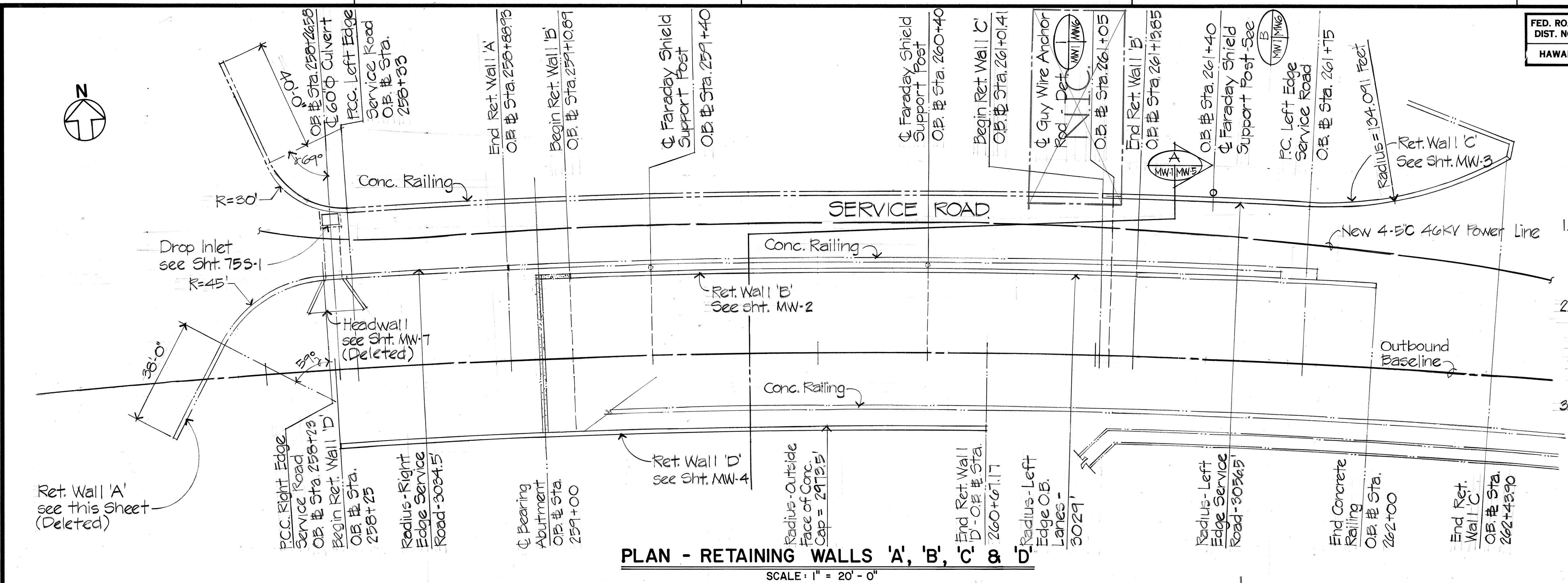
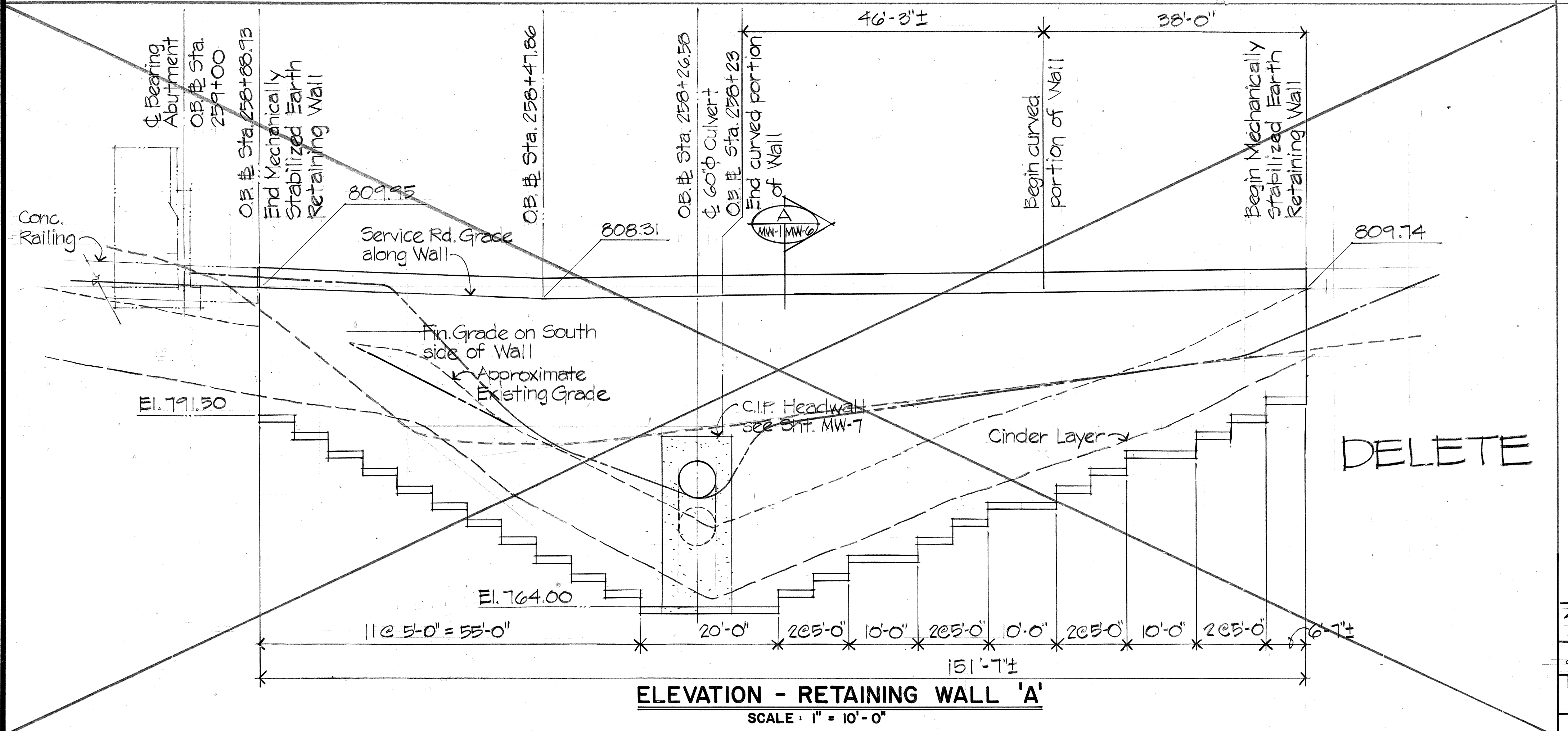


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(52)	1988	27	75



- Note:
1. Contractor shall coordinate the placement of the various Utilities present and the MSERW Wall.
 2. Location of Cinder Layer shown in all Plan Sheets is approximate. Bottom of Footing Elevation to be approved by the Engineer.
 3. Faraday Shield Supports to be located radially to the Baseline.



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
DESIGNED BY		
NOTED BY		
CHECKED BY		

DATE	REVISION
4/6/90	Clarification of Conc. Railing.
9/1/89	Revise Limits of Walls 'C', Delete 'A'.
1/10/89	Guy Wire Deleted, Notes 2 & 3 Added, Faraday Shield Posts Located

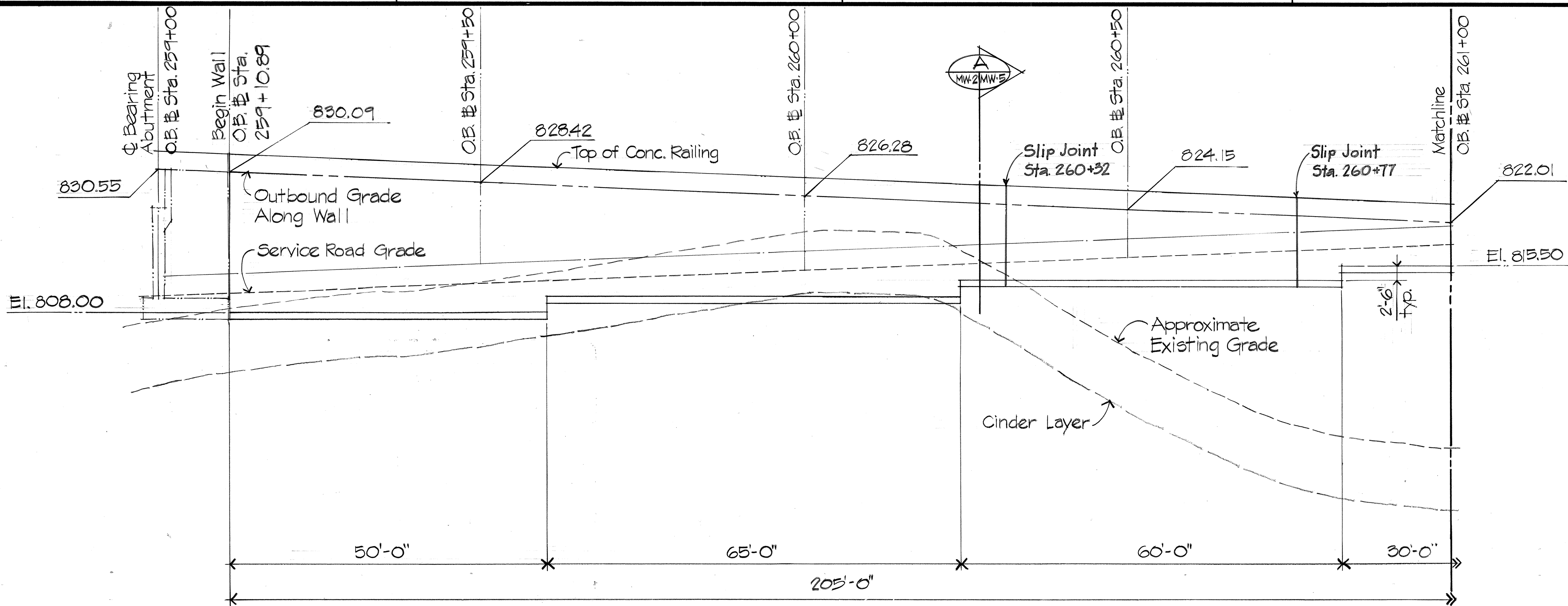
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
Myron Okubo

