

PRACTICE SOCCER FIELDS DRAINAGE IMPROVEMENTS

PREPARED FOR UNIVERSITY OF SOUTH CAROLINA COLUMBIA, SOUTH CAROLINA

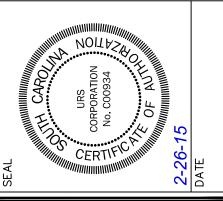


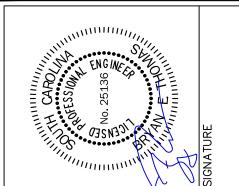
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REFER TO PROJECT SPECIFICATIONS FOR CONTRACTOR LICENSING AND FIELD CERTIFICATION REQUIREMENTS









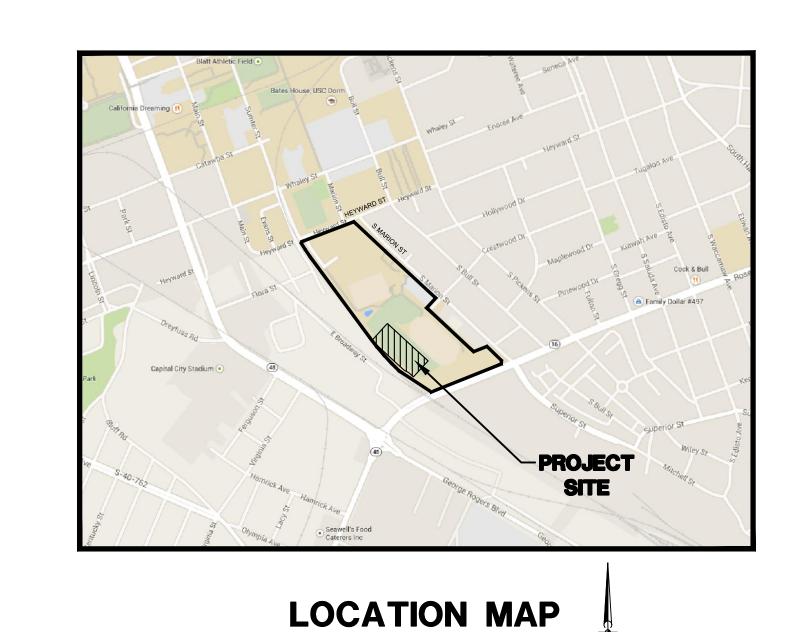
FEBRUARY 26, 2015 STATE PROJECT NO. H27-Z204

