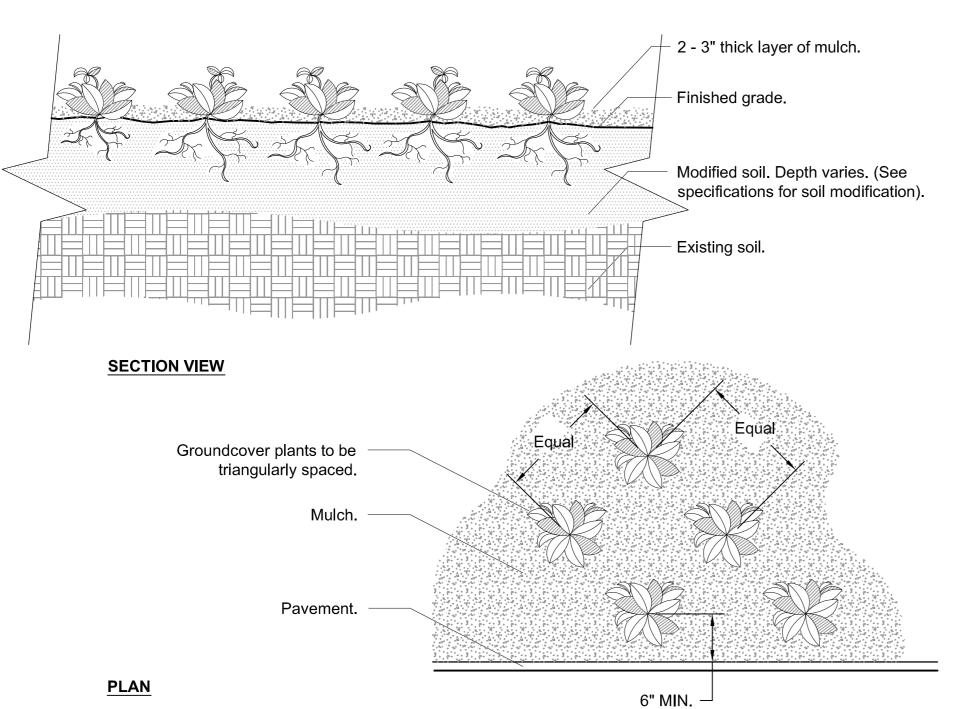


Shrub. Rootball. 4" high x 8" wide round - topped soil 4" layer of mulch. berm above root ball surface shall be No more than 1" of constructed around the root ball. mulch on top of Berm shall begin at root ball periphery. root ball. (See specifications for mulch). Prior to mulching, lightly tamp soil around the root ball in 6" lifts to brace Finished grade. shrub. Do not over compact. When the Slope sides of planting hole has been backfilled, pour water around the root ball to settle the loosened soil. Loosened soil. Dig and turn the soil to reduce the Existing soil. compaction to the area and depth shown. Root ball rests on existing or recompacted soil. **SECTION VIEW**

1- Shrubs shall be of quality prescribed in the root observations detail and specifications.

2- See specifications for further requirements related to this detail.

