

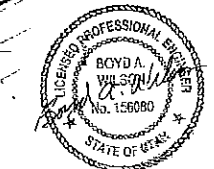
CONTROL POINTS (CP)

PT. NO.	DESCRIPTION	NORTHING	EASTING	ELEVATION
100	MON S.L.C. CP	271920.299	574957.539	1296.045
108	H&T 600N-NB ONRAMP	272003.570	575194.133	1292.156
118	PK	271935.391	575393.599	1286.852
119	H&T NW COR 600N-600W	271940.648	575214.234	1286.385
120	PK	272031.667	575356.626	1287.092
122	H&T SE NB OFFRAMP	271954.928	575162.752	1285.638
123	PK NE COR 600W-540N	271849.614	575218.938	1286.284
800 WEST	SLC MON	271989.022	574725.284	
300 WEST	SLC MON	271983.954	575932.705	1292.097
400 WEST	SLC MON	271984.994	575592.995	1288.234

NOTES:  
 1. H&T = HUB AND TACK  
 2. BASIS OF ELEVATION SALT LAKE CITY BENCH MARK BM5182 ELEV 4217.2915 FEET = 1285.43045 METERS.  
 3. COORDINATES AND ELEVATIONS ARE BASED ON SALT LAKE CITY MONUMENTS AND BENCH MARKS. TO CONVERT TO I-15 COORDINATES, ROTATE COUNTERCLOCKWISE 0°00'38" ABOUT THE POINT N 271745.409 E 575207.318, AND THEN SUBTRACT N 214232.853 E 525479.313. TO CONVERT TO I-15 ELEVATIONS, ADD 1.106 METERS.  
 4. FOR GEOMETRIC DATA SEE PLAN SHEETS.

ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE

WASATCH CONSTRUCTORS  
 OCT 03 1997  
 RELEASED FOR CONSTRUCTION



600 NORTH / I-15 INTERCHANGE IMPROVEMENTS SALT LAKE COUNTY	INDEX OF CONTROL POINTS PROJECT NUMBER SP-15-7(145)312	UTAH DEPARTMENT OF TRANSPORTATION REGION 2, SALT LAKE CITY, UTAH ROADWAY DESIGN	REVIEW 33/2/500 DATE	REVISIONS NO. DATE BY 1. 10/3/97 JAW
--	--	---	----------------------------	--

