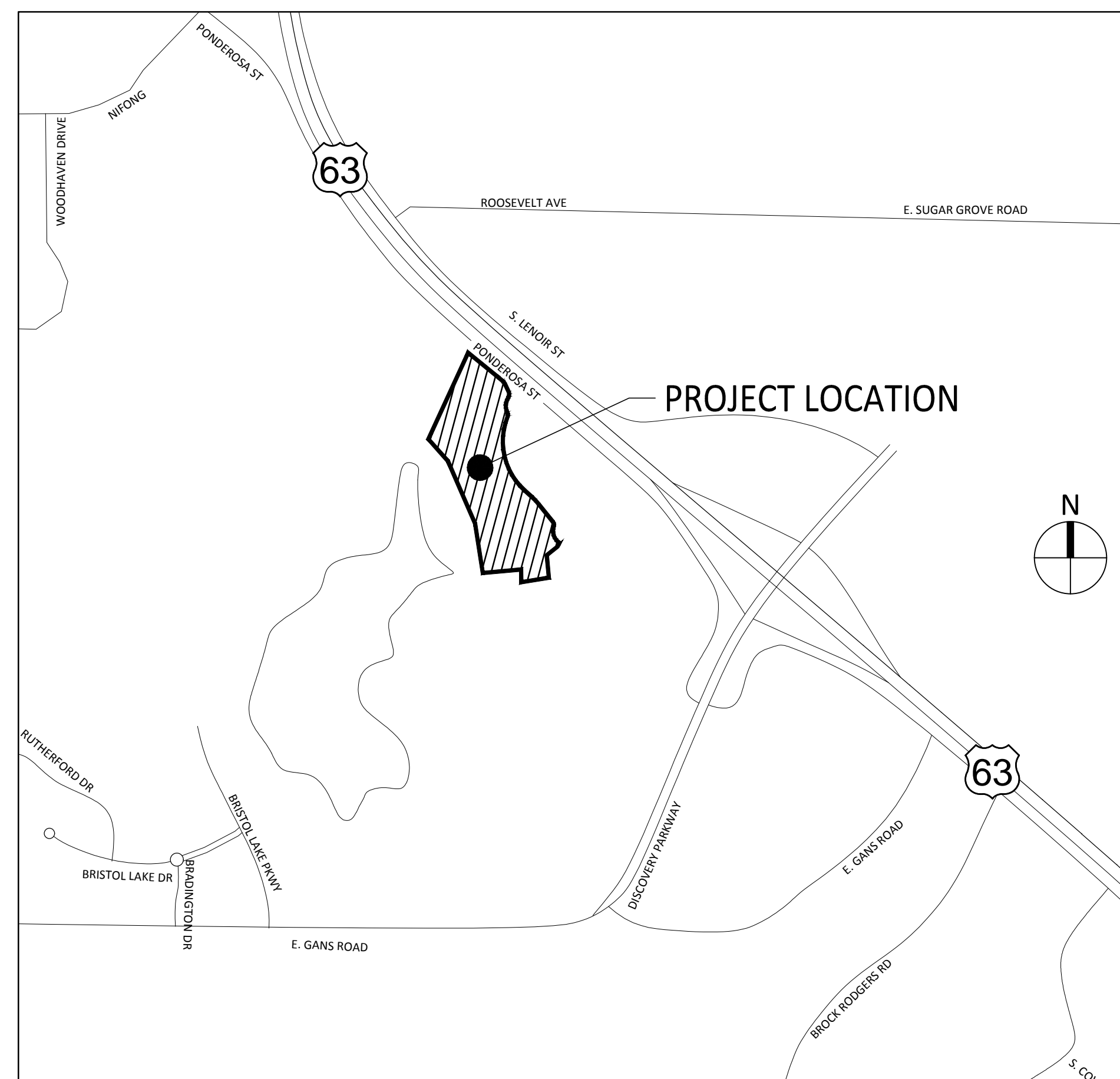


MAJOR AMENDMENT TO PD PLANS FOR  
**LOT 4 Discovery Park PLAT 2-B & LOTS  
 501 & 502 Discovery Park PLAT 2-C**

LOCATED IN SECTION 32, TOWNSHIP 48N, RANGE 12W

BOONE COUNTY, MISSOURI  
 APRIL 2017

**Project Location Map**



**Index of Drawings**

SHEET NUMBER	SHEET TITLE
X0.1	COVER SHEET
X0.2	ABBREVIATIONS & NOTES
C1.1	CP PLAN
C1.2	CP PLAN

APPROVED BY THE PLANNING AND ZONING COMMISSION THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 2017.

