



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

January 26, 2005

US Army Corps of Engineers
Regulatory Field Office
151 Patton Ave.
Room 208
Asheville, NC 28801-5006

ATTENTION: Mr. Steve Lund
NCDOT Coordinator

Dear Sir:

Subject: **Revised Permit Drawings for Nationwide 23 & 33 Permit Application** for the Replacement of Bridge No. 187 over Long Creek on SR 1214, Stanly County, Federal Aid Project No. BRZ-1214(3), State Project No. 8.2681401, TIP B-3700, Division 10.

Please find enclosed one copy of the revised permit drawings for the above referenced project and replace the originals dated November 18, 2004. The revisions include a slight change in the alignment of the abutments and a change in the drainage from the bridge.

There are no changes to the permanent impacts for this project or the rock causeway.

If you have any questions or need additional information, please contact Mr. Chris Underwood at (919) 715-1451.

Sincerely,

A handwritten signature in black ink, appearing to read "Gregory J. Thorpe".

Gregory J. Thorpe, Ph.D., Environmental Management Director
Project Development and Environmental Analysis Branch

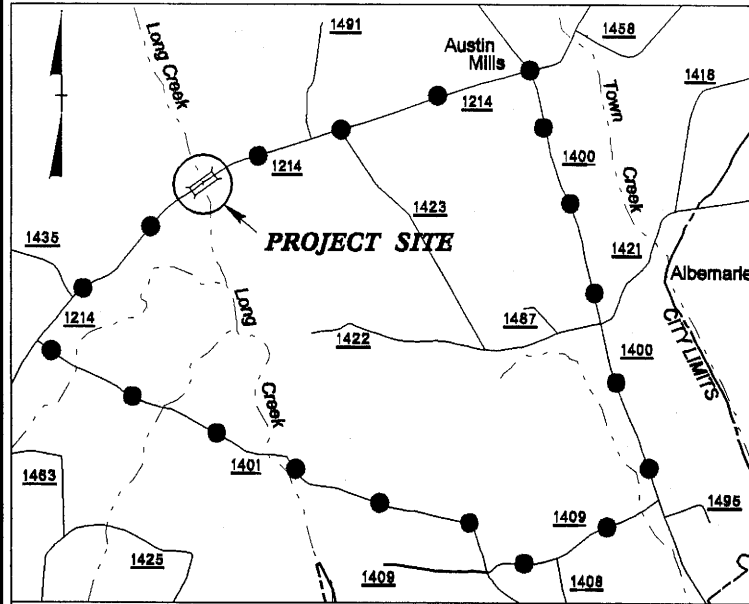
cc: W/attachment

Mr. John Hennessy, Division of Water Quality (7 copies)
Ms. Marella Buncick, USFWS
Ms. Marla Chambers, NCWRC
Mr. David Chang, P.E., Hydraulics
Mr. Greg Perfetti, P.E., Structure Design
Mr. B. G. Payne, P.E., Division Engineer
Mr. Larry Thompson, DEO

W/o attachment

Mr. Jay Bennett, P.E., Roadway Design
Mr. Omar Sultan, Programming and TIP
Mr. Art McMillan, P.E., Highway Design
Mr. Mark Staley, Roadside Environmental
Mr. David Franklin, USACE, Wilmington (Cover Letter only)
Mr. Elmo Vance, Planning Engineer

