

**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT  
EQUIPMENT AND PROCUREMENT DIVISION  
BID INVITATION**

Bid Number:                     #M-06-030P                    

**BID OPENING LOCATION:**  
AHTD Equipment and  
Procurement Division  
11302 W. Baseline Road  
Little Rock, AR 72209

**MAIL TO:**  
AHTD Equipment and  
Procurement Division  
P.O. Box 2261  
Little Rock, AR 72203

**DELIVER TO:**  
AHTD Equipment and  
Procurement Division  
11302 W. Baseline Road  
Little Rock, AR 72209

Bid Opening Date:   August 30, 2005   Time:   11:00 a.m.  

Sealed bids for furnishing the commodities and/or services described below, subject to the Conditions on Page 2 of this Bid Invitation will be received at the above-noted mail and delivery locations until the above-noted bid opening date and time, and then publicly opened at the above-noted bid opening location. **Bids must be submitted on this form, with attachments when appropriate, or bids will be rejected. Late bids and unsigned bids will not be considered.**

In compliance with this Bid Invitation and subject to all the Conditions thereof, the undersigned offers and agrees to furnish any and all items upon which prices are quoted, at the price set opposite each item.

Company Name: \_\_\_\_\_

Name (Type or Print): \_\_\_\_\_

Address: \_\_\_\_\_

Title: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Federal Tax ID or Social Security No.: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

**Signature:** \_\_\_\_\_  
Signature must be original (not photocopied) and in ink. Unsigned bids will be rejected.

| Item No. | Description  | Quantity | Unit | Unit Price | Amount |
|----------|--|----------|------|------------|--------|
| 1.       | <p><b>50' Diameter Salt Storage Dome</b></p> <p>To meet the requirements of Arkansas State Highway and Transportation Department Specifications and Plans attached to and made a part of this bid.</p> <p>FOB: District 3 Headquarters, 2911 Hwy. 29 North, Hope, Arkansas 71801</p> <p>If any literature and/or specifications of items conflict with AHTD specifications, the conflict(s) shall be specifically noted, corrected and submitted with the bid.</p> <p>Bid price shall include all labor, materials, and equipment necessary to perform the work as specified, and shall further include all licenses, fees, permits, royalties, and <u>all taxes</u>. Bid price shall represent full compensation for completion of the work. This provision supersedes Condition 4 on Page 2 of Bid Invitation. Payment will be made in accordance with Arkansas Highway &amp; Transportation Department Standard Specifications and Applicable Special Provisions.</p> <p>Subsection 105.04, 108.07, 109.01 and 109.02 of the AHTD Standard Specifications for Highway Construction, Edition of 2003, will be in effect. (Specifications are accessible on our web site at <a href="http://www.arkansashighways/contract/progcon/general/stdspecs.htm">www.arkansashighways/contract/progcon/general/stdspecs.htm</a>.)</p> <p><b>Bid Bond</b> in the amount of 5% of total bid price required of all bidders at time of bid opening or bid will be rejected. <b><u>Personal and company checks are not acceptable as Bid Bonds.</u></b> See Condition 3 on page 2 of Bid Invitation.</p> <p><b>Performance Bond</b> <u>only</u> (no checks of any kind allowed) in the amount of 100% of total bid price will be required of successful bidder prior to providing goods/services. See Condition 3 on page 2 of Bid Invitation.</p> <p>The successful bidder will be required to complete job within 90 days after notice to begin from District Engineer.</p> <p>Bids and Specifications are available on-line by going to the AHTD Web Site – <a href="http://www.arkansashighways.com">www.arkansashighways.com</a> and clicking on “Bids/Contracts”. Tabulations will also be available at this site within 72 hours after bid opening. If you have any questions, call this office at 501-569-2667.</p> <p>Arkansas Contractor’s License No. _____.<br/>Current Arkansas Contractor’s Licence Number must be listed or bid will be rejected<br/>(A.C.A. ¶17-25-101 <i>et.seq.</i>).</p> | 1        | ea.  |            |        |
|          | (33-0453) 55-10  |          |      | TOTAL BID  |        |

