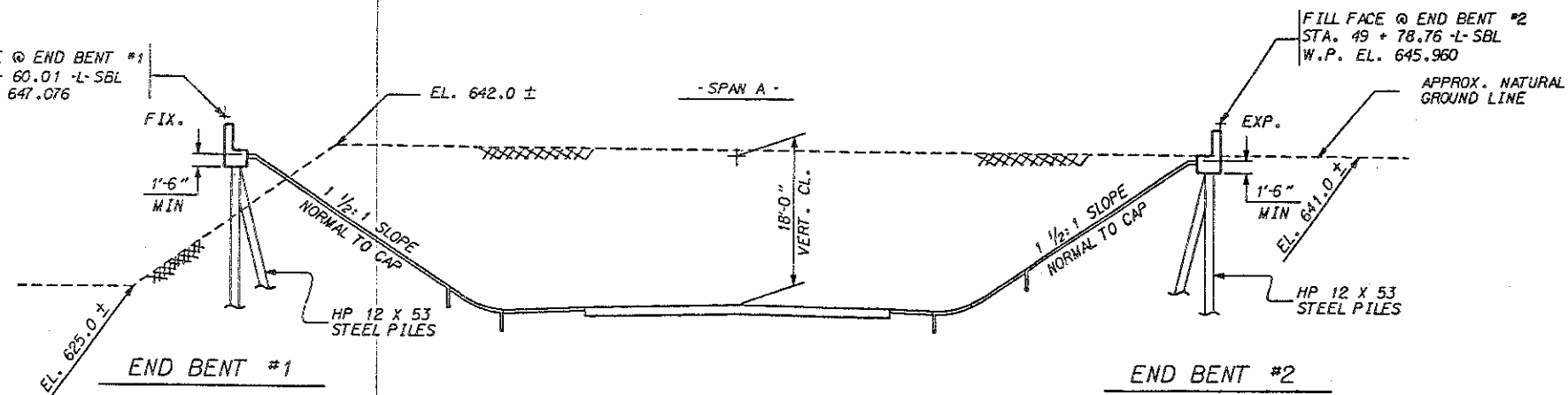


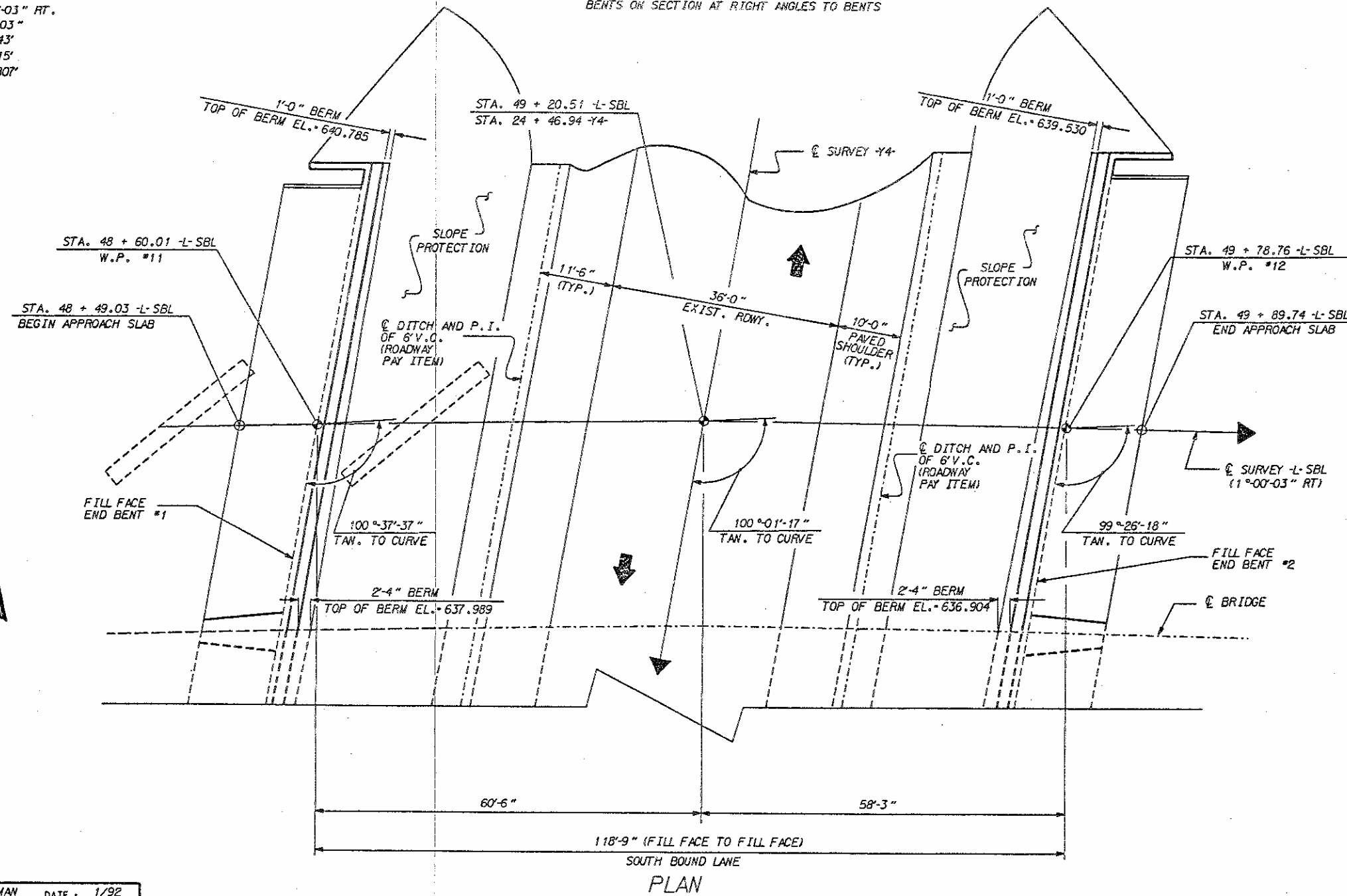
FILL FACE @ END BENT #1
STA. 48 + 60.01 -L-SBL
W.P. EL. 647.076



-0.940 % -1.295 %
PI = 52 + 00
EL = 644.00
VC = 200.00

HORIZONTAL CURVE DATA -L-SBL

PI = 50 + 61.10
Δ = 27° 17' 03" RT.
Dc = 1° 00' 03"
T = 1389.43'
L = 2726.15'
R = 5724.80'



NOTE:

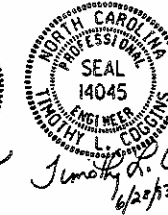
END SLOPES SHALL BE GRADED TO PROVIDE
FOR BERM WIDTHS SHOWN IN PLAN VIEW.

