

CONTRACT NO. 8-11979

INDEX					
PROJECT	STRUCTURE	TYPE	SPAN	OVER	STATION
ID-FR-65-5 (52)133	267-06-4294A	DECK RECONSTRUCTION AND OVERLAY CONTIGUOUS REINFORCED CONCRETE GIRDER BRIDGE	4 SPANS 1 @ 38'-0" 2 @ 65'-0" 1 @ 38'-0"	INTERSTATE 65	C 10+00 LINE "S-2-E" REV.
SHEET NO.	SHEET DESIGNATION	SUBJECT			F.H.W.A. APPROVAL
1		TITLE AND INDEX			
2		TRAFFIC MAINTENANCE DETAILS			
3	(D1)	GENERAL PLAN			
4	(D2)	DETAILS			
5	(D3)	IMPACT ATTENUATOR SAND BARREL ARRAY & FAD			
6	(D4)	BARRIER RAISING TYPE "X1" DETAILS			
7		BRIDGE ESTIMATE OF QUANTITIES			

STATE OF INDIANA  
INDIANA STATE HIGHWAY COMMISSION

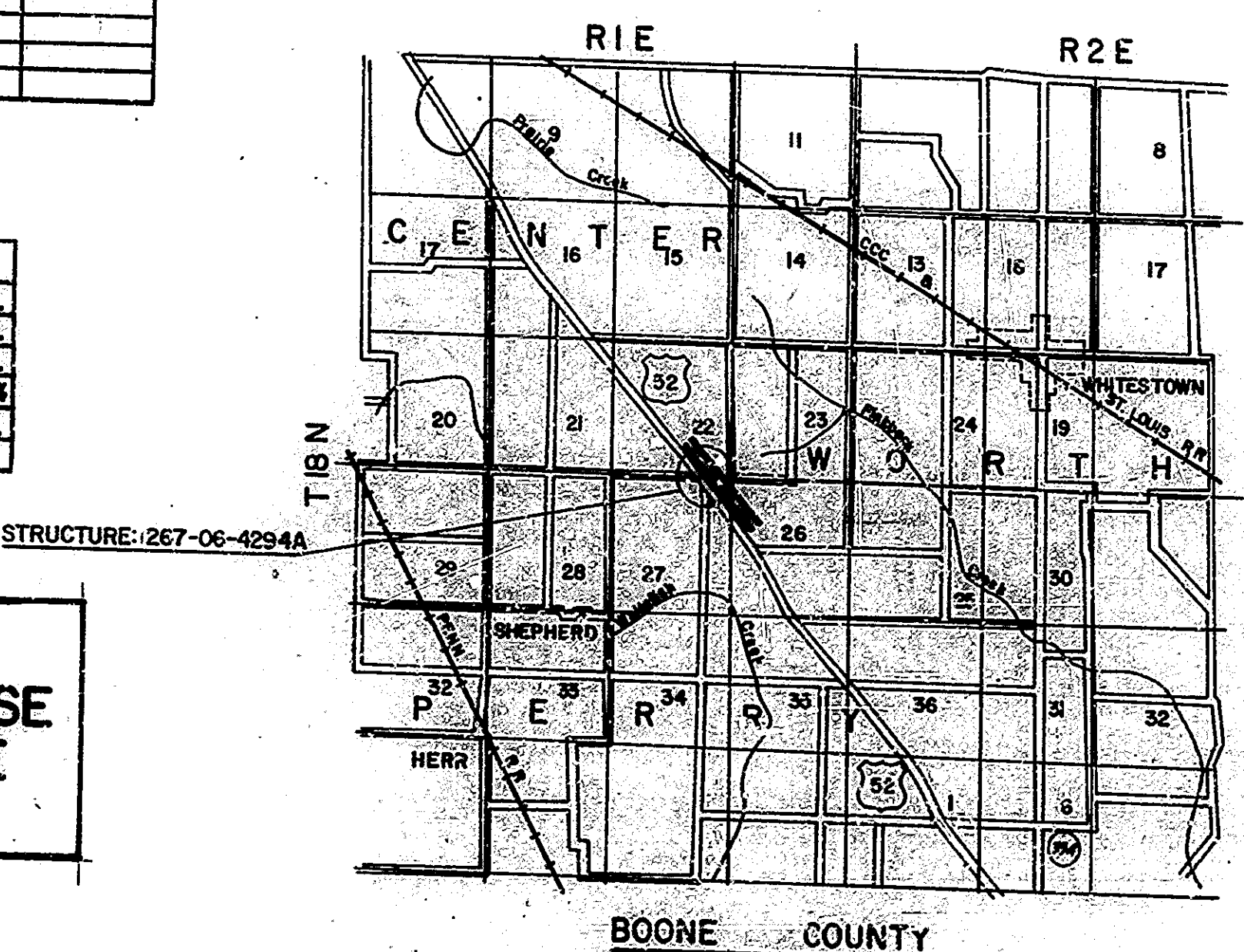
# BRIDGE PLANS FOR SPANS OVER 20 FEET ON STATE ROAD NO. PROJECT NO. ID-FR-65-5(52)133

BEGINNING AT A POINT 362 FEET SOUTHWEST OF THE NORTH LINE OF SECTION 27, T.18N, R.1E AND RUNNING IN A SOUTHWESTERLY DIRECTION 260 FEET TO A POINT 622 FEET SOUTHWEST OF THE NORTH LINE OF SECTION 27, T.18N, R.1E, BOONE COUNTY.

BRIDGE LENGTH: MI.  
ROADWAY LENGTH: MI.  
TOTAL LENGTH: MI.  
MAX. GRADE: %

TRAFFIC DATA		
A.D.T. (1975)		4500 V.P.D.
A.D.T. (19 PROJECTED)		V.P.D.
C.H.T. (19 PROJECTED)		V.P.D.
TRUCKS		D.H.V. \$ A.D.T. \$
DESIGN SPEED		M.P.H.
ACCESS CONTROL		

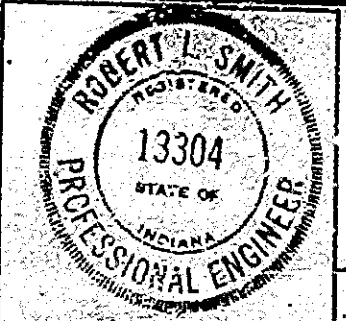
**NOTE:**  
WHENEVER I-FI-65-5(52)133 APPEARS IN THESE PLANS OR CONTRACT DOCUMENTS IT SHALL BE INTERPRETED AS ID-FR-65-5(52)133.