## STANDARD BID CONDITIONS

## M-06-030P

1. **ACCEPTANCE AND REJECTION:** The Arkansas State Highway and Transportation Department (AHTD) reserves the right to reject any or all bids, to accept bids in whole or in part (unless otherwise indicated by bidder), to waive any informalities in bids received, to accept bids on materials or equipment with variations from specifications where efficiency of operation will not be impaired, and to award bids to best serve the interest of the State.
2. **PRICES:** Unless otherwise stated in the Bid Invitation, the following will apply: (1) unit prices shall be bid, (2) prices should be stated in units of quantity specified (feet, each, lbs., etc.), (3) prices must be F.O.B. destination specified in bid, (4) prices must be firm and not subject to escalation, (5) bid must be firm for acceptance for 30 days from bid opening date. In case of errors in extension, unit prices shall govern. Discounts from bid price will not be considered in making awards.
3. **BID BONDS AND PERFORMANCE BONDS:** If required, a **Bid Bond** in the form of a cashier's check, certified check, or surety bond issued by a surety company, in an amount stated in the Bid Invitation, must accompany bid. **Personal and company checks are not acceptable as Bid Bonds.** Failure to submit a Bid Bond as required will cause a bid to be rejected. The Bid Bond will be forfeited as liquidated damages if the successful bidder fails to provide a required Performance Bond within the period stipulated by AHTD or fails to honor their bid. Cashier's checks and certified checks submitted as Bid Bonds will be returned to unsuccessful bidders; surety bonds will be retained. The successful bidder will be required to furnish a **Performance Bond** in an amount stated in the Bid Invitation and in the form of a cashier's check, certified check, or surety bond issued by a surety company, unless otherwise stated in the Bid Invitation, as a guarantee of delivery of goods/services in accordance with the specifications and within the time established in the bid. **Personal and company checks are not acceptable as Performance Bonds.** In some cases, a cashier's check or certified check submitted as a Bid Bond will be held as the Performance Bond of the successful bidder. Cashier's checks or certified checks submitted as Performance Bonds will be refunded shortly after payment has been made to the successful bidder for completion of all terms of the bid; surety bonds will be retained. Surety bonds must be issued by a surety company authorized to do business in Arkansas, and must be signed by a Resident Local Agent licensed by the Arkansas State Insurance Commissioner to represent that surety company. Resident Agent's Power-of-Attorney must accompany the surety bond. Certain bids involving labor will require Performance Bonds in the form of surety bonds only (no checks of any kind allowed). In such cases, the company issuing the surety bond must comply with all stipulations herein and must be named in the U. S. Treasury listing of companies holding Certificates of Authority as acceptable sureties on Federal Bonds and as acceptable reinsuring companies. Any excess between the face amount of the bond and the underwriting limitation of the bonding company shall be protected by reinsurance provided by an acceptable reinsuring company. Annual Bid and Performance Bonds on file with E & P Division must have sufficient unencumbered funds to meet current bonding requirements, or the bid will be rejected, unless the balance is submitted as set forth above, prior to bid opening.
4. **TAXES:** The AHTD is not exempt from Arkansas State Sales and Use Taxes, or local option city/county sales taxes, when applicable, and bidders are responsible to the State Revenue Department for such taxes. These taxes should not be included in bid prices, but where required by law, will be paid by the AHTD as an addition thereto, and should be added to the billing to the AHTD. The AHTD is exempt from Federal Excise Taxes on all commodities except motor fuels; and excise taxes should not be included in bid prices except for motor fuels. Where applicable, tax exemption certificates will be furnished by the AHTD.
5. **"ALL OR NONE" BIDS:** Bidders who wish to bid "All or None" on two or more items shall so stipulate on the face of bid sheet; otherwise, bid may be awarded on an individual item basis.
6. **SPECIFICATIONS:** Complete specifications should be attached for any substitution or alternate offered, or where amplification is necessary. Bidder's name must be placed on all attachments to the bid.
7. **EXCEPTIONS TO SPECIFICATIONS:** Any exceptions to the bid specifications must be stated in the bid. Any exceptions to manufacturer's published literature must be stated in the bid, or it will be assumed that bidder is bidding exactly as stated in the literature.
8. **BRAND NAME REFERENCES:** All brand name references in bid specifications refer to that commodity or its equivalent, unless otherwise stated in Bid Invitation. Bidder should state brand or trade name of item being bid, if such name exists.
9. **FREIGHT:** All freight charges should be included in bid price. Any change in common carrier rates authorized by the Interstate Commerce Commission will be adjusted if such change occurs after the bid opening date. Receipted common carrier bills that reflect ICC authorized rate changes must be furnished.
10. **SAMPLES, LITERATURE, DEMONSTRATIONS:** Samples and technical literature must be provided free of any charge within 14 days of AHTD request, and free demonstrations within 30 days, unless AHTD extends time. Failure to provide as requested within this period may cause bid to be rejected. Samples, literature and demonstrations must be substantially the same as the item(s) being bid, unless otherwise agreed to by AHTD. Samples that are not destroyed will be returned upon request at bidders expense. Samples from successful bidders may be retained for comparison with items actually furnished.
11. **GUARANTY:** Unless otherwise indicated in Bid Invitation, it is understood and agreed that any item offered or shipped on this bid shall be newly manufactured, latest model and design, and in first class condition; and that all containers shall be new, suitable for storage or shipment and in compliance with all applicable laws relating to construction, packaging, labeling and registration.
12. **BACKORDERS OR DELAY IN DELIVERY:** Backorders or failure to deliver within the time required may constitute default. Vendor must give written notice to the AHTD, as soon as possible, of the reason for any delay and the expected delivery date. The AHTD has the right to extend delivery if reasons appear valid. If reason or delivery date is not acceptable, vendor is in default.
13. **DEFAULT:** All commodities furnished will be subject to inspection and acceptance by AHTD after delivery. Default in promised delivery or failure to meet specifications authorizes the AHTD to cancel award or any portion of same, to reasonably purchase commodities or services elsewhere and to charge full increase, if any, in cost and handling to defaulting vendor. Applicable bonds may be forfeited.
14. **ETHICS:** *"It shall be a breach of ethical standards for a person to be retained, or to retain a person, to solicit or secure a State contract upon an agreement of understanding for a commission, percentage, brokerage, or contingent fee, except for retention of bona fide employees or bona fide established commercial selling agencies maintained by the contractor for the purpose of securing business."* (Arkansas Code, Annotated, Section 19-11-708).

