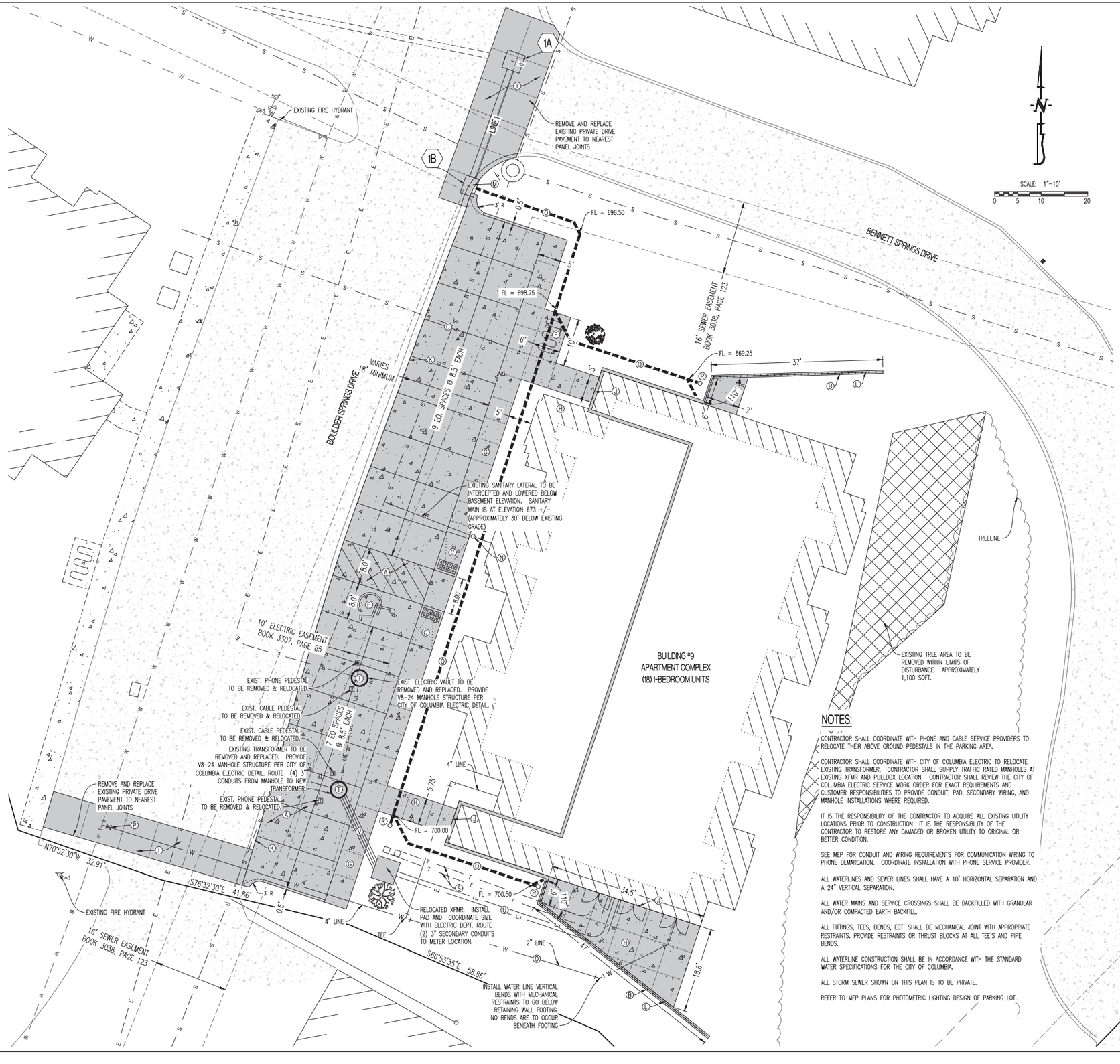



## LEGEND OF LABELS

- (A) CONSTRUCT 5" PCC CONCRETE ON 4" BASE WITH INTEGRAL ROLL BACK CURB. SEE CE6 FOR PAVEMENT DETAILS.
- (B) CONSTRUCT RETAINING WALL GRADES SHOWN ON CE 2. DESIGN BY OTHERS. INSTALL 42" MIN. FENCE/GUARDRAIL.
- (C) CONSTRUCT ADA ACCESSIBLE RAMP AS SHOWN. REFER TO DETAIL ON CE 6.
- (D) PAINT 4" PARKING STALL STRIPES. COLOR TO BE WHITE.
- (E) INSTALL ALL COMPONENTS OF A TYPICAL HANDICAP ACCESSIBLE PARKING STALL. COMPONENTS TO INCLUDE PAINTED SYMBOL IN STALL, HANDICAP ACCESSIBLE SIGN, AND HATCHED AREA (MIN. 5' WIDE) IMMEDIATELY ADJACENT TO HANDICAP STALL. COLOR OF STALL STRIPES AND HATCHED AREA TO BE BLUE. REFER TO DETAILS ON CE 6.
- (F) INSTALL RIBBON RACK BICYCLE RACK (MODEL RB05; GALVANIZED IN-GROUND MOUNTING OR APPROVED EQUAL) WITH CONCRETE PAD.
- (G) CONSTRUCT 4" THICK, 5' WIDE PCC ADA ACCESSIBLE WALK WITH THICKENED EDGE AT BACK OF CURB AS SHOWN. MAXIMUM LONGITUDINAL SLOPE 1:20. MAXIMUM CROSS SLOPE AT 1:50. REFER TO DETAIL ON CE 6.
- (H) CONSTRUCT 4" THICK, PCC ADA ACCESSIBLE WALK PER PLAN DIMENSIONS. SEE SIDEWALK DETAILS ON CE 6. MAXIMUM LONGITUDINAL SLOPE 1:20. MAXIMUM CROSS SLOPE AT 1:50.
- (I) SAW-CUT AND REMOVE EXISTING CONCRETE PAVEMENT FOR UTILITY INSTALLATION. CONCRETE PAVEMENT TO BE REPLACED PER TYPICAL CONCRETE PAVEMENT DETAIL ON CE 6.
- (J) INSTALL 1/2" EXPANSION JOINT BETWEEN SIDEWALK PAVEMENT AND BUILDING.
- (K) INSTALL 3/4" TYPE A EXPANSION JOINT BETWEEN EXISTING PAVEMENT AND NEW PAVEMENT.