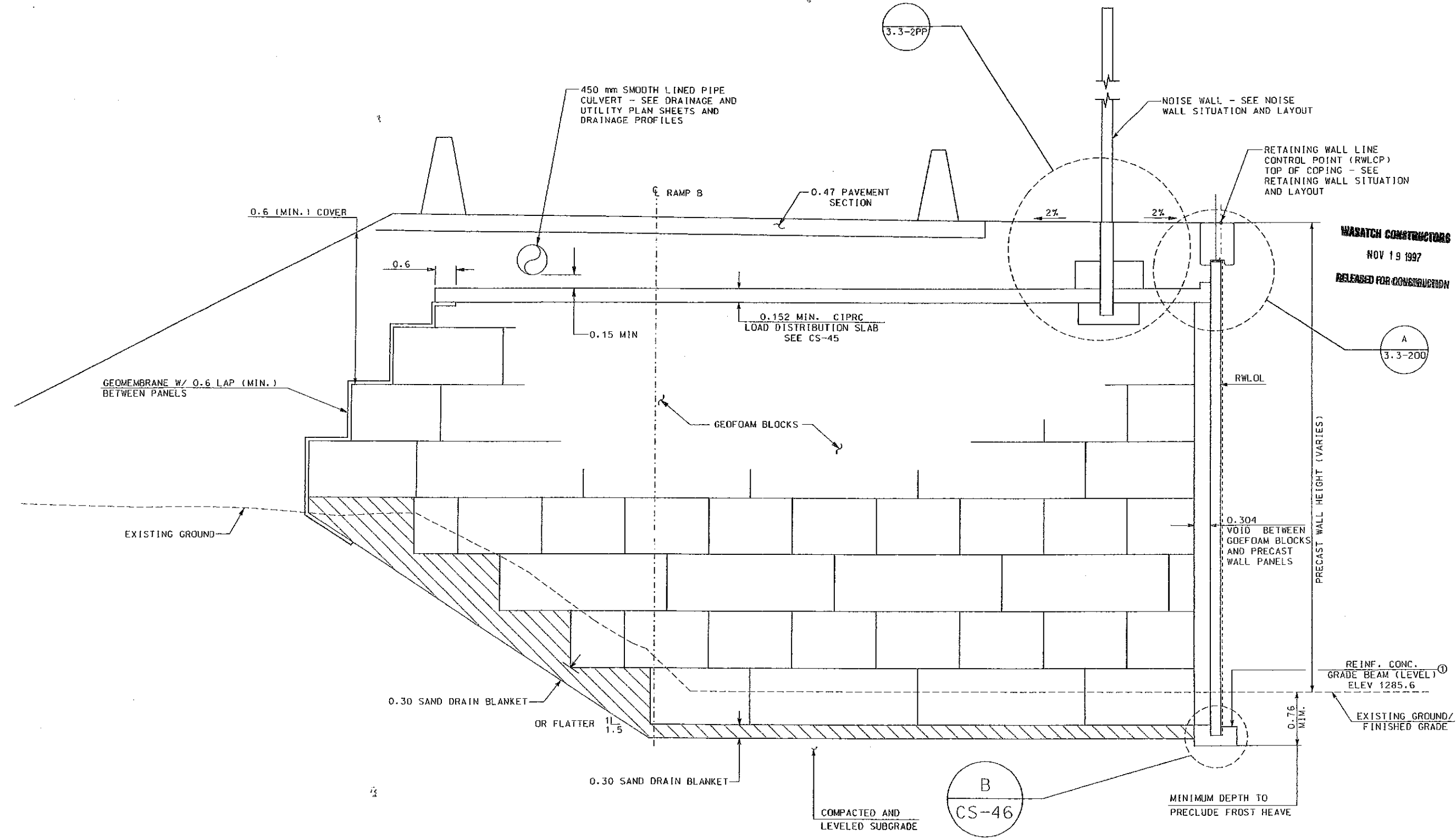




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TYPICAL SECTION  
 GEOFOAM (EPS) WALL  
 RAMP B STA 1+253 TO STA 1+316

- NOTES:
- ELEVATION OF TOP OF GRADE BEAM SHALL BE AT OR BELOW ELEVATION OF BOTTOM OF GEOFOAM.
  - ELEVATIONS BASED ON 600 N DATUM.
  - GEOFOAM FILL SHALL NOT BE CONSTRUCTED UNTIL AFTER ADJACENT EMBANKMENT SETTLEMENT HAS OCCURRED.



