DATE: 7-29-02

MEMORANDUM TO ROAD DESIGN SQUAD LEADER Sease

FROM HYDRAULIC DESIGN ENGINEER Givens

SUBJECT: Hydrology Data For Bridge Over Park Creek

Rt/Rd SC-28 Construction PIN 2644O

Bridge Length 175 Ft. Bridge Roadway Width 44 Ft.

Beg. Station 285+95 End Station 287+70 Skew Angle 25°

Minimum Low Cord Elev. 473.59' Minimum F. G. Elev. 478.54' End Fill Slope 2:1

Riprap Req'd Yes ✓ No ___ To Elevation 472'

COMMENTS: Remove old bridge abtments located down stream of bridge.

HIGH WATER DATA:

50 Year H. W. Elev. = 471.66 including .07 Ft. Backwater

100 Year H. W. Elev. = 472.38 including .08 Ft. Backwater

Highwater Elevation = Calculated 500 yr WSEL = 473.75ft

Highwater Elevation = ___

HYDROLOGY DATA:

D. A. = 20.22 sq. mi.

Q_{50} = 2725 cfs

Area furnished under

Elev. 471.36 = 1174 ft^2

Vel. = 2.32 ft/sec

Q_{100} = 3151 cfs

Area furnished under

Elev. 472.05 = 1271 ft^2

Vel. = 2.48 ft/sec

OVERTOPPING FLOOD:

Q = ≈ 13,000 cfs

Probability = < .002

Hydraulic Design Engineer

cc: Bridge Design Squad Leader Kam