DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.
04	Ala	880	16.2/18.5	162

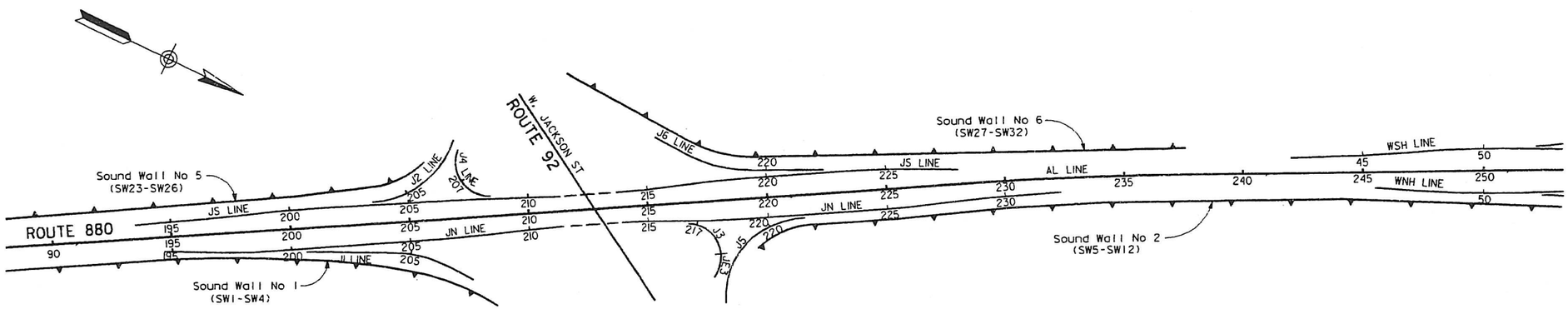
REGISTERED CIVIL ENGINEER

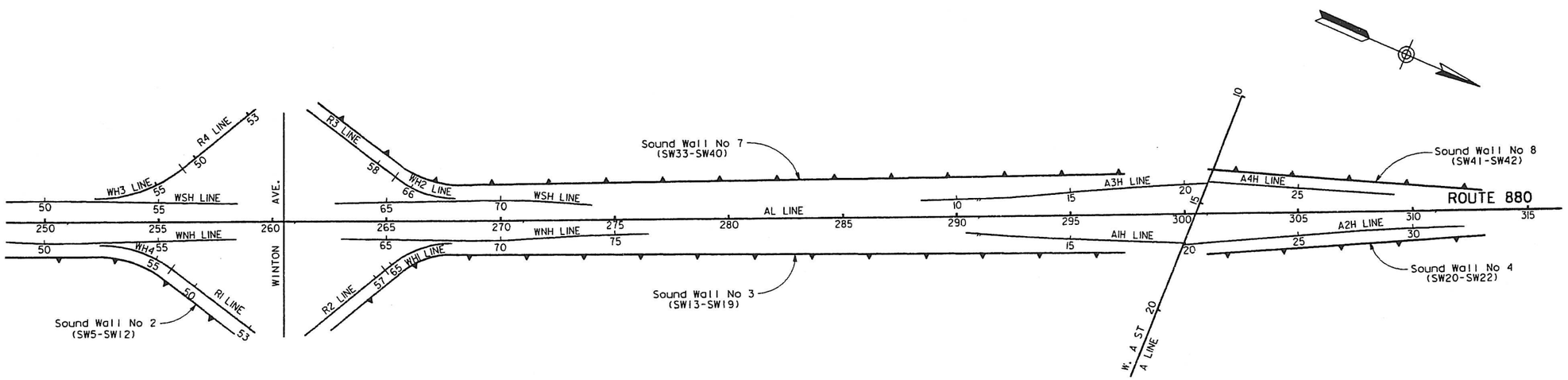
6-12-89

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
R.L. Richardson
No. C35355
Exp. 9-30-91
CIVIL
STATE OF CALIFORNIA

REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN





SOUND WALL LINE INDEX

NO SCALE

SW-0

DATE REVISED

CHECKED BY

S. M. JUNG

PROJECT DEVELOPMENT

SOUND WALLS

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU 04173 EA 123141

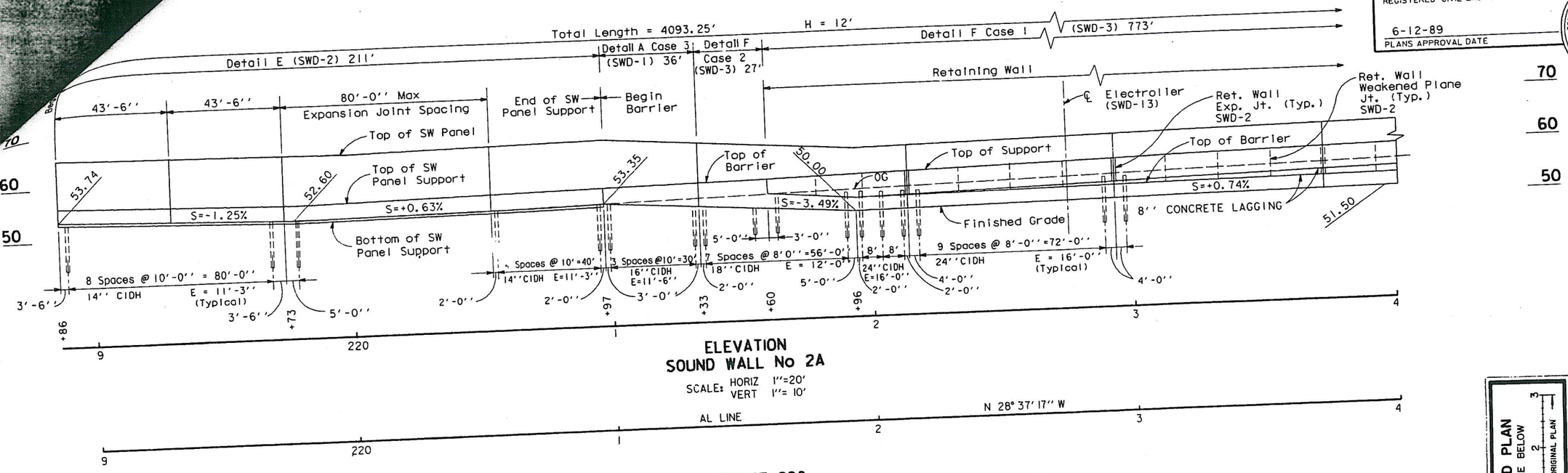
Ret Wall "F"

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Ala	880	16.2/18.5	167	290

REGISTERED CIVIL ENGINEER

6-12-89
PLANS APPROVAL DATE

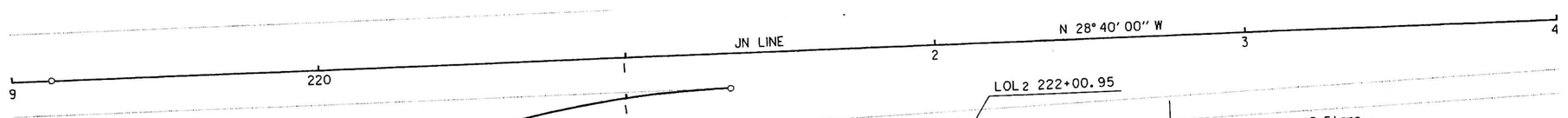
REGISTERED PROFESSIONAL ENGINEER P.L. Richardson No. C35355 Exp. 9-30-91 CIVIL STATE OF CALIFORNIA

