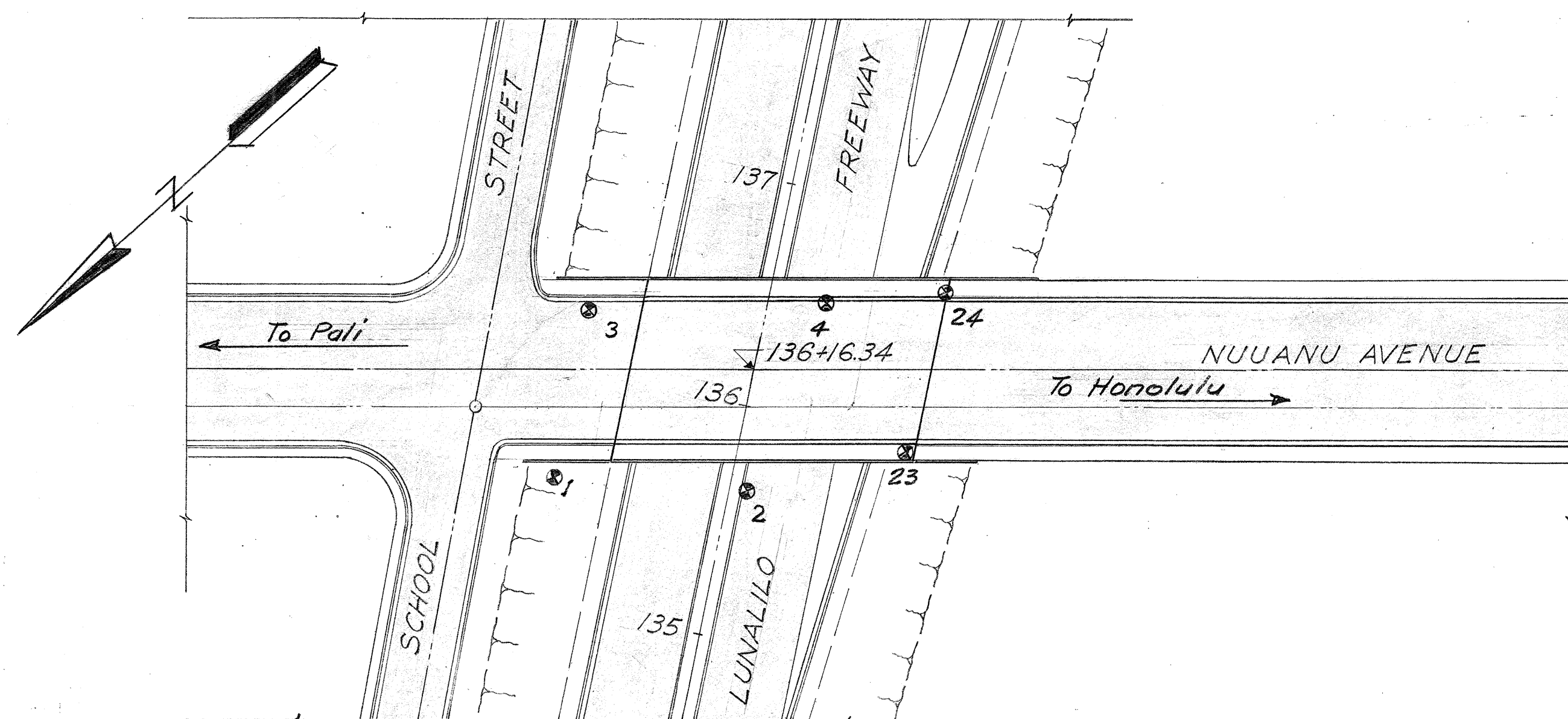




LOCATION PLAN

Scale: 1"=50'

ESTIMATED QUANTITIES

Concrete	-----	Lump Sum (1585 Cu. Yds.)
Reinforcing steel	-----	Lump Sum (237,000 lbs.)
Structural excavation	-----	910 Cu. Yds.
A.C. Pavement Mix No. V	-----	74.9 Tons
Bituminous tack coat	-----	222 Gals.
Filter Material	-----	268 Cu. Yds.
Aluminum Railing	-----	405 Lin. Ft.

GENERAL NOTES

MATERIALS

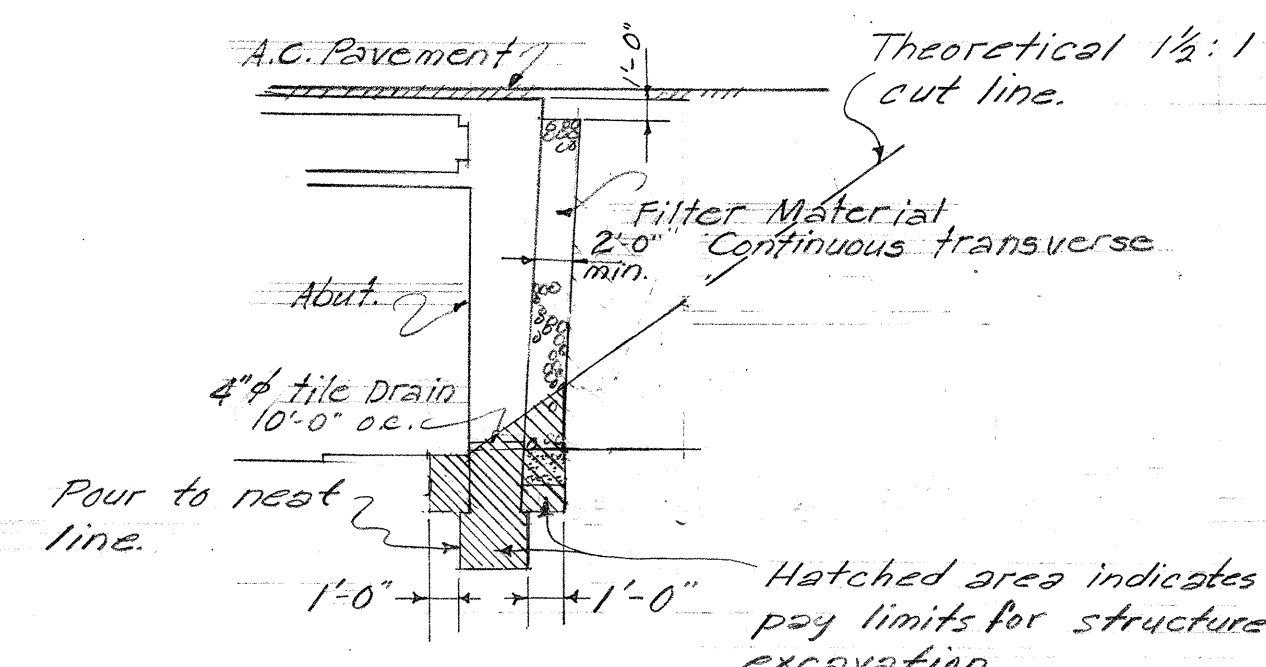
- All concrete class A-1 unless otherwise noted on plans.
- All steel reinforcement shall be intermediate grade.

CONSTRUCTION METHODS

Curb and sidewalk on bridge shall not be poured until after release of falsework.

Placing of backfill at bridge shall not be started until after the concrete in the superstructure has reached a strength of 3,000 lbs. per sq. inch. The fill must be brought up evenly and simultaneously at both ends of the structure so as to avoid one-sided earth pressure.

For concrete finish - see Standard Specifications.

TYPICAL SECTION SHOWING LIMITS FOR
STRUCTURE EXCAVATION
No Scale.

Note:

- For Retaining Wall Detail
See Std. Retaining Wall Det. Sht. No. 280
- For Railing Detail
See Std. Aluminum Railing Det. Sht. No. 280
- For Box Girder Detail
See Std. Box Girder Det. Sht. No. 270

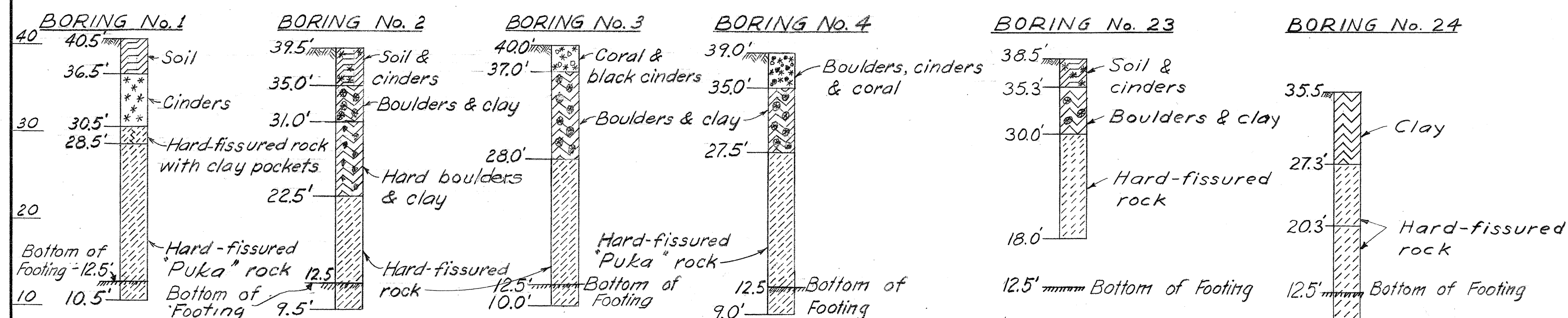
Footings shall be poured to neat lines as shown. In case of overexcavation, space between footing and ground shall be filled with concrete at the contractor's expense. This fill concrete shall have a minimum quality of Class D.

False work and forms for the support of box girders shall be designed to support the load that would be superimposed were the entire superstructure poured at one time. False work and forms supporting the bottom slab of box girders shall not be removed until 14 days after the final top slab pour. All interior forms except those permitted to remain in place shall be removed completely and the inside cleared of all loose material and swept clean. Forms for bottom slab of box girders shall be 5-ply panel board.

DRIP

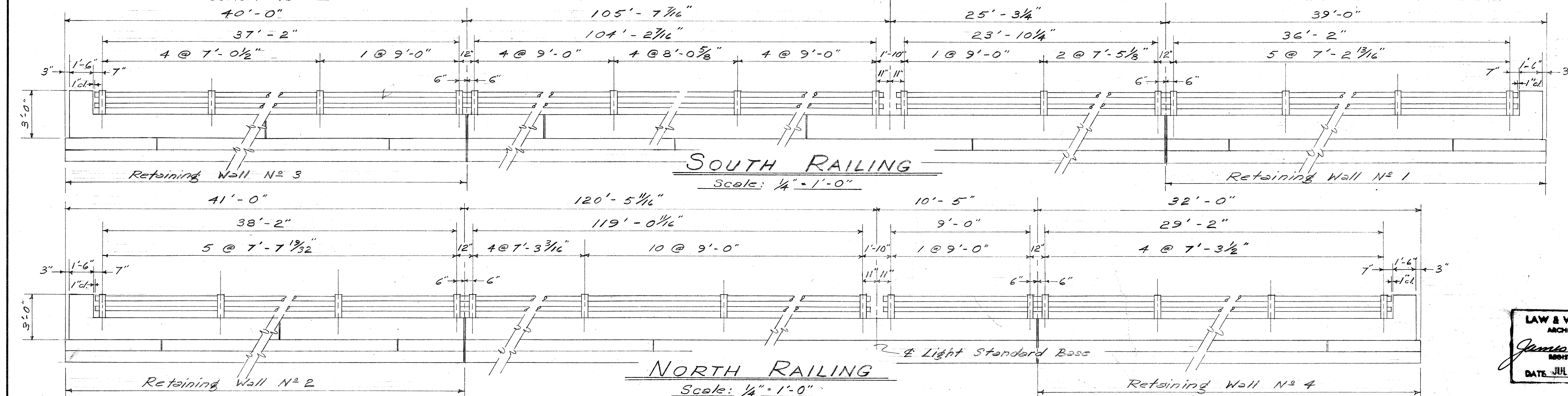
4 inch drip shall be used thruout, instead of 3 inch drip shown in the Std. Br. Det.