- (L) INSTALL GUARDRAIL AS SHOWN. REFER TO ARCHITECTURAL PLANS FOR RAILING STYLE.
- (M) INSTALL NEW TYPE A INLET. CONNECT TO NEW JUNCTION BOX AS SHOWN. SEE STORM SEWER PROFILES.
- (N) EXISTING SANITARY SEWER LATERAL TO BE INTERCEPTED AND LOWERED BELOW BASEMENT ELEVATION. REFER TO MEP PLANS FOR ELEVATION REQUIRED AT BASEMENT ENTRY. SEE MEP DRAWINGS FOR UNDERGROUND PLUMBING INSIDE BUILDING. CAUTION. SEWER MAIN IS APPROXIMATELY 30' DEEP IN THIS LOCATION. TRENCH ROCK EXCAVATION TO BE ANTICIPATED.
- (O) INSTALL C-900 WATERLINE FROM WATER MAIN TO BUILDING. SEE MEP FOR ENTRY TO BUILDING AND LINE SIZE.
- (P) INSTALL TAPPING VALVE & SLEEVE WITH VALVE BOX TO SURFACE. PROVIDE MECHANICAL RESTRAINTS (MEGALUG) AS REQUIRED BY CITY OF COLUMBIA SPECIFICATIONS.
- (Q) 6" PVC SDR35 DOWNSPOUT COLLECTOR PIPE AT 1.03% MINIMUM GRADE WITH BENDS AND CLEANOUTS (100' MAX. BETWEEN) AS NECESSARY.
- (R) INSTALL STANDARD CLEANOUT.
- (S) INSTALL (2) 2" CONDUITS FOR TELEPHONE AND CABLE. ROUTE TO ELECTRICAL ROOM. SEE MEP DRAWINGS FOR BUILDING DEMARC. LOCATION.
- (T) INSTALL V8-24 MANHOLE. COORDINATE INSTALLATION WITH ELECTRIC DEPARTMENT. SEE DETAIL ON CE7
- (U) INSTALL SECONDARY CONDUITS AND PROVIDE SECONDARY WIRING AS REQUIRED BY ELECTRIC DEPARTMENT. COORDINATE INSTALLATION AND INSPECTIONS WITH ELECTRIC DEPARTMENT.
- (V) INSTALL PRIMARY CONDUITS AS REQUIRED BY ELECTRIC DEPARTMENT. COORDINATE INSTALLATION AND INSPECTIONS WITH ELECTRIC DEPARTMENT.

