

GENERAL GRADING NOTES:

1. MANY EXISTING NATURAL AREAS (TREES & PASTURE) ARE SHOWN TO BE PRESERVED & SHALL BE OFF LIMITS TO ANY TYPE OF CONSTRUCTION ACTIVITY. TEMPORARY CONSTRUCTION FENCE SHALL BE ERECTED AROUND THESE SITES PRIOR TO THE START OF ANY CONSTRUCTION.
2. A 6" LAYER OF TOPSOIL SHALL BE STRIPPED IN ALL AREAS OF CUT AND FILL AND REPLACED AT A 6" THICKNESS ON PROPOSED GRADING AREAS UNLESS NOTED OTHERWISE. NOTE: THE FINISHED GRADE INDICATES THE SURFACE ELEVATION AFTER THE LAYER OF TOPSOIL HAS BEEN PLACED. IN CASES WHERE GRADING IS DIRECTED UNDER TREE DRIP LINES NO TOPSOIL STRIPPING SHALL BE PERFORMED WITHIN THESE AREAS.
3. WHERE OFFSITE TOPSOIL IS NEEDED, IT SHALL BE FERTILE NATURAL TOPSOIL, TYPICAL OF THE LOCALITY, OBTAINED FROM WELL DRAINED AREAS. STOCKPILED TOPSOIL MAY BE USED. IT SHALL BE WITHOUT ADMIXTURE OF SUBSOIL OR SLAG AND SHALL BE FREE OF STONES, LUMPS, STICKS, PLANTS OR THEIR ROOTS, TOXIC SUBSTANCES OR OTHER EXTRANEIOUS MATTER THAT MAY BE HARMFUL TO PLANT GROWTH OR WOULD INTERFERE WITH FUTURE MAINTENANCE. TOPSOIL pH RANGE SHALL BE 5.5 TO 7.0. TOPSOIL SHALL BE APPROVED BY MKEC'S LANDSCAPE ARCHITECT PRIOR TO PLACEMENT.
4. CONTRACTOR SHALL COORDINATE WITH MKEC ON HAUL ROAD ROUTES, IF OTHER THAN THOSE INDICATED ON THE PLANS OR PREVIOUSLY COMPLETED GRADING PLANS.

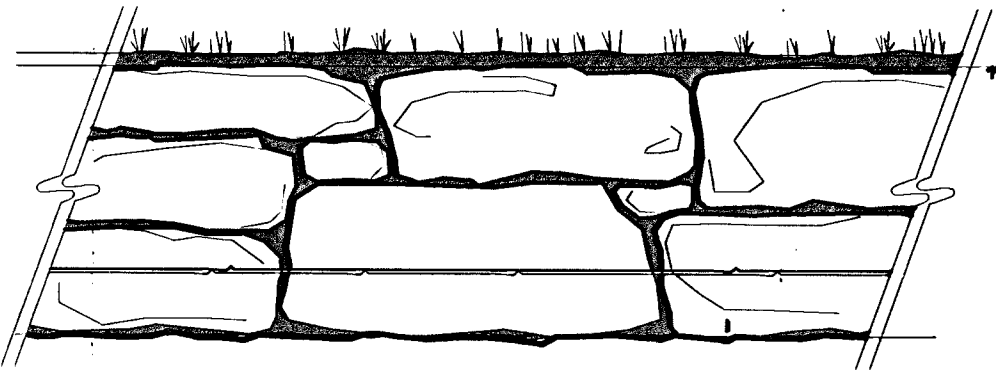
GENERAL TREE PROTECTION NOTES:

1. TREES ARE AN IMPORTANT ASSET TO THE DEVELOPER. EVERY EFFORT SHOULD BE MADE TO PRESERVE EACH AND EVERY TREE (UNLESS NOTED FOR REMOVAL) AS DIRECTED IN THESE PLANS & NOTES.
2. BEFORE ANY TYPE OF CONSTRUCTION BEGINS WITHIN THE PROJECT IMPROVEMENT AREA THE CONTRACTOR SHALL INSTALL PROTECTION FENCE AROUND ALL TREE MASSES & INDIVIDUAL TREES THAT ARE NOT NOTED FOR REMOVAL.
3. EQUIPMENT AND CONSTRUCTION MATERIALS SHALL REMAIN OUT OF AND AWAY FROM TREE DRIPLINES SO AS TO NOT COMPACT THE ROOT ZONE OR DAMAGE THE TREE. CHEMICAL SPILL DAMAGE SHALL BE PREVENTED BY FILLING GAS TANKS, CLEANING TOOLS & REPAIRING EQUIPMENT WELL OUTSIDE TREE PROTECTED ROOT ZONES. MIXING TRUCKS SHALL BE RINSED OUT OFF SITE. WHERE IT OCCURS THAT A CONSTRUCTION ROUTE OR A PROPOSED IMPROVEMENT OCCURS WITHIN A TREE'S PROTECTED ROOT ZONE, IT MAY BE NECESSARY, DEPENDENT UPON THE TYPE OF CONSTRUCTION AND EQUIPMENT USED, TO INSTALL A ROOT PROTECTION BRIDGE OR APPROVED EQUIVALENT. THIS MAY BE DETERMINED IN THE FIELD AT THE DIRECTION OF THE LANDSCAPE ARCHITECT.
4. ANY TREE THAT MUST HAVE BRANCHES REMOVED SHALL BE TRIMMED WITH SHARP INSTRUMENT/TOOL THAT IS INTENDED FOR SUCH OPERATIONS. CONSULT LANDSCAPE ARCHITECT PRIOR TO TRIMMING. KNOCKING BRANCHES OFF WITH A BACKHOE OR OTHER SIMILAR MACHINE IS NOT ACCEPTABLE! REFER TO TREE TRIMMING DETAIL ON THIS SHEET FOR TRIMMING PROCEDURE.

GENERAL DRY STACK WALL NOTES (ALT. 3):

1. DRY STACK QUARRY BLOCK STONE PROVIDED BY: BAYER STONE, INC. - SITE: CHASE COUNTY, KS QUARRY TYPE: COTTONWOOD LIMESTONE SIZE: RANDOM SPLIT STONE, LEDGE HEIGHT: 9-24" LENGTH: (REFER TO STONE SCHEDULE) RESERVE LARGER STONES FOR BASE COURSE, COORDINATE PLACEMENT W/ LANDSCAPE ARCHITECT.
2. THE LIFTS OF STONE PROVIDING SHORELINE TREATMENT FOR LAKE EDGES SHALL BE CONSTRUCTED IN A RANDOM PATTERN, AS SHOWN.
3. RESERVE LARGER STONES FOR THE BASE COURSE AND INCORPORATE SMALLER STONES AS REQUIRED TO MAKE TRANSITION FOR EACH LIFT.
4. OVERLAP STONES OFTEN TO PROVIDE AN INTERLOCKING STRUCTURAL STABILITY WITHIN THE WALL.
5. SAMPLES OF STONE TO BE PROVIDED FOR APPROVAL BY MKEC PRIOR TO DELIVERY TO THE SITE. AS PART OF BID, CONTRACTOR SHALL PROVIDE TEST RESULTS FOR ROCK FROM QUARRY THAT IS TO BE SUPPLIED FOR PROJECT.
6. REFER TO INCLUDED STONE SCHEDULE FOR REQUIRED STONE DIMENSIONS AND MIX.

NOTE: THE LIFTS OF STONE PROVIDING SHORELINE TREATMENT FOR LAKE EDGES SHALL BE CONSTRUCTED IN A RANDOM PATTERN, AS SHOWN. RESERVE LARGER STONES FOR THE BASE COURSE AND INCORPORATE SMALLER STONES AS REQUIRED TO MAKE TRANSITION FOR EACH LIFT. OVERLAP STONES OFTEN TO PROVIDE AN INTERLOCKING STRUCTURAL STABILITY WITHIN THE WALL.

