

# CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES

4/55

## NONCONFORMANCE REPORT

Project No. 20-01402-571

NCR No. 2002-10

### PART 1: DESCRIPTION OF NONCONFORMANCE:

Dimensions of thermocouple holes provided in Drawing 20-01402-571-20 rev 01 are not correct. The depth dimension did not account for the 0.050" dimension of the weld preparation joint. Staff from Texas Toolmakers discovered error during machining of carbon steel mockup plates and informed Darrell Dunn via phone.

Initiated by: Darrell S. Dunn

Date: 7/19/2002

### PART 2: PROPOSED DISPOSITION AND CORRECTIVE ACTION

#### Disposition:

Accept specimens as is.

#### Basis of Disposition:

As a result of the error in the drawing the location of thermocouples was off by 0.50". This will not affect the welding process and the intent of the mockup plates, which was to approximate the amount of distortion that resulted from the welding process, will not be compromised.

#### Action to Correct Nonconformance:

The error in the drawing was discussed with staff at Texas Toolmakers (Mike Ridgway). Texas Toolmakers was instructed to complete machining using dimensions from weld preparation surface and ignore incorrect and redundant dimensions of thermocouple hole depths. Future drawings of weld preparation specimens will not include redundant dimensions. Actual depths of the thermocouple holes were recorded for each machined plate. Measurements made using calibrated micrometer Mitutoyo CD-6" P serial number 06-DC-5 Asset number 002438 calibrated March 25, 2002

Target date for completion: 8/31/2002

Proposed by: Darrell S. Dunn

Date: 7/19/2002

### PART 3: APPROVAL

Element Manager: [Signature]

Date: 7/19/02

Director of QA: [Signature]

Date: 7/22/02

Comments/Instructions:

Revise drawings to reflect the correct hole depth requirements.  
Record as-built measurements on future drawings. [Signature]

### PART 4: CLOSE OUT

Comments: Drawing 20-01402-571-20-  
Revision 1 has been revised to Revision 2.  
Revision 2 now references correct  
hole depth requirements.

Verified by: [Signature] Date: 9/5/02

Distribution: original/D. Dunn

EMS

G. Snyne, H. Garcia

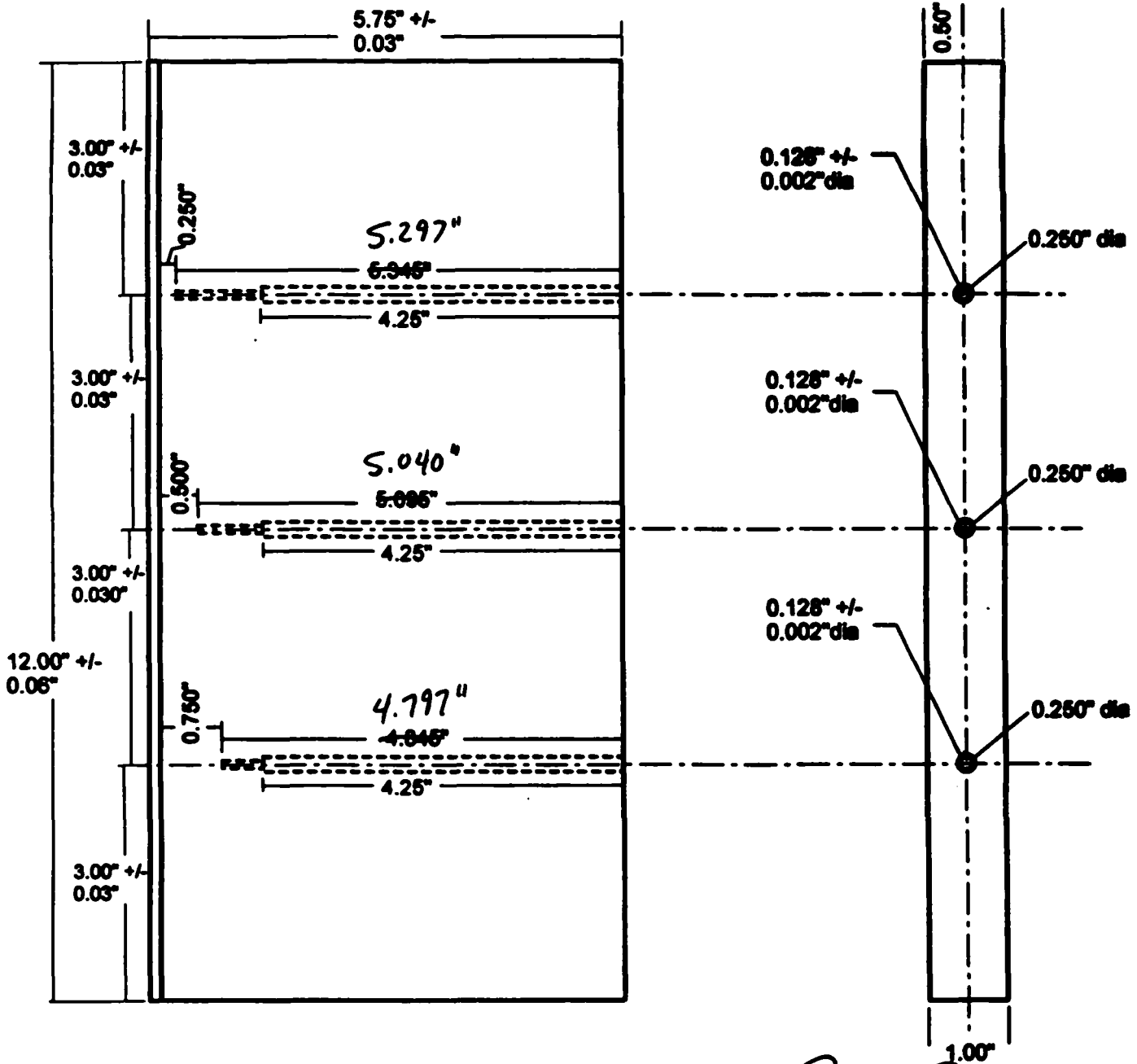
M. Christman

Darrell S. Dunn  
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 e-mail: ddunn@swri.org

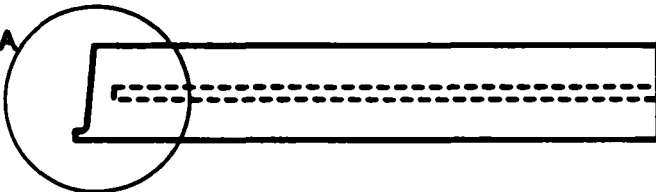
Carbon Steel Mockup Specimen  
 CNWRA Drawing 20-01402-571-20 Rev. 01  
 All Dimensions  $\pm 0.010"$   
 unless otherwise specified  
 Note: Detail A on Page 2

