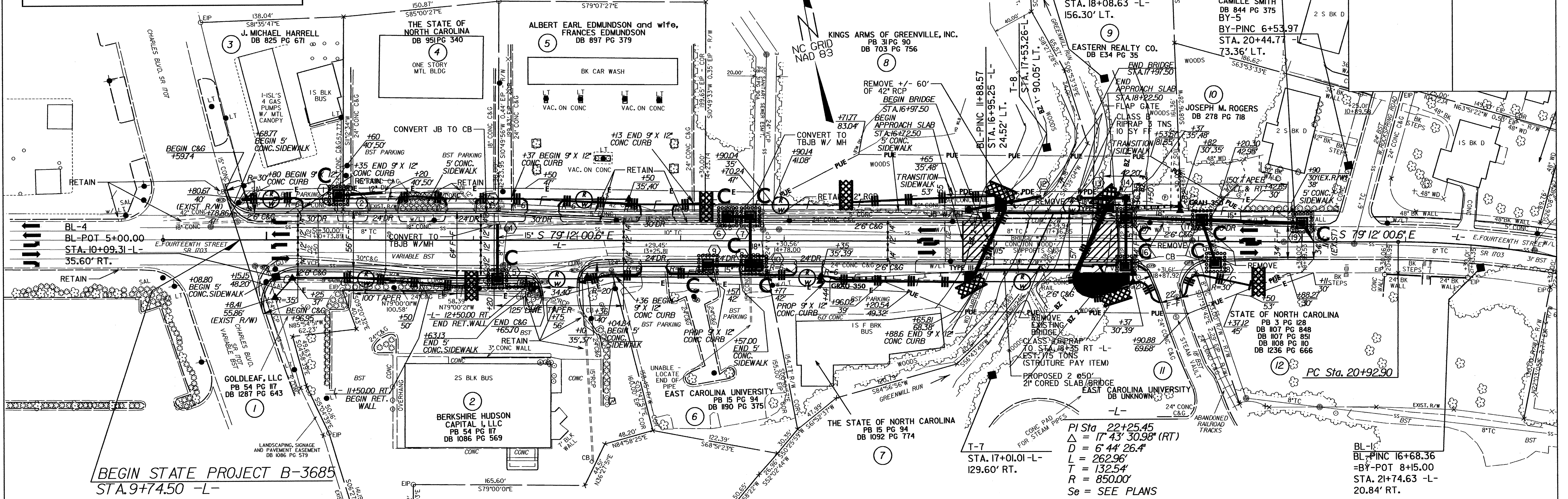
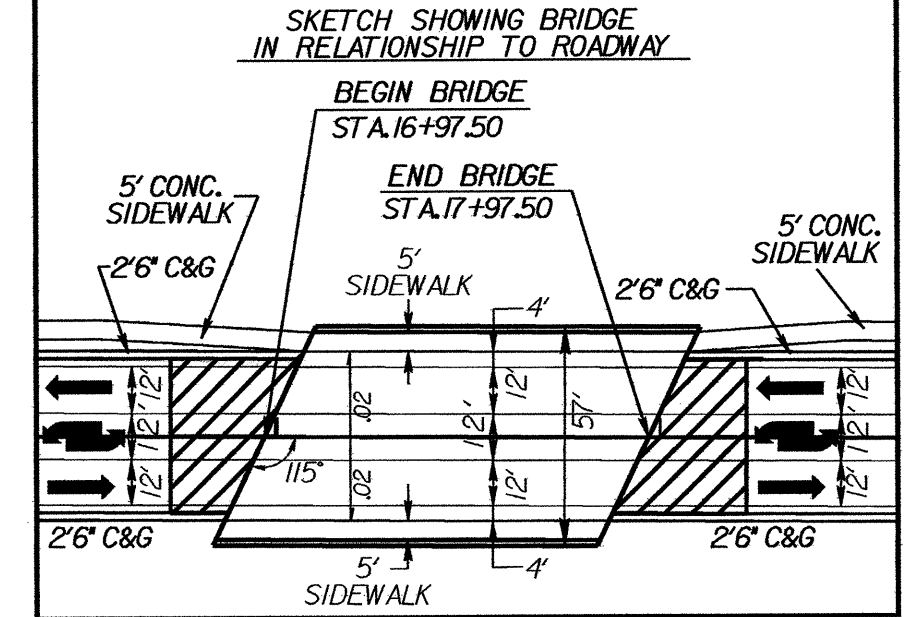
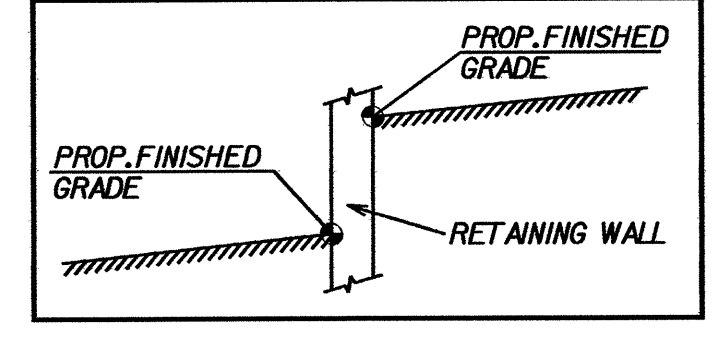


