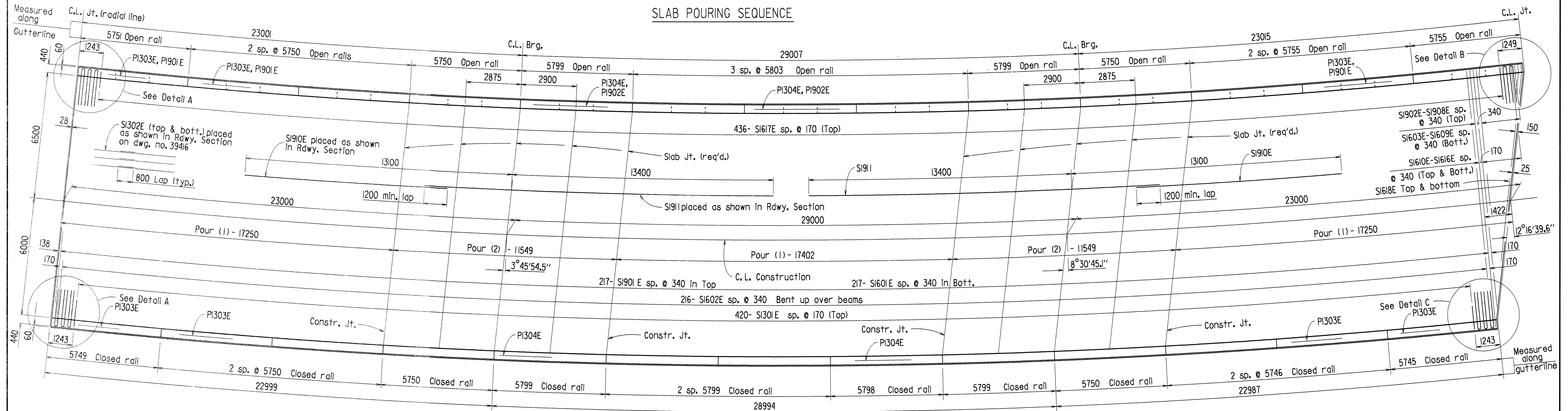


Concrete in bridge superstructure shall be placed, consolidated and screeded for the entire pour before any concrete has taken its initial set. This may require the use of a retarding agent. The contractor must obtain approval from the Bridge Engineer for any deviations from the pouring sequence shown.



Mark	No. Req'd.	Length	A	B	Pin Dia.
SI301E	420	1490			Str.
SI302E	812	11370			Str.
SI601E	217	13 400			Str.
SI602E	216	13 690			76
SI603E-	1 ea.	2320 to			Str.
SI609E		11 700			
SI610E-	2 ea.	3120 to			Str.
SI616E		12 500			
SI617E	436	1600			Str.
SI901E	217	13 380			Str.
SI902E-	1 ea.	2320 to			Str.
SI908E		11 700			
SI909E	2	1750			114
SI910E	92	10 000			Str.
SI911E	92	18 000			Str.
S2201E	11	3900			150
SI618E	2	13 590			Str.
PI303E	88	5620			Str.
PI304E	55	5670			Str
PI305E	247	1750			50
PI306E	585	2265			50
PI307E	338	1810			50
PI308E	78	2110			50
PI309E	78	965			50
PI901E	40	5620			Str.
PI902E	25	5670			Str.

Bending Diagrams

(Dimensions are out to out of bars.)

* 12 mm Overtolerance, No Undertolerance.

PI306E

PI305E

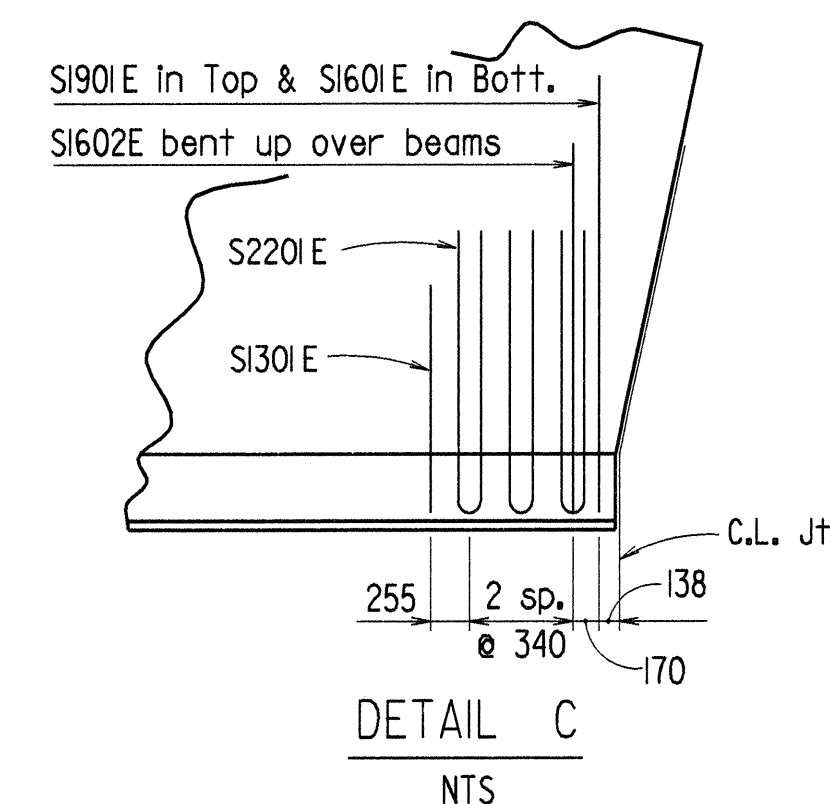
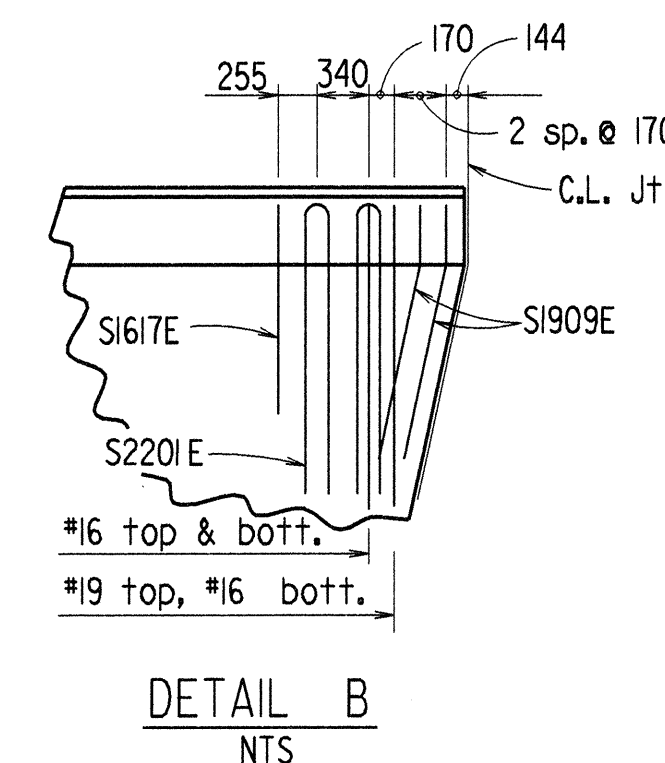
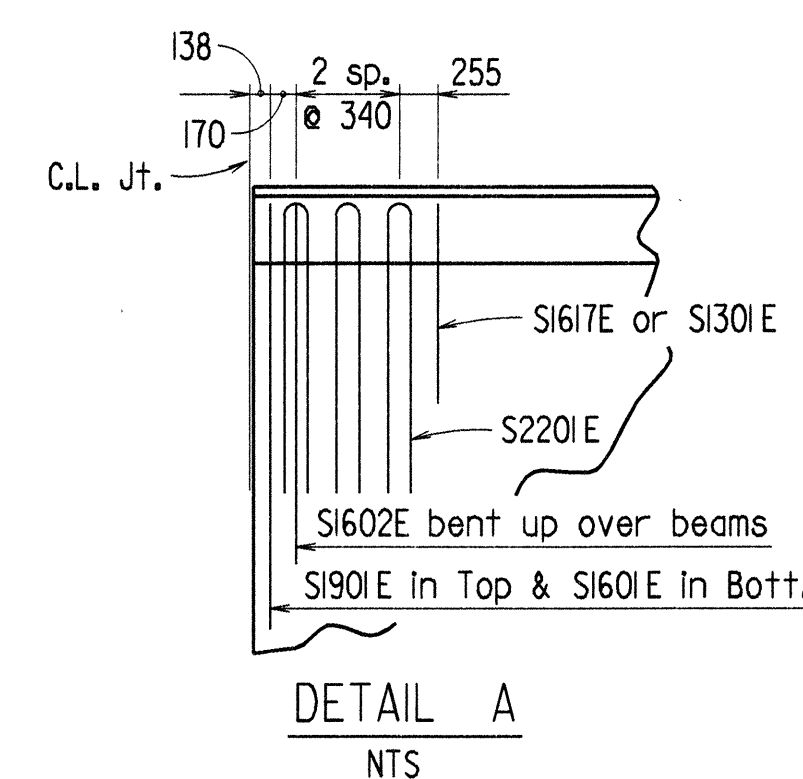
PI307E

