STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

CONSTRUCTION PROPOSAL

STATE PROJECT NO. 605-01-0075
DISTRICT 05 BUILDING SECURITY PROJECT
PHASE 1
OUACHITA PARISH

STATE PROJECT NO. 605-01-0075
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NOTICE TO CONTRACTORS (08/07)

Sealed bids for construction of the following project will be received by the Louisiana Department of Transportation and Development (DOTD), 8010 DeSiard St. Monroe, Louisiana until 1:30 p.m. on, August 17, 2009, at which time and place bids will be publicly opened and read. No bids will be received after 1:30 p.m. Any person requiring special accommodations shall notify the Department of Transportation and Development (DOTD) at (318) 342-0100 not less than 3 business days before bid opening.

STATE PROJECT NO. 605-01-0075
DESCRIPTION: DISTRICT 05 BUILDING SECURITY PROJECT PHASE 1
ROUTE: US 80
PARISH: Ouachita
TYPE: Installation of Security System
LIMITS: State Project No. 605-01-0075: Located on route US 80
ESTIMATED COST RANGE: $50,000.00 - $100,000.00
PROJECT ENGINEER: MR. JIM JACKSON, P.E., 8010 DESIARD ST, MONROE, LA TELEPHONE (318) 342-0200
PROJECT MANAGER: Mr. Paul Colquette, P.E., (318) 342-0112
COST OF PROPOSAL FORMS: FREE
COST OF PLANS: Included in proposal (no additional charge). FREE

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

NOTICE TO CONTRACTORS (CONTINUED)

Plans and/or proposals may be obtained at DOTD District 05 Headquarters, 8010 DeSiard St., Monroe, LA or by contacting the DOTD; Phone (318) 342-0103, FAX: (318) 342-0260, or by written requests sent to the Louisiana Department of Transportation and Development, P. O. Box 4068, Monroe, LA 71211. Proposals will not be issued later than 24 hours prior to the time set for opening bids. Pre Bid meeting will be held at 10:00a.m. on August 4, 2009. 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.

SUBLETTING OF CONTRACT (02/99): Subsection 108.01 of the Standard Specifications is amended as follows:

The second, third and fourth sentences are deleted and the following substituted.

If such consent is given, the contractor will be permitted to sublet the work up to 100 percent of the total contract amount including materials.

PROJECT LOCATION:
This project is located at 8010 DeSiard St., in Monroe, Louisiana.

PROJECT INTENT:
The intent of this project is to install a security system, fence, gates, doors and walls at designated locations.

PROPOSED WORK:
This project will require the furnishing and installation of all materials to complete: **1)** security system, **2)** ornamental fence and gates; **3)** remodel the Lobby / Receptionist area for safe and secure entrance and exits; **4)** add safe and secure entrances to and in Credit Union Hallway; **5)** replace and modify doors and/or frames at designated locations. All work shall be as shown on the plans, specified herein, and as directed by the Project Engineer.

METHOD OF PAYMENT:
These items consist of furnishing all labor, tools, and materials required to complete the construction of the Security System at the District 05 Headquarters facility in accordance with plan details and specifications. Payment will be made under the following items:

Item No. S-001, Site Construction, per Lump Sum,
Item No. S-002, Fence and Gates, per Lump Sum,
Item No. S-003, Wood & Plastics, per Lump Sum,
Item No. S-004, Thermal & Moisture Protection, per Lump Sum,
Item No. S-005, Doors & Windows, per Lump Sum,
Item No. S-006, Finishes, per Lump Sum,
Item No. S-007, Electrical, per Lump Sum,
Item No. S-008, Access Control System, per Lump Sum.

GENERAL REQUIREMENTS

Scope of Work: The contractor shall furnish all equipment, materials, and labor necessary to construct the required security system, fence, gates, window, walls and doors in accordance with the plan details and as specified herein.

A. Plans and Specifications: These plans and specifications are supplemental to the **2006 edition of LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES** (hereinafter called the Standard Specifications), applicable codes, manufacturer's instructions and best prevailing construction trade practices. The specifications and plans do not necessarily include or define everything required for a complete, operating and safe security system, fence and gates, or walls and doors. The contractor is expected to possess sufficient experience and technical knowledge to construct complete, safe and operational systems and to perform the work in a safe manner.

B. Equipment and Materials: Equipment and material shall be suitable for the intended use and shall be furnished with all necessary hardware and components. The contractor shall be

responsible for all modifications or fabrications necessary for proper installation and operation of the equipment. All equipment and material shall be new unless specified otherwise. All like equipment and materials shall be of the same manufacturer. Reference to a specific manufacturer's name and/or catalog number is intended to denote the quality of the equipment or material and not to specifically exclude other acceptable products. Descriptive specifications, plans and system compatibility shall govern over specified manufacturer's names, model numbers or catalog numbers. The contractor shall check all equipment catalog numbers and availability with suppliers and coordinate with all other sub-contractors.

C. Existing Conditions: The contractor shall visit the construction site to determine existing conditions and shall allow for such conditions in computing his bid. The contractor shall be responsible for all modifications necessary to fit the equipment. Any damages caused by the contractor shall be repaired at no additional cost to the department.

D. Coordination: The contractor shall submit to the Project Engineer a Construction Schedule for approval. The construction schedule shall show and describe the various activities of work required to complete the contract in sufficient detail so that all activities are readily identifiable. Immediate areas of work will not be occupied during construction. Adjacent areas may be occupied by the public. Half of all entrances and exits shall be accessible during construction. The contractor shall coordinate the work with the Project Engineer to avoid interference and conflicts with DOTD business functions.

E. Verification: The contractor shall verify mounting space, equipment dimensions and installation requirements before ordering materials or equipment.

F. Warranties and Guaranties: The contractor guaranties, by his signing of this contract, all equipment, apparatus, materials and workmanship for a period of one (1) year after the date of final acceptance of this project. Prior to final acceptance of the project, the contractor shall furnish to the Project Engineer the following additional warranties and guaranties pertaining to each piece of mechanical and electrical equipment furnished:

1. The manufacturer's standard written warranties on all equipment furnished on the project.
2. The contractor's written guarantee that, during a period of one (1) year after final acceptance of the project, all necessary repairs to or replacement of said warranted equipment will be made by the contractor at no cost to the Department.
3. Other warranties and guarantees as required under the specific items elsewhere herein.

G. Submittals: The contractor shall submit shop drawings, equipment submittals, descriptive data, brochures and samples as soon as possible after award of the contract and before beginning work. **The contractor shall be responsible for obtaining written approval of shop drawings from the State Fire Marshal.** The name of the project, project number, fabricator or manufacturer's name and the parish in which the project is located shall be shown on each sheet of every submittal unless they are bound. If bound, the information may be shown on the cover sheet only. Bound submittals shall be treated as single submittals so that any rejected item within shall cause the entire submittal to be rejected. Shop drawings and equipment submittals shall measure either 8 1/2" x 11" or 22" x 36". Equipment submittals shall be clearly marked as to the specific size and/or model being submitted and for what purpose it is to be used on the project.

The contractor shall submit three (3) copies of each and every item requested for submittal, marked as previously described, to the Project Engineer. Each submittal will be returned with required revisions noted thereon or it will be distributed. The contractor shall make the required revisions and send three (3) copies of each submittal to the Project Engineer for final approval and distribution. One (1) copy of each submittal given final approval will be returned to the contractor. Brochures shall be originals where colors or patterns are shown, otherwise originals or copies equal to originals shall be acceptable. No material, equipment or apparatus shall be ordered or work started until final distribution is made.

Corrections and/or comments made on submittals are not intended to relieve the contractor from compliance with the contract documents.

Approval of the submittals and drawings does not imply that the equipment or materials described is complete, can be constructed or installed, will operate successfully or will coordinate with existing or other equipment specified. The contractor shall remain responsible for confirming and correlating all quantities and dimensions, for selecting fabrication processes and techniques of construction, for coordination of the work, for performing the work in a safe and satisfactory manner and for satisfactory installation and operation of equipment.

Shop Drawings, certified dimensional drawings, product description brochures, installation procedures, samples and color patterns shall be submitted for the following as indicated (**X**):

SUBMITTALS

Item	Shop Drawings	Brochures Description	Installation Procedures	Color Chart
Ornamental Gate	*	*	*	*
Ornamental Fence	*	*	*	*
Casework & Countertop	*		*	*
Interior & Exterior Joint Sealer		*	*	*
Steel Doors		*	*	*
Steel Door Frames		*	*	*
Aluminum Windows		*	*	*
All Hardware		*	*	
Gypsum Board		*		*
Resilient Flooring		*	*	*
Painting		*		*
Electrical	*	*	*	
Exit Signs		*	*	
Access Control System	*	*	*	

The Project Engineer reserves the right to:

1. Request submittal of additional brochures on items not listed.
2. Take random test samples from the materials, equipment, and apparatus furnished.

For the items on which they are required as shown above, the approved "Manufacturer's Installation Brochures" will be the basis for inspection of installation procedures used on the work.

No Direct payment will be made for furnishing shop drawings, equipment submittals, or samples required above.

H. Codes and Fees: All material furnished and all work performed shall be in accordance with all state laws, codes, rules and regulations. The contractor shall file for and obtain all necessary State permits. The contractor shall pay all fees for State permits and licenses required to complete the project in accordance with the plans and the specifications.

I. Testing and Adjusting: The contractor shall perform all tests and adjustments described elsewhere herein in the presence of the Project Engineer and to his satisfaction. Each test required by these specifications shall be recorded and attested to by the contractor and the project engineer or their representatives.

J. Quantities: Estimated quantities are given on the plans for informational purposes only. The contractor is required to compute and furnish the quantity of materials necessary to complete the work as detailed on the plans and specified herein.

ITEM NO. S-001, Site Construction

Scope of work: The work under this item consists of selective building and site demolition in accordance with the approved Contractor's Construction Schedule. The contractor shall furnish labor, tools, equipment, and other items to complete work as shown on the plans and described herein. The work shall include but not limited to the removal of wall and flooring in the receptionist / lobby area noted in plans, removal of doors and frames, removal of concrete walkway, and any other necessary prep work to complete the project as shown in plans and specifications. The contractor shall remove and legally dispose of materials off of state property.

Measurement and Pay: No changes in the lump sum contract amount will be made for minor additions or deletions to the scope of this item. Payment for site construction will be made at the contract lump sum price upon the satisfactory completion of this item.
Payment will be made under:

Item S-001, Site Construction, per lump sum.

ITEM NO. S-002, Fence and Gates:

Scope of Work: The work under this item consists of furnishing labor, tools, equipment, materials and appurtenances necessary for the ornamental fence and gates as indicated in the plans and specifications. All work shall be as shown on the plans and described herein. All work shall be complete and conform to ADA compliance and the best acceptable practice. Any work necessary to prepare site to receive fence or gates shall be paid under S-001, Site Construction.

Ornamental Picket Gates:

General: The work under this item consists of shop drawings of the layout of fence and gates with dimensions, details, and finishes of components, accessories and post foundations. The contractor shall include manufacturer's catalog cuts indicating material compliance and specified options. If requested, samples of materials are to be provided. The contractor will provide manufacturer's standard limited warranty that its ornamental gate is free from defects in material

and workmanship including cracking, peeling, blistering and corroding for a period of 1 year from installation. The contractor shall provide labors and supervisors who are thoroughly familiar with the type of construction involved and materials and techniques specified. Products from qualified manufacturers having a minimum of 5 years experience manufacturing ornamental picket fencing will be acceptable by the project engineer as equal, if approved in writing.

Gate Frames: Ornamental picket swing gate shall be fabricated using galvanized steel members, ASTM A-924/A-924M, structural quality steel, 45,000 psi (310 MPa) tensile strength, and ASTM A-653/A-653M hot-dip galvanized G90 coating. Frame members shall be welded using stainless steel. The contractor shall complete welds to form rigid one-piece unit. (No substitution) Minimum size vertical uprights, 2" square 13 gauge wall thickness.

Ornamental Picket Infill: Picket infill shall be formed from hot rolled, structural steel, 1-3/8" wide x 1-1/2" deep, 11 gauge wall thickness. Pickets galvanized steel, ¾" square tube 16 gauge with accessories to match fence.

Bracing: Diagonal adjustable length truss rods on gates can be used to prevent sag.

Hardware Materials: Galvanized steel or malleable iron shapes to suit gate size.

Exit Bars: Exit bars shall be commercial / industrial grade 1 and designed for outdoor use. A manual press of the exit bar shall automatically unlock and open the gate.

Closers: The contractor shall provide an automatic gate closer which shall be designed for high frequency use.

Hinges: Hinges shall be structurally capable of supporting gate leaf and allow opening and closing without binding. Non-lift-off type hinge design shall permit gate to swing 180°.

Keeper: The contractor shall provide keeper for each gate leaf over 5' wide. Gate keeper shall consist of mechanical device for securing free end of gate when in full open position.

Gate Posts: Square members, ASTM A924/A924M, structural quality steel 45,000 psi (310MPa) tensile strength, with galvanized G90 coating. Gate posts size will be 3" x 3".

Finish: Finishing of the fence and gates shall be as detailed in the plans and specifications. All pickets, welded frames, posts, fittings and accessories shall be polyester powder coated individually after welding, drilling and layout, to ensure maximum corrosion protection. (Coating of assembled gate is unacceptable). All ferrous components of the fence and gate shall be given a 4-stage "Power Wash" pre-treatment process that cleans and prepares the galvanized surface to assure complete adhesion of the finish coat. All metal is a polyester resin based powder coating applied by the electrostatic spray process, minimum 2.5 mils. The finish is then cured in a 450°F (metal temperature) oven for 20 minutes. (Standard Color – Black)

Concrete: Class R with a minimum 28 day compressive strength of 1,800psi (20MPa).

Concrete set gate posts: The post holes shall be drilled in firm, undisturbed or compacted soil. Holes shall have diameter 4 times greater than outside dimension of post, and depths approximately 6" deeper than post bottom. Excavate deeper as required for adequate support in soft and loose soils, and for posts with heavy lateral loads. Set post bottom 36" below surface when in firm, undisturbed soil. Place concrete around posts in a continuous pour. Trowel finish around post and slope to direct water away from posts. Set keeper, stops, and sleeves into concrete. Check each post for vertical and top alignment, and maintain in position during placement and finishing operations.

Installation: Install gates plumb, level, and secure for full opening without interference. Attach hardware by means, which will prevent unauthorized removal. Adjust hardware for smooth operation. Clean up debris and unused material and remove from the site.

Ornamental Fence (6-Foot Height):
General: The work under this item consists of furnishing labor, tools, equipment, and materials to install new commercial grade ornamental fencing as listed on the plans. All work shall be complete and conform to the best acceptable practice. The contractor shall furnish all necessary equipment and materials necessary to perform all work and make any necessary modifications or fabrications required.

Materials: All materials and accessories installed under this contract shall conform to the rules and codes as recommended by the National Associations governing. Equipment and material shall be suitable for the intended use and shall be furnished with all necessary hardware and components. The contractor shall be responsible for all modifications or fabrications necessary for proper installation and operation of the equipment. All materials shall be new and of best quality. The contractor shall protect the entire system and all parts thereof from injury during the process and up to the acceptance of work. All like equipment and materials shall be of the same manufacturer.

All primary fence components; pickets, rails, and posts shall be manufactured from coil steel having a yield strength of 50,000 psi. All primary fence components; pickets, rails, and posts shall be galvanized by the hot-dip process. Pickets shall be 1" square and 14 ga. wall thickness. Rails shall be 1 3/4" square with a 14 ga. wall thickness. Post shall be 3" square with a 12 ga. wall thickness.

Finish: Cutting, welding, punching and drilling shall be done prior to coating to facilitate assembly without compromising the integrity of the finish. All primary fence components; pickets, rails, and posts shall hot-dipped galvanized. The components shall then receive a phosphate conversion with the final coat being an electro-statically applied, thermally bonded polyester powder coating (standard color – black).

Fabrication: Pickets, rails and posts shall be cut to specified lengths. Rails shall be punched to accept pickets. Pickets shall be drilled to accept retaining rods. Cutting, punching and drilling shall be done prior to coating to facilitate assembly without compromising the integrity of the finish.

Rubber or poly vinyl grommets shall be inserted into the pre-punched holes in the rails. Pickets shall be inserted through the grommets so that the pre-drilled holes in the pickets align with the internal raceway of the rails.

