STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

LETTER BID PROPOSAL

STATE PROJECT NO. 450-90-0219
CITY STREETS SLIDING JOINT REPLACEMENTS (BRPM)
ROUTE I-10
ORLEANS PARISH

STATE OF LOUISIANA
JENNIFER D. BRANTON
License No. E 31529
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

1/13/2009

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

STATE PROJECT NO. 450-90-0219
TABLE OF CONTENTS

Page No.

Title Sheet A-1
Table of Contents B-1
Notice to Contractors ..... C-1 thru C-2
Special Provisions ..... D-1 thru D-5
Supplemental Specifications:
Supplemental Specifications for 2006 Standard Specifications (08/08) ..... E-1 thru E-31
Plans (49 sheets) ..... F-1 thru F-49
Letter Bid Proposal Returnables:
Title Sheet G-1
Bid Bond H-1
Schedule of Items ..... I-1 thru I-2
Letter Bid Proposal Signature and Execution Form ..... J-1 thru J-2

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

NOTICE TO CONTRACTORS (D02 01/12/09)

Sealed paper bids for the following project will be received by the Louisiana Department of Transportation and Development (DOTD), 7252 Lakeshore Drive, New Orleans, La 70124, until 10:00 a.m. on Friday, January 30, 2009. No bids are accepted after 10:00 a.m.

STATE PROJECT NO. 450-90-0219
DESCRIPTION: CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)
ROUTE: I-10
PARISH: ORLEANS
LENGTH: 1.55 miles.
TYPE: BRIDGE DECK SLIDING PLATE JOINT REPLACEMENTS
LIMITS: State Project No. 450-90-0219 : FROM ITS JUNCTION WITH TULANE AVE. NORTH TO ITS JUNCTION WITH ALLEN ST.
ESTIMATED COST RANGE: $250,000 to $500,000
PROJECT ENGINEER: FRANCES BERGER; P.O. Box 9180,Bridge City, LA 70096, 504-253-6130
PROJECT MANAGER: JENNIFER BRANTON

Bids must be prepared and submitted in accordance with Section 102 of the 2006 Louisiana Standard Specifications for Roads and Bridges as amended by the project specifications, and must include all information required by the proposal.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

NOTICE TO CONTRACTORS (CONTINUED)

Paper plans and/or proposals may be obtained at New Orleans District Design Office, 7252 Lakeshore Drive, New Orleans, La 70124, or by contacting the DOTD; Email: JenniferBranton@dotd.la.gov, Phone (504) 816-7303, FAX: (504) 816-7302. Proposals will not be issued later than 24 hours prior to the time set for opening bids. Paper copies of the plans are included in the proposal.

The U. S. Department of Transportation (DOT) operates a toll free "Hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should call 1-800-424-9071. All information will be treated confidentially and caller anonymity will be respected.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

SPEICAL PROVISIONS
STATE PROJECT NO. 450-90-0219

GENERAL BIDDING REQUIREMENTS (08/06): The specifications, contract and bonds governing the construction of the work are the 2006 Edition of the Louisiana Standard Specifications for Roads and Bridges, together with any supplementary specifications and special provisions attached to this proposal.

Bids shall be prepared and submitted in accordance with Section 102 of the Standard Specifications.

The plans herein referred to are the plans approved and marked with the project number, route and Parish, together with all standard or special designs that may be included in such plans. The bidder declares that the only parties interested in this proposal as principals are those named herein; that this proposal is made without collusion or combination of any kind with any other person, firm, association, or corporation, or any member or officer thereof; that careful examination has been made of the site of the proposed work, the plans, Standard Specifications, supplementary specifications and special provisions above mentioned, and the form of contract and payment, performance, and retainage bond; that the bidder agrees, if this proposal is accepted, to provide all necessary machinery, tools, apparatus and other means of construction and will do all work and furnish all material specified in the contract, in the manner and time therein prescribed and in accordance with the requirements therein set forth; and agrees to accept as full compensation therefore, the amount of the summation of the products of the quantities of work and material incorporated in the completed project, as determined by the engineer, multiplied by the respective unit prices herein bid.

It is understood by the bidder that the quantities given in this proposal are a fair approximation of the amount of work to be done and that the sum of the products of the approximate quantities multiplied by the respective unit prices bid shall constitute gross sum bid, which sum shall be used in comparison of bids and awarding of the contract.

The bidder further agrees to perform all extra and force account work that may be required on the basis provided in the specifications.

The bidder further agrees that within 15 calendar days after the contract has been transmitted to him, he will execute the contract and furnish the Department satisfactory surety bonds.

If this proposal is accepted and the bidder fails to execute the contract and furnish bonds as above provided, the proposal guaranty shall become the property of the Department; otherwise, said proposal guaranty will be returned to the bidder; all in accordance with Subsection 103.04.

MAINTENANCE OF TRAFFIC (08/06): Subsection 104.03 of the 2006 Standard Specifications is amended to include the following requirements.

The contractor shall direct special attention to the maintenance of traffic at entrance and exit ramps particularly when construction operations are being conducted on the adjacent travel lanes of interstate highways. Additional signs, barricades, channelizing devices, etc. shall be provided and maintained by the contractor as directed by the engineer and their cost shall be included in the prices bid on the Temporary Signs and Barricades pay items.

The roadway and shoulders shall remain open to traffic as much as possible during nonwork periods as directed by the engineer. During the period that all lanes are open to traffic, the contractor shall neither store material nor park equipment on roadway shoulders.

PUBLIC CONVENIENCE AND SAFETY (09/05): Subsection 107.07 of the Standard Specifications is amended to include the following.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

The procurement of police officers for public safety during construction shall be in accordance with the Department's Policy for Use of Police Officers in Construction/Maintenance Work Zones. The DOTD project engineer shall determine the need for police officers to assist in controlling traffic in a particular work zone. The number of officers needed, the tasks they will perform, and their location within the work zone will vary as a function of the zone type. Police officers shall be placed at strategic locations at times during construction as determined by the DOTD project engineer.

The three types of law enforcement services are Police Presence, Police Enforcement and Police Traffic Control. Police Presence is defined as the use of police officers at the beginning of the active work zone area utilizing their blue lights to gain the attention of drivers. Police Enforcement is utilized when enforcement is required to enhance the safe operation of the work zone. Police Traffic Control is to be used in detour / diversion situations.

The DOTD project engineer will extend an invitation to the appropriate Louisiana State Police (LSP) Troop Commander to attend the pre-construction conference.

Prior to commencing the work on the project, the contractor shall contact the LSP Troop Commander to obtain law enforcement services of police officers during construction. If the LSP Troop is unable to provide law enforcement services for the project work zone, the LSP Troop Commander or the contractor will extend the invitation to the appropriate local law enforcement authorities.

Police officers will report directly to the contractor. However, the contractor will not have the authority to direct the placement of the police officer or the patrol vehicle in situations that are contrary to established procedures and/or could endanger the police officer. The DOTD project engineer will make the final determination on all issues regarding police officer responsibility in work zones.

Prior to the beginning of the shift, the contractor shall provide a daily work zone briefing to the police officer. For major changes in traffic patterns, advanced notification shall be provided to the police agency working the detail. This information should also be provided to the motoring public through the DOTD district and / or the LSP Troop.

The contractor shall pay for law enforcement services provided by the police officers based on the hourly wage and vehicle rate fee schedule below. The Department will reimburse the contractor monthly for the incurred cost. The contractor shall furnish time record documentation with the request for reimbursement. The provisions of Subsection 109.04 shall not apply to this reimbursement.

The agreed upon fee schedule for police officers in the work zone is as follows:

$25 per vehicle per day - vehicle use fee
$40 per hour per officer (one officer per vehicle) (minimum 2 hours).

ITEM S-101, POLYMER CONCRETE JOINT REPAIRS: This item consists of mixing, handling, preparing surfaces, placing and curing polymer concrete for the repair and restoration of concrete deck joint nosings as shown on the plans or as directed by the engineer. Design quantities may be adjusted by the engineer to facilitate repair of the joints and installation of joint seals. Payment for this item will be based on plan quantities of materials to be installed.

Payment for polymer concrete for joint repairs will be made at the contract unit price per linear foot, which includes furnishing all materials, labor, tools and equipment necessary to complete the item.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

The polymer concrete material used for this item shall conform to the following specifications:

POLYMER CONCRETE FOR PORTLAND CEMENT CONCRETE REPAIRS

DESCRIPTION: This material consists of a polymer concrete to be used for Portland cement concrete repair that meets all of the specified requirements.

MATERIALS:

Aggregate: Kiln dried well-graded sand (70% passing Nos. 4-16 sieve, 20% passing No. 85 sieve, 10% passing No. 325 sieve) siliceous aggregate blend with shrinkage control additives contained in a 0.5 ft^3 poly-lined paper bag.

Resin: Polyester based resin in a 5 or 50-gallon container.

Catalyst: 50% Methyl Ethyl Ketone Peroxide in Dimethyl Phthalate contained in a scribed (mark) pint or gallon container.

The product shall be a 1:1:1 (1 mark catalyst: 1 gallon resin: 1 bag aggregate) mixture of the above items. The product shall conform to the following requirements.

Requirement	ASTM Specification	Value
Working time		12-20 minutes
Compressive Strength 2 hours 24 hours 7 days	C579-82	 2500 psi 7000-8000 psi 12000 psi
PCC Bond Strength	C882-78	3500 psi
Flexural Strength	C580-74	3000 psi
Linear Shrinkage	C531-81	.01% maximum
Coefficient of Thermal Expansion	C531-81	11×10^{-6} in/in/°F
Tensile Strength	C307-77	1200 psi

PACKAGING: The materials shall be packaged as a small or large kit. A small kit will consist of 5 gallons of resin, 5 bags of aggregate, and 5 marks of catalyst that will yield 2.5 cubic feet of cured product. A large kit will consist of 50 gallons of resin, 50 bags of aggregate, and 50 marks of catalyst that will produce 25 cubic feet of cured product.

SAMPLING: Sampling shall be in accordance with the Department's Materials Sampling Manual.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

SURFACE PREPARATION: Surface preparation shall be in accordance with Subsection 805.06(2) along with this special provision.

The existing deck concrete surface upon being clean, dry, and consisting of no loose concrete shall be primed with one layer of the same polyester resin used in the polymer concrete prior to application of the polymer concrete.

Any existing embedded steel angles or metal end dams to which polymer concrete is to be bonded shall be cleaned and blasted prior to application of primer adhesive and polymer concrete.

Payment will be made under:

Item S-101, Polymer Concrete Joint Repairs, per Lin. Ft

ITEM S-102 , DYNAMIC MESSAGE SIGN UNIT (12/04): This work consists of furnishing, operating and maintaining solar powered portable dynamic (changeable) message signs to be used at locations designated on the plans or as directed by the engineer.

The dynamic message sign shall be in good operational condition when delivered to the job site. The engineer will inspect the signs, and if they are found to be in good operational condition with all working parts functioning, the signs will be approved for use on the project.

The message sign shall consist of three separate lines. Each line shall consist of eight characters. Each character shall nominally be 18 inches (450 mm) in height. The width shall be adequate to meet the below legibility requirements. Each character shall be a 5 x 7 LED module or hybrid LED disk. Characters shall be separated at a distance such that the legibility requirements are maintained.

All internally illuminated portions of the sign shall be amber in color. All other illuminated surfaces meant for message display shall be fluorescent yellow. All other surfaces on the front panel shall be flat black in color.

The sign shall be clearly visible under all conditions and all lanes of travel from a distance of 1000 feet (300 m) perpendicular to the sign center. The sign shall maintain this legibility throughout the entire project. The contractor shall be responsible for maintaining this minimum legibility. Determination of legibility distance shall rest solely with the engineer.

The portable dynamic message sign shall be used in conjunction with other traffic signs and devices in accordance with the plans, project specifications and as directed by the engineer.

The signs shall be stored in an approved secure storage area when not in use. The contractor shall be required to perform all maintenance operations recommended by the manufacturer and keep adequate records of such operations.

The signs shall be kept clean and in good repair at all times. This includes keeping unit clean.

Measurement of the dynamic message sign unit will be per each.

Payment for the dynamic message signs will be made at the contract unit price per each which will be full compensation for furnishing, operating, relocating and maintaining the unit during the life of the contract and includes all equipment, tools, labor and incidentals necessary for this item of work.

Payment will be made under:

Item S-102, Dynamic Message Sign Unit, per each.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

CONTRACT TIME (03/05): The entire contract shall be completed in all details and ready for final acceptance in accordance with Subsection 105.17(b) within **thirty (30) working days**.

Prior to assessment of contract time, the contractor will be allowed 30 calendar days from the date stipulated in the Notice to Proceed to commence with portions of the contract work including but not limited to assembly periods, preparatory work for materials fabrications such as test piles, or other activities which hinder progress in the beginning stages of construction. Prior to issuance of the Notice to Proceed, the Department will consider extending the assembly period upon written request from the contractor justifying the need for additional time.

The contractor shall be responsible for maintenance of traffic from the beginning of the assembly period. During the assembly period, the contractor will be allowed to do patching and other maintenance work necessary to maintain the roadway with no time charges when approved by the engineer.

If the contractor begins regular construction operations prior to expiration of the assembly period, the assessment of contract time will commence at the time construction operations are begun.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

(08/08)

LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
SUPPLEMENTAL SPECIFICATIONS
(FOR 2006 STANDARD SPECIFICATIONS)

TABLE OF CONTENTS

PART I – GENERAL PROVISIONS

SECTION 101 – GENERAL INFORMATION, DEFINITIONS, AND TERMS
Subsection 101.03 – Definitions 1
SECTION 102 – BIDDING REQUIREMENTS
Subsection 102.09 – Proposal / Bid Guaranty 1
SECTION 107 – LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC
Subsection 107.05 – Federal Aid Participation 2
SECTION 108 – PROSECUTION AND PROGRESS
Subsection 108.04 – Prosecution of Work 2

PART II – EARTHWORK

SECTION 202 – REMOVING OR RELOCATING STRUCTURES AND OBSTRUCTIONS
Subsection 202.06 – Plugging or Relocating Existing Water Wells 2

PART III – BASE COURSES

SECTION 302 – CLASS II BASE COURSE
Subsection 302.05 – Mixing 2
SECTION 305 – SUBGRADE LAYER
Subsection 305.06 – Payment 2
SECTION 307 – PERMEABLE BASES
Subsection 307.02 – Materials 3
SECTION 308 – IN-PLACE CEMENT TREATED BASE COURSE
All Subsections 3

PART V – ASPHALTIC PAVEMENTS

SECTION 502 – SUPERPAVE ASPHALTIC CONCRETE MIXTURES
Subsection 502.02 – Materials 3
Subsection 502.14 – Lot Sizes 4
SECTION 508 – STONE MATRIX ASPHALT
Subsection 508.01 – Description 5
Subsection 508.02 – Materials 5

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

PART VI – RIGID PAVEMENT

SECTION 602 – PORTLAND CEMENT CONCRETE PAVEMENT REHABILITATION
Subsection 602.17 – Payment 5

PART VII – INCIDENTAL CONSTRUCTION

SECTION 701 – CULVERTS AND STORM DRAINS
All Subsections 5
SECTION 704 – GUARD RAIL
Subsection 704.03 – General Construction Requirements 16
SECTION 706 – CONCRETE WALKS, DRIVES AND INCIDENTAL PAVING
All Subsections 16
SECTION 713 – TEMPORARY TRAFFIC CONTROL
Subsection 713.06 – Pavement Markings 18
SECTION 729 – TRAFFIC SIGNS AND DEVICES
Subsection 729.02 – Materials 19
Subsection 729.04 – Fabrication of Sign Panels and Markers 20

PART VIII – STRUCTURES

SECTION 804 – DRIVEN PILES
Subsection 804.08 – Construction Requirements 20

PART IX – PORTLAND CEMENT CONCRETE

SECTION 901 – PORTLAND CEMENT CONCRETE
Subsection 901.06 – Quality Control of Concrete 20
Subsection 901.08 – Composition of Concrete 20

PART X – MATERIALS

SECTION 1001 – HYDRAULIC CEMENT
Subsection 1001.01 – Portland Cement 21
SECTION 1003 – AGGREGATES
Subsection 1003.02 – Aggregates for Portland Cement Concrete and Mortar 21
SECTION 1005 – JOINT MATERIALS FOR PAVEMENTS AND STRUCTURES
Subsection 1005.04 – Combination Joint Former/Sealer 22
SECTION 1006 – CONCRETE AND PLASTIC PIPE
Subsection 1006.09 – Plastic Yard Drain Pipe 23

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

SECTION 1013 – METALS
Subsection 1013.09 – Steel Piles 23
SECTION 1015 – SIGNS AND PAVEMENT MARKINGS
Subsection 1015.04 – Sign Panels 23
Subsection 1015.05 – Reflective Sheeting.....24
Subsection 1015.11 – Preformed Plastic Pavement Marking Tape 28
SECTION 1020 – TRAFFIC SIGNALS
Subsection 1020.01 – Traffic Signal Heads.....29
Subsection 1020.04 – Poles for Traffic Signal Systems 30

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
SUPPLEMENTAL SPECIFICATIONS

The 2006 Louisiana Standard Specifications for Roads and Bridges and supplemental specifications thereto are amended as follows.

PART I – GENERAL PROVISIONS

SECTION 101 – GENERAL INFORMATION, DEFINITIONS, AND TERMS:
Subsection 101.03 – Definitions (07/07), Pages 3 – 13).

Delete the definition for "Proposal/Bid Guaranty" and substitute the following.

Proposal / Bid Guaranty. The required security furnished with a bid. The only form of security acceptable is a Bid Bond.

SECTION 102 – BIDDING REQUIREMENTS:
Subsection 102.09 – Proposal / Bid Guaranty (07/07), Page 19.

Delete the contents of this subsection and substitute the following.

PROPOSAL/BID GUARANTY. Each bid shall be accompanied by a proposal/bid guaranty in an amount not less than five percent of the total bid amount when the bidder's total bid amount as calculated by the Department in accordance with Subsection 103.01 is greater than $50,000. No proposal/bid guaranty is required for projects when the bidder's total bid amount as calculated by the Department is $50,000 or less. The official total bid amount for projects that include alternates is the total of the bidder's base bid and all alternates bid on and accepted by the Department. The proposal/bid guaranty submitted by the bidder shall be a bid bond made payable to the contracting agency as specified on the bid bond form provided in the construction proposal. No other form of security will be accepted.

The bid bond shall be on the "Bid Bond" form provided in the construction proposal, on a form that is materially the same in all respects to the "Bid Bond" form provided, or on an electronic form that has received Department approval prior to submission. The bid bond shall be filled in completely, shall be signed by an authorized officer, owner or partner of the bidding entity, or each entity representing a joint venture; shall be signed by the surety's agent or attorney-in-fact; and shall be accompanied by a notarized document granting general power of attorney to the surety's signer. The bid bond shall not contain any provisions that limit the face amount of the bond.

The bid bond will be written by a surety or insurance company that is in good standing and currently licensed to write surety bonds in the State of Louisiana by the Louisiana Department of Insurance and also conform to the requirements of LSA-R.S. 48:253.

All signatures required on the bid bond may be original, mechanical reproductions, facsimiles or electronic. Electronic bonds issued in conjunction with electronic bids must have written Departmental approval prior to use. The Department will make a listing of approved electronic sureties providers on the Bidx.com site.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

SECTION 107 – LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC:
Subsection 107.05 – Federal Aid Participation (04/08), Pages 57 and 58.

Delete the second paragraph.

SECTION 108 – PROSECUTION AND PROGRESS:
Subsection 108.04 – Prosecution of Work (03/05) Pages 74 and 75.

Add the following sentence to the third paragraph of Heading (b).

Should the surety or the Department take over prosecution of the work, the contractor shall remain disqualified for a period of one year from the completion of the project, unless debarment proceedings are instituted.

When the Department of Transportation and Development is not the contracting agency on the project, the second paragraph under Heading (c) is deleted.

PART II – EARTHWORK

SECTION 202 – REMOVING OR RELOCATING STRUCTURES AND OBSTRUCTIONS:
Subsection 202.06 – Plugging or Relocating Existing Water Wells (03/04), Page 105.

Delete the first sentence and substitute the following.

All abandoned wells shall be plugged and sealed at the locations shown on the plans, or as directed by the engineer, in accordance with the "Water Well Rules, Regulations, and Standards, State of Louisiana." This document is available at the Department of Transportation and Development, Water Resources Section, P. O. Box 94245, Baton Rouge, Louisiana 70804-9245. The Water Resource Section's telephone number is (225) 274-4172.

PART III – BASE COURSES

SECTION 302 – CLASS II BASE COURSE:
Subsection 302.05 – Mixing (08/06), Pages 152 and 153.

Delete the first sentence of Subheading (b)(1), In-Place Mixing, and substitute the following.

In-place mixing shall conform to Heading (a)(1) except that the percentage of Type I portland cement required will be 6 percent by volume.

SECTION 305 – SUBGRADE LAYER:
Subsection 305.06 – Payment (01/08), Page 184.

Delete the contents of this subsection and substitute the following.

305.06 Payment. Payment for subgrade layer will be made at the contract unit price which includes lime, lime treatment, cement, cement treatment, water, stone, recycled portland cement concrete, crushed slag, blended calcium sulfate, asphaltic concrete, and asphalt curing membrane or prime coat, subject to the payment adjustment provisions of Section 1002 for specification deviations of asphalt materials and Subsection 303.11(a) for density deficiencies of cement treated materials. Adjustments in pay for increase or decrease in the percent cement ordered by the engineer will be in accordance with Subsection 303.13. Adjustments in pay for

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

increase or decrease in the percent lime ordered by the engineer will be based on the price of lime shown on paid invoices (total of all charges). The Materials and Testing Section will provide the payment adjustment percentage for properties of asphalt materials.

Payment for geotextile fabric will be included in the contract unit price for subgrade layer.

Payment will be made under:

Item No.	Pay Item	Pay Unit
305-01	Subgrade Layer _____in (mm) Thick	Square Yard (Sq m)

SECTION 307 – PERMEABLE BASES:

Subsection 307.02 – Materials (09/07), Pages 187 and 188.

Delete the contents of Subheading (b), Asphalt, and substitute the following.

(b) Asphalt: The asphalt for asphalt treated permeable base shall be an approved polymer modified asphalt cement, PG 76-22m, or PG 82-22rm complying with Section 1002. The percentage of asphalt cement shall be 2.0 percent to 4.0 percent by weight (mass) of the total mixture. Asphalt cement content and mixing process shall be such that all aggregates are visibly coated. The mixture shall retain 90 percent coating when tested in accordance with DOTD TR 317.

A job mix formula shall be submitted and approved in accordance with Section 502.

SECTION 308 – IN-PLACE CEMENT TREATED BASE COURSE:

All Subsections within Section 308 – (07/07), Pages 191 – 198.

Whenever the reference to "DOTD TR-432, Method D" is used, it shall mean "DOTD TR-432".

PART V – ASPHALTIC PAVEMENTS

SECTION 502 – SUPERPAVE ASPHALTIC CONCRETE MIXTURES:

Subsection 502.02 – Materials (08/06) (11/07), Pages 210 – 213.

Delete Table 502-2, Superpave Asphalt Cement Usage under Subheading (a) and substitute the following.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

Table 502-2
Superpave Asphalt Cement Usage

Current Traffic Load Level	Mixture Type	Grade of Asphalt Cement
Level 1	Wearing Course	PG 70-22m
	Binder Course	PG 70-22m
	Base Course	PG 64-22
Level 2	Wearing Course	PG 76-22m
	Binder Course	PG 76-22m
Level A	Incidental Paving	PG 70-22m

Note: A PG 82-22 rm, Waste Tire Rubber Modified Asphalt, may be substituted for any other grade of asphalt cement.

Delete Table 502-3, Aggregate Friction Rating under Subheading (c)(1) and substitute the following.

Table 502-3
Aggregate Friction Rating

Friction Rating	Allowable Usage
I	All mixtures
II	All mixtures
III	All mixtures, except travel lane wearing courses with plan ADT greater than 7000[1]
IV	All mixtures, except travel lane wearing courses[2]

[1] When plan current average daily traffic (ADT) is greater than 7000, blending of Friction Rating III aggregates and Friction Rating I and/or II aggregates will be allowed for travel lane wearing courses at the following percentages. At least 30 percent by weight (mass) of the total aggregates shall have a Friction Rating of I, or at least 50 percent by weight (mass) of the total aggregate shall have a Friction Rating of II. The frictional aggregates used to obtain the required percentages shall not have more than 10 percent passing the No. 8 (2.36 mm) sieve.
[2] When the average daily traffic (ADT) is less than 2500, blending of Friction Rating IV aggregates with Friction Rating I and/or II aggregates will be allowed for travel lane wearing courses at the following percentages. At least 50 percent by weight (mass) of the total aggregate in the mixture shall have a Friction Rating of I or II. The frictional aggregates used to obtain the required percentages shall not have more than 10 percent passing the No. 8 (2.36 mm) sieve.

Subsection 502.14 – Lot Sizes (11/07), Pages 232 and 233.

Delete the first sentence of the first paragraph and substitute the following.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

A lot is a segment of continuous production of asphaltic concrete mixture from the same job mix formula produced for the Department at a specific plant, delivered to a specific DOTD project.

SECTION 508 – STONE MATRIX ASPHALT:

Subsection 508.01 – Description (09/07), Page 274.

Delete this subsection and substitute the following.

508.01 DESCRIPTION. This work consists of furnishing and constructing Stone Matrix Asphalt (SMA) which is a plant mixed asphalt concrete wearing course for high traffic applications. This mixture is a rut resistant hot mix design with stone on stone contact. The mixture shall be composed of a PG 76-22m, or PG 82-22rm asphalt cement and a gap graded coarse aggregate structure. Mineral filler and/or fibers shall be used to control draindown. This work shall be in accordance with these specifications, plan details, and as directed. All requirements of Section 502 apply to Stone Matrix Asphalt, except as modified herein. All plant and paving equipment and processes must meet the requirements of Section 503.

Mixture used for shoulder may be Stone Matrix Asphalt or any mixture type shown in Table 502-5.

Subsection 508.02 – Materials (09/07), Page 274.

Delete the contents of subheading (a), Asphalt Cement and substitute the following.

(a) Asphalt Cement: Asphalt cement shall be PG 76-22m, or PG 82-22rm as listed on QPL 41 and complying with Section 1002.

PART VI – RIGID PAVEMENT

SECTION 602 – PORTLAND CEMENT CONCRETE PAVEMENT REHABILITATION:

Subsection 602.17 – Payment (09/07), Pages 341 – 344.

Delete the last paragraph of Subheadings (d), Full Depth Corner Patching of Jointed Concrete Pavement, (e) Full Depth Patching of Jointed Concrete Pavement, and (g) Patching Continuously Reinforced Concrete Pavement, and substitute the following.

Payment for deteriorated base course removed as directed by the engineer and replaced with concrete will be made as follows: The value per inch (mm) thickness will be determined by dividing the contract unit price per square yard (sq m) by the plan thickness. Thickness of patches will be measured from the surface that exists at the time of patching. Payment for the additional thickness will be made at 50 percent of the value per inch (mm) thus determined.

PART VII – INCIDENTAL CONSTRUCTION

SECTION 701 – CULVERTS AND STORM DRAINS:

All Subsections within Section 701 (08/07), Pages 347 – 358.

Delete Section 701, Culverts and Storm Drains and substitute the following.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

SECTION 701
CULVERTS AND STORM DRAINS

701.01 DESCRIPTION. This work consists of furnishing, installing, and cleaning pipe, pipe arch, storm drains and sewers, also referred to as culverts or conduit, in accordance with these specifications and in conformity with lines and grades shown on the plans or established.

701.02 MATERIALS. Materials shall comply with the following sections and subsections:

Usable Soil	203.06(a)
Selected Soil	203.06(b)
Plastic Soil Blanket	203.10
Mortar	702.02
Flowable Fill	710
Portland Cement Concrete	901
Reclaimed Asphaltic Pavement (RAP)	1003.01 & 1003.04(d)
Stone	1003.03(b)
Recycled Portland Cement Concrete	1003.03(c)
Granular Material	1003.07
Bedding Material	1003.08
Concrete Sewer Pipe	1006.02
Reinforced Concrete Pipe	1006.03
Reinforced Concrete Pipe Arch	1006.04
Gasket Materials	1006.06
Plastic Pipe	1006.07
Split Plastic Coupling Bands	1006.07(d)(4)
Plastic Yard Drain Pipe	1006.09
Bituminous Coated Corrugated Steel Pipe and Pipe Arch	1007.02
Structural Plate for Pipe, Pipe Arch and Arch	1007.04
Corrugated Aluminum Pipe and Pipe Arch	1007.05
Coupling Bands	1007.09
Reinforcing Steel	1009
Geotextile Fabric	1019

(a) Side Drain Pipe or Side Drain Pipe Arch: When the item for Side Drain Pipe or Side Drain Pipe Arch is included in the contract, the contractor has the option of furnishing reinforced concrete pipe or reinforced concrete pipe arch, corrugated metal pipe or corrugated metal pipe arch, or plastic pipe, as allowed by EDSM II.2.1.1 or unless otherwise specified.

(b) Cross Drain Pipe or Cross Drain Pipe Arch: When the item for Cross Drain Pipe or Cross Drain Pipe Arch is included in the contract, the contractor has the option of furnishing reinforced concrete pipe or reinforced concrete pipe arch, corrugated metal pipe or corrugated metal pipe arch, or plastic pipe, as allowed by EDSM II.2.1.1 or unless otherwise specified.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

(c) Storm Drain Pipe or Storm Drain Pipe Arch: When the item for Storm Drain Pipe or Storm Drain Pipe Arch is included in the contract, the contractor has the option of furnishing reinforced concrete pipe or reinforced concrete pipe arch, or plastic pipe, as allowed by EDSM II.2.1.1 or unless otherwise specified.

(d) Yard Drain Pipe: When the item for Yard Drain Pipe is included in the contract, the contractor has the option of furnishing concrete sewer pipe, plastic yard drain pipe or plastic pipe in accordance with Section 1006 unless otherwise specified.

(e) Material Type Abbreviations:

(1) Reinforced Concrete Pipe:

RCP	Reinforced Concrete Pipe
RCPA	Reinforced Concrete Pipe Arch

(2) Corrugated Metal Pipe:

CAP	Corrugated Aluminum Pipe
CAPA	Corrugated Aluminum Pipe Arch
CMP	Corrugated Metal Pipe
CMPA	Corrugated Metal Pipe Arch
CSP	Corrugated Steel Pipe
CSPA	Corrugated Steel Pipe Arch
BCCSP	Bituminous Coated Corrugated Steel Pipe
BCCSPA	Bituminous Coated Corrugated Steel Pipe Arch

(3) Plastic Pipe:

PP	Plastic Pipe
PVCP	Polyvinyl Chloride Pipe
RPVCP	Ribbed Polyvinyl Chloride Pipe
CPEPDW	Corrugated Polyethylene Pipe Double Wall

(f) Joint Type Abbreviations:

T1	Type 1 Joint
T2	Type 2 Joint
T3	Type 3 Joint

(g) Quality Assurance for Pipe: Manufacturing plants will be periodically inspected for compliance with specified manufacturing methods, and material samples will be randomly obtained for laboratory testing for verification of manufacturing lots. Materials approved at the manufacturing plant will be subject to visual acceptance inspections at the jobsite or point of delivery.

701.03 EXCAVATION. For all pipe, when the sides of the trench are stable as evidenced by the sides of the trench being able to maintain a vertical cut face, the minimum trench width at the bottom of the excavation will be 18 inches (460mm) on either side of the outside diameter of the pipe. If the sides of the trench are unstable, the width of the trench at the bottom of the excavation, for plastic or metal pipe, shall be a minimum width of at least 18 inches (460mm) or one pipe diameter on each side of the outside diameter of the pipe, which ever is greater. Surplus material or excavated material that does not conform to the requirements of Subsection 203.06(a) shall be satisfactorily disposed of in accordance with Subsection 202.02. Moisture controls

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

including backfill materials selection and dewatering using sumps, wells, well points or other approved processes may be necessary to control excess moisture during excavation, installation of bedding, over-excavated trench backfilling, pipe placement and pipe backfill.

(a) Over-excavation: When unsuitable soils as defined in Subsection 203.04 or a stable, non-yielding foundation cannot be obtained at the established pipe grade, or at the grade established for placement of the bedding, unstable or unsuitable soils below this grade shall be removed and replaced with granular material meeting the requirements of Subsection 1003.07, bedding materials meeting the requirements of Subsection 1003.08 or Type A backfill. All granular, backfill materials placed below the established pipe or bedding grade shall be placed in lifts not exceeding 8 inches (200 mm) thick and sufficiently compacted by hand or a dynamic mechanical hand compaction device over the surface of each lift to form a stable, non-yielding foundation at the surface of the established bedding or pipe grade.

When rock is encountered, it shall be removed below grade and replaced with material complying with Subsection 1003.07, bedding materials meeting the requirements of Subsection 1003.08 or Type A backfill. The compacted earth cushion shall have a thickness under the pipe of at least 1/2 inch per foot (40 mm/m) of fill height over the top of the pipe with a minimum thickness of 8 inches (200 mm). All granular, backfill materials placed below the established pipe or bedding grade shall be placed in lifts not exceeding 8 inches (200 mm) thick and sufficiently compacted by hand or a dynamic mechanical hand operated compaction device over the surface of each lift to form a stable, non-yielding foundation at the surface of the established bedding or pipe grade.

Materials used to backfill in an over-excavated portion of a trench do not require encasement in a Geotextile Fabric.

Density of approved materials placed in over-excavated trenches will not be measured or determined.

701.04 FORMING PIPE BED. Bedding material, when specified, shall be constructed in accordance with Section 726. Materials allowed for bedding shall be as specified in Subsection 1003.08 or may be Type A backfill materials. When bedding materials are specified, additional excavation shall be performed below established pipe grade and the bedding material placed in lifts not exceeding 8 inches (200 mm) thick and lightly compacted by hand or a dynamic hand compaction device over the surface of each lift.

When the bottom of the pipe is not laid in a trench but is constructed above natural soils, a uniform bed shall be constructed as specified for the bottom of a trench.

Density of approved bedding materials will not be measured or determined.

701.05 LAYING PIPE. Pipe laying shall begin at the downstream end of the line. The pipe shall be in contact with the foundation throughout its length. Bell or groove ends of pipe and outside circumferential laps of riveted metal pipe shall be placed facing upstream. Riveted seam metal pipe shall be placed with longitudinal laps at sides. Pipes in each continuous line shall have the same wall thickness. Metal pipes provided with lifting lugs shall be handled only by these lugs.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

After pipe has been laid and before backfill is placed, the engineer will inspect the pipe for alignment, grade, integrity of joints, and coating damage.

701.06 JOINING PIPE.

(a) Joint Usage:

(1) Type 1 (T1) joints shall be used for side drains under drives and similar installations.

(2) Type 2 (T2) joints shall be used for cross drains under roadways, including turnouts.

(3) Type 3 (T3) joints shall be used for closed storm drain systems, flumes and siphons.

(b) Concrete Pipe: Concrete pipe may be either bell and spigot, or tongue and groove. The method of joining pipe sections shall be such that ends are fully entered and inner surfaces are flush and even.

An approved mechanical pipe puller shall be used for joining pipes over 36 inches (900 mm) in diameter. For pipe 36 inches (900 mm) or less in diameter, any approved method for joining pipe may be used which does not damage the pipe.

Joints shall comply with Subsection 1006.05, and shall be sealed with gasket material installed in accordance with the manufacturer's recommendations.

(c) Metal Pipe: Metal pipe shall be firmly joined by coupling bands. Bands shall be centered over the joint.

For Type 1 joints, approved gasket material shall be placed in one corrugation recess on each side of the joint at the coupling band and on each band connection in such manner to prevent leakage.

When Type 2 or 3 joints are specified, joining of metal pipe sections shall conform to the following provisions:

(1) General: Band joints shall be sealed with gasket material. Gasket material shall be placed in accordance with the plan details.

(2) Circular Section: Connecting bands shall be of an approved design and shall be installed in accordance with plan details.

(3) Arch Section: Connecting bands shall be a minimum of 12 inches (300 mm) wide for pipe arch less than 36 inches (900 mm) round equivalent diameter, and a minimum of 21 inches (525 mm) wide for 36 inches (900 mm) round equivalent diameter pipe arch and greater. Bands shall be connected at the ends by approved angle or strap connections. Connecting bands used for 36 inches (900 mm) round equivalent diameter pipe arch and above shall be 2-piece bands.

(d) Plastic Pipe: Joints for plastic pipe shall be either bell and spigot or split coupling bands.

(1) Bell and Spigot Type Joint System: The method of joining pipe sections shall be such that ends are fully entered and inner surfaces are flush and even.

Any approved method for joining pipe may be used which does not damage the pipe.

Joints shall be approved and shall be sealed with a gasket system utilizing gasket material complying with Subsection 1006.06(a).

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

(2) Split Coupling Type Joint System: Split coupling bands shall comply with all dimensional and material requirements of Subsection 1006.07. The bands shall be centered over the joint. The split coupling band shall be secured to the pipe with a minimum of five stainless steel or other approved corrosion resistant bands.

Joints shall be approved and shall be sealed with gasket material. Gasket material shall be placed in the first two corrugation recesses on each side of the pipe connections. Gasket material shall also be placed on each band connection to prevent leakage. When flexible plastic gasket material is used it shall be a minimum of 1/2 inch (13 mm) in size. The bands shall be tightened to create overlap of the band and shall adequately compress the gasket material.

(e) Connections: Approved connections shall be used when joining new pipes to existing pipes. When concrete collars are required in order to extend the ends of existing pipes that have been damaged or to join different types or sizes of pipes, the concrete collars shall be constructed in accordance with plan details, the applicable requirements of Section 901, and as directed.

(f) Geotextile Fabric, Pipe Joints: For concrete, metal and plastic pipes, Types 2 and 3 joints shall be wrapped with geotextile fabric for a minimum of 12 inches (300 mm) on each side of joint for pipe 36 inches (900 mm) or less in diameter and a minimum of 18 inches (450 mm) on each side of the joint for pipe greater than 36 inches (900 mm) in diameter. Ends of the fabric shall be lapped at least 10 inches (250 mm). The edges and ends of fabric shall be suitably secured for the entire circumference of the pipe.

701.07 RELAYING PIPE. If specified or directed, existing pipes shall be removed and suitable sections relaid as specified for new pipes.

701.08 BACKFILLING.

(a) General: Prior to backfilling, pipes found to be damaged or out of alignment or grade shall be removed and reinstalled, or replaced.

Type A backfill material shall be stone, recycled portland cement concrete, flowable fill, or RAP.

Type B backfill materials are selected soils. Where Type B backfill materials are called for, Type A backfill materials may be substituted.

When corrugated metal pipe is used, the backfill material shall be tested and shall have a resistivity greater than 1500 ohm-cm and a pH greater than 5 when tested in accordance with DOTD TR 429 and DOTD TR 430 respectively.