## NOTES:

CONTRACTOR SHALL COORDINATE WITH PHONE AND CABLE SERVICE PROVIDERS TO RELOCATE THEIR ABOVE GROUND PEDESTALS IN THE PARKING AREA.

CONTRACTOR SHALL COORDINATE WITH CITY OF COLUMBIA ELECTRIC TO RELOCATE EXISTING TRANSFORMER. CONTRACTOR SHALL SUPPLY TRAFFIC RATED MANHOLES AT EXISTING XFMR AND PULLBOX LOCATION. CONTRACTOR SHALL REVIEW THE CITY OF COLUMBIA ELECTRIC SERVICE WORK ORDER FOR EXACT REQUIREMENTS AND CUSTOMER RESPONSIBILITIES TO PROVIDE CONDUIT, PAD, SECONDARY WIRING, AND MANHOLE INSTALLATIONS WHERE REQUIRED.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ACQUIRE ALL EXISTING UTILITY LOCATIONS PRIOR TO CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO RESTORE ANY DAMAGED OR BROKEN UTILITY TO ORIGINAL OR BETTER CONDITION.

SEE MEP FOR CONDUIT AND WIRING REQUIREMENTS FOR COMMUNICATION WIRING TO PHONE DEMARCATION. COORDINATE INSTALLATION WITH PHONE SERVICE PROVIDER.

ALL WATERLINES AND SEWER LINES SHALL HAVE A 10' HORIZONTAL SEPARATION AND A 24" VERTICAL SEPARATION.

ALL WATER MAINS AND SERVICE CROSSINGS SHALL BE BACKFILLED WITH GRANULAR AND/OR COMPACTED EARTH BACKFILL.

ALL FITTINGS, TEES, BENDS, ECT. SHALL BE MECHANICAL JOINT WITH APPROPRIATE RESTRAINTS. PROVIDE RESTRAINTS OR THRUST BLOCKS AT ALL TEE'S AND PIPE BENDS.

ALL WATERLINE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD WATER SPECIFICATIONS FOR THE CITY OF COLUMBIA.

ALL STORM SEWER SHOWN ON THIS PLAN IS TO BE PRIVATE.

REFER TO MEP PLANS FOR PHOTOMETRIC LIGHTING DESIGN OF PARKING LOT.

