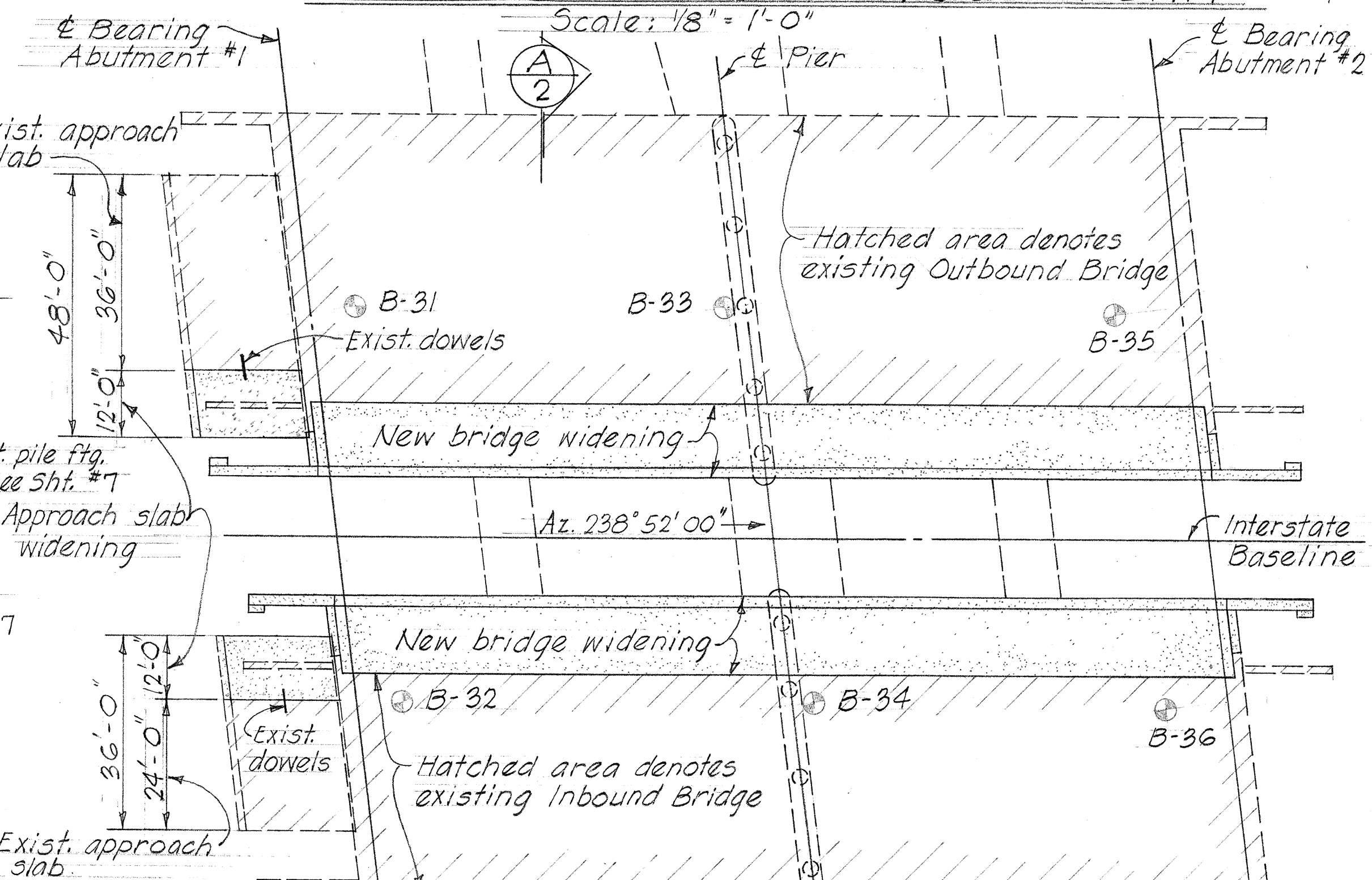
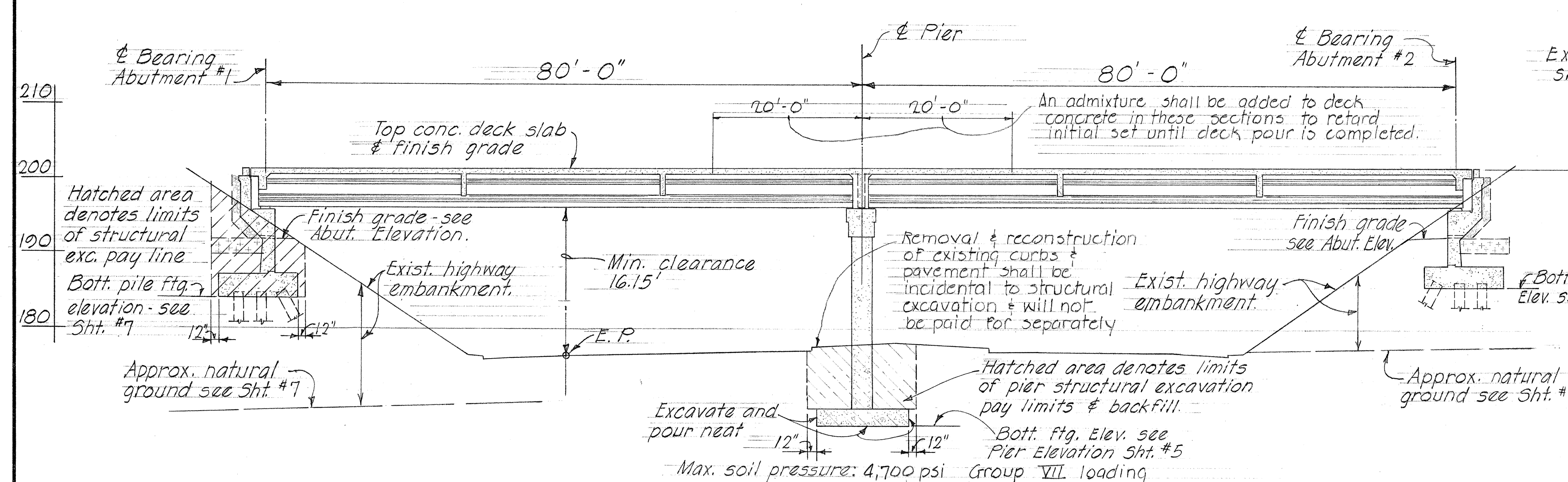
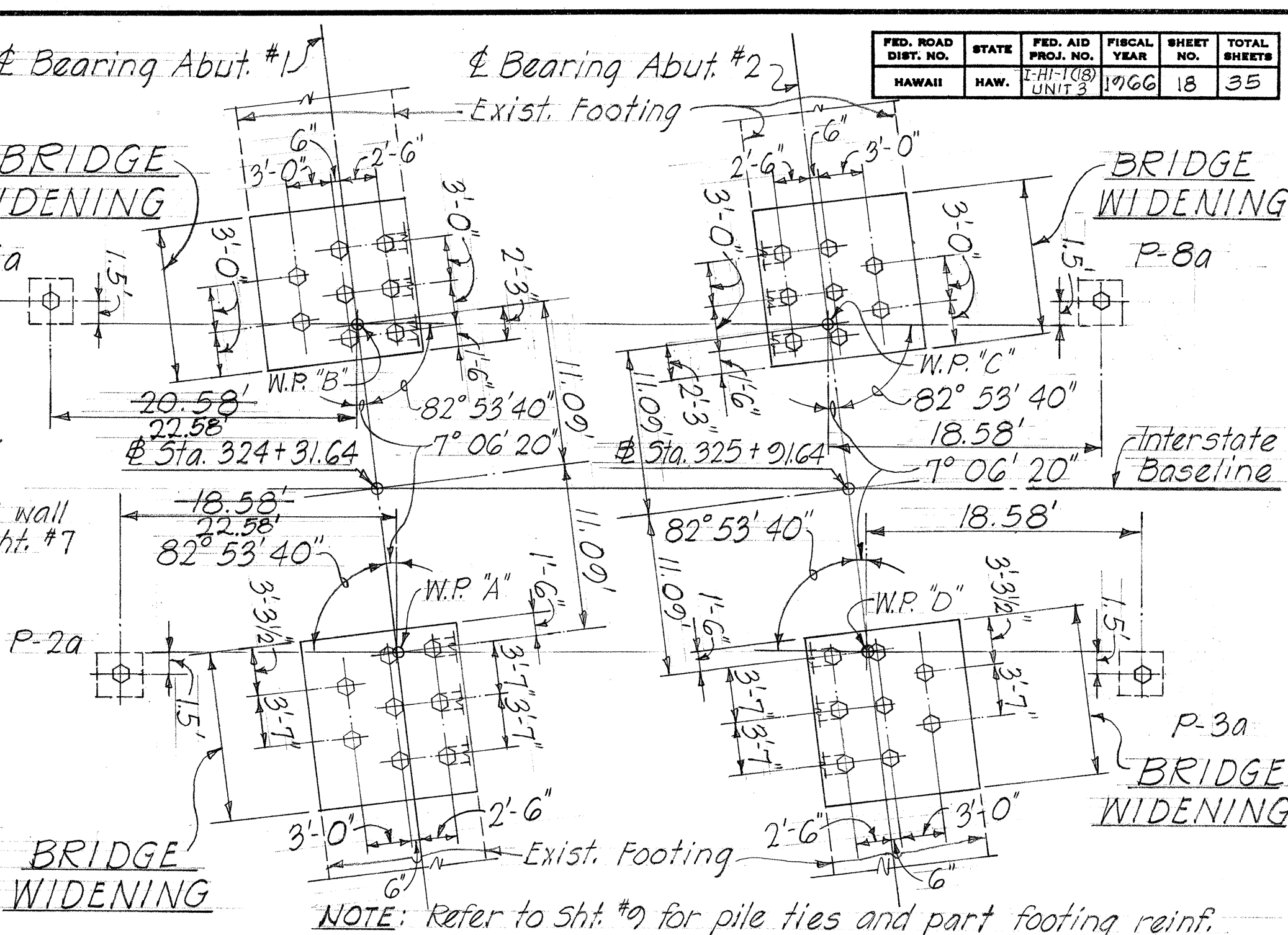
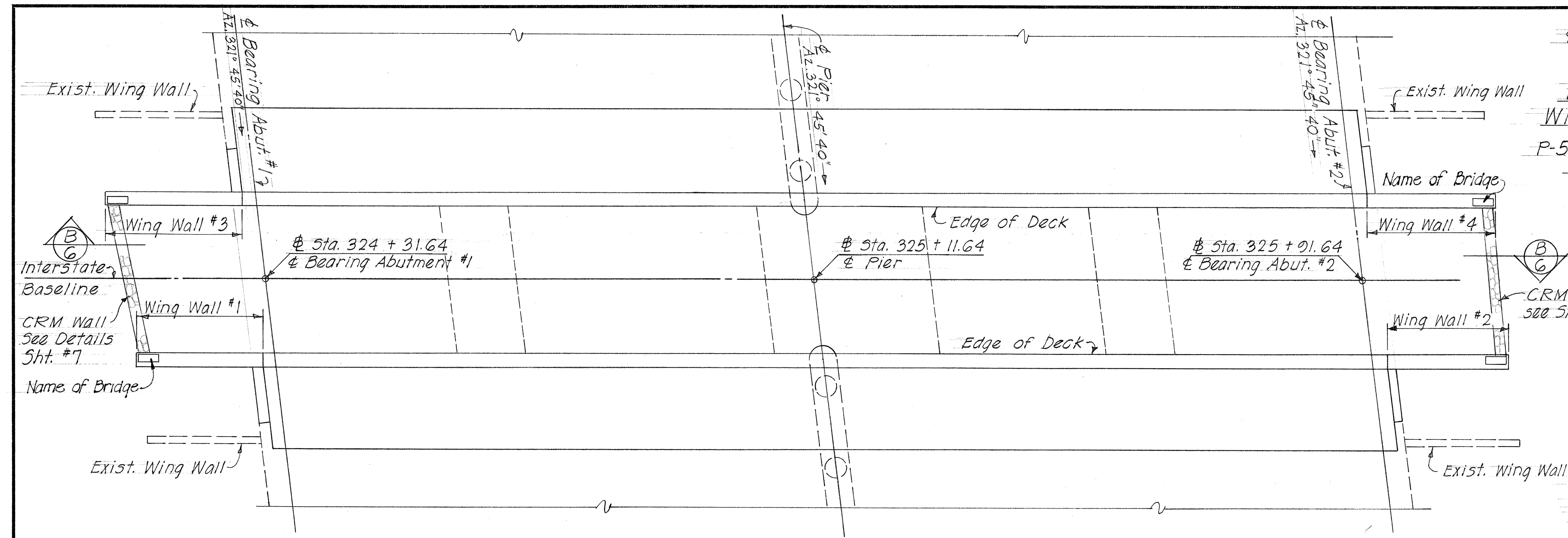




PRESTRESSED CONCRETE PILE DATA					
Location	Pile Cutoff El.	Vert. Pile Tip El.	Batter Pile Tip El.	Vert. Pile Length	Batter Pile Length
Inbound Abut. #1	El. 184.75	El. 158.25	El. 158.67	29 L.F.	29 L.F.
Outbound Abut. #1	El. 188.75	El. 162.25	El. 162.61	29 L.F.	29 L.F.
Inbound Abut. #2	El. 185.75	El. 167.25	El. 167.54	21 L.F.	21 L.F.
Outbound Abut. #2	El. 190.75	El. 171.25	El. 171.52	22 L.F.	22 L.F.
P-2a	El. 198.51	El. 158.01	—	43 L.F.	—
P-3a	El. 198.34	El. 169.84	—	31 L.F.	—
P-5a	El. 202.54	El. 162.04	—	43 L.F.	—
P-8a	El. 202.32	El. 166.82	—	38 L.F.	—

Symbols

○ Vertical Piles

◡ Batter Piles

→ Direction of batter

All batter piles to be driven on a 2:12 slope.

ESTIMATED QUANTITIES		
Class A-1 Concrete	Lump Sum	(297 CY)
Reinforcing Steel	Lump Sum	(63,658 lbs)
Prestressed Girder		64.4 LF
Structural Excavation		431.2 CY
Filter Material		15.2 CY
C.R.M.		14.7 CY
Metal Bridge Railing (Traffic Type)		389 LF*
Concrete Piles		960 LF

GENERAL

All Concrete Construction joints between existing structure and bridge widening shall be cleaned prior to pouring of new concrete.

In general all horizontal & vertical grade control and location of new bridge widening to match existing shall be verified in field prior to construction.

REFERENCE NOTES:

For General Notes, Boring Logs & Miscellaneous Details see Sht. #9.

For additional details not shown on these drawings refer to Standard Detail Drawings Sht. #51, #55, #56, #59.

* See Special provisions for availability of metal bridge railing at State base yard.

PROJECT INFORMATION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

KUNIA INTERCHANGE ADDITION

PROJ. NO. I-HI-108 UNIT 3 SEPT. 1966

SHEET No. 1 OF 3 SHEETS

DATE: 1/6/66

SURVEY PLOTTED BY: J.V.