See attachment for sheet no. 202 for additional reinforcing bars @ retaining walls connection, to abutment for Structure #2, 3, 4, 11.



LOG OF BORINGS

Scale 1"=10'

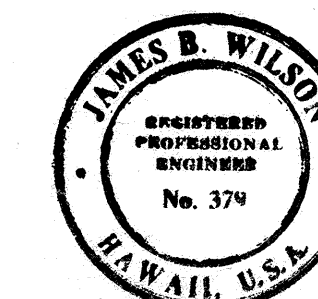


SOUTH RAILING

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

NORTH RAILING

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



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James B. Wilson
REGISTERED ENGINEER
DATE JUL 3 1957

STRUCTURE NO. 11

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

LUNALILO FREEWAY

PROJECT NO. F-072(1)(1), UNIT 3
GRADE SEPARATION AT

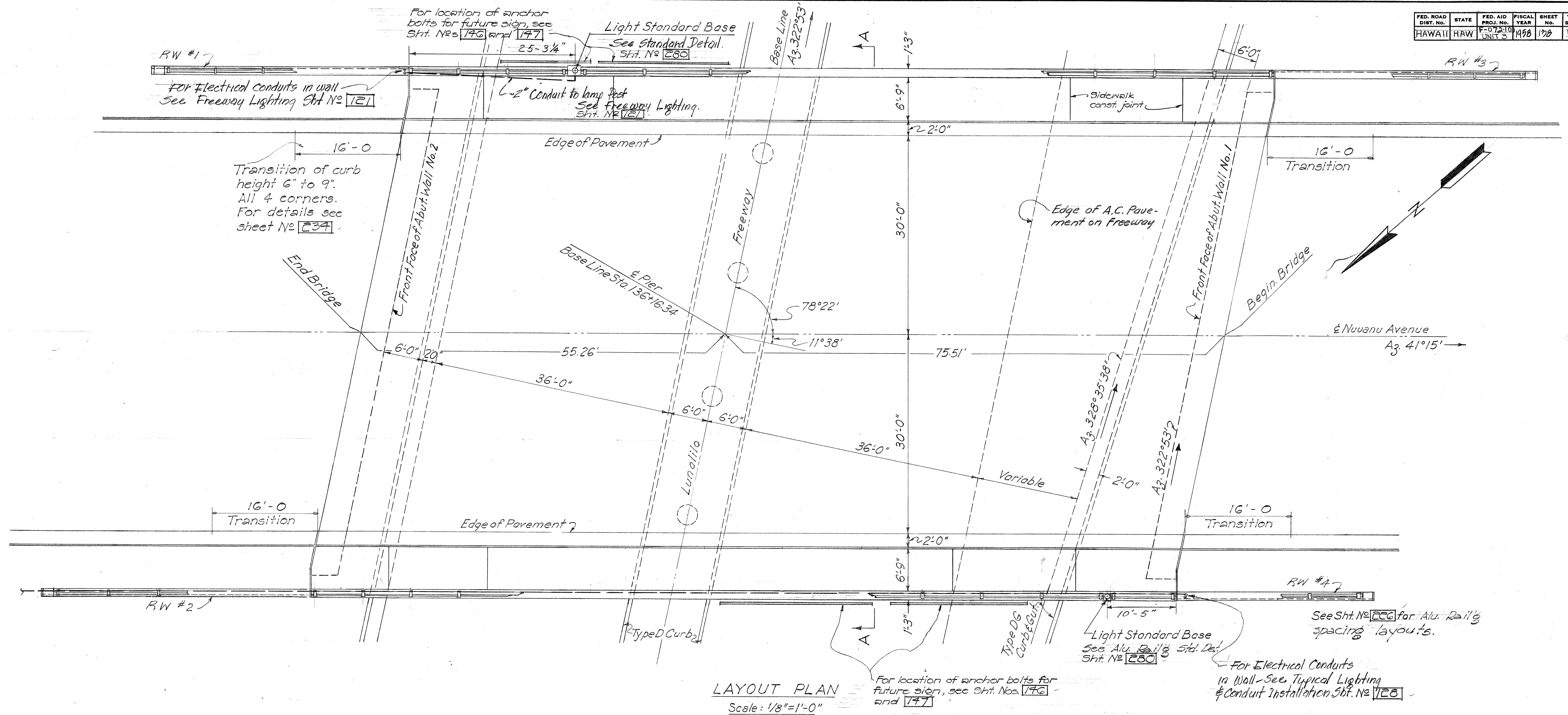
NUUANU AVENUE

LOCATION PLAN & BORINGS

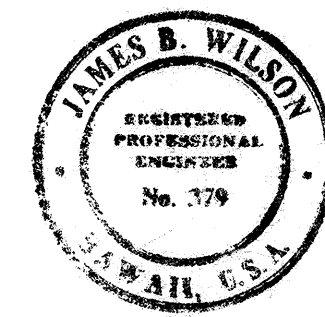
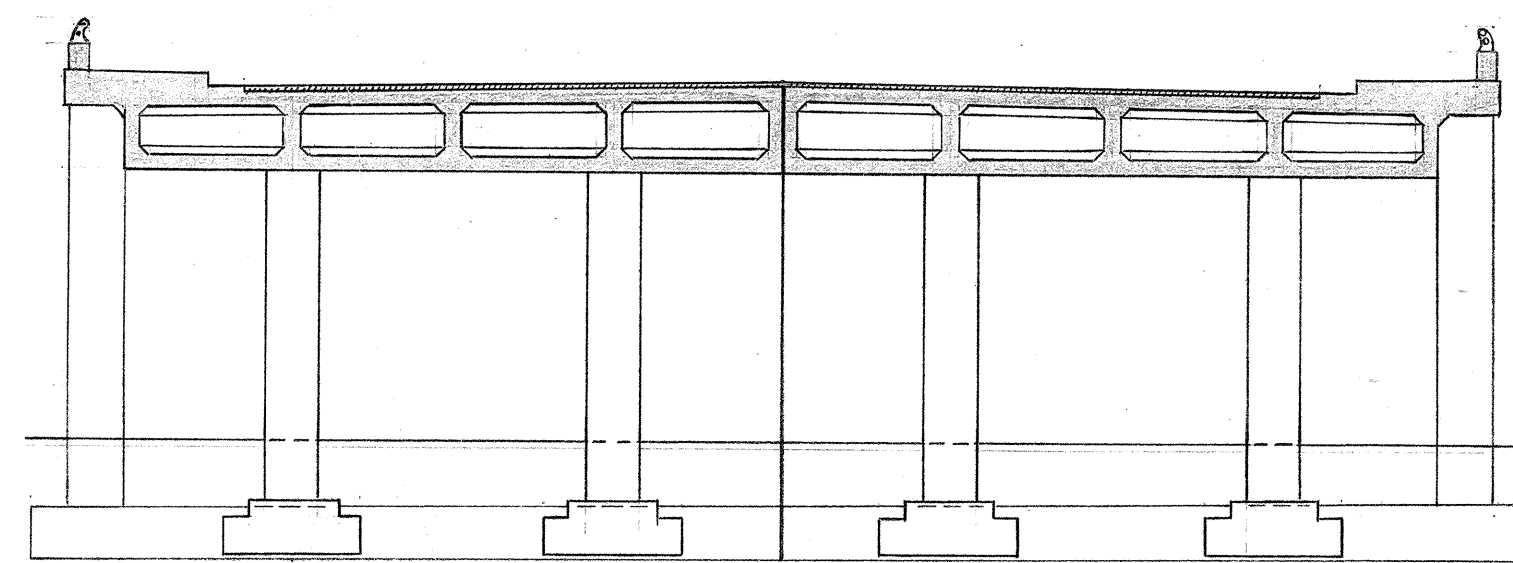
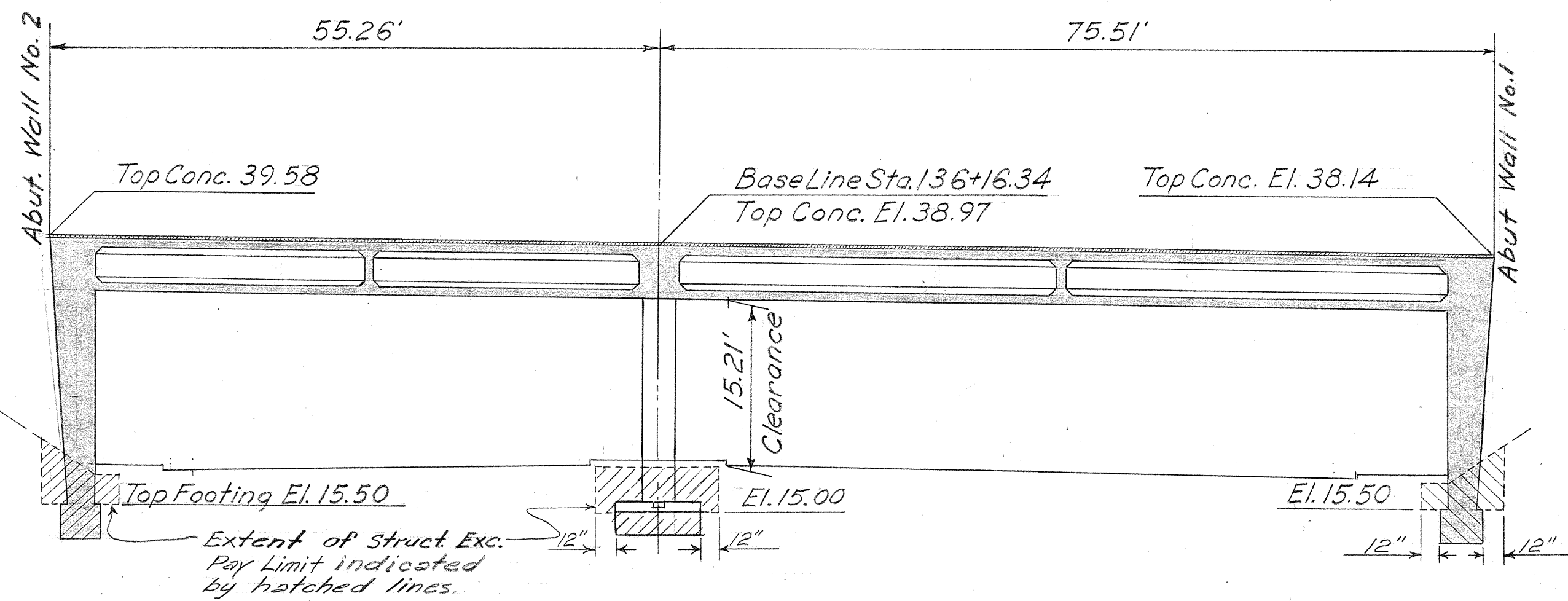
SHEET NO. 1 OF 10 SHEETS

S173 (1).137 226

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	1-157210	1958	128	148



Note:
Install underpass lighting conduits and outlet boxes as shown on Shts 121 and 128.



