

Date Bids Due 11/12/2014		Time of Bid Opening 1:00 PM	Bid Opening Location 800 Lincoln Way, Ames, IA	
Proposal Number 13121	Description Large Type "B" Extruded Aluminum Highway Signs and Steel Breakaway Sign Posts			
Contract to Begin 12/1/2014	Date of Completion 11/23/2017	Proposal Guaranty Amount \$0.00		Liquidated Damages \$0.00
Purchasing Agent Rhonda Ruark	E-Mail Address rhonda.ruark@dot.iowa.gov	Phone 515-239-1285	Fax 515-239-1538	
Company Name			Federal Tax ID	
Street Address		City	State	Zip Code
Supplier Contact (type or print)	E-Mail Address	Phone	Fax	
Supplier agrees to sell items/services at the same prices under the same terms and conditions to any other state agency, Regent or Political Subdivision upon request. Please check Yes or No. <input type="checkbox"/> YES <input type="checkbox"/> NO		Are you a Iowa Targeted Small Business? <input type="checkbox"/> YES <input type="checkbox"/> NO		

GENERAL INFORMATION

This bid package includes the proposal, schedule of prices, standard terms and conditions, supplemental terms, specifications, mailing label and other information you need to prepare your bid. The pages of the document labeled "Bid response" must be typed or completed in ink, signed, and returned in a flat style envelope prior to the bid opening date and time. Please use the furnished mailing label, or indicate on your return bid by marking "Iowa Department of Transportation, proposal number & letting date" on the outside of the return envelope. The bidder may personally deliver, mail, or select a carrier that ensures timely delivery. **Faxed bids will not be accepted.**

If required, each bid must be accompanied by a proposal guaranty in an accepted form, in the sum indicated above. Refer to the Standard Terms and Conditions for the accepted forms in which the proposal guaranty requirement may be fulfilled. Bids lacking a required proposal guaranty will not be considered for award. If the contractor fails to enter into a formal contract within fifteen (15) days after award is made, the proposal guaranty may be retained by the State.

PROPOSAL STATEMENT

The entire contents of this Proposal, Addendums to the Proposal, Specifications, Supplemental Terms and Conditions, Standard Terms and Conditions, and Schedule of Prices shall become part of the contract.

We promise to enter into a contract within fifteen (15) days after award or forfeit the proposal guaranty furnished herewith.

We promise to furnish all materials, equipment and/or services specified, in the manner and the time prescribed, at prices hereinafter set out.

We certify that we have not, either directly or indirectly, entered into any agreement or participated in any collusion or otherwise taken any action in restraint of free competition; that no attempt has been made to induce any other person or firm to submit or not to submit a bid; that this bid has been independently arrived at without collusion with any other bidder, competitor, or potential competitor; and that this bid has not been knowingly disclosed prior to the opening of bids to any other bidder or competitor.

We certify that all materials, equipment and/or services proposed meet or exceed the specifications and will be supplied in accordance with the entire contents of this proposal.

We promise to complete the contract within the contract period, or pay any liquidated damages, if stipulated, for each calendar day as set forth in the bid documents.

Signed: _____ **Date:** _____



Iowa Department of Transportation
Standard Terms and Conditions
For
Bid Proposals/Contracts
-FORMAL-

The entire contents of this bid proposal shall become a part of a contract or purchase order. In case of a discrepancy between the contents of the bid documents, the following items listed by descending order shall prevail:

- Addendums to the bid proposal
- Bid Proposal-
 - Schedule of Prices
 - Specifications
 - Plans and Drawings
- Supplemental Terms and Conditions
- Standard Terms and Conditions

Formal is the procurement process required by Iowa law when the estimated, aggregate amount of the purchase equals or exceeds \$50,000.

(Example - if a statement in the specifications contradicts a statement in the Standard Terms and Conditions, the statement in the specifications shall apply)

Preparation of Bid Response: All bid responses must address all aspects of the proposal including clearly answering all questions within the proposal. Bid responses must be typed or completed in ink and submitted on the forms supplied by the Iowa DOT.

Bid responses must be signed and received prior to the bid opening date and time as indicated on the Bid Response cover page or bid opportunity. The signed, submitted quotation or bidder's proposal shall become the official bid response to be considered for award.

No email, fax or web link bid responses will be accepted. Bid responses must be signed, sealed and delivered in person or by a mail courier that ensures timely delivery.

A. Bid Proposal

1. **Bid Opening:** Bid openings are made public and conducted at the Iowa DOT, Ames complex unless otherwise specified. Proposals received after the time of the bid opening will be returned unopened and considered non-compliant.
2. **Communications:** Questions concerning this proposal should be directed to the purchasing agent listed on the bid proposal. Inquiries can be written, phoned, or faxed. In all cases, written communication will take precedence over verbal communication
3. **Proposal Guaranty:** If required, the bid response page will indicate the amount required to be included in the bid response. A Proposal Guaranty can be supplied in one of the following ways: **(1)** Certified check or credit union certified share draft, cashier's check, or bank draft, drawn on a solvent bank or credit union. Certified checks and certified share drafts shall be drawn and endorsed in the amount indicated. Checks or drafts shall be made payable either to the Iowa Department of Transportation (Iowa DOT) or to the bidder. If payable to the bidder, the check or draft shall be endorsed without qualifications to the Iowa DOT by the bidder or an authorized agent. **(2)** An insurance or surety company may be retained to provide a bond in fulfillment of the proposal guaranty requirement. A properly completed and signed copy of the Proposal Guaranty (*Form 131084*) must accompany the bid. **The Iowa DOT's Proposal Guaranty form must be used; no other forms or formats will be accepted.**
4. **Pricing and Discount:** Unit prices shown on the bid/proposal shall be quoted as the price per unit (e.g., gal., case, each, etc.) as stated in the bid proposal. If there is a discrepancy between the unit bid prices, extension, or total amount of bid, the unit prices shall prevail. Unless otherwise indicated, prices shall be firm for the duration of the contract or purchase. Discounts for early payment are allowed, but not considered in award of the contract.

5. **Acceptance/Rejection:** The Iowa DOT reserves the right to accept or reject any or all bids and to waive irregularities or technicalities, provided such waiver does not substantially change the offer or provide a competitive advantage to any supplier(s). The Iowa DOT also reserves the right to accept that bid which is deemed to be in the best interests of the state. Any unauthorized changes, additions, or conditional bids including any ties to another bid or proposal or any reservations about accepting an award or entering into a contract, may result in rejection of the bid. Bids must remain available for award for thirty (30) days from date of bid opening.
6. **Bid Results & Disclosure:** A bid tabulation will be sent to all responsive bidders with an award recommendation indicated. At the conclusion of the selection process, the contents of all received bid responses will be placed in the public domain and be open to inspection by interested parties, according to state law. Trade secrets or proprietary information that are recognized as such and are protected by law may be withheld if clearly identified as such in the proposal.
7. **Quality:** All material shall be new and of first quality. Items which are used, demonstrators, refurbished, obsolete, seconds, or which have been discontinued are unacceptable without prior written approval by the Iowa DOT.
8. **Recycled Content:** The Iowa Code encourages purchase of products and materials with recycled content, including but not limited to paper products, oils, plastic products, compost materials, aggregate, solvents, and rubber products. Recycled items or alternatives must be noted in the bid response, if known.
9. **Shipping Terms:** Deliveries shall be F.O.B. Destination unless otherwise specified. All deliveries shall be accompanied by a packing slip indicating the Supplier, quantities shipped, and the purchase order number(s). All deliveries charges shall be included in the bid price and paid by the Supplier. No collect C.O.D. deliveries shall be accepted. When entering into a contract, the Supplier shall notify the freight company that all freight and delivery charges are to be prepaid by the Supplier. Goods delivered to the Iowa DOT Distribution Center at 800 Lincoln Way, Ames, IA shall be received between the hours of 7:30 a.m. and 3:30 p.m. on any day except Saturday, Sunday, or a holiday. For deliveries to other Iowa DOT locations, the Supplier may contact the destination location for available times to deliver as not all Iowa DOT locations have the same business hours. The Iowa DOT will not be liable for any freight claims or unpaid freight bills arising from contract or purchase order issues.

B. Award

The binding agreement (award) may be issued in the form a purchase order or contract or both depending on the requirements and complexity of the agreement.

