

DETERMINING THE CRITICAL ROOT ZONE

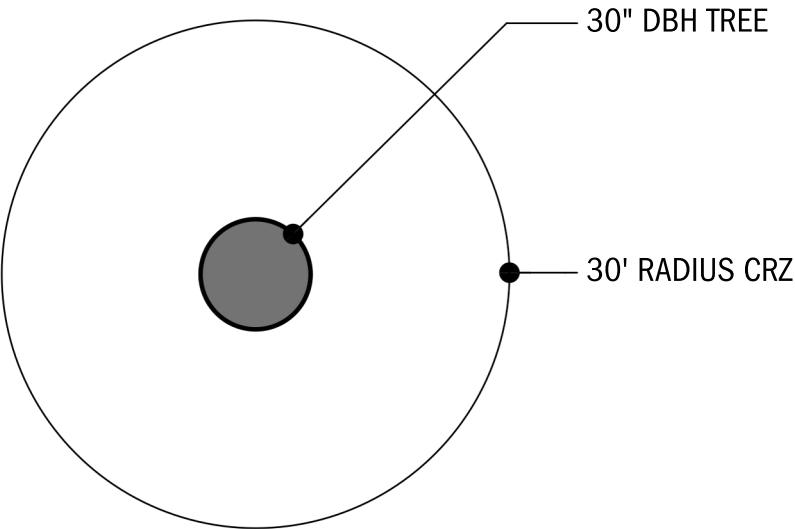
THE CRITICAL ROOT ZONE OF A TREE IS THE ZONE IN WHICH THE MAJORITY OF A TREE'S ROOTS LAY. 85% OF ROOTS OF MOST TREES WILL BE FOUND IN THE TOP 24" OF THE SOIL. OF THOSE, THE MAJORITY OF THE ROOTS THAT SUPPLY THE NUTRIENTS AND WATER TO THE TREE ARE FOUND IN THE UPPERMOST LAYER, JUST BELOW THE SOIL SURFACE. THE TOTAL AMOUNT OF A TREE'S ROOTS ARE GENERALLY PROPORTIONAL TO THE VOLUME OF THE TREE'S CANOPY. THEREFORE, IF THE ROOTS ONLY PENETRATE A THIN LAYER OF SOIL, THEN THE ROOTS MUST SPREAD FAR FROM THE TREE, BEYOND THE LIMITS OF THE CANOPY. GENERALLY ROOTS SPREAD OUT 2-3X THE HEIGHT OF THE TREE.

ROOTS ARE VITAL TO THE FUNCTIONING OF ANY TREE. THEY PROVIDE STRUCTURAL SUPPORT AS WELL AS THE MAJOR MECHANISM FOR NUTRIENT AND WATER UPTAKE FOR USE BY THE REST OF THE TREE. DESTROYING A SECTION OF A TREE'S ROOTS WILL ULTIMATELY RESULT IN A PROPORTIONAL LOSS OF THE TREE'S CANOPY

THE CRITICAL ROOT ZONE OF A TREE TO BE SAVED SHALL BE THE MINIMUM AREA PROTECTED WITH TREE PROTECTION FENCING.

THE FOLLOWING IS THE METHOD USED BY THE CITY OF GREENVILLE, SC TO DETERMINE THE SIZE OF THE CRITICAL ROOT ZONE.

1" DBH = 1' RADIUS OF
THE CRITICAL ROOT ZONE
(DBH=DIAMETER BREAST HEIGHT)