SHRUB - UNMODIFIED SOIL



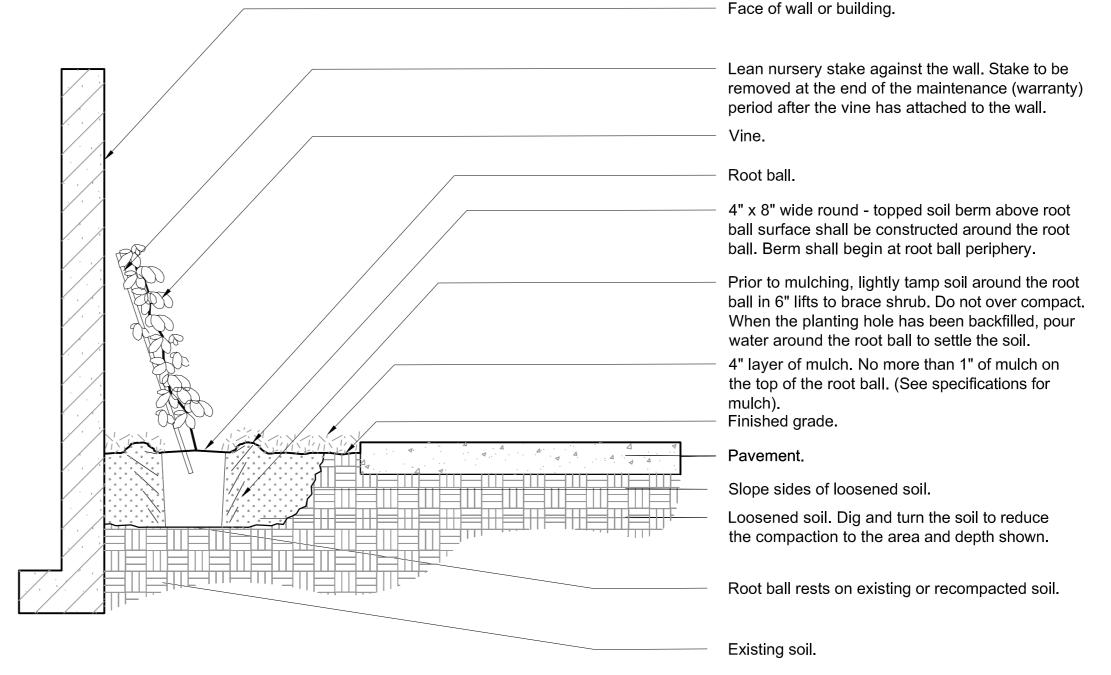
1- See planting legend for groundcover species, size, and spacing dimension.

2- Small roots (¼" or less) that grow around, up, or down the root ball periphery are considered a normal condition in container production and are acceptable however they should be eliminated at the time of planting. Roots on the periperhy can be removed at the time of planting. (See root ball shaving container detail).

3- Settle soil around root ball of each groundcover prior to mulching.

GROUNDCOVER



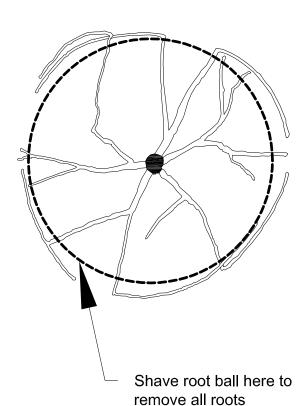


1- Vines shall be of quality as prescribed in the root observations detail and specifications.

2- See specifications for further requirements related to this detail.

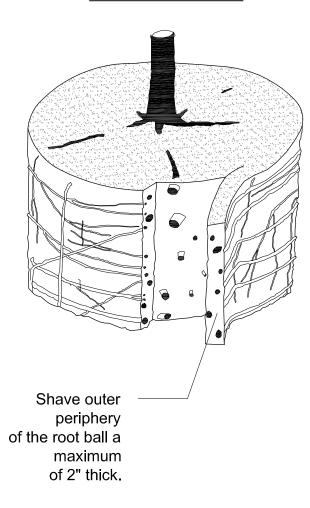
VINE - UNMODIFIED SOIL

BEFORE SHAVING

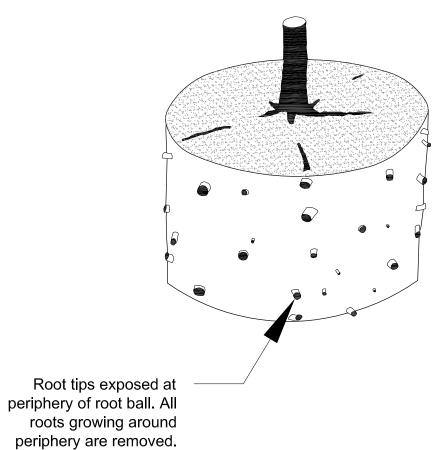


SHAVING PROCESS

growing on periphery.



SHAVING COMPLETE



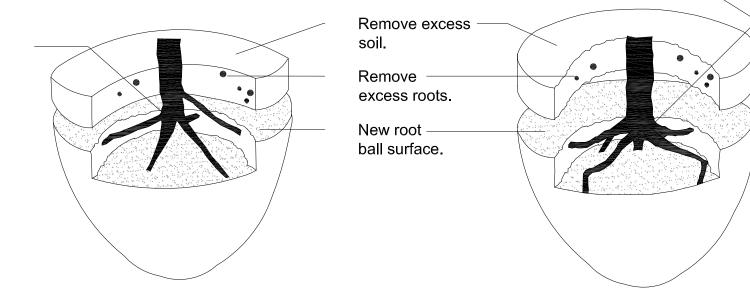
1- Shaving to be conducted using a sharp blade or hand saw eliminating no more than needed to remove all roots on the periphery of root ball.