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Symbology Sheet



VICINITY MAP

DETOUR ROUTE

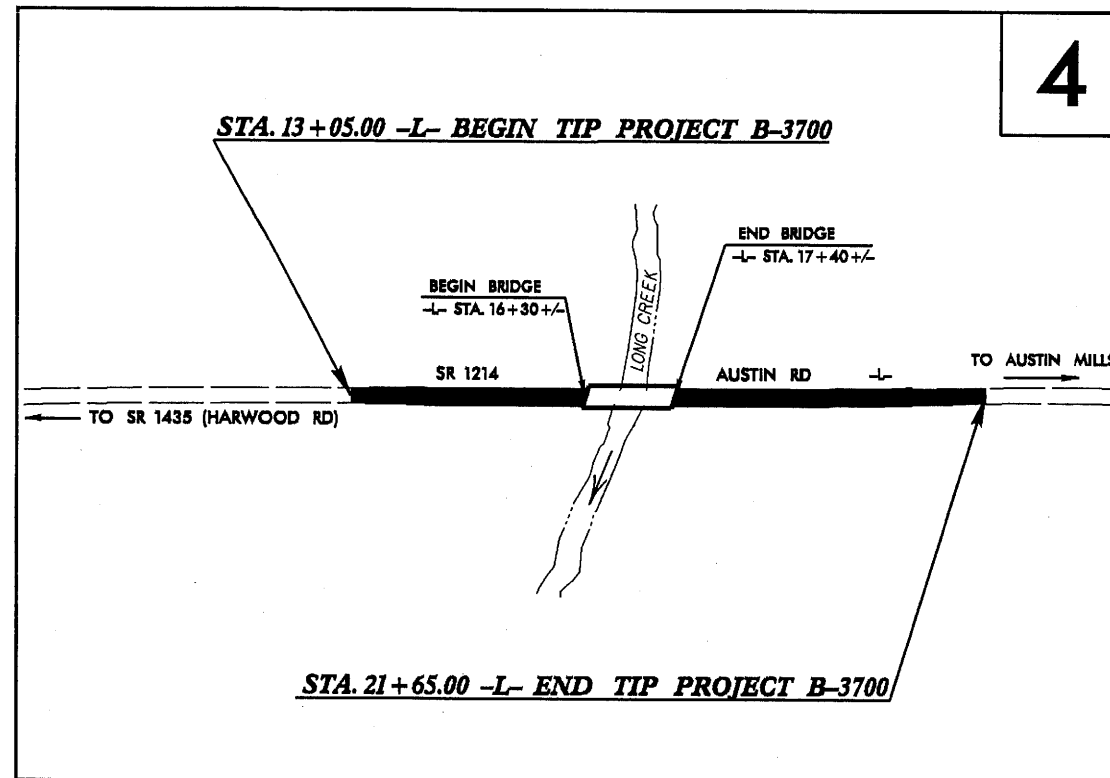
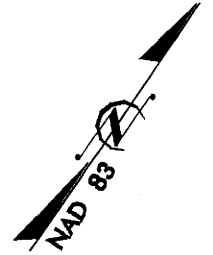
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STANLY COUNTY

LOCATION: BRIDGE NO. 187 OVER LONG CREEK ON SR 1214 (AUSTIN RD)

TYPE OF WORK: GRADING, PAVING, DRAINAGE AND STRUCTURE

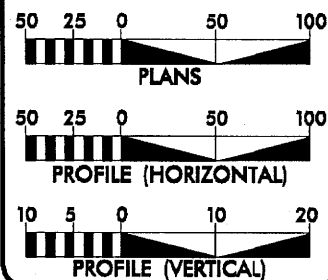
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-3700	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33240.1.1	BRZ-1214(3)	PE	
33240.2.2	BRZ-1214(3)	UTIL, R/W	
33240.3.1	BRZ-1214(3)	CONST.	



THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

GRAPHIC SCALES



DESIGN DATA

ADT 2005 = 2170
ADT 2025 = 3400
DHV = 11 %
D = 60 %
T = 4 % *
V = 50 MPH
* TTST 1 % + DUAL 3 %

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-3700 = 0.142 MI
LENGTH STRUCTURE TIP PROJECT B-3700 = 0.021 MI
TOTAL LENGTH TIP PROJECT B-3700 = 0.163 MI

Prepared in the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

2002 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
OCTOBER 15, 2004

LETTING DATE:
MAY 17, 2005

BRENDA MOORE, PE
PROJECT ENGINEER

REKHA PATEL, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.
ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.

**DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA**

STATE DESIGN ENGINEER
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED DIVISION ADMINISTRATOR DATE

12-JAN-2005 14:35
R:\Roadway\Proj\B3700.tsh
cablings AT

TIP PROJECT: B-3700

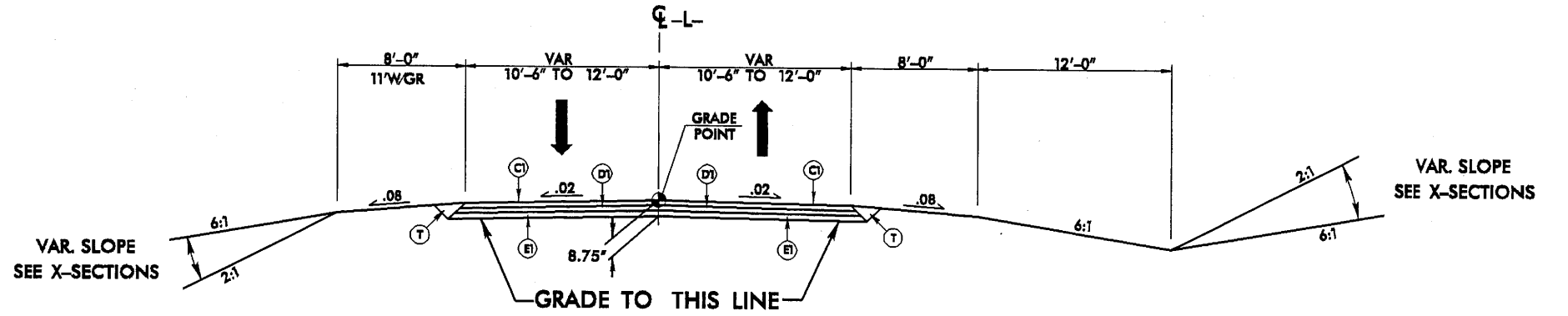
CONTRACT: C201324

6/2/99

FINAL PAVEMENT DESIGN SCHEDULE	
C1	PROP. APPROX. 2.50" ASPHALT CONCRETE SURFACE COURSE, TYPE BFB.BA, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
D1	PROP. APPROX. 2.25" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 288.5 LBS. PER SQ. YD.
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B2B.0B, AT AN AVERAGE RATE OF 488 LBS. PER SQ. YD.