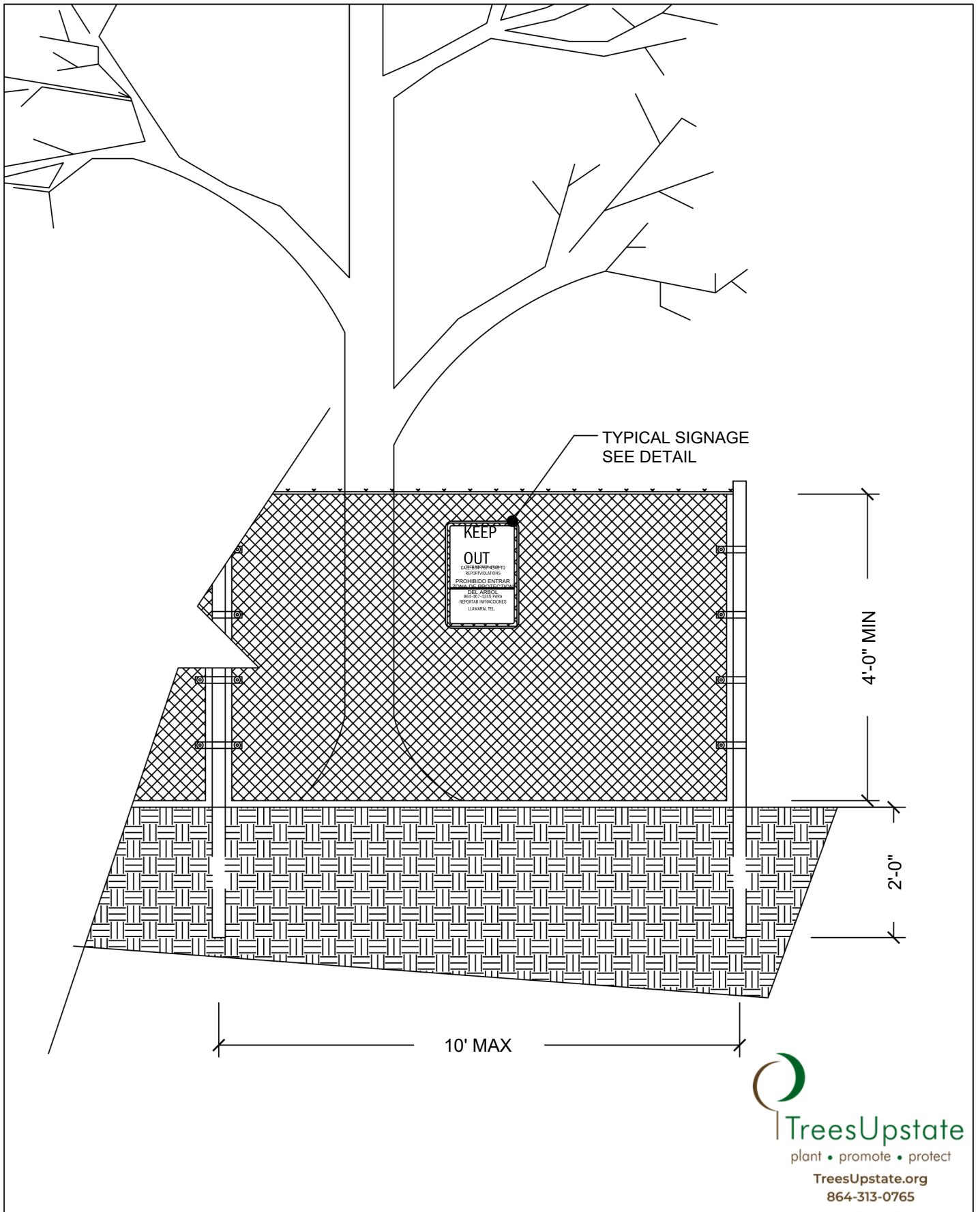


NOTE: DRAWINGS ARE NOT TO SCALE. USE AS A GUIDE FOR DETERMINING MINIMUM CRZ

CRITICAL ROOT ZONE DETAIL

PROJECT NO.	REVISION	NO.	DATE	BY/CHKD
DATE October 11, 2017				
DESIGNED BY ANDREW HEDGECOCK				





 **TreesUpstate**
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864-313-0765

TREE PROTECTION FENCE ELEVATION

PROJECT NO.	REVISION	NO.	DATE	BY/CHKD
DATE October 11, 2017				
DRAWN BY ANDREW WELLS				
CHECKED BY ANDREW WELLS				



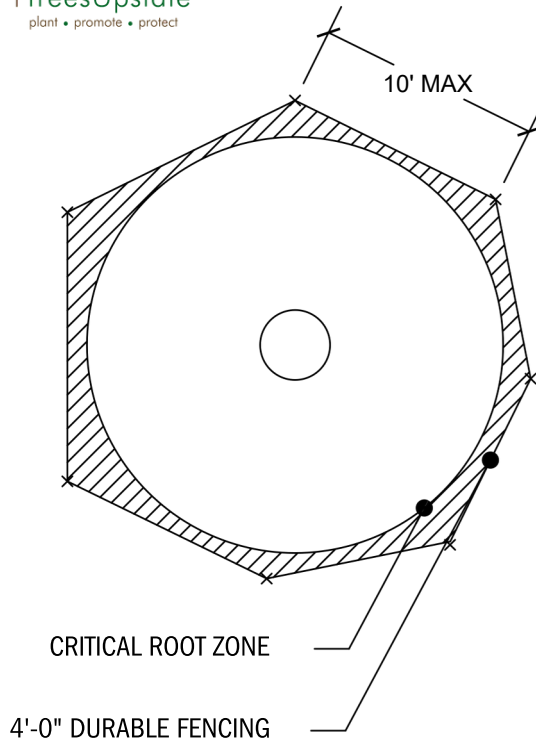
TREE PROTECTION FENCING NOTES

1. TREE PROTECTION SHALL FENCE SHALL BE MINIMUM 5 FEET TALL CONSTRUCTED OF STURDY MATERIAL (CHAIN LINK OR EQUIVALENT STRENGTH/DURABILITY). MOUNTED ON VERTICAL PIPES DRIVEN 2'-0" IN THE GROUND, AT APPROXIMATELY 8'-0" TO 10'-0" (MAX.) ON CENTER, WITH NO GATES.