2- Shaving can be performed just prior to planting or after placing in the hole.



ROOT BALL SHAVING CONTAINER **DETAIL**

Step 1 - Remove soil and roots over the root collar.



Tree planted too deeply in root ball. Remove excess soil and roots to meet root inspection detail.

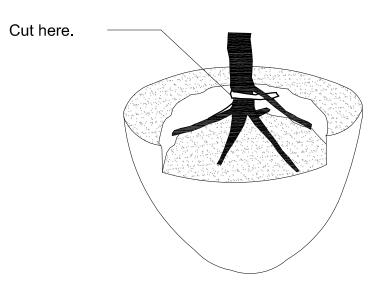
Tree planted too deeply in root ball. Remove excess soil and roots to meet root inspection detail.

Root collar.

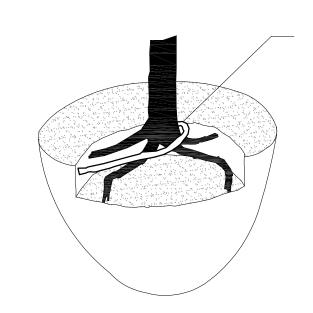
Cut here.

Step 2 - Remove defects.

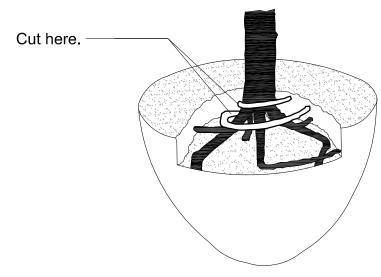
Root collar



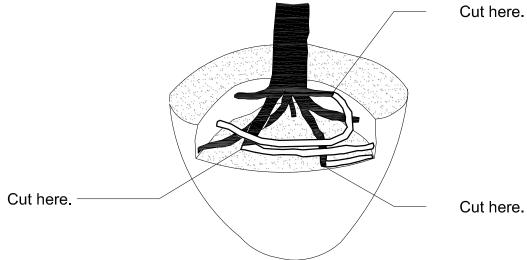
Five structural (large) roots shown in black. Remove structural (white) root wrapping root collar.



Four structural roots shown in black. Remove root (white) growing over structural roots.



Six structural roots shown in black. Remove structural roots (white) growing over root collar by cutting them just before they make an abrupt turn.



Seven structural roots shown in black. Remove structural roots (white) growing around or over root collar by cutting them just before they make an abrupt turn.



Remove structural roots (4 shown in black) deflected on root ball periphery. Small roots ($\frac{1}{4}$ " or less) at the periphery of the root ball are not defined as defects and do not need to be removed.

1- All trees shown are rejectable unless they undergo recommended correction.

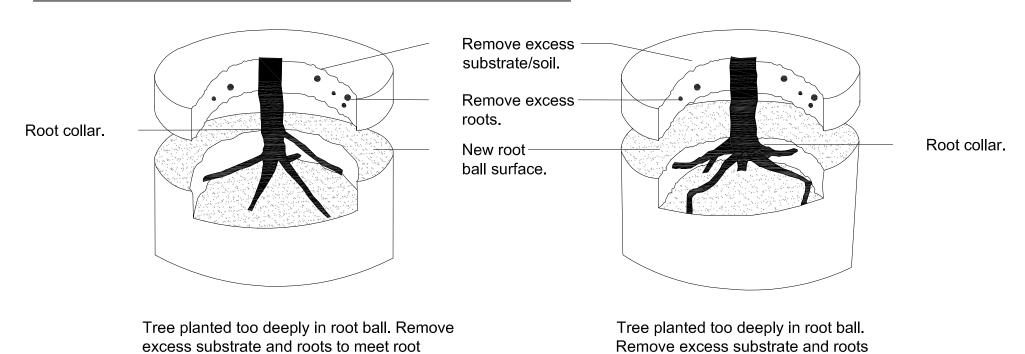
Remove structural roots (4 shown in

black) extending from root ball.

- 2- First step 1, then step 2. Adjust hole depth to allow for the removal of excess soil and roots over the root collar.
- 3- Roots and soil may be removed during the correction process; substrate/soil shall be replaced after the correction has been completed. 4- Trees shall pass root observations detail following correction.

