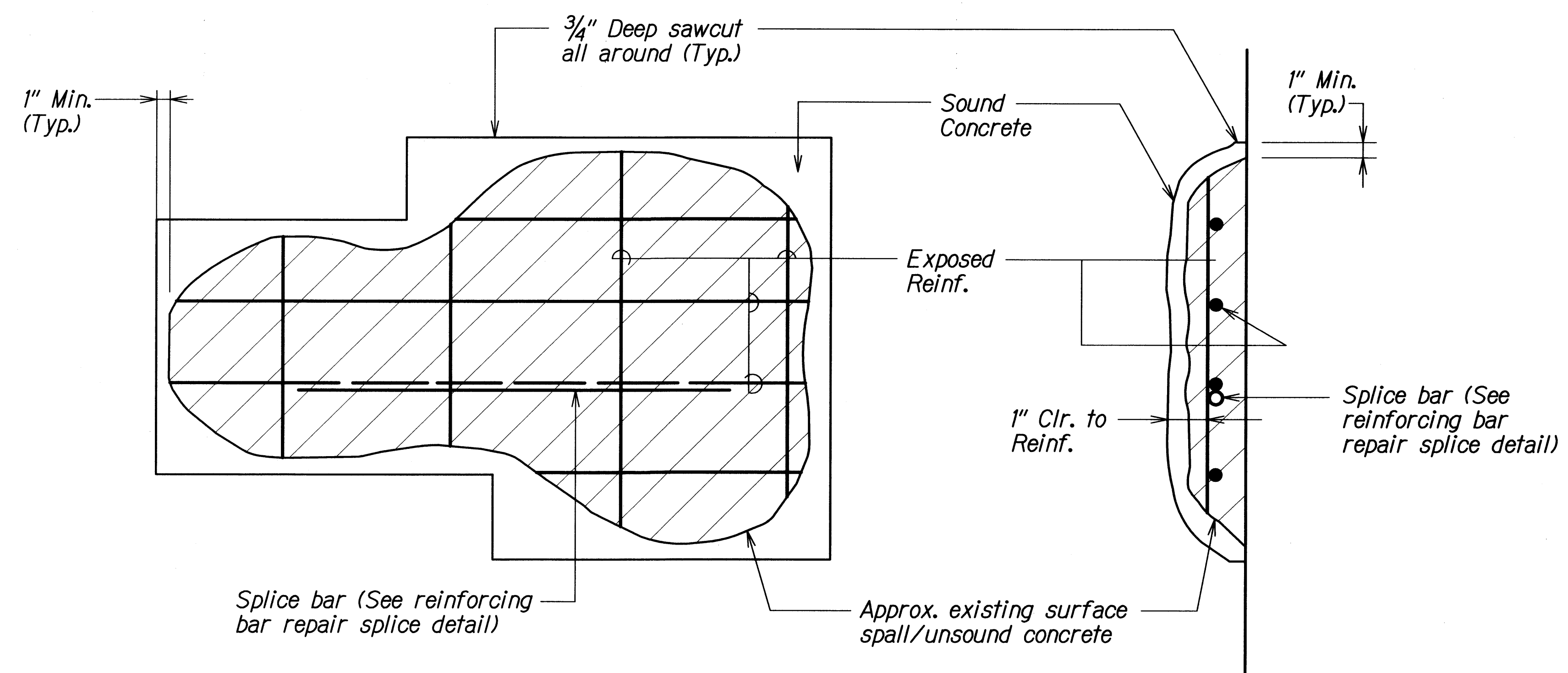


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360AB-01-11M	2011	15	44



**TYPICAL SPALL REPAIR DETAIL**  
Not to Scale

**GENERAL SPALL REPAIR NOTES:**

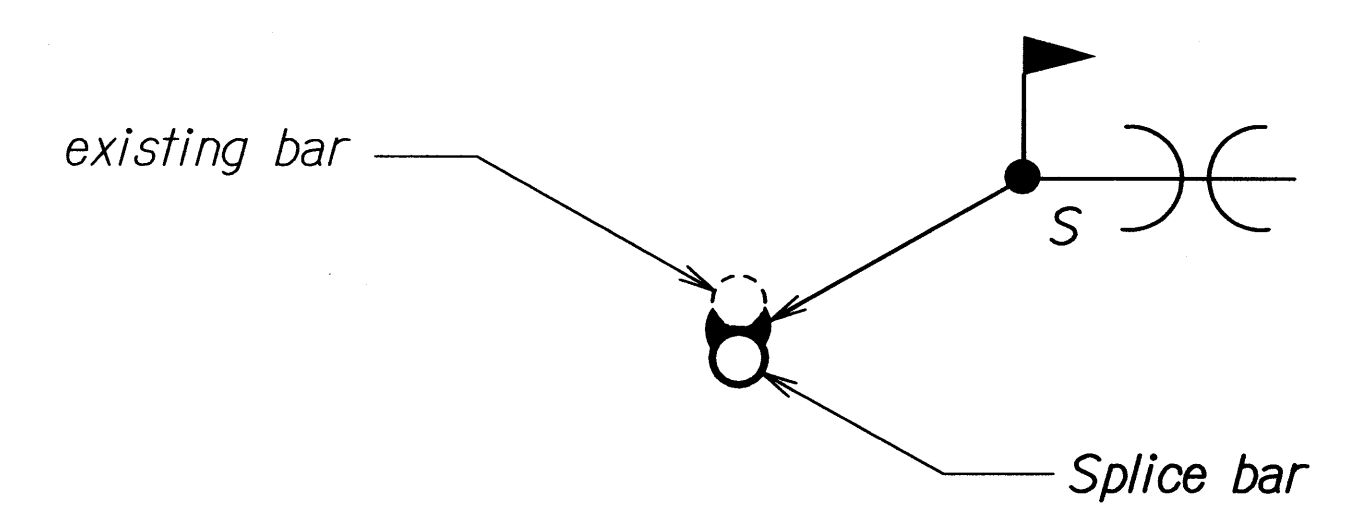
- Contractors shall protect existing surfaces and objects to remain from damage. Any item to remain that is damaged by the Contractor shall be replaced or repaired to match the existing adjacent surfaces at no additional cost to the State.
- Edges of spall repairs shall not be feathered. Provide a 3/4" deep square cut along perimeter of spall repairs.
- Surface preparation of repair area, and mixing and application of repair material shall be in accordance with the manufacturer's recommendations.
- Spalls and delaminations are called out as "spalls". No separate distinction is made between them since the repairs are the same.

**SPALL REPAIR MATERIALS:**

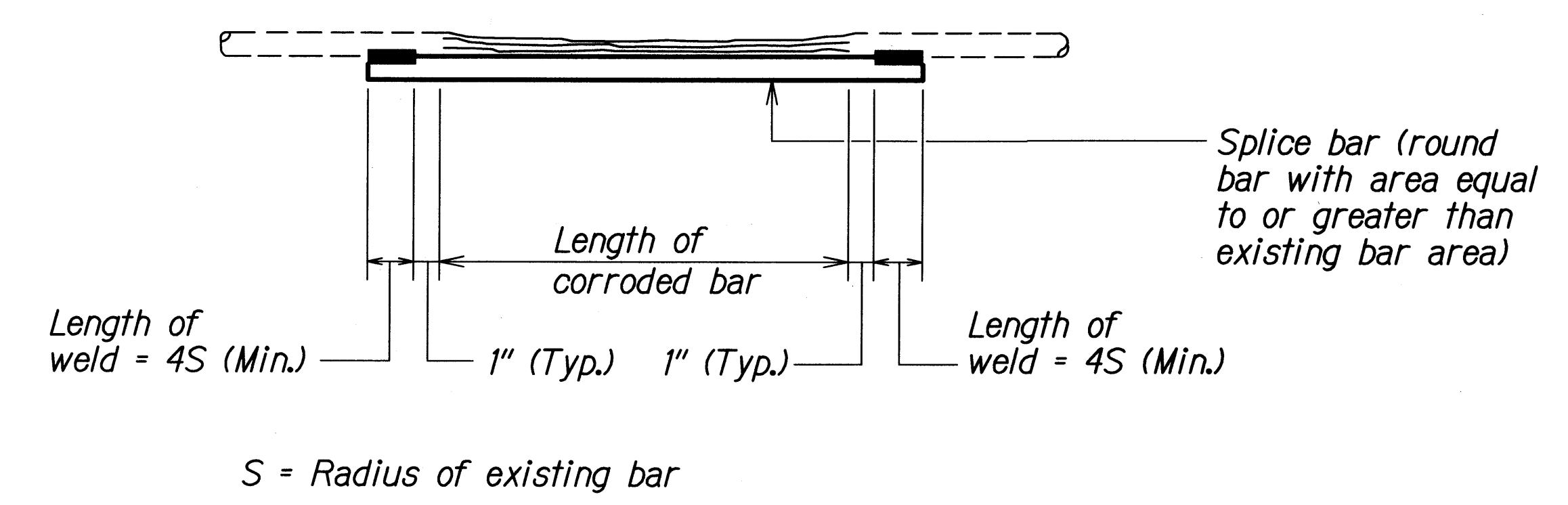
- Splice bars to be welded to existing steel reinforcing bars shall be deformed reinforcing bars conforming to ASTM A706, Grade 60. Welding of steel reinforcing bars shall be in accordance with the latest adopted AWS D1.4 - Structural Welding Code - Reinforcing Steel.
- All exposed steel reinforcing bars (including welded splice bars) shall be coated with "VpCI Corvverter" rust primer as supplied by Cortec Corporation. Surface preparation and application shall be in accordance with the manufacturer's recommendations.
- Repair mortar for patching spall repairs shall be "MCI-2702" Polymer-Modified repair mortar by Cortec Corporation. Surface preparation, mixing and application shall be in accordance with the manufacturer's recommendations.
- Migrating corrosion inhibitor to be applied to the concrete surface after spall repair shall be "MCI-2020 V/O" surface applied corrosion inhibitor for vertical and overhead applications by Cortec Corporation. Surface preparation and application shall be in accordance with the manufacturer's recommendations.