1. **Method of Award:** Award shall be made to the lowest responsible, responsive bidder whose bid meets the requirements of the solicitation and is the most advantageous to the Iowa DOT unless otherwise specified. An Iowa bidder will be given preference over an out-of-state bidder when bid responses are equal in all aspects and are tied in price. By virtue of statutory authority preference will be given to products and provisions grown and coal produced within the State of Iowa.
2. **Award Protests:** Protests of award recommendations are to be addressed to the Director of Purchasing, and shall be made in accordance with paragraph 761--20.4(6)"e" of the Iowa Administrative Code.
3. **Contracts:** Successful contractor(s) may be sent either a formal Contract, Notification of Award or purchase order as confirmation of acceptance and award. Any of these binding agreements shall be for the term stated in the bid proposal or on a purchase order and may be renewed for additional period(s) under the same terms and conditions upon mutual agreement as defined. The successful bidder may not assign a contract to another party without written authorization from the Iowa DOT Purchasing Section.
4. **Payment Terms:** The Iowa DOT typically pays properly submitted vendor invoices within thirty (30) days of receipt, providing goods and/or services have been successfully delivered, installed or inspected (if required), and accepted. Invoices presented for payment must be only for quantities received by the Iowa DOT and must reference the purchase order number to be submitted for processing.
5. **Default:** Failure of the Supplier to adhere to specified delivery schedules or to promptly replace rejected materials shall render the Supplier liable for all costs in excess of the bid price when alternate procurement is necessary. This shall not be the exclusive remedy and the Iowa DOT reserves the right to pursue other remedies available to it by law or under the terms of the binding agreement.

C. General

1. **Administrative Rules:** For Additional details on the rules governing the actions of the Iowa DOT Purchasing Section, refer to 761 IAC, Chapter 20, Iowa Administrative Code, entitled "Procurement of Equipment, Materials, Supplies and Services".
2. **Affirmative Action:** The Contractor (and also subcontractor, vendor or supplier) is prohibited from engaging in discriminatory employment practices forbidden by federal and state law, executive orders and rules of the Iowa Department of Management, pertaining to equal employment opportunity and affirmative action. Contractor may be required to have on file a copy of their affirmative action program, containing goal and time specifications. Contractors doing business with Iowa in excess of \$5,000 annually and employing 50 or more full time employees may be required to file with the Iowa Department of Management a copy of their affirmative action plan. Failure to fulfill these non-discrimination requirements may cause the contract to be canceled and the contractor declared ineligible for future state contracts or subject to other sanctions as provided by law or rule.
3. **Applicable Law:** The contract shall be governed under the laws of the State of Iowa. The contractor shall at all times comply with and observe all federal and state laws, local laws, ordinances, and regulations which are in effect during the period of a contract and which in any manner affect the work or its conduct. Any legal action relating to a contract shall only be commenced in the Story County, Iowa, District Court or the United States District Court for the Southern District of Iowa.
4. **Conflict of Interest:** No state or county official or employee, elective or appointive shall be directly or indirectly interested in any contract issued by the Iowa DOT, See Code of Iowa 314.2
5. **Debarment and Vendor Suspension:** By submitting a proposal, the contractor is certifying that it and its Principals and/or subcontractors are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by the State of Iowa or any Federal department or agency.
6. **Equal Opportunity:** Firms submitting bids must be an "Equal Opportunity Employer" as defined in the Civil Rights Act of 1964 and in Iowa Executive Order Number Thirty-four.
7. **Infringement:** Goods shall be delivered free of the rightful claim of any third party by way of infringement. Contractor shall indemnify and save harmless the State of Iowa and the Iowa DOT against all claims for infringement of, and/or royalties claimed under, patents or copyrights on materials and equipment furnished under this bid.
8. **Records Audit:** The contractor agrees that the Auditor of the State of Iowa or any authorized representative of the state, and where federal funds are involved, the Comptroller General of the U.S. Government, shall have access to and the right to examine, audit, excerpt, and transcribe any directly pertinent books, documents, papers, and records of the contractor relating to orders, invoices, or payments of a contract or purchase order.
9. **Targeted Small Businesses:** The Iowa DOT seeks to provide opportunities for women and/or minority small business enterprises. To apply for certification as an Iowa Targeted Small Business, contact the Iowa Department of Inspection and Appeals (515-281-5796). Contractors shall take documented steps to encourage participation from Targeted Small Businesses for the purpose of subcontracting and supplying of good or services or both.
10. **Taxes:** Prices quoted shall not include state or federal taxes from which the state is exempt. Exemption certificates will be furnished upon request.
11. **Termination:**
 - **Termination Due to Lack of Funds or Change in Law**

The Iowa DOT shall have the right to terminate this Contract without penalty by giving thirty (30) days written notice to the vendor as a result of any of the following:

 - Adequate funds are not appropriated or granted to allow the Iowa DOT to operate as required and to fulfill its obligations under contract.
 - Funds are de-appropriated or not allocated or if funds needed by the Iowa DOT, at the Iowa DOT's sole discretion, are insufficient for any reason.
 - The Iowa DOT's authorization to operate is withdrawn or there is a material alteration in the programs administered by the Iowa DOT.
 - The Iowa DOT's duties are substantially modified.

Following a 30 day written notice, the Iowa DOT may terminate a binding agreement in whole or in part without the payment of any penalty or incurring any further obligation to the Supplier. Following termination upon notice, the Supplier shall be entitled to compensation upon submission of invoices and proper proof of claim for goods and services under contract up to and including the date of termination.



Schedule Of Prices

Number	13121
Date Required	11/12/2014 1:00 PM

Title Large Type "B" Extruded Aluminum Highway Signs and Steel Breakaway Sign Posts

Vendor

Delivery Location ,

PA Name Rhonda J Ruark

Shipping Terms FOB Destination/Freight Prepaid

Phone 515-239-1285

E-Mail rhonda.ruark@dot.iowa.gov

Description

Product Availability Days: _____

Item	Qty	Unit	Description	Part #	Unit Price	Total Price
1 Steel Breakaway Sign Posts for Large Type "B" Aluminum Signs						
1.1	120	EACH	POST STUBS FOR STEEL BREAKAWAY SIGN POSTS 6"X12LB			
Comments:						
1.2	1,700	LF	GALV STEEL BREAKAWAY SIGN POSTS 6"X12LB 42 DAY A fuse plate and all the bolts, nuts and washers for the fuse plate are part of the sign post. Included with the post are: four base bolts, all the nuts, washers, shims and keeper plate used to fasten post stub to the sign post.			
Comments:						
1.3	70	EACH	POST STUBS FOR STEEL BREAKAWAY SIGN POSTS 8"X21LB			
Comments:						
1.4	1,200	LF	GALV STEEL BREAKAWAY SIGN POSTS 8"X21LB 42 DAY A fuse plate and all the bolts, nuts and washers for the fuse plate are part of the sign post. Included with the post are: four base bolts, all the nuts, washers, shims and keeper plate used to fasten post stub to the sign post.			
Comments:						
1.5	60	EACH	POST STUBS FOR STEEL BREAKAWAY SIGN POSTS 12"X26LB			
Comments:						
1.6	22,264	LF	GALV STEEL BREAKAWAY SIGN POSTS 12"X26LB 42 DAY A fuse plate and all the bolts, nuts and washers for the fuse plate are part of the sign post. Included with the post are: four base bolts, all the nuts, washers, shims and keeper plate used to fasten post stub to the sign post.			
Comments:						
1.7	200	LF	RECT TUBE GALV STEEL BREAKAWAY POSTS 4"X6"X1/4" A fuse plate and all the bolts, nuts and washers for the fuse plate are part of the sign post. Included with the post are: four base bolts, all the nuts, washers, shims and keeper plate used to fasten post stub to the sign post.			
Comments:						

Item	Qty	Unit	Description	Part #	Unit Price	Total Price
1.8	20	SET	RECT TUBE ALUM ZEE-BARS & FASTNERS Each set has five zee-bars with fasteners to mount the sign to the zee-bar, and zee-bar to the tubular post.			
Comments:						
2	Large Type "B" Extruded Aluminum Signs					
2.1	30,000	SQFT	TYPE B EXTRUDED ALUMINUM W/ D/A COPY PANELS 42 DAY			
Comments:						

I HEREBY CERTIFY THAT THIS PROPOSAL MEETS OR EXCEEDS THE MINIMUM REQUIREMENT INCLUDING SPECIFICATIONS AND ADDENDUMS.

Signature: _____ Date: _____

**Iowa Department of Transportation
SUPPLEMENTAL TERMS & CONDITIONS
For
Large Type B Extruded Aluminum Highway Signs &
Steel Breakaway Sign Posts
Proposal No.:13121
Letting Date: November 12, 2014**

Proposal Guarantee

Proposal guarantee is not required on this proposal.

Exceptions or Equals

Any requests for changes or exceptions to the instructions, specifications, or terms of this proposal must be submitted on the enclosed form "Bidder's Request for Exception or Equal." The form must specifically state the requested change or deviation and be accompanied by adequate supporting information to evaluate the request.

The completed "Bidder's Request for Exceptions or Equal" form must be received in sufficient time *prior* to the bid opening to evaluate and respond with appropriate action.

Exception or Equals forms must be received by the purchasing office by October 31, 2014 1:00 PM.

