

Attachment D – Section 26a General and Standard Conditions

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GENERAL AND STANDARD CONDITIONS Section 26a and Land Use

General Conditions

1. You agree to make every reasonable effort to construct and operate the facility authorized herein in a manner so as to minimize any adverse impact on water quality, aquatic life, wildlife, vegetation, and natural environmental values.
2. This permit may be revoked by TVA by written notice if:
 - a) the structure is not completed in accordance with approved plans;
 - b) if in TVA's judgment the structure is not maintained as provided herein;
 - c) the structure is abandoned;
 - d) the structure or work must be altered to meet the requirements of future reservoir management operations of the United States or TVA, or;
 - e) TVA finds that the structure has an adverse effect upon navigation, flood control, or public lands or reservations.
3. If this permit for this structure is revoked, you agree to remove the structure, at your expense, upon written notice from TVA. In the event you do not remove the structure within 30 days of written notice to do so, TVA shall have the right to remove or cause to have removed, the structure or any part thereof. You agree to reimburse TVA for all costs incurred in connection with removal.
4. In issuing this Approval of Plans, TVA makes no representations that the structures or work authorized or property used temporarily or permanently in connection therewith will not be subject to damage due to future operations undertaken by the United States and/or TVA for the conservation or improvement of navigation, for the control of floods, or for other purposes, or due to fluctuations in elevations of the water surface of the river or reservoir, and no claim or right to compensation shall accrue from any such damage. By the acceptance of this approval, applicant covenants and agrees to make no claim against TVA or the United States by reason of any such damage, and to indemnify and save harmless TVA and the United States from any and all claims by other persons arising out of any such damage.
5. In issuing this Approval of Plans, TVA assumes no liability and undertakes no obligation or duty (in tort, contract, strict liability or otherwise) to the applicant or to any third party for any damages to property (real or personal) or personal injuries (including death) arising out of or in any way connected with applicant's construction, operation, or maintenance of the facility which is the subject of this Approval of Plans.
6. This approval shall not be construed to be a substitute for the requirements of any federal, state, or local statute, regulation, ordinance, or code, including, but not limited to, applicable electrical building codes, now in effect or hereafter enacted.
7. The facility will not be altered, or modified, unless TVA's written approval has been obtained prior to commencing work.
8. You agree to notify TVA of any transfer of ownership of the approved structure to a third party. Third party is required to make application to TVA for permitting of the structure in their name.
9. You agree to stabilize all disturbed areas within 30 days of completion of the work authorized. All land-disturbing activities shall be conducted in accordance with Best Management Practices as defined by Section 208 of the Clean Water Act to control erosion and sedimentation to prevent adverse water quality and related aquatic impacts. Such practices shall be consistent with sound engineering and construction principles; applicable federal, state, and local statutes, regulations, or ordinances; and proven techniques for controlling erosion and sedimentation, including any *required* conditions.
10. You agree not to use or permit the use of the premises, facilities, or structures for any purposes that will result in draining or dumping into the reservoir of any refuse, sewage, or other material in violation of applicable standards or requirements relating to pollution control of any kind now in effect or hereinafter established.
11. The facility will be maintained in a good state of repair and in good, safe, and substantial condition. If the facility is damaged, destroyed, or removed from the reservoir or stream for any reason, or deteriorates beyond safe and serviceable use, it cannot be repaired or replaced without the prior written approval of TVA.
12. You agree that if any historical or prehistoric archaeological material (such as arrowheads, broken pottery, bone or similar items) is encountered during construction of this facility you will immediately contact this office and temporarily suspend work at that location until authorized by this office to proceed.
13. The Native American Graves Protection and Repatriation Act and the Archaeological Resources Protection Act apply to archaeological resources located on the premises. If LESSEE (or licensee or grantee (for easement) or applicant (for 26a permit on federal land)) discovers human remains, funerary objects, sacred objects, objects of cultural patrimony, or any other archaeological resources on or under the premises, LESSEE (or licensee, grantee, or applicant) shall immediately stop activity in the area of the discovery, make a reasonable effort to protect the items, and notify TVA by telephone (phone 8656321300). Work may not be resumed in the area of the discovery until approved by TVA.

14. On TVA land, unless otherwise stated on this permit, vegetation removal is prohibited.
15. You agree to securely anchor all floating facilities to prevent them from floating free during major floods.
16. You are responsible for accurately locating your facility, and this authorization is valid and effective only if your facility is located as shown on your application or as otherwise approved by TVA in this permit. The facility must be located on land owned or leased by you, or on TVA land at a location approved by TVA.
17. It is understood that you own adequate property rights at this location. If at any time it is determined that you do not own sufficient property rights, or that you have only partial ownership rights in the land at this location, this permit may be revoked if TVA receives an objection to your water use facility from any owner or partial owner of the property rights at this location.

Standard Conditions: (Items that pertain to your request have been checked.)

1. Structures and Facilities

- a) TVA number _____ has been assigned to your facility. When construction is complete, this number shall be placed on a readily visible part of the outside of the facility in the numbers not less than three inches high.
- b) The 100-year flood elevation at this site is estimated to be _____-feet mean sea level. As a minimum, your fixed facility should be designed to prevent damage to stored boats by forcing them against roof during a 100-year flood event.
- c) You agree that the float will be temporarily connected (i.e., by slip pin/ropes) and not permanently attached to nonnavigable houseboat.
- d) You agree that this _____ shall have no side enclosures except wire mesh or similar screening.
- e) Buildings or other enclosed structures containing sleeping or living accommodations, including toilets and related facilities, or that have enclosed floor area in excess of 32 square feet, are prohibited.
- f) Ski jumps will not be left unattended for extended periods of time. All facilities will be tied to the shoreline or to a boathouse or pier fronting your property at the completion of each day's activities.
- g) For all electrical services permitted, a disconnect must be located at or above the _____-foot contour that is accessible during flooding.
- h) You should contact your local government official(s) to ensure that this facility complies with all applicable local floodplain regulations.
- i) The entire closed-loop coil heating and air conditioning system and its support apparatus must be either placed below elevation _____ (to provide a five-foot clearance for water craft at minimum pool elevations of _____) or located underneath a TVA approved water-use facility or other TVA approved structure. The supply and return lines must be buried as they cross the reservoir drawdown zone in areas of water depth less than five feet (minimum pool). The liquid contents of the closed-loop heating and air conditioning system must be propylene glycol or water, and the applicant or authorized agent must provide TVA with written verification of this fact.
- j) You agree that only those facilities which have been approved by TVA prior to construction will be placed within the harbor limits and that permanent mooring buoys, boat slips, or other harbor facilities will not be placed outside the harbor limits.
- k) You agree that all storage, piping, and dispensing of liquid fuel shall comply with applicable requirements of the "Flammable and Combustible Liquids" section of the National Fire Codes and any additional requirements of federal, state, and local laws and regulations.
- l) You agree that the golf facility and greenway facility hereby approved will be used for public use as approved by TVA and for no other purpose unless approved in writing from TVA.
- m) You agree that if the construction project covered by this permit is not initiated within (18) months after the date of issuance, this permit will then automatically expire and you must submit a new 26a permit application for TVA approval with the applicable fee.

2. Ownership Rights

- a) No fill will be placed higher than elevation _____ maximum shoreline contour (msc), and every precaution will be taken not to disturb or alter the existing location of the _____-foot contour elevation through either excavation or placement of fill.
- b) You are advised that TVA retains the right to flood this area and that TVA will not be liable for damages resulting from flooding.
- c) You shall notify TVA of any sale or transfer of land, which would affect the landward limits of harbor area, as far in advance of such sale or transfer as possible.
- d) This approval of plans is only a determination that these harbor limits will not have any unacceptable effect on TVA programs or other interests for which TVA has responsibility. Such approval does not profess or intend to give the applicant exclusive control over the use of navigable waters involved.
- e) You recognize and understand that this authorization conveys no property rights, grants no exclusive license, and in no way restricts the general public's privilege of using shoreland owned by or subject to public access rights owned by TVA. It is also subject to any existing rights of third parties. Nothing contained in this approval shall be construed to detract or deviate from the rights of the United States and TVA held over this land under the Grant of Flowage Easement. This Approval of Plans does not give any property rights in real estate or material and does not authorize any injury to private property or invasion of private or public rights. It merely constitutes a finding that the facility, if constructed at the location specified in the plans submitted and in accordance with said plans, would not at this time constitute an obstruction unduly affecting navigation, flood control, or public lands or reservations.

3. Shoreline Modification and Stabilization

- a) For purposes of shoreline bank stabilization, all portions will be constructed or placed, on average, no more than two feet from the existing shoreline at normal summer pool elevation.
- b) You agree that spoil material will be disposed of and contained on land lying and being above the 822-foot contour. Every precaution will be made to prevent the reentry of the spoil material into the reservoir.
- c) Bank, shoreline, and floodplain stabilization will be permanently maintained in order to prevent erosion, protect water quality, and preserve aquatic habitat.
- d) You agree to reimburse TVA \$ _____, which is the current value of the _____ acre feet of power storage volume displaced by fill into the reservoir.

4. Water Intake

- a) If the reservoir falls below the elevation of the intake, the applicant will be responsible for finding another source of raw water.
- b) You must install and maintain a standard regulatory hazard buoy at the end of the intake to warn boaters of the underwater obstruction. The word "intake" should be added to the buoy and be attached using a five-foot cable.
- c) The screen openings on the intake strainer must be 1/8-inch (maximum), to minimize the entrapment of small fish.
- d) This approval does not constitute approval of the adequacy or safety of applicant's water system. TVA does not warrant that the water withdrawn and used by applicant is safe for drinking or any other purpose, and applicant is solely responsible for ensuring that all water is properly treated before using.

5. Bridges and Culverts

- a) You agree to design/construct any instream piers in such a manner as to discourage river scouring or sediment deposition.
- b) Applicant agrees to construct culvert in phases, employing adequate streambank protection measures, such that the diverted streamflow is handled without creating streambank or streambed erosion/sedimentation and without preventing fish passage.
- c) Concrete box culverts and pipe culverts (and their extensions) must create/maintain velocities and flow patterns which offer refuge for fish and other aquatic life, and allow passage of indigenous fish species, under all flow conditions. Culvert floor slabs and pipe bottoms must be buried below streambed elevation, and filled with naturally occurring streambed materials. If geologic conditions do not allow burying the floor, it must be otherwise designed to allow passage of indigenous fish species under all flow conditions.

- d) All natural stream values (including equivalent energy dissipation, elevations, and velocities; riparian vegetation; riffle/pool sequencing; habitat suitable for fish and other aquatic life) must be provided at all stream modification sites. This must be accomplished using a combination of rock and bioengineering, and is not accomplished using solid, homogeneous riprap from bank to bank.
- e) You agree to remove demolition and construction by-products from the site--for recycling if practicable, or proper disposal--outside of the 100-year floodplain. Appropriate BMPs will be used during the removal of any abandoned roadway or structures.