To be completed at time of order: 7/55  
 Material: \_\_\_\_\_  
 Heat: \_\_\_\_\_  
 Specimen Orientation: \_\_\_\_\_  
 Other: \_\_\_\_\_

Page 1 of 2  
 PLATE #3



Detail A



*Darrell Dunn* 3/6/02  
 Initiated by: D. Dunn Date

*V. Jain* 3/6/02  
 Reviewed by: V. Jain Date

*B. Mabrito* 3/6/02  
 QA Approval B. Mabrito Date

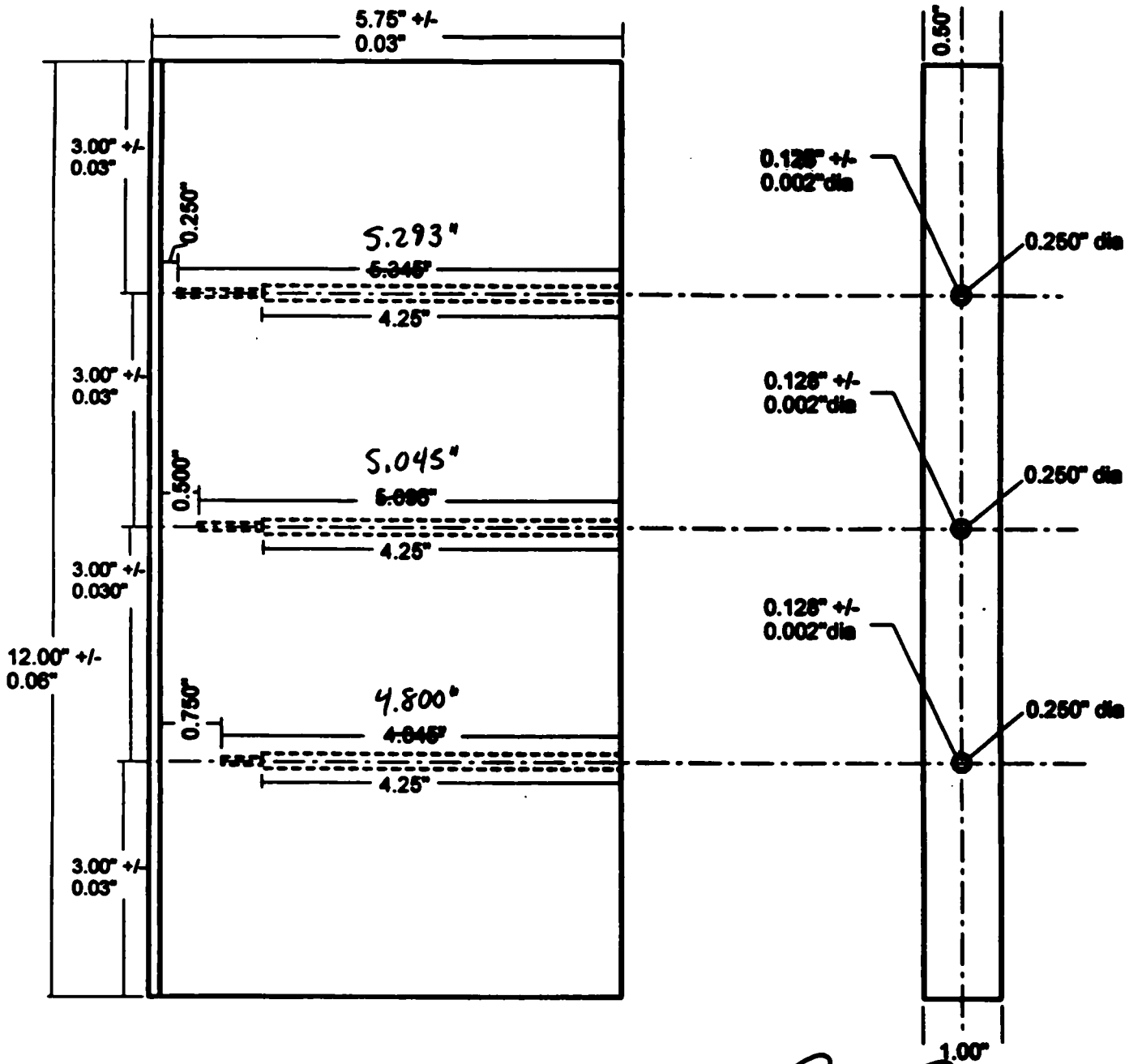
Darrell S. Dunn  
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 e-mail: ddunn@swri.org

Carbon Steel Mockup Specimen  
 CNWRA Drawing 20-01402-571-20 Rev. 01  
 All Dimensions  $\pm 0.010"$   
 unless otherwise specified  
 Note: Detail A on Page 2

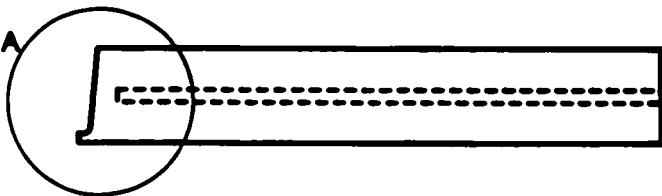
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 Material: \_\_\_\_\_  
 Heat: \_\_\_\_\_  
 Specimen Orientation: \_\_\_\_\_  
 Other: \_\_\_\_\_