DESIGNED BY: J.V.

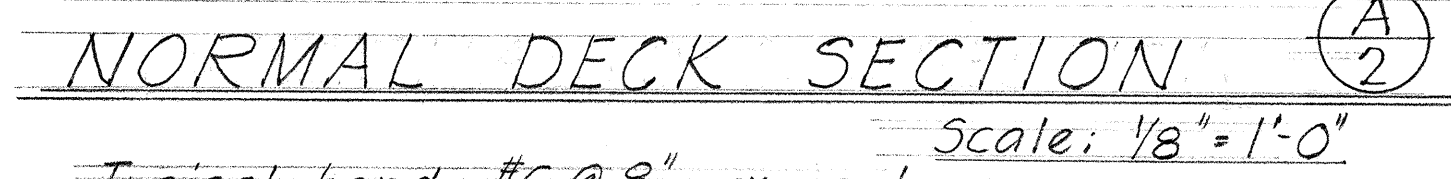
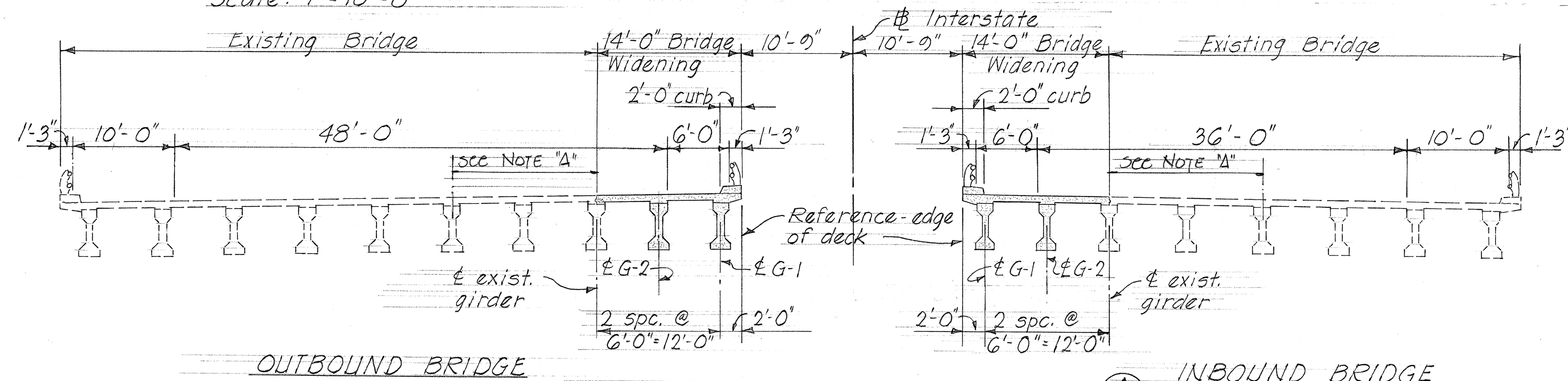
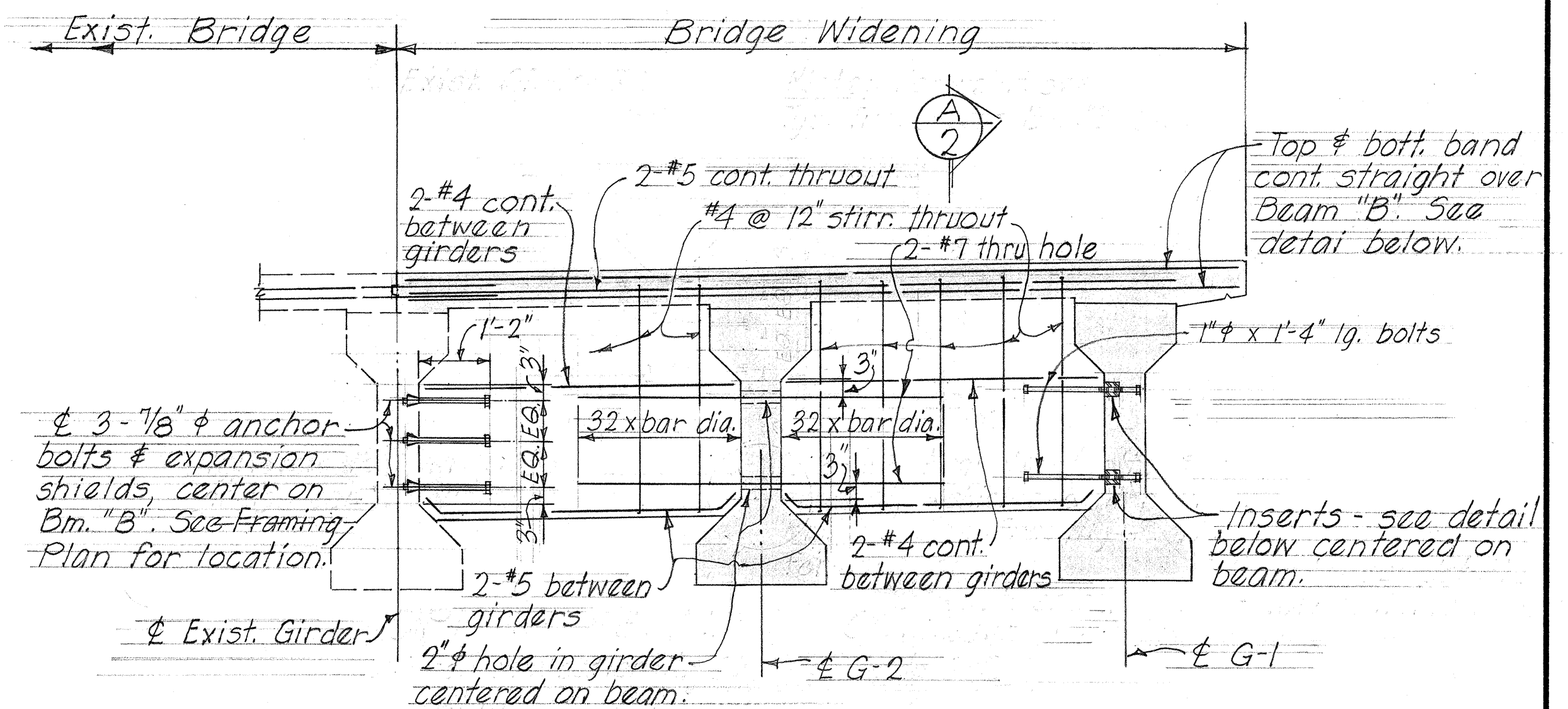
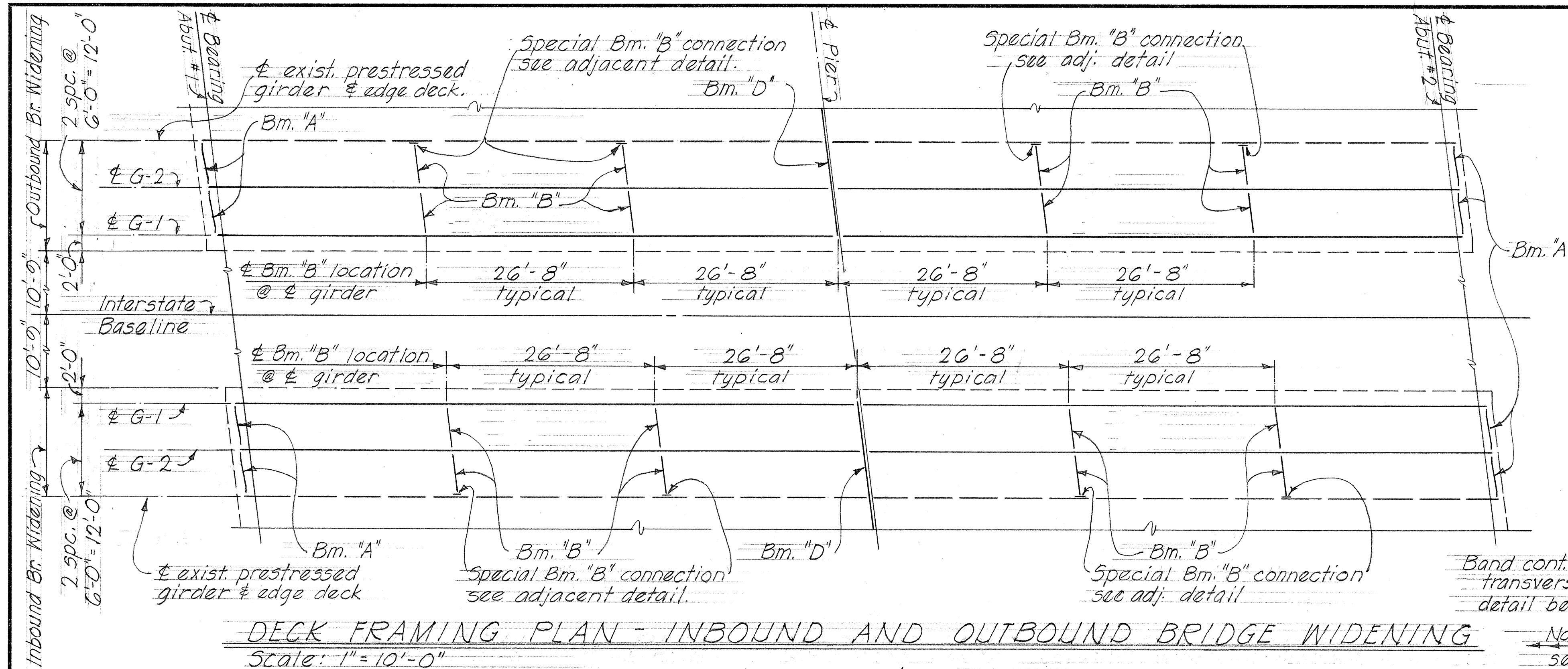
CHECKED BY: J.V.

ORIGINAL PLAN

NOTE BOOK

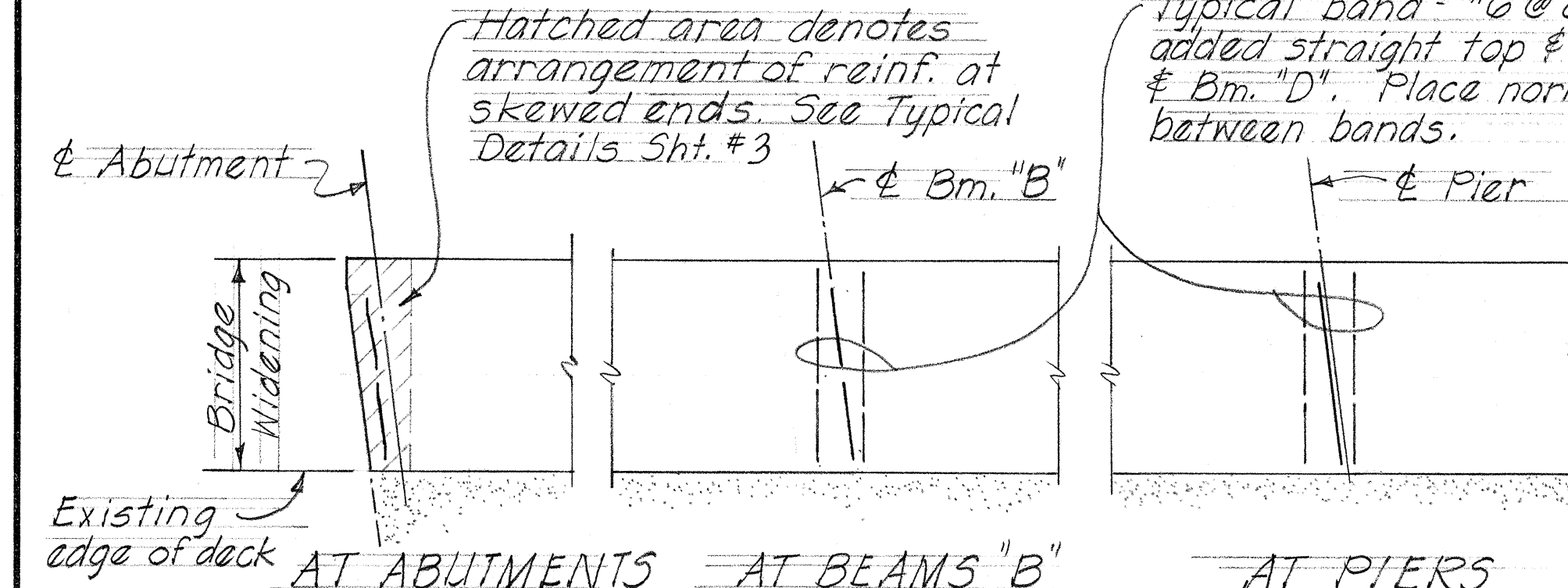
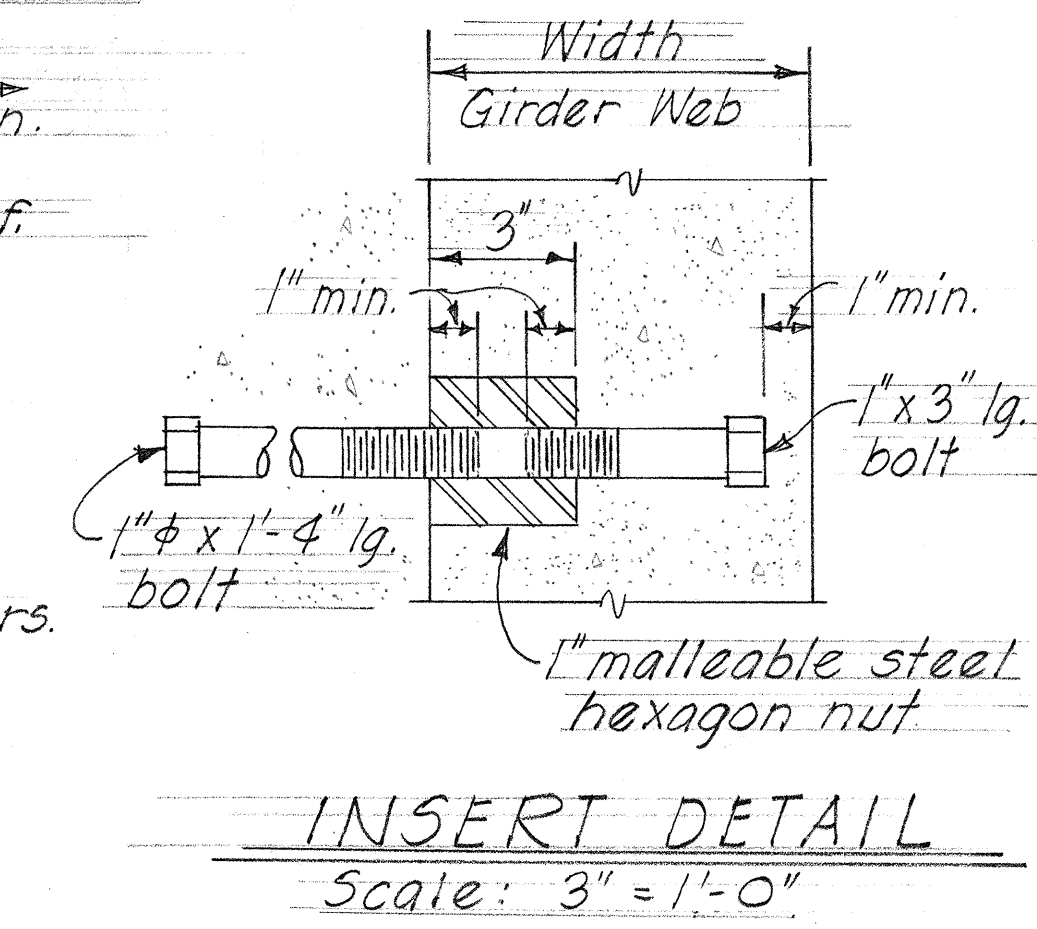
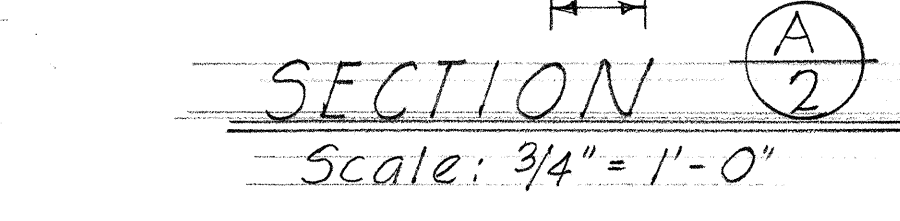
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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-101(108) UNIT 3	1966	19	35



NOTE: For typical deck reinf. & additional details see Sht. #3

NOTE "A": Truck traffic not permitted over this width until structure is completed.