\_\_\_\_\_  
 RUSTY STRODTMAN - CHAIRPERSON

ACCEPTED BY ORDINANCE OF THE CITY COUNCIL OF COLUMBIA MISSOURI THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 2017.

\_\_\_\_\_  
 BRIAN TREECE - MAYOR

\_\_\_\_\_  
 SHEELA AMIN - CITY CLERK

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MISSOURI.

JUNE 12, 2017  
 CHRISTOPHER M. SANDER, P.E.  
 MO E-20013013178  
 EXPIRES 12-31-2017

**Set No:**

Project Number: ORIG17.05

**A CIVIL GROUP**  
 CIVIL ENGINEERING • PLANNING • SURVEYING  
 3401 BROADWAY BUSINESS PARK COURT  
 SUITE 105  
 COLUMBIA, MO 65203  
 PH: (573) 817-5750, FAX: (573) 817-1677  
 MISSOURI CERTIFICATE OF AUTHORITY: 2001006115

STANDARD ABBREVIATIONS

Note: See the National CAD Standard for Abbreviations not Included Below

Table of standard abbreviations for engineering drawings, including AASHTO, AC, Acc, ACI, etc., and their corresponding full names.

LEGEND

Legend table showing symbols for existing and proposed features: Sanitary Manhole, Storm Manhole, Electric Transformer, Telephone Pedestal, Water Valve, Hydrant, Corporation Stop, Storm Intake, Light Pole, Deciduous Tree, Flared End, Sign, Gas Meter, Telephone Manhole, Telephone Pedestal, Buried Telephone Box, Sanitary Sewer Manhole, Sanitary Cleanout, Utility Pole, Utility Pole Anchor, Yard Light, Electric Manhole, Electric Meter, Buried Electric Box, GPS/Control Monument, Existing Spot Elevation, Stone Marker, Non-standard Property Marker, 1/2" Property Iron, 5/8" or Larger Property Iron, Type A Monument, Right-of-Way Marker, Proposed Public Road, Proposed Pavement, Proposed Sidewalk, Proposed Dentention.

OWNER & DEVELOPER

OWNER: DISCOVERY PARK APARTMENTS, LLC 4220 PHILIPS FARM ROAD COLUMBIA, MISSOURI 65201 573-449-9902

DEVELOPER: ORIGIN CONSTRUCTORS 4240 PHILIPS FARM ROAD, SUITE 101 COLUMBIA, MISSOURI 65201 573-449-9902

FLOOD PLAIN NOTE

THIS TRACT IS NOT LOCATED WITHIN THE 50 & 100 YEAR FLOOD PLAIN PER THE FEMA FIRM MAP PANEL 29019C02950, EFFECTIVE DATE MARCH 17, 2011.

GENERAL NOTES

- 1. ALL TOPOGRAPHY SHOWN ON THESE DRAWINGS IS FROM LIDAR INFORMATION OBTAINED FROM BOONE COUNTY RESOURCE MANAGEMENT.
2. THE TOTAL ACREAGE FOR THIS CP PLAN IS 17.55 ACRES.
3. THE MAXIMUM BUILDING HEIGHT SHALL BE NO MORE THAN 50 FEET.
4. ALL DIMENSIONS ARE FROM BACK OF CURB UNLESS OTHERWISE NOTED.
5. DRIVEWAY APPROACH AND H.C. RAMPS ARE TO BE CONSTRUCTED PER CITY OF COLUMBIA STANDARDS.
6. THIS PROJECT WILL BE COMPLETED IN ONE OR MORE PHASES.
7. DEVELOPER WILL COORDINATE WITH AMEREN UE FOR DESIGN OF NATURAL GAS SERVICE FOR THIS AREA IF NEEDED.
8. DEVELOPER WILL COORDINATE WITH COLUMBIA WATER AND LIGHT FOR THE DESIGN OF ELECTRIC AND WATER TO THE SITE.

