

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	72B-02-68	1968	9	13

GENERAL NOTES

DESIGN SPECIFICATIONS: AASHO

1. STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES (8th EDITION) WITH SUBSEQUENT ADDITIONS & MODIFICATIONS.

2. DESIGN LOADS:

LIVE LOAD — 60 PSF
WIND PRESSURE — 50 PSF
EARTHQUAKE — ZONE I
FOUNDATION — 2.5 KSF

DESIGN STRESSES:

1. REINFORCED CONCRETE

SEE AASHO SPECIFICATIONS EXCEPT AS OTHERWISE NOTED & SEE SPECIAL PROVISIONS.

$f'_c = 1,200$ PSI

$n = 10$

$f_s = 20,000$ PSI TENSION

2. PRESTRESSED GIRDERS

$f'_c = 5,500$ PSI AT 28 DAYS

$f'_c = 4,000$ PSI AT TRANSFER

$1/2"$ ϕ DIAM. - 270^K 7 WIRE STRANDS

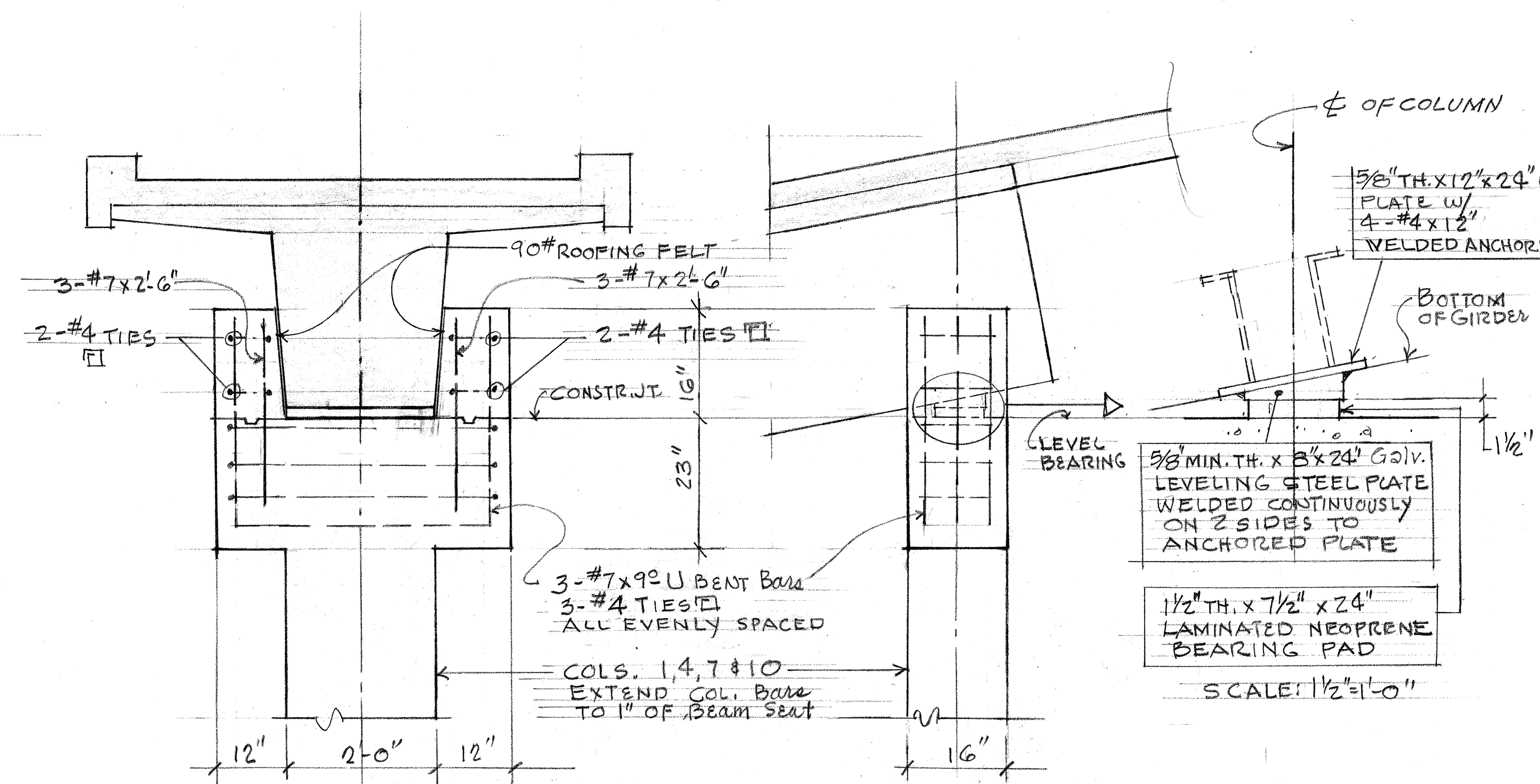
TENSIONING LOAD = 28,910 LBS. PER STRAND