When Type A backfill material is used, geotextile fabric surrounding this backfill shall be placed in accordance with Subsection 726.03 between the aggregate backfill material and all other natural or placed soils in the trench or embankment. Care shall be taken to prevent damage to geotextile fabric during placement of backfill material. For concrete pipe, the fabric shall enclose not only the initial backfill but shall be wrapped over the top of the pipe with at least 12 inches (300 mm) of overlap.

When a trench box or trench sheeting is used in unstable soils and/or for worker safety, and when moved during backfilling operations, filling and additional compaction of the disturbed zone of backfill must take place immediately and in a manner acceptable to the engineer.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

Initial backfill is a structural backfill encasing the pipe from the bottom of the pipe to the springline for concrete pipe and to a point one foot (0.3 m) above the top of the pipe for both metal and plastic pipe. Final backfill is not a structural backfill and shall extend from the top of the initial backfill to the top of the natural ground or subgrade in cut areas or to the top of existing ground in fill areas. Any fill required above the final backfill is considered and treated as embankment.

(b) Backfill Applications: For projects using A+B+C bidding method where rigid and flexible pavement alternates are considered, backfill application (2) below, "Cross Drains Under Flexible Pavements", shall apply for either rigid or flexible pavements.

(1) Under Concrete Pavements: Type B backfill may be used as initial and final backfill for all pipes, culverts or drains under concrete pavements. Placement and compaction shall be as specified in Heading (d) below.

(2) Cross Drains Under Flexible Pavements: All reaches, exclusive of those portions of the pipe which are under shoulders, of cross drains and all other culverts, pipes or drains that cross the centerlines of the new roadway or centerlines of existing roadways, such as intersections and are under flexible pavements shall receive an initial backfill of Type A material. Type B backfill materials may be used as final backfill for all pipes. Placement and compaction shall be as specified in Heading (c) and (d) below. Where the subgrade is above existing ground, embankment material as specified for the remainder of the project shall be used from the top of the final backfill to the top of the established embankment grade.

(3) Other Drains Under Flexible Pavements: All reaches of all culverts, pipes or drains under flexible pavements that do not cross the centerlines of new roadway or centerlines of existing roadways, and exclusive of those portions of the pipe which are totally under shoulders, shall receive an initial and final backfill of Type B material. Placement and compaction shall be as specified in Heading (d) below. Where the subgrade is above existing ground, embankment material as specified for the remainder of the project shall be used from the top of the final backfill to the top of the established embankment grade.

(4) Other Areas: All culverts, pipes or drains in nonpaved areas or paved areas that serve as driveways or shoulders shall receive an initial and final backfill of Type B material. Placement and compaction shall be as specified in Heading (d) below.

(5) Pipes Subject to Construction Traffic; The embankment or pipe backfill shall be constructed to a minimum of 24 inches (600 mm) over the pipe before heavy construction equipment is allowed to cross the installation. Where practical, installations with less than 24 inches (600 mm) of cover over the top of the pipe shall be constructed after heavy hauling is completed over the pipe location. After completion of hauling operations, the contractor shall remove excess cover material. Pipe damaged by hauling and backfilling operations shall be removed and reinstalled, or replaced, at no direct pay.

(c) Placement and Compaction; Type A Backfill: For all pipes, culverts and conduits under paved and nonpaved areas, where Type A backfill material is used, the Type A backfill shall be thoroughly hand compacted under the pipe haunches and then dynamically compacted in layers not exceeding 8 inches (200 mm) compacted thickness. Compaction under the haunches of the pipe shall initially be by hand tamping or other acceptable means, until a level is reached that the dynamic tamping can commence. Each lift shall be compacted by applying at least eight

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

passes of a hand operated, dynamic mechanical compaction device over the surface of each lift. With approval of the engineer, layer thickness may be increased to 12 inches (300 mm) with verification of satisfactory installation and performance. If flowable fill is used it shall be furnished, placed and consolidated in accordance with Section 710. The contractor shall control placement operations during initial backfill operations so as not to damage protective coatings on metal pipes. The contractor shall repair damaged coatings at no additional pay.

(d) Placement and Compaction; Type B Backfill: For all pipes, culverts and conduits, where Type B backfill is allowed, the Type B material shall be placed in layers not exceeding 8 inches (200 mm) compacted thickness. Compaction shall be with suitable mechanical equipment. With approval of the engineer, layer thickness may be increased to 12 inches (300 mm) with verification of satisfactory installation and performance.

(e) Placement and Compaction; Trenchless or Partial Trench Condition: All pipes, culverts, drains and conduits placed with any portion of the pipe above existing ground must also comply with Subsections (a),(b) (c) and (d) above for the portion of the pipe within a trench and that portion of the pipe not constructed in a trench. The width of initial and final backfill of that portion above existing ground and not within a trench will be constructed to such a width that the requirements for placement, compaction and density are met.

(f) Density Requirements: The in place density of Type A backfill materials and bedding materials, will not be measured or determined. Type A backfill, exclusive of RAP and flowable fill, shall be placed at or near optimum moisture content determined in accordance with DOTD TR 415 or 418. RAP materials shall be placed and compacted in a slightly moist condition.

The maximum dry density of initial or final Type B backfill under all paved areas which are to be under traffic will be determined in accordance with DOTD TR 415 or TR 418 and in-place density determined in accordance with DOTD TR 401. Initial and final Type B backfill under all paved areas, under traffic, shall be placed at or near optimum moisture content determined in accordance with DOTD TR 415 or TR 418. Each layer shall be compacted by approved methods prior to the placement of a subsequent layer. The engineer will approve the compaction method based upon validation that such method, including moisture control, will achieve at least 95 percent of maximum dry density as determined in accordance with DOTD TR 401. With approval of the engineer, density testing may be waived on subsequent layers with backfill installation in accordance with approved compaction methods and continued satisfactory performance.

Initial and final backfill in unpaved areas or paved areas such as shoulders or driveways, shall be placed evenly and compacted along the length of the culvert, pipe or drain from the top of the initial backfill to the top of the subgrade. Layered backfill shall be compacted at least to the density of the adjoining existing soils or the compaction required of the laterally adjoining layers of soil immediately outside the trench for embankment elevations. Initial and final backfill shall be placed and compacted at or near optimum moisture content determined in accordance with DOTD TR 415 or TR 418.

701.09 INSPECTION OF PIPES. After completion of embankment and prior to roadway surfacing, the engineer shall inspect pipes for proper alignment and integrity of joints. Any misaligned pipe or defective joints shall be corrected by the contractor at no direct pay.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

(a) Plastic Pipe: Installed plastic pipe shall be tested to ensure that vertical deflections do not exceed 5.0 percent. Maximum allowable deflections shall be governed by the mandrel requirements stated herein.

Deflection tests shall be performed no sooner than 30 calendar days after installation and compaction of backfill. The pipe shall be cleaned and inspected for offsets and obstructions prior to testing.

For pipe 36 inches (900 mm) and less in diameter, a mandrel shall be pulled through the pipe by hand to ensure that maximum allowable deflections have not been exceeded. The mandrel shall be approved by the engineer prior to use. Use of an unapproved mandrel or a mandrel altered or modified after approval will invalidate the test. If the mandrel fails to pass, the pipe is overdeflected.

Unless otherwise permitted, overdeflected pipe shall be uncovered and, if not damaged, reinstalled. Damaged pipe shall not be reinstalled, but shall be removed and replaced with new pipe. Any pipe subjected to any method or process other than removal, which attempts, even successfully, to reduce or cure any overdeflection, shall be removed and replaced with new pipe.

The mandrel shall be a rigid, nonadjustable, odd-numbered legged (minimum 9 legs) mandrel having a length not less than its nominal diameter or 24 inches (600 mm), whichever is less. The minimum diameter at any point shall be 5.0 percent less than the base inside diameter of the pipe being tested. The mandrel shall be fabricated of steel, aluminum or other approved material fitted with pulling rings at each end. The nominal pipe size and outside diameter of the mandrel shall be stamped or engraved on some segment other than a runner. A suitable carrying case shall be furnished.

For pipe larger than 36 inches (900 mm) in diameter, deflection shall be determined by a method approved by the engineer. If a mandrel is selected, the minimum diameter, length, and other requirements shall conform to the above requirements.

Mandrel testing shall be conducted by the contractor in the presence of the engineer. Mandrel testing shall be at no direct pay.

(b) Metal Pipe: If the inside diameter of metal pipe or rise dimension of metal pipe arch deflects more than 5.0 percent from original dimensions, they shall be removed and reinstalled, unless they do not rebound or are damaged. Pipe or pipe arch which are damaged or do not rebound shall be removed and replaced at no direct pay. Measurement of deflection will be made by the engineer away from rerolled ends.

701.10 CLEANING PIPES.

(a) Existing Pipes: Pipes designated to be cleaned shall be cleaned of soil, debris and other materials to the invert of the pipe. Designated pipes shall be cleaned by approved methods that will not damage the pipes. Any damage caused by the contractor's operations shall be satisfactorily repaired at no direct pay.

Removed soil, debris and other materials shall be disposed of in accordance with Subsection 202.02 or as otherwise approved in writing.

(b) Contractor Installed Pipes: Prior to final acceptance, pipes shall be cleaned of all debris and soil to the invert of the pipe at no direct pay.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

Removed soil, debris and other materials shall be disposed of in accordance with Subsection 202.02 or as otherwise approved in writing.

701.11 STUBBING AND PLUGGING PIPES. When it is required that pipes be plugged, such plugs shall be constructed of Class R concrete complying with Section 901. Thickness of plug and method of construction shall be as directed.

When new pipes are to be stubbed into new or existing pipes or other structures, the connection shall be made with approved mortar complying with Subsection 702.02.

701.12 MEASUREMENT. Pipe, both new and relaid, will be measured in linear feet (lin m) as follows unless stated otherwise.

(a) Pipe not confined by fixed structures will be measured by the number of joints at the nominal length of each joint.

(b) Pipe confined by fixed structures will be measured along the pipe between the termini of pipe in structure walls.

(c) Pipe confined by a fixed structure on one end and unconfined at the other end will be measured along the pipe from the terminus of pipe in the structure wall to the unconfined end of pipe.

(d) Fabricating of pipe tees, elbows and other fittings will be measured per each fitting. The length of pipe in such fittings will be included in the pay length measurement of pipes of which they form a part.

(e) Excavation required for installation of pipes will not be measured for payment, except as otherwise specified in Subsection 203.14.

(f) Furnishing and placing backfill material below existing ground level for pipes will not be measured for payment. Backfill material needed to complete backfill above natural ground and around pipes that extend above natural ground will be measured and payment will be made under applicable earthwork items. When specified, flowable fill will be measured and paid for in accordance with Section 710.

(g) Plugging and stubbing of pipes will not be measured for payment.

(h) Cleaning existing pipes will be measured by the length of pipe cleaned and accepted.

(i) Concrete collars will be measured per each.

701.13 PAYMENT.

(a) Payment for pipe will be made at the contract unit price per linear foot (lin m) of the types and sizes specified.

When plastic pipe is specified on the plans or elected to be used by the contractor, payment will be made at the contract unit price per linear foot (lin m) of the types and sizes specified in accordance with the payment schedule of Table 701-1.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

Table 701-1
Payment Schedule for Plastic Pipe

Percent Payment	Stage of Completeness
75	After placement and backfill has been completed
25	After the pipe has met vertical deflection requirements in accordance with Subsection 701.09(a)

(b) Payment for fabricating pipe tees, elbows and other fittings will be made at the contract unit price per each fitting.

(c) When unstable conditions are encountered, the additional excavation will not be measured for payment; however, the additional materials furnished and placed for the pipe foundation will be measured and paid for as follows:

(1) Granular Materials: Payment will be made under the embankment item. The net section volume of the materials will be multiplied by 3 to determine the pay volume. When the contract does not include a pay item for embankment, payment will be made in accordance with Subsection 104.02.

(2) Bedding Material: Measurement and payment will be made in accordance with Section 726. When the contract does not include a pay item for bedding material, payment will be made in accordance with Subsection 104.02.

(d) Payment for cleaning existing pipes will be made at the contract unit price per linear foot (lin m).

(e) Payment for concrete collars will be made at the contract unit price per each.

Payment will be made under:

Item No.	Pay Item	Pay Unit
701-01	Cross Drain Pipe (Size & Type)	Linear Foot (Lin m)
701-02	Cross Drain Pipe Arch (Size & Type)	Linear Foot (Lin m)
701-03	Storm Drain Pipe (Size & Type)	Linear Foot (Lin m)
701-04	Storm Drain Pipe Arch (Size & Type)	Linear Foot (Lin m)
701-05	Side Drain Pipe (Size)	Linear Foot (Lin m)
701-06	Side Drain Pipe Arch (Size)	Linear Foot (Lin m)
701-07	Yard Drain Pipe (Size)	Linear Foot (Lin m)
701-08	Relaying Pipe	Linear Foot (Lin m)
701-09	Fabricating Pipe Fittings	Each
701-10	Reinforced Concrete Pipe (Extension)	Linear Foot (Lin m)
701-11	Reinforced Concrete Pipe Arch (Extension)	Linear Foot (Lin m)
701-12	Corrugated Metal Pipe (Extension)	Linear Foot (Lin m)
701-13	Corrugated Metal Pipe Arch (Extension)	Linear Foot (Lin m)

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

701-14	Cleaning Existing Pipes	Linear Foot (Lin m)
701-15	Concrete Collar	Each
701-16	Plastic Pipe (Extension)	Linear Foot (Lin m)

SECTION 704 – GUARD RAIL:
Subsection 704.03 – General Construction Requirements (01/05), Pages 368 and 369.

Add the following to Heading (d), Guard Rail End Treatments.

All end treatments shall bear a label indicating the manufacturer and exact product name of the end treatment along with its assigned NCHRP 350 test level. This label shall resist weathering and shall be permanently affixed to the railing in such a way as to be readily visible.

SECTION 706 – CONCRETE WALKS, DRIVES AND INCIDENTAL PAVING:
All Subsections within Section 706 (04/08), Pages 375 – 377.

Delete Section 706, Concrete Walks, Drives and Incidental Paving and substitute the following.

SECTION 706
CONCRETE WALKS, DRIVES AND INCIDENTAL PAVING

706.01 DESCRIPTION. This work consists of furnishing and constructing portland cement concrete walks, handicapped curb ramps, drives and incidental paving slabs in accordance with these specifications and in conformity with lines, grades and dimensions shown on the plans or established.

706.02 MATERIALS. Materials shall comply with the following Section or Subsections.

Portland Cement Concrete (Class M)	901
Joint Filler	1005.01(c)
Reinforcing Steel	1009.01
Curing Materials	1011.01

706.03 CONSTRUCTION REQUIREMENTS.

(a) Excavation: Excavation shall be made to required depth and width. The top of the subgrade shall be shaped and compacted to a firm, even surface conforming to the section shown on the plans. Unsuitable material shall be removed and disposed of in accordance with Subsection 202.02 and replaced with approved material at no direct pay.

(b) Forms: Forms shall be of wood or metal and shall extend the full depth of concrete. Forms shall be straight, clean and of sufficient strength to resist the pressure of concrete. Bracing of forms shall be such that forms remain in horizontal and vertical alignment until their removal.

Concrete may be placed by slip-form methods. Slip-formed concrete shall be placed with an approved machine designed to spread, vibrate, consolidate and finish concrete in one pass of the machine in such manner that minimum hand finishing is necessary. Sliding forms shall be

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

rigidly held together to prevent spreading of forms. After the passing of the side forms there shall be no noticeable slumping of concrete.

(c) Subgrade: The subgrade shall be thoroughly moistened immediately prior to placing concrete.

(d) Placing and Finishing: Concrete shall be placed on the subgrade, struck off to required thickness and tamped sufficiently to bring the mortar to the surface. The surface shall be finished with a wood float or steel trowel followed by brushing to a slightly rough finish. Joints and edges shall be rounded with an edging tool having a 1/4-inch (6 mm) radius.

(e) Joints:

(1) Expansion Joints: Expansion joints shall be filled with 1/2 inch (13 mm) thick preformed expansion joint filler. Expansion joints shall be installed at maximum 100-foot (30 m) intervals, and between intersecting paving and any fixed structure such as a building, bridge or curbing, and between intersecting paving and the handicapped curb ramps. Expansion joint material shall extend for the full width and depth of paving.

(2) Weakened Plane: Weakened planes shall be formed by a jointing tool or other acceptable means. Weakened planes shall extend into concrete for at least 1/4 of the depth and shall be approximately 1/8 inch (3 mm) wide.

a. Walks: Spacing of weakened planes for walks shall be equal to the width of walk.

b. Drives: A longitudinal weakened plane shall be formed along the centerline of drives more than 16 feet (5 m) wide, and transverse weakened planes shall be formed at not more than 16-foot (5 m) intervals.

c. Incidental Paving: Weakened planes for incidental paving shall be formed at intervals not exceeding 30 times the thickness of the concrete in length or width. Incidental paving poured adjacent to jointed concrete shall be jointed to match existing joints, with intermediate joints formed as necessary not to exceed the maximum joint spacing.

(3) Construction Joints: Construction joints shall be formed around manholes, utility poles, etc., extending into paving and 1/4 inch (6 mm) thick preformed expansion joint filler shall be installed in these joints.

(4) Tie-ins: Tie-ins of existing concrete shall be made by full depth sawing at no direct pay.

(f) Curing: Concrete shall be cured in accordance with Subsection 601.10.

(g) Detectable Warning Surface for Handicap Ramps and At-Grade Sidewalk Intersections: Sidewalks, when intersecting with roadways, shall be equipped with a detectable warning surface system consisting of raised truncated domes as a transition between the sidewalk and the street as required by the Americans with Disabilities Act, 28 CFR Part 36, ADA Standards for Accessible Design.

Detectable warnings (truncated domes) shall be installed on the ramp surface over the full width of the ramp throat for a distance of 24 inches (600 mm) in the direction of travel from the back of the curb. Detectable warnings (truncated domes) shall also be installed on at-grade sidewalks intersecting with roadways for a distance of 36 inches (900 mm) in the direction of travel from the end of the sidewalk. Truncated domes shall be laid out on a square grid in order to allow enough space for wheelchairs to roll between the domes.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

Light reflectance of the truncated domes and the underlying surface must meet the 70 percent contrast requirement of ADAAG.

706.04 MEASUREMENT. Quantities of concrete walks, drives and incidental paving slabs for payment will be the design quantities as specified on the plans and adjustments thereto. Design quantities will be adjusted if the engineer makes changes to adjust to field conditions, if design errors are proven or if design changes are made. Design areas are based on the horizontal dimensions shown on the plans. Excavation, backfill, reinforcing steel and joint materials will not be measured for payment.

Handicapped curb ramps, including the detectable surface warning system, will be measured per each.

Detectable surface warning systems for at-grade sidewalk intersection will not be measured for payment.

706.05 PAYMENT. Payment for concrete walks, drives and incidental paving will be made on a lot basis at the contract unit price per square yard (sq m), adjusted in accordance with the following provisions. Payment for each lot will be made in accordance with Table 901-6. Size, sampling, and testing of each concrete lot shall be in accordance with the Materials Sampling Manual.

Payment for handicapped curb ramps, including the detectable surface warning system, will be made by each and shall include, but not limited to, curb transitions, detectable warning system, gutter, landing and base.

Payment will be made under:

Item No.	Pay Item	Pay Unit
706-01	Concrete Walk (inch (mm) Thick)	Square Yard (Sq m)
706-02	Concrete Drive (inch (mm) Thick)	Square Yard (Sq m)
706-03	Incidental Concrete Paving (inch (mm) Thick	Square Yard (Sq m)
706-04	Handicapped Curb Ramps	Each

SECTION 713 – TEMPORARY TRAFFIC CONTROL:

Subsection 713.06 – Pavement Markings (08/06), Pages 400 – 403.

Delete Table 713-1, Temporary Pavement Markings and substitute the following.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

Table 713-1
Temporary Pavement Markings[1,2]

		Two-lane Highways	Undivided Multilane Highways	Divided Multilane Highways
SHORT TERM	ADT<1500; or ADT>1500 and time<3 days	Lane lines 4-foot (1.2 m) tape on 40-foot (12 m) centers; with "Do Not Pass" and "Pass With Care" signs as required		
	ADT>1500; Time>3 days and<2 weeks	Lane lines 4-foot (1.2-m) tape on 40-foot (12-m) centers with no passing zone markings		
	All ADT's with time <2 weeks		Lane lines 4-foot (1.2m) tape on 40-foot (12 m) centers; double yellow centerline	Lane lines 4-foot (1.2 m) tape on 40-foot (12 m) centers
LONG TERM	All ADT's with time >2 weeks	Standard lane lines, no-passing zone markings, legends and symbols and when pavement width is 22 feet (6.7 m) or greater, edge lines	Standard lane lines, centerlines, edge lines, and legends and symbols	Standard lane lines, centerlines, edge lines, and legends and symbols.

[1]No-passing zones shall be delineated as indicated whenever a project is open to traffic.
[2]On all Asphaltic Surface Treatments that are open to traffic and used as a final wearing course or as an interlayer, temporary pavement markings (tabs) on 20-foot (6 m) centers shall be used, in lieu of the 4-foot (1.2 m) tape, on 40-foot (12 m) centers.

SECTION 729 – TRAFFIC SIGNS AND DEVICES:

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

Subsection 729.02 – Materials (04/08), Pages 456 and 457.

Delete the contents of Heading (a), Sign and Marker Sheeting, and substitute the following.

(a) Sign and Marker Sheeting: Sheeting material for sign panels, delineators, barricades and other markers shall comply with Section 1015. All permanent signs shall meet the requirements of ASTM D 4956, Type X.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

Subsection 729.04, Fabrication of Sign Panels and Markers (04/08), Pages 458 – 460.

Delete the third paragraph of Heading (c), Sheeting Application and substitute the following.

ASTM D 4956 Type X reflective sheeting shall be applied with an orientation determined by the engineer to obtain the optimum entrance angle performance. Fabricated vertical splices in ASTM D 4956 Type X reflective sheeting will be allowed only when the horizontal dimension of the sign face or attached shield is in excess of the maximum manufactured width of the sheeting. Fabricated vertical splices in ASTM D 4956 Type X reflective sheeting will also be allowed when the specified orientation will create excessive sheeting waste.

SECTION 804 – DRIVEN PILES:

Subsection 804.08 – Construction Requirements (04/07), Pages548 – 554.

Delete the first sentence of Heading (a), Preboring and substitute the following.

Preboring by augering, wet-rotary drilling, or other methods used to facilitate pile driving will not be permitted unless specified in the plans or allowed by the engineer.

Delete the first sentence of Heading (b), Jetting and substitute the following.

Jetting will not be permitted unless allowed in the plans or allowed by the engineer.

SECTION 901 – PORTLAND CEMENT CONCRETE:

Subsection 901.06 – Quality Control of Concrete (08/06), Pages 726 – 731.

Add the following to the contents of Heading (b), Quality Control Tests.

The contractor shall be responsible for monitoring the components (cement, mineral and chemical admixtures, aggregates) in their mix to protect against any changes due to component variations. As component shipments arrive, the contractor shall verify slump, air content and set time by testing at ambient temperatures. The contractor shall make adjustments to the mix design to rectify any changes which would adversely affect constructability, concrete placement or the specifications. The contractor shall submit test results to the Department for review each day of paving. Testing to validate component consistency will be documented on the control logs. Conformance or variation in mix parameters (workability, set times, air content, etc.) shall be noted on the control logs. The contractor shall provide a copy of the proposed testing plan to the engineer for record. Acceptance of the plan does not relieve the contractor's responsibility for consistency.

Subsection 901.08 – Composition of Concrete (12/05), Pages 732 – 734.

Add the following to Heading (a).

The blended cement containing up to 50 percent of grade 100 or grade 120 ground granulated blast-furnace slag must be in compliance with Subsection 1001.04 for portland blast-furnace slag cement.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

SECTION 1001 – HYDRAULIC CEMENT:

Subsection 1001.01 – Portland Cement (09/07). Page 749.

Delete the contents of this subsection and substitute the following.

1001.01 PORTLAND CEMENT. Portland cement shall be from an approved source listed in QPL 7 and shall comply with AASHTO M 85.

Alkali content calculated as sodium oxide equivalent shall not exceed 0.60 percent by weight for all types of cement.

SECTION 1003 – AGGREGATES:

Subsection 1003.02 – Aggregates for Portland Cement Concrete and Mortar (07/07), Pages 763 – 766.

Delete the contents of Heading (c), Aggregates for Types B and D Pavements, and substitute the following.

(c) Aggregates for Types B and D Pavements: For the combined aggregates for the proposed portland cement concrete pavement mix, the percent retained based on the dry weight (mass) of the total aggregates shall meet the requirements of Table 1003-1A for the type of pavement specified in the plans. Additionally, the sum of the percents retained on any two adjacent sieves so designated in the table shall be at least 12 percent of the total combined aggregates. The maximum amounts by weight (mass) of deleterious materials for the total aggregate shall be the same as shown in Subsection 1003.02(b).

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

Table 1003-1A
Aggregates for Types B and D Pavements

U.S. Sieve	Metric Sieve	Percent Retained of Total Combined Aggregates	
		Pavement Type	
		Type B	Type D
2 1/2 inch	63 mm	0	0
2 inch	50 mm	0	0-20
1 1/2 inch	37.5 mm	0-20	0-20
1 inch	25.0 mm	0-20	
3/4 inch	19.0 mm		
1/2 inch	12.5 mm		
3/8 inch	9.5 mm		
No. 4	4.75 mm		
No. 8	2.36 mm		
No. 16	1.18 mm		
No. 30	600 µm		
No. 50	300 µm	0-20	0-20
No. 100	150 µm	0-20	0-20
No. 200	75 µm	0-5	0-5
Note: For the sieves in the shaded areas, the sum of any two adjacent sieves shall be a minimum of 12 percent of the total combined aggregates.			

Each type of aggregate to be used in the proposed mixture shall be sampled and tested individually. The percent of total combined aggregates retained shall be determined mathematically based on the proportions of the combined aggregate blend. All gradation calculations shall be based on percent of dry weight (mass).

SECTION 1005 – JOINT MATERIALS FOR PAVEMENTS AND STRUCTURES:
Subsection 1005.04 – Combination Joint Former/Sealer (11/05), Pages 782 and 783.

Delete Heading (a) and substitute the following.

(a) Description: This joint former/sealer is intended for use in simultaneously forming and sealing a weakened plane in portland cement concrete pavements.

The material shall consist of an elastomeric strip permanently bonded either mechanically or chemically at the top of each of two rigid plastic side frames and covered with a removable plastic top cap. Side frames shall be of such configuration that when the sealer is inserted into plastic concrete and vibrated, a permanent bond forms between side frames and concrete.

Delete Heading (b)(1) and substitute the following.

(1) Elastomer: The elastomer strip portion of the material shall be manufactured from vulcanized elastomeric compound using polymerized chloroprene or thermoplastic vulcanizate as the base polymer, and shall comply with the following requirements:

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

Property	ASTM Test Method	Requirements	
		Polymerized Chloroprene	Thermoplastic Vulcanizate
Tensile Strength, kPa, Min.	D 412	12,400	7,400
Elongation at Break, % Min.	D 412	200	400
Hardness, Shore A	D 2240	65 ± 10	65 ± 10
Properties after Aging, 70 h @ 100°C	D 573		
Tensile Strength, % Loss, Max.		20	20
Elongation, % loss, Max.		25	25
Hardness, pts. increase, Max.		10	10
Ozone Resistance, 20% strain or bentloop, 300 pphm in air, 70 h @ 40°C	D 1149	no cracks	no cracks
Oil Swell, IRM 903, 70 h @ 100°C, wt change, % Max.	D 471	45	75

Delete Headings (b)(2) and (b)(3) and substitute the following:

(2) Bond of Elastomer to Plastic: The force required to shear the elastomer from the plastic shall be a minimum of 5.0 pounds per linear inch (90 g/mm) of sealer when tested in accordance with DOTD TR 636.

(3) Bond of Plastic to Cement Mortar: This bond will be evaluated and shall meet the following requirements:

The force required to separate the cement mortar from the plastic shall be a minimum of 5.0 pounds per linear inch (90 g/mm) of sealer when tested in accordance with DOTD TR 636.

SECTION 1006 – CONCRETE AND PLASTIC PIPE:

Subsection 1006.09 – Plastic Yard Drain Pipe (06/07), Page 789.

Delete the contents of Subheading (a)(3), Ribbed Polyvinyl Chloride Pipe (RPVCP) and substitute the following.

Ribbed Polyvinyl Chloride Pipe (RPVCP): Ribbed Polyvinyl Chloride Pipe shall comply with ASTM F 794, Series 46 or ASTM F 949 (46 psi).

SECTION 1013 – METALS:

Subsection 1013.09 – Steel Piles (08/06) Page 822.

Delete the title and references to "Steel Piles" in this subsection and substitute "Steel H Piles".

SECTION 1015 – SIGNS AND PAVEMENT MARKINGS:

Subsection 1015.04 – Sign Panels (05/07), Pages 832 and 833.

Delete the contents of Heading (a), Permanent Sign Panels and substitute the following.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

(a) Permanent Sign Panels: Flat panels shall be aluminum sheets or plates complying with ASTM B 209, Alloy 6061-T6 or Alloy 5052-H38. Extruded aluminum panels shall comply with ASTM B 221 (ASTM B 221M), Alloy 6063-T6 and after fabrication, have a flatness equal to or less than 0.031 inch per foot of length and 0.004 inch per inch of width.

Subsection 1015.05 - Reflective Sheeting (04/08), Pages 833 – 838.

Delete the contents of this subsection and substitute the following.

1015.05 REFLECTIVE SHEETING.

(a) Permanent and Temporary Standard Sheeting: Reflective sheeting shall be one of the following standard types as specified on the plans and complying with ASTM D 4956 except as modified herein. Permanent warning, regulatory, guide and supplemental guide sign sheeting shall meet the requirements of ASTM D 4956 Type X. Reflective sheeting for temporary signs and devices shall meet the requirements of ASTM D 4956 Type III except as noted in Subsection 1015.05(f). Reflective sheeting shall be an approved product listed in QPL 13.

Type III - A high-intensity retroreflective sheeting that is typically encapsulated glass-bead retroreflective material.

Type VI - An elastomeric high-intensity retroreflective sheeting without adhesive. This sheeting is typically a vinyl microprismatic retroreflective material.

Type X - A super high-intensity retroreflective sheeting having highest retroreflectivity characteristics at medium distances. This sheeting is typically an unmetalized microprismatic retroreflective element material.

(b) Fluorescent Pink Retroreflective Sheeting: Signs for temporary control of traffic through incident management areas shall be Type VI fluorescent pink retroreflective sheeting and shall comply with the MUTCD. Temporary traffic control signs for incident management shall be placed to notify motorists of upcoming incidents on the roadway, and shall be removed from public view once the incident has been managed. Physical properties shall comply with ASTM D 4956. Photometric properties shall be as follows.

(1) Retroreflectivity: Minimum Coefficients of Retroreflection shall be as specified in Table 1015-1.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

Table 1015-1
Coefficients of Retroreflection for Fluorescent Pink Sheeting[1]

Observation Angle, degrees	Entrance Angle, degrees	Fluorescent Pink
0.2	-4	100
0.2	+30	40
0.5	-4	40
0.5	+30	15

[1]Minimum Coefficient of Retroreflection (R_A) (cd $lx^{-1}m^{-2}$)

(2) Color and Daytime Luminance: Color Chromaticity Coordinates and Daytime Luminance Factors shall be as specified in Table 1015-2.

Table 1015-2
Fluorescent Pink Color Specifications Limits (Daytime)

Chromaticity Coordinates (corner points) [1]								Luminance Factor, min.
1		2		3		4		Y%
x	y	x	y	x	y	x	y	25
0.450	0.270	0.590	0.350	0.644	0.290	0.536	0.230	

[1]The four pairs of chromaticity coordinates measured with CIE 2° Standard Observer and 45/0 (0/45) geometry and CIE D65 Standard Illuminant.

(c) Adhesive Classes: The adhesive required for retroreflective sheeting shall be Class 1 (pressure sensitive) as specified in ASTM D 4956.

(d) Accelerated Weathering: Reflective sheeting, when processed, applied and cleaned in accordance with the manufacturer's recommendations shall perform in accordance with the accelerated weathering standards in Table 1015-3.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

Table 1015-3
Accelerated Weathering Standards[1]

Type	Retroreflectivity[2]				Colorfastness[3]	
	Orange/ Fluorescent Orange		All colors, except orange/Fluorescent Orange		Orange/ Fluorescent Orange	All colors, except orange/Fluorescent Orange
III	1 year	80[4]	3 years	80[4]	1 year	3 years
III (for drums)	1 year	80[4]	1 year	80[4]	1 year	1 year
VI	1/2 year	50[5]	1/2 year	50[5]	1/2 year	1/2 year
X	1 year	80[6]	3 years	80[6]	1 year	3 years

[1]At an angle of 45° from the horizontal and facing south in accordance with ASTM G 7 at an approved test facility in Louisiana or South Florida.
[2]Percent retained retroreflectivity of referenced table after the outdoor test exposure time specified.
[3]Colors shall conform to the color specification limits of ASTM D 4956 after the outdoor test exposure time specified.
[4]ASTM D 4956, Table 8.
[5]ASTM D 4956, Table 13.
[6]ASTM D 4956, Table 4.

(e) Expected Sign Life Data and Performance: The sheeting manufacturer shall supply expected retroreflectivity service life curves for each of the following sign sheeting colors: white, green, blue, brown, red, and yellow. The service life curves shall be plots of the 95 percent expected life plotted on an x-y graph with life years on the x-axis and retroreflectivity on the y-axis. The expected life shall account for worst case installations, equivalent to an installation in South Louisiana with the sign facing to the South. The sheeting manufacturer shall also supply a table of expected life values taken from the service life curves for Revision Number 2 to the 2003 Edition of the MUTCD minimum reflectivity requirements published in the Federal Register on December 21, 2007. Reflective sheeting for signs, when processed, applied and cleaned in accordance with the manufacturer's recommendations shall perform outdoors in accordance with the performance standards in Table 1015-4.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

Table 1015-4
Reflective Sheeting Performance Standards

Type	Retroreflectivity[1] -- Durability[2]				Colorfastness[3]
	Orange/ Fluorescent Orange		All colors, except orange/Fluorescent Orange		
III	3 years	80[4]	10 years	80[4]	3 years
X	3 years	80[5]	7years	80[5]	3 years

[1]Percent retained retroreflectivity of referenced table after installation and the field exposure time specified.
[2]All sheeting shall maintain its structural integrity, adhesion and functionality after installation and the field exposure time specified.
[3]All colors shall conform to the color specification limits of ASTM D 4956 after installation and the field exposure time specified.
[4]ASTM D4956, Table 8.
[5]ASTM D 4956, Table 4.

(f) Temporary Signs, Barricades, Channelizing Devices, Drums and Cones: Reflective sheeting for temporary signs, barricades and channelizing devices, shall meet the requirements of ASTM D 4956, Type III except that temporary warning construction signs used on the mainline of freeways and expressways shall be fluorescent orange and meet the requirements of ASTM D 4956, Type X.

Reflective sheeting for vertical panels shall meet the requirements of ASTM D 4956, Type III.

Reflective sheeting for drums shall be a minimum of 6 inches (150 mm) wide and shall meet the requirements of ASTM D 4956, Type III, and the Supplementary Requirement S2 for Reboundable Sheeting as specified in ASTM D 4956. Reflective sheeting for traffic cone collars shall meet the requirements of ASTM D 4956, Type III or Type VI.

(g) Sheeting Guaranty. The contractor shall provide the Department with a guaranty from the sheeting manufacturer stating that if the retroreflective sheeting fails to comply with the performance requirements of this subsection, the sheeting manufacturer shall do the following:

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

Table 1015-5
Manufacturer's Guaranty-Reflective Sheeting

Type	Manufacturer shall restore the sign face in its field location to its original effectiveness at no cost to the Department if failure occurs during the time period[1] as specified below		Manufacturer shall replace the sheeting required to restore the sign face to its original effectiveness at no cost to the Department if failure occurs during the time period[1] as specified below
	Orange/Fluorescent Orange	All colors, except orange/Fluorescent Orange	All colors, except orange/Fluorescent Orange
III	<3 years	<7 years	7-10 years
X	<3 years	<5 years	5-7 years

[1] From the date of sign installation.

Replacement sheeting for sign faces, material, and labor shall carry the unexpired guaranty of the sheeting for which it replaces.

The sign fabricator shall be responsible for dating all signs with the month and year of fabrication at the time of sign fabrication. This date shall constitute the start of the guaranty obligation period.

Subsection 1015.11 - Preformed Plastic Pavement Marking Tape (06/07), Pages 842 – 844.

Delete the contents of this subsection and substitute the following.

1015.11 PREFORMED PLASTIC PAVEMENT MARKING TAPE.

(a) General: Preformed plastic pavement marking tape shall be approved products listed on QPL 64 and shall comply with ASTM D4505 Retroreflectivity Level I or Level II, or DOTD Intersection Grade (as specified below), except as modified herein. The marking tape shall be Class 2 or 3. The type and color shall be in accordance with the plans and the MUTCD.

(b) Thickness: All preformed plastic pavement marking tape shall have a minimum overall thickness of 0.060 inches (1.5 mm) when tested without the adhesive.

(c) Friction Resistance: The surface of the Retroreflectivity Level II preformed plastic pavement marking tape shall provide a minimum frictional resistance value of 35 British Polish Number (BPN) when tested according to ASTM E303. The surface of the Retroreflectivity Level I and DOTD Intersection Grade preformed plastic pavement marking tape shall provide a minimum frictional resistance value of 45 BPN when tested according to ASTM E303. Values for the Retroreflectivity Level I material with a raised surface pattern as defined in ASTM D4505 are calculated by averaging values taken at downweb and at a 45 degrees angle from downweb.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

(d) Retroreflective Requirements: The preformed plastic pavement marking tape shall have the minimum initial specific luminance values shown in Table 1015-7 when measured in accordance with ASTM D 4061.

Table 1015-7
Specific Luminance of Preformed Plastic Tape

Type	Observation Angle, degrees	Entrance Angle, degrees	Specific Luminance (mcd/sq m/lx)	
			White	Yellow
Retroreflectivity Level I	1.05	88.76	500	300
DOTD Intersection Grade	1.05	88.76	375	250
Retroreflectivity Level II	1.05	88.76	250	175

(e) Durability Requirements: The DOTD Intersection Grade preformed plastic pavement marking tape shall show no appreciable fading, lifting or shrinkage for a least 12 months after placement when placed in accordance with the manufacturer's recommended procedures on pavement surfaces having a daily traffic count not to exceed 15,000 ADT per lane.

The Retroreflectivity Level I preformed plastic pavement marking tape shall show no appreciable fading, lifting or shrinkage for a least 4 years after placement for longitudinal lines and at least 2 years after placement for symbols and legends.

The Retroreflectivity Level I preformed plastic pavement marking tape shall also retain the following reflectance values for the time period detailed in Table 1015-8.