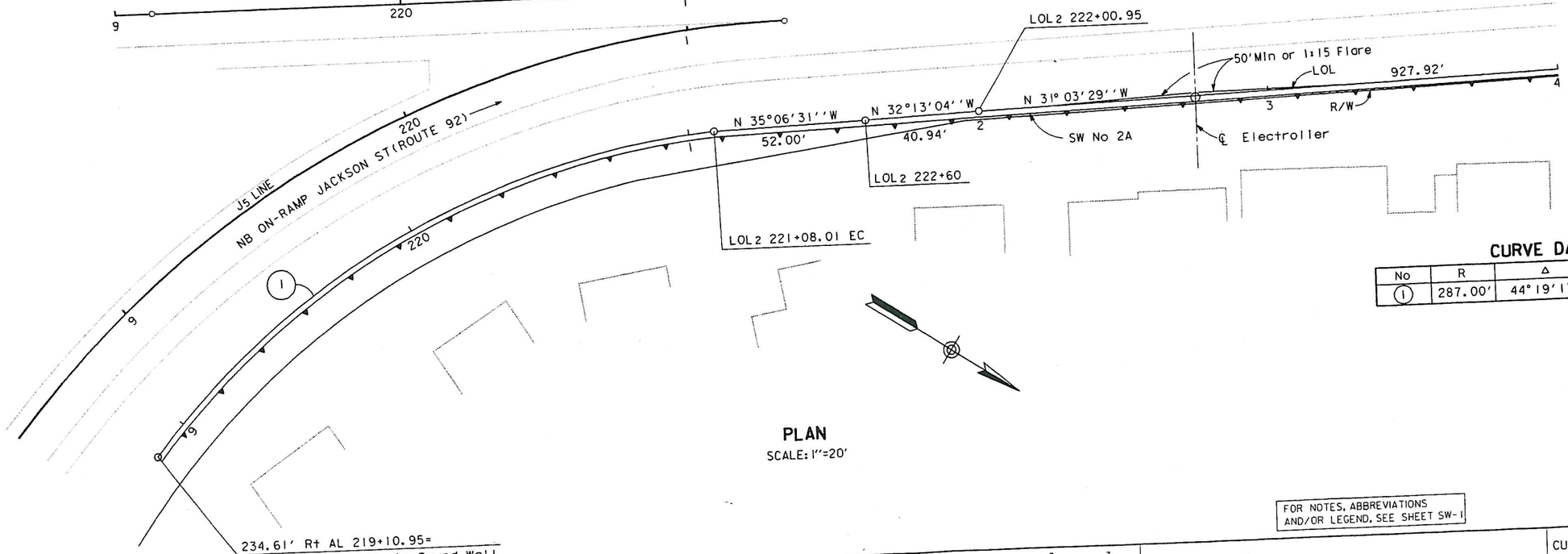


ELEVATION
SOUND WALL No 2A

SCALE: HORIZ 1''=20'
VERT 1''= 10'

NB ROUTE 880





PLAN
SCALE: 1''=20'

CURVE DATA

No	R	Δ	T	L
1	287.00'	44° 19' 17''	116.89'	222.01'

REDUCED PLAN USE SCALE BELOW 0 1 2 3 3 INCHES ON ORIGINAL PLAN

FOR NOTES, ABBREVIATIONS AND/OR LEGEND, SEE SHEET SW-1

SOUND WALL PLAN
SCALE: AS SHOWN

SW-5

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU 04173 | EA 123141

T4AVAX::ZGA1:[331,3]4123141W05.DGN;

