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1770 West Main Street, Columbia, MO 65201
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www.es-s.com
MO Engineering Corp. # 2004000016

0 10 20
SCALE: 1"=20'

N

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SCALE: 1"=20'

CONDITIONAL USE PERMIT
BREW CREW, LLC
7 BREW
COLUMBIA, BOONE COUNTY, MISSOURI

STATE OF MISSOURI
MATTHEW A. KOBETZ
PROFESSIONAL ENGINEER
RE-200700811
P. ORIGINAL SIGNATURE OR DIGITAL
NOTIFICATION OF NOT PRESENT THIS
MEDIA SHOULD NOT BE CONSIDERED A
CERTIFIED DOCUMENT
Date
DECEMBER 15, 2023
Revised
JANUARY 8, 2023
Design: JH Drawn: CGH
LANDSCAPE PLAN
Sheet
L1.01
E8&S PROJECT NO. 16108

LANDSCAPING NOTES

- ALL PLANT MATERIAL SHALL BE (PER 29-4.4(C)(3 & 4)):
 - HARDY TO CENTRAL MISSOURI (USDA HARDNESS ZONE 8B)
 - FREE OF DISEASE AND INSECTS
 - CONFORMING TO AMERICAN STANDARD FOR NURSERY STOCK OF THE AMERICAN ASSOCIATION OF NURSERMEN
- ALL NON-PLANTED AREAS SHALL RECEIVE THE FOLLOWING:
 - PERMANENT LANDSCAPED AREAS: MIN. 6" OF TOPSOIL
 - INTERIOR LANDSCAPED ISLANDS: MIN. 15" OF TOPSOIL
 - THE SITE CONTRACTORS SHALL BE RESPONSIBLE TO PROVIDE FINISHED GRADE TO THIS SUBGRADE
 - NO LESS THAN 50% OF LANDSCAPED AREA MUST BE COVERED WITH LIVE PLANTS, NOT MULCH, BARK, GRAVEL, ETC. (PER 29-4.4(C)(4))
- PLANTING MATERIALS SHALL BE OF THE FOLLOWING MINIMUM SIZE (PER 29-4.4(C)(4)):
 - LARGE DECIDUOUS SHADE TREES (MATURE HEIGHT >45') = 2" CALIPER
 - MEDIUM DECIDUOUS SHADE TREES (MATURE HEIGHT 30'-45') = 2" CALIPER
 - SMALL DECIDUOUS SHADE TREES (MATURE HEIGHT 20'-30') = 4" IN HEIGHT
 - ORNAMENTAL TREE (MATURE HEIGHT <20') = 4" IN HEIGHT
 - CONIFER = 6" IN HEIGHT
 - SHRUBS = 5-GAL. CONTAINER
 - GROUND COVER = APPROPRIATE FOR SOIL COVERAGE WITHIN 2 GROWING SEASONS
 - GRASS SEED, 500 = 300% PURE LIVE SEED, 99% WEED FREE
- PLANTINGS SHALL NOT BE PLACED CLOSER THAN 4" FROM THE FENCE OR PROPERTY LINE, UNLESS NOTED OTHERWISE ON THE PLANS (PER 29-4.4(C)(7))
- SNOW STORAGE SHALL NOT OCCUR IN BUFFER AREAS (PER 29-4.4(C)(8))
- SOOT TRIANGLE (PER 29-4.4(C)(11)): NO PLANTINGS WITH MATURE HEIGHTS TALLER THAN 18 INCHES SHALL BE PLACED WITHIN THE DEFINED SOOT TRIANGLE AS SHOWN ON THE PLAN.
- PLANTING SHALL BE COMPLETED WITHIN ONE PLANTING SEASON (SPRING TO FALL) OF THE COMPLETION OF EXTERIOR IMPROVEMENTS, OR WITHIN ONE YEAR OF THE ISSUANCE OF THE LAND DISTURBANCE PERMIT, WHICHEVER OCCURS LATER (PER 29-4.4(C)(10)). THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A PERFORMANCE BOND, ESCROW LETTER OF CREDIT, OR OTHER INSTRUMENT ACCEPTABLE TO THE CITY OF COLUMBIA, TO THE CITY OF COLUMBIA AND OWNERS, FOR ANY WORK NOT COMPLETED OR ACCEPTED WITHIN THIS TIME FRAME.
- TREE PROTECTION SHALL BE REQUIRED PRIOR TO AND DURING CONSTRUCTION AND LAND DISTURBANCE ACTIVITIES.
- NO ACTIVITY WITH THE POTENTIAL OF CAUSING DAMAGE TO THE ROOT SYSTEM OF TREES SHALL BE ALLOWED WITHIN 20 FEET OF THE OUTSIDE OF PRESERVED, PROTECTED, OR PLANTED TREE DRIP LINE (PER 29-4.4(C)(9)).
- ORANGE CONSTRUCTION FENCE, WITH A SIGN STATING "TREE PROTECTION - KEEP OUT EVERY 100 FEET SHALL BE INSTALLED ALONG THE PERIMETER OF THE TREE PROTECTION AREA BEFORE AND THROUGHOUT CONSTRUCTION.
- IF SITE GRADING OCCURS WITHIN 20' OF THE TREE PRESERVATION, THE PERIMETER OF THE AREA MUST BE TRENCHED TO A MINIMUM WIDTH AND DEPTH OF 2", AND ROOT PRUNED.
- NO CONSTRUCTION, GRADING, EQUIPMENT, MATERIAL STORAGE, OR OTHER ASSOCIATED ACTIVITY SHALL BE ALLOWED WITHIN THE FENCED AREA.
- ALL TREE AND VEGETATION PROTECTION MEASURES SHALL BE INSPECTED AND APPROVED BY CITY STAFF PRIOR TO THE START OF ANY LAND DISTURBING ACTIVITIES.
- ANY FAILURE OF THE CONTRACTOR TO FOLLOWING THESE REQUIREMENTS SHALL BE REMEDIED, AT THE CONTRACTOR'S SOLE EXPENSE, BY ONE OF THE FOLLOWING, AS FOUND ACCEPTABLE TO THE CITY OF COLUMBIA AND OWNERS:
 - PAYMENT OF \$750 TO THE CITY OF COLUMBIA RIGHT OF WAY LANDSCAPING BUDGET PER NEW TREE REQUIRED TO REPLACE IMPACTED TREE.
 - REPLACEMENT OF DAMAGED TREES PER 29-4.4(C)(10).