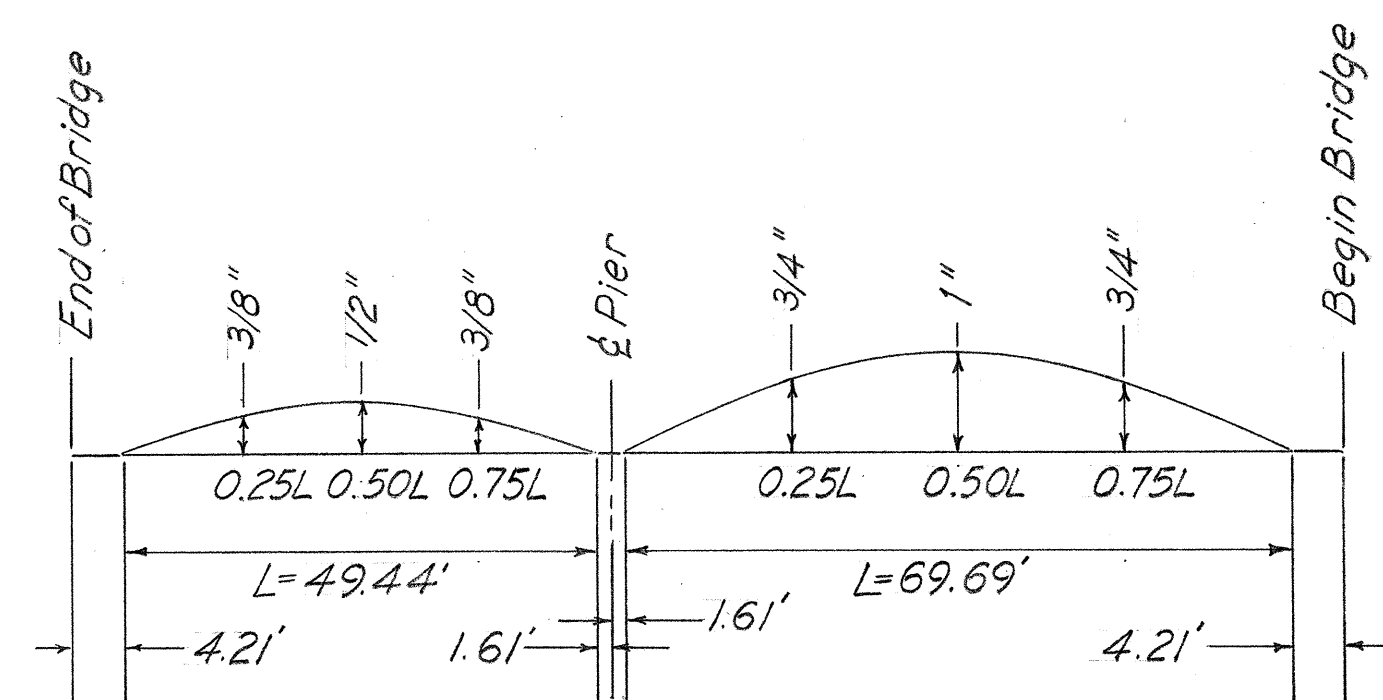
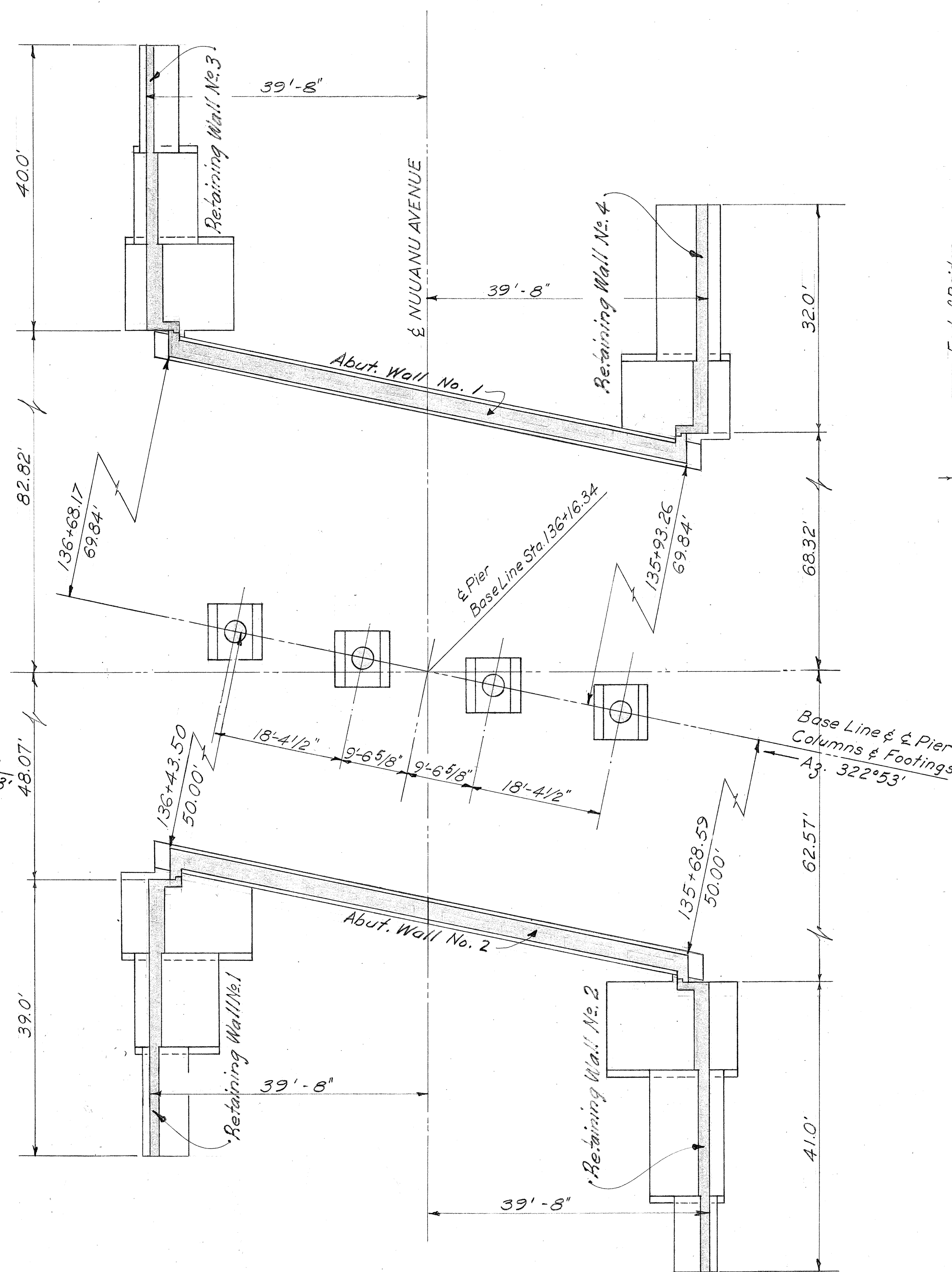
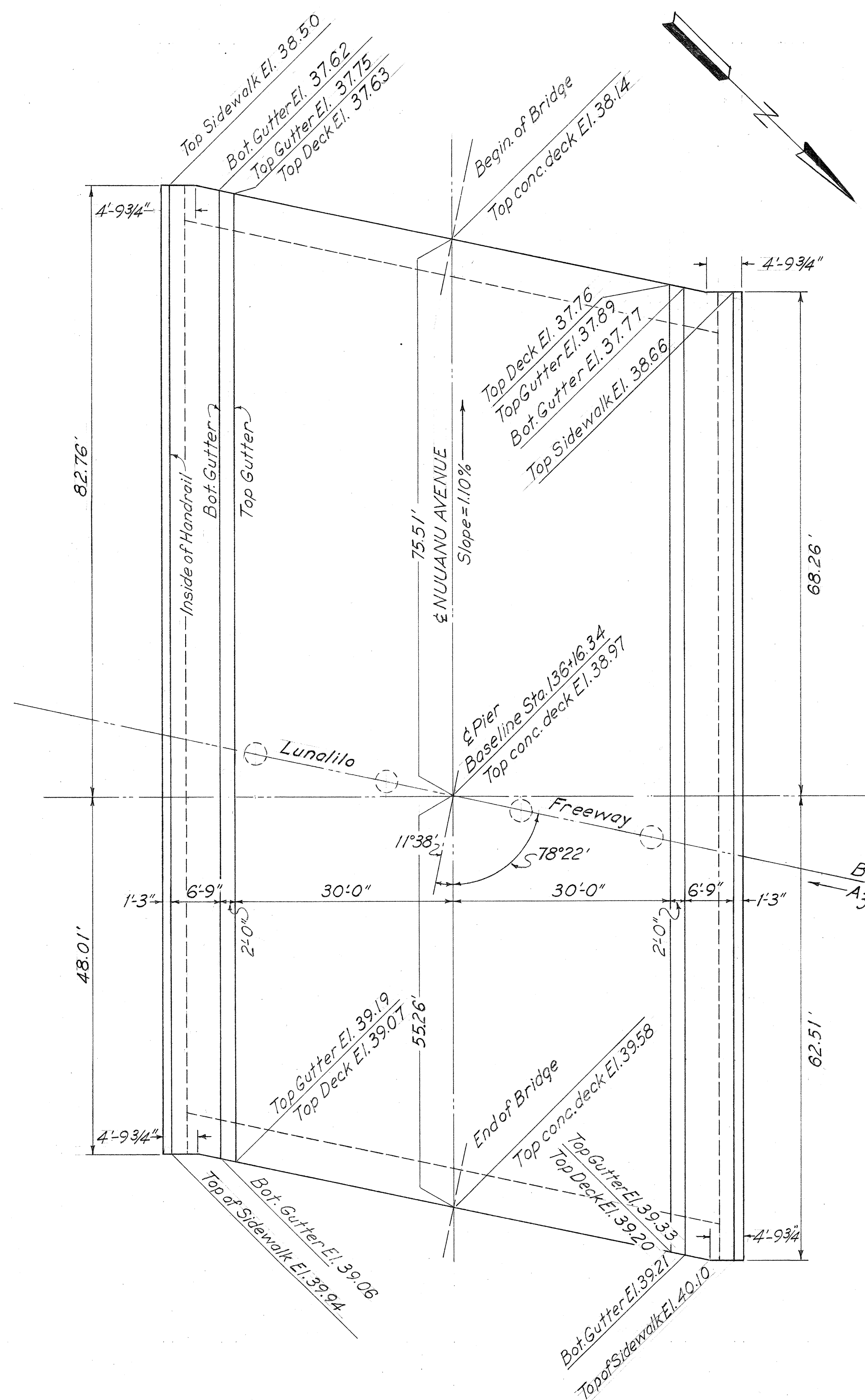
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REGISTERED ENGINEER
DATE JUL 3 1957

STRUCTURE NO. 11
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
LUNALILO FREEWAY
PROJECT NO. F-072-1(1), UNIT 3
GRADE SEPARATION AT
NUUANU AVENUE
LAYOUT PLAN & SECTIONS

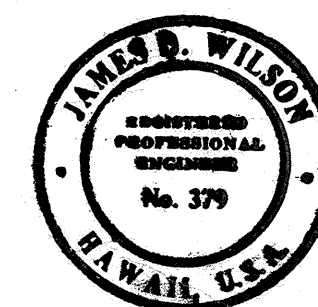
SHEET NO. 2 OF 10 SHEETS

.S173 (1).138 227

SURVEY PLOTTED BY	DATE
DESIGNED BY	
DRAWN BY	
CHECKED BY	
NOTE BOOK	
QUANTITIES CHECKED BY	
NO.	