It is suggested that any requests for exception or equal be submitted either by e-mail, or fax immediately upon receipt of the proposal in order to receive full consideration. Fair treatment to all vendors shall be the primary concern in evaluation of exceptions or deviations, particularly those submitted just prior to the bid opening.

Do not submit the "Bidders Request for Exception or Equal" form with your bid.

Samples

The department may require a sample to evaluate quality and/or compliance with proposal requirements prior to award. In lieu of sampling and testing, the contracting authority may require certifications of any material or tests specified for the material.

Additional Information

If any additional information is required to properly evaluate the bid, the bidder shall furnish the requested information prior to 1:00 p.m. on the Monday following the letting.

Contract Award

Award will be made by group. All items within a group must be bid to be considered for a group award.

Contract Period

The successful bidder(s) will be awarded a three (3) year contract with an option to renew for three (3) additional years in twelve (12) month increments.

Price Adjustments

Prices shall be held firm for the first 365 days of the contract period. Price adjustments may be requested after the initial 365 days to reflect manufacturer's increases and/or decreases in price.

Price adjustment may be allowed on each extension but must not exceed the CPI, PPI, or appropriate index for adjustment used. Any adjustment must be mutually agreed upon and be pre-approved by the Iowa Department of Transportation, Purchasing Section.

If a price adjustment does not appear to be in the best interest of the State of Iowa, the Iowa DOT reserves the right to cancel the contract.

Contract Quantities

Estimated quantity is based on previous purchases. It is understood that the Iowa DOT considers this only a best estimate of requirements and makes no firm quantity commitment.

Purchase Orders

Purchase orders will be issued for items as needed throughout the contract period. Design and sign layouts will be emailed utilizing Sign Cad format.

Delivery Locations and Requirements

Material shall be delivered to various sites throughout the state of Iowa. Personnel from the DOT office of Traffic and Safety will work with the selected vendor(s) to establish delivery destinations and provide post lengths.

Normal delivery will be expected on a 42-day turnaround, after receipt of a purchase order.

Typically orders will be truckload. Assume nine separate shipments; each shipment for 30 posts approximately 18' long and 30 stubs.

Invoicing & Packing List

Each packing list and invoice must reflect only the merchandise relating to one purchase order. Multiple orders may be shipped together but each order requires individual invoicing and packing list stating purchase order number.

Liquidated Damages

Liquidated damages of \$100.00 per day will be assessed for each business day the contract remains uncompleted after the order due date.

Shipping Charges

Normally orders are truckload quantities. On occasions small orders may be placed. For any order under \$3,000.00, the Iowa Department of Transportation will allow shipping charges.

Iowa Department of Transportation
Large Type “B” Extruded Aluminum Posts Specifications
Proposal No.: 13121
Letting Date: November 12, 2014

DESCRIPTION:

The Iowa Department of Transportation (DOT) desires to enter into a contract to purchase new and unused steel break-away sign posts, post stubs and all necessary break-away hardware for large type B signs.

SIGN POST MANUFACTURERS:

Sign post manufacturers shall be pre-approved as outlined in Materials Instructional Memorandum (IM) 557 and listed in IM 557 appendix C for sign support structures.

These documents are available electronically at:

<http://www.iowadot.gov/erl/current/IM/content/557>

SIGN POSTS:

All materials must be new and unused.

Except as modified by contract documents, the signs posts, post stubs, and all necessary break-away hardware shall meet the Iowa Department of Transportation Standard Specifications for Highway and Bridge Construction section 4186, including supplements. Sign posts, post stubs, and break-away hardware shall be fabricated according to the dimensions shown on Standard Road Plan SI-113, SI-114, and SI-132. Specifications are available electronically at:

<http://www.iowadot.gov/erl/current/GS/content/4186>

Iowa Department of Transportation
Large Type “B” Extruded Aluminum Highway Signs Specifications
Proposal No.: 13121
Letting Date: November 12, 2014

DESCRIPTION:

The Iowa Department of Transportation (DOT) desires to enter into a contract to purchase new type B signs.

SIGN MANUFACTURERS:

Sign manufacturers shall be pre-approved as outlined in Materials Instructional Memorandum (IM) 486. Guidelines are available electronically at:

http://www.iowadot.gov/erl/current/IM/navigation/index_number.htm

DETAILS:

All materials for the signs shall meet the Iowa Department of Transportation Standard Specifications for highway and bridge construction section 4186, including supplements. Specifications are available electronically at: <http://www.iowadot.gov/erl/current/GS/Navigation/nav41.htm> . Details on sign construction can be found in Standard Road Plan SI-123. This is available electronically at: http://www.iowadot.gov/design/stdplne_si.htm . An alternate extruded aluminum panel is allowed. The alternate has a minimum face thickness of 0.081 inches and a minimum weight of 2.4 pounds per lineal foot (for the 12” wide extrusion).

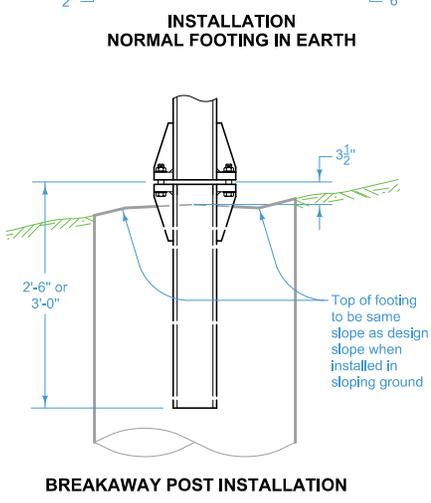
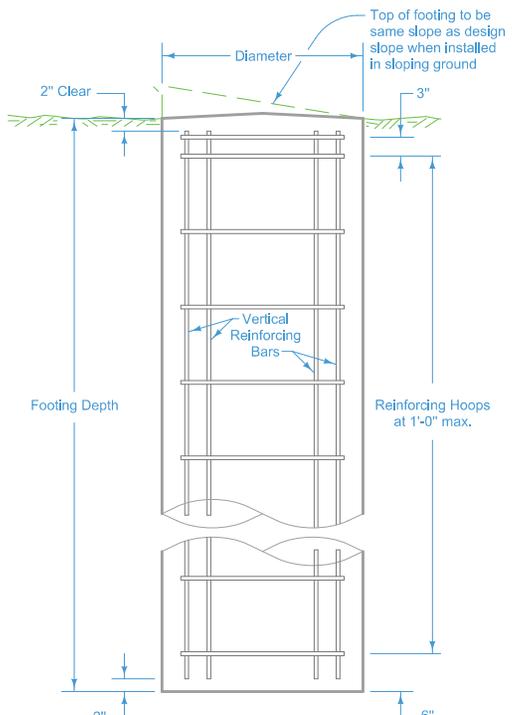
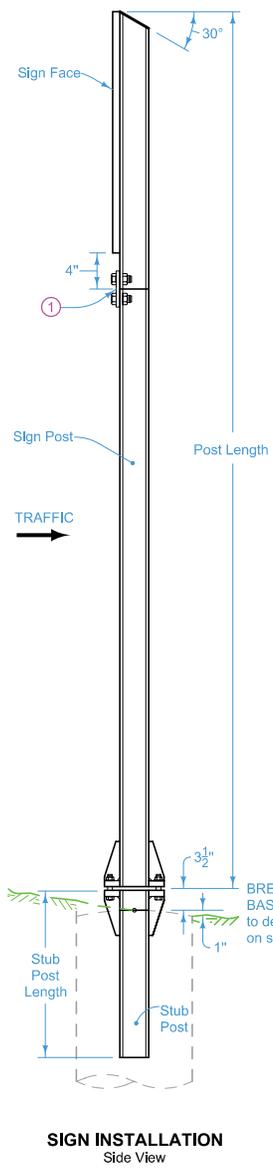
The retroreflective sign sheeting material for white, blue, green, brown and red sheeting shall be type IV or Iowa VII retroreflective sheeting. For yellow sheeting, the material shall be fluorescent yellow Iowa VII retroreflective sheeting. Sign legends shall be accomplished through use of direct applied retroreflective letters, numerals, symbols and borders.

Each sign shall have the necessary aluminum clips for fastening the extruded signs to the sign supports.

