



## ARDOT - STANDARD BID CONDITIONS

1. **GENERAL:** Any special terms and conditions included in the invitation for bid override these standard terms and conditions. The standard terms and conditions and any special terms and conditions become part of any contract entered into if any or all parts of the bid are accepted by the Arkansas Department of Transportation (ARDOT).
2. **ACCEPTANCE AND REJECTION:** ARDOT 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.
3. **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.
4. **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 ARDOT or fails to honor their bid. When a bidder claims and can show clear and convincing evidence that a material mistake was made in the bid and was not the bid intended, the bidder may be permitted to withdraw their bid prior to award without forfeiture of bid bond. 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 that is authorized to do business in the State of Arkansas and that is listed on the current United States Department of the Treasury Listing of Approved Sureties. Surety bonds must be executed by a resident or non-resident agent who is licensed by the Arkansas State Insurance Commissioner to represent the surety company executing the bond, and the resident or non-resident agent shall file with the bond the power of attorney of the agent to act on behalf of the bonding company. Certain bids involving labor will require Performance Bonds in the form of surety bonds only (no checks of any kind allowed). These bonds shall not only serve to guarantee the completion of the work, but also to guarantee the excellence of both workmanship and material until the work is finally accepted and the provisions of the Plans, Specifications, and Special Provisions fulfilled. 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.
5. **TAXES:** The ARDOT 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 ARDOT as an addition thereto, and should be added to the billing to the ARDOT. The ARDOT 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 ARDOT.
6. **"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.
7. **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.
8. **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.
9. **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.
10. **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.

11. **SAMPLES, LITERATURE, DEMONSTRATIONS:** Samples and technical literature must be provided free of any charge within 14 days of ARDOT request, and free demonstrations within 30 days, unless ARDOT 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 ARDOT. 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.
12. **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.
13. **BACKORDERS OR DELAY IN DELIVERY:** Backorders or failure to deliver within the time required may constitute default. Vendor must give written notice to the ARDOT, as soon as possible, of the reason for any delay and the expected delivery date. The ARDOT has the right to extend delivery if reasons appear valid. If reason or delivery date is not acceptable, vendor is in default.
14. **DEFAULT:** All commodities furnished will be subject to inspection and acceptance by ARDOT after delivery. Default in promised delivery or failure to meet specifications authorizes the ARDOT 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.
15. **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).
16. **NOTICE OF NONDISCRIMINATION:** The Arkansas State Highway Commission, through ARDOT, complies with all civil rights provisions of federal statutes and related authorities that prohibit discrimination in programs and activities receiving federal financial assistance. Therefore, ARDOT does not discriminate on the basis of race, sex, color, age, national origin, religion (not applicable as a protected group under the Federal Motor Carrier Safety Administration Title VI Program), disability, Limited English Proficiency (LEP), or low-income status in the admission, access to and treatment in the ARDOT's programs and activities, as well as the ARDOT's hiring or employment practices. Complaints of alleged discrimination and inquiries regarding the ARDOT's nondiscrimination policies may be directed to Joanna P. McFadden Section Head – EEO/DBE (ADA/504/Title VI Coordinator), P. O. Box 2261, Little Rock, AR 72203, (501)569-2298, (Voice/TTY 711), or the following email address: [joanna.mcfadden@ardot.gov](mailto:joanna.mcfadden@ardot.gov). Free language assistance for Limited English Proficient individuals is available upon request. This notice is available from the ADA/504/Title VI Coordinator in large print, on audiotape and in Braille.
17. **PROHIBITION OF EMPLOYMENT OF ILLEGAL IMMIGRANTS:** Pursuant to Arkansas Code Annotated 19-11-105, all bidders must certify prior to award of a contract that they do not employ or contract with any illegal immigrant(s) in its contract with the state. Bidders shall certify online at <https://www.ark.org/dfa/immigrant/index.php>.
18. **DISCLOSURE:** Failure to make any disclosure required by Governor's Executive Order 98-04, or any violation of any rule, regulation, or policy adopted pursuant to that order, **shall** be a material breach of the terms of this contract. Any contractor, whether an individual or entity, who fails to make the required disclosure or who violates any rule, regulation, or policy **shall** be subject to all legal remedies available to the agency.



ATTACHMENT A

**ELIGIBLE BIDDER CERTIFICATION**

The Bidder represents and warrants for itself, its employees and its subcontractors and certifies they:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
2. Have not within a three-year period preceding this Bid been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph two (2) of this Certification;
4. Have not within a one-year period preceding this application/Bid had one or more public transactions (Federal, State, or local) terminated for cause or default; and

The Bidder represents, warrants and acknowledges the understanding that restrictions placed on the employment of labor or on the scale of pay for the work on a contract will be the requirements of the Fair Labor Standards Act (Federal Wage-Hour Law) of 1938, 28 USC §201 et seq., and other applicable labor laws.

The person executing this Certification further represents, warrants and affirms the truthfulness and accuracy of the contents of the statements submitted on or with this Certification and understands that the provisions of 31 USC §3801 et seq. are applicable thereto.

\_\_\_\_\_  
BIDDER NAME

BY: \_\_\_\_\_  
Signature

TITLE: \_\_\_\_\_

# RESTRICTION OF BOYCOTT OF ISRAEL CERTIFICATION

Pursuant to Arkansas Code Annotated § 25-1-503, a public entity **shall not** enter into a contract valued at \$1,000 or greater with a company unless the contract includes a written certification that the person or company is not currently engaged in, and agrees for the duration of the contract not to engage in, a boycott of Israel.

By signing below, the Contractor agrees and certifies that they do not currently boycott Israel and will not boycott Israel during any time in which they are entering into, or while in contract, with any public entity as defined in § 25-1-503\* If at any time after signing this certification the contractor decides to engage in a boycott of Israel, the contractor must notify the contracting public entity in writing.

If a company does boycott Israel, see Arkansas Code Annotated § 25-1-503.

Name of public entity	Arkansas Department of Transportation
Description of product or service	H-21-236H/Guard Rail Maintenance D6 (Pulaski & Saline Counties Only)
Contractor name	

Contractor Signature: \_\_\_\_\_

Date:

\_\_\_\_\_  
Signature must be hand written, in ink

“Public Entity” means the State of Arkansas, or a political subdivision of the state, including all boards, commissions, agencies, institutions, authorities, and bodies politic and corporate of the state, created by or in accordance with state law or regulations, and does include colleges, universities, a statewide public employee retirement system, and institutions in Arkansas as well as units of local and municipal government.

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# ILLEGAL IMMIGRANT CERTIFICATION

Pursuant to Arkansas Code Annotated § 19-11-105, Contractor(s) **shall** certify with OSP that they do not employ or contract with illegal immigrants.

By signing below, the Contractor agrees and certifies that they do not employ illegal immigrants and will not employ illegal immigrants during the remaining aggregate term of the contract.

Bid Number/Contract Number	H-21-236H
AASIS Number	N/A
Description	Guard Rail Maintenance District 6 (Pulaski & Saline Counties Only)
Contractor name	

Contractor Signature: \_\_\_\_\_  
Signature must be hand written, in ink

Date: \_\_\_\_\_

ARKANSAS TRANSPORTATION DEPARTMENT  
 CONTRACT FOR GUARD RAIL MAINTENANCE  
BID FORM

CONTRACT NO. H-21-236H

BIDDER \_\_\_\_\_

Prices bid herein are subject to discount of \_\_\_\_\_ % for payment of invoices within \_\_\_\_\_ days.

Item No.	Description	Approx. Useage	Unit	Unit Price	Extended Amount
1.	Guardrail (Section 1)	50	L.F.		
2.	Guardrail (Section 2)	1413	L.F.		
3.	Guardrail (Section 3)	150	L.F.		
4.	Guardrail (Section 4)	75	L.F.		
5.	Guardrail (Terminal Rail, Type 2, 12 GA.)	2	EA.		
6.	SKT W-beam Guardrail End Section, 12 Ga.	1	EA.		
7.	Guardrail Back-up Plate	15	EA.		
8.	Guardrail Line Posts (Steel)	89	EA.		
9.	Guardrail Line Posts (Concrete)	40	EA.		
10.	Guardrail Line Posts (Wood)	15	EA.		
11.	Guardrail Spacer Blocks (Steel)	71	EA.		
12.	Guardrail Spacer Blocks (Concrete)	2	EA.		
13.	Guardrail Spacer Blocks (Wood)	16	EA.		
14.	Guardrail Spacer Blocks (Plastic)	33	EA.		
15.	Terminal Anchor Posts (Type A)	1	EA.		
16.	Terminal Anchor Posts (Type B)	1	EA.		
17.	Removal & Disposal of Guardrail (Type A)	1738	L.F.		