R	SHOULDER BERM GUTTER.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.

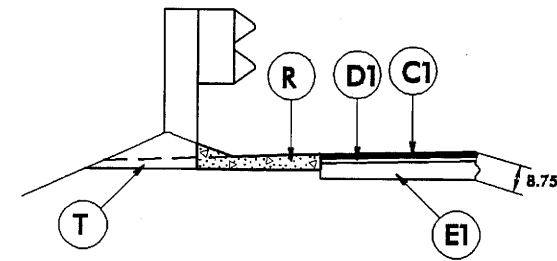
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

PROJECT REFERENCE NO. B-3700	SHEET NO. 2
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER
PRELIMINARY PLANS <small>DO NOT USE FOR CONSTRUCTION</small>	



TYPICAL SECTION NO. 1

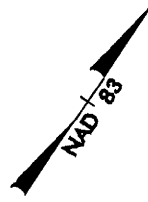
USE TYPICAL SECTION NO. 1
 -L- STA. 13+05.00 TO -L- STA. 16+30+/- (BEGIN BRIDGE)
 -L- STA. 17+40+/- (END BRIDGE) TO -L- STA. 21+65.00



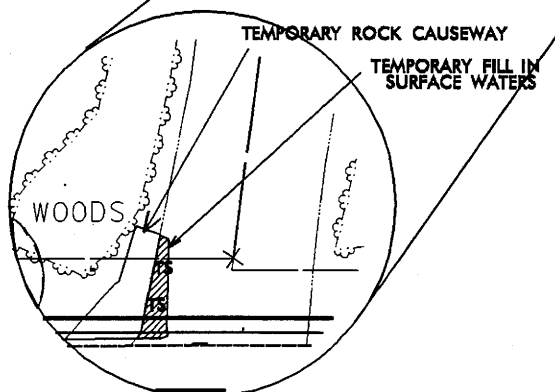
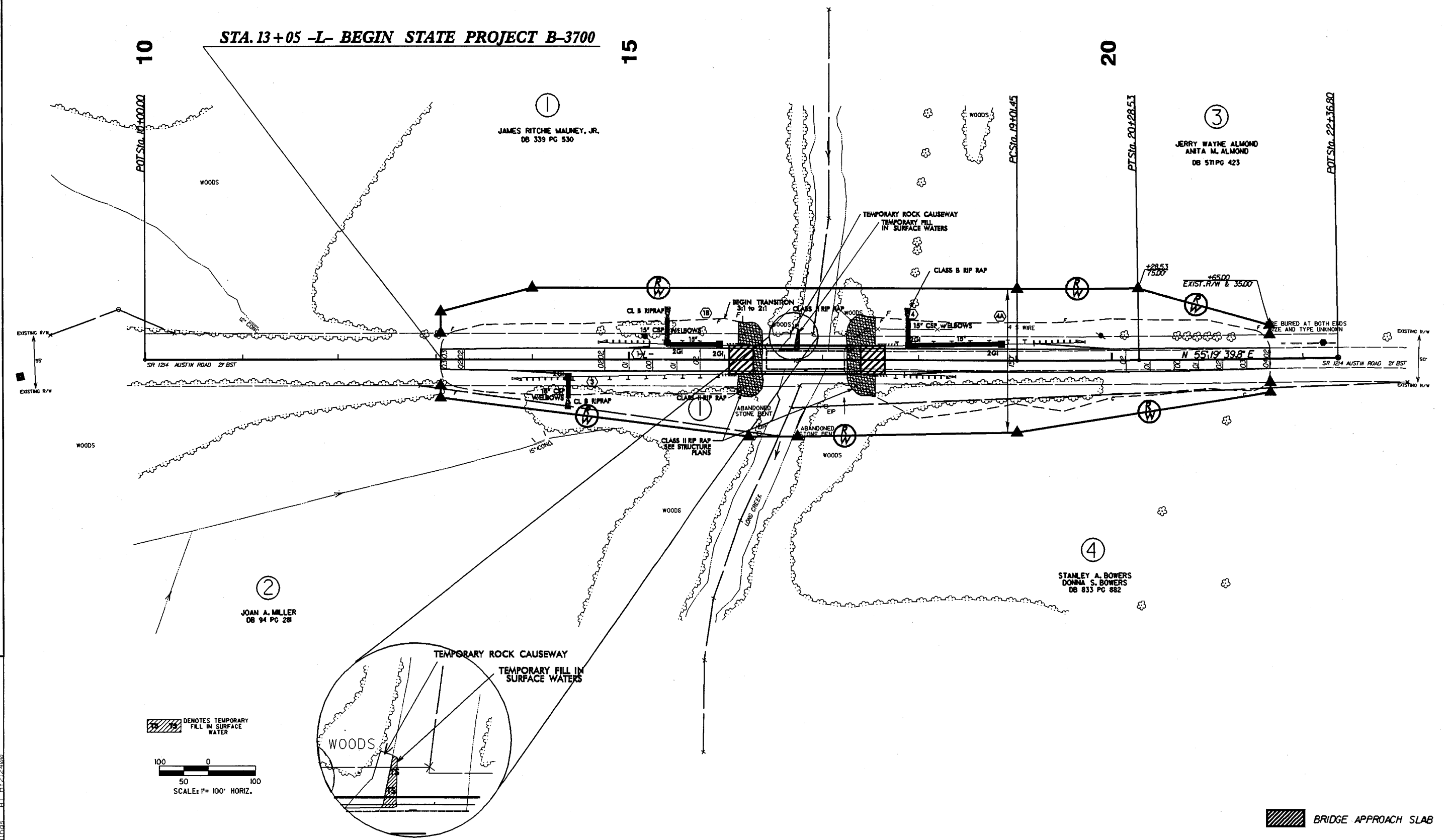
SHOULDER BERM GUTTER DETAIL