ROOT CORRECTION DETAIL - BALLED AND BURLAPPED

Step 1 - Remove substrate over root collar.

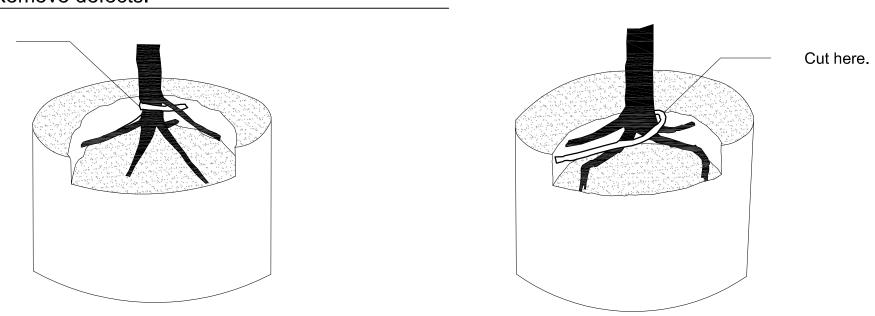


Step 2 - Remove defects.

Cut here.

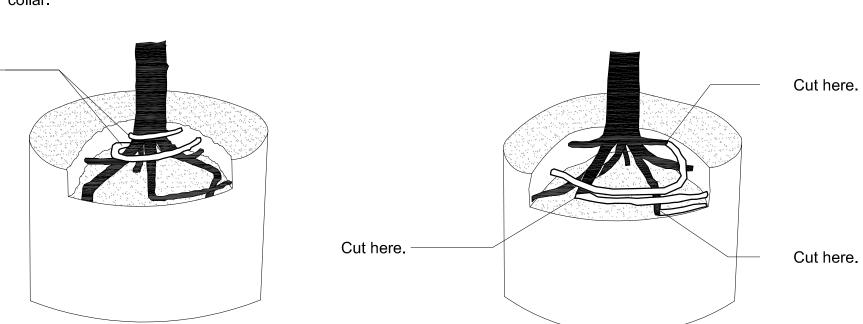
Cut here.

inspection detail.

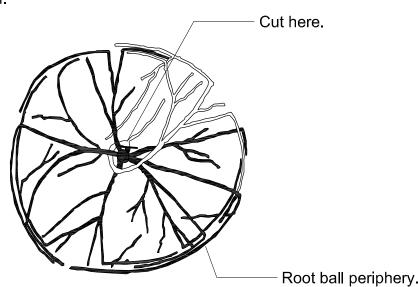


to meet root inspection detail.

Five structural (large) roots shown in black. Remove structural root (white) wrapping root



Six structural roots shown in black. Remove roots (white) growing over root collar by cutting them just before they make an abrupt



Cut structural root just before it makes abrupt turn. Pruning cut should be made tangent (parallel) to the trunk.

Seven structural roots shown in black. Remove structural roots (white) growing around or over root collar by cutting them just before they make an abrupt turn.

Four structural roots shown in black. Remove root

(white) growing over structural roots.

Cut structural roots just before they make abrupt turn by cutting tangent (parallel) to the trunk (two cuts shown).

Notes:

1- All trees shown are rejectable unless they undergo recommended correction.

- 2- First Step 1, then Step 2. Roots and soil may be removed during the correction process; substrate/soil shall be replaced after correction has been completed.
- 3- Trees shall meet root observations detail following correction.
- 4- Small roots (1/4" or less) on the periphery of the root ball are common with container plant production. These small roots are not defined as "defects" and can be addressed at the time of installation (See root ball shaving container detail).