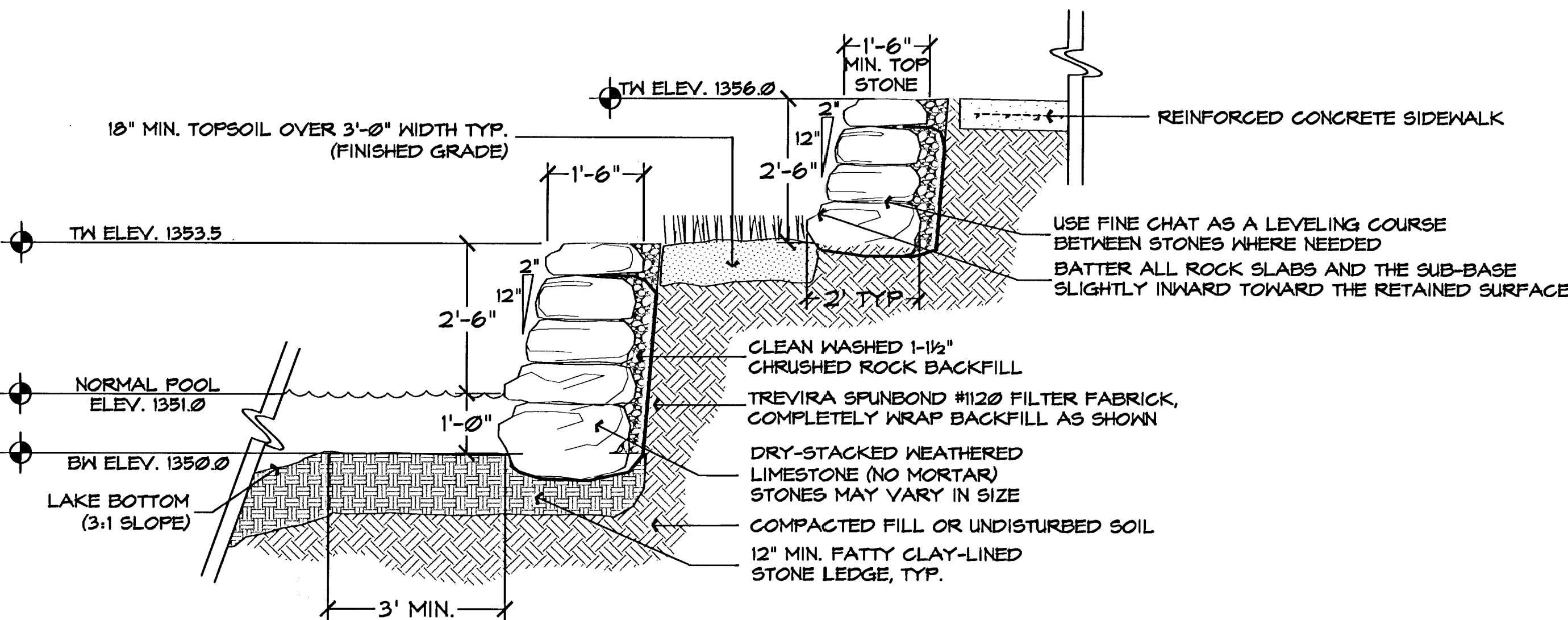


ELEVATION - DRY STACK RETAINING WALL (ALT. 3)

