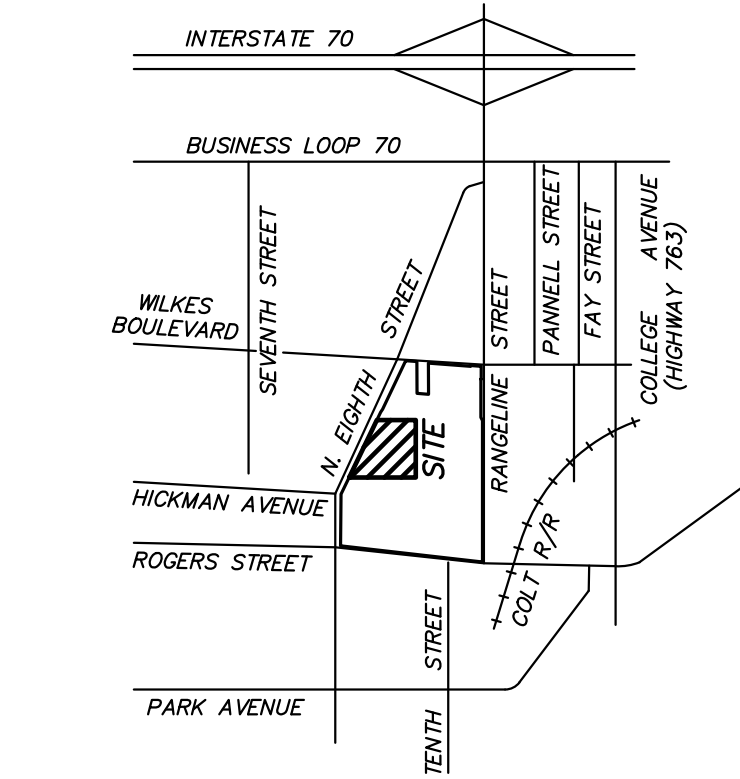


\\192.168.0.99\PROJECTS\GENERAL PROJECTS\16584--SCA--MILLER--HALL--DEMOL--CAD\16584--DEMOLITION PLAN.DWG 4/15/2025



SITE LOCATION MAP

NOT TO SCALE

STREAM BUFFER NOTE

THERE ARE NO STREAMS OR WATERWAYS ON THIS TRACT REGULATED BY THE CITY OF COLUMBIA STREAM BUFFER ORDINANCE AS DETERMINED BY SITE INSPECTION AND BY THE USGS MAP FOR THIS AREA AND ARTICLE X OF CHAPTER 12A OF THE CITY OF COLUMBIA CODE OF ORDINANCES.

LEGEND

—E—	PROPERTY LINE
—T—	ELECTRIC LINE
—UE—	TELECOMMUNICATIONS LINE
—UT—	UNDERGROUND ELECTRIC LINE
—S—	UNDERGROUND TELECOMMUNICATIONS LINE
—SS—	SANITARY SEWER LINE
—G—	STORM SEWER LINE
—W—	GAS LINE
—X—	WATER LINE
---	FENCE
---	EXISTING CONTOUR
750	IRON
⊕	CONTROL POINT
Δ CP#	AIR CONDITIONER
A/C	DUCTILE IRON PIPE
DI	ELECTRIC METER
EM	FIRE DEPARTMENT CONNECTOR
FDC	FIRE HYDRANT
FH	FLOW LINE
FL	FIBER OPTIC PULLBOX
FPB	GAS METER
GM	HIGH DENSITY POLYETHYLENE PIPE
HDPE	LIGHT STANDARD
LS	POLYVINYL CHLORIDE PIPE
PVC	REINFORCED CONCRETE PIPE
RCP	TELECOMMUNICATIONS PEDESTAL
TP	TELECOMMUNICATIONS PULLBOX
TPB	TOP OF WALL
TW	UTILITY POLE
UP	VITRIFIED CLAY PIPE
VCP	WATER METER
WM	WATER VALVE
WV	SILT FENCE
---	STRAW WATTLE
---	TREE PRESERVATION BARRIER
---	FINISH CONTOUR
---	TOP OF CURB ELEVATION
---	TOP OF PAVEMENT ELEVATION
---	FINISH GRADE ELEVATION
---	PROPOSED UNDERGROUND ELECTRIC
---	PROPOSED UNDERGROUND TELECOMMUNICATIONS
---	PROPOSED UNDERGROUND FIBER OPTIC
---	PROPOSED STORM SEWER
---	PROPOSED PAVEMENT
---	PAVEMENT AREA TO BE REMOVED
---	CONCRETE CURB & GUTTER
---	CONCRETE SIDEWALK

MILLER HALL

COLUMBIA, BOONE COUNTY, MISSOURI

DEMOLITION PLAN

APRIL 15, 2025

UTILITY NOTES

THE LOCATIONS, SIZES, AND MATERIAL TYPES OF UNDERGROUND UTILITIES INDICATED ON THE PLAT, NOT VISIBLE OR APPARENT FROM THE SURFACE, ARE SHOWN IN THEIR APPROXIMATE LOCATIONS FROM A MISSOURI ONE CALL SYSTEM LOCATE, OR UTILITY COMPANY RECORDS AND WERE NOT VERIFIED IN THE FIELD. UNDERGROUND UTILITY SERVICES TO BUILDINGS WERE NOT LOCATED.

WATER

CITY OF COLUMBIA WATER & LIGHT DEPARTMENT
P.O. BOX 6015
COLUMBIA, MISSOURI 65205
CONTACT: JOE STRODTMAN 573-874-6308

ELECTRIC

CITY OF COLUMBIA WATER & LIGHT DEPARTMENT
P.O. BOX 6015
COLUMBIA, MISSOURI 65205
CONTACT: JOHN BLAKEMORE 573-874-7313

GAS

AMEREN MISSOURI
2001 MAGUIRE BOULEVARD
COLUMBIA, MISSOURI 65201
CONTACT: TRENT SNOODGRASS 573-876-3063

TELECOMMUNICATIONS

CENTURYLINK
625 E. CHERRY STREET
COLUMBIA, MISSOURI 65201
CONTACT: DAVID ROBERTS 573-886-3503

MEDIACOM

1211 WILKES BOULEVARD
COLUMBIA, MISSOURI 65201
CONTACT: BOB BONER 573-443-1536

SANITARY SEWER

CITY OF COLUMBIA UTILITIES DEPARTMENT
P.O. BOX 6015
COLUMBIA, MISSOURI 65205
CONTACT: ERIN KEYS 573-874-7502

STORM SEWER

CITY OF COLUMBIA UTILITIES DEPARTMENT
P.O. BOX 6015
COLUMBIA, MISSOURI 65205
CONTACT: TOM WELLMAN 573-874-7250



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MISSOURI ONE-CALL SYSTEM, INC.

SURVEY CONTROL POINTS

MODIFIED STATE PLANE COORDINATES NAD 83, MISSOURI CENTRAL ZONE, NAVD 88, U.S. SURVEY FEET				
POINT #	NORTH	EAST	ELEVATION	DESCRIPTION
CP3	1137726.56	1689507.94	762.57	IRON
CP6	1138055.26	1689535.30	753.81	IRON
CP7	1137896.86	1689564.91	762.17	IRON
CP8	1137857.19	1689345.37	757.17	IRON
CP10	1137337.38	1689276.59	753.84	IRON
CP11	1137598.38	1689282.87	758.83	IRON
CP12	1137685.34	1689304.54	758.47	IRON
CP13	1138432.36	1690202.76	754.68	IRON
CP37	1138498.08	1689785.44	748.10	IRON
CP38	1137227.18	1690185.12	758.66	IRON
CP40	1137306.96	1689302.71	751.03	DRILL HOLE

BENCH MARK

BM - MISSOURI DEPARTMENT OF TRANSPORTATION VRS NETWORK.

TBM - CHISELED SQUARE ON THE SOUTHEAST CORNER OF 12 INCH CONCRETE WALL LOCATED 21 FEET SOUTHEAST OF THE SOUTHEAST CORNER OF MILLER HALL AND 54 FEET SOUTHWEST OF THE WEST FACE OF THE FIRE PIT.

ELEVATION = 765.62

MDNR PERMIT

MDNR PERMIT NO. XXXX XXXXX

PROPERTY DESCRIPTION

PART OF LOT 1 OF COLUMBIA COLLEGE SUBDIVISION
- PLAT J RECORDED IN PLAT BOOK 51 PAGE 61

PROPERTY OWNER

COLUMBIA COLLEGE
1001 ROGERS STREET
COLUMBIA, MO 65216

ZONING NOTE

THIS PROPERTY IS ZONED "R-MF" MULTIPLE FAMILY DWELLING

FLOODPLAIN NOTE

THIS TRACT IS NOT LOCATED WITHIN A FLOOD HAZARD ZONE AS DEFINED IN CITY ORDINANCE 29-2.3(d)(4), AS SHOWN BY FLOOD INSURANCE RATE MAP NUMBER 29019C0280E, DATED APRIL 19, 2017.

SHEET INDEX

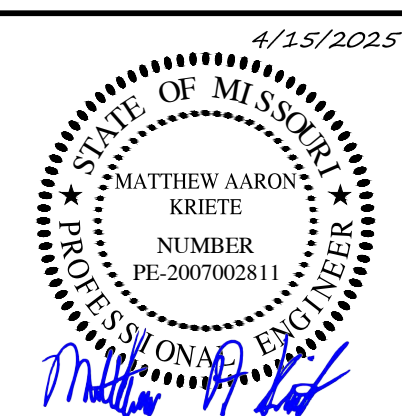
C0.01	COVER
C0.02	GENERAL NOTES
C1.01	DEMOLITION PLAN
C2.01	SITE PLAN
C3.01	TEMPORARY TRAFFIC CONTROL PLAN - PHASE 1
C3.02	TEMPORARY TRAFFIC CONTROL PLAN - PHASE 2
C4.01-C4.02	DETAILS



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MO Engineering Corp. # 2004005018

