

**GUIDANCE & SPECIFICATONS FOR CONSTRUCTION ON PROPERTY OWNED  
OR CONTROLLED BY THE UPPER NECHES RIVER MUNICIPAL WATER  
AUTHORITY (THE AUTHORITY OR UNRMWA)**

October 2020

**LAKE ELEVATIONS**

Spillway elevation (normal or conservation pool level) of Lake Palestine is 345.0' mean sea level (msl). The 100-year frequency flood elevation is 355.0' msl. Except in rare instances, the intervening water front property lying between normal pool level of 345.0' elevation and the flood elevation of 355.0' msl is owned in fee by the Upper Neches River Municipal Water Authority (Authority). In such exceptional cases, the Authority owns a flood easement encompassing the intervening property. In either situation, use of this property is prohibited except by permit(s) granted by the Authority. Lake Palestine is a municipal water supply reservoir, and the level of water in the lake will vary depending on the amount of water used from the lake, evaporation rates, amounts of rainfall and runoff in the reservoir watershed, and other factors.

**LIMITED USE PERMIT (LUP)**

A Limited Use Permit (LUP) must be obtained by property owners abutting the takeline (generally 355.0' msl) in order to have any permissive rights whatsoever on the area between the takeline and the lake surface. The permit is available at the UNRMWA office at Blackburn Crossing Dam. The annual fee for the permit is \$25.00 plus \$0.05 for each one-foot of frontage at take line.

**CONSTRUCTION PERMIT**

Construction of piers, boathouses, boatramps, bulkheads, docks, or any other structure on property owned or controlled by the UNRMWA will require a permit issued by the Authority prior to commencement of any construction. A permit is required for the placement or operation of any structure, addition to any facility, or to excavate or place fill materials at or below elevation 355.0' msl.

The fee for a construction permit is \$50.00, with said permit being valid for 180 days. Checks should be made payable to UNRMWA. Repair or renovation which does not change the "footprint" of an existing permitted structure (i.e., replacing boards on a pier) generally will not require a permit. Once a permit is issued, any significant redesign prior to completion of construction will require a permit amendment and an additional \$50.00 fee. No construction permit will be issued without a current LUP.

**APPLICATION FORM AND REQUIRED SUBMITTALS**

Application forms shall be completed in their entirety. If information is not applicable, please put N/A in the blank. Construction permit applications shall contain:

- a. the completed application form properly executed by owner;
- b. an attached sketch drawn to scale containing the following (see attached):
  1. the 345' msl, and preferably the platted lot/property line(s) and the 355' msl;
  2. all structural dimensions;
  3. location of the structure with respect to the shoreline, lot/property lines extended into the water (as applicable), and neighboring piers and boathouses (with dimensions so noted);
  4. various elevations (front, side, etc.) for enclosed structures drawn to scale (as necessary);
  5. distinction between parts of structures to be demolished and/or added as appropriate;

6. other improvements on Authority property (i.e., boatramps, gazebos, retaining walls, drainage improvements, etc.), including appropriate dimensions and distances.
- c. a site location map (i.e. a subdivision plat) which identifies the location of the subdivision (property) on the Lake, and the location of the lot in the subdivision (as applicable).
- d. a copy of the most recent survey of the lot/property. A current boundary survey may be required.