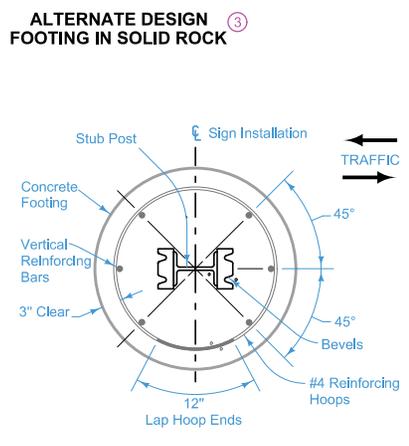
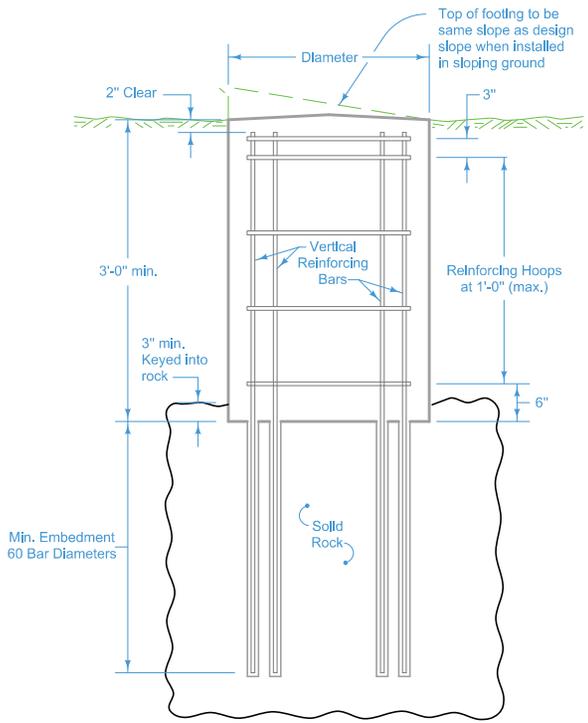
The DOT will design and provide sign layouts in Sign Cad format. The DOT will retain ownership of all artwork. Personnel for the office of Traffic and Safety will work with the contractor to establish proofing procedures and delivery destinations. The Engineer must approve any deviation from the contract documents before work is started.

Finished signs will be visually inspected upon receipt for correct message, and conformity to specifications. The DOT will be responsible for the accuracy of artwork provided; the successful vendor will be accountable for quality of the fabrication process. The sign fabricator shall warrant materials and workmanship for no less than the sheeting manufacturer’s warranty and replace non-complying signs at no additional cost to the contracting authority.

Delivery will be expected on a 42-day turnaround after receipt of a purchase order.



POST DATA	
Post Size	Stub Post Length
W 6 x 9 W 6 x 12 W 6 x 15 W 8 x 18	2'-6"
W 8 x 21 W 10 x 22 W 10 x 26 W 12 x 26	3'-0"



PLAN
(Reinforcing Placement and Sign Orientation)

Plumb signpost by installing brass stock or strip shims complying with ASTM B36. Furnish two shims each of 0.012" and 0.032" thickness (total of 4 per post).

Construct the footing as shown for normal footing in earth. Where solid rock is encountered, the alternate design for footing in solid rock may be used with the approval of the Engineer.

Dispose of all excavation for the footing in the area adjacent to the footing and shape to normal ground contour, unless directed otherwise by the Engineer.

Hold the stub post in proper position by an approved device to ensure that it remains in proper position upon completion of concrete placement.

The contract price for size of footing required is full compensation for footing as detailed hereon, including all necessary excavation regardless of character.

- ① Not for single post installations.
- ② Lengths are for normal footings. Required length may vary where alternate rock design is used.
- ③ Set vertical bars in solid rock as follows:
 1. Drill holes twice bar diameter and fill with water.
 2. When hole is fully saturated, blow water out and fill two-thirds depth with sand cement mortar.
 3. Insert bar and consolidate mortar.
 4. Fill hole to top with mortar.

Possible Contract Item:
Concrete Footing for Breakaway Sign Post
Steel Breakaway Sign Post for Type A or B Signs

Post Size	FOOTING REINFORCING DATA		Vertical Rein. Bar Size	Vertical Rein. Bar Length (2)
	Stub Length	Footing Diameter		
W6x9	2'-6"	2'-0"	6'-0"	No. 6 5'-8"
W6x12	2'-6"	2'-0"	6'-0"	No. 6 5'-8"
W6x15	2'-6"	2'-0"	6'-6"	No. 6 6'-2"
W8x18	2'-6"	2'-0"	7'-0"	No. 6 6'-8"
W8x21	3'-0"	2'-8"	7'-6"	No. 8 7'-2"
W10x22	3'-0"	2'-8"	8'-0"	No. 8 7'-8"
W10x26	3'-0"	2'-8"	8'-6"	No. 8 8'-2"
W12x26	3'-0"	2'-8"	9'-0"	No. 8 8'-8"

Iowa Department of Transportation

STANDARD ROAD PLAN

REVISIONS: Updated welds. Modified notes. Rearranged drawings.

Deanna Maifield
APPROVED BY DESIGN METHODS ENGINEER

REVISION

5	10-16-12
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SI-113

SHEET 1 of 3

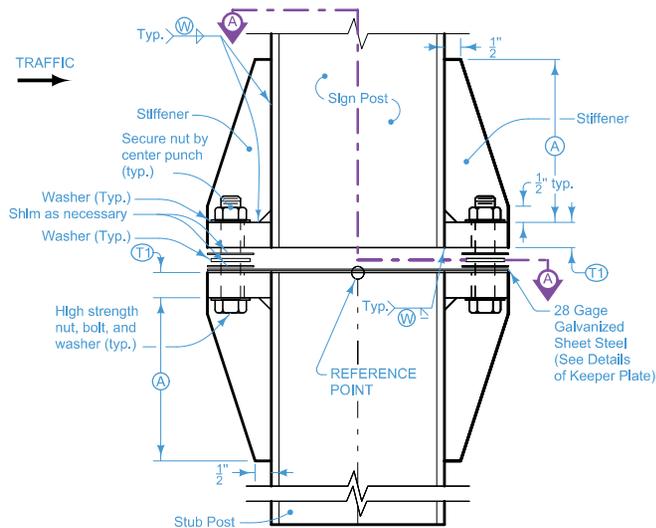
SUPPORT STRUCTURES -
STEEL BREAKAWAY POSTS

The following Base Plate alternates are considered equivalent:

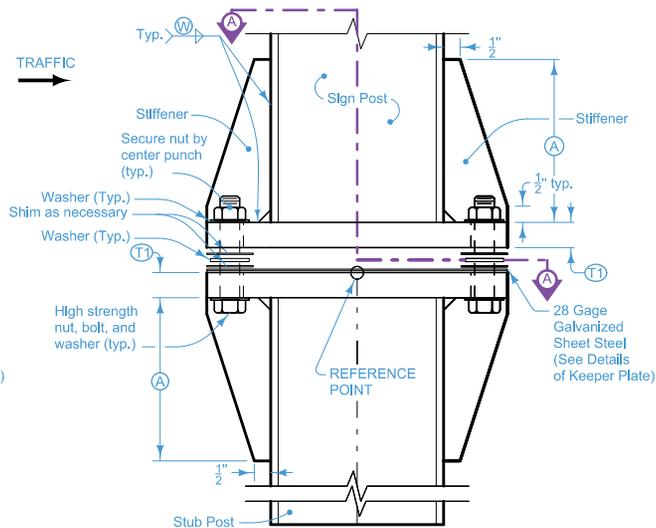
Alternate 1 - Weld base plates (2 each), to sides of signpost and stub post flanges.

Alternate 2 - Weld base plate (1 each) to end of sign post and stub post. Properly match and align the bolt holes and notches in the stub post plate and the sign post plate as indicated herein.

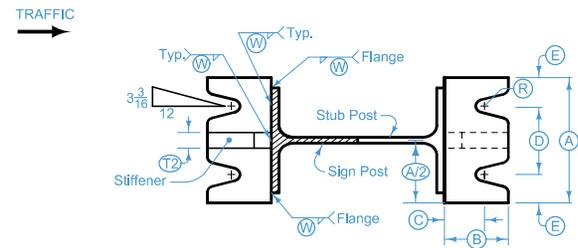
Grind smooth all welds and galvanizing between Base Plates.



