BOBBY JINDAL
GOVERNOR

State of Louisiana

ROBERT J. BARHAM
SECRETARY

DEPARTMENT OF WILDLIFE AND FISHERIES
OFFICE OF SECRETARY

Louisiana Natural & Scenic River System
SCENIC RIVER PERMIT #929

Issue/Effective Date: July 13, 2015

Scenic River: Middle Fork of Bayou D'Arbonne

Recipient: Louisiana DOTD
c/o Tiffinee Brown
1201 Capitol Access Road
Baton Rouge, LA 70802

Description: Bridge Replacement on LA Hwy 520 over Middle Fork of Bayou D'Arbonne

This permit is issued by authority of Part II of Chapter 8, Title 56 of the LRS of 1950 as amended and re-enacted regarding the Louisiana Natural & Scenic Rivers System and the administrative procedures pertaining to the management of these watercourses designated as Scenic Rivers.

The permit is issued by the Administrator with the understanding that the recipient in implementation of the proposal will proceed in compliance with, and not significantly deviate from the provisions contained in the petition for the permit and any special conditions attached hereto. The permit holder is expected to minimize adverse impacts to the structural and functional integrity of the natural systems and aesthetics associated with the Scenic River where the activity is occurring so as to preserve the fundamental character and purpose for which the System was established.

The Administrator assumes no responsibility for or incurs no liability for any injury to persons or property caused by any act of the permit holder or his agent in the permission granted by this permit. In addition to the Department of Wildlife & Fisheries, the petition was given a full and thorough evaluation by the Louisiana Departments of Agriculture & Forestry; Culture, Recreation & Tourism; Environmental Quality; and the Office of State Planning and Budget. If during the review process objections were made to the proposed activity, those objections were either found to be insignificant or they have been included in the conditions of the permit.

This permit shall expire if the permitted activity has not begun within 18 months of the "Issue Date" indicated above.

Compliance with these conditions is necessary for this permit to be valid:

General Conditions:

1) Adequate erosion/sediment control measures are to be taken during the implementation of this project to insure that no sediments or other construction/activity related debris are allowed to enter Middle Fork of Bayou D'Arbonne.

2) All other applicable permits not contingent upon this permit from governmental entities will be acquired and their conditions implemented with fidelity. Applicant has title to the property or permission from the landowner to implement the project.

3) If during project activity, any sensitive archaeological, biological or botanical element is encountered, activity will temporarily cease and the permit holder will contact the Administrator to determine the disposition of that element or artifact.

4) This project must be carried out in a manner consistent with the design that the applicant submitted during the permit process and as depicted in the attached plats. Should significant physical modification to the project become necessary during implementation of the project or after its completion, the permit holder will submit a letter of explanation within one week of discovery to the Administrator to determine if another petition will be required.

Special Operating Conditions:

1) Signs indicating that Middle Fork of Bayou D'Arbonne is a Louisiana designated Natural and Scenic River shall be placed at both approaches of the new bridge.