6. Best Management Practices

- a) You agree that removal of vegetation will be minimized, particularly any woody vegetation providing shoreline/streambank stabilization.
- b) You agree to installation of cofferdams and/or silt control structures between construction areas and surface waters prior to any soil-disturbing construction activity, and clarification of all water that accumulates behind these devices to meet state water quality criteria *at the stream mile where activity occurs* before it is returned to the *unaffected portion of the stream*. Cofferdams must be used wherever construction activity is at or below water elevation.
- c) A floating silt screen extending from the surface to the bottom is to be in place during excavation or dredging to prevent sedimentation in surrounding areas. It is to be left in place until disturbed sediments are visibly settled.
- d) You agree to keep equipment out of the reservoir or stream and off reservoir or stream banks, to the extent practicable (i.e., performing work "in the dry").
- e) You agree to avoid contact of wet concrete with the stream or reservoir, and avoid disposing of concrete washings, or other substances or materials, in those waters.
- f) You agree to use erosion control structures around any material stockpile areas.
- g) You agree to apply clean/shaken riprap or shot rock (where needed at water/bank interface) over a water permeable/soil impermeable fabric or geotextile and in such a manner as to avoid stream sedimentation or disturbance, or that any rock used for cover and stabilization shall be large enough to prevent washout and provide good aquatic habitat.
- h) You agree to remove, redistribute, and stabilize (with vegetation) all sediment which accumulates behind cofferdams or silt control structures.
- i) You agree to use vegetation (versus riprap) wherever practicable and sustainable to stabilize streambanks, shorelines, and adjacent areas. These areas will be stabilized as soon as practicable, using either an appropriate seed mixture that includes an annual (quick cover) as well as one or two perennial legumes and one or two perennial grasses, or sod. In winter or summer, this will require initial planting of a quick cover annual only, to be followed by subsequent establishment of the perennials. Seed and soil will be protected as appropriate with erosion control netting and/or mulch and provided adequate moisture. Streambank and shoreline areas will also be permanently stabilized with native woody plants, to include trees wherever practicable and sustainable (this vegetative prescription may be altered if dictated by geologic conditions or landowner requirements). You also agree to install or perform additional erosion control structures/techniques deemed necessary by TVA.

Additional Conditions

- Bank stabilization would not be conducted from March through June to protect bank nesting bird species.
- The golf practice facility would follow guidelines in the Tennessee Handbook for Golf Course Environmental Management.
- Applicants would incorporate measures into their landscape plan to address the exotic, invasive plants found in the riparian zone along the entire shoreline area in an effort to replace these species with native flora that would provide the highest level of natural habitat for the proposal.
- Before greenway construction is complete, the applicant would coordinate with WMA personnel to determine if signage describing the strict hunting regulations is necessary and, if so, the appropriate location of such signage along the greenway.
- No golf practice facility construction would occur along the lower terrace as described in the site evaluation (Phase II).
- The placement of cut and fill for the golf practice facility would be monitored by qualified archaeologists (ARL personnel), and archaeological features would be marked for avoidance. No cuts would occur where intact features were recorded; the location would remain the same or fill would be placed above it.
- During the greenway construction, personnel from the ARL would monitor the installation of pipe and headwalls in existing ditches (where excavation is necessary) to determine the existence of archaeologically significant materials.
- During the drainage placement under greenway (where excavation is necessary), personnel from the ARL would monitor to determine the existence of archaeologically significant materials.
- During the installation of bridge abutments for the greenway, ARL personnel would investigate the abutment footprints to determine the existence of archaeologically significant materials.
- If archaeological features were encountered during the golf practice facility and greenway construction monitoring, UT would abide by the stipulations in the MOA.

- If it is necessary to cut a keyway along the beach area, personnel from ARL would monitor the installation of riprap stabilization to determine the existence of archaeologically significant materials.
- There would be no bank reshaping, and all vegetation would be removed by hand.
- **A layer of non-woven 6.4 oz. per yard geotextile filter fabric would be placed along the entire shoreline proposed for stabilization prior to placing riprap.**
- **The applicants would place Class C, D, or D50 riprap to the top of the bank.**
 - If heavy equipment (trackhoe) were required for accessing areas for stabilization that a barge cannot reach or if a keyway were necessary, archaeological monitoring would be necessary. If archaeological resources were exposed during this procedure, all work would cease in the area where the resources have been encountered.
 - If this project is not completed within five years of submittal to TVA, UT would consult with the SHPO to determine if these requirements were still suitable or if additional investigations would be necessary.

GENERAL AND STANDARD CONDITIONS Section 26a and Land Use

General Conditions

1. You agree to make every reasonable effort to construct and operate the facility authorized herein in a manner so as to minimize any adverse impact on water quality, aquatic life, wildlife, vegetation, and natural environmental values.
2. This permit may be revoked by TVA by written notice if:
 - a) the structure is not completed in accordance with approved plans;
 - b) if in TVA's judgment the structure is not maintained as provided herein;
 - c) the structure is abandoned;
 - d) the structure or work must be altered to meet the requirements of future reservoir management operations of the United States or TVA, or;
 - e) TVA finds that the structure has an adverse effect upon navigation, flood control, or public lands or reservations.
3. If this permit for this structure is revoked, you agree to remove the structure, at your expense, upon written notice from TVA. In the event you do not remove the structure within 30 days of written notice to do so, TVA shall have the right to remove or cause to have removed, the structure or any part thereof. You agree to reimburse TVA for all costs incurred in connection with removal.
4. In issuing this Approval of Plans, TVA makes no representations that the structures or work authorized or property used temporarily or permanently in connection therewith will not be subject to damage due to future operations undertaken by the United States and/or TVA for the conservation or improvement of navigation, for the control of floods, or for other purposes, or due to fluctuations in elevations of the water surface of the river or reservoir, and no claim or right to compensation shall accrue from any such damage. By the acceptance of this approval, applicant covenants and agrees to make no claim against TVA or the United States by reason of any such damage, and to indemnify and save harmless TVA and the United States from any and all claims by other persons arising out of any such damage.
5. In issuing this Approval of Plans, TVA assumes no liability and undertakes no obligation or duty (in tort, contract, strict liability or otherwise) to the applicant or to any third party for any damages to property (real or personal) or personal injuries (including death) arising out of or in any way connected with applicant's construction, operation, or maintenance of the facility which is the subject of this Approval of Plans.
6. This approval shall not be construed to be a substitute for the requirements of any federal, state, or local statute, regulation, ordinance, or code, including, but not limited to, applicable electrical building codes, now in effect or hereafter enacted.
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11. The facility will be maintained in a good state of repair and in good, safe, and substantial condition. If the facility is damaged, destroyed, or removed from the reservoir or stream for any reason, or deteriorates beyond safe and serviceable use, it cannot be repaired or replaced without the prior written approval of TVA.
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13. The Native American Graves Protection and Repatriation Act and the Archaeological Resources Protection Act apply to archaeological resources located on the premises. If LESSEE (or licensee or grantee (for easement) or applicant (for 26a permit on federal land)) discovers human remains, funerary objects, sacred objects, objects of cultural patrimony, or any other archaeological resources on or under the premises, LESSEE (or licensee, grantee, or applicant) shall immediately stop activity in the area of the discovery, make a reasonable effort to protect the items, and notify TVA by telephone (phone 8656321300). Work may not be resumed in the area of the discovery until approved by TVA.

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16. You are responsible for accurately locating your facility, and this authorization is valid and effective only if your facility is located as shown on your application or as otherwise approved by TVA in this permit. The facility must be located on land owned or leased by you, or on TVA land at a location approved by TVA.
17. It is understood that you own adequate property rights at this location. If at any time it is determined that you do not own sufficient property rights, or that you have only partial ownership rights in the land at this location, this permit may be revoked if TVA receives an objection to your water use facility from any owner or partial owner of the property rights at this location.

Standard Conditions: (Items that pertain to your request have been checked.)

1. Structures and Facilities

- a) TVA number _____ has been assigned to your facility. When construction is complete, this number shall be placed on a readily visible part of the outside of the facility in the numbers not less than three inches high.
- b) The 100-year flood elevation at this site is estimated to be _____-feet mean sea level. As a minimum, your fixed facility should be designed to prevent damage to stored boats by forcing them against roof during a 100-year flood event.
- c) You agree that the float will be temporarily connected (i.e., by slip pin/ropes) and not permanently attached to nonnavigable houseboat.
- d) You agree that this _____ shall have no side enclosures except wire mesh or similar screening.
- e) Buildings or other enclosed structures containing sleeping or living accommodations, including toilets and related facilities, or that have enclosed floor area in excess of 32 square feet, are prohibited.
- f) Ski jumps will not be left unattended for extended periods of time. All facilities will be tied to the shoreline or to a boathouse or pier fronting your property at the completion of each day's activities.
- g) For all electrical services permitted, a disconnect must be located at or above the _____-foot contour that is accessible during flooding.
- h) You should contact your local government official(s) to ensure that this facility complies with all applicable local floodplain regulations.
- i) The entire closed-loop coil heating and air conditioning system and its support apparatus must be either placed below elevation _____ (to provide a five-foot clearance for water craft at minimum pool elevations of _____) or located underneath a TVA approved water-use facility or other TVA approved structure. The supply and return lines must be buried as they cross the reservoir drawdown zone in areas of water depth less than five feet (minimum pool). The liquid contents of the closed-loop heating and air conditioning system must be propylene glycol or water, and the applicant or authorized agent must provide TVA with written verification of this fact.
- j) You agree that only those facilities which have been approved by TVA prior to construction will be placed within the harbor limits and that permanent mooring buoys, boat slips, or other harbor facilities will not be placed outside the harbor limits.
- k) You agree that all storage, piping, and dispensing of liquid fuel shall comply with applicable requirements of the "Flammable and Combustible Liquids" section of the National Fire Codes and any additional requirements of federal, state, and local laws and regulations.
- l) You agree that the GREENWAY facility hereby approved will be used for PUBLIC USE and for no other purpose unless approved in writing from TVA.
- m) You agree that if the construction project covered by this permit is not initiated within (18) months after the date of issuance, this permit will then automatically expire and you must submit a new 26a permit application for TVA approval with the applicable fee.

2. Ownership Rights

- a) No fill will be placed higher than elevation _____ maximum shoreline contour (msc), and every precaution will be taken not to disturb or alter the existing location of the _____-foot contour elevation through either excavation or placement of fill.
- b) You are advised that TVA retains the right to flood this area and that TVA will not be liable for damages resulting from flooding.
- c) You shall notify TVA of any sale or transfer of land, which would affect the landward limits of harbor area, as far in advance of such sale or transfer as possible.
- d) This approval of plans is only a determination that these harbor limits will not have any unacceptable effect on TVA programs or other interests for which TVA has responsibility. Such approval does not profess or intend to give the applicant exclusive control over the use of navigable waters involved.
- e) You recognize and understand that this authorization conveys no property rights, grants no exclusive license, and in no way restricts the general public's privilege of using shoreland owned by or subject to public access rights owned by TVA. It is also subject to any existing rights of third parties. Nothing contained in this approval shall be construed to detract or deviate from the rights of the United States and TVA held over this land under the Grant of Flowage Easement. This Approval of Plans does not give any property rights in real estate or material and does not authorize any injury to private property or invasion of private or public rights. It merely constitutes a finding that the facility, if constructed at the location specified in the plans submitted and in accordance with said plans, would not at this time constitute an obstruction unduly affecting navigation, flood control, or public lands or reservations.

