

VALUE ENGINEERING PROPOSAL

PROPOSAL NO: S-9

PAGE NO: 1 OF 2

DESCRIPTION: Use Modular Lock Control Houses

ORIGINAL DESIGN:

The existing design drawings call for four (4) control houses, two at each end of the lock located in the vicinity of the lock gates. Plan drawings indicate the control houses are proposed to be constructed on-site of masonry block with wood constructed roofs and shingles.

PROPOSED DESIGN:

Use pre-engineered building for the control house. With programmable logic controllers (PLC) and closed circuit television (CCTV) system remote control cameras it is practical to operate lock structures from a single location. Tow clearance past the gates and any obstructions can be viewed through the (CCTV) system. With this system, only one central control house and one local control point is needed to adequately operate the project. The local control point can be a single panel or a small modular control house similar to those that exist on parking lots. The central control house could be incorporated into the operations building with one modular control house at one end of the lock and one local control point at the other end.

A complete discussion and recommendations regarding control houses and systems can be found in ETL 1110-2-553 which is available on the network (<http://www.usace.army.mil/inet/usace-docs/eng-tech-ltrs/etl1110-2-553>)

ADVANTAGES:

Savings in first cost and future maintenance.

DISADVANTAGES:

None.

JUSTIFICATION:

This proposal reduces the overall project costs and improves the efficiency of construction. The modular structures are precast and can be placed quickly. QA/QC issues should be minimal if this proposal is adopted.

