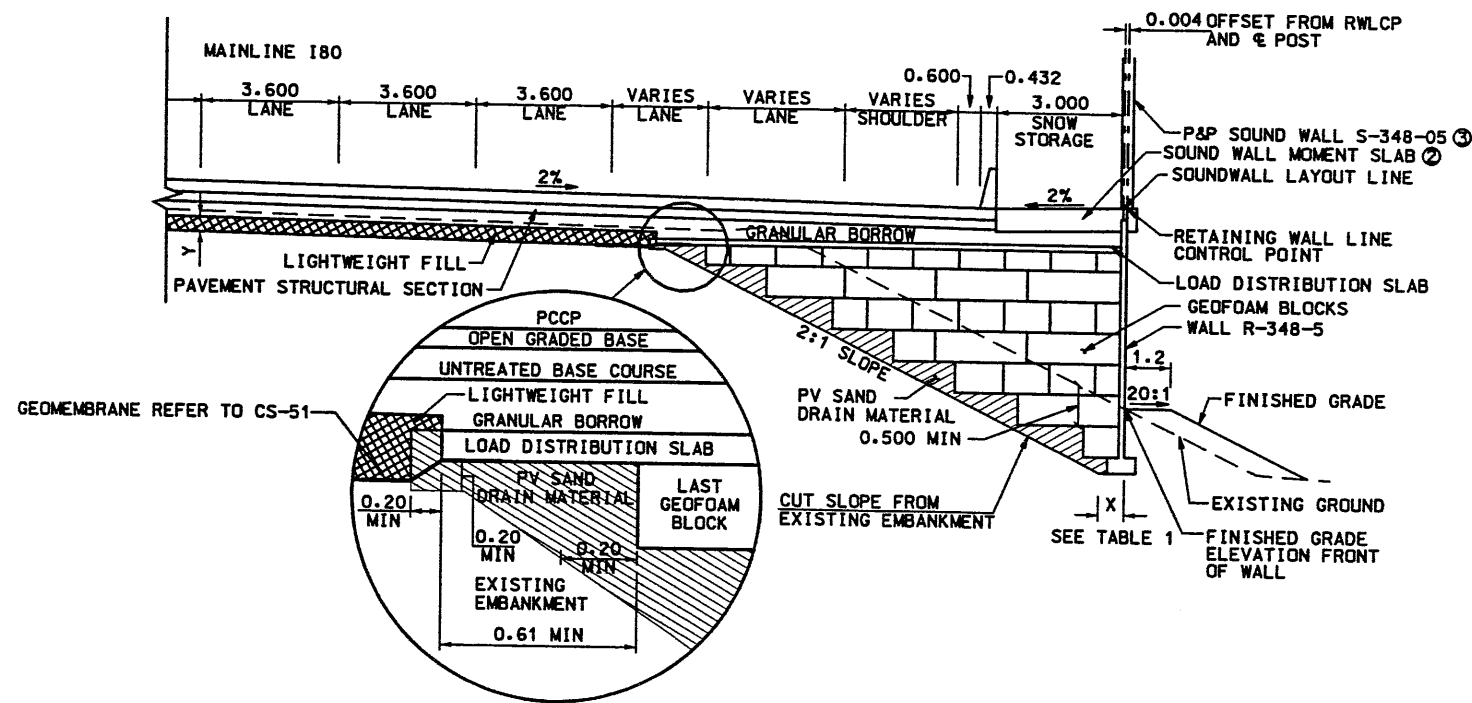


MSE 1-STAGE WALL R-348-5
RETAINING WALL STA 1+000.000 TO STA 1+143.476



GEOFOAM WALL R-348-5
RETAINING WALL STA 1+143.476 TO STA 2+215.564

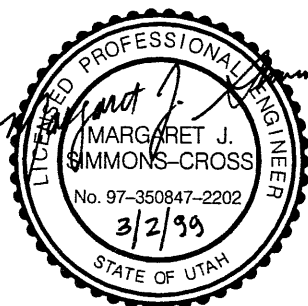
WASATCH CONSTRUCTORS
MAR 15 1999
RELEASED FOR CONSTRUCTION

TABLE 1

STA	X	Y	FINISHED GRADE AT FACE OF WALL
1+150	1.413	-	1295.828
1+160	1.413	0.395	1295.749
1+170	1.413	0.395	1295.498
1+180	1.413	0.395	1295.131
1+190	1.413	0.395	1294.864
1+200	1.413	0.395	1294.379
1+210	1.413	0.395	1293.199

NOTES:

- REFER TO CORRIDOR STANDARD DRAWINGS CS-43, 44, 45, 46, 47, 48, 48-1, 49, 49-1, 49-3, 50, 51, 52 AND 2.5-DT13 FOR GEOFOAM AND STRUCTURAL DETAILS.
- FOR SOUND WALL CONNECTION DETAILS SEE DWG CS-83-1.
- SEE SITUATION AND LAYOUT FOR SOUND WALL HEIGHTS.



APPROVED FOR CONSTRUCTION

NO. DATE 3/15/99 ORIGINAL RELEASE FOR 2-0495

UTAH DEPARTMENT OF TRANSPORTATION

SVERDRUP/DE LEUW

DESIGN D/J 2/79 CHECK MGC 2/79

DRAWN D/J 2/79 CHECK MGC 2/79

QUANT. 2513401

TRACKING NO. 2513401

APPROVAL RECORD: MARGARET J. SIMMONS-CROSS DATE 3/2/99 PROJECT DESIGN ENGINEER JOHN TERRY SECTION MANAGER

I-15 CORRIDOR RECONSTRUCTION

RETAINING WALL R-348-5

SECTION 2.5

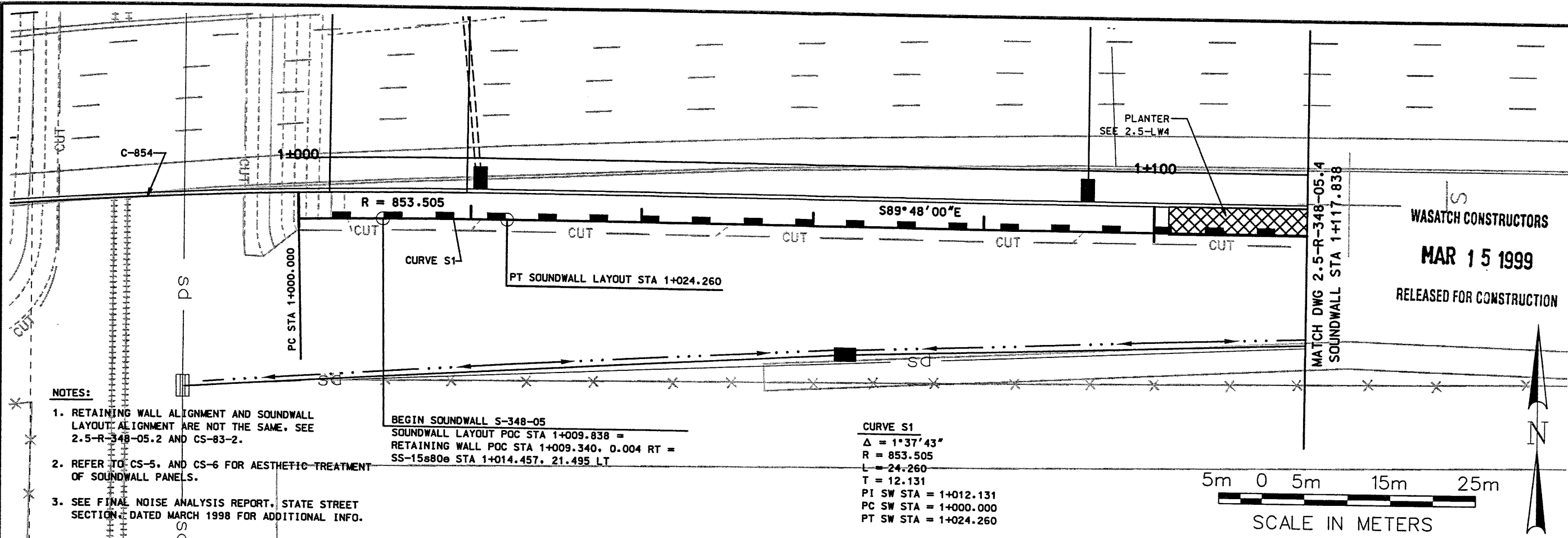
COUNTY SALT LAKE

DWG. NO. 2.5-R-348-5.2

PROJECT NUMBER *SP-15-7(135)296

SHT. OF

Doc# 02-MAR-1999 Time: 14:28 User: rcmis (dsonson)

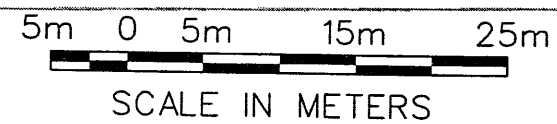


NOTES:

1. RETAINING WALL ALIGNMENT AND SOUNDWALL LAYOUT ALIGNMENT ARE NOT THE SAME. SEE 2.5-R-348-05.2 AND CS-83-2.
2. REFER TO CS-5, AND CS-6 FOR AESTHETIC TREATMENT OF SOUNDWALL PANELS.
3. SEE FINAL NOISE ANALYSIS REPORT, STATE STREET SECTION, DATED MARCH 1998 FOR ADDITIONAL INFO.

BEGIN SOUNDWALL S-348-05
 SOUNDWALL LAYOUT POC STA 1+009.838 =
 RETAINING WALL POC STA 1+009.340, 0.004 RT =
 SS-15s80e STA 1+014.457, 21.495 LT

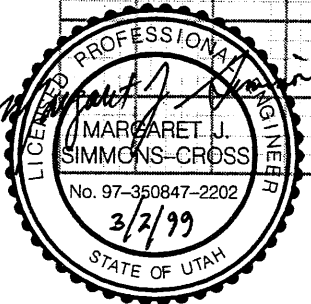
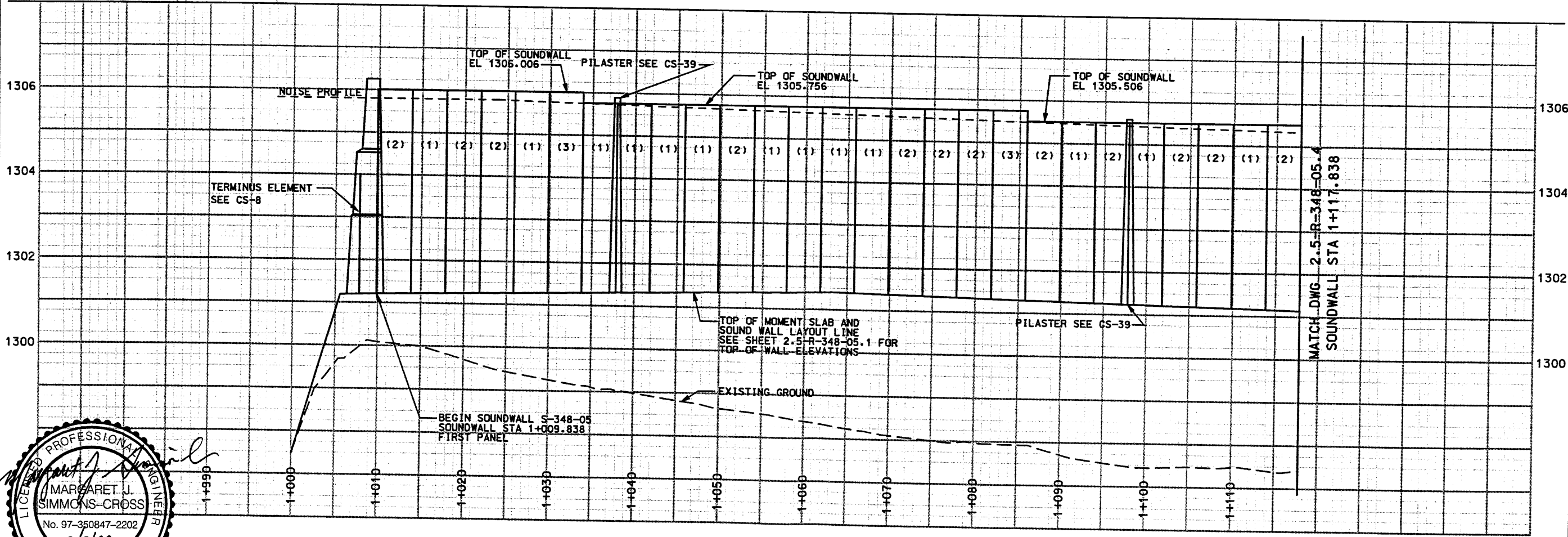
CURVE S1
 $\Delta = 1^{\circ}37'43''$
 R = 853.505
 L = 24.260
 T = 12.131
 PI SW STA = 1+012.131
 PC SW STA = 1+000.000
 PT SW STA = 1+024.260



WASATCH CONSTRUCTORS
MAR 15 1999
 RELEASED FOR CONSTRUCTION

APPROVED FOR CONSTRUCTION	
NO.	DESCRIPTION
1	ORIGINAL RELEASE FORM 2-0495
DATE	3/2/99

UTAH DEPARTMENT OF TRANSPORTATION		SVERDRUP/DE LEUW	
APPROVAL RECORD	DESIGN	CHECK	QUANT.
3/99	MARGARET J. SIMMONS-CROSS	2/99	2513401
DATE	PROJECT DESIGN ENGINEER	DATE	SECTION MANAGER
3/99	JOHN TERRY	3/99	

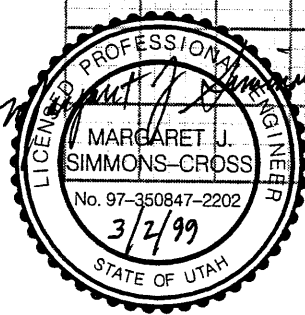
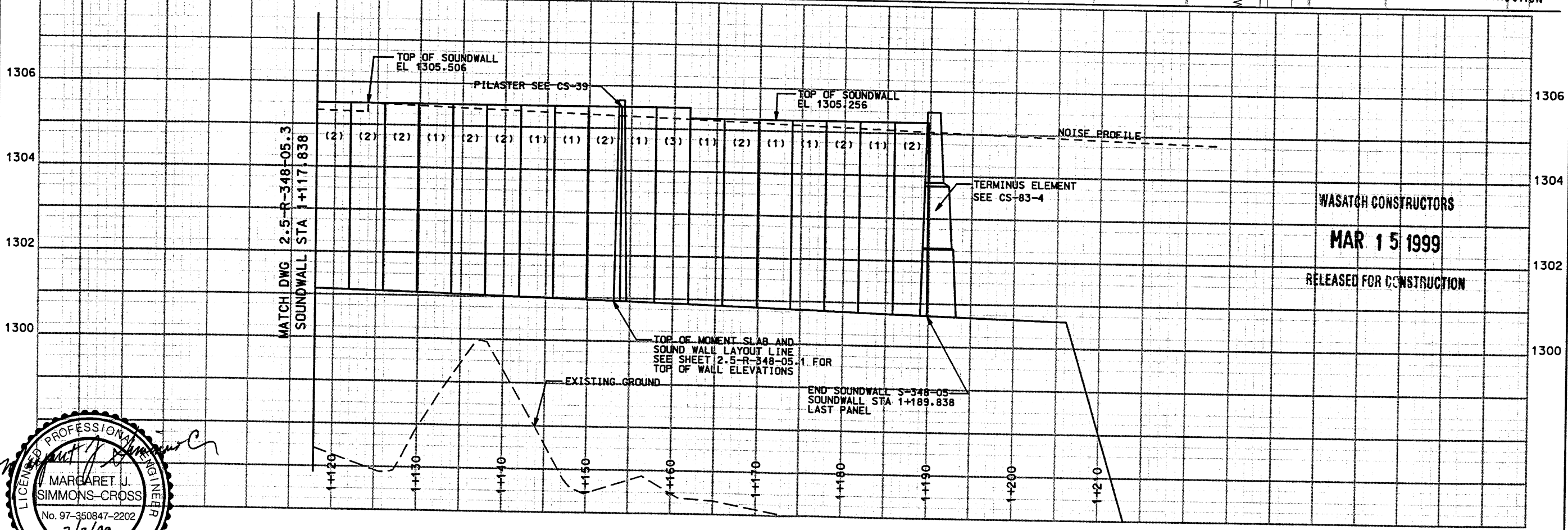
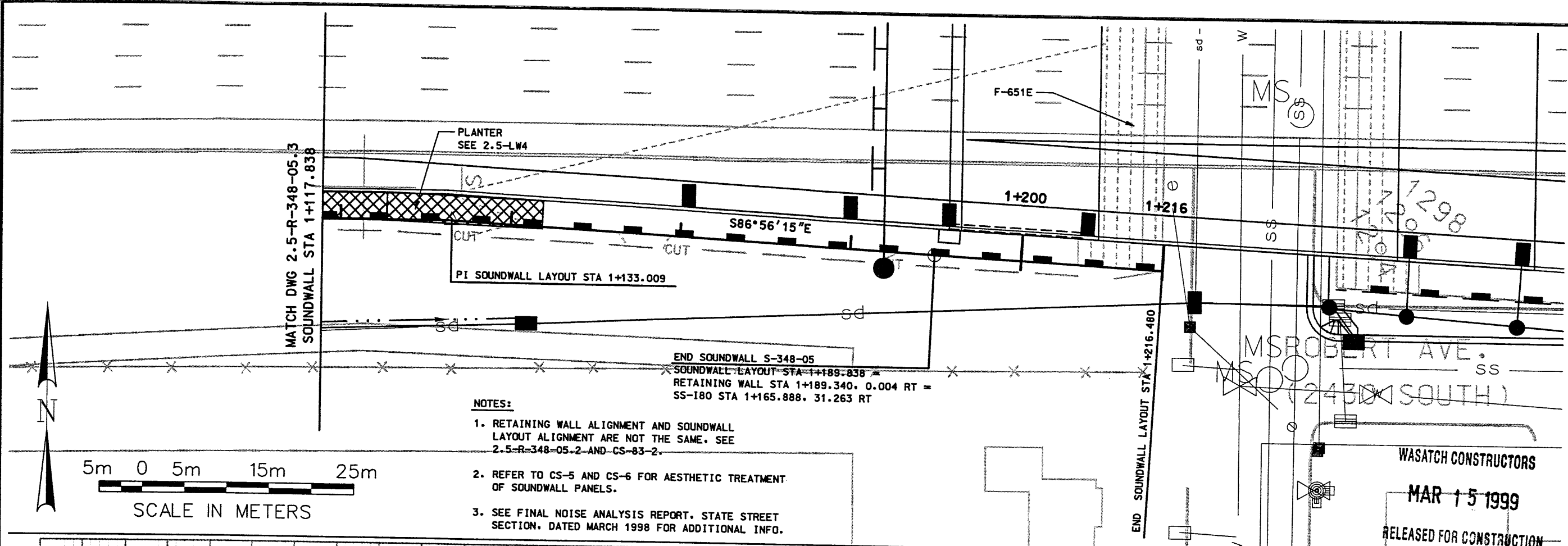


WALL S-348-5 (SOUNDWALL)

1-15 CORRIDOR RECONSTRUCTION	SALT LAKE COUNTY
RETAINING WALL R-348-05	DWG. NO. 2.5-R-348-05.3
SECTION 2.5	SHT. OF
PROJECT NUMBER #SP-15-7(135)296	

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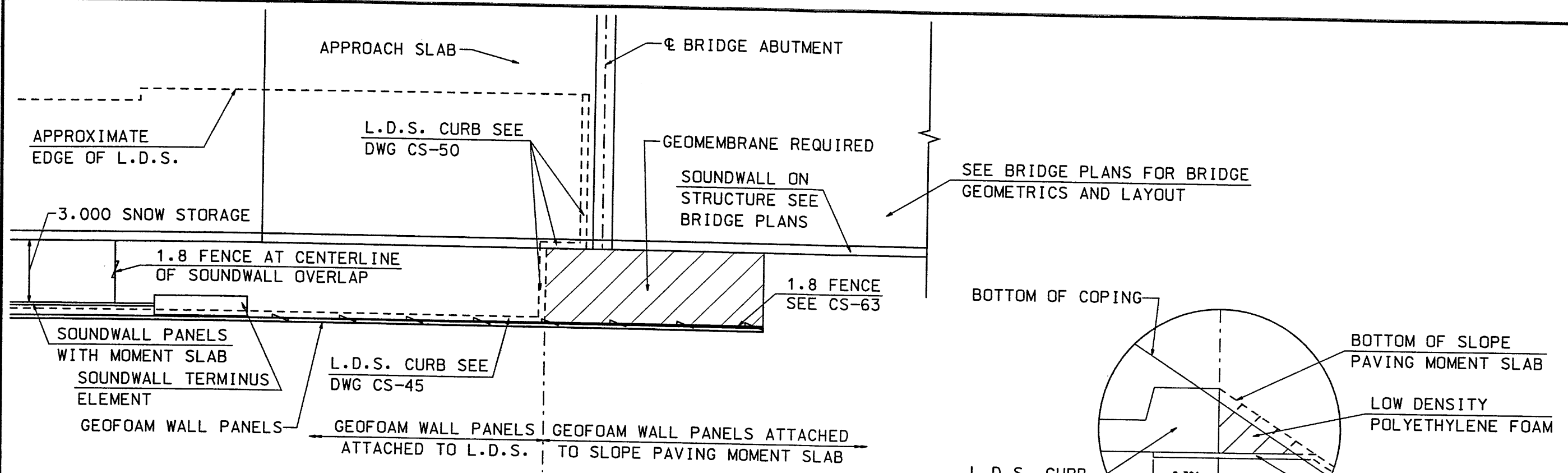
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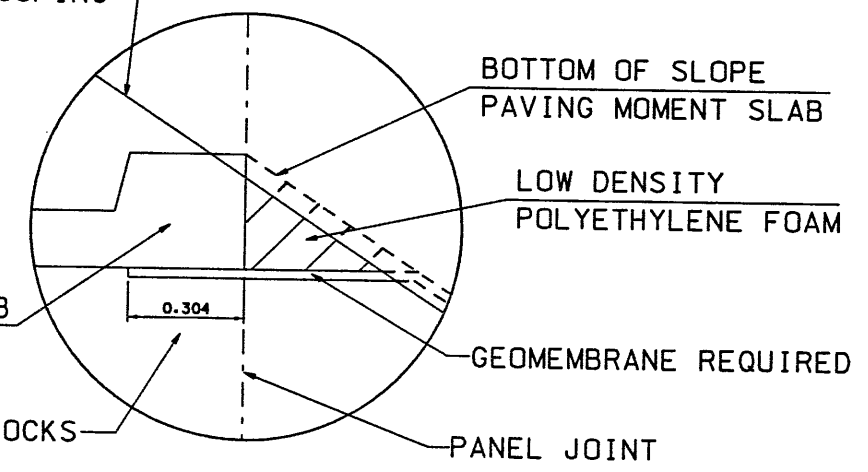
WALL S-348-5 (SOUNDWALL)

APPROVED FOR CONSTRUCTION		DESCRIPTION	
NO.	DATE	NO.	DATE
1	3/2/99	1	3/2/99
ORIGINAL RELEASE FOM 2-0495			
UTAH DEPARTMENT OF TRANSPORTATION			
SVERDRUP/DE LEUW		DESIGN	2/98
MARGARET SIMMONS-CROSS		CHECK	2/98
PROJECT DESIGN ENGINEER		DRAWN	2/98
DATE 3/99		JOHN TERRY	2/98
APPROVED 3/99		SECTION MANAGER	QUANT.
DATE 3/99			
1-15 CORRIDOR RECONSTRUCTION		TRACKING NO. 2513401	
RETAINING WALL R-348-05			
SECTION 2.5			
PROJECT NUMBER #SP-15-7(135)296			
SALT LAKE COUNTY			
DWG. NO. 2.5-R-348-05.4			
SHT.	OF		

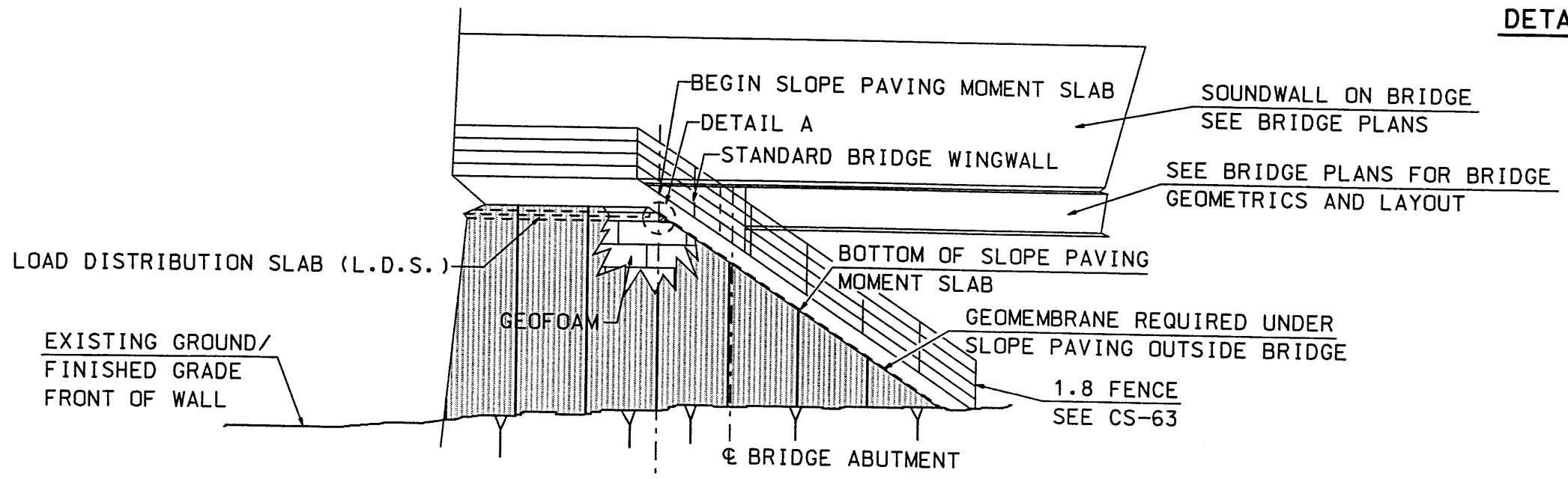
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**PLAN VIEW GEOFOAM WALL PANELS
(WITH SOUNDWALL)**

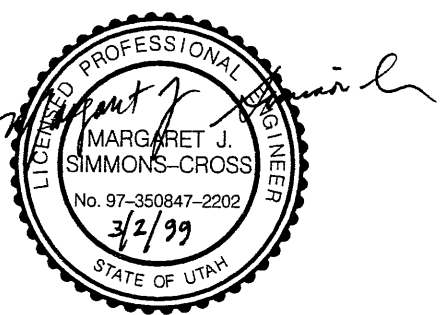


DETAIL A



GEOFOAM WALL PANEL DETAIL AT BRIDGE ABUTMENT (WITH SOUNDWALL)

NOTE:
 1. GEOMEMBRANE REQUIRED UNDER SLOPE PAVING OUTSIDE OF BRIDGE LIMITS TO PROVIDE DOUBLE BARRIER PROTECTION TO GEOFOAM.

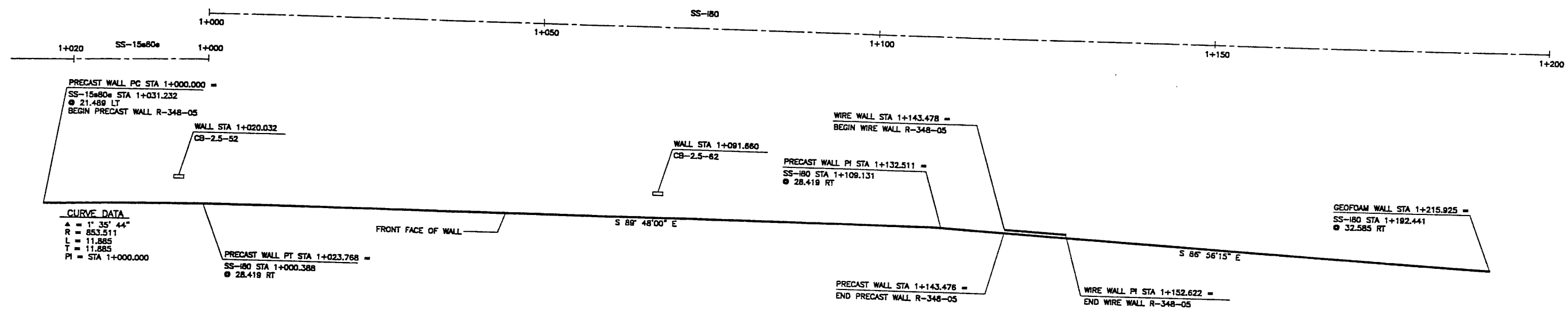


WASATCH CONSTRUCTORS
MAR 15 1999
 RELEASED FOR CONSTRUCTION

APPROVED FOR CONSTRUCTION		DESCRIPTION	
NO.	DATE	NO.	DATE
1	3/2/99		
ORIGINAL RELEASE FDM 2-0495			
UTAH DEPARTMENT OF TRANSPORTATION		SVERDRUP/DE LEUW	
DESIGN NO.	TRACKING NO.	DESIGN TKN	10/98
2513401	2513401	DRWN TKN	10/98
CHECK	CHECK	CHECK	CHECK
MSC	2/98	MSC	2/98
MSC	2/98	MSC	2/98
CHECK	CHECK	CHECK	CHECK
SECTION MANAGER	DATE	SECTION MANAGER	DATE
JOHN TERRY	3/2/99	JOHN TERRY	3/2/99
I-15 CORRIDOR RECONSTRUCTION		SECTION 2.5	
SOUNDWALL DETAILS		PROJECT NUMBER #SP-15-7(135)296	
SALT LAKE COUNTY		DWG. NO. 2.5-R-348-5.5	
SHT.	OF		

REFERENCE (X-UTAH/DWG)

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
▲	03-01-99	RELEASE FOR CONSTRUCTION



CURVE DATA
 A = 1' 35' 44"
 R = 853.511
 L = 11.885
 T = 11.885
 PI = STA 1+000.000

SCORIA	
ANGLE OF INTERNAL FRICTION (SELECT)	= 26°
ANGLE OF INTERNAL FRICTION (BASE)	= 26°
ANGLE OF INTERNAL FRICTION (RANDOM)	= 26°
UNIT WEIGHT BACKFILL	= 52 TO 60 PCF. (8.2 TO 9.4 KN/M ³)
TRAFFIC SURCHARGE	= 250 PSF (12 KPa)
SEISMIC ACCELERATION COFF.	= 0.27g (50 YR)
SEISMIC ACCELERATION COFF.	= 0.66g (250 YR)
DESIGN CRITERIA	
SAFETY FACTOR (OVERTURNING)	= 2.0
SAFETY FACTOR (SLIDING)	= 1.5
SAFETY FACTOR (PULLOUT)	= 1.5
DESIGN LIFE	= 75 YEARS

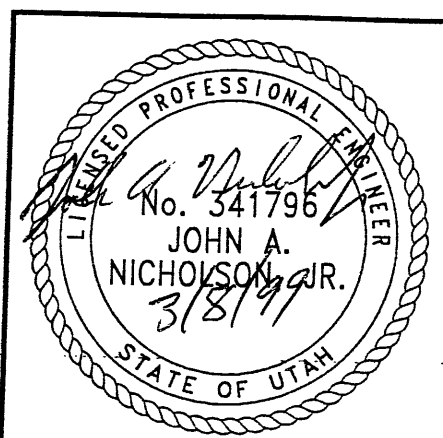
RETAINED EARTH INDEX	
RE-1	PLAN PRECAST FACE WALL R-348-05, NOTES & DESIGN CRITERIA
RE-2	TYPICAL CROSS SECTION
RE-3	ELEVATION PRECAST WALL "R-348-05"
RE-4	ELEVATION PRECAST WALL "R-348-05"
RE-5	ELEVATION PRECAST WALL "R-348-05"
RE-6	SPECIAL PANEL DETAILS

PLAN VIEW WALL "R-348-05"
 SCALE: 1=250 (FULL SIZE)
 SCALE: 1=500 (HALF SIZE)

WASATCH CONSTRUCTORS
MAR 15 1999
 RELEASED FOR CONSTRUCTION

METRIC

CERTIFIED FOR INTERNAL STABILITY OF RETAINED EARTH™ STRUCTURES ONLY. EXTERNAL STABILITY, INCLUDING BUT NOT LIMITED TO FOUNDATION AND SLOPE STABILITY, IS THE RESPONSIBILITY OF THE OWNER. DESIGN IS BASED ON THE ASSUMPTION THAT THE MATERIAL WITHIN THE RETAINED EARTH™ MASS, METHODS OF CONSTRUCTION, AND QUALITY OF PREFABRICATED MATERIALS CONFORM TO THE MANUFACTURER'S SPECIFICATION.



