposed Lot Line         |
|        | Existing Easement Line     |  | Proposed Easement         |
|        | Existing Curb & Gutter     |  | Proposed Curb & Gutter    |
|        | Existing Sidewalk          |  | Proposed Sidewalk         |
|        | Existing Storm Sewer       |  | Proposed Storm Sewer      |
|        | Existing Storm Structure   |  | Proposed Storm Structure  |
|        | Existing Waterline         |  | Proposed Fire Hydrant     |
|        | Existing Gas Main          |  | Proposed Waterline        |
|        | Existing Sanitary Sewer    |  | Proposed Sanitary Sewer   |
|        | Existing Sanitary Manhole  |  | Proposed Sanitary Manhole |
|        | Existing Contour Major     |  | Proposed Contour Major    |
|        | Existing Contour Minor     |  | Proposed Contour Minor    |
|        |                            |  | Future Curb and Gutter    |
|        | Utility Easement           |  |                           |
|        | Sanitary Sewer Easement    |  | Access Easement           |
|        | Drainage Easement          |  | Temporary Easement        |

Lot 2 Legal Description:

A TRACT OF LAND BEING LOCATED IN SECTION 29, TOWNSHIP 48, RANGE 31, LEE'S SUMMIT, JACKSON COUNTY MISSOURI, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF LOT 4 OF RICE ACRES, LOTS 4 & 5, A SUBDIVISION IN SAID LEE'S SUMMIT, MISSOURI; THENCE NORTH 88° 38' 41" WEST, A DISTANCE OF 84.60 FEET TO THE POINT OF BEGINNING; THENCE NORTH 88° 38' 41" WEST, A DISTANCE OF 256.00 FEET; THENCE NORTH 1° 23' 04" EAST, A DISTANCE OF 276.31 FEET; THENCE SOUTH 88° 38' 51" EAST, A DISTANCE OF 255.59 FEET; THENCE ALONG A CURVE TO THE RIGHT TANGENT TO THE PRECEDING COURSE AND HAVING A RADIUS OF 15.00 FEET, AN ARC DISTANCE OF 23.57 FEET; THENCE SOUTH 1° 23' 04" WEST, A DISTANCE OF 172.36; THENCE SOUTH 13° 21' 00" WEST, A DISTANCE OF 37.98 FEET; THENCE ALONG A CURVE TO THE LEFT TANGENT TO THE PRECEDING COURSE AND HAVING A RADIUS OF 328.00 FEET, AN ARC DISTANCE OF 552.28 FEET TO THE POINT OF BEGINNING.

TRACT CONTAINS 73,958.97 SF (1.70 ACRES) MORE OR LESS.

OIL/GAS WELL NOTE:

There is no visible evidence, this date, of abandoned oil or gas wells located within the property boundary as identified in "Environmental Impact Study of Abandoned Oil and Gas Wells in Lee's Summit, Missouri" by Edward Alton May.

FLOOD PLAIN NOTE

According to the FEMA Flood Insurance Rate Map Number 29095C0430G, revised January 20, 2017 portions of this tract lie in: Zone X, AREA OF MINIMAL FLOOD HAZARD.

The information concerning locations of underground utilities shown hereon which are not visible from the surface, has been taken from the records and field locations of the various utility companies and has not been field verified by this company. These locations are not to be construed as accurate or exact.

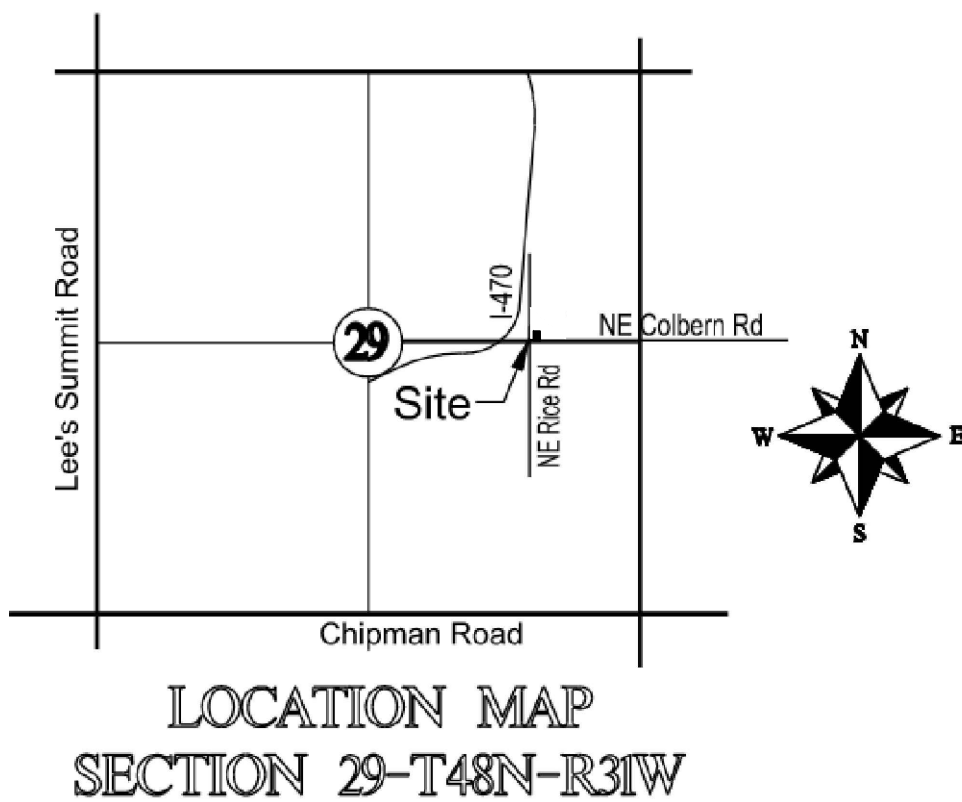
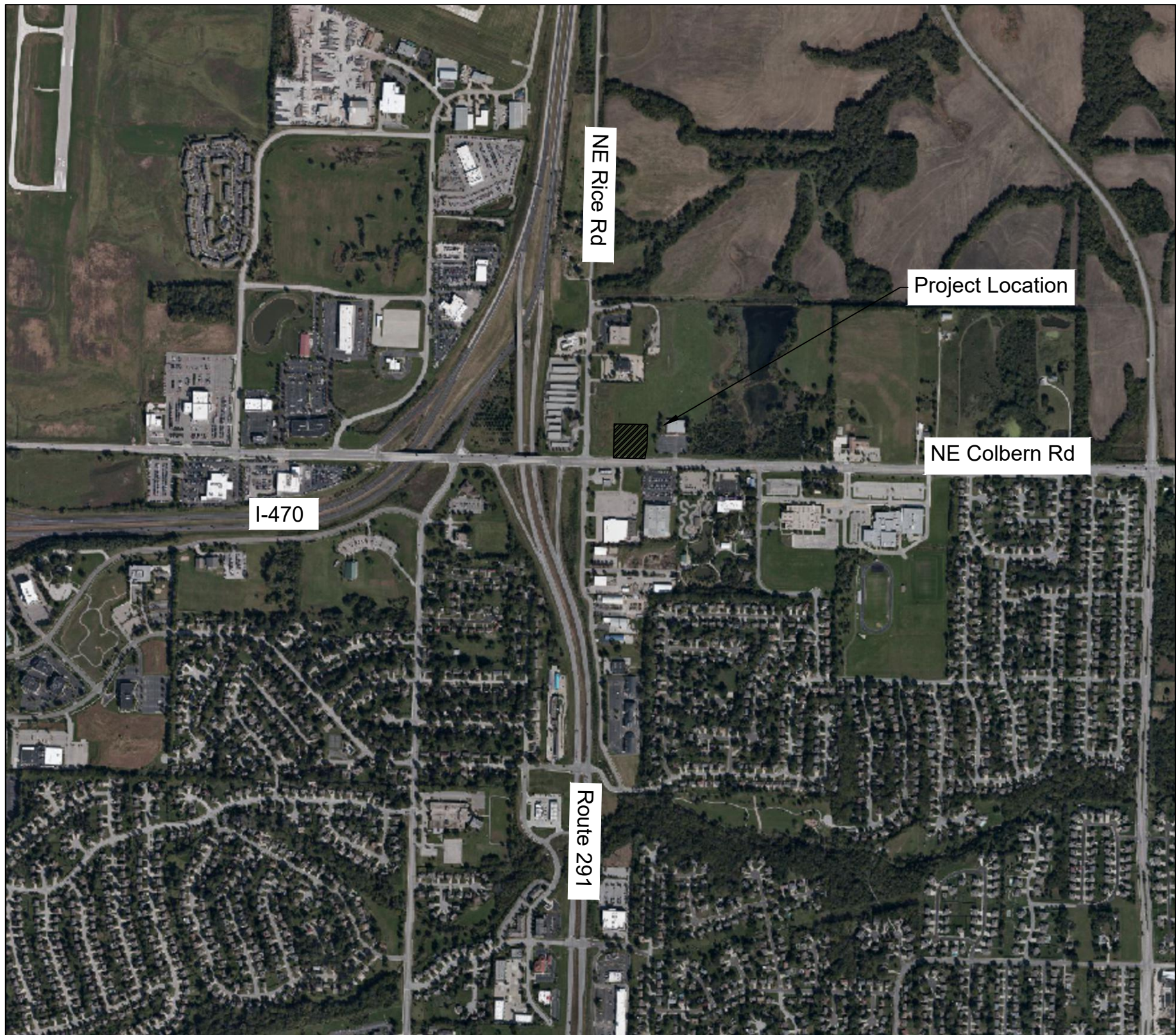