PROJECT NO. 8.7500311
ORANGE COUNTY

STATION: 49 + 20.51 -L-SBL
24 + 46.94 -Y4

SHEET 2 OF 7 REPLACES BRIDGE #52

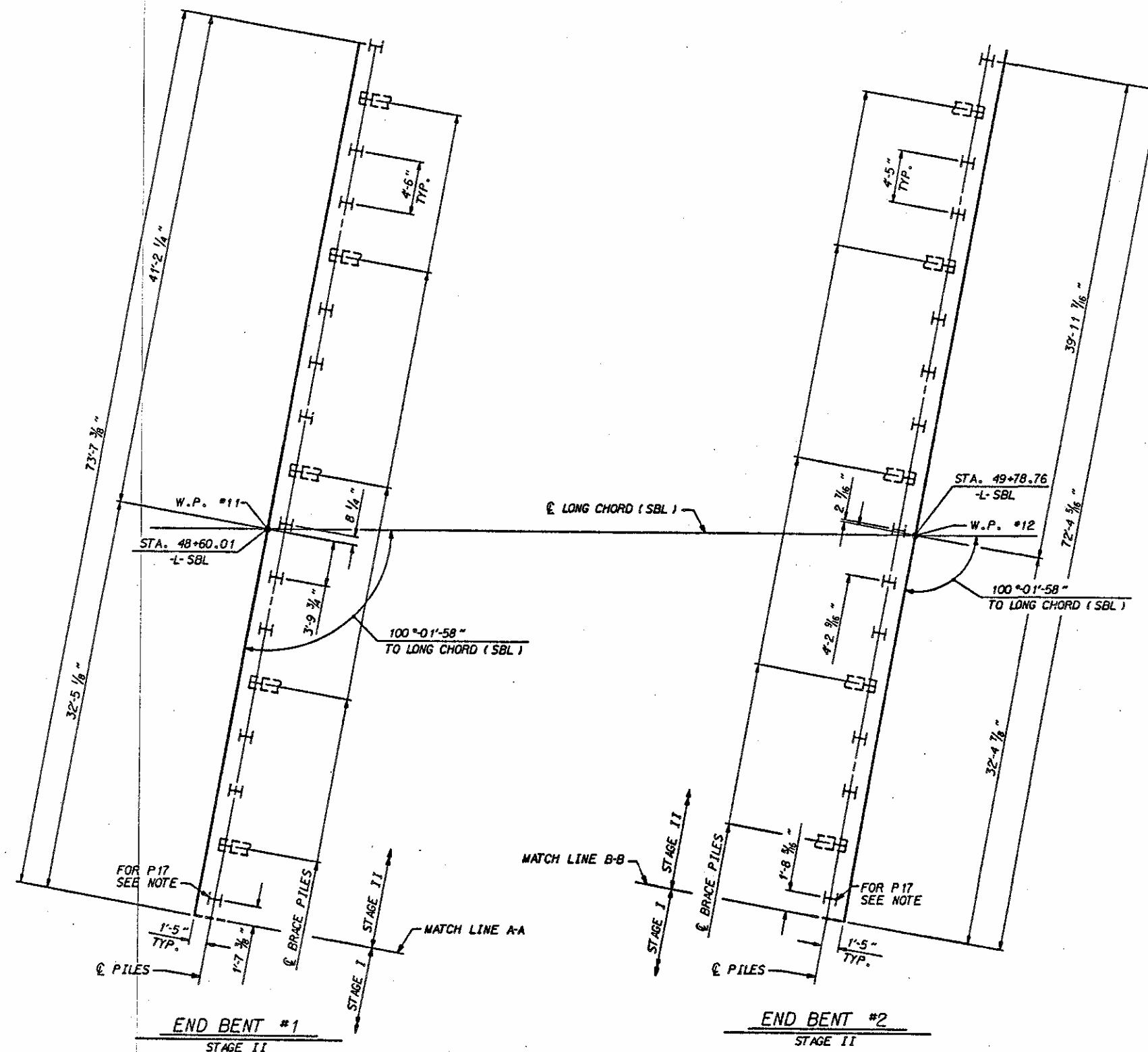
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
GENERAL DRAWING
FOR BRIDGE OVER
US-70 CONNECTOR
(SBL)
STAGE II



DRAWN BY: D. CHAPMAN DATE: 1/92
CHECKED BY: O. PUIGSERVER DATE: 5/93

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			5-72
2			4			TOTAL SHEETS 108

NOTE :
PILE P17 OF END BENT "1 AND END BENT "2 STAGE II
CONSTRUCTION SHALL BE DRIVEN WITH THE PILES FOR
STAGE I CONSTRUCTION.



FOUNDATION LAYOUT

(DIMENSIONS LOCATING PILES ARE SHOWN TO THE PILE CENTERLINE)
BATTER BRACE PILES AT 3 TO 12

DRAWN BY : N.M. RUFFIN DATE : 4/26/93
CHECKED BY : O. PUTGERVER DATE : 4/27/93

24-JUN-1993 08:17
ZG:(206011)130403FL.DGM:
NRUFFIN



Ned O. Chapman Timothy A. Logan
6-25-93 6/25/93

PROJECT NO. 8.T500311

ORANGE COUNTY

STATION: 49+20.51 -L- SBL

SHEET 4 OF 7

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
GENERAL DRAWING
FOUNDATION LAYOUT
SBL STAGE II

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			5-74 TOTAL SHEETS 108
2			4			

2 SURVEY -L-
1°-00'-03"
CURVE RT.

W.P. #11

STA. 48 + 60.01 -L- SBL
FILL FACE AT END BENT 1

2

1

LONG CHORD

STA. 49 + 78.76 -L- SBL
FILL FACE AT END BENT 2

3

W.P. #12

4

-L- SBL
ANGLES

deg m/n sec

- 1 100-01-58
- 2 100-37-37 TAN. TO CURVE
- 3 99-26-18 TAN. TO CURVE
- 4 100-01-57

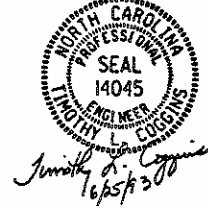
D = 1°-00'-03"
R = 5724.807'

118.748' ALONG LONG CHORD -L- SBL

LONG CHORD LAYOUT

-L- SBL
HORIZONTAL CURVE DATA

PI = 50 + 61.10
 $\Delta = 27^\circ - 17' - 03''$ RT
DC = 1°-00'-03"
T = 138943'
L = 2726.15'
R = 5724.807'



PROJECT NO. 8.T500311

ORANGE COUNTY

STATION: 49 + 20.51 -L- SBL

SHEET 6 OF 7

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE
LONG CHORD LAYOUT
(SBL)
STAGE II

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			5-76
2			4			TOTAL SHEETS 108

DRAWN BY: D. CHAPMAN DATE: 4/93
CHECKED BY: D. PUTTOVER DATE: 5/93

24-JUN-1993 10:33
Z:\01206022\11304E03LC.DGN
DCHAPMAN



TOTAL BILL OF MATERIAL															
	REMOVAL OF EXISTING STRUCTURE	REINFORCED CONCRETE DECK SLAB	GROOVING BRIDGE FLOORS	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	STRUCTURAL STEEL	HP 12 X 53 STEEL PILES		CONCRETE BARRIER RAIL	4" SLOPE PROTECTION	T F E EXPANSION BEARING ASSEMBLIES	PREFORMED COMPRESSION JOINT SEALS	CONCRETE BARRIER RAIL AT MEDIAN	CONCRETE MEDIAN BARRIER
	LUMP SUM	SQ.FT.	SQ.FT.	CU.YDS.	LUMP SUM	LBS.	APPROX.LBS.	NO.	LIN.FT.	LIN.FT.	SQ.YDS.	LUMP SUM	LUMP SUM	LIN.FT.	LIN.FT.
SUPERSTRUCTURE		17,515	19,107		LUMP SUM		491,000			233.36		LUMP SUM	LUMP SUM	233.26	24.00
END BENT NO.1				84.0		13,604		35	1,140		710				
END BENT NO.2				84.7		13,573		35	1,045		635				
TOTAL	LUMP SUM	17,515	19,107	164.7	LUMP SUM	27,177	491,000	70	2,185	233.36	1,345	LUMP SUM	LUMP SUM	233.26	24.00

A588 STEEL WITH A MINIMUM YIELD STRENGTH OF 58,000 PSI UNLESS OTHERWISE NOTED ON THE PLAN.

FOR REINFORCED CONCRETE DECK SLAB, SEE

FOR FABRICATED METAL STAY-IN-PLACE FOR PROVISIONS.

FOR CURING BRIDGE DECK SLABS, SEE THE "REINFORCED CONCRETE DECK SLAB."

FOR EPOXY PROTECTIVE COATING, SEE SPEC

PILES FOR END BENTS SHALL BE DRIVEN TO BEARING CAPACITY OF 50 TONS EACH.

AFTER SERVING AS A TEMPORARY STRUCTURE STRUCTURE CONSISTING OF 4 SIMPLE SPANS 37'-6", 64'-0", AND 48'-10 1/2" WITH A AT 8' 0" COUNTERS, CLEAR ROADWAY WIDTH AND DEC. 10' FEET HIGH 14' C&G CAN. AND 2 COLUMN POST AND BEAM BEAMS AND L PROPOSED STRUCTURE SHALL BE REMOVED. BRIDGE IS PRESENTLY NOT POSTED FOR LOAD. THE STRUCTURAL INTEGRITY OF THE BRIDGE DURING CONSTRUCTION OF THE PROPOSED BR MAY BE POSTED AND MAY BE REDUCED AS FO DURING THE LIFE OF THE PROJECT.

THE SUBSTRUCTURE OF THE EXISTING BRIDGE ON THE PLANS IS FROM THE BEST INFORMATION SINCE THIS INFORMATION IS SHOWN FOR THE USE OF THE CONTRACTOR, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DELAYS OR ADDITIONAL COST INCURRED AS A RESULT OF ANY DIFFERENCES BETWEEN THE EXISTING BRIDGE SHOWN ON THE PLANS AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" FOR SEISMIC CATEGORY A.