ZONING AND USE NOTES

THE EXISTING ZONING FOR THIS PD PLAN IS AS INDICATED IN DETAIL 1. EXISTING ZONING AS SHOWN ON THIS SHEET BELOW. THE ZONING AND LOTS NUMBERS SHOWN IN THE 'PROPOSED ZONING' GRAPHIC ARE BASED UPON THE LOTS SHOWN ON DISCOVERY PARK PLAT 2-B AND DISCOVERY PARK SUBDIVISION PLAT 2-C AND WILL BE GOVERNED BY THE ZONING INDICATED BY CITY COUNCIL APPROVAL.

BENCHMARK INFORMATION

DNR GRS ALUMINUM DISK STAMPED BO-15, IN A 12" CONCRETE MONUMENT, FROM THE INTERSECTION OF PONDEROSA STREET AND GRINDSTONE PARKWAY (MISSOURI ROUTE AC) GO SOUTHEAST ON PONDEROSA STREET 0.88 MILES, 16' NORTHEAST OF A STEEL T-POST, 32.5' SOUTHWEST OF PONDEROSA STREET, 15.9' NORTHWEST OF A STEEL T-POST, 11.1' NORTH OF A CARSONITE WITNESS POST AT A FENCE AND 9.9' NORTHEAST OF A NAIL AND SHINER IN A FENCE POST. ELEVATION = 799.74'

DNR GRS ALUMINUM DISK STAMPED BO-14 IN A 12" CONCRETE MONUMENT, STATION IS LOCATED AT THE MFA OIL COMPANY'S HEADQUARTERS, 32 FEET SOUTH OF THE SOUTH EDGE OF DRIVING LANE OF STADIUM BOULEVARD, 22.9' SOUTHWEST OF THE END OF CURB, 105 FEET WEST OF THE CENTER OF EAST POINT DRIVE AND 34.5' NORTH-NORTHWEST OF A CARSONITE WITNESS POST AT A RIGHT-OF-WAY MARKER.

UTILITY CONTACT INFORMATION

Table with utility contact info: LOCATES, SEWER (CITY OF COLUMBIA), WATER (COLUMBIA WATER & LIGHT), GAS (AMEREN UE), CATV (MEDIACOM), ELECTRICAL (COLUMBIA WATER & LIGHT), TELEPHONE (CENTURYLINK).

FUTURE INFRASTRUCTURE NOTE

FINAL SIZING OF FUTURE INFRASTRUCTURE WILL BE SIZED UPON SUBMISSION OF FINAL DESIGN PLANS.

MO-DNR LAND DIST. PERMIT NO.

MORAO2958 ISSUED ON APRIL 2, 2013; MORAO10132 ISSUED ON MARCH 28, 2017

STREAM BUFFER STATEMENT

THIS TRACT DOES NOT INCLUDE ANY REGULATED STREAMS AS DEFINED BY THE CITY OF COLUMBIA STREAM BUFFER ORDINANCE AS DETERMINED BY THE USGS MAP FOR COLUMBIA QUADRANGLE, BOONE COUNTY, MISSOURI AND ARTICLE X OF CHAPTER 12A OF THE CITY OF COLUMBIA CODE OF ORDINANCES.

LIGHTING

LIGHT POLES SHOWN SHALL BE FULL-CUTOFF SHOEBOX FIXTURES, INWARD AND DOWNWARD DIRECTED, WHICH MAY BE RELOCATED OR CHANGED IN TOTAL NUMBER BY THE LIGHTING ENGINEER WITHOUT ADDITIONAL APPROVAL. MAXIMUM LIGHT POLE HEIGHT SHALL BE 20 FEET. BUILDING MOUNTED LIGHTING IS UNKNOWN AT THIS TIME. ALL OUTDOOR LIGHTING SHALL BE SHOWN ON A FUTURE LIGHTING PLAN THAT WILL COMPLY WITH CHAPTER 29-4.5 OF THE CITY OF COLUMBIA CODE OF ORDINANCES.