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
PROJECT DEVELOPMENT

PROJECT ENGINEER S. M. JUNG
DESIGNED BY
CHECKED BY
DATE REVISED

DIST	COUNTY	ROUTE
04	Ala	880

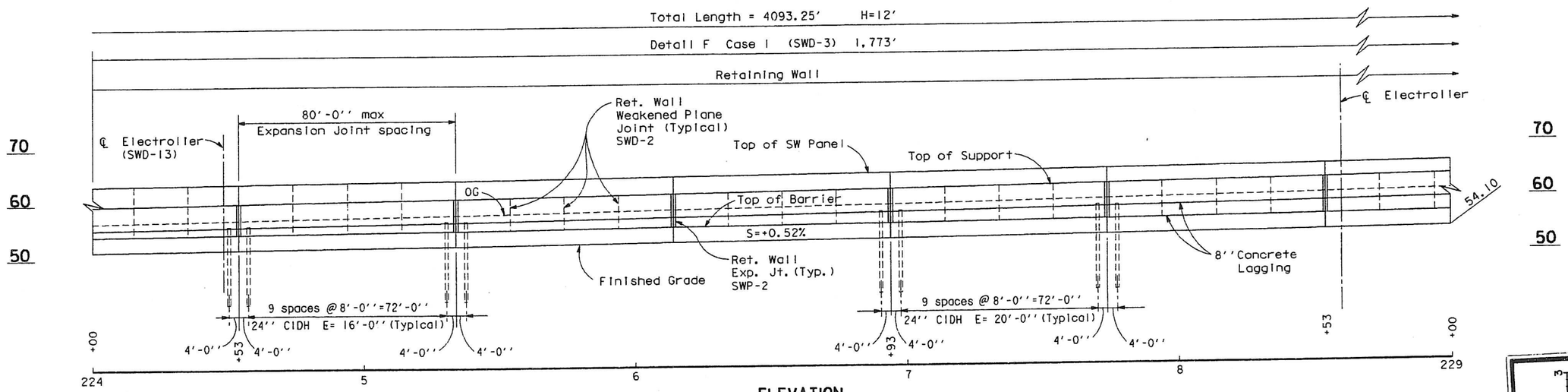
REGISTERED CIVIL ENGINEER

6-12-89

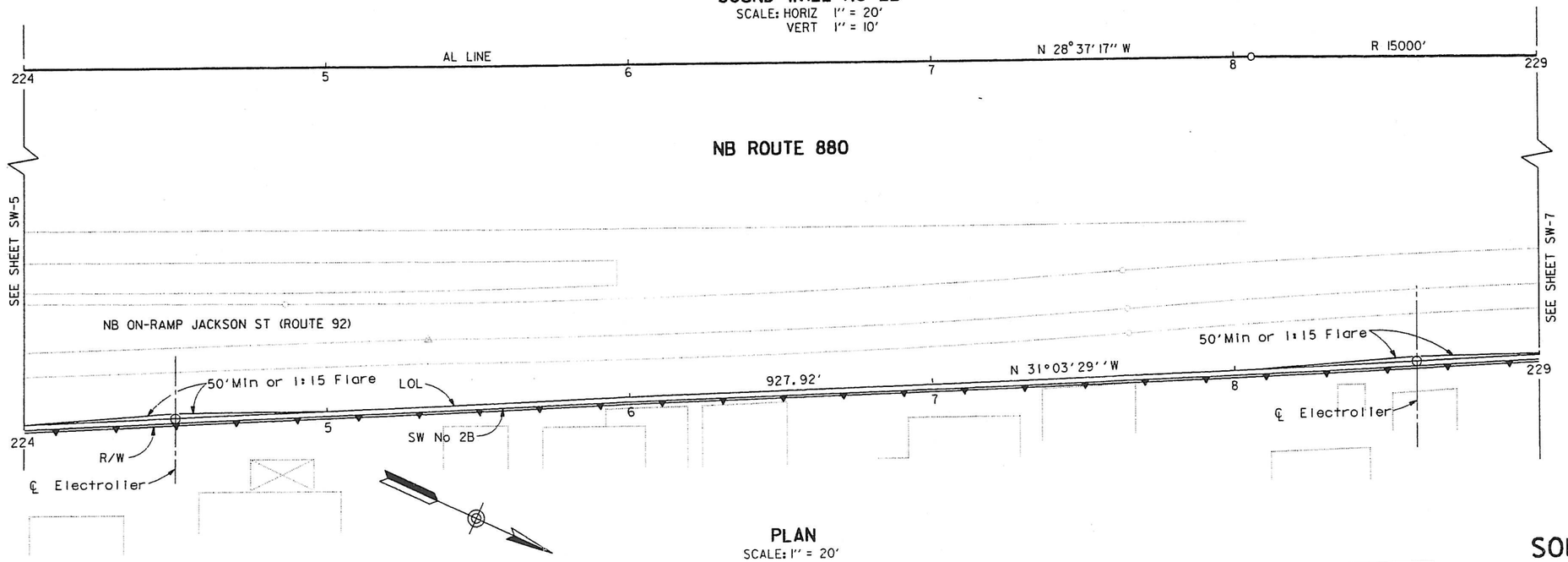
PLANS APPROVAL DATE

DATE REVISED

CHECKED BY



ELEVATION
SOUND WALL No 2B
SCALE: HORIZ 1″ = 20′
VERT 1″ = 10′



PLAN
SCALE: 1″ = 20′

REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN

FOR NOTES, ABBREVIATIONS AND/OR LEGEND, SEE SHEET SW-1

SOUND WALL PLAN

SCALE: AS SHOWN

SW-6

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU 04173 EA 123141

T4AVAX::ZFA2:[331,2]4123141W06.DGN;1

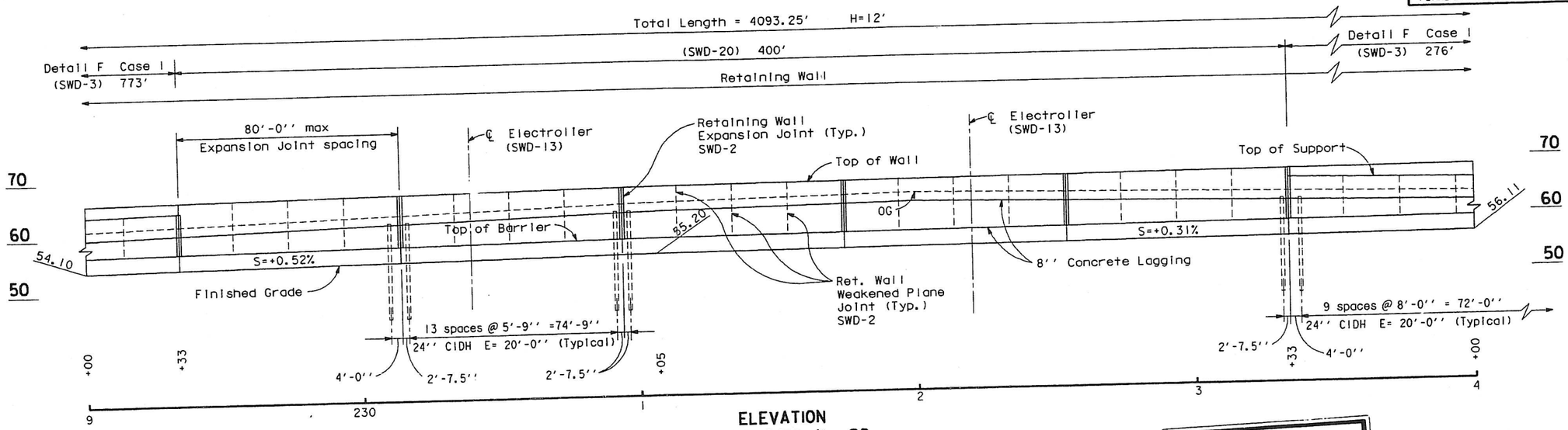
IC-OE-92-PF (REV. 1/86)

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Ala	880	16.2/18.5	169	290

D. Richardson
REGISTERED CIVIL ENGINEER

6-12-89
PLANS APPROVAL DATE

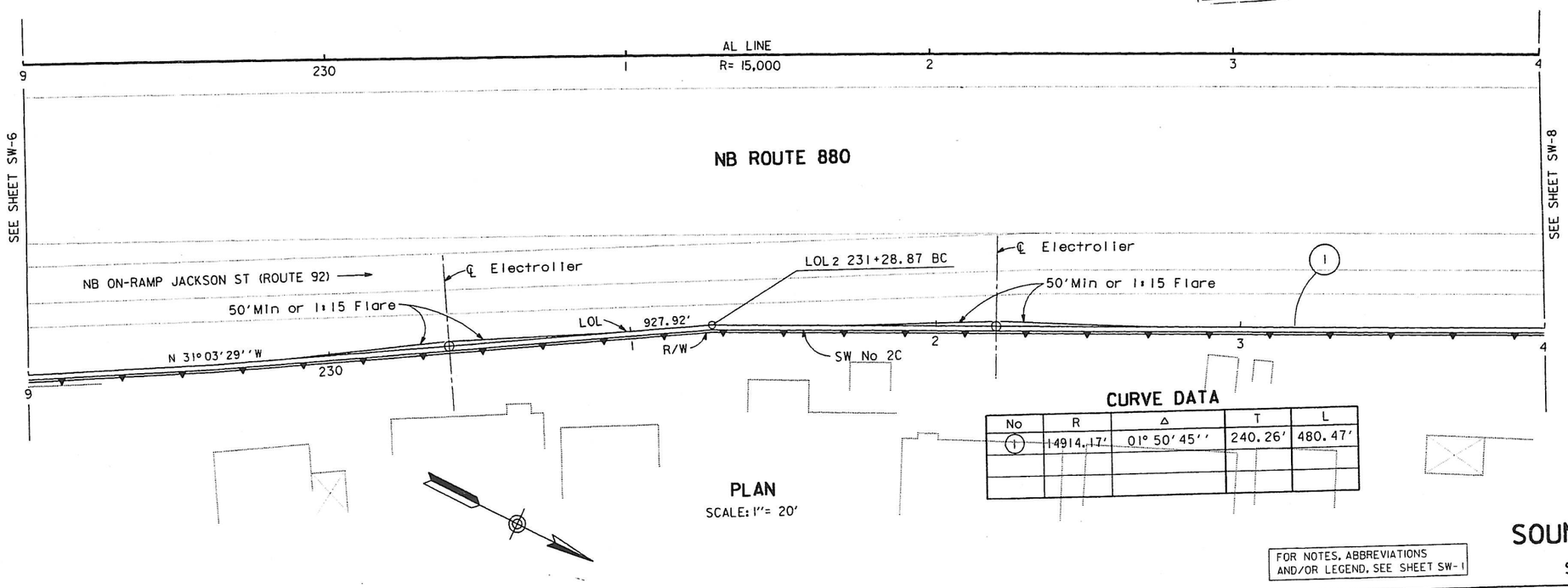
REGISTERED PROFESSIONAL ENGINEER
D.L. Richardson
No. C35355
Exp. 9-30-91
CIVIL
STATE OF CALIFORNIA



ELEVATION
SOUND WALL No 2C

SCALE: HORIZ 1''= 20'
VERT 1''= 10'

REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN



PLAN
SCALE: 1''= 20'

CURVE DATA

No	R	Δ	T	L
1	14914.17'	01° 50' 45''	240.26'	480.47'

FOR NOTES, ABBREVIATIONS AND/OR LEGEND, SEE SHEET SW-1

SOUND WALL PLAN
SCALE: AS SHOWN **SW-7**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT
Caltrans

PROJECT ENGINEER S. M. JUNG

CALCULATED/DESIGNED BY | CHECKED BY | DATE | REVISED BY | DATE REVISED

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU 04173 | EA 123141

T4AVAX:7GAI:[331,3341]2314W07.DGN:1

FORM DC-OE-92-PF (REV. 1/86)

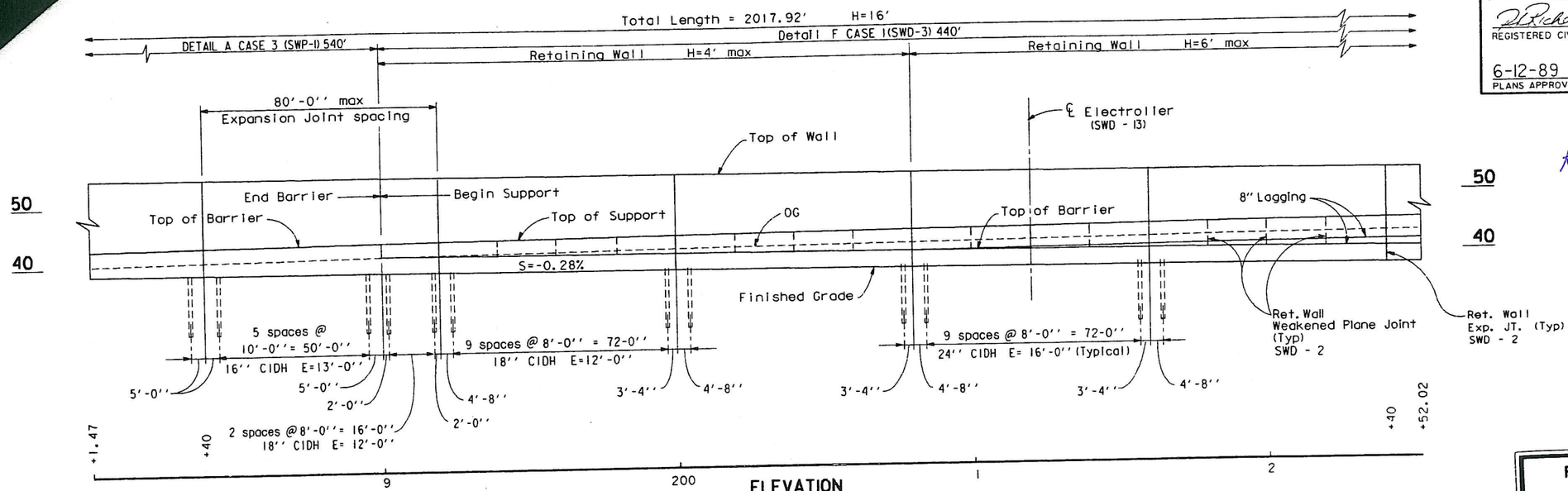
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Ala	880	16.2/18.5	187	290