LANDSCAPING STRIP NOTE (PER 29-4.4(C))

WIDTH (FT):	REQUIRED	PROVIDED
DRIVEWAY SIDE TREES	N/A	N/A
PLANTING CATEGORIES:	4	N/A
COVERAGE OF STRIP:	>50%	>50%
OPACITY (1" TO 5" ABOVE GRADE)	>50%	>50%

STREET TREES: 1/80 LF * 172 LF = 3

	1	2
MEDIUM:	30% OF TOTAL = 1	2
LARGE:	30% OF TOTAL = 2	2

TOTAL TREES: 4

PLANTING MATERIALS PROVIDED: ORNAMENTAL TREES, MEDIUM SHADE TREES, LARGE SHADE TREES, GRASS, AND SHRUBS

PROPERTY EDGE BUFFERING NOTE (PER 29-4.4(C))

SUBJECT PROPERTY:	ZONING:	USE:	SCREENING LEVEL:	BUFFER AREA:	TREES
SUBJECT PROPERTIES:	M-DT	COMMERCIAL	N/A	852 SF	1
SOUTH:	M-DT	NON-RESIDENTIAL	N/A		1
EAST:	M-DT	NON-RESIDENTIAL	N/A		1
WEST:	M-DT	NON-RESIDENTIAL	N/A		1
TOTAL:					5

PLANTING CATEGORIES: 1727 SF

	REQUIRED	PROVIDED
COVERAGE OF STRIP:	>50%	>50%
OPACITY (1" TO 5" ABOVE GRADE)	>50%	>50%

PARKING LOT LANDSCAPING NOTE (PER 29-4.4(C))