## **CONSTRUCTION GUIDELINES**

### **General**

- No living quarters, kitchens, toilets, or other facility containing plumbing fixtures shall be allowed on property owned or controlled by UNRMWA, whether it be spanned, cantilevered or by other means. Living quarters shall be defined as plumbed and/or capable of sustaining overnight residency (in accordance with state health and safety codes).
- No structure may extend laterally beyond a point within 10 linear feet of an adjacent property line extended from the 355.0' msl takeline (designating shoreline allocation), except as allowed by the Authority. NOTE: This rule may not apply to waterfront lots located in coves. In such cases, the Authority shall allocate spacing for structures on the water in an effort to protect access to the lake for those owning waterfront lots or acreage.
- No structure shall extend more than 70 linear feet from the shoreline at normal pool elevation (345.0' msl) as measured perpendicular to the shoreline, except by variance for cause.
- No structure shall occupy more than one third (1/3) of any channel width, and in no case shall any part of the structure come within ten (10) feet of the centerline of the channel. Exceptions may be granted for structures located at the end of a channel.
- Any structure extending into Lake Palestine more than 70 linear feet (as described above) will provide adequate continuous lighting of the structure.
- All materials exposed to the elements shall be cedar, redwood, treated wood, concrete or steel materials. Other materials with long life expectancy will be considered. No metal barrels may be used for flotation. Only extruded (closed cell) polystyrene or foam bead expanded polystyrene that is encased in a high quality protective cover and that has been approved by the Authority may be used for flotation. Any replacement of flotation on existing structures must be made using the approved encapsulated polystyrene.
- All electrical wiring must be in accordance with the National Electric Code as amended and revised, and certified by an electrical contractor.
- All construction activities disturbing the soil at or below the flood stage boundary of the reservoir must employ accepted erosion control practices to minimize the amount of sediment entering the reservoir. An erosion control plan may be required.
- Construction shall not commence until the Authority has issued a valid permit for same.
- IN ALL MATTERS RELATING TO THE PERMIT TO CONSTRUCT, THE DECISION OF THE GENERAL MANAGER SHALL BE FINAL.

### **Boathouses (non-commercial)**

- Limited to two (2) wetlips (stalls), and a personal watercraft (jetski) slip, except when there is a justifiable need for additional storage and adequate space available without a variance.
- In those cases where additional stalls are allowed, the structure accommodating the additional slip(s) will be an open structure.

- An annual fee will be assessed for each additional slip in excess of two (2) (excluding a jetski stall).
- Watercraft entrance into the wet slips shall be perpendicular to the shoreline. Side entry slips will only be permitted by variance for cause.
- Interior walkways shall be a minimum of three (3) feet wide, and a maximum of eight (8) feet wide.
- Piers and exterior boathouse walkways will be a minimum of four (4) feet wide, and a maximum of eight (8) feet wide.
- A covered sitting area is allowed, but shall not exceed 400 ft<sup>2</sup> (20' x 20' or equivalent) in area.
- A 144ft.<sup>2</sup> (12' x 12' equivalent) storage closet is allowed.

### **Decks**

- A deck or landing may be constructed at the terminus of, or adjacent to, a pier or boathouse, but shall not exceed 256 ft<sup>2</sup> (16' x 16' or equivalent) in area.
- Elevated decks MAY be allowed but shall not exceed the area defined above (256 ft<sup>2</sup>) and shall be equipped with no improvements other than guardrails for safety.
- Pergolas may be allowed and will be considered open deck areas.

### **Bulkheads (Retaining Walls)**

- Bulkheads (retaining walls) shall be constructed of concrete, soil cement, masonry or cement block, pressure treated lumber (no creosote), stone, sheet piling (minimum 8 gauge steel, or pvc), or other similar material.
- Location of the wall shall not be below the 345.0' msl elevation as shown on the plat of record. Location of the wall shall not be above the 345.0' msl elevation without approval by the Authority.
- Retaining walls shall be constructed in a manner that improves the shoreline alignment. If an eroded area along the shoreline is approved by the Authority to be reclaimed, the backfill material must also be reclaimed from the reservoir.
- Construction or reconstruction of a bulkhead requires a permit from the Authority (see specifications).
- Acceptable erosion control measures must be utilized throughout the construction period (i.e. containment, silt screens, other physical structures to minimize the amount of sediment entering the reservoir).