COLUMBIA COLLEGE
MILLER HALL
602 NORTH 8TH STREET
COLUMBIA, BOONE COUNTY, MISSOURI



MATTHEW A. KRIETE
PROFESSIONAL ENGINEER
PE-2007002811

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

Date
APRIL 15, 2025

Revised

Design: SMS Drawn: MJS

COVER

Sheet

C0.01

ES&S PROJECT NO. 16584

MILLER HALL DEMOLITION PLAN

GRADING AND STORM SEWER CONSTRUCTION NOTES

1. CONFIRM LOCATION OF ALL EXISTING UTILITIES WITHIN AREAS TO BE DISTURBED.
2. ESTABLISH CONSTRUCTION FENCING, PERIMETER EROSION AND SEDIMENT CONTROLS CURB INLET PROTECTION IN 8TH STREET, CONSTRUCTION EXIT AND STAGING AREA, AND PHASE I OF TEMPORARY PEDESTRIAN TRAFFIC CONTROL.
3. BEGIN CLEARING/GRUBBING AND STOCKPILE TOPSOIL IN AREAS INDICATED ON PLANS.
4. REMOVE EXISTING IMPROVEMENTS INDICATED TO BE REMOVED ALONG PATH OF FIBER OPTIC LINE RELOCATION.
5. COORDINATE FIBER OPTIC LINE RELOCATION WITH COLUMBIA COLLEGE. SERVICE SHALL NOT BE INTERRUPTED FOR MORE THAN A BRIEF OUTAGE.
6. CAP GEOTHERMAL LINE (SEE MEP PLANS).
7. DISCONNECT UTILITIES FROM MILLER HALL. CONTRACTOR SHALL COORDINATE UTILITY TERMINATIONS WITH RESPECTIVE PROVIDERS AND CONFIRM PROPER DISCONNECTS PRIOR TO BUILDING DEMOLITION. ANY FUEL OIL REMAINING IN PREVIOUSLY ABANDONED FUEL LINES SHALL BE DISPOSED OF PROPERLY BY CONTRACTOR.
8. BEGIN DEMOLITION OF BUILDING AND SITE IMPROVEMENTS PER PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE SITE AND SURROUNDING AREAS, INCLUDING ABATEMENT OF LEAD, ASBESTOS, AND OTHER HAZARDOUS MATERIALS THAT MAY BE PRESENT.
9. FILL AND GRADE BUILDING FOOTPRINT AREA AND SURROUNDING SITE AS INDICATED ON PLANS. INSTALL STORM SEWER, GEOTHERMAL, AND UNDERGROUND ELECTRIC. INSTALL REMAINING EROSION CONTROL AND TEMPORARY SEEDING ONCE GRADE ESTABLISHED AND STORM INLETS INSTALLED.
10. CONSTRUCT SITE WALKWAYS AND LIGHTING.
11. BEGIN PHASE 2 OF TEMPORARY PEDESTRIAN TRAFFIC CONTROL AND CONSTRUCTION FENCING. RE-OPEN NORTHEAST EGRESS ROUTE FROM DULANY HALL PRIOR TO CLOSING NORTHWEST DOORS AND EGRESS ROUTE.
12. REMOVE AND REPAVE SITE DRIVEWAY AND CURB & GUTTER.
13. ESTABLISH PERMANENT SITE STABILIZATION PRIOR TO REMOVAL OF TEMPORARY EROSION CONTROL AND INLET PROTECTION. PERMANENT STABILIZATION IS DEFINED AS WHEN 70% PERMANENT VEGETATION OR PERMANENT MATERIALS (BUILDINGS, PAVEMENT, ETC.) COVER ALL DISTURBED AREAS.
14. REMOVE ALL CONSTRUCTION EQUIPMENT, REMAINING ITEMS INDICATED TO BE REMOVED, DEBRIS AND RUBBISH FROM SITE. REMOVE CONSTRUCTION FENCING AND TEMPORARY PEDESTRIAN TRAFFIC CONTROLS.
1. ALL STORM SEWER PIPES AND INLETS SHALL MEET HEAVY DUTY TRAFFIC (HS20) LOADING AND BE INSTALLED ACCORDINGLY.
2. ALL HDPE PIPE SHALL BE ADS N-12 ST SOIL TIGHT, SMOOTH INTERIOR PIPE OR APPROVED EQUAL. INSTALLATION SHALL FOLLOW THE "EMBEDMENT OF PLASTIC STORM SEWER PIPE" DETAIL.
3. PVC PIPE MAY BE USED IN LIEU OF HDPE FOR DIAMETERS LESS THAN 15". PVC PIPE SHALL BE SDR 35 OR GREATER, AS REQUIRED BY DEPTH OR AS NOTED IN THESE PLANS.
4. INLINE DRAIN AND DRAIN BASINS SHALL BE NYLOPLAST, HARCO, OR APPROVED EQUAL AND SHALL BE PVC CONFORMING TO ASTM D1784 CELL CLASS 12454. JOINTS SHALL BE WATER TIGHT FLEXIBLE ELASTOMERIC SEALS CONFORMING TO ASTM D3212. INLINE DRAIN AND DRAIN BASIN GRATES AND FRAMES SHALL BE DUCTILE IRON CONFORMING TO ASTM A536 GRADE 70-50-05, OR 80-55-06.
5. CONTRACTOR SHALL ADJUST ALL GRATES, MANHOLES, VALVE BOXES, ETC. TO MATCH FINISH GRADES, AS REQUIRED.
6. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE FLUSH WITH FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER". TOP OF BOXES SHALL BE SLOPED TO MATCH PAVEMENT GRADE.
7. PIPE LENGTHS ARE GIVEN FROM CENTER OF STRUCTURE OR DOWNSTREAM END OF FLARED END SECTIONS.
8. CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS, TREES AND BRUSH, AND OTHER MATERIAL CREATED AS A RESULT OF CONSTRUCTION. MATERIAL SHALL BE DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. BURNING ON SITE SHALL BE ALLOWED BY PERMIT ONLY.
9. CONTRACTOR SHALL REMOVE ALL STUMPS BY EXCAVATING TO INCLUDE REMOVAL OF ASSOCIATED ROOT SYSTEM.
10. CONTRACTOR SHALL NOT ADVANCE TRENCH EXCAVATION BEYOND AMOUNT THAT CAN ACCOMMODATE PIPE INSTALLATION AND BACKFILLING AT THE END OF EACH DAY.
11. ENGINEERED FILL SHOULD BE FREE OF FROZEN SOIL, ORGANICS, RUBBISH, LARGE ROCKS, WOOD, OR OTHER DELETERIOUS MATERIAL. COHESIVE FILLS SHOULD BE UNIFORMLY COMPACTED TO AT LEAST 95 PERCENT OF THE "STANDARD" MAXIMUM DRY DENSITY AND BE WITHIN -2 TO +4 PERCENT OF OPTIMUM MOISTURE CONTENT AS DESCRIBED BY ASTM D698. GRANULAR FILLS SHOULD BE UNIFORMLY COMPACTED TO AT LEAST 95 PERCENT OF THE "STANDARD" MAXIMUM DRY DENSITY. THE MOISTURE CONTENT SHOULD BE HIGH ENOUGH TO PROVIDE FOR PROPER COMPACTION BUT LOW ENOUGH TO PREVENT UNDUE PUMPING. PLACE FILL MATERIAL IN LOOSE LIFTS NOT TO EXCEED 8 INCHES IN THICKNESS.
12. ROCKS AND STONES THAT EXCEED THE THICKNESS OF THE LOOSE LIFT FILL LAYER SHOULD BE REMOVED AND DISPOSED OF OFF THE IMMEDIATE CONSTRUCTION AREA.
13. SOILS PROPOSED FOR USE AS FILL OR BACKFILL SHOULD BE REVIEWED AND ANALYZED BY THE GEOTECHNICAL ENGINEER PRIOR TO USE ON SITE. SOIL CLASSIFIED AS MH, OH, OL, OR PT (HIGH PLASTICITY SOILS AND ORGANIC SILTS) BY THE UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D2487) SHOULD NOT BE IMPORTED FOR USE AS ENGINEERED FILL. SUITABLE IMPORTED MATERIALS FOR GENERAL SITE FILL ARE THOSE THAT CLASSIFY AS GW, GM, GC, SC, AND CL IN ACCORDANCE WITH ASTM D 2487. MATERIALS CLASSIFIED AS CH SHOULD BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO THEIR IMPORTATION AND ONLY USED OUTSIDE THE BUILDING PAD AT DEPTHS BELOW THE UPPER 2 FEET OF SUBGRADE. SUBJECT TO FINAL DESIGN REQUIREMENTS FOR WALL BACKFILL, SUITABLE IMPORTED MATERIALS FOR WALL AND TRENCH BACKFILL ARE THOSE THAT CLASSIFY AS GW, GP, GM, GC, SM, SW, SP, SC, AND CL IN ACCORDANCE WITH ASTM D2487.
14. FILLS PLACED IN AREAS WHERE THE NATURAL SLOPE IS GREATER THAN 5H:1V (HORIZONTAL TO VERTICAL) SHOULD BE BENCHED INTO THE EXISTING GRADE TO REDUCE THE POTENTIAL FOR SLIPPAGE BETWEEN EXISTING SLOPES AND ENGINEERED FILL. BENCHES SHOULD BE LEVEL AND WIDE ENOUGH TO ACCOMMODATE COMPACTION AND EARTH MOVING EQUIPMENT.
15. FILL AND SUBGRADE CONSTRUCTION SHOULD NOT BE STARTED ON FOUNDATION SOIL, PARTIALLY COMPLETED FILL, OR SUBGRADES THAT CONTAIN FROST OR ICE. FILL SHOULD NOT BE CONSTRUCTED USING FROZEN SOIL. FROZEN SOIL SHOULD BE REMOVED PRIOR TO PLACING FILL MATERIAL.
16. PRIOR TO FILL PLACEMENT, AREAS TO BE FILLED SHALL BE PROOF ROLLED USING A LOADED TANDEM AXLE DUMP TRUCK TO IDENTIFY SOFT AND UNSUITABLE AREAS. SOFT MATERIAL MAY BE MOISTURE CONDITIONED AND REUSED AS ENGINEERED FILL, UNSUITABLE AND DELETERIOUS MATERIAL SHALL BE REMOVED FROM SITE.
17. ALL NEW UTILITY TRENCHES SHOULD BE BACKFILLED IN ACCORDANCE WITH APPROPRIATE CONTROLLED ENGINEERED FILL SPECIFICATIONS.
18. FIELD DENSITY TESTS SHOULD BE CONDUCTED IN ACCORDANCE WITH ASTM D6938 (NUCLEAR METHODS) OR ASTM D 1536 (SAND CONE METHOD). FIELD DENSITY TESTS SHOULD BE PERFORMED AT THE RATE OF ONE TEST PER 2,500 SQUARE FEET PER LIFT WITHIN THE BUILDING AND 10,000 SQUARE FEET PER LIFT BENEATH PAVEMENTS, SIDEWALKS, AND OTHER POTENTIAL STRUCTURAL AREAS WITH A MINIMUM OF 3 TESTS PER LIFT AND ONE TEST PER 150 LINEAL FEET PER LIFT FOR FOUNDATION, TRENCH AND WALL BACKFILL.
19. BUILDING PAD AND PARKING AREAS SHALL BE PROOF-ROLLED WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK TO IDENTIFY ANY SOFT OR UNSUITABLE AREAS. PRIOR TO BASE ROCK PLACEMENT, THE PROOF-ROLL SHALL BE OBSERVED BY THE PROJECT GEOTECHNICAL ENGINEER. AREAS IDENTIFIED AS UNSUITABLE SHALL BE OVER EXCAVATED AND RECONSTRUCTED WITH ENGINEERED FILL.
20. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS FOR ALL LANDSCAPED AND PAVED AREAS.
21. CONTRACTOR SHALL PLACE STOCKPILED TOPSOIL FROM SITE IN ALL LANDSCAPE AREAS TO A MINIMUM DEPTH OF 6", UNLESS NOTED OTHERWISE IN PROJECT SPECIFICATIONS. ANY EXCESS TOPSOIL SHALL BE DISPOSED OF ON-SITE PER OWNER.
22. APPROXIMATELY 4,200 CY FILL IMPORT IS EXPECTED BY ENGINEER. CONTRACTOR SHALL NOTIFY ENGINEER OF ANTICIPATED DEVIATIONS FROM THIS QUANTITY PRIOR TO BIDDING.
23. CONTRACTOR SHALL PROVIDE DEDUCT ALTERNATE TO CRUSH CONCRETE FROM BUILDING, WALLS, STAIRS, WALKWAYS, AND BLOCKS AND PLACE AS 2-INCH MINUS FILL. CONTRACTOR SHALL REMOVE REBAR AND OTHER DELETERIOUS MATERIALS AND PLACE FILL HOMOGENEOUSLY, AVOIDING NESTING OR VOID CREATION. SOIL IMPORT WILL DECREASE BY THE AMOUNT OF CRUSHED CONCRETE FILL PLACED.

CONSTRUCTION NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
2. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL IDENTIFIED PROPERTY CORNERS, LAND SURVEY CORNERS, AND ACCESSORIES. THE CONTRACTOR SHALL CAUSE THE CORNERS AND ACCESSORIES TO BE REFERENCED BY A LICENSED LAND SURVEYOR, AND ANY SUCH CORNER OR ACCESSORIES DISTURBED OR DESTROYED DURING CONSTRUCTION SHALL BE RESET BY THE SURVEYOR AT THE ORIGINAL LOCATION, AND FILE THE RESTORATIONS AND MONUMENT DOCUMENTS AS THE LAW REQUIRES.
4. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEERING SURVEYS AND SERVICES FOR REVIEW AND APPROVAL FOR ALL MATERIALS BEFORE ORDERING.
5. ALL DIMENSIONS ARE TO BACK OF CURB, FACE OF SIDEWALK, OR EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED.
6. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
7. SITE SHALL COMPLY WITH ALL REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT. SIDEWALKS SHALL BE CONSTRUCTED WITH MAXIMUM 4.75% RUNNING SLOPE AND MAXIMUM 1.75% CROSS SLOPE UNLESS OTHERWISE NOTED. RAMPS SHALL BE CONSTRUCTED WITH MAXIMUM 7.5% RUNNING SLOPE AND MAXIMUM 1.75% CROSS SLOPE. LANDING AND DROP-OFF AREA SHALL BE CONSTRUCTED WITH MAXIMUM 1.75% SLOPE IN ALL DIRECTIONS.
8. PAVEMENT MAY BE CONCRETE OR ASPHALT UNLESS OTHERWISE NOTED.
9. ALL TRAFFIC CONTROL SHALL BE PER CURRENT MUTCD REQUIREMENTS AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. A TRAFFIC CONTROL PLAN WILL BE REQUIRED FOR ANY WORK WITHIN THE RIGHT-OF-WAY.
10. CONTRACTOR SHALL NOTIFY ADJACENT PROPERTY OWNERS IN WRITING 30 DAYS PRIOR TO CONSTRUCTION.
11. IF A CONFLICT EXISTS BETWEEN THE CIVIL PLANS AND CIVIL SPECIFICATIONS, THE CIVIL PLANS SHALL GOVERN.
12. CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE BUILDING AND SITE DEVELOPMENT RIGHT-OF-WAY TECHNICIAN (874-7474) IMMEDIATELY PRIOR TO CLOSURE OF STREET, DURING CONSTRUCTION FOR INSPECTIONS AND AGAIN WHEN WORK IS COMPLETE AND STREET IS REOPENED.
13. FOR A MINIMUM OF 3 MONTHS AFTER PLANTING, ALL TREES AND SHRUBS SHALL BE WATERED ONCE A WEEK A MINIMUM OF 15 GALLONS BY A SLOW RELEASE WATERING DEVICE SIMILAR TO TREECATOR, OR APPROVED EQUAL. IF 1" OR MORE OF RAIN FALLS ON THE SITE WITHIN 7 DAYS OF THE PREVIOUS WATERING, WATERING CAN BE SUSPENDED FOR 7 DAYS AFTER THE RAIN EVENT.
14. ALL INCIDENTAL ITEMS INCLUDING BUT NOT LIMITED TO SIGNS, PAVEMENT MARKING, PAVEMENT, CURBS, TRUNCATED DOMES, FENCING, LANDSCAPING, IRRIGATION, ETC. EITHER DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE RETURNED TO ORIGINAL CONDITIONS BY THE CONTRACTOR.
15. MISCELLANEOUS ITEMS ON SITE (E.G., TRASH CANS, BENCHES, PET WASTE STATION, RECREATIONS/LANDSCAPE EQUIPMENT) WILL BE REMOVED FROM SITE BY OWNER.