NOT TO SCALE TYPICAL ELEVATION

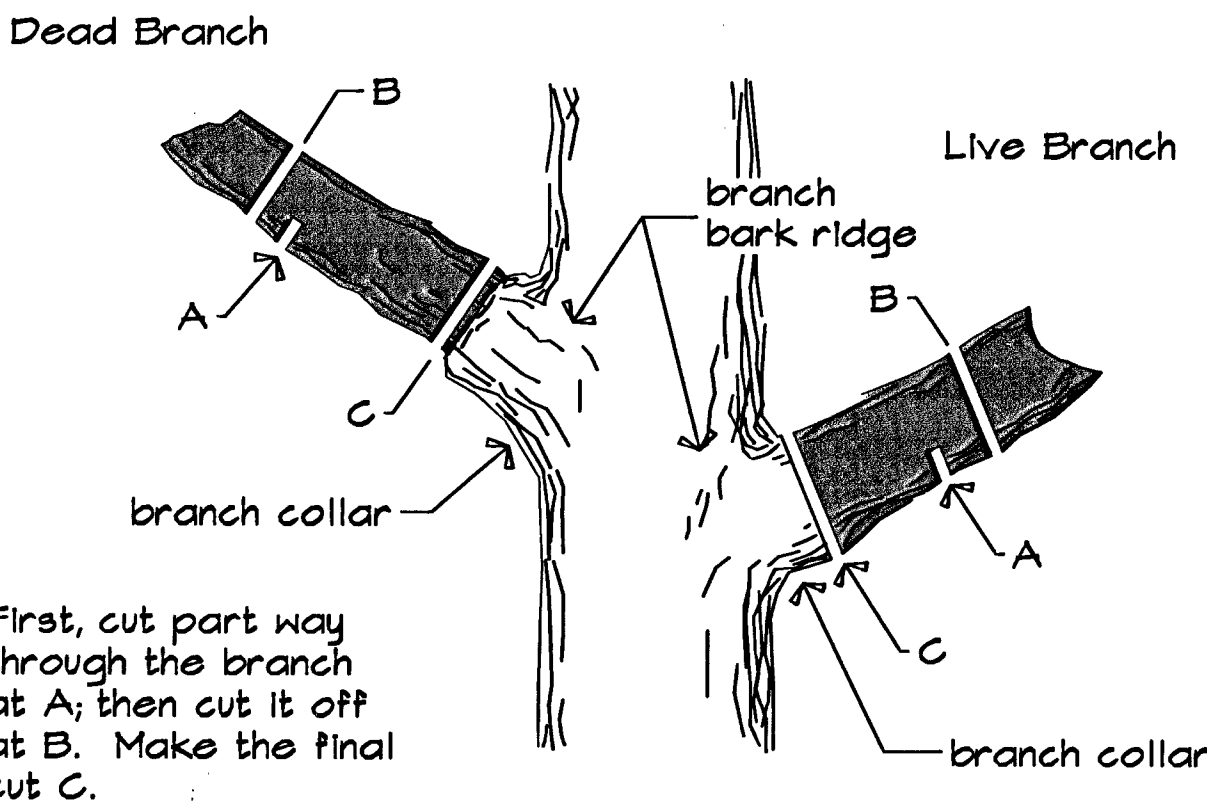
DRY STACK RETAINING WALL STONE SCHEDULE			
LIFT	MIX	LENGTH	DEPTH
9"-12"	50%	18" MIN.	24"
12"	25%	24"-36"	24"
24"	25%	36"	24"

NOTE: ALL NOTES APPLY TO THE CONSTRUCTION OF EACH TIER OF THE WALL. THE ROCK FACE IS TO BE BUILT SO THAT ALL ROCKS ARE NOT FLUSH BUT RATHER JUTTED IN AND OUT TO CREATE A MORE NATURAL APPEARANCE. ROCKS SHALL NOT BE CANTED OUT SO FAR HOWEVER AS TO WEAKEN THE INTEGRITY OR THE WALL (INDIVIDUAL ROCKS THAT EXTEND FURTHER OUT SHALL ALSO EXTEND AN EQUIVALENT DISTANCE BACK INTO THE EARTH FILLED SIDE OF THE WALL). FILL MUST BE ADDED AT THE SAME TIME WALL IS CONSTRUCTED.