ARKANSAS TRANSPORTATION DEPARTMENT  
 CONTRACT FOR GUARD RAIL MAINTENANCE  
BID FORM

CONTRACT NO. H-21-236H

BIDDER \_\_\_\_\_

Item No.	Description	Approx. Useage	Unit	Unit Price	Extended Amount
18.	Removal & Disposal of Guardrail (Type B)	1	L.F.		
19.	Guardrail Terminal Section	2	EA.		
20.	Straighten and Align existing Guardrail Posts	34	EA.		
21.	Furnish and Install Guardrail System (Type A)	100	L.F.		
22.	Furnish and Install Guardrail System (Type B)	1	L.F.		
23.	Furnish & Install Bridge Connection – Curb	3	EA.		
24.	Furnish & Install Bridge Connection – Parapet Wall	1	EA.		
25.	Steel Tube (6"x8"x54"x3/16")	1	EA.		
26.	Soil Plate (18"x24"x1/4")	4	EA.		
27.	(Type 2) Terminal Wood Posts (5-1/2"x7-1/2"x45")	2	EA.		
28.	(Type 2) Terminal Wood Posts (6"x8"x6'0")	3	EA.		
29.	(Type 2) Terminal Wood Posts (5-1/2"x7-1/2"x14")	1	EA.		
30.	Pipe Sleeve (2" Std. Pipe x 5-1/2")	1	EA.		
31.	Bearing Plate (8"x8"x5/8")	1	EA.		



ARKANSAS TRANSPORTATION DEPARTMENT  
 CONTRACT FOR GUARD RAIL MAINTENANCE  
BID FORM

CONTRACT NO. H-21-236H

BIDDER \_\_\_\_\_

Item No.	Description	Approx. Useage	Unit	Unit Price	Extended Amount
32.	Cable Anchor Bracket	2	EA.		
33.	SKT Anchor Box	1	EA.		
34.	Cable Assembly	3	EA.		
35.	Offset Strut	1	EA.		
36.	Guard Rail Extruder	1	EA.		
37.	SKT Ground Strut Hinged Post	1	EA.		
38.	Furnish and Install Terminal (Type 2) System (50')	1	EA.		
39.	ET2000 HBA Post #1 Top	1	EA.		
40.	ET2000 HBA Post #1 Bottom	1	EA.		
41.	ET2000 HBA Angle Strut	1	EA.		
42.	Steel Yielding Terminal Post SYTP	3	EA.		
43.	Guard Rail (Thrie Section)	2	EA.		
44.	SKT First Post Assembly Top	1	EA.		
45.	SKT First Post Assembly Bottom	1	EA.		
46.	SKT Second Post Assembly Top	1	EA.		
47.	SKT Second Post Assembly Bottom	1	EA.		
48.	Guard Rail (Thrie Transition Section)	1	EA.		
49.	Guard Rail Connector Plate (Thrie Beam)	1	EA.		

ARKANSAS TRANSPORTATION DEPARTMENT  
 CONTRACT FOR GUARD RAIL MAINTENANCE  
BID FORM

CONTRACT NO. H-21-236H

BIDDER \_\_\_\_\_

50.	Guard Rail Spacer Blocks (Steel Tube-Thrie)	7	EA.		
51.	Guard Rail Spacer Blocks (Wood – Thrie)	1	EA.		
52.	Furnish and Install Thrie Beam Guard Rail Terminal	1	EA.		
53.	Special End Shoe (Thrie Beam)	1	EA.		
54.	Thrie Beam Guard Rail Steel Post (78’)	7	EA.		
55.	Thrie Beam Guard Rail Transition Steel Post (72’)	1	EA.		
56.	Guard Rail Post (Concrete) (Dept. Supplied)	1	EA.		
57.	Guard Rail Spacer Block (Concrete) (Dept. Supplied)	1	EA.		
<b>BID TOTAL:</b>					

Rev. 2/16

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

SPECIAL PROVISION

GUARD RAIL MAINTENANCE

**DESCRIPTION:**

This work shall consist of:

1. Removing and disposing of existing sub-standard installations or those installations which have been damaged beyond repair.
2. Installation of new guard rail systems with materials furnished by the Contractor or the Department as appropriate and constructed to current standards.

This work shall be limited to District Six (Pulaski and Saline Counties only). Locations within the District shall be selected by the District Engineer.

The Contract shall be limited to a one year period following the award of the Contract.

The Department reserves the right to default the Contractor if work is not performed according to these Specifications and/or time constraints are not met.

If a Contractor is defaulted or quits a contract, the Contractor will not be allowed to bid on another Department guardrail maintenance contract for a period of twelve (12) months.

The Department reserves the right to cancel the Contract before the one year time limit.

The Department reserves the right to also perform guard rail repair as necessary within the areas covered by this Contract.

The Contractor shall assume full liability for traffic hazards that might be created by his operation and save harmless the Arkansas State Highway Commission in all respects.

**MATERIALS:**

All materials furnished by the Contractor shall meet the requirements of the Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, Edition of 2014, all applicable Special Provisions and Supplemental Specifications and Current Standard Drawings GR-7, GR-8, GR-8A, GR-9, GR-10, GR-10A, GR-11, GRT-1 and MNTNC-1.

Department furnished materials will be available at the District Six Headquarters at Little Rock during normal working hours. Miscellaneous hardware items such as nuts, bolts, washers, etc. necessary to reset Department furnished items shall be supplied by the Contractor and shall comply with all applicable specification requirements and be approved by Materials Division. Only the exact amount of materials necessary for the installation will be furnished. Any material damaged by the Contractor will be replaced at no cost to the State.

Any guard rail elements removed from an installation which the District Engineer determines to be salvageable shall become the property of the Department and shall be delivered to the District Six Headquarters during normal working hours. Non-Salvageable materials shall be disposed of by the Contractor.

**EQUIPMENT:**

All equipment necessary for the satisfactory performance of this work shall be on hand before work begins.

**PROCEDURE:**

The Contractor will be required to begin work within ten (10) calendar days of notification from the District Engineer that work is required and will be notified in writing each time it is necessary to perform work. A list will be enclosed with the notification which includes Department furnished materials, Contractor furnished materials, and the location and length of each installation. This list will be an estimate only and may be adjusted once work begins. The Contractor shall provide the District Maintenance Engineer with their schedule for repairs at the various locations. This notification shall include anticipated traffic control. No lane closures will be allowed in the mornings between 6 a.m. and 9 a.m. and in the afternoons between 3 p.m. and 6 p.m. without the consent of the District Engineer. When the Contractor completes all of the specified work at a location, he shall notify the District Maintenance Engineer and an inspection will be made. Upon acceptance of the work and materials by the Department, a list of completed pay items will be furnished by the Contractor and the specified work will be considered complete. If the Contractor fails to begin work within 10 calendar days of notification, full liability of any and all accidents concerning these guardrails will be assumed by the Contractor.

Replacement, assembly and or installation of guard rail elements shall conform to the Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, Edition of 2014, all applicable Special Provisions and Supplemental Specifications and Current Standard Drawings GR-7, GR-8, GR-8A, GR-9, GR-10, GR-10A, GR-11, GRT-1 and MNTNC-1. The alignment and location of replaced guard rail elements shall conform to and match the portion of any installation which is undamaged and is to remain in place.

When the Engineer determines that an entire guard rail installation is damaged beyond repair or needs to be upgraded to current standards, the Contractor will be instructed to remove and dispose of the installation and to construct a new installation with materials supplied by the Contractor. In such instances, all materials, work, measurement and payment will be in accordance with Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, Edition of 2014, all applicable Special Provisions and Supplemental Specifications and Current Standard Drawings numbered GR-7, GR-8, GR-8A, GR-9, GR-10, GR-10A, GR-11, GRT-1 and MNTNC-1. Post holes created by the removal of concrete or wood posts shall be backfilled and thoroughly compacted using suitable material before driving the new steel posts. When possible the spacing of the steel posts shall be staggered between the vacated post holes. In such instances the backfilling may then be accomplished either before or after the steel posts are driven.

**METHOD OF MEASUREMENT AND BASIS OF PAYMENT:**

Mobilization will not be measured and paid for directly but will be considered included in the prices bid for the various items of the Contract.

The cost of traffic control through the work zones will not be measured and paid for directly but will be considered included in the prices bid for the various items of the Contract.

Replaced steel guard rail sections, installed and accepted, will be measured by the linear foot, complete in place, and paid for at the Contract unit price bid. As indicated on the Standard Drawings Sections 1 and 2 are end sections and will each be considered as 25 feet in length. Intermediate Section 3 shall be measured along the roadway face from centerline of post to centerline of post. NOTE: The item, Guard Rail Section 1, as shown on Standard Drawing GR-8A, is required to be a double section. Each Section 1 of the double rail will be paid as 50 L.F. of guard rail plate. For the items, Guard Rail Sections 2, 3 and 4, each installation will be paid for as a 25 L.F. section of guard rail plate. This note applies only when individual parts or pieces of a guard rail installation are being replaced and does not apply to the items "Furnish and Install Guard Rail (Type \_\_\_\_).