RETAINED EARTH™ WALLS
 PLAN VIEW PRECAST WALL "R-348-05"
 UTAH I-15 RECONSTRUCTION
 SALT LAKE COUNTY, UTAH
 UTAH DEPARTMENT OF TRANSP.

DWG. NO.	2.5R-348-5.6
JOB NO.	239-0007
SHT. NO.	RE-1

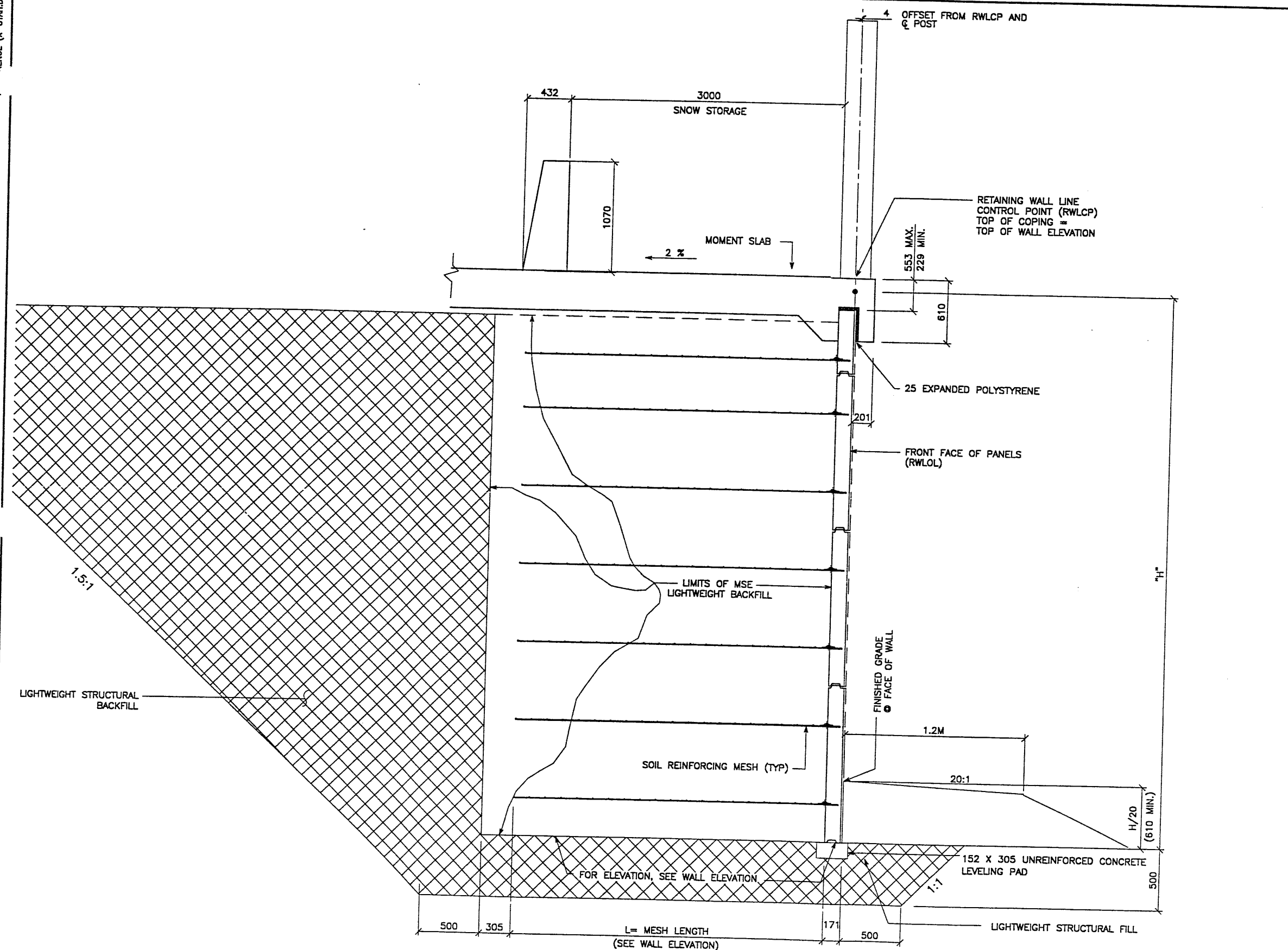
VSL CORPORATION
 2840 Plaza Place, Suite 200
 Raleigh, NC 27612
 Telephone: (919) 781-6272
 Fax: (919) 781-4989



ATLANTA, GA / DALLAS, TX / HALDOR, NC (CORPORATE OFFICE)
 MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA

VSL Corporation (VSL) hereby certifies that the design, engineering, and construction of the project described herein were performed by VSL employees or independent contractors who are duly licensed and qualified to perform such services. VSL Corporation (VSL) shall not be held liable for any errors or omissions in the design, engineering, or construction of the project described herein.

FINAL PLOT 03-01-99



TYPICAL CROSS SECTION - STA 1+000.000 TO STA 1+143.476

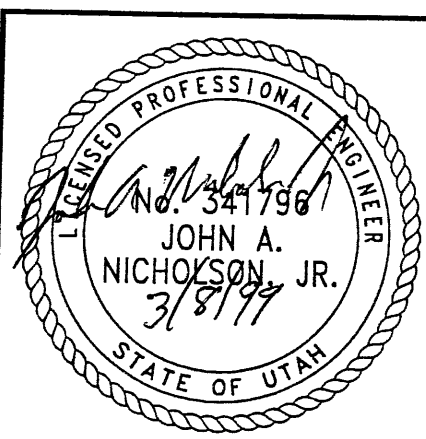
(SEE DWG. NO. 2.5R-348-5.6 FOR ADDITIONAL INFORMATION)
SCALE: 1:20 (FULL SIZE)
SCALE: 1:40 (HALF SIZE)

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METRIC

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
▲	03-01-99	RELEASE FOR CONSTRUCTION

WASATCH CONSTRUCTORS
MAR 15 1999
RELEASED FOR CONSTRUCTION



RETAINED EARTH™ WALLS
PRECAST MSE WALL "R-348-05"
TYPICAL CROSS SECTION

UTAH 1-15 RECONSTRUCTION
SALT LAKE COUNTY, UTAH
UTAH DEPARTMENT OF TRANSP.

DWG. NO.
2.5R-348-5.7

JOB NO.
239-0007

SHT. NO.
RE-2

VSL CORPORATION
2940 Potts Road, Suite 200
Raleigh, NC 27612
Telephone: (919) 781-8272
Fac: (919) 781-4869

ATLANTA, GA / DULHAS, TX / AUSTIN, TX (CORPORATE OFFICE)
MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, IL

DES. 12-11-98 JN
DRN. 12-11-98 DSW
CHK. 12-11-98 JN

REVISION

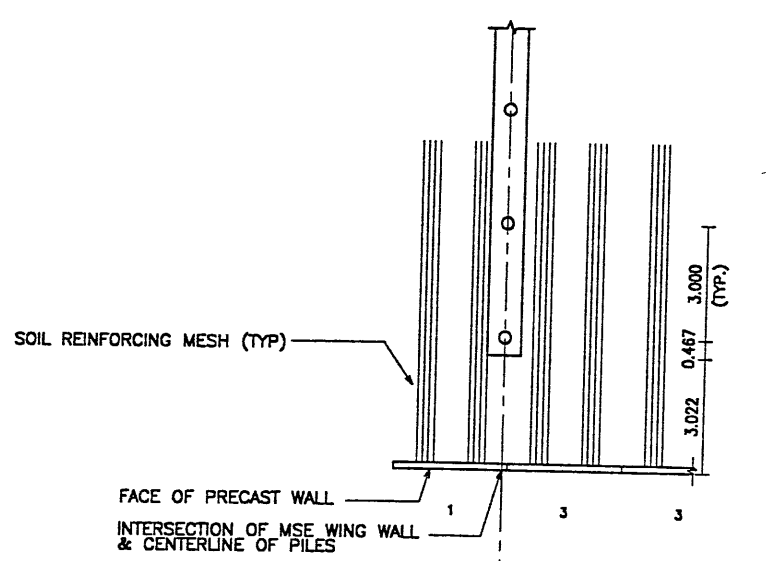
NO. DATE

BY CHK

REFERENCE (X-UTAH.DWG)

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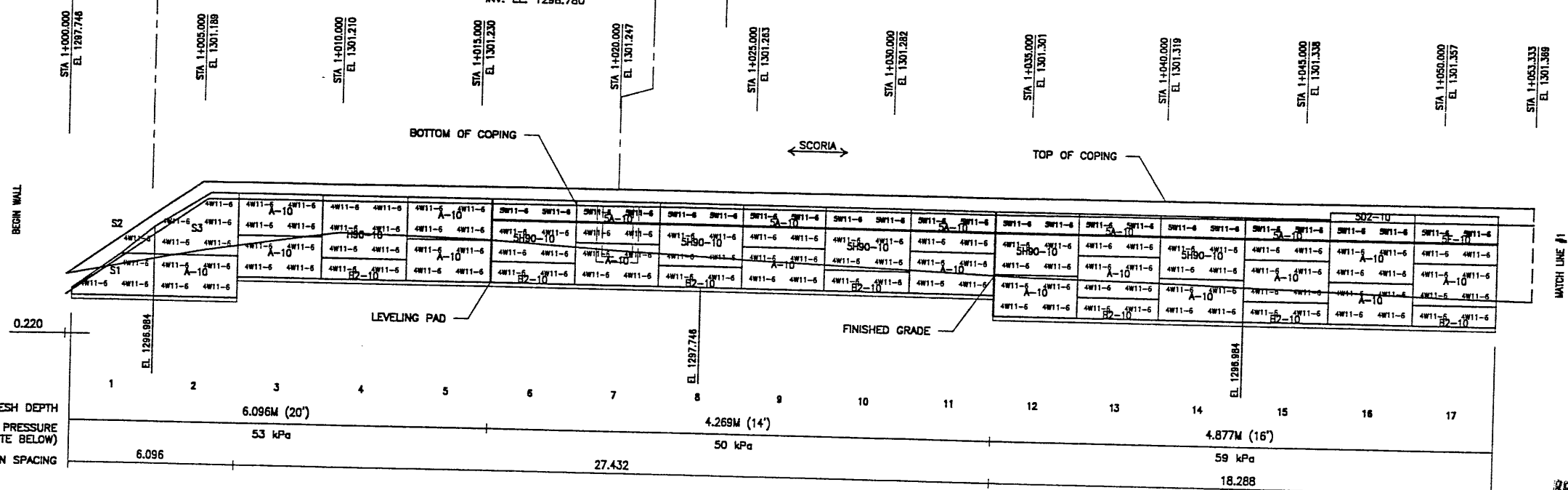
FINAL PLOT 03-01-99



BEGIN WALL R-348-05
WALL STA 1+000.000 =
SS-15#80@ STA 1+031.232
@ 21.489 LT
NOMINAL PANEL FACE (RWLDL)

WALL STA 1+020.032 =
SS-15#80@ STA 1+002.916
INLET CB-2.5-52
INV. EL. 1298.780

WALL PT STA 1+023.768 =
SS-180 STA 1+000.388
@ 28.419 RT



MESH DEPTH
MAXIMUM BEARING PRESSURE
(SEE NOTE BELOW)
PIN SPACING

0.220	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	6.096M (20')			4.269M (14')			4.877M (16')										
	53 kPa			50 kPa			59 kPa										
	6.096			27.432			18.288										

ELEVATION PRECAST WALL R-348-05
(FRONT FACE SHOWN)
(TOTAL SURFACE AREA OF PANELS = 678.45 SM)
SCALE 1:100 (FULL SIZE)
SCALE 1:200 (HALF SIZE)

METRIC

NOTE:
THE INDICATED MAXIMUM BEARING
PRESSURE AT FINAL STAGE FOR
STATIC LOAD CONDITION.

CERTIFIED FOR INTERNAL STABILITY OF RETAINED EARTH™ STRUCTURES ONLY.
EXTERNAL STABILITY, INCLUDING BUT NOT LIMITED TO FOUNDATION AND SLOPE
STABILITY, IS THE RESPONSIBILITY OF THE OWNER. DESIGN IS BASED ON THE
ASSUMPTION THAT THE MATERIAL WITHIN THE RETAINED EARTH™ MASS, METHODS
OF CONSTRUCTION, AND QUALITY OF PREFABRICATED MATERIALS CONFORM TO
THE MANUFACTURER'S SPECIFICATION.

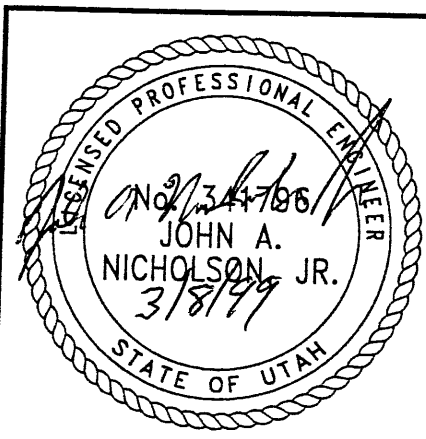
APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
△	03-01-99	RELEASE FOR CONSTRUCTION

DES.	DRN.	CHK.	RETAINED EARTH™	NO.	DATE	BY
JN	DSW	JN				

VSL CORPORATION
2816 Price Place, Suite 200
Reno, NV 89502
Telephone: (818) 781-8272
Facsimile: (818) 781-8868

ATLANTA, GA / DALLAS, TX / MADEIRA, NC (CORPORATE OFFICE)
MINNAPOLIS, MN / SAN JOSE, CA / SPRINGFIELD, IL

WASATCH CONSTRUCTORS
MAR 15 1999
RELEASED FOR CONSTRUCTION



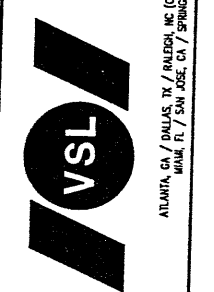
RETAINED EARTH™ WALLS
PRECAST WALL "R-348-05"
UTAH I-15 RECONSTRUCTION
SALT LAKE COUNTY, UTAH
UTAH DEPARTMENT OF TRANSP.

DWG. NO.	25.1R-348-5.8
JOB NO.	239-0007
SHT. NO.	RE-3

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
△ 03-01-99		RELEASE FOR CONSTRUCTION

NO.	DATE	REVISION

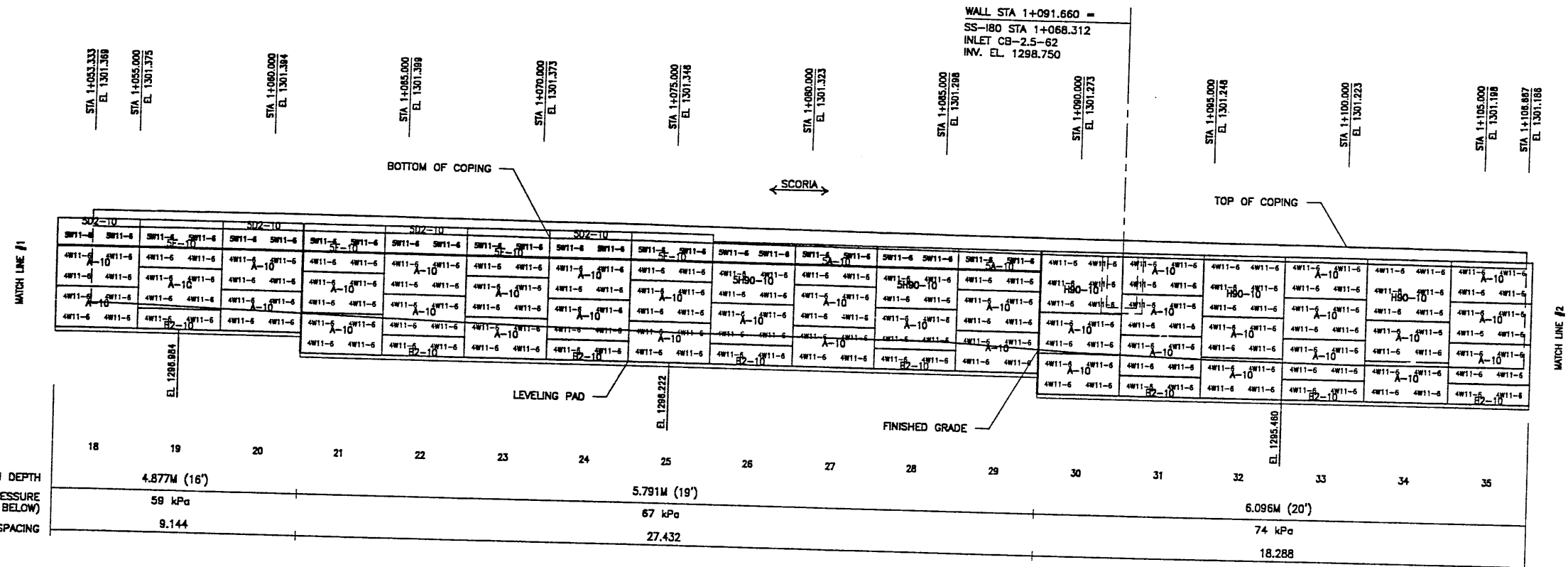
VSL CORPORATION
 2840 Plaza Place, Suite 200
 Raleigh, NC 27612
 Telephone: (919) 781-6272
 Fax: (919) 81-4989



ATLANTA, GA / DALLAS, TX / RALEIGH, NC (CORPORATE OFFICE)
 MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA

RETAINED EARTH™ WALLS
 PRECAST WALL "R-348-05"
 UTAH I-15 RECONSTRUCTION
 SALT LAKE COUNTY, UTAH
 UTAH DEPARTMENT OF TRANSP.

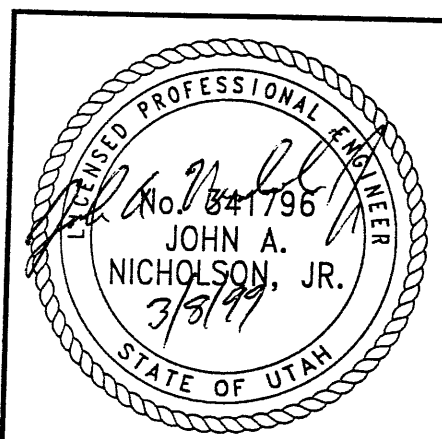
DWG. NO.	2.5R-348-5.9
JOB NO.	239-0007
SHT. NO.	RE-4



ELEVATION PRECAST WALL R-348-05
 (FRONT FACE SHOWN)
 (TOTAL SURFACE AREA OF PANELS = 678.45 SM)
 SCALE 1:100 (FULL SIZE)
 SCALE 1:200 (HALF SIZE)

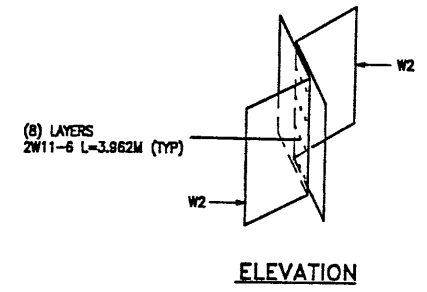
WASATCH CONSTRUCTORS
 MAR 15 1999
 RELEASED FOR CONSTRUCTION

METRIC

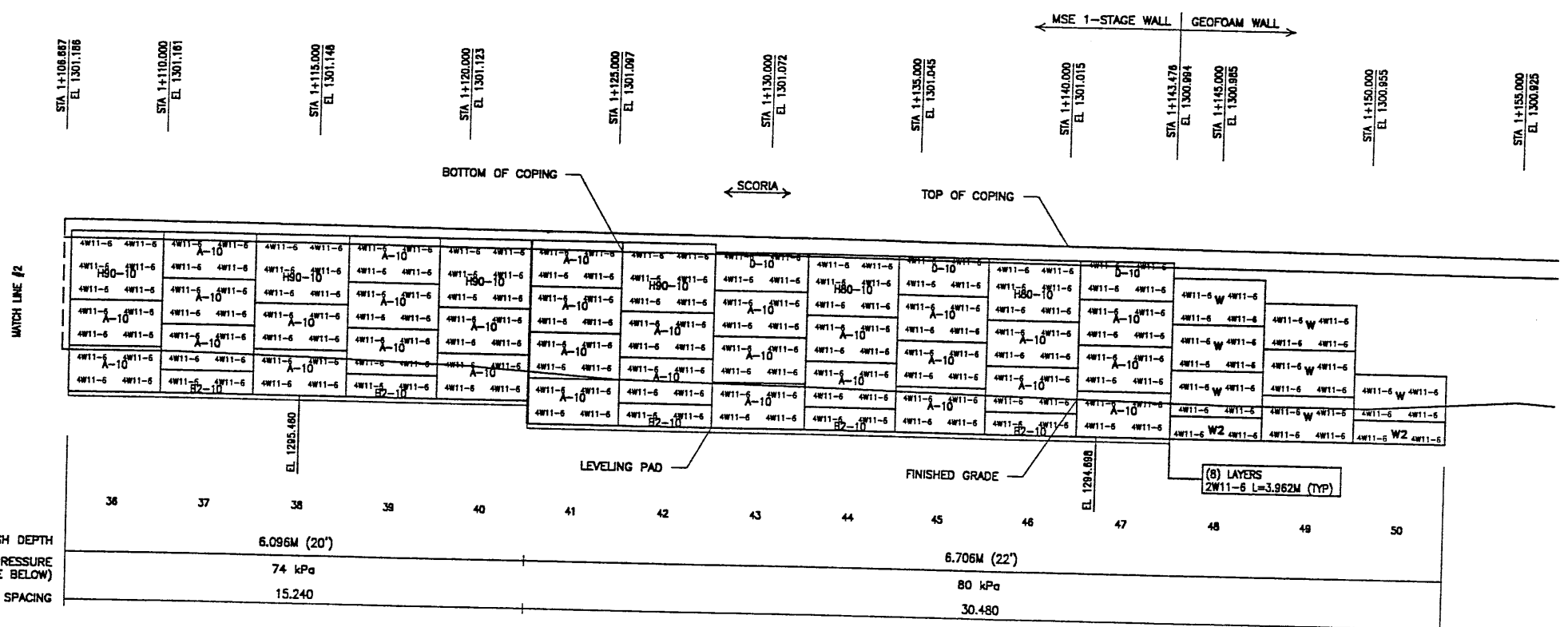
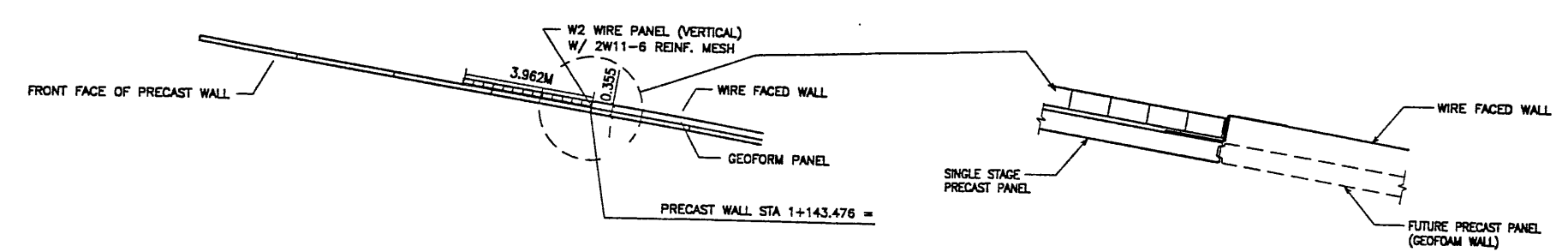


CERTIFIED FOR INTERNAL STABILITY OF RETAINED EARTH™ STRUCTURES ONLY. EXTERNAL STABILITY, INCLUDING BUT NOT LIMITED TO FOUNDATION AND SLOPE STABILITY, IS THE RESPONSIBILITY OF THE OWNER. DESIGN IS BASED ON THE ASSUMPTION THAT THE MATERIAL WITHIN THE RETAINED EARTH™ MASS, METHODS OF CONSTRUCTION, AND QUALITY OF PREFABRICATED MATERIALS CONFORM TO THE MANUFACTURER'S SPECIFICATION.

NOTE:
 THE INDICATED MAXIMUM BEARING PRESSURE AT FINAL STAGE FOR STATIC LOAD CONDITION.



NOTE:
THE ENDS ON THE W2 PANELS ARE
TO BE TRIMMED AS REQUIRED.



ELEVATION PRECAST WALL R-348-05
(FRONT FACE SHOWN) SCALE 1:100 (FULL SIZE)
(TOTAL SURFACE AREA OF PANELS = 678.45 SM) SCALE 1:200 (HALF SIZE)

NOTE:
THE INDICATED MAXIMUM BEARING
PRESSURE AT FINAL STAGE FOR
STATIC LOAD CONDITION.

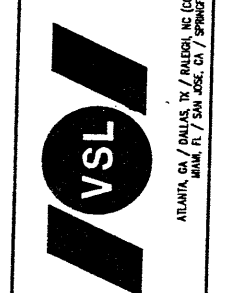
CERTIFIED FOR INTERNAL STABILITY OF RETAINED EARTH™ STRUCTURES ONLY.
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THE MANUFACTURER'S SPECIFICATION.

METRIC

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
△ 03-01-99		RELEASE FOR CONSTRUCTION

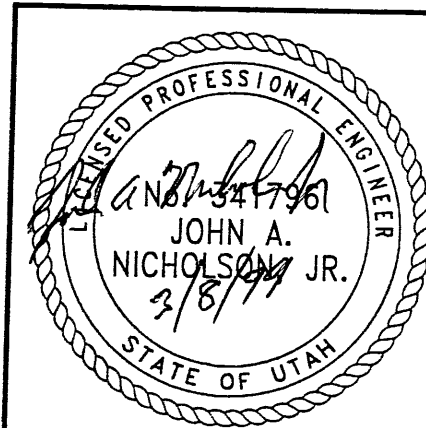
DES.	DRN.	CHK.	RETAINED EARTH™
JN	DSW	JN	
12-17-98	12-17-98	12-17-98	

VSL CORPORATION
2840 Plaza Place, Suite 200
Raleigh, NC 27612
Telephone: (919) 781-8272
Fax: (919) 781-6669

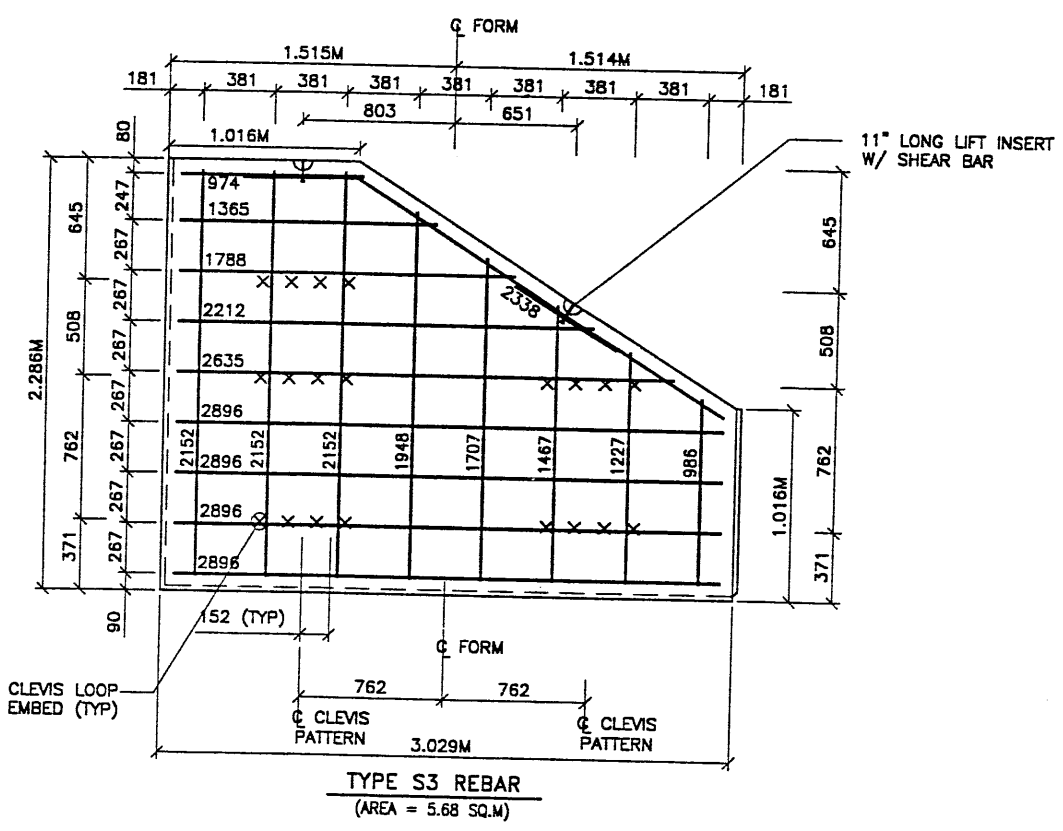
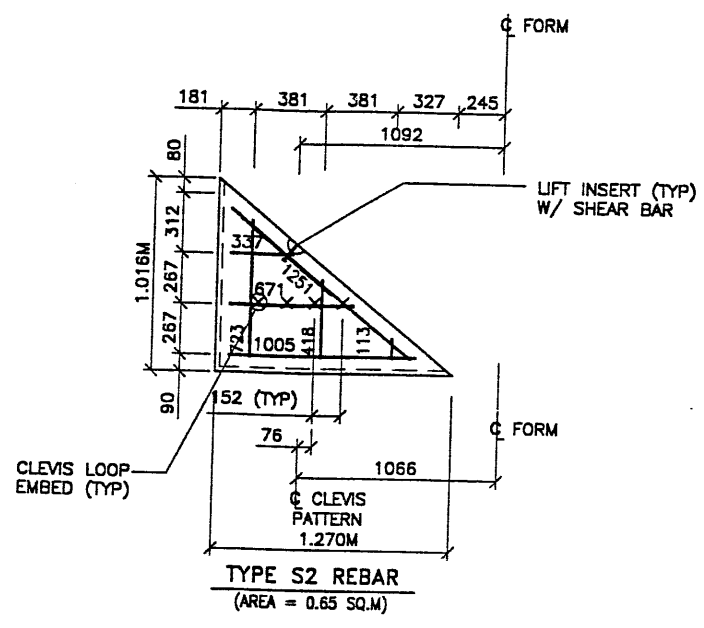
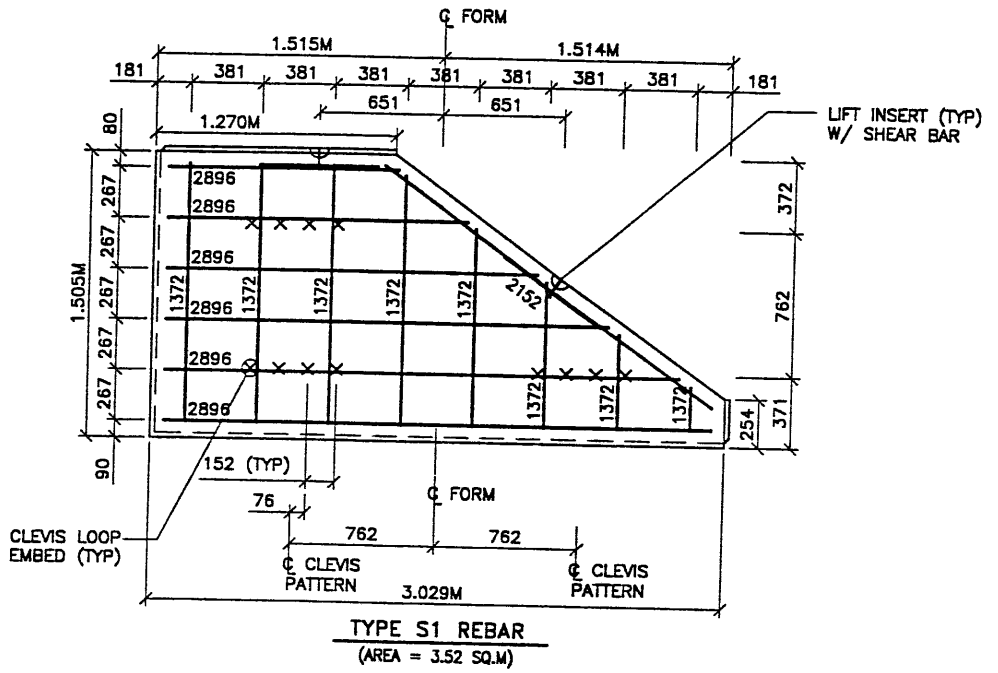


ATLANTA, GA / DALLAS, TX / BALDWIN, NC (CORPORATE OFFICE)
MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA

WASATCH CONSTRUCTORS
MAR 15 1999
RELEASED FOR CONSTRUCTION



RETAINED EARTH™ WALLS PRECAST WALL "R-348-05"	DWG. NO. 2.5R-348-5.10
UTAH I-15 RECONSTRUCTION SALT LAKE COUNTY, UTAH UTAH DEPARTMENT OF TRANSP.	JOB NO. 239-0007
	SHT. NO. RE-5



APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	03-01-99	RELEASE FOR CONSTRUCTION

- PANEL REINFORCEMENT NOTES:**
- PANELS ARE SHOWN BACK FACE.
 - HORIZONTAL REINFORCEMENT SHALL HAVE 50 mm MINIMUM COVER TO THE BACK FACE.
 - ALL REINFORCEMENT SHALL HAVE 50 mm MINIMUM COVER TO THE SIDES.
 - ALL REINFORCING BARS ARE #13 METRIC. LABELS ON EACH BAR INDICATE LENGTH. EXAMPLE: 1345 IS A #13 BAR 1345 mm LONG.
 - PANEL REINFORCEMENT BARS SHALL BE DEFORMED BILLET STEEL BARS FOR CONCRETE REINFORCEMENT CONFORMING TO THE SPECIFICATIONS OF ASTM DESIGNATION A615, GRADE 60.
 - ALL REINFORCING STEEL TO BE GALVANIZED IN ACCORDANCE WITH ASTM 757 CLASS 1.
 - CONCRETE PANELS TO HAVE 28 DAY COMPRESSIVE STRENGTH OF 25,200 KPa.
 - EQUIVALENT WELDED WIRE FABRIC MAY BE USED.
 - ALL PANELS TO USE 9.5mm# CLEVIS LOOPS.
 - VSL RETAINED EARTH™ IS PROTECTED UNDER PATENT 4,725,170.
 - LIFT INSERTS ARE 6 3/4" LONG IN ALL PANELS LESS THAN 1.524M TALL. PANELS TALLER THAN 1.524M SHALL HAVE 11" LONG LIFT ANCHORS.