3. Shoreline Modification and Stabilization

- a) For purposes of shoreline bank stabilization, all portions will be constructed or placed, on average, no more than two feet from the existing shoreline at normal summer pool elevation.
- b) You agree that spoil material will be disposed of and contained on land lying and being above the 822-foot contour. Every precaution will be made to prevent the reentry of the spoil material into the reservoir.
- c) Bank, shoreline, and floodplain stabilization will be permanently maintained in order to prevent erosion, protect water quality, and preserve aquatic habitat.
- d) You agree to reimburse TVA \$ _____, which is the current value of the _____ acre feet of power storage volume displaced by fill into the reservoir.

4. Water Intake

- a) If the reservoir falls below the elevation of the intake, the applicant will be responsible for finding another source of raw water.
- b) You must install and maintain a standard regulatory hazard buoy at the end of the intake to warn boaters of the underwater obstruction. The word "intake" should be added to the buoy and be attached using a five-foot cable.
- c) The screen openings on the intake strainer must be 1/8-inch (maximum), to minimize the entrapment of small fish.
- d) This approval does not constitute approval of the adequacy or safety of applicant's water system. TVA does not warrant that the water withdrawn and used by applicant is safe for drinking or any other purpose, and applicant is solely responsible for ensuring that all water is properly treated before using.

5. Bridges and Culverts

- a) You agree to design/construct any instream piers in such a manner as to discourage river scouring or sediment deposition.
- b) Applicant agrees to construct culvert in phases, employing adequate streambank protection measures, such that the diverted streamflow is handled without creating streambank or streambed erosion/sedimentation and without preventing fish passage.
- c) Concrete box culverts and pipe culverts (and their extensions) must create/maintain velocities and flow patterns which offer refuge for fish and other aquatic life, and allow passage of indigenous fish species, under all flow conditions. Culvert floor slabs and pipe bottoms must be buried below streambed elevation, and filled with naturally occurring streambed materials. If geologic conditions do not allow burying the floor, it must be otherwise designed to allow passage of indigenous fish species under all flow conditions.

- d) All natural stream values (including equivalent energy dissipation, elevations, and velocities; riparian vegetation; riffle/pool sequencing; habitat suitable for fish and other aquatic life) must be provided at all stream modification sites. This must be accomplished using a combination of rock and bioengineering, and is not accomplished using solid, homogeneous riprap from bank to bank.
- e) You agree to remove demolition and construction by-products from the site—for recycling if practicable, or proper disposal—outside of the 100-year floodplain. Appropriate BMPs will be used during the removal of any abandoned roadway or structures.

6. Best Management Practices

- a) You agree that removal of vegetation will be minimized, particularly any woody vegetation providing shoreline/streambank stabilization.
- b) You agree to installation of cofferdams and/or silt control structures between construction areas and surface waters prior to any soil-disturbing construction activity, and clarification of all water that accumulates behind these devices to meet state water quality criteria at the stream mile where activity occurs before it is returned to the unaffected portion of the stream. Cofferdams must be used wherever construction activity is at or below water elevation.
- c) A floating silt screen extending from the surface to the bottom is to be in place during excavation or dredging to prevent sedimentation in surrounding areas. It is to be left in place until disturbed sediments are visibly settled.
- d) You agree to keep equipment out of the reservoir or stream and off reservoir or stream banks, to the extent practicable (i.e., performing work "in the dry").
- e) You agree to avoid contact of wet concrete with the stream or reservoir, and avoid disposing of concrete washings, or other substances or materials, in those waters.
- f) You agree to use erosion control structures around any material stockpile areas.
- g) You agree to apply clean/shaken riprap or shot rock (where needed at water/bank interface) over a water permeable/soil impermeable fabric or geotextile and in such a manner as to avoid stream sedimentation or disturbance, or that any rock used for cover and stabilization shall be large enough to prevent washout and provide good aquatic habitat.
- h) You agree to remove, redistribute, and stabilize (with vegetation) all sediment which accumulates behind cofferdams or silt control structures.
- i) You agree to use vegetation (versus riprap) wherever practicable and sustainable to stabilize streambanks, shorelines, and adjacent areas. These areas will be stabilized as soon as practicable, using either an appropriate seed mixture that includes an annual (quick cover) as well as one or two perennial legumes and one or two perennial grasses, or sod. In winter or summer, this will require initial planting of a quick cover annual only, to be followed by subsequent establishment of the perennials. Seed and soil will be protected as appropriate with erosion control netting and/or mulch and provided adequate moisture. Streambank and shoreline areas will also be permanently stabilized with native woody plants, to include trees wherever practicable and sustainable (this vegetative prescription may be altered if dictated by geologic conditions or landowner requirements). You also agree to install or perform additional erosion control structures/techniques deemed necessary by TVA.

Additional Conditions

- Bank stabilization would not be conducted from March through June to protect bank nesting bird species.
 - Applicants would incorporate measures into their landscape plan to address the exotic, invasive plants found in the riparian zone along the entire shoreline area in an effort to replace these species with native flora that would provide the highest level of natural habitat for the proposal.
 - Before greenway construction is complete, the applicant would coordinate with WMA personnel to determine if signage describing the strict hunting regulations is necessary and, if so, the appropriate location of such signage along the greenway.
 - During the greenway construction, personnel from the ARL would monitor the installation of pipe and headwalls in existing ditches (where excavation is necessary) to determine the existence of archaeologically significant materials.
 - During the drainage placement under greenway (where excavation is necessary), personnel from the ARL would monitor to determine the existence of archaeologically significant materials.
 - During the installation of bridge abutments for the greenway, ARL personnel would investigate the abutment footprints to determine the existence of archaeologically significant materials.
 - If archaeological features were encountered during the golf practice facility and greenway construction monitoring, UT would abide by the stipulations in the MOA.
 - If it is necessary to cut a keyway along the beach area, personnel from ARL would monitor the installation of riprap stabilization to determine the existence of archaeologically significant materials.
 - There would be no bank reshaping, and all vegetation would be removed by hand.
- A layer of non-woven 6.4 oz. per yard geotextile filter fabric would be placed along the entire shoreline proposed for stabilization prior to placing riprap.

- The applicants would place Class C, D, or D50 riprap to the top of the bank.
 - All work would be conducted during dry weather conditions.
 - If heavy equipment (trackhoe) were required for accessing areas for stabilization that a barge cannot reach or if a keyway were necessary, archaeological monitoring would be necessary. If archaeological resources were exposed during this procedure, all work would cease in the area where the resources have been encountered.
 - If this project is not completed within five years of submittal to TVA, UT would consult with the SHPO to determine if these requirements were still suitable or if additional investigations would be necessary.

Page intentionally blank

**Attachment E – Summary of Species Found
Within the Proposal Area**

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Plant Species Found Within the Stream Vegetative Buffer

Vegetation in the stream area is typical for moist site riparian zones on Fort Loudoun Reservoir and includes small trees and shrubs such as black willow, silver and red maple, and silky dogwood, and a herbaceous layer that includes exotic species such as Japanese honeysuckle, multiflora rose, and tall fescue grass, in addition to some native sedges, blackberry, pokeweed, goldenrod, ironweed, pigweed, and swamp dock.

Plant Species Found Along the Shoreline

The shoreline area along the reservoir is comprised of a “one-tree-wide” riparian zone with sycamore, silver maple, and black willow being the most common species. The understory along this shoreline area is comprised of a mix of common native and invasive exotic species including those previously mentioned with the addition of Amur honeysuckle, privet, mimosa, and a *Clematis* vine.

Plant Species Found Within the Proposed Greenway

The area proposed for the greenway trail is currently planted to winter wheat cover, which typically follows a spring/summer row crop planting of corn or other forage crop for UT. The reservoir shoreline area proposed to be stabilized with hard armor riprap is similar to the downstream portion fronting the Knox County property in that it is comprised of a very narrow, essentially one-tree-wide riparian zone. Native trees scattered along this shoreline segment include sycamore, green ash, black locust, hackberry, silver maple, black walnut, and black willow. Native herbaceous and understory plants include blackberry, pokeweed, goldenrod, poison ivy, smooth sumac, and ironweed with Carolina coralbeads being a fairly common native vine. Most of this narrow zone is seriously infested with a variety of exotic, invasive plants including multiflora rose, Amur honeysuckle, Japanese honeysuckle, privet, kudzu, tall fescue, and Bradford pear.

Plant Species Found Within the Proposed Golf Practice Facility

The dominant vegetative cover in this area is exotic tall fescue along with a substantial number of 18- to 24-inch tall Bradford pear seedlings currently scattered across the field site.

Wildlife Species Found Within the Proposal Area

Wildlife species observed, or expected to use the available habitats on the site, include resident and migratory birds such as Canada geese, eastern bluebird, eastern phoebe, song sparrow, mockingbird, northern cardinal, mourning dove, white-eyed vireo, common yellowthroat, and belted kingfisher. Mammals utilizing the site include meadow vole, white-footed mouse, muskrat, eastern cottontail, striped skunk, raccoon, coyote, and red fox. Amphibians and reptiles using the site include eastern garter snake, black rat snake, eastern box turtle, western chorus frog, and American toad.

State- and Federally Listed and Other Aquatic Species of Conservation Concern Found Near the Proposal Area

Common Name	Scientific Name	State Status	Federal Status
Fish			
Ashy Darter	<i>Etheostoma cinereum</i>	THR (S2S3)	-
Blue Sucker	<i>Cycleptus elongatus</i>	THR (S2)	-
Duskytail Darter	<i>Etheostoma percnum</i>	END (S1)	END
Flame Chub	<i>Hemitremia flammea</i>	NMGT (S3)	-
Highfin Carpsucker*	<i>Carpodes velifer</i>	NMGT (S2S3)	-
Lake Sturgeon	<i>Acipenser fulvescens</i>	END (S1)	-
Longhead Darter	<i>Percina macrocephala</i>	THR (S2)	-
Snail Darter	<i>Percina tanasi</i>	THR (S2S3)	THR
Tangerine Darter	<i>Percina aurantiaca</i>	NMGT (S3)	-
Tennessee Dace	<i>Phoxinus tennesseensis</i>	NMGT (S3)	-
Mussel			
Fine-rayed Pigtoe	<i>Fusconaia cuneolus</i>	END (S1)	END
Orange-foot Pimpleback#	<i>Plethobasus cooperianus</i>	END (S1)	END
Snails			
Spiny Riversnail#	<i>Io fluvialis</i>	NOST (S2)	-
Ornate Rocksnail#	<i>Lithasia geniculata</i>	NOST (S3)	-
Anthony's Riversnail	<i>Athearnia anthonyi</i>	END (S1)	END

*Species does not occur within the potentially affected watersheds

Historical record

Status Codes: END = Endangered; NOST= No Status but tracked by the Tennessee State Heritage Project; THR = Threatened; NMGT = In Need of Management.

State Ranks: S1 = Critically Imperiled; S2 = Imperiled; S3 = Vulnerable

Attachment F – Application, Proposal Drawings, and Maps

Page intentionally blank

OMB No. 3316-0060
Exp. Date 03/31/2007

United States - Naval Reserve Center
Tennessee Department of Transportation

List of previous DA/TVA permits/approvals DA _____ TVA _____ See attached
Permit Number Date

Is any portion of the activity for which authorization is sought now complete? Yes No (If "Yes" attach explanation)
 Month and year the activity was completed: _____ . Indicate the existing work on the drawings.

List all approvals or certifications required by other federal, interstate, state, or local agencies for any structures, construction, discharges, deposits, or other activities described in this application.