HAZARDOUS SUBSTANCE NOTE

1. SUBSTANCES REGULATED BY FEDERAL LAW UNDER THE RESOURCE CONSERVATION AND RECOVERY ACT (RORA) OR THE COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA) WHICH ARE TRANSPORTED, STORED OR USED FOR MAINTENANCE, CLEANING OR REPAIRS SHALL BE MANAGED ACCORDING TO THE PROVISIONS OF RORA AND CERCLA.
2. ALL PAINTS, SOLVENTS, PETROLEUM PRODUCTS AND PETROLEUM WASTE PRODUCTS (EXCEPT FUELS) AND STORAGE CONTAINERS (SUCH AS DRUMS, CANS OR CARTONS) SHALL BE STORED SUCH THAT THESE MATERIALS ARE NOT EXPOSED TO STORM WATER. SUFFICIENT PRACTICES OF SPILL PREVENTION, CONTROL AND/OR MANAGEMENT SHALL BE PROVIDED TO PREVENT ANY SPILLS OF THESE POLLUTANTS FROM ENTERING A WATER OF THE STATE. ANY CONTAINMENT SYSTEM USED TO IMPLEMENT THIS REQUIREMENT SHALL BE CONSTRUCTED OF MATERIALS COMPATIBLE WITH THE SUBSTANCES CONTAINED AND SHALL ALSO PREVENT THE CONTAMINATION OF GROUNDWATER.
3. THE APPLICANT SHALL NOTIFY BY TELEPHONE AND IN WRITING THE DEPARTMENT OF NATURAL RESOURCES, WATER POLLUTION CONTROL PROGRAM, POST OFFICE BOX 176, JEFFERSON CITY, MO 65102, 1-800-361-4827, OF ANY OIL SPILLS OR IF HAZARDOUS SUBSTANCES ARE FOUND DURING THE PROSECUTION OF WORK UNDER THIS PERMIT.

STORM WATER POLLUTION PREVENTION PLAN NOTES

1. CONTRACTOR SHALL FOLLOW THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL N.P.D.E.S. PERMIT FOR STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES. A COPY OF THIS PLAN, SWPPP, AND ALL PERMITS SHALL REMAIN ON SITE THROUGHOUT CONSTRUCTION.
2. CONTRACTORS ARE REQUIRED TO SUBMIT TO CITY INSPECTION STAFF COPIES OF THEIR INSPECTION REPORTS REQUIRED BY THE SWPPP ON A MONTHLY BASIS.
3. NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED AND APPROVAL HAS BEEN RECEIVED FROM ALL GOVERNING AUTHORITIES.
4. IMMEDIATELY UPON COMPLETION OF FINISH GRADING IN EACH AREA, ALL LANDSCAPING AREAS SHALL BE STABILIZED PER PLANS AND/OR SPECIFICATIONS.
5. SHOULD CONSTRUCTION STOP FOR LONGER THAN 14 DAYS, THE SITE SHALL BE SEEDED AS SPECIFIED IN THE SWPPP.
6. SITE INSPECTION SHOULD OCCUR ON A REGULAR SCHEDULE AND WITHIN 24 HOURS OF A STORM EVENT OF 0.25 INCHES OR GREATER. REGULARLY SCHEDULED INSPECTION SHALL BE A MINIMUM OF ONCE EVERY 7 CALENDAR DAYS, ANY DEFICIENCIES SHALL BE NOTED IN A WEEKLY REPORT OF THE INSPECTION AND CORRECTED WITHIN SEVEN CALENDAR DAYS OF THE REPORT.
7. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE AS THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SOIL SEDIMENT FROM LEAVING THE SITE.
8. CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
9. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION.
10. CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
11. ALL SLOPES GREATER THAN 3:1 SHALL BE REINFORCED BY NORTH AMERICAN GREEN P300 PERMANENT TURF REINFORCEMENT MAT OR APPROVED EQUAL.
12. ALL ROLLED EROSION CONTROL MATS, BIONETS, BLANKETS, ETC. SHALL BE INSTALLED PER MANUFACTURER'S REQUIREMENTS. INSURE THAT THE RESULT IN A PRODUCT THAT IS TIGHTLY SECURED TO THE GROUND THAT FORCES RUNOFF TO DRAIN OVER, NOT UNDER, THE PRODUCT. GRASS SHALL BE PLANTED PRIOR TO PRODUCT PLACEMENT SO IT WILL GROW THRU THE BLANKET. ALL ASPECTS OF THE PRODUCT SHALL BE FIRMLY SECURED TO THE GROUND SO IT CAN BE MOWED OVER WITHOUT GETTING TANGLED IN THE MOWER.
13. CONTRACTOR SHALL REMOVE ALL TRASH, DEBRIS, TREES & BRUSH AND OTHER MATERIAL CREATED AS A RESULT OF THE CONSTRUCTION WORK AND THE SITE SHALL BE RETURNED TO ITS ORIGINAL CONDITION.
14. ALL PERIMETER LANDSCAPED AREAS SHALL BE GRASS COVERED.
15. IN ORDER TO TERMINATE A MISSOURI DEPARTMENT OF NATURAL RESOURCES (MDNR) STATE OPERATING PERMIT, THE CONTRACTOR SHALL SUBMIT A REQUEST FOR TERMINATION OF OPERATING PERMIT FORM TO MDNR. A PERMIT IS ELIGIBLE FOR TERMINATION WHEN EITHER PERENNIAL VEGETATION, PAVEMENT, BUILDINGS, OR STRUCTURES USING PERMANENT MATERIALS COVER ALL AREAS THAT HAVE BEEN DISTURBED. VEGETATIVE COVER SHOULD BE AT LEAST 70% OF FULLY ESTABLISHED PLANT DENSITY OVER 100% OF THE DISTURBED AREA. A COPY OF THE REQUEST FOR TERMINATION OF OPERATING PERMIT FORM SHALL BE SUBMITTED TO THE CITY OF COLUMBIA AT WHICH TIME THE CITY WILL REMOVE THE PROJECT FROM ITS INSPECTION SCHEDULE.
16. THE SITE CONTRACTOR SHALL INCLUDE MAINTENANCE OF ALL BMP'S AS PART OF THEIR CONTRACT AND SHALL BE RESPONSIBLE FOR THE PROJECT UNTIL THE NPDES PERMIT IS TERMINATED.
17. SOIL STOCKPILES SHALL COMPLY WITH THE CITY OF COLUMBIA ORDINANCE SECTION 12A-71 "STOCKPILE OF SOIL".

UTILITY CONSTRUCTION NOTES

1. LOCATION OF SITE UTILITIES SHALL BE VERIFIED BY CONTRACTOR AND THE PROPER UTILITY COMPANY PROVIDING SERVICE PRIOR TO THE START OF CONSTRUCTION.
2. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
3. UTILITY TIE-INS ARE SHOWN IN APPROXIMATE LOCATIONS. REFER TO MEP PLANS FOR EXACT TIE-IN OF ALL UTILITIES.
4. SITE CONTRACTOR WILL BE RESPONSIBLE FOR ALL TAP AND TIE ON FEES REQUIRED, AS WELL AS COST OF UNDERGROUND SERVICE CONNECTIONS TO THE BUILDING.
5. SITE CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATING UTILITY REMOVALS AND RELOCATIONS WITH RESPECTIVE PROVIDERS.
6. SITE CONTRACTOR SHALL CONTACT COLUMBIA WATER & LIGHT TO COORDINATE REMOVAL AND/OR ABANDONMENT OF WATER AND UNDERGROUND ELECTRIC.
7. SITE CONTRACTOR SHALL CONTACT MEDIACOM AND BRIGHTSPEED TO COORDINATE REMOVAL AND/OR ABANDONMENT OF UNDERGROUND TELECOM AND TV.
8. SITE CONTRACTOR SHALL COORDINATE FIBER OPTIC RELOCATION WITH COLUMBIA COLLEGE.
9. SITE CONTRACTOR SHALL CONTACT AMEREN MISSOURI TO COORDINATE REMOVAL OF THE GAS SERVICE. GAS SERVICE SHALL BE REMOVED BY AMEREN MISSOURI.
10. ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS, BACKFILL OF TRENCHES THROUGH ANY IMPROVED AREAS, SUCH AS STREET, DRIVES OR PARKING LOTS SHALL BE COMPACTED TO MINIMUM 95% STANDARD PROCTOR DENSITY (ASTM D-698).
11. ALL UNDERGROUND UTILITY CONDUITS SHALL BE PLACED 48" BELOW FINISH GRADE UNLESS NOTED OTHERWISE.
12. ALL UNDERGROUND LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
13. TOPS OF EXISTING ELECTRIC, SANITARY, STORM, WATER, TELECOMMUNICATION, GAS, IRRIGATION, CHILLED WATER, AND STEAM STRUCTURES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH PROPOSED FINISHED ELEVATIONS.
14. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH OF 3000 P.S.I.
15. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODE AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICE.
16. REFER TO MEP PLANS FOR SITE LIGHTING PLAN.
17. PVC CONDUIT SHALL BE SCHEDULE 40 PVC WITH LONG SWEEPS ONLY (36" MINIMUM RADIUS) AND CONTAIN PULLTAPE, UNLESS OTHERWISE NOTED.
18. UTILITY STUBS SHOULD BE CLEARLY MARKED AND ES&S CONTACTED FOR DATA COLLECTION.

SPECIAL INSPECTION NOTE

UPON COMPLETION OF CONSTRUCTION AND PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A SPECIAL INSPECTION AND WRITTEN REPORT TO THE CITY OF COLUMBIA--COMMUNITY DEVELOPMENT DEPARTMENT FOR:

1. ALL ACCESSIBLE PARKING, ACCESSIBLE ROUTES AND OTHER ACCESSIBLE ELEMENTS IN NEW PARKING LOTS, RAMPS, BUILDINGS, STRUCTURES, AND SITES. THE REPORT SHALL VERIFY CONFORMANCE WITH IBC 2015 CHAPTER 11 SECTIONS 1104, 1105, AND 1106, AND ICC/ANSI A-117.1 - 2003. THE REPORT SHALL INCLUDE GRADES, SLOPES, CROSS SLOPES, AND DETAILS REQUIRED TO VERIFY COMPLIANCE.
2. ALL EXTERIOR LIGHTING. THE REPORT SHALL VERIFY CONFORMANCE WITH CITY OF COLUMBIA UNIFIED DEVELOPMENT CODE SECTION 29-4.5.

CITY OF COLUMBIA BUILDING INSPECTORS DO NOT PERFORM ANY SPECIAL INSPECTIONS.

CODE CONFORMANCE NOTES

THESE PLANS CONFORM TO THE CURRENT CITY OF COLUMBIA CODE OF ORDINANCES FOR:

- CHAPTER 12A, ARTICLE V: STORMWATER MANAGEMENT
- CHAPTER 12A, ARTICLE X: STREAM BUFFER REQUIREMENTS
- CHAPTER 12A-71: STOCKPILE OF SOIL
- CHAPTER 29-4.4: LANDSCAPING, SCREENING, AND TREE PRESERVATION

STORM WATER MANAGEMENT NOTE

THIS PROJECT IS PART OF A STORM WATER MASTER PLAN, UPDATED AND APPROVED NOVEMBER 2017. THIS PROJECT IS NOTED AS "MILLER HALL DEMO" IN THE SUMMARY TABLE BELOW.

Central Campus Impervious			
Location	New Impervious	Remove & Replace Impervious	Total New and Remove & Replace Impervious
Wilkes & Eighth Parking Lot	0.70A	0.53A	1.23A
Kiln Pavilion	0.01	0.00	0.01
Sidewalks	0.03	0.07	0.10
Science Building	0.88	0.04	0.92
Practice Hall	0.00	0.00	0.00
Dorsey Hall	0.00	0.00	0.00
West Loop Tower Enclosure	0.01	0.01	0.02
Soccer Field	0.36	0.02	0.38
North Quad	0.03	0.41	0.44
Gaming Hut	0.00*	0.00*	0.00*
Hughes Hall	0.10	0.02	0.12
Banks Hall	0.00	0.00*	0.00*
Maintenance Facility	0.00	(0.06)	(0.06)
Res Hall 2018	0.65	0.3	0.95
Miller Hall Demo	0.02	(0.27)	(0.25)
Remaining Impervious	0.70	0.36	1.06
Total	3.49A	1.43A	4.92A
1. Existing Central Campus (April 2011) = 6.55A Impervious + 14.80A Pervious = 21.35A. 2. Soccer Field Calculated separately as Impervious with CN of 94. 3. New Impervious does not include additional 50% of existing Impervious used in detention calculations.			