BUTLER, FAIRMAN & SEUFERT, INC.  
ENGINEERS  
CARMEL INDIANA

PROJECT NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	10-FR-65-5(52)133	1975	1	27

INDEX CONTINUED			
SHEET NO.	SHEET DESIGNATION	SUBJECT	DATE
9	BRIDGE STD. 01	ALUMINUM BRIDGE RAILING	10-11-73
9	BRIDGE STD. 02	ALUMINUM BRIDGE RAILING DETAILS	10-11-73
9	BRIDGE STD. 03	STEEL BRIDGE RAILING	10-11-73
9	BRIDGE STD. 04	STEEL BRIDGE RAILING DETAILS	10-11-73
9	BRIDGE STD. 05	RAILING CONNECTION DETAILS	10-11-73
9	BRIDGE STD. 06	RAILING CONNECTION DETAILS	10-11-73
10	BRIDGE STD. C1	MISCELLANEOUS DETAILS	6-15-77
10	BRIDGE STD. C2	MISCELLANEOUS DETAILS	6-15-77
10	BRIDGE STD. C3	MISCELLANEOUS DETAILS	6-15-77
10	BRIDGE STD. C4	MISCELLANEOUS DETAILS	6-15-77
10	BRIDGE STD. D	CURTAIN DETAILS: ROADWAY DRAINS	
10	BRIDGE STD. E	PRECAST CONCRETE TYPE 1 BEAMS	
10	BRIDGE STD. F	PRECAST CONCRETE TYPE 1 BEAMS	
10	BRIDGE STD. G	PRECAST CONCRETE BOX BEAMS	
10	BRIDGE STD. H	PRECAST CONCRETE BOX BEAMS WIDE	
10	BRIDGE STD. I	PRECAST CONCRETE BOX BEAMS WIDE	
10	BRIDGE STD. J	ELASTOMERIC BEARING PAD DETAILS	
10	BRIDGE STD. K	BRIDGE LIGHTING DETAILS	
10	BRIDGE STD. L	MISCELLANEOUS DETAILS	
10	BRIDGE STD. M	MISCELLANEOUS DETAILS	
10	BRIDGE STD. N	STANDARD TEMPORARY BRIDGE	
10	BRIDGE STD. O	STANDARD TEMPORARY BRIDGE	
10A	ROAD STD. SHEET A	STANDARD PAVEMENT JOINTS	11-29-76
10A	ROAD STD. SHEET B	STANDARD PAVEMENT JOINTS	11-29-76
10A	ROAD STD. SHEET C	MISCELLANEOUS STANDARDS	11-29-76
10A	ROAD STD. SHEET D	MISCELLANEOUS STANDARDS	11-29-76
10A	ROAD STD. SHEET E	MISCELLANEOUS STANDARDS	11-29-76
10A	ROAD STD. SHEET F	MISCELLANEOUS STANDARDS	11-29-76
10A	ROAD STD. SHEET G	MISCELLANEOUS STANDARDS	11-29-76
10A	ROAD STD. SHEET H	MISCELLANEOUS STANDARDS	11-29-76
10A	ROAD STD. SHEET I	MISCELLANEOUS STANDARDS	11-29-76
10A	ROAD STD. SHEET J	MISCELLANEOUS STANDARDS	11-29-76
10A	ROAD STD. SHEET K	MISCELLANEOUS STANDARDS	11-29-76
10A	ROAD STD. SHEET L	MISCELLANEOUS STANDARDS	11-29-76
10A	ROAD STD. SHEET M	MISCELLANEOUS STANDARDS	11-29-76
10A	ROAD STD. SHEET N	MISCELLANEOUS STANDARDS	11-29-76
10A	ROAD STD. SHEET O	MISCELLANEOUS STANDARDS	11-29-76
10A	ROAD STD. SHEET P	MISCELLANEOUS STANDARDS	11-29-76
10A	ROAD STD. SHEET Q	MISCELLANEOUS STANDARDS	11-29-76
10A	ROAD STD. SHEET R	MISCELLANEOUS STANDARDS	11-29-76
10A	ROAD STD. SHEET S	MISCELLANEOUS STANDARDS	11-29-76
10A	ROAD STD. SHEET T	MISCELLANEOUS STANDARDS	11-29-76
10A	ROAD STD. SHEET U	MISCELLANEOUS STANDARDS	11-29-76
10A	ROAD STD. SHEET V	MISCELLANEOUS STANDARDS	11-29-76
10A	ROAD STD. SHEET W	MISCELLANEOUS STANDARDS	11-29-76
10A	ROAD STD. SHEET X	MISCELLANEOUS STANDARDS	11-29-76
10A	ROAD STD. SHEET Y	MISCELLANEOUS STANDARDS	11-29-76
10A	ROAD STD. SHEET Z	MISCELLANEOUS STANDARDS	11-29-76