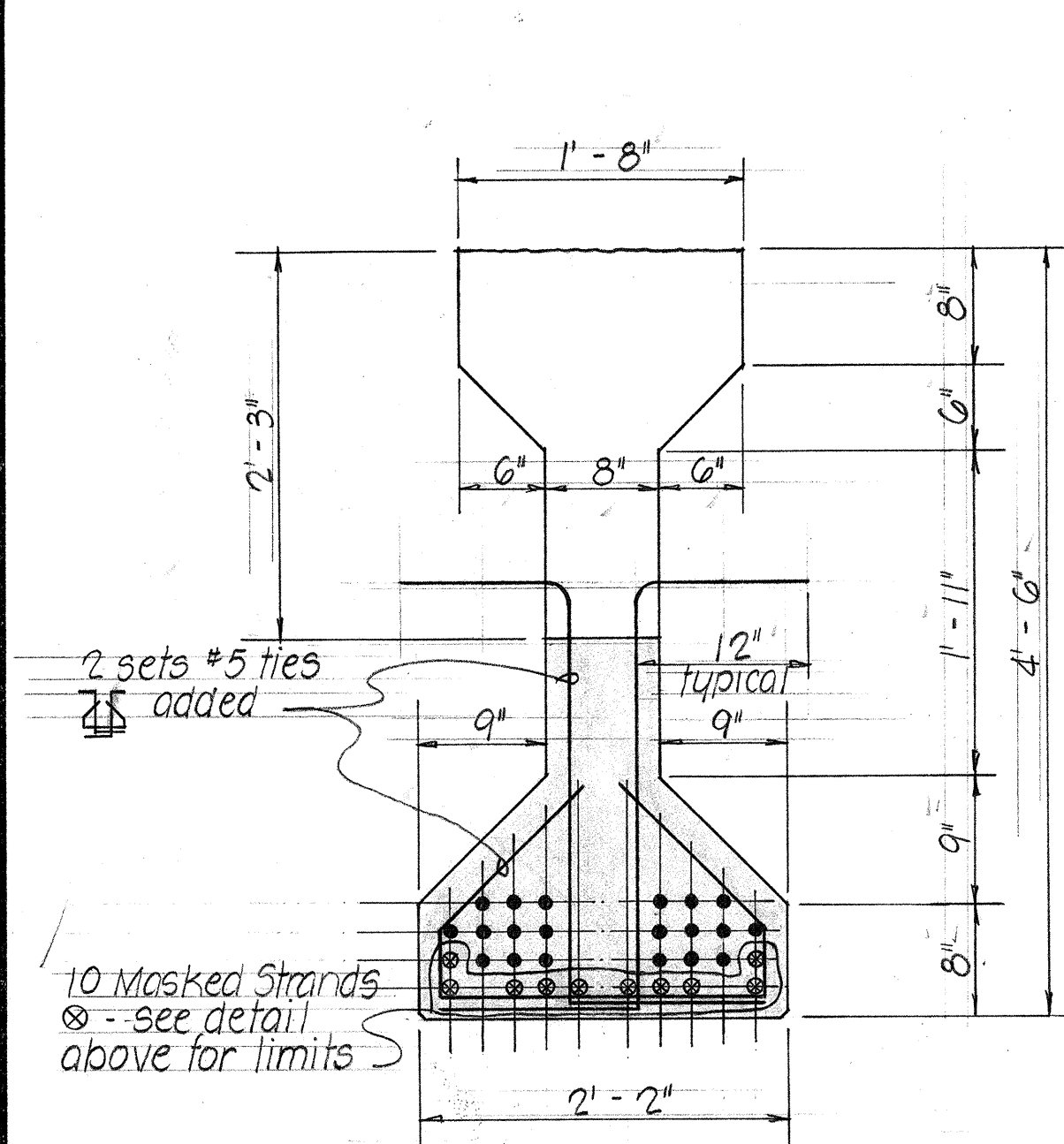
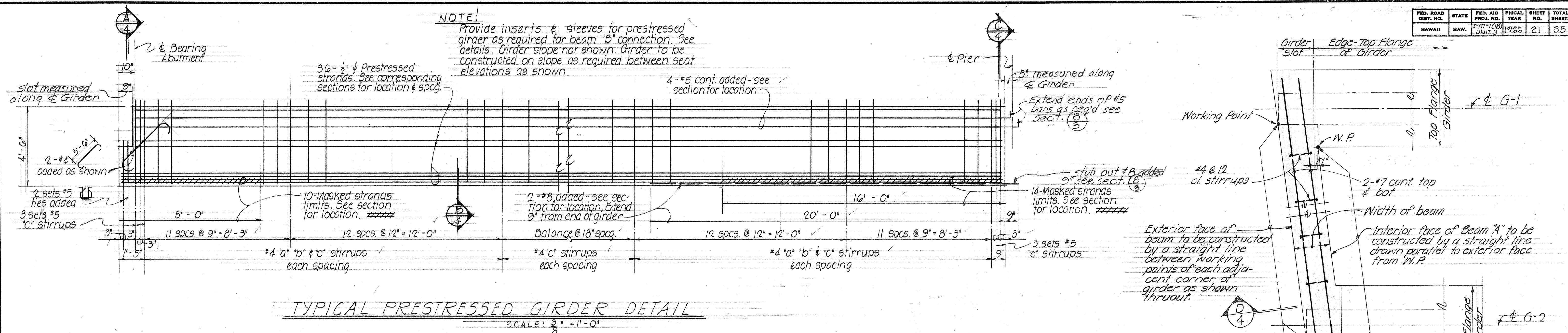
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

KUNIA INTERCHANGE ADDITION

PROJ. NO. I-101(108) UNIT 3 SEPT. 1966

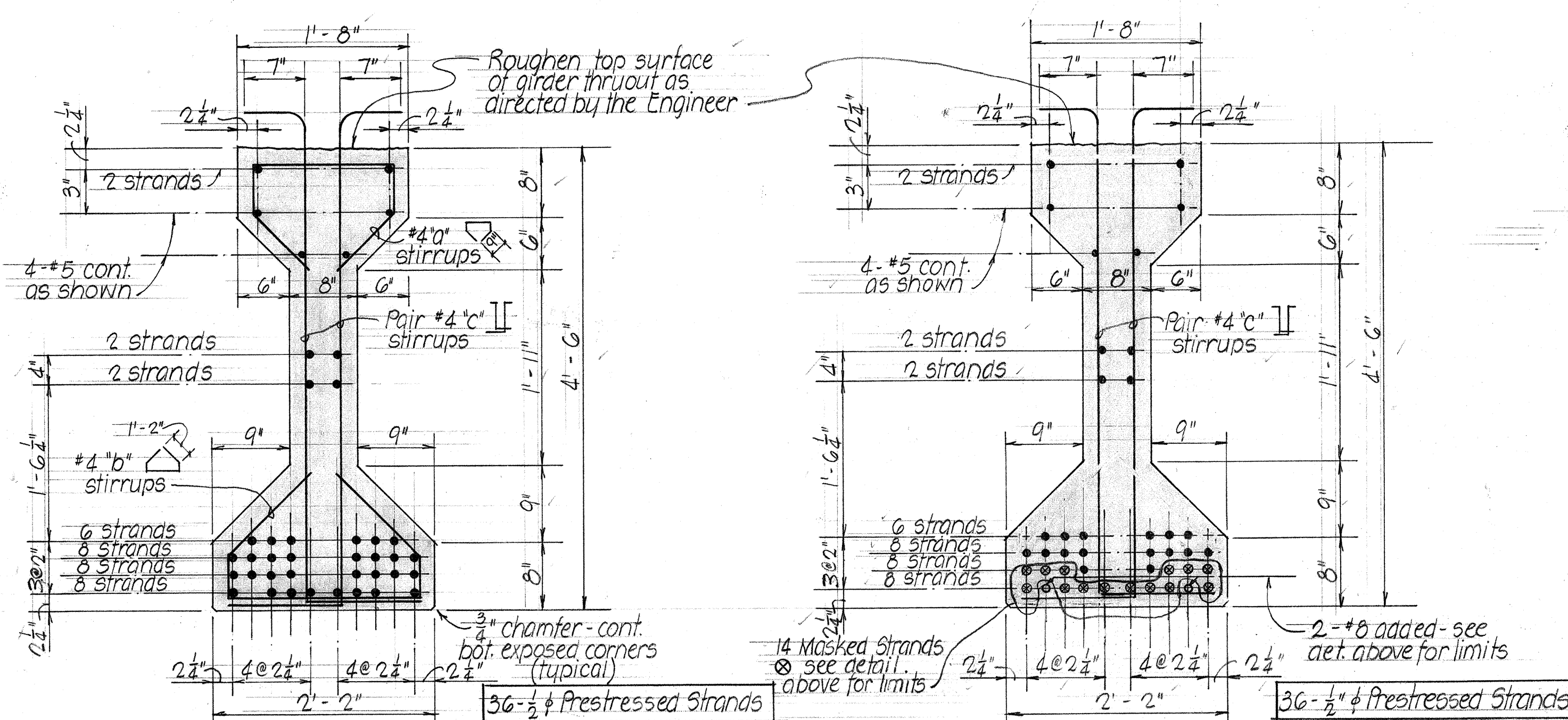
SHEET No. 2 OF 9 SHEETS

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HAWAII	HAW.	I-HI-1(18) UNIT 3	1966	21	35

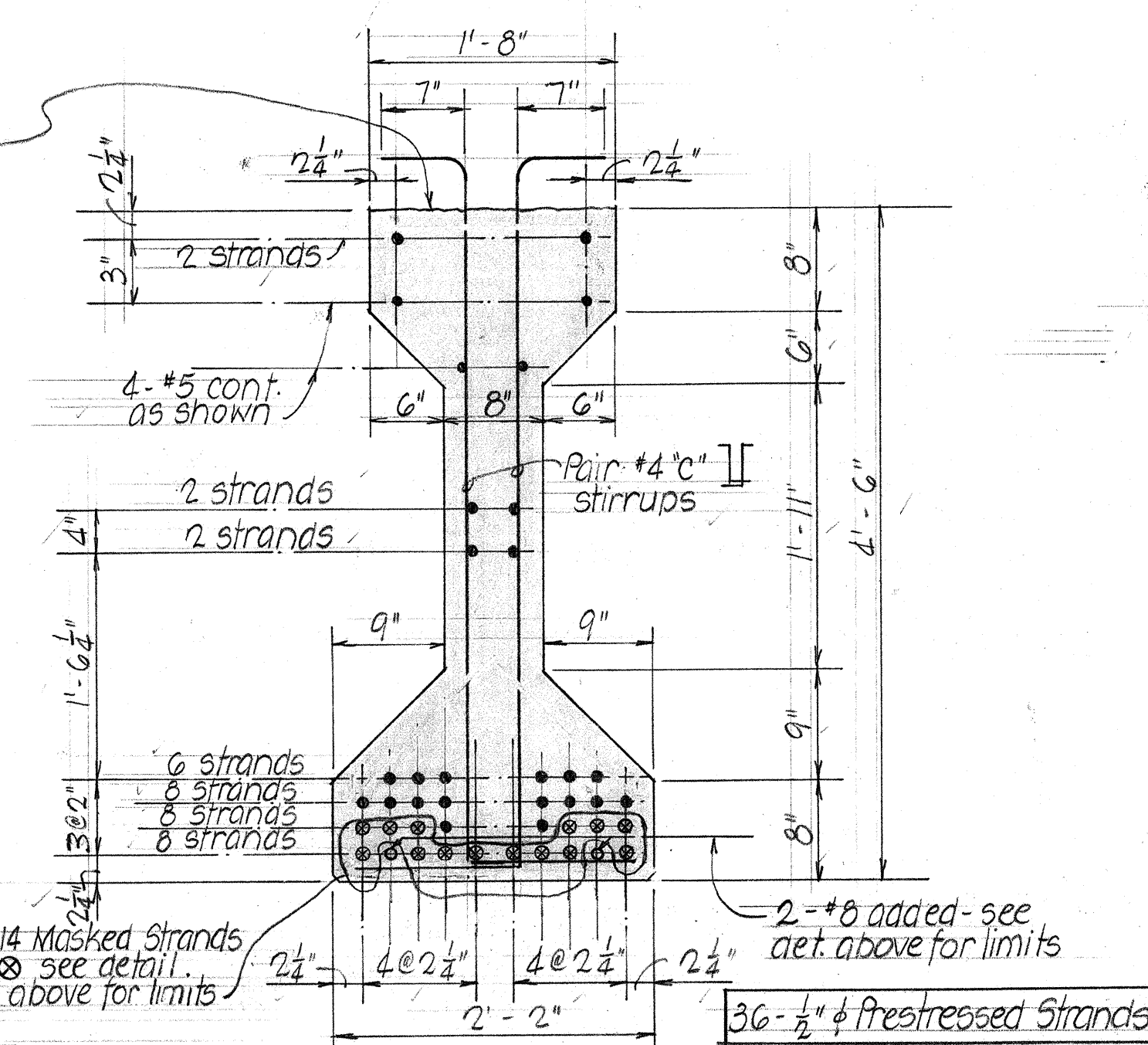


SECTION 

SCALE: 1" = 1'-0"