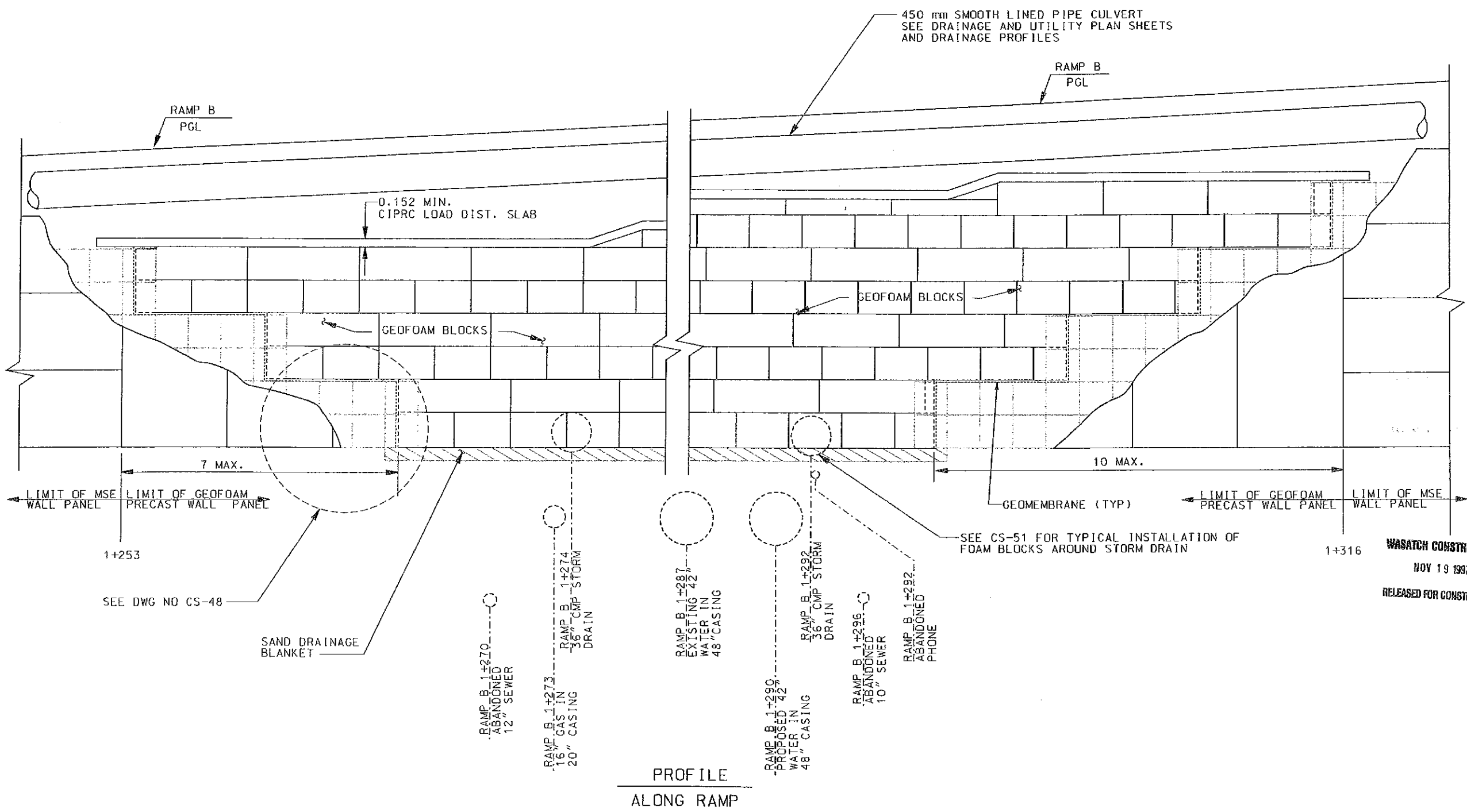
APPROVED FOR CONSTRUCTION		DESCRIPTION	
NO.	DATE	NO.	DATE
A	11-14-97		
RELEASED FOR CONSTRUCTION			
<b>HASATCH CONSTRUCTORS</b> NOV 19 1997 RELEASED FOR CONSTRUCTION			
UTAH DEPARTMENT OF TRANSPORTATION		URS Greiner	
SVERDRUP/DE LEUW		DESIGN NO. 10/97	
PROJECT DESIGN ENGINEER		CHECK BY 10/97	
RICK CHAPMAN		CHECK BY 10/97	
DATE 11/87		CHECK BY 10/97	
PROJECT DESIGN ENGINEER		CHECK BY 10/97	
DON GRULL		CHECK BY 10/97	
DATE 11/87		CHECK BY 10/97	
SECTION MANAGER		QUANT. /	
SECTION MANAGER		QUANT. /	
I-15 CORRIDOR RECONSTRUCTION		SECTION 3.3	
GEOFOAM (EPS) TYPICAL SECTION		PROJECT NUMBER #SP-15-7(135)296	
SALT LAKE COUNTY		DWG. NO. 3.3-2LL	
SHT. _____ OF _____			

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 Third Reference File Levels:

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WASATCH CONSTRUCTORS  
 NOV 19 1997  
 RELEASED FOR CONSTRUCTION



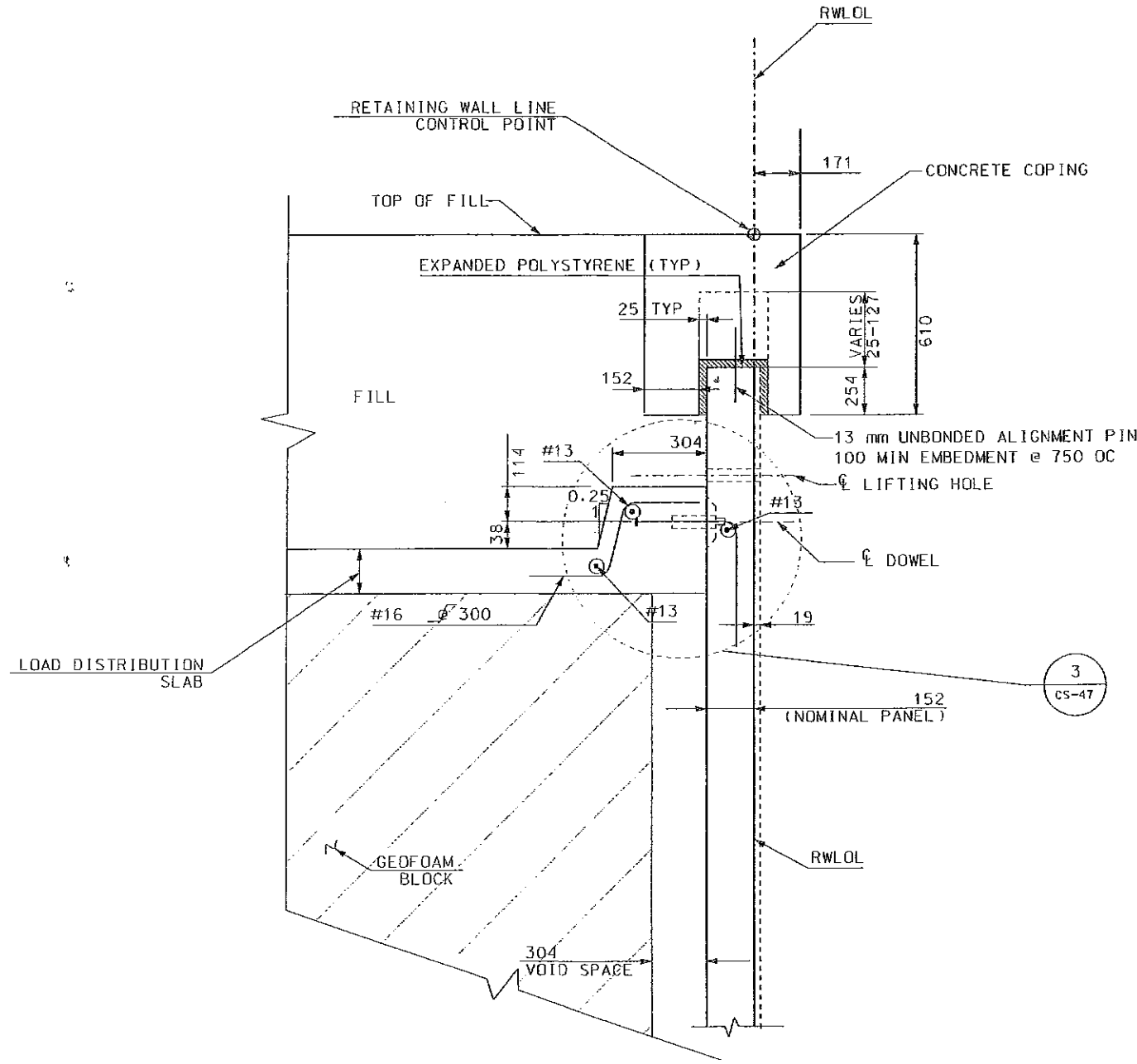
1-15 CORRIDOR RECONSTRUCTION		UTAH DEPARTMENT OF TRANSPORTATION		APPROVED FOR CONSTRUCTION	
GEOFOAM (EPS) PROFILE		URS Greiner		DESCRIPTION	
SECTION 3.3		SVERDRUP/DE LEUW		NO. DATE	
PROJECT NUMBER *SP-15-7(135)296		DESIGN BY 10/97		11-14-97	
		DRAWN BY 10/97		RELEASED FOR CONSTRUCTION	
		CHECK BY 10/97			
		APPROVED DATE			
		SECTION MANAGER			
SALT LAKE COUNTY		DWG. NO. 3.3-2MM			
SHT. OF					



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LOAD DISTRIBUTION SLAB RESTRAINT