# Heartland Market - Lee's Summit

Lee's Summit, Jackson County, Missouri  
Section 29, Township 48N, Range 31W

## Preliminary Development Plans

Watershed: Little Blue River



| Sheet List Table |                     |
|------------------|---------------------|
| Sheet Number     | Sheet Title         |
| C01              | Title Sheet         |
| C02              | General Layout      |
| C03              | Dimension Plan      |
| C04              | Existing Conditions |
| C05              | Grading Plan        |
| C06              | Utility Plan        |
| C07              | Fire Truck Route    |
| C08              | Trash Truck Route   |
| C09              | Sight Distance Plan |
| L01              | Landscape Plan      |
| E01              | Photometric Plan    |

Preliminary Development Plans  
22-0133  
Heartland Market - Lee's Summit  
Lee's Summit, Jackson County, Missouri

Title Sheet

| NO. | DATE       | REVISION                 |
|-----|------------|--------------------------|
| 3   | 11/28/2022 | Per city Comments        |
| 2   | 10/11/2022 | Revised Per City Comment |
| 1   | 9/9/2022   | PDP Submittal            |

|          |            |
|----------|------------|
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| ZM       | DB         |

**Renaissance**  
Infrastructure  
Consulting

400 E 17TH STREET  
KANSAS CITY, MISSOURI 64108  
816.800.0950  
WWW.RIC-CONSULT.COM

MO Certificate of Authority: E-2010033630

Consultant  
Renaissance Infrastructure Consulting  
Dustin Burton, PE  
400 E 17th St, Kansas City, MO 64108  
(816) 800-0950

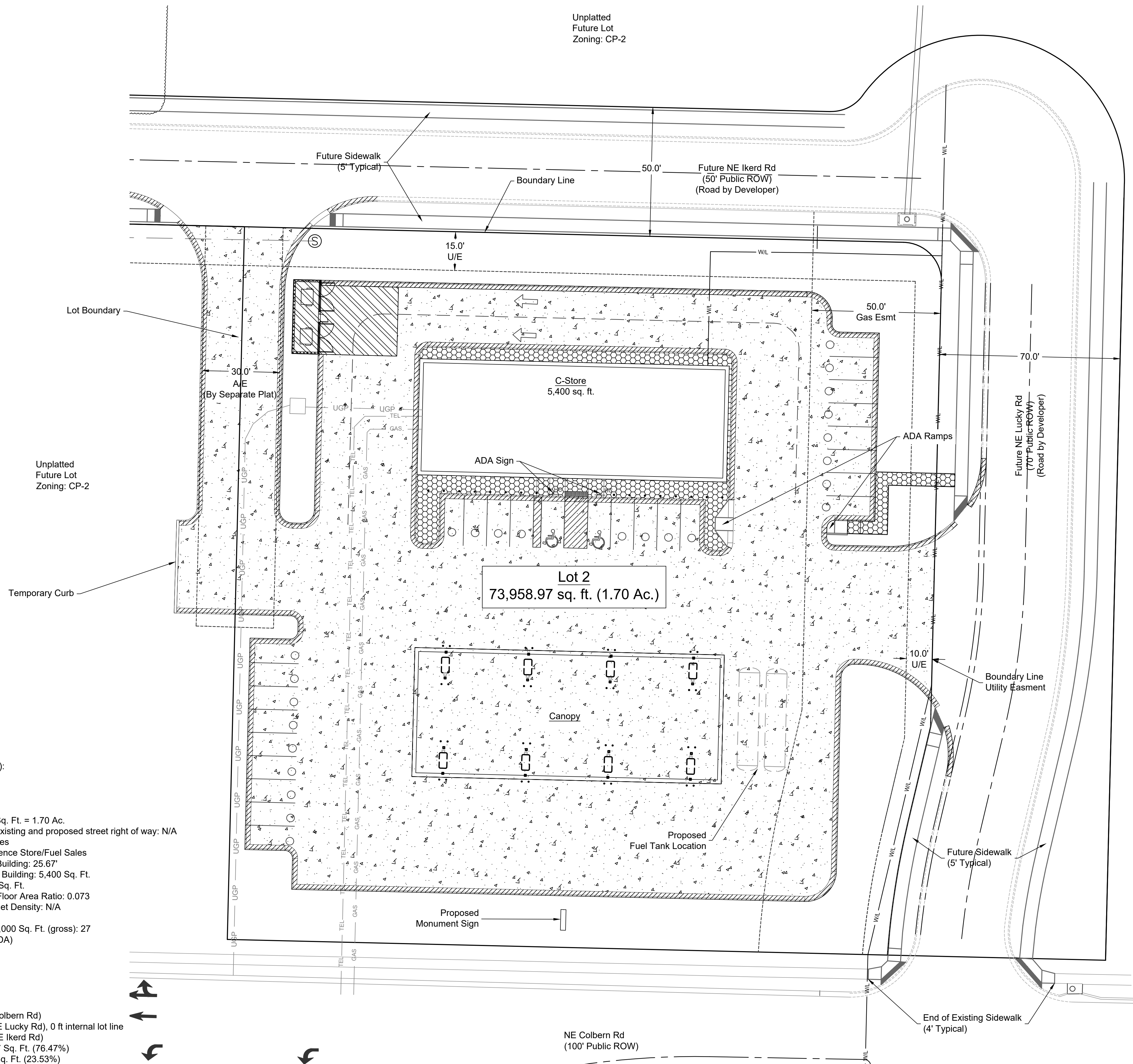
Sheet  
C01



SITE DATA TABLE (Proposed):

LOT 2:

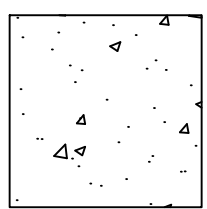
- A. Zoning: CP-2  
B. Total Lot Area: 73,959 Sq. Ft. = 1.70 Ac.  
C. Land Area or acres for existing and proposed street right of way: N/A  
D. Net Land Area: 1.70 Acres  
E. Proposed Use: Convenience Store/Fuel Sales  
F. Height above Grade at Building: 25.67'  
G. Gross Floor Area - Main Building: 5,400 Sq. Ft.  
H. Total Floor Area: 5,400 Sq. Ft.  
I. Building Coverage and Floor Area Ratio: 0.073  
J. Residential Gross and Net Density: N/A  
K. Commercial Parking  
Required - 5 stalls per 1,000 Sq. Ft. (gross): 27  
Provided: 27 Stalls (2 ADA)  
L. Parking Set Back:  
20 ft from Colbern Rd  
15 ft from other roads  
0 ft internal  
M. Building Set Back  
Front yard: 15 ft (from Colbern Rd)  
Side yard: 15 ft (from NE Lucky Rd), 0 ft internal lot line  
Rear yard: 15 ft (from NE Ikerd Rd)  
N. Impervious Area: 56,557 Sq. Ft. (76.47%)  
Pervious Area: 17,402 Sq. Ft. (23.53%)



Lot 4  
Rice Acres, Lots 4 & 5  
Zoning: CP-2

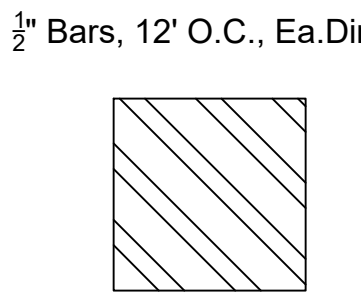
PAVEMENT SECTION DETAILS

PC Concrete Pavement



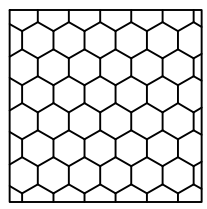
6" PC Concrete Pavement  
(4K KCMMB Mix)  
4" - 3/4" Clean  
Aggregate base  
12" - 95% Standard  
Compacted Soils

