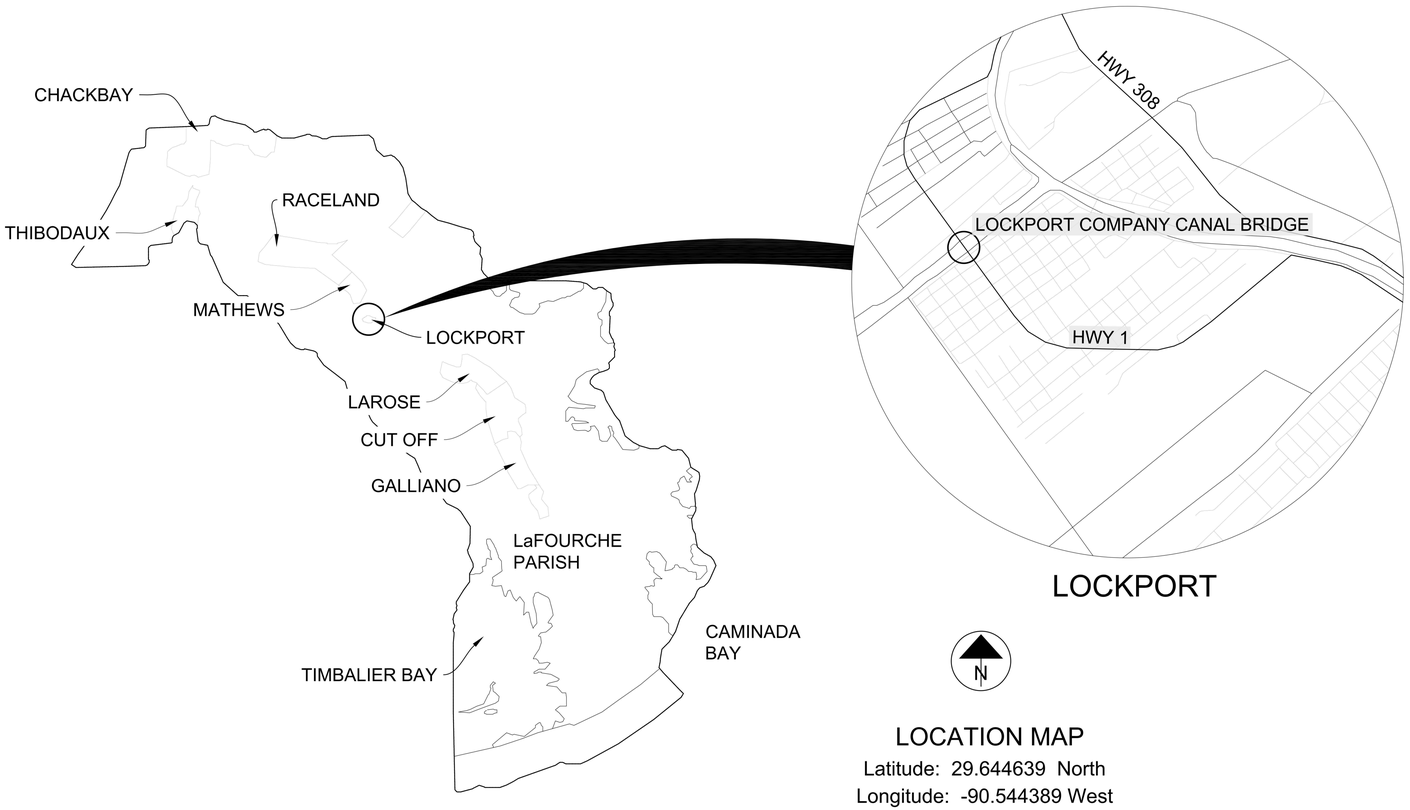
LOCKPORT COMPANY CANAL BRIDGE



LOCATION MAP
Latitude: 29.644639 North
Longitude: -90.544389 West

The Lockport Company Canal Bridge (Bridge Recall No. 000930), designed by the Louisiana Department of Highways and constructed in 1959, is significant as an intact representative example of a tower-drive vertical lift bridge, a subtype within the vertical lift bridge subtype. The bridge's variation is demonstrated in the location of a separate motor and drive mechanism on each tower. The motor and drive mechanisms power the two sheaves on each tower. The Lockport Company Canal Bridge was determined eligible for listing in the National Register of Historic Places in 2013 under *Criterion C: Design/Engineering* at the state level of significance.

This documentation was prepared to fulfill Stipulation IX.5 of the Programmatic Agreement Among the Federal Highway Administration, the Louisiana Department of Transportation and Development, the Advisory Council on Historic Preservation, and the Louisiana State Historic Preservation Officer Regarding Management of Historic Bridges in Louisiana, dated August 18, 2015 and executed September 21, 2015. The Louisiana Department of Transportation and Development (LADOTD) retained Mead & Hunt to prepare this document. It was prepared by Timothy S. Smith, Cultural Resource Specialist, and Justin Duffie, Design Technician, of Mead & Hunt. Dietrich Floeter completed the photography.

The measured drawings were prepared based on a site visit to the bridge to confirm as-built plans and perform selective hand measuring in the field to verify measurements.

DELINEATED BY: J. DUFFIE, MEAD & HUNT, INC., 2017

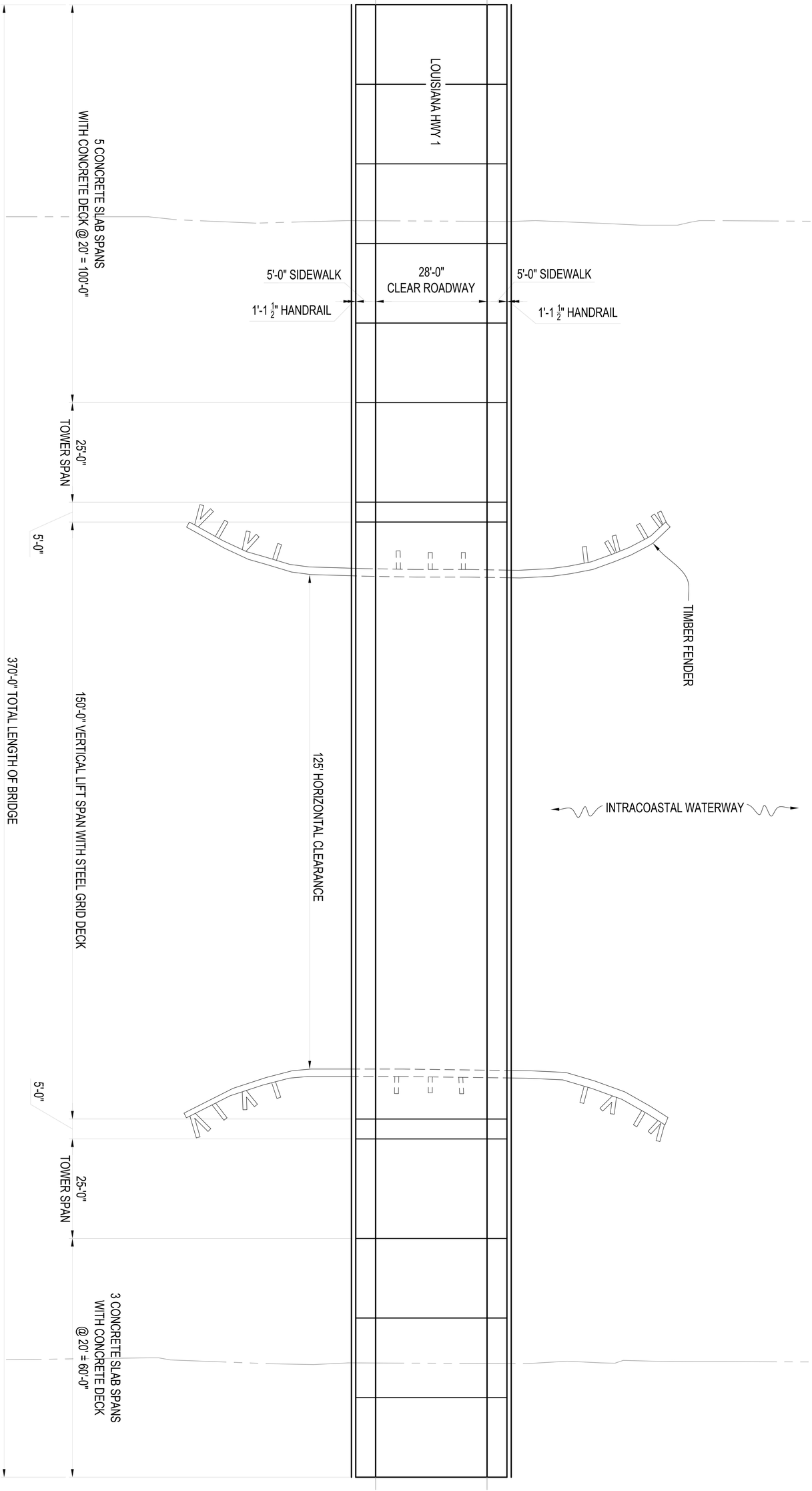
LOUISIANA HISTORIC BRIDGE INVENTORY
HISTORIC AMERICAN ENGINEERING RECORD
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

LOCKPORT COMPANY CANAL BRIDGE
CARRIES LOUISIANA HIGHWAY 1 (LA 1) OVER LOCKPORT CANAL
LAFOURCHE PARISH
LOCKPORT
LOUISIANA

SHEET 1 OF 4

HISTORIC AMERICAN ENGINEERING RECORD
LA-32

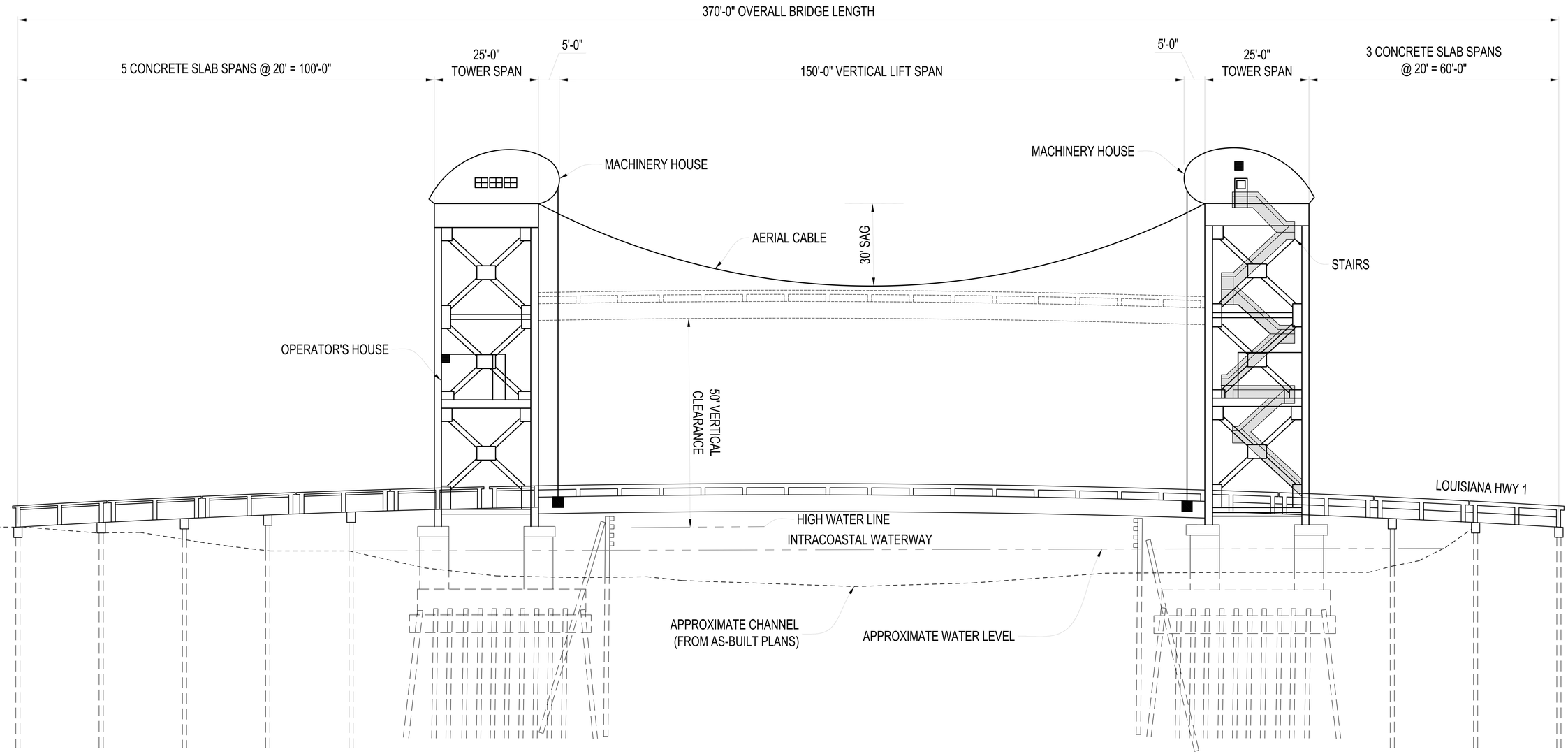
LIBRARY OF CONGRESS INDEX NUMBER



PLAN VIEW

DELINEATED BY: J. DUFFIE, MEAD & HUNT, INC., 2017

LOUISIANA HISTORIC BRIDGE INVENTORY NATIONAL PARK SERVICE UNITED STATES DEPARTMENT OF THE INTERIOR	LOCKPORT	LOCKPORT COMPANY CANAL BRIDGE CARRIES LOUISIANA HIGHWAY 1 (LA 1) OVER LOCKPORT CANAL LAFOURCHE PARISH	LOUISIANA	SHEET 2 OF 4	HISTORIC AMERICAN ENGINEERING RECORD LA-32	LIBRARY OF CONGRESS INDEX NUMBER



ELEVATION - SOUTHWEST

0 1/2' 1' 2'

DELINEATED BY: J. DUFFIE, MEAD & HUNT, INC., 2017

LOUISIANA HISTORIC BRIDGE INVENTORY
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

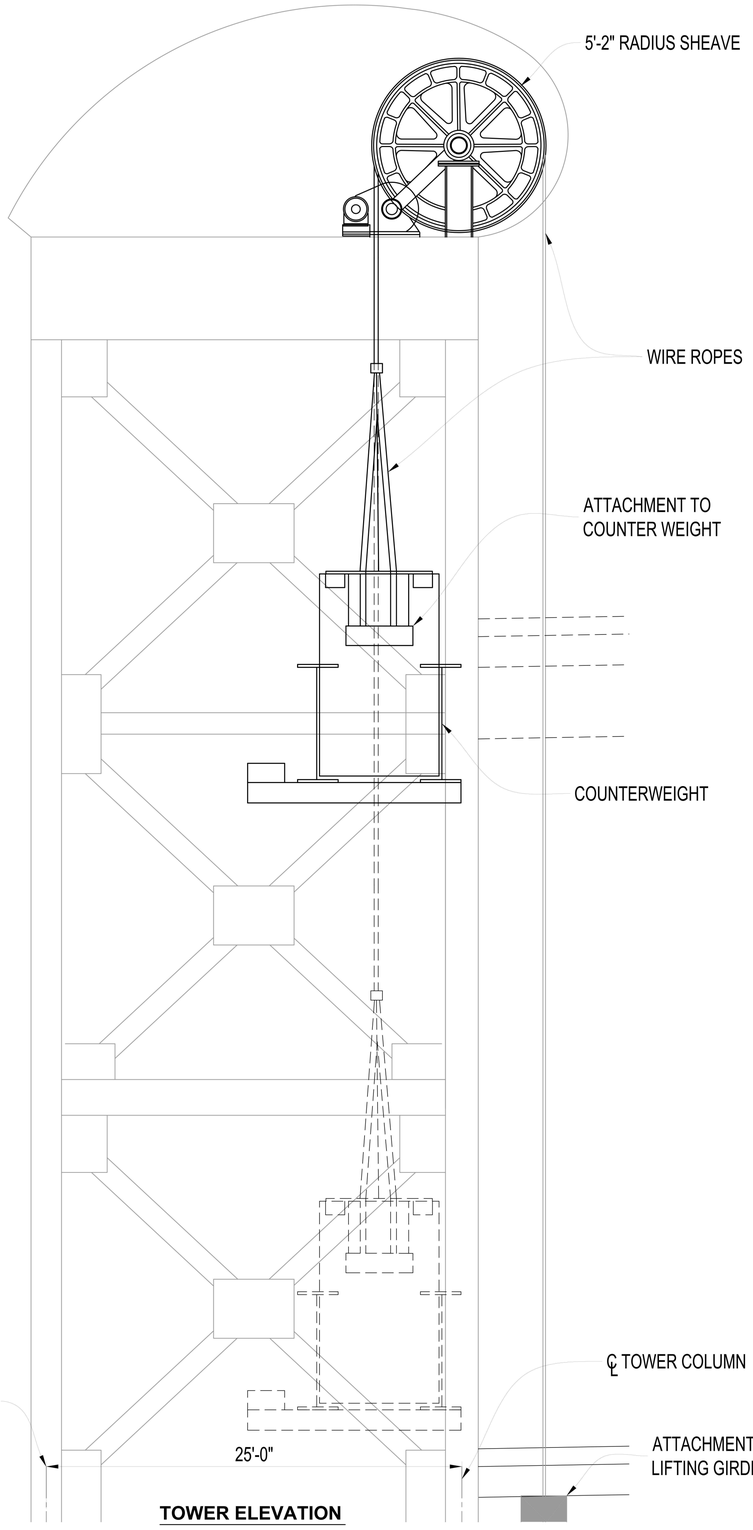
LOCKPORT

LOCKPORT COMPANY CANAL BRIDGE
CARRIES LOUISIANA HIGHWAY 1 (LA 1) OVER LOCKPORT CANAL
LAFOURCHE PARISH
LOUISIANA

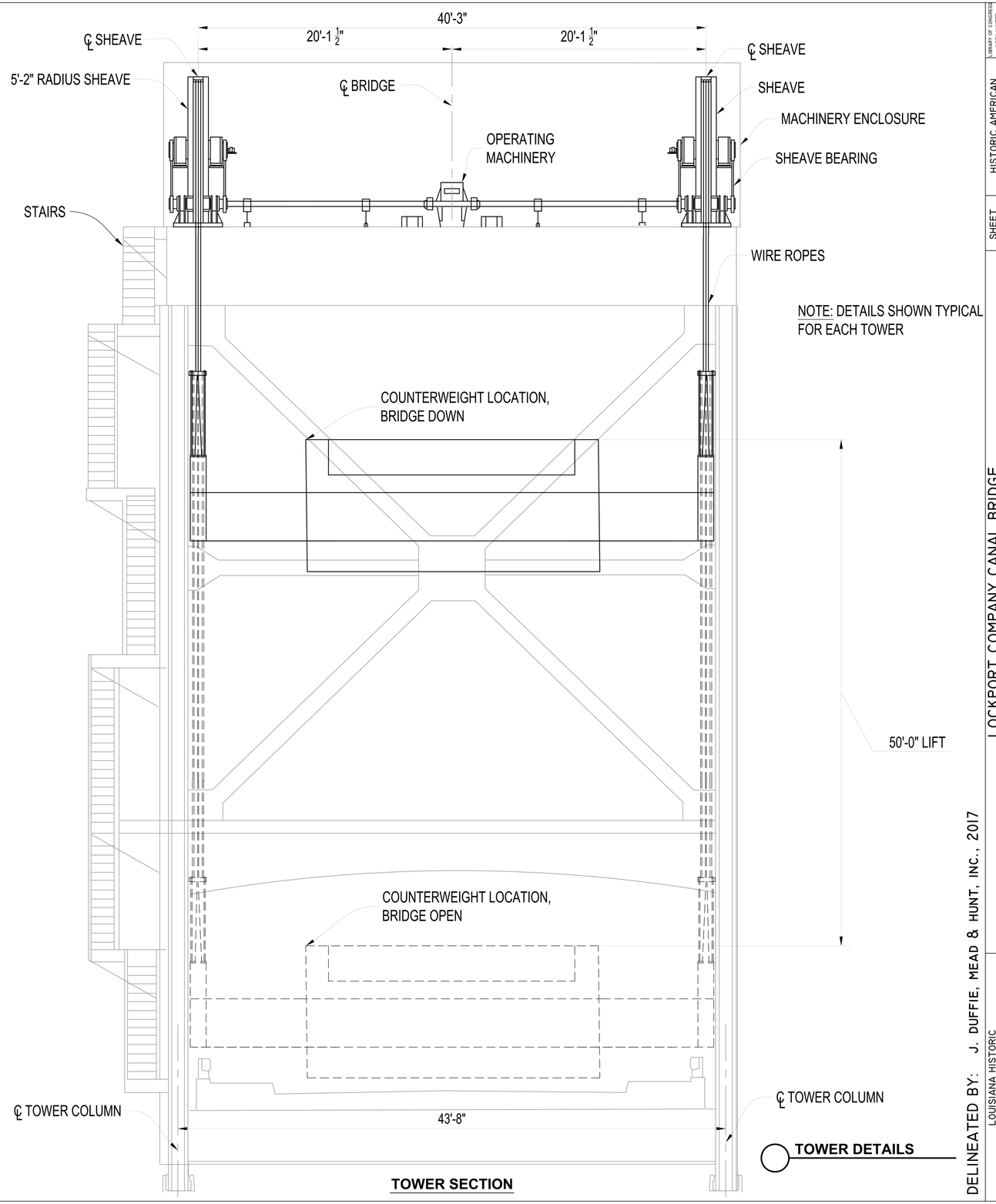
SHEET 3 OF 4

HISTORIC AMERICAN ENGINEERING RECORD LA-32

LIBRARY OF CONGRESS INDEX NUMBER



TOWER ELEVATION



TOWER SECTION

TOWER DETAILS

DELINEATED BY: J. DUFFIE, MEAD & HUNT, INC., 2017

LOUISIANA HISTORIC
BRIDGE INVENTORY
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

LOCKPORT

LOCKPORT COMPANY CANAL BRIDGE
CARRIES LOUISIANA HIGHWAY 1 (LA 1) OVER LOCKPORT CANAL
LAFOURCHE PARISH

LOUISIANA

SHEET 4 OF 4

HISTORIC AMERICAN ENGINEERING RECORD
LA-32

LIBRARY OF CONGRESS INDEX NUMBER

5	STATE PROJECT	PARISH	SHEET NO.
253(3)	64-06-16	Lafourche	1

83

INDEX TO SHEETS

SHEET No.	DESCRIPTION
1	Title Page and Layout Map
2-2a 2b 2c	Typical Section & Details
3 13	Plan & Profile
14 15	Summary Sheets
16 17	Summary of Drainage Structures
18 19	Detail of Intersections & Turnouts
20	General Bridge Plan
21	Detail of Bents
22 23	Detail of Piers
24	Detail of Spans
25 50	Detail of 150' Vertical Lift Span (Std Plan BL-50-150-28)
51	Modified Details for Aluminum Railings
52	Concrete Approach Slab
53	Fender System
54	Summary of Bridge Quantities and Camber Detail
55-69	Electrical System
70-71	Bridge Borings

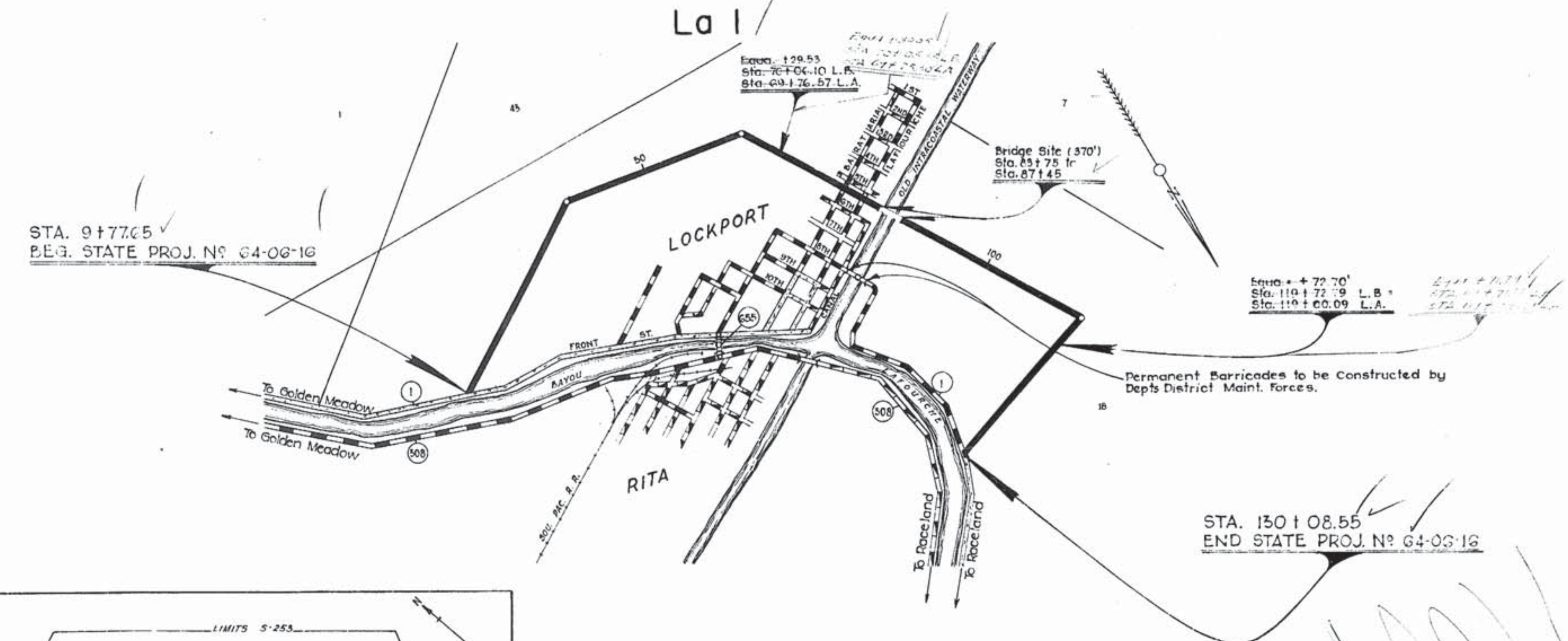
	Standard Plans	Rev. Date
201	C-M-95	11-30-54
202	[illegible]	[illegible]
203	C-M-3	[illegible]
204	C-M-90	[illegible]
205	[illegible]	2-25-56
206	C-S-170	1-23-58
207	[illegible]	
208	R-M-14	
209	R-F-10	
210	[illegible]	
211	R-P-67	
212	[illegible]	
213	R-[illegible]-24	
214	R-[illegible]-24A	
215	R-CT-75	
4-1-135	Cross Sections	

Total Sheets without X-Sections 69
Total Sheets with X-Sections 124

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

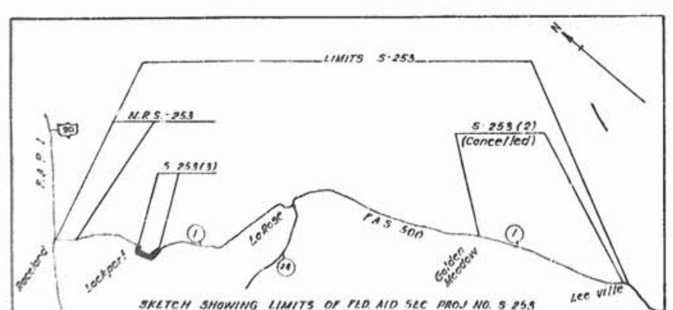
PLANS OF PROPOSED
STATE HIGHWAY

S-253(3)
STATE PROJECT NO. 64-06-16
LOCKPORT RELOCATION
LAFOURCHE PARISH
La 1



SCHEDULE OF REVISIONS

DATE	REVISION	DATE	RECOMMENDED	DATE	APPROVED



DATUM USED: U.S.G.S. (1932)
MAG. VAR.: 0°-40' E
BEARINGS ARE True
TRANSIT BOOKS: 36-271
LEVEL BOOKS: 36-491
SCALES PLAN: 1" = 40'
PROFILE: HOR. 1" = 40'
VERT. 1" = 4'

TYPE OF CONSTRUCTION: Portland Cement Concrete Pavement

DELIVERY POINTS: Lockport [illegible]

LAYOUT MAP
SCALE: 1 INCH 1000 FEET

LENGTH OF PROJECT

DESCRIPTION	ALGEBRAIC SUM OF ALL EQUATIONS	GROSS LENGTH	EXCEPTION	BRIDGE LENGTH		ROADWAY LENGTH	
STA. TO STA.	FEET	FEET	FEET	FEET	MILES	FEET	MILES
9+77.65 - 130+08.55	+102.23	12133.13		370	0.070	11763.13	2.227
TOTAL LENGTH OF BRIDGES				370	0.070		
TOTAL LENGTH OF ROADWAY						11763.13	2.227
TOTAL MILES				2.297			

RECOMMENDED FOR APPROVAL
TRAFFIC & PLANNING ENGINEER

RECOMMENDED FOR APPROVAL
A. D. Jackson
ROAD DESIGN ENGINEER 11-7-57

RECOMMENDED FOR APPROVAL
J. B. Carter
BRIDGE DESIGN ENGINEER 11-7-57

APPROVED
CHIEF ENGINEER 11-7-57

RECOMMENDED FOR APPROVAL DATE
[redacted]
DISTRICT ENGINEER
DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED DATE
[redacted]
DIVISION ENGINEER
DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

LAYOUT	DATE
SURVEYED BY	
PLOTTED	7-55
TRACED	11-55
CHECKED	11-55

AS BUILT PLANS

9f

STATE PROJECT	PARISH	SHEET NO
700-11	LAFOURCHE	9

PLAN	SURVEYED	DRAWN	ALIGNMENT CHECKED	NOTE BOOK	PROFILE CHECKED	NO. 16229	PLANS BY

PROFILE	SURVEYED	DRAWN	NOTE BOOK	NO. 16229	PLANS BY

79+00 80+00 85+00 90+00 91+00

Total 370'-0" Length of Bridge

For Detail of Intersection See Sheet No. 19

Remove to R/W Line

To be Moved

5TH ST.

20' Approach Slab

INTRACOASTAL CANAL

Projected & Adopted ℄

Surveyed & Abandoned ℄

N. 32° 46' W

N. 90° 46' W

R/W

ETHEL TOURS

ANTOINETTE CULLOTTA

MRS V. LUSCO, SR.

GEORGE BOLLINGER

TRAILER PARK

FELIX SAUCET

RICHARD BARKER

NUMA MAYET

Field Ditch

Wooden Gate

SPOIL BANK

RICHARD BARKER

Ends of Bridge at -4.5

20' Approach Slab

12% Top of Bank

3:1 Slope of Water

Edge of Water

300' Canal R/W (CORPS OF ENGINEERS)

B.M.
Gold Nail in 6" Cottonwood
35' Lt. Sta. 84+10
Elev. 4.51

B.M.
Top of Abutment (Left)
Sta. 93+45
Elev. 13.74

P.I. 75+49.75
El. 6.76

-0.50 %

300' V.C.

200' V.C.

P.I. 82+75
El. 6.13

+4.00 %

-3.00 %

400' V.C.

P.I. 85+80
El. 17.35 (B.S.)

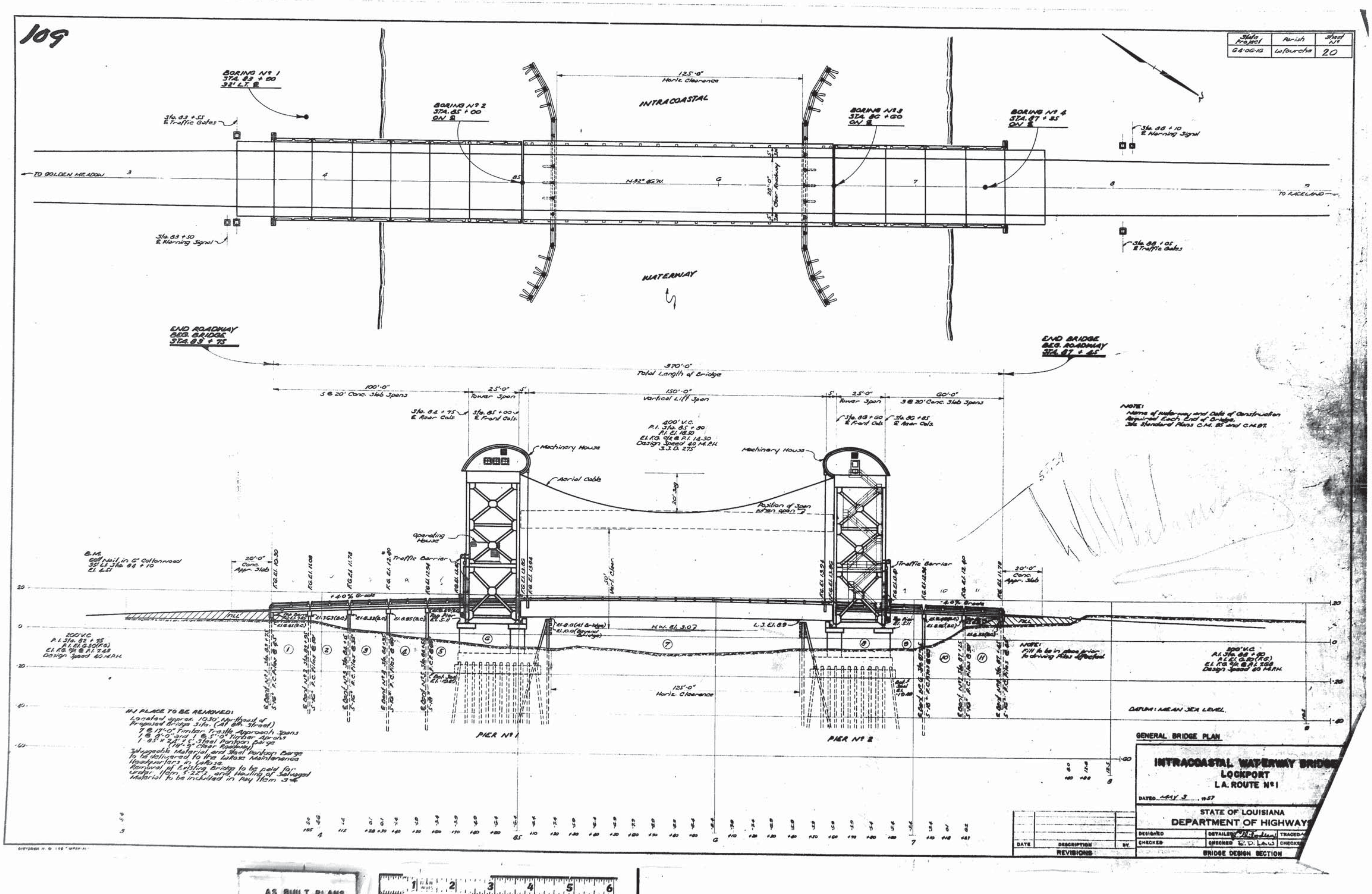
200' V.C.