BID DOCUMENTS

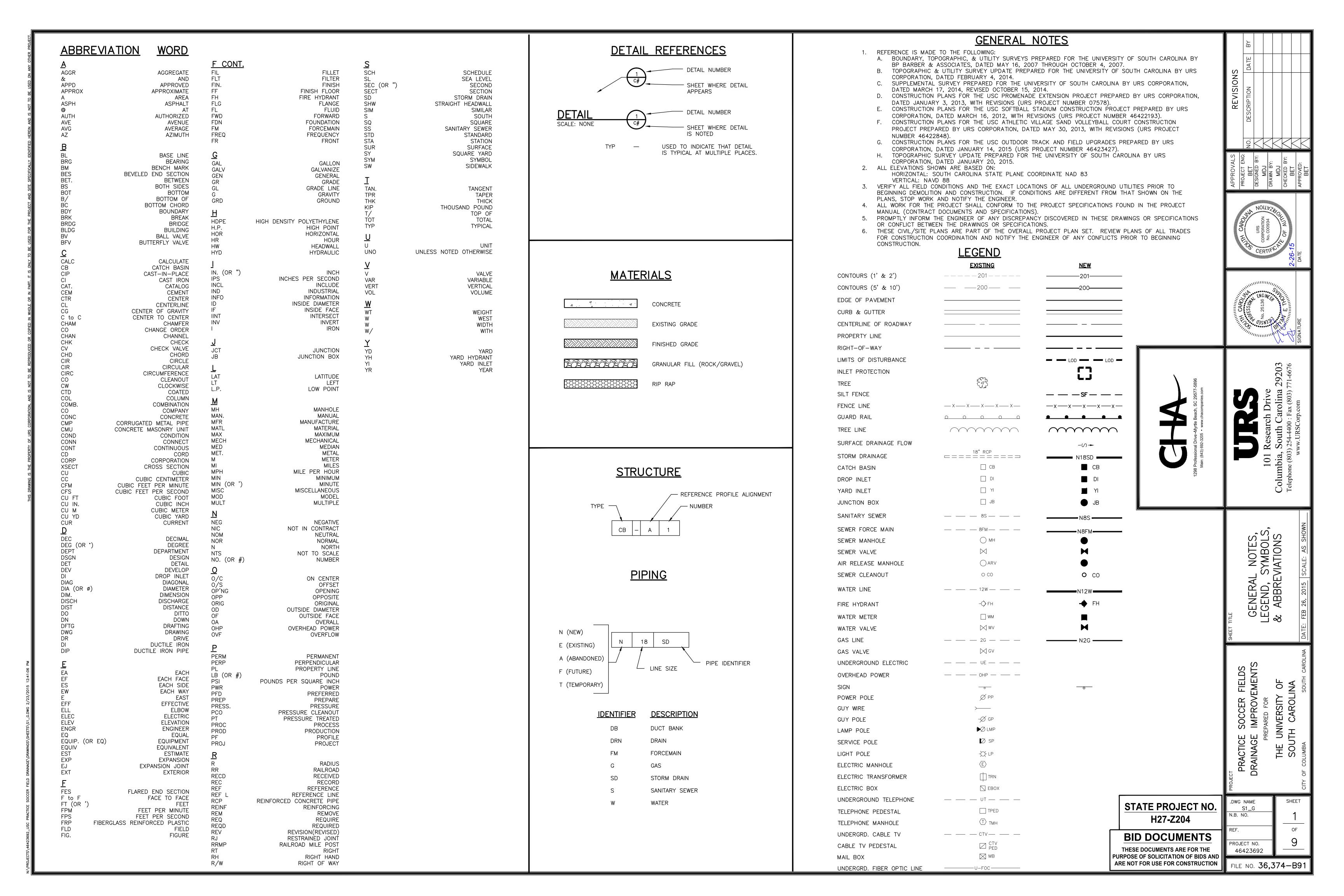
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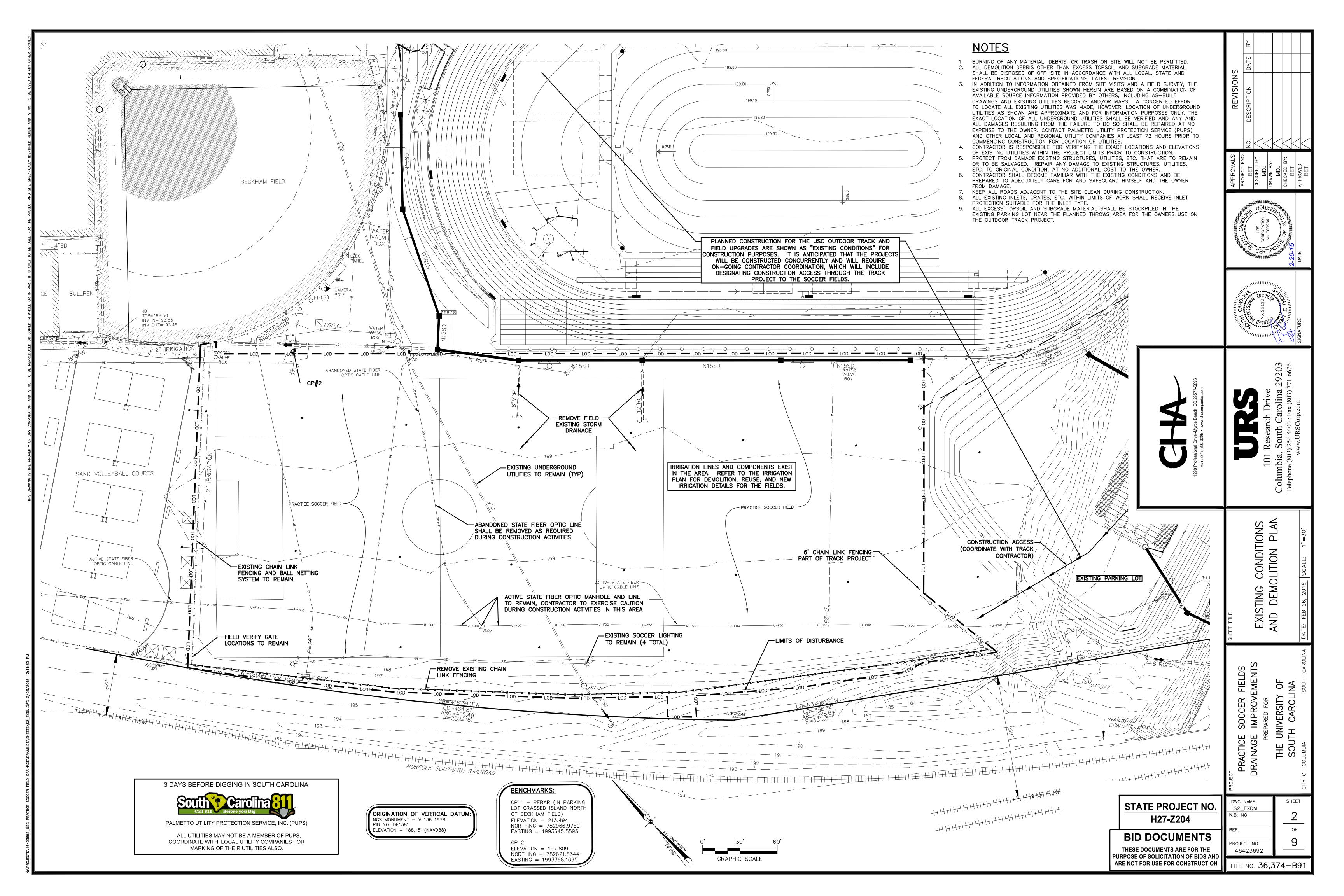
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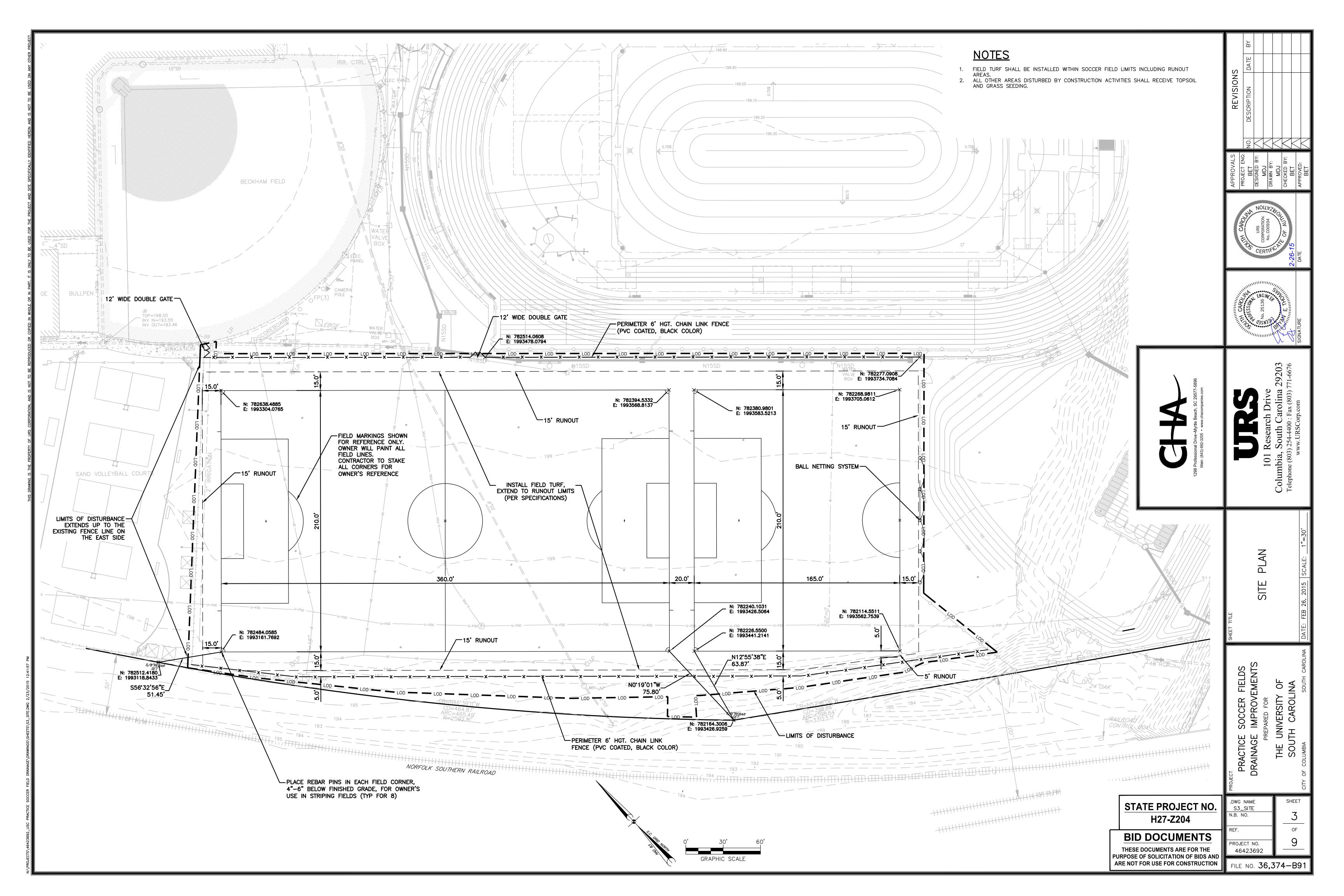
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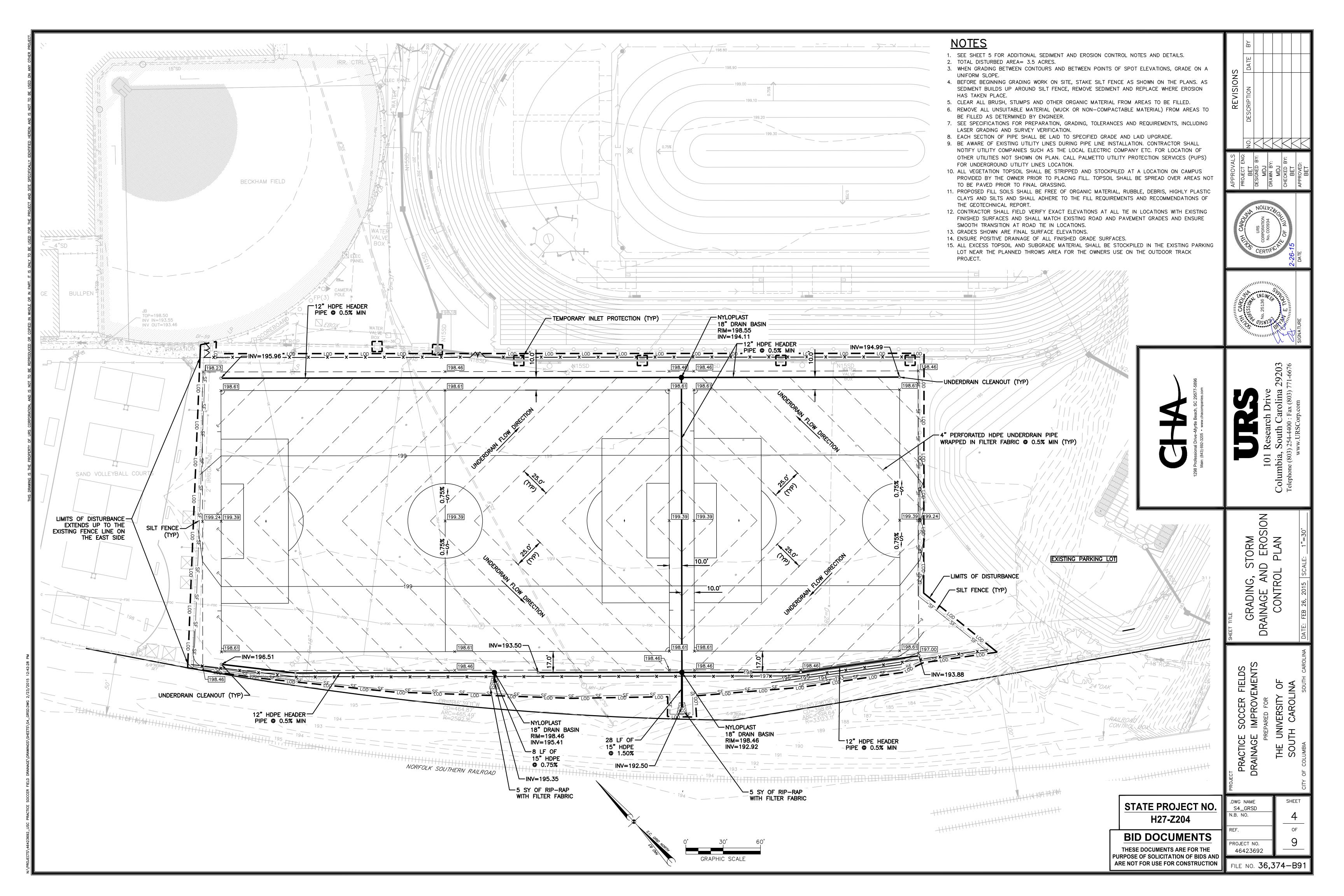