A zinc plated steel retaining rod shall then be inserted into the upper raceway of the rails through the pre-drilled holes in each picket.

Completed sections shall be capable of supporting a 600 pound load at mid-span without permanent deformation.

Installation: Posts shall be placed a minimum of 36" into the ground and set in Class R concrete. The contractor shall attach fabricated panels to posts using brackets supplied by the manufacturer. Attachment to the post shall be accomplished by the use of tamper resistant fasteners. Posts shall have a square cap firmly affixed to the extending end.

Warranty: The contractor shall provide a written 10-year limited warranty against defects in materials and workmanship from the manufacturer. The written 10-year limited warranty shall include the coating against cracking, blistering, peeling or corroding.

Measurement and Pay:
Work under this item will not be measured for payment. Payment for fence, gates, gate frames, and hardware will be made at the contract lump sum price upon the satisfactory completion of this item.
Payment will be made under:

Item S-002, Fence and Gates, per lump sum.

ITEM NO. S-003, Wood & Plastics
Scope of work: The work under this item consists of furnishing labor, tools, equipment and materials for the interior architectural woodwork and the rough carpentry for miscellaneous items indicated in the plans and specifications. All work shall be as shown on the plans and described herein. All work shall be complete and conform to the best acceptable practice.

Rough Carpentry:
General: The contractor shall provide rough carpentry for the miscellaneous items indicated in the plans and specifications and for the wood grounds, nailers, and blocking at stud walls and window perimeters.

Materials: The contractor shall provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. All materials shall be delivered, handled, and stored in accordance with manufacturer's instructions. Materials must meet the following requirements:

- Lumber Standards and Grade Stamps: US Product Standard PS 20, American Softwood Lumber Standard and inspection agency grade stamps.
- Construction Panel Standards: PS 1, U.S. Product Standard for Construction and Industrial Plywood; APA PRP-108.

- Fire-Retardant Treatment: AWPA C20 for lumber and AWPA C27 for plywood; noncorrosive type. Provide at building interior where required by code.
- Miscellaneous Lumber: Moisture Content 19%, Standard grade light framing.
- Auxiliary Materials: Sill Sealer Gaskets shall be glass fiber strip resilient insulation. Framing anchors and fasteners shall be non-corrosive, suitable for load and exposure (Drywall screws are not acceptable).

The contractor shall comply with recommendations on APA Design and Construction Guide – Commercial. The contractor shall provide nailers, blocking and grounds where required to set cabinets, interior wood window trim, and miscellaneous equipment and accessories. Materials and systems shall be installed in accordance with manufacturer's instructions and approved submittals. Contractor shall restore damaged components.

Architectural Woodwork:

General: The contractor shall furnish and install casework and countertop at the receptionist area. The contractor shall submit shop drawings of casework and countertop indicating material characteristics, details of construction, connections and relationship with adjacent construction. The contractor shall submit two representative samples of each material specified indicating visual characteristics and finish.

The contractor shall follow the "Architectural Woodwork Quality Standards" from Architectural Woodwork Institute (AWI). The work product shall be in compliance with the following formaldehyde emission levels: Particleboard, NPA 8 compliance; Medium Density Fiberboard, NPA 9 compliance; Hardwood Plywood, HPMA FE compliance.

Materials: All materials shall be delivered, handled, and stored in accordance with manufacturer's instructions. Materials must meet the following requirements:

- Interior Plastic Laminate Clad Casework: Laminate: High-pressure decorative laminate, NEMA LD-3 from Manufacturer's full range, by Nevamar or approved equal.
- Casework Hardware and Auxiliary Materials: Hardware Standard, ANSI/BHMA A156.9; Hardware Pulls, Lansa Stainless Steel Bar Pulls, as available through IKEA: 6 1/4" center to center mount, brushed finish or approved equal; Hinges, Adjustable European style, self-closing, cabinet door hinges for flush cabinet doors as manufactured by Amerock, or approved equal.
- Interior Plastic Laminate Clad Countertops: Laminate, High pressure decorative laminate, NEMA LD-3, from Manufacturer's full range, by Nevamar or approved equal; Plywood Core; Laminate Edge.
- Wood Trim & Casing: Painted Clear Fir, in sizes and shapes per plans.
- Auxiliary Materials: Screws: FS FF-S-111; Nails: FS FF-N-105; Anchors: Type required for secure anchorage.

The contractor shall install materials and systems in accordance with manufacturer's instructions and approved submittals. The contractor shall install casework and countertop plumb, level and straight with tight joints and scribe work to fit. The installation shall be in proper relation with adjacent construction. The contractor shall restore damaged components.

Measurement and Pay: No changes in the lump sum contract amount will be made for minor additions or deletions to the scope of this item. Payment for wood and plastics will be made at the contract lump sum price upon the satisfactory completion of this item.
Payment will be made under:

Item S-003, Wood and Plastics, per lump sum.

ITEM NO. S-004, Thermal & Moisture Protection

Scope of Work: The contractor shall provide joint sealers at interior and exterior vertical and horizontal joints. The contractor shall submit manufacturer's product data and installation instructions for each material and product used. Samples shall be submitted of each material indicating visual characteristics and finish.

Materials: All materials shall be delivered, handled, and stored in accordance with manufacturer's instructions. Materials must meet the following requirements:

- Urethane Elastomeric Joint Sealants: Manufacturers: Bostik, Pecora Corp., Sika Corp., Tremco or approved equal; Type and Application: Multi-part nonsag urethane sealant, ASTM C 920; Approved: ChemCalk 500 by Bostik or Approved Equal.
- Latex Joint Sealants: Manufacturers: Pecora Corporation, Polymeric Systems, Inc., Sonneborn Building Products, Tremco, or approved equal; Type: Acrylic-emulsion, ASTM C 834 or Silicone emulsion, ASTM C 834, and ASTM C 920.
- Auxiliary Materials: Plastic foam joint fillers, Elastomeric tubing backer rods, Bond breaker tape.

General: The contractor shall examine all substrates prior to beginning work. Unsatisfactory conditions shall be addressed prior to installation of joint sealer. Materials and systems shall be installed in accordance with manufacturer's instructions and approved submittals. The contractor shall clean and prime joints, install bond breakers, backer rods and sealant as recommended by manufacturers. Installation shall be in proper relation with adjacent construction and with uniform appearance. The depth shall be equal width up to 1/2" wide. For all other joints, the depth to width ratio of the sealant shall be in the strict conformance with the manufacturer's recommendations for the specific product and application. The contractor shall cure and protect sealants as directed by the manufacturer. The contractor shall clean adjacent surfaces to remove spillage and replace or restore damaged sealants.

Measurement and Pay: No changes in the lump sum contract amount will be made for minor additions or deletions to the scope of this item. Payment for thermal and moisture protection will be made at the contract lump sum price upon the satisfactory completion of this item.
Payment will be made under:

Item S-004, Thermal and Moisture Protection, per lump sum.

ITEM NO. S-005, Doors & Windows

Scope of work: The work under this item consists of furnishing labor, tools, equipment and materials for the steel doors and frames, windows, and hardware as indicated in the plans and specifications. All work shall be as shown on the plans and described herein. All work shall be complete and conform to ADA compliance and the best acceptable practice.

Steel Doors and Frames:

General: Steel doors and frames shall be furnished in accordance with the plan details and schedules and the following specifications. Installation procedures and fabrication tolerances shall be as recommended by the Steel Door Institute Standards 111A, 117 and the manufacturer's recommendations.

Steel doors: Steel doors for normal applications shall be hollow metal, insulated, of flush construction extra heavy-duty grade III. Steel shall be stretcher level standard hot dipped galvanized in accordance with ASTM A653 and A924. All surfaces are to be thoroughly cleaned and chemically prepared for the acceptance of a factory applied prime coat of paint. Factory applied paint shall be a rust inhibiting primer either baked on or air-dried, and suitable as a base for the field applied finish coat.

Steel doors panels shall be 16 gauge with 14 gauge spot welded channel end closures. Steel doors shall be reinforced for application of hardware and closures. Reinforcing shall be 10 gauge galvanized steel for hinges, 14 gauge for closures, and 16 gauge elsewhere.

Doors shall be prepared to receive mortise and concealed finish hardware, including cutouts, reinforcing, drilling and tapping in accordance with the required hardware and templates provided by hardware suppliers. Drilling and/or tapping for surface applied finish hardware may be done at site.

Where glazing is required, non-removable stops shall be applied on the outside and removable beads on the inside. Glazing shall be minimum 20 gauge steel. Surface applied muntins may be used for multiple lite requirements.

Louvers and vision lites as required shall be in accordance with ANSI A250.

Steel doors shall be 1-3/4" thick completely filled with suitable sound deadening and self-extinguishing insulating material.

Fire Doors: Doors that are required to be fire rated shall be hollow metal, insulated, of flush construction extra heavy-duty grade III conforming to ANSI E-152, ANSI/U 610(b) or NFPA 252. The door shall bear the appropriate underwriter's label for the class rating required.

Decorative Steel Doors: Doors that are designated as decorative shall be 1-3/4" thick hollow metal fabricated of 20 gauge galvanized steel and have the face sheets embossed. Doors shall be stiffened and filled with self-extinguishing insulating material. Coatings and hardware preparation shall be as specified under "Steel Doors" above.

Steel Door Frames: Steel door frames shall be manufactured of 16 gauge galvanized steel conforming to ASTM Designations A653 and A924. Unit type welded construction shall be used throughout with corners mitered, welded, and ground smooth on the outside. Removable steel spreaders are to be welded to bottom of frame. Anchors of 18 gauge galvanized steel shall be provided for installation. There shall be a minimum of 6 wall anchors and 2 floor anchors per frame. Frames for fire doors shall be listed. Painting shall be as specified under "Steel Doors" above. Provide two silencers on drill stops of strike jams.

Aluminum Windows:
General: The contractor shall furnish and install transaction window in accordance with the plan details and schedules and the following specifications. Installation procedures and fabrication tolerances shall be as recommended by the International Building Code, 2006, and the manufacturer's recommendations.

The window frame shall be made of extruded aluminum, 6063 alloy and tempered with a minimum wall thickness of 0.125". Non-removable stops shall be applied on the outside and removable beads on the inside. Glazing bead must be isolated from the glazing material by a gasket. The glass shall be ¼" laminated safety glass. The bottom panel shall sit flush on the counter and be polished clear so as to not obstruct the view.

Hardware:
General: The contractor shall furnish and install hardware in accordance with the plan details and schedules and the following specifications. Installed hardware shall conform with the recommendations of the Steel Door Institute or Door and Hardware Institute for location of locks, hinges, latches, push/pull plates and panic bars, exit devices, handle sets, closer reinforcings, roller latches, and arm pulls. The contractor shall submit for approval hardware schedule proposed for use. The contractor shall submit manufacturer's product data and installation instructions for each approved material and product used.

Material: All materials shall be delivered, handled, and stored in accordance with manufacturer's instructions. Materials and applications shall be in compliance with ANSI A156 series standards. Materials must meet the following requirements:

- Quality level of hardware: heavy duty commercial and ADA compliant.
- Locksets and latch sets: mortise type.
- Lock cylinders: seven pin interchangeable type
- Keying: Match existing building and key control system.
- Hinges and Butts: Full-mortise type with non-removable pins at exterior doors.
- Closers, Door Control, and Exit Devices: High frequency and barrier free.
- Panic bars: Commercial / industrial grade 1.
- Push/Pull Units: Through-bolted type.
- Hardware Finishes: Satin stainless finish on exposed surfaces.

Installation: The contractor shall install materials and systems in proper relation with adjacent construction and with uniform appearance. Work shall be coordinated with other sections. The contractor shall make necessary adjustments for correct operation of hardware.

Measurement and Pay:
Work under this item will not be measured for payment. Payment for doors, frames, windows, and hardware will be made at the contract lump sum price upon the satisfactory completion of this item.
Payment will be made under:

Item S-005, Doors and Windows, per lump sum.

ITEM NO. S-006, Finishes

Scope of Work: The work under this item consists of furnishing labor, tools, equipment and materials for the finishes to all surfaces constructed, installed, or modified as indicated in the plans and specifications. All work shall be as shown on the plans and described herein. All work shall be complete and conform to the best acceptable practice.

Fence and Gates: The contractor shall finish the fence and gates as indicated in the plans and specifications. The contractor shall meet the requirements of finishes detailed under S-002, Fence and Gates. The work for finishes on the fence and gates shall be paid under S-002, Fences and Gates.

Gypsum Board Assemblies:

General: The contractor shall furnish and install gypsum board assemblies as indicated in the plans and specifications for the interior walls and partitions with tape and joint compound finish. The contractor shall submit manufacturer's product data and installation instructions for each material and product used. Gypsum board assemblies shall meet the requirements of building code for fire and structural.

Material: All material shall be delivered, handled, and stored in accordance with manufacturer's instructions. Materials must meet the following requirements:

- Manufacturers of Gypsum Board: Domtar Gypsum, Georgia-Pacific Corp., National Gypsum Co., United States Gypsum Co., or approved equal.
- Gypsum Wallboard for Tape and Joint Compound Finish: ASTM C 36, regular, moisture-resistant, and fire-rated types as required; Typical Thickness: 5/8 inch.
- Water-Resistant Gypsum Backing Board: ASTM C 630, regular and fire-rated types as required; Typical Thickness: 5/8 inch.
- Joint Treatment: ASTM C 475 and ASTM C 840, 3-coat system, paper or fiberglass tape.
- Cementitious Backer Units: Type: ANSI A 118.9, cement-coated Portland cement panels; Thickness: 5/8 inch nominal.
- Trim Accessories: Metal trim; Types: Cornerbead, edge trim, and control joints.

Installation: The contractor shall install with a tolerance of not more than 1/16 inch difference in true plane at joints between adjacent boards before finishing. After finishing, joints shall not be visible. The contractor shall install with a tolerance of not more than 1/8 inch in 10 feet deviation from true plane, plumb, level and proper relation to adjacent surfaces in finished work. Gypsum boards shall be installed vertically. But-to-butt joints or joints that do not fall over framing members are not allowed. The contractor shall repair surface defects and leave ready for finish painting or wall treatment.

Acoustical Panel Ceilings:

General: The contractor shall remove and reinstall existing ceilings as necessary for other work. The contractor shall handle tiles with white gloves and avoid damaging corners and edges. The contractor shall clean tiles and grid system which have to be removed. Ceiling shall be level to within 1/8" in 10' in both directions.

Any layout changes shall be submitted for approval. If necessary, new materials shall match existing materials as approved and panels shall be scribed and cut to fit accurately.

Resilient Flooring:
General: The contractor shall furnish and install resilient flooring and floor preparation as indicated in the plans and specifications. The contractor shall submit manufacturer's product data and installation instructions for each material and product used. Samples shall be submitted of each material indicating visual characteristics and finish.

Materials: Solid Vinyl Tile Flooring shall be Azrock, Milano, Slip Resistant Solid Vinyl Tile or approved equal. Vinyl tile shall be per Federal Specification SS-T-312, Type III. Auxiliary materials including but not limited to edge strips, terminations, and leveling compound shall be in accordance with manufacturer's recommendations.

Installation: The contractor shall install in proper relation to adjacent work. Installation shall comply with manufacturer's instruction and recommendations and comply with governing codes and regulations. Surface shall be prepared by cleaning, leveling, and priming as required for tile installation. Tile shall be installed with tight joints and with one-way pattern. Tile layout shall be such to prevent less than ½ tile units.

Resilient Base and Accessories:
General: The contractor shall furnish and install wall base and associated accessories. The contractor shall submit samples of each material indicating visual characteristics and finish.

Materials: Materials shall comply with governing codes and regulations. The contractor shall use materials to best match existing conditions in the adjacent areas.

Installation: The contractor shall comply with manufacturer's instructions and recommendations and install in proper relation to adjacent work. Base and accessories shall be installed to minimize joints and space as far from corners as practical.

Painting:
General: The work under this item consists of furnishing labor, tools, equipment and materials for the painting and surface preparation for unfinished surfaces. The contractor shall submit samples of each material indicating visual characteristics and finish. Full range of manufacturer's color and finish options shall be submitted if additional selection is required.