DESIGNED BY	DATE
DRAWN BY	"
CHECKED BY	"
QUANTITIES CHECKED BY	"
CHECKED BY	"
NO.	3-27-57



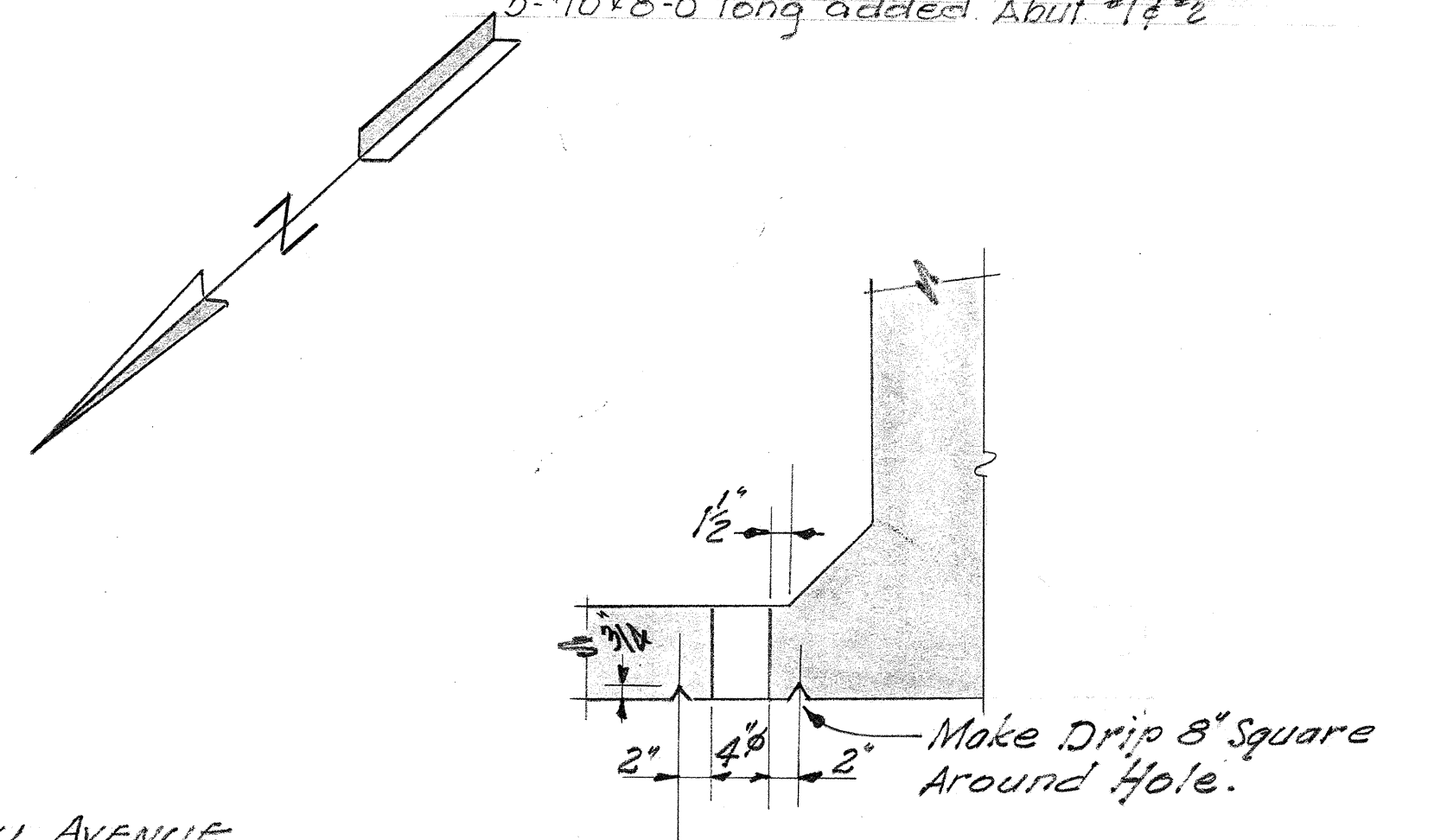
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James D. Wilson
REGISTERED ENGINEER
DATE JUL 3 1957

STRUCTURE NO. 11
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
LUNALILO FREEWAY
PROJECT NO. F-072-101, UNIT 3
GRADE SEPARATION AT
NUUANU AVENUE
DECK & FOUNDATION PLANS

Revision N^o 12 3/2/61
Transite Korducts (Telephone)
3 ducts added

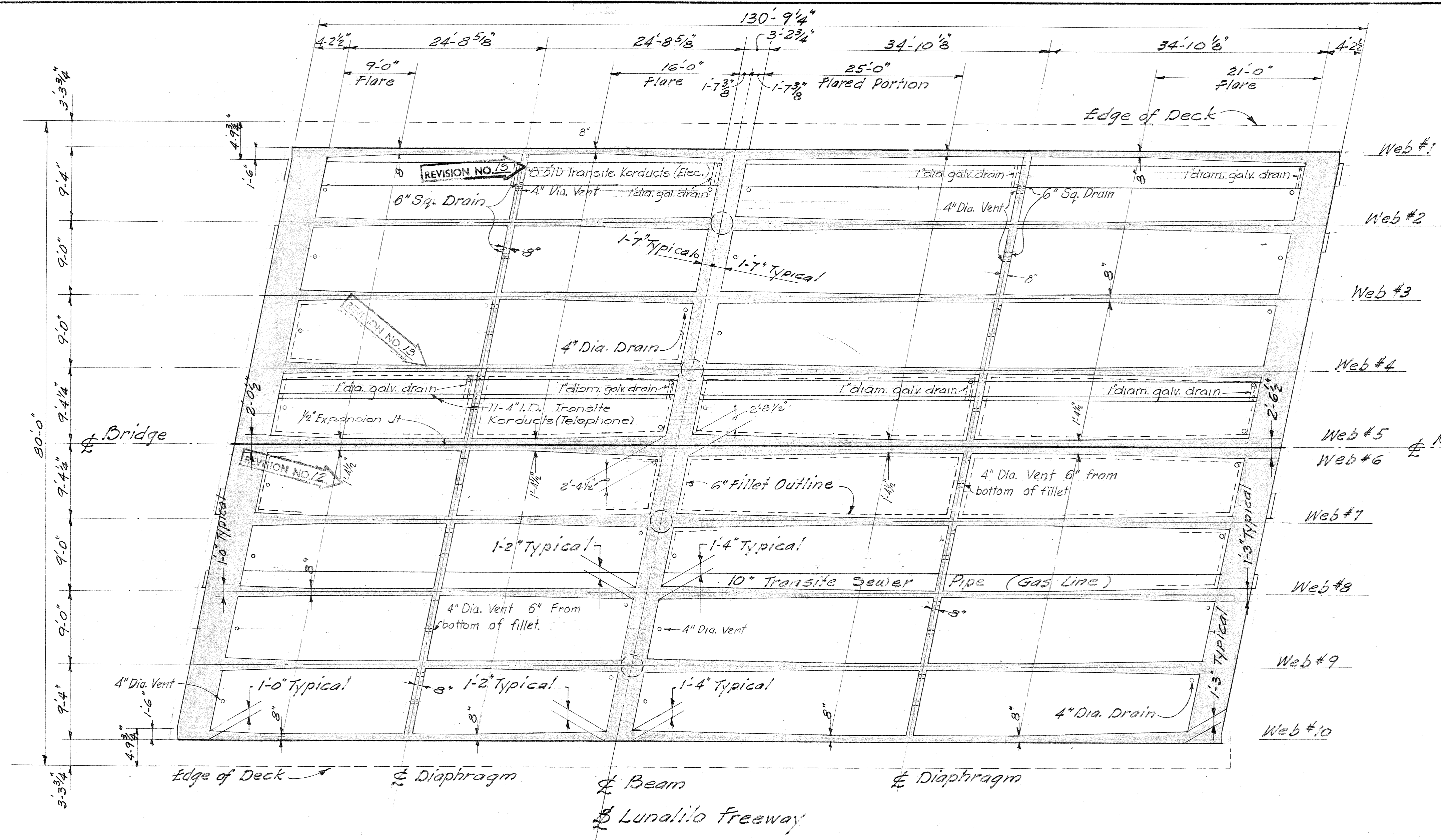
Revision N^o 13 3/9/61
Relocated Telephone ducts. Change size
+ add 4 Electrical ducts.
5'-10" x 8'-0" long added Abut #14*2

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-072-10	1958	140	178

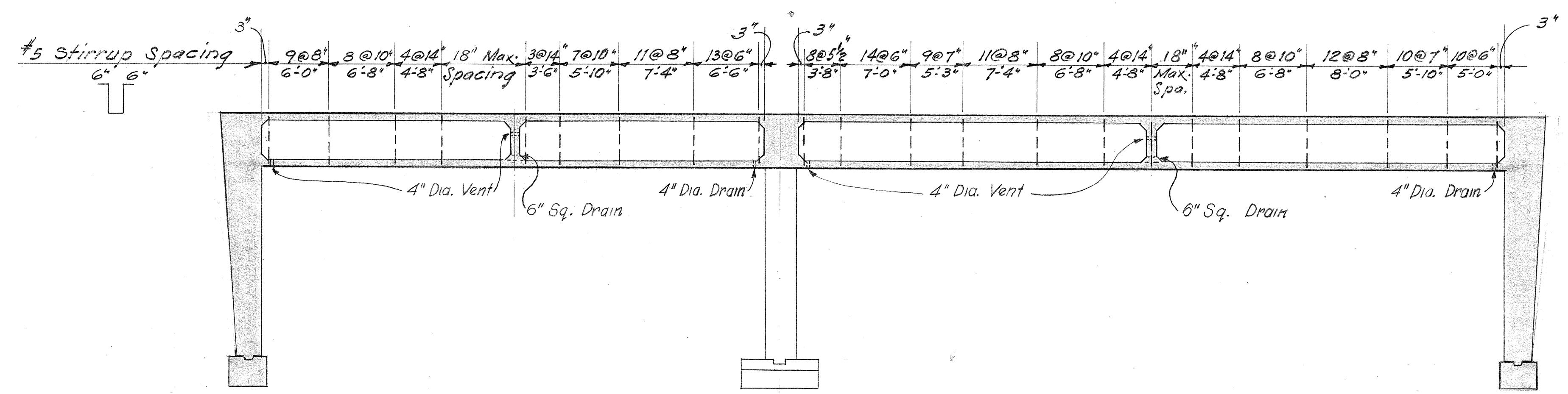


TYPICAL SECTION AT DRAIN & VENT
Scale: 1" = 1'-0"