DESIGN LOAD = 23,550 LBS. PER STRAND

FORMS MUST BE REMOVED & THE GIRDER INSPECTED BEFORE THE STRANDS ARE CUT.

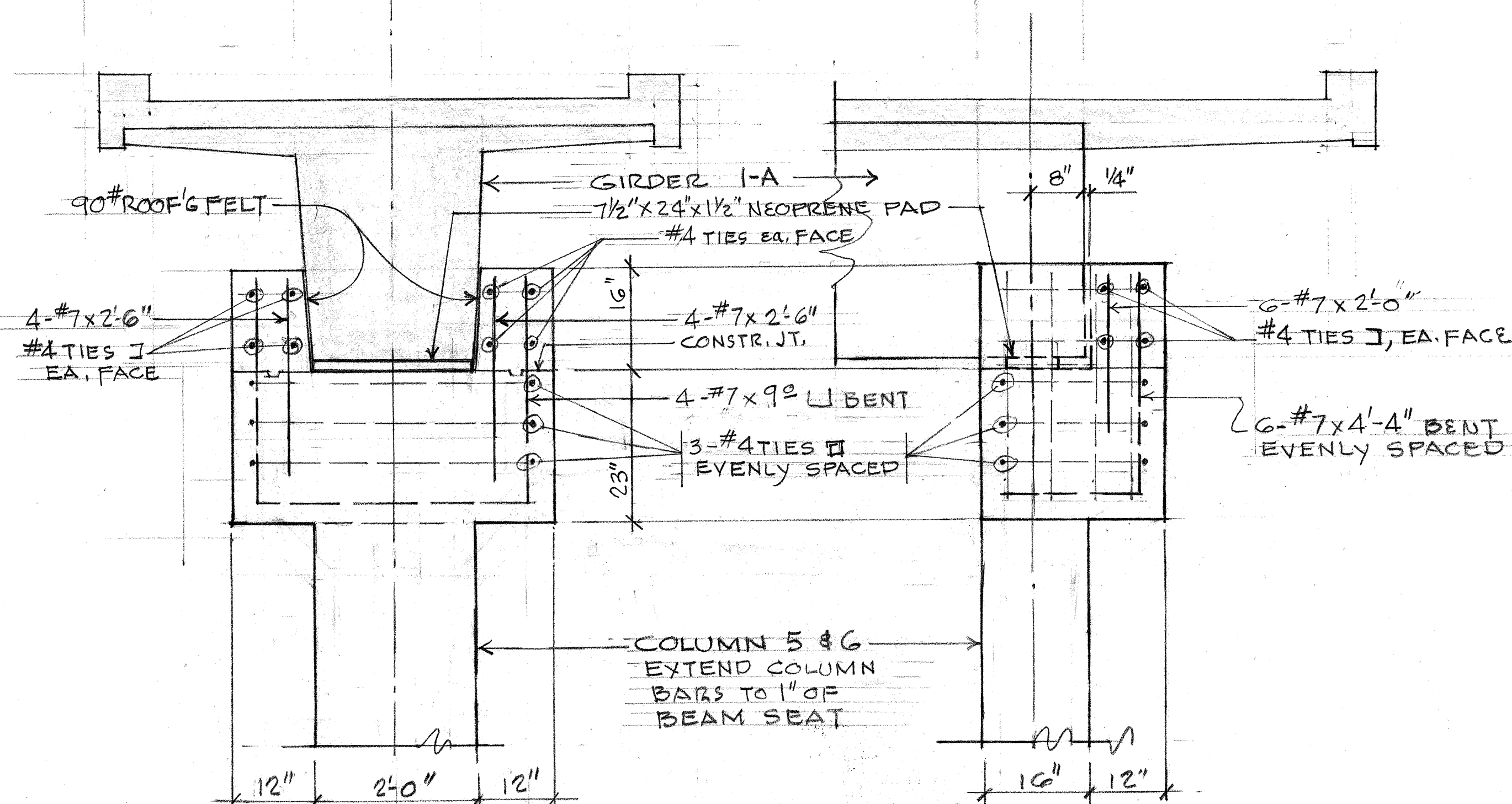
ESTIMATED QUANTITIES

1. STRUCTURAL EXCAVATION	281.30	193 C.Y.
2. POURED-IN-PLACE CONCRETE	168.00	162 C.Y.
3. PRESTRESSED GIRDERS	216.45	545 LF
4. REINF. STEEL IN POURED-IN-PLACE CONCRETE	17,756	76,000 LB
5. METAL RAILING	823.40	795 LF
6. GUARD RAIL	162.20	169 LF



① CAP DETAIL AT
COLUMNS ① ④ ⑦ ⑩
SCALE: 3/4" = 1'-0"

NOTE: BEARING PAD SHALL BE 7 1/2" x 24" x 1/2" THICK (1/2" TH. LAMINATIONS) LAMINATED NEOPRENE PAD, SECURED TO CONCRETE BY NEOPRENE ADHESIVE "PERMANEX" OR APPROVED EQUAL.



② COLUMNS ⑤ & ⑥ CAP DETAIL
SCALE: 3/4" = 1'-0"

MATERIALS

- ALL CONCRETE SHALL BE CLASS A-1 EXCEPT AS OTHERWISE NOTED ON PLANS. CONCRETE FOR PRESTRESSED CONCRETE GIRDERS - SEE SPECIAL PROVISIONS AND AS NOTED ABOVE. ALL CEMENT SHALL BE TYPE I.
- SEE SPECIAL PROVISIONS FOR ADMIXTURE IN CONCRETE.

CONSTRUCTION METHODS

- SEE STANDARD SPECIFICATIONS & SPECIAL PROVISIONS. EXCEPT WALL FOOTINGS (SEE PAGE 4).