D L Richardson
REGISTERED CIVIL ENGINEER

6-12-89
PLANS APPROVAL DATE

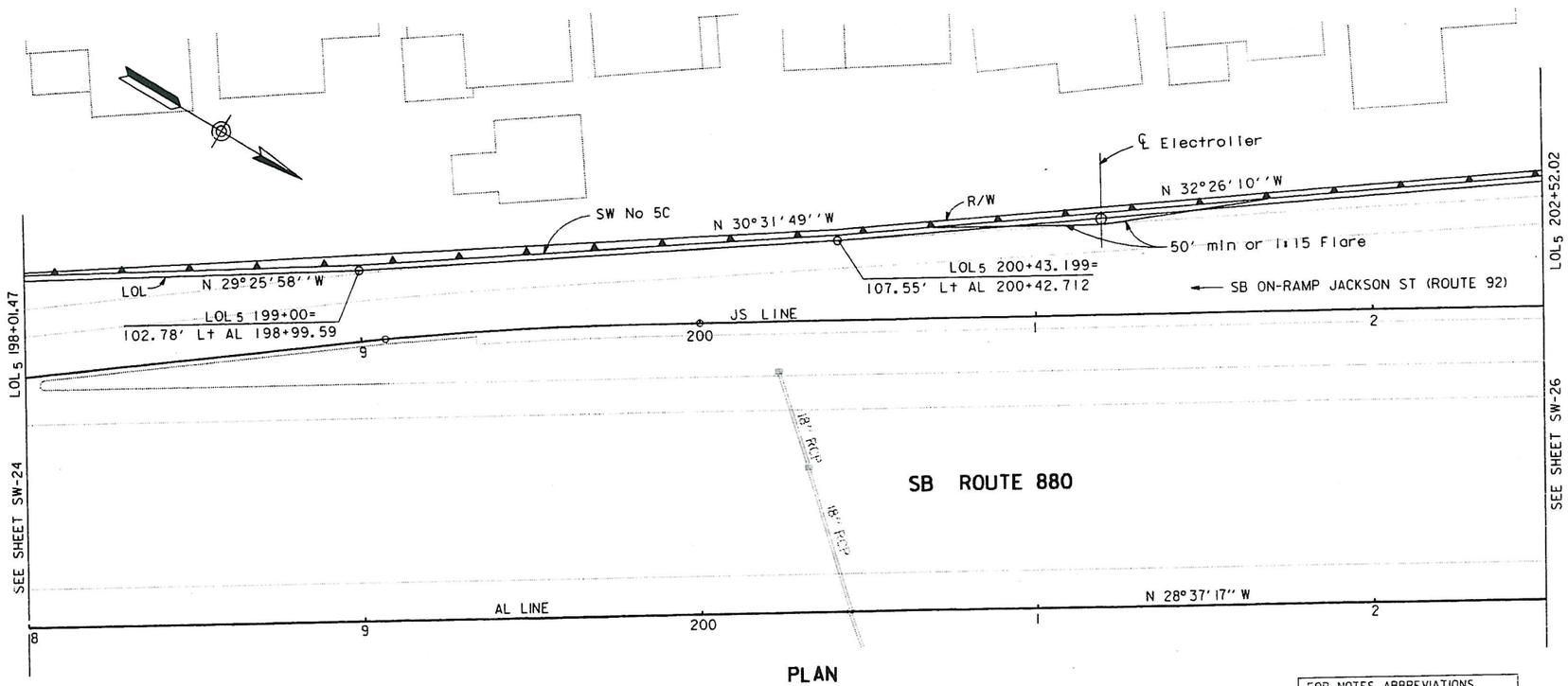
REGISTERED PROFESSIONAL ENGINEER
D.L. Richardson
No. C35355
Exp. 9-30-91
CIVIL
STATE OF CALIFORNIA

Ret Wall G "



ELEVATION
SOUND WALL No 5C
SCALE: HORIZ 1"= 20'
VERT 1"= 10'

REDUCED PLAN
USE SCALE BELOW
0 2 3
3 INCHES ON ORIGINAL PLAN



PLAN
SCALE: 1"=20'

FOR NOTES, ABBREVIATIONS AND/OR LEGEND, SEE SHEET SW-1

SOUND WALL PLAN
SCALE: AS SHOWN
SW-25

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT
PROJECT ENGINEER S. M. JUNG
CALCULATED/DESIGNED BY
CHECKED BY
DATE
REVISED BY
DATE REVISED

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU 04173 EA 123141

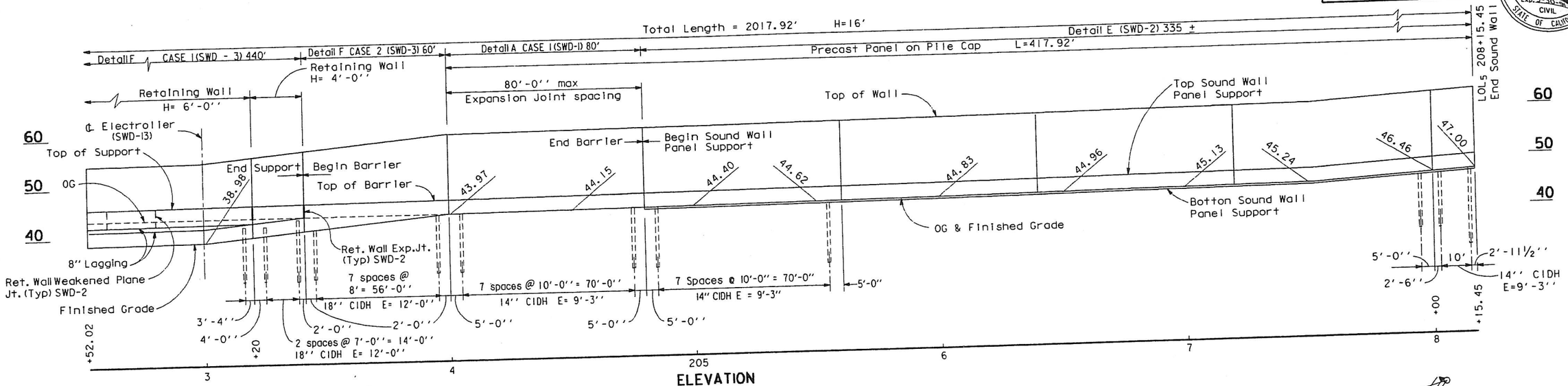
T4AVAX::ZGAI:[331,334]2314W25.DGN;1

FORM DC-OE-92-PF (REV. 1/86)

