MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Inter-Departmental Memorandum

TO: Squad Leaders

DATE: February 9, 1994

FROM: Roadway Design Division
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SUBJECT OR PROJECT NO: Inlet Quantities

INFORMATION COPY TO:

Section Engineers
Design Memo File

COUNTY:

There as been a discrepancy between squads in determining the quantity of concrete and steel for inlets. The height (H) value shown on the plan-profile sheets and estimated drainage quantity sheets is to be used to calculate quantities for the inlet. If the H given is greater than the minimum H in standards, then extra concrete and steel must be calculated. The height of all inlets except for the MI-1B, MI-2A, MI-3, MI-4, MI-4A and SS-2 is measured from the top of inlet to the bottom of the slab. The SS-2 is the only inlet where the height is measured to the invert (flow line). For the remaining inlets listed above either a minimum height is used or the height is measured to the top of a box culvert or pipe.

Please use the example shown below to calculate future inlet quantities.

Example: A MI-1A with a H of 6.00 ft. 2-30" openings. 2 F.E.S.

from Standard:

Min Depth to F.L.	=	4.29'= 51.5"	conc./ extra ft =.021
pipe thickness (T)	=	3.5"	rein./ extra ft = 25
slab thickness under pipe	=	6.0"	min. conc. = 1.370 cy
minimum H	=	5.083'= 61.0"	min. rein. = 151 lb

therefore extra height = 6.00-5.083=.793'
.793 * 0.21 = .1665 use .167 cy
.793 * 25 = 19.8 use 20 lb
toe wall for FES = 2 * .102 = .204 cy

total concrete = .204 + .167 + 1.370 = 1.741 cy
total reinforcement = 0 + 20 + 151 = 171 lb

JP/sr