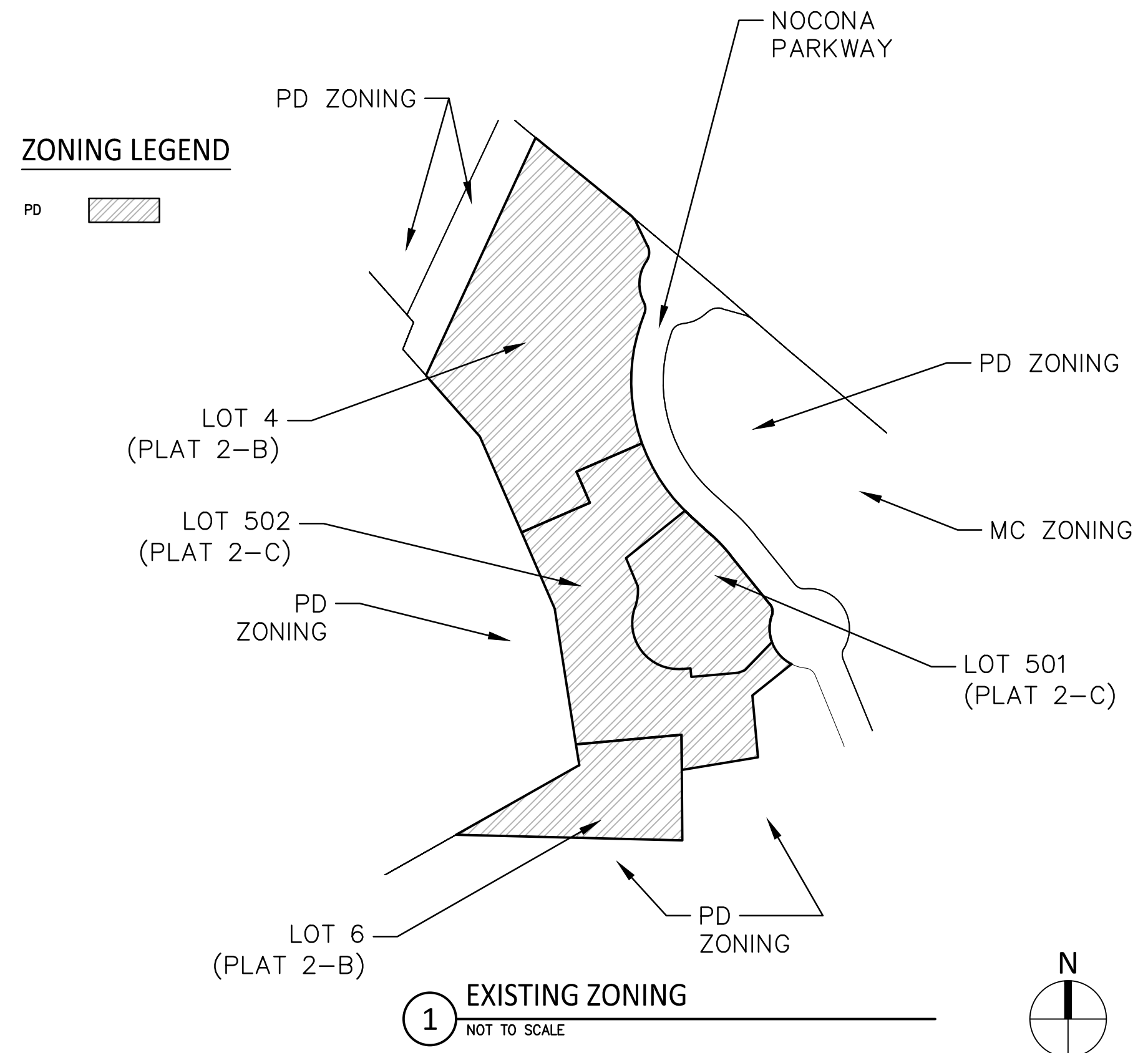
SIGNAGE

TWO MONUMENT SIGNS ARE PROPOSED AT THE ENTRANCE TO LOT 4 FROM THE NOCONA/PONDEROSA ROUNDABOUT ON EITHER SIDE OF THE ENTRANCE TO LOT 4. EACH SIGN WILL HAVE A MAXIMUM HEIGHT OF 12 FEET AND SHALL NOT EXCEED 64 SQUARE FEET.

