

GENERAL NOTES

- DEVELOPER/OWNER: SPARTANBURG COUNTY SCHOOL DISTRICT TWO
3231 OLD FURNACE ROAD
CHESNEE SC 29323
- PROJECT ADDRESS: 2251 OLD FURNACE ROAD, BOILING SPRINGS SC 29316
- CONTACT PERSON: PAUL HOLLIFIELD - DIRECTOR OF MAINTENANCE
343 BALLOCK ROAD
BOILING SPRINGS, SC 29316
- TAX MAP NO.: 2-44-00-008-00
- SURVEY WORK BY: GOOCH & ASSOCIATES, P.A. - SURVEYORS
P.O. BOX 587
SPARTANBURG, S.C. 29304
864-682-1109
- TOTAL PARCEL ACREAGE IS: 123.2+ ACRES.
DISTURBED ACREAGE: 0.4 ACRES (OPTION A)
0.35 ACRES (OPTION B)
 - THIS PROJECT DESIGN IS BASED UPON SURVEY INFORMATION PROVIDED BY OTHERS. McCUTCHEEN ENGINEERING ASSOCIATES, PC (MCEA) ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THIS INFORMATION.
 - THE CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS BEFORE SUBMITTING HIS BID PRICE. REFER TO SURVEY AND GEOTECHNICAL REPORT FOR FURTHER INFORMATION.
 - ALL DISTANCES AND DATA SHALL BE CHECKED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. IN CASE OF CONFLICT, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY SO THAT CLARIFICATIONS MAY BE MADE PRIOR TO THE START OF WORK. ALL CONDITIONS NOTED FOR FIELD VERIFICATION SHALL BE DONE PRIOR TO COMMENCING WITH THE AFFECTED WORK.
 - THE CONTRACTOR SHALL SUPPLY AND ESTABLISH SURVEY CONTROL, INCLUDING THE HORIZONTAL AND VERTICAL CONTROL POINTS. THE CONTRACTOR SHALL MAINTAIN THIS CONTROL AND PROVIDE ALL BENCHMARKS, STAKES, GRADES, LEVELS, AND LINES NECESSARY FOR CONSTRUCTION. CONTRACTORS SHALL PROVIDE ADEQUATE SUPERVISION TO PREVENT DAMAGE AND MOVEMENT FROM EQUIPMENT WORKING AROUND CONSTRUCTION STAKES. THESE CONSTRUCTION STAKES SHALL REMAIN IN PLACE & BE PROTECTED UNTIL OWNER APPROVES THEIR REMOVAL. ANY STAKES OR PROPERTY CORNERS THAT HAVE BEEN DISPLACED AS A RESULT OF CONSTRUCTION ACTIVITY ARE TO BE REPLACED BY A LICENSED LAND SURVEYOR ENGAGED BY THE CONTRACTOR AT NO COST TO THE OWNER.
 - ALL EXISTING IMPROVEMENTS DAMAGED AS A RESULT OF CONSTRUCTION OPERATIONS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION TO THE SATISFACTION OF THE OWNER. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGE AND NOTIFY CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION START.
 - ALL EXISTING PAVEMENT AND CONCRETE TO BE JOINED SHALL BE SAWCUT.
 - BURNING ON OR NEAR THE JOB SITE WILL NOT BE PERMITTED.
 - CITY/COUNTY PLANNING AND ENGINEERING DEPARTMENTS TO BE GIVEN 48 HOURS NOTICE PRIOR TO START OF CONSTRUCTION. COORDINATE PRE-CONSTRUCTION MEETING WITH CITY/COUNTY ENGINEER AND OWNER.
 - COORDINATE ALL CURB AND STREET GRADES IN INTERSECTIONS WITH THE CITY/COUNTY INSPECTOR.
 - THE CONTRACTOR SHALL MAINTAIN EACH STREAM, CREEK, OR BACKWASH CHANNEL IN AN UNOBTAINED STATE DURING CONSTRUCTION. REMOVE ALL DEBRIS, LOGS, TIMBER, ETC. THAT MAY ACCUMULATE IN CHANNEL, (IF APPLICABLE).
 - ALL ROAD IMPROVEMENTS/ENHANCEMENTS TO BE COORDINATED WITH SCOTD AND/OR THE CITY/COUNTY ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION. DRIVEWAYS TO BE CONSTRUCTED TO STATE AND LOCAL CODES. CONTRACTOR SHALL OBTAIN REQUIRED PERMITS (PAY ALL APPLICABLE FEES) AND MATCH PROPOSED CURB AND GUTTER, CONCRETE AND PAVEMENT TO EXISTING GRADE AND ALIGNMENT.
 - THE CITY/COUNTY ENGINEERING DEPARTMENT HAS NOT REVIEWED THE STRUCTURAL STABILITY OF ANY RETAINING WALLS ON THE SITE AND DOES NOT ASSUME RESPONSIBILITY FOR THEM (UNLESS NOTED OTHERWISE ON PLANS). THE CONTRACTOR SHALL PROVIDE DESIGN DRAWINGS FOR ALL RETAINING WALLS, PREPARED, SIGNED, AND SEALED BY A THIRD PARTY PROFESSIONAL ENGINEER FOR REVIEW AND APPROVAL.
 - NON-STANDARD ITEMS (IE. PAVERS, IRRIGATION SYSTEMS, ETC.) IN ANY RIGHT OF WAY REQUIRE AN ENCROACHMENT AGREEMENT WITH THE CITY/COUNTY ENGINEERING DEPARTMENT BEFORE INSTALLATION.
 - THE ENGINEER WILL NOT BE CONTINUOUSLY PRESENT IN THE FIELD. IT IS SPECIFICALLY UNDERSTOOD THAT HE DOES NOT UNDERTAKE OR ASSUME ANY OBLIGATION FOR SUPERVISION OF CONSTRUCTION. SAFETY MEASURES TAKEN DURING THE COURSE OF CONSTRUCTION ARE THE RESPONSIBILITY FOR SCHEDULING THE WORK FOR INSURING COMPLETE COMPLIANCE WITH THE CONTRACT DOCUMENTS, AND/OR ALL CODE REQUIREMENTS, RULES, AND REGULATIONS OF ANY PUBLIC OR PRIVATE AUTHORITY HAVING JURISDICTION OVER THE WHOLE OR ANY PART OF THE WORK. IN ADDITION, THE ENGINEER NEITHER UNDERTAKES, ASSUMES, NOR GUARANTEES THE WORK AND/OR PERFORMANCE OF THE CONTRACTOR.
 - ALL CONSTRUCTION SHALL COMPLY WITH ALL GOVERNING CODES (LOCAL, STATE AND FEDERAL) AND BE CONSTRUCTED IN ACCORDANCE WITH THE SAME.
 - DIMENSIONS SHOWN ARE TO BOTTOM FACE OF CURB, FACE OF BUILDING OR CENTERLINE OF PARKING BAY STRIPE UNLESS NOTED OTHERWISE.
 - THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ON-SITE LOCATIONS OF EXISTING UTILITIES.
 - ALL EXISTING SEWERS, PIPING AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DEMOLITION AND REMOVAL OF ALL SERVICE LINES AND CAP LINES BEFORE PROCEEDING WITH THE WORK. UTILITIES TO BE ABANDONED AND LEFT IN PLACE AS ALLOWABLE BY THE ENGINEER SHALL BE GROUTED UNLESS NOTED OTHERWISE ON THE PLANS.
 - SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR EXACT LOCATION AND SIZE OF WATER, SEWER, ELECTRICAL, GAS, TELEPHONE/FIBER SERVICES, AND ROOF DRAIN DOWNSPOUTS. ROOF DRAIN DOWNSPOUTS SHALL BE CONNECTED TO THE NEARBY STORM DRAINAGE SYSTEM.
 - SEE ARCHITECTURAL PLAN FOR BUILDING DIMENSIONS, FEATURES, STAIRS AND HANDRAILS, ETC.
 - HANDICAP ACCESSIBILITY REGULATIONS:
 - A HANDICAP PARKING SPACE SHALL HAVE NO GREATER SLOPE THAN 1/4" PER FOOT ACROSS THE SPACE. ALL HANDICAP SPACES SHALL BE MARKED WITH A SIGN.
 - HANDRAILS ARE TO BE PROVIDED ON HANDICAP RAMPS WITH A RISE GREATER THAN 6 INCHES AND A HORIZONTAL PROJECTION GREATER THAN 12 INCHES. HANDRAILS ARE NOT REQUIRED ON CURB RAMPS.
 - ALL HANDICAP SPACES WILL BE MARKED WITH A FREESTANDING OR WALL MOUNTED SIGN. THE HANDICAP SIGN SHALL BE 7'-0" IN HEIGHT FROM THE BOTTOM OF THE SIGN OR ABOVE THE DRIVING SURFACE, OR 5'-0" WHERE THE SIGNS ARE LOCATED BETWEEN THE BACK OF SIDEWALK AND BUILDING.
 - THE NEW GRADES AS SHOWN ARE THE FINISH GRADES UNLESS OTHERWISE SHOWN.
 - THE CONTRACTOR SHALL RESET ALL MANHOLE COVERS, CATCH BASIN GRATES AND ANY OTHER UTILITY ACCESS COVERS TO FINISH PAVEMENT SURFACE OR SIDEWALK GRADE. ALL EXISTING DRIVEWAYS AND CURB CUTS THAT ARE NOT USED SHALL BE REMOVED AND REPLACED WITH A MATCHING CONCRETE CURB AND GUTTER AND/OR SIDEWALK (IF EXISTING). PROTECT UNDERGROUND UTILITIES AND THEIR APPURTENANCES TO REMAIN ON SITE FROM DAMAGE DURING CONSTRUCTION OPERATIONS.
 - PROTECT UNDERGROUND UTILITIES AND THEIR APPURTENANCES TO REMAIN ON SITE FROM DAMAGE DURING CONSTRUCTION OPERATIONS.
 - UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL CLEAN THE ENTIRE SITE OF ALL CONSTRUCTION RELATED MATERIAL OR DEBRIS TO THE OWNER'S SATISFACTION. CONTRACTOR IS RESPONSIBLE FOR PROVIDING AN ON-SITE DUMPSTER OR DEBRIS ENCLOSURE DURING CONSTRUCTION TO MAINTAIN A CLEAN CONSTRUCTION SITE AND CONCRETE WASHOUT AREA.
 - TREE SAVE NOTES:
 - TEMPORARY TREE SAVE FENCING INSTALLED UNDER THE ROUGH GRADING CONTRACT (IF APPLICABLE) SHALL BE MAINTAINED UNTIL THE CITY/COUNTY ALLOWS REMOVAL. REMOVAL OF THIS FENCING SHALL BE INCLUDED HEREIN.
 - THE SITE WORK CONTRACTORS SHALL BE FAMILIAR WITH AND OBSERVE THE APPLICABLE REQUIREMENTS. ANY QUESTION SHOULD BE DIRECTED TO THE PROJECT CIVIL ENGINEERING REPRESENTATIVE.
 - PRIOR TO GRADING, THE ZONING AND USE ENFORCEMENT OFFICER WILL BE CONTACTED TO ENSURE TREES MARKED FOR RETENTION IN THE LANDSCAPE PLAN ARE PROPERLY IDENTIFIED AND FENCED OFF.
 - ALL LANDSCAPE AREAS WILL BE DELINEATED BY CURBING UNLESS NOTED OTHERWISE. REFER TO LANDSCAPING PLAN FOR FURTHER DETAILS.
 - ASPHALT PAVING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS AND THE SCOTD STANDARD SPECIFICATION FOR HIGHWAY CONSTRUCTION. CONTRACTOR SHALL PROVIDE ALL REQUIRED STRIPING AND SIGNAGE FOR WORK IN SCOTD RIGHT OF WAY.
 - ALL SITE WORK RELATED TO CAST-IN-PLACE CONCRETE SHALL BE 4,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS (UNLESS NOTED OTHERWISE).
 - REFER TO ELECTRICAL SITE PLAN FOR SITE LIGHTING LOCATIONS, SLEEVES, AND BASEPOLE/FIXTURE DETAILS. SITE LIGHTING PLAN SHALL BE PROVIDED BY OWNER.
 - CONTRACTOR IS RESPONSIBLE FOR PERFORMING ALL WORK IN ACCORDANCE WITH OSHA STANDARDS.
 - CONTRACTOR IS RESPONSIBLE FOR PERFORMING ALL WORK WITHIN THE SCOTD AND/OR COUNTY R/W PER MUTCD SAFETY STANDARDS.
 - CONTRACTOR SHALL PROVIDE KNOX PAD LOCKS AT ALL GATES AS A PART OF THE BASE BID.
 - CGP IS CONSIDERED A PART OF THESE DRAWINGS AS AN APPENDIX. CONTRACTOR IS RESPONSIBLE FOR DOWNLOADING A COPY FROM SCDEHC WEBSITE AND KEEP ON-SITE DURING CONSTRUCTION.
 - THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS CONSIDERED A PART OF THESE DRAWINGS AND PLANS. THE CONTRACTOR AND ITS SUB-CONTRACTORS ARE RESPONSIBLE FOR READING AND BEING FAMILIAR WITH THE REQUIREMENTS AND RECOMMENDATIONS DETAILED IN THIS REPORT. A COPY OF THIS REPORT SHALL REMAIN ON-SITE DURING CONSTRUCTION.

