

# K-1 SPEED PRELIMINARY DEVELOPMENT PLAN

## LEE'S SUMMIT, MISSOURI 64063

2911 NORTHEAST INDEPENDENCE AVE



NOT FOR CONSTRUCTION

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### UTILITY CONTACTS

CITY OF LEE'S SUMMIT, MO

**PLANNING AND DEVELOPMENT**  
CITY HALL  
220 SE GREEN STREET  
LEE'S SUMMIT, MO 64063  
TEL: (816) 969-1600  
FAX: (816) 969-1619

**PUBLIC WORKS**  
CITY HALL  
220 SE GREEN STREET  
LEE'S SUMMIT, MO 64063  
TEL: (816) 969-1800  
FAX: (816) 969-1809

**LEE'S SUMMIT FIRE DEPARTMENT**  
207 SE DOUGLAS ROAD  
LEE'S SUMMIT, MO 64063  
TEL: (816) 969-1300

**TELEPHONE COMPANY**  
AT&T  
TEL: (800) 464-7928

**CODES ADMINISTRATION**  
CITY HALL  
220 SE GREEN STREET  
LEE'S SUMMIT, MO 64063  
TEL: (816) 969-1200  
FAX: (816) 969-1201

**WATER UTILITIES**  
CITY HALL  
1200 SE HAMBLEN RD  
LEE'S SUMMIT, MO 64063  
TEL: (816) 969-1900  
FAX: (816) 969-1935

**ELECTRIC COMPANY**  
EVERGY  
TEL: (888) 471-5275

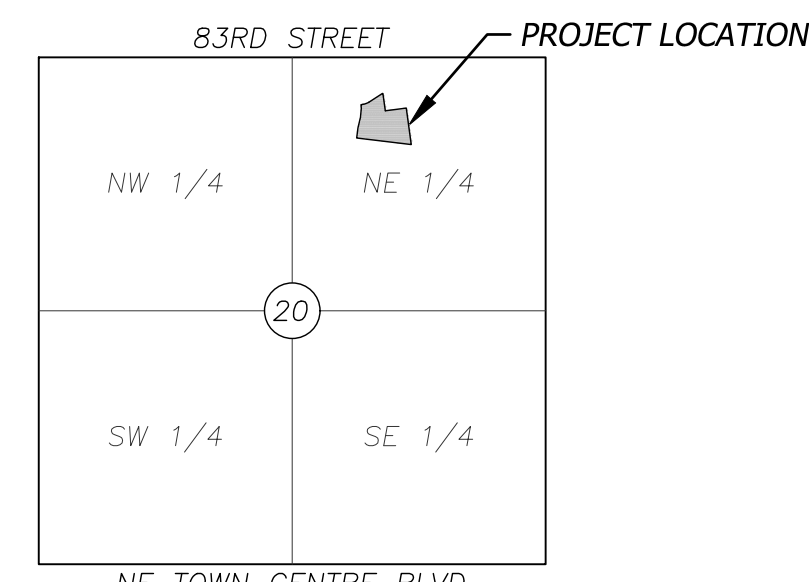
**GAS COMPANY**  
MISSOURI GAS ENERGY  
TEL: (816) 756-5252



VICINITY MAP

SCALE: 1" = 1000'

All existing utility locations shown are approximate only and are not guaranteed to be accurate or all inclusive. Contractor shall be responsible for contacting all utility companies and verifying the actual field locations of all utilities prior to any construction activity. Contractor shall keep all utility locations current. Utilities damaged through the negligence of the contractor to obtain the proper field locations shall be the responsibility of the contractor to repair or replace at their expense and at the direction of the utility company. The contractor shall pothole and survey all utility crossings prior to construction of any portion of storm sewer, sanitary sewer laterals, underdrains, conduit and any other subsurface element of the project. The survey information shall be forwarded to the project engineer for review. The contractor shall not begin construction on any subsurface element on the project without the approval of the project engineer. Utility coordination, potholing/surveying shall be subsidiary to other bid items.



SECTION MAP

SCALE: 1" = 2000'  
SECTION 20-T48N-R31W  
LEE'S SUMMIT, MISSOURI

### SURVEYOR OF RECORD

OLSSON  
1301 BURLINGTON ST.  
NORTH KANSAS CITY, KANSAS 64116  
P (816) 361-1177  
F (816) 361-1888  
CONTACT: JASON S. ROUDEBUSH  
EMAIL: JROUDEBUSH@OLSSON.COM

### DEVELOPER/OWNER

DH4 HOLDINGS  
10624 S EASTERN AVE, SUITE A-975  
HENDERSON, NEVADA 89052  
P (816) 853.8323  
CONTACT: DAVID HILL  
EMAIL: DAVID.HILL@DH4L.COM

### CIVIL ENGINEER

BHC  
7101 COLLEGE BOULEVARD, SUITE 400  
OVERLAND PARK, KANSAS 66210  
P (913) 663-1900  
F (913) 663-1633  
CONTACT: AUSTIN LAGE  
EMAIL: AUSTIN.LAGE@IBHC.COM

