

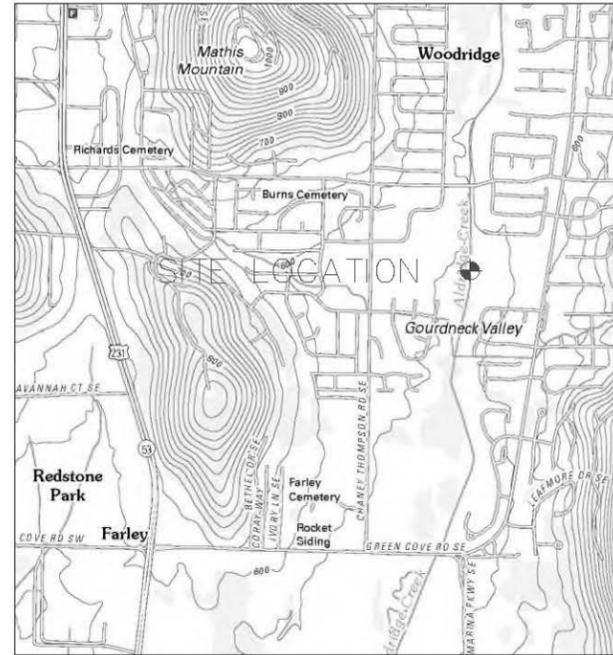
LRN-0-4450600 PN-15.37
City of Huntsville
Aldridge Creek
Exhibit A Location Map

LRN-0-4450600 PN 15-37
City of Huntsville
Aldridge Creek
Exhibit B Sheet 1 of 30

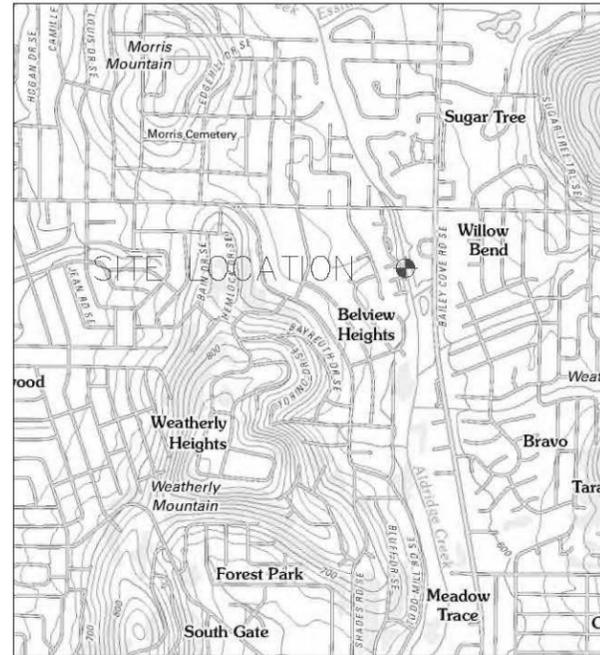
**ALDRIDGE CREEK STREAM DREDGING AND
 CHANNEL MAINTENANCE PLANS**
 HUNTSVILLE, MADISON COUNTY, ALABAMA

NOT FOR CONSTRUCTION

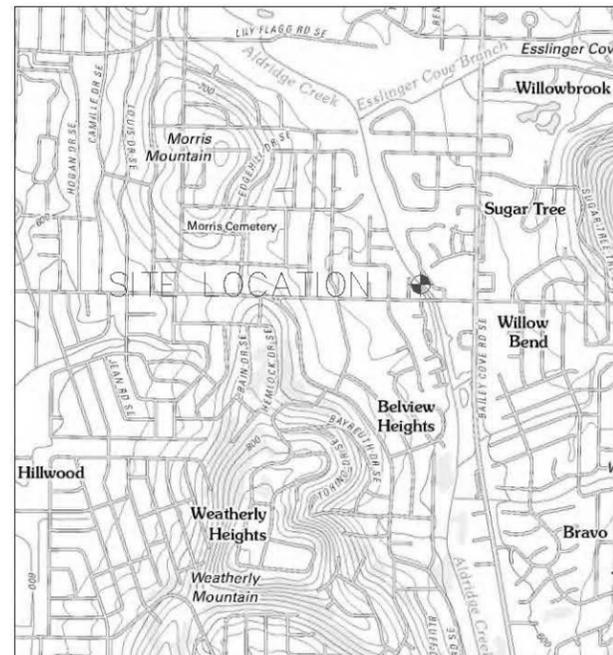
PREPARED FOR:
 CITY OF HUNTSVILLE
 320 FOUNTAIN CIRCLE
 HUNTSVILLE, ALABAMA 35801