**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT  
SPECIFICATIONS  
JOB 3-804  
DOME STYLE SALT STORAGE BUILDING  
DISTRICT 3 AREA HEADQUARTERS  
HOPE, ARKANSAS**

**SCOPE**

Work under this item shall consist of the furnishing and construction of a Dome Style Salt Storage Building designed and constructed at the specified location, complete as specified hereinafter, for the purpose of stockpiling de-icing material to be used in the ice and snow control program for the Arkansas State Highway and Transportation Department. These Specifications cover the furnishing of all materials, labor, tools, equipment, drayage, rigging, fees, permits and any and all incidental items required for the complete furnishing and construction of a Dome Style Salt Storage Building, as indicated on the Plans, as called for in these Specifications, or as directed by the Engineer.

**GENERAL CONDITIONS**

The applicable portions of the General Provisions of the Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, Edition of 2003, as amended by Supplemental Specifications, together with applicable Special Provisions, shall govern where appropriate.

**LOCAL CONDITIONS**

Bidders are required to visit the site prior to submission of proposal to familiarize themselves with local conditions, including general characteristics of the site, and accessibility of the work.

**PERMITS, INSPECTIONS, AND TAXES**

The Contractor, if awarded a Contract for the furnishing and construction of a Dome Style Salt Storage Building, shall give all necessary notices; obtain and pay for all permits, licenses, certificates, inspection and other legal fees required and other costs in connection with his work, both permanent and temporary, including utility taps and/or connections; file all necessary plans; prepare all documents and obtain all necessary approvals of all governmental departments having jurisdiction; and obtain required certificates of inspection for his work and deliver same to the Department.

The Contractor shall include in the work, without extra cost to the Department, all labor materials, services, apparatus, drawings, and related items in order to comply with all laws, ordinances, rules and regulations, whether or not shown on the Plans and/or in these Specifications.

The Contractor shall include in his bid all State Sales Tax, Social Security Taxes, State Unemployment Compensation Insurance, and all other such items of like nature. It is the intent that the bid shall represent the total cost to the Department of all work included in this Contract.

#### **EXAMINATION OF PLANS AND SPECIFICATIONS**

Before submitting a proposal, each bidder shall examine the Plans and Specifications and shall become fully informed as to the extent and character of the work to be performed. No consideration will be given to alleged misunderstandings of materials to be furnished or work required under this contract. Submission of a proposal is an implied consent to the conditions of the Plans and Specifications.

#### **SUBSTITUTING OF MATERIALS**

It is intended that the Contractor may have the option of substituting a material or appliance that will perform the function or service equally as well as the one named. The Engineer shall be given written notice two (2) weeks prior to the proposed use of a substitution so that a decision can be made as to the equal merits of the two (2) products.

#### **ACCESS TO THE WORK**

The Engineer or his representatives shall have access to the work at all times, shall be permitted to approach, enter or examine all stages or phases of the work as it progresses and shall have the authority to reject work which is defective in workmanship or material.

#### **REQUIRED SUPERVISION**

The Contractor shall keep on the job at all times, when work is in progress, a competent superintendent satisfactory to the Engineer. The superintendent shall represent the Contractor in his absence and all instructions given to him shall be binding on the Contractor. Workmanship shall be by craftsmen skilled in their trade and shall be in accordance with the best standard practice.