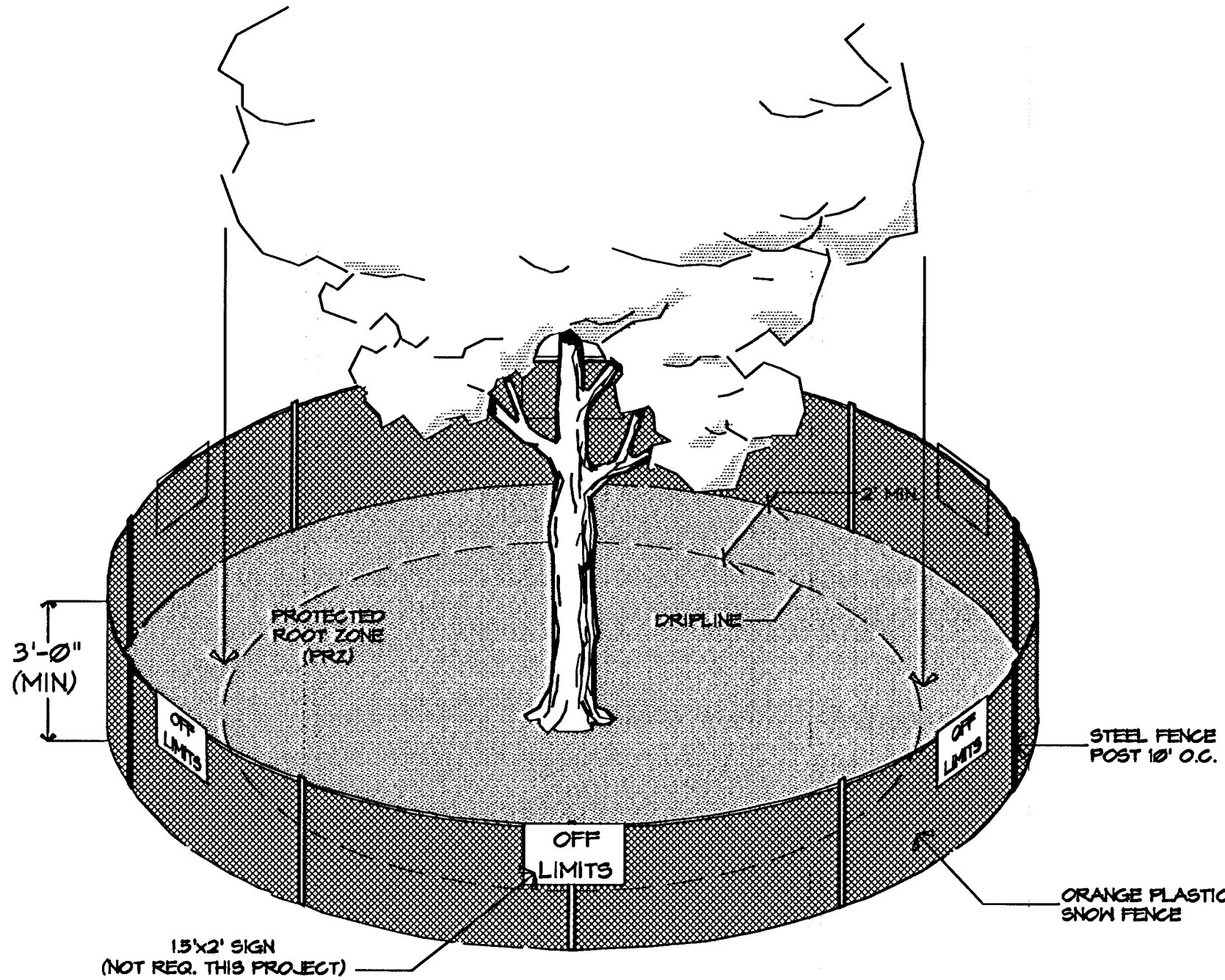
SECTION - DOUBLE TIER DRY STACK RETAINING WALL (ALT. 3)

NOT TO SCALE TYPICAL ELEVATION



TREE TRIMMING DETAIL

NOT TO SCALE



TEMPORARY TREE PROTECTION DETAIL

NOT TO SCALE



HAWTHORNE ADDITION
PROJECT NAME
DRY STACK WALL DETAILS &
TREE PROTECTION DETAILS
SHEET TITLE

MKEC MKEC MKEC
DESIGN BY: DRAWN BY: CHECKED BY:

APRIL, 2003 02167 6 / 28
DATE JOB NO. SHEET/OF

411 N. WEBB ROAD
WICHITA, KS. 67206
316 - 684 - 9600