REFLECTED CEILING PLAN
Not to Scale

₵ Bent, Girder or Bay
₵ Bent, Girder or Bay
2'-0" min.
5'-0" max.
8'-0"
5'-0" max.
8'-0"
2'-0" max.
5'-0" max.
5'-0" max.
5'-0" max.
5'-0" max.
5'-0" max.
5'-0" max.
5'-0" max. (Typ.)
5'-0" max. (Typ.)
5'-0" max.
Span

Repair areas with dimensions greater than those shown shall be repaired by section and sequence similar to that shown below. The number of sections will depend on the size of repair. The Engineer will determine the necessity of sectional repair for variable repair areas.

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:

1. Repair section (A).

2. 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.
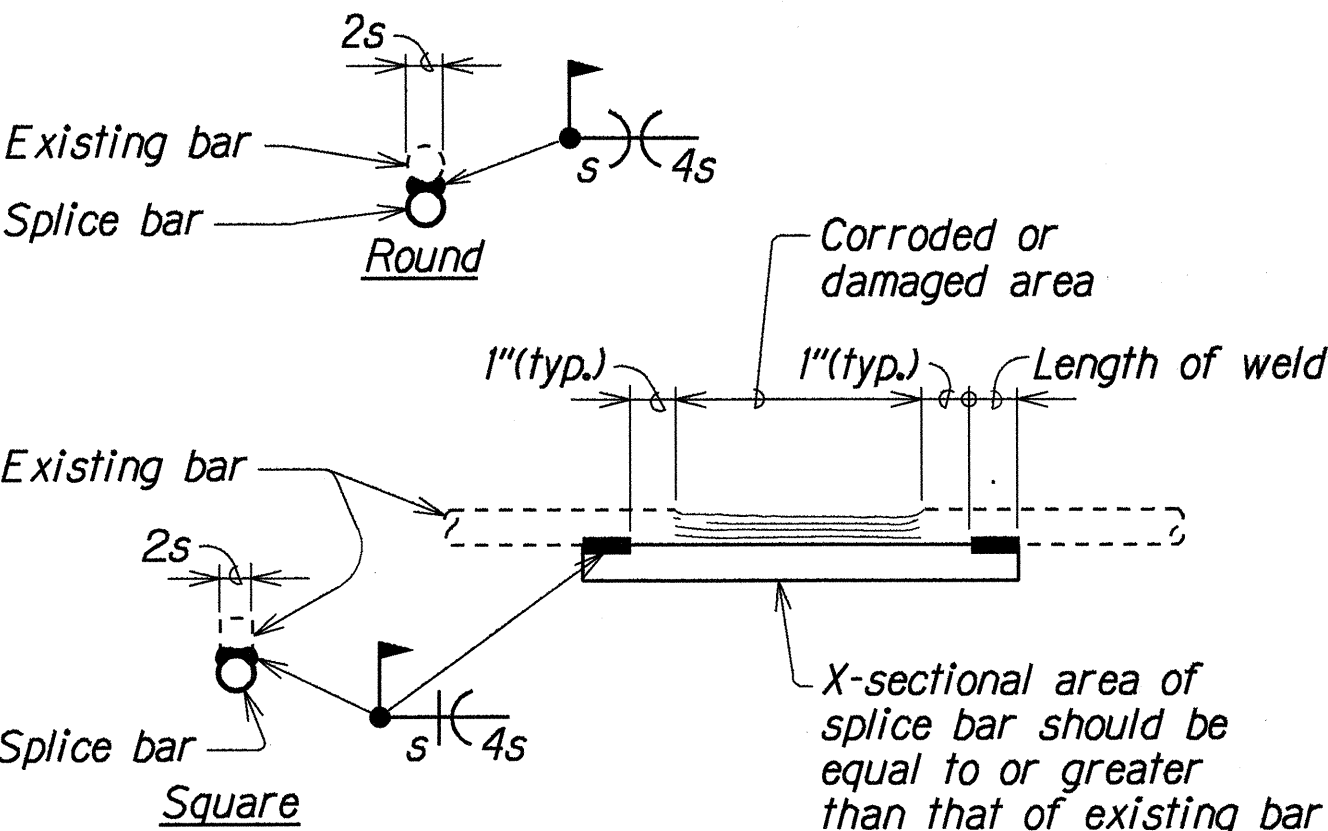
REINFORCING BAR REPAIR SPLICE DETAIL
Not to Scale