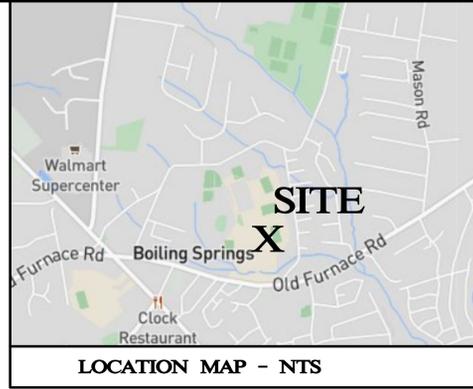
CONTRACTOR NOTES

- UPON SATISFACTION OF SITE ENGINEER INSPECTION, THE SITE ENGINEER SHALL FILE THE NOTICE OF TERMINATION, WHICH SHALL CLOSE THE NPDES PERMIT.
- CONTRACTOR SHALL PROVIDE CONCRETE TRUCK WASHOUT FACILITIES AS DESCRIBED IN THE EROSION CONTROL DETAILS.
- CONTRACTOR SHALL LOCATE PORTABLE RESTROOM FACILITIES IN SUCH A MANNER SO AS TO PREVENT ANY LEAKAGE OR DISCHARGE INTO SURROUNDING WATER BODIES AND/OR DRAINAGE STRUCTURES.
- CONTRACTOR SHALL PROVIDE A DESIGNATED LOCATION AND MEANS OF ENCLOSED AND/OR CONTAINING ALL CONSTRUCTION RELATED DEBRIS PRIOR TO THEIR LAWFUL DISPOSAL. THIS CONTAINMENT SHALL PREVENT THE DEBRIS FROM SPREADING OR LEAVING THE SITE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY AND ALL APPLICABLE PERMITS (INCLUDING BUT NOT LIMITED TO NPDES) FOR OFF-SITE BORROW AND/OR BORROW SITES REQUIRED TO COMPLETE THE GRADING ACTIVITIES INDICATED ON THIS PLAN.
- CONTRACTOR SHALL VERIFY ALL BENCHMARK INFORMATION INDICATED IN THESE PLANS WITH THE SURVEYOR. MCEA IS NOT RESPONSIBLE FOR BENCHMARK INTERPRETATION OR LOCATION ERRORS.
- CONTRACTOR IS RESPONSIBLE FOR INSTALLING CONDUIT FOR ELECTRICAL, SITE LIGHTING, DATA, TELEPHONE, IRRIGATION AND ELECTRICAL SERVICE. PROVIDE ONE (1) SPARE FOR EACH SERVICE. COORDINATE WITH OTHER DISCIPLINE DRAWINGS FOR LOCATIONS.
- CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND RELOCATING EXISTING UTILITIES, INCLUDING ITEMS NOT IDENTIFIED ON PROPOSED PLANS AND SURVEY. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH EACH UTILITY PROVIDER.
- ADEQUATE SITE SECURITY MEASURES SHALL BE PROVIDED BY THE CONTRACTOR TO PREVENT UNAUTHORIZED PERSONNEL FROM ACCESSING THE SITE DURING/AFTER WORKING HOURS. CONTRACTOR IS ALSO RESPONSIBLE FOR PROVIDING APPROPRIATE AND VISIBLE SIGNAGE TO RESTRICT UNAUTHORIZED PERSONNEL FROM THE SITE. ALL VISITORS MUST REGISTER WITH THE SITE SUPERINTENDENT AND NOT BE ALLOWED TO ROAM THE SITE UN-SUPERVISED. TEMPORARY GATES AND FENCING MAY BE REQUIRED TO ADEQUATELY PROVIDE THIS.
- DURING CONSTRUCTION OF THE RETAINING WALL (IF APPLICABLE), CONTRACTOR IS RESPONSIBLE FOR INSTALLING TEMPORARY FENCING AND SAFETY BARRIERS UNTIL FINAL FENCE IS INSTALLED AS A PART OF THE BASE BID. PROPER SAFETY SIGNAGE SHALL BE INSTALLED INDICATING THE WALL - IF APPLICABLE.
- IF AN MSE/SEGMENTAL RETAINING WALL IS USED, THE CALCULATIONS AND PLANS SHALL BE PROVIDED BY THE WALL CONTRACTOR AS A PART OF THE BASE BID. WALL COLOR/MATERIAL/MANUFACTURER MUST BE APPROVED BY THE ARCHITECT AND OWNER PRIOR TO CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING TO SPARTANBURG COUNTY FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. THESE PLANS MUST BE PREPARED BY A REGISTERED SOUTH CAROLINA ENGINEER. INSPECTION RECORDS MUST BE KEPT DURING THE WALL CONSTRUCTION AND PROVIDED TO SPARTANBURG COUNTY, AND ARCHITECT UPON REQUEST.
- BASE BID OF MSE/SEGMENTAL RETAINING WALL SHALL INCLUDE BLOCK AND STONE UNDERNEATH GRADE.
 - TW = TOP OF WALL
 - BW = BOTTOM OF WALL (AT GRADE)
 - NOTE: MSE/SEGMENTAL RETAINING WALLS TYPICALLY REQUIRE BLOCKSTONE BELOW GRADE. THIS SHALL BE INCLUDED IN BASE BID WALL QUANTITIES.
- EXISTING LANDSCAPING SHALL BE PROTECTED DURING ALL PHASES OF CONSTRUCTION.
- DRIVEWAY AND ROAD PAVEMENT MARKINGS SHALL BE THERMOPLASTIC. DIMENSIONS SHALL CONFORM TO SCOTD STANDARD DRAWINGS.
- SITE DESIGN IS BASED UPON A FIELD SURVEY WITH A LOCAL HORIZONTAL AND VERTICAL DATUM AS INDICATED ON THE SURVEY
- STABILIZE ALL NON-PAVED DENUDE SURFACES USING HYDRAULICALLY APPLIED FLEXITERRA FGM IMMEDIATELY AFTER FINISH GRADING AND PRIOR TO FIRST RAINFALL THEREAFTER. STRICTLY COMPLY WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS AND APPLICATION RATES. PROPER PREPARATION OF THE SOIL SHALL BE PERFORMED PRIOR TO INSTALLATION.
- COORDINATE WITH OTHER DESIGN DISCIPLINES FOR INSTALLATION OF REQUIRED CONDUIT TO PROVIDE UTILITY SERVICES AND CONSTRUCTION PHASING.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH ORIGINAL SURVEYOR TO ESTABLISH TEMPORARY BENCHMARKS DURING CONSTRUCTION. MULTIPLE EXISTING ELEMENTS SHALL BE CHECKED TO INSURE ACCURACY OF TEMPORARY BENCHMARKS.
- CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL PLANS FOR BUILDING LAYOUT.
- ROOF DRAINS CONNECT VIA UNDERGROUND PIPING TO THE CLOSEST CATCH BASIN AND/OR DIRECTLY TO THE STORM WATER MANAGEMENT POND.
- CONTRACTOR IS RESPONSIBLE FOR INSTALLING A JOB BOX ON-SITE AND RAIN GAUGE. JOB BOX SHALL CONTAIN COPIES OF REQUIREMENTS OF 2017 CGP PERMIT, INSPECTION REPORTS AND ALL APPLICABLE APPROVALS.
- AS A PART OF THE BASE BID, THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY SEEDING IN AREAS NOTED TO RECEIVE SOD AS INTERMEDIATE EROSION CONTROL PROTECTION BEFORE FINAL LANDSCAPING IS INSTALLED.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING TRAFFIC CONTROL DURING CONSTRUCTION PER SCOTD REQUIREMENTS. AS A PART OF THE BASE BID PRICE, CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN FOR ALL WORK PERFORMED WITHIN THE EXISTING RIGHT OF WAYS. ANY AND ALL FEES ASSOCIATED WITH PROVIDING A PERFORMANCE BOND (10% OF ALL IMPROVEMENTS WITHIN SCOTD RIGHT OF WAY) SHALL BE INCLUDED IN THE BASE BID PRICE.
- INLET PROTECTION SHALL BE PROVIDED AT EACH INSTALLED INLET DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR CONTINUING MAINTENANCE.
- DURING CONSTRUCTION, SEDIMENT AND EROSION CONTROL BMP'S MAY NEED TO BE MOVED OR ADJUSTED IN ORDER TO ACHIEVE FINAL GRADES AND PRIOR TO FINAL STABILIZATION. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THESE FIELD ADJUSTMENTS AS NECESSARY TO ACHIEVE FINAL GRADES AS A PART OF THE BASE BID. THESE ITEMS MAY INCLUDE SILT FENCE, INLET PROTECTION, RIP RAP OUTLET PROTECTION, CHECK DAMS, ETC.
- FOR AREAS TO RECEIVE SOD, CONTRACTOR SHALL INCLUDE THE COST TO REMOVE TEMPORARY GRASS, FINE GRADE, ESTABLISH TOP SOIL AND INSTALL SOD. TEMPORARY IRRIGATION MAY NEED BE REQUIRED TO ESTABLISH MATERIAL. COORDINATE WITH GENERAL CONTRACTOR TO DETERMINE LANDSCAPE SCOPE OF WORK.
- NO MECHANICAL GRADING SHALL OCCUR OUTSIDE THE LIMITS OF DISTURBANCE. WHERE LANDSCAPING IS TO BE INSTALLED OUTSIDE THE LIMITS OF DISTURBANCE, THE CONTRACTOR SHALL USE APPROPRIATE INDUSTRY STANDARD METHODS OF EXCAVATING THE APPROPRIATE HOLE AND INSTALLING THE PLANT MATERIAL.

GRADING NOTES

- APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ON ADJACENT PROPERTIES.
- ON-SITE BURIAL PITS ARE NOT PERMITTED.
- ANY GRADING BEYOND THE DENIUED LIMITS SHOWN ON THE PLAN IS A VIOLATION OF THE EROSION CONTROL REGULATIONS AND IS SUBJECT TO A FINE.
- GRADING MORE THAN ONE ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION OF THE COUNTY/CITY/SCDEHC EROSION CONTROL ORDINANCE AND IS SUBJECT TO A FINE.
- STABILIZATION IS THE BEST FORM OF EROSION CONTROL. TEMPORARY SEEDING IS NECESSARY TO ACHIEVE EROSION CONTROL ON LARGE DENIUED AREAS AND ESPECIALLY WHEN SPECIFICALLY REQUIRED AS PART OF THE CONSTRUCTION SEQUENCE SHOWN ON THE PLAN. ALL SLOPES MUST BE SEEDED (WITH TOPSOIL, RE-SPREAD) AND MULCHED WITHIN 14 CALENDAR DAYS. REFER TO SCDEHC/SPARTANBURG COUNTY STANDARD NOTES AND EROSION CONTROL ORDINANCE (IF APPLICABLE) FOR ADDITIONAL REQUIREMENTS.
- ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY A REPRESENTATIVE OF THE COUNTY/SCDEHC/CITY ENGINEERING DEPARTMENT AND/OR SCDEHC.
- SLOPES SHALL BE GRADED NO STEEPER THAN 2H:1V. FILL SLOPES GREATER THAN 10' REQUIRE ADEQUATE TERRACING. ALL GRASSED/LANDSCAPED AREAS SHALL BE FINISHED IN A MOWABLE CONDITION WITH A SMOOTH SURFACE, FREE OF PROTRUDING ROOTS, ROCKS, OR OTHER DEBRIS THAT WOULD IMPEDE OPERATION OF A TYPICAL RESIDENTIAL GRADE MOWER.
- IN ORDER TO ENSURE PROPER DRAINAGE, KEEP A MINIMUM SLOPE OF 0.5% ALONG THE CURB.
- EARTHWORK SHALL BE TO THE LINES AND GRADES SHOWN (±1" IN LANDSCAPED AREAS, ±0.5" IN PAVEMENT/BUILDING PAD AREAS). THE CONTRACTOR SHALL PROOF-ROLL THE CONSTRUCTION AREA WITH HEAVY LOADED PNEUMATIC Tired EQUIPMENT. ALL SOFT SPOTS SHALL BE UNDERCUT AND RECOMPACTED WITH SUITABLE STRUCTURAL FILL MATERIAL. ALL FILL COMPACTION SHALL BE 95% OF MAXIMUM PER ASTM D 998 (STANDARD PROCTOR). ALL MATERIAL WITHIN 18 INCHES OF PAVEMENT AND BUILDING SUBGRADE SHALL BE COMPACTED TO 98 % OF MAXIMUM. FILL MATERIAL SHALL NOT CONTAIN ORGANIC MATERIAL, DEBRIS OR ROCKS. WHERE FILL IS TO BE PLACED, ALL EXISTING VEGETATION, ROOTS AND OTHER ORGANIC MATTER BELOW EXISTING GRADE SHALL BE STRIPPED AND DISPOSED OF AS DIRECTED BY THE GEOTECHNICAL ENGINEER. FILL SHALL BE PLACED IN SUCCESSIVE LAYERS OF NOT MORE THAN 6 TO 8 INCHES LOOSE THICKNESS. EACH LAYER SHALL BE SPREAD EVENLY AND COMPACTED AS SPECIFIED BEFORE THE NEXT LAYER IS PLACED.
- ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATIONS SHALL RECEIVE 4 INCHES OF TOPSOIL AND PERMANENT GRASSINGS. U.N.O. CONTRACTOR SHALL APPLY EROSION CONTROL BLANKETS (NORTH AMERICAN GREEN SC150 OR APPROVED EQUAL) TO ALL SLOPES 3H:1V OR STEEPER AND PERMANENT SYNTHETIC TURF REINFORCEMENT MATTING (NORTH AMERICAN GREEN P300 OR APPROVED EQUAL) TO ALL SLOPES 2H:1V OR STEEPER. UNTIL A HEALTHY STAND OF GRASS IS OBTAINED, INSTALL BLANKETS WITH BIODEGRADABLE STAPLES PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS. IF SOD GRASSING IS INSTALLED, IT SHALL BE PROPERLY SECURED AND STAPLED.
- THE CONTRACTOR SHALL REMOVE ALL DEBRIS INCLUDING PAVEMENT, CONCRETE, AND UNSUITABLE MATERIAL FROM THE SITE. ALL AREAS UNDER EXISTING PAVEMENT SHALL BE SCARIFIED BEFORE PLACING STRUCTURAL FILL MATERIAL.
- ALL STORM DRAINAGE PIPING SHALL BE RCP CLASS III, U.N.O. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTING ALL EXISTING STRUCTURES WHERE NEW CONNECTIONS ARE INDICATED AND REPLACE AND/OR REPAIR AS NECESSARY TO PROVIDE A CONNECTION IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- REINFORCED CONCRETE PIPE (RCP) SHALL BE:
 - CLASS II - DEPTHS 0'-12" TYPE 3 BEDDING
 - CLASS IV - DEPTHS 12'-14" TYPE 3 BEDDING
 - CLASS IV - DEPTHS 15'-25" TYPE 2 BEDDING
 - CLASS V - DEPTHS 25'-39" TYPE 2 BEDDING