Issuing Agency	Type Approval	Identification No.	Date of Application	Date of Approval
Department of the Army	Section 404 Clean Water Act			
Department of the Army	Section 10 Rivers and Harbors Act			
TDEC	Section 401 Clean Water Act			
City of Knoxville	Various permits (floodplain, grading, stormwater, etc)			

Has any agency denied approval for the activity described herein or for any activity directly related to the activity described herein?
 Yes No (If "Yes" attach explanation)

Project plans or drawings should accompany the application. These should be on paper suitable for reproduction no larger than 11 x 17 inches or contained on a 3-1/2 inch floppy computer disc in "dxf" format, and should be submitted to the appropriate TVA and U.S. Army Corps of Engineers offices. An application that is not complete will be returned for additional information.

U.S.A.C.E. Offices		TVA Office Location
U.S. Army Corps of Engineers Eastern Regulatory Field Office Spring Cress Business Park 501 Adessa Blvd., Suite 250 Lenoir City, Tennessee 37771 (865) 986-7296	U.S. Army Corps of Engineers Savannah District The Plaza, Suite 130 1590 Adamson Parkway Morrow, Georgia 30260-1763 (678) 422-2729	Tennessee Valley Authority Little Tennessee Watershed Team 260 Interchange Park Drive, LCB 1A-LCT Lenoir City, TN 37772-5664 (865) 632-1300
U.S. Army Corps of Engineers Regulatory Branch 3701 Bell Road Nashville, Tennessee 37214 (615) 369-7500	U.S. Army Corps of Engineers Western Regulatory Field Office 2042 Beltline Road, SW, Bldg C, Suite 415 Decatur, Alabama 35602 (256) 350-5620	
U.S. Army Corps of Engineers Norfolk District P.O. Box 338 Abingdon, Virginia 24212 (276) 623-5259	U.S. Army Corps of Engineers Asheville Regulatory Field Office 151 Patton Avenue, Room 208 Asheville, North Carolina 28801-5006 (828) 271-4856	

Privacy Act Statement
 This information is being requested in accordance with Section 26a of the TVA Act as cited on the front page of this form. Disclosure of the information requested is voluntary; however, failure to provide any required information or documents may result in a delay in processing your application or in your being denied a Section 26a permit. An application that is not complete will be returned for additional information. TVA uses this information to assess the impact of the proposed project on TVA programs and the environment and to determine if the project can be approved. Information in the application is made a matter of public record through issuance of a public notice if warranted. Routine uses of this information include providing to federal, state, or local agencies, and to consultants, contractors, etc., for use in program evaluations, studies, or other matters involving support services to the program; to respond to a congressional inquiry concerning the application or Section 26a program; and for oversight or similar purposes, corrective action, litigation or law enforcement.

Burden Estimate Statement

Public reporting burden for this collection of information is estimated to average 1.5 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Agency Clearance Officer, Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402; and to the Office of Management and Budget, Paperwork Reduction Project (3316-0060), Washington, D.C. 20503.



TENNESSEE VALLEY AUTHORITY

LAND USE APPLICATION

Sensitive Information

Tennessee Valley Authority (TVA) Environmental Stewardship and Policy receives several hundred requests annually for use of TVA land or landrights. Please fill out this application completely. TVA has implemented a cost recovery system so that those who benefit directly from the use of public lands reimburse TVA for its total cost. The appropriate initial payment or standard fee must be included with your application. You will be billed for any additional costs for those actions that exceed the initial payment. Please see the attached sheet *TVA Land Transaction Fees* for additional information. If you have any questions, please call your local TVA Environmental Stewardship and Policy Watershed Team.

TVA OFFICIAL USE ONLY	
RLR No.: <u>182504</u>	Tract No. Assigned by Realty: <u>FL-1035</u>

1. Name and Mailing Address of Applicant:

The University of Tennessee
5723 Middlebrook Pike Ste. 120
Knoxville TN 37996

Home Telephone No.: 974-2441

Office Telephone No.: 974-2441

E-Mail Address: rstivers@tennessee.edu

SSN or Federal ID No.: _____

2. Name, Address, and Title of Authorized Agent: (i.e., builder, engineer.) Include a letter confirming your authorization.

Robbi Stivers

Home Telephone No.: _____

Office Telephone No.: _____

3. Location:

Attach a location map and a map showing boundaries of TVA land needed.

Subdivision: _____

Subdivision Plat Lot No.: _____

Tax Map & Parcel No.: 147 NW Map 45D

Reservoir: Fort Loudoun

River: TENNESSEE RIVER

River Mile: 643.51

4. Type of Land Use Required:

Please call your local TVA Environmental Stewardship and Policy Team (WT) to help us determine the appropriate TVA action needed.

Approval by TVA WT:

Land Use Permit

License Agreement

Sufferance Agreement

(Complete page 1 only)

Approval by TVA Board:

Easement

Deed Modification

Lease (____ years needed)

Abandonment

Land Transfer

5. Proposed Time Schedule for your Project:

Start Date: Upon execution of license Projected Completion Date: 6/2009

6. Describe your project, its purpose and intended use:

Describe the proposed development, on or off TVA land. Include a general description of proposed structures to be erected and land disturbance including vegetation removal, fills or excavations. Attach a copy of detailed plans as appropriate.

Construction of golf practice facility and shoreline stabilization

7. Will federal assistance be used as part of this project?

Yes No If yes, describe activity and complete Applicant Information Pre-Award Form.

8. Authorization for TVA to process your application:

Application is hereby made for approval of the land use described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. By submitting this request, I understand credit checks will be performed as part of the normal business procedure. Additional financial information may be requested.

PAYMENT TERMS: Payment for Land Transaction Fees and any related costs are due Net thirty (30) days from the date of invoice. On any overdue payment, TVA shall charge interest at the rate payable by TVA under the United States Prompt Payment Act (31 U.S.C. §§3901-3906), from the date payment is due until the date TVA receives payment. Payment of interest shall be due within thirty (30) days after TVA's invoice for such interest is dated.

Failure by the Customer to pay all invoices within sixty (60) days will result in termination of the request.

Sensitive Information

8. Authorization (continued)

I understand TVA charges a standard fee for minor land actions, and that full cost recovery is required for all other actions. I understand and agree to pay all of TVA's costs associated with the processing of this application. Upon receipt of a complete application and standard fee or initial processing fee, TVA will initiate the review of the request. Upon completion of the draft instrument, a standard closing cost fee of \$800.00 will be assessed for deed execution, mailing, and filing. Payment of any fee does not guarantee TVA approval. TVA may impose terms and conditions at the time of the approval. The processing fees are in addition to any payment required for the purchase or use of the TVA land. Any unused portion of the processing fee will be refunded. I understand TVA will invoice me monthly when costs exceed the initial processing fee.

2/5/08
Date

[Signature]
Signature of Applicant

9. Anticipated Economic Impacts of your Project:

A. Projected cost estimate and funding source (if project is to be completed in phases, please include time schedule and costs for each phase):

B. Number of jobs to be created - Near - Term (including construction) _____
Long - Term _____

C. Negative socioeconomic impacts considered:

D. Expected public and investor benefits:

10. Describe Anticipated Environmental Impacts: (Include copies of reviews, assessments, or letters from federal or state agencies)

11. Alternative Site(s) Considered: (Include justification for rejecting alternate locations; attach explanation if needed)

12. List all permits, approvals, or certifications required by other federal, state, or local agencies:
(Include those required for any structure, construction activity, discharge or other activities described in this application)

Issuing Agency	Type Approval	Identification Number	Date of Application	Date of Approval

13. Has any agency denied approval for the project described herein or any activity related to the project?

No Yes (If "Yes", attach explanation)

A complete request should include:

1. This completed application form and a check or money order with Social Security Number or Federal ID Number on the check made payable to "TVA" for the appropriate land transaction fee.
2. A location map indicating the area of TVA land or landrights affected by the project.
3. Drawing(s) or plan(s) of any proposed construction activity or development which would result if land or landrights are granted.
4. Other documents as available (surveys, environmental documents, etc.).

**RECEIVED
FOR TVA USE ONLY**

FEB 05 2008

Date Application Received [Signature] Initials

Date Application Complete 2-5-2008 [Signature] Initials

[Signature]
Team Manager



TENNESSEE VALLEY AUTHORITY

Sensitive Information

LAND USE APPLICATION

Tennessee Valley Authority (TVA) Environmental Stewardship and Policy receives several hundred requests annually for use of TVA land or landrights. Please fill out this application completely. TVA has implemented a cost recovery system so that those who benefit directly from the use of public lands reimburse TVA for its total cost. The appropriate initial payment or standard fee must be included with your application. You will be billed for any additional costs for those actions that exceed the initial payment. Please see the attached sheet *TVA Land Transaction Fees* for additional information. If you have any questions, please call your local TVA Environmental Stewardship and Policy Watershed Team.

TVA OFFICIAL USE ONLY	
RLR No.: <u>182515</u>	Tract No. Assigned by Realty: <u>FL-1035</u>

<p>1. Name and Mailing Address of Applicant:</p> <p><u>Knox County</u></p> <p><u>600 Sutherland Avenue</u></p> <p><u>Knoxville, Tennessee 37920</u></p> <p>Home Telephone No.: <u>865-215-6600</u></p> <p>Office Telephone No.: _____</p> <p>E-Mail Address: _____</p> <p>SSN or Federal ID No.: _____</p>	<p>2. Name, Address, and Title of Authorized Agent: (i.e., builder, engineer.) <i>Include a letter confirming your authorization.</i></p> <p>_____</p> <p>_____</p> <p>Home Telephone No.: _____</p> <p>Office Telephone No.: _____</p>
---	--

<p>3. Location:</p> <p><i>Attach a location map and a map showing boundaries of TVA land needed.</i></p> <p>Subdivision: _____</p> <p>Subdivision Plat Lot No.: _____</p> <p>Tax Map & Parcel No.: _____</p> <p>Reservoir: <u>Fort Loudoun</u></p> <p>River: <u>Tennessee River</u></p> <p>River Mile: <u>643.5L</u></p>	<p>4. Type of Land Use Required:</p> <p><i>Please call your local TVA Environmental Stewardship and Policy Team (WT) to help us determine the appropriate TVA action needed.</i></p> <table border="0"> <tr> <td>Approval by TVA WT:</td> <td>Approval by TVA Board:</td> </tr> <tr> <td><input type="checkbox"/> Land Use Permit</td> <td><input type="checkbox"/> Easement</td> </tr> <tr> <td><input checked="" type="checkbox"/> License Agreement</td> <td><input type="checkbox"/> Deed Modification</td> </tr> <tr> <td><input type="checkbox"/> Surrender Agreement</td> <td><input type="checkbox"/> Lease (____ years needed)</td> </tr> <tr> <td><i>(Complete page 1 only)</i></td> <td><input type="checkbox"/> Abandonment</td> </tr> <tr> <td></td> <td><input type="checkbox"/> Land Transfer</td> </tr> </table>	Approval by TVA WT:	Approval by TVA Board:	<input type="checkbox"/> Land Use Permit	<input type="checkbox"/> Easement	<input checked="" type="checkbox"/> License Agreement	<input type="checkbox"/> Deed Modification	<input type="checkbox"/> Surrender Agreement	<input type="checkbox"/> Lease (____ years needed)	<i>(Complete page 1 only)</i>	<input type="checkbox"/> Abandonment		<input type="checkbox"/> Land Transfer
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<i>(Complete page 1 only)</i>	<input type="checkbox"/> Abandonment												
	<input type="checkbox"/> Land Transfer												

5. Proposed Time Schedule for your Project:

Start Date: When signed Projected Completion Date: 06-30-2009

6. Describe your project, its purpose and intended use:

Describe the proposed development, on or off TVA land. Include a general description of proposed structures to be erected and land disturbance including vegetation removal, fills or excavations. Attach a copy of detailed plans as appropriate.

