

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	83C-01-89M, 83C-02-89M 83D-01-89M, 83E-01-89M	1989	3	7

GENERAL NOTES

REPAIR NOTES:

- Face of exist. concrete
- Finish concrete patch flush with existing concrete (Field Change)
- 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.
- Efflorescence shall be inspected and repaired as directed by the Engineer.
- All cracks shall be repaired by applying epoxy under pressure. See Specifications.
- The Engineer shall determine all areas to be repaired and the limits of repair at each area.
- Apply Hydrozo Clear 16 Waterproofing or equivalent as approved by the Engineer. Application shall be according to the Manufacturer's recommendations.

INCIDENTAL ITEMS: The following items shall be considered incidental to the various pay items of repairs & will 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.
- Furnishing and application of Hydrozo Clear 16 Waterproofing Material.

GENERAL:

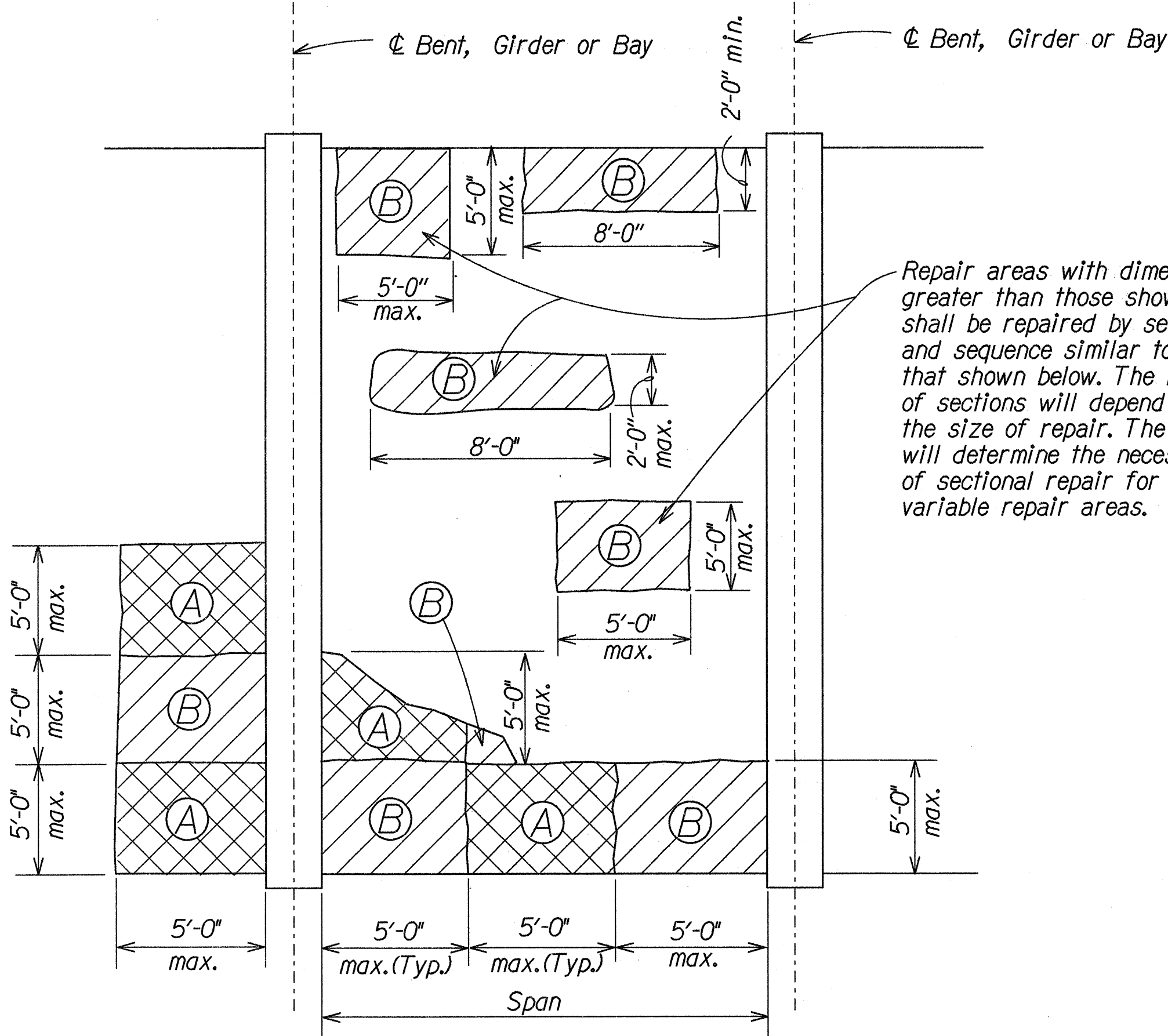
- All reinforcing steel to be ASTM A615 Grade 40.
- All welding shall be done in accordance with the current edition of the Reinforcing Steel Welding Code AWS D1.4.
- Maintenance & control of traffic - see Special Provisions sub-section 104.04 & sub-section 676.03(A).
- Repairs to the underside of slab shall be made in sections & sequences as indicated in note at left.