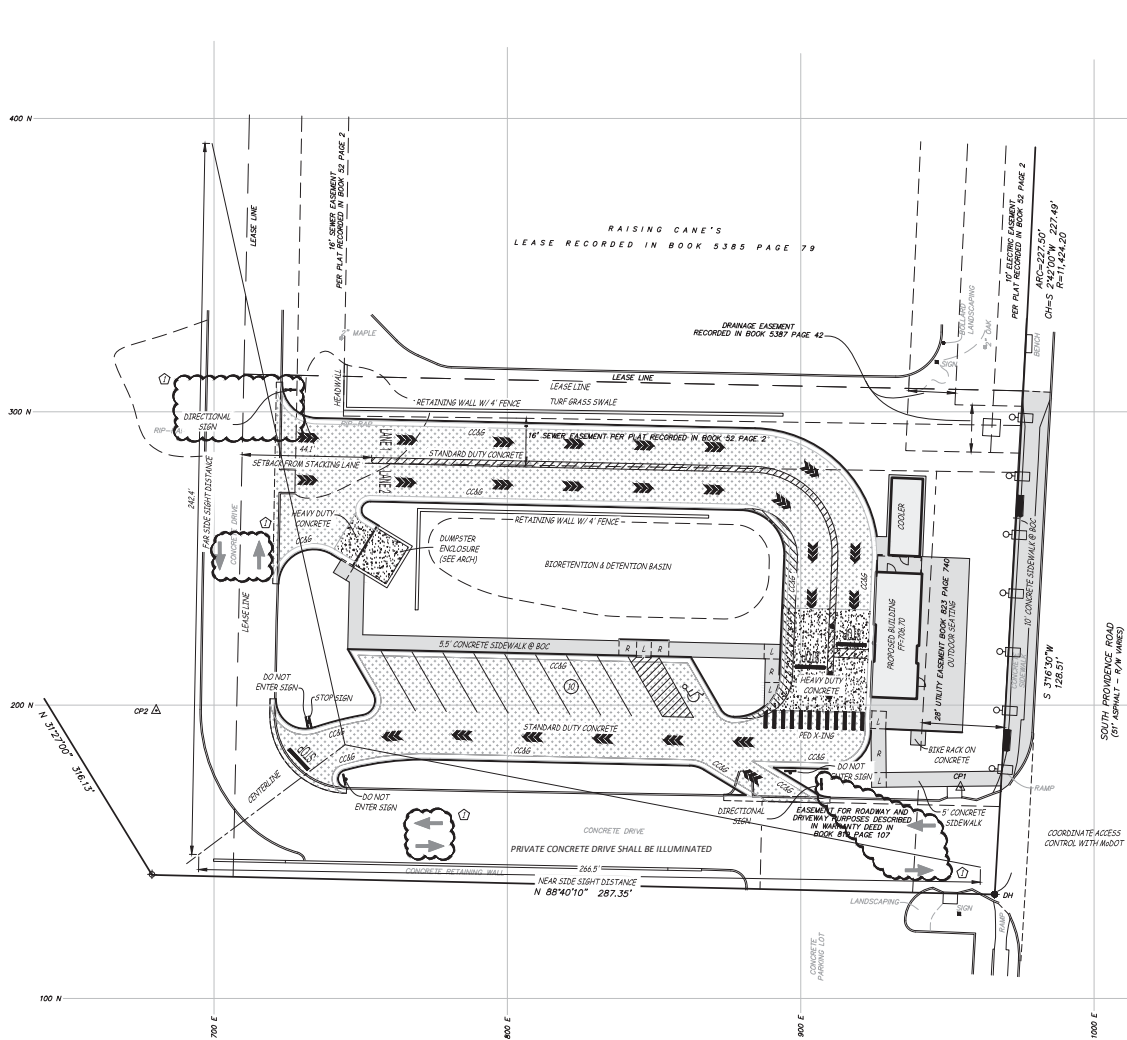
	REQUIRED	PROVIDED
INTERIOR LANDSCAPED ISLANDS:	>100 STALLS	N/A
INTERIOR ISLAND WIDTH:	8'	N/A
SEPARATION ISLANDS:	>150 STALLS	N/A
INTERIOR ISLANDS (AREA 200 SF MINIMUM)	1	2
SEPARATION ISLANDS (AREA 200 SF MINIMUM)	3	0
LARGE (40% OF TOTAL)	0	0
SMALL (60% OF TOTAL)	4	6
TOTAL TREES:		6

SEEDING / SODDING SPECIFICATIONS

- FINISH GRADE SHOWN ON PLAN INCLUDES 6" OF TOPSOIL, RESURF FROM STOCKPILES.
- ALL DISTURBED AREAS SHALL BE SEED OR SODDED PER SPECIFICATIONS.
- ALL LAWN AREAS TO BE 500' AROUND & WITHIN 15 FEET OF BUILDINGS AND WALKS.

