Heartland Market - Lee's Summit

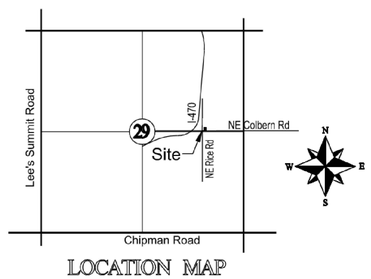
Lee's Summit, Jackson County, Missouri
Section 29, Township 48N, Range 31W

Preliminary Development Plans

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
U/E	Utility Easement		
SS/E	Sanitary Sewer Easement	A/E	Access Easement
D/E	Drainage Easement	T/E	Temporary Easement

Watershed: Little Blue River



LOCATION MAP
SECTION 29-T48N-R31W

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	Storm Plan & Profile
C08	Fire Sheet
L01	Landscape Plan
E01	Photometric Plan

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.

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.

811 Know what's below. Call before you dig.

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

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

Title Sheet

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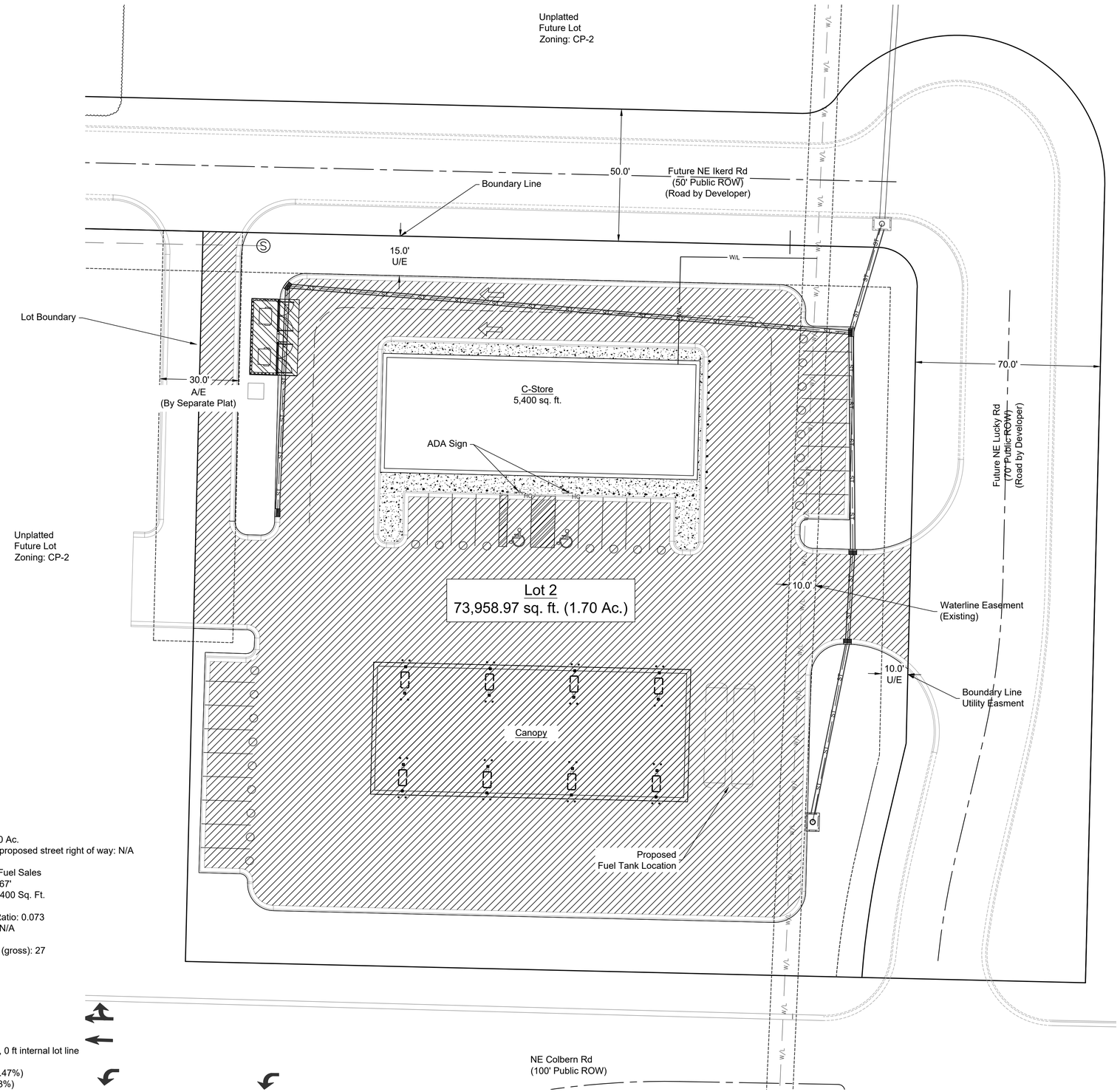

SITE DATA TABLE (Proposed):

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%)

PAVEMENT SECTION DETAILS

PC Concrete Pavement

Heavy Duty PC Concrete Pavement

4" PC Concrete Sidewalk

Preliminary Development Plans

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Lee's Summit, Jackson County, Missouri