### **Dredging**

- All dredging in Lake Palestine (including that associated with retaining walls and/or bulkheads, shoreline leveling and/or contouring, and boatramp construction) shall be performed in accordance with rules and guidelines established by the U.S. Army Corps of Engineers.
- All dredging in Lake Palestine requires a permit from the Authority (including those projects where no permit or notice is required by the Corp of Engineers).
- Acceptable erosion control measures must be utilized throughout the construction period (i.e. containment, silt screens, other physical structures to minimize the amount of sediment entering the reservoir).
- Retaining walls shall be constructed in a manner that improves the shoreline alignment. If an eroded area along the shoreline is approved by the Authority to be reclaimed, the backfill material must also be reclaimed from the reservoir.

### **Irrigation Systems**

- A permit from the Authority is required to pump water from Lake Palestine for non-potable domestic purposes (irrigation only).
- The diversion of raw water from Lake Palestine for irrigation purposes is permitted by waterfront property owners only (and only on property that is contiguous to the reservoir).
- The electrical services shall be installed in accordance with the National Electric Code as amended and revised.
- Intakes for above ground pumps shall be located and anchored in a manner as not to be a hazard to navigation or recreational activities.

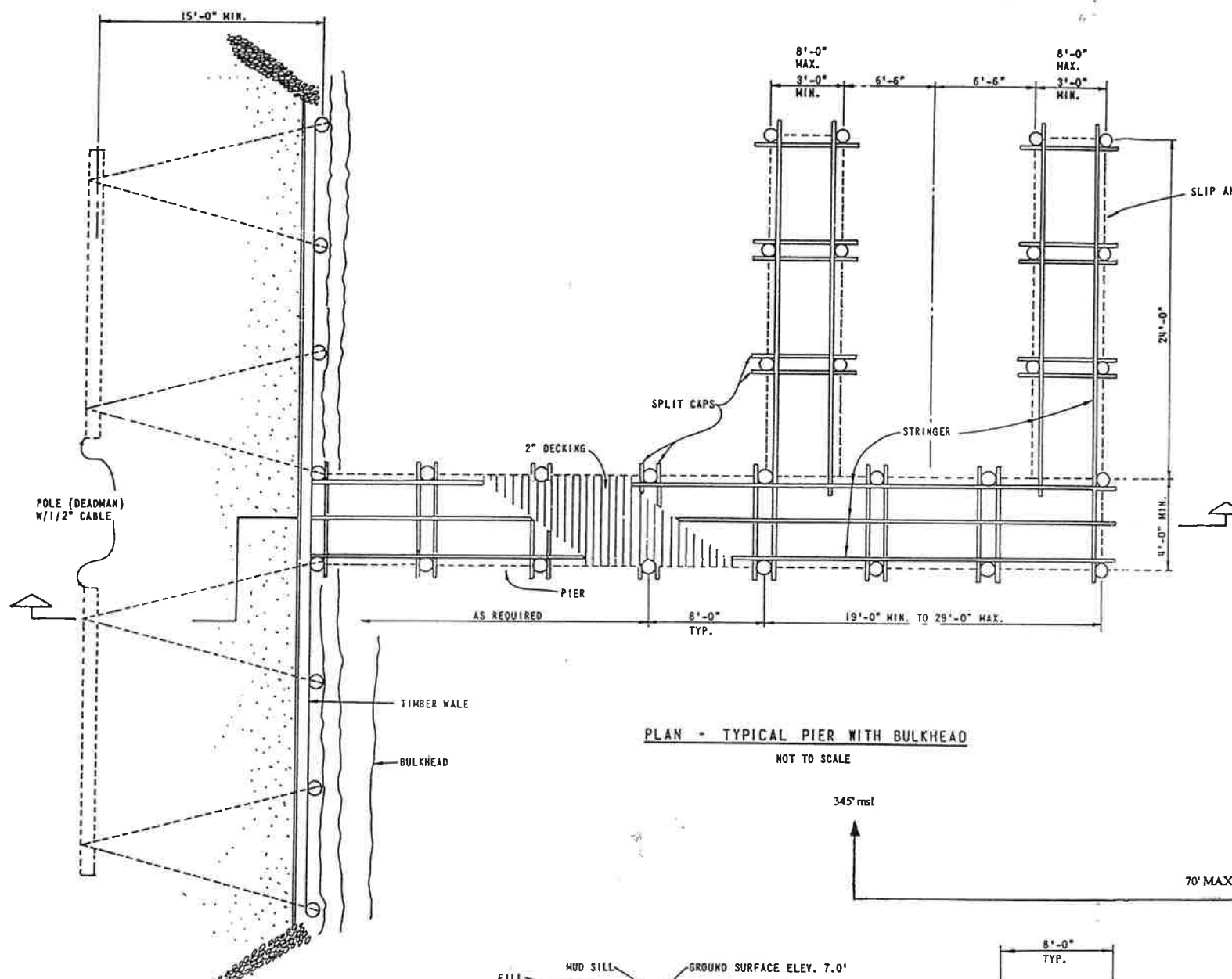
### **Miscellaneous**

- Boatramp construction requires a permit from the Authority.
- The construction of roads, driveways, sidewalks, or related structures on UNRMWA property requires a permit from the Authority.
- Fences are allowed on Authority property (with a permit) but may not extend beyond (below) the 345.0' msl elevation. Open mesh (chainlink or field fence), or split rail are the types allowed, but may not exceed 48" in height. Cross fencing is allowed only at the surveyed property line.