### APPROVED BY:

\_\_\_\_\_  
Administrator, Engineering Services Division Date

### SUBMITTED BY:

BHC  
OVERLAND PARK, KANSAS

\_\_\_\_\_  
Austin Lage, P.E. Date  
MO P.E. No. 2021029127



K-1 Speed  
Entertainment Complex  
Lot 4C Strother Crossing  
Lots 4A-4C Lee's Summit, MO

#	Revisions:
01	PDF-CITY COMMENTS 03/15/2022
02	PDF-CITY COMMENTS 04/04/2022

Project #: 211107

Preliminary  
Development Plan  
10 February 2022

COVER SHEET  
CVR





NOT FOR CONSTRUCTION

**K-1 Speed**  
 Entertainment Complex  
 Lot 4C Strother Crossing  
 Lots 4A-4C Lee's Summit, MO

SIGHT TRIANGLE FOR LEFT-HAND TURNS				
DESIGN SPEED (MPH)	LENGTH OF LEG (FT)	APPROACH GRADE (%)	ADJUSTMENT FACTOR	FINAL LENGTH OF LEG (FT)
35	165	-0.91	1	165

SIGHT TRIANGLE FOR RIGHT-HAND TURNS				
DESIGN SPEED (MPH)	LENGTH OF LEG (FT)	APPROACH GRADE (%)	ADJUSTMENT FACTOR	FINAL LENGTH OF LEG (FT)
35	165	0.81	1	165

SITE DATA	
<b>SITE</b>	
SITE AREA:	4.51 AC 196,592 SF
<b>IMPERVIOUS AREA:</b>	
LOT 1:	35,238 SF
LOT 2:	108,715 SF
<b>BUILDING</b>	
BUILDING LOT 1:	11,250 SF (6.0%) FAR .06
BUILDING LOT 2:	46,700 SF (23.8%) FAR .24
<b>PARKING</b>	
LOT 1:	
PARKING PROVIDED:	45 STANDARD 2 HANDICAP (1 VAN)
PARKING REQUIRED: CUSTOMER & EMPLOYEE STALLS: (4/1000 SF OFFICE SPACE - 11,250)	45
ADA STALLS: (BASED ON THE 45 STALLS)	2
LOT 2:	
PARKING PROVIDED:	110 STANDARD 5 HANDICAP (1 VAN)
PARKING REQUIRED: CUSTOMER & EMPLOYEE STALLS: (6/1000 SF NON-TRACK AREA - 14,830)	89
ADA STALLS: (BASED ON THE 110 STALLS)	5

**NOTE:**

LOT 1 BY SEPARATE CONTRACT

**ZONING**

CP-2 (PLANNED GENERAL BUSINESS DISTRICT)

**CONSTRUCTION NOTES**

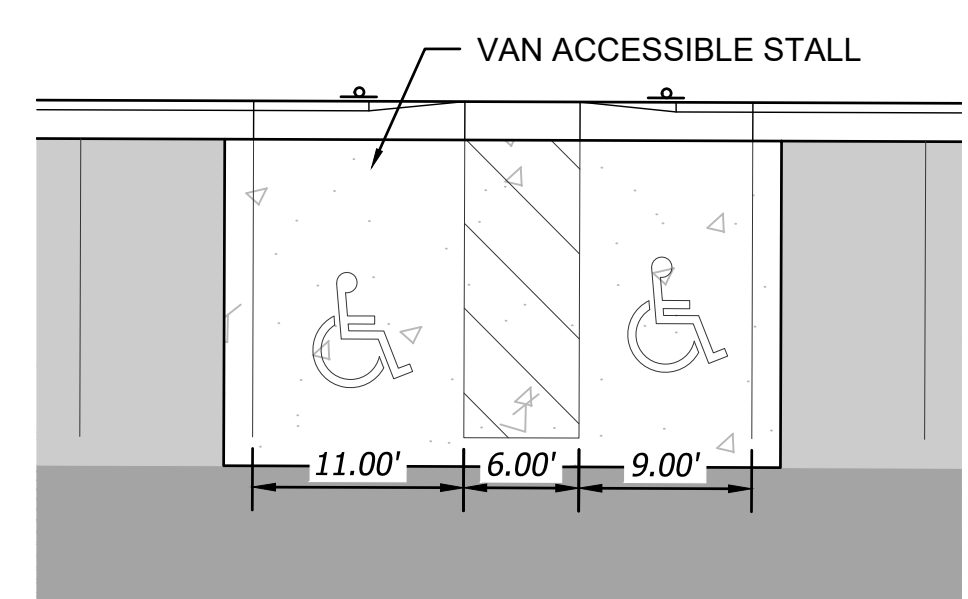
- 01 LEAD FREE, WATER-BORNE EMULSION BASED TRAFFIC PAINT FOR PARKING LOT STRIPING (WHITE ON ASPHALT & YELLOW ON CONCRETE).
- 02 PROPOSED MONUMENT SIGN; RE. TO ARCHITECTURAL PLANS.
- 03 PROPOSED TRASH ENCLOSURE LOCATION.
- 04 PROPOSED STORM SYSTEM.
- 05 PROPOSED TRANSFORMER PAD LOCATION; COORDINATE WITH ELECTRIC COMPANY.
- 06 PROPOSED SITE LIGHTING; REFER TO LIGHTING PLANS.
- 07 ADA PARKING AREA. 2% MAXIMUM SLOPE IN ANY DIRECTION.
- 08 RETAINING WALL.
- 09 EXISTING SIDEWALK.
- 10 SIGNAGE - "FIRE LANE - NO PARKING"