NOTE: UTILIZE TEMPORARY ROCK SILT CHECKS TYPE - A AS STILLING BASIN WHERE APPLICABLE.



**DATUM DESCRIPTION**  
 THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCGS FOR MONUMENT "FICKLEN" WITH NAD 83 STATE PLANE GRID COORDINATES OF NORTHING: 67657.7734 FT EASTING: 2486874.4617 FT THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999893267 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "FICKLEN" TO -L- STATION 9+74.50 IS N 67° 53' 32.23" W 2781.9366 FT ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES

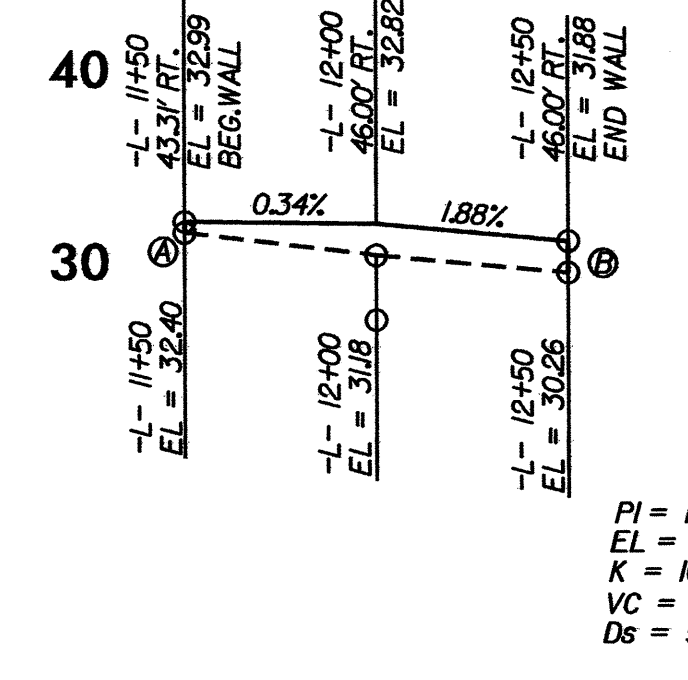


**BRIDGE HYDRAULIC DATA**

DESIGN DISCHARGE	= 4470 CFS
DESIGN FREQUENCY	= 50 YRS
DESIGN HW ELEVATION	= 33.98 FT
BASE DISCHARGE	= 4930 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 34.31 FT
OVERTOPPING DISCHARGE	= +/- 650 CFS
OVERTOPPING FREQUENCY	= -10 YRS
OVERTOPPING ELEVATION	= 28.6 FT

DATE OF SURVEY = 10/19/01  
 W.S. ELEVATION AT DATE OF SURVEY = 22.26 FT

RETAINING WALL ENVELOPE



PI = 15+51.56  
 EL = 28.64  
 K = 667  
 VC = 247.73  
 Ds = 45mph

PI = 12+75.93  
 EL = 29.37  
 K = 100.3  
 VC = 215.00  
 Ds = 50mph

PI = 19+00.64  
 EL = 40.68  
 K = 68.4  
 VC = 100.00  
 Ds = 40mph