TWO MONUMENT SIGNS ARE PROPOSED AT THE ENTRANCE TO LOT 502 FROM THE NOCONA ROUNDABOUT ON EITHER SIDE OF THE ENTRANCE TO LOT 502. EACH SIGN WILL HAVE A MAXIMUM HEIGHT OF 12 FEET AND SHALL NOT EXCEED 64 SQUARE FEET.

ZONING LEGEND

PD



A CIVIL GROUP CIVIL ENGINEERING - PLANNING - SURVEYING 3401 BROADWAY, SUITE 200 BUSINESS PARK COURSE COLUMBIA, MO 65203 PH: (573) 817-5750; FAX: (573) 817-1677 MISSOURI CERTIFICATE OF AUTHORITY: 2001006115

JUNE 12, 2017 CHRISTOPHER M. SANDER, P.E. MO E-2001004658 12-31-2017 MISSOURI ENG. CORP #2001006116 12-31-2017

MAJOR AMEND. TO PD PLAN FOR LOTS 4, 501 & 502 DISCOVERY PARK SUB. ORIGIN CONSTRUCTORS COLUMBIA, MISSOURI

Table with columns: REVISIONS, DRAWN (CMS), APPROVED (CMS), ISSUED FOR (DATE), FIELD BOOK.

SHEET NAME 24X36 TITLEBLOCK - ARCH D

PROJECT NO. ORIG17.05 CLIENT NO. SHEET NO.