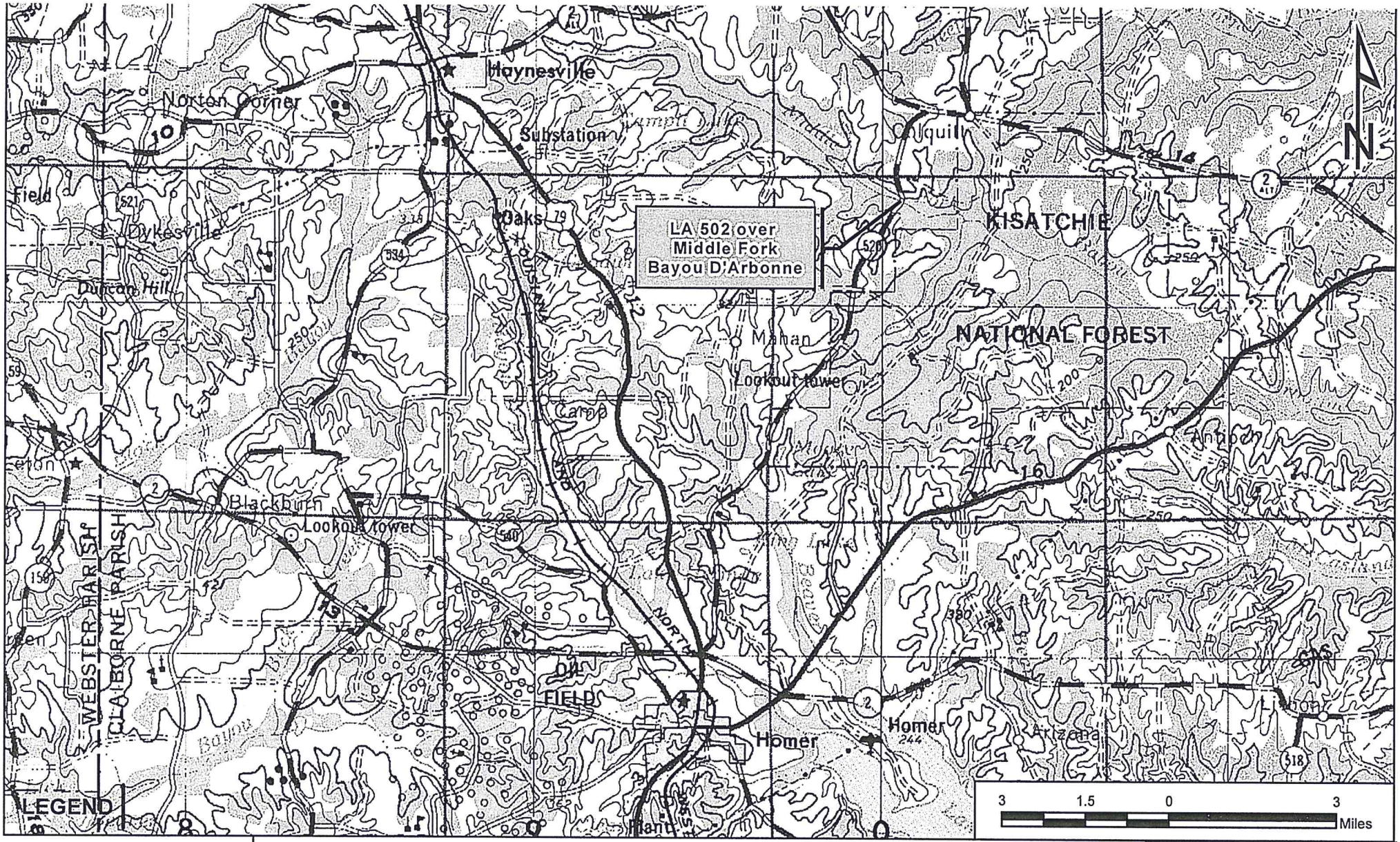
2) The permittee shall ensure that all contractors, subcontractors, and workers are made fully aware of the limits of the work authorized by this permit and adhere to and comply with all conditions listed in this Scenic River permit. Non-compliance with permit terms and conditions may result in permit suspension or revocation.

3) The permittee shall remove all remnants (e.g., pilings, rip rap, etc.) of the existing bridge following completion of the new bridge. The right of way for the existing bridge shall immediately be contoured and sodded or seeded to restore cover and prevent erosion.

4) The permittee shall submit post-construction, photographic documentation of the proposed project to LDWF within 30 days following project completion.

If you need any additional information, you may contact Mr. Kyle Balkum, Biologist Program Manager, in the Baton Rouge Office at (225) 765-2819.

Robert J. Barham
Administrator



LOCATION MAP

SOURCE: USGS 1:250,000 TOPOGRAPHIC MAP - SHREVEPORT QUADRANGLE

STATE PROJECT NO. H.001763
FEDERAL AID PROJECT NO. H001763
LA 520: MIDDLE FORK BAYOU D'ARBONNE BRIDGE
CLAIBORNE PARISH

FINAL PLATS
7-14-15
CP

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

PLANS OF PROPOSED STATE HIGHWAY

FEDERAL PROJECT NO. H001763
STATE PROJECT NO. H.001763

LA 520: MIDDLE FORK BAYOU D'ARBONNE BRIDGE

CLAIBORNE PARISH

INDEX TO SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET AND LAYOUT MAP
1a	TEMPORARY BENCH MARKS AND REFERENCE POINTS
2-2a	TYPICAL SECTIONS AND DETAILS
3	SUMMARY SHEETS
4-6	PLAN-PROFILE SHEETS
7-8	GEOMETRIC DETAILS OF DIVERSION
9	EMBANKMENT WIDENING
10-13	SUGGESTED SEQUENCE OF CONSTRUCTION AND CONSTRUCTION SIGNING
14-21	SPECIAL DETAILS: TEMPORARY TRAFFIC CONTROL
101-XXX	BRIDGE PLANS
401-411	CROSS SECTION SHEETS

