

## GENERAL GRADING NOTES:

1. THIS IS DESIGN GRADING. ALL GRADES ABOVE THE NORMAL POOL ELEVATION SHALL BE CONTOURED SMOOTHLY WITH GENTLE ROUNDING/SHAPING OF ALL AFFECTED LAND SURFACES. ABRUPT TRANSITIONS AT THE TOP OF SLOPES WHERE PROPOSED GRADES MEET EXISTING ARE NOT ACCEPTABLE. SURVEY STAKES ARE FOR GENERAL GRADING PURPOSES ONLY. NOT ALL SLOPES ARE CONSTANT AND THEREFORE THE GRADING PLANS SHALL BE REFERRED TO FOR FINAL GRADE SHAPING. THE GRADING SHALL BE APPROVED BY MKEC'S LANDSCAPE ARCHITECT PRIOR TO THE ADDITION OF THE TOPSOIL LAYER.

2. MANY EXISTING NATURAL AREAS (TREES AND PASTURE) ARE TO BE PRESERVED AND SHALL BE OFF LIMITS TO CONSTRUCTION ACTIVITY. TEMPORARY CONSTRUCTION FENCE SHALL BE ERECTED AS INDICATED BEFORE ANY TYPE OF CONSTRUCTION IS INITIATED. REFER TO SHEET 18. NO EQUIPMENT OR WORK OF ANY KIND SHALL ENTER/DISTURB THESE AREAS.

3. A 6" LAYER OF TOPSOIL SHALL BE STRIPPED IN ALL AREAS OF CUT AND FILL AND REPLACED AT A 6" THICKNESS (WITH THE EXCEPTION OF AREAS BELOW THE NORMAL POOL ELEVATIONS IN THE PONDS) ON PROPOSED GRADING AREAS. 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.

4. 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.

5. CONTRACTOR SHALL COORDINATE WITH MKEC ON HAUL ROAD ROUTES, IF THOSE INDICATED ON THE PLANS ARE INSUFFICIENT IN THE CONTRACTORS OPINION. HAUL ROADS SHALL BE RIPPED TO A DEPTH OF 18" AT THE END OF CONSTRUCTION OPERATIONS TO LOOSEN THE SOIL OF THESE COMPACTED SOILS.

6. COMPACTION TESTING SHALL BE PROVIDED BY THE CONTRACTOR FOR LAKES, ROADS, AND LOT FILL. FREQUENCY OF TESTING SHALL BE DETERMINED BY ENGINEER BUT NOT LESS THAN 2 TESTS PER LIFT PER WORKING AREA.

7. CONTRACTOR SHALL MAKE THE RCB THE CRITICAL ITEM OF WORK AND FINISH IT AS SOON AS POSSIBLE. THIS ALLOWS THE PAVING CONTRACTOR TO START WORK ON THE ROAD PROJECT AS THE POND GRADING IS BEING COMPLETED.

8. COORDINATE WITH MKEC ON LOCATIONS ON SITE WHERE EXISTING WETLAND TYPE SOILS CAN BE EXCAVATED & STOCKPILED FOR USE IN THE WETLAND MITIGATION AREAS. KEEP THESE SOILS WET WHEN STOCKPILED TO PREVENT PLANT INOCULUM LOSS