NOTES

- IMMEDIATELY UPON COMPLETION OF FINISH GRADING IN EACH AREA, ALL LANDSCAPED AREAS SHALL BE SEEDDED AND MULCHED.
- ALL NURSERY STOCK SHALL CONFORM TO THE CURRENT "AMERICAN STANDARDS FOR NURSERY STOCK" ANSI Z60.1.
- LIVING LANDSCAPING SHALL BE USED TO COVER ALL OPEN GROUND SUPPLEMENTED WITH HARD WOOD MULCH.
- LANDSCAPING SHALL BE PLANTED SUCH THAT THE MATURE SPREAD OF THE PLANT IS TO REMAIN 2" FROM THE BUILDING.
- VARIANCE GRANTED TO ALLOW REQUIRED STREET TREES TO BE PLACED NO GREATER THAN 50 FEET FROM THE FRONTING PROPERTY LINE OF THE SUBJECT SITE.
- SITE IS ZONED M-DT



LEGEND

	—U—	PROPERTY LINE
	—U—	UNDERGROUND ELECTRIC LINE
	—U—	UNDERGROUND TELECOMMUNICATIONS LINE
	—S—	SANITARY SEWER LINE
	—S—	STORM SEWER LINE
	—G—	GAS LINE
	—W—	WATER LINE
	—C—	EXISTING CONTOUR
	—A—	ANCHOR
	—N—	NOB
	◆	DRILL HOLE
	△	CONTROL POINT
	△	FLARED END SECTION
	△	Pipe HYDRANT
	△	Flow LINE
	△	HIGH DENSITY POLYETHYLENE PIPE
	△	LIGHT POLE
	△	LIGHT STANDARD
	△	FLY ASH/CLAY/Pipe
	△	REINFORCED CONCRETE PIPE
	△	TELECOMMUNICATIONS
	△	TOP OF WALL
	△	UTILITY POLE
	△	UTRIFIED CLAY PIPE
	△	WATER VALVE
	△	EXISTING CONTOUR
	△	PROPOSED SANITARY SEWER LINE
	△	PROPOSED WATER LINE
	△	PROPOSED UNDERGROUND ELECTRIC
	△	PROPOSED UNDERGROUND TELECOMMUNICATIONS
	△	PROPOSED STORM SEWER
		STANDARD DUTY PAVEMENT
		HEAVY DUTY CONCRETE

IMPERVIOUS AREA (LEASE PARCEL)

PRE PROJECT

PERVIOUS	=	0.60 ACRE
IMPERVIOUS	=	0.20 ACRE
TOTAL	=	0.80 ACRE

POST PROJECT

PERVIOUS	=	0.23 ACRE
IMPERVIOUS	=	0.57 ACRE
TOTAL	=	0.80 ACRE

SITE PARKING NOTE

NOTE:
PARKING IS NOT REQUIRED IN M-DT DISTRICT.
APPLICANT PROPOSES THE FOLLOWING.

ALLOWED MAX PARKING:
1 SPACE/200 SQ. FT. FLOOR AREA WITH MAX 150%
PROPOSED BUILDING AREA = 937 SQ. FT.
PROPOSED OUTDOOR SEATING AREA = 900 SQ. FT.
TOTAL FLOOR AREA = 1,837 SQ. FT.
 $1,837/200 = 9$ STALLS $\times 150\% = 14$ STALLS

PARKING STALLS PROVIDED = 10 STALLS

BIKE PARKING

PROVIDED
4 STALLS LOCATED SOUTH OF BUILDING

INTERSECTION SITE DISTANCE NOTE

NOTE:
DESIGN SPEED OF 20 MPH WAS USED TO DETERMINE
SIGHT DISTANCE

MINIMUM SIGHT DISTANCE FOR PASSENGER CARS:
195'