PI308E

PI309E

S2201E

SI909E



Note: All longitudinal lines and longitudinal reinforcing steel shall be placed on curves concentric with C.L. Construction
All transverse reinforcing steel shall be placed on radial lines and shall be measured along C.L. Construction.

6 mm x 25 mm Type 6 Joint Sealer. See Sections 501.02 (h) and 501.05 (j) of the Standard Specifications. Joint Sealer shall be measured and paid for as Class S(AE) Concrete-Bridge. Slab joints shall extend to the outside edge of the deck slab. Slab joints shall be installed before the parapet railing is poured. If slab joints are to be sawed, they shall be sawed before any vehicular traffic is allowed on the unit.

SLAB JOINT DETAIL

No Scale

All dimensions are in millimeters (mm) unless otherwise noted.

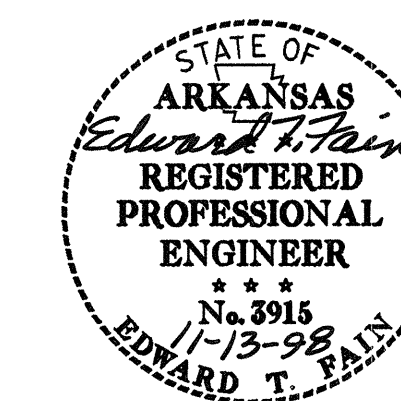
For General Notes, see dwg. no. 39419

SHEET 1 OF 2

DETAILS OF 75M CONTINUOUS
COMPOSITE PLATE GIRDER UNIT (UNIT 1)
BEAR CREEK

ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: LM DATE: 6-5-98
CHECKED BY: DHP DATE: 10-23-98 SCALE: 1:100
DESIGNED BY: JAC DATE: 4-20-98
BRIDGE NO. 06750 DRAWING NO. 39411



BRIDGE ENGINEER

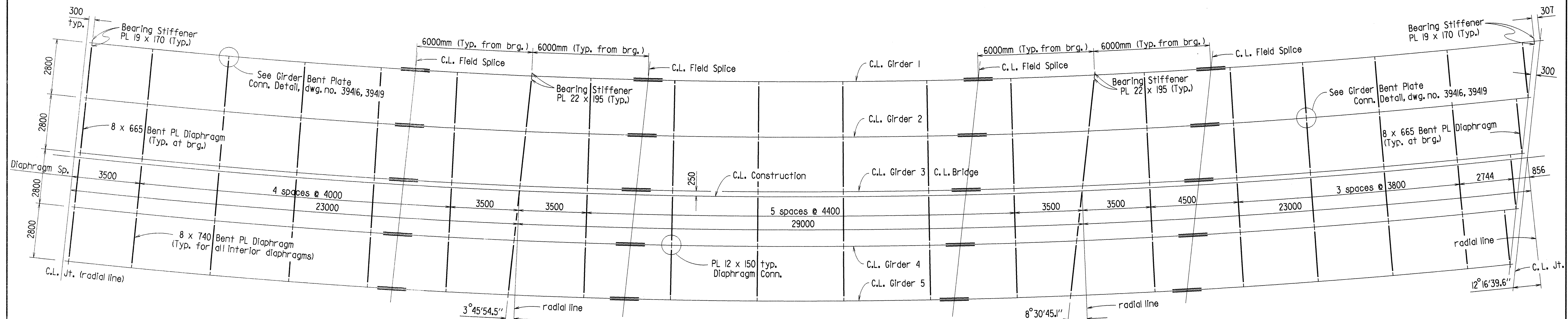


MICROFILMED
DEC 17 1998

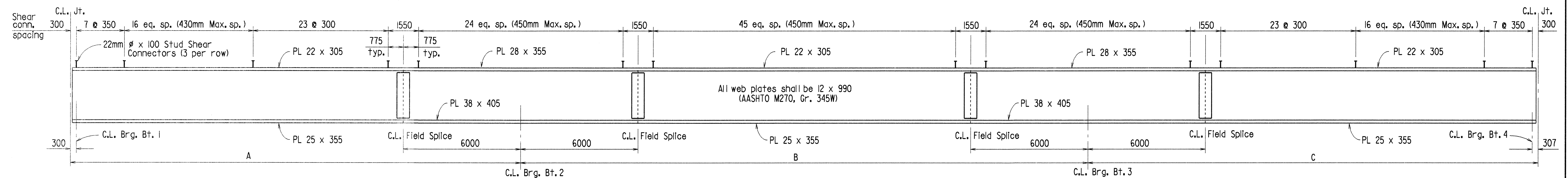
09829.sl

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		009829	45	131
				06750		75M UNIT		39412

Note: Girders are curved and concentric to C.L. Construction.
All diaphragms (except as noted) are on radial lines and spaced along C.L. Construction.