ROOT CORRECTION DETAIL - CONTAINER

LANDSCAPE NOTES

- 1. PLANTS DESIGNATED "B&B" IN THE PLANT LIST SHALL BE BALLED AND BURLAPPED. THEY SHALL BE DUG WITH FIRM, NATURAL BALLS OF EARTH OF SUFFICIENT DIAMETER AND DEPTH TO ENCOMPASS THE FIBROUS AND FEEDING ROOT SYSTEM NECESSARY FOR FULL RECOVERY OF THE PLANT. BALLS SHALL BE FIRMLY WRAPPED WITH BURLAP OR SIMILAR MATERIAL AND BOUND WITH TWINE OR CORD.
- 2. ONLY "HEMP" BURLAP AND TWINE SHALL BE USED. NO TREATED OR PRESERVED BURLAP OR TWINE IS ALLOWED. ALL HEMP TWINE ATTACHED TO THE TREE TRUNK IS TO BE REMOVED AFTER PLANTING. AT A MINIMUM THE TOP ONE-THIRD OF THE ROOT BALL IS TO HAVE ALL BURLAP AND TWINE REMOVED.
- 3. THE BALLS OF "B&B" PLANTS WHICH CANNOT BE PLANTED IMMEDIATELY ON DELIVERY SHALL BE COVERED WITH MOIST SOIL OR MULCH, OR OTHER PROTECTION FROM DRYING WINDS AND SUN. ALL PLANTS SHALL BE WATERED BY LANDSCAPE CONTRACTOR AS NECESSARY UNTIL FINAL ACCEPTANCE.
- 4. NO PLANT SHALL BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK OR DISFIGURE THE BRANCHES.
- 5. TREE BALLS SHALL HAVE A DIAMETER IN FEET EQUAL TO 10" FOR EACH CALIPER INCH OF THE TREE TO BE TRANSPLANTED.
- 6. ALL PLANTS SHALL BE HANDLED SO THAT ROOTS ARE ADEQUATELY PROTECTED AT ALL TIMES. DURING SHIPMENT, THE ENTIRE PLANT SHALL BE PROTECTED BY TARPAULINS OR OTHER SUITABLE COVERING. PLANT MATERIAL SUFFERING FROM WIND BURN OR OTHER WIND DAMAGE IS NOT A CCEPTABLE.
- 7. NO PLANT SHALL BE BOUND WITH ROPE OR WIRE AS NOT TO DAMAGE THE BARK, BREAK BRANCHES, OR DESTROY ITS NATURAL SHAPE. NO PLANT MATERIAL REQUIRED TO BE BALLED AND BURLAPPED SHALL BE ACCEPTED IF THE BALL IS CRACKED OR BROKEN EITHER BEFORE OR DURING THE PROCESS OF PLANTING, OR WHEN BURLAP, STAVES, ROPES OR PLATFORM REQUIRED HAVE BEEN REMOVED.
- PRIOR TO THE START OF WORK, THE LANDSCAPE CONTRACTOR SHALL ASCERTAIN THE LOCATION OF ALL SURFACE AND UNDERGROUND UTILITIES, ETC., AND SHALL TAKE PROPER PRECAUTIONS TO PREVENT DAMAGE TO SUCH IMPROVEMENTS. IN THE EVENT ANY UTILITIES ARE UNCOVERED, THE LANDSCAPE CONTRACTOR SHALL PROMPTLY NOTIFY THE LANDSCAPE ARCHITECT. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL UTILITIES FROM DAMAGE DURING CONSTRUCTION AND TO REPAIR ANY DAMAGE WHICH SHOULD OCCUR TO THE SATISFACTION OF THE OWNER.
- 9. ANY SERIES OF TREES OR SHRUBS TO BE PLACED IN A PARTICULAR ARRANGEMENT WILL BE FIELD CHECKED FOR ACCURACY BY THE CONTRACTOR. ANY PLANTS INCORRECTLY ARRANGED SHALL BE RELOCATED WITH THE LANDSCAPE ARCHITECT'S APPROVAL.