	STANDARD PLAN	REV. DATE
201-202	BM-01 (2 SHTS.)	08/22/2007
203-204	EC-01 (2 SHTS.)	10/01/2008
205	HS-03	01/03/2005
206	PM-01	11/01/2010
207	RM-01	05/26/2009
208	WP-01	05/26/2009
209	DW-03	09/21/1982

TOTAL SHEETS = XX

TRAFFIC DATA
2012 A.D.T. = 750
2032 A.D.T. = 1,025
D = 55%
K = 10%
T = 13%

DESIGN SPEED = 60 M.P.H.
ROADWAY CLASS: RC-2

DATE	REVISION	DATE	RECOMMENDED	DATE	APPROVED

SCHEDULE OF REVISIONS

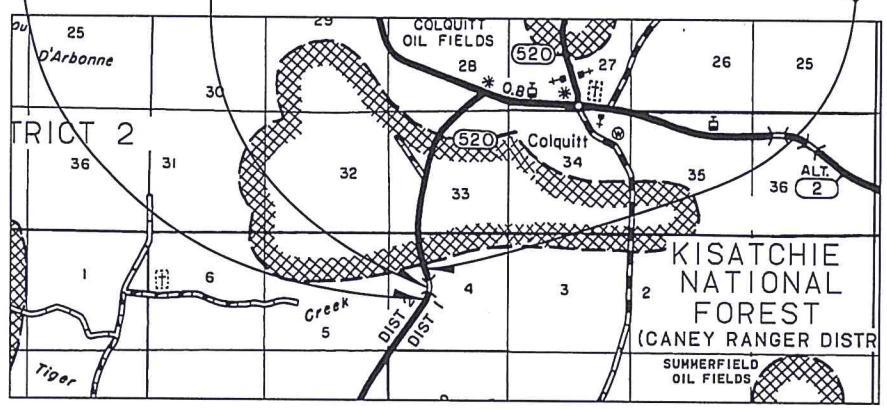
TYPE OF CONSTRUCTION:

GRADING, EARTHWORK, SUPERPAVE ASPHALTIC CONCRETE PAVEMENT, CLASS II BASE COURSE AND CONCRETE SLAB SPAN BRIDGE

C.S. 101-01 LOG MILE 9.296
STA. 105+21.37

BRIDGE SITE: 300.00'
STA. 110+60.00 TO
STA. 113+60.00

C.S. 101-01 LOG MILE 9.773
STA. 130+40.00



LOCATION OF WORK

CONTROL SECTION	LOG MILE BEGIN	LOG MILE END
101-01	9.296	9.773

95% Preliminary Plans

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION, BIDDING, RECORDATION, CONVEYANCE, SALES OR AS THE BASIS FOR THE ISSUANCE OF A PERMIT.

Louisiana Department of Transportation and Development
ENGINEER: RYAN RICHARD
LICENSE #: 33290
DATE: 4/3/2012

APPROVED
DOTD CHIEF ENGINEER
DATE

APPROVED
FEDERAL HIGHWAY ADMINISTRATION
DATE

FINAL PLATS
7-14-15
CM

LAYOUT MAP

DATUM USED : NAD 83 & NAVD 88
MAGNETIC VAR :
BEARINGS ARE :

TRANSIT BOOKS :
LEVEL BOOKS : 181-598

SCALES:
PLAN - 1" = 50'
PROFILE HOR. - 1" = 50'
VERT. - 1" = 5'

SCALE: 1 INCH = 2640 FEET
2460 0 2460 5280 7920

NOTE:
THE 2006 EDITION OF THE LOUISIANA DOTD STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, AS AMENDED BY THE PROJECT SPECIFICATIONS, SHALL GOVERN ON THIS PROJECT.