General Layout

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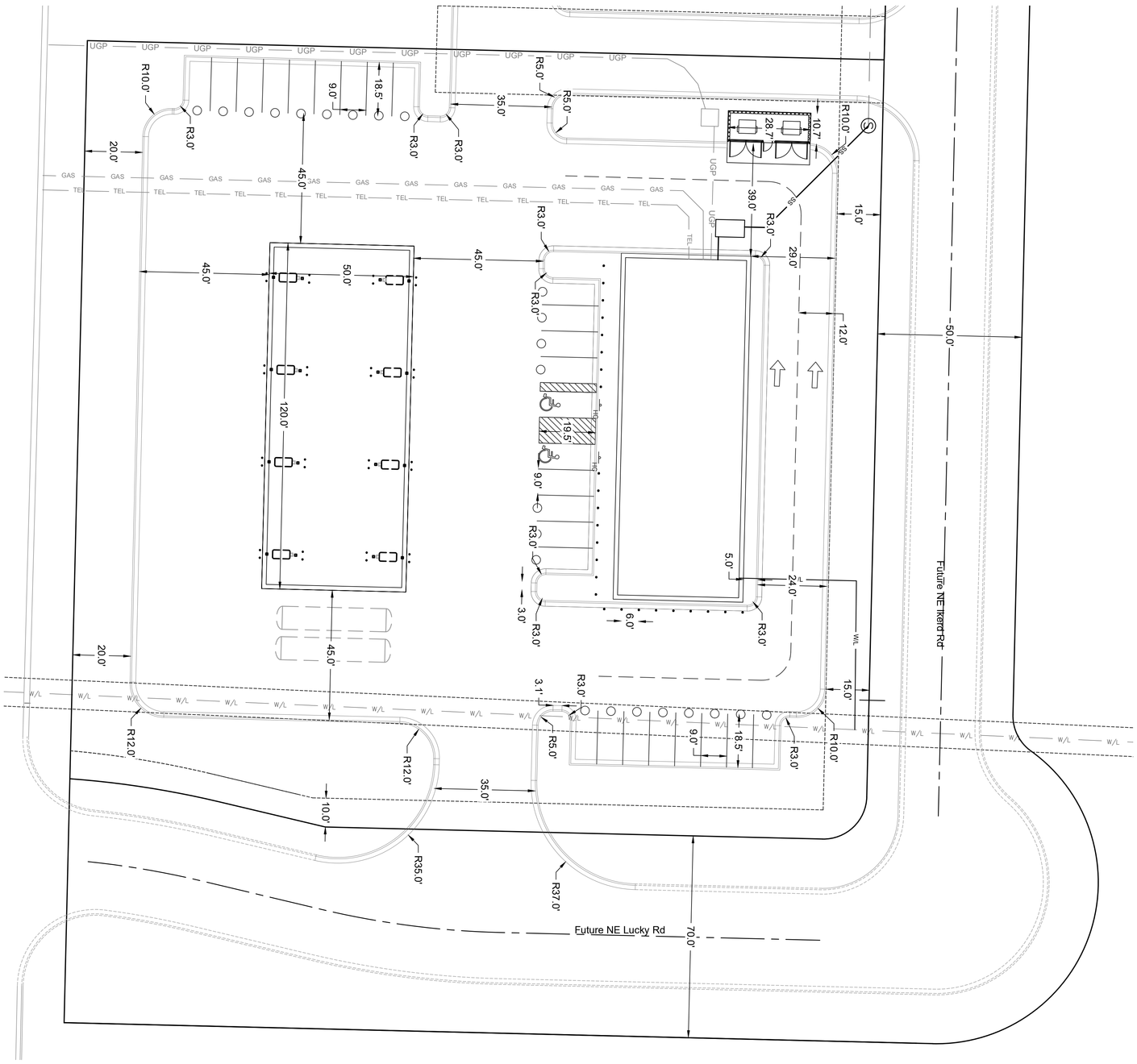

NORTH
1"=20'
0 10' 20'

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Dimension Plan

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Sheet C03

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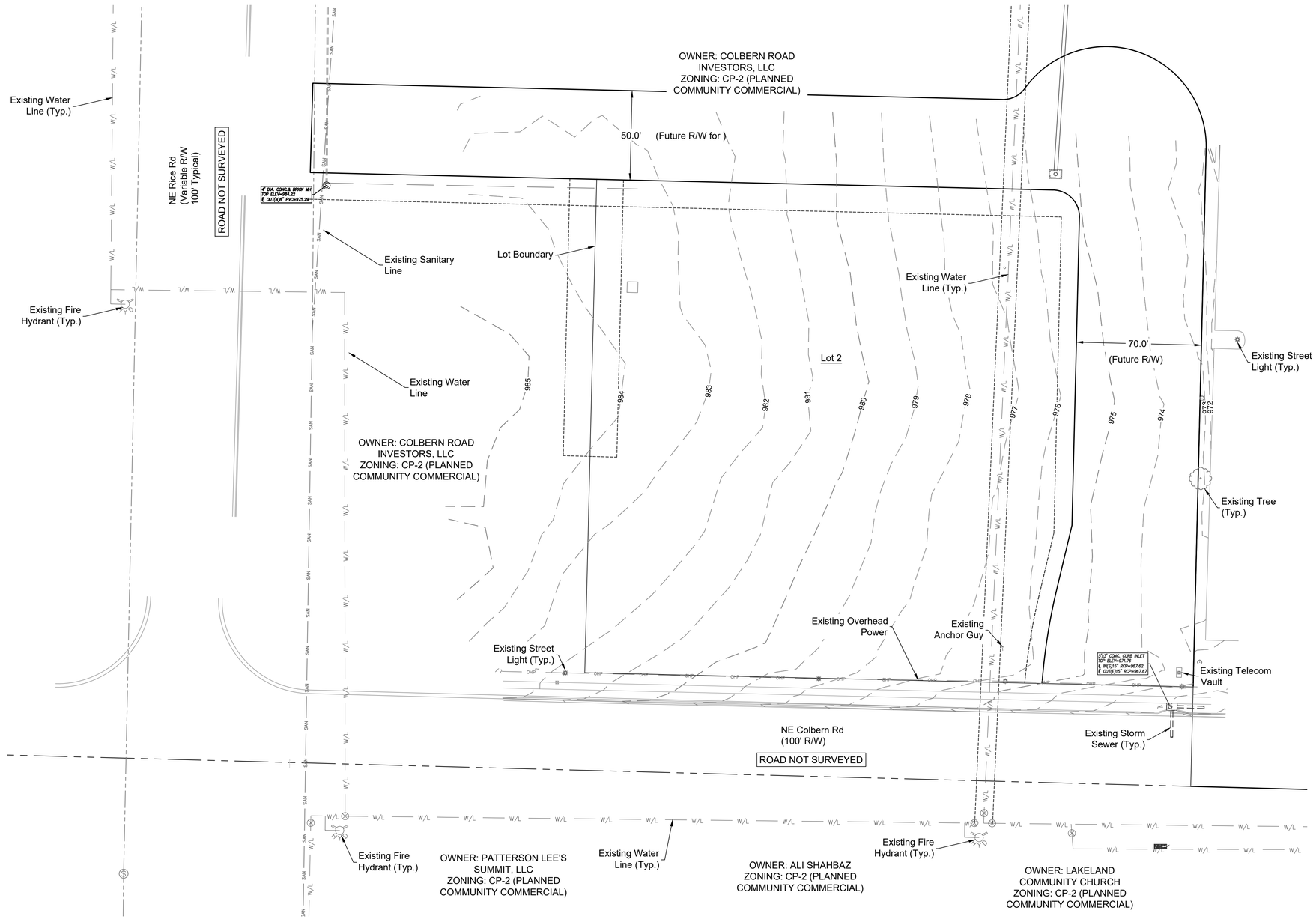