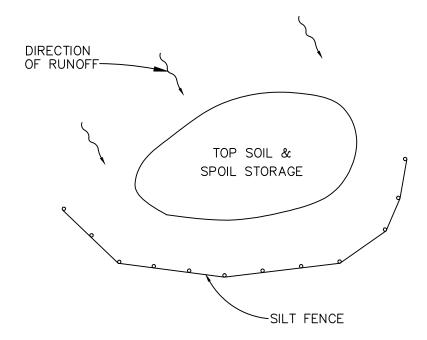
SCALE: 1" = 1,000'



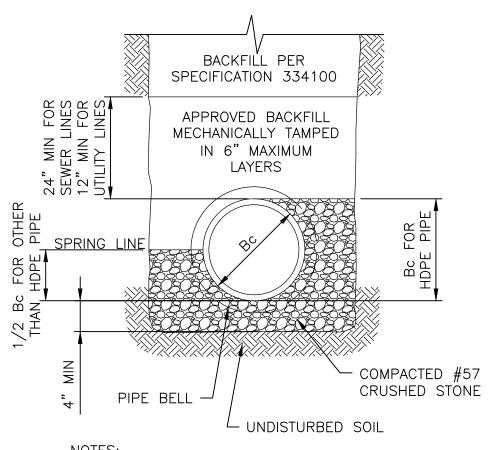








TOP SOIL & SPOIL STORAGE



1. 1/4 Bc HAND SHAPED BOTTOM - SHAPE BELL HOLES FOR USE IN DRY EARTH TRENCHES ONLY. APPLICABLE TO BOTH EARTH AND ROCK TRENCHES.

10'-0" MAX.

VARIES AS DIRECTED

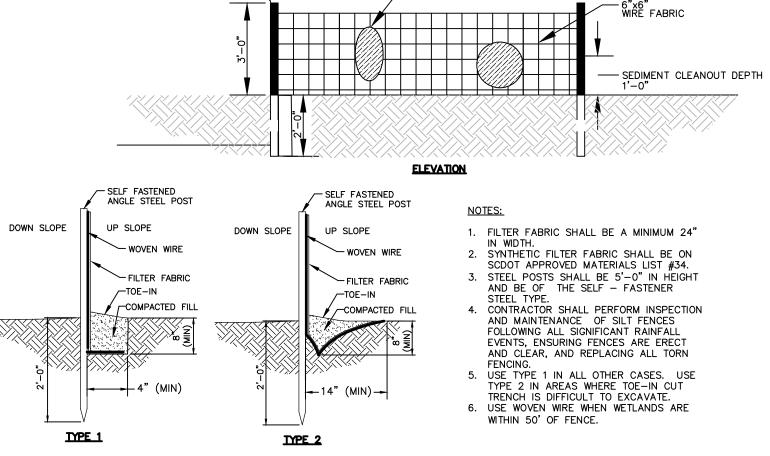
SYNTHETIC FABRIC

TYPE 2- HDPE PIPE

CLASS "B" BEDDING



STEEL POST-



SILT FENCE WITH WIRE FABRIC



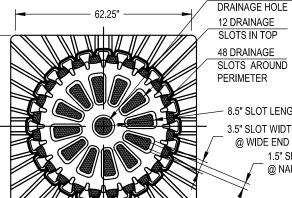
REEN HIGH-FLOW GRAY HIGH-EFFICIENCY

ROCK PROVIDED BY PURCHASER.

SHOWN WITH ROADWAY PROJECTS FILTER HAT

2.0" SLOT WIDTH @ NARROW END

ELEVATION VIEW



SLOTS AROUNI 3.5" SLOT WIDTH @ WIDE END 1.5" SLOT WIDTH _ @ NARROW END

EAD (FT) EQUATION OPENING FRAME FILTER FILTEREI 0.5 O 2.1 7 6 2 3.25" SLOT WIDTH DUE TO NARROW SLOT. A TRANSITION WILL OCCUR BETWEEN WEIR AND ORIFICE CONDITIONS. ORIFICE FLOW WILL PROVIDE A MORE CONSERVATIVE ESTIMATE OF FLOW, THEREFORE THE LESSER OF THE

ASSEMBLY

CALCULATION. FILTER MATERIAL ALLOWS 129 gpm/SF OR 0.29cfs/SF DRIFICE EQUATION (O) = Q=0.6A(2gh)^0.5 P = FEET PERIMETER = HEAD IN FEET Q = CAPACITY IN cfs A = FREE OPEN AREA OF FRAME

ORIFICE AND WEIR FLOWS WILL BE USED FOR EACH STAGE

FILTER OPTIONS
FILTER HAT IS AVAILABLE IN THREE OPTIONS:

COMES IN ONE PIECE FOR EASY INSTALLATION.

REPLACE OR REPOSITION AS NECESSARY.

PROFESSIONAL'S SPECIFICATIONS.

3) HIGH-FLOW MATERIAL ON TOP HALF OF HAT, HIGH-EFFICIENCY

MATERIAL ON BOTTOM HALF (THIS FILTER COVER IS RECOMMENDED.

IT IS THE PURCHASERS RESPONSIBILITY TO PURCHASE APPROPRIATE FILTER HAT. PURCHASER SHALL PROVIDE ROCK FOR FILTER POCKETS.

FILTER HAT SLIDES DIRECTLY OVER FILTER FRAME. TO KEEP FILTER

ALL TEMPORARY EROSION, SEDIMENTATION, & POLLUTION CONTROL

REMOVE SEDIMENT AND DISPOSE OF IN A PROPER MANNER. INSPECT

FRAME & FILTER DISCHARGE ANALYSIS

USED AREA (SF) FLOW (CFS) AREA (SF) FLOW (CFS

<u>→ HEA</u>D - 3.0'

S-200A DAILY FOR CUTS, ABRASIONS, AND PROPER INSTALLATION.