PROJECT 1
 USGS QUADRANGLE: FARLEY, AL
 NO 1 TO SCALE



PROJECT 2
 USGS QUADRANGLE: HUNTSVILLE, AL
 NO 1 TO SCALE



PROJECT 3
 USGS QUADRANGLE: HUNTSVILLE, AL
 NO 1 TO SCALE



PROJECT 4
 USGS QUADRANGLE: FARLEY, AL
 NO 1 TO SCALE

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1. COVER AND INDEX

PROJECT 1

2. EXISTING SITE CONDITIONS (1 OF 2)
3. EXISTING SITE CONDITIONS (2 OF 2)
4. PROPOSED GRADING (1 OF 2)
5. PROPOSED GRADING (2 OF 2)
6. EROSION AND SEDIMENT CONTROL PLAN (ESC PLAN) (1 OF 2)
7. EROSION AND SEDIMENT CONTROL PLAN (ESC PLAN) (2 OF 2)
8. RESTORATION AND BANK STABILIZATION (1 OF 2)
9. RESTORATION AND BANK STABILIZATION (2 OF 2)

PROJECT 2B

10. EXISTING SITE CONDITIONS (1 OF 3)
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20. RESTORATION AND BANK STABILIZATION (2 OF 3)
21. RESTORATION AND BANK STABILIZATION (3 OF 3)

PROJECT 3

22. EXISTING SITE CONDITIONS
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24. EROSION AND SEDIMENT CONTROL PLAN (ESC PLAN)
25. RESTORATION AND BANK STABILIZATION

PROJECT 4

26. EXISTING SITE CONDITIONS
27. PROPOSED GRADING
28. EROSION AND SEDIMENT CONTROL PLAN (ESC PLAN)
29. RESTORATION AND BANK STABILIZATION

30. DETAIL SHEET

PREPARED BY:



S&ME, INC.
 399 EXECUTIVE DRIVE
 HUNTSVILLE, AL 35816



NO.	DATE	DESCRIPTION	BY

ALDRIDGE CREEK STREAM DREDGING AND FLOODWAY MAINTENANCE HUNTSVILLE, MADISON COUNTY, ALABAMA	
COVER AND INDEX	

ENGINEERING LICENSE NO.	
DRAWN BY: JKJ	CHECKED BY: CRO
DESIGNED BY:	APPROVED BY:
PROJECT NUMBER: 1824-13-166	
SCALE: AS NOTED	DATE: 09/22/2015
DRAWING: 1	OF: 30

LRN-0-4450600 PN-15-37
City of Huntsville
Aldridge Creek
Exhibit B Sheet 4 of 30



WWW.SMEINC.COM
 1415 TOWNSEND ROAD
 HUNTSVILLE, AL 35894
 PH: (256) 837-1000

NO.	DATE	DESCRIPTION	BY

ALDRIDGE CREEK
HUNTSVILLE, AL

PROJECT 1
 PROPOSED GRADE
 PAGE 1 OF 2

ENGINEERING LICENSE NO.

DRAWN BY: JKJ CHECKED BY: CRO

DESIGNED BY:

APPROVED BY:

PROJECT NUMBER
1824-13-166

SCALE: 1" = 30' FT DATE: 06/22/2015

DRAWING: **4**

OF: **30**

LRN-0-4450600 PN-15-37
City of Huntsville
Aldridge Creek
Exhibit B Sheet 6 of 30



EROSION & SEDIMENT CONTROL PLAN LEGEND:

- EX GROUND CONTOUR 1FT
- SF — TEMPORARY SILT FENCE
- SW — STRAWWATTLE CHECK DAM
- LIMITS OF EXCAVATION

GENERAL EROSION CONTROL NOTES:

1. CLEAR AND GRUB AS NECESSARY TO INSTALL INITIAL EROSION AND SEDIMENT CONTROL MEASURES.
2. LOCATIONS OF SILT FENCE AND OTHER EMPS DEPICTED HERE ARE APPROXIMATE. ACTUAL LOCATIONS TO BE DETERMINED IN FIELD BASED ON ACTUAL SITE CONDITIONS.
3. LOCATIONS OF SILT FENCE AND OTHER EMPS MAY BE MOVED TO ALLOW FOR CONSTRUCTION IN DIFFERENT PHASES.
4. IF SOIL STOCKPILING IS REQUIRED, A SILT FENCE PERIMETER SHALL BE CONSTRUCTED AROUND SOIL STOCKPILE TO DIVERT AND FILTER STORMWATER RUNOFF.
5. IN SOME INSTANCES STRAWWATTLES OR EROSION FELS MAY BE USED IN PLACE OF SILT FENCING TO PROVIDE TEMPORARY PROTECTION.
6. THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL DEVICES AT LEAST TWICE A WEEK (72 HOURS BETWEEN INSPECTIONS). THE CONTRACTOR SHALL PERFORM ANY REQUIRED REPAIRS OR MAINTENANCE IMMEDIATELY IN ORDER TO ENSURE EFFECTIVE EROSION AND SEDIMENT CONTROL.
7. THE CONTRACTOR SHALL MAINTAIN A RECORD OF ALL INSPECTIONS AND MAINTENANCE ACTIVITIES AT THE PROJECT SITE.
8. ALL DISTURBED AREAS WHERE CONSTRUCTION ACTIVITY WILL BE SUSPENDED FOR MORE THAN 15 DAYS SHALL BE SEEDDED FOR TEMPORARY EROSION CONTROL.
9. SEED AND STABILIZE DISTURBED AREAS AS SOON AS PRACTICABLE USING PERMANENT PLANTINGS IF APPROPRIATE FOR TIME OF YEAR. ALL CONSTRUCTION AND EROSION AND SEDIMENT CONTROL MEASURES MUST CONFORM WITH THE PROJECT PLANS AND SPECIFICATIONS, AS WELL AS THE ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT REGULATIONS, AND OTHER RELATED GOVERNMENT AGENCY REQUIREMENTS.

WWW.SMEINC.COM
1415 TORRENCE ROAD
 LOWELL, AL 36226
 PH: (256) 837-1111

NO.	DESCRIPTION	DATE	BY

**ALDRIDGE CREEK
HUNTSVILLE, AL**

PROJECT 1
EROSION AND SEDIMENT CONTROL PLAN
PAGE 1 OF 2

ENGINEERING LICENSE NO.

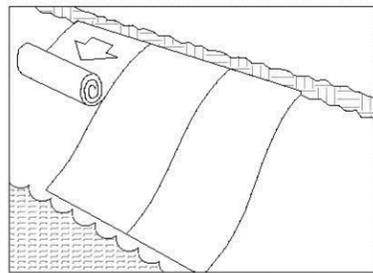
DRAWN BY: JKJ CHECKED BY: CRO
 DESIGNED BY: APPROVED BY:

PROJECT NUMBER
1824-13-166

SCALE: 1 1/4" = 30 FT DATE: 06/22/2015

DRAWING: 6

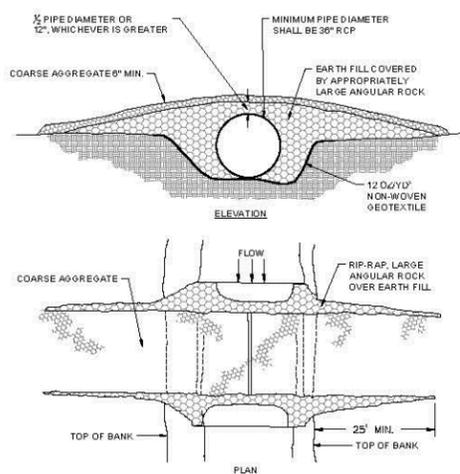
OF: 30



- ROLLED EROSION CONTROL PRODUCT (RECP) SHALL BE APPLIED TO THE BANKS OF THE NOW CHANNEL AS SHOWN ON DRAWINGS. RECP FOR THE STREAM BANKS SHALL BE NORTH AMERICAN GREEN BIONET C125 OR ENGINEER APPROVED EQUIVALENT.
- PREPARE SOIL BEFORE INSTALLING RECPs, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER AND SEED. THE SURFACE OF THE SOIL SHOULD BE SMOOTH AND FREE OF ROCKS, ROOTS, AND OTHER OBSTRUCTIONS TO PREVENT BRIDGING OF THE RECP.
- BEGIN AT THE TOP OF THE BANK BY ANCHORING THE RECP IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP OVER SEED AND COMPACTED SOIL. SECURE RECP OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP.
- ROLL THE RECP (A) DOWN OR (B) HORIZONTALLY ACROSS THE BANK. ALL RECPs MUST BE SECURELY FASTENED TO THE SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS RECOMMENDED BY THE MANUFACTURER.
- THE EDGES OF ALL HORIZONTAL AND VERTICAL SEAMS MUST BE STAPLED/STAKED WITH APPROXIMATELY 8" OVERLAP. SEAM OVERLAP SHOULD BE SHINGLED ACCORDING TO THE PREDOMINANT EROSION ACTION.
- THE EDGE OF THE RECP AT OR BELOW NORMAL WATER LEVEL MUST BE ANCHORED BY PLACING STAPLES/STAKES IN A 6" DEEP X 6" WIDE ANCHOR TRENCH. ANCHOR RECP WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART IN THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- USE WIRE STAPLES OF GAUGE 11 OR LOWER AND A MINIMUM LENGTH OF 8". IF WOODEN STAKES ARE USED, THE MINIMUM LENGTH IS 12". ANCHORS SHOULD BE LONG ENOUGH TO PROVIDE A STRONG BOND BETWEEN THE RECP AND THE SOIL SURFACE.
- IN LOOSE SOIL CONDITIONS, THE USE OF LONGER STAPLE OR STAKE LENGTHS MAY BE NECESSARY TO PROPERLY SECURE THE RECP.

SOURCE: NORTH AMERICAN GREEN AND ROLANKA

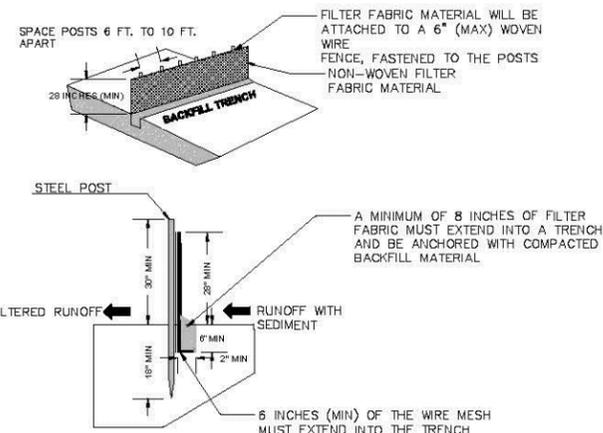
1 ROLLED EROSION CONTROL PRODUCT Scale: 1/8"



TEMPORARY STREAM CROSSING NOTES:

- PIPE SHALL BE A MINIMUM OF 36" DIAMETER.
- CLEARING OF STREAMBED AND BANKS SHALL BE KEPT TO A MINIMUM.
- THE STRUCTURE SHALL BE REMOVED AS SOON AS IT IS NO LONGER NECESSARY FOR PROJECT CONSTRUCTION.
- UPON REMOVAL OF STRUCTURE, THE STREAM SHALL IMMEDIATELY BE RESTORED TO ITS ORIGINAL CROSS-SECTION AND PROPERLY STABILIZED.
- THE INVERT ELEVATION OF THE CULVERT SHALL BE INSTALLED ON THE NATURAL STREAMBED GRADE.
- THE CULVERT(S) SHALL EXTEND A MINIMUM OF ONE FOOT BEYOND THE UPSTREAM AND DOWNSTREAM TOE OF THE AGGREGATE. IN NO CASE SHALL THE CULVERT EXCEED 40 FEET IN LENGTH.
- THE CULVERT SHALL BE COVERED WITH A MINIMUM OF ONE FOOT OF AGGREGATE.