#### **QUALITY OF MATERIAL**

All material, appliances or appurtenances furnished under these Specifications shall be new and unused and shall be free from defects and imperfections. Any material, appliance or appurtenance thereto found to be defective shall be replaced by the Contractor at no cost to the Arkansas Highway and Transportation Department. All material shall comply with the requirements and applicable provisions of the Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, Edition of 2003, applicable Special Provisions and these Specifications. Any material not covered in the Specifications above shall be approved by the Engineer.

## **INSURANCE**

The Contractor shall carry Workmen's Compensation Insurance as required by Arkansas Law. In case any hazardous occupations are required for the execution of the work which are not covered by the above Insurance, special Employer's Liability Policies shall be obtained to cover workers engaged in such hazardous occupations. The Contractor shall procure and maintain, during the life of the Contract, Contractor's Public Liability Insurance in the amount of not less than \$250,000/\$500,000 limits, and Property Damage Insurance in the amount of not less than \$250,000/\$500,000 limits.

## **ACCIDENT PREVENTION**

Precaution shall be exercised at all times for the protection of persons and property. The safety provisions of applicable laws and building and construction codes shall be observed. Machinery, equipment and other hazards shall be guarded in accordance with safety provisions of the Manual of Accident Prevention in Construction, published by the Associated General Contractors of America, to the extent that such provisions are not in contravention of applicable laws. The Contractor shall be responsible for any damage which may be caused by workmen during the performance of the work.

## **DRAWINGS AND SPECIFICATIONS**

- A. Bidders shall submit copies of the manufacturer's descriptive literature, proposal drawings, capacity computations and a cross-section through the proposed structure.
- B. The lowest acceptable bidder, if awarded a Contract for the furnishing and construction of a Dome Style Salt Storage Building, shall subsequently be required to furnish five (5) copies of the final construction drawings and specifications, signed and sealed by a registered professional engineer.

## **QUALITY ASSURANCE**

- A. The Vendor must be able to demonstrate a successful completion record as a pre-engineered Dome Style Salt Storage Building supplier or manufacturer.
- B. Erection Subcontractors must have adequate previous experience in this specialized work and must be certified by the Vendor as a qualified erector.
- C. The Contractor shall have a minimum experience of completing at least three (3) similar buildings. Contractor shall include name, address and telephone numbers of other owners of the same or similarly constructed buildings supplied and constructed by him.

## **DELIVERY, PROTECTION OF MATERIALS, AND ERECTION**

- A. Delivery, protection and acceptance of materials at the work site is the Contractor's responsibility, including any losses due to theft, vandalism or accidental damage.

- B. The building furnished by the Contractor is to be erected and assembled at the work site and in accordance with Plans and Specifications as approved by the Department. The Contractor shall be responsible for the safe unloading and storage of materials and building components. It will also be the responsibility of the Contractor to make minor adjustments in the footings and foundation as deemed necessary and as directed by the Engineer.

#### **CLEAN-UP**

The Contractor shall not allow any waste material or rubbish caused by his employees to accumulate in or about the premises but shall promptly remove same. At completion of the work, all rubbish, tools, scaffolding and surplus materials shall be removed and the Contractor shall leave the site clean and ready to use.

#### **WARRANTY**

All materials and workmanship shall be warranted against defects for a period of one (1) year from date of acceptance by the Arkansas Highway and Transportation Department, with a ten (10) year warranty on the structural integrity of the Dome, and a twenty (20) year warranty on the exterior waterproofing. The Warranty of the materials by the supplier shall be in writing to the Contractor who will forward copies to the Department for a permanent record.

#### **MATERIALS AND CONSTRUCTION METHODS**

##### GENERAL

- A. Salt Storage Dome shall be a pre-engineered high quality dome structure, as manufactured by Dome Corporation of America, 5450 East Street, Saginaw, Michigan 48601; Domes America, Inc., 250 West St. Charles Road, Villa Park, Illinois 60181; or approved equivalent.
- B. The dome structure shall be approximately 50'-0" outside diameter by approximately 27'-6" high and shall have storage capacity of 975 tons (minimum) of salt. The capacity shall be calculated based upon salt with a bulk density of 80 pounds per cubic foot and a 32° angle of repose.
- C. The dome structure shall be erected on an asphalt pad to be constructed by the Department and which is not a part of this Contract.
- D. TOLERANCES - The vertical height of the dome shall not vary more than plus or minus 2'-0" from the 27'-6" shown on the Plans. All dimensional tolerances should be considered in the design of the dome.

##### STRUCTURAL DESIGN

- A. The structure shall be self-supporting and shall have no internal supports which would hamper loading and unloading of de-icing material.
- B. Structural design calculations and detailed construction drawings and specifications shall be prepared under the direction of and certified by a registered professional engineer specializing in structural engineering.
- C. BASIC DESIGN CRITERIA:
  - 1. Snow Load - 40 psf
  - 2. Wind Load - 90 mph
  - 3. The base of the dome wall shall have a minimum thickness of 12" of reinforced concrete to the height of 8'-0".
- D. ENTRY WAY - The entry way shall accommodate a 15'x15' opening and shall extend 10'-0" from the edge of the ring beam foundation.