USE SHOULDER BERM GUTTER
 -L- STA. 14+38.28 TO -L- STA. 16+00.74 (RT.)
 -L- STA. 17+69.26 TO -L- STA. 17+85.71 (RT.)
 -L- STA. 15+21.79 TO -L- STA. 16+00.74 (LT.)
 -L- STA. 17+69.26 TO -L- STA. 19+19.24 (LT.)

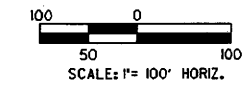
PROJECT REFERENCE NO. B-3700	SHEET NO. 4
ROADWAY DESIGN ENGINEER ENGLISH	HYDRAULICS ENGINEER ENGLISH
ENGLISH	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	



STA. 13+05 -L- BEGIN STATE PROJECT B-3700



DENOTES TEMPORARY FILL IN SURFACE WATER

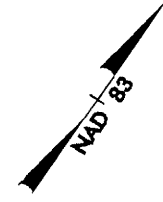


BRIDGE APPROACH SLAB

REVISIONS

8/17/99
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caballeros

PROJECT REFERENCE NO. B-3700	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
ENGLISH	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

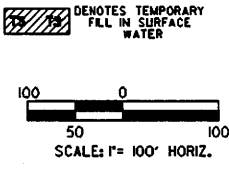
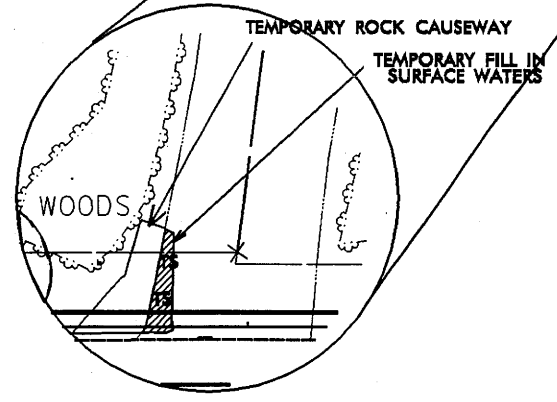
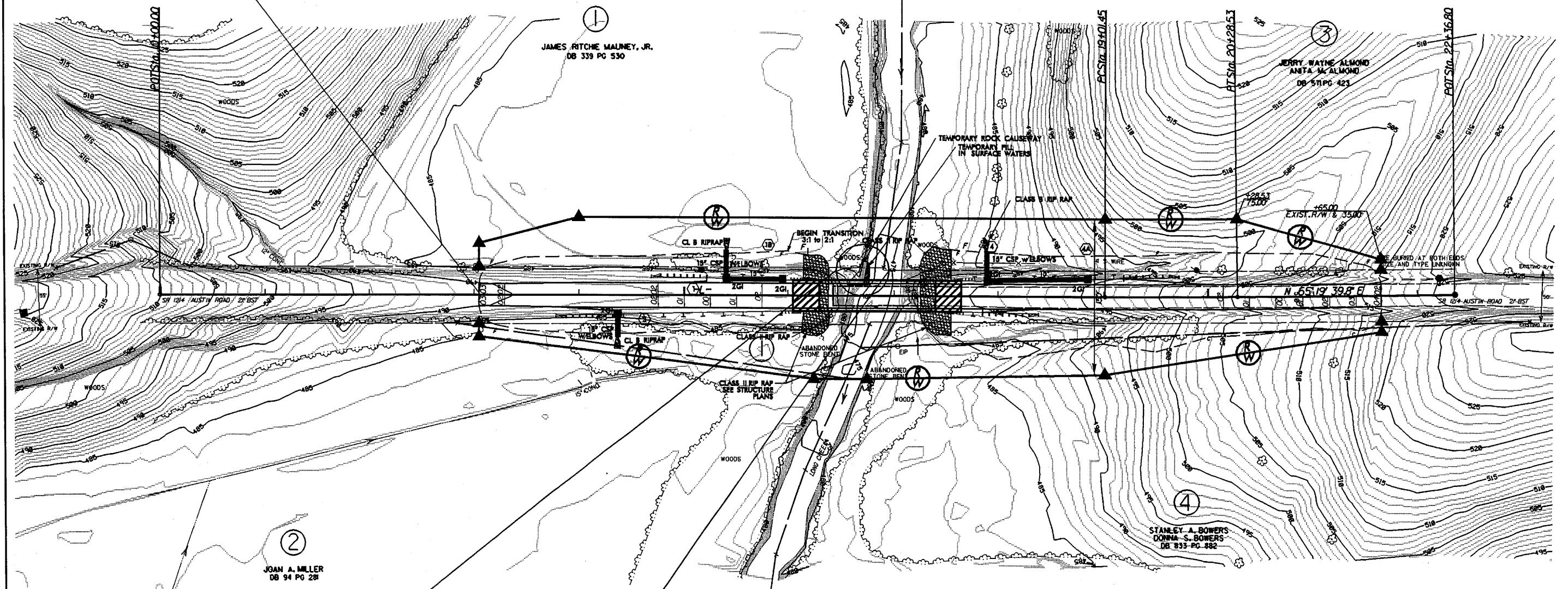