Page 1 of 2

PLATE # 4



Detail A



*Darrell Dunn* 3/6/02  
 Initiated by: D. Dunn Date

*V. Jain* 3/6/02  
 Reviewed by: V. Jain Date

*B. Mabrito* 3/6/02  
 QA Approval B. Mabrito Date

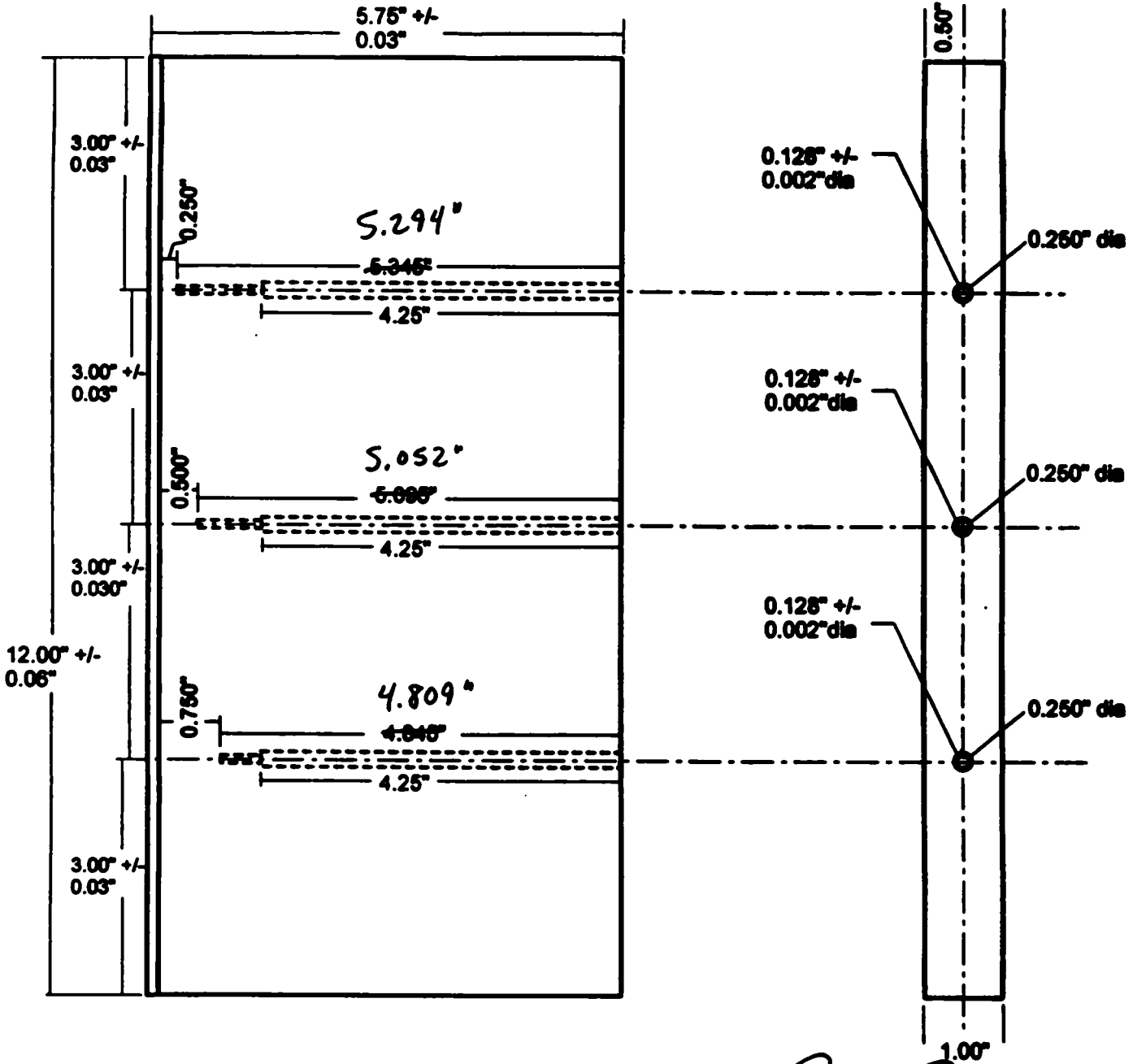
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 e-mail: ddunn@swri.org

Carbon Steel Mockup Specimen  
 CNWRA Drawing 20-01402-571-20 Rev. 01  
 All Dimensions  $\pm 0.010"$   
 unless otherwise specified  
 Note: Detail A on Page 2

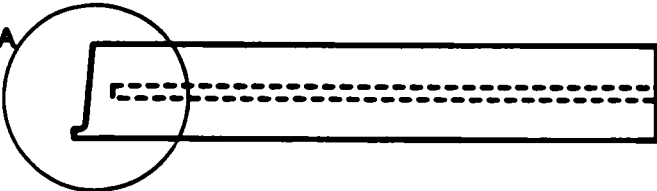
To be completed at time of order. 9/5  
 Material: \_\_\_\_\_  
 Heat: \_\_\_\_\_  
 Specimen Orientation: \_\_\_\_\_  
 Other: \_\_\_\_\_