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
MSERW PLAN & SECTION
RETAINING WALL "A"
 INTERSTATE ROUTE H-3
 F.A.I. PROJECT NO. I-H3-1(52)
 SCALE: AS NOTED DATE: JULY 1988
 SHEET No. MW-OF 8 SHEETS

AS BUILT

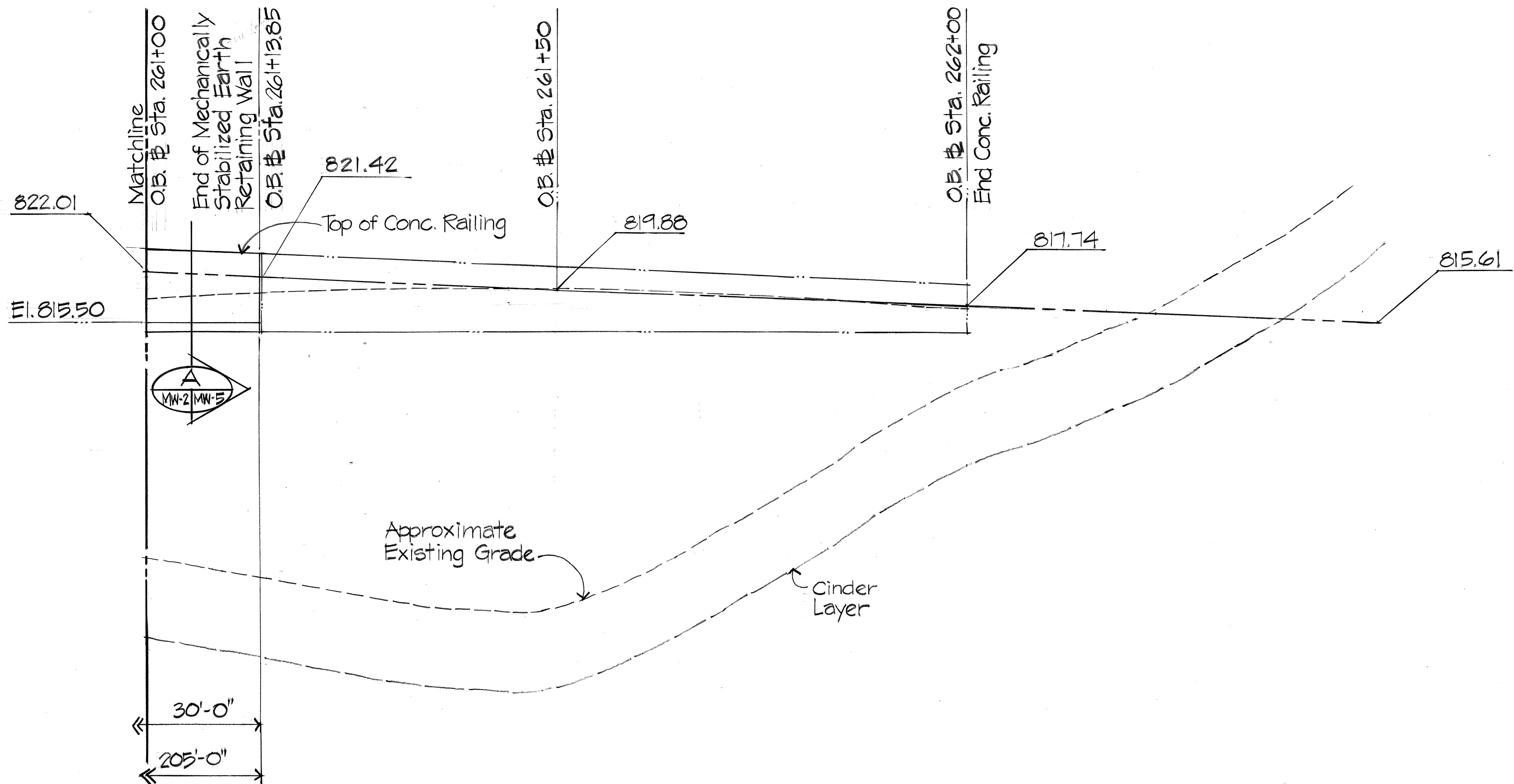
C.O.ADD. 27R

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(52)	1988	28	75



PARTIAL ELEVATION - RETAINING WALL 'B'

SCALE: 1" = 10' - 0"



PARTIAL ELEVATION - RETAINING WALL 'B'

SCALE: 1" = 10' - 0"

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



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Myron Okubo

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**MSERW ELEVATION
RETAINING WALL "B"**
INTERSTATE ROUTE H-3
F.A.I. PROJECT NO. I-H3-1(52)

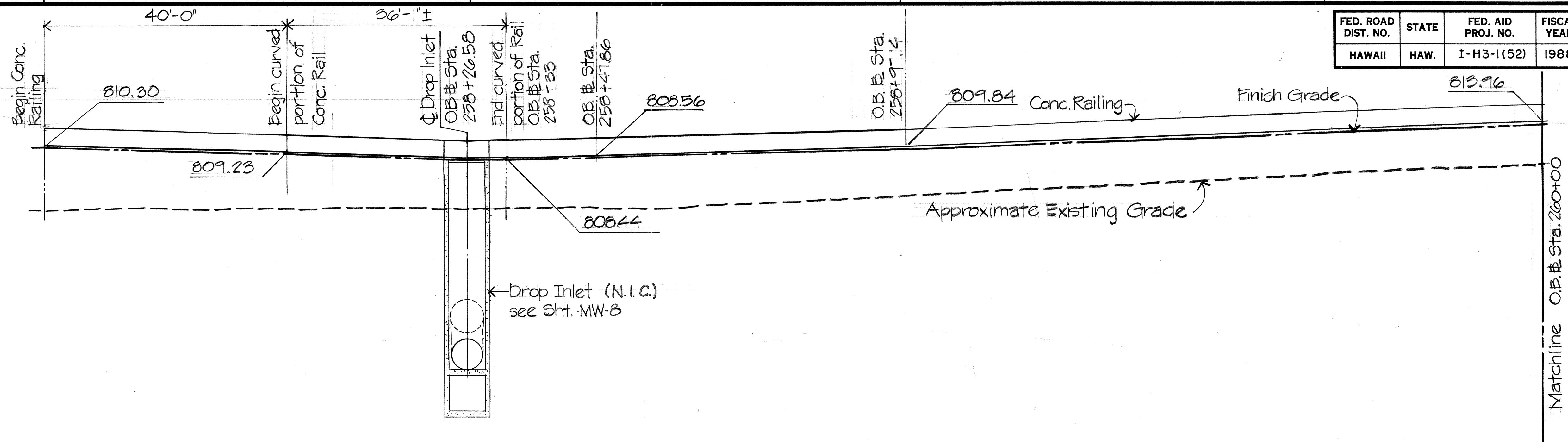
SCALE: AS NOTED DATE: JULY 1988

SHEET No.MW-2OF 8 SHEETS

DATE REVISION

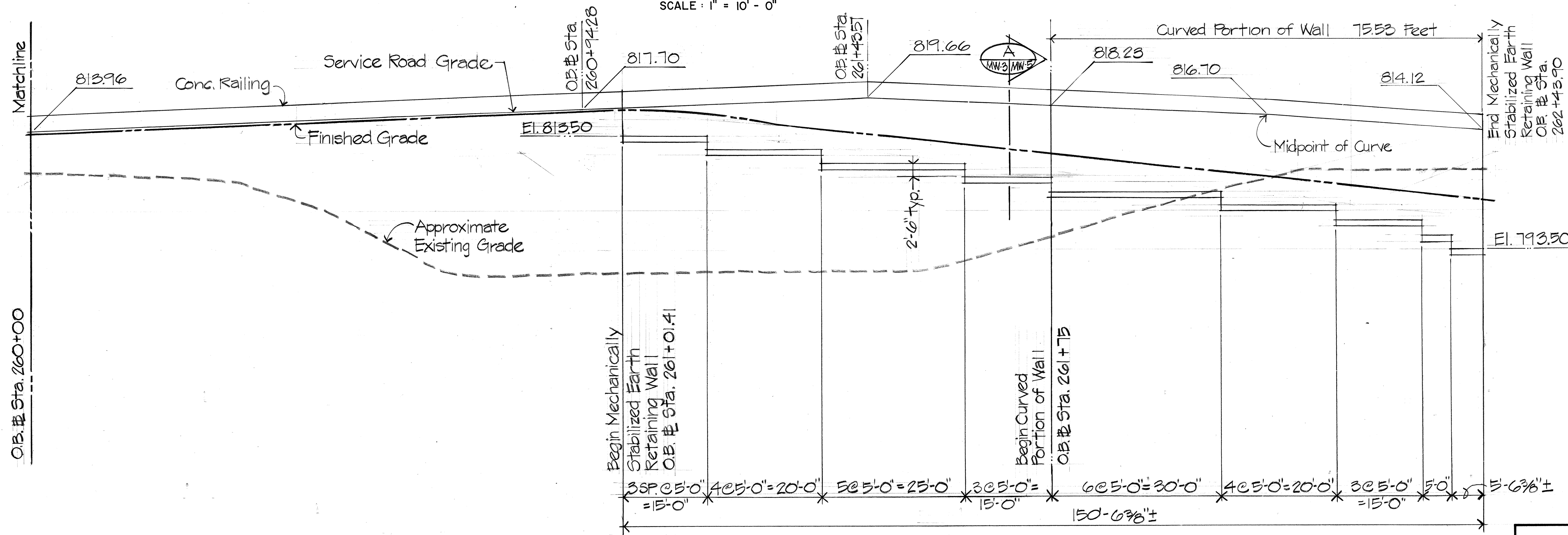
AS BUILT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(52)	1988	29	75



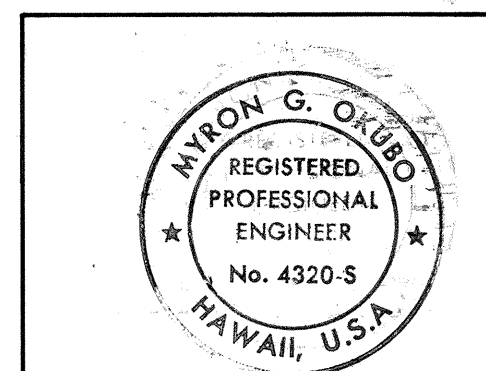
PARTIAL ELEVATION - RETAINING WALL 'C'

SCALE: 1" = 10' - 0"



PARTIAL ELEVATION - RETAINING WALL 'C'

SCALE: 1" = 10' - 0"



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Myron Oshiro

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MSERW ELEVATION RETAINING WALL "C"

INTERSTATE ROUTE H-3
F.A.I. PROJECT NO. I-H3-1(52)

SCALE: AS NOTED DATE: JULY 1988

SHEET No. MW-30F 8 SHEETS

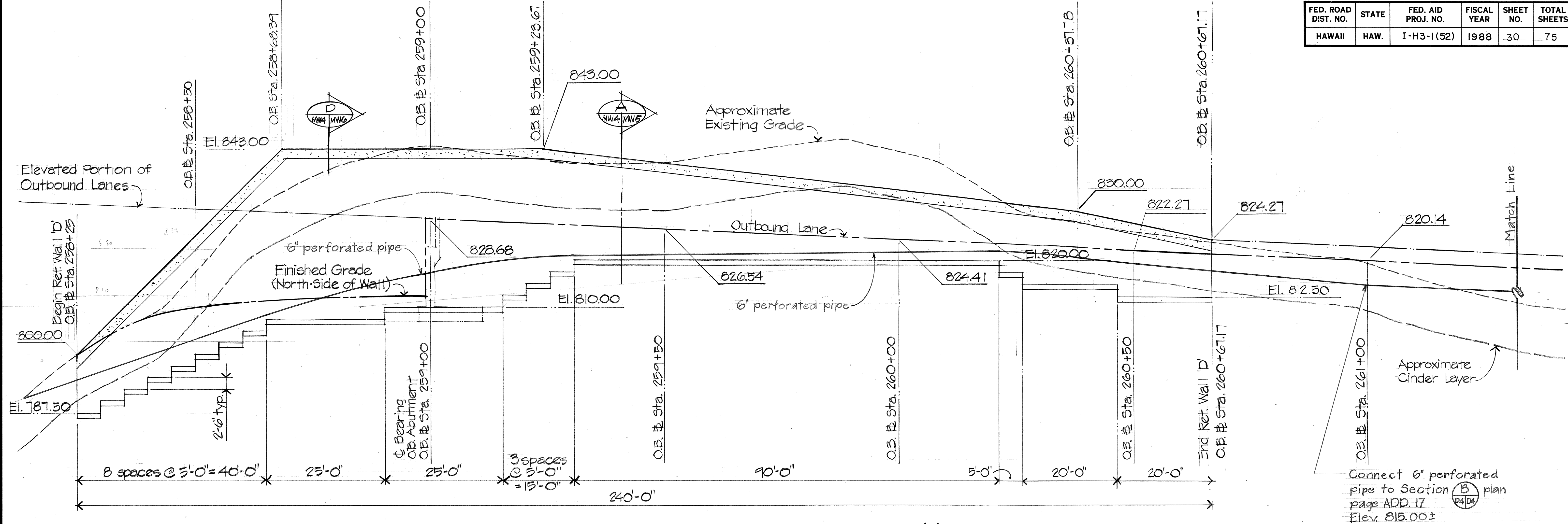
DATE	REVISION
9/11/89	Revised Grades & Extents of MSERW

AS BUILT

C.O. 29

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(52)	1988	30	75



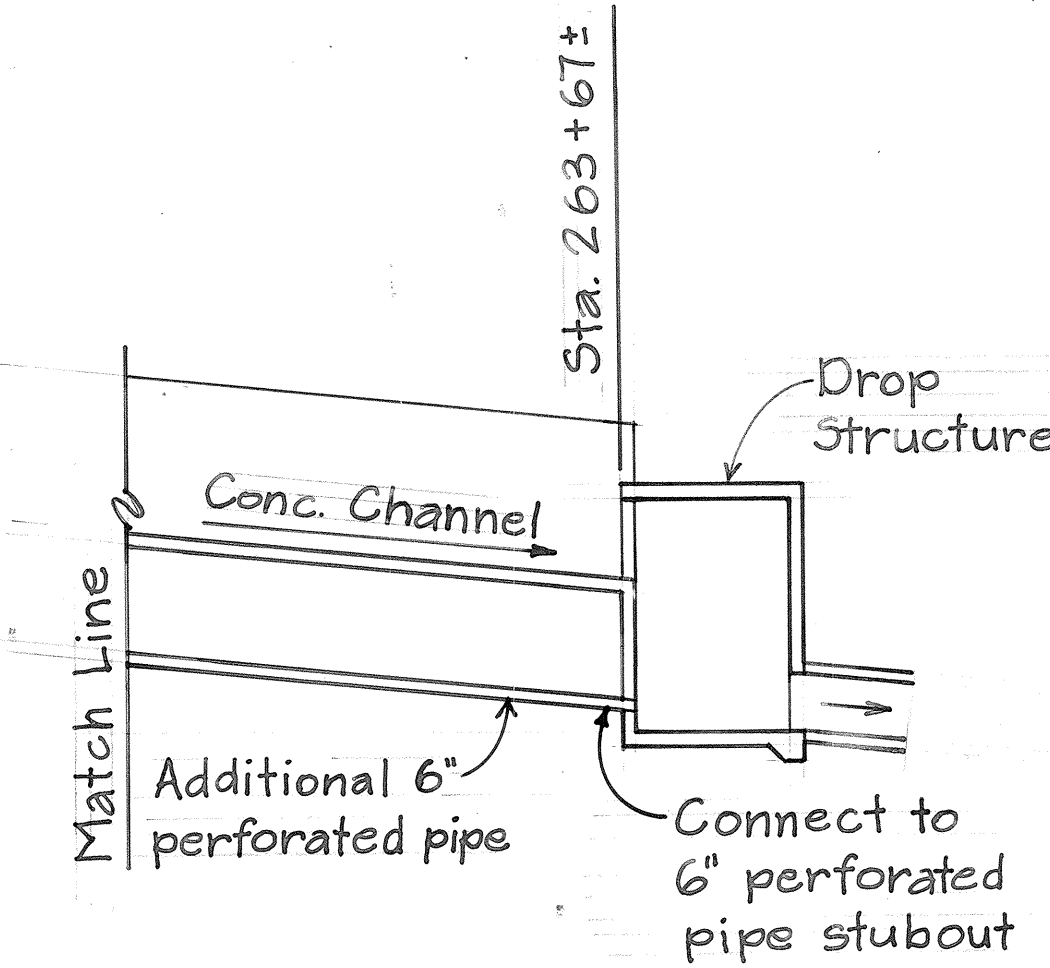
ELEVATION - RETAINING WALL 'D'
SCALE: 1" = 10' - 0"
& PERFORATED PIPE PROFILE

INSPECTION ELEMENT NOTES

1. Inspection Elements shall be installed on each MSERW at a uniform spacing of 25 feet (maximum) horizontally along the wall. The Inspection Elements shall be located vertically in the first exposed Panels above Final Finish Grade.
2. Inspection Elements shall be fabricated from an Element representative of the Elements used to stabilize the Wall.
3. Contractor shall submit Shop Drawings indicating locations of the Inspection Elements on each Wall, complete details of the Inspection Element installation and provisions for removal of these Elements.
4. Inspection Elements will not be measured and shall be considered incidental to MSERW Materials.

NOTES:

1. End 6" perforated pipe at Sta. 258+15± and Elev. 790.00±.
2. Contractor to verify end is above open channel invert.
3. 6" perforated pipe is located beneath the Drainage Channel Sta. 261+00 to 263+67± connecting to Drop Structure.



MYRON G. OKUBO
REGISTERED PROFESSIONAL ENGINEER
No. 4320-S
HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
Myron Okubo

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**MSERW ELEVATION
RETAINING WALL "D"**
INTERSTATE ROUTE H-3
F.A.I. PROJECT NO. I-H3-1(52)
SCALE: AS NOTED DATE: JULY 1988
SHEET No. MW-4 OF 8 SHEETS

1/10/89 Control Elevations Added
DATE REVISION

AS BUILT

ADD.30

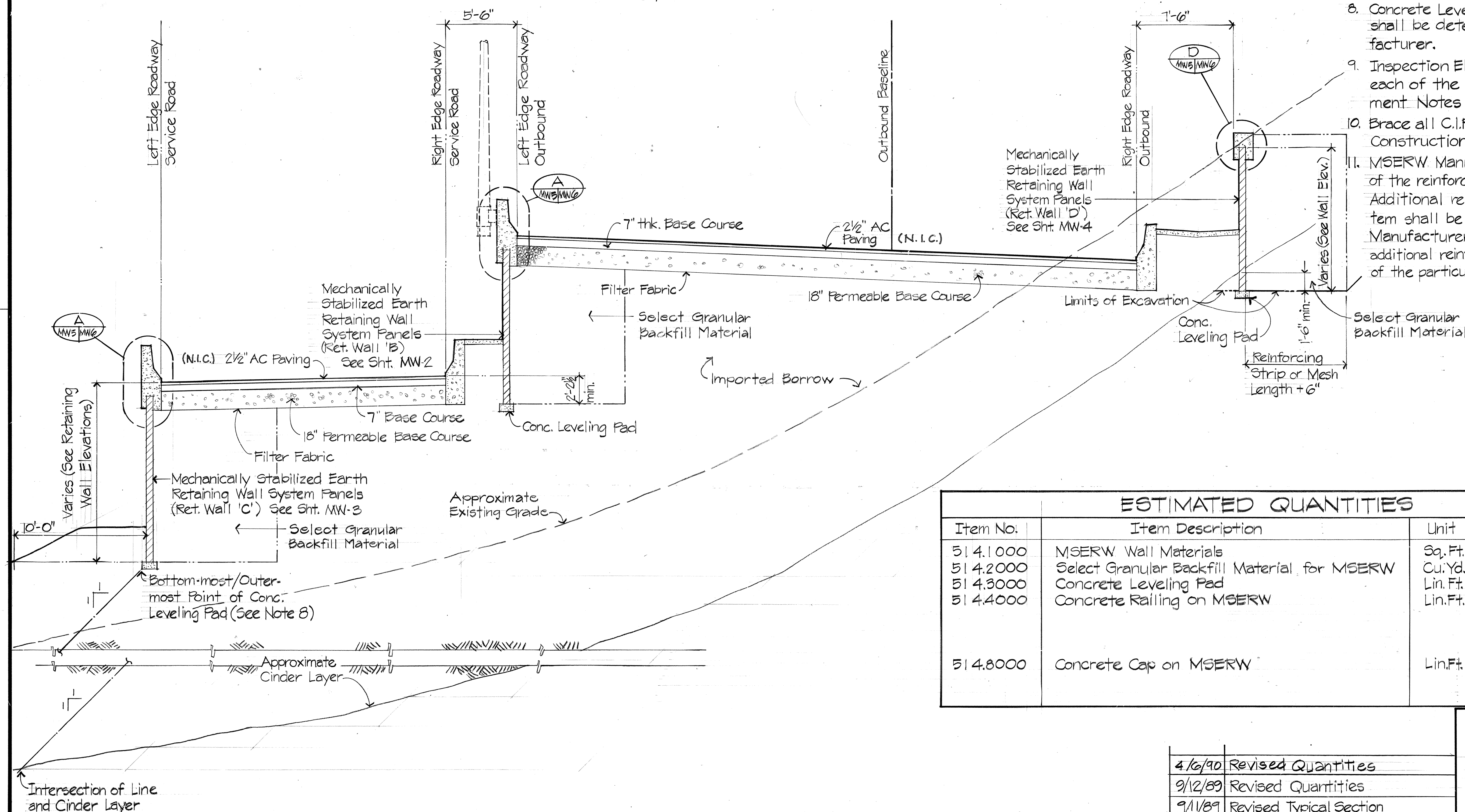
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
No.	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	

NOTES:

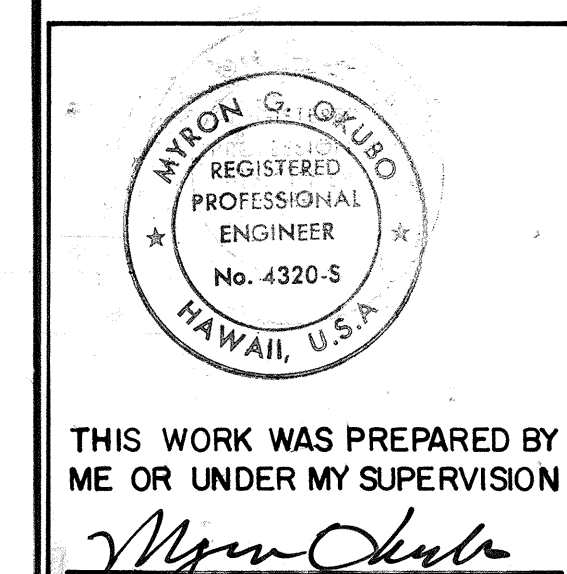
- Stations indicated are measured along the Base-line of the Outbound Roadway unless noted otherwise.
- The assumed size for the Mechanically Stabilized Earth Retaining Wall (MSERW) Panels is 5'-0" x 5'-0". Actual Size and Shape (Square, "Cruciform", Hexagonal, etc.) will be determined by the actual MSERW System chosen.
- MSERW Panels along curves will be formed by a series of Chords to match, as closely as possible, the desired Wall Alignment, except as noted and approved.
- Finishes for MSERW System shall be:
Precast Concrete Wall Panels, Drop Inlet and Headwall ————— Fractured Rope Finish
Concrete Railing & Cap — Medium Sandblast Fin.
- Top of Footing (T.O.F.) Elevations for Walls 'A', 'C' and 'D' shall be set at a minimum of 1'-6" below top of Cinder Layer. Cinder Layer locations indicated on the drawings are approximate.
- T.O.F. Elevations for Wall 'B' shall be set at a minimum of 2'-2 1/2" below Finish Road Elevation of the Service Road.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(52)	1988	31	75

- Final T.O.F. Elevations will be determined by actual Site Conditions and the MSERW Manufacturer. Drawings indicating actual T.O.F. Elevations shall be prepared by the Contractor and submitted to the Engineer for review. Final T.O.F. Elevations shall be approved by the Engineer prior to placement of the Concrete Leveling Pad.
- Concrete Leveling Pad Size and Reinforcing shall be determined by the MSERW Manufacturer.
- Inspection Elements shall be provided for each of the MSERW. See Inspection Element Notes on Sheet MW-4.
- Brace all C.I.P. Structures as required during Construction.
- MSERW Manufacturer to verify the adequacy of the reinforcing steel for the various Structures. Additional reinforcing steel for a particular system shall be added, as required, by the MSERW Manufacturer. No payment shall be made for additional reinforcing steel required for the design of the particular MSERW System used.



ESTIMATED QUANTITIES			
Item No.	Item Description	Unit	Quantity
514.1000	MSERW Wall Materials	Sq. Ft.	10,500.00
514.2000	Select Granular Backfill Material for MSERW	Cu. Yd.	9,810.00
514.3000	Concrete Leveling Pad	Lin. Ft.	600.00
514.4000	Concrete Railing on MSERW	Lin. Ft.	360.00
514.8000	Concrete Cap on MSERW	Lin. Ft.	260.00



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

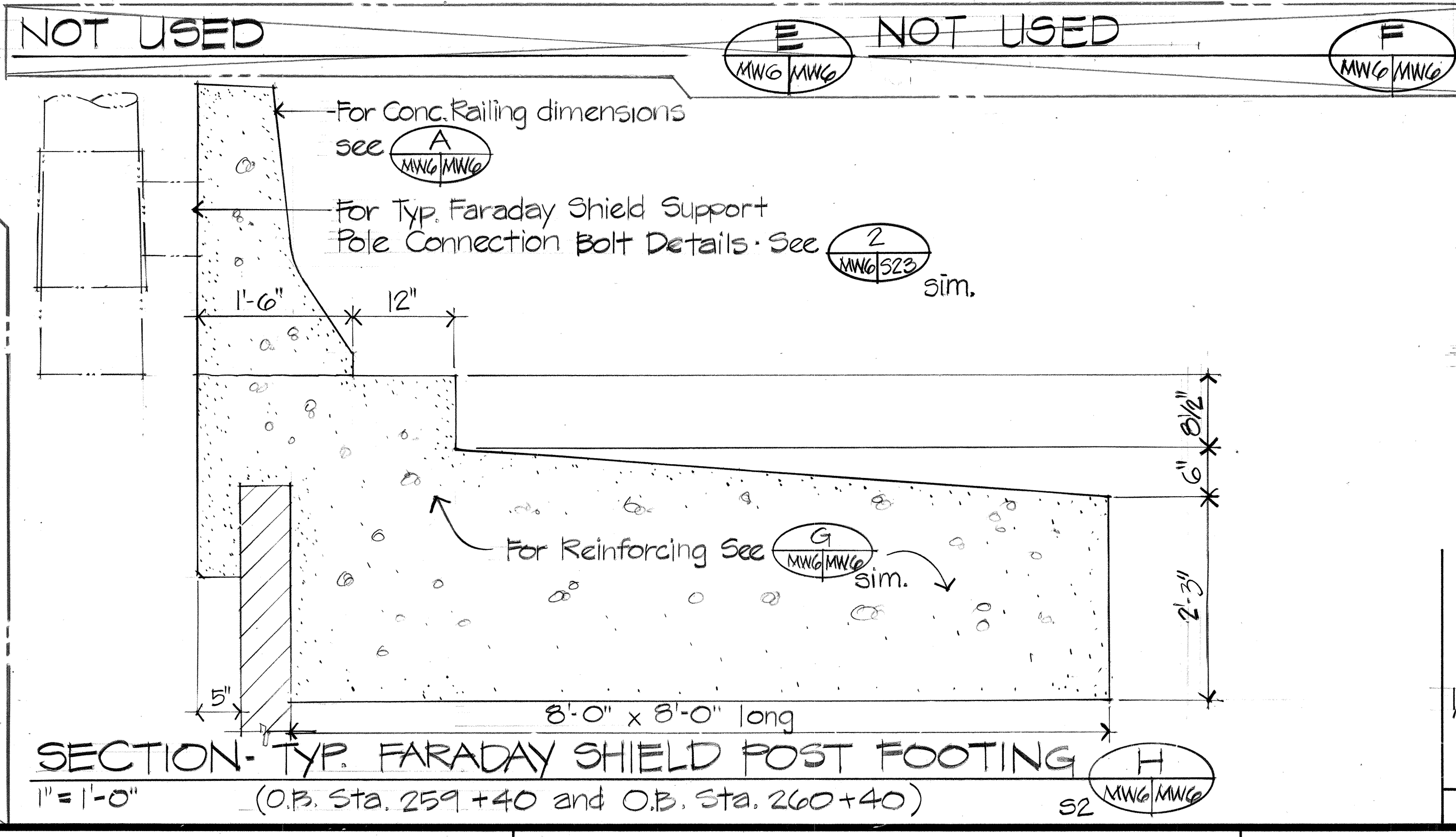
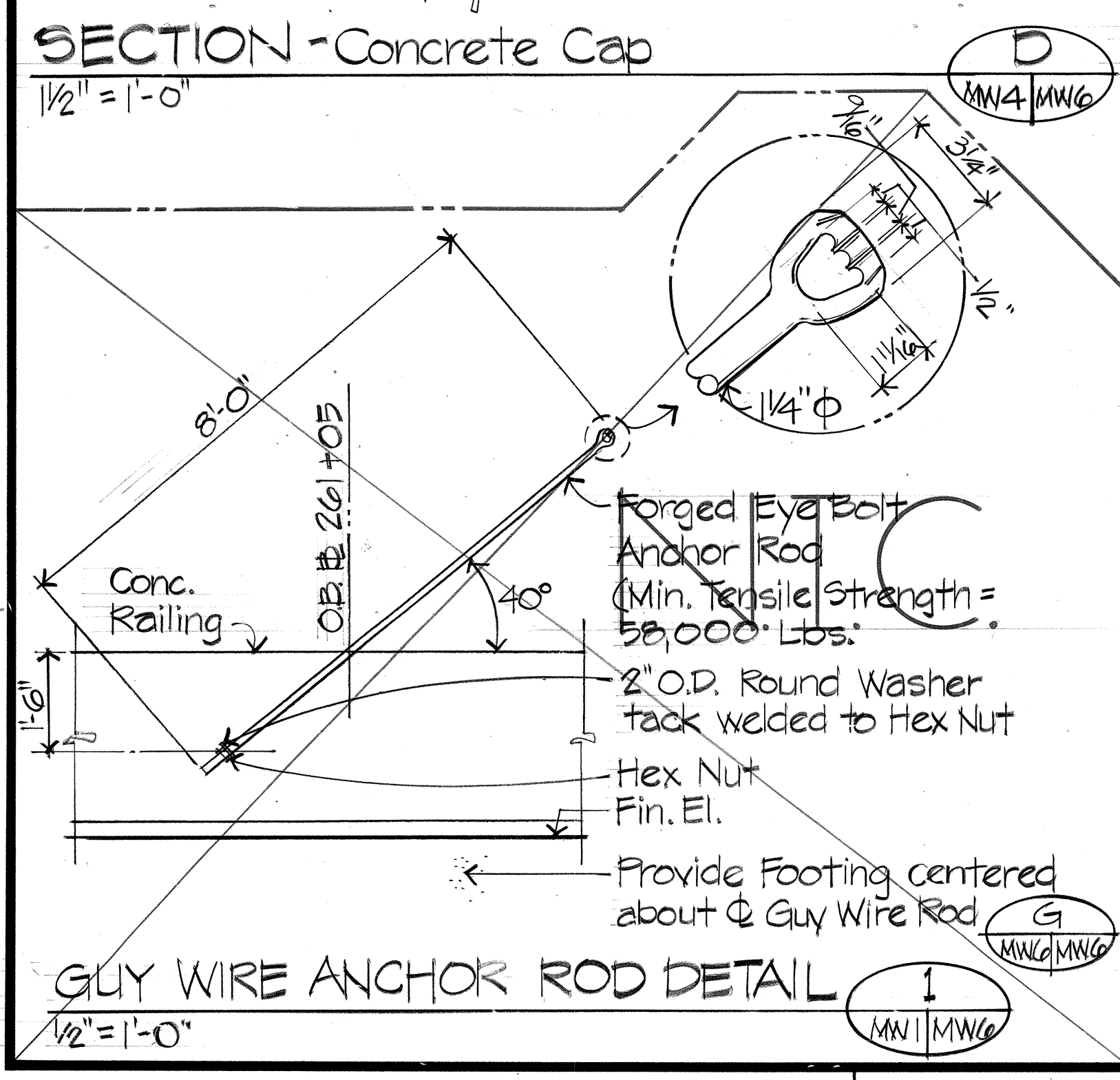
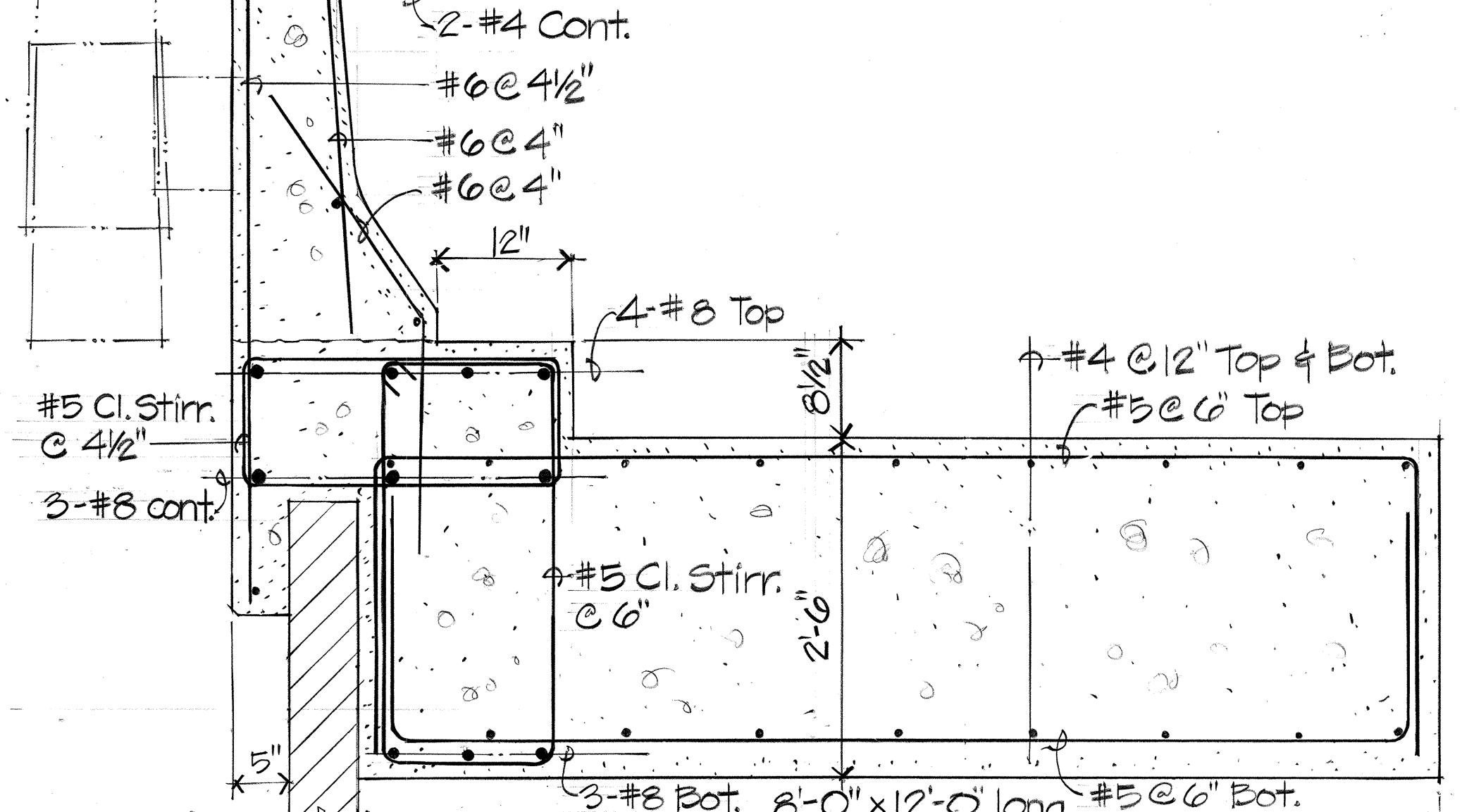
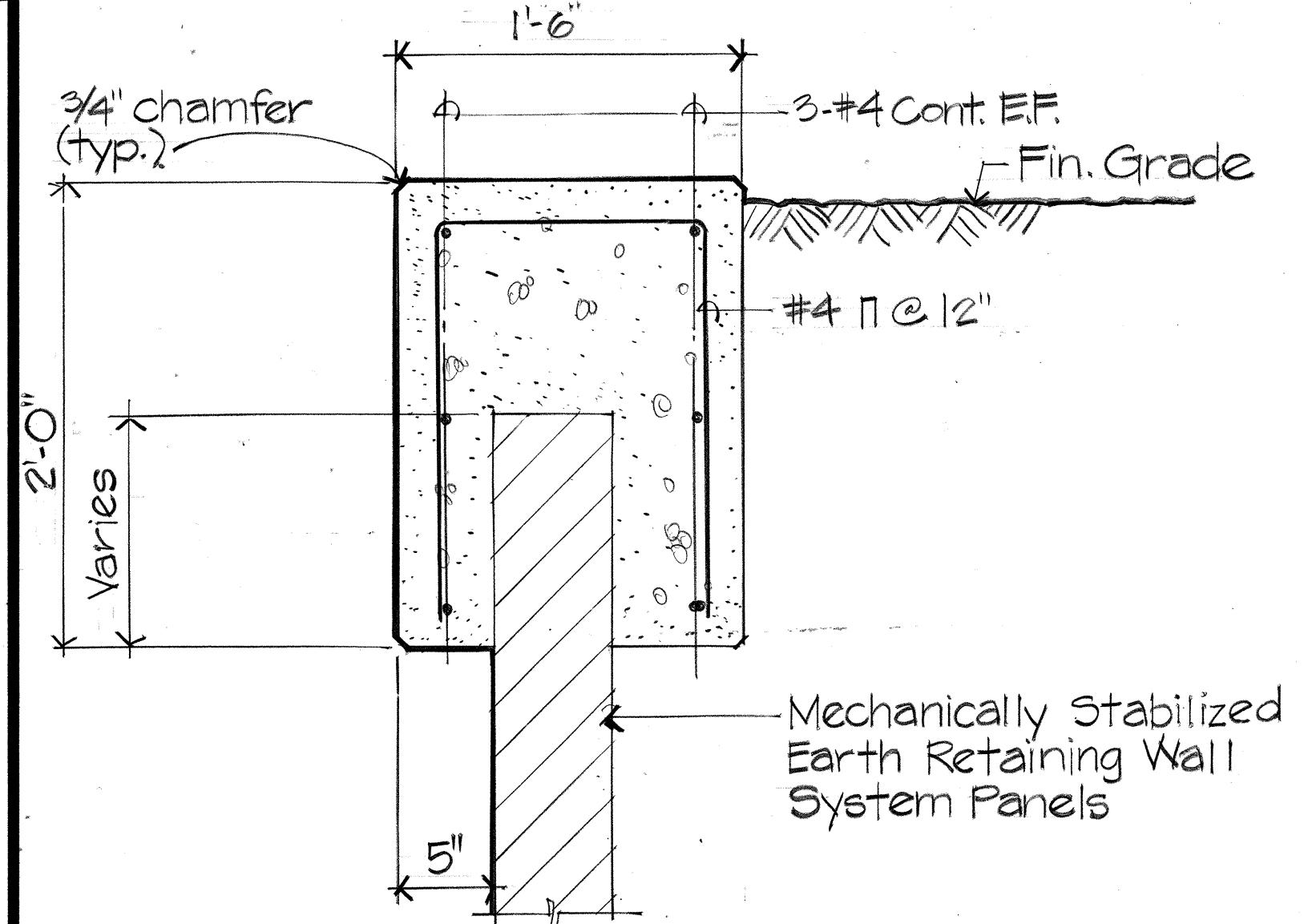
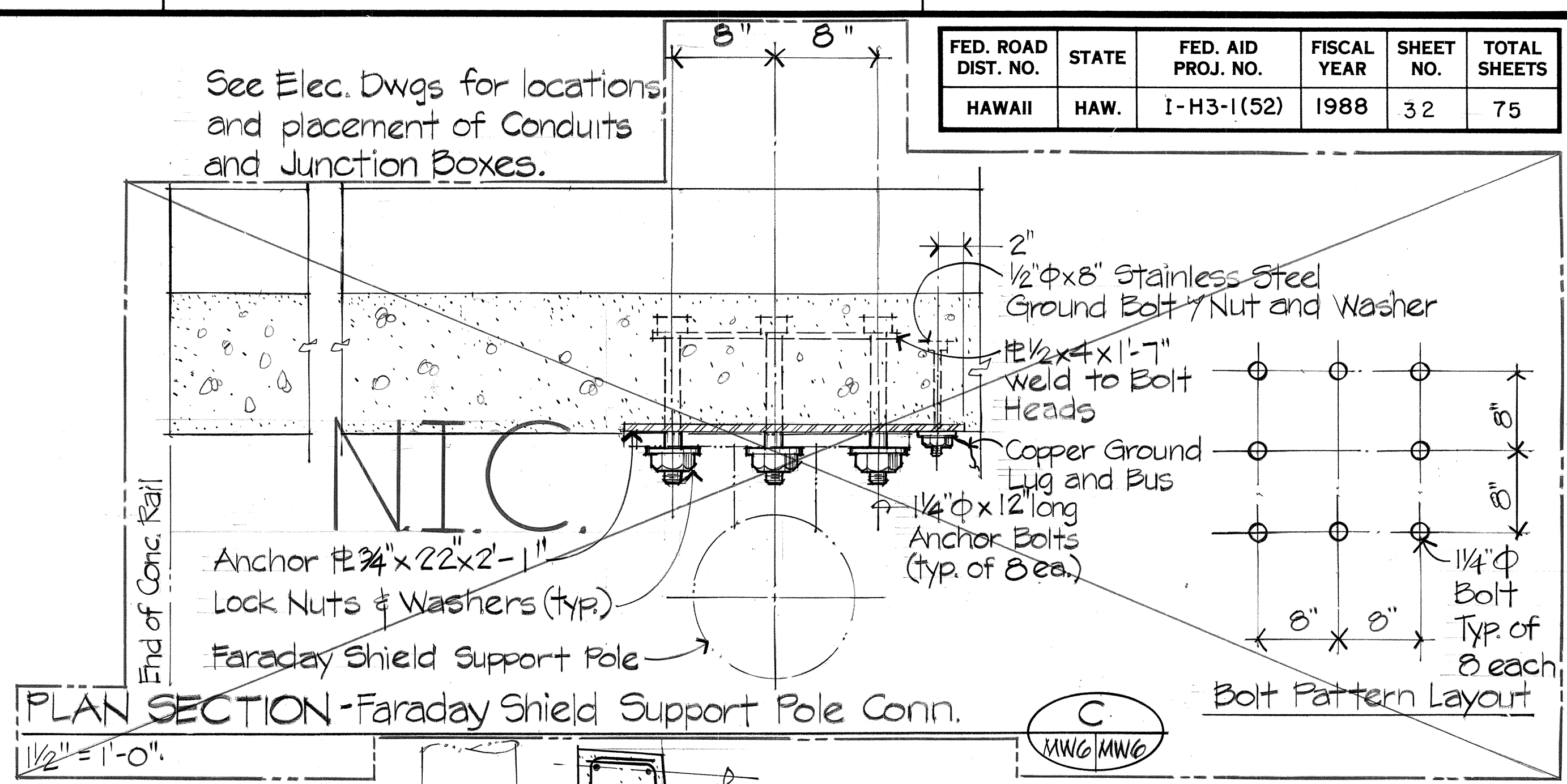
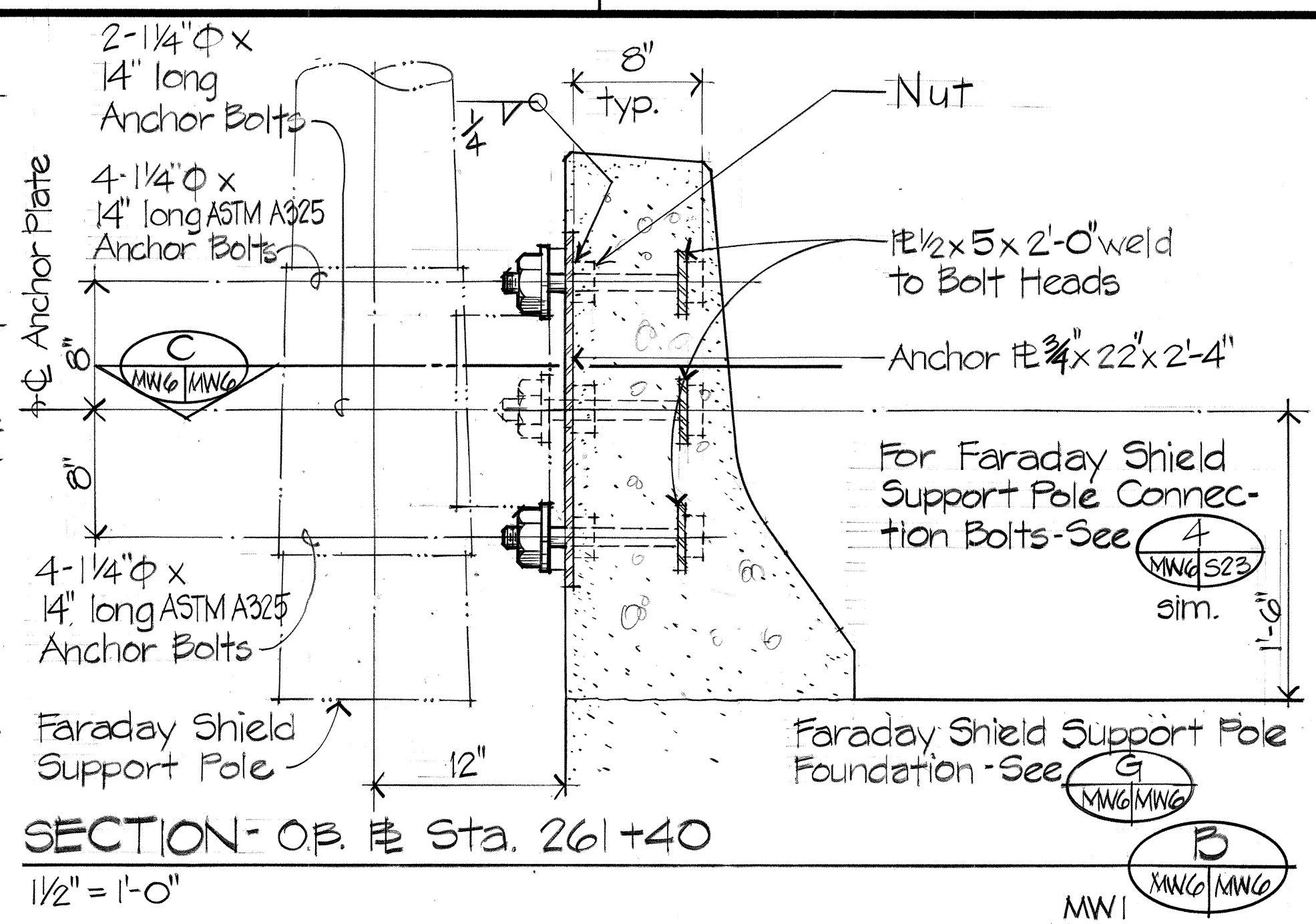
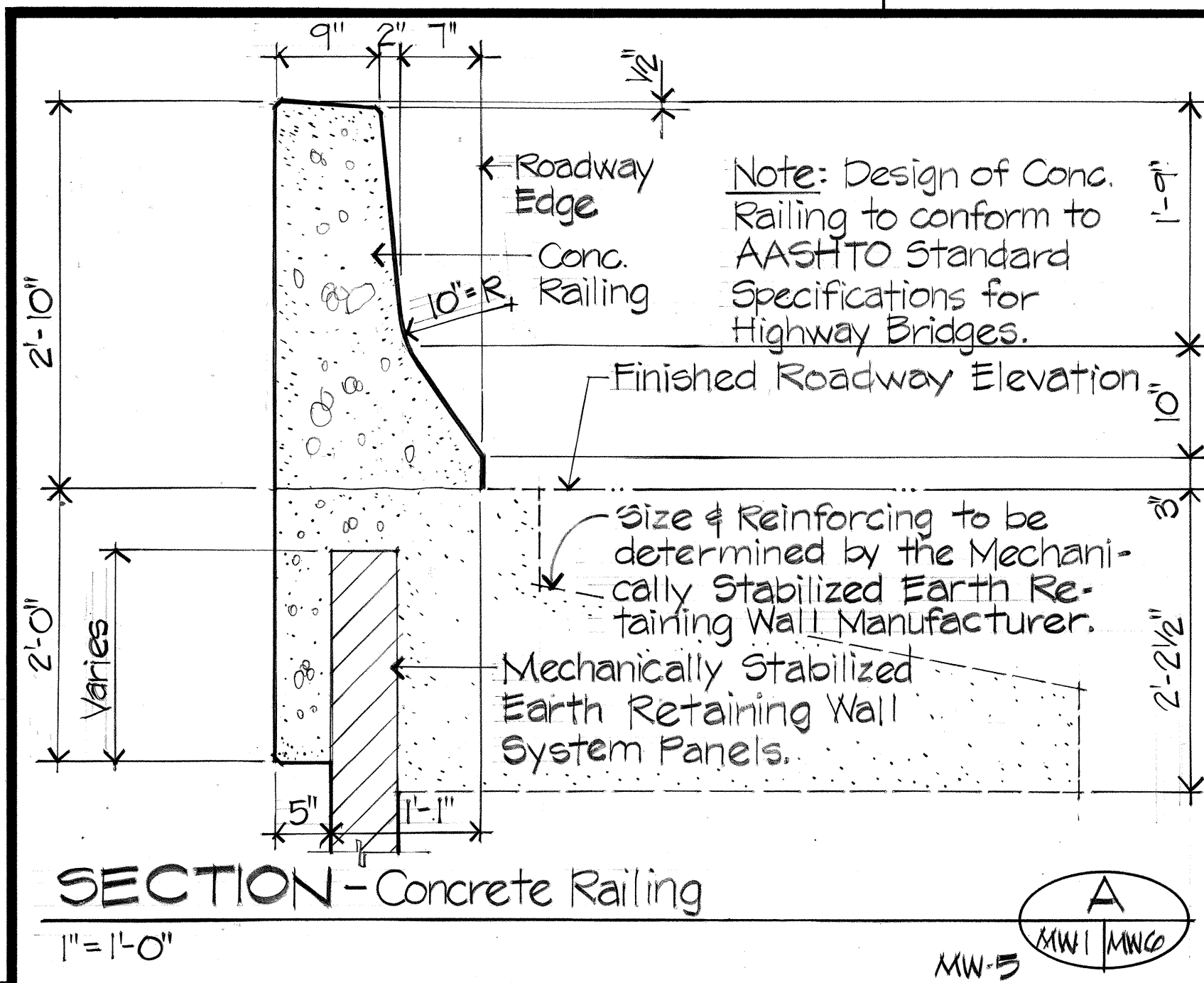
DATE	REVISION
4/6/90	Revised Quantities
9/12/89	Revised Quantities
9/11/89	Revised Typical Section
1/10/89	Quantities Revised, Limits of Excavation Revised, Notes 2 & 4 Revised, Note 11 Added

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
MSERW SYSTEM TYPICAL SECTION	
INTERSTATE ROUTE H-3 F.A.I. PROJECT NO. I-H3-1(52)	
SCALE: AS NOTED	DATE: JULY 1988
SHEET No. MW-5 OF 8 SHEETS	

AS BUILT

C.O. ADD. 31

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(52)	1988	32	75



SECTION (O.B. Sta. 261+05 & 261+40)
Notes:

- Center 12'-0" long Footing about ϕ of Pole.
- Faraday Shield Post Footings on MSERW shall be incidental to Concrete Railing on MSERW.
- Location and Details of Construction and Expansion Joints in Concrete Railing and Concrete Cap to be submitted to the Engineer for Approval.

1/10/89 Notes 2 & 3 Added, Details C, E, F, & I Deleted, Details A, B, G, & H Revised.

DATE REVISION

AS BUILT

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

MSERW SYSTEM-DETAILS

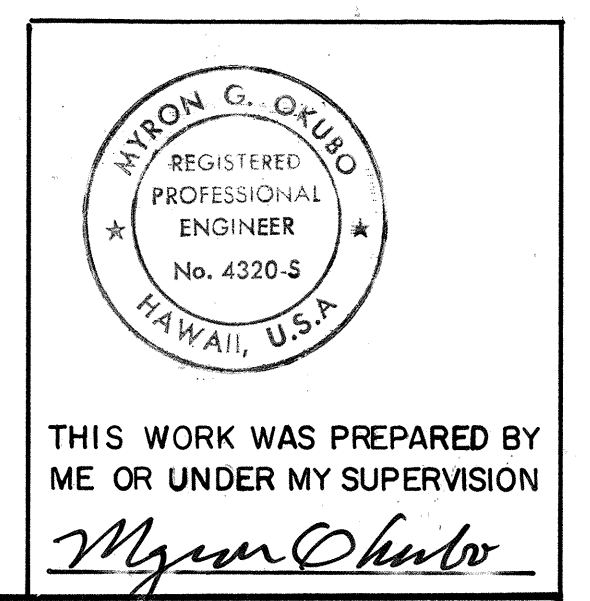
INTERSTATE ROUTE H-3
 F.A.I. PROJECT NO. I-H3-1(52)

SCALE: AS NOTED DATE: JULY 1988

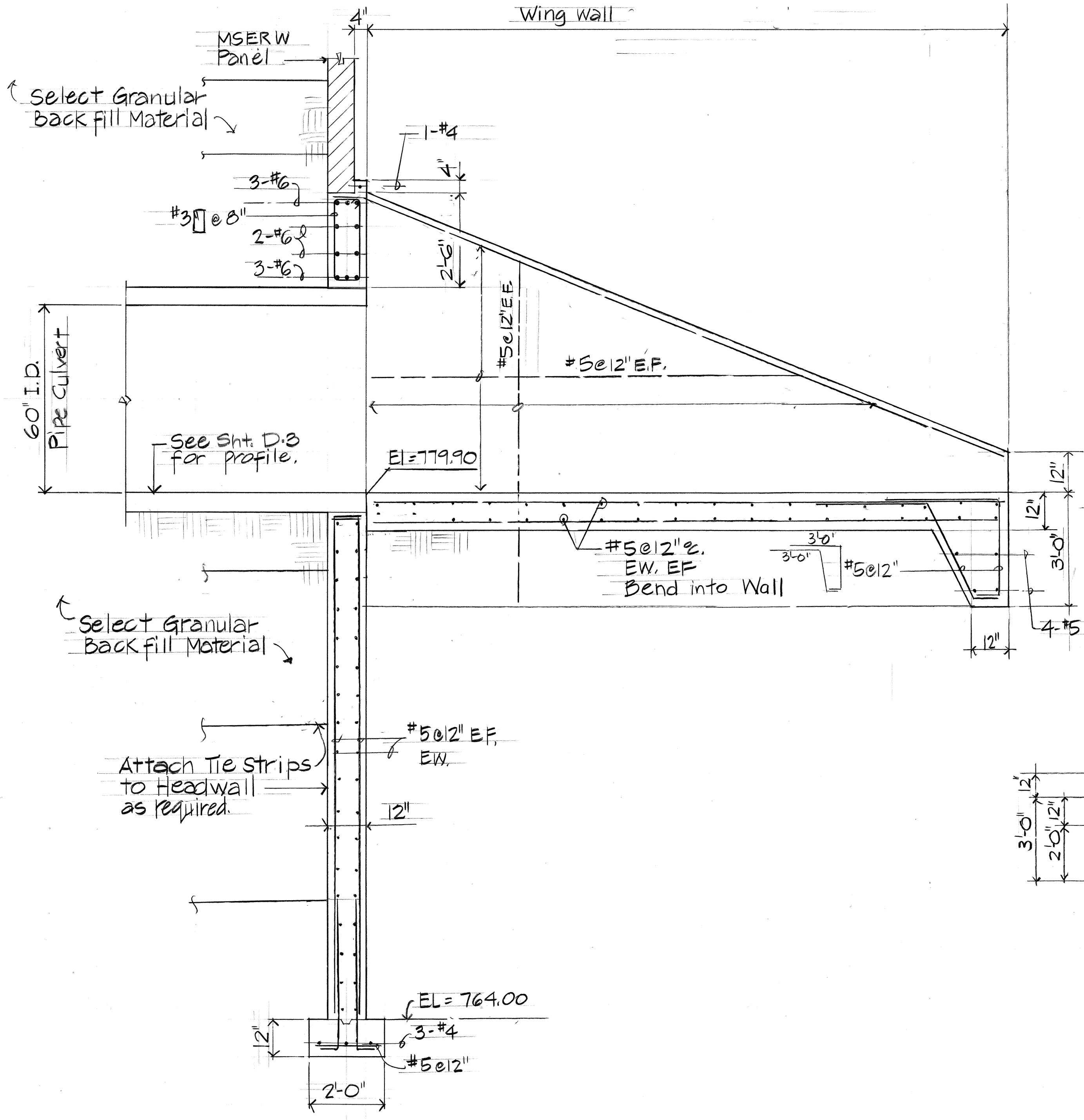
SHEET NO. MW-6 OF 8 SHEETS

ADD. 32

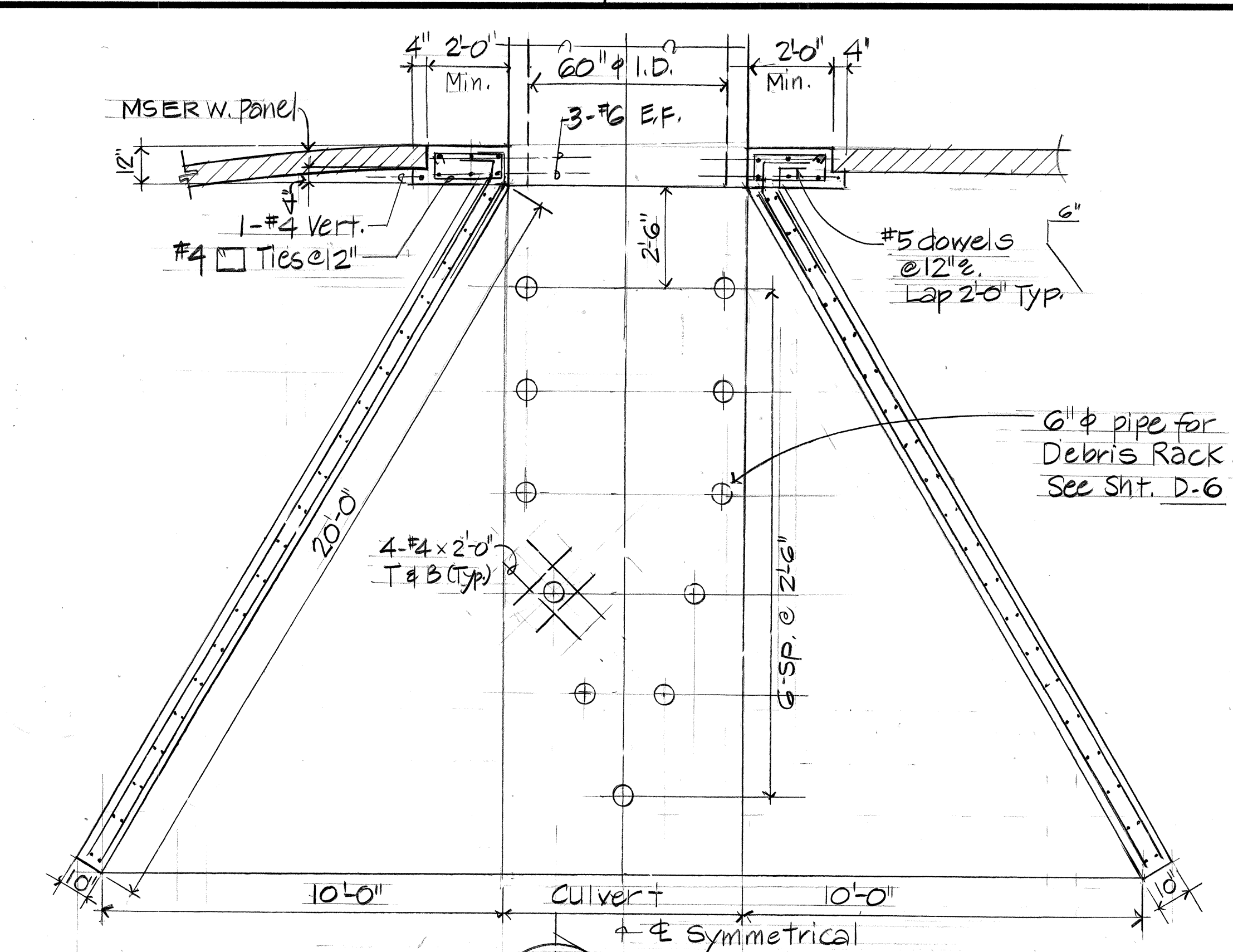
SURVEY PLOTTED BY	DATE
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QUANTITIES BY	
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ORIGINAL PLAN	
NOTE BOOK	
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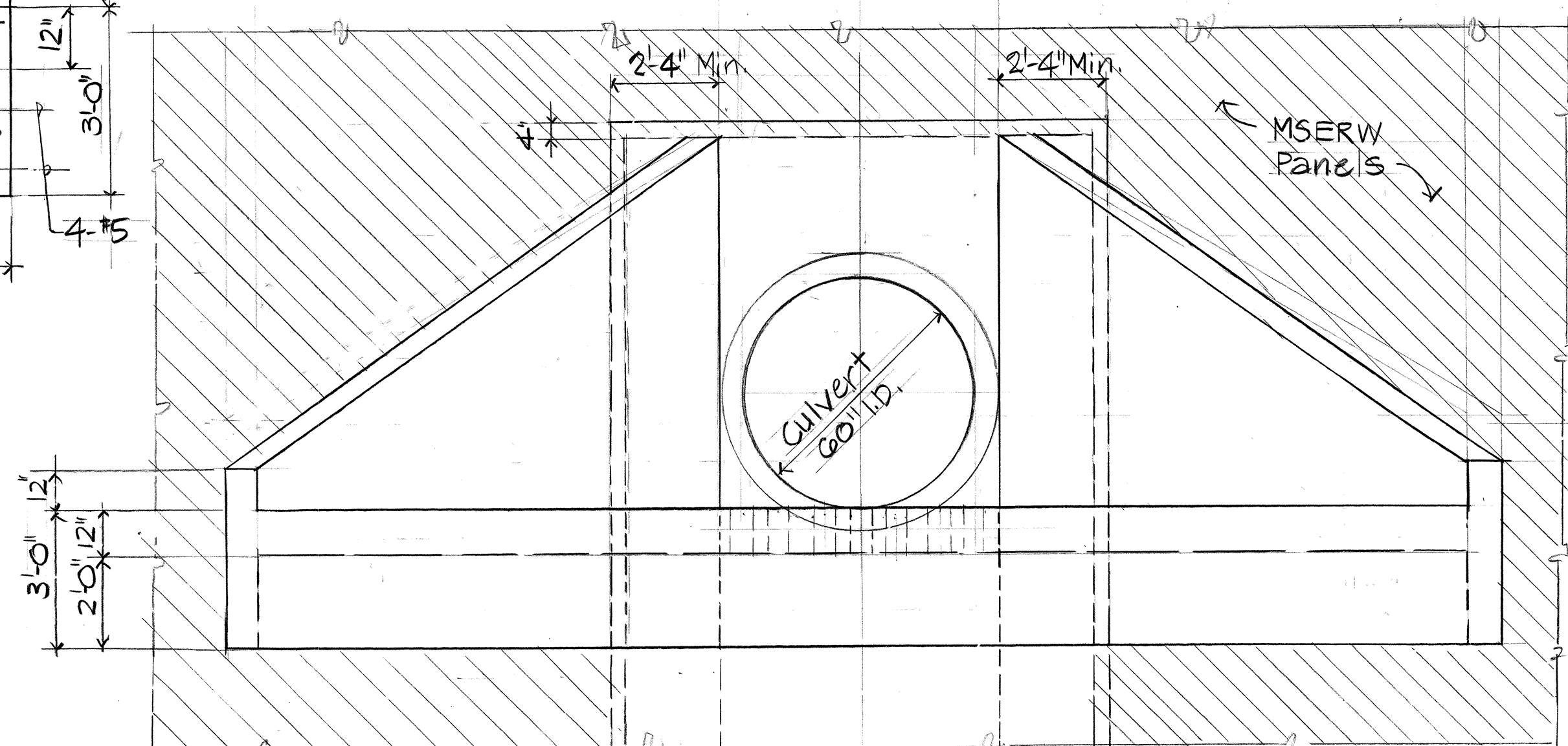
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I - H3 - 1(52)	1988	33	75



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

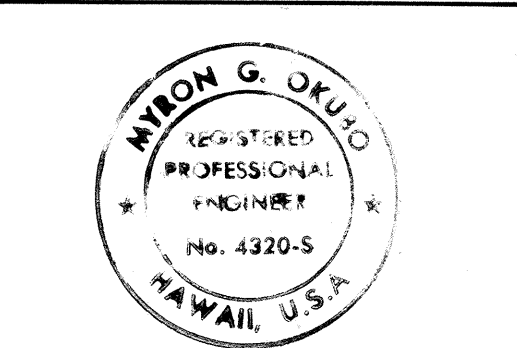


PLAN
Scale: 3/8" = 1'-0"



FRONT ELEVATION B
Scale: 3/8" = 1'-0"

SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	



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Myron G. Okubo

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
HEADWALL AT O.B. STA. 258+26.58	
INTERSTATE ROUTE H-3 F.A.I. PROJECT NO. I-H3-1(52)	
SCALE:	DATE: JULY 1988
SHEET NO. MW-7 OF 8 SHEETS	

9/1/89	Delete Sheet
1/10/89	Plan Revised, Elevation Clarified
DATE	REVISION

AS BUILT

ADD.33