- REFER TO AMERICAN CONCRETE PIPE ASSOCIATION LRFD FILL HEIGHT TABLES FOR CONCRETE PIPE, CURRENT EDITION, FOR BEDDING INFORMATION. DEPTHS INDICATED ABOVE ARE APPLICABLE FOR PIPE SIZES UP TO 66 INCH Ø. THE DESIGN ENGINEER SHALL PROVIDE DETAILED INFORMATION FOR LARGER DIAMETER PIPE SIZES. SEE RIGID PIPE BEDDING DETAILS. ALL RCP SHALL HAVE BUTYL RUBBER GASKET SEALANT UNLESS OTHERWISE SPECIFIED. JOINTS AND FITTINGS/ACCESSORIES SHALL BE COMPATIBLE WITH PIPE. ALL JOINTS SHALL BE SOIL-TIGHT AND WATER-TIGHT (BELL AND SPIGOT W/O-RING) WHERE INDICATED. ALL STORM DRAINAGE PIPE SHALL HAVE MINIMUM 3" BEDDING INSTALLED IN A TRENCH CONDITION (CLASS 3 MIN) AND BE BACKFILLED TO 95% STANDARD PROCTOR COMPACTION MINIMUM.
- HOPE STORM SEWER LINES (WHERE INDICATED) SHALL BE ASTM F2309 WITH SMOOTH INTERIOR WALLS. JOINTS SHALL BE GASKETED WITH MINIMUM SOIL TIGHT CONNECTIONS (ASTM F 477). BEDDING AND INITIAL BACKFILL SHALL BE A MINIMUM CLASS IA, IB, OR II (ASTM D 2321) NO. 5, 56, 57, 6, OR 67 STONE (ASHTO M43).
 - HP STORM SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THIRD PARTY TESTING FIRM FOR BEDDING AND BACKFILL REQUIREMENTS.
 - CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE PROVIDING AND MAINTAINING A COMPLETE EROSION CONTROL SYSTEM AS SHOWN IN THESE PLANS, AS WELL AS ANY ADDITIONAL TEMPORARY SEDIMENT TRAPS, DIVERSION DITCHES, OR OTHER MEASURES REQUIRED TO STABILIZE THE SITE THROUGHOUT THE CONTRACTOR'S CHOSEN SEQUENCE OF WORK. THE CONSTRUCTION SEQUENCE INDICATED HEREIN IS FOR THE CONTRACTOR'S REFERENCE, AND THE CONTRACTOR SHALL INDEPENDENTLY EVALUATE THE CRITICAL PROJECT MILESTONES IN ORDER TO DETERMINE THE ACTUAL CONSTRUCTION SEQUENCE.
 - ALL CATCH BASIN COVERS SHALL BE CAST WITH THE PHRASE "NO DUMPING DRAINS TO STREAM". YARD INLETS SHALL BE PERMANENTLY STENCILED/CAST WITH THE SAME PHRASE.
 - CEPSI INSPECTIONS SHALL BE PERFORMED BY "QUALIFIED PERSONNEL" AS DEFINED IN THE MOST CURRENT SOUTH CAROLINA NPDES GENERAL PERMIT, AT THE INTERVALS INDICATED IN THE "SCDEHC GENERAL NOTES", THIS SHEET. THE OWNER SHALL BE RESPONSIBLE FOR RETAINING THE SERVICES.
 - CONTRACTOR IS RESPONSIBLE FOR INSTALLING MATTING WHERE SLOPES ARE INDICATED AS 3:1 OR STEEPER, EVEN IF SLOPES ARE GRADED DIFFERENTLY.

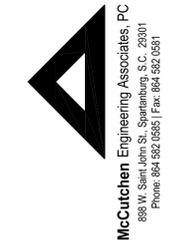


LOCATION MAP - NTS

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SPARTANBURG COUNTY SCHOOLS



Project: SPARTANBURG SCHOOL DISTRICT 2
BOILING SPRINGS 9TH GRADE ACADEMY - PARKING LOT
2251 OLD FURNACE ROAD, SPARTANBURG 29316

Sheet Title: COVER SHEET

Engineer: JDM
Drawn By: CWJ
Date: APRIL 2022
Revisions:
A ISSUE FOR PERMIT REVIEW/PROG 04.25.22

Project Number: 22071.001

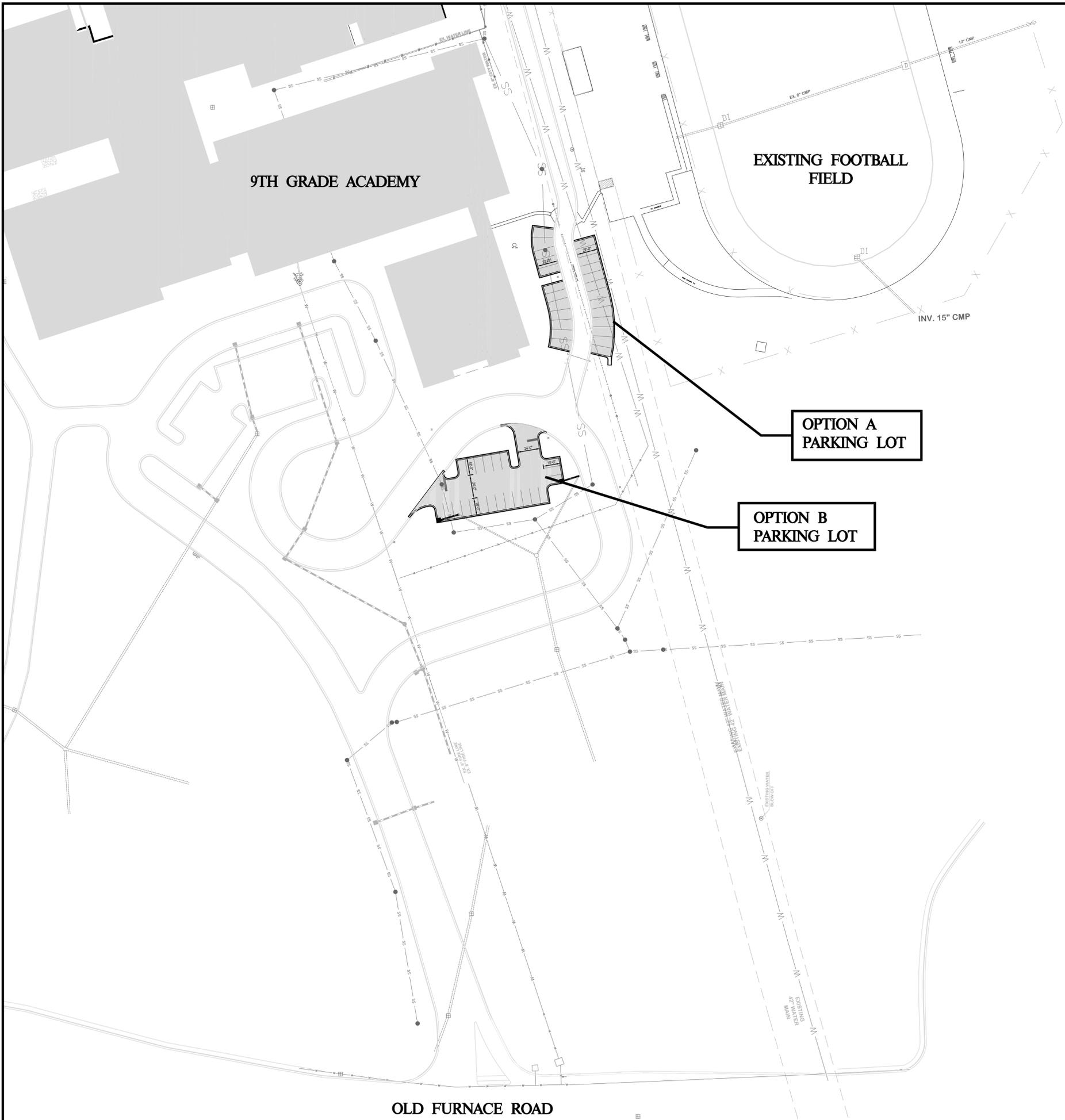
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GRASSING/LANDSCAPING:
CONTRACTOR SHALL REFER TO GRASSING NOTES AND DETAILS FOR FURTHER INFORMATION. CONTRACTOR SHALL ALSO COORDINATE WITH LANDSCAPE PLANS FOR AREAS TO RECEIVE SOD. AREAS TO RECEIVE SOD MAY REQUIRE TEMPORARY GRASSING. PERMANENT GRASSING (NON SOD AREAS) AREAS SHALL RECEIVE HYDRAULICALLY APPLIED FLEXITERRA FGM IMMEDIATELY AFTER FINISHING GRADING AND PRIOR TO FIRST RAINFALL EVENT. APPLICATION AND INSTALLATION OF FLEXITERRA SHALL STRICTLY COMPLY WITH MANUFACTURER'S RECOMMENDATIONS.

NOTE:
CONTRACTOR SHALL BID EARTHWORK AS A COMPLETED SITE AS PER THE DRAWINGS, DETAILS, AND FINISHED GRADES. PERFORM INDEPENDENT EARTHWORK ANALYSIS AS NEEDED TO CONFIRM QUANTITIES (IMPORT OR EXPORT). ANY EARTH MATERIALS TO BE REMOVED FROM THE SITE IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE DISPOSED IN A LAWFUL MANNER. IF MATERIAL IS TO BE IMPORTED, IT SHALL BE APPROVED STRUCTURAL MATERIAL (AS IDENTIFIED BY THE GEOTECHNICAL ENGINEER). THERE WILL NOT BE AN ADJUSTMENT TO CONTRACT PRICE FOR EARTHWORK.



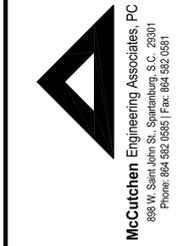
THE UTILITIES SHOWN ARE SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATIONS OF ALL UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE MADE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.