Heavy Duty Concrete Pavement

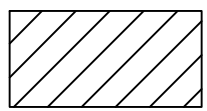


7" PC Concrete Pavement  
(4K KCMMB Mix)  
4" - 3/4" Clean  
Aggregate base  
12" - 95% Standard  
Compacted Soils

Sidewalk Pavement



4" PC Concrete Pavement  
Compacted Low Plasticity  
Subgrade



CG-1 Curb



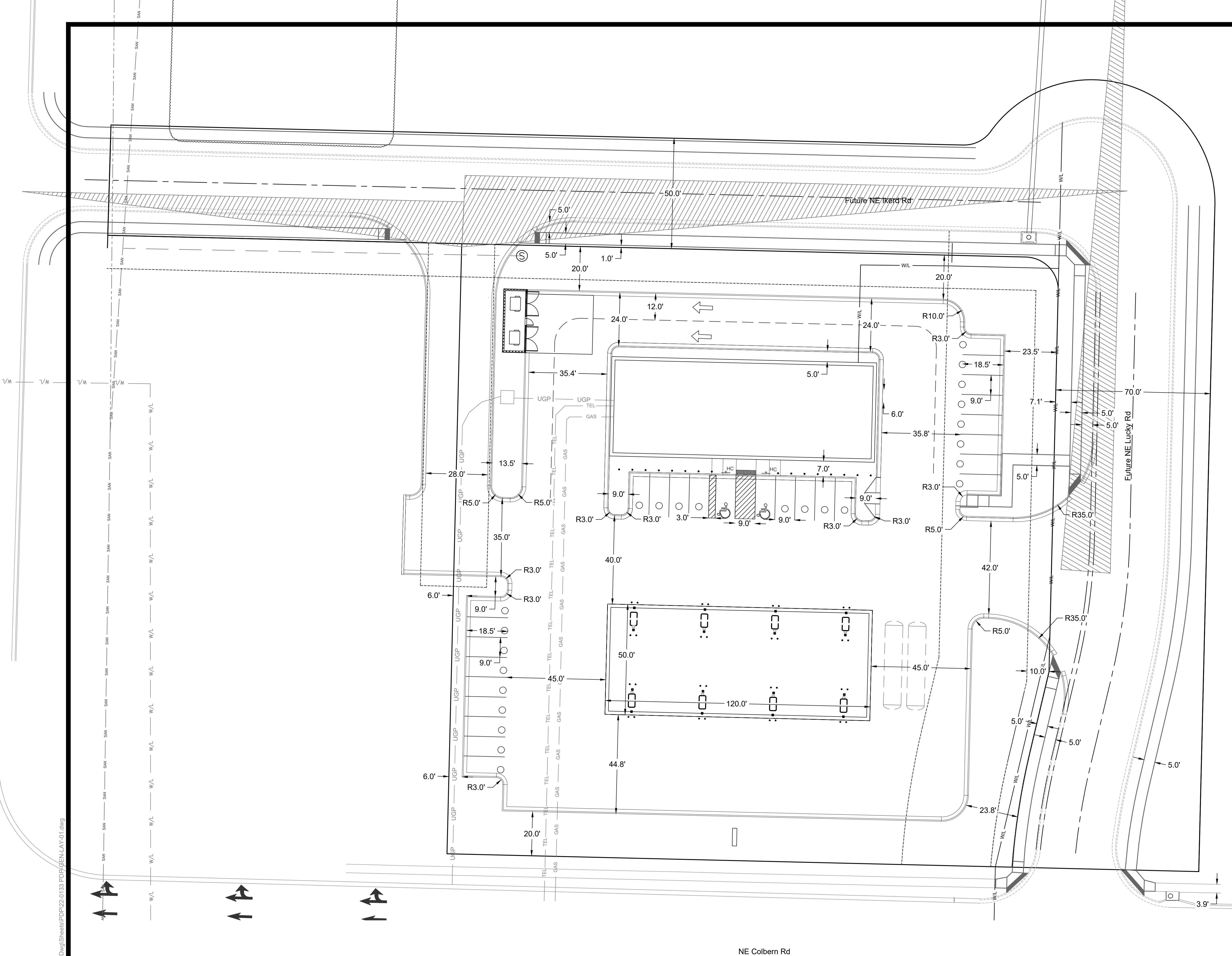
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| ZM       | DB         |

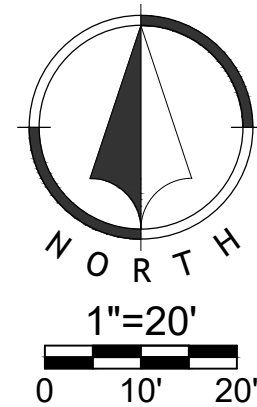
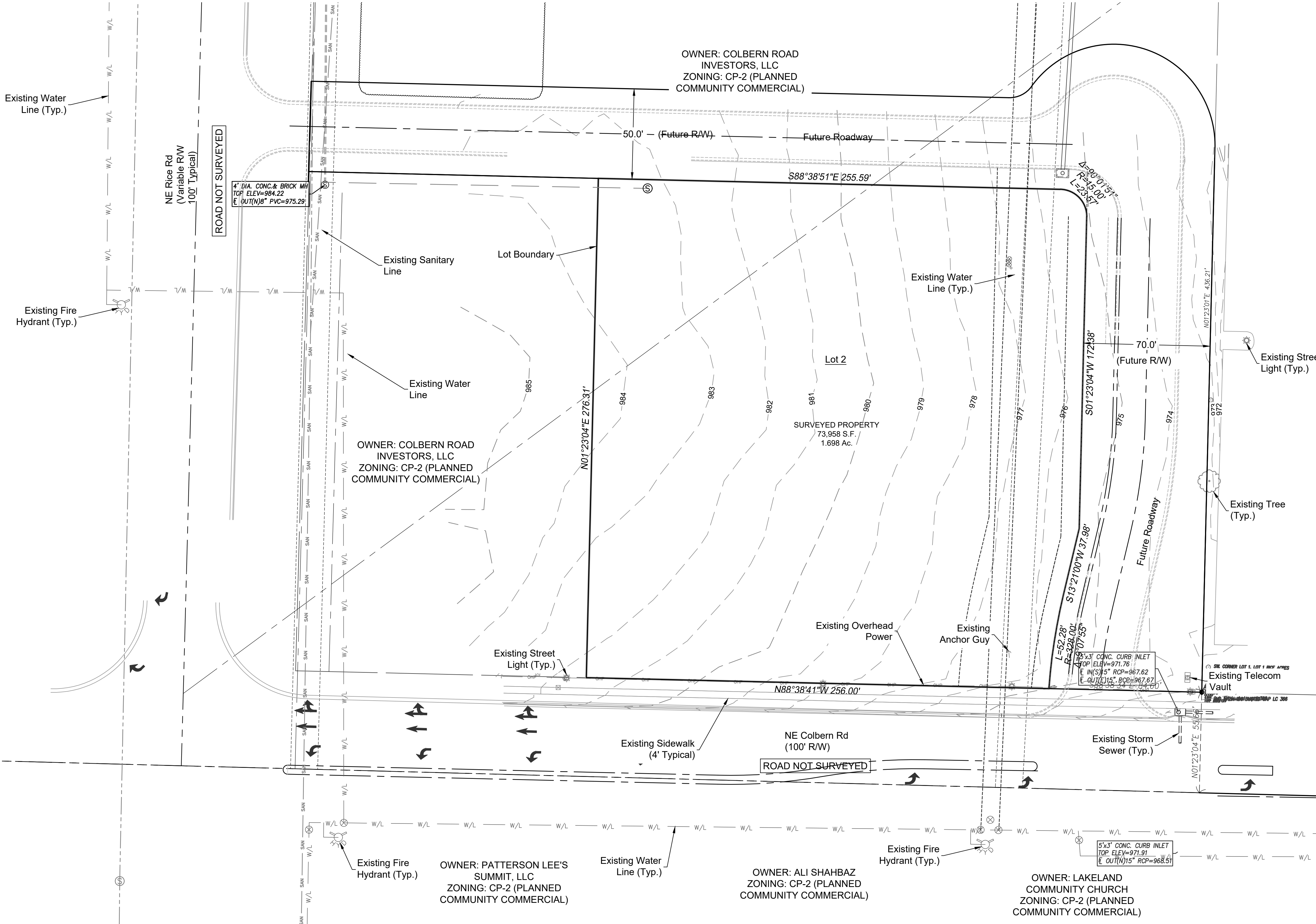