2s
Existing bar
Splice bar
Round
s
4s

Corroded or damaged area
1"(typ.)
1"(typ.)
Length of weld
Existing bar
2s
Splice bar
Square
s
4s
X-sectional area of splice bar should be equal to or greater than that of existing bar

PLAN OR ELEVATION

Limits of sound concrete removal
Face of exist. concrete
1" min.
See Repair Note No. 2
1" min. (typ.)
Exposed reinf.
Approx. exist. surface spalls or unsound concrete (shown dotted). Removal in sq. ft. areas. See General Notes.
Typical pay limits
Approx. corner spalls or unsound concrete (shown dotted)

TYPICAL SECTIONS
A | Q1 | Q1

TYPICAL CONCRETE REPAIRS
Not to Scale

Approx. exist. spalls or unsound concrete (shown dotted)
1"cl.
Face of exist. concrete
1"cl.
Limits of sound concrete removal
Limits of sound concrete removal
1" min.
See Repair Note No. 2
Limits of sound concrete removal
See Repair Note No. 2
Note: Provide 2"min. cover (typ.)
1"
1"
WWF 2x2-W1.4xW1.4 & ¼"∅ hooked exp. bolts @12"max. ea. direction, for areas 1 sq. ft. or greater and as directed by the Engineer

AT SURFACE
AT CORNERS

GENERAL NOTES

REPAIR NOTES:

1. 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.

2. Provide minimum 2" concrete cover over reinforcement or welded wire fabric. See specifications for welded wire fabric requirements.

3. Reinforcing bars that have rusted more than 25% of their original cross sectional area shall be cleaned and strengthened as shown on "Reinforcing Bar Repair Splice Detail", this sheet.

4. The Engineer shall determine all areas to be repaired and the limits of repair at each area.

5. Apply silane waterproofing 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 for repairs and will not be paid for separately:

1. Cleaning of all exposed, corroded reinforcing steel to sound metal.

2. Reinforcing bars for repair splice.

3. Furnishing and application of silane waterproofing material.

GENERAL:

1. All reinforcing steel to be ASTM A 615 Grade 40.

2. All welding shall be done in accordance with the current edition of the Reinforcing Steel Welding Code AWS D1.4.

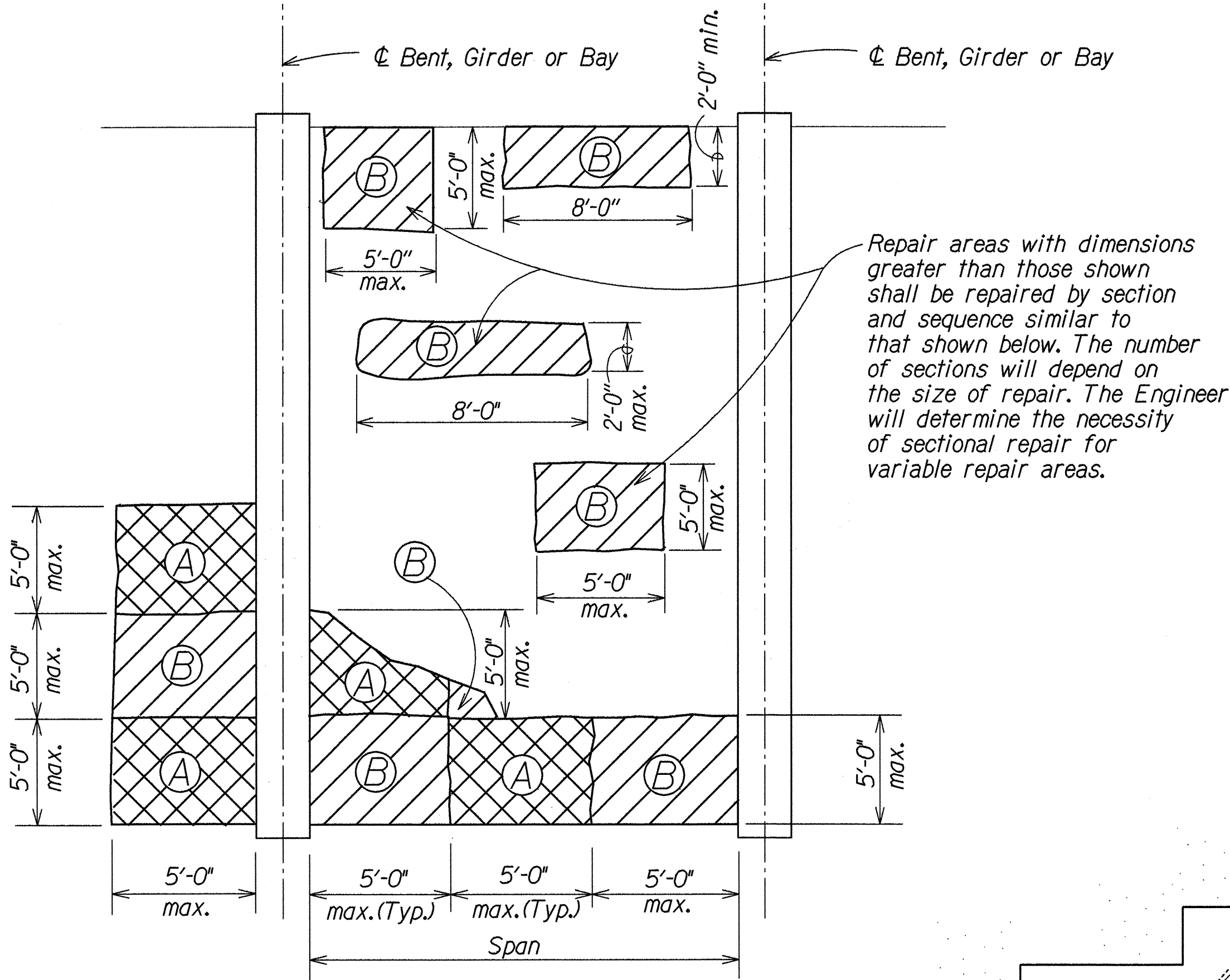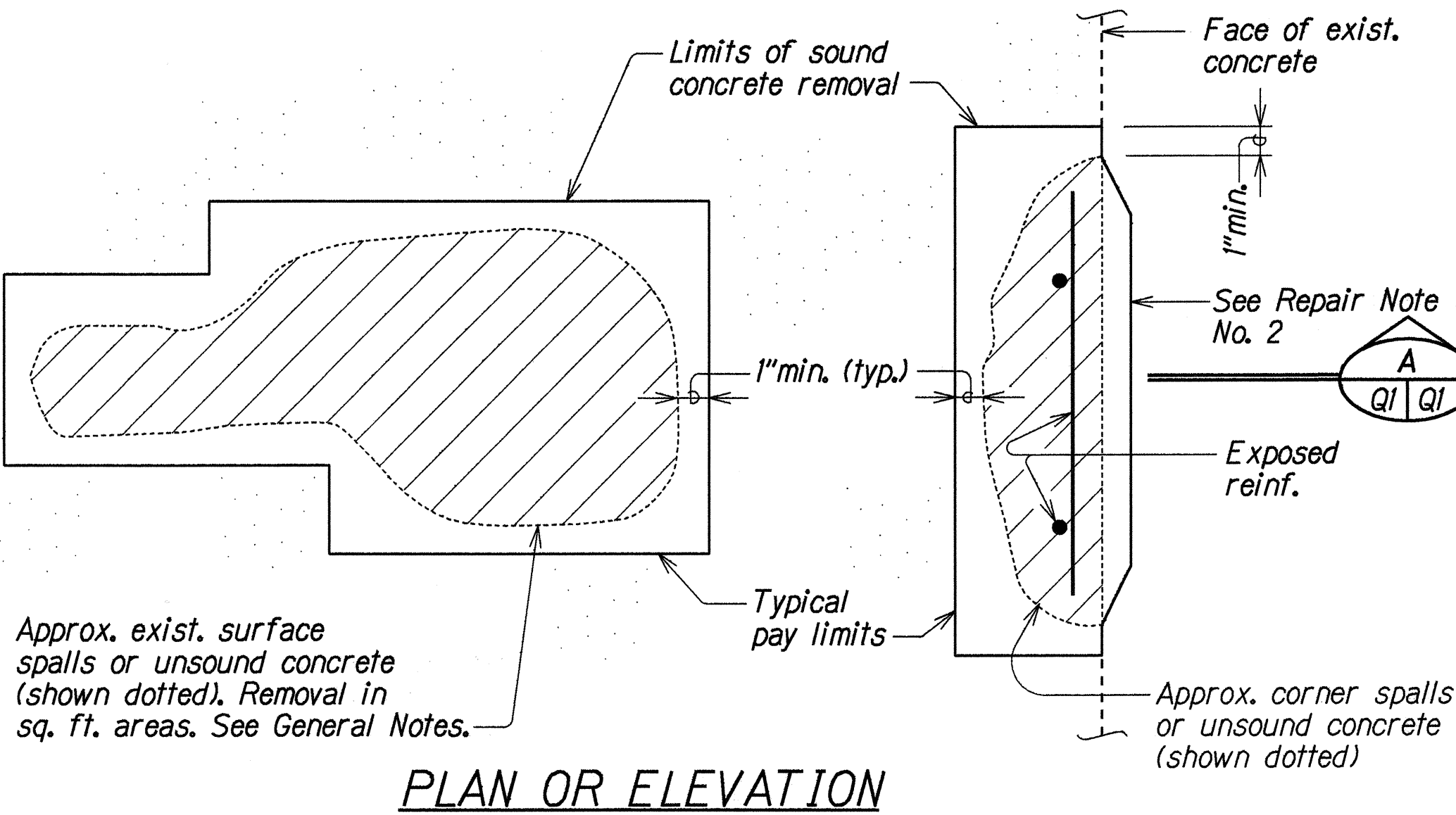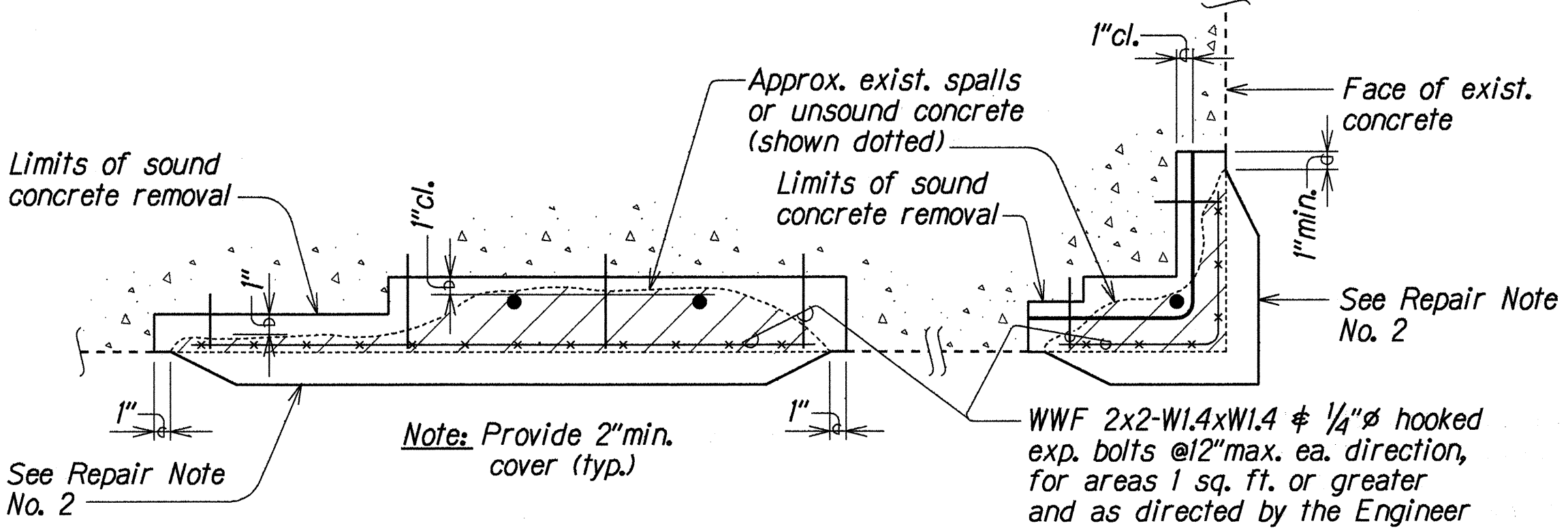3. Maintenance & control of traffic--See Special Provisions sub-section 104.04.