- ALL FOOTINGS SHALL BEAR ON FIRM UNDISTURBED GROUND, A MINIMUM OF 5'-0" BELOW EXISTING GRADE, AND POURED TO NEAT LINES. IN CASE OF OVER EXCAVATION, FILL TO REQUIRED GRADE WITH CONCRETE AT CONTRACTOR'S EXPENSE. THE FILL CONCRETE SHALL HAVE A MINIMUM QUALITY OF CLASS D-1.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND THE LOCATION OF ALL EXISTING UTILITY LINES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES IN WRITING BEFORE COMMENCING WORK.
- NO PRESTRESSED GIRDER SHALL BE PLACED ON THE POURED-IN-PLACE SUPPORTS, NOR THE SHORES REMOVED FROM THE POURED-IN-PLACE BEAMS & SLABS FOR 10 DAYS, OR UNTIL THE CONCRETE HAS GAINED A STRENGTH OF 3000 PSI, WHICHEVER OCCURS LATER.

LOADING COMBINATIONS

- RAMP — GROUP IV
- PIERS — GROUP V
- FOUNDATION — GROUP II

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
PEDESTRIAN OVERPASS	
PROJECT NO. 72B-02-68	
KALANIANA'OLE HWY. AT LUNALILO HOME RD.	
HONOLULU OAHU	
COLUMN CAPITALS	
SCALE: AS NOTED AUG 1968	
SHEET No. 8 OF 11 SHEETS	



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