Table 1015-8
Retained Specific Luminance for Retroreflectivity Level I
Preformed Plastic Pavement Marking Tape

Time	Observation Angle, degrees	Entrance Angle, degrees	Specific Luminance (mcd/sq m/lx)	
			White	Yellow
1 year	1.05	88.76	400	240
4 years (2 years for symbols and legend)	1.05	88.76	100	100

(f) Plastic Pavement Marking Tape Guaranty (DOTD Intersection Grade and Retroreflectivity Level I): If the plastic pavement marking tape fails to comply with the performance and durability requirements of this subsection within 12 months for DOTD Intersection Grade and 4 years for Retroreflectivity Level I, the manufacturer shall replace the plastic pavement marking material at no cost to the Department.

SECTION 1020 – TRAFFIC SIGNALS:

Subsection 1020.01 – Traffic Signal Heads (06/07), Pages 873 – 884.

Delete the contents of Heading (a), General Requirements and substitute the following.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

(a) General Requirements: Traffic signal sections, beacon sections and pedestrian signal sections shall be of the adjustable type. Materials and construction of each section shall be the same.

Signals shall be constructed for either 8 or 12-inch (200 mm or 300 mm) lens in accordance with the plans. Signal sections shall have three to five sections per face and beacon sections have only one section per face. Signal sections and associated brackets shall be finished inside and out with two coats of high grade dark olive green enamel, color number 14056 according to Federal Standard No. 595b with each coat independently baked. Visors shall be coated green on the outside and black on the inside. Edges shall be deburred and smooth with no sharp edges.

Subsection 1020.04 – Poles for Traffic Signal Systems (06/07), Pages 890 – 894.

Delete the sixth paragraph of Heading (a), Pedestal Support Signal Poles, and substitute the following.

Pedestals shall be finished with at least one coat of rustproofing primer, applied to a clean surface and one coat of dark olive green enamel, color number 14056 according to Federal Standard No. 595b.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION
PLANS OF PROPOSED

STATE HIGHWAY

STATE PROJECT NO. 450-90-0219

CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)
ORLEANS PARISH
ROUTE I-10

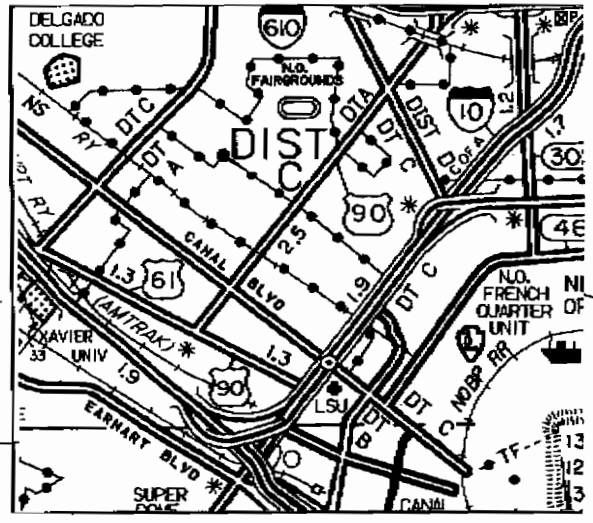
INDEX TO SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	SUMMARY OF QUANTITIES
3	GENERAL NOTES
4 - 4c	PLAN SHEETS
5 - 5h	TYPICAL SECTION SHEETS
6	JOINT DETAIL
7-7e	TRAFFIC DETAIL
8-8w	AS BUILTS

VICINITY MAP

BRIDGE LOCATIONS

STRUCTURE NUMBER	C.S.L.M.	LENGTH (FEET)
4509004362	4.35	19772



N.T.S.

C.S. 450-90 LOG MILE 5.98
STA. 192+10.00
END. S.P. 450-90-0219

C.S. 450-90 LOG MILE 4.43
STA. 110+05.25
BEG. S.P. 450-90-0219

TRAFFIC DATA
2009 A.D.T. = 84,300
2019 A.D.T. = 92,730
D = 60%
K = 12%
T = 17%

TYPE OF CONSTRUCTION:
BRIDGE DECK SLIDING PLATE JOINT REPLACEMENTS

STATE OF LOUISIANA
JENNIFER D. BRANTON
License No. E-31529
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
1/12/2009

RECOMMENDED FOR APPROVAL
01/12/09
ASSISTANT DISTRICT 02 ADMINISTRATOR-ENGINEERING

DISTRICT ADMINISTRATOR
1/13/09
DATE

NO.	DATE	REVISION DESCRIPTION	DATE	RECOMMENDED	DATE	APPROVED

SCHEDULE OF REVISIONS

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

DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)	DESIGNED JRM / CHECKED MBP	PARISH	ORLEANS	SHEET NO.
	TITLE SHEET	DETAILED FAC / CHECKED JRM	FEDERAL PROJECT		1
	NO. DATE REVISION DESCRIPTION BY	DATE 7/2008 / SHEET	STATE PROJECT	450-90-0219	

DATED 01/08/09 08:47:08

STATE PROJECT	PARISH	SHEET NO.
450-90-0219	ORLEANS	2

SUMMARY OF ESTIMATED QUANTITIES

ITEM NO.	ITEM	UNIT	QUANTITY S.P. NO. 450-90-0219	TOTAL QUANTITY
202-02	REMOVAL OF ANGLE END DAMS AND ANCHORAGES	EACH	9	
713-01	TEMPORARY SIGNS & BARRICADES	LUMP	LUMP	
727-01	MOBILIZATION	LUMP	LUMP	
740-01	CONSTRUCTION LAYOUT	LUMP	LUMP	
805-09	EXPANSION JOINT SEAL	LNFT	443.00	
S-101	POLYMER CONCRETE JOINT REPAIRS	LNFT	886	
S-102	DYNAMIC MESSAGE SIGN UNIT	EACH	4	

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

GENERAL NOTES

CONSTRUCTION SPECIFICATIONS:

CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES EXCEPT WHERE SUPPLEMENTED OR AMENDED BY THE PLANS, SUPPLEMENTAL SPECIFICATIONS OR SPECIAL PROVISIONS.

DIMENSIONS: ALL DIMENSIONS ARE GIVEN AT NORMAL TEMPERATURE (68^ F).

MAINTENANCE OF TRAFFIC:

THE CONTRACTOR SHALL BE ALLOWED TO COMPLETELY CLOSE ONE DIRECTION OF THE ELEVATED ROADWAY FROM 10:00 P.M. TO 5:00 A.M., SUNDAY THROUGH FRIDAY MORNING. AS AN OPTION THE CONTRACTOR SHALL BE ALLOWED TO CLOSE TWO OF THE THREE LANES IN ONE DIRECTION FROM 8:30 P.M. TO 5:30 A.M., SUNDAY EVENING THROUGH FRIDAY MORNING. IF LANE CLOSURE OPTION IS CHOSEN RAMP CLOSURES WILL BE ALLOWED IN THE IMMEDIATE VICINITY OF THE WORK. NO MORE THAN ONE RAMPS MAY BE CLOSED IN EACH DIRECTION AT A TIME.

A LATE LANE OPENING RENTAL FEE WILL BE ASSESSED AS PER SECTION 104.03 OF THE LA DOTD STANDARD SPECIFICATIONS.

DYNAMIC MESSAGE BOARDS, CHANNELIZATION, BARRICADES AND ADVANCE SIGNING ALERTING TRAFFIC TO RAMP CLOSURES, LANE REDUCTIONS AND WORK ZONES SHALL BE PROVIDED BY THE CONTRACTOR PER THE PLANS, SPECIFICATIONS, TRAFFIC CONTROL SPECIAL DETAILS AND AS DIRECTED BY THE PROJECT ENGINEER.

TRUCK MOUNTED CRASH ATTENUATORS WILL BE REQUIRED TO PROVIDE WORKZONE SAFTEY ON THE RAMPS AS WELL AS ALONG I-10. TRUCK MOUNTED CRASH ATTENUATORS SHALL BE PAID FOR UNDER ITEM 713-01, TEMPORARY SIGNS AND BARRICADES.

ALL REQUIRED CHANNELIZATION DEVICES, SIGNING AND WARNING DEVICES REQUIRED FOR RAMP CLOSURES AND LANE REDUCTIONS SHALL BE PAID FOR UNDER ITEM 713-01, TEMPORARY SIGNS AND BARRICADES.

JOINT REPAIR WORK SHALL NOT TAKE PLACE ON SAINTS FOOTBALL GAME DAYS SCHEDULED IN NEW ORLEANS OR ANY OTHER SPECIAL EVENT DAYS SUBJECT TO THE PROJECT ENGINEER'S DISCRETION.

ALL WORK ACTIVITIES AND TRAFFIC MAINTENANCE ACTIVITIES SHALL BE COORDINATED WITH OTHER CONSTRUCTION PROJECT ACTIVITIES AND SCHEDULED DEPARTMENT MAINTENANCE ACTIVITIES WITHIN THE PROJECT LIMITS. WORK LOCATIONS AND WORKING TIMES SHALL BE SUBJECT TO APPROVAL BY THE PROJECT ENGINEER.

CONTRACTOR SHALL ENSURE THAT NO ITEMS FALL ON ROADWAYS UNDERNEATH THE WORK AREA.

CONTRACTOR SHALL ENSURE THAT ANY BOND BREAKER RESIDUE LEFT FROM FORMING THE POLYMER CONCRETE JOINT NOSING SHALL BE COMPLETELY REMOVED FROM THE CONCRETE PRIOIR TO INSTALLING THE NEW SILICONE JOINT SEALING SYSTEM.

LOCATION DESCRIPTION

THE PROJECT BEGINS ON ELEVATED I-10 AT ITS JUNCTION WITH TULANE AVENUE AT C.S. 450-90 L.M. 4.43 AND PROCEEDS ALONG I-10 TO ITS JUNCTION WITH ALLEN STREET NEAR ST. BERNARD HIGHWAY. LM 5.98

SCOPE OF PROJECT

THE SCOPE OF THIS PROJECT WILL BE TO REMOVE DAMAGED END DAM ANGLES AND REPLACE WITH POLYMER CONCRETE AND SEAL JOINTS WITH A PREFORMED SILICONE JOINT SEALING SYSTEM.

POLYMER CONCRETE NOSING:

DECK JOINT NOSING SHALL BE REESTABLISHED PER THE PLANS AND AS DIRECTED BYTHE PROJECT ENGINEER. PREPARATION OF THE SURFACE SHALL CONFORM TO SPECIAL PROVISION ITEMS-101. POLYMER CONCRETE NOSING SHALL BE PAID FOR UNDER ITEM S-101, POLYMER CONCRETE JOINT REPAIRS, PRE LIN. FT.

CONCRETE MATERIALS FOR DECK JOINT AND BENT REPAIRS:

ALL JOINT REPAIR CONCRETE FOR REESTABLISHMENT OF DECK JOINT NOSINGS AS INDICATED IN THE PLANS SHALL BE POLYMER CONCRETE CONFORMING TO ITEM S-101, POLYMER CONCRETE JOINT REPAIRS.

REMOVAL OF EXISTING ANGLE IRON END DAMS AND ANCHORAGES:

EXISTING ANGLE IRON END DAMS AND ANCHORAGES SHALL BE REMOVED AS INDICATED IN THE PLANS. THIS INCLUDES REMOVING EMBEDDED LEVELING OR ATTACHMENT PLATES AND BOLTS AND TORCH CUTTING ANY PLATES OR ELEMENTS WHICH MUST REMAIN IN THE DECK DUE TO ATTACHMENT TO GIRDERS TO NO LESS THAN 3 INCHES FROM THE ROADWAY SURFACE OR AS DIRECTED BY THE PROJECT ENGINEER. REMOVAL OF EXISTING ANGLE IRON END DAMS AND ANCHORAGES SHALL BE PAID FOR UNDER ITEM 202-02-02, REMOVAL OF ANGLE IRON END DAMS AND ANCHORAGES.

POURED JOINT SEALING SYSTEM:

POURED JOINT SEAL AND BACKING ROD MATERIAL SHALL CONFORM TO SUBSECTION 805.12(c)(1) AND SUBSECTION 1005.02(d) OF THE LOUISIANA STANDARD SPECIFICATION FOR ROADS AND BRIDGES. THE SILICONE SEAL SHALL BE A TWO COMPONENT (RAPID CURE) DESIGN LISTED IN OPL 42. POURED JOINT SEAL REPAIR SHALL BE PAID FOR UNDER ITEM 805-09, EXPANSION JOINT SEAL, PER LIN. FT.

REINFORCING STEEL:

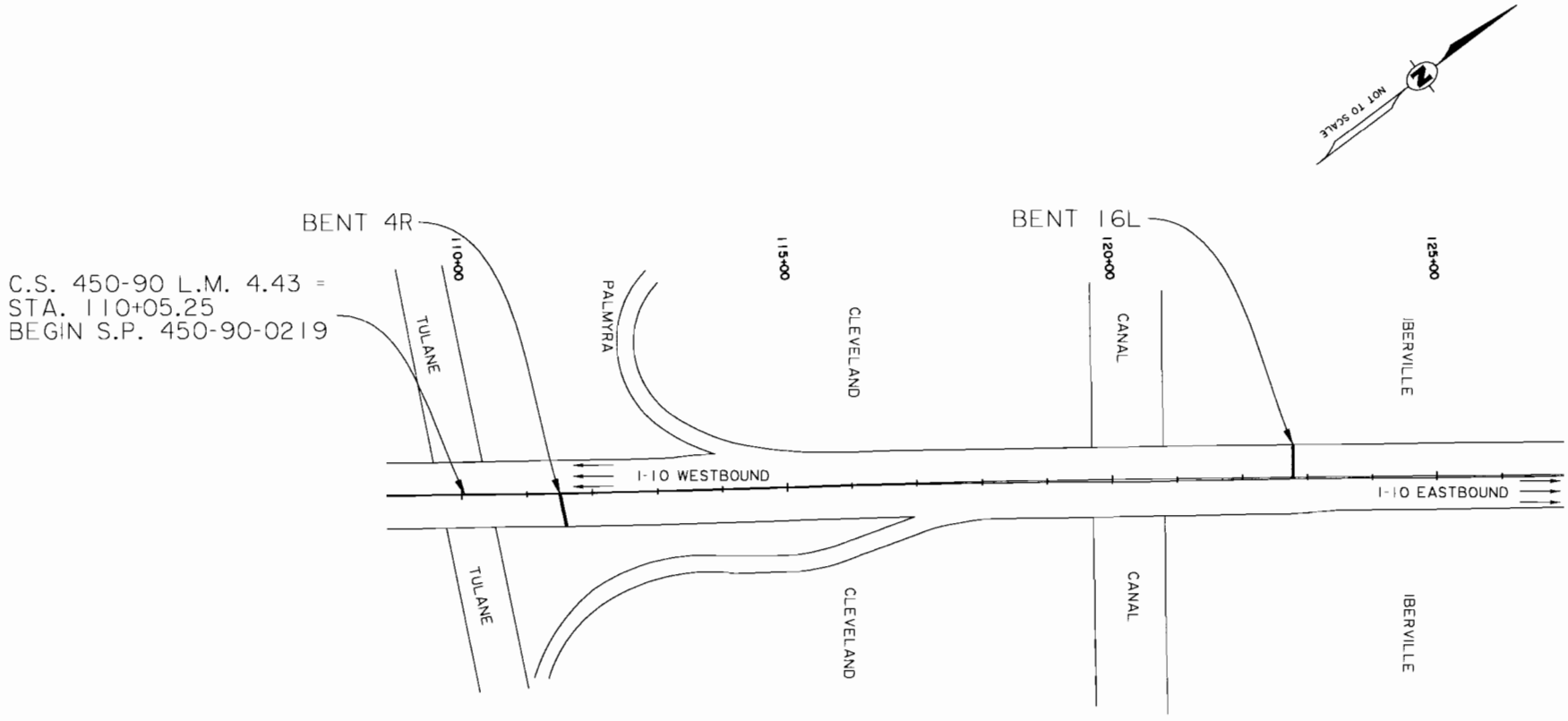
THE MINIMUM COVER FROM THE SURFACE OF THE CONCRETE TO THE FACE OF ANY DEFORMED REINFORCING STEEL SHALL NOT BE LESS THAN THE FOLLOWING:

TOP OF DECK	= 2"
BOTTOM OF DECK	= 1"

FINISH OF CONCRETE:

SURFACE FINISHES SHALL BE IN ACCORDANCE WITH APPLICABLE PROVISIONS OF ARTICLE 805.13 "CONCRETE SURFACE FINISHED" OF THE LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES AS DIRECTED BY THE PROJECT ENGINEER.

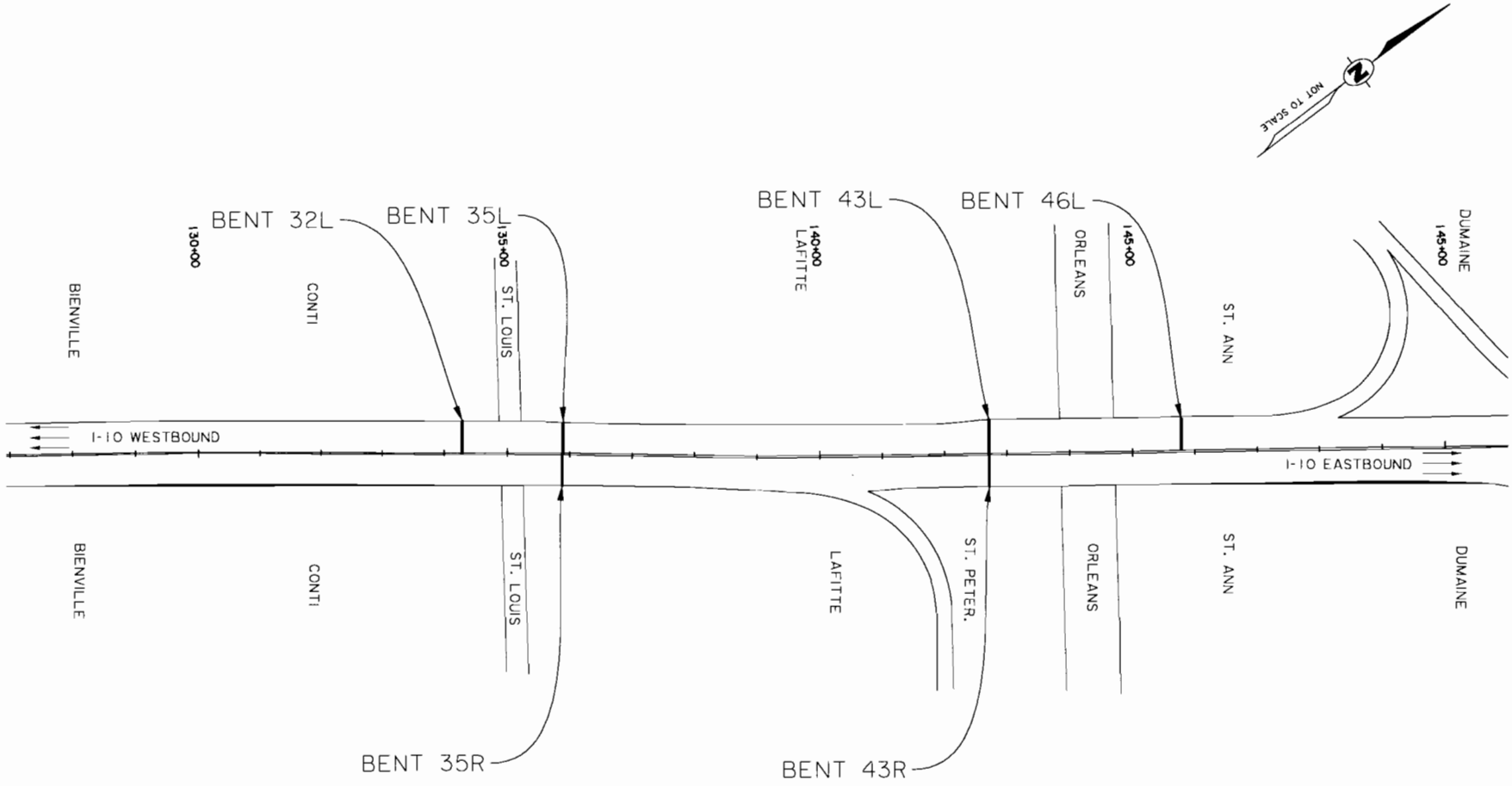
ELECTRONIC COPY - NOT FOR BID SUBMITTAL



NOTES:
1. ARROWS DENOTE DIRECTION OF TRAFFIC AND NOT NECESSARILY NUMBER OF LANES

DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)	NO.	DATE	REVISION DESCRIPTION	BY	DESIGNED JRM / CHECKED WBP	PARISH ORLEANS	SHEET NO. 4
	PLAN SHEETS					DETAILED FAC / CHECKED JRM	FEDERAL PROJECT	
						DATE 7/2008 / SHEET	STATE PROJECT 450-90-0219	

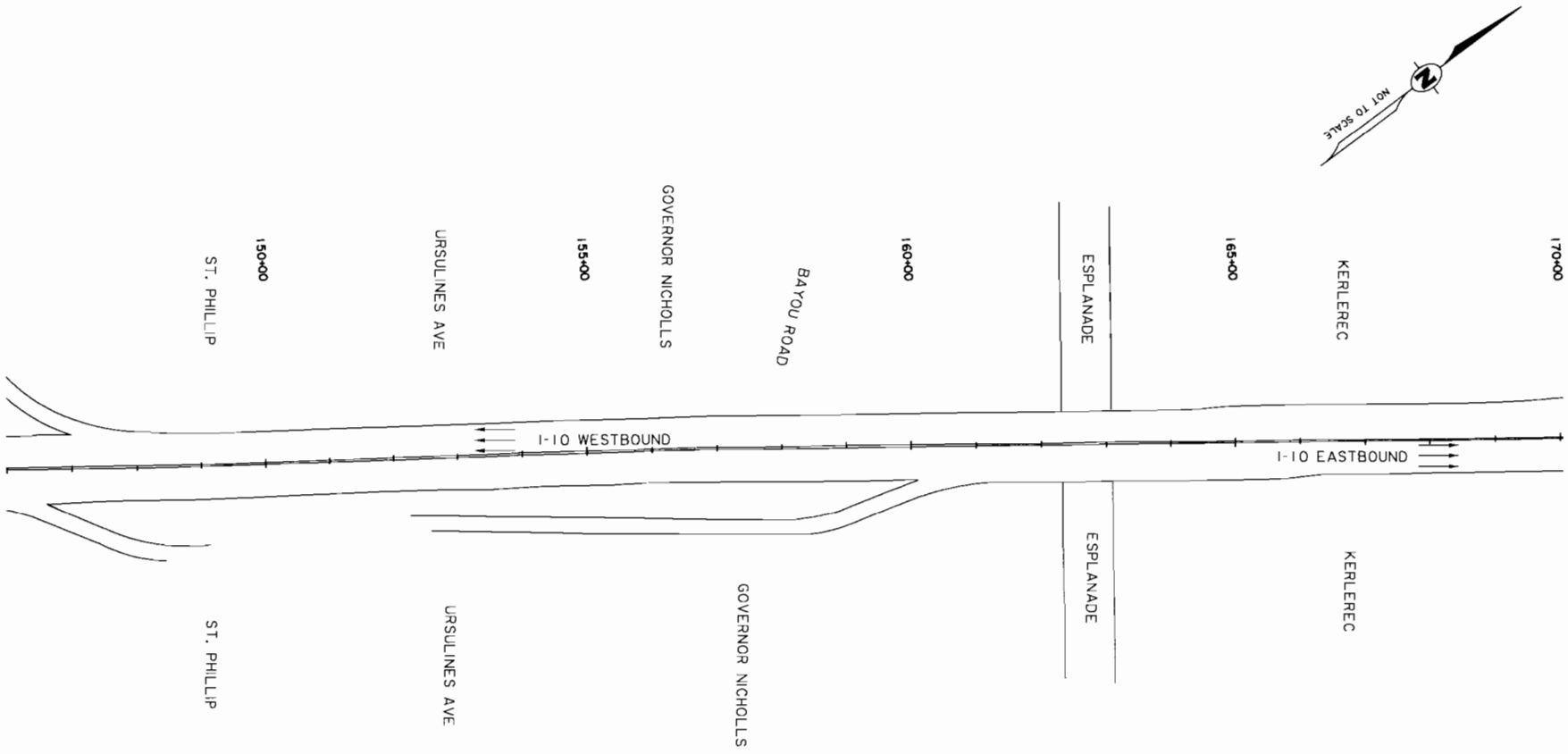
ELECTRONIC COPY - NOT FOR BID SUBMITTAL



NOTES:
1. ARROWS DENOTE DIRECTION OF TRAFFIC AND NOT NECESSARILY NUMBER OF LANES

DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)	NO.	DATE	REVISION DESCRIPTION	BY	DESIGNED JRM / CHECKED WBP	PARISH ORLEANS	SHEET NO. 4a
	PLAN SHEETS					DETAILED FAC / CHECKED JRM	FEDERAL PROJECT	
						DATE 7/2008 / SHEET	STATE PROJECT 450-90-0219	

ELECTRONIC COPY - NOT FOR BID SUBMITTAL



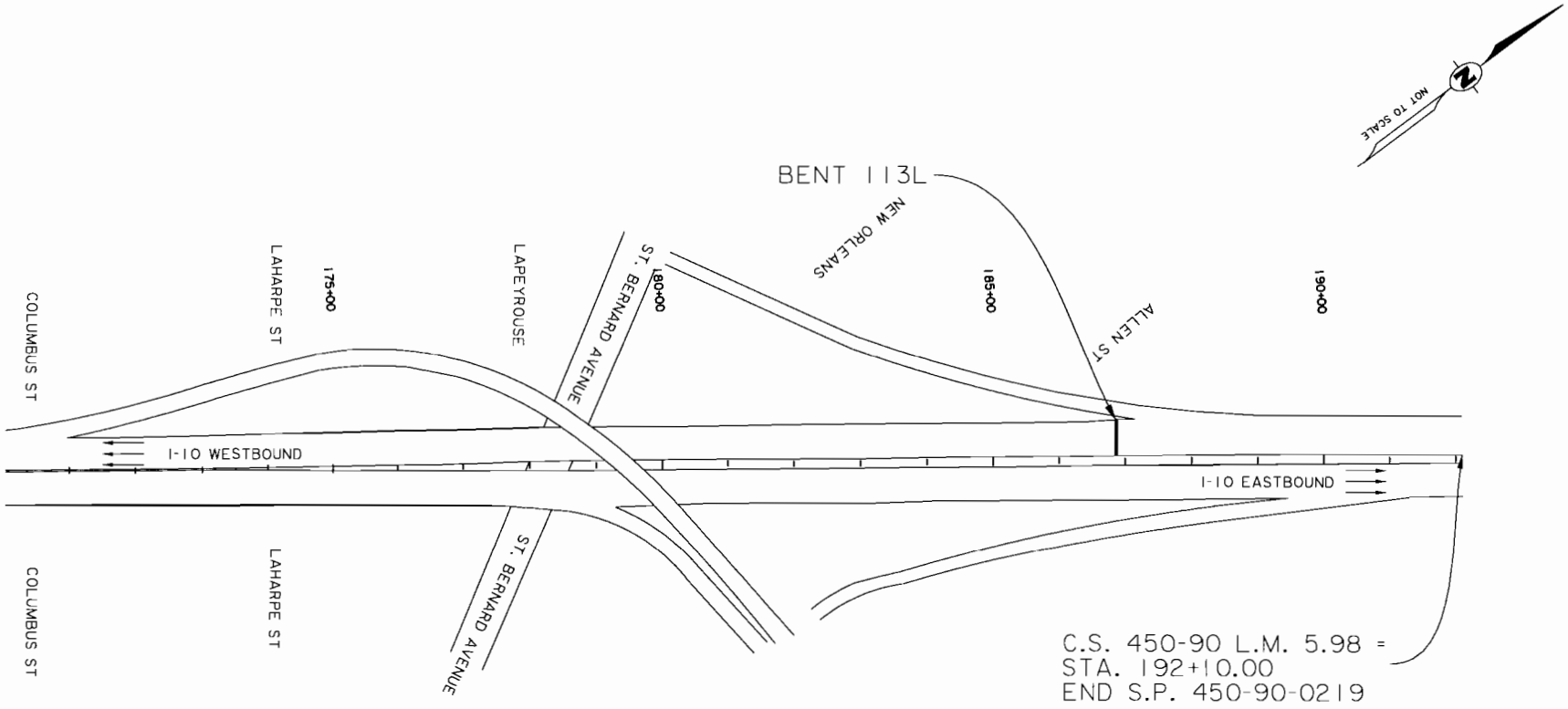
NOTES:
1. ARROWS DENOTE DIRECTION OF TRAFFIC AND NOT NECESSARILY NUMBER OF LANES

DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)	NO.	DATE	REVISION DESCRIPTION	BY	DESIGNED JRM CHECKED WBP	PARISH ORLEANS
	PLAN SHEETS					DETAILED FAC CHECKED JRM	FEDERAL PROJECT
						DATE 7/2008 SHEET	STATE PROJECT 450-90-0219

SHEET NO. 4b

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

R:\PROJECT FOLDERS\450-90-0219 (City streets sliding plate joint replacements - BRPM)\I-10 Aerials.dgn 13-JAN-2009 12:46



NOTES:
1. ARROWS DENOTE DIRECTION OF TRAFFIC AND NOT NECESSARILY NUMBER OF LANES

DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)	NO.	DATE	REVISION DESCRIPTION	BY	DESIGNED / CHECKED	JRM / WBP	PARISH	ORLEANS
	PLAN SHEETS					DETAILED / CHECKED	FAC / JRM	FEDERAL PROJECT	
						DATE / SHEET	7/2008	STATE PROJECT	450-90-0219

SHEET NO. 4c

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

TYPICAL DAMAGED JOINT (BENT 4R)

DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)	NO.	DATE	REVISION DESCRIPTION	BY	DESIGNED JRM CHECKED WBP	PARISH ORLEANS
	TYPICAL SECTION					DETAILED FAC CHECKED JRM	FEDERAL PROJECT
						DATE SHEET 7/2008	STATE PROJECT 450-90-0219

SHEET NO. 5

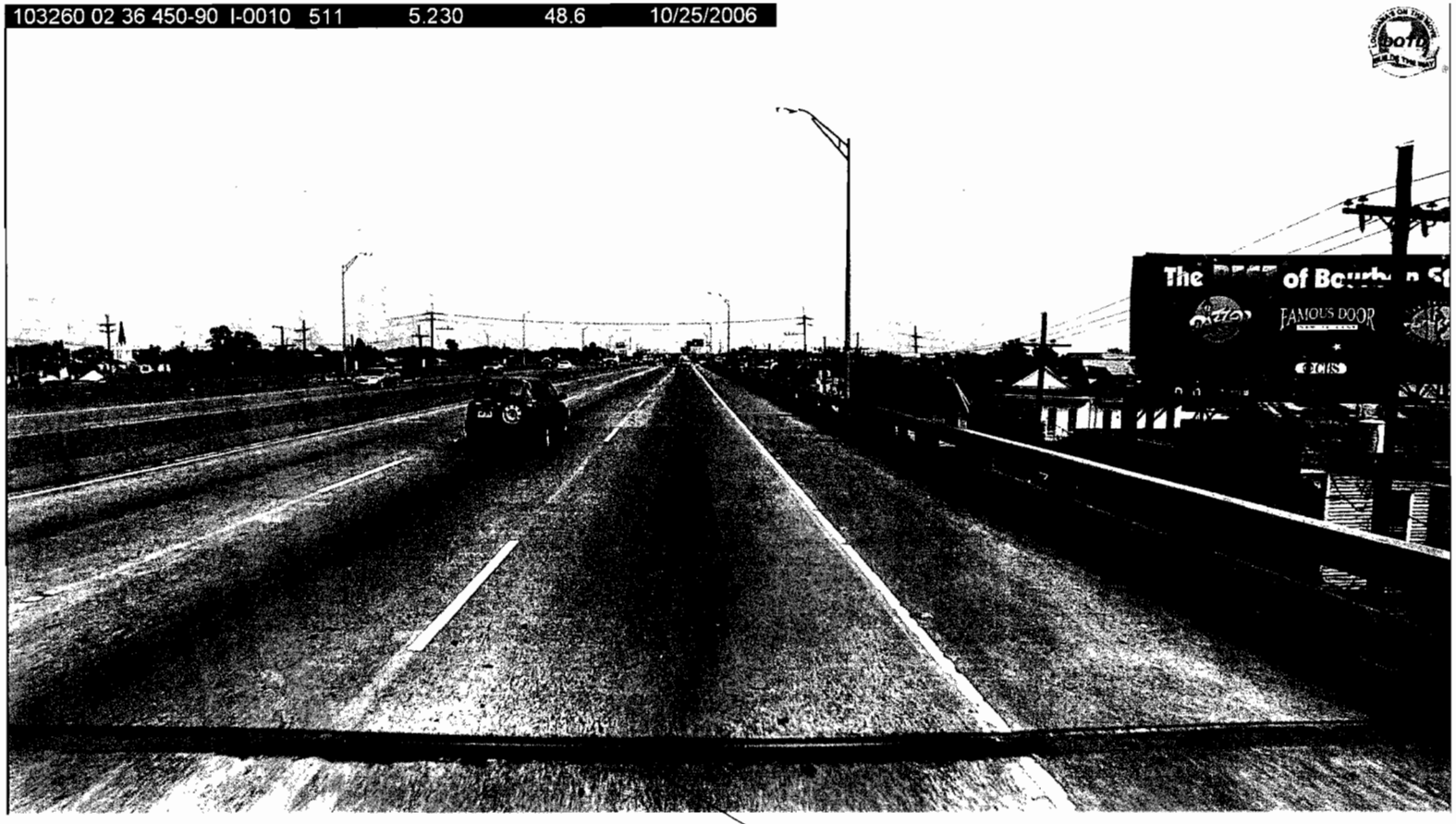
ELECTRONIC COPY - NOT FOR BID SUBMITTAL

NOTE MISSING CONCRETE AND BROKEN ANGLES

TYPICAL DAMAGED JOINT (BENT 35R)

DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)			DESIGNED JRM CHECKED WBP	PARISH	ORLEANS	SHEET NO. 5a
	TYPICAL SECTION	NO.	DATE	DETAILED FAC CHECKED JRM	FEDERAL PROJECT		
			REVISION DESCRIPTION BY	DATE SHEET 7/2008	STATE PROJECT	450-90-0219	

ELECTRONIC COPY - NOT FOR BID SUBMITTAL



NOTE MISSING CONCRETE AND BROKEN ANGLES

TYPICAL DAMAGED JOINT (BENT 43R)

DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)	NO.	DATE	REVISION DESCRIPTION	BY	DESIGNED JRM CHECKED WBP	PARISH ORLEANS
	TYPICAL SECTION					DETAILED FAC CHECKED JRM	FEDERAL PROJECT
						DATE 7/2008 SHEET	STATE PROJECT 450-90-0219

SHEET NO. 5b

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

NOTE MISSING CONCRETE AND BROKEN ANGLES

TYPICAL DAMAGED JOINT (BENT 113L)

DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)	NO.	DATE	REVISION DESCRIPTION	BY	DESIGNED JRM CHECKED WBP	PARISH ORLEANS
	TYPICAL SECTION					DETAILED FAC CHECKED JRM	FEDERAL PROJECT
						DATE 7/2008 SHEET	STATE PROJECT 450-90-0219

SHEET NO. 5c

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

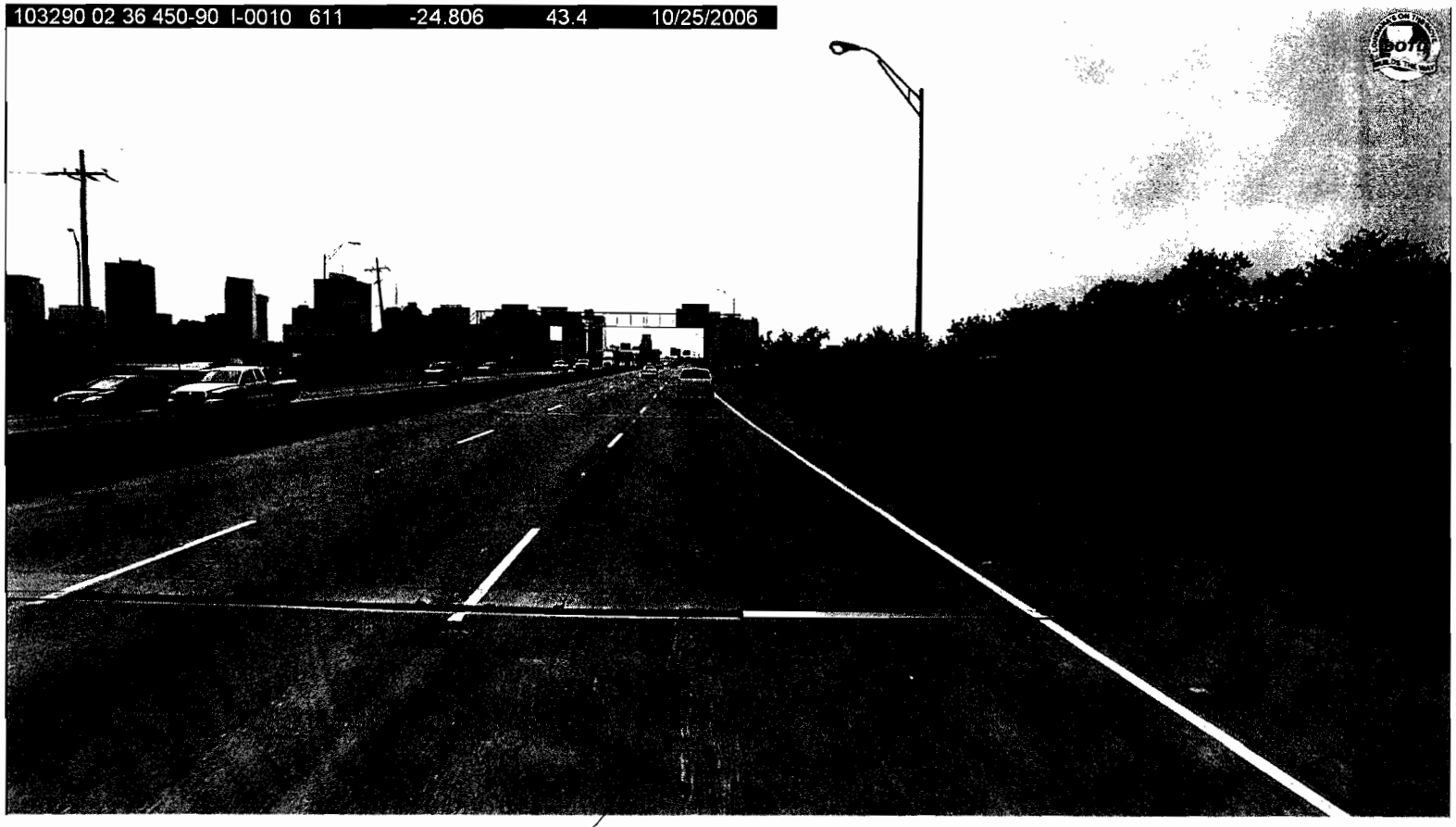
NOTE MISSING CONCRETE AND BROKEN ANGLES

TYPICAL DAMAGED JOINT (BENT 46L)

DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)	NO.	DATE	REVISION DESCRIPTION	BY	DESIGNED JRM CHECKED WBP	PARISH ORLEANS
	TYPICAL SECTION					DETAILED FAC CHECKED JRM	FEDERAL PROJECT
						DATE 7/2008 SHEET	STATE PROJECT 450-90-0219

SHEET NO. 5d

ELECTRONIC COPY - NOT FOR BID SUBMITTAL



NOTE MISSING CONCRETE AND BROKEN ANGLES

TYPICAL DAMAGED JOINT (BENT 43L)

DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)	NO.	DATE	REVISION DESCRIPTION	BY	DESIGNED JRM CHECKED WBP	PARISH ORLEANS	SHEET NO. 5e
	TYPICAL SECTION					DETAILED FAC CHECKED JRM	FEDERAL PROJECT	
						DATE SHEET 7/2008	STATE PROJECT 450-90-0219	

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

NOTE MISSING CONCRETE AND BROKEN ANGLES

TYPICAL DAMAGED JOINT (BENT 35L)

DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)	NO.	DATE	REVISION DESCRIPTION	BY	DESIGNED JRM CHECKED WBP	PARISH ORLEANS	SHEET NO. 5f
	TYPICAL SECTION					DETAILED FAC CHECKED JRM	FEDERAL PROJECT	
						DATE 7/2008 SHEET	STATE PROJECT 450-90-0219	

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

NOTE MISSING CONCRETE AND BROKEN ANGLES

TYPICAL DAMAGED JOINT (BENT 32L)

DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)	NO.	DATE	REVISION DESCRIPTION	BY	DESIGNED JRM / CHECKED WBP	PARISH ORLEANS
	TYPICAL SECTION					DETAILED FAC / CHECKED JRM	FEDERAL PROJECT
						DATE 7/2008 / SHEET	STATE PROJECT 450-90-0219

SHEET NO. 5g

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

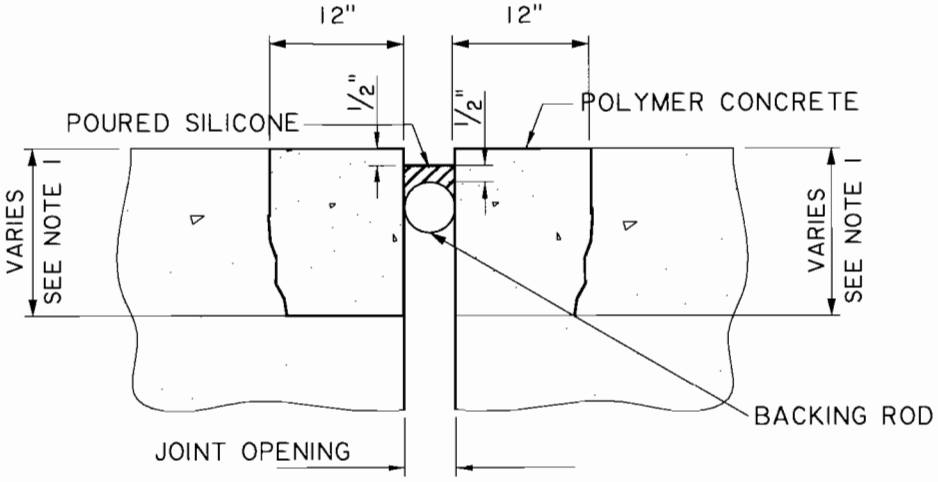
NOTE MISSING CONCRETE AND BROKEN ANGLES

TYPICAL DAMAGED JOINT (BENT 16L)

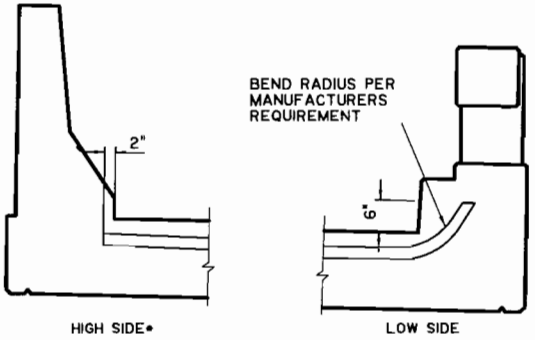
DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)	NO.	DATE	REVISION DESCRIPTION	BY	DESIGNED JRM CHECKED WBP	PARISH ORLEANS
	TYPICAL SECTION					DETAILED FAC CHECKED JRM	FEDERAL PROJECT
						DATE 7/2008 SHEET	STATE PROJECT 450-90-0219

SHEET NO. 5h

ELECTRONIC COPY - NOT FOR BID SUBMITTAL



POURED SILICONE JOINT SEAL



POURED SILICONE SEALS

POURED SILICONE JOINT SEALS AND BACKER RODS SHALL EXTEND VERTICALLY 6" @ LOW GUTTERS AND 2" HORIZONTALLY ON HIGH SIDE OF RDWY. AS SHOWN.

