

INDEX TO SHEETS CONTINUED

FEDERAL REGION NO.	STATE	PROJECT NUMBER	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	ALA.	I-IR-10-1(84)	1987	1A	159H

SHEET NO.	LISTING
" "	9 OMIT
" "	10 OMIT
" "	11 OMIT
" "	12 PAVING LAYOUT STA. 535+50 TO STA. 550+00
" "	13 PAVING LAYOUT STA 550+00 TO STA 566+00
" "	14 " " " 566+00 TO STA. 582+00
" "	15 " " " 582+00 TO STA. 595+00
" "	16 " " " 595+00 TO STA. 611+00
" "	17 " " " 611+00 TO STA. 625+00
" "	18 " " " 625+00 TO STA. 640+00
" "	19 " " " 640+00 TO STA. 660+00
" "	20 OMIT
" "	21 OMIT
" "	22 OMIT
" "	23 OMIT
" "	24 OMIT
" "	25-25I UTILITY SHEETS
" "	26-26G DRAINAGE SHEETS
" "	27-27R BRIDGE SHEETS OVER BROAD STREET
" "	28-28U BRIDGE SHEETS OVER TENNESSEE STREET AND ILLINOIS CENTRAL GULF RAILROAD
" "	29-29U BRIDGE SHEETS OVER WARREN-LAWRENCE CONNECTOR
" "	30-30W BRIDGE SHEETS OVER VIRGINIA STREET
" "	31-31Y BRIDGE SHEETS OVER TEXAS STREET
" "	32-32A TEST BORING RECORD
" "	33 INTERIOR JOINT REPAIR
" "	34-34U LIGHTING DETAILS
P	35-35R TRAFFIC STRIPING LAYOUT AND SIGN LAYOUT
" "	36 OMIT
" "	37 DETAIL FOR MOUNTING WARNING SIGNS ON MEDIAN BARRIER
" "	38 SPECIAL PROJECT DETAIL BARRIER WITH LUMINAIRE MOUNTING DETAILS
" "	39 OMIT
" "	40 SPECIAL DWG. NO. BES-450-0 DETAILS OF BRIDGE END SLAB
" "	41 " " " GR-630-FD FLARE DETAIL AND WARRANTY CRITERIA FOR GUARDRAIL
" "	42 " " " GR-630-S GALVANIZED STEEL BEAM GUARDRAIL
" "	43-43B " " " RPC-530 (3-SHEETS) DETAILS OF BEDDING OF PIPE
" "	44 " " " GA-630-8 DETAILS OF TYPE 8 GUARDRAIL END ANCHORS
" "	45 " " " GA-630-10 DETAILS OF TYPE 10 GUARDRAIL END ANCHORS
" "	46 " " " GA-630-13 DETAILS OF GUARDRAIL END ANCHOR TYPE 13
" "	47-47A " " " GR-9A & GUARDRAIL END ANCHOR TY 3 (FOR INFORMATION PURPOSE ONLY)
" "	48 " " " PU-606 DETAILS FOR PIPE UNDERDRAIN INSTALLATION
" "	49 " " " 197-4LM SUPERELEVATION OF CURVES FOR FOUR (4) LANE HIGHWAYS
" "	50 " " " PM-705-1 PAVEMENT MARKERS
" "	51 " " " IHS-710-14 HIGHWAY SIGN MOUNTING FOR STANDARD SIGNS
" "	52 " " " B-107-1 BARRICADES TYPE I, TYPE II AND TYPE III
" "	53 " " " LCS-107 REQUIREMENTS FOR LIGHTING CONSTRUCTION SIGNS
" "	54 " " " T.C.D. 100 DETAILS FOR TRAFFIC CHANNELIZING DEVICES
" "	55 " " " T.C.M. 703 PAVEMENT LEGENDS AND MARKINGS
" "	56 " " " P.M.-705-2 APPLICATION OF PAVEMENT MARKERS
" "	57-57A " " " P.M.-705-3 REFLECTORIZED MARKINGS
" "	58 OMIT
" "	59 OMIT
" "	60 SPECIAL DWG. NO. ECN-659 EROSION CONTROL NETTING
" "	61 " " " IPS-701-8 TRAFFIC STRIPING AUXILIARY LANES AND RAMPS
" "	62 " " " IPS-701-5 TRAFFIC STRIPES FOR 6 LANE RURAL HIGHWAYS WITH PAVED SHOULDERS
" "	63 OMIT
" "	64 OMIT
" "	65 SPECIAL DWG. NO. 623-XY DETAILS OF CONCRETE CURBS & CONCRETE CURB & GUTTER MOUNTABLE & BARRIER TYPES
" "	66 " " " B-614 SLOPE PAVING ON SLOPES UNDER SEPARATION BRIDGES
" "	67 " " " CPJ-450 PLAIN AND REINFORCED CEMENT CONC. PAVT. AND BRIDGE END SLAB JOINTS
" "	68 " " " NC-623 GORE AT TERMINALS OF ENTRANCE & EXIT RAMPS. RURAL OR URBAN SECTIONS
" "	69 " " " IPS-10(SC) DETAILS SHOWING NOSE GORE REQUIRED ADJACENT TO RECOVERY LANE & REQUIRED ADJACENT TO RECOVERY LANE
" "	70 " " " GTE-629 CONCRETE MEDIAN BARRIER TYPE 6-A FOR USE WITH G-R-E-A-T SYSTEM (PORTABLE)
" "	71 " " " GR-630-PP DETAIL OF GUARDRAIL FOR BRIDGE PIER PROTECTION ON EXISTING PROJ WITH SLOPES GREATER THAN 10:1
" "	72 " " " J.B.-621-P PRE-CAST JUNCTION BOX-TYPE 1P, 2P & 5
" "	73 " " " PNJB-629 PRE-CAST CONCRETE BARRIER TYPE-6
" "	74-74A " " " FE-619 DETAIL OF CONCRETE FLARED END SECTION W/GRATE FOR CONCRETE AND METAL PIPE
" "	75 " " " S.W.-618 DETAILS OF SIDEWALKS
" "	76 SPECIAL PROJECT DETAIL - STEEL PLATE ON CONC. MEDIAN BARRIER
" "	77-77ASPECIAL PROJECT DWG (2-SHTS) WIND VELOCITY CHART
" "	78 SPECIAL PROJECT DETAIL INLET TYPE E3 AND E4 FOR USE WITH CONC. MEDIAN BARRIER
" "	79 " " " CONC. MEDIAN BARRIER TREATMENT UNDERPASS PIERS
" "	80 " " " DETAILS SHOWING LOCATION OF BASE PLATES & REQD JOINT FOR OVERHEAD SIGN SUPPORT TY 5 MEDIAN BARRIER
" "	81 SPECIAL DWG. NO. 710-2 BEAM POST DETAILS BASE CONN. TY-1 FUSE PLATE
" "	82 SPECIAL DWG. NO. CC-530 DETAILS OF CONC. COLLAR
" "	83 " " " SS-654 SOD TERRACE OUTLETS & FLUMES
" "	84 " " " EC-665-F DETAILS OF SILT FENCE
" "	85 SPEC. DETAIL DETAILS OF TY. 2 MOD, TY. 4A MOD. CONC. BARRIER & TRANSITION ALSO DETAIL OF TY. 10 MOD. CONC. BARRIER
" "	86 SPEC. DWG. NO. 710-3 BEAM POST DETAILS BASE CONN. TY-2 FUSE PLATE
" "	87-87H STD. DWG. NO. BRIDGE STANDARDS --- BGN-1, PSCP-1, TPI 2SHEETS, I-100, I-131 3SHEETS, LPS-1
" "	88-88Z10 BRIDGE PLAN SHEETS FOR INFORMATION PURPOSES ONLY
" "	89-89H STANDARD HIGHWAY SIGNS -1-9-10-11-21-22-23-24-25
" "	90 SPEC. DWG. NO. I.F.-634 -- INDUSTRIAL FENCE
" "	91 " " " C.S.P.-532 DETAILS OF CORRUGATED SLOTTED DRAIN PIPE 12"-30" DIAMETER
" "	92 " " " JB-620-B DETAILS OF JUNCTION BOX FOR PIPES 15"-60" TYPE I (0'-10' FILL HEIGHT)
" "	93-93B " " " I.H.S.-710-4 (3-SHTS) MULTI-DIRECTIONAL BREAKAWAY BASE
" "	94 " " " I.H.S.-710-11 ALUMINUM LAMINATED SIGNS
" "	95 " " " IA-720-G DETAILS OF G-R-E-A-T SYSTEM-IMPACT ATTENUATOR
" "	96 " " " IHS-710-24 MOUNTING FLAT SHT. ALUM. SIGNS ON EXTRUDED ALUMINUM STIFFENERS
" "	97 " " " MP-710 DETAILS FOR MILEPOST ON 2 LANE OR 4 LANE HIGHWAY
" "	98-125I CROSS SECTIONS EBR STA. 541+50 ~ 660+19
" "	125J-125K OMIT
" "	126-148 CROSS SECTIONS WBR STA 540+00 ~ 597+25.70
" "	149-159F CROSS SECTIONS WBR STA. 609+18.44 ~ 653+00
" "	159G CROSS SECTIONS MEDIAN STA. 655+50 ~ 660+00
" "	159-H Spec. Dwg No. IHS-710-19 DETAILS OF MOUNTING SIGN ON ROUND BREAKAWAY POST

P Add STD DWG 9/3/87.

SUMMARY OF QUANTITIES

BRIDGE		ROADWAY		TOTAL
I-FUNDS	IR-FUNDS	I-FUNDS	IR-FUNDS	
			2313	2313
			3223	3223
		50	50	100
		476	4272	4748
		1500	500	2000
		5050	4605	9655
213100	515250			728350
2	8			10
	2			2
2	6			8
2	8			10
	2			2
2	6			8
3402	10235			13637
	2005			2005
5213	13325			18538
34830	113120			147950
1	1			2
893	2249			3142
1				1
1				1
	1			1
	1			1
	1			1
	1			1
	1			1
	1			1
	1			1
	4689			4689
1379	1379			2758
	49			49
		16	402	418
			77	77
			3	3
			42	42
		84	180	264
		4290	5616	9906
		0.22	0.28	0.50
		5628	6416	12044

ITEM NO.	UNIT	DESCRIPTION
416A-003	TON	BITUMINOUS CONCRETE WEARING SURFACE (MIX B)
416C-000	TON	BITUMINOUS CONCRETE PLANT MIX, LEVELING
416D-000	TON	BITUMINOUS CONCRETE PLANT MIX, WIDENING
420A-001	TON	OPEN GRADED PLANT MIXED SEAL (MIX B)
430B-001	TON C I P	AGGREGATE SURFACING (PROCESSED REEF SHELLS)
450B-000	SO YD	REINFORCED CEMENT CONCRETE BRIDGE END SLAB
502A-000	POUND	STEEL REINFORCEMENT
505A-000	EACH	STEEL TEST PILES (HP 10X42)
505A-005	EACH	PRETENSIONED-PRESTRESSED CONCRETE TEST PILE (12 INCHES SQUARE)
505A-006	EACH	PRETENSIONED-PRESTRESSED CONCRETE TEST PILE (14 INCHES SQUARE)
505B-000	EACH	LOADING TESTS (HP 10X42)
505B-005	EACH	LOADING TESTS (12 INCHES SQUARE)
505B-006	EACH	LOADING TESTS (14 INCHES SQUARE)
505C-000	LIN FT	STEEL PILING (HP 10X42)
505C-005	LIN FT	PRETENSIONED-PRESTRESSED CONCRETE PILING (12 INCHES SQUARE)
505C-006	LIN FT	PRETENSIONED-PRESTRESSED CONCRETE PILING (14 INCHES SQUARE)
508A-000	POUND	STRUCTURAL STEEL
508C-030	SET	BEARING PLATES BRONZE (ONE SET CONSISTS OF 30 PLATES)
510A-000	CU YD	BRIDGE SUBSTRUCTURE CONCRETE, CLASS A
510C-000	LUMP SUM	REINFORCED BRIDGE CONCRETE SUPERSTRUCTURE, STA. 555+41.45, APPROX. 867 CU. YDS. - (INSIDE WIDENING)
510C-001	LUMP SUM	REINFORCED BRIDGE CONCRETE SUPERSTRUCTURE, STA. 555+41.45, APPROX. 769 CU. YDS. - (OUTSIDE WIDENING)
510C-002	LUMP SUM	REINFORCED BRIDGE CONCRETE SUPERSTRUCTURE, STA. 591+16.85, APPROX. 366 CU. YDS. - (INSIDE WIDENING)
510C-003	LUMP SUM	REINFORCED BRIDGE CONCRETE SUPERSTRUCTURE, STA. 591+16.85, APPROX. 319 CU. YDS. - (OUTSIDE WIDENING)
510C-004	LUMP SUM	REINFORCED BRIDGE CONCRETE SUPERSTRUCTURE, STA. 597+19.36, APPROX. 262 CU. YDS. - (INSIDE WIDENING)
510C-005	LUMP SUM	REINFORCED BRIDGE CONCRETE SUPERSTRUCTURE, STA. 597+19.36, APPROX. 147 CU. YDS. - (OUTSIDE WIDENING)
510C-006	LUMP SUM	REINFORCED BRIDGE CONCRETE SUPERSTRUCTURE, STA. 607+73.22, APPROX. 289 CU. YDS. - (INSIDE WIDENING)
510C-007	LUMP SUM	REINFORCED BRIDGE CONCRETE SUPERSTRUCTURE, STA. 607+73.22, APPROX. 182 CU. YDS. - (OUTSIDE WIDENING)
510C-008	LUMP SUM	REINFORCED BRIDGE CONCRETE SUPERSTRUCTURE, STA. 621+66.47, APPROX. 249 CU. YDS. - (INSIDE WIDENING)
510C-009	LUMP SUM	REINFORCED BRIDGE CONCRETE SUPERSTRUCTURE, STA. 621+66.47, APPROX. 255 CU. YDS. - (OUTSIDE WIDENING)
513B-004	LIN FT	PRETENSIONED-PRESTRESSED CONCRETE GIRDERS, TYPE II (SPECIALTY ITEM)
513B-005	LIN FT	PRETENSIONED-PRESTRESSED CONCRETE GIRDERS, TYPE III (SPECIALTY ITEM)
523B-000	EACH	LIFTING BEARING
530A-001	LIN FT	18" ROADWAY PIPE (CLASS 3 R.C.)
530A-101	LIN FT	18" ROADWAY PIPE (CLASS 3 R.C.) (EXTENSION)
530A-102	LIN FT	24" ROADWAY PIPE (CLASS 3 R.C.) (EXTENSION)
530A-105	LIN FT	42" ROADWAY PIPE (CLASS 3 R.C.) (EXTENSION)
530A-200	LIN FT	15" ROADWAY PIPE (14 GAUGE C.C.S.P.I.)
532A-001	LIN FT	15" B.C.C.S. SLOTTED DRAIN PIPE
600A-000	LUMP SUM	MOBILIZATION
606A-005	LIN FT	6" UNDERDRAIN PIPE, TYPE 9