Materials: All coating products shall be first-line commercial quality products. Material shall be ICI Devoe Coatings, Benjamin Moore, Pratt and Lambert, Sherwin Williams, Superior Coating Systems or approved equal. All coatings shall comply with VOC and environmental regulations.

Gypsum drywall walls shall have 1 coat of latex primer (ProMar Latex Wall Primer, B28-W-1 or approved equal) and 2 coats alkyd finish (ProMar Alkyd Eg-Shel Enamel, B-33-W-100 or approved equal) with a semi-gloss finish.

Ferrous metals shall have 1 coat of rust-inhibiting primer (Sherwin Williams, Kem Kromik Metal Primer B50N2/B50W1 or approved equal) and 2 coats alkyd enamel (Sherwin Williams Industrial Enamel B-45 Series or approved equal) with a high gloss finish.

Galvanized metal shall have 1 coat galvanized metal primer (Sherwin Williams B50W3 or approved equal) and 2 coats alkyd enamel (Sherwin Williams Industrial Enamel B-45 Series or approved equal with a semi-gloss finish.

Installation: The contractor shall inspect surfaces and address any unsatisfactory conditions. The contractor shall comply with the manufacturer's instructions and recommendations for preparation, priming, and coating work.

Measurement and Pay:
No changes in the lump sum contract amount will be made for minor additions or deletions to the scope of this item. Payment for gypsum board assemblies, acoustical panel ceilings, resilient flooring, resilient base and accessories, and painting will be made at the contract lump sum price upon the satisfactory completion of this item.
Payment will be made under:

Item S-006, Finishes, per lump sum.

ITEM NO. S-007, Electrical

Scope of Work: The work under this item consists of furnishing labor, tools, equipment, all necessary equipment and material, perform all necessary work for installation of buildings and appurtenances, and electric power feeders to various loads and make any necessary modifications or fabrications required for a complete, operational and safe system.

Ordinances Rules and Regulations: All material and construction shall conform to the requirements of all building codes, sanitary codes and ordinances in force in the locality in which the work is to be done. All materials and construction shall also conform to the rules and regulations of the National Fire Protection Association, Underwriter's Laboratories, American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE), National Electric Code (NEC), and Section 730 of the Louisiana Standard Specifications for Roads and Bridges. The contractor shall pay for permits and inspections.

Equipment Submittals: Before proceeding with the work, the contractor shall furnish to the Project Engineer for approval brochures and manufacture's installation instructions for all electrical equipment listed below (note: the equipment listed below does not include all materials that the contractor shall provide.). Additional equipment submittals may be requested at any time by the design engineer or project engineer. Submittals shall be in accordance with the "General Requirements" elsewhere herein.

Equipment to submit on

- Ground rods & ground rod clamps
- All types and sizes of circuit breakers
- All light fixtures & exit signs
- All conduit types
- All panels & load centers
- All disconnects
- All switch types

- All receptacle types
- All sizes and types of conductors

Note: See plans and or construction proposal/specifications for information on items listed above.

Record As Built Drawings: Upon completion of the project, the contractor shall furnish one (1) set of plans which reflect the final as built condition of the electrical portion of the project. The drawings shall reflect all plan or field changes, and include a complete equipment list showing each manufacturer's name and catalog or shop drawing number for each piece of equipment furnished and a copy of all equipment submittals with approved stamp.

Materials and Equipment: All material, equipment, and accessories installed under this contract shall conform to the rules and codes as recommended by the National Associations governing. All materials shall be new and of best quality. The contractor shall protect the entire system and all parts thereof from injury during the process and up to the acceptance of work.

Identification: Each piece of equipment furnished shall have permanent identification plates and shall be identified as follows:

1. Conductor Identifications: Conductor sizes A.W.G. no. 8 and smaller shall be identified by color coding their entire length. All other conductors shall have individual permanent identification at each termination, splice, tap, junction box, and equipment enclosure.
2. Starter, Disconnect, Panel, & Load Center Identification: Each starter, disconnect, panel, and load center shall have a permanently engraved plate attached to the cover or housing with stainless steel hardware. The plate shall clearly identify the components function and the specific equipment served.
3. Circuit Schedules: Each panel board & load center shall have a typed circuit schedule permanently mounted inside the cover. The circuit designation shown on the schedule shall match the designations shown on the plans.

Tests: The contractor shall furnish all testing equipment and conduct the following tests:

1. Performance Test: All equipment shall be given a two-week (minimum) performance test before final acceptance.
2. Receptacle Test: After completion of the electrical system the contractor shall test each receptacle for proper polarity and continuity of the ground.
3. Special Test: Special tests shall be conducted where equipment or systems are suspected of improper operation, or where additional data is necessary to determine conformance with the specification.
4. Insulation Test: Megohm tests shall be conducted on all conductors larger than A.W.G. #8 after the conductors are installed in place but before connecting equipment that may be damaged by the test. Readings below 50 megohms, when measured with a 1000 volt D.C. insulation tester, will be considered defective.

Service: The contractor shall furnish and install all necessary equipment to provide power to the Lobby / Receptionist area. DOTD will provide a circuit breaker panel connected to

emergency power for this service. The circuit breaker panel will be located in the East Mechanical room and will be switched off. DOTD will switch the power on to the circuit breaker only when the contractor has made a request in writing to the Project Engineer. Power for all other areas shall be tied to existing service. The contractor shall submit for approval exact connection locations and power usage to prevent any overloads to current system.

Conduit System: All conduits shall be installed concealed unless specifically stated otherwise on the plans or specifications. Conduits shall not be installed above the wire mesh reinforcing of concrete slabs. Conduits shall be placed sufficiently below the slab surface to permit entrance conduits to emerge perpendicular to the slab surface. Conduits entering the slab shall be continuous to the first device or junction box. Where conduits are installed through fire rated walls or floors the holes shall be sealed with fire seals to preserve the fire rating of the barriers. Where conduits are installed through vapor barriers, the holes shall be suitably sealed. Where empty conduits are required, the conduits shall be capped on each end. Underground stub-outs shall extend 2'-0" from the slab at a depth of 3'-0" unless otherwise noted. A galvanized marker pipe shall be driven 6" above grade on the edge of the slab at the point of stub-out. Underground conduits shall be installed 3'-0" below grade unless specified otherwise. Marker tape shall be placed above all conduit carrying electrical conductors.

Electrical Metallic Tubing (EMT): Electrical metallic tubing shall conform to A.N.S.I. specification C80.3 and shall be installed where shown on the plans. EMT shall not be installed where subject to physical damage or corrosion, in concrete, or underground. EMT shall not be connected to rigid conduits without a device or junction box. EMT ¾" diameter shall be required for all home run circuitry. When EMT is shown on the plans to be installed exposed outdoors, all fittings shall be compression gland type, covers shall be equipped with neoprene gaskets, conduit straps shall be galvanized, and hardware shall be galvanized. Setscrew type fittings will not be acceptable.

Rigid Steel Conduit: Rigid steel tubing shall conform to ANSI C80.1 and shall be installed where conduits enter the ground or slab and where shown on the plans. Fittings shall be threaded type with malleable iron bodies and covers having zinc finish, solid neoprene gaskets and stainless steel screws.

Rigid Aluminum Conduit: Rigid aluminum conduit shall conform to ANSI C80.5 and shall be installed where conduits are required outdoors, in hazardous locations, where subject to physical damage, and where shown on the plans. Aluminum conduit shall not be installed in concrete or underground. Threads shall be painted with a conducting oxide inhibiting compound before installation. Fittings shall be threaded type with cast or die-cast copper free bodies and covers, solid neoprene gaskets, and stainless steel screw. Expansion fittings shall be installed with external aluminum bonding straps, stainless steel "U" bolt clamps and hardware.

Non Metallic Conduits (NM): Non metallic conduit shall be schedule 80 PVC or schedule 80 high density polyethylene and shall be buried 3'-0" underground unless installed under concrete slabs. NM conduit will not be permitted above ground or slab. All NM conduits shall contain an equipment grounding conductor.

Flexible Metal Conduit: Flexible metal conduit shall conform to ANSI C33.92 and shall be installed where a connection is made to recessed lighting fixtures, motors, transformers, and other equipment requiring a flexible connection. When flexible conduits are installed outdoors or in areas subject to moisture, oil or other liquids, the conduit shall be of liquid tight construction. Flexible metal conduits shall be installed in 1'-6" (maximum) lengths, except for sections serving recessed lighting fixtures in buildings in which case they may be 4'-0" in length. Flexible conduit connectors shall be compression type, thread-on type connectors will not be acceptable. When flexible conduits are installed on circuits not having separate continuous grounding conductors, external bonding jumpers shall be installed.

Note: BX cable shall not be used.

Wire and Cable: Unless specifically stated otherwise on the plans or specifications, all conductors shall be installed in raceways and shall conform to I.C.E.A. class B stranded copper.

Insulation shall be the type suitable for the environment encountered. Where conductors are connected to, or installed near heat producing equipment (luminaries, heater, motors, etc.), the conductor insulation for the affected conductors shall have a temperature rating in excess of the temperature expected to be encountered. Where suitable for the environment and installed in raceways, conductor insulation shall be rated 600 volts and shall conform to UL type THWN-2.

Wire Connections and Devices: The contractor shall provide all necessary connections to all equipment requiring electrical service. Unless specifically stated otherwise, all splices, joints, taps, and connections shall be made in junction boxes or equipment enclosures. Splices will not be permitted in conduit bodies or raceways. Splices shall be made with insulated compression type connectors. Screw-on type wire nuts are not acceptable.

Service and feeder conductors shall be installed their entire length without splices. Where taps are required from feeder or service conductors, the taps shall be made without cutting the main conductors. Taps shall be made with parallel type gutter tap connectors having insulated covers.

Terminal blocks shall be one piece barrier type rated 600 volts. The terminal blocks shall also have high pressure box lug terminals suitable for copper conductors.

Panel Boards: A 100amp circuit breaker panel will be provided by DOTD and located in the East Mechanical room. The circuit breaker panel will be connected to the emergency power and switched off. The contractor shall request in writing to the Project Engineer for power to be switched on.

Circuit Breakers: The contractor shall supply commercial / industrial circuit breakers as necessary to the panel board. The circuit breakers shall be sized according to NEC standards.

Switch and Receptacles: Unless specifically stated otherwise on the plans or specifications, all switches and receptacles shall be mounted flush and wires shall be connect by means of screw terminals, switches and receptacles shall not be located on wall spaces that are obstructed by open doors, and permanently installed counters, cabinets or equipment. The contractor shall

verify the exact location of all equipment, and door swings before installing. Unless stated otherwise, all dimensions are measured from the centerline of the device box.

Receptacles: Receptacles shall be grounding type, commercial grade and shall have standard configurations except where installed to serve specific equipment that is provided with other configuration plugs.

1. General-purpose wall receptacles shall be mounted 18" from the finished floor unless shown otherwise or to avoid conflicts with other equipment.

Switches: Switches shall be quiet type, commercial grade. The number of poles and type shall be required for intended use. Where switches are required for general lighting control and connected to 20 amp branch circuits, the switches shall be rated 20 amps.

1. Light switches shall be mounted on the walls adjacent to latch side door jamb, approximately 50" form the floor except to avoid conflicts with other equipment.

Disconnects: The contractor shall furnish and install all disconnects complete with all hardware and supports as required to meet applicable codes and as shown on the plans. NEMA Type 3R disconnects shall be furnished for outdoor installations mounted on galvanized steel supports.

All individual disconnects serving appliances and equipment are not necessarily shown on the plans. The contractor shall furnish the necessary disconnects for all equipment not having acceptable integral disconnects or located "in sight" of the circuit disconnects. Where disconnects are to serve specific appliances or equipment, the rating and number of poles, as shown on the plans, shall be matched to the requirements of the equipment served. Disconnects shall have provisions for locking covers. The contractor shall coordinate his bid with all suppliers and shall furnish all necessary electrical equipment to serve exact appliances and equipment supplied. Underground service shall be provided to the building breaker box.

Supporting Devices: Equipment supports shall be suitable for the environment and shall be capable of supporting a minimum of five (5) times the actual load of the equipment along with the any additional loads likely to be encountered.

Device and Junction Boxes: All boxes shall be metallic type and shall be mounted flush unless specified otherwise. Where boxes are installed inside masonry walls, the box shall be mounted such that at least one edge of the box falls in the mortar joint. Boxes used with a rigid conduit system shall be cast type boxes with neoprene gaskets.

Device Boxes: Device boxes shall be 4" square by 1-1/2" deep or larger, with raised device covers. Where only one conduit enters the box, single gang boxes may be used.

Underground Boxes: Underground boxes shall be formed from carbon filled high density polyethylene, or from fiberglass reinforced polymer concrete. Polyethylene boxes shall have ribbed walls, minimum outside dimensions of 10"x12" top, 14"x17" bottom, and 15' high. Top opening shall be 8'x10' (min.) and shall be fitted with 3/16" thick hot-dip galvanized steel cover with grounding lug, 3/8" stainless steel threaded plate. Box shall be furnished with riveted, galvanized steel frame for flush installation in concrete. Cut-outs in box shall be as required for

conduit entrance (equal to Formed Plastics 4121). Polymer concrete boxes shall have minimum inside dimensions of 10.5"w x 10.5"1x12"h, heavy duty covers for service loads of 150 psi over a 10" x 10" area, and stainless steel penta-head cover bolts (equal to Quazite PC1212GA). Boxes shall be installed in 6" thick concrete pads unless otherwise shown on the plans. Metal covers shall be grounded to the equipment grounding conductor.

Grounding and Bonding: The contractor shall ground and bond the electrical system according to the requirements of the NEC. The neutral conductor bar shall be bonded to the ground bar at the service only.

Ground Rods: Unless otherwise stated in plans, ground rods shall be ¾" dia. X 10'-0" copper clad steel rods. Multiple rods shall be separated 6'-0" minimum. All rods shall be bonded together and connected to the cold water piping system.

Grounding Conductors: Grounding conductors shall be copper and shall have green insulation except bare conductors shall be used in underground non-metallic conduits. A separate grounding conductor shall be installed as part of each circuit. All non metallic (NM) conduits shall contain equipment grounding conductors sized in accordance with the NEC. Where lighting circuits are connected to a continuously grounded metal raceway and all fixture components are mounted a minimum of 8'-0" above the ground or floor, a separate grounding conductor will not be required.

Lighting: The contractor shall relocate lighting fixtures in the Lobby / Receptionist area. Lighting locations shall be such that the current 4 lamp (Lithonia PM3-G) fluorescent light fixture over the receptionist desk will be relocated over the new receptionist desk and the current 3 lamp (Lithonia PM3-G) fluorescent light fixture in the lobby area will be relocated to the new lobby area. The contractor shall relocate lighting without damage to the fixtures or at any additional cost to DOTD. The contractor shall install new fluorescent bulbs upon completion of relocation of lighting.

Exit Signs: The exit signs shall comply with UL924 for sign colors and lettering size and with NFPA 101 for visibility and luminance requirements. Internally lighted signs with lamps for AC operation shall have light emitting diodes with 70,000 hours minimum of rated lamp life. Exit signs battery shall be sealed, maintenance free, nickel cadmium type with special warranty. Charger for exit sign battery shall be fully automatic, solid-state type with sealed transfer relay. The exit sign shall operate on a relay that automatically energizes lamp from battery when circuit voltage drops to 80 percent of nominal voltage or below. When normal voltage is restored, relay disconnects lamp from battery, and battery is automatically recharged and floated on charger.

Measurement and Pay:
No changes in the lump sum contract amount will be made for minor additions or deletions to the scope of this item. Payment for all necessary electrical will be made at the contract lump sum price upon the satisfactory completion of this item.
Payment will be made under:

Item S-007, Electrical, per lump sum.

ITEM NO. S-008, Access Control System:

Scope of Work: The work under this item consists of furnishing labor, tools, equipment and materials to install an access control system. All work shall be as shown on the plans and described herein. All work shall be complete and conform to the best acceptable practice. The contractor shall furnish all necessary equipment and materials necessary to perform all work and make any necessary modifications or fabrications required.

General: The access control system shall be programmed to release the magnetic door locks or electric strikes on the successful recognition of a valid fingerprint reading, the actuation of panic bar, or other exit release device.