## EARTHWORK TABULATIONS:

POND GRADING  
86700 CY OF CUT  
23500 CY OF FILL

ROAD & LOT GRADING  
3300 CY OF CUT  
16500 CY OF FILL

## GENERAL TREE PROTECTION NOTES:

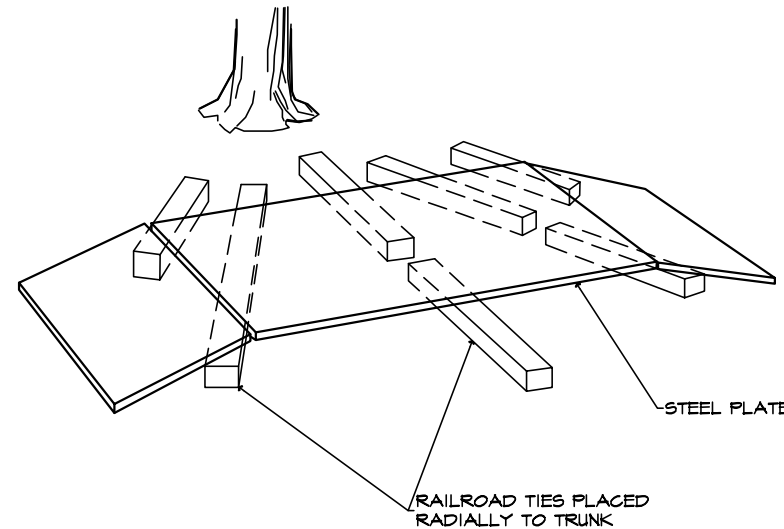
1. TREES ARE AN IMPORTANT ASSET TO THE DEVELOPER. EVERY EFFORT SHOULD BE MADE TO PRESERVE EACH AND EVERY TREE (UNLESS NOTED FOR REMOVAL) AS DIRECTED IN THESE PLANS & NOTES.

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 IN A DESIGNATED AREA. WHERE IT OCCURS THAT A CONSTRUCTION ROUTE OR A PROPOSED IMPROVEMENT OCCURS WITHIN A TREE'S (PRZ) 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 (REFER TO DETAIL THIS SHEET).

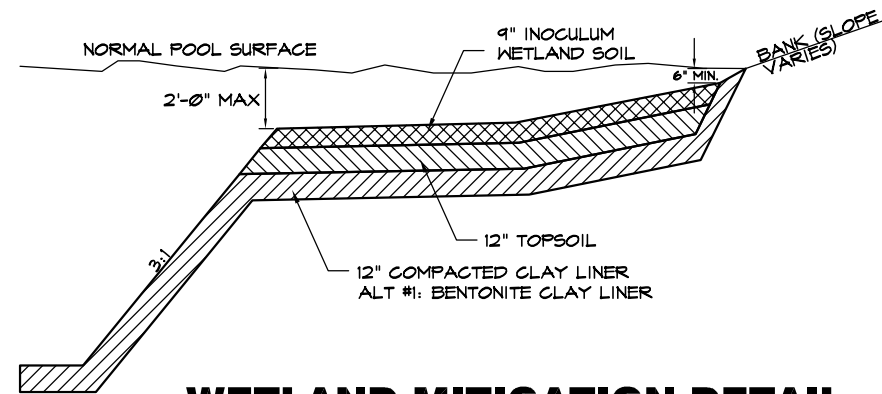
4. ANY TREE THAT MUST HAVE BRANCHES REMOVED SHALL BE TRIMMED WITH SHARP INSTRUMENT/TOOL THAT IS INTENDED FOR SUCH OPERATIONS. CONSULT LANDSCAPE ARCHITECT PRIOR TO TRIMMING. KNOCKING BRANCHES OFF WITH A BACKHOE OR OTHER SIMILAR MACHINE IS NOT ACCEPTABLE! REFER TO TREE TRIMMING DETAIL ON THIS SHEET FOR TRIMMING PROCEDURE.

5. IT MAY BE NECESSARY IN CERTAIN AREAS THAT THE CONTRACTOR USE SMALLER MACHINERY IN ORDER TO COMPLETE WORK NEARER TO TREES & ALONG POND EDGES WHERE GRADING OCCURS NEAR TREES OR BELOW DRIPLINES.



## ROOT BRIDGING DETAIL

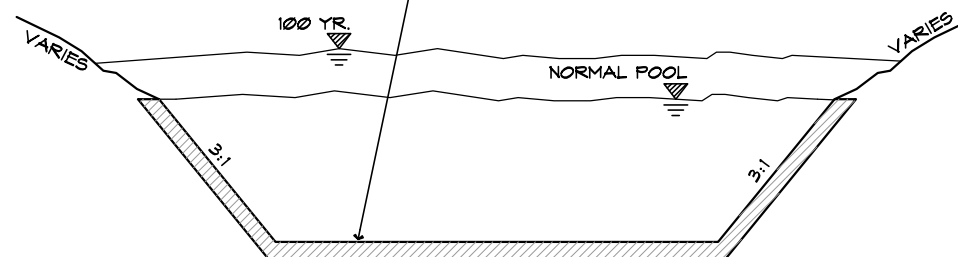
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## WETLAND MITIGATION DETAIL