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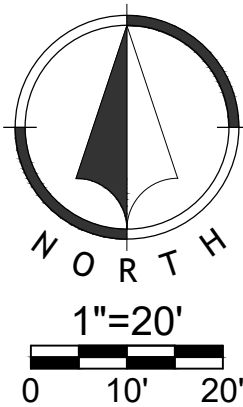
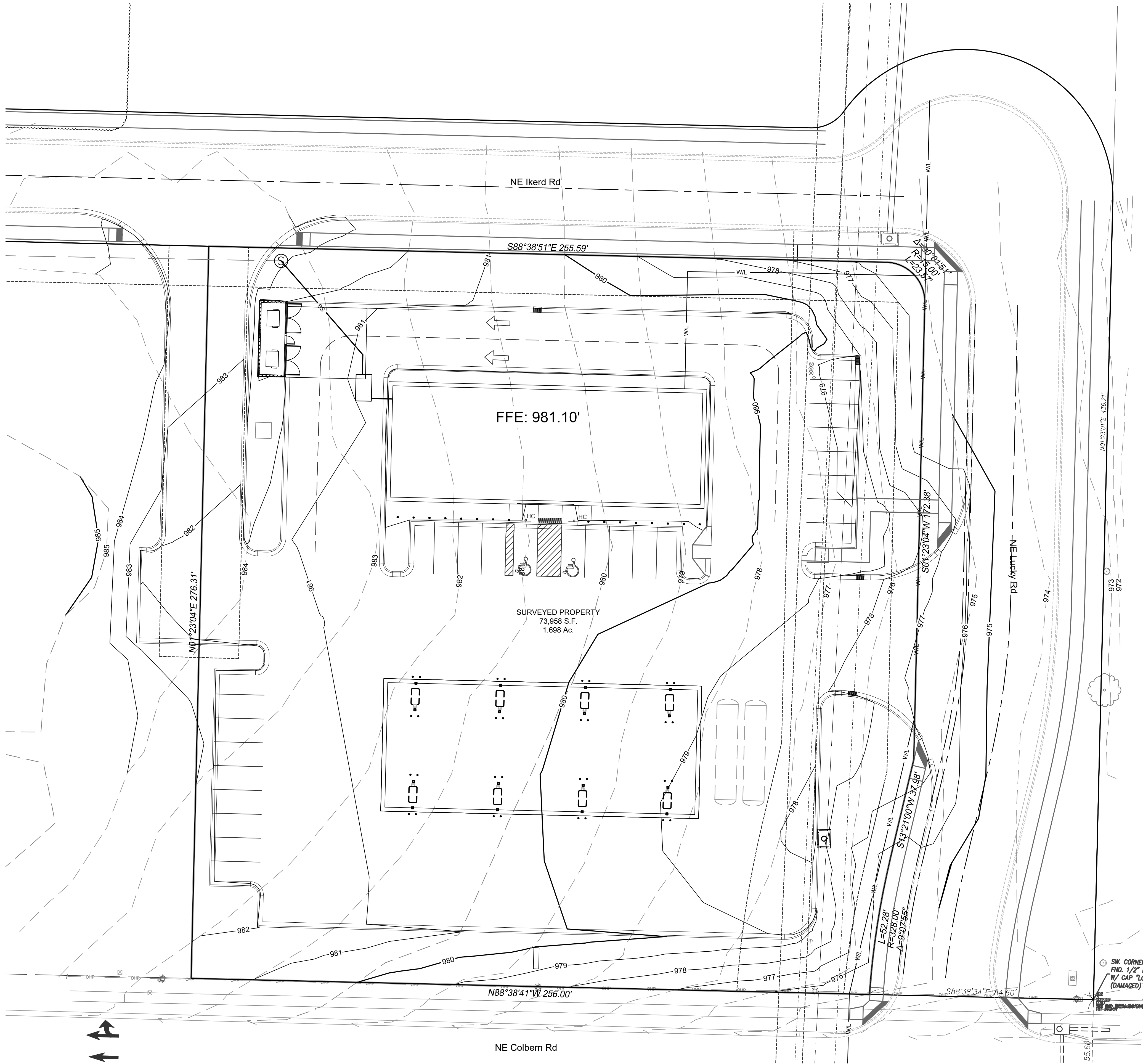
## Existing Conditions

## Preliminary Development Plans

22-0133

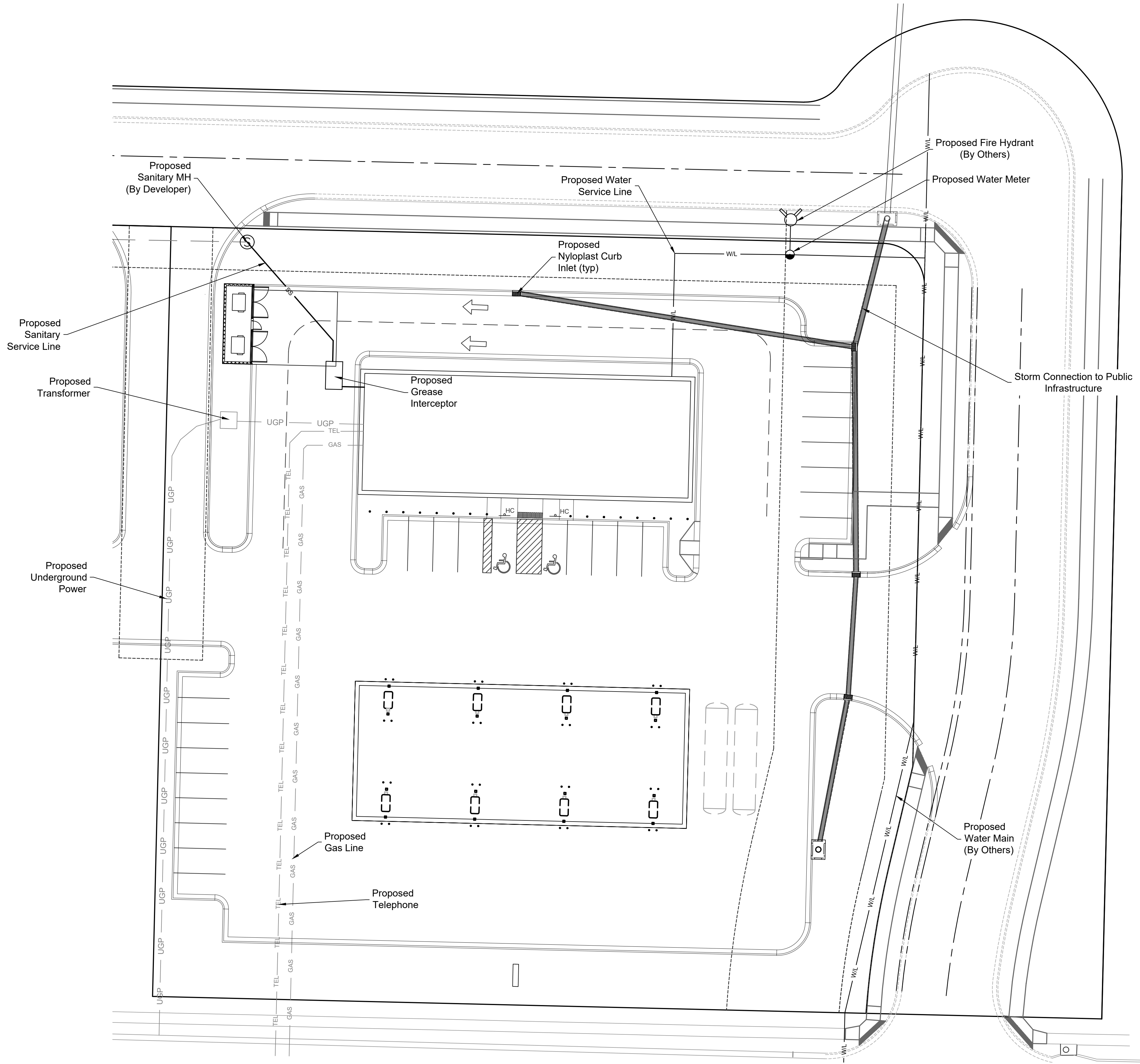
Heartland Market - Lee's Summit  
Lee's Summit, Jackson County, Missouri