PROVIDED SIGHT DISTANCE FOR PASSENGER CARS:
NEAR SIDE SIGHT DISTANCE = 266.5'
FAR SIDE SIGHT DISTANCE = 242.4'

FAR SIDE SIGHT DISTANCE = 242.4'



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MATTHEW A. KRIETE
PROFESSIONAL ENGINEER
PE-2007002811

Date
DECEMBER 15, 2021

Revised
JANUARY 8, 2023

Design: JH	Drawn: CGH
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SITE PLAN

Sheet

C1.01

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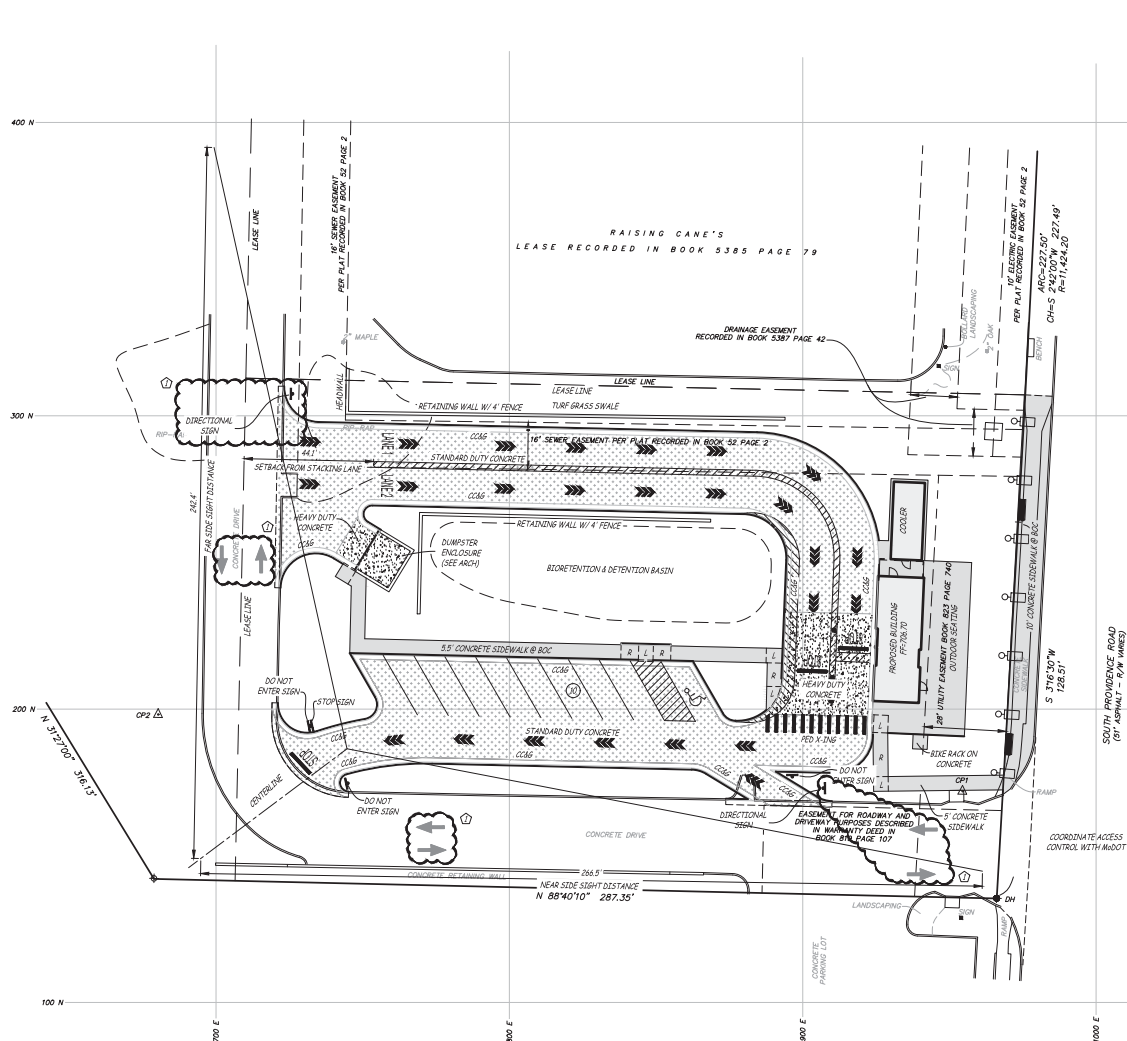
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SITE PLAN