The access control system shall be installed by qualified technicians who have been trained and certified. The contractor shall coordinate installation to maintain as little interruption as possible to current building access. The system shall not be accepted until it has operated for a period of two continuous weeks and shows no defects. During this time the contractor shall make technicians available for repairs or adjustments as required.

Installation contractor shall conduct instruction in use, operation, and maintenance of the system and technical training in troubleshooting and service of the system to designated owner representatives upon installation.

On-site maintenance and repair service shall be available locally.

Materials: All materials and accessories installed under this contract shall conform to the applicable sections of NFPA 101 and the National Electric Code. Equipment and material shall be suitable for the intended use and shall be furnished with all necessary hardware and components. The contractor shall be responsible for all modifications or fabrications necessary for proper installation and operation of the equipment. All equipment shall be new, in current production, and the standard products of the manufacturer. The contractor shall protect the entire system and all parts thereof from injury during the process and up to the acceptance of work. All like equipment and materials shall be of the same manufacturer.

The contractor shall provide and install all wiring, conduit, power supplies, connections, and accessories needed to connect the access control system to the locks and access control terminals and to make necessary connections to the electrical panel in the designated building. All locks and electrical installed shall conform to all national, state, and local codes governing. All connections to existing electrical shall be coordinated with district electricians. Wiring shall be uniform and in accordance with national electric codes and manufactures instructions. All splices shall be in easy accessible junction boxes or on terminal boards. All cable runs in all junction boxes shall be tagged and identified. All tagged and identified cable runs shall be listed on the as-built wiring diagram.

The contractor shall provide a computer work station fitted with an enrollment station to record personal access control information. The PC must meet the following requirements:

Minimum requirements:

- A Pentium 4 3.0GHz processor (or above):
- 512 Megabytes of RAM;
- A network card;
- A serial port;
- 6 USB ports

Its display resolution should be a minimum of 1024 x 768.
Operation system specification:

- Windows XP Service Pack 3.

The contractor shall provide enrollment and management software. The software shall meet the following functional specifications:

- Capture fingerprints via an optic biometric terminal,
- View fingerprint positioning and control image quality during enrollment,
- Tune the false acceptance rate to specified security requirements,
- Configure user and user-group access and time restrictions,
- Grant, limit, or restrict access in real-time,
- Configure administrator and operator permissions,
- Create, update and delete terminal groups,
- Add defined terminals to new or existing terminal groups,
- Name terminal groups by administrator-defined criteria (zones, offices, or facilities)
- Assign local group designators to terminals (e.g. IP address and alphanumeric field descriptions)
- Capture and retrieve server, terminal, or event logs manually or automatically
- Retrieve terminal event logs on request or on a periodic basis, and
- Provide at-a-glance reports on terminals including date and time of last database update.

A fingerprint sensor shall be plugged in the USB port to capture and record fingerprints.

Access control terminals shall be installed at the access points shown on the plans. Terminals shall be made of a screen, a keyboard, and a fingerprint sensor. Access control terminals shall operate in identification mode and offer a storage capacity of two biometric templates for a minimum of 3,000 individuals. The access control terminals shall be networked and work in an application mode to control physical access entry. All access control terminals shall be through a USB serial RS-485. Access control terminals shall be powered over the Ethernet. Operating temperatures of the access control terminals shall be within 14°F to 122°F. Access control terminals located outside shall meet Protection Classification 65 (IP65) rating, sealed against dust and protected against water jet.

The contractor shall provide a manual release device. The manual release device is to be located at the receptionist desk to grant access for entrance into the facility. The manual release device shall be positioned in a manner to prohibit access from receptionist window.

The contractor shall provide electric strikes or magnetic locks as noted on plans. Electric strike controllers shall meet or exceed HES 1006J specifications. The magnetic locks shall meet or exceed GL-1 Gate Lock specifications. The locking devices shall incorporate a "Fail-Safe" design. Locking devices shall not prevent emergency egress. The contractor shall provide all

components necessary to operate the system successfully from the access control terminals to the software to the locking mechanisms.

Maintenance and Operation Manuals: The contractor shall submit to the Project Engineer for approval three (3) copies of all Operations and Maintenance Manuals. Manuals shall be submitted in ring binders and shall include the following:

1. Copies of the warranties and guarantees required under "Warranties and Guarantees" above.
2. Copy of the As Built Drawings.
3. Copy of test recordings.

As-Built Drawings: The submittals shall include an equipment list, data sheet(s), system description, block diagrams on equipment of "As-Builts" showing the equipment furnished and electrical wiring diagrams for installation.

Measurement and Pay:
No changes in the lump sum contract amount will be made for minor additions or deletions to the scope of this item. Payment for access control system will be made at the contract lump sum price upon the satisfactory completion of this item.
Payment will be made under:

Item S-008, Access Control System, per lump sum.

CONTRACT TIME: The contractor will be issued a "Conditional Notice to Proceed" to acquire approvals of required drawings, brochures and other submittals, and to begin purchase and assembly of materials. **The contractor shall be responsible for obtaining written approval of the plans from the State Fire Marshal. A full notice to Proceed will be issued by the Department upon receipt of shop drawings approved by the State Fire Marshal.** The "Conditional Notice to Proceed" will expire **45 calendars** after its issuance, unless the contractor requests an earlier expiration date, where upon a "Full Notice to Proceed" will be issued.

The entire contract shall be completed in all details and ready for final acceptance in accordance with Subsection 105.17(b) within sixty (60) calendar days after the date stipulated in the "Full Notice to Proceed".

(05/09)

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

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LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
SUPPLEMENTAL SPECIFICATIONS

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

PART I – GENERAL PROVISIONS

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

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

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

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

Delete the contents of this subsection and substitute the following.

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

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

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

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

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

Delete the second paragraph.

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

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

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

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

PART II – EARTHWORK

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

Delete the first sentence and substitute the following.

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

PART III – BASE COURSES

SECTION 302 – CLASS II BASE COURSE:
Subsection 302.01 – Description (12/08), Page 150.

Add the following to the third paragraph:

(6) Blended Calcium Sulfate

Subsection 302.02 – Materials (12/08), Pages 150 and 151.

Add the following to the first paragraph:

Blended Calcium Sulfate	1003.01 & 1003.03 (e)

Subsection 302.04 – General Construction Requirements (12/08), Page 152.

Add the following:

Blended calcium sulfate will be allowed in areas of new alignment, fill areas, and cut areas less than one foot.

In cut areas greater than one foot (300 mm), an additional one foot (300 mm) of undercut will be required prior to placement of BCS. The additional undercut area shall be replaced with non-plastic sand embankment and encapsulated with a Class D geotextile fabric. The additional

non-plastic material, geotextile fabric, and undercut shall be at no additional cost to the Department.

Blended calcium sulfate will not be allowed in areas needed to facilitate traffic control or when a soil cement base course is specified in the plans. Blended calcium sulfate shall not be placed within 10 feet (3.0 m) of metal drainage structures. The contractor will be allowed to substitute any untreated Class II base course material listed in Subsection 302.01. Flowable fill under Section 710, or other approved backfill material in Section 701 shall be used to backfill the drainage structure.

Subsection 302.05 – Mixing (08/06) (12/08), 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.

Add Heading (d) as follows:

(d) Blended Calcium Sulfate: Calcium sulfate shall be blended with an approved aggregate or lime prior to placement. The blended calcium sulfate material shall be uniformly mixed and sampled from dedicated stockpiles. Gradation sampling in accordance with Subsection 1003.03 shall be taken from the dedicated stockpiles at the point of material origin.

Subsection 302.06 – Transporting and Placing on Subgrade (12/08), Page154.

Add the following:

Water shall be added or other suitable means taken to prevent dust during the transporting and placing of dry blended calcium sulfate.

Subsection 302.07 - Compacting and Finishing (12/08), Pages 154 and 155.

Add Heading (e) as follows:

(e) Blended Calcium Sulfate: Blended calcium sulfate shall be placed and spread on the subgrade and compacted to produce layers not exceeding 12 inches (300 mm) compacted thickness. During placement the material shall be thoroughly wetted by application of water to maintain 2 to 4 percent above optimum moisture. After application of water, allow the moisture to reach equilibrium in the base before applying rolling techniques. Rolling of BCS is required to the edge of the embankment or subgrade. Each layer shall be compacted to at least 95 percent of maximum dry density or compacted by an approved established rolling pattern determined by the project engineer before the next layer is placed. Optimum moisture and maximum density shall be determined in accordance with DOTD TR 418 Method G modified to include a maximum drying temperature of 140°F (60°C).

Add Heading (f) as follows:

(f) Proof Rolling: Proof rolling shall be done by a load of 25 tons (25 Mg) in a 12 to 14 cubic yard (9 to 10.5 cubic meters) tandem dump truck with ten wheels or approved loaded truck

determined by the project engineer. Proof rolling shall be a minimum of 5 passes in each direction at the same locations and at a maximum vehicle speed of 3 mph (4.8 km/h).

All BCS base will be tested by proof rolling prior to placement of surfacing material, including asphalt binder. Any irregularities or soft spots shall be corrected prior to placement of the surfacing material. Any rain event on the project site between the proof rolling and placement of the surfacing will require an additional proof rolling as noted above.

Subsection 302.09 – Protection and Curing (12/08), Page 155.

Add Heading (c) as follows:

(c) Blended Calcium Sulfate: Protection and curing of blended calcium sulfate shall be in accordance with Subsection 302.09(b).

Subsection 302.12 – Acceptance Requirements (12/08), Pages 156 – 161.

Add the following to Heading (a):

The acceptance requirements for blended calcium sulfate base course shall be the same as stone base course with the following modifications. Upon completion of compaction operations, the density will be determined in accordance with DOTD TR 401 except that all moisture content determinations for density calculations shall be conducted by oven drying the material for 24 hours at 140°F (60°C). A forced draft type oven capable of maintaining the temperature shall be provided by the contractor for field moisture content determination for density control.

SECTION 305 – SUBGRADE LAYER:

Subsection 305.06 – Payment (01/08), Page 184.

Delete the contents of this subsection and substitute the following.

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

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

Payment will be made under:

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

SECTION 307 – PERMEABLE BASES:
Subsection 307.02 – Materials (09/07), Pages 187 and 188.

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

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

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

SECTION 308 – IN-PLACE CEMENT TREATED BASE COURSE:
All Subsections within Section 308 – (07/07), Pages 191 – 198.

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

PART V – ASPHALTIC PAVEMENTS

SECTION 502 – SUPERPAVE ASPHALTIC CONCRETE MIXTURES:
Subsection 502.02 – Materials (08/06) (11/07), Pages 210 – 213.

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

Table 502-2
Superpave Asphalt Cement Usage

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

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

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

Table 502-3
Aggregate Friction Rating

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

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

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

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

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

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

SECTION 508 – STONE MATRIX ASPHALT:

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

Delete this subsection and substitute the following.

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

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

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

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

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

PART VI – RIGID PAVEMENT

SECTION 602 – PORTLAND CEMENT CONCRETE PAVEMENT REHABILITATION:

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

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

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

PART VII – INCIDENTAL CONSTRUCTION

SECTION 701 – CULVERTS AND STORM DRAINS:

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

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

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

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

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

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

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

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

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

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)

SECTION 704 – GUARD RAIL:

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

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

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

SECTION 706 – CONCRETE WALKS, DRIVES AND INCIDENTAL PAVING:

All Subsections within Section 706 (04/08), Pages 375 – 377.

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

SECTION 706
CONCRETE WALKS, DRIVES AND INCIDENTAL PAVING

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

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

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

706.03 CONSTRUCTION REQUIREMENTS.

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

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

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

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

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

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

(e) Joints:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Payment will be made under:

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

SECTION 713 – TEMPORARY TRAFFIC CONTROL:

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

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

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

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

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

SECTION 729 – TRAFFIC SIGNS AND DEVICES:

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

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

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

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

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

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

SECTION 804 – DRIVEN PILES:

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

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

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

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

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

SECTION 901 – PORTLAND CEMENT CONCRETE:

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

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

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

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

Add the following to Heading (a).

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

SECTION 1001 – HYDRAULIC CEMENT:

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

Delete the contents of this subsection and substitute the following.

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

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

SECTION 1003 – AGGREGATES:

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

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

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

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

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

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

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

Delete Heading (a) and substitute the following.

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

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

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

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

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

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

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

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

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

SECTION 1006 – CONCRETE AND PLASTIC PIPE:

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

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

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

SECTION 1013 – METALS:

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

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

SECTION 1015 – SIGNS AND PAVEMENT MARKINGS:

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

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

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

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

Delete the contents of this subsection and substitute the following.

1015.05 REFLECTIVE SHEETING.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Table 1015-3
Accelerated Weathering Standards[1]

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

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

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

Table 1015-4
Reflective Sheeting Performance Standards

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

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

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

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

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

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

Table 1015-5
Manufacturer's Guaranty-Reflective Sheeting

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

[1] From the date of sign installation.

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

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

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

Delete the contents of this subsection and substitute the following.

1015.11 PREFORMED PLASTIC PAVEMENT MARKING TAPE.

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

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

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

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

Table 1015-7
Specific Luminance of Preformed Plastic Tape

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

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

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

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

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

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

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

SECTION 1020 – TRAFFIC SIGNALS:

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

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

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

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

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

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

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

STANDARD PLANS TO
BE USED ON THIS PROJECT

STANDARD REV. DATE

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION

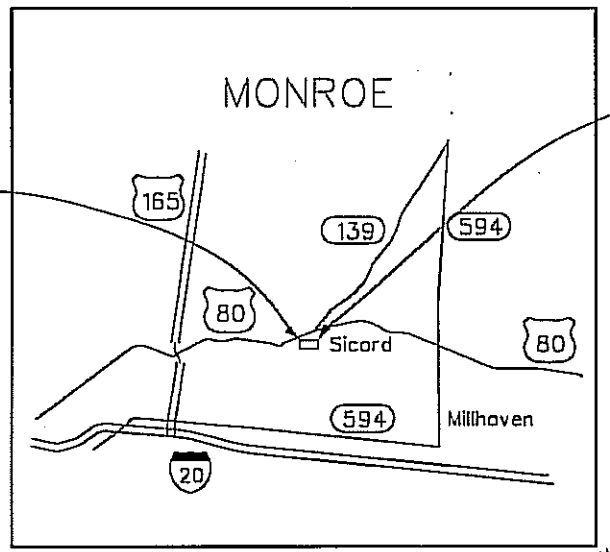
PLANS OF PROPOSED

STATE HIGHWAY

STATE PROJECT NO. 605-01-0075
DISTRICT 05 BUILDING SECURITY PROJECT
PHASE I
OUACHITA PARISH

C.S. LOG MILE 2.980
BEG. S.P. 605-01-0075

C.S. LOG MILE 2.980
END. S.P. 605-01-0075



TYPE OF CONSTRUCTION: MINOR BUILDING MODIFICATIONS & INSTALLATION OF SECURITY SYSTEM

RECOMMENDED FOR APPROVAL

7-20-09
PROGRAM DELIVERY/DESIGN ENGINEER

DISTRICT ADMINISTRATOR

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

7/20/09
DATE

DATE	REVISIONS	DATE	RECOMMENDED	DATE	APPROVED

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

SHEET NUMBER 1
PARISH OUACHITA
FEDERAL PROJECT
STATE PROJECT 605-01-0075
DESIGNED PED
DETAILED MSW
CHECKED DEP
CHECKED ALG
DATE
SHEETS
TITLE SHEET

