

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	56D-01-82M	1982	7	11

# GENERAL NOTES

## REPAIR NOTES:

- Face of exist. concrete
 

Hatched area denotes approx. damaged area from which loose or unsound concrete has been partially removed.
- Limits of conc. removal or conc. patch (see detail this sht.). Apply bonding agent immediately before placing mortar or conc.

- All deteriorated, damaged, cracked, spalled, honeycombed concrete or concrete over rusted reinforcing bars shall be removed as shown and repaired with hand placed mortar or shotcrete. The Engineer shall determine all areas to be repaired and the limit of repair at each area.
- Provide minimum 2" concrete cover over reinforcement or wire mesh. See specifications for welded wire fabric requirements.
- Reinforcing bars that have rusted more than 25% of their original cross sectional area shall be strengthened as shown on Repair Splice Detail this sheet.

**INCIDENTAL ITEMS:** The following items shall be considered incidental to the various pay items of repairs & shall not be paid for separately.

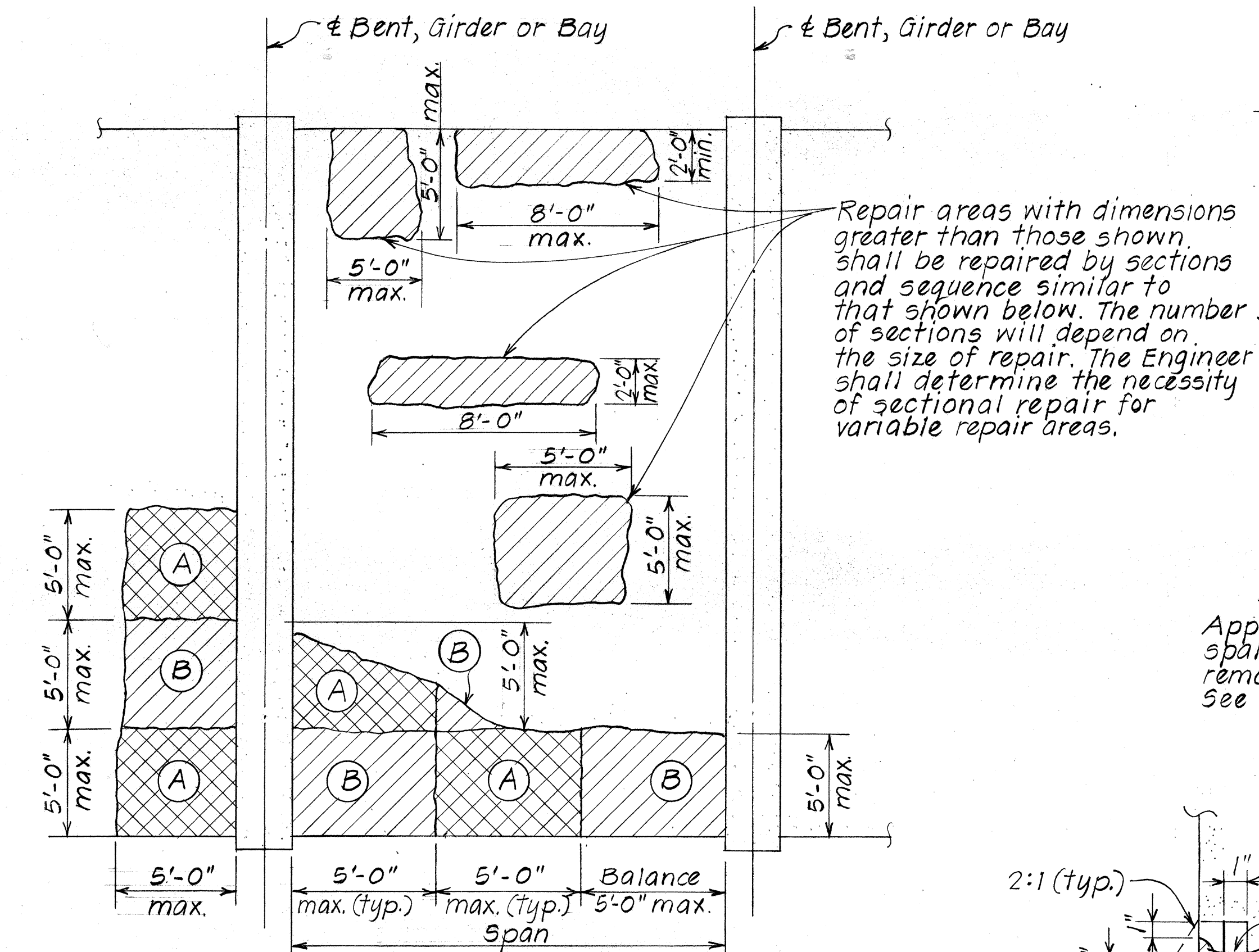
- Expansion bolts & other miscellaneous hardware including hot-dipped galvanized and welded wire fabric.
- Cleaning of all exposed, corroded reinforcing steel to sound metal.
- Reinforcing bars of repair splice for strengthening corroded bars.
- Approximate existing ground lines (as shown on plans) and water levels under the structure may vary due to seasonal, tidal, and dam conditions at stream outlets. If necessary, the contractor shall lower the water level or ground line to perform his work.