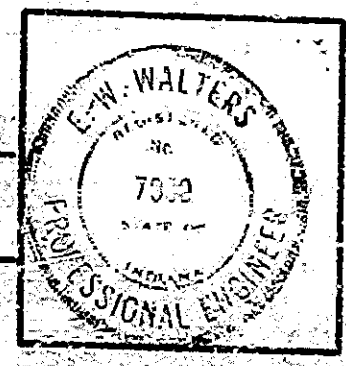
Robert L. Smith, Dec. 14, 1975

APPROVED 2-5-79

*G.K. Halloran*  
CHIEF HIGHWAY ENGINEER - INDIANA STATE HIGHWAY COMMISSION

FEDERAL HIGHWAY ADMINISTRATION  
DEPARTMENT OF TRANSPORTATION

APPROVED: \_\_\_\_\_  
DIVISION ADMINISTRATOR DATE

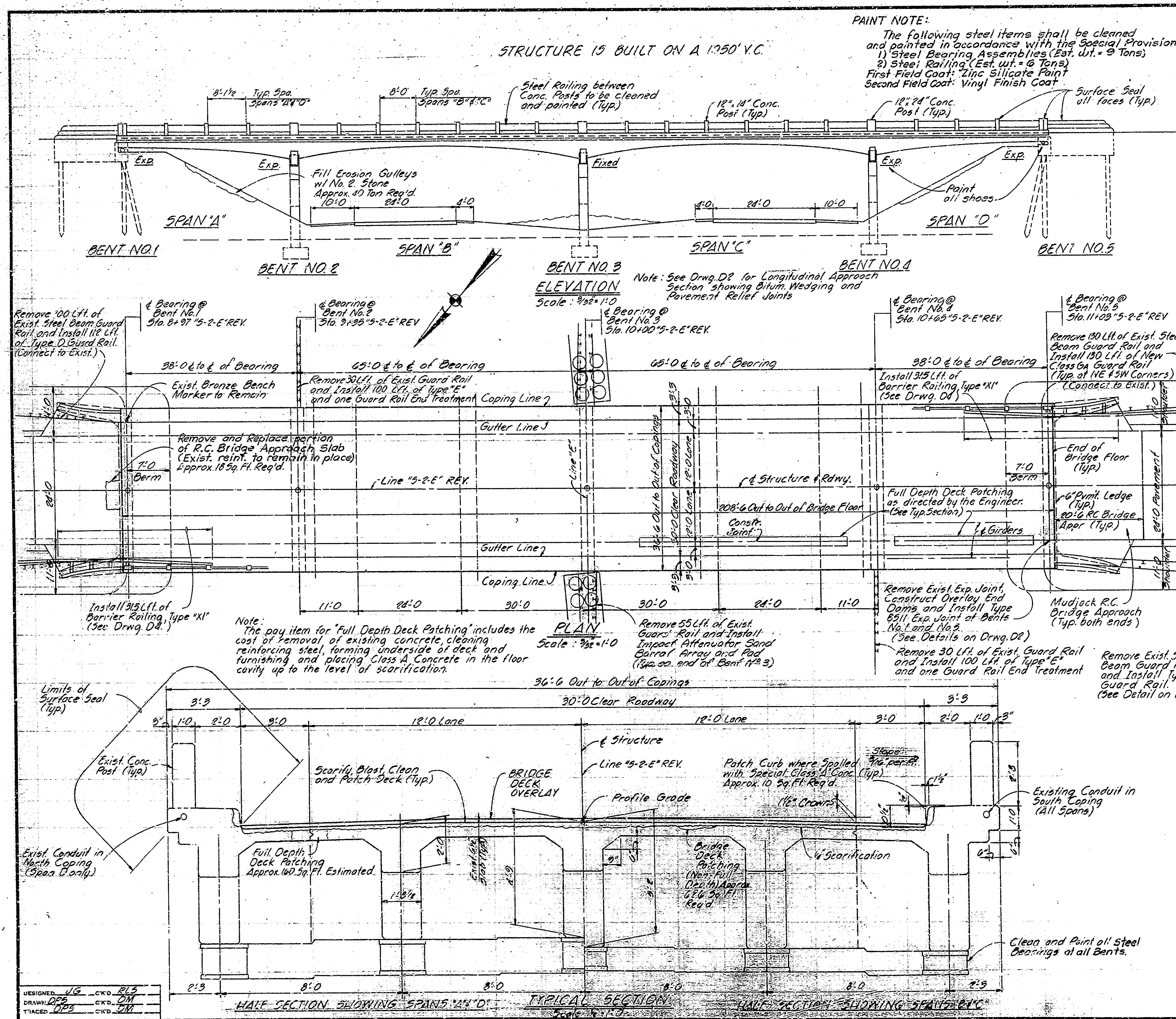


REVISIONS		REVISIONS	
DATE	SHEET NO.	DATE	SHEET NO.
2-15-79	1, 5, 12, 13, 14, 20 & 22		

INDIANA STATE HIGHWAY COMMISSION  
STANDARD SPECIFICATIONS DATED 1978  
TO BE USED WITH THESE PLANS

BRIDGE FILE: 267-06-4294A





STRUCTURE IS BUILT ON A 1350' Y.C.

**PAINT NOTE:**  
 The following steel items shall be cleaned and painted in accordance with the Special Provisions:  
 1) Steel Bearing Assemblies (Est. Wt. = 9 Tons)  
 2) Steel Railing (Est. Wt. = 6 Tons)  
 First Field Coat: Zinc Silicate Paint  
 Second Field Coat: Vinyl Finish Coat

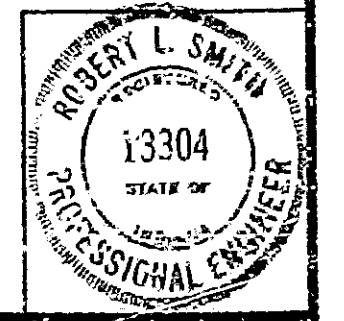
**GENERAL NOTES**  
 Plans for the existing structure are on file in the Central Office as Bridge File 267-E9-4294 and are available on request.  
 Where new work is to be fitted to old work, the Contractor shall check all dimensions and conditions in the field and report any errors or discrepancies to the Engineer and assume responsibility for their correctness and the fit of the new part to the old.  
 The hand chipping and cleaning of deteriorated deck areas shall be as directed by the Engineer. It is the intent of these plans that all such deteriorated concrete be removed and should there be any doubt as to the quality of the concrete removal shall continue until PERFECTLY SOUND CONCRETE is exposed. All existing non-full depth patches shall be removed.  
 Concrete in patches for deteriorated deck areas below scarified depth shall be Modified Portland Cement Concrete or Special Class "A" Concrete. See the Special Provisions.  
 For the composition of concrete in overlay dams see the Special Provisions.  
 All bituminous material required in this contract shall be included in the pay item "Bituminous Mixture for Approaches except Tack Coat" which shall be paid for as a separate item.  
 Seal all exposed concrete surfaces as noted on the plans with a penetrating epoxy sealer.  
 The length and quantity of bituminous wedging shown on the plans is based on the use of the Modified Portland Cement Concrete Overlay. See the Special Provisions.  
 Seal all joints and cracks in the approach pavement with a hot poured joint sealer, before placing bituminous wedges.  
 Removed guard rail shall remain the property of the State.

**CONSTRUCTION PROCEDURE**  
 Work shall be completed on North Half of Structure (Phase I) and then South Half of Structure (Phase II) as shown on Sht. 2.  
 Scarify the entire bridge floor to a depth of 1/4 inch. Scarify additional areas of the bridge floor an additional 1/4 inch as directed by the Engineer. Remove scarified dust.  
 Remove all deteriorated concrete below the level of scarification, around exposed reinforcing, along curbs inaccessible to scarifying equipment and as required for the construction of the overlay dams.  
 Pneumatic hammers, 30 lbs. maximum weight, to be used for removals.  
 Blast and clean all removal and scarified deck areas. Construct overlay dams.  
 Place the Bridge Deck Patching and Overlay as shown on the plans and in accordance with the Special Provisions. Install expansion joint seals.  
 Clean and seal exposed concrete surfaces as noted on the plans with a penetrating epoxy sealer.  
 Place the bituminous wedge and level courses and construct all other work shown on the plans including the removal and installation of guard rail.  
 The sequence of above notes does not necessarily indicate the sequence of operations.