**DETAILS**

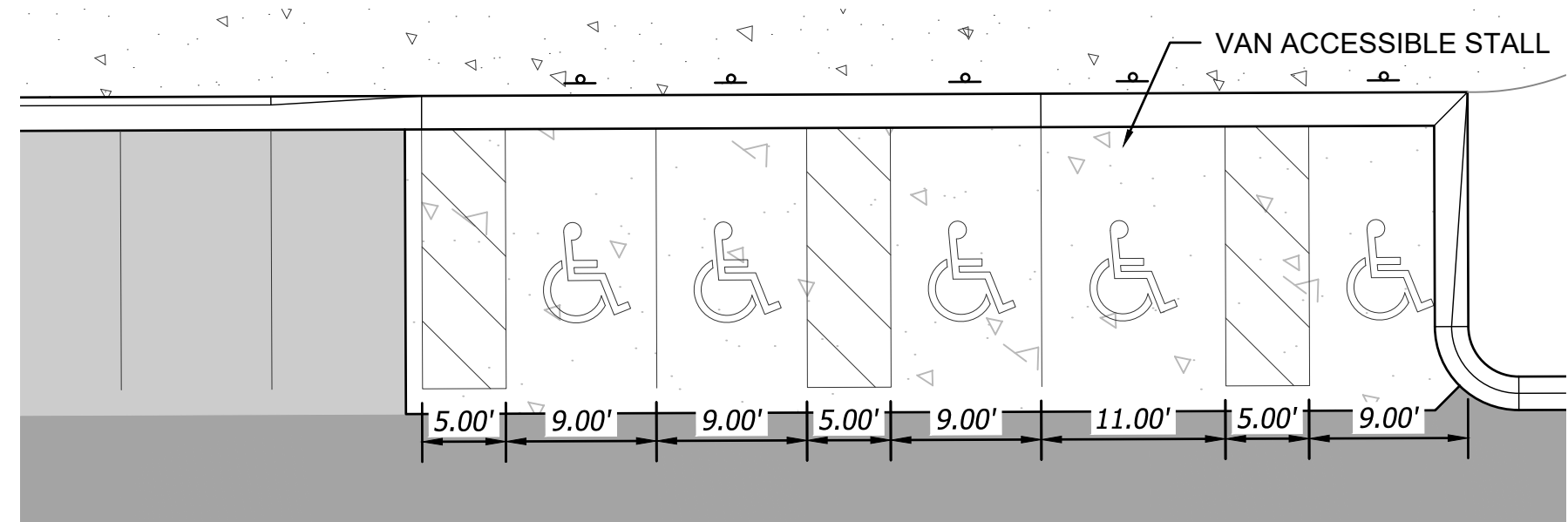
- 002 CONCRETE CURB & GUTTER; RE. LEGEND FOR TYPE
- 005 LIGHT DUTY ASPHALT PAVEMENT
- 006 MEDIUM DUTY ASPHALT PAVEMENT
- 007 HEAVY DUTY ASPHALT PAVEMENT
- 009 LIGHT DUTY PCC PAVEMENT
- 010 MEDIUM DUTY PCC PAVEMENT
- 012 CONCRETE DUMPSTER PAD
- 014 CONCRETE SIDEWALK
- 035 CONCRETE STAIRS

**SITE LEGEND**

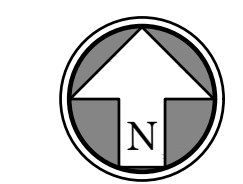
	PROPOSED BUILDING		PARKING STALL COUNT
	FUTURE BUILDABLE AREA		CURB & NO GUTTER
	LIGHT DUTY ASPHALT PAVEMENT		ROLLOVER CURB & GUTTER
	MEDIUM DUTY ASPHALT PAVEMENT		STANDARD CURB & GUTTER
	HEAVY DUTY ASPHALT PAVEMENT		ACCESSIBLE ADA ROUTE
	LIGHT DUTY PCC PAVEMENT		RETAINING WALL
	MEDIUM DUTY PCC PAVEMENT		
	CONCRETE PAD		
	CONCRETE SIDEWALK		