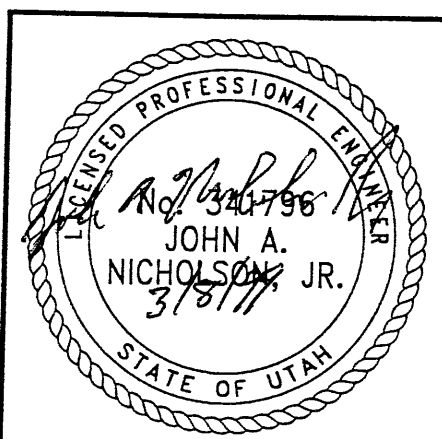
VSL CORPORATION
 1910 Pine Ridge, Suite 200
 Raleigh, NC 27612
 Telephone: (919) 781-8372
 Fac: (919) 781-1688



ATLANTA, GA / DULLES, VA / INGLEWOOD, NC (CORPORATE OFFICE)
 MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA

VSL Corporation (VSL) does a strict proprietary design and construction of its Retained Earth™ walls. Such information is made available to the public only after the project has been completed and the information is no longer needed for the project. The information is not to be used for any other purpose without the written consent of VSL Corporation.

WASATCH CONSTRUCTORS
MAR 15 1999
 RELEASED FOR CONSTRUCTION



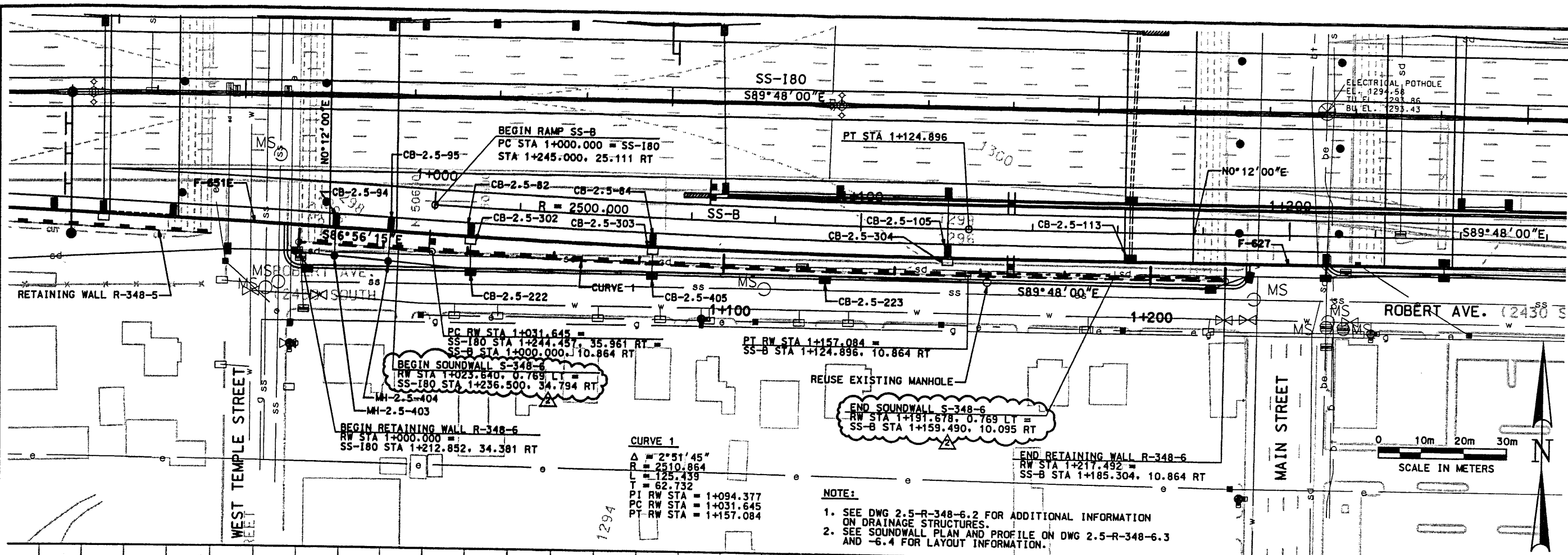
CERTIFIED FOR INTERNAL STABILITY OF RETAINED EARTH™ STRUCTURES ONLY. EXTERNAL STABILITY, INCLUDING BUT NOT LIMITED TO FOUNDATION AND SLOPE STABILITY, IS THE RESPONSIBILITY OF THE OWNER. DESIGN IS BASED ON THE ASSUMPTION THAT THE MATERIAL WITHIN THE RETAINED EARTH™ MASS, METHODS OF CONSTRUCTION, AND QUALITY OF PREFABRICATED MATERIALS CONFORM TO THE MANUFACTURER'S SPECIFICATION.

METRIC

RETAINED EARTH™ WALLS PRECAST WALL "R-348-14" SPECIAL PANEL DETAILS
UTAH I-15 RECONSTRUCTION SALT LAKE COUNTY, UTAH UTAH DEPARTMENT OF TRANSP.
DWG. NO. 2.5R-348-5.11
JOB NO. 239-0007
SH. NO. RE-6

Dotfile IS-APR-1999 Times:0.30 User: name.horizonte

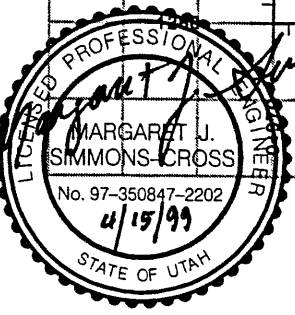
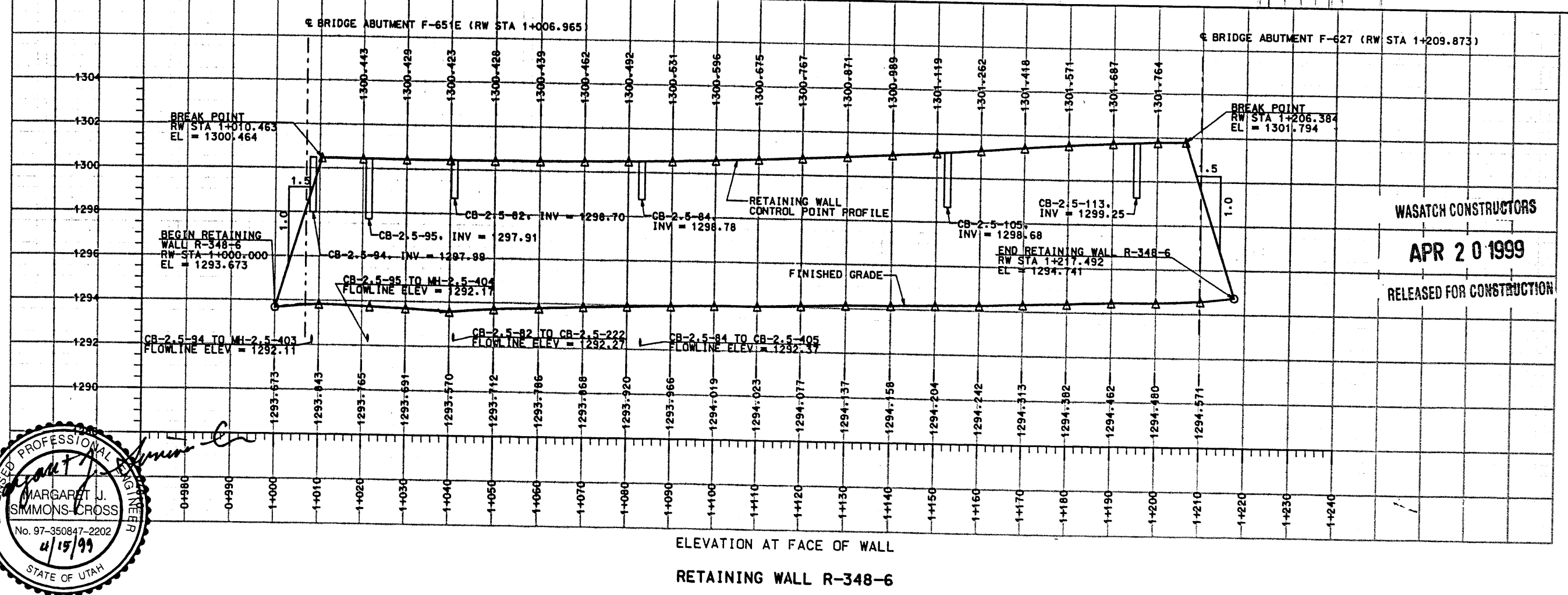
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BEGIN SOUNDWALL S-348-6
 RW STA 1+023.640, 0.769 LT =
 SS-180 STA 1+236.500, 34.794 RT

END SOUNDWALL S-348-6
 RW STA 1+191.678, 0.769 LT =
 SS-B STA 1+159.490, 10.095 RT

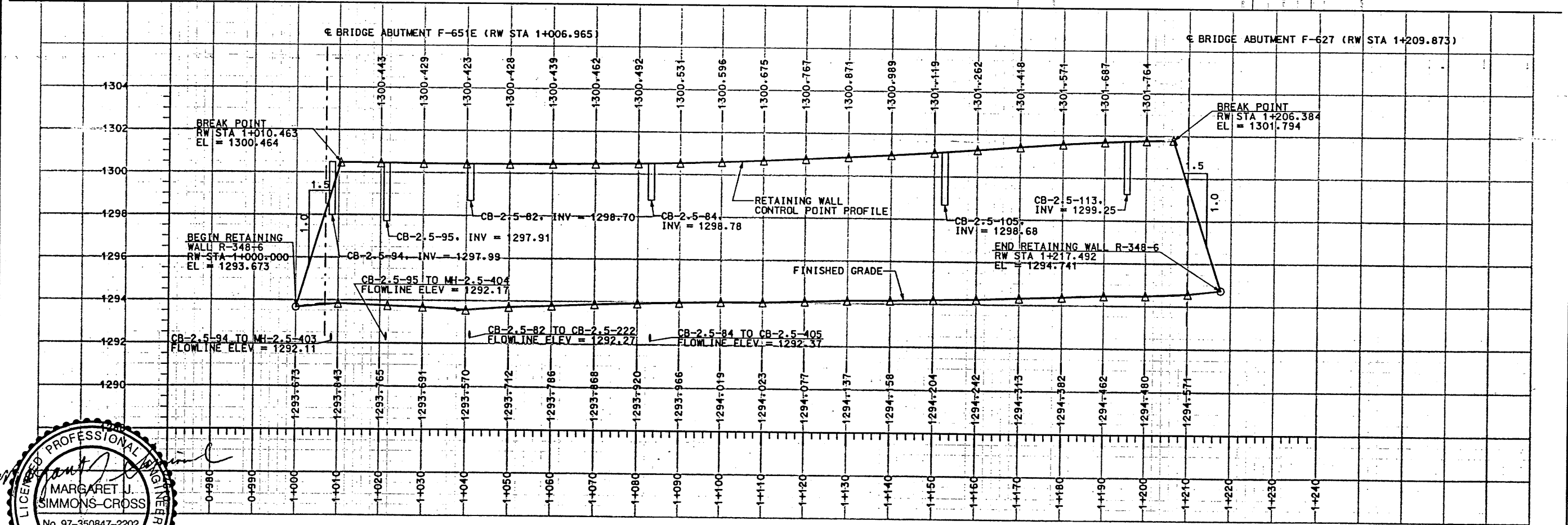
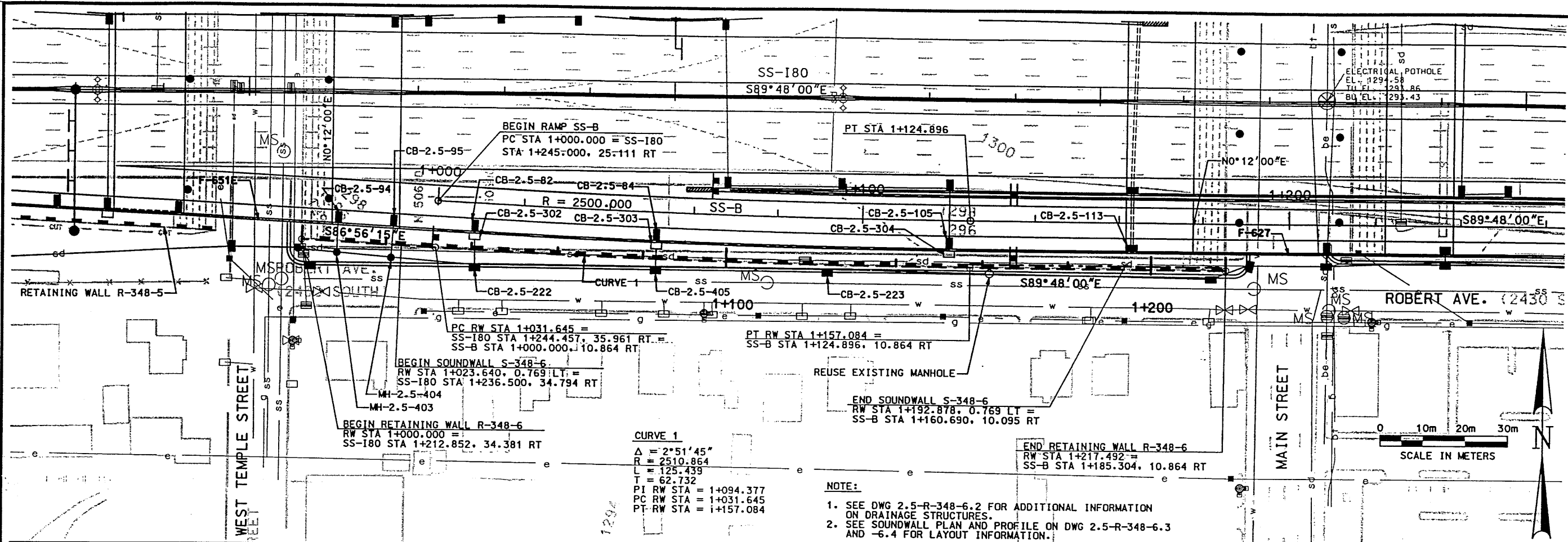
- NOTE:
- SEE DWG 2.5-R-348-6.2 FOR ADDITIONAL INFORMATION ON DRAINAGE STRUCTURES.
 - SEE SOUNDWALL PLAN AND PROFILE ON DWG 2.5-R-348-6.3 AND -6.4 FOR LAYOUT INFORMATION.



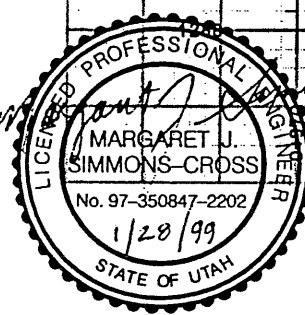
WASATCH CONSTRUCTORS
 APR 20 1999
 RELEASED FOR CONSTRUCTION

APPROVED FOR CONSTRUCTION		DESCRIPTION	
NO.	DATE	INITIAL RELEASE PER FDM 2-0667C	REVISED SOUNDWALL TO 4.0 PANELS
1	1/26/99		
2	4/8/99		
UTAH DEPARTMENT OF TRANSPORTATION		TRACKING NO.	2513402
SVERDRUP/DE LEUW		CHECK USC	CHECK USC
DESIGN		TECH	4/2/99
DRAWN		TECH	4/2/99
PROJECT DESIGN ENGINEER		CHECK	CHECK
APPROVAL		DATE	DATE
MARGARET J. SIMMONS-CROSS		12/7/98	12/7/98
PROJECT DESIGN ENGINEER		APPROVED	12/7/98
SECTION MANAGER		DATE	DATE
JONN TERRY			
SECTION MANAGER			
1-15 CORRIDOR RECONSTRUCTION		PROJECT NUMBER *SP-15-7(135)296	
RETAINING WALL R-348-6		SECTION 2.5	
SALT LAKE COUNTY		DWG. NO. 2.5-R-348-6.1	
SHT. 1 OF 4			

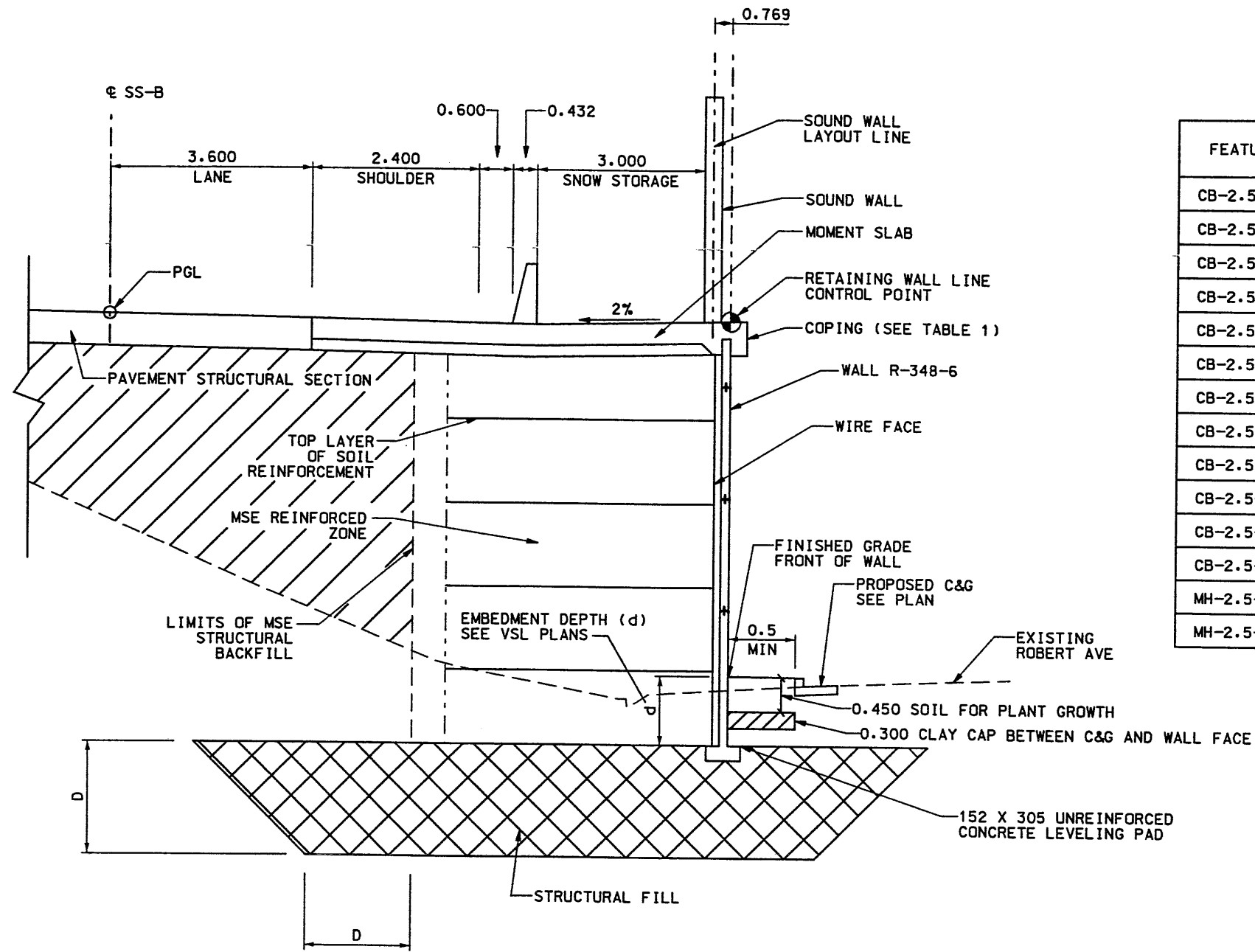
RFC After Final Approval



ELEVATION AT FACE OF WALL
RETAINING WALL R-348-6



APPROVED FOR CONSTRUCTION		NO.	DATE	DESCRIPTION
		1/26/99	INITIAL RELEASE PER FDM 2-0667C	
UTAH DEPARTMENT OF TRANSPORTATION		TRACKING NO.	2513402	
SVERDRUP/DE LEUW		CHECK DATE	CHECK BY	CHECK
DESIGN DATE: 12/7/98		DESIGN TECH: 1/78	CHECK DATE: 11/78	CHECK BY: 11/78
PROJECT DESIGN ENGINEER: MARGARET J. SIMMONS-CROSS		DRAWN DATE: 1/78	CHECK DATE: 11/78	CHECK BY: 11/78
PROJECT MANAGER: JOHN TERRY		DATE: 12/7/98	SECTION MANAGER:	QUANT.:
I-15 CORRIDOR RECONSTRUCTION		RETAINING WALL R-348-6		
SECTION 2.5		PROJECT NUMBER #SP-15-7(135)296		
SALT LAKE COUNTY		DWG. NO. 2.5-R-348-6.1		
SHT. 1 OF 10				



MSE 2-STAGE WALL WITH P&P SOUNDWALL TYPICAL SECTION WALL R-348-6

NTS
(REFER TO CS-83-2)

TABLE 1

RET WALL STA RANGE	COPING STANDARD DRAWING
1+000.000 - 1+010.463	CS-29-1
1+010.463 - 1+023.640	CS-27-1 (SEE NOTE 3)
1+023.640 - 1+192.878	CS-83-2
1+192.878 - 1+206.384	CS-27-1 (SEE NOTE 3)
1+206.384 - 1+217.492	CS-29-1

FEATURE	RET WALL STA. OFFSET (SEE NOTE 5)	FL (INCOMING)	FL (OUTGOING)	TYPE
CB-2.5-82	1+040.538, 4.119 LT	1299.30 (S)	1298.70 (INV)	V-1710 (R) CS-16
CB-2.5-84	1+082.902, 4.119 LT	1299.38 (S)	1298.78 (INV)	V-1710 (R) CS-16
CB-2.5-94	1+008.484, 4.123 LT	—	1297.99 (INV)	SEE BRIDGE PLANS
CB-2.5-95	1+021.500, 4.123 LT	—	1297.91 (INV)	SEE BRIDGE PLANS
CB-2.5-105	1+152.263, 4.119 LT	1300.07 (S)	1298.68 (N)	V-1710 (A,R)
CB-2.5-113	1+195.403, 4.119 LT	—	1299.25 (INV)	SEE BRIDGE PLANS
CB-2.5-222	1+040.963, 3.598 RT	1292.20 (E) 1292.20 (N)	1292.17 (W)	V-1710 (B)
CB-2.5-223	1+124.100, 1.280 RT	1292.48 (E)	1292.45 (W)	V-1710 (B)
CB-2.5-302	1+040.538, 4.119 LT	—	(SEE NOTE 2)	CS-93
CB-2.5-303	1+082.902, 4.119 LT	—	(SEE NOTE 2)	CS-93
CB-2.5-304	1+152.263, 4.119 LT	—	(SEE NOTE 2)	CS-93
CB-2.5-405	1+083.142, 2.077 RT	1292.33 (E) 1292.33 (N)	1292.33 (W)	V-1711 (B)
MH-2.5-403	1+008.518, 2.116 RT	1292.06 (E) 1292.06 (N)	1292.04 (W)	V-1711
MH-2.5-404	1+021.460, 3.149 RT	1292.11 (E) 1292.11 (N)	1292.10 (W)	V-1711

DRAINAGE STRUCTURE INFORMATION

WASATCH CONSTRUCTORS
FEB 11 1999
RELEASED FOR CONSTRUCTION

NOTE:

- REFER TO VSL SHOP DRAWINGS FOR LIMITS OF STRUCTURAL FILL (D).
- REFER TO CS-93 FOR SNOW STORAGE DRAIN ELEVATIONS.
- WHEN USING CS-27-1, MODIFY THE CROSS SLOPE OF THE COPING TO BE 2% TOWARDS THE BARRIER TO MATCH THE LAYOUT OF CS-83-2. SEE TABLE 1.
- ALL DIMENSIONS SHOWN ARE IN METERS UNLESS NOTED OTHERWISE.
- CONTRACTOR TO ADJUST STATION LOCATION OF INLETS ADJACENT TO MSE WALLS TO MISS MSE STRAPS. SEE VSL SHOP DRAWINGS FOR FINAL INLET LOCATIONS.