FOR INFORMATIONAL PURPOSES ONLY

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INDEX TO SHEETS

INDEX TO SHEETS

OUACHITA

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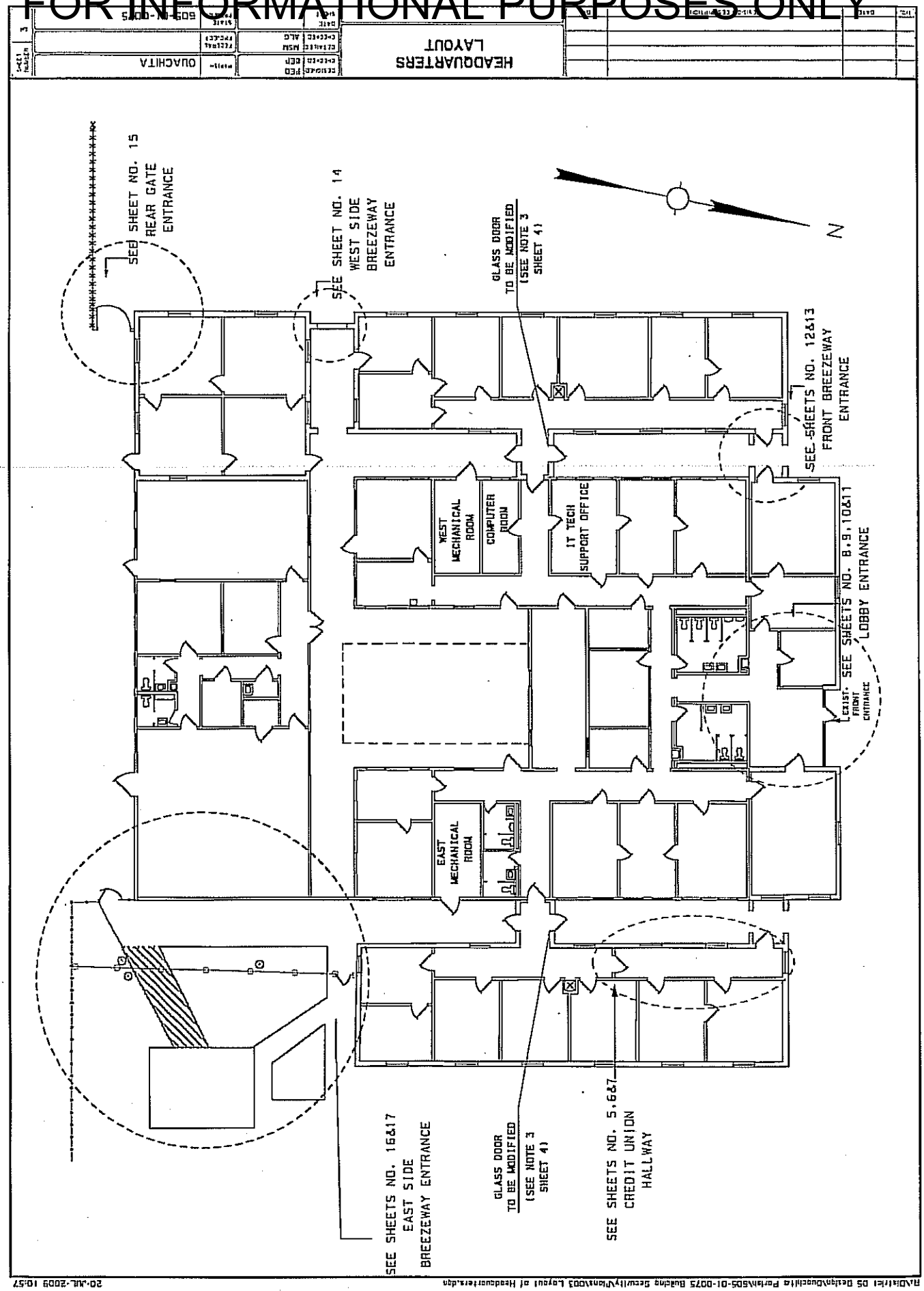


GENERAL NOTES

(1) IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DO ALL WORK INDICATED ON ALL DRAWINGS AND IN THE SPECIFICATIONS THAT PERTAINS TO AND IS NORMALLY DONE BY HIS TRADE WHETHER OR NOT IT IS SPECIFICALLY INCLUDED IN THE DETAILS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING MEASUREMENTS ON DETAILS PRIOR TO ANY WORK BEING PERFORMED. FAILURE TO READ OR REVIEW ALL DRAWINGS AND DETAILS SHALL NOT RELIEVE HIM OF THIS RESPONSIBILITY.

(2) THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE PROJECT ENGINEER AND ESTABLISH A SEQUENCE OF CONSTRUCTION FOR THE LEAST AMOUNT OF DISRUPTION TO NORMAL DOTD BUSINESS. HALF (1/2) OF THE ENTRANCES AND EXITS SHALL BE ACCESSIBLE DURING CONSTRUCTION.

(3) THE CONTRACTOR SHALL MODIFY THE 2 GLASS DOORS INDICATED ON THE LAYOUT SHEET. THE DOORS SHALL BE EQUIPPED WITH A PANIC BAR FOR AN "EXIT ONLY" CONDITION. EXISTING DEADBOLT BOLTS AND PULL BAR SHALL BE REMOVED FROM EXTERIOR AND REPLACED WITH VANDAL RESISTANT TRIM.

(4) EXIT SIGNS SHALL BE LOCATED AS SHOWN ON THE PLANS.

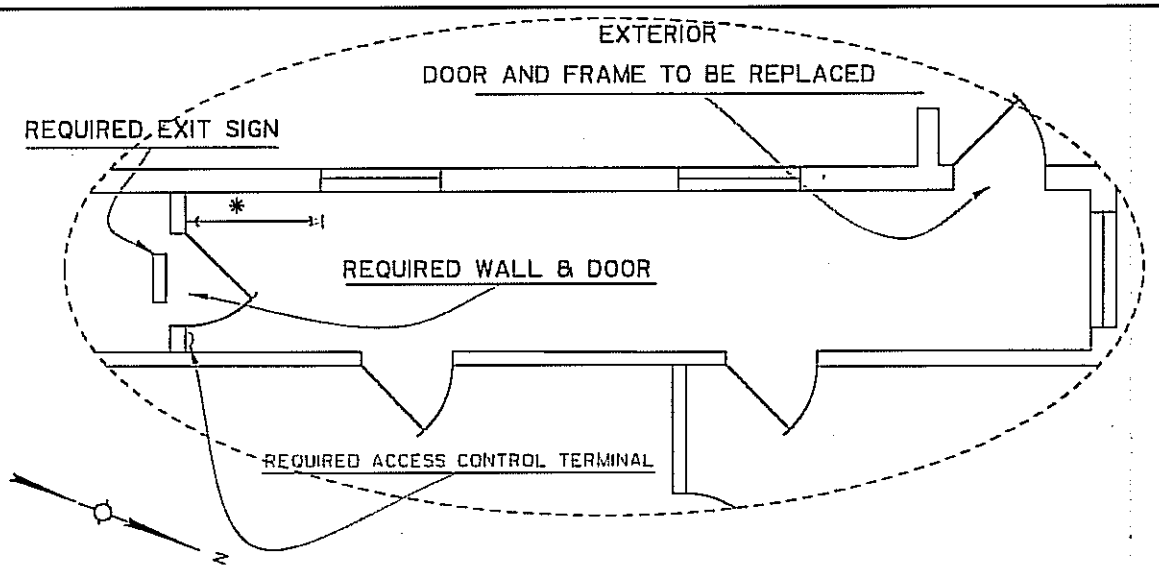
(5) THE CONTRACTOR SHALL FURNISH AND INSTALL AN ACCESS CONTROL SYSTEM. THE SYSTEM SHALL ALLOW THE DEPARTMENT TO UPGRADE AS ITS NEEDS GROW WITHOUT COMPLETE SYSTEM CHANGE.

(6) THE ELECTRIC LOCKING SYSTEM FOR ALL DOORS SHALL PROVIDE A POSITIVE LOCKING FUNCTION INTO THE CARRIER OF THE DOOR PANEL SO THAT THE DOOR CANNOT BE MANUALLY PRIED OPEN. THE LOCKING SYSTEM SHALL NOT INTERFERE WITH THE EMERGENCY EGRESS REQUIREMENTS OF NFPA 101. ALL DOORS SHALL OPERATE IN A FAIL-SAFE MODE.

(7) ACCESS CONTROL TERMINALS SHALL BE POWERED OVER ETHERNET LINES AND RUN TO THE COMPUTER ROOM. THE CONTRACTOR SHALL BE PROVIDED ACCESS AND SPACE IN THE COMPUTER ROOM FOR INSTALLATION OF HUB. THE COMPUTER WORKSTATION FOR THE ACCESS CONTROL SYSTEM SHALL BE LOCATED IN THE IT TECH SUPPORT OFFICE ACROSS THE HALL FROM THE COMPUTER ROOM.

(8) THE CODE ENTRY NUMBERS AND BIOMETRIC DATA SHALL BE ACCESSIBLE AND CHANGEABLE BY THE DEPARTMENT THROUGH THE USE OF THE REQUIRED COMPUTER WORKSTATION.

(9) ALL FINISHES AND SURFACES FINAL COLORS AND TEXTURES SHALL BE APPROVED PRIOR TO PLACEMENT.



SEE SHEETS 6 & 7
FOR DOOR DETAILS.

* APPROXIMATELY 12" FROM WINDOW TO AVOID ELECTRICAL OUTLET AND LIGHT.

NOTES:

(1) ACCESS TO HALLWAY MUST BE MAINTAINED FOR CREDIT UNION MEMBERS. CONSTRUCTION SHALL BE ALLOWED ON ONE END OF HALLWAY AT A TIME.

(2) CONTRACTOR SHALL INSTALL ACCESS CONTROL SYSTEM SUCH THAT THE INTERIOR DOOR UNIT SHALL BE SECURED IN FAIL-SAFE MODE.

(3) BOTH NEW DOORS SHALL BE RIGHT HAND REVERSE BEVEL (RHRB). INTERIOR DOOR SHALL BE EQUIPPED WITH 3 FULL MORTISE HINGES, AN OFFICE LOCK, A DOOR CLOSER, AND AN EXIT DEVICE. EXTERIOR DOOR SHALL BE EQUIPPED WITH 3 FULL MORTISE HINGES, AN EXIT DEVICE, A LOCK, A RIM CYLINDER, A DOOR CLOSER, A DOOR STOP, A THRESHOLD, WEATHER STRIPPING AND A DOOR SWEEP.

(4) EXISTING TRIM TO BE REMOVED AT WALL LOCATION.

(5) WALL SHALL BE SQUARED UP AND TIED INTO CEILING AND ANCHORED TO FLOOR. WALL SHALL HAVE TRIM WORK TO MATCH EXISTING (PAINTING, STAINED, ETC).

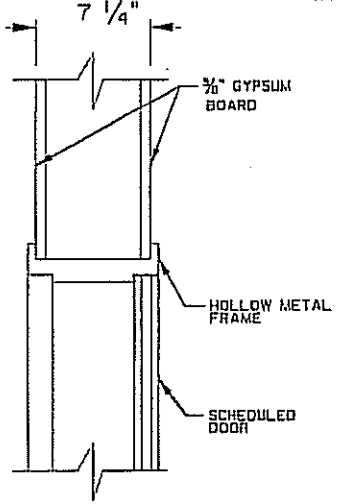
CREDIT UNION HALLWAY

QUACHITA

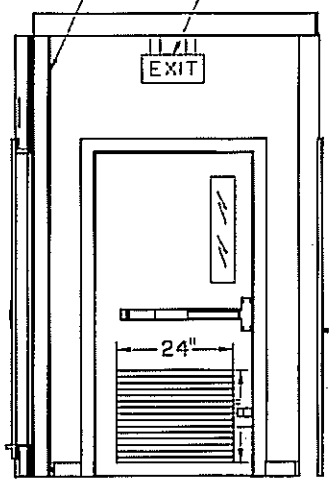
FOR INFORMATIONAL PURPOSES ONLY

REQUIRED TRIM WORK
IN CORNERS (3/4" ROUND)

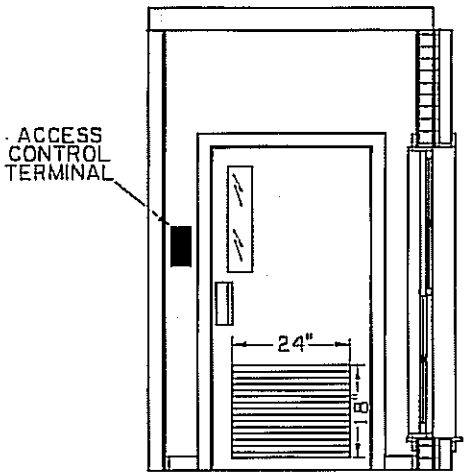
REQUIRED EXIT SIGN



HEAD AT INTERIOR DOOR



REAR VIEW



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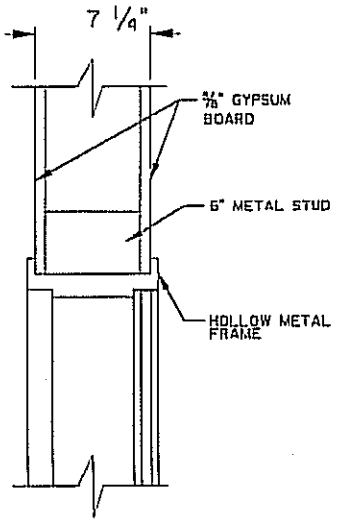
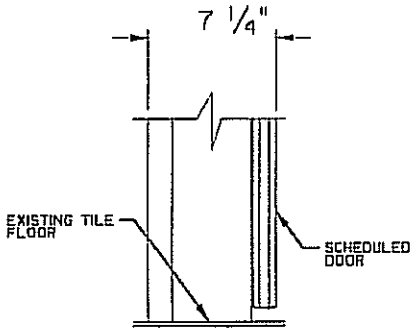


JAMB AT INTERIOR DOOR



SILL AT INTERIOR DOOR

CREDIT UNION INTERIOR DOOR
N.T.S.

(1) FURNISH AND INSTALL ONE (1) STEEL DOOR UNIT. THE DOOR IS TO BE 7'0" IN HEIGHT X 3'0" WIDE WITH A LONG VISION WINDOW AND INVERTED "Y" OR CHEVRON LOUVER.

(2) THE GLASS IN THE DOOR UNIT SHALL BE 1/4" THICK CLEAR TEMPERED GLASS. THE GLASS STOPS TO BE NON-REMOVABLE FROM THE OUTSIDE OF THE DOOR.

CREDIT UNION
INTERIOR DOOR

OUACHITA

605-01-0075

F-6

CREDIT UNION
EXTERIOR DOOR

CREDIT UNION EXTERIOR DOOR
N.T.S.

(1) FURNISH AND INSTALL ONE (1) STEEL DOOR UNIT. THE DOOR IS TO BE 7'0" IN HEIGHT x 3'0" WIDE WITH A LONG VISION WINDOW.

(2) MEASUREMENTS SHALL BE VERIFIED PRIOR TO ANY CUSTOM FRAME WORK.

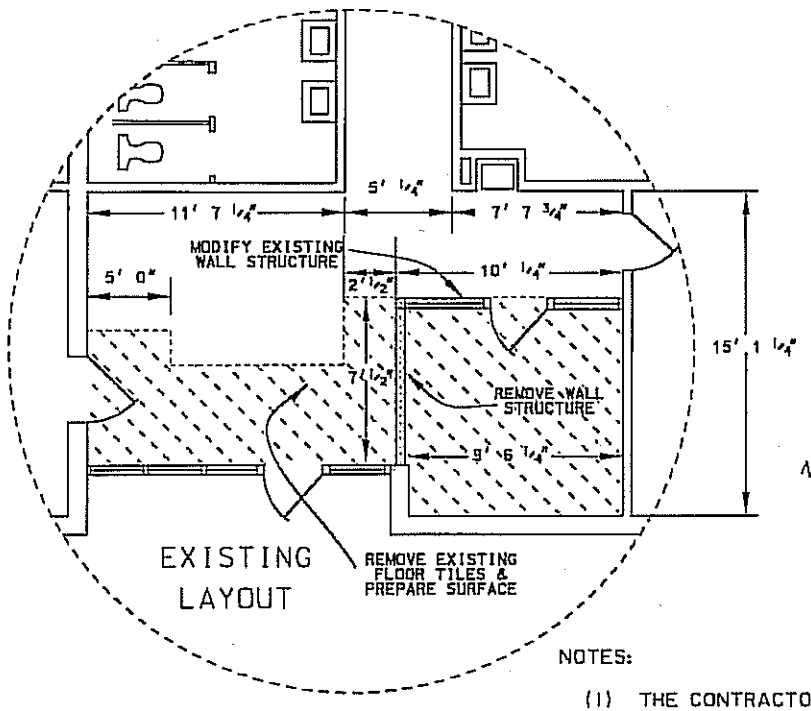
(3) REPLACEMENT LOCKS SHOULD BE OF EQUAL DESIGN AS EXISTING LOCKS.