* HIGH SIDE BARRIER MAY BE OF THE CONCRETE POST AND RAIL VARIETY

REPAIR NOTES:

1. REMOVE ALL EXISTING END DAM ANGLES, ANCHORAGE DEVICES AND CONCRETE PATCHING. DEPTH SHALL BE ADEQUATE ENOUGH TO REMOVE SAID ANCHORAGE DEVICES BUT NOT DEEP ENOUGH TO CAUSE DAMAGE TO UNDERLYING GIRDERS. AMOUNT OF REMOVAL SHALL BE APPROVED BY PROJECT ENGINEER.
2. REBUILD NOSING WITH POLYMER CONCRETE IN ACCORDANCE WITH SPECIAL PROVISION ITEM S-101. JOINT OPENING DIMENSION SHALL BE 2".
3. ALL JOINT OPENINGS MUST BE FIELD VERIFIED TO BE WITHIN THE POURED SILICONE JOINT SEAL MANUFACTURER'S ALLOWABLE INSTALLATION OPENING WIDTHS. IF ANY JOINT OPENING IS LARGER THAN THE MAXIMUM ALLOWABLE OPENING, BUILD-UP JOINT NOSING WITH POLYMER CONCRETE TO BE WITHIN LIMITS.

JUNCTION OF I-10 AND TULANE IS AT C.S.L.M. 4.43 = STATION 110+05

BENT NO.	LOCATION FROM NEAREST INTERSECTION	BENT LENGTH (LN. FT.)	LOG MILE	STATION	POLYMER CONCRETE (LN. FT.)
4R	EAST OF TULANE AVENUE	48	4.46	111+51.00	96
35R	EAST OF ST. LOUIS STREET	48	4.92	136+02.00	96
43R	EAST OF ST. PETER STREET	48	5.05	142+80.00	96
113L	EAST OF ALLEN STREET	50	5.98	192+10.00	100
46L	EAST OF ORLEANS AVENUE	52	5.11	145+85.00	104
43L	WEST OF ORLEANS AVE	53	5.05	142+80.00	106
35L	EAST OF ST LOUIS STREET	48	4.92	136+02.00	96
32L	WEST OF ST LOUIS STREET	48	4.89	134+16.25	96
16L	EAST OF CANAL STREET	48	4.67	122+75.50	96

DISTRICT 02 DESIGN

CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)

JOINT DETAILS

NO.	DATE	REVISION DESCRIPTION	BY

DESIGNED	JRM	PARISH	ORLEANS
CHECKED	WBP		
DETAILED	FAC	FEDERAL PROJECT	
CHECKED	JRM		
DATE	7/2008	STATE PROJECT	450-90-0219
SHEET			

SHEET NO. 6

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

GENERAL PROVISIONS

- All Temporary Traffic Control Devices used shall be in accordance with the LaDOTD Standard Specifications for Roads and Bridges, the Manual on Uniform Traffic Control Devices (MUTCD), and shall meet the National Cooperative Highway Research Program (NCHRP) 350 for Test Level 3 requirements.
- Materials used for Temporary Traffic Controls shall be in accordance with the LaDOTD Standard Specifications for Roads and Bridges and when applicable the LaDOTD Qualified Products List (QPL).
- No temporary traffic controls shall be erected without the approval of the Project Engineer and until work is about to begin, unless they are covered.
- No lane closures, lane shifts, diversions, or detours shall occur without the authorization of the Project Engineer.
- Responsibility is hereby placed upon the contractor for the installation, maintenance, and operation of all temporary traffic control devices called for in these plans or required by the Project Engineer for the protection of the traveling public as well as all Department and construction personnel.
- The contractor shall also be responsible for the maintenance of all permanent signs and pavement markings left in place as essential to the safe movement and guidance of traffic within the project limits.
- The District Traffic Operations Engineer (DTOE) shall serve as a technical advisor to the Project Engineer for all Traffic Control matters.
- "Road Work Next XX Miles" sign shall be required on all projects equal to or greater than 2 miles and located at the begining of the project unless otherwise noted. The distance on the sign shall be stated to the nearest whole mile. The sign shall be a minimum 36"X60" unless otherwise noted.
- Warning signs used for lane closures or lane shifts in which the roadway shall be returned to full public use within 12 hours or less may be placed on NCHRP350 approved portable sign frames.
- If the spacing on the plans need to be altered, the new spacings need to be approved by the Project Engineer.

SPEED LIMITS

- Speed limits shall be lowered by 10 mph for any construction, maintenance, or utility operation that requires one or more of the following: (A) the condition of the original highway is degraded due to milled surfaces or uneven pavements; (B) work is in progress in the immediate vicinity of the travel way requiring lane closures, lane width reductions, or low speed diversions; (C) workers present on the shoulder within 2' of the edge of traveled way without barrier protection.
- The reduced speed zone shall only apply to those portions of the project limits affected. The Project Engineer may allow SPEED LIMIT WHEN FLASHING signs to supplement reduced speed zones.
- At the end of the reduced speed zone, a speed limit sign displaying the original speed limit before construction shall be installed.
- If conditions warrant, the District Traffic Operations Engineer may authorize the reduction of the speed limit by more than 10 mph.

PAVEMENT MARKINGS (see QPL)

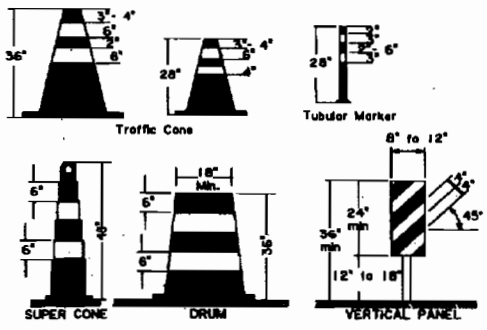
- All pavement markings within the limits of the project that are in conflict with the project signing or the required traffic movements shall be removed from the pavement by blast cleaning or grinding (existing striping shall not be painted over with black paint or covered with tape).
- If special pavement markings are needed, they shall be reflectorized, removable, and accompanied by the proper signage.
- Temporary Raised Pavement Markers (RPMs) may be added to supplement temporary striping in areas of transition, in tapers, in detours, and in other areas of need as directed by the Project Engineer.
- Materials and placement of temporary pavement markings shall conform to section 713 of the Standard Specifications. If no pay item exists, temporary markings will be considered incidental to traffic control.

SIGNS

- All signs used for temporary traffic controls shall follow the Department's Traffic Control (TC) details and the MUTCD. Signs shown in the TC Illustrations are typical and may vary with each specific condition.
- More appropriate signing for a specific condition may be required or substituted with the approval of the Project Engineer and reviewed by the District Traffic Operations Engineer.
- When projects are separated by less than one mile, they shall be signed as one project.
- At no time shall signs warning against a particular operation be left in place once the operation has been completed or where the obstacle has been removed.
- Signs over 10 sq ft shall be mounted on two post and signs over 20 sq ft shall be mounted on at least three post.
- Signs shall have a minimum of two bolts per post.
- Permanent signs no longer applicable or in conflict shall be removed or covered with a strong, lightweight, opaque material.
- Warning signs used for temporary traffic controls shall meet the following guidelines unless otherwise noted in the plans: (A) size shall be 48" x 48", (B) see the Departments Standard Specifications and the QPL for sheeting information, (C) a minimum of a 2 lb U-Channel post shall be used driven to a minimum depth of 3', (D) sign height shall be a minimum of 5' above the roadway surface unless there is a concern for pedestrians or bicycle traffic in which it shall be a minimum of 7', (E) lateral distance of signs shall be a minimum of 5' from the edge of shoulder or edge of pavement if no shoulder exist and 2' from the back of curb in urban areas.
- Vinyl Roll Up signs will be allowed for short term (less than 12 hours) daytime work provided that they meet all size, color, retroreflectivity requirements, and NCHRP 350.
- Mesh rollup signs shall not be allowed on any project.
- All signs shall be removed or covered when no longer applicable.
- Contractor shall use caution not to damage existing signs which remain in place. Any DOTD signs damaged by work operations shall be replaced.

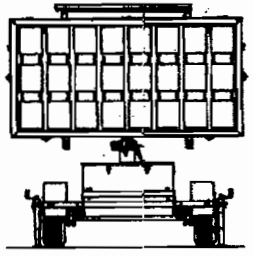
CHANNELIZING DEVICES

- The following devices may be used: Tubular Markers, Vertical Panels, Cones, Drums, and Super Cones. Drums (at standard spacing) and Super Cones (at ½ standard spacing) are the only devices allowed to be used in taper areas on the interstate system during daylight hours. Only drums can be used in tapers during night operations.
- The spacing of channelizing devices in a taper should not exceed a distance in feet equal to 1.0 times the posted speed limit in mph (with a maximum of 50 feet).
- The spacing of channelizing devices in a tangent should not exceed a distance in feet equal to 2.0 times the posted speed limit in mph (with a maximum of 100 feet) unless otherwise noted.
- Retroreflective material pattern used on super cones shall match that used on drums.
- 28" traffic cones are not allowed on: 1) Interstates, 2) Highways with speeds greater than 40 mph. During night time operations: 1) 28" and 36" cones are not allowed, 2) drums are the only device allowed in the taper.



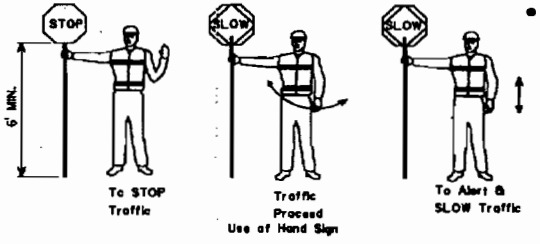
PORTABLE CHANGEABLE MESSAGE SIGNS

- When working within the traveled way, including shoulders and auxiliary lanes, Changeable Message Signs (CMS) shall be used on all Interstate Highways and on all other roadways (where space is available) with an ADT greater than 20,000 and should be delineated with retroreflective TTC devices. CMS will be paid for by each.
- When used in advance of a lane closure or a lane shift, the CMS should be placed on the right hand side of the road a minimum distance of 2 miles in advance of the taper for Interstates and to be determined by the Engineer on other highways.
- If vehicles are queing beyond the 2 mile CMS, an additional CMS should be placed on the right hand side of the road approximately 5 miles in advance of the taper for Interstates.
- CMS messages shall be approved by the District Traffic Operations Engineer (DTOE).
- When Portable Changeable Message signs are not being used, they should be removed; if not removed, they should be shielded by guardrail or barriers; or if the previous two options are not feasible, they should be delineated with retroreflective TTC devices.



FLAGGERS

- All flaggers must be qualified. The contractor shall be responsible for training or assuring that all flaggers are qualified to perform flagging duties. A Qualified Flagger is one that has completed courses such as those offered by the American Traffic Safety Services Association (ATSSA), The Associated General Contractors of America (AGC) or other courses approved by the Louisiana DOTD's Work Zone Task Force. The contractor shall be responsible for getting the flagger course approved.
- When utilized, a flagger shall use a minimum 18 inch octagonal shape sign on a minimum 6' stop/slow paddle and wear ANSI Class 2 Lime Green vest during day time operations and ANSI Class 3 Lime Green ensemble during night operations. In all flagging operations, the flagger must be visible from the flagger advance warning sign.



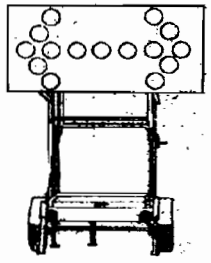
TYPE III BARRICADES

- All barricades shall use Type 3 High Intensity Sheeting on both sides of the barricade.
- All Type III Barricades shall be a minimum of 8 feet in length and must meet NCHRP 350 requirements.
- When signs and lights are to be mounted to a barricade, they must meet NCHRP 350 requirements.

MUTCD Website:
http://mutcd.fhwa.dot.gov/

FLASHING ARROW PANELS

- Flashing Arrow Panels shall be used for lane closures on all facilities with 2 or more lanes in a single direction and a speed limit greater than 35 mph.
- When used, flashing arrow panels should be located on the shoulder at the beginning of the taper.
- Where the shoulder width is limited, the flashing arrow panel should be placed within the closed lane as close to the beginning of the taper as practical.
- All Flashing Arrow Panels used on high speed roadways (45 mph and greater) shall be 4' x 8' Type C.
- When Flashing Arrow Panels signs are not being used, they should be removed; if not removed, they should be shielded by guardrail or barriers; or if the previous two options are not feasible, they should be delineated with retroreflective TTC devices.

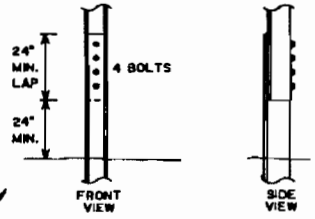


LIGHTING (see QPL)

- When used for overnight closures, lighting shall supplement all barricades that are placed in a closed lane or that extend across a highway. Two Type B High Intensity lights shall be used per lane closed in rural areas. In urban areas two Type A Low Intensity Lights may be used where adequate ambient lighting is available.
- One Type B High Intensity light shall be used to supplement the first sign (or pair of signs) that gives warning about a lane closure during night time operations.
- Type C steady burn lights shall be used on all channelizing devices in the taper as well as the first two devices in the tangent, for night use.

ALLOWABLE LAP SPLICE FOR U-CHANNEL POST

- U-Channel posts may be spliced where long lengths are required. The upper section shall overlap the lower section by at least 24 inches. The bottom edge of the upper section of the splice shall be a minimum of 24 inches above the ground. The spliced sections shall be secured with at least four ⅝ inch diameter hex bolts spaced equally along the splice.



ELECTRONIC COPY - NOT FOR SUBMITTAL

TRAFFIC ENGINEERING

TEMPORARY TRAFFIC CONTROL
GENERAL NOTES SHEET

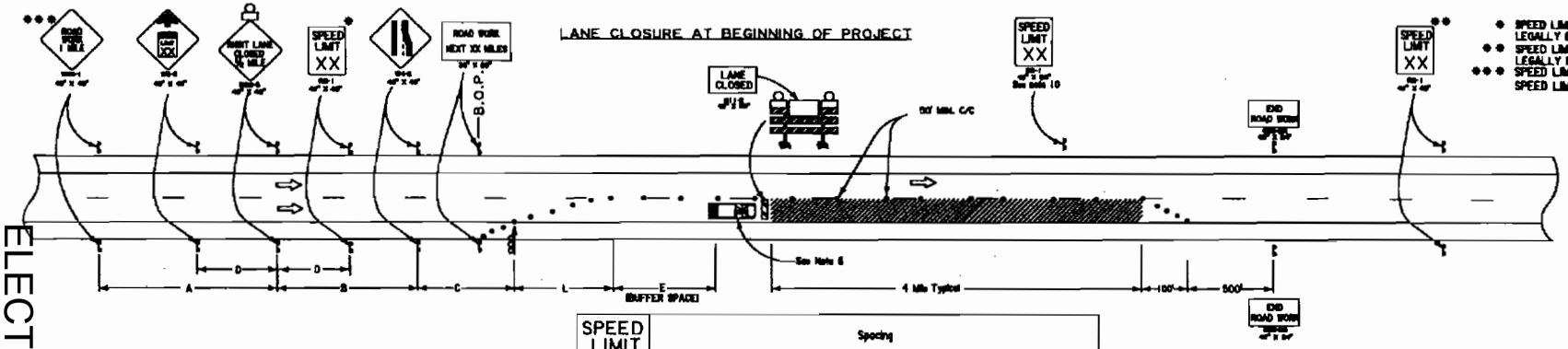
TC-00

NO.	DATE	REVISION DESCRIPTION	BY

DESIGNED	E. COURVILLE	PARISH	ORLEANS
CHECKED	J. COLVIN		
DETAILED	G. EDWARDS	FEDERAL PROJECT	
CHECKED	J. COLVIN		
DATE	01/25/2008	STATE PROJECT	450-90-0219
SHEET			

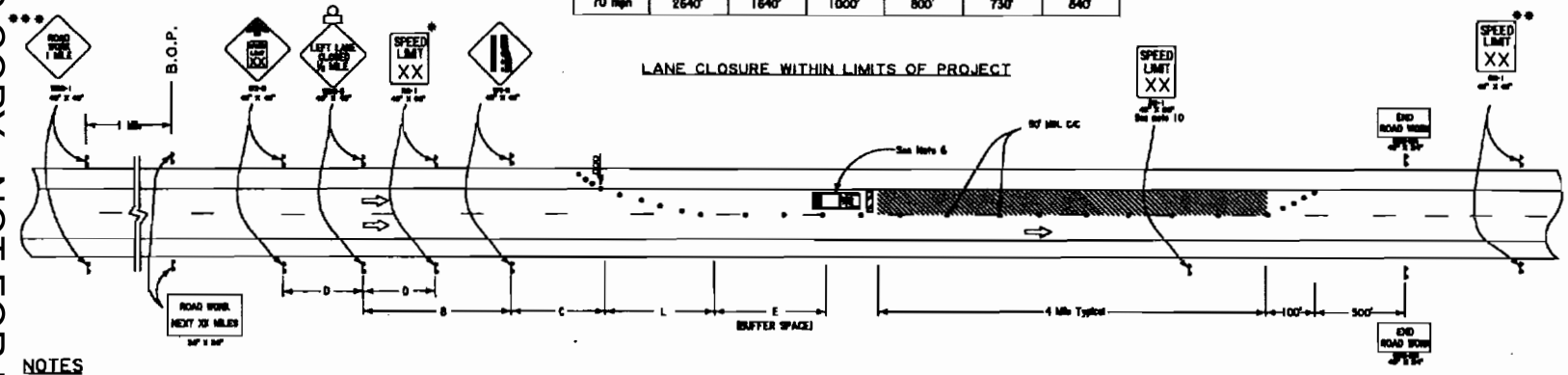
SHEET NO. 7

ELECTRONIC COPY - NOT FOR BID SUBMITTAL



* SPEED LIMIT IS TO BE 10 MPH LESS THAN LEGALLY ESTABLISHED SPEED LIMIT
** SPEED LIMIT IS TO BE RETURNED TO LEGALLY ESTABLISHED SPEED LIMIT
*** SPEED LIMIT > 45 MPH USE "ROAD WORK 1 MILE"
SPEED LIMIT ≤ 45 MPH USE "ROAD WORK AHEAD"

SPEED LIMIT	Spacing					
	'A'	'B'	'C'	'D'	'E'	'L'
45 mph	1140'	1000'	500'	500'	360'	540'
55 mph	2640'	1640'	1000'	800'	495'	660'
60 mph	2640'	1640'	1000'	800'	570'	720'
65 mph	2640'	1640'	1000'	800'	645'	780'
70 mph	2640'	1640'	1000'	800'	730'	840'



LEGEND

- Traffic Sign
- Channelizing Devices
- Type III Barricades
- Flashing Arrow Panel
- Work Area
- Type B Light

NOTES

THIS SHEET SHALL BE USED WITH THE "TEMPORARY TRAFFIC CONTROL GENERAL NOTES SHEET (TC-001)".

1. SPEED LIMIT REFERS TO THE LEGALLY ESTABLISHED SPEED LIMIT BEFORE CONSTRUCTION.
2. WHEN DOING ANY INTERSTATE WORK, A MINIMUM OF TWO DYNAMIC MESSAGE SIGNS PER DIRECTION SHALL BE PLACED IN ADVANCE OF THE LANE CLOSURE. GUIDANCE AS TO PLACEMENT IS SHOWN ON TC-00; HOWEVER, SPECIFIC DISTANCES TO BE SET BY THE PROJECT ENGINEER.
3. DOWNSTREAM TAPERS SHALL BE 100' PER LANE WITH CHANNELIZING DEVICES SPACED AT A SPACING OF 20'.
4. TYPE III BARRICADES SHALL BE PLACED IN THE CLOSED LANE AT A 1000' INTERVAL WHERE NO ACTIVE WORK IS ON GOING AND THE LANE MUST REMAIN CLOSED. TYPE III BARRICADES ARE ALSO REQUIRED BEFORE EACH OR GROUP OF UNFILLED HOLES OR HOLES FILLED WITH TEMPORARY MATERIAL, OR WHERE UNCURED CONCRETE EXISTS.
5. IF A RAMP ENTRANCE OR EXIT TAPER FALLS WITHIN THE WORK AREA, REFER TO STANDARD ROAD PLANS TC-08 AND TC-09 FOR TRAFFIC CONTROL DETAILS.
6. A VEHICLE WITH A FLASHING AMBER LIGHT AND A TRUCK MOUNTED ATTENUATOR SHALL BE USED IN ADVANCE OF AREAS WHERE WORKERS ARE PRESENT WITHOUT POSITIVE BARRIER PROTECTION.
7. CHANNELIZING DEVICES MAY ENCROACH UP TO 2 FEET FROM CENTERLINE INTO THE OPEN LANE ONLY AT SPECIFIC LOCATIONS WHERE ACTUAL WORK ACTIVITY IS TAKING PLACE. CHANNELIZING DEVICES SHALL BE RETURNED TO TO THE CLOSED LANE WHEN THE WORK ACTIVITY HAS PASSED. IN NO CASE SHALL THE MAINLINE WIDTH OF THE TRAVEL LANE BE LESS THAN 10'.
8. A FLAGGER SHALL BE USED TO ALERT MOTORISTS WHEN EQUIPMENT OR WORKERS ENCROACH WITHIN 2 FEET OF AN OPEN LANE. THE FLAGGER SHALL BE POSTED ADJACENT TO THE OPEN TRAVEL LANE AND IMMEDIATELY UPSTREAM OF EACH OPERATION. ENCROACHMENT SHALL BE HELD TO A MINIMUM.
9. WHEN THE LENGTH OF CLOSURE IS GREATER THAN 1 MILE, INSTALL SPEED LIMIT SIGNS AT 1 MILE INTERVALS.
10. IF CONDITIONS RESULT IN A DROPOFF OR RISE, BETWEEN LANE CLOSURE AND TRAVEL LANE, WHICH EXCEEDS 2 INCHES OVERNIGHT, THE CONTRACTOR SHALL PLACE A TEMPORARY EDGE LINE IN THE OPEN LANE. A MINIMUM OF 1 FOOT FROM THE DROPOFF OR RISE. IF THE CONTRACTOR CHOOSES TO USE DRUMS FOR THE CHANNELIZING DEVICES, THE TEMPORARY EDGE LINE MAY BE OMITTED AS LONG AS THE DEVICE SPACING IS 50' OR LESS. IN EITHER CASE, THE CHANNELIZING DEVICES SHALL BE PLACED IN THE CLOSED LANE DURING NONWORKING HOURS.
11. HIGH INTENSITY FLASHING LIGHTS SHALL BE USED TO MARK THE SECOND ADVANCE WARNING SIGN (_____LANE CLOSED 1/2 MILE). LOW INTENSITY FLASHING LIGHTS SHALL BE USED TO MARK ALL OTHER HAZARDS OFF THE TRAVEL WAY. STEADY BURNING LIGHTS SHALL BE USED ON ALL TRAFFIC CONTROL DEVICES USED FOR MERGING TAPER, INCLUDING THE FIRST TWO DEVICES AFTER THE TAPER ENDS. FIRST LIGHT IN A MERGING TAPER SHALL BE FLASHING.
12. THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A MERGING TAPER AND SHIFTING TAPER SHALL NOT BE GREATER THAN 50'.
13. ANY SIGNS IN CONFLICT WITH CONSTRUCTION SIGNING SHALL BE REMOVED OR COVERED.
14. MINIMUM CONSTRUCTION SIGNING: ANY ADDITIONAL SIGNS SHOWN IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND REQUIRED BY THE PROJECT ENGINEER SHALL BE INSTALLED UNDER ITEM 713-01.
15. NEITHER WORK ACTIVITY NOR STORAGE OF EQUIPMENT, VEHICLES, OR MATERIALS SHALL OCCUR WITHIN THE BUFFER SPACE.

TRAFFIC ENGINEERING

TRAFFIC CONTROL LAYOUT FOR
LANE CLOSURES ON DIVIDED HIGHWAYS

TC-06

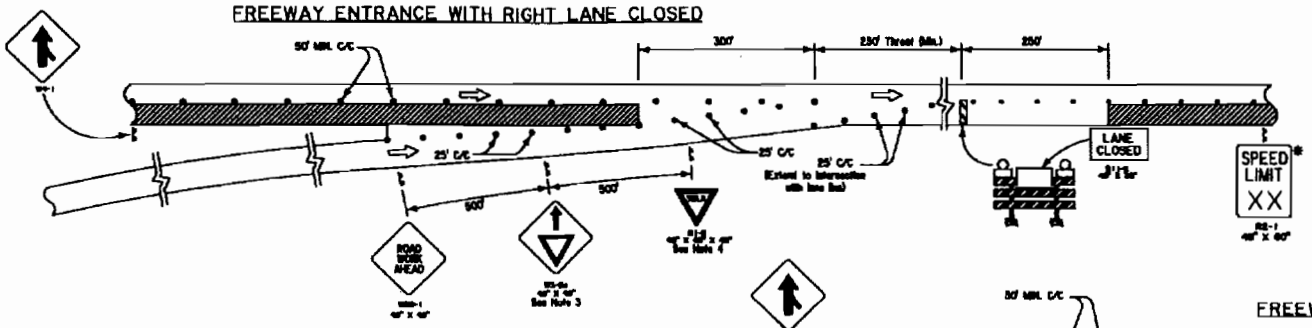
NO.	DATE	REVISION DESCRIPTION	BY

DESIGNED	E. COURVILLE	PARISH	ORLEANS
CHECKED	J. COLVIN		
DETAILED	D. EDWARDS	FEDERAL PROJECT	
CHECKED	J. COLVIN		
DATE	01/23/2008	STATE PROJECT	450-90-0219
SHEET			

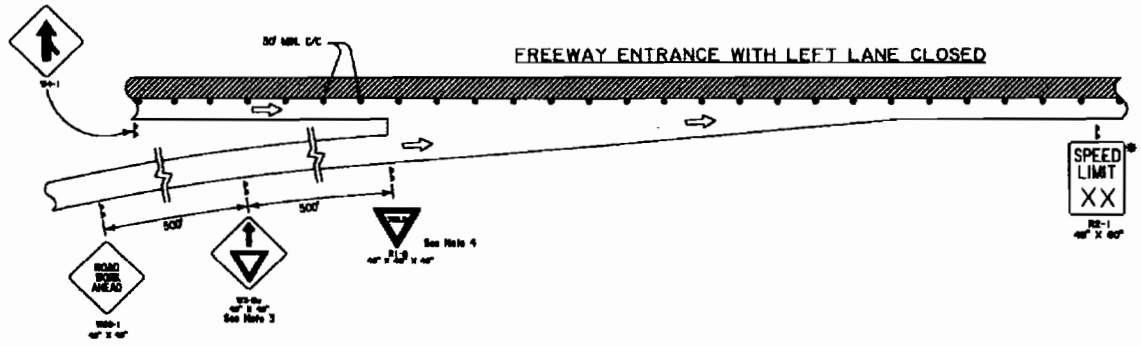
SHEET NO. 7a

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

FREEWAY ENTRANCE WITH RIGHT LANE CLOSED

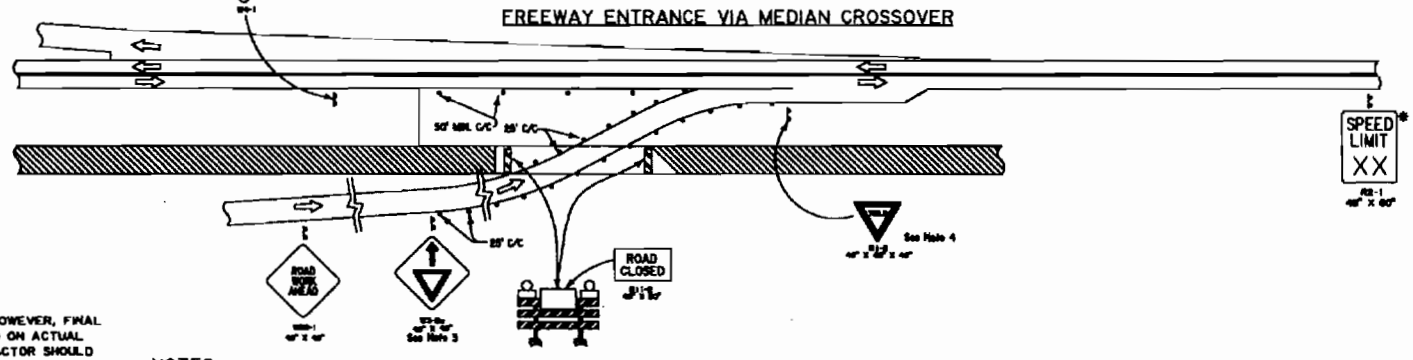


FREEWAY ENTRANCE WITH LEFT LANE CLOSED



* SPEED LIMIT IS TO BE 10 MPH LESS THAN LEGALLY ESTABLISHED SPEED LIMIT

FREEWAY ENTRANCE VIA MEDIAN CROSSOVER



NOTE

TYPICAL APPLICATIONS; HOWEVER, FINAL DESIGN SHOULD BE BASED ON ACTUAL GEOMETRICS. THE CONTRACTOR SHOULD CONSULT WITH THE PROJECT ENGINEER.

LEGEND

- Traffic Sign
- Channelizing Devices
- Type III Barricades
- Work Area
- Type B Light

NOTES

THIS SHEET SHALL BE USED WITH THE "TEMPORARY TRAFFIC CONTROL GENERAL NOTES SHEET (TC-001)".

1. FOR MAINLINE LANE CLOSURES SEE OTHER SHEETS.
2. CHANNELIZING DEVICES ON THE LANE LINE SHALL BE OF THE SAME TYPE. CHANNELIZING DEVICES IN EACH TAPER SHALL BE OF THE SAME TYPE.
3. THE "YIELD AHEAD" SIGN IS REQUIRED EXCEPT FOR SHORT TERM MAINTENANCE OPERATIONS WHERE ITS USE MAY BE AN OPTION AS DETERMINED BY THE PROJECT ENGINEER.
4. USE EXISTING "YIELD" SIGN IF PRESENT, OTHERWISE FURNISH "YIELD" SIGN. WHERE INADEQUATE ACCELERATION DISTANCE EXISTS FOR THE TEMPORARY ENTRANCE, THE YIELD SIGN SHALL BE REPLACED WITH STOP SIGNS (ONE ON EACH SIDE OF THE APPROACH), AND STOP AHEAD SIGNS SHALL REPLACE THE YIELD AHEAD SIGNS.
5. LOCATION OF CHANNELIZING DEVICES WITHIN THE GORE AREA TO BE BASED ON DRIVER SIGHT DISTANCE. TO BE DETERMINED BY THE DISTRICT TRAFFIC OPERATIONS ENGINEER.
6. ANY SIGNS IN CONFLICT WITH CONSTRUCTION SIGNING SHALL BE REMOVED OR COVERED.
7. MINIMUM CONSTRUCTION SIGNING; ANY ADDITIONAL SIGNS SHOWN IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND REQUIRED BY THE PROJECT ENGINEER SHALL BE INSTALLED UNDER ITEM 713-01.

