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CONSTRUCTION SPECIFICATIONS FOR SINGLE-FAMILY WASTE STABILIZATION PONDS-LAGOONS

GENERAL:

- 1. The completed construction of the facility shall conform to the plans and specifications approved by the Kansas Department of Health and Environment or its representative.
- 2. The facility shall be operated in such a manner that a public health nuisance or water pollution problem will not arise.

PUBLIC SEWERS:

3. If public sewers become available to the property, they are to be used and the waste stabilization pond abandoned. The permit for the waste stabilization pond will be rendered invalid following a reasonable period for connection to the newly available sanitary sewer. The Sumner County Code Officer is to be notified of such development.

PROPERTY LINE:

4. A minimum separation of 50 feet between the proposed water's edge of the pond (at the five-foot water depth) and the **property line** of another owner shall be provided.\

EXCAVATION:

5. When the pond excavation penetrates or terminates in either a rock strata or a porous (sand or gravel) strata, the excavation shall be extended a distance of one foot on both the bottom and side slopes. The area of supplemental excavation shall be filled with a non-permeable earthen material to limit seepage from to pond to a maximum value of one-fourth {¼} inch per day. This normally may be accomplished by using a clayish soil which is free of rocks. If a clayish soil is not available, the fill soil should be mixed with bentonite clay at the manufacturer's recommended rate and compacted.

DIKE:

6. Once the pond is constructed according to size and shape, the builder shall smooth the **dike** so that no clods, rocks, or ruts will interfere with a mower.

GRASS

7. A stand of **grass** shall be established on the dike. This grass should be short-rooted perennial such as blue, fescue, or brome and shall be mowed regularly.

FENCE

8. The entire pond area shall be **fenced** with minimum four-foot high woven or welded wire fencing with 2" X 4" maximum openings. This fence is to discourage entry by unauthorized persons {especially children}, pets, and livestock. See attached diagrams.

GATE:

 A gate of sufficient size and location to accommodate the entrance of a mower must be provided. Chain with padlock required.

ROOF DRAINS:

 Roof drains may not be discharged into the waste stabilization pond unless approved control arrangement is provided to readily facilitate diversion from the sewer system.

PERMITS/REGULATIONS

- 11. Waste treatment facilities are required by State Law to be authorized by a permit from the Kansas Department of Health and Environment or its' representative. Permits issued for the construction and operation of sewage treatment facilities are nontransferable. If a change in ownership occurs, a new permit must be secured.
- 12. Poorly constructed waste stabilization ponds will not be approved. A permit to operate and maintain this facility will be issued after a final inspection confirms the facility was constructed in accordance with the approved plans and specifications.
- 13. This facility is subject to all addendums to Kansas Department of Health and Environment and {its' representative} Water Quality Regulations.

GENERAL NOTES:

- Waste Stabilization Pond Bottom shall be constructed at an elevation above the ground water table.
- Pond Area to be adequately <u>fenced with gate and chain with padlock</u> to prevent entrance of unauthorized personnel and livestock.
- 3. All **Dike Slopes** to be 3 ½ Feet Horizontal to 1 Foot Vertical.
- 4. Surface Drainage to be diverted around pond.
- 5. **Pond Bottom and Interior Dikes** up to Elevation 2' to be treated with a herbicide at the manufacturer's recommended sterilization rate. Care shall be taken not to apply herbicide above elevation of 2' where grass will be seeded.
- 6. All **Dike Area NOT** sterilized is to be seeded with a densely-growing short-rooted grass such as blue, fescue, brome, or Bermuda.
- 7. **Inlet Pipe** between pond and cleanout "Y" to be of rigid freeze breakage resistance material such as steel or plastic, **P.V.C. SDR 35 or SCHEDULE 40 NON-CELLULAR CORE ONLY.**
- 8. Minimum Dike Berm width to be 4 FEET.
- 9. Minimum Dike Freeboard to be 2 FEET.
- 10. Maximum Fencepost Spacing to be 12 to 15 FEET.
- 11. A Minimum **Separation** of 50 FEET shall be provided <u>between pond water</u> <u>surface and other property</u>.
- 12. Splash Pad = 3 FOOT Square
- 13. Minimum **Height for Fence** = 4 FEET.