LOT 1 ADA



LOT 2 ADA



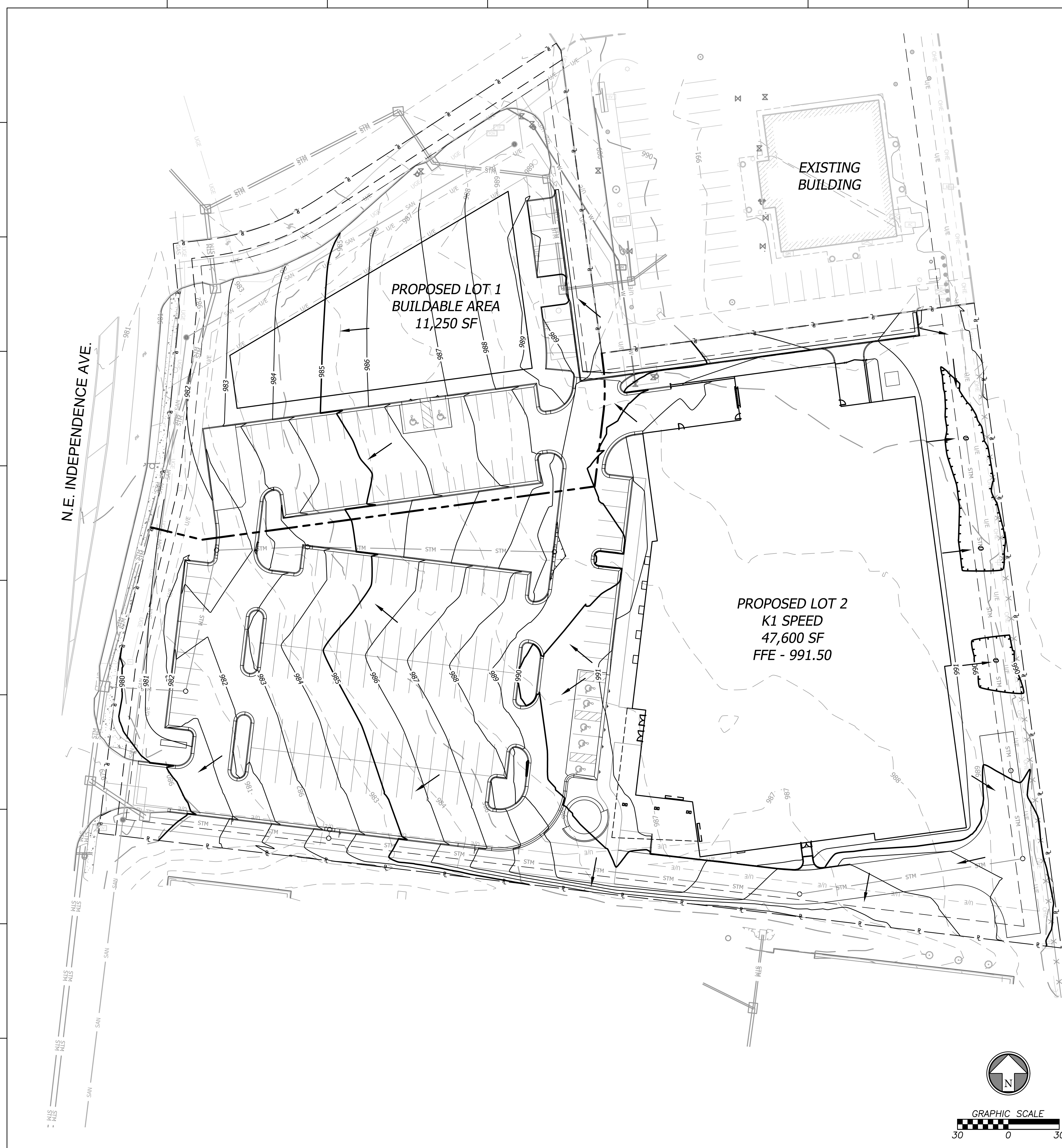
**BHC**  
 CIVIL ENGINEERING / SURVEYING / UTILITIES  
 7101 College Blvd., Suite 400  
 Overland Park, Kansas 66210  
 p. (913) 663-1900  
 BHC is a trademark of Brueggemann & Company, P.A.

#	Revisions:
01	PDF-CITY COMMENTS 03/15/2022
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SITE PLAN  
**C1.0**



**GRADING NOTES**

1. Contractor shall obtain a copy of the Geotechnical Services Report for the project and be familiar with the existing conditions and recommendations contained in the report if such a report has been prepared.
2. Contractor is responsible for any over excavation of existing unsuitable soils that will be required under building and pavement areas. Contractor shall perform over excavation of unsuitable soils as a part of this work.
3. Contractor shall obtain soils suitable as structural fill from off-site sources. All borrow materials must be tested and approved by the Geotechnical Engineer prior to importing the soils to the project site.
4. Contractor shall operate under the terms and permits included in the Stormwater Pollution Prevention Plan (SWPPP) prepared for this project and permitted through the State of Missouri. Contractor shall employ a qualified person to conduct regular inspections of the site erosion control measures and document such inspections in the SWPPP document maintained by the Contractor.
5. All topsoil, vegetation, root structures, and deleterious materials shall be stripped from the ground surface prior to the placement of embankments. Contractor shall obtain the on-site geotechnical representative's acceptance of the existing ground surface materials and the proposed fill material prior to the placement of fill.
6. All proposed contour lines and spot elevations shown are finish ground elevations. Contractor shall account for pavement depths, building pads, topsoil, etc when grading the site.
7. All disturbed areas that are not to be paved (green spaces) shall be finish graded with a minimum of six inches of topsoil.
8. All excavation and embankments shall comply with the recommendations provided by the geotechnical engineer.
9. Prior to placing any concrete or asphalt pavement the contractor shall perform a proof roll of the pavement sub-grade with a fully loaded tandem axle dump truck. The proof roll shall be conducted in the presence of the on-site geotechnical representative. Areas that display rutting or pumping that are unsatisfactory to the geotechnical representative shall be re-worked and a follow-up proof roll shall be conducted prior to acceptance of the sub-grade for paving. The contractor may, at its own expense, stabilize the sub-grade using Class C fly ash or quicklime, as approved by the geotechnical engineer.
10. Finished grades shall not be steeper than 3:1.
11. All grading work shall be considered unclassified. No additional payments shall be made for rock excavation. Contractor shall satisfy himself as to any rock excavation required to accomplish the improvements shown hereon.
12. A 2.0% maximum cross slope shall be maintained on all pedestrian sidewalks and paths.