TRAFFIC ENGINEERING

TRAFFIC CONTROL LAYOUT
FOR WORK AREA THROUGH RAMP ENTRANCE TAPER

TC-08

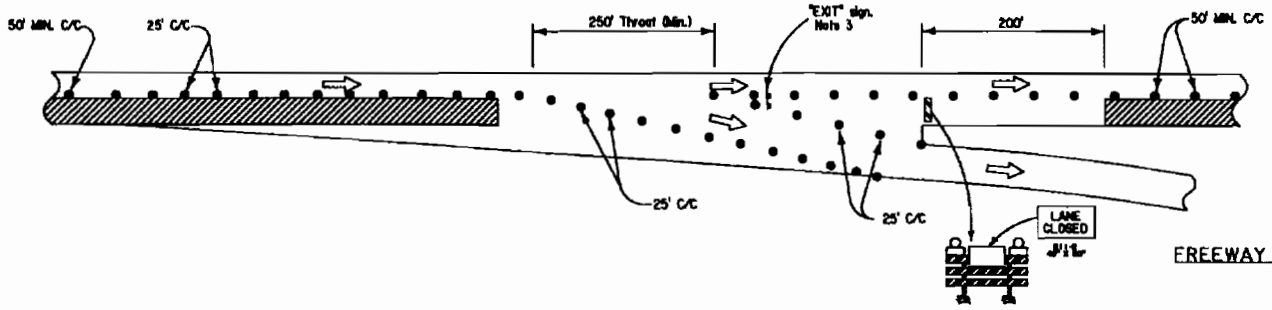
NO.	DATE	REVISION DESCRIPTION	BY

DESIGNED	E. COURVILLE	PARISH	ORLEANS
CHECKED	J. COLVIN		
DETAILED	D. SOWARDS	FEDERAL PROJECT	
CHECKED	J. COLVIN		
DATE	01/25/2008	STATE PROJECT	450-90-0219
SHEET			

SHEET NO. 7b

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

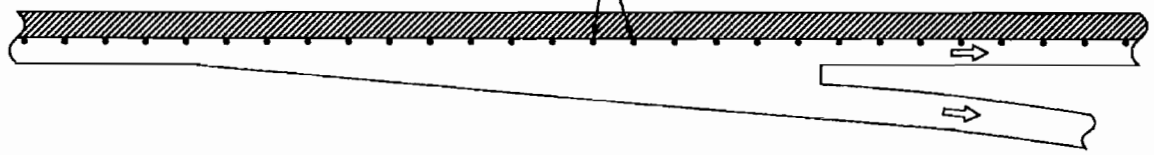
FREEWAY EXIT WITH RIGHT LANE CLOSED



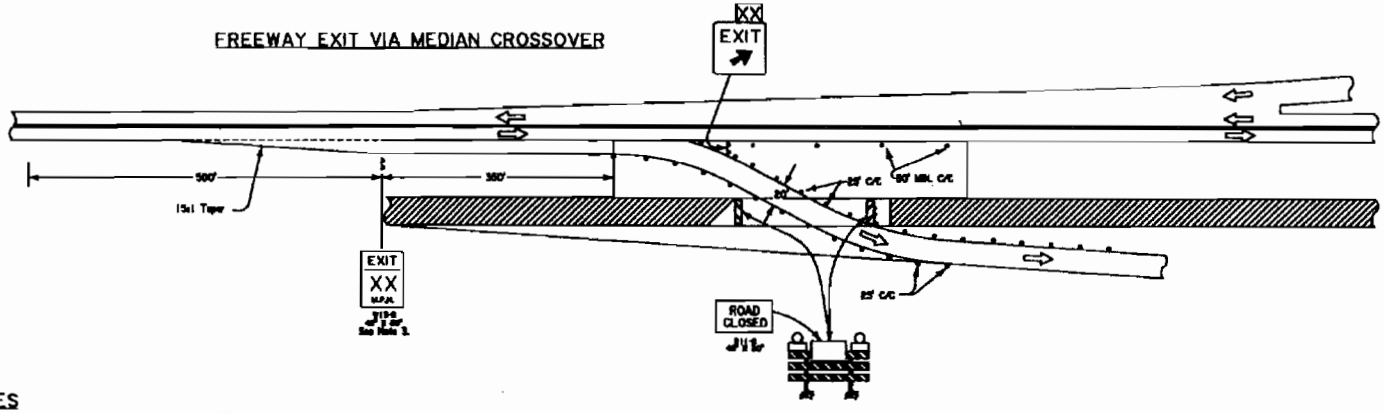
LEGEND

- Traffic Sign
- Channelizing Devices
- Work Area
- Type III Barricades
- Temporary Traffic Barrier
- Type B Light

FREEWAY EXIT WITH LEFT LANE CLOSED



FREEWAY EXIT VIA MEDIAN CROSSOVER



NOTES

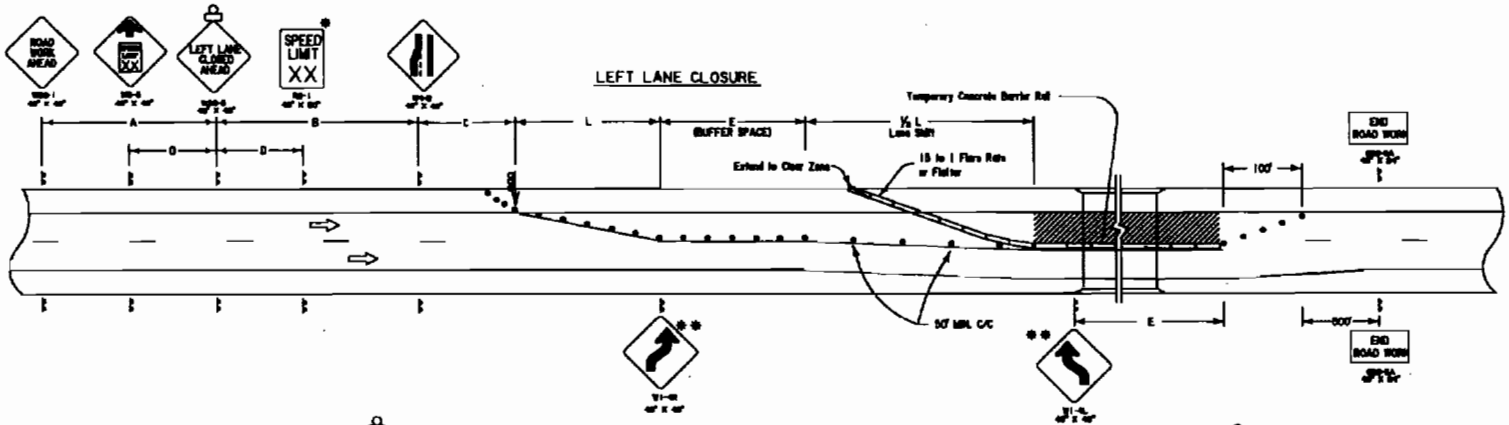
THIS SHEET SHALL BE USED WITH THE "TEMPORARY TRAFFIC CONTROL GENERAL NOTES SHEET (TC-00)".

1. FOR MAINLINE LANE CLOSURES SEE OTHER SHEETS.
2. CHANNELIZING DEVICES ON THE LANE LINE SHALL BE OF THE SAME TYPE. CHANNELIZING DEVICES IN EACH TAPER SHALL BE OF THE SAME TYPE.
3. THE MOUNTING HEIGHT OF THE TEMPORARY "EXIT" SIGN SHALL BE A MINIMUM OF 7 FEET FROM THE PAVEMENT SURFACE TO THE BOTTOM OF THE SIGN. THE EXISTING GREEN AND WHITE "EXIT" SIGN SHALL BE COVERED. IF THE TEMPORARY "EXIT" SIGN WILL BE IN PLACE FOR MORE THAN ONE DAY, AN "EXIT NUMBER PANEL" DISPLAYING THE PROPER EXIT NUMBER SHALL BE PLACED ABOVE THE TEMPORARY "EXIT" SIGN.
4. EXIT SPEED TO BE SET ACCORDING TO DESIGN CRITERIA FOR THE CROSSOVER.
5. ANY SIGNS IN CONFLICT WITH CONSTRUCTION SIGNING SHALL BE REMOVED OR COVERED.
6. MINIMUM CONSTRUCTION SIGNING; ANY ADDITIONAL SIGNS SHOWN IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND REQUIRED BY THE PROJECT ENGINEER SHALL BE INSTALLED UNDER ITEM 713-01.

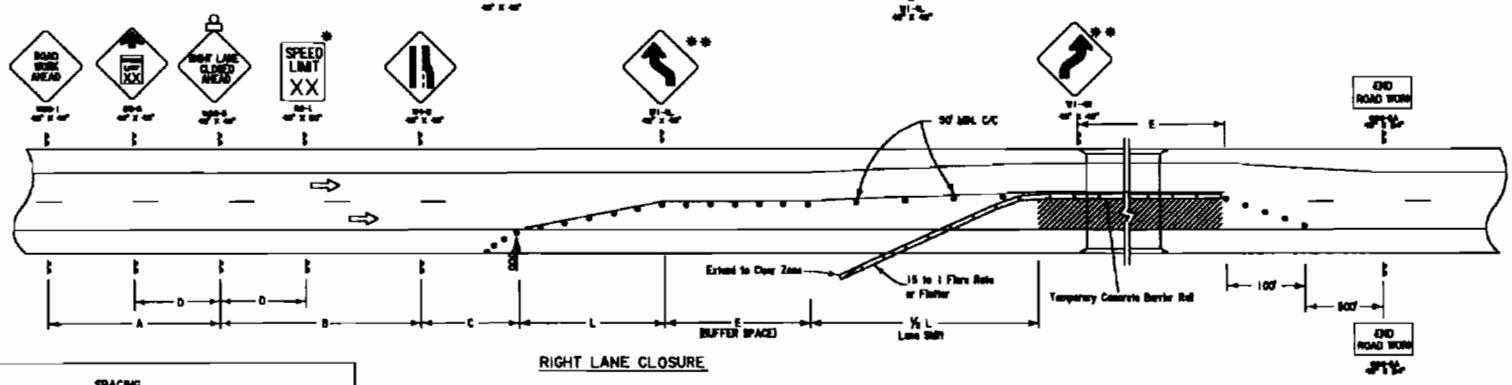
TRAFFIC ENGINEERING	**TRAFFIC CONTROL LAYOUT** FOR WORK AREA THROUGH RAMP EXIT TAPER	NO.	DATE	REVISION DESCRIPTION	BY	DESIGNED / CHECKED	PARISH: ORLEANS
	TC-09					DETAILED / CHECKED	FEDERAL PROJECT:
						DATE / SHEET	STATE PROJECT: 450-90-0219

SHEET NO. 7C

ELECTRONIC COPY - NOT FOR BID SUBMITTAL



LEFT LANE CLOSURE



RIGHT LANE CLOSURE

SPEED LIMIT	SPACING					
	'A'	'B'	'C'	'D'	'E'	'L'
45 mph	1140'	1000'	500'	500'	360'	540'
55 mph	2640'	1640'	1000'	800'	495'	660'
60 mph	2640'	1640'	1000'	800'	570'	720'
65 mph	2640'	1640'	1000'	800'	645'	780'
70 mph	2640'	1640'	1000'	800'	730'	840'

* SPEED LIMIT IS TO BE 10 MPH LESS THAN LEGALLY ESTABLISHED SPEED LIMIT

** TO BE USED ONLY WHEN A LANE SHIFT IS UTILIZED

LEGEND

- Traffic Sign
- Channelizing Devices
- Flashing Arrow Panel (Type 'C')
- Work Area
- Type B Light
- Concrete Barrier

NOTES

THIS SHEET SHALL BE USED WITH THE "TEMPORARY TRAFFIC CONTROL GENERAL NOTES SHEET (TC-001)".

1. THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A MERGING TAPER SHALL BE APPROXIMATELY EQUAL IN FEET TO THE SPEED LIMIT.
2. CHANNELIZING DEVICES ON THE LANE LINE SHALL BE OF THE SAME TYPE. CHANNELIZING DEVICES IN EACH TAPER SHALL BE OF THE SAME TYPE.
3. IF A RAMP ENTRANCE OR EXIT TAPER FALLS WITHIN THE WORK AREA, REFER TO STANDARD ROAD PLAN TC-08 AND TC-09 FOR TRAFFIC CONTROL DETAILS.
4. DOWNSTREAM TAPERS SHALL CONTAIN A MINIMUM OF 4 CHANNELIZING DEVICES.
5. BROKEN LANE LINE SHALL BE REMOVED IN AREA OF TAPER.
6. PARKING OF VEHICLES OR UNATTENDED EQUIPMENT, OR STORAGE OF MATERIALS, WITHIN THE CLEAR ZONE SHALL NOT BE PERMITTED UNLESS PROTECTED BY FUNCTIONING BARRIER RAIL.
7. ANY SIGNS IN CONFLICT WITH CONSTRUCTION SIGNING SHALL BE REMOVED OR COVERED.
8. MINIMUM CONSTRUCTION SIGNING: ANY ADDITIONAL SIGNS SHOWN IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND REQUIRED BY THE PROJECT ENGINEER SHALL BE INSTALLED UNDER ITEM 713-01.
9. SPEED LIMIT REFERS TO THE LEGALLY ESTABLISHED SPEED LIMIT BEFORE CONSTRUCTION.
10. HIGH INTENSITY FLASHING LIGHTS SHALL BE USED TO MARK THE SECOND ADVANCE WARNING SIGN (_____ LANE CLOSED AHEAD). LOW INTENSITY FLASHING LIGHTS SHALL BE USED TO MARK ALL OTHER HAZARDS OFF THE TRAVEL WAY. STEADY BURNING LIGHTS SHALL BE USED ON ALL TRAFFIC CONTROL DEVICES USED FOR MERGING TAPER, INCLUDING THE FIRST TWO DEVICES AFTER THE TAPER ENDS. FIRST LIGHT IN A MERGING TAPER SHALL BE FLASHING.
11. NEITHER WORK ACTIVITY NOR STORAGE OF EQUIPMENT, VEHICLES, OR MATERIALS SHALL OCCUR WITHIN THE BUFFER SPACE.

STATE OF LOUISIANA
CARL E. COURVILLE
REG. No. 29812
CIVIL ENGINEER

January 25, 2008

TRAFFIC ENGINEERING

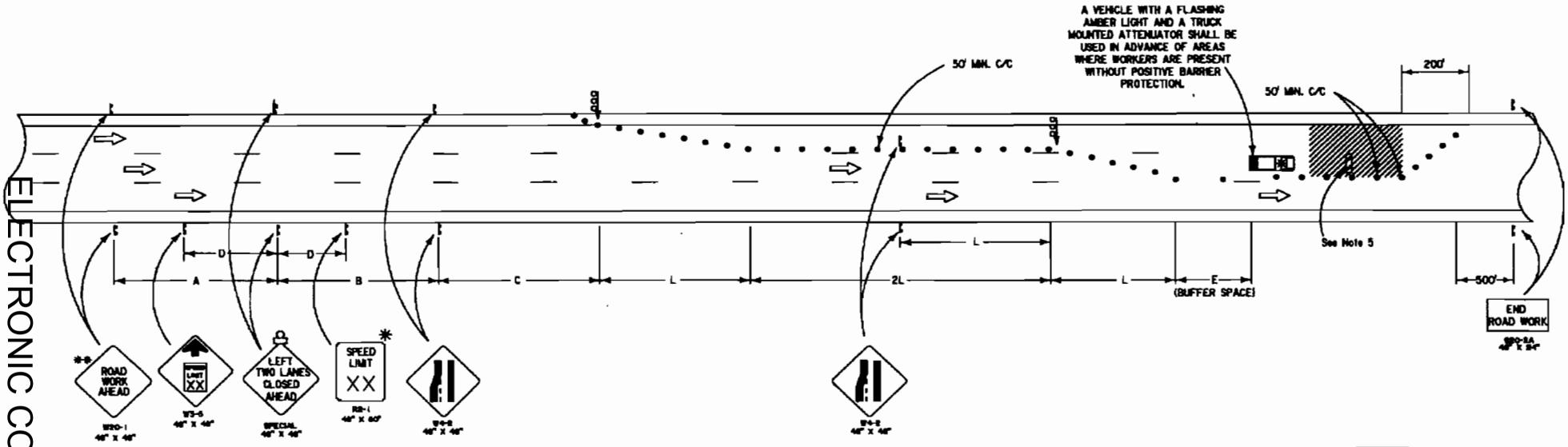
TRAFFIC CONTROL LAYOUT
FOR LANE CLOSURE USING TEMPORARY BARRIER RAIL DIVIDED HIGHWAYS

TC-11

NO.	DATE	REVISION DESCRIPTION	BY

DESIGNED	E. COURVILLE	PARISH	ORLEANS
CHECKED	J. COLVIN		
DETAILED	D. BOWARDS	FEDERAL PROJECT	
CHECKED	J. COLVIN		
DATE	01/25/2008	STATE PROJECT	450-90-0219
SHEET			

SHEET NO. 7d



SPEED LIMIT	SPACING					
	'A'	'B'	'C'	'D'	'E'	'L'
25 mph	250'	250'	250'	n/a	155'	125'
35 mph	650'	500'	350'	n/a	250'	245'
45 mph	1140'	1000'	500'	500'	360'	540'
55 mph	2640'	1640'	1000'	800'	495'	660'
60 mph	2640'	1640'	1000'	800'	570'	720'

* SPEED LIMIT IS TO BE 10 MPH LESS THAN LEGALLY ESTABLISHED SPEED LIMIT FOR SPEEDS ≥ 45 MPH

** SPEED LIMIT > 45 MPH USE "ROAD WORK 1 MILE"
SPEED LIMIT ≤ 45 MPH USE "ROAD WORK AHEAD"

NOTES

THIS SHEET SHALL BE USED WITH THE "TEMPORARY TRAFFIC CONTROL GENERAL NOTES SHEET (TC-001".

1. SPEED LIMIT REFERS TO THE LEGALLY ESTABLISHED SPEED LIMIT BEFORE CONSTRUCTION.
2. THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A TAPER SHALL NOT EXCEED 50'.
3. A "ROAD WORK AHEAD" SIGN SHALL BE PLACED 300 TO 500 FEET AHEAD OF THE ENTRANCE RAMP NOSE FOR ANY RAMP WITHIN THE AREA OF TRAFFIC CONTROL SIGNING. IF A RAMP ENTRANCE OR EXIT TAPER FALLS WITHIN THE WORK AREA, REFER TO STANDARD ROAD PLAN TC-08 AND TC-09 FOR TRAFFIC CONTROL DETAILS.
4. CHANNELIZING DEVICES ON THE LANE LINE SHALL BE OF THE SAME TYPE. CHANNELIZING DEVICES IN EACH TAPER SHALL BE OF THE SAME TYPE.
5. TYPE III BARRICADES SHALL BE PLACED IN THE CLOSED LANE AT A 1000' INTERVAL WHERE NO ACTIVE WORK IS ON GOING AND THE LANE MUST REMAIN CLOSED. TYPE III BARRICADES ARE ALSO REQUIRED BEFORE EACH OR GROUP OF UNFILLED HOLES OR HOLES FILLED WITH TEMPORARY MATERIAL, OR WHERE UNCURED CONCRETE EXISTS.
6. WHEN TRAFFIC CONTROL IS PLANNED TO BE IN PLACE FOR MORE THAN 3 DAYS, CONFLICTING PAVEMENT MARKINGS SHALL BE REMOVED AND TEMPORARY MARKINGS ADDED.
7. ANY SIGNS IN CONFLICT WITH CONSTRUCTION SIGNING SHALL BE REMOVED OR COVERED.
8. ANY ADDITIONAL SIGNS SHOWN IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND REQUIRED BY THE PROJECT ENGINEER SHALL BE INSTALLED UNDER ITEM 713-01.
9. HIGH INTENSITY FLASHING LIGHTS SHALL BE USED TO MARK THE SECOND ADVANCE WARNING SIGN (LEFT TWO LANES CLOSED AHEAD). LOW INTENSITY FLASHING LIGHTS SHALL BE USED TO MARK ALL OTHER HAZARDS OFF THE TRAVEL WAY. STEADY BURNING LIGHTS SHALL BE USED ON ALL TRAFFIC CONTROL DEVICES USED FOR MERGING TAPER, INCLUDING THE FIRST TWO DEVICES AFTER THE TAPER ENDS. FIRST LIGHT IN A MERGING TAPER SHALL BE FLASHING.
10. NEITHER WORK ACTIVITY NOR STORAGE OF EQUIPMENT, VEHICLES, OR MATERIALS SHALL OCCUR WITHIN THE BUFFER SPACE.

LEGEND

- Traffic Sign
- Channelizing Devices
- Type III Barricades
- Flashing Arrow Panel (Type "C")
- Work Area
- Type B Light

STATE OF LOUISIANA
CARL E. COURVILLE
REG. No. 28512
REGISTERED PROFESSIONAL ENGINEER
January 25, 2007

TRAFFIC ENGINEERING

TRAFFIC CONTROL LAYOUT
FOR CLOSURE OF TWO LANES ON A MULTILANE HIGHWAY

TC-13

NO.	DATE	REVISION DESCRIPTION	BY

DESIGNED	E. COURVILLE	PARISH	ORLEANS
CHECKED	J. COLVIN		
DETAILED	G. BOWARDS	FEDERAL PROJECT	
CHECKED	J. COLVIN		
DATE	01/25/2007	STATE PROJECT	450-90-0219
SHEET			

SHEET NO. 7e

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

* SPEED LIMIT IS TO BE 10 MPH LESS THAN THE LEGALLY ESTABLISHED SPEED LIMIT

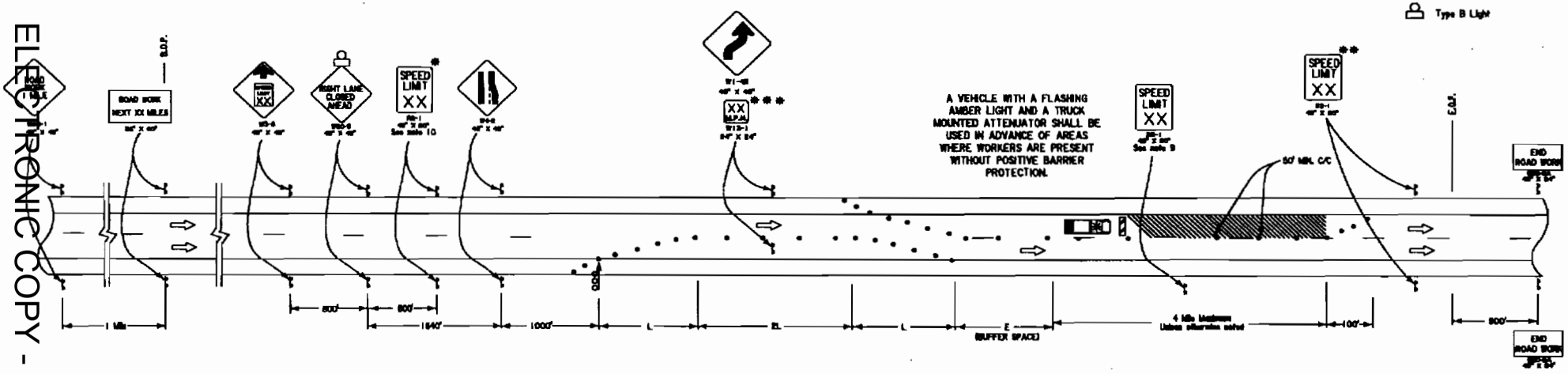
** SPEED LIMIT IS TO BE RETURNED TO THE LEGALLY ESTABLISHED SPEED LIMIT

*** MAY USE AN ADVISORY SPEED PLAQUE (W13-1) IF DEEMED NECESSARY. ADVISORY SPEED TO BE DETERMINED BY THE DISTRICT TRAFFIC OPERATIONS ENGINEER.

SPEED LIMIT	Spacing	
	'E'	'L'
60 mph	570'	720'
65 mph	645'	780'
70 mph	730'	840'

LEGEND

- Traffic Sign
- Channelizing Devices
- Type III Barricades
- Flashing Arrow Panel
- Work Area
- Type B Light



NOTES

THIS SHEET SHALL BE USED WITH THE "TEMPORARY TRAFFIC CONTROL GENERAL NOTES SHEET (TC-00)".

1. WHEN DOING ANY INTERSTATE WORK, OR THE AVERAGE DAILY TRAFFIC (ADT) EXCEEDS 20,000 VEHICLES PER DAY OR WHEN THE TRAFFIC QUEUES BEYOND THE ADVANCED SIGNING, A MINIMUM OF TWO CMS SIGNS PER DIRECTION SHALL BE PLACED IN ADVANCE OF THE LANE CLOSURE. GUIDANCE AS TO PLACEMENT IS SHOWN ON TC-00; HOWEVER, SPECIFIC DISTANCES TO BE SET BY THE PROJECT ENGINEER.

2. THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A MERGING TAPER AND SHIFTING TAPER SHALL BE APPROXIMATELY EQUAL IN FEET TO THE SPEED LIMIT BEFORE ROAD WORK.

3. TYPE III BARRICADES SHALL BE PLACED IN THE CLOSED LANE AT A 1000' INTERVAL WHERE NO ACTIVE WORK IS ON GOING AND THE LANE MUST REMAIN CLOSED. TYPE III BARRICADES ARE ALSO REQUIRED BEFORE EACH OR GROUP OF UNFILLED HOLES OR HOLES FILLED WITH TEMPORARY MATERIAL, OR WHERE UNCURED CONCRETE EXISTS.

4. IF A RAMP ENTRANCE OR EXIT TAPER FALLS WITHIN THE WORK AREA, REFER TO STANDARD ROAD PLANS TC-08 AND TC-09 FOR TRAFFIC CONTROL DETAILS.

5. A FLAGGER SHALL BE USED TO ALERT MOTORISTS WHEN EQUIPMENT OR WORKERS ENCROACH WITHIN 2 FEET OF AN OPEN LANE. THE FLAGGER SHALL BE POSTED ADJACENT TO THE OPEN TRAFFIC LANE AND IMMEDIATELY UPSTREAM OF EACH OPERATION. ENCROACHMENT SHALL BE HELD TO A MINIMUM.

6. A VEHICLE WITH A FLASHING AMBER LIGHT AND A TRUCK MOUNTED ATTENUATOR SHALL BE USED IN ADVANCE OF AREAS WHERE WORKERS ARE PRESENT WITHOUT POSITIVE BARRIER PROTECTION.

7. UNDER NORMAL CLOSURE CONDITIONS, DEVICES SHOULD BE PLACED 2' FROM CENTERLINE INTO THE CLOSED LANE. CHANNELIZING DEVICES MAY ENCROACH UP TO 2' FROM CENTERLINE INTO THE OPEN LANE ONLY AT SPECIFIC LOCATIONS WHERE ACTUAL WORK ACTIVITY IS TAKING PLACE. CHANNELIZING DEVICES SHALL BE RETURNED TO THE CLOSED LANE WHEN THE WORK ACTIVITY HAS PASSED. IN NO CASE SHALL THE MAINLINE WIDTH OF THE TRAVEL LANE BE LESS THAN 10'.

8. WHEN THE LENGTH OF CLOSURE IS GREATER THAN 1 MILE, INSTALL SPEED LIMIT SIGNS AT 1 MILE INTERVALS.

FOR LANE-LINE DROPOFF OR RISE:

9. IF CONDITIONS RESULT IN A DROPOFF OR RISE WHICH EXCEEDS 2" OVERNIGHT, THE CONTRACTOR SHALL PLACE A TEMPORARY EDGE LINE IN THE OPEN LANE. A MINIMUM OF 1' FROM THE DROPOFF OR RISE. (IF THE CONTRACTOR CHOOSES TO USE DRUMS FOR THE CHANNELIZING DEVICES, THE TEMPORARY EDGE LINE MAY BE OMITTED AS LONG AS THE DRUM SPACING IS 50'. IN EITHER CASE, THE CHANNELIZING DEVICES SHALL BE PLACED IN THE CLOSED LANE DURING NONWORKING HOURS.

10. HIGH INTENSITY FLASHING LIGHTS SHALL BE USED TO MARK THE SECOND ADVANCE WARNING SIGN (RIGHT LANE CLOSED AHEAD). LOW INTENSITY FLASHING LIGHTS SHALL BE USED TO MARK ALL OTHER HAZARDS OFF THE TRAVEL WAY. STEADY BURNING LIGHTS SHALL BE USED ON ALL TRAFFIC CONTROL DEVICES USED FOR MERGING TAPER, INCLUDING THE FIRST TWO DEVICES AFTER THE TAPER ENDS. FIRST LIGHT IN A MERGING TAPER SHALL BE FLASHING.

11. ANY SIGNS IN CONFLICT WITH CONSTRUCTION SIGNING SHALL BE REMOVED OR COVERED.

12. MINIMUM CONSTRUCTION SIGNING; ANY ADDITIONAL SIGNS SHOWN IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND REQUIRED BY THE PROJECT ENGINEER SHALL BE INSTALLED UNDER ITEM T13-01.

13. NEITHER WORK ACTIVITY NOR STORAGE OF EQUIPMENT, VEHICLES, OR MATERIALS SHALL OCCUR WITHIN THE BUFFER SPACE.

STATE OF LOUISIANA
CARL E. COURVILLE
REG. NO. 28818
PROFESSIONAL ENGINEER
JANUARY 25, 2008

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

TRAFFIC ENGINEERING

TRAFFIC CONTROL LAYOUT
FOR LOUISIANA LEFT ON INTERSTATE HIGHWAYS

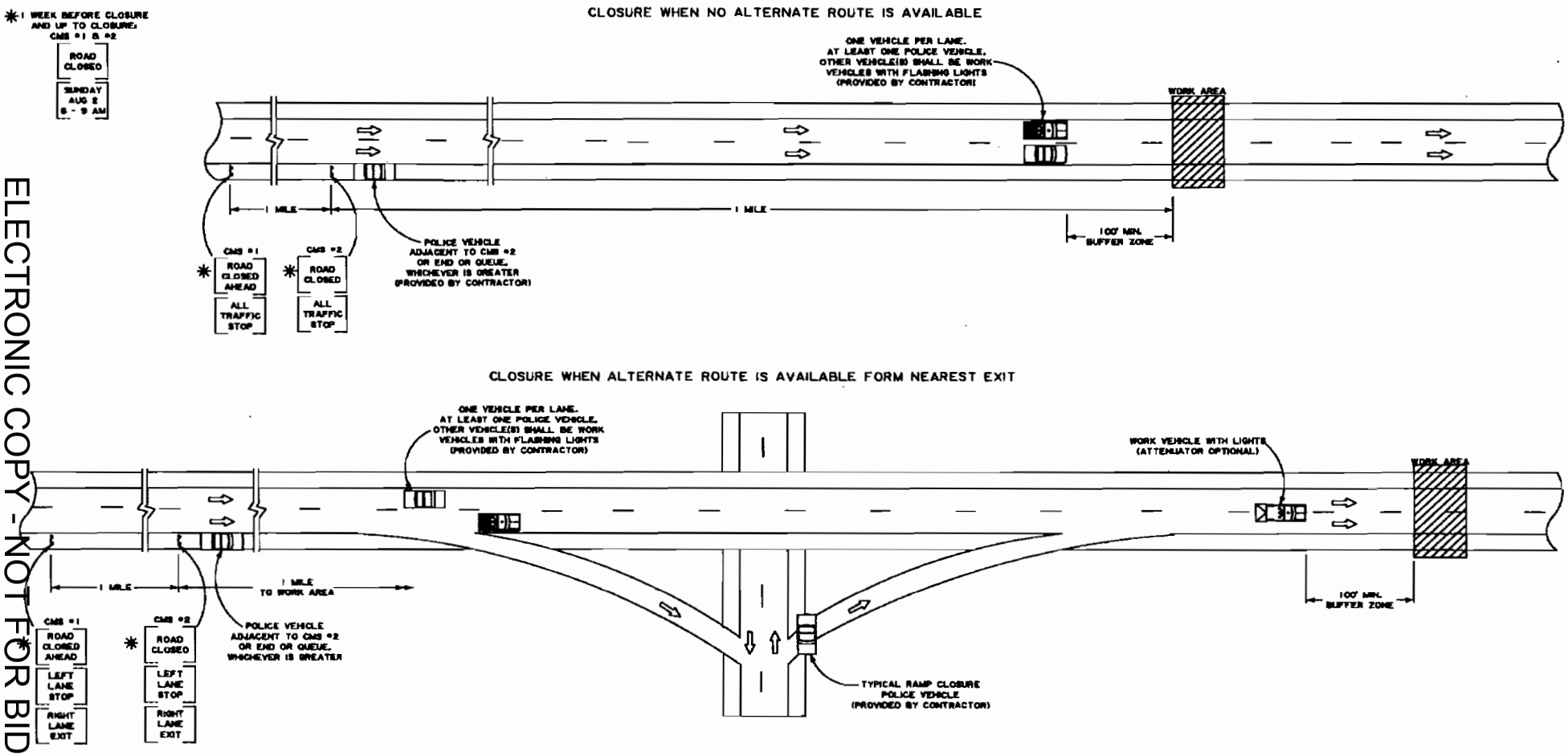
TC-14

NO.	DATE	REVISION DESCRIPTION	BY

DESIGNED	E. COURVILLE	PARISH	ORLEANS
CHECKED	J. COLVIN		
DETAILED	D. SOWARDS	FEDERAL PROJECT	
CHECKED	J. COLVIN		
DATE	DI/ES/CCOS	STATE PROJECT	450-90-0219
SHEET			

SHEET NO. 7f

ELECTRONIC COPY - NOT FOR BID SUBMITTAL



NOTES

1. THIS SHEET SHALL BE USED WITH THE "TEMPORARY TRAFFIC CONTROL GENERAL NOTES SHEET (TC-00)".
2. THIS TYPE OF HIGHWAY CLOSURE SHALL ONLY BE USED FOR EMERGENCIES OR FOR CONSTRUCTION OPERATIONS APPROVED BY THE ENGINEER AND WHEN THE DURATION OF CLOSURE WILL NOT EXCEED 15 MINUTES. AFTER THE DIVIDED HIGHWAY HAS BEEN CLOSED AND REOPENED VIA THIS PROCEDURE A MINIMUM PERIOD OF 30 MINUTES OR QUEUE DISSIPATION SHALL ELAPSE BEFORE ANOTHER SHORT DURATION CLOSURE, EXCEPT WITH THE APPROVAL OF THE ENGINEER.
2. A MINIMUM OF TWO POLICE OFFICERS AND TWO POLICE CARS SHALL BE PROVIDED ON EACH APPROACH TO THE CLOSURE. EACH POLICE CAR SHALL HAVE A ROOF MOUNTED ROTATION BLUE LIGHT OR LIGHT BAR.
3. GENERALLY ROAD CLOSURES ARE NOT PERMITTED ON HOLIDAYS OR BETWEEN THE HOURS OF 6 AM TO 9 AM, 11 AM TO 1 PM AND 3 PM TO 6 PM ON MONDAY THROUGH FRIDAY, UNLESS AUTHORIZED BY THE ENGINEER.
4. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO BE INCLUDED IN ITEM 713-01, INCLUDING SECURING POLICE SERVICES.

LEGEND

POLICE CAR

WORK VEHICLE

WORK VEHICLE

STATE OF LOUISIANA
CARL E. COURVILLE
REG. No. 22012
CIVIL ENGINEERING
JANUARY 25, 2008

TRAFFIC ENGINEERING

TRAFFIC CONTROL LAYOUT
FOR SHORT DURATION CLOSING OF DIVIDED HIGHWAYS

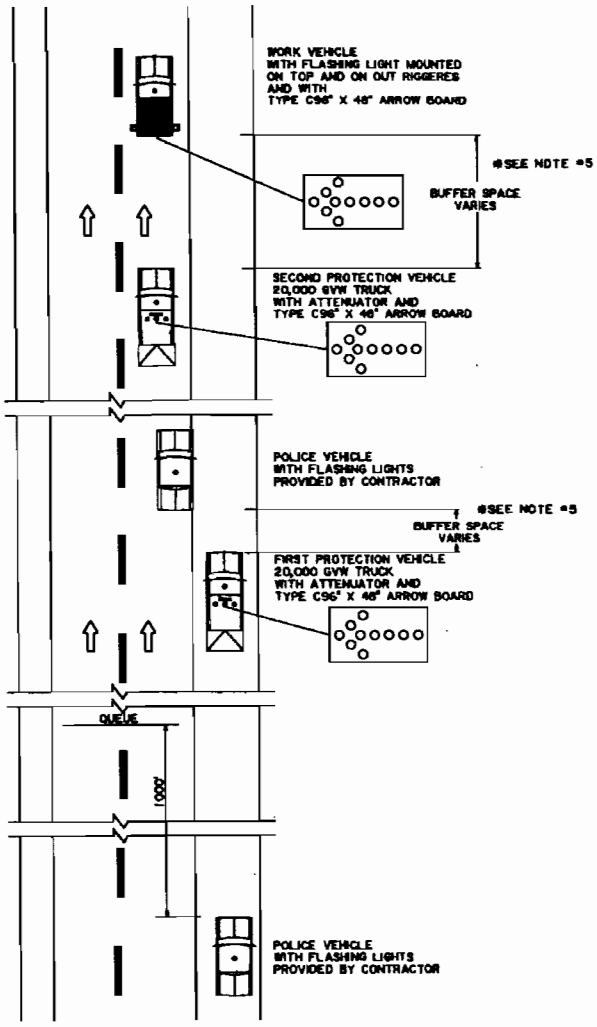
TC-17

NO.	DATE	REVISION DESCRIPTION	BY

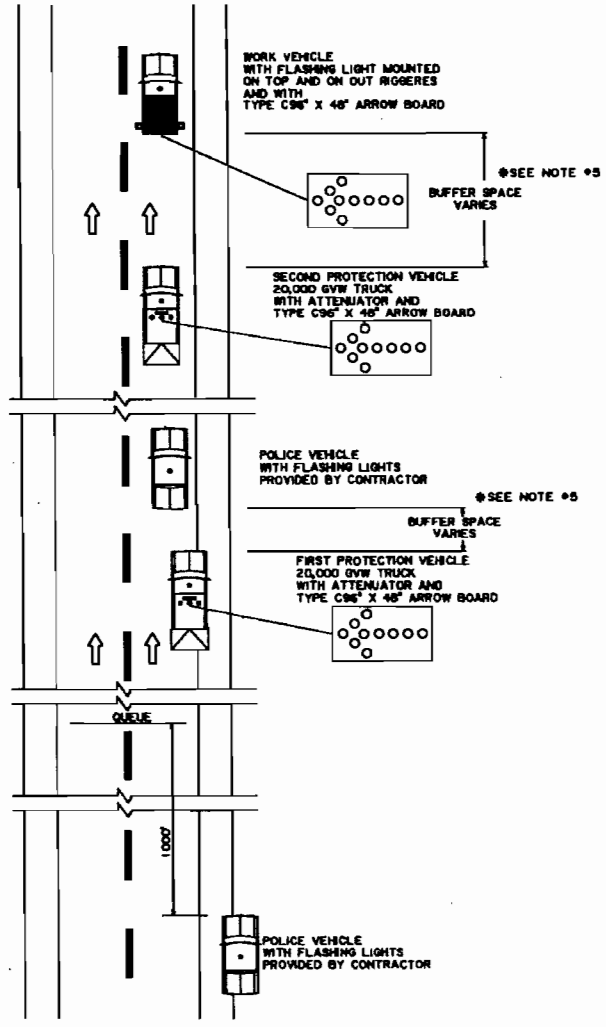
DESIGNED	E. COURVILLE	PARISH	ORLEANS
CHECKED	J. COLVIN		
DETAILED	D. EDWARDS	FEDERAL PROJECT	
CHECKED	J. COLVIN		
DATE SHEET	01/25/2008	STATE PROJECT	450-90-0219

SHEET NO. 7g

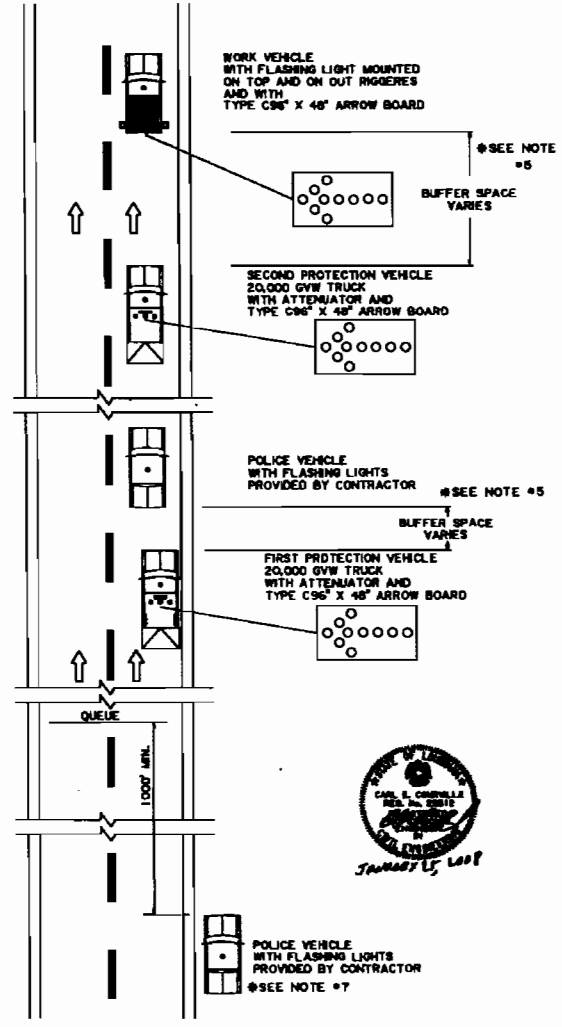
ELECTRONIC COPY - NOT FOR BID SUBMITTAL



FULL SHOULDER



PARTIAL SHOULDER



NO SHOULDER

NOTES

THIS SHEET SHALL BE USED WITH THE "TEMPORARY TRAFFIC CONTROL GENERAL NOTES SHEET (TC-00)".

