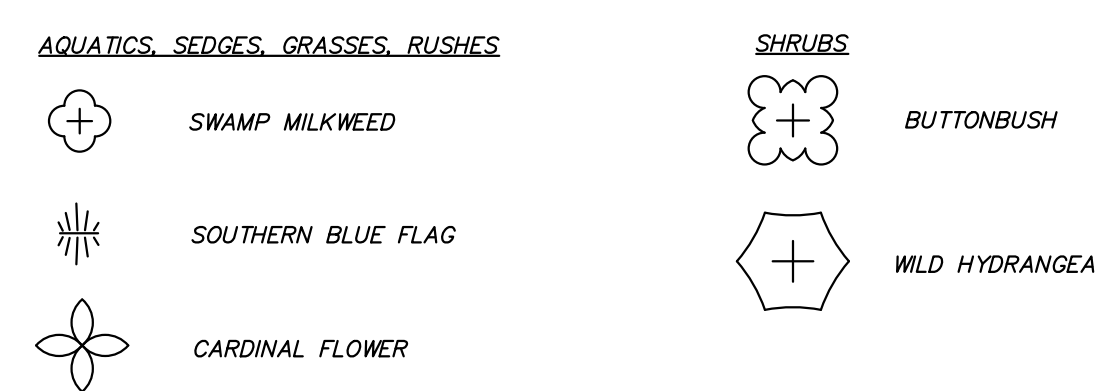


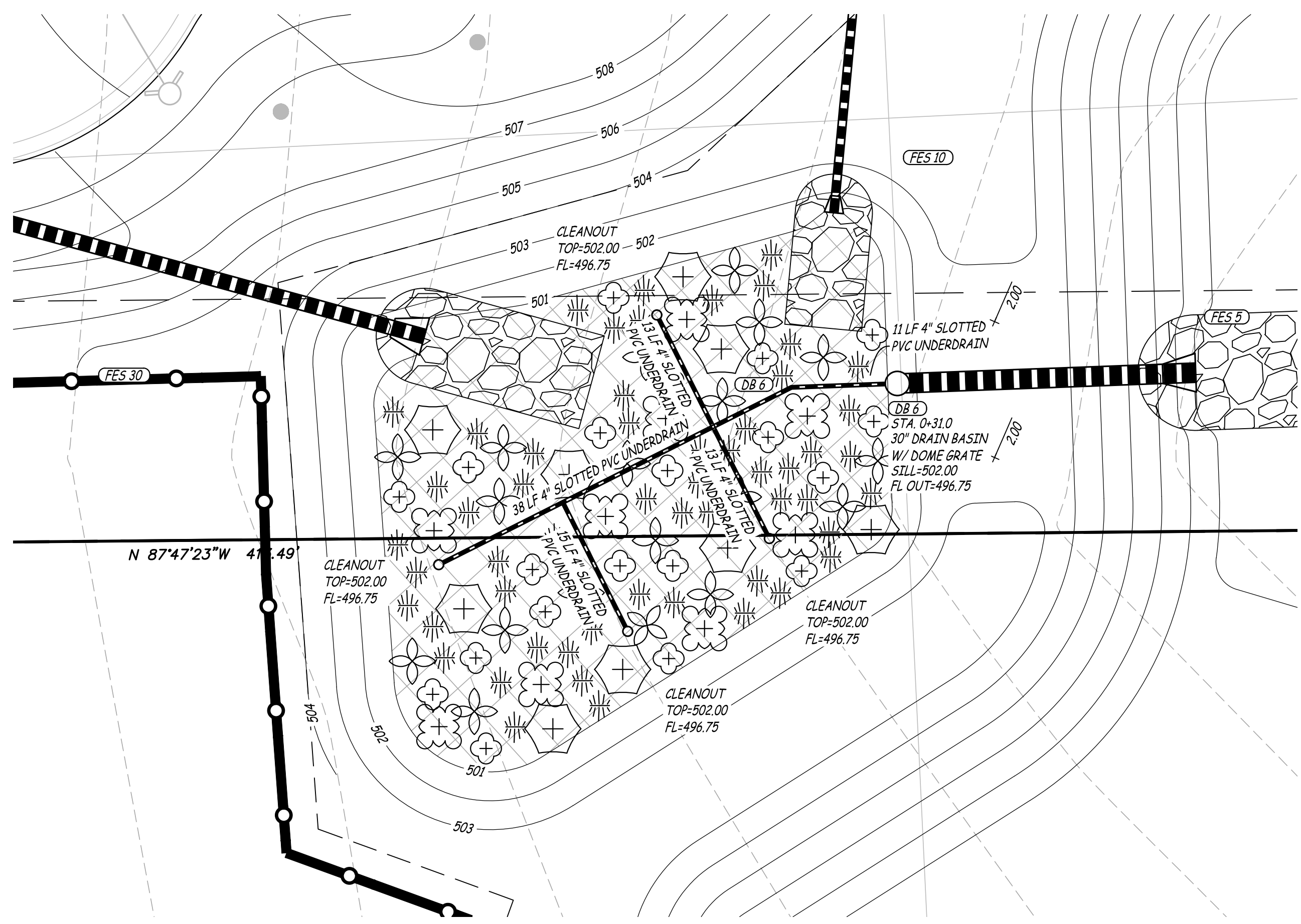
BIORETENTION TYPICAL CROSS SECTION
NOT TO SCALE

PLANT SCHEDULE table with columns: QTY, COMMON NAME, BOTANICAL NAME. Lists plants like Swamp Milkweed, Southern Blue Flag, Cardinal Flower, Button Bush, Wild Hydrangea.



MULCH (SEE BIORETENTION CROSS SECTION DETAIL)

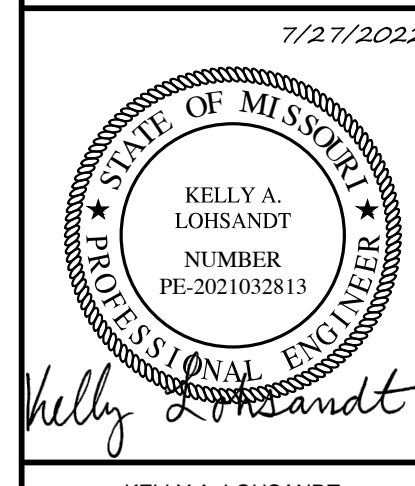
BIORETENTION PLAN VIEW
SCALE: 1" = 10'