- 10. EXAMINE SUB-GRADE UPON WHICH WORK IS TO PERFORMED. VERIFY SUB-GRADE ELEVATIONS, OBSERVE CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED, AND PROVIDE PERCOLATION TESTS AND ALL OTHER TESTS NECESSARY TO ASCERTAIN THAT ADEQUATE GROWING CONDITIONS WILL BE PROVIDED FOR PLANTS. IF PERCOLATION TESTS OR SUBSOIL CONDITIONS INDICATE RETENTION OF WATER IN PLANTING AREAS, AS SHOWN BY SEEPAGE OR OTHER EVIDENCE INDICATING PRESENCE OF UNDERGROUND WATER, NOTIFY LANDSCAPE ARCHITECT IN WRITING OF THIS FACT OR OF OTHER SATISFACTORY CONDITIONS BEFORE BACKFILLING. A CHANGE ORDER MAY BE ISSUED TO DIRECT INSTALLATION OF DRAIN TILE OR OTHER MEASURES BEYOND DRAINAGE REQUIREMENTS INDICATED. DO NOT PROCEED WITH THE WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. COMMENCEMENT OF PLANTING WORK INDICATES THAT SITE CONDITIONS HAVE BEEN ACCEPTED "AS IS".
- 11. PRE-EMERGENT HERBICIDE (TREFLAN OR EQUIVALENT) SHALL BE APPLIED (ACCORDING TO MANUFACTURER'S INSTRUCTIONS) TO ALL PLANT BEDS PRIOR TO PLANTING FOR NOXIOUS WEED CONTROL.
- 12. ALL PLANTING BEDS SHALL BE EXCAVATED TO RECEIVE A MINIMUM 3" DEEP SHREDDED HARDWOOD MUCH LAYER.
- 13. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR THE WATERING AND MAINTENANCE OF ALL INSTALLED PLANT MATERIAL UNTIL ACCEPTANCE BY LANDSCAPE ARCHITECT.
- 14 ALL PLANT MATERIAL IS TO BE GUARANTEED FOR ONE (1) YEAR. GUARANTEE PERIOD STARTS FROM DATE OF ACCEPTANCE BY LANDSCAPE ARCHITECT.
- 15. THE QUANTITIES INDICATED ON THE DRAWINGS ARE PROVIDED FOR THE BENEFIT OF THE LANDSCAPE CONTRACTOR, BUT SHOULD NOT BE ASSUMED TO ALWAYS BE CORRECT. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS OWN QUANTITY CALCULATIONS AND THE LIABILITY WHICH PERTAINS TO THOSE QUANTITIES AND ANY RELATED CONTRACT DOCUMENTS AND/OR PRICE QUOTATIONS.
- 16. ALL PLANTING BEDS ARE TO BE THOROUGHLY ROTOTILLED A MINIMUM OF 12". SAND AND PEAT MOSS ARE TO BE ADDED AT THE FOLLOWING RATES: PEAT MOSS (1) SIX CUBIC FOOT BALE PER 75 SQ. FT. OF BED AREA; SAND (1) CUBIC YARD OF SAND PER 150 SQ. FT. BED. LANDSCAPE CONTRACTOR MAY SUBMIT AN ALTERNATE SOIL AMENDMENT PLAN. THIS PLAN MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO SUBMISSION OF BID.
- 17. ALL PLANTING AREAS ARE TO HAVE SOIL TESTS PERFORMED UPON THEM TO DETERMINE IF THE PROPER SOIL PH IS PRESENT. RESULTS FROM THESE TEST ARE TO BE SENT TO THE LANDSCAPE ARCHITECT. IF THE TEST INDICATES IMPROPER PH, THEN THE LANDSCAPE CONTRACTOR IS TO ADD LIME OR SULFUR TO PROVIDE THE PROPER SOIL PH.
- 18. DIMENSIONS FOR HEIGHTS, SPREAD, AND TRUNK SPECIFIED ON THE MATERIAL SCHEDULE IS A GENERAL GUIDE FOR THE MINIMUM DESIRED SIZE OF EACH PLANT. AT A MINIMUM, ALL PLANT MATERIALS SHALL COMPLY WITH THE LATEST EDITION OF PUBLICATION ANSI 260.1, AND AMERICAN STANDARDS FOR NURSERY STOCK BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
- 19. CONTRACTOR IS RESPONSIBLE FOR CONDUCTING SITE INSPECTION PRIOR TO BIDDING WORK, TO DETERMINE SITE CONDITIONS AND AREAS TO BE SEEDED AND PLANTED. SUBMISSION OF BID INDICATES CONTRACTOR HAS VERIFIED SITE CONDITIONS AND PLANT MATERIAL QUANTITITES.