Greenway and associated culverts, bridges, and other associated facilities.

7. Will federal assistance be used as part of this project?

Yes No If yes, describe activity and complete Applicant Information Pre-Award Form.

8. Authorization for TVA to process your application:

Application is hereby made for approval of the land use described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. By submitting this request, I understand credit checks will be performed as part of the normal business procedure. Additional financial information may be requested.

PAYMENT TERMS: Payment for Land Transaction Fees and any related costs are due Net thirty (30) days from the date of invoice. On any overdue payment, TVA shall charge interest at the rate payable by TVA under the United States Prompt Payment Act (31 U.S.C. §§3901-3908), from the date payment is due until the date TVA receives payment. Payment of interest shall be due within thirty (30) days after TVA's invoice for such interest is dated.

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Sensitive Information

8. Authorization (continued)

I understand TVA charges a standard fee for minor land actions, and that full cost recovery is required for all other actions. I understand and agree to pay all of TVA's costs associated with the processing of this application. Upon receipt of a complete application and standard fee or initial processing fee, TVA will initiate the review of the request. Upon completion of the draft instrument, a standard closing cost fee of \$800.00 will be assessed for deed execution, mailing, and filing. Payment of any fee does not guarantee TVA approval. TVA may impose terms and conditions at the time of the approval. The processing fees are in addition to any payment required for the purchase or use of the TVA land. Any unused portion of the processing fee will be refunded. I understand TVA will invoice me monthly when costs exceed the initial processing fee.

APPROVED BY: 08-040

South Willow 2-6-08 Date

Michael R. Kapes
Signature of Applicant
2-8-08

9. Anticipated Economic Impacts of your Project:

A. Projected cost estimate and funding source (if project is to be completed in phases, please include time schedule and costs for each phase):

B. Number of jobs to be created - Near - Term (including construction) _____
Long - Term _____

C. Negative socioeconomic impacts considered:

D. Expected public and investor benefits:

10. Describe Anticipated Environmental Impacts: (Include copies of reviews, assessments, or letters from federal or state agencies)

11. Alternative Site(s) Considered: (Include justification for rejecting alternate locations; attach explanation if needed)

12. List all permits, approvals, or certifications required by other federal, state, or local agencies: (include those required for any structure, construction activity, discharge or other activities described in this application)

Issuing Agency	Type Approval	Identification Number	Date of Application	Date of Approval

13. Has any agency denied approval for the project described herein or any activity related to the project?

No Yes (If "Yes", attach explanation)

<p>A complete request should include:</p> <ol style="list-style-type: none"> This completed application form and a check or money order with Social Security Number or Federal ID Number on the check made payable to "TVA" for the appropriate land transaction fee. A location map indicating the area of TVA land or landrights affected by the project. Drawing(s) or plan(s) of any proposed construction activity or development which would result if land or landrights are granted. Other documents as available (surveys, environmental documents, etc.). 	<p>FOR TVA USE ONLY</p> <p>FEB 11 2008 Date Application Received Initials <u>JSD</u></p> <p>TVA-LTWT 2-12-2008 Date Application Complete Initials <u>JSD</u></p> <p><u>Rachel D. J.</u> Team Manager</p>
--	---

Sensitive Information

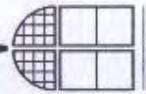
UT INTERCOLLEGIATE GOLF COMPLEX

CONCEPTUAL MASTER PLAN (REVISED)

SCALE: 1" = 100' DATE: MARCH 26, 2007

IN STATE PLANE
(NAD 83)

- DESIGNERS**
ALLEN & HAYS
1000 EAST 1000 SOUTH
SALT LAKE CITY, UT 84143
- OWNER**
UNIVERSITY OF UTAH
160 SOUTH 1400 EAST
SALT LAKE CITY, UT 84143
- ARCHITECTS**
GARDNER WHARREN ARCHITECTS
1000 EAST 1000 SOUTH
SALT LAKE CITY, UT 84143
- ENGINEERS**
CIVIL ENGINEERS
1000 EAST 1000 SOUTH
SALT LAKE CITY, UT 84143



EARTHWORK CALCULATIONS (APPROXIMATE)
VOLUME TO BE EXCAVATED: 1,200,000 CU YD
VOLUME TO BE FILLED: 1,200,000 CU YD
TOTAL VOLUME: 2,400,000 CU YD



1. ALL DISTANCES ARE APPROXIMATE.
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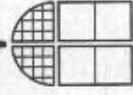
	GREENS - "Short Grass" (200)
	FIRMS - "Tall Grass" (200)
	FAIRWAYS - "Tall Grass" (200)
	ROUGH - "Tall Grass" (200)
	PLAYERS GRASSES - "Tall Grass" (200)
	TERRACE PLANTS (200)

	10 Year Flood Elevation (Approx.)
	50 Year Flood Elevation (Approx.)
	Anticipated Setback Line
	Area of Total Avoidance (No Paved Areas)
	Area of Total Avoidance (No Paved Areas)
	Proposed Overall Elevation Grade (OM)
	Proposed Overall Elevation Grade (OM)

- UNIVERSITY OF UTAH**
SCHOOL OF ARCHITECTURE
160 SOUTH 1400 EAST
SALT LAKE CITY, UT 84143
- DESIGNERS**
ALLEN & HAYS
1000 EAST 1000 SOUTH
SALT LAKE CITY, UT 84143
- ARCHITECTS**
GARDNER WHARREN ARCHITECTS
1000 EAST 1000 SOUTH
SALT LAKE CITY, UT 84143
- ENGINEERS**
CIVIL ENGINEERS
1000 EAST 1000 SOUTH
SALT LAKE CITY, UT 84143

Allen & Hoshall
since 1915

PROJECT DESIGNER



DESIGNERS
ASSOCIATES
ARCHITECTS
1215 West Park Road, Suite 100
Knoxville, TN 37922

GOLF COURSE DESIGNER



GOLF COURSE DESIGN
10000 Highway 100, Suite 100
Knoxville, TN 37922

8331 T. Walker Springs, Suite 102, Knoxville, TN 37922
Phone: 606.693.7881 Fax: 606.693.7828
www.allenandhoshall.com

UNIVERSITY OF TENNESSEE
GOLF TEAM FACILITY (PRACTICE COURSE)
SBC NO. 540/09-06-01
CONSTRUCTION PLANS
KNOXVILLE, TENNESSEE

INDEX OF DRAWINGS

- CE-1 COVER
- CE-2 COORDINATOR'S GENERAL NOTES
- CE-3 SITE CONDITIONS
- CE-4 SITE DEMONSTRATION
- CE-5 SITE LOCATION PLAN
- CE-6 PROPOSED COURSE PLAN
- CE-7 PROPOSED TRENCHES AND DRAINAGE UTILITY
- CE-8 PROPOSED TRENCHES AND DRAINAGE UTILITY
- CE-9 PROPOSED TRENCHES AND DRAINAGE UTILITY
- CE-10 PROPOSED TRENCHES AND DRAINAGE UTILITY
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- CE-12 PROPOSED TRENCHES AND DRAINAGE UTILITY
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- CE-100 PROPOSED TRENCHES AND DRAINAGE UTILITY



T University of Tennessee
Division of Facilities Planning
5723 Middlebrook Pike, Suite 119
Knoxville, TN 37921-0040
www.utk.edu

JOB NUMBER 71358

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THE UNIVERSITY OF MICHIGAN
 CORD TRAM FACILITY
 SEC. NO. 34089-05-01

UNIVERSITY OF MICHIGAN
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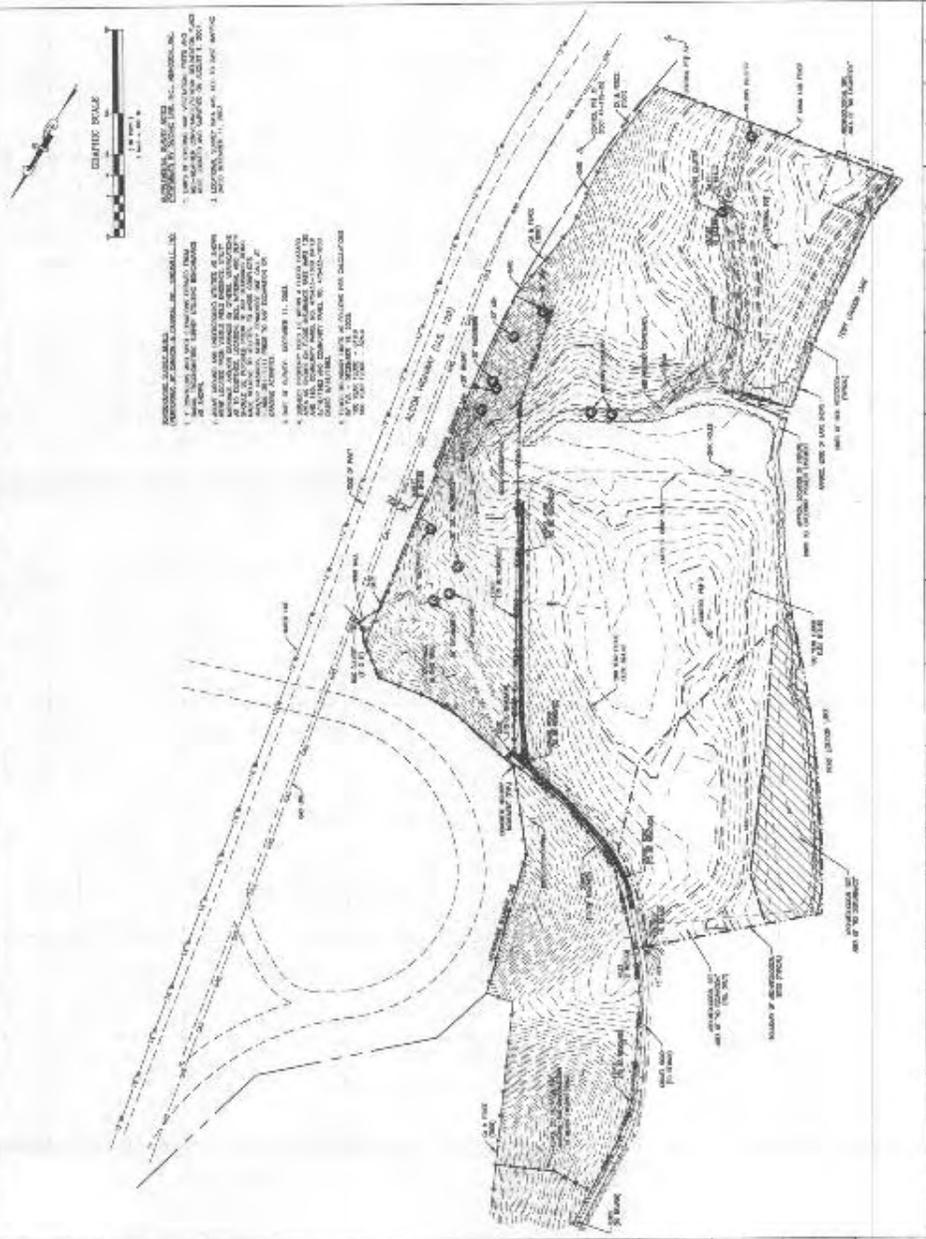


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		<p>1. THE CITY OF MICHIGAN HAS REVIEWED THE PROJECT AND HAS DETERMINED THAT THE PROJECT IS IN ACCORDANCE WITH THE CITY OF MICHIGAN'S ZONING ORDINANCES AND REGULATIONS. THE CITY OF MICHIGAN HAS REVIEWED THE PROJECT AND HAS DETERMINED THAT THE PROJECT IS IN ACCORDANCE WITH THE CITY OF MICHIGAN'S ZONING ORDINANCES AND REGULATIONS.</p>
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DATE: 11/28
 DRAWN BY: ...
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 10. SHOW OF ELEVATION: NOVEMBER 11, 1934.