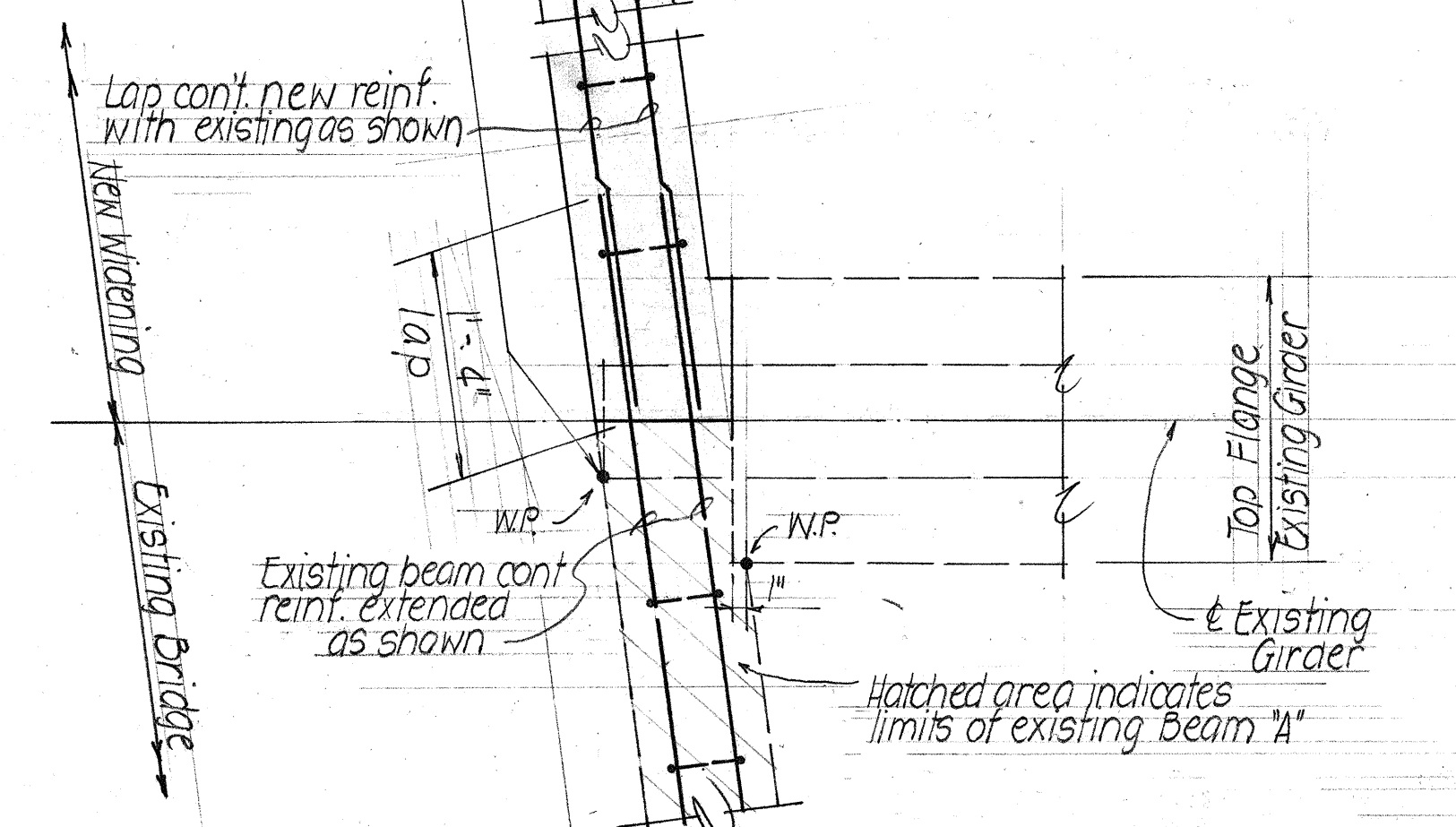


SECTION  SCALE: 1" = 1'-0"

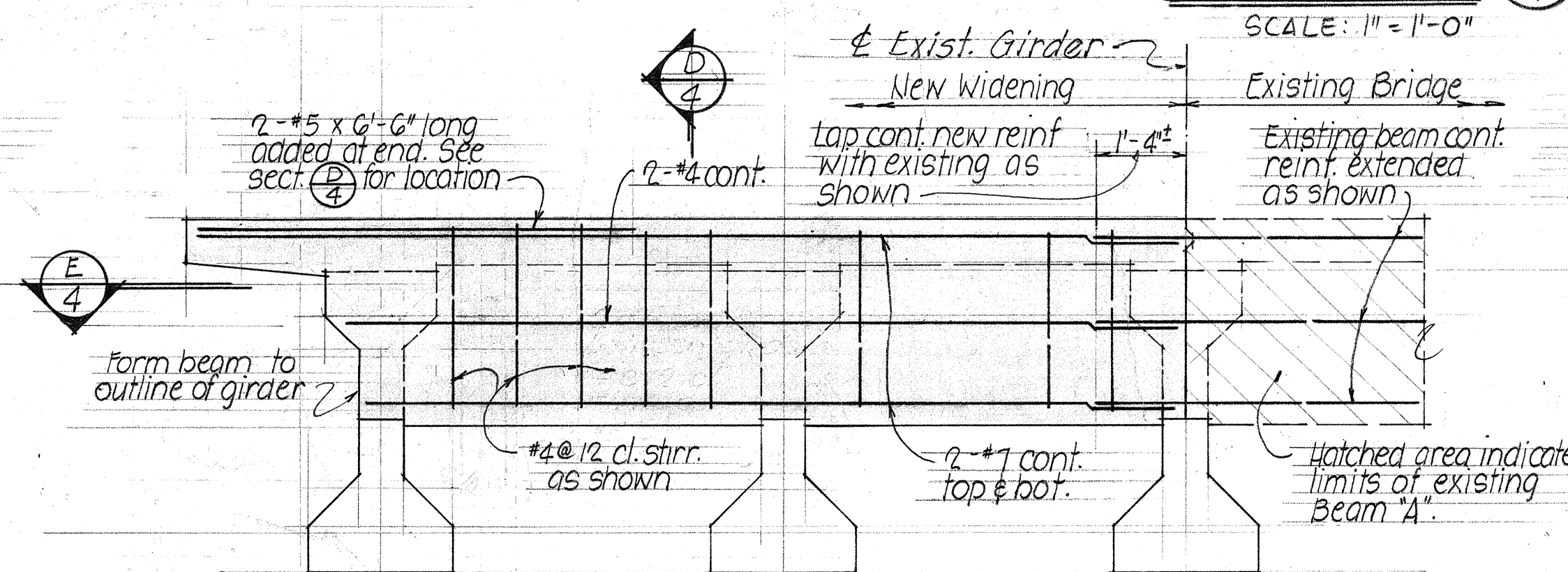


SECTION C
4

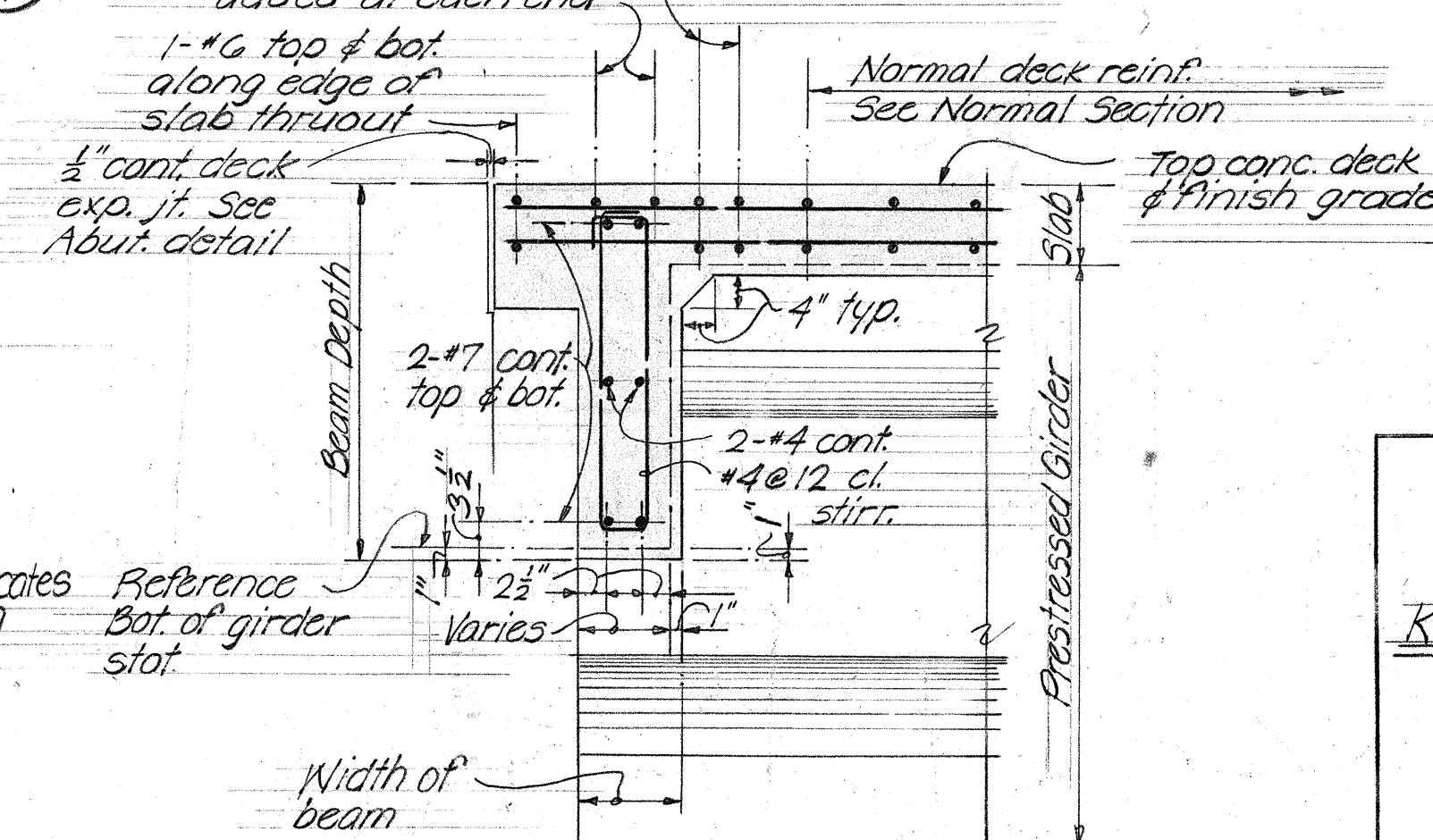
SCALE: 1" = 1'-0"



TYPICAL BEAM "A" PLAN $\left(\frac{E}{4} \right)$
SHOWING ARRANGEMENT OF REINFORCING
 SCALE: 1" = 1'-0"



TYPICAL TRANSVERSE BEAM "A"
SCALE: $\frac{1}{2}" = 1'-0"$



SECTION D
4

SCALE: $\frac{3}{8}" = 1'-0"$

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

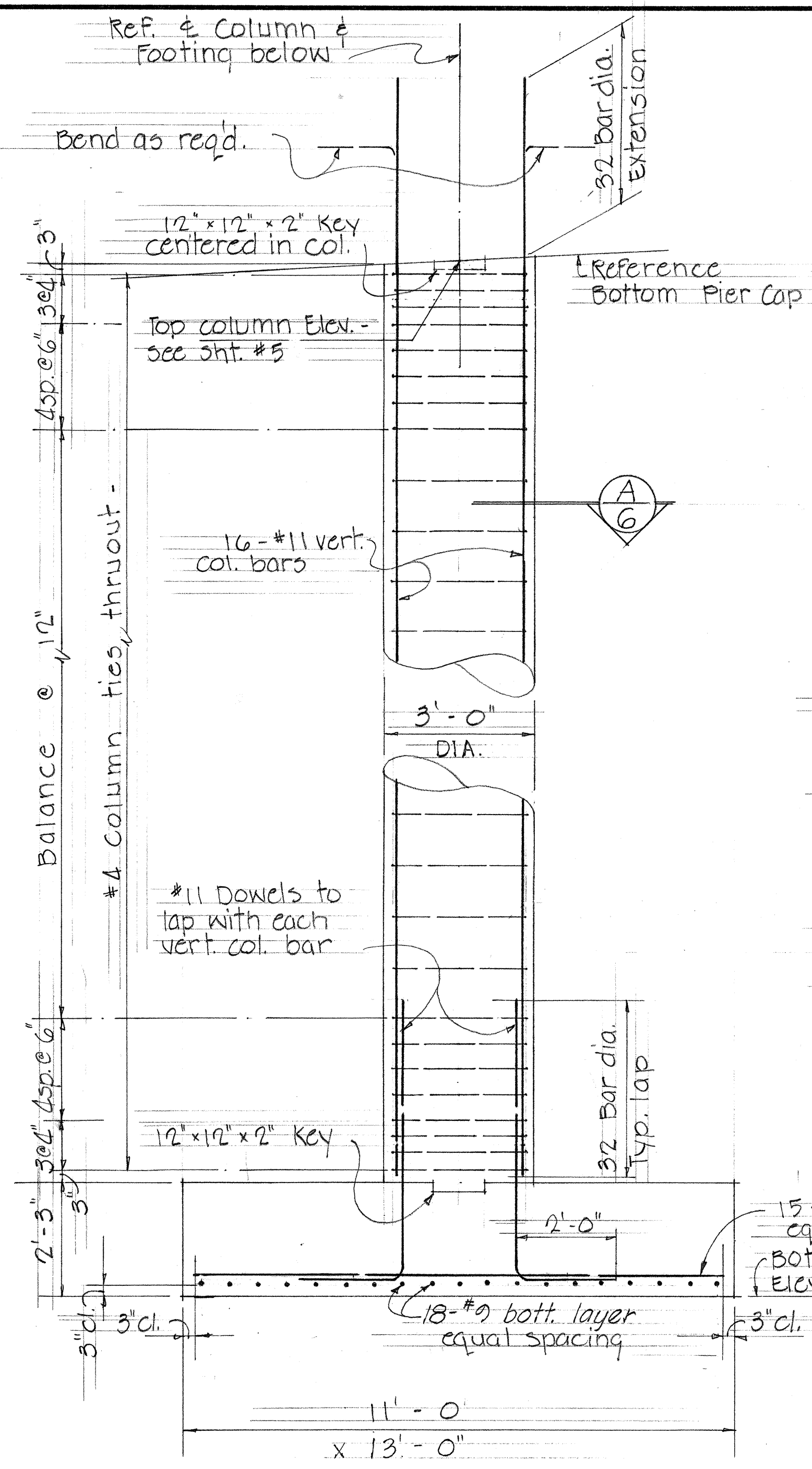
KUNIA INTERCHANGE ADDITION

PROJ. NO. I-HI-1(18) UNIT 3 SEPT. 1966

SHEET No. 4 OF 9 SHEETS

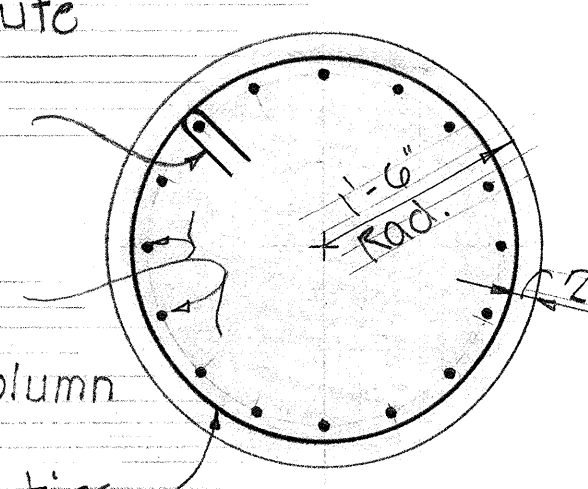
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NOTE BOOK	DRAWN BY <i>TKM</i>	<i>MB</i>
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	DESIGNED BY <i>V.C.</i>	_____
	QUANTITIES BY <i>TKM</i>	<i>MB</i>
No. _____	CHECKED BY <i>S.O.</i>	<i>£ 17</i>