DIST	COUNTY	ROUTE
04	Ala	880

REGISTERED CIVIL ENGINEER

6-12-89
PLANS APPROVAL DATE

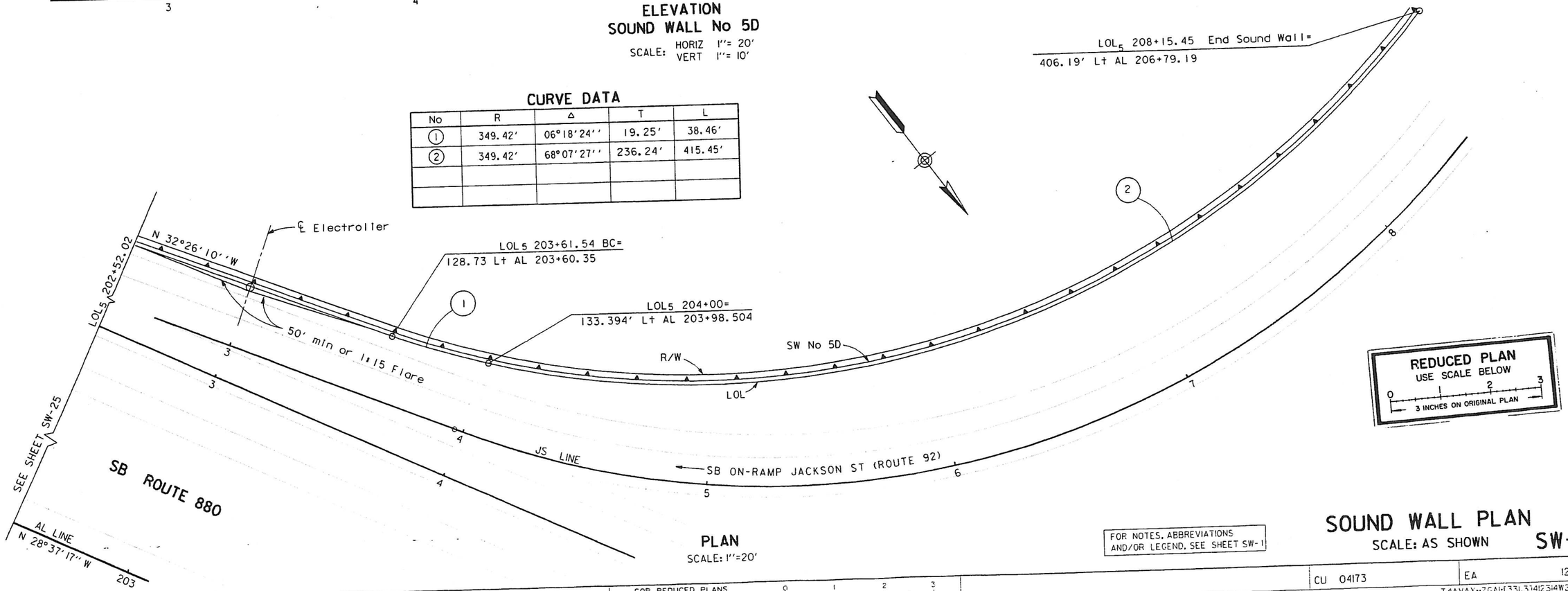


ELEVATION
SOUND WALL No 5D

SCALE: HORIZ 1''= 20'
VERT 1''= 10'

CURVE DATA

No	R	Δ	T	L
1	349.42'	06°18'24''	19.25'	38.46'
2	349.42'	68°07'27''	236.24'	415.45'



PLAN
SCALE: 1''=20'

REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN

FOR NOTES, ABBREVIATIONS AND/OR LEGEND, SEE SHEET SW-1

SOUND WALL PLAN
SCALE: AS SHOWN

SW-26

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU 04173 | EA 123141

T4AVAX::ZGA1:[331.3]412314W26.DGN;1

DATE REVISED
CHECKED BY
S. M. JUNG
PROJECT DEVELOPMENT
PROJECT DEVELOPMENT

-OE-92-PF (REV. 1/86)

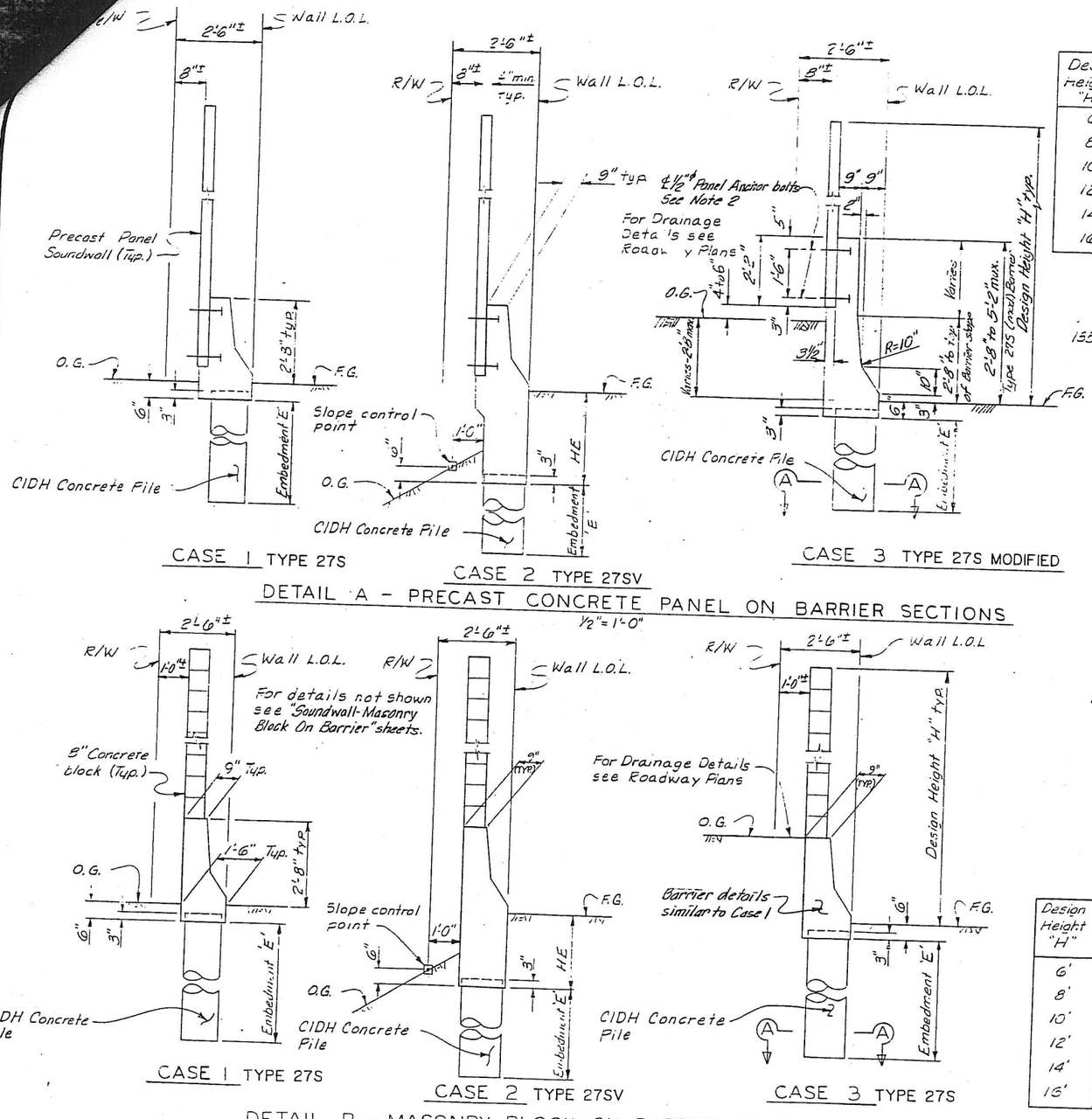
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO	TOTAL SHEETS
04	Ala	880	16.2/18.5	207	290

R. J. Zelinski
REGISTERED ENGINEER - CIVIL

6-12-89
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER R.J. ZELINSKI No. 17729 Exp. 6-30-89 CIVIL STATE OF CALIFORNIA

For details not shown see "Soundwall-PC Concrete Panel On Barrier" sheets.



CASE 1 TYPE 27S

CASE 2 TYPE 27SV

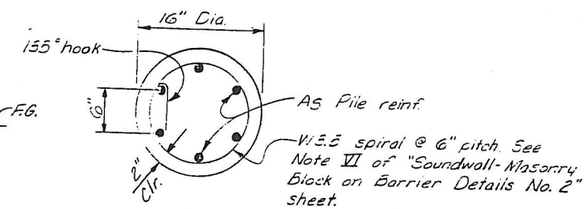
CASE 3 TYPE 27S MODIFIED

DETAIL 'A' - PRECAST CONCRETE PANEL ON BARRIER SECTIONS

1/2" = 1'-0"

CASE 3 PC PANEL

Design Height "H"	SP 300 Spacing "S"	SP 300 Embed "E"	SP 300 Pile Reinf. As	SP 450 Spacing "S"	SP 450 Embed "E"	SP 450 Pile Reinf. As
6'	10'-0"	10'-0"	6-#6	10'-0"	9'-0"	6-#6
8'	10'-0"	10'-6"	6-#6	10'-0"	9'-6"	6-#6
10'	10'-0"	11'-0"	6-#6	10'-0"	10'-0"	6-#6
12'	10'-0"	11'-6"	6-#7	10'-0"	11'-0"	6-#6
14'	10'-0"	12'-0"	6-#7	10'-0"	11'-6"	6-#6
16'	10'-0"	13'-0"	6-#7	10'-0"	12'-0"	6-#7



SECTION A-A
No Scale

DETAIL 'A'- PC CONCRETE PANEL ON BARRIER

	From Station*	To Station*
Case 1	LOL3 204+00	LOL5 204+80
Case 2	LOL1 190+40	LOL1 193+03
	LOL2 238+93	LOL2 248+53
	LOL5 190+40	LOL5 193+60
	LOL6 235+85	LOL6 238+25
Case 3	LOL1 188+00	LOL1 190+40
	LOL2 220+97	LOL2 221+33
	LOL2 236+09	LOL2 238+93
	LOL2 248+53	LOL2 254+93
	LOL5 188+00	LOL5 190+40
	LOL5 193+60	LOL5 199+00
	LOL6 221+00	LOL6 222+25
	LOL6 233+45	LOL6 235+85

* See Note 1

DETAIL "B"- MASONRY BLOCK ON BARRIER

	From Station*	To Station*
Case 1	LOL7 298+96	LOL7 300+51
Case 2	LOL3 283+56	LOL3 297+36
	LOL4 302+73	LOL4 303+84
	LOL4 310+63	LOL4 313+13
	LOL7 268+56	LOL7 270+96
	LOL7 278+96	LOL7 290+96
	LOL7 297+76	LOL7 298+96
Case 3	LOL3 267+56	LOL3 283+56
	LOL4 301+10	LOL4 302+73
	LOL7 270+96	LOL7 278+96

*See Note 1.

REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN

Notes:
1. Stations are approximate only and must be verified in the field.
2. For Anchorage details see "Soundwall-P/C Concrete Panel On Barrier" sheets.
3. P/C on PC = Precast.

CASE 1 TYPE 27S

CASE 2 TYPE 27SV

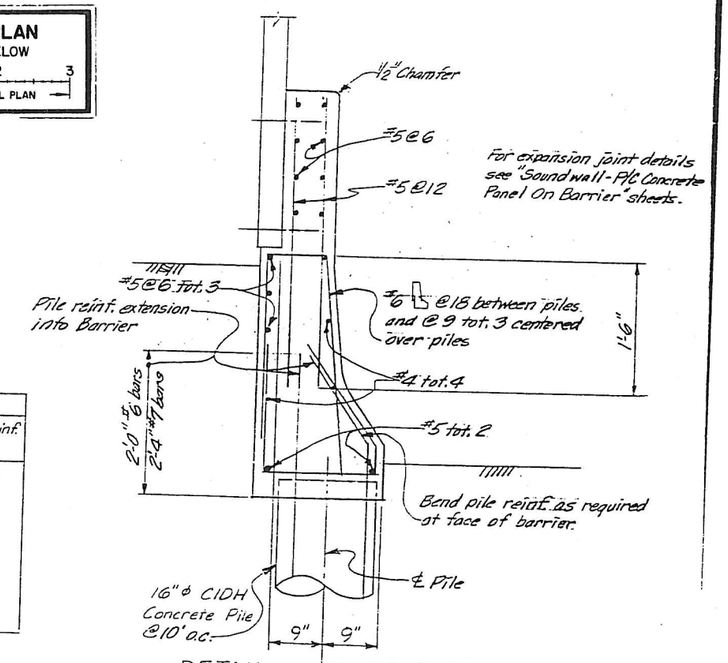
CASE 3 TYPE 27S

DETAIL B - MASONRY BLOCK ON BARRIER SECTIONS

1/2" = 1'-0"

CASE 3 MASONRY BLOCK

Design Height "H"	SP 300 Spacing "S"	SP 300 Embed "E"	SP 300 Pile Reinf. As	SP 450 Spacing "S"	SP 450 Embed "E"	SP 450 Pile Reinf. As
6'	10'-0"	9'-6"	6-#6	10'-0"	8'-0"	6-#6
8'	10'-0"	10'-0"	6-#6	10'-0"	8'-9"	6-#6
10'	10'-0"	10'-9"	6-#6	10'-0"	9'-6"	6-#6
12'	10'-0"	11'-6"	6-#6	10'-0"	10'-3"	6-#6
14'	10'-0"	12'-0"	7-#6	10'-0"	11'-0"	6-#6
16'	10'-0"	12'-9"	7-#7	10'-0"	11'-9"	6-#7



DETAIL A - CASE 3 REINF.
1" = 1'-0"

	By	Date	Checked	Date
DESIGN	Kelly A. Hedlin	11/88	E. Tolentino	12/88
DETAILS	M. Moreno	11/88	E. Tolentino	12/88
QUANTITIES				

State of CALIFORNIA DEPARTMENT OF TRANSPORTATION

DIVISION OF STRUCTURES STRUCTURE DESIGN 4
Kelly A. Hedlin C042268
PROJECT ENGINEER REGISTERED CIVIL ENGINEER NO.

BRIDGE NO.
POST MILE

SOUNDWALL FOUNDATION DETAILS NO. 1

SWD-1

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU C4175
EA 225141

Disregard prints bearing earlier revision dates

REVISION DATES (PRELIMINARY STAGE ONLY)

SHEET OF

DS OSC 2135 (2/86)

DIST.	COUNTY	ROUTE
04	Ala.	880

R. J. Zelinski
REGISTERED ENGINEER - CIVIL

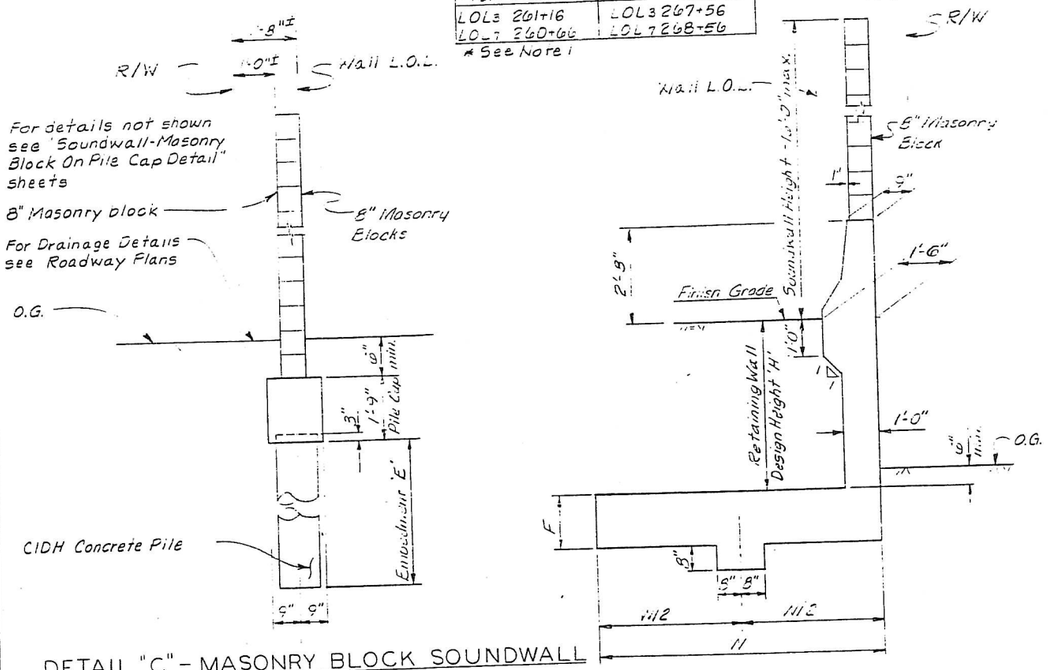
6-12-89
PLANS APPROVAL DATE

REGISTERED CIVIL ENGINEER No. 13... Exp. 6-30-... STATE OF CALIFORNIA

DETAIL "C"-MASONRY BLOCK ON PILE CAP

From Station *	To Station *
LOL3 261+16	LOL3 267+56
LOL7 260+66	LOL7 268+56

* See Note 1



DETAIL "C" - MASONRY BLOCK SOUNDWALL ON PILE CAP

1/2" = 1'-0"

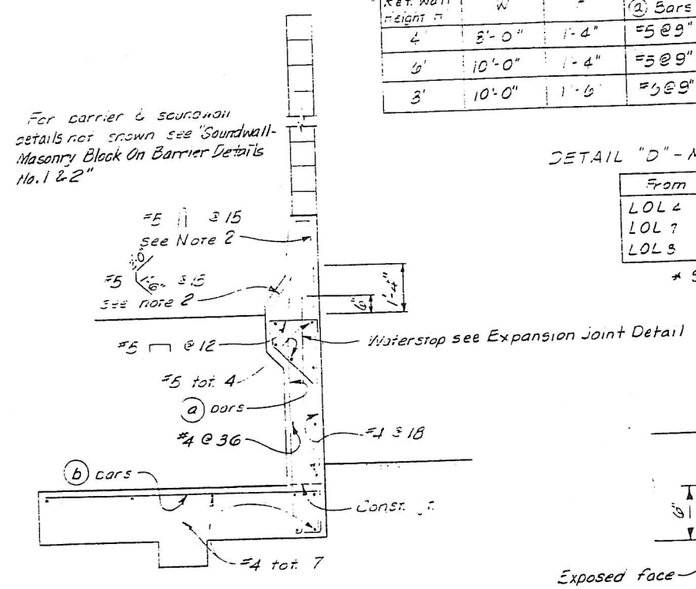
DETAIL "D"