ALL INFORMATION ON THIS MAP
 WAS OBTAINED FROM THE
 FOLLOWING SOURCES:
 1. ALTON HIGHWAY (200 FT. 1930)
 2. RIVER BANK
 3. SLOPE OF 10%
 4. SLOPE OF 15%

THE UNIVERSITY OF TENNESSEE
 CIVIL ENGINEERING DEPARTMENT
 KNOXVILLE, TENNESSEE

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 CIVIL ENGINEERING DEPARTMENT
 KNOXVILLE, TENNESSEE

UNITED STATES
 GEOLOGICAL SURVEY
 WASHINGTON, D. C.

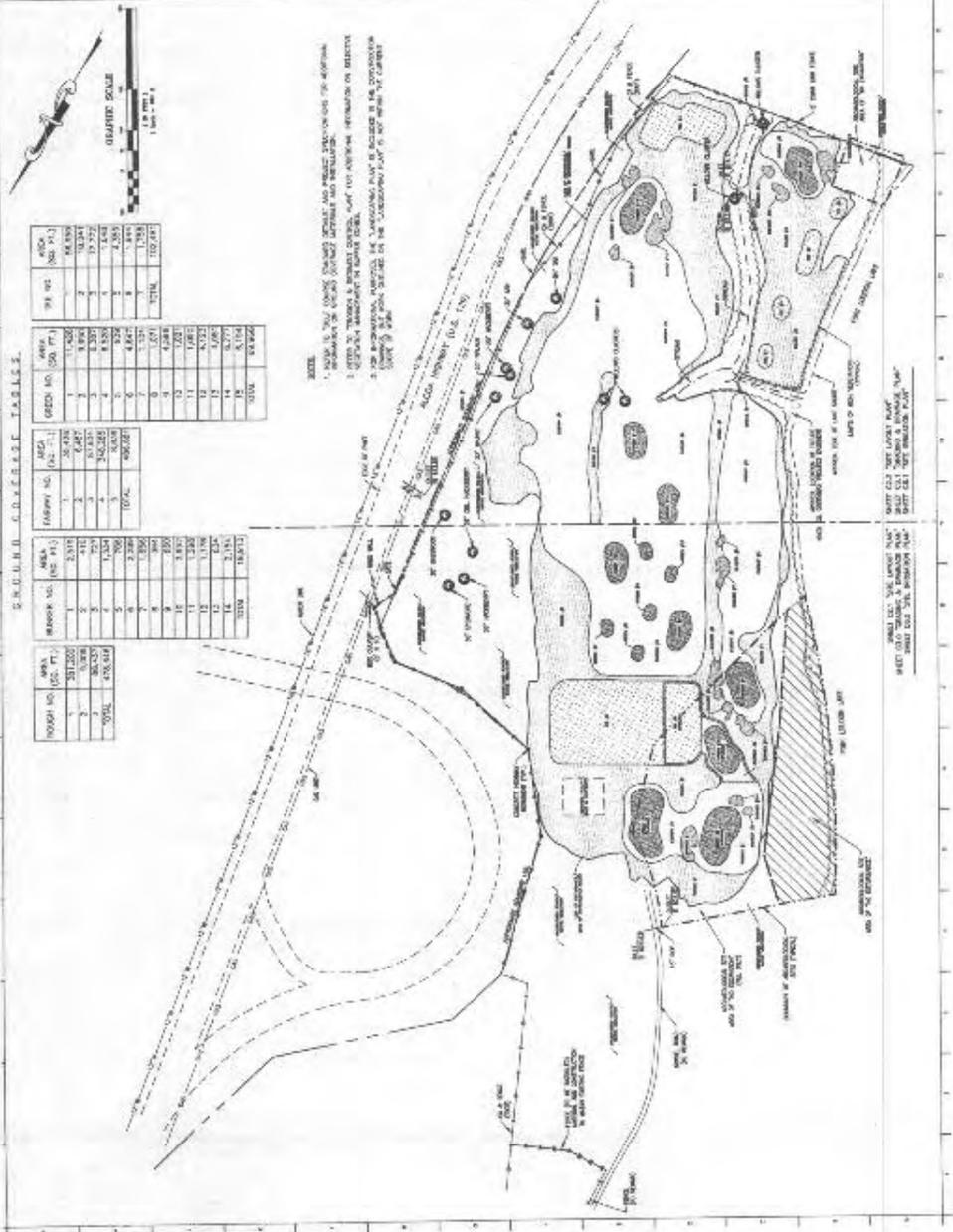


THE UNIVERSITY OF MISSISSIPPI
TRAM FACILITY
SEC. NO. 4400-106-01

UNIVERSITY OF MISSISSIPPI
TRAM FACILITY
SEC. NO. 4400-106-01



C2.0



367 Peachtree Street, N.W.
Atlanta, Georgia 30308
Telephone: (404) 525-1100
FAX: (404) 525-1101

NAME: _____
ADDRESS: _____
CITY: _____
STATE: _____
ZIP: _____

THE UNIVERSITY OF TENNESSEE
SOIL TEAM FACILITY
566 NO. SHANNONWAY
KNOXVILLE, TN 37996

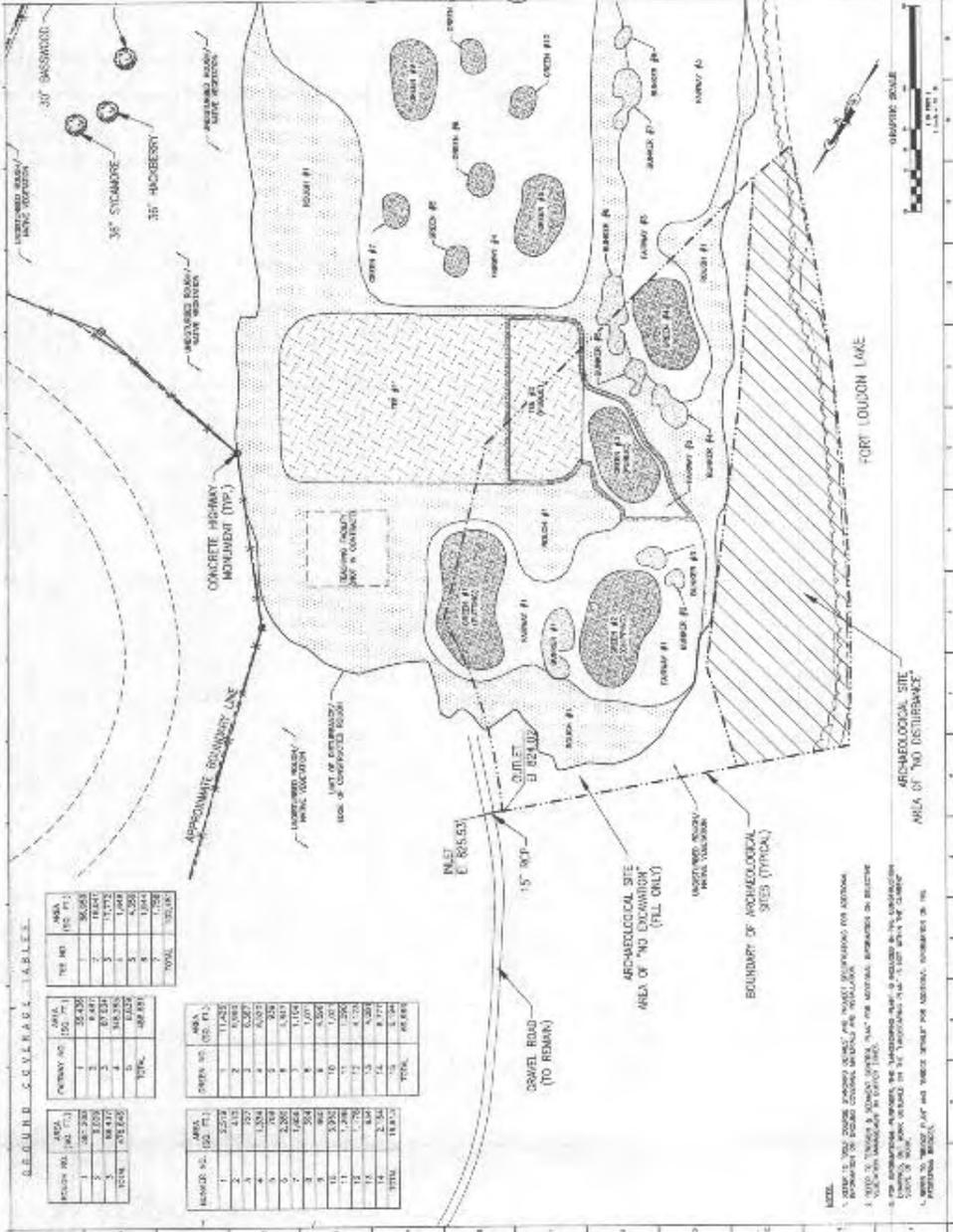
APPROVED BY: _____
DATE: _____

SITE LOCATION

DATE: 11/28
DRAWN BY: JEP
CHECKED BY: JEP
SCALE: 1" = 40'



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Q.E.D.U.B.D. S.C.V.E.A.R.S. A.B.L.E.E.

PLANT NO.	AREA (SQ. FT.)	TYPE NO.	AREA (SQ. FT.)
1	30,000	1	30,000
2	10,000	2	10,000
3	10,000	3	10,000
4	10,000	4	10,000
5	10,000	5	10,000
TOTAL	70,000	TOTAL	70,000

PLANT NO.	AREA (SQ. FT.)	TYPE NO.	AREA (SQ. FT.)
1	1,000	1	1,000
2	1,000	2	1,000
3	1,000	3	1,000
4	1,000	4	1,000
5	1,000	5	1,000
6	1,000	6	1,000
7	1,000	7	1,000
8	1,000	8	1,000
9	1,000	9	1,000
10	1,000	10	1,000
11	1,000	11	1,000
12	1,000	12	1,000
13	1,000	13	1,000
14	1,000	14	1,000
TOTAL	10,000	TOTAL	10,000

NOTE: THIS PLAN SHOWS THE RESULTS OF THE SURVEY CONDUCTED FOR THE PURPOSE OF IDENTIFYING AND LOCATING ARCHAELOGICAL SITES AND AREAS OF INTEREST. THE SURVEY WAS CONDUCTED IN ACCORDANCE WITH THE STANDARDS AND PROCEDURES OF THE NATIONAL ARCHAEOLOGICAL SERVICE. THE SURVEY WAS CONDUCTED BY THE UNIVERSITY OF TENNESSEE SOIL TEAM FACILITY. THE SURVEY WAS CONDUCTED ON 11/28/98. THE SURVEY WAS CONDUCTED BY JEP AND JEP. THE SURVEY WAS CONDUCTED BY JEP AND JEP. THE SURVEY WAS CONDUCTED BY JEP AND JEP.