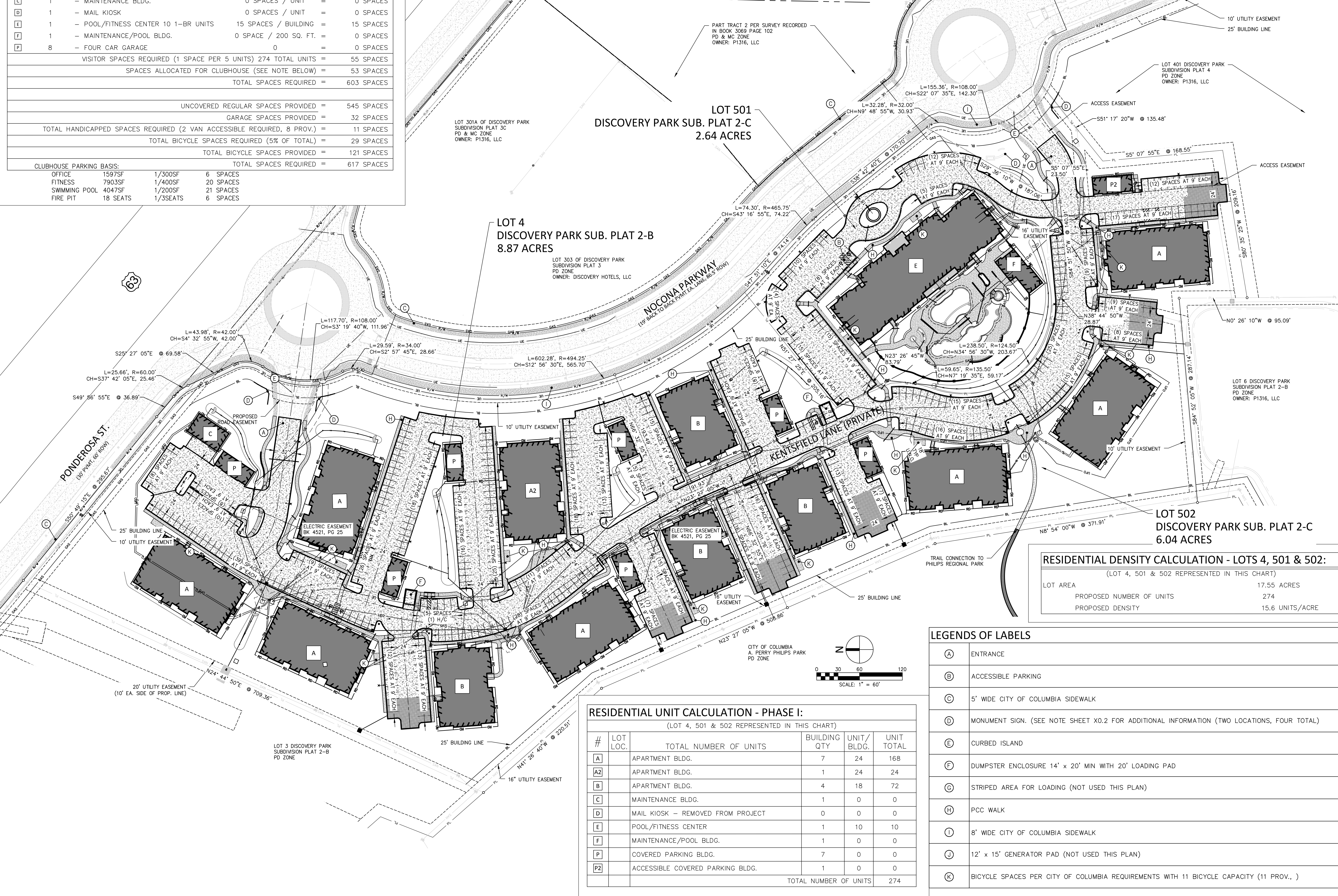
X0.2

### RESIDENTIAL PARKING CALCULATION - LOTS 4, 501 & 502:

KEY	NO. BLDGS	DESCRIPTION	TOTAL
A	7	- APARTMENTS 15 2-BR, 9 1-BR UNITS	43.5 SPACES / BLDG = 305 SPACES
A2	1	- APARTMENTS 15 2-BR, 9 1-BR UNITS	43.5 SPACES / BLDG = 44 SPACES
B	4	- APARTMENTS 12 2-BR, 6 1-BR UNITS	33 SPACES PER UNIT = 132 SPACES
C	1	- MAINTENANCE BLDG.	0 SPACES / UNIT = 0 SPACES
D	1	- MAIL KIOSK	0 SPACES / UNIT = 0 SPACES
E	1	- POOL/FITNESS CENTER 10 1-BR UNITS	15 SPACES / BUILDING = 15 SPACES
F	1	- MAINTENANCE/POOL BLDG.	0 SPACE / 200 SQ. FT. = 0 SPACES
P	8	- FOUR CAR GARAGE	0 = 0 SPACES
VISITOR SPACES REQUIRED (1 SPACE PER 5 UNITS) 274 TOTAL UNITS			= 55 SPACES
SPACES ALLOCATED FOR CLUBHOUSE (SEE NOTE BELOW)			= 53 SPACES
TOTAL SPACES REQUIRED			= 603 SPACES
UNCOVERED REGULAR SPACES PROVIDED			= 545 SPACES
GARAGE SPACES PROVIDED			= 32 SPACES
TOTAL HANDICAPPED SPACES REQUIRED (2 VAN ACCESSIBLE REQUIRED, 8 PROV.)			= 11 SPACES
TOTAL BICYCLE SPACES REQUIRED (5% OF TOTAL)			= 29 SPACES
TOTAL BICYCLE SPACES PROVIDED			= 121 SPACES
TOTAL SPACES REQUIRED			= 617 SPACES
CLUBHOUSE PARKING BASIS:			
OFFICE	1597SF	1/300SF	6 SPACES
FITNESS	7903SF	1/400SF	20 SPACES
SWIMMING POOL	4047SF	1/200SF	21 SPACES
FIRE PIT	18 SEATS	1/3SEATS	6 SPACES

# MAJOR AMENDMENT TO PD PLAN FOR LOTS 4, 501 & 502 DISCOVERY PARK SUB.

LOCATED IN SECTION 32, TOWNSHIP 48N, RANGE 12W  
BOONE COUNTY, MISSOURI  
APRIL 2017



### RESIDENTIAL DENSITY CALCULATION - LOTS 4, 501 & 502:

(LOT 4, 501 & 502 REPRESENTED IN THIS CHART)	
LOT AREA	17.55 ACRES
PROPOSED NUMBER OF UNITS	274
PROPOSED DENSITY	15.6 UNITS/ACRE