Page 1 of 2

PLATE #5



Detail A



*Darrell Dunn* 3/6/02  
 Initiated by: D. Dunn Date

*V. Jain* 3/6/02  
 Reviewed by: V. Jain Date

*B. Mabrito* 3/6/02  
 QA Approval B. Mabrito Date

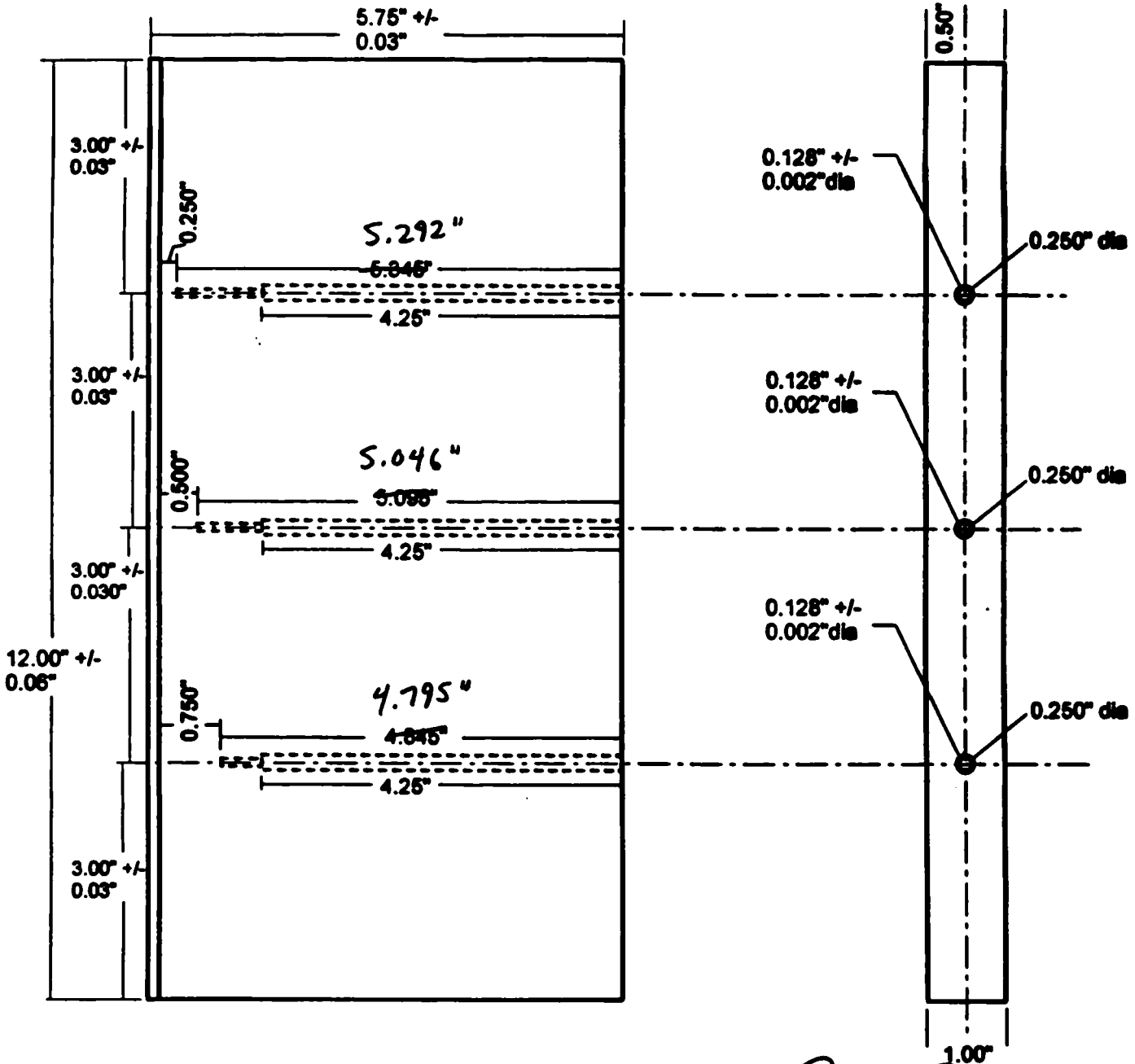
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Carbon Steel Mockup Specimen  
 CNWRA Drawing 20-01402-571-20 Rev. 01  
 All Dimensions  $\pm 0.010"$   
 unless otherwise specified  
 Note: Detail A on Page 2

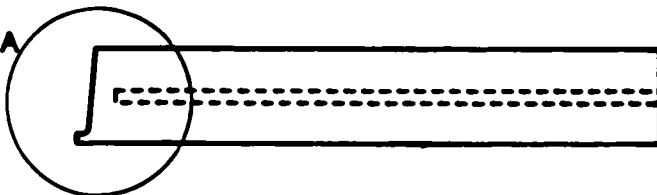
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 Material: \_\_\_\_\_  
 Heat: \_\_\_\_\_  
 Specimen Orientation: \_\_\_\_\_  
 Other: \_\_\_\_\_

Page 1 of 2

PLATE #6



Detail A



*Darrell Dunn* 3/6/02  
 Initiated by: D. Dunn Date

*V. Jain* 3/6/02  
 Reviewed by: V. Jain Date

*B. Mabrito* 3/6/02  
 QA Approval B. Mabrito Date

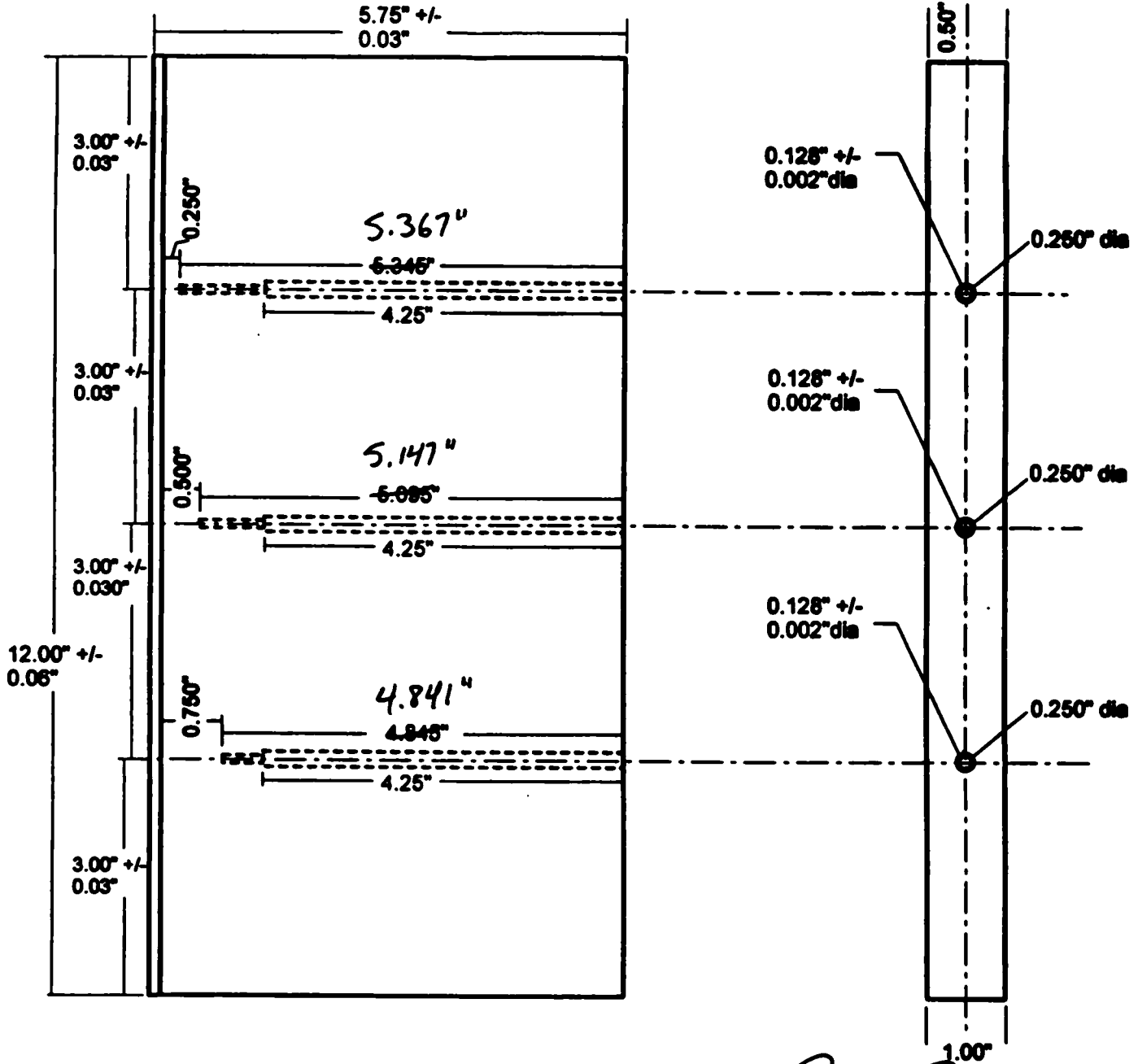
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Carbon Steel Mockup Specimen  
 CNwRA Drawing 20-01402-571-20 Rev. 01  
 All Dimensions  $\pm 0.010"$   
 unless otherwise specified  
 Note: Detail A on Page 2