APPROVED FOR CONSTRUCTION

UTAH DEPARTMENT OF TRANSPORTATION

SVERDRUP/DE LEUW

I-15 CORRIDOR RECONSTRUCTION

RETAINING WALL R-348-6

SECTION 2.5

PROJECT NUMBER #SP-15-7(135)296

SALT LAKE COUNTY

DWG. NO. 2.5-R-348-6.2

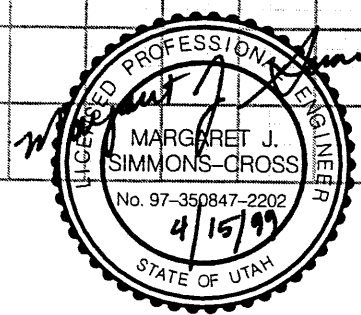
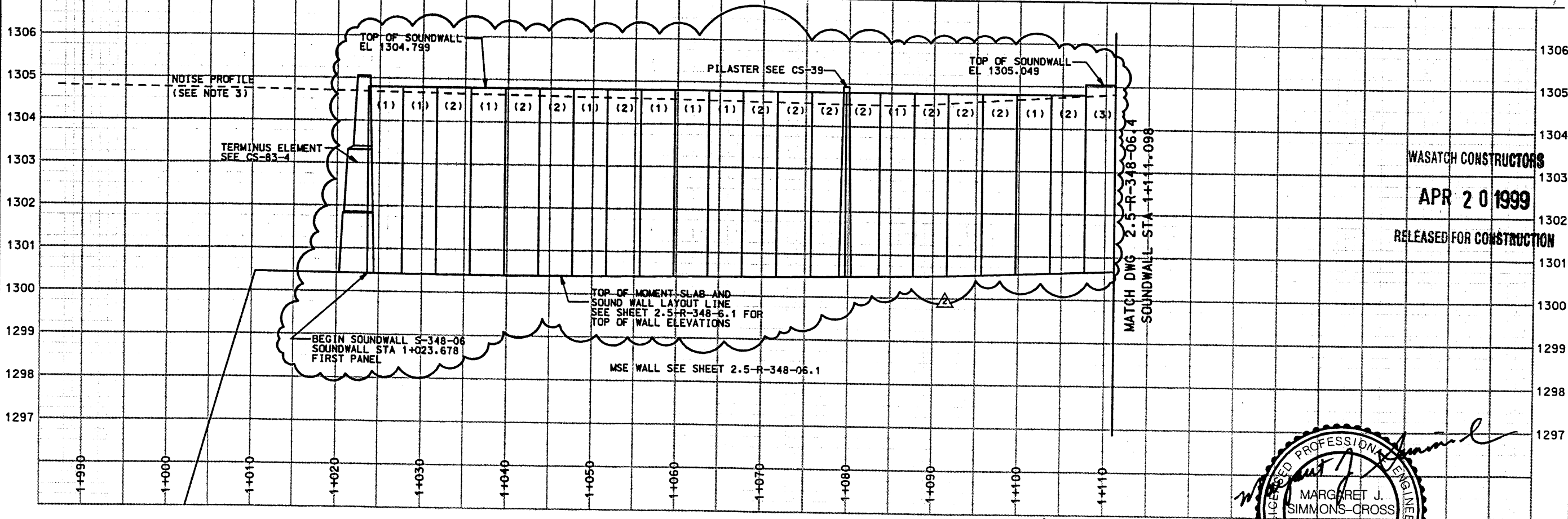
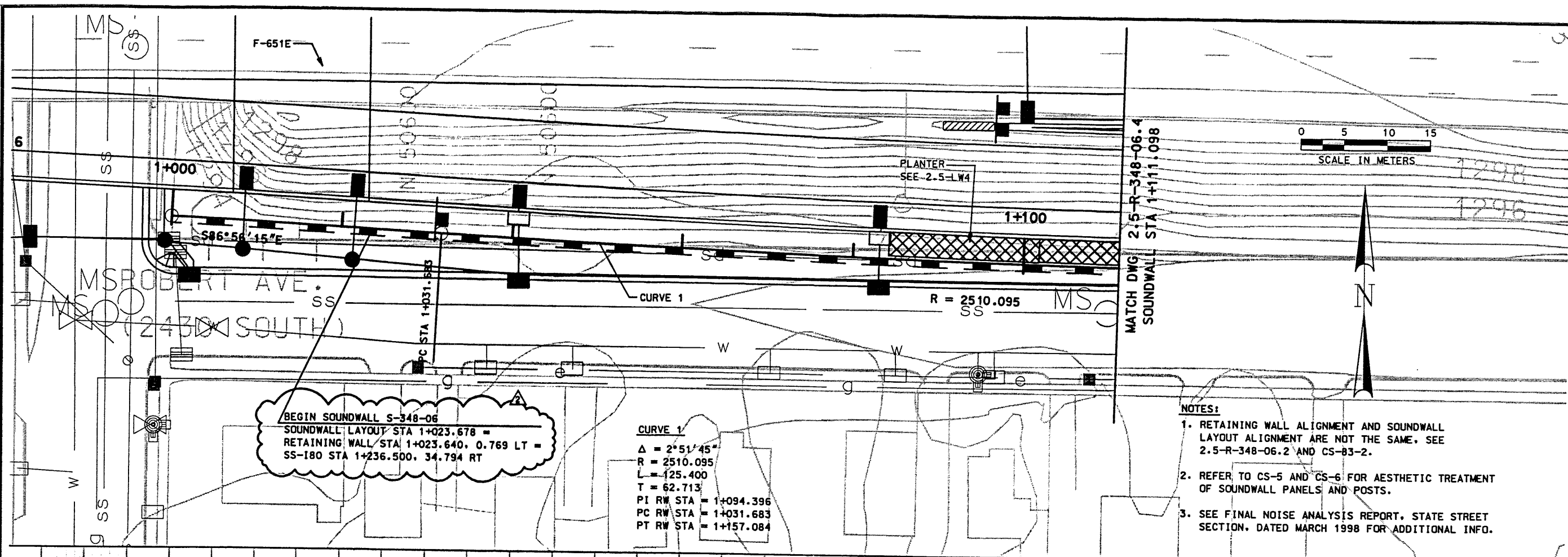
SHT. 2 OF 4

NO.	DATE	DESCRIPTION
1	1/26/99	INITIAL RELEASE PER FDM 2-0667C

DESIGN	TECH	11/98	CHECK	MSC	12/98
DRANK	TECH	11/98	CHECK	MSC	12/98
QUANT.			CHECK		

TRACKING NO. 2513402

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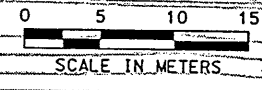
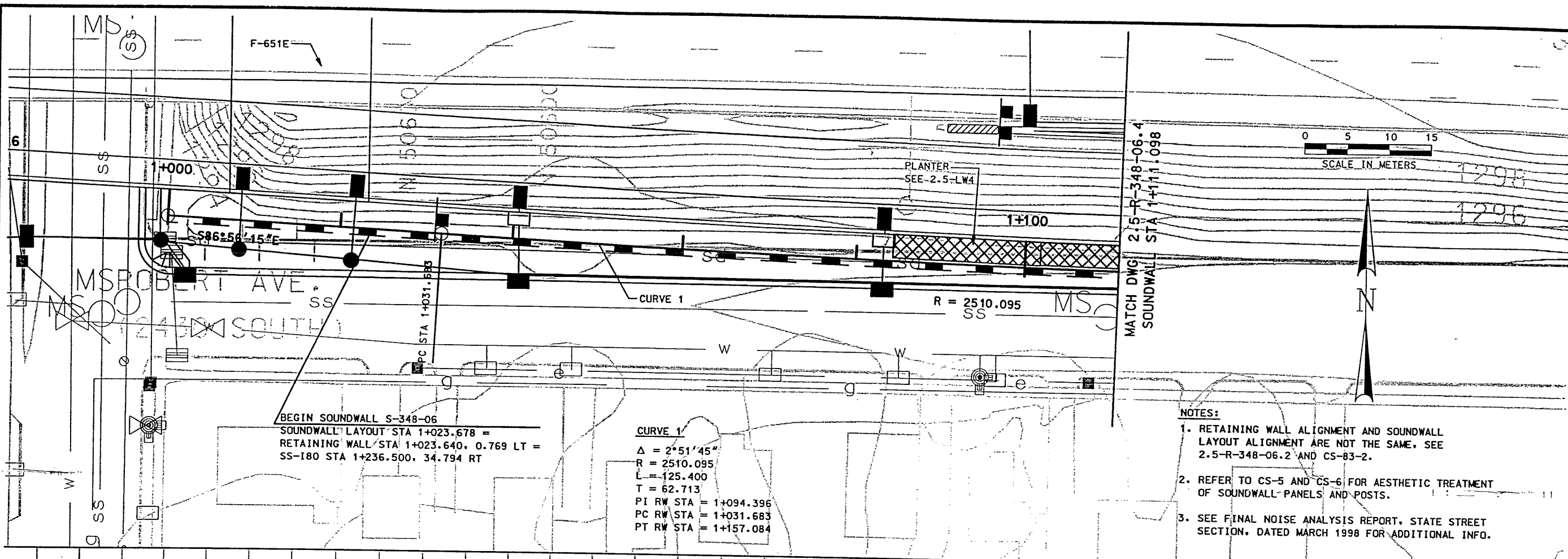


WALL R-348-6 (SOUNDWALL)

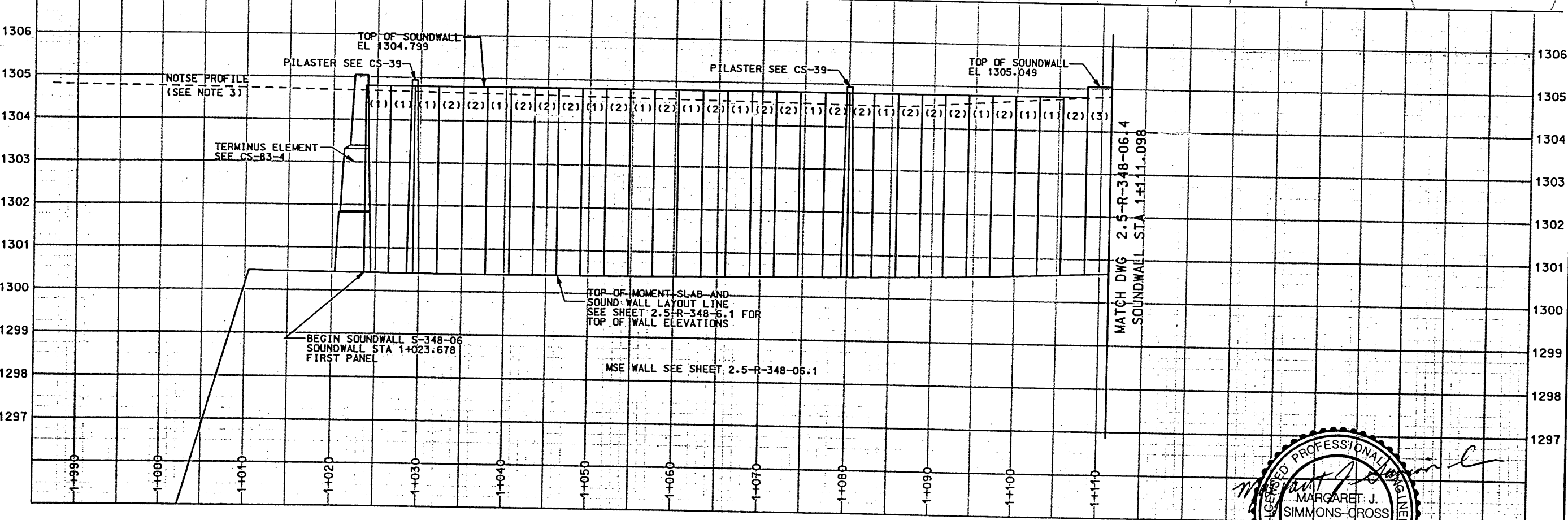
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NO.	DATE	INITIAL	RELEASE PER
1	1/26/99	MM	FORM 2-0667C
2	4/8/99	MM	REVISED SOUNDWALL TO 4.0 PANELS
UTAH DEPARTMENT OF TRANSPORTATION		TRACKING NO.	2513402
SVERDRUP/DE LEUW		CHECK USC	7/98
DESIGN		TEH	7/98
DRAWN		TEH	7/98
QUANT.		CHECK USC	7/98
CHECK		CHECK	CHECK
I-15 CORRIDOR RECONSTRUCTION		APPROVAL DATE	8/13/98
RETAINING WALL R-348-6		DESIGNER	MARGARET SIMMONS-CROSS
SECTION 2.5		PROJECT DESIGN ENGINEER	JOHN TERRY
PROJECT NUMBER #SP-15-7(135)296		APPROVED DATE	8/13/98
SALT LAKE COUNTY		SECTION MANAGER	
DWC. NO. 2.5-R-348-6.3			
SHT. 3 OF 4			

RFC After Final Approval

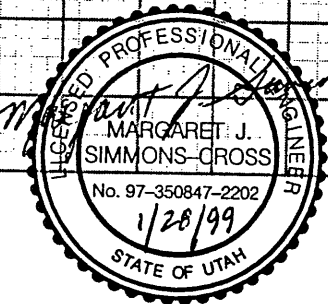
Date: 25-JAN-1999 Time: 15:36 User: name: hancanto



- NOTES:**
1. RETAINING WALL ALIGNMENT AND SOUNDWALL LAYOUT ALIGNMENT ARE NOT THE SAME. SEE 2.5-R-348-06.2 AND CS-83-2.
 2. REFER TO CS-5 AND CS-6 FOR AESTHETIC TREATMENT OF SOUNDWALL PANELS AND POSTS.
 3. SEE FINAL NOISE ANALYSIS REPORT, STATE STREET SECTION, DATED MARCH 1998 FOR ADDITIONAL INFO.



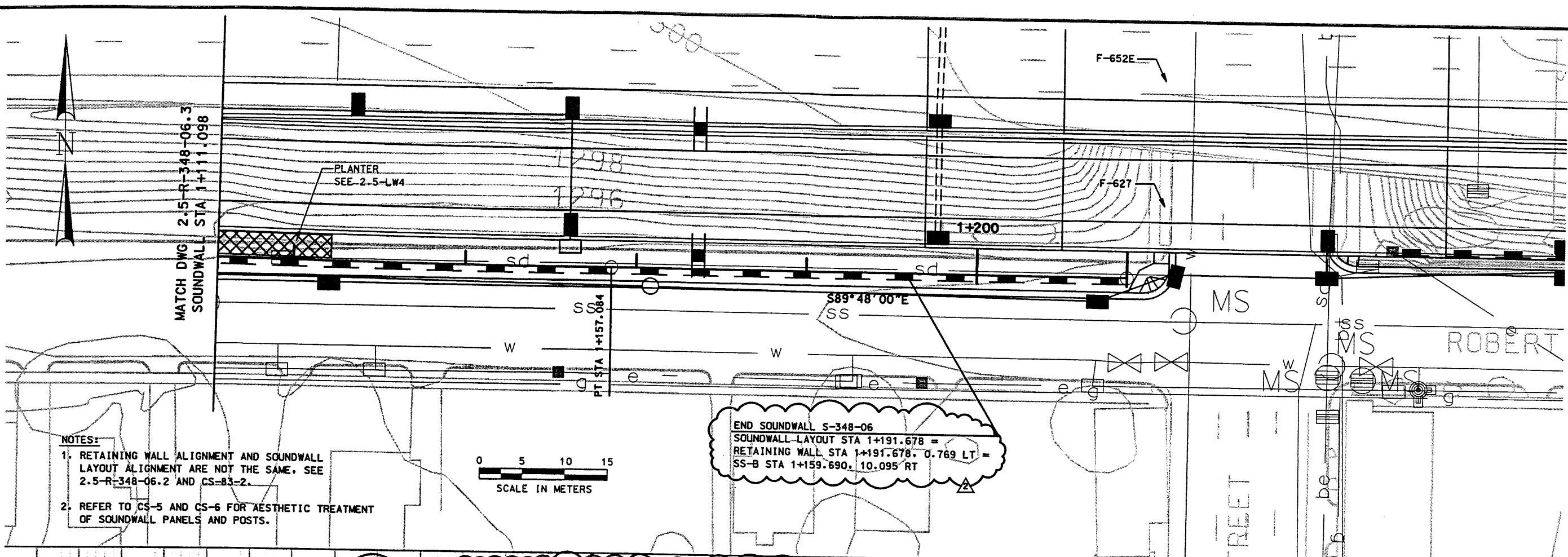
WALL R-348-6 (SOUNDWALL)



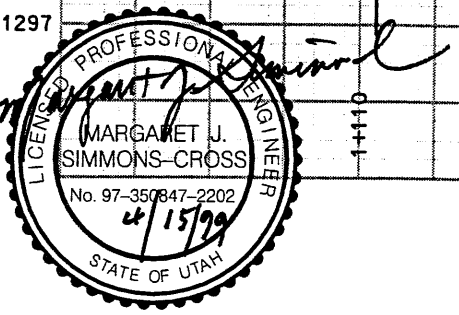
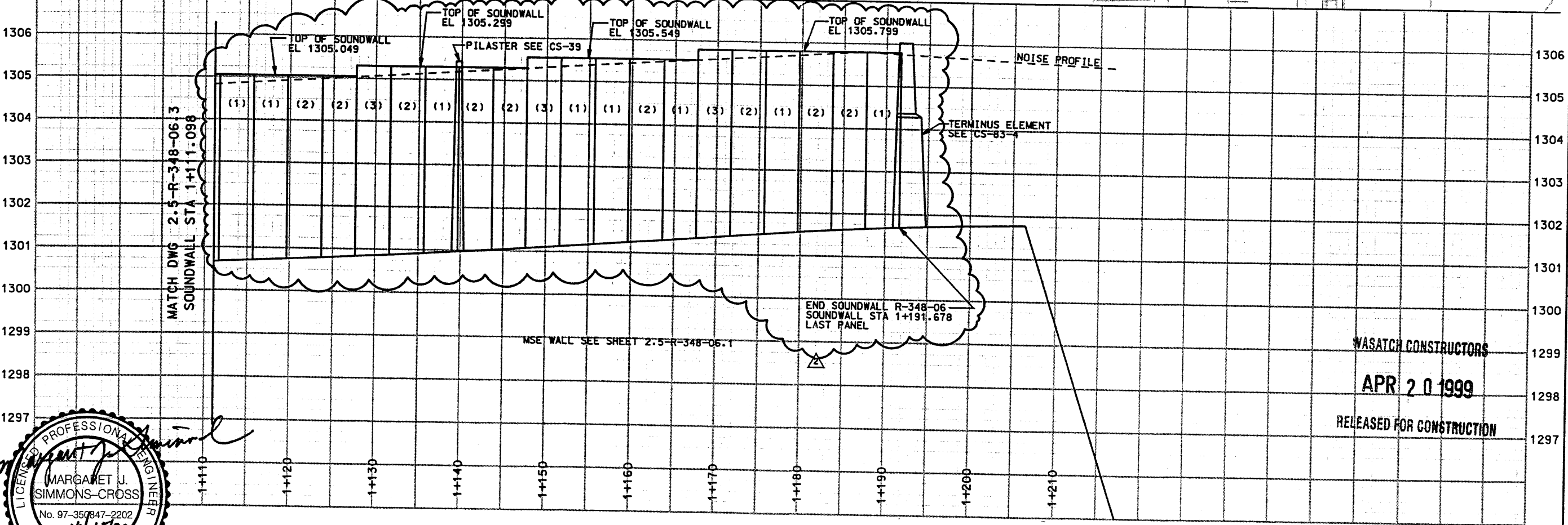
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NO.	DATE	INITIAL	RELEASE PER
1	1/26/99		FORM 2-0667C
UTAH DEPARTMENT OF TRANSPORTATION		TRACKING NO.	2513402
SVERDRUP/DE LEUW		CHECK	DATE
MARGARET J. SIMMONS-GROSS		DESIGN	7/98
PROJECT DESIGN ENGINEER		DRAWN	7/98
JOHN TERRY		CHECK	7/98
SECTION MANAGER		CHECK	
I-15 CORRIDOR RECONSTRUCTION		SECTION 2.5	
RETAINING WALL R-348-6		PROJECT NUMBER #SP-15-7(135)296	
SALT LAKE COUNTY		DWG. NO. 2.5-R-348-6.3	
SHT. 3 OF 10			

Date: 15-APR-1999 Time: 10:34 Username: hansonrte

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- NOTES:**
1. RETAINING WALL ALIGNMENT AND SOUNDWALL LAYOUT ALIGNMENT ARE NOT THE SAME. SEE 2.5-R-348-06.2 AND CS-83-2.
 2. REFER TO CS-5 AND CS-6 FOR AESTHETIC TREATMENT OF SOUNDWALL PANELS AND POSTS.



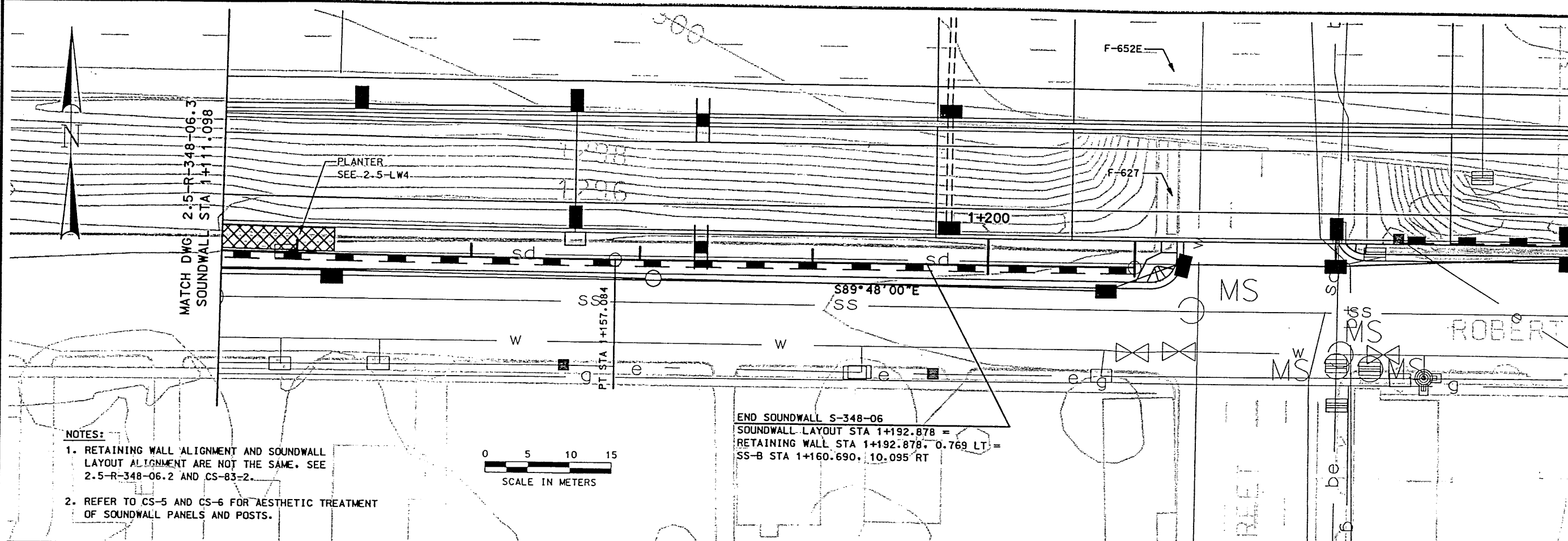
WALL R-348-6 (SOUNDWALL)

WASATCH CONSTRUCTORS
APR 20 1999
RELEASED FOR CONSTRUCTION

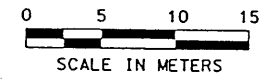
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NO.	DATE	INITIAL RELEASE PER FDM 2-0667C	REVISED SOUNDWALL TO 4.0 PANELS
1	1/26/98		
2	4/8/99		
UTAH DEPARTMENT OF TRANSPORTATION		TRACKING NO.	2513402
SVERDRUP/DE LEUW		CHECK 12/98	CHECK 12/98
APPROVAL	8/13/98	DESIGN	7/98
RECOMM.	MARGARET SIMMONS-CROSS	CHECK	MSC
DATE	8/13/98	PROJECT	DESIGN ENGINEER
APPROVED	8/13/98	DATE	7/98
	JONN TERRY	DATE	7/98
	SECTION MANAGER	QUANT.	CHECK
I-15 CORRIDOR RECONSTRUCTION		RETAINING WALL R-348-6	
SECTION 2.5		PROJECT NUMBER #SP-15-7(135)296	
SALT LAKE COUNTY		DWG. NO. 2.5-R-348-6.4	
SHT.	4	OF	4

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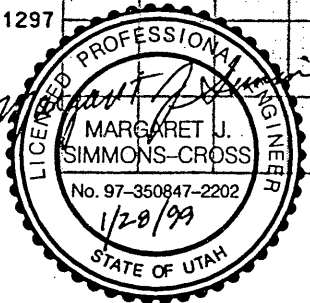
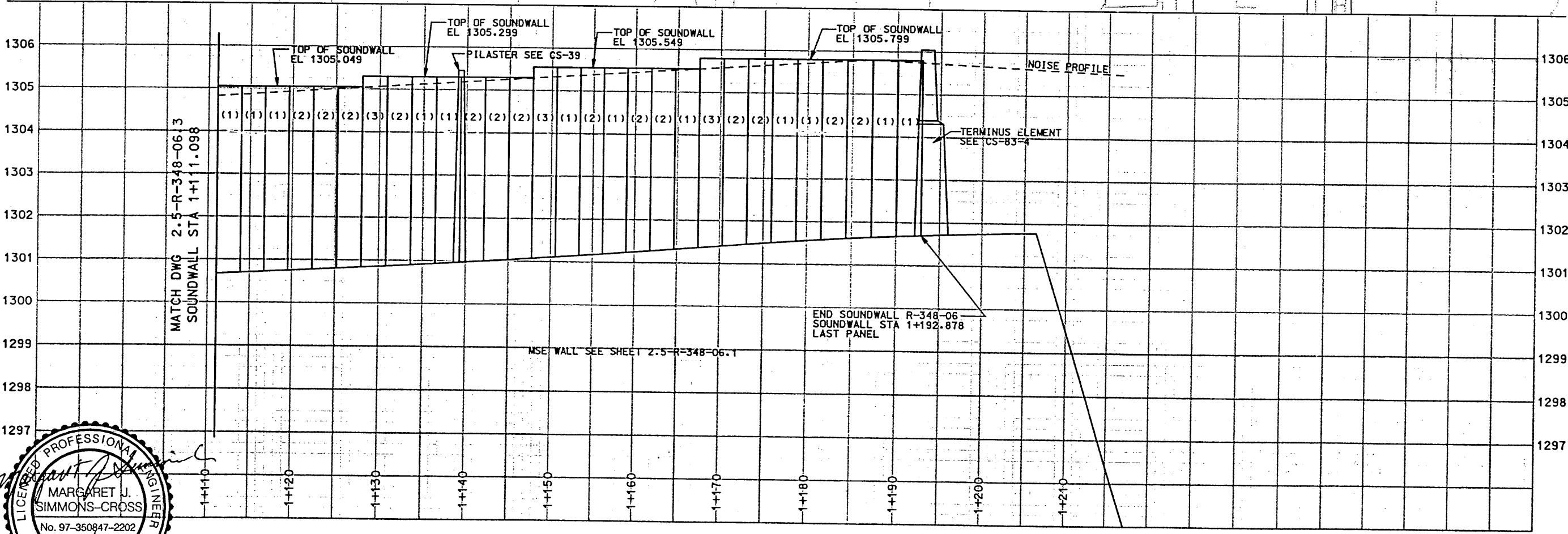
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- NOTES:**
1. RETAINING WALL ALIGNMENT AND SOUNDWALL LAYOUT ALIGNMENT ARE NOT THE SAME. SEE 2.5-R-348-06.2 AND CS-83-2.
 2. REFER TO CS-5 AND CS-6 FOR AESTHETIC TREATMENT OF SOUNDWALL PANELS AND POSTS.



END SOUNDWALL S-348-06
 SOUNDWALL LAYOUT STA 1+192.878 =
 RETAINING WALL STA 1+192.878, 0.769 LT =
 SS-B STA 1+160.690, 10.095 RT



WALL R-348-6 (SOUNDWALL)

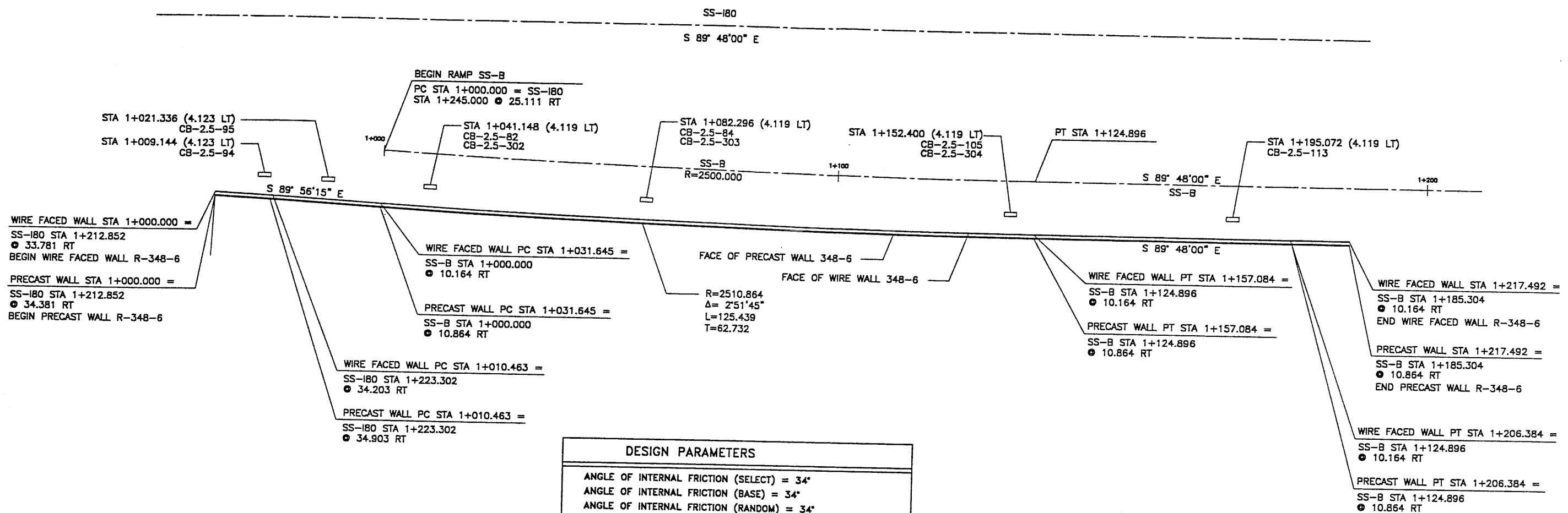
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UTAH DEPARTMENT OF TRANSPORTATION		SVERDRUP/DE LEUW		TRACKING NO.	
I-15 CORRIDOR RECONSTRUCTION		DESIGN TDR 7/98		2513402	
RETAINING WALL R-348-6		PROJECT DESIGN ENGINEER		CHECK USC	
SECTION 2.5		DATE 8/13/98		12/98	
PROJECT NUMBER #SP-15-7(135)296		PROJECT DESIGN ENGINEER		CHECK USC	
		DATE 8/13/98		12/98	
		SECTION MANAGER		CHECK	
SALT LAKE COUNTY		DWG. NO.			
		2.5-R-348-6.4			
SHT. 4 OF 10					

REFERENCE (X-UTAH)DWG

H:\RE_EARTH\PROJECT\239-0007\1998\SS-WALLS\SS-06\RE-1

FINAL PLOT 01-29-99

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
▲	01-29-99	RELEASE FOR 1ST STAGE CONST.



DESIGN PARAMETERS	
ANGLE OF INTERNAL FRICTION (SELECT)	= 34°
ANGLE OF INTERNAL FRICTION (BASE)	= 34°
ANGLE OF INTERNAL FRICTION (RANDOM)	= 34°
UNIT WEIGHT BACKFILL	= 135 PCF. (21.2 KN/M ³)
TRAFFIC SURCHARGE	= 250 PSF (12 KPa)
SEISMIC ACCELERATION COFF.	= 0.27g (50 YR)
SEISMIC ACCELERATION COFF.	= 0.68g (250 YR)

DESIGN CRITERIA	
SAFETY FACTOR (OVERTURNING)	= 2.0
SAFETY FACTOR (SLIDING)	= 1.5
SAFETY FACTOR (PULLOUT)	= 1.5
DESIGN LIFE	= 75 YEARS

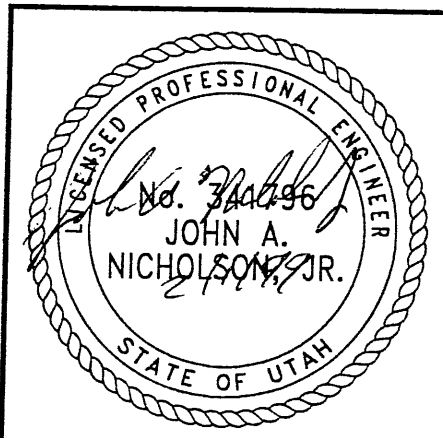
RETAINED EARTH INDEX	
RE-1	PLAN WIRE FACED WALL R-348-6, NOTES & DESIGN CRITERIA
RE-2	TYPICAL CROSS SECTION
RE-3	WIRE FACED WALL "R-348-6"
RE-4	WIRE FACED WALL "R-348-6"
RE-5	WIRE FACED WALL "R-348-6"
RE-6	WIRE FACED WALL "R-348-6"

WASATCH CONSTRUCTORS
FEB 11 1999
 RELEASED FOR CONSTRUCTION

PLAN VIEW WALL "R-348-6"
 SCALE: 1=250 (FULL SIZE)
 SCALE: 1=500 (HALF SIZE)

METRIC

CERTIFIED FOR INTERNAL STABILITY OF RETAINED EARTH™ STRUCTURES ONLY. EXTERNAL STABILITY, INCLUDING BUT NOT LIMITED TO FOUNDATION AND SLOPE STABILITY, IS THE RESPONSIBILITY OF THE OWNER. DESIGN IS BASED ON THE ASSUMPTION THAT THE MATERIAL WITHIN THE RETAINED EARTH™ MASS, METHODS OF CONSTRUCTION, AND QUALITY OF PREFABRICATED MATERIALS CONFORM TO THE MANUFACTURER'S SPECIFICATION.