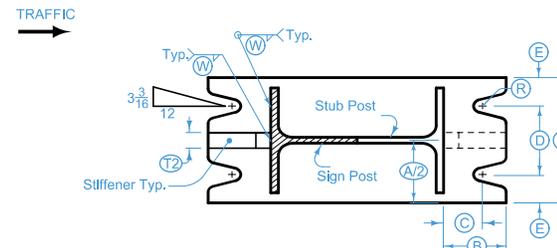
BREAKAWAY BASE
Side View
(Alternate 1)



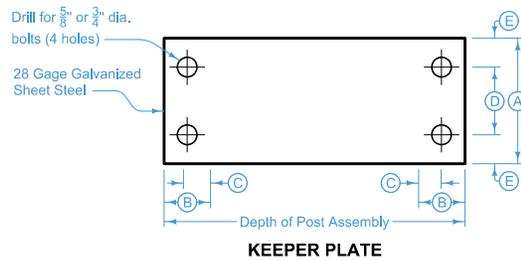
BREAKAWAY BASE
Side View
(Alternate 2)



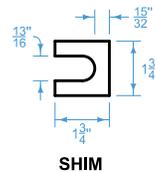
SECTION A-A
PLAN - BASE
(ALTERNATE 1)



SECTION A-A
PLAN - BASE
(ALTERNATE 2)



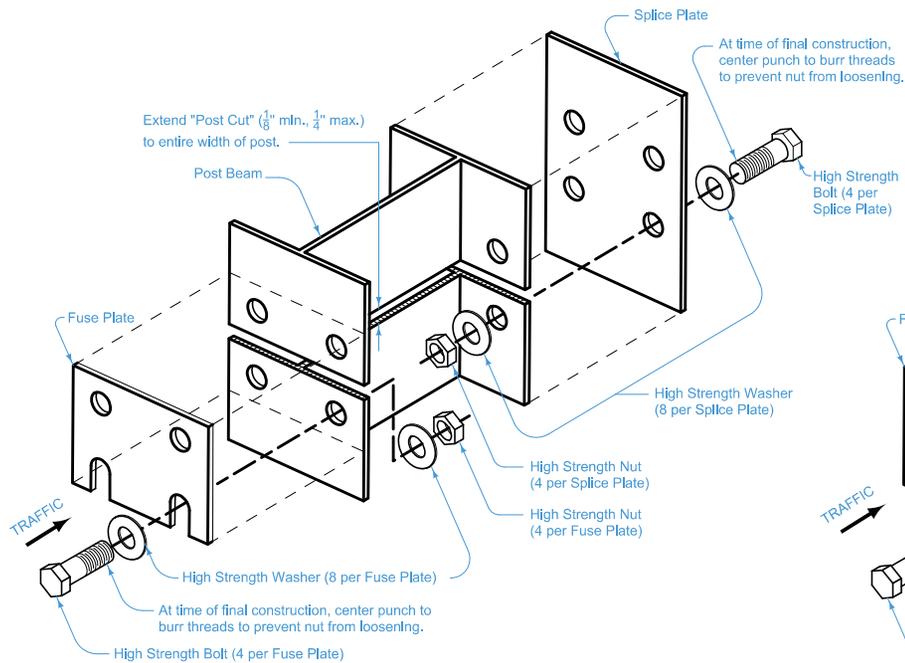
KEEPER PLATE



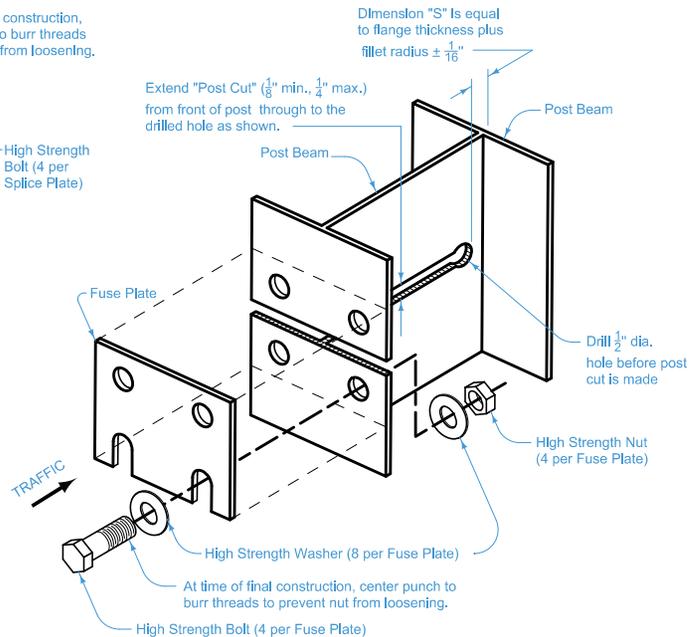
SHIM

BREAKAWAY BASE DATA										
Post Size	Bolt Size & Torque	A	B	C	D	E	T1	T2	W	R
W 6 x 9	5/8" dia. x 2 3/4" Torque = 37.50 ft. lbs.	5"	2"	1 1/4"	2 3/4"	1 3/8"	3/4"	1"	1"	1 1/2"
W 6 x 12										
W 6 x 15										
W 8 x 18	3/4" dia. x 3 1/2" Torque = 62.50 ft. lbs.	6"	2 1/4"	1 3/8"	3 1/2"	1 1/4"	1"	3/4"	5/16"	1 3/32"
W 8 x 21										
W 10 x 22										
W 10 x 26										
W 12 x 26										

<p>Iowa Department of Transportation</p> <p>STANDARD ROAD PLAN</p> <p>REVISIONS: Updated welds. Modified notes. Rearranged drawings.</p> <p><i>Deanna Maifield</i> APPROVED BY DESIGN METHODS ENGINEER</p> <p>SUPPORT STRUCTURES - STEEL BREAKAWAY POSTS</p>	REVISION 5 10-16-12
	SI-113 SHEET 2 of 3



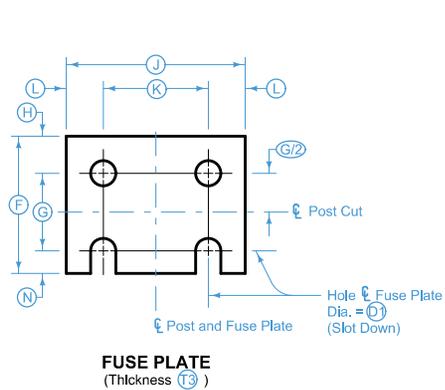
Hinge Alternate 1
(With Splice Plate)



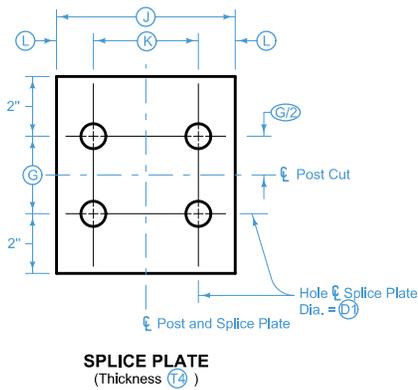
Hinge Alternate 2
(One-Piece Post)

④ If post is to be transported after cut is made, bolt a Splice Plate to front of post to prevent damage to the post.

FUSE PLATE ASSEMBLY



FUSE PLATE
(Thickness T_3)

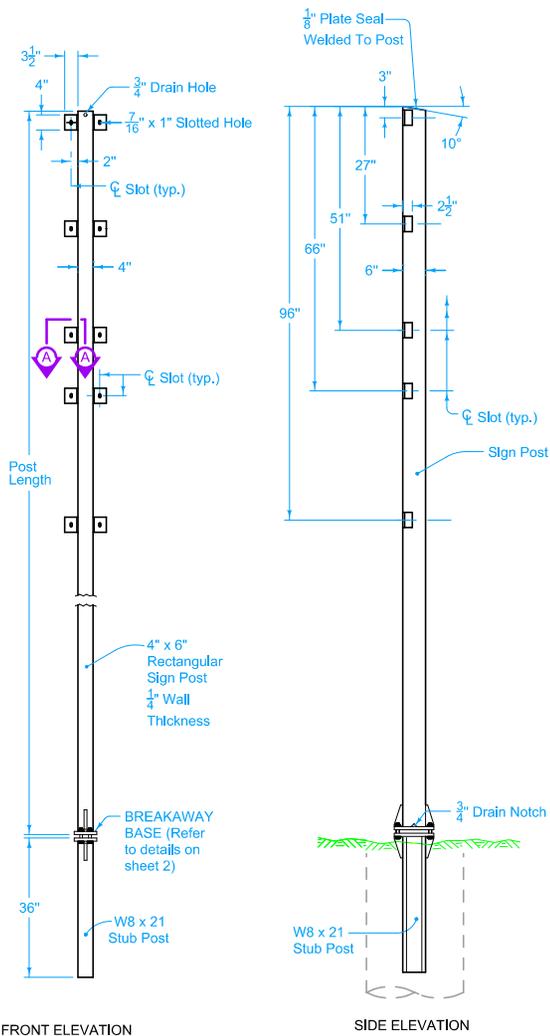


SPLICE PLATE
(Thickness T_4)

Bolt Size	Torque
1"	100 Ft. Lbs.
5/8"	180 Ft. Lbs.
3/4"	320 Ft. Lbs.
7/8"	470 Ft. Lbs.

