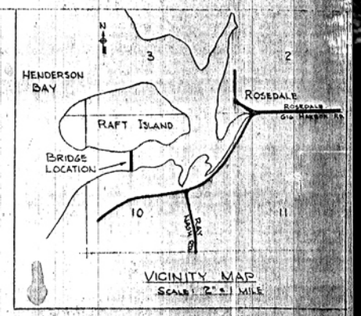
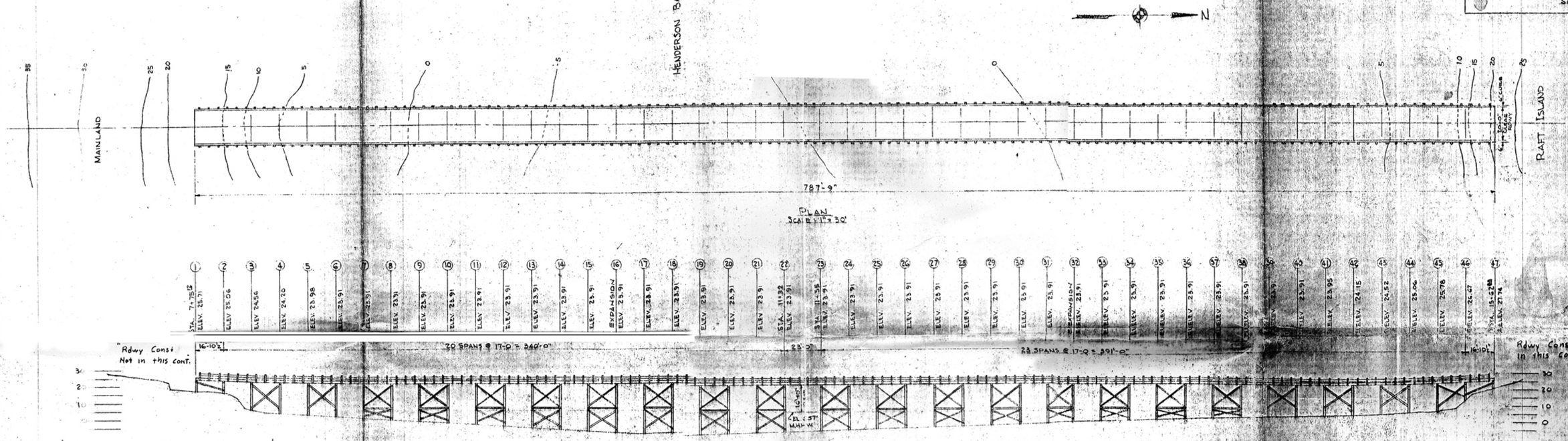
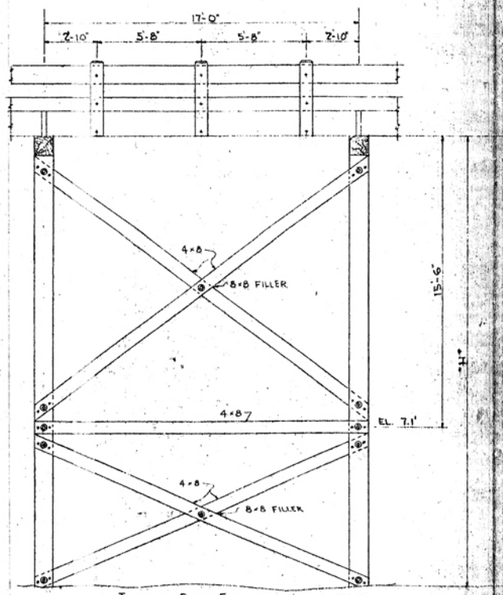


VICINITY MAP
SCALE 2" = 1 MILE



PLAN
SCALE 1" = 30'

ELEVATION
SCALE 1" = 30'



TYPICAL BENT FRAMING
SCALE: ¼" = 1'-0"

ALL LONGITUDINAL BRACES SHALL BE FASTENED AT EACH END WITH ⅞" FLAT HEAD BOLT WITH MALLEABLE WASHER, AND 2-8"×10" BOAT SPIKES AND AT INTERSECTIONS WITH ONE (1) 3" FLAT HEAD BOLT WITH MALLEABLE WASHER.

LONGITUDINAL STRUTS AND CROSS BRACES SHALL BE PLACED ON OUTSIDE PILES ON BOTH SIDES OF TRESTLES AS SHOWN. TWO STORY BRACING SHALL BE USED WHERE "H" EXCEEDS TWENTY (20) FEET.

GENERAL NOTES

ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE OF WASHINGTON, DEPARTMENT OF HIGHWAYS, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED JULY, 1957.