FRAMING PLAN
1:100

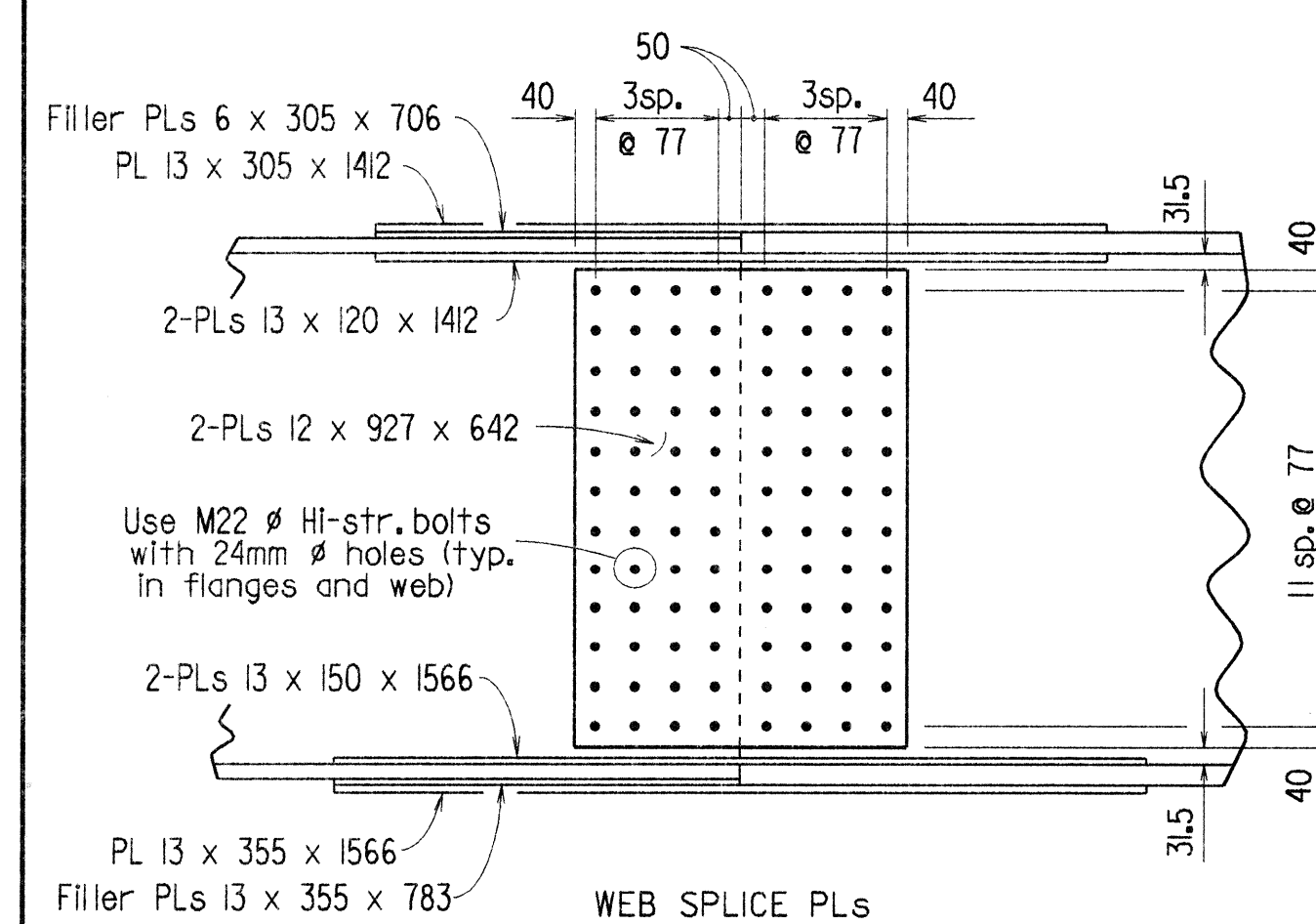


GIRDER ELEVATION

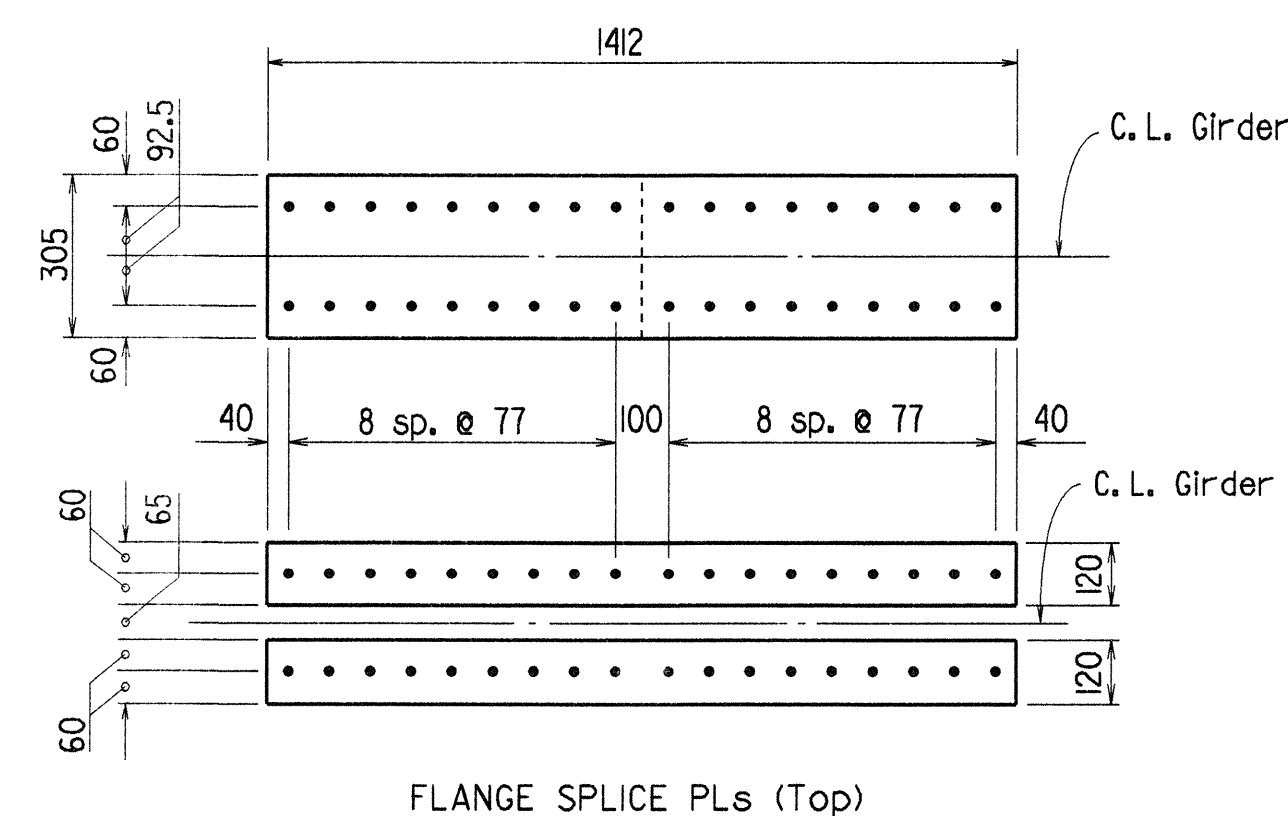
TABLE OF GIRDER VARIABLES

Girder No.	A	B	C
1	23001	29006	23014
2	23000	29003	23007
3	23000	29000	23001
4	23000	28997	22994
5	22999	28995	22988

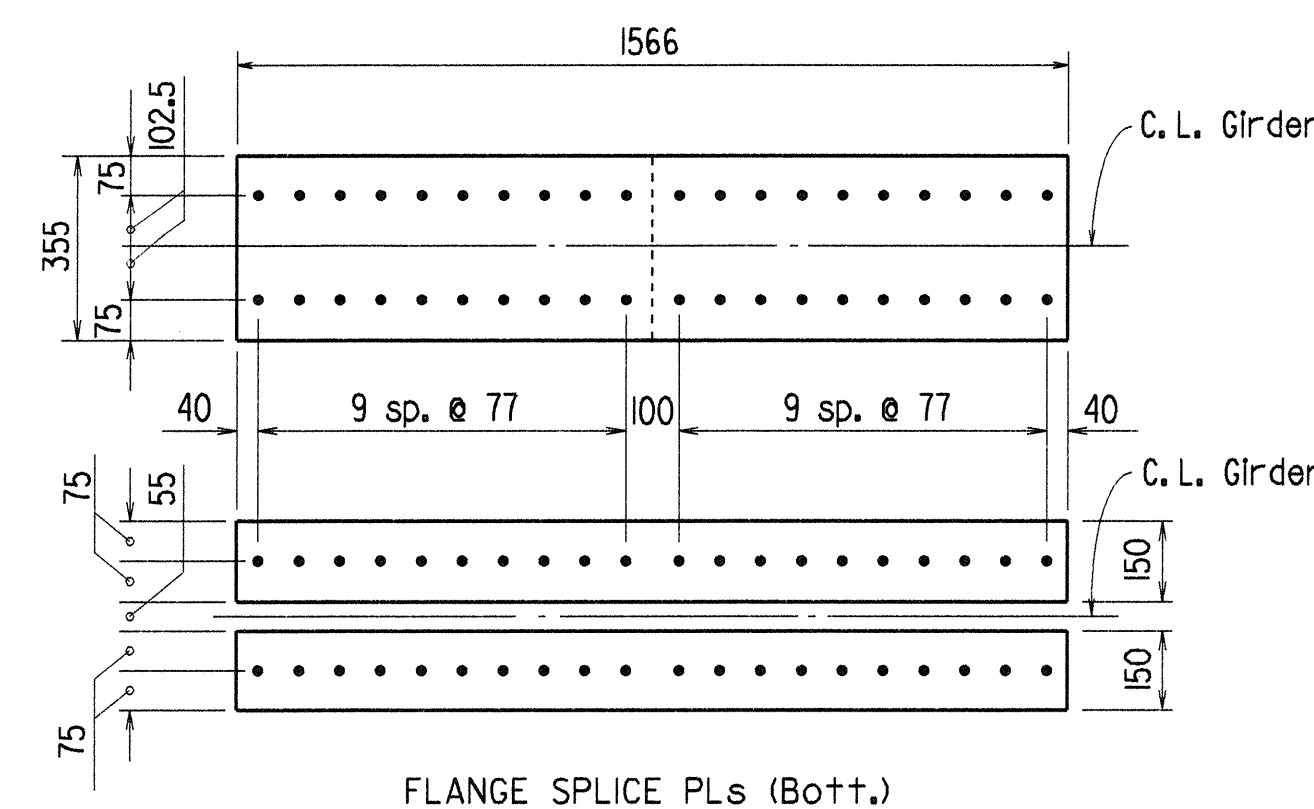
For General Notes, see dwg. no. 39419
For Welding Details, see dwg. no. 39414
For Shear Connector Details, see dwg. no. 39414



FIELD SPICE DETAILS
NTS



Note: All field splice plates shall be AASHTO M270, Gr. 345W.