## GENERAL:

- All reinforcing steel to be ASTM A615 Grade 40.
- All welding shall be done in accordance with the Reinforcing Steel Welding Code AWS D1.4-70.
- Maintenance of traffic - see Standard Specs. sub-section 104.04.
- Repairs to the underside of slab shall be made in sections and sequences as indicated in note at left.
- All welded wire fabric shall conform to ASTM A185.

## SYMBOLS & ABBREVIATIONS

- Exposed reinf. bars where occurs.
- SS - Surface spall (Concrete)  
 S.C. - Surface crack (Concrete)  
 sq. ft. - Square feet  
 S.F. - Square feet  
 L.F. - Linear feet



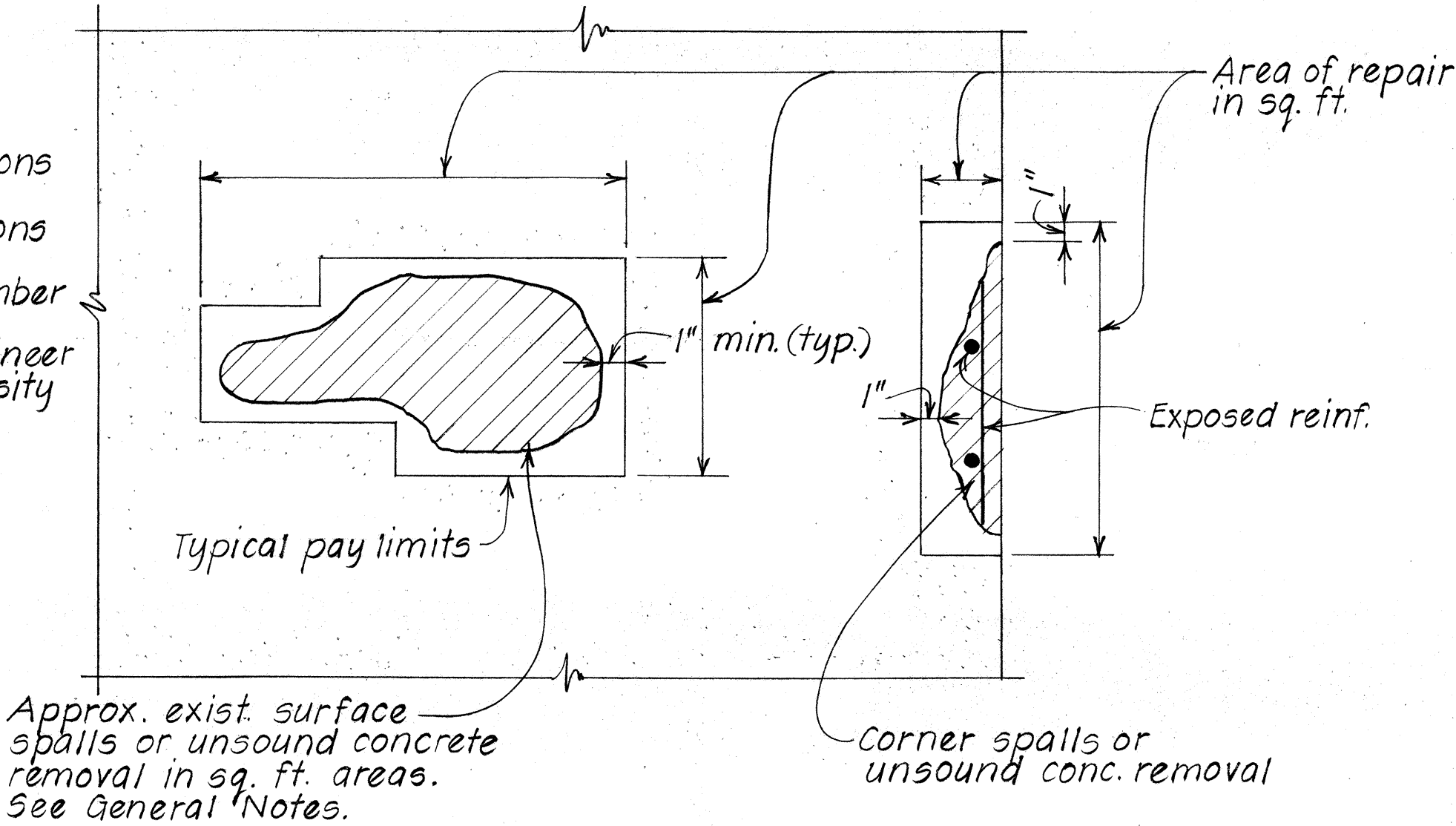
REFLECTED SPAN CEILING PLAN  
 Not to Scale

