STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

CONSTRUCTION PROPOSAL

"CONSTRUCTION SPECIFICATIONS"
(Construction Proposal modified to include: Any addenda, any DBE CS-6AAA Forms, Schedule of Items with bid prices, any additional required returnables, copy of Construction Proposal Signature and Execution Form).

Letting Date: APRIL 25, 2007

Checked by: Edwin Santos
05/22/2007

STATE PROJECT NO. 338-01-0014
JUNCTION LA 134 - JUNCTION LA 881
ROUTE LA 581
EAST CARROLL PARISH

STATE OF LOUISIANA
RANDAL D. SANDERS
REG. No. 21391
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
14 MARCH 2007

KATHLEEN BABINEAUX BLANCO
GOVERNOR

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
P.O. Box 94245
Baton Rouge, Louisiana 70804-9245
www.dotd.louisiana.gov
225-379-1485

JOHNNY B. BRADBERRY
SECRETARY

April 18, 2007

STATE PROJECT NO. 338-01-0014
JUNCTION LA 134 - JUNCTION LA 881
ROUTE LA 581
EAST CARROLL PARISH

SUBJECT: ADDENDUM NO. 2 (CONSTRUCTION PROPOSAL REVISION)

Gentlemen:

Attached are the construction proposal revisions dated 04/18/2007 on the captioned project for which bids will be received on Wednesday, April 25, 2007.

The following changes have been made:

1. Revised the Quality Control section of the special provision entitled **Item S-002, In-Place Asphalt Treated Base Course; and Item S-004, Asphalt Emulsion** (14 pages).

Please note these revisions in the proposal previously furnished you and bid accordingly.

Very truly yours,

RANDAL D. SANDERS, P. E.
CONTRACTS & SPECIFICATIONS ENGINEER

Attachments
pc: Mr. Brian Buckel
Mr. Ricky Moon
Mr. Marshall Hill
Mr. Mark Chenevert
Mr. Paul Colquette
Mr. John Oglesby
Mr. Masood Rasoulian

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KATHLEEN BABINEAUX BLANCO
GOVERNOR

JOHNNY B. BRADBERRY
SECRETARY

April 17, 2007

SUBJECT: GENERAL ADDENDUM FOR LETTING OF 04/25/2007 - REVISION OF SUPPLEMENTAL SPECIFICATION FOR 2006 STANDARD SPECIFICATIONS.

Gentlemen:

Attached is the construction proposal revision dated 04/17/2007 on the following projects for which bids are scheduled to be received on Wednesday, April 25, 2007:

Lead Project No.	Project Name	Route	Parish
065-91-0021	Presque Isle Bridge Upper Deck and Wire Rope Repl	LA 24	Terrebonne
247-02-0025	Boudreaux Canal Bridge Mech. and Elec. Rehab.	LA 56	Terrebonne
276-05-0019	Chipseal	LA 439, LA 440, LA 1049, LA 1050, LA 1051	Tangipahoa and Washington
338-01-0014	Junction LA 134 - Junction LA 881	LA 581	East Carroll
454-01-0078	Pavement Marking Replacement, East and West Bound Lanes	I-12	East Baton Rouge and Livingston

The following change has been made:

1. The **Supplemental Specification for 2006 Standard Specifications** has been revised (5 pages).

Please note this revision in the proposals previously furnished you and bid accordingly.

Sincerely,

Randal D. Sanders

RANDAL D. SANDERS, P. E.
CONTRACTS AND SPECIFICATIONS ENGINEER

Attachment
pc: Mr. Brian Buckel
Mr. Lawrence Hofsted
Mr. John Oglesby
Mr. Michael Stack
Mr. Frank Standige
Mr. William Fontenot, Jr.
Mr. Michael Eldridge
Mr. John Sanders
Mr. Darrell Goza
Mr. Marshall Hill
Mr. Robert Hennigan
Mr. Lester LeBlanc
Mr. Wayne Marchand
Mr. Robert Mays
Mr. Ricky Moon
Mr. James Free
Mr. Roy Schmidt
Mr. Tom Landry
Ms. Connie Standige
Mr. Stephen Perilloux
Mr. Edwin McClanahan
Mr. Billy Grice
Mr. Phil Meyers (LTM)

KATHLEEN BABINEAUX BLANCO
GOVERNOR

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JOHNNY B. BRADBERRY
SECRETARY

April 10, 2007

STATE PROJECT NO. 338-01-0014
JUNCTION LA 134 - JUNCTION LA 881
ROUTE LA 581
EAST CARROLL PARISH

SUBJECT: ADDENDUM NO. 1 (CONSTRUCTION PROPOSAL REVISION)
ELECTRONIC BIDDING AMENDMENT NO. 1

Gentlemen:

Attached are the construction proposal revisions dated 04/10/2007 on the captioned project for which bids will be received on Wednesday, April 25, 2007.

The following changes have been made:

1. The Estimated Cost Range in the **Notice to Contractors** has been revised (1 page).
2. The special provision entitled **Item S-002, In-Place Asphalt Treated Base Course** has been deleted.
3. The special provision entitled **Item S-002, In-Place Asphalt Treated Base Course; and Item S-004, Asphalt Emulsion,** has been added (14 pages).
4. Plan Revision No. 1 has been included (3 pages).
5. Item S-004, Asphalt Emulsion, has been added to the **Schedule of Items** (1 page).

Please note these revisions and substitute the construction proposal returnable, page J-8, in the proposal previously furnished you and bid accordingly. If bidding electronically, all amendments must be downloaded to this project prior to placing the on-line bid with Bid Express.

Very truly yours,

Randal D. Sanders

RANDAL D. SANDERS, P. E.
CONTRACTS & SPECIFICATIONS ENGINEER

Attachments
pc: Mr. Brian Buckel
Mr. Ricky Moon
Mr. Marshall Hill
Mr. Mark Chenevert
Mr. Paul Colquette
Mr. John Oglesby
Mr. Masood Rasoulian

STATE PROJECT NO. 338-01-0014
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NOTICE TO CONTRACTORS (08/06)

Sealed bids for the following project will be received by the Louisiana Department of Transportation and Development (DOTD), 1201 Capitol Access Road, Headquarters Administration Building, Room 405-L, Baton Rouge, Louisiana 70802 until 8:00 a.m. on **Wednesday, April 25, 2007**. After 8:00 a.m., bids will be received in the Headquarters Auditorium until 10:00 a.m., at which time and place bids will be publicly opened and read. No bids will be received after 10:00 a.m. Any person requiring special accommodations shall notify the Department of Transportation and Development (DOTD) at (225) 379-1111 not less than 3 business days before bid opening.

STATE PROJECT NO. 338-01-0014
DESCRIPTION: JUNCTION LA 134 - JUNCTION LA 881
ROUTE: LA 581
PARISH: EAST CARROLL
LENGTH: 4.830 miles.
TYPE: GRADING, CEMENT TREATED BASE COURSE, IN-PLACE STABILIZED BASE COURSE, COLD PLANING ASPHALTIC CONCRETE, DRAINAGE STRUCTURES, ASPHALTIC SURFACE TREATMENT, AND RELATED WORK.
LIMITS: State Project No. 338-01-0014: LOCATED ON ROUTE LA 581 FROM ITS INTERSECTION WITH ROUTE LA 314 to ITS INTERSECTION WITH ROUTE LA 881.
ESTIMATED COST RANGE: $2,500,000 to $5,000,000
PROJECT ENGINEER: HILL, T. MARSHALL; Highway 80 East, Tallulah, LA 71282; (318) 574-4661.
PROJECT MANAGER: COLQUETTE, PAUL E.; (318) 342-0104.
COST OF PROPOSAL FORMS: $25.00
COST OF PLANS: Included in proposal (no additional charge).

Bids must be 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.

Plans and/or proposals may be obtained in Room 101-A of the DOTD Headquarters Administration Building, 1201 Capitol Access Road in Baton Rouge, or by contacting the DOTD; Email: sknight@dotd.la.gov, Phone (225) 379-1111, FAX: (225) 379-1714, or by written requests sent to the Louisiana Department of Transportation and Development, Contracts Management Section, P. O. Box 94245, Baton Rouge, LA 70804-9245. Proposals will not be issued later than 24 hours prior to the time set for opening bids. Purchase price for plans and proposals is non-refundable. Plans and specifications may be seen at the Project Engineer's office or in Room 101-A of the DOTD's Headquarters Administration Building in Baton Rouge. Upon request, the Project Engineer will show the work.

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.

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 provide for and maintain through and local traffic at all times and shall conduct his operations in such manner as to cause the least possible interference with traffic at junctions with roads, streets and driveways.

During asphaltic surface treatment operations, the contractor will be permitted to interrupt traffic for periods not exceeding 50 consecutive minutes in each 60-minute period.

The contractor shall conduct his paving operations on one side of the roadway at a time. The side of the roadway, including shoulder, that is open to traffic shall be clear at all times.

When the plans show asphaltic concrete pavement layers to be placed in thicknesses of 2 inches (50 mm) or less, the contractor will be permitted to pave in one lane for a full day; the adjacent lane may be paved the following workday. When pavement layers are greater than

2 inches (50 mm) thickness, the contractor shall place approximately 1/2 of each day's production in one lane and the remainder in the adjacent lane.

At the end of each day's paving operations, temporary pavement markings shall be in place and proper signs and barricades displayed. During the period that all lanes are open to traffic, the contractor shall neither store material nor park equipment on roadway shoulders.

When asphaltic concrete pavement is cold planed to a depth of 2 inches (50 mm) or less, the contractor will be permitted to cold plane in one lane for a full day; the adjacent lane may be cold planed the following workday. When the depth of cold planing is greater than 2 inches (50 mm), the contractor shall cold plane approximately 1/2 of each day's production in one lane and the remainder in the adjacent lane.

ENVIRONMENTAL PROTECTION (08/06): Subsection 107.14 of the 2006 Standard Specifications is amended to include the following paragraphs at the end of this subsection.

The Notice of Intent (NOI) will be submitted by the Department to the Louisiana Department of Environmental Quality (LADEQ) prior to the project letting. The project engineer will complete and submit the Notice of Termination (NOT) to the LADEQ after final stabilization of the site, in accordance with the terms of the permit.

The use of erosion control features or methods other than those in the contract shall be as directed.

The Storm Water Pollution Prevention Plan shall be comprised of Section 204 of the standard specifications along with applicable supplemental specifications and special provisions, and Standard Plan EC-01, "Temporary Erosion Control Details."

SUBLETTING OF CONTRACT (01/83): In accordance with Subsection 108.01 of the Standard Specifications, the following items are designated as "Specialty Items":

Item 729-16-B, Object Marker Assembly (Type 2)
Item 731-02, Reflectorized Raised Pavement Markers
Item 732-02-A-03, Plastic Pavement Striping (Solid Line) (4" Width) Hot Applied Thermoplastic (40 mil Thickness)
Item 732-03-A-03, Plastic Pavement Striping (Broken Line) (4" Width) Hot Applied Thermoplastic (40 mil Thickness)

PAYMENT ADJUSTMENT (05/06): Section 109, Measurement and Payment of the Standard Specifications is amended to add the following.

This project is not designated for payment adjustments for asphalt cements or fuels.

CULVERTS AND STORM DRAINS (01/07): Section 701, Culverts and Storm Drains, of the 2006 Standard Specifications, and the supplemental specifications thereto, is deleted and the following substituted.

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.

(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 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.

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).

(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.

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:

(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 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.

(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.

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.

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

TEMPORARY TRAFFIC CONTROL (08/06): Section 713 of the 2006 Standard Specifications and the Supplemental Specifications is amended as follows:

Subsection 713.04, Temporary Signs and Barricades, is amended to include the following:

(d) Project Signs: The contractor shall furnish, install, maintain, and upon completion of the project remove "project signs" in accordance with the following requirements.

Project signs shall conform to the requirements of Section 713 and the project sign detail contained elsewhere herein. Shop drawings will be furnished to the successful bidder by contacting the Department's Traffic Services Sign Shop at (225) 935-0121 or (225) 935-0142.

Project signs shall be required at the beginning and end of the project and shall follow sign G-20-1, "Road Work Next 'X' Miles", or as directed by the engineer.

Payment for project signs shall be included in the contract unit price for Item 713-01 Temporary Signs and Barricades.

PORTLAND CEMENT CONCRETE (08/06): Section 901 of the 2006 Standard Specifications and the supplemental specifications thereto is amended as follows.

Subsection 901.06 is amended as follows.

Heading (b) is amended to include the following.

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.

ITEM S-001, RECYCLED ASPHALTIC PAVEMENT (RAP) (DOTD FURNISHED: This work consists of loading and hauling recycled asphaltic pavement from the Madison Parish Maintenance Stockpile located at the north junction of US 65 at LA 603 and placing as directed by the project engineer and in conformity with Section 402 of the Project Specifications as revised by the following requirements. The contractor is hereby directed to make arrangements with Robert Matthews with the Madison Parish Maintenance Office (318-574-3827) in Tallulah to review the material and yard prior to bidding.

The recycled asphaltic pavement shall be used as aggregate additive necessary for the asphaltic stabilized base. The recycled asphaltic pavement shall be placed directly on the prepared and approved subgrade. Reclaimed asphaltic material shall be placed to the required thickness and shaped to the required section.

Recycled asphaltic pavement shall be measured by the cubic yard in approved hauling vehicles at the point of delivery in accordance with Subsection 109.01. No adjustment factor will be used.

Payment will be made at the contract unit price under:

Item S-001, Recycled Asphaltic Pavement (Rap) (DOTD Furnished, per cubic yard.

ITEM S-002, IN-PLACE ASPHALT TREATED BASE COURSE; and ITEM S-004, ASPHALT EMULSION: This item consists of in-place asphalt emulsion stabilization to obtain the width and depth specified in the plans. Two inches of Reclaimed Asphalt Pavement (RAP) shall be added prior to stabilization as described in the plans. Asphalt emulsion will be added to the blend of materials; water will be added as needed. The material will be spread and compacted, resulting in a finished bituminous base in accordance with the plans and these specifications. This item is intended for the exclusive use on La 581 as describe in this contract. General construction requirements of section 302.04 shall be followed except as amended in these special provisions.

MATERIALS

Asphalt Emulsion: The properties of the asphalt emulsion shall be adjusted to meet the needs of the in-situ materials and shall be determined by SEM Materials, 6120 S. Yale Ave., Suite 700, Tulsa, OK, 74136; contact Mr. Hoot Gibson, Phone 1-800-365-6656. For bid purposes, the contractor may assume an Asphalt Emulsion rate of 4 percent by weight and 1 percent cement by weight.

Existing Materials: Two inches of existing base, four inches of existing asphalt pavement and two inches of RAP supplied by the district in accordance with the plans shall be used to construct the asphalt stabilized base.

Mix Design: SEM Materials shall recommend a mix design before the start of the project. Refer to Appendix 1. The reclaimed material at the recommended emulsion content shall meet the properties in Table 1. Based on road variability, more than one design may be required. The properties and minimum quantities of asphalt emulsion, additional RAP, and water shall be determined by the mix design. The Contractor shall submit the mix design to the Engineer for approval prior to the start of the project.

Table 1	
150 mm diameter specimens shall be prepared in a Superpave gyratory compactor	
Property	Criteria
Superpave gyratory compaction, 1.25° angle, 600 kPa, gyrations	30
Short-term strength test, 1 hour – modified cohesiometer, ASTM D 1560-92 (Part 13), g/25mm of width (see Appendix 1 for modifications)	175 min.
Indirect tensile strength (ITS), ASTM D 4867 Part 8.11.1, 25°C, psi	50 min.
Conditioned ITS, ASTM D 4867 (see Note 1), psi	40 min.
* Resilient modulus, ASTM D 4123, 25°C, psi x 1000	150 min.

* For Information

Other Additives: If necessary, additives may be used to meet the requirements in Table 1. In the case that an additive is used, the type and allowable usage percentage must be described in the submitted design recommendation. A maximum of 2% Portland cement will be allowed.

EQUIPMENT

All equipment for required for this item is described below shall be in proper working condition and approved by the Engineer.

The self-propelled reclaimer shall be capable of fully reclaiming the existing road to the depth required, incorporate the asphalt emulsion and water, and mix the materials to produce a homogeneous material. The recommended minimum power of the reclaimer is 400 hp. The machine shall be capable of reclaiming not less than 8-ft. (2.4 m) wide and up to 12-inches deep in each pass. The reclaimer shall have a system for adding asphalt emulsion with a full width spray bar consisting of a positive displacement pump interlocked to the machine speed so that the amount of emulsion being added is automatically adjusted with changes in machine speed. The additive system shall be capable of incorporating up to 7 gallons per square yard of emulsion. Individual valves on the spray bar shall be capable of being turned off as necessary to minimize emulsion overlap on subsequent passes.

A motor grader for pre-shaping, aerating, spreading and final shaping of the material is necessary. The motor grader shall have a cross slope indicator.

A vibratory padfoot roller with 84 inch wide drum and 10 ton minimum weight is required; a blade is recommended for back-dragging. A pneumatic tire roller with 20 ton minimum weight with water spray system is required. A double drum vibratory steel roller with 10 ton minimum weight with water spray system is required.

If the reclamation depth is 4 inches or less, then a padfoot roller is optional. If no padfoot roller is used, then the pneumatic roller shall be 25-ton minimum weight with water spray system.

A water truck for supplying water to the reclaimer for addition of moisture, as required, during the operation shall be used. The water truck shall be capable and set up for a controlled spray on the road before compaction.

CONSTRUCTION METHODS

Work shall not proceed in the rain. The weather forecast shall not call for freezing temperatures for seven days. The historical weather database shall not call for freezing temperatures within 7 days of the end of the project; this shall be based on 50 percent reliability. Any deviation from these requirements requires the written authorization of the Engineer.

Pre-Shaping: The road shall be shaped by the reclaimer and / or motor grader to correct for profile, crown, and contour, according to the plans, before the addition of emulsion. Water and add rock can be added during this operation. The material shall then be compacted to support equipment and / or traffic and to provide depth control during reclaiming; compaction with a steel roller should be sufficient unless otherwise determined by the Engineer.

RECLAIMING

Moisture content before emulsion addition shall be within 1 percent from the mix design recommendation and as measured below; aerate if too wet and add water if too dry. The amount of asphalt emulsion used shall be as recommended from the mix design. The required depth of reclamation shall be monitored regularly. Prior to spreading and compacting, the material shall have a gradation meeting the requirement as specified below.

The entire operation of reclaiming the existing road, incorporating add rock, water, and asphalt emulsion can be completed in one pass if adequate mixing is achieved.

If the entire operation cannot be completed in one pass, then the existing road shall be reclaimed to the depth on the plans, and during this first pass, water and add rock shall be added; pre-shaping can also be accomplished at this time. After completion of the first pass, the road shall be shaped with a motor grader and compacted with a steel roller to provide better depth control. A second pass of a reclaimer shall be completed with the required amount of asphalt emulsion added.

If an additional pass of the reclaimer significantly improves dispersion of the emulsion, then this additional pass shall be required for the entire project.

Initial compaction: The breakdown roller (padfoot or pneumatic) shall not be behind the reclaimer by more than 500 feet. The padfoot roller, applying high amplitude and low frequency, or the pneumatic roller shall perform initial compaction at enough passes until it walks out of the material. Walking out for the padfoot roller is defined as light being clearly evident between all of the pads at the material–padfoot drum interface. Walking out for the pneumatic roller is defined as no significant wheel impressions being left on the surface.

Shaping: After the completion of padfoot rolling, any remaining pad foot marks shall be removed and the material spread using a motor grader cut no deeper than necessary to remove the padfoot marks. Desired slope and shape shall be achieved. Compaction will be aided if the steel roller (high frequency / low amplitude) and / or pneumatic roller follow the motor grader; this is required if there are no compaction measurement requirements. After the first day of emulsion addition, the reclaimed base shall not be shaped or significant chunking will result.

Intermediate and Final Compaction: The vibratory double-drum steel roller and pneumatic roller shall compact the bladed material. The best combination of number of passes and order of rollers shall be used to meet compaction requirements. Do not finish roll in vibratory mode. A light spray of water may aid in final compaction density and appearance.

Proof roll the compacted material according to Engineer's approval. It is recommended that proof rolling represent the type of traffic expected on the road. If deformation does not occur, moving truck traffic can be allowed on the reclaimed base. If deformation does occur,

truck traffic should be kept off until the reclaimed material is firm enough. It is expected that the reclaimed base can support moving car traffic after finish rolling has occurred.

Before placing any surfacing, the reclaimed base shall be allowed to cure until the moisture content in the material is reduced to 2.5 percent or less, or at the discretion of the Engineer. The reclaimed base shall be surfaced before winter.

QUALITY CONTROL

A pre-construction meeting shall be held at the Project Engineer's direction. A representative of the asphalt emulsion supplier shall be present to discuss handling of emulsions and delivery issues. For clarification: Asphalt emulsion sampling, testing and source approval shall be in accordance with Section 500 of the 2006 Louisiana Standard Specification for Roads and Bridges, except that the preliminary source approval testing shall be conducted by the contractor before shipping and at least once every two weeks. Upon approval of test results by the DOTD Materials and Testing Section, a lab number will be issued and the supplier may ship to the project.

The Contractor shall be responsible for quality control (QC) of the process and the completed reclaimed base. Quality control shall include the following activities, and the results of the QC reported daily in writing to the Engineer. See Appendix 2 for data sheets.

Asphalt Emulsion: A representative from the asphalt emulsion supplier will check the mixing and setting properties as needed and will make adjustments to the asphalt emulsion formulation if necessary. Changes shall comply with Table 2. The sampling frequency shall be in accordance with the Engineer's requirements and be established prior to the start of the project. The testing shall meet the requirements in Table 2.

Table 2

Test		Minimum	Maximum
Residue from distillation, %	AASHTO T-59 & ASTM D244[1]	63	
Oil distillate by distillation, %	AASHTO T-59 & ASTM D244[1]		0.5
Sieve Test, %	AASHTO T-59 & ASTM D244[1]		0.1
Penetration (TBD[2]), 25°C, dmm	AASHTO T-49(ASTM D5)	-25%	+25%

[1] Modified ASTM D244 procedure: distillation temperature of 177°C with a 20 minute hold. The ASTM D244 vacuum distillation procedure may be substituted once the maximum oil distillate is satisfied.

[2] TBD: To be determined from the mix design prior to emulsion manufacture for project. Penetration range will be reported on the submitted mix design.

RAP: The spread rate of the RAP shall be checked and conform to the quantity required by the mix design. The type of RAP shall conform to the type used in the mix design. Rates shall be checked by yield at a frequency to be decided by the Engineer.

Maximum Material Size: Samples of the reclaimed material shall be obtained before beginning compaction and sieved over the sieves to determine compliance with the following maximum particle size requirements:

Sieve Size	Percent Passing
2.0 in. (50 mm)	100
1.75 in. (44 mm)	97-100

Sample size shall be 40 pounds. Sampling frequency shall be at the Engineer's discretion.

Moisture Content: Prior to emulsion addition, moisture content shall be checked by microwave oven according to ASTM D 4643 or equivalent procedure. Other suitable methods are acceptable, such as a nuclear gauge, direct heating or infrared. Minimum sample size recommended is 700 grams for the microwave procedure after screening through a ¾ inch sieve. Check the moisture content on the same day that emulsion will be added. If rain has occurred after testing and before emulsion addition, re-check the moisture content. If the average moisture content is not within 1 percent of the mix design recommendation, then it shall be adjusted by moisture addition (water truck) or by aeration. If the moisture content has been manipulated, it shall be re-checked. The sample shall be to the depth of reclamation by any suitable method; make sure the sides of the sample hole are perpendicular to the road surface. Keep samples sealed until they are ready for testing. The moisture content shall be checked on at least each of three reclaimer passes on the first day of production. Moisture content sampling frequency shall be at the Engineer's discretion after the first day.

Emulsion Content: The amount of asphalt emulsion used shall be as recommended from the mix design. Any changes in asphalt emulsion content must be approved by the Engineer. The percentage of emulsion added shall be checked by determining the amount used by meter readings or truck weight tickets and by estimating the quantity of road reclaimed – depth, width, length, and estimated in-place density by Proctor density (mix design or field check) or nuclear density. On the first day of production, emulsion content shall be determined at a minimum on the first emulsion transport. Adjustments in equipment calibration shall be made if necessary. If adjustments are made, emulsion content shall be checked again. Thereafter, emulsion content shall be determined at a sampling frequency at the Engineer's discretion.

Depth Control: The reclaiming depth during all operations shall be monitored regularly to determine compliance with the plans. The depth shall be determined on each side of the reclaimer pass and shall be adjusted immediately as necessary.

COMPACTION

Modified Proctor Density: Refer to ASTM D 1557, Method C or equivalent; the 6 inch diameter mold is required. Only the nuclear gauge shall be used for acceptance testing when Modified Proctor is used as the reference density, and it shall be measured at the same location as the nuclear gauge reading. Samples shall be obtained to the full depth of reclamation before rolling and stored in a sealed container for no longer than one hour before Proctor compaction. Material shall be compacted to a minimum of 97 percent reference density of the Modified Proctor average reference density. Moisture contents on the material shall be obtained in accordance with Section 5.4 for reference. The mold shall be placed on a firm surface during compaction. If accurate dry (nuclear) density results cannot be obtained, then wet density shall be the reference. Correction to dry density shall be by direct moisture measurement, as described above.

Reclaimed Base Contour and Profile: The contour and profile and their methods and tolerances shall be as indicated on the plans or as required by the Engineer.

APPENDIX 1

Mix Design Procedure

Mix Design Procedure

1. Sampling and Processing

Based on data from auger borings (ASTM D 1452), cores, and / or other determinations (i.e. pavement records, FWD deflection data, etc.), determine if more than one design shall be performed. In addition, FDR projects with more than a 2-inch difference in bituminous surface between sections shall have separate designs performed. A minimum sample size of 350 pounds is required for each mix design.