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Existing Conditions

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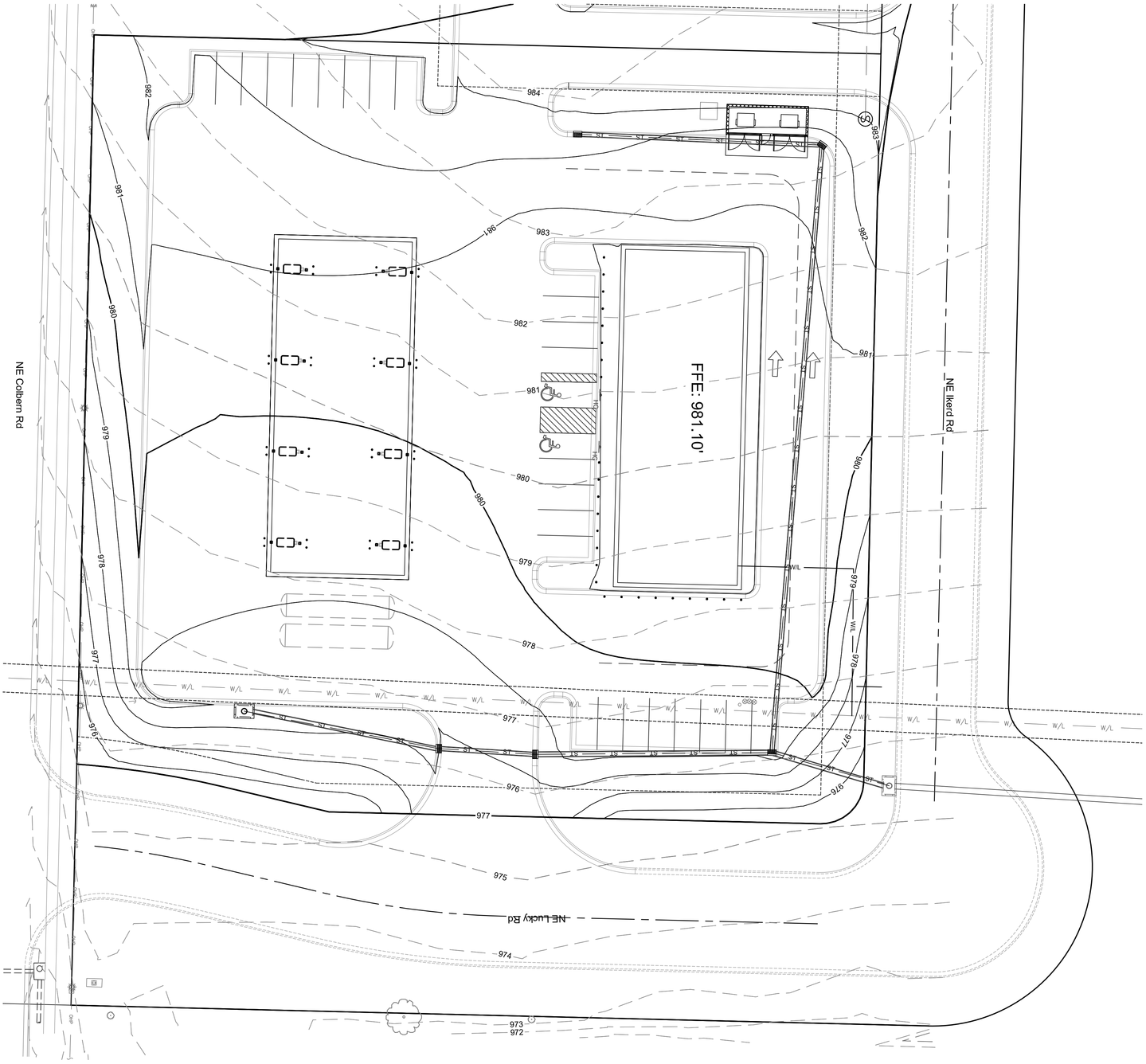

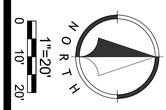

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Grading Plan

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Lee's Summit, Jackson County, Missouri