SYMBOLS & ABBREVIATIONS:

- Spall or unsound surface area.
- Exposed reinf. bars where occurs.
- S.S. - Surface spall (Concrete)
- S.C. - Surface crack (Concrete)
- H.C. - Hairline crack
- Sq. ft.; S.F. - Square feet
- L.F. - Linear feet

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
TYPICAL BRIDGE REPAIR DETAILS
KAMEHAMEHA HIGHWAY
Proj. Nos. 83C-01-89M, 83C-02-89M
83D-01-89M, 83E-01-89M
Scale: As Shown Date: February 1989
SHEET No. PI OF 5 SHEETS

3



REFLECTED CEILING PLAN

Not to Scale

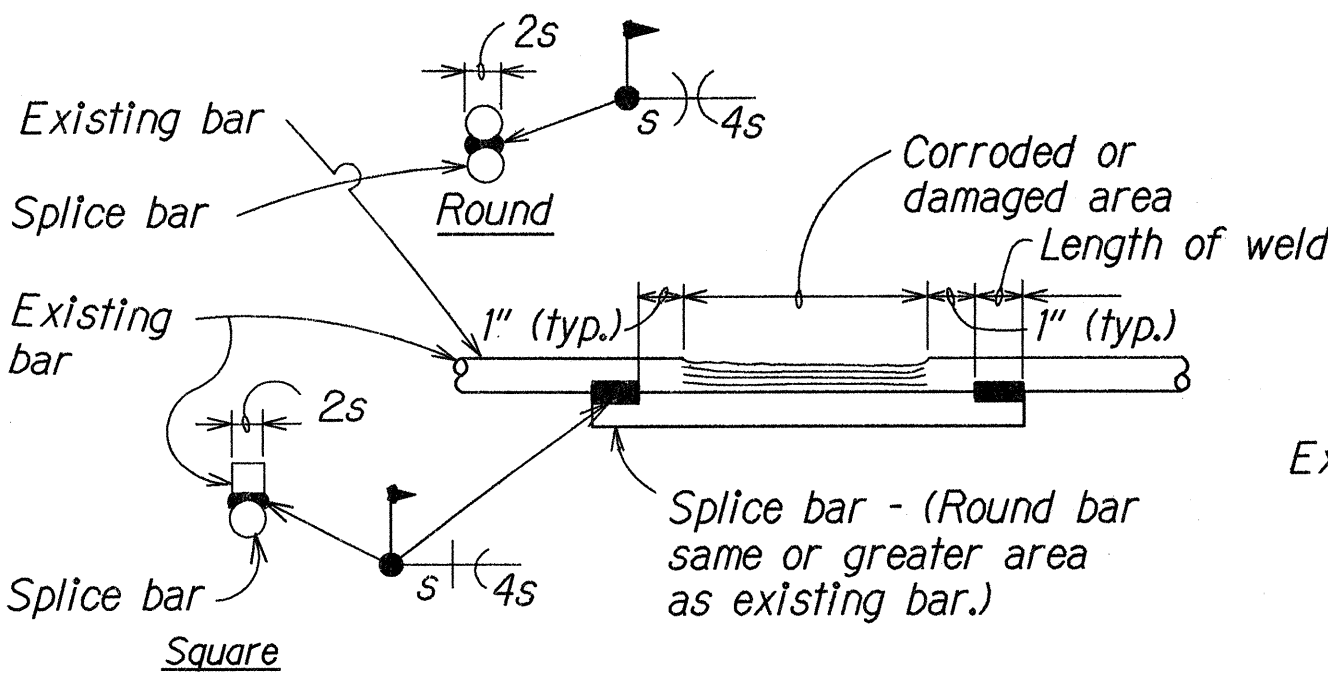
NOTE:

Slab damage 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 will determine the necessity for sectional repairs after portions of the steel have been exposed.