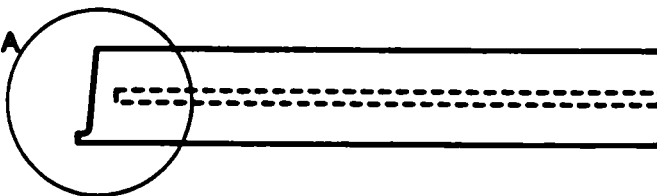
To  completed at time of order: 11/55  
 Material: \_\_\_\_\_  
 Heat: \_\_\_\_\_  
 Specimen Orientation: \_\_\_\_\_  
 Other: \_\_\_\_\_

Page 1 of 2

PLATE # 7



Detail A



*Darrell Dunn* 3/6/02  
 Initiated by: D. Dunn Date

*V. Jain* 3/6/02  
 Reviewed by: V. Jain Date

*B. Mabrito* 3/6/02  
 QA Approval B. Mabrito Date

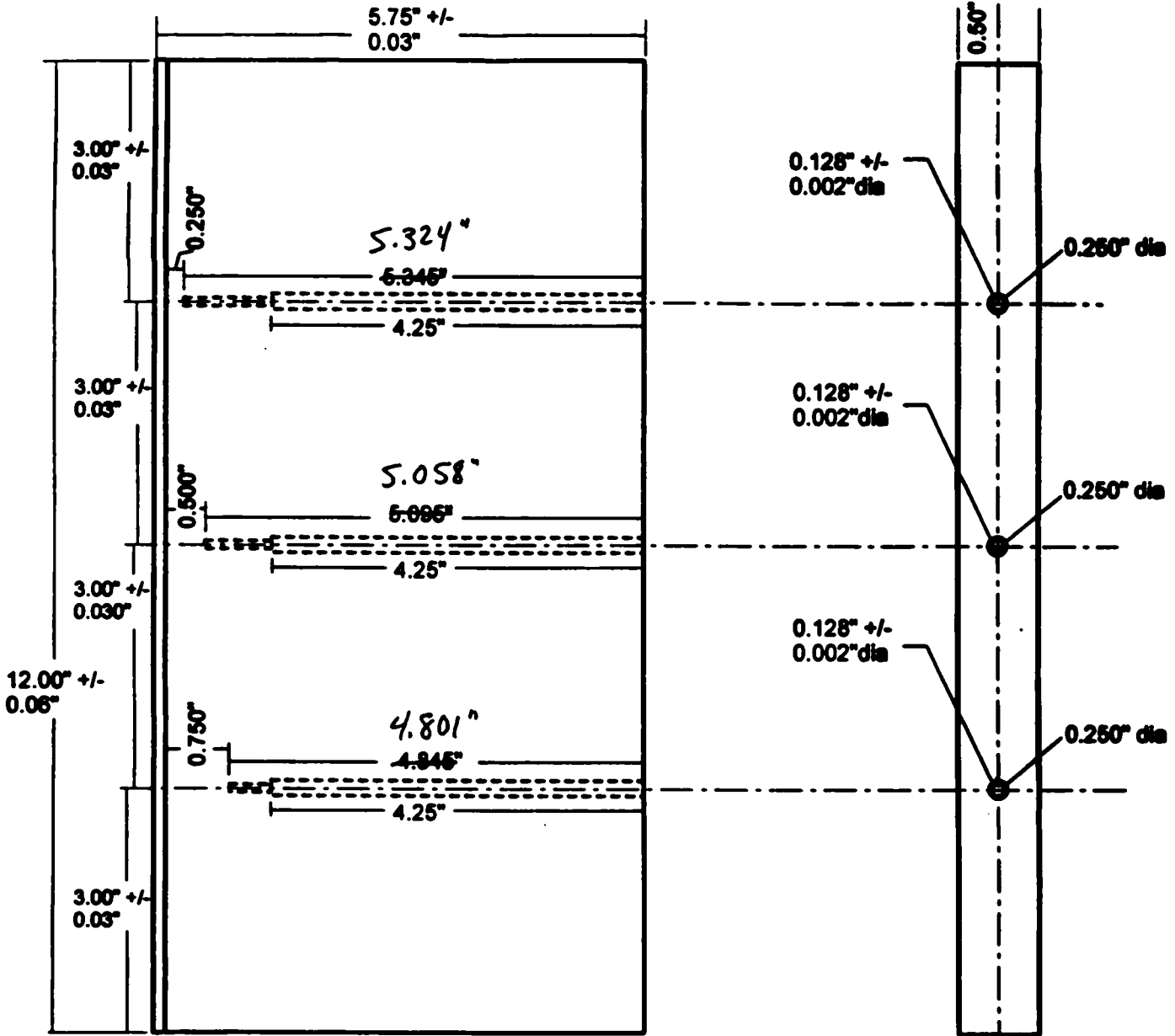
Darrell S. Dunn  
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 E-mail: ddunn@swri.org

Carbon Steel Mockup Specimen  
 CNWRA Drawing 20-01402-571-20 Rev. 01  
 All Dimensions  $\pm 0.010"$   
 unless otherwise specified  
 Note: Detail A on Page 2

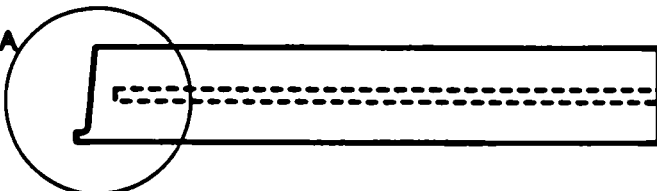
To  completed at time of order: 12/55  
 Material: \_\_\_\_\_  
 Heat: \_\_\_\_\_  
 Specimen Orientation: \_\_\_\_\_  
 Other: \_\_\_\_\_