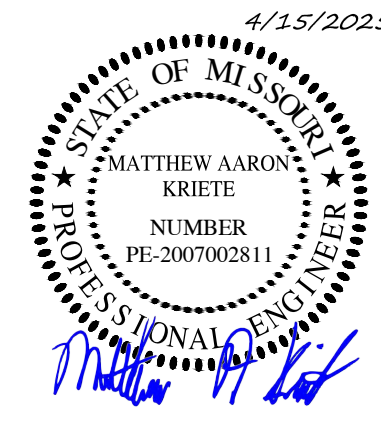
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MATTHEW A. KRIETE
PROFESSIONAL ENGINEER
PE-2007002811

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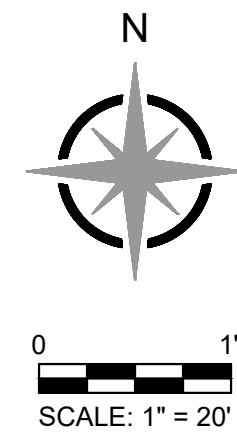
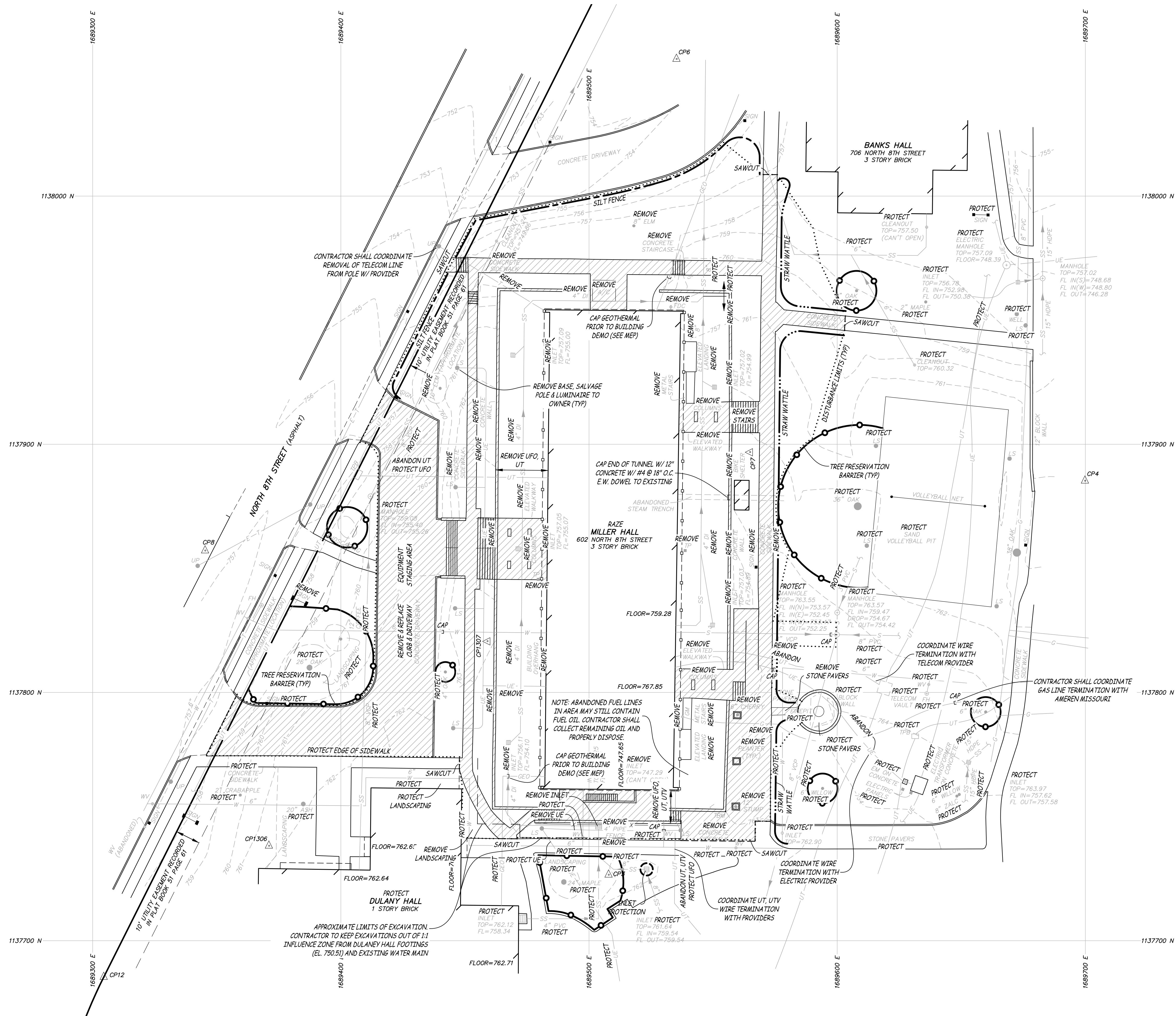
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GENERAL NOTES

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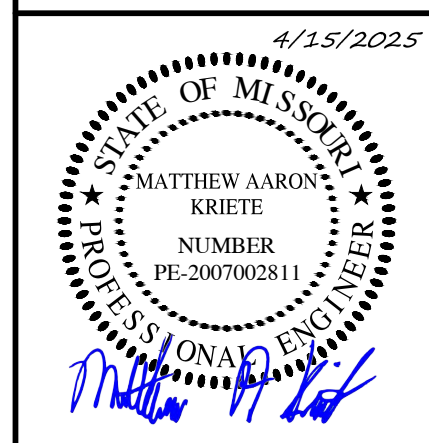
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LEGEND

PAVEMENT REMOVAL AREA

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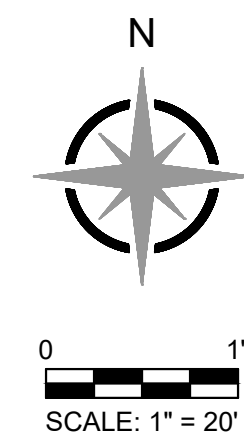
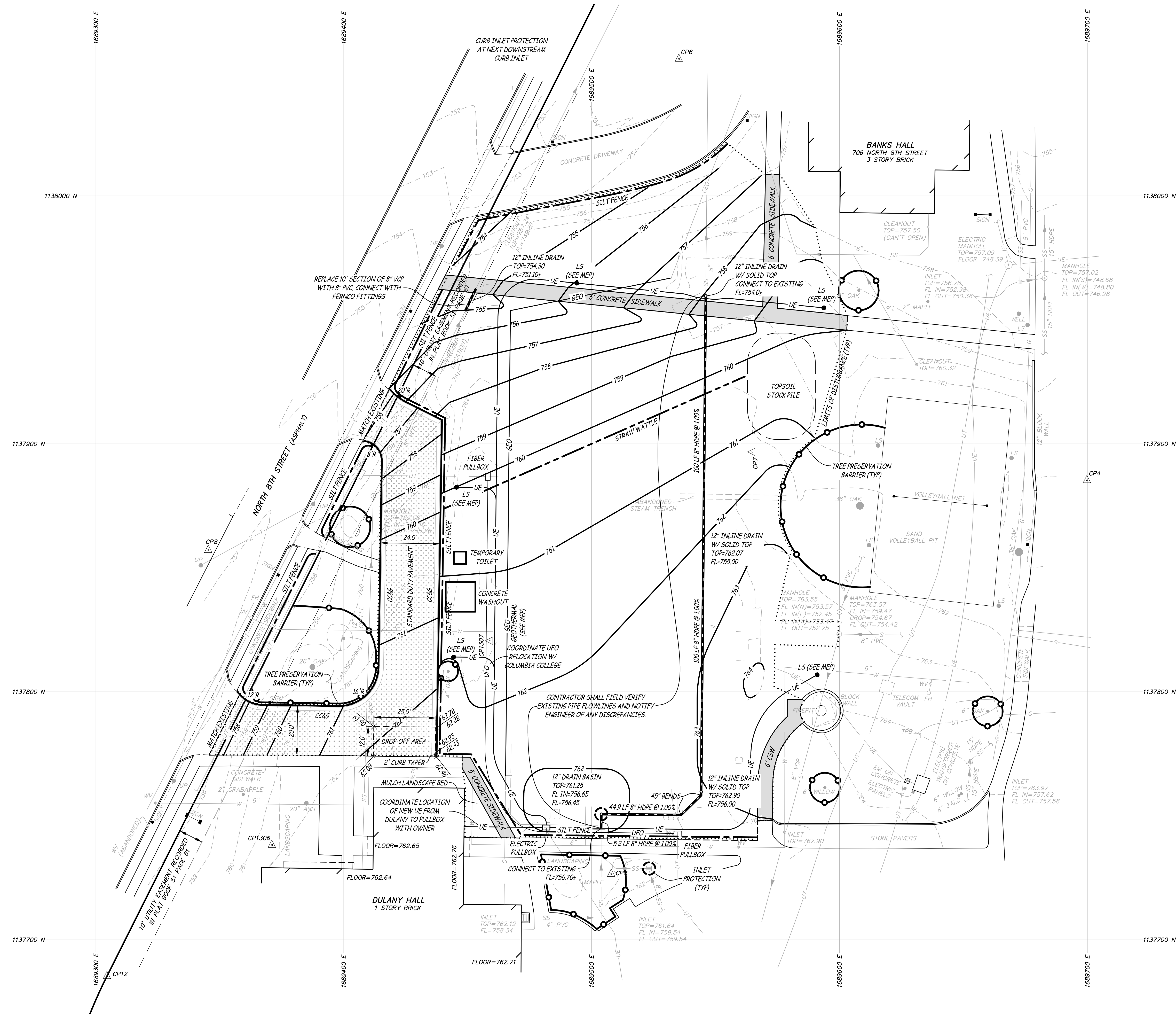
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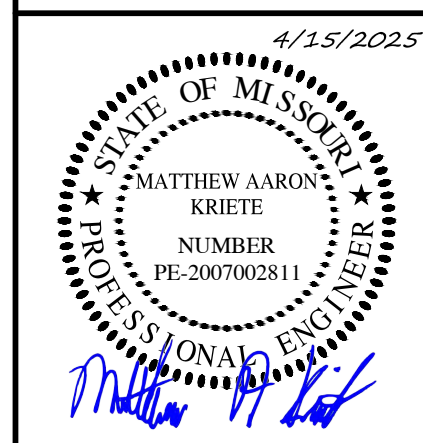
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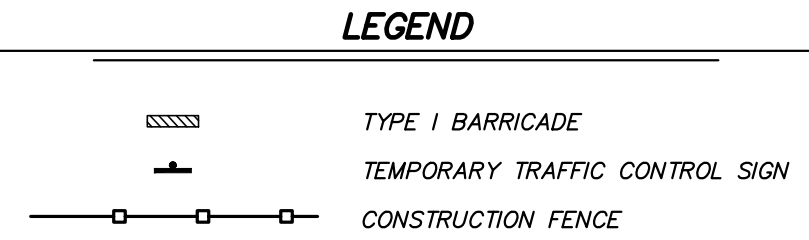
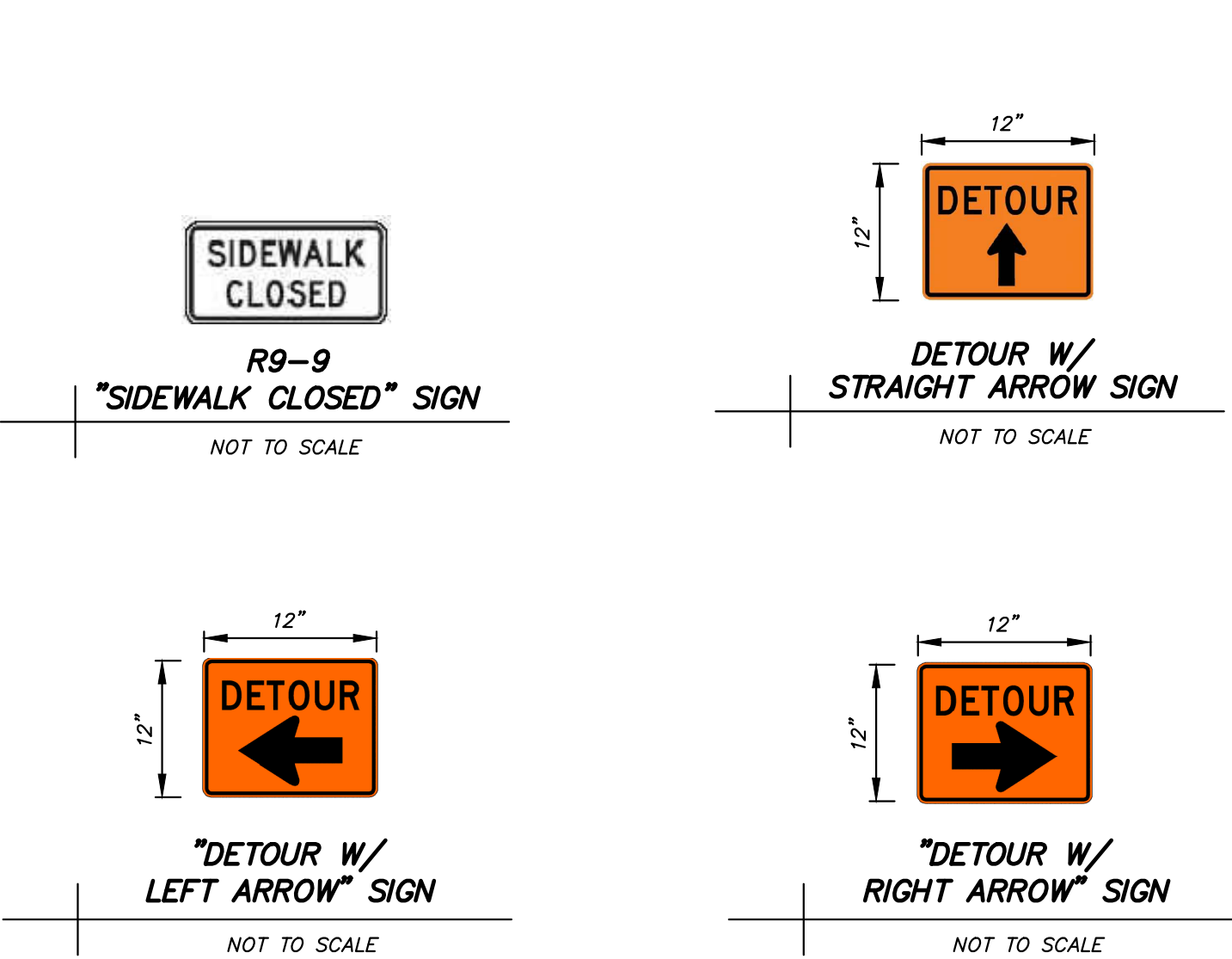
SITE PLAN