FOR PAINTING WEATHERING STEEL, SEE SPE
THE CONTRACTOR SHALL PROVIDE INDEPENDENT
OF REINFORCING STEEL AS DIRECTED BY THE

A ONE MONTH WAITING PERIOD IS REQUIRED OF THE APPROACH EMBANKMENT BEFORE BEGI OF APPROACH SLABS AT END BENTS.

FOR ANCHOR BOLTS, SEE SPECIAL PROVISIO

THIS BRIDGE HAS BEEN DESIGNED BY STRENGTH SPECIFIED IN AASHTO SPECIFICATIONS.



N. D. Chapman
10-25-93



Minister L. Cozzani

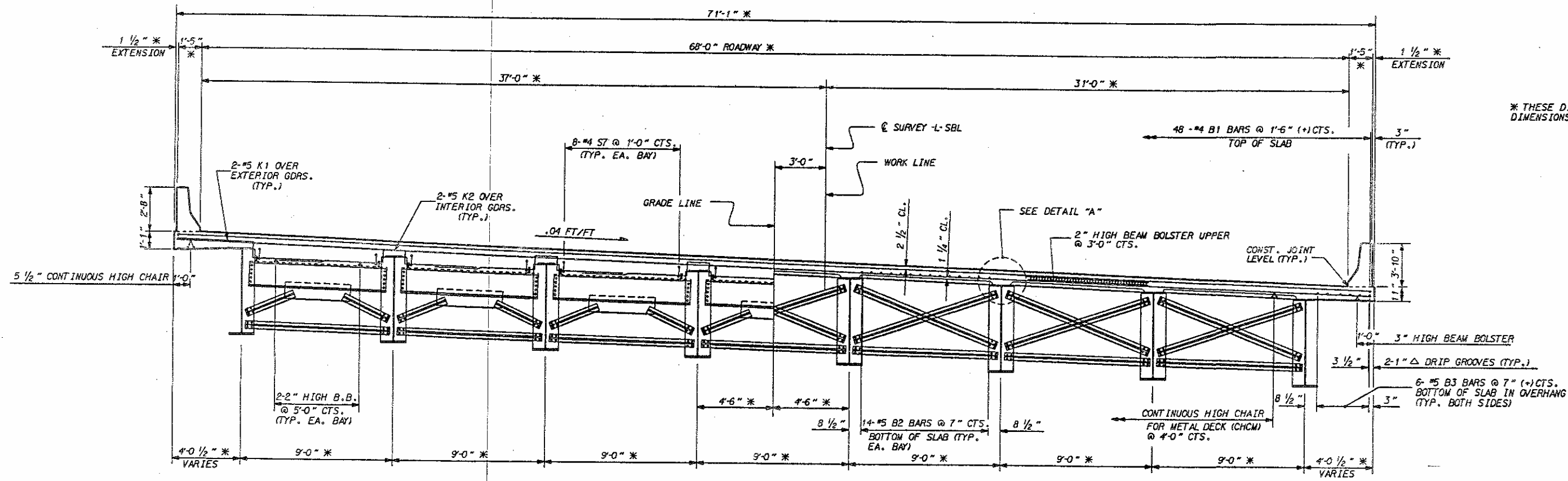
PROJECT
OR

STATION: -

SHEET 7 OF 7

DEPARTMENT

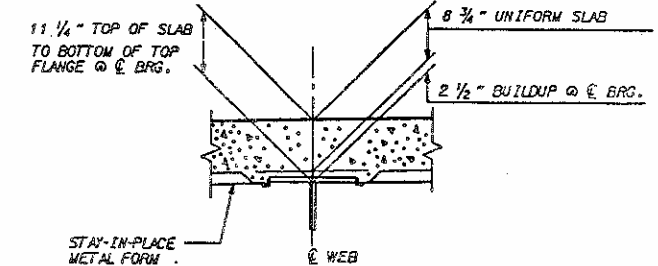
GENE
FOR



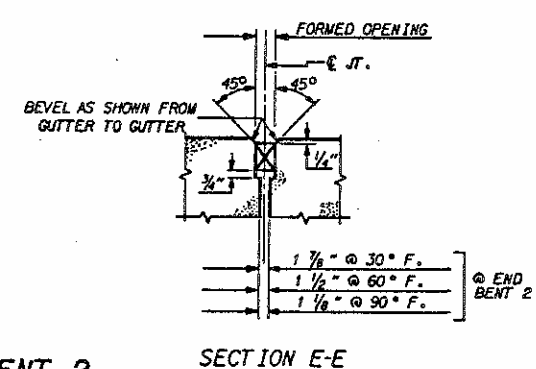
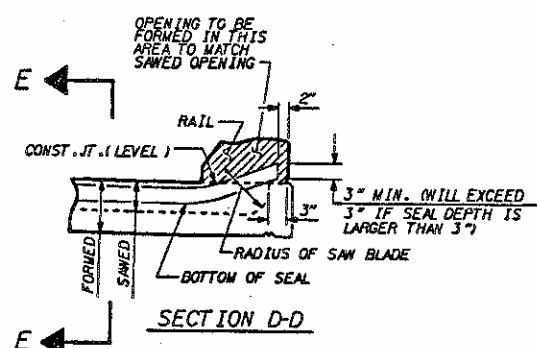
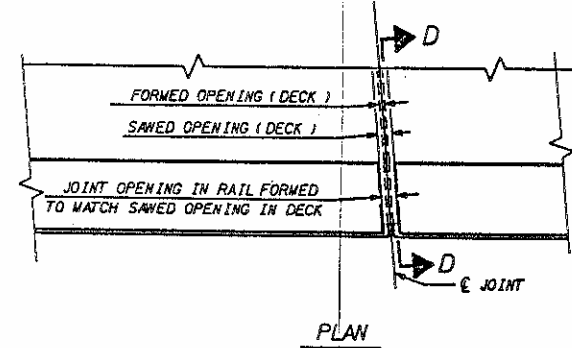
* THESE DIMENSIONS ARE RADIAL DIMENSIONS.

HALF TYPICAL SECTION @ END BENT DIAPHRAGM
FOR END BENT DIAPHRAGMS, SEE "SUPERSTRUCTURE STRUCTURAL STEEL DETAIL". FOR END BENT DIAPHRAGM LOCATIONS, SEE "FRAMING PLAN".

HALF TYPICAL SECTION @ INTERMEDIATE DIAPHRAGM
FOR INTERMEDIATE DIAPHRAGMS, SEE "SUPERSTRUCTURE STRUCTURAL STEEL DETAIL". FOR INTERMEDIATE DIAPHRAGM LOCATIONS, SEE "FRAMING PLAN".



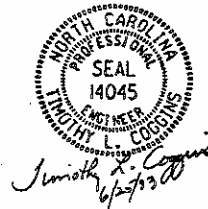
DETAIL "A"



COMPRESSION JOINT SEAL DETAILS @ END BENT 2

THE OPENING SHOWN @ EB #2 IS BASED ON A NOMINAL UNCOMPRESSED SEAL WIDTH OF 4".