1011 FORT LINDSEY BLVD., SUITE 100
MEMPHIS, TENNESSEE 38117
PH: 901.525.1100
FAX: 901.525.1101
WWW.ALLENANDHOCHSTADT.COM

UNIVERSITY OF TENNESSEE
ONE TEAM FACILITY
SEC. NO. 38095-01-01

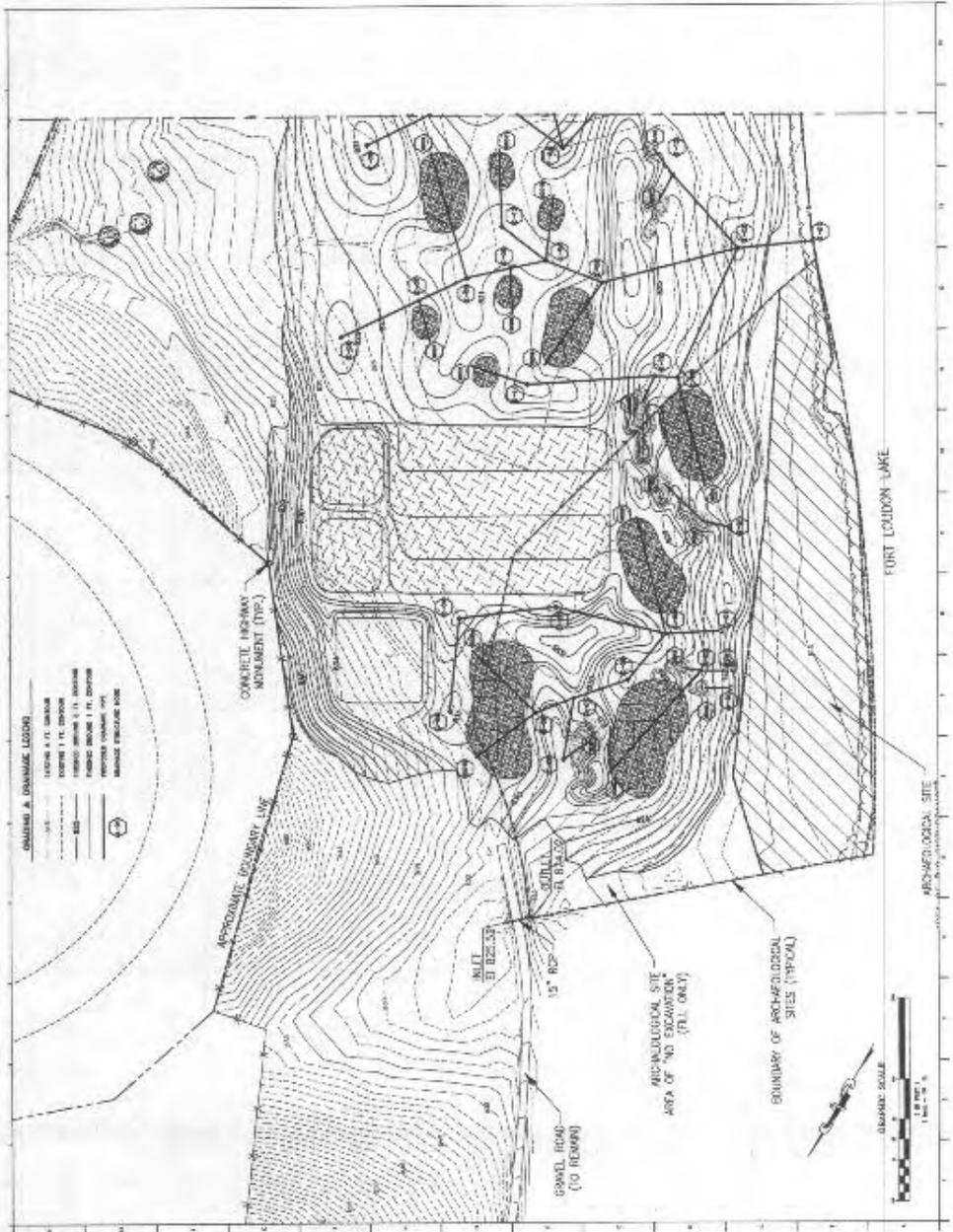
UNIVERSITY OF TENNESSEE
PROJECT NO. 10000000000000000000

GAMING & MANUFACTURING

DATE: 11/08
SCALE: AS SHOWN
PROJECT: ONE TEAM FACILITY
SHEET: 01 OF 01



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GAMING & MANUFACTURING LOGO

--- 1/4" = 1' SCALE
--- 1/8" = 1' SCALE
--- 1/16" = 1' SCALE
--- 1/32" = 1' SCALE
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ANN ARBOR, MICHIGAN 48106
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FACSIMILE 734-769-1001

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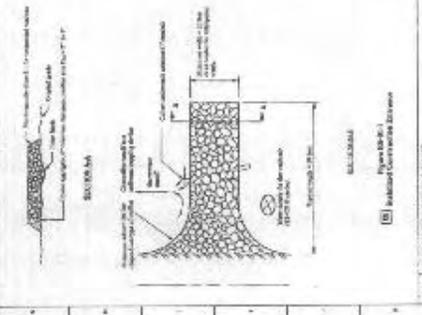
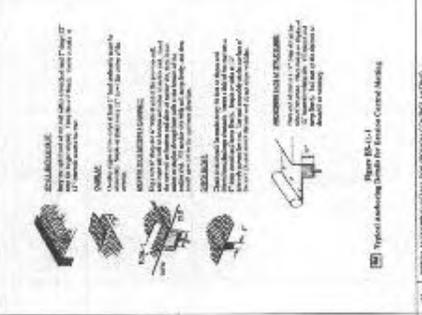
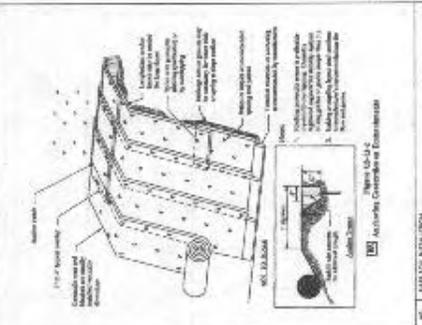
DATE: 1971
DRAWN BY: [Name]
CHECKED BY: [Name]
SCALE: AS SHOWN



C4.1



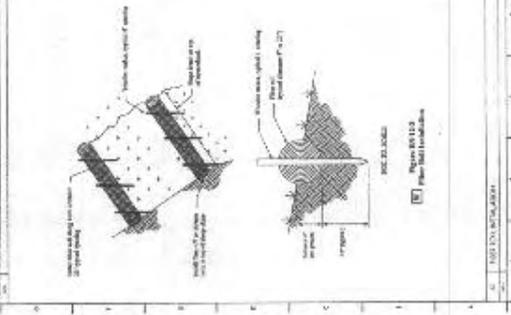
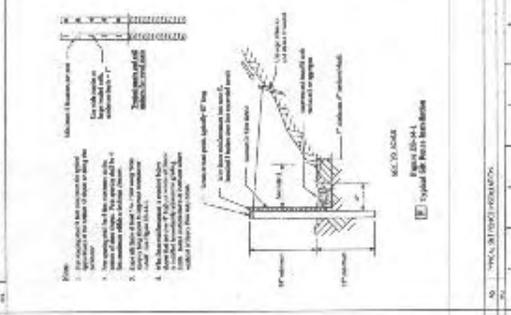
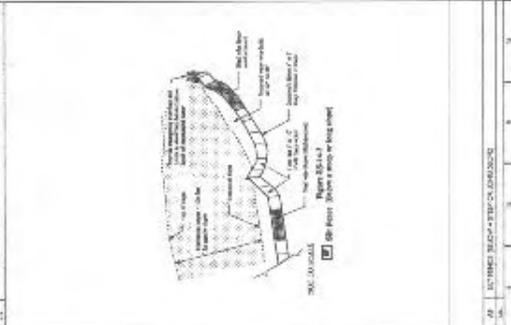
NOTES:
 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION OF PUBLIC WORKS, AS APPLICABLE.
 2. THE DESIGNER HAS CONDUCTED VISUAL INSPECTIONS OF THE EXISTING STRUCTURE AND FOUND IT TO BE IN GOOD CONDITION.
 3. THE DESIGNER HAS CONDUCTED VISUAL INSPECTIONS OF THE EXISTING STRUCTURE AND FOUND IT TO BE IN GOOD CONDITION.
 4. THE DESIGNER HAS CONDUCTED VISUAL INSPECTIONS OF THE EXISTING STRUCTURE AND FOUND IT TO BE IN GOOD CONDITION.
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THE UNIVERSITY OF TENNESSEE
 SCOTTS DALE FACILITY
 SEC. 10-1.1.1.1

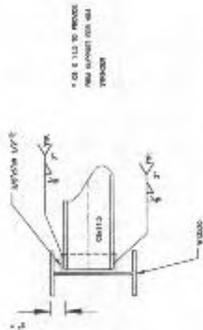
UNIVERSITY OF TENNESSEE
 SCOTTS DALE FACILITY
 SEC. 10-1.1.1.1

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 SCOTTS DALE FACILITY
 SEC. 10-1.1.1.1

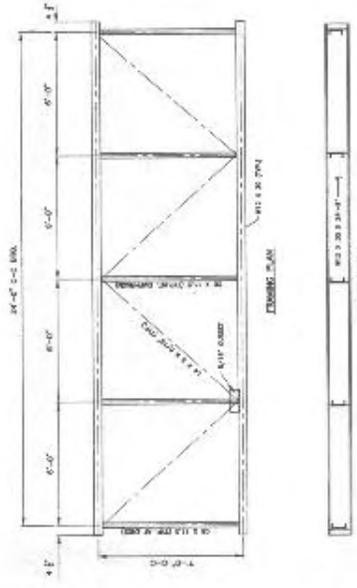


UNIVERSITY OF TENNESSEE
 SCOTTS DALE FACILITY
 SEC. 10-1.1.1.1

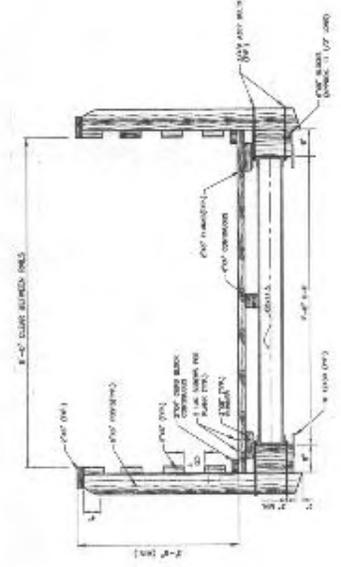
- GENERAL NOTES:**
1. RAISED LANE: SHALL BE ORIENTED HORIZONTALLY AND UNLESS OTHERWISE INDICATED, ALL RAISED LANE TRUCKS SHALL BE DESIGNED FOR 400 LB PER HORIZONTAL AREA.
 2. ALL RAISED LANE TRUCKS SHALL BE ATTACHED TO THE DECK WITH 1/2" DIA. 1/4" DIA. ANCHORS.
 3. ALL RAISED LANE TRUCKS SHALL BE ATTACHED TO THE DECK WITH 1/2" DIA. 1/4" DIA. ANCHORS.
 4. ALL RAISED LANE TRUCKS SHALL BE ATTACHED TO THE DECK WITH 1/2" DIA. 1/4" DIA. ANCHORS.
 5. DECKING SHALL BE ATTACHED TO EACH RAMP WITH 1/2" DIA. 1/4" DIA. ANCHORS AND 1/2" DIA. 1/4" DIA. ANCHORS.
 6. THE CONTRACTOR MAY SUBMIT ALTERNATE DETAILS FOR REVIEW AND APPROVAL.
 7. DETAILS SHALL BE IN ACCORDANCE WITH SECTION 052 OF THE STANDARD SPECIFICATIONS.