Page 1 of 2

PLATE #8



Detail A



*Darrell Dunn* 3/6/02  
 Initiated by: D. Dunn Date

*V. Jain* 3/6/02  
 Reviewed by: V. Jain Date

*B. Mabrito* 3/6/02  
 QA Approval B. Mabrito Date

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Carbon Steel Mockup Specimen  
 CNWRA Drawing 20-01402-571-20 Rev. 01  
 All Dimensions  $\pm 0.010"$   
 unless otherwise specified  
 Note: Detail A on Page 2

To be completed at time of order. 13/55

Material: \_\_\_\_\_

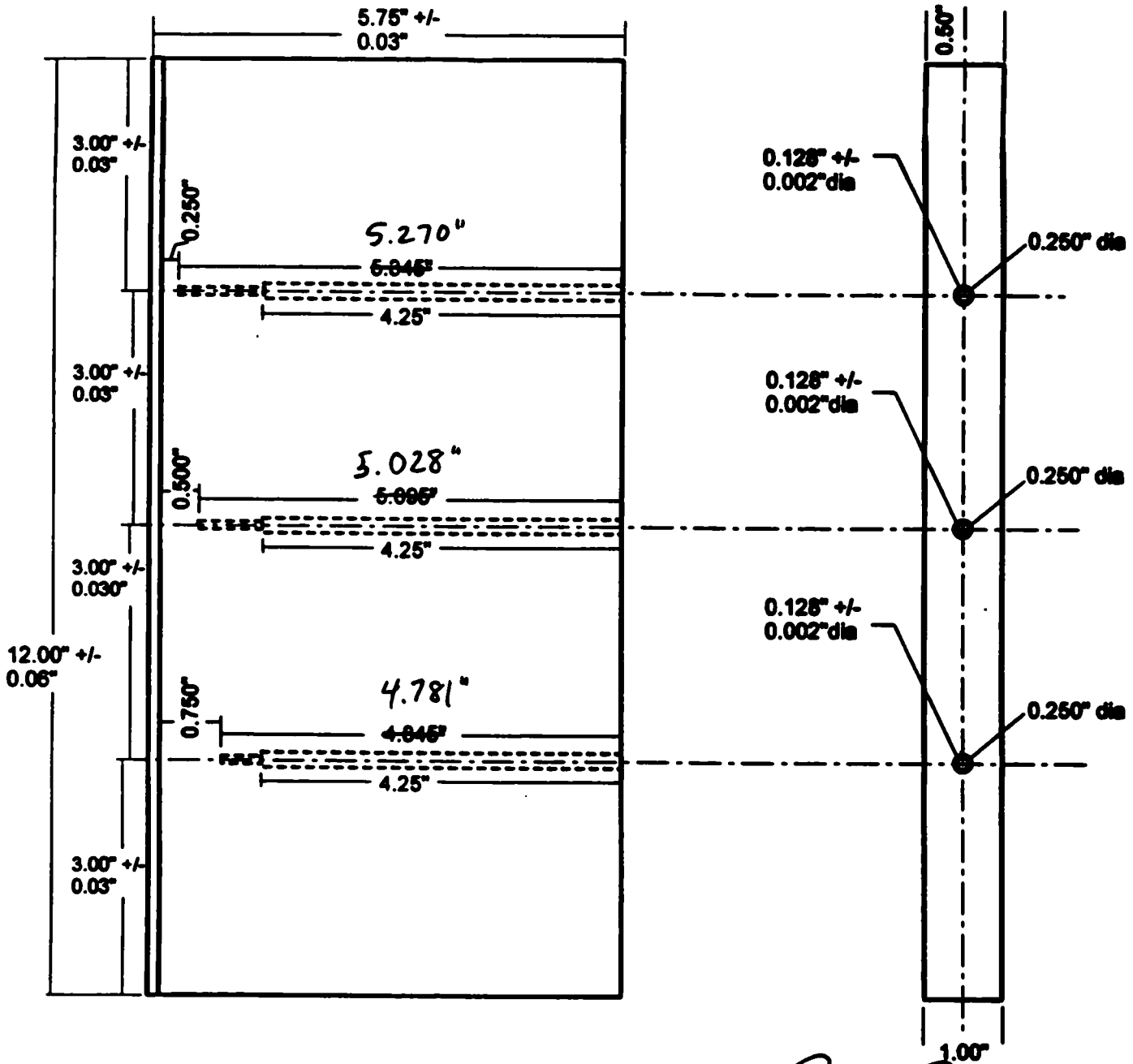
Heat: \_\_\_\_\_

Specimen Orientation: \_\_\_\_\_

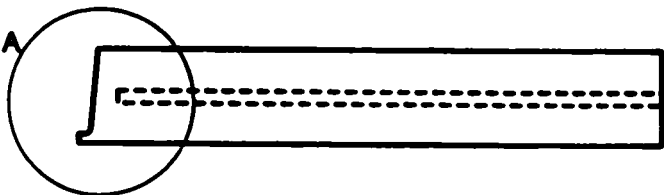
Other: \_\_\_\_\_

Page 1 of 2

PLATE # 1



Detail A



*Darrell Dunn* 3/6/02  
 Initiated by: D. Dunn Date

*V. Jain* 3/6/02  
 Reviewed by: V. Jain Date

*B. Mabrito* 3/6/02  
 QA Approval B. Mabrito Date