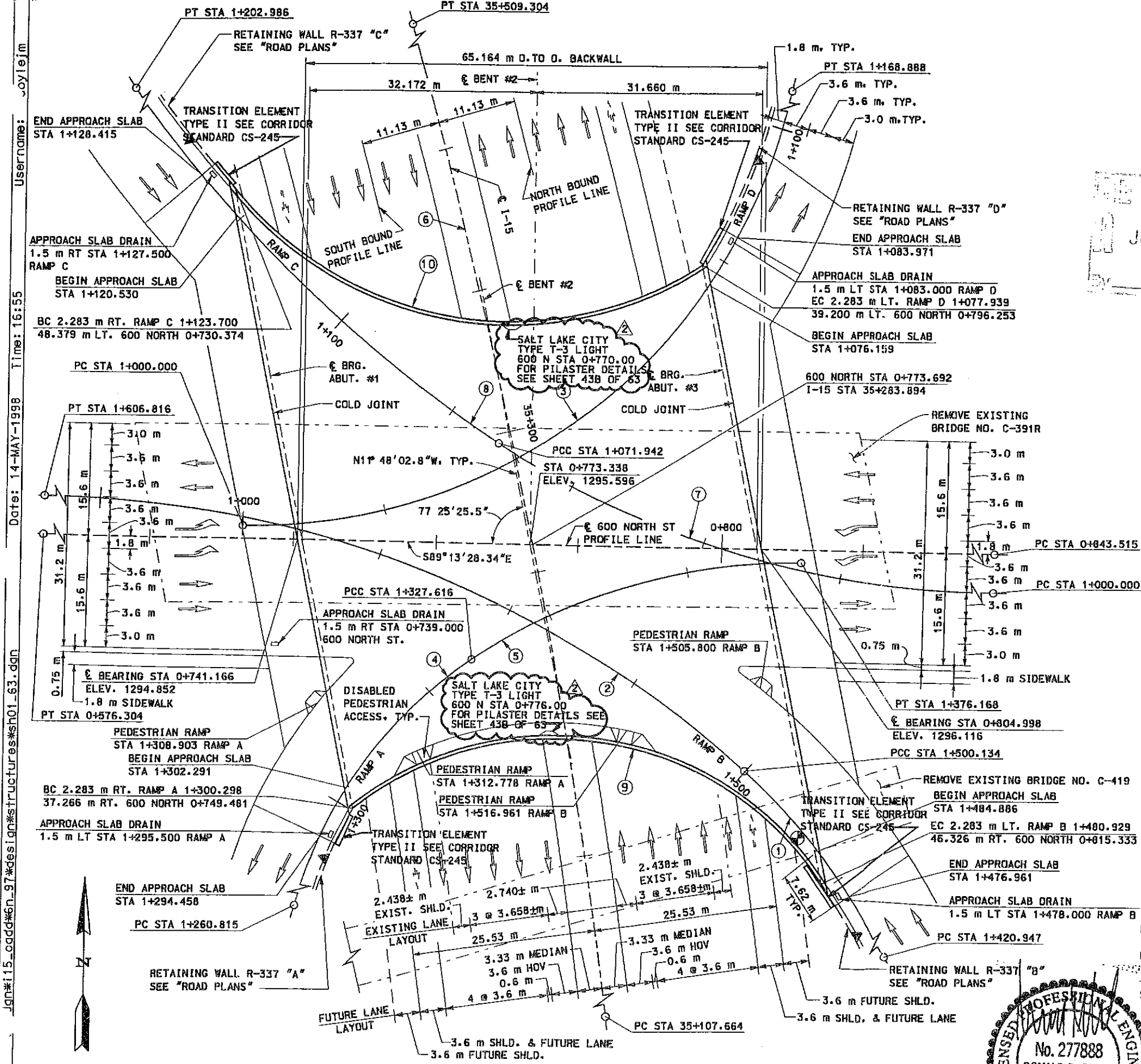
NOTES:  
 1. LIFTING HOLES TO BE DRY PACKED