KDHE Bulletin 4-2, March 1997

Minimum Required and Minimum Recommended Separation Distances for Onsite Wastewater Systems

Minimum Distance (ft)	
Required	Recommended 1
10	10
20	50
25 ₂	25
10 .	25
10	50
100 ₃	200
50 ₃	100
50	100
50 ₄	200
50 ₄	200
	25 ₂ 10 10 10 10 10 100 ₃ 50 ₃

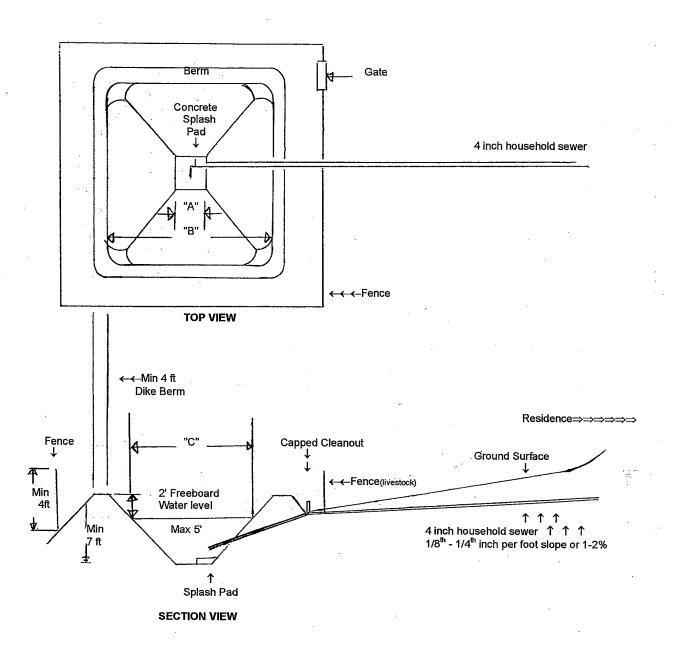
These recommended separation distances help assure a minimum of problems, but are not assurance that problems will not result.

^{2.} The minimum distance specified by KDHE guidelines for public water supplies.

The minimum distance required by KAR 28-30-8 (a)

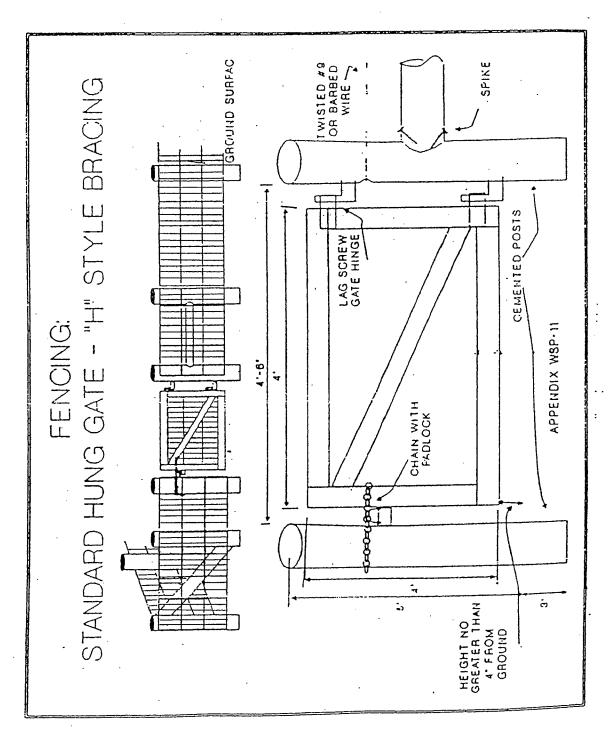
When lot dimension, topography, or soil condition make maintaining the required 50 feet separation distance impossible, a written variance from the affected property owners shall be obtained and filed with deeds.

WASTEWATER STABILIZATION POND DESIGN Dimensions			
Pond Type	"A"	"B"	"C"
M-40	10'	52'	40
M-45	10'	59'	45
M-50	15'	64'	50
M-55	20'	69'	55
M-60	25'	74'	60