If cores or slabs are received, determine the individual and average thickness values. Also, measure the density of four cores or two slabs (if possible) if the bituminous materials are the primary component of the mix design (for emulsion rate calculations later).

Crush bituminous materials to the gradation below before blending with the aggregate. If bituminous materials consist of a chip seal only, then the only requirement is that it shall be crushed to 100% passing the 1-inch sieve.

Sieve Size	Gradation
1.25 in. (31.25 mm)	100
1 in. (25 mm)	90 to 100
¾ in. (19 mm)	80 to 97
No. 4 (4.75 mm)	30 to 55
No. 30 (0.6 mm)	5 to 15

Specimens prepared for mix design shall have a maximum size passing the 1.25 in. (31.25 mm) screen for all material components.

2. Material Evaluation

The base rock shall have a washed gradation (ASTM C 117 and C 136) and sand equivalent (ASTM D 2419, method B) performed and reported. RAP shall have a dry or washed gradation and sand equivalent performed. Report the washed gradation and sand equivalent on the blend.

Perform Modified Proctor compaction according to ASTM D 1557, Method C to determine optimum moisture content (OMC) at peak dry density. OMC shall be defined by a best-fit curve from a minimum of four points. Material containing 20% or more passing No. 200 shall be mixed with target moisture, sealed, and set aside a minimum of 12 hours. All other material shall be set aside a minimum of 3 hours. If a material contains less than 4 percent passing No. 200, then this testing is not required.

3. Selection of Water Content for Design

Water content of specimens, not including water in the emulsion, shall be:

- 60 to 75 percent of OMC if SE ≤ 30
- 45 to 65 percent of OMC if SE > 30

Sand equivalent value (SE) is from the combined materials.

If a material contains less than 4 percent passing No. 200 or if no peak develops with the OMC curve, then fix the moisture content between 2 and 3 percent.

Specimens shall be mixed with the required amount of water before the addition of emulsion. Specimens shall be mixed with the appropriate amount of water and allowed to sit sealed according to the same guidelines as used for Modified Proctor specimens.

4. Number of Specimens / Mixing

Samples shall have a weight before addition of water and emulsion to produce 70 to 80 mm tall compacted specimens (except for IDT testing).

Choose four emulsion contents that will bracket the design emulsion content.

A minimum of two specimens at each of four emulsion contents shall be produced for short-term strength testing.

Four specimens at each of four emulsion contents shall be produced for the strength and retained strength tests.

Two specimens shall be produced for maximum specific gravity.

Four specimens at 120 to 140 mm tall at the design emulsion content shall be produced for thermal cracking testing (IDT).

A mechanical mixer shall be used that has a bowl of 10 to 12 inches in diameter. It shall rotate on its axis at 50 to 75 revolutions per minute. A mixing paddle which makes contact with the bottom and side of the bowl shall rotate on its axis at twice the bowl rotation rate and in the opposite rotation direction as the bowl.

Aggregate material and emulsion shall be mixed at a temperature of 20 to 26°C.

Water shall be mixed for 60 seconds.

Emulsion shall be mixed for 60 seconds.

If other materials are added, such as lime or cement, then they shall be introduced in a similar manner as they will be on the project. For example, if lime is incorporated a day or more before emulsion addition, then it shall be added to the wet aggregate a day or more before mixing with emulsion. If lime is incorporated as a slurry, then it shall be incorporated as a slurry in the laboratory.

5. Curing Before Compaction

Loose specimens shall be cured individually in plastic containers of 4 to 7 inches (100 to 180 mm) height and 6 inches (150 mm) diameter. Specimens shall be cured at 40°C for 30 (± 3) minutes. No further mixing or aeration shall occur during this time.

6. Compaction

Specimens shall be compacted in a Superpave gyratory compactor (SGC) at a vertical pressure of 600 kPa, an angle of 1.25°, and a mold of 150 mm diameter for 30 gyrations. After the last gyration, 600 kPa pressure shall be applied for 10 seconds. The mold shall not be heated.

7. Short-Term Strength (STS) Test

A modified Hveem cohesiometer apparatus shall be used to test early strength (1 hour). This apparatus and procedure generally conforms to ASTM D 1560 Section 10 with the following exceptions:

- It shall have the capability of testing 150 mm diameter specimens.
- It shall have a shot flow rate of 2700 ± 50 g/minute.

- Specimens shall be cured before compaction according to Section 5, and cure each specimen at each emulsion content for 60 ± 5 minutes at 25°C and 10 to 70 percent humidity after compaction and before testing.
- See Appendix 3 for further details of the equipment and operation.

8. Curing After Compaction

Specimens (except STS specimens) shall be cured for 72 hours at 40°C. The bottom of the specimens shall rest on racks with slots or holes for air circulation. After curing, specimens for moisture conditioning shall be cooled at ambient temperature a maximum of 24 hours; specimens for dry strength shall cool at ambient temperature or 25°C and be tested at the same time as moisture-conditioned specimens.

Specimens for maximum specific gravity shall be cured at the same conditions as the compacted specimens, except they can be tested after cooling a maximum of 24 hours.

9. Volumetric Measurements

Perform bulk specific gravity of the specimens according to ASTM D 6752. Keep specimens in bags until testing or vacuum saturation is performed. ASTM D 2726 (one minute soak) can be performed if absorption is less than 2 percent.

Perform maximum specific gravity measurements according to ASTM D 2041 with the supplemental dry-back procedure. Determine maximum specific gravity at the other emulsion contents, corrected for the residue of the emulsion.

Determine air voids at each emulsion content.

10. Mechanical Measurements

Perform resilient modulus testing in accordance with ASTM D 4123 on at least two specimens at each emulsion content after conditioning for at least two hours at 25°C. Test at a frequency of 1 Hz and use a Poisson's ratio of 0.30 to 0.40 for analysis. This can be performed before the ITS test on the same (dry) specimens.

Perform strength testing according to ASTM D 4867. Specimens shall be conditioned at 25°C for two hours before testing.

Vacuum saturate half the specimens at each emulsion content to a minimum 55 percent of the voids filled with water. Soak for 24 hours at 25°C before testing.

11. Thermal Cracking

See Appendix 4.

12. Emulsion Content Selection

The emulsion content selected shall result in the mixture meeting the requirements of Table 1.

13. Report

The mix design report shall have the following information:

- The name of the road and other pertinent project information
- Penetration of the emulsion residue used in the mix design
- A general description of the materials received, their locations, and how samples were obtained

- Average thickness of bituminous materials. Report density if Proctor testing was not performed.
- Thickness to be reclaimed
- Washed gradation of the separate and blended material(s). If RAP was crushed in the laboratory, then the gradation of the RAP shall be reported, and the combined washed gradation of the blend shall be reported.
- Sand equivalent value of the separate and blended materials
- Density and OMC from Proctor compaction
- The moisture content used in mix design
- Range of emulsion contents
- Short-term strength at each emulsion content (average values)
- Density, Gmm, and air voids at each emulsion content (average values)
- Resilient modulus and indirect tensile strength at each emulsion content (average values)
- Level of saturation and conditioned indirect tensile strength at each emulsion content (average values)
- Critical thermal cracking temperature from IDT at the design emulsion content, if performed
- Design emulsion content as a percent, in gallons per square yard, and in gallons per foot (with assumed width reported)

APPENDIX 2
QC Data Sheet (Use one or more data sheets per day)

INFORMATION

Date:	Project / location:
QC personnel:	Phone:
Temperature at start of day:	Temperature at end of day:
Climate conditions:	
Other notes:	

RESULTS OF MIX DESIGN

Optimum moisture content (OMC) from Modified Proctor	
Density at OMC	
Recommended field moisture range	Recommended emulsion content

ADD ROCK

Station / location						
Type and source						
Length, ft						
Width, ft						
Weight, lb						
Rate, lb/SY						

TEST STRIP FOR SAND CONE OR NUCLEAR DENSITY

Location	Station	Wet density, pcf	Moisture, %	Dry density, pcf	Notes
Average (Reference density)					
Operator	Gauge model	Gauge serial #			
Final roller pattern:					

❑ Density measurements not required. Final roller pattern:

MATERIAL TESTS

Station / location						
Max. size (Sec. 5.3) – 2"						
Size (Sec. 5.3) – 1.75"						
Moisture content, % (Section 5.4)						
Emulsion content, % (Section 5.5)						
Wet Density, pcf (Sec. 5.7)						
Dry density, pcf (Sec. 5.7)						
Proctor dry density, pcf (Sec. 5.7)						
Percent of reference density						

Reported by:_____

APPENDIX 3

Additional Instructions for the Short-Term Strength Test

Ensure that the following calibrations are made:

1. The counter balance should be positioned exactly so that the hinged plate just barely remains horizontal when the top brackets and empty bucket are in place. This ensures that there is no force on the sample until shot begins to flow into the bucket.
2. The gap between the bars of the switch that turns off the flow of shot should have a gap of ¾ inch when there is 3000 g of shot in the bucket. During this adjustment the locking bolt that prevents the plate from moving is in place.

To test cohesion:

1. Tare the balance with the empty bucket weight.
2. Center the specimen on the unit.
3. Place plates on top of sample and press down while adjusting the outer lower nuts up until they just contact the bottom of the plate.
4. Use a torque wrench or torque-meter to tighten the nuts on the specimen to 20 inch-pounds (maximum).
5. Gently support the bar so the unit does not move when the pin is pulled releasing the hinged plate.
6. Pull pin and push open valve to start the flow of shot.
7. After the unit shuts off the flow of shot, immediately put the locking pin in place and then record the weight of shot.
8. Loosen top nuts to remove plates and rotate specimen 90°.
9. Repeat procedure on the other axis of the specimen.
10. Calculate short-term strength as follows:

$$\text{shot weight} / (15 * (0.031*\text{height} + 0.0027*\text{height}^2))$$

where shot weight is in grams and height is in cm.

11. A total of two results will be obtained for each specimen at each emulsion content, and a total of four results will be obtained at each emulsion content.

APPENDIX 4

Procedures for performing AASHTO T-322 for FDR and GBS Design Specimens

NOTE: Procedure for critical cold temperature selection

Specification temperature shall be chosen using FHWA LTPPBind software (Version 2.1) using the weather station closest to the project. The required temperature for the specification is the coldest temperature at the top of the FDR / GBS layer in the pavement structure. Use 98 percent reliability.

Perform the indirect tensile testing (IDT) according to AASHTO T-322 with the following exceptions:

1. Specimens shall be 150 mm in diameter and at least 115 mm in height and cured and compacted as described in the testing procedures. After curing, two specimens shall be cut from each compacted specimen to 50 mm in height. Perform bulk specific gravity after cutting.
2. Two to three specimens are required at each of three temperatures.
3. Select two temperatures at 10°C intervals that bracket the required specification. For example, if the required specification temperature is –25°C, then select testing temperatures of –20°C and –30°C. A temperature of –10°C or –40°C should then be selected to complete the third required temperature.
4. The tensile strength test shall be carried out on each specimen directly after the tensile creep test at the same temperature as the creep test.
5. The environmental chamber must be capable of temperatures down to –40°C.
6. The critical cracking temperature is defined as the intersection of the calculated pavement thermal stress curve (derived from the creep data) and the tensile strength line (the line connecting the results of the average tensile strength at the two temperatures).

MEASUREMENT AND PAYMENT: Placing, mixing, additional materials (i.e. water and cement) and compaction shall be measured and paid for by the square yard. The Asphalt Emulsion shall be measured and paid for by the gallon.

Payment will be made at the unit contract price under the following:

Item S-002, In-Place Asphalt Treated Base Course (8" Thick), per square yard.
Item S-004, Asphalt Emulsion, per gallon.

ITEM S-003, CLEANING EXISTING DITCHES (04/99): This item consists of excavating and disposing of materials from existing ditches in accordance with plan details and the following.

Unless otherwise directed, material excavated from existing ditches shall be disposed of by the contractor in accordance with Subsection 202.02.

If ditches are cleaned within embankment areas, ditches shall be backfilled with embankment material satisfactorily compacted by approved methods. Such backfill will not be measured for payment.

Cleaning existing ditches will be measured by the linear foot (linear meter) along the center line of each ditch.

Payment for cleaning existing ditches will be made at the contract unit price per linear foot (linear meter), which includes removal of obstructions, furnishing and placing required backfill material, and disposing of removed material.

Payment will be made under:

Item S-003, Cleaning Existing Ditches, per linear foot (linear meter).

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 **sixty (60) 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.

(04/07)

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

TABLE OF CONTENTS

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.

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.

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.

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 502 – SUPERPAVE ASPHALTIC CONCRETE MIXTURES:

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

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.

SECTION 704 – GUARD RAIL:

Subsection 704.03 – General Construction Requirements (01/05), Pages 368 and 369.

Add the following to subparagraph (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 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.

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 901 – PORTLAND CEMENT CONCRETE:

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.

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:

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.

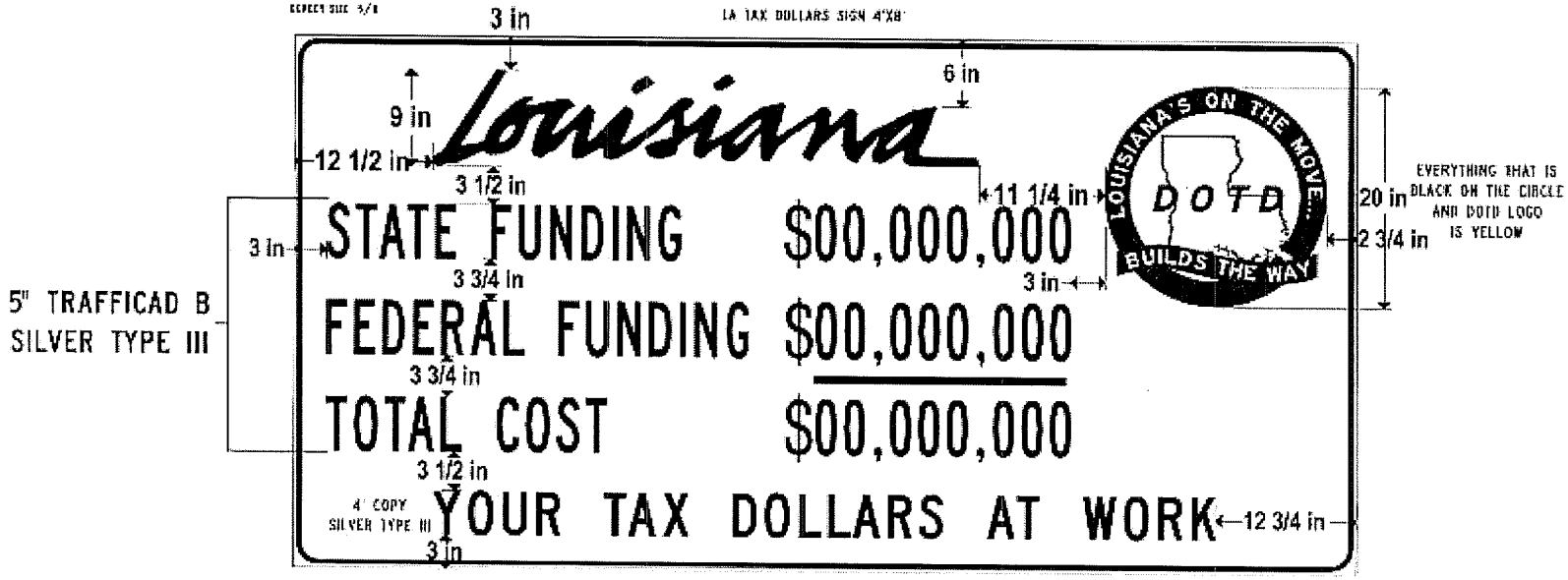
SECTION 1013 – METALS:

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".

TWO LANE ROADS

SHEETING: TYPEIII COLORS: BACKGROUND-BLUE, BORDER AND COPY-SILVER HI TYPEIII
"LOUISIANA AND DOTD LOGO ARE YELLOW HI TYPEIII
LA TAX DOLLARS SIGN 4'X8'



COLOR ARTWORK CAN BE FURNISHED UPON REQUEST

STANDARD PLANS TO BE USED ON THIS PROJECT

Std. Plans	Rev. Date
BM-01	01-08-07
DW-04	09-16-82
EC-01	01-14-94
HS-03	01-03-05
MB-01	01-14-92
PM-01	01-21-98

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION & DEVELOPMENT
PLANS OF PROPOSED
STATE HIGHWAY

STATE OF LOUISIANA
PAUL E. COLQUETTE
REG. No. 19848
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

STATE PROJECT NO. 338-01-0014

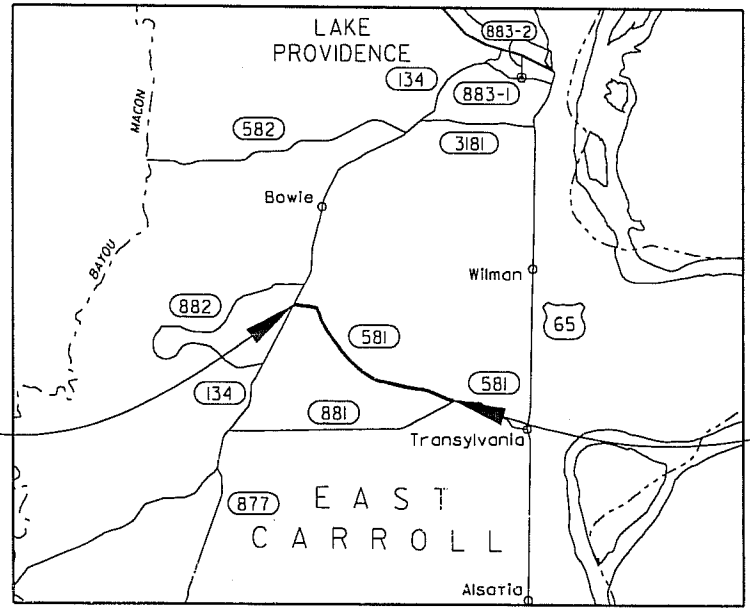
JCT. LA 134 – JCT. LA 881

EAST CARROLL PARISH

LA 581

FOR BRIDGE IN-PLACE
SEE SHEET NO. 3.

C.S. LOG MILE 0.000
STATION 10+00
BEGIN STATE PROJECT NO.
338-01-0014



C.S. LOG MILE 4.830
STATION 265+00
END STATE PROJECT NO.
338-01-0014

TRAFFIC DATA
2006 ADT = 200
2016 ADT = 225
D = 55%
K = 10%
T = 5%

TYPE OF CONSTRUCTION: DRAINAGE STRUCTURE IMPROVEMENTS, COLD PLANING, BASE STABILIZATION AND ASPHALTIC SURFACE TREATMENT.

RECOMMENDED FOR APPROVAL

1-30-07
DISTRICT DESIGN, WATER RESOURCES AND DEVELOPMENT ENGINEER

DISTRICT ADMINISTRATOR

APPROVED

CHIEF ENGINEER
DATE 2.26.07

1 4/3/07	Shts. 1, 10 & 27	4-4-07		4-5-07	
DATE	REVISIONS	DATE	RECOMMENDED	DATE	APPROVED

THE 2006 LOUISIANA D.O.T.D. STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, AS AMENDED BY THE PROJECT SPECIFICATIONS, SHALL GOVERN ON THIS PROJECT.

SHEET NUMBER 1
PARISH EAST CARROLL
FEDERAL PROJECT
STATE PROJECT 338-01-0014
DESIGNED AG
CHECKED PEC
DETAILED SC
CHECKED RJM
DATE 1-26-07
SHEET
No. DATE REVISION DESCRIPTION BY
TITLE SHEET
DISTRICT 05 DESIGN

INDEX TO SHEETS

SHEET NUMBER 2

PARISH	FEDERAL PROJECT	STATE PROJECT
EAST CARROLL		338-01-0014

DESIGNED CHECKED	DETAILED CHECKED	DATE SHEET
AG PEC	SC RJM	1-26-07

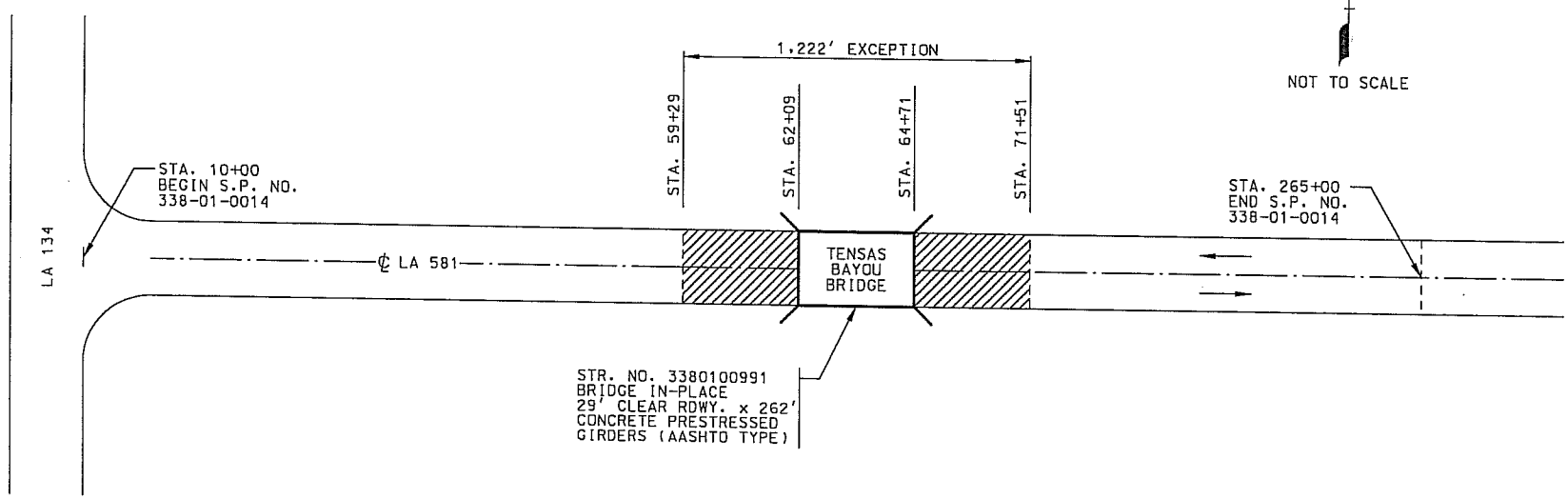
NO.	DATE	REVISION DESCRIPTION	BY

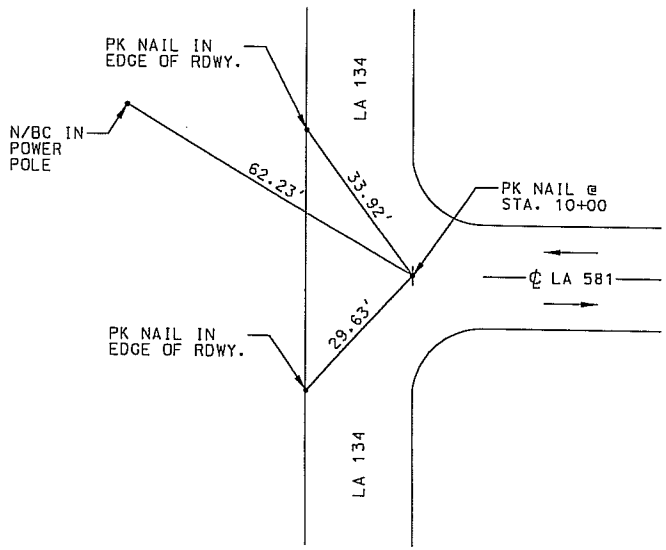
STATE OF LOUISIANA

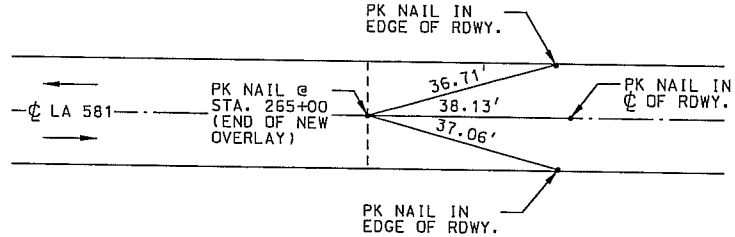
INDEX TO SHEETS

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DISTRICT 05 DESIGN







SHEET NUMBER	3
PARISH	EAST CARROLL
FEDERAL PROJECT	
STATE PROJECT	338-01-0014
DESIGNED	AG
CHECKED	PEC
DETAILED	SC
CHECKED	RJH
DATE	1-26-07
SHEET	

No.	DATE	REVISION DESCRIPTION	BY

LIMITS OF
PROJECT AND
BRIDGE IN-PLACE

DISTRICT 05
DESIGN

GENERAL NOTES

1.) **ITEM NO. 202-01, REMOVAL OF STRUCTURES AND OBSTRUCTIONS** - SHALL COMPLY WITH SECTION 202 OF THE "LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES", 2006 EDITION.

2.) **ITEM NO. 203-07, BORROW (VEHICULAR MEASUREMENT)** - QUANTITY IS BASED ON 752 CU. YDS. FOR SHOULDER DRESSING, 705 CU. YDS. FOR SLOPE CORRECTIONS IN CURVES AND 6,049 CU. YDS. FOR SHOULDER IMPROVEMENT AT CROSS DRAINS. COMPACTION SHALL BE TO THE SATISFACTION OF THE PROJECT ENGINEER. IN AREAS REQUIRING FILL, THE EXISTING TOP SOIL SHALL BE BLADED BACK PRIOR TO PLACING REQUIRED FILL. THEN SAID MATERIAL SHALL BE BLADED BACK ON TOP OF THE NEW FILL PRIOR TO BEGINNING DEEDING OPERATION. IN LOW FILL AREAS, DRESSING SHALL BE REQUIRED TO THE TOE OF THE SLOPE.