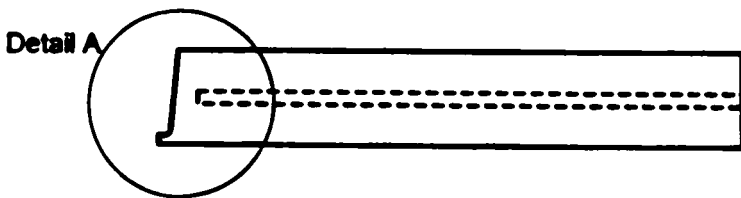
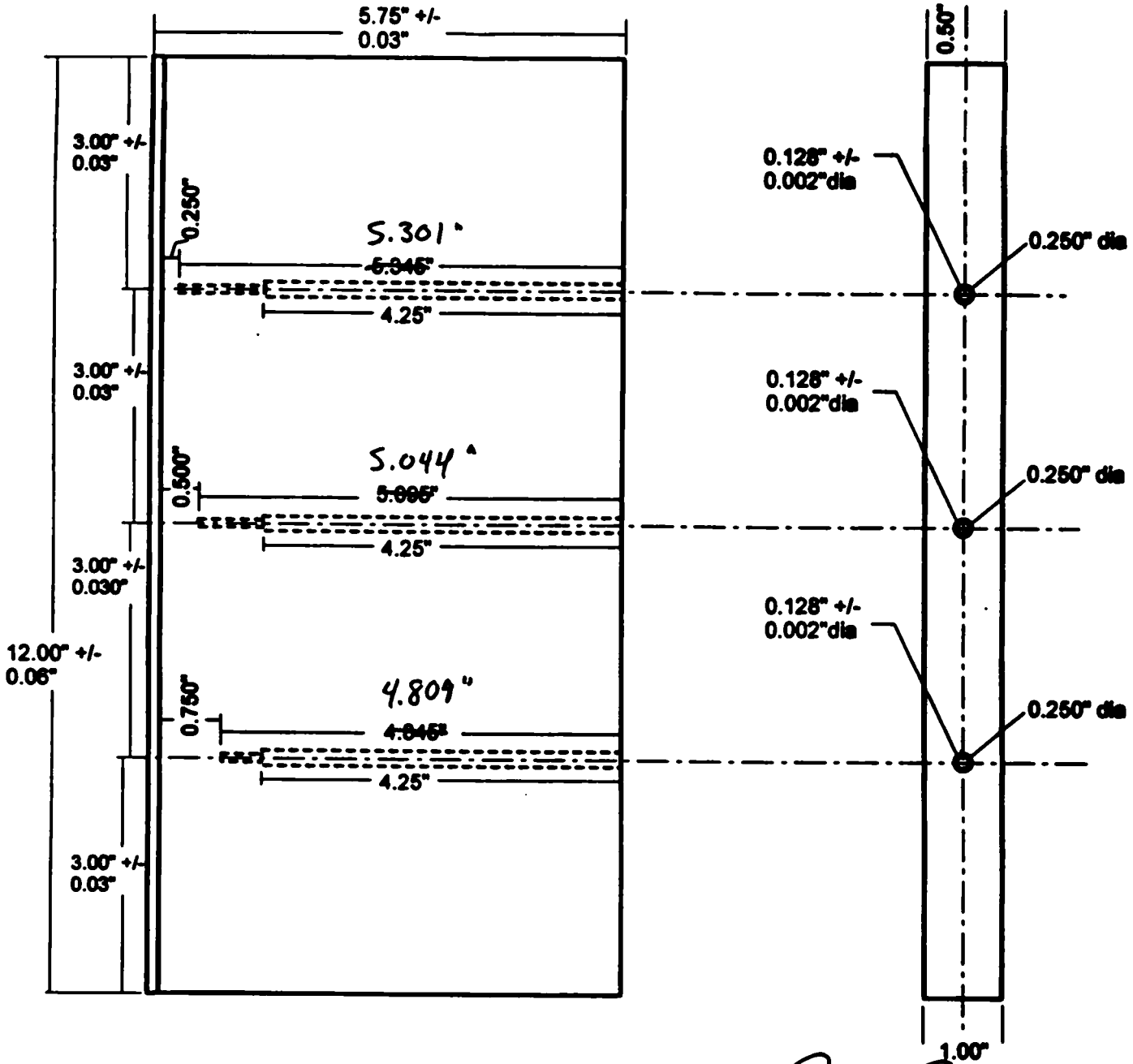


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Carbon Steel Mockup Specimen  
 CNWRA Drawing 20-01402-571-20 Rev. 01  
 All Dimensions  $\pm 0.010"$   
 unless otherwise specified  
 Note: Detail A on Page 2

To be completed at time of order. 14/55.  
 Material: \_\_\_\_\_  
 Heat: \_\_\_\_\_  
 Specimen Orientation: \_\_\_\_\_  
 Other: \_\_\_\_\_

Page 1 of 2 **PLATE # 2**



*Darrell Dunn* 3/6/02  
 Initiated by D. Dunn Date

*V. Jain* 3/6/02  
 Reviewed by V. Jain Date

*B. Mabrito* 3/6/02  
 QA Approval B. Mabrito Date

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Carbon Steel Mockup Specimen  
CNWRA Drawing 20-01402-571-20 Rev. 02  
All Dimensions  $\pm 0.010$ "  
unless otherwise specified  
Note: Detail A on Page 2