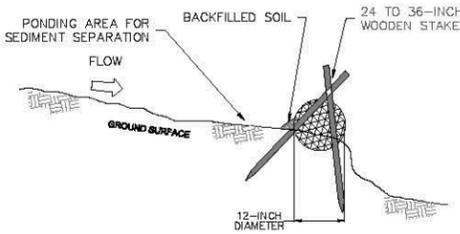
2 TEMPORARY STREAM CROSSING (TYP.) Scale: 1/8"



SILT FENCE NOTES:

- SILT FENCE FOR THIS PROJECT SHALL BE TYPE B SILT FENCE.
- 48" STEEL POSTS SHALL BE USED. POSTS SHALL BE SPACED 6 FT. TO 10 FT. APART.
- SILT FENCE SHOULD NOT BE INSTALLED ACROSS STREAMS, DITCHES, WATERWAYS, OR OTHER CONCENTRATED FLOW AREAS.
- ALL SILT FENCE SHOULD BE INSTALLED ALONG THE CONTOUR, NOT UP OR DOWN A SLOPE EXCEPT AT ENDS WHERE SILT FENCE SHOULD BE TURNED UPSLOPE A MINIMUM OF 5'.
- SEDIMENT SHALL BE REMOVED ONCE IT HAS ACCUMULATED TO 1/2 THE ORIGINAL HEIGHT OF THE SILT FENCE. FILTER FABRIC SHALL BE REPLACED WHENEVER IT HAS DETERIORATED TO SUCH AN EXTENT THAT THE EFFECTIVENESS OF THE FABRIC IS REDUCED (APPROXIMATELY 6 MONTHS).
- ALL SEDIMENT ACCUMULATED AT THE FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF BEFORE FENCE IS REMOVED.

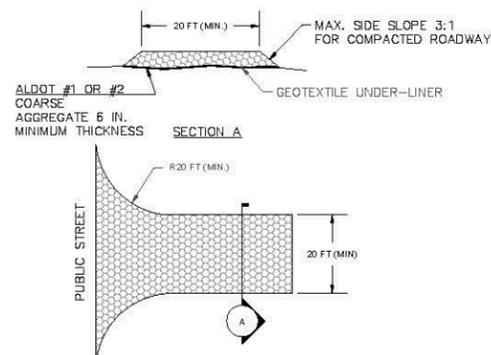
3 SILT FENCE (SF) Scale: 1/8"



STRAW WATTLE NOTES:

- STRAW WATTLES MUST BE INSTALLED PRIOR TO BEGINNING EARTHWORK.
- STRAW WATTLES MUST BE 12 INCHES IN DIAMETER.
- EACH WATTLE MUST BE INSTALLED IN A 2-3" DEEP X 9" WIDE ANCHOR TRENCH. EXCAVATED SOIL SHOULD BE PLACED UP-SLOPE FROM THE ANCHOR TRENCH.
- PLACE THE WATTLE IN THE TRENCH SO THAT IT CONTOURS TO THE SOIL SURFACE. COMPACT SOIL FROM THE EXCAVATED TRENCH AGAINST THE WATTLE ON THE UPSLOPE. ADJACENT WATTLES SHOULD TIGHTLY ABUT.
- SECURE THE WATTLE WITH TWO 24-36" STAKES AT EACH END AND WITH A MAXIMUM SPACING OF 2 FEET. STAKES SHOULD BE DRIVEN AT ANGLES THROUGH THE WATTLE NETTING AND SHOULD CROSS ABOVE THE WATTLE TO SECURE IT.