#### CAST-IN-PLACE CONCRETE

- A. All concrete used for footings, foundation and pier or post supports below and above grade shall have a minimum 28 day compressive strength of 3000 psi. Approved mix designs in accordance with Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, Edition of 2003 may be used.
- B. Portland Cement shall be in accordance with ASTM-C150-74.
- C. Air entrainment shall be 4% to 7% by volume.
- D. Mixing water shall be clean and free from oil, acid and injurious amounts of vegetable matter, alkalies or other salts.
- E. It shall be the Contractor's responsibility to check all dimensions and accuracy of the form-work and reinforcing steel prior to placing the concrete. The Contractor shall follow the normal and recommended practice for the placing and protection of the concrete.
- F. The concrete shall be tested for strength on a periodic basis with a Windsor Test Probe. Tests should occur at 7, 14 and 28 days as directed by the Engineer. The Contractor shall conduct the tests with his equipment and tests shall be observed by the Engineer or his representative.

#### BASE WALL

- A. The reinforced concrete Base Wall shall be 12" thick and 8'-0" above finished grade. The Base Wall shall be a reinforced concrete tension ring, 1' thick with reinforcing

steel designed to withstand the pressure of stored material and the dome structure dead and live loads.

- B. Reinforcing steel shall be deformed bars conforming to ASTM-A618, Grade 60, clean and free from loose rust, scale or coating that will reduce bond.
- C. Grade beam shall be excavated to a minimum of 36" below grade at entry way threshold only, as indicated on the Plans and in accordance with manufacturer's recommendations.
- D. Anchor bolts shall be hot dipped galvanized conforming to ASTM-A307 yield strength  $F_y = 36$  ksi.
- E. Concrete mix shall be in accordance with ASTM-C150-74 or Class S(AE) and shall have a minimum 28 day compressive strength of 3000 psi. Concrete shall be air entrained 4% to 7% by volume.
- F. INTERIOR AND EXTERIOR CONCRETE PROTECTIVE TREATMENT - In order to protect the reinforcement bars from chemical attack, the entire interior concrete surface of the dome shall be coated with a silane solution that is 40% by weight isobutyltrialkoxo silane in ethyl alcohol, and allowed to dry in accordance with manufacturer's recommendations. The aforementioned coating shall be applied after the concrete has been allowed to cure a minimum of 14 days. The protective treatment shall be capable of completely preventing the intrusion of rain/water into the building and shall be applied in accordance with the manufacturer's specifications.

#### PRE-FABRICATED STRUCTURE

The dome structure shall be constructed of pre-engineered panels. These panels as well as entry way trusses, canopy walls, etc., shall be as indicated on the Plans and shall be in accordance with the following:

- A. Panel, entry way truss and canopy wall framing members shall be SPF species or better, Grade #2 or better, kiln dried to a maximum 15% moisture content. All panels, entry way trusses and canopy walls shall be framed 16" on center and assembled with galvanized nails. All lumber shall conform to American Softwood Lumber Standard PS-20-83.
- B. Plywood sheathing shall be 1/2" (minimum) Douglas fir exterior plywood, Structural Grade #1, or approved equivalent, and shall be agency rated, conforming to PS-1-83. Sheathing shall be glued to panel framing and mechanically fastened with 1-1/2", #16 galvanized staples at 6" on center.
- C. Glue shall be Liquid Resorcinol-Phenolic Formaldehyde Resin, or approved equivalent, mixed and applied in accordance with manufacturer's instructions.

- D. Hardware shall be 5/8" diameter x 3-1/2" (minimum) hot dipped galvanized carriage bolts conforming to ASTM-A037. Nails shall be galvanized 16P common nails.
- E. Sill plates shall be pentachlorophenol treated pine, or approved equivalent.
- F. Panels shall be bolted, glued between edges with water resistant construction adhesives, and clipped with tension clips on all common edges.
- G. Canopy walls, exterior and interior, shall be painted T-111 plywood siding or approved equivalent. Color to be as selected by the Department.
- H. Assembly and erection of pre-fabricated panels, installation of entry way trusses, canopy walls and all related work shall be in accordance with manufacturer's drawings and specifications. Adjustments may be made on site if found to be necessary and shall be performed in a workmanlike manner conforming to good building practices.