Sheet

C1.01

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LEGEND

	UT	PROPERTY LINE
	UT	UNDERGROUND ELECTRIC LINE
	UT	UNDERGROUND TELECOMMUNICATIONS LINE
	SS	SANITARY SEWER LINE
	SS	STORM SEWER LINE
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	UT	WATER LINE
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	→	ANCHOR
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	LS	LIGHT POLE
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	PVC	POLYVINYL CHLORIDE PIPE
	RCP	REINFORCED CONCRETE PIPE
	TELECOM	TELECOMMUNICATIONS
	UT	TOP OF HILL
	UT	UTILITY POLE
	WCP	WETTED CLAY PIPE
	WV	WATER VALVE
	WV	WASH CONCRETE
	-S	PROPOSED SANITARY SEWER LINE
	-E	PROPOSED WATER LINE
	-UT	PROPOSED UNDERGROUND ELECTRIC
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INTERSECTION SITE DISTANCE NOTE

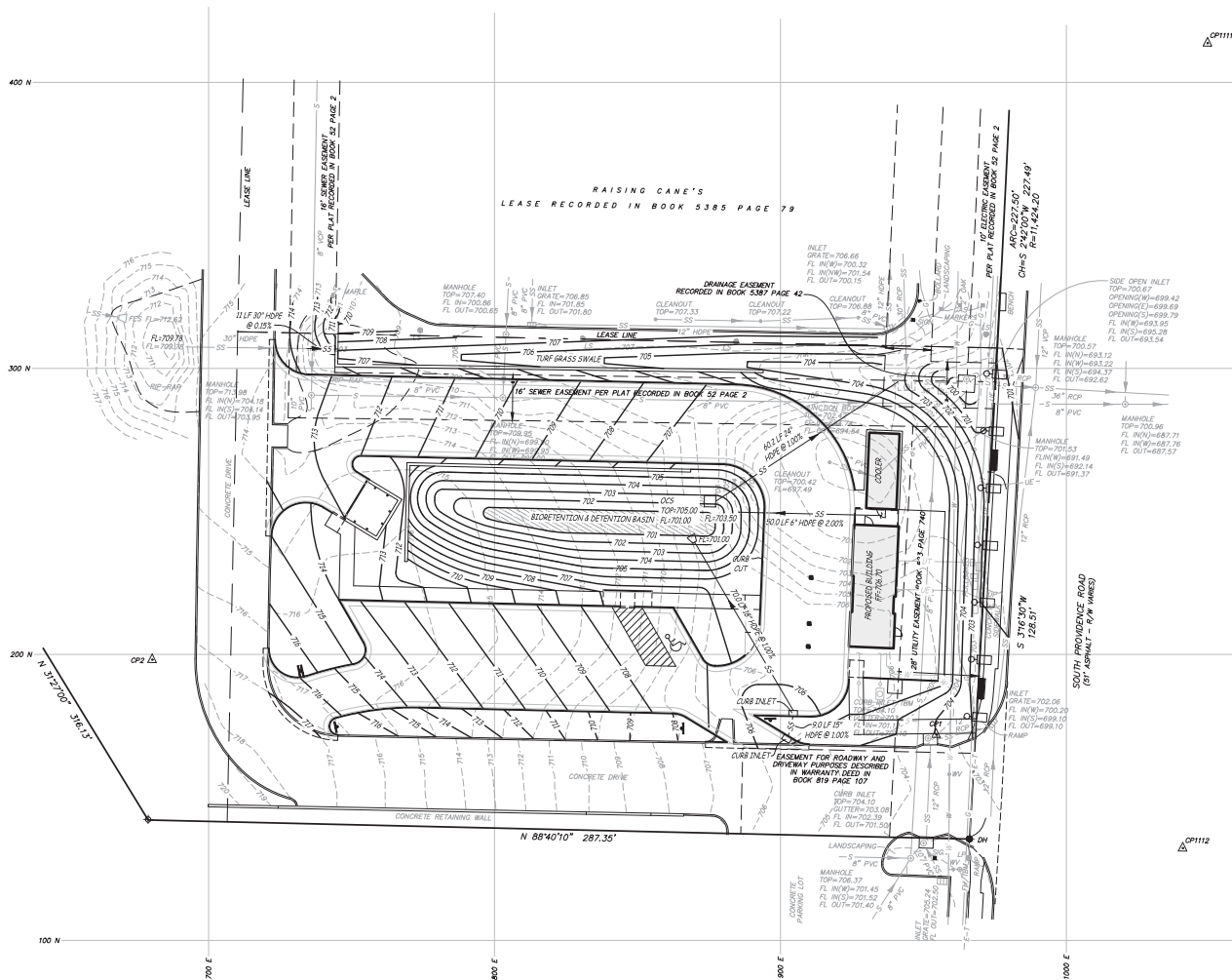
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FAR SIDE SIGHT DISTANCE = 242.4'