FILTER FABRIC SILT-SAVER HAT SHALL BE BASED ON DESIGN

PRACTICES SHOULD BE INSPECTED DAILY. CONTRACTOR SHALL

FRAME IN PLACE OVER STORM STRUCTURE, ROCK POCKETS ARE

SEWN DIRECTLY INTO FILTER HAT MATERIAL. EVERY FILTER HAT

1) ALL HIGH-FLOW MATERIAL

2) ALL HIGH-EFFICIENCY MATERIAL

FOR ALL ROADWAY PROJECTS

REPLACEMENT FILTERS: MODEL # S-240 = 32.2 FEET-PER-SECOND/SECOND

FRAME MATERIAL: BLACK 0.25" HMWPE SQUARE FRAME & FILTER ILTER FABRIC MATERIAL: REFER TO SPEC SCALE: NOT TO SCALE

LAST UPDATED: APRIL 2010

SILT-SAVER, INC. 1094 CULPEPPER DRIVE, CONYERS, GA 30094 PHONE: (770) 388-7818 FAX: (770) 388-7640 TOLL FREE: 1-888-382-SILT (7458) www.siltsaver.com

SEDIMENT AND EROSION CONTROL NOTES

- 1. SEE EROSION CONTROL PLAN SHEETS FOR ADDITIONAL NOTES. 2. ALL ELEVATIONS ARE BASED ON MEAN SEA LEVEL DATUM.
- 3. CONTRACTOR SHALL, FOR ALL GRASSED AREAS, BE RESPONSIBLE FOR REPLACING ERODED SOIL AND GRASS SEED UNTIL AN APPROVED STAND OF GRASS IS ESTABLISHED. 4. CONTRACTOR SHALL, BEFORE BEGINNING GRADING WORK ON SITE, STAKE SILT FENCE AND
- INSTALL ALL PERIMETER CONTROLS AS SHOWN ON THIS PLAN. 5. CONTRACTOR SHALL BE AWARE OF EXISTING UTILITY LINES DURING PIPE LINE INSTALLATION. CONTRACTOR SHALL NOTIFY UTILITY COMPANIES SUCH AS THE LOCAL ELECTRIC COMPANY,
- AT&T. ETC. FOR LOCATION OF OTHER UTILITIES NOT SHOWN ON PLAN. CALL PALMETTO UTILITIES PROTECTION SERVICES (888-721-7877) FOR UNDERGROUND UTILITY LINES LOCATION. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION
- 6. PROMPTLY INFORM THE ENGINEER OF ANY ERROR OR DISCREPANCIES DISCOVERED IN THE DRAWINGS OR SPECIFICATIONS OR CONFLICTS BETWEEN THE DRAWING AND SPECIFICATIONS IN ORDER FOR CORRECTIONS TO BE MADE.
- 7. ALL WORK AND MATERIALS MUST CONFIRM WITH CITY OF COLUMBIA AND SCDHEC REGULATIONS AND SPECIFICATIONS, LATEST REVISIONS AT THE BEGINNING OF CONSTRUCTION.
- 8. ALL NEWLY CONSTRUCTED SLOPES WHICH ARE STEEPER THAN 3 TO 1 MUST BE STABILIZED BY INSTALLATION OF EROSION CONTROL MATTING. OTHER AREAS SUCH AS CHANNEL BOTTOMS, CHANNEL SIDESLOPES, AND SLOPES NEAR SENSITIVE WETLAND AREAS MAY ALSO REQUIRE EROSION CONTROL MATTING WHERE SHOWN ON PLANS. USE NORTH AMERICAN GREEN S150 OR APPROVED EQUAL. EQUAL PRODUCTS MUST BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
- PROVIDE A TEMPORARY STONE SPLASH PAD AT ALL FIRE HYDRANTS OR OTHER POINTS OF DISCHARGE DURING TESTING OF THE WATER DISTRIBUTION SYSTEM.
- 10. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES AS MAY BE REQUIRED TO CONTROL SOIL EROSION DURING OFF SITE UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY
- INSTALLATION. 11. ALL AREAS WHICH ARE DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE SEEDED AT NO ADDITIONAL EXPENSE TO THE OWNER.
- 12. INSTALL PERMANENT VEGETATIVE COVER AND THE LONG-TERM EROSION PROTECTION MEASURES OR STRUCTURES AS SOON AS PRACTICAL IN THE DEVELOPMENT PROCESS. 13. PROVIDE FOR HANDLING OF THE INCREASED RUNOFF CAUSED BY CHANGED SOIL AND SURFACE CONDITIONS. USE EFFECTIVE MEANS TO CONSERVE EXISTING ON-SITE SOIL INCLUDING THE USE OF DIVERSION DITCHES, GRASSED WATERWAYS AND STORM SEWERS.
- 14. PLACE SILT FENCE BARRIERS AT LOCATIONS SHOWN ON THE EROSION CONTROL PLAN. SILT BARRIERS SHALL BE MAINTAINED IN PLACE AND IN GOOD CONDITION UNTIL GROUND COVER IS ESTABLISHED. SILT FENCE SHALL BE CLEANED OR REPLACED WHEN SILT ACCUMULATION REACHES 1/3 THE HEIGHT OF THE FENCE. SEDIMENT SHALL BE RESPREAD ONSITE.
- 15. ALL DISTURBED AREAS NOT PAVED SHALL BE GRASSED OR LANDSCAPED. USE TEMPORARY PLANT COVER, MULCHING, AND/OR STRUCTURES TO CONTROL RUNOFF AND PROTECT AREA SUBJECT TO EROSION DURING CONSTRUCTION. 16. ADDITIONAL EROSION CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION TO CONTROL EROSION AND/OR OFF SITE SEDIMENTATION. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING
- ESTABLISHED. ANY AREAS DAMAGED BY EROSION SHALL BE REPAIRED TO ITS ORIGINAL CONDITION AND PROTECTED FROM FURTHER EROSION AT NO ADDITIONAL COST TO THE OWNER. 17. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETED AND THE SITE STABILIZED.

THE STABILITY OF ALL GRADED AND/OR CLEARED AREAS UNTIL PERMANENT GROUND COVER IS

- 18. STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITIES WILL DISCHARGE TO ROCKY BRANCH CREEK IN THE SALUDA RIVER BASIN.
- 19. TYPE A INLET PROTECTION SHALL BE PLACED ON ALL EXISTING INLETS.

SEQUENCE OF CONSTRUCTION ACTIVITIES:

PHASE I - INITIAL LAND DISTURBANCE PHASE

- RECEIVE NOTIFICATION OF NPDES COVERAGE FROM SCDHEC AND LAND DISTURBANCE APPROVAL FROM CITY OF COLUMBIA MS4. COORDINATE PRE-CONSTRUCTION MEETING ON-SITE WITH OWNER, CONTRACTOR AND CITY OF COLUMBIA STORMWATER MANAGEMENT
- NOTIFY SCDHEC EQC OFFICE (COLUMBIA OFFICE) AND CITY OF COLUMBIA UTILITIES AND ENGINEERING STAFF AT LEAST 48 HOURS
- IN ADVANCE OF LAND DISTURBING ACTIVITIES. VERIFY INSTALLATION OF STABILIZED CONSTRUCTION ENTRANCE BY THE TRACK CONTRACTOR. INSTALL SILT FENCE, RAIN GAUGE, AND
- PERIMETER SOIL EROSION CONTROL MEASURES. BEGIN PERFORMING WEEKLY SCDHEC SWPPP INSPECTIONS UNTIL
- SITE IS PERMANENTLY STABILIZED. CLEAR AND GRUB SITE IN AREAS TO BE DEVELOPED. REMOVE

AND DISPOSE OF ITEMS OFFSITE AS APPROPRIATE.

PHASE II - CONSTRUCTION/STABILIZATION PHASE

- STRIP AND STOCKPILE TOPSOIL AND STABILIZE STOCKPILES AS NOTED IN THE SPECIFICATIONS, PLANS AND DETAILS.
- PERFORM GRADING OPERATIONS ON THE SITE. INSTALL STORM DRAINAGE STRUCTURES AND OTHER IMPROVEMENTS IN CONJUNCTION WITH GRADING OPERATIONS.
- INSTALL EROSION CONTROL DEVICES AS REQUIRED OR NEEDED AS
- SITE IS EXTENDED TO FINISHED GRADE. STOCKPILE UNUSED MATERIAL AND STABILIZE AS NOTED IN THE
- PLANS AS CONSTRUCTION PROGRESSES. 12. MAINTAIN THE EROSION CONTROLS AS NECESSARY.
- 13. PERFORM FINAL GRADING OPERATIONS ON THE SITE, INSTALLING EROSION CONTROL MATTING, MULCHING, RIP RAP, AND OTHER DEVICES AS FINAL GRADING IS REACHED.
- 14. REAPPLY TOPSOIL AND INITIATE VEGETATIVE STABILIZATION MEASURES AS FINAL GRADING IS REACHED.
- 15. INSPECT AND MAINTAIN ALL SEDIMENT AND EROSION CONTROLS UNTIL SITE IS FULLY STABILIZED.
- UPON COMPLETE STABILIZATION OF SITE, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND REMOVE SEDIMENT BUILDUP IN THE STORMWATER CONVEYANCE SYSTEM.
- CONTRACTOR TO PROVIDE A COMPLETE AS-BUILT SURVEY OF ALL STORM DRAINAGE INFRASTRUCTURE INCLUDING PROFILES AND SOCCER FIELD SURVEY SHOWING FINAL GRADES. AS-BUILT SURVEY TO INCLUDE FINAL CONTOURS, GRADES AND SHOULD INCLUDE ELEVATIONS AND DIMENSIONS OF ALL PIPES, DRAINAGE STRUCTURES AND OUTLET STRUCTURES. SURVEY TO BE COMPLETED AND STAMPED BY A LICENSED LAND SURVEYOR. SUBMIT TO ENGINEER FOR APPROVAL.
- 18. SUBMIT NOTICE OF TERMINATION (NOT) TO CITY OF COLUMBIA AS APPROPRIATE (BY ENGINEER).