0.00 %

P.I. 88+80
Elev. 5.35

PLATE 1: PLAN-PROFILE — F.H.W.A. STANDARD

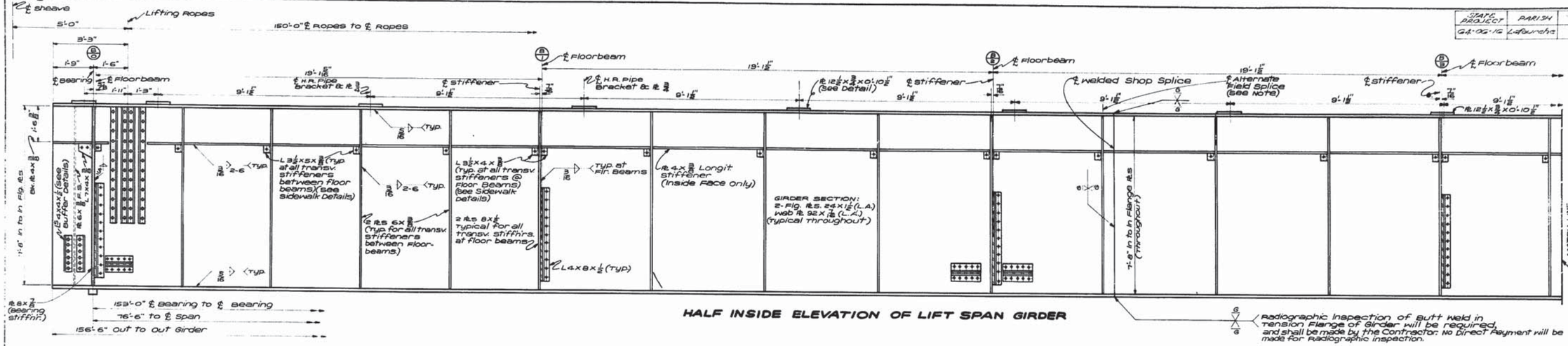
AS BUILT PLANS


109
State Project | Parish | Sheet No.
64-06-16 | Lafourche | 20
BORING No. 1 STA. 83 + 00 32' LT. ℄
BORING No. 2 STA. 85 + 00 ON ℄
BORING No. 3 STA. 86 + 60 ON ℄
BORING No. 4 STA. 87 + 85 ON ℄
125'-0" Horiz. Clearence
INTRACOASTAL
WATERWAY
TO GOLDEN MEADOW
TO RACELAND
Sta. 83 + 55 ℄ Traffic Gates
Sta. 83 + 50 ℄ Warning Signal
Sta. 88 + 10 ℄ Warning Signal
Sta. 88 + 05 ℄ Traffic Gates
END ROADWAY BEG. BRIDGE STA. 83 + 75
END BRIDGE BEG. ROADWAY STA. 87 + 45
370'-0" Total Length of Bridge
100'-0" 5 @ 20' Conc. Slab Spans
25'-0" Tower Span
150'-0" Vertical Lift Span
25'-0" Tower Span
60'-0" 3 @ 20' Conc. Slab Spans
Machinery House
Aerial Cable
Operating House
Traffic Barrier
Position of Span when open
H.W. El. 3.07
L.W. El. 0.0
125'-0" Horiz. Clearence
PIER No. 1
PIER No. 2
NOTE: Name of Waterway and Date of Construction Required Each End of Bridge. See Standard Plans C.M. 85 and C.M. 87.
NOTE: Fill to be in place prior to driving Piles affected.
DATUM: MEAN SEA LEVEL
IN PLACE TO BE REMOVED:
GENERAL BRIDGE PLAN
INTRACOASTAL WATERWAY BRIDGE
LOCKPORT
LA. ROUTE No. 1
DATED MAY 3 1957
STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS
BRIDGE DESIGN SECTION
REVISIONS
AS BUILT PLANS

HAER No. LA-32

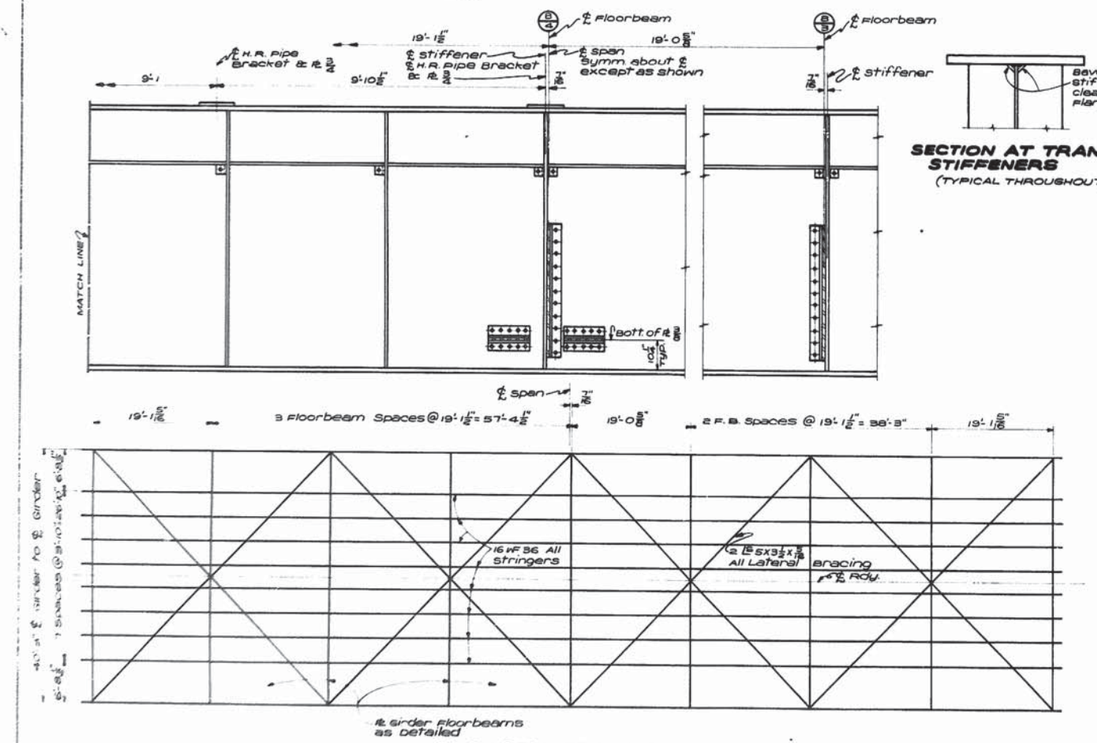
114

STATE PROJECT	PARISH	SHEET NO
451-02-12	Lafourche	45



HALF INSIDE ELEVATION OF LIFT SPAN GIRDER

G Radiographic Inspection of butt weld in tension flange of girder will be required, and shall be made by the Contractor. No Direct Payment will be made for radiographic inspection.



PLAN DECK FRAMING AND LATERAL SYSTEM

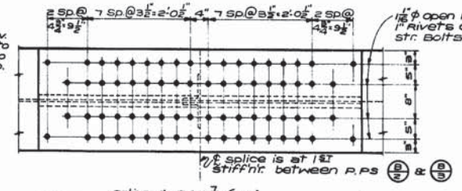
GIRDER DESIGN DATA

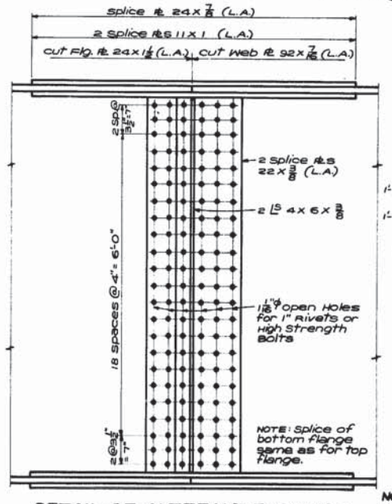
DESIGN SPAN FOR DEAD LOAD =	150'-0"		
DESIGN SPAN FOR S.W.L.L. & LIVE LOAD =	153'-0"		
DEAD LOAD CONCENTRATION AT PANEL POINTS:	13,488 LBS.		
UNIFORM DEAD LOAD:	468 LBS. PER FT.		
MAX. MOM. AT ℄: DL	3351 FT.-KIPS	DLR = 97.7K	SWLL = 19.7K
SWLL	755	20% I = 19.5	LLR = 82.4
LL	2816	TOTAL = 117.2K	I = 15.0
I	513		TOTAL = 117.1K
TOTAL	7435 FT.-KIPS		

GIRDER PROPERTIES

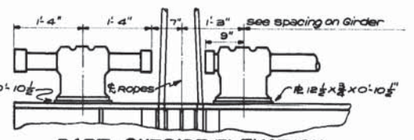
I GROSS =	185,746 IN.⁴	MRC = 7622 I-K	
I NET @ FLOORBEAM =	182,749	MRC = 7622	
I NET @ ℄ ALT. SPLICE =	168,149	MRT = 6869	

SECTION AT TRANSV. STIFFENERS
(TYPICAL THROUGHOUT)

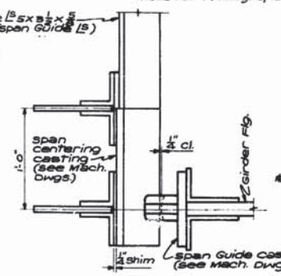




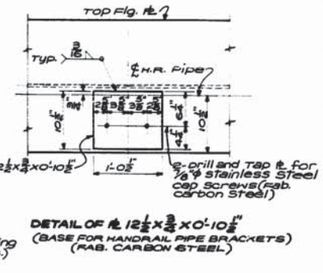
DETAIL OF ALTERNATE SPLICE



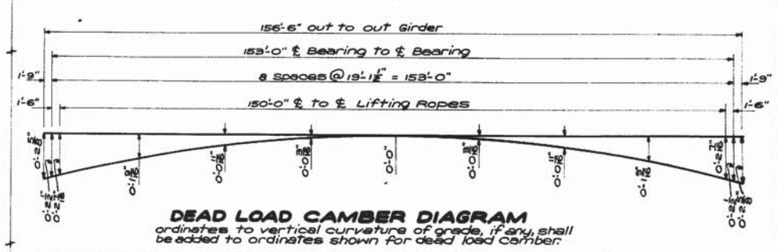
PART OUTSIDE ELEVATION OF PIPE HANDRAIL AT GIRDER ENDS



ELEVATION OF SPAN CENTERING DEVICE (LIFT SPAN SEATED)
DETAIL SHOWN IS FOR FIXED END)
(detail for Exp. End Similar)



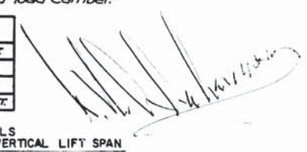
DETAIL OF Pl 12½x¾x0'-10⅝"
(BASE FOR HANDRAIL PIPE BRACKETS)
(RAB. CARBON STEEL)



DEAD LOAD CAMBER DIAGRAM
ordinates to vertical curvature of grade, if any, shall be added to ordinates shown for dead load camber.

ESTIMATED QUANTITIES
(150' VERTICAL LIFT SPAN)

OPEN GRID BRIDGE FLOORING	4950 SQ. FT.
STRUCTURAL LOW ALLOY STEEL	163,000 LBS.
FABRICATED CARBON STEEL	121,800 LBS.
PIPE HANDRAIL	308.67 LIN. FT.



DETAILS
150' VERTICAL LIFT SPAN

NOTE:
contractor will be required to use alternate splice if he elects to splice girder in field. weight of splice material, estimated at 2600 lbs. per splice, will not be included in pay quantity for Structural Low Alloy Steel if the contractor elects to use the alternate splice, but shall be included in the price bid on other items.

DATE	DESCRIPTION	BY
	REVISIONS	

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY — 5'-0" SIDEWALKS
45'-0" LIFT — OPEN STEEL GRID FLOOR
DATED MAR. 15 1957

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

DESIGNED	DETAILED	TRACED	CHECKED
S.L.P.	S.L.P.	O. Chapman	S.L.P.

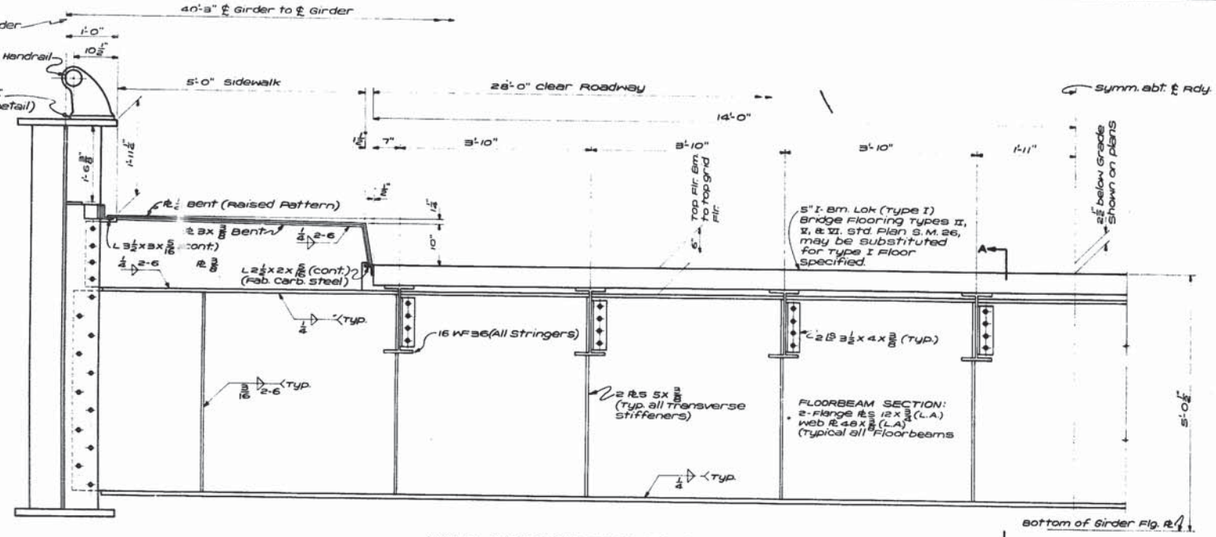
BRIDGE DESIGN SECTION

SHEET 1 OF 26

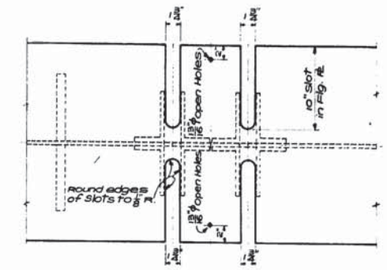
SL50-150-28

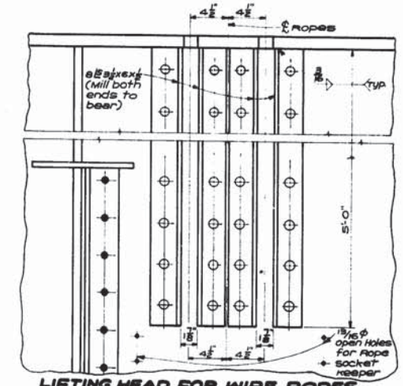
AS BUILT PLANS

STATE PROJECT	PARISH	SHEET
924-06-16	Lafourche	26

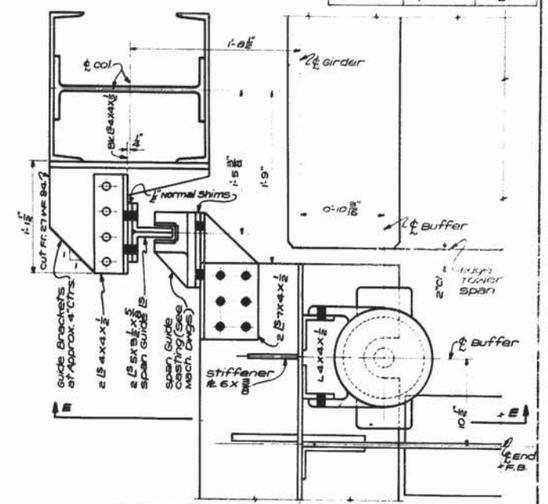


HALF SECTION THRU ROADWAY AT FLOORBEAM

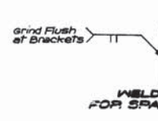




LIFTING HEAD FOR WIRE ROPES
For complete Assembly, See Machinery Drawings

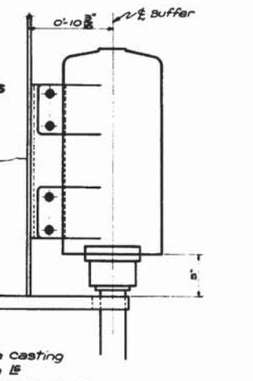


PLAN VIEW AT FIXED END OF SPAN
SHOWING SPAN GUIDE AND BUFFER CONN.
(detail at Exp. end same except for Span Guide casting)

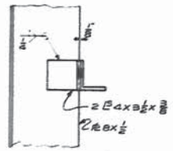


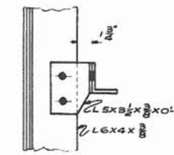
WELDING DETAIL
FOR SPAN GUIDE ANGLES

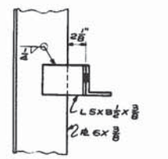
PL 7x4½ may be left blank and drilled in field after parts have been set to correct alignment and adjustment or sub-punched or drilled ¾" smaller and reamed to size in field after erection.

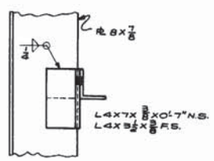


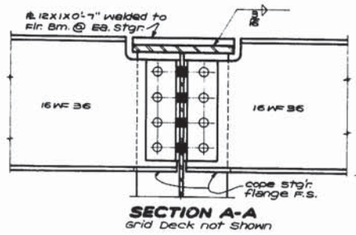
ELEVATION E-E



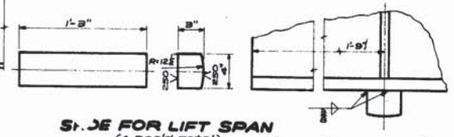




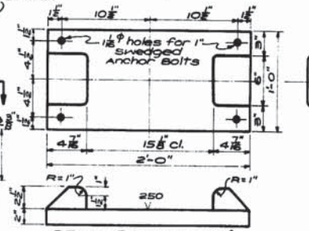




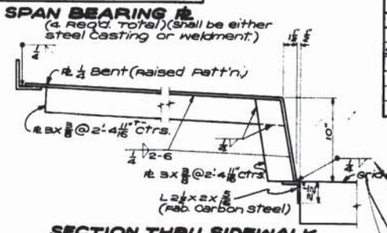
SECTION A-A
Grid Deck not Shown



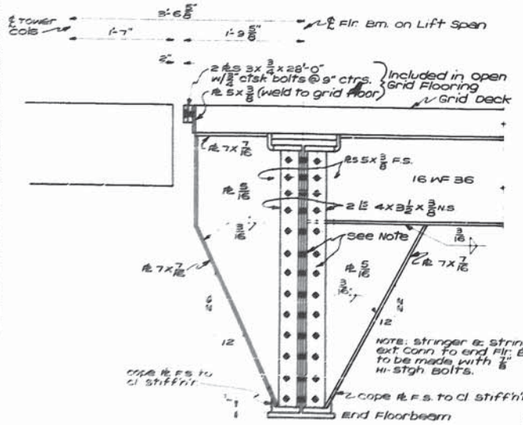
SHOE FOR LIFT SPAN
(4 Req'd Total)



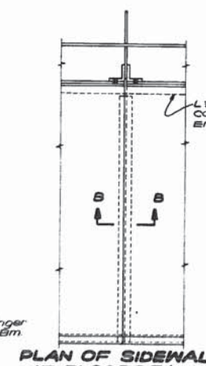
SPAN BEARING
(4 Req'd. Total) (Shall be either steel casting or weldment)



SECTION THRU SIDEWALK BETWEEN FLOORBEAMS

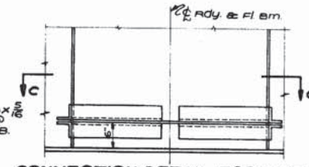


CONNECTION DETAIL AT TOWER

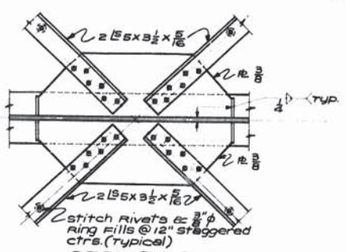


PLAN OF SIDEWALK AT FLOORBEAM

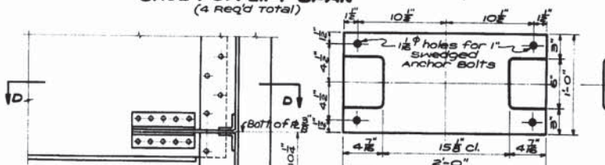
SECTION B-B



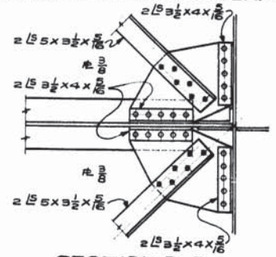
CONNECTION DETAIL FOR LATERAL BRACING AT ODD FLOORBEAMS



SECTION C-C



CONNECTION DETAIL FOR LAT'L. BRACING AT EVEN FLOORBEAMS



SECTION D-D

MOMENTS AND REACTIONS FOR STRINGERS & FLOORBEAMS						
	EXTERIOR STERS.		INTERIOR STGRS.		FLOORBEAMS	
	M(K-FT)	R (K)	M(K-FT)	R (K)	(M)(K-FT)	R (K)
D	6.9	1.4	5.1	1.1	155.6	13.0
SWL	11.4	2.4	0.0	0.0	26.2	3.9
L	48.2	19.5	58.7	20.1	646.1	47.0
I	14.5	4.1	17.6	6.0	193.8	14.1
T	81.0	21.4	81.4	27.2	1021.7	78.0

DETAILS
150' VERTICAL LIFT SPAN

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY 5'-0" SIDEWALKS
45'-0" LIFT OPEN STEEL GRID FLOOR
DATE MARCH 18 57

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS
DESIGNED J.L.P. DETAILED J.L.P. CHECKED J.L.P.
BRIDGE DESIGN SECTION

REVISIONS

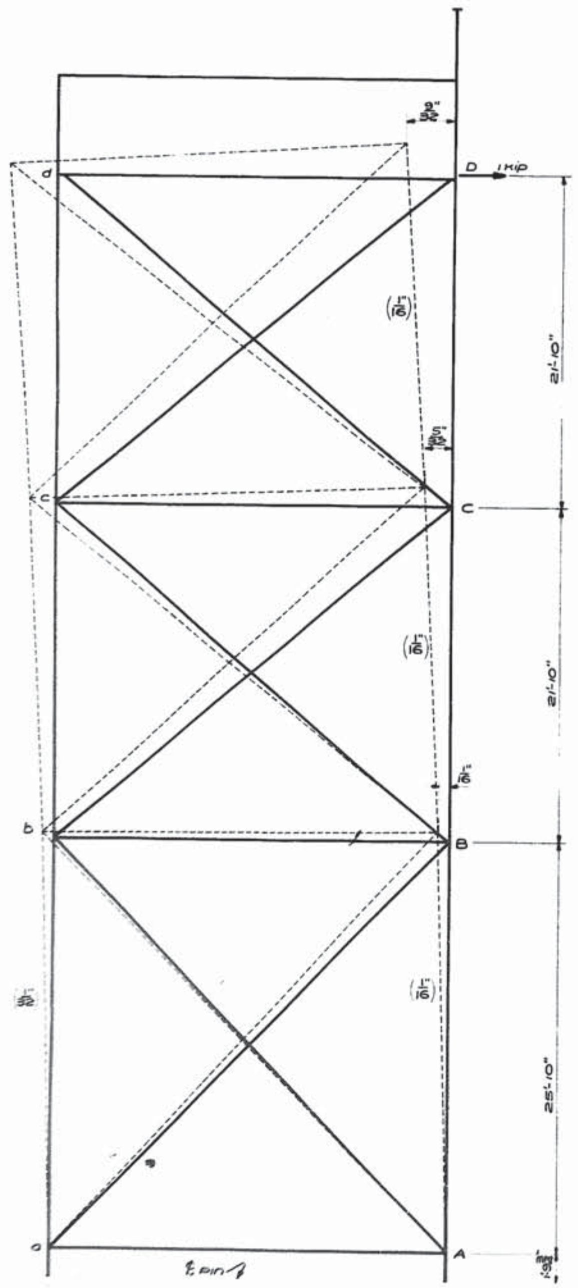
SHEET 2 OF 26

SL50-150-28

AS BUILT PLANS

116

STATE PROJECT	PARISH	SHEET NO
640-016	Lafourche	27

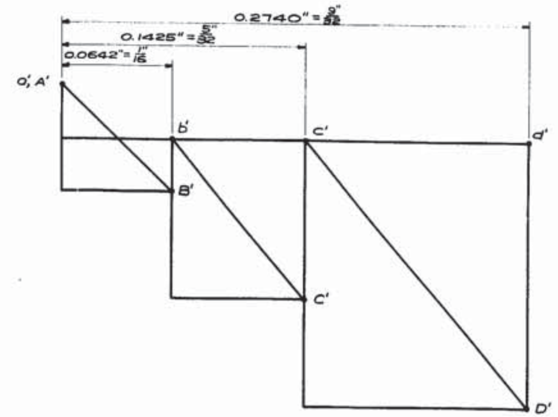


TOWER CAMBER DIAGRAM

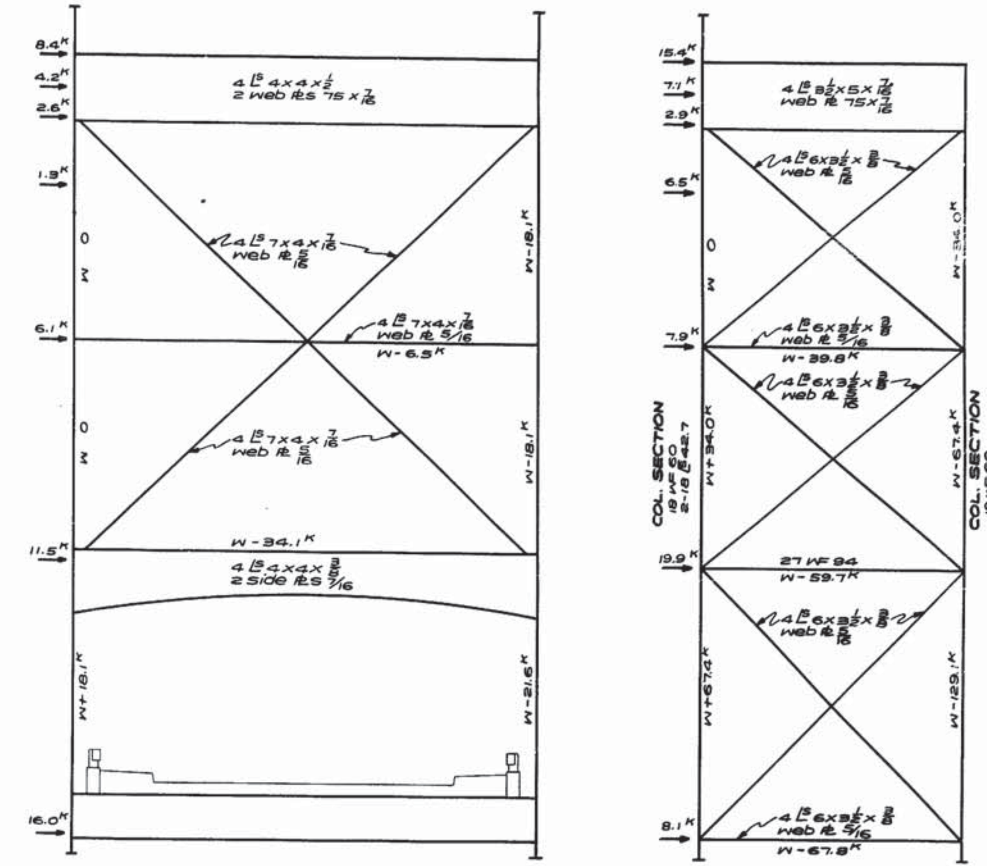
LEGEND
——— Indicates uncambered position of tower
- - - - Indicates cambered position of tower

MEMBER	D.L. STRESS KIPS	LENGTH INS.	AREA SQ. INS.	SL/AE CALCULATED INS.		SL/AE ACTUAL INS.	"U" STRESS 1 KIP LD @ d	$\Delta_H = \frac{SUL}{AE}$
DC	253.1	252	42.60	0.0516"	1/16"	-0.0625	-0.8400	+0.0525
CB	269.1	252	42.60	0.0549"	1/16"	-0.0625	-1.6800	+0.1050
BA	307.2	310	42.60	0.0771"	1/16"	-0.0625	-2.7188	+0.1696
dc	29.3	252	42.60	0.0060"	0	0.0000	0.0000	0.0000
cb	42.7	252	42.60	0.0087"	0	0.0000	+0.8400	0.0000
ba	90.0	310	42.60	0.0226"	1/32"	-0.0313	+1.6800	-0.0525

$\Sigma \frac{SUL}{AE} = \Delta_H = +0.2746$



WILLIOT DIAGRAM
SCALE 1" = 0.0500"



WIND LOADS AND STRESSES FOR 50#/□' WIND SPAN LOWERED

GENERAL NOTES:

CONSTRUCTION SPECS: LA. DEPT. OF HIGHWAYS STD. SPECS. FOR ROADS AND BRIDGES, DATED JULY, 1955.
DESIGN SPECS: A.A.S.H.O. STD. SPECS. FOR HIGHWAY BRIDGES, 1953, AS AMENDED TO DEC., 1955.
WELDING SPECS: STD. SPECS. FOR WELDED HIGHWAY AND RAILWAY BRIDGES, 1956, AND LA. DEPT. OF HWYS. SPECIAL PROVISIONS.
LIVE LOAD: H20-S16-44.

REINFORCING BARS SHALL BE INTERMEDIATE OR HARD GRADE A.S.T.M. A15, OR RAIL STEEL A.S.T.M. A16, AND SHALL CONFORM TO A.S.T.M. A-305. DIMENSIONS TO REINFORCING STEEL ARE TO BAR CENTERS. EXPOSED CONCRETE CORNERS TO BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED. HANDRAIL AND HANDRAIL POSTS TO BE POURED IN ONE OPERATION. HANDRAIL POSTS TO BE CONSTRUCTED NORMAL TO GRADE. CONCRETE AND REINFORCING STEEL IN H.R. ABOVE TOP OF 4" SIDEWALK CURB TO BE PAID FOR PER LIN. FT. OF CONCRETE H.R., INCLUDING BARS L, L1, L2 AND L3 THAT PROJECT INTO SAID 4" CURB. PIPE HANDRAIL AND BRACKETS, INCLUDING ANCHOR BOLTS FOR SAME, ON TOWER SPAN, ARE TO BE PAID FOR PER LIN. FT. OF PIPE HANDRAIL. NO DEDUCTION IN QUANTITY OF CLASS "A" CONCRETE WILL BE MADE FOR 3 5/8" X 5 5/8" DRAIN OPENINGS. SURFACE FINISHES, WHERE INDICATED, SHALL CONFORM TO THE AMERICAN STANDARDS FOR SURFACE ROUGHNESS, WAVINESS AND LAY, PART I A.S.A. B46.1-1947. SHOP CONNECTIONS 7/8" Φ RIVETS, OPEN HOLES 15/16" Φ UNLESS OTHERWISE NOTED. ALL RIVETS SHALL CONFORM TO A.S.T.M. A141. THE CONTRACTOR MAY SUBSTITUTE HIGH STRENGTH BOLTS FOR RIVETS FOR ALL FIELD CONNECTIONS. WELDED PLATE GIRDERS ARE TO BE CAMBERED FOR DEAD LOAD AND VERTICAL CURVATURE AS SHOWN ON PLANS. FLOORBEAMS AND STRINGERS NEED NOT BE CAMBERED BUT ARE TO BE FABRICATED WITH CONVEX FLANGE UP. MATERIAL MARKED "L.A." SHALL BE STRUCTURAL LOW ALLOY STEEL, A.S.T.M. DESIGNATION A242. THE CONTRACTOR'S ATTENTION IS CALLED TO THE ALTERNATE SPLICES, AND NOTE THEREON, FOR THE WELDED GIRDERS OF THE VERTICAL LIFT SPAN. TOWERS SHALL BE CAMBERED SO THAT FRONT LEGS WILL BE VERTICAL UNDER DEAD LOAD.

TOWER COLUMNS AND LONGITUDINAL BRACING SHALL BE SHOP ASSEMBLED, AND THE HOLES IN THE FIELD CONNECTIONS OF THE LONGITUDINAL BRACING MEMBERS AND COLUMN SPLICES SHALL BE REAMED AT ASSEMBLY. SHOP ASSEMBLY WILL NOT BE REQUIRED FOR THE TRANSVERSE BRACING, AND THE HOLES FOR THE FIELD CONNECTIONS OF THE TRANSVERSE BRACING MAY BE PUNCHED OR DRILLED FULL SIZE.

BASIS OF DESIGN FOR LATERAL STRESSES

SPAN LOWERED: 50#/□' WIND @ 125 % OF BASIC STRESSES
SPAN RAISED: 30#/□' WIND @ 150 % OF BASIC STRESSES
15#/□' WIND @ 125 % OF BASIC STRESSES

MAXIMUM REACTION PER SHOE

	FRONT COL.	REAR COL.
D.L.	375^K	182^K *
D.L.I.	75^K	36^K *
L.L.	91^K	44^K *
L.L.I.	18^K	13^K *
S.W.L.L.	25^K	10^K *

* Incl. 20' Appr. Span

TABLE OF ESTIMATED QUANTITIES

	2 TOWERS	2 COUNTERWEIGHTS
CLASS "A" CONCRETE	98.40 CU. YDS.	
FAB. CARBON STEEL	581,700 LBS.	41,440 LBS.
DEF. REINF. STEEL	17,872 LBS.	3460 LBS.
CONCRETE HANDRAIL	91.00 LIN. FT.	
PIPE HANDRAIL	91.00 LIN. FT.	
CLASS "A" CONCRETE IN COUNTERWEIGHTS		89.48 CU. YDS.
STRUCTURAL LOW ALLOY STEEL	36,600 LBS.	
BALANCE CHAINS		LUMP

TOWER DESIGN DATA

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY 5'-0" SIDEWALKS
45'-0" LIFT OPEN STEEL GRID FLOOR
DATED MAY 9 1957

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

DATE	DESCRIPTION	
5-16-58	Struct. Low Alloy Steel Quant.	

REVISIONS

DESIGNED [signature] CHECKED S.L.P. | DETAILED [signature] CHECKED S.L.P. | TRACED A. Chapman CHECKED [signature]

BRIDGE DESIGN SECTION

SHEET 3 OF 26

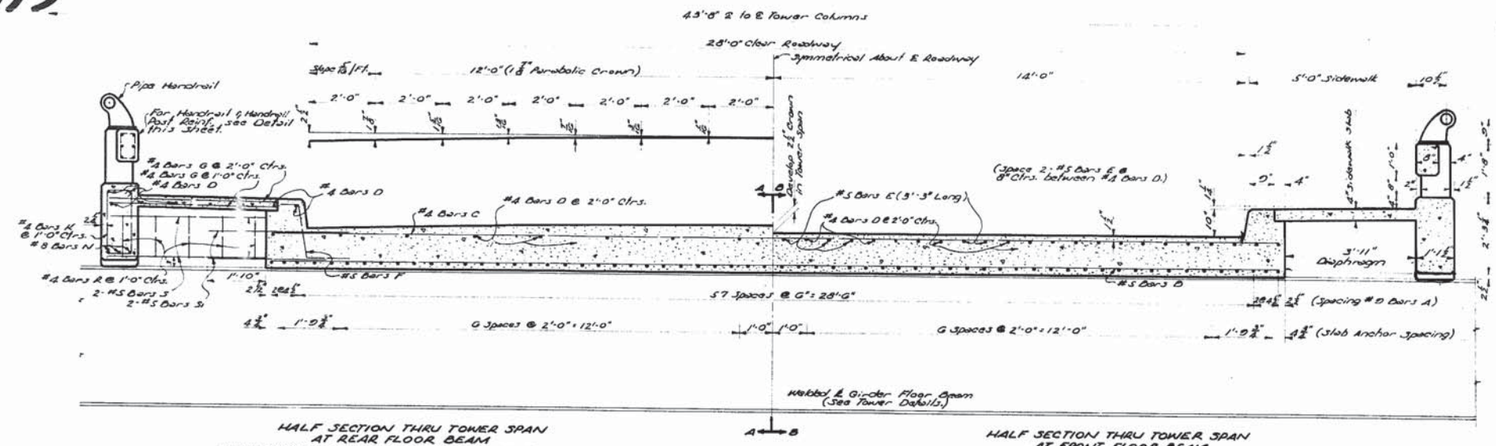
SL50-150-28

AS BUILT PLANS

HAER No. LA-32

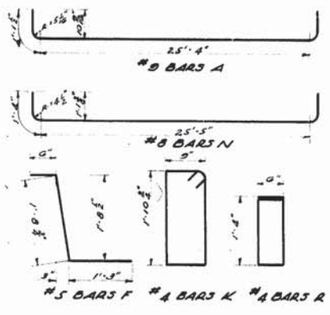
112

STATE PROJECT	PARISH	SHEET NO
64-00-116	Lafourche	28



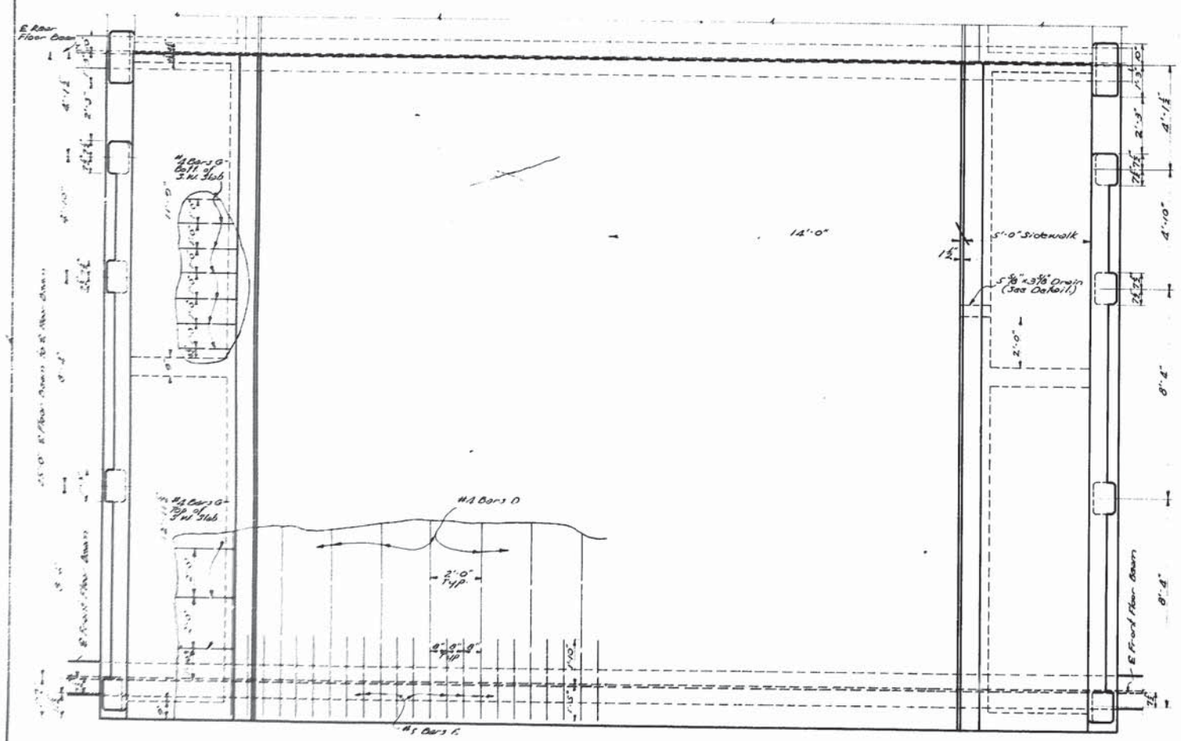
HALF SECTION THRU TOWER SPAN AT REAR FLOOR BEAM
SHOWING TYPICAL SIDEWALK AND HANDRAIL REINFORCEMENT

HALF SECTION THRU TOWER SPAN AT FRONT FLOOR BEAM
SHOWING TYPICAL SIDEWALK AND HANDRAIL DIMENSIONS



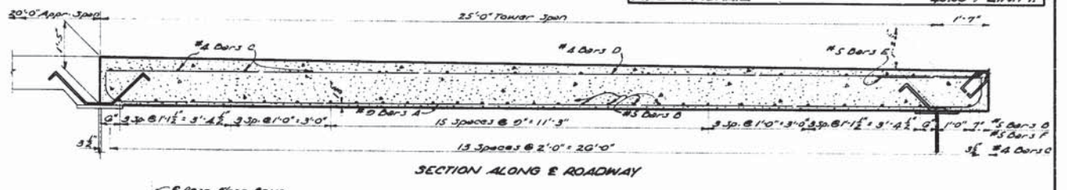
BILL OF MATERIAL (ONE SPAN)

BAR	SIZE	No	LENGTH	TOTAL LENGTH	LOCATION
A	#9	62	27'-4"	1004'-8"	Longit. in Slab
TOTAL No 9 BARS = 1004'-8" = 5702 LBS.					
N	#8	6	28'-1"	168'-6"	Longit. in S.W. Beam
TOTAL No 8 BARS = 168'-6" = 450 LBS.					
D	#5	20	30'-0"	870'-0"	Transv. Bott. of Slab
E	#5	30	3'-3"	97'-6"	Top of Slab @ Curb End
F	#5	58	3'-6"	203'-0"	Curb
S	#5	8	4'-10"	38'-8"	Diaphragm
T	#5	8	3'-8"	29'-4"	Diaph. to Slab Dowels
TOTAL No 5 BARS = 1238'-6" = 1202 LBS.					
C	#4	14	30'-0"	420'-0"	Transv. in Top of Slab
D	#4	34	26'-2"	889'-8"	Longit. Top Slab & S.W.
G	#4	72	5'-2"	372'-0"	Top & Bott. Transv. in S.W.
K	#4	54	6'-3"	337'-6"	Stirrups in S.W. Beam
R	#4	30	4'-2"	125'-0"	Stirrups in Diaph.
TOTAL No 4 BARS = 2144'-2" = 1432 LBS.					
TOTAL REINFORCING STEEL =				3634	LBS.
TOTAL CLASS "A" CONCRETE =				40.2	CU. YDS.
FABRICATED CARBON STEEL =				577	LBS.
CONCRETE HANDRAIL				45.90	LIN. FT.
PIPE HANDRAIL				45.90	LIN. FT.