RAISED LANE ELEVATION

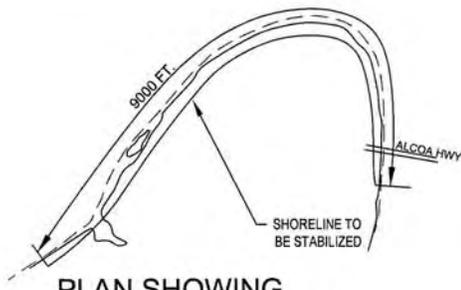


STRUCTURAL STEEL DETAILS

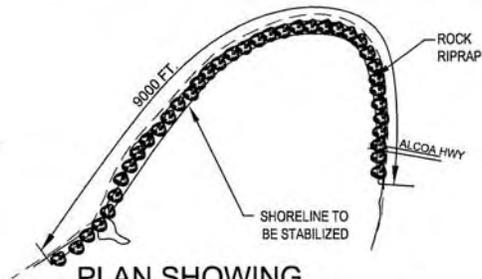


TYPICAL SECTION

THE UNIVERSITY OF TENNESSEE
 560 MC DONALD DRIVE
 KNOXVILLE, TN 37996-0001
 UNIVERSITY OF TENNESSEE
 ARCHITECTURAL SERVICES
 560 MC DONALD DRIVE
 KNOXVILLE, TN 37996-0001
 UNIVERSITY OF TENNESSEE
 ARCHITECTURAL SERVICES
 560 MC DONALD DRIVE
 KNOXVILLE, TN 37996-0001



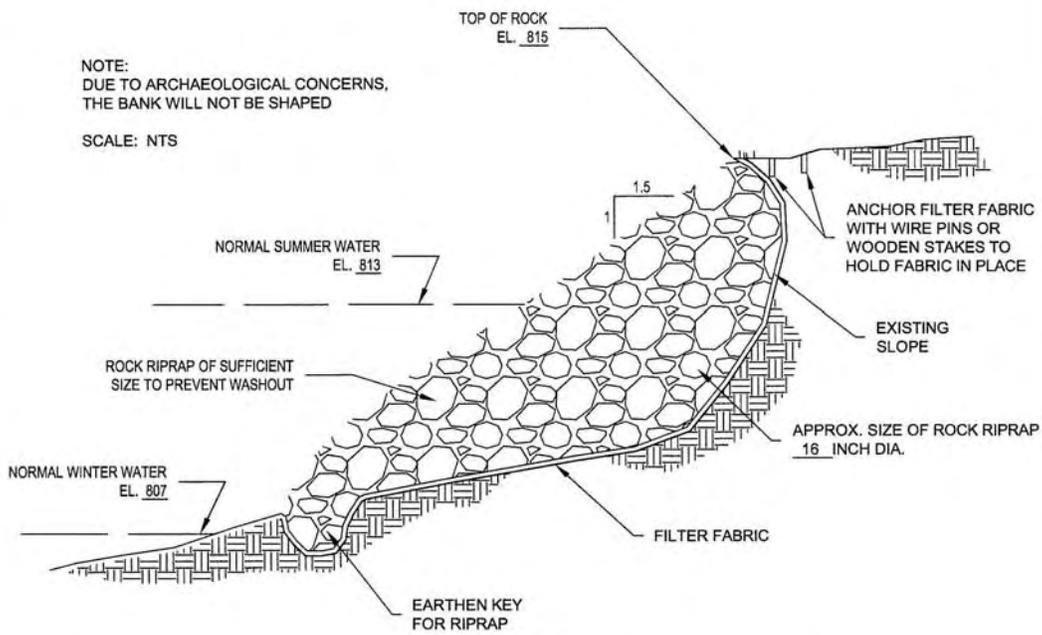
PLAN SHOWING EXISTING SHORELINE



PLAN SHOWING STABILIZED SHORELINE

NOTE:
DUE TO ARCHAEOLOGICAL CONCERNS,
THE BANK WILL NOT BE SHAPED

SCALE: NTS



SECTION SHOWING STABILIZED SHORE LINE

THE NORMAL SUMMER WATER LEVEL IS: EL. 813

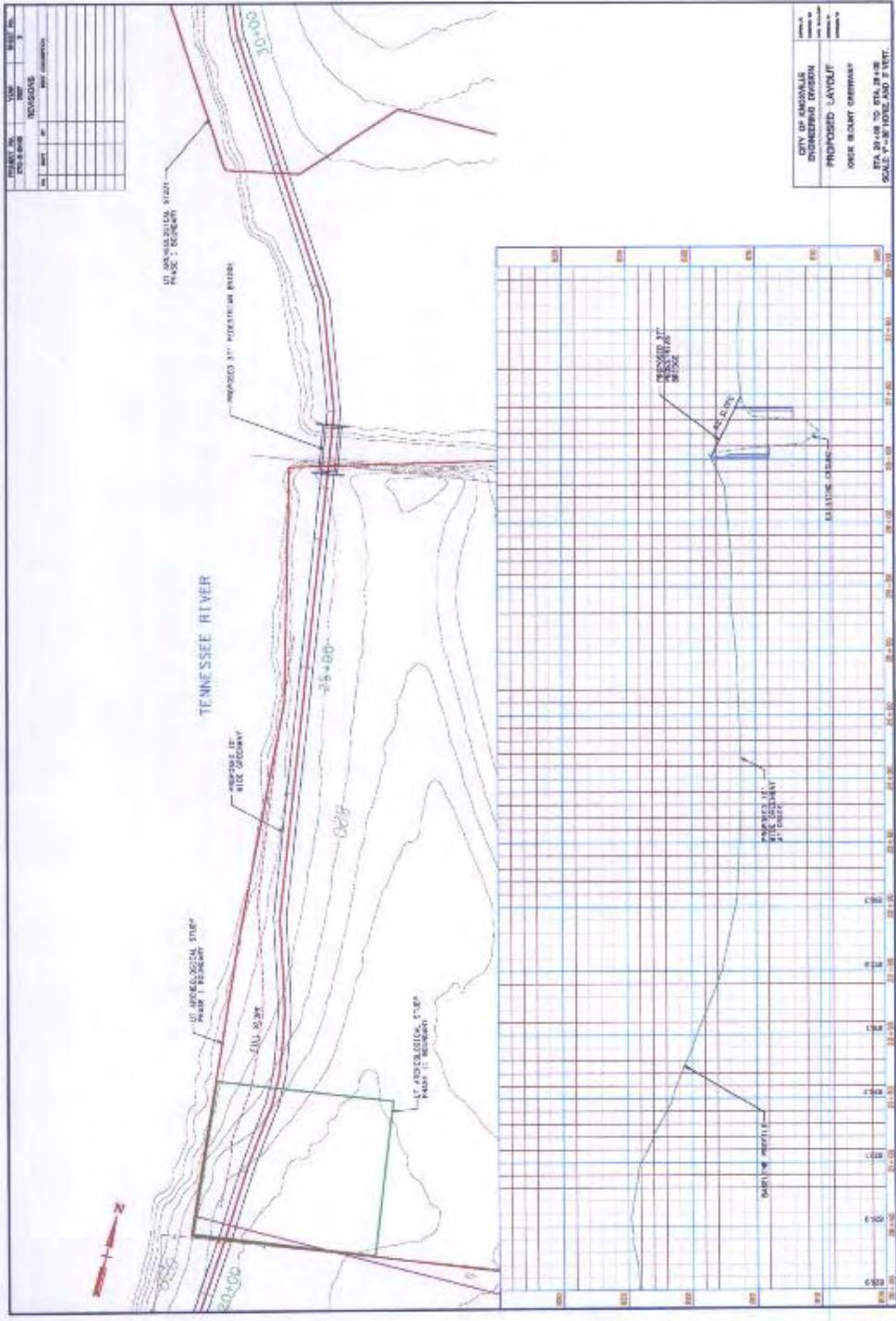
TYPICAL SHORELINE ROCK RIPRAP

PROJECT LOCATION INFORMATION:

STREAM NAME TENNESSEE RIVER SUBDIVISION NAME N/A
 RESERVOIR NAME FORT LOUDOUN LOT NUMBER PARCEL 001
 MILE MARKER 638 MAP NO. CLT MAP 108

(APPLICANT'S NAME) GEORGE CRISS, DIRECTOR, UNIVERSITY OF TENNESSEE, DIVISION OF FACILITIES

NOTE:
INCLUDE ALL DIMENSIONS AND ELEVATIONS
WHERE INDICATED.



NO.	DATE	BY	REVISION

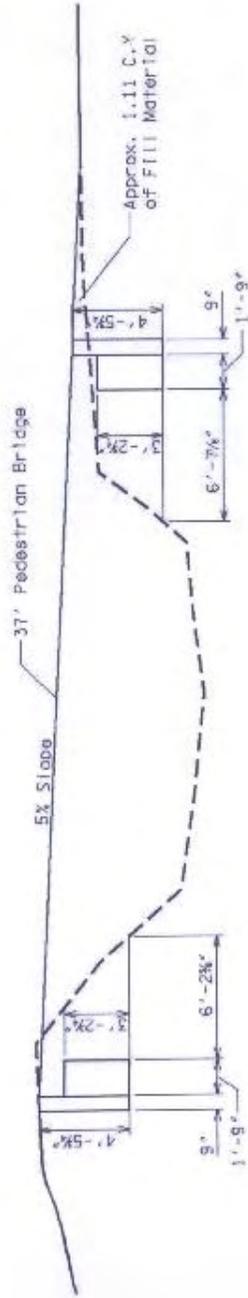
TENNESSEE RIVER



TENNESSEE RIVER



CITY OF MEMPHIS ENGINEERING DIVISION PROPOSED LAYOUT RIVER BANK GREENWAY STA. 20+00 TO STA. 80+00 SCALE: 1" = 40'	Date: _____ Title: _____ Author: _____ Check: _____ Appr: _____
--	---



KNOX - BLOUNT GREENWAY
37' PEDESTRIAN BRIDGE DETAILS
 N.T.S.

FIGURE 1

PROJECT NO.	DATE	BY	
NO. 3-041	10/17/07	JK	
REVISIONS			
NO.	DATE	BY	DESCRIPTION

CITY OF KNOXVILLE
 ENGINEERING DIVISION
 CROSS SECTIONS
 8000 ALBERT BERRYWAY
 STA. 1+00 TO STA. 3+00
 SCALE 1" = 2' HORIZ. AND 1" = 4' VERT.