| OVERALL PARKING SUMMARY FOR LOT 41A OF COLLEGE PARK SOUTH SUBDIVISION, PLAT 4-A : | | |
|---|---|---|
| REQUIRED: | | |
| 109 – 2 BEDROOM UNITS AT 2 SPACES PER UNIT = | | 218 SPACES |
| 12 – 3 BEDROOM UNITS AT 2.5 SPACES PER UNIT = | | 30 SPACES |
| 79 – 1 BEDROOM UNITS AT 1.5 SPACES PER UNIT = | | 119 SPACES |
| VISITOR PARKING AT 1 SPACE PER 5 UNITS | 200 UNITS/5 = | 40 SPACES |
| TOTAL SPACES REQUIRED = | | 407 SPACES |
| PROPOSED: | | |
| TOTAL GARAGE SPACES = | | 52 SPACES |
| TOTAL PARKING IN FRONT OF GARAGE = | | 52 SPACES |
| TOTAL LOT SPACES = | | 283 SPACES |
| BICYCLE SPACES = 29 SPACES PROVIDED | 5% OF REQUIRED VEHICLE SPACES = | 20 SPACES |
| TOTAL SPACES PROVIDED = | | 407 SPACES |

| PLANTING NOTES: | | |
|---|---|---|
| | QUANTITY | PLANT SPECIES |
| | 1 | SWAMP WHITE OAK – QUERCUS BICOLOR – 2" CALIPER AT 6" ABOVE GRADE |
| | 1 | SARGENT CRABAPPLE – MALUS SARGENTII – 4' IN HEIGHT |

NOTE:

ALL PLANT MATERIALS AND FINAL LANDSCAPE PLAN SHALL BE IN ACCORDANCE WITH THE LANDSCAPING GUIDELINES AND STANDARDS OF THE CITY OF COLUMBIA.

LANDSCAPING SHALL COMPLY WITH SECTIONS 12A-49 (e) AND (f), 29-13.1 (d) (6), AND 29-25 (e) (3) AND (4) OF THE CITY OF COLUMBIA CODE OF ORDINANCES.

| CALCULATIONS: | | |
|---|---|---|
| PARKING LOT LANDSCAPE COMPLIANCE: | | |
| TOTAL PARKING LOT & DRIVE AREA = | | 2,782 SQ. FT. |
| TREES REQUIRED @ 1 TREE/4500 SQ FT. = | | 1 TREES |
| TOTAL TREES REQUIRED = | | 1 TREES |
| MEDIUM TO LARGE TREES REQUIRED (30%) = | | 1 TREES |
| TOTAL TREES PROVIDED = | | 2 TREES |
| LOT COVERAGES: | ACTUAL | |
| NET LAND AREA: | 15.59 ACRES | 100% |
| EXISTING IMPERVIOUS SURFACE AREA: | 6.76 ACRES | 43% |
| EXISTING OPEN SPACE: | 8.83 ACRES | 57% |
| PROPOSED IMPERVIOUS SURFACE AREA: | 7.03 ACRES | 45% |
| PROPOSED OPEN SPACE: | 8.56 ACRES | 55% |

REVISIONS:

| NO. | DATE |
|---|---|
| ORIGINAL | 09/09/2016 |
| 1 CITY | 10/04/2016 |
| 2 BLDG | 10/13/2016 |

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

STATE OF MISSOURI – JESSE RAY STEPHENS – NUMBER PE-2009018995 – PROFESSIONAL ENGINEER

JESSE RAY STEPHENS
MO LICENSE - 2010000868

SITE/CIVIL ENGINEER:
CROCKETT ENGINEERING CONSULTANTS
ENGINEERING CONSULTANTS
3604 North Stadium Boulevard
Columbia, Missouri 65202
(573) 445-6105
www.crockettengineering.com
Crockett Engineering Consultants, LLC
Missouri Certificate of Authority #2009131501

OWNER:
BOULDER SPRINGS - COLUMBIA
2650 S. HANLEY - SUITE 200
ST. LOUIS, MO 63144

# BOULDER SPRINGS - BUILDING 9

A MAJOR SUBDIVISION LOCATED IN
SECTION 24, TOWNSHIP 48 NORTH, RANGE 13 WEST
COLUMBIA, BOONE COUNTY, MISSOURI

DRAWING INCLUDES:
SITE PLAN

DESIGNED: JRS
DRAWN: JRS
PROJECT NO.: 101812

SHEET:
CE 1