3.) **ITEM NO. 203-07-A, BORROW (VEHICULAR MEASUREMENT)(SELECTED SOILS)** - QUANTITY INCLUDES 2,306 CU. YDS. FOR RAISING THE ELEVATION OF THE ROADWAY FROM STA. 10+00 TO STA. 59+29, 991 CU. YDS. FOR SUPERELEVATION CORRECTIONS IN CURVES AND 902 CU. YDS. TO BE USED IN AREAS WHERE ASPHALT PATCHES ARE REMOVED. SUPERELEVATION CORRECTIONS IN CURVES SHALL BE MADE BY ADDING ADDITIONAL BORROW (SELECTED SOILS) PRIOR TO CEMENT TREATMENT OF BASE.

4.) **ITEM NO. 402-01, TRAFFIC MAINTENANCE AGGREGATE (VEHICULAR MEASUREMENT)** - QUANTITY IS BASED ON 247.9 CU. YDS. TO BE BLENDED WITH SELECTED SOILS FOR SUPERELEVATION CORRECTIONS IN CURVES.

5.) **ITEM NO. 509-02, CONTRACTOR RETAINED RECLAIMED ASPHALTIC PAVEMENT** - THE CONTRACTOR SHALL RETAIN 75% OF THE R.A.P. MATERIAL GENERATED FROM COLD PLANING. THE REMAINING R.A.P MATERIAL IS TO BE HAULED TO THE EAST CARROLL PARISH POLICE JURY'S STOCKPILE SITE (PARISH BUILT) LOCATED AT 3112 HWY. 581 IN EAST CARROLL PARISH.

SHEET NUMBER 4

PARISH	FEDERAL PROJECT	STATE PROJECT
EAST CARROLL		338-01-0014

DESIGNED / CHECKED	DETAILED / CHECKED	DATE SHEET
AG / PEC	SC / RJM	

NO.	DATE	REVISION DESCRIPTION	BY

GENERAL NOTES

SHEET 1 OF 3

DISTRICT 05 DESIGN

GENERAL NOTES

6.) **701-01, CROSS DRAIN PIPE** - ROAD CLOSURES WILL BE REQUIRED FOR CROSS DRAIN REPLACEMENTS. CLOSURE SIGNING IN ACCORDANCE WITH PLAN DETAILS AND M.U.T.C.D. WILL BE ERECTED PRIOR TO EACH CLOSURE. EACH SITE WILL BE REOPENED TO NORMAL TRAFFIC PRIOR TO ERECTING CLOSURE SIGNING FOR NEXT SITE. SEVENTY-TWO (72) HOURS PRIOR TO CLOSURE, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER'S OFFICE, EMERGENCY SERVICES AND MEDIA OF THE LOCATION AND ANTICIPATED DURATION OF THE CLOSURE. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL SIGNING REQUIRED FOR ROAD CLOSURE (ALL SIGNS WITHIN PROJECT LIMITS). D.O.T.D. WILL ERECT AND MAINTAIN DETOUR SIGNS ALONG THE DETOUR ROUTE. GRADING AND SHAPING DITCHES SHALL INCLUDE GRADING EXISTING DITCHES TO DRAIN, GRADING AND SHAPING AROUND NEW PIPE AND EXISTING PIPE, AND GRADING AND SHAPING DITCHES FROM THE ENDS OF ALL CROSS DRAINS AS DIRECTED BY THE PROJECT ENGINEER. THE CONTRACTOR SHALL TAKE CARE DURING PIPE AND HEADWALL INSTALLATIONS SO AS NOT TO DAMAGE EXISTING WATER AND TELEPHONE LINES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO SAID UTILITIES. THE COST OF ANY INCIDENTAL CLEARING TO PERFORM PIPE OR HEADWALL WORK SHALL BE INCLUDED IN RELATED ITEMS. THE EXISTING CROSS DRAIN AT STA. 113+56 HAS A 2" PVC WATER LINE RUNNING THROUGH IT. D.O.T.D. PERSONNEL WILL NOTIFY THE OWNER OF THE WATER LINE SO THE WATER CAN BE TURNED OFF. THE CONTRACTOR SHALL CUT THE WATER LINE AND EXTEND THE CROSS DRAIN. THE OWNER OF THE WATER LINE SHALL REPAIR IT AT HIS OWN EXPENSE. THE EXISTING CROSS DRAIN AT STA. 121+14 HAS A CYPRESS TREE ON THE RIGHT END. THE CYPRESS TREE IS TO REMAIN WHILE THE EXISTING PIPE IS TO BE REMOVED AND REPLACED. THE NEW PIPE SHALL BE LAID SO AS TO MISS THE CYPRESS TREE.

7.) **ITEM NOS. 701-10, REINFORCED CONCRETE PIPE (EXTENSION) & 701-12, CORRUGATED METAL PIPE (EXTENSION)** - WHEN AN EXISTING PIPE IS TO BE EXTENDED, THE EXTENSION SHALL BE OF THE SAME MATERIAL AS THE PIPE TO BE EXTENDED. SOME PIPE ENDS MAY HAVE TO BE CUT OFF TO ACCEPT AN EXTENSION. CONCRETE COLLARS ARE INCLUDED TO JOIN EXISTING PIPE TO THE EXTENSION. PAYMENT FOR THE CUT OFF PIPE IS TO BE INCLUDED IN THE COST OF THE PIPE EXTENSION.

SHEET NUMBER	5		
EAST CARROLL			338-01-0014
PARISH	FEDERAL PROJECT		STATE PROJECT
AG PEC	SC RJM	1-26-07	
DESIGNED CHECKED	DETAILED CHECKED	DATE SHEET	

NO.	DATE	REVISION DESCRIPTION	BY

GENERAL NOTES

SHEET 2 OF 3

DISTRICT 05 DESIGN

GENERAL NOTES

8.) **ITEM NO. 713-01, TEMPORARY SIGNS AND BARRICADES** - ANY SIGNS OR OBJECT MARKERS MOVED BY THE CONTRACTOR FOR CONSTRUCTION OPERATIONS SHALL BE PUT BACK IN PLACE IMMEDIATELY UPON COMPLETION OF SAID CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL REPLACE IN KIND AND AT HIS OWN EXPENSE ANY HIGHWAY WARNING OR REGULATORY SIGNS WHICH BECOME DAMAGED AS A RESULT OF CONSTRUCTION.

9.) **ITEM NO. 716-01-A, MULCH (VEGETATIVE); 717-01, SEEDING; 718-01, FERTILIZER** - QUANTITIES ARE BASED ON 8' FROM THE EDGE OF THE SHOULDER ON EACH SIDE OF THE ROADWAY FOR THE ENTIRE LENGTH OF THE PROJECT WITH EXCEPTION FOR BRIDGE SITE (STA. 59+29 TO STA. 71+51).

10.) **ITEM NO. 740-01, CONSTRUCTION LAYOUT** - SHALL INCLUDE LAYOUT OF BORROW PLACEMENT, CONTROL OF HORIZONTAL AND VERTICAL ALIGNMENT FOR ROADWAY AND STRIPING LAYOUT. STATIONING FOR THESE PLANS IS BASED ON THE CENTERLINE OF THE ROADWAY. THE CONTRACTOR SHALL FURNISH THE PROJECT ENGINEER WITH A PLOTTED PROFILE OF THE CENTERLINE AND BOTH EDGES OF THE TRAVEL LANES ON ALL HORIZONTAL CURVES WITH SUPERELEVATION CORRECTIONS FOR HIS APPROVAL PRIOR TO BEGINNING WORK.

SHEET NUMBER 6

PARISH	FEDERAL PROJECT	STATE PROJECT
EAST CARROLL		338-01-0014

DESIGNED CHECKED	DETAILED CHECKED	DATE SHEET
AG PEC	SC RJM	1-26-07

NO.	DATE	REVISION DESCRIPTION	BY

STATE OF LOUISIANA

GENERAL NOTES

SHEET 3 OF 3

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DISTRICT 05 DESIGN

CONSTRUCTION NOTES

STA. 10+00 TO STA. 59+29

1.) REMOVE 2" (AVG.) OF EXISTING HMAC SURFACE BY COLD PLANING.
2.) PLACE SELECT MATERIAL (6" DEPTH) TO RAISE ELEVATION OF ROADWAY.
3.) PLACE AND BLEND ADDITIONAL SELECT MATERIAL AND TRAFFIC MAINTENANCE AGGREGATE AS NEEDED TO ACHIEVE MINIMUM/DESIRABLE SUPERELEVATION OF HORIZONTAL CURVES.
4.) IN-PLACE CEMENT TREAT REMAINING BASE AND SURFACING WITH PORTLAND CEMENT (6% BY VOLUME)(12" DEPTH x 25').
5.) PLACE ASPHALTIC SURFACE TREATMENT (3 APPLICATIONS).
6.) STRIPE AND FINAL DRESS.

STA. 71+51 TO STA. 265+00

1.) PULVERIZE 4" (AVG.) OF EXISTING HMAC SURFACE WITH A SINGLE PASS OF STABILIZER.
2.) EXCAVATE ROADWAY SHOULDERS (6" DEPTH x 2.5') AND FILL WITH RECLAIMED ASPHALTIC PAVEMENT (6" DEPTH).
3.) PLACE AND BLEND ADDITIONAL SELECT MATERIAL AND TRAFFIC MAINTENANCE AGGREGATE AS NEEDED TO ACHIEVE MINIMUM/DESIRABLE SUPERELEVATION OF HORIZONTAL CURVES.
4.) IN-PLACE ASPHALT TREAT REMAINING BASE AND SURFACING WITH EMULSION (6" DEPTH x 25').
5.) PLACE ASPHALTIC SURFACE TREATMENT (3 APPLICATIONS).
6.) STRIPE AND FINAL DRESS.

NOTE: ANY EXISTING ASPHALT PATCHES WHICH CANNOT BE PULVERIZED SHALL BE REMOVED AND REPLACED WITH SELECT BORROW. COST TO BE INCLUDED IN ITEM NO. 202-01.

SHEET NUMBER 7
EAST CARROLL | PARISH
FEDERAL PROJECT
338-01-0014 | STATE PROJECT
AG PEC | SC RJM | 1-26-07
DESIGNED CHECKED | DETAILED CHECKED | DATE SHEET
NO. | DATE | REVISION DESCRIPTION | BY
STATE OF LOUISIANA
CONSTRUCTION NOTES
DOTD
DISTRICT 05 DESIGN

QUALITY CONTROL (QC) GUIDELINES FOR EMBANKMENT AND BASE COURSE

IN CONJUNCTION WITH THE REQUIREMENTS OF THE MANUAL FOR "APPLICATION OF QUALITY ASSURANCE SPECIFICATIONS FOR EMBANKMENT AND BASE COURSE", THE DISTRICT WILL REQUIRE THE FOLLOWING:

CONTRACTOR QUALITY CONTROL PERSONNEL SHALL HAVE ALL NECESSARY TESTING EQUIPMENT ON SITE DURING OPERATIONS TO CONDUCT REQUIRED TESTS. PERSONNEL SHALL ALSO HAVE AVAILABLE CURRENT EDITIONS OF THE DEPARTMENT'S SAMPLING AND TESTING MANUAL, FIELD TESTING PROCEDURES MANUAL, QC APPLICATIONS MANUAL AND PROJECT PLANS AND SPECIFICATIONS.

TESTING SHALL BE CONDUCTED ON SITE OR AT A FIELD LABORATORY. QC PERSONNEL SHALL ADVISE THE CONTRACTOR'S FOREMEN AND D.O.T.D. INSPECTOR OF RESULTS IN A TIMELY MANNER. WHEN TESTING REVEALS MATERIALS TO BE OUT OF COMPLIANCE WITH SPECIFICATIONS, THE CONTRACTOR SHALL MODIFY OPERATIONS OR REWORK AREAS AS NEEDED TO BRING PROCESSES WITHIN SPECIFICATION LIMITS. FAILURE TO PROVIDE QC MONITORING OF OPERATIONS SHALL RESULT IN SUSPENSION OF WORK AND REJECTION OF MATERIALS PLACED.

DISCREPANCIES BETWEEN D.O.T.D. RESULTS AND CONTRACTOR QC TESTS SHALL BE INVESTIGATED AND RESOLVED EXPEDIENTLY. ACCEPTANCE WILL BE BASED ON RESULTS OF QUALITY ASSURANCE TESTS PERFORMED BY DEPARTMENT PERSONNEL.

AS A MINIMUM, CONTRACTOR QC PERSONNEL SHALL CONDUCT AND RECORD DAILY TWO MOISTURE CONTENT TESTS, A PROJECT CONTROL OPTIMUM DENSITY CURVE AND A QC CHECK TEST FOR DENSITY PER MATERIAL ZONE. MEASUREMENTS FOR VERIFICATION OF DEPTH, WIDTH AND CROSS-SLOPE SHALL ALSO BE RECORDED. QC PERSONNEL SHALL MAINTAIN A LOG OF CEMENT/LIME SPREADS WHEN APPLICABLE. ADDITIONAL TESTING DUE TO MATERIAL OR PROCESS CHANGES SHALL BE REQUIRED. QC NOTES AND DATA MAY BE ENTERED ON APPROPRIATE D.O.T.D. FORMS OR IN A FORMAT ACCEPTABLE TO THE PROJECT ENGINEER. QUALITY CONTROL RECORDS WILL BE TRANSMITTED TO THE PROJECT OFFICE BOUND IN AN 8 1/2" x 11" FOLDER UPON COMPLETION OF EMBANKMENT AND BASE OPERATIONS FOR INCLUSION IN THE FINAL MATERIALS REPORT (FORM 2059).

SHEET NUMBER	8		
EAST CARROLL			338-01-0014
PARISH	FEDERAL PROJECT		STATE PROJECT
AG PEC	SC RJM		1-26-07
DESIGNED CHECKED	DETAILED CHECKED		DATE SHEET

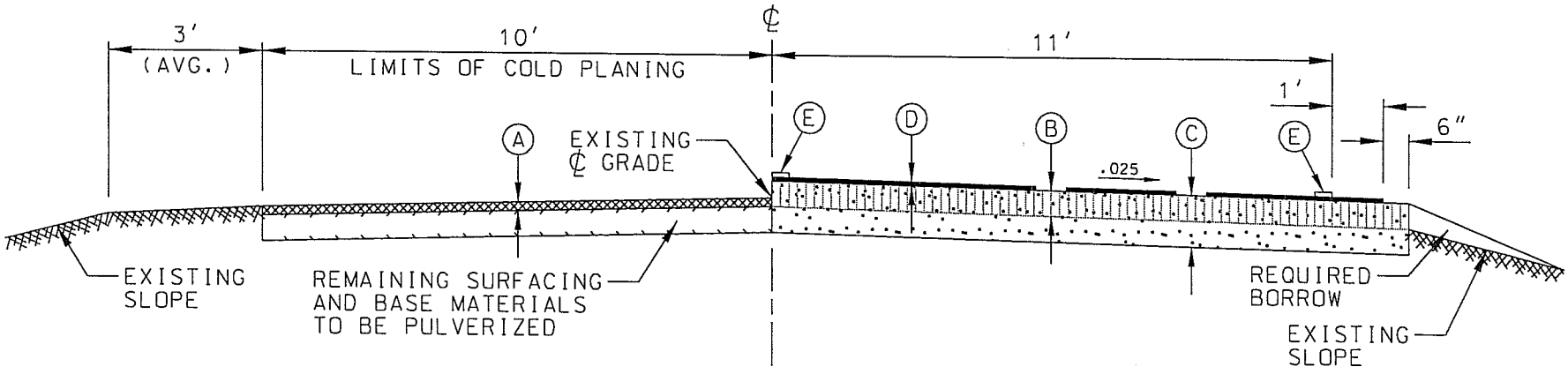
NO.	DATE	REVISION DESCRIPTION	BY

STATE OF LOUISIANA

QUALITY CONTROL GUIDELINES

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT dotd

DISTRICT 05 DESIGN



TYPICAL HALF SECTION FOR EXISTING ROADWAY

TYPICAL HALF SECTION FOR PROPOSED ROADWAY

TO APPLY: STA. 10+00 - STA. 59+29

(A) EXISTING ASPHALTIC CONCRETE TO BE REMOVED BY COLD PLANING (2″ AVG. DEPTH). DEVELOP 2.5% CROSS SLOPE WHERE POSSIBLE.

(B) BORROW (SELECTED SOILS)(6″ DEPTH).

(C) 12″ IN-PLACE CEMENT TREATED BASE COURSE.

(D) ASPHALTIC SURFACE TREATMENT (3 APPLICATIONS)(TYPE D).

(E) THERMOPLASTIC CENTERLINE AND EDGELINE STRIPING.

G-9

SHEET NUMBER 9

PARISH EAST CARROLL | FEDERAL PROJECT | STATE PROJECT 338-01-0014

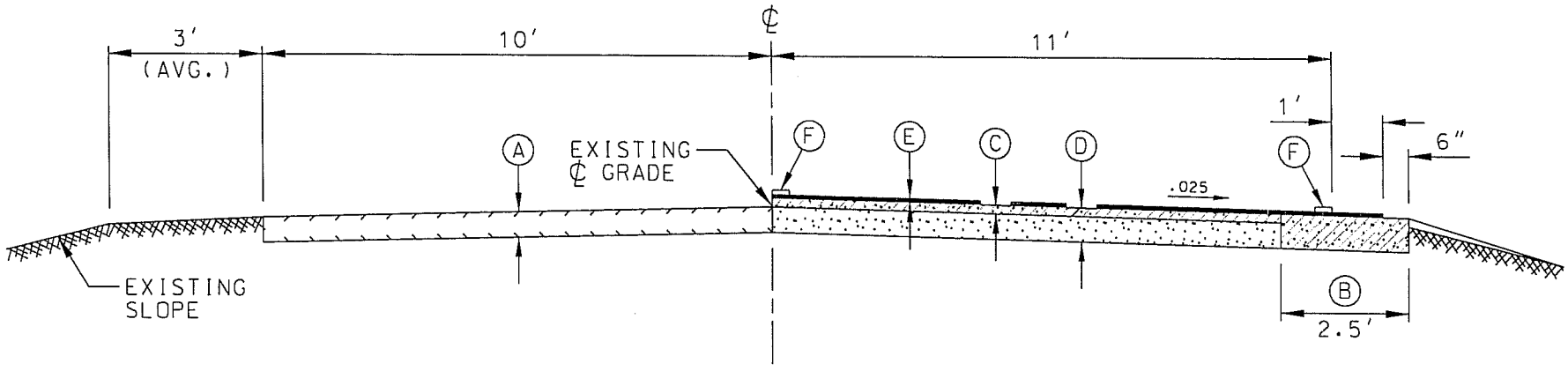
DESIGNED AG CHECKED PEC | DETAILED SC CHECKED RJW | DATE SHEET 1-26-07

No.	DATE	REVISION DESCRIPTION	BY

TYPICAL SECTION

SHEET 1 OF 2

DISTRICT 05 DESIGN



TYPICAL HALF SECTION FOR EXISTING ROADWAY

TYPICAL HALF SECTION FOR PROPOSED ROADWAY

TO APPLY: STA. 71+51 - STA. 265+00

(A) EXISTING ASPHALTIC CONCRETE SURFACING (4" AVG. DEPTH) AND BASE MATERIALS TO REMAIN IN-PLACE AND BE PULVERIZED.

(B) EXISTING SHOULDER TO BE EXCAVATED AND FILLED WITH R.A.P. MATERIAL (6" DEPTH).

(C) R.A.P. MATERIAL (2" DEPTH) * [1]

(D) 8" IN-PLACE ASPHALT STABILIZED BASE COURSE.

(E) ASPHALTIC SURFACE TREATMENT (3 APPLICATIONS)(TYPE D).

(F) THERMOPLASTIC CENTERLINE AND EDGELINE STRIPING.

[1] * RAP to be blended into asphalt treated base.

G-10

SHEET NUMBER 10

PARISH EAST CARROLL | FEDERAL PROJECT | STATE PROJECT 338-01-0014

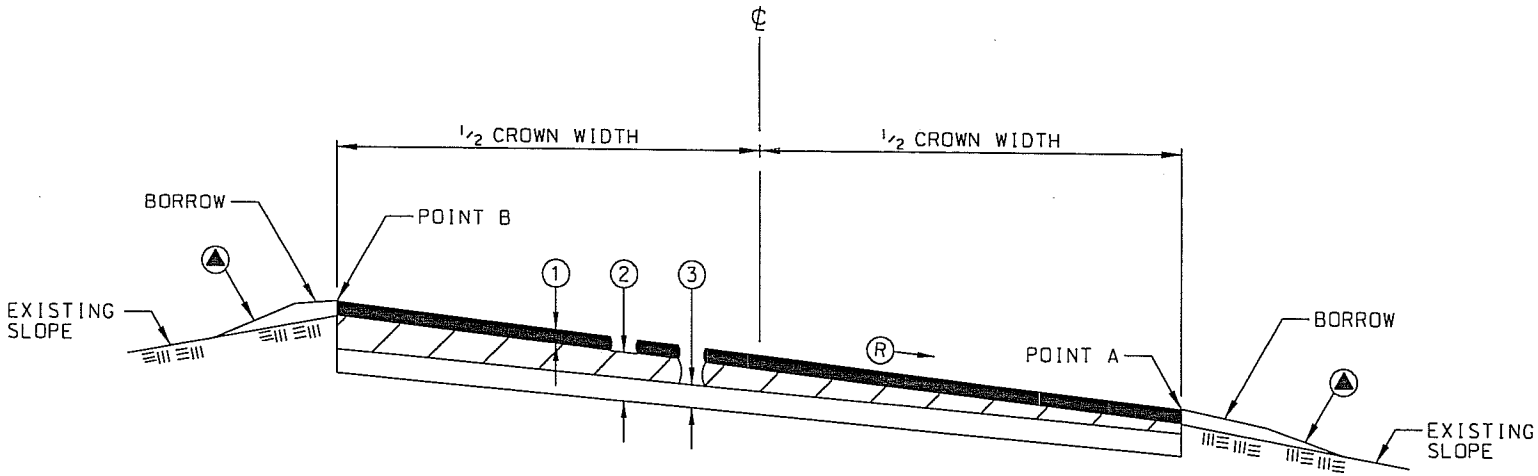
DESIGNED AG PEC | DETAILED SC RJN | CHECKED | DATE | SHEET

No.	DATE	REVISION DESCRIPTION	BY
1	4/3/07	Added note	MC

TYPICAL SECTION

SHEET 2 OF 2

DISTRICT 05 DESIGN



SUPERELEVATED SECTION

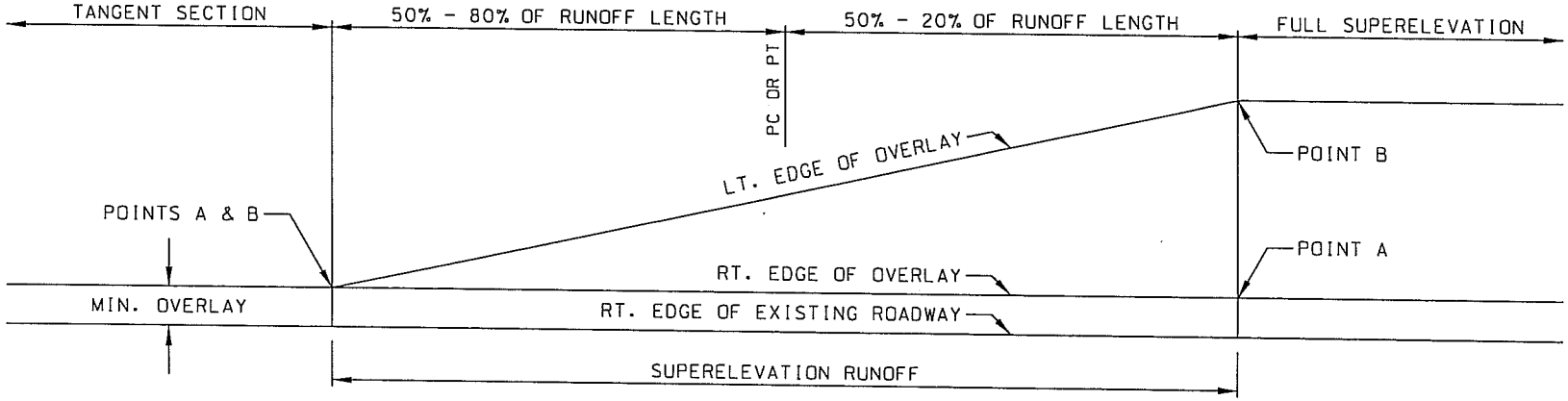
(1) REQUIRED SURFACING FOR ROADWAY CROWN TO CROWN

(2) STABILIZED BASE COURSE (SOIL CEMENT)

(3) REQUIRED LEVELING - BORROW (SELECT SOILS) AND TRAFFIC MAINTENANCE AGGREGATE (TO ACHIEVE SUPERELEVATION)

(▲) MATCH EXISTING SLOPE (NOT STEEPER THAN 33%)

(R) RATE OF SUPERELEVATION (%)



SUPERELEVATION DIAGRAM
(FOR RIGHT CURVATURE)