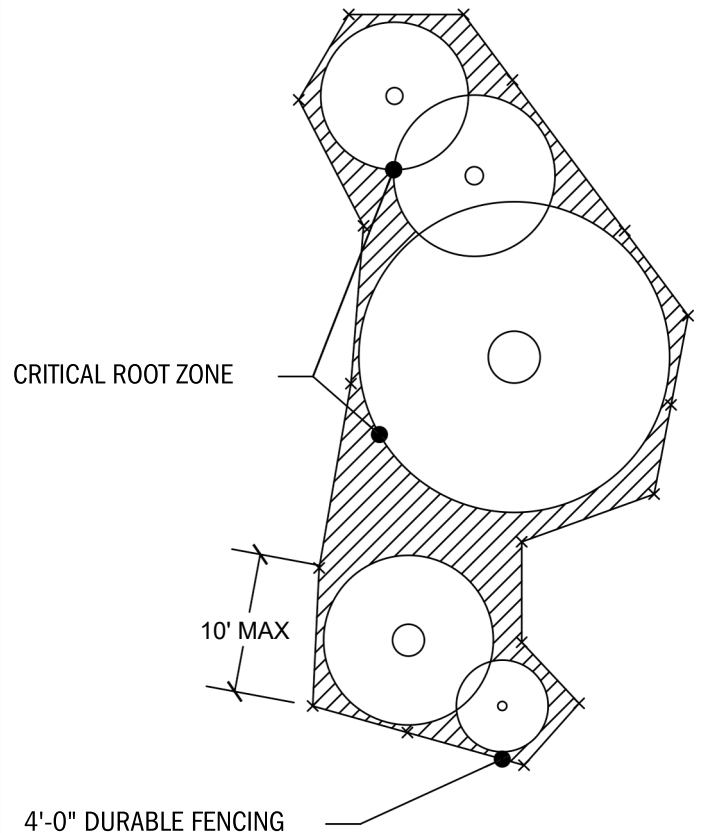
IN AREAS WHERE SUPER SILT FENCE (SSF) AND TREE PROTECTION FENCE RUN PARALLEL, SSF MAY BE UTILIZED FOR TREE PROTECTION PURPOSES UPON APPROVAL BY THE CITIES' URBAN FORESTER.

2. TREE PROTECTION FENCING SHALL BE ERECTED AT THE CRITICAL ROOT ZONE OR BEYOND PRIOR TO START OF ANY CLEARING, GRADING, OR OTHER CONSTRUCTION ACTIVITY. SIGNS STATING "NO ENTRY, TREE PROTECTION AREA, CALL 864467-4345 TO REPORT VIOLATIONS" ARE TO BE POSTED IN BOTH ENGLISH AND SPANISH. SEE REFERENCE DETAIL 2.A. TREE PROTECTION SHALL NOT BE REMOVED UNTIL COMPLETION OF ALL CONSTRUCTION ACTIVITY.

3. FOR QUESTIONS RELATED TO TREE PROTECTION OR FOR FIELD INSPECTION OF TREE PROTECTION, CONTACT THE CITIES URBAN FORESTER AT 864-467-4345



SINGLE OR SPECIMEN TREE



MULTIPLE OR CLUSTERED TREES

TREE PROTECTION FENCE

PROJECT NO.	REVISION	NO.	DATE	BY/CHKD
DATE				
October 11, 2017				
DESIGNED BY				
ANDREW'S REVISION				
ANDREW'S REVISION				



12" STANDARD SIGN DETAIL

18" STANDARD SIGN DIMENSION

KEEP

OUT

TREE PROTECTION

CALL: 864-467-4350 TO
REPORT VIOLATIONS



PROHIBIDO ENTRAR
ZONA DE PROTECTION

DEL ARBOL

TEL. 864-467-4350 PARA
REPORTAR INFRACCIONES

TREE PROTECTION SIGNAGE FOR THE
PRESERVATION AREA

PROJECT NO.	REVISION	NO.	DATE	BY/ORD
DATE				
July 21, 2010				
DESIGNED BY				
APPROVED BY				
ISSUED FOR				