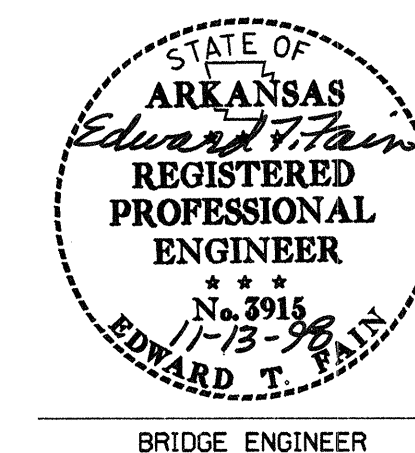
All dimensions are in millimeters (mm) unless otherwise noted.

SHEET 2 OF 2
DETAILS OF 75M CONTINUOUS (UNIT 1)
COMPOSITE PLATE GIRDER UNIT
BEAR CREEK

ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: LM DATE: 7-31-98
CHECKED BY: DHP DATE: 10-23-98
DESIGNED BY: JAC DATE: 4-20-98
BRIDGE NO. 06750 DRAWING NO. 39412



microFILMED
DEC 17 1998

009829.52

For R/W Data, See Rdy. Plans

Note: Use Type Special Approach Cutter at both ends of bridge. See Dwg. No. 3949.

CONSTRUCTION HORIZONTAL CURVE DATA
PI = Sta. 106+97.25
Delta = 68°25'30.28"
R = 350.000 m
T = 237.972 m
L = 47.985 m

Note: Construction is on a left curve with a 350 m radius. Longitudinal lines shall be constructed on curves concentric with Construction. All bents are parallel and shall be skewed from radial lines at Construction as shown.

Note: Span Lengths, Stations, Elevations & Skew Angles are referenced from Construction.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	009829	3.3	131	

06750 - LAYOUT - 39400

GENERAL NOTES

All dimensions are in meters unless otherwise noted.

BENCH MARK: C.P.S. in side of Comb. Pole 1639 m right of Sta. 103+42.405, Elev. 193.32.

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (1996 edition) with applicable supplemental specifications and special provisions.

DESIGN SPECIFICATIONS: AASHTO Standard Specifications for Highway Bridges (1996 edition) with current interim specifications.

LIVE LOADING: MSB METHOD OF DESIGN: Load Factor
SEISMIC PERFORMANCE CATEGORY: A

MATERIALS AND STRENGTHS:
Class 5A/2 Concrete (superstructure) $f'_c = 28.0$ MPa
Class 5 Concrete (substructure) $f'_c = 24.0$ MPa
Reinforcing Steel (ASTM A65-96, Gr. 420) $f_y = 420$ MPa
Structural Steel (AASHTO M270, Gr. 345M) $f_y = 345$ MPa
Structural Steel (AASHTO M270, Gr. 250) $f_y = 250$ MPa

BORING LOGS: Boring logs may be obtained from the Programs and Contracts Division.

STEEL PILING: All piling shall be HP 30x79 and shall be driven with an approved air, steam, or diesel hammer to a minimum safe bearing capacity of 490 kN per pile and into the material designated as hard, gray dolomite on the boring legend. Lengths of piling shown are for estimating quantities and for use in determining payment for cut-off and build-up in accordance with the Standard Specifications. Piles in and bent to be driven after embankment to bottom of cap is in place. On all piles the contractor shall use approved steel H-pile driving points. Minimum penetration for piles at end bents shall be 6 m below bottom of cap.

FOOTINGS: Footings for Bent 6 shall be set a minimum of 0.5 m into material designated as hard, gray dolomite on the boring legend. Rock excavations shall be made to neat lines of the concrete footings. Care shall be exercised to avoid shattering of rock faces by excessive blasting. Concrete in footings shall be poured directly against excavated surfaces of rock. Footings for Bents 2 - 6 shall have a minimum cover above top of footings of 0.6 m. Foundations for footings shall be prepared in accordance with section 804.04 of the Standard Specifications.

BRIDGE DECK: The concrete bridge deck shall be given a fine finish as specified for final finishing in subsection 802.03 for Class 5 Tined Bridge Roadway Surface Finish.

Class 1 Protective Surface Treatment shall be applied to the roadway surface and to the face and top of the concrete parapet rail.

DETAIL DRAWINGS:
End Bents 39402-39405
Intermediate Bents 39406-39410
75 m Cont. Comp. Plate Girder Units 39411-39418
Elastic Bearing Units 39419-39420
Soil Borings 39421
Embankment Construction 36500
Dumped Riprap and Filter Blanket 36501
Computing Excavation for Structures 36502
Type C Bridge Name Plate 36503
Steel Piling 36505
Permanent Steel Bridge Deck Forms 36506
Type Special Approach Gutters 39409

EXISTING BRIDGE: The existing bridge No. 1674 dog 4.30 is 7.0 m wide and 137.46 m long and consists of a concrete T-beam superstructure supported by a concrete substructure with webrails. The existing bridge is located approximately 30 meters upstream from the proposed new bridge.

REMOVAL AND SALVAGE: After the new bridge is open to traffic, the existing bridge No. 1674 shall be removed in accordance with section 205 of the Standard Specifications. All material from the existing bridge shall become the property of the contractor, except for the guard rail terminal (Type 2) which shall remain the property of the State.

Bent No.	Top of Deck at Construction to Low Side Top of Cap	Bent Height at Low Side	Bottom of Footing Elev.
2	1926 m	7.0 m	193.83
3	1955 m	7.0 m	193.81
4	1966 m	9.5 m	193.30
5	1955 m	9.5 m	193.31
6	1948 m	11.0 m	189.82