G-11

SHEET NUMBER 11

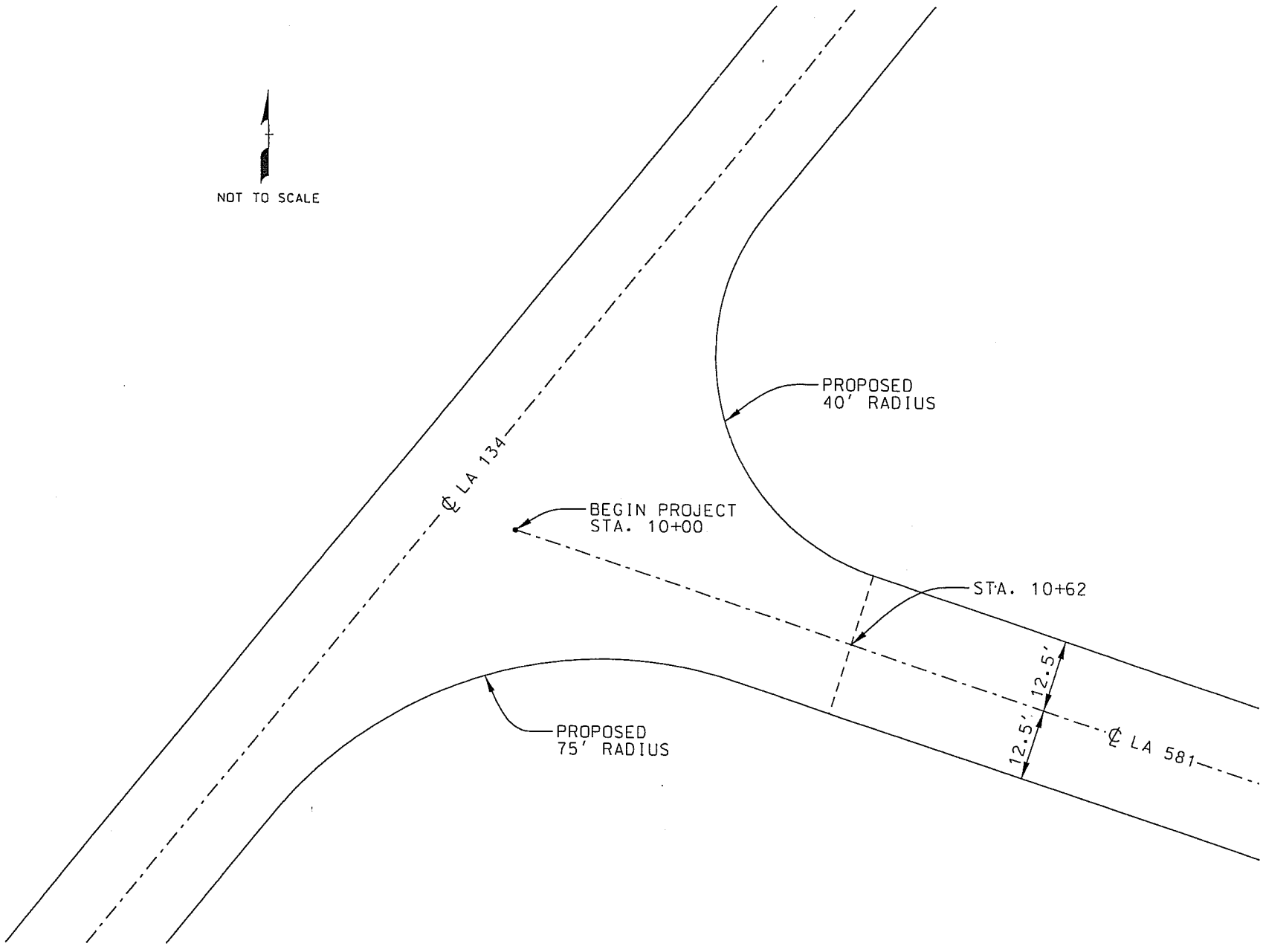
PARISH: EAST CARROL | FEDERAL PROJECT: | STATE PROJECT: 338-01-0014

DESIGNED: AG | CHECKED: PEC | DETAILED: SC | CHECKED: RJM | DATE: 1-26-07 | SHEET:

No.	DATE	REVISION DESCRIPTION	BY

SUPERELEVATION REQUIREMENTS FOR OVERLAYING RURAL HIGHWAYS

DISTRICT 05 DESIGN



SHEET NUMBER 12

PARISH: EAST CARROLL
FEDERAL PROJECT:
STATE PROJECT: 338-01-0014

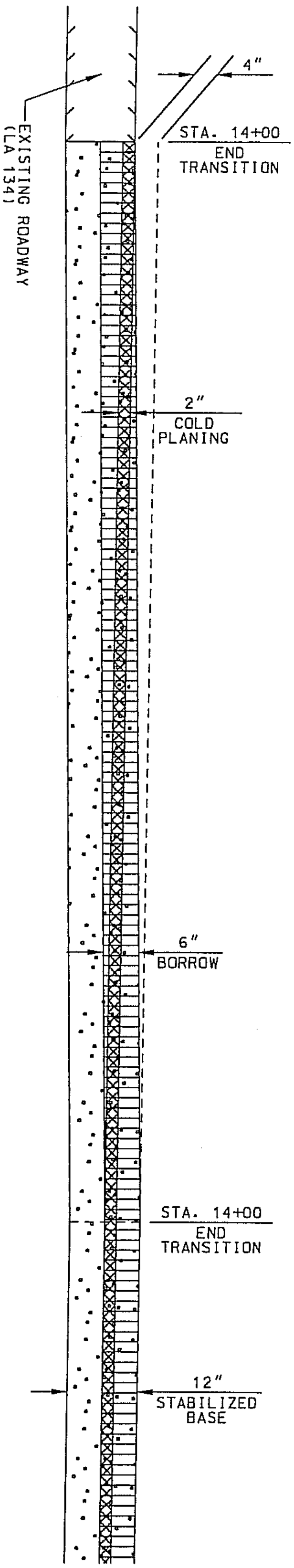
DESIGNED AG
CHECKED PEC
DETAILED SC
CHECKED RJM
DATE 1-26-07
SHEET

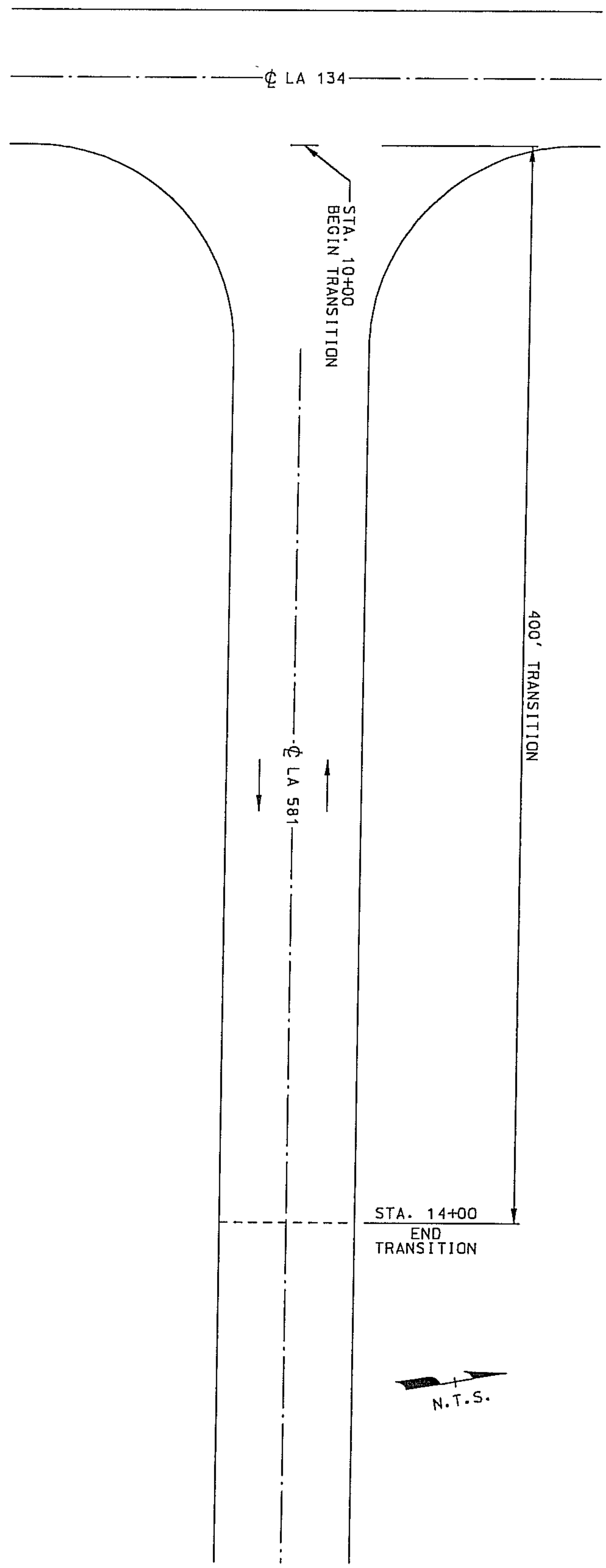
No.	DATE	REVISION DESCRIPTION	BY

DETAIL OF INTERSECTION @ LA 134

DISTRICT 05 DESIGN

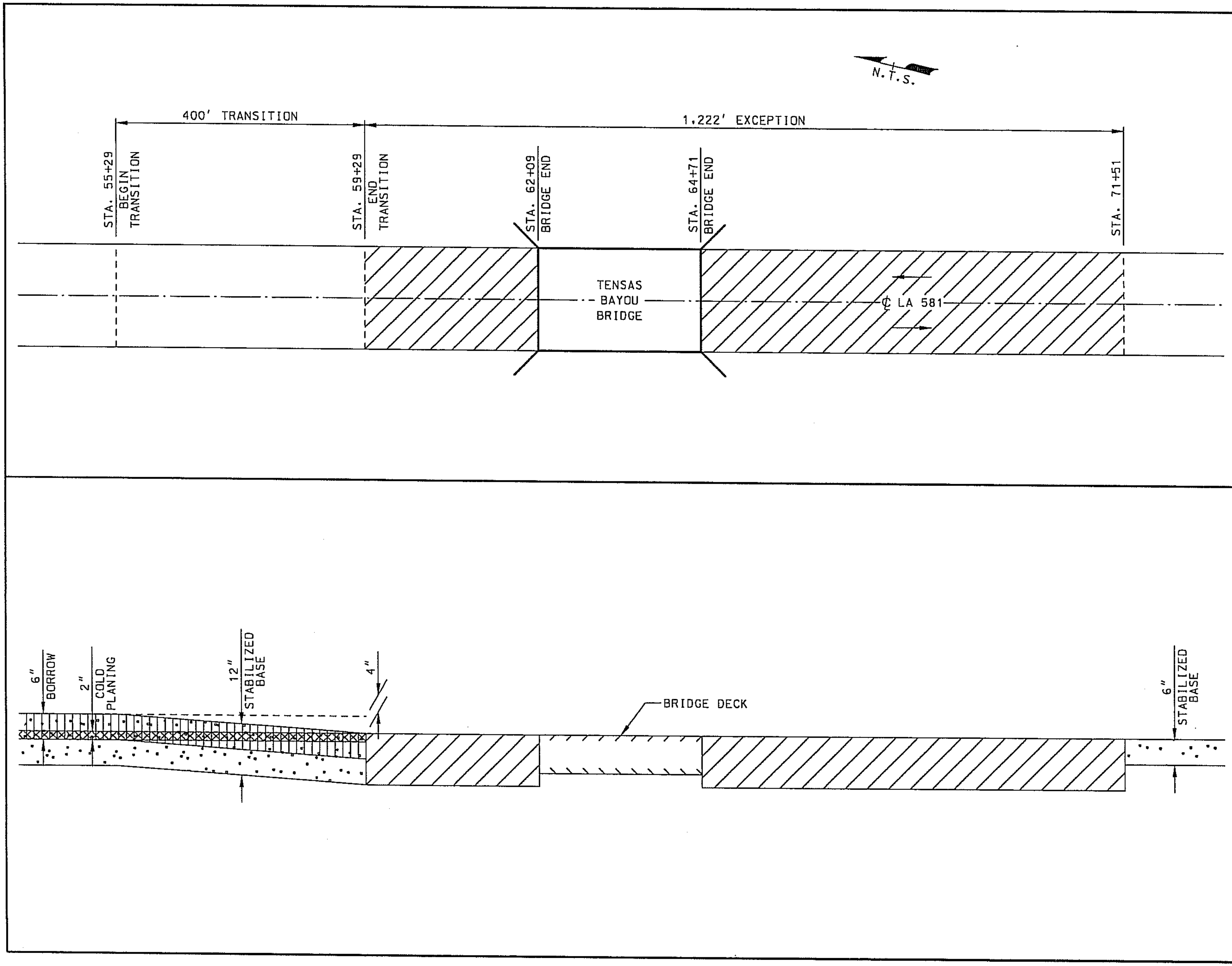
C-12





DISTRICT 05 DESIGN	ROADWAY TRANSITION @ INTERSECTION OF LA 134	DESIGNED	AG	PARISH	EAST CARROLL	SHEET NUMBER
		CHECKED	PEC			
		DETAILED	SC	FEDERAL PROJECT		
		CHECKED	RJM			
		DATE	1-26-07	STATE PROJECT	338-01-0014	13
		SHEET				

No.	DATE	REVISION DESCRIPTION	BY



SHEET NUMBER	14
PARISH	EAST CARROLL
FEDERAL PROJECT	
STATE PROJECT	338-01-0014
DESIGNED	AG
CHECKED	PEC
DETAILED	SC
CHECKED	RJW
DATE	1-26-07
SHEET	

No.	DATE	REVISION DESCRIPTION	BY

ROADWAY TRANSITION @ BRIDGE SITE

DISTRICT 05 DESIGN

CONCRETE DRIVES

STATION	SIDE OF CENTERLINE	LENGTH (Ft.)	AVERAGE WIDTH (Ft.)	202-02-D REMOVAL OF CONCRETE WALKS AND DRIVES SQ. YD.	LENGTH (Ft.)	AVERAGE WIDTH (Ft.)	706-02-C CONCRETE DRIVE (6" THICK) SQ. YD.
23+69	LEFT	10.5	23.8	28	8.0	22.8	20.3
TOTALS				28			20.3

SUMMARY SHEET

DISTRICT 05 DESIGN

NO.	DATE	REVISION DESCRIPTION	BY

DESIGNED	AG
CHECKED	PEC
DESIGNED	SC
CHECKED	RJM
DATE SHEET	1-26-07
STATE PROJECT	338-01-0014
FEDERAL PROJECT	
PARISH	EAST CARROLL
SHEET NUMBER	15

GENERAL EXCAVATION

STATION	STATION	DESCRIPTION	LENGTH	WIDTH	203-01 GENERAL EXCAVATION (6" DEPTH)	S-001 RECLAIMED ASPHALTIC PAVEMENT (6" DEPTH)
			FEET	FEET	CU. YD.	CU. YD.
71+51	265+00	ROADWAY SHOULDER LEFT OF C/L	19,349	2.5	896	896
71+51	265+00	ROADWAY SHOULDER RIGHT OF C/L	19,349	2.5	896	896
		TOTAL			1,792	1,792

SHEET NUMBER 16

PARISH	FEDERAL PROJECT	STATE PROJECT
EAST CARROLL		338-01-0014

DESIGNED AG	DESIGNED SC	DATE 1-26-07
CHECKED PEC	CHECKED RJM	SHEET

NO.	DATE	REVISION DESCRIPTION	BY

STATE OF LOUISIANA

SUMMARY SHEET

DOTD DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DISTRICT 05 DESIGN

BORROW (SELECTED SOILS) & AGGREGATE

STATION	STATION	SIDE OF CENTERLINE	DESCRIPTION	LENGTH	WIDTH	DEPTH	203-07-A	402-01
							BORROW (VEHICULAR MEASUREMENT) (SELECTED SOILS)	TRAFFIC MAINTENANCE AGGREGATE (VEHICULAR MEASUREMENT)
				FT.	FT.	FT.	CU. YD.	CU. YD.
10+00	10+62	---	ROADWAY	62	VARIES	0.50	53	
10+62	59+29	---	ROADWAY	4,867	25	0.50	2,253	
85+00	88+00	LEFT	PATCH AREA	300	10	0.50	56	
85+00	91+00	RIGHT	PATCH AREA	600	10	0.50	111	
96+50	97+50	LEFT	PATCH AREA	100	6	0.50	11	
96+50	97+50	RIGHT	PATCH AREA	100	6	0.50	11	
98+00	100+00	LEFT	PATCH AREA	200	8	0.50	30	
102+50	104+00	LEFT	PATCH AREA	150	10	0.50	28	
108+00	109+00	RIGHT	PATCH AREA	100	10	0.50	19	
110+00	115+50	LEFT	PATCH AREA	550	10	0.50	102	
110+00	115+50	RIGHT	PATCH AREA	550	10	0.50	102	
120+00	121+50	LEFT	PATCH AREA	150	8	0.50	22	
122+50	126+00	LEFT	PATCH AREA	350	8	0.50	52	
128+00	131+20	LEFT	PATCH AREA	320	6	0.50	36	
133+00	137+00	LEFT	PATCH AREA	400	10	0.50	74	
137+00	139+50	LEFT	PATCH AREA	250	10	0.50	46	
137+00	139+50	RIGHT	PATCH AREA	250	10	0.50	46	
142+25	143+25	LEFT	PATCH AREA	100	10	0.50	19	
152+00	154+00	RIGHT	PATCH AREA	200	10	0.50	37	
179+00	181+50	RIGHT	PATCH AREA	250	8	0.50	37	

SHEET NUMBER 17

EAST CARROLL | PARISH | AG PEC | DESIGNED CHECKED

FEDERAL PROJECT | SC RJM | DETAILED CHECKED

338-01-0014 | STATE PROJECT | 1-26-07 | DATE SHEET

NO. | DATE | REVISION DESCRIPTION | BY

SUMMARY SHEET

SHEET 1 OF 2

DISTRICT 05 DESIGN

BORROW (SELECTED SOILS) & AGGREGATE

STATION	STATION	SIDE OF CENTERLINE	DESCRIPTION	LENGTH	WIDTH	DEPTH	203-07-A	402-01
							BORROW (VEHICULAR MEASUREMENT) (SELECTED SOILS)	TRAFFIC MAINTENANCE AGGREGATE (VEHICULAR MEASUREMENT)
				FT.	FT.	FT.	CU. YD.	CU. YD.
194+75	195+25	RIGHT	PATCH AREA	50	8	0.50	7	
196+75	197+00	RIGHT	PATCH AREA	25	10	0.50	5	
197+50	198+00	RIGHT	PATCH AREA	50	10	0.50	9	
198+50	199+00	RIGHT	PATCH AREA	50	10	0.50	9	
201+50	202+00	RIGHT	PATCH AREA	50	10	0.50	9	
209+40	211+00	RIGHT	PATCH AREA	160	8	0.50	24	
TOTALS							3,208	---

SHEET NUMBER 18

EAST CARROLL | PARISH | AG PEC | DESIGNED CHECKED

FEDERAL PROJECT | SC RJM | DETAILED CHECKED

338-01-0014 | STATE PROJECT | 1-26-07 | DATE SHEET

NO. | DATE | REVISION DESCRIPTION | BY

STATE OF LOUISIANA

SUMMARY SHEET

SHEET 2 OF 2

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DISTRICT 05 DESIGN

BASE COURSE

STATION	STATION	DESCRIPTION	LENGTH	WIDTH	308-01-A	S-002
					IN-PLACE CEMENT TREATED BASE COURSE (12" THICK)	IN-PLACE ASPHALT TREATED BASE COURSE (8" THICK)
			FEET	FEET	SQ. YD.	SQ. YD.
10+00	10+62	INTERSECTION OF LA 581 & LA 134	62	VARIES	316	---
10+62	59+29	ROADWAY	4,867	25	13,519	---
59+29	71+51	*EXCEPTION: NEW ROADWAY & BRIDGE*	1,222	---	---	---
71+51	265+00	ROADWAY	19,349	25	---	53,747
TOTAL					13,835	53,747

SHEET NUMBER 19

PARISH	FEDERAL PROJECT	STATE PROJECT
EAST CARROLL		338-01-0014

DESIGNED / CHECKED	DETAILED / CHECKED	DATE / SHEET
AG / PEC	SC / RJM	1-28-07

NO.	DATE	REVISION DESCRIPTION	BY

SUMMARY SHEET

DISTRICT 05 DESIGN

D	DESIGN SPEED (MPH)																							
	30				35				40				45				50				55				60			
	R		L		R		L		R		L		R		L		R		L		R		L		R		L	
	MIN.	DES.	MIN.	DES.	MIN.	DES.	MIN.	DES.	MIN.	DES.	MIN.	DES.	MIN.	DES.	MIN.	DES.	MIN.	DES.	MIN.	DES.	MIN.	DES.	MIN.	DES.	MIN.	DES.	MIN.	DES.
0° 15'	N.C.	N.C.			N.C.	N.C.			N.C.	N.C.			N.C.	N.C.			N.C.	N.C.			N.C.	N.C.			N.C.	N.C.		
0° 30'	N.C.	N.C.			N.C.	N.C.			N.C.	N.C.			N.C.	N.C.			N.C.	N.C.			N.C.	R.C.		160	N.C.	R.C.		175
0° 45'	N.C.	N.C.			N.C.	N.C.			N.C.	N.C.			N.C.	N.C.			N.C.	R.C.		150	N.C.	R.C.		160	N.C.	R.C.		175
1° 00'	N.C.	N.C.			N.C.	N.C.			N.C.	R.C.		125	N.C.	R.C.		140	N.C.	R.C.		150	N.C.	.028		160	N.C.	.030		175
2° 00'	N.C.	R.C.		100	N.C.	R.C.		110	N.C.	.028		125	N.C.	.035		140	N.C.	.040		150	N.C.	.050		160	N.C.	.055		175
3° 00'	N.C.	R.C.		100	N.C.	.033		110	N.C.	.040		125	N.C.	.050		140	N.C.	.057		150	R.C.	.069	165	180	R.C.	.077	175	210
4° 00'	N.C.	.033		100	N.C.	.042		110	N.C.	.051		125	N.C.	.062		155	R.C.	.072	150	180	R.C.	.083	165	215	.040	.093	175	250
5° 00'	N.C.	.040		100	N.C.	.051		115	N.C.	.061		130	R.C.	.073	140	165	R.C.	.063	150	200	.042	.092	165	235	.078	.098	210	270
6° 00'	N.C.	.046		100	N.C.	.058		125	N.C.	.070		150	R.C.	.081	140	185	.036	.092	150	220	.077	.096	185	245	.080	.100	215	270
7° 00'	N.C.	.053		100	N.C.	.065		130	R.C.	.078	125	160	R.C.	.088	140	200	.062	.098	150	240	.080	.100	205	255				
8° 00'	N.C.	.058		110	R.C.	.072	115	145	R.C.	.084	125	180	.040	.092	140	210	.080	.100	190	240								
9° 00'	N.C.	.063		120	R.C.	.077	115	155	R.C.	.089	125	190	.068	.095	155	215												
10° 00'	N.C.	.068		120	R.C.	.081	115	160	.036	.094	125	200	.080	.100	180	220												
11° 00'	N.C.	.072		130	R.C.	.085	115	165	.058	.097	125	200																
12° 00'	R.C.	.076	100	140	R.C.	.088	115	175	.077	.099	170	210																
13° 00'	R.C.	.080	100	140	.033	.090	115	175	.080	.100	170	210																
14° 00'	R.C.	.083	100	150	.050	.092	115	180																				
16° 00'	R.C.	.089	100	160	.075	.095	120	185																				
18° 00'	.028	.093	100	170	.080	.100	160	190																				
20° 00'	.050	.100	100	180																								

R = RATE OF SUPERELEVATION (FT. PER FT.)
L = LENGTH OF SUPERELEVATION RUNOFF (FT.)
D= DEGREE OF CURVE
MPH = MILES PER HOUR
MIN. = MINIMUM DESIGN
DES. = DESIRABLE DESIGN
N.C. = NORMAL CROWN
R.C. = REMOVE ADVERSE CROWN, SUPERELEVATE AT NORMAL CROWN

NOTES: *LENGTHS OF SUPERELEVATION RUNOFFS ARE SHOWN FOR TWO-LANE ROADWAYS. FOR FOUR-LANE ROADWAYS, RUNOFF LENGTHS SHOULD BE INCREASED AS DIRECTED BY THE PROJECT ENGINEER.*

EXCEPTIONS TO THE MINIMUM SUPERELEVATION VALUES SHOWN MAY BE MADE WITH PROPER JUSTIFICATION BY THE PROJECT ENGINEER.