**FLOOD STATEMENT**

The subject property lies within Flood Zone "X" (unshaded) (Areas determined to be outside the 0.2% annual chance floodplain), as shown on the Jackson County, Kansas and Incorporated Areas Flood Insurance Rate Map (F.I.R.M.).

Map Number: 29095C0430G  
 Panel No: 417 of 625  
 Map Revised Date: January 20, 2017

**NOTE:** This statement is provided for informational purposes only and shall in no way constitute a basis for a flood certificate. No field work was performed to establish the boundaries of this zone. The information was derived by scaling the subject property on the above referenced map.

**GRADING LEGEND**

	STANDARD CURB & GUTTER		FINISH GRADE MAJOR CONTOURS
	ROLLOVER CURB & GUTTER		FINISH GRADE MINOR CONTOURS
	RETAINING WALL		EXISTING GRADE MAJOR CONTOURS
	DRAINAGE DIRECTION		EXISTING GRADE MINOR CONTOURS
			PROPERTY LINE



NOT FOR CONSTRUCTION

**K-1 Speed**  
 Entertainment Complex  
 Lot 4C Strother Crossing  
 Lots 4A-4C Lee's Summit, MO

Revisions:

#	DESCRIPTION	DATE
01	PDF-CITY COMMENTS	03/15/2022
02	PDF-CITY COMMENTS	04/04/2022

Project #: 211107

Preliminary Development Plan

10 February 2022



GRADING PLAN  
**C2.0**

NOT FOR CONSTRUCTION

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#	Revisions:
01	PDF-CITY COMMENTS 03/15/2022
02	PDF-CITY COMMENTS 04/04/2022

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 Development Plan

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UTILITY PLAN

**C3.0**

**(X) 00 CONSTRUCTION NOTES**

- W - WATER SERVICE INFORMATION - CITY OF LEE SUMMIT**
- 01 EXISTING 6" WATER MAIN LINE, CONTRACTOR TO VERIFY LOCATION AND DEPTH
  - 02 2.5" TAPPING SLEEVE AND 2.5" TAPPING VALVE TO BE INSTALLED ON EXISTING 6" WATER MAIN. CONTRACTOR TO EXCAVATE TAP HOLE.
  - 03 INSTALL 2.5" DOMESTIC WATER LINE.
  - 04 CONNECT DOMESTIC SERVICE LINE TO BUILDING PLUMBING.
  - 05 INSTALL 6"x6"x6" TEE.
  - 06 INSTALL 6" FIRE PROTECTION LINE.
  - 07 INSTALL FIRE HYDRANT.
  - 08 INSTALL 6"x6"x6" TEE.
  - 09 CONNECT FIRE PROTECTION LINE TO BUILDING PLUMBING.
  - 10 BUILDING MOUNTED FDC.