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SPARTANBURG COUNTY SCHOOLS



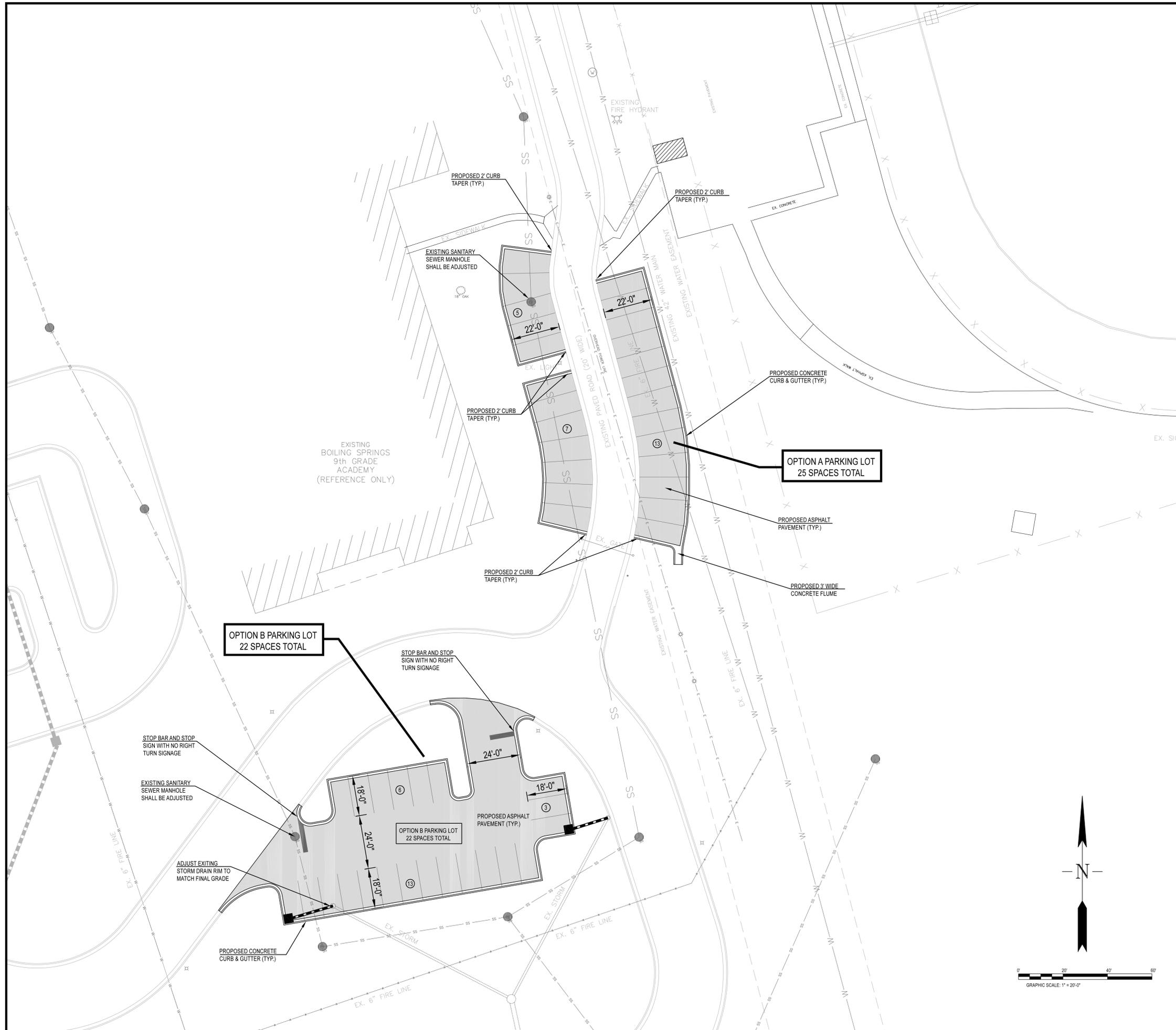
Project
SPARTANBURG SCHOOL DISTRICT 2
BOILING SPRINGS 9TH GRADE ACADEMY - PARKING LOT
 2251 OLD FURNACE ROAD, SPARTANBURG 29316

Sheet
OVERALL SITE DEVELOPMENT PLAN

Engineer
 JDM
 Drawn By
 CWJ
 Date
 APRIL 2022
 Revisions
 A ISSUE FOR PERMIT REVIEW/PRICING 04.25.22

Project Number
 22071.001

Sheet
C100



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McCUTCHEN ENGINEERING ASSOCIATES, PC
 888 W. Saint John St., Spartanburg, S.C. 29301
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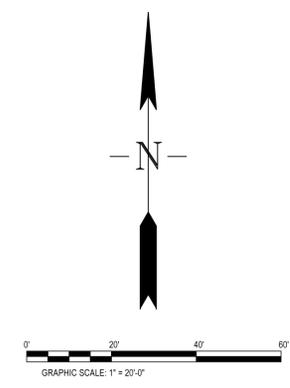
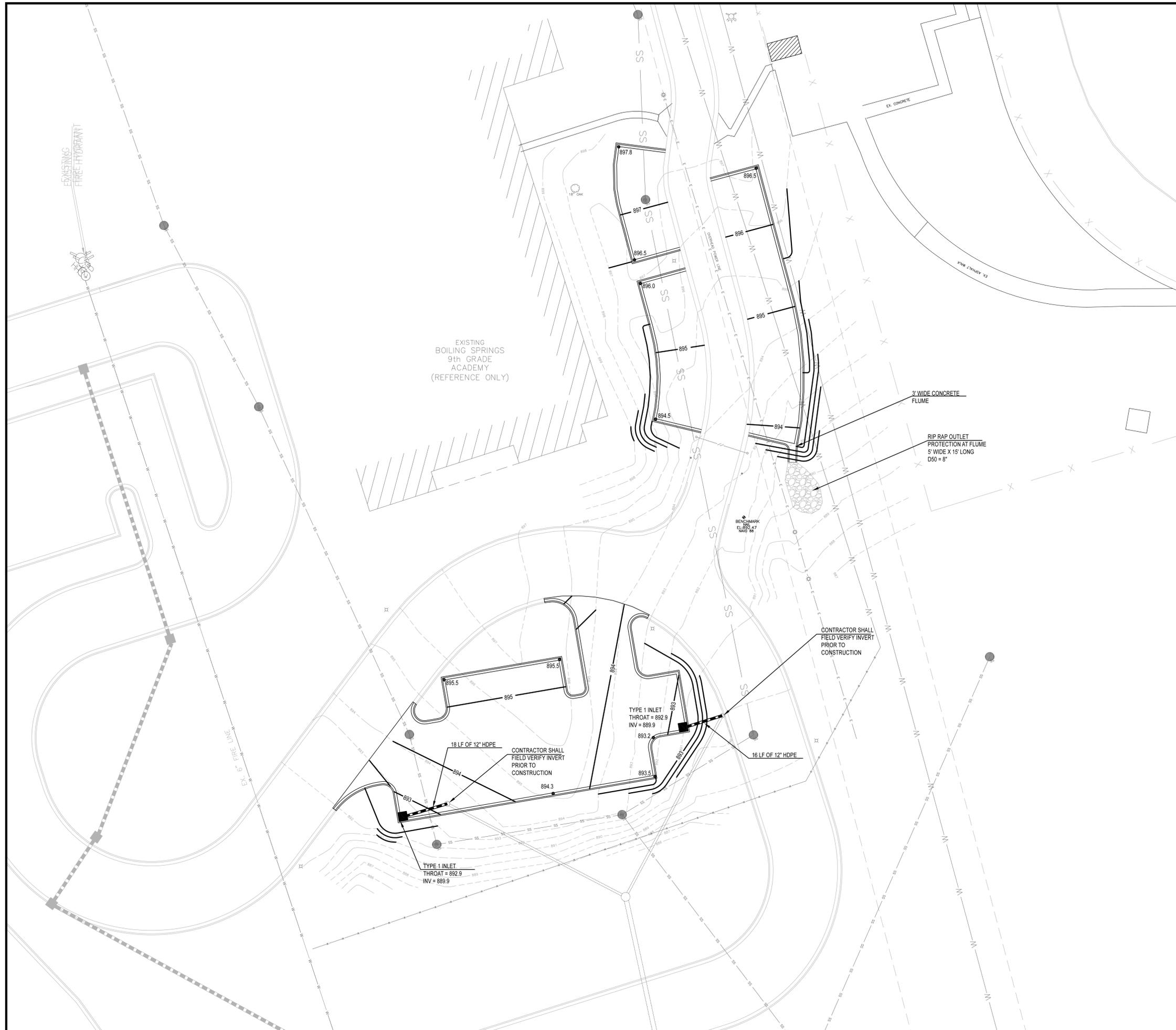
J. DAVID McCUTCHEN
 04-25-2022

Project: SPARTANBURG SCHOOL DISTRICT 2
 BOILING SPRINGS 9TH GRADE ACADEMY - PARKING LOT
 2251 OLD FURNACE ROAD, SPARTANBURG 29316
 Sheet Title: SITE LAYOUT PLAN

Engineer: JDM
 Drawn By: CWJ
 Date: APRIL 2022
 Revisions:
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Project Number: 22071.001

Sheet: C101



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Project: SPARTANBURG SCHOOL DISTRICT 2
 BOILING SPRINGS 9TH GRADE ACADEMY - PARKING LOT
 2251 OLD FURNACE ROAD, SPARTANBURG 29316
 Sheet Title: GRADING AND STORM DRAINAGE PLAN

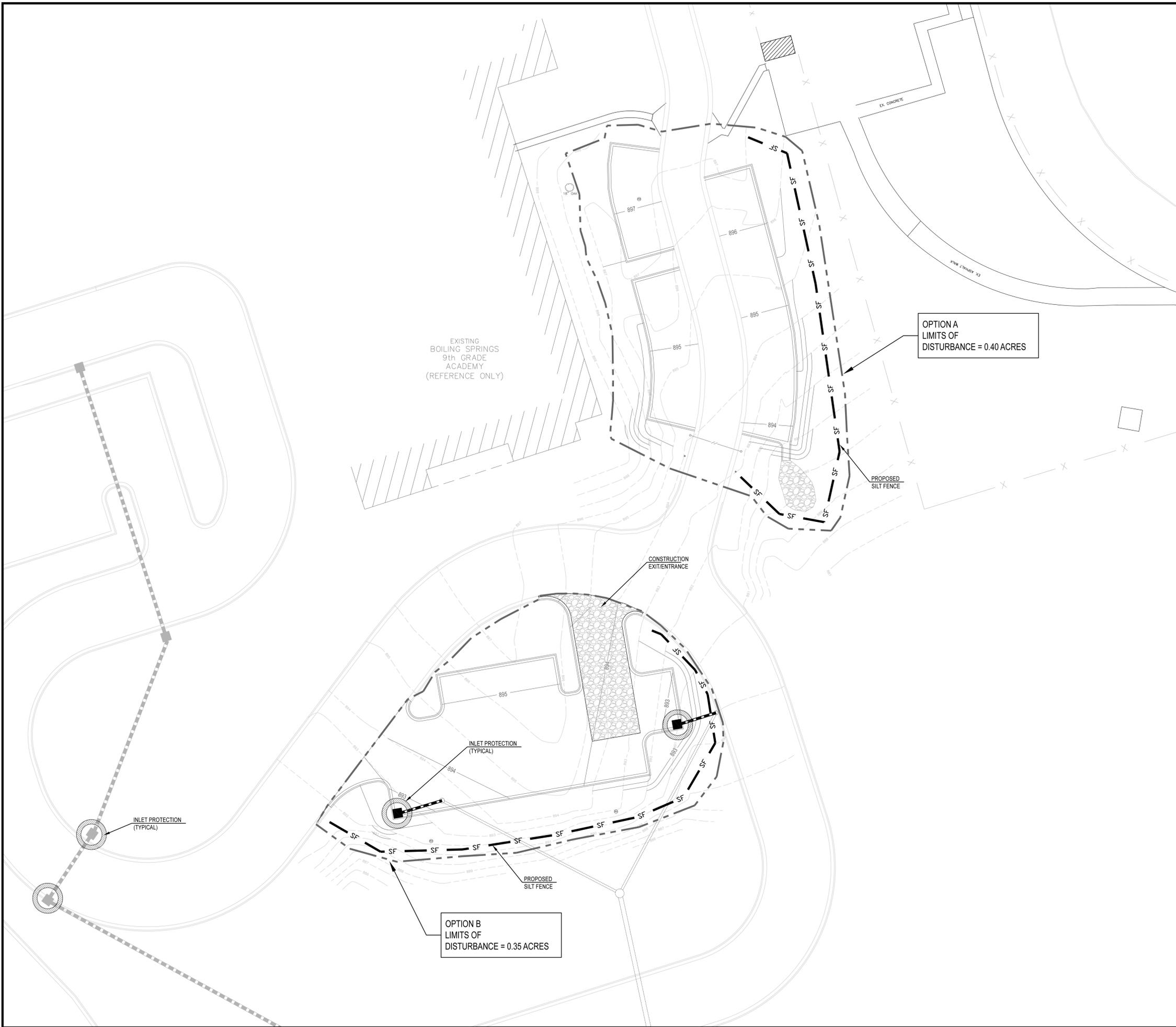
Engineer: JDM
 Drawn By: CWJ
 Date: APRIL 2022

Revisions

A	ISSUE FOR PERMIT REVIEW/PROG	04.25.22

Project Number: 22071.001

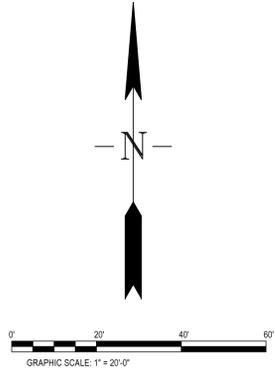
Sheet: C200



EXISTING
BOILING SPRINGS
9th GRADE
ACADEMY
(REFERENCE ONLY)