SUPERELEVATION REQUIREMENTS FOR OVERLAYING RURAL HIGHWAYS

DATE: MARCH, 1990

SHEET NUMBER 20

EAST CARROLL | | 338-01-0014

PARISH | FEDERAL PROJECT | STATE PROJECT

AG PEC | SC RJM | 1-26-07

DESIGNED CHECKED | DETAILED CHECKED | DATE SHEET

NO. | DATE | REVISION DESCRIPTION | BY

SUPERELEVATION REQUIREMENTS TABLE

DISTRICT 05 DESIGN

SUPERELEVATION CORRECTION TABLE

P.C./P.T.	STATION	DEGREE	RECOMMENDED RATE	DESIGN SPEED (MPH)	SUPERELEVATION RUNOFF			203-07-A	402-01
					LENGTH	LENGTH IN TANGENT	LENGTH IN CURVE	BORROW (VEHICULAR MEASUREMENT) (SELECTED SOILS)	TRAFFIC MAINTENANCE AGGREGATE (VEHICULAR MEASUREMENT)
					FEET	FEET	FEET	CU. YD.	CU. YD.
P.C.	31+65	2°17'30"	N.C.	55	---	---	---	---	---
P.T.	34+00				---	---	---		
P.C.	38+33	12°47'39"	0.079	40	170	119	51	289	72.3
P.T.	45+70				170	119	51		
P.C.	109+00	2°44'59"	R.C.	55	166	116	50	138	34.5
P.T.	112+00				166	116	50		
P.C.	114+74	1°50'0"	N.C.	55	---	---	---	---	---
P.T.	117+42				---	---	---		
P.C.	143+82	2°17'30"	R.C.	55	166	116	50	113	28.3
P.T.	147+59				166	116	50		
P.C.	164+27	4°34'55"	0.035	55	166	116	50	140	35.0
P.T.	168+00				166	116	50		
P.C.	211+42	1°8'45"	N.C.	55	---	---	---	---	---
P.T.	214+45				---	---	---		
P.C.	224+70	1°36'15"	R.C.	55	160	112	48	160	40.0
P.T.	229+67				160	112	48		
P.C.	259+82	9°9'10"	0.070	45	160	112	48	151	37.8
P.T.	263+00				160	112	48		
TOTALS								991	247.9

SHEET NUMBER 21

EAST CARROLL | PARISH | 338-01-0014 | STATE PROJECT

AG PEC | SC RJM | 1-26-07 | DATE SHEET

DESIGNED CHECKED | DETAILED CHECKED

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STATE OF LOUISIANA

SUMMARY SHEET

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DISTRICT 05 DESIGN

ROADWAY SURFACING

STATION	STATION	DESCRIPTION	LENGTH	WIDTH	SQ. YDS.	507-01-A	507-02-A	507-02-B	507-02-C
						ASPHALTIC MATERIAL (CRS-2P COLD APPLIED EMULSION)	AGGREGATE (S1)	AGGREGATE (S2)	AGGREGATE (S3)
			FEET	FEET		GAL.	SQ. YD.	SQ. YD.	SQ. YD.
10+00	10+62	INTERSECTION OF LA 581 & LA 134	62	VARIES	306	330	306	306	306
10+62	59+29	ROADWAY	4,867	24	12,979	14,017	12,979	12,979	12,979
59+29	71+51	*EXCEPTION: NEW ROADWAY & BRIDGE*	1,222	---	---	---	---	---	---
71+51	265+00	ROADWAY	19,349	24	51,597	55,725	51,597	51,597	51,597
TOTALS						70,072	64,882	64,882	64,882

SHEET NUMBER 22

EAST CARROLL | PARISH | AG PEC | DESIGNED CHECKED

FEDERAL PROJECT | SC RJM | DETAILED CHECKED

338-01-0014 | STATE PROJECT | 1-26-07 | DATE SHEET

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SUMMARY SHEET

DISTRICT 05 DESIGN

COLD PLANING

STATION	STATION	DESCRIPTION	LENGTH	WIDTH	509-01 COLD PLANING ASPHALTIC PAVEMENT (2" DEPTH)
			FEET	FEET	SQ. YD.
10+00	10+62	INTERSECTION OF LA 581 & LA 134	62	VARIES	263
10+62	59+29	ROADWAY	4,867	20	10,816
		TOTAL			11,079

G-23

SHEET NUMBER 23

EAST CARROLL | PARISH | AG PEC | DESIGNED CHECKED

FEDERAL PROJECT | SC RJM | DESIGNED CHECKED

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SUMMARY SHEET

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DISTRICT 05 DESIGN

MAILBOXES

STATION	SIDE OF CENTERLINE	735-01 MAILBOXES	735-02 MAILBOX SUPPORTS (SINGLE)	735-03 MAILBOX SUPPORTS (DOUBLE)	735-04 MAILBOX SUPPORTS (MULTIPLE)
		EACH	EACH	EACH	EACH
19+51	LEFT	1	1		
23+49	LEFT	1	1		
33+27	LEFT	1	1		
66+34	LEFT	1	1		
119+40	LEFT	1	1		
160+97	LEFT	1	1		
166+03	LEFT	1	1		
264+88	LEFT	1	1		
TOTALS		8	8	---	---

SHEET NUMBER 24

EAST CARROLL | PARISH | FEDERAL PROJECT | STATE PROJECT 338-01-0014

AG PEC | SC RJM | 1-26-07

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DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT dotd

DISTRICT 05 DESIGN

CLEANING EXISTING DITCHES

STATION	LEFT OF CENTERLINE	RIGHT OF CENTERLINE	S-003 CLEANING EXISTING DITCHES
	FEET	FEET	LIN. FT.
77+26	---	75	75
96+98	75	75	150
103+66	75	75	150
113+56	---	75	75
121+14	75	75	150
131+03	75	75	150
138+18	75	75	150
142+91	75	75	150
147+47	75	75	150
152+96	75	---	75
167+23	75	75	150
174+71	75	75	150
180+78	---	75	75
186+75	75	75	150
191+91	75	75	150
204+54	75	75	150
212+69	75	75	150
229+30	75	75	150
240+39	75	75	150
254+43	---	75	75
264+94	75	75	150
TOTAL			2,775

SHEET NUMBER 25

EAST CARROLL | PARISH | FEDERAL PROJECT | STATE PROJECT 338-01-0014

AG PEC | SC RJM | 1-26-07 | DESIGNED CHECKED | DETAILED CHECKED | DATE SHEET

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SUMMARY SHEET

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DISTRICT 05 DESIGN

DATED 02/15/07 09:55:14

STATE PROJECT	PARISH	SHEET NO.
338-01-0014	E CARROLL	26

SUMMARY OF ESTIMATED QUANTITIES

ITEM NO.	ITEM	UNIT	QUANTITY S.P. NO. 338-01-0014	TOTAL QUANTITY
202-01	REMOVAL OF STRUCTURES & OBSTRUCTIONS	LUMP	LUMP	
202-02-D	REMOVAL OF CONCRETE WALKS & DRIVES	SQYD	28	
203-01	GENERAL EXCAVATION	CUYD	1,792	
203-07	BORROW (VEHICULAR MEASUREMENT)	CUYD	7,506	
203-07-A	BORROW (VEHICULAR MEAS.) (SELECTED SOILS)	CUYD	4,199	
308-01-A	IN-PLACE CEMENT TREATED BASE COURSE (12" THICK)	SQYD	13,835	
402-01	TRAFFIC MAINTENANCE AGGREGATE (VEHICULAR MEASUREMENT)	CUYD	247.9	
507-01-A	ASPHALTIC MATERIAL (CRS-2P EMULSION)	GAL	70,072	
507-02-A	AGGREGATE (S1)	SQYD	64,882	
507-02-B	AGGREGATE (S2)	SQYD	64,882	
507-02-C	AGGREGATE (S3)	SQYD	64,882	
509-01	COLD PLANING ASPHALTIC PAVEMENT	SQYD	11,079	
509-02	CONTRACTOR RETAINED RECLAIMED ASPHALTIC PAVEMENT	CUYD	-463	
701-01-K	CROSS DRAIN PIPE (30" RCP/PCP)	LNFT	244	
701-01-M	CROSS DRAIN PIPE (36" RCP/PCP)	LNFT	134	
701-01-N	CROSS DRAIN PIPE (42" RCP/PCP)	LNFT	132	
701-01-O	CROSS DRAIN PIPE (48" RCP/PCP)	LNFT	76	
701-05-G	SIDE DRAIN PIPE (18")	LNFT	40	
701-10-M	REINFORCED CONCRETE PIPE (EXTENSION) (36")	LNFT	4	
701-12-I	CORRUGATED METAL PIPE (EXTENSION) (24")	LNFT	36	
701-12-K	CORRUGATED METAL PIPE (EXTENSION) (30")	LNFT	22	
701-12-M	CORRUGATED METAL PIPE (EXTENSION) (36")	LNFT	18	
701-12-N	CORRUGATED METAL PIPE (EXTENSION) (42")	LNFT	18	
701-12-O	CORRUGATED METAL PIPE (EXTENSION) (48")	LNFT	32	
701-12-P	CORRUGATED METAL PIPE (EXTENSION) (54")	LNFT	12	
701-15	CONCRETE COLLAR	EACH	20	
702-02-B	MANHOLES (R-CB-11)	EACH	1	
706-02-C	CONCRETE DRIVE (6" THICK)	SQYD	20.3	
713-01	TEMPORARY SIGNS & BARRICADES	LUMP	LUMP	
713-06-A	TEMPORARY REFLECTORIZED RAISED PAVEMENT MARKERS (TABS)	EACH	1,216	
716-01-A	MULCH (VEGETATIVE)	TON	17.8	
717-01	SEEDING	LB	401	
718-01	FERTILIZER	LB	8,920	

DATED 04/03/07 13:30:41

STATE PROJECT	PARISH	SHEET NO.
338-01-0014	E CARROLL	27

SUMMARY OF ESTIMATED QUANTITIES

ITEM NO.	ITEM	UNIT	QUANTITY S.P. NO. 338-01-0014	TOTAL QUANTITY
726-01	BEDDING MATERIAL	CUYD	342.6	
727-01	MOBILIZATION	LUMP	LUMP	
729-16-B	OBJECT MARKER ASSEMBLY (Type 2)	EACH	37	
731-02	REFLECTORIZED RAISED PAVEMENT MARKERS	EACH	608	
732-02-A-03	PLAST PVMT STRIPING (SOLID LINE) (4" WIDTH) HOT APPL THERMO (40 MIL THICKNESS)	MILE	11.775	
732-03-A-03	PLASTIC PVMT STRIPING (BROKEN LINE) (4" WIDTH) HOT APPL THERMO (40 MIL THICK)	MILE	4.177	
735-01	MAILBOXES	EACH	8	
735-02	MAILBOX SUPPORTS (SINGLE)	EACH	8	
740-01	CONSTRUCTION LAYOUT	LUMP	LUMP	
S-001	RECYCLED ASPHALTIC PAVEMENT (RAP) (DOTD FURNISHED)	CUYD	1,792	
S-002	IN-PLACE ASPHALT TREATED BASE COURSE (8" THICK)	SQYD	53,747	
S-003	CLEANING EXISTING DITCHES	LNFT	2,775	
1 S-004	ASPHALT EMULSION	GAL	191,859	

1 04/03/07 ADD ITEM

SUMMARY OF DRAINAGE STRUCTURES (PIPE REPLACEMENTS)

STATION	DESCRIPTION		701-01 CROSS DRAIN PIPE K 30" LIN. FT.	701-01 CROSS DRAIN PIPE M 36" LIN. FT.	701-01 CROSS DRAIN PIPE N 42" LIN. FT.	701-01 CROSS DRAIN PIPE O 48" LIN. FT.	701-05-G SIDE DRAIN PIPE (18" RCP) LIN. FT.	702-02-B MANHOLES (R-CB-11) EACH	726-01 BEDDING MATERIAL CU. YD.	729-16-B OBJECT MARKER ASSEMBLY (TYPE 2) EACH
77+26	EXISTING:	1 ~ 36" x 185' CMP CROSS DRAIN								
	REQUIRED:	REMOVE 58' OF EXISTING CROSS DRAIN;		64				1	32.0	1
		REPLACE WITH 1 ~ MANHOLE (R-CB-11) &								
		64' OF RCP/PCP CROSS DRAIN								
103+66	EXISTING:	1 ~ 24" x 41' CMP CROSS DRAIN								
	REQUIRED:	REMOVE EXISTING CROSS DRAIN AND	54						23.2	2
		REPLACE WITH 1 ~ 30" x 54' RCP/PCP								
		CROSS DRAIN								
121+14	EXISTING:	1 ~ 36" x 49' CMP CROSS DRAIN								
	REQUIRED:	REMOVE EXISTING CROSS DRAIN AND			60				30.3	2
		REPLACE WITH 1 ~ 42" x 60' RCP/PCP								
		CROSS DRAIN								
131+03	EXISTING:	1 ~ 24" x 58' CMP CROSS DRAIN								
	REQUIRED:	REMOVE EXISTING CROSS DRAIN AND	70						29.7	2
		REPLACE WITH 1 ~ 30" x 70' RCP/PCP								
		CROSS DRAIN								

SHEET NUMBER 28

EAST CARROLL | PARISH | 338-01-0014 | FEDERAL PROJECT | STATE PROJECT

AG PEC | SC RJM | 1-26-07 | DESIGNED CHECKED | DETAILED CHECKED | DATE SHEET

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STATE OF LOUISIANA

SUMMARY OF DRAINAGE STRUCTURES

SHEET 1 OF 3

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DISTRICT 05 DESIGN

SUMMARY OF DRAINAGE STRUCTURES (PIPE REPLACEMENTS)

STATION	DESCRIPTION		701-01 CROSS DRAIN PIPE K 30" LIN. FT.	M 36" LIN. FT.	N 42" LIN. FT.	O 48" LIN. FT.	701-05-G SIDE DRAIN PIPE (18" RCP) LIN. FT.	702-02-B MANHOLES (R-CB-11) EACH	726-01 BEDDING MATERIAL CU. YD.	729-16-B OBJECT MARKER ASSEMBLY (TYPE 2) EACH
138+18	EXISTING:	1 ~ 42" EQUIV. x 59' CMPA CROSS DRAIN								
	REQUIRED:	REMOVE EXISTING CROSS DRAIN AND				76			38.0	2
		REPLACE WITH 1 ~ 48" x 76' RCP/PCP								
		CROSS DRAIN								
186+75	EXISTING:	1 ~ 24" EQUIV. x 44' CMPA CROSS DRAIN								
	REQUIRED:	REMOVE EXISTING CROSS DRAIN AND	56						24.0	2
		REPLACE WITH 1 ~ 30" x 56' RCP/PCP								
		CROSS DRAIN								
191+91	EXISTING:	1 ~ 24" EQUIV. x 49' CMPA CROSS DRAIN								
	REQUIRED:	REMOVE EXISTING CROSS DRAIN AND	64						27.3	2
		REPLACE WITH 1 ~ 30" x 64' RCP/PCP								
		CROSS DRAIN								
212+69	EXISTING:	1 ~ 30" EQUIV. x 47' CMPA CROSS DRAIN								
	REQUIRED:	REMOVE EXISTING CROSS DRAIN AND		70					27.0	2
		REPLACE WITH 1 ~ 36" x 70' RCP/PCP								
		CROSS DRAIN								

SHEET NUMBER 29

EAST CARROLL | PARISH | AG PEC | DESIGNED CHECKED

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338-01-0014 | STATE PROJECT | 1-26-07 | DATE SHEET

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SUMMARY OF DRAINAGE STRUCTURES

SHEET 2 OF 3

DISTRICT 05 DESIGN

SUMMARY OF DRAINAGE STRUCTURES (PIPE REPLACEMENTS)

STATION	DESCRIPTION	701-01 CROSS DRAIN PIPE K 30" LIN. FT.	701-01 CROSS DRAIN PIPE M 36" LIN. FT.	701-01 CROSS DRAIN PIPE N 42" LIN. FT.	701-01 CROSS DRAIN PIPE O 48" LIN. FT.	701-05-G SIDE DRAIN PIPE (18") LIN. FT.	702-02-B MANHOLES (R-CB-11) EACH	726-01 BEDDING MATERIAL CU. YD.	729-16-B OBJECT MARKER ASSEMBLY (TYPE 2) EACH
240+14	EXISTING: 1 ~ 15" x 25' CMP SIDE DRAIN ON RIGHT								
	SIDE OF ROADWAY								
	REQUIRED: REMOVE EXISTING SIDE DRAIN AND					40			
	REPLACE WITH 1 ~ 18" x 40' SIDE DRAIN								
240+39	EXISTING: 1 ~ 36" x 49' CMP CROSS DRAIN								
	REQUIRED: REMOVE EXISTING CROSS DRAIN AND			72				36.1	2
	REPLACE WITH 1 ~ 42" x 72' RCP/PCP								
	CROSS DRAIN								
TOTALS		244	134	132	76	40	1	267.6	17

SHEET NUMBER 30

EAST CARROLL | PARISH | 338-01-0014 | FEDERAL PROJECT | STATE PROJECT

AG PEC | SC RJM | 1-26-07 | DESIGNED CHECKED | DETAILED CHECKED | DATE SHEET

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STATE OF LOUISIANA

SUMMARY OF DRAINAGE STRUCTURES

SHEET 3 OF 3

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DISTRICT 05 DESIGN

SUMMARY OF DRAINAGE STRUCTURES (PIPE EXTENSIONS)

STATION	DESCRIPTION	701-10-M	701-12						701-15	726-01	729-16-B
		REINFORCED CONCRETE PIPE (EXTENSION)(36")	CORRUGATED METAL PIPE (EXTENSION)						CONCRETE COLLAR	BEDDING MATERIAL	OBJECT MARKER ASSEMBLY (TYPE 2)
			I	K	M	N	O	P			
			24"	30"	36"	42"	48"	54"			
		LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	EACH	CU. YD.	EACH
96+98	EXISTING: 1 ~ 42" x 64' CMP CROSS DRAIN										
	REQUIRED: EXTEND EXISTING CROSS DRAIN					18			2	10.1	2
	8' LEFT AND 10' RIGHT										
113+56	EXISTING: 1 ~ 48" x 74' CMP CROSS DRAIN										
	REQUIRED: EXTEND EXISTING CROSS DRAIN						10		1	5.9	1
	10' RIGHT										
142+91	EXISTING: 1 ~ 24" x 46' CMP CROSS DRAIN										
	REQUIRED: EXTEND EXISTING CROSS DRAIN		8						2	4.0	2
	4' LEFT AND 4' RIGHT										
147+47	EXISTING: 1 ~ 24" x 43' CMP CROSS DRAIN										
	REQUIRED: EXTEND EXISTING CROSS DRAIN		12						2	5.5	2
	8' LEFT AND 4' RIGHT										
152+96	EXISTING: 1 ~ 54" x 66' CMP CROSS DRAIN										
	REQUIRED: EXTEND EXISTING CROSS DRAIN							6	1	4.2	1
	6' LEFT										

SHEET NUMBER 31

PARISH	FEDERAL PROJECT	STATE PROJECT
EAST CARROLL		338-01-0014

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STATE OF LOUISIANA

SUMMARY OF DRAINAGE STRUCTURES

SHEET 1 OF 3

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT — DOTD

DISTRICT 05 DESIGN

SUMMARY OF DRAINAGE STRUCTURES (PIPE EXTENSIONS)

STATION	DESCRIPTION	701-10-M	701-12						701-15	726-01	729-16-B
		REINFORCED CONCRETE PIPE (EXTENSION)(36")	CORRUGATED METAL PIPE (EXTENSION)						CONCRETE COLLAR	BEDDING MATERIAL	OBJECT MARKER ASSEMBLY (TYPE 2)
			I	K	M	N	O	P			
			24"	30"	36"	42"	48"	54"			
		LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	EACH	CU. YD.	EACH
167+23	EXISTING: 1 ~ 30" x 50' CMP CROSS DRAIN										
	REQUIRED: RELOCATE EXISTING WATER LINE ON			12					2	6.1	2
	LEFT SIDE OF ROADWAY; EXTEND										
	EXISTING CROSS DRAIN 8' LEFT AND										
	4' RIGHT										
174+71	EXISTING: 1 ~ 24" x 45' CMP CROSS DRAIN										
	REQUIRED: EXTEND EXISTING CROSS DRAIN		16						2	7.0	2
	8' LEFT AND 8' RIGHT										
180+78	EXISTING: 1 ~ 54" x 68' CMP CROSS DRAIN										
	REQUIRED: EXTEND EXISTING CROSS DRAIN							6	1	4.2	1
	6' RIGHT										
204+54	EXISTING: 1 ~ 48" x 53' CMP CROSS DRAIN										
	REQUIRED: EXTEND EXISTING CROSS DRAIN						22		2	12.9	2
	8' LEFT AND 14' RIGHT										
229+30	EXISTING: 1 ~ 36" x 59' CMP CROSS DRAIN										
	REQUIRED: EXTEND EXISTING CROSS DRAIN				18				2	7.8	2
	8' LEFT AND 10' RIGHT										

SHEET NUMBER 32

EAST CARROLL | PARISH | AG PEC | DESIGNED CHECKED

FEDERAL PROJECT | SC RJM | DETAILED CHECKED

338-01-0014 | STATE PROJECT | 1-26-07 | DATE SHEET

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SUMMARY OF DRAINAGE STRUCTURES

SHEET 2 OF 3

DISTRICT 05 DESIGN

SUMMARY OF DRAINAGE STRUCTURES (PIPE EXTENSIONS)

STATION	DESCRIPTION	701-10-M	701-12						701-15	726-01	729-16-B
		REINFORCED CONCRETE PIPE (EXTENSION)(36")	CORRUGATED METAL PIPE (EXTENSION)						CONCRETE COLLAR	BEDDING MATERIAL	OBJECT MARKER ASSEMBLY (TYPE 2)
			I	K	M	N	O	P			
			24"	30"	36"	42"	48"	54"			
		LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	EACH	CU. YD.	EACH
254+43	EXISTING: 1 ~ 36" x 53' RCP CROSS DRAIN										
	REQUIRED: EXTEND EXISTING CROSS DRAIN	4							1	2.0	1
	4' RIGHT										
264+94	EXISTING: 1 ~ 30" x 42' RCP CROSS DRAIN										
	REQUIRED: EXTEND EXISTING CROSS DRAIN			10					2	5.3	2
	4' LEFT AND 6' RIGHT										
TOTALS		4	36	22	18	18	32	12	20	75.0	20

SHEET NUMBER 33

EAST CARROLL | | 338-01-0014

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SUMMARY OF DRAINAGE STRUCTURES

SHEET 3 OF 3

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT DOTD

DISTRICT 05 DESIGN

NOTE: ALLOWABLE MATERIALS INCLUDE: RCP(A), BCCSP(A), CAP(A), RPVCP AND CPEPDW. MINIMUM METAL PIPE GAGE REQUIRED TO PROVIDE 50-YEAR SERVICE LIFE IS SHOWN IN THE CROSS DRAIN PIPE TABLE.

PLEASE NOTE: REFER TO EDSM II.2.1.13 FOR MAXIMUM FILL HEIGHT FOR PLASTIC PIPE.

CROSS DRAIN PIPE TABLE

STATION	pH	RESISTIVITY	ROUND	ARCH	+GAGE	
			DIAMETER	ROUND EQUIVALENT DIAMETER	BCCSP BCCSPA	CAP CAPA
77+26	5.6	1500	36"		N/A	N/A
103+66	5.9	1200	30"		N/A	N/A
121+14	5.5	1000	42"		N/A	N/A
131+03	5.6	1800	30"		N/A	N/A
138+18	5.7	1700	48"		N/A	N/A
186+75	5.7	1000	30"		N/A	N/A
191+91	5.8	1200	30"		N/A	N/A
212+69	5.6	1100	36"		N/A	N/A
240+39	5.6	1100	42"		N/A	N/A

N/A = NOT ALLOWED

GAGE SPECIFICATION (00/00): THE UPPER NUMBER IS MINIMUM GAGE FOR 3" x 1", 5" x 1" OR 6" x 1" CORRUGATIONS AND THE LOWER NUMBER IS MINIMUM GAGE FOR 2 2/3" x 1/2" CORRUGATIONS. AN "X" IN EITHER THE UPPER OR LOWER SPACE INDICATES THAT NO GAGE IS APPLICABLE IN THAT CORRUGATION STYLE.