- Trees and brush less than 3" in diameter may be removed from Authority property without a construction permit if removed by hand for aesthetic purposes (i.e., view). If removed mechanically where there will be significant disturbance of the surface topsoil, a permit will be required, and approved erosion control measures must be utilized.
- Any tree and brush removal done in conjunction with the construction of drainage improvements on or across UNRMWA property requires a permit from the Authority. Approved erosion control measures must be utilized. Drainage improvements include the construction of ditches, pipes, or other appurtenances associated with facilitating the removal of stormwater or surfacing groundwater.
- Any sale of timber from UNRMWA property will require Authority approval and a contract provided by the holder of the LUP for that property. That timber is owned by the Authority and all financial gain from the sale of that timber belongs to the Authority.
- Swimming pools and all associated appurtenances must be located above the 355.0' msl elevation.
- Gazebos, stand-alone decks, stand-alone patios, and related structures may be allowed below the 355.0' msl elevation on UNRMWA property with approval (a permit) from the Authority. Under no circumstances will plumbing be allowed in such a structure.
- Temporary storage buildings may be located below the 355.0' msl elevation with approval (a permit) by the Authority. Buildings shall not be constructed on a slab and shall not exceed 12' x 12' (144 square feet) in size without special permission from the Authority. Requests for such buildings and their location below the 355.0' msl will be considered on a case-by-case basis.

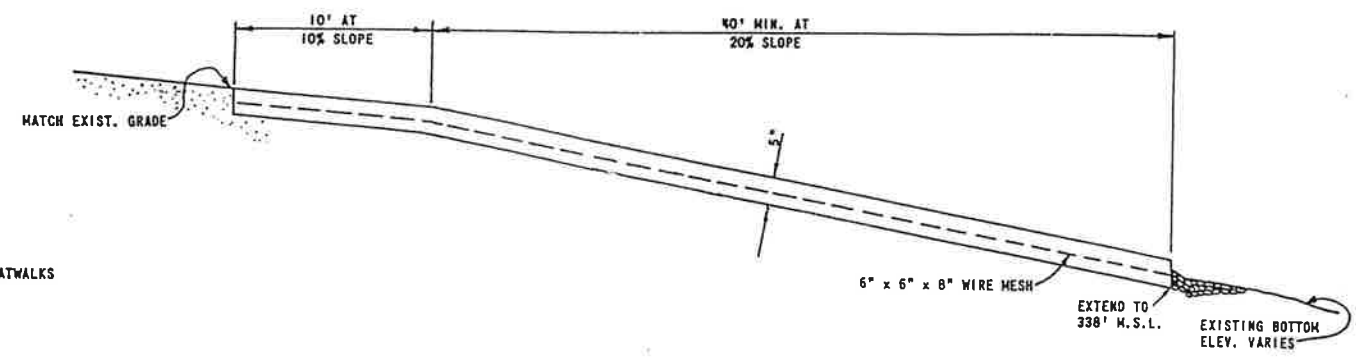
### **CONSTRUCTION STANDARDS/SPECIFICATIONS**

- See attached MINIMUM STANDARDS AND TYPICAL DETAIL.