NOTE!
For Utility Details See Sheet No. E35

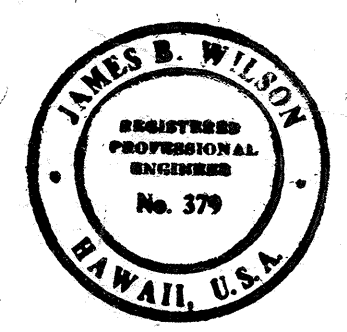


DECK FRAMING PLAN
Scale: 1/8" = 1'-0"



WEB STIRRUP SPACING
Scale: 1/8" = 1'-0"

SURVEY PLOTTED BY	DATE
PLAN	"
TRACED BY	"
QUANTITIES BY	"
CHECKED BY	"
NOTE BOOK	"
No.	"



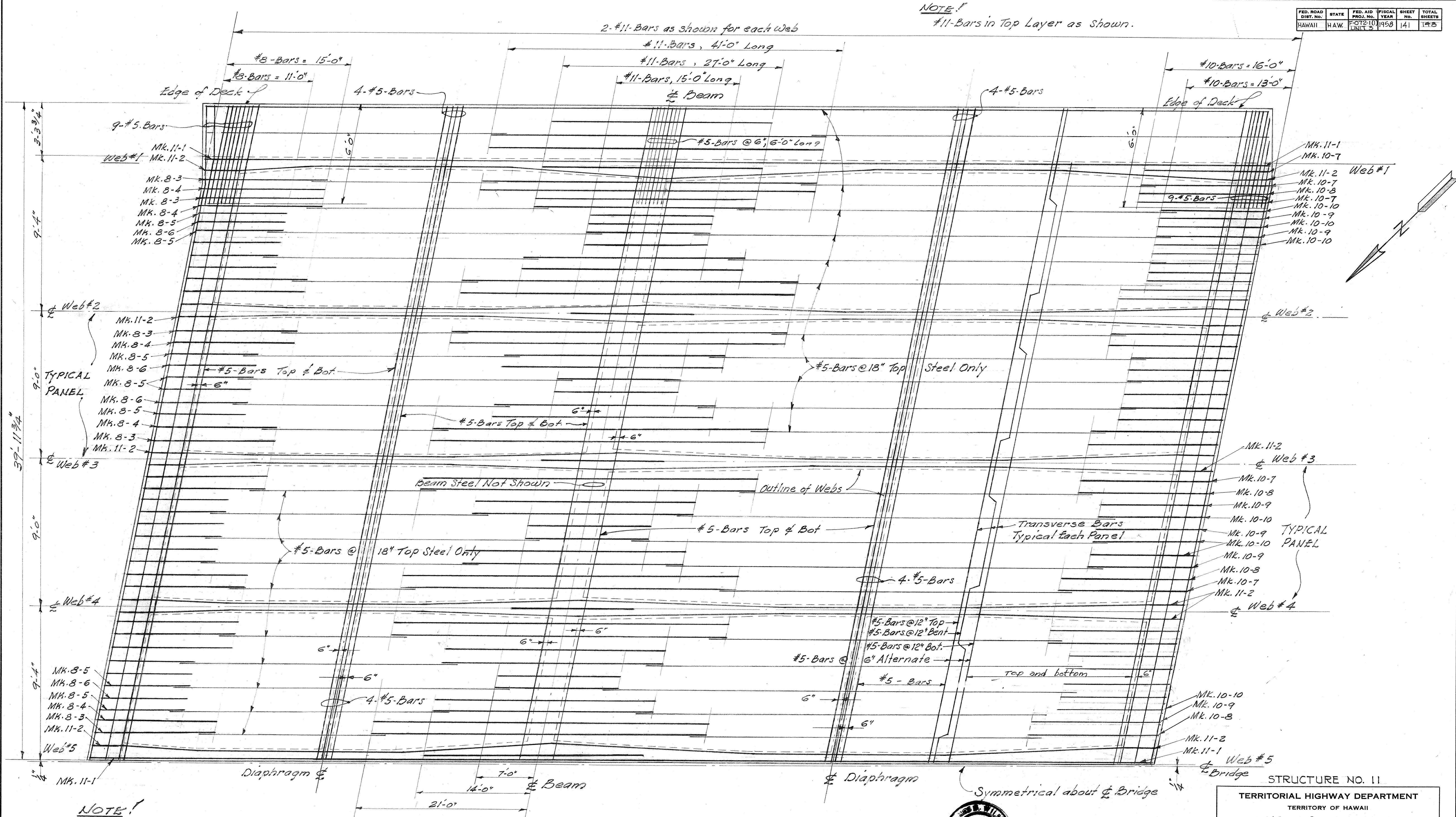
LAW & WILSON • TUDOR • TOWILL
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James B. Wilson No. 379
REGISTERED ENGINEER
DATE JUL 3 1957

STRUCTURE NO. 11
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
LUNALILO FREEWAY
PROJECT NO. F-072-1(1), UNIT 3
GRADE SEPARATION AT
NUUANU AVENUE
DECK FRAMING PLAN

SHEET NO. 4 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F072-10	1958	141	148

NOTE: #11-Bars in Top Layer as Shown.



NOTE: Top layer of longitudinal reinforcing shown except as noted; for bottom layer of longitudinal steel see Section on Sheet No. 142.

HALF PLAN ~ TOP SLAB REINFORCEMENT
Scale: Width = $\frac{3}{8}$ " = 1'-0" & Length = $\frac{3}{16}$ " = 1'-0"



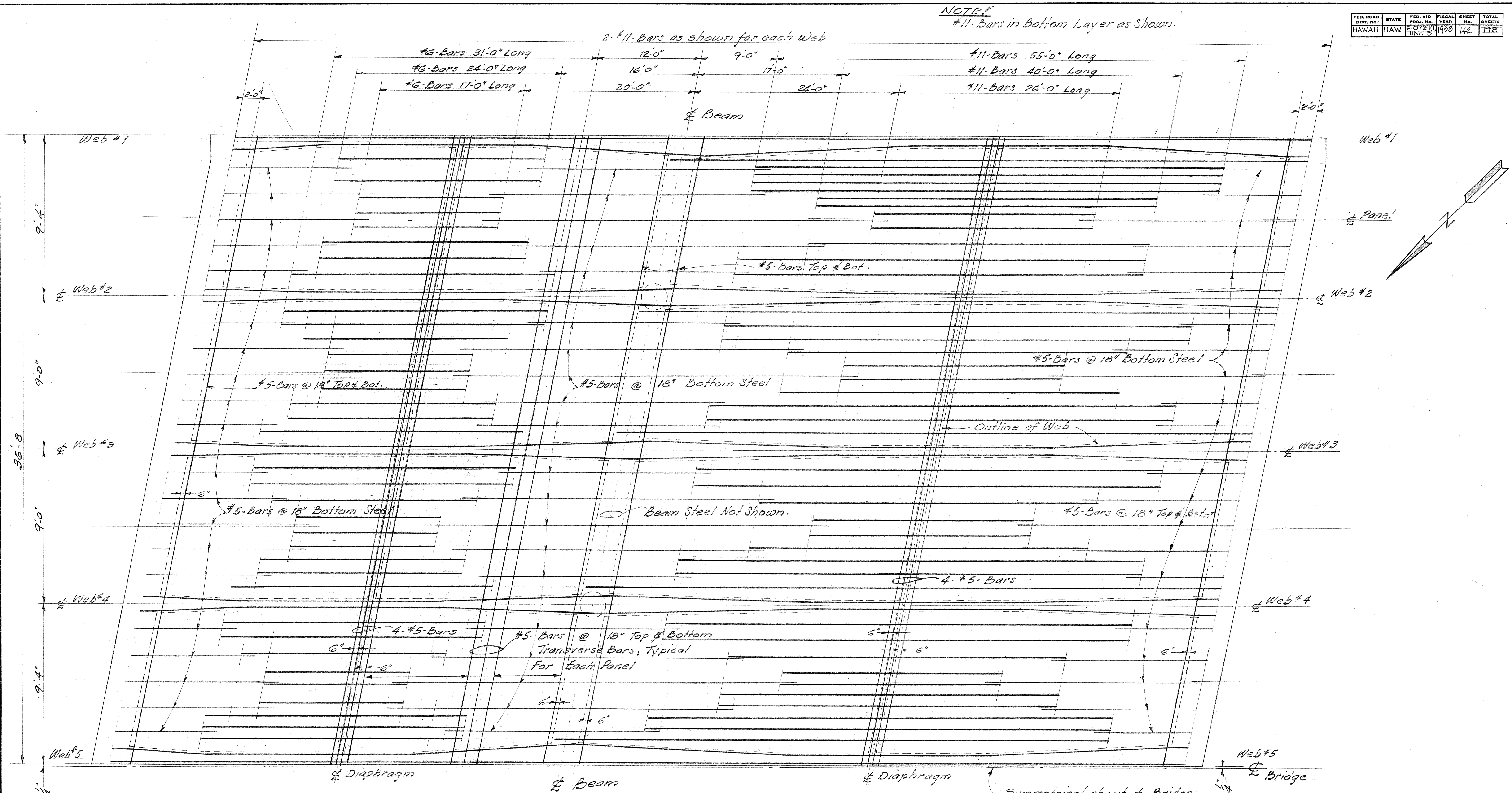
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James E. Wilson
REGISTERED ENGINEER
DATE JUL 3 1957

STRUCTURE NO. 11
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
LUNALILO FREEWAY
PROJECT NO. F-072-10, UNIT 3
GRADE SEPARATION AT
NUUANU AVENUE
TOP SLAB REINFORCEMENT

SHEET NO. 5 OF 10 SHEETS

DATE	3-27-57
DESIGNED BY	W. E. Wilson
DRAWN BY	G. E. Wilson
CHECKED BY	W. E. Wilson
NOTE BOOK	
QUANTITIES CHECKED BY	
CHECKED BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1072-10	1958	142	148



NOTE:
Bottom layer of longitudinal reinforcing shown except as noted; for top layer of longitudinal steel see Section on Sheet No. 132.