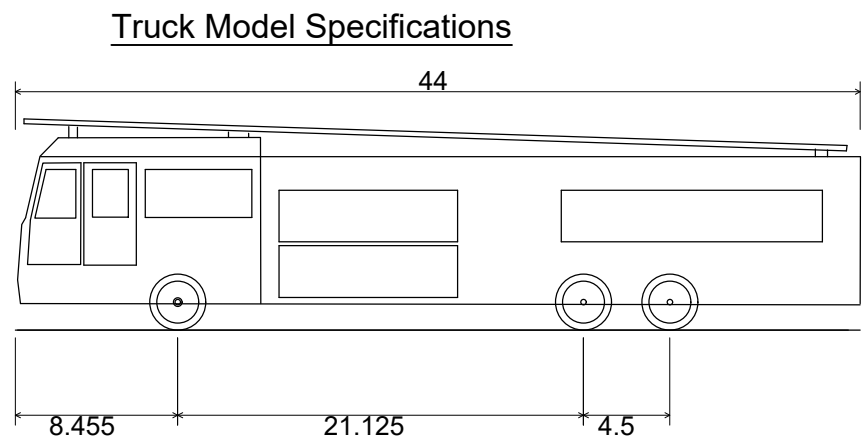
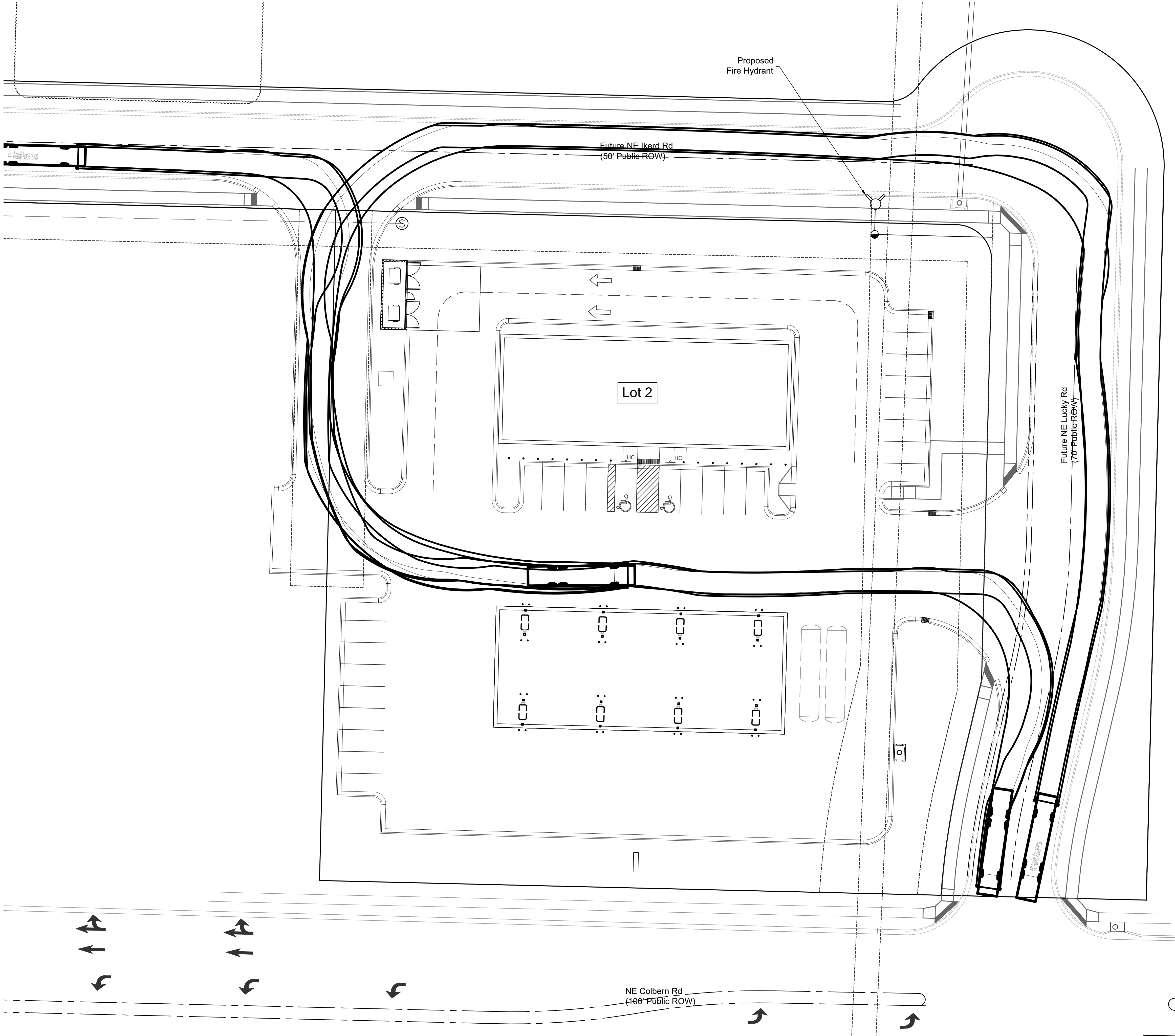
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44' Aerial Apparatus  
Overall Length 44.000ft  
Overall Width 8.000ft  
Overall Body Height 11.000 ft  
Min Body Ground Clearance 1.400ft  
Track Width 8.000ft  
Lock-to-lock time 4.00s  
Max Wheel Angle 45.00°

FT Scale  
1" = 10'

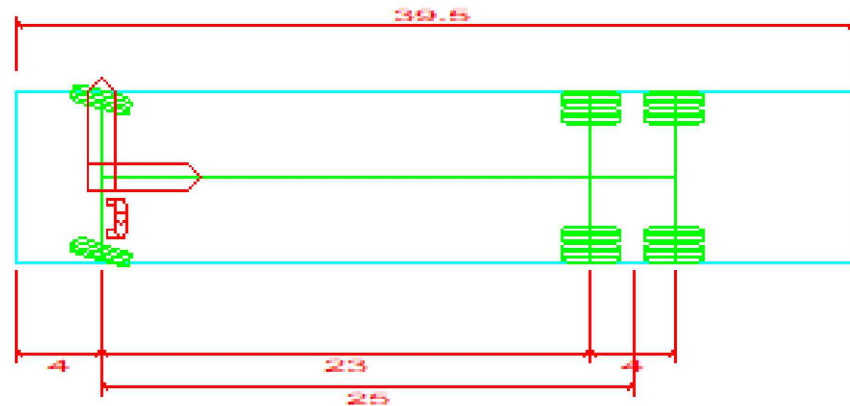
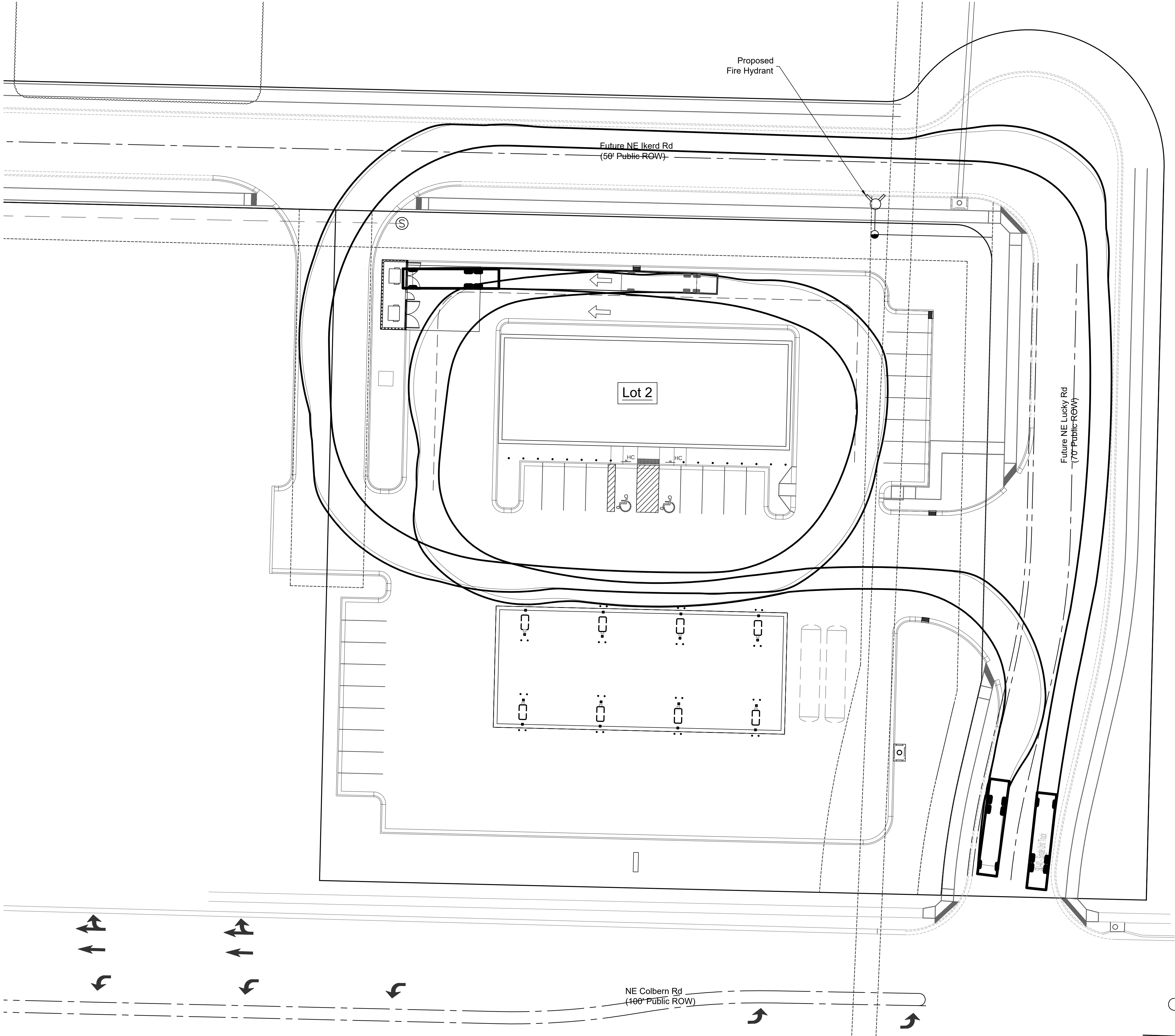