LENGTH OF PROJECT

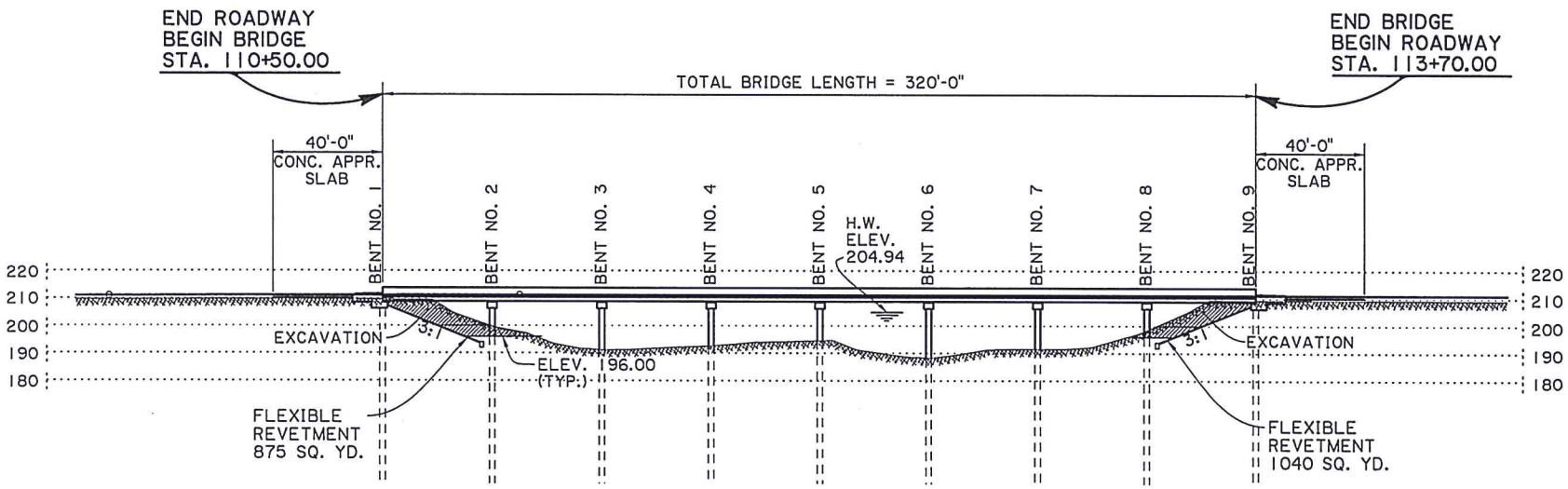
DESCRIPTION	ALGEBRAIC SUM OF ALL EQUATIONS	GROSS LENGTH	EXCEPTION	BRIDGE LENGTH		ROADWAY LENGTH	
STATION TO STATION	FEET	FEET	FEET	FEET	MILES	FEET	MILES
105+21.37 - 130+60.00	+0.15	2528.63		300.00	0.057	2218.63	0.420
TOTAL LENGTH OF BRIDGES				300.00	0.057		
TOTAL LENGTH OF ROADWAY						2218.63	0.420
TOTAL MILES				0.477			

SHEET NUMBER 1
PARISH CLAIBORNE
FEDERAL PROJECT H001763
STATE PROJECT H.001763
DESIGNED S. BAYNE
CHECKED R. RICHARD
DETAILED S. BAYNE
CHECKED R. RICHARD
DATE 4/3/2012
SHEET 1 OF 1

NO.	DATE	REVISION DESCRIPTION	BY

TITLE SHEET AND LAYOUT MAP
MIDDLE FORK BAYOU D'ARBONNE BRIDGE
ROAD DESIGN

Headquarters\100 thru 199\H.001763; 101-01-0012\Road-Site\Plans\sheet0001.dgn 4/3/2012 12:48
95% Preliminary Plans



FINAL PLATS
7-14-15
CD

CHECK PRINTS

IP_PWP:d0360292\Approach Slab Replacements.dgn 3/27/2015 09:22

PARISH	CONTROL SECTION	STATE PROJECT	SHEET NUMBER
CLAIBORNE	101-01	H.001763 (101-01-0012)	