OPTION A
LIMITS OF
DISTURBANCE = 0.40 ACRES

OPTION B
LIMITS OF
DISTURBANCE = 0.35 ACRES



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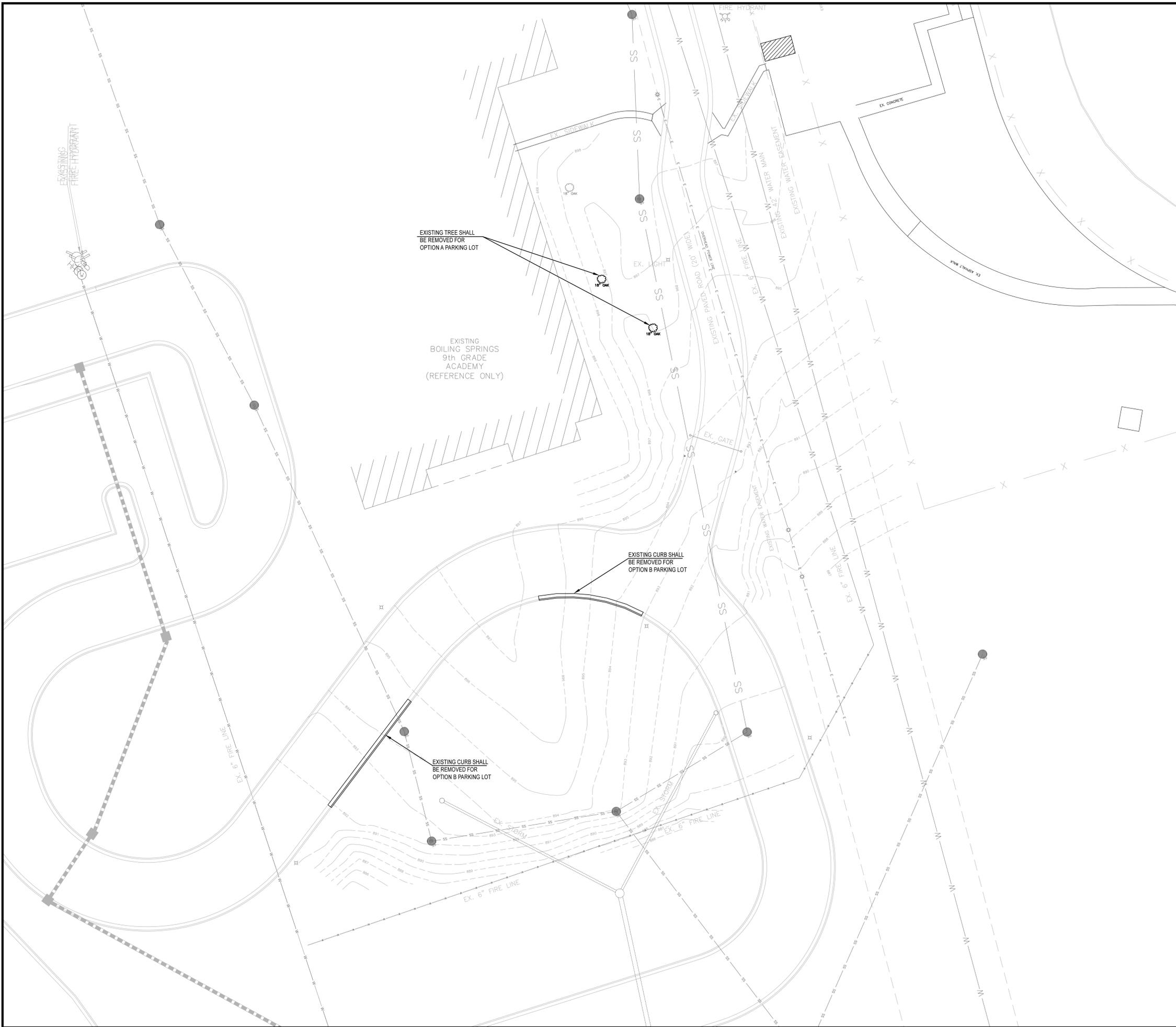


SPARTANBURG
COUNTY
SCHOOLS



Project	SPARTANBURG SCHOOL DISTRICT 2 BOILING SPRINGS 9TH GRADE ACADEMY - PARKING LOT 2251 OLD FURNACE ROAD, SPARTANBURG 29316
Sheet Title	EROSION CONTROL PLAN
Engineer	JDM
Drawn By	CWJ
Date	APRIL 2022
Revisions	A ISSUE FOR PERMIT REVIEW/PRICING 04.25.22

Project Number	22071.001
Sheet	C300

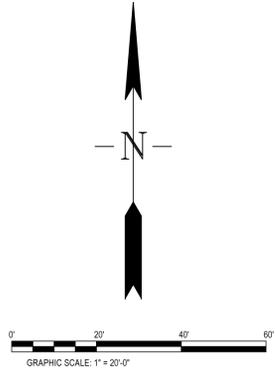


EXISTING TREE SHALL
BE REMOVED FOR
OPTION A PARKING LOT

EXISTING
BOILING SPRINGS
9th GRADE
ACADEMY
(REFERENCE ONLY)

EXISTING CURB SHALL
BE REMOVED FOR
OPTION B PARKING LOT

EXISTING CURB SHALL
BE REMOVED FOR
OPTION B PARKING LOT



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SPARTANBURG
COUNTY
SCHOOLS



Project
SPARTANBURG SCHOOL DISTRICT 2
BOILING SPRINGS 9TH GRADE ACADEMY - PARKING LOT
2251 OLD FURNACE ROAD, SPARTANBURG 29316

Sheet
Title
EXISTING CONDITIONS AND
DEMOLITION PLAN

Engineer
JDM
Drawn By
CWJ
Date
APRIL 2022

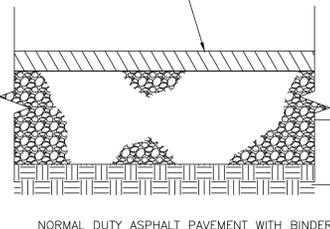
Revisions

A	ISSUE FOR PERMIT REVIEW/PRICING	04.25.22

Project Number
22071.001

Sheet
C400

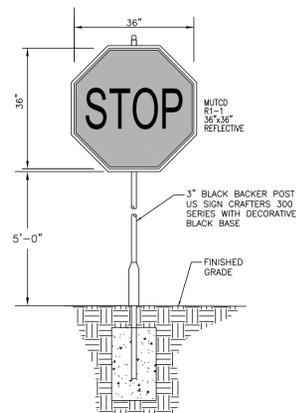
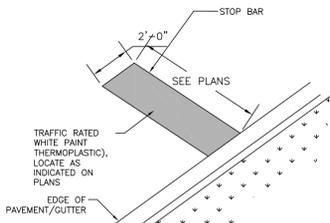
2" ASPHALT SURFACE COURSE (TYPE C) PER SCDOT SPECIFICATION SECTION 403



6" COMPACTED CRUSHED STONE BASE PER SCDOT SPECIFICATION SECTION 305
98% COMPACTED SUBGRADE (18" MINIMUM) MAX. DRY DENSITY PER ASTM D-698, SEE SPECIFICATIONS AND GEOTECH REPORT

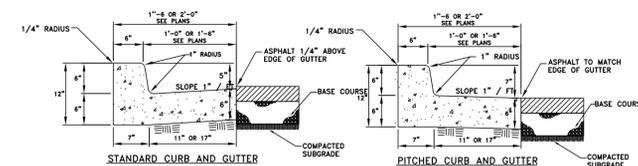
ASPHALT PAVING (ONSITE) DETAIL

NOT TO SCALE

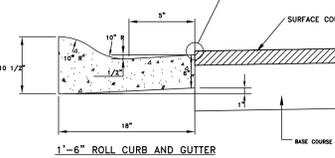


STOP SIGN AND STOP BAR DETAIL

NOT TO SCALE



STANDARD CURB AND GUTTER
PITCHED CURB AND GUTTER



1'-6" ROLL CURB AND GUTTER

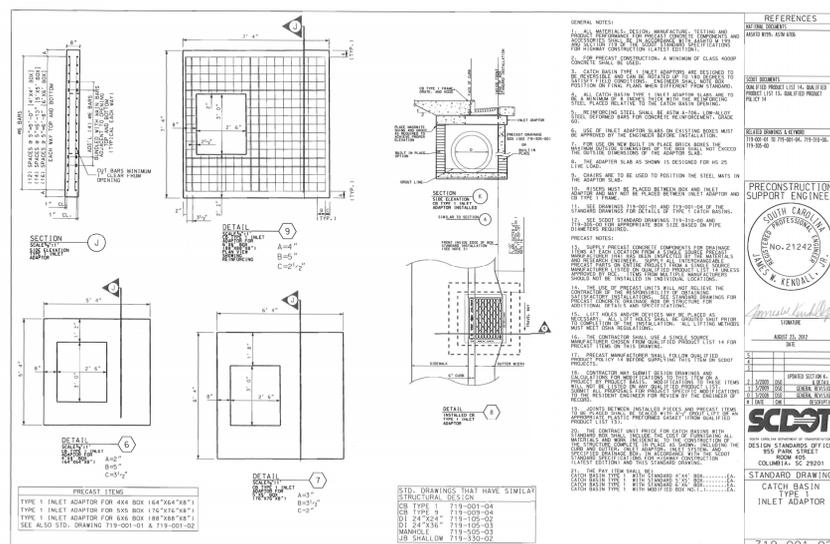
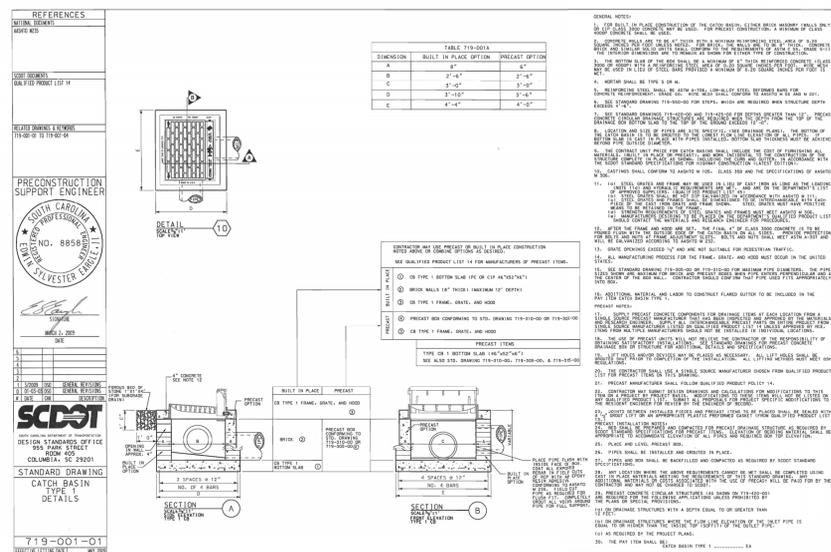
STANDARD CURB AND GUTTER DETAIL

NOT TO SCALE

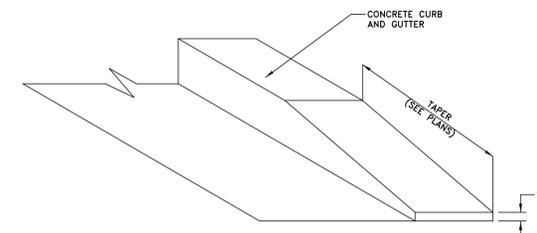
CATCH BASIN / DROP INLET / JUNCTION BOX NOTES:

- FOR IN PLACE CONSTRUCTION OF CATCH BASINS, THE WALLS MAY BE EITHER BRICK MASONRY OR CLASS 3000 CONCRETE. CONCRETE WALLS ARE TO BE 6" THICK WITH A REINFORCING STEEL AREA OF 0.20 SQ. INCH PER FT. BRICK WALLS ARE TO BE 8" THICK. CONCRETE BRICK AND SIMILAR SOLID UNITS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C 55, GRADE S-II.
- THE BOTTOM SLAB OF THE BOX SHALL BE A MINIMUM OF 6" THICK CLASS 3000 CONCRETE WITH A REINFORCING STEEL AREA OF 0.20 SQ. INCH PER FT. WIRE MESH MAY BE USED IN LIEU OF STEEL BARS PROVIDED A MINIMUM OF 0.20 SQ. INCH PER FT. IS MET.
- MORTAR SHALL BE TYPE S, TYPE M IS AN ALLOWABLE ALTERNATIVE.
- IF DESIRED THESE ITEMS MAY BE PRECAST PRIOR TO INSTALLATION IN LIEU OF BEING CAST IN PLACE. THE USE OF PRECAST UNITS WILL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF OBTAINING SATISFACTORY INSTALLATIONS. SEE STANDARD DRAWING FOR PRECAST CONCRETE DRAINAGE BOXES OR STRUCTURES FOR ADDITIONAL DETAILS AND SPECIFICATIONS.
- REINFORCING STEEL SHALL BE ASTM A-706. LOW ALLOY STEEL DEFORMED BARS FOR CONCRETE REINFORCEMENT, GRADE 60. WIRE MESH SHALL CONFORM TO AASHTO M 55 AND M 221.
- IF STRUCTURE DEPTH EXCEEDS 4'-6", METAL STEPS ARE TO BE PLACED ON WALL. SEE STEP REINFORCEMENT, GRADE 60. WIRE MESH SHALL CONFORM TO AASHTO M 55 AND M 221.
- CASTING SHALL CONFORM TO AASHTO M 105, CLASS 35B AND THE LOAD TEST OF AASHTO M 306 (40,000LBS.).
- STEEL GRATES AND FRAME MAY BE USED IN LIEU OF CAST IRON AS LONG AS THE LOADING AND HYDRAULIC REQUIREMENTS ARE MET, AND ARE ON THE DEPARTMENT'S LIST OF APPROVED SUPPLIERS.
- STEEL GRATES SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH AASHTO M 111.
- STEEL GRATES AND FRAMES SHALL BE DIMENSIONED TO BE INTERCHANGEABLE WITH EACH PIECE OF THE CAST IRON GRATE AND FRAME. STAINLESS STEEL GRATES MUST HAVE POSITIVE MEANS TO BE RETAINED IN THE FRAME.
- STRENGTH REQUIREMENTS OF STEEL GRATES AND FRAMES MUST MEET AASHTO M 306.
- THE CONTRACT UNIT PRICE FOR CATCH BASINS SHALL INCLUDE THE COST OF FURNISHING ALL MATERIALS AND WORK INCIDENTAL TO THE CONSTRUCTION OF THE STRUCTURE COMPLETE IN PLACE AS SHOWN IN ACCORDANCE WITH THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION).
- THE SOFFIT (INSIDE TOP OF PIPE) OF THE OUTLET PIPE SHOULD BE NO HIGHER THAN THE FLOW-LINE OF THE INLET PIPE, UNLESS A PRECAST STRUCTURE IS SPECIFIED.
- GRADE OPENINGS THAT EXCEED 1/2" ARE NOT SUITABLE FOR PEDESTRIAN TRAFFIC.
- AFTER THE FRAME (AND HOOD IF APPLICABLE) ARE SET, THE FINAL 4" OF CLASS 3000 CONCRETE IS TO BE POURED FLUSH WITH THE OUTSIDE EDGE OF THE CATCH BASIN ON ALL SIDES. PROVIDE PROTECTION FOR BOLTS AND NUTS AT FRAME ADJUSTMENT SLOTS, BOLTS AND NUTS SHALL MEET ASTM A-307 AND WILL BE GALVANIZED ACCORDING TO AASHTO M 111.
- ALL DRAINAGE STRUCTURES SHALL MEET SCDOT SPECIFICATIONS.
- ALL STRUCTURE INVERTS SHALL BE PAVED AND SLOPED TO OUTLETS.
- ALL YARD INLETS SHALL HAVE 6" MIN. EXPOSED CONCRETE PERIMETER COLLARS.
- ALL KNOCKOUT BOXES OR OTHER PRECAST BOXES SHALL HAVE TOP 12" BRICKED TO ALLOW FOR FIELD ADJUSTMENT IF REQUIRED.
- ALL PIPE LENGTHS SHOWN ON PLANS ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR VERIFYING LENGTHS WITH FIELD CONDITIONS.

STORM DRAINAGE NOTES



TYPE 1 CATCH BASIN

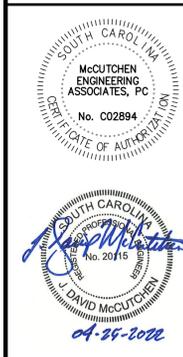
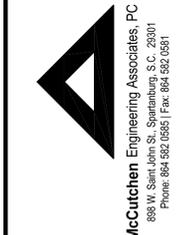


CURB TAPER

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SPARTANBURG COUNTY SCHOOLS



Project
SPARTANBURG SCHOOL DISTRICT 2
BOILING SPRINGS 9TH GRADE ACADEMY - PARKING LOT
2251 OLD FURNACE ROAD, SPARTANBURG 29316

Sheet Title
NOTES AND DETAILS

Engineer
JDM
Drawn By
CWJ
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APRIL 2022
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Project Number
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Sheet
C400

TEMPORARY STABILIZATION

TEMPORARY STABILIZATION:
TEMPORARY STABILIZATION IS DEFINED AS A CONDITION WHERE EXPOSED SOILS OR DISTURBED AREAS ARE PROVIDED A TEMPORARY VEGETATIVE AND/OR NON-VEGETATIVE PROTECTIVE COVER TO PREVENT EROSION AND SEDIMENT LOSS. TEMPORARY STABILIZATION MAY INCLUDE TEMPORARY SEEDING, GEOTEXTILES, MULCHES, AND OTHER TECHNIQUES TO REDUCE OR ELIMINATE EROSION UNTIL EITHER FINAL STABILIZATION CAN BE ACHIEVED OR UNTIL FURTHER CONSTRUCTION ACTIVITIES TAKE PLACE TO RE-DISTURB THIS AREA.

INITIATING TEMPORARY STABILIZATION:
INITIATE TEMPORARY STABILIZATION BY MULCH OR TEMPORARY STABILIZATION BY SEEDING WITHIN 7 CALENDAR DAYS WHERE LAND DISTURBING ACTIVITIES HAVE TEMPORARILY CEASED ON THE PROJECT AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. WHERE LAND DISTURBING ACTIVITIES ON A PORTION OF THE PROJECT ARE TEMPORARILY CEASED, AND THE LAND DISTURBING ACTIVITIES ARE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES ARE NOT REQUIRED TO BE INITIATED ON THAT PORTION OF THE PROJECT.

TEMPORARY STABILIZATION BY SEEDING IS REQUIRED IF THE PROJECT WILL NOT BE WORKED FOR PERIOD LONGER THAN 60 DAYS:
INITIATE TEMPORARY STABILIZATION MEASURES AS SOON AS PRACTICABLE FOR AREAS WHERE INITIATING TEMPORARY STABILIZATION MEASURES WITHIN 7 DAYS IS INFEASIBLE (E.G., WHERE SNOW COVER, FROZEN GROUND, OR DROUGHT CONDITIONS PRECLUDE STABILIZATION).

ACCEPTANCE OF TEMPORARY STABILIZATION:
BEFORE ACCEPTANCE OF TEMPORARY STABILIZATION BY THE REGULATORY AGENCY AND THE DESIGN ENGINEER OR LANDSCAPE ARCHITECT, TEMPORARY STABILIZATION IS REQUIRED THAT IS SUFFICIENT TO CONTROL EROSION FOR A GIVEN AREA AND LENGTH OF TIME BEFORE THE NEXT PHASE OF CONSTRUCTION OR THE ESTABLISHMENT OF PERMANENT SEEDING IS TO COMMENCE. A SATISFACTORY STAND OF TEMPORARY STABILIZATION MEETING THE REQUIREMENTS OF THIS SPECIFICATION IS REQUIRED REGARDLESS OF THE TIME OF THE YEAR THE WORK IS PERFORMED.

TEMPORARY COVER BY MULCH:
USE TEMPORARY COVER BY MULCH WHERE IT IS NOT FEASIBLE OR PRACTICABLE TO BRING AN AREA TO FINAL GRADE AND GRADE. FINISH THE SURFACE SO THAT PERMANENT SEEDING CAN BE PERFORMED WITHOUT SUBSEQUENT DISTURBANCE BY ADDITIONAL GRADING.

TEMPORARY COVER BY SEEDING:
FOLLOWING THE PREPARATION OF THE SEEDBED, SOU SEED PER THE SEEDING TABLES AND APPLY AN APPROPRIATE MULCH PRIOR TO A RAINFALL EVENT THAT COMPACTS THE SEEDBED. THE CONTRACTOR MAY ADD GRANULAR LIME AND FERTILIZER AS NECESSARY TO ENHANCE GROWTH.

FINAL STABILIZATION

FINAL STABILIZATION IS DEFINED THAT ALL LAND -- DISTURBING ACTIVITIES AT THE CONSTRUCTION SITE HAVE BEEN COMPLETED AND THAT ON ALL AREAS NOT COVERED BY PERMANENT STRUCTURES, EITHER

1. A UNIFORM (E.G., EVENLY DISTRIBUTED, WITHOUT LARGE BARE AREAS) PERMANENT VEGETATIVE COVER WITH A DENSITY OF 70 PERCENT HAS BEEN ESTABLISHED, OR
2. EQUIVALENT PERMANENT STABILIZATION MEASURES (SUCH AS THE USE OF LANDSCAPING MULCH, RIPRAP, PAVEMENT, AND GRAVEL) HAVE BEEN IMPLEMENTED TO PROVIDE EFFECTIVE COVER FOR EXPOSED PORTIONS OF THE CONSTRUCTION SITE NOT STABILIZED WITH PERMANENT VEGETATION.

FINAL STABILIZATION BY VEGETATION MUST BE ACHIEVED WITH PERMANENT PERENNIAL VEGETATION PRIOR TO ISSUING THE NOTICE OF TERMINATION (NOT).

INITIATING PERMANENT SEEDING WITHIN 7 CALENDAR DAYS WHERE LAND DISTURBING ACTIVITIES HAVE TEMPORARILY CEASED ON THE PROJECT: WHERE LAND DISTURBING ACTIVITIES ARE RESUMED WITHIN 14 DAYS, STABILIZATION MEASURES ARE NOT REQUIRED TO BE INITIATED ON THAT PORTION OF THE PROJECT. INITIATE PERMANENT SEEDING MEASURES AS SOON AS PRACTICABLE FOR AREAS WHERE INITIATING PERMANENT SEEDING MEASURES WITHIN 7 DAYS IS INFEASIBLE (E.G., WHERE SNOW COVER, FROZEN GROUND, OR DROUGHT CONDITIONS PRECLUDE STABILIZATION). WHEN PERFORMING PERMANENT SEEDING FOR PERMANENT DETENTION PONDS, ENSURE THAT THE DETENTION POND IS CLEANED OF ANY DEPOSITED SEDIMENT AND GRADED TO THE REQUIRED PERMANENT DETENTION BASIN CONFIGURATION. ENSURE THE SEEDBED FOR THE PERMANENT SEEDING IS ESTABLISHED IN ACCORDANCE WITH THIS SPECIFICATION.

ACCEPTANCE OF PERMANENT SEEDING:
BEFORE ACCEPTANCE, A UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70% OF EACH SQUARE YARD OF THE SEEDBED AREA IS REQUIRED. A WELL DEVELOPED ROOT SYSTEM MUST BE ESTABLISHED TO SUFFICIENTLY SURVIVE DRY PERIODS AND WINTER WEATHER AND BE CAPABLE OF RE-ESTABLISHMENT IN THE SPRING.

PERMANENT SEEDING INSTALLATION:
FOLLOWING THE PREPARATION OF THE SEEDBED, PERFORM PERMANENT SEEDING PER THE SEEDING TABLES AND APPLY AN APPROPRIATE MULCH WITHIN 5 WORKING DAYS AND/OR PRIOR TO A RAINFALL EVENT THAT COMPACTS THE PREPARED SEEDBED. IF A RAIN EVENT OCCURS THAT COMPACTS OR ERODES THE SEEDBED PRIOR TO PERFORMING PERMANENT SEEDING, THE SEEDBED MUST BE RE-PREPARED PRIOR TO CONDUCTING PERMANENT SEEDING. ADD FERTILIZER AND LIME AS REQUIRED BY A SOIL TEST.

LIME

AGRICULTURAL GRANULAR LIME:
USE AGRICULTURAL GRADE, STANDARD GROUND LIMESTONE FOR ALL PERMANENT SEEDING APPLICATIONS AND SODDING APPLICATIONS.

APPLYING GRANULAR LIME:
A SOIL ANALYSIS IS RECOMMENDED PRIOR TO APPLICATION. APPLY AT A RATE WITHIN ±100% OF WEIGHT RECOMMENDATION OF SOIL ANALYSIS. DO NOT APPLY MORE THAN 2,500 LBS/ACRE OF LIME IN A SINGLE APPLICATION.

FAST ACTING LIME:
USE FAST ACTING LIQUID AND/OR DRY FORMS OF LIME FOR ALL TEMPORARY SEEDING AND PERMANENT SEEDING APPLICATIONS.

FERTILIZER

GRANULAR FERTILIZER:
USE FOR ALL PERMANENT SEEDING APPLICATIONS AND ALL SODDING APPLICATIONS. PROPER MIXTURE IS DEPENDENT ON THE EXISTING SOIL CONDITIONS AND IT IS RECOMMENDED THAT A SOIL ANALYSIS BE PERFORMED IF THE SOIL CONDITIONS ARE UNCERTAIN IN THE AREA OF FERTILIZER APPLICATION.