#### MOISTURE PROTECTION-ORGANIC/FIBERGLASS MAT ASPHALT SHINGLES

For moisture protection, all surfaces designated for shingles shall have asphalt roofing shingles installed and shall be in accordance with the following:

##### A. ROOFING:

1. Shingles shall be self-sealing tab asphalt shingle with organic or fiberglass mat and shall carry a twenty-five (25) year manufacturer's prorated warranty. The shingles shall be installed with large flathead, galvanized roofing nails in accordance with shingle manufacturer's specifications.
2. Underlayment shall be non-perforated, 15 lbs. per 100 sq. ft. asphalt saturated felt, 36" or 32" width conforming to ASTM D-226-68. The felt shall be attached directly to the plywood sheathing with large flat head, galvanized roofing nails in accordance with felt manufacturer's specifications.
3. The color of the shingles shall be as selected by the Department.
4. Flashing, including drip flashing, shall be 24 gage painted aluminum or non-corrosive metal.
5. Gravity roof ventilators in top of building to provide adequate ventilation and net free area of 1/600th of net floor area shall be installed. Roof vents shall be aluminum.

##### B. CONSTRUCTION:

1. Surfaces to be covered with asphalt roofing shall be smooth and free from defects of every description and shall be dry and clean from dirt, rubbish and

other foreign materials before the roofing is installed. All projecting nails shall be set flush to the sheathing.

2. Roofing shall be installed in strict accordance with the manufacturer's instructions.
3. Felt shall be applied in such a manner that each panel joint is over-lapped to prevent leakage.
4. Flashing shall be installed to completely prevent the intrusion of rain/water into the building and where shown on approved drawings.
5. Roof vents and other openings in the roof shall be properly installed in such a manner as to prevent leakage.

#### FINISHES

- A. GENERAL - All exposed exterior wood surfaces, including interior canopy walls, shall be painted. All painting shall be performed within the actual and anticipated ambient temperature ranges specified by the paint manufacturer.
- B. SURFACE PREPARATION - Surfaces to be painted shall be sanded smooth, shall be free of all dust and dirt and must be completely dry.
- C. PAINT:
  1. Paint shall be first quality as manufactured by Sherwin Williams, Pittsburgh Paints, Devoe Paint, or approved equivalent.
  2. Paint shall be semi-gloss, latex exterior house paint.
  3. Color shall be as selected by the Department.
- D. APPLICATION:
  1. The paint selected shall be applied in strict compliance with the manufacturer's specifications.
  2. The painting shall consist of one (1) primer coat and two (2) finish coats.
- E. CLEAN-UP:
  1. The Contractor shall be responsible for the removal of all drops or spots of paint on all other surfaces and shall leave the work in a clean and acceptable condition.
  2. All paint cans and debris resulting from the painting operation shall be removed from the site and disposed of legally.

### MISCELLANEOUS STEEL

At the entrance opening, furnish and install two of the following jamb protection devices (one each at the outside corners of the entry way) as indicated on the Plans:

Standard 6", Schedule 40, black steel pipes, 6'-0" above grade, solidly "set-in" and filled with concrete.

### PAINTING

Exterior metal shall be painted with one (1) primer coat and one (1) coat of exterior oil base alkyd, full gloss enamel. Color to be as selected by the Department.

### EXECUTION

All materials and work shall be installed and completed in a workmanlike manner. The Department reserves the right to direct, to the Contractor, the removal and replacement of any items which do not present reasonable appearance. Such removal and replacement shall be at the Contractor's expense.

### ELECTRICAL

- A. The interior of the dome structure shall be illuminated with three (3) high-pressure sodium light fixtures equally spaced around the upper one-third of the structure, or as directed by the Engineer. Light fixtures shall be industrial moisture-proof type for use of this nature with 250 Watt lamps. The fixtures shall be installed so as not to be hidden or obstructed by any building construction and aligned to completely illuminate the full interior of the structure.
- B. The Contractor shall install 100 Amp, 120/240 Volt, lockable, weatherproof panelboard with a main and circuit breakers to control lighting and outlet. The panelboard shall be mounted firmly to the exterior of the concrete wall near the entrance, as indicated on the Plans, or as directed by the Engineer.
- C. All pull-boxes and junction boxes inside the structure shall be PVC, weatherproof and corrosion resistant. They shall be firmly attached to the walls of the structure. The Contractor shall install a surface-mounted switch for controlling interior lights; and a 20 Amp, 120/240 Volt, heavy duty rated receptacle shall be installed near the entry way outside the door, as indicated on the Plans, or as directed by the Engineer.
- D. All conduit from the panelboard to and including the interior of the structure shall be Schedule 40 PVC. Conduit shall not be less than 3/4".
- E. All Electrical shall be in accordance with the National Electrical Code.