HALF PLAN - BOTTOM SLAB REINFORCEMENT

Scale: Width = $\frac{3}{8}$ " = 1'-0" & Length = $\frac{3}{16}$ " = 1'-0"



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REGISTERED ENGINEER
DATE JUL 3 1957

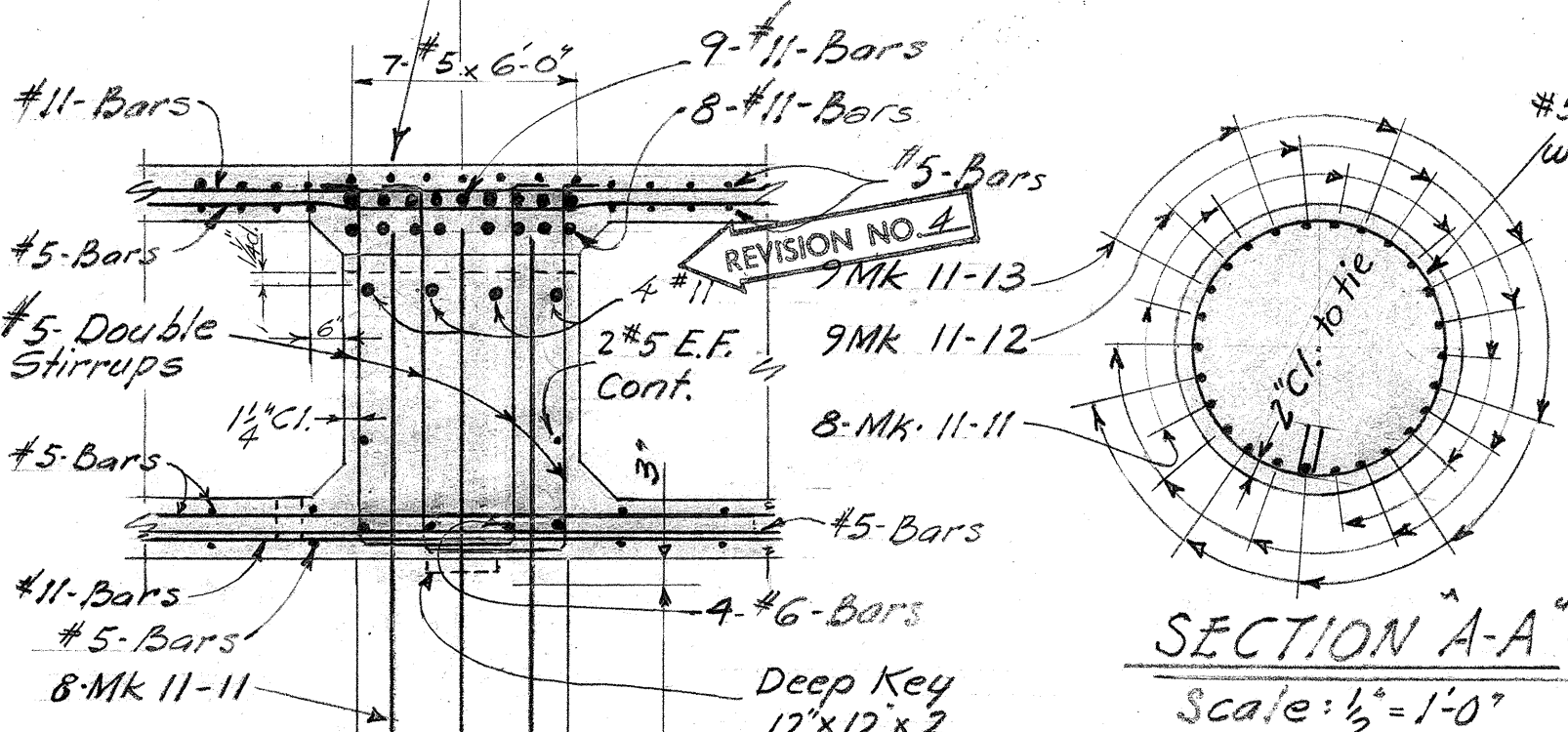
STRUCTURE NO. 11
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
LUNALILO FREEWAY
PROJECT NO. F-012-1(1), UNIT 3
GRADE SEPARATION AT
NUUANU AVENUE
BOTTOM SLAB REINFORCEMENT

SHEET NO. 6 OF 10 SHEETS

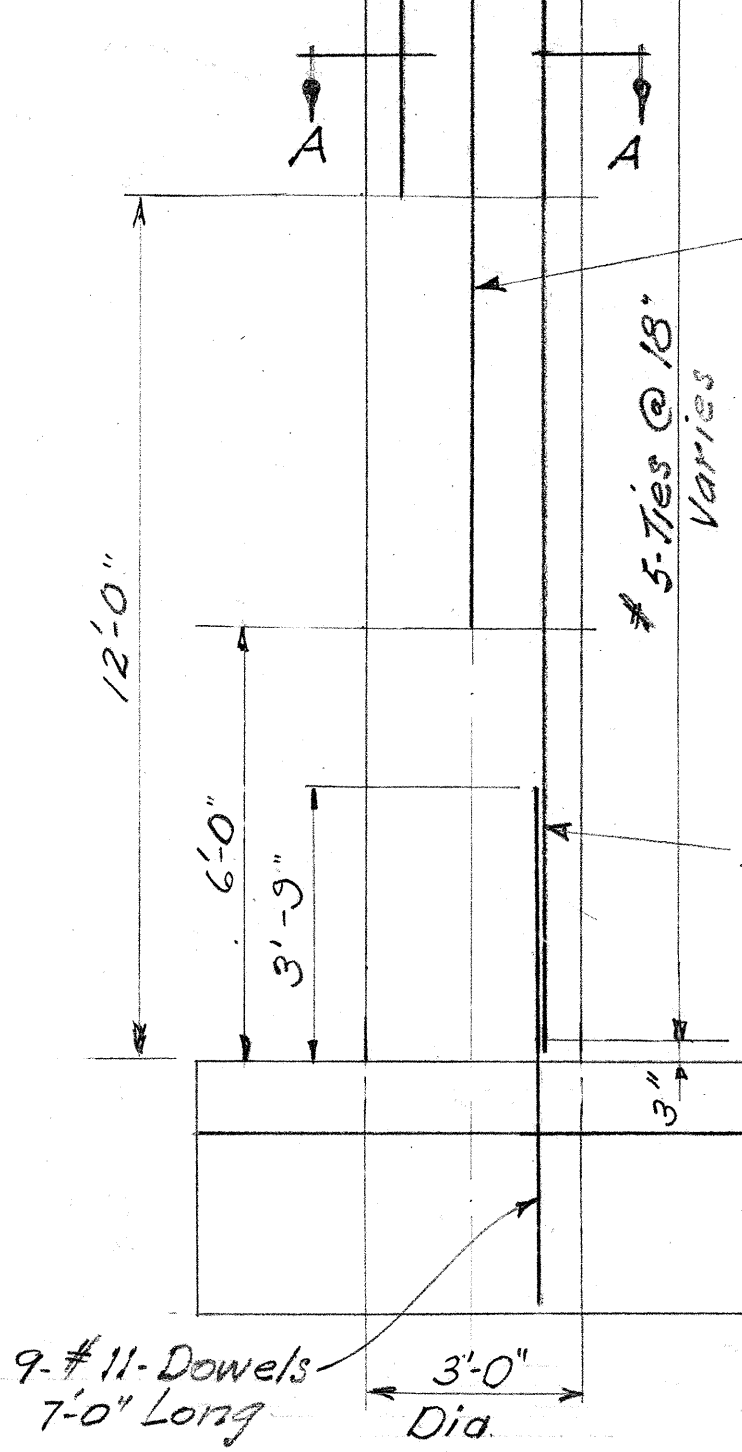
.S173 (1).142 231

DATE	BY
3-7-57	3-7-57
DESIGNED BY	3-7-57
DRAWN BY	3-7-57
CHECKED BY	3-7-57
QUANTITIES CHECKED BY	3-7-57
NOTE BOOK	3-7-57
NO.	3-7-57

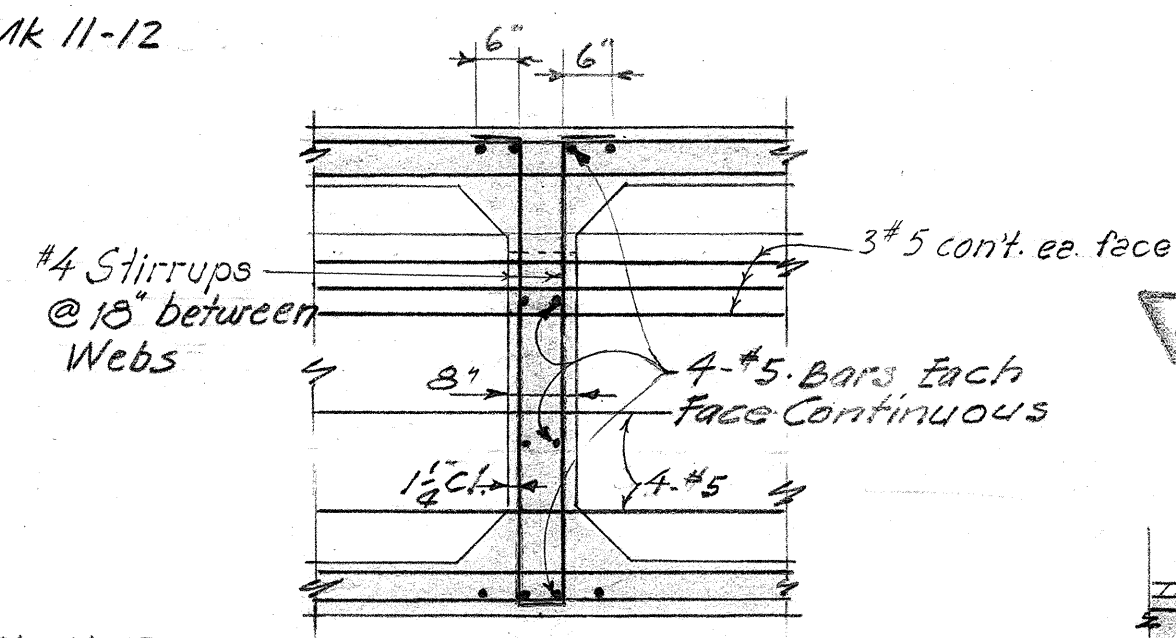
NOTE!
SEE BEAM
REIN. DETAIL



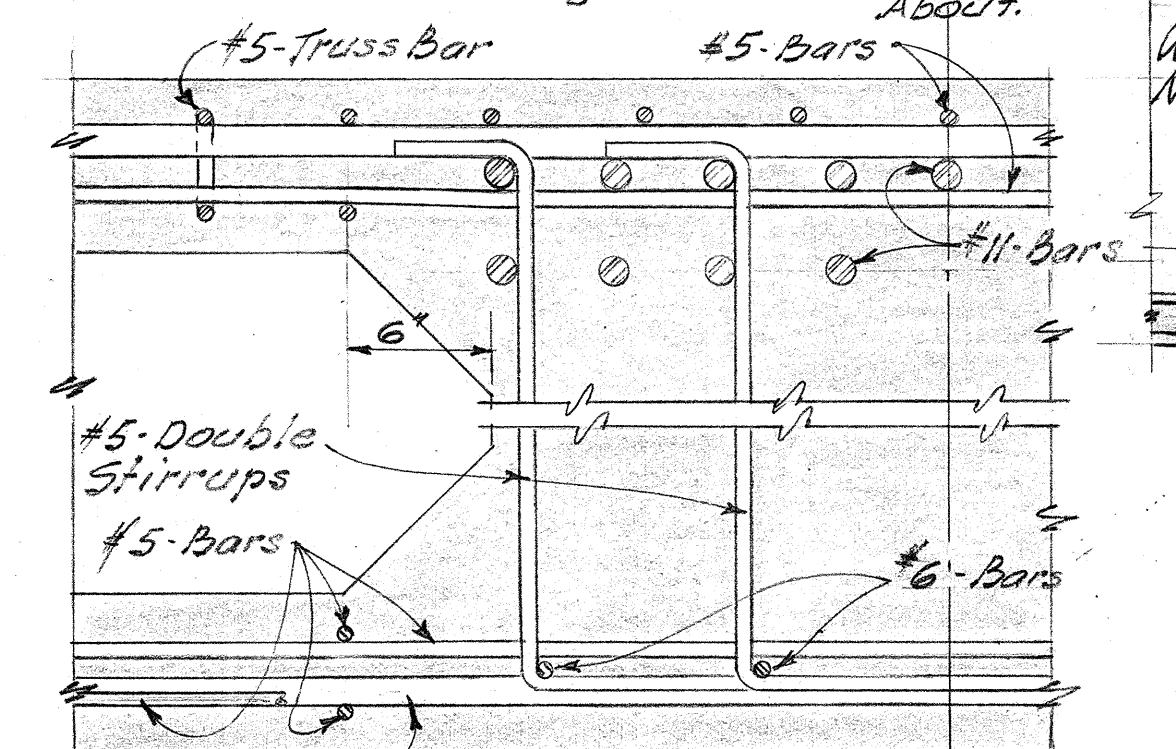
SECTION A-A
Scale: 1/2" = 1'-0"