14 DAY STABILIZATION CLAUSE

ALL DISTURBED AREAS WHICH ARE TO BE LEFT IDLE FOR A PERIOD OF 14 DAYS OR LONGER ARE TO RECEIVE TEMPORARY VEGETATION OR MULCH.

EROSION CONTROL MAINTENANCE SCHEDULE

ALL SEDIMENT AND EROSION CONTROLS ARE TO BE INSPECTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS. CONTRACTOR TO DOCUMENT WITH SCDHEC APPROVED INSPECTION REPORTS AND LOGGED IN THE PROJECT SWPPP.

GRASSING NOTES

SEED THESE AREAS IMMEDIATELY UPON COMPLETION OF GRADING OR CONSTRUCTION AND CLEAN-UP OPERATIONS.

- A. SLOPES GREATER THAN FOUR HORIZONTAL TO ONE VERTICAL. B. UTILITY RIGHTS-OF-WAY ADJACENT TO STREAM BANKS.
- AREAS READY FOR PLANTING BETWEEN AUGUST 16 AND FEBRUARY 28 SHALL BE PLANTED WITH A TEMPORARY COVER OF SCHEDULE NO. 2. AT THE ACCEPTABLE SEASONS FOR PLANTING SCHEDULE NO. 1, THE TURF SHALL BE DESTROYED BY REWORKING THE SOIL, AND SCHEDULE NO. 1 SEEDING ESTABLISHED AS SPECIFIED
- USE RATE A LBS. PER 1000 SQ. FT. ON SLOPES OVER 5' HORIZONTAL TO 1' VERTICAL IN HEIGHT AND USE RATE B LBS. PER 1000 SQ. FT. ON SLOPES LESS THAN 5' HORIZONTAL TO 1' VERTICAL.
- 4. SEE GRASSING SPECIFICATIONS (SECTION 02930) FOR ADDITIONAL REQUIREMENTS.

GRASSING SCHEDULES:

GRASSING SCHEDULE NO. 1 - PLANTING DATES MARCH 1 TO AUGUST 15:

COMMON NAME OF SEED	RATE A	RATE B
RYE GRAIN	1	1
COMMON BERMUDA (HULLED)	0	1.5
SERICEA LESPEDEZA (CLAY SOILS)	1	0
WEEPING LOVE GRASS (SANDY SOILS)	1	0
CENTIPEDE	0.5	0.5
FERTILIZER	18-25	18-25

GRASSING SCHEDULE NO. 2 - PLANTING DATES AUGUST 16 - FEBRUARY 28:

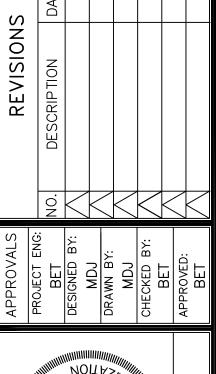
COMMON NAME OF SEED	RATE A	RATE B
RYE GRAIN	0	1
COMMON BERMUDA (HULLED)	0	1.5
BROWN TOP MILLET	5	0
COMMON BERMUDA (UNHULLED)	0	2.0
FERTILIZER	18-25	18-25

STANDARD SCDHEC NOTES

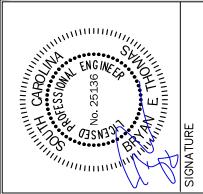
- IF NECESSARY, SLOPES, WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS, IN ADDITION TO HYDROSEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT
- STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW.
 - A. WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
 - B. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, & EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
- ALL SEDIMENT & EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY OR INCORRECTLY INSTALLED, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.
- PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL, COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE ANY SEDIMENTS BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.
- ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES & ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
- THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS & THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT. AS MAY
- RESIDENTIAL SUBDIVISIONS REQUIRE EROSION CONTROL FEATURES FOR INFRASTRUCTURE AS WELL AS FOR INDIVIDUAL LOT CONSTRUCTION. INDIVIDUAL PROPERTY OWNERS SHALL FOLLOW THESE PLANS DURING CONSTRUCTION OR OBTAIN APPROVAL OF AN INDIVIDUAL PLAN IN ACCORDANCE WITH S.C. REG. 72-300 ET. SEQ. AND SCR100000.
- 8. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT-LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.
- ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW OF SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CAN'T BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WOS.
- 10. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, & BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) & CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.
- 11. A COPY OF THE SWPPP, INSPECTION RECORDS & RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.
- 12. INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR
- TEMPORARILY CEASED, & WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS. MINIMIZE SOIL COMPACTION &, UNLESS INFEASIBLE, PRESERVE TOPSOIL 14. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT & VEHICLE WASHING, WHEEL WASH WATER & OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR
- BETTER TREATMENT PRIOR TO DISCHARGE. 15. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES & EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMPS (SEDIMENT BASIN, FILTER BAG, ETC.)
- 16. THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:
- A. WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY
- APPROPRIATE CONTROL; B. WASTEWATER FROM WASHOUT/CLEANOUT OF STUCCO, PAINT, FORM
- RELEASE OILS, CURING COMPOUNDS & OTHER CONSTRUCTION MATERIALS: C. FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE & EQUIPMENT
- **OPERATION & MAINTENANCE:** D. SOAPS OR SOLVENTS USED IN VEHICLE & EQUIPMENT WASHING 17. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK & MUST BE CONDUCTED UNTIL
- FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE. 18. IF EXISTING BMPS NEED TO BE MODIFIED OR IF ADDITIONAL BMPS ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND /OR SC'S WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION IS IMPRACTICABLE. THE
- IMPLEMENTED AS SOON AS REASONABLY POSSIBLE. 19. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON-LINEAR PROJECTS THAT DISTURB 10 ACRES OR MORE THIS CONFERENCE MUST BE HELD ON-SITE UNLESS THE DEPARTMENT HAS

SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPS MUST BE

APPROVED OTHERWISE. 20. CONTRACTORS ARE REQUIRED TO HAVE RAIN GAUGES AT THE CONSTRUCTION SITE AND THE RAIN TOTALS DOCUMENTED FOR REVIEW BY CITY OF COLUMBIA AND SCDHEC.