Post Size	Bolt Dia.	FUSE AND SPLICE PLATE DATA									
		F	G	H	J	K	L	N	D	T3	T4
W6x9	1/2"	3 3/8"	2"	1 3/8"	4"	2 1/4"	7 7/8"	3 1/2"	5 1/8"	1 1/4"	1 1/4"
W6x12	5/8"	3 3/4"	2"	1 3/8"	4"	2 1/4"	7 7/8"	5 1/8"	11 1/8"	3 1/8"	1 1/4"
W6x15	3/4"	4 1/2"	2 1/2"	1 3/4"	6"	3 1/2"	11 1/4"	3 3/4"	13 1/8"	1 1/2"	1 1/4"
W8x18	3/4"	4 1/2"	2 3/2"	1 3/4"	5 1/4"	2 3/4"	11 1/4"	3 3/4"	13 1/8"	3 1/2"	1 1/4"
W8x21	7/8"	4 7/8"	2 1/2"	1 3/2"	5 1/4"	2 3/4"	11 1/4"	7 7/8"	15 1/8"	3 1/2"	1 1/4"
W10x22	7/8"	5 3/8"	3"	1 1/2"	5 3/4"	2 3/4"	11 1/2"	7 7/8"	15 1/8"	3 1/2"	1 1/4"
W10x26	7/8"	5 3/8"	3"	1 1/2"	5 3/4"	2 3/4"	11 1/2"	6 7/8"	15 1/8"	3 1/2"	1 1/4"
W12x26	7/8"	5 3/8"	3"	1 1/2"	6 1/4"	3 1/2"	11 1/2"	7 7/8"	15 1/8"	3 1/2"	1 1/4"

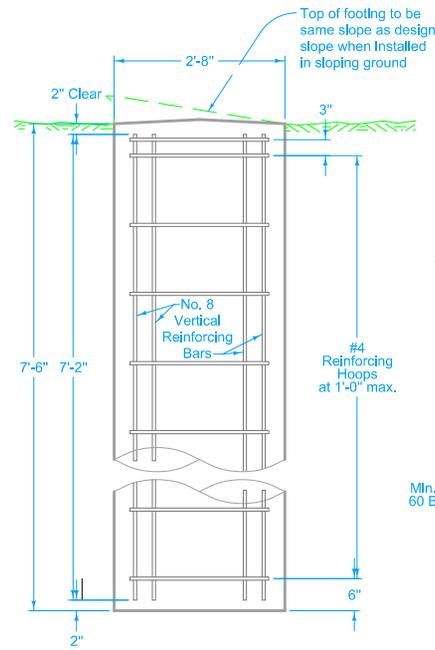
<p>Iowa Department of Transportation</p> <p>STANDARD ROAD PLAN</p> <p>REVISIONS: Updated welds. Modified notes. Rearranged drawings.</p> <p><i>Deanna Maifield</i> APPROVED BY DESIGN METHODS ENGINEER</p> <p>SUPPORT STRUCTURES - STEEL BREAKAWAY POSTS</p>	REVISION	10-16-12
	5	
	<p>SI-113</p> <p>SHEET 3 of 3</p>	



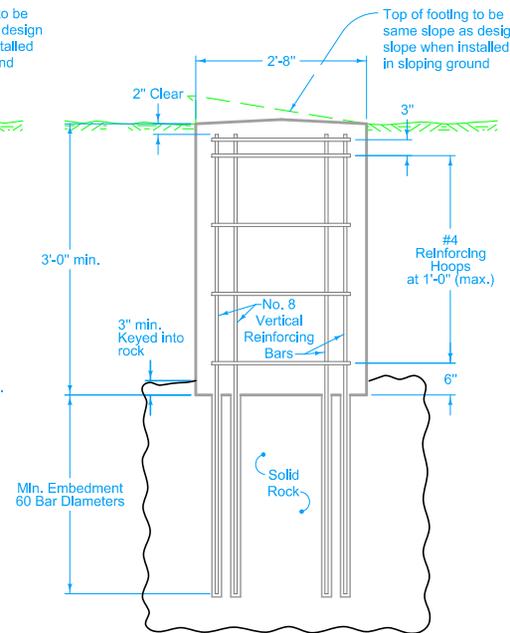
FRONT ELEVATION

SIDE ELEVATION

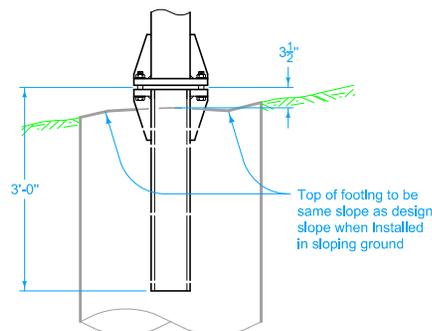
4" x 6" RECTANGULAR TUBE POST FOR INTERSTATE SPEED SIGNS



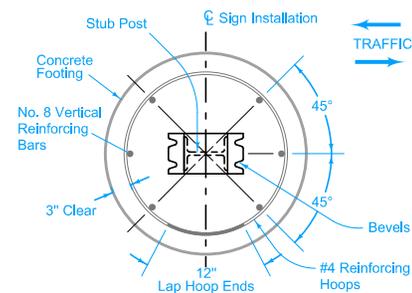
INSTALLATION NORMAL FOOTING IN EARTH



ALTERNATE DESIGN ① FOOTING IN SOLID ROCK



BREAKAWAY POST INSTALLATION



PLAN
(Reinforcing Placement and Sign Orientation)

Plumb signpost by installing brass stock or strip shims complying with ASTM B 36. Furnish two shims each of 0.012" and 0.032" thickness (total of 4 per post).

Construct the footing as shown for normal footing in earth. Where solid rock is encountered, the alternate design for footing in solid rock may be used with the approval of the Engineer.

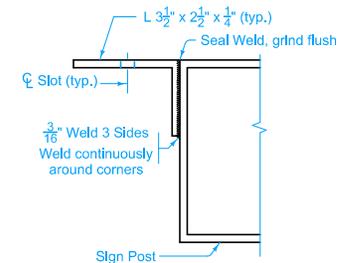
Dispose of all excavation for the footing in the area adjacent to the footing and shape to normal ground contour, unless directed otherwise by the Engineer.

Hold the stub post in proper position by an approved device to ensure that it remains in proper position upon completion of concrete placement.

The contract price for size of footing required is full compensation of footing as detailed hereon, including all necessary excavation regardless of character.

- ① Set vertical bars in solid rock as follows:
1. Drill holes twice bar diameter and fill with water.
 2. When hole is fully saturated, blow water out and fill two-thirds depth with sand cement mortar.
 3. Insert bar and consolidate mortar.
 4. Fill hole to top with mortar.

Possible Contract Items:
Concrete Footing for Breakaway Sign Post
Steel Breakaway Sign Post, Rectangular Tube

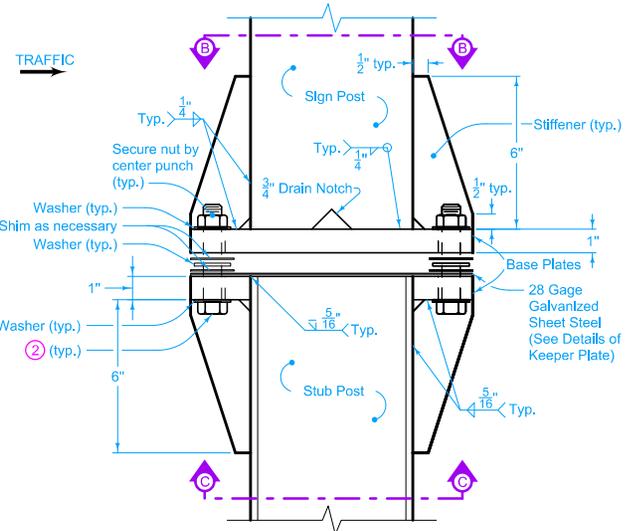


SECTION A-A

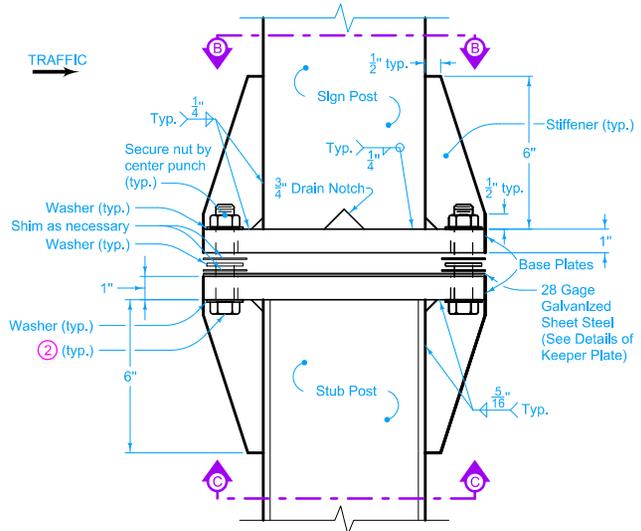
<p>Iowa Department of Transportation</p>	REVISION
	2 10-16-12
STANDARD ROAD PLAN	SI-114
REVISIONS: Updated welds. Modified notes. Rearranged drawings.	SHEET 1 of 2

