

# Highway Safety Corporation

Glastonbury, CT

## Welding Procedure Specification

|                                      |                                    |           |             |
|--------------------------------------|------------------------------------|-----------|-------------|
| Material specification               | ASTM A500 gr B                     |           |             |
| Welding process                      | Gas Metal Arc Welding (GMAW)       |           |             |
| Manual, semi-automatic, or automatic | Semi-Automatic                     |           |             |
| Position of welding                  | Flat (1F)                          |           |             |
| Filler metal specification           | AWS A5.18                          |           |             |
| Filler metal classification          | ER70S-6                            |           |             |
| Electrode and manufacturer           | Lincoln Electric Lincoln Weld L-56 |           |             |
| Flux and manufacturer                | N/A                                |           |             |
| Shielding gas                        | 86% Argon / 14% CO2                | Flow rate | 39 - 45 CFH |
| Single or multiple pass              | Single                             |           |             |
| Single or multiple arc               | Single                             |           |             |
| Welding current                      | DCEP                               |           |             |
| Polarity                             | Reverse - electrode positive       |           |             |
| Welding progression                  | Stringers                          |           |             |
| Root treatment                       | clean base metal                   |           |             |
| Preheat and interpass temperature    | base metal up to 3/4" (50°F)       |           |             |
| Postweld heat treatment              | None                               |           |             |
| Electrode extension                  | 3/4" ± 1/4"                        |           |             |

**SHOP DRAWING REVIEW**

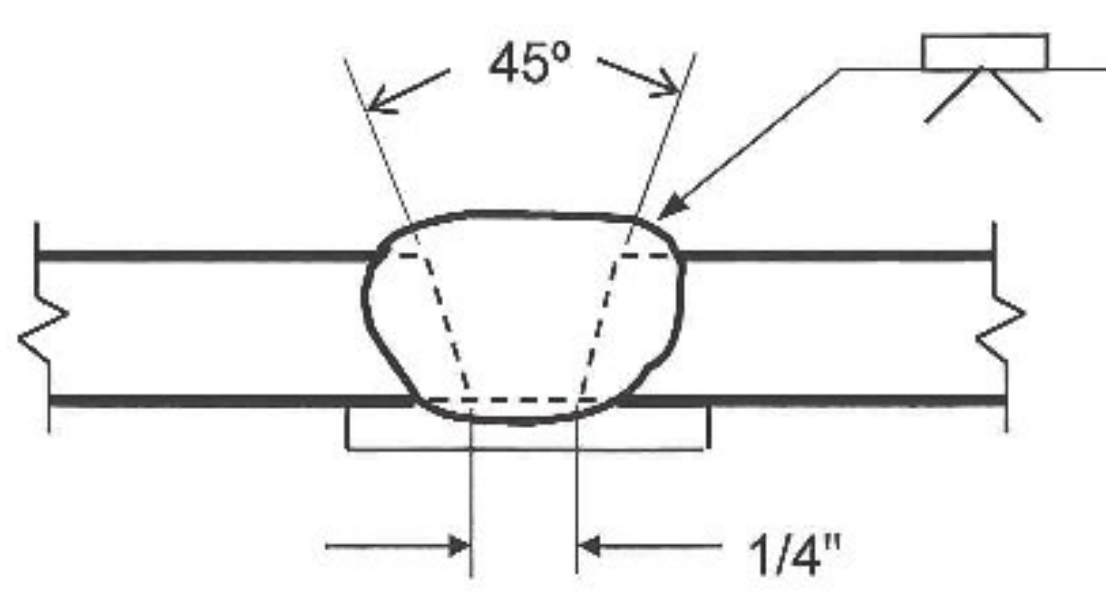
REVIEWED AS REQUIRED BY THE CONSTRUCTION CONTRACT DOCUMENTS AND APPROVED, BUT ONLY FOR CONFORMANCE TO THE DESIGN CONCEPT OF THE WORK AND SUBJECT TO FURTHER LIMITATIONS AND REQUIREMENTS CONTAINED IN THE CONSTRUCTION CONTRACT DOCUMENTS.

REJECTED   
  REVISE AND RESUBMIT   
  APPROVED AS NOTED

CORRECTIONS OR COMMENTS MADE ON THE SHOP DRAWINGS DURING THIS REVIEW DID NOT RELIEVE CONTRACTOR FROM COMPLIANCE WITH REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS. THIS CHECK IS ONLY FOR REVIEW OF GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL CONFORMANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS, SELECTING FABRICATION PROCEDURES AND TECHNIQUES, CONSTRUCTING AND COMPLETING THEIR WORK WITH THAT OF ALL OTHER TRADES, AND PERFORMING THEIR WORK IN A SAFE AND SATISFACTORY MANNER.

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|--|--|--------------------|
|  | GLD Consulting Engineers<br>540 Commercial Street<br>Glastonbury, CT 06033<br>033-633-8223 | Job Number: 150223 |
|  | Reviewed by: <u>CRB</u>  | Date: 04/29/2015   |

### WELDING PROCEDURE

| Weld size | Pass no. | Electrode size | Welding parameters |             | Travel speed  | Joint detail  |
|-----------|----------|----------------|--------------------|-------------|---------------|---|
|           |          |                | Amperes            | Volts       |               |   |
|           | 1        | 0.063"         | 300 A<br>± 30      | 29 V<br>± 2 | 15 ipm<br>± 2 | B-U2a-GF<br> |

Vermont Agency of Transportation

RECEIVED

ON: April 28, 2016

and Checked for

CONFORMANCE

BY: Jennifer Fitch DATE: 05/02/16

This procedure may vary due to fabrication sequence, fit-up, pass size, etc. within the limitation of variables given in section 5 of latest edition AWS D1.5

|   |  |
|---|--|
| WPS no. <u>W-VGwBCK</u>                         | Fabricator <u>Highway Safety Corporation</u> |
| Revision no. <u>0</u>                           | Prepared By: <u>Paul Radice</u>              |
| Supporting PQR no. <u>W-AWSD1511 (06-22-11)</u> | Date <u>04-28-16</u>                         |
| Project Name <u>Irasburg, VT</u>                | Project Number <u>IM DECK (46)</u>           |

Paul A Radice  
CWI 98070221  
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