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-HI-1(8) UNIT 3	1966	23	35

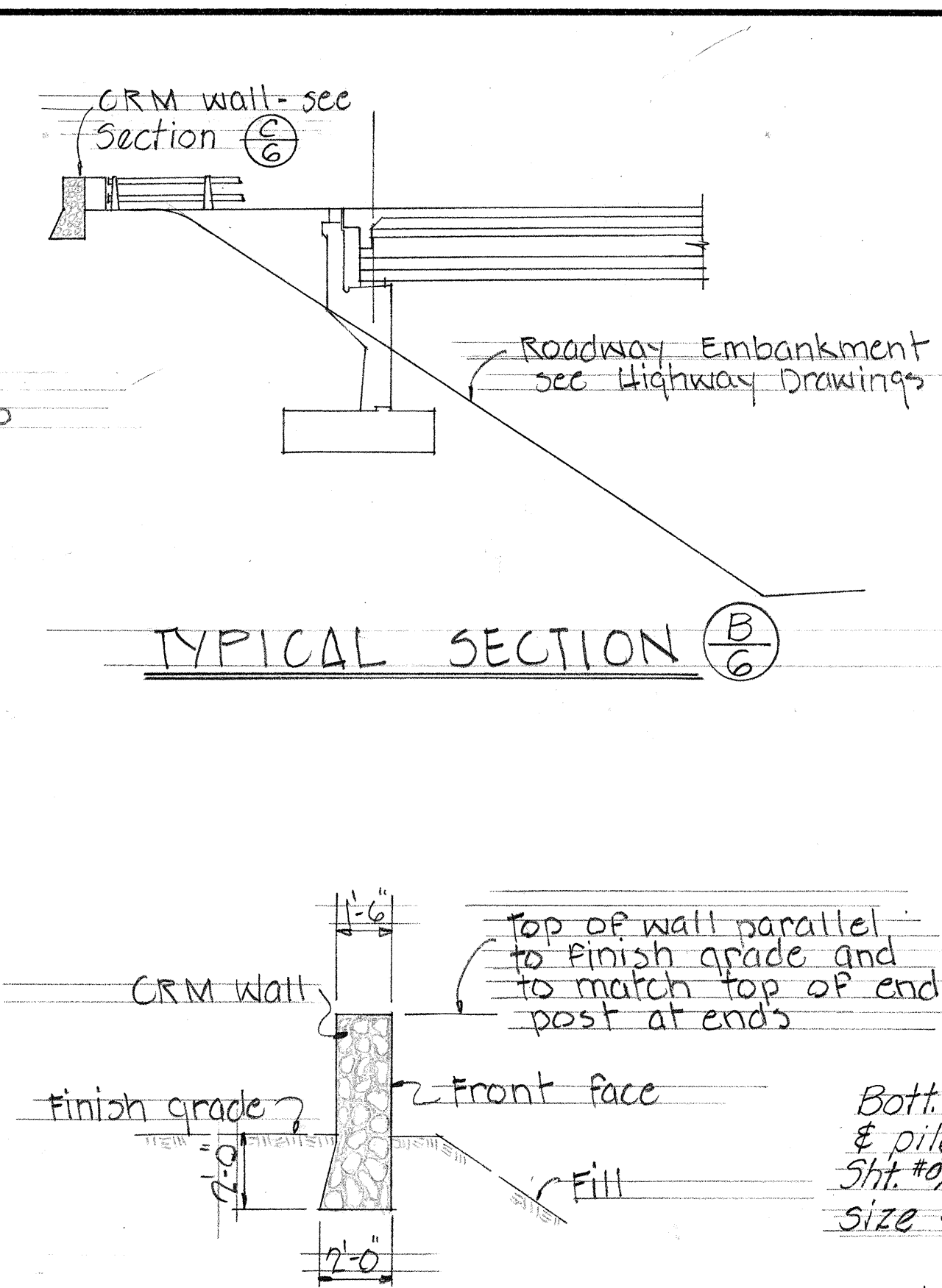


TYPICAL COLUMN DETAIL
SCALE: 1/2" = 1'-0"

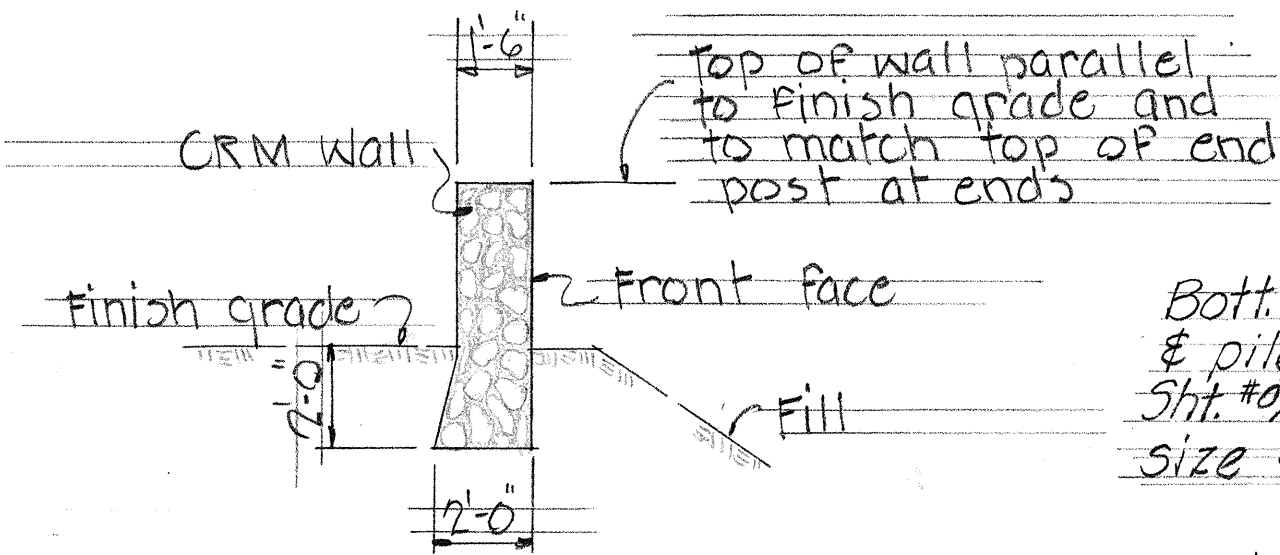
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DRAWN BY	11/6
TRACED BY	VC
DESIGNED BY	VC
CHECKED BY	PT
NOTE BOOK	No.



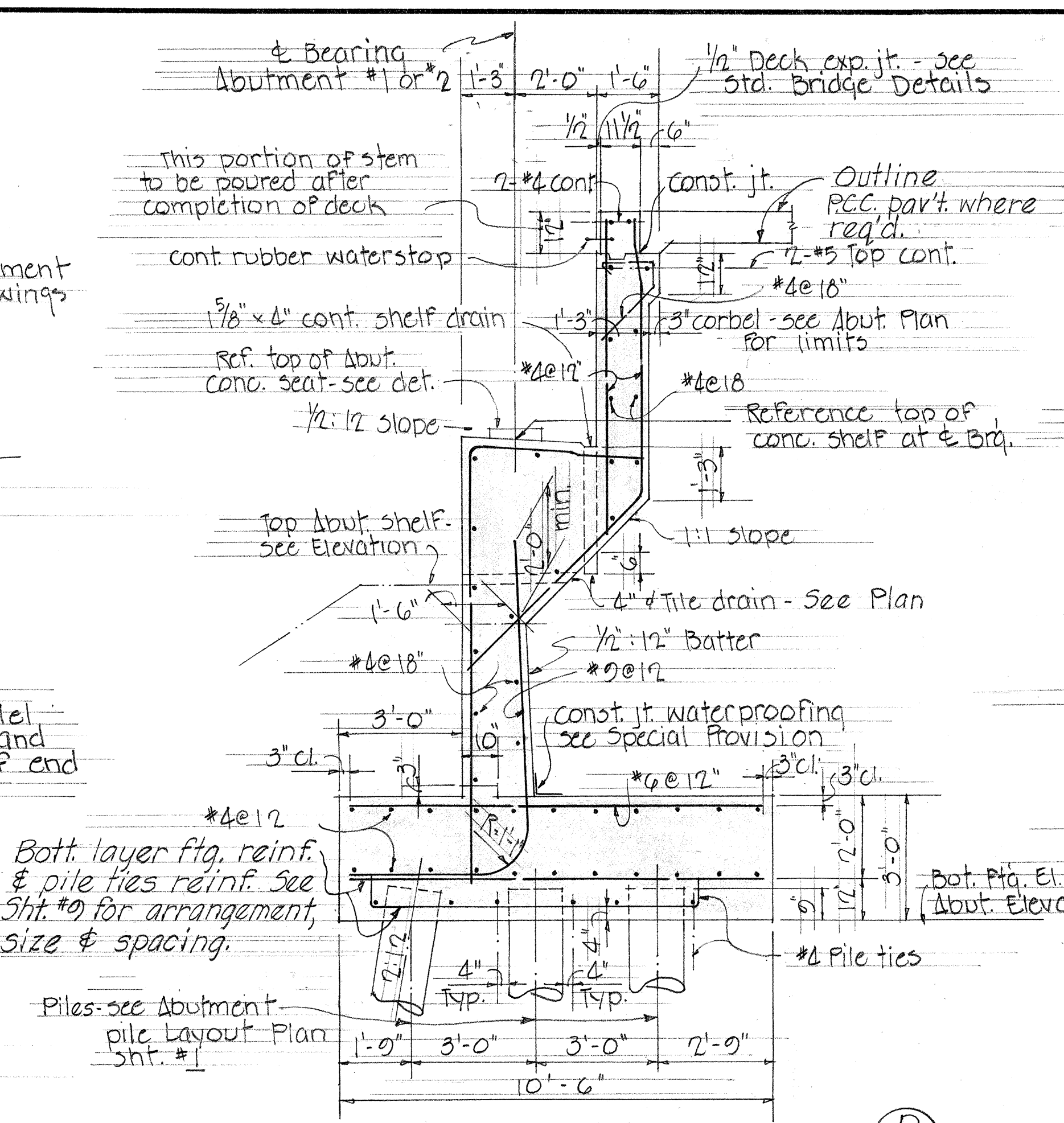
SECTION (A)
SCALE: 3/8" = 1'-0"



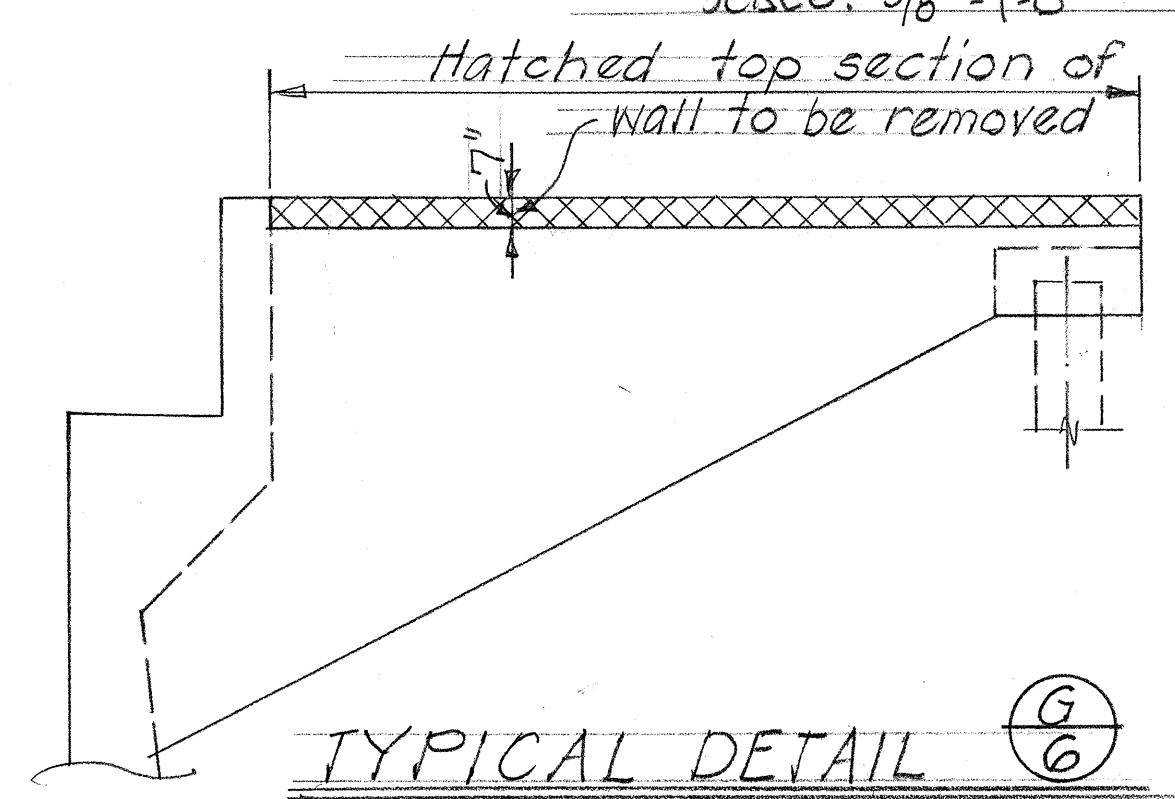
TYPICAL SECTION (B)