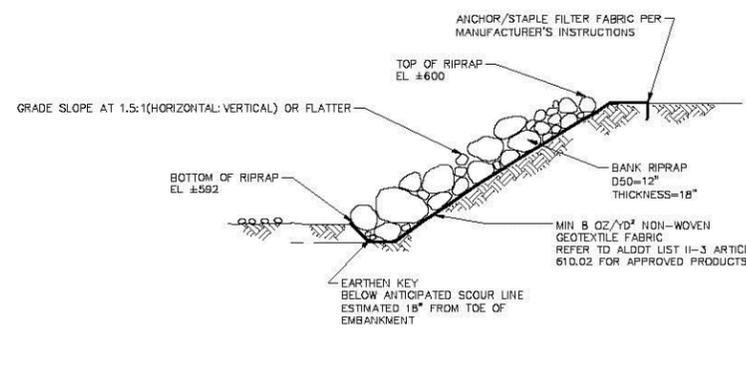
4 STRAW WATTLE (TYP.) (SW) Scale: 1/8"



CONSTRUCTION EXIT NOTES:

- A STABILIZED ENTRANCE PAD OF ALDOT #1 OR #2 COARSE AGGREGATE (1.5 TO 3.5 INCH STONE) HAVING A MINIMUM THICKNESS OF 6 INCHES SHALL BE LOCATED WHERE TRAFFIC WILL ENTER OR LEAVE THE CONSTRUCTION SITE ONTO A PUBLIC STREET. CONTRACTOR IS RESPONSIBLE FOR PREVENTING TRUCKS FROM LEAVING SITE WITH ROCKS OR DEBRIS LODGED BETWEEN TIRES OR ON CROSS MEMBERS.
- THE EXIT AREA SHALL BE EXCAVATED TO A DEPTH OF 3 INCHES AND CLEARED OF ALL VEGETATION AND ROOTS PRIOR TO LAYING GEOTEXTILE AND PLACING GRAVEL.
- THE TURNING RADIUS ENTERING & EXITING THE CONSTRUCTION ENTRANCE MUST BE SUFFICIENT TO ACCOMMODATE LARGE TRUCKS AND SHALL BE A MINIMUM OF 20 FEET.
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC STREETS OR EXISTING PAVEMENT. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS WARRANT AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- ANY SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC STREETS MUST BE REMOVED IMMEDIATELY.
- UNDER-LINER SHALL BE A 6 OZ/YD² NON-WOVEN GEOTEXTILE.
- EXISTING GRAVEL DRIVE MAY BE USED FOR CONSTRUCTION EXIT IF SUFFICIENT FOR PREVENTING TRACKING OF SEDIMENT ONTO PUBLIC STREETS OR EXISTING PAVEMENT.

5 CONSTRUCTION EXIT Scale: 1/8"



RIPRAP STABILIZATION DETAIL

GENERAL NOTES:

- BASE DRAWINGS FOR THE PROJECT PROVIDED BY SMITH ENGINEERING COMPANY, INC.
- LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING AND PLANNED UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE DRAWINGS, BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY AND AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE FEATURES AFFECTING THE WORK. ANYTHING NOT SHOWN ON THESE DRAWINGS SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE AND SHALL NOT CONSTITUTE AN EXTRA, UNLESS APPROVED BY THE OWNER.
- THE CONTRACTOR SHALL CONTACT THE OWNER IMMEDIATELY CONCERNING ANY CONFLICTS ARISING DURING CONSTRUCTION OF ANY IMPROVEMENTS SHOWN ON THESE DRAWINGS.
- LOCATION OF EXISTING UTILITIES, PUBLIC OR PRIVATE, ARE APPROXIMATE ONLY. ALL UTILITIES MAY NOT BE SHOWN ON THESE DRAWINGS. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS TO NOTIFY THEM OF WORK IN THE AREA AND REQUEST THEM TO LOCATE THEIR RESPECTIVE UTILITY. THESE NOTIFICATIONS SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY (ALABAMA LINE LOCATION CENTER 1-800-292-9525).
- IN THE EVENT OF DAMAGE TO EXISTING UTILITIES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REPAIRS TO ORIGINAL CONDITIONS AND RELATED EXPENSES.
- ALL CONSTRUCTION ACTIVITIES AND MATERIALS IN RIGHTS-OF-WAY SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RIGHTS-OF-WAY HOLDERS.
- APPROPRIATE STEPS SHALL BE TAKEN TO ENSURE THAT PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE PREVENTED FROM ENTERING WATERS OF THE STATE. ALL SPILLS MUST BE REPORTED IMMEDIATELY AND MEASURES SHALL BE TAKEN TO PREVENT THE POLLUTION OF WATERS IN THE STATE.
- SEED AND STABILIZE DISTURBED AREAS AS SOON AS PRACTICABLE USING PERMANENT PLANTINGS IF APPROPRIATE FOR TIME OF YEAR. SEE MOST RECENT EDITION OF ADEM EROSION AND SEDIMENT CONTROL HANDBOOK FOR SPECIFICATIONS.
- WATER SEEDED AREAS AS NEEDED TO MAINTAIN GROWTH BUT NOT TO THE EXTENT TO CAUSE EROSION.
- MEASURES SHALL BE IMPLEMENTED TO MEET LOCAL, STATE, AND FEDERAL REQUIREMENTS FOR SAFETY.
- UNDER NO CIRCUMSTANCES SHALL S&ME, INC. OR ANY OTHER ENTITIES BESIDES THE CONTRACTOR AND THEIR SUBCONTRACTORS BE ASSUMED TO BE RESPONSIBLE FOR SITE SAFETY DURING CONSTRUCTION.
- OBSERVATION VISITS TO THE JOB SITE BY FIELD REPRESENTATIVES OF THE ENGINEER SHALL NEITHER BE CONSTRUCTED AS INSPECTION NOR APPROVAL OF CONSTRUCTION.
- IF THE CONTRACTOR DISCOVERS ANY ERRORS, OMISSIONS, OR DISCREPANCIES IN THE DRAWINGS, SPECIFICATIONS, OR OTHER CONTRACT DOCUMENTS, HE SHALL CONTACT THE ENGINEER PRIOR TO PROCEEDING. THE ENGINEER WILL THEN ISSUE INSTRUCTIONS ON HOW TO PROCEED.