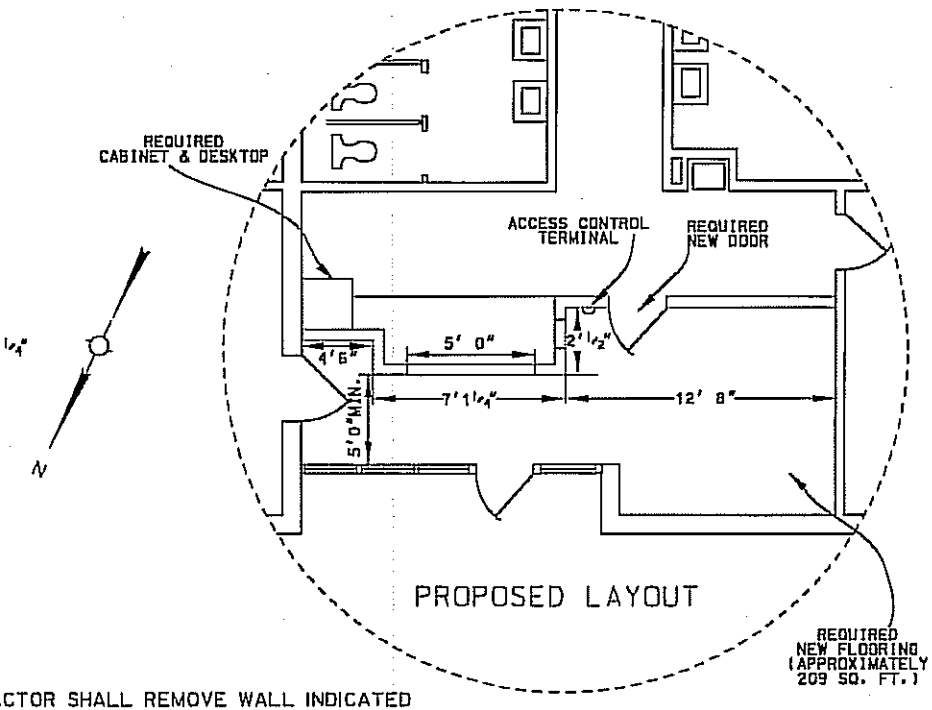
(4) MODIFY INTERIOR TRIM AS REQUIRED.

(APPROX. MEASUREMENTS FOR CUSTOM FRAME TO FIT INTO EXISTING MASONERY)

HEAD AT EXTERIOR DOOR
N.T.S.

SILL AT EXTERIOR DOOR
N.T.S.





NOTES:

(1) THE CONTRACTOR SHALL REMOVE WALL INDICATED AND MODIFY EXISTING WALLS AS NECESSARY FOR NEW LOBBY LAYOUT. EXISTING TRIM TO BE REMOVED AS NECESSARY FOR NEW WALLS.

(2) THE CONTRACTOR SHALL CONSTRUCT NEW WALL, DOORS AND WINDOW AS DETAILED ON SHEETS 9 AND 10 AND SHOWN HERE.

(3) WALL SHALL BE SQUARED UP AND TIED INTO STRUCTURE AND ANCHORED TO FLOOR.

(4) THE CONTRACTOR SHALL REFERENCE SHEET 11 FOR REQUIRED ELECTRICAL.

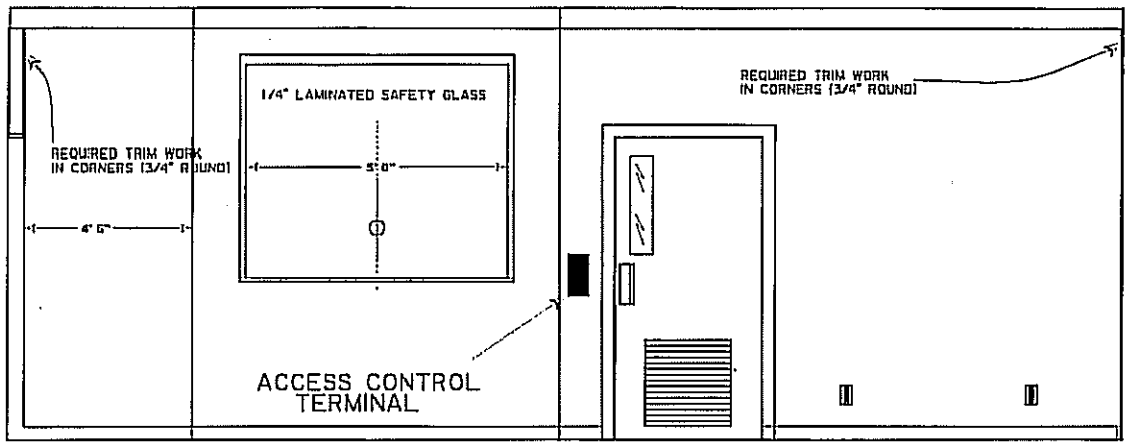
(5) THE CONTRACTOR SHALL REMOVE OLD FLOORING AND PREPARE SURFACE AND FURNISH AND INSTALL NEW FLOOR TILE.

LOBBY

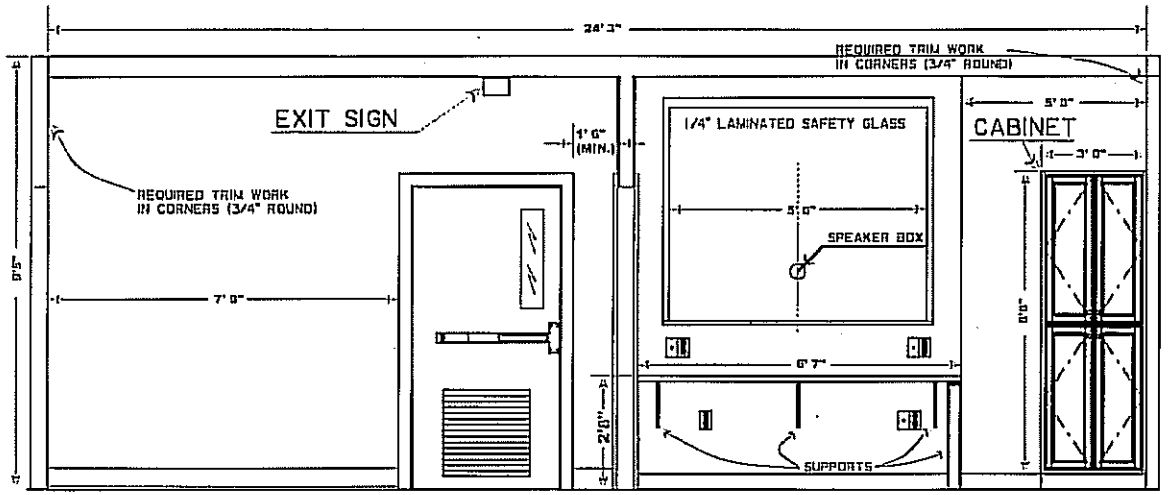
OUACHITA

FOR INFORMATIONAL PURPOSES ONLY

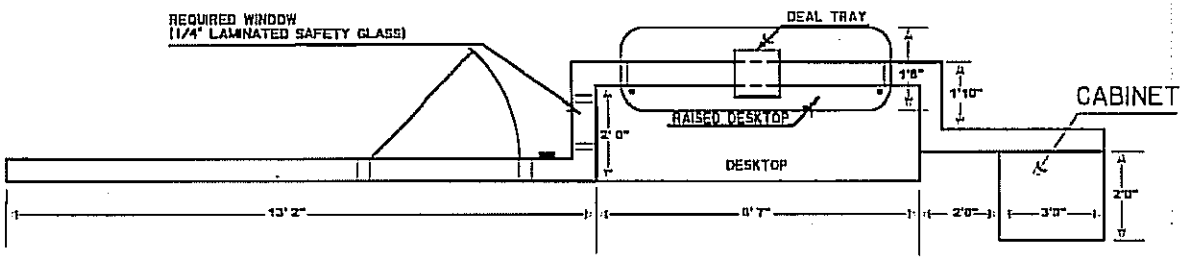
F-8



FRONT VIEW



REAR VIEW



PLAN VIEW

NOTES:

(1) FURNISH AND INSTALL ONE (1) STEEL DOOR UNIT. THE DOOR IS TO BE 7'0" IN HEIGHT X 3'0" WIDE WITH A LONG VISION WINDOW.

(2) THE GLASS IN THE DOOR UNIT SHALL BE 1/4" THICK CLEAR TEMPERED GLASS. THE GLASS STOPS TO BE NON-REMOVABLE FROM THE OUTSIDE OF THE DOOR.

(3) CONTRACTOR SHALL INSTALL AN ADA COMPLIANT EXIT DEVICE INTERFACED WITH THE ACCESS CONTROLL SYSTEM. THE INTERIOR DOOR UNIT SHALL BE SECURED IN FAIL-SAFE MODE.

(4) INTERIOR DOOR SHALL BE EQUIPPED WITH 3 FULL MORTISE HINGES, AN OFFICE LOCK, A DOOR CLOSER, AN EXIT DEVICE AND A DOOR SWEEP.

(5) THE CONTRACTOR SHALL CONSTRUCT RECEPTIONIST WORK AREA AS DETAILED, HERE AND ON SHEET 8. FRONT WINDOW SHALL BE CONSTRUCTED USING 1/4" LAMINATED SAFETY GLASS WITH A REQUIRED PASS THROUGH OPENING (DEAL TRAY DT-15 OR APPROVED EQUAL) AND A SPEAKER BOX. (NOS - D TALK THRU OR APPROVED EQUAL) APPROXIMATE WINDOW SIZE SHALL BE 5'0" X 3'6". SIDE WINDOW SHALL BE CONSTRUCTED USING 1/4" LAMINATED SAFETY GLASS APPROXIMATE SIZE 1'0" X 3'6".

(6) THE CONTRACTOR SHALL CONSTRUCT A FINISHED CABINET WITH 2 DOORS OPENING UP TO SHELVES AND 2 DOORS OPENING UP TO DRAWERS. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO BEGINNING CONSTRUCTION ON CABINET SECTION.

QUACHITA

LOBBY

SHEET NUMBER 9

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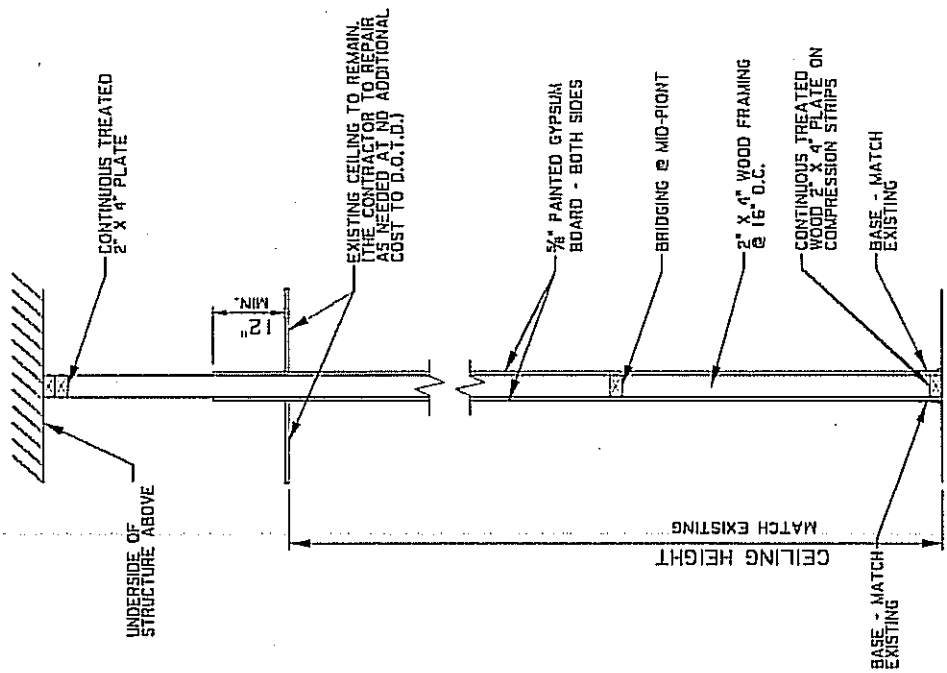
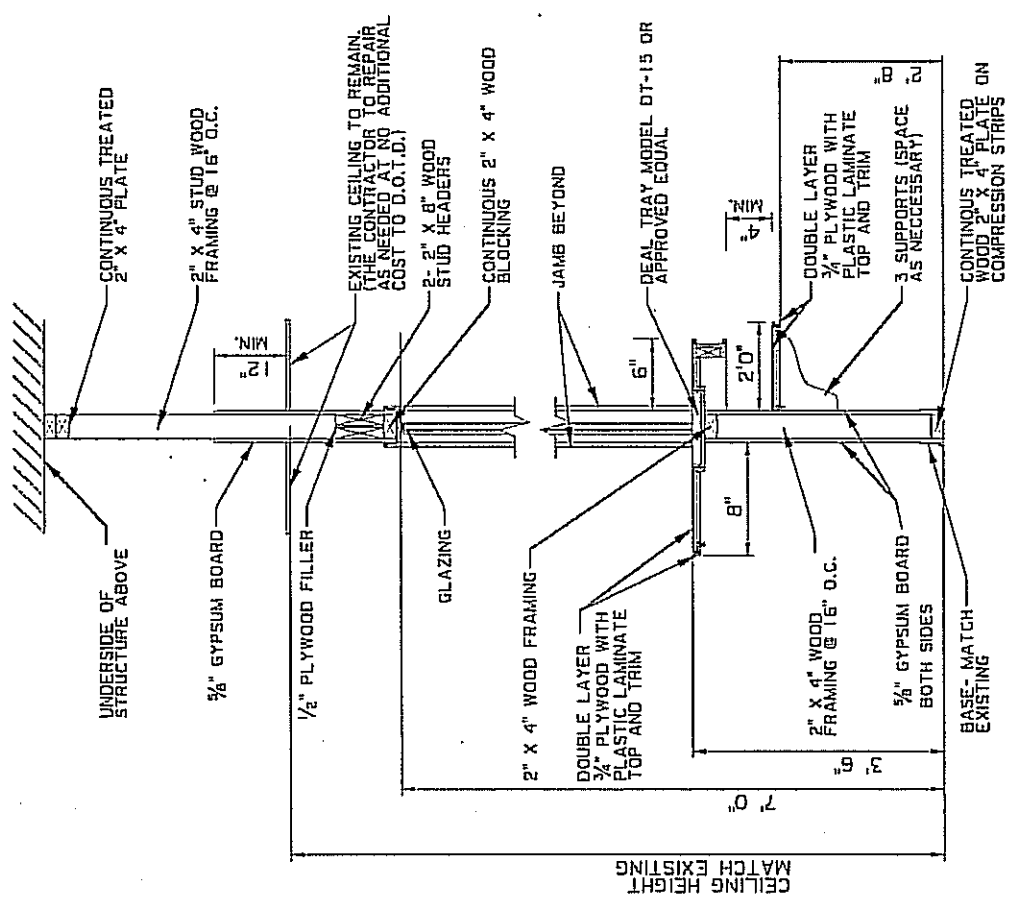
LOBBY - WALL DETAILS





LOBBY - ELECTRICAL DETAILS

NOTES:

(1) LOCATIONS OF THE 3 BULB FLUORESCENT LIGHT SYSTEMS AND THE 4 BULB FLUORESCENT LIGHT SYSTEMS TO BE RELOCATED SUCH THAT THE 4 BULB SYSTEMS REMAIN OVER THE RECEPTIONIST DESK.

(2) A POWER CONNECTION POINT FOR ALL NEW CIRCUITS INSTALLED WILL BE PROVIDED BY DOTD IN THE EAST MECHANICAL ROOM IN PANEL # 177.

(3) DATA/NETWORK BOXES SHALL BE INSTALLED TO A CONDUIT EQUIPPED WITH PULL STRING FOR USE BY DOTD. CONDUIT SHALL BE STUBBED INTO CEILING. 2 - 3/4" CONDUITS WILL BE FOR THE GANG BOX AT 36" A.F.F. AND A 1 1/4" CONDUIT WILL BE FOR THE GANG BOX AT 18" A.F.F.