**METHOD OF MEASUREMENT**

Dome Style Salt Storage Building, complete, in place and operating, including all subsidiary items, as indicated on the Plans, as called for in these Specifications, or as directed by the Engineer and accepted, will be measured for payment by the "Lump Sum".

**BASIS OF PAYMENT**

Work completed and accepted under this item and measured as provided above will be paid for at the lump sum price bid for "Dome Style Salt Storage Building", which price shall be full compensation for all materials, labor, tools, equipment, machinery, drayage, clean-up, guarantees and any and all incidental items required to complete the work.

**PAY ITEM**

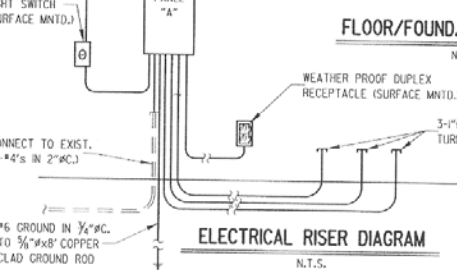
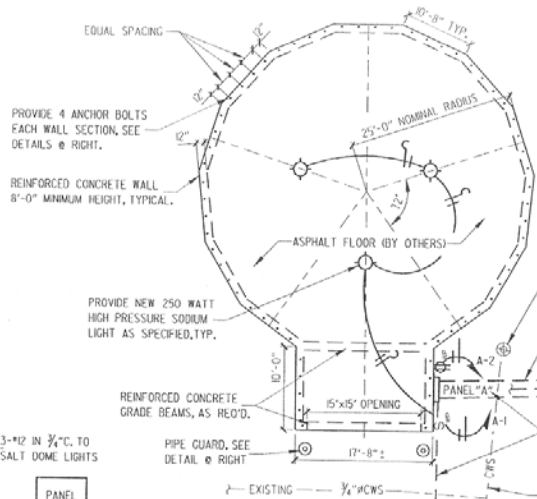
**PAY UNIT**

Dome Style Salt Storage Building

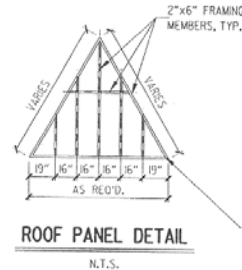
Lump Sum

| DATE REVISION | DATE FILMED | DATE REVISION | DATE FILMED | FED. PROJ. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|---------------|-------------|---------------|-------------|----------------|-------|--------------------|-----------|--------------|
|               |             |               |             | 6              | ARK.  |                    |           |              |
|               |             |               |             | JOB NO.        | 3-804 |                    | 1         | 1            |

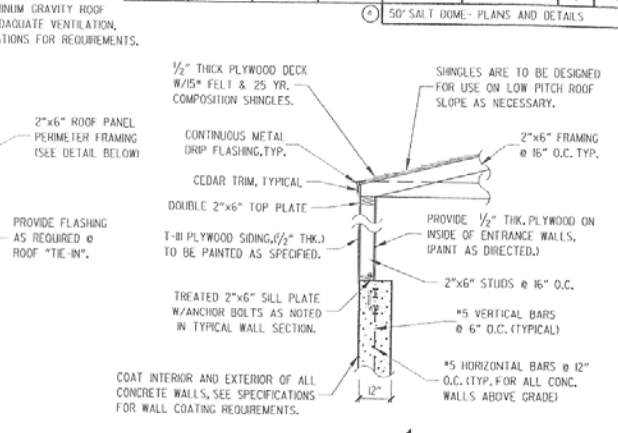
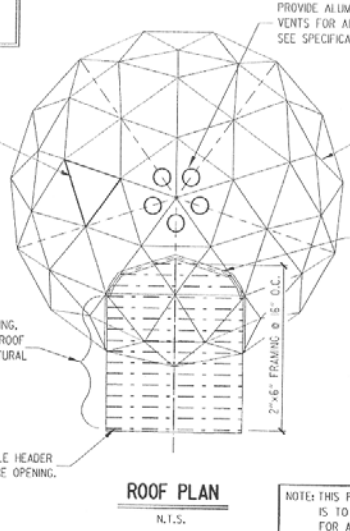
THIS PLAN  
IS NOT DRAWN TO SCALE