THICKNESS IS ADEQUATE FOR FILL HEIGHTS UP TO 10 FEET ABOVE TOP OF PIPE. IF FILL HEIGHT EXCEEDS 10 FEET OR ROAD SURFACING IS PORTLAND CEMENT CONCRETE, DESIGN SERVICE LIFE WILL BE 70 YEARS AND **NO METAL PIPE IS ALLOWED.**

SHEET NUMBER 34

EAST CARROLL | PARISH | 338-01-0014 | FEDERAL PROJECT | STATE PROJECT

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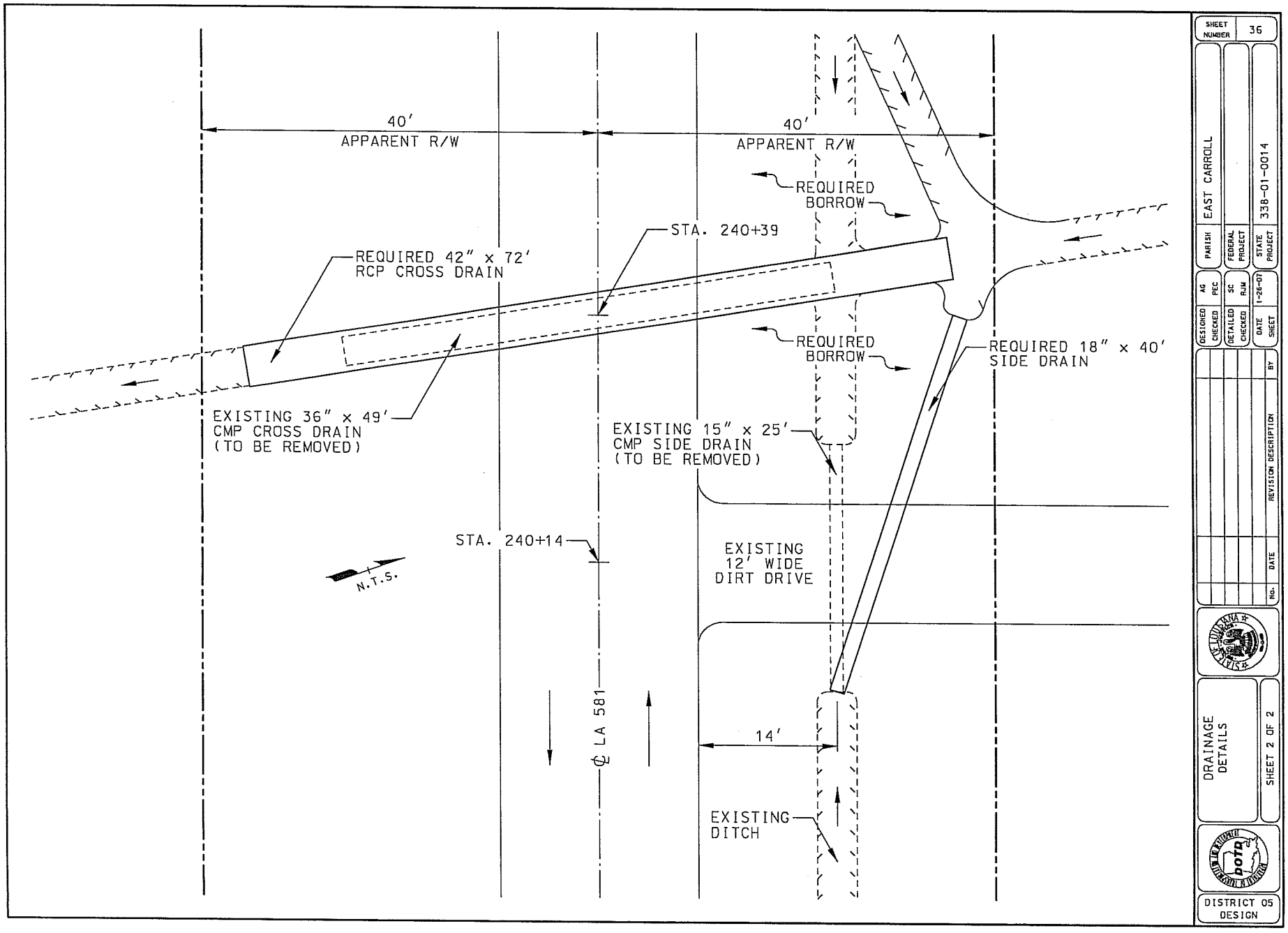
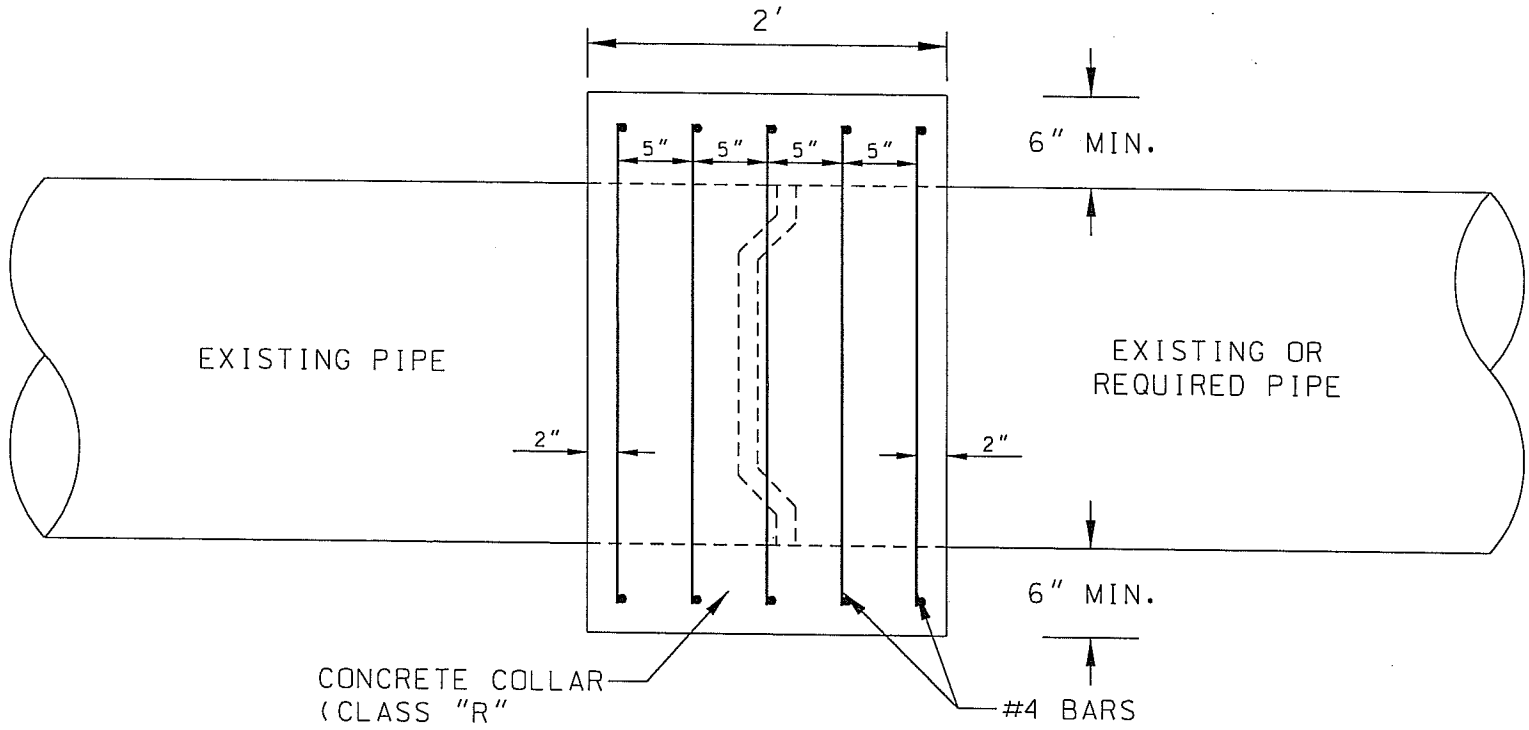
CROSS DRAIN PIPE TABLE

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

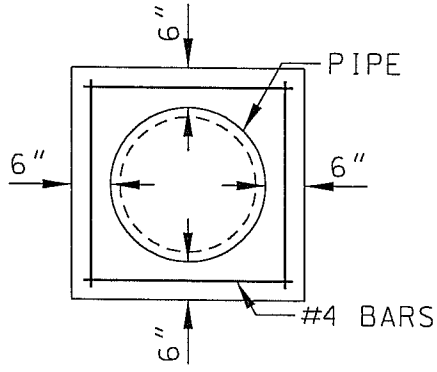
DISTRICT 05 DESIGN

DISTRICT 05
DESIGN
DRAINAGE
DETAILS
SHEET 1 OF 2
NO.
DATE
BY
REVISION DESCRIPTION
DESIGNED AG
CHECKED PEC
DETAILED SC
CHECKED RJM
DATE 1-26-07
SHEET
STATE PROJECT 338-01-0014
FEDERAL PROJECT
PARISH EAST CARROLL
SHEET NUMBER 35
40' APPARENT R/W
REQUIRED BORROW
REQUIRED BORROW
N. T. S.
℄ LA 581
STA. 77+26
58' OF EXISTING 36" CMP TO BE REMOVED AND REPLACED WITH 64' OF 36" RCP
PARISH MAINTENANCE UNIT
127' OF EXISTING 36" CMP TO REMAIN
30'
REQUIRED MANHOLE (R-CB-11)
40' APPARENT R/W


40'
APPARENT R/W
40'
APPARENT R/W
REQUIRED
BORROW
STA. 240+39
REQUIRED 42" x 72'
RCP CROSS DRAIN
REQUIRED
BORROW
REQUIRED 18" x 40'
SIDE DRAIN
EXISTING 36" x 49'
CMP CROSS DRAIN
(TO BE REMOVED)
EXISTING 15" x 25'
CMP SIDE DRAIN
(TO BE REMOVED)
STA. 240+14
N.T.S.
EXISTING
12' WIDE
DIRT DRIVE
℄ LA 581
14'
EXISTING
DITCH
SHEET NUMBER 36
PARISH EAST CARROLL
FEDERAL PROJECT
STATE PROJECT 338-01-0014
DESIGNED AG
CHECKED PEC
DETAILED SC
CHECKED RJW
DATE 1-26-07
SHEET
No. DATE REVISION DESCRIPTION BY
DRAINAGE DETAILS
SHEET 2 OF 2
DISTRICT 05 DESIGN



PLAN VIEW



END VIEW

CONCRETE COLLAR DETAIL

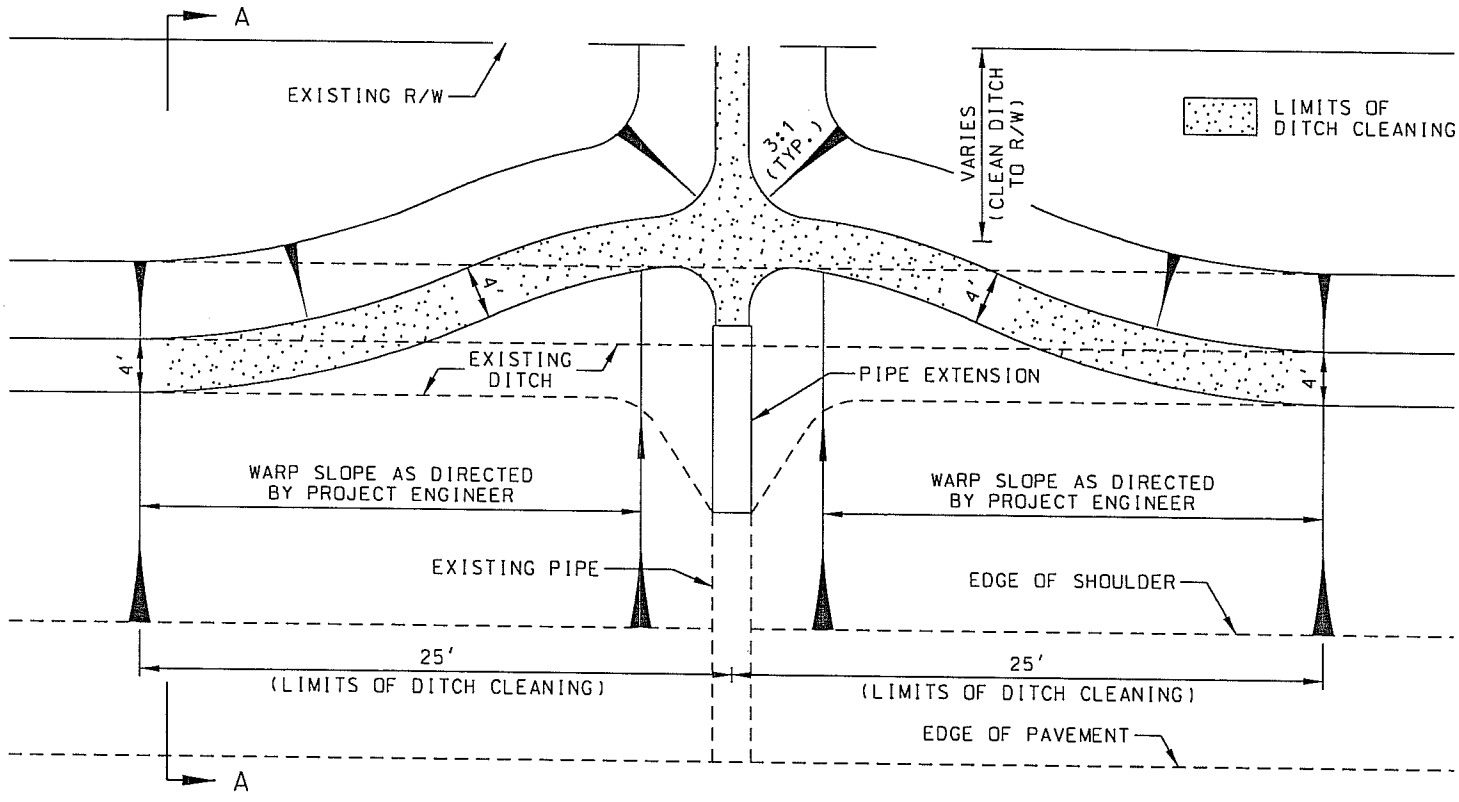
(TO CONNECT DISSIMILAR PIPE TYPES AND/OR JOINTS
OR
TO REPAIR EXISTING PIPE JOINT SEPARATION)

NOTES:

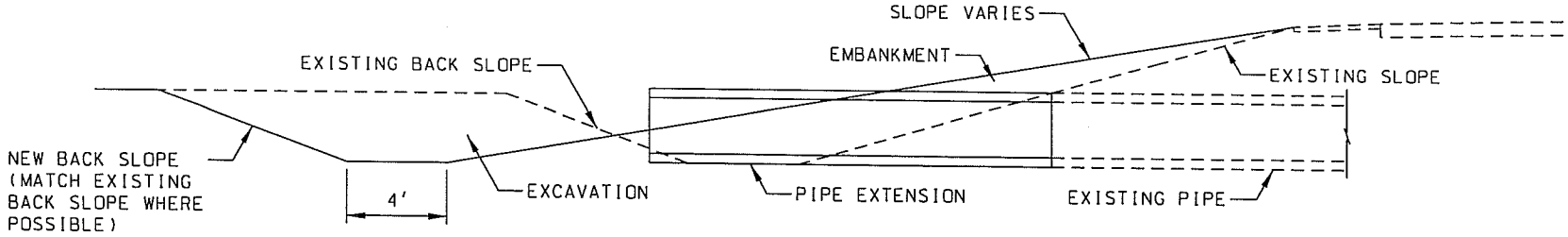
1.) WRAP PIPE JOINTS WITH GEOTEXTILE FABRIC BEFORE POURING CONCRETE. SEE SECTION 1019.01 OF THE LA DOTD STD. SPECS (2000 EDITION).

2.) COST OF STEEL AND GEOTEXTILE FABRIC TO BE INCLUDED IN CONCRETE COLLAR.

SHEET NUMBER 37
PARISH: EAST CARROLL
FEDERAL PROJECT:
STATE PROJECT: 338-01-0014
DESIGNED: AG
CHECKED: PEC
DETAILED: SC
CHECKED: RJM
DATE: 1-26-07
SHEET
NO. | DATE | REVISION DESCRIPTION | BY
CONCRETE COLLAR DETAIL
DISTRICT 05 DESIGN



PLAN VIEW



SECTION A-A

NOTES:

1.) SEED AND FERTILIZE ALL RAW SLOPES AND DISTURBED AREAS AS DIRECTED BY THE PROJECT ENGINEER.

2.) IF EXCAVATION AND/OR EMBANKMENT IS REQUIRED TO RELOCATE DITCH, COST TO BE INCLUDED IN CLEANING EXISTING DITCHES.

3.) CLEARING IS INCIDENTAL TO DRAINAGE ITEM.

SHEET NUMBER 38

PARISH EAST CARROLL | FEDERAL PROJECT | STATE PROJECT 338-01-0014

DESIGNED AG | CHECKED PEC | DETAILED SC | CHECKED RJM | DATE 1-26-07 | SHEET

NO.	DATE	REVISION DESCRIPTION	BY

DETAIL OF CLEANING DITCHES AT CROSS DRAINS

DISTRICT 05 DESIGN

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 XX Miles" sign shall be required on all projects and located at begining of the project unless otherwise noted. 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 14 hours or less may be placed on NCHRP350 approved portable sign frames.

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)

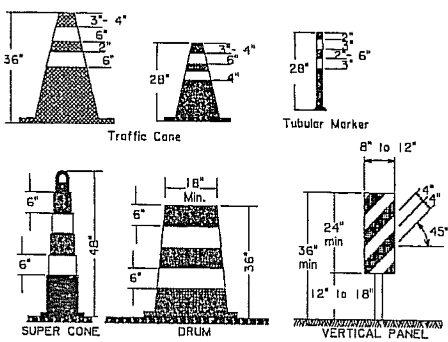
- All pavement markings within the limits of the project that are in conflict with the project signing or the required traffic movements shall be removed from the pavement by blast cleaning or grinding (Existing striping shall not be painted over with black paint or covered with tape).
- If special pavement 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. It 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 may 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 6' 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.

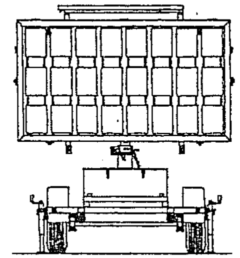
CHANNELIZING DEVICES

- 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.



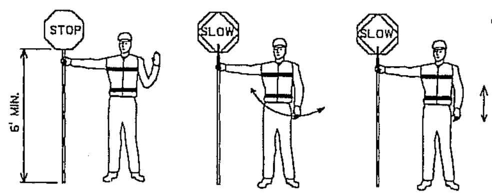
PORTABLE CHANGEABLE MESSAGE SIGNS

- 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 certificate indicating completion of a flagger training course shall be available to the engineer if requested. A Qualified Flagger is one that has attended courses such as those offered by the American Traffic Safety Services Association (ATSSA) or other courses approved by the Louisiana DOTD's Work Zone Task Force.
- When utilized, a flagger shall use a minimum 18 inch sign on a minimum 6' stop/slow paddle and wear ANSI Class 2 vest during day time operations and ANSI Class 3 ensemble during night operations. In all flagging operations, the flagger must be visible from flagger advance warning sign. Flaggers shall be properly trained.



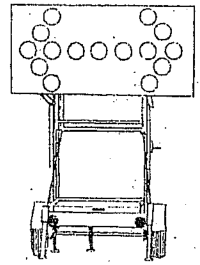
TYPE III BARRICADES

- 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.

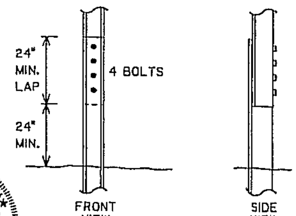


LIGHTING (see QPL)

- 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 5/16 inch diameter hex bolts spaced equally along the splice.



STATE OF LOUISIANA
PETER A. ALLAIN
REG. No. 20966
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
11/2/06

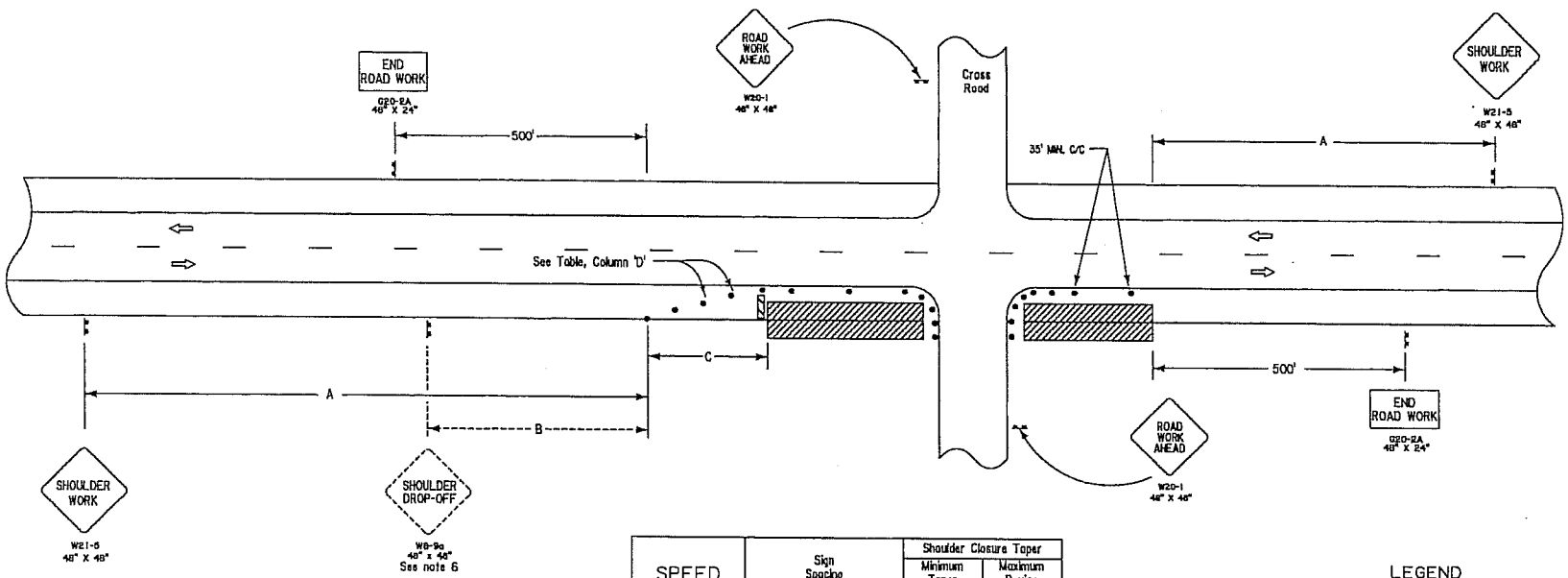
SHEET NUMBER	39
PARISH	EAST CARROLL
FEDERAL PROJECT	
STATE PROJECT	338-01-0014
DESIGNED	C. ADAMS
CHECKED	P. ALLAIN
DETAILED	D. SOWARDS
CHECKED	J. COLVIN
DATE	10/16/06
SHEET	1 OF 1

TEMPORARY TRAFFIC CONTROL GENERAL NOTES SHEET

SPECIAL DETAIL TC-00

DOTD

TRAFFIC ENGINEERING



SPEED LIMIT	Sign Spacing		Shoulder Closure Taper	
			Minimum Taper Length	Maximum Device Spacing
	'A'	'B'	'C'	'D'
35 mph	500'	250'	100'	25'
45 mph	1000'	350'	200'	45'
≥55 mph	1500'	500'	250'	50'

If horizontal curve radius is less than 300', devices spacing shall be 25'.

LEGEND

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

NOTES

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

1. THIS LAYOUT REPRESENTS TRAFFIC CONTROLS REQUIRED FOR WORKERS AND EQUIPMENT OPERATING WITHIN THE CLEAR ZONE FOR MORE THAN 1 HOUR. LESS THAN 1 HOUR, SEE FIG. TA-4 OF THE MUTCD. PORTABLE SIGNS MAY BE USED FOR WORK LASTING LESS THAN 3 DAYS.

2. NO SIGNS OR BARRICADES ARE REQUIRED FOR EQUIPMENT OPERATING OR WORK IN PROGRESS OUTSIDE THE CLEAR ZONE.

3. SIGNS AND BARRICADES SHALL BE COVERED OR REMOVED DURING NONWORKING HOURS UNLESS A DROP-OFF OR PHYSICAL OBSTRUCTION REMAINS WITHIN THE CLEAR ZONE.

4. TRAFFIC CONES MAY BE USED AS CHANNELIZING DEVICES ALONG THE WORK AREA DURING DAYLIGHT HOURS ONLY.

5. WORK OR EQUIPMENT CONFINED TO A SPOT LOCATION (LESS THAN 200 FEET) SHALL BE MARKED BY CHANNELIZING DEVICES SPACED AT 25 FEET OR BY A VEHICLE WITH A YELLOW REVOLVING LIGHT OR YELLOW STROBE LIGHT VISIBLE TO ONCOMING TRAFFIC. WORK EXTENDING MORE THAN 200 FEET OF ROADWAY LENGTH SHALL BE MARKED WITH APPROPRIATE DEVICES SPACED AS NOTED IN THE TABLE.

6. SHOULDER DROP-OFFS

   A. WHEN A SHOULDER DROP-OFF GREATER THAN 2" BUT LESS THAN 6" EXISTS, A "SHOULDER DROP-OFF" SIGN WILL FOLLOW THE "SHOULDER WORK" SIGN. WHEN THE DROP-OFF EXCEEDS 6", THE "SHOULDER DROP-OFF" SIGN SHALL BE REPLACED BY A "NO SHOULDER" SIGN.

   B. IF THE SPEED LIMIT IS GREATER THAN 45 MPH AND THE DROPOFF IS 10" OR GREATER WITHIN 2' OF THE TRAVEL LANE DURING NONWORKING HOURS, A PORTABLE BARRIER SHALL BE USED.

7. SPEED LIMIT IN THE ABOVE TABLE REFERS TO THE LEGALLY ESTABLISHED SPEED LIMIT BEFORE CONSTRUCTION. IF WORKERS ARE PRESENT WITHIN 2' OF TRAVEL LANE, SPEED LIMIT MAY NEED TO BE REDUCED.

8. WHEN A WORK AREA HAS BEEN ESTABLISHED ON ONE SIDE OF THE ROADWAY ONLY, THERE SHALL BE NO CONFLICTING OPERATIONS OR PARKING ON THE OPPOSITE SHOULDER WITHIN 500 FEET OF THE WORK AREA.

9. A TEMPORARY EDGELINE OR CHANNELIZING DEVICE SHALL BE PLACED AT THE PAVEMENT EDGE ADJACENT TO THE DROP-OFF DURING NONWORKING HOURS WHEN THE DROPOFF IS GREATER THAN 2".

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

11. 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.

12. 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.