SECTION A

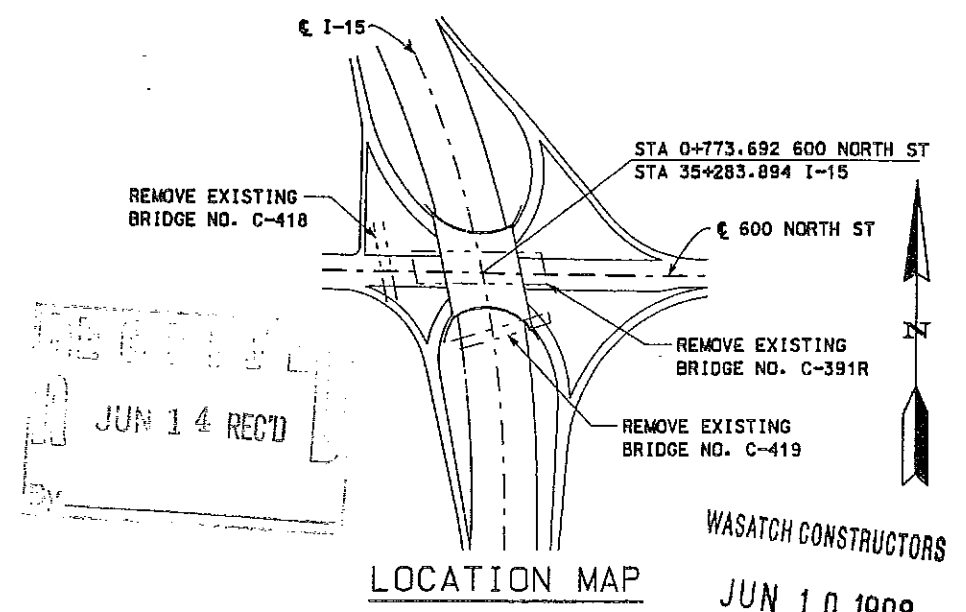
WASATCH CONSTRUCTORS  
 NOV 19 1997  
 RELEASED FOR CONSTRUCTION



I-15 CORRIDOR RECONSTRUCTION		UTAH DEPARTMENT OF TRANSPORTATION		APPROVED FOR CONSTRUCTION	
GEOFOAM WALL RESTRAINT DETAILS		URS Greiner		DESCRIPTION	
SECTION 3.3		SVERDRUP/DE LEUW		RELEASED FOR CONSTRUCTION	
REVISION	DATE	DESIGN	CHECK	DATE	DESCRIPTION
11/97	11/97	10/97	10/97	11-14-97	RELEASED FOR CONSTRUCTION
APPROVED	DATE	DESIGN	CHECK	DATE	DESCRIPTION
11/97	11/97	10/97	10/97		
PROJECT NUMBER *SP-15-7(135)296		SECTION NUMBER		QUANT.	
SALT LAKE COUNTY		DWC. NO.		3.3-200	
SHT.	DF				



PLAN



GENERAL NOTES

- EXCEPT FOR PILES. ALL REINFORCEMENT SHALL BE EPOXY-COATED DEFORMED BILLET-STEEL BARS CONFORMING TO AASHTO M 284M AND M 31M GRADE 400. REINFORCEMENT FOR PILES SHALL BE UNCOATED DEFORMED BILLET STEEL BARS CONFORMING TO AASHTO M 31M GRADE 400.
- ALL STRUCTURAL STEEL SHALL CONFORM TO AASHTO M 270M GRADE 345 EXCEPT WHERE NOTED OTHERWISE.
- CHAMFER ALL EXPOSED CONCRETE CORNERS 20 mm EXCEPT WHERE NOTED OTHERWISE.
- CONCRETE COVER TO REINFORCING STEEL SHALL BE 50 mm EXCEPT WHERE NOTED OTHERWISE.
- ALL CAST-IN-PLACE CONCRETE SHALL BE CLASS AA(AE) EXCEPT WHERE SPECIFIED.
- ALL DIMENSIONS SHOWN ARE MILLIMETERS UNLESS SPECIFIED OTHERWISE. ALL ELEVATIONS SHOWN ARE IN METERS.

DESIGN DATA

MS-18 (HS20) OR INTERSTATE ALTERNATE LOADING IN ACCORDANCE WITH CURRENT AASHTO AND INTERIM SPECIFICATIONS.