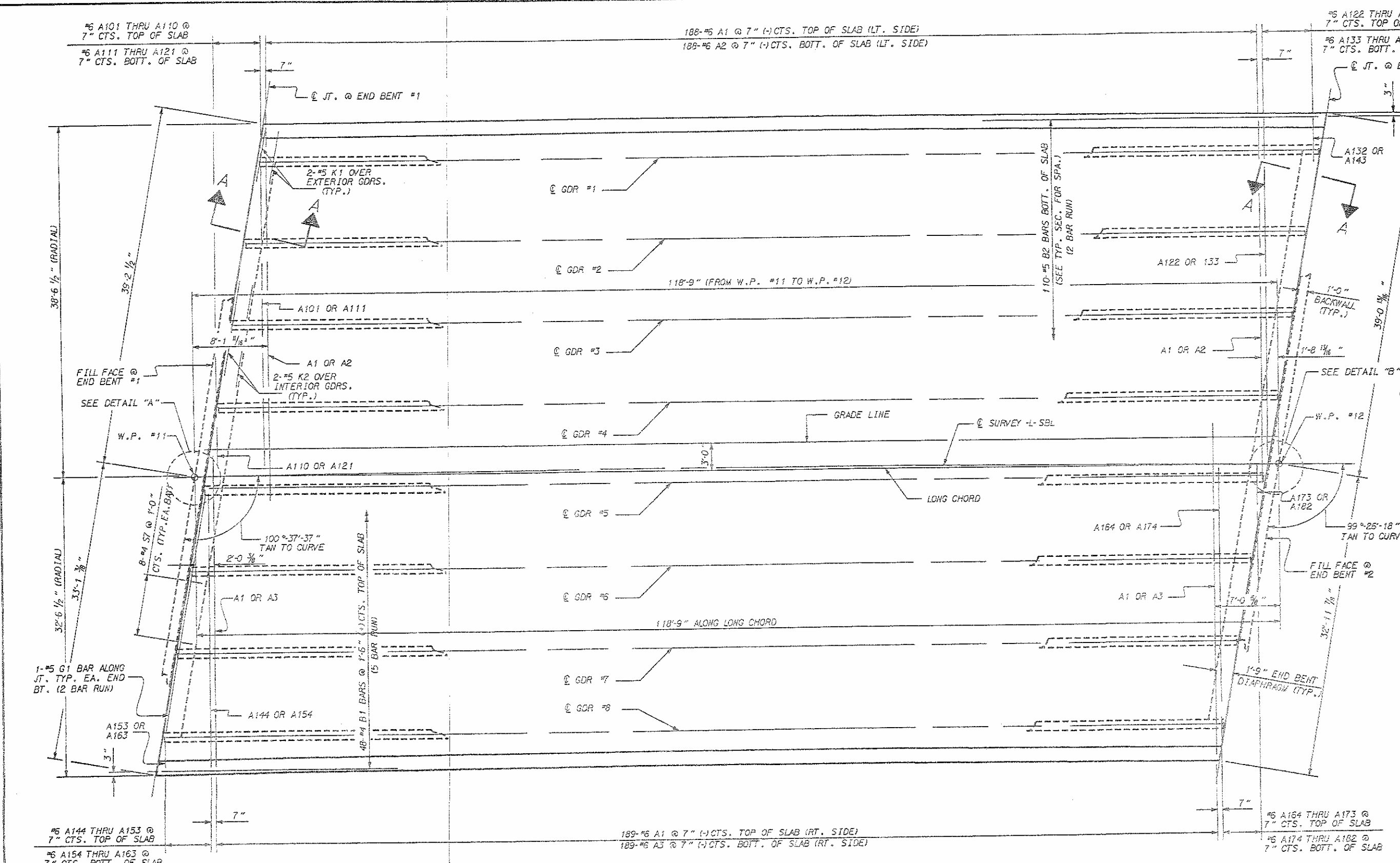
PROJECT NO. 8.T500311
ORANGE COUNTY
STATION: 49+20.51 -L- SBL



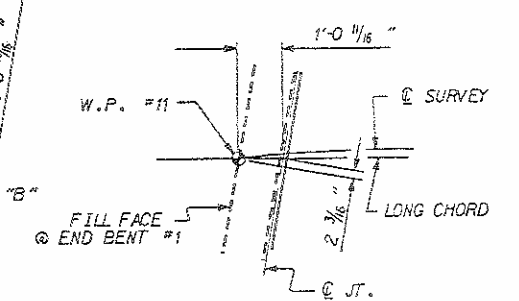
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
SUPERSTRUCTURE TYPICAL SECTIONS (SBL) STAGE II					
REVISIONS					
NO.	BY	DATE	NO.	BY	DATE
1			3		
2			4		
					SHEET NO. S-79 TOTAL SHEETS 108

DRAWN BY: D. CHAPMAN DATE: 4/93
CHECKED BY: L.E. SUTTON DATE: 5/93

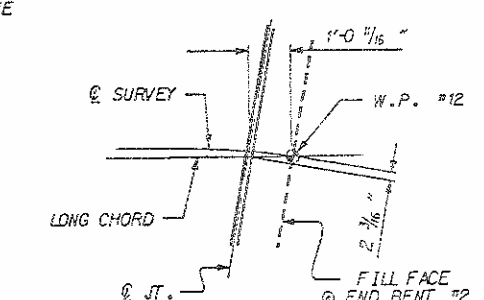
24-JUN-1993 11:48
Z:\02\206022\304E03TS.DGN
DCHAPMAN



NOTE:
FOR REINFORCING STEEL IN BARRIER RAIL,
SEE BARRIER RAIL DETAILS.



DETAIL "A"



DETAIL "B"

PROJECT NO. 8.T500311
ORANGE COUNTY
 STATION: 49+20.51 -L- SBL

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE
 PLAN OF SPAN "A"
 (SBL)
 STAGE II