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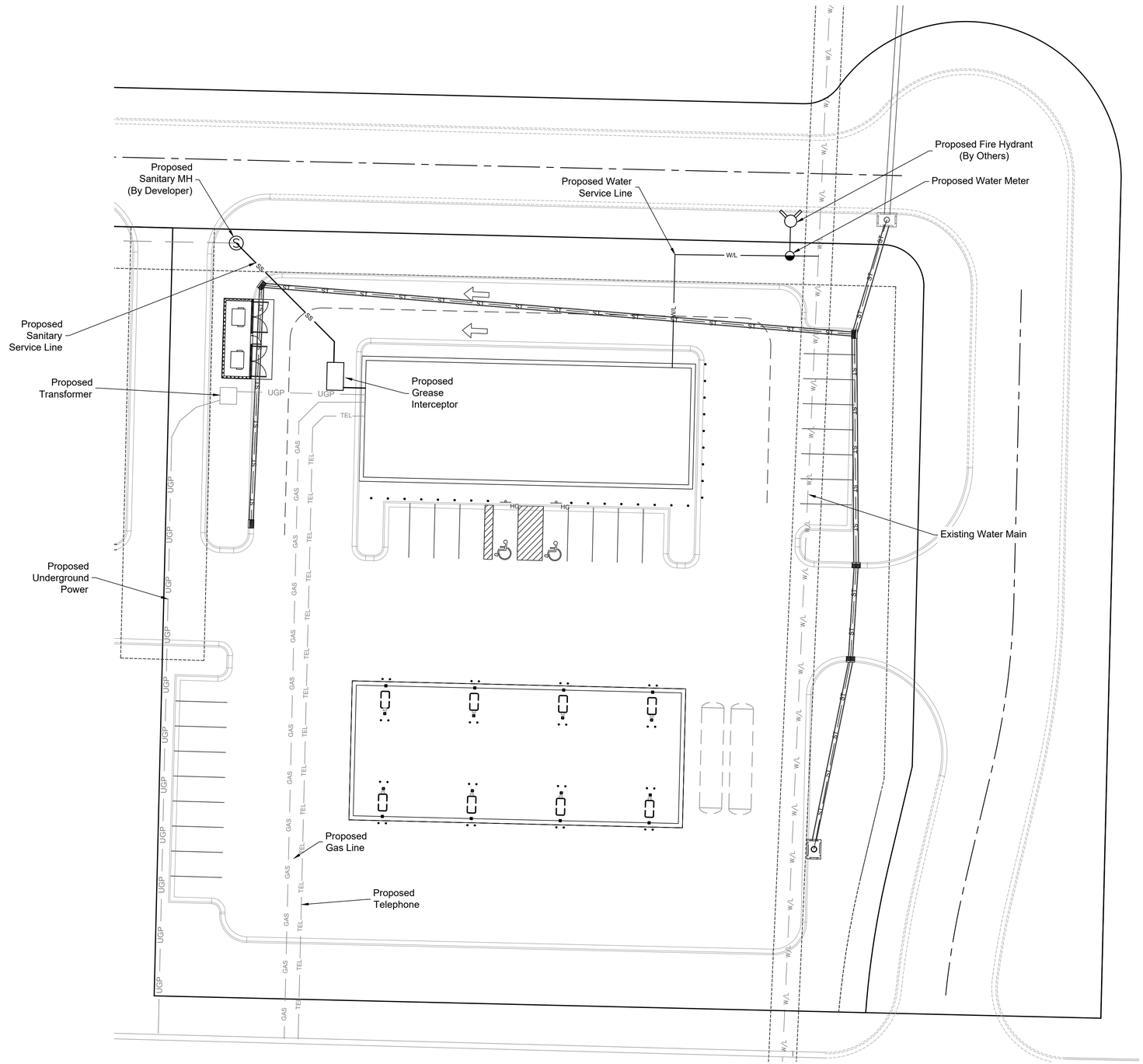

NORTH

1"=20'

0 10' 20'

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Heartland Market - Lee's Summit
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Utility Plan

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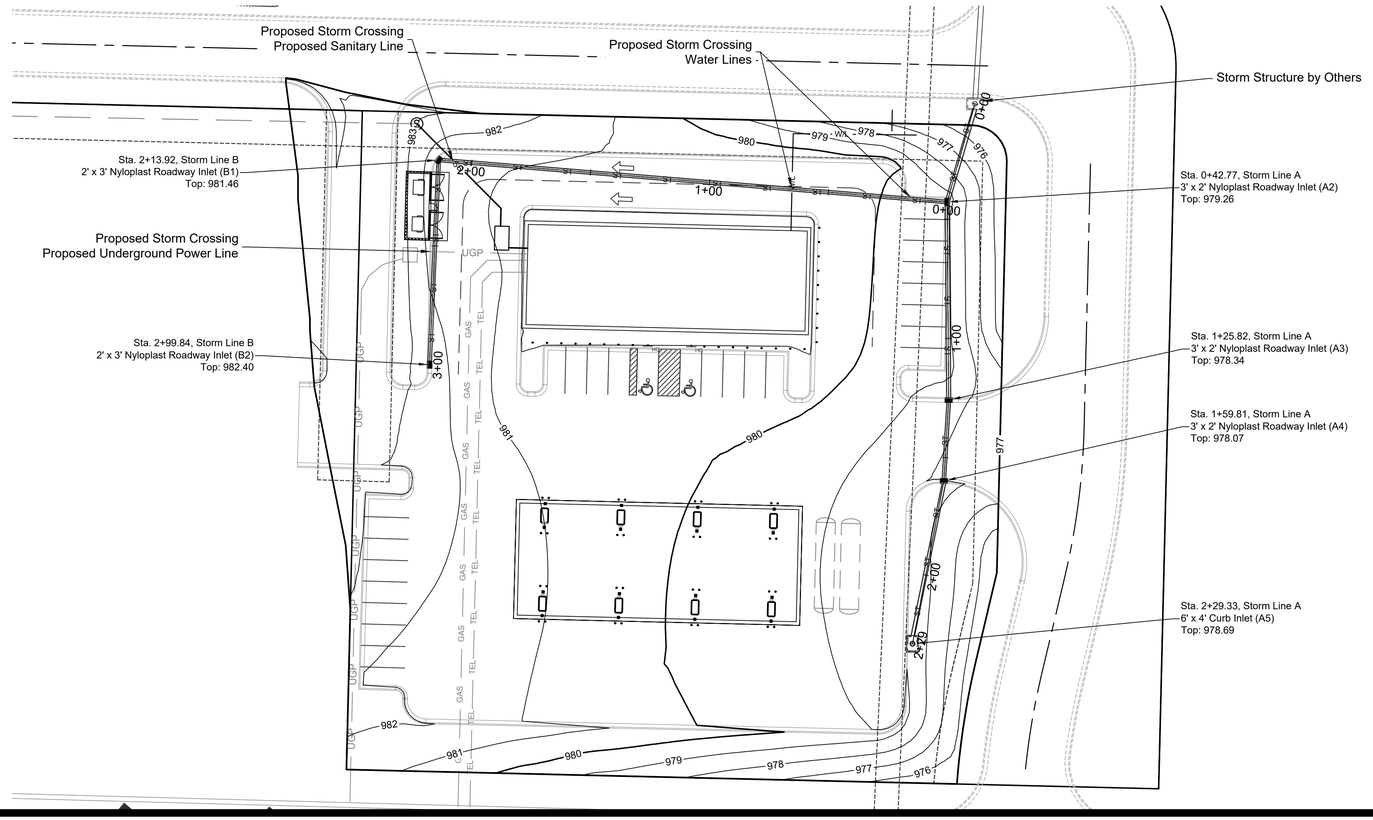