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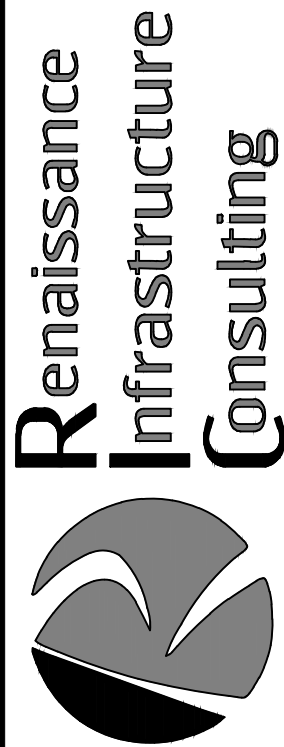
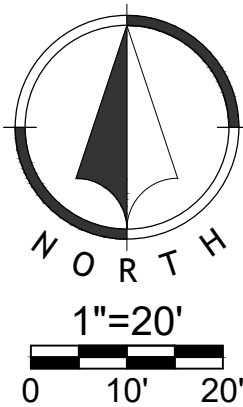
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|                              |          |
|------------------------------|----------|
| SU-40 - Single Unit Truck    |          |
| Overall Length               | 39.500ft |
| Overall Width                | 8.000ft  |
| Overall Body Height          | 13.500ft |
| Min Body Ground Clearance    | 1.367ft  |
| Track Width                  | 8.000ft  |
| Lock-to-lock time            | 5.00s    |
| Max Steering Angle (Virtual) | 31.80°   |



Sheet  
C08

Preliminary Development Plans  
22-0133  
Heartland Market - Lee's Summit  
Lee's Summit, Jackson County, Missouri

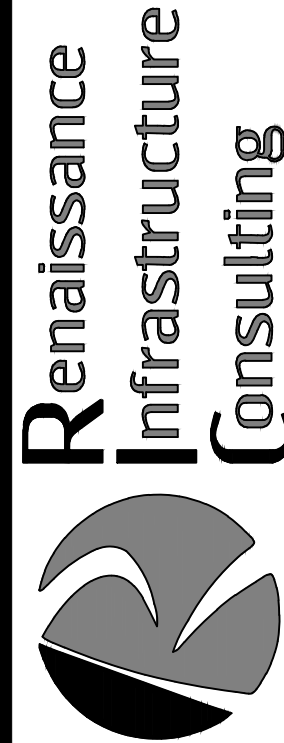
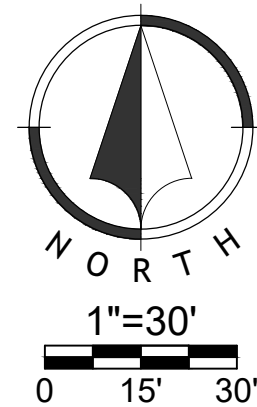
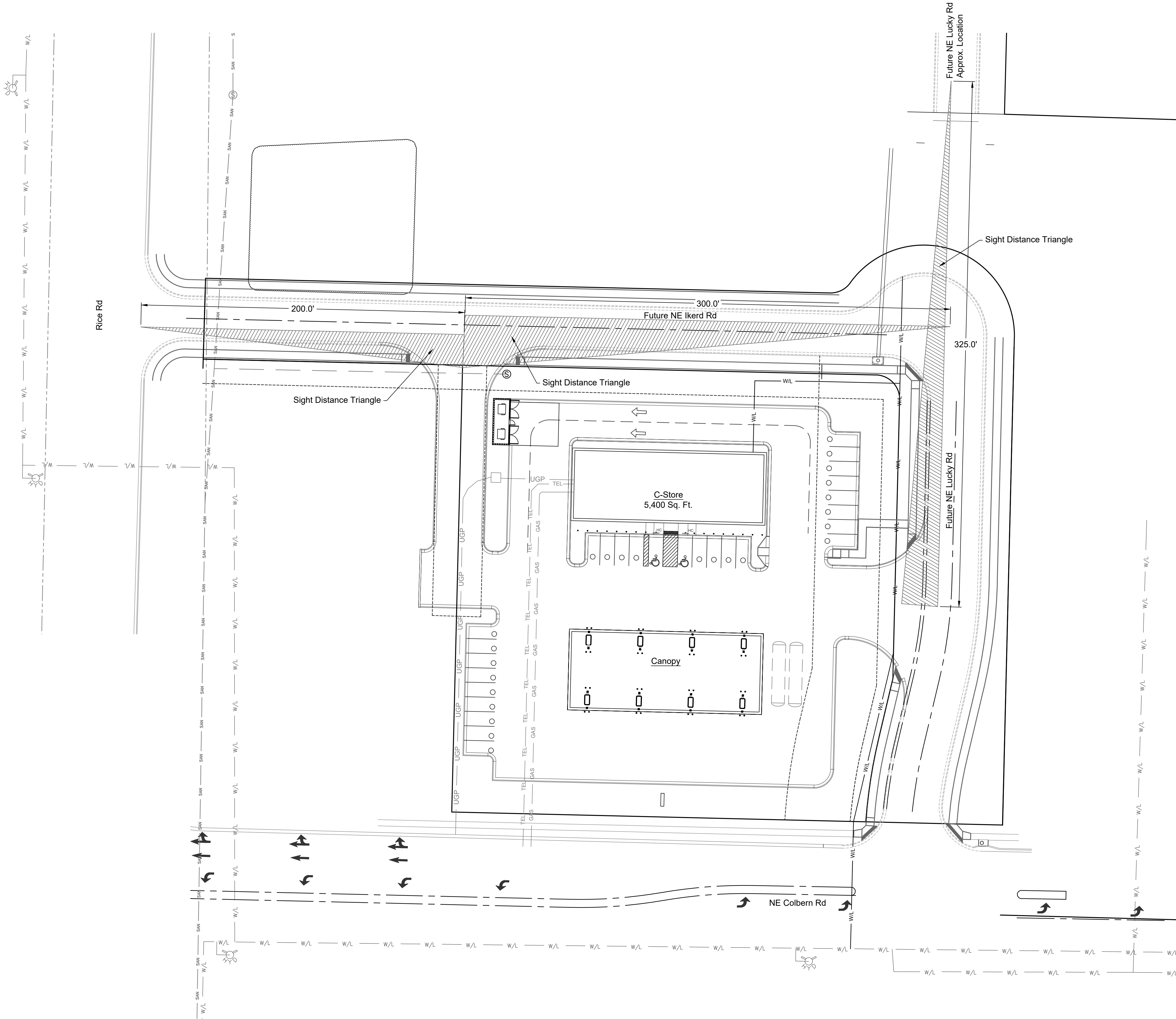
Trash Truck Route

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MO Certificate of Authority: E-2010033630





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Sight Distance Plan

Preliminary Development Plans  
22-0133  
Heartland Market - Lee's Summit  
Lee's Summit, Jackson County, Missouri



LANDSCAPE CALCULATIONS

Zoning: CP-2 (Planned Community Commercial)

Street Frontage

Required: 1 Tree / 30' Street Frontage and 20' Landscape Strip with 1 Shrub / 20'

Provided:

Colbern Rd (256') = 9 Trees + 13 Shrubs  
Ikerd Rd (256') = 9 Trees + 13 Shrubs  
Lucky Rd (226') = 8 Trees + 12 Shrubs

Open Yard

Required: 2 Shrubs / 5,000 sf Lot Area (excluding building) + 1 Tree / 5,000 sf Landscape Open Space  
Provided: Lot Area (68,560 sf) = 28 Shrubs; Landscape Open Space (17,229 sf) = 4 Trees