STA. 13+05 -L- BEGIN STATE PROJECT B-3700

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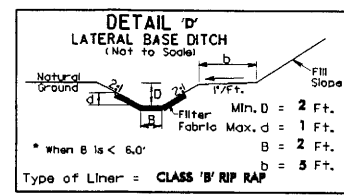
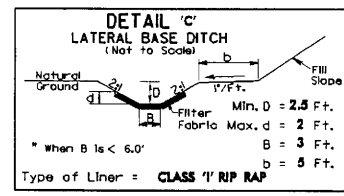
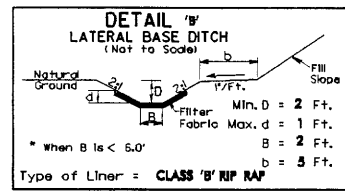
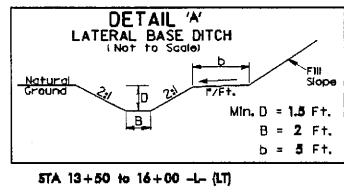
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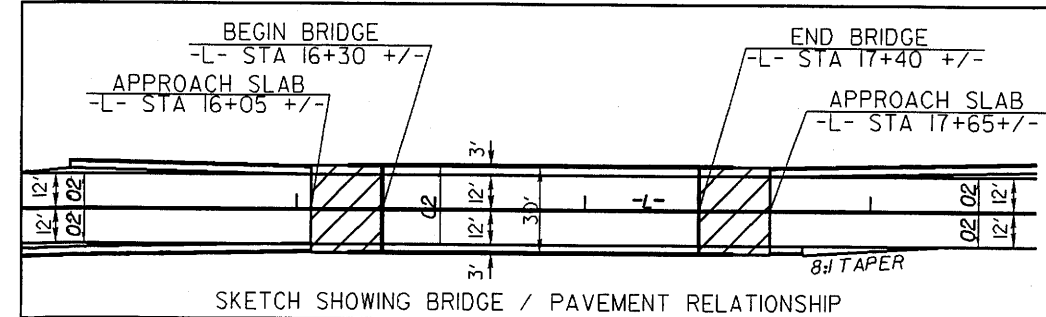
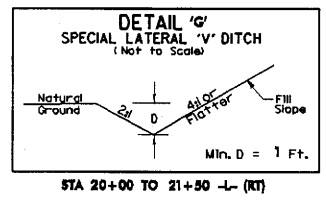
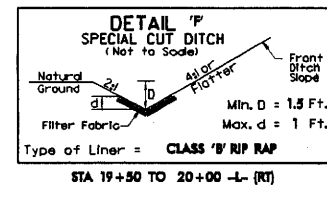
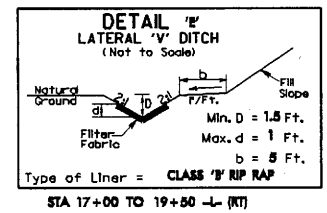
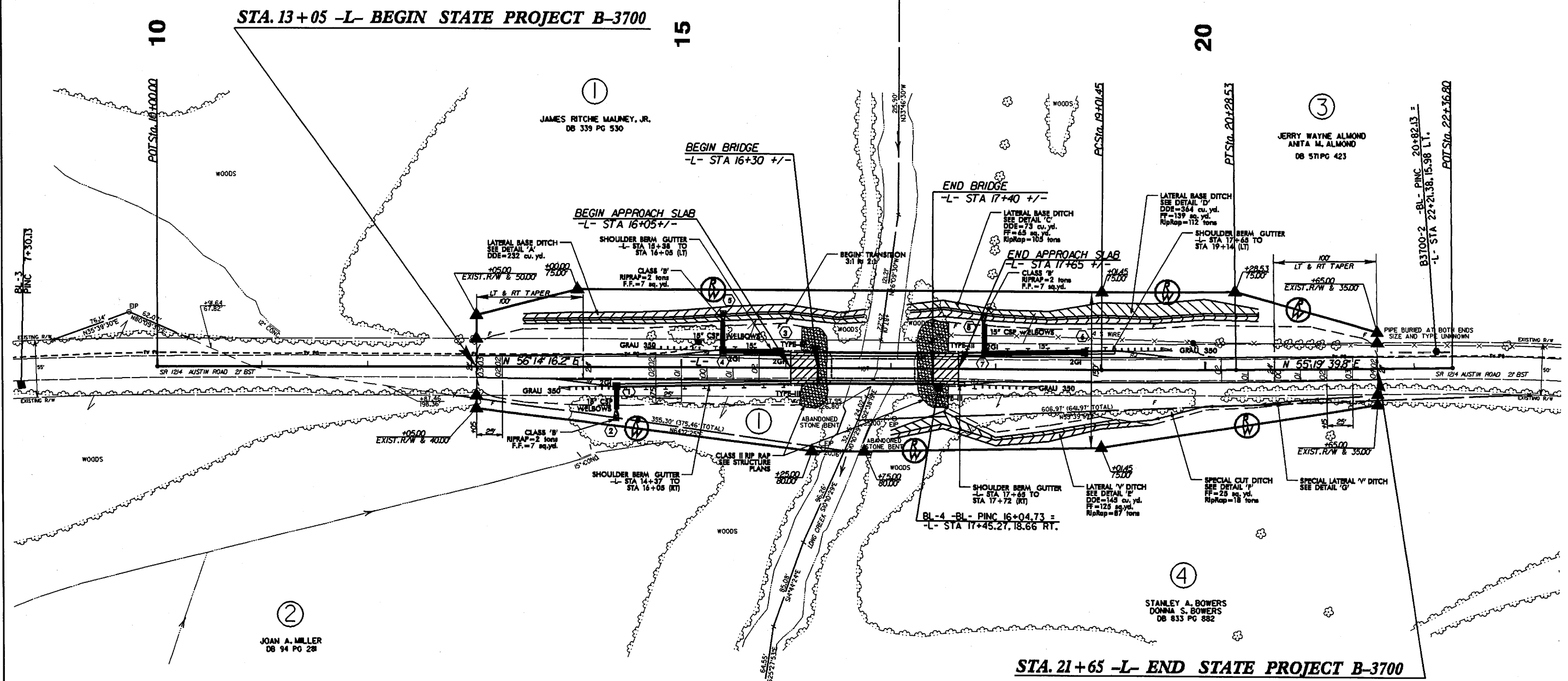
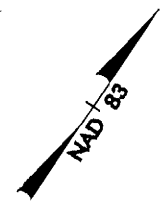
BRIDGE APPROACH SLAB

REVISIONS

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JAN 2005 14:37
C:\projects\permit\B3700_hyd\PERMIT_PLAN2.dgn