### NOTE!

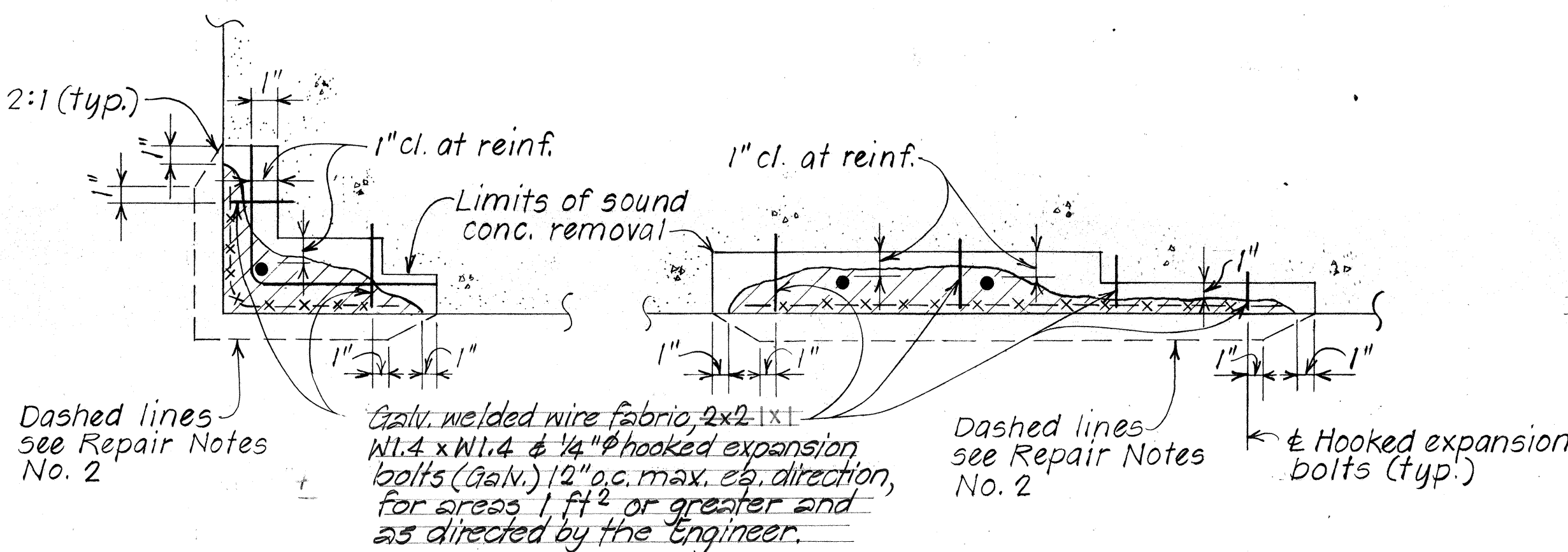
Slab damaged over a large area shall be repaired in sections A & B as shown. The sequence of repair for each section shall be as follows:

- Repair section A.
- Start repair of section B 7 days after placing mortar for section A.