### RESIDENTIAL UNIT CALCULATION - PHASE I:

(LOT 4, 501 & 502 REPRESENTED IN THIS CHART)

#	LOT LOC.	TOTAL NUMBER OF UNITS	BUILDING QTY	UNIT/BLDG.	UNIT TOTAL
A	APARTMENT BLDG.	7	24	168	
A2	APARTMENT BLDG.	1	24	24	
B	APARTMENT BLDG.	4	18	72	
C	MAINTENANCE BLDG.	1	0	0	
D	MAIL KIOSK - REMOVED FROM PROJECT	0	0	0	
E	POOL/FITNESS CENTER	1	10	10	
F	MAINTENANCE/POOL BLDG.	1	0	0	
P	COVERED PARKING BLDG.	7	0	0	
P2	ACCESSIBLE COVERED PARKING BLDG.	1	0	0	
TOTAL NUMBER OF UNITS					274

### LEGENDS OF LABELS

(A)	ENTRANCE
(B)	ACCESSIBLE PARKING
(C)	5' WIDE CITY OF COLUMBIA SIDEWALK
(D)	MONUMENT SIGN. (SEE NOTE SHEET X0.2 FOR ADDITIONAL INFORMATION (TWO LOCATIONS, FOUR TOTAL))
(E)	CURBED ISLAND
(F)	DUMPSTER ENCLOSURE 14' x 20' MIN WITH 20' LOADING PAD
(G)	STRIPED AREA FOR LOADING (NOT USED THIS PLAN)
(H)	PCC WALK
(I)	8' WIDE CITY OF COLUMBIA SIDEWALK
(J)	12' x 15' GENERATOR PAD (NOT USED THIS PLAN)
(K)	BICYCLE SPACES PER CITY OF COLUMBIA REQUIREMENTS WITH 11 BICYCLE CAPACITY (11 PROV., )

## MAJOR AMEND. TO PD PLAN LOTS 4, 501, & 502 DISCOVERY PARK SUB. ORIGIN CONSTRUCTORS COLUMBIA, MISSOURI

REVISIONS

DRAWN	CMS
APPROVED	CMS
ISSUED FOR	----
DATE	----
FIELD BOOK	----

SHEET NAME  
**PD PLAN**

PROJECT NO. ORIG17.05  
CLIENT NO.  
SHEET NO.

C1.1

**A CIVIL GROUP**  
CIVIL ENGINEERING - PLANNING - SURVEYING  
3401 BROADWAY  
COLUMBIA, MO 65203  
PH: (573) 817-5750, FAX: (573) 817-1677  
MISSOURI CERTIFICATE OF AUTHORITY: 2001006.115

JUNE 12, 2017  
CHRISTOPHER M. SANDER, P.E.  
MO E-2001004658  
EXPIRES 12-31-2017  
MISSOURI ENG. CORP #2001006116  
EXPIRES 12-31-2017

# MAJOR AMENDMENT TO PD PLAN FOR LOTS 4, 501 & 502 DISCOVERY PARK SUB.

LOCATED IN SECTION 32, TOWNSHIP 48N, RANGE 12W  
BOONE COUNTY, MISSOURI  
APRIL 2017

LEGENDS OF LABELS				
QUANTITY	SIZE	CATEGORY	SPECIES	SYMBOL
49	2" CAL.	SHADE TREE (MED. - LG.)	TRIDENT MAPLE (ACER BUERGERIANUM) RIVER BIRCH (BETULA NIGRA) OR APPROVED EQUAL. NATIVE PLANTING: SWAMP WHITE OAK, KENTUCKY COFFERTREE, PIN OAK	
55	4' TALL	ORNAMENTAL TREE	SERVICEBERRY (AMELANCHER ARBOREA), NATIVE PLANTING: RIVER BIRCH, APPALACHIAN RE REDBUD (CERCIS CANADENSIS) OR APPROVED EQUAL	
152	4' TALL	EVERGREEN TREE	GREEN GIANT ARBORVITAE (OR APPROVED EQUAL) AT 15' CENTERS, STAGGERED PLACEMENT TO AVOID UNIFORM APPEARANCE. NATIVE PLANTING: SHORT LEAFED PINE, RED CEDAR	
142	2 GAL.	DECIDUOUS SHRUB	BURNING BUSH (EUONYMUS ALATA 'COMPACTA') SPIREA (SPIRAEA X BUMALDA) OR APPROVED EQUAL IN NATIVE PLANTING AREAS NEW JERSEY TEA (CEANOTHUS AMERICANUS) OR CORALBERRY (SYMPHOCARPUS ORBICULATUS)	
64	2 GAL.	EVERGREEN SHRUB	HARDY BOXWOOD (BUXUS SINICA INSULARIS) JUNIPER (JUNIPERUS CHINENSIS 'SEA GREEN') OR APPROVED EQUAL	