Page 1 of 2

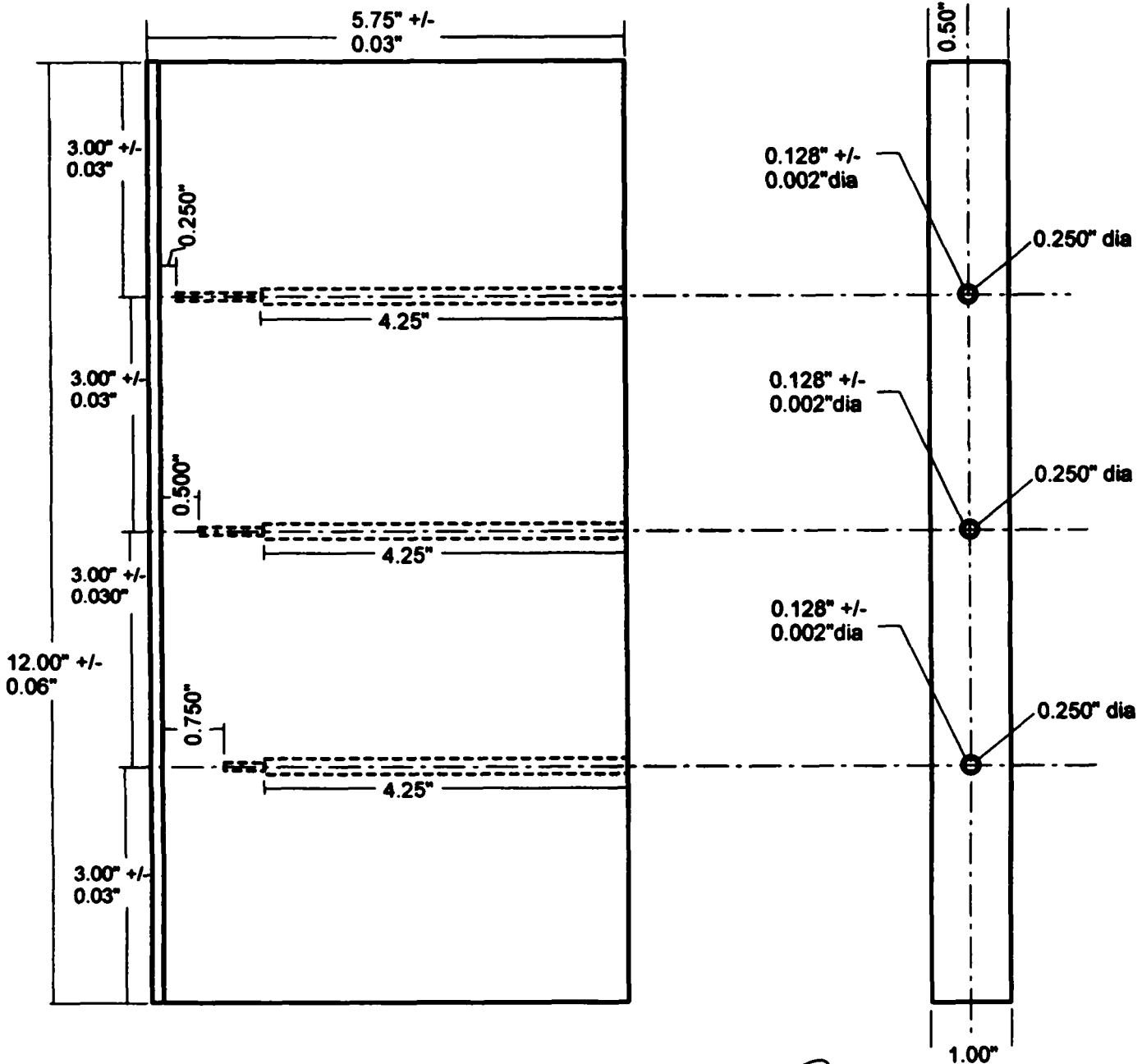
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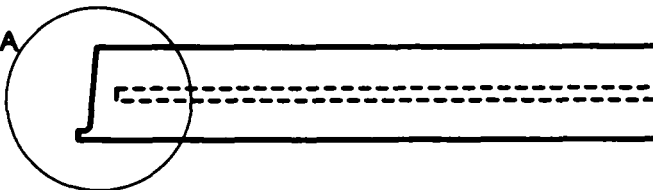
Heat: \_\_\_\_\_

Specimen Orientation: \_\_\_\_\_

Other: \_\_\_\_\_



Detail A



*Darrell Dunn* 8/27/2002  
Initiated by. D. Dunn Date

*Vijay Jain* 8/27/2002  
Reviewed by VJain Date

*B. Mabrito* 8/29/2002  
QA Approval B. Mabrito Date

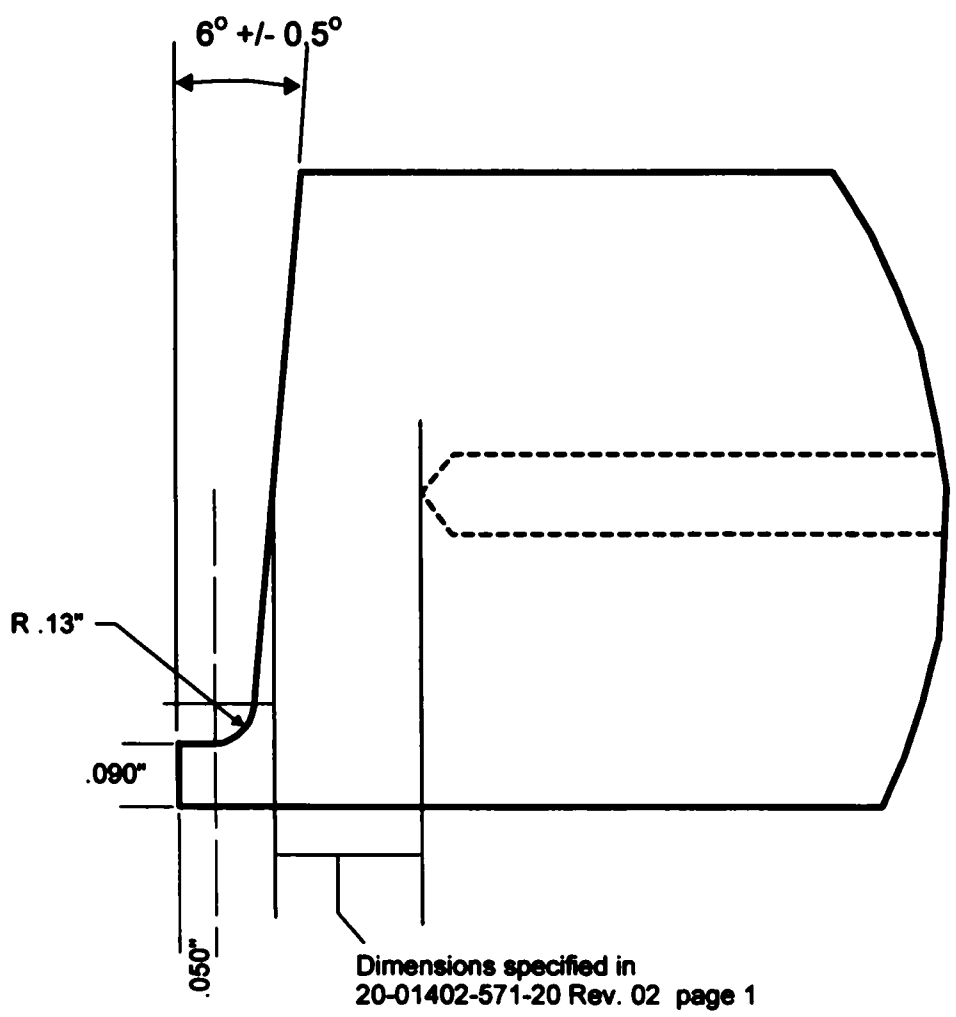
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Carbon Steel Mockup Specimen  
CNWRA Drawing 20-01402-571-20 Rev. 02  
All Dimensions  $\pm 0.005"$   
unless otherwise specified  
Detail A identified on Page 1

To be completed at time of order: 16/55  
Material: \_\_\_\_\_  
Heat: \_\_\_\_\_  
Specimen Orientation: \_\_\_\_\_  
Other: \_\_\_\_\_

Page 2 of 2

### Detail A



*Darrell Dunn* 8/27/2002  
Initiated by: D. Dunn Date

*W. Jain* 8/27/2002  
Reviewed by: W. Jain Date

*B. Mabrito* 8/27/2002  
QA Approval: B. Mabrito Date