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NOT FOR CONSTRUCTION



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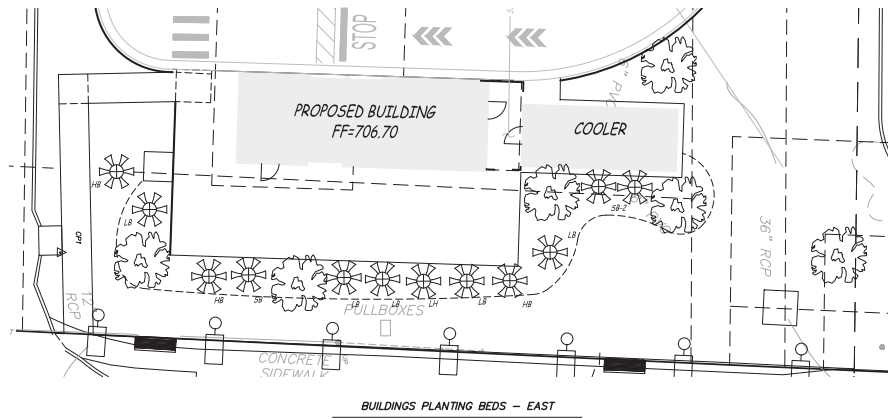
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Revised
DECEMBER 29, 2023

Design: JH Drawn: CGH

GRADING & DRAINAGE PLAN

Sheet
C2.01

ES&S PROJECT NO. 16108



BUILDINGS PLANTING BEDS - EAST



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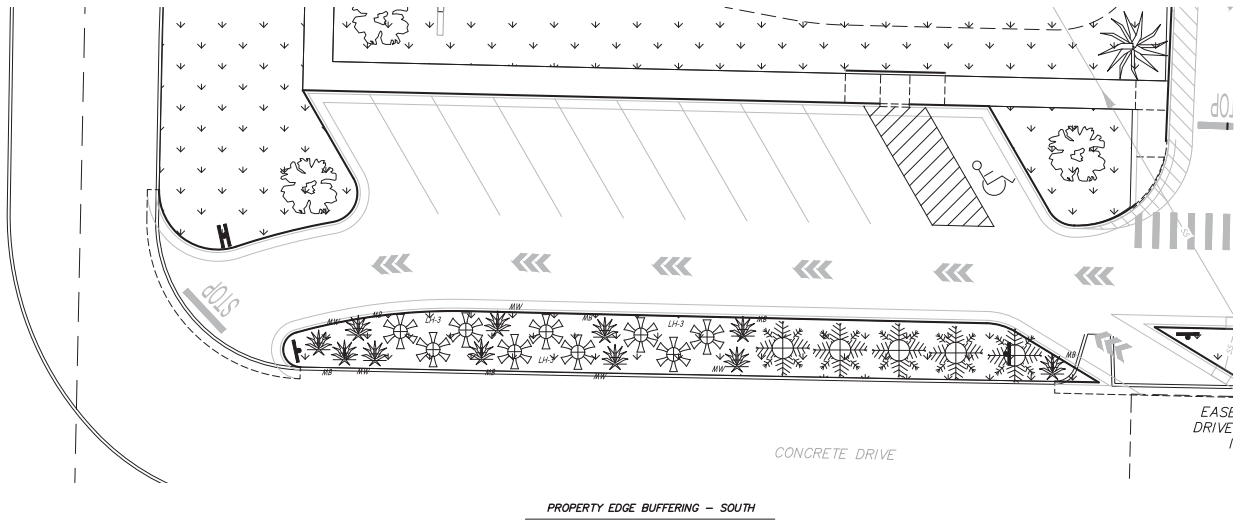
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LANDSCAPE PLAN