SERVICE LOAD DESIGN  
(ALL MEMBERS EXCEPT COLUMNS)

CAST-IN-PLACE CONCRETE:  $f'c = 25 \text{ MPa}$   $f_s$  (REINF) = 160 MPa  
 $f_c = 10 \text{ MPa}$   $n = 9$

STRUCTURAL STEEL:  $f_s = 190 \text{ MPa}$  (FOR AASHTO M 270M GRADE 345 STEEL)

LOAD FACTOR DESIGN  
(COLUMNS)

CAST-IN-PLACE CONCRETE:  $f'c = 25 \text{ MPa}$   $f_y$  (REINF) = 400 MPa

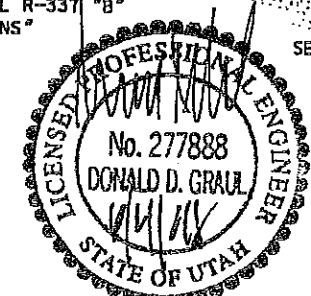
FUTURE WEARING SURFACE: 13 mm CONCRETE: 171 Kg/m

DESIGN SPEED: I-15 110 km/h  
600 NORTH ST. 70 km/h

SEISMIC: AASHTO SEISMIC PERFORMANCE CATEGORY C  
A = 0.73 g. SOIL TYPE III

LEGEND

- DENOTES EXISTING STRUCTURES
- ⊙ DENOTES POINT OF MINIMUM VERTICAL CLEARANCE



Username: jayleim  
 Date: 14-MAY-1998  
 Time: 16:55  
 File: j:\i15\_cadd\en\_97\des\ign\structures\sh01\_63.dgn

UTAH DEPARTMENT OF TRANSPORTATION GREINER, INC. MIDVALE, UTAH		DESIGN: M. JACKSON CHECK: D. ANDERSON	DATE: 2/98	DATE: 2/98												
600 NORTH STREET OVER I-15 SITUATION & LAYOUT NO. 1		ED. BELL PROJECT DESIGN ENGINEER	APPROVED: 2/98	DATE: 2/98												
PROJECT NUMBER SP-15-7(145)312		DRAWN: A. GOMEZ CHECK: D. ANDERSON	QUANT.: M. ILEY	CHECK: D. ANDERSON												
SALT LAKE COUNTY C-816 DRG. NO.		REVISIONS														
SHT. 1 OF 63		<table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> <th>REMARKS</th> </tr> <tr> <td>1</td> <td>3/98</td> <td>JMC</td> <td>AESTHETIC REVISION</td> </tr> <tr> <td>2</td> <td>5/98</td> <td>JMC</td> <td>SALT LAKE CITY T-3 LIGHTS</td> </tr> </table>			NO.	DATE	BY	REMARKS	1	3/98	JMC	AESTHETIC REVISION	2	5/98	JMC	SALT LAKE CITY T-3 LIGHTS
NO.	DATE	BY	REMARKS													
1	3/98	JMC	AESTHETIC REVISION													
2	5/98	JMC	SALT LAKE CITY T-3 LIGHTS													