**MATERIAL NOTES**  
**BITUMINOUS WIDENING:** 900 Lbs./50 Yd. Bituminous Base, Type No. 5D.  
**BRIDGE DECK OVERLAY:** 1 1/2" Modified Portland Cement Concrete or 2 1/2" Dense Portland Cement Concrete (1 1/2" or 2 1/2" respectively above the original surface)  
**BITUMINOUS WEDGE:** 400 Lbs./50 Yd. Bituminous Surface, U.A.C. Type No. 11B, over Variable Depth Bituminous Binder.  
**PAVEMENT RELIEF JOINT:** 110 Lbs./5 Yd. Bituminous Surface, U.A.C. Type No. 11B, over 1870 Lbs./5 Yd. Bituminous Base

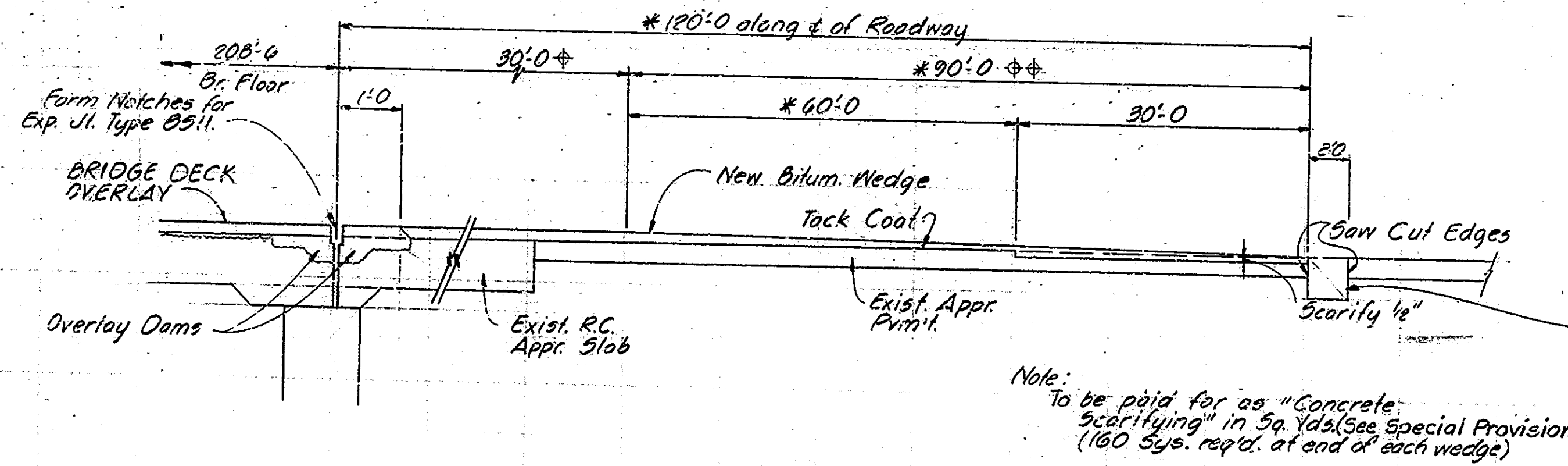
Note: See Drwg. D2 for Standard Drawings req'd.  
**GENERAL PLAN**  
**DECK RECONSTRUCTION AND OVERLAY**  
**CONTINUOUS REINFORCED CONCRETE GIRDER BRIDGE**  
 4 SPANS, 1 @ 38'-0", 2 @ 65'-0", 1 @ 38'-0", 20'-0" CLEAR ROADWAY  
 2'-2" SIDEWALKS, NO. 3 REIN. ON 5'-0" OVER INTERSTATE 45  
**INDIANA STATE HIGHWAY COMMISSION**  
 BOONE COUNTY  
 SCALE: AS NOTED DATE: Dec 14, 1975  
 SUBMITTED FOR APPROVAL: Robert L. Smith  
 DRAWING: D1 OF 4 SHEET: 3 OF 27  
 PROJECT: I-FI-65-5(52)133  
 CONTRACT NO. B-11975  
 BRIDGE FILE: 267-06-4294A

DESIGNED: JG	CHKD: RL5
DRAWN: DDB	CHKD: DM
TRACED: DDB	CHKD: DM



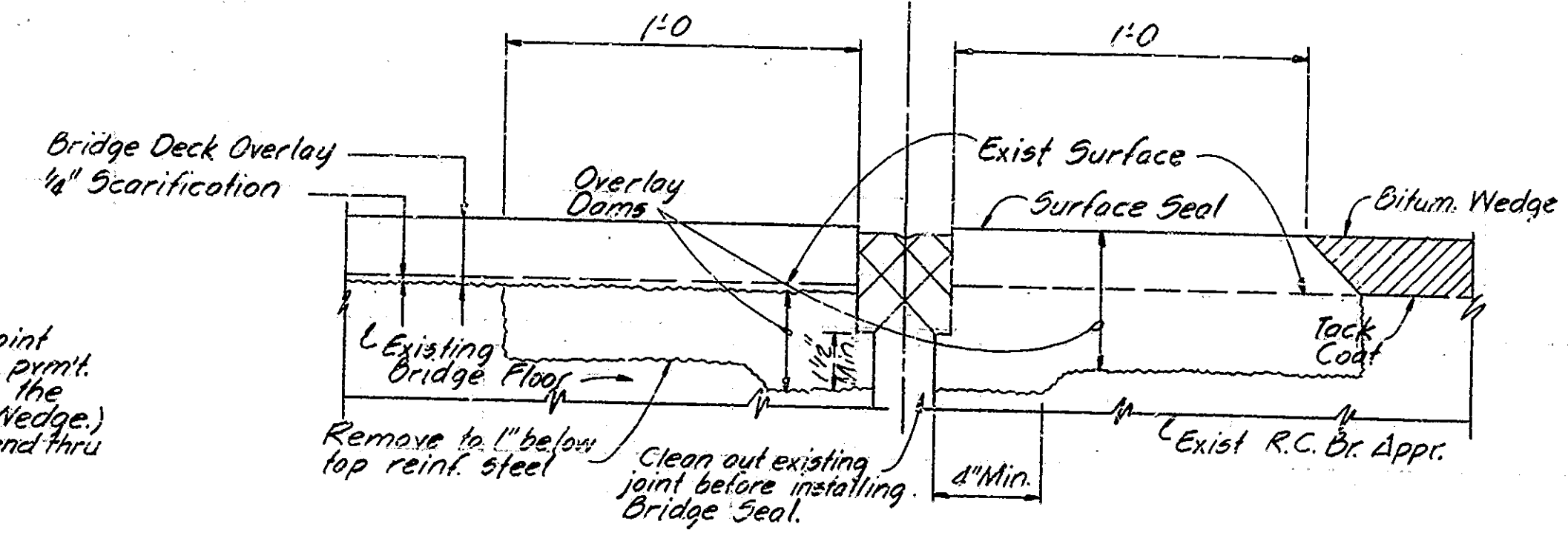
\* Dimensions req'd with 1 1/2" Bridge Deck Overlay.  
(See Special Provisions if 3/4" Bridge Deck Overlay is used.)

Top of wedge shall be a continuation of bridge deck profile.  
Top of wedge shall be tapered uniformly to meet existing pavement.