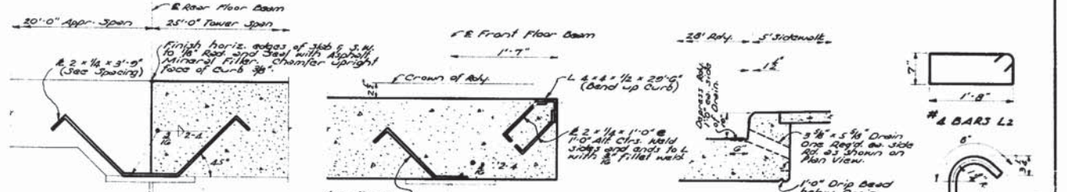


HALF PLAN
SHOWING HANDRAIL ON SIDE OPPOSITE STAIRS AND REINFORCEMENT AS NOTED

HALF PLAN
SHOWING HANDRAIL SPACING ON STAIR SIDE



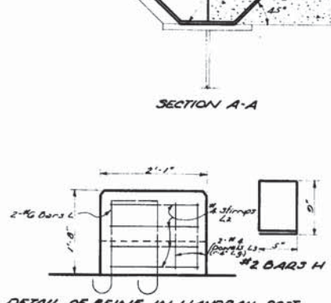
SECTION ALONG ℄ ROADWAY



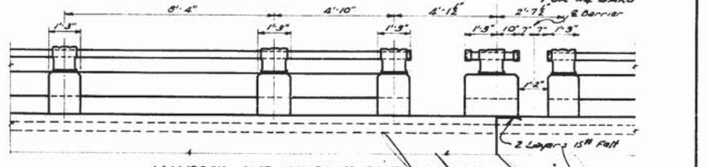
SECTION A-A

SECTION B-B

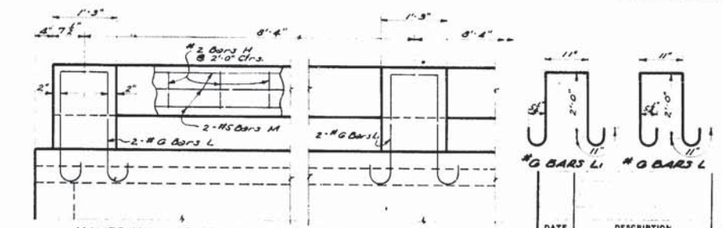
SECTION SHOWING DRAIN



DETAIL OF REINF. IN HANDRAIL POST AT CONSTRUCTION JOINT



HANDRAIL AND HANDRAIL POST ON STAIR SIDE
OTHER SIDE SIMILAR BUT OPPOSITE HAND



HANDRAIL AND HANDRAIL POST REINFORCEMENT

TOWER SPAN

REVISIONS		
DATE	DESCRIPTION	BY

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY 5'-0" SIDEWALKS
45'-0 LIFT OPEN STEEL GRID FLOOR
DATED FEB. 28, 1957

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

DESIGNED	DETAILED	TRACED AS MODIFIED
CHECKED SLP	CHECKED SLP	CHECKED

BRIDGE DESIGN SECTION

SHEET 4 OF 26

SL50-150-28

AS BUILT PLANS

HAER No. LA-32

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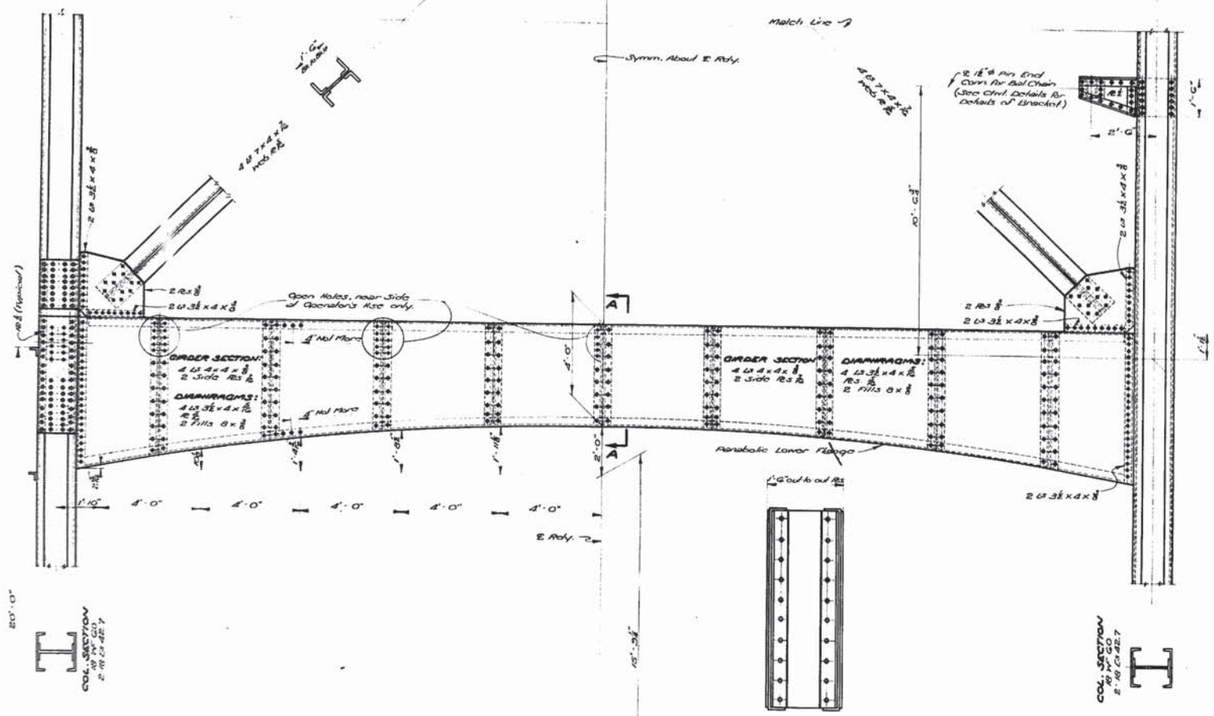
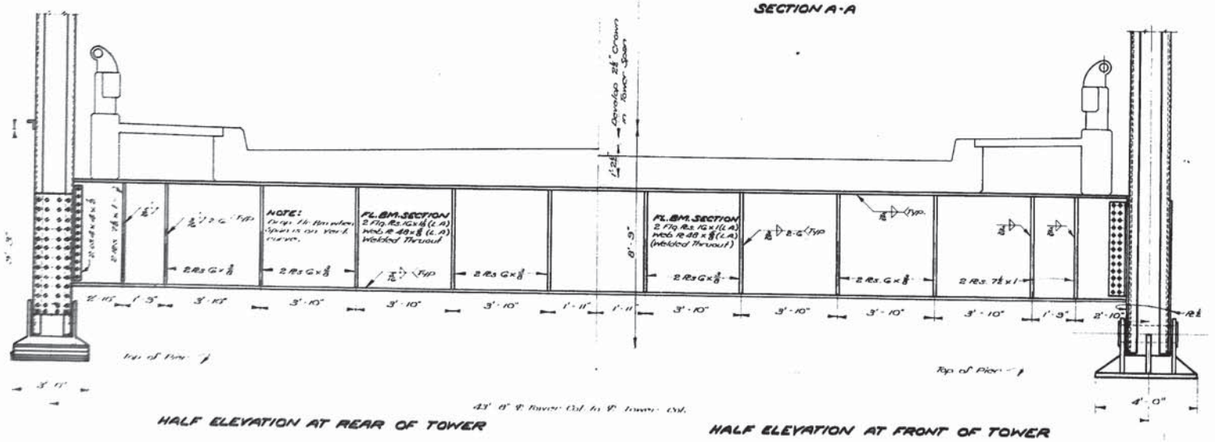
STATE PROJECT	PARISH	SHEET NO.
641-06-16	Lafourche	29

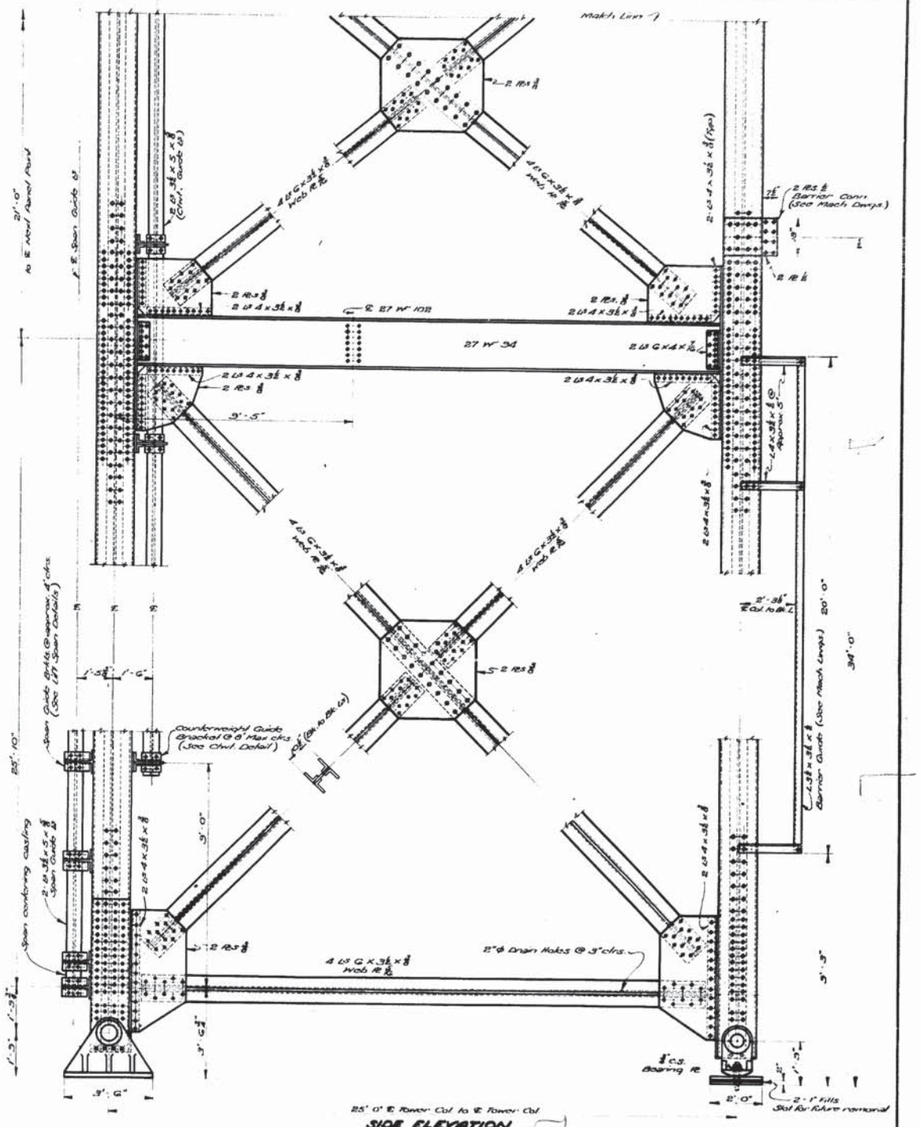


SECTION A-A



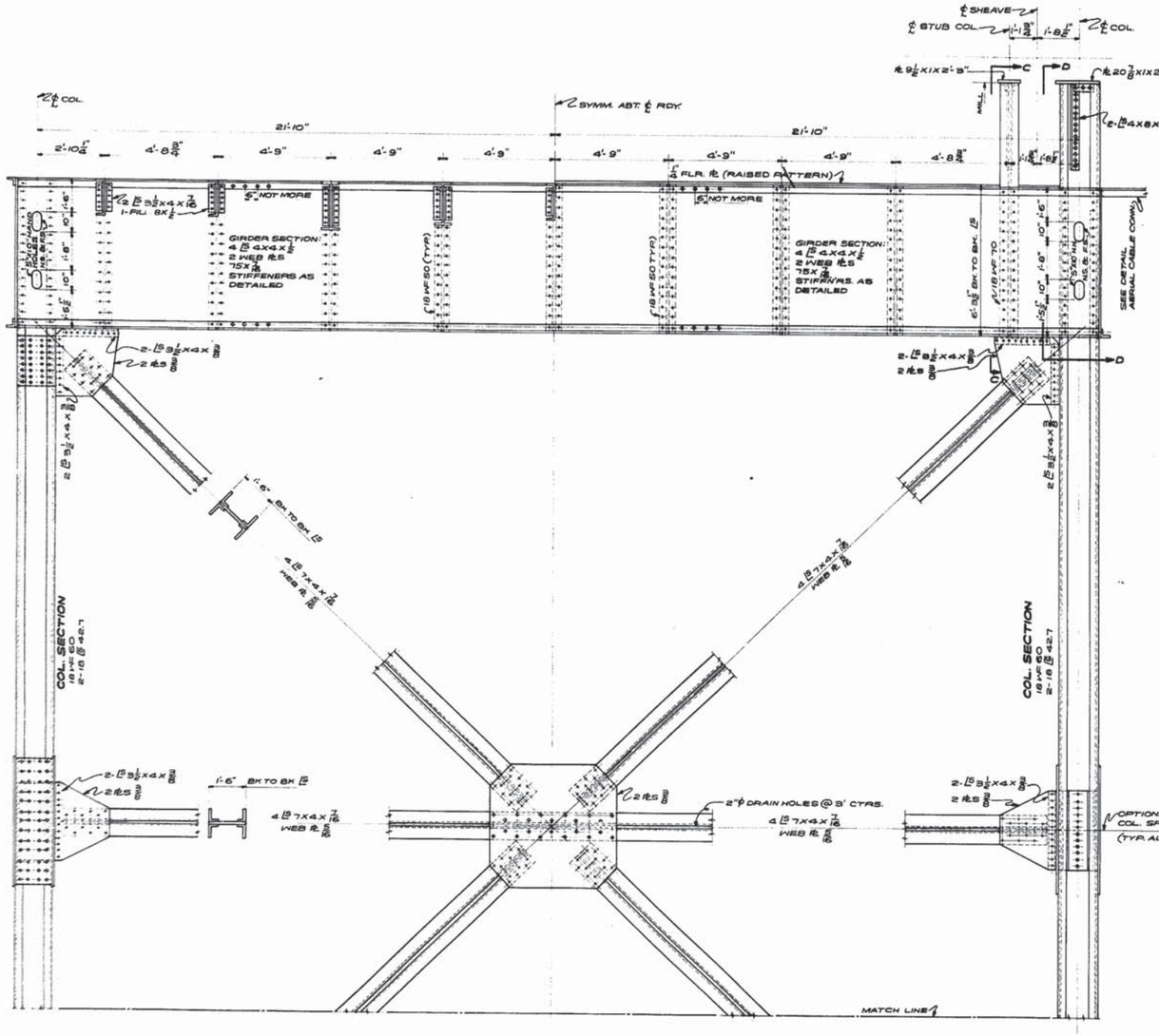
HALF ELEVATION AT REAR OF TOWER

HALF ELEVATION AT FRONT OF TOWER


Match Line
21'-0" to E Roof Panel Point
E. Span Guide ⅜
2 @ 4 x 3½ x ⅜
2 Rs ⅜
2 @ 4 x 3½ x ⅜
2 @ 4 x 3½ x ⅜
2 Rs ⅜
2 @ 4 x 3½ x ⅜
27 W 102
27 W 94
2 @ G x 4 x ⅜
4 @ G x 3½ x ⅜ Web ⅜
2 @ 4 x 3½ x ⅜
2 @ 4 x 3½ x ⅜
2 @ 4 x 3½ x ⅜
2 @ 4 x 3½ x ⅜
2 Rs ⅜
2 @ 4 x 3½ x ⅜
2 Rs ⅜
2 @ 4 x 3½ x ⅜
2 Rs

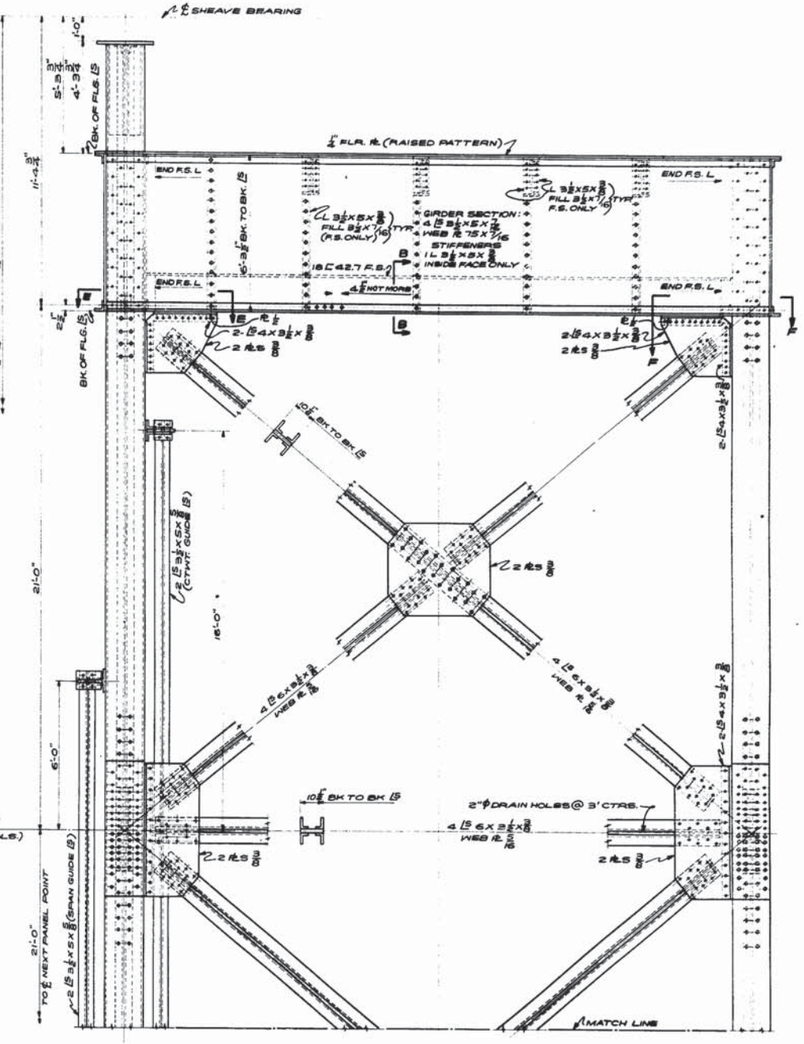
119

STATE PROJECT	PARISH	SHEET NO.
024-06-12	Lafourche	30

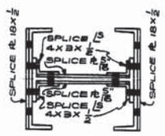


HALF ELEVATION AT REAR OF TOWER

HALF ELEVATION AT FRONT OF TOWER

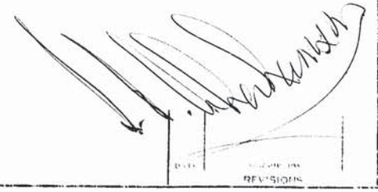


SIDE ELEVATION



SECTION THRU TYPICAL OPTIONAL COLUMN SPLICE

NOTE: SEE SHEET N° 7 OF 26 FOR SECTION B-B, C-C, D-D, E-E AND F-F



TOWER DETAILS

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY 5'-0" SIDEWALKS
45'-0" LIFT OPEN STEEL GRID FLOOR
APRIL 23 57

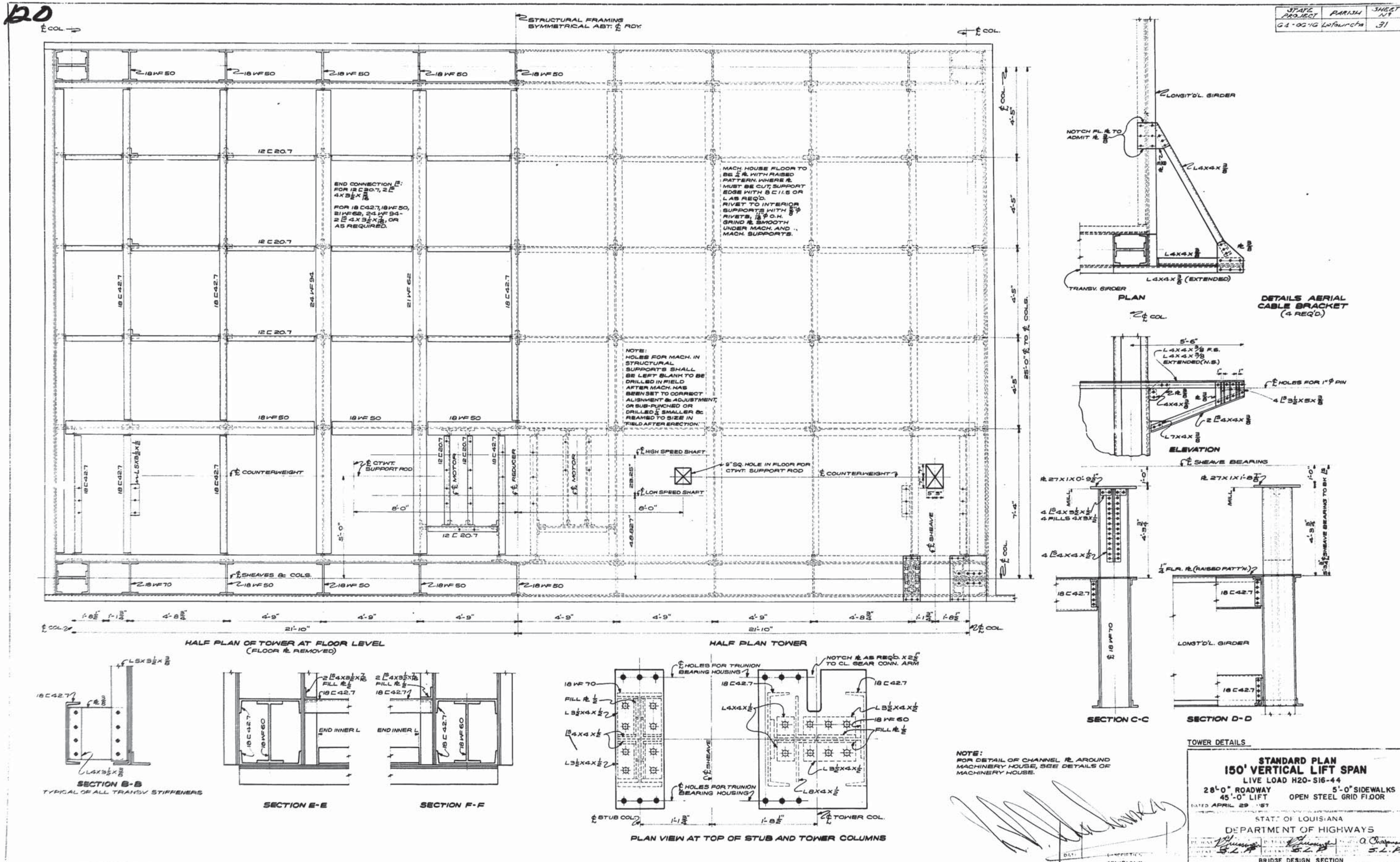
STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS
S.L.P. S.L.P. S.L.P.
BRIDGE DESIGN SECTION

REVISIONS

SHEET 6 OF 26

SL50-150-28

AS BUILT PLANS



STATE PROJECT	PARISH	SHEET No.
64-02-16	Lafourche	31

TOWER DETAILS

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY 5'-0" SIDEWALKS
45'-0" LIFT OPEN STEEL GRID FLOOR
DATED APRIL 29 '57

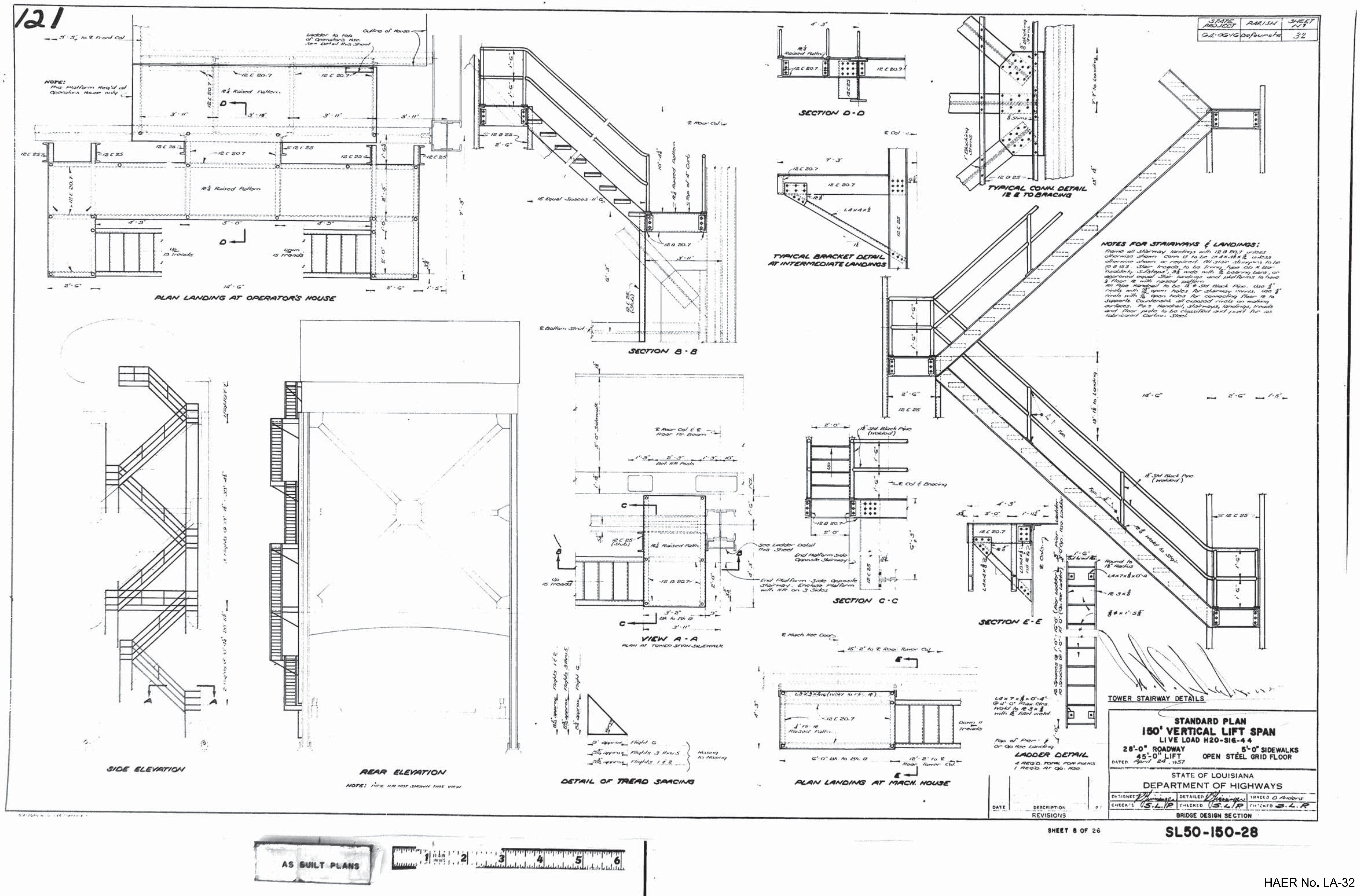
STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS
BRIDGE DESIGN SECTION

SHEET 7 OF 26

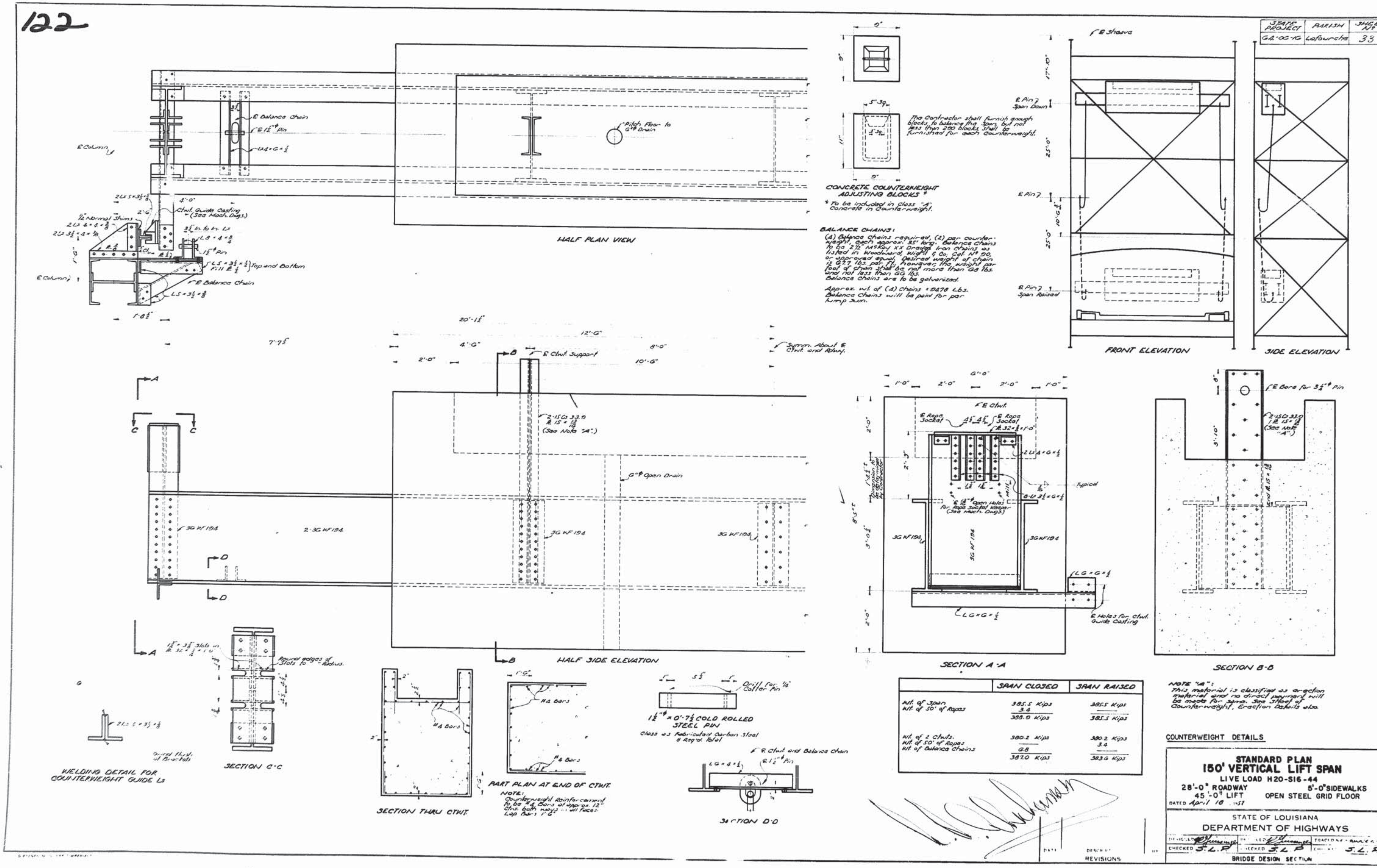
SL50-150-28

AS BUILT PLANS

HAER No. LA-32


121
PLAN LANDING AT OPERATOR'S HOUSE
SECTION B-B
SECTION D-D
TYPICAL CONN. DETAIL 12 E TO BRACING
TYPICAL BRACKET DETAIL AT INTERMEDIATE LANDINGS
SIDE ELEVATION
REAR ELEVATION
NOTE: PIPE HR NOT SHOWN THIS VIEW
VIEW A-A
PLAN AT TOWER SPAN SIDEWALK
SECTION C-C
SECTION E-E
DETAIL OF TREAD SPACING
PLAN LANDING AT MACH. HOUSE
LADDER DETAIL
NOTES FOR STAIRWAYS & LANDINGS:
TOWER STAIRWAY DETAILS
STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY
45'-0" LIFT
5'-0" SIDEWALKS
OPEN STEEL GRID FLOOR
DATED April 24, 1957
STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS
BRIDGE DESIGN SECTION
SHEET 8 OF 26
SL50-150-28
AS BUILT PLANS

HAER No. LA-32



122
HALF PLAN VIEW
HALF SIDE ELEVATION
CONCRETE COUNTERWEIGHT ADJUSTING BLOCKS *
* To be included in Class "A" Concrete in Counterweight.
The Contractor shall furnish enough blocks to balance the Span but not less than 250 blocks shall be furnished for each Counterweight.
BALANCE CHAINS:
(4) Balance chains required, (2) per counterweight, each approx. 35' long. Balance Chains to be 2½" McKay XX Dredge Iron chains as listed in Woodward, Wight & Co. Cat. No 90, or approved equal. Desired weight of chain is 67.7 lbs. per ft., however, the weight per foot of chain shall be not more than 68 lbs. and not less than 66 lbs.
Balance chains are to be galvanized.
Approx. wt. of (4) Chains = 9478 Lbs.
Balance Chains will be paid for per lump sum.
FRONT ELEVATION
SIDE ELEVATION
SECTION A-A
SECTION B-B
SECTION C-C
SECTION THRU CTWT.
PART PLAN AT END OF CTWT.
NOTE:
Counterweight Reinforcement to be #4 Bars at approx. 12" Ctrs. both ways - all faces. Lap bars 1'-6"
1½"ϕ × 0'-7½ COLD ROLLED STEEL PIN
Class as Fabricated Carbon Steel & Reg'd. Total
SECTION D-D
WELDING DETAIL FOR COUNTERWEIGHT GUIDE Ls
NOTE "A":
This material is classified as erection material and no direct payment will be made for same. See Sheet of Counterweight, Erection Details also.

	SPAN CLOSED	SPAN RAISED
Wt. of Span Wt. of 50' of Ropes	385.5 Kips 3.4 388.9 Kips	385.5 Kips ——— 385.5 Kips
Wt. of 2 Ctwts. Wt. of 50' of Ropes Wt. of Balance Chains	380.2 Kips ——— 6.8 387.0 Kips	380.2 Kips 3.4 ——— 383.6 Kips

STATE PROJECT	PARISH	SHEET NO.
62-06-16	Lafourche	33

COUNTERWEIGHT DETAILS

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY 5'-0" SIDEWALKS
45'-0" LIFT OPEN STEEL GRID FLOOR
DATED April 18 1957

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS
CHECKED S.L.P. CHECKED S.L.P. CHECKED S.L.P.
BRIDGE DESIGN SECTION

DATE DESCRIPTION REVISIONS BY

SHEET 9 OF 26

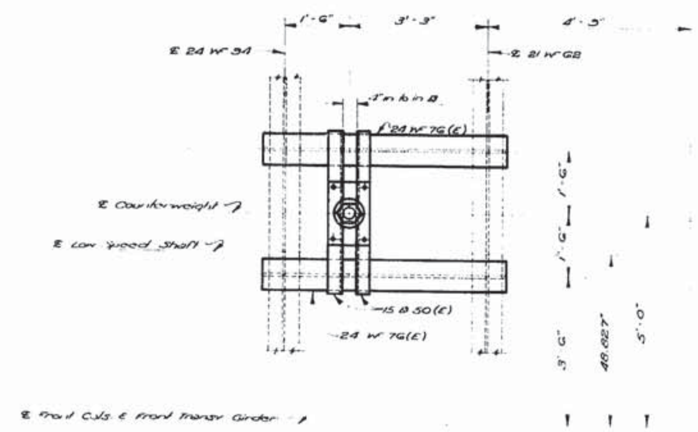
SL50-150-28

AS BUILT PLANS

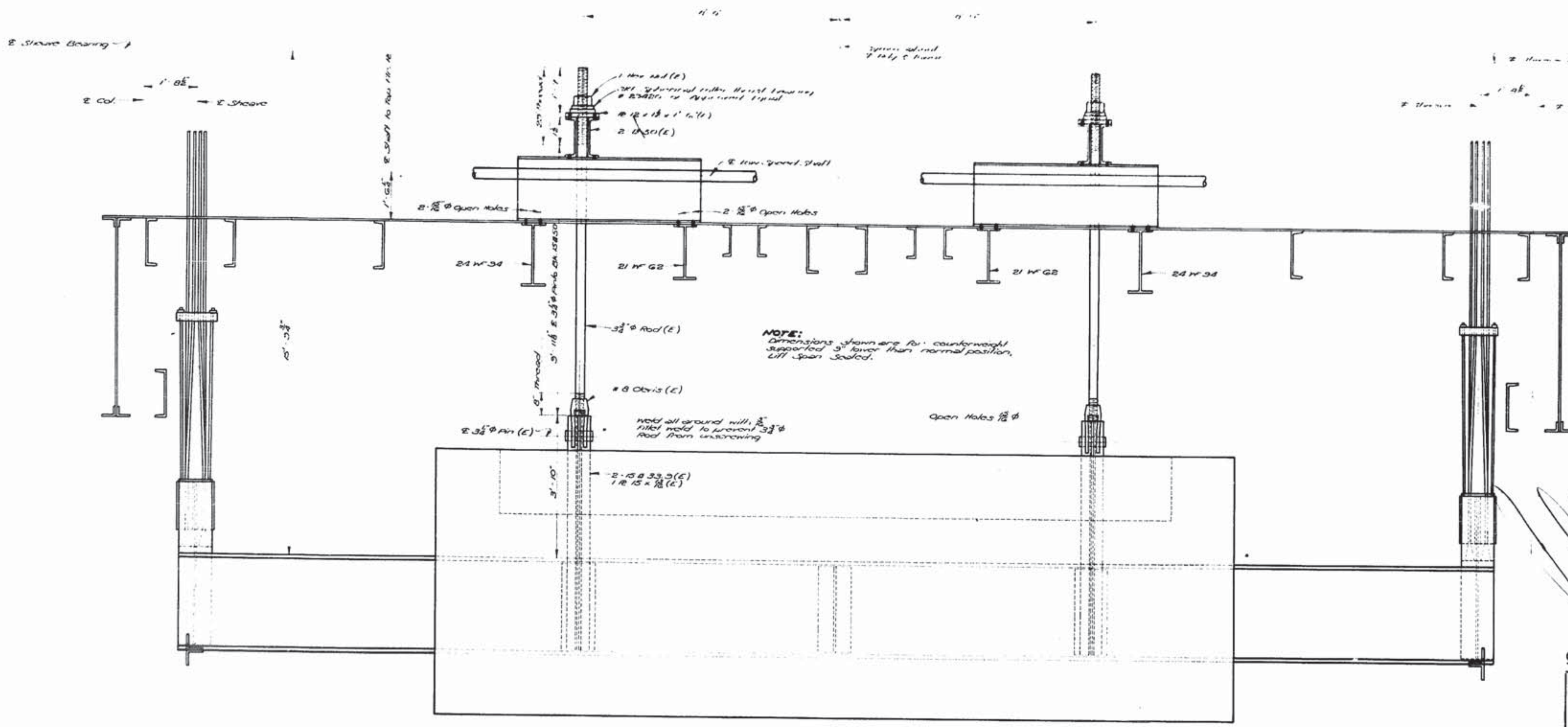
HAER No. LA-32

123

STATE PROJECT	PARISH	SHEET NO.
64-06-10	Lafourche	34



PLAN VIEW AT SUPPORTING DEVICE



SUGGESTED METHOD OF SUPPORTING COUNTERWEIGHT DURING ERECTION

NOTES:

The method of supporting the counterweight in the event the contractor elects to float in the completed lift span is suggestive only, and the contractor may use any other satisfactory method of his choice. All items marked (E) are classified as erection material.
No direct payment will be made for erection material, and all material so classified, with the exception of 15 B 33.9 and Pls 15 x 1/16, permanently fixed to counterweight, shall remain the property of the contractor.