E:\APROJECT\239-000\PLANS  
06-19-97  
FINAL

APPROVED FOR CONSTRUCTION

NO.	DATE	DESCRIPTION
△	6-23-97	RELEASE FOR 1ST STAGE CONST. WALLS A & C ONLY

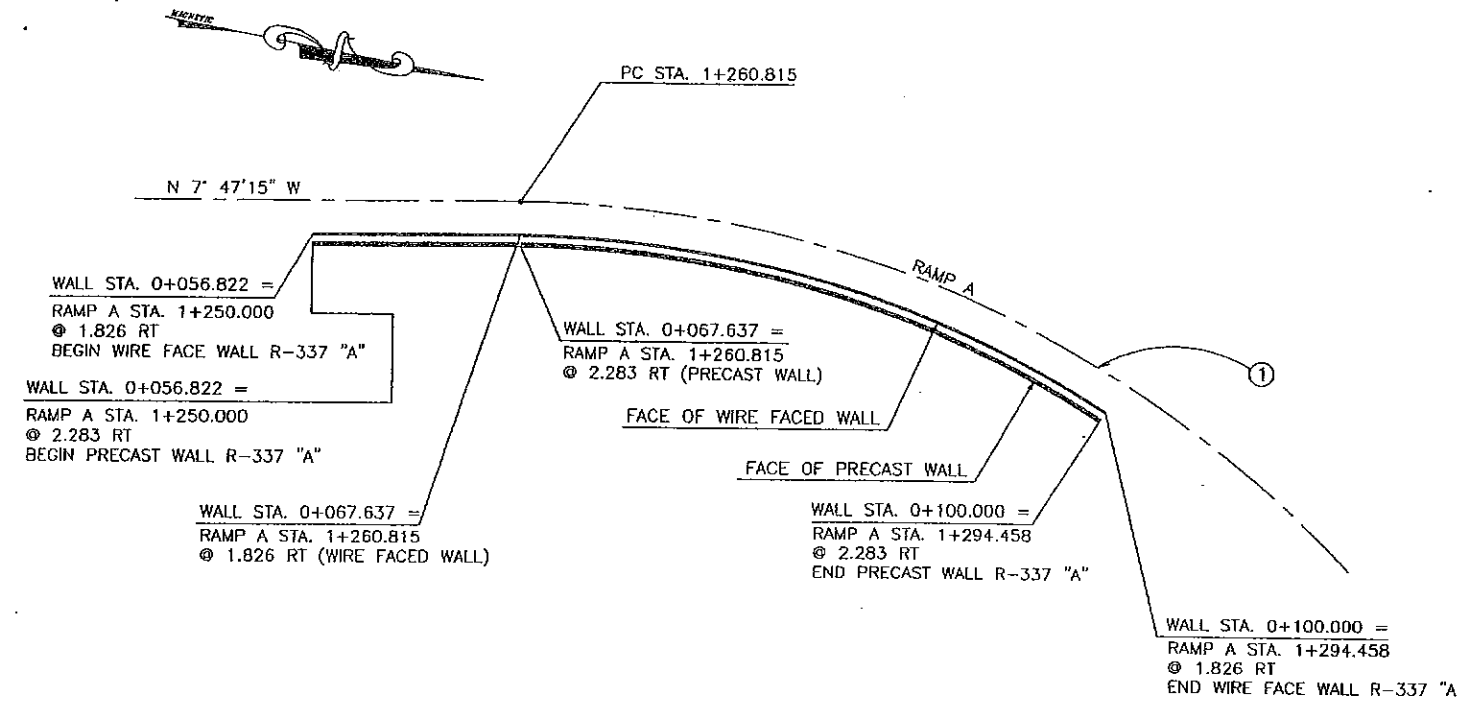
RETAINED EARTH INDEX	
RE-1	PLAN WIRE FACE WALLS A & B, NOTES & DESIGN CRITERIA
RE-2	PLAN WIRE FACE WALLS C & D
RE-3	PLAN WIRE FACE WALLS E & F
RE-4	WALL CONNECTION DETAILS @ STAGE CONST.
RE-5	TYPICAL DETAILS
RE-6	TYPICAL CROSS SECTIONS @ WIRE FACED WALL
RE-7	TYPICAL CROSS SECTIONS
RE-8	CONCRETE BARRIER DETAILS @ STAGE CONST.
RE-9	TYPICAL CONCRETE BARRIER DETAILS
RE-10	WIRE FACED WALL R-337 "A"
RE-11	WIRE FACED WALL R-337 "B"
RE-12	WIRE FACED WALL R-337 "C"
RE-13	WIRE FACED WALL R-337 "D"
RE-14	WIRE FACED WALL R-337 "E"
RE-15	WIRE FACED WALL R-337 "E"
RE-16	WIRE FACED WALL R-337 "E"
RE-17	WIRE FACED WALL R-337 "E"
RE-18	WIRE FACED WALL R-337 "F"
RE-19	WIRE FACED WALL R-337 "F"

DESIGN PARAMETERS	
ANGLE OF INTERNAL FRICTION (SELECT) = 36°	
ANGLE OF INTERNAL FRICTION (BASE) = 30°	
ANGLE OF INTERNAL FRICTION (RANDOM) = 35°	
UNIT WEIGHT BACKFILL = 135 PCF.	
TRAFFIC SURCHARGE = 250 PSF	

DESIGN CRITERIA	
SAFETY FACTOR (OVERTURNING) = 2.0	
SAFETY FACTOR (SLIDING) = 1.5	
SAFETY FACTOR (PULLOUT) = 1.5	
DESIGN LIFE = 75 YEARS	
MAXIMUM BEARING CAPACITY = 2.5 TSF *	