SYMBOLS AND ABBREVIATIONS:

Spall or unsound surface area.
Exposed reinf. bars

S.S. - Surface spall (Concrete)
S.C. - Surface crack (Concrete)
H.C. - Hairline crack
S.F. or sq. ft. - Square feet
L.F. - Linear feet

ESTIMATED QUANTITIES

ITEM NO.	ITEM	UNIT	*QUANTITY
676J000	Repair of Spalls	S.F.	2,325 sq. ft.
677J000	Soffit Crack Repair	L.F.	26 ft.

* Includes estimated overrun.

DATE: Oct 1994
Oct 1994
Oct 1994
Oct 1994
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
CHKO
KBF
KBF
KBF
ORIGINAL PLAN
NOTE BOOK
No.

NOTE:
1. Areas (S.F.) shown are for illustrative purposes only.
2. Actual areas to be repaired shall be determined in the field.
3. Bottom Cap Spalls not shown for clarity.
   (Approx. Sq. Ft. Area= 208)

Top plan:

Abut. #1

₵ Pile Cap #1   ₵ Pile Cap #2   ₵ Pile Cap #3   MATCH LINE   ₵ Pile Cap #4

4'-0"

5'-0"
20 S.F.
2 S.F.
64 S.F.
37 S.F.
2 S.F.
12 S.F.
4'-0"
3'-0"
4 S.F.
1 S.F.
12 S.F.
Longit. cracks 4'
5'
12 S.F.
2 S.F.
1 S.F.
6 S.F.
4 S.F.

← TO KANEOHE
1 S.F.
4 S.F.
4 S.F.
44 S.F.
2-0"x 14'-0" Side 28 S.F.
2 S.F.
6 S.F.
4 S.F.
TO KAHUKU ⇒

3'-0"
5 S.F.
1 S.F.
5 S.F.
1'-0"x 8'-0" 8 S.F.
8 S.F.
2' Vert. crack @ cap.
6 S.F.
6 S.F.
1 S.F.
10'-0"
160 S.F.
9'-0"
6'-0"
4'-0"
95 S.F.
6 S.F.
12 S.F.
102 S.F.
5'-0"
4 S.F.
1 S.F.
2 S.F.

MAKAI

PARTIAL REFLECTED CEILING PLAN
Scale: ¼"=1'-0"

Bottom plan:

MATCH LINE   ₵ Pile Cap #4   ₵ Pile Cap #5   ₵ Pile Cap #6   Abut. #2

48 S.F.
4 S.F.
48 S.F.
2 S.F.
40 S.F.
2 S.F.
6 S.F. Cap side
2 S.F.
1 S.F.
2 S.F.
2 S.F.
4 S.F.
1 S.F.

← TO KANEOHE
6 S.F.
2 S.F.
2' Height @ cap 8' long.
4 S.F.
1 S.F.
2 S.F.
10 S.F.
₵ Bridge
TO KAHUKU ⇒

1 S.F.
4 S.F.
1' Height @ cap 27 S.F.
4 S.F.
4 S.F.
6 S.F.
13'-0"
9'-0"
68 S.F.
128 S.F.
13 S.F.
155 S.F.
8'-0"
4 S.F.
4 S.F.

16'-0"
MAKAI

PARTIAL REFLECTED CEILING PLAN
Scale: ¼"=1'-0"

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