COUNTERWEIGHT ERECTION DETAILS

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY 5'-0" SIDEWALKS
45'-0" LIFT OPEN STEEL GRID FLOOR
DATED May 3, 1957

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

DESIGNED	DETAILED	TRACED D. Andoris
CHECKED S.L.P.	CHECKED S.L.P.	CHECKED

BRIDGE DESIGN SECTION

DATE	DESCRIPTION	BY

REVISIONS

SHEET 10 OF 26

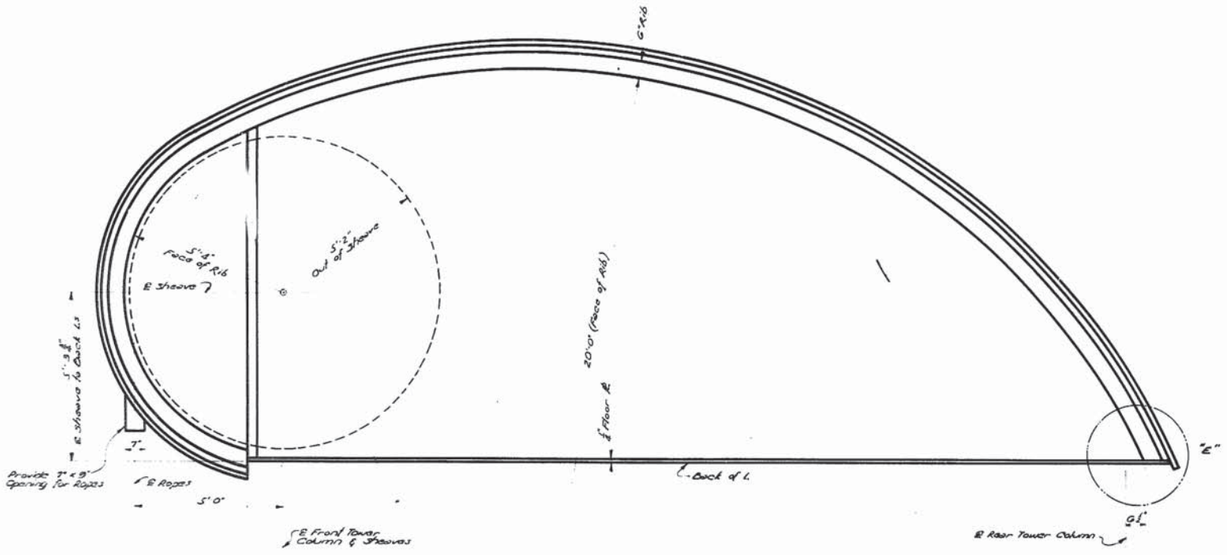
SL50-150-28

AS BUILT PLANS

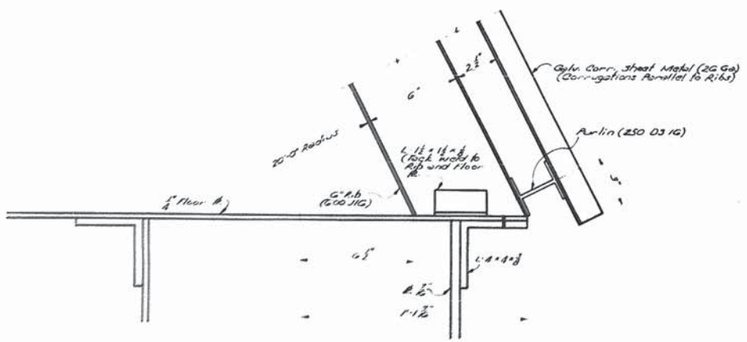
HAER No. LA-32

124

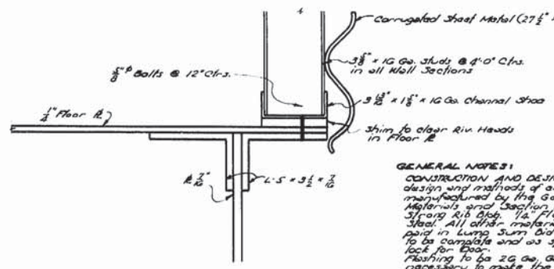
STATE PROJECT	PARISH	SHEET NO.
658-06-16	Lafourche	35



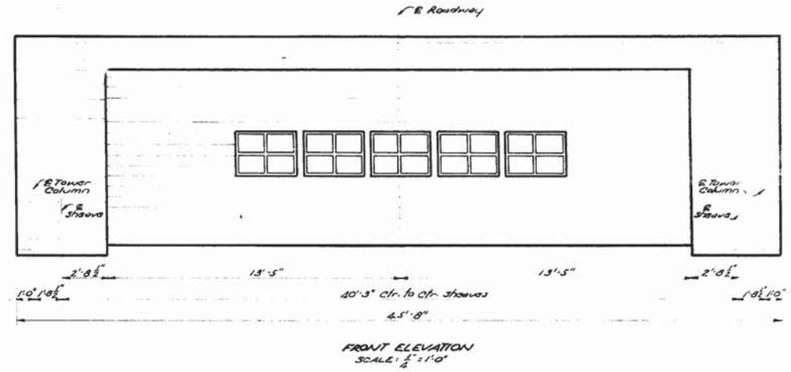
OUTLINE DIMENSIONS
SCALE: 1/4" = 1'-0"



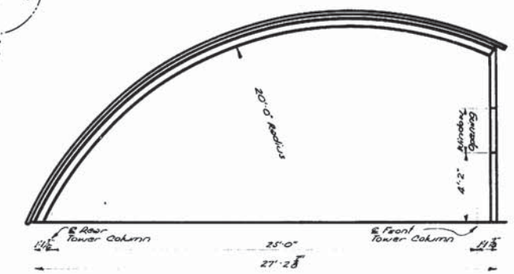
SECTION "E"



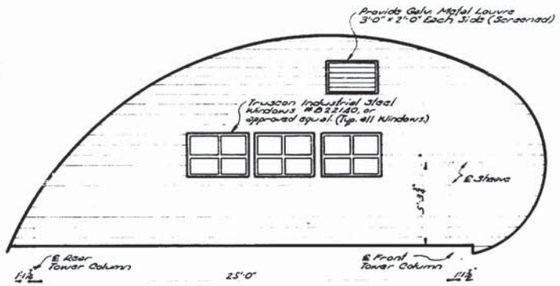
SIDE WALL CONNECTION DETAIL



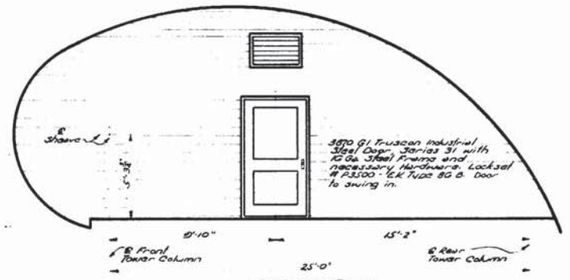
FRONT ELEVATION
SCALE: 1/4" = 1'-0"



SECTION ALONG E ROADWAY
SCALE: 1/4" = 1'-0"



SIDE ELEVATION
SCALE: 1/4" = 1'-0"



SIDE ELEVATION
SCALE: 1/4" = 1'-0"

GENERAL NOTES:

CONSTRUCTION AND DESIGN SPECIFICATIONS: According to the latest design and methods of erection of the "80 STRONG RIB BLDG.", as manufactured by the Gordon-Taylor Steel Co. or an approved equal. Materials and Section to be the equivalent, or better than this 40' Strong Rib Bldg. Ia. Floor & to be paid for as Fabricated Carbon Steel. All other materials necessary to complete house are to be paid in Lump Sum Bid for "Machinery House". Door and windows to be complete and as specified, or an approved equal. Provide lock for Door.

Flashing to be 26 Ga. Galv. Sheet Metal, and provided where necessary to make the house substantially watertight.

Doors and Windows to be glazed with polished wire glass.

Provide necessary bracing in walls and ceiling.

Galv. Surfaces to receive two field coats of aluminum paint. All foreign material shall be removed from surfaces before painting. The Contractor will not be required to treat Galv. Surfaces with solution stipulated in Specifications "Painting of Metal Surfaces" Art. 4.13, Part 5, Div. II, 31st. Specs.

MACHINERY HOUSES

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY 5'-0" SIDEWALKS
45'-0" LIFT OPEN STEEL GRID FLOOR
DATED May 8 1957

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

DESIGNED	DETAILED	TRACED
CHECKED	CHECKED	CHECKED

BRIDGE DESIGN SECTION

DATE	DESCRIPTION	BY
	REVISIONS	

SHEET 11 OF 26

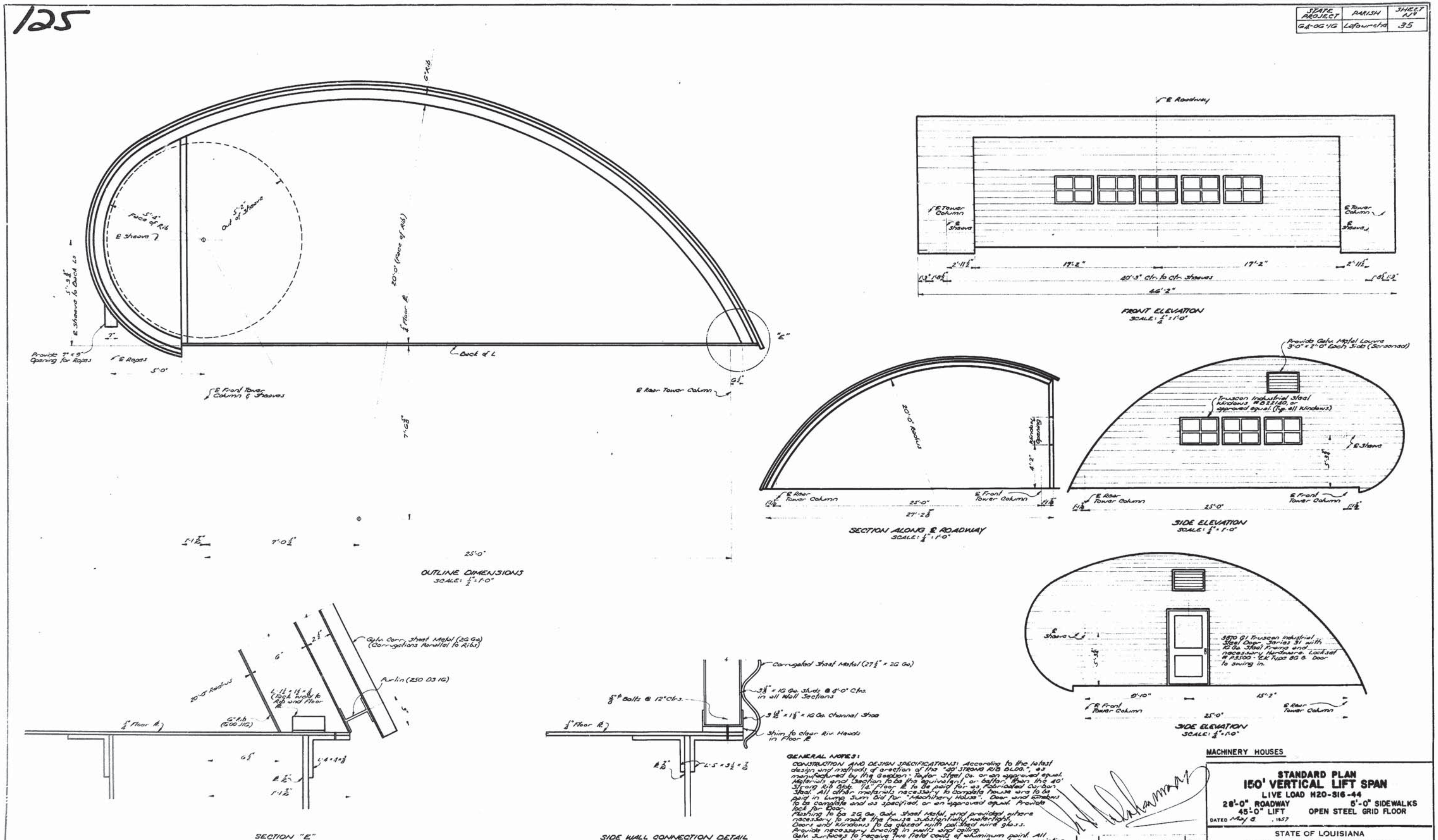
SL50-150-28

AS BUILT PLANS

HAER No. LA-32

125

STATE PROJECT	PARISH	SHEET Nº
66-06-16	Lafourche	35



GENERAL NOTES:

CONSTRUCTION AND DESIGN SPECIFICATIONS: According to the latest design and methods of erection of the "40' STRONG RIB BLDG.", as manufactured by the Goodson-Taylor Steel Co. or an approved equal. Materials and Section to be the equivalent, or better, than the 40' Strong Rib Bldg. 1/4" Floor ℞ to be paid for as Fabricated Carbon Steel. All other materials necessary to complete house are to be paid in Lump Sum Bid for "Machinery House". Door and Windows to be complete and as specified, or an approved equal. Provide lock for Door.

Flashing to be 26 Ga. Galv. Sheet Metal, and provided where necessary to make the house substantially watertight.

Doors and Windows to be glazed with polished wire glass.

Provide necessary bracing in walls and ceiling.

Galv. Surfaces to receive two field coats of aluminum paint. All foreign material shall be removed from surface before painting. The Contractor will not be required to treat Galv. Surfaces with solution stipulated in Specifications "Painting of Metal Surfaces" Art. 4.13, Part 5, Div. II, Std. Specs.

DATE	DESCRIPTION	BY
3.5.59	Dimns. Front Elev.	R.G./S.N.

REVISIONS

MACHINERY HOUSES

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY 5'-0" SIDEWALKS
45'-0" LIFT OPEN STEEL GRID FLOOR
DATED May 8, 1957

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

DESIGNED	DETAILED	TRACED M. MONCRIEF
CHECKED	CHECKED	CHECKED

BRIDGE DESIGN SECTION

SHEET 11 OF 28

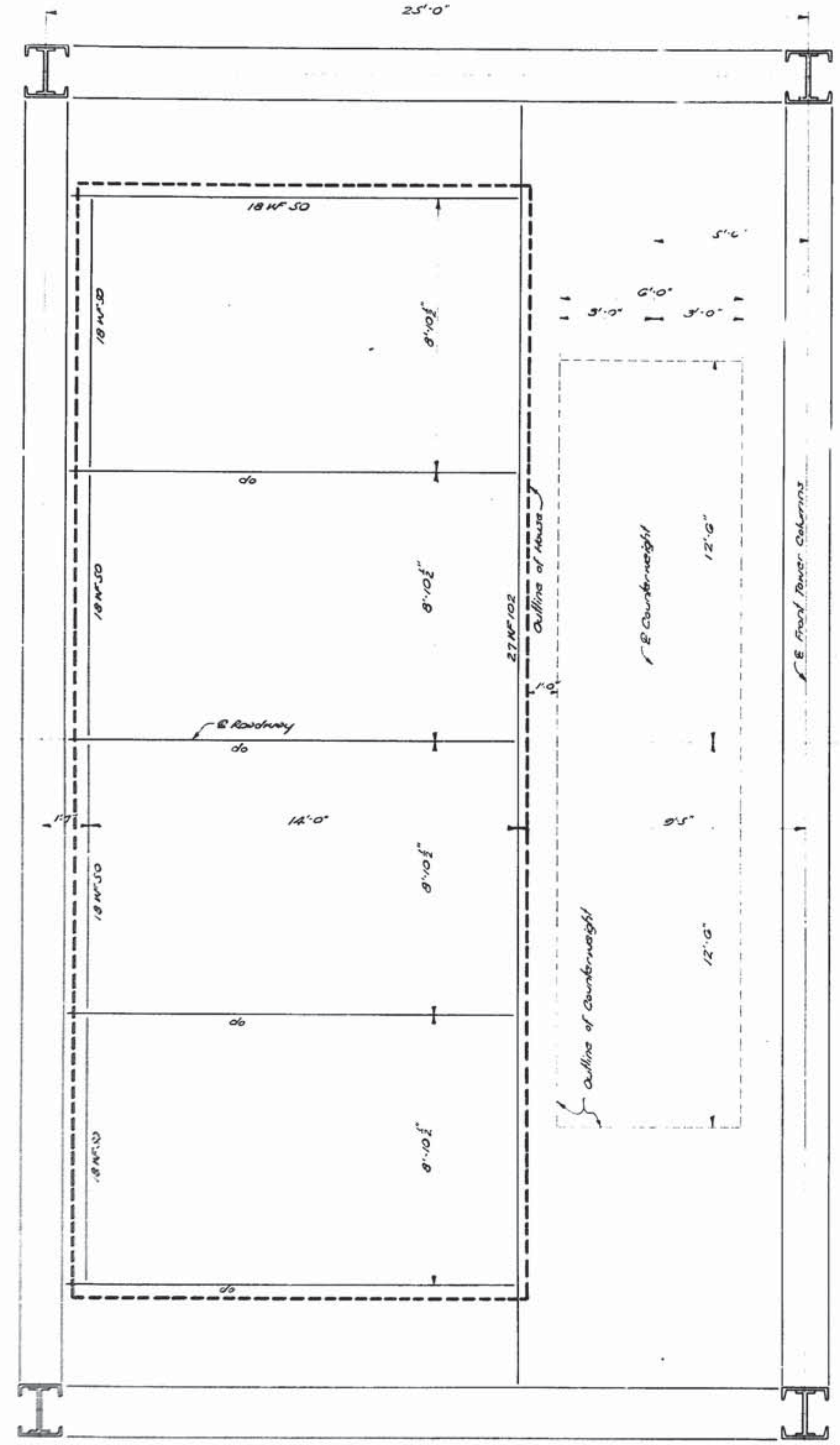
SL 50-150-28

AS BUILT PLANS

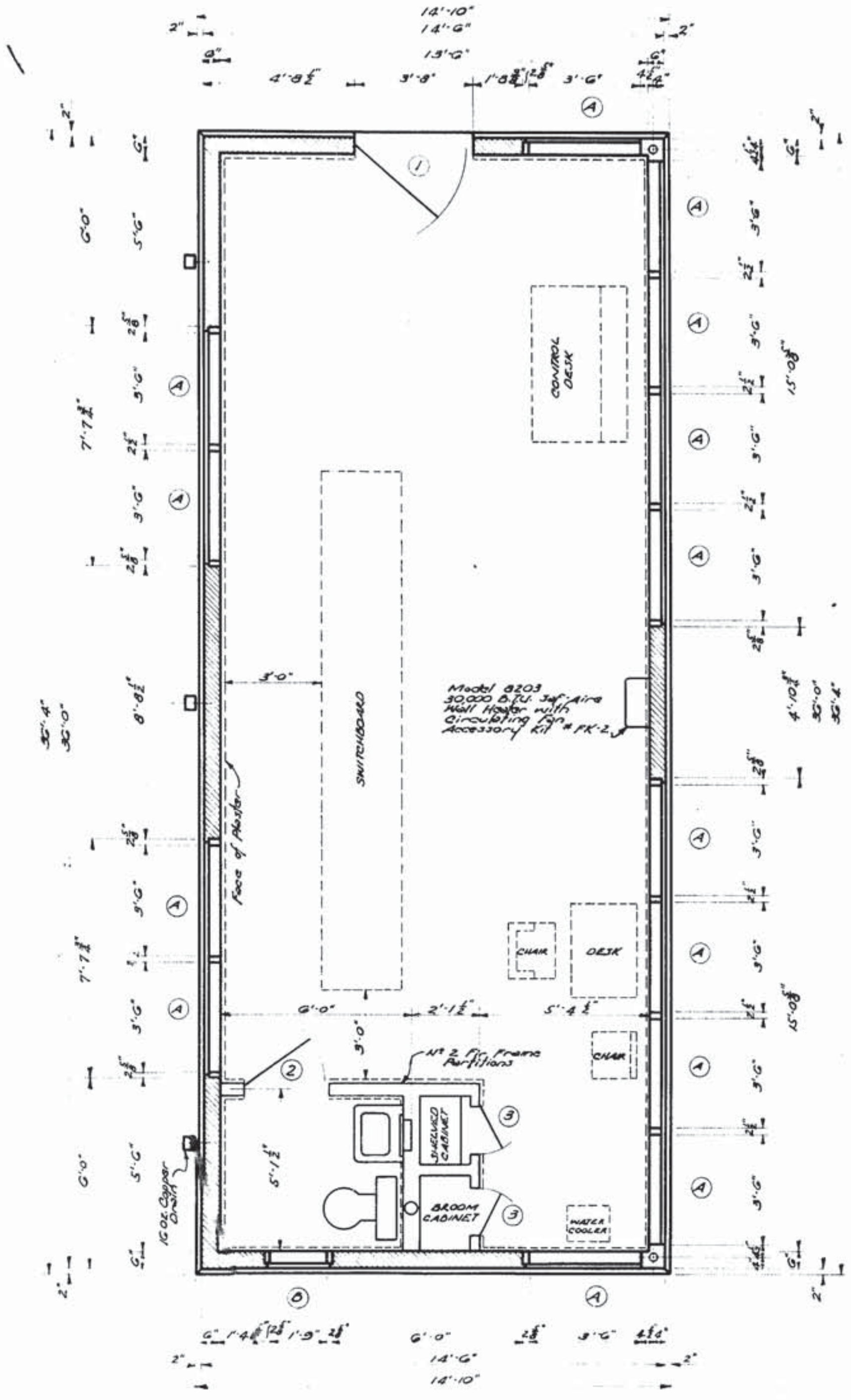
HAER No. LA-32

126

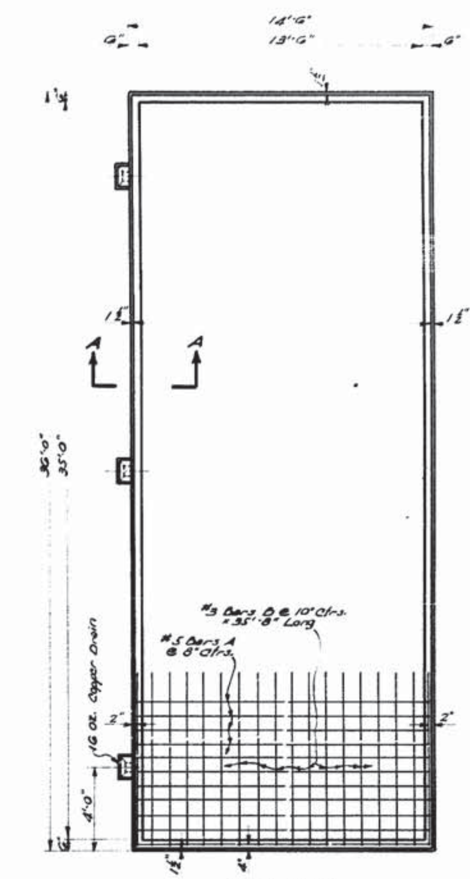
STATE PROJECT	PARISH	SHEET NO.
64-06-16	Lafourche	36



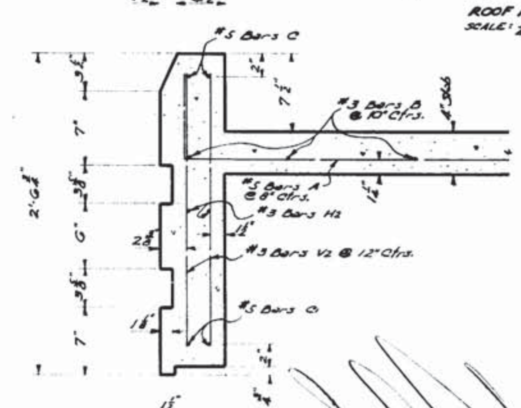
PLAN
SHOWING HOUSE LOCATION AND STRUCTURAL STEEL LOCATION
SCALE: $\frac{3}{8}$" = 1'-0"



FLOOR PLAN
SCALE: $\frac{3}{8}$" = 1'-0"



ROOF PLAN
SCALE: $\frac{3}{8}$" = 1'-0"



SECTION A-A
SCALE: $1\frac{1}{2}$" = 1'-0"

NOTE:
All Aluminum Surfaces to be placed in contact with, or fastened to, steel members shall be thoroughly coated with an approved aluminum impregnated caulking compound. All Aluminum Surfaces to be placed in contact with Concrete shall be given a heavy coat of an approved alkali-resistant bituminous paint, or a coat of Zinc Chromate paint and allowed to dry before placing on the Concrete.

DOOR AND WINDOW SCHEDULE

MARK	SIZE	TYPE	STYLE	REMARKS
1	3'-4" × 7'-0" × 1$\frac{3}{4}$"	Jalousie	4$\frac{1}{2}$" Glass	Aluminum Frame
2	2'-6" × 6'-8" × 1$\frac{3}{4}$"	Flush	Steel	Steel Metal Frame
3	1'-6" × 6'-5" × 1$\frac{5}{8}$"	Flush	Steel	Steel Metal Frame
A	3'-6" × 5'-1$\frac{5}{8}$"	Jalousie	6$\frac{1}{2}$" Glass	Aluminum Frame G35-TS
B	1'-9" × 2'-2$\frac{3}{4}$"	Jalousie	6$\frac{1}{2}$" Glass	Aluminum Frame G35-TS

FINISH SCHEDULE

ITEM	WALLS		CEILING	FLOOR	BASE	TRIM	ROOF	WAINSCOT
	OUTSIDE	INSIDE						
House	Rubbed	Tile & Plaster	Plaster	Tile	Tile	Metal	Tar & Gravel	39" Above Floor
Toilet	-	Tile & Plaster	Plaster	Tile	Tile	Metal	-	39" Above Floor
Cabinets	Plaster	$\frac{3}{8}$" Plywood	Plaster	Tile	-	Metal	-	

DATE | DESCRIPTION | REVISIONS

OPERATING HOUSE

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY 5'-0" SIDEWALKS
45'-0" LIFT OPEN STEEL GRID FLOOR
DATED May 13 1957

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

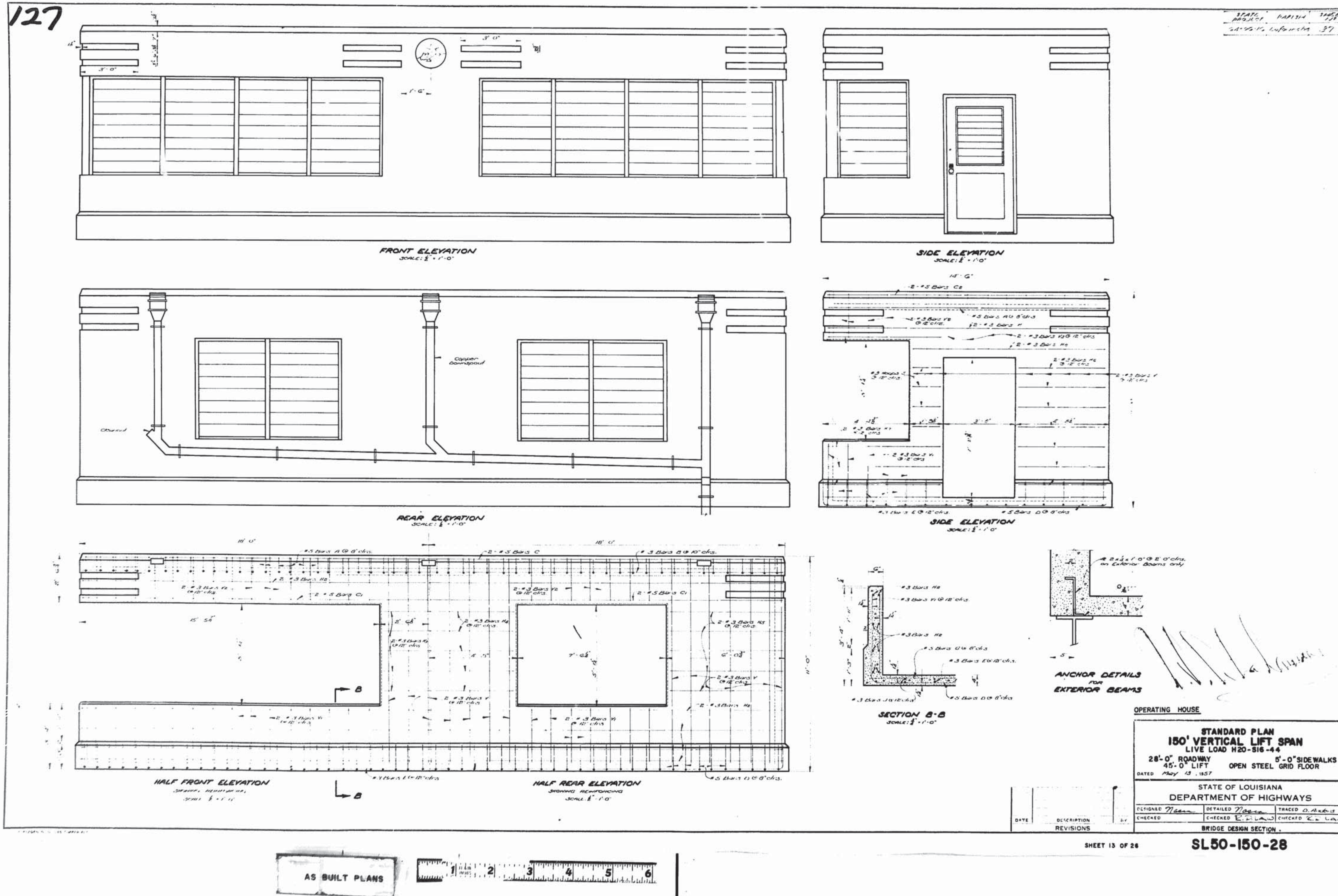
DESIGNED	DETAILED	TRACED M. MONCRIEF
CHECKED	CHECKED E. D. LAW	CHECKED E. D. LAW

BRIDGE DESIGN SECTION

SHEET 12 OF 26

SL50-150-28

AS BUILT PLANS



OPERATING HOUSE

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY 5'-0" SIDEWALKS
45'-0" LIFT OPEN STEEL GRID FLOOR
DATED May 13, 1957

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS
BRIDGE DESIGN SECTION

REVISIONS

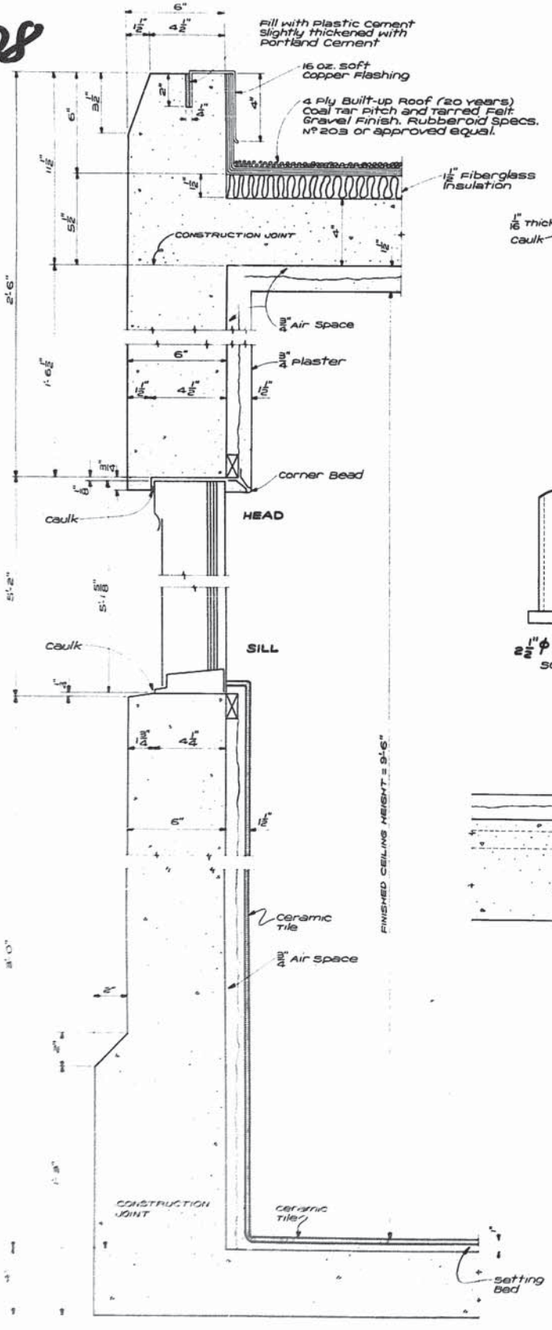
SHEET 13 OF 26

SL50-150-28

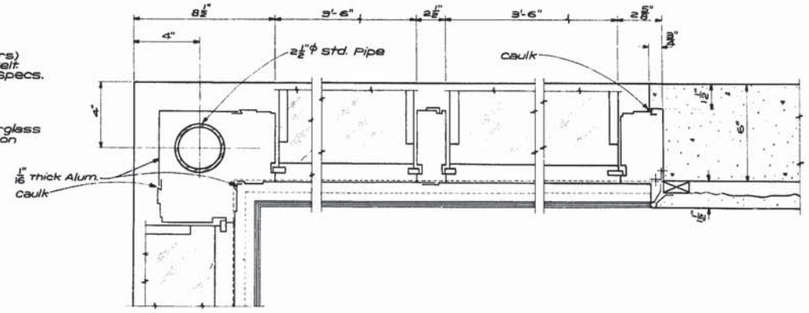
HAER No. LA-32

128

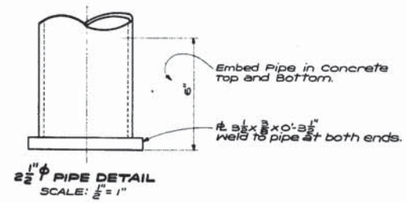
STATE PROJECT	PARISH	SHEET NO
041-06-16	Lafourche	38



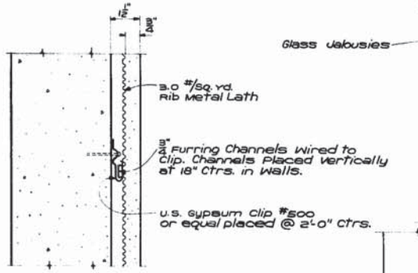
TYPICAL WALL SECTION
SCALE: 1/4" = 1"



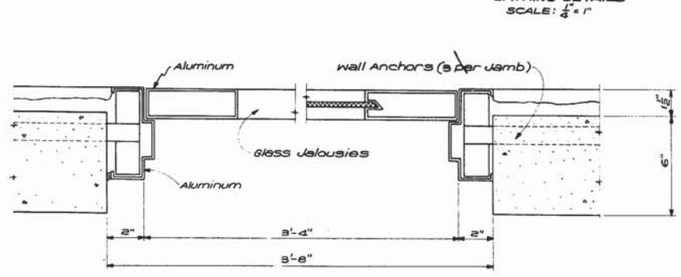
WINDOW MULLION AND JAMB DETAILS
SCALE: 1/4" = 1"



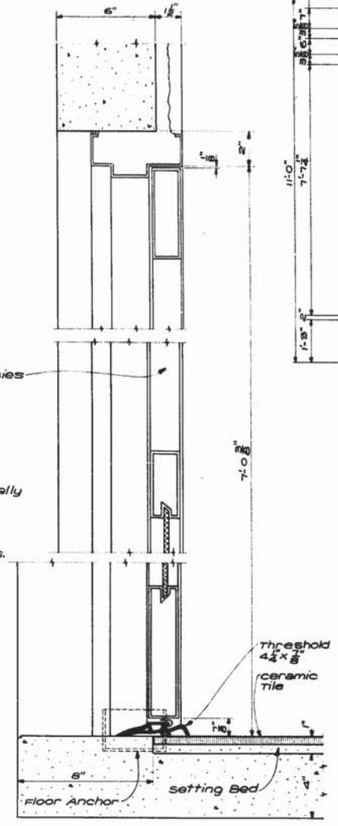
SCALE: 1/2" = 1"



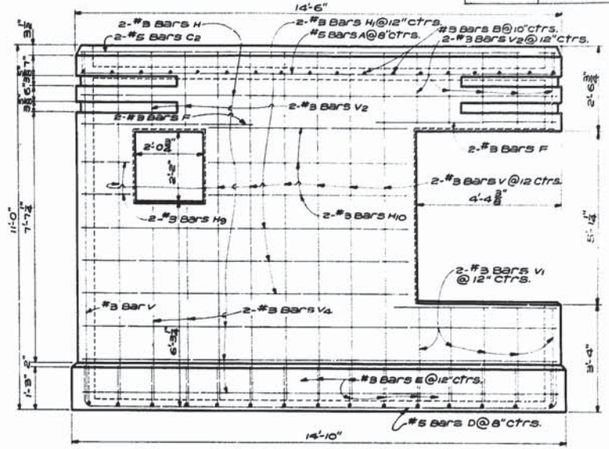
LATHING DETAILS
SCALE: 1/4" = 1"



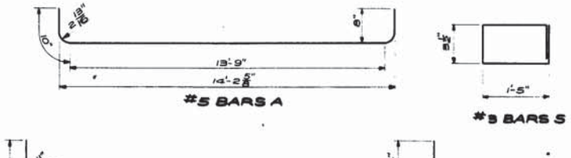
EXTERIOR DOOR JAMB DETAILS
SCALE: 1/4" = 1"

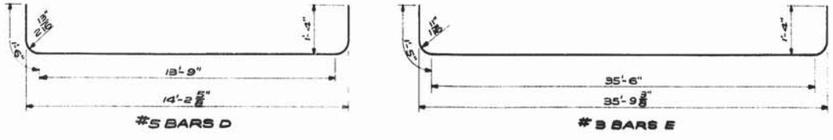


DOOR DETAILS
SCALE: 1/4" = 1"



SIDE ELEVATION
SHOWING REINFORCING
SCALE: 1/4" = 1'-0"





BILL OF REINFORCING STEEL

BAR	SIZE	Nº	UNIT LENGTH	TOTAL LENGTH	LOCATION
A	5	54	15'-6"	882'-6"	short Span in Roof Slab
C	5	4	35'-8"	142'-8"	Horiz. in Front and Rear Walls (TOP)
C1	5	4	35'-8"	142'-8"	Horiz. in Front & Rear Walls over Windows
C2	5	4	14'-2"	56'-8"	Horiz. in Side Walls (TOP)
D	5	54	16'-9"	904'-6"	short Span in Floor Slab (Bottom)
G	5	54	14'-6"	788'-0"	short Span in Floor Slab (TOP)
Total #5 bars = 2862'-0" = 2985 Lbs.					
B	8	18	35'-8"	642'-0"	Long Span in Roof Slab
E	8	15	36'-4"	545'-0"	Long Span in Floor Slab (Bottom)
F	8	2	5'-3"	10'-6"	Horiz. in Side Wall over Toilet Window
H	8	10	14'-2"	141'-8"	Horiz. in Side Walls
H1	8	6	9'-10"	59'-0"	Horiz. in Side Wall below Toilet Window
H2	8	20	35'-8"	713'-4"	Horiz. in Front and Rear Walls
H3	8	10	4'-8"	46'-8"	Horiz. in Front Wall between Windows
H4	8	10	8'-6"	85'-0"	Horiz. in Rear Wall between Windows
H5	8	20	5'-8"	113'-4"	Horiz. in Rear Wall at Ends
H6	8	14	4'-4"	60'-8"	Horiz. in Wall near door
H7	8	8	5'-9"	46'-0"	Horiz. in Wall near door
H8	8	2	9'-9"	19'-6"	Horiz. in Wall over door
H9	8	4	1'-6"	6'-0"	Horiz. in Side Wall near Toilet Window
H10	8	6	5'-9"	34'-6"	Horiz. in Side Wall near Toilet Window
J	8	15	36'-0"	468'-0"	Long Span in Floor Slab (TOP)
S	8	4	3'-8"	14'-8"	Hoops in Wall near door
V	8	84	10'-6"	882'-0"	vertical in Walls
V1	8	108	2'-10"	306'-0"	vertical in Walls below Windows
V2	8	112	2'-2"	242'-8"	vertical in Walls above Windows
V3	8	8	3'-0"	24'-0"	vertical in Walls above door
V4	8	4	5'-9"	23'-0"	vert in Side Wall below Toilet Window
Total #8 Bars = 4513'-6" = 1697 Lbs.					