Deanna McFild
APPROVED BY DESIGN METHODS ENGINEER

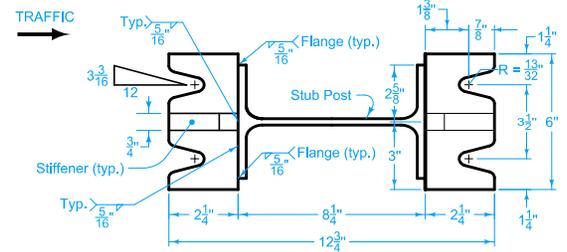
SUPPORT STRUCTURES - STEEL BREAKAWAY POSTS RECTANGULAR TUBE



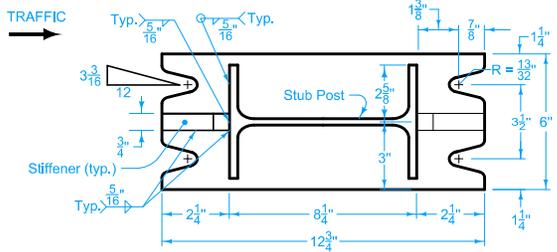
BREAKAWAY BASE
Side View
(Alternate 1)



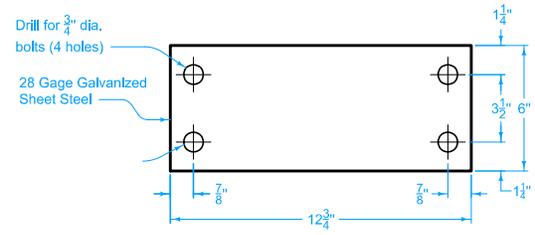
BREAKAWAY BASE
Side View
(Alternate 2)



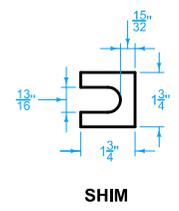
SECTION C-C
PLAN - BASE
(ALTERNATE 1)



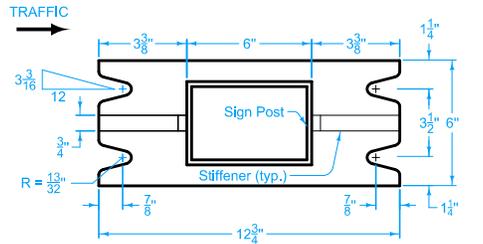
SECTION C-C
PLAN - BASE
(ALTERNATE 2)



KEEPER PLATE



SHIM



SECTION B-B
PLAN - BASE

The following Base Plate alternates are considered equivalent:

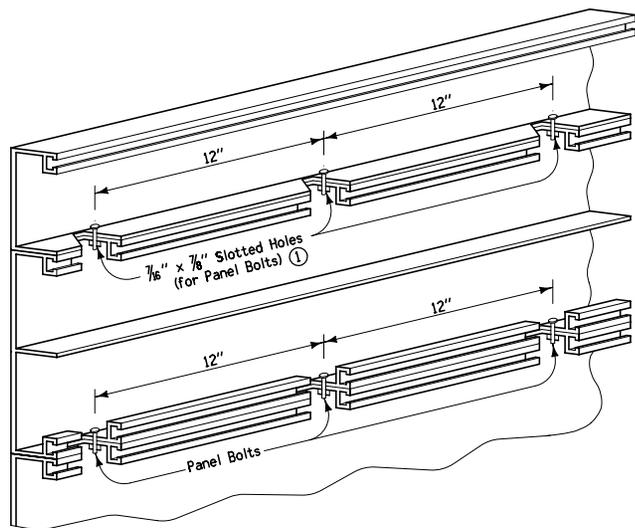
ALTERNATE 1 - Weld base plates (2 each) to sides of stub post flanges.

ALTERNATE 2 - Weld base plate (1 each) to end of stub post. During assembly, properly match and align the bolt holes and notches in the stub post plate and the sign post plate as indicated herein.

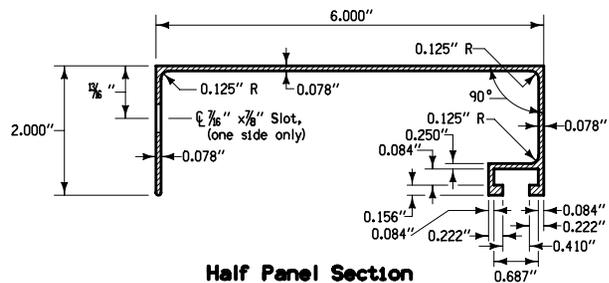
Grind smooth all welds and galvanizing between Base Plates.

② 3/4" dia. x 3 1/2"
Torque = 62.50 ft. lbs.

 Iowa Department of Transportation STANDARD ROAD PLAN	REVISION
	2 10-16-12
	SI-114
SHEET 2 of 2	
REVISIONS: Updated welds. Modified notes. Rearranged drawings.	
<i>Deanna Mufield</i> <small>APPROVED BY DESIGN METHODS ENGINEER</small>	
SUPPORT STRUCTURES - STEEL BREAKAWAY POSTS RECTANGULAR TUBE	



ASSEMBLY DETAIL



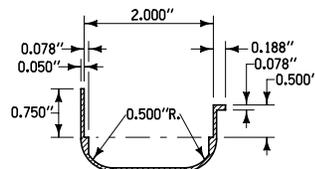
Half Panel Section

Panel bolt slotted holes spaced at 12 inch centers shall be located along the full length of each panel, such that the outermost slots are of equal distances (not to exceed 6 inches) from the ends of the panel.

Signs shall be made up of full panels unless a half panel is required, in which case it shall be placed at the top edge of the sign.

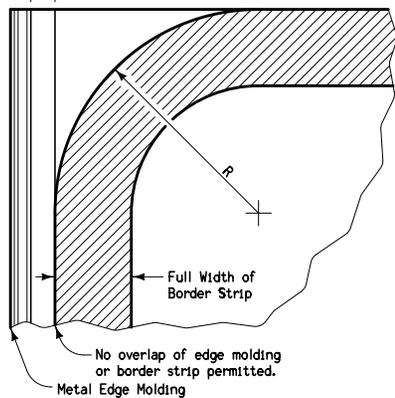
Refer to detail project plans and summary sheet for exact data for individual sign fabrication requirements.

① 2 Washers per panel bolt, one each side of sign.



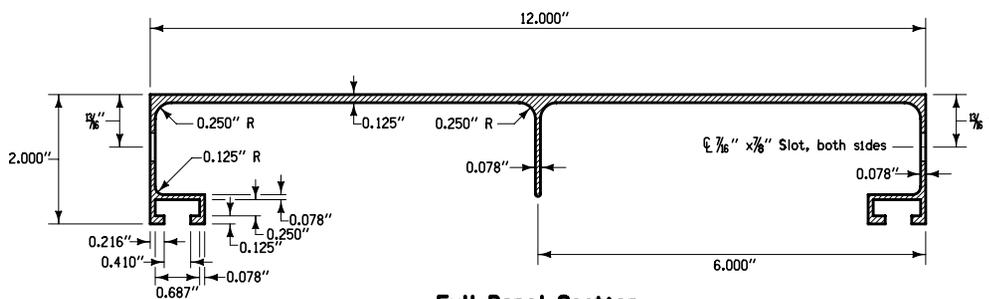
EDGE MOLDING

Actual Length of Panels = Design Length + 1.5"
3/4"



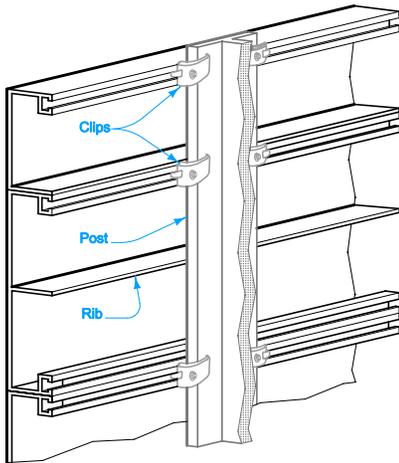
EDGE MOLDING BORDER STRIP DETAIL

Edge molding shall be installed full length of each vertical side of each sign. Attach in accordance with current specifications.