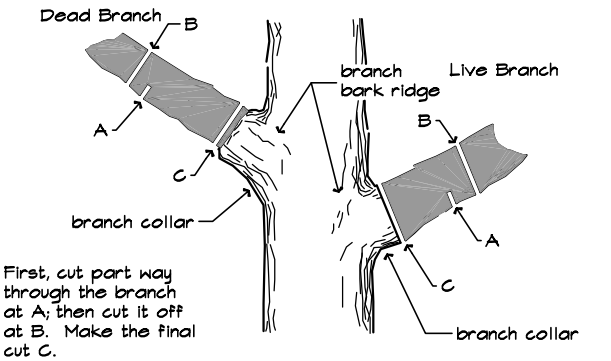
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OVER EXCAVATE 12" OF SOIL. PLACE IN TWO 6" LIFTS CLAY LINER (PI=30). COMPACT TO 2% ABOVE OPTIMUM ASTM D698 95% RELATIVE MAX DENSITY. ALL COST ASSOCIATED WITH THIS WORK SHALL BE SUBSIDIARY TO EARTHWORK ITEMS.  
ALT #1: TOP 6" CLAY LIFT TO BE BLENDED WITH BENTONITE. BENTONITE TO BE PLACED @ A RATE OF 20 LB/SY.



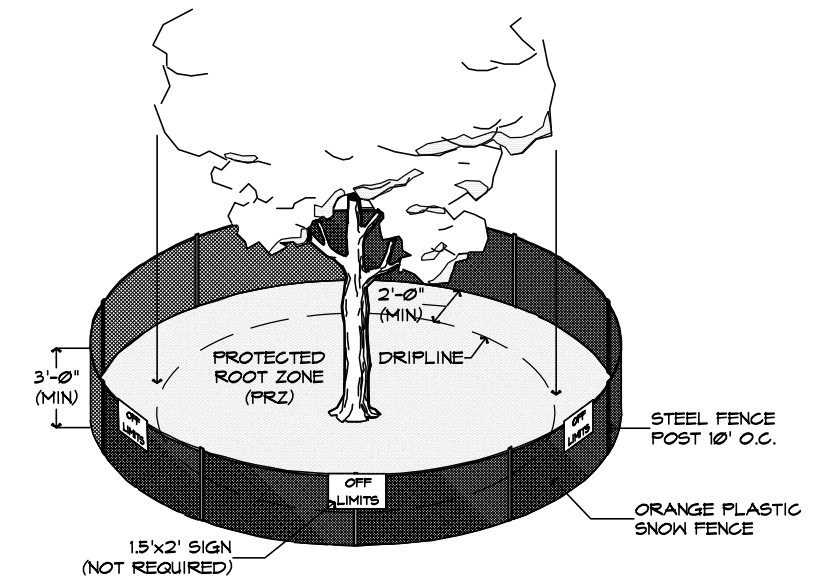
## TYPICAL POND DETAIL

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## TREE TRIMMING DETAIL

NOT TO SCALE



NOTE: THE TEMPORARY FENCE IS TO BE CONSTRUCTED AROUND SPECIFIED AREAS/TREES PRIOR TO ANY CONSTRUCTION AND SHALL REMAIN UNTIL ALL CONSTRUCTION IS COMPLETE. CONSTRUCTION EQUIPMENT AND MATERIALS ARE NOT PERMITTED WITHIN THE (PRZ). THE FENCE PLACEMENT AROUND THE (PRZ) MAY ONLY BE ADJUSTED WITH PERMISSION FROM THE OWNER'S REPRESENTATIVE.

## TEMPORARY TREE PROTECTION DETAIL

NOT TO SCALE

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**MKEC**  
ENGINEERING  
CONSULTANTS  
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WICHITA, KS. 67206  
316 - 684 - 9600

**REED'S COVE ADDITION**

PROJECT NAME

**GRADING AND TREE  
PRESERVATION NOTES & DETAILS**

SHEET TITLE

JAG  
DESIGN BY:

DMU  
DRAWN BY:

GJA  
CHECKED BY:

JUNE 2003  
DATE

02121  
JOB NO.

2 / 36  
SHEET/OF