LAYOUT OF BRIDGE OVER
BEAR CREEK
HOLDER & BEAR CREEKS STRS. & APPRS. (F)
SEARCY COUNTY

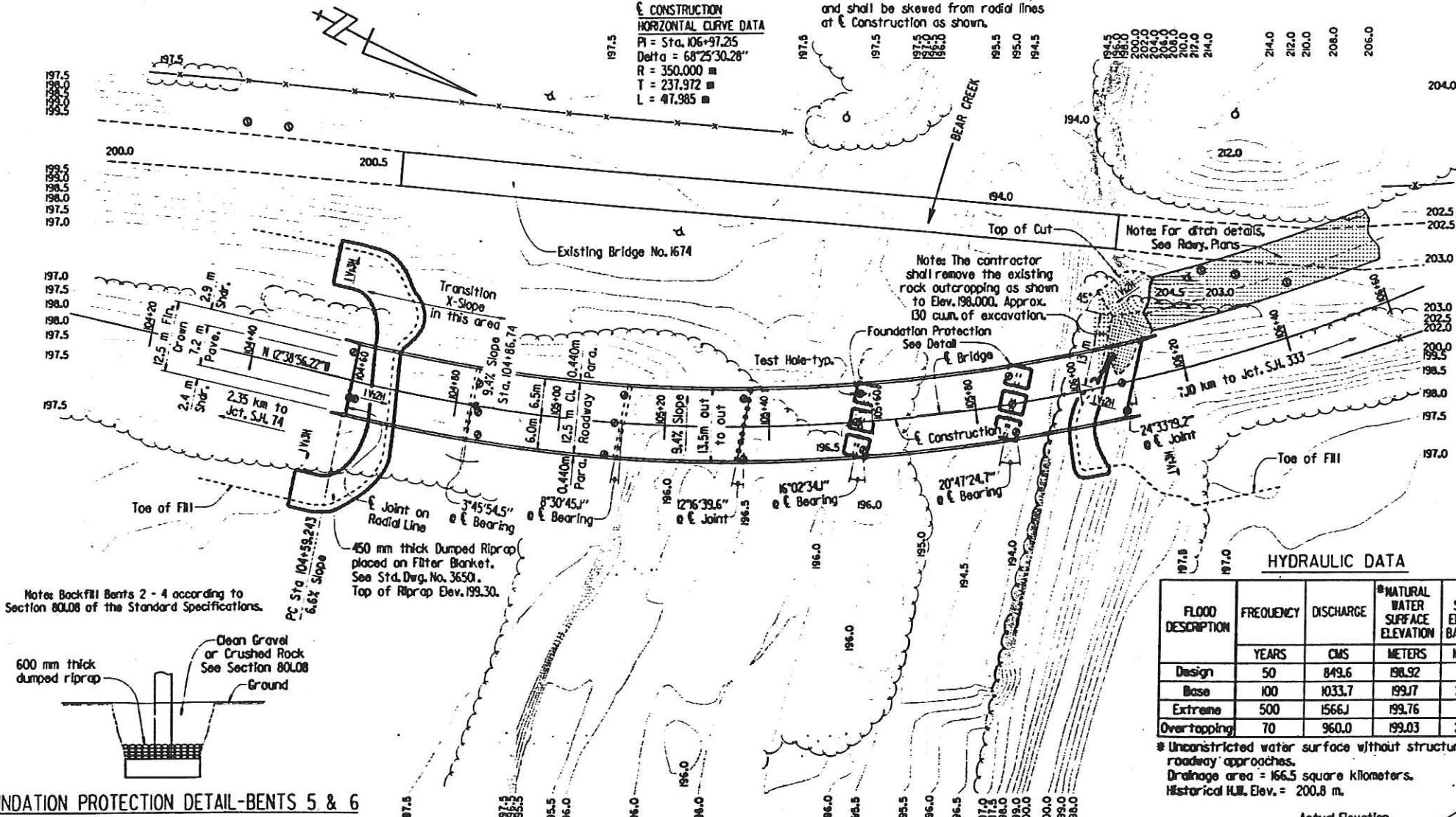
ROUTE 65 SEC. 5
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

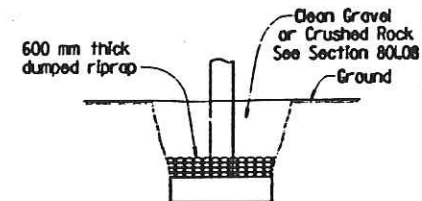
DRAWN BY: KDH DATE: 7 JAN 98
CHECKED BY: C.J.F. DATE: 1-15-98 SCALE: 1:500
DESIGNED BY: C.J.F. DATE: 12-30-97
BRIDGE NO. 06750 DRAWING NO. 39400



BRIDGE ENGINEER



Note: Backfill Bents 2 - 4 according to Section 804.08 of the Standard Specifications.

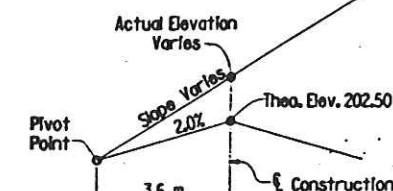
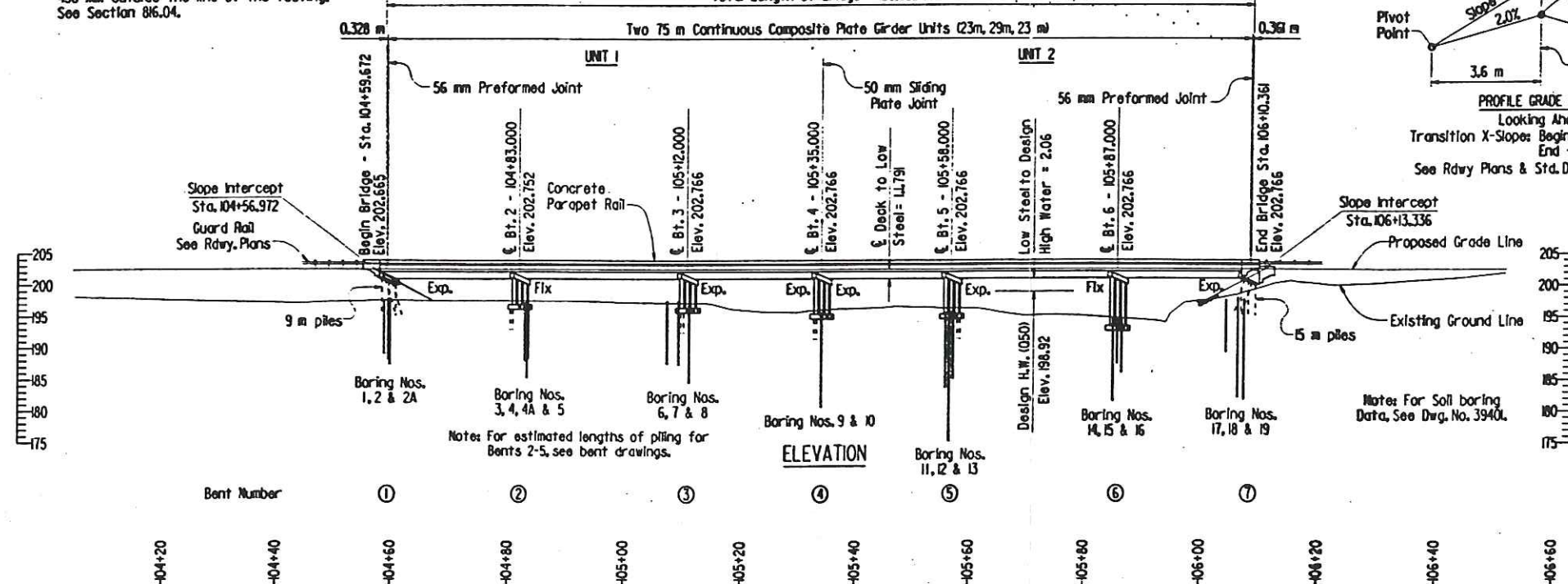


FOUNDATION PROTECTION DETAIL-BENTS 5 & 6

Plan quantities for dumped riprap are based on vertical planes parallel to and 450 mm outside the line of the footing. See Section 806.04.

PLAN

Total Length of Bridge = 150.689 m



PROFILE GRADE DETAIL

Looking Ahead
Transition X-Slopes Begin - Sta. 103+76.74
End - Sta. 104+86.74
See Rdy. Plans & Std. Dwg. No. SE-200

Slope Intercept
Sta. 106+13.336

Notes For Soil boring Data, See Dwg. No. 39404.