Trash Storage

Required: Screened from public view  
Provided: As required

Interior Parking Lot

Required: 1 Tree / Parking Island  
Provided: 2 Islands = 2 Trees

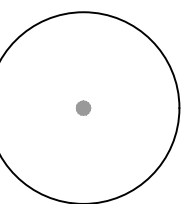
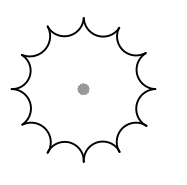
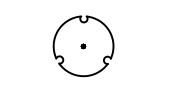
Parking Lot Screening

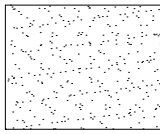
Required: Min. 2.5' ht. perimeter screen adj. to street - 12 Shrubs / 40'  
Provided: Colbern Rd (230') = 69 Shrubs

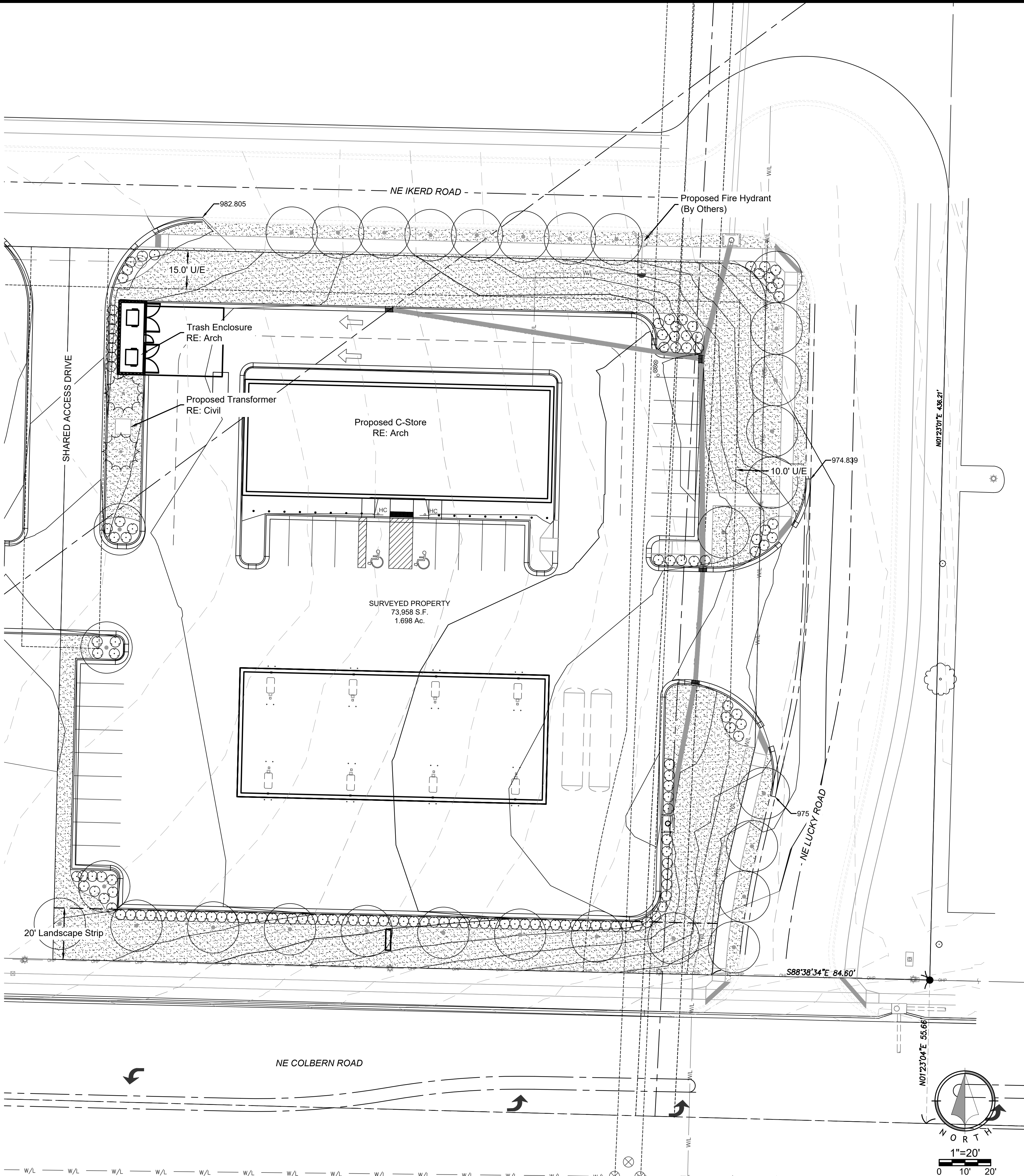
LANDSCAPE NOTES

- LOCATE UTILITIES PRIOR TO COMMENCING LANDSCAPE OPERATIONS. ALL TREES SHALL BE FIELD POSITIONED AS TO AVOID CONFLICTS WITH EXISTING AND PROPOSED UTILITIES. NOTIFY LANDSCAPE ARCHITECT OF ANY CONFLICTS OR OBSTRUCTIONS.
- CONTRACTOR SHALL STAKE ALL PLANTING AREAS IN THE FIELD PRIOR TO PLANTING FOR APPROVAL OF THE OWNER OR THEIR REPRESENTATIVE.
- QUANTITIES SHOWN ARE FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY ALL PLANT QUANTITIES PRIOR TO BIDDING AND SHALL BE RESPONSIBLE FOR ALL QUANTITIES FOR THEIR BID. ANY DISCREPANCIES WITH THE PLAN SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. THE PLAN QUANTITIES SHALL SUPERCEDE SCHEDULED QUANTITIES.
- ALL PLANT MATERIAL SHALL BE SPECIMEN QUALITY AND SHALL COMPLY WITH RECOMMENDATIONS AND REQUIREMENTS OF ANSI Z60.1 THE 'AMERICAN STANDARD FOR NURSERY STOCK'.
- ALL PLANTING BEDS & NATIVE GRASS STANDS SHALL BE EDGED AS SHOWN IN PLAN.
- PREPARE PLANTING BEDS AND INCORPORATE AMENDMENTS ACCORDING TO PLANS.
- SHREDDED HARDWOOD MULCH, PER SPECIFICATIONS SHALL BE USED AS A THREE INCH (3") TOP DRESSING IN ALL PLANTING BEDS AND AROUND ALL TREES. SINGLE TREES AND SHRUBS SHALL BE MULCHED TO THE OUTSIDE EDGE OF THE SAUCER OR LANDSCAPE ISLAND.
- ALL TREES SHALL BE STAKED PER DETAIL.
- ALL PLANT MATERIAL SHALL BE INSTALLED TO ALLOW A ONE FOOT (1') CLEARANCE BETWEEN PLANT AND ADJACENT PAVEMENT.
- THE LANDSCAPE CONTRACTOR SHALL NOT COMMENCE WORK UNTIL THE SITE IS FREE OF DEBRIS CAUSED BY ON-GOING CONSTRUCTION OPERATIONS. REMOVAL OF DEBRIS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. LANDSCAPE WORK SHALL NOT BEGIN UNTIL THE LANDSCAPE ARCHITECT AND OWNER HAVE GIVEN WRITTEN APPROVAL FOR SUCH. THERE SHALL BE NO DELAYS DUE TO LACK OF COORDINATION FOR THIS ACTIVITY.
- THE LANDSCAPE ARCHITECT AND OWNER SHALL APPROVE GRADES AND CONDITION OF SITE PRIOR TO SODDING/SEEDING OPERATIONS.
- ALL AREAS DISTURBED DURING CONSTRUCTION AND NOT DESIGNATED FOR OTHER PLANTINGS OR HARDSCAPE SHALL BE SODDED WITH TURF TYPE FESCUE.
- ALL LANDSCAPE AREAS SHALL BE IRRIGATED. TURF AREAS SHALL BE IRRIGATED BY SPRAY OR ROTOR. PLANT BEDS SHALL BE IRRIGATED BY DRIP IRRIGATION. IRRIGATION SYSTEM SHALL INCLUDE AUTOMATIC RAIN-SENSOR DEVICE. IRRIGATION SHOP DRAWINGS SHALL BE PROVIDED BY THE CONTRACTOR FOR APPROVAL PRIOR TO CONSTRUCTION.