Replaced guard rail line posts, spacer blocks, back-up plates, terminal sections and terminal anchor posts (Type A & B), installed and accepted, will be measured by the unit and paid for at the Contract unit price bid.

Furnishing and placing anchor bolts, splicing hardware, and/or attachment hardware will not be measured and paid for directly but will be considered included in the prices bid for the various items of the Contract.

No measurement and payment will be made for necessary excavation and/or backfilling performed in connection with replacing damaged elements of guard rail.

Removal and disposal of guard rail will be measured as provided in the Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, Edition of 2014, all applicable Special Provisions and Standard Drawings GR-7, GR-8, GR-8A, GR-9, GR-10, GR-10A, GR-11, GRT-1, MNTNC-1 and paid for at the contract unit price bid. Removal and disposal of posts, spacer blocks, and miscellaneous hardware will not be measured and paid for directly but will be considered included in the price bid for the various items of the contract.

Work completed at each designated location shall be paid for upon acceptance of the work. Payment shall be based upon the list of completed pay items furnished by the Contractor to the Department and the Contract unit price for those items.

**TRAFFIC CONTROL THROUGH WORK ZONE:**

The Contractor shall sign and mark all work zones and lane closures in accordance with the Manual on Uniform Traffic Control Devices and Current Standard Drawings TC-1, TC-2, TC-3, TC-4 and TC-5. All signing materials shall be High Intensity. The Contractor shall conduct repair operations in such a manner that all feasible traffic lanes will be open to traffic. Lane closures may be established as needed to perform the work, except that during period of adverse weather or peak high traffic, lane closures will be permitted only if approved by the Engineer.

ARKANSAS DEPARTMENT OF TRANSPORTATION  
LITTLE ROCK, ARKANSAS  
ARDOT -EQUIPMENT & PROCUREMENT DIVISION

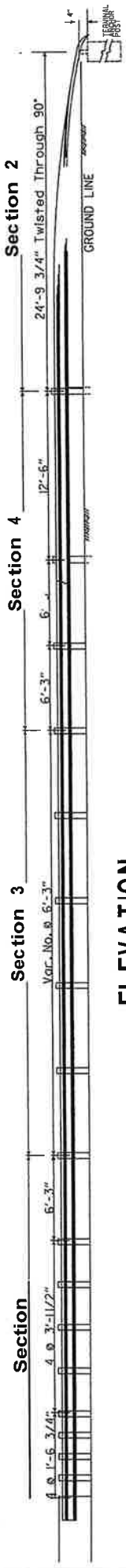
Contract No. H-21-236H

Cooperative Purchasing. Other tax-supported entities\* in Arkansas (cities, counties, state agencies, school districts, etc.) may purchase commodities covered in this Contract on an individual basis under the same specifications and conditions, and at the pricing set forth by each vendor, all at the discretion of each vendor in each case. Prices could be reduced by a vendor for minor alterations in conditions (changing minimum order quantities, etc.) as agreed by both parties, but could not be raised above the contract bid price under any circumstances. Vendors would not be required to sell to any such entity under this Contract, and those entities would not be obligated to purchase from the Contract.

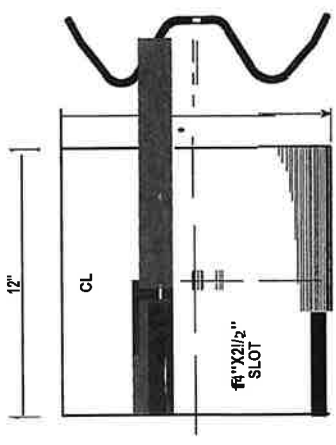
Each entity wishing to purchase from the Contract would make contact directly with the appropriate vendor(s). The Department of Transportation would remain “out of the loop” for such transactions: all contact, orders, invoices, payments, etc. regarding such transactions must take place exclusively between the tax-supported entity and the vendor. The Department would be held harmless of any and all liability arising from such transactions.

\*Tax-supported entities are defined as those receiving more than half of total funding from appropriated tax funds.



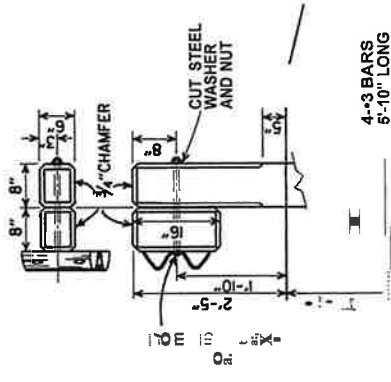


**ELEVATION**



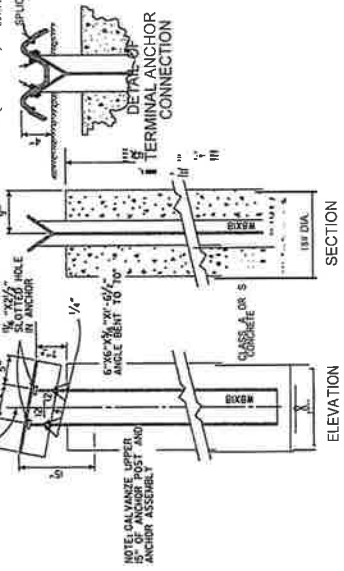
**BACK-UP PLATE DETAILS**

NOTE: A BACK-UP PLATE SHALL BE PLACED BETWEEN GUARD RAIL & POST AT NON-SPLICED INTERMEDIATE POSTS.



**CONCRETE POST DETAILS**

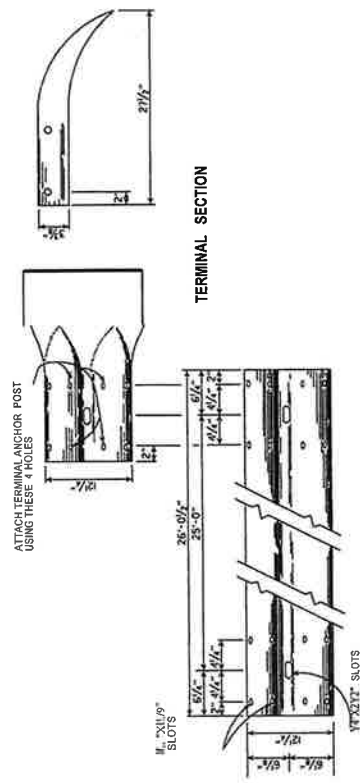
CL ANCHORAGE AND RAIL CONNECTION  
 1/2" X 2 1/2" SLOTTED HOLE AT ANCHOR  
 1/4" X 1/2" X 1/2" ANGLE BENT TO 90°  
 1/2" DIA WASTE UPPER 8" OF ANCHOR POST AND ANCHOR ASSEMBLY  
 70°/111°  
 4 1/4" X 2 1/2" AASHTO. M 164 HIGH STRENGTH BOLTS & NUTS WITH TWO CUT STEEL WASHERS FOR EACH BOLT. INSTALLED IN ACCORDANCE WITH SUBSECTION 807.101 OF THE STANDARD SPECIFICATIONS.



**ELEVATION**

NOTE: RAIL MEMBERS MAY BE BOLTED TO ANGLE AT TERMINAL ANCHOR AND THE TWO ASSEMBLIES POSITIONED TO PROPER ALIGNMENT PRIOR TO PLACING CONCRETE AROUND 8 W-17 POST IF CONTRACTOR SO DESIRES.