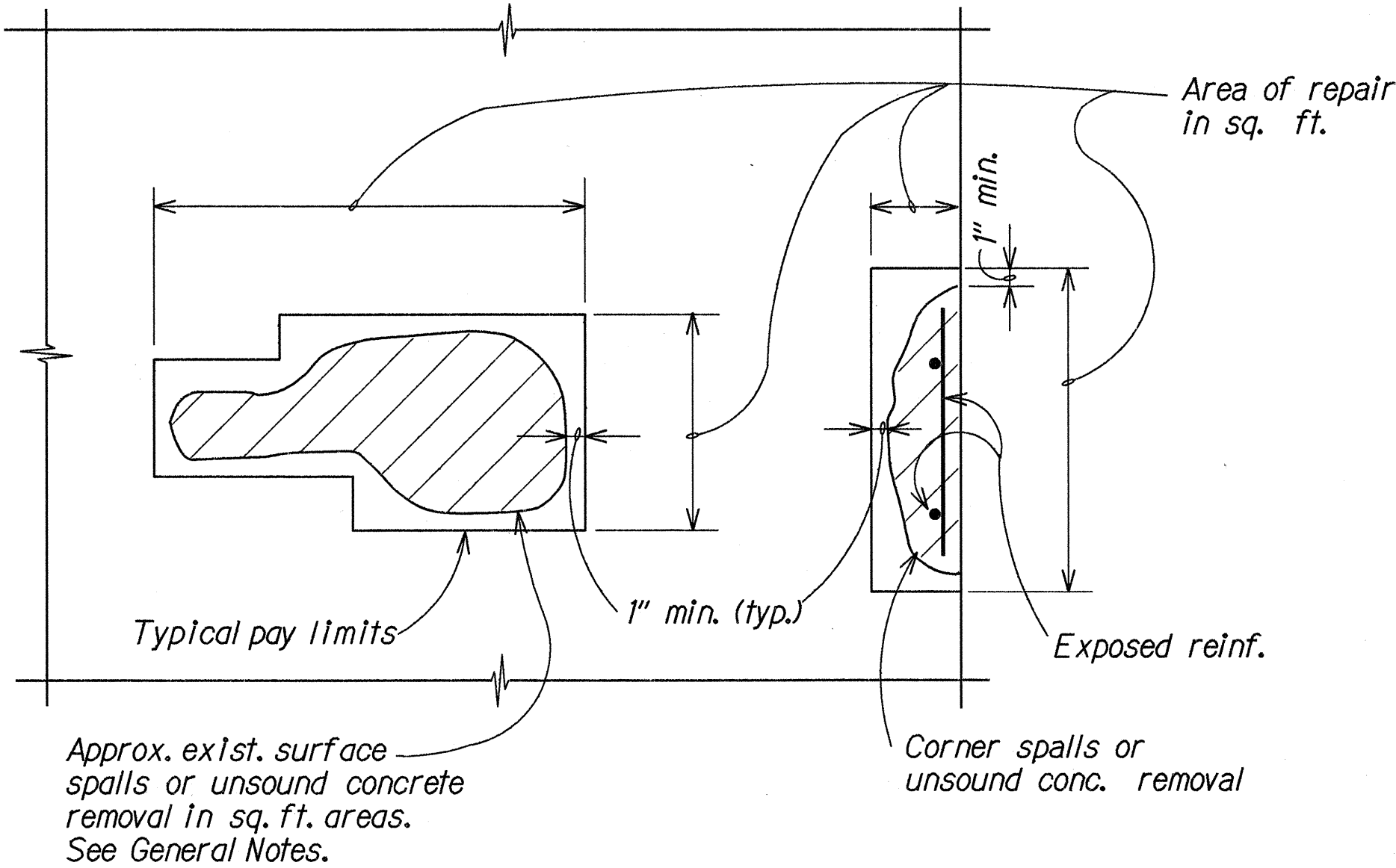
Welded wire fabric, 2x2-W1.4xW1.4 & 1/4" ϕ hooked expansion bolts 12" o.c. max. ea. direction, for areas 1 sq. ft. or greater and as directed by the Engineer.