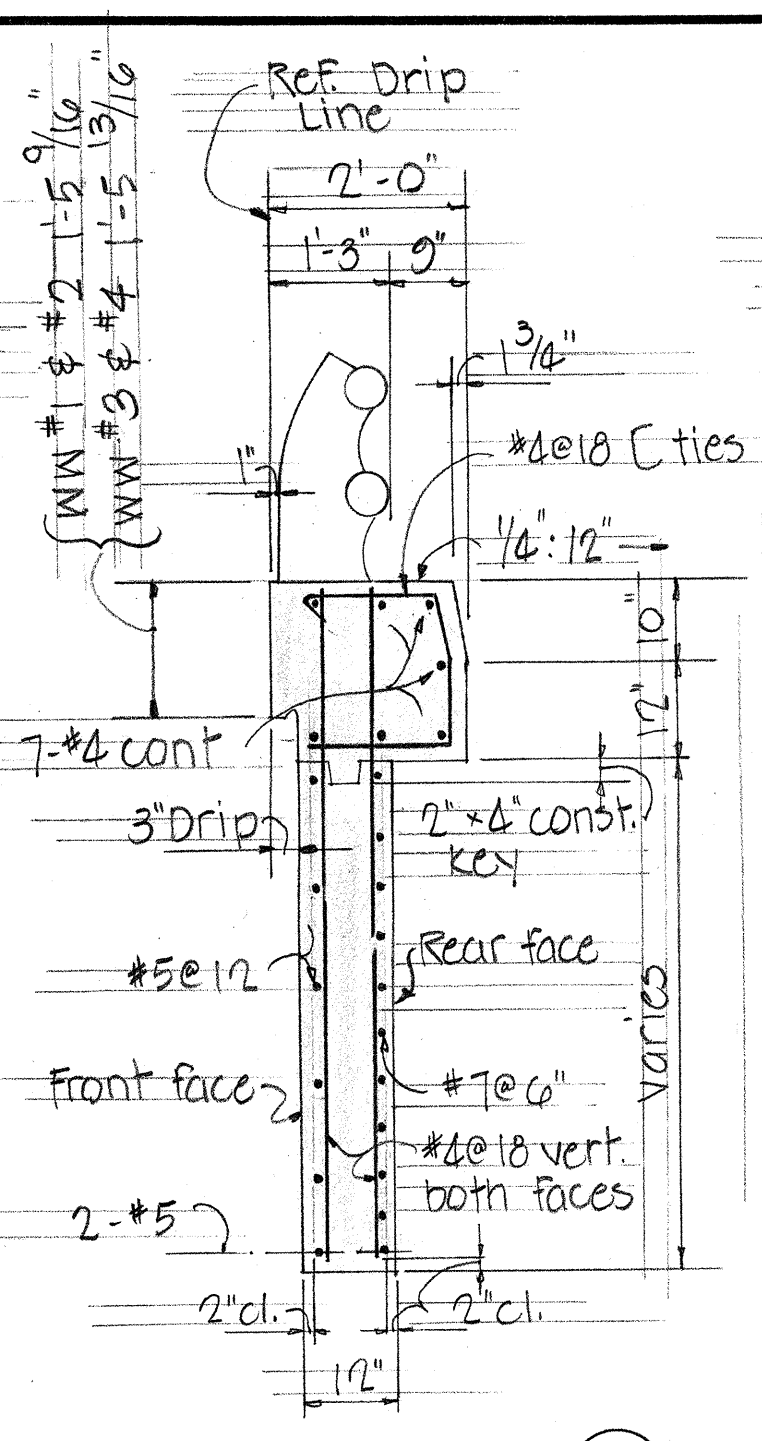
SECTION (C)



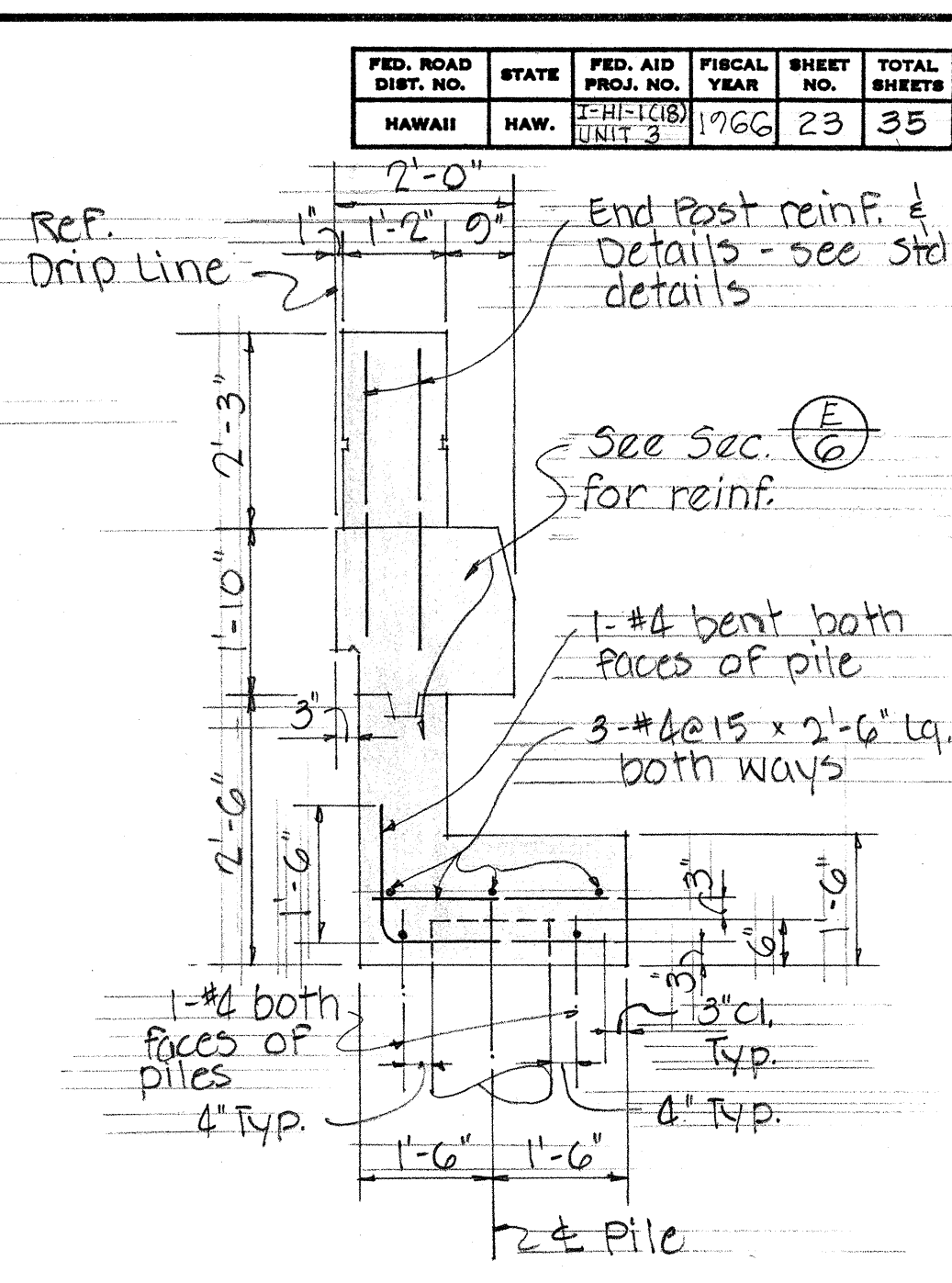
NORMAL ABUTMENT SECTION (D)
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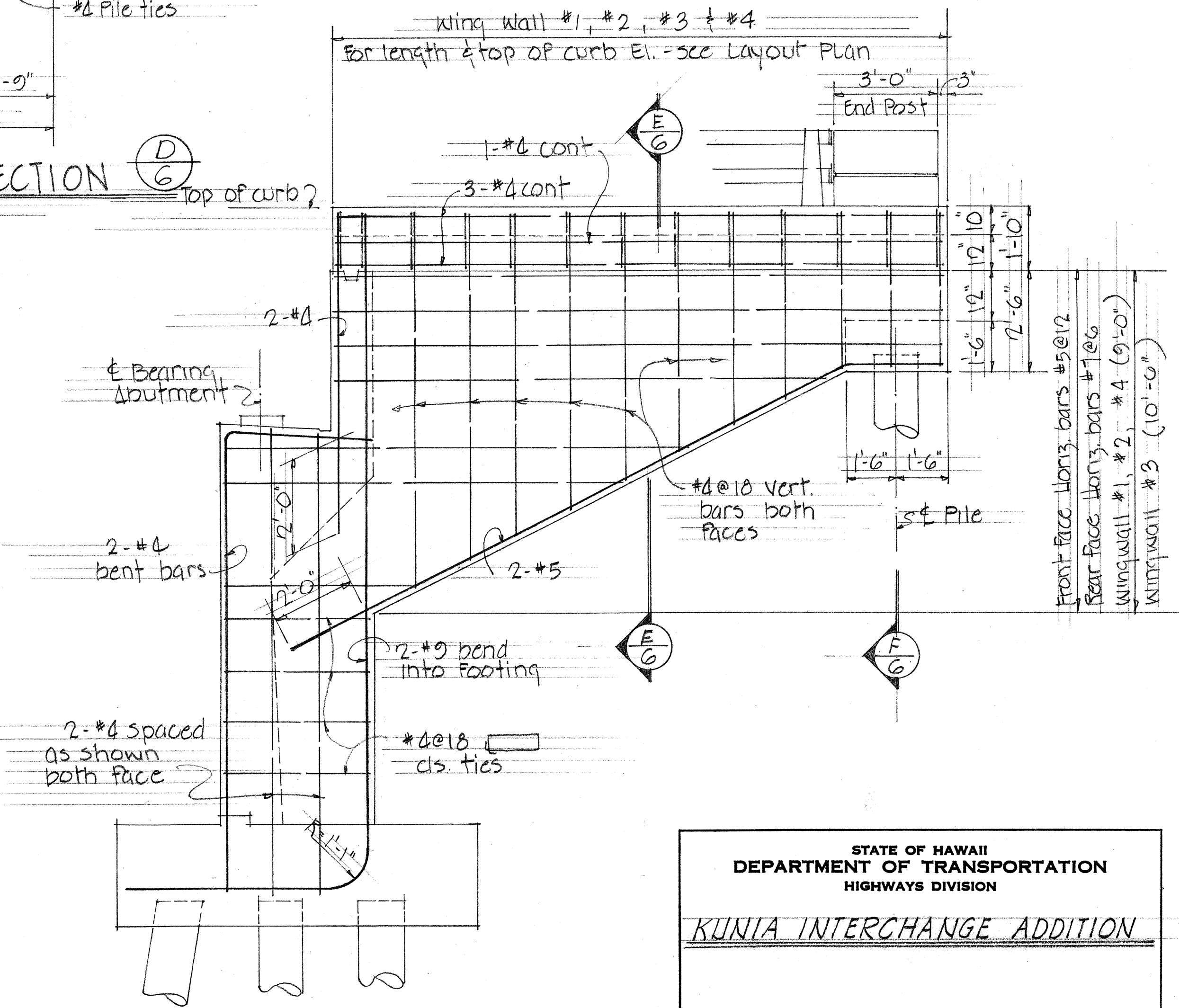
TYPICAL DETAIL (E)
No Scale



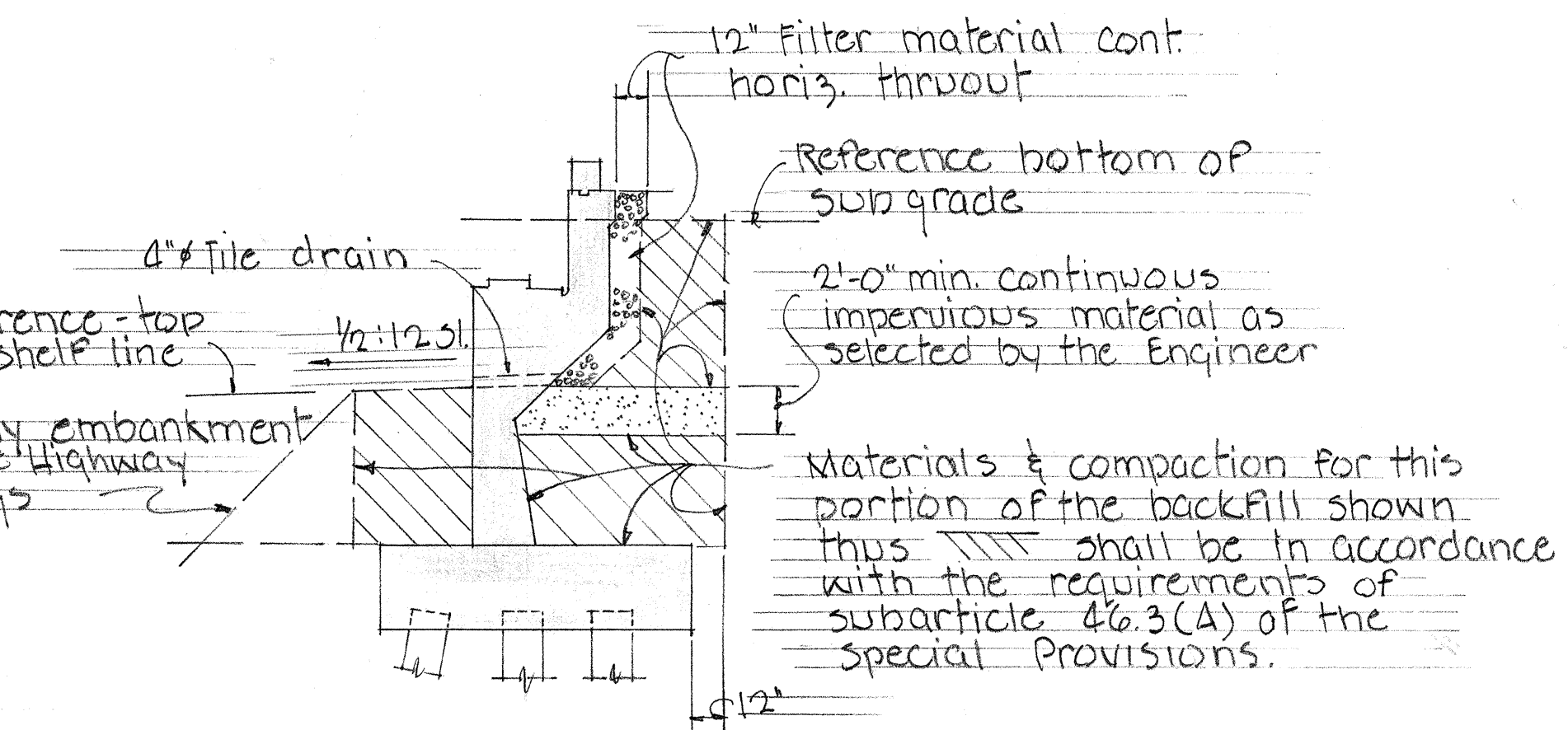
SECTION (E)
SCALE: 1/2" = 1'-0"



SECTION (F)
SCALE: 1/2" = 1'-0"



TYPICAL ABUTMENT END AND WING WALL ELEVATION
No Scale



TYPICAL LIMITS OF ABUTMENTS #1 & #2 BACKFILL
SCALE: 1/2" = 1'-0"