-L-
PI Sta 19+64.99
Δ = 0° 54' 36.4" (LT)
D = 0° 42' 58.3"
L = 127.08'
T = 63.54'
R = 8,000.00'
SE = NC



BRIDGE APPROACH SLAB

FOR -L- PROFILE SEE SHEET 5

B717/94

REVISIONS

R:\MAN-2005\1451\Proj\B3700.psh

5/14/99

PROJECT REFERENCE NO. B-3700	SHEET NO. 5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
ENGLISH	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

FOR -L- PLAN VIEW SEE SHEET 4

-L-

BM #2 RR SPIKE IN BASE OF TREE
 -L- STA 16+65.29, 138.40 FT
 ELEV = 484.85

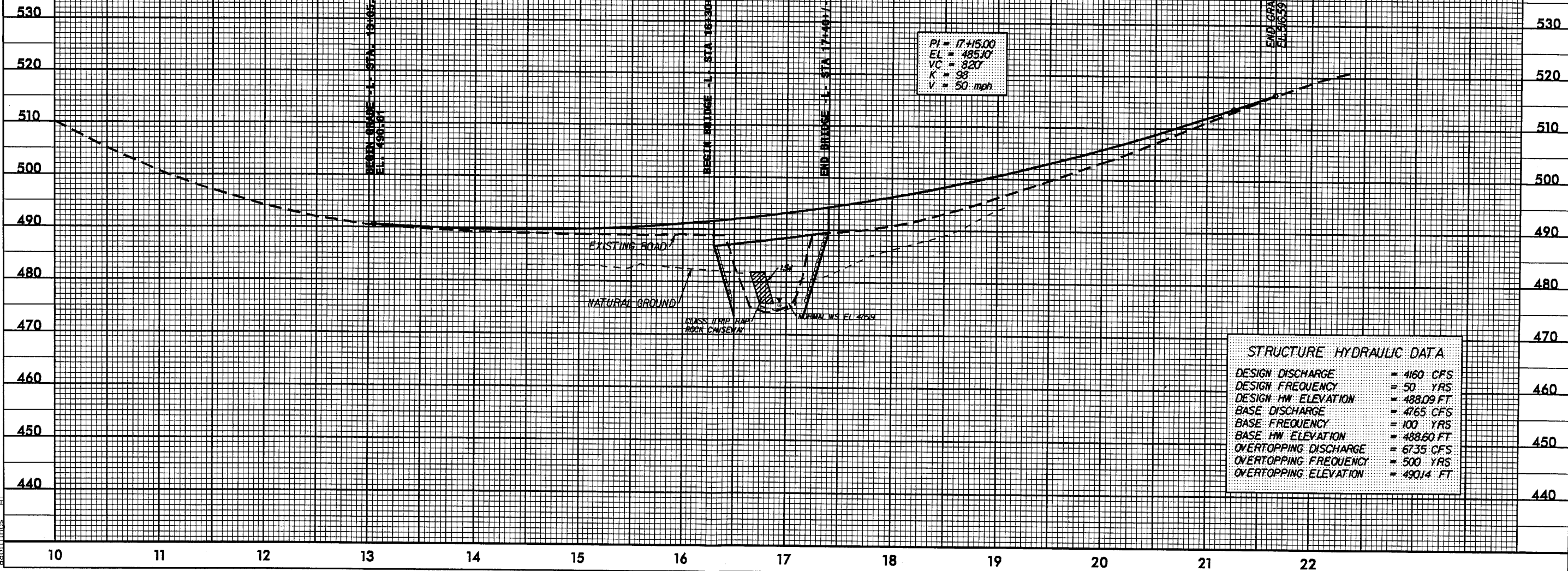
PI = 17+15.00
 EL = 485.10'
 VC = 820'
 K = 98
 V = 50 mph

END GRADE -L- STA 21+65.00
 EL 516.53'

BEGIN GRADE -L- STA 13+65.50
 EL 490.81

BEGIN BRIDGE -L- STA 16+30+7

END BRIDGE -L- STA 17+40+7



STRUCTURE HYDRAULIC DATA	
DESIGN DISCHARGE	= 4160 CFS
DESIGN FREQUENCY	= 50 YRS
DESIGN HW ELEVATION	= 488.09 FT
BASE DISCHARGE	= 4765 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 488.60 FT
OVERTOPPING DISCHARGE	= 6735 CFS
OVERTOPPING FREQUENCY	= 500 YRS
OVERTOPPING ELEVATION	= 490.14 FT

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5/14/99

PROJECT REFERENCE NO. B-3700	SHEET NO. 5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