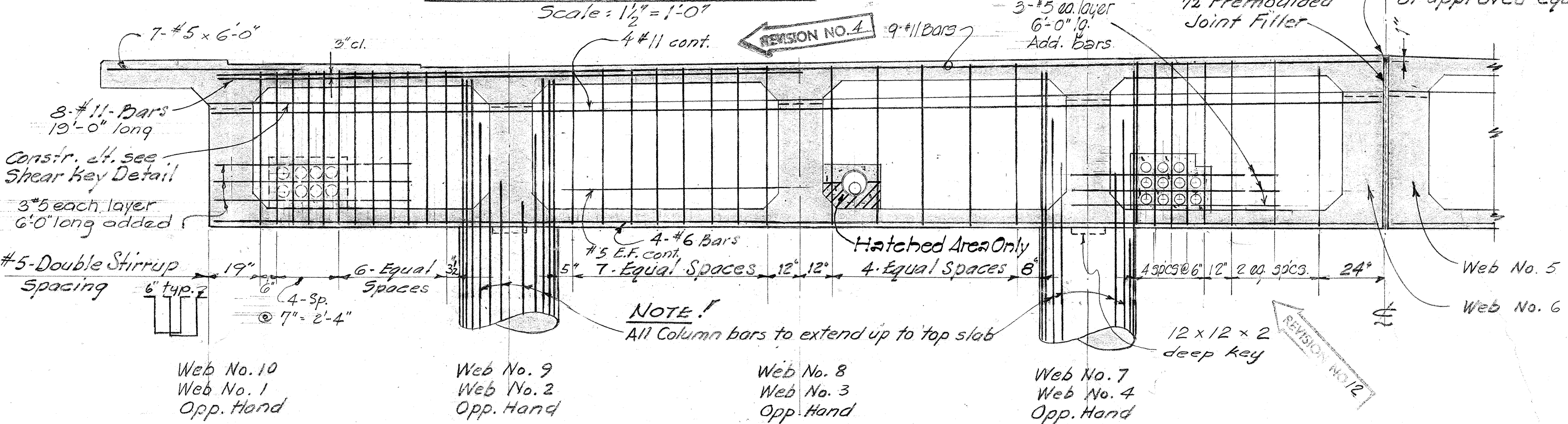
COLUMN DETAIL
No Scale



DIAPHRAGM SECTION
Scale: 1/2" = 1'-0"



BEAM REINFORCING DETAIL
Scale: 1/2" = 1'-0"



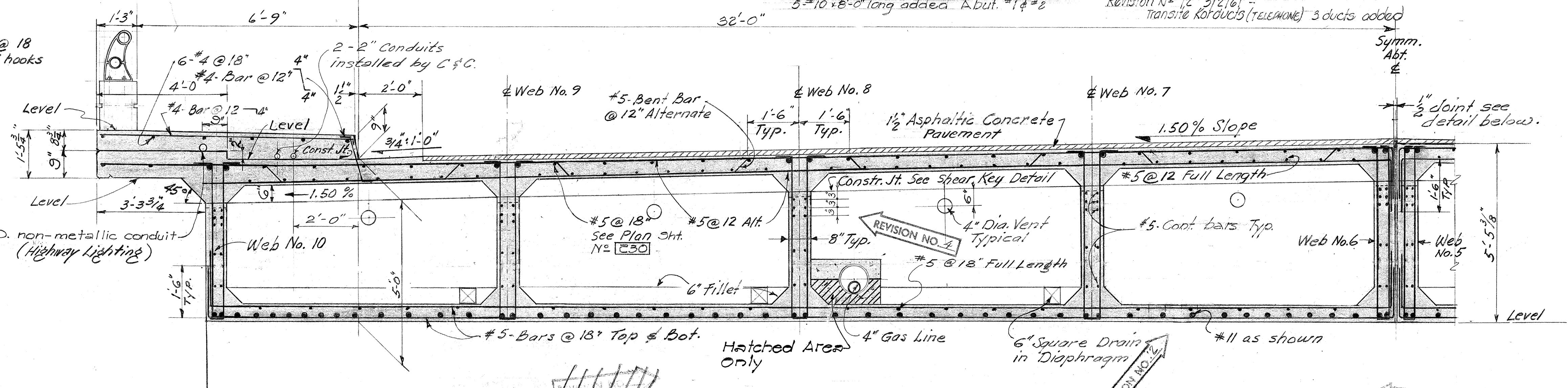
BEAM OVER COLUMNS
Scale: 3/8" = 1'-0"

NOTE!
Telephone & Electrical Conduits
are located at Webs No. 1 & 6
only.

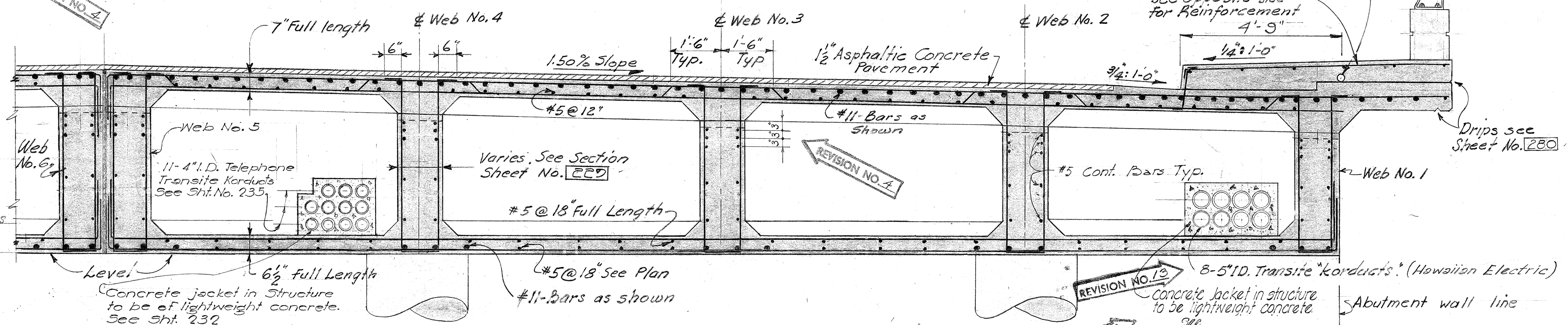
Revision No. 13 3/9/61
Relocated Telephone ducts. Change
size & add 4 Electrical ducts.
5 #10 x 6'-0" long added. Abut. #1 & 2

Revision No. 4 7/22/59
Revised: Box Girder Reinf.
Beam Over Pier Reinf.
Revision No. 12 3/12/61
Transite Korducts (Telephone) 3 ducts added

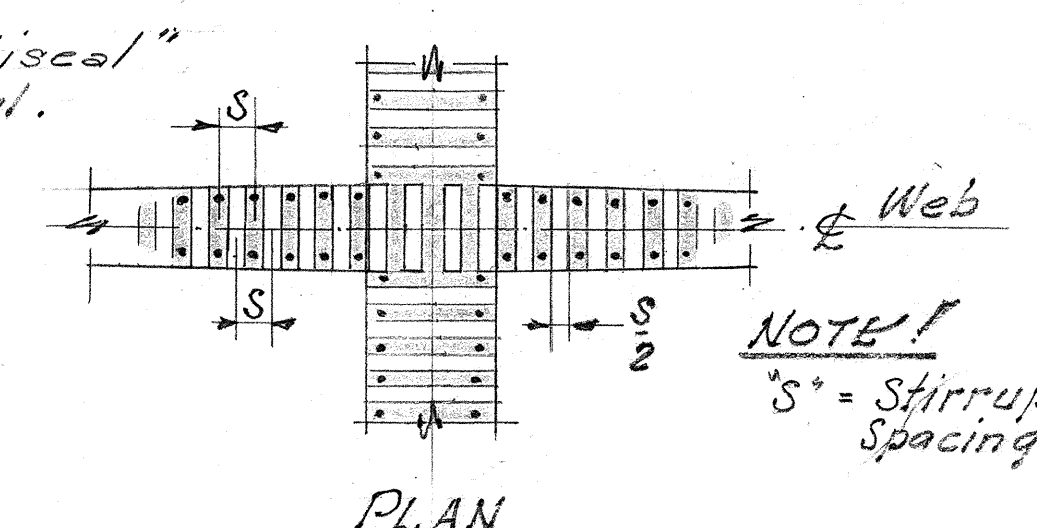
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	107-011	1958	143	198



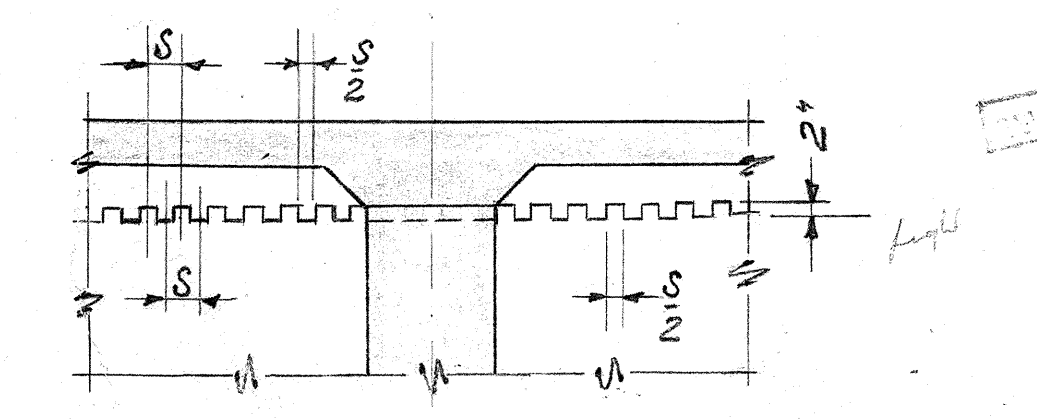
SECTION AT MIDSPAN
Scale: 1/2" = 1'-0"



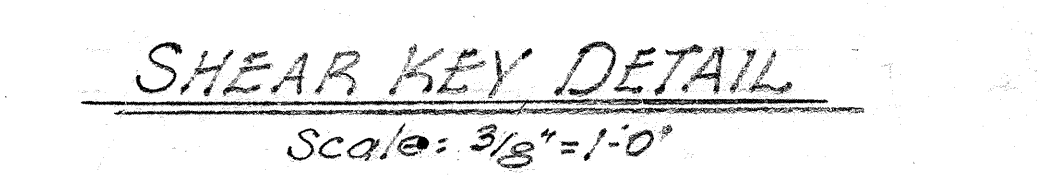
SECTION NEAR PIER
Scale: 1/2" = 1'-0"



PLAN



SECTION



SHEAR KEY DETAIL
Scale: 3/8" = 1'-0"

NOTES

1. For Top Slab Reinforcement See Sheet No. 230
2. For Bottom Slab Reinforcement See Sheet No. 231
3. For Utility Details See Sheet No. 235
4. Reinforcing steel descriptions & structural dimensions are similar for each section unless otherwise noted
5. All Reinf. to be 1/4" Clear Minimum to face of Concrete
6. For location of outlet boxes for future Under-Pass Lighting, see sheet Nos. 121 & 128
7. Lightweight concrete shall not exceed 110 lbs. per cubic ft. weight and shall have a 28 days compressive strength of not less than 1500 lbs. per sq. inch. at 28 days.