USE FERTILIZER THAT INCORPORATES A MINIMUM OF 50% WATER INSOLUBLE (SLOW RELEASE) ANIMAL BY-PRODUCT OR MUNICIPAL WASTE FERTILIZERS ARE NOT ACCEPTABLE UNDER THIS SPECIFICATION UNLESS A SOIL ANALYSIS IS PERFORMED TO DETERMINE OTHERWISE, A GOOD RULE OF THUMB GRANULAR FERTILIZER TO APPLY IN THE UPSTATE OF SOUTH CAROLINA IS 10-10-10.

IN NO CASE SHOULD A 20-20-20 FERTILIZER BE USED DUE TO THE POTENTIAL BURNING OF THE SEEDBED.

COMPOST SOIL AMENDMENT

FOR SEEDBEDS THAT HAVE LITTLE OR NO TOPSOIL, ARE HIGHLY ACIDIC, OR ARE LACKING SUFFICIENT NUTRIENTS TO SUSTAIN A HEALTHY STAND OF GRASS PLANT, AND MIX CERTIFIED WEED FREE COMPOST INTO THE SEEDBED TO ENSURE A GOOD STAND OF GRASS.

BIOLOGICAL GROWTH STIMULANT

USE FOR ALL PERMANENT SEEDING, SODDING, AND TEMPORARY SEEDING APPLICATIONS. ANIMAL BY-PRODUCTS OR MUNICIPAL WASTE PRODUCTS ARE NOT ACCEPTABLE, AND CAN CAUSE BURNING OF THE SEEDBED IF APPLIED AS SUCH.

SEEDING DATES AND RATES OF APPLICATION

PERFORM SEEDING DURING THE PERIODS AND AT THE RATES SPECIFIED IN THE SEEDING TABLES. DO NOT USE TEMPORARY COVER BY SEEDING OR PERMANENT SEEDING FOR PROJECTS WHEN

- THE GROUND IS FROZEN AND/OR WHEN THE 10-DAY FORECASTED LOW TEMPERATURE REMAINS BELOW 35 DEGREES FAHRENHEIT;
- THE GROUND IS EXCESSIVELY WET; OR
- THE GROUND IS EXCESSIVELY DRY PERIODS OF DROUGHT) UNLESS WATERING IS SPECIFIED.

DURING PERIODS OF ADVERSE CONDITIONS, USE TEMPORARY COVER BY MULCH.

SEEDBED PREPARATION

- ENSURE THAT THE AREAS RECEIVING PERMANENT SEEDING ARE UNIFORM AND CONFORM TO THE FINISHED GRADE OF THE PROJECT.
- PERFORM MINOR SHAPING AND EVENING OF UNEVEN AND ROUGH AREAS OUTSIDE OF THE GRADED AREA IN ORDER TO PROVIDE FOR MORE EFFECTIVE EROSION CONTROL, AND FOR EASE OF CURBING AND FINISHING OPERATIONS.
- CURBING AND FINISHING OPERATIONS (CUT SLOPES) TO A MINIMUM DEPTH OF THREE (3) INCHES BEFORE INITIATING PERMANENT SEEDING AND TEMPORARY SEEDING.
- AN ACCEPTABLE METHOD OF PREPARING THE SEEDBED ON SLOPES IS VERTICALLY TRACKING THE SEEDBED UP AND DOWN THE SLOPE WITH PROPER EQUIPMENT.
- REMOVE STONES LARGER THAN TWO (2) AND ONE-HALF (1½) INCHES IN ANY DIMENSION, LARGE DIRT CLOUDS, ROOTS, OR OTHER DEBRIS BROUGHT TO THE SURFACE.
- USE COMPOST IF GOOD SEEDBED MATERIAL IS NOT LOCATED ON SITE OR RESULTS OF THE SOIL TEST SHOW THE SEEDBED IS EXCESSIVELY NUTRIENT DEFICIENT TO THE EXTENT OF REQUIRING COSTLY FERTILIZER ADDITIONS AND/OR HAVE EXCESSIVELY LOW PH VALUES (LOWER THAN 5.0).
- CONSIDER THE USE OF MECHANICAL SEED BRILLS TO PERFORM PERMANENT SEEDING ON AREAS WHERE TEMPORARY SEEDING OR TEMPORARY COVER BY MULCH WAS PREVIOUSLY UTILIZED.

MULCH

REQUIRED FOR ALL PERMANENT SEEDING, TEMPORARY SEEDING, AND TEMPORARY COVER APPLICATIONS. TEMPORARY SEEDING AND TEMPORARY COVER APPLICATIONS WHEN THE APPLICATION AREA WILL REQUIRE, DO NOT USE MULCH IN AREAS WHERE CONCENTRATED FLOW IS EXPECTED. USE HEAP MULCH FOR ADDITIONAL GRADING PRIOR TO PERMANENT SEEDING. DO NOT USE EROSION CONTROL BLANKETS (ECB) OR TURF REINFORCEMENT MATTING (TRM) IN THIS SITUATION.

WOOD CHIP MULCH

WOOD CHIP MULCH IS NOT ACCEPTABLE FOR SEEDING APPLICATIONS. IF WOOD CHIP MULCH IS USED FOR TEMPORARY COVER BY MULCH, IT MUST BE REMOVED PRIOR TO PERFORMING PERMANENT SEEDING.

STRAW OR HAY MULCH WITH TACKIFIER

USE MATERIAL THAT IS CERTIFIED WEED DO NOT USE ON SLOPES STEEPER THAN 4H:1V. ANCHOR USING ONE OF THE FOLLOWING TACKING AGENTS:

- ORGANIC OR CHEMICAL TACKIFIER
- HYDRAULIC STRAW TACKIFIERS
- EMULSIFIED ASPHALT

APPLYING STRAW OR HAY

MULCH APPLY MATERIAL AT THE RATE OF 2,000 POUNDS PER ACRE.

COMPOST MULCH

ONLY USE FROM PRODUCER THAT PARTICIPATES IN THE USSA STC PROGRAM. DO NOT USE MATERIALS THAT HAVE BEEN TREATED WITH CHEMICAL PRESERVATIVES AS A COMPOST MULCH. DO NOT USE MIXED MUNICIPAL SOLID WASTE COMPOST.

HYDRAULIC EROSION CONTROL PRODUCTS (HEPCS)

USE AS AN ALLOWABLE MULCH FOR TEMPORARY COVER BY MULCH, TEMPORARY COVER BY SEEDING OR PERMANENT COVER BY SEEDING APPLICATIONS. DO NOT USE AS A CHANNEL LINER OR FOR AREAS RECEIVING CONCENTRATED FLOW.

TEMPORARY EROSION CONTROL BLANKETS (ECB) AND TURF REINFORCEMENT MATTING (TRM)

CONSIDER FOR PERMANENT SEEDING APPLICATION AREAS WITH STEEP SLOPES OR AREAS WHERE THERE IS A SIGNIFICANT EROSION PROBLEM OR POTENTIAL FOR EROSION. USE IN AREAS WHERE CONCENTRATED FLOW IS EXPECTED. DO NOT USE FOR TEMPORARY SEEDING APPLICATIONS WHEN THE APPLICATION AREAS WILL REQUIRE ADDITIONAL GRADING OR MODIFICATIONS PRIOR TO PERMANENT SEEDING.

PROTECTION OF STRUCTURES

COVER ANY PARTS OF BRIDGES, CULVERTS, GUARDRAILS, SIGNS, SIDEWALKS, CURB AND GUTTERS, CATCH BASINS, PIPE ENDS, AND OTHER STRUCTURES AS NECESSARY TO PREVENT DISCOLORATION BEFORE SPRAYING HEPCS, ORGANIC OR CHEMICAL TACKIFIERS.

SLOPE INTERRUPTION

THE MAXIMUM ALLOWABLE CONTINUOUS SLOPE LENGTH FOR STRAW OR HAY MULCH, HEPCS, COMPOST AND ECB APPLICATIONS IS 50 FEET. SLOPE INTERRUPTION DEVICES (SUCH AS SEDIMENT TUBES) OR TRMS ARE REQUIRED FOR CONTINUOUS SLOPE LENGTH LONGER THAN 50 FEET.

INSPECTION

ENSURE THAT ALL SEED, SOU, FAST ACTING LIME, BIOLOGICAL GROWTH STIMULANTS, AGRICULTURAL GRANULAR LIME, GRANULAR FERTILIZER, STRAW AND HAY MULCH, HEPCS, COMPOST MULCH, AND EGDS ARE APPLIED AS SPECIFIED. THE DESIGN ENGINEER OR LANDSCAPE ARCHITECT, OR MEMBER OF THE DESIGN ENGINEER OR LANDSCAPE ARCHITECT STAFF MUST DOCUMENT ON-SITE THAT THESE MATERIALS ARE APPLIED CORRECTLY BY COMPLETING AND SIGNING PROPER FORMS.

MAINTENANCE

PERFORM ALL MAINTENANCE NECESSARY TO KEEP STABILIZATION AREAS IN A SATISFACTORY CONDITION UNTIL THE WORK IS FINALLY ACCEPTED. THIS INCLUDES MOWING, REPAIRING AREAS OF EROSION AND WASHES, AND APPLYING ADDITIONAL SEED, FERTILIZER, AND MULCH TO AREAS WHERE A SATISFACTORY STAND OF GRASS HAS NOT BEEN ACHIEVED.

MOWING

MOW ROAD SHOULDERS AND MEDIANS WHEN VEGETATION REACHES A HEIGHT OF APPROXIMATELY 18 TO 24 INCHES. DO NOT PERFORM EXCESSIVE MOWING OF SLOPES RESULTING IN RUTS, FURROWS OR GROOVES. DO NOT PERFORM EXCESSIVE MOWING OF SLOPES THAT INHIBITS THE ESTABLISHMENT OF THE SLOPE VEGETATION. DO NOT PERFORM MOWING WHEN SOIL AND WEATHER CONDITIONS ARE SUCH THAT RUTTING OR OTHER DAMAGE TO THE PROJECT MAY OCCUR.

ENSURE MOWING RESULTS IN A UNIFORM VEGETATION HEIGHT OF 4 TO 6 INCHES, UNLESS OTHERWISE DIRECTED. WHEN UTILIZING A NURSE CROP FOR PERMANENT SEEDING, MOW MILLET (NO LOWER THAN 3 INCHES) ONCE IT REACHES A HEIGHT OF 18 INCHES TO REDUCE COMPETITIVENESS WITH THE PERMANENT VEGETATION. MOW WHEAT AND RYE GRASS (NO LOWER THAN 3 INCHES) ONCE THEY REACH A HEIGHT OF 6-8 INCHES TO REDUCE COMPETITIVENESS WITH PERMANENT VEGETATION.

SOD

INITIATE SOD APPLICATIONS WITHIN 7 CALENDAR DAYS WHERE LAND DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED ON THE PROJECT. INITIATE SOD APPLICATIONS MEASURES AS SOON AS PRACTICABLE FOR AREAS WHERE INITIATING SOD APPLICATIONS WITHIN 7 DAYS IS INFEASIBLE (E.G., WHERE SNOW COVER, FROZEN GROUND, OR DROUGHT CONDITIONS PRECLUDE STABILIZATION). USE SOD ON SLOPES LESS THAN 2H:1V.

ACCEPTANCE OF SOD:
ACCEPTANCE IS CONTINGENT ON ESTABLISHING A SATISFACTORY STAND OF PERENNIAL GRASS. SOD APPLICATION AREAS ARE ACCEPTABLE WHEN ALL REQUIREMENTS INCLUDING MAINTENANCE ARE MET AND A HEALTHY, EVENLY COLORED, VIABLE STAND OF GRASS IS ESTABLISHED. A SATISFACTORY STAND OF GRASS MUST HAVE A ROOT SYSTEM THAT IS SUFFICIENT TO SURVIVE DRY PERIODS AND WINTER WEATHER AND IS CAPABLE OF RE-ESTABLISHING IN THE SPRING.

- DO NOT USE SODDING ON SLOPES STEEPER THAN 2H:1V AND IF SODDING IS MOWED, DO NOT PLACE ON SLOPES GREATER THAN 3H:1V. INSTALL WARM SEASON SOD BETWEEN MARCH 1ST AND SEPTEMBER 1ST. INSTALL COOL SEASON SOD ANYTIME DURING THE YEAR AS LONG AS THE SOIL IS NOT FROZEN AND DOES NOT PLACE SOD ON:
- SOIL THAT IS EXCESSIVELY WET;
 - SOIL THAT IS FROZEN AND/OR WHEN THE 10-DAY FORECASTED LOW TEMPERATURE REMAINS BELOW 35 DEGREES FAHRENHEIT;
 - SOIL THAT IS EXCESSIVELY DRY PERIODS OF HEAT OR DROUGHT) UNLESS WATERING IS SPECIFIED;
 - SOIL THAT IS COMPOSED OF COMPACTED LAY; AND
 - SOIL THAT HAS BEEN TREATED WITH PESTICIDES.