OPERATING HOUSE

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY 5'-0" SIDEWALKS
45'-0" LIFT OPEN STEEL GRID FLOOR
DATED MAY 14 -87

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

DESIGNED	DETAILED	TRACED
CHECKED	CHECKED	CHECKED
ENGINEER	BRIDGE DESIGN SECTION	

DATE	DESCRIPTION REVISIONS

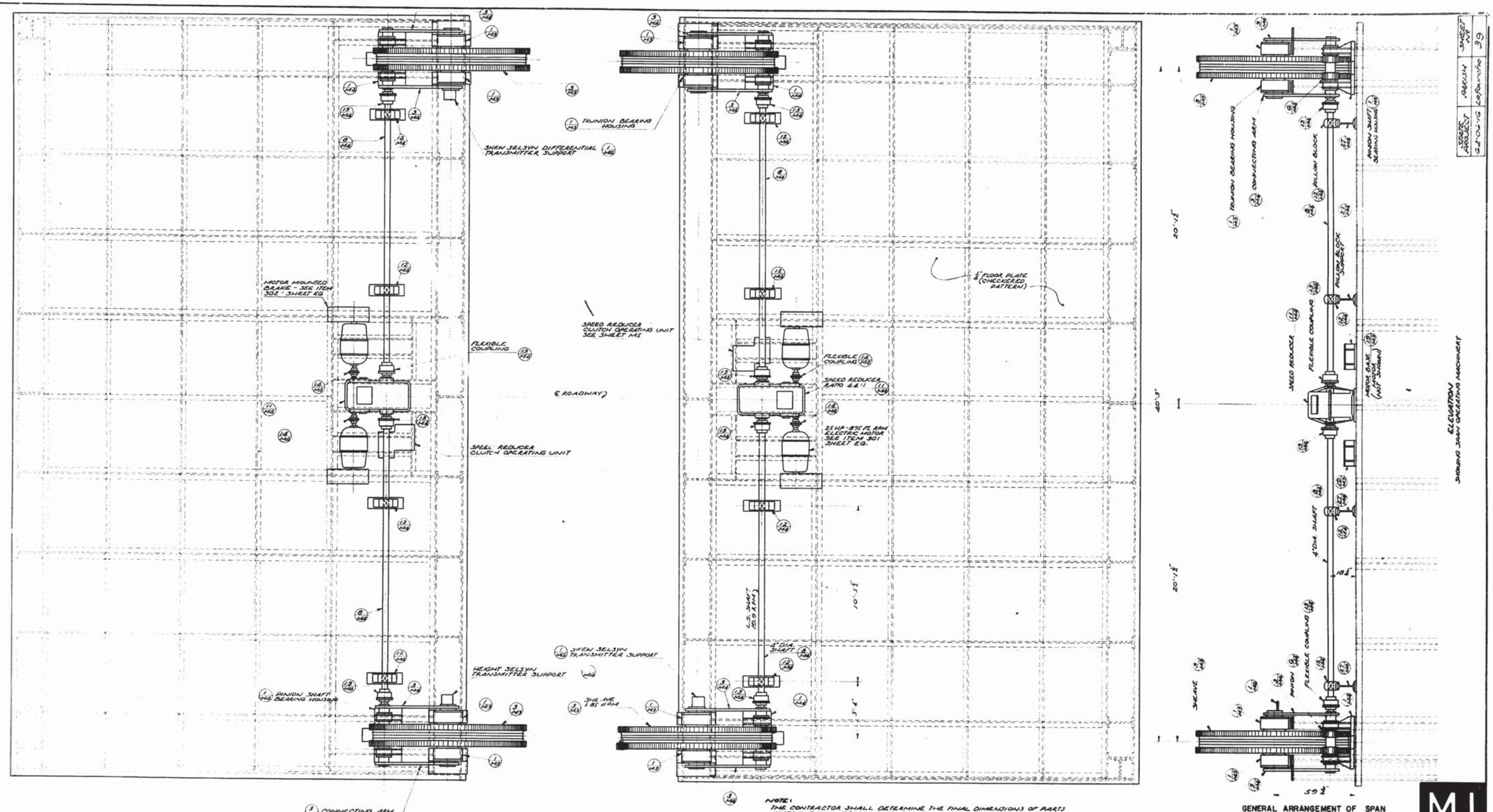
SHEET 4 OF 26

SL50-150-28

AS BUILT PLANS

HAER No. LA-32

129



THICKNESS AND Nº OF SHIMS TO BE FURNISHED			
ONE NORMAL SHIM \ THICKNESS	1/32"	1/16"	1/8"
1/8"	2	2	3
1/2"	4	2	4
3/4"	6	5	5

NOTE:
THE CONTRACTOR SHALL DETERMINE THE FINAL DIMENSIONS OF PARTS INVOLVING COMMERCIAL PRODUCTS SUCH AS MOTORS, SPEED REDUCERS, BEARINGS, ELECTRICAL EQUIPMENT AND THE LIKE, FROM CERTIFIED DIMENSIONS OUTLINES OF THE COMMERCIAL PRODUCTS BEFORE MAKING SHOP DRAWINGS OF THE PARTS INVOLVED.

PAINTING NOTE:
ALL UNFINISHED SURFACES OF MACHINERY SHALL BE PAINTED ONE SHOP COAT OF RED LEAD AND OIL. ALL FINISHED SURFACES SHALL BE COATED WITH WHITE LEAD AND TALLOW BEFORE SHIPMENT AND SHALL BE PROTECTED BY WOODEN LAGGING.

LUBRICATION NOTE:
UNLESS OTHERWISE SHOWN ON DETAIL DRAWING LUBRICANT SHALL BE AS FOLLOWS OR APPROVED EQUAL:
- PILLOW BLOCKS, COUPLINGS & TRUNION BEARINGS - ESSO FIBRE GREASE "O".
- EXPOSED TEETH - MEDIUM HARD GREASE.
- ENCLOSED SPEED REDUCERS - STD. OIL "TERESSO 65" VISC SAE 30.
- WIRE ROPE - STD. OIL CO. SURRETTE COMPOUND Nº 1500.

DATE	DESCRIPTION	BY
9-24-57	Added Shim Thickness Table	A.A.K.

REVISIONS

GENERAL ARRANGEMENT OF SPAN OPERATING MACHINERY

M1

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY 5'-0" SIDEWALKS
45'-0" LIFT OPEN STEEL GRID FLOOR
DATE APRIL 25, 1957

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

DESIGNED Kuzel	DETAILED Brewer	TRACED M. MONCRIEF
CHECKED Brewer	CHECKED Kuzel	CHECKED Brewer

BRIDGE DESIGN SECTION

SHEET 15 OF 26

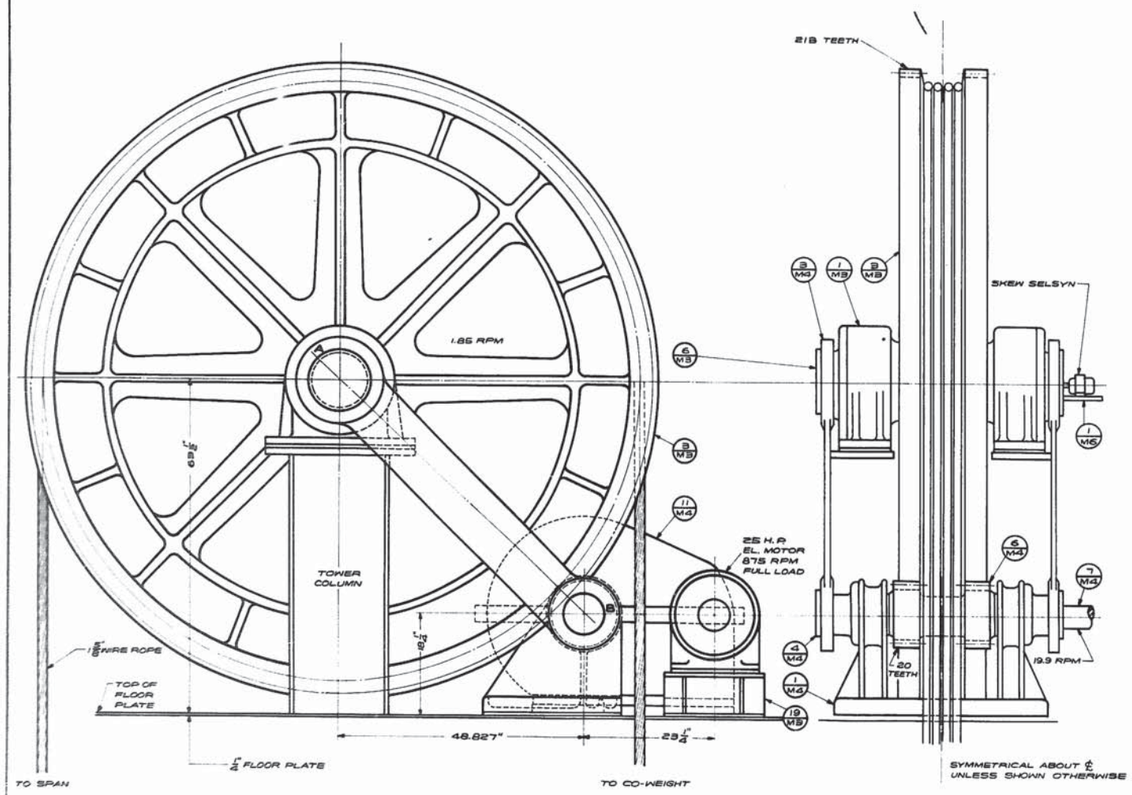
SL50-150-28

STATE PROJECT	PARISH	SHEET NO.
22-02-16	Lafourche	39

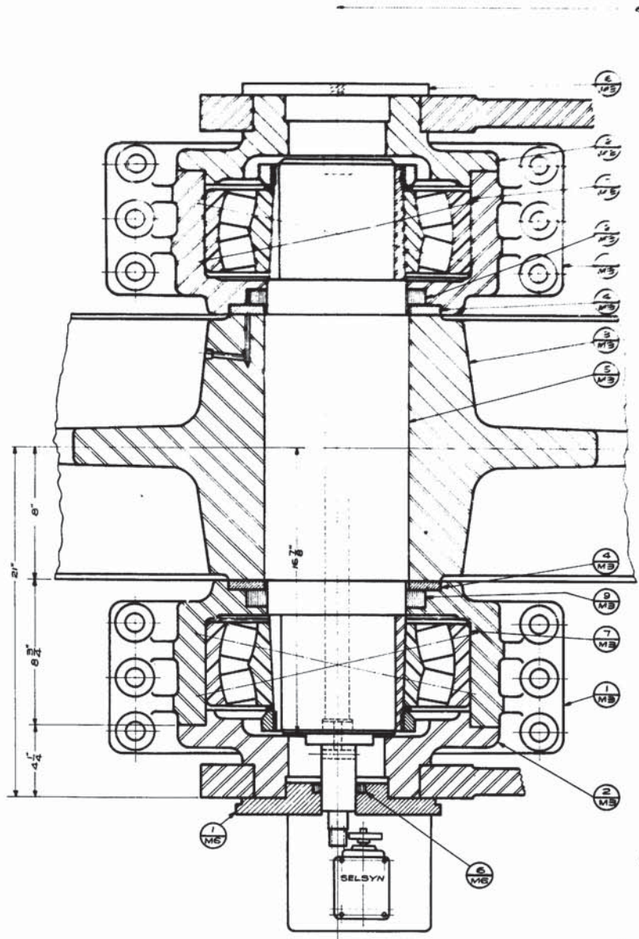
AS BUILT PLANS

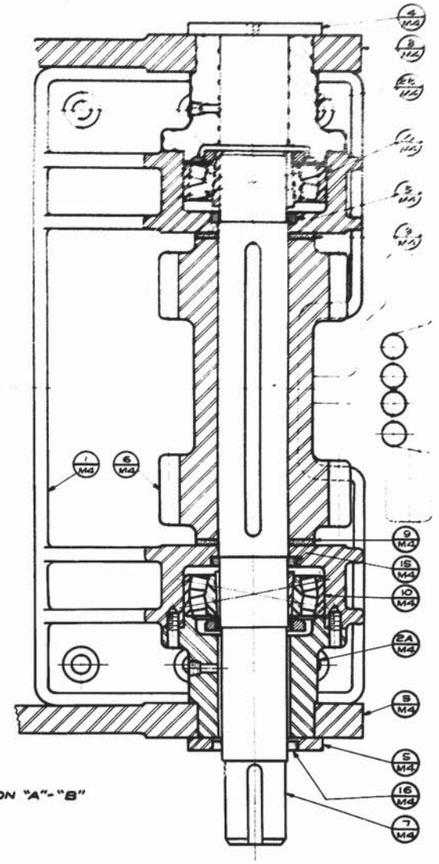
130

STATE PROJECT	PARISH	SHEET NO.
58-02-15	Lafourche	45

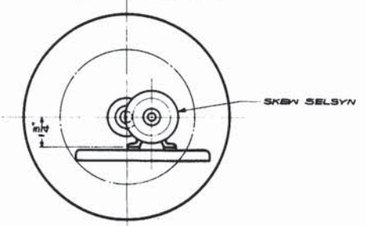


GENERAL ARRANGEMENT OF BRIDGE MACHINERY
ON DWG. # M1





SECTION "A"-"B"



SELSYN MOUNTINGS AND GEARS ON DWG. M6

NOTE:
FOR REMOVING PINION SHAFT (7 M4) REMOVE CAPS, BEARINGS AND GREASE SEALS FROM BOTH ENDS OF THE ASSEMBLY. ROTATE THE PINION SPACER (9 M4) NEAREST THE COUPLING END OF THE SHAFT UNTIL ITS KEY SLOT IS IN LINE WITH THE KEY SLOT IN THE BORE OF THE HOUSING (1 M4) ROTATE THE SHAFT UNTIL THE KEYS ARE STRAIGHT DOWN. LIFT IT UPWARD AGAINST THE TOP OF THE BORE AND PRESS IT OUT IN THE DIRECTION OF THE COUPLING END.

NOTE:
THE CONTRACTOR SHALL DETERMINE THE FINAL DIMENSIONS OF PARTS INVOLVING COMMERCIAL PRODUCTS SUCH AS MOTORS, SPEED REDUCERS, BEARINGS, ELECTRICAL EQUIPMENT AND THE LIKE, FROM CERTIFIED DIMENSIONS OUTLINES OF THE COMMERCIAL PRODUCTS BEFORE MAKING SHOP DRAWINGS OF THE PARTS INVOLVED.
UNLESS OTHERWISE SHOWN ON DETAIL DRAWING LUBRICANT SHALL BE AS FOLLOWS OR APPROVED EQUAL:
PILLOW BLOCKS, COUPLINGS & TRUNION BEARINGS - ESSO FIBRE GREASE "C"
EXPOSED TEETH - MEDIUM HARD GREASE.
ENCLOSED SPEED REDUCERS - STD. OIL "TERESSO 95" VISC SAE 90.
WIRE ROPE - STD. OIL CO. SURRETTE COMPOUND Nº 1600.
ALL UNFINISHED SURFACES OF MACHINERY SHALL BE PAINTED ONE SHOP COAT OF RED LEAD AND OIL.
ALL FINISHED SURFACES SHALL BE COATED WITH WHITE LEAD AND TALLOW BEFORE SHIPMENT AND SHALL BE PROTECTED BY WOODEN LAGGING.

ASSEMBLY OF GEAR TRAIN FOR SHEAVE DRIVE

M2

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY 5'-0" SIDEWALKS
45'-0" LIFT OPEN STEEL GRID FLOOR
DATED FEB. 22 1957

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

DESIGNED Kuzel	DETAILED Kuzel	TRACED Q. Carlson
CHECKED Brewer	CHECKED Brewer	CHECKED Brewer

BRIDGE DESIGN SECTION

DATE	REVISIONS	BY
4-9-58	REV. PART Nº [illegible]	A.R.K.

SHEET 16 OF 26

SL50-150-28

AS BUILT PLANS

131

STATE PROJECT	PARISH	SHEET NO.
G.A. 06-16	Lafourche	41

BILL OF MATERIAL FOR ONE SPAN

PART NO.	QUAN.	DESCRIPTION		
1	8	TRUNION BEARING HOUSING	ST. CAST ASTM-A27-GR 65-35	
2	8	HOUSING COVER	ST. CAST ASTM-A27-GR 65-35	
3	4	SHEAVE	ST. CAST ASTM-A27-GR 65-115	
4	8	SHEAVE THRUSTWASHER	BRONZE	
5	4	TRUNION	ST. FORG'G. ASTM-A235-CL. G	
6	5	CONN. ARM RETAINER	STEEL	
7	8	TRUNION BEARING SKF #22338 CK+SNH/I OR TORR #190SD23A		COMM.
8	16	1" DIA. PIN - 4" LONG	STEEL	
9	8	GARLOCK SEAL #51-3510		COMM.
10	64	1-10 NC. CAPSCREW - 2¼" LG.	STEEL	
11	64	1" SHAKEPROOF LOCKWASHER		COMM.
12	32	1-11 NC. CAPSCREW - 1½" LG.	STEEL	
13	32	1" SHAKEPROOF LOCKWASHER		COMM.
14	12	⅝-16 NC. CAPSCREW - 1" LONG	STEEL	
15	12	⅝" SHAKEPROOF LOCKWASHER		COMM.
16	21	ALEMITE HYDRAULIC FITTING		COMM.
17	16	¼" COUNTERSUNK PLUG	BRASS	COMM.
18	48	TURNED BOLT COMPL.	STEEL	
19	4	MOTOR BASE	STEEL WELDM.	
20	16	MOTOR BOLT COMPL.	STEEL	
21	6	BASE FOR REDUCER	STEEL C.P. 1½" x 3"	
22	12	BOLT FOR REDUCER - COMPL.	STEEL	

GENERAL NOTES:

ALL PARTS FURNISHED BY THE CONTRACTOR SHALL BE AS SHOWN OR APPROVED EQUAL. ALL PARTS LISTED ON THIS SHEET TO BE INCLUDED IN ITEM 5:8:1 MOVABLE BRIDGE MACHINERY, INCLUDING ALL NECESSARY SHIMS. ALL BOLTS TO HAVE ONE NUT AND ONE HEAVY SAE LOCKWASHER, UNLESS NOTED, OR OTHER MEANS OF LOCKING NUT ARE SHOWN ON DETAILS. THE CONTRACTOR SHALL DETERMINE THE FINAL DIMENSIONS OF PARTS INVOLVING COMMERCIAL PRODUCTS SUCH AS MOTORS, SPEED REDUCERS, BEARINGS, ELECTRICAL EQUIPMENT AND THE LIKE, FROM CERTIFIED DIMENSIONS OUTLINES OF THE COMMERCIAL PRODUCTS BEFORE MAKING SHOP DRAWINGS OF THE PARTS INVOLVED.

DETAILS OF SHEAVE & SHEAVE DRIVE

M3

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY — 5'-0" SIDEWALKS
45'-0" LIFT — OPEN STEEL GRID FLOOR
FEB. 16 56

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS
Kuzel — Kuzel — A. Chatman
Brewer — Brewer — Kuzel
BRIDGE DESIGN SECTION

9-24-57 TRUNION BEARING HOUSING — REVISIONS

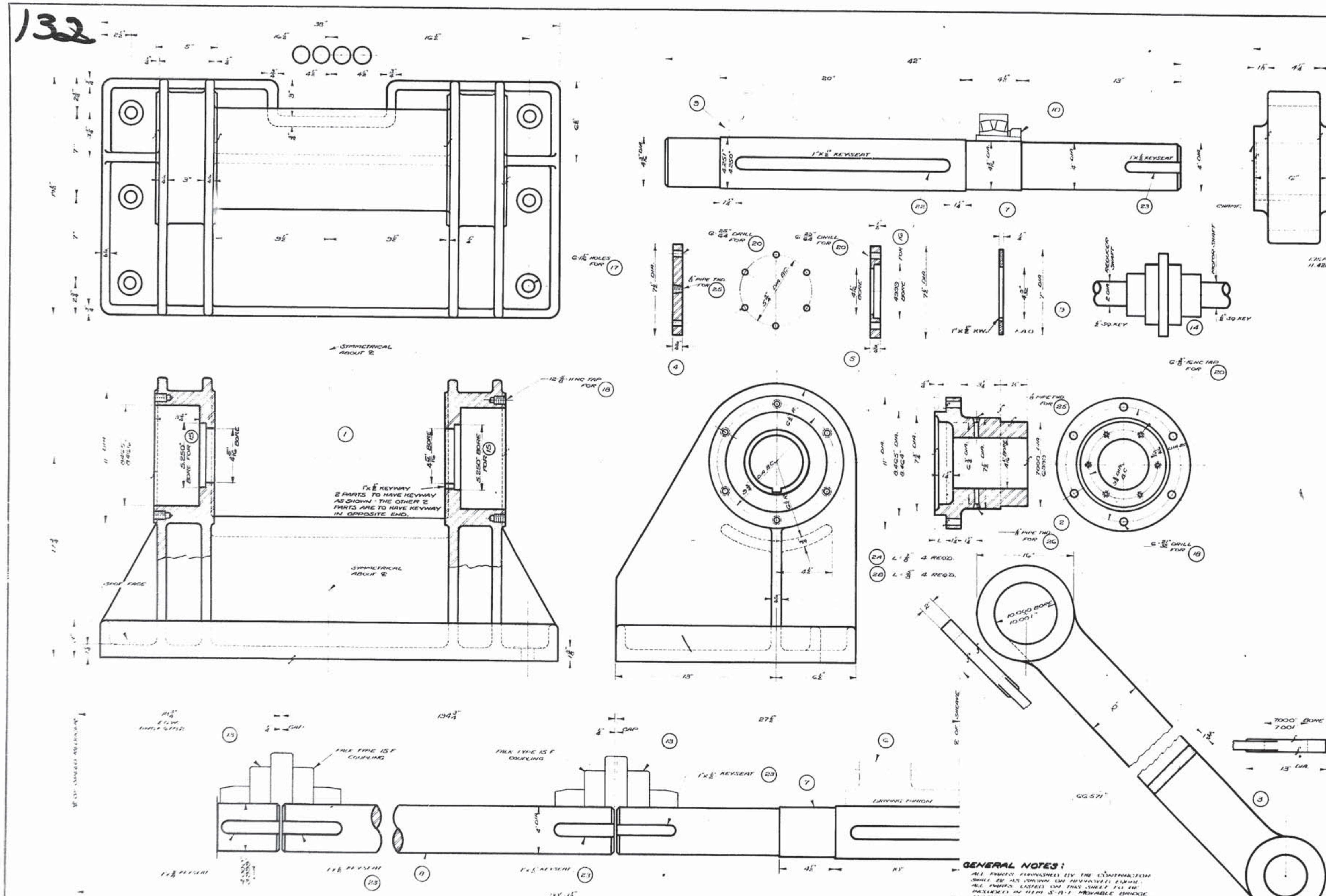
SHEET 17 OF 26

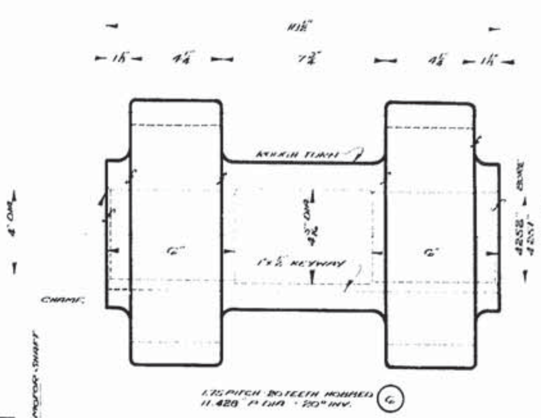
SL50-150-28

AS BUILT PLANS

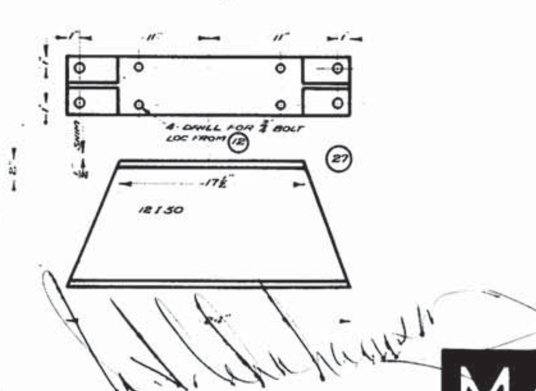
HAER No. LA-32

STATE PROJECT	PARISH	SHEET NO
62-06-16	Lafourche	42





BILL OF MATERIAL FOR ONE SPAN			
PART NO	QUAN	DESCRIPTION	MATERIAL
1	4	PINION SHAFT BEAR'G HOUSING	ST. CAST'G ASTM A27 GR 65-35
2	8	HOUSING COVER	ST. CAST'G ASTM A27 GR 65-35
3	8	CONNECTING ARM	ST. CAST'G ASTM A27 GR 65-35
4	4	CONN. ARM RETAINER	STEEL
5	4	CONN. ARM RETAINER	STEEL
6	4	PINION	ST. FORG'G ASTM A235 CL G
7	4	PINION SHAFT	STEEL ASTM A107 GR 1045
8	4	INTERMEDIATE SHAFT	STEEL ASTM A108
9	8	PINION SHAFT SPACER	BRASS
10	8	PINION SHAFT BEAR'G SKF #22224 CK + SNW OR TORR #13030 22 A COMM	
11	2	SPEED REDUCER EARL GEAR CO # G½ DD-SPECIAL LG #G182 E24 COMM	
12	8	PILLOW BLOCK SKF - SAF 22522 A FOR 4" SHAFT	COMM
13	8	COUPLING FALK #15F	COMM
14	4	COUPLING FALK #8F	COMM
15	8	GARLOCK SEAL #53-2630	COMM
16	4	GARLOCK SEAL #53-2537	COMM
17	24	TURNED BOLT COMPL	STEEL
18	48	⅝"-11 NC C SCREW - 2¼" LONG	STEEL
19	48	⅝" SHAKEPROOF LOCKWASHER	COMM
20	48	½"-13 NC C SCREW - 2¼" LONG	STEEL COMM
21	48	½" SHAKEPROOF LOCKWASHER	COMM
22	4	1" SQ KEY - 17½" LONG	STEEL - KEYSTOCK
23	12	1" SQ KEY - 5" LONG	STEEL - KEYSTOCK
24	32	¾"-10 NC MACH BOLT COMPL 3½" LG	STEEL
25	12	⅛" ALEMITE HYDRAULIC FITTING	COMM
26	8	⅛" PIPE PLUG	BRASS COMM
27	8	SUPPORT FOR PILLOW BLOCK	STEEL



GENERAL NOTES:

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M4

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY 5'-0" SIDEWALKS
45'-0" LIFT OPEN STEEL GRID FLOOR
May 1 '57

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

Kuzel	DETAILED Kuzel	TRACED D. Anders
Brewer	CHECKED Brewer	Kuzel

BRIDGE DESIGN SECTION

DATE	DESCRIPTION	
4-3-58	REV. PART NO 1, 6, 3, 15 (M4)	A.R.K

REVISIONS

SHEET 18 OF 26

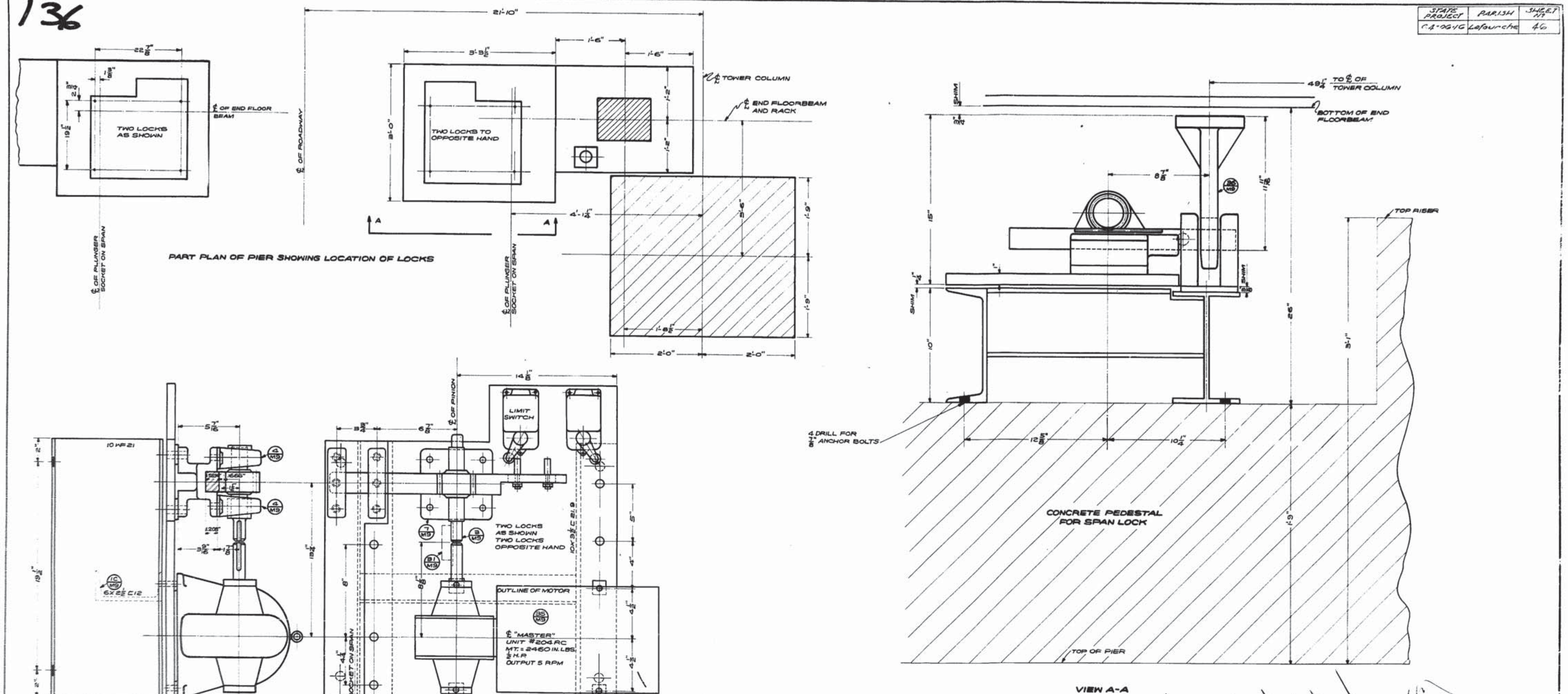
SL50-150-28

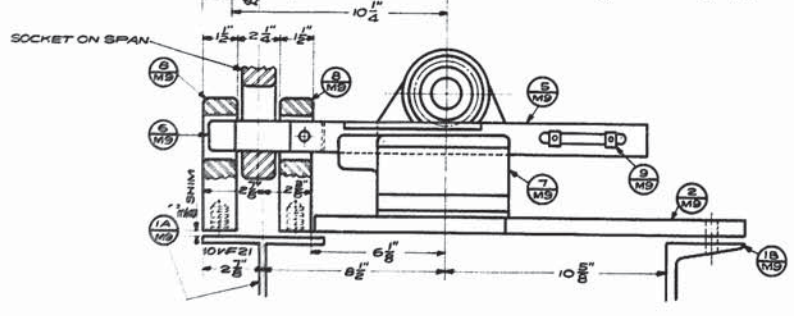
AS BUILT PLANS

HAER No. LA-32

136

STATE PROJECT	PARISH	SHEET NO
C4-06-16	Lafourche	46





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THE CONTRACTOR SHALL DETERMINE THE FINAL DIMENSIONS OF PARTS INVOLVING COMMERCIAL PRODUCTS SUCH AS MOTORS, SPEED REDUCERS, BEARINGS, ELECTRICAL EQUIPMENT AND THE LIKE, FROM CERTIFIED DIMENSIONS OUTLINES OF THE COMMERCIAL PRODUCTS BEFORE MAKING SHOP DRAWINGS OF THE PARTS INVOLVED.
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UNLESS OTHERWISE SHOWN ON DETAIL DRAWING LUBRICANT SHALL BE AS FOLLOWS OR APPROVED EQUAL:
- PILLOW BLOCKS, COUPLINGS & TRUNION BEARINGS- ESSO FIBRE GREASE "C."
- EXPOSED TEETH- MEDIUM HARD GREASE.
- ENCLOSED SPEED REDUCERS- STD. OIL "TERESSO G5" VISC SAE 30.
- WIRE ROPE- STD. OIL CO. SURRETTE COMPOUND Nº 1500.