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S5-S7 DETS

SHEET

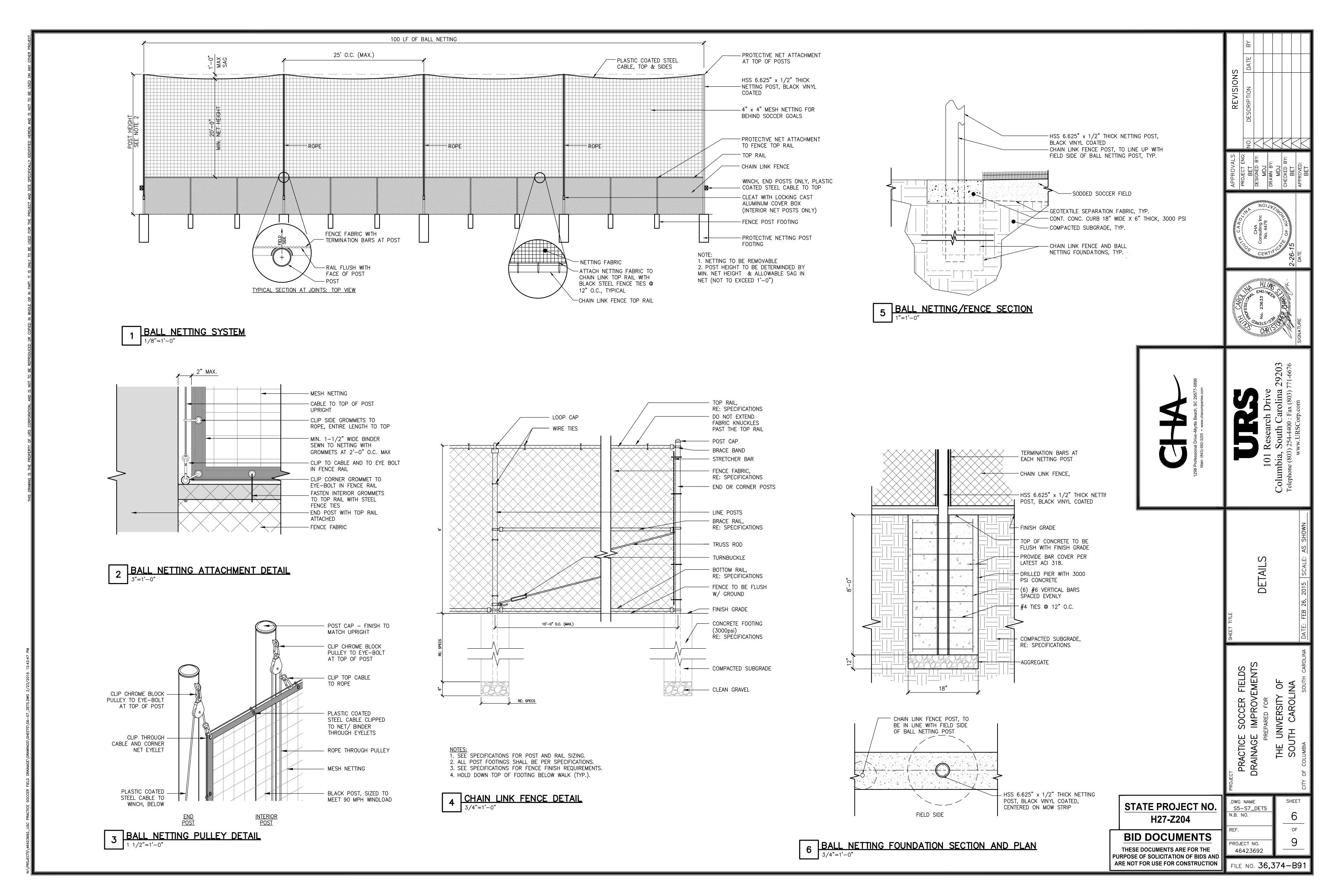
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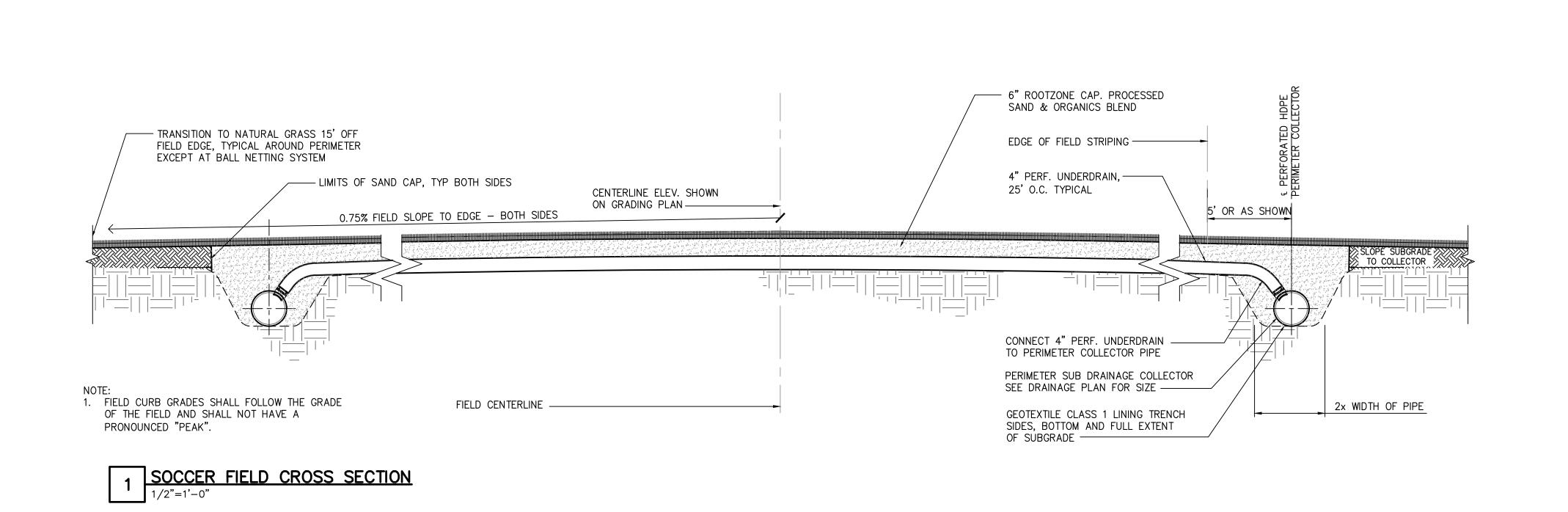
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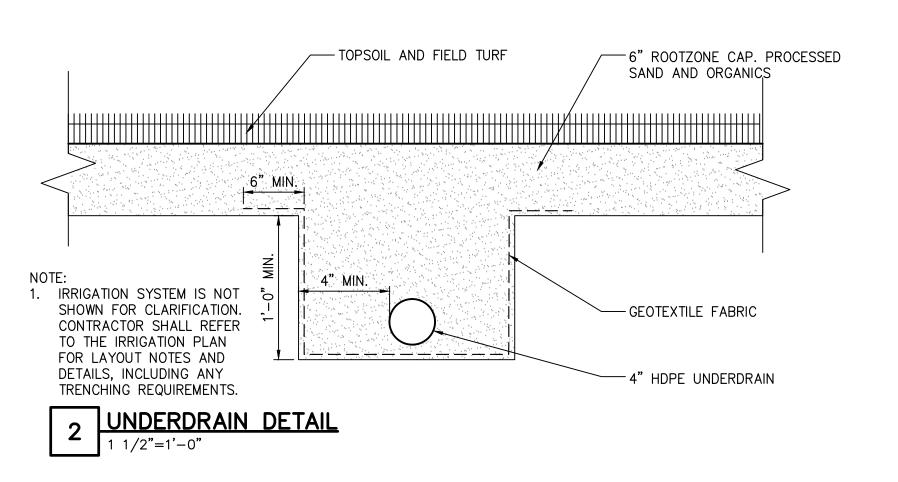
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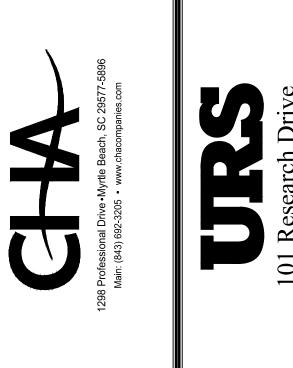
ROJECT NO. 46423692

FILE NO. 36,374-B91









DETAILS

SOCCER FIELDS
IMPROVEMENTS
REPARED FOR

.DWG NAME S5-S7_DETS STATE PROJECT NO.