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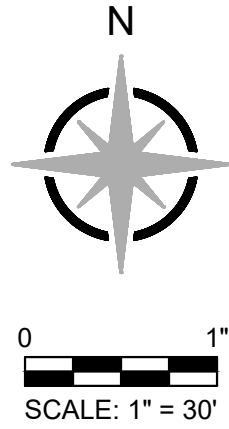
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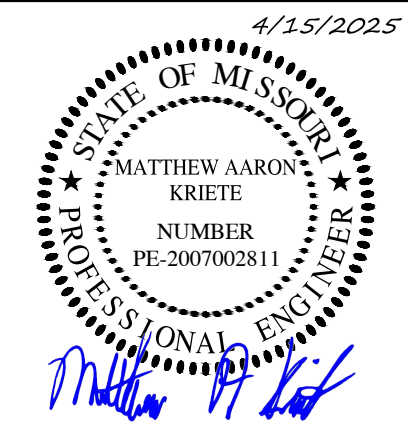


TEMPORARY TRAFFIC GENERAL NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND ANY APPLICABLE SAFETY AND DESIGN CODES. ALL TEMPORARY TRAFFIC CONTROL PLANS SHALL BE IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE MUTCD.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE, WORKER, AND TRAFFIC SAFETY.
3. CONTRACTOR MAY MODIFY THE TEMPORARY TRAFFIC CONTROL PLAN TO ACCOMMODATE THEIR CONSTRUCTION MEANS, METHODS, SEQUENCE, AND TECHNIQUES OR PROCEDURES. CONTRACTOR SHALL SUBMIT ALL PROPOSED MODIFICATIONS TO THE TEMPORARY TRAFFIC CONTROL PLAN TO THE CITY OF GREENSBORO FOR APPROVAL, IN WRITING, PRIOR TO IMPLEMENTATION.
4. CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL AS THE WORK ZONE SPECIALIST (WZS) WHO IS KNOWLEDGEABLE, COMPETENT BY TRAINING AND/OR CERTIFICATION AND EXPERIENCE IN THE PRINCIPLES OF PROPER TEMPORARY TRAFFIC CONTROL IN ACCORDANCE WITH CHAPTER 6 OF THE MUTCD, AT THE PROJECT LEVEL WHO HAS THE PRIMARY RESPONSIBILITY, WITH SUFFICIENT AUTHORITY, FOR IMPLEMENTING THE TEMPORARY TRAFFIC CONTROL PLAN AND OTHER SAFETY AND MOBILITY ASPECTS OF THE PROJECT. CONTRACTOR SHALL SUBMIT PROOF THAT THEIR WZS HAS TRAINING IN WORK ZONE SAFETY.
5. CONTRACTOR SHALL MONITOR TRAFFIC FLOW THROUGH THE WORK ZONE AND MAKE ADJUSTMENTS TO THE TRAFFIC CONTROL PLAN, WITH THE APPROVAL OF THE AUTHORITY HAVING JURISDICTION, AS REQUIRED.
6. GRINDING TO REMOVE PAVEMENT MARKINGS ON PERMANENT PAVEMENT IS PROHIBITED.



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TEMPORARY TRAFFIC
CONTROL PLAN - PHASE 1

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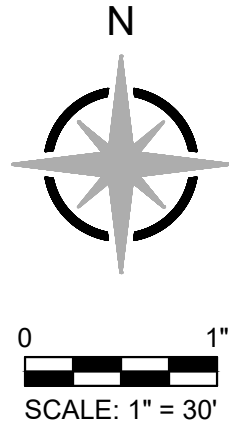


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4/15/2025

STATE OF MISSOURI
MATTHEW AARON KRIETE
NUMBER PE-2007002811
PROFESSIONAL ENGINEER

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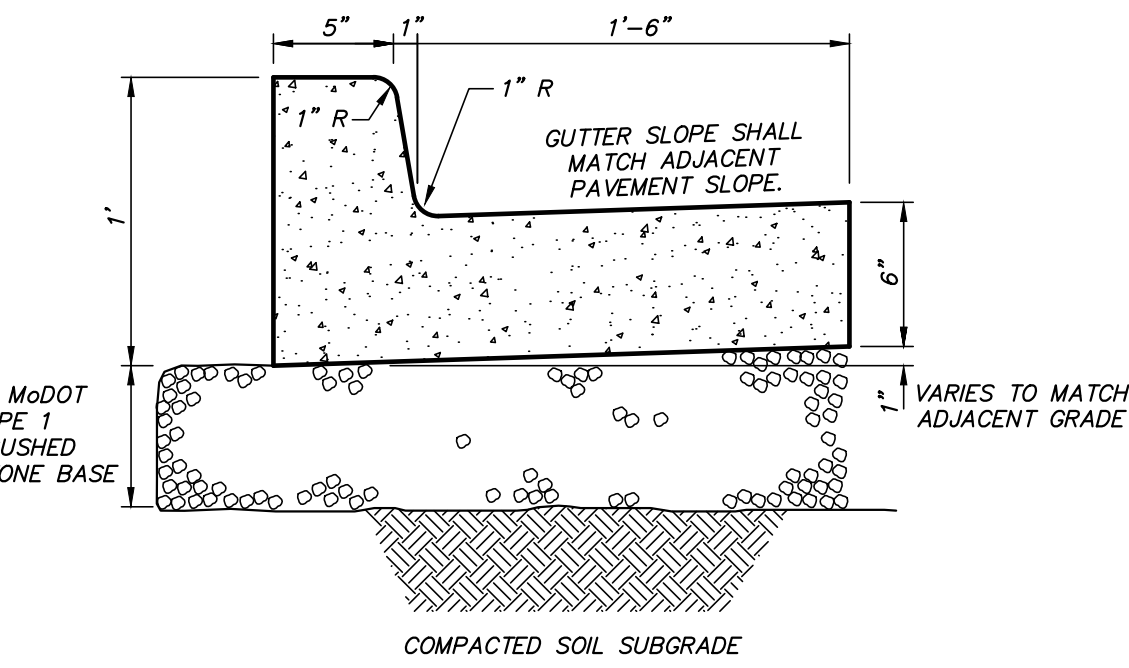
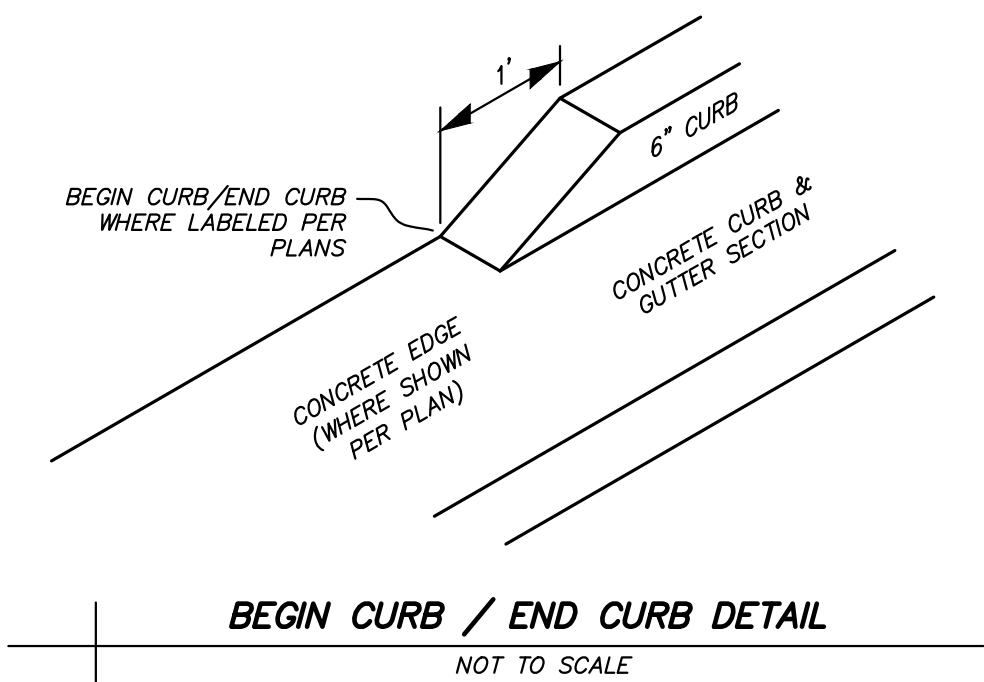
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TEMPORARY TRAFFIC
CONTROL PLAN - PHASE 2

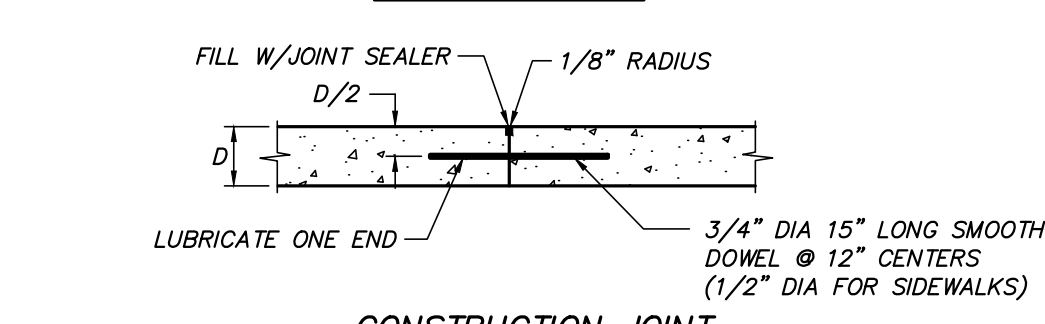
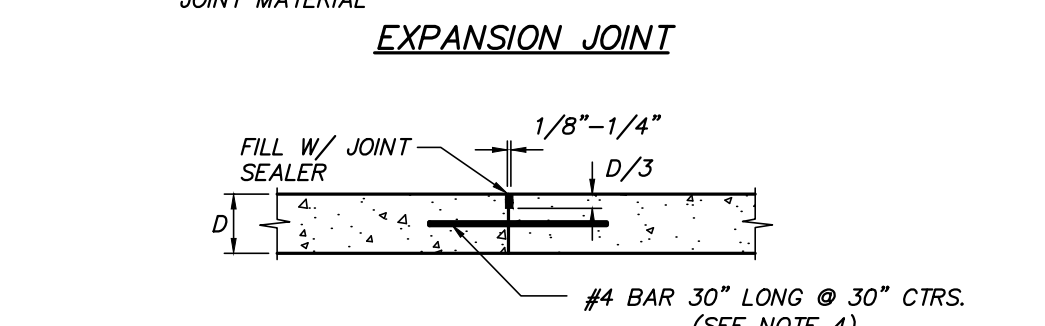
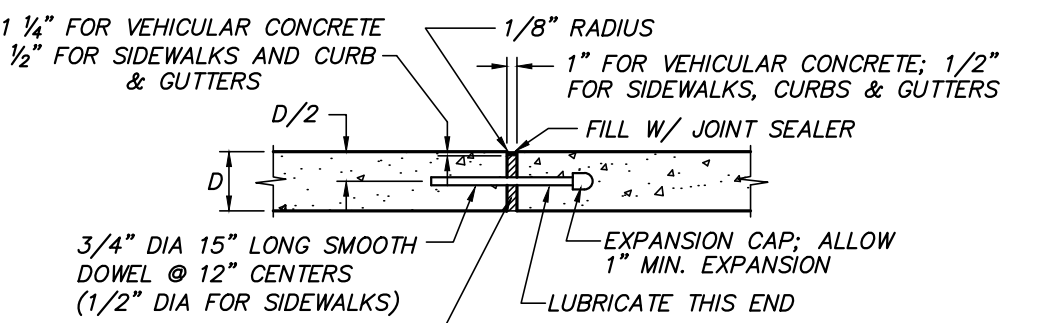
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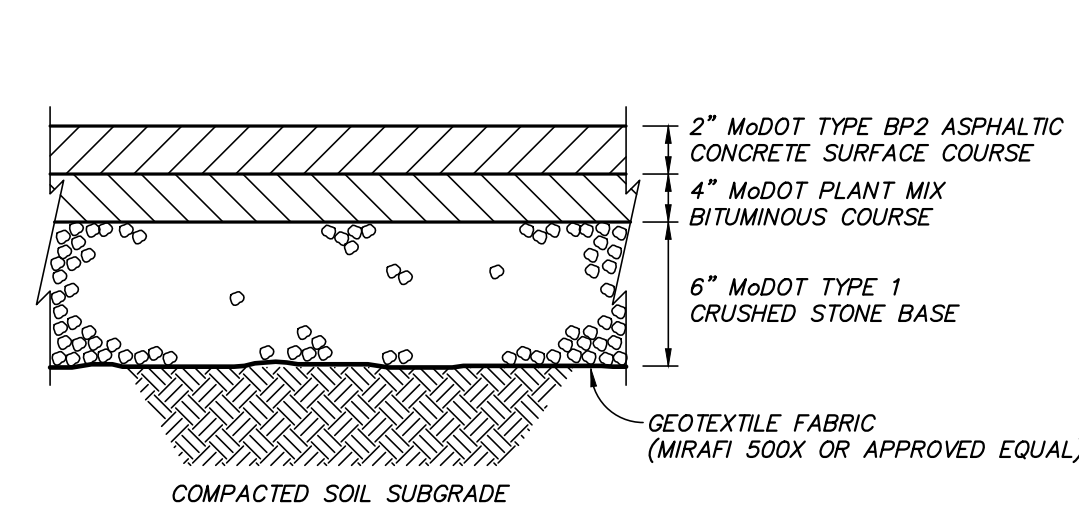
- NOTES:
1. CURB AND GUTTER MAY BE INTEGRAL IF CONCRETE PAVEMENT IS USED.
 2. INSTALL TRANSVERSE EXPANSION JOINTS TO MATCH ADJACENT PAVEMENT, OR AT EVERY 150' MAX.
 3. INSTALL SAW-CUT JOINTS TO MATCH ADJACENT PAVEMENT OR EVERY 10' MAX.
 4. SAW-CUT JOINTS SHALL EXTEND THROUGH THE ENTIRE CURB SECTION FROM THE TOP OF CURB TO A DEPTH OF 2" BELOW THE GUTTER SURFACE.