(4) THE CONTRACTOR SHALL CONNECT ONE RECEPTACLE BELOW RECEPTIONIST DESK TO A DEDICATED CIRCUIT BREAKER IN PANEL. RECEPTABLE SHALL BE TAGGED AS "HEATER ONLY"

(5) THE CONTRACTOR SHALL INSTALL A PUSH BUTTON AT THE RECEPTIONIST DESK TO RELEASE INTERIOR DOOR. THE PUSH BUTTON DEVICE SHALL BE LOCATED SUCH THAT IT CAN NOT BE SEEN OR REACHED FROM WINDOW.

(6) ALL WORK SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF THE LATEST NATIONAL ELECTRIC CODE, NATIONAL ELECTRICAL SAFETY CODE AND U.L. STANDARDS EXCEPT WHERE SUPERSEDED BY APPLICABLE LAWS.

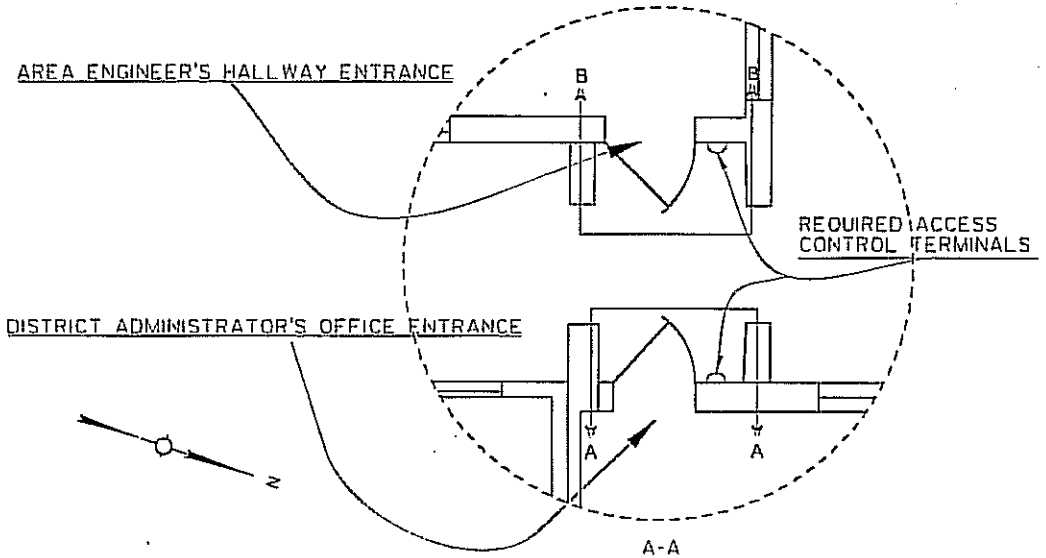
(7) ALL RECEPTACLES SHALL BE COMMERCIAL GRADE, SIZED FOR 20 AMPS.

(8) ALL WIRING INSTALLED SHALL BE 600 VOLT, COPPER, SOLID OR STRANDED, SIZED FOR 20 AMPS.

(9) TYPE MC CABLE IS PERMITTED FOR INSTALLATION BEHIND WALLS AND IN THE ATTIC.

(10) ALL SURFACE MOUNTED CONDUCTORS SHALL BE IN CONDUIT.

MARK	DESCRIPTION	QTY.
(A)	EXIT LIGHT, WITH BATTERY AUX.	1
(B)	TYPICAL DUPLEX GROUNDED RECEPTACLE 18" A.F.F.	4
(C)	TYPICAL DUPLEX GOUNDED RECEPTACLE 36" A.F.F.	2
(D)	SINGLE GANG BOX FOR DATA/NETWORK 18" A.F.F.	1
(E)	SINGLE GANG BOX FOR DATA/NETWORK 36" A.F.F.	2
(F)	EXISTING 3 BULB FLUORESCENT LIGHT TO BE RELOCATED	2
(G)	EXISTING 4 BULB FLUORESCENT LIGHT TO BE RELOCATED	2
(H)	EXISTING 3 BULB FLUORESCENT LIGHT TO REMAIN IN PLACE	3



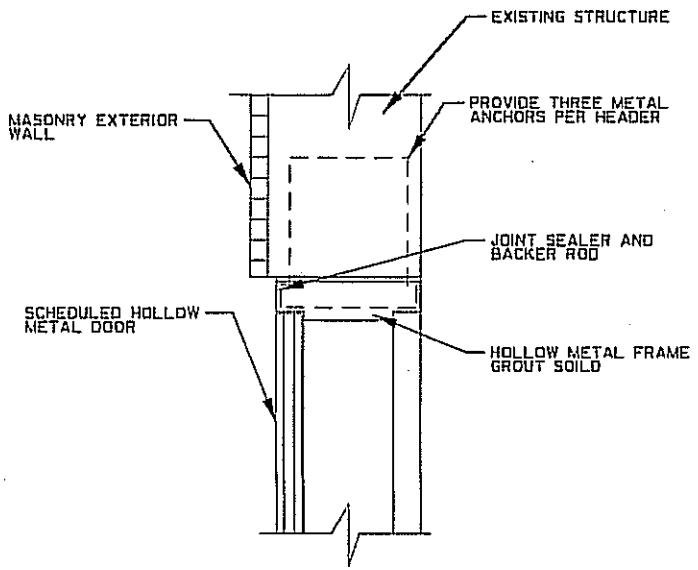
A-A
B-B
SEE SHEET 13

FRONT BREEZEWAY ENTRANCES
N.T.S.

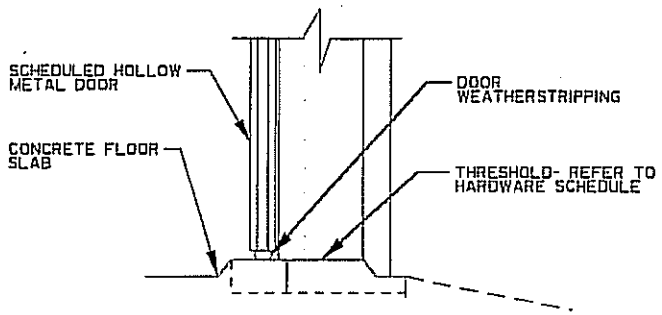
(1) NEW DOORS SHALL OPEN AS INDICATED ON PLAN SHEET. DOORS SHALL BE EQUIPPED WITH 3 FULL MORTISE HINGES, AN EXIT DEVICE, A RIM CYLINDER, A DOOR CLOSER, A DOOR STOP, A THRESHOLD, WEATHER STRIPPINGS AND A DOOR SWEEP.

(2) THE CONTRACTOR SHALL INSTALL AN ADA COMPLIANT EXIT DEVICE INTERFACED WITH THE ACCESS CONTROL SYSTEM. THE EXTERIOR DOOR UNITS SHALL BE SECURED IN FAIL-SAFE MODE.

(3) MODIFY INTERIOR TRIM AS NECESSARY.



HEADER DETAIL
N.T.S.



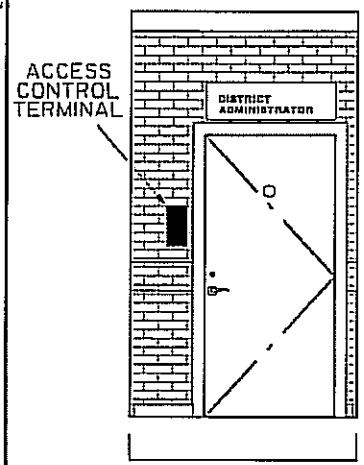
SILL DETAIL
N.T.S.

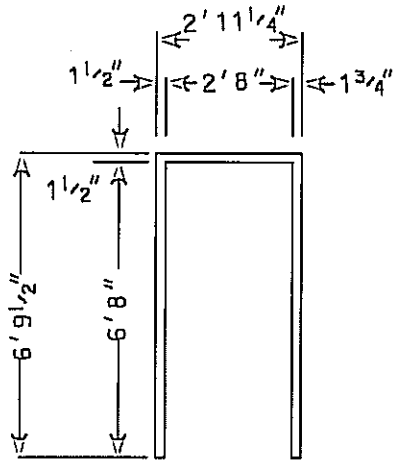
FRONT BREEZEWAY ENTRANCES

OUACHITA

FOR INFORMATIONAL PURPOSES ONLY

DISTRICT ADMINISTRATOR'S DOOR



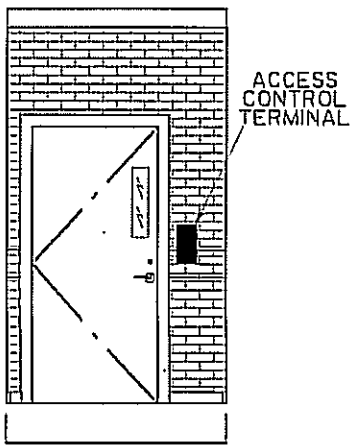


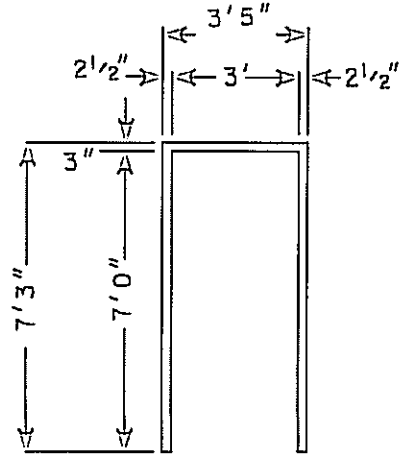
(APPROXIMATE MEASUREMENTS FOR CUSTOM FRAME TO FIT INTO EXISTING MASONRY)

NOTES:

(1) FURNISH AND INSTALL ONE (1) STEEL DOOR UNIT. THE DOOR IS TO BE 6'8" IN HEIGHT X 2'8" WIDE WITH A PEEP HOLE AT DISTRICT ADMINISTRATOR'S DOOR.

AREA ENGINEER'S HALLWAY





(APPROXIMATE MEASUREMENTS FOR CUSTOM FRAME TO FIT INTO EXISTING MASONRY)

NOTES:

(1) FURNISH AND INSTALL ONE (1) STEEL DOOR UNIT. THE DOOR IS TO BE 7'0" IN HEIGHT X 3'0" WIDE WITH A LONG VISION WINDOW.

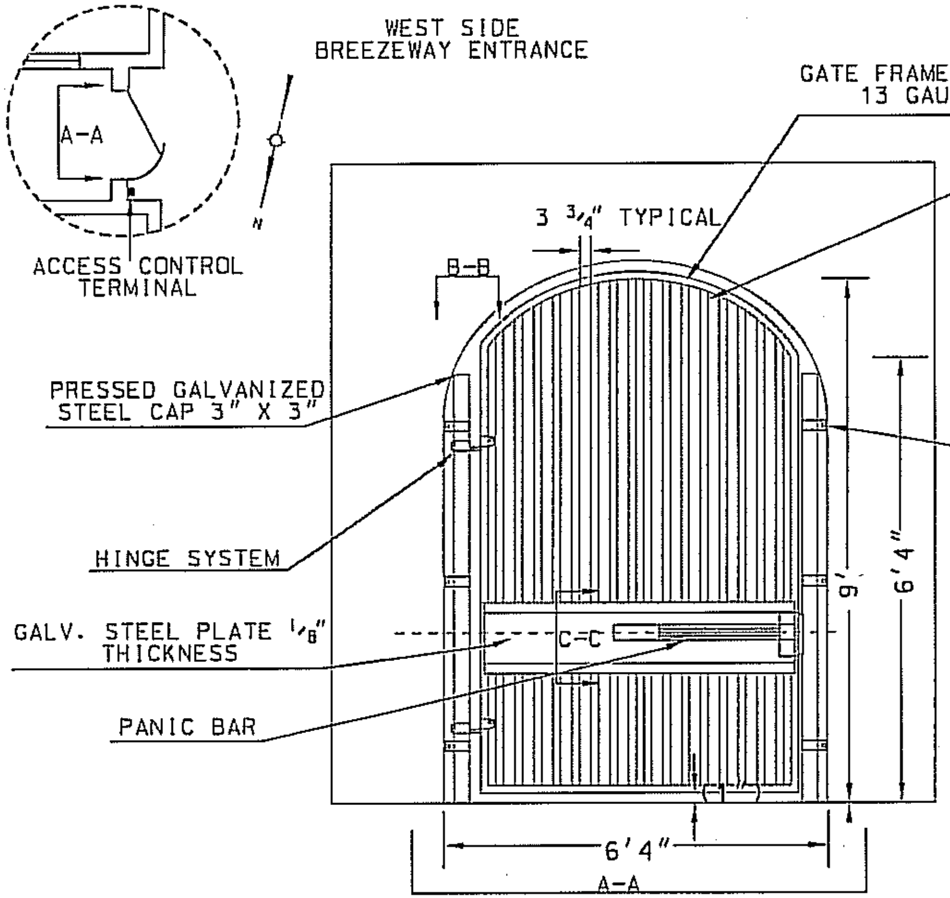
(2) THE GLASS IN THE DOOR UNIT SHALL BE 1/4" THICK CLEAR TEMPERED GLASS. THE GLASS STOPS TO BE NON-REMOVABLE FROM THE OUTSIDE OF THE DOOR.

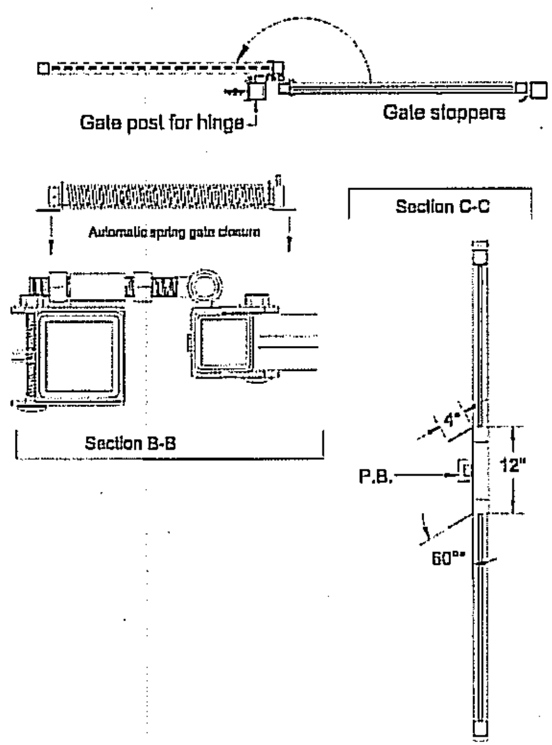
FRONT BREEZEWAY ENTRANCES

QUACHITA

FOR INFORMATIONAL PURPOSES ONLY

F-13





NOTES:

(1) THE CONTRACTOR SHALL FURNISH AND INSTALL GATE SYSTEM TO EXISTING MASONRY STRUCTURE AND MATCH RADIUS AS BEST POSSIBLE.

(2) THE CONTRACTOR SHALL INSTALL ACCESS CONTROL TERMINAL TO THE EXTERIOR WALL IN CLOSE PROXIMITY TO GATE SYSTEM.

(3) THE GATE UNIT SHALL BE INTERFACED WITH THE ACCESS CONTROL SYSTEM AND BE SECURED BY A FAIL-SAFE SYSTEM.

(4) EXIT DEVICE SHALL BE ADA COMPLIANT AND NOT INHIBIT EGRESS FROM FACILITY.