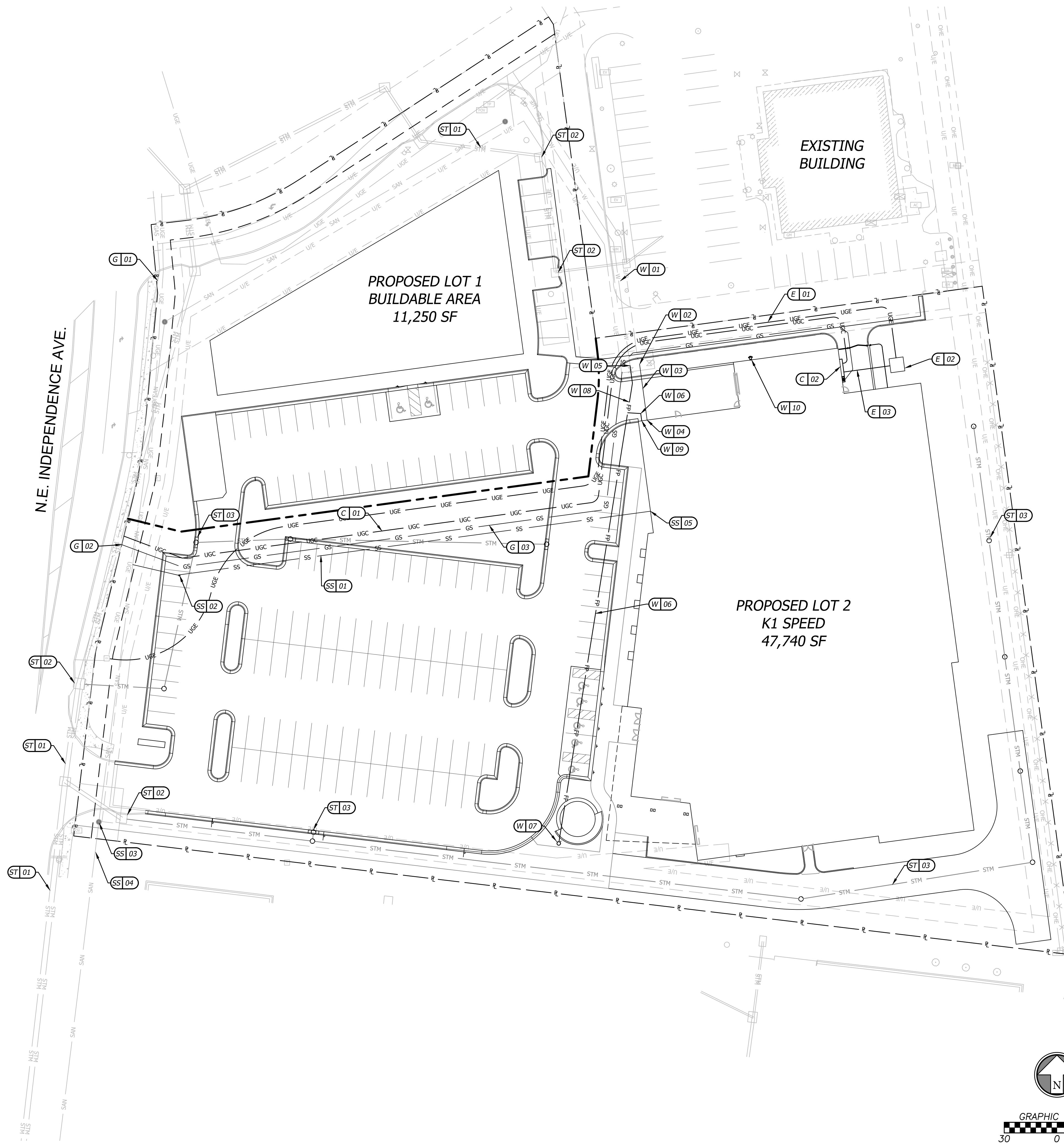
- E - ELECTRIC SERVICE INFORMATION - EVERGY**
- 01 CONTRACTOR TO INSTALL PRIMARY UNDERGROUND ELECTRIC SERVICE FROM EXISTING ELECTRIC STRUCTURE TO TRANSFORMER PAD.
  - 02 PROPOSED TRANSFORMER PAD.
  - 03 CONTRACTOR TO INSTALL SECONDARY UNDERGROUND ELECTRIC SERVICE LINE FROM PROPOSED TRANSFORMER TO BUILDING

- C - COMMUNICATION SERVICE INFORMATION**
- 01 CONTRACTOR TO INSTALL COMMUNICATION CONDUIT W/ PULL WIRE FROM THE BUILDING TO THE CONNECTION AT COMMUNICATION BOX; COORDINATE W/ COMMUNICATION UTILITY PROVIDER.
  - 02 CONNECT COMMUNICATIONS CONDUITS TO BUILDING; REFER TO: ELECTRICAL PLAN.

- G - GAS SERVICE INFORMATION**
- 01 EXISTING 4" GAS MAIN.
  - 02 TAP EXISTING GAS MAIN FOR SERVICE LINE. VERIFY LOCATION.
  - 03 INSTALL 305 LF GAS SERVICE LINE.
  - 04 GAS CONNECTION TO BLDG.