STATE OF LOUISIANA
PETER A. ALLAIN
REG. NO. 20966
REGISTERED PROFESSIONAL ENGINEER IN
CIVIL ENGINEERING
11/2/06

SHEET NUMBER 40
PARISH EAST CARROLL
FEDERAL PROJECT
STATE PROJECT 338-01-0014
DESIGNED C. ADAMS
CHECKED P. ALLAIN
DETAILED D. SOWARDS
CHECKED J. COLVIN
DATE 10/16/06
SHEET
REVISION DESCRIPTION
NO.
DATE

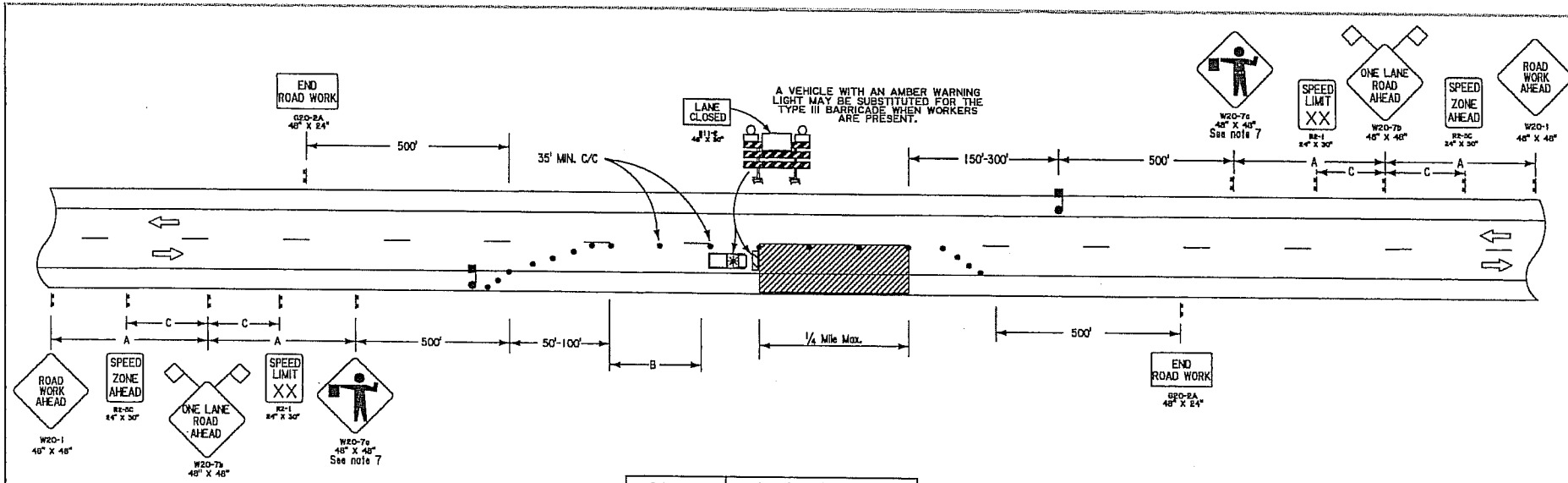
TRAFFIC CONTROL LAYOUT FOR WORK LESS THAN 15' FROM THE TRAVELED LANE

SPECIAL DETAIL TC-01

DOTD

TRAFFIC ENGINEERING

G-40



SPEED LIMIT (See note 5)	Approximate Sign Spacing		
	"A"	"B"	"C"
35 mph	500'	100'-200'	N/A
45 mph	1000'	100'-200'	500'
55 mph	1500'	200'-300'	800'

SIGN SPACING TO BE ADJUSTED FOR HORIZONTAL & VERTICAL CURVES.

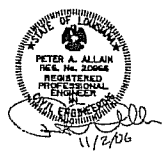
FLAGGERS
WHEN UTILIZED, A FLAGGER SHALL USE A MINIMUM 18 INCH SIGN ON A MINIMUM 6' STOP/ SLOW PADDLE AND WEAR ANSI CLASS 2 VEST DURING DAY OPERATIONS AND ANSI CLASS 3 ENSEMBLE DURING NIGHT OPERATIONS. IN ALL FLAGGING OPERATIONS, THE FLAGGER MUST BE VISIBLE FROM FLAGGER ADVANCE WARNING SIGN. FLAGGERS SHALL BE PROPERLY TRAINED.

Use of Hand Sign

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

1. CONDITIONS REPRESENTED ARE FOR WORK WHICH REQUIRES CLOSING TRAFFIC LANES DURING DAYLIGHT HOURS ONLY. PORTABLE SIGNS MAY BE USED FOR WORK LASTING LESS THAN 3 DAYS.
2. WHEN A WORK AREA HAS BEEN ESTABLISHED ON ONE SIDE OF THE ROADWAY ONLY, THERE SHALL BE NO PARKING ON THE OPPOSITE SHOULDER WITHIN 500 FEET OF THE WORK AREA.
3. CHANNELIZING DEVICES MAY BE PLACED UP TO 2' BEYOND CENTER-LINE ONLY AT SPECIFIC LOCATIONS WHERE ACTUAL WORK ACTIVITY IS TAKING PLACE. A 10' MINIMUM TRAVELED LANE SHOULD BE MAINTAINED WHERE PRACTICAL. CHANNELIZING DEVICES SHALL BE RETURNED TO THE CENTERLINE WHEN THE WORK ACTIVITY HAS PASSED.
4. SPACING OF CHANNELIZING DEVICES IN THE TAPER SHOULD BE NO MORE THAN 20'. A MINIMUM OF 5 CHANNELIZING DEVICES ARE TO BE USED IN THE TAPER.
5. SPEED LIMIT REFERS TO THE LEGALLY ESTABLISHED SPEED LIMIT BEFORE CONSTRUCTION.
6. TO PREVENT VEHICLES FROM ENTERING THE WORK AREA AGAINST THE FLOW OF TRAFFIC, AN ADDITIONAL FLAGGER SHALL BE STATIONED AT EACH INTERSECTION, MAJOR DRIVEWAY, RAILROAD CROSSING OR CROSSING WITHIN THE WORK AREA.
7. VISUAL OR RADIO CONTACT SHALL BE REQUIRED BETWEEN FLAGGERS AT ALL TIMES. THE FLAGGER SHALL BE VISIBLE FROM FLAGGER SIGN.
8. ANY SIGNS IN CONFLICT WITH CONSTRUCTION SIGNING SHALL BE REMOVED OR COVERED BY THE CONTRACTOR.
9. 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.
10. 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.

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



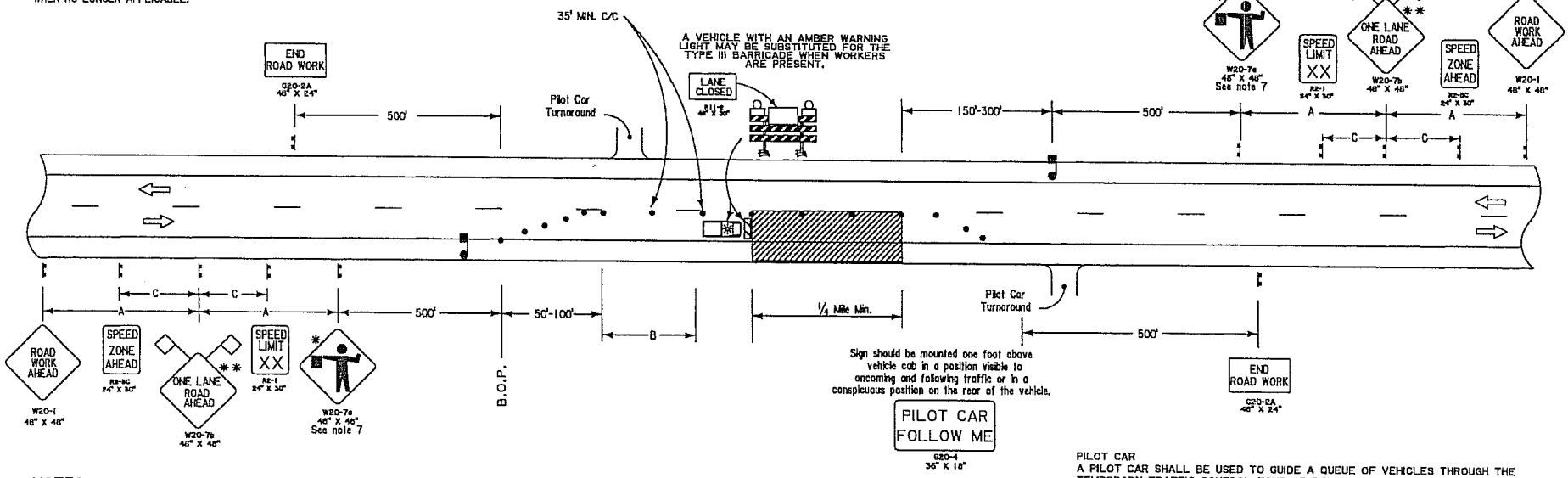
SHEET NUMBER 41
PARISH: EAST CARROLL
PROJECT NO.: 338-01-0014
DESIGNED C. ADAMS
DETAILED P. ALLAIN
CHECKED D. SOWARDS
CHECKED J. COLVIN
DATE 10/15/05
SHEET
REVISION DESCRIPTION
DATE
BY
NO.

TRAFFIC CONTROL LAYOUT FOR LANE CLOSURE LESS THAN 1/4 MILE IN LENGTH
STANDARD SHEET NO. TC-02

DOTD
TRAFFIC ENGINEERING

G-41

* REMOVE OR COVER WHEN NO LONGER APPLICABLE.
** REPLACE WITH "ROAD WORK ½ MILE" WHEN NO LONGER APPLICABLE.



NOTES

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

1. WHEN A WORK AREA HAS BEEN ESTABLISHED ON ONE SIDE OF THE ROADWAY ONLY, THERE SHALL BE NO PARKING ON THE OPPOSITE SHOULDER WITHIN 500 FEET OF THE WORK AREA.

2. CHANNELIZING DEVICES MAY BE PLACED UP TO 2' BEYOND CENTERLINE ONLY AT SPECIFIC LOCATIONS WHERE ACTUAL WORK ACTIVITY IS TAKING PLACE. A 10' MINIMUM TRAVELED LANE SHOULD BE MAINTAINED WHERE PRACTICAL. CHANNELIZING DEVICES SHALL BE RETURNED TO THE CENTERLINE WHEN THE WORK ACTIVITY HAS PASSED.

3. SPACING OF CHANNELIZING DEVICES IN THE TAPER SHOULD BE NO MORE THAN 20'. A MINIMUM OF 5 CHANNELIZING DEVICES ARE TO BE USED IN THE TAPER.

4. SPEED LIMIT REFERS TO THE LEGALLY ESTABLISHED SPEED LIMIT BEFORE CONSTRUCTION.

5. TO PREVENT VEHICLES FROM ENTERING THE WORK AREA AGAINST THE FLOW OF TRAFFIC, AN ADDITIONAL FLAGGER SHALL BE STATIONED AT EACH INTERSECTION, MAJOR DRIVEWAY, RAILROAD CROSSING OR CROSSING WITHIN THE WORK AREA.

6. WITH THE APPROVAL OF THE ENGINEER, THE LENGTH OF THE WORK AREA MAY, FOR A SHORT DURATION, BE CHANGED TO AS MUCH AS ONE-HALF MILE MAXIMUM TO IMPROVE THE SIGHT DISTANCE TO THE FLAGGER. VISUAL OR RADIO CONTACT SHALL BE REQUIRED BETWEEN THE FLAGGERS AT ALL TIMES.

7. FOR PROJECTS IN RURAL AREAS THE DISTANCE BETWEEN FLAGGERS SHALL NOT EXCEED 2.5 MILES FOR A.D.T. (AVERAGE DAILY TRAFFIC) OF LESS THAN 2,500 AND 2.0 MILES FOR A.D.T. FROM 2,500 TO 5,000. DISTANCE BETWEEN FLAGGERS SHALL NOT EXCEED 1.5 MILES FOR A.D.T. GREATER THAN 5,000 VEHICLES.

8. THE CONTRACTOR MAY EXTEND THE LANE CLOSURE AN ADDITIONAL 1.0 MILE UNDER THE FOLLOWING PROVISIONS:

   (A) THE LANE CLOSURE EXTENSION IS PERMITTED ONLY DURING NON-PEAK HOURS.

   (B) ONCE THE TRAFFIC CONTROL DEVICES HAVE BEEN PLACED TO EXTEND THE LANE CLOSURE, THE TRAFFIC CONTROL DEVICES AT THE BEGINNING OF THE TRAFFIC CONTROL SHALL BE MOVED DOWNSTREAM TO LIMIT THE WORK AREA TO THE DISTANCE DEFINED IN NOTE 7.

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

10. 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.

11. VISUAL OR RADIO CONTACT SHALL BE REQUIRED BETWEEN FLAGGERS AT ALL TIMES. THE FLAGGER SHALL BE VISIBLE FROM FLAGGER SIGN.

12. 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.

13. IF THE CONTRACTOR IS REQUIRED TO USE A PILOT CAR, HE IS NOT REQUIRED TO HAVE CHANNELIZING DEVICES IN THE TANGENT SECTION. IF NOT REQUIRED, THE CONTRACTOR CAN USE EITHER A PILOT CAR OR CHANNELIZING DEVICES.

SPEED LIMIT (See note 4)	Approximate Sign Spacing		
	"A"	"B"	"C"
35 mph	500'	100'-200'	N/A
45 mph	1000'	100'-200'	500'
55 mph	1500'	200'-300'	800'

LEGEND

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

PILOT CAR

A PILOT CAR SHALL BE USED TO GUIDE A QUEUE OF VEHICLES THROUGH THE TEMPORARY TRAFFIC CONTROL ZONE OR DETOUR. IT SHALL BE USED IN RESTRICTED VISIBILITY OPERATIONS SUCH AS LIME OR CEMENT STABILIZATION, CHIP SEALS, OR OPERATIONS IN HILLY OR CURVY TERRAINS WHERE FLAGGERS CAN'T SEE EACH OTHER (REQUIRE A CLEAR LINE-OF-SIGHT). PILOT CARS ARE NOT REQUIRED IN CONFINED OPERATIONS SUCH AS STRIPING OR OTHER LIMITED LANE CLOSURE OPERATIONS LESS THAN 250' (i.e. CROSS DRAIN INSTALLATIONS UNLESS THERE ARE MULTIPLE CROSS DRAINS WITH A CONTINUOUS LANE CLOSURE). THE OPERATION OF THE PILOT VEHICLE SHALL BE COORDINATED WITH FLAGGING OPERATIONS OR OTHER CONTROLS AT EACH END OF THE ONE-LANE SECTION.

FLAGGERS

WHEN UTILIZED, A FLAGGER SHALL USE A MINIMUM 18 INCH SIGN ON A MINIMUM 6' STOP/SLOW PADDLE AND WEAR ANSI CLASS 2 VEST DURING DAY OPERATIONS AND ANSI CLASS 3 ENSEMBLE DURING NIGHT OPERATIONS. IN ALL FLAGGING OPERATIONS, THE FLAGGER MUST BE VISIBLE FROM FLAGGER ADVANCE WARNING SIGN. FLAGGERS SHALL BE PROPERLY TRAINED.

Use of Hand Sign

STATE OF LOUISIANA
PETER A. ALLAIN
REG. No. 22368
REGISTERED PROFESSIONAL ENGINEER
IN ENGINEERING
11/2/06

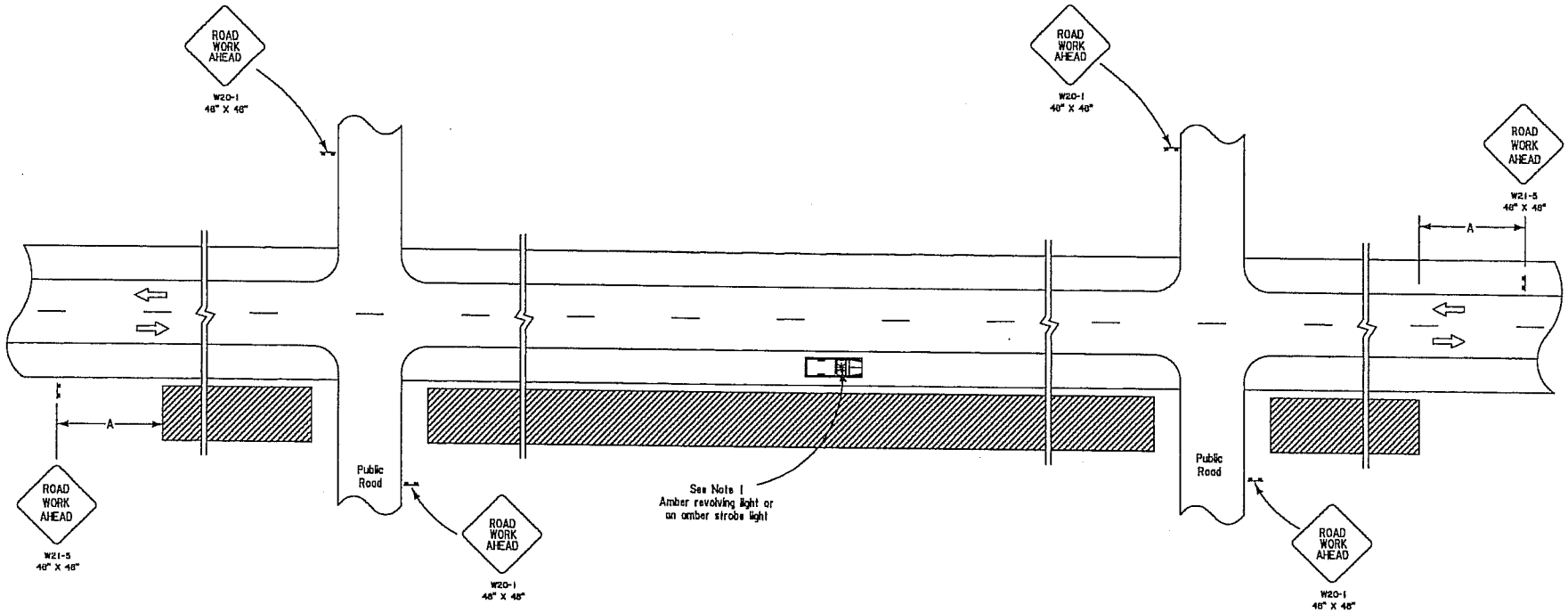
TRAFFIC CONTROL FOR LANE CLOSURE GREATER THAN ¼ MILE IN LENGTH (SUITABLE FOR MOVING OPERATIONS)

TC-03

TRAFFIC ENGINEERING

SHEET NUMBER 42
PARISH EAST CARROLL
FEDERAL PROJECT
STATE PROJECT 538-01-0014
DESIGNED C. ADAMS
CHECKED P. ALLAIN
DETAILED D. EDWARDS
CHECKED J. COLVIN
DATE 10/16/06
SHEET
BY
DATE
NO.
REVISION DESCRIPTION

G-42



LEGEND

Traffic Sign

Work Area

SPEED LIMIT	Approximate Sign Spacing
	'A'
35 mph	500'
45 mph	1000'
55 mph	1500'

NOTES

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

1. THIS LAYOUT REPRESENTS TRAFFIC CONTROLS REQUIRED FOR WORKERS AND EQUIPMENT OPERATING OUTSIDE OF CLEAR ZONE. IF THE OPERATION RESULTS IN EQUIPMENT OR OTHER VEHICLES BEING PARKED WITHIN THE CLEAR ZONE, BUT NOT WITHIN THE ROADWAY EACH VEHICLE SHALL HAVE AN AMBER LIGHT.
2. WHEN A WORK AREA HAS BEEN ESTABLISHED ON ONE SIDE OF THE ROADWAY ONLY, THERE SHALL BE NO PARKING ON THE OPPOSITE SHOULDER WITHIN 500 FEET OF THE WORK AREA.
3. SPEED LIMIT REFERS TO THE LEGALLY ESTABLISHED SPEED LIMIT BEFORE CONSTRUCTION.
4. AN ADDITIONAL "ROAD WORK AHEAD" SIGN SHALL BE PLACED AT EACH PUBLIC ROAD INTERSECTING THE PROJECT WITHIN THE WORK AREA.
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.

STATE OF LOUISIANA
PETER A. ALLAIN
REG. No. 20966
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING
12/2/06

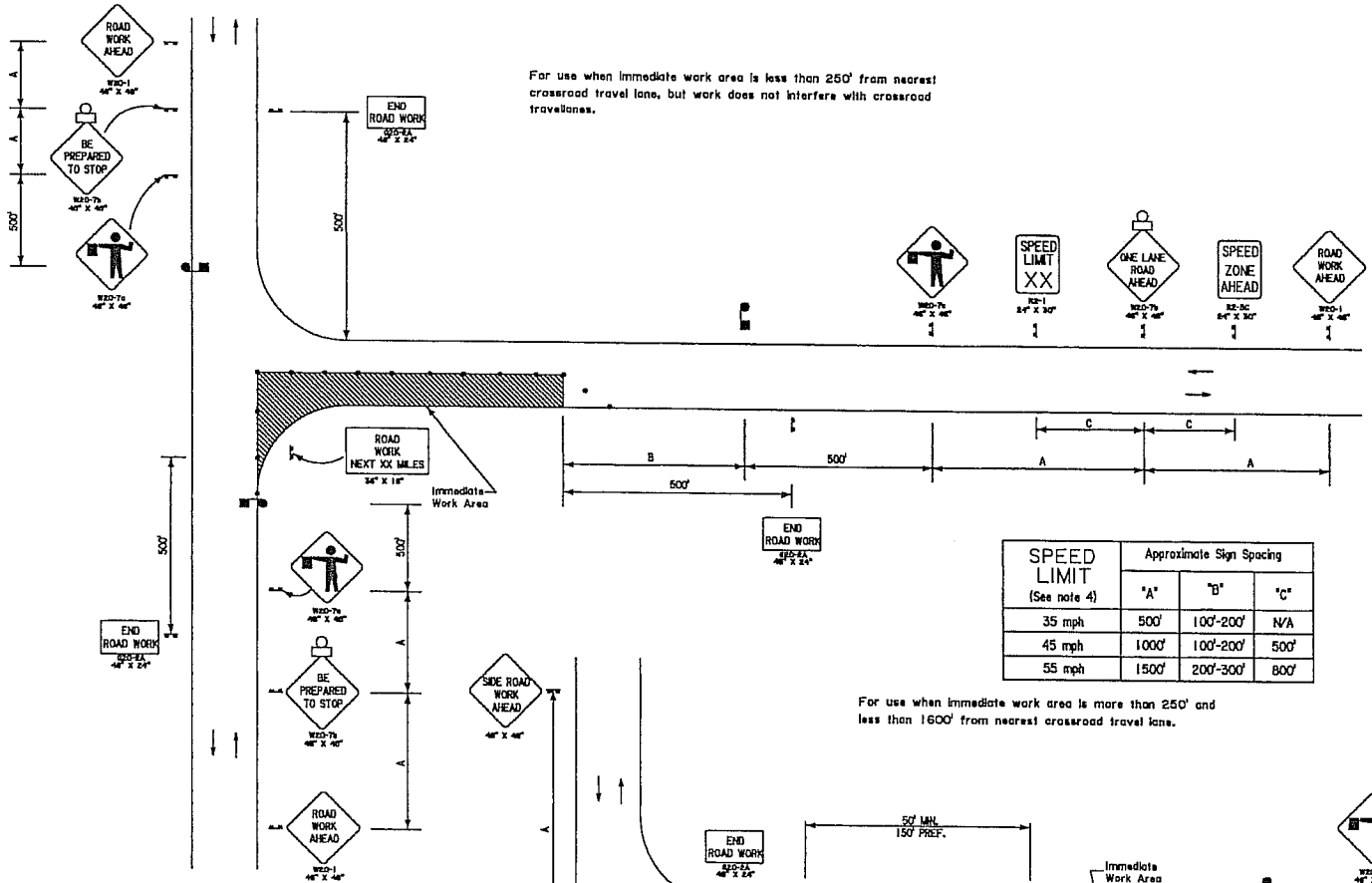
SHEET NUMBER 43
PARISH EAST CARROLL
FED.AID PROJECT
STATE PROJECT 138-01-0014
DESIGNED C. ADAMS
CHECKED P. ALLAIN
DETAILED D. EDWARDS
CHECKED J. COLVIN
DATE CHECKED 10/16/06
ET
REVISION DESCRIPTION
NO. DATE

TRAFFIC CONTROL FOR WORK GREATER THAN 15' FROM THE TRAVELED LANE

SPECIAL DETAIL TC-05

DOTD
TRAFFIC ENGINEERING

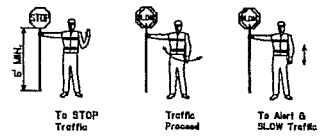
G-43



For use when immediate work area is less than 250' from nearest crossroad travel lane, but work does not interfere with crossroad travellanes.

FLAGGERS

WHEN UTILIZED, A FLAGGER SHALL USE A MINIMUM 18 INCH SIGN ON A MINIMUM 6' STOP/ SLOW PADDLE AND WEAR ANSI CLASS 2 VEST DURING DAY OPERATIONS AND ANSI CLASS 3 ENSEMBLE DURING NIGHT OPERATIONS. IN ALL FLAGGING OPERATIONS, THE FLAGGER MUST BE VISIBLE FROM FLAGGER ADVANCE WARNING SIGN. FLAGGERS SHALL BE PROPERLY TRAINED.



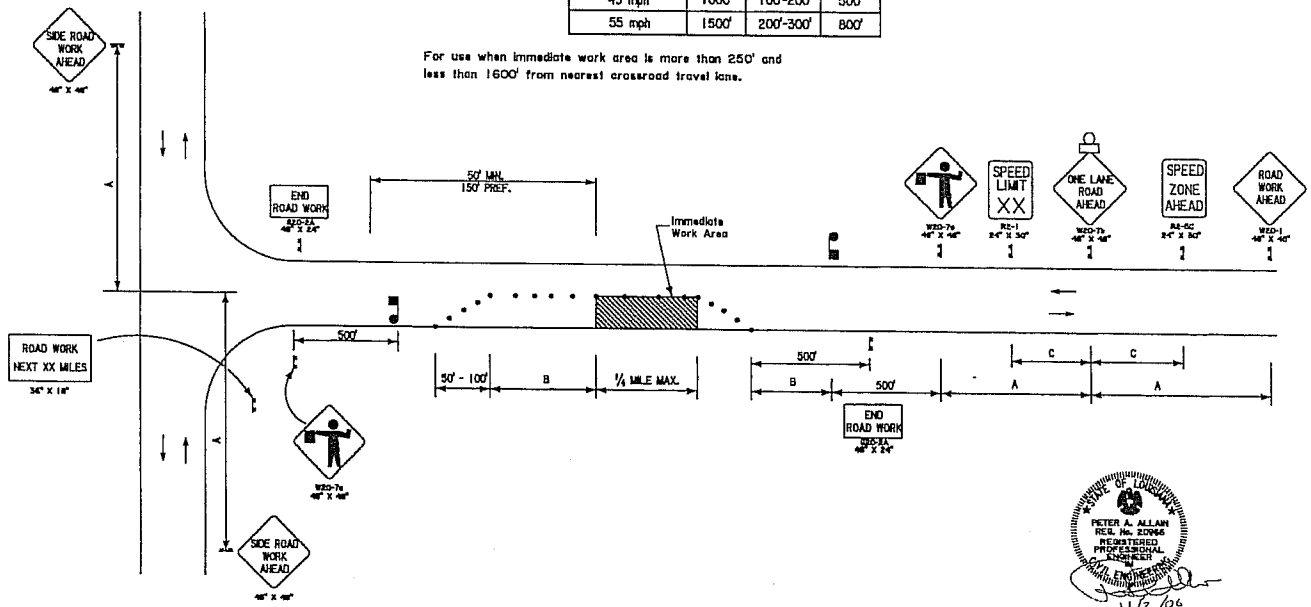
Use of Hand Sign

LEGEND

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

SPEED LIMIT (See note 4)	Approximate Sign Spacing		
	"A"	"B"	"C"
35 mph	500'	100'-200'	N/A
45 mph	1000'	100'-200'	500'
55 mph	1500'	200'-300'	800'

For use when immediate work area is more than 250' and less than 1600' from nearest crossroad travel lane.