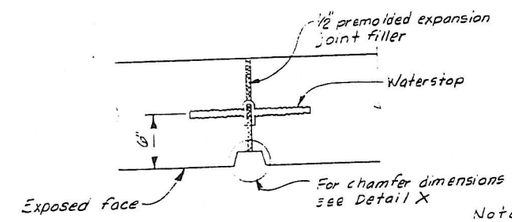
Ret. Wall Height H	W	F	Reinforcement (a) Bars	Reinforcement (b) Bars
4'	8'-0"	1'-4"	#5@9"	#5@9"
6'	10'-0"	1'-4"	#5@9"	#5@9"
3'	10'-0"	1'-6"	#5@9"	#5@9"

DETAIL "D"-MASONRY BLOCK ON RETAINING WALL

From Station *	To Station *
LOL4 303+84	LOL4 310+63
LOL7 290+96	LOL7 297+76
LOL8 304+24	LOL8 313+12

* See Note 1

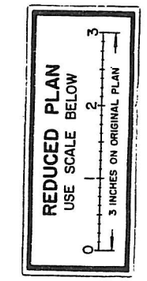




EXPANSION JOINT DETAIL

No Scale

Note: This detail supersedes (B0-3/3-4)



DETAIL "D" - MASONRY BLOCK SOUNDWALL ON RETAINING WALL FOOTING

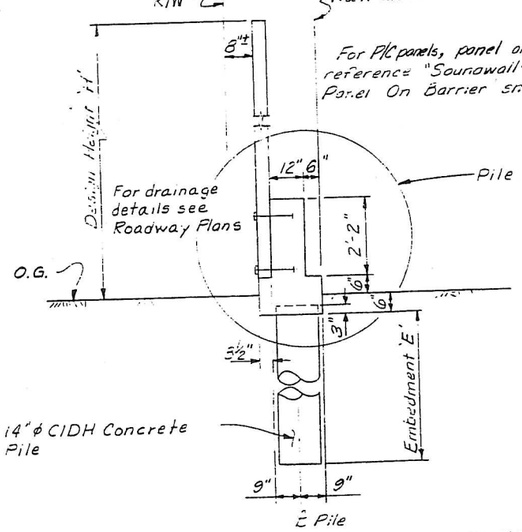
W127S BARRIER

1/2" = 1'-0"

Cut or burn every other front face horizontal bar

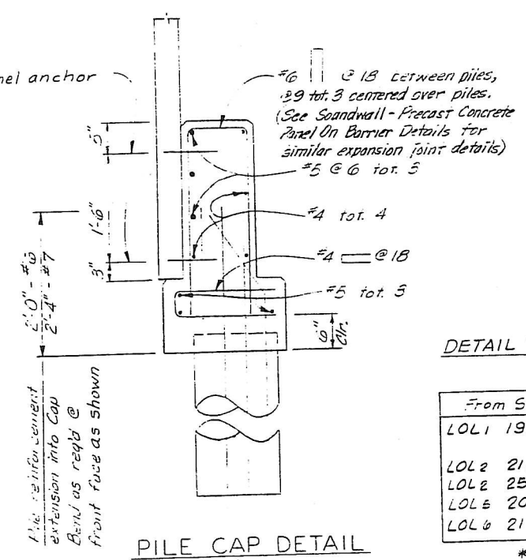
Notes:

1. Stations are approximate only and must be verified in the field.
2. Except @ 10", tot. 4 each side of joint.



DETAIL "E" - PRECAST CONCRETE PANEL ON PILE CAP

1/2" = 1'-0"



PILE CAP DETAIL

1" = 1'-0"

DETAIL "E" - PRECAST CONCRETE PANEL ON PILE CAP

From Station *	To Station *
LOL1 193+03	LOL1 209+60
LOL2 218+86	LOL2 220+97
LOL2 254+93	LOL2 259+79
LOL5 204+80	LOL5 208+15
LOL6 211+08	LOL6 221+00

* See Note 1

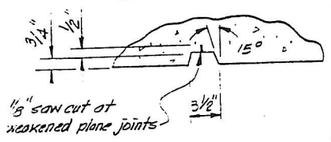
WEAKENED PLANES DETAIL

No Scale

See Detail X

Note: This detail supersedes (B0-3/3-2)

Joint may be formed with 1/8" hardboard and cut back to the root of the chamfer on the exposed face.



DETAIL X

No Scale

Design Data

GENERAL NOTES
LOAD FACTOR DESIGN

DESIGN: BRIDGE DESIGN SPECIFICATIONS (1983 AASHTO with Interims and Revisions by CALTRANS)

REINFORCED CONCRETE: $f_y = 60{,}000$ psi
$f'_c = 3{,}250$ psi
$n = 9$

FOOTING PRESSURE:	ALLOWABLE	DESIGN
(Tons per SF)	1.5	1.5

SWD-2

DESIGN	B. Kelly A. Fitter 11/88	Checker	E. Tolentino 12/88
DETAILS	B. M. Moreno 11/88	Checker	E. Tolentino 12/88
QUANTITIES	B.	Checker	

State of CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF STRUCTURES
STRUCTURE DESIGN 4

Kelly A. Fitter CE-22668
PROJECT ENGINEER — REGISTERED CIVIL ENGINEER NO.

CU 04173
EA 123141

BRIDGE NO.
POST MILE

SOUNDWALL FOUNDATION DETAILS NO. 2

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

Disregard prints bearing earlier revision dates

REVISION DATES (PRELIMINARY STAGE ONLY)

SHEET OF

CS 050 2139 (2/86)

LYLE B. OEHLER

LANDSCAPE ARCHITECTURE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL NO. SHEETS
04	Ala	880	16.2/18.5	209	290

R.O. Zelinski
REGISTERED ENGINEER - CIVIL
6-12-89
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER R. J. ZELINSKI No. 17729 Exp. 6-30-89 CIVIL STATE OF CALIFORNIA

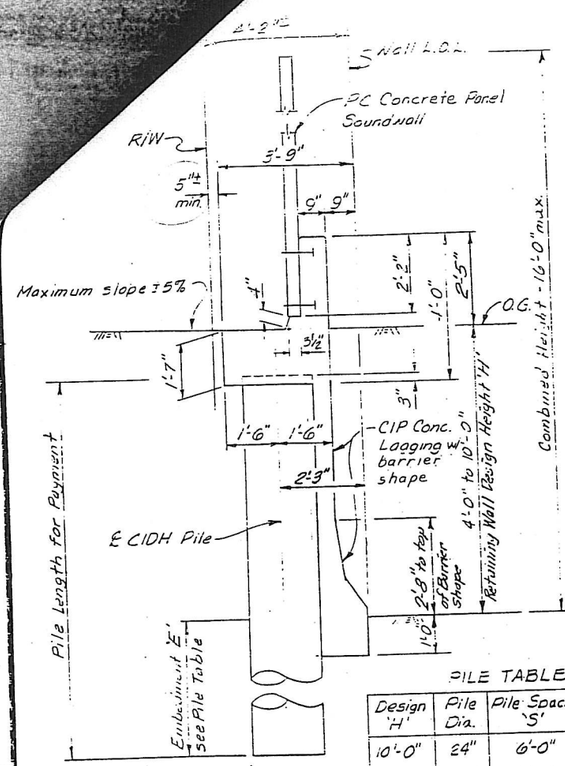
REDUCED PLAN USE SCALE BELOW 0 1 2 3 INCHES ON ORIGINAL PLAN

DETAIL F - PRECAST CONCRETE PANEL ON RETAINING WALL

	FROM	STATION *	TO	STATION *
CASE 1	LOL_2	221+60	LOL_2	236+09
	LOL_5	199+00	LOL_5	203+40
	LOL_6	222+25	LOL_6	233+45
CASE 2	LOL_2	221+35	LOL_2	221+60
	LOL_5	203+40	LOL_5	204+00

* STATIONS ARE APPROXIMATE ONLY AND MUST BE VERIFIED IN THE FIELD.