RESIDENTIAL CALCS. - LOTS 4, 501 & 502:			
(LOTS 4, 501 & 502 REPRESENTED IN THIS CHART)			
<b>AREA</b>			
TOTAL LOT AREA =	17.55 ACRES		
TOTAL PARKING LOT AREA =	4.60 ACRES		
TOTAL SIDEWALK AREA =	1.01 ACRES		
TOTAL BUILDING FOOTPRINT AREA =	3.53 ACRES		
TOTAL IMPERVIOUS AREA =	9.14 ACRES	52.08%	
TOTAL PERVIOUS AREA =	8.41 ACRES	47.92%	
<b>LANDSCAPE COMPLIANCE</b>			
TOTAL PARKING LOT & DRIVE AREA	200,376 SQ. FT.		
TOTAL REQUIRED @ 1 TREE/4500 SQ. FT.	45 TREES		
TOTAL TREES REQUIRED =	45 TREES		
MEDIUM TO LARGE TREES REQUIRED (30%) =	13 TREES		
TOTAL TREES PROVIDED (SEE TABLE) =	SEE TABLE		
LANDSCAPE REQUIRED (15% OF TOTAL LOT)	2.63 ACRES		
LANDSCAPE PROVIDED (22.2% ACTUAL, TURF NOT INCL.)	3.91 ACRES		

NATIVE VEGETATION PLANTED (0.21 AC DRAINS TO LOT 3, 1.01 ACRES DRAINS TO PARK PROPERTY, 0.34 DRAINS TO LOT 6). TOTAL OF 1.56 ACRES

GRASSES SHALL BE A COMBINATION OF NATIVE TYPE PLANTINGS AND GRASSES AS OUTLINED IN THE CITY OF COLUMBIA STORMWATER MANUAL, MISSOURI BOTANICAL GUIDES AND AS APPROVED AND INCLUDE, BUT NOT NECESSARILY LIMITED TO: INDIAN GRASS, LITTLE BLUESTEM, SWITCHGRASS, RIVER OATS, REDTOP, FESCUE, TIMOTHY, KENTUCKY 31 FESCUE, PERENNIAL RYEGRASS.

TREE/SHRUB PLANTINGS SHALL BE NATIVE PER TABLE AND AS NOTED ON PLAN (MINIMUM PLANTINGS).

**MAJOR AMEND. TO PD PLAN  
LOTS 4, 501, & 502 DISCOVERY  
PARK SUB.  
ORIGIN CONSTRUCTORS  
COLUMBIA, MISSOURI**

REVISIONS	

DRAWN CMS  
APPROVED CMS  
ISSUED FOR  
DATE  
FIELD BOOK

SHEET NAME  
**PD PLAN**

PROJECT NO. ORIG17.05  
CLIENT NO.  
SHEET NO.

**C1.2**

**A CIVIL GROUP**  
CIVIL ENGINEERING - PLANNING - SURVEYING  
3401 BROADWAY  
COLUMBIA, MO 65203  
PH: (573) 817-5750, FAX: (573) 817-1677  
MISSOURI CERTIFICATE OF AUTHORITY: 2001006115

JUNE 12, 2017  
CHRISTOPHER M. SANDER, P.E.  
MO E-2001004658  
EXPIRES 12-31-2017  
MISSOURI ENG. CORP #2001006116  
EXPIRES 12-31-2017

d:\projects\DATA - CATALYST DESIGN WORKS\WORK 1 - RESIDENTIAL\DRAWINGS\2017-04-04-203 CP Plan.dwg | DATE: 12/06/2017 | TIME: 15:43