1. CONDITIONS REPRESENTED ARE FOR MOVING OPERATIONS ON INTERSTATE HIGHWAYS AND ON ALL OTHER MULTI-LANE ROADWAYS WITH AN ADT GREATER THAN 20,000.
2. MINIMUM CONSTRUCTION SIGNING: ANY ADDITIONAL SIGNS SHOWN IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND REQUIRED BY THE PROJECT ENGINEER SHALL BE INSTALLED UNDER ITEM 713-01.
3. A MINIMUM OF TWO POLICE OFFICERS AND TWO POLICE CARS SHALL BE PROVIDED. EACH POLICE CAR SHALL HAVE A ROOF MOUNTED ROTATION BLUELIGHT OR BLUE BAR. THEIR LOCATION IS AT THE DISCRETION OF THE PROJECT ENGINEER.
4. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO BE INCLUDED IN ITEM 713-01, INCLUDING SECURING POLICE SERVICES.
5. DISTANCES BETWEEN VEHICLES WILL VARY AND SHOULD BE ADJUSTED DUE TO DRYING TIME AND SIGHT OBSTRUCTIONS SUCH AS OVERPASSES AND HILLS.
6. STRIPING OPERATION SHOWN FOR RIGHT LANE. LEFT LANE OPERATION SAME BUT OPPOSITE.
7. IF A QUEUE GREATER THAN 30 MINUTES (ABOUT 2 MILES) EXISTS, THE CONTRACTOR SHALL CEASE OPERATIONS AND PULL OVER TO THE SHOULDER UNTIL THE QUEUE DISSIPATES.

STATE OF LOUISIANA
CARL E. COURVILLE
REG. No. 28815
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
JANUARY 15, 2008

TRAFFIC ENGINEERING

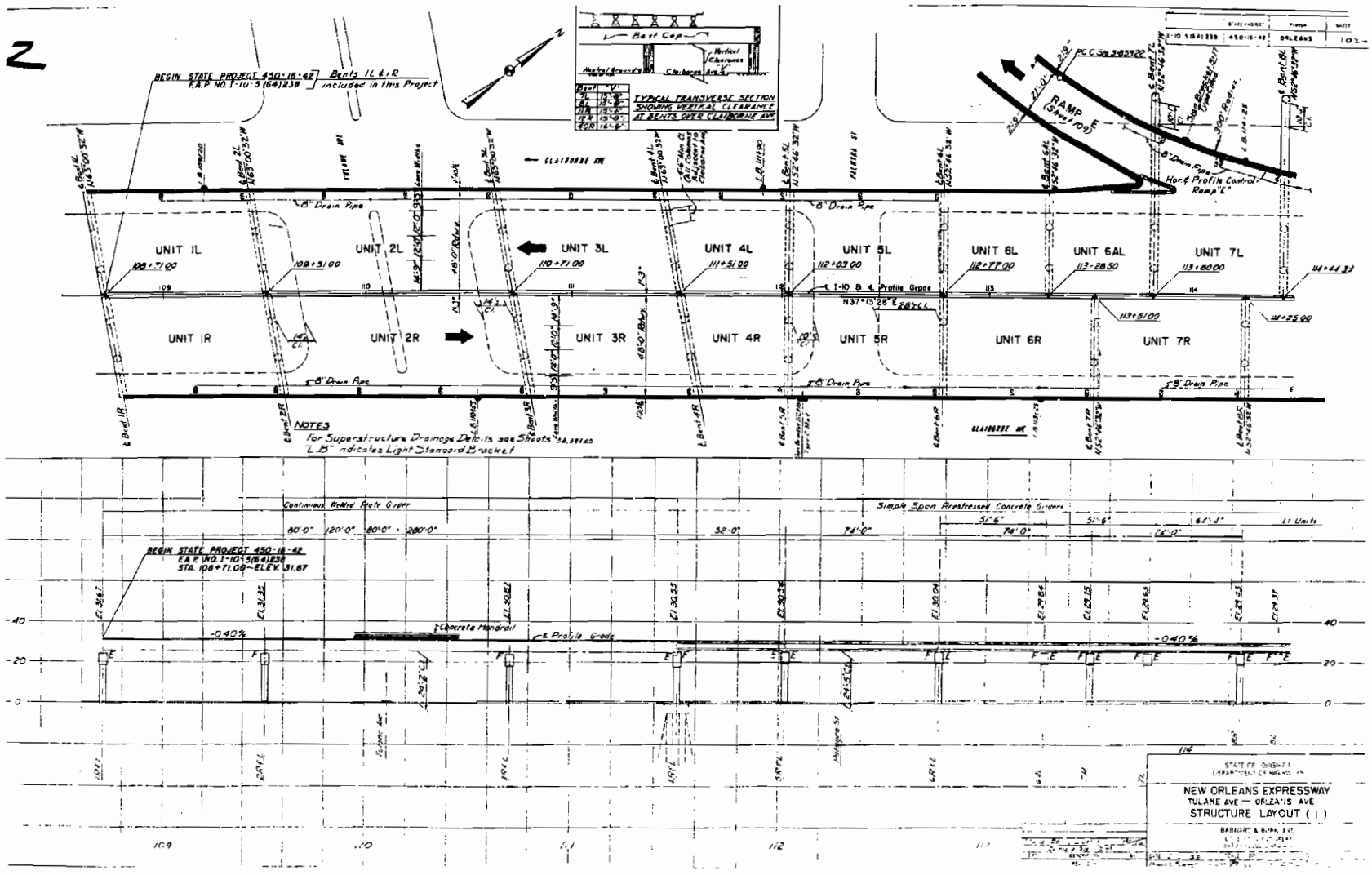
TRAFFIC CONTROL LAYOUT
MOVING OPERATIONS FOR INTERSTATE AND MULTI-LANE ROADWAYS

TC-19

NO.	DATE	REVISION DESCRIPTION	BY

DESIGNED	E. COURVILLE	PARISH	ORLEANS
CHECKED	J. COLVIN		
DETAILED	D. BOWARDS	FEDERAL PROJECT	
CHECKED	J. COLVIN		
DATE	01/25/2008	STATE PROJECT	450-90-0219
SHEET			

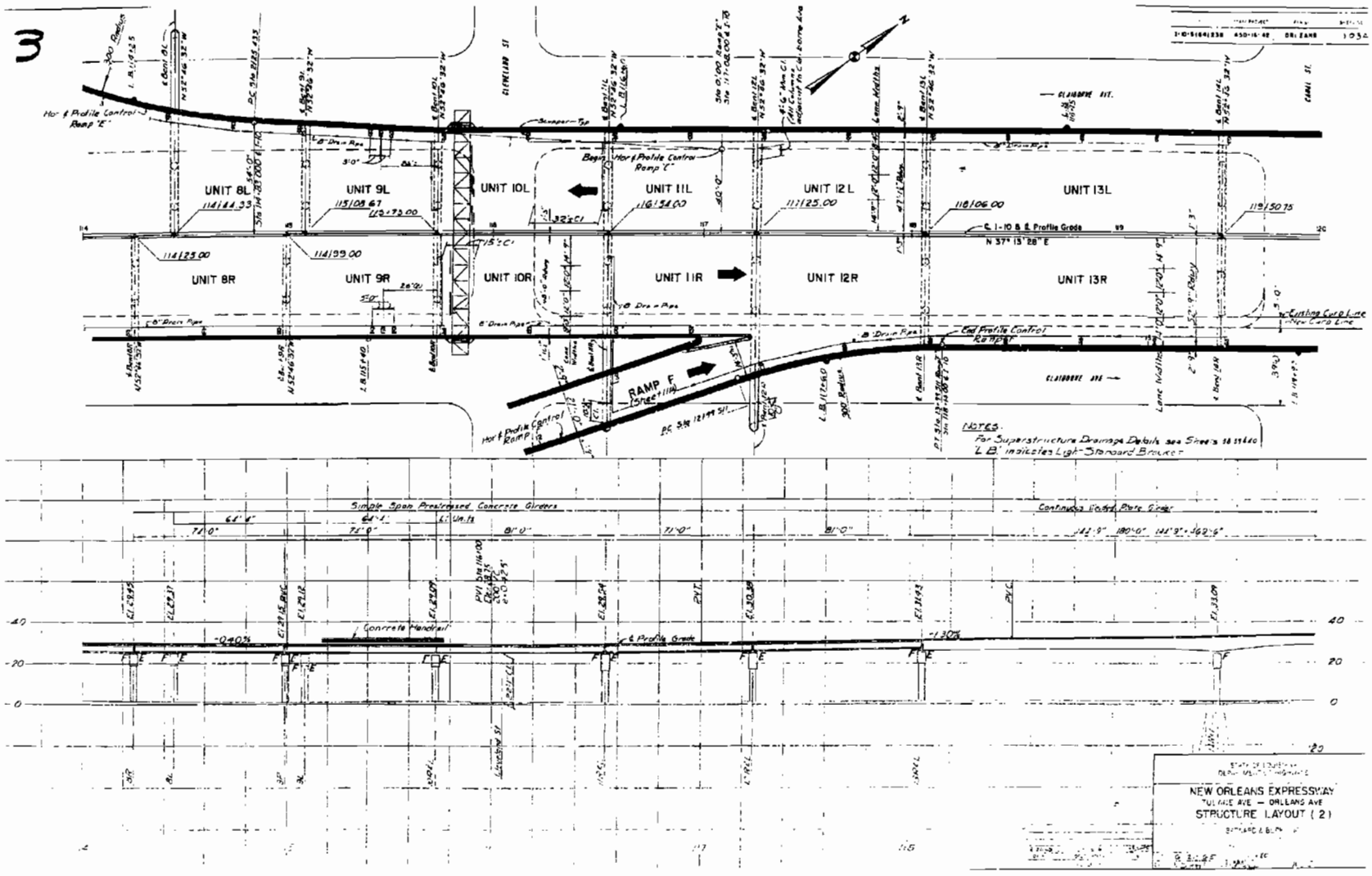
SHEET NO. 7h



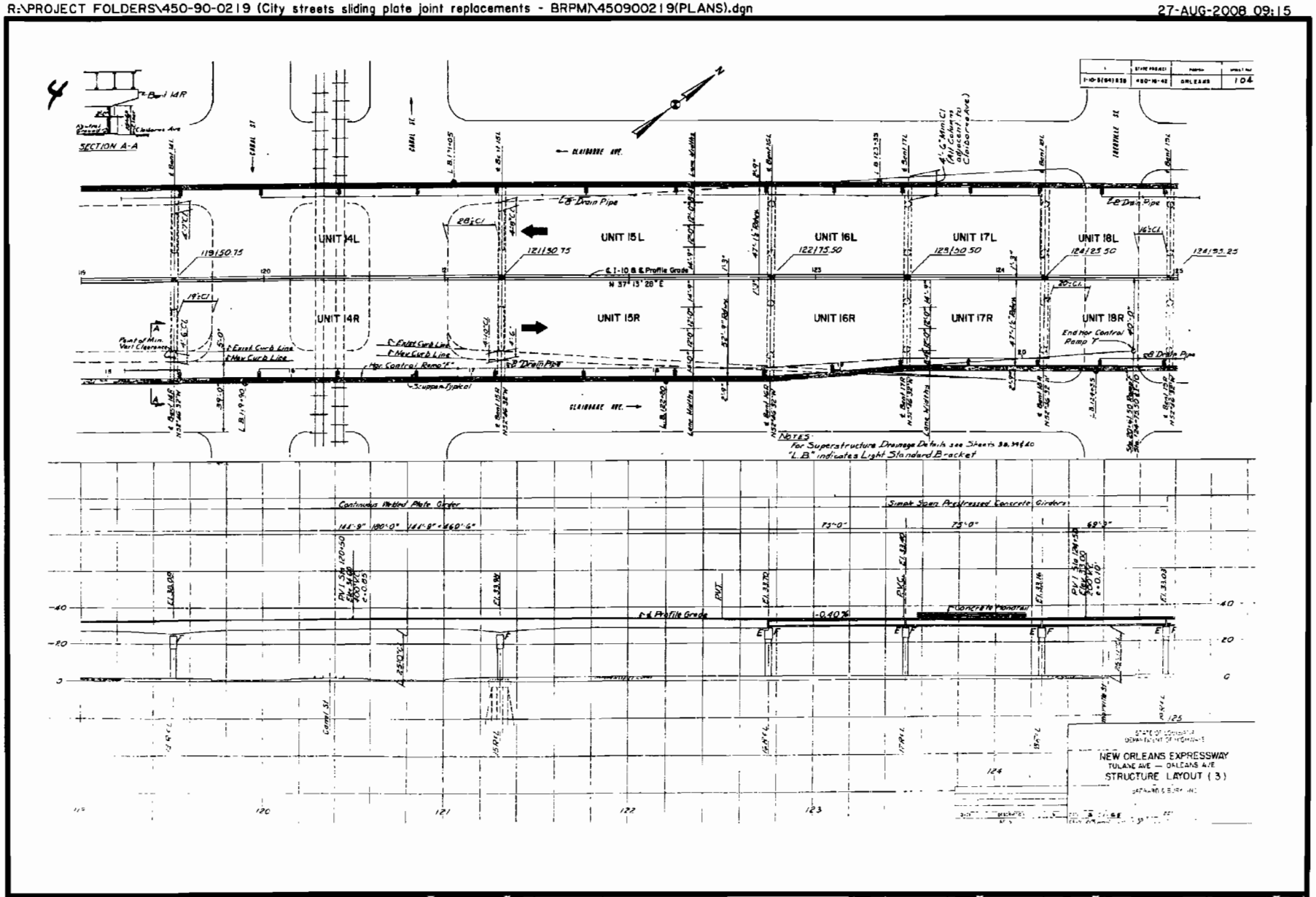
DISTRICT DESIGN 02	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)		DESIGNED JRM	PARISH ORLEANS	SHEET NO. 8
			CHECKED WBP		
			DETAILED FAC	FEDERAL PROJECT	
			CHECKED JRM		
	AS BUILTS		DATE 7/2008	STATE PROJECT 450-90-0219	
		NO. DATE REVISION DESCRIPTION BY	SHEET		

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

ELECTRONIC COPY - NOT FOR BID SUBMITTAL



DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)	NO.	DATE	REVISION DESCRIPTION	BY	DESIGNED JRM / CHECKED WBP	PARISH ORLEANS	SHEET NO. 8a
	AS BUILTS					DETAILED FAC / CHECKED JRM	FEDERAL PROJECT	
						DATE 7/2008 / SHEET	STATE PROJECT 450-90-0219	



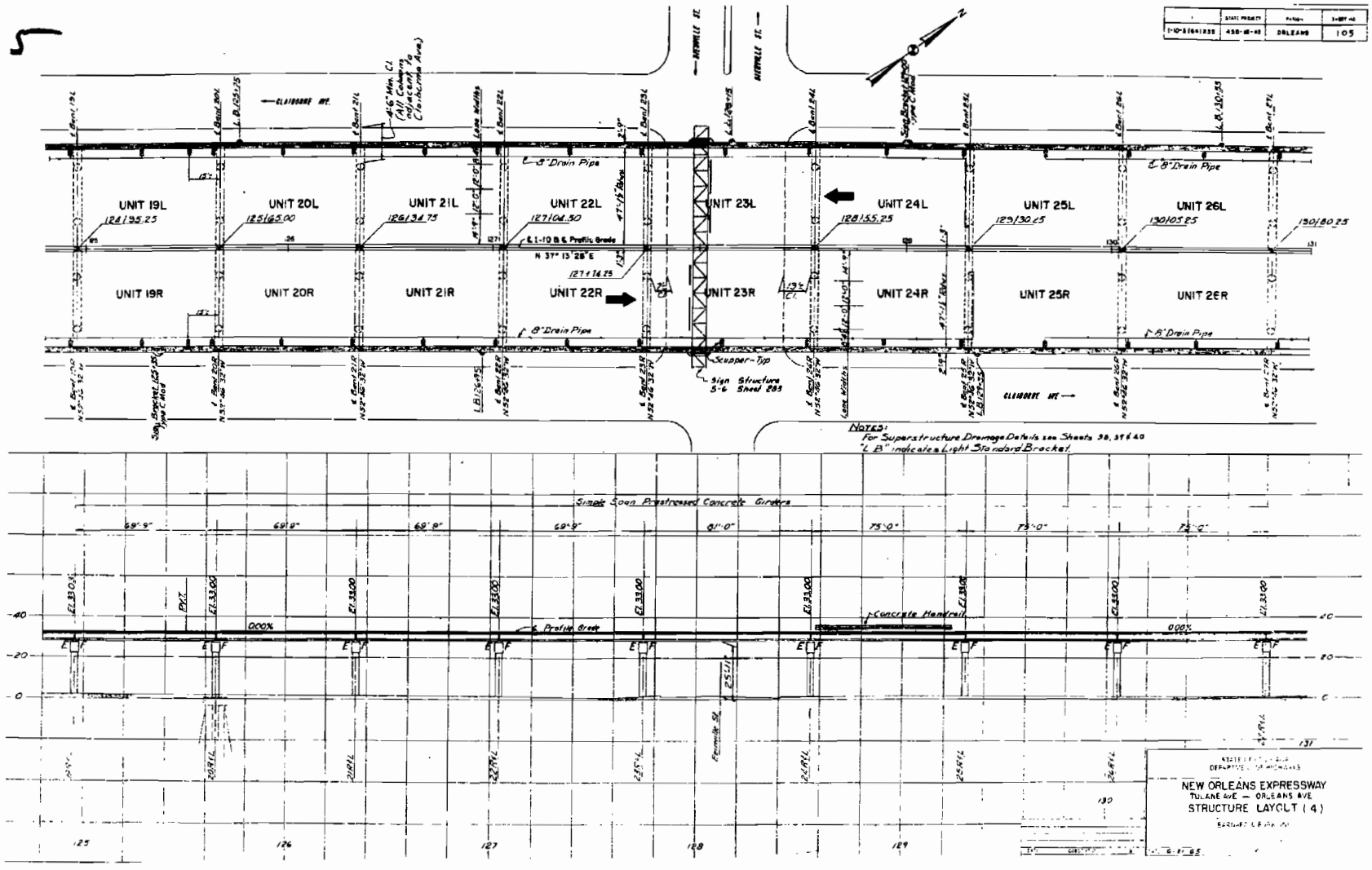
DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)		DESIGNED JRM	PARISH	ORLEANS	SHEET NO.	8b
			CHECKED WBP				
			DETAILED CHECKED FAC	FEDERAL PROJECT			
	AS BUILTS		CHECKED JRM				
			DATE 7/2008	STATE PROJECT	450-90-0219		
			SHEET				

NO.	DATE	REVISION DESCRIPTION	BY

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

R:\PROJECT FOLDERS\450-90-0219 (City streets sliding plate joint replacements - BRPM)\450900219(PLANS).dgn

27-AUG-2008 09:15

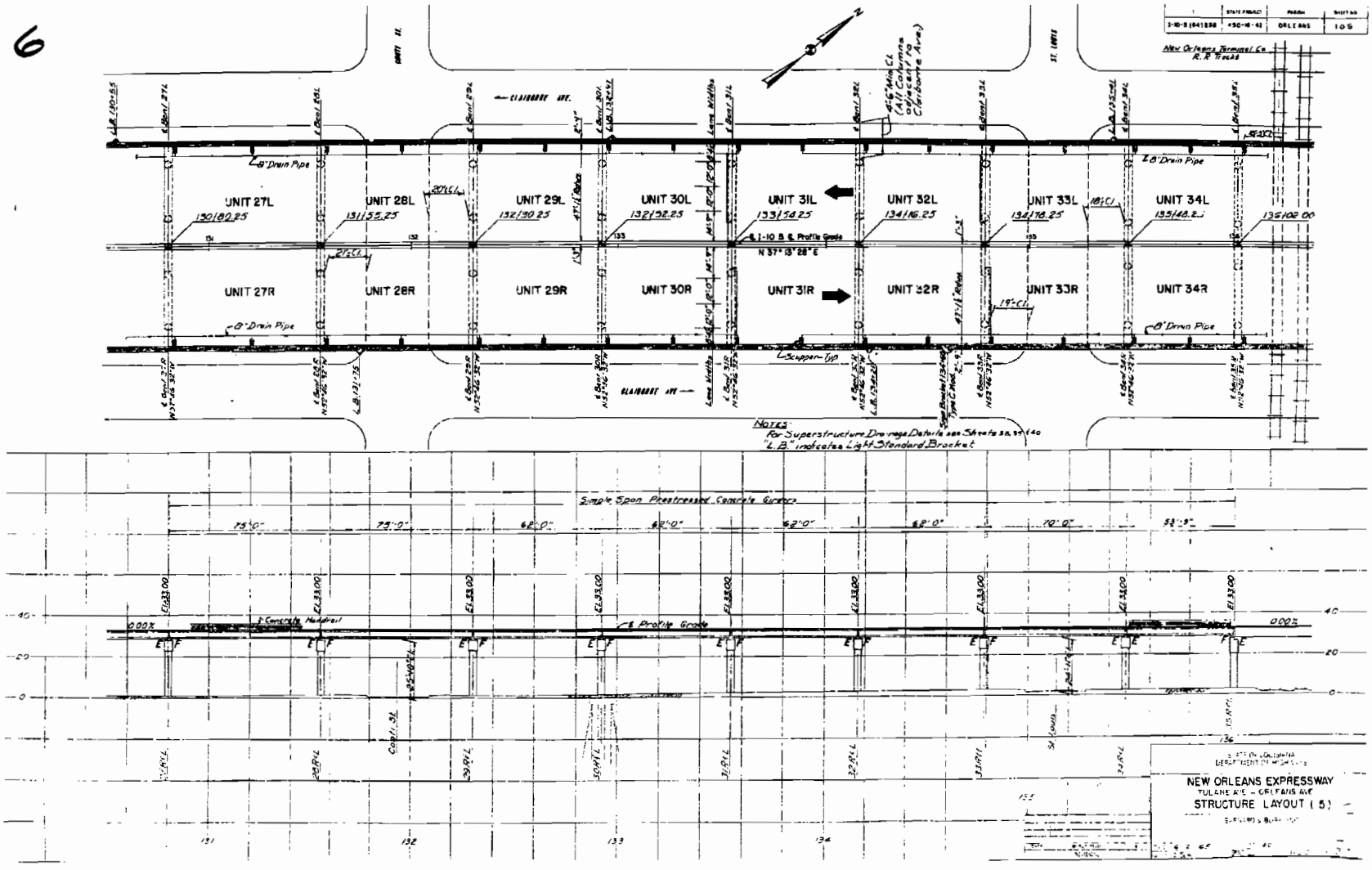


DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)	NO.	DATE	REVISION DESCRIPTION	BY	DESIGNED JRM CHECKED WBP	PARISH ORLEANS
	AS BUILTS					DETAILED FAC CHECKED JRM	FEDERAL PROJECT
						DATE 7/2008 SHEET	STATE PROJECT 450-90-0219

SHEET NO. 8C

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

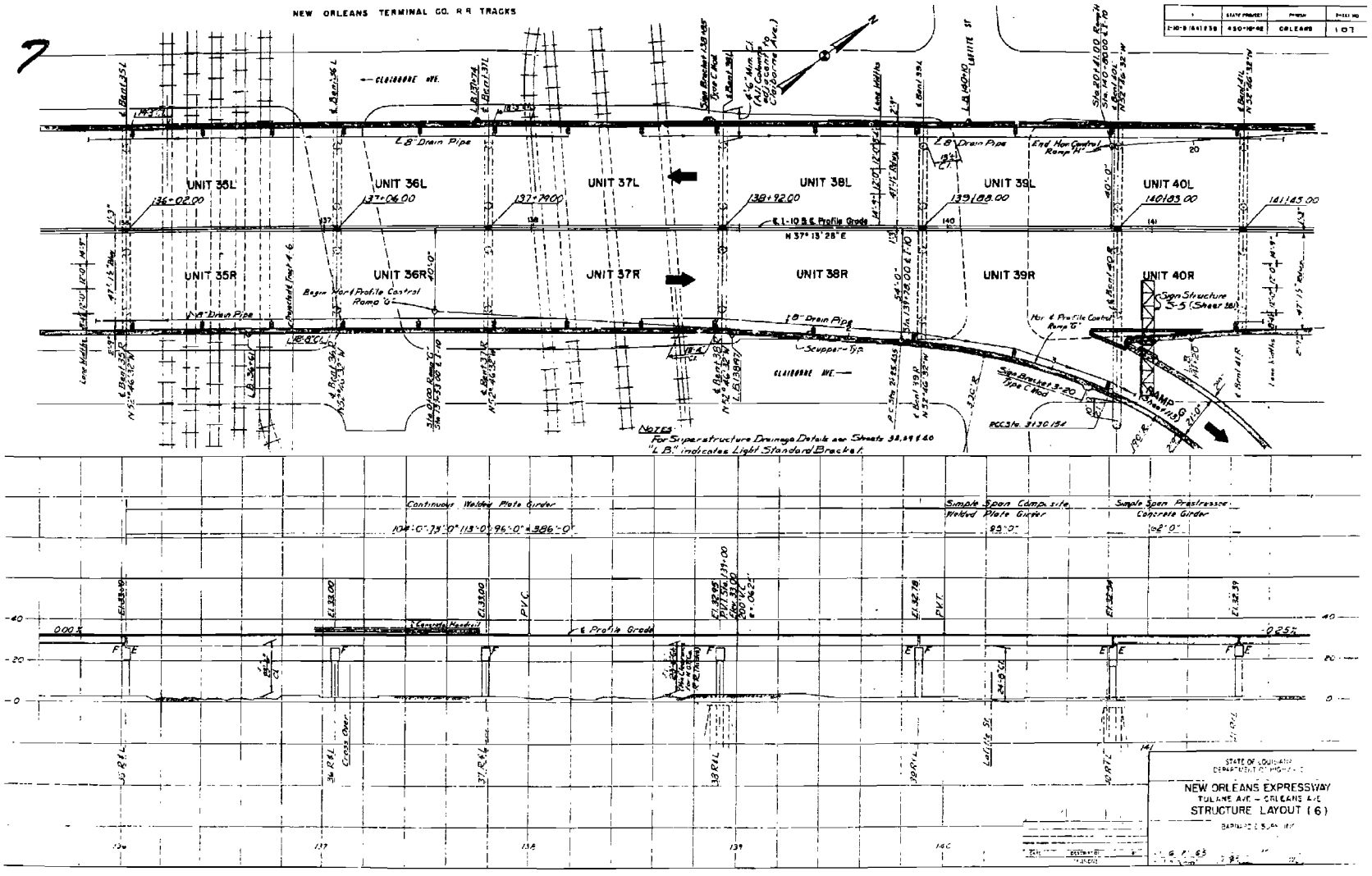
6



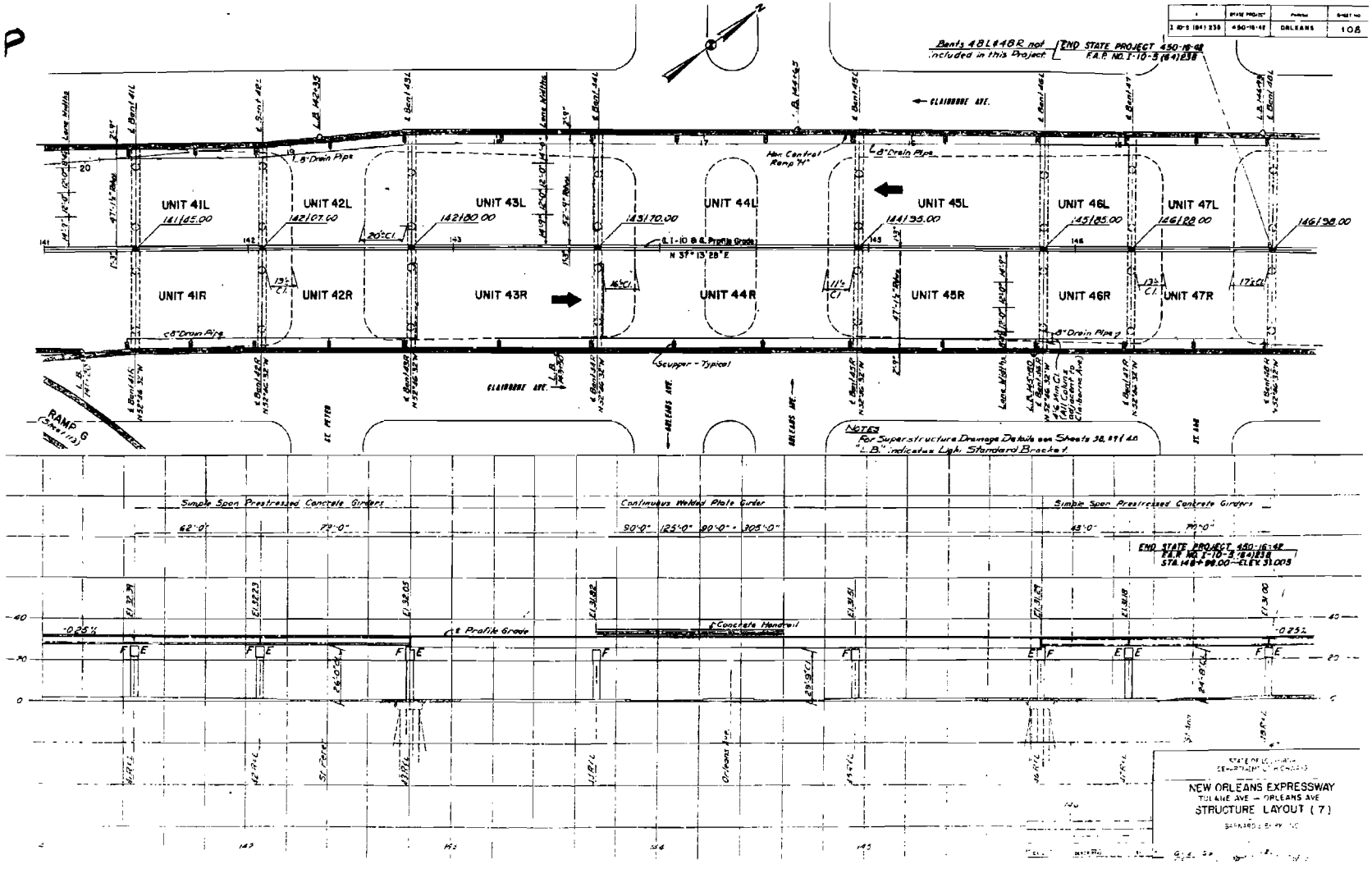
DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)								
	AS BUILTS	NO.	DATE	REVISION DESCRIPTION	BY	DESIGNED JRM / CHECKED WBP	PARISH	ORLEANS	SHEET NO. 8d
						DETAILED FAC / CHECKED JRM	FEDERAL PROJECT		
						DATE 7/2008 / SHEET	STATE PROJECT	450-90-0219	

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

ELECTRONIC COPY - NOT FOR BID SUBMITTAL



DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)			DESIGNED JRM	PARISH ORLEANS	SHEET NO. 8e
				CHECKED WBP		
				DETAILED FAC	FEDERAL PROJECT	
				CHECKED JRM		
	AS BUILTS	NO.	DATE	REVISION DESCRIPTION	BY	DATE SHEET 7/2008	STATE PROJECT 450-90-0219

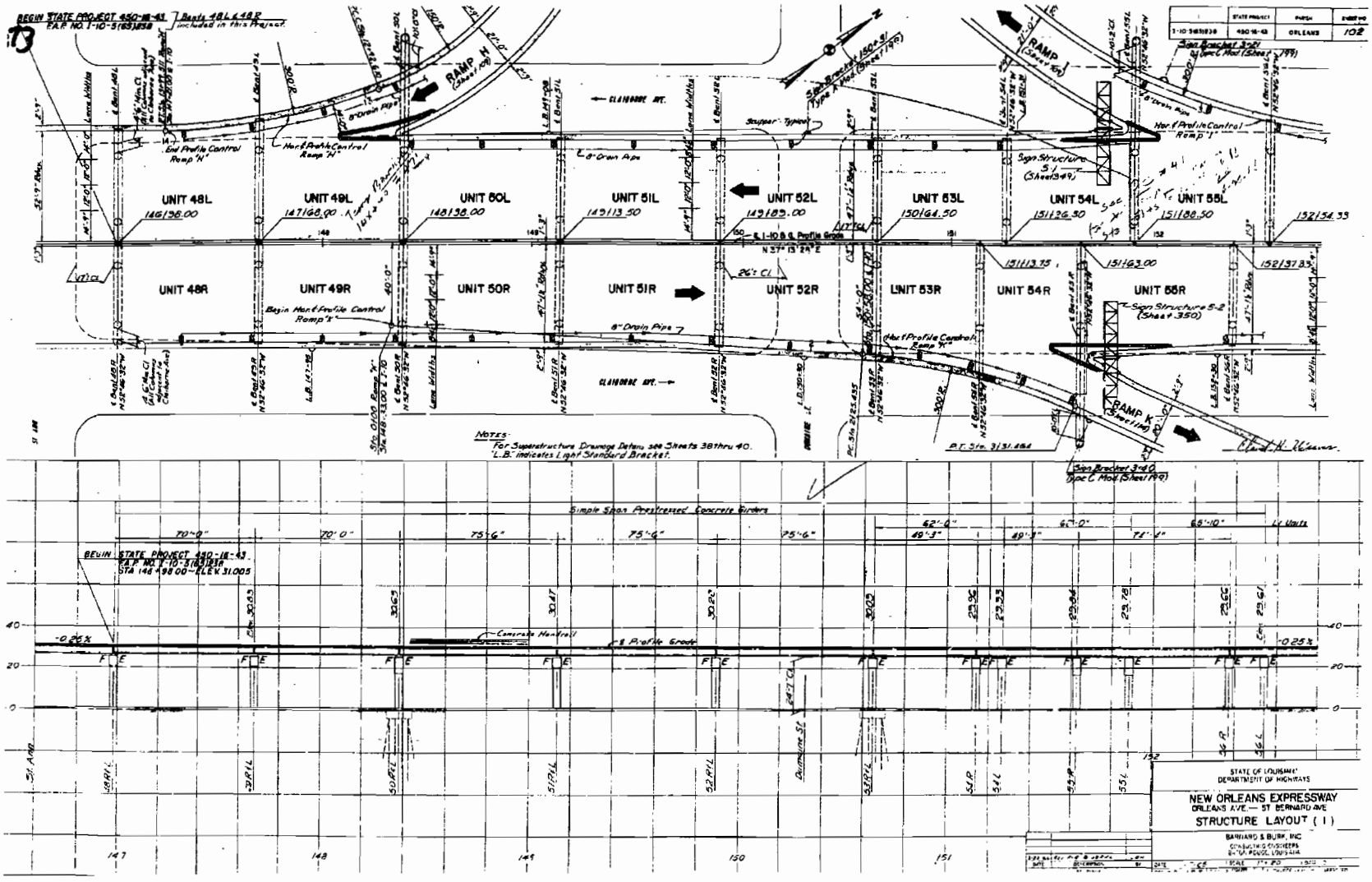


NOTES
For Superstructure Drainage Details see Sheets 38, 39 & 40
"L.B." indicates Light Standard Bracket

I-10-3 (164) 238	450-16-42	ORLEANS	108

DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)	NO.	DATE	REVISION DESCRIPTION	BY	DESIGNED JRM / CHECKED WEP	PARISH ORLEANS	SHEET NO. 8f
	AS BUILTS					DETAILED FAC / CHECKED JRM	FEDERAL PROJECT	
						DATE 7/2008 / SHEET	STATE PROJECT 450-90-0219	

ELECTRONIC COPY - NOT FOR BID SUBMITTAL



STATE PROJECT	PARISH	SHEET NO
450-18-43	ORLEANS	102

DISTRICT 02 DESIGN

CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)

AS BUILTS

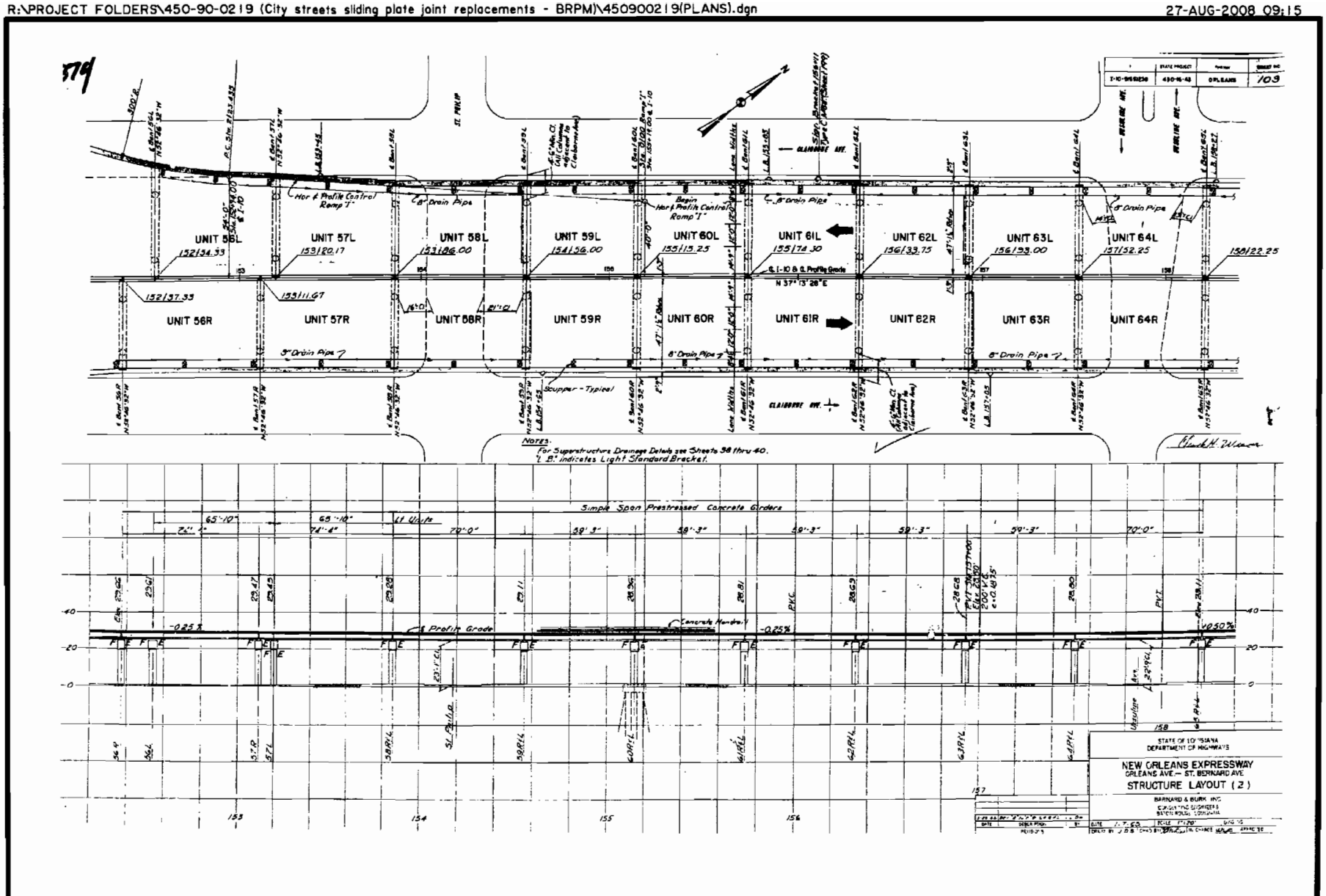
NO.	DATE	REVISION DESCRIPTION	BY

DESIGNED	JRM	PARISH	ORLEANS
CHECKED	WBP		
DETAILED	FAC	FEDERAL PROJECT	
CHECKED	JRM		
DATE	7/2008	STATE PROJECT	450-90-0219
SHEET			