SEEDING NOTES:

- PREPARE SOIL TO ELIMINATE UNEVEN AREAS AND LOW SPOTS. MAINTAIN LINES, LEVELS, PROFILES AND CONTOURS. MAKE CHANGES IN GRADE GRADUAL. BLEND SLOPES INTO LEVEL AREAS.
- IF THE AREA HAS BEEN RECENTLY LOOSED OR DISTURBED, NOT FURTHER ROUGHENING IS REQUIRED.
- WHEN THE AREA IS COMPACTED, CRUSTED, OR HARDENED, THE SOIL SURFACE SHALL BE LOOSENED BY DISKING, RAKING, HARROWING, OR OTHER MEANS TO A DEPTH AS DIRECTED BY THE ENGINEER.
- REMOVE FOREIGN MATERIALS, WEEDS AND UNDESIRABLE PLANTS AND THEIR ROOTS.
- SEED SHALL CONSIST OF 80% TALL FESCUE (KY 31 OR SIMILAR) AND 20% ANNUAL RYE GRASS. SEED SHALL BE EVENLY APPLIED WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER.
- GRASSES AND LEGUMES SHALL BE PLANTED NO MORE THAN 14-INCH DEEP. RAKE IN LIGHTLY. DO NOT SEED AREAS IN EXCESS OF THAT WHICH CAN BE COVERED OR MULCHED ON THE SAME DAY.
- REFER TO THE MOST RECENT EDITION OF THE ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL, AND STORMWATER MANAGEMENT ON CONSTRUCTION SITE AND URBAN AREAS FOR MULCHING DETAILS.
- DO NOT SOW IMMEDIATELY FOLLOWING RAIN, WHEN GROUND IS TOO DRY, OR WHEN WINDS EXCEED 12 MPH.
- AREAS THAT FAIL TO ESTABLISH VEGETATIVE COVER ADEQUATE TO PREVENT RILL EROSION WILL BE RE-SEED AS SOON AS SUCH AREAS ARE IDENTIFIED.



NO.	DATE	DESCRIPTION	BY

ALDRIDGE CREEK HUNTSVILLE, AL
DETAIL SHEET

ENGINEERING LICENSE NO.	
DRAWN BY: JJK	CHECKED BY: CRO
DESIGNED BY:	APPROVED BY:
PROJECT NUMBER: 1824-13-166	
SCALE: 1 IN = 30 FT	DATE: 8/22/2015
DRAWING: 30	OF: 30

LRN-0-4450600 PN-15-37
City of Huntsville
Aldridge Creek
Exhibit B Sheet 30 of 30