SOD BED PREPARATION:

- ENSURE THE SOD BED IS UNIFORM AND CONFORMS TO THE FINISHED GRADE OF THE PROJECT.
- LOOSEN THE SOD BED TO A MINIMUM DEPTH OF 3 INCHES BEFORE PLACING SOD.
- FURNISH AND PLACE TOPSOIL OR COMPOST IN THE SOD BED IN AREAS WHERE THE EXISTING SOD BED HAS LITTLE OR NO TOPSOIL.
- LAY SOD WHEN SOD BED IS MOST MOIST. DRY SOD BEDS BEFORE SOD IS LAY. SOD MATERIAL SHOULD BE FREE OF DISEASE, INSECT PESTS, WEEDS, OTHER OR ASSSES, STONES, AND ANY OTHER HARMFUL OR DETRIMENTAL MATERIALS.

SOD INSTALLATIONS:
ENSURE SOD IS NOT INSTALLED UNTIL THE END OF THE PROJECT OR WHEN FINAL STABILIZATION IS ACHIEVED ON ADJACENT AREAS OF THE PROJECT THAT DRAIN OR DISCHARGE TO THE SOD APPLICATION.

GRASSING NOTES:

1. ON ANY PORTION OF THE SITE WHERE CONSTRUCTION HAS TEMPORARILY OR PERMANENTLY CEASED, ALL DISTURBED AREAS SHALL BE STABILIZED WITH GRASS AS SOON AS PRACTICAL, BUT NOT EXCEEDING FOURTEEN (14) DAYS AFTER WORK HAS CEASED. TEMPORARY GRASS SHALL BE APPLIED IN AREAS WHERE FUTURE CONSTRUCTION WILL RE-DISTURB THIS AREA, OTHERWISE, PERMANENT GRASS SHALL BE APPLIED.
2. IN ANY AREA IN WHICH TEMPORARY GRASS HAS BEEN APPLIED, THE GRASS SHALL BE MOWED AND THE SEED BED RE-SCARIFIED BEFORE PERMANENT GRASS APPLICATION.
3. BEFORE PERMANENT GRASS SEEDING IS PERFORMED, THE ENGINEER/ OWNER SHALL BE NOTIFIED FOR AN ON SITE INSPECTION OF THE PREPARED SEED BED AND FOR AN INSPECTION OF THE QUANTITIES OF MATERIAL TO BE APPLIED. CALL (864) 582-0585 TO SCHEDULE AN INSPECTION. ANY PROPOSED MODIFICATIONS TO THE GRASSING SPECIFICATIONS AND/OR METHODOLOGY SHOULD BE SUBMITTED TO THE ENGINEER WELL IN ADVANCE OF GRASSING ACTIVITIES. MODIFICATIONS MAY OR MAY NOT BE APPROVED.
4. THE CONTRACTOR SHALL PROVIDE A CERTIFIED LETTER INDICATING THE QUANTITIES OF MATERIAL APPLIED PER ACRE.
5. BEFORE ACCEPTANCE OF THE SEEDING PERFORMED FOR THE ESTABLISHMENT OF PERMANENT VEGETATION, THE CONTRACTOR WILL BE REQUIRED TO PRODUCE A UNIFORM VEGETATIVE COVER WITH A DENSITY OF 60% OF THE SEEDBED AREA.
6. PERMANENT GRASS SHALL BE PROVIDED FOR ALL DISTURBED AREAS WITH THE FOLLOWING CRITERIA:
 - A. LIME SHALL BE AGRICULTURAL GRADE GROUND LIMESTONE CONTAINING AT LEAST 34% MAGNESIUM CARBONATE.
 - B. SEED SHALL BE A MINIMUM 90 % PURITY AND 80 % GERMINATION.
 - C. AREAS TO HAVE GRASS APPLIED SHALL BE SCARIFIED CULTIVATED TO A DEPTH OF 3 INCHES, WITH ALL CLOUDS OR CLUMPS GREATER THAN 3" BROKEN UP AND FOREIGN MATERIAL INCLUDING ROCK, ROOTS, AND MISC. DEBRIS REMOVED.
 - D. FERTILIZER AND LIME SHALL BE THOROUGHLY WORKED INTO THE SOIL, AND THE SURFACE RAKED SMOOTH BEFORE APPLYING SEED.
 - E. SEED SHALL BE APPLIED EVENLY AT THE MINIMUM RATE AND RAKED IN LIGHTLY WITH APPROXIMATELY 1/4" TOPSOIL COVER. SEEDBED AREAS SHALL BE DRESSED SMOOTH, THEN MULCH (STRAW) SHALL BE APPLIED MECHANICALLY.
 - F. AREAS SHALL BE SPRAYED IMMEDIATELY WITH AN EMULSION TO BIND SEED AND MULCH.
7. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ALL MAINTENANCE NECESSARY TO KEEP SEEDBED AREAS IN SATISFACTORY CONDITION UNTIL THE WORK IS ACCEPTED. THIS INCLUDES MOWING, IRRIGATING, REPAIRING OF EROSION WASHES, AND ADDITIONAL SEED, FERTILIZER AND MULCH APPLIED TO AREAS WHERE A SATISFACTORY STAND OF GRASS HAS NOT BEEN ACHIEVED. ALL COSTS INCLUDING IRRIGATING AND MOWING TO BE INCLUDED IN BASE BID PRICE.
8. PAYMENT TO THE CONTRACTOR SHALL NOT EXCEED 75 % OF THE CONTRACT PRICE FOR GRASS UNTIL A SATISFACTORY STAND OF PERMANENT GRASS HAS BEEN OBTAINED.
9. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A STAND OF GRASS WITH A ROOT SYSTEM THAT HAS DEVELOPED SUFFICIENTLY TO SURVIVE DRY PERIODS AND WINTER WEATHER AND BE CAPABLE OF RE-ESTABLISHMENT IN THE SPRING. THE CONTRACTOR SHALL WARRANT ALL GRASS FOR A PERIOD OF 1 YEAR BEGINNING FROM THE DATE OF ACCEPTANCE BY THE OWNER/ENGINEER.
10. ALL COSTS FOR PROVIDING AN ACCEPTABLE STAND OF GRASS SEEDING (PERMANENT OR TEMPORARY SEEDINGS) SHALL BE INCLUDED IN BASE BID PRICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INCLUDING THE FOLLOWING:
 - ALL BELT-HOOKS AND BELT-HOOKS TO BE REMOVED FROM THE REASON SPECIFIED.
 - ROCKS, ROOTS AND OTHER OBSTRUCTIONS AND CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE SURFACE OF THE SEEDBED. SURFACE OF COMPLETED AREAS SHALL BE GRASSING SUITABLE FOR RESIDENTIAL GRADE EQUIPMENT.
11. UPON PROVIDING A STAND OF GRASS (PERMANENT) THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MAINTENANCE NECESSARY TO KEEP SEEDBED AREAS IN SATISFACTORY CONDITION UNTIL THE WORK IS ACCEPTED. THIS INCLUDES MOWING, REPAIRING AREAS OF EROSION AND WASHES, AND APPLYING ADDITIONAL SEED, FERTILIZER, AND MULCH TO AREAS WHERE A SATISFACTORY STAND OF GRASS HAS NOT BEEN ACHIEVED.

CONTRACTOR SHALL TILL DISC AND/OR HARROW IF NECESSARY TO ACHIEVE THIS.

IF NO SOIL TEST IS TAKEN, FERTILIZER AND LIME SHALL BE APPLIED ACCORDING TO THE SEEDING SPECIFICATIONS.

IF SOIL TEST IS TAKEN, APPLY FERTILIZER AND LIME IN ACCORDANCE W/SOIL TEST RECOMMENDATIONS.

LIME AND FERTILIZER SHALL BE APPLIED UNIFORMLY AND MIXED WITH THE SOIL DURING SEEDBED PREPARATION.

CONTRACTOR SHALL STABILIZE ALL NON-PAVED DENUDED SURFACES USING HYDRAULICALLY APPLIED FLEXTERRA FGM IMMEDIATELY AFTER FINISH GRADING AND PRIOR TO FIRST RAINFALL THEREAFTER. STRICTLY COMPLY WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS AND APPLICATION RATES.

TEMPORARY GRASSING SCHEDULE

TEMPORARY GRASS JAN 1 - MAY 1

COMMON NAME	PLANTING RATE
RYE (GRAIN)	75 LB/ACRE
ANNUAL LESPEDEZA	50 LB/ACRE
MULCH (STRAW)	4000 LB/ACRE
AGRICULTURAL LIMESTONE	3000 LB/ACRE
FERTILIZER 17-17-17	500 LB/ACRE

TEMPORARY GRASS MAY 1 - MAY 15

COMMON NAME	PLANTING RATE
GERMAN MILLET	75 LB/ACRE
MULCH (STRAW)	4000 LB/ACRE
AGRICULTURAL LIMESTONE	3000 LB/ACRE
FERTILIZER 17-17-17	500 LB/ACRE

TEMPORARY GRASS AUG 15 - DEC 30

COMMON NAME	PLANTING RATE
RYE (GRAIN)	75 LB/ACRE
MULCH (STRAW)	4000 LB/ACRE
AGRICULTURAL LIMESTONE	3000 LB/ACRE
FERTILIZER 17-17-17	500 LB/ACRE

PERMANENT GRASSING SCHEDULE

COMMON NAME	PLANTING RATE	PLANTING DATES														
		JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR				
COMMON BERMUDA GRASS	125 LBS/ACRE															
CRIMSON CLOVER	30 LBS/ACRE															
BROWN TOP MILLET	15 LBS/ACRE															
FERTILIZER 17-17-17	500 LBS/ACRE															
AGRICULTURE LIMESTONE	3000 LBS/ACRE															
TALL FESCUE (KY-31)	250 LBS/ACRE															
COMMON BERMUDA GRASS WITH MULLS	75 LBS/ACRE															
CRIMSON CLOVER	15 LBS/ACRE															
PERENNIAL RYE GRASS	30 LBS/ACRE															
FERTILIZER 17-17-17	500 LBS/ACRE															
AGRICULTURE LIMESTONE	3000 LBS/ACRE															

*** SLOPES 3:1 AND GREATER, ADD 75 LB/ACRE LOVEGRASS TO SEED MIX.

ALL DISTURBED AREAS NOT RECEIVING SHALL RECEIVE HYDRAULICALLY APPLIED FLEXTERRA FGM IMMEDIATELY AFTER FINISHING GRADING AND PRIOR TO FIRST RAINFALL EVENT. APPLICATION AND INSTALLATION OF FLEXTERRA SHALL STRICTLY COMPLY WITH MANUFACTURER'S RECOMMENDATIONS.

ALL SLOPES 3:1 OR GREATER SHALL RECEIVE MATTING AND FLEXTERRA FGM.

MULCH APPLICATION TABLE

MULCH	APPLICABLE SLOPE (H:V)	MINIMUM APPLICATION RATE (LBS/ACRE-DRY)
WOOD CHIPS	7:41	500 CY/ACRE
STRAW OR HAY WITH TACKIFIER	7:41	2,000
HECP TYPE 1	7:41	2,000
HECP TYPE 2	4:1 < 3:2:1	2,500
HECP TYPE 3	3:1 < 2:2:1	3,000
HECP TYPE 4	2:1 < 2:1	3,500
COMPOST MULCH	7:41	4,000 (TEMP COVER ONLY)
		200 CY/ACRE

- 1) THE MAXIMUM ALLOWABLE CONTINUOUS SLOPE LENGTH FOR ALL MULCH APPLICATIONS IS 50 FEET. SLOPE INTERRUPTION DEVICES OR TRMS ARE REQUIRED FOR CONTINUOUS SLOPE LENGTH LONGER THAN 50 FEET.
- 2) STRICTLY COMPLY WITH THE MANUFACTURER'S MOWING RECOMMENDATION FOR THE ACTUAL SLOPE STEEPNESS AND THE ACTUAL CONTINUOUS SLOPE LENGTH OF THE APPLICATION.
- 3) HECP TYPE 4 MAY BE USED FOR PERMANENT COVER APPLICATIONS ON SLOPES 3:1 OR GREATER AT A MOWING RATE OF 4000 POUNDS PER ACRE.

ECB AND TRM APPLICATION TABLE

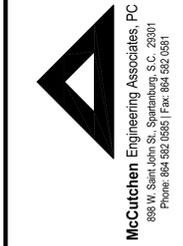
ECB/TRM TYPE	SLOPE (H:V)	MINIMUM SLOPE LENGTH (FT)
TEMPORARY ECB OR TYPE 1 TRM	7:41	5
TYPE 2 TRM	7:1:1	5
TYPE 3 TRM	7:1:1	5

- 1) STRICTLY COMPLY WITH THE MANUFACTURER'S SPECIFICATIONS.
- 2) THE MAXIMUM ALLOWABLE CONTINUOUS SLOPE LENGTH FOR ECBs IS 30 FEET. SLOPE INTERRUPTION DEVICES OR TRMS ARE REQUIRED FOR CONTINUOUS SLOPE LENGTH LONGER THAN 30 FEET.

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SPARTANBURG COUNTY SCHOOLS



Project
SPARTANBURG SCHOOL DISTRICT 2
BOILING SPRINGS 9TH GRADE ACADEMY - PARKING LOT
2251 OLD FURNACE ROAD, SPARTANBURG 29316

Sheet Title
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