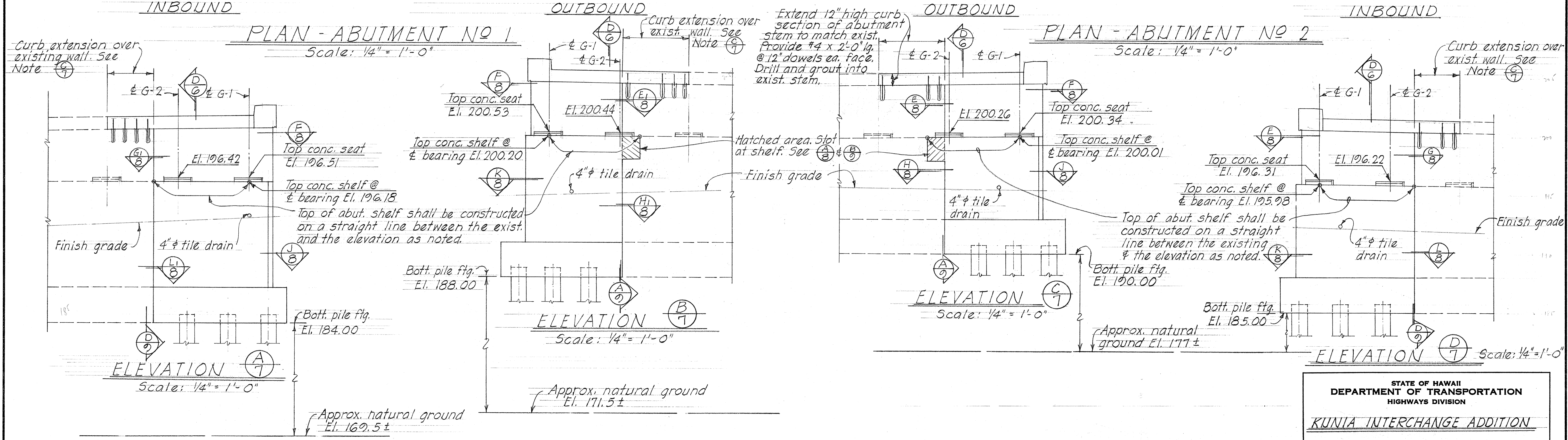
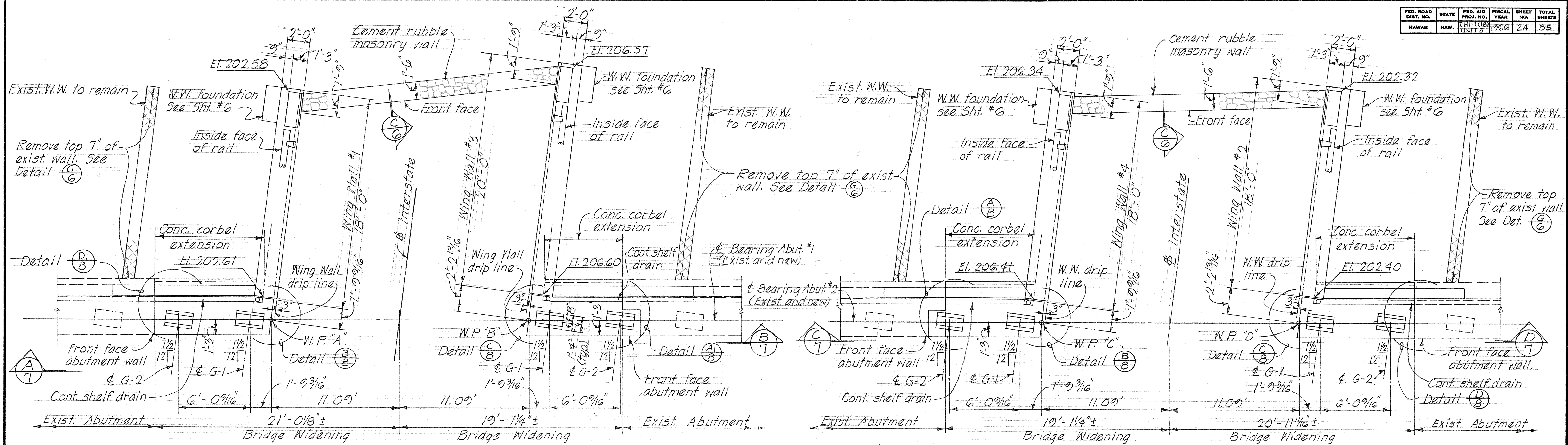
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

KUNIA INTERCHANGE ADDITION

PROJ. NO. I-HI-1(8) UNIT 3 SEPT. 1966

SHEET No. 6 OF 9 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	101-1(18) UNIT 3	1966	24	35



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

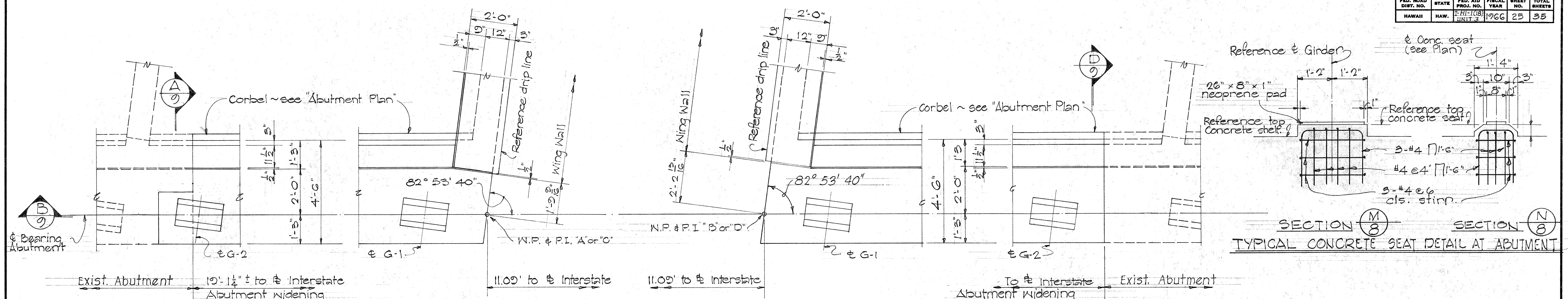
KUNIA INTERCHANGE ADDITION

PROJ. NO. I-HI-1(18) UNIT 3 SEPT. 1966

SHEET No. 7 OF 9 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H-1(18) UNIT 3	1966	25	35



DETAIL (A) 8 AS SHOWN

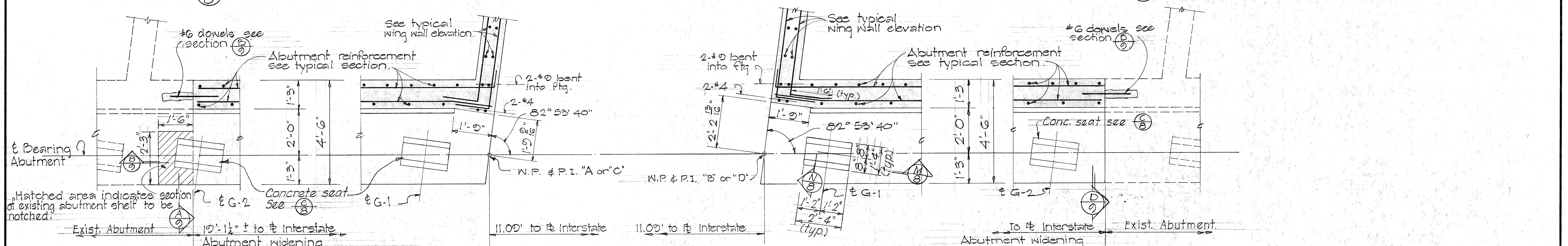
DETAIL (A1) 8 SIMILAR

DETAIL (B) 8

DETAIL (C) 8

DETAIL (D) 8 AS SHOWN

DETAIL (D1) 8 SIMILAR



SECTION (E) 8 AS SHOWN

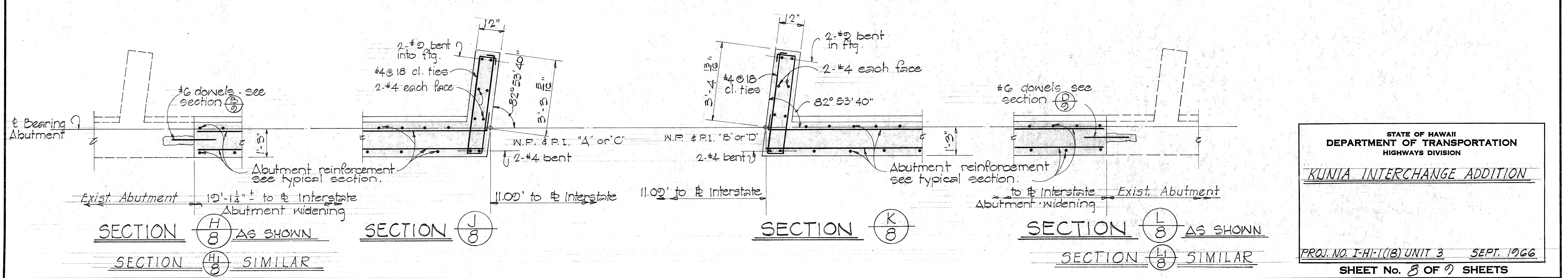
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SECTION (F) 8

SECTION (G) 8

SECTION (G) 8 AS SHOWN

SECTION (G1) 8 SIMILAR



SECTION (H) 8 AS SHOWN

SECTION (H1) 8 SIMILAR

SECTION (J) 8

SECTION (K) 8

SECTION (L) 8 AS SHOWN

SECTION (L1) 8 SIMILAR

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

KUNIA INTERCHANGE ADDITION

PROJ. NO. I-H-1(18) UNIT 3 SEPT. 1966

SHEET No. 8 OF 9 SHEETS

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
ORIGINAL PLAN	
NOTE BOOK	

GENERAL NOTES

SPECIFICATIONS: AASHTO
Standard Specifications for Highway Bridges (8th Edition) with subsequent additions and modifications.

DESIGN STRESSES:
1. RC BEAMS & SLABS -
See AASHTO specifications except as otherwise noted and see special provisions.
FC = 3,000 psi
FI = 1,200 psi
n = 10
FS = 20,000 psi tension

2. PRESTRESSED BEAMS -
FC = 3,500 psi
FI = 4,000 psi
1/2" dia. 7 wire strands
Tensioning load = 25,200 lb. per strand
Design load = 20,160 lb. per strand
Forms must be removed and the beam inspected before the strands are cut.

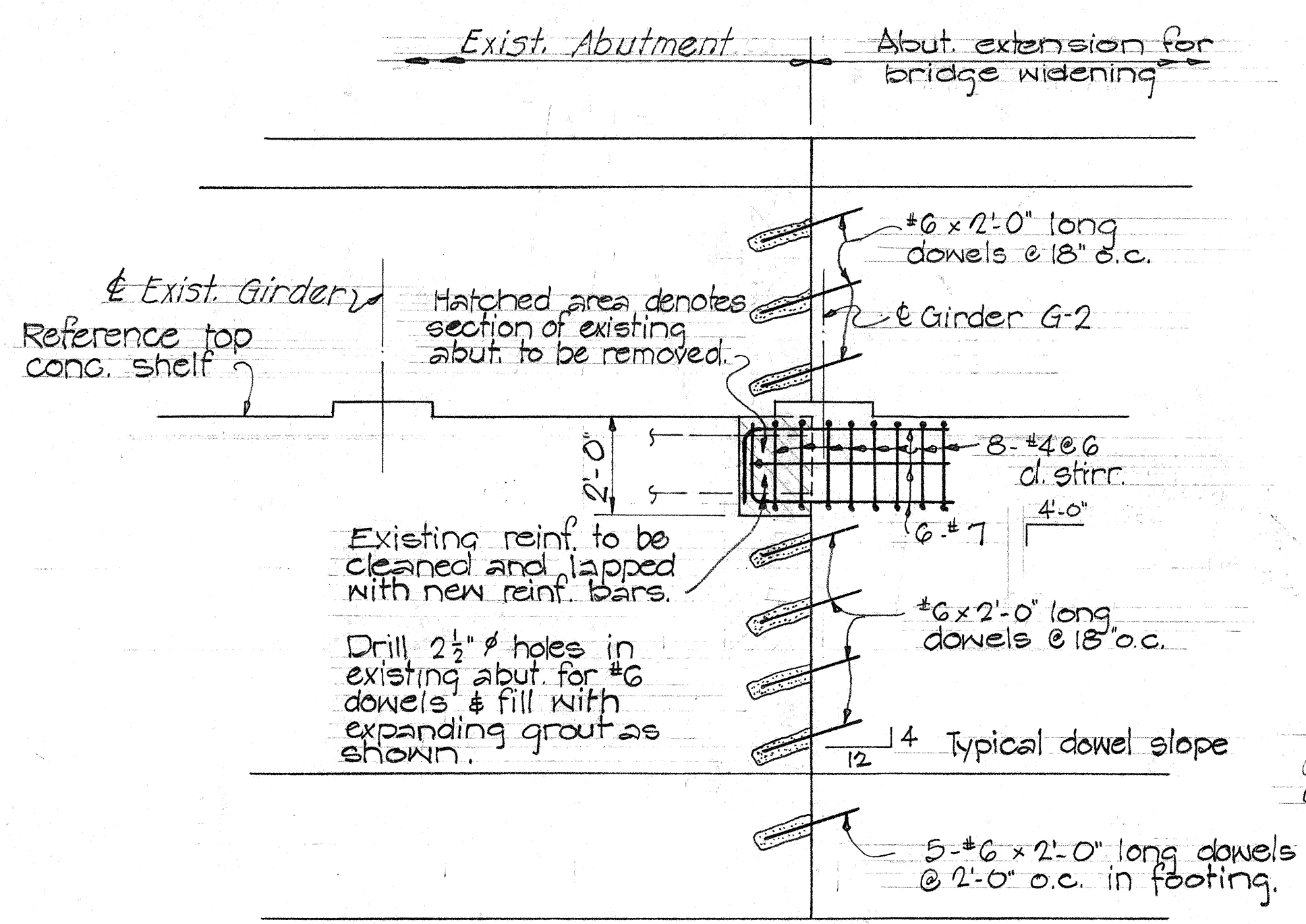
MATERIALS:
1. All concrete shall be Class 4-1 except as otherwise noted on plans. Concrete for pre-stressed concrete girders see Special Provision and as noted above.
2. Neoprene pads are incidental to prestressed concrete girders and will not be paid for separately.
3. See Special Provisions for admixture in conc.
4. All piles to be prestressed concrete piles Type I - see Standard Details sht. #3-1.

CONSTRUCTION METHODS:
1. See Standard Specifications and Special Provision.
2. Except for footings on piles and as otherwise noted, all other footings shall be excavated and poured to neat lines. In case of over excavation, space between footing and ground shall be filled with concrete at the Contractor's expense. The fill concrete shall have a minimum quality of Class D-1. Limits of excavation for pile footings see corresponding details.
3. The Contractor shall verify the location of all existing utility lines and notify the respective owners before commencing work of excavation or pile driving.
4. All fill behind abutments and wingwalls shall be complete in place before placing superstructure and prestressed concrete girders.
5. For concrete finish see Special Provisions. Concrete seats & creep blocks to be poured monolithically with pier or abutment sections. Seats shall receive a hard trowel finish, level & true elevations.
6. Neoprene pads shall be secured against displacement by adhesives, which shall be approved by the Engineer.