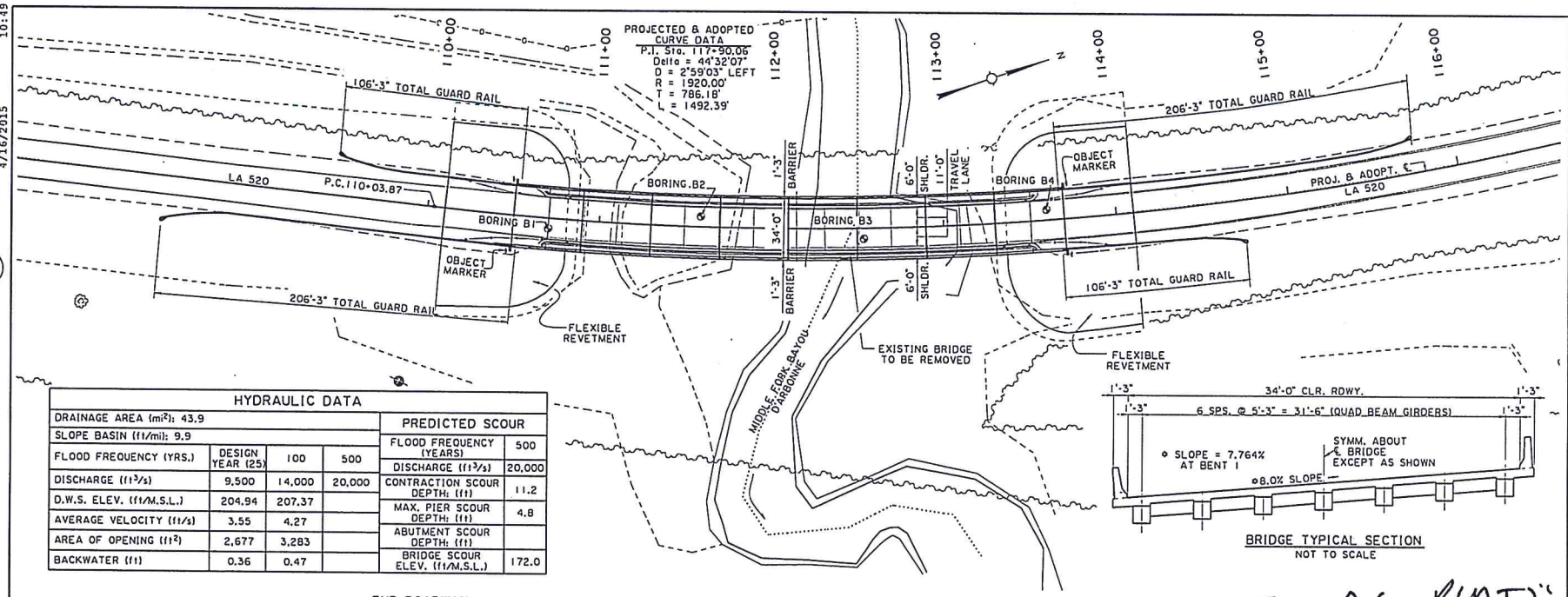
DESIGNED | CHECKED | DETAILED | CHECKED | REVIEWED | SERIES

NO.	DATE	REVISION OF CHANGE ORDER DESCRIPTION	BY

MIDDLE FORK BAYOU D'ARBONNE BRIDGE
PROFILE

MIDDLE FORK BAYOU D'ARBONNE BRIDGE

BRIDGE & STRUCTURAL DESIGN



HYDRAULIC DATA			
DRAINAGE AREA (mi²): 43.9			
SLOPE BASIN (ft/mi): 9.9			
FLOOD FREQUENCY (YRS.)	DESIGN YEAR (25)	100	500
DISCHARGE (ft³/s)	9,500	14,000	20,000
D.W.S. ELEV. (ft/M.S.L.)	204.94	207.37	
AVERAGE VELOCITY (ft/s)	3.55	4.27	
AREA OF OPENING (ft²)	2,677	3,283	
BACKWATER (ft)	0.36	0.47	

PREDICTED SCOUR	
FLOOD FREQUENCY (YEARS)	500
DISCHARGE (ft³/s)	20,000
CONTRACTION SCOUR DEPTH: (ft)	11.2
MAX. PIER SCOUR DEPTH: (ft)	4.8
ABUTMENT SCOUR DEPTH: (ft)	
BRIDGE SCOUR ELEV. (ft/M.S.L.)	172.0

FINAL PLATS
7-14-15
CM

300' VERTICAL CURVE
PVI STA. 109+50.00
ELEV. 211.10
G1=+0.54%, G2=0.00%

END ROADWAY BEGIN BRIDGE STA. 110+50.00

END BRIDGE BEGIN ROADWAY STA. 113+70.00

TOTAL BRIDGE LENGTH = 320'-0"
4-80'-0" QUADBEAM GIRDER SPANS UNITS

40'-0" CONC. APPR. SLAB | 2-40'-0" CONT. P.P.C. QUADBEAM SPANS | 2-40'-0" CONT. P.P.C. QUADBEAM SPANS | 2-40'-0" CONT. P.P.C. QUADBEAM SPANS | 2-40'-0" CONT. P.P.C. QUADBEAM SPANS | 40'-0" CONC. APPR. SLAB