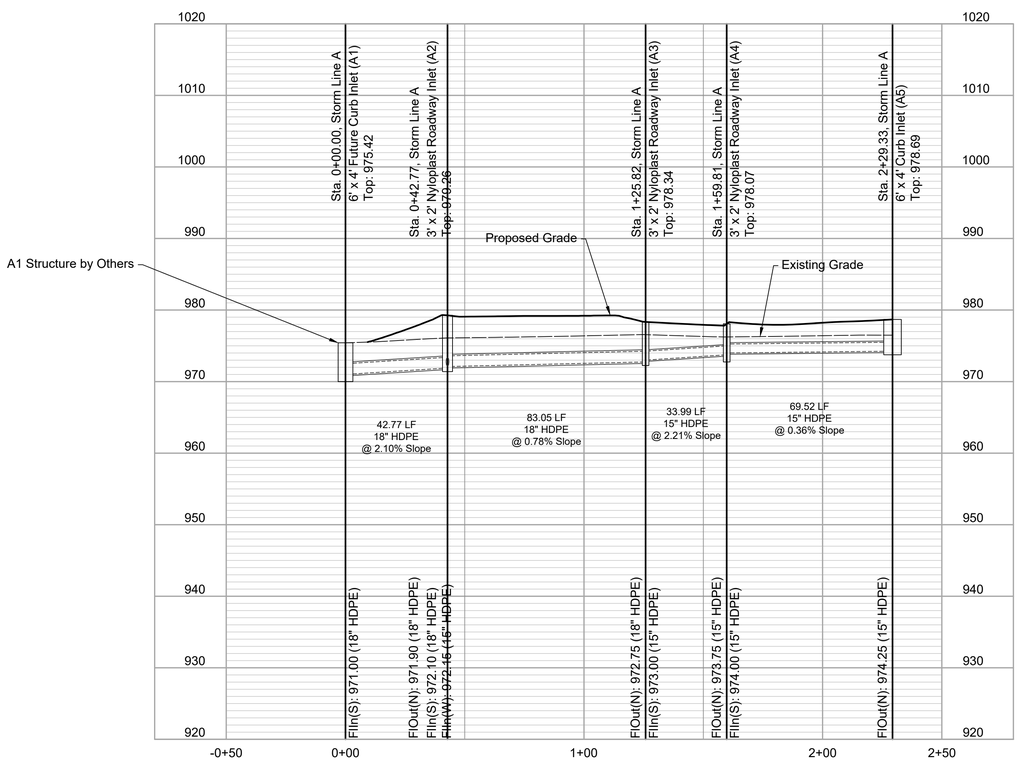

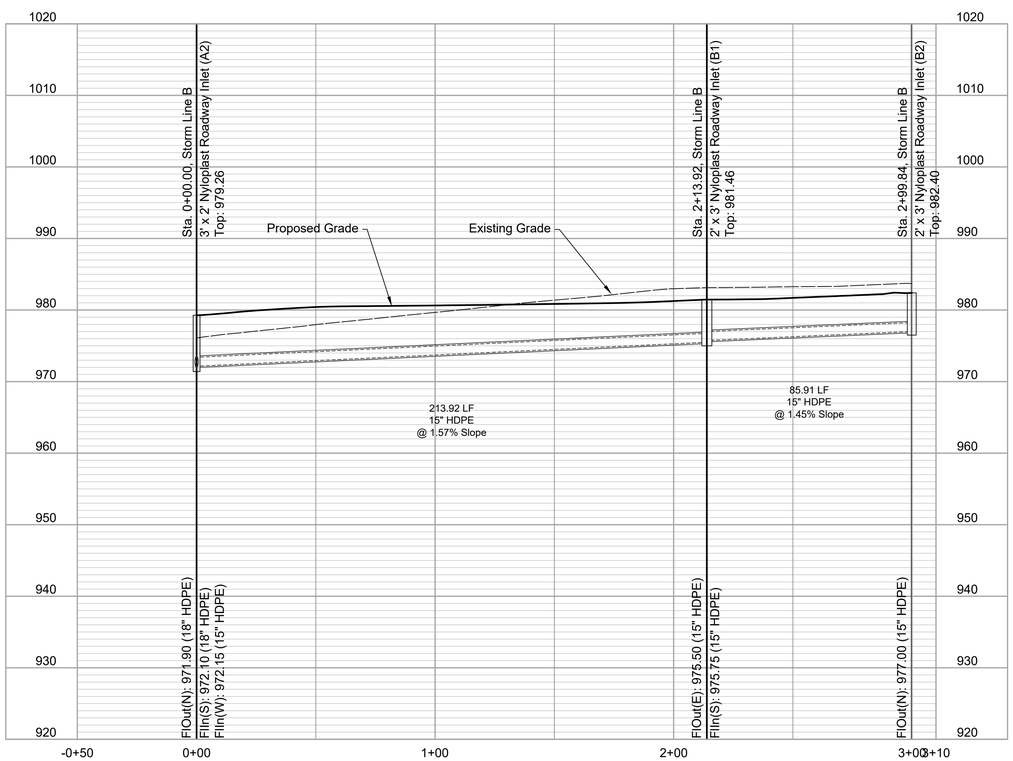

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Storm Plan & Profile

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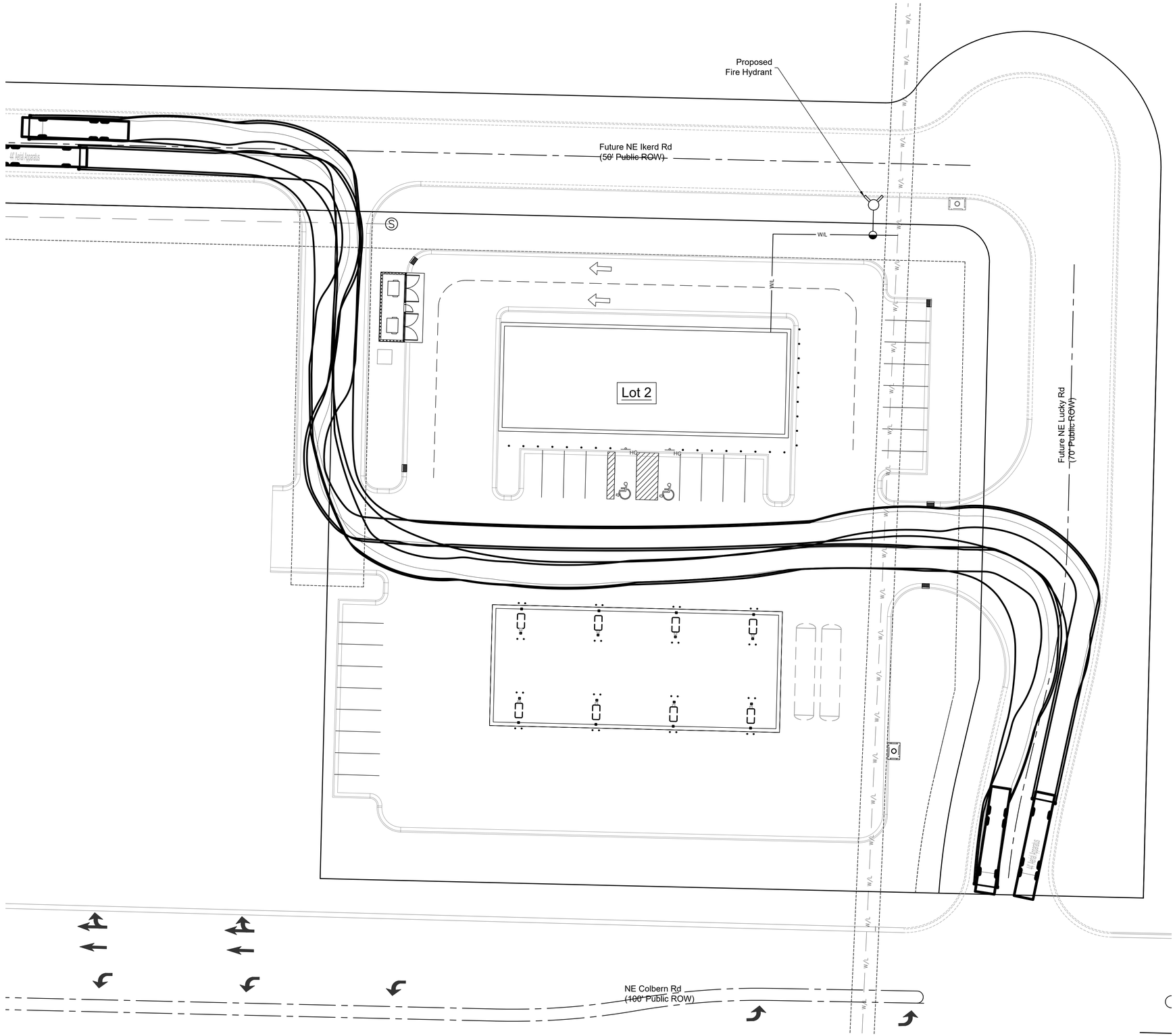
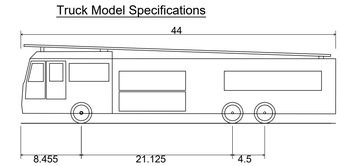


Truck Model Specifications



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'

NORTH

1"=20'
0 10' 20'

Preliminary Development Plans

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Fire Sheet

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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

1. 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.
2. CONTRACTOR SHALL STAKE ALL PLANTING AREAS IN THE FIELD PRIOR TO PLANTING FOR APPROVAL OF THE OWNER OR THEIR REPRESENTATIVE.
3. 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.
4. ALL PLANT MATERIAL SHALL BE SPECIMEN QUALITY AND SHALL COMPLY WITH RECOMMENDATIONS AND REQUIREMENTS OF ANSI Z60.1 THE 'AMERICAN STANDARD FOR NURSERY STOCK'.
5. ALL PLANTING BEDS & NATIVE GRASS STANDS SHALL BE EDGED AS SHOWN IN PLAN.
6. PREPARE PLANTING BEDS AND INCORPORATE AMENDMENTS ACCORDING TO PLANS.
7. 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.
8. ALL TREES SHALL BE STAKED PER DETAIL.
9. ALL PLANT MATERIAL SHALL BE INSTALLED TO ALLOW A ONE FOOT (1') CLEARANCE BETWEEN PLANT AND ADJACENT PAVEMENT.
10. 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.
11. THE LANDSCAPE ARCHITECT AND OWNER SHALL APPROVE GRADES AND CONDITION OF SITE PRIOR TO SODDING/SEEDING OPERATIONS.
12. ALL AREAS DISTURBED DURING CONSTRUCTION AND NOT DESIGNATED FOR OTHER PLANTINGS OR HARDSCAPE SHALL BE SODDED WITH TURF TYPE FESCUE.
13. 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.