RAIL POSTS (ANT.) SHALL BE PAINTED WITH ONE PRIMING COAT OF WHITE PAINT, STATE STANDARD FORMULA E-1, AND ONE FINISH COAT OF YELLOW PAINT, STATE STANDARD FORMULA D-2.

ALL OTHER TIMBER AND LUMBER SHALL BE PRESSURE TREATED BY THE EMPTY-CELL PROCESS TO PROVIDE A MINIMUM RETENTION OF TWELVE (12) POUNDS OF CREOSOTE OIL PER CUBIC FOOT OF TIMBER, EXCEPT PILE CAPS WHICH ARE TO HAVE EIGHTY (8) #/CU/FT.

ALL PILES SHALL BE TREATED BY THE FULL-CELL PROCESS TO PROVIDE A MINIMUM RETENTION OF TWELVE (12) POUNDS OF CREOSOTE OIL PER CUBIC FOOT OF PILE.

BEAM GUARD RAIL TO BE FIRE BEAM OR EQUAL. FIELD DRILLED TO MATCH BOLT HOLES IN POSTS AND SHALL HAVE ONE (1) SHOP COAT OF PAINT NO. A-1 AND TWO (2) FIELD COATS OF FEDERAL YELLOW D-2. GUARD RAIL SHALL BE IN 12'-6" STD. LENGTHS.

ALL HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH A.S.T.M. DESIGNATION A-153.

ALL PILES SHALL BE DRIVEN TO A DEPTH SUFFICIENT TO DEVELOP A MINIMUM LOAD BEARING CAPACITY OF FIFTEEN (15) TONS PER PILE.

PRESTRESSED CONCRETE DECK SLAB

MINIMUM COMPRESSIVE STRENGTH OF CONCRETE IN 28 DAYS TO BE 5,000 p.s.i. STRENGTH AT TIME OF RELEASE TO BE 4000 p.s.i. FOR 23 FOOT SLABS THE CONCRETE STRENGTH IS TO BE 5500 psi AND 4800 p.s.i. RESPECTIVELY. THE ⅜"ϕ STRESS RELIEVED STRANDS TO HAVE AN ULTIMATE STRENGTH OF 250 K.S.I. AND TO BE TENSIONED TO 175 K.S.I. (14"). THE 23 FOOT SLABS ARE TO HAVE 4-⅜"ϕ UNSTRESSED STRANDS TIED TO BOTTOM REINFORCEMENT (2 EACH SIDE) FOR ULTIMATE LOAD REQUIREMENTS: DESIGN CRITERIA FOR PRESTRESSED SLABS ARE IN ACCORDANCE WITH THE REQUIREMENTS OF THE BUREAU OF PUBLIC ROADS, U.S. DEPARTMENT OF COMMERCE.

GROUT SHALL BE ONE (1) PART HIGH EARLY STRENGTH CEMENT TO TWO (2) PARTS OF CLEAN FINE GRADED SAND, WELL MIXED WITH ENOUGH WATER TO MAKE WORKABLE AS A DRY PACK. GROUT SHALL BE NON-SHRINKING.

APPROXIMATE QUANTITIES

PRECAST CONCRETE BRIDGE DECK	18,312 SQ. FT. (Not IN CONTRACT)
TYPE I-I ASPH.-CONC. PAVT. CLASS (C)	100 TONS
FLEX-BEAM GUARD RAIL	1865 LIN. FT.
STEEL REINFORCING BARS AS PLANS & QTYS	1690 LBS.
TIMBER & LUMBER (CREOSOTE TREATED)	88.9 M.B.M.
FURNISHING TIMBER PILING (CREO. TR.)	6,710 LIN. FT.
DRIVING TIMBER PILES (CREO. TR.)	190 EACH
FURNISHING & DRIVING TIMBER TEST PILE	2 EACH
PLACING & GROUTING PRECAST DECK SECTIONS	322 SECTIONS
EXPANSION JOINTS	2 EA.

NOTE:
DATUM: U.S.C.&G.S. MSC&GS 7.5
ALL ELEV. SHOWN ARE U.S.C.&G.S.

H15-44 LOADING

PROFILE
FOR
RAFT ISLAND BRIDGE
FOR
ARCHIE MATTHEW 3814 No. MONROE, TACOMA

SITTS & HILL
PROFESSIONAL ENGINEERS
CIVIL & STRUCTURAL
1530 CENTER ST. TACOMA, WASH.

DRAWN: D.L.T.	CHECKED: K.O.J.	APPVD: H.S.	
SCALE: AS NOTED		56-54-1	
DATE: 8-26-57			