P.V.C. 108+00.00 ELEV. 210.28 — SLOPE +0.54% — P.V.I. 109+50.00 ELEV. 211.10 — SLOPE 0.00%

EL. 211.03 — EL. 211.08 S.S. — EL. 211.10 — EL. 211.10 S.S. — EL. 211.10 — EL. 211.10 S.S. — H.W. ELEV. 204.94 — EL. 211.10 — EL. 211.10 S.S. — EL. 211.10 — EL. 211.10 S.S. — EL. 211.10

EXCAVATION 3:1 — ELEV. 196.00 (TYP.) — EXCAVATION 3:1

BENT NO. 1 STA. 110+50.00 — 4-24"ø P.P.C. PILES
BENT NO. 2 STA. 110+90.00 — 4-24"ø P.P.C. PILES
BENT NO. 3 STA. 111+30.00 — 4-24"ø P.P.C. PILES
BENT NO. 4 STA. 111+70.00 — 4-24"ø P.P.C. PILES
BENT NO. 5 STA. 112+10.00 — 4-24"ø P.P.C. PILES
BENT NO. 6 STA. 112+50.00 — 4-24"ø P.P.C. PILES
BENT NO. 7 STA. 112+90.00 — 4-24"ø P.P.C. PILES
BENT NO. 8 STA. 113+30.00 — 4-24"ø P.P.C. PILES
BENT NO. 9 STA. 113+70.00 — 4-24"ø P.P.C. PILES

108: 209.78 — 109: 209.55 — 110: 209.73 — 111: 209.53, 206.21, 198.79, 197.64, 196.48, 192.69, 191.05 (+70+72, +93, +07+13+27) — 112: 193.91, 194.42, 194.80 (+81, +15) — 113: 187.87, 191.56, 191.52, 191.46, 194.47, 195.25, 205.84, 209.56 (+47, +74, +08+15+23, +49+51) — 114: 209.35

S.S. = STRIP SEAL JOINT
* = BATTER EXTERIOR PILES 1½" IN 12"

NOTES:

DATE OF CONSTRUCTION REQUIRED AT EACH END OF BRIDGE, SEE STANDARD DETAIL YP-01.

FOR ADDITIONAL GUARD RAIL INFORMATION, SEE STANDARD PLAN GR-200, AND SHEET 104.

FOR REVETMENT DETAILS, SEE STANDARD DETAIL FR-1.

FILL TO BE IN PLACE AND EXCAVATION TO MADE PRIOR TO DRIVING PILES AFFECTED.

FIELD BOOK: 181-598

IN PLACE TO BE REMOVED

STATION 110+70 TO STATION 113+50
STRUCTURE NO. 041410101094O1
24.0' x 280.0' CONC. SLAB SPAN BRIDGE

GENERAL PLAN
SCALE 1:30

95% FINAL PLANS

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION, BIDDING, RECORDATION, CONVEYANCE, SALES OR AS THE BASIS FOR THE ISSUANCE OF A PERMIT.

Louisiana Department of Transportation and Development
ENGINEER: VICTOR A. SANCHEZ
LICENSE #: 33976
DATE: 4/16/2015

SHEET NUMBER 104
PARISH: CLAIBORNE
CONTROL SECTION: 101-01
FAIR PROJECT: H.001763 (101-01-0012)
DESIGNED V. SANCHEZ
CHECKED J. MARKLEY
DETAILED V. SANCHEZ
CHECKED V. SANCHEZ
REVIEWED C. ALCKOWN
SERIES 1 OF 1
NO. DATE REVISION OR CHANGE ORDER DESCRIPTION BY