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James B. Wilson
REGISTERED ENGINEER
DATE JUL 3 1957

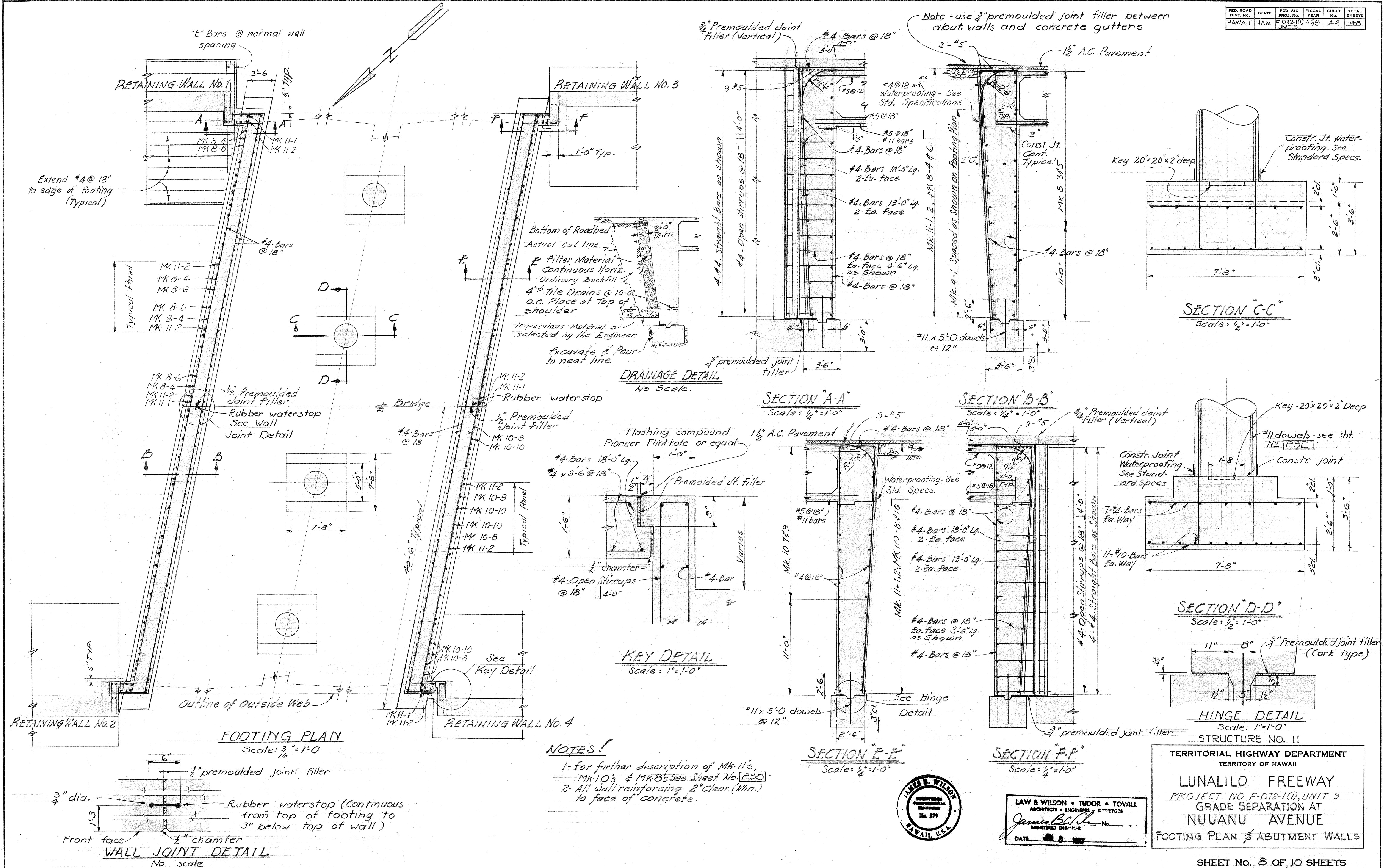
STRUCTURE NO. 11
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
LUNALILO FREEWAY
PROJECT NO. F-072-1(1), UNIT 3
GRADE SEPARATION AT
NUUANU AVENUE
DECK SECTIONS

SHEET NO. 7 OF 10 SHEETS

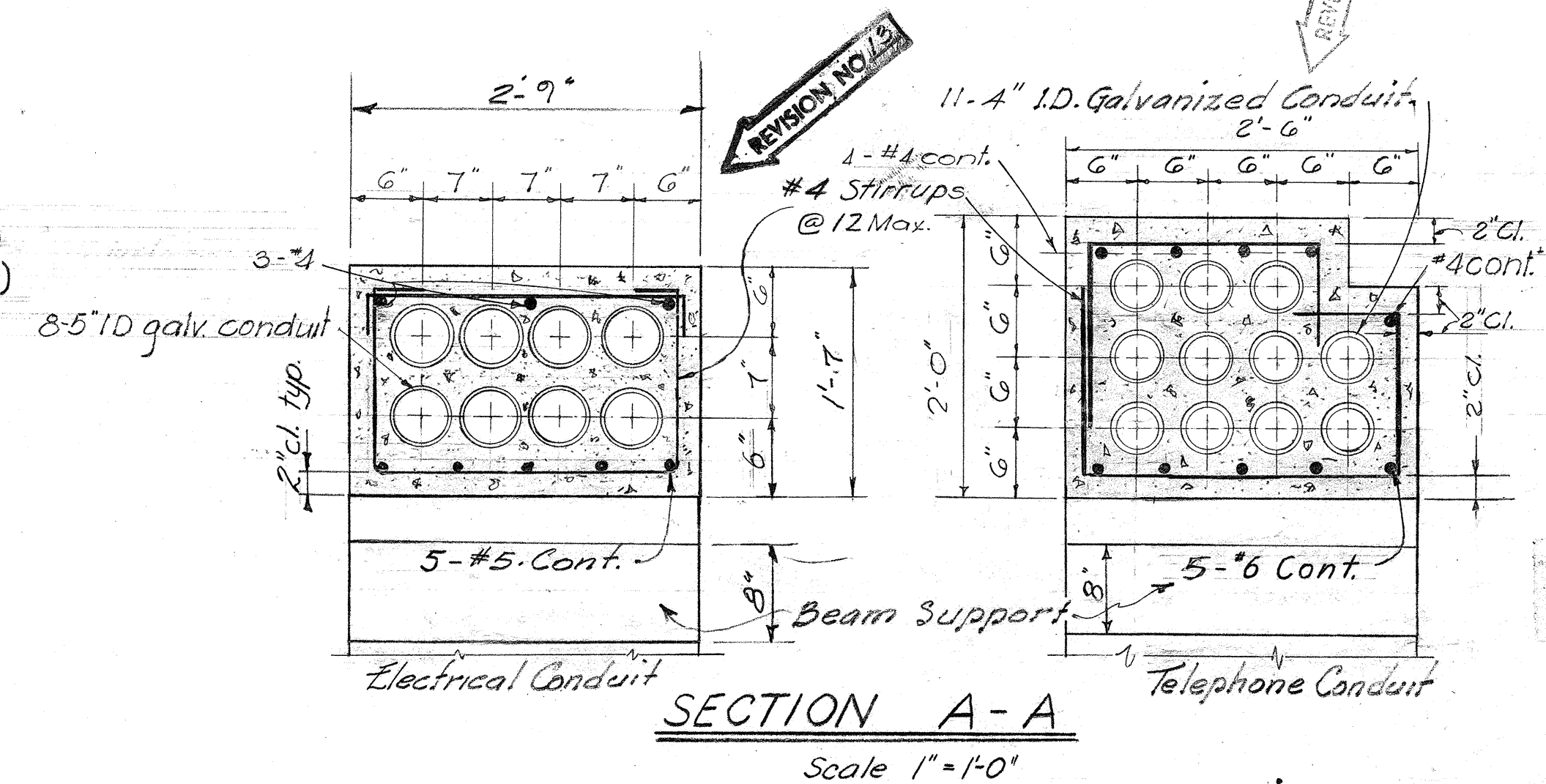
8173 (1).143 232

REVISED TRACING - JULY 22, 1959

ORIGINAL PLAN
DESIGNED BY
DRAWN BY
CHECKED BY
QUANTITIES CHECKED BY
DATE
3-22-57



ORIGINAL	SURVEY PLOTTED BY _____	DATE _____
PLAN	DESIGNED BY <u>L. G.</u>	"
	DRAWN BY <u>G. D. G. A. C.</u>	"
NOTE BOOK	TRACED BY _____	"
	QUANTITIES BY _____	"
No.	QUANTITIES CHECKED BY _____	"
	CHECKED BY <u>J. R. T.</u>	"
		<u>5-27-57</u>



10" cement asbestos pipe

9" 9"

2 #4 Cont.

4" Gas Line

3 #6 Cont.

24"

20"

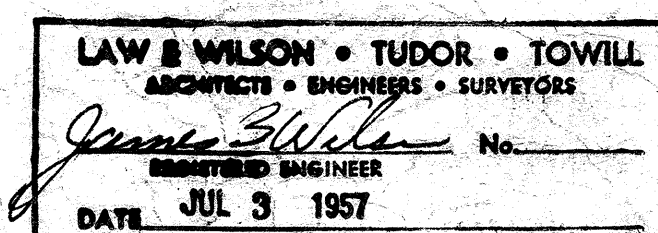
4"

#4 Stirrups @ 12" Max.

Beam Support

18"

SECTION C-C
Scale: 1" = 1'-0"



SHEET No. 10 OF 10 SHEETS