ASSEMBLY OF SPAN LOCK

M8

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-6" ROADWAY 5'-0" SIDEWALKS
45'-0" LIFT OPEN STEEL GRID FLOOR
DATED MAY 1 1957

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

DESIGNED Kuzel	DETAILED Kuzel	TRACED Q. Chapman
CHECKED Brewer	CHECKED Brewer	CHECKED Brewer

BRIDGE DESIGN SECTION

DATE	DESCRIPTION	

REVISIONS

SHEET 22 OF 26

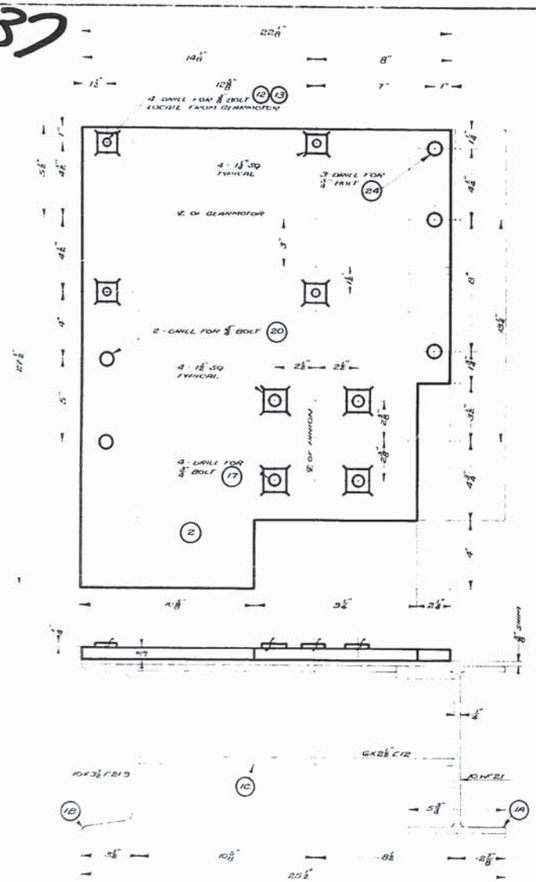
SL50-150-28

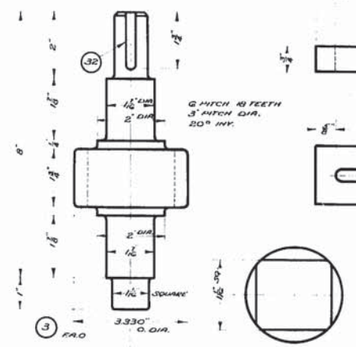
AS BUILT PLANS

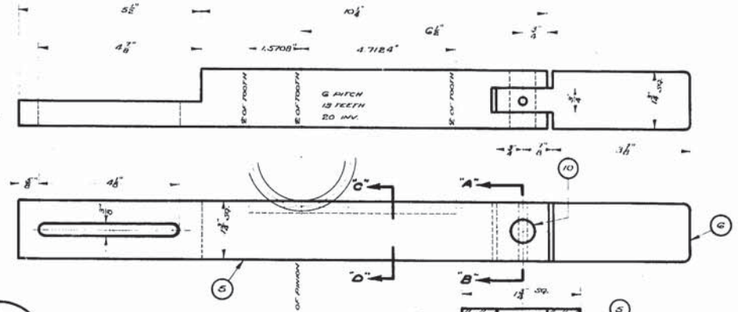
HAER No. LA-32

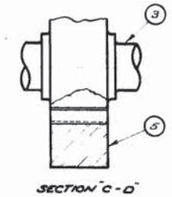
137

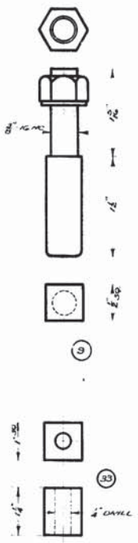
STATE PROJECT	PARISH	SHEET NO.
G.4.00.16	Lafourche	47

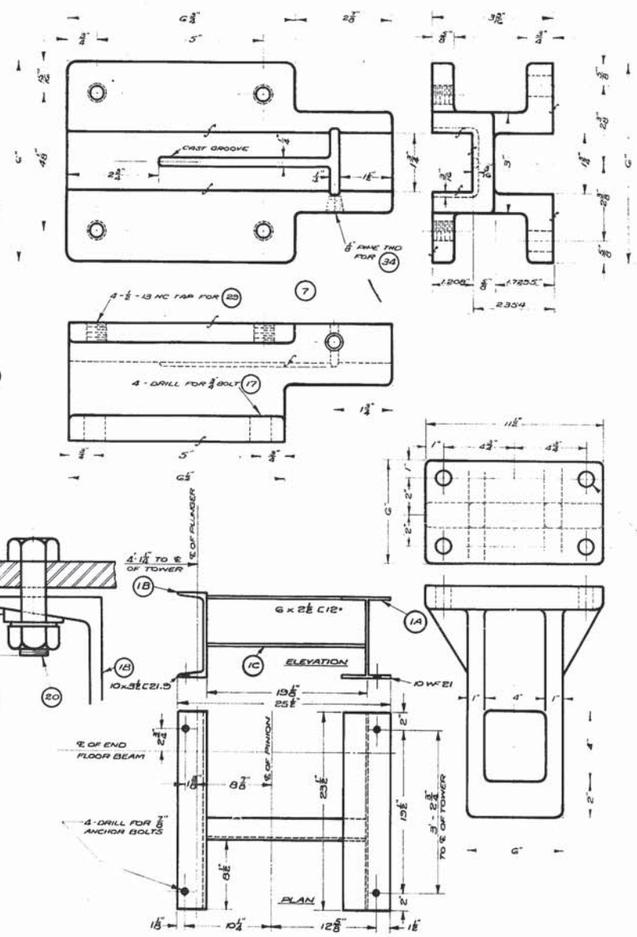


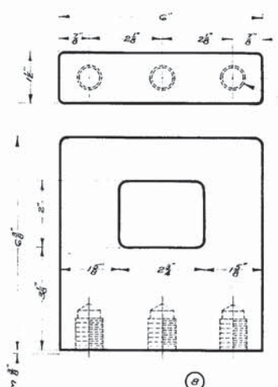


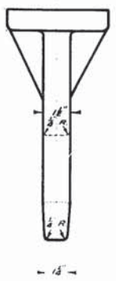


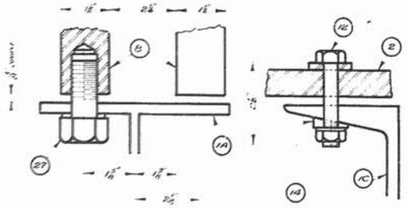


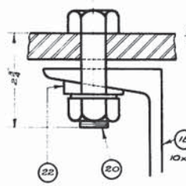












BILL OF MATERIAL FOR ONE SPAN LOCK

PART #	QUAN	DESCRIPTION	MATERIAL	
1	1	SUPPORT FOR LOCK ASS'Y	STEEL WELDM.	
1A	1	10 WF 21 - 23½" LONG	STEEL	
1B	1	10 X 4⅛" I. 21½" W.M.	STEEL	
1C	1	6 X 2½" L. 13" LONG	STEEL	
2	1	BASE PLATE	STEEL	
3	1	PINION	STEEL	
4	2	PINION BEARING	SKF SY 107	COMM.
5	1	RACK	STEEL C.I.	
6	1	RACK EXTENSION	STEEL	
7	1	RACK HOUSING	C.I.	
8	2	SOCKET ON LOCK	STEEL	
9	2	LIMIT SWITCH ACTUATOR COMM.	BRASS	
10	1	⅝" PIN - 13⅜" LONG	STEEL	
11	1	⅝" PIN - 1¾" LONG	STEEL	
12	3	⅞" - 16 NC MACH BOLT 2½" LONG	STEEL	
13	1	⅞" - 16 NC MACH BOLT - 1¾" LONG	STEEL	
14	3	⅞" BEVEL WASHER		COMM.
15	4	⅞" - 16 NC STD. NUT	STEEL	
16	4	⅞" SHAKEPROOF LOCKWASHER		COMM.
17	4	¾" - 10 NC MACH BOLT - 2¾ LONG	STEEL	
18	4	¾" - 10 NC STD. NUT	STEEL	
19	4	¾" SHAKEPROOF LOCKWASHER		COMM.
20	2	¾" - 10 NC MACH BOLT - 2½" LONG	STEEL	
21	2	¾" -10 NC STD. NUT	STEEL	
22	2	¾" BEVEL WASHER		COMM.
23	2	¾" SHAKEPROOF LOCKWASHER		COMM.
24	3	¾" - 10 NC MACH. BOLT - 2¾" LONG	STEEL	
25	3	¾" - 10 NC STD. NUT	STEEL	
26	3	¾" SHAKEPROOF LOCKWASHER		COMM.
27	6	¾" - 10 NC MACH BOLT - 1¾" LONG	STEEL	
28	6	¾" SHAKEPROOF LOCKWASHER		COMM.
29	4	⅝" 13 NC MACH BOLT - 1¼" LONG	STEEL	
30	4	⅝" SHAKEPROOF LOCKWASHER		COMM.
31	1	COUPLING - MORSE DSC #4 - 1G		COMM.
32	1	⅜" SQ KEY - 1¾" LONG	STEEL - KEYSTOCK	
33	6	SPACER	BRASS	
34	1	⅝ ALEMITE HYDR. FITTING		COMM.
35	1	MASTER ELECTRIC UNIT FR 7204 RC 2460 IN LBS TORQUE ⅝ HP - OUTPUT SHAFT 3 RPM		
36	1	SOCKET ON SPAN	STD STEEL ASTM A27 GRADE 35	
37	4	TURNED BOLT COMPL	STEEL	

FOUR LOCKS REQUIRED FOR ONE SPAN
TWO LOCKS AS SHOWN
TWO LOCKS TO OPPOSITE HAND

GENERAL NOTES:

- ALL PARTS FURNISHED BY THE CONTRACTOR SHALL BE AS SHOWN OR APPROVED EQUAL.
- ALL PARTS LISTED ON THIS SHEET TO BE INCLUDED IN ITEM 5.18.1 MOVABLE BRIDGE MACHINERY, INCLUDING ALL NECESSARY SHIMS.
- ALL BOLTS TO HAVE ONE NUT AND ONE HEAVY SAE LOCKWASHER, UNLESS NOTED, OR OTHER MEANS OF LOCKING NUT ARE SHOWN ON DETAILS.
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DETAIL OF SPAN LOCK

M9

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY — 5'-0" SIDEWALKS
45'-0" LIFT — OPEN STEEL GRID FLOOR
DATE May 1 -57

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

DESIGNED	DETAILED	CHECKED	APPROVED
Ruzzell	Ruzzell	D Hinderis	
Brewer	Brewer	Brewer	

BRIDGE DESIGN SECTION

DATE | DESCRIPTION | REVISIONS

SHEET 23 OF 26

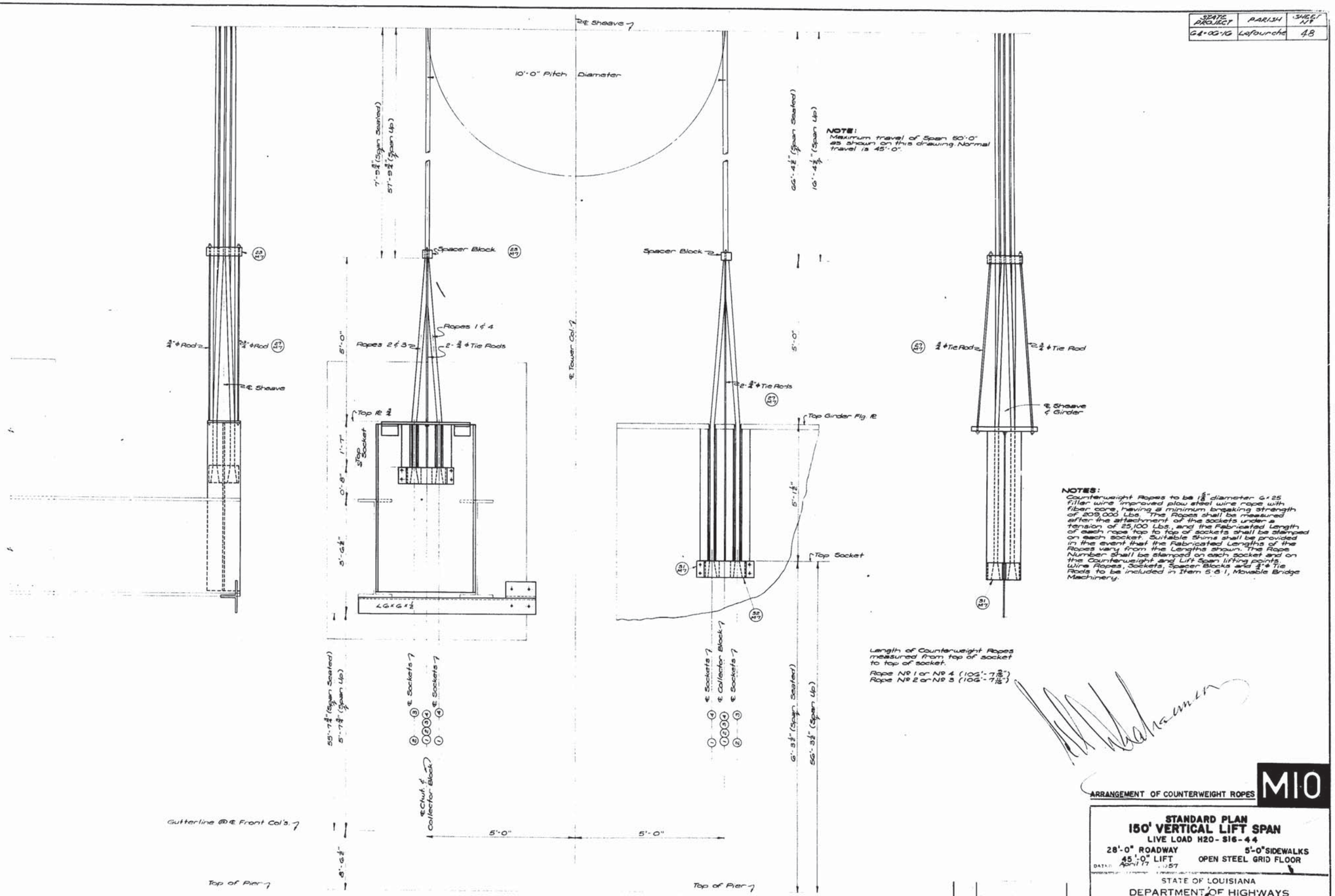
SL50-150-28

FOUNDATION PLAN FOR SPAN LOCK

AS BUILT PLANS

138

STATE PROJECT	PARISH	SHEET NO.
64-06-16	Lafourche	48



NOTE:
Maximum travel of Span 50'-0" as shown on this drawing. Normal travel is 45'-0".

NOTES:
Counterweight Ropes to be 1⅛" diameter 6 x 25 Filler wire improved plow steel wire rope with fiber core, having a minimum breaking strength of 209,000 Lbs. The Ropes shall be measured after the attachment of the sockets under a tension of 25,100 Lbs, and the Fabricated Length of each rope top to top of sockets shall be stamped on each socket. Suitable Shims shall be provided in the event that the Fabricated Lengths of the Ropes vary from the Lengths shown. The Rope Number shall be stamped on each socket and on the Counterweight and Lift Span lifting points. Wire Ropes, Sockets, Spacer Blocks and ¾" ℄ Tie Rods to be included in Item 5.8.1, Movable Bridge Machinery.

Length of Counterweight Ropes measured from top of socket to top of socket.

Rope № 1 or № 4 (104'-7[illegible]")
Rope № 2 or № 3 (104'-7[illegible]")

ARRANGEMENT OF COUNTERWEIGHT ROPES **M10**

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY 5'-0" SIDEWALKS
45'-0" LIFT OPEN STEEL GRID FLOOR
DATE: April 77 1957

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

DESIGNED	DETAILED	TRACED
CHECKED S.L.P.	CHECKED S.L.P.	CHECKED S.L.P.

BRIDGE DESIGN SECTION

DATE	DESCRIPTION	BY
	REVISIONS	

SHEET 24 OF 26

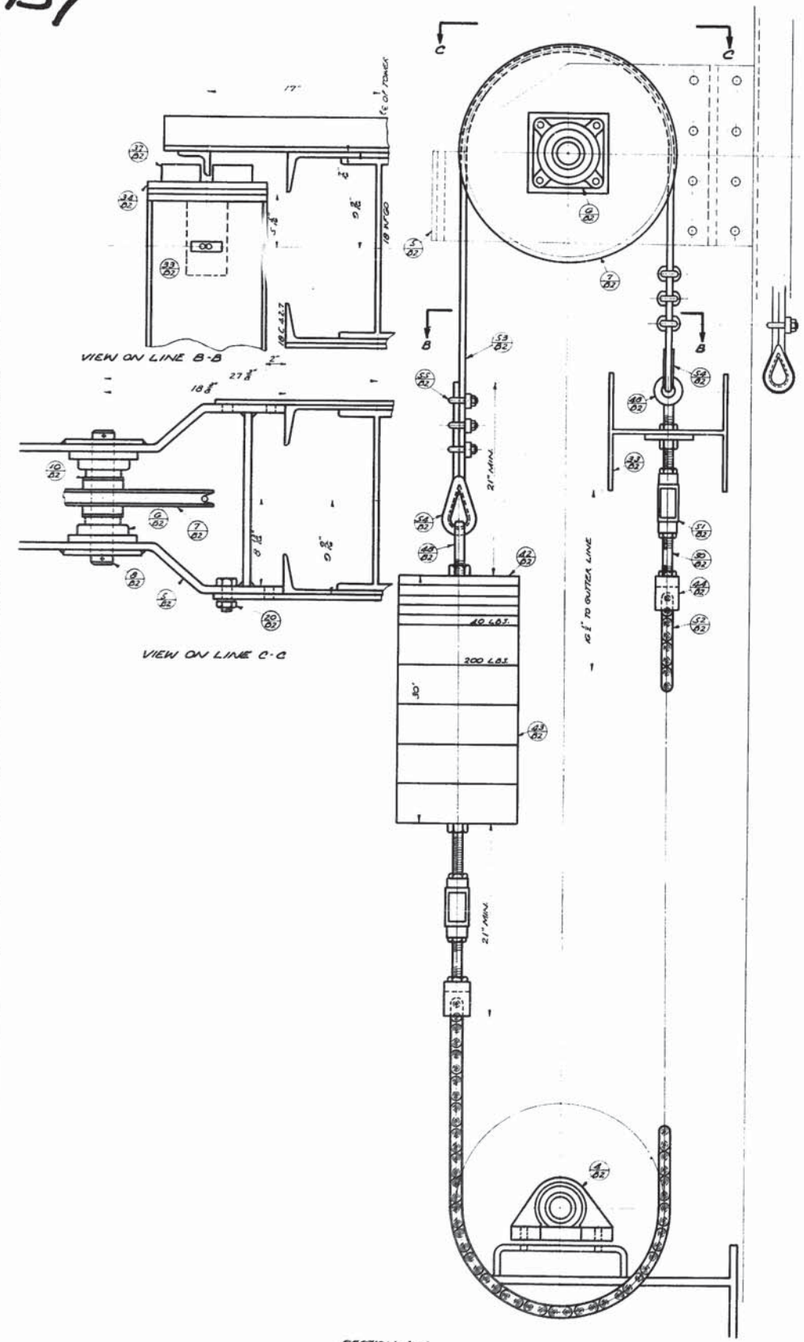
SL50-150-28

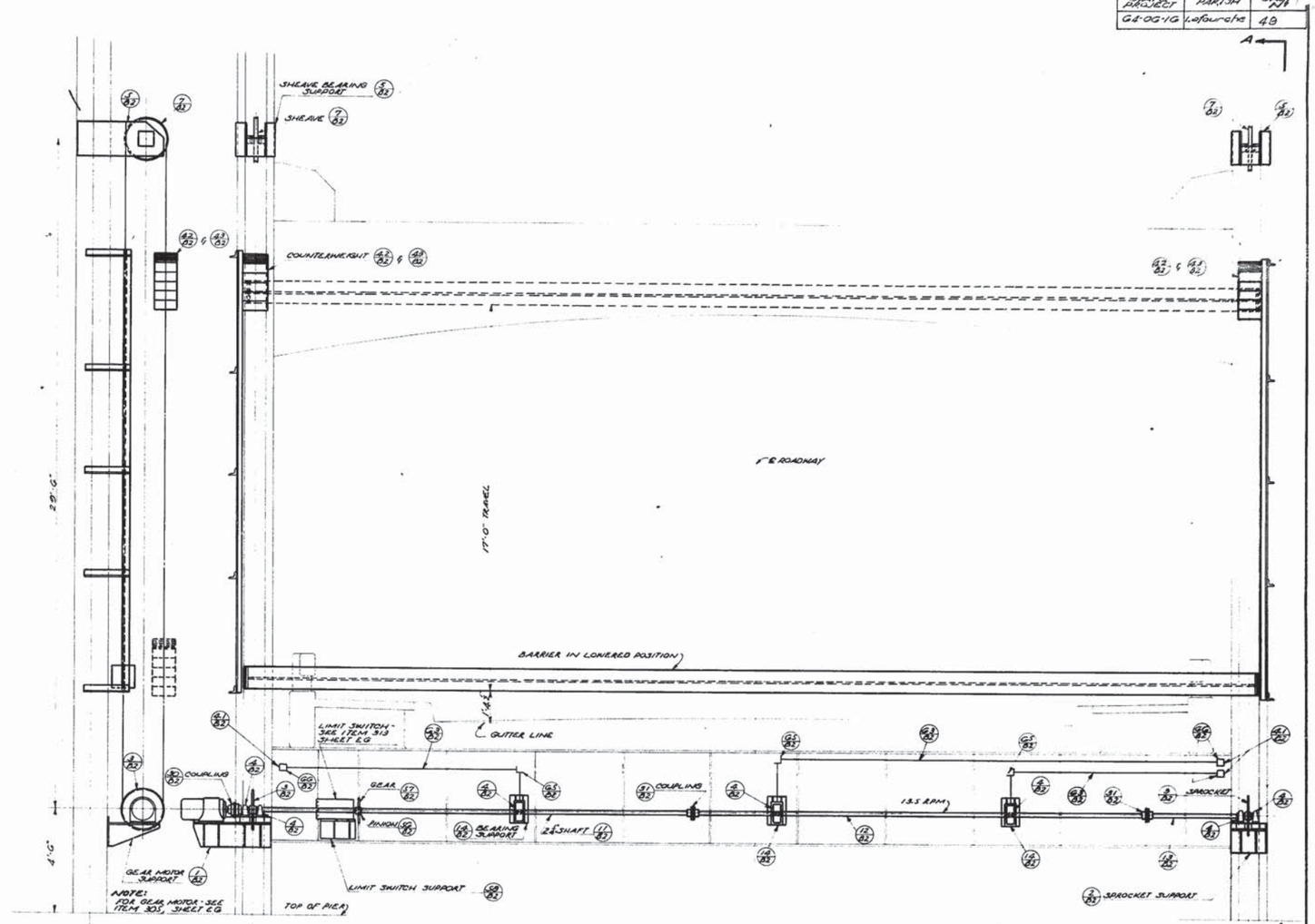
AS BUILT PLANS

HAER No. LA-32

139

STATE PROJECT	PARISH	SHEET NO.
66-00-16	Lafourche	48





PART SIDE ELEVATION OF TOWER SHOWING BARRIER

PART REAR ELEVATION OF TOWER SHOWING BARRIER OPERATING MACHINERY

THICKNESS / SIZE NORMAL SHIM	½"	¼"	⅛"
½	1	2	4

NOTE:
THE CONTRACTOR SHALL DETERMINE THE FINAL DIMENSIONS OF PARTS INVOLVING COMMERCIAL PRODUCTS SUCH AS MOTORS, SPEED REDUCERS, BEARINGS, ELECTRICAL EQUIPMENT AND THE LIKE, FROM CERTIFIED DIMENSIONS OUTLINES OF THE COMMERCIAL PRODUCTS BEFORE MAKING SHOP DRAWINGS OF THE PARTS INVOLVED.

PAINTING NOTE:
ALL UNFINISHED SURFACES OF MACHINERY SHALL BE PAINTED ONE SHOP COAT OF RED LEAD AND OIL. ALL FINISHED SURFACES SHALL BE COATED WITH WHITE LEAD AND TALLOW BEFORE SHIPMENT AND SHALL BE PROTECTED BY WOODEN LAGGING.

LUBRICATION NOTE:
UNLESS OTHERWISE SHOWN ON DETAIL DRAWING, LUBRICANT SHALL BE AS FOLLOWS OR APPROVED EQUAL:
PILLOW BLOCKS, COUPLINGS, & TRUNION BEARINGS - E330 FIBRE GREASE "O".
EXPOSED TEETH - MEDIUM HARD GREASE.
ENCLOSED SPEED REDUCERS - STD. OIL "TERES 330 95° VI.3C SAE 30.
WIRE ROPE - STD. OIL CO. "JUARETTE COMPOUND N° 1500.

DATE	DESCRIPTION	BY
	REVISIONS	

GENERAL ARRANGEMENT OF TRAFFIC BARRIER

BI

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY 5'-0" SIDEWALKS
45'-0" LIFT OPEN STEEL GRID FLOOR
DATED MAY 1 1957

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

DESIGNED Kuzel	DETAILED Brewer	TRACED A.J. Mouchet
CHECKED Brewer	CHECKED Kuzel	CHECKED Brewer

BRIDGE DESIGN SECTION

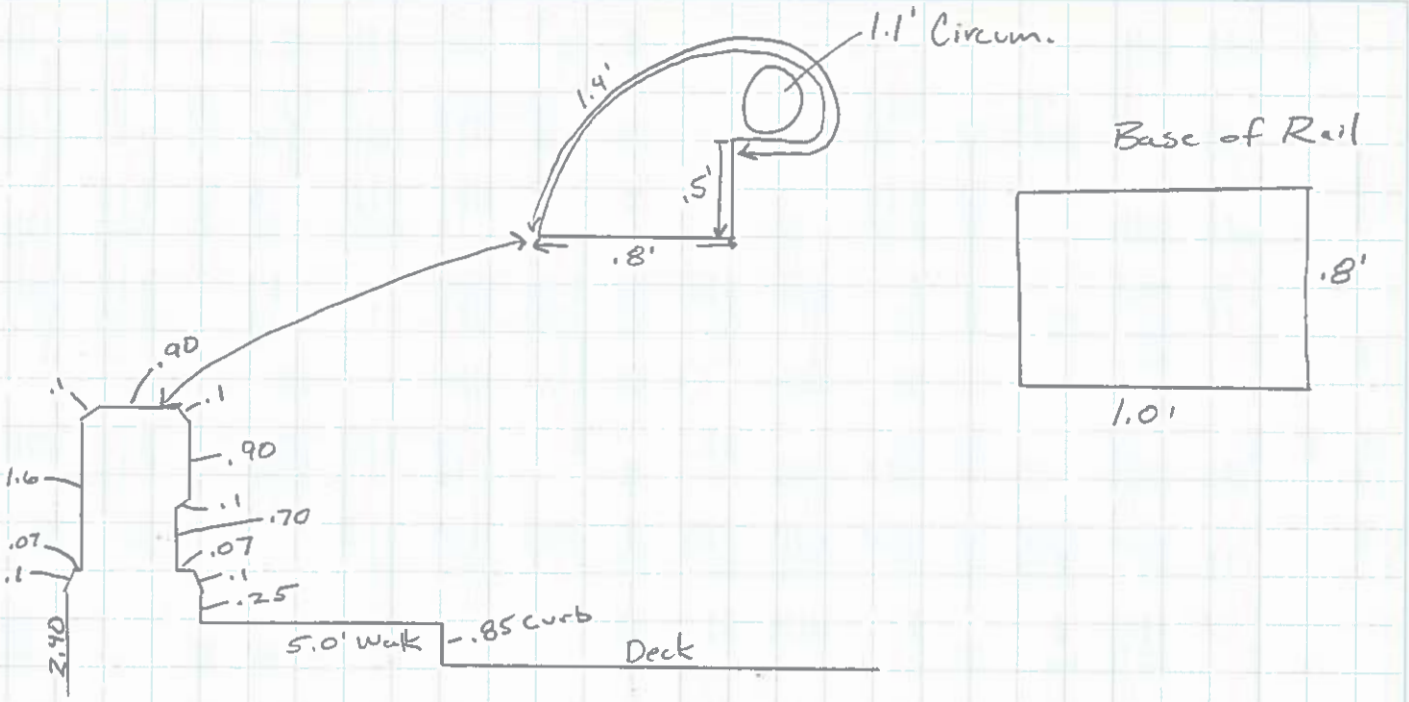
SHEET 25 OF 26

SL50-150-28

AS BUILT PLANS

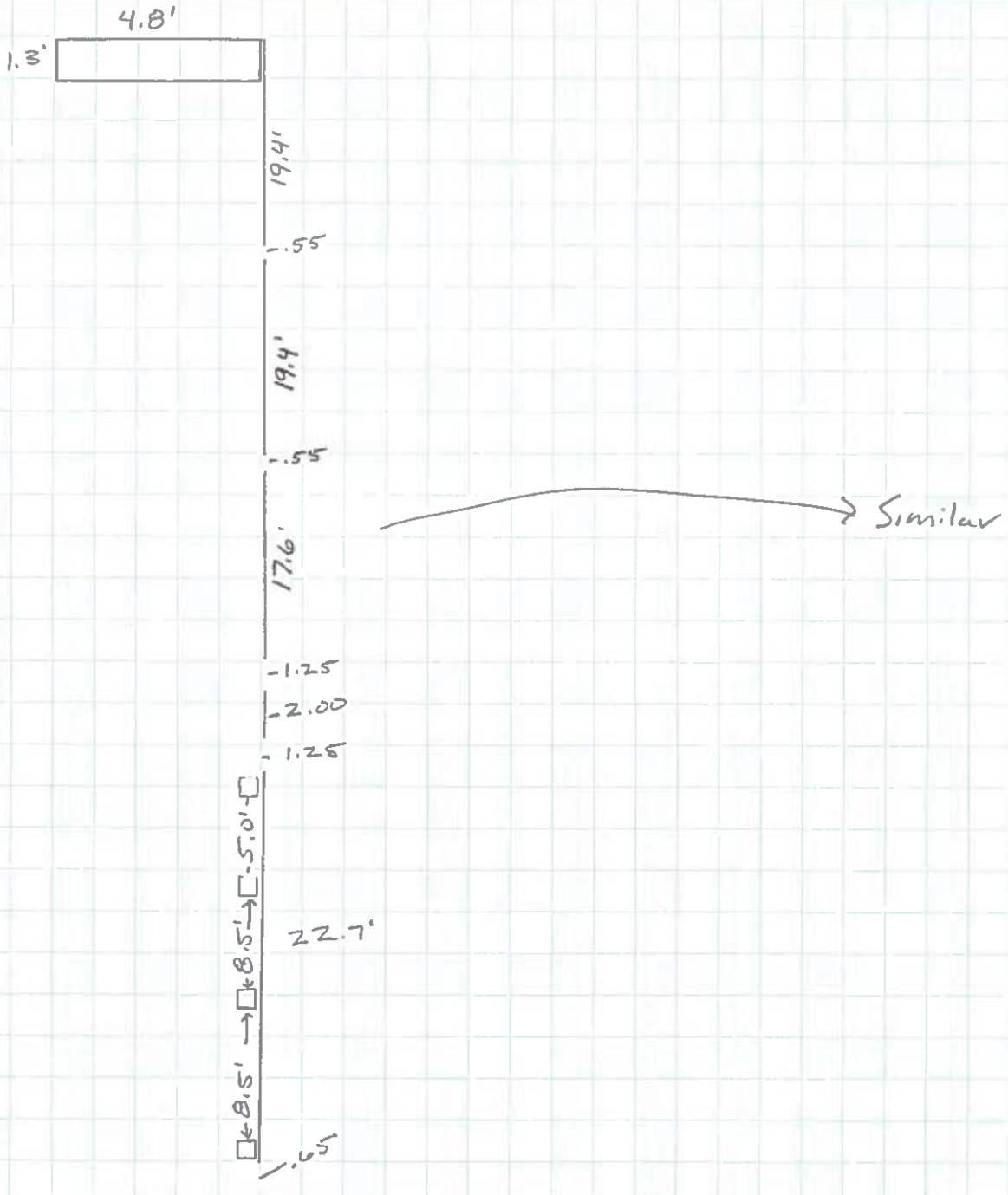
Mead & Hunt, Inc.

Job No. _____ Sheet _____ of _____
Job Name 000930
Task Rail Details
Calculated by _____ Date _____
Checked by _____ Date _____



Mead & Hunt, Inc.

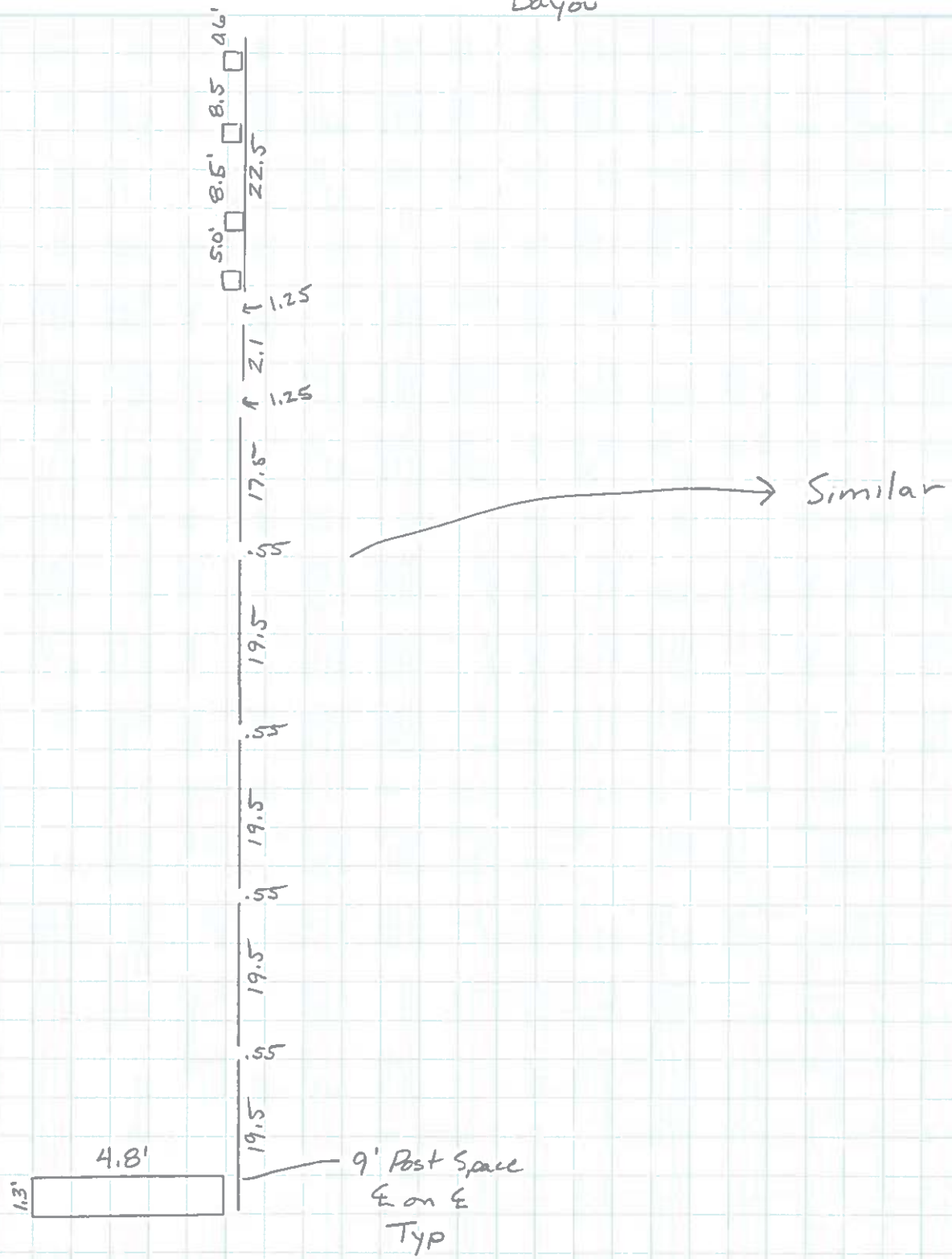
Job No. _____ Sheet _____ of _____
Job Name 000930
Task Rail Details
Calculated by _____ Date _____
Checked by _____ Date _____



Mead & Hunt, Inc.

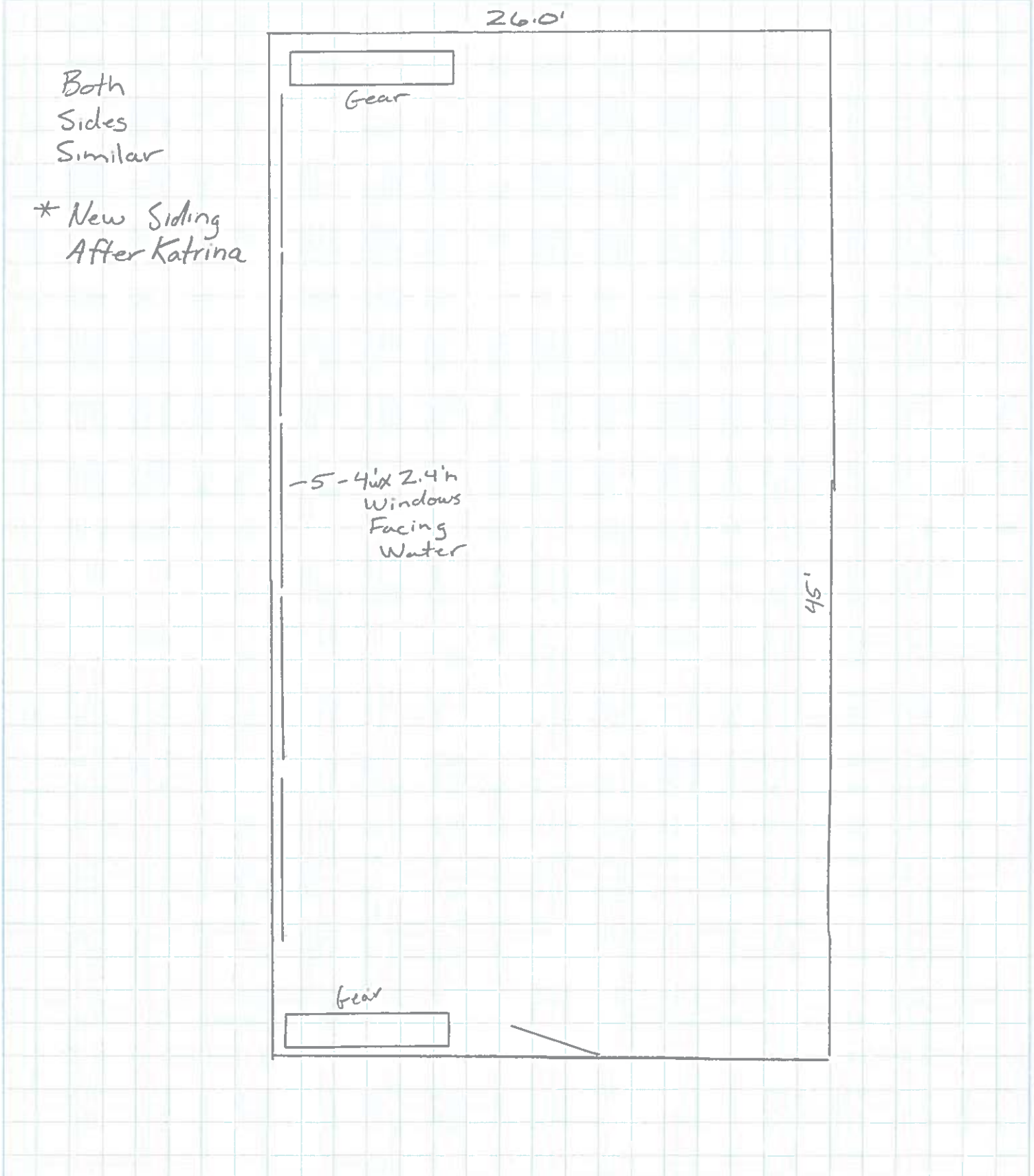
Job No. _____ Sheet _____ of _____
Job Name 000930
Task Rail Details
Calculated by _____ Date _____
Checked by _____ Date _____

Bayou



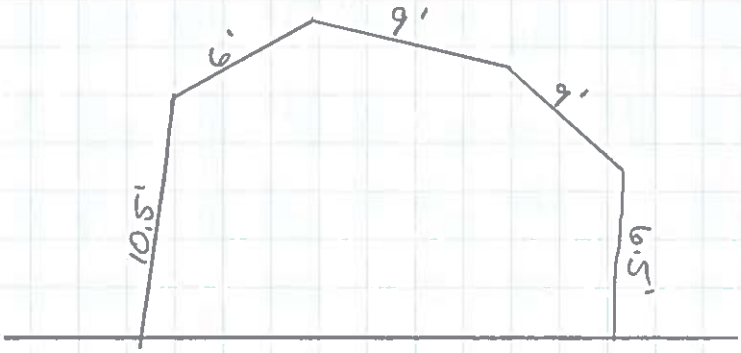
Mead & Hunt, Inc.