CONCEPT PLANT SCHEDULE

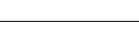
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|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
|  | <b>SHADE TREE</b><br>3" Cal. B&B<br>Acer platanoides 'Crimson King' / Crimson King Maple<br>Celtis occidentalis 'Prairie Sentinel' / Prairie Sentinel Hackberry<br>Cercis canadensis 'Forest Pansy' TM / Forest Pansy Redbud<br>Cornus kousa / Kousa Dogwood<br>Gymnocladus dioica 'Espresso' / Kentucky Coffeetree<br>Liriodendron tulipifera / Tulip Poplar<br>Nyssa sylvatica 'Wildfire' / Black Gum<br>Zelkova serrata 'City Sprite' TM / City Sprite Zelkova              | 30  |
|  | <b>EVERGREEN TREE</b><br>8" Ht. Min. B&B<br>Juniperus virginiana 'Hillspire' / Hillspire Juniper<br>Picea glauca 'Densata' / Black Hills Spruce<br>Picea pungens 'Fat Albert' / Colorado Spruce<br>Pinus flexilis 'Vanderwolf's Pyramid' / Vanderwolf's Pyramid Pine                                                                                                                                                                                                           | 2   |
|  | <b>SHRUBS AND GRASSES</b><br>3-5 Gal. 24" Ht. Min.<br>Aronia melanocarpa 'Morton' TM / Iroquis Beauty Black Chokeberry<br>Cornus stolonifera 'Arctic Fire' / Arctic Fire Dogwood<br>Hydrangea paniculata 'ILVOBO' TM / Bobo Panicle Hydrangea<br>Hypericum frondosum 'Sunburst' / Sunburst Hypericum<br>Itea virginica 'Henry's Garnet' / Henry's Garnet Sweetspire<br>Juniperus chinensis 'Gold Lace' / Gold Lace Juniper<br>Juniperus horizontalis 'Hughes' / Hughes Juniper | 135 |

 **TURF GRASS SOD AREA**  
Turfgrass Sod Fescue Mix; RE: Notes





# LUMINAIRE SCHEDULE

| SYMBOL                                                                            | MOUNTING | MODEL                                                             | WATTAGE | QUANTITY | MOUNTING HEIGHT | LAMP DEPRECIATION |
|-----------------------------------------------------------------------------------|----------|-------------------------------------------------------------------|---------|----------|-----------------|-------------------|
|  | RECESSED | CREE, INC., CAN-304-SL-x-04-E-UL-700-40K or BXCP-E04E-UD7 (700mA) | 135     | 32       | 16'-6"          | 0.9               |
|  | POLE     | HUBBELL OUTDOOR, RAR-2-320L-110-4K7-2-BC                          | 110     | 2        | 28'             | 0.9               |
|  | POLE     | HUBBELL OUTDOOR, RAR-2-320L-110-4K7-3-BC                          | 110     | 10       | 28'             | 0.9               |
|  | POLE     | HUBBELL OUTDOOR, RAR2-320L-110-4K7-4W                             | 110     | 1        | 28'             | 0.9               |

## Canopy

|                             |       |
|-----------------------------|-------|
| AVERAGE FOOT-CANDLES        | 21.43 |
| MAXIMUM FOOT-CANDLES        | 32.8  |
| MINIMUM FOOT-CANDLES        | 6.4   |
| AVERAGE TO MINIMUM FC RATIO | 3.36  |

## Parking Lot

|                             |      |
|-----------------------------|------|
| AVERAGE FOOT-CANDLES        | 2.42 |
| MAXIMUM FOOT-CANDLES        | 6.3  |
| MINIMUM FOOT-CANDLES        | 0.5  |
| AVERAGE TO MINIMUM FC RATIO | 4.67 |



# RATIO Series

AREA/SITE LIGHTER

## FEATURES

- Low profile LED area/site luminaire with a variety of IES distributions for lighting applications such as retail, commercial and campus parking lots
- Featuring Micro Strike Optics which maximizes target zone illumination with minimal losses at the house-side, reducing light trespass issues
- Visual comfort standard
- Compact and lightweight design with low EPA
- 3G rated for high vibration applications including bridges and overpasses
- Control options including photo control, occupancy sensing, NX Distributed Intelligence™ and 7-Pin with networked controls
- Best in class surge protection available



IP66



See Certification Specifications

|            |           |
|------------|-----------|
| DATE:      | LOCATION: |
| TYPE:      | PROJECT:  |
| CATALOG #: |           |



## RELATED PRODUCTS

 [Ratio](#)  [Cimarron LED](#)  [Ratio Family](#)

# 304 Series™

LED Recessed Canopy Luminaire

## Product Description

Luminaire housing is constructed from rugged die cast aluminum components (RS Mount) or die cast and extruded aluminum components (RD Mount). LED driver is mounted in a sealed weathertight center chamber that allows for access from below the fixture. Luminaire mounts directly to the canopy deck and is secured in place with die cast aluminum trim frame. Luminaire housing is provided with factory applied foam gasket that provides a watertight seal between luminaire housing and canopy deck. Suitable for use in single or double skin canopies with 16" (406 mm) wide panels. Designed for canopies of 19-22 gauge (maximum 0.040" [1 mm] thickness). Applications: Petroleum stations, convenience stores, drive-thru banks and restaurants, retail and grocery

## Performance Summary

Patented NanoOptic® Product Technology

Assembled in the U.S.A. of U.S. and imported parts

CRI: Minimum 70 CRI

CCT: 4000K (+/- 300K), 5700K (+/- 500K) standard

Limited Warranty\*: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

\* See <http://creighting.com/warranty> for warranty terms

## Accessories

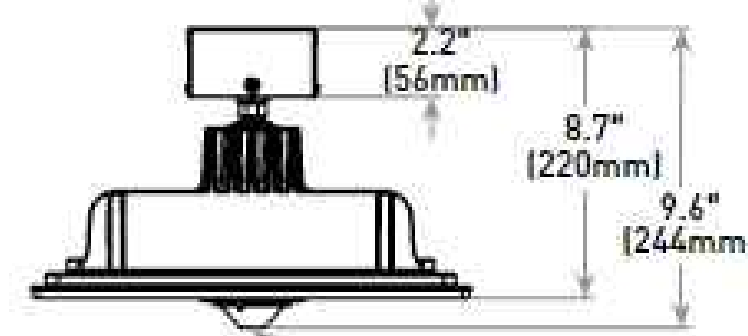
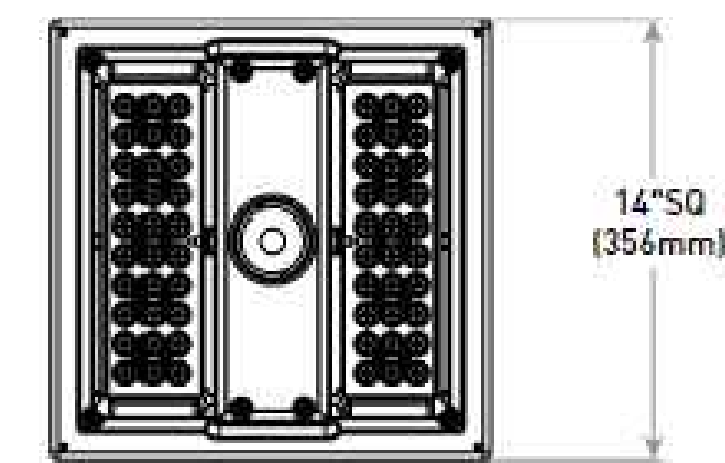
### Field-Installed

Hand-Held Remote  
XA-SENSREM

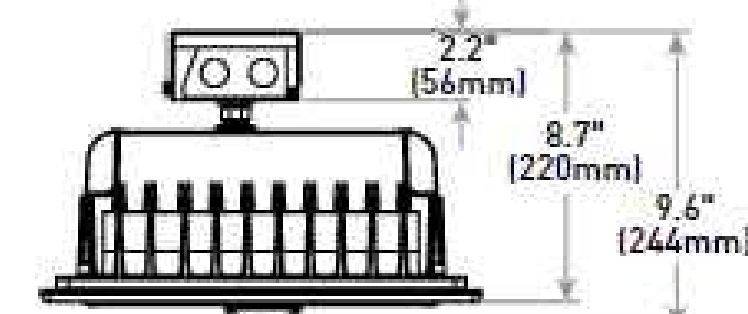
- For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required

Rev. Date: V7 04/05/2021

## RS Mount



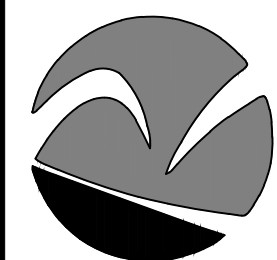
Programmable Multi-level Sensor location (ordered as an option)



Preliminary Development Plan  
22-0133  
Heartland Market - Lee's Summit  
Lee's Summit, Jackson County, MO

Photometric Plan

Renaissance  
Infrastructure  
Consulting



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MO Certificate of Authority: E-2010033630

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