SHEET NO. 89

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

R:\PROJECT FOLDERS\450-90-0219 (City streets sliding plate joint replacements - BRPM)\450900219(PLANS).dgn 27-AUG-2008 09:15

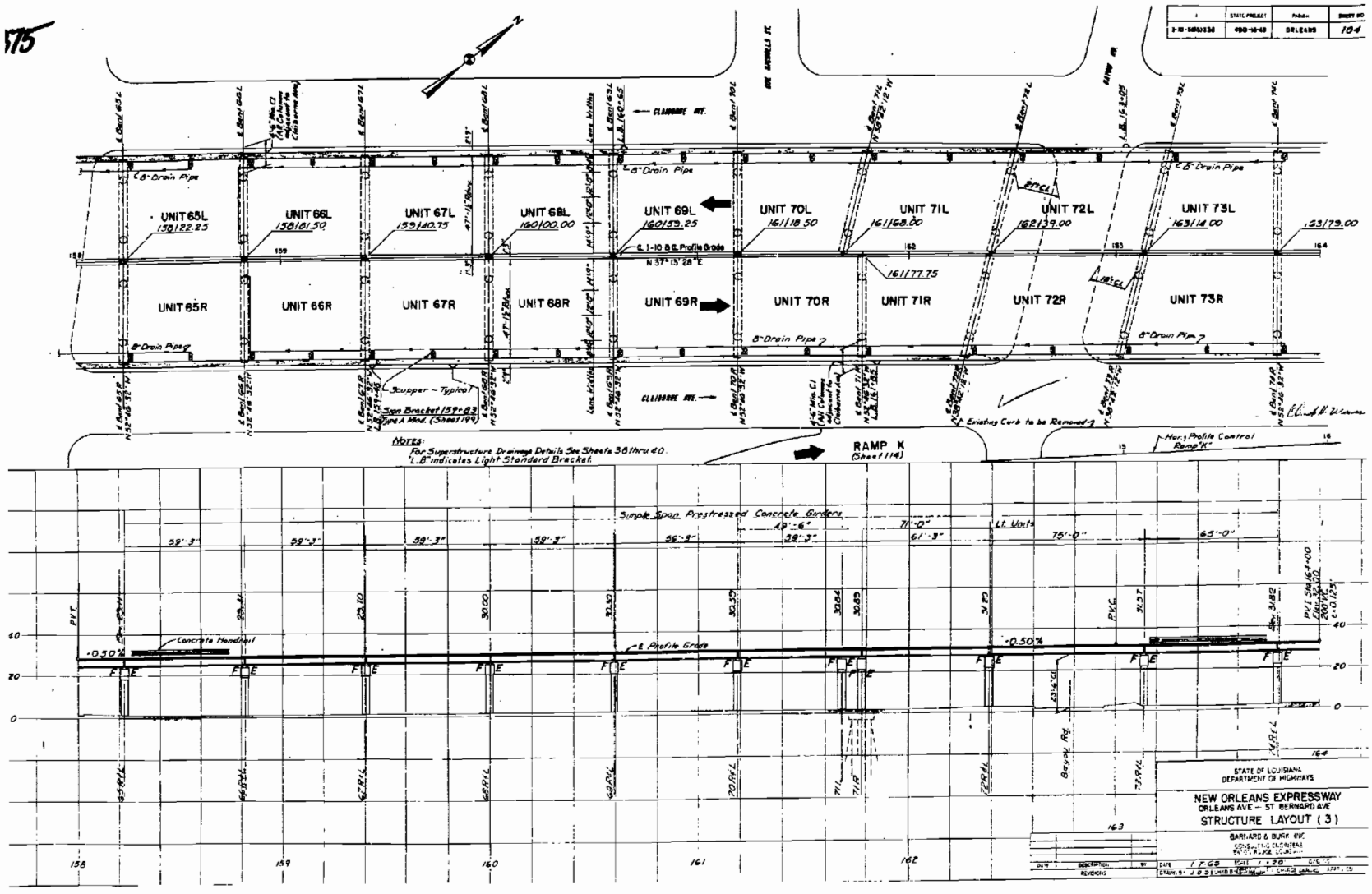


DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)			DESIGNED / CHECKED	JRM / WBP	PARISH	ORLEANS
	AS BUILTS	NO.	DATE	REVISION DESCRIPTION	BY	DETAILED / CHECKED	FAC / JRM
						FEDERAL PROJECT	
						DATE / SHEET	7/2008
						STATE PROJECT	450-90-0219

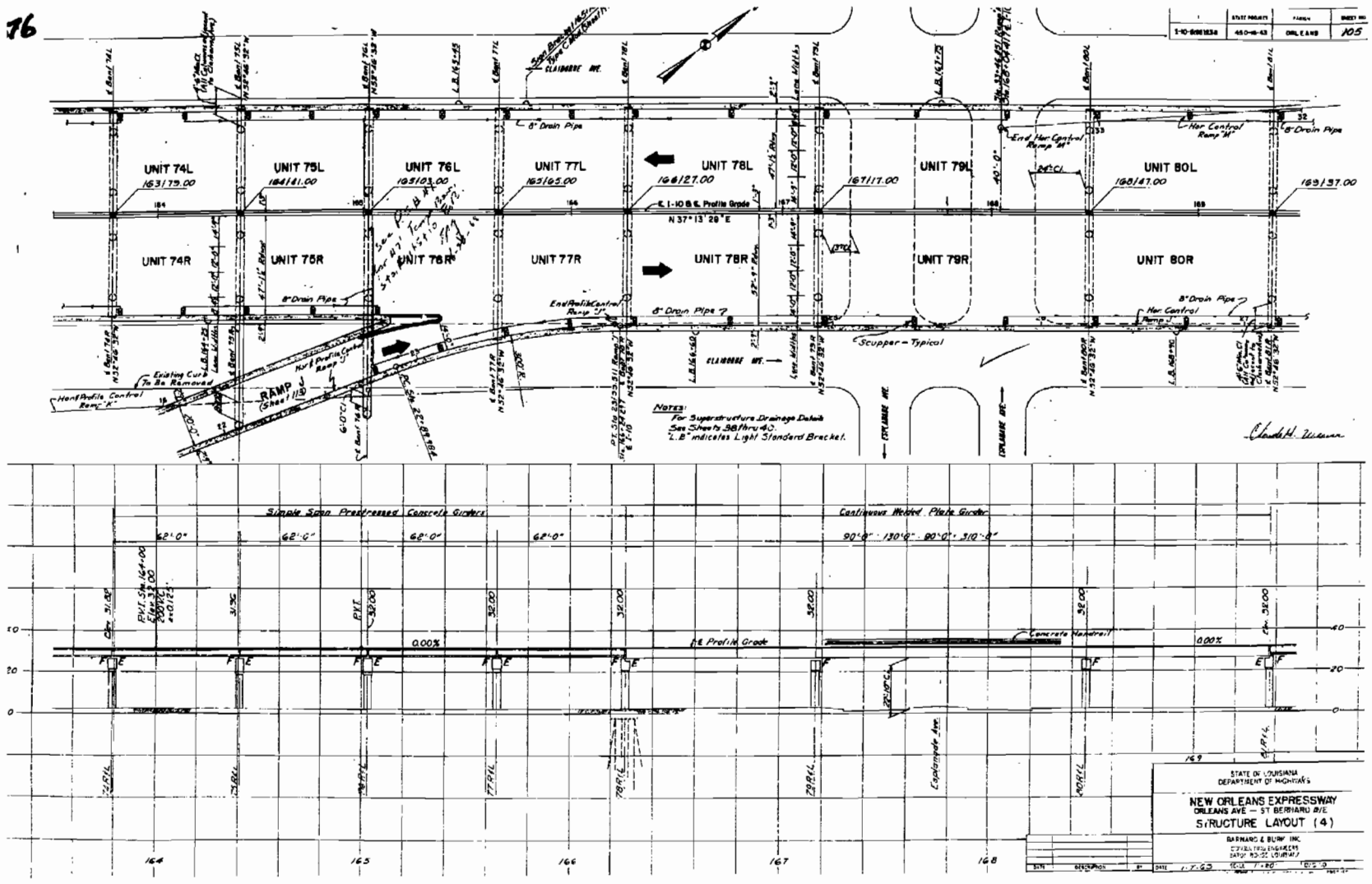
SHEET NO. 8h

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

ELECTRONIC COPY - NOT FOR BID SUBMITTAL



DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)			DESIGNED JRM / CHECKED WBP	PARISH ORLEANS	SHEET NO. 8i
				DETAILED FAC / CHECKED JRM	FEDERAL PROJECT	
	AS BUILTS	NO.	DATE	REVISION DESCRIPTION	BY	DATE SHEET 7/2008	STATE PROJECT 450-90-0219

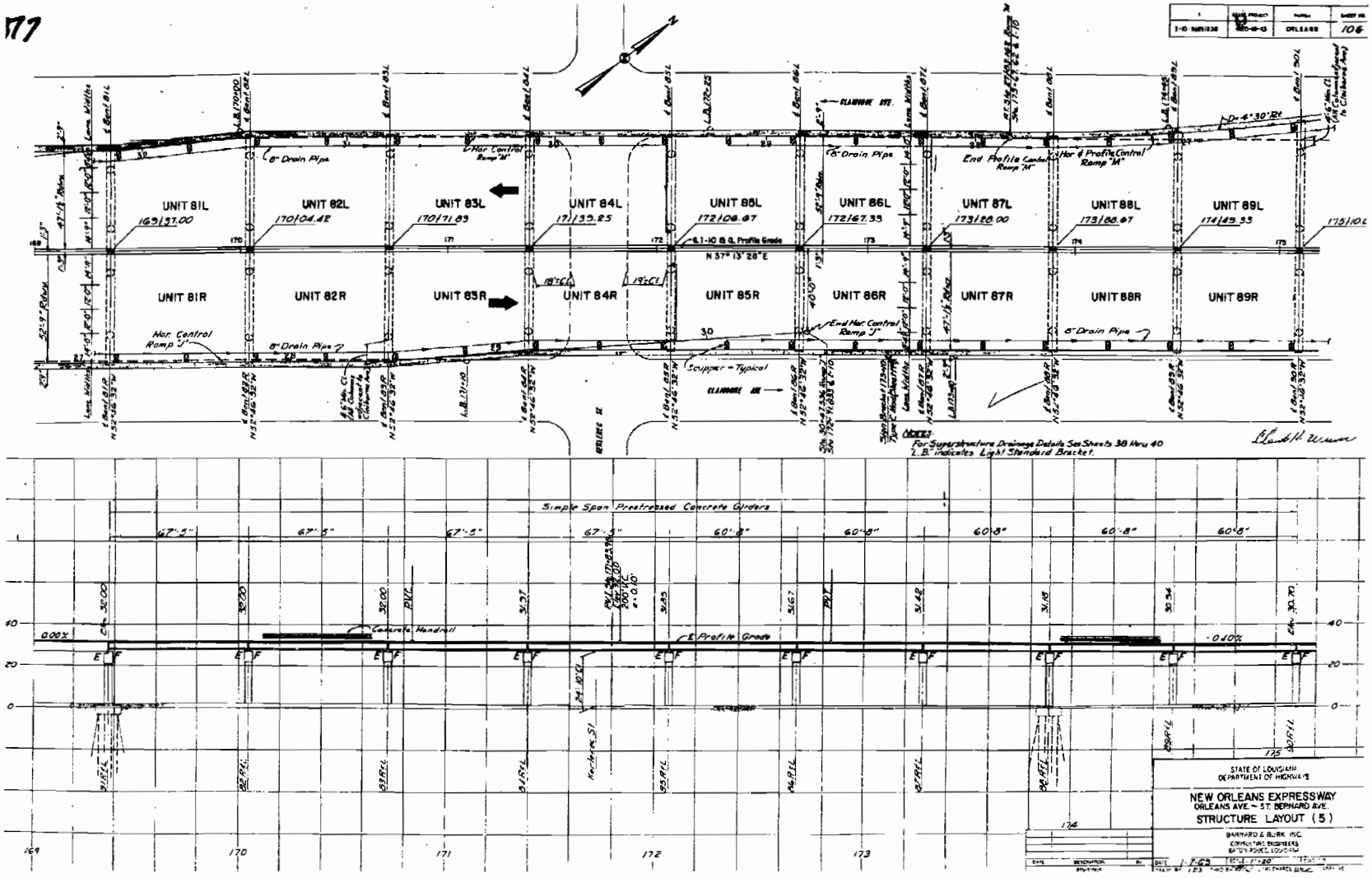


DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)	DESIGNED JRM / CHECKED WBP	PARISH ORLEANS
	AS BUILTS	DETAILED FAC / CHECKED JRM	FEDERAL PROJECT
	NO. DATE REVISION DESCRIPTION BY	DATE 7/2008 / SHEET	STATE PROJECT 450-90-0219

SHEET NO. 8j

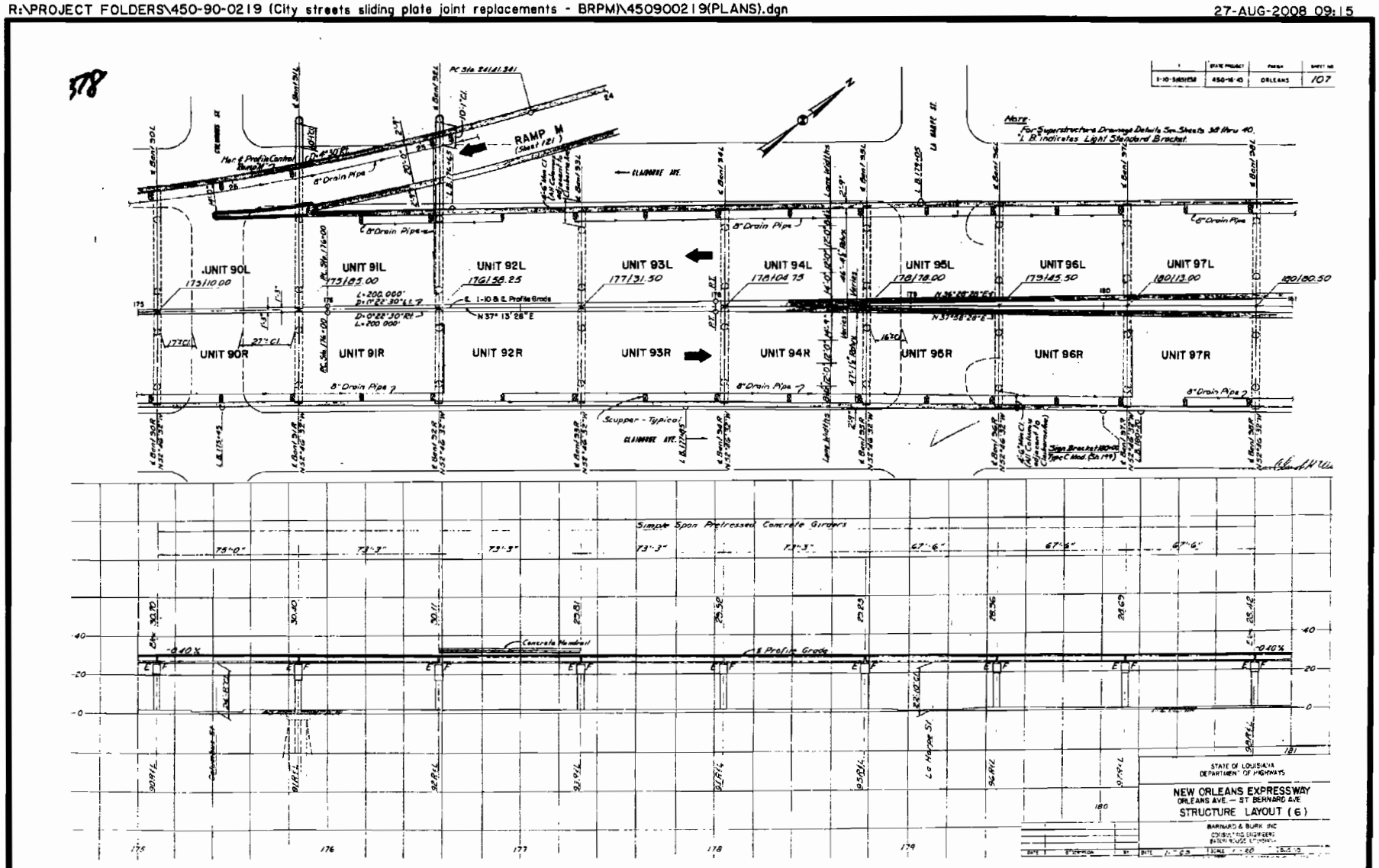
ELECTRONIC COPY - NOT FOR BID SUBMITTAL

ELECTRONIC COPY - NOT FOR BID SUBMITTAL



DISTRICT DESIGN 02	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)		DESIGNED JRM / CHECKED WBP	PARISH	ORLEANS	SHEET NO. 8k
			DETAILED FAC / CHECKED JRM	FEDERAL PROJECT		
	AS BUILTS	NO. DATE REVISION DESCRIPTION BY	DATE SHEET 7/2008	STATE PROJECT	450-90-0219	

R:\PROJECT FOLDERS\450-90-0219 (City streets sliding plate joint replacements - BRPM)\450900219(PLANS).dgn 27-AUG-2008 09:15

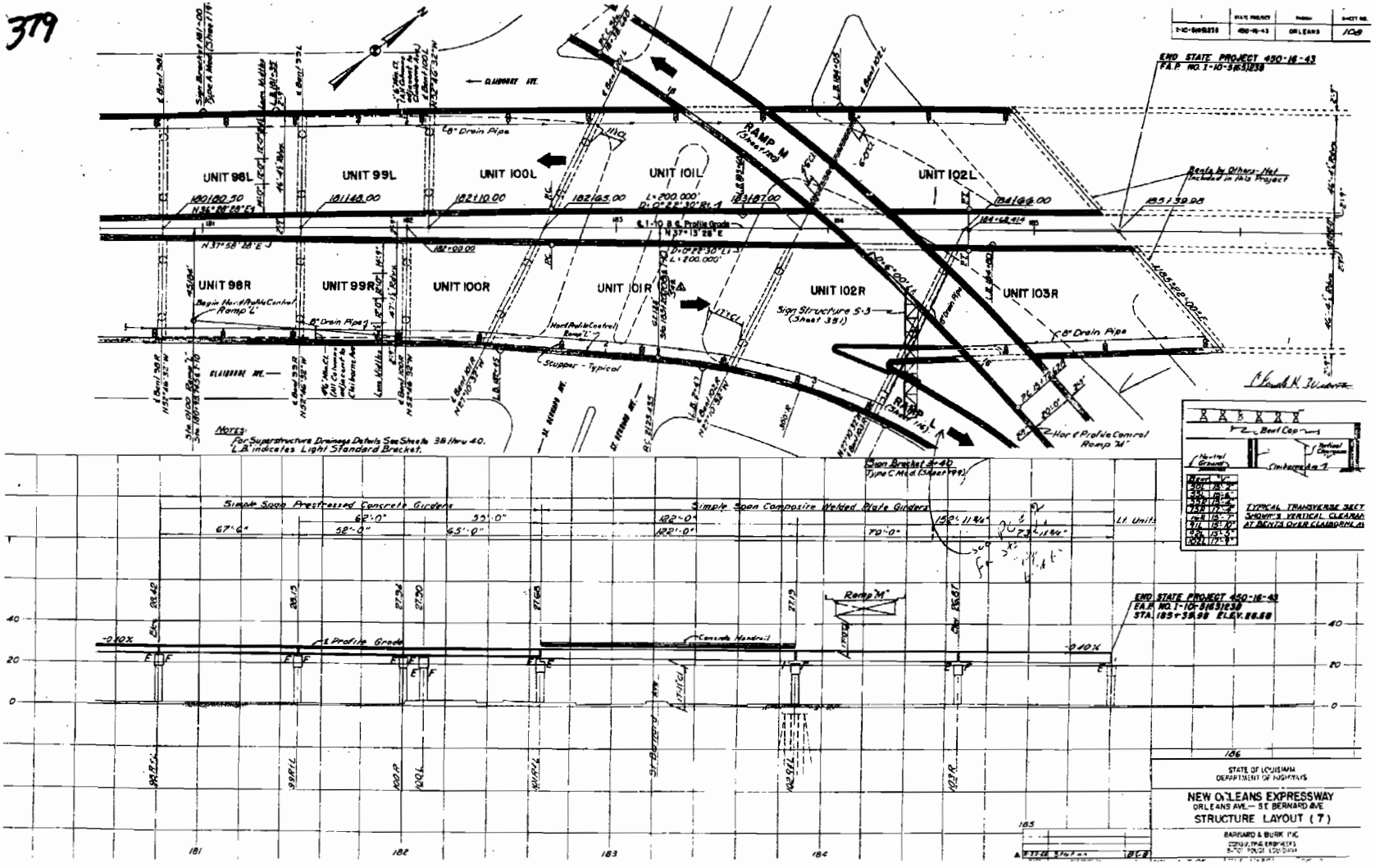


DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)	NO.	DATE	REVISION DESCRIPTION	BY	DESIGNED JRM CHECKED WBP	PARISH ORLEANS
	AS BUILTS					DETAILED FAC CHECKED JRM	FEDERAL PROJECT
						DATE 7/2008 SHEET	STATE PROJECT 450-90-0219

SHEET NO. 81

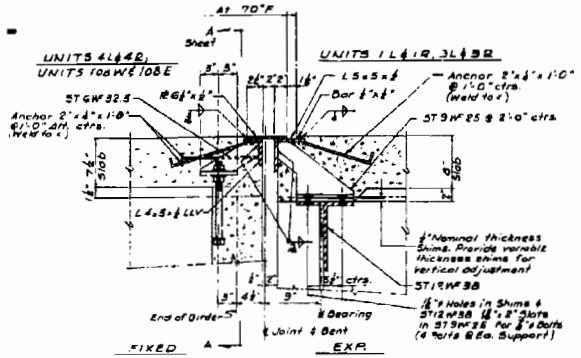
ELECTRONIC COPY - NOT FOR BID SUBMITTAL

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

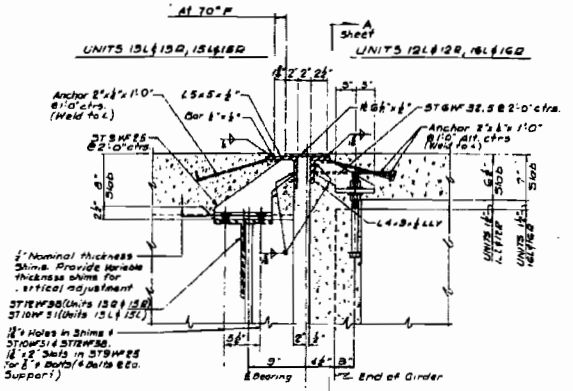


DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)			DESIGNED JRM / CHECKED WBP	PARISH	ORLEANS	SHEET NO. 8m
				DETAILED FAC / CHECKED JRM	FEDERAL PROJECT		
	AS BUILTS	NO.	DATE	REVISION DESCRIPTION	BY	DATE 7/2008 / SHEET	STATE PROJECT 450-90-0219

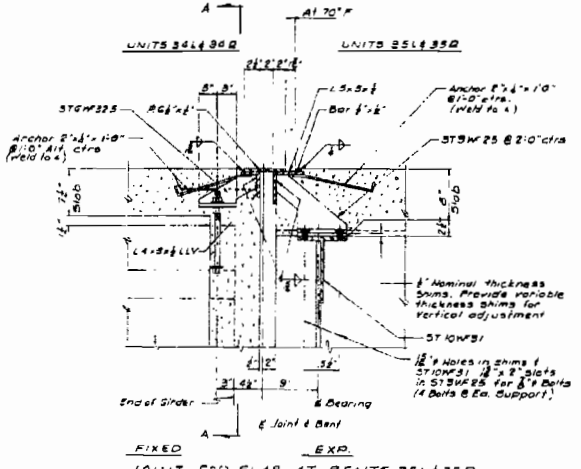
E-10-58(4)38	450-90-0219	ORLEANS	177



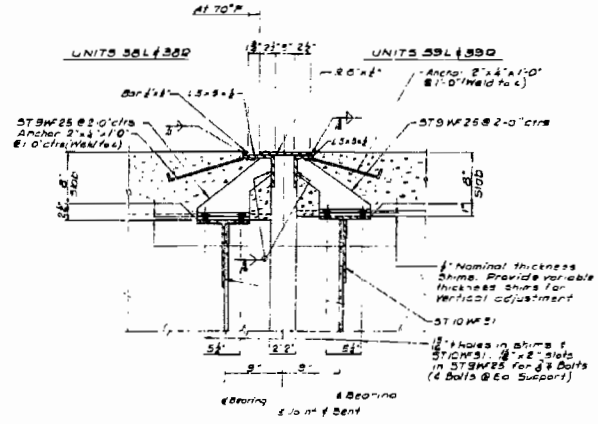
JOINT FOR SLAB AT BENTS 1L & 1R
JOINT FOR SLAB AT BENTS 4L & 4R OPP. HAND



JOINT FOR SLAB AT BENTS 16L & 16R
JOINT FOR SLAB AT BENTS 13L & 13R OPP. HAND



JOINT FOR SLAB AT BENTS 35L & 35R



JOINT FOR SLAB AT BENTS 39L & 39R

NOTES:
1 - For General Notes See Structural
2 - All steel used in slab joints shall be A36 & is to be paid for as STEEL (A36). For Steel Units, Quantities shown on "Girder Layout" sheets include steel for joints. For Prestressed Units Quantities shown on "Slab Details & Girder Layout" sheets includes steel for joints.
3 - Angles & Plates to be extended to within ½" of curb

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

NEW ORLEANS EXPRESSWAY
TULANE AVE -- ORLEANS AVE
MISCELLANEOUS SLAB DETAILS (2)

BARNARD & BURK INC
CONSULTING ENGINEERS
BATON ROUSE LOUISIANA

DISTRICT 02 DESIGN

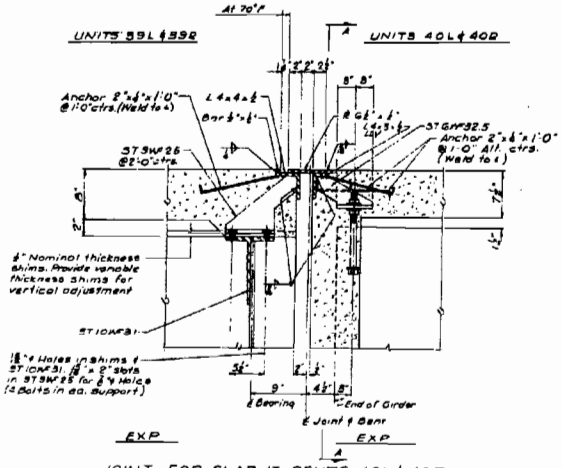
CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)

AS BUILTS

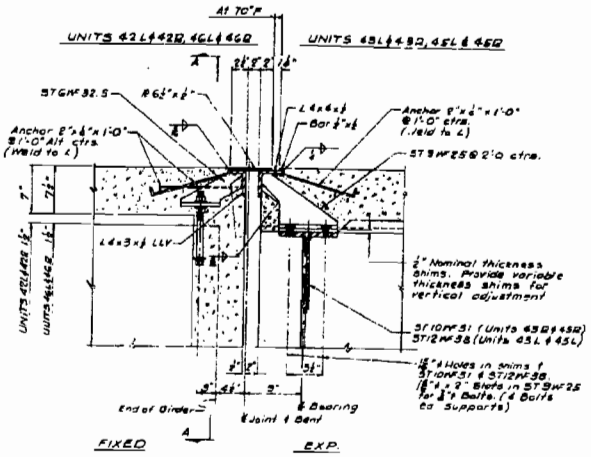
NO.	DATE	REVISION DESCRIPTION	BY

DESIGNED	JRM	PARISH	ORLEANS	SHEET NO. 8n
CHECKED	WBP			
DETAILED	FAC	FEDERAL PROJECT		
CHECKED	JRM			
DATE	7/2008	STATE PROJECT	450-90-0219	
SHEET				

ELECTRONIC COPY - NOT FOR BID SUBMITTAL



JOINT FOR SLAB AT BENTS 40L & 40R



JOINT FOR SLAB AT BENTS 43L & 43R
JOINT FOR SLAB AT BENTS 46L & 46R OPP. HAND

	STATE PROJECT	PARISH	SHEET NO.
2-10-58(4)(3)	450-90-0219	ORLEANS	178

NOTES

For Notes for ϕ Sheet, see Sheet 2 of 5

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

NEW ORLEANS EXPRESSWAY
TULANE AVE — ORLEANS AVE
MISCELLANEOUS SLAB DETAILS (3)

BARNARD & BURK, INC
CONSULTING ENGINEERS
BATON ROUGE LOUISIANA

DISTRICT 02 DESIGN

CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)

AS BUILTS

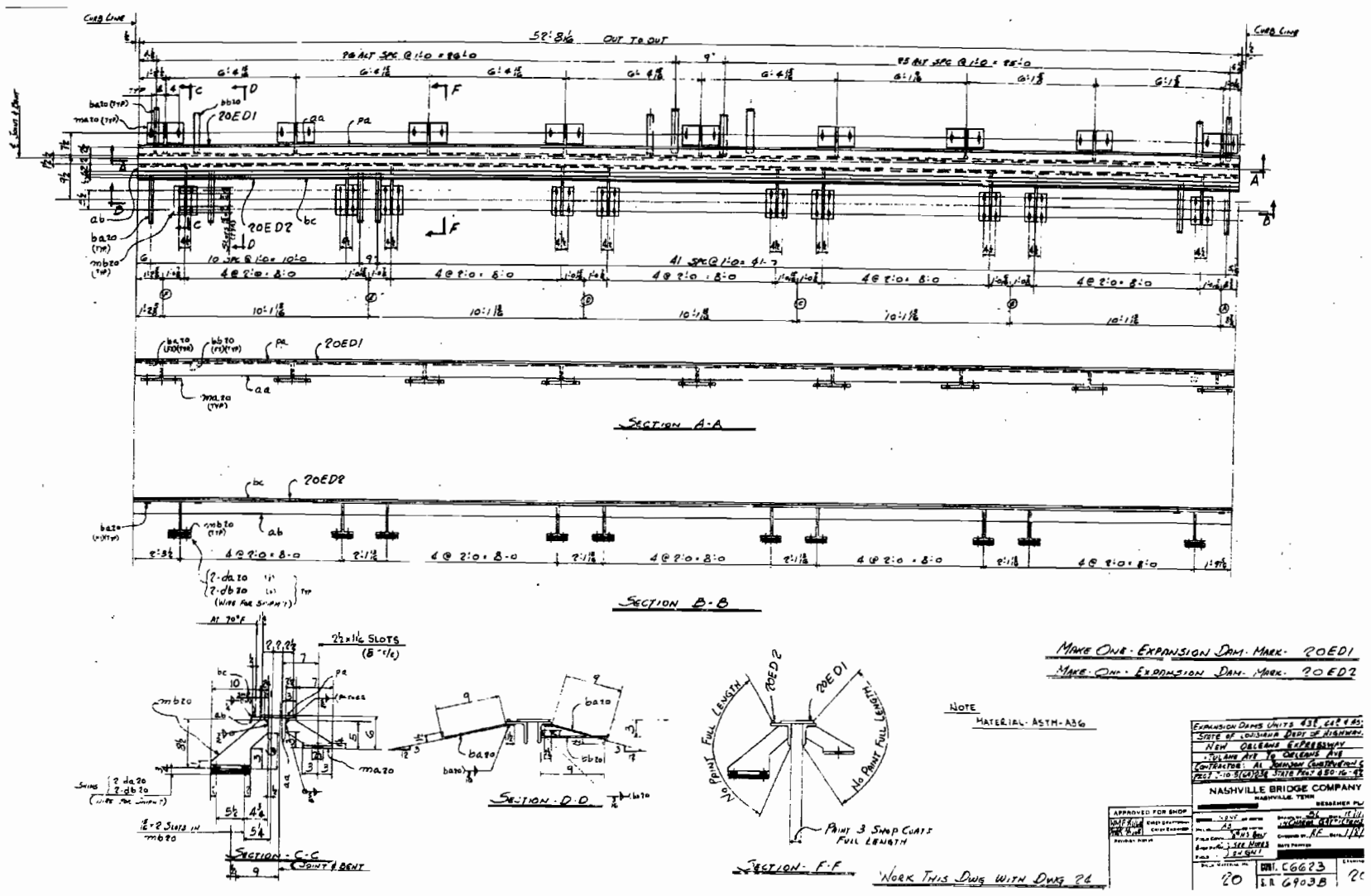
NO.	DATE	REVISION DESCRIPTION	BY

DESIGNED	JRM	PARISH	ORLEANS
CHECKED	WBP		
DETAILED	FAC	FEDERAL PROJECT	
CHECKED	JRM		
DATE	7/2008	STATE PROJECT	450-90-0219
SHEET			

SHEET NO. 80

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

R:\PROJECT FOLDERS\450-90-0219 (City streets sliding plate joint replacements - BRPM)\4509002 19(PLANS).dgn 27-AUG-2008 09:15

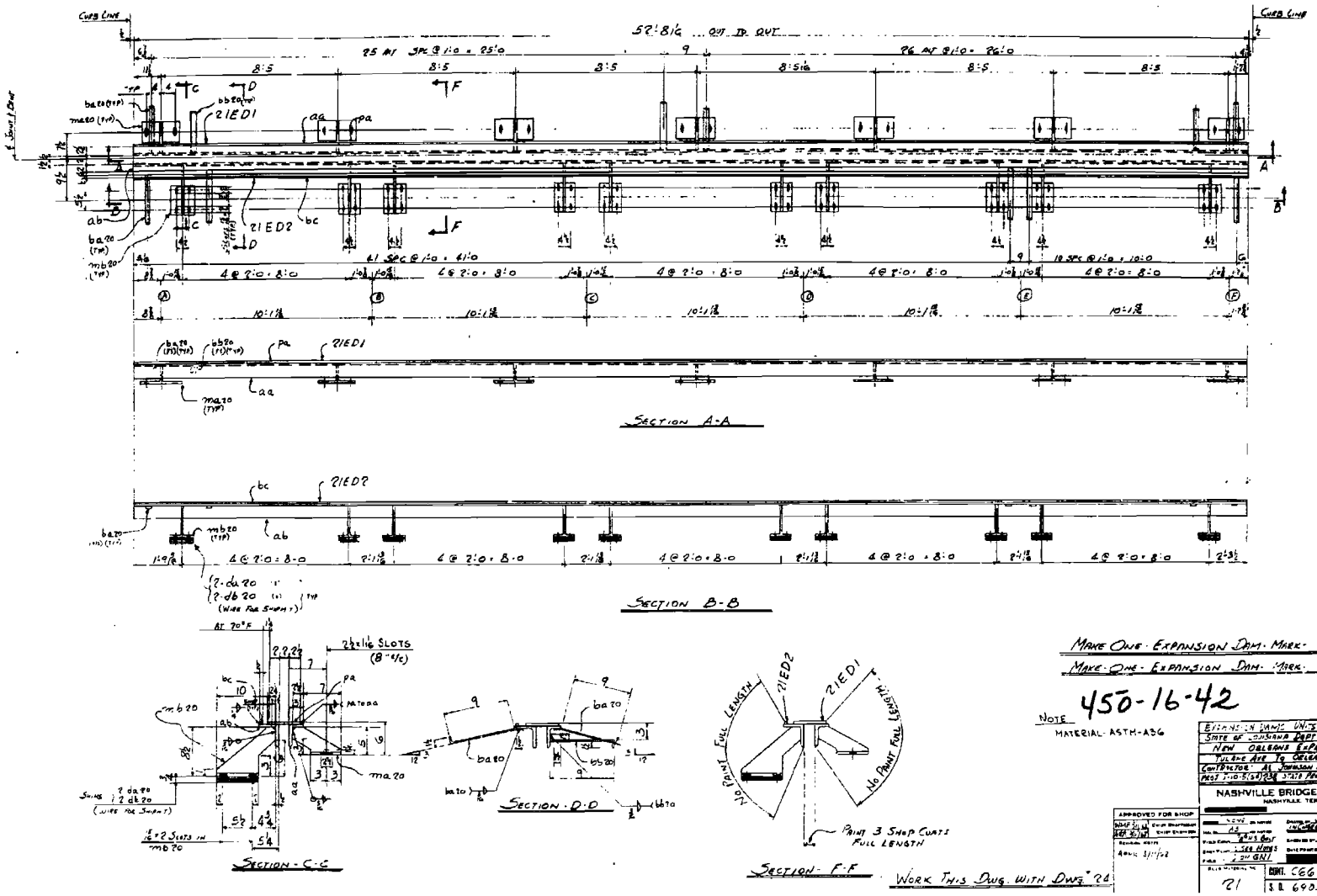


Expansion Dam Units 43R & 43L

DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)	NO.	DATE	REVISION DESCRIPTION	BY	DESIGNED JRM CHECKED WBP	PARISH ORLEANS
	AS BUILTS					DETAILED FAC CHECKED JRM	FEDERAL PROJECT
						DATE 7/2008 SHEET	STATE PROJECT 450-90-0219