REVISION		NO.	DATE	CHK

DES.	10-16-98	MM		
DRN.	10-16-98	DSW		
CHK.	10-16-98	MM		

RETAINED EARTH™

VSL CORPORATION
 2610 Piedmont Place, Suite 200
 Raleigh, NC 27612
 Telephone: (919) 781-5272
 Fax: (919) 781-4609

ALABAMA, CA / DANIA, TX / RALEIGH, NC (CORPORATE OFFICE)
 MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA

VSL

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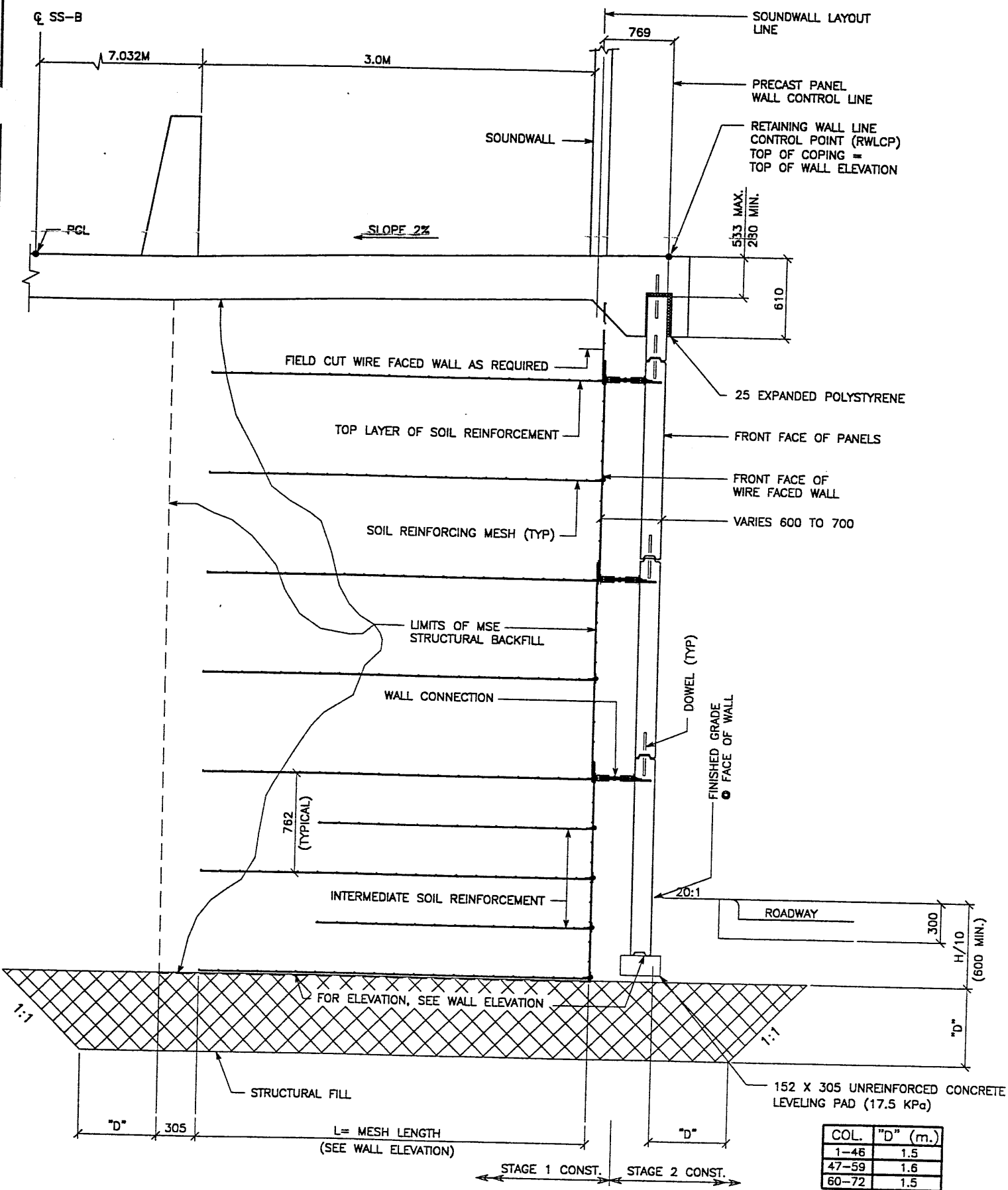
RETAINED EARTH™ WALLS
 PLAN VIEW MSE WALL "R-348-6"
 UTAH I-15 RECONSTRUCTION
 SALT LAKE COUNTY, UTAH
 UTAH DEPARTMENT OF TRANSP.

DWG. NO.	2.5R-348-6.5
JOB NO.	239-0007
SHT. NO.	RE-1

REFERENCE (X-UTAH.DWG)

C:\MSE-DWGS\SS-SERIES\SS-06\RE-2

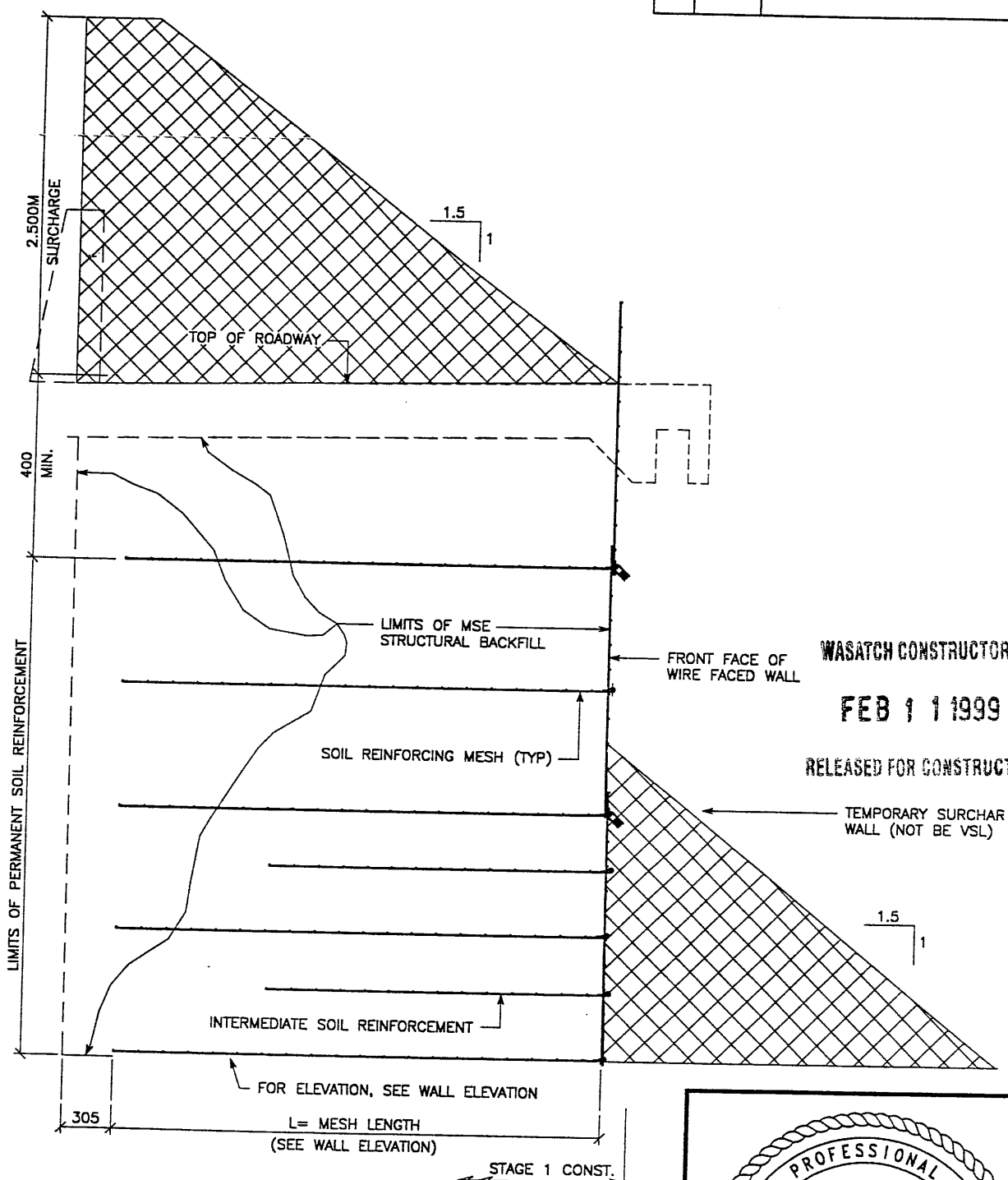
FINAL PLOT 01-29-99



COL.	"d" (m.)
1-46	1.5
47-59	1.6
60-72	1.5

TYPICAL CROSS SECTION
SCALE: 1:20 (FULL SIZE)
SCALE: 1:40 (HALF SIZE)

SEE FOSTER GEOTECHNICAL STD
DWG FOR PLACEMENT OF
INTERMEDIATE SOIL REINFORCEMENT



SURCHARGE DETAIL
TYPICAL CROSS SECTION

SCALE: 1:20 (FULL SIZE)
SCALE: 1:40 (HALF SIZE)

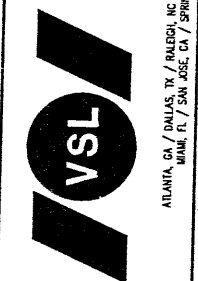
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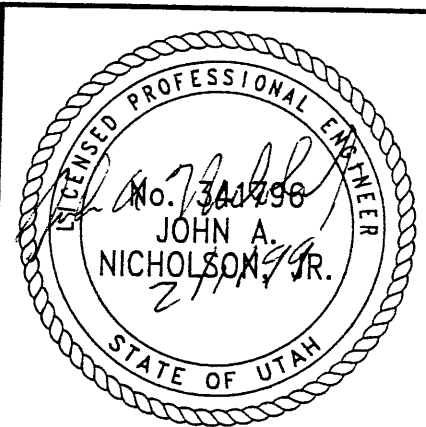
APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
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DES.	MM
09-30-98	MM
DRN.	DSW
09-30-98	DSW
CHK.	MM
09-30-98	MM

VSL CORPORATION
2840 Plaza Place, Suite 200
Raleigh, NC 27612
Telephone: (919) 781-8272
Fax: (919) 781-4969



WASATCH CONSTRUCTORS
FEB 11 1999
RELEASED FOR CONSTRUCTION



RETAINED EARTH™ WALLS
WIRE FACED WALL "R-348-6"
TYPICAL CROSS SECTION
UTAH I-15 INTERCHANGE
SALT LAKE COUNTY, UTAH
UTAH DEPARTMENT OF TRANSP.

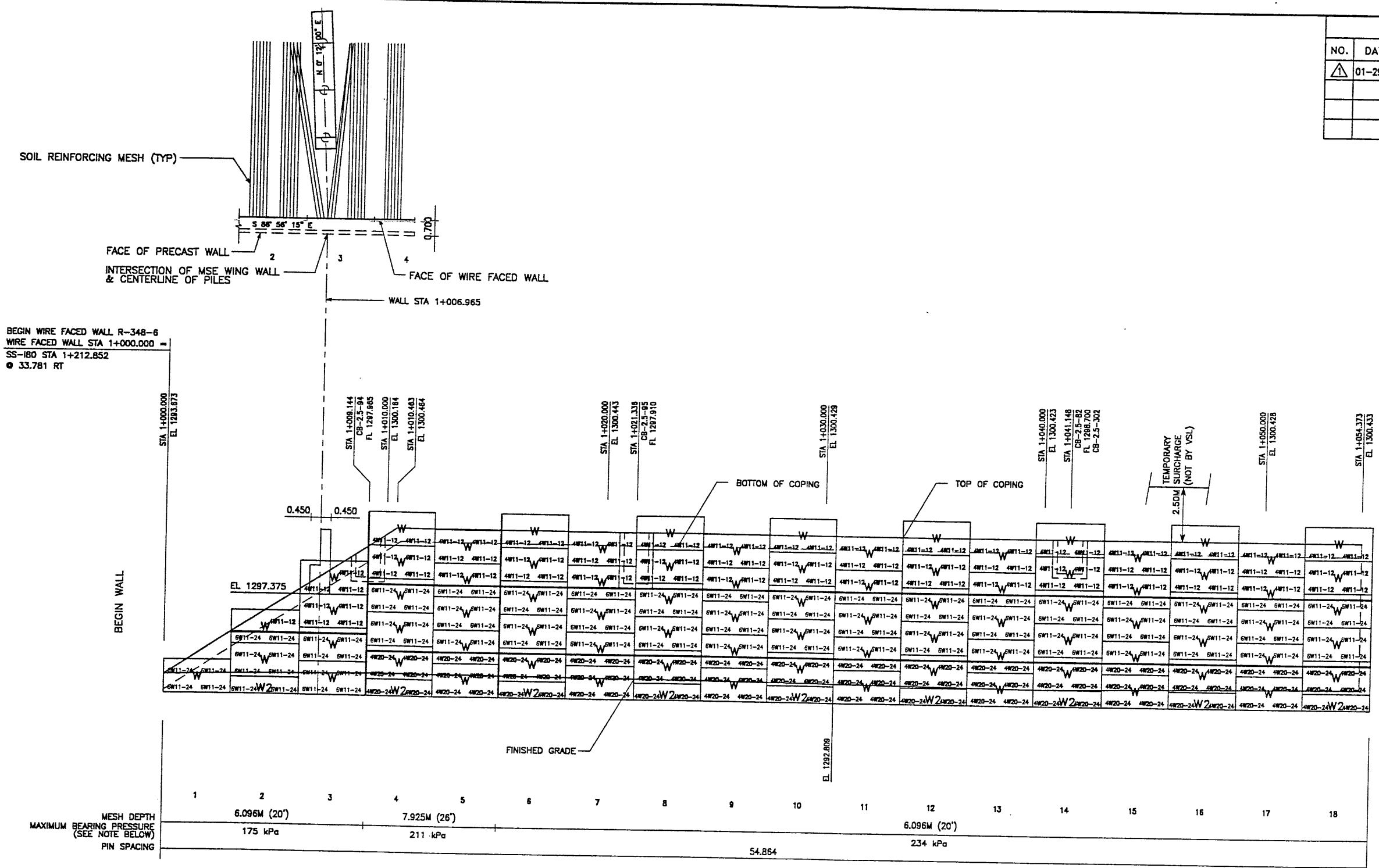
DWG. NO.	2.5R-348-6.6
JOB NO.	239-0007
SHT. NO.	RE-2

NO.	DATE	REVISION	BY	CHK

REFERENCE (X-UTAH.DWG)

C:\MSE-DWGS\SS-SERIES\SS-06\SS-06

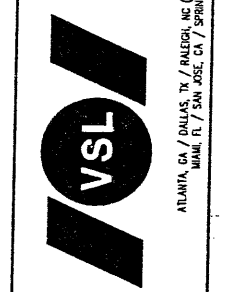
FINAL PLOT 01-29-99



APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
▲ 01-29-99		RELEASE FOR 1ST STAGE CONSTRUCTION

DES.	MM	DSW	MM	RETAINED EARTH™
01-01-98				
01-01-98				
01-01-98				

VSL CORPORATION
2840 Plaza Place, Suite 200
Raleigh, NC 27612
Telephone: (919) 781-6772
Fax: (919) 781-6959



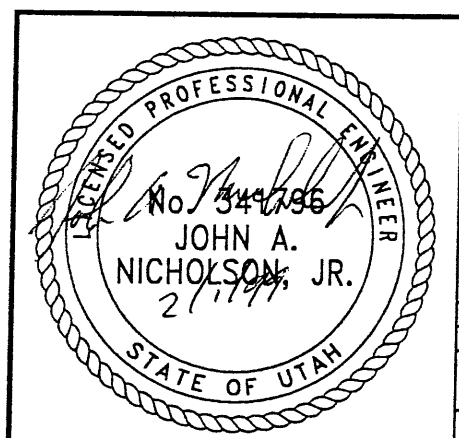
ATLANTA, GA / DALLAS, TX / RALEIGH, NC (CORPORATE OFFICE)
MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA

WASATCH CONSTRUCTORS
FEB 1 1 1999
RELEASED FOR CONSTRUCTION

RETAINING WALL "R-348-6" - 1ST STAGE: WIRE FACED WALL
(FRONT FACE SHOWN)
(TOTAL SURFACE AREA OF FACING = 1817.30 SM)
SCALE 1:100 (FULL SIZE)
SCALE 1:200 (HALF SIZE)

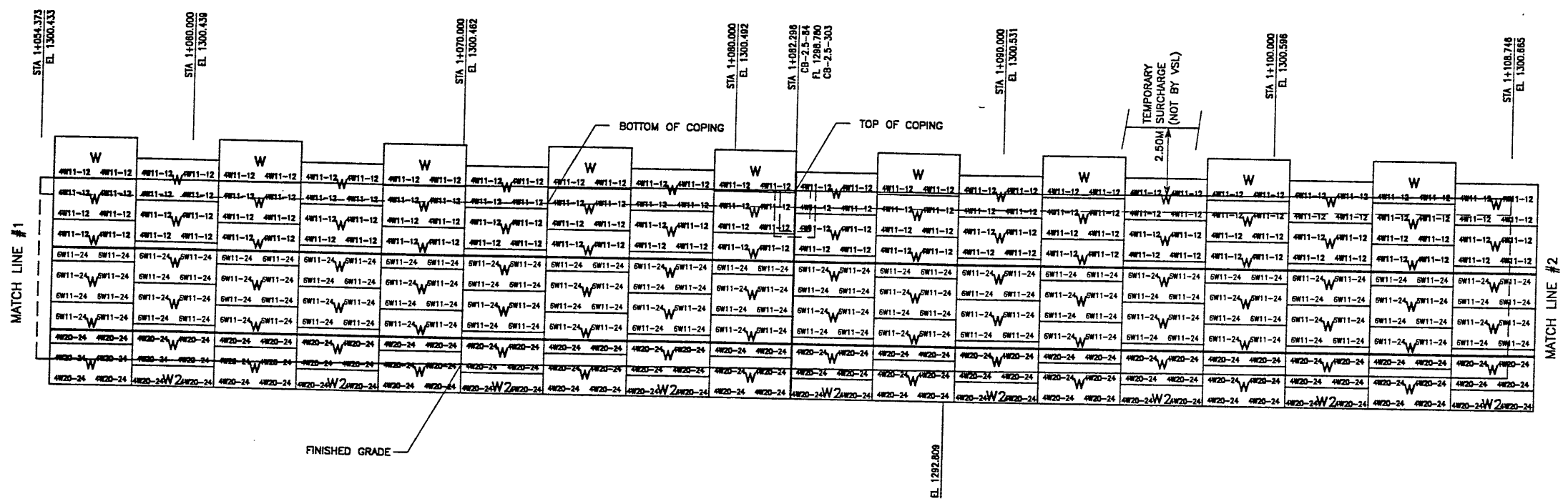
METRIC

CERTIFIED FOR INTERNAL STABILITY OF RETAINED EARTH™ STRUCTURES ONLY. EXTERNAL STABILITY, INCLUDING BUT NOT LIMITED TO FOUNDATION AND SLOPE STABILITY, IS THE RESPONSIBILITY OF THE OWNER. DESIGN IS BASED ON THE ASSUMPTION THAT THE MATERIAL WITHIN THE RETAINED EARTH™ MASS, METHODS OF CONSTRUCTION, AND QUALITY OF PREFABRICATED MATERIALS CONFORM TO THE MANUFACTURER'S SPECIFICATION.



RETAINED EARTH™ WALLS WALL "R-348-6" - 1ST STAGE: WIRE FACED WALL
UTAH 1-15 INTERCHANGE SALT LAKE COUNTY, UTAH UTAH DEPARTMENT OF TRANSP.
DWG. NO. 2.5R-348-6.7
JOB NO. 239-0007
SHT. NO. RE-3

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	01-29-99	RELEASE FOR 1ST STAGE CONSTRUCTION



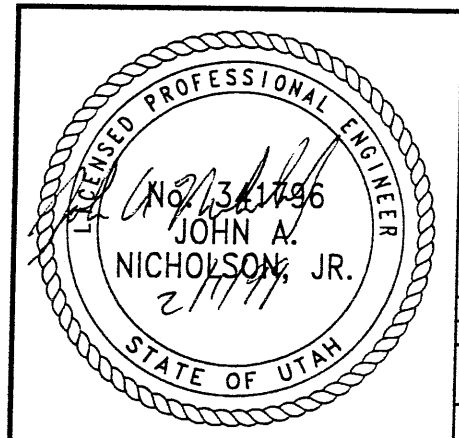
MESH DEPTH	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	
MAXIMUM BEARING PRESSURE (SEE NOTE BELOW)	6.096M (20')																	6.706M (22')	
PIN SPACING	234 kPa																	244 kPa	
																		54.864	

RETAINING WALL "R-348-6" - 1ST STAGE: WIRE FACED WALL
 (FRONT FACE SHOWN) SCALE 1:100 (FULL SIZE)
 (TOTAL SURFACE AREA OF FACING = 1817.30 SM) SCALE 1:200 (HALF SIZE)

WASATCH CONSTRUCTORS
 FEB 11 1999
 RELEASED FOR CONSTRUCTION

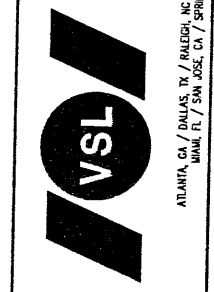
METRIC

CERTIFIED FOR INTERNAL STABILITY OF RETAINED EARTH™ STRUCTURES ONLY. EXTERNAL STABILITY, INCLUDING BUT NOT LIMITED TO FOUNDATION AND SLOPE STABILITY, IS THE RESPONSIBILITY OF THE OWNER. DESIGN IS BASED ON THE ASSUMPTION THAT THE MATERIAL WITHIN THE RETAINED EARTH™ MASS, METHODS OF CONSTRUCTION, AND QUALITY OF PREFABRICATED MATERIALS CONFORM TO THE MANUFACTURER'S SPECIFICATION.



RETAINED EARTH™ WALLS
 WALL "R-348-6" - 1ST STAGE: WIRE FACED WALL
 UTAH I-15 INTERCHANGE
 SALT LAKE COUNTY, UTAH
 UTAH DEPARTMENT OF TRANSP.

DWG. NO.	2.5R-348-6.8
JOB NO.	239-0007
SHT. NO.	RE-4



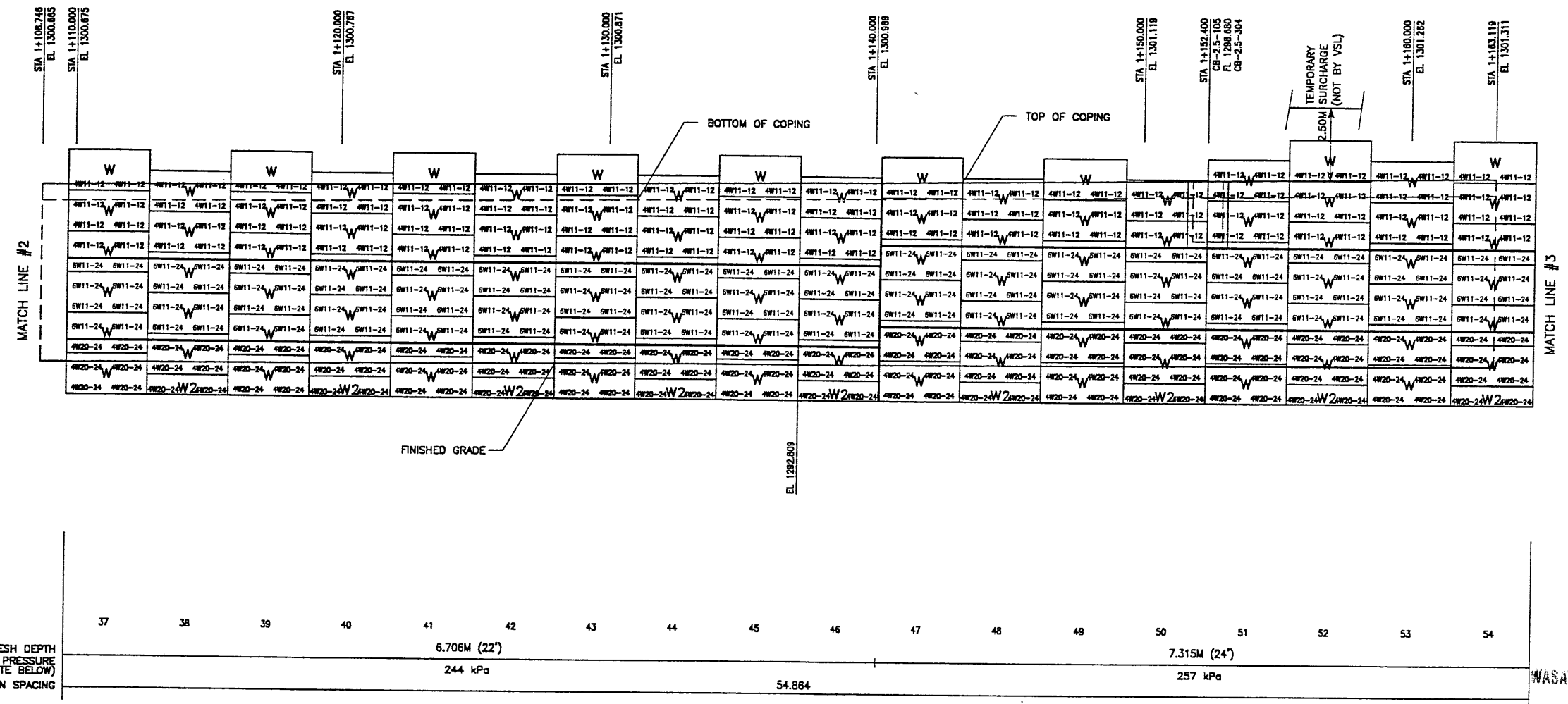
VSL CORPORATION
 2840 Plaza Place, Suite 200
 Raleigh, NC 27612
 Telephone (919) 781-6272
 Fax (919) 781-6689

DES.	01-01-98	MM
DRN	01-01-98	DSW
CHK.	01-01-98	MM

NO.	DATE	DESCRIPTION	BY

ATLANTA, GA / DALLAS, TX / RALEIGH, NC (CORPORATE OFFICE)
 MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
▲	01-29-99	RELEASE FOR 1ST STAGE CONSTRUCTION



RETAINING WALL "R-348-6" - 1ST STAGE: WIRE FACED WALL
 (FRONT FACE SHOWN)
 (TOTAL SURFACE AREA OF FACING = 1817.30 SM)

SCALE 1:100 (FULL SIZE)
 SCALE 1:200 (HALF SIZE)

METRIC

CERTIFIED FOR INTERNAL STABILITY OF RETAINED EARTH™ STRUCTURES ONLY. EXTERNAL STABILITY, INCLUDING BUT NOT LIMITED TO FOUNDATION AND SLOPE STABILITY, IS THE RESPONSIBILITY OF THE OWNER. DESIGN IS BASED ON THE ASSUMPTION THAT THE MATERIAL WITHIN THE RETAINED EARTH™ MASS, METHODS OF CONSTRUCTION, AND QUALITY OF PREFABRICATED MATERIALS CONFORM TO THE MANUFACTURER'S SPECIFICATION.

RELEASED FOR CONSTRUCTION

FEB 11 1999

WASATCH CONSTRUCTORS

VSL CORPORATION
 2810 Plaza Place, Suite 200
 Raleigh, NC 27612
 Telephone: (919) 781-6272
 Fax: (919) 781-4689



ATLANTA, GA / DALLAS, TX / BALTIMORE, MD (CORPORATE OFFICE)
 MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA

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RETAINED EARTH™ WALLS
 WALL "R-348-6" - 1ST STAGE: WIRE FACED WALL
 UTAH I-15 INTERCHANGE
 SALT LAKE COUNTY, UTAH
 UTAH DEPARTMENT OF TRANSP.

DWG. NO.	2.5R-348-6.9
JOB NO.	239-0007
SHT. NO.	RE-5

DES.	01-01-98	MM
DRN.	01-01-98	DSW
CHK.	01-01-98	MM

NO.	DATE	REVISION

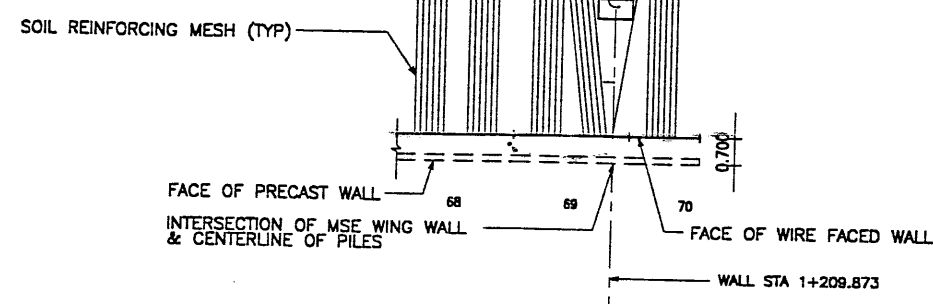
BY	CHK

REFERENCE (X-UTAH.DWG)

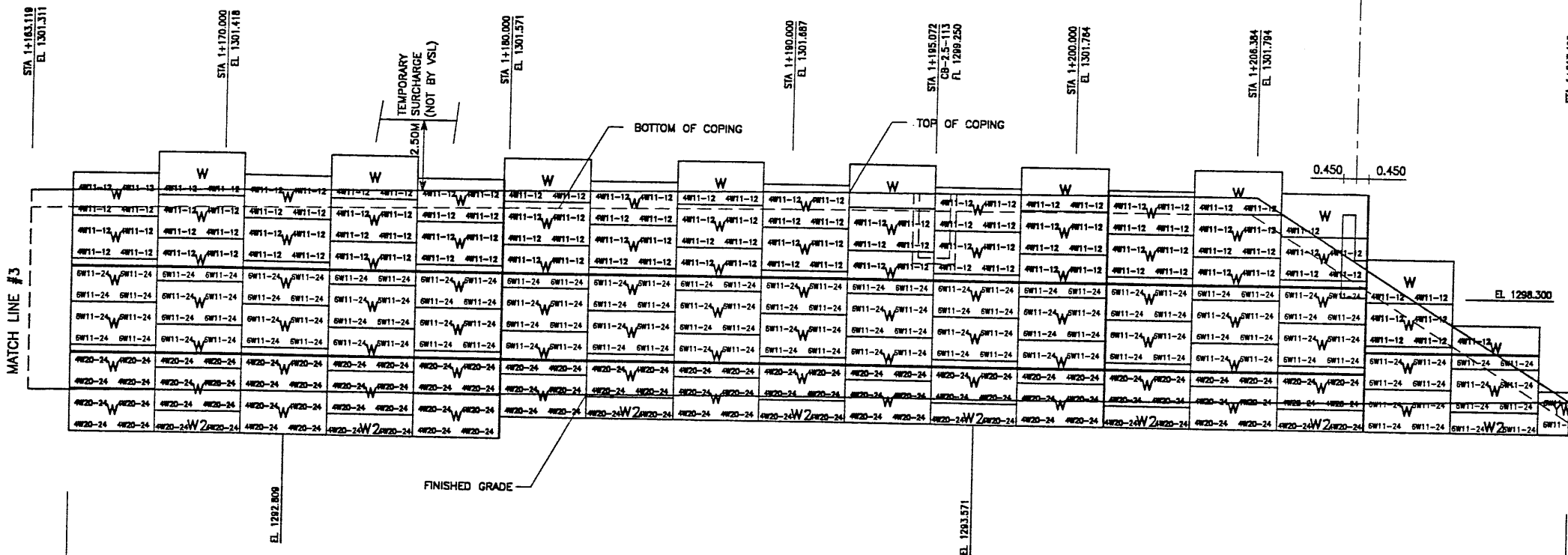
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FINAL PLOT 01-29-99

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
▲	01-29-99	RELEASE FOR 1ST STAGE CONSTRUCTION



END WIRE FACED WALL R-348-6
 WIRE FACED WALL STA 1+217.492-
 SS-B STA 1+185.304
 @ 10.264 RT

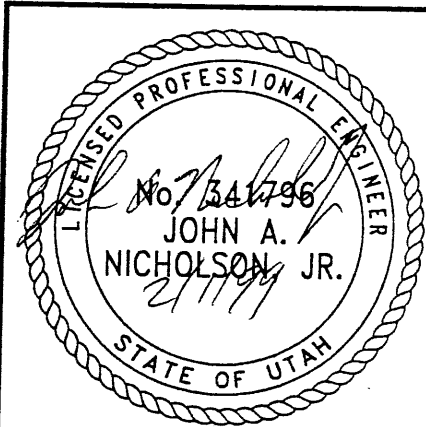


MESH DEPTH	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
MAXIMUM BEARING PRESSURE (SEE NOTE BELOW)			7.315M (24')						6.708M (22')							7.925M (26')		6.096M (20')
PIN SPACING			257 kPa						244 kPa							230 kPa		175 kPa

RETAINING WALL "R-348-6" - 1ST STAGE: WIRE FACED WALL
 (FRONT FACE SHOWN) SCALE 1:100 (FULL SIZE)
 (TOTAL SURFACE AREA OF FACING = 1817.30 SM) SCALE 1:200 (HALF SIZE)

METRIC

CERTIFIED FOR INTERNAL STABILITY OF RETAINED EARTH™ STRUCTURES ONLY. EXTERNAL STABILITY, INCLUDING BUT NOT LIMITED TO FOUNDATION AND SLOPE STABILITY, IS THE RESPONSIBILITY OF THE OWNER. DESIGN IS BASED ON THE ASSUMPTION THAT THE MATERIAL WITHIN THE RETAINED EARTH™ MASS, METHODS OF CONSTRUCTION, AND QUALITY OF PREFABRICATED MATERIALS CONFORM TO THE MANUFACTURER'S SPECIFICATION.