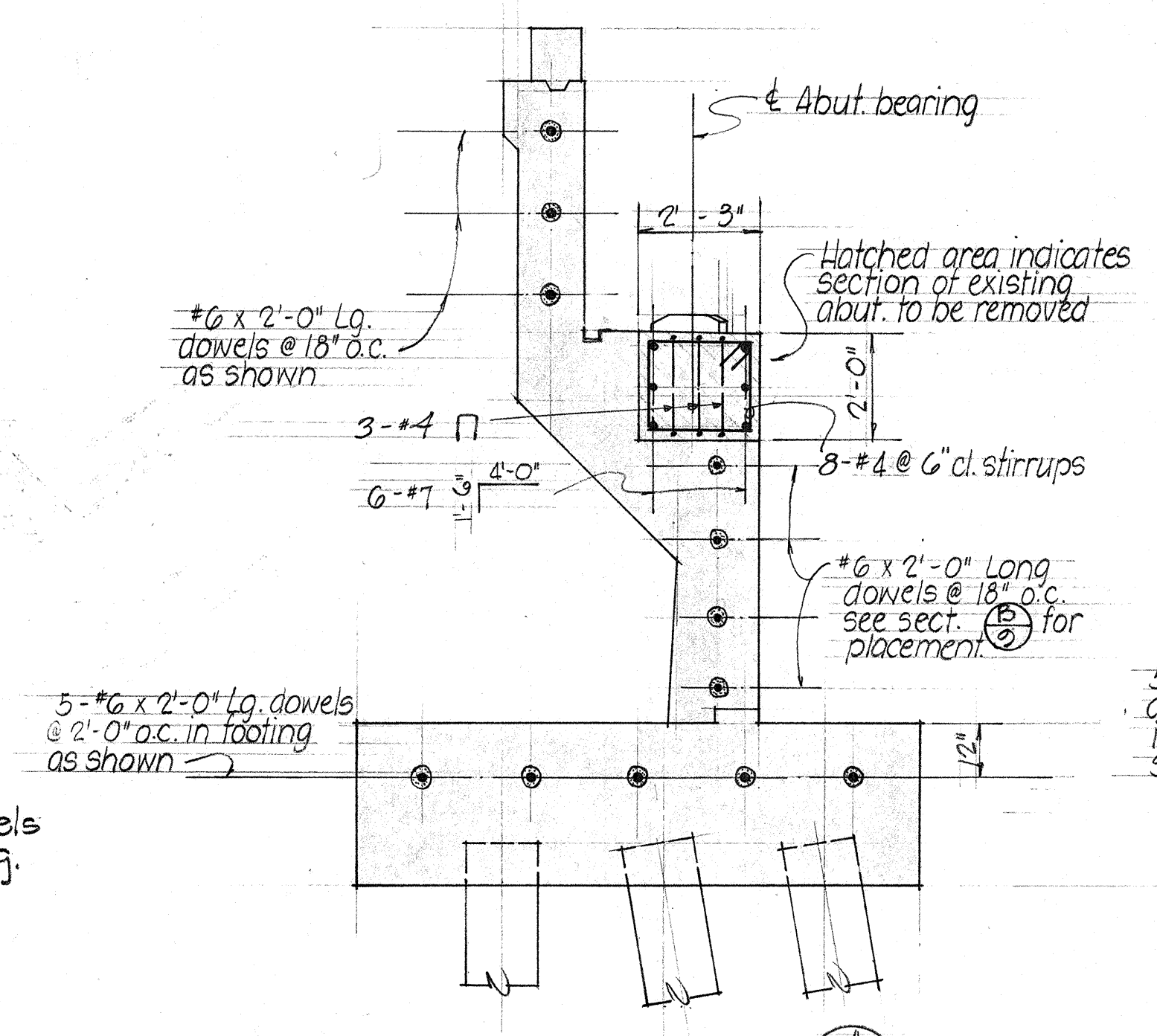
GENERAL NOTES

SYMBOLS:
(No) - Denotes column numbers.
(A) - Alphabet section no. description.
(No) - Sheet no. detail is drawn on.
P.I. - Point of intersection.
W.P. - Working point.
⊗ - Boring

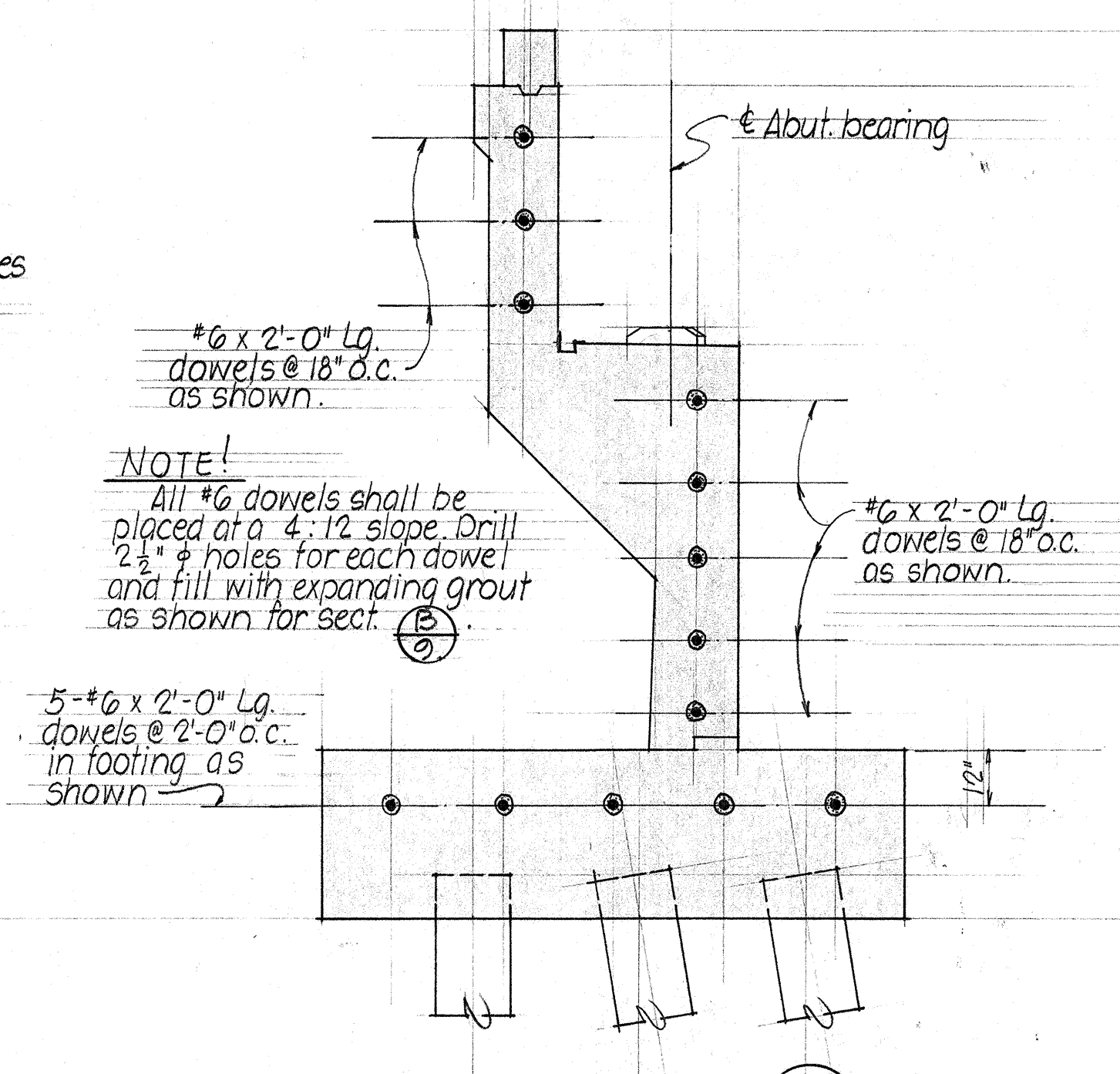
For additional details and general notes not covered by these drawings, refer to Standard drawings sheets #5-1, #5-5, #5-6, #5-9.



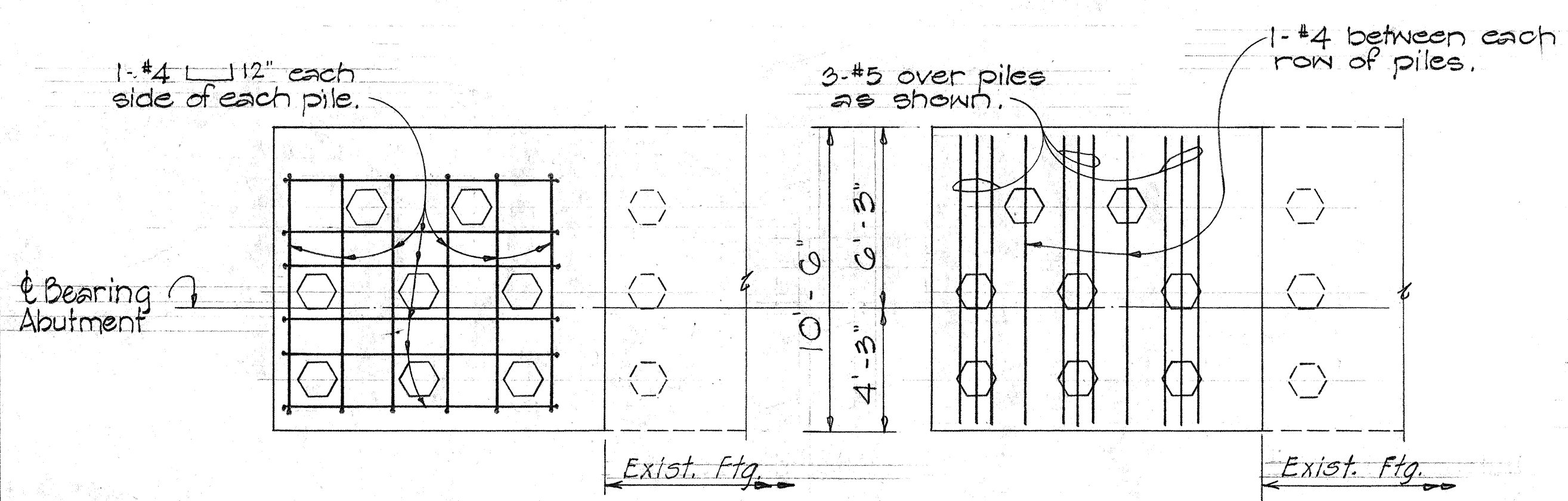
SECTION B
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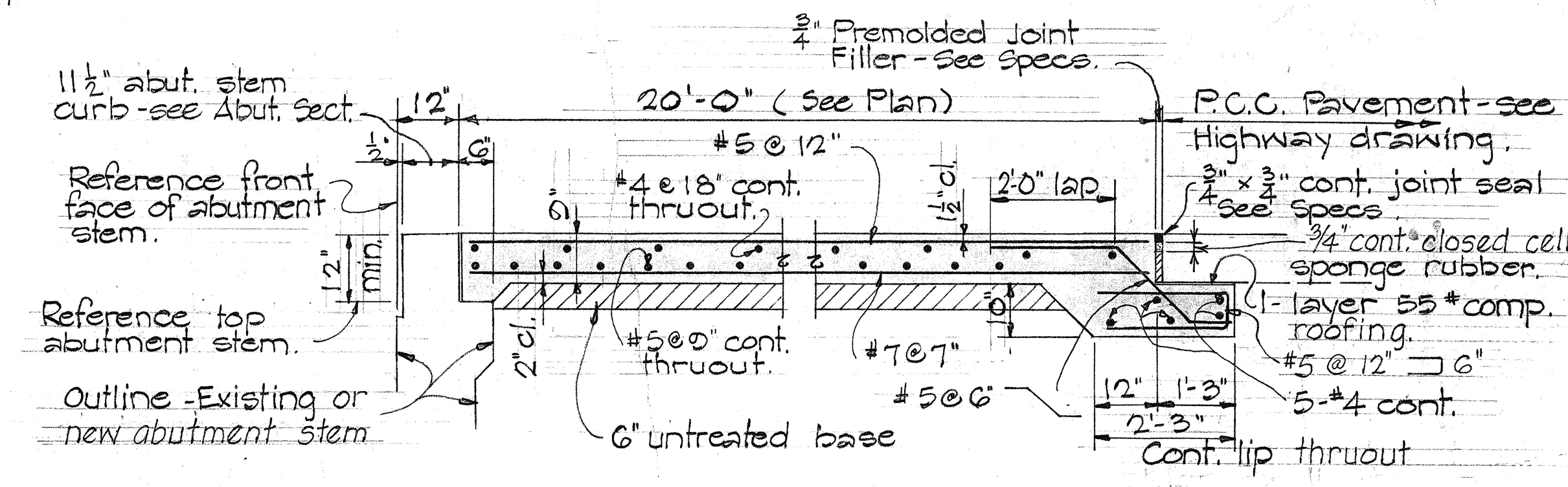
SECTION A
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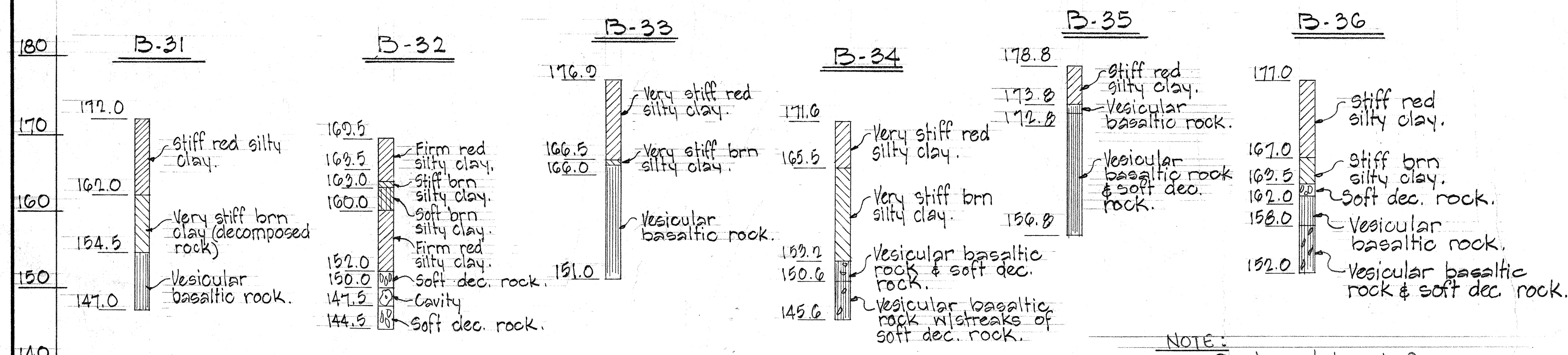
SECTION D
Scale: 3/8" = 1'-0"



TYPICAL ARRANGEMENT OF ABUTMENT FOOTING REINFORCEMENT
Scale: 1/4" = 1'-0"



TYPICAL LONGITUDINAL SECTION THRU APPROACH SLAB
Scale: 1/2" = 1'-0"



BORING LOG FOR BRIDGE WIDENING
Scale: 1" = 10'-0"

NOTE:
Borings taken before construction of highway embankment.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

KUNIA INTERCHANGE ADDITION

PROJ. NO. I-HI-108 UNIT 3 SEPT. 1966
SHEET No. 26 OF 35 SHEETS

ORIGINAL PLAN
DESIGNED BY
CHECKED BY
DATE