WEST SIDE BREEZEWAY

SHEET NUMBER	14
PARISH	OUACHITA
DESIGNED	PED
CHECKED	DEP
DETAILED	MSH
CHECKED	ALG
STATE PROJECT	GO5-01-0075

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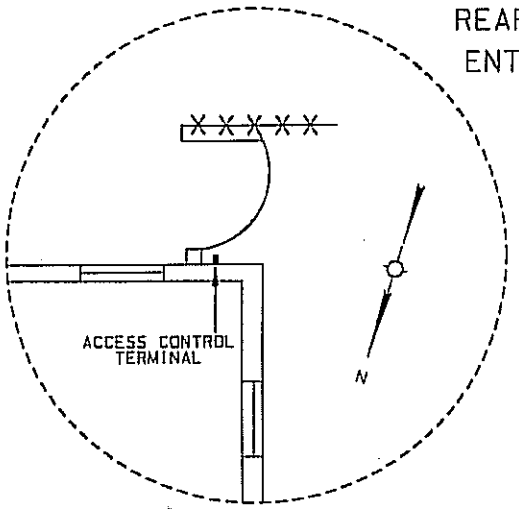
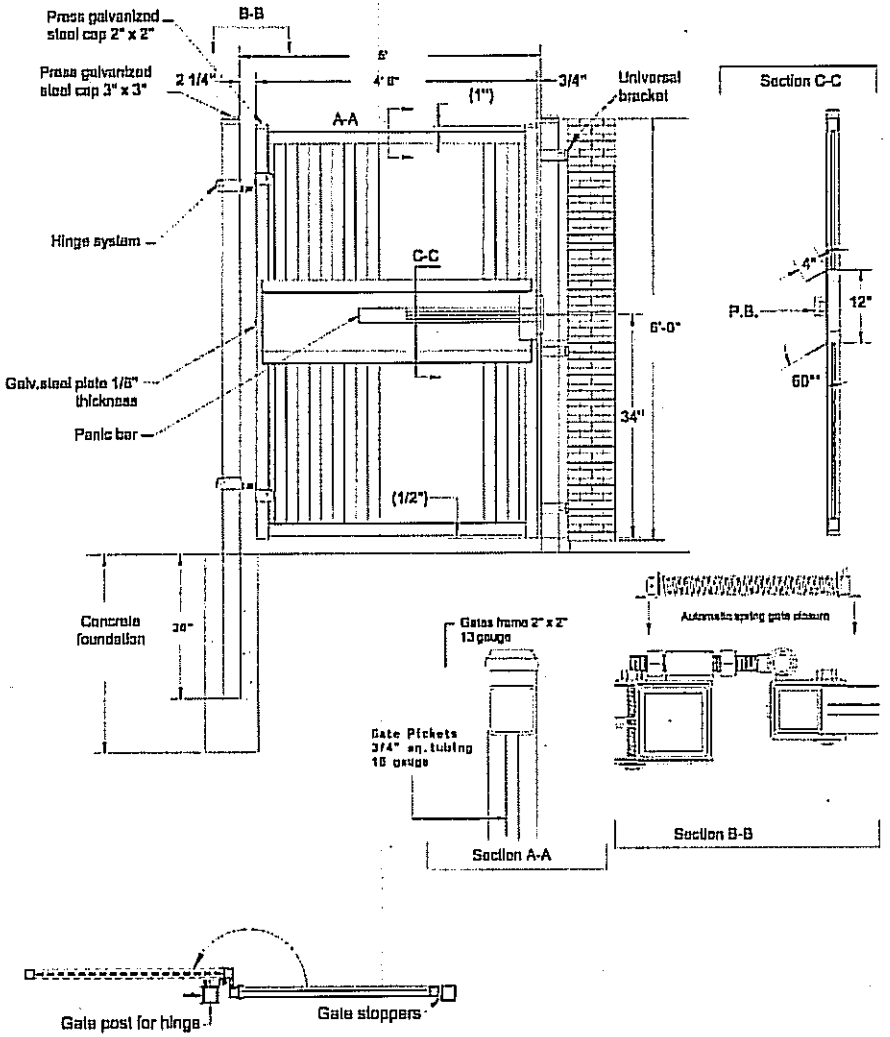
REAR GATE ENTRANCE





NOTES:

(1) THE CONTRACTOR SHALL FURNISH AND INSTALL GATE SYSTEM TO EXISTING MASONRY STRUCTURE AND NOT MORE THAN 4" FROM EXISTING FENCE.

(2) THE CONTRACTOR SHALL INSTALL ACCESS CONTROL TERMINAL TO EXTERIOR WALL IN CLOSE PROXIMITY TO GATE SYSTEM.

(3) THE GATE UNIT SHALL BE INTERFACED WITH THE ACCESS CONTROL SYSTEM AND BE SECURED BY A FAIL-SECURE SYSTEM.

(4) GATE PICKETS SHALL BE SPACED FOR A 3 3/4" TYPICAL OPENING.

SHEET NUMBER 15

QUACHITA

REAR ENTRANCE

FOR INFORMATIONAL PURPOSES ONLY

F-15

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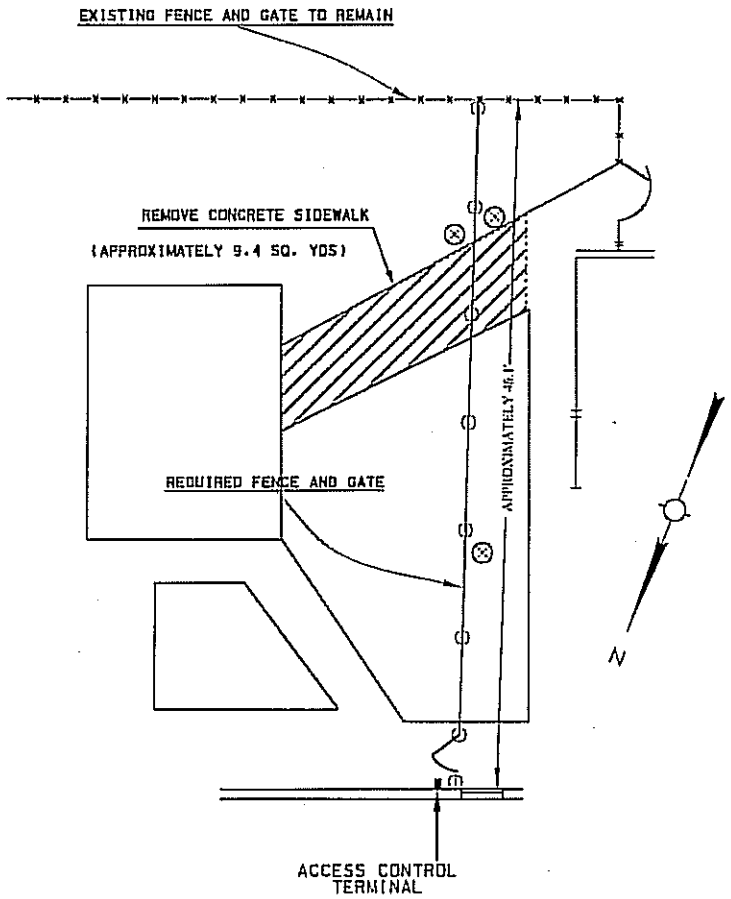

EAST BREEZEWAY ENTRANCE

(1) THE CONTRACTOR SHALL REMOVE SIDEWALK AND GRADE SURFACE FOR FENCE. SIDEWALK SHALL BE SAW CUT AT REMOVAL JOINTS.
(TO BE PAID UNDER S-001, SITE CONSTRUCTION)

(2) THE CONTRACTOR SHALL FURNISH AND INSTALL FENCE AND GATE SYSTEM TO EXISTING MASONRY AND NOT MORE THAN 4" FROM EXISTING FENCE.

(3) THE CONTRACTOR SHALL INSTALL ACCESS CONTROL TERMINAL TO EXTERIOR WALL IN CLOSE PROXIMITY TO GATE SYSTEM.

(4) THE GATE UNIT SHALL INTERFACE WITH THE ACCESS CONTROL SYSTEM AND BE SECURED BY A FAIL-SECURE SYSTEM

(5) EXIT DEVICE SHALL BE ADA COMPLIANT AND NOT INHIBIT EGRESS FROM THE FACILITY.

(6) GATE PICKETS SHALL BE SPACED FOR A 3 3/4" TYPICAL OPENING.

SEE SHEET 17 FOR GATE AND FENCE DETAILS.

SHEET NUMBER 16

OUACHITA

EAST BREEZEWAY ENTRANCE

E-16

EAST BREEZE WAY
DETAILS

QUACHITA

GATE DETAILS
N.T.S.

FENCE DETAILS
N.T.S.

REFERENCE	LOCATION DESCRIPTION
1	CREDIT UNION INTERIOR DOOR
2	CREDIT UNION EXTERIOR DOOR
3	LOBBY / RECEPTIONIST INTERIOR DOOR
4	DISTRICT ADMIINSTRATIOR'S EXTERIOR DOOR
5	AREA ENGINEER'S HALLWAY EXTERIOR DOOR

ALL DOORS AND FRAMES SHALL BE PAINTED HOLLOW METAL.

DOOR SCHEDULE

REFERENCE	NO. LEAVES	SIZE DIMENSIONS	U.L. RTG. DR. & FR.	DOOR INT/EXT	GLASS TYPE	HDWR SET #	DESCRIPTION
1	SINGLE	REFER TO ELEVATION SHEET 6	NA	INTERIOR	T	01	INSULATED HOLLOW METAL DOOR & FRAME
2	SINGLE	REFER TO ELEVATION SHEET 7	1-HR	EXTERIOR	T	02	FIRE RATED EXTERIOR, INSULATED METAL DOOR & FRAME
3	SINGLE	REFER TO ELEVATION SHEET 9	NA	INTERIOR	T	01	INSULATED HOLLOW METAL DOOR & FRAME
4	SINGLE	REFER TO ELEVATION SHEET 13	1-HR	EXTERIOR	-	03	FIRE RATED EXTERIOR, INSULATED METAL DOOR & FRAME
5	SINGLE	REFER TO ELEVATION SHEET 13	1-HR	EXTERIOR	T	04	FIRE RATED EXTERIOR, INSULATED METAL DOOR & FRAME

DESIGNED FED DEP
DETAILED MSH
CHECKED ALG
DATE

QUACHITA

DOOR SCHEDULE

SHEET NUMBER 18

605-01-0075

FOR INFORMATIONAL PURPOSES ONLY

E-18

20-JUL-2009 16:53

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DOOR HARDWARE SCHEDULE

HARDWARE SET: 01
DOOR NUMBERS: 1 & 3
EACH TO HAVE:

3	EA	HINGES	FBB179 4.5 X 4.5	626	STANLEY
1	EA	MORTISE LOCK	8705 LN X AUR	626	YALE
1	EA	ELECTRIC STRIKE	7100	630	HES
1	EA	CLOSER	3300	689	YALE
1	EA	FLOOR STOP	440	626	ROCKWOOD

HARDWARE SET: 02
DOOR NUMBERS: 2
EACH TO HAVE:

3	EA	HINGES	FBB179 4.5 X 4.5	626	STANLEY
1	EA	EXIT DEVICE	7100 X 629F	630	YALE
1	EA	CYLINDER	1190	626	YALE
1	EA	CLOSER	3300	689	YALE
1	EA	FLOOR STOP	462	BLK	ROCKWOOD
1	EA	SWEEP	346 X 36	689	PEMKO
1	EA	WEATHER STRIP	303AV - 36X84	689	PEMKO
1	EA	THRESHOLD	2085AV - 36	689	PEMKO

HARDWARE SET: 03
DOOR NUMBERS: 4
EACH TO HAVE:

3	EA	HINGES	FBB179 4.5 X 4.5	626	STANLEY
1	EA	EXIT DEVICE	7100 X 629F	630	YALE
1	EA	CYLINDER	1190	626	YALE
1	EA	ELECTRIC STRIKE	4500	630	HES
1	EA	CLOSER	3300	689	YALE
1	EA	FLOOR STOP	462	BLK	ROCKWOOD
1	EA	SWEEP	346 X 36	689	PEMKO
1	EA	WEATHER STRIP	303AV - 34X84	689	PEMKO
1	EA	THRESHOLD	2085AV - 36	689	PEMKO

HARDWARE SET: 04
DOOR NUMBERS: 5
EACH TO HAVE:

3	EA	HINGES	FBB179 4.5 X 4.5	626	STANLEY
1	EA	EXIT DEVICE	7100 X 629F	630	YALE
1	EA	CYLINDER	1190	626	YALE
1	EA	ELECTRIC STRIKE	4500	630	HES
1	EA	CLOSER	3300	689	YALE
1	EA	FLOOR STOP	462	BLK	ROCKWOOD
1	EA	SWEEP	346 X 36	689	PEMKO
1	EA	WEATHER STRIP	303AV - 36X84	689	PEMKO
1	EA	THRESHOLD	2085AV - 36	689	PEMKO

DATED 07/21/09 06:48:39

STATE PROJECT	PARISH	SHEET NO.
605-01-0075	DISTRICT 05	20

SUMMARY OF ESTIMATED QUANTITIES

ITEM NO.	ITEM	UNIT	QUANTITY S.P. NO. 605-01-0075	TOTAL QUANTITY
S-001	SITE CONSTRUCTION	LUMP	LUMP	
S-002	FENCE & GATES	LUMP	LUMP	
S-003	WOOD & PLASTICS	LUMP	LUMP	
S-004	THERMAL & MOISTURE PROTECTION	LUMP	LUMP	
S-005	DOORS & WINDOWS	LUMP	LUMP	
S-006	FINISHES	LUMP	LUMP	
S-007	ELECTRICAL	LUMP	LUMP	
S-008	ACCESS CONTROL SYSTEM	LUMP	LUMP	

FOR INFORMATIONAL PURPOSES ONLY

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

CONSTRUCTION PROPOSAL INFORMATION FOR

STATE PROJECT NO. 605-01-0075
DISTRICT 05 BUILDING SECURITY PROJECT
PHASE 1
OUACHITA PARISH

FOR INFORMATIONAL PURPOSES ONLY

BID BOND

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

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

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

The condition of this obligation is such that, whereas the Principal has submitted a bid to the Department on a contract for the construction of **STATE PROJECT NO. 605-01-0075, DISTRICT 05 BUILDING SECURITY PROJECT PHASE 1,OUACHITA PARISH,** if the bid is accepted and the Principal, within the specified time, enters into the contract in writing and gives bond with Surety acceptable to the Department for payment and performance of said contract, this obligation shall be void; otherwise to remain in effect.

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

_____
Surety

By _____ (Seal)
Agent or Attorney-in-Fact

_____
Typed or Printed Name

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

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

07/07
Form CS-2A

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
SCHEDULE OF ITEMS

LEAD PROJECT: 605-01-0075
OTHER PROJECTS:

ITEM NUMBER	APPROXIMATE QUANTITY	UNIT OF MEASURE	PAY ITEM UNIT PRICE (IN WORDS, INK OR TYPED)
S-001	LUMP	LUMP SUM	SITE CONSTRUCTION _____ DOLLARS _____ CENTS
S-002	LUMP	LUMP SUM	FENCE & GATES _____ DOLLARS _____ CENTS
S-003	LUMP	LUMP SUM	WOOD & PLASTICS _____ DOLLARS _____ CENTS
S-004	LUMP	LUMP SUM	THERMAL & MOISTURE PROTECTION _____ DOLLARS _____ CENTS
S-005	LUMP	LUMP SUM	DOORS & WINDOWS _____ DOLLARS _____ CENTS
S-006	LUMP	LUMP SUM	FINISHES _____ DOLLARS _____ CENTS

LEAD PROJECT: 605-01-0075
OTHER PROJECTS:

ITEM NUMBER	APPROXIMATE QUANTITY	UNIT OF MEASURE	PAY ITEM UNIT PRICE (IN WORDS, INK OR TYPED)
S-007	LUMP	LUMP SUM	ELECTRICAL _____ DOLLARS _____ CENTS
S-008	LUMP	LUMP SUM	ACCESS CONTROL SYSTEM _____ 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(S). **605-01-0075**

NAME OF PROJECT **DISTRICT 05 BUILDING SECURITY PROJECT PHASE 1**

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.

FOR INFORMATIONAL PURPOSES ONLY

STATE PROJECT NO(S). **605-01-0075**

BIDDER SIGNATURE REQUIREMENTS (APPLICABLE TO ALL PROJECTS)

THIS BID FOR THE CAPTIONED PROJECT IS SUBMITTED BY:

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

If Joint Venture, Name of First Partner

(Louisiana Contractor's License Number of Bidder or First Partner to Joint Venture)

(Business Street Address)

(Business Mailing Address, if different)

(Area Code and Telephone Number of Business)

(Telephone Number and Name of Contact Person)

(Telecopier Number, if any)

If Joint Venture, Name of Second Partner

(Louisiana Contractor's License Number of Second Partner to Joint Venture)

(Business Street Address)

(Business Mailing Address, if different)

(Area Code and Telephone Number of Business)

(Telephone Number and Name of Contact Person)

(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)

(Printed Name)

(Title)

(Date of Signature)

(Signature)

(Printed Name)

(Title)

(Date of Signature)

CONTRACTOR'S TOTAL BASE BID $ _____

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

CS-14AA
08/06