REVISIONS				SHEET NO.
NO.	BY	DATE	NO.	
1			3	S-81
2			4	
				TOTAL SHEETS
				108

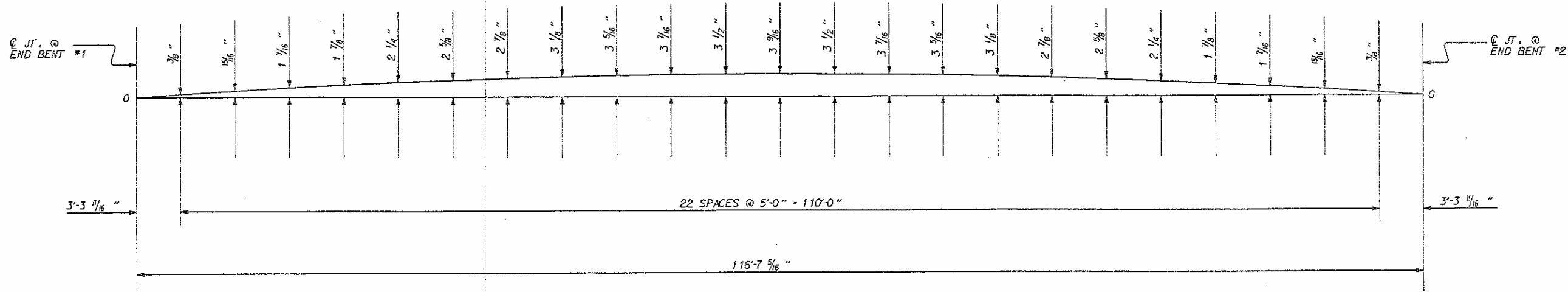


Signature of L. E. Sutton
 1/6/2003

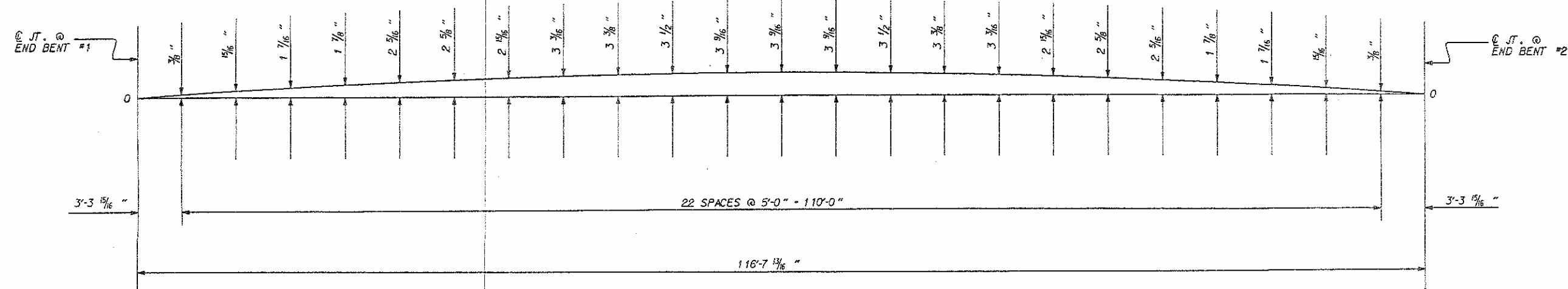
DRAWN BY: D. CHAPMAN DATE: 4/93
 CHECKED BY: L. E. SUTTON DATE: 5/93

25-JUN-1993 08:37
 2X0420602220304E03PS.DWG
 ECHAPMAN

PLAN OF SPAN "A"
 "A" BARS TO BE PLACED NORMAL TO SHORT CHORD



ARC OFFSETS ALONG OUTSIDE EDGE OF SUPERSTRUCTURE - LEFT SIDE



ARC OFFSETS ALONG OUTSIDE EDGE OF SUPERSTRUCTURE - RIGHT SIDE



PROJECT NO. 8.T500311
ORANGE COUNTY
STATION: 49+20.51 -L- SBL

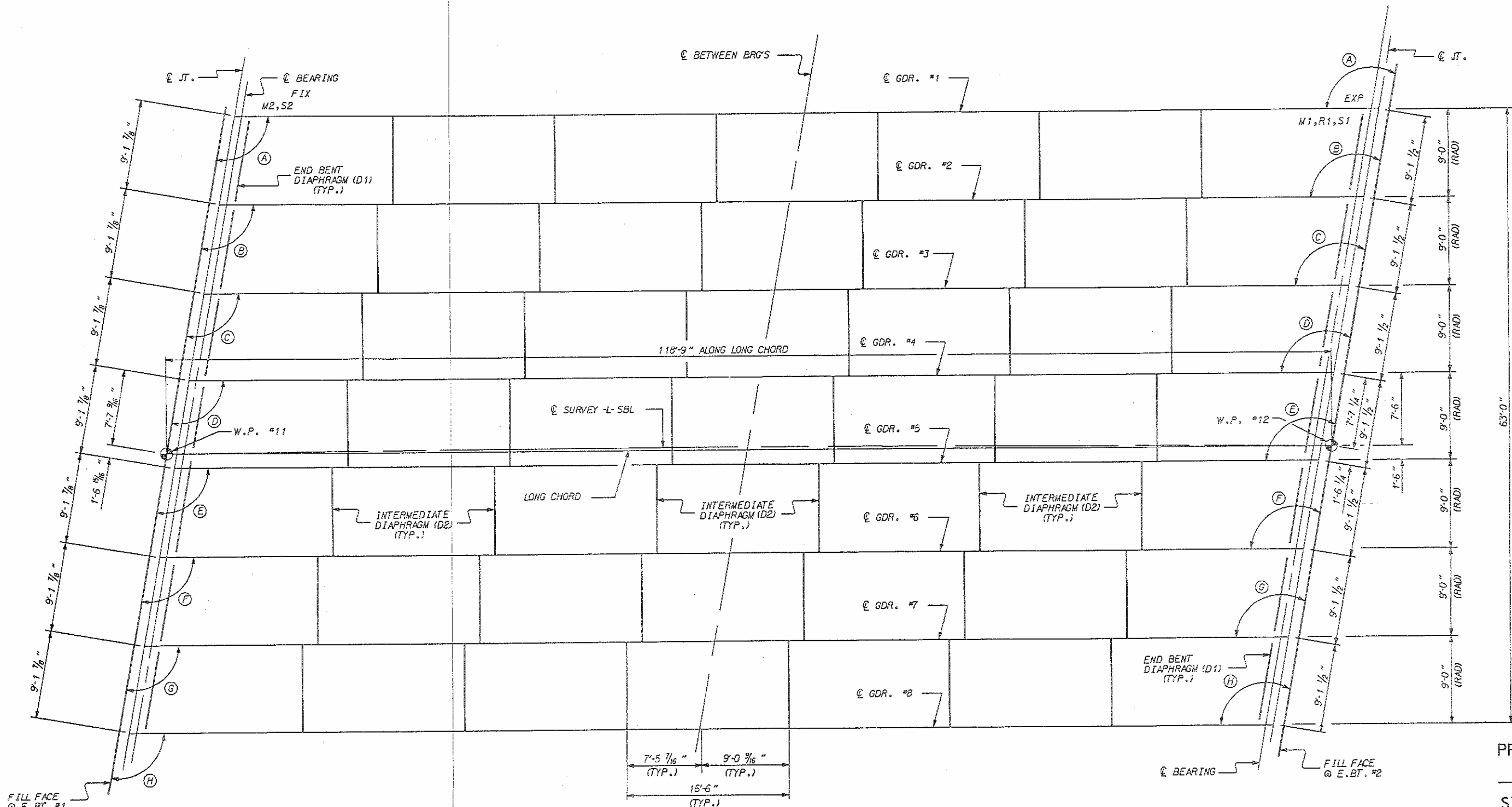
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE
(SBL)
STAGE II

DRAWN BY: D. CHAPMAN DATE: 4/93
CHECKED BY: L.E. SUTTON DATE: 5/93

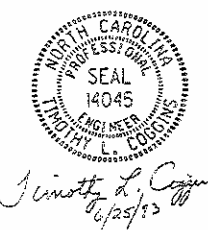
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DCHAPMAN

REVISIONS						SHEET NO. 5-83
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 108
2			4			



BEAM ANGLES	
A	99°58'-19"
B	99°59'-16"
C	100°00'-13"
D	100°01'-10"
E	100°02'-07"
F	100°03'-05"
G	100°04'-02"
H	100°05'-00"

DRAWN BY: D. CHAPMAN DATE: 3/93
 CHECKED BY: L. E. SUTTON DATE: 5/93

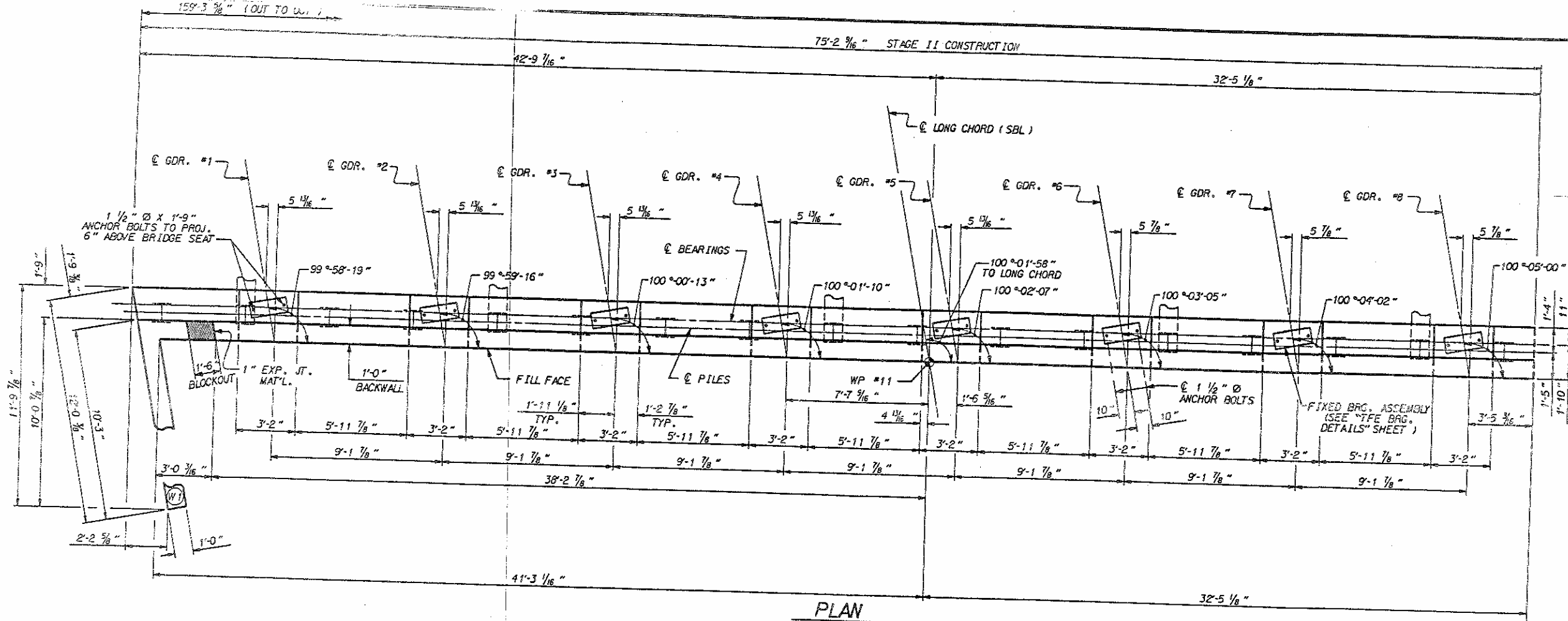


PROJECT NO. 8.T500311
 ORANGE COUNTY
 STATION: 49+20.51 -L- SBL

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			5-85
2			4			TOTAL SHEETS 108

25-JUN-1993 08:45
 ZHOZ060223504E03FP.DGN
 DCHAPMAN

REVISIONS						SHEET NO. 5-94
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 108
2			4			



--- NOTES ---

STIRRUPS IN CAP MAY BE SHIFTED AS NECESSARY TO CLEAR ANCHOR BOLTS.

FOR EPOXY PROTECTIVE COATING, SEE SPECIAL PROVISIONS.

PIPE DRAINS MAY BE SHIFTED SLIGHTLY AS NECESSARY TO CLEAR REINFORCING STEEL AND ANCHOR BOLTS.

FOR PIPE DRAIN DETAILS, SEE END BENT #1 SHEET 4 OF 4.

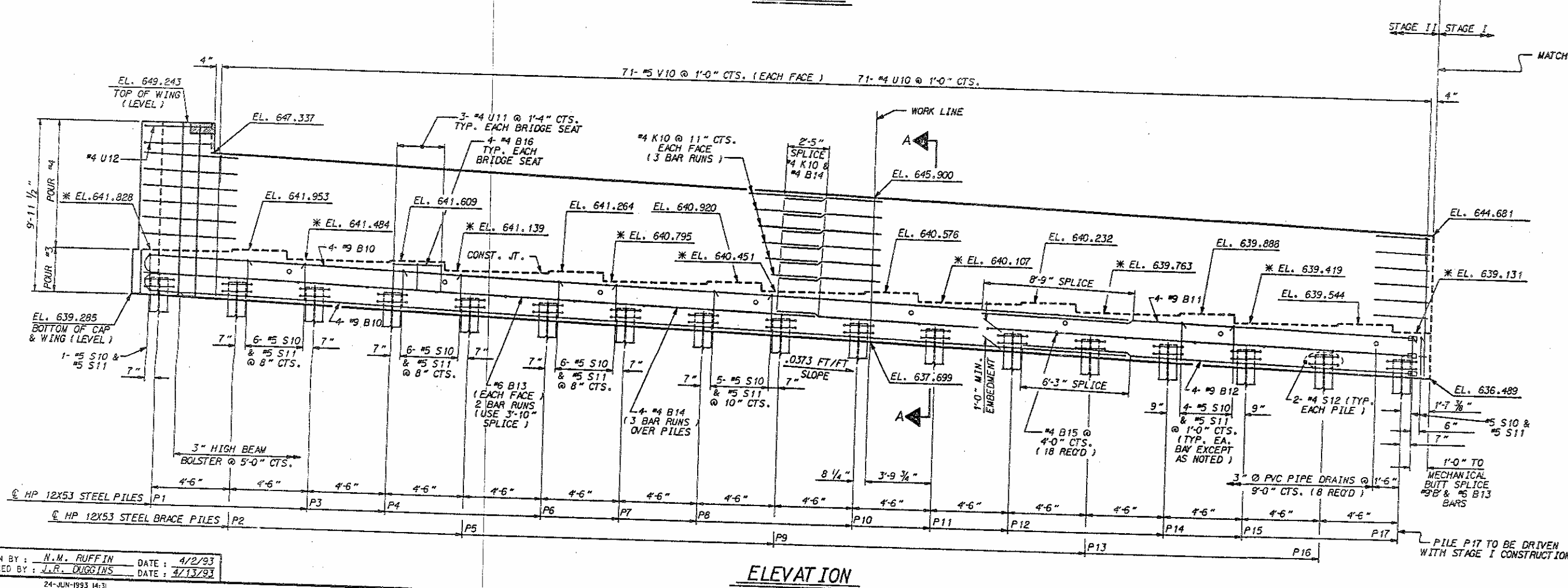
FOR PILE SPlice DETAILS, SEE END BENT #1 SHEET 4 OF 4.

BACKWALL SHALL BE PLACED BEFORE APPLYING THE EPOXY PROTECTIVE COATING.

THE TOP SURFACE AREAS OF THE END BENT CAPS SHALL BE CURED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS EXCEPT THAT THE MEMBRANE CURING COMPOUND METHOD SHALL NOT BE USED.

THE TOP SURFACE OF THE END BENT CAP EXCEPT THE BRIDGE SEAT BUILDUPS SHALL BE SLOPED TRANSVERSELY FROM THE FILL FACE TO THE BACK FACE AT THE RATE OF 1/4\"/>

PLAN



ELEVATION

TOP OF PILE ELEVATION	
PILE	ELEVATION
P1	640.253
P2	640.086
P3	639.918
P4	639.750
P5	639.582
P6	639.414
P7	639.246
P8	639.079
P9	638.911
P10	638.743
P11	638.575
P12	638.407
P13	638.239
P14	638.071
P15	637.904
P16	637.736
P17	637.568

PROFESSIONAL SEAL
15779
JOHN R. DUGGINS
6-28-93

PROJECT NO. 8.7500311
ORANGE COUNTY
STATION: 49 + 20.51 -L- SBL
SHEET 2 OF 4

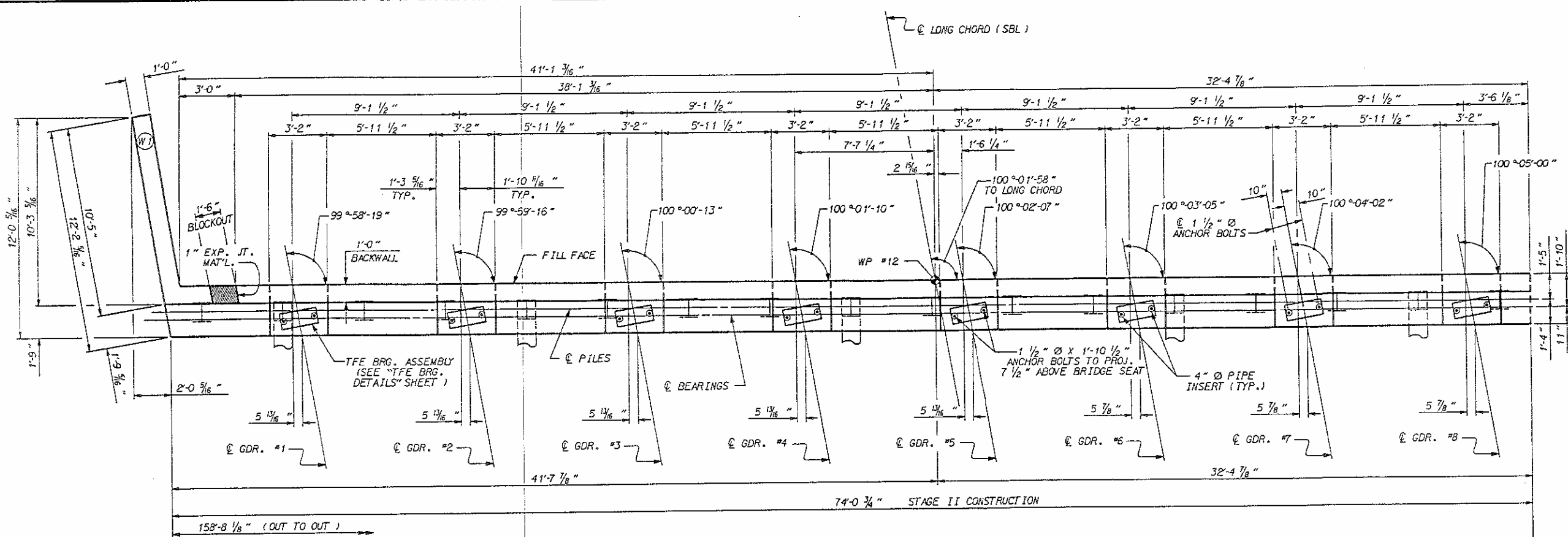
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE
END BENT #1
SBL STAGE II

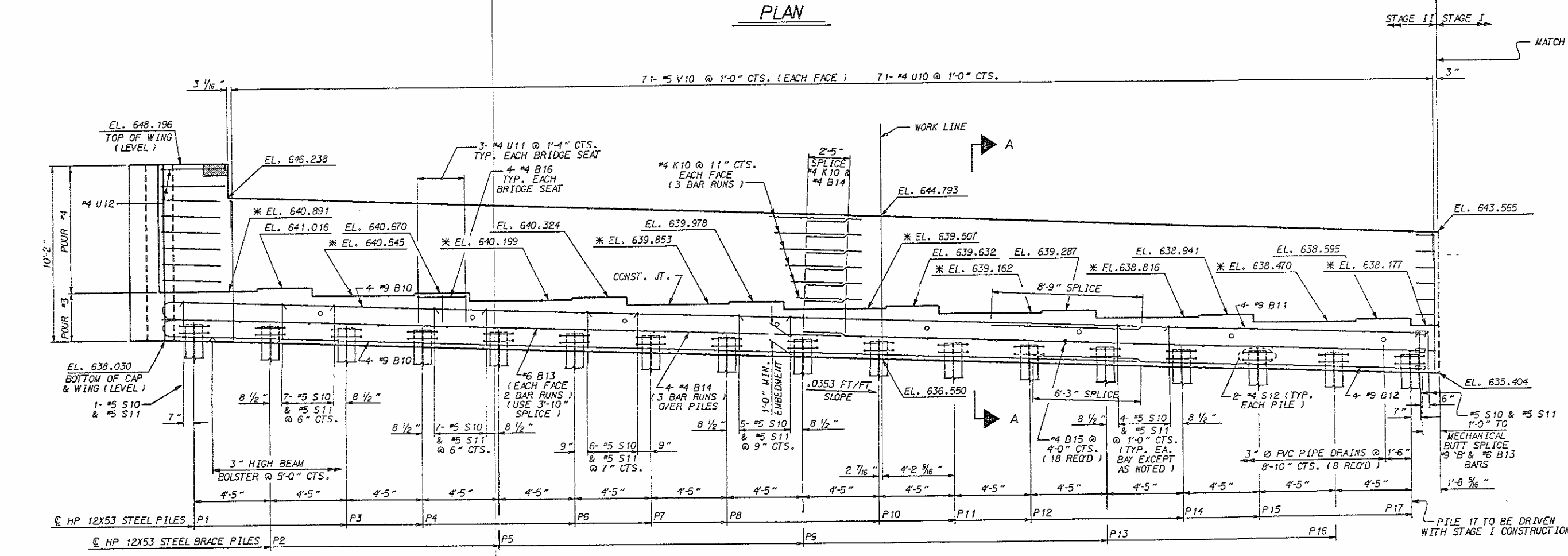
REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	
1			3			5-96
2			4			TOTAL SHEETS 108

DRAWN BY: N.M. RUFFIN DATE: 4/2/93
CHECKED BY: J.R. DUGGINS DATE: 4/13/93

24-JUN-1993 14:31
Z0620601330403EL.DWG
NRUFFIN



PLAN



ELEVATION

--- NOTES ---

STIRRUPS IN CAP MAY BE SHIFTED AS NECESSARY TO CLEAR ANCHOR BOLTS.

FOR EPOXY PROTECTIVE COATING, SEE SPECIAL PROVISIONS.

PIPE DRAINS MAY BE SHIFTED SLIGHTLY AS NECESSARY TO CLEAR REINFORCING STEEL AND ANCHOR BOLTS.

FOR PIPE DRAIN DETAILS, SEE END BENT #2 SHEET 4 OF 4.

FOR PILE SPLICE DETAILS, SEE END BENT #2 SHEET 4 OF 4.

FOR PIPE INSERT DETAILS SEE TFE BEARING DETAILS SHEET.

BACKWALL SHALL BE PLACED BEFORE APPLYING THE EPOXY PROTECTIVE COATING.

THE TOP SURFACE AREAS OF THE END BENT CAPS SHALL BE CURED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS EXCEPT THAT THE MEMBRANE CURING COMPOUND METHOD SHALL NOT BE USED.

THE TOP SURFACE OF THE END BENT CAP EXCEPT THE BRIDGE SEAT BUILDUPS SHALL BE SLOPED TRANSVERSELY FROM THE FILL FACE TO THE BACK FACE AT THE RATE OF 1/4" PER FOOT.

THE CONCRETE IN THE SHADED AREA OF THE WING SHALL BE POURED AFTER THE JOINT IN THE DECK AND THE APPROACH SLAB HAS BEEN SAWS AND THE BARRIER RAIL IS CAST IF SLIP FORMING IS USED.

FOR DETAILS ON THE CONCRETE IN THE SHADED AREA OF THE WING, SEE SHEET 4 OF 4.

* FOR LOCATION OF THE ELEVATION BETWEEN BRIDGE SEAT BUILDUP, SEE SECTION A-A SHEET 4 OF 4.

FOR MECHANICAL BUTT SPLICING FOR REINFORCING STEEL, SEE SPECIAL PROVISIONS.

TOP OF PILE ELEVATION	
PILE	ELEVATION
P1	638.978
P2	638.822
P3	638.566
P4	638.510
P5	638.354
P6	638.198
P7	638.042
P8	637.886
P9	637.730
P10	637.574
P11	637.418
P12	637.262
P13	637.106
P14	636.949
P15	636.793
P16	636.637
P17	636.482

JOHN R. DUGGINS
6-28-93

PROJECT NO. 8.7500311
ORANGE COUNTY
STATION: 49 + 20.51 -L-SBL

REVISIONS				SHEET NO.
NO.	BY:	DATE:	NO.	
1			3	S-100
2			4	108

DRAWN BY: N.M. RUFFIN DATE: 4/17/93
CHECKED BY: J.R. DUGGINS DATE: 4/22/93

24-JUN-1993 14:40
Z:\G2060\J30403E2.DGN
NRUFFIN

STANDARD NOTES

DESIGN DATA:

SPECIFICATIONS - - - - -	A. A. S. H. T. O. (CURRENT)
LIVE LOAD - - - - -	SEE PLANS
IMPACT ALLOWANCE - - - - -	SEE A. A. S. H. T. O.
STRESS IN EXTREME FIBER OF	
STRUCTURAL STEEL - A. S. T. M. A36 GRADE - -	20,000 LBS. PER SQ. IN.
- A. S. T. M. A588 - - - - -	27,000 LBS. PER SQ. IN.
- A. S. T. M. A572, GRADE 50 - -	27,000 LBS. PER SQ. IN.
REINFORCING STEEL IN TENSION	
GRADE 60 - - - - -	24,000 LBS. PER SQ. IN.
CONCRETE IN COMPRESSION - - - - -	1,200 LBS. PER SQ. IN.
CONCRETE IN SHEAR - - - - -	SEE A. A. S. H. T. O.
STRUCTURAL TIMBER - TREATED OR	
UNTREATED - EXTREME FIBER STRESS - - - - -	1,800 LBS. PER SQ. IN.
COMPRESSION PERPENDICULAR TO GRAIN	
OF TIMBER - - - - -	375 LBS. PER SQ. IN.
EQUIVALENT FLUID PRESSURE OF EARTH - - - - -	30 LBS. PER CU. FT.
	(MINIMUM)

MATERIAL AND WORKMANSHIP:

EXCEPT AS MAY OTHERWISE BE SPECIFIED ON PLANS OR IN THE SPECIAL PROVISIONS, ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE 1990 STANDARD SPECIFICATIONS "FOR ROADS AND STRUCTURES" OF THE N. C. DEPARTMENT OF TRANSPORTATION.

CONCRETE:

UNLESS OTHERWISE REQUIRED ON PLANS, CLASS A CONCRETE SHALL BE USED FOR ALL PORTIONS OF ALL STRUCTURES WITH THE EXCEPTION THAT: CLASS AA CONCRETE SHALL BE USED IN BRIDGE SUPERSTRUCTURES, ABUTMENT BACKWALLS, AND APPROACH SLABS; CLASS B CONCRETE SHALL BE USED FOR SLOPE PROTECTION AND RIP RAP; AND CLASS S SHALL BE USED FOR UNDERWATER FOOTING SEALS.

CONCRETE CHAMFERS:

UNLESS OTHERWISE NOTED ON THE PLANS, ALL EXPOSED CORNERS ON STRUCTURES SHALL BE CHAMFERED 3/4" WITH THE FOLLOWING EXCEPTIONS: TOP CORNERS OF CURBS MAY BE ROUNDED TO 1-1/2" RADIUS WHICH IS BUILT INTO CURB FORMS; CORNERS OF TRANSVERSE FLOOR EXPANSION JOINTS SHALL BE ROUNDED WITH A 1/4" FINISHING TOOL UNLESS OTHERWISE REQUIRED ON PLANS; AND CORNERS OF EXPANSION JOINTS IN THE ROADWAY FACES AND TOPS OF CURBS AND SIDEWALKS SHALL BE ROUNDED TO A 1/4" RADIUS WITH A FINISHING STONE OR TOOL UNLESS OTHERWISE REQUIRED ON PLANS.

DOWELS:

DOWELS WHEN INDICATED ON PLANS AS FOR CULVERT EXTENSIONS, SHALL BE EMBEDDED AT LEAST 12" INTO THE OLD CONCRETE AND GROUTED INTO PLACE WITH 1:2 CEMENT MORTAR.

ALLOWANCE FOR DEAD LOAD DEFLECTION, SETTLEMENT, ETC. IN CASTING SUPERSTRUCTURES:

BRIDGES SHALL BE BUILT ON THE GRADE OR VERTICAL CURVE SHOWN ON PLANS. SLABS, CURBS AND PARAPETS SHALL CONFORM TO THE GRADE OR CURVE. ALL DIMENSIONS WHICH ARE GIVEN IN SECTION AND ARE AFFECTED BY DEAD LOAD DEFLECTIONS ARE DIMENSIONS AT CENTER LINE OF BEARING UNLESS OTHERWISE NOTED ON PLANS. IN SETTING FORMS FOR STEEL BEAM BRIDGES AND PRESTRESSED CONCRETE GIRDER BRIDGES, ADJUSTMENTS SHALL BE MADE DUE TO THE DEAD LOAD DEFLECTIONS FOR THE ELEVATIONS SHOWN. WHERE BLOCKS ARE SHOWN OVER BEAMS FOR BUILDING UP TO THE SLAB, THE VERTICAL DIMENSIONS OF THE BLOCKS SHALL BE ADJUSTED BETWEEN BEARINGS TO COMPENSATE FOR DEAD LOAD DEFLECTIONS, VERTICAL CURVE ORIGINATE, AND ACTUAL BEAM CAMBER. WHERE BOTTOM OF SLAB IS IN LINE WITH BOTTOM OF TOP FLANGES, DEPTH OF SLAB BETWEEN BEARINGS SHALL BE ADJUSTED TO COMPENSATE FOR DEAD LOAD DEFLECTION, VERTICAL CURVE ORIGINATE, AND ACTUAL BEAM CAMBER.

IN SETTING FALSEWORK AND FORMS FOR REINFORCED CONCRETE SPANS, AN ALLOWANCE SHALL BE MADE FOR DEAD LOAD DEFLECTIONS, SETTLEMENT OF FALSEWORK, AND PERMANENT CAMBER WHICH SHALL BE PROVIDED FOR IN ADDITION TO THE ELEVATIONS SHOWN. AFTER REMOVAL OF THE FALSEWORK, THE FINISHED STRUCTURES SHALL CONFORM TO THE PROFILE AND ELEVATIONS SHOWN ON THE PLANS AND CONSTRUCTION ELEVATIONS FURNISHED BY THE ENGINEER. FIVE SETS OF DETAILED DRAWINGS FOR FALSEWORK OR FORMS FOR BRIDGE SUPERSTRUCTURE AND ANY STRUCTURE OR PARTS OF A STRUCTURE AS NOTED ON THE PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE CONSTRUCTION OF THE FALSEWORK OR FORMS IS STARTED.

REINFORCING STEEL:

ALL REINFORCING STEEL SHALL BE DEFORMED WITH THE EXCEPTION OF #2 BARS WHICH MAY BE FABRICATED FROM COLD DRAWN STEEL WIRE. DIMENSIONS RELATIVE TO PLACEMENT OF REINFORCING ARE TO CENTERS OF BARS UNLESS OTHERWISE INDICATED IN THE PLANS. DIMENSIONS ON BAR DETAILS ARE TO CENTERS OF BARS OR ARE OUT TO OUT AS INDICATED ON PLANS. WIRE BAR SUPPORTS SHALL BE PROVIDED FOR REINFORCING STEEL WHERE INDICATED ON THE PLANS. WHEN BAR SUPPORT PIECES ARE PLACED IN CONTINUOUS LINES, THEY SHALL BE SO PLACED THAT THE ENDS OF THE SUPPORTING WIRES SHALL BE LAPPED TO LOCK LEGS ON ADJOINING PIECES.

STRUCTURAL STEEL:

AT THE CONTRACTOR'S OPTION, HE MAY SUBSTITUTE 7/8" Ø SHEAR STUDS FOR THE #2 Ø STUDS SPECIFIED ON THE PLANS. THIS SUBSTITUTION SHALL BE MADE AT THE RATE OF 3 - 7/8" Ø STUDS FOR 4 - 3/4" Ø STUDS, AND STUD SPACING CHANGES SHALL BE MADE AS NECESSARY TO PROVIDE THE SAME EQUIVALENT NUMBER OF 7/8" Ø STUDS ALONG THE BEAM AS SHOWN FOR 3/4" Ø STUDS BASED ON THE RATIO OF 3 - 7/8" Ø STUDS FOR 4 - 3/4" Ø STUDS. STUDS OF THE LENGTH SPECIFIED ON THE PLANS MUST BE PROVIDED. THE MAXIMUM SPACING SHALL BE 2'-0". EXCEPT AT THE INTERIOR SUPPORTS OF CONTINUOUS BEAMS WHERE THE COVER PLATE IS IN CONTACT WITH BEARING PLATE, THE CONTRACTOR MAY, AT HIS OPTION, SUBSTITUTE FOR THE COVER PLATES DESIGNATED ON THE PLANS COVER PLATES OF THE EQUIVALENT AREA PROVIDED THESE PLATES ARE AT LEAST 5/16" IN THICKNESS AND DO NOT EXCEED A WIDTH EQUAL TO THE FLANGE WIDTH LESS 2" OR A THICKNESS EQUAL TO 2 TIMES THE FLANGE THICKNESS. THE SIZE OF FILLET WELOS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ANSI/AASHTO/AWS "BRIDGE WELDING CODE". ELECTROSLAG WELDING WILL NOT BE PERMITTED.

PLACEMENT OF BEAM OR GIRDER MEMBERS ON TRUCKS FOR HAULING SHALL BE DONE IN COMPLIANCE WITH LIMITS SHOWN ON SKETCHES PROVIDED TO THE MATERIALS AND TEST UNIT APPROVED BY THE STRUCTURE DESIGN UNIT DATED MAY 8, 1991. THESE SKETCHES PRIMARILY LIMIT THE UNSUPPORTED CANTILEVER LENGTH OF MEMBERS. WHEN THE CONTRACTOR WISHES TO PLACE MEMBERS ON TRUCKS NOT IN ACCORDANCE WITH THESE LIMITS, TO SHIP BY RAIL, TO ATTACH SHIPPING RESTRAINTS TO THE MEMBERS OR TO INVERT MEMBERS, HE SHALL SUBMIT A SKETCH FOR APPROVAL PRIOR TO SHIPPING. SEE ALSO ARTICLE 1072-11.

WITH THE SOLE EXCEPTION OF EDGES AT SURFACES WHICH BEAR ON OTHER SURFACES, ALL SHARP EDGES AND ENDS OF SHAPES AND PLATES SHALL BE SLIGHTLY ROUNDED BY SUITABLE MEANS TO A RADIUS OF APPROXIMATELY 1/16 INCH OR EQUIVALENT FLAT SURFACE AT A SUITABLE ANGLE PRIOR TO PAINTING, GALVANIZING, OR METALLIZING.

HANDRAILS AND POSTS:

METAL STANDARDS AND FACES OF THE CONCRETE END POSTS FOR THE METAL RAIL SHALL BE SET NORMAL TO THE GRADE OF THE CURB, UNLESS OTHERWISE SHOWN ON PLANS. THE METAL RAIL AND TOPS OF CONCRETE POSTS USED WITH THE ALUMINUM RAIL SHALL BE BUILT PARALLEL TO THE GRADE OF THE CURB. METAL HANDRAILS SHALL BE IN ACCORDANCE WITH THE PLANS. RAILS SHALL BE AS MANUFACTURED FOR BRIDGE RAILING. CASTINGS SHALL BE OF A UNIFORM APPEARANCE. FINISHES AND OTHER DEFORMATIONS RESULTING FROM CASTING OR OTHERWISE SHALL BE REMOVED IN A MANNER SO THAT A UNIFORM COLORING OF THE COMPLETED CASTING SHALL BE OBTAINED. CASTINGS WITH DISCOLORATIONS OR OF NON-UNIFORM COLORING WILL NOT BE ACCEPTED. CERTIFIED MILL REPORTS ARE REQUIRED FOR METAL RAILS AND POSTS.

SPECIAL NOTES:

GENERALLY, IN CASE OF DISCREPANCY, THIS STANDARD SHEET OF NOTES SHALL GOVERN OVER THE SPECIFICATIONS, BUT THE REMAINDER OF THE PLANS SHALL GOVERN OVER NOTES HEREON, AND SPECIAL PROVISIONS SHALL GOVERN OVER ALL. SEE SPECIFICATIONS ARTICLE 105-4.