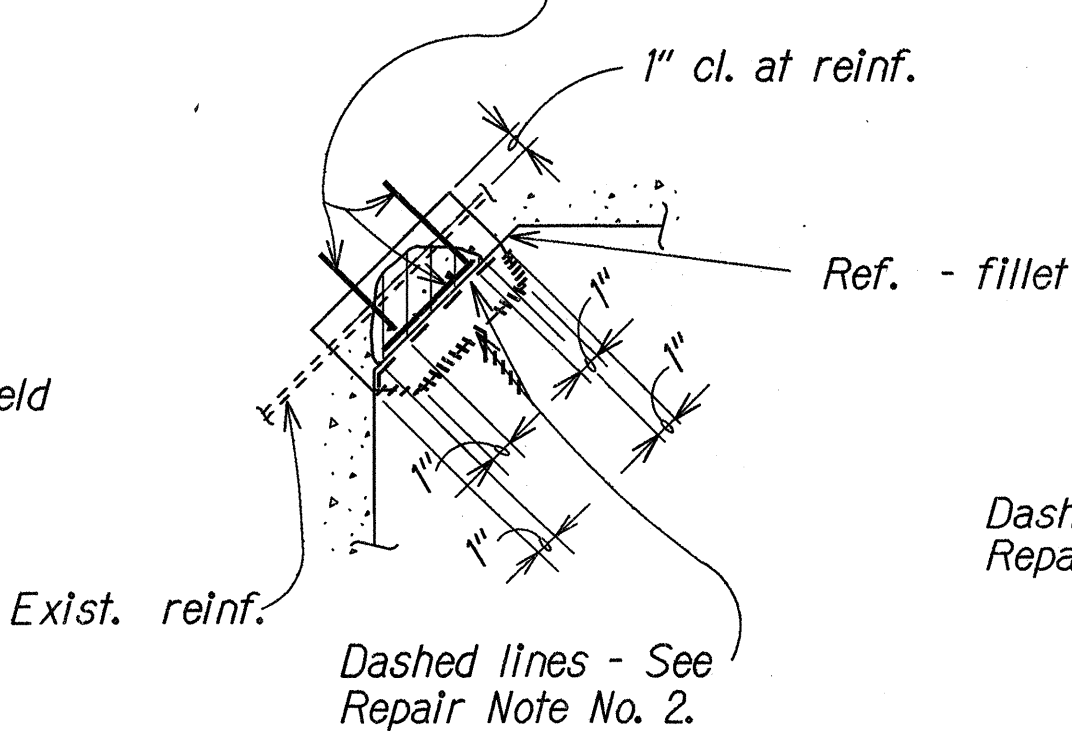
TYPICAL REINFORCING BAR

REPAIR SPLICE DETAIL

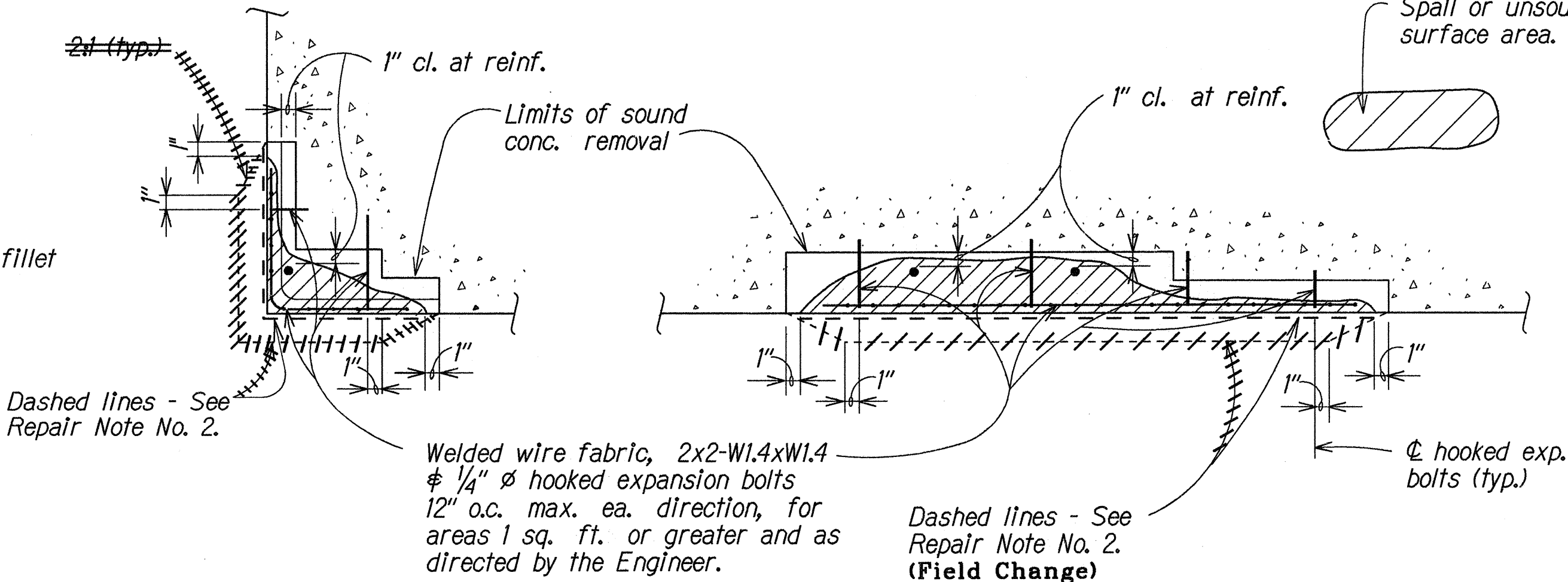
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PLAN OR ELEVATION



AT FILLET



AT CORNER

AT SURFACE

TYPICAL REPAIRS AT CONCRETE SPALLS

Not to Scale