SHEET NO. 8p

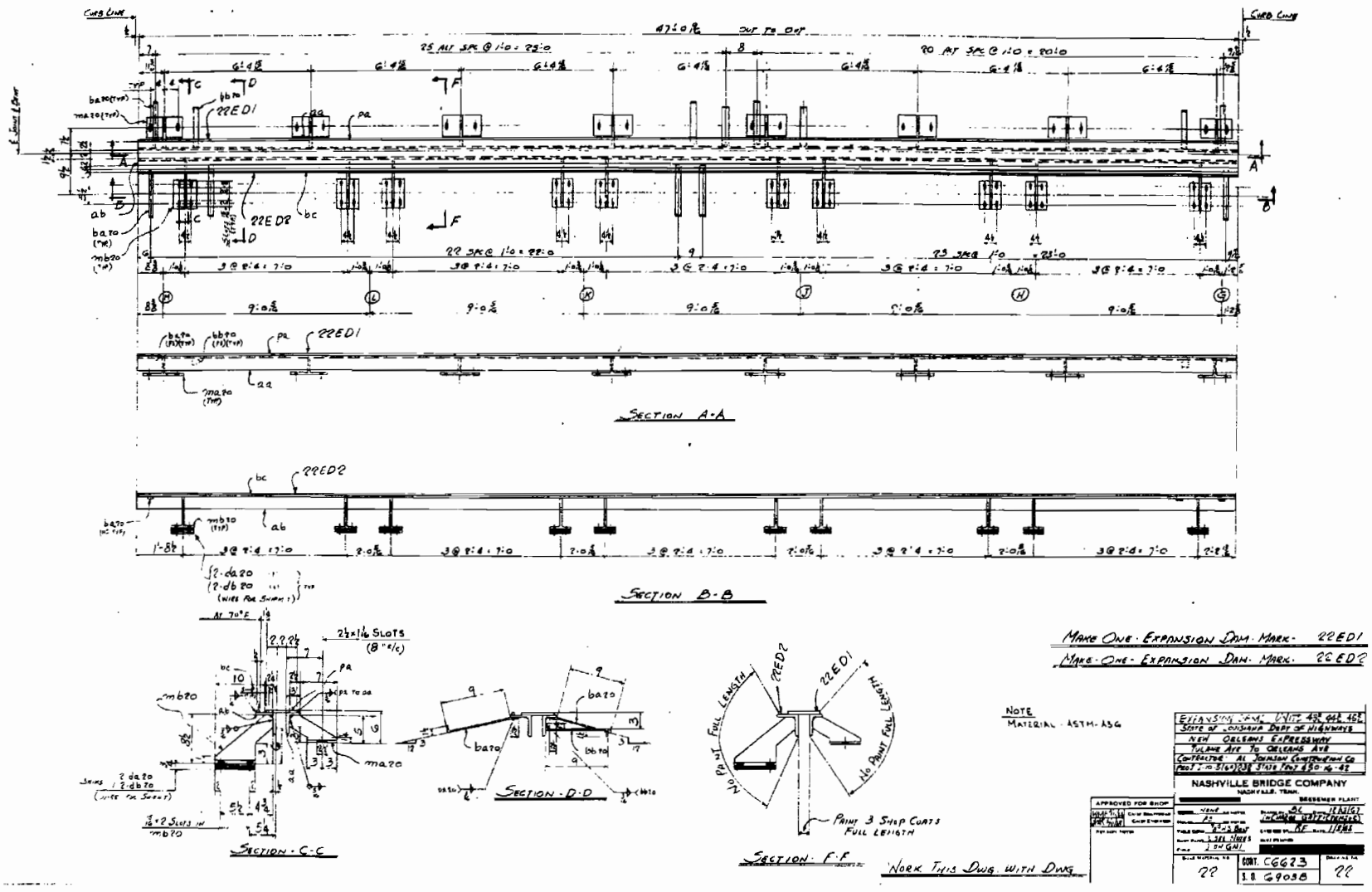
ELECTRONIC COPY - NOT FOR BID SUBMITTAL



Expansion Dam Units 43R & 43L

DISTRICT DESIGN 02	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)		DESIGNED JRM	PARISH ORLEANS	SHEET NO. 8a
			CHECKED WBP		
			DETAILED FAC	FEDERAL PROJECT	
			CHECKED JRM		
	AS BUILTS	NO. DATE REVISION DESCRIPTION BY	DATE SHEET 7/2008	STATE PROJECT 450-90-0219	

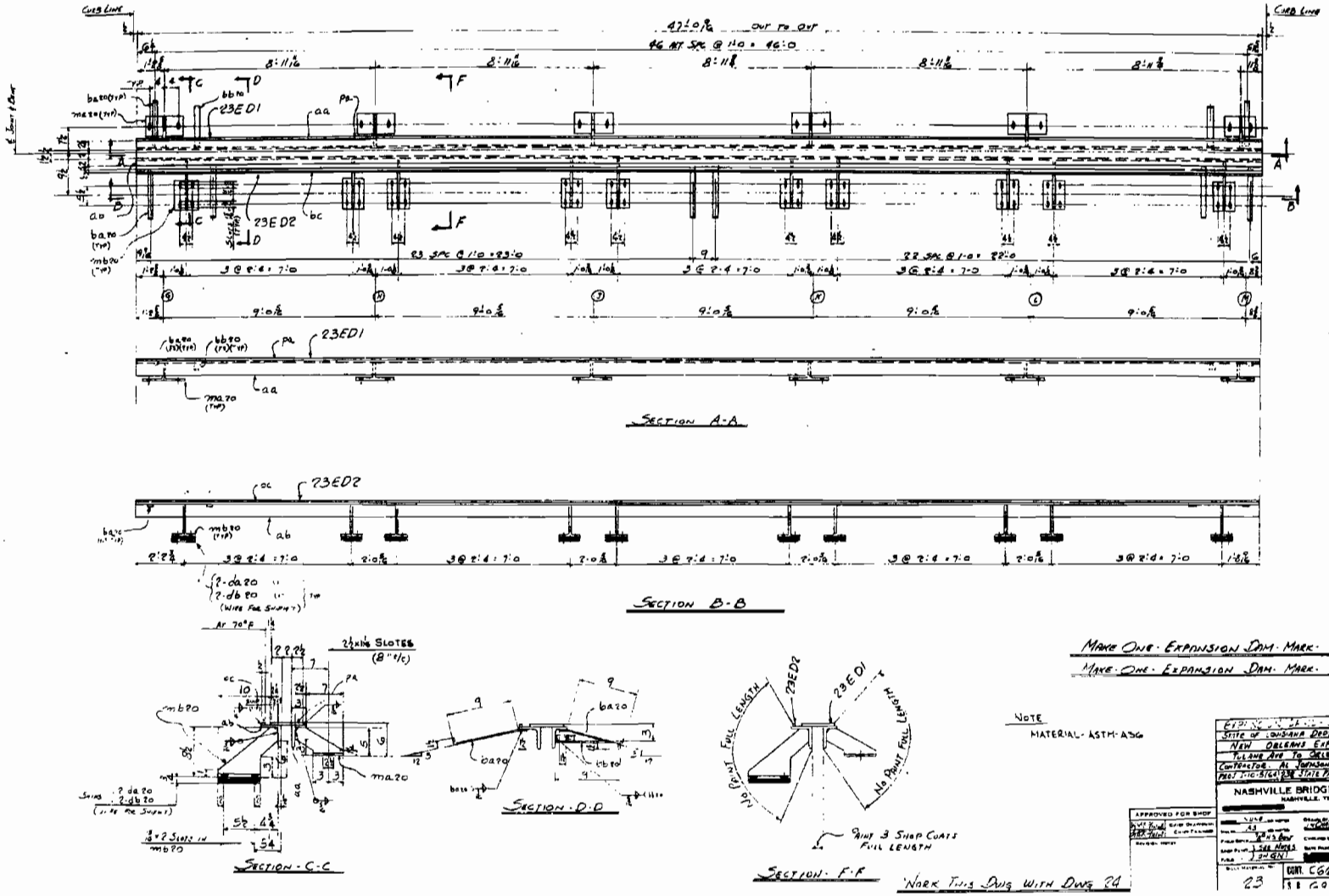
ELECTRONIC COPY - NOT FOR BID SUBMITTAL



Expansion Dam Units 43R & 43L

DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)		DESIGNED JRM	PARISH	ORLEANS	SHEET NO.	8r
			CHECKED WBP				
			DETAILED FAC	FEDERAL PROJECT			
	AS BUILTS		CHECKED JRM				
			DATE 7/2008	STATE PROJECT	450-90-0219		
		NO. DATE REVISION DESCRIPTION BY	SHEET				

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

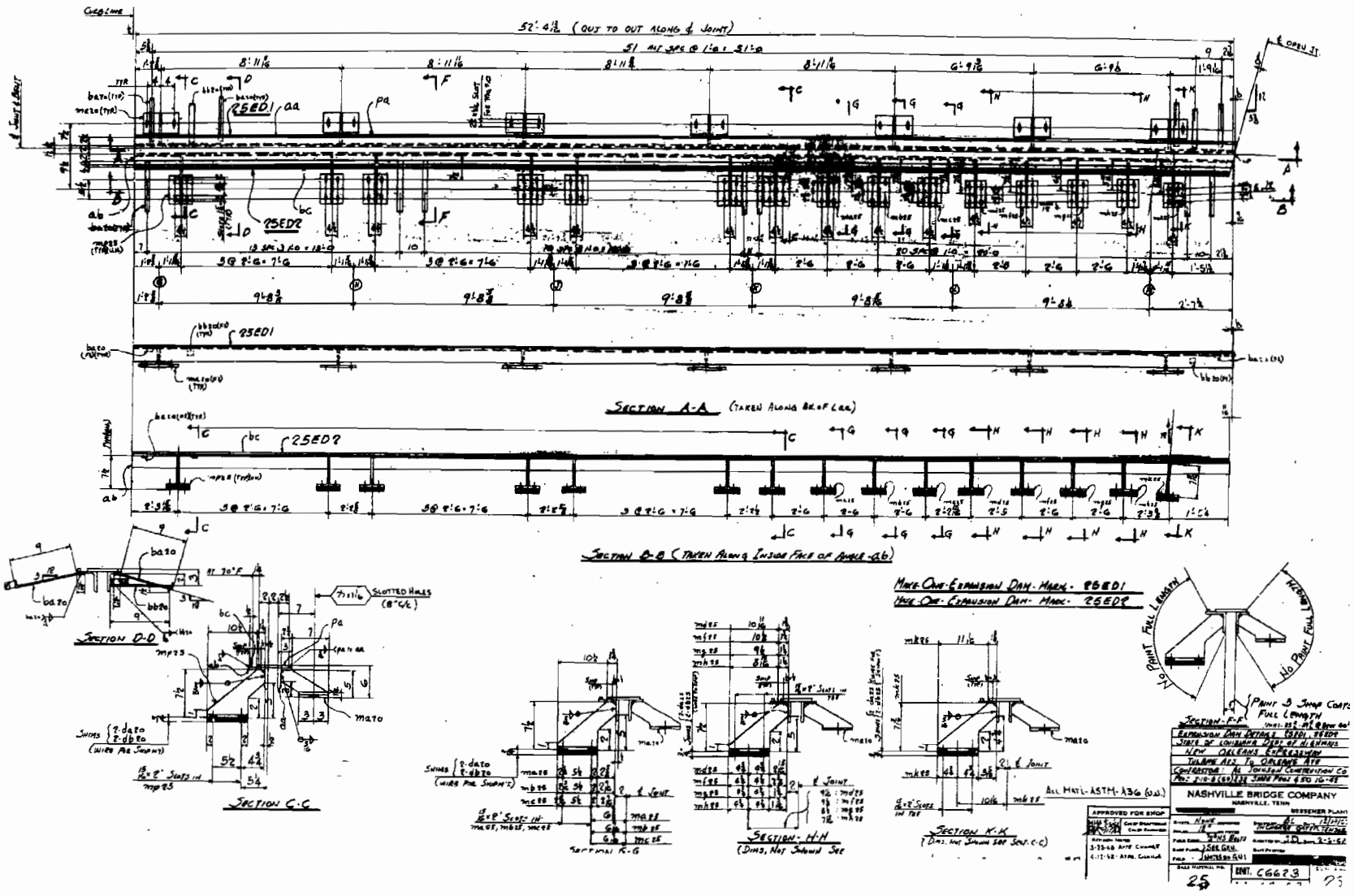


Expansion Dam Units 43R & 43L

DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)			DESIGNED JRM CHECKED WBP	PARISH ORLEANS	SHEET NO. 8S
	AS BUILTS	NO.	DATE	REVISION DESCRIPTION BY	DETAILED FAC CHECKED JRM	FEDERAL PROJECT
					DATE 7/2008 SHEET	STATE PROJECT 450-90-0219

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

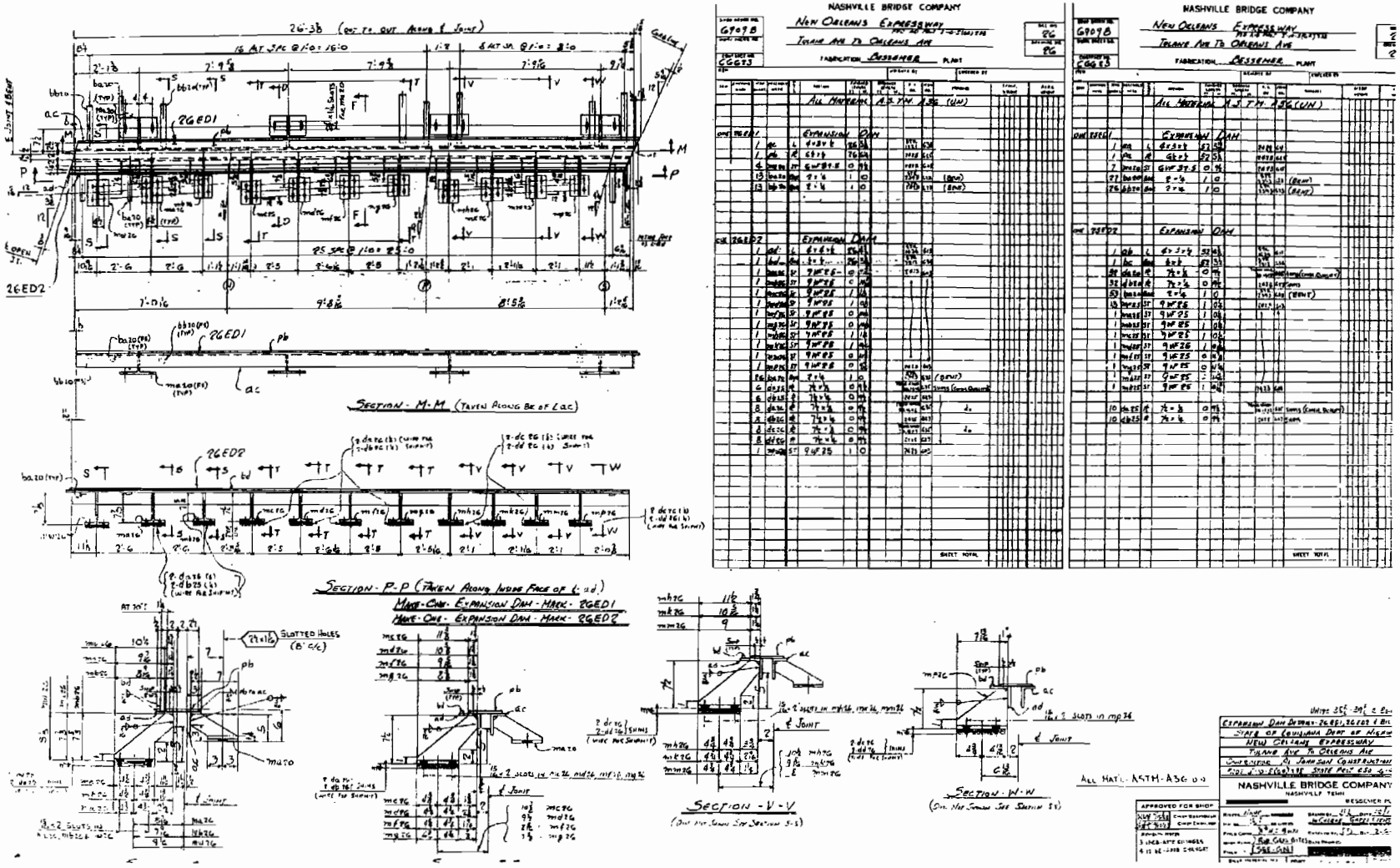
ELECTRONIC COPY - NOT FOR BID SUBMITTAL



Expansion Dam Details 35R & 35L

DISTRICT DESIGN 02	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)		DESIGNED JRM CHECKED WBP	PARISH ORLEANS	SHEET NO. 81
			DETAILED FAC CHECKED JRM	FEDERAL PROJECT	
	AS BUILTS	NO. DATE REVISION DESCRIPTION BY	DATE SHEET 7/2008	STATE PROJECT 450-90-0219	

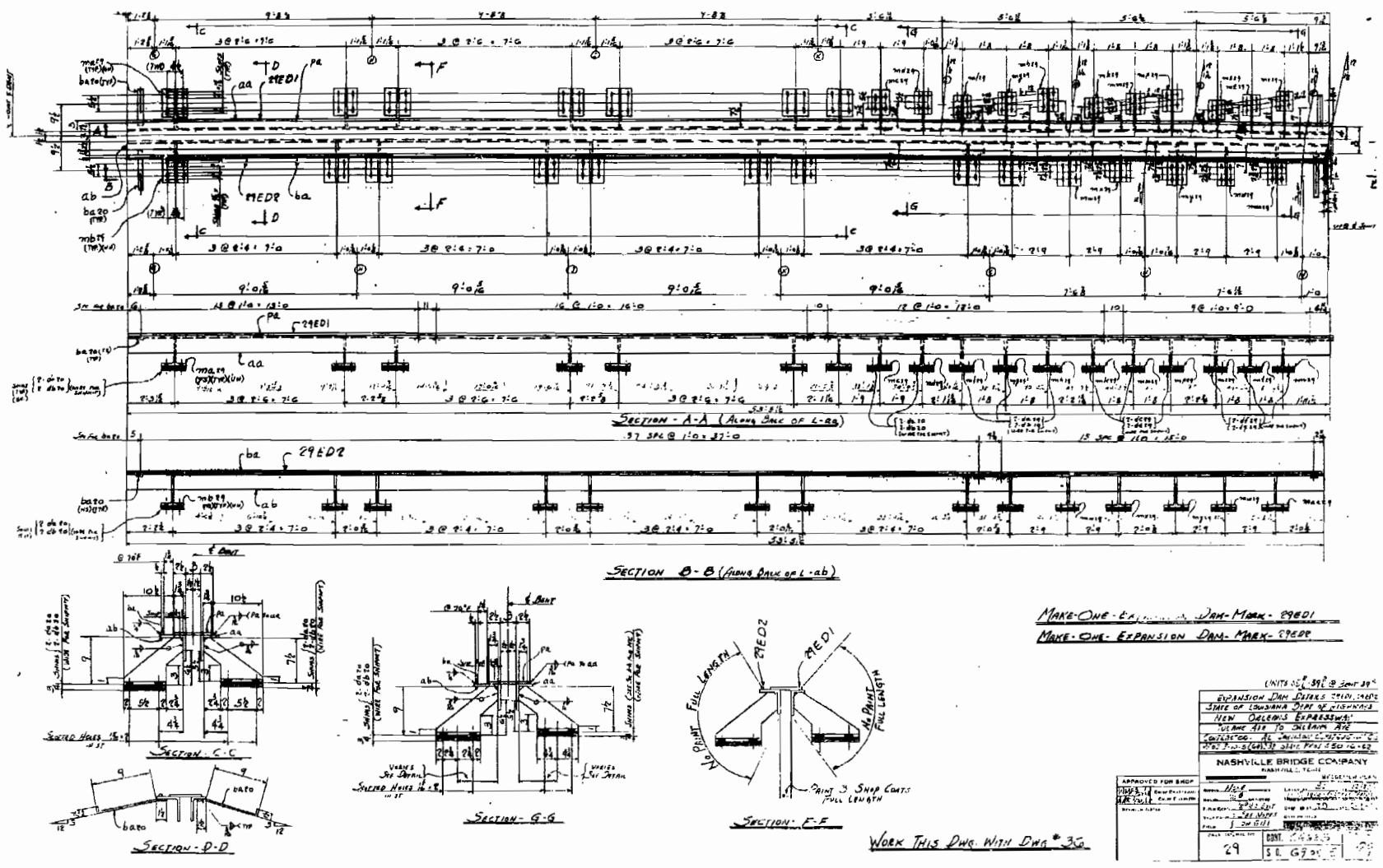
ELECTRONIC COPY - NOT FOR BID SUBMITTAL



Expansion Dam Units 35R & 35L

DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)		DESIGNED JRM / CHECKED WBP	PARISH ORLEANS	SHEET NO. 8u
	AS BUILTS		DETAILED FAC / CHECKED JRM	FEDERAL PROJECT	
		NO. DATE REVISION DESCRIPTION BY	DATE 7/2008 / SHEET	STATE PROJECT 450-90-0219	

R:\PROJECT FOLDERS\450-90-0219 (City streets sliding plate joint replacements - BRPM)\450900219(PLANS).dgn 27-AUG-2008 09:15



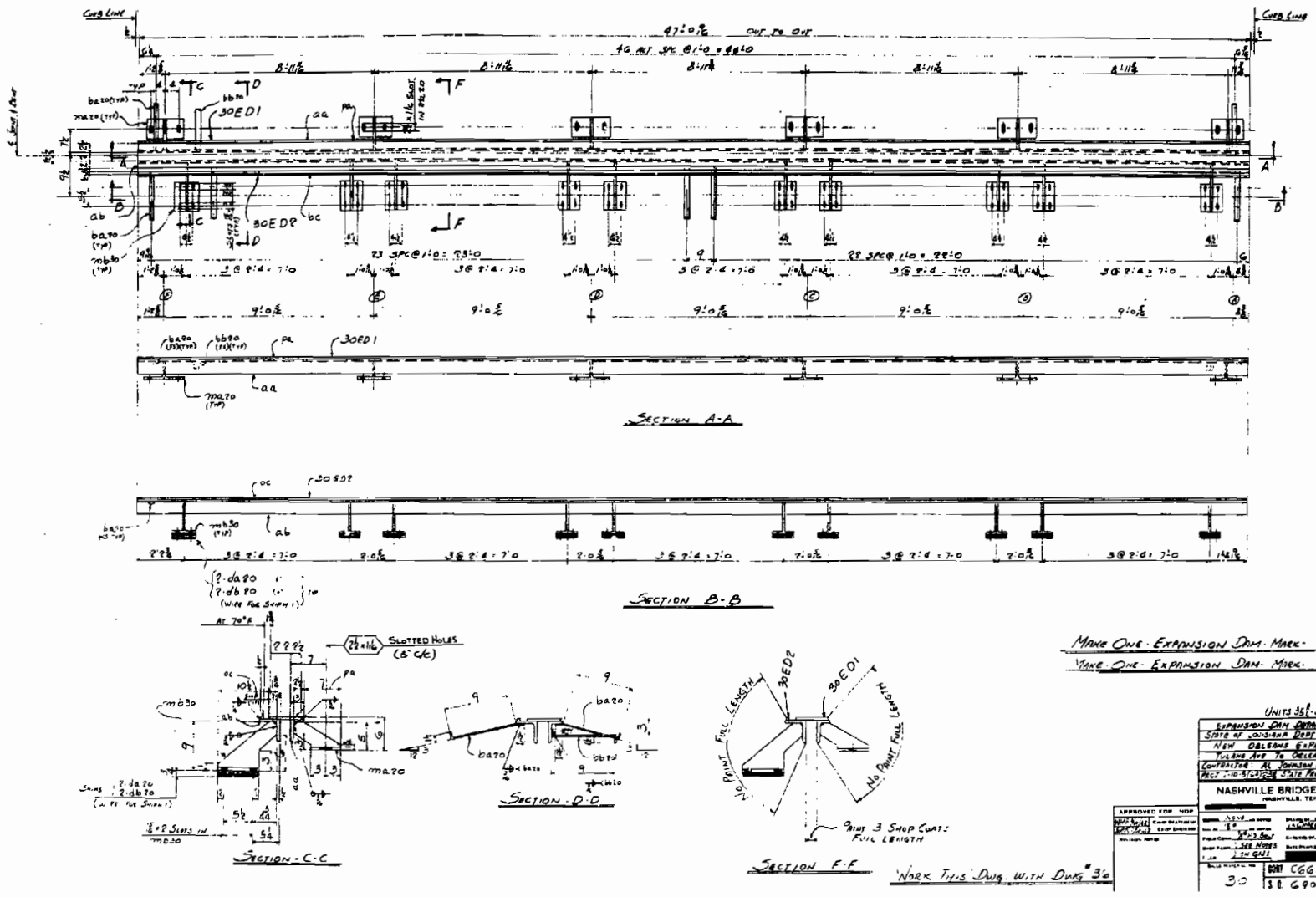
Expansion Dam Units 35R & 35L

DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)	NO.	DATE	REVISION DESCRIPTION	BY	DESIGNED JRM / CHECKED WBP	PARISH ORLEANS
	AS BUILTS					DETAILED FAC / CHECKED JRM	FEDERAL PROJECT
						DATE 7/2008 / SHEET	STATE PROJECT 450-90-0219

SHEET NO. 8V

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

R:\PROJECT FOLDERS\450-90-0219 (City streets sliding plate joint replacements - BRPM)\450900219(PLANS).dgn 27-AUG-2008 09:15



Expansion Dam Units 35R & 35L

DISTRICT 02 DESIGN	CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)	NO.	DATE	REVISION DESCRIPTION	BY	DESIGNED JRM CHECKED WSP	PARISH ORLEANS
	AS BUILTS					DETAILED FAC CHECKED JRM	FEDERAL PROJECT
						DATE 7/2008 SHEET	STATE PROJECT 450-90-0219

SHEET NO. 8W

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

LETTER BID PROPOSAL INFORMATION FOR

STATE PROJECT NO.450-90-0219
CITY STREETS SLIDING PLATE JOINT REPLACEMENT (BRPM)
ROUTE I10
ORLEANS PARISH

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

BID BOND

A Bid Bond is required when the bidder's total bid amount as calculated by the Department in accordance with Subsection 103.01 is greater than $50,000. *(See Section 102 of the Project Specifications.)*

_____, as Principal (Bidder) and

_____, as Surety, are bound unto the State of Louisiana, Department of Transportation and Development, (hereinafter called the Department) in the sum of five percent (5%) of the bidder's total bid amount as calculated by the Department for payment, of which the Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, as solidary obligors.

Signed and sealed this _____ day of _____, 20_____.

The condition of this obligation is such that, whereas the Principal has submitted a bid to the Department on a contract for the construction of **STATE PROJECT NO. 450-90-0219,CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM), located in ORLEANS PARISH, ROUTE I-10,** if the bid is accepted and the Principal, within the specified time, enters into the contract in writing and gives bond with Surety acceptable to the Department for payment and performance of said contract, this obligation shall be void; otherwise to remain in effect.

_____	_____
Principal (Bidder or First Partner to Joint Venture)	If a Joint Venture, Second Partner
By _____	By _____
Authorized Officer-Owner-Partner	Authorized Officer-Owner-Partner
_____	_____
Typed or Printed Name	Typed or Printed Name

_____

Surety

By _____ (Seal)

Agent or Attorney-in-Fact

_____

Typed or Printed Name

To receive a copy of the contract and subsequent correspondence / communication from LA DOTD, with respect to the bid bonds, the following information must be provided:

_____	_____
Bonding Agency or Company Name	Address
_____	_____
Agent or Representative	Phone Number / Fax Number

07/07
Form CS-2A

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
SCHEDULE OF ITEMS

LEAD PROJECT: 450-90-0219
OTHER PROJECTS:

ITEM NUMBER	APPROXIMATE QUANTITY	UNIT OF MEASURE	PAY ITEM UNIT PRICE (IN WORDS, INK OR TYPED)
202-02	9	EACH	REMOVAL OF ANGLE END DAMS AND ANCHORAGES _____ DOLLARS _____ CENTS
713-01	LUMP	LUMP SUM	TEMPORARY SIGNS & BARRICADES _____ DOLLARS _____ CENTS
727-01	LUMP	LUMP SUM	MOBILIZATION _____ DOLLARS _____ CENTS
740-01	LUMP	LUMP SUM	CONSTRUCTION LAYOUT _____ DOLLARS _____ CENTS
805-09	443.00	LINEAR FOOT	EXPANSION JOINT SEAL _____ DOLLARS _____ CENTS
S-101	886	LINEAR FOOT	POLYMER CONCRETE JOINT REPAIRS _____ DOLLARS _____ CENTS

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
SCHEDULE OF ITEMS

LEAD PROJECT: 450-90-0219
OTHER PROJECTS:

ITEM NUMBER	APPROXIMATE QUANTITY	UNIT OF MEASURE	PAY ITEM UNIT PRICE (IN WORDS, INK OR TYPED)
S-102	4	EACH	DYNAMIC MESSAGE SIGN UNIT _____ DOLLARS _____ CENTS

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

LETTER BID PROPOSAL SIGNATURE AND EXECUTION FORM

THIS FORM, THE SCHEDULE OF ITEMS, AND THE PROPOSAL GUARANTY MUST BE COMPLETED AS INDICATED AND SUBMITTED TO THE LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT (DOTD) TO CONSTITUTE A VALID BID

STATE PROJECT NO(S). **450-90-0219**

FEDERAL AID PROJECT NO(S).

NAME OF PROJECT **CITY STREETS SLIDING PLATE JOINT REPLACEMENTS (BRPM)**

I (WE) HEREBY CERTIFY THAT I (WE) HAVE CAREFULLY EXAMINED THE PROPOSAL, PLANS AND SPECIFICATIONS, INCLUDING ANY AND ALL ADDENDA, AND THE SITE OF THE ABOVE PROJECT AND AM (ARE) FULLY COGNIZANT OF ALL PROPOSAL DOCUMENTS, THE MASTER COPY OF WHICH IS ON FILE AT DOTD HEADQUARTERS IN BATON ROUGE, LA., AND ALL WORK, MATERIALS AND LABOR REQUIRED THEREIN, AND AGREE TO PERFORM ALL WORK, AND SUPPLY ALL NECESSARY MATERIALS AND LABOR REQUIRED FOR SUCCESSFUL AND TIMELY COMPLETION OF THE ABOVE PROJECT AND TO ACCEPT THE SUMMATION OF THE PRODUCTS OF THE UNIT PRICES BID ON THE SCHEDULE OF ITEMS ATTACHED HERETO AND MADE A PART HEREOF MULTIPLIED BY THE ACTUAL QUANTITY OF UNIT OF MEASURE PERFORMED FOR EACH ITEM, AS AUDITED BY DOTD, AS FULL AND FINAL PAYMENT FOR ALL WORK, LABOR AND MATERIALS NECESSARY TO COMPLETE THE ABOVE PROJECT, SUBJECT TO INCREASE ONLY FOR PLAN CHANGES (CHANGE ORDERS) APPROVED BY THE DOTD CHIEF ENGINEER OR HIS DESIGNEE. THIS BID IS SUBMITTED IN ACCORDANCE WITH THE GENERAL BIDDING REQUIREMENTS IN THE CONSTRUCTION PROPOSAL AND ALL SPECIAL PROVISIONS, PLANS, SUPPLEMENTAL SPECIFICATIONS, AND THE LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES (2006 EDITION). I (WE) UNDERSTAND THAT THE SUMMATION OF THE PRODUCTS OF THE UNIT PRICES BID ON THE SCHEDULE OF ITEMS MULTIPLIED BY THE ESTIMATED QUANTITY OF UNIT OF MEASURE FOR EACH ITEM, ALONG WITH ANY OTHER FACTORS SPECIFIED TO BE APPLICABLE SUCH AS CONSTRUCTION TIME AND/OR LANE RENTAL, SHALL BE THE BASIS FOR THE COMPARISON OF BIDS. I (WE) UNDERSTAND THAT THE SCHEDULE OF ITEMS MUST CONTAIN UNIT PRICES WRITTEN OUT IN WORDS AND THAT THE SCHEDULE OF ITEMS SUBMITTED AS PART OF THIS BID IS ON THE FORM SUPPLIED BY DOTD IN THE BID PROPOSAL. MY (OUR) PROPOSAL GUARANTY IN THE AMOUNT SPECIFIED FOR THE PROJECT IS ATTACHED HERETO AS EVIDENCE OF MY (OUR) GOOD FAITH TO BE FORFEITED IF THIS BID IS ACCEPTED BY DOTD AND I (WE) FAIL TO COMPLY WITH ANY REQUIREMENT NECESSARY FOR AWARD AND EXECUTION OF THE CONTRACT, AS WELL AS, SIGN AND DELIVER THE CONTRACT AND PAYMENT/PERFORMANCE/RETAINAGE BOND AS REQUIRED IN THE SPECIFICATIONS.

NONCOLLUSION DECLARATION (APPLICABLE TO FEDERAL-AID PROJECTS)

I (WE) DECLARE UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE UNITED STATES AND THE STATE OF LOUISIANA THAT I (WE) HAVE NOT DIRECTLY OR INDIRECTLY, ENTERED INTO ANY AGREEMENT, PARTICIPATED IN ANY COLLUSION, OR OTHERWISE TAKEN ANY ACTION IN RESTRAINT OF FREE COMPETITIVE BIDDING IN CONNECTION WITH THE CONTRACT FOR THIS PROJECT NOR VIOLATED LA. R.S. 48:254.

BIDDER'S DBE GOAL STATEMENT (APPLICABLE TO DBE GOAL PROJECTS)

IF THIS PROJECT IS DESIGNATED BY SPECIAL PROVISION AS A DISADVANTAGED BUSINESS ENTERPRISE (DBE) GOAL PROJECT IN ACCORDANCE WITH THE DBE PROVISIONS OF THIS CONTRACT, THE BIDDER ASSURES DOTD THAT HE/SHE WILL MEET OR EXCEED THE DBE CONTRACT GOAL, OR IF THE BIDDER CANNOT MEET THE REQUIRED DBE GOAL, THE BIDDER ASSURES DOTD THAT HE/SHE HAS MADE AND CAN DOCUMENT GOOD FAITH EFFORTS MADE TOWARDS MEETING THE GOAL REQUIREMENT IN ACCORDANCE WITH THE CONTRACT AND DBE PROGRAM MANUAL INCORPORATED HEREIN BY REFERENCE.

THE APPARENT LOW BIDDER SHALL COMPLETE AND SUBMIT TO THE DOTD COMPLIANCE PROGRAMS OFFICE, FORM CS-6AAA AND ATTACHMENT(S) AND, IF NECESSARY, DOCUMENTATION OF GOOD FAITH EFFORTS MADE BY THE BIDDER TOWARD MEETING THE GOAL, WITHIN TEN BUSINESS DAYS AFTER THE OPENING OF BIDS FOR THIS PROJECT. RESPONSIVENESS OF INFORMATION SUPPLIED IN THIS SECTION OF THIS CONSTRUCTION PROPOSAL SIGNATURE AND EXECUTION FORM IS GOVERNED BY THE DBE REQUIREMENTS INCLUDED WITHIN THE SPECIFICATIONS AND DBE PROGRAM MANUAL.

CERTIFICATION OF EMPLOYMENT OF LOUISIANA RESIDENTS TRANSPORTATION INFRASTRUCTURE MODEL FOR ECONOMIC DEVELOPMENT (TIME) PROJECTS (APPLICABLE TO TIME PROJECTS)

IF THIS PROJECT IS DESIGNATED BY SPECIAL PROVISION AS A TRANSPORTATION INFRASTRUCTURE MODEL FOR ECONOMIC DEVELOPMENT (TIME) PROJECT AS DEFINED IN ACT NO. 16 OF THE 1989 FIRST EXTRAORDINARY SESSION OF THE LEGISLATURE WHICH ENACTED PART V OF CHAPTER 7 OF SUBTITLE II OF TITLE 47 OF THE LOUISIANA REVISED STATUTES OF 1950, COMPRISED OF R.S. 47:820.1 THROUGH 820.6.

THE BIDDER CERTIFIES THAT AT LEAST 80 PERCENT OF THE EMPLOYEES EMPLOYED ON THIS TIME PROJECT WILL BE LOUISIANA RESIDENTS IN ACCORDANCE WITH LOUISIANA R.S. 47:820.3.

NON PARTICIPATION IN PAYMENT ADJUSTMENT (ASPHALT CEMENT AND FUELS) STATEMENT

IF THIS PROJECT IS DESIGNATED BY SPECIAL PROVISION AS BEING SUBJECT TO PAYMENT ADJUSTMENT FOR ASPHALT CEMENT AND/OR FUELS, THE BIDDER HAS THE OPTION OF REQUESTING EXCLUSION FROM SAID PAYMENT ADJUSTMENT PROVISIONS THAT ARE ESTABLISHED BY SPECIAL PROVISION ELSEWHERE HEREIN.

IF THE BIDDER DESIRES TO BE EXCLUDED FROM THESE PAYMENT ADJUSTMENT PROVISIONS,

THE BIDDER IS REQUIRED TO MARK HERE ☐

FAILURE TO MARK THIS BOX PRIOR TO BID OPENING WILL CONSTITUTE FORFEITURE OF THE BIDDER'S OPTION TO REQUEST EXCLUSION.

ELECTRONIC COPY - NOT FOR BID SUBMITTAL

STATE PROJECT NO(S). **450-90-0219**

BIDDER SIGNATURE REQUIREMENTS (APPLICABLE TO ALL PROJECTS)

THIS BID FOR THE CAPTIONED PROJECT IS SUBMITTED BY:

Name of Principal (Individual, Firm, Corporation, or Joint Venture)

If Joint Venture, Name of First Partner	If Joint Venture, Name of Second Partner
(Louisiana Contractor's License Number of Bidder or First Partner to Joint Venture)	(Louisiana Contractor's License Number of Second Partner to Joint Venture)
(Business Street Address)	(Business Street Address)
(Business Mailing Address, if different)	(Business Mailing Address, if different)
(Area Code and Telephone Number of Business)	(Area Code and Telephone Number of Business)
(Telephone Number and Name of Contact Person)	(Telephone Number and Name of Contact Person)
(Telecopier Number, if any)	(Telecopier Number, if any)

ACTING ON BEHALF OF THE BIDDER, THIS IS TO ATTEST THAT THE UNDERSIGNED DULY AUTHORIZED REPRESENTATIVE OF THE ABOVE CAPTIONED FIRM, CORPORATION OR BUSINESS, BY SUBMISSION OF THIS BID, AGREES AND CERTIFIES THE TRUTH AND ACCURACY OF ALL PROVISIONS OF THIS PROPOSAL, INCLUSIVE OF THE REQUIREMENTS, STATEMENTS, DECLARATIONS AND CERTIFICATIONS ABOVE AND IN THE SCHEDULE OF ITEMS AND PROPOSAL GUARANTY. EXECUTION AND SIGNATURE OF THIS FORM AND SUBMISSION OF THE SCHEDULE OF ITEMS AND PROPOSAL GUARANTY SHALL CONSTITUTE AN IRREVOCABLE AND LEGALLY BINDING OFFER BY THE BIDDER.

(Signature)	(Signature)
(Printed Name)	(Printed Name)
(Title)	(Title)
(Date of Signature)	(Date of Signature)

CONTRACTOR'S TOTAL BASE BID $ _____

IT IS AGREED THAT THIS TOTAL, DETERMINED BY THE BIDDER, IS FOR PURPOSES OF OPENING AND READING BIDS ONLY, AND THAT THE LOW BID FOR THIS PROJECT WILL BE DETERMINED FROM THE EXTENSION AND TOTAL OF THE BID ITEMS BY DOTD.

CS-14AA
08/06

ELECTRONIC COPY - NOT FOR BID SUBMITTAL