SEEDING NOTES (AS NEEDED)

- 1. 4" OF TOPSOIL SHALL BE PROVIDED AND INSTALLED PRIOR TO SEEDING.
- 2. SEED ALL DISTURBED AREAS WITH TURF-TYPE FESCUE VARIETY
 SUITABLE FOR SEEDING AT A RATE OF 7-8 lbs/1,000sq.ft.. SOD AND SEED VARIETIES
 TO MATCH
- 3. INITIAL TREATMENT, SEEDBED PREPARATION: THOROUGHLY DISK AND SCARIFY AREA TO BE SEEDED OR SODDED TO A DEPTH OF AT LEAST 4". REMOVE ROCKS, ROOTS, OR OTHER OBJECTS THAT WILL INTERFERE WITH VEGETATION ESTABLISHMENT OR MAINTENANCE OPERATIONS.
- 4. FERTILIZER: APPLY AGRICULTURAL LIME AT THE RATE OF 1 ½TONS PER ACRE. SPREAD LIME AND FERTILIZER UNIFORMLY OVER ALL AREAS IMMEDIATELY BEFORE FINAL LAND PREPARATION AND MIX THOROUGHLY. WITH THE SOIL. APPLY TOPDRESSING OF 100 POUNDS PER ACRE OF AMMONIUM NITRATE (OR EQUIVALENT) WHEN GRASS IS 2" TO 4" TALL
- AREAS WILL BE REPLANTED IF PERMANENT VEGETATION IS DISTURBED OR NOT ESTABLISHED.
- 6. PERMANENT VEGETATIVE COVER OF AT LEAST 90% IS REQUIRED. APPLY A ½" TO ¾" LAYER OF THRASHED RYE, OAT, OR WHEAT STRAW, OR BERMUDA GRASS HAY. APPLY MULCH ON ALL SEEDED AREAS IMMEDIATELY FOLLOWING SEEDING OPERATIONS. MAINTAIN A COVER OF MULCH UNTIL SEEDS HAVE GERMINATED AND SEEDLINGS ARE A MINIMUM OF 2" HEIGHT AND MOWING OPERATIONS HAVE BEGUN. APPLY STRAW AT A RATE OF APPROX. 175 sq. ft. PER BALE. FIELD ADJUST FOR UNIFORM COVERAGE.
- 7. REPAIR AND RESEED ALL ERODED OR DISTURBED SEEDED AREAS WHERE VEGETATIVE COVER HAS NOT BEEN ESTABLISHED.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF SEEDED AREAS UNTIL ADEQUATE VEGETATIVE COVER IS ESTABLISHED AND ACCEPTED BY LANDSCAPE ARCHITECT.

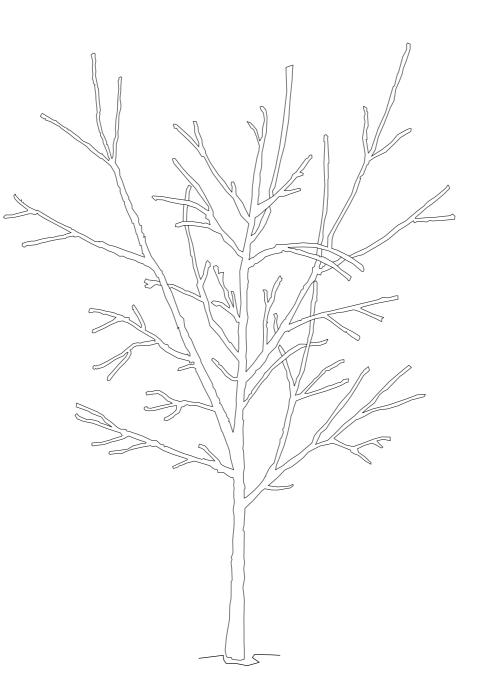
SODDING NOTES

- 1. SOD ALL AREAS AS INDICATED ON PLANS. ALL SLOPES GREATER THAN 3:1 SHALL BE PEGGED TO HOLD SOD IN PLACE. ALL DRAINAGE SWALES ARE TO RECEIVE A 6' WIDE BAND OF SOD. PROVIDE A 3' WIDE BAND OF SOD AROUND ALL DRAINAGE INLETS.
- THE SOIL SHALL BE THROUGHLY TILLED TO DEPTH OF FOUR (4) INCHES AND TWENTY-FIVE (25)