NOTES

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

1. IF REDUCED SPEED LIMIT IS REQUIRED, APPLICABLE SPEED LIMIT TO BE DETERMINED IN THE FIELD, TO BE AS HIGH AS PRACTICABLE AND NEVER LOWER THAN 20 MPH.
2. VISUAL OR RADIO CONTACT SHALL BE REQUIRED BETWEEN THE FLAGGERS AT ALL TIMES.
3. ANY SIGNS IN CONFLICT WITH CONSTRUCTION SIGNING SHALL BE REMOVED OR COVERED.
4. 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.
5. ANY SIGN NOT APPLICABLE FOR NIGHT TIME USE SHALL BE EITHER REMOVED OR COVERED AT THE END OF EACH DAY.

TRAFFIC CONTROL LAYOUT FOR LANE CLOSURES ON TWO LANE UNDIVIDED HIGHWAYS DURING OVERLAYS AND MOVING OPERATIONS

TC-15

TRAFFIC ENGINEERING

SHEET NUMBER	44
PARISH	EAST CARROLL
FEDERAL PROJECT	
STATE PROJECT	338-01-0014
DESIGNED	C. ADAMS
CHECKED	P. ALLAIN
DETAILED	D. EDWARDS
CHECKED	J. COLVIN
DATE	10/16/06
SHEET	87

S.P. 338-01

LOCATION		ROADWAY						SHOULDER					
		SURFACE		BASE		SUBBASE		SURFACE		BASE		SUBBASE	
LOG MILE (FT.)		TYPE	(")	TYPE	(")	TYPE	% MOIST.	TYPE	(")	TYPE	(")	TYPE	% MOIST.
0.10	6 FT. LT CL	HM	4.00	S-1,GRAV SDY LM A-1-A(00), NP	8.00	S-2, CL LM A-6(07), LL=30 PI=14							
	6 FT. RT CL	HM	4.00	(S-1)	7.50	(S-2)							
0.30	6 FT. LT CL	HM	4.00	(S-1)	6.00	(S-2)							
	6 FT. RT CL	HM	4.00	(S-1)	6.00	(S-2)							
0.50	15 FT. LT CL							(S-1)	7.00	S-3, LM A-4(03), LL=26 PI=10			
	6 FT. LT CL	HM	3.50	(S-1)	5.00	(S-3)							
	6 FT. RT CL	HM	4.00	(S-1)	6.00	(S-3)							
	15 FT. RT CL							(S-1)	9.00	(S-3)			
0.70	6 FT. LT CL	HM	4.00	S-4, GRAV SDY LM A-1-A(00), LL=24 PI=5	4.00	(S-3)							
	6 FT. LT CL	HM	4.50	(S-4)	6.00	(S-3)							
0.90	6 FT. LT CL	HM	4.00	(S-4)	5.00	(S-3)							
	6 FT. RT CL	HM	4.00	(S-4)	5.50	(S-3)							

KEY:

HM	ASPHALTIC CONCRETE
SC	SOIL CEMENT
PCC	PORTLAND CEMENT CONCRETE
SCG	SAND CLAY GRAVEL
ST	SURFACE TREATMENT
CL	CENTERLINE

REMARKS: 100' FROM SOUTHEND OF BRIDGE 9.50" HOTMIX.
100' FROM NORTHEND OF BRIDGE 6.00" HOTMIX.

STATE OF LOUISIANA
DAVID L. HODNETT
REG. No. 24421
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

SUBMITTED BY: CARL K. HARWELL DATE BORED: 4/3/2006 LAB ENGINEER

SHEET NUMBER 45

EAST CARROLL | PARISH | FEDERAL PROJECT | STATE PROJECT 338-01-0014

DISTRICT LAB BORINGS FOR PRELIMINARY PROJECTS

DISTRICT 05 DESIGN

NO.	DATE	REVISION DESCRIPTION	BY

DESIGNED | CHECKED | DETAILED | CHECKED | DATE | SHEET

S.P. 338-01

LOCATION		ROADWAY						SHOULDER					
		SURFACE		BASE		SUBBASE		SURFACE		BASE		SUBBASE	
LOG MILE (FT.)		TYPE	(")	TYPE	(")	TYPE	% MOIST.	TYPE	(")	TYPE	(")	TYPE	% MOIST.
1.10	6 FT. LT CL	HM	8.00	S-5, GRAV SDY LM A-1-B(00), NP									
	6 FT. RT CL	HM	10.50	(S-5)									
1.30	6 FT. LT CL	HM	4.00	(S-5)	6.50	S-6, CL LM A-4(03), LL=29 PI=9							
	6 FT. RT CL	HM	5.00	(S-5)	7.00	(S-6)							
1.50	15 FT. LT CL							(S-5)	7.50	S-7, LT SDY CL A-6(10), LL=35 PI=20			
	6 FT. LT CL	HM	4.50	(S-5)	7.00	(S-7)							
	6 FT. RT CL	HM	6.00	(S-5)	7.00	(S-7)							
	15 FT. RT CL							(S-5)	7.00	(S-7)			
1.70	6 FT. LT CL	HM	3.50	S-8, GRAV LM A-1-A(00), NP	7.00	(S-7)							
	6 FT. LT CL	HM	3.50	(S-8)	6.00	(S-7)							
1.90	6 FT. LT CL	HM	12.50	(S-8)	8.00	S-9, CL LM A-6(06) LL=31							
	6 FT. RT CL	HM	4.00	(S-4)	5.50	(S-3)							

KEY:

HM ASPHALTIC CONCRETE
SC SOIL CEMENT
PCC PORTLAND CEMENT CONCRETE
SCG SAND CLAY GRAVEL
ST SURFACE TREATMENT
CL CENTERLINE

REMARKS: PATCH IN LEFT LANE AT LOG MILE 1.9 300' LONG.

SUBMITTED BY: CARL K. HARWELL DATE BORED: 4/3/2006 LAB ENGINEER

STATE OF LOUISIANA
DAVID L. HODNETT
REG. No. 24421
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

SHEET NUMBER 46

EAST CARROLL | | 338-01-0014
PARISH | FEDERAL PROJECT | STATE PROJECT

DISTRICT LAB BORINGS FOR PRELIMINARY PROJECTS

DISTRICT 05 DESIGN

DESIGNED | CHECKED | DETAILED | CHECKED | DATE | SHEET

NO. | DATE | REVISION DESCRIPTION | BY

S.P. 338-01

LOCATION		ROADWAY						SHOULDER					
		SURFACE		BASE		SUBBASE		SURFACE		BASE		SUBBASE	
LOG MILE (FT.)		TYPE	(")	TYPE	(")	TYPE	% MOIST.	TYPE	(")	TYPE	(")	TYPE	% MOIST.
2.10	6 FT. LT CL	HM	6.00	(S-8)	6.50	(S-9)							
	6 FT. RT CL	HM	4.50	(S-8)	6.00	(S-9)							
2.30	6 FT. LT CL	HM	4.00	S-10, GRAV SDY LM A-1-A(00), NP	7.00	(S-9)							
	6 FT. RT CL	HM	4.00	(S-10)	6.00	(S-9)							
2.50	15 FT. LT CL							(S-10)	7.50	S-11, CL LM A-6(07), LL=27 PI=14			
	6 FT. LT CL	HM	4.50	(S-10)	6.00	(S-11)							
	6 FT. RT CL	HM	4.00	(S-10)	8.00	(S-11)							
	15 FT. RT CL							(S-10)	8.00	(S-11)			
2.70	6 FT. LT CL	HM	4.00	(S-10)	7.00	(S-11)							
	6 FT. LT CL	HM	3.50	(S-10)	8.00	(S-11)							
2.90	6 FT. LT CL	HM	4.50	S-12, GRAV SDY LM A-1-A(00), NP	6.00	S-13, CL LM A-6(05), LL=28 PI=12							
	6 FT. RT CL	HM	3.50	(S-12)	6.50	(S-13)							

KEY:

HM ASPHALTIC CONCRETE
SC SOIL CEMENT
PCC PORTLAND CEMENT CONCRETE
SCG SAND CLAY GRAVEL
ST SURFACE TREATMENT
CL CENTERLINE

REMARKS:

STATE OF LOUISIANA
DAVID L. HODNETT
REG. No. 24421
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

SUBMITTED BY: CARL K. HARWELL DATE BORED: 4/3/2006 LAB ENGINEER

SHEET NUMBER 4/7

EAST CARROLL | PARISH | FEDERAL PROJECT | STATE PROJECT 338-01-0014

DISTRICT LAB BORINGS FOR PRELIMINARY PROJECTS

DISTRICT 05 DESIGN

DESIGNED | DRAWN | DETAILED | CHECKED | DATE | SHEET | BY | REVISION DESCRIPTION | DATE | NO.

S.P. 338-01

LOCATION		ROADWAY						SHOULDER					
		SURFACE		BASE		SUBBASE		SURFACE		BASE		SUBBASE	
LOG MILE (FT.)		TYPE	(")	TYPE	(")	TYPE	% MOIST.	TYPE	(")	TYPE	(")	TYPE	% MOIST.
3.10	6 FT. LT CL	HM	4.50	(S-12)	6.00	S-14, LT STY CL A-7-6(30), LL=50 PI=34							
	6 FT. RT CL	HM	5.50	(S-12)	5.50	(S-14)							
3.30	6 FT. LT CL	HM	3.50	(S-12)	5.50	(S-14)							
	6 FT. RT CL	HM	5.00	(S-12)	5.00	(S-14)							
3.50	15 FT. LT CL							S-15, GRAV SDY CL LM, A-1-A(00) LL=23 PI=6	5.00	(S-14)			
	6 FT. LT CL	HM	3.50	(S-15)	5.00	(S-14)							
	6 FT. RT CL	HM	4.00	(S-15)	5.00	(S-14)							
	15 FT. RT CL							(S-15)	6.50	(S-14)			
3.70	6 FT. LT CL	HM	4.50	(S-15)	6.00	S-16, MED STY CL A-7-6(29), LL=50 PI=31							
	6 FT. LT CL	HM	5.00	(S-15)	4.00	(S-16)							
3.90	6 FT. LT CL	HM	3.50	(S-15)	6.00	S-17, CL LM A-6(08), LL=31 PI=15							
	6 FT. RT CL	HM	4.00	(S-15)	5.50	(S-17)							

KEY:

HM ASPHALTIC CONCRETE
SC SOIL CEMENT
PCC PORTLAND CEMENT CONCRETE
SCG SAND CLAY GRAVEL
ST SURFACE TREATMENT
CL CENTERLINE

REMARKS:

STATE OF LOUISIANA
DAVID L. HODNETT
REG. No. 24421
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

SUBMITTED BY: CARL K. HARWELL DATE BORED: 4/3/2006 LAB ENGINEER

SHEET NUMBER 48

EAST CARROLL | PARISH | FEDERAL PROJECT | STATE PROJECT 338-01-00X4

DISTRICT LAB BORINGS FOR PRELIMINARY PROJECTS

DISTRICT 05 DESIGN

DESIGNED | CHECKED | DETAILED | CHECKED | DATE | SHEET | BY | REVISION DESCRIPTION | DATE | NO.

S.P. 338-01

LOCATION		ROADWAY						SHOULDER					
		SURFACE		BASE		SUBBASE		SURFACE		BASE		SUBBASE	
LOG MILE (FT.)		TYPE	(")	TYPE	(")	TYPE	% MOIST.	TYPE	(")	TYPE	(")	TYPE	% MOIST.
4.10	6 FT. LT CL	HM	6.00	S-18, GRAV SDY LM A-1-A(00), NP	6.00	(S-17)							
	6 FT. RT CL	HM	5.00	(S-18)	6.00	(S-17)							
4.30	6 FT. LT CL	HM	5.00	(S-18)	5.00	(S-17)							
	6 FT. RT CL	HM	4.50	(S-18)	5.00	(S-17)							
4.50	15 FT. LT CL							(S-18)	7.50	S-19, CL LM A-6(05), LL=28 PI=12			
	6 FT. LT CL	HM	4.50	(S-18)	6.00	(S-19)							
	6 FT. RT CL	HM	4.00	(S-18)	6.00	(S-19)							
	15 FT. RT CL							(S-18)	7.00	(S-19)			
4.70	6 FT. LT CL	HM	3.50	S-20, GRAV LM A-1-A(00), NP	7.50	(S-19)							
	6 FT. LT CL	HM	5.00	(S-20)	5.00	(S-19)							
	FT. CL												
	FT. CL												

KEY:

HM ASPHALTIC CONCRETE
SC SOIL CEMENT
PCC PORTLAND CEMENT CONCRETE
SCG SAND CLAY GRAVEL
ST SURFACE TREATMENT
CL CENTERLINE

REMARKS:

STATE OF LOUISIANA
DAVID L. HODNETT
REG. No. 24421
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

SUBMITTED BY: CARL K. HARWELL DATE BORED: 4/3/2006 LAB ENGINEER

SHEET NUMBER 49

EAST CARROLL | | 338-01-0014
PARISH | FEDERAL PROJECT | STATE PROJECT

DISTRICT LAB BORINGS FOR PRELIMINARY PROJECTS

DISTRICT 05 DESIGN

NO.	DATE	REVISION DESCRIPTION	BY	SHEET	DATE	CHECKED	DESIGNED	DETAILED	CHECKED

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

CONSTRUCTION PROPOSAL RETURNABLES FOR

STATE PROJECT NO. 338-01-0014
JUNCTION LA 134 - JUNCTION LA 881
ROUTE LA 581
EAST CARROLL PARISH

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

SCHEDULE OF ITEMS

LEAD PROJECT: 338-01-0014
OTHER PROJECTS:

ITEM NUMBER	APPROXIMATE QUANTITY	UNIT OF MEASURE	PAY ITEM UNIT PRICE (IN WORDS, INK OR TYPED)	AMOUNT
202-01	LUMP	LUMP SUM	REMOVAL OF STRUCTURES & OBSTRUCTIONS FORTY THOUSAND DOLLARS NO CENTS	40,000.00
202-02-D	28	SQUARE YARD	REMOVAL OF CONCRETE WALKS & DRIVES FORTY DOLLARS NO CENTS	1,120.00
203-01	1,792	CUBIC YARD	GENERAL EXCAVATION EIGHTEEN DOLLARS NO CENTS	32,256.00
203-07	7,506	CUBIC YARD	BORROW (VEHICULAR MEASUREMENT) TWENTY DOLLARS NO CENTS	150,120.00
203-07-A	4,199	CUBIC YARD	BORROW (VEHICULAR MEAS.) (SELECTED SOILS) TWENTY DOLLARS NO CENTS	83,980.00
308-01-A	13,835	SQUARE YARD	IN-PLACE CEMENT TREATED BASE COURSE (12" THICK) TWELVE DOLLARS NO CENTS	166,020.00

SCHEDULE OF ITEMS

LEAD PROJECT: 338-01-0014
OTHER PROJECTS:

ITEM NUMBER	APPROXIMATE QUANTITY	UNIT OF MEASURE	PAY ITEM UNIT PRICE (IN WORDS, INK OR TYPED)	AMOUNT
402-01	247.9	CUBIC YARD	TRAFFIC MAINTENANCE AGGREGATE (VEHICULAR MEASUREMENT) FORTY DOLLARS NO CENTS	9,916.00
507-01-A	70,072	GALLON	ASPHALTIC MATERIAL (CRS-2P EMULSION) TWO DOLLARS SEVENTY-FIVE CENTS	192,698.00
507-02-A	64,882	SQUARE YARD	AGGREGATE (S1) TWO DOLLARS TEN CENTS	136,252.20
507-02-B	64,882	SQUARE YARD	AGGREGATE (S2) TWO DOLLARS TEN CENTS	136,252.20
507-02-C	64,882	SQUARE YARD	AGGREGATE (S3) TWO DOLLARS TEN CENTS	136,252.20
509-01	11,079	SQUARE YARD	COLD PLANING ASPHALTIC PAVEMENT THREE DOLLARS NO CENTS	33,237.00

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

SCHEDULE OF ITEMS

LEAD PROJECT: 338-01-0014
OTHER PROJECTS:

ITEM NUMBER	APPROXIMATE QUANTITY	UNIT OF MEASURE	PAY ITEM UNIT PRICE (IN WORDS, INK OR TYPED)	AMOUNT
509-02	-463	CUBIC YARD	CONTRACTOR RETAINED RECLAIMED ASPHALTIC PAVEMENT ONE DOLLARS NO CENTS	-463.00
701-01-K	244	LINEAR FOOT	CROSS DRAIN PIPE (30" RCP/PCP) TWO HUNDRED TEN DOLLARS NO CENTS	51,240.00
701-01-M	134	LINEAR FOOT	CROSS DRAIN PIPE (36" RCP/PCP) TWO HUNDRED THIRTY-FIVE DOLLARS NO CENTS	31,490.00
701-01-N	132	LINEAR FOOT	CROSS DRAIN PIPE (42" RCP/PCP) TWO HUNDRED FIFTY-TWO DOLLARS NO CENTS	33,264.00
701-01-O	76	LINEAR FOOT	CROSS DRAIN PIPE (48" RCP/PCP) TWO HUNDRED SEVENTY DOLLARS NO CENTS	20,520.00
701-05-G	40	LINEAR FOOT	SIDE DRAIN PIPE (18") SEVENTY DOLLARS NO CENTS	2,800.00

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

SCHEDULE OF ITEMS

LEAD PROJECT: 338-01-0014
OTHER PROJECTS:

ITEM NUMBER	APPROXIMATE QUANTITY	UNIT OF MEASURE	PAY ITEM UNIT PRICE (IN WORDS, INK OR TYPED)	AMOUNT
701-10-M	4	LINEAR FOOT	REINFORCED CONCRETE PIPE (EXTENSION) (36") TWO HUNDRED FIFTY DOLLARS NO CENTS	1,000.00
701-12-I	36	LINEAR FOOT	CORRUGATED METAL PIPE (EXTENSION) (24") ONE HUNDRED EIGHTY DOLLARS NO CENTS	6,480.00
701-12-K	22	LINEAR FOOT	CORRUGATED METAL PIPE (EXTENSION) (30") TWO HUNDRED TEN DOLLARS NO CENTS	4,620.00
701-12-M	18	LINEAR FOOT	CORRUGATED METAL PIPE (EXTENSION) (36") TWO HUNDRED FORTY DOLLARS NO CENTS	4,320.00
701-12-N	18	LINEAR FOOT	CORRUGATED METAL PIPE (EXTENSION) (42") TWO HUNDRED SIXTY DOLLARS NO CENTS	4,680.00
701-12-O	32	LINEAR FOOT	CORRUGATED METAL PIPE (EXTENSION) (48") THREE HUNDRED DOLLARS NO CENTS	9,600.00

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

SCHEDULE OF ITEMS

LEAD PROJECT: 338-01-0014
OTHER PROJECTS:

ITEM NUMBER	APPROXIMATE QUANTITY	UNIT OF MEASURE	PAY ITEM UNIT PRICE (IN WORDS, INK OR TYPED)	AMOUNT
701-12-P	12	LINEAR FOOT	CORRUGATED METAL PIPE (EXTENSION) (54") THREE HUNDRED FIFTY DOLLARS NO CENTS	4,200.00
701-15	20	EACH	CONCRETE COLLAR SIX HUNDRED DOLLARS NO CENTS	12,000.00
702-02-B	1	EACH	MANHOLES (R-CB-11) THREE THOUSAND SIX HUNDRED DOLLARS NO CENTS	3,600.00
706-02-C	20.3	SQUARE YARD	CONCRETE DRIVE (6" THICK) SEVENTY-FIVE DOLLARS NO CENTS	1,522.50
713-01	LUMP	LUMP SUM	TEMPORARY SIGNS & BARRICADES ONE HUNDRED TWENTY-FIVE THOUSAND DOLLARS NO CENTS	125,000.00
713-06-A	1,216	EACH	TEMPORARY REFLECTORIZED RAISED PAVEMENT MARKERS (TABS) THREE DOLLARS NO CENTS	3,648.00

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

SCHEDULE OF ITEMS

LEAD PROJECT: 338-01-0014
OTHER PROJECTS:

ITEM NUMBER	APPROXIMATE QUANTITY	UNIT OF MEASURE	PAY ITEM UNIT PRICE (IN WORDS, INK OR TYPED)	AMOUNT
716-01-A	17.8	TON	MULCH (VEGETATIVE) ONE THOUSAND DOLLARS NO CENTS	17,800.00
717-01	401	POUND	SEEDING NINE DOLLARS NO CENTS	3,609.00
718-01	8,920	POUND	FERTILIZER NO DOLLARS SIXTY CENTS	5,352.00
726-01	342.6	CUBIC YARD	BEDDING MATERIAL NINETY-FIVE DOLLARS NO CENTS	32,547.00
727-01	LUMP	LUMP SUM	MOBILIZATION TWO HUNDRED FIFTY THOUSAND DOLLARS NO CENTS	250,000.00
729-16-B	37	EACH	OBJECT MARKER ASSEMBLY (Type 2) ONE HUNDRED TWENTY DOLLARS NO CENTS	4,440.00

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

SCHEDULE OF ITEMS

LEAD PROJECT: 338-01-0014
OTHER PROJECTS:

ITEM NUMBER	APPROXIMATE QUANTITY	UNIT OF MEASURE	PAY ITEM UNIT PRICE (IN WORDS, INK OR TYPED)	AMOUNT
731-02	608	EACH	REFLECTORIZED RAISED PAVEMENT MARKERS SIX DOLLARS NO CENTS	3,648.00
732-02-A-03	11.775	MILE	PLAST PVMT STRIPING (SOLID LINE) (4" WIDTH) HOT APPL THERMO (40 MIL THICKNESS) ONE THOUSAND ONE HUNDRED DOLLARS NO CENTS	12,952.50
732-03-A-03	4.177	MILE	PLASTIC PVMT STRIPING (BROKEN LINE) (4" WIDTH) HOT APPL THERMO (40 MIL THICK) NINE HUNDRED DOLLARS NO CENTS	3,759.30
735-01	8	EACH	MAILBOXES ONE DOLLARS NO CENTS	8.00
735-02	8	EACH	MAILBOX SUPPORTS (SINGLE) THREE HUNDRED DOLLARS NO CENTS	2,400.00
740-01	LUMP	LUMP SUM	CONSTRUCTION LAYOUT FIFTY THOUSAND DOLLARS NO CENTS	50,000.00

0033

SCHEDULE OF ITEMS

LEAD PROJECT: 338-01-0014
OTHER PROJECTS:

ITEM NUMBER	APPROXIMATE QUANTITY	UNIT OF MEASURE	PAY ITEM UNIT PRICE (IN WORDS, INK OR TYPED)	AMOUNT
S-001	1,792	CUBIC YARD	RECYCLED ASPHALTIC PAVEMENT (RAP) (DOTD FURNISHED) TWENTY DOLLARS NO CENTS	35,840.00
S-002	53,747	SQUARE YARD	IN-PLACE ASPHALT TREATED BASE COURSE (8" THICK) NINE DOLLARS FIFTY CENTS	510,596.50
S-003	2,775	LINEAR FOOT	CLEANING EXISTING DITCHES TWENTY-THREE DOLLARS NO CENTS	63,825.00
S-004	191,859	GALLON	ASPHALT EMULSION TWO DOLLARS FIFTY CENTS	479,647.50
			DOLLARS CENTS	
			DOLLARS CENTS	

CONSTRUCTION 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. 338-01-0014

FEDERAL AID PROJECT NO. N/A

NAME OF PROJECT JUNCTION LA 134 - JUNCTION LA 881

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.

STATE PROJECT NO. 338-01-0014

BIDDER SIGNATURE REQUIREMENTS (APPLICABLE TO ALL PROJECTS)

THIS BID FOR THE CAPTIONED PROJECT IS SUBMITTED BY:

SOIL STABILIZERS INC.
Name of Principal (Individual, Firm, Corporation, or Joint Venture)

If Joint Venture, Name of First Partner	If Joint Venture, Name of Second Partner
2068	
(Louisiana Contractor's License Number of Bidder or First Partner to Joint Venture)	(Louisiana Contractor's License Number of Second Partner to Joint Venture)
BOX 809	
(Business Street Address)	(Business Street Address)
RUSTON, LA- 71273	
(Business Mailing Address, if different)	(Business Mailing Address, if different)
318-255-6202	
(Area Code and Telephone Number of Business)	(Area Code and Telephone Number of Business)
318-255-6202 LAMAR HADDOX	
(Telephone Number and Name of Contact Person)	(Telephone Number and Name of Contact Person)
318-255-6237	
(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)
LAMAR HADDOX	
(Printed Name)	(Printed Name)
President	
(Title)	(Title)
4-25-07	
(Date of Signature)	(Date of Signature)

CONTRACTOR'S TOTAL BASE BID $ 2,914,049 90

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.

RECEIVED
APR 25 2007

ISSUED FOR BID

CS-14AA
08/06