**PROCEDURES FOR SPALL REPAIR:**

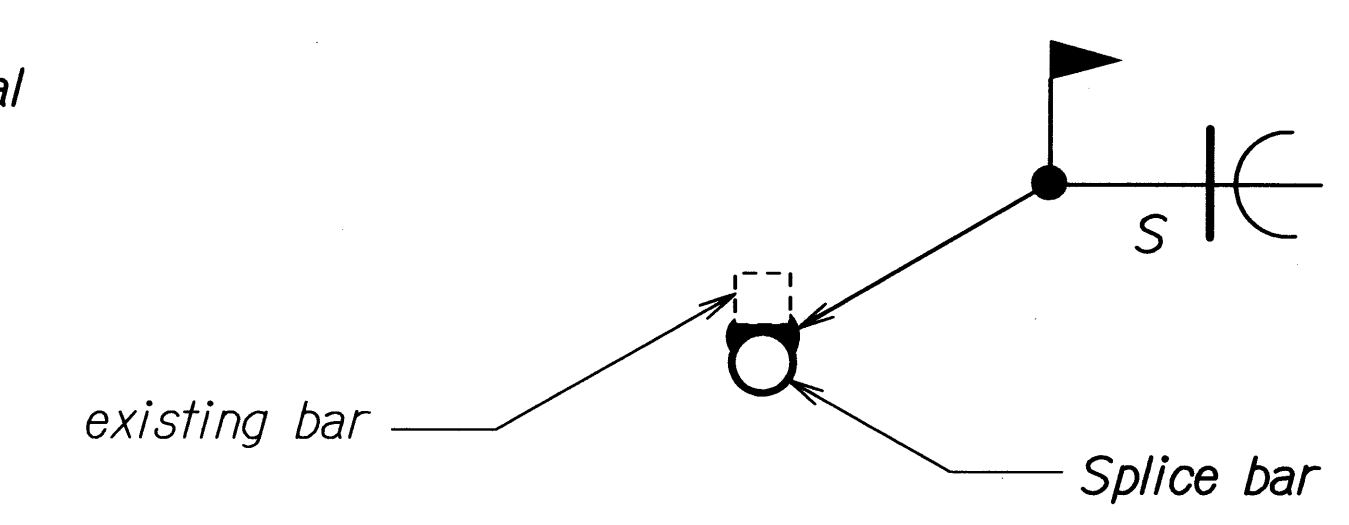
- Prior to start of repair work, Contractor shall sound the existing concrete surfaces with a hammer or other suitable device. The surface shall be marked to identify the perimeter of the repair area.
- Provide 3/4" deep square cut edges around the perimeter of the repair area (See "Spall Repair Detail") and chip to sound concrete.
- All exposed steel reinforcing bars that have corroded more than 25% of the original cross-sectional area shall be strengthened as shown on "Reinforcing Bar Repair Splice Detail".
- Splice bars shall be round deformed reinforcing bars with a cross-sectional area that is equal to or greater than the cross-sectional area of the existing bar.
- All existing steel reinforcing bars that are exposed after chipping and welded splice bars shall be cleaned and coated with a rust primer.
- Clean the spall repair area and patch with repair mortar.
- Apply migrating corrosion inhibitor to the entire exposed concrete surface. Coverage rate during application shall be as recommended by the manufacturer.



**EXISTING BAR ROUND**  
Not to Scale



**REINFORCING BAR REPAIR SPLICE DETAIL**  
Not to Scale



**EXISTING BAR SQUARE**  
Not to Scale

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
PLAN	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**TYPICAL DETAILS FOR  
BRIDGE REPAIRS**

HANA HIGHWAY RESURFACING  
Vicinity of Honomanu Bridge to Waikani Bridge

Project No. 360AB-01-11M

Scale: As Shown      Date: November, 2010

SHEET No. 1 OF 1 SHEETS