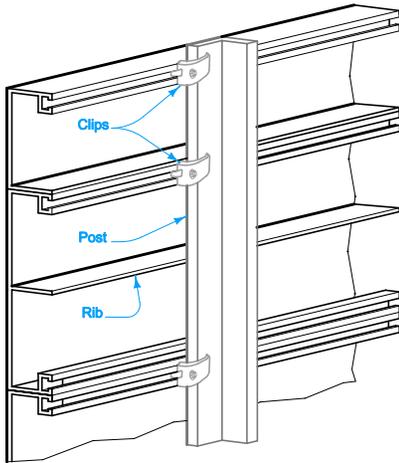
Full Panel Section
STANDARD STRUCTURAL SIGN PANELS

	REVISION
	1 10-20-09
STANDARD ROAD PLAN	SI-123
	SHEET 1 of 1
REVISIONS: Modified general notes.	
<i>Deanna Milfield</i> APPROVED BY DESIGN METHODS ENGINEER	
FABRICATION - TYPE 'B' SIGNS	



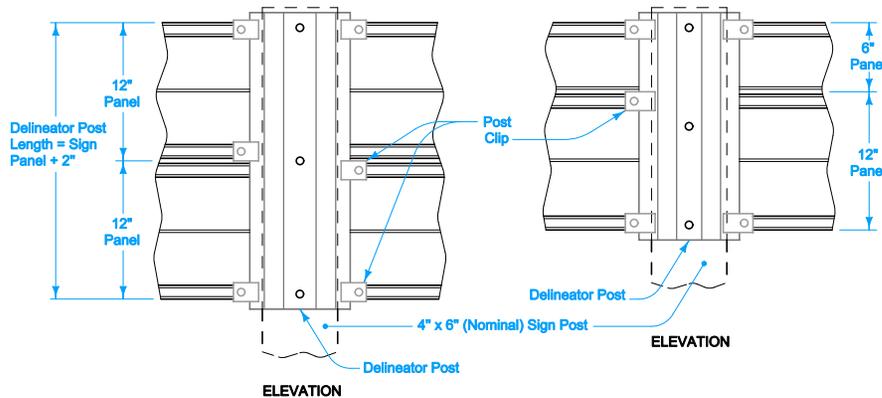
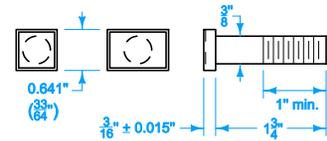
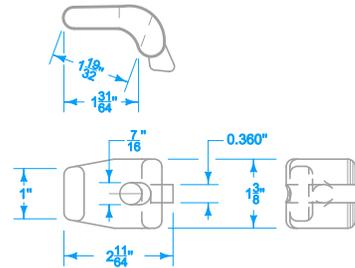
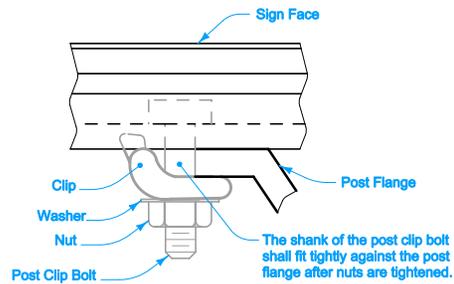
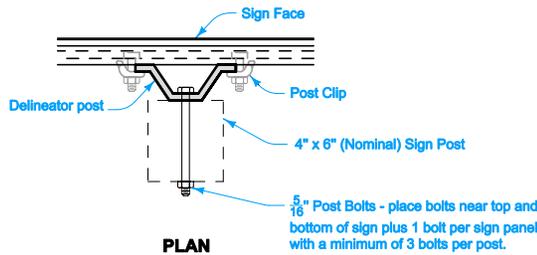
TYPE 1 ATTACHMENT

Type 1 Attachment shall be used for all signs placed on metal breakaway posts.



TYPE 4 ATTACHMENT

Type 4 Attachment shall be used for all signs mounted on overhead sign support structures.



TYPE 3 ATTACHMENT

Type 3 Attachment shall be used for all signs with wood posts.

Position the EXIT NUMBER PANEL above the guide sign aligned with the edge of the guide sign indicating direction of exit.

If the bolt holes in the top panel and the bottom panel of the two signs line up, panel bolts are to be used.

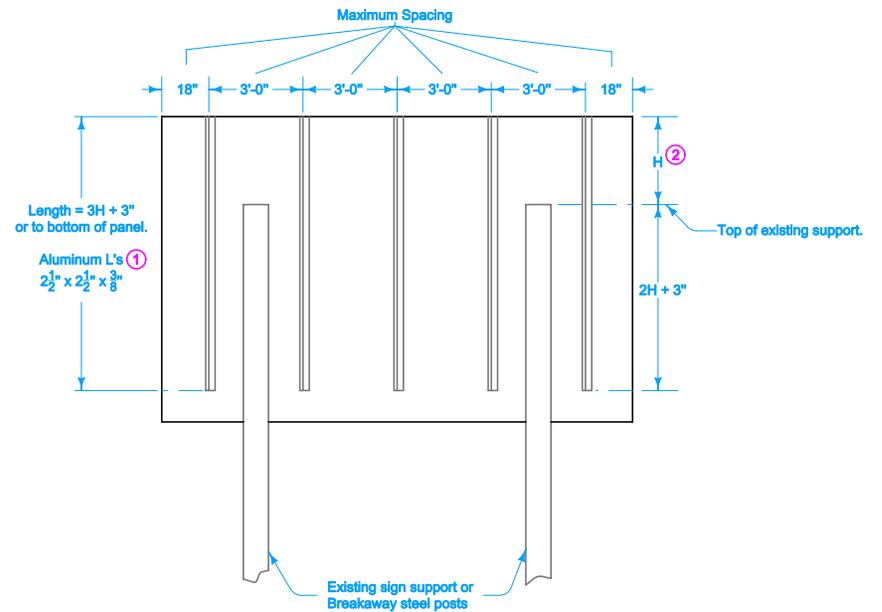
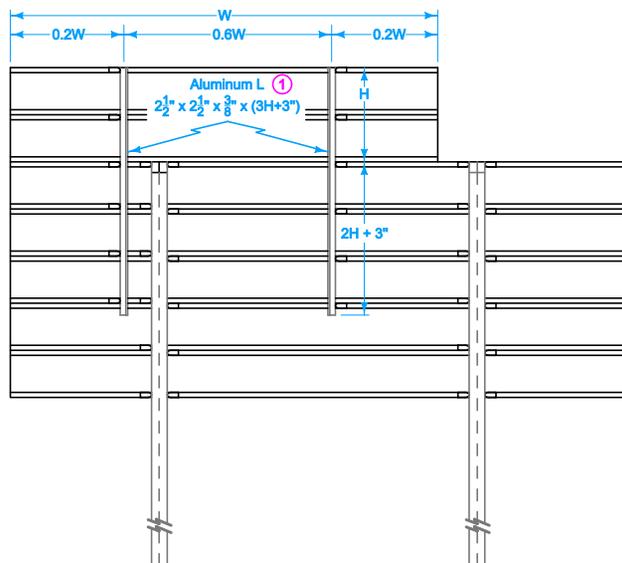
If the angle fasteners can not be horizontally placed as shown, they can be moved so as to securely hold the top sign.

A post clip is required on each angle at top of panel and each extrusion joint.

The aluminum angles are considered part of the mounting hardware and will be furnished by the Contractor as an incidental item and no separate payment will be made.

<p>Iowa Department of Transportation</p> <p>STANDARD ROAD PLAN</p> <p>REVISIONS: Removed general note already covered in spec.</p> <p><i>Deanna McFalls</i> APPROVED BY DESIGN METHODS ENGINEER</p>	<p>REVISION</p> <p>2 04-20-10</p>
	<p>SI-132</p> <p>SHEET 1 of 2</p>
	<p>INSTALLATION - TYPE 'B' SIGNS</p>

- ① The aluminum L shall never extend below the bottom of the major sign.
- ② Sign height added above existing supports.



GUIDE SIGNS

 Iowa Department of Transportation	REVISION	
	2	04-20-10
STANDARD ROAD PLAN	SI-132	
SHEET 2 of 2		
REVISIONS: Removed general note already covered in spec.		
 APPROVED BY DESIGN METHODS ENGINEER		
INSTALLATION - TYPE 'B' SIGNS		

(Vendor may copy as needed)

**Due on or Before
October 31, 2014**

**If Required
E-mail/Fax At Once**

Letting Date: November 12, 2014

**If Required
E-mail/Fax At Once**

**Iowa Department of Transportation
Bidders Request for Exceptions or Equal
Proposal No.: 13121**

Item: _____ Spec. No. _____

Bid Proposal Requests: _____

Bidder Proposes to furnish in lieu of above: _____

E-mail/Fax to:

Iowa Department of Transportation
Attention: Rhonda Ruark
Purchasing Section
800 Lincoln Way
Ames, Iowa 50010
Phone No. 515-239-1285
Fax No. 515-239-1538
rhonda.ruark@dot.iowa.gov

By _____

Company _____

Address _____

City State Zip Code
Phone No. _____

Fax No. _____

=====
DOT USE ONLY

Approved _____

Disapproved _____

Reason _____

Signature: _____

Date: _____

Bidder _____

SEALED BID

LETTING DATE: November 12, 2014

PROPOSAL NO: 13121

PROPOSAL DESCRIPTION: Large Type "B" Extruded Aluminum
Highway Signs and Steel Breakaway Sign
Posts

Iowa Department of Transportation
PURCHASING - SEALED BID PROPOSAL
800 Lincoln Way
Ames, IA 50010