DEC 17 1998

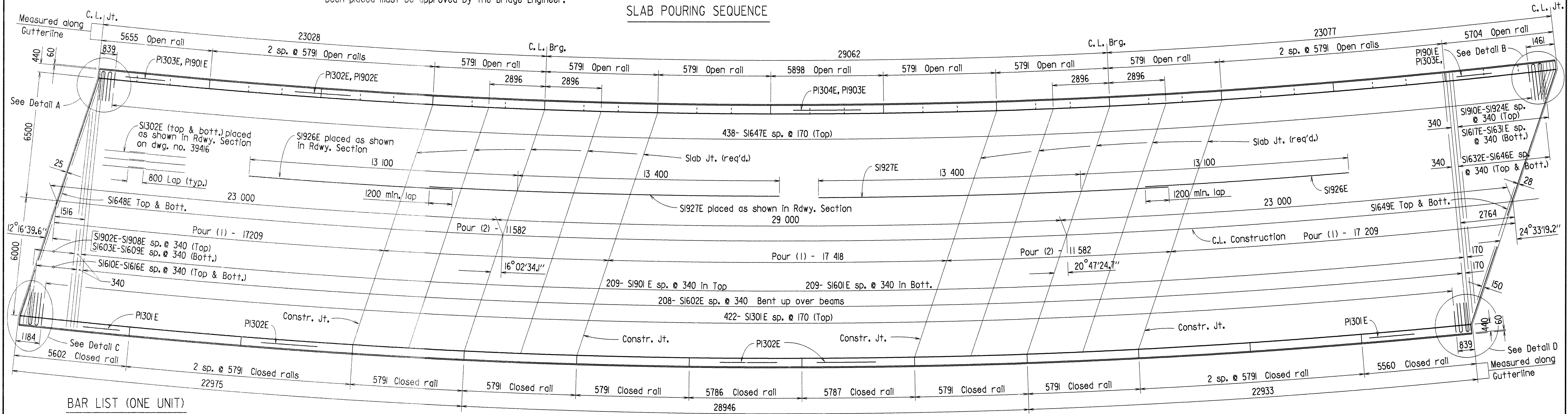
8009829XLLI

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		009829	46	131
				06750		75M CONT. UNIT		39413

Note: Pours with the same number may be placed simultaneously or separately. All Pours (1) must be placed before Pours (2) can be placed. 48 hours shall elapse between the end of a pour and the start of the next pour. 72 hours shall elapse between adjacent pours. Any railing pours made before the entire slab unit has been placed must be approved by the Bridge Engineer.

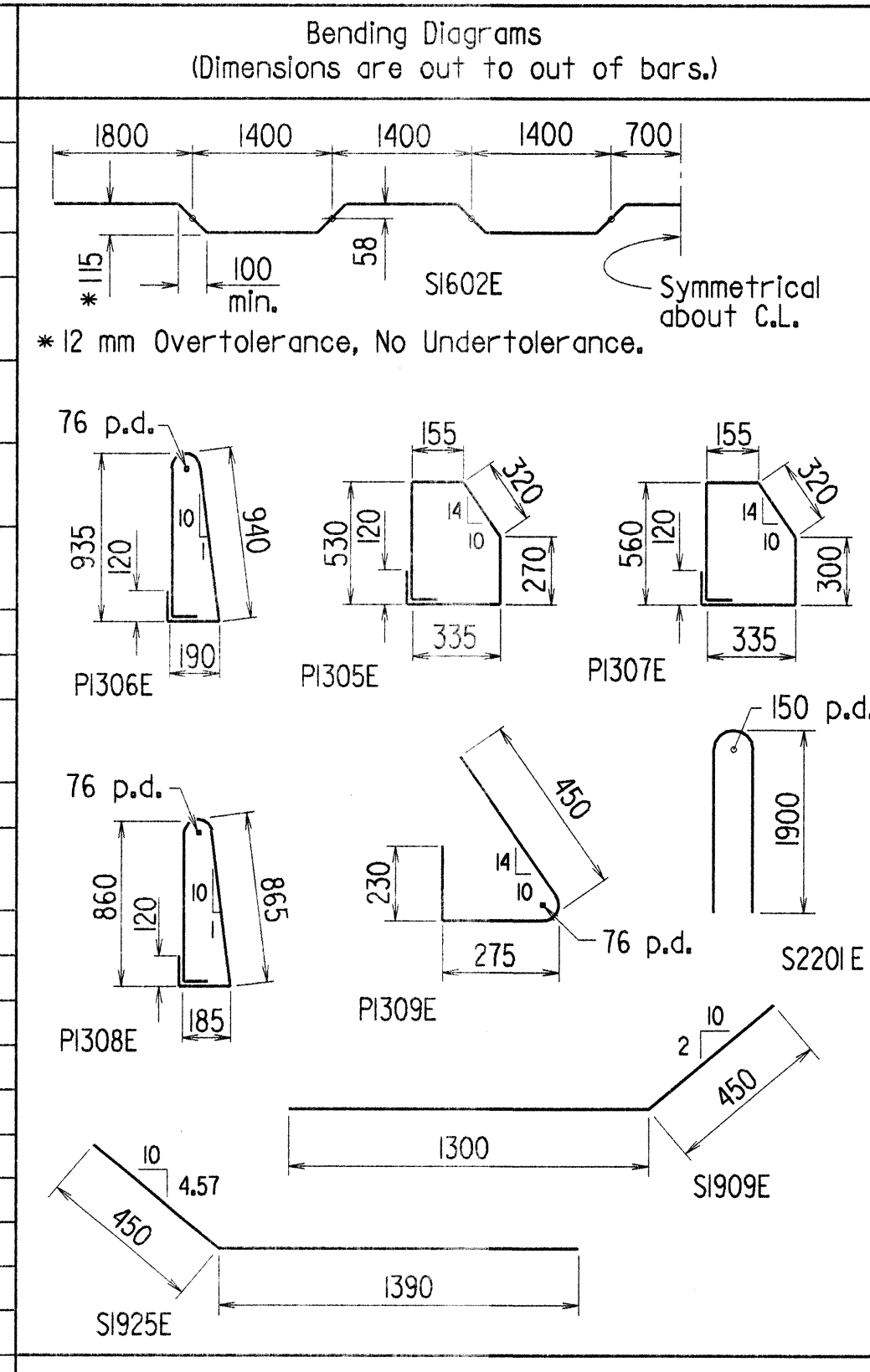
Concrete in bridge superstructure shall be placed, consolidated and screeded for the entire pour before any concrete has taken its initial set. This may require the use of a retarding agent. The contractor must obtain approval from the Bridge Engineer for any deviations from the pouring sequence shown.