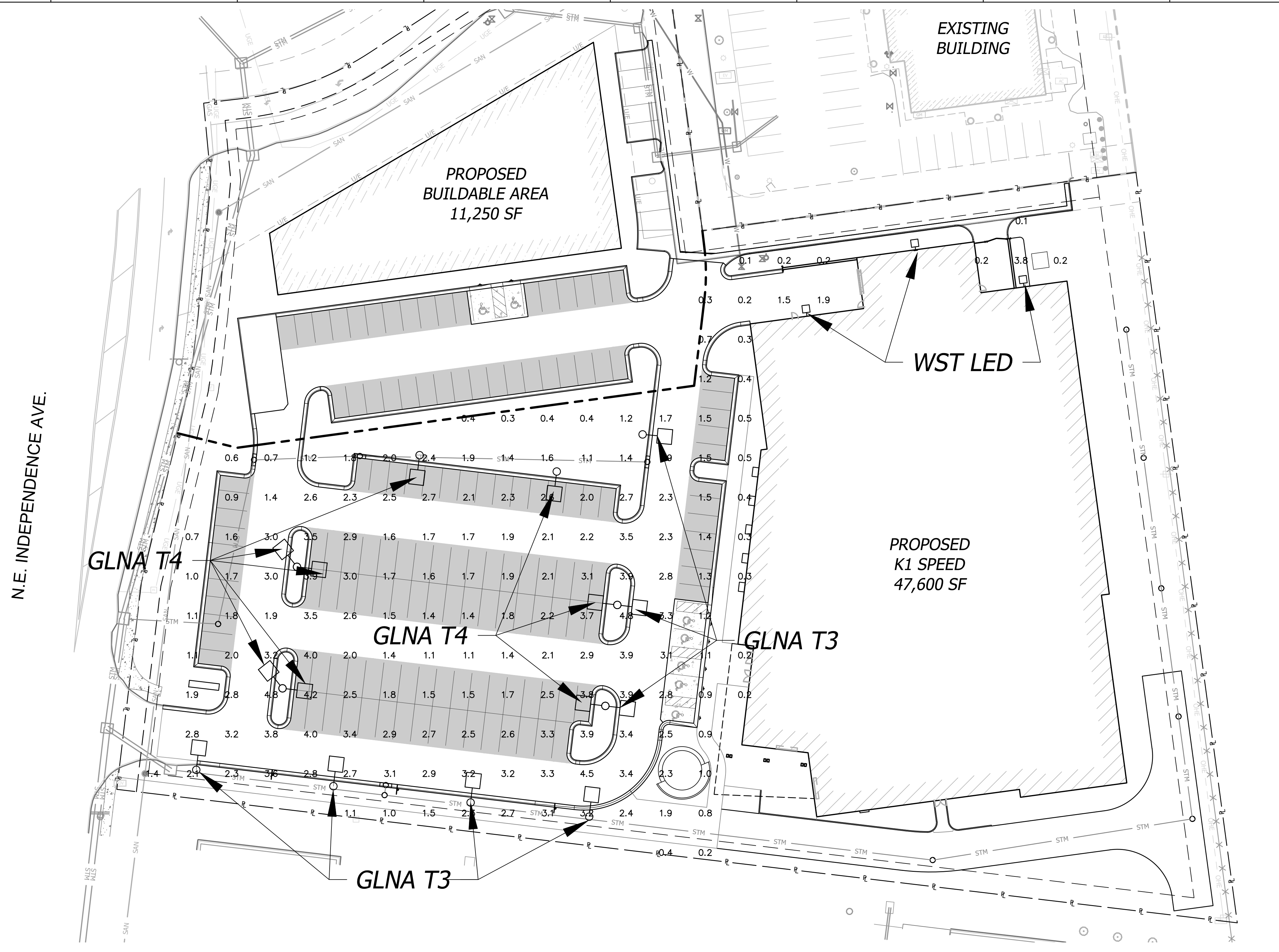
- ST - STORM SEWER INFORMATION - CITY OF LEE SUMMIT**
- 01 EXISTING STORM SEWER LINE.
  - 02 EXISTING CURB INLET.
  - 03 PROPOSED STORM INFRASTRUCTURE.

- SS - SANITARY SEWER INFORMATION**
- 01 SANITARY SEWER SERVICE LINE.
  - 02 SANITARY SEWER CLEAN OUT.
  - 03 EXISTING SANITARY SEWER MANHOLE.
  - 04 EXISTING SANITARY SEWER MAIN.
  - 05 SANITARY SEWER BUILDING CONNECTION.



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 Lots 4A-4C Lee's Summit, MO

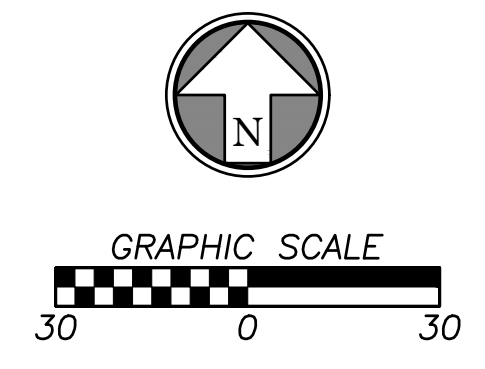


**GENERAL  
 PHOTOMETRIC  
 SCHEDULE**

AVERAGE FOOT-CANDLES	2.01
MAXIMUM FOOT-CANDLES	4.8
MINIMUM FOOT-CANDLES	0.1
MINIMUM TO MAXIMUM FC RATIO	0.02
MAXIMUM TO MINIMUM FC RATIO	57.67
AVERAGE TO MINIMUM FC RATIO	24.16

**LUMINAIRE SCHEDULE**

CALLOUT	SYMBOL	QUANTITY	MOUNTING	MODEL	VOLTS
GLNA - T3		7	POLE	COOPER LIGHTING SOLUTIONS - MCGRAW-EDISON (FORMERLY EATON), GLNA-AF-02-LED-E1-T3	120V 1P 2W
GLNA - T4		8	POLE	COOPER LIGHTING SOLUTIONS - MCGRAW-EDISON (FORMERLY EATON), GLNA-AF-02-LED-E1-T4FT	120V 1P 2W
WST LED		3	WALL	Lithonia Lighting, WST LED P1 40K VF HVOLT	120V 1P 2W