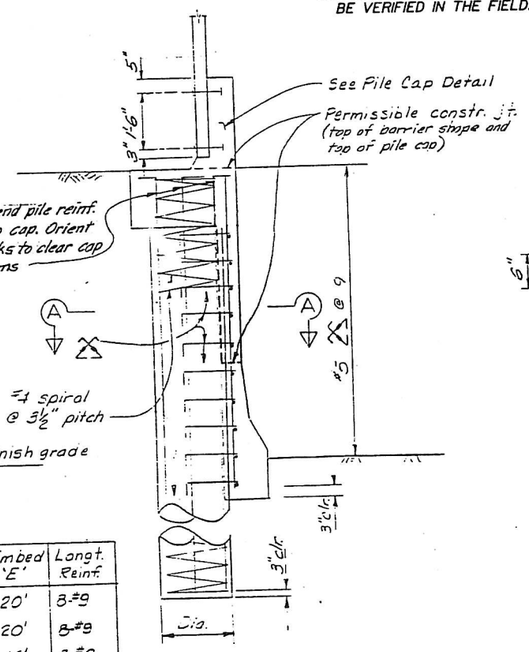
For PC Concrete Panel and panel anchorage details see "Soundwall - Precast Concrete Panel On Barrier" sheets.



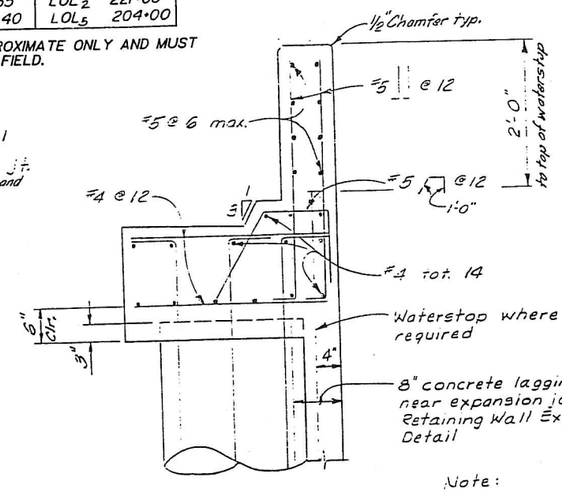
CASE 1 - TYPICAL SECTION
½" = 1'-0"

PILE TABLE

Design 'H'	Pile Dia.	Pile Spacing 'S'	Embed 'E'	Longit. Reinf.
10'-0"	24"	6'-0"	20'	8-#9
8'-0"	24"	8'-0"	20'	8-#9
6'-0"	24"	8'-0"	16'	8-#9
4'-0"	18"	8'-0"	12'	6-#7

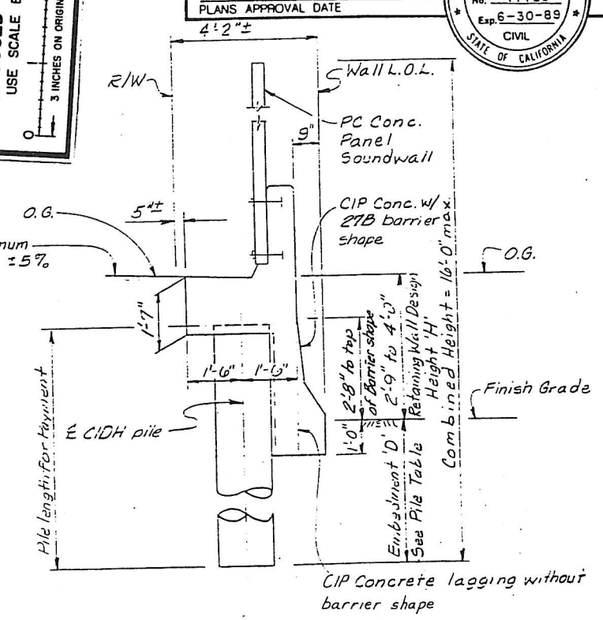


TYPICAL REINFORCEMENT
½" = 1'-0"

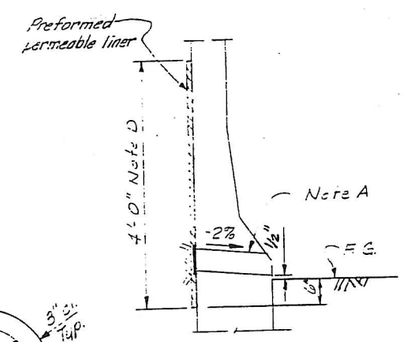


PILE CAP DETAIL
1" = 1'-0"

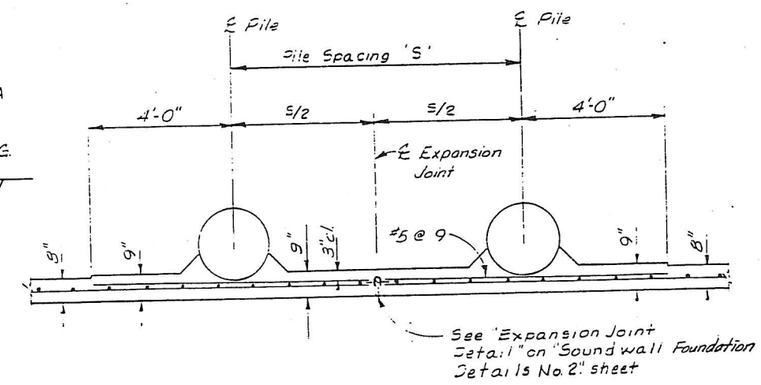
Note:
For Weakened Plane Joint Details see "Soundwall Foundation Details No. 2" sheet.



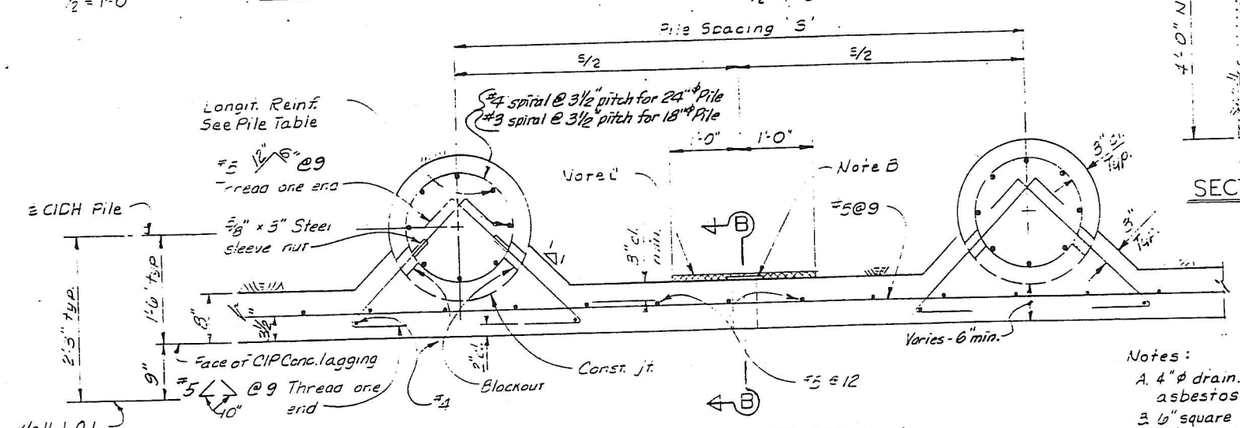
CASE 2 - TYPICAL SECTION
½" = 1'-0"



SECTION B-B
No Scale



RETAINING WALL EXPANSION JOINT DETAIL
½" = 1'-0"



SECTIONAL PLAN A-A
1" = 1'-0"

DETAIL F - PRECAST CONCRETE PANEL ON RETAINING WALL

Notes:
A. 4"φ drain. Use 4" cast iron or asbestos cement pipe.
B. 6" square aluminum or galvanized steel wire ½" mesh hardware cloth. (Min. wire diameter 0.025") Center over drain pipe.
C. Geocomposite Drain liner 2'-0" x 4'-0". Cast concrete lagging directly against liner.
D. When retaining wall height is 4' or less, liner shall be placed to top of pile.

SWD - 3

DESIGN	B+ Kelly A. Holden 11/29/88	Checked E. Tolentino 12/1/88	
DETAILS	B+ A. Moreno 11/29/88	Checked E. Tolentino 12/1/88	
QUANTITIES	B+	Checked	

State of CALIFORNIA DEPARTMENT OF TRANSPORTATION

DIVISION OF STRUCTURES STRUCTURE DESIGN 4
Kelly A. Holden C042268
PROJECT ENGINEER REGISTERED CIVIL ENGINEER NO.

BRIDGE NO.
POST MILE

SOUNDWALL FOUNDATION DETAILS NO. 3

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 04173
EA 123141

Disregard prints bearing earlier revision dates

REVISION DATES (PRELIMINARY STAGE ONLY)

SHEET OF