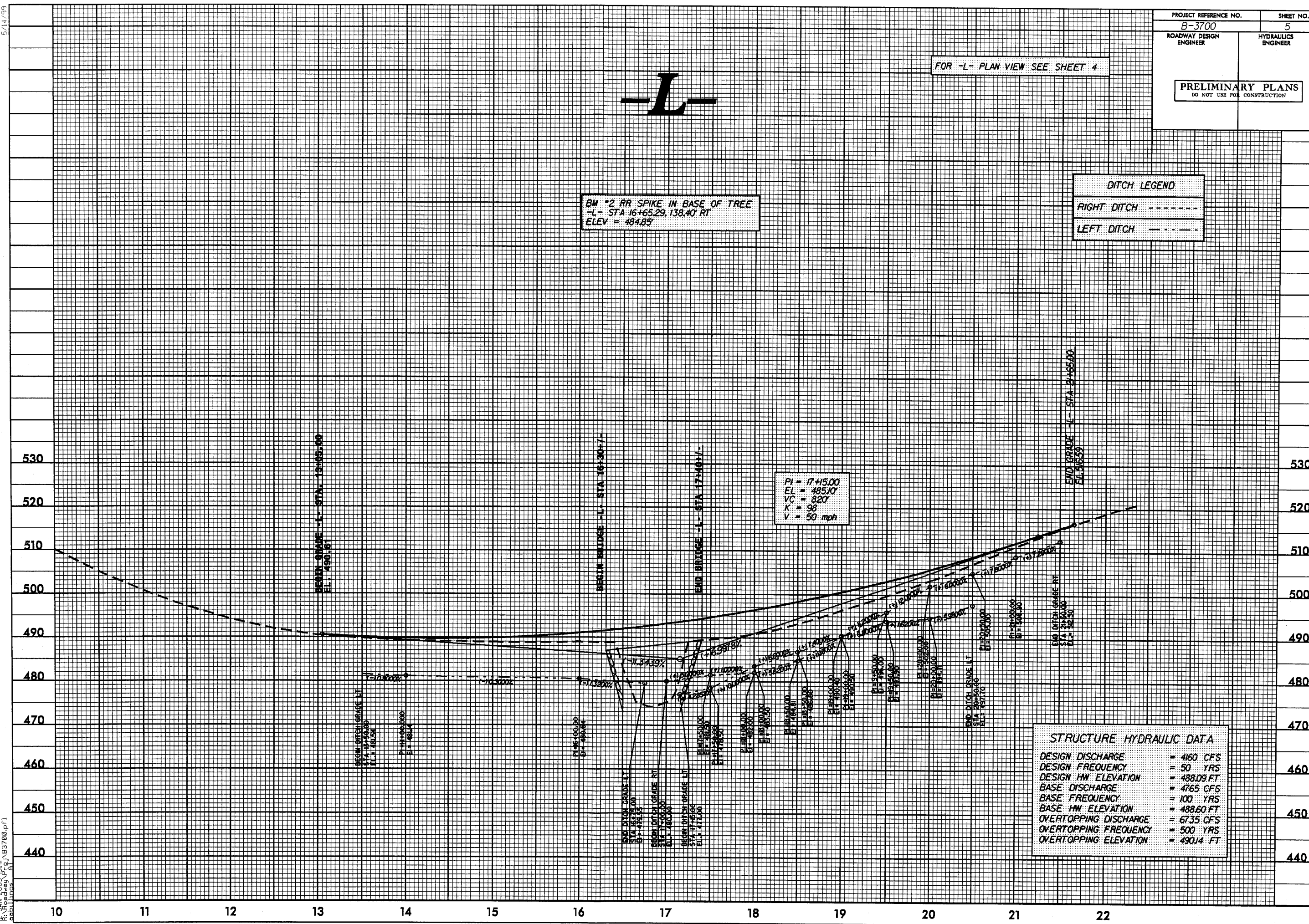
FOR -L- PLAN VIEW SEE SHEET 4

-L-

BM *2 RR SPIKE IN BASE OF TREE
 -L- STA 16+65.29, 138.40' RT
 ELEV = 484.85'

DITCH LEGEND

RIGHT DITCH	-----
LEFT DITCH	-----



PI = 17+15.00
 EL = 485.10'
 VC = 820'
 K = 98
 V = 50 mph

STRUCTURE HYDRAULIC DATA

DESIGN DISCHARGE	= 4160 CFS
DESIGN FREQUENCY	= 50 YRS
DESIGN HW ELEVATION	= 488.09 FT
BASE DISCHARGE	= 4765 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 488.60 FT
OVERTOPPING DISCHARGE	= 6735 CFS
OVERTOPPING FREQUENCY	= 500 YRS
OVERTOPPING ELEVATION	= 490.14 FT

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