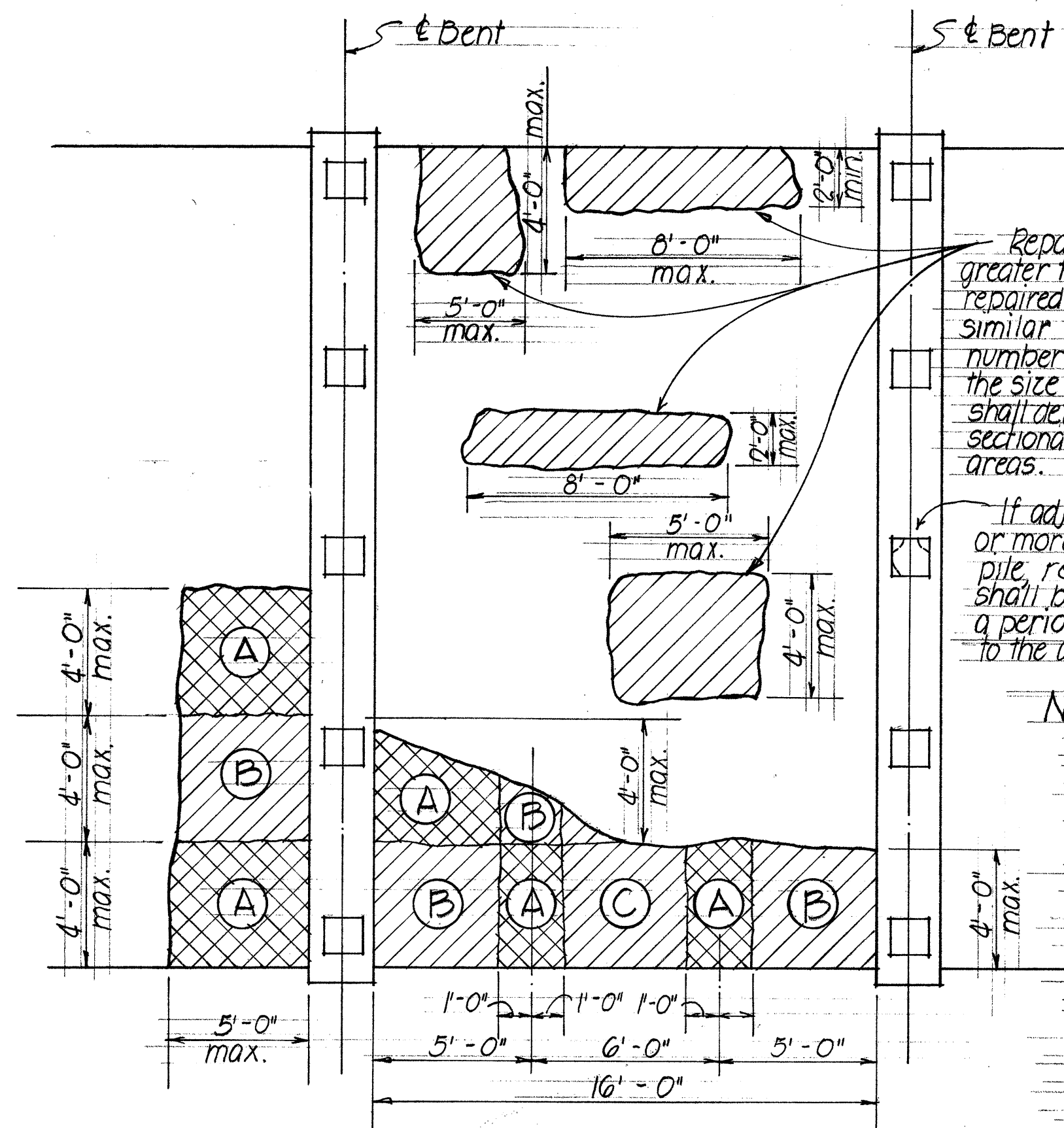


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	83E05-69	1968	2	3



REFLECTED SPAN CEILING PLAN
SCALE: $\frac{1}{4}'' = 1'-0''$

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

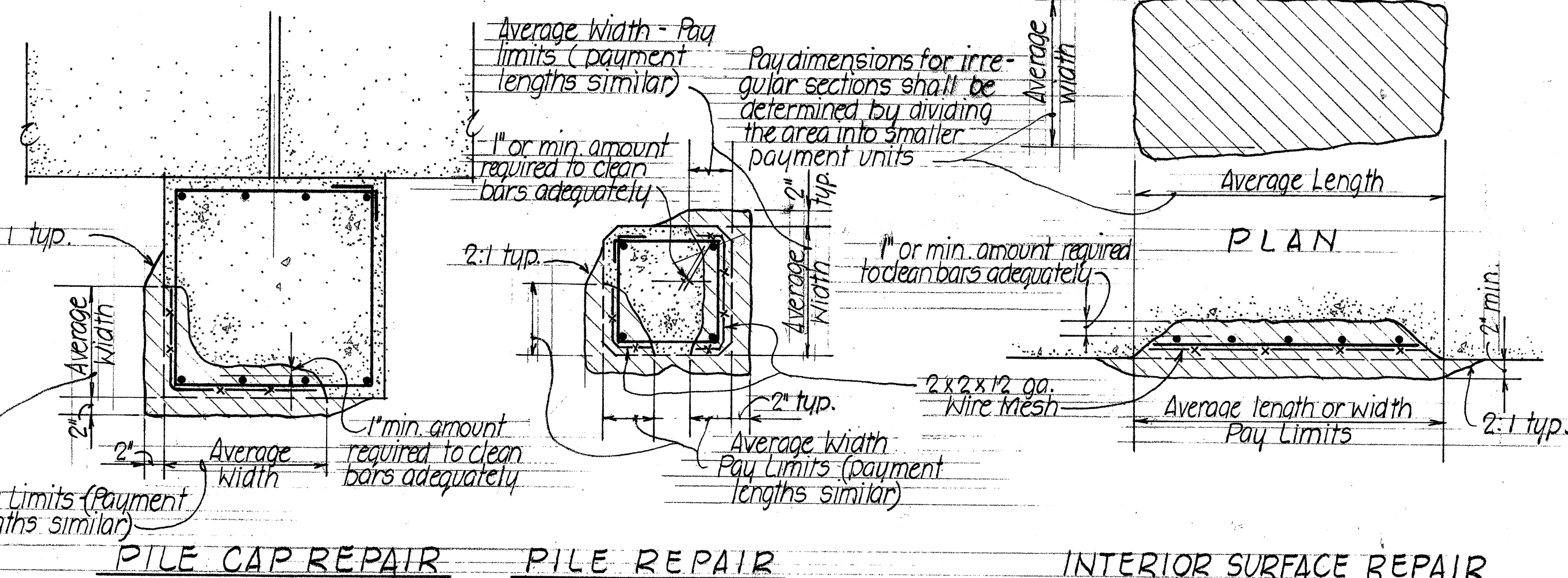
If adjacent piles require three or more corners to be repaired per pile, repairs to one pile shall be completely finished for a period of 24 hours before repairs to the adjacent pile is started.

NOTE 1

Slab damaged over a large area shall be repaired in sections (A), (B), & (C) 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)
3. Start repair of section (C) 7 days after placing mortar for section (B)