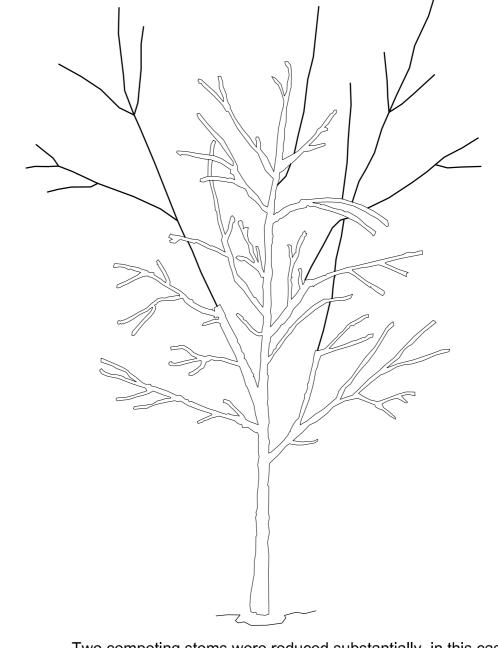
 2. POUNDS OF A COMPLETE FERTILIZER PER ONE THOUSAND (1,000) SQUARE FEET OF LAWN AREA SHALL BE ADDED. FOLLOWING THIS, THE SOD AREA SHALL BE GRADED TO REMOVE ALL RIDGES AND DEPRESSIONS, AND THE SURFACE CLEARED OF ALL STONE AND DEBRIS.
 - SOD IS TO BE ROLLED AND WATERED AT TIME OF INSTALLATION
- ENDS OF SOD PANELS ARE TO BE OFFSET. SOD PANELS SHALL BE LAID TIGHTLY TOGETHER SO
- AS TO MAKE SOLID SODDED AREA.
- 5. TOP DRESSING WITH CLEAN, WEED FREE BUILDER'S SAND MAY BE REQUIRED IF DEEMED NECESSARY BY THE LANDSCAPE ARCHITECT TO FILL ANY DEPRESSIONS OR IRREGULARITIES IN THE SOD.
- 6. SOD IS TO BE LAID AS SOON AS IT IS DELIVERED TO SITE. ONLY HEALTHY, MOIST, AND GREEN SOD IS TO BE LAID. ANY SOD WHICH IS BROWN AND UNDER STRESS IS UNACCEPTABLE. ANY SOD WHICH IS NOT LAID WITHIN 24 HOURS OF DELIVERY IS UNACCEPTABLE UNLESS APPROVED BY LANDSCAPE ARCHITECT.

MULCH & SEASONAL COLOR NOTES (AS NEEDED)

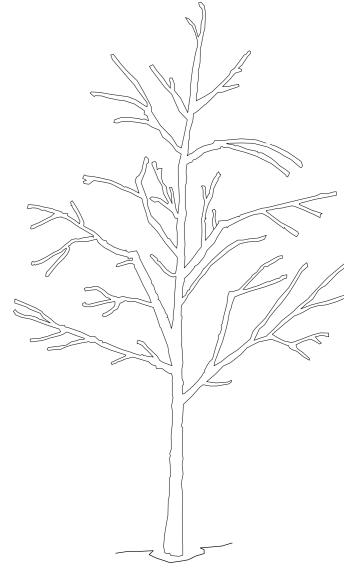
- MULCH SHALL BE PARTIALLY DECOMPOSED HARDWOOD MULCH AND BE OF SUFFICIENT CHARACTER AS NOT TO BE EASILY DISPLACED BY WIND OR WATER RUNOFF.
- 2. SEASONAL COLOR:
 - TILL BED TO A DEPT OF 8" 12". REMOVE ROOTS, ROCKS, AND OTHER DEBRIS. ADD THE FOLLOWING PER 150 SQ. FT. OF BED:
 - A. 6 CUBIC FEET OF PEAT MOSS, ROTTED SAWDUST, OR OTHER WELL COMPOSTED
 - ORGANIC MATERIAL.
 - B. 12 CUBIC FEET OF COARSE SAND.C. 10 POUNDS OF BONE MEAL.
 - D. 2 POUNDS OF "SIERRABLEN" 19-7-10 (PLUS IRON) OR EQUIVALENT.
 - E. DOLOMITIC LIME OR SULFUR TO PROVIDE A PH OF 6.0 TO 6.5.
- 3. ROTOTILL THIS MATERIAL INTO THE TOP 6" 8" OF SOIL.
- 4. MULCH WITH A RAPID DECOMPOSING ORGANIC MATERIAL, SUCH AS PINE NEEDLES OR HARDWOOD MULCH.



Before planting, tree has three codominant stems. The two that compete with the one in the center should be pruned to supress their growth.



Two competing stems were reduced substantially, in this case remvoing about 70% of their foilage using reduction cuts.



After pruning, tree has only one dominant stem

lotes:

1- All trees shown are rejectable unless they undergo recommended treatment.

2- Tree shall meet crown observation detail following correction.



CROWN CORRECTION DETAIL