SLAB POURING SEQUENCE

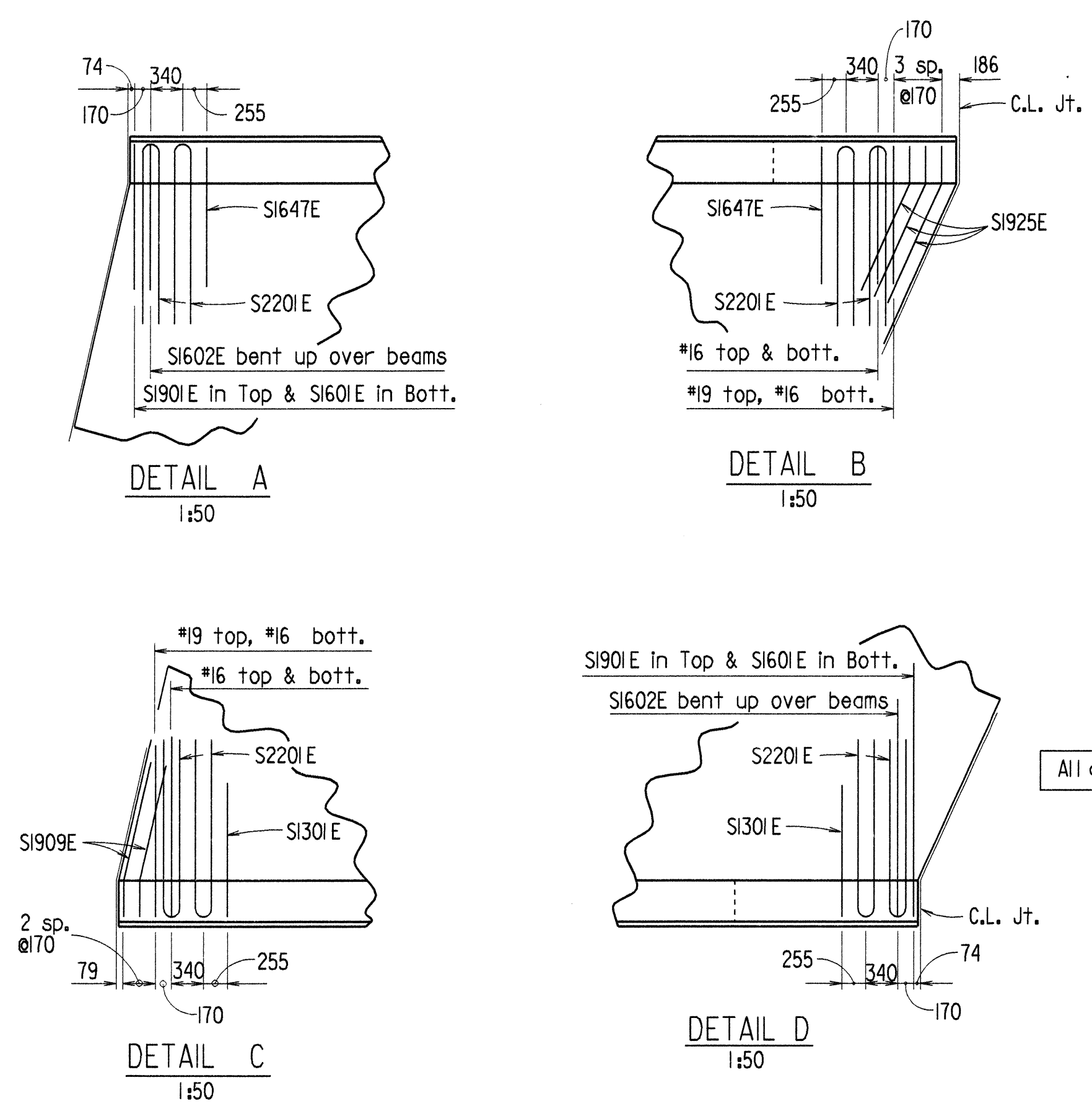


BAR LIST (ONE UNIT)

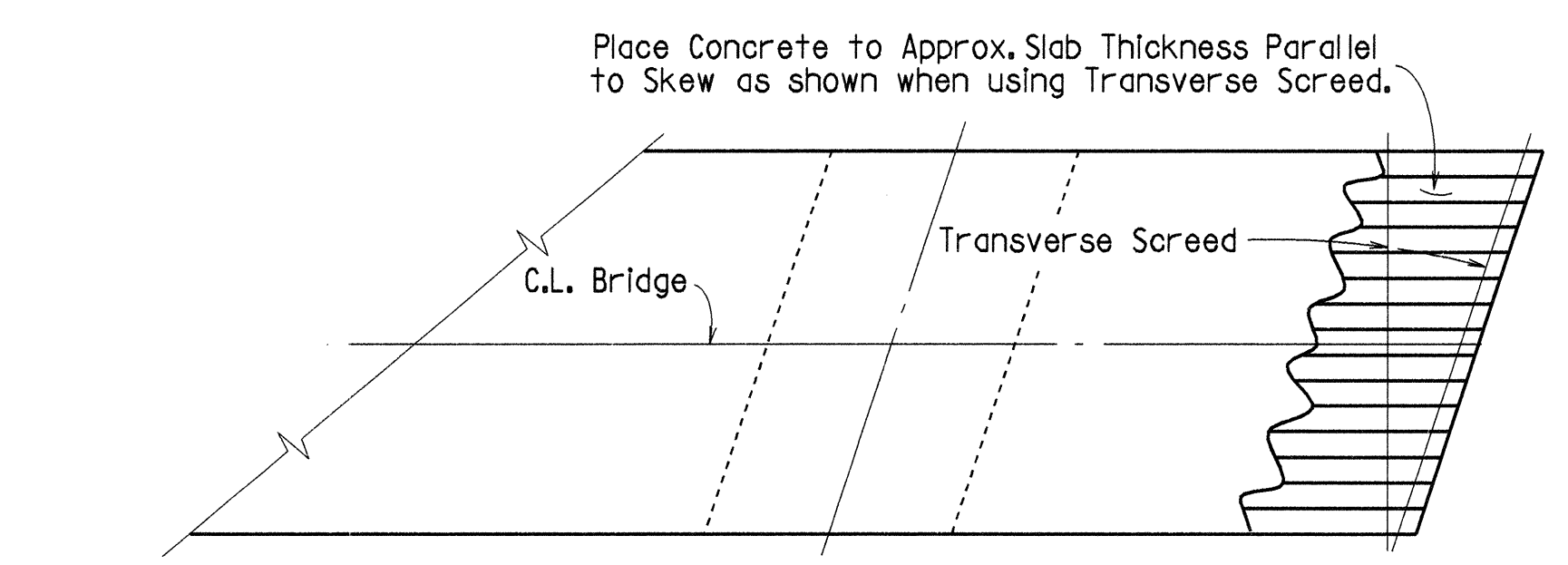
Mark	No. Req'd.	Length	A	B	Pin Dia.
SI301E	422	1490			Str.
SI302E	812	11 410			Str.
SI601E	209	13 400			Str.
SI602E	208	13 690			Str.
SI603E-SI609E	1 ea.	2129 to 11 490			Str.
SI610E-SI616E	2 ea.	2900 to 12 270			Str.
SI617E-SI631E	1 ea.	1830 to 12 250			Str.
SI632E-SI646E	2 ea.	2200 to 12 620			Str.
SI647E	438	1600			Str.
SI901E	209	13 400			Str.
SI902E-SI908E	1 ea.	2120 to 11 490			Str.
SI909E	2	1750			114
SI910E-SI924E	1 ea.	1830 to 12 250			Str.
SI925E	3	1840			114
SI926E	92	10 000			Str.
SI927E	92	18 000			Str.
S2201E	8	3910			150
SI648E	2	13 590			Str.
SI649E	2	14 600			Str.
PI301E	14	5430			Str.
PI302E	117	5660			Str.
PI303E	8	5530			Str.
PI304E	4	5770			Str.
PI305E	247	1750			50
PI306E	587	2265			50
PI307E	340	1810			50
PI308E	78	2110			50
PI309E	78	965			50
PI901E	10	5430			Str.
PI902E	50	5660			Str.
PI903E	5	5770			Str.



REINFORCING PLAN



Note: All longitudinal lines and longitudinal reinforcing steel shall be placed on curves concentric with C.L. Construction. All transverse reinforcing steel shall be placed on radial lines and shall be measured along C.L. Construction.



CONCRETE PLACEMENT PROCEDURE

Note: At the Contractor's Option, the Transverse Screenshot may be placed parallel to the skew or perpendicular to C.L. Bridge.

For General Notes, see dwg. no. 39419
For details of Slab Joint Detail, see dwg. 39411

All dimensions are in millimeters (mm) unless otherwise noted.

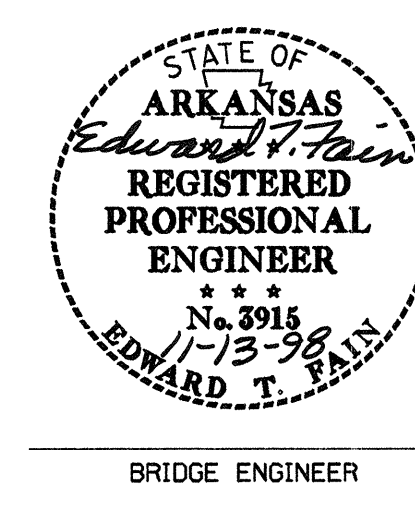
SHEET 1 OF 2

DETAILS OF 75M CONTINUOUS COMPOSITE PLATE GIRDER UNIT (UNIT 2) BEAR CREEK

ROUTE SEC. ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: LM DATE: 6-23-98
CHECKED BY: DHP DATE: 10-23-98 SCALE: 1:100
DESIGNED BY: JAC DATE: 4-20-98
BRIDGE NO. 06750 DRAWING NO. 39413



BRIDGE ENGINEER

MICROFILMED
DEC 17 1998

B09829.s2

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		009829	47	131
				06750		75M UNIT		39414

Note: Girders are curved and concentric to C.L. Construction.
All diaphragms (except as noted) are on radial lines and spaced along C.L. Construction.