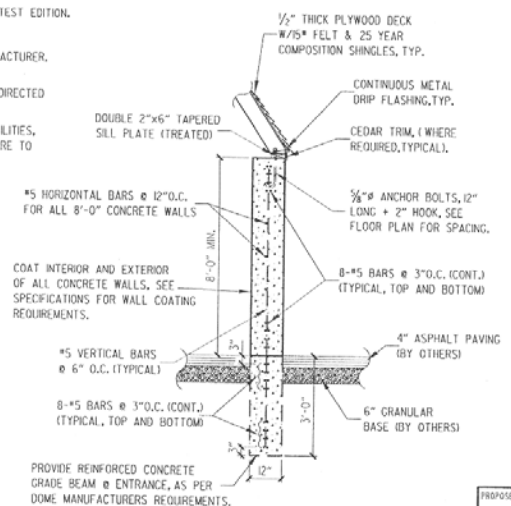
| PANELBOARD SCHEDULE |                |           |                      |                                     |              |                  |
|---------------------|----------------|-----------|----------------------|-------------------------------------|--------------|------------------|
| MARK                | PHASE FEED     | MAIN TYPE | SINGLE POLE BREAKERS | 2POLE BREAKERS                      | MOUNTING     |                  |
| "A"                 | 120/240 3W-5YN | LUGS      | 100A                 | 4-20A; LIGHTS, RECEPTACLES & SPARES | 1-40A; SPARE | EXTERIOR SURFACE |



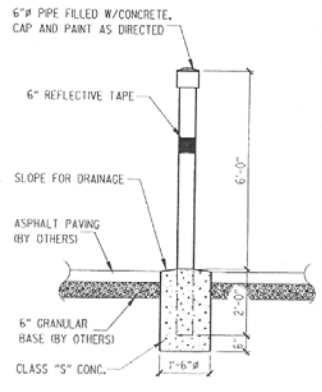
- GENERAL NOTES**
- ALL FLASHING MATERIALS SHALL BE ALUMINUM AND ALL ANCHOR BOLTS, SCREWS, NAILS, ETC. ARE TO BE GALVANIZED.
  - ALL EXTERIOR WOOD IS TO BE PAINTED AS DIRECTED OR SPECIFIED, TYPICAL.
  - ALL ELECTRICAL WORK TO BE IN ACCORDANCE W/ "THE NATIONAL ELECTRICAL CODE", LATEST EDITION.
  - SEE SPECIFICATIONS FOR BUILDING DESIGN CRITERIA.
  - ALL DETAILS AND DIMENSIONS SHOWN ARE APPROXIMATE AND MAY VARY DUE TO MANUFACTURER. ACTUAL SIZES ARE CONTROLLED BY BUILDING STORAGE CAPACITY.
  - THE CONTRACTOR IS TO CONSTRUCT SALT DOME STORAGE BUILDING AT THE LOCATION DIRECTED BY THE ENGINEER.
  - THE CONTRACTOR IS TO BE RESPONSIBLE FOR LOCATING AND AVOIDING ALL EXISTING UTILITIES. (LOCATIONS SHOWN ARE APPROXIMATE). ANY UTILITIES DAMAGED DURING CONSTRUCTION ARE TO BE REPAIRED BY THE CONTRACTOR @ NO ADDITIONAL EXPENSE TO THE A.H.T.D.



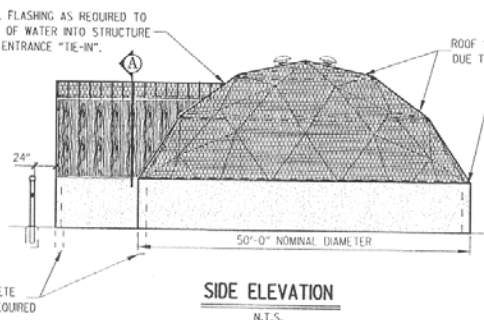
**DETAIL A**  
SCALE: 1/2" = 1'-0"



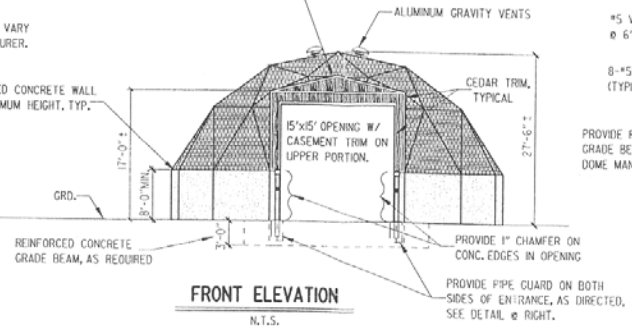
**TYP. WALL SECTION**  
SCALE: 1/2" = 1'-0"



**TYP. PIPE GUARD DETAIL**  
SCALE: 1/2" = 1'-0"



**SIDE ELEVATION**  
N.T.S.



**FRONT ELEVATION**  
N.T.S.

PROPOSED PLANS FOR A.R.I.S.

## DOME STYLE BULK SALT STORAGE BUILDING

HOPE, ARKANSAS

DISTRICT #3 HEADQUARTERS DISTRICT NO. 3 DRAWING NO.

SD-1

DATE: 7-21-05 REVISION:

