

Oklahoma Department of Transportation

Curtain Wall Substitutions
Construction Control Directive No. **19990625**

February 15, 2002

Scope: To identify those projects and locations where sheet piling curtain walls may be substituted for concrete curtain walls on reinforced concrete box drainage structures.

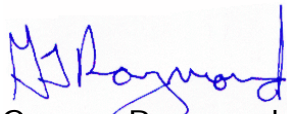
There have been some occasions where steel sheet piling has been used for curtain walls instead of the reinforced concrete curtain walls specified. The steel walls will not have the durability of the concrete walls and could shorten the life of the structure if the steel walls deteriorate rapidly. This is especially true in some areas of the state where there is an exceptional amount of acid in the soil.

Do not allow this substitution on highway route projects. It may be used on Local Government Projects when it is specified or special approval is obtained from the Bridge Division (refer to the attached [memo](#)).

What is acceptable?

When the curtain wall is to be placed in a stream that is so saturated that the trench walls will not stand, the concrete curtain wall may be cast in separately "in the flat" and then lifted into place after a sufficient curing period. This method will require a few additional reinforcing steel bars for the connection to the structure, for lifting and possibly a slight thickness increase to provide a tongue & groove joint, depending on the configuration needed. Confer with the Bridge Division as needed.

If you allow the sheet piling curtain wall substitution, a change order will be required to document the change in design.



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