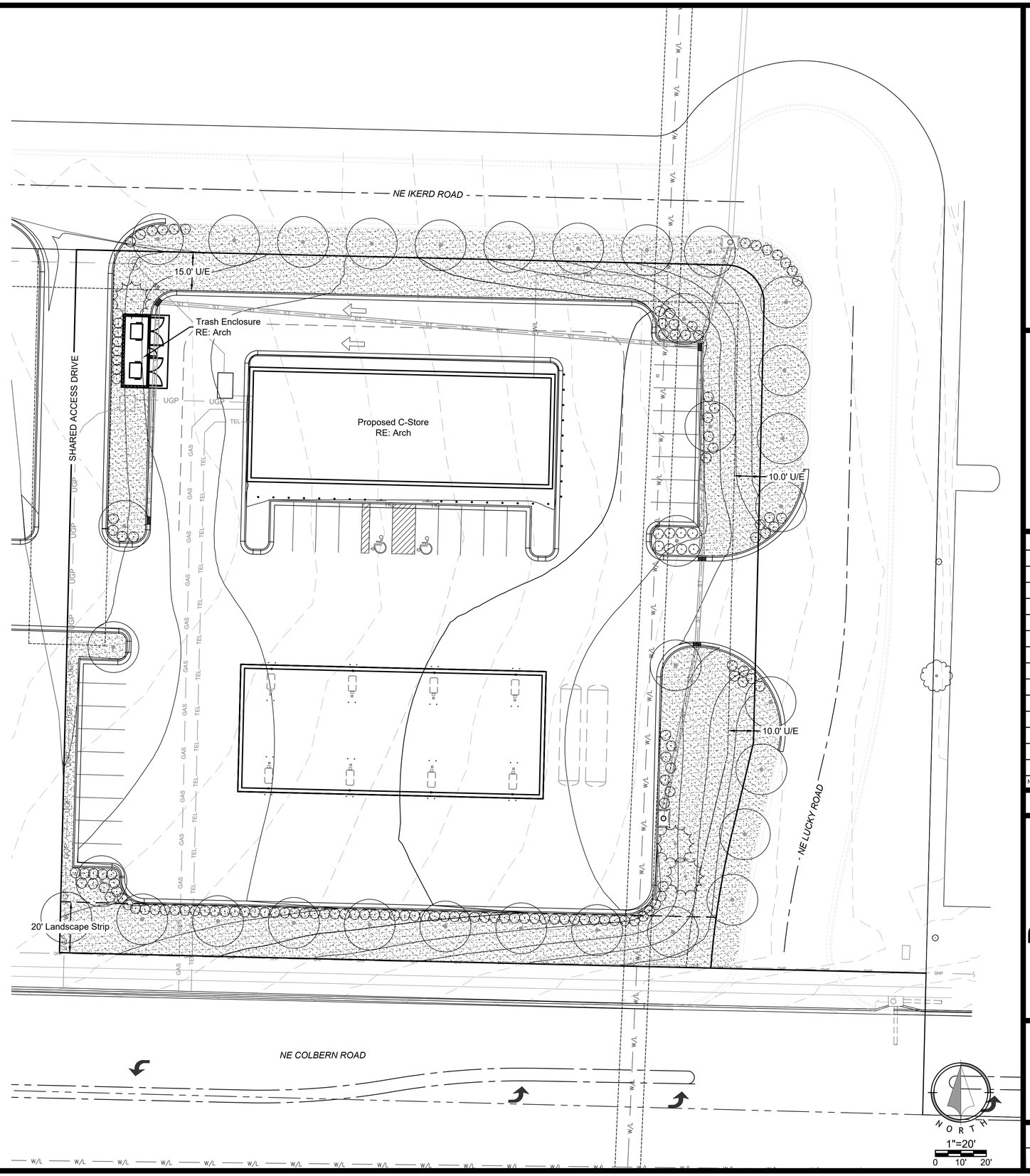
CONCEPT PLANT SCHEDULE

SHADE TREE — 33
2" Cal. B&B
Acer platanoides `Crimson King` / Crimson King Maple
Celtis occidentalis `Prairie Sentinel` / Prairie Sentinel Hackberry
Cercis canadensis `Forest Pansy` TM / Forest Pansy Redbud
Cornus kousa / Kousa Dogwood
Gymnocladus dioica 'Espresso' / Kentucky Coffeetree
Liriodendron tulipifera / Tulip Poplar
Nyssa sylvatica `Wildfire` / Black Gum
Zelkova serrata `City Sprite` TM / City Sprite Zelkova

EVERGREEN TREE — 3
5-6` Ht. Min. B&B
Juniperus virginiana `Hillspire` / Hillspire Juniper
Picea glauca `Densata` / Black Hills Spruce
Picea pungens `Fat Albert` / Colorado Spruce
Pinus flexilis `Vanderwolf`s Pyramid` / Vanderwolf`s Pyramid Pine