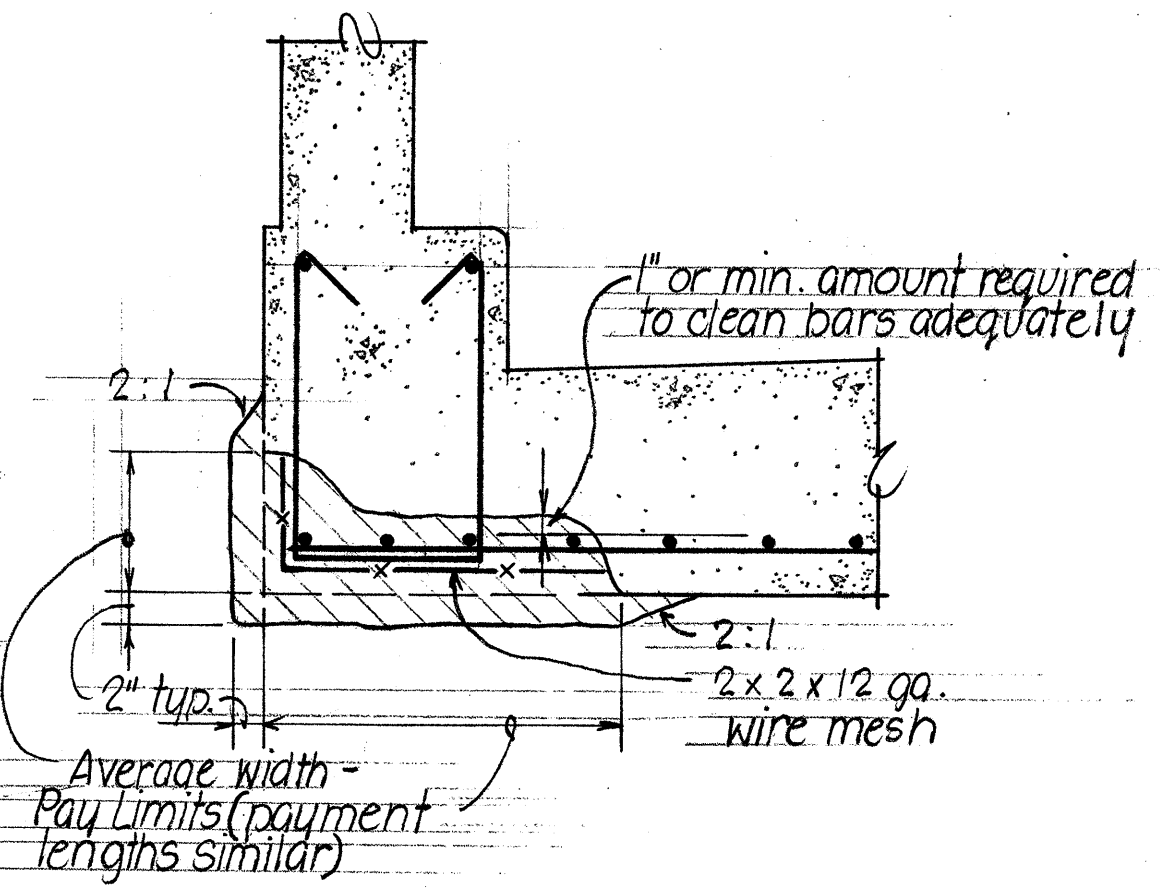
The necessity for sectional repairs will depend on the amount of reinforcing bars that has to be exposed and cleaned. The Engineer shall determine the necessity for sectional repairs after portions of the steel has been exposed.



PILE CAP REPAIR

PILE REPAIR

INTERIOR SURFACE REPAIR



SLAB CORNER REPAIRS

SIZE OF BAR	SIZE OF WELD	LENGTH OF WELD
$\frac{1}{4}'' \phi$	$\frac{1}{8}''$	$1\frac{1}{2}''$
$\frac{1}{2}'' \phi$	$\frac{1}{4}''$	$1\frac{1}{2}''$
$\frac{3}{4}'' \phi$	$\frac{1}{4}''$	3"
$\frac{1}{8}'' \phi$	$\frac{5}{16}''$	$3\frac{1}{2}''$