WASATCH CONSTRUCTORS
 FEB 1 1 1999
 RELEASED FOR CONSTRUCTION

NO.	DATE	DESCRIPTION	BY	CHK

DES.	01-01-98	MM			
DRN.	01-01-98	DSW			
CHK.	01-01-98	MM			

RETAINED EARTH™

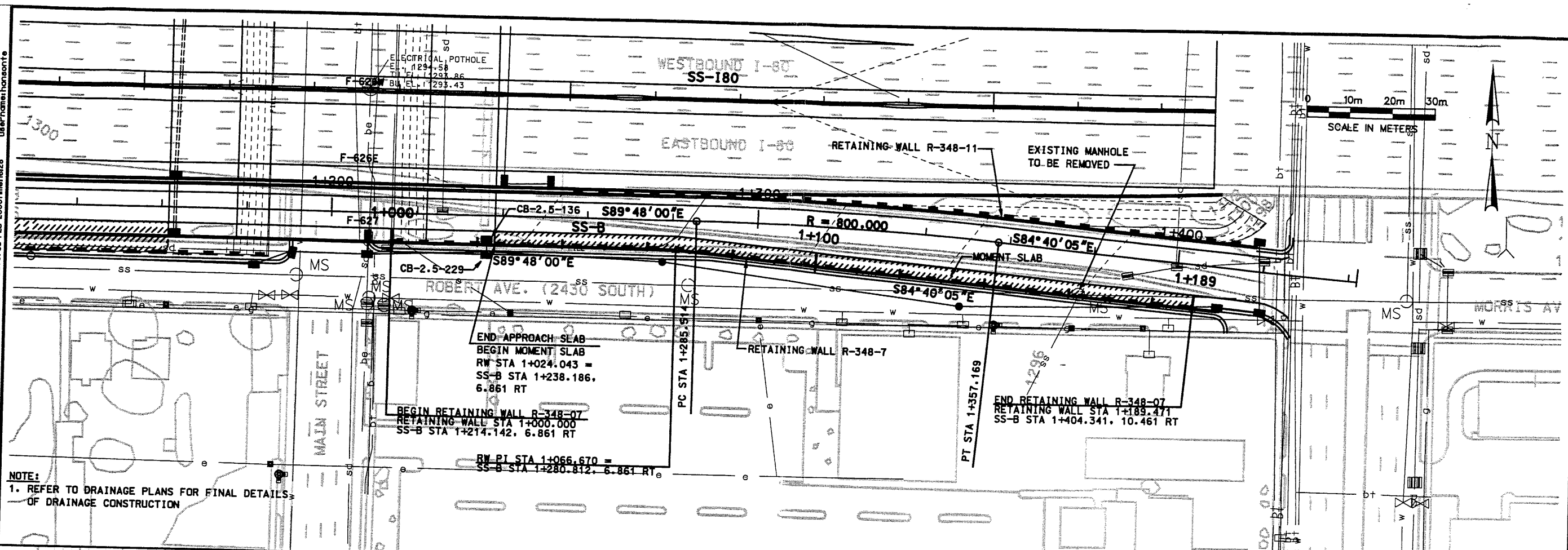
VSL CORPORATION
 2800 Plaza Place, Suite 200
 Raleigh, NC 27617-7816-6272
 Telephone: (919) 781-6272
 Fax: (919) 781-6869

ALABAMA, CA / DALLAS, TX / DENVER, CO (CORPORATE OFFICE)
 MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA

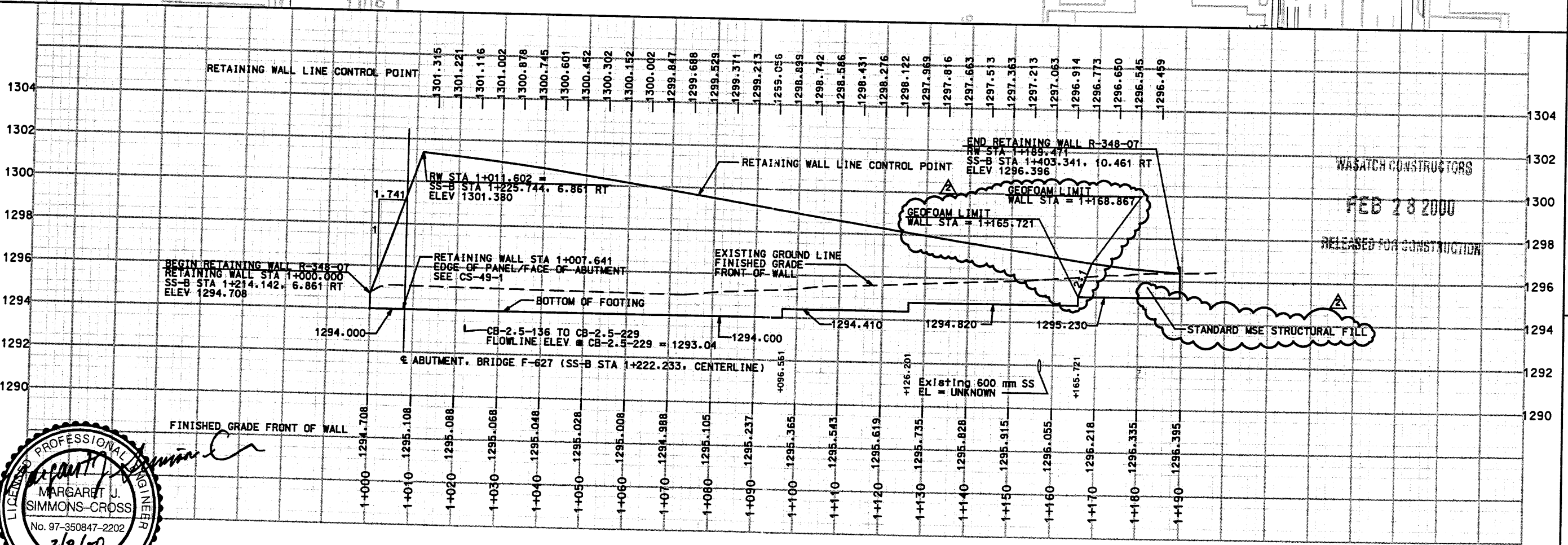
RETAINED EARTH™ WALLS
 WALL "R-348-6" - 1ST STAGE: WIRE FACED WALL
 UTAH I-15 INTERCHANGE
 SALT LAKE COUNTY, UTAH
 UTAH DEPARTMENT OF TRANSP.

DWG. NO.
 2.5R-348-6.10
 JOB NO.
 239-0007
 SHEET NO.
 RE-6

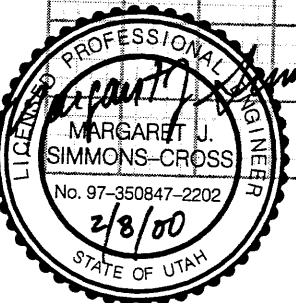
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 Date: 03-FEB-2000 Time: 16:28
 User Name: hansonr



NOTE:
 1. REFER TO DRAINAGE PLANS FOR FINAL DETAILS OF DRAINAGE CONSTRUCTION

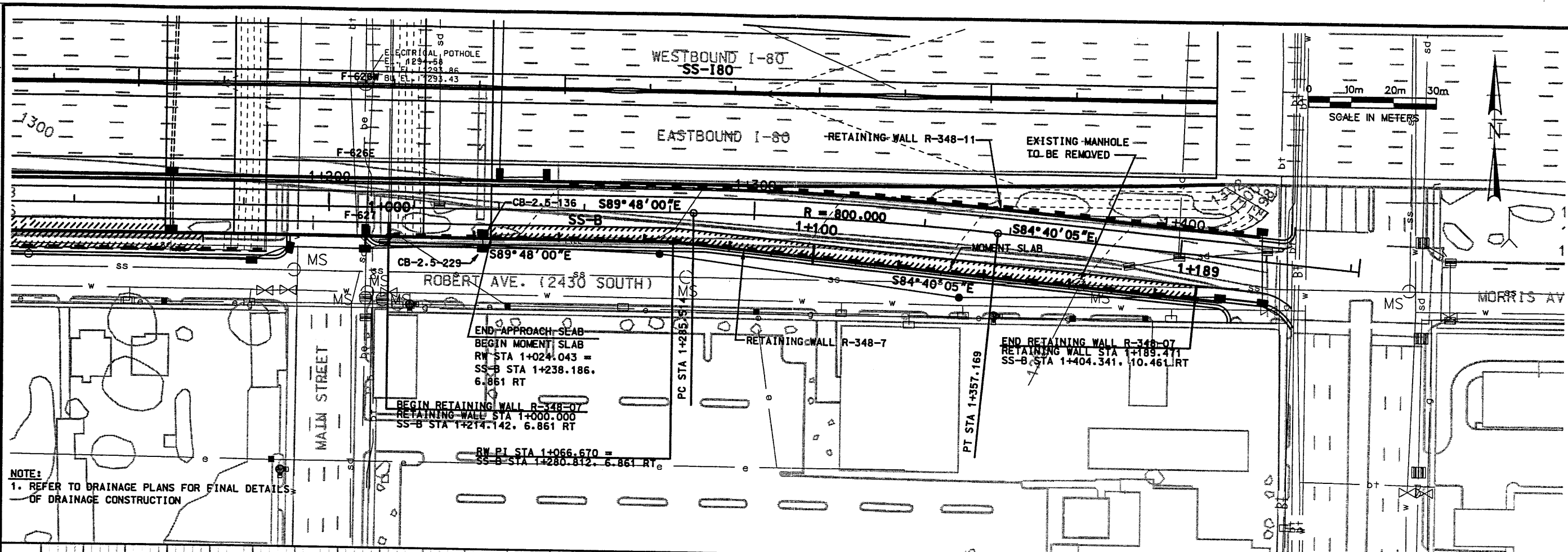


WALL R-348-07 ELEVATION OF FACE OF WALL

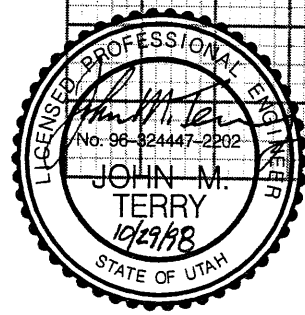
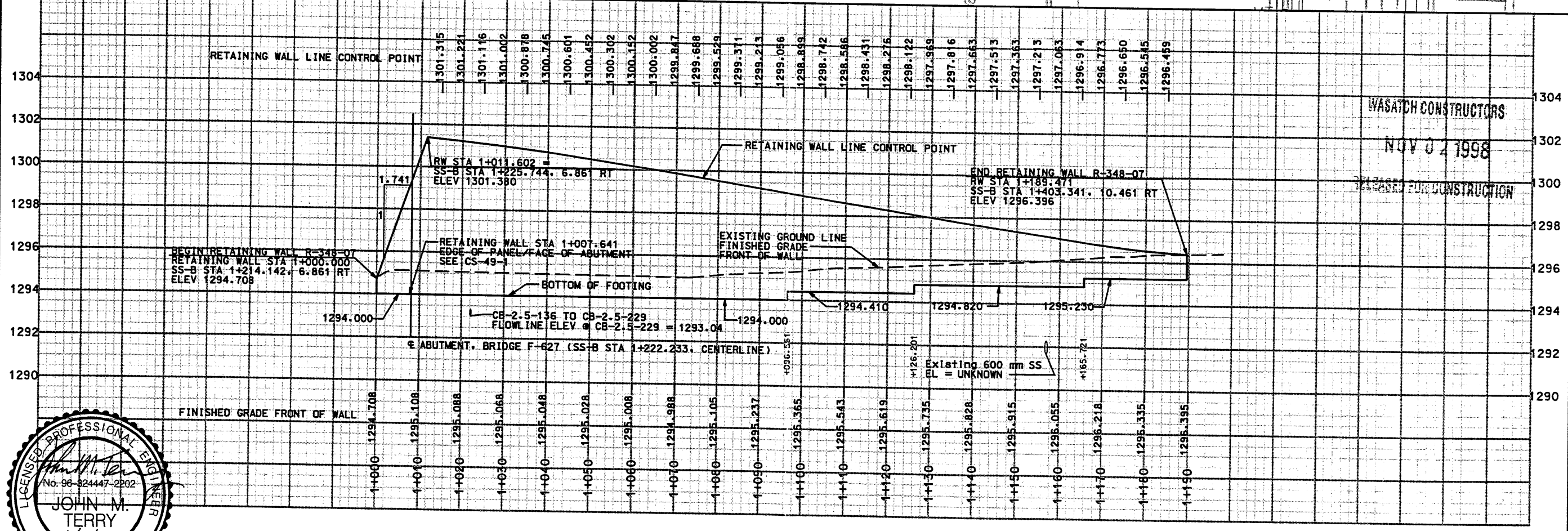
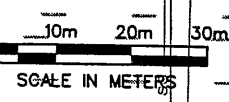


RFC After Final Approval

APPROVED FOR CONSTRUCTION		DESCRIPTION	
NO.	DATE	INITIAL RELEASE	REVISED FOR STRUCTURAL FILL AT END OF WALL (FDC 2-1410)
1	10/27/98		2/3/00
UTAH DEPARTMENT OF TRANSPORTATION		TRUCKING NO.	2513403
SYVERDRUP/DE LEUW		CHECK	CHECK
APPROVAL RECORD:	DATE	DESIGNER	QUANT.
MARGARET SIMMONS-CROSS	8/21/98	TEH	4/98
PROJECT DESIGN ENGINEER	DATE	DRAIN	4/98
JOHN TERRY	8/21/98		
SECTION MANAGER	DATE		
I-15 CORRIDOR RECONSTRUCTION		RETAINING WALL R-348-07	
SECTION 2.5		PROJECT NUMBER: *SP-15-7(135)296	
SALT LAKE COUNTY		DWG. NO. 2.5-R-348-7.1	
SHT. 1 OF 2			

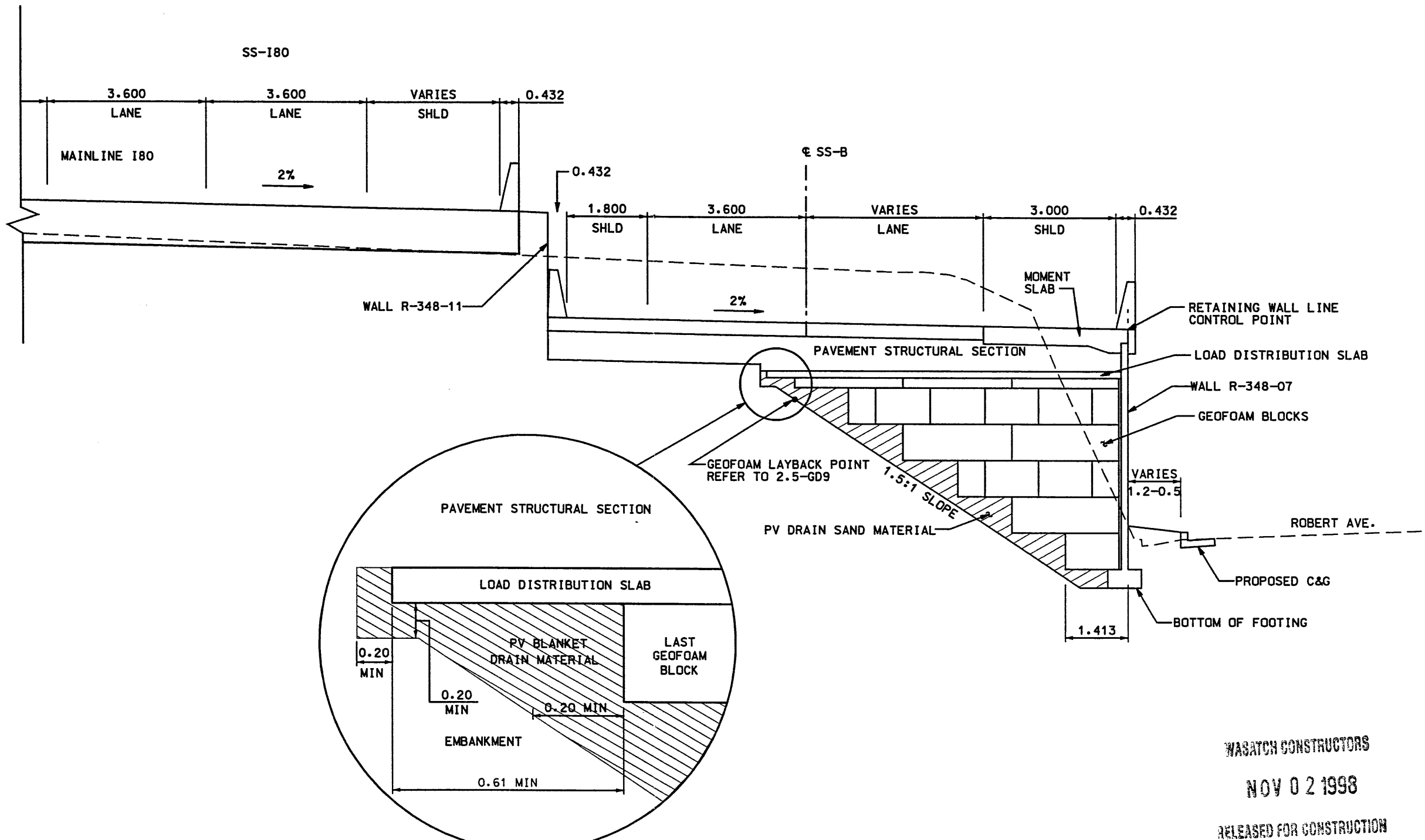


NOTE:
1. REFER TO DRAINAGE PLANS FOR FINAL DETAILS OF DRAINAGE CONSTRUCTION



WALL R-348-07 ELEVATION OF FACE OF WALL

APPROVED FOR CONSTRUCTION		NO. DATE		DESCRIPTION	
A		10/27/98		INITIAL RELEASE	
UTAH DEPARTMENT OF TRANSPORTATION			SVERDRUP/DE LEUW		
I-15 CORRIDOR RECONSTRUCTION		DESIGN TEN 4/98		CHECK MSC 8/98	
RETAINING WALL R-348-07		DRAWN TEN 4/98		CHECK MSC 8/98	
SECTION 2.5		PROJECT DESIGN ENGINEER		CHECK	
PROJECT NUMBER *SP-15-(7)1351296		DATE 8/21/98		JOHN TERRY SECTION MANAGER	
SALT LAKE COUNTY		DWG. NO. 2.5-R-348-7.1			
SHT. 1		OF 2			



WALL R-348-07 SECTION
 RETAINING WALL STA 1+024.043 TO STA 1+189.471

NOTES:

1. REFER TO CORRIDOR STANDARD DRAWINGS CS-43, 44, 45, 46, 47, 49, 49-1, 49-2, 49-3, 50, 51 AND 52 FOR GEOFOAM AND STRUCTURAL DETAILS.

WASATCH CONSTRUCTORS
 NOV 02 1998
 RELEASED FOR CONSTRUCTION

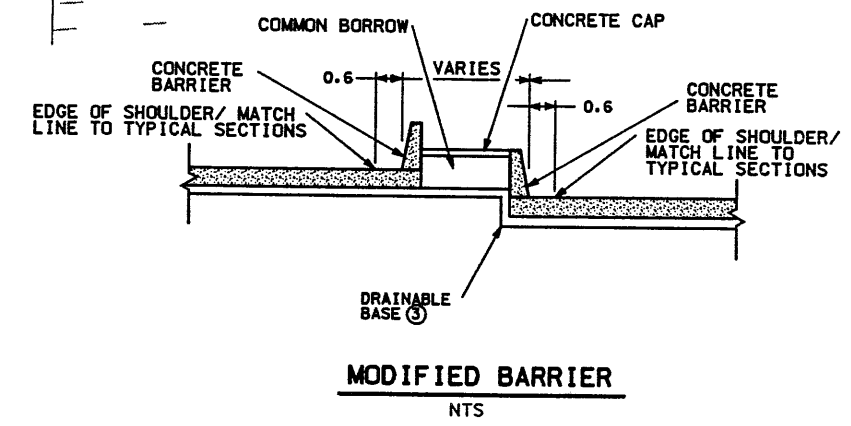
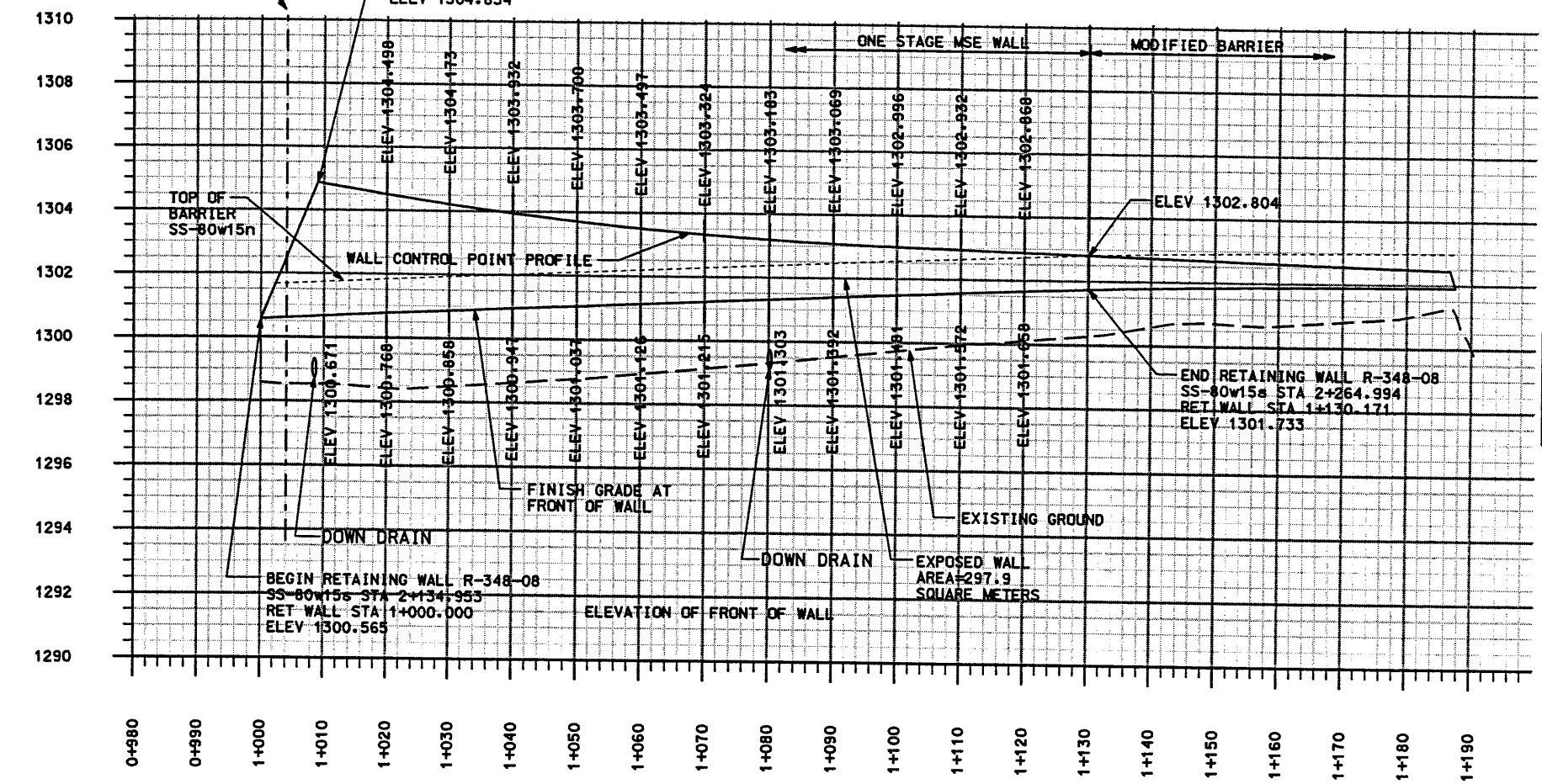
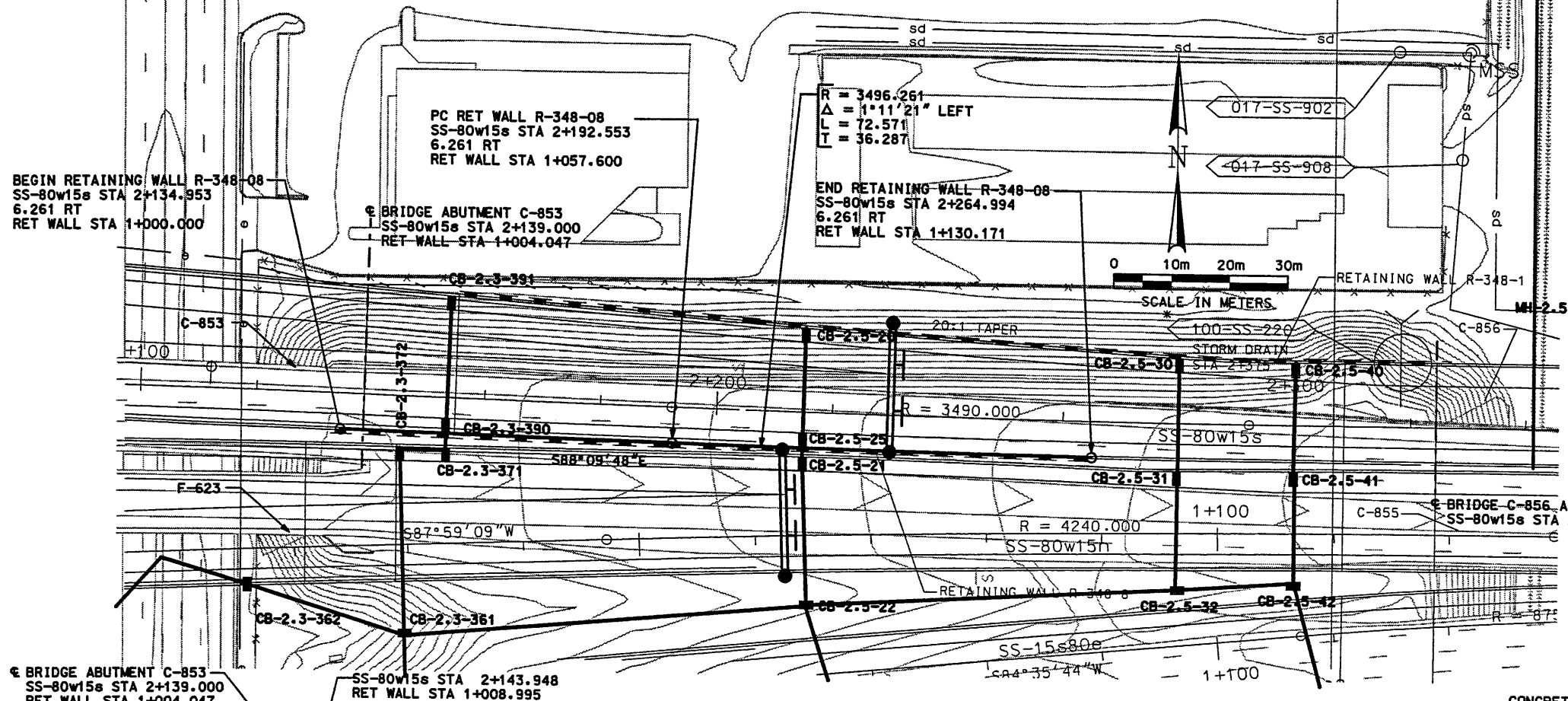
APPROVED FOR CONSTRUCTION		DESCRIPTION	
NO.	DATE	INITIAL	RELEASE
1	10/27/98		
UTAH DEPARTMENT OF TRANSPORTATION			
SVERDRUP/DE LEUW		TRACKING NO.	2513403
APPROVAL DATE	DESIGN	CHECK	CHECK
8/21/98	TEH	4/98	MSC
RECOMM. DATE	DRAWN	CHECK	CHECK
8/21/98	TEH	4/98	MSC
APPROVED DATE	SECTION MANAGER	QUANT.	CHECK
8/21/98	JOHN TERRY		
I-15 CORRIDOR RECONSTRUCTION			
RETAINING WALL R-348-07			
SECTION 2.5			
PROJECT NUMBER #SP-15-7(135)296			
SALT LAKE COUNTY			
DWG. NO. 2.5-R-348-7.2			
SHT. 2 OF 2			

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WASATCH CONSTRUCTORS
 MAR 31 1998
 RELEASED FOR CONSTRUCTION
 WASATCH CONSTRUCTORS
 MAR 31 1998
 RELEASED FOR CONSTRUCTION



DRAINAGE DATA					
ID NO.	STATION SS-80w15s	OFFSET TO CONTROL POINT	OFFSET TO ϕ OF BOX	STATION R-348-08	ELEV AT BOTTOM OF CATCH BASIN
CB-2.5-25	2+215.000	5.700	5.319	1+080.089	1300.274
CB-2.3-390	2+153.500	5.700	5.319	1+018.547	1301.331

- NOTES:
- REFER TO DRAINAGE PLANS TO CONFIRM FINAL LOCATION OF DRAINAGE STRUCTURES.
 - FOR CATCH BASIN AND DOWNDRAIN DETAILS SEE CS-22 AND CS-19-1.
 - SEE DRAINAGE PLANS FOR PAVEMENT EDGE DRAIN DETAILS.
 - LOCATE RETRIEVABLE SAMPLES SS-80w15s STA 2+160.000, RET WALL STA 1+025.047.