GENERAL PLAN
LA 520
MIDDLE FORK BAYOU D'ARBONNE BRIDGE

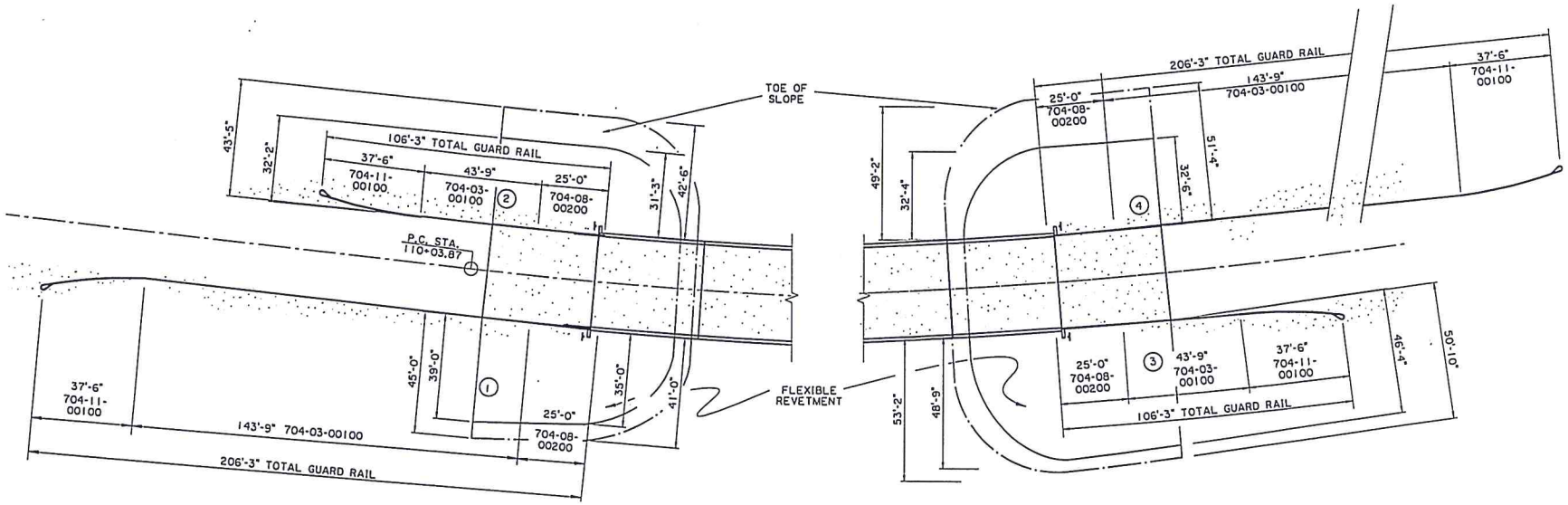
BRIDGE & STRUCTURAL DESIGN

95% FINAL PLANS

IP_PWP:d0360292\104_Genplan(QuadBeam).dgn 4/16/2015 10:49

GUARDRAIL DESIGN STANDARDS *								
HWY. DESIGN CLASS	DESIGN SPEED (MPH)			2032 ADT		LC		
RC-2	60			1025		24'		
GUARDRAIL LENGTH REQUIREMENTS								
BR. SIDE	LR	LH	LW	SW	A/B	CZc	X	Y
1	345'	24'	11'	6'	N/A	31.2	193.75'	N/A
2	345'	24'	11'	6'	N/A	31.2	93.75'	N/A
3	345'	24'	11'	6'	N/A	31.2	93.75'	N/A
4	345'	24'	11'	6'	N/A	31.2	193.75'	N/A

* GUARDRAIL TO BE INSTALLED PARALLEL WITH EDGE OF ROADWAY.



FINAL PLATS
7-18-15
CD

NOTE:

FOR ADDITIONAL GUARD RAIL INFORMATION, SEE STANDARD PLAN GR-200.
ALL AREAS OF DISTURBED EMBANKMENT SHALL BE SEEDED AND FERTILIZED.
FOR ADDITIONAL REVETMENT INFORMATION, SEE STANDARD DETAIL FR-01.

95% FINAL PLANS

PRELIMINARY
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Louisiana Department of Transportation and Development

ENGINEER: VICTOR A. SANCHEZ
LICENSE #: 33976
DATE: 4/16/2015

GUARD RAIL & REVETMENT
LA 520
MIDDLE FORK BAYOU D'ARBONNE BRIDGE

BRIDGE & STRUCTURAL DESIGN

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

DESIGNED V. SANCHEZ
CHECKED J. NAKHLEH
DETAILED J. NAKHLEH
CHECKED V. SANCHEZ
REVIEWED C. McKOWN
SERIES 8 1 OF 1

PARISH CLAIBORNE
CONTROL SECTION 101-01
STATE PROJECT H.001763 (101-01-0012)