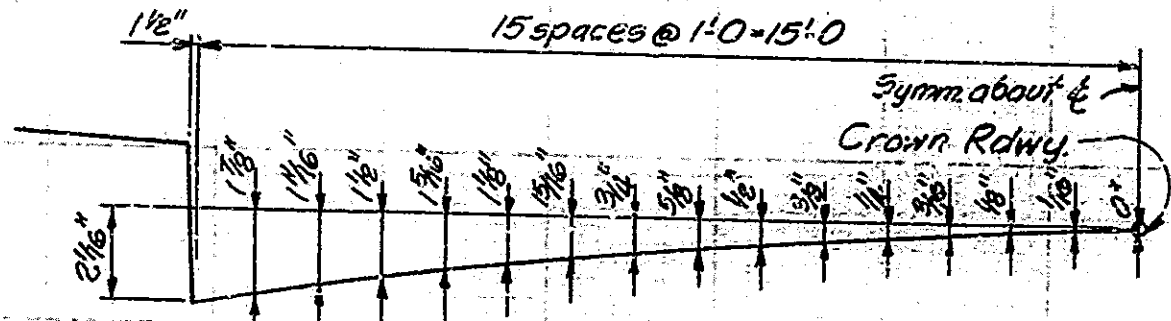


Note: To be paid for as "Concrete Scarifying" in Sp. Yds. (See Special Provisions) (160 Sys. req'd. at end of each wedge)

Permit Relief Joint (Place at first permit joint outside the limits of the wedge.) Joint shall extend thru Lip Gutter.

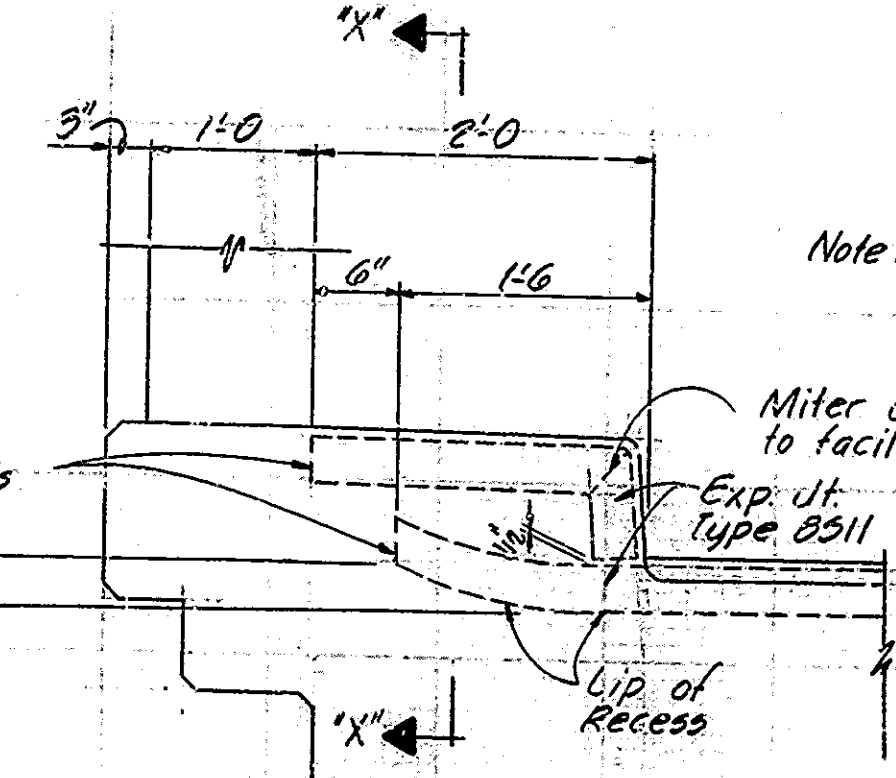


TYPICAL SECTION AT BENTS NO. 1 & NO. 5  
Scale: 3"=1'-0"



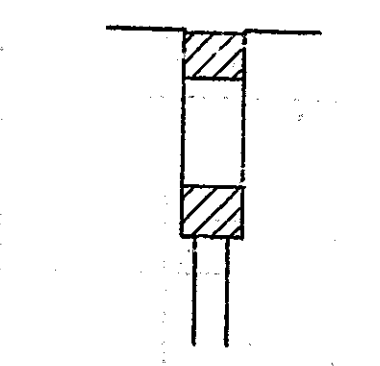
CROWN OFFSETS  
Not to Scale

TYPICAL APPROACH SECTION  
Not to Scale



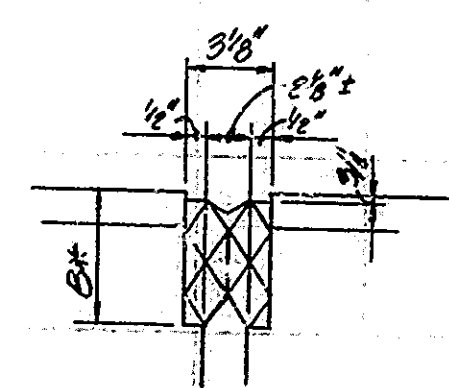
CURB SECTION AT BENTS NO. 1 & NO. 5  
Scale: 1"=1'-0"

Note: Reconstruct curb to accommodate Bridge Seal. Cost to be included in the cost of Exp. Jt. Type B511. Miter underside of seal to facilitate curb fit.

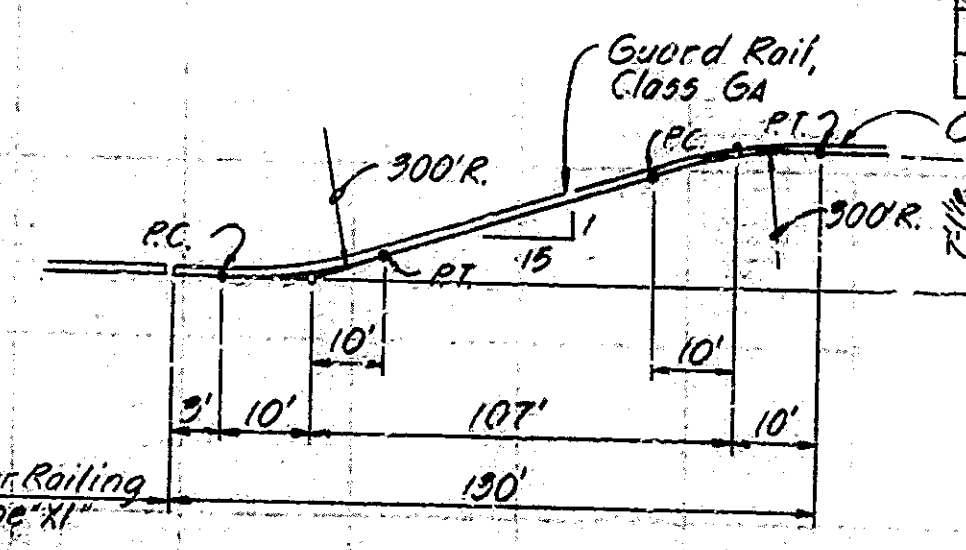
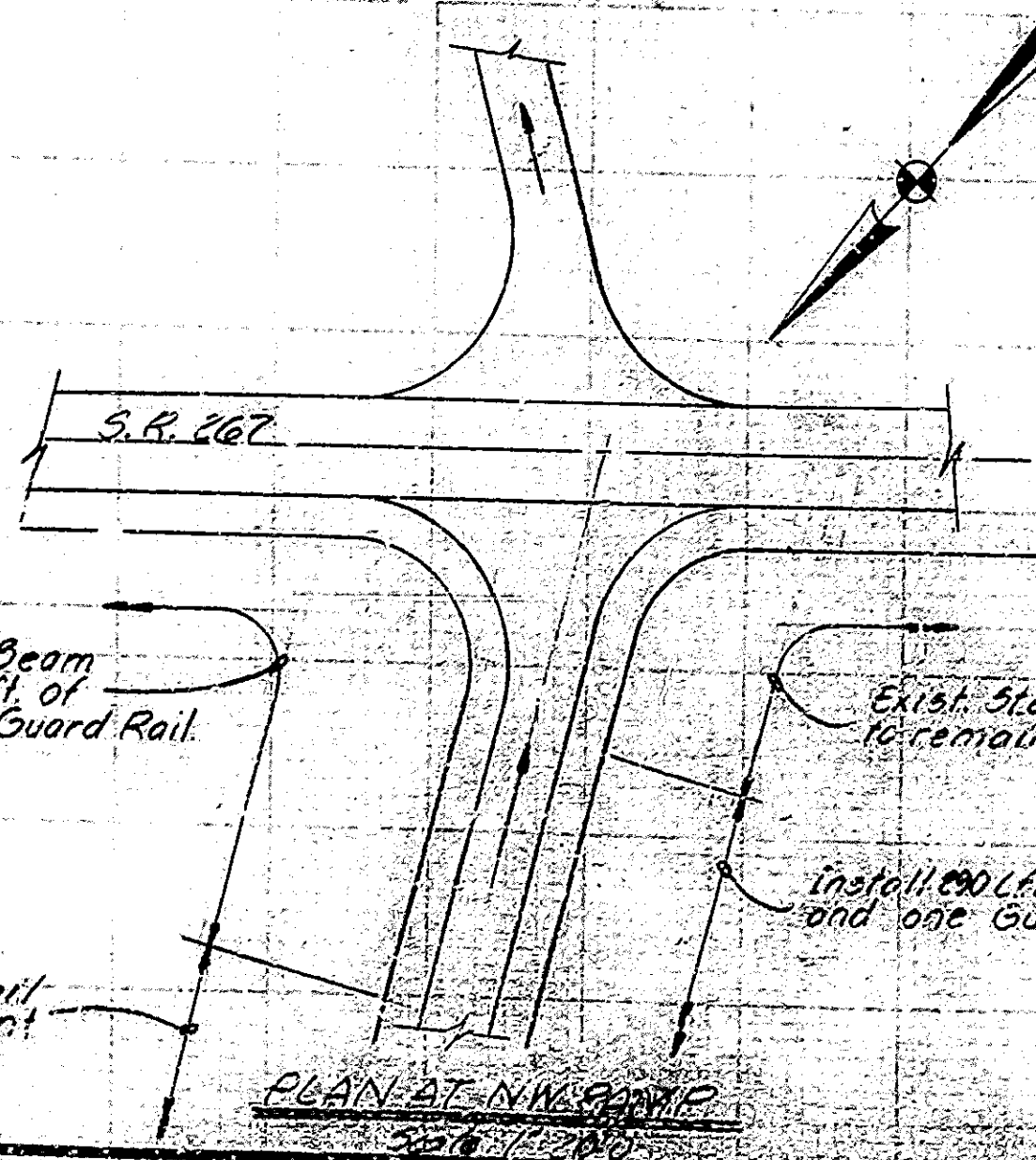


SECTION "X-X"  
Not to Scale

\* To be determined in the field (See the Special Provisions.)  
EXP. JT. TYPE B511 DETAIL



STANDARDS		
BRIDGE	ROAD	DESCRIPTION
	GR4	Guard Rail, Class Ga
	GR6	Steel Beam Guard Rail, Class Da
	GR2	Guard Rail, Class Ba & Es
	GR3	Guard Rail, Class Ba, Bb, Ea, & Es
	GR5	Aluminum Guard Rail Details
	GR6	Steel Tube Guard Rail Details
	GR7	Guard Rail Pier Connection Details
	GR10	Guard Rail, Buried Ends
	C&E	Temporary Concrete Barrier
	Del. 201.1	Standard Detour Signs
	Del. 201.2A	Standard Detour Signs
	Del. 201.3	Standard Detour Signs
	Del. 201.4	Standard Detour Signs
	Del. 201.5	Sign Design Details
	Del. 201.6	Traffic Sign Details
	GR10A	Breakaway Cable Terminal, Type A
BRI		Aluminum Bridge Railing
BR2		Aluminum Bridge Railing Details
CI		Reinforcing Bar, 1/2"
	GR9	Guard Rail, Class Da



GUARD RAIL TRANSITION AT NE AND SW CORNER  
Not to Scale

Remove 200 Lft. of Exist. Steel Beam Guard Rail and Install 100 Lft. of Type D and 112 Lft. of Type B Guard Rail.

Exist. Steel Beam Guard Rail to remain.

Install 200 Lft. of Type B Guard Rail and one Guard Rail End Treatment

Install 200 Lft. of Type B Guard Rail and one Guard Rail End Treatment

Note: See Orng. D1 for General Notes, Material Notes and Construction Procedure Notes.

DETAILS

INDIANA STATE HIGHWAY COMMISSION  
BOONE COUNTY

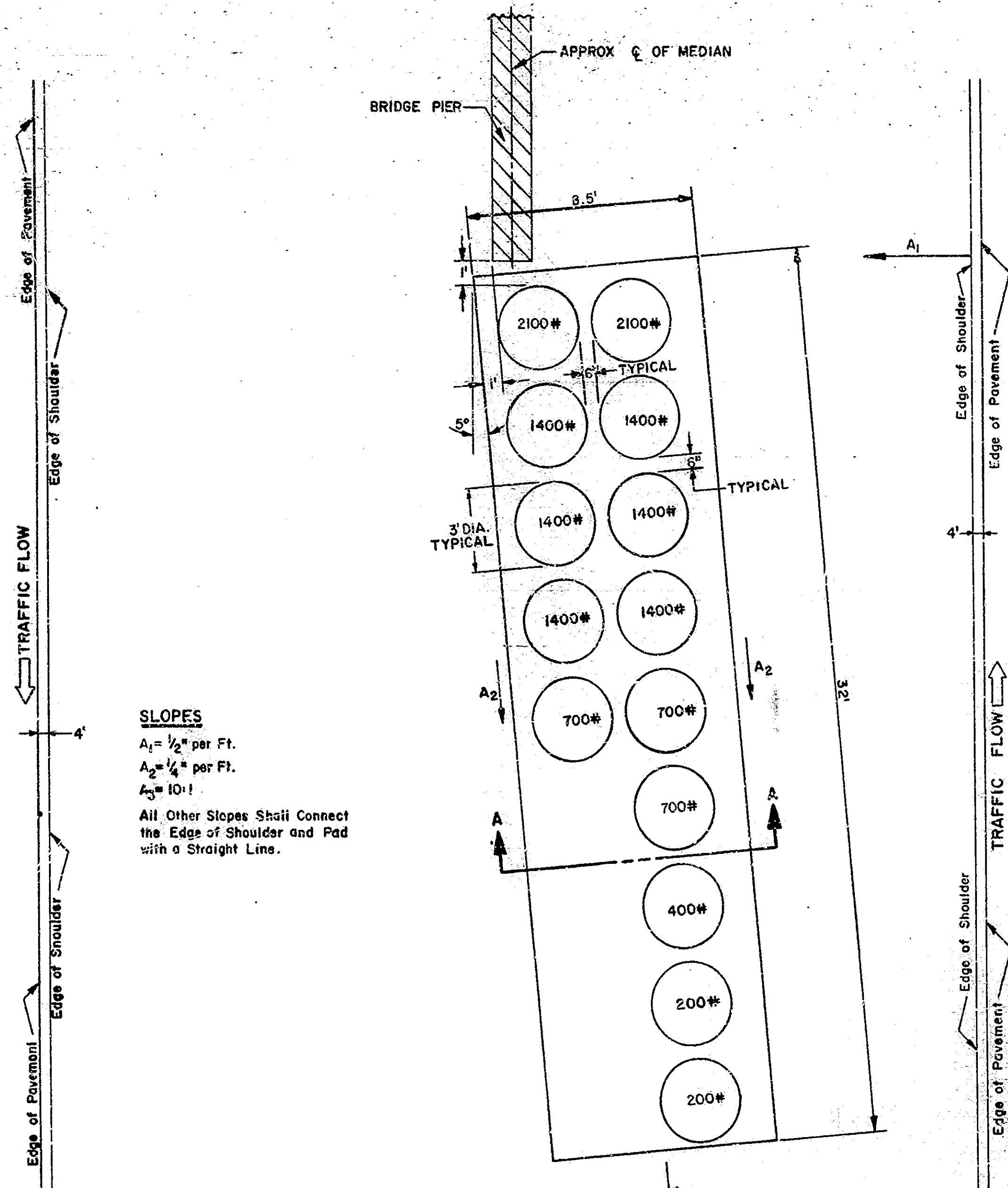
SCALE: AS NOTED DATE: Dec. 14, 1978

SUBMITTED FOR APPROVAL: *Robert E. Smith*

DRAWING: D2 OF 4 SHEET: 4 OF 27  
PROJECT: I-75-5(52)133  
CONTRACT NO. B-11979  
BRIDGE FILE: 267-00-4221A



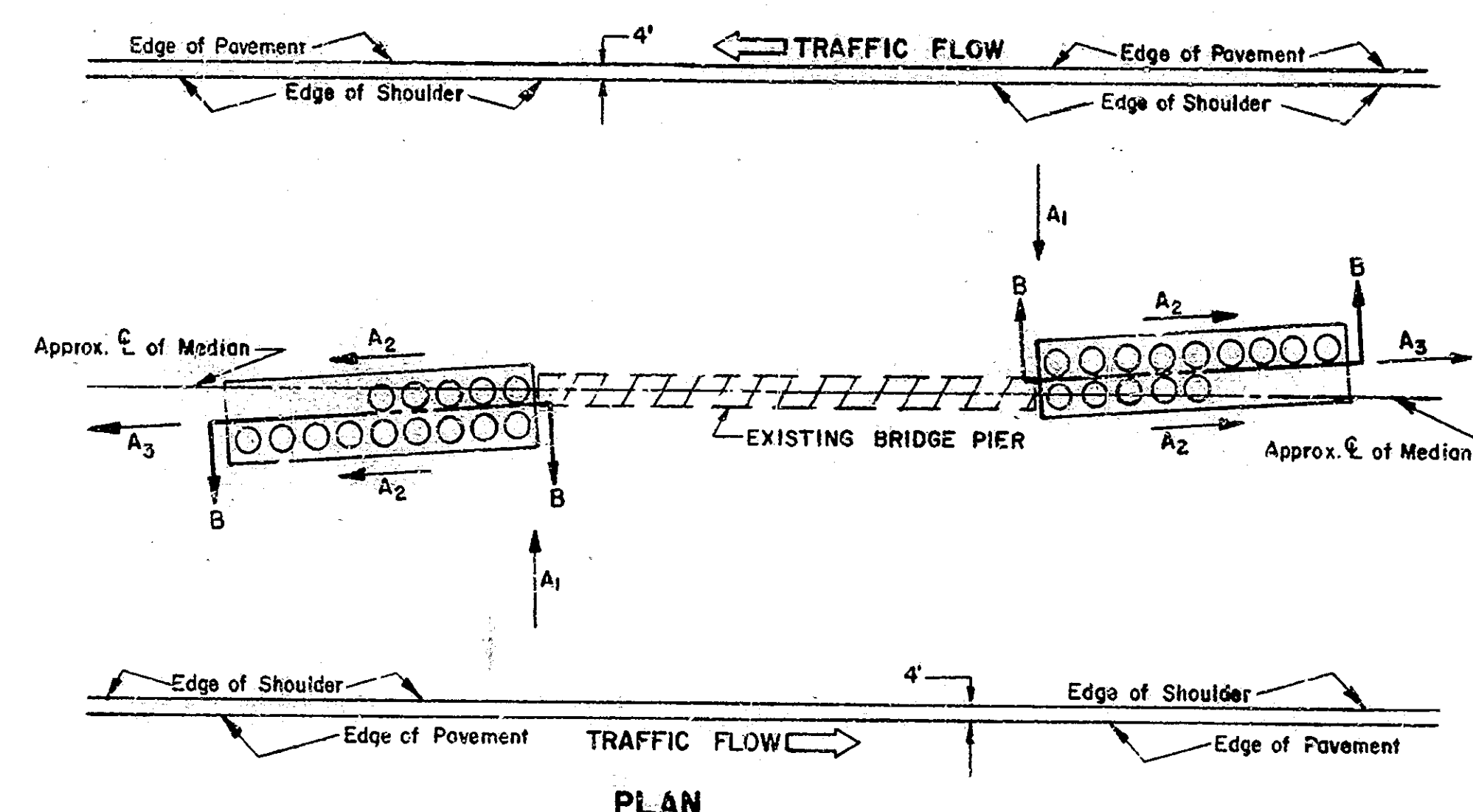
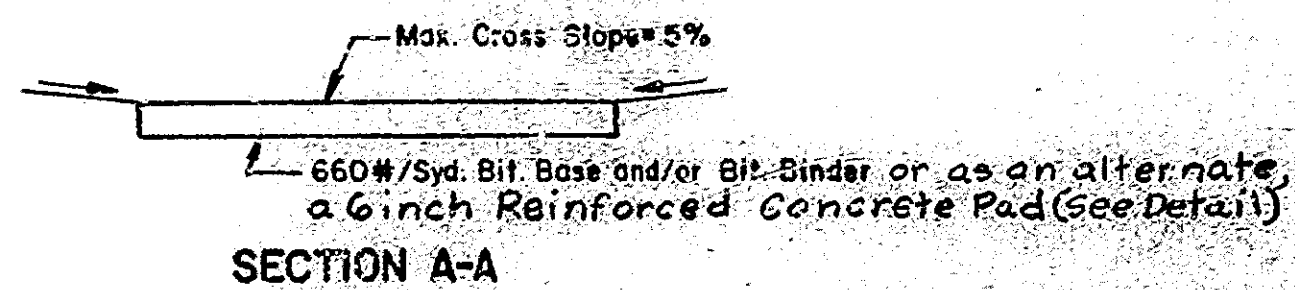
DESIGNED	UG	CHKD	RLS
DRAWN	OPS	CHKD	DLR
TRACED	OPS	CHKD	