SHRUBS AND GRASSES — 135
3-5 Gal. 24" Ht. Min.
Aronia melanocarpa `Morton` TM / Iroquis Beauty Black Chokeberry
Cornus stolonifera `Arctic Fire` / Arctic Fire Dogwood
Hydrangea paniculata `ILVOBO` TM / Bobo Panicle Hydrangea
Hypericum frondosum `Sunburst` / Sunburst Hypericum
Itea virginica `Henry`s Garnet` / Henry`s Garnet Sweetspire
Juniperus chinensis `Gold Lace` / Gold Lace Juniper
Juniperus horizontalis `Hughes` / Hughes Juniper

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



Preliminary Development Plans

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Landscape Plan

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LUMINAIRE SCHEDULE

SYMBOL	MOUNTING	MODEL	WATTAGE	QUANTITY	MOUNTING HEIGHT	LAMP DEPRECIATION
□	RECESSED	CREE, INC., CAN-304-SL-xx-04-E-UL-700-40K or BXCP:ED4E-UD7 (700mA)	135	32	16'-6"	0.9
○—□	POLE	HUBBELL OUTDOOR, RAR-2-320L-110-4K7-2-BC	110	2	25'	0.9
○—□	POLE	HUBBELL OUTDOOR, RAR-2-320L-110-4K7-3-BC	110	10	25'	0.9
○—□	POLE	HUBBELL OUTDOOR, RAR2-320L-110-4K7-4W	110	1	25'	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	4.87

HUBBELL Outdoor Lighting

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

RATIO Series

AREA/SITE LIGHTER

FEATURES

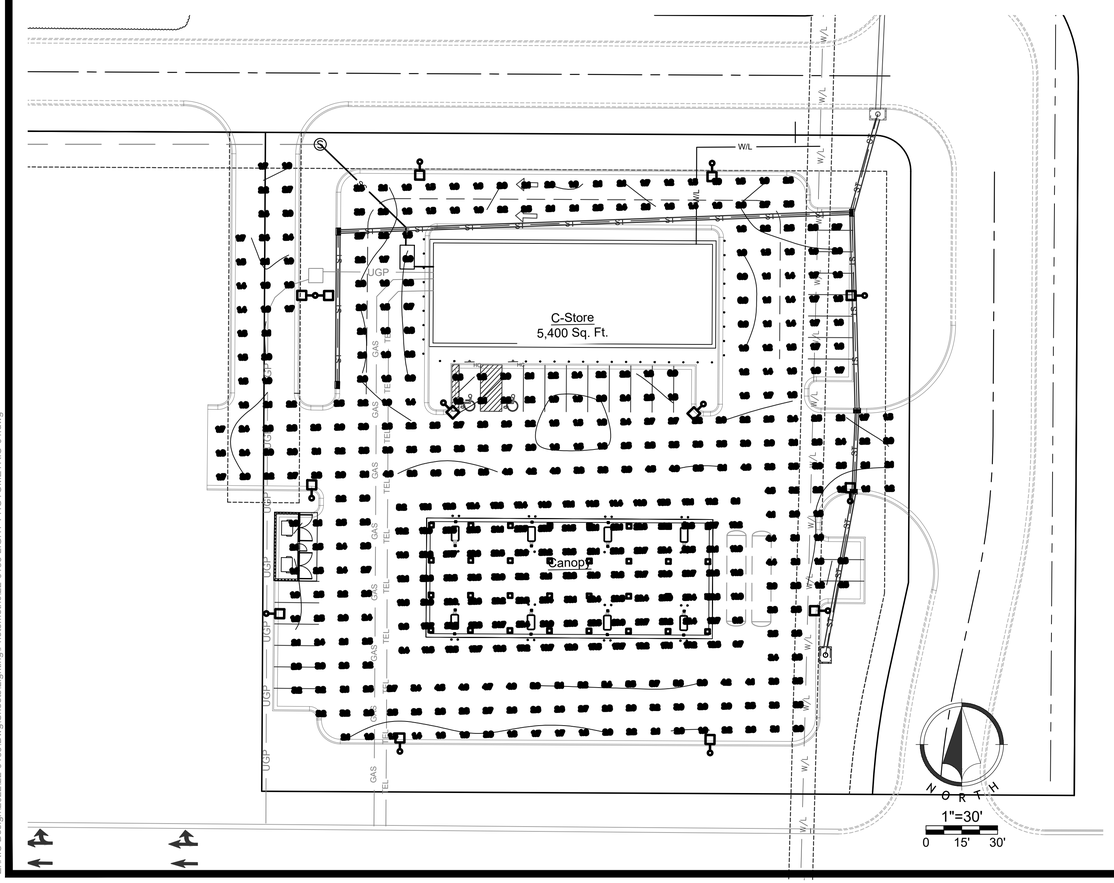
- Low profile LED area/site luminaire with a variety of IES distributions for lighting applications such as retail, commercial and campus parking lots
- Featuring Micro Strike Optics which maximizes target zone illumination with minimal losses at the house-side, reducing light trespass issues
- Visual 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

c UL us IP66 DLC LISTED DLC LISTED PREMIUM BUY AMERICAN SOLUTIONS

See Certification Specifications

RELATED PRODUCTS

Airo | Cimarron LED | Ratio Family



304 Series™

LED Recessed Canopy Luminaire

Rev. Date: V7 04/05/2021

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

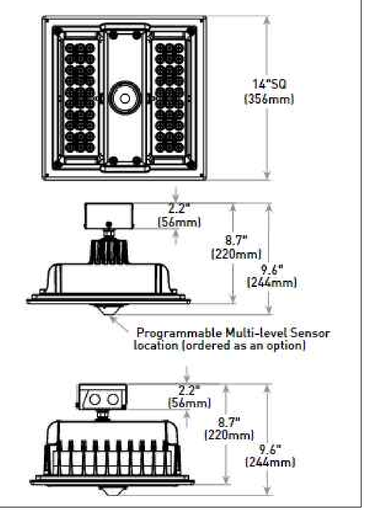
Limited Warranty†: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

† See http://creelighting.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

RS Mount



Preliminary Development Plan

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

Photometric Plan

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