**DETAIL OF TERMINAL ANCHOR POST <TYPE D**



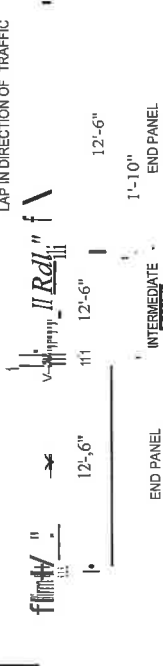
**TERMINAL SECTION**

**RAIL DETAILS**

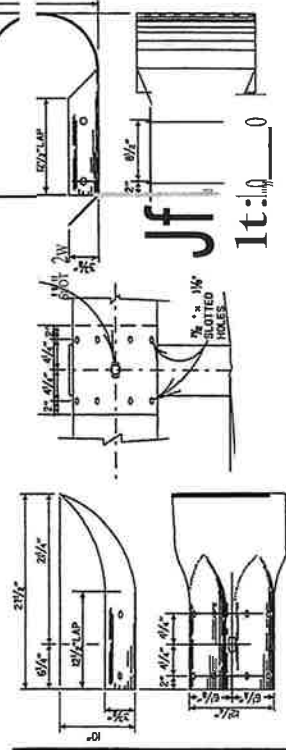
**ADDITIONAL GUARD RAIL DETAILS**

PLAN

LAP IN DIRECTION OF TRAFFIC



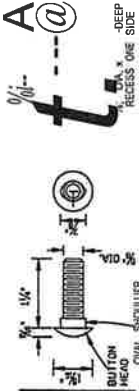
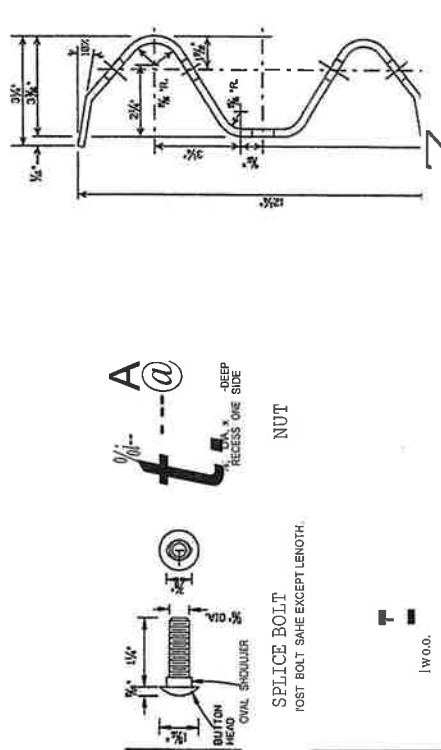
ELEVATION



TERMINAL SECTION

RAIL SPLICE

TERMINAL SECTION

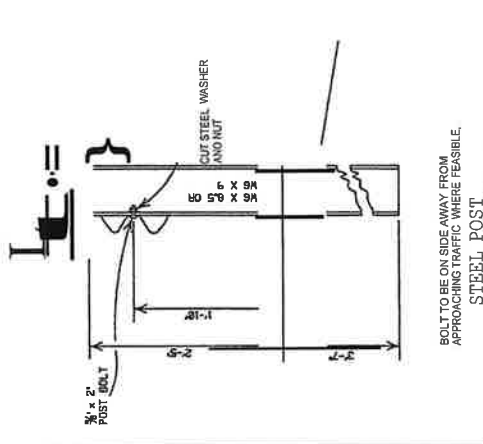


SPLICE BOLT  
POST BOLT SAME EXCEPT LENGTH.

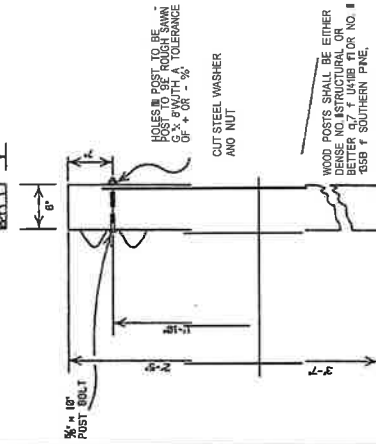
NUT



CUT STEEL WASHER



STEEL POST



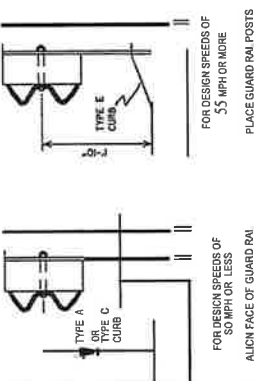
WOOD POST

DETAILS OF POST CONNECTIONS

NO.	DATE	REVISION
1	10-10-56	ISSUED HEIGHT OF GUARD RAIL 1'
2	10-10-56	REVISED DIMENSION OF STEEL POST
3	10-10-56	REVISED DIMENSION OF WOOD POST
4	10-10-56	REVISED DIMENSION OF WOOD POST
5	10-10-56	REVISED DIMENSION OF WOOD POST
6	10-10-56	REVISED DIMENSION OF WOOD POST
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99	10-10-56	REVISED DIMENSION OF WOOD POST
100	10-10-56	REVISED DIMENSION OF WOOD POST

ARKANSAS STATE HIGHWAY COMMISSION  
 GUARD RAIL DETAILS  
 <TYPE C>  
 STREET / ROAD BARRICADE OR  
 TEMPORARY INSTALLATION  
 STANDARD DRAWING GR-7



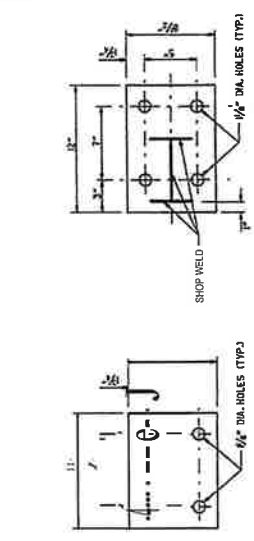


**DETAIL OF GUARD RAIL PLACEMENT BEHIND CURB (W-BEAM)**

FOR DESIGN SPEEDS OF 55 MPH OR MORE  
PLACE GUARD RAIL POSTS AGAINST BACK OF CURB.

FOR DESIGN SPEEDS OF 50 MPH OR LESS  
ALIGN FACE OF GUARD RAIL WITH FACE OF CURB.

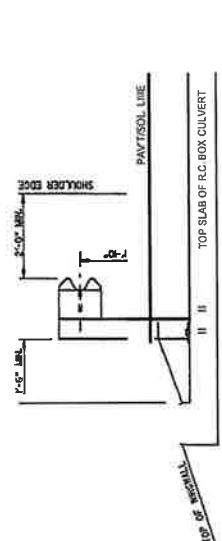
FOR DESIGN SPEEDS OF 55 MPH OR MORE  
STANDARD CURB, MAY BE USED FOR DESIGN SPEEDS OF 55 MPH OR MORE  
TYPE "E" CURB FACE SHALL BE USED.



**WASHER PLATE**  
1/2" DIA. HOLES (TYP.)

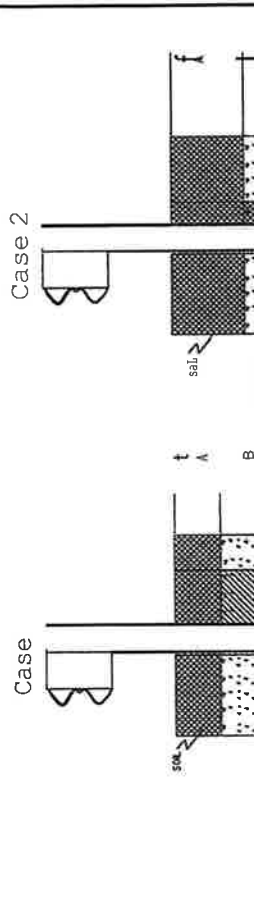
**BASE PLATE**  
1/2" DIA. HOLES (TYP.)

Note: Bolt nuts, washers and plates shall be galvanized in accordance with Section 807 of the Standard Specifications.



**SECTION A-A**

DETAIL OF CONNECTION

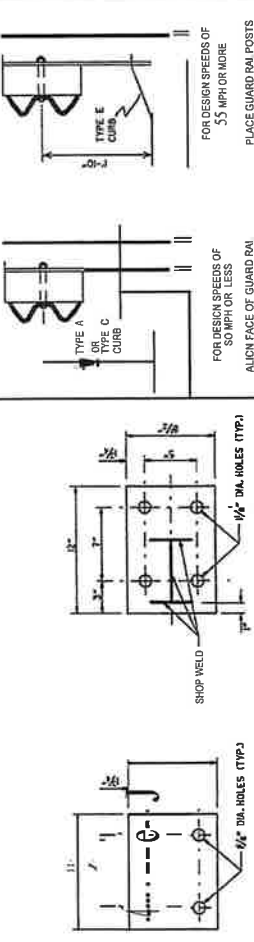


**Case 1**

**Plan View Steel Posts**  
Either hole configuration acceptable

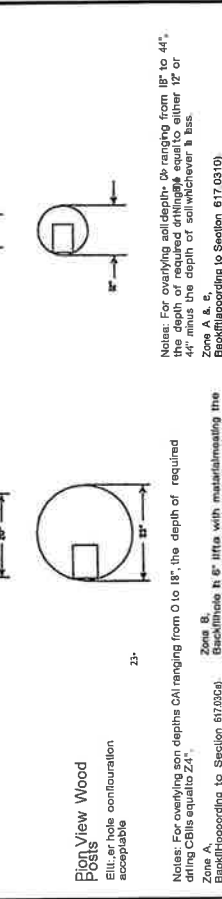
**Plan View Wood Posts**  
Elliptical hole configuration acceptable

Notes: For overlying soil depths CAI ranging from 0 to 18", the depth of required drilling CEIS equal to 24".  
Zone A.  
Bored in accordance to Section 617.02(5).



