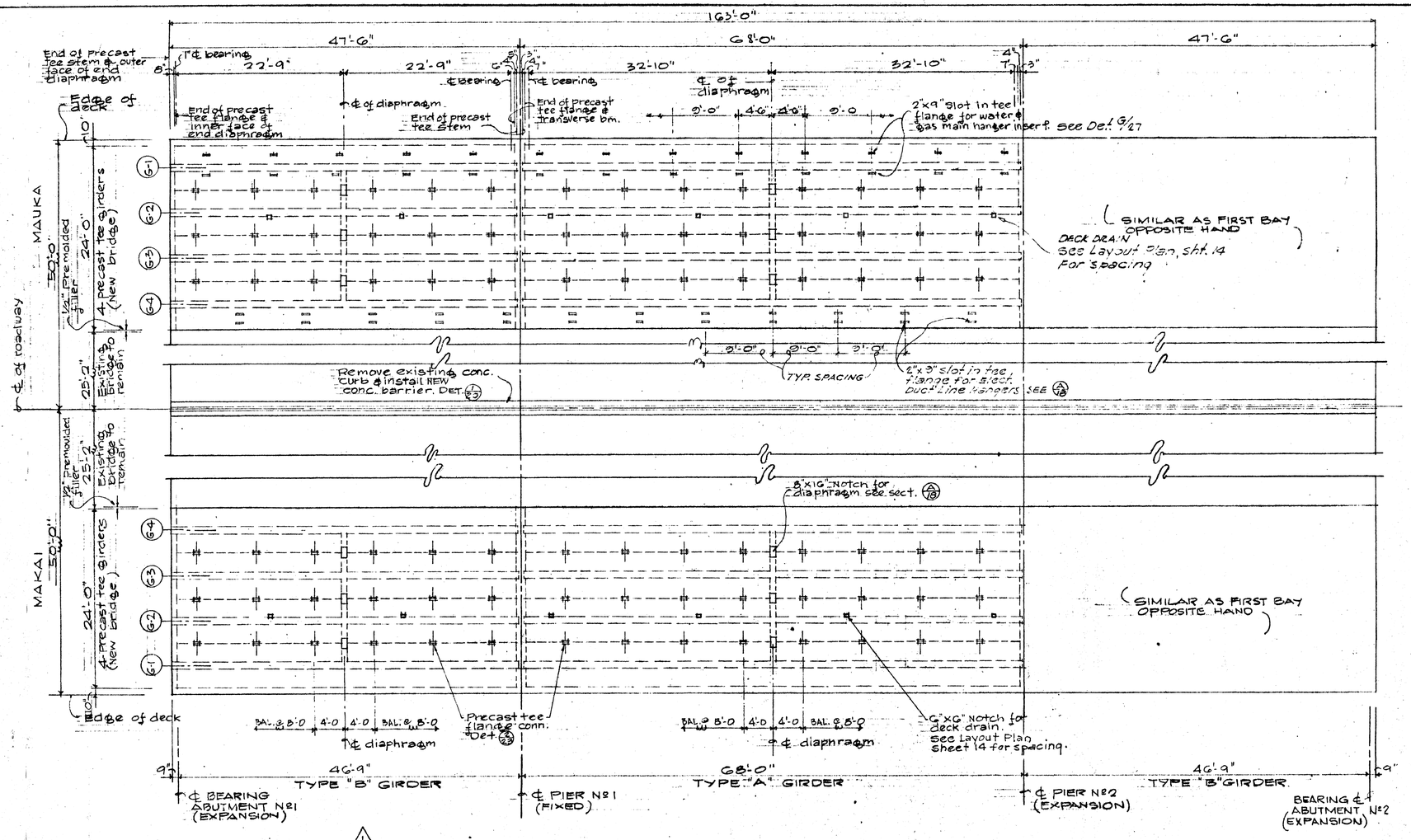
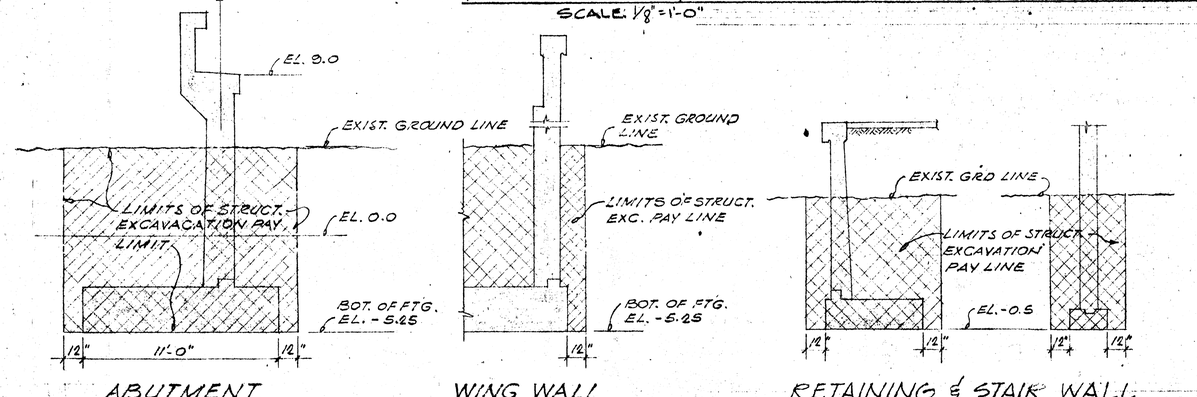


TEE GIRDER, TRANSVERSE BEAM & DIAPHRAGM LAYOUT

SCALE: 1/8" = 1'-0"



ABUTMENT — WING WALL — RETAINING & STAIR WALL

TYPICAL LIMITS OF STRUCTURAL EXCAVATION PAYLINE

SCALE: 1/4" = 1'-0"