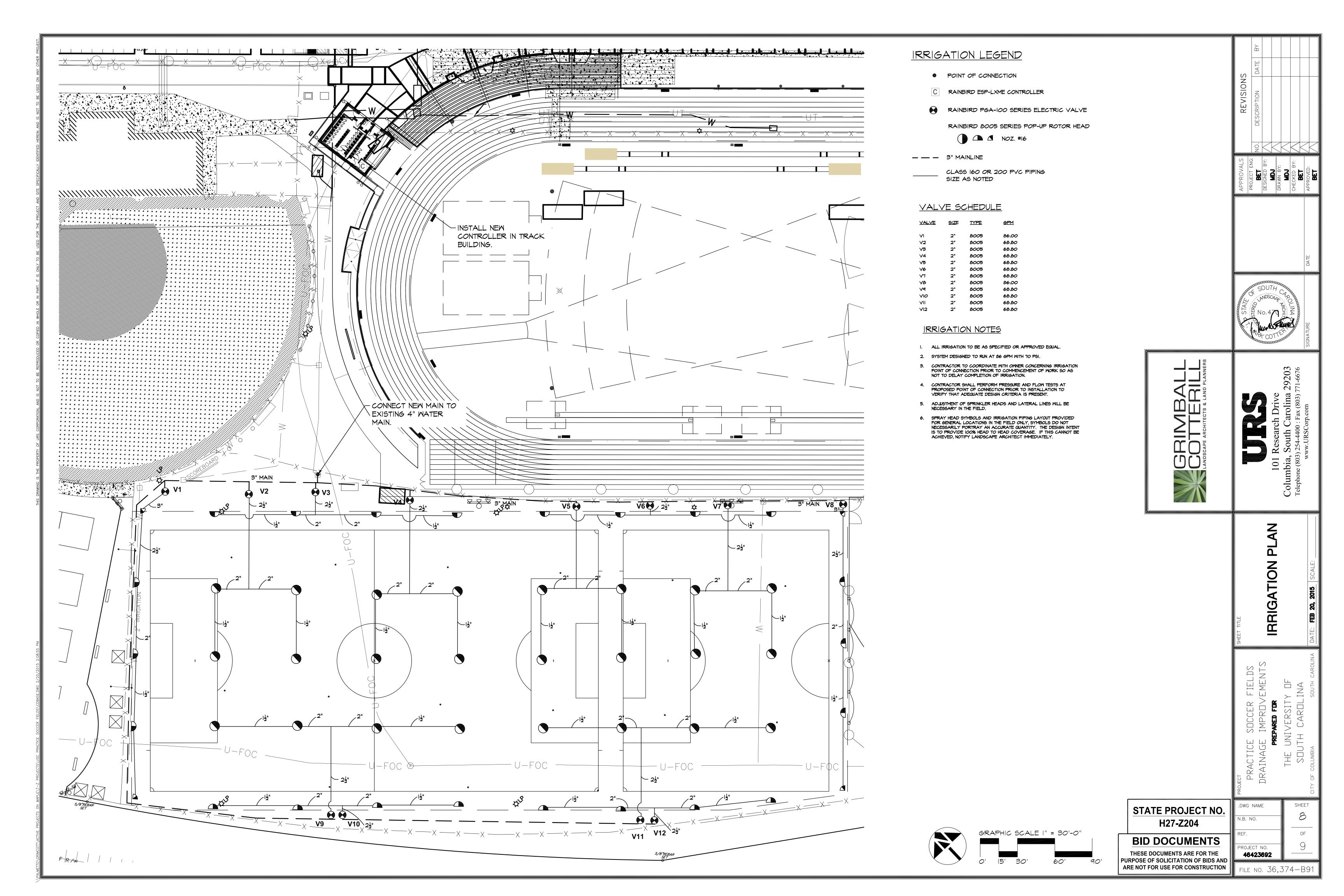
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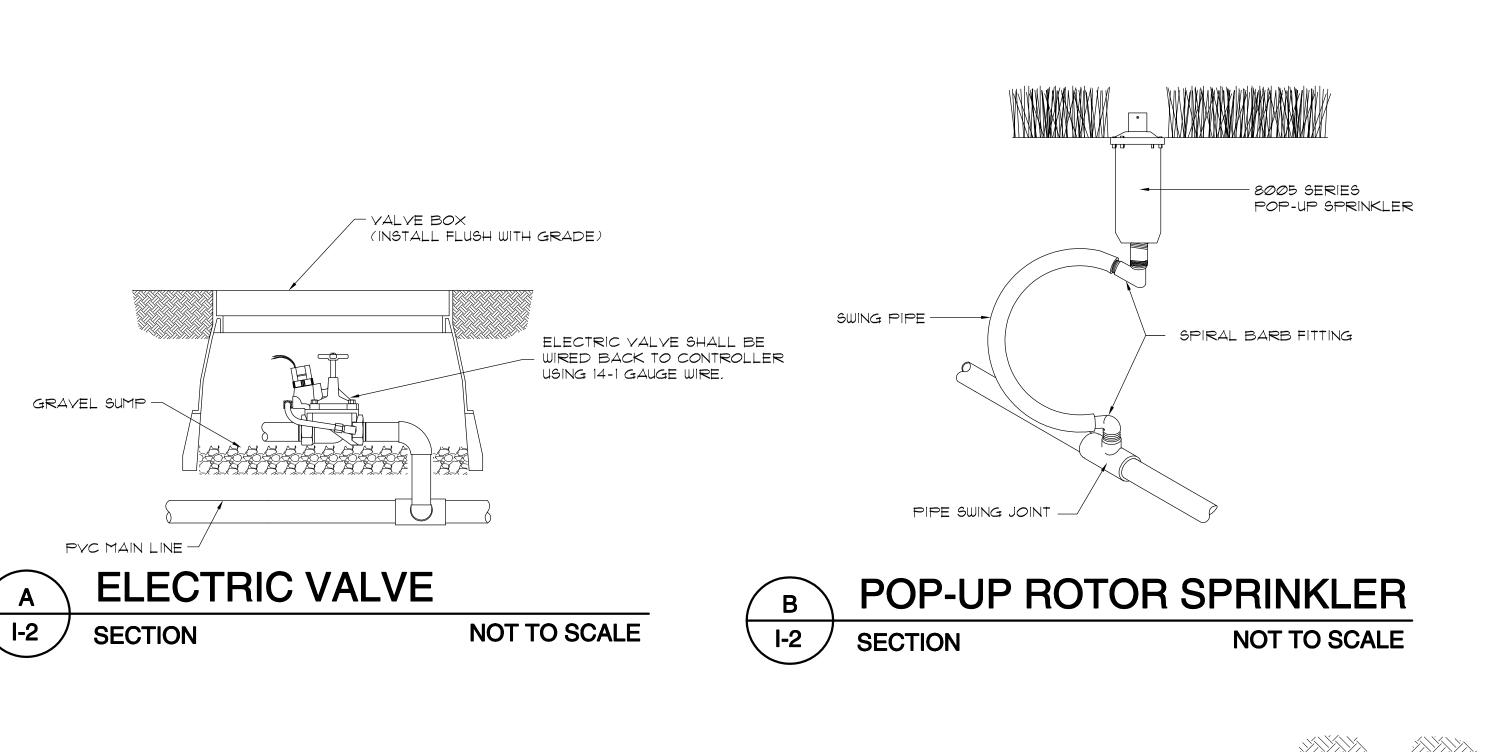
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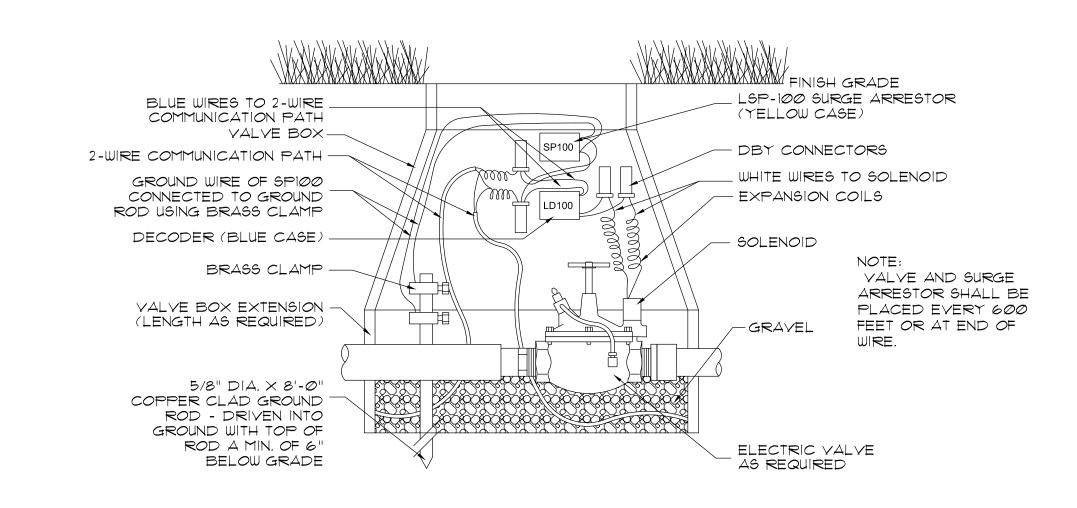
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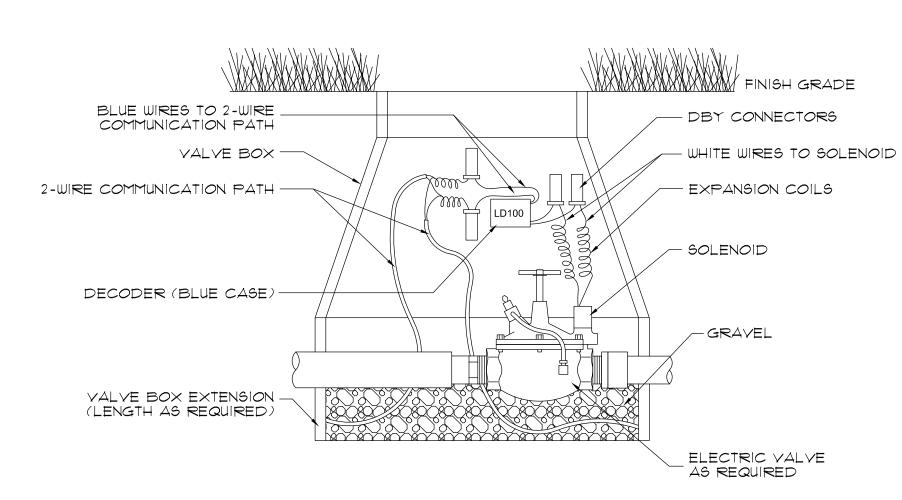