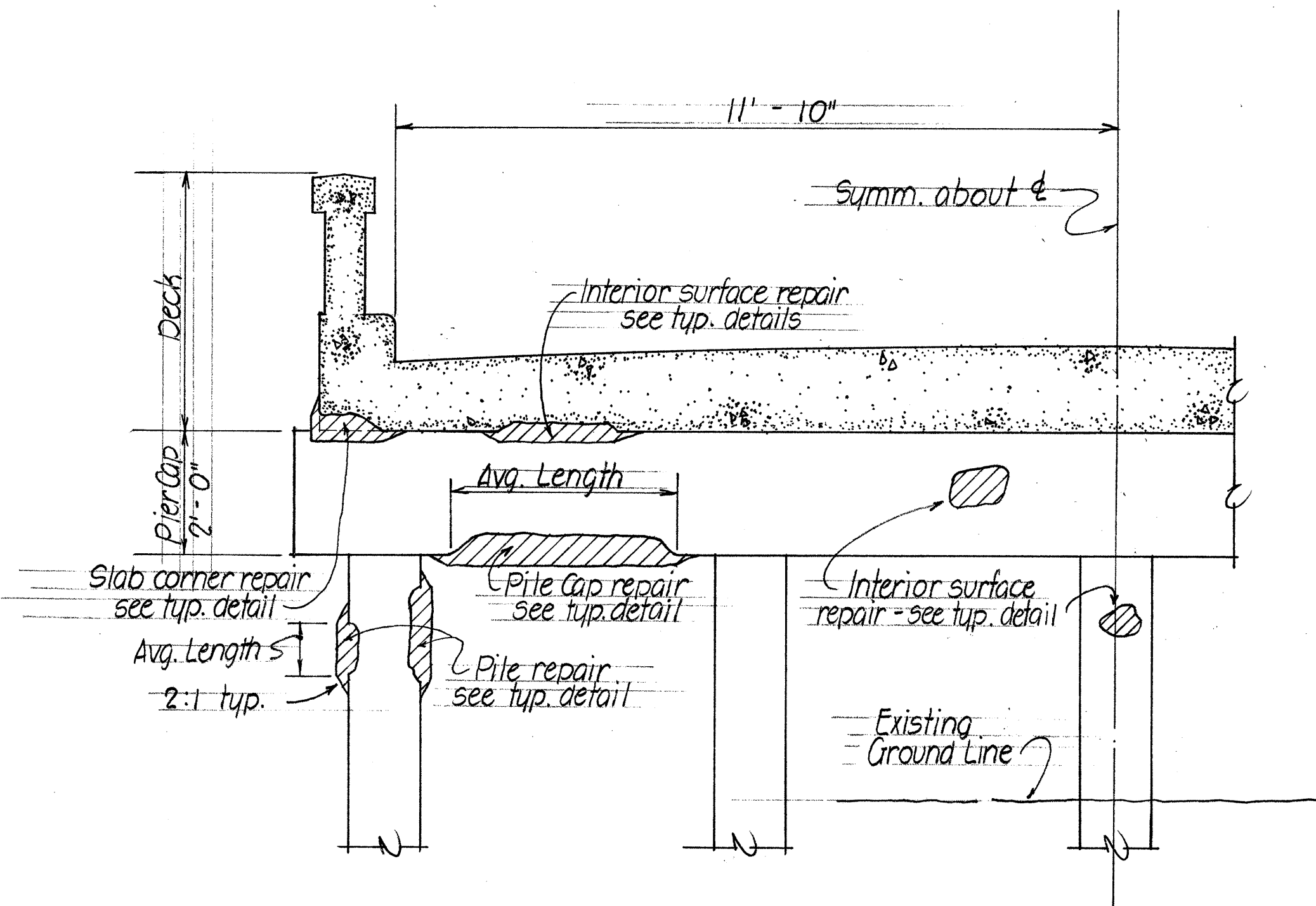
EXISTING BAR
ADDED BAR - (ROUND BAR SAME SIZE AS SQUARE BAR)

REINF. BAR SPLICE DETAIL

AT SPALLED AREAS

TYPICAL REPAIR DETAILS

SHOWING VARIOUS TYPES OF REPAIRS AND LIMITS OF MEASUREMENT FOR PAYMENT



HALF DECK SECTION
SHOWING VARIOUS TYPES OF REPAIRS
SCALE: $\frac{1}{2}'' = 1'-0''$

NOTES:

1. Repairs to the underside of slab shall be made in sections and sequences as shown on the Reflected Ceiling Plan as required by the Engineer.
2. Payment for repairs by square feet shall be measured by the average width and average length as shown on the details.
3. Reinforcing bars that are rusted more than 50% of their original area, shall be strengthened as shown on Splice Detail.
4. All deteriorated, damaged, cracked, spalled, honeycombed concrete or concrete over rusted reinforcing bars shall be removed and repaired with pneumatically placed mortar. The Engineer shall determine all areas to be repaired and the limits of repair repair at each area.
5. Cleaning - See Special Provisions.
6. Control of traffic - See Special Provisions.

DATE	_____
DESIGNED BY	_____
CHECKED BY	_____
NOTED BY	_____
QUANTITIES BY	_____
ORIGINAL PLAN	_____
NOTE BOOK	_____
No.	_____

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

REPAIRS TO
KAHANA BRIDGE #56
TYPICAL REPAIR DETAILS

PROJ. NO. 83E-05-69 AUGUST 1968
SHEET No. 2 OF 3 SHEETS