Note: Girders are curved and concentric to CL Construction.
All diaphragms (except as noted) are on radial lines.

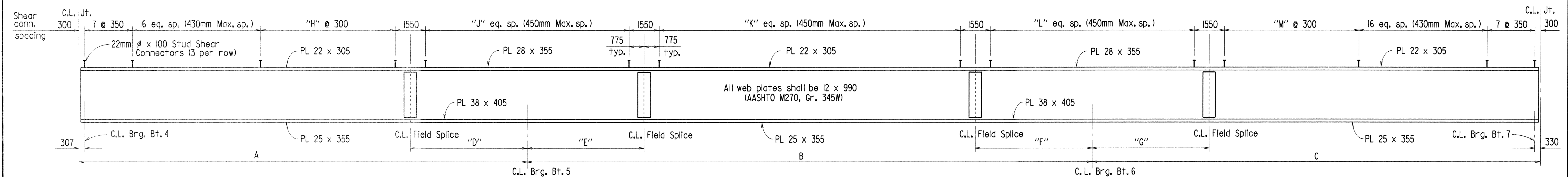
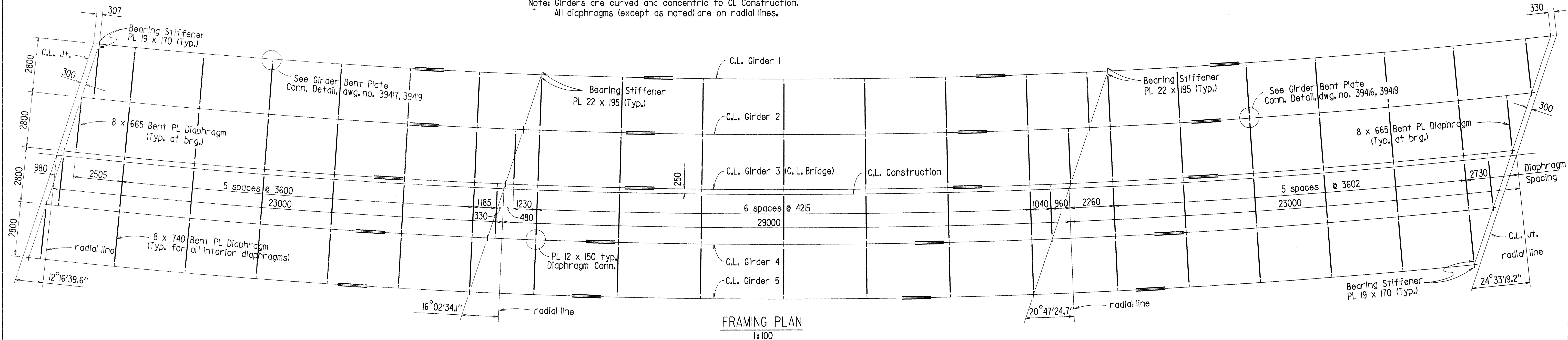
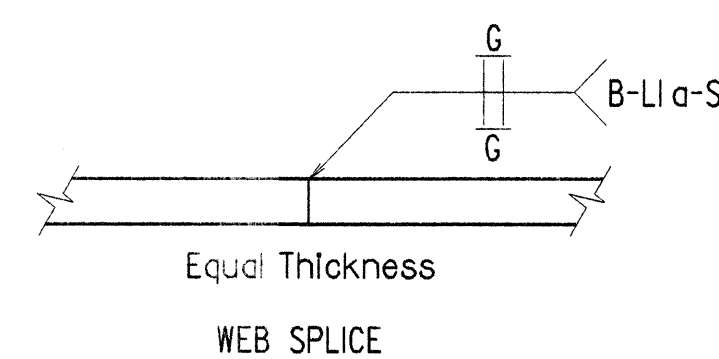
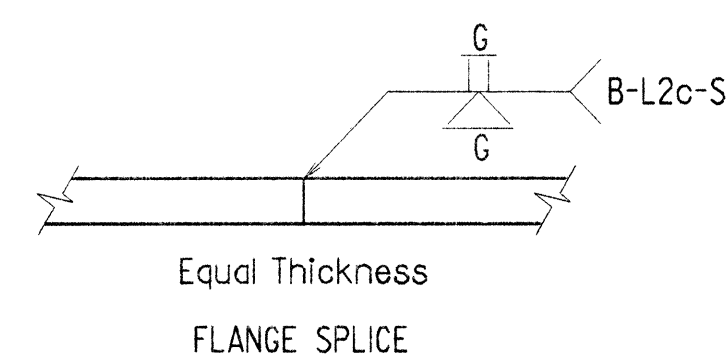
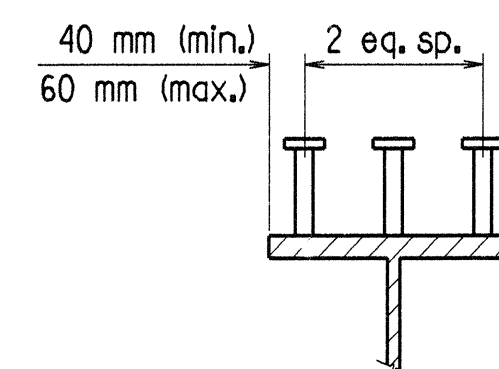


TABLE OF GIRDER VARIABLES

Girder No.	A	B	C	D	E	F	G	H	J	K	L	M
1	23025	29056	23069	5750	6000	6000	6000	24	24	45	24	23
2	23013	29029	23036	5100	6000	6000	6000	26	22	45	24	23
3	23001	29002	23003	6000	6900	5300	6800	23	26	44	25	21
4	22989	28977	22971	6000	5800	6300	6000	23	24	45	25	23
5	22978	28952	22940	6000	6000	6000	6000	23	24	45	24	23



DETAILS OF WELDED SPLICES
No Scale



SHEAR CONNECTOR DETAIL
No Scale

Stud Shear Connectors shall be 22 mm ϕ x 100 mm long, granular flux filled, solid fluxed or equal, and automatically end welded to the girder flange in accordance with the recommendations of the Manufacturer. 20 mm ϕ studs may be used in place of the 22 mm ϕ studs shown, at the ratio of 1.36:1 - 20 mm ϕ studs in place of one 22 mm ϕ stud. 22 mm ϕ studs will be used as basis for measurement of structural steel in shear connectors. Maximum stud spacing = 600 mm.

For General Notes, see dwg. no. 39419
For Splice Details, see dwg. no. 39412

TABLE OF WELD

Material Thickness of Thicker Part Joined (Inches)	Minimum Size of Fillet Weld (Inches)	Single Pass Weld Must Be Used
To 20mm Inclusive	6mm	
Over 20mm	8mm	

NOTE: When a fillet weld size, as shown on the plans, is larger than the minimum, the first pass shall be that specified for minimum size of fillet weld.

All dimensions are in millimeters (mm) unless otherwise noted.

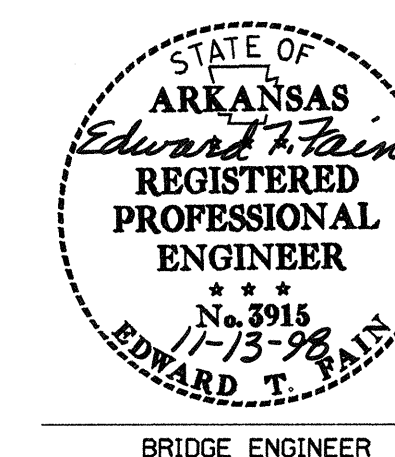
SHEET 2 OF 2

DETAILS OF 75M CONTINUOUS (UNIT 2)
COMPOSITE PLATE GIRDER UNIT
BEAR CREEK

ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: LM DATE: 8-5-98
CHECKED BY: DHP DATE: 10-23-98
DESIGNED BY: JAC DATE: 4-20-98
BRIDGE NO. 06750 DRAWING NO. 39414



BRIDGE ENGINEER



DEC 17 1998

009829-52