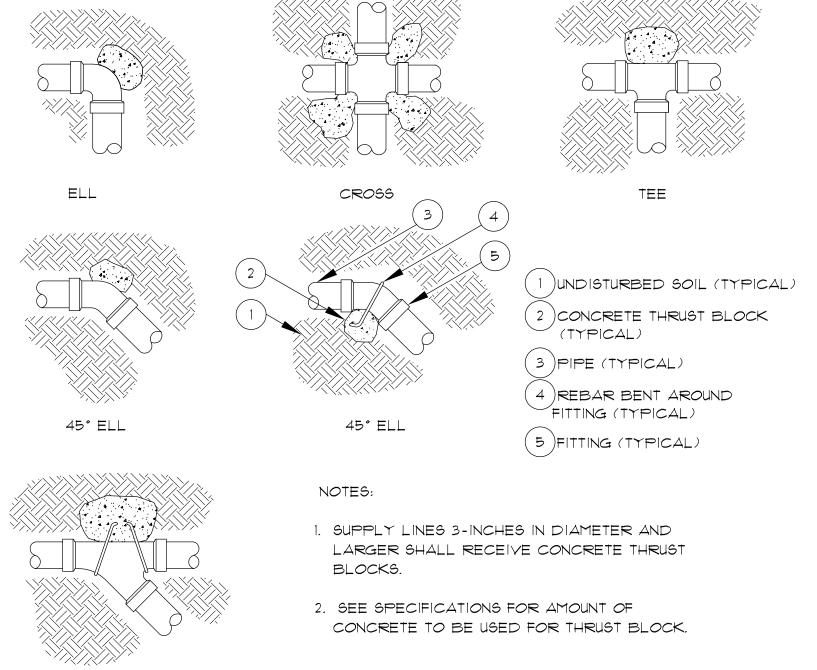


TWO-WIRE VALVE, DECODER & SURGE ARRESTOR

NOT TO SCALE







THRUST BLOCK FOR IRRIGATION PIPE 3" OR LARGER NOT TO SCALE

IRRIGATION NOTES

- I. ALL PLASTIC PIPE FITTINGS TO BE MINIMUM SCHEDULE 40 PVC.
- 2. ALL MAIN LINES TO BE SCHEDULE 40 PVC OR SCHEDULE 200 PVC.
- 3. ALL LATERAL LINES TO BE SCHEDULE 200 PVC OR SCHEDULE 160 PVC.
- 4. COORDINATE WITH GENERAL CONTRACTOR FOR INSTALLATION OF SCHEDULE 40 PVC PIPE UNDER PAVED SURFACES AS NOTED ON THE DRAWINGS TO BE UTILIZED FOR IRRIGATION SLEEVING. THE LOCATION OF SLEEVING IS MARKED ON THE IRRIGATION PLAN. DEVIATIONS MAY OCCUR DURING CONSTRUCTION.
- 5. TRENCHES FOR PVC PIPE MAINLINES SHALL BE EXCAVATED TO SUFFICIENT DEPTH OF 18" MINIMUM AND AN SUFFICIENT WIDTH TO PERMIT PROPER HANDLING AND INSTALLATION OF PIPE AND FITTINGS. TRENCHES FOR PVC PIPE LATERAL SPRINKLER LINES SHALL BE EXCAVATED TO SUFFICIENT DEPTH OF 12" MINIMUM AND AN SUFFICIENT WIDTH TO PERMIT PROPER HANDLING AND INSTALLATION OF PIPE AND FITTINGS.
- 6. ALL CONTROL VALVES SHALL BE INSTALLED IN A VALVE BOX IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- 7. ALL WIRING TO BE USED FOR CONNECTING THE AUTOMATIC REMOTE CONTROL VALVE TO THE AUTOMATIC CONTROLLERS SHALL BE TYPE "UF", I4-I, STRANDED OR SOLID COPPER, SINGLE CONDUCTION WIRE WITH PVC INSULATION AND BEAR UL APPROVAL FOR DIRECT UNDERGROUND BURIAL FEEDER CABLE. WIRE CONNECTIONS TO REMOTE CONTROL ELECTRIC VALVES AND SPLICES OF WIRE IN THE FIELD SHALL BE PEN-TITE WIRE CONNECTORS OR APPROVED EQUAL AND SCALING CEMENT.
- 8. THE IRRIGATION CONTRACTOR SHALL CONNECT ALL VALVE WIRING TO A SPECIFIED CONTROLLER LOCATED AS NOTED ON THIS PLAN.
- 9. ALL CONTROL VALVE CABLES SHALL BE INSTALLED BY DIRECT BURIAL AT A MINIMUM DEPTH OF 12". WHERE PRACTICAL, THE WIRE SHALL BE INSTALLED IN THE SAME TRENCH AS THE MAINLINE PIPE.
- IO. AFTER COMPLETION OF THE PIPING INSTALLATION, THE CONTRACTOR SHALL FURNISH AN "AS-BUILT" DRAWING SHOWING ALL SPRINKLER HEADS, VALVES, DRAINS AND PIPE LINES TO SCALE WITH DIMENSIONS WHERE REQUIRED. INSTRUCTION SHEETS AND PARTS LISTS COVERING ALL OPERATING EQUIPMENT WILL BE BOUND INTO A FOLDER AND FURNISHED TO THE OWNER IN DUPLICATE.
- II. FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE WORK PERFORMED UNDER THIS CONTRACT, THE CONTRACTOR SHALL PROMPTLY FURNISH, WITHOUT COST TO THE OWNER, ANY AND ALL PARTS AND LABOR WHICH PROVE DEFECTIVE IN MATERIAL OR WORKMANSHIP.

12. DURING THE LAST MONTH OF THE GUARANTEE PERIOD, THE LANDSCAPE ARCHITECT AND CONTRACTOR SHALL INSPECT THE INSTALLATION TO DETERMINE THE CONDITION OF THE COMPLETE SYSTEM. A LIST OF DEFECTIVE MATERIALS OR INSTALLATIONS TO BE REPLACED SHALL BE MADE BY THE CONTRACTOR WITHIN THIRTY DAYS OF RECEIVING WRITTEN NOTIFICATION. REPLACED MATERIALS AND INSTALLATION SHALL BE IN ACCORD WITH THESE SPECIFICATIONS, DRAWINGS AND OR SCHEDULES.

STATE PROJECT NO. H27-Z204

BID DOCUMENTS
THESE DOCUMENTS ARE FOR THE

PURPOSE OF SOLICITATION OF BIDS AND ARE NOT FOR USE FOR CONSTRUCTION

.DWG NAME SHEET

N.B. NO.

REF.

PROJECT NO.
46423692

FILE NO. 36,374—B91