Job No. _____ Sheet _____ of _____
Job Name 000930
Task Equipment Room
Calculated by _____ Date _____
Checked by _____ Date _____



Mead & Hunt, Inc.

Job No. _____ Sheet _____ of _____
Job Name 000930
Task Equipment Room Roof Beams
Calculated by _____ Date _____
Checked by _____ Date _____



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6-8	Summary Sheets
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20	General Bridge Plan
21	Detail of Berths
22-23	Detail of Piers
24-25	Detail of Spans
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28	Modified Details for Aluminum Railings
29	Concrete Approach Slab
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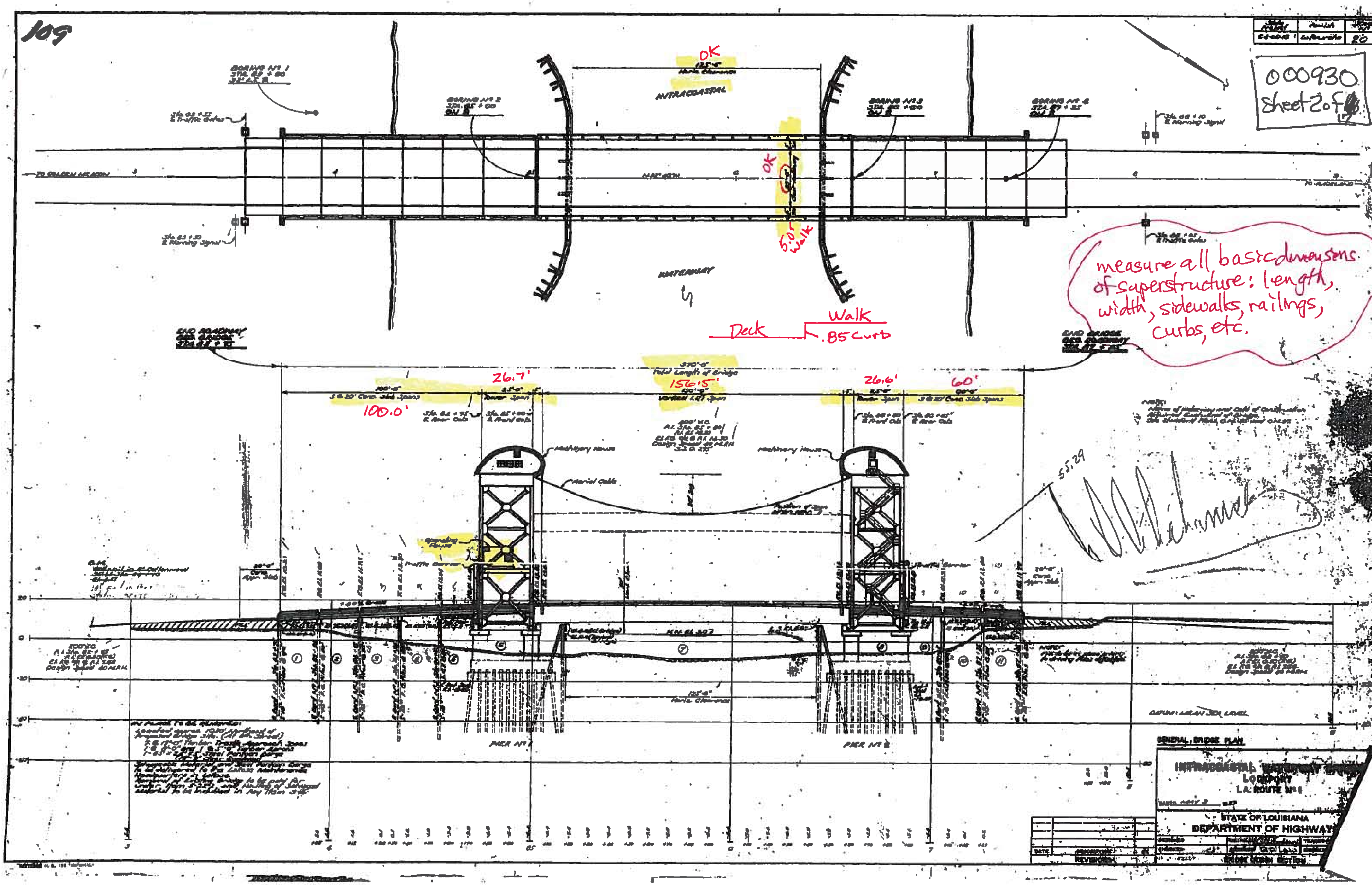
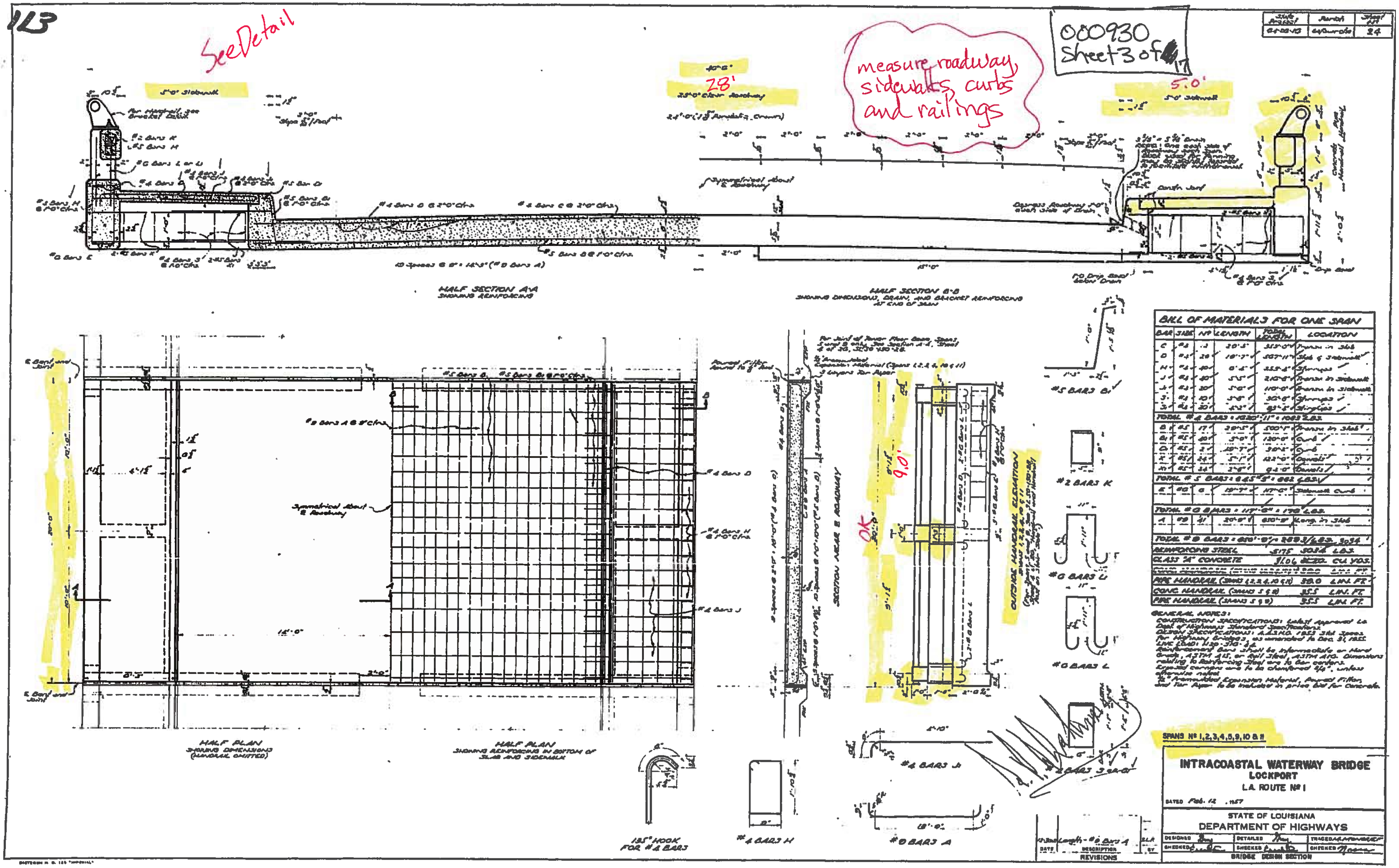

109
000930
INTRACOASTAL
WATERWAY
OK
OK
5.0' walk
Deck
Walk
.85 Curb
measure all basic dimensions of superstructure: length, width, sidewalks, railings, curbs, etc.
26.7'
156.5'
26.6'
60'
100.0'
Machinery House
Aerial Cable
Machinery House
PIER No 1
PIER No 2
GENERAL BRIDGE PLAN
LOCKPORT
STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS
REVISIONS


123
See Detail
measure roadway, sidewalks, curbs and railings
000930
Sheet 3 of 17
5'-0" Sidewalk
28'
26'-0" Clear Roadway
5.0'
5'-0" Sidewalk
HALF SECTION A-A
SHOWING REINFORCING
HALF SECTION B-B
SHOWING DIMENSIONS, DRAIN, AND BRACKET REINFORCING AT END OF SPAN
HALF PLAN
SHOWING DIMENSIONS (HANDRAIL OMITTED)
HALF PLAN
SHOWING REINFORCING IN BOTTOM OF SLAB AND SIDEWALK
SECTION NEAR ℄ ROADWAY
OUTSIDE HANDRAIL ELEVATION
9.0'
OK
135° HOOK FOR #4 BARS
#4 BARS H
#8 BARS A
#4 BARS J
#5 BARS B
#2 BARS K
#6 BARS L
BILL OF MATERIALS FOR ONE SPAN
TOTAL #4 BARS = 1620'-11" = 1083 LBS.
TOTAL #5 BARS = 645'-5" = 662 LBS.
TOTAL #6 BARS = 117'-6" = 176 LBS.
TOTAL #8 BARS = 850'-8" = 2893 LBS. 3034
REINFORCING STEEL 5175 5034 LBS.
CLASS "A" CONCRETE 31.06 CU. YDS.
PIPE HANDRAIL (SPANS 1,2,3,4,10 & 11) 38.0 LIN. FT.
CONC. HANDRAIL (SPANS 5 & 9) 35.5 LIN. FT.
PIPE HANDRAIL (SPANS 5 & 9) 35.5 LIN. FT.
GENERAL NOTES:
CONSTRUCTION SPECIFICATIONS: Latest Approved La. Dept. of Highways Standard Specifications.
DESIGN SPECIFICATIONS: A.A.S.H.O. 1953 Std. Specs. for Highway Bridges, as amended to Dec. 31, 1955.
LIVE LOAD: H20-S16-44
Reinforcement Bars shall be Intermediate or Hard Grade, ASTM A15, or Rail Steel, ASTM A16. Dimensions relating to Reinforcing Steel are to bar centers.
Exposed corners are to be chamfered 3/4", unless otherwise noted.
1/2" Premoulded Expansion Material, Poured Filler, and Tar Paper to be included in price bid for Concrete.
SPANS Nº 1,2,3,4,5,9,10 & 11
INTRACOASTAL WATERWAY BRIDGE
LOCKPORT
LA. ROUTE Nº 1
DATED Feb. 12, 1957
STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS
DESIGNED
DETAILED
TRACED
CHECKED
CHECKED
CHECKED
BRIDGE DESIGN SECTION
DATE
DESCRIPTION
BY
REVISIONS

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Sheet 4 of 16

see notes on Sheet 3 of 16

HALF SECTION THRU ROADWAY AT FLOORBEAM

LIFTING HEAD FOR WIRE ROPES
For complete Assembly, See Machinery Drawings

PLAN VIEW AT FIXED END OF SPAN
SHOWING SPAN GUIDE AND BUFFER CONN.
(detail at exp. end same except for span guide casting)

WELDING DETAIL
FOR SPAN GUIDE ANGLES

SIDEWALK CLIP ⅜ TYP.
FOR ALL TRANSV. STIFFN'RS.
AT INT. FLOORBEAMS

SIDEWALK CLIP L TYP.
FOR TRANSV. STIFFN'R.
AT ALT. SPLICE

SIDEWALK CLIP L TYP.
FOR ALL TRANSVERSE
STIFFN'RS. BETWEEN
FLOORBEAMS

SIDEWALK CLIP ⅜ TYP.
FOR TRANSVERSE
STIFFENERS @ END
FLOORBEAMS

SECTION A-A
grid deck not shown

SHOE FOR LIFT SPAN
(4 reqd total)

Swivel may be left blank and drilled in field after parts have been set to correct alignment and adjustment or subpunched or drilled smaller and reamed to size in field after erection

ELEVATION E-E

CONNECTION DETAIL AT TOWER

PLAN OF SIDEWALK
AT FLOORBEAM

SECTION B-B

CONNECTION DETAIL FOR LATERAL
BRACING AT ODD FLOORBEAMS

CONNECTION DETAIL FOR LAT'L
BRACING AT EVEN FLOORBEAMS

SECTION C-C

SECTION D-D

SPAN BEARING B
(4 reqd. total)(shall be either steel casting or weldment)

SECTION THRU SIDEWALK
BETWEEN FLOORBEAMS

MOMENTS AND REACTIONS FOR STRINGERS & FLOORBEAMS

	EXTERIOR STRS.		INTERIOR STRS.		FLOORBEAMS	
	M(K-FT)	R (K)	M(K-FT)	R (K)	M(K-FT)	R (K)
D	6.9	1.4	8.1	1.1	155.6	13.0
D+L	11.4	2.4	0.0	0.0	98.2	8.2
L	48.2	10.5	58.7	20.1	646.1	47.0
I	14.8	4.1	17.6	6.0	198.9	14.1
T	81.0	21.4	81.4	27.8	1081.7	76.0

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY 5'-0" SIDEWALKS
46'-0" LIFT OPEN STEEL GRID FLOOR
DATE MARCH 16 1957
STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS
BRIDGE DESIGN SECTION

REVISIONS

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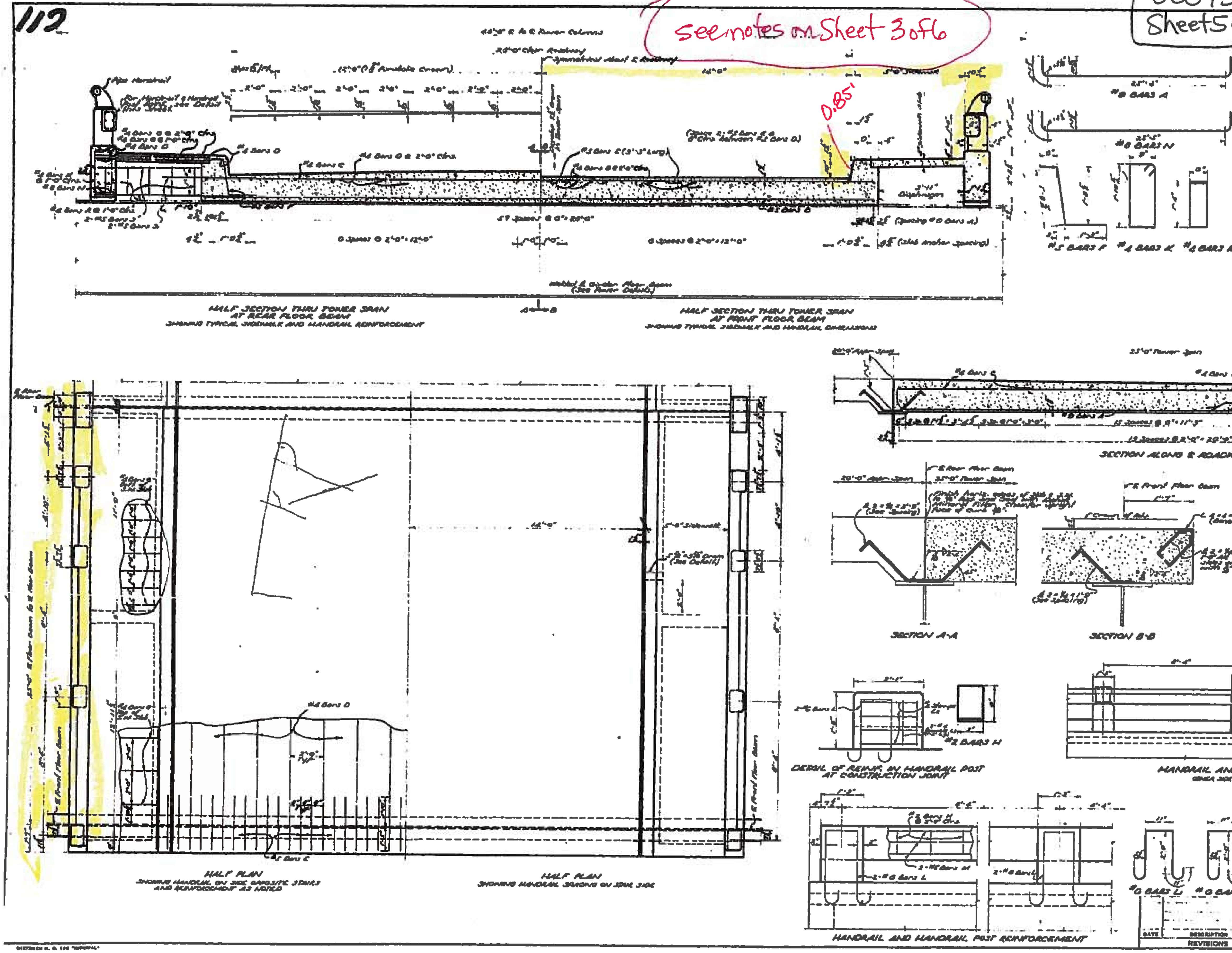
Sheet 5 of 6

see notes on Sheet 3 of 6

STATE PROJECT NO.	PARISH	SHEET NO.
04-00YC	Lafourche	28



BILL OF MATERIAL (ONE SPAN)

BAR	SIZE	NO.	LENGTH	TOTAL LENGTH	LOCATION
A	#8	63	27'-3"	1898'-8"	Longit. in Slab
TOTAL NO. 8 BARS = 1898'-8" = 5782 LBS.					
N	#8	6	25'-1"	126'-0"	Longit. in Sdk. Beam
TOTAL NO. 8 BARS = 126'-0" = 420 LBS.					
B	#5	20	30'-0"	670'-5"	Transv. Bott. of Slab
E	#5	30	3'-3"	97'-6"	Top of Slab @ Curb End
F	#5	58	3'-6"	203'-0"	Curb
J	#5	6	4'-10"	29'-0"	Diaphragm
J₁	#5	8	3'-5"	29'-4"	Diaph. to Slab Dowels
TOTAL NO. 5 BARS = 1299'-6" = 1352 LBS.					
C	#4	14	30'-0"	420'-0"	Transv. in Top of Slab
D	#4	34	20'-3"	689'-6"	Longit. Top Slab & Sdk.
G	#4	72	5'-2"	372'-0"	Top & Bott. Transv. in Sdk.
H	#4	54	6'-3"	337'-6"	Stirrups in Sdk. Beam
K	#4	30	4'-2"	125'-0"	Stirrups in Diaph.
TOTAL NO. 4 BARS = 3144'-2" = 1432 LBS.					
TOTAL REINFORCING STEEL =				8986	LBS.
TOTAL CLASS "A" CONCRETE =				49.2	CU. YDS.
FABRICATED CARBON STEEL =				577	LBS.
CONCRETE HANDRAIL				41.50	LIN. FT.
PIPE HANDRAIL				41.50	LIN. FT.

TOWER SPAN

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY 5'-0" SIDEWALKS
45'-0" LIFT OPEN STEEL GRID FLOOR
DATED FEB. 26, 1957

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS
BRIDGE DESIGN SECTION

DATE | DESCRIPTION | BY
REVISIONS

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THICKNESS AND Nº OF SHIMS TO BE FURNISHED			
SHIMS / BEARING SHIMS	1/16"	1/8"	1/4"
3/8"	2	2	2
1/2"	4	2	4
3/4"	6	3	3

check/measure whatever you can safely get to; take photos

NOTE:
THE CONTRACTOR SHALL DETERMINE THE FINAL DIMENSIONS OF PARTS INVOLVING COMMERCIAL PRODUCTS SUCH AS MOTORS, SPEED REDUCERS, BRAKES, ELECTRICAL EQUIPMENT AND THE LIKE, FROM CERTIFIED DIMENSIONAL OUTLINES OF THE COMMERCIAL PRODUCTS BEFORE MAKING SHOP DRAWINGS OF THE PARTS INVOLVED.

PAINTING NOTE:
ALL UNFINISHED SURFACES OF MACHINERY SHALL BE PAINTED ONE SHOP COAT OF RED LEAD AND OIL. ALL FINISHED SURFACES SHALL BE COATED WITH WHITE LEAD AND TALLOW BEFORE SHIPMENT AND SHALL BE PROTECTED BY WOODEN CASING.

LUBRICATION NOTE:
UNLESS OTHERWISE SHOWN ON DETAIL DRAWINGS
BUSHINGS SHALL BE AS FOLLOWS OIL IMPREGNATED BRONZE BUSHINGS SHALL BE USED FOR ALL PULLEY BLOCKS, COUPLINGS & TRUNION BEARINGS - E.320 FOR GREASE "G".
SPURRED TEETH - MEDIUM HARD BRONZE.
ENCLOSED SPEED REDUCERS - STD OIL TEXACO 85" VISC SAE 90.
WIRE ROPE - STD OIL CO. LUBRITE COMPOUND Nº 1500.

DATE	DESCRIPTION	BY
	REVISIONS	

GENERAL ARRANGEMENT OF SPAN
OPERATING MACHINERY

M1

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY 6'-0" SIDEWALKS
45'-0" LIFT OPEN STEEL GRID FLOOR
DATE APRIL 25, 1927

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

DESIGNED	DETAILED	TRACED	CHECKED
Kurrus	Brewster	Brewster	Kurrus

BRIDGE DESIGN SECTION

SHEET 15 OF 26

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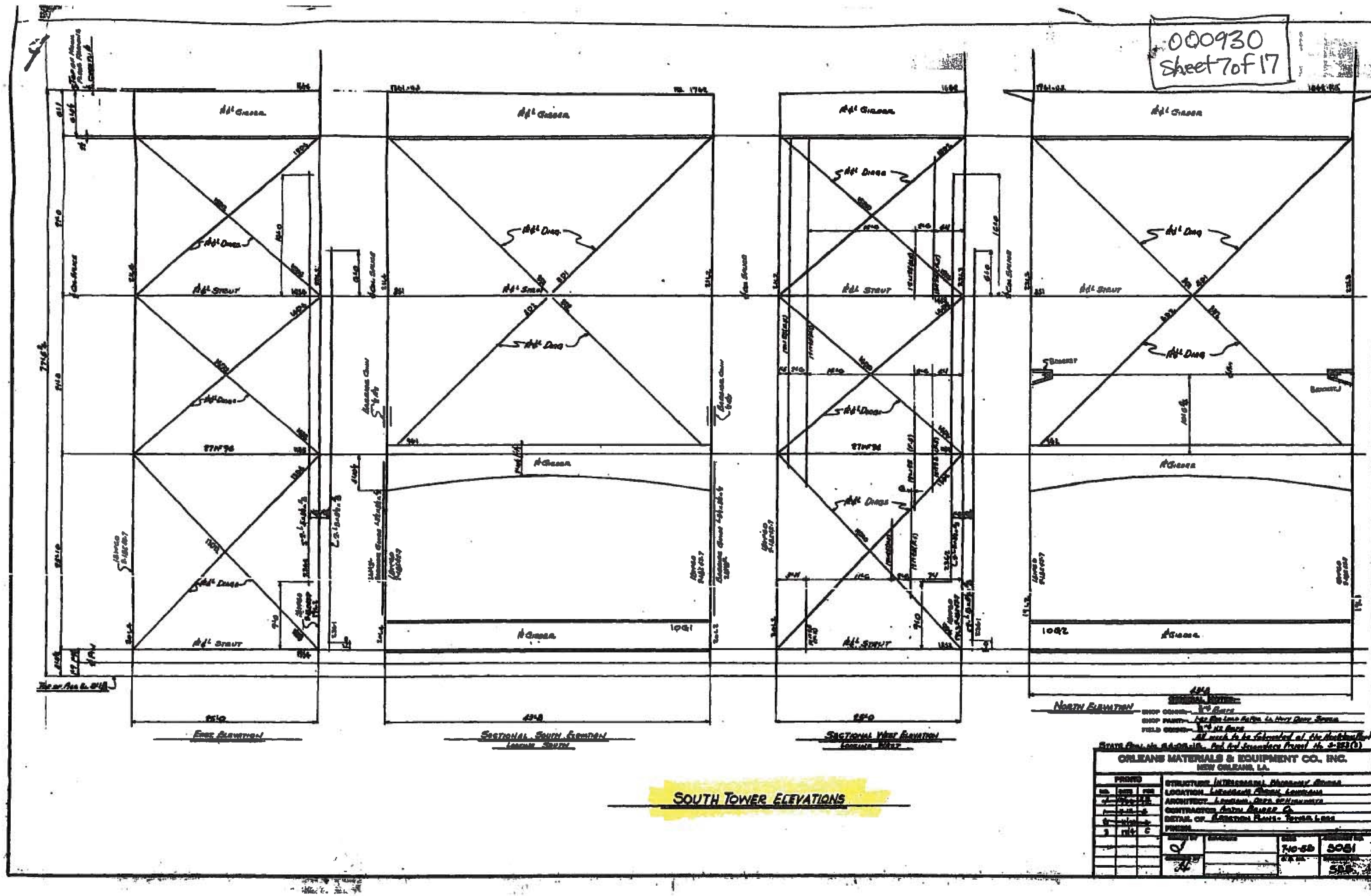
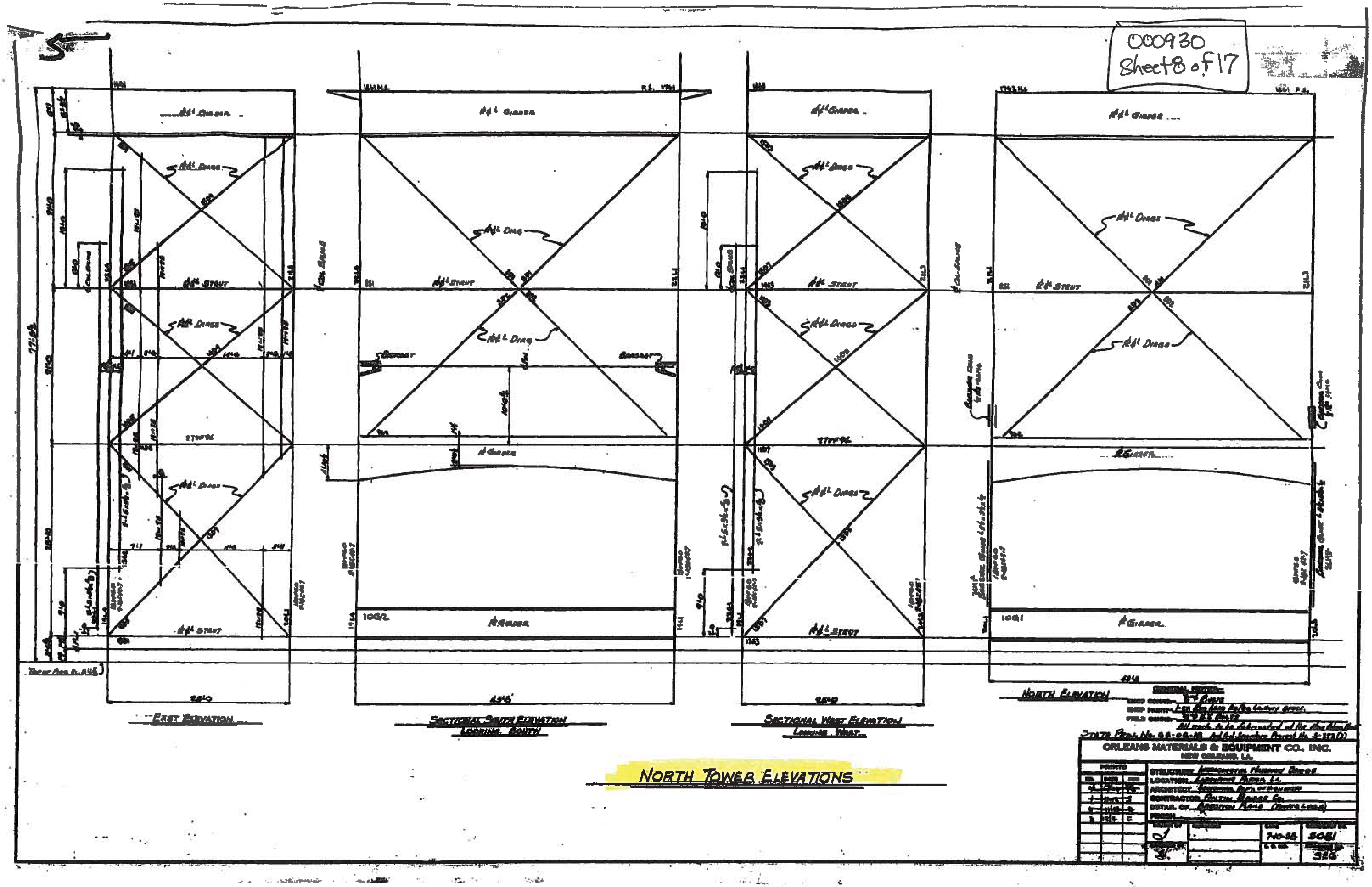

000930
Sheet 7 of 17
East Elevation
Sectional South Elevation
Looking South
Sectional West Elevation
Looking West
North Elevation
SOUTH TOWER ELEVATIONS
ORLEANS MATERIALS & EQUIPMENT CO. INC.
NEW ORLEANS, LA.


000930
Sheet 8 of 17
East Elevation
Sectional South Elevation
Looking South
Sectional West Elevation
Looking West
North Elevation
General Notes:
ORLEANS MATERIALS & EQUIPMENT CO. INC.
NEW ORLEANS, LA.
STRUCTURE
LOCATION
ARCHITECT
CONTRACTOR
DETAIL OF
7-10-35
3081
326
NORTH TOWER ELEVATIONS

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No Vehicle Hits

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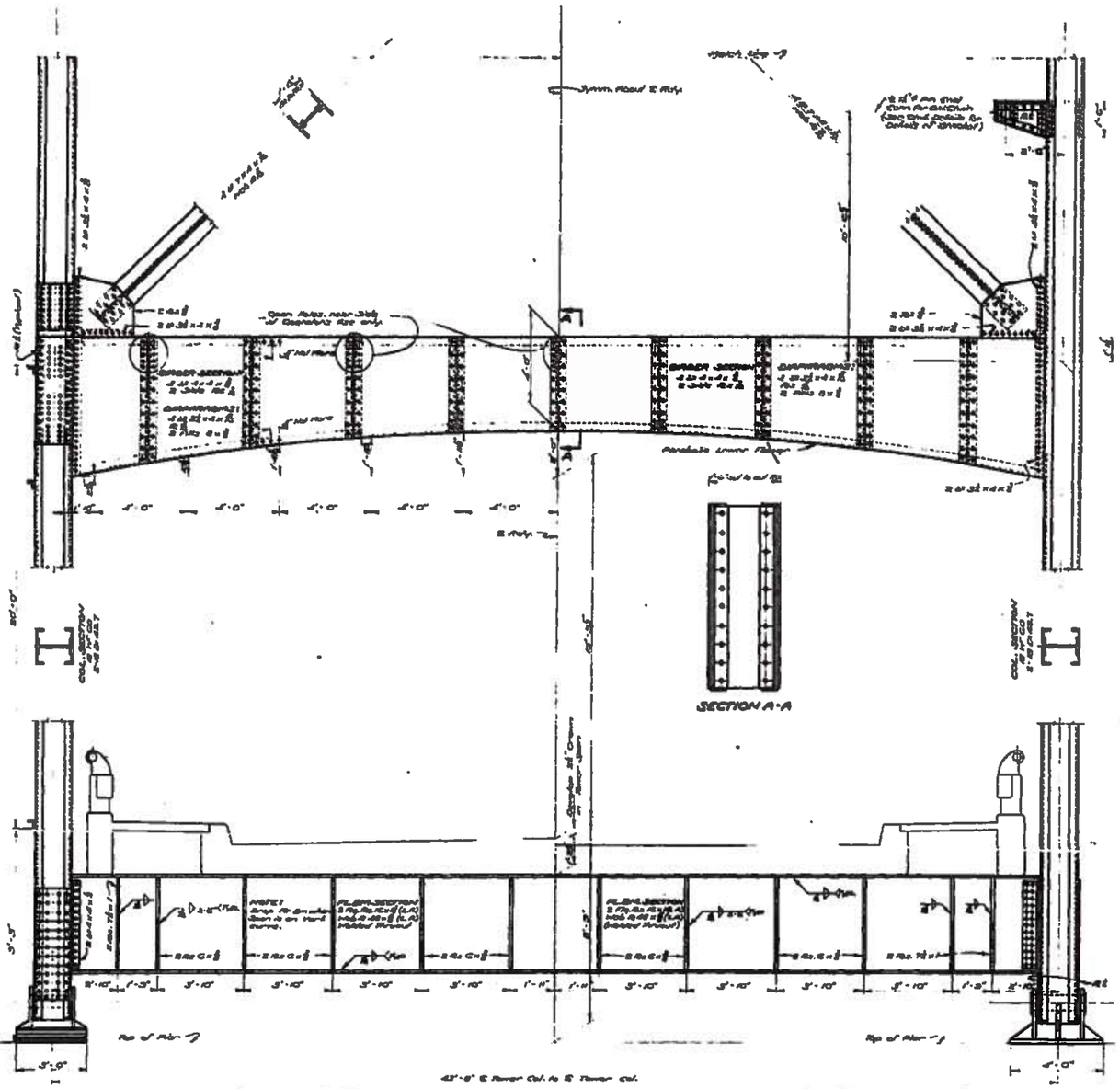
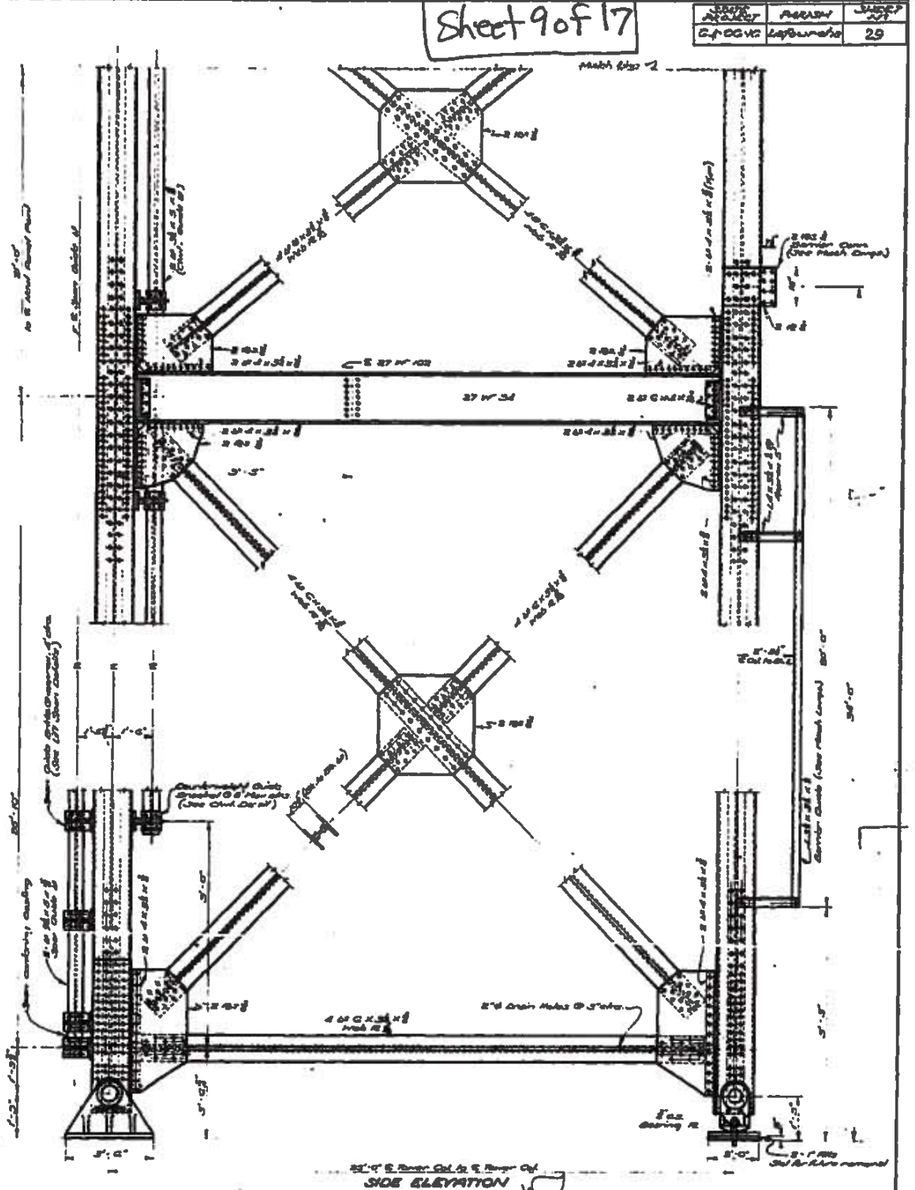


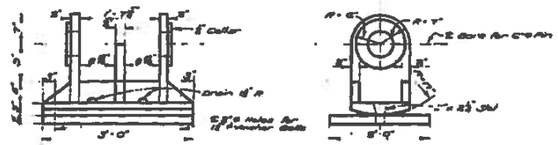
SECTION A-A

HALF ELEVATION AT REAR OF TOWER

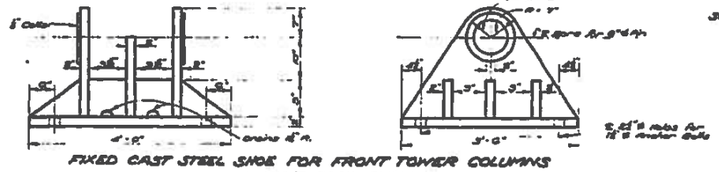
HALF ELEVATION AT FRONT OF TOWER



SIDE ELEVATION



CAST STEEL EXPANSION SHOE FOR REAR TOWER COLUMNS
2 REQ'D. EACH TOWER



FIXED CAST STEEL SHOE FOR FRONT TOWER COLUMNS
2 REQ'D EACH TOWER

SURFACE FINISHES:

TOWER DETAILS

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY
46'-0" LIFT
5'-0" SIDEWALKS
OPEN STEEL GRID FLOOR
DATED: April 1, 1957

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

DESIGNED	DETAILED	TRACED
CHECKED S.L.P.	CHECKED S.L.P.	CHECKED S.L.P.