The necessity for sectional repairs will depend on the amount of reinforcing bars that has to be exposed and cleaned. The Engineer shall determine the necessity for sectional repairs after portions of the steel have been exposed.



PLAN OR ELEVATION

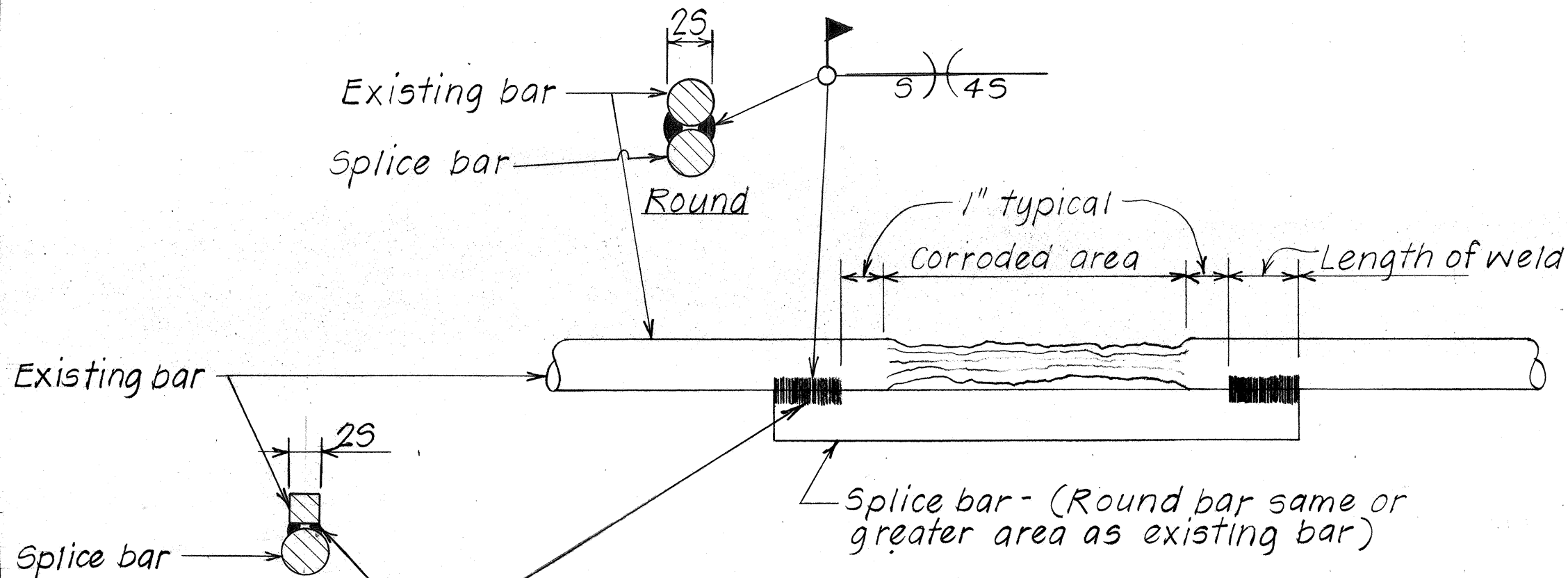


AT CORNER AT SURFACE

## TYPICAL SECTIONS

## TYPICAL REPAIRS AT CONCRETE SPALLS

Not to Scale



TYPICAL REINF. BAR REPAIR  
 SPLICE DETAIL Not to Scale

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

REHABILITATION & REPAIRS

TO BRIDGE

TYPICAL DETAILS

Proj. No. 56D-01-82M

Scale: As Noted

Date: June 1981

SHEET No. 1 OF 1 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	