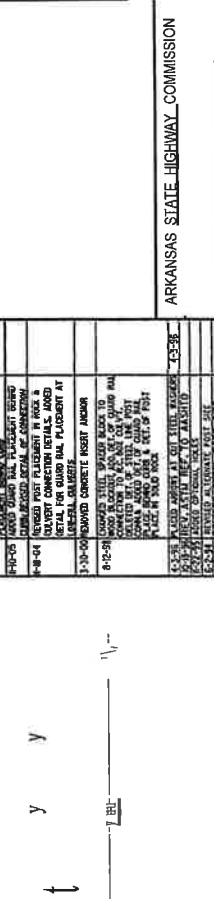
**Case 2**

Notes: For overlying soil depths CAI ranging from 18" to 44", the depth of required drilling equal to either 12" or 44" minus the depth of soil whichever is less.  
Zone A, B, C.  
Bored in accordance to Section 617.03(1).



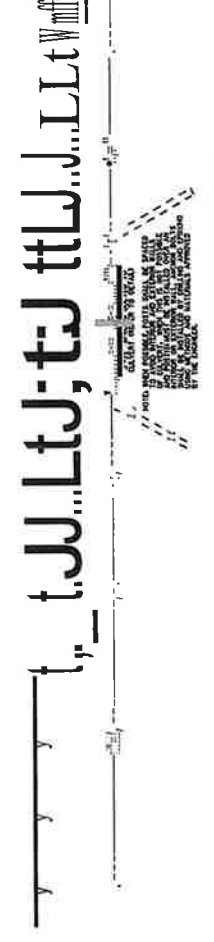
**DETAIL OF POST PLACEMENT IN SOLID ROCK (W-BEAM)**

Notes: For overlying soil depths CAI ranging from 0 to 18", the depth of required drilling CEIS equal to 24".  
Zone A.  
Bored in accordance to Section 617.02(5).  
Zone B.  
Bored in 12" to 18" with, maintaining the requirements of Section 602.02(10). Alternate gradation. Compact to 95% max-Cumulative dry density per ASTM D-698.



**PLAN LAYOUT OF TYPE A GUARD RAIL AT LOWER FILL CULVERTS**

SEE M110(11)



**SECTION A-A**

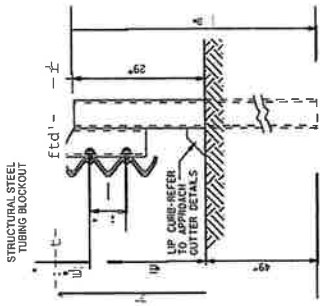
DETAIL OF CONNECTION

NO.	DESCRIPTION	DATE
1-00	ISSUED FOR CONSTRUCTION	08-28-01
1-01	REVISED TO ADD 1/2" DIA. HOLES TO WASHER PLATE	08-28-01
1-02	REVISED TO ADD 1/2" DIA. HOLES TO BASE PLATE	08-28-01
1-03	REVISED TO ADD 1/2" DIA. HOLES TO WASHER PLATE	08-28-01
1-04	REVISED TO ADD 1/2" DIA. HOLES TO BASE PLATE	08-28-01
1-05	REVISED TO ADD 1/2" DIA. HOLES TO WASHER PLATE	08-28-01
1-06	REVISED TO ADD 1/2" DIA. HOLES TO BASE PLATE	08-28-01
1-07	REVISED TO ADD 1/2" DIA. HOLES TO WASHER PLATE	08-28-01
1-08	REVISED TO ADD 1/2" DIA. HOLES TO BASE PLATE	08-28-01
1-09	REVISED TO ADD 1/2" DIA. HOLES TO WASHER PLATE	08-28-01
1-10	REVISED TO ADD 1/2" DIA. HOLES TO BASE PLATE	08-28-01
1-11	REVISED TO ADD 1/2" DIA. HOLES TO WASHER PLATE	08-28-01
1-12	REVISED TO ADD 1/2" DIA. HOLES TO BASE PLATE	08-28-01
1-13	REVISED TO ADD 1/2" DIA. HOLES TO WASHER PLATE	08-28-01
1-14	REVISED TO ADD 1/2" DIA. HOLES TO BASE PLATE	08-28-01
1-15	REVISED TO ADD 1/2" DIA. HOLES TO WASHER PLATE	08-28-01
1-16	REVISED TO ADD 1/2" DIA. HOLES TO BASE PLATE	08-28-01
1-17	REVISED TO ADD 1/2" DIA. HOLES TO WASHER PLATE	08-28-01
1-18	REVISED TO ADD 1/2" DIA. HOLES TO BASE PLATE	08-28-01
1-19	REVISED TO ADD 1/2" DIA. HOLES TO WASHER PLATE	08-28-01
1-20	REVISED TO ADD 1/2" DIA. HOLES TO BASE PLATE	08-28-01
1-21	REVISED TO ADD 1/2" DIA. HOLES TO WASHER PLATE	08-28-01
1-22	REVISED TO ADD 1/2" DIA. HOLES TO BASE PLATE	08-28-01
1-23	REVISED TO ADD 1/2" DIA. HOLES TO WASHER PLATE	08-28-01
1-24	REVISED TO ADD 1/2" DIA. HOLES TO BASE PLATE	08-28-01
1-25	REVISED TO ADD 1/2" DIA. HOLES TO WASHER PLATE	08-28-01
1-26	REVISED TO ADD 1/2" DIA. HOLES TO BASE PLATE	08-28-01
1-27	REVISED TO ADD 1/2" DIA. HOLES TO WASHER PLATE	08-28-01
1-28	REVISED TO ADD 1/2" DIA. HOLES TO BASE PLATE	08-28-01
1-29	REVISED TO ADD 1/2" DIA. HOLES TO WASHER PLATE	08-28-01
1-30	REVISED TO ADD 1/2" DIA. HOLES TO BASE PLATE	08-28-01

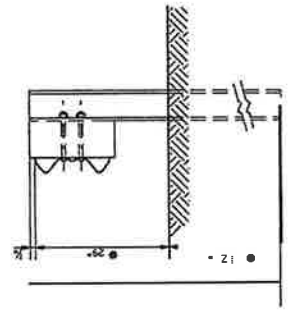






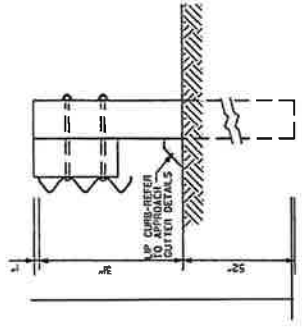


THREE BEAM RAIL WITH STEEL TUBING BLOCKOUT AND STEEL POST  
POSTS 1-7

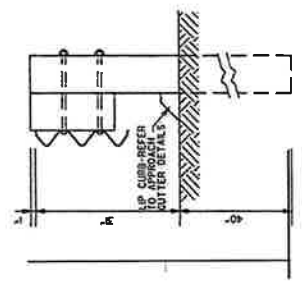


W-BEAM TO THREE BEAM TRANSITION RAIL WITH WOOD OR PLASTIC BLOCKOUT AND STEEL POST  
POST B

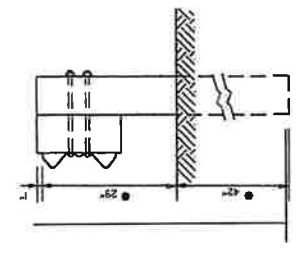
NOTE:  
THESE DIMENSIONS WILL NEED TO BE ADJUSTED IN THE FIELD TO MAKE THE TRANSITION FROM 21" MID POINT OF THREE BEAM TO 22" MID POINT OF W-BEAM.



THREE BEAM RAIL WITH WOOD OR PLASTIC BLOCKOUTS & WOOD POSTS  
POSTS 1-6



THREE BEAM RAIL WITH WOOD OR PLASTIC BLOCKOUT & WOOD POST  
POST 7



W-BEAM TO THREE BEAM TRANSITION RAIL WITH WOOD OR PLASTIC BLOCKOUT & WOOD POST  
POST 8

GENERAL NOTES:  
RAIL POSTS SHALL BE SET PERPENDICULAR TO THE ROADWAY PROFILE GRADE AND VERTICALLY IN CROSS SECTION.  
WOOD POSTS & WOOD BLOCKS SHALL BE EITHER DENSE NO. 1 STRUCTURAL OR BETTER, S.7.1 1400 #1 OR NO. 1350 # SOUTHERN PINE.

ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

STANDARD DRAWING GR-10A

DATE	REVISION	DATE & FILE
12-22-01	REVISED TO AASHTO M 288-01	
08-22-01	REVISED TO AASHTO M 288-01	
05-22-01	REVISED TO AASHTO M 288-01	
03-22-01	REVISED TO AASHTO M 288-01	



**ADVANCE DISTANCES**  
CHUCK\*

500 FT	1/2 MILE
1000 FT	1/4 MILE
1500 FT	1 MILE
	1/8 MILE

**GENERAL NOTES.**

- ALL TRAFFIC CONTROL DEVICES USED ON ROAD CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE FEDERAL MANUAL ON TRAFFIC CONTROL DEVICES, LATEST EDITION OR AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION.
- TRAFFIC CONTROL DEVICES SHALL BE SET UP 150 FEET BEFORE THE START OF CONSTRUCTION OPERATIONS AND SHALL BE PROPERLY MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. EXISTING SIGNS AND CONSTRUCTION SIGNS SHALL BE KEPT IN PROPER POSITION AND REPAIRED AS NEEDED. EXISTING SIGNS THAT ARE DAMAGED OR THAT ACCUMULATE DIRT DURING CONSTRUCTION SHALL BE CLEANED, REPAIRED OR REPLACED.
- SIGNS ARE USUALLY MOUNTED ON A SINGLE POST, ALTHOUGH THOSE WIDER THAN 36" OR LARGER THAN 150 FT. SHALL BE MOUNTED ON TWO POSTS OR A TYPE II BARRICADE.
- SIGN POSTS DIRECTED TO THE RIGHT SHALL BE IN MINIMUM FRAME POSTS 4'-4" ALUMINUM DISTANCE FROM THE BOTTOM OF THE SIGN TO THE TOP OF THE SURFACE. WARMING SIGN TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR INTERMEDIATE TERM STATIONARY WORK CONDITIONS. THE SIGNS MINIMUM MOUNT HEIGHT SHALL BE 7 FEET ABOVE THE ROAD SURFACE. PORTABLE SUPPORTS SHALL BE MOUNTED ON PORTABLE SUPPORTS FOR SHORT TERM, SHORT DURATION, AND MOBILE CONDITIONS. THEY SHALL BE NO LESS THAN ONE FOOT ABOVE THE TRAVELED WAY. LOW SPEED TRAVELING WORK ZONES SHALL BE MOUNTED ON THE ENGINEER CONCRETE PADS CONCRETE OR ROCK BALLAST OR OTHER SOLID MATERIALS SHALL NOT BE UTILIZED WITH PORTABLE SIGN SUPPORTS.
- ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN RURAL AREAS SHALL BE MOUNTED AT A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN RURAL AREAS SHALL BE MOUNTED AT A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE. WARMING SIGN TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR INTERMEDIATE TERM STATIONARY WORK CONDITIONS. THE SIGNS MINIMUM MOUNT HEIGHT SHALL BE 7 FEET ABOVE THE ROAD SURFACE. PORTABLE SUPPORTS SHALL BE MOUNTED ON PORTABLE SUPPORTS FOR SHORT TERM, SHORT DURATION, AND MOBILE CONDITIONS. THEY SHALL BE NO LESS THAN ONE FOOT ABOVE THE TRAVELED WAY. LOW SPEED TRAVELING WORK ZONES SHALL BE MOUNTED ON THE ENGINEER CONCRETE PADS CONCRETE OR ROCK BALLAST OR OTHER SOLID MATERIALS SHALL NOT BE UTILIZED WITH PORTABLE SIGN SUPPORTS.
- POST MOUNTED SIGNS IN RURAL AREAS SHALL BE CONSTRUCTED WITH THE NEAR EDGE OF THE SIGN FROM 6 TO 12 FEET FROM THE PAVEMENT EDGE. SIGNS IN URBAN AREAS AND BARRICADE MOUNTED SIGNS SHALL BE MOUNTED A MINIMUM OF 2 FEET FROM THE PAVEMENT EDGE.

8. FLAGGEAS SHALL USE REFLECTORIZED STOP-SLOW FACILES PLACES MAY BE USED ONLY FOR EMERGENCY SITUATIONS.

9. MOST OF THE SIGNS BEYOND THE PRIORITY TO THE USE OF RED OR BROWN IMAGES OF THE SIGNS WHERE THE REVERSE ORIENTATION MIGHT & TIER CONVEY TO MOTORISTS THE PROPER DIRECTION OF MOVEMENT.

10. RESEARCHERS SHALL BE PLACED AT LEAST 1500' AWAY FROM THE WORK AREA. THE SIGN SHALL BE PLACED AT LEAST 1500' IN ADVANCE OF THE REDUCED SPEED ADVISORY SIGN.

\*NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VESTIBULAR PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 8, 9, & 10 SHALL BE USED ONLY FOR ASSESSMENT OF SAFETY OR AS A TEMPORARY MEASURE IN THE EVENT OF AN EMERGENCY. THE SIGN SHALL BE PLACED AT LEAST 1500' IN ADVANCE OF THE REDUCED SPEED ADVISORY SIGN.

15-14	REWORK SIGN	
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15-100	REWORK SIGN	

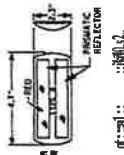
DATE

ARKANSAS STATE HIGHWAY COMMISSION  
STANDARD TRAFFIC CONTROL SIGNS  
FOR HIGHWAY CONSTRUCTION  
STANDARD DRAWING T-1

RH		STANDARD 30"x30" EXPRESSWAY 36"x36" SPECIAL 48"x48"	RS-1		30"x30" EXPRESSWAY 36"x36" SPECIAL 48"x48"	VI-3		VI-3		30"x30" EXPRESSWAY 36"x36" SPECIAL 48"x48"
RI-2		STD. 36"x36"x36" EXPRESSWAY 48"x48"x48" SPECIAL 60"x60"x60"	RII-2		48"x48"	VI-4		VI-4		48"x48"
RZ-1		STD. 24"x30" EXPRESSWAY 36"x48" FWY. 48"x60"	RII-3A		60"x30"	VI-5		VI-5		60"x30"
R2-5A		STD. 24"x30" EXPRESSWAY 36"x48" FWY. 48"x60"	RII-4		60"x30"	VI-6		VI-6		60"x30"
R2-5C		STD. 24"x30" EXPRESSWAY 36"x48" FWY. 48"x60"	RSP-1		36"x36" EXPRESSWAY 48"x48"	VI-8		VI-8		36"x36" EXPRESSWAY 48"x48"
R4-1		STD. 27"x30" EXPRESSWAY 36"x48" FWY. 48"x60"	WH		36"x36" EXPRESSWAY 48"x48"	W3-2		W3-2		36"x36" EXPRESSWAY 48"x48"
R4-2		STD. 27"x30" EXPRESSWAY 36"x48" FWY. 48"x60"	WI-2		36"x36" EXPRESSWAY 48"x48"	W3-1		W3-1		36"x36" EXPRESSWAY 48"x48"
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						W3-1		W3-1		36"x36" EXPRESSWAY 48"x48"
						W3-2		W3-2		

**KEY:**

- FLUORESCENT
- POSITIVE BARRIER
- ARROW PANELS REQUIRED
- TYPE-II BARRIERS
- CHANNELIZING DEVICE
- REFLECTIVE DRUM
- RAISED PAVEMENT INQUIRY



DETAIL OF RAISED PAVEMENT MARKERS



TYPICAL ADVANCE WARNING SIGN PLACEMENT

TAPER FOR 45 MPH OR MORE.  
L-SAW FOR SPEEDS OF 45 MPH OR MORE.

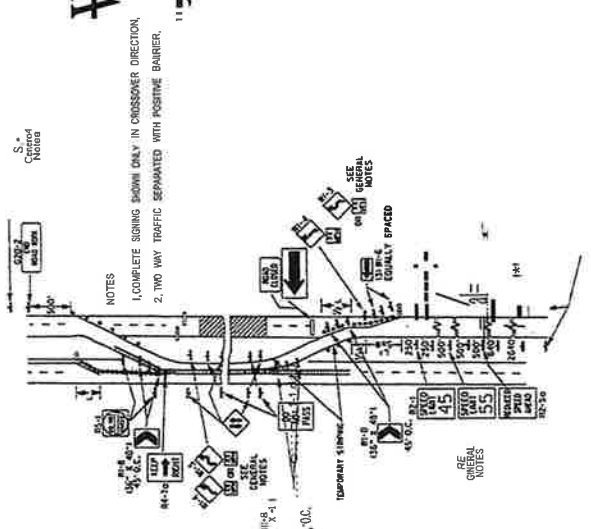
L-WS 2

WHERE:  
L = MINIMUM LENGTH OF TAPER.  
S = NUMBER OF POSTS OF POSTED SPEED LIMIT PRIOR TO WORK  
W = WIDTH OF OFFSET.  
W = WIDTH OF OFFSET.