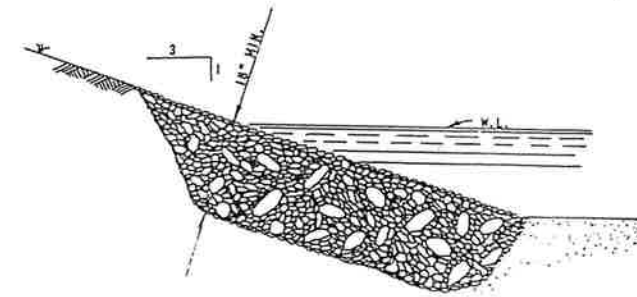
**NOTE: Circumstances will arise whereby some of the above guidelines may not be practicable. In such cases, the Authority management reserves the right to use its own discretion.**



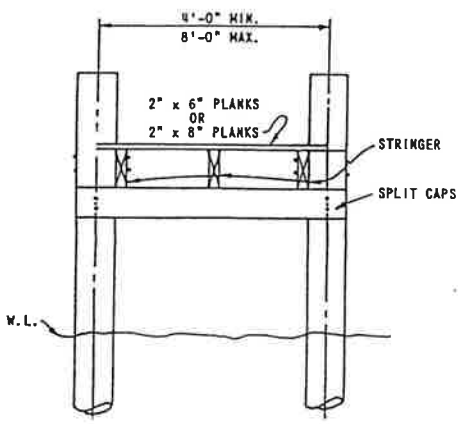
PLAN - TYPICAL PIER WITH BULKHEAD  
NOT TO SCALE



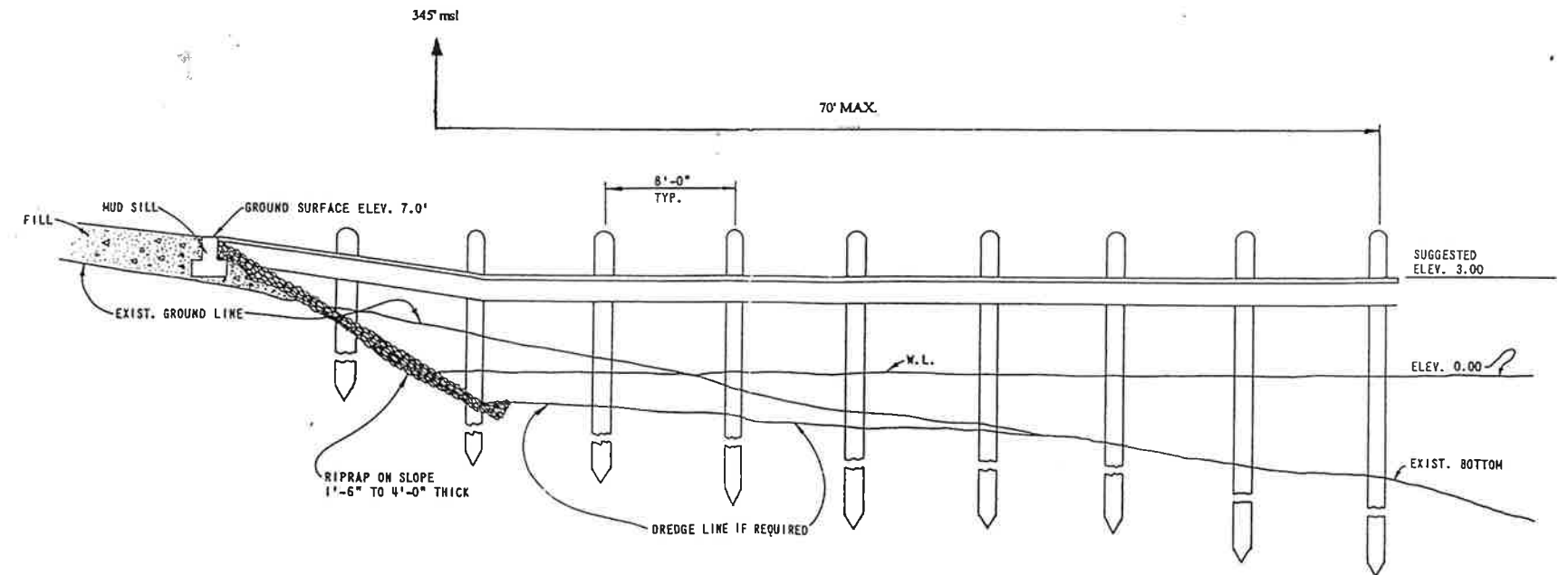
12' X 50' TYPICAL BOAT RAMP  
NOT TO SCALE