GENERAL NOTES

DESIGN SPECIFICATIONS: AASHO

1. STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES (9th EDITION - 1965) WITH SUBSEQUENT ADDITIONS AND MODIFICATIONS.
2. LIVE LOAD: HS 20-44

DESIGN STRESSES:

1. REINFORCED CONCRETE —
   SEE AASHO SPECIFICATIONS EXCEPT AS OTHERWISE NOTED AND SEE SPECIAL PROVISIONS.
   CLASS 'A' $f'c$ = 3000 PSI.
   N = 10
2. REINFORCING STEEL —
   f_s = 20,000 PSI TENSION
   f_s = 16,000 PSI COMPRESSION
3. PRESTRESSED TEE GIRDERS — (SHALL NOT BE ERECTED UNTIL 7-DAYS AFTER CASTING)
   $f'c$ = 6,000 PSI AT 28 DAYS
   $f'ci$ = 4,000 PSI AT TRANSFER
   1/2" DIA. 7 WIRE STRANDS
   TENSIONING LOAD = 25,200 LBS. PER STRAND
   DESIGN LOAD = 20,160 LBS. PER STRAND
4. PRESTRESSED PILES —
   SEE SPECIAL PROVISIONS

MATERIALS:

1. ALL CONCRETE SHALL BE CITY AND COUNTY CLASS 'A' CONCRETE EXCEPT AS OTHERWISE NOTED. CONCRETE FOR PRESTRESSED CONCRETE TEE GIRDERS, SEE SPECIAL PROVISIONS AND AS NOTED ABOVE. CEMENT FOR PIER AND ABUTMENT CONCRETE WORK SHALL BE TYPE II. ALL OTHER CONCRETE WORK SHALL HAVE TYPE I CEMENT.
2. NEOPRENE PADS ARE INCIDENTAL TO PRESTRESSED CONCRETE GIRDERS AND SHALL NOT BE PAID FOR SEPARATELY.
3. SEE SPECIAL PROVISIONS FOR ADMIXTURE IN CONCRETE.
4. ALL PILES SHALL BE PRECAST PRESTRESSED CONCRETE PILES — SEE STANDARD DETAILS.
5. ALL REINFORCING STEEL TO BE ASTM DESIGN. A-15 & A-305 BILLET STEEL, INTERMEDIATE GRADE EXCEPT AS OTHERWISE NOTED.
6. ALL NEOPRENE PADS SHALL BE LAMINATED AND AS SPECIFIED IN SECTION SP 18 - ELASTOMERIC BEARING PADS OF THE SPECIAL PROVISIONS.

CONSTRUCTION METHODS:

1. SEE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. ALL FILL BEHIND ABUTMENTS AND WINGWALLS SHALL BE COMPLETE IN PLACE BEFORE PLACING SUPERSTRUCTURE AND PRESTRESSED CONCRETE TEE GIRDERS.
3. RAILS, SIDEWALKS AND CURBS SHALL NOT BE PLACED UNTIL THE DECK SLAB CONCRETE ATTAINS A STRENGTH OF 3,000 PSI OR 14-DAYS WHICHEVER IS LONGER.
4. REINFORCING —
   SPLICES: SHALL BE STAGGERED WHERE POSSIBLE UNLESS SHOWN OTHERWISE. MINIMUM LAP = 30 BAR DIAMETERS, NOT LESS THAN 12".
   SUSPENDED BEAMS AND SLABS: TOP BARS @ MIDSPAN; BOTT. BARS @ SUPPORT.
   PILE CAPS: TOP BARS @ MIDSPAN; BOTT. BARS @ PILES.
   CLEARANCES: FOOTINGS - 3" CLEAR; PIERS & ABUTMENTS - 3" CLEAR; DECK SLAB - TOP 1 1/2" CLEAR, BOTT. 1" CLEAR; ALL OTHERS - 2" CLEAR.
   PRESTRESS: TIES AND STIRRUPS - 1" CLEAR; PRESTRESSING STEEL - 1 1/2" CLEAR.
6. PILES —
   LENGTH SHALL BE THE CAST LENGTHS. DESIGN LOAD = 40 TONS PER PILE.
7. CONTRACTOR SHALL REPLACE ALL CANAL WALLS DISTURBED DUE TO CONSTRUCTION OF ABUTMENTS. NEW WALLS SHALL MATCH EXISTING WALLS.
8. PORTIONS OF THE EXISTING CONCRETE RETAINING WALLS AND STAIRS LYING 18 IN. OR MORE BELOW FINISHED GRADE AND NOT OTHERWISE DISTURBED MAY BE LEFT IN PLACE.
9. CONTRACTOR SHALL VERIFY WITH THE RESPECTIVE UTILITY COMPANIES ON THE SIZE AND NUMBER OF INSERTS AND CONDUITS TO BE IMBEDDED IN CONCRETE WORK.

JOB NO. 35-68R

REVISION	DATE	BRIEF	BY	APPROVED
1		REVISED TEE CONN. SPACING	JH	

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU
DIVISION OF ENGINEERING

TEE GIRDER LAYOUT & GENERAL NOTES

WIDENING OF ALA MOANA BRIDGE OVER ALA WAI CANAL

HONOLULU, OAHU, HAWAII

ENGINEER K.O.P. DATE 4/26/68
DRAFTSMAN R.L. CHECKED A.K.
SCALE AS SHOWN TRACER
APPROVED: APPROVED: 10-22-68
CHIEF ENGINEER DPW DIRECTOR DIV. OF ENG.

FILE	POCKET	FOLDER	NO.
9	5	2	19

APPROVED:
CHIEF, ENGINEERING DIV., B.W.S. 10/7/68 DATE

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
Signature