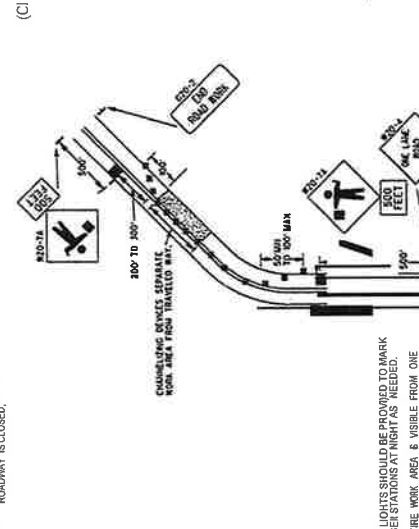
1. ADVISORY SPEED POSTED ON W10 OR W14 CURVE WARNING SIGNS SHALL BE PLACED AT A DISTANCE OF 300 FT OR GREATER.
2. WHEN THE EXISTING SPEED LIMIT IS 55 MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 45 MPH, THE EXISTING SPEED LIMIT SIGN SHALL BE REMOVED AND A 45 MPH SPEED LIMIT SIGN SHALL BE PLACED AT THE END OF THE WORK AREA AT A DISTANCE OF 300 FT FROM THE BEGINNING OF THE WORK AREA.
3. SIGN - THE BASIC SPEED LIMIT OF 45 MPH SHALL BE REMOVED. ADDITIONAL 45 MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT 1000 FT INTERVALS. THE SIGN SHALL BE INSTALLED IN THE AREA A 100 FT SMALL TO MATCH ORIGINAL SPEED LIMIT. THE SIGN SHALL BE INSTALLED IN THE AREA A 100 FT SMALL TO MATCH ORIGINAL SPEED LIMIT.
4. THE MANUAL SPACING BETWEEN CHANNELIZING DEVICES SHALL BE 10 FT. THE TAPER WIDTHS SHALL BE 10 FT. THE TAPER WIDTHS SHALL BE 10 FT.
5. THE SPEED LIMIT SIGNS DIRECTED BY THE ADVISORY.
6. PAVEMENT MARKINGS NO LONGER APPLICABLE WHICH MUST BE REMOVED OR PAINTED OVER. THE SIGN SHALL BE PLACED AT THE END OF THE WORK AREA AT A DISTANCE OF 300 FT FROM THE BEGINNING OF THE WORK AREA.
7. TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANNELIZING DEVICES SHALL BE PLACED IN THE AREA OF THE TRAILER WITH PLACEMENT OF ADVISORY TO THE SHOULDER AND NOT TO THE TRAILER. THE SIGN SHALL BE PLACED AT THE END OF THE WORK AREA AT A DISTANCE OF 300 FT FROM THE BEGINNING OF THE WORK AREA.

GENERAL NOTES:  
1. TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANNELIZING DEVICES SHALL BE PLACED IN THE AREA OF THE TRAILER WITH PLACEMENT OF ADVISORY TO THE SHOULDER AND NOT TO THE TRAILER. THE SIGN SHALL BE PLACED AT THE END OF THE WORK AREA AT A DISTANCE OF 300 FT FROM THE BEGINNING OF THE WORK AREA.

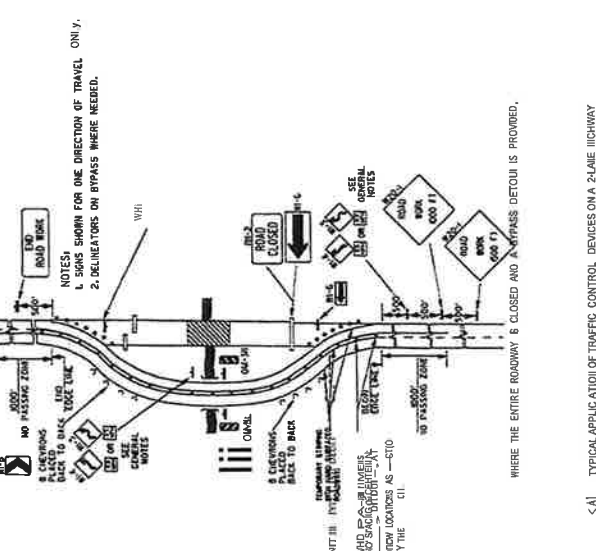
ITEM	QUANTITY	REMARKS
W20-1	1	ADVISORY SPEED LIMIT SIGN
W20-2	1	ADVISORY SPEED LIMIT SIGN
W20-3	1	ADVISORY SPEED LIMIT SIGN
W20-4	1	ADVISORY SPEED LIMIT SIGN
W20-5	1	ADVISORY SPEED LIMIT SIGN
W20-6	1	ADVISORY SPEED LIMIT SIGN
W20-7	1	ADVISORY SPEED LIMIT SIGN
W20-8	1	ADVISORY SPEED LIMIT SIGN
W20-9	1	ADVISORY SPEED LIMIT SIGN
W20-10	1	ADVISORY SPEED LIMIT SIGN
W20-11	1	ADVISORY SPEED LIMIT SIGN
W20-12	1	ADVISORY SPEED LIMIT SIGN
W20-13	1	ADVISORY SPEED LIMIT SIGN
W20-14	1	ADVISORY SPEED LIMIT SIGN
W20-15	1	ADVISORY SPEED LIMIT SIGN
W20-16	1	ADVISORY SPEED LIMIT SIGN
W20-17	1	ADVISORY SPEED LIMIT SIGN
W20-18	1	ADVISORY SPEED LIMIT SIGN
W20-19	1	ADVISORY SPEED LIMIT SIGN
W20-20	1	ADVISORY SPEED LIMIT SIGN
W20-21	1	ADVISORY SPEED LIMIT SIGN
W20-22	1	ADVISORY SPEED LIMIT SIGN
W20-23	1	ADVISORY SPEED LIMIT SIGN
W20-24	1	ADVISORY SPEED LIMIT SIGN
W20-25	1	ADVISORY SPEED LIMIT SIGN
W20-26	1	ADVISORY SPEED LIMIT SIGN
W20-27	1	ADVISORY SPEED LIMIT SIGN
W20-28	1	ADVISORY SPEED LIMIT SIGN
W20-29	1	ADVISORY SPEED LIMIT SIGN
W20-30	1	ADVISORY SPEED LIMIT SIGN
W20-31	1	ADVISORY SPEED LIMIT SIGN
W20-32	1	ADVISORY SPEED LIMIT SIGN
W20-33	1	ADVISORY SPEED LIMIT SIGN
W20-34	1	ADVISORY SPEED LIMIT SIGN
W20-35	1	ADVISORY SPEED LIMIT SIGN
W20-36	1	ADVISORY SPEED LIMIT SIGN
W20-37	1	ADVISORY SPEED LIMIT SIGN
W20-38	1	ADVISORY SPEED LIMIT SIGN
W20-39	1	ADVISORY SPEED LIMIT SIGN
W20-40	1	ADVISORY SPEED LIMIT SIGN
W20-41	1	ADVISORY SPEED LIMIT SIGN
W20-42	1	ADVISORY SPEED LIMIT SIGN
W20-43	1	ADVISORY SPEED LIMIT SIGN
W20-44	1	ADVISORY SPEED LIMIT SIGN
W20-45	1	ADVISORY SPEED LIMIT SIGN
W20-46	1	ADVISORY SPEED LIMIT SIGN
W20-47	1	ADVISORY SPEED LIMIT SIGN
W20-48	1	ADVISORY SPEED LIMIT SIGN
W20-49	1	ADVISORY SPEED LIMIT SIGN
W20-50	1	ADVISORY SPEED LIMIT SIGN



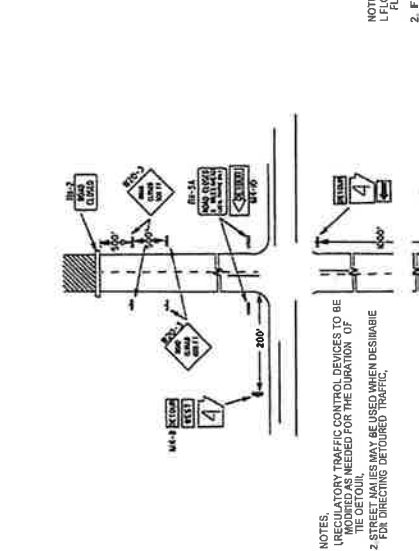
(B) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON A 4-LANE DIVIDED ROADWAY WHERE ONE ROADWAY IS CLOSED.



(C) TYPICAL APPLICATION - 4 LANE UNDIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.



(A) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON A 2-LANE HIGHWAY WHERE THE ENTIRE ROADWAY IS CLOSED AND A BYPASS DETOUR IS PROVIDED.



(C) TYPICAL APPLICATION - ROADWAY CLOSED BEYOND DETOUR POINT.

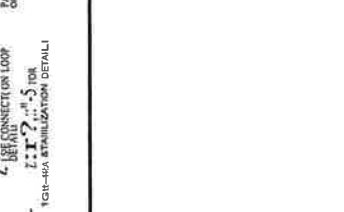
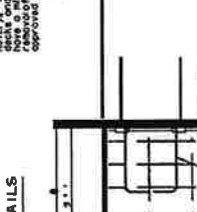
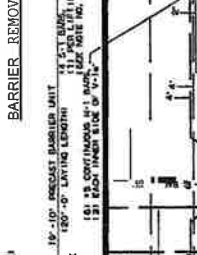
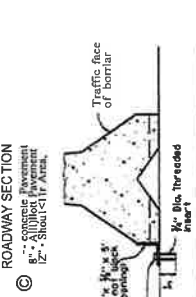
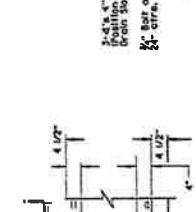
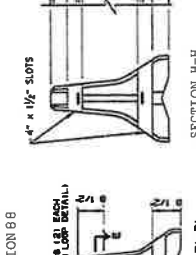
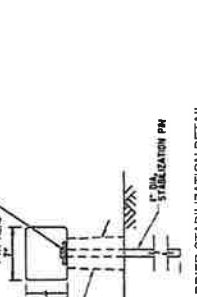
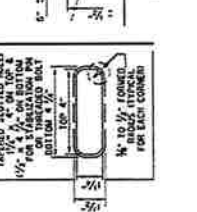
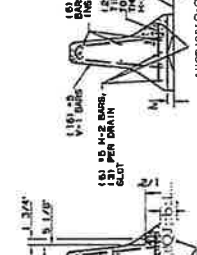
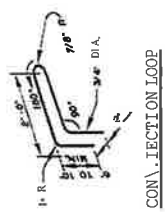
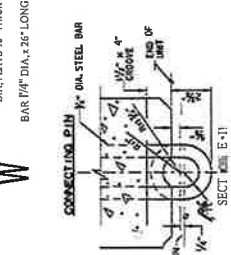
NOTES:  
1. REGULATORY TRAFFIC CONTROL DEVICES TO BE USED FOR THE DURATION OF THE DETOUR.  
2. STREET MAINTENANCE MAY BE USED WHEN DESIRABLE FOR DIRECTING DETOURED TRAFFIC.

NOTES:  
1. FLOOD LIGHTS SHOULD BE PROVIDED TO MARK ROAD CLOSED AT NIGHT AS NEEDED.  
2. IF ENTIRE ROADWAY IS VISIBLE FROM STATION, A SINGLE PLAGGER MAY BE USED.  
3. CHANNELIZING DEVICES ARE TO BE USED TO APPROACHING TRAFFIC.  
4. AUTOMATED FLAGGER ASSISTANCE DEVICE IS TO BE USED WHERE APPROPRIATE.



REINFORCING BAR TABLE PER BARR. PER UNIT

LOCATION	BAR SIZE	11 (C-1)	SKETCH
H-1 TURNER TUB	#4	181	
H-2 DRAIN ALTERNATE	#4	181	
H-3 DRAIN ALTERNATE	#4	121	
H-4 DRAIN ALTERNATE	#4	121	
H-5 OVER LIFT HOLES	#4	121	
H-6 HORIZ. ABOVE LOT LIFTWEN ABOVE DRAIN	#4	121	
H-7	#4	181	



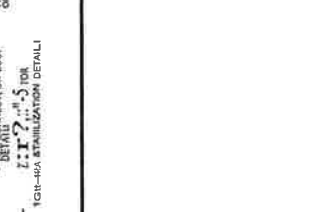
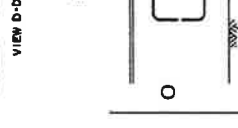
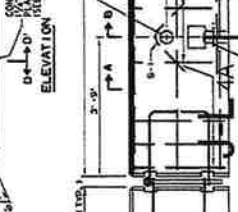
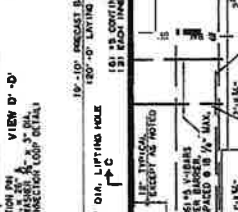
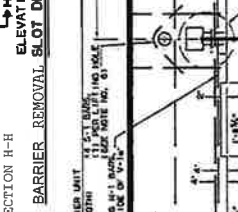
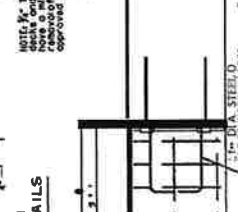
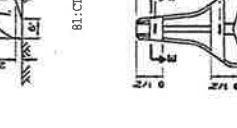
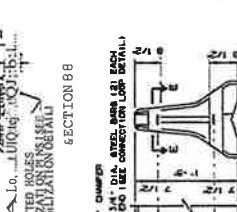
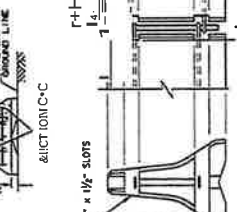
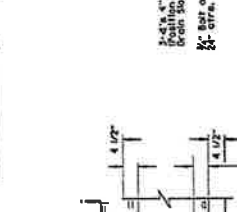
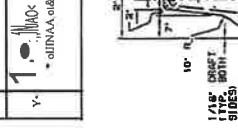
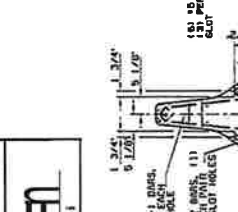
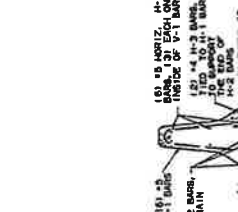
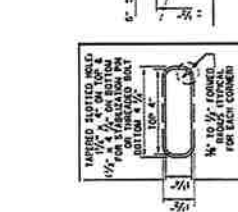
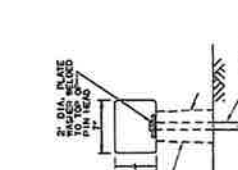
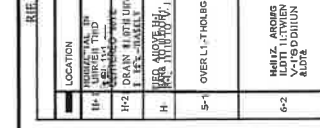
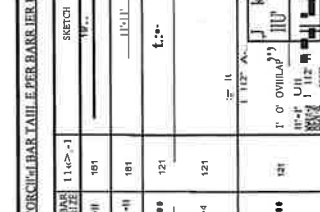
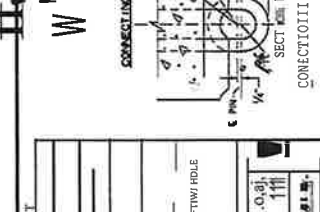
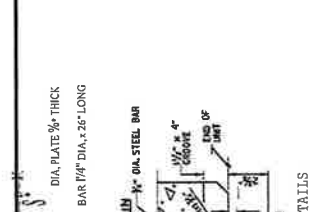
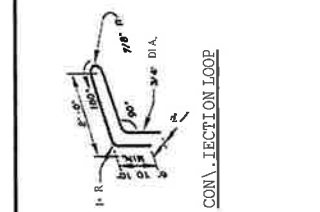
① The contractor shall install the Precast Concrete Barrier Units and shall be responsible for the maintenance, repair, and replacement of the units. The contractor shall be responsible for the maintenance, repair, and replacement of the units. The contractor shall be responsible for the maintenance, repair, and replacement of the units.

② The contractor shall be responsible for the maintenance, repair, and replacement of the units. The contractor shall be responsible for the maintenance, repair, and replacement of the units. The contractor shall be responsible for the maintenance, repair, and replacement of the units.

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⑤ The contractor shall be responsible for the maintenance, repair, and replacement of the units. The contractor shall be responsible for the maintenance, repair, and replacement of the units. The contractor shall be responsible for the maintenance, repair, and replacement of the units.



ITEM	DESCRIPTION	QUANTITY	UNIT
1	REINFORCING BAR #4	181	PER UNIT
2	REINFORCING BAR #4	121	PER UNIT
3	REINFORCING BAR #4	121	PER UNIT
4	REINFORCING BAR #4	121	PER UNIT
5	REINFORCING BAR #4	121	PER UNIT
6	REINFORCING BAR #4	121	PER UNIT
7	REINFORCING BAR #4	121	PER UNIT
8	REINFORCING BAR #4	121	PER UNIT
9	REINFORCING BAR #4	121	PER UNIT
10	REINFORCING BAR #4	121	PER UNIT
11	REINFORCING BAR #4	121	PER UNIT
12	REINFORCING BAR #4	121	PER UNIT
13	REINFORCING BAR #4	121	PER UNIT
14	REINFORCING BAR #4	121	PER UNIT
15	REINFORCING BAR #4	121	PER UNIT
16	REINFORCING BAR #4	121	PER UNIT
17	REINFORCING BAR #4	121	PER UNIT
18	REINFORCING BAR #4	121	PER UNIT
19	REINFORCING BAR #4	121	PER UNIT
20	REINFORCING BAR #4	121	PER UNIT



ARIZONA STATE HIGHWAY COMMISSION  
STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION  
TEMPORARY PRECAST BARRIER  
STANDARD DRAWING TC-4