BRIDGE DESIGN SECTION

DATE	DESCRIPTION	BY
	REVISIONS	

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HALF ELEVATION AT REAR OF TOWER

HALF ELEVATION AT FRONT OF TOWER

SIDE ELEVATION

SECTION THRU TYPICAL OPTIONAL COLUMN SPLICE

NOTE: SEE SHEET Nº 7 OF 26 FOR SECTION B-B, C-C, D-D, E-E AND F-F

TOWER DETAILS

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY 5'-0" SIDEWALKS
45'-0" LIFT OPEN STEEL GRID FLOOR

DATE APRIL 28 67

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

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PLAN LANDING AT GENERATOR'S HOUSE

SECTION B-B

SECTION D-D

TYPICAL BRACKET DETAIL AT INTERMEDIATE LANDINGS

TYPICAL CONN. DETAIL I2 ⌀ TO BRACING

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NOTES FOR STAIRWAYS & LANDINGS:

SIDE ELEVATION

REAR ELEVATION

DETAIL OF TREAD SPACING

VIEW A-A

SECTION C-C

SECTION E-E

PLAN LANDING AT MACK HOUSE

LADDER DETAIL

TOWER STAIRWAY DETAILS

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
26'-0" ROADWAY 5'-0" SIDEWALKS
45'-0" LIFT OPEN STEEL GRID FLOOR
DATED April 24, 1957

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS
DESIGNED DETAILED TRACED
CHECKED CHECKED CHECKED
BRIDGE DESIGN SECTION

DATE DESCRIPTION BY
REVISIONS

SHEET 8 OF 26

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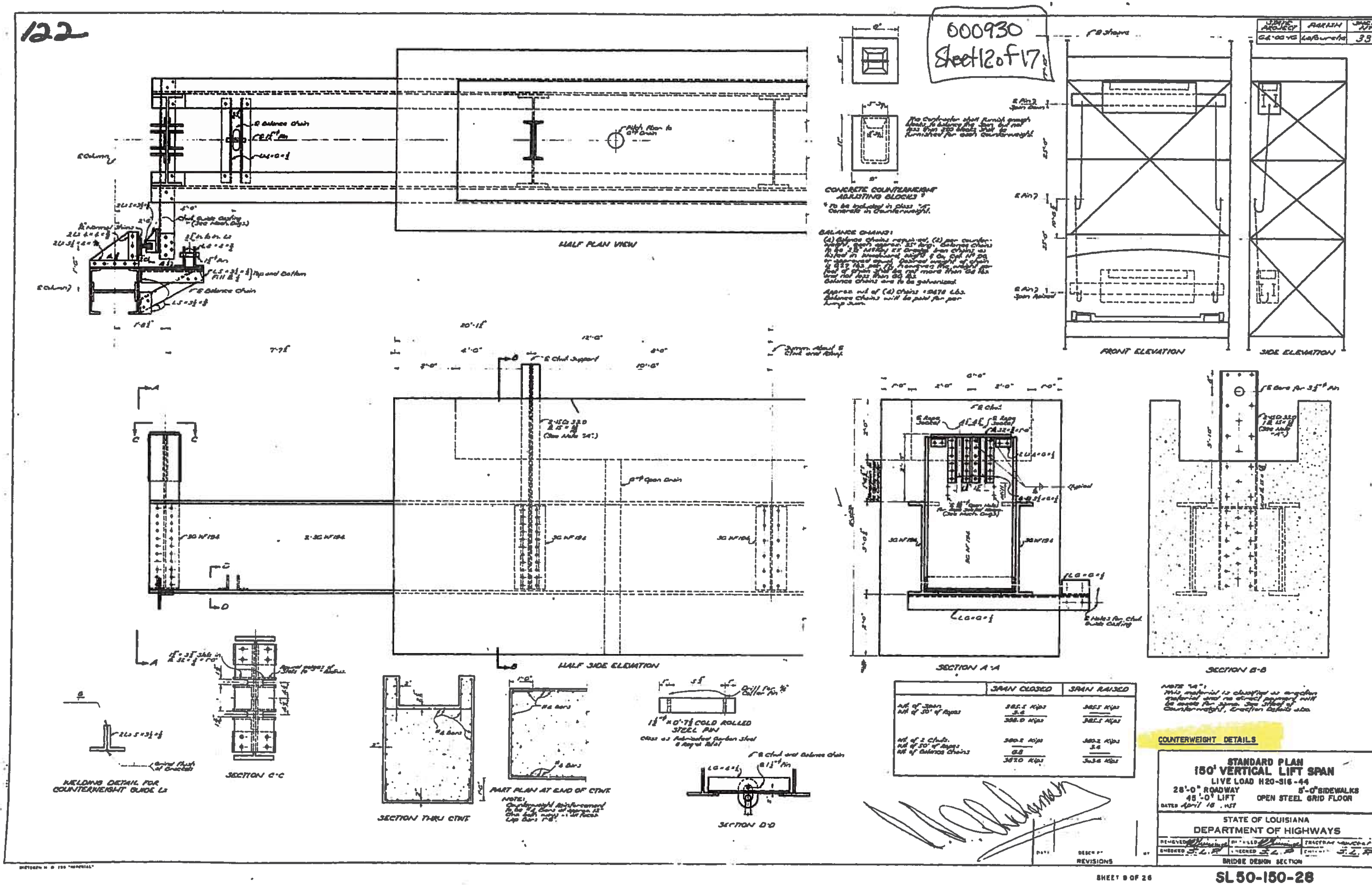
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HALF PLAN VIEW
CONCRETE COUNTERWEIGHT ADJUSTING BLOCKS
BALANCE CHAINS:
FRONT ELEVATION
SIDE ELEVATION
HALF SIDE ELEVATION
SECTION A-A
SECTION B-B
SECTION C-C
WELDING DETAIL FOR COUNTERWEIGHT GUIDE Ls
SECTION THRU CTWT.
PART PLAN AT END OF CTWT.
SECTION D-D
SPAN CLOSED
SPAN RAISED
COUNTERWEIGHT DETAILS
STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY
45'-0" LIFT
5'-0" SIDEWALKS
OPEN STEEL GRID FLOOR
STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS
REVISIONS
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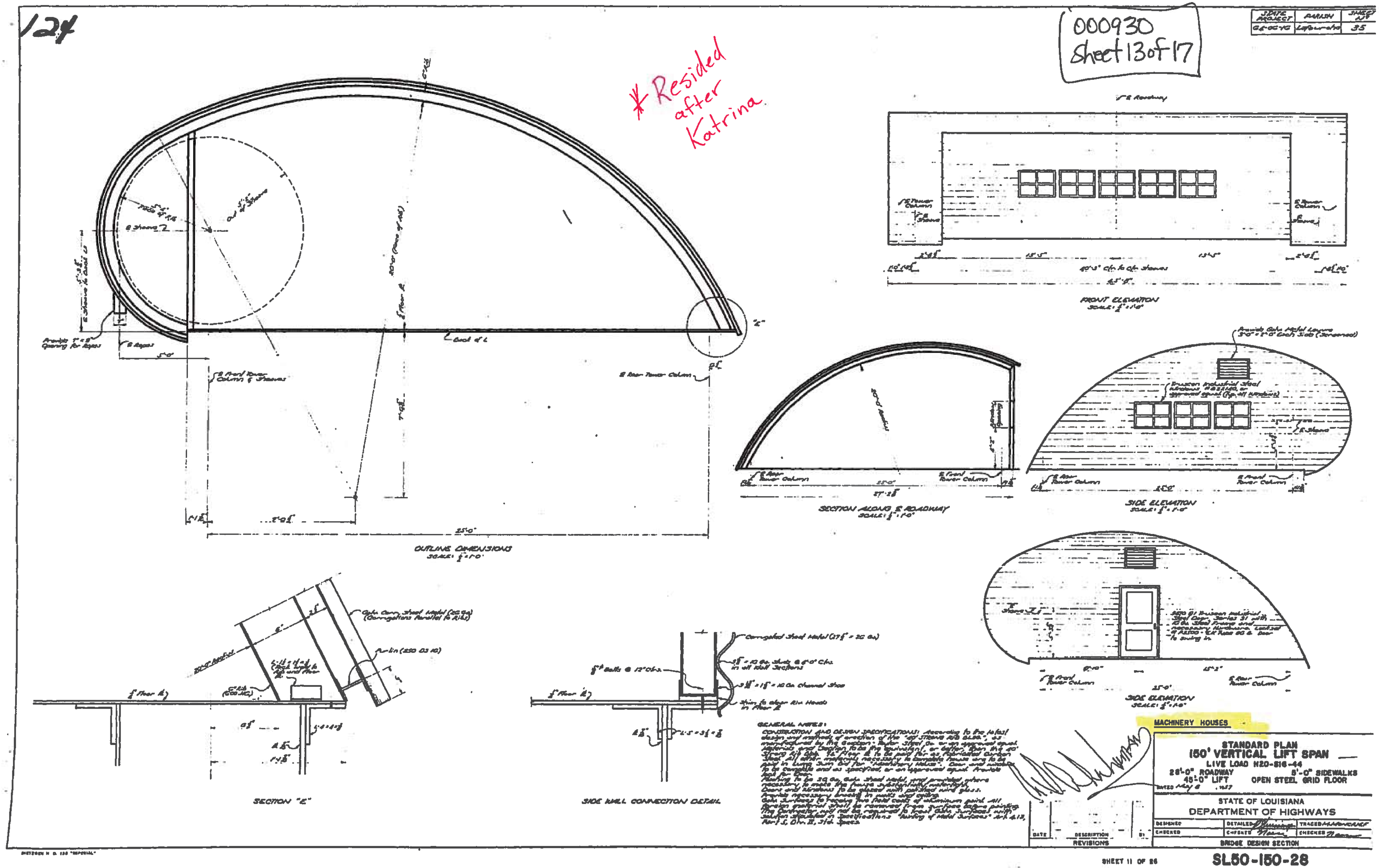
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* Resided after Katrina
OUTLINE DIMENSIONS
FRONT ELEVATION
SECTION ALONG ℄ ROADWAY
SIDE ELEVATION
SIDE ELEVATION
SECTION "E"
SIDE WALL CONNECTION DETAIL
GENERAL NOTES:
MACHINERY HOUSES
STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY
8'-0" SIDEWALKS
45'-0" LIFT
OPEN STEEL GRID FLOOR
STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS
DESIGNED
DETAILED
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BRIDGE DESIGN SECTION
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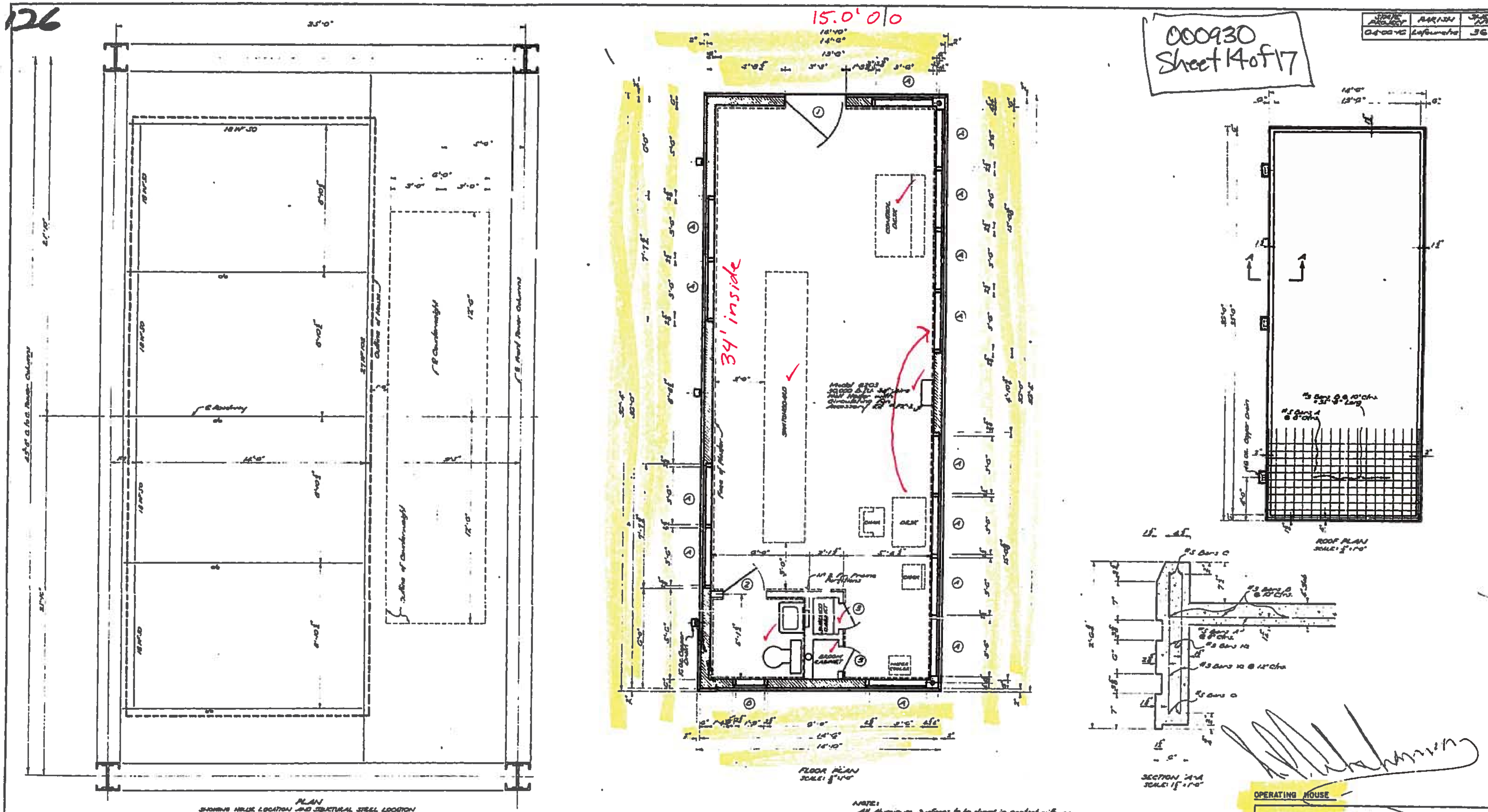

DOOR AND WINDOW SCHEDULE				
MARK	SIZE	TYPE	STYLE	REMARKS
1	3'-6" × 7'-0" × 1 3/4"	Jalousie	4 1/2" Glass	Aluminum Frame
2	2'-0" × 6'-8" × 1 3/4"	Flush	Steel	Steel Metal Frame
3	1'-6" × 6'-8" × 1 3/4"	Flush	Steel	Steel Metal Frame
A	5'-6" × 5'-1 1/2"	Jalousie	6 1/2" Glass	Aluminum Frame GS3-TS
B	1'-8" × 2'-2 1/2"	Jalousie	6 1/2" Glass	Aluminum Frame GS3-TS

FINISH SCHEDULE								
ITEM	WALLS: OUTSIDE	WALLS: INSIDE	CEILING	FLOOR	BASE	TRIM	ROOF	WAINSCOT
House	Rubbed	Tile & Plaster	Plaster	Tile	Tile	Metal	Tar & Gravel	All Above Floor
Toilet	-	Tile & Plaster	Plaster	Tile	Tile	Metal	-	All Above Floor
Cabinets	Plaster	3/4" Plywood	Plaster	Tile	-	Metal	-	-

NOTE:
All aluminum surfaces to be placed in contact with, or fastened to, steel members shall be thoroughly coated with an approved aluminum impregnated caulking compound. All aluminum surfaces to be placed in contact with concrete shall be given a heavy coat of an approved alkali-resistant bituminous paint, or a coat of zinc chromate paint and allowed to dry before placing on the concrete.

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY 5'-0" SIDEWALKS
45'-0" LIFT OPEN STEEL GRID FLOOR
DATED May 13 1957

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS
BRIDGE DESIGN SECTION

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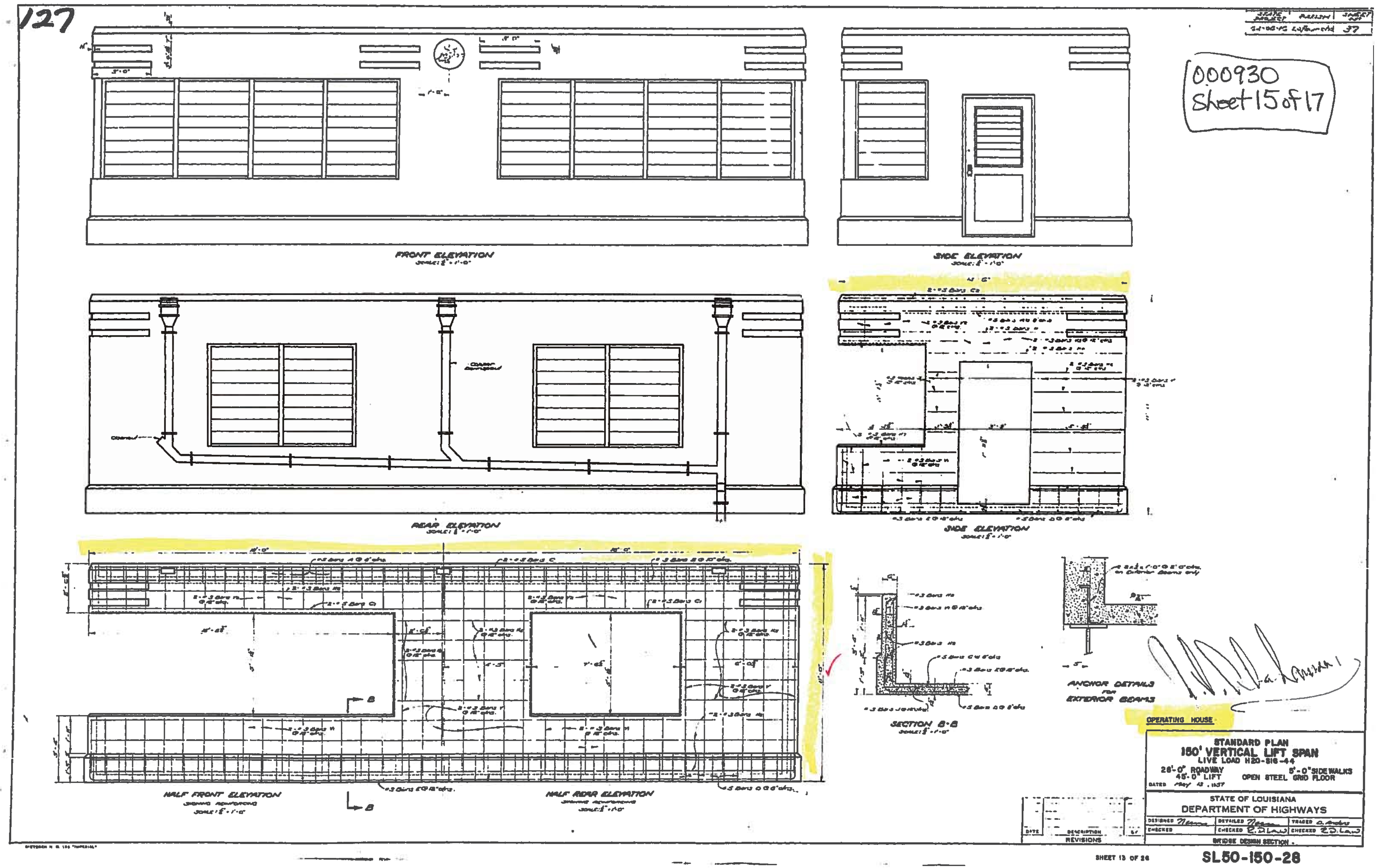
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FRONT ELEVATION
SIDE ELEVATION
REAR ELEVATION
SIDE ELEVATION
HALF FRONT ELEVATION
HALF REAR ELEVATION
SECTION B-B
ANCHOR DETAILS FOR EXTERIOR BEAMS
OPERATING HOUSE
STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY
45'-0" LIFT
5'-0" SIDEWALKS
OPEN STEEL GRID FLOOR
STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS
DESIGNED
DETAILED
TRACED
CHECKED
BRIDGE DESIGN SECTION.
DATE
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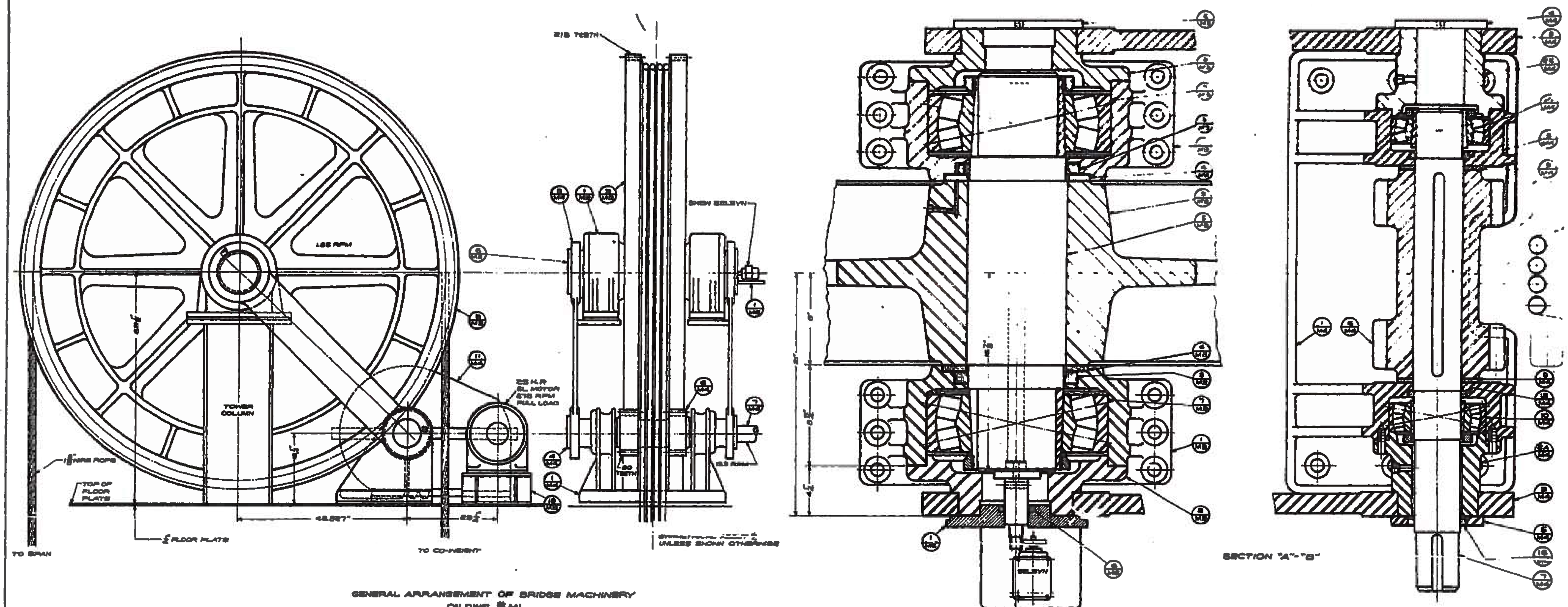
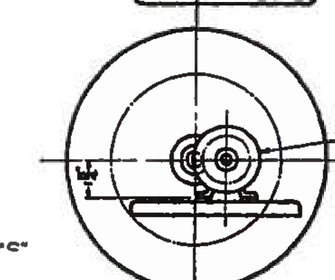


GENERAL ARRANGEMENT OF BRIDGE MACHINERY ON DWG. # M1

NOTE:
FOR REMOVING PINION SHAFT REMOVE CAPS, BEARINGS AND GREASE SEALS FROM BOTH ENDS OF THE ASSEMBLY.
ROTATE THE PINION SPACER NEAREST THE COUPLING END OF THE SHAFT UNTIL IT'S KEY SLOT IS IN LINE WITH THE KEY SLOT IN THE BORE OF THE HOUSING.
ROTATE THE SHAFT UNTIL THE KEYS ARE STRAIGHT DOWN. LIFT IT UPWARD AGAINST THE TOP OF THE BORE AND PRESS IT OUT IN THE DIRECTION OF THE COUPLING END.

NOTE:
THE CONTRACTOR SHALL DETERMINE THE FINAL DIMENSIONS OF PARTS INVOLVING COMMERCIAL PRODUCTS SUCH AS MOTORS, SPEED REDUCERS, BEARINGS, ELECTRICAL EQUIPMENT AND THE LIKE, FROM CERTIFIED DIMENSIONS OUTLINES OF THE COMMERCIAL PRODUCTS BEFORE MAKING SHOP DRAWINGS OF THE PARTS INVOLVED.
UNLESS OTHERWISE SHOWN ON DETAIL DRAWING LUBRICANT SHALL BE AS FOLLOWS OR APPROVED EQUAL:
PILLOW BLOCKS, COUPLINGS & TRUNION BEARINGS - ESSO FIBRE GREASE "C"
EXPOSED TEETH - MEDIUM HARD GREASE.
ENCLOSED SPEED REDUCERS - STD. OIL "TERESSO 65" VISC SAE 50.
WIRE ROPE - STD. OIL CO. SURRETTE COMPOUND Nº 1500.
ALL UNFINISHED SURFACES OF MACHINERY SHALL [redacted] PAINTED ONE SHOP COAT OF RED LEAD AND OIL.
ALL FINISHED SURFACES SHALL BE COATED WITH WHITE LEAD AND TALLOW BEFORE SHIPMENT AND SHALL BE PROTECTED BY WOODEN LAGGING.



SELSYN MOUNTING AND GEARS ON DWG. M6

ASSEMBLY OF GEAR TRAIN FOR SHEAVE DRIVE

M 2

STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY 5'-0" SIDEWALKS
45'-0" LIFT OPEN STEEL GRID FLOOR
DATED FEB. 22 1957

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

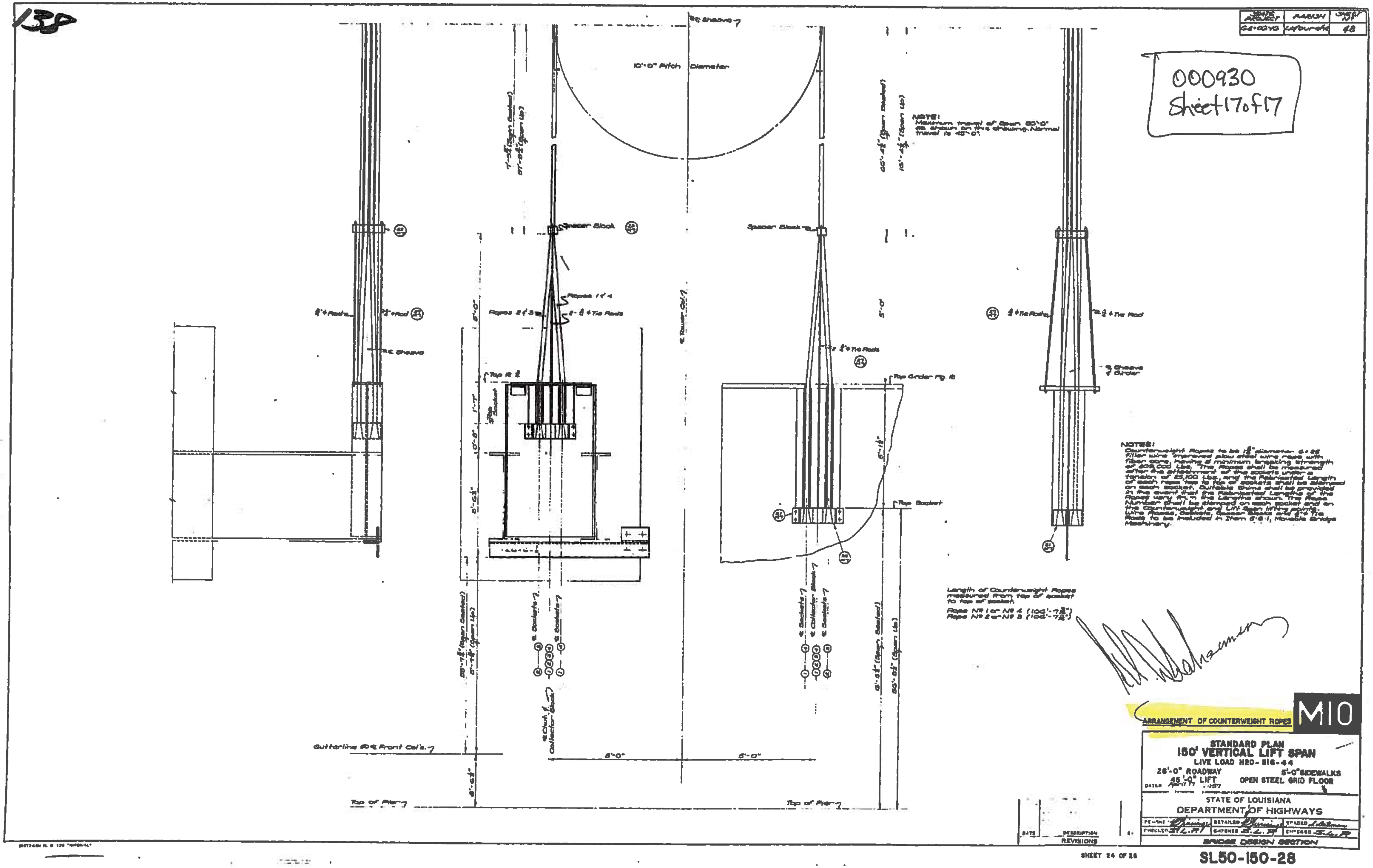
DESIGNED Kuzel	DETAILED Kuzel	TRACED O. Chofman
CHECKED Brewer	CHECKED Brewer	CHECKED Brewer

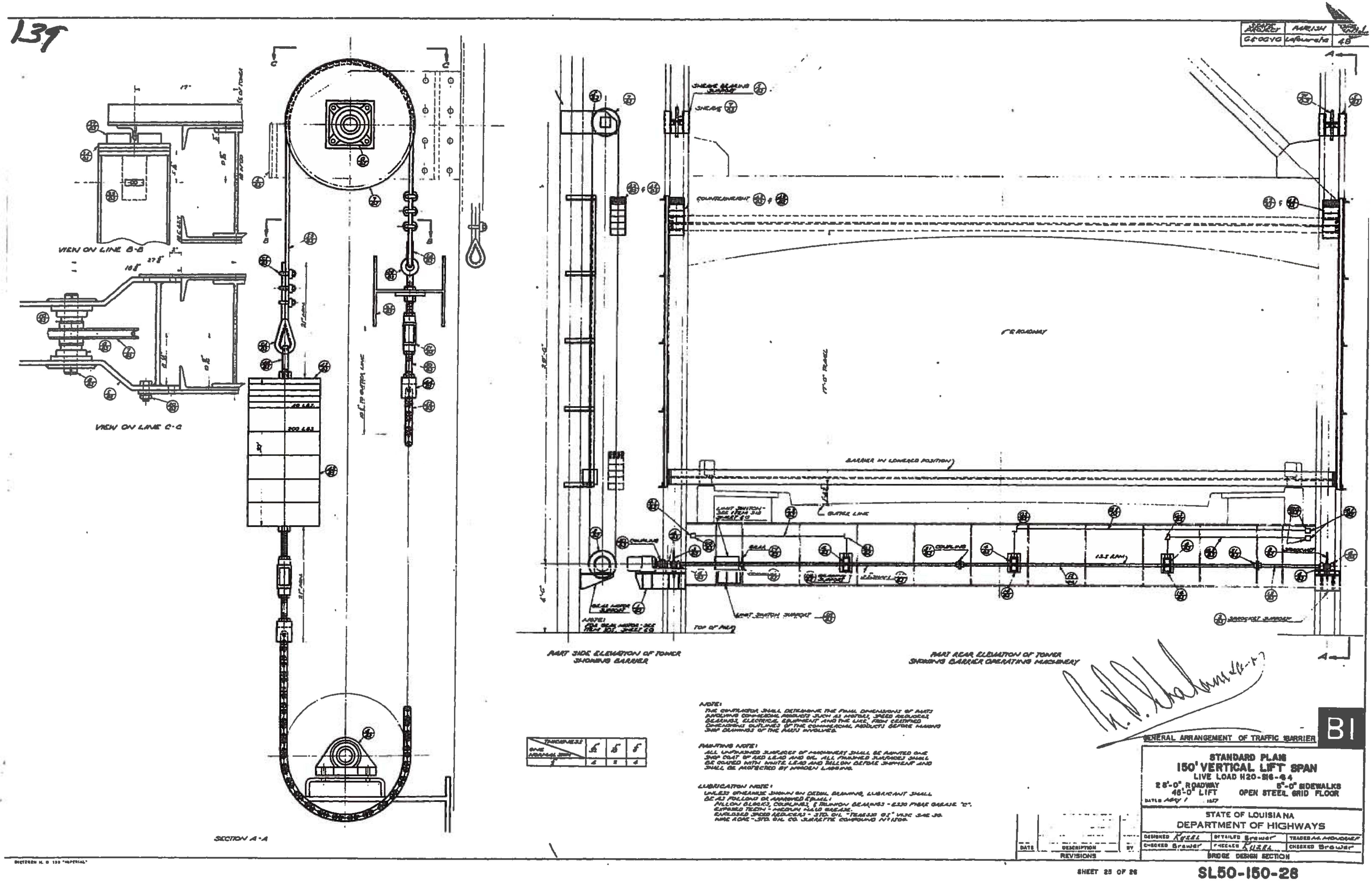
BRIDGE DESIGN SECTION

DATE	DESCRIPTION	BY
REVISIONS		

SHEET 16 OF 26

SL50-150-28


138
000930
Sheet 17 of 17
10'-0" Pitch Diameter
Spacer Block
Top of Pier
Gutterline @ ℄ Front Col's.
Top Socket
Top Girder Flg.
NOTES:
Length of Counterweight Ropes measured from top of socket to top of socket.
M10
ARRANGEMENT OF COUNTERWEIGHT ROPES
STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY
45'-0" LIFT
5'-0" SIDEWALKS
OPEN STEEL GRID FLOOR
STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS
BRIDGE DESIGN SECTION
SHEET 24 OF 28
SL50-150-28


139
VIEW ON LINE B-B
VIEW ON LINE C-C
SECTION A-A
PART SIDE ELEVATION OF TOWER SHOWING BARRIER
PART REAR ELEVATION OF TOWER SHOWING BARRIER OPERATING MACHINERY
BARRIER IN LOWERED POSITION
COUNTERWEIGHT
SHEAVE
LIMIT SWITCH SUPPORT
COUPLING
TOP OF PIER
NOTE:
THE CONTRACTOR SHALL DETERMINE THE FINAL DIMENSIONS OF PARTS INVOLVING COMMERCIAL PRODUCTS SUCH AS MOTORS, SPEED REDUCERS, BEARINGS, ELECTRICAL EQUIPMENT AND THE LIKE, FROM CERTIFIED DIMENSIONAL OUTLINES OF THE COMMERCIAL PRODUCTS BEFORE MAKING SHOP DRAWINGS OF THE PARTS INVOLVED.
PAINTING NOTE:
ALL UNFINISHED SURFACES OF MACHINERY SHALL BE PAINTED ONE SHOP COAT OF RED LEAD AND OIL. ALL FINISHED SURFACES SHALL BE COATED WITH WHITE LEAD AND TALLOW BEFORE SHIPMENT AND SHALL BE PROTECTED BY WOODEN LAGGING.
LUBRICATION NOTE:
UNLESS OTHERWISE SHOWN ON DETAIL DRAWING, LUBRICANT SHALL BE AS FOLLOWS OR APPROVED EQUAL:
EXPOSED TEETH - MEDIUM HARD GREASE.
GENERAL ARRANGEMENT OF TRAFFIC BARRIER
B1
STANDARD PLAN
150' VERTICAL LIFT SPAN
LIVE LOAD H20-S16-44
28'-0" ROADWAY
5'-0" SIDEWALKS
45'-0" LIFT
OPEN STEEL GRID FLOOR
STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS
DESIGNED Kuzel
DETAILED Brewer
TRACED M. Mondrief
CHECKED Brewer
CHECKED Kuzel
CHECKED Brewer
BRIDGE DESIGN SECTION
DATE
DESCRIPTION
BY
REVISIONS
SHEET 25 OF 26
SL50-150-28