SHEET NUMBER 105

95% FINAL PLANS

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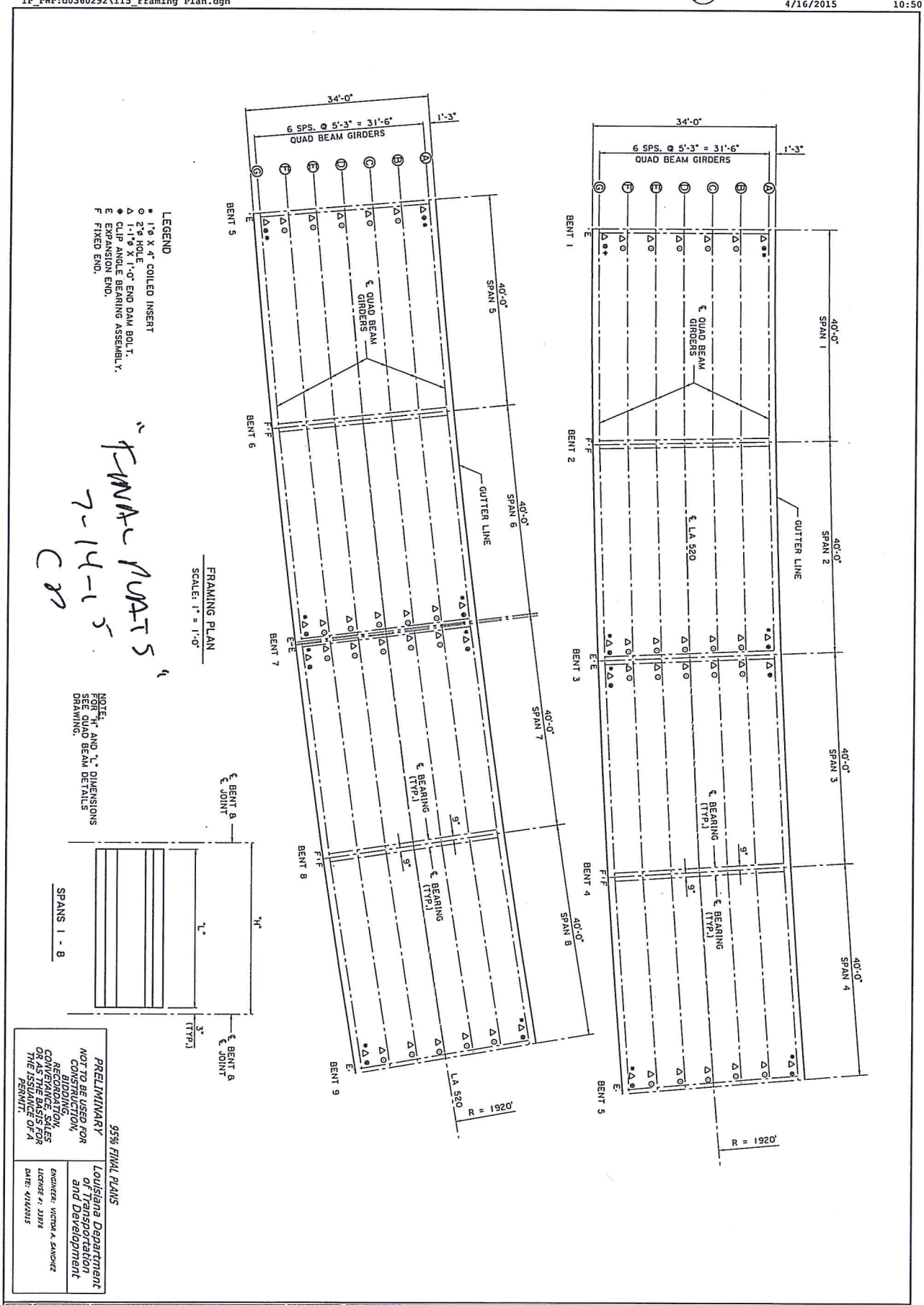

BRIDGE & STRUCTURAL DESIGN	FRAMING PLAN LA 520 MIDDLE FORK BAYOU D'ARBONNE BRIDGE	NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY	DESIGNED J. NAKHLEH CHECKED V. SANCHEZ DETAILED J. NAKHLEH CHECKED V. SANCHEZ REVIEWED C. McKOWN SERIES II 1 OF 1	PARISH CLAIBORNE CONTROL SECTION 101-01 STATE PROJECT H.001763 (101-01-0012) SHEET NUMBER 115