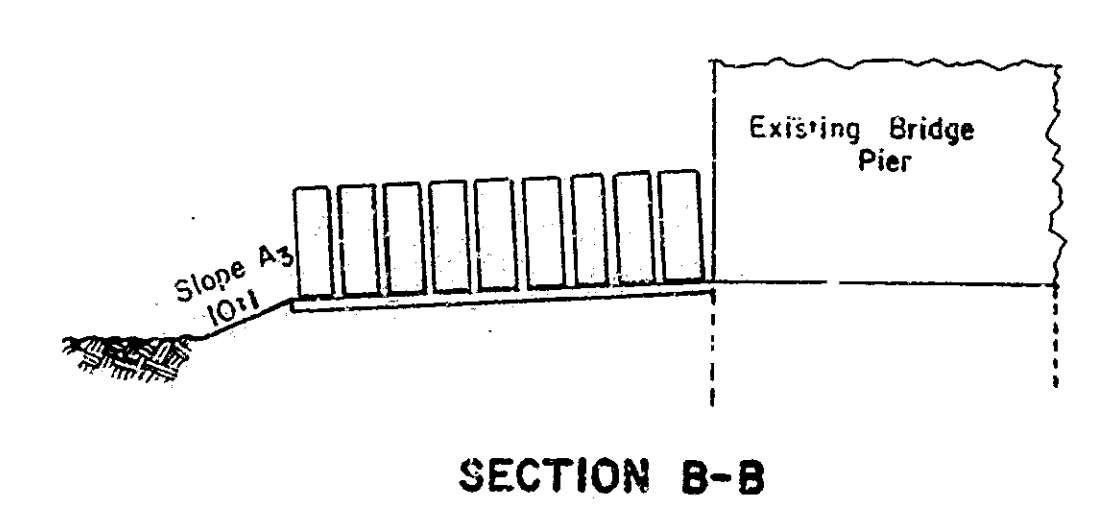
**SLOPES**  
 $A_1 = 1/2$ " per Ft.  
 $A_2 = 1/4$ " per Ft.  
 $A_3 = 10:1$   
 All Other Slopes Shall Connect the Edge of Shoulder and Pad with a Straight Line.

**DETAIL OF IMPACT ATTENUATOR**

SCALE - 1" = 3'-0"

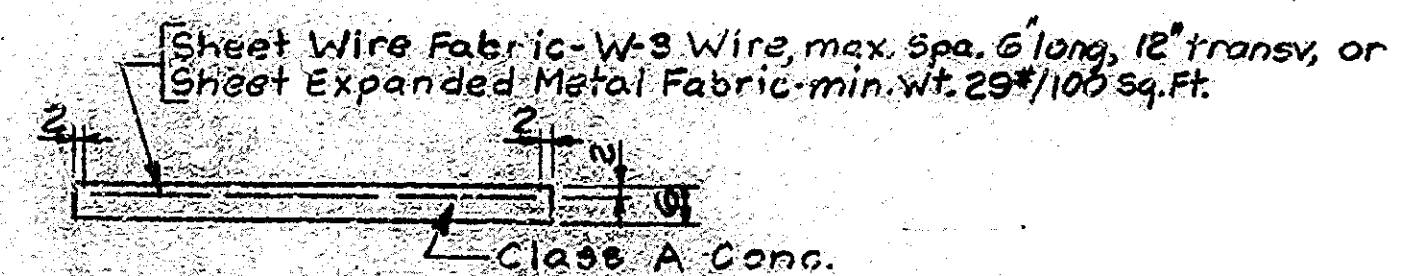


**PLAN**



**SECTION B-B**

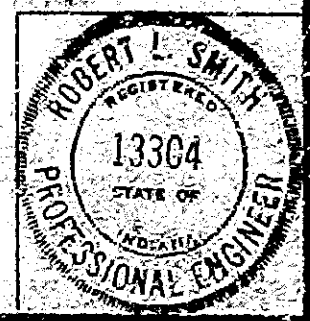
**SLOPES**  
 $A_1 = 1/2$ " per Ft.  
 $A_2 = 1/4$ " per Ft.  
 $A_3 = 10:1$   
 All Other Slopes Shall Connect the Edge of Shoulder and Pad with a Straight Line.



**SECTION AA (Concrete Pad)**

**IMPACT ATTENUATOR SAND BARREL ARRAY AND PAD**  
**INDIANA STATE HIGHWAY COMMISSION**  
 BOONE COUNTY

SCALE: -  
 DATE: Dec. 14, 1978  
 SUBMITTED FOR APPROVAL: Robert L. Smith  
 DRAWING: 03 OF 6 SHEET: 3 OF 27  
 PROJECT: I.F.I-G-3-5(52)133  
 CONTRACT NO. 25-11979  
 BRIDGE FILE: 267-06-4294A



DESIGNED: JB	CHKD: RLS
DRAWN: LAR	CHKD: DM
TRACED: _____	CHKD: _____

Rev. 2-15-79: Alternate Conc. Pad Added.