**Test Information**

Test Method: LM-79-08  
Report Number: P299104  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24140)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-02-LED-E1-T3  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 4000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12139 lumens  
Efficiency: N/A  
Efficacy: 107.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B2 - U0 - G2  
Input Watts (W): 113  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THD): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

2 of 8



**Test Information**

Test Method: LM-79-08  
Report Number: P300305  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24295)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-02-LED-E1-T4FT  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 4000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Forward Throw OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12210.1 lumens  
Efficiency: N/A  
Efficacy: 108.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G2  
Input Watts (W): 113  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THD): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

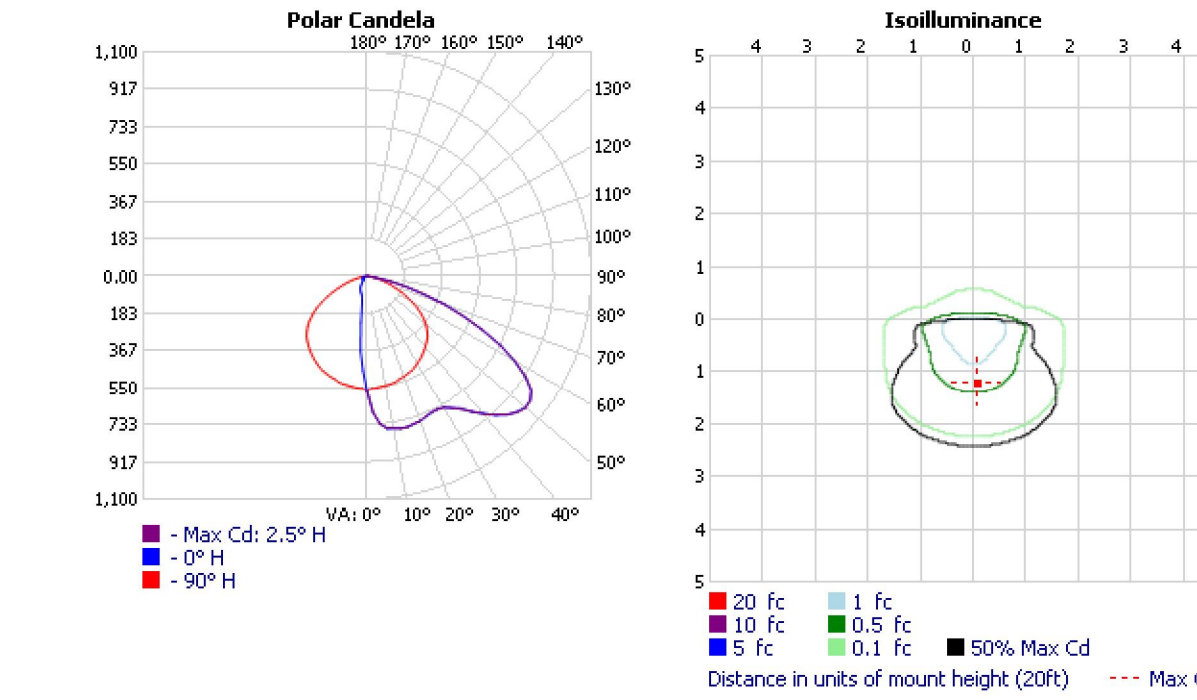


FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

2 of 8

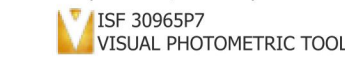
**OUTDOOR PHOTOMETRIC REPORT**

CATALOG: WST LED P1 40K VF HVOLT  
Test #: ISF 30965P7  
Test Lab: SCALED PHOTOMETRY  
Test Date: 5/16/2016  
Catalog: WST LED P1 40K VF HVOLT  
Description: WST LED, Performance package 1, 4000 K, visual comfort forward throw, HVOLT  
Series: WST-LED  
Lamp: LED  
Lamp Output: Total Luminaire Lumens: 1639.3, absolute photometry \*  
Ballast / Driver: LED DRIVER  
Input Wattage: 14  
Luminous Opening: Rectangle (L: 7.56', W: 12')  
Max Cd: 1,013.4 at Horizontal: 2.5°, Vertical: 50°  
Roadway Class: VERY SHORT, TYPE III



\*Test based on absolute photometry where lamp lumens=lumens total.  
\*Cutoff Classification and efficiency cannot be properly calculated for absolute photometry.

Visual Photometric Tool 1.2.46 copyright 2022, Acuity Brands Lighting.  
This Photometric report has been generated using methods recommended by the IESNA. Calculations are based on Photometric data provided by the manufacturer, and the accuracy of this Photometric report is dependent on the accuracy of the data provided. End-user environment and application (including, but not limited to, voltage variation and dirt accumulation) can cause actual Photometric performance to differ from the performance calculated using the data provided by the manufacturer. This report is provided without warranty as to accuracy, completeness, reliability or otherwise. In no event will Acuity Brands Lighting be responsible for any loss resulting from any use of this report.



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PHOTOMETRIC FIXTURES

PH1.1