



TO: Director, Preliminary Plan Review Bureau SUPERSEDED BY EB 97-039 EFFECTIVE 7/1/1997	 ENGINEERING INSTRUCTION NEW YORK STATE DEPARTMENT OF TRANSPORTATION SUBJECT: REVISION TO N.Y.S. CULVERT ANALYSIS COMPUTER PROGRAM Subject Code: 7.26-2
Distribution: <input checked="" type="checkbox"/> Main Office <input checked="" type="checkbox"/> Regions <input type="checkbox"/> Special	Code: <u>EI 74-11</u> Date: <u>1/21/74</u>
APPROVED:  <u>Deputy Chief Engineer (Facilities Design Subdiv.)</u>	Modifies: EI 73-073 DATE 10/1/73

In accordance with Engineering Instruction 73-73 which established acceptable roughness coefficients for corrugated metal pipe, the N.Y.S. Culvert Analysis Computer Program was revised to reflect these changes. This included:

1. The removal of the paved option
2. The inclusion of the 3" x 1" pipe corrugation

The removal of the paved pipe option does not eliminate the need for a velocity check for paved pipe to determine erosion control measures. It will, however, require the designer to perform a second run with a selected pipe size and specifying a special "n" value of 0.019.

The inclusion of the 3" x 1" corrugation now provides the engineer all the available pipe combinations accepted for use in New York State.

The designer should be aware that the diameter selected for the minimum size is based on the lowest "n" value for available corrugations at that diameter, and that the calculated headwater for larger corrugations may exceed the allowable. Although this may appear at first to be incorrect, it should be understood that a design based on the largest "n" values would indicate pipe sizes one to two sizes larger than necessary for the smaller corrugations.

In the selection of an appropriate sized pipe in which optional corrugations may be selected by the Contractor, extreme care must be used in selection of the specified size. The hydraulic characteristic of the different corrugations may differ widely. This might create situations where too much or too little erosion control devices are installed, or variations in headwater height may affect property costs, etc. Comments should be included in the Hydraulic Report indicating that all possibilities have been explored and each condition has been provided for.

PREL.	FINAL
PHOTOGRAPHIC LANDSCAPE	
FEBRUARY 1974	
FACILITIES DESIGN SUBDIVISION	
FEB 1 1974	
CHIEF	DESIGNER
TITLE	DESIGN