6" CONCRETE CURB & GUTTER SECTION
NOT TO SCALE

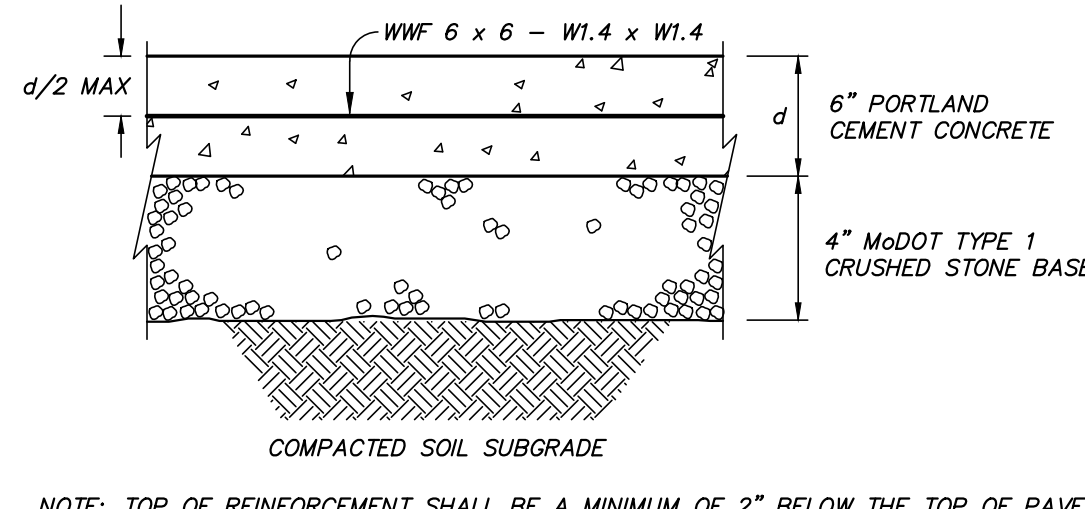


- NOTES:
1. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL SUBMIT A PAVEMENT JOINT PLAN OF ALL CONCRETE PAVEMENT FOR APPROVAL.
 2. CONCRETE PAVEMENT SHALL HAVE SAW-CUT OR CONSTRUCTION JOINTS EVERY 10 FEET FOR 4 INCH THICK PAVEMENT, 12 FEET FOR 5 INCH THICK PAVEMENT, AND 15 FEET FOR 6 INCH THICK PAVEMENT OR GREATER. PANELS SHALL BE CUT SUCH THAT PANELS ARE NEARLY SQUARE AND DO NOT EXCEED 1:4 LENGTH TO WIDTH RATIO. EXPANSION JOINTS SHALL BE PROVIDED AT ALL FIXED STRUCTURES, SUCH AS: LIGHT STANDARD FOUNDATIONS, SEWER STRUCTURES, BUILDINGS, WALLS, BOTTOM OF STAIRS, ROOF DRAINS, ETC., AND EVERY 150 FEET MAXIMUM. DOWEL BARS SHALL BE PROVIDED AT TRANSVERSE JOINTS IN ALL HEAVY DUTY PAVEMENT DRIVE AISLES.
 3. THIS DETAIL APPLIES TO ALL CONCRETE PAVEMENT FOR PARKING LOTS, DRIVE/ACCESS AISLES, CURBS & GUTTERS, AND SIDEWALKS.
 4. INCLUDE BAR WITH TRANSVERSE SAW-CUT JOINTS FOR HEAVY DUTY PAVEMENT. OMIT BAR WITH SAW-CUT JOINTS FOR STANDARD DUTY PAVEMENT AND SIDEWALKS.
 5. PROVIDE CONSTRUCTION JOINT AT END OF DAYS WORK OR IF CONCRETE PLACEMENT IS SUSPENDED FOR MORE THAN 30 MINUTES.
 6. SAW-CUT JOINTS SHALL BE CUT WITHIN 12 HOURS OF INITIAL SET OF CONCRETE. RAVELED JOINTS WILL NOT BE ACCEPTED.
 7. ELASTOMERIC POLYURETHANE OR SILICONE JOINT SEALANT IS REQUIRED FOR ALL JOINTS AND SHALL BE LIGHT GRAY IN COLOR.
 8. OMIT DOWEL BARS FOR EXPANSION JOINTS AT BUILDINGS, LIGHT STANDARDS, AND ROOF DRAINS.

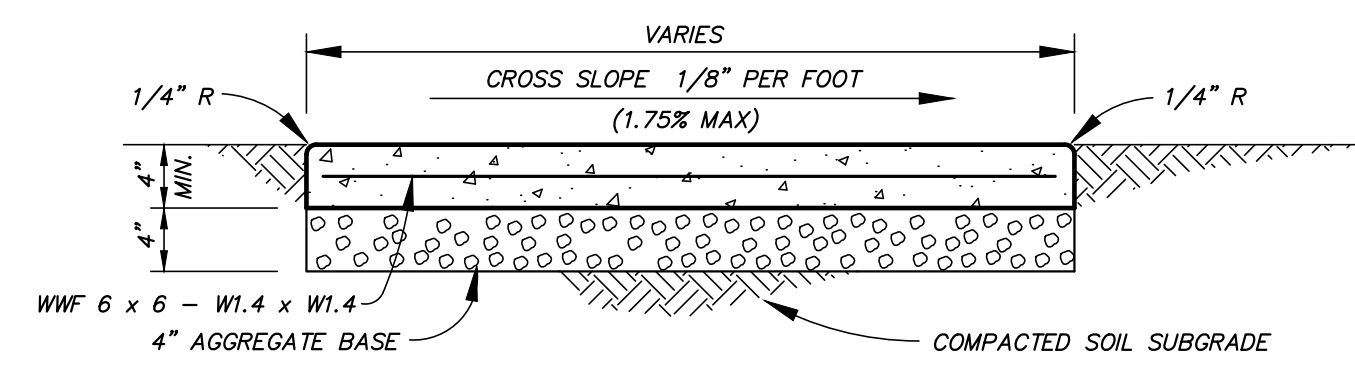
CONCRETE PAVEMENT JOINTS
NOT TO SCALE



ASPHALT PAVEMENT
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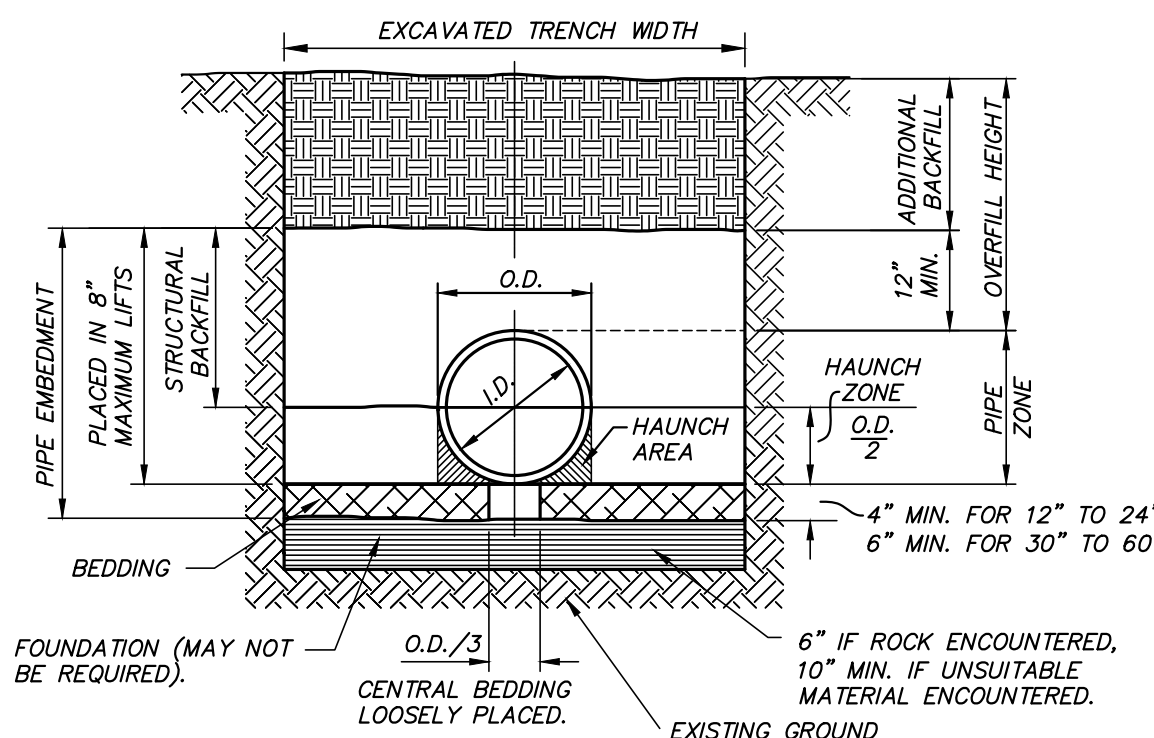


CONCRETE PAVEMENT
NOT TO SCALE



- NOTES:
1. SIDEWALK SHALL BE 5-8% AIR-ENTRAINED, 6 BAG MIX, 4,000 PSI PORTLAND CEMENT CONCRETE.
 2. INSTALL TRANSVERSE EXPANSION JOINTS TO MATCH STREET OR CURB AND GUTTER EXPANSION JOINTS AND AT ALL DRIVEWAY APPROACHES, FIXED STRUCTURES, BUILDINGS, AND SIDEWALK RAMPS. SPACING SHALL NOT EXCEED 100'.
 3. FOR SIDEWALKS UP TO 6 FT. WIDE, INSTALL TRANSVERSE SAW-CUT JOINTS AT SPACING EQUAL TO SIDEWALK WIDTH.
 4. FOR SIDEWALKS WIDER THAN 6 FT., INSTALL LONGITUDINAL SAW JOINT AT CENTERLINE OR AT A SPACING NOT TO EXCEED 5 FT. TRANSVERSE SAW-CUT JOINT SPACING EQUAL TO HALF SIDEWALK WIDTH.
 5. IF SIDEWALK IS REINFORCED, NO STEEL SHALL BE PLACED THROUGH AN EXPANSION JOINT.
 6. SEE SEPARATE DETAIL FOR ADDITIONAL CONCRETE JOINT REQUIREMENTS.