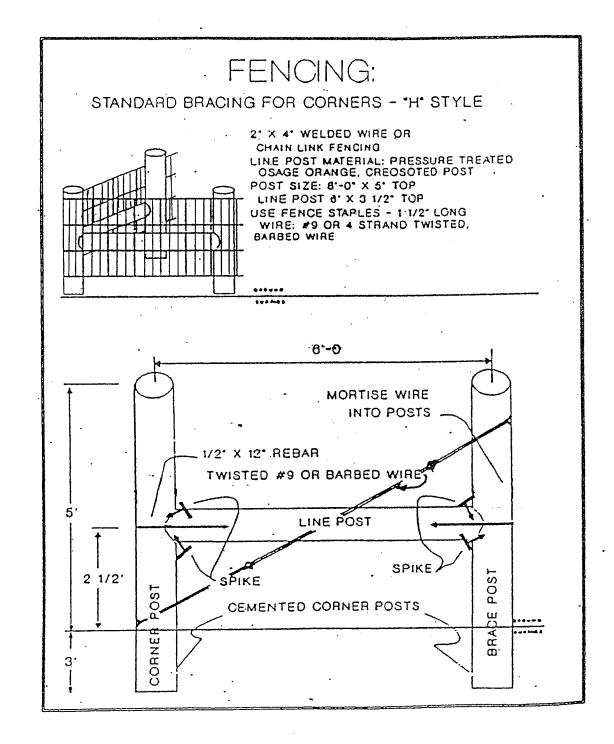
APPENDIX F

FENCING: THE STANDARD HUNG GATE



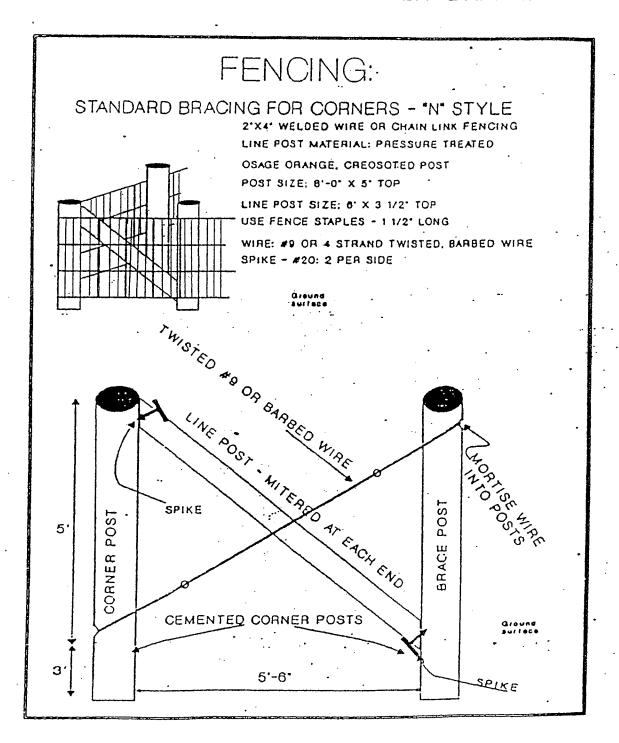
APPENDIX G

FENCING: THE "H" STYLE CORNER BRACE



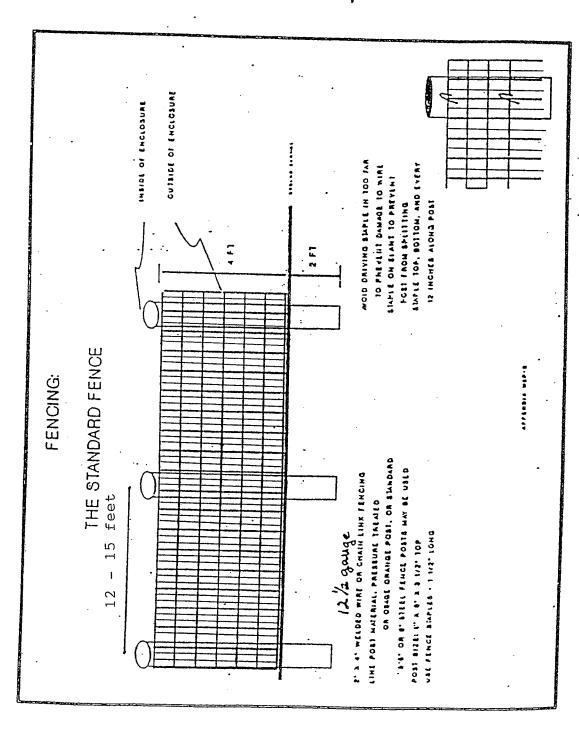
APPENDIX H

FENCING: THE "N" STYLE CORNER BRACE



APPENDIX 1

FENCING: THE STANDARD FENCE



APPENDIX J

FENCING: PLACEMENT