BIORETENTION FACILITY NOTES

- 1. THE BIORETENTION FACILITY AREA SHALL BE USED AS A TEMPORARY SEDIMENT TRAP UNTIL CONTRIBUTING DRAINAGE AREA IS STABILIZED.
2. AFTER THE ENTIRE CONTRIBUTING DRAINAGE AREA IS STABILIZED VIA VEGETATION OR CONSTRUCTED IMPERVIOUS SURFACES, ALL SEDIMENT SHALL BE COMPLETELY REMOVED AND DEPOSITED ONSITE IN AN AREA OUTSIDE THE CONTRIBUTING DRAINAGE AREA FOR THIS FACILITY, AS DIRECTED BY THE OWNER.
3. GEOTEXTILE FABRIC SHALL BE NEEDLE PUNCHED NON WOVEN POLYPROPYLENE FABRIC: MSD TYPE 4, OR APPROVED EQUAL.
4. ALL SAND AND GRAVEL IS TO BE NATURAL AND UNCRUSHED.
5. THE PLANTING SOIL MIXTURE (PSM) SHALL CONSIST OF A MIXTURE OF PLANTING SOIL, MULCH, AND SAND CONSISTING OF THE FOLLOWING:
- 25% PLANTING SOIL
- 15% ORGANIC COMPOST
- 60% SAND (ASTM C33 FINE AGGREGATE)
THE PSM SHALL HAVE A COEFFICIENT OF PERMEABILITY OF AT LEAST 1 FT/DAY
6. PLANTING SOIL: THE USDA TEXTURAL CLASSIFICATION SHALL BE LOAMY SAND OR SANDY LOAM. PRIOR TO PURCHASE, A SAMPLE OF THE PLANTING SOIL SHALL BE SUBMITTED FOR APPROVAL BY THE ENGINEER. PLANTING SOIL SHALL MEET THE FOLLOWING CRITERIA:
- 50 - 85% SAND (2.0 - 0.050 MM, TEST METHOD: AASHTO T88)
- 0 - 50% SILT (0.050 - 0.002 MM, TEST METHOD: AASHTO T88)
- 2 - 5% CLAY (LESS THAN 0.002MM, TEST METHOD: AASHTO T88)
- 3 - 10% ORGANIC MATTER (C/N RATIO <= 25, TEST METHOD: AASHTO T194)
NO TIME EXTENSIONS WILL BE GRANTED FOR FAILURE TO MEET THE MINIMUM REQUIREMENTS. ONCE THE STOCKPILE OF THE PLANTING SOIL HAS BEEN SAMPLED, NO MATERIAL SHALL BE ADDED TO THE STOCKPILE.
7. ORGANIC COMPOST: COMPOST SHALL BE A HOMOGENEOUS AND FRIABLE MIXTURE OF PARTIALLY DECOMPOSED ORGANIC MATTER RESULTING FROM COMPOSTING. COMPOST SHALL NOT CONTAIN MORE THAN 1 PERCENT FOREIGN MATTER. FOREIGN MATTER IS DEFINED AS ANY MATTER OVER A 2 MM DIMENSION HAVING INORGANIC CONSTITUENTS SUCH AS METAL, GLASS, AND SYNTHETIC POLYMERS (E.G. PLASTIC AND RUBBER).
8. THE PSM SHALL BE A UNIFORM MIX, FREE OF PLANT RESIDUE, STONES, STUMPS, ROOTS, OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES EXCLUDING MULCH.
9. AFTER REMOVAL OF SEDIMENT, THE FACILITY SHALL BE EXCAVATED TO THE DIMENSIONS AND GRADES SHOWN ON THE PLANS. THE BOTTOM OF THE EXCAVATION SHALL BE ROTO-TILLED A MINIMUM 12" DEEP.
10. THE PSM SHALL BE PLACED USING LOW GROUND-CONTACT PRESSURE EQUIPMENT, OR BY EXCAVATORS AND/OR BACKHOES OPERATING ON THE GROUND ADJACENT TO THE FACILITY. NO HEAVY EQUIPMENT SHALL BE USED WITHIN THE FACILITY DURING OR AFTER THE PLACEMENT OF THE PSM. THE PSM SHALL BE PLACED IN 12" LIFTS AND SHALL BE SATURATED OVER THE ENTIRE AREA AFTER THE PLACEMENT OF EACH LIFT. FINAL ELEVATIONS SHALL BE WITHIN 1" OF THE PLANS.
11. ONCE THE PSM HAS BEEN PLACED, THE ENTIRE FACILITY SHALL BE COVERED WITH 3" OF WELL AGED, SHREDDED HARDWOOD BARK MULCH. MULCHING SHALL BE COMPLETE WITHIN 24 HOURS.
12. INSTALL PLANTS PER SPECIFICATIONS.
13. ANY PLANT SUBSTITUTIONS SHALL BE APPROVED BY THE ENGINEER PRIOR TO ORDERING.

MEADOWOOD ESTATES II, LP
MEADOWOOD ESTATES - PHASE II
LOT 4 - MEADOWOOD ESTATES SUBDIVISION
O'FALLON, ST. CHARLES COUNTY, MISSOURI



KELLY A. LOHSANDT
PROFESSIONAL ENGINEER
PE-2021032813

IF ORIGINAL SIGNATURE OR DIGITAL AUTHENTICATION IS NOT PRESENT THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT.

Date
JULY 27, 2022

Table with columns: Design: KAL, Drawn: BR

BIORETENTION PLAN

Sheet
C4.02

P:\GENERAL PROJECTS\15511-ES-MEADOWOOD-II-STEP PLAN\CAD\15511-ES-MEADOWOOD-II-STEP PLAN.DWG 10/19/2022