CONCRETE SIDEWALK
NOT TO SCALE



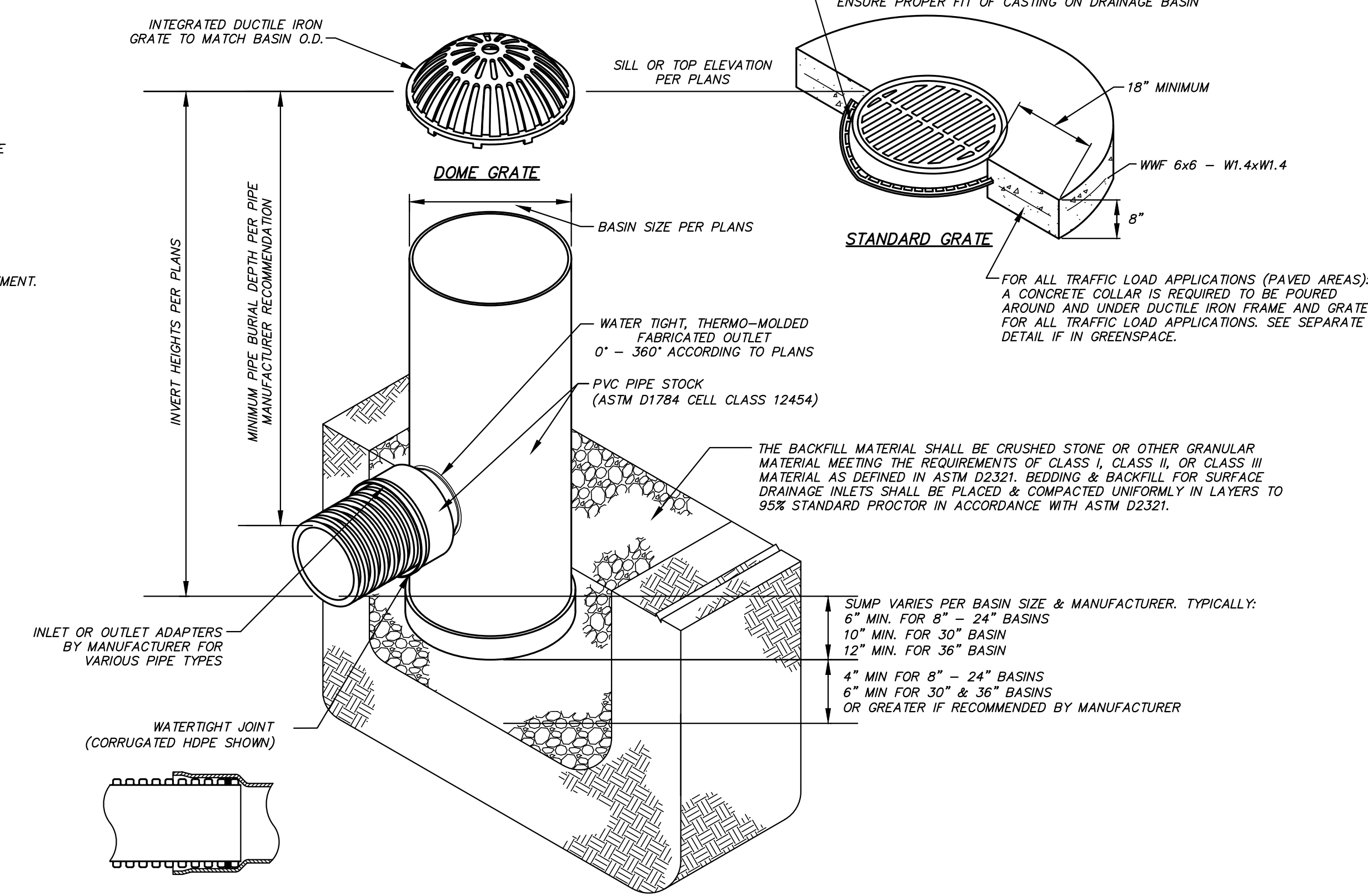
TYPICAL TRENCH DETAIL

- BACKFILL NOTES:
1. BEDDING, HAUNCH, AND STRUCTURAL BACKFILL SHALL BE IN CONFORMANCE WITH AASHTO M145 A1 OR A-3 COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DEFINED BY ASTM D698.
 2. ALL PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND ASTM D2321 LATEST ADDITION.
 3. HAUNCH, STRUCTURAL, AND ADDITIONAL BACKFILL SHALL BE PLACED IN LIFTS NOT TO EXCEED 8 INCHES AND COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DEFINED BY ASTM D698.

SPECIFIED DIA OF PIPE (IN.)	MIN OVERFILL HEIGHT (FT)	HDPE MAX OVERFILL HEIGHT (FT)	POLYVINYL CHLORIDE MAX OVERFILL HEIGHT (FT)	VIRGIN RESIN (AASHTO M294) OVERFILL HEIGHT* (FT)	ENGINEERED COMPOUND (RECYCLED, ASTM F2648) OVERFILL HEIGHT* (FT)	TRENCH WIDTH (IN.)
12	2	26	15	30	27	34
15	2	28	15	30	22	39
18	2	24	15	30	19	44
24	2	20	15	30	16	55
30	2.5	17	N/A	N/A	15	67
36	2.5	19	N/A	N/A	16	76
42	2.5	19	N/A	N/A	17	84
48	2.5	17	N/A	N/A	18	95
54	2.5	9	N/A	N/A	15	104
60	2.5	9	N/A	N/A	20	113

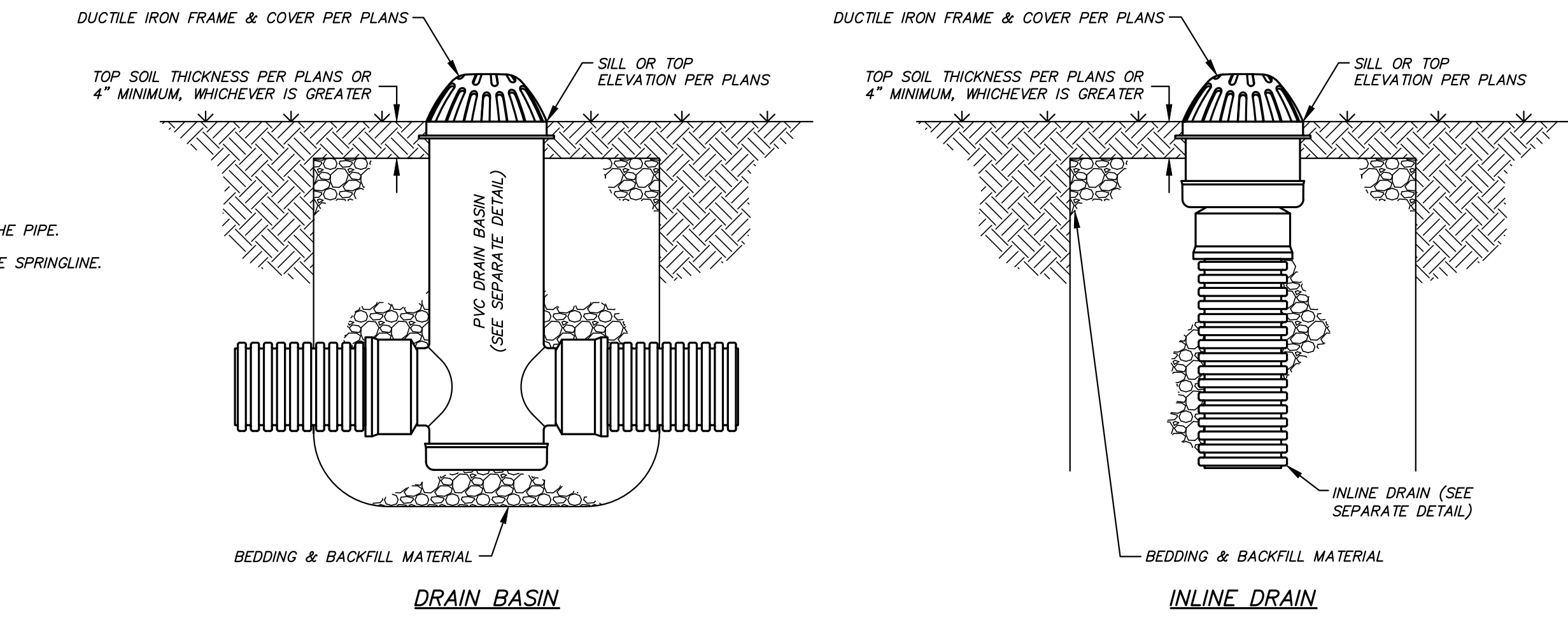
- TABLE ASSUMES STANDARD PROCTOR DENSITY OF 95%
- * MAXIMUM OVERFILL MEASURED FROM THE TOP OF PIPE TO SURFACE.
 - ** CLASS 1 - CRUSHED ROCK, ANGULAR; AASHTO M43 - 5, 6, 56, 57, 67; AASHTO M145 - A1, A3
 - ** CLASS 2 - CLEAN, COARSE GRAINED SOILS TO BORDERLINE CLEAN FINES; AASHTO M43 - GRAVEL AND SAND WITH <10% FINES;
 - ** CLASS 3 - COARSE GRAINED SOILS WITH FINES AND INORGANIC FINE-GRAINED SOILS; AASHTO M43 - GRAVEL AND SAND WITH <10% FINES;
 - AASHTO M145 - A-2-4, A-2-5, A-2-6, A-4, OR A-6 WITH >30% RETAINED ON #200 SIEVE
 - ** REFER TO CURRENT ADS INC. DRAINAGE HANDBOOK FOR A COMPLETE LISTING OF SUITABLE MATERIALS
 - # PER ASTM D-3034 FOR PIPE UP TO 15" AND ASTM F679 OVER 15"

EMBEDMENT OF PLASTIC STORM SEWER PIPE
NOT TO SCALE



- NOTES:
1. ALL CONNECTIONS SHALL BE WATERTIGHT.
 2. SEE PLANS FOR GRATE TYPE FOR EACH BASIN.
 3. ALL FRAMES & GRATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05, OR 80-55-06.
 4. ALL STANDARD OR SOLID GRATES SHALL BE MEET H-20 LOAD RATING. DOME GRATES HAVE NO LOAD RATING.
 5. DRAIN BASINS SHALL BE CUSTOM MANUFACTURED AS A SINGLE UNIT ACCORDING TO PLAN DIMENSIONS. RISERS SHALL NOT BE ALLOWED WITHOUT PRIOR APPROVAL BY ENGINEER.
 6. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE & PVC PIPE.
 7. STORM INLET TOP/GRATE SHALL BE LABELED TO DISCOURAGE DUMPING OF POLLUTANTS TO WATERWAY.

PVC DRAIN BASIN & GRATE
NOT TO SCALE



- NOTES:
1. THE BEDDING & BACKFILL MATERIAL SHALL BE CRUSHED STONE OR OTHER GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS I, CLASS II, OR CLASS III MATERIAL AS DEFINED IN ASTM D2321. ALL BEDDING & BACKFILL SHALL BE PLACED & COMPACTED UNIFORMLY IN LIFTS TO 95% STANDARD PROCTOR IN ACCORDANCE WITH ASTM D2321.
 2. STORM INLET TOP/GRATE SHALL BE LABELED TO DISCOURAGE DUMPING OF POLLUTANTS TO WATERWAY.

PVC BASIN/DRAIN INSTALLATION FOR NON-TRAFFIC/GREENSPACE AREAS ONLY
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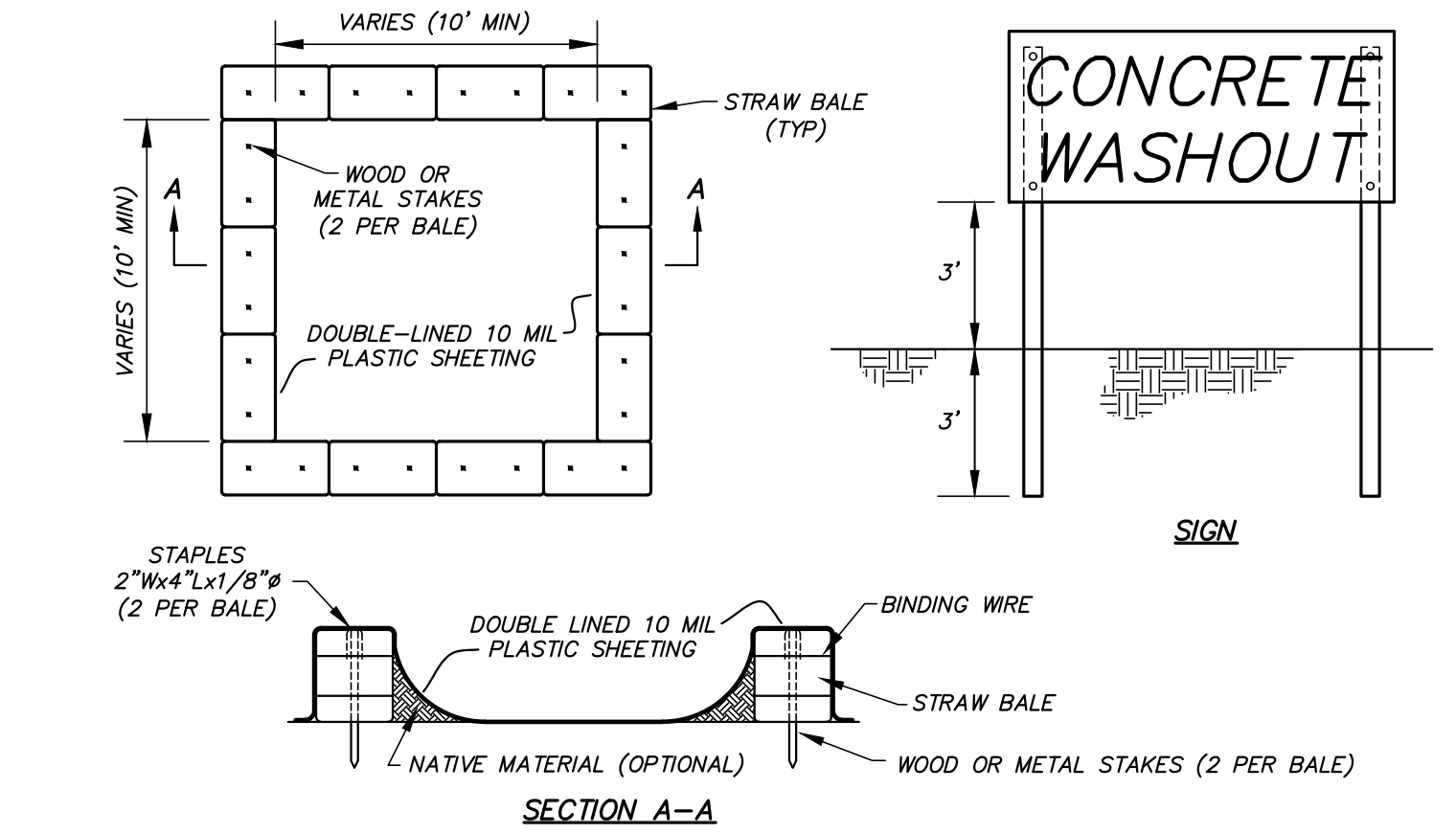
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DETAILS