ROCK RIP-RAP  
NOT TO SCALE



TYPICAL PIER SECTION  
NOT TO SCALE



SECTION - WITHOUT BULKHEAD  
NOT TO SCALE

MAX. HT. FROM G.L. TO DECK FOR 6" POST 8'-0"  
MAX. HT. FROM G.L. TO DECK FOR 8" POST 12'-0"  
MAX. HT. FROM G.L. TO DECK FOR 10" POST 16'-0"

NOTES:

- BULKHEAD MAY BE OF STEEL, CONCRETE OR WOOD. WOOD TREATED WITH CREOSOTE OR PENTA BASED PRESERVATIVES IS NOT ALLOWED.
- POSTS OR PILINGS MUST BE DRIVEN HALF THEIR LENGTH INTO THE LAKE BED. POSTS AND PILINGS ARE TO HAVE A MINIMUM TOP DIAMETER OF 6 INCHES.
- STRINGERS AND SPLIT CAPS TO BE SIZED ACCORDING TO SPAN. (8' SPAN - 2" x 10" or 3" x 8", 6' SPAN - 2" x 8", 4' SPAN - 2" x 6")
- USE 2" x 8" or 2" x 6" DECK PLANKING. SET 8" OR 6" ON CENTER.
- ALL PILES AND POSTS TO BE PRESSURE TREATED USING CURRENTLY APPROVED PRESERVATIVE TREATMENT METHOD(S). HEAVY WALL STEEL PIPE MAY BE USED AS AN ALTERNATIVE (minimum 2 7/8" diameter).
- ALL PLANKING TO BE PRESSURE TREATED USING CURRENTLY APPROVED PRESERVATIVE TREATMENT METHOD(S). NOTE: THESE METHODS MAY BE MORE RESTRICTIVE THAN THOSE FOR PILES AND POSTS.
- ALL STRINGERS AND SPLIT CAPS MUST BE BOLTED TO PIER POSTS. SPLIT CAPS MUST HAVE TWO BOLTS IN EACH END AT THEIR JUNCTION WITH THE PIER POST.
- USE CAST WASHERS (HOT-DIPPED GALVANIZED OR BETTER) UNDER ALL HEADS AND NUTS OF BOLTS IN CONTACT WITH WOOD.
- ALL BOLTS TO BE 1/2 INCH OR LARGER (HOT-DIPPED GALVANIZED OR BETTER).
- ALL OTHER BOLTS, NAILS, CABLES, AND RELATED HARDWARE MUST BE HOT-DIPPED GALVANIZED OR OTHERWISE TREATED TO RESIST CORROSION.

UPPER NECHES RIVER MUNICIPAL WATER AUTHORITY  
OF TEXAS

MINIMUM STANDARDS  
AND  
TYPICAL DETAILS  
OF PIERS, BULKHEADS, AND RAMPS

February 24, 2004

# SAMPLE SKETCH