Sheet
L1.02

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PLANT SCHEDULE									
SYMBOL	LABEL	QTY	COMMON NAME	BOTANICAL NAME	MATURE HEIGHT (FT)	MATURE SPREAD (FT)	SHADE/SUN	ZONE	FLOWERING
	GC	3	GRINDSTONE GINKGO	GINKGO BILOBA 'GRINDSTONE'	20-30	5-10	FULL SUN	4-8	YES, APRIL
	JW	3	JAPANESE WHITE BIRCH	BETULA PLATYPHYLLA 'YARGO' DAKOTA PINNACLE	30-40	10-12	FULL SUN - PART SHADE	3-7	NA
	KS	4	NARROW KINDRED SPIRIT OAK TREE	QUERCUS 'NADLER' KINDRED SPIRIT	50-60	10-20	FULL SUN	4-9	YES, APRIL
									NATIVE REGION
SYMBOL	LABEL	QTY	COMMON NAME	BOTANICAL NAME	MATURE HEIGHT (FT)	MATURE SPREAD (FT)	SHADE/SUN	ZONE	FLOWERING
	RM	2	RED SUNSET RED MAPLE	ACER RUBRUM 'RED SUNSET'	40-50	30-40	FULL SUN-PART SHADE	3-9	YES, MARCH
									NATIVE REGION
SYMBOL	LABEL	QTY	COMMON NAME	BOTANICAL NAME	MATURE HEIGHT (FT)	MATURE SPREAD (FT)	SHADE/SUN	ZONE	FLOWERING
	AR	5	GREEN GIANT ARBORVITAE	THUJA 'GREEN GIANT'	40-60	12-18	FULL SUN-PART SHADE	3-8	NA
									NATIVE REGION
SYMBOL	LABEL	QTY	COMMON NAME	BOTANICAL NAME	MATURE HEIGHT (FT)	MATURE SPREAD (FT)	SHADE/SUN	ZONE	FLOWERING
	HB	5	BIGLEAF HYDRANGEA	HYDRANGEA MACRONYLLA 'BALMER' ENDLESS SUMMER	3-4	3-4	PART SHADE	4-9	YES, JULY-SEPTEMBER
	LB	5	LLAC 'BLOOMERANG'	SYRINGA 'PINKA' 'BLOOMERANG'	3-4	3-4	FULL SUN	4-7	YES, APRIL-MAY
	LH	10	VIRGINIA SWEETSPICE	ITEA VIRGINICA 'SPRICH' LITTLE HENRY	1.5-2	2-2.5	FULL SUN-PART SHADE	5-9	YES, JUNE-JULY
	SB	3	SPIRAEA 'DOUBLE PLAY BIG BANG'	SPIRAEA JAPONICA 'DOUBLE PLAY BIG BANG'	2-3	2-3	FULL SUN-PART SHADE	3-9	YES, JUNE-SEPTEMBER
SYMBOL	LABEL	QTY	COMMON NAME	BOTANICAL NAME	MATURE HEIGHT (FT)	MATURE SPREAD (FT)	SHADE/SUN	ZONE	FLOWERING
	WB	5	BUTTERFLY MIMIFED	ASCLEPIAS TUBEROSA	1.0-1.5	1-2.5	FULL SUN	3-9	YES, JUNE - AUGUST
	MB	6	THREADEDLEAF CORDEPSS	CORDEPSS VERTICILLATA 'MOONBEAM'	1.5-2	1.5-2	FULL SUN	3-9	YES, JUNE - AUGUST
									NATIVE REGION

1115 Fox Street, Columbia, MO 65201
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12/29/23

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LANDSCAPE PLAN

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