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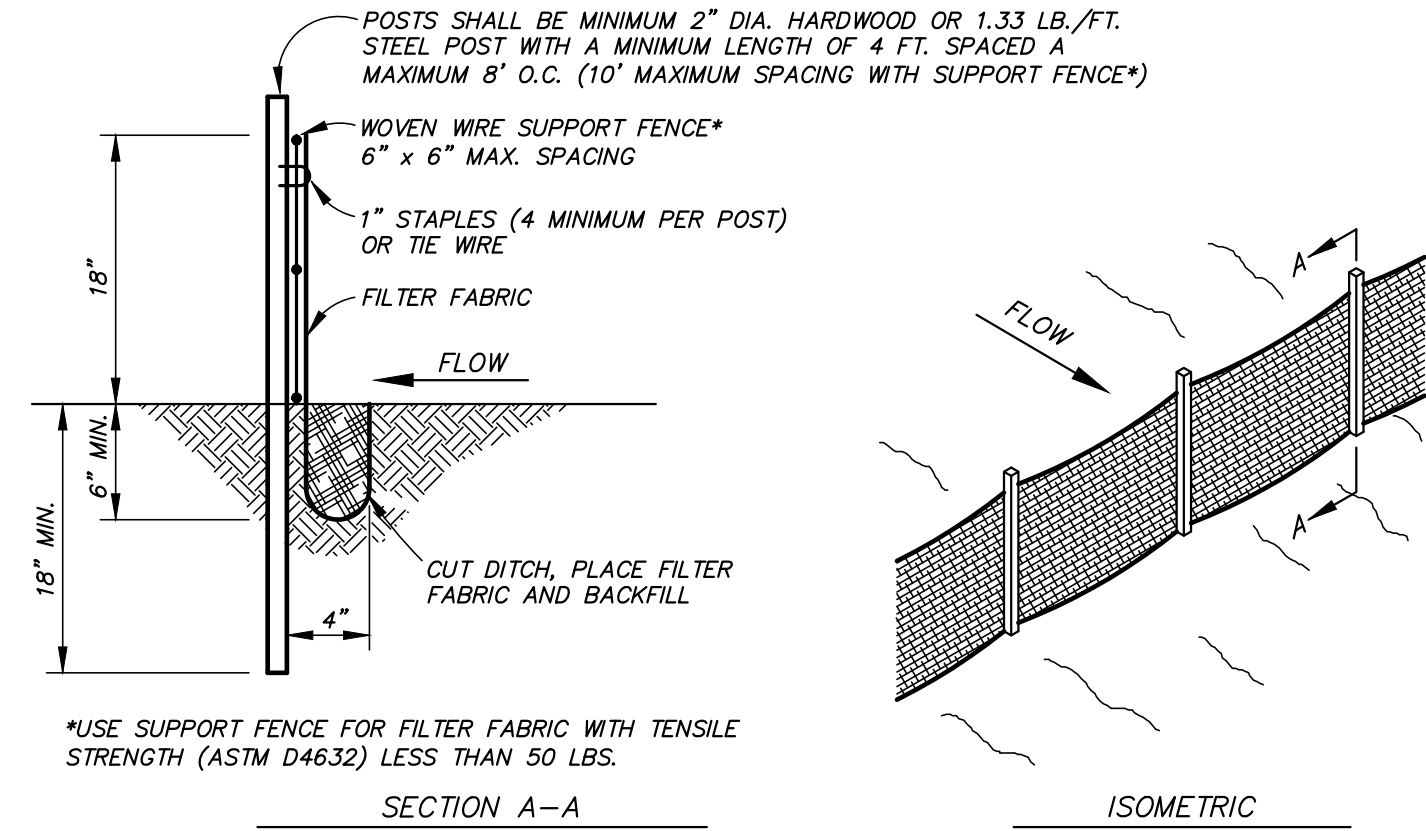
ESS&S PROJECT NO. 16584



- NOTES:
1. ALL CONCRETE WASTE MATERIAL, INCLUDING WASHOUT WATER, SHALL BE TOTALLY CONTAINED.
 2. SEE SWPPP FOR MORE DETAILS.
 3. UPON PROJECT COMPLETION CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL CONCRETE WASTE FROM THE OWNER'S PROPERTY PER ALL APPLICABLE SOLID WASTE REGULATIONS.
 4. CONSTRUCT SIGN OF WEATHER PROOF MATERIALS OF A SIZE EASILY READABLE BY CONCRETE TRUCK DRIVERS. PLACE SIGN WITHIN 10' OF WASHOUT.
 5. CONTRACTOR SHALL CONTAIN WASHOUT WATERS AT ALL TIMES.

CONCRETE WASHOUT AREA

NOT TO SCALE



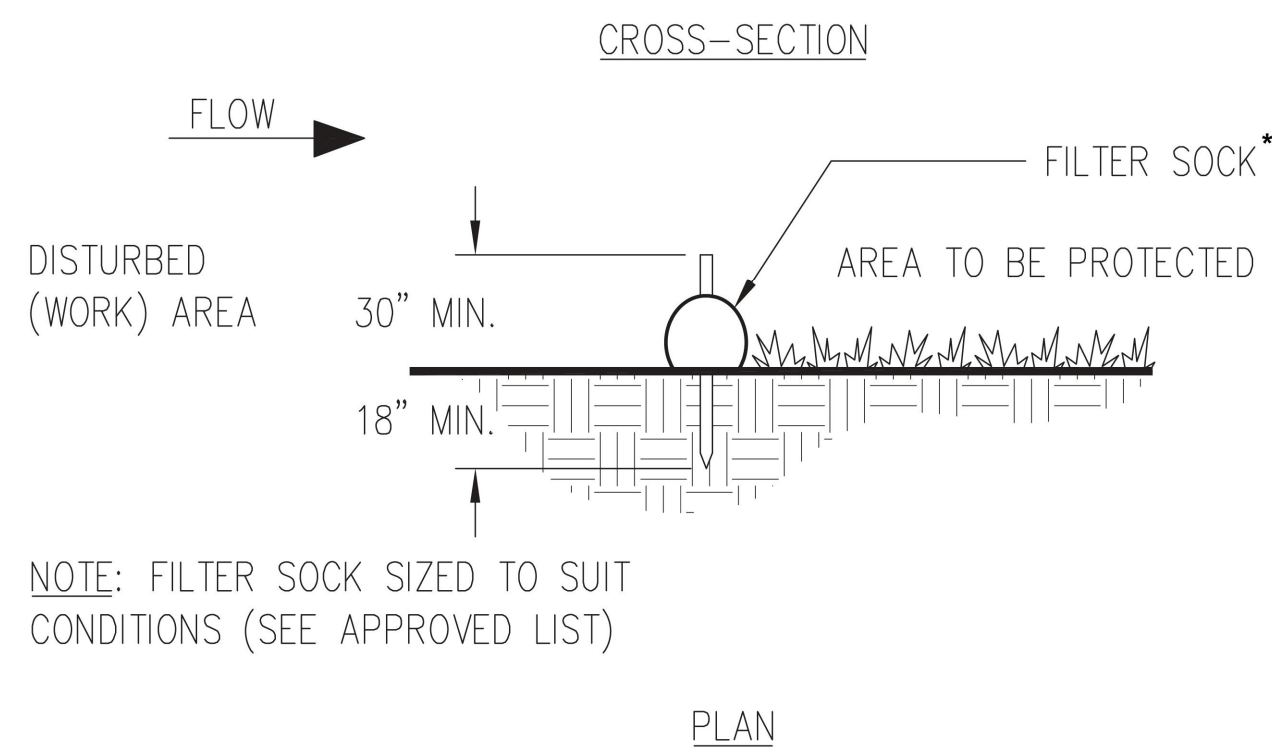
- NOTES:
1. CONTRACTOR SHALL INSTALL SILT FENCE AT TOE OF SLOPES OF ALL AREAS AFFECTED BY CONSTRUCTION PRIOR TO ANY DISTURBANCE ON THE SITE.
 2. SILT FENCE SHALL REMAIN UNTIL VEGETATION HAS BEEN ESTABLISHED ON DISTURBED AREAS.
 3. BUILT UP SEDIMENT SHALL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.
 4. SILT FENCES SHALL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, ETC., TO VERIFY THE FABRIC IS SECURELY ATTACHED TO THE POSTS, THE POSTS ARE SECURELY IN THE GROUND, AND THE FABRIC IS SECURELY IMBEDDED IN THE GROUND TO PREVENT RUNOFF FROM GOING UNDER ANY PART OF THE FENCE.
 5. CONTRACTOR SHALL REMOVE ALL SILT FENCES WHEN ALL DISTURBED AREAS ARE COVERED WITH A MINIMUM 80% VEGETATION. SEED AND MULCH ALL AREAS DISTURBED DURING REMOVAL.

SILT FENCE DETAIL

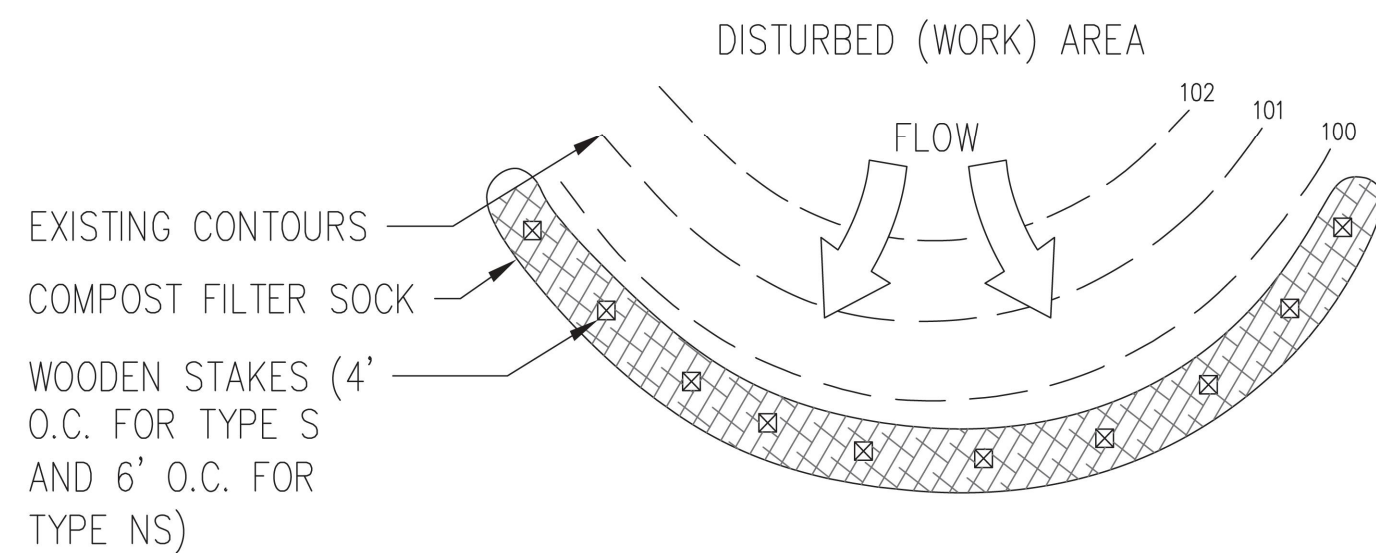
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EROSION AND SEDIMENT CONTROL

COMPOST FILTER SOCK



NOTE: FILTER SOCK SIZED TO SUIT CONDITIONS (SEE APPROVED LIST)



*HEIGHT IS TO BE SHOWN ON THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN

Figure 6-27.3

GSWCC (Amended - 2013)

6-195

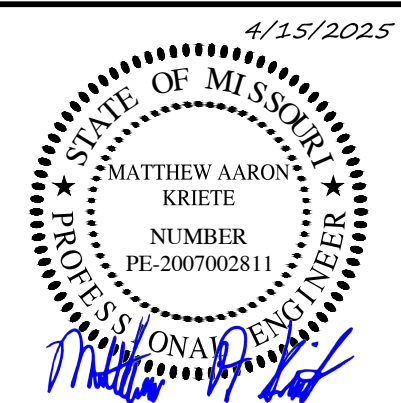


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DETAILS

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