UTAH DEPARTMENT OF TRANSPORTATION

APPROVED FOR CONSTRUCTION

NO. DATE DESCRIPTION

3/23/98 Initial Release

TRACKING NO. 2512405

DESIGNER: SVERDRUP/DE LEUW

DESIGN: MEH 12/97

DRAWN: DMB 12/97

QUANT.: _____

PROJECT NUMBER: #SP-15-7(135)296

SECTION & LAYOUT: SECTION 2.5

SECTION: SECTION 2.5

PROJECT NUMBER: #SP-15-7(135)296

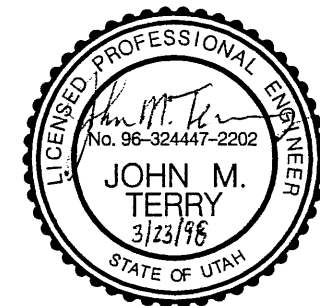
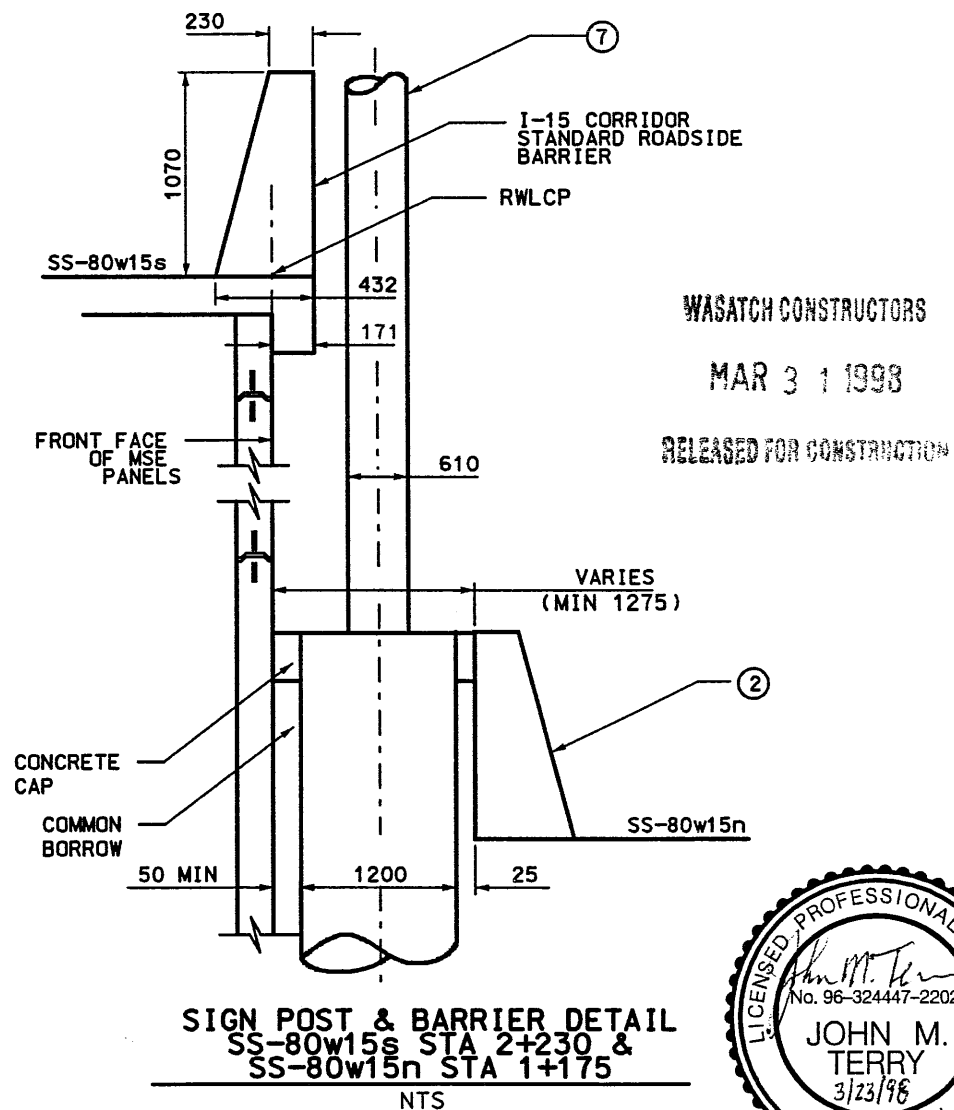
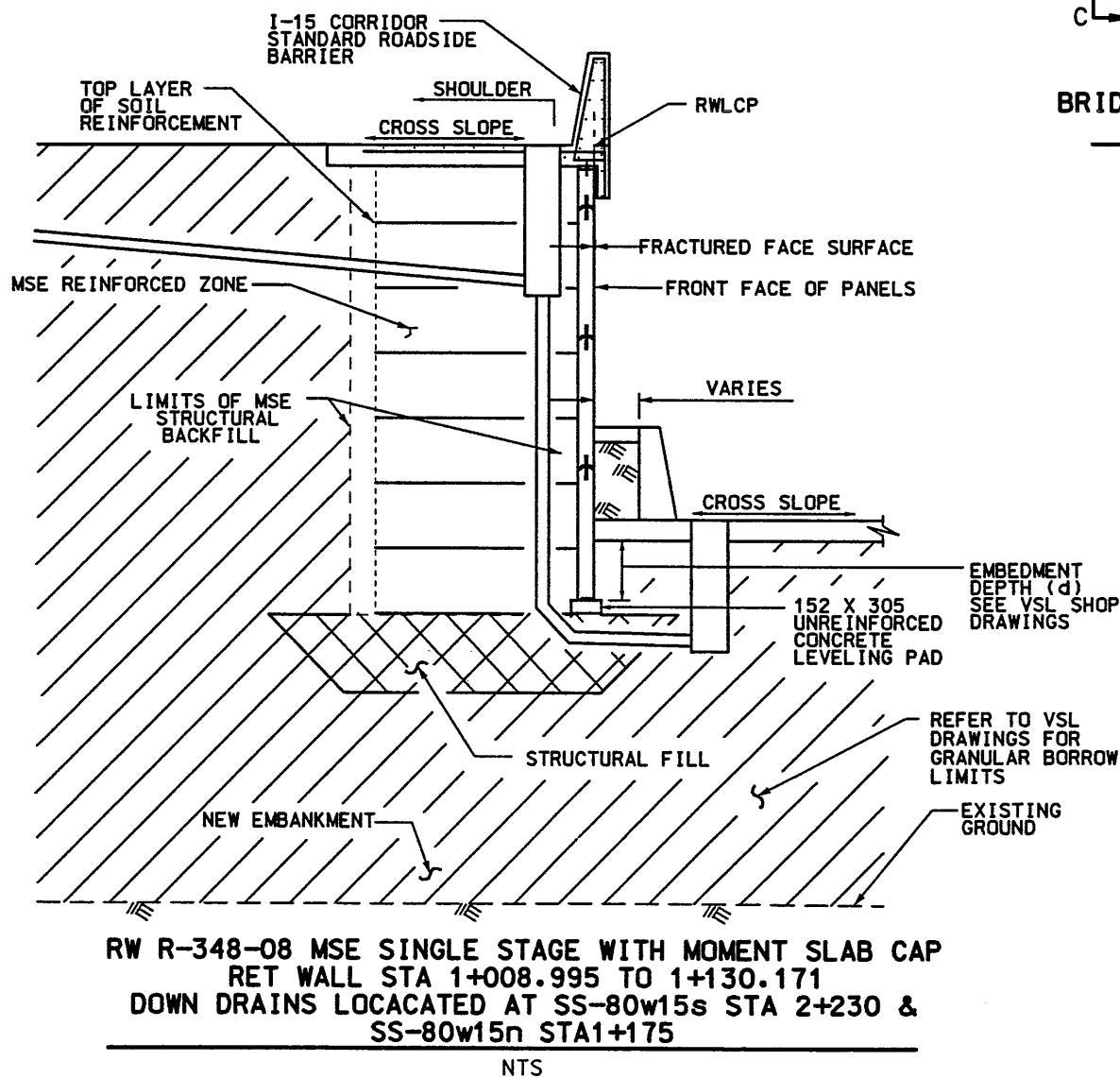
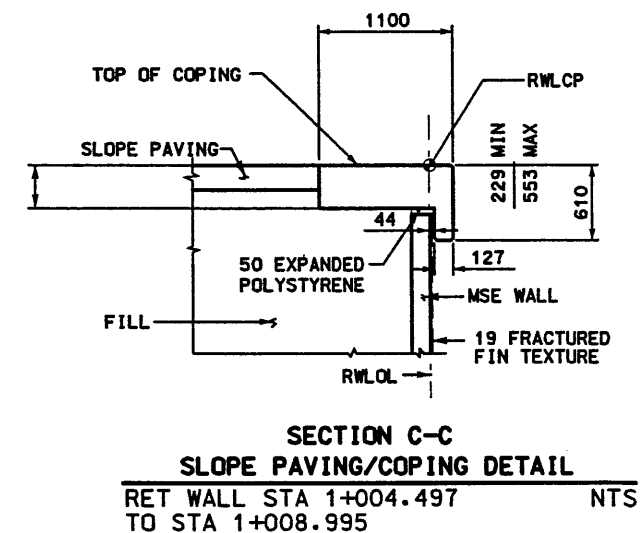
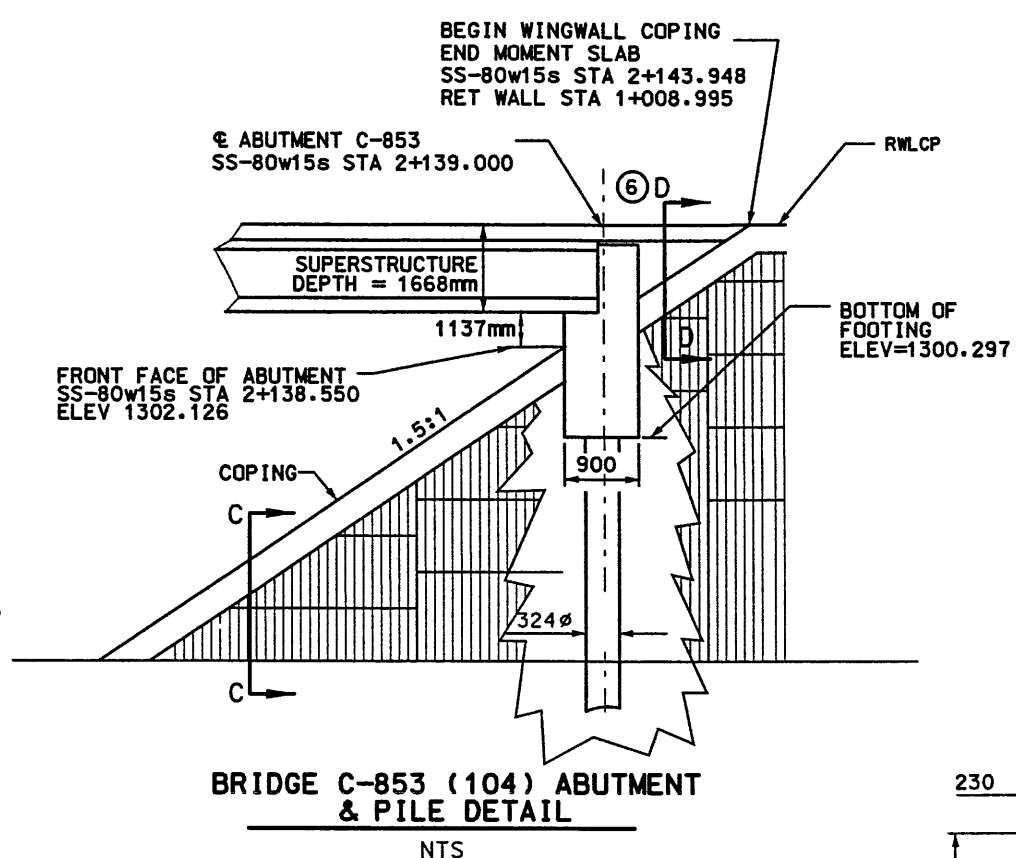
SALT LAKE COUNTY

DWG. NO. 2.5-R-348-08.1

SHT. 1 OF 2

NOTES:

1. CONSTRUCT WALL TO DESIGN PAVEMENT ELEVATION AND SETTLEMENT ALLOWANCE.
2. FLARE MEDIAN BARRIER ON 80w15n AROUND SIGN POST STRUCTURES. SEE DWG NO. CS-67-2.
3. MINIMUM TOE EMBEDMENT (d)=H/7 WHERE H EQUALS THE WALL HEIGHT.
4. FOR MOMENT SLAB DETAILS SEE DWG NO. CS-28-1.
5. NEW EMBANKMENT MATERIAL IN THE STRUCTURAL FILL ZONE SHOULD MEET THE REQUIREMENTS FOR STRUCTURAL FILL. EXISTING EMBANKMENT MATERIAL IN THIS ZONE CAN REMAIN IN PLACE IF OBSERVATIONS BY THE GEOTECHNICAL FIELD ENGINEER INDICATE THAT THE EXISTING EMBANKMENT MATERIAL MEETS THE REQUIREMENTS FOR STRUCTURAL FILL.
6. SEE BRIDGE PLANS FOR WINGWALL DETAILS ON BRIDGE C-853.
7. SEE SIGN PLANS FOR EXACT SIGN LOCATIONS.
8. REFER TO CS-54 FOR DETAILS OF REINFORCING FOR WALL COPING.

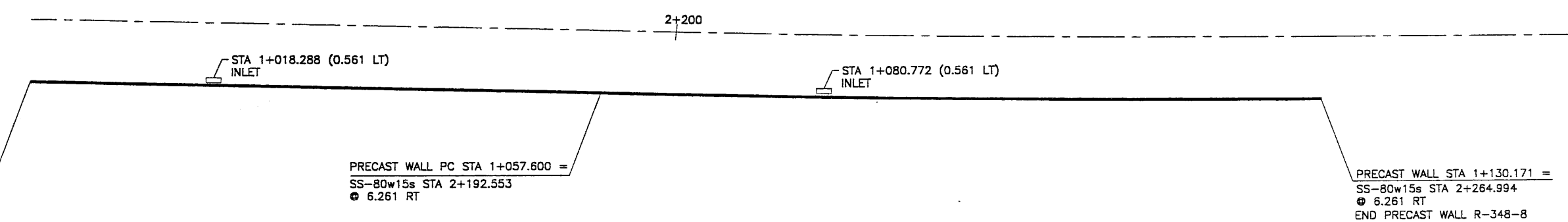


APPROVED FOR CONSTRUCTION		DESCRIPTION	
NO.	DATE	NO.	DATE
1	3/23/98	1	3/23/98
			Initial Release
UTAH DEPARTMENT OF TRANSPORTATION		TRACKING NO. 2512405	
SVERDRUP/DE LEUW		DESIGN	CHECK
3/08/98	3/08/98	3/08/98	3/08/98
MARGARET SIMMONS-CROSS	PROJECT DESIGN ENGINEER	JOHN TERRY	SECTION MANAGER
3/08/98	3/08/98	3/08/98	3/08/98
APPROVAL RECORD	DATE	APPROVED	DATE
WASATCH CONSTRUCTORS			
MAR 31 1998			
RELEASED FOR CONSTRUCTION			
I-15 CORRIDOR RECONSTRUCTION	WALL DETAIL 348-08.1	SECTION 2.5	PROJECT NUMBER #SP-15-7(135)296
SALT LAKE COUNTY	DWG. NO. 2.5-R-348-08.2		
SHT. 2	OF 2		

FINA T 03-16-98 H:\RE_EARTH\PROJECT\239-0007\1998\SS-08\SUBMITL-2\RE-1 VANCE (X-UTAH.DWG)

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
▲	03-16-98	RELEASE FOR CONSTRUCTION

R=3496.261
 Δ= 1'11'21"
 L=72.571
 T=36.287



PRECAST WALL STA 1+000.000 =
 SS-80w15s STA 2+134.953
 ● 6.261 RT
 BEGIN PRECAST WALL R-348-8

PRECAST WALL PC STA 1+057.600 =
 SS-80w15s STA 2+192.553
 ● 6.261 RT

PRECAST WALL STA 1+130.171 =
 SS-80w15s STA 2+264.994
 ● 6.261 RT
 END PRECAST WALL R-348-8

GENERAL NOTES

- ALL WALLS ARE SHOWN FRONT FACE. NOTE STATIONING.
- PANEL TYPE IS DESIGNATED ON EACH PANEL. CONNECTOR LABELS INDICATE NUMBER OF CONNECTORS PER ROW.
EXAMPLE: 5B2-10 IS A "B2-10" PANEL WITH FIVE (5) CONNECTORS PER ROW.
IF NO CONNECTORS ARE SHOWN, FOUR (4) CONNECTOR PANELS SHALL BE USED:
- SOIL REINFORCING MESH TYPE IS DESIGNATED ON EACH PANEL. MESH LABELS INDICATE WIRE SIZE AND SPACING. LONGITUDINAL WIRE AND CROSSBAR SIZES ARE THE SAME UNLESS NOTED OTHERWISE.
EXAMPLE: 4W15-6 MESH HAS FOUR (4) W15 LONGITUDINAL WIRES WITH W15 CROSSBARS AT 6" CENTERS.
EXAMPLE: 5W15-12 MESH HAS FOUR (4) W15 LONGITUDINAL WIRES WITH W15 CROSSBARS AT 12" CENTERS.
- SEE RETAINED EARTH INSTALLATION MANUAL FOR PROPER WALL ERECTION PROCEDURES AND GUIDELINES.
- CONSTRUCTION PROCEDURES SHALL PREVENT BACKFILL SATURATION AND PONDING.
- HEAVY EQUIPMENT SHALL NOT BE USED WITHIN ONE METER OF THE BACK OF THE RETAINED EARTH PANELS. HAND COMPACTORS SHALL BE USED IN THIS AREA.
- CARE SHALL BE TAKEN TO PREVENT DAMAGE TO GALVANIZING. DAMAGED GALVANIZING SHALL BE COATED WITH ZINC RICH PAINT.
- BEARING PADS AND FILTER FABRIC ARE NOT REQUIRED BETWEEN THE LEVELING PAD AND THE FIRST ROW OF PANELS. TEMPORARY WEDGES MAY BE USED TO PROVIDE PROPER ALIGNMENT.
- VSL RETAINED EARTH IS PROTECTED UNDER U.S. PATENT 4,725,170.
- ALL PANELS SHALL HAVE AN ARCHITECTURAL FINISH, SEE VSL STANDARD SHEET STD-7 FOR DETAILS.

DESIGN PARAMETERS	
ANGLE OF INTERNAL FRICTION (SELECT) = 34°	
ANGLE OF INTERNAL FRICTION (BASE) = 34°	
ANGLE OF INTERNAL FRICTION (RANDOM) = 34°	
UNIT WEIGHT BACKFILL = 135 PCF. (21.2 KN/M ³)	
TRAFFIC SURCHARGE = 250 PSF (12 KPa)	
SEISMIC ACCELERATION COFF. = 0.27g (TYP)	
SEISMIC ACCELERATION COFF. = 0.68g (AT BRIDGE ABUTMENTS)	
DESIGN CRITERIA	
SAFETY FACTOR (OVERTURNING) = 2.0	
SAFETY FACTOR (SLIDING) = 1.5	
SAFETY FACTOR (PULLOUT) = 1.5	
DESIGN LIFE = 75 YEARS	

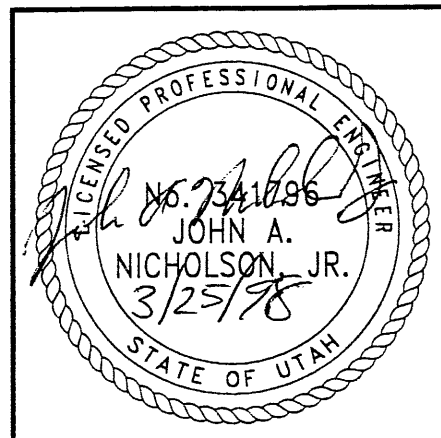
RETAINED EARTH INDEX	
RE-1	PLAN PRECAST FACE WALL R-348-8, NOTES & DESIGN CRITERIA
RE-2	TYPICAL CROSS SECTION
RE-3	TYPICAL CROSS SECTION
RE-4	ELEVATION PRECAST WALL "R-348-8"
RE-5	ELEVATION PRECAST WALL "R-348-8"
RE-6	SPECIAL PANEL DETAILS

PLAN VIEW WALL "R-348-8"

SCALE: 1=250 (FULL SIZE)
 SCALE: 1=500 (HALF SIZE)

METRIC

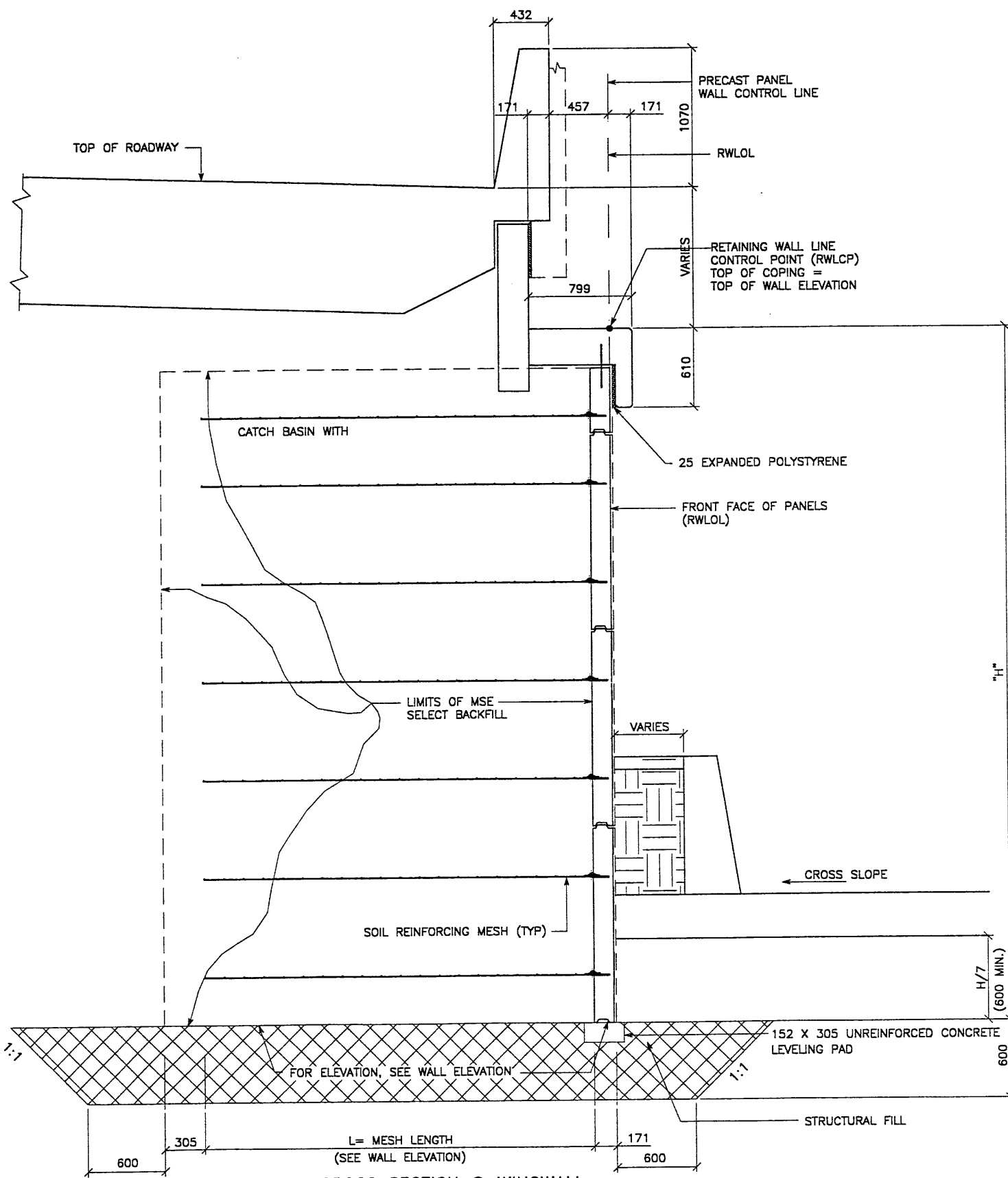
CERTIFIED FOR INTERNAL STABILITY OF RETAINED EARTH™ STRUCTURES ONLY. EXTERNAL STABILITY, INCLUDING BUT NOT LIMITED TO FOUNDATION AND SLOPE STABILITY, IS THE RESPONSIBILITY OF THE OWNER. DESIGN IS BASED ON THE ASSUMPTION THAT THE MATERIAL WITHIN THE RETAINED EARTH™ MASS, METHODS OF CONSTRUCTION, AND QUALITY OF PREFABRICATED MATERIALS CONFORM TO THE MANUFACTURER'S SPECIFICATION.



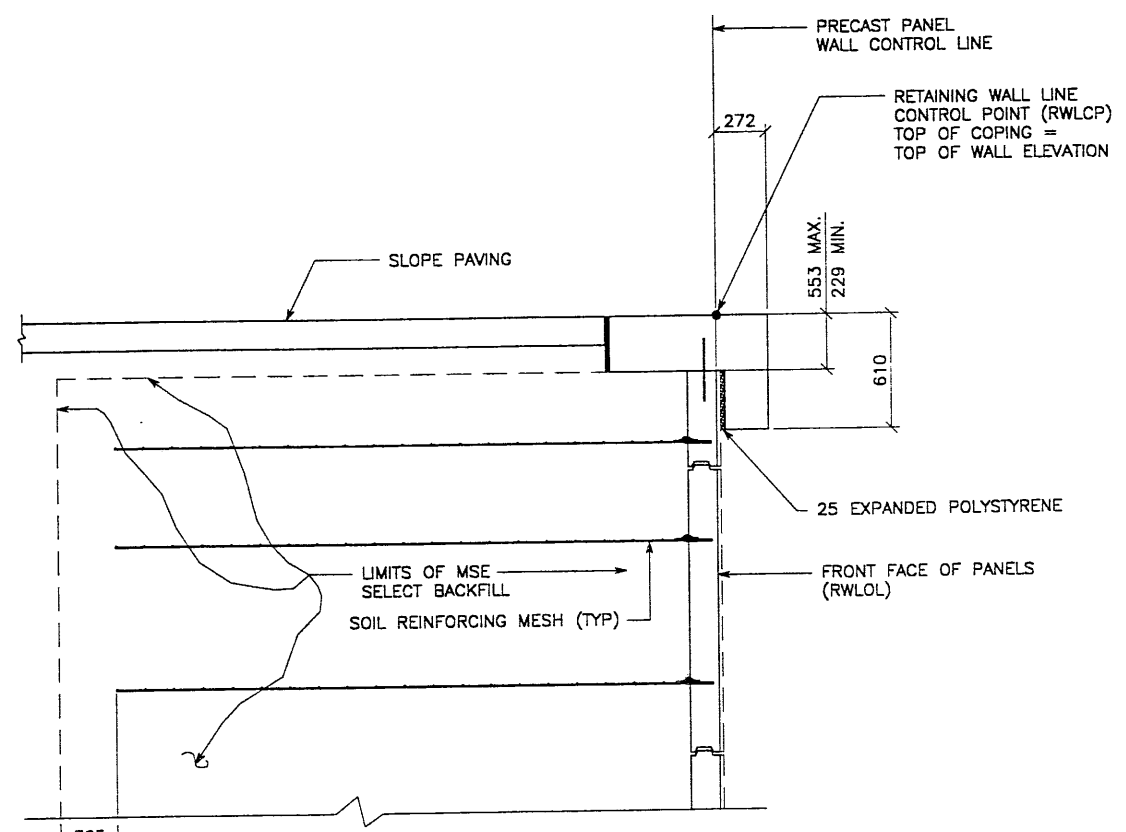
WASATCH CONSTRUCTORS
MAR 31 1998
 RELEASED FOR CONSTRUCTION

VSL CORPORATION 2940 Third Street, Suite 200 Boulder, CO 80501 (303) 440-6272 Fax (303) 440-4869		D.S. 02-23-98 JL DRN. 02-23-98 LOP CHK. 02-23-98 JL	NO. DATE REVISION
		RETAINED EARTH™ (VSL)	NO. DATE
VSL CORPORATION ALABAMA, GA / DALAS, TX / BALDWIN, NC (CORPORATE OFFICE) MAINE, IL / SAN JOSE, CA / SPRINGFIELD, VA		RETAINED EARTH™ WALLS PLAN VIEW PRECAST WALL "R-348-8" UTAH I-15 RECONSTRUCTION SALT LAKE COUNTY, UTAH UTAH DEPARTMENT OF TRANSP.	DWG. NO. 2,5R-348-8.3 JOB NO. 239-0007 SHT. NO. RE-1

FINAL 73-16-98 H:\RE_EARTH\PROJECT\239-0007\1998\SS-08\SUBMITL-2\RE-2



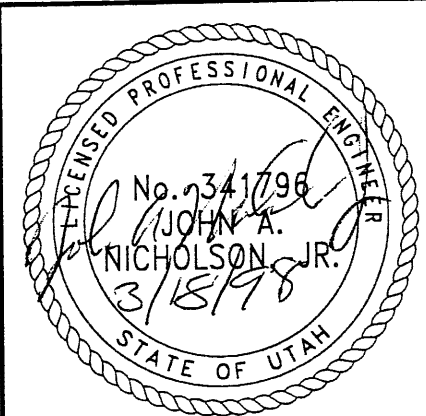
TYPICAL CROSS SECTION @ WINGWALL
 (SEE DWG. NO. 2.5R-348-8.02 FOR ADDITIONAL INFORMATION)
 SCALE: 1:20 (FULL SIZE)
 SCALE: 1:40 (HALF SIZE)



TYPICAL CROSS SECTION - STA 1+000.000 TO 1+008.995
 (SEE DWG. NO. 2.5R-348-8.02 FOR ADDITIONAL INFORMATION)
 SCALE: 1:20 (FULL SIZE)
 SCALE: 1:40 (HALF SIZE)

METRIC

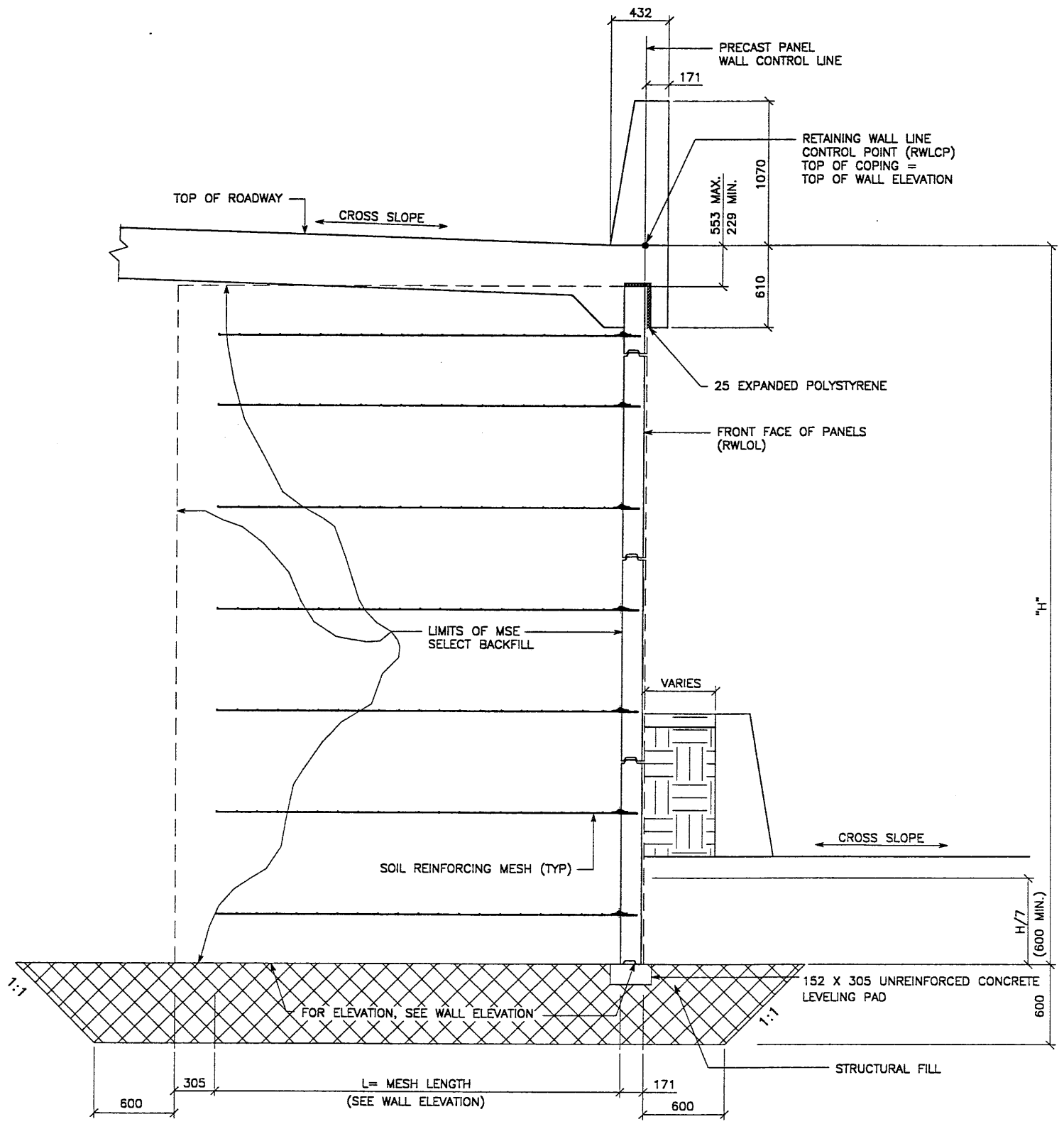
CERTIFIED FOR INTERNAL STABILITY OF RETAINED EARTH™ STRUCTURES ONLY. EXTERNAL STABILITY, INCLUDING BUT NOT LIMITED TO FOUNDATION AND SLOPE STABILITY, IS THE RESPONSIBILITY OF THE OWNER. DESIGN IS BASED ON THE ASSUMPTION THAT THE MATERIAL WITHIN THE RETAINED EARTH™ MASS, METHODS OF CONSTRUCTION, AND QUALITY OF PREFABRICATED MATERIALS CONFORM TO THE MANUFACTURER'S SPECIFICATION.



APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
▲	03-16-98	RELEASE FOR CONSTRUCTION

DIS. 02-23-98		JL	RETAINED EARTH™	NO.	DATE
DRN. 02-23-98		LOP			
CHK. 02-23-98		JL			
VSL CORPORATION 2840 Placo Place, Suite 200 Raleigh, NC 27612 Telephone (919) 781-8272 Fax (919) 781-8959					
VSL Corporation (P&H) right in it is a single, vertical (horizontal) wall with a on the front. The use of or in part, or any other design thereof, is, etc. to the material, VSL Any other use is strictly CLAIMS AND LIABILITY THE LIMITATION					
RETAINED EARTH™ WALLS WIRE FACED WALL "R-348-B" TYPICAL CROSS SECTION UTAH I-15 INTERCHANGE SALT LAKE COUNTY, UTAH UTAH DEPARTMENT OF TRANSP.					
DWG. NO. 2.5R-348-8.4					
JOB NO. 239-0007					
SH. NO. RE-2					

FINA T 03-16-98 H:\RE_EARTH\PROJECT\239-0007\1998\SS-08\SUBMITL-2\RE-3 VANCE (X-UTAH.DWG)




TYPICAL CROSS SECTION - STA 1+008.995 TO STA 1+130.171
 (SEE DWG. NO. 2.5R-348-08.02 FOR ADDITIONAL INFORMATION)
 SCALE: 1:20 (FULL SIZE)
 SCALE: 1:40 (HALF SIZE)

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
△	03-16-98	RELEASE FOR CONSTRUCTION <i>JK</i>

NO.	DATE	REVISION	BY

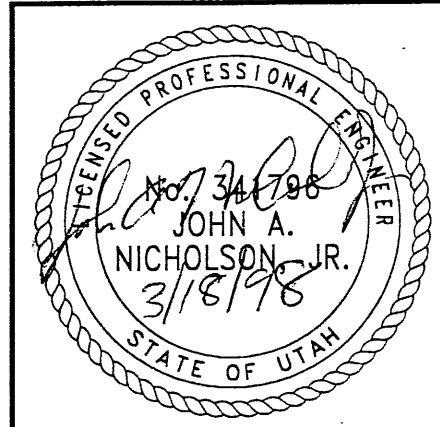
VSL CORPORATION
 7040 Flora Place, Suite 700
 Raleigh, NC 27617
 Tel: (919) 881-8277
 Fax: (919) 881-4885



ATLANTA, GA / DALLAS, TX / HALETH, NC (CORPORATE OFFICE)
 MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA

VSL Corporation (VSL) is not responsible for the design and calculations of the retaining wall. The use of such information is made at the user's risk. VSL does not warrant the use of this information for any other purpose. Any other use is made at the user's risk. VSL is not responsible for the design and calculations of the retaining wall. The use of such information is made at the user's risk. VSL does not warrant the use of this information for any other purpose. Any other use is made at the user's risk.

WASATCH CONSTRUCTORS
 MAR 3 1 1998
 RELEASED FOR CONSTRUCTION



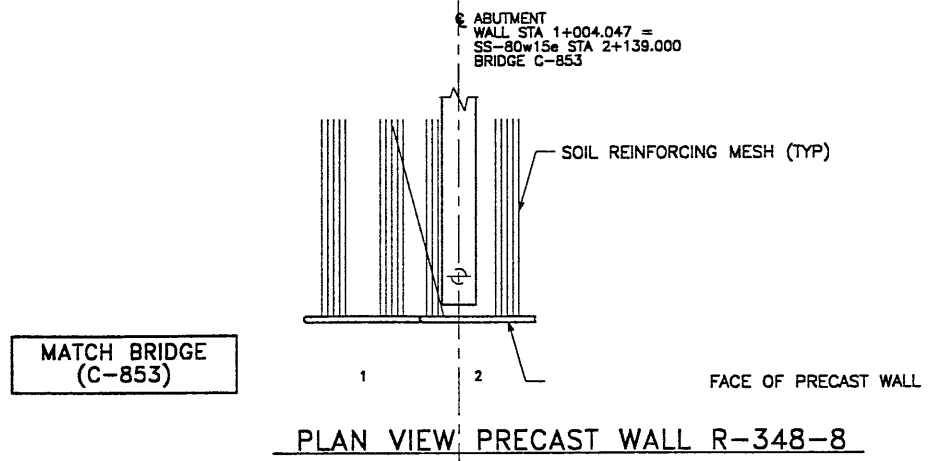
RETAINED EARTH™ WALLS WIRE FACED WALL "R-348-8" TYPICAL CROSS SECTION UTAH I-15 INTERCHANGE SALT LAKE COUNTY, UTAH UTAH DEPARTMENT OF TRANSP.	
DWG. NO.	2.5R-348-8.5
JOB NO.	239-0007
SHT. NO.	RE-3

CERTIFIED FOR INTERNAL STABILITY OF RETAINED EARTH™ STRUCTURES ONLY. EXTERNAL STABILITY, INCLUDING BUT NOT LIMITED TO FOUNDATION AND SLOPE STABILITY, IS THE RESPONSIBILITY OF THE OWNER. DESIGN IS BASED ON THE ASSUMPTION THAT THE MATERIAL WITHIN THE RETAINED EARTH™ MASS, METHODS OF CONSTRUCTION, AND QUALITY OF PREFABRICATED MATERIALS CONFORM TO THE MANUFACTURER'S SPECIFICATION.

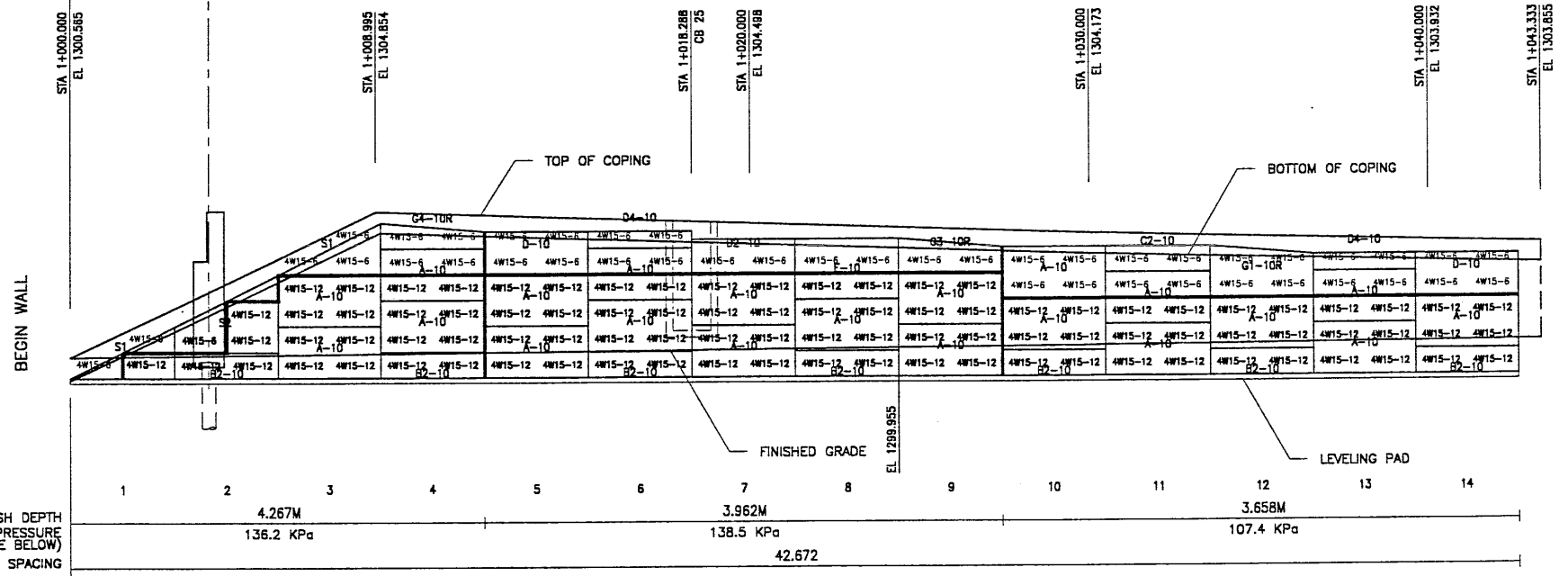
METRIC

H:\RE_EARTH\PROJECT\239-0007\1998\SS-WALL
 03-16-98
 FINAL
 V:\BMTL-2\SS-08
 VE (X-UTAH.DWG)

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
▲ 03-16-98		RELEASE FOR CONSTRUCTION <i>[Signature]</i>



BEGIN WALL R-348-8
 WALL STA 1+000.000 =
 SS-80w15e STA 2+134.953
 ● 6.261 RT
 NOMINAL PANEL FACE (RWL/L)

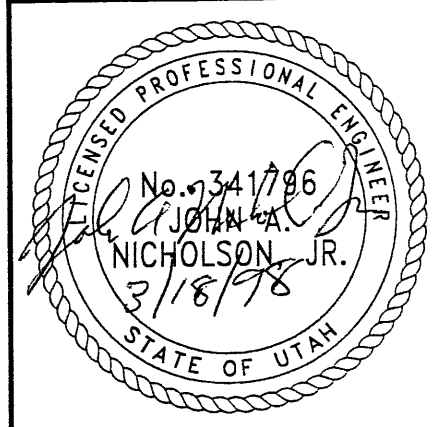


ELEVATION PRECAST WALL R-348-8
 (FRONT FACE SHOWN) SCALE 1:100 (FULL SIZE)
 (TOTAL SURFACE AREA OF PANELS = 369.45 SM) SCALE 1:200 (HALF SIZE)

APPROVER NOTE:
 MAXIMUM FINAL UNFACTORED BEARING PRESSURES
 ARE INDICATED BELOW "MESH DEPTH LINE".
 REVIEWER TO VERIFY MAXIMUM BEARING
 CAPACITY OF FOUNDATION.

CERTIFIED FOR INTERNAL STABILITY OF RETAINED EARTH™ STRUCTURES ONLY.
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 THE MANUFACTURER'S SPECIFICATION.

METRIC



WASATCH CONSTRUCTORS
MAR 31 1998
 RELEASED FOR CONSTRUCTION

DIS.	02-23-98	JL	02-23-98	LOP	02-23-98	JL	RETAINED EARTH™	NO.	DATE	REVISION	BY	CHK
DRN												
CHK												

VSL CORPORATION
 2840 Plaza Place, Suite 200
 Raleigh, NC 27617
 Telephone: (919) 781-6272
 Fax: (919) 781-4969

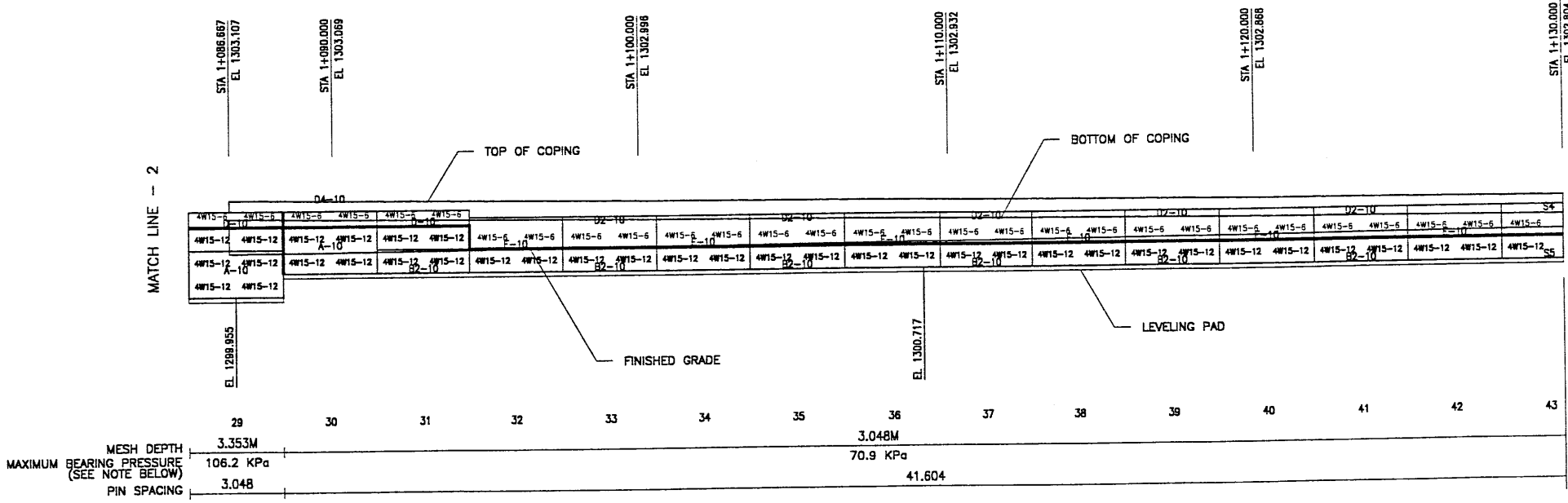
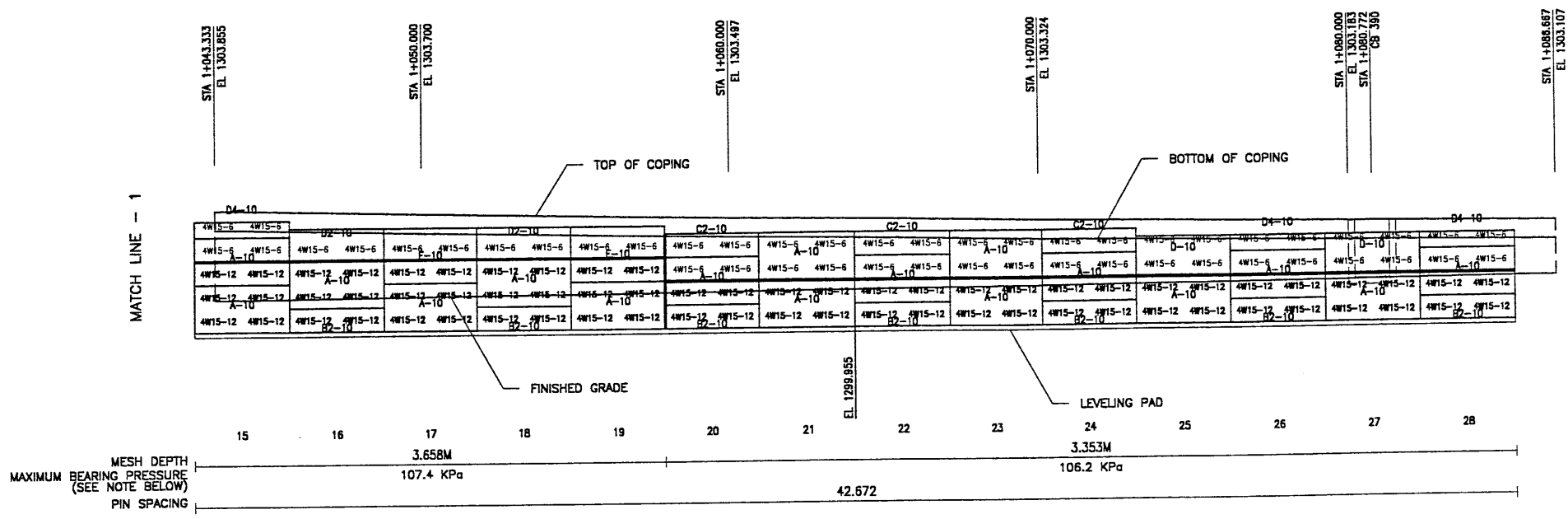
ALABAMA, CA / DANIEL, TX / RANCHO, NC (CORPORATE OFFICE)
 MINNAPOLIS, IL / SAN JOSE, CA / SPRINGFIELD, VA

RETAINED EARTH™ WALLS
PRECAST WALL "R-348-8"
UTAH I-15 RECONSTRUCTION
SALT LAKE COUNTY, UTAH
UTAH DEPARTMENT OF TRANSP.

DWG. NO.	2.5R-348-8.6
JOB NO.	239-0007
SHT. NO.	RE-4

6 of 8

H:\RE_EARTH\PROJECT\239-0007\1998\SS-WALL SUBMTL-2\SS-08 03-16-98 FINAL



ELEVATION PRECAST WALL R-348-8
 (FRONT FACE SHOWN) SCALE 1:100 (FULL SIZE)
 (TOTAL SURFACE AREA OF PANELS = 369.45 SM) SCALE 1:200 (HALF SIZE)

APPROVER NOTE:
 MAXIMUM FINAL UNFACTORED BEARING PRESSURES
 ARE INDICATED BELOW "MESH DEPTH LINE"
 REVIEWER TO VERIFY MAXIMUM BEARING
 CAPACITY OF FOUNDATION.

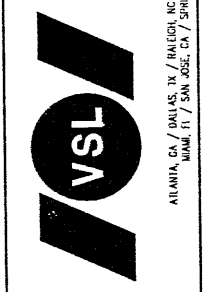
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METRIC

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	03-16-98	RELEASE FOR CONSTRUCTION

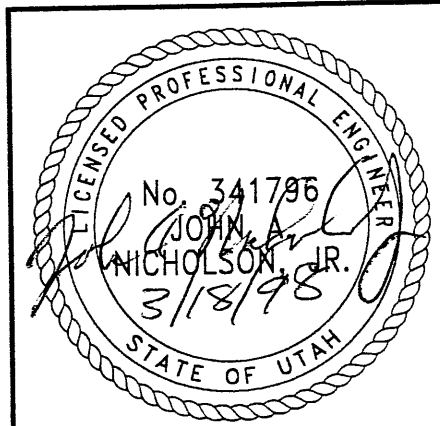
NO.	DATE	REVISION

DES: 02-23-98
 DRN: 02-23-98
 CHK: 02-23-98



VSL CORPORATION
 2840 Plaza Place, Suite 200
 Raleigh, NC 27617
 Telephone: (919) 781-6172
 Fax: (919) 781-6959

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MAR 3 1 1998
RELEASED FOR CONSTRUCTION

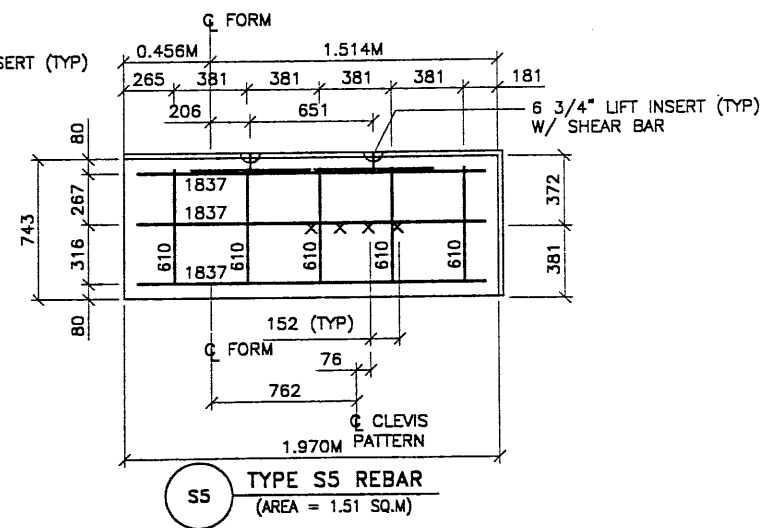
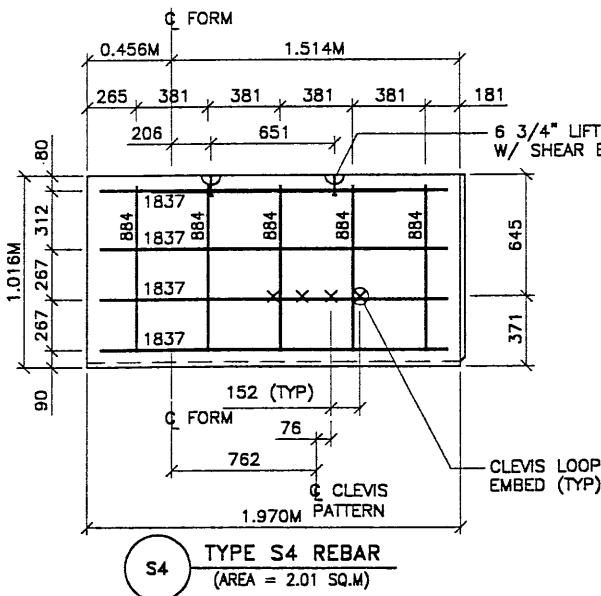
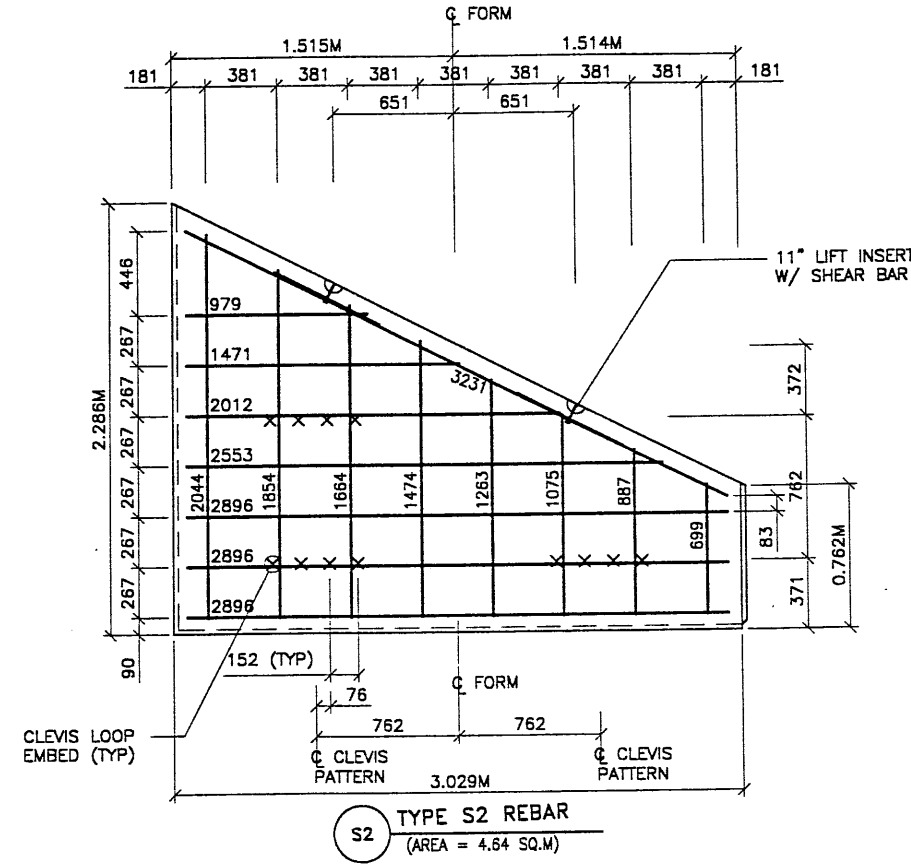
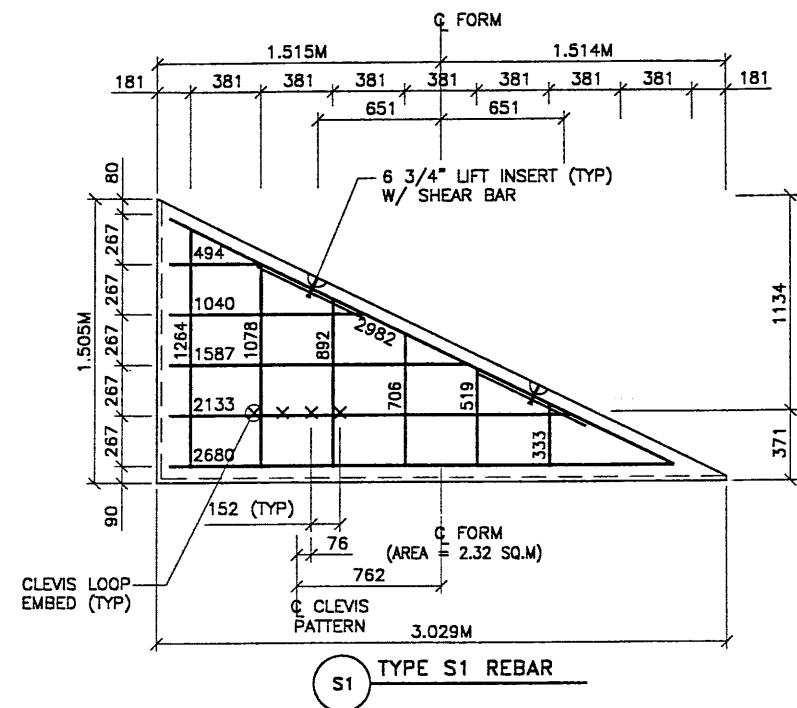


RETAINED EARTH™ WALLS
 PRECAST WALL "R-348-8"
 UTAH I-15 RECONSTRUCTION
 SALT LAKE COUNTY, UTAH
 UTAH DEPARTMENT OF TRANSP.

DWG. NO.	2.5R-348-8.7
JOB NO.	239-0007
Sht. NO.	RE-5

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	03-16-98	RELEASE FOR CONSTRUCTION

NO.	DATE	REVISION	BY	CHK



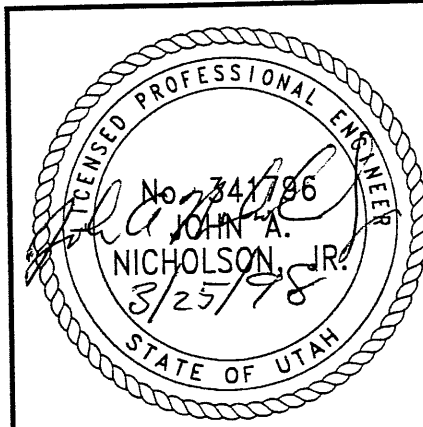
- PANEL REINFORCEMENT NOTES:
- PANELS ARE SHOWN BACK FACE.
 - HORIZONTAL REINFORCEMENT SHALL HAVE 50 mm MINIMUM COVER TO THE BACK FACE.
 - ALL REINFORCEMENT SHALL HAVE 50 mm MINIMUM COVER TO THE SIDES.
 - ALL REINFORCING BARS ARE #13 METRIC. LABELS ON EACH BAR INDICATE LENGTH. EXAMPLE: 1345 IS A #13 BAR 1345 mm LONG.
 - PANEL REINFORCEMENT BARS SHALL BE DEFORMED BILLET STEEL BARS FOR CONCRETE REINFORCEMENT CONFORMING TO THE SPECIFICATIONS OF ASTM DESIGNATION A615, GRADE 60.
 - ALL REINFORCING STEEL TO BE GALVANIZED IN ACCORDANCE WITH ASTM 767 CLASS I.
 - CONCRETE PANELS TO HAVE 28 DAY COMPRESSIVE STRENGTH OF 27,500 KPa.
 - EQUIVALENT WELDED WIRE FABRIC MAY BE USED.
 - ALL PANELS TO USE 9.5mm# CLEVIS LOOPS.
 - VSL RETAINED EARTH™ IS PROTECTED UNDER PATENT 4,725,170.
 - LIFT INSERTS ARE 6 3/4" LONG IN ALL PANELS LESS THAN 1.524M TALL. PANELS TALLER THAN 1.524M SHALL HAVE 11" LONG LIFT ANCHORS.

NO.	DATE	REVISION	BY	CHK

VSL CORPORATION
 2840 Plaza Drive, Suite 600
 Raleigh, NC 27603 / TEL: 919-872-7272
 Fax: (919) 872-4969

ALABAMA, CA / DALLAS, TX / HAITI, NC (CORPORATE OFFICE)
 MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA

WASATCH CONSTRUCTORS
 MAR 31 1998
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RETAINED EARTH™ WALLS
 PRECAST WALL "R-348-8"
 SPECIAL PANEL DETAILS
 UTAH I-15 RECONSTRUCTION
 SALT LAKE COUNTY, UTAH
 UTAH DEPARTMENT OF TRANSP.

DWG. NO.	2.5R-348-8.8
JOB NO.	239-0007
SHT. NO.	RE-6