SUMMARY OF QUANTITIES
PROJECT NO. I-IR-10-1(84)
MOBILE COUNTY

FEDERAL REGION NO.	STATE	PROJECT NUMBER	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	ALA.	I-IR-10-1(84)	1987	3-K	159H

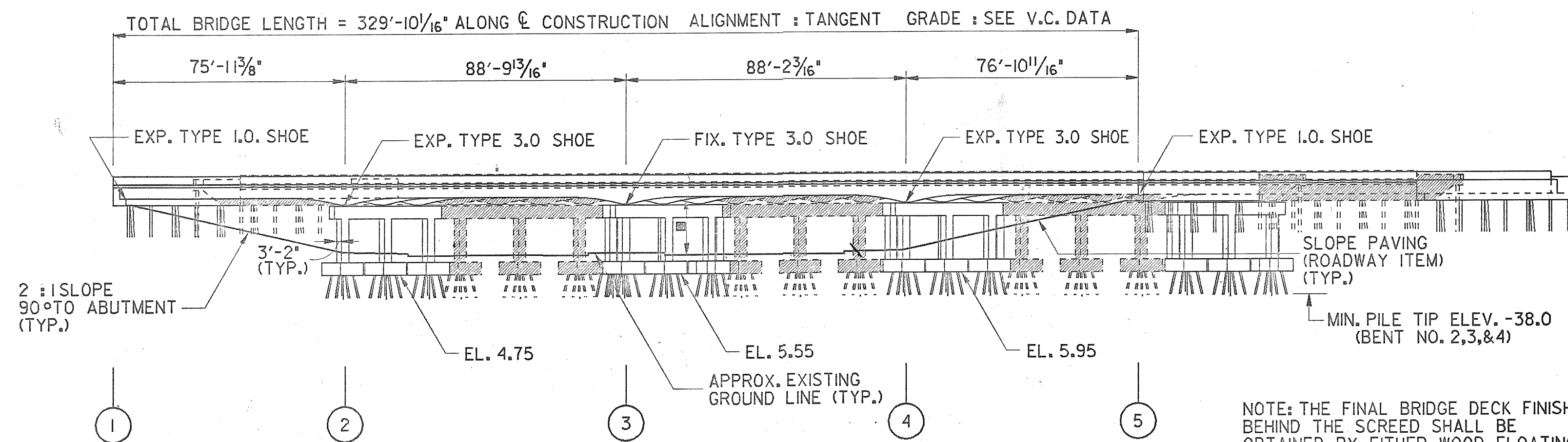
REQUIRED WIDENING AND PARTIAL REMOVAL OLD R.C.D.G. BRIDGES

STATION	SIDE	E LENGTH LIN. FT.	206A REMOVAL OF OLD BRIDGE LUMP SUM	215A UNCLASSIFIED BRIDGE EXCAVATION CU YD.	502A STEEL REINFORCEMENT LB.	505A STEEL TEST PILE (HP10X42) EACH	505A PRESTRESSED CONC TEST PILES (EACH)			505B LOADING TEST (HP10X42) EACH	505B LOADING TEST (EACH)			505C STEEL PILING (HP 10X42) LIN FT	505C PRESTRESSED CONC. PILING (LIN FT)			508A STRUCTURAL STEEL LB	508C BEARING PLATES BRONZE SET		510A BRIDGE SUBSTRUCTURE CONC CL A. CU YDS	510-C REINFORCED BRIDGE CONC. SUPERSTRUCTURE LUMP SUM	513B PRESTRESSED CONCRETE GIRDERS TYPE II	513B PRESTRESSED CONCRETE GIRDERS TYPE III	STD DWG No's	
							12"sq	14"sq	24"sq		12"sq	14"sq	24"sq		12"sq	14"sq	24"sq		30							
555+41.45	206A-50		1	755	141,400	1		1	1				2,250		3988		22,130		30		595	1 @ 867cy.				
591+16.85	206A-52		1	340	71,700	1		1	1				1152		1225		12,700				298	1 @ 366cy.		1379		
			1	1095	213100	2		2	2				3402		5213		34830		1		893	1		1379		
555+41.45	206A-51		1	755	136,900	1		1	1				2340		3988		26,480		1		581	1 @ 769				
591+16.85	206A-53		1	450	81,200	1		1	1				1440		1627		16,110				336	1 @ 319cy		1379		
597+19.36	INSIDE		1	300	52,550	1	1		1	1			946	1203			12,300				248	1 @ 262cy	938			
597+19.36	OUTSIDE		1	190	26,000	1	1		1	1			637	802			10,690				134	1 @ 147cy	313			
607+73.22	INSIDE		1	290	60,500	1			1	1			1344	1907			12,600				258	1 @ 289	1032			
607+73.22	OUTSIDE		1	193	31,500	1			1	1			672	1271			10,530				134	1 @ 182	344			
621+66.47	INSIDE		1	259	58,500	1			1	1			1344	1936			9,200				258	1 @ 249	1030			
621+66.47	OUTSIDE		1	235	68,100	1			1	1			1512	2596			15,210				300	1 @ 255	1032			
			1	2672	515250	8	2	6		8	2	6		10235	2005	13325		113120		1		2249	1	4689	1379	

FHWA REG. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	ALA.	I-10-10-1	1987	27	159H

(84)

ESTIMATED QUANTITIES
SEE BRIDGE SHT. 1A OF 18



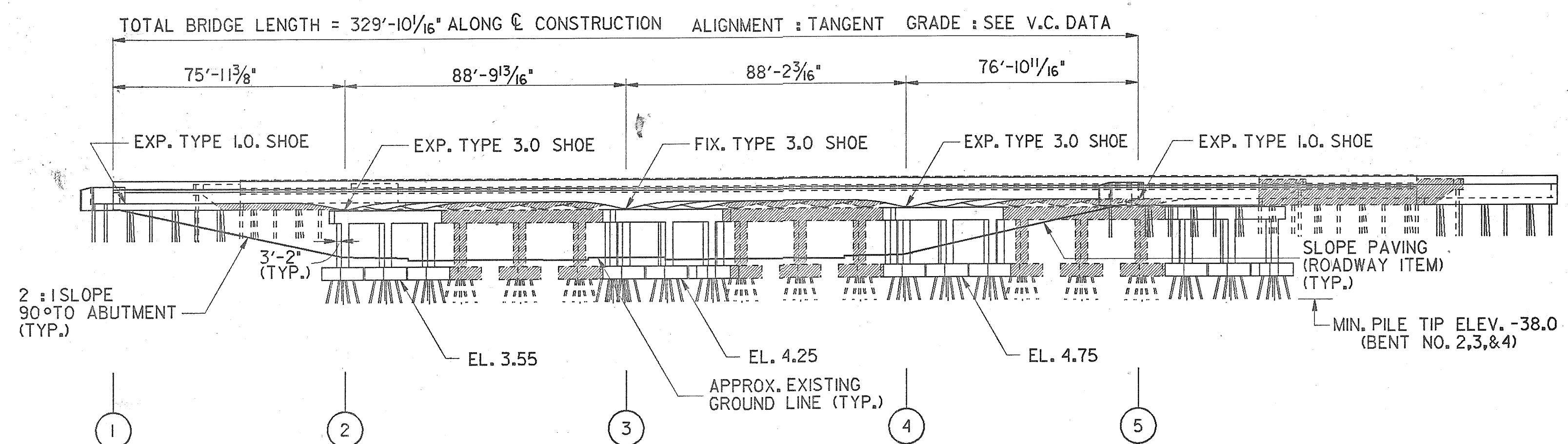
ELEVATION (W.B.L.)
(LOOKING NORTH)
SCALE: 1" = 30'

MINIMUM VERTICAL CLEARANCE ON BROAD STREET:
16'-3" EXISTING
15'-2" PROPOSED
SEE PLAN VIEW ON BR. SHT. 2 FOR LOCATION

NOTE: THE FINAL BRIDGE DECK FINISH BEHIND THE SCREED SHALL BE OBTAINED BY EITHER WOOD FLOATING OR BURLAP DRAG TO MATCH THE EXISTING DECK FINISH.

NOTE: EXIST. BRIDGE IS INDICATED BY DASHED LINES & CROSS-HATCHED AREAS. (TYP. ALL BRIDGE SHTS.)

NOTE: THE EXIST. SHOE ASSEMBLY FOR ALL ABUTMENTS & ALL BENTS SHALL BE SANDBLASTED & PAINTED IN ACCORDANCE WITH SUBARTICLE 521.03(c) OF THE STD. SPECIFICATIONS. COST SHALL BE INCLUDED IN OTHER PAY ITEMS.



ELEVATION (E.B.L.)
(LOOKING NORTH)
SCALE: 1" = 30'

SPECIAL NOTE
REGARDING EPOXY ADHESIVES

PRIOR TO PLACING NEW CONC. AGAINST ANY BROKEN OR SCARIFIED SURFACE, A TYPE II EPOXY ADHESIVE SHALL BE APPLIED TO THE ROUGHENED CONC.

ALL DOWEL BARS PLACED IN EXIST. CONC. SHALL BE SET W/ A TYPE I, GRADE I EPOXY ADHESIVE.

SEE SECTION 870, EPOXY ADHESIVES, OF THE STANDARD SPECIFICATIONS.

** TRAFFIC PROTECTORS WILL ONLY BE REQUIRED UNDER THE NEW CONST. AREAS. (5'-0" MIN. OUTSIDE OF THE LIMITS OF NEW CONST.)

REQUIRED

- 1. WIDENING 75'-11 3/8", 88'-9 3/16", 88'-2 3/16", 76'-10 11/16" R.C.D.G. CONT. SPAN --- BR. SH. NO. 1 THRU 13
- 2. WIDENING CONCRETE BENTS (PILE FTGS.) --- BR. SH. NO. 14 THRU 15
- 3. WIDENING CONCRETE AND STEEL PILE ABUTMENTS --- BR. SH. NO. 16 THRU 18
- EXIST. ORIGINAL BRIDGE PLANS --- BR. SH. NO. E1 THRU E7
- BRIDGE GENERAL NOTES --- STD. DWG. BGN-1 (1 SHT.)
- TEST BORING RECORD --- BR. SHT. NO. 1A OF 3A
- STANDARD DETAILS --- STD. DWG. I-131 (3 SHTS.)
- BEARING ASSEMBLIES --- STD. DWG. I-100
- ** TRAFFIC PROTECTION --- STD. TP-1 (2 SHTS.)
- REINFORCED CONCRETE BRIDGE END SLAB --- SPECIAL DWG. NO. BES-450-0
- LIGHT POLE SUPPORT --- STD. DWG. LPS-1

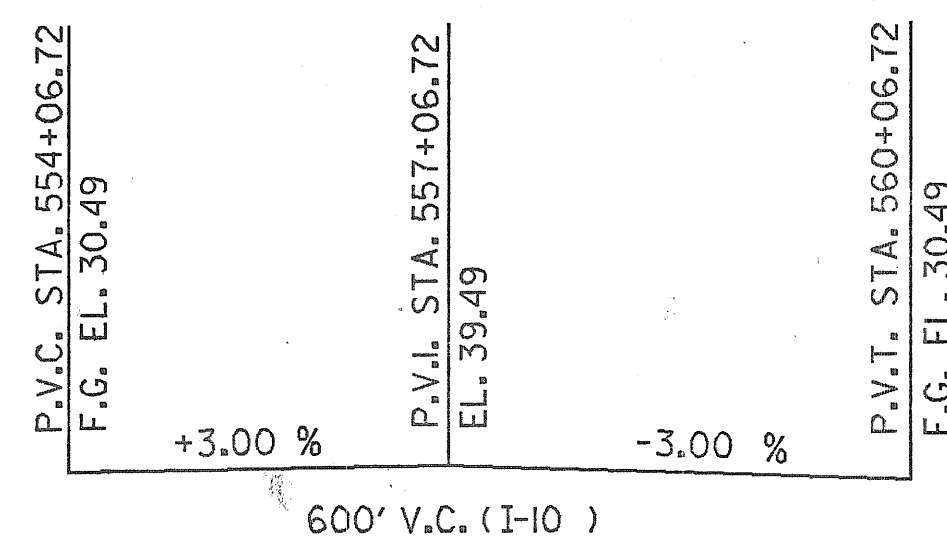
SPECIAL NOTES

- 1. TEMPORARY BARRIER RAILS SHALL BE ERECTED CONCURRENT W/ REMOVAL OF EXIST. DECK, CURB, & HANDRAIL.
- 2. THE TOP OF EXIST. DECK SLAB SHALL BE SAWED A MIN. OF 1/2" MAX. OF ONE (1) INCH DEEP ALONG BREAKLINE PRIOR TO REMOVING THE SUPERSTRUCTURE CONCRETE.
- 3. ALL PLAN ELEVATIONS & DIMENSIONS ARE TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR AND ANY NECESSARY ADJUSTMENTS MADE PRIOR TO ORDERING ANY MATERIAL.

BRIDGE GENERAL NOTES

SEE STANDARD DRAWING NO. BGN-1 (1 SHEET)
ROADWAY: 71'-8 1/16" (WESTBOUND) AND 71'-8 1/16" (EASTBOUND)
GUTTER TO GUTTER WITH BARRIER RAIL.

- 1 - HS20-44 AND ALTERNATE LOADING PPM20-4, DATED 8-10-56.
- 5 - ABUTS.-35 TONS; BENTS-55 TONS.
- 7
- 11
- 13
- 15
- 16
- 18
- 19
- 24
- 25



VERTICAL CURVE DATA (I-10)

I CERTIFY THAT CHECKS OF (1) DESIGN CALCULATIONS AND (2) DETAILS AND DRAFTING OF PLANS HAVE BEEN MADE BY COMPETENT ENGINEERS OF THIS ORGANIZATION BARGE, WAGGONER, SUMNER, & CANNON <i>Jack L. Wood</i> 6-12-87 TITLE SENIOR VICE-PRESIDENT ALABAMA PROFESSIONAL ENGINEER NO. 12008 Alabama Reg. Engineer No. 12008	BRIDGE SHEET NO. 1 OF 18 REVISIONS	STATE OF ALABAMA HIGHWAY DEPARTMENT PROJECT NO. I-IR-10-1(84) WIDENING OF I-10 BRIDGES OVER BROAD STREET AT STATION 557+01.74 MOBILE COUNTY, ALABAMA	
	APPROVED: SECTION SUPERVISOR <i>William D. McAttee</i> CHIEF BRIDGE DESIGN ENGINEER BRIDGE ENGINEER <i>Charlie H. Cook</i>	SCALE: AS SHOWN	DESIGNED: WJP DRAWN: B.W.S.C. CAD/D REINF. CHKD: CHECKED: TWJW

ESTIMATED QUANTITIES

"I" FUNDS (INSIDE WIDENING)

QUANTITY	UNIT	DESCRIPTION
1	Lump Sum	Removal of Old Bridge, Station 555+41.45 (Partial Only W.B.L. & E.B.L.-Inside Widening)
755	Cu. Yds.	Unclassified Bridge Excavation
141,400	Lbs.	Steel Reinforcement
1	Each	Steel Test Pile (HP 10X42)
1	Each	△ Pretensioned-Prestressed Concrete Test Piles (14" Square)
1	Each	△ Loading Tests (HP 10X42)
1	Each	△ Loading Tests (14" Square)
2,250	Lin. Ft.	Steel Piling (HP 10X42)
3,988	Lin. Ft.	△ Pretensioned-Prestressed Concrete Piling (14" Square)
22,130	Lbs.	Structural Steel
1	Set	Bearing Plates, Bronze (30 Plates)
595	Cu. Yds.	Bridge Substructure Concrete, Class A
1	Lump Sum	Reinforced Bridge Concrete Superstructure, Sta. 555+41.45, Approx. 867 Cu. Yd.
3,174	Sq. Yds.	Reinforced Cement Concrete Bridge End Slab

NOTE: Inside Widening Quantities Include Reworking The Ends Of The Existing Bridges To Bring The Abutment Backwalls To Grade.

△ NOTE: Test Piles Shall Not Be Load Tested Until Seven (7) Days, Minimum, After Driving.

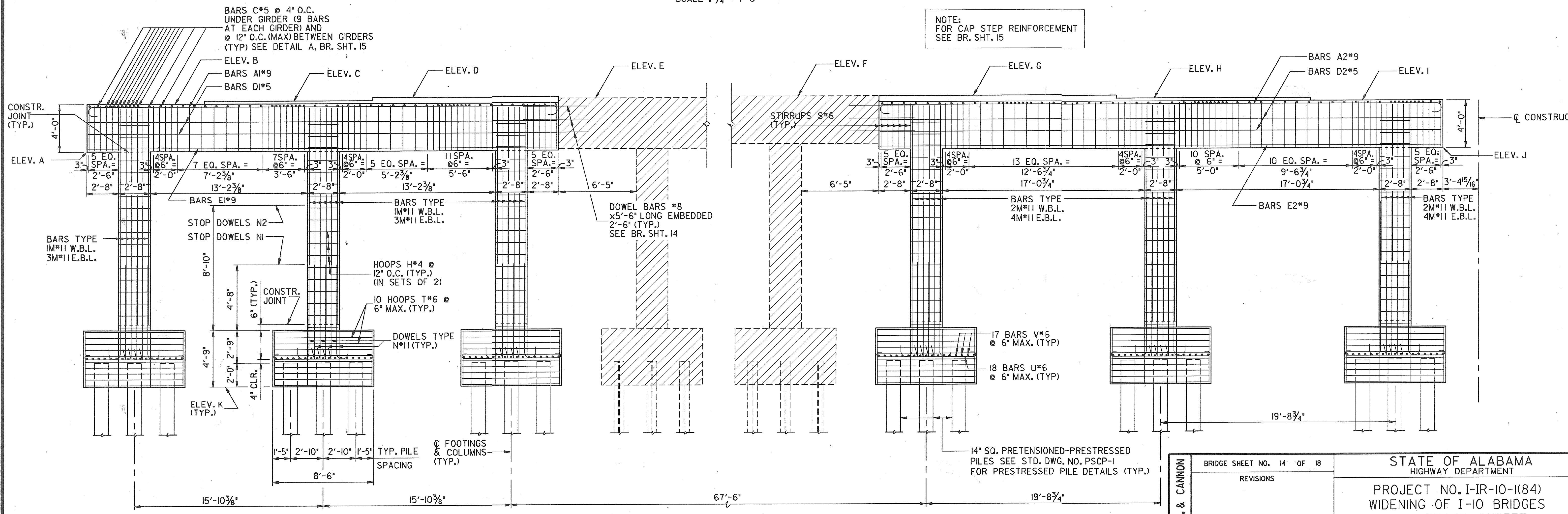
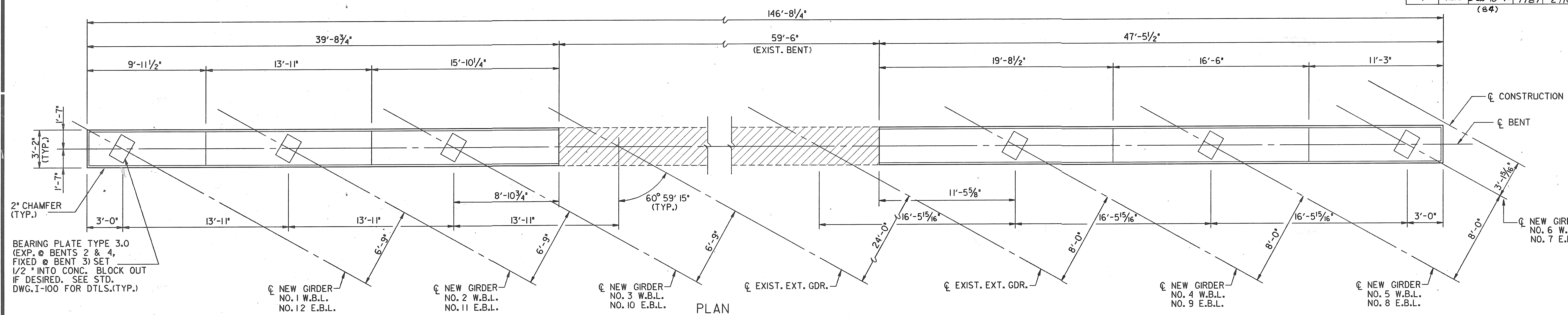
△ NOTE: Use 3" Clear From Face Of Pile To Spiral Reinforcing Steel. Concrete Shall Be A Fly-Ash Mix Using Type II Cement, Or Type I Cement Provided The Tricalcium Aluminate Content In The Type I Cement Is Less Than 8%. The Amount Of Fly-Ash Shall Not Be Less Than 12 Lbs. Per Bag of Cement.

ESTIMATED QUANTITIES

"IR" FUNDS (OUTSIDE WIDENING)

QUANTITY	UNIT	DESCRIPTION
1	Lump Sum	Removal of Old Bridge, Station 555+41.45 (Partial Only W.B.L. & E.B.L.-Outside Widening)
755	Cu. Yds.	Unclassified Bridge Excavation
136,900	Lbs.	Steel Reinforcement
1	Each	Steel Test Pile (HP 10X42)
1	Each	△ Pretensioned-Prestressed Concrete Test Piles (14" Square)
1	Each	△ Loading Tests (HP 10X42)
1	Each	△ Loading Tests (14" Square)
2,340	Lin. Ft.	Steel Piling (HP 10X42)
3,988	Lin. Ft.	△ Pretensioned-Prestressed Concrete Piling (14" Square)
26,480	Lbs.	Structural Steel
1	Set	Bearing Plates, Bronze (30 Plates)
581	Cu. Yds.	Bridge Substructure Concrete, Class A
1	Lump Sum	Reinforced Bridge Concrete Superstructure, Sta. 555+41.45, Approx. 769 Cu. Yd.

BRIDGE SHEET NO. 1A OF 18		STATE OF ALABAMA HIGHWAY DEPARTMENT		
REVISIONS		PROJECT NO. I-IR-10-1(84) WIDENING OF I-10 BRIDGES OVER BROAD STREET AT STATION 557+01.74 MOBILE COUNTY, ALABAMA		
APPROVED:		ESTIMATED QUANTITIES		
SECTION SUPERVISOR <i>William D. McAllen</i> CHIEF BRIDGE DESIGN ENGINEER		SCALE:	DESIGNED: DRAWN: W. FARRIOR REINF CHKD: CHECKED:	QUANTITIES COMP: AMF CHKD: TDH
BRIDGE ENGINEER <i>Charles H. Cook</i>				DATE JUNE 1987



	A	B	C	D	E	F	G	H	I	J	K
BENT NO. 2 W.B.L.	24.1158	28.1158	28.2969	28.4631	28.38	28.28	28.2979	28.0417	27.7647	23.7647	4.75
BENT NO. 2 E.B.L.	21.8172	25.8172	26.2157	26.5994	26.72	27.36	27.6823	27.6838	27.6645	23.6645	3.55
BENT NO. 3 W.B.L.	23.3718	27.3718	27.6610	27.9354	27.92	28.26	28.3907	28.2627	28.1138	24.1138	5.55
BENT NO. 3 E.B.L.	23.3590	27.3590	27.6494	27.9250	27.96	28.23	28.3873	28.2606	28.1132	24.1132	4.25
BENT NO. 4 W.B.L.	21.8528	25.8528	26.2494	26.6311	26.76	27.47	27.7025	27.7016	27.6800	23.6800	5.95
BENT NO. 4 E.B.L.	24.1092	28.1092	28.2923	28.4605	28.31	28.43	28.3067	28.0529	27.7783	23.7783	4.75

NOTE: FOOTING SIZE & REINFORCEMENT TO BE THE SAME FOR EACH COLUMN
NOTE: DOWEL HOLES TO BE FILLED WITH AN APPROVED EPOXY ADHESIVE, SEE SECTION 870 OF THE STD. SPECIFICATIONS.
NOTE: BOTTOM OF NEW CAP BEAM TO BE LEVEL-STEP TOP AS SHOWN

ITEM	UNITS	BENT NO. 2		BENT NO. 3		BENT NO. 4	
		W.B.L.	E.B.L.	W.B.L.	E.B.L.	W.B.L.	E.B.L.
SUBSTRUCTURE CONCRETE	CU. YD.	151.2	150.8	149.1	151.8	146.3	151.4
STEEL REINFORCEMENT-GRADE 60	LBS.	38,059	38,032	36,987	38,180	35,879	38,059

BRIDGE SHEET NO. 14 OF 18

REVISIONS

STATE OF ALABAMA
HIGHWAY DEPARTMENT

PROJECT NO. I-10-10-1(84)
WIDENING OF I-10 BRIDGES
OVER BROAD STREET
AT STATION 557+01.74
MOBILE COUNTY, ALABAMA

BENTS NO. 2, 3, & 4

APPROVED:

SECTION SUPERVISOR
William J. M. Allen
CHIEF BRIDGE DESIGN ENGINEER

DESIGNED: WAP
DRAWN: BWSC CAD/D
REINFC CHKD: WAP
CHECKED: TWJW

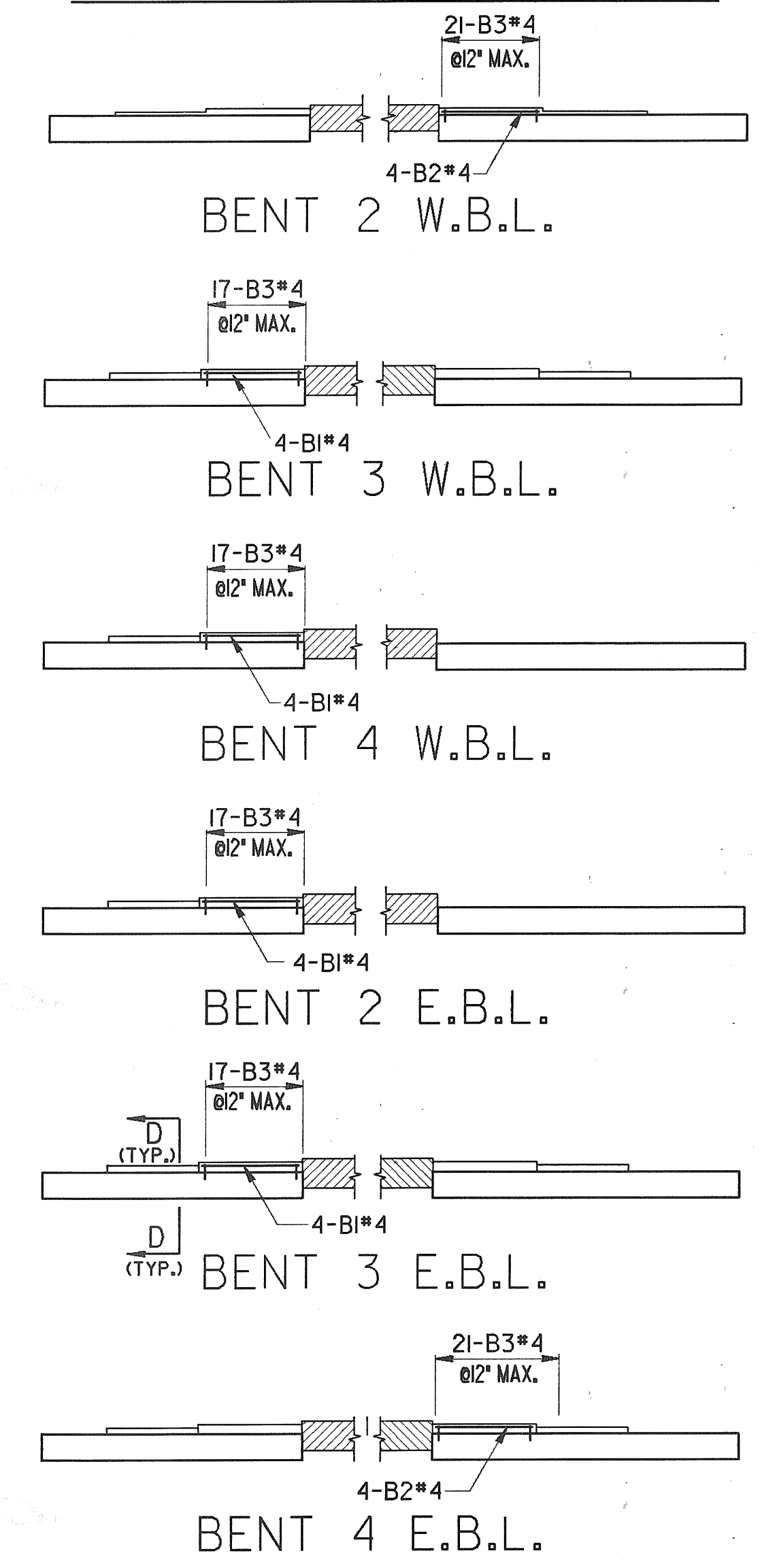
QUANTITIES
COMP: WAP
CHKD: TWJW

DATE
5/15/87

SCALE:
AS SHOWN

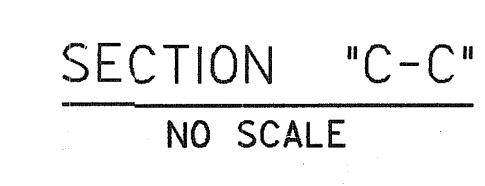
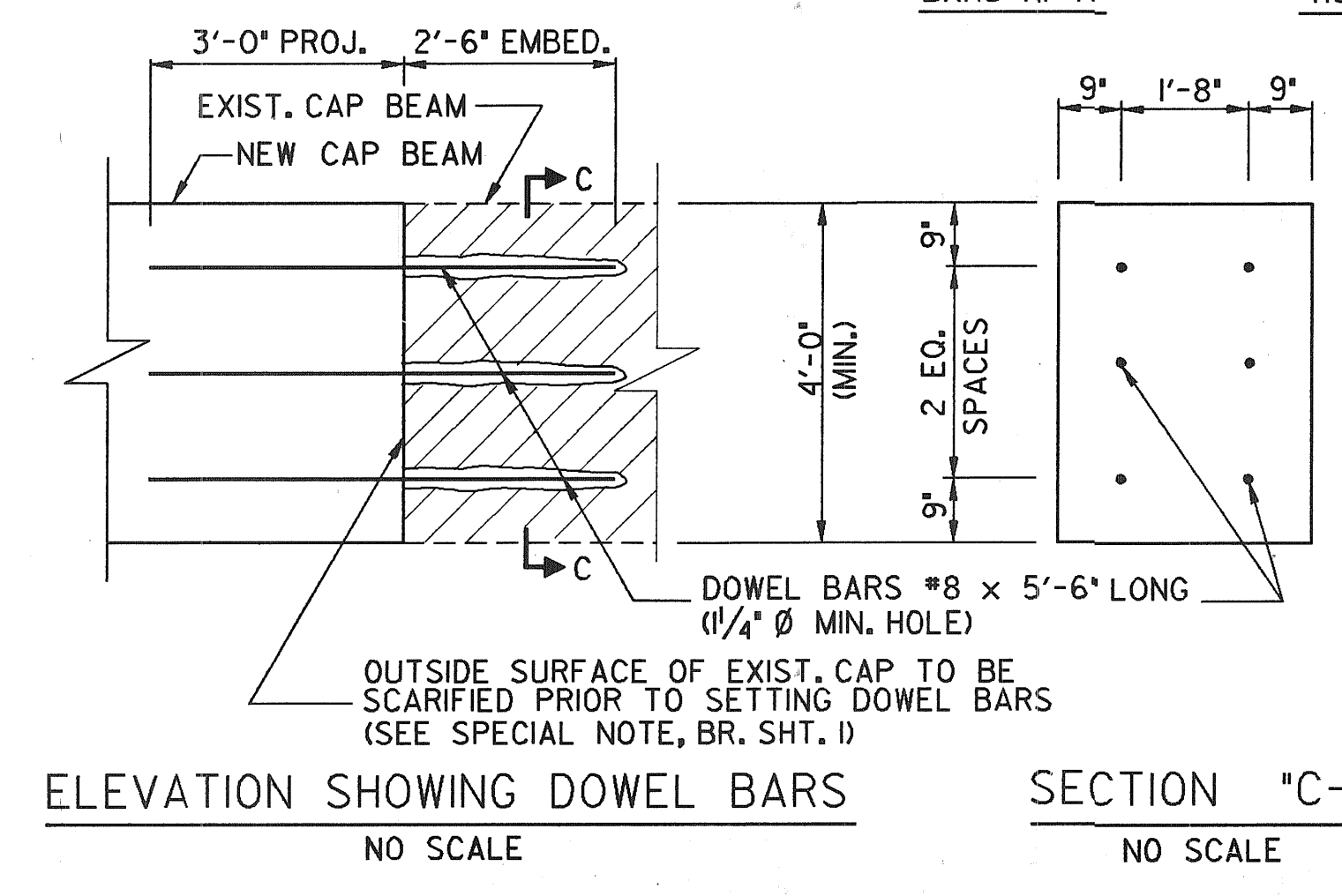
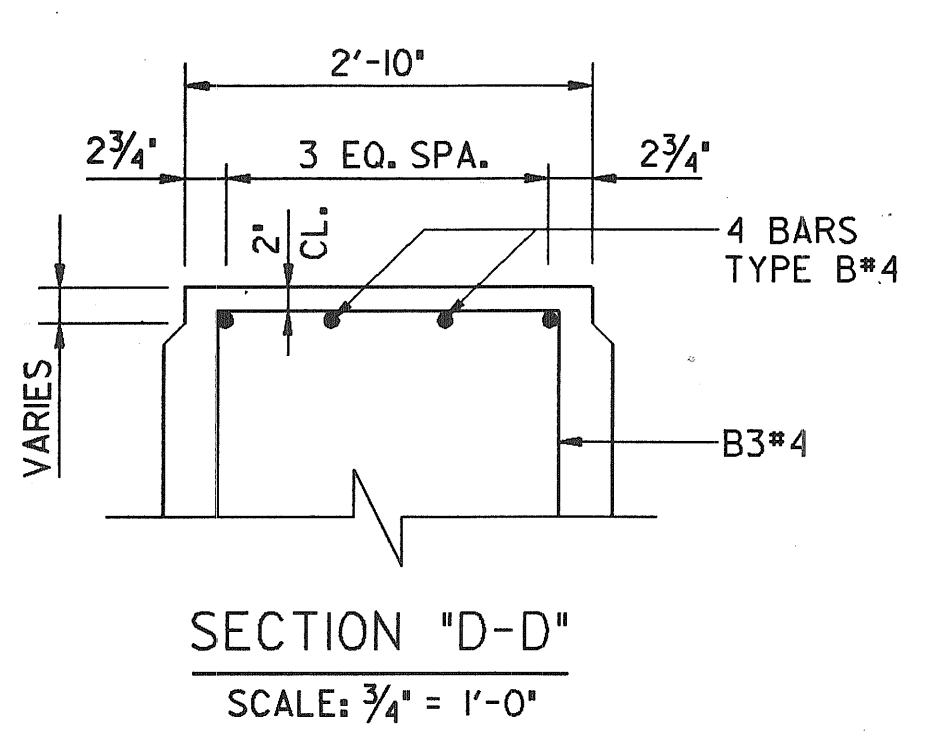
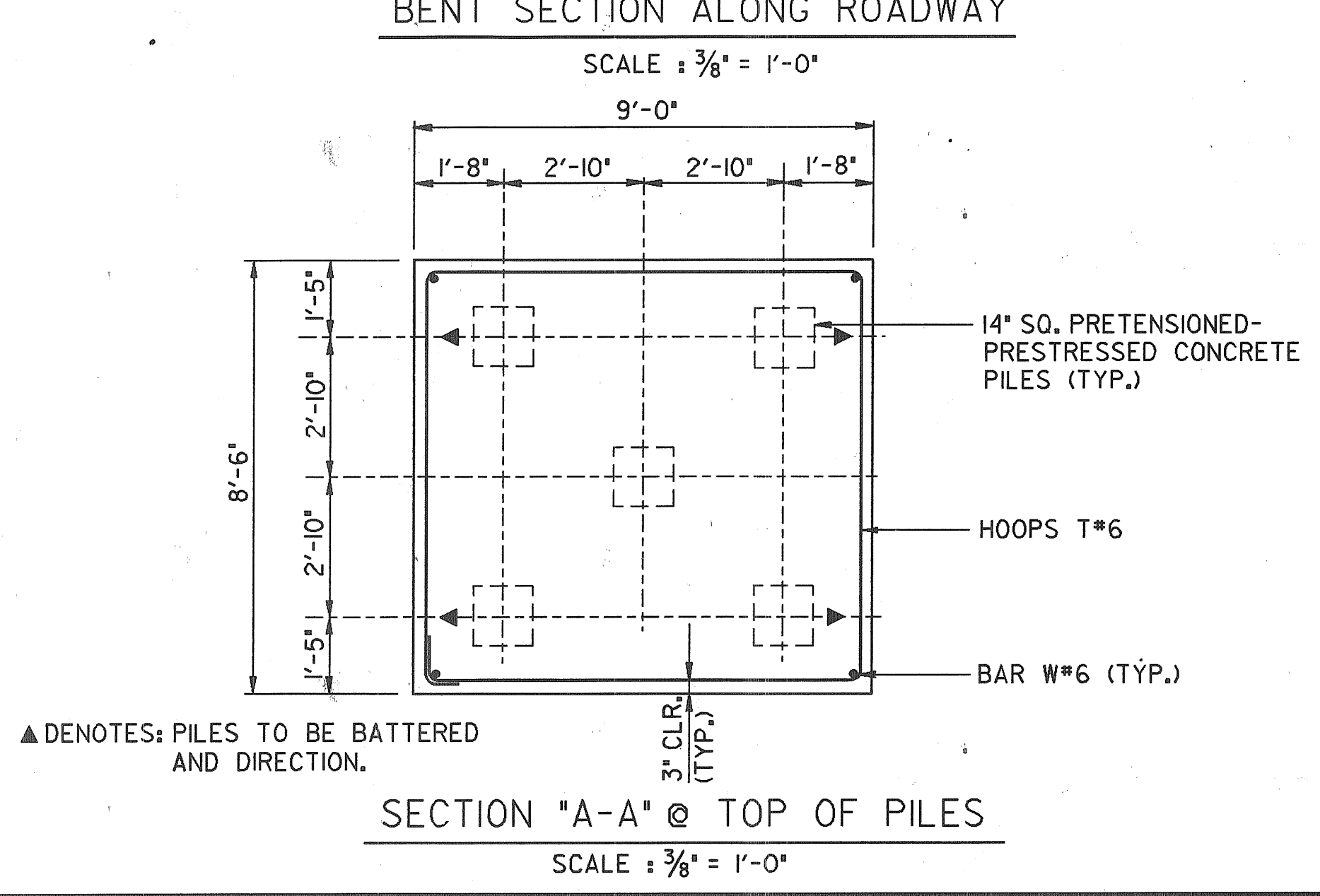
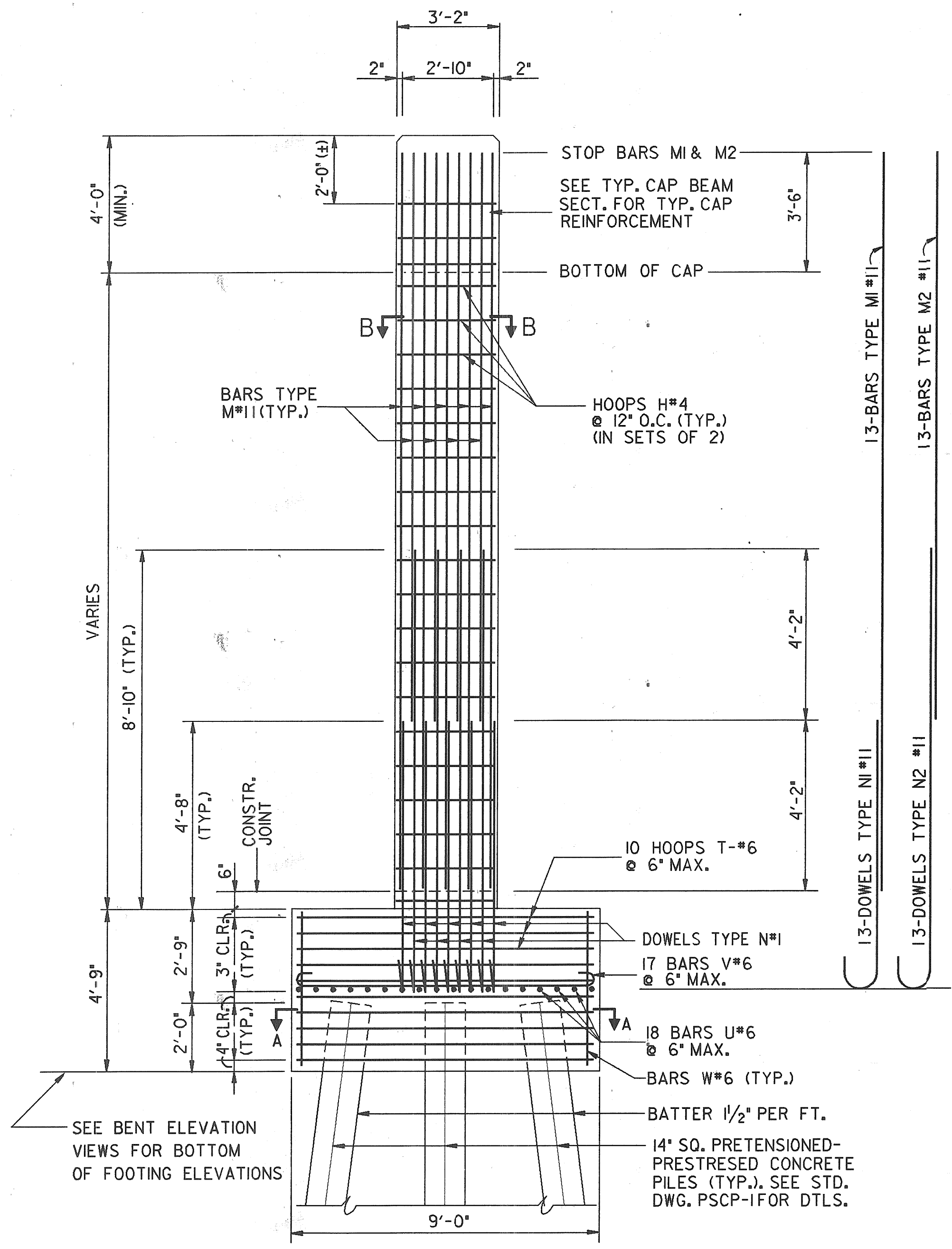
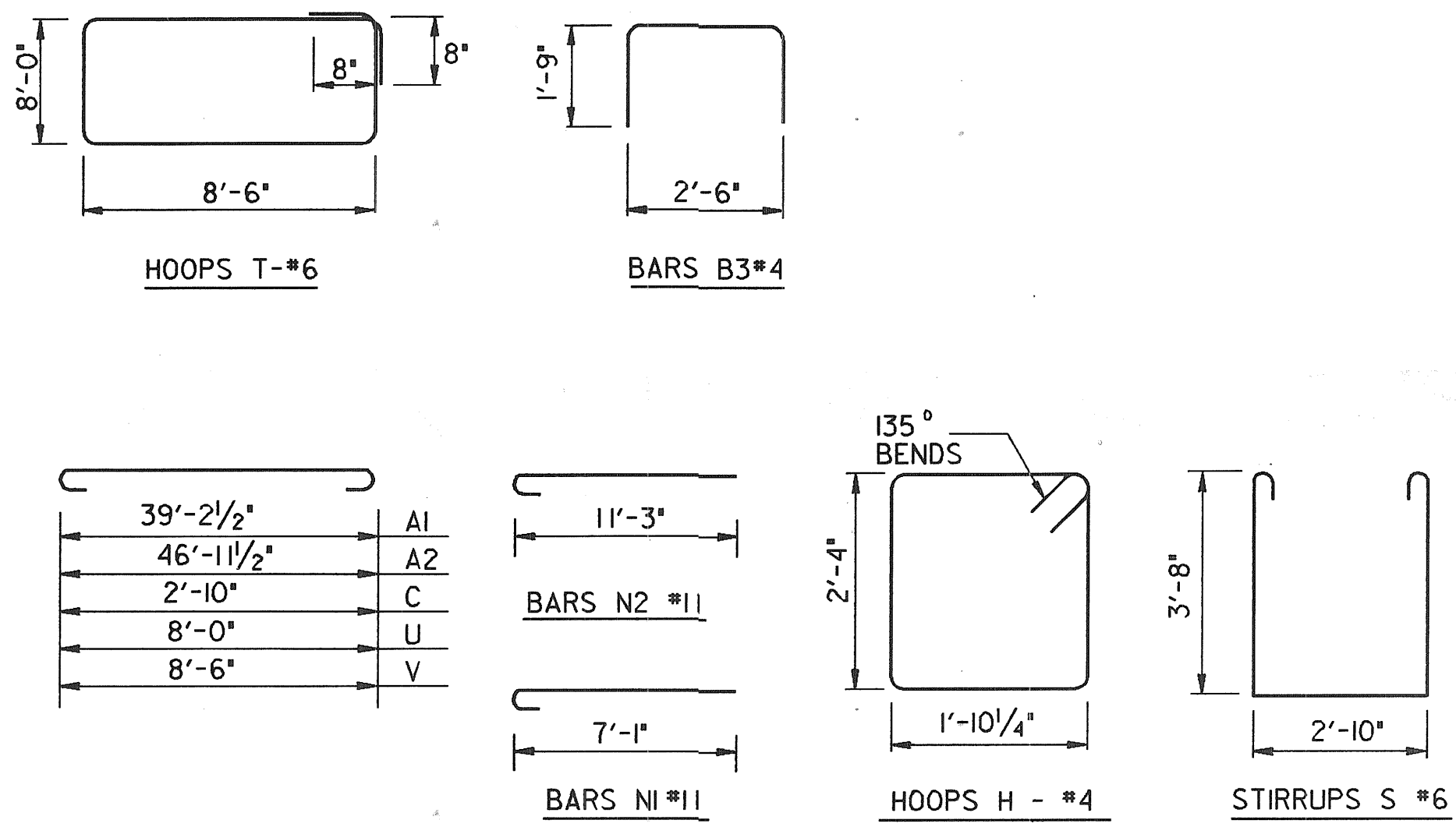
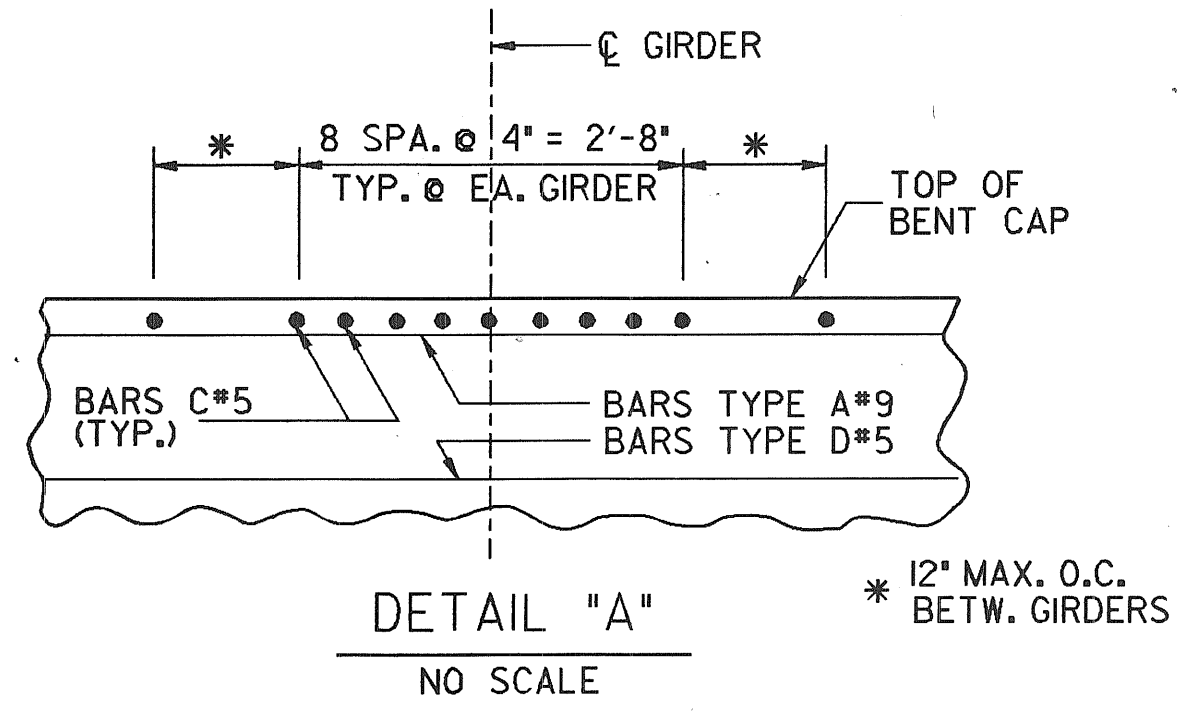
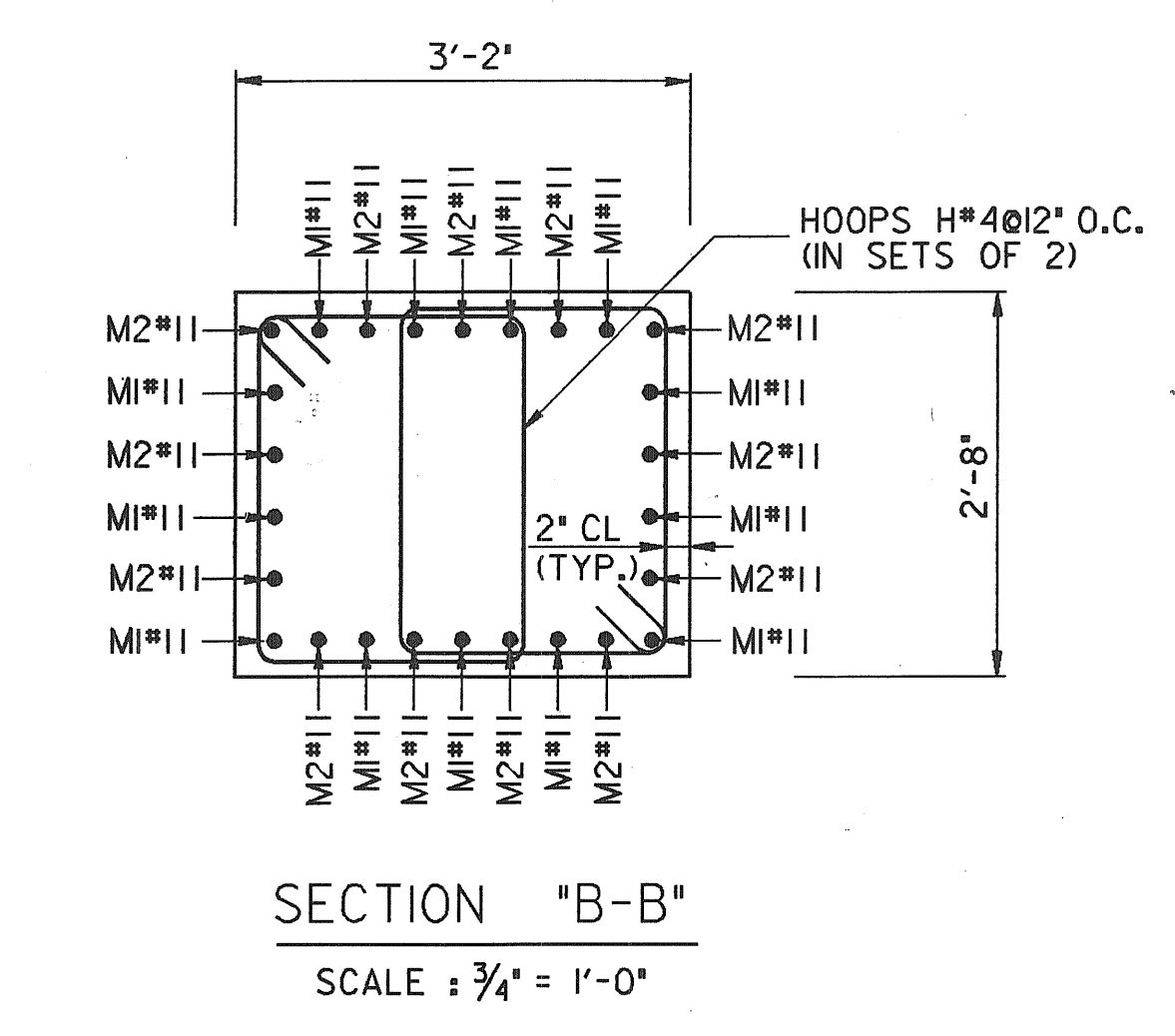
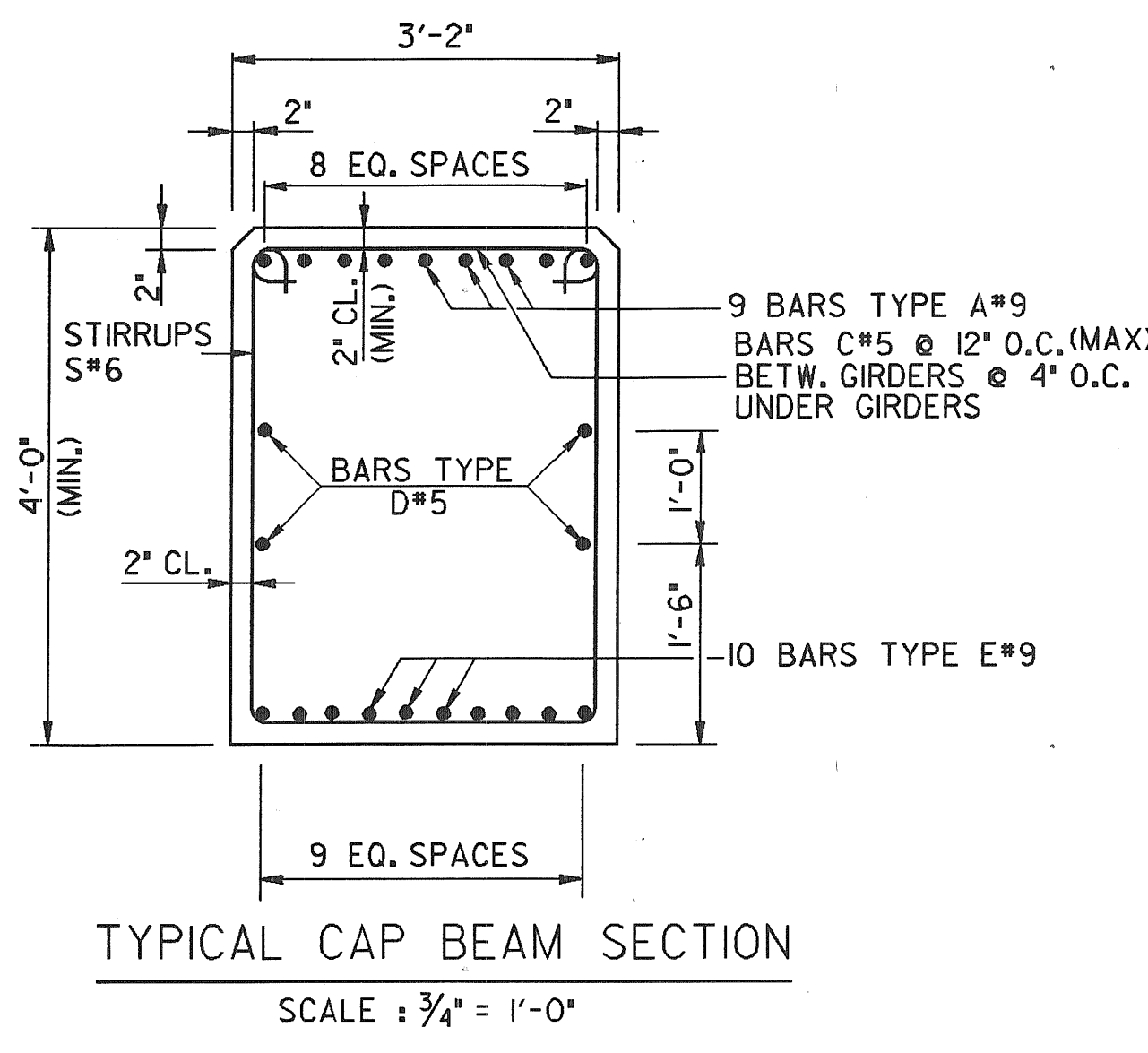
BRIDGE ENGINEER
Charlie H. Cook

CAP STEP REINFORCEMENT



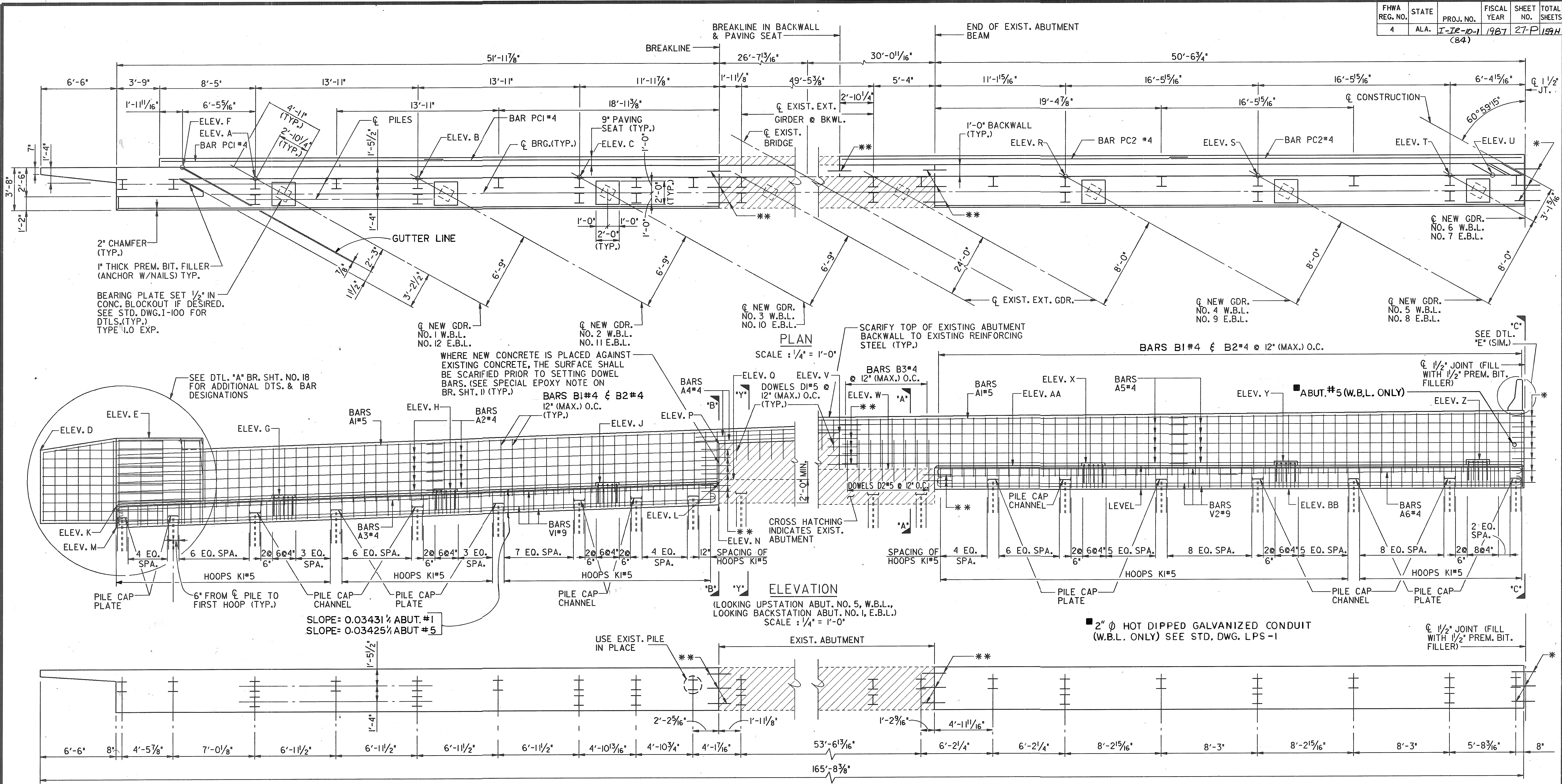
BAR	SIZE	BENT NO. 2		BENT NO. 3		BENT NO. 4	
		NO. REQ'D	LENGTH	NO. REQ'D	LENGTH	NO. REQ'D	LENGTH
A1	9	18	41'-8 1/2"	18	41'-8 1/2"	18	41'-8 1/2"
A2	9	18	49'-5 1/2"	18	49'-5 1/2"	18	49'-5 1/2"
B1	4	4	15'-6 1/4"	8	15'-6 1/4"	4	15'-6 1/4"
B2	4	4	19'-4 1/2"	—	—	—	19'-4 1/2"
B3	4	38	6'-0"	34	6'-0"	38	6'-0"
C	5	248	4'-0"	248	4'-0"	248	4'-0"
D1	5	8	39'-2 1/2"	8	39'-2 1/2"	8	39'-2 1/2"
D2	5	8	46'-1 1/2"	8	46'-1 1/2"	8	46'-1 1/2"
E1	9	20	39'-2 1/2"	20	39'-2 1/2"	20	39'-2 1/2"
E2	9	20	46'-1 1/2"	20	46'-1 1/2"	20	46'-1 1/2"
H	4	408	9'-4 1/2"	408	9'-4 1/2"	384	9'-4 1/2"
IM1	11	39	17'-8"	39	16'-1"	39	14'-2"
IM2	11	39	13'-6"	39	11'-1"	39	10'-0"
2M1	11	39	17'-4"	39	16'-10"	39	16'-0"
2M2	11	39	13'-2"	39	12'-8"	39	11'-10"
3M1	11	39	16'-7"	39	17'-5"	39	17'-8"
3M2	11	39	12'-5"	39	13'-3"	39	13'-6"
4M1	11	39	18'-5"	39	18'-2"	39	17'-4"
4M2	11	39	14'-3"	39	14'-0"	39	13'-2"
N1	11	156	8'-8"	156	8'-8"	156	8'-8"
N2	11	156	12'-10"	156	12'-10"	156	12'-10"
S	6	222	11'-6"	222	11'-6"	222	11'-6"
T	6	120	34'-4"	120	34'-4"	120	34'-4"
U	6	216	9'-4"	216	9'-4"	216	9'-4"
V	6	204	9'-10"	204	9'-10"	204	9'-10"
W	6	48	4'-3"	48	4'-3"	48	4'-3"
DOWEL	8	24	5'-6"	24	5'-6"	24	5'-6"

NOTE: ALL BARS GRADE 60 REINFORCEMENT



BRIDGE SHEET NO. 15 OF 18	STATE OF ALABAMA HIGHWAY DEPARTMENT		
	PROJECT NO. I-IR-10-1(84) WIDENING OF I-10 BRIDGES OVER BROAD STREET AT STATION 557+01.74 MOBILE COUNTY, ALABAMA		
REVISIONS	BENT DETAILS		
APPROVED:	SCALE:	DESIGNED: WAP	QUANTITIES
SECTION SUPERVISOR <i>William J. McArthur</i>	AS SHOWN	DRAWN: B.W.S.C. CAD/D	DATE
CHIEF BRIDGE DESIGN ENGINEER <i>Charlie H. Cook</i>		REIN. CHKD: WAP	5/15/87
BRIDGE ENGINEER		CHECKED: TWW	

▲ DENOTES: PILES TO BE BATTERED AND DIRECTION.



* INDICATES 1" Ø X 2'-0" PLAIN ROD DOWEL GREASE ONE END AND WRAP W/ TAR PAPER

** INDICATES DOWEL BARS NO. 6 X 2'-6" LONG EMBEDDED 12" INTO EXIST. CONC. DOWEL HOLES (1" Ø MIN.) TO BE FILLED WITH APPROVED EPOXY ADHESIVE. SEE BR. SHT. NO. 1 AND SECTION 870 OF THE STD. SPECS.

NOTE: WHERE APPLICABLE, EXIST. BACKWALL & ABUTMENT BEAM REINFORCEMENT TO EXTEND INTO NEW BACKWALLS & ABUTMENT BEAMS. MINIMUM EXTENSION INTO NEW CONC. = 2'-0"

ESTIMATED QUANTITIES	ABUT. NO. 1		ABUT. NO. 5	
	W.B.L.	E.B.L.	W.B.L.	E.B.L.
SUBSTRUCTURE CONCRETE	CU. YD.	52.3	56.4	52.3
STEEL REINFORCEMENT	LBS.	9,798	10,111	9,798
STRUCTURAL STEEL	LBS.	2466	2481	2466

PILE LOCATION PLAN
SCALE: 1/4" = 1'-0"

NOTE: SPLICE BARS #4 = 1'-6"
SPLICE BARS #5 = 1'-10"

NOTE: EXISTING WINGWALLS AND WINGWALL PILES TO BE REMOVED AS NECESSARY TO ACCOMMODATE NEW CONSTRUCTION.

NOTE: FOR SECTION *Y-Y* SEE BR. SHT. 4.

NOTE: FINISH GRADE OF RAISED BACKWALL ON EXISTING ABUTMENTS SHALL MATCH EXISTING BRIDGE DECK SLOPE.

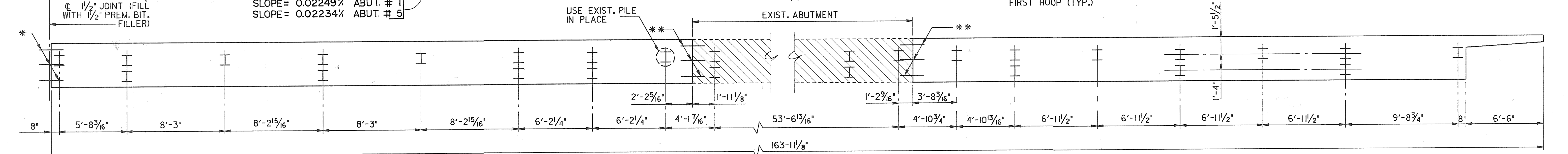
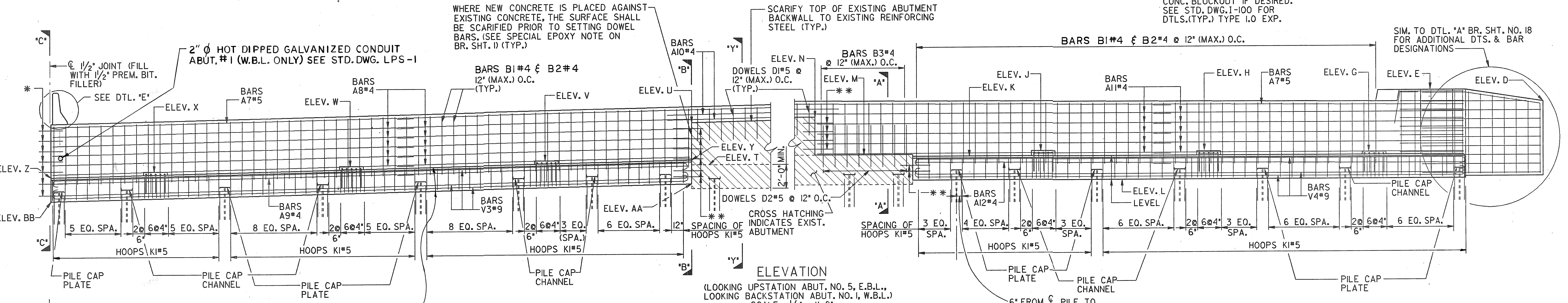
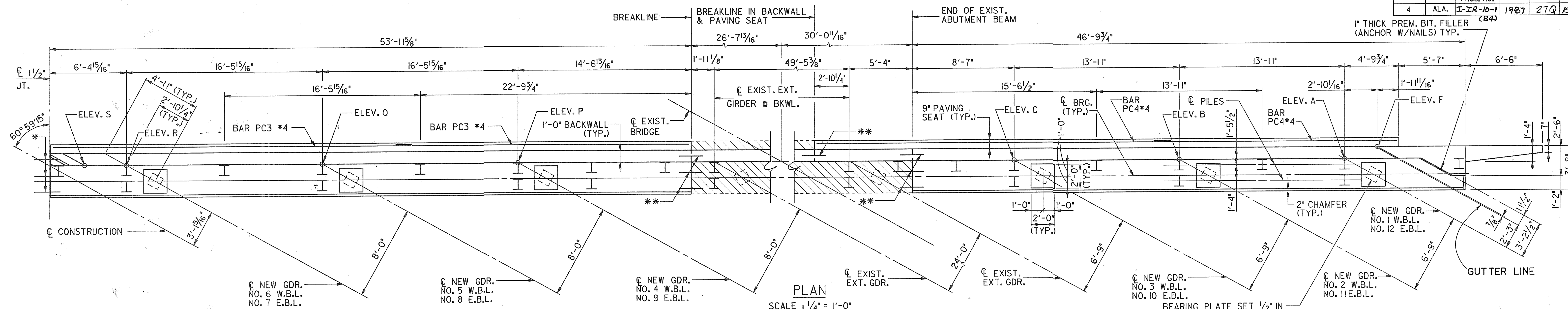
NOTE: POUR BARRIER RAILS WITH BRIDGE END SLAB BARRIER RAILS. BARS BL TO BE CONTINUED FROM BRIDGE END SLAB RAILS.

NOTE: FOR ELEVATIONS @ BACK FACE OF ABUTMENT BACKWALL, SEE BRIDGE SHEETS NO. 5 & 6.

TABLE OF ELEVATIONS

	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z	AA	BB
ABUT. NO. 1	30.3086	30.7970	31.2706	30.0812	31.0812	30.0812	26.1833	26.6682	27.1384	25.4300	27.2140	23.4300	25.2140	30.45(+)	27.36	32.8698	32.9779	33.0652	33.0808	31.62(+)	28.22	28.7176	28.8215	28.9047	28.4676	26.4676
ABUT. NO. 5	30.3255	30.8132	30.2861	30.1020	31.1020	30.1020	26.2035	26.6876	27.1569	25.4511	27.2320	23.4511	25.2320	30.45(+)	27.36	32.8811	32.9884	33.0748	33.0902	31.62(+)	28.25	28.7312	28.8342	28.9163	28.4812	26.4812

BRIDGE SHEET NO. 16 OF 18	STATE OF ALABAMA HIGHWAY DEPARTMENT	
	PROJECT NO. I-IR-10-(K84) WIDENING OF I-10 BRIDGES OVER BROAD STREET AT STATION 557+01.74 MOBILE COUNTY, ALABAMA	
APPROVED:	ABUTMENTS NO. 1 E.B.L. & NO. 5 W.B.L.	
SECTION SUPERVISOR <i>William J. McArthur</i> CHIEF BRIDGE DESIGN ENGINEER <i>Charlie H. Cook</i> BRIDGE ENGINEER	SCALE: AS SHOWN	DESIGNED: WAP DRAWN: BWSC CAD/D REINF CHKD: CHECKED: TWJW
BARGE, WAGGONER, SUMNER, & CANNON	QUANTITIES COMP: WAP CHKD: TWJW	DATE 5/15/87



* INDICATES 1" Ø X 2'-0" PLAIN ROD DOWEL GREASE ONE END AND WRAP W/ TAR PAPER

** INDICATES DOWEL BARS NO. 6 X 2'-6" LONG EMBEDDED 12" INTO EXIST. CONC. DOWEL HOLES (1" Ø MIN.) TO BE FILLED WITH APPROVED EPOXY ADHESIVE. SEE BR. SHT. NO. 1 AND SECTION 870 OF THE STD. SPECS.

NOTE: WHERE APPLICABLE, EXIST. BACKWALL & ABUTMENT BEAM REINFORCEMENT TO EXTEND INTO NEW BACKWALLS & ABUTMENT BEAMS. MINIMUM EXTENSION INTO NEW CONC. = 2'-0"

NOTE: FOR SECTION *Y-Y* SEE BR. SHT. 4.

NOTE: FINISH GRADE OF RAISED BACKWALL ON EXISTING ABUTMENTS SHALL MATCH EXISTING BRIDGE DECK SLOPE.

NOTE: POUR BARRIER RAILS WITH BRIDGE END SLAB BARRIER RAILS. BARS BL TO BE CONTINUED FROM BRIDGE END SLAB RAILS.

NOTE: FOR ELEVATIONS @ BACK FACE OF ABUTMENT BACKWALL, SEE BRIDGE SHEETS 5 & 6.

PILE LOCATION PLAN
SCALE: 1/4" = 1'-0"

NOTE: SPLICE BARS #4 = 1'-6"
SPLICE BARS #5 = 2'-2"

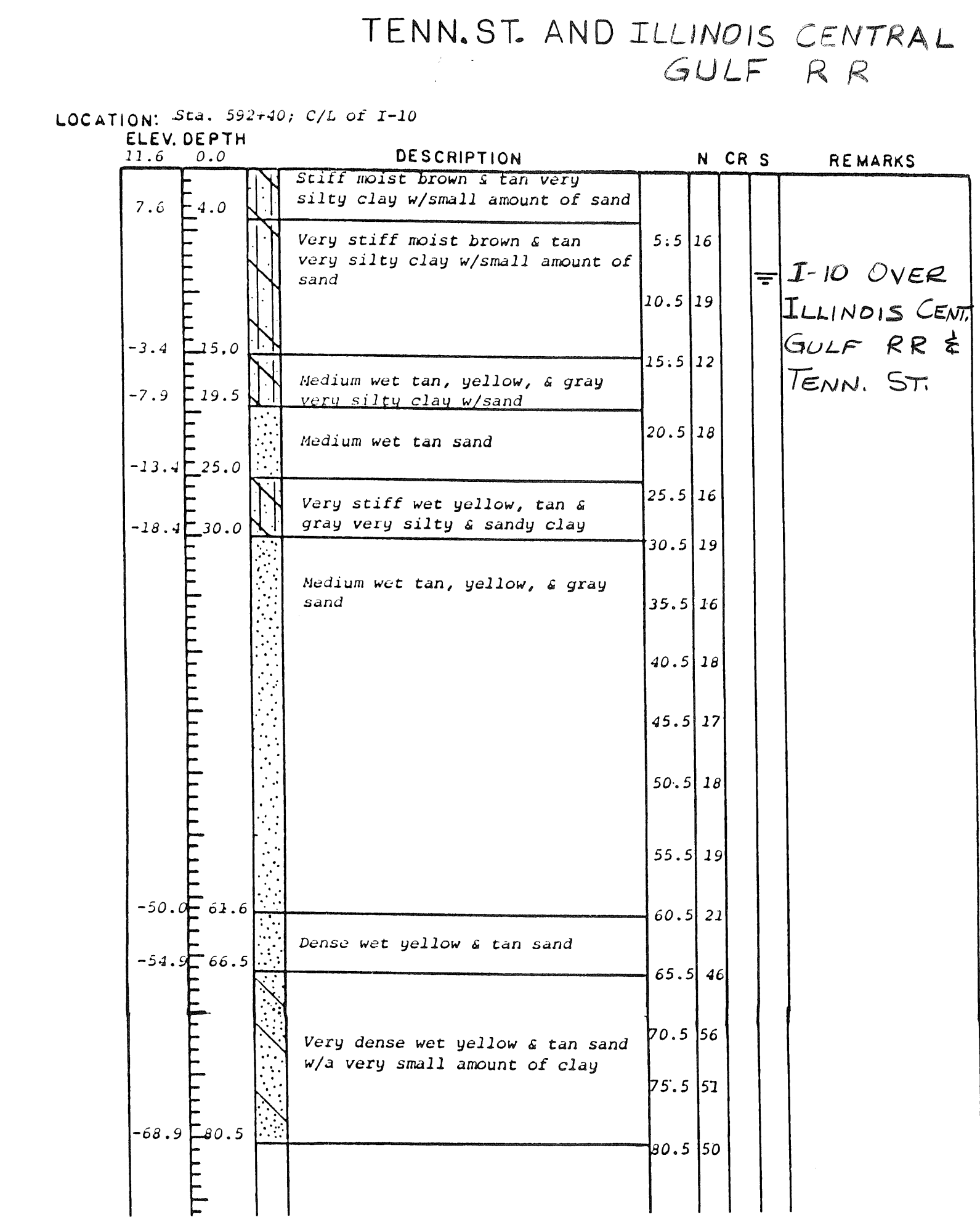
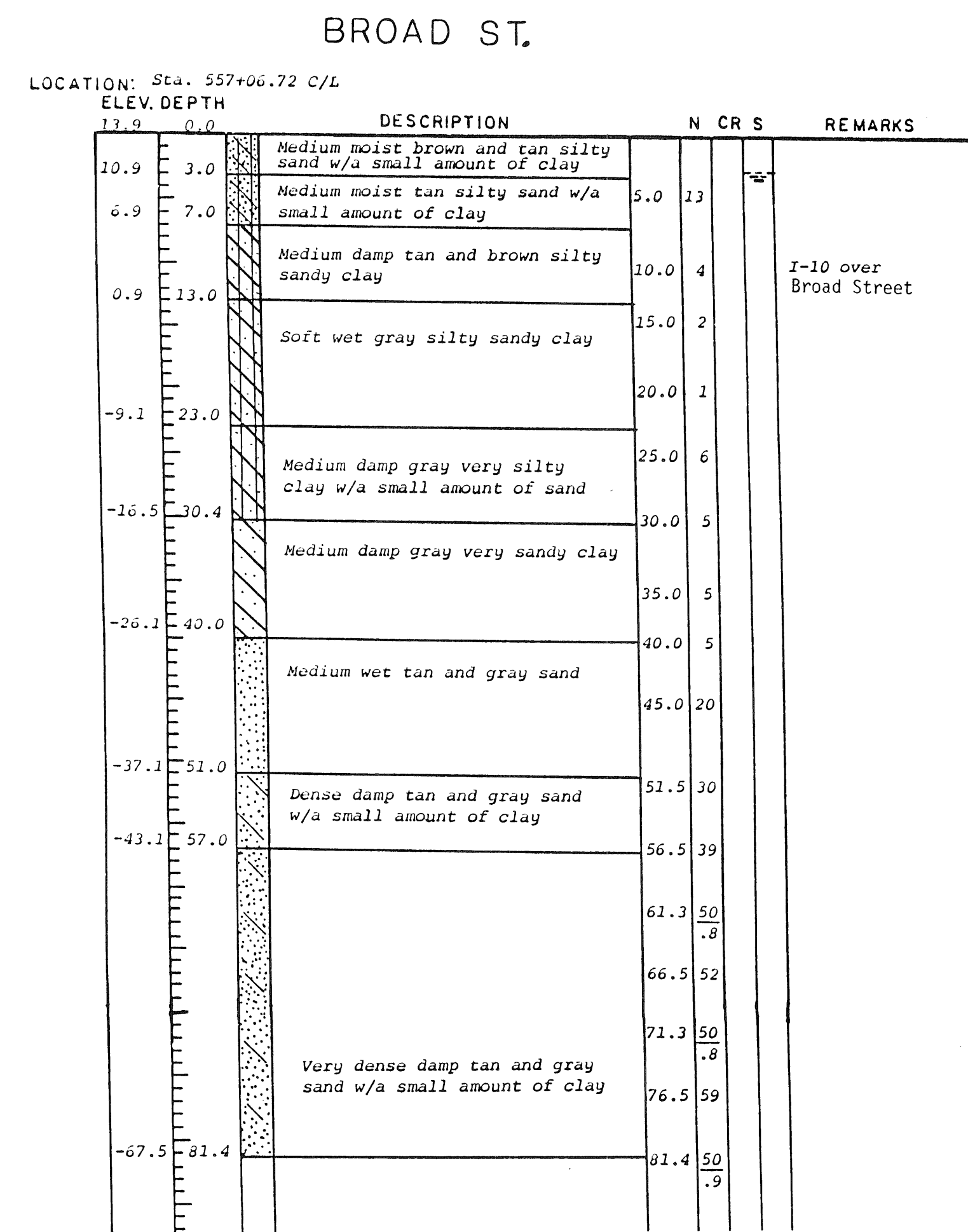
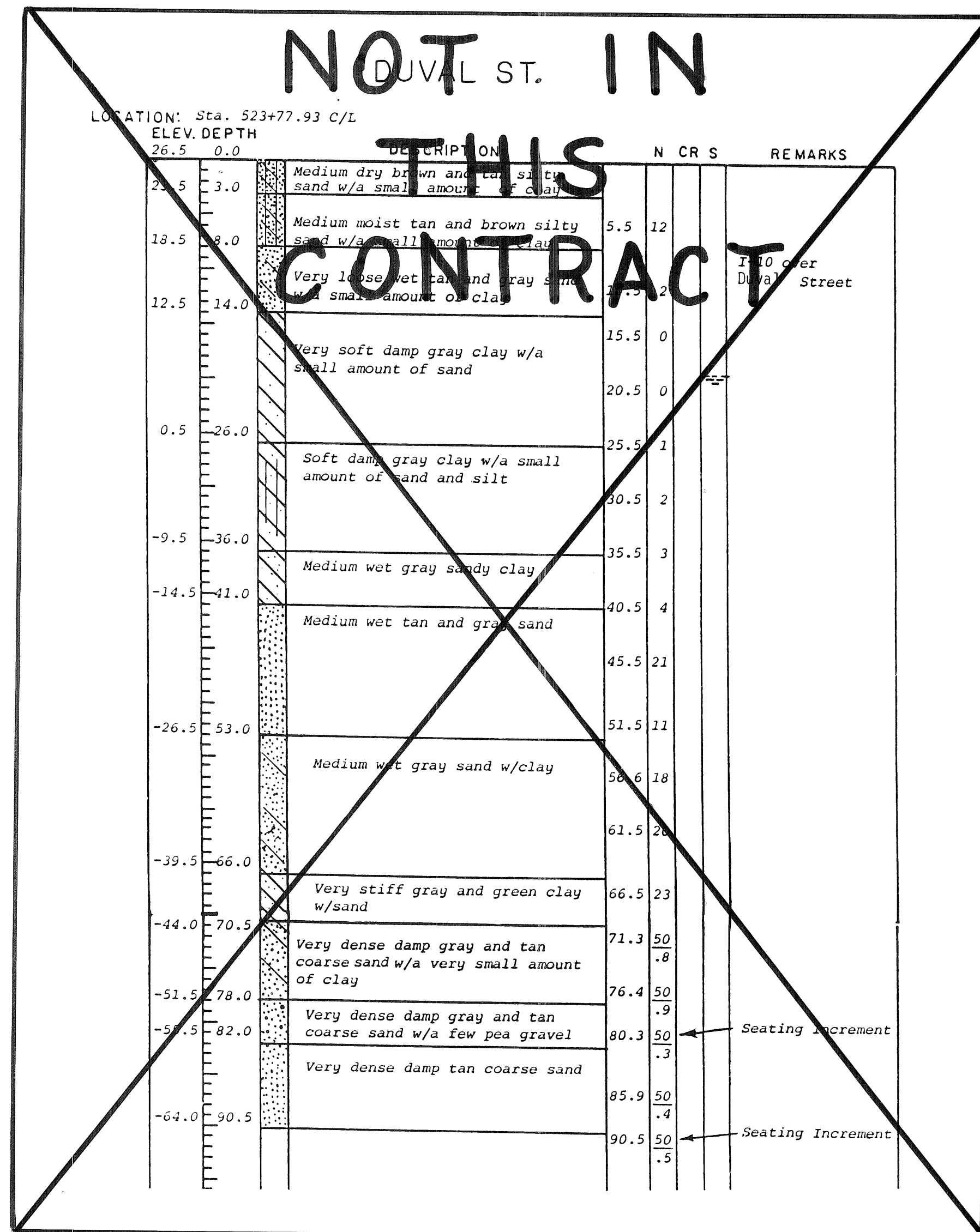
NOTE: EXISTING WINGWALLS AND WINGWALL PILES TO BE REMOVED AS NECESSARY TO ACCOMMODATE NEW CONSTRUCTION.

TABLE OF ELEVATIONS

	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z	AA	BB
ABUT. NO. 1	34.5085	34.5997	34.6761	34.4683	35.4683	34.4683	30.3097	30.4043	30.4842	30.0597	28.0597	30.26	33.39(±)	33.9945	33.6318	33.2482	33.1645	29.98	32.98(±)	29.8226	29.4640	29.0845	29.8467	28.6343	27.8467	26.6343
ABUT. NO. 5	34.5109	34.6029	34.6802	34.4706	35.4706	34.4706	30.3119	30.4074	30.4881	30.0619	28.0619	30.22	33.40(±)	34.0035	33.6418	33.2592	33.1766	29.45	32.99(±)	29.8314	29.4738	29.0953	29.8507	28.6465	27.8507	26.6465

BARGE, WAGGONER, SUMNER, & CANNON	BRIDGE SHEET NO. 17 OF 18	STATE OF ALABAMA HIGHWAY DEPARTMENT	
	REVISIONS	PROJECT NO. I-10-10-1(K84) WIDENING OF I-10 BRIDGES OVER BROAD STREET AT STATION 557+01.74 MOBILE COUNTY, ALABAMA	
	APPROVED:	ABUTMENTS NO. 1 W.B.L. & NO. 5 E.B.L.	
	SECTION SUPERVISOR <i>William D. M. Allen</i> CHIEF BRIDGE DESIGN ENGINEER	SCALE: AS SHOWN	DESIGNED: DRAWN: BWSC CAD/D REINF. CHKD: CHECKED:
	BRIDGE ENGINEER <i>Charlie H. Cook</i>	QUANTITIES COMP: CHKD:	DATE 5/15/87

FEDERAL REGION NO.	STATE	PROJECT NUMBER	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	ALA.	I-IR-10-1(84)	1987	32	159H



SPECIAL NOTE: SUBSURFACE INFORMATION SHOWN ON THIS DRAWING WAS OBTAINED SOLELY FOR USE IN ESTABLISHING DESIGN CONTROLS FOR THIS PROJECT. THE ACCURACY OF THIS INFORMATION IS NOT GUARANTEED & IT IS NOT TO BE CONSTRUED AS PART OF THE PLANS GOVERNING CONSTRUCTION OF THIS PROJECT.

- N - IS PENETRATION IN BLOWS PER FOOT (ASTM D-1586)
- 5 CR - IS % CORE RECOVERY, NX OR AX DESIGNATES BIT SIZE (ASTM D-2113)
- SYMBOLS DESCRIBED BELOW:
- UNDISTURBED SAMPLE (ASTM D-1587)
 - WATER TABLE, TIME OF BORING
 - WATER TABLE, 24 HOUR READING
 - LOSS OF DRILLING FLUID

BRIDGE SHEET NO. 1A OF 3A		STATE OF ALABAMA HIGHWAY DEPARTMENT			
REVISIONS		PROJECT NO. I-IR-10-1(84) WIDENING OF I-10 BRIDGES OVER BROAD ST., TENN. ST., WAR-LAW. ST., VIRGINIA ST., AND TEXAS ST. MOBILE COUNTY, ALABAMA			
APPROVED:		TEST BORING RECORD			
SECTION SUPERVISOR <i>William D. McArthur</i> CHIEF BRIDGE DESIGN ENGINEER	SCALE:	DESIGNED: G.W.	QUANTITIES	DATE	
BRIDGE ENGINEER <i>Charlie H. Cook</i>		DRAWN: G.W.	COMP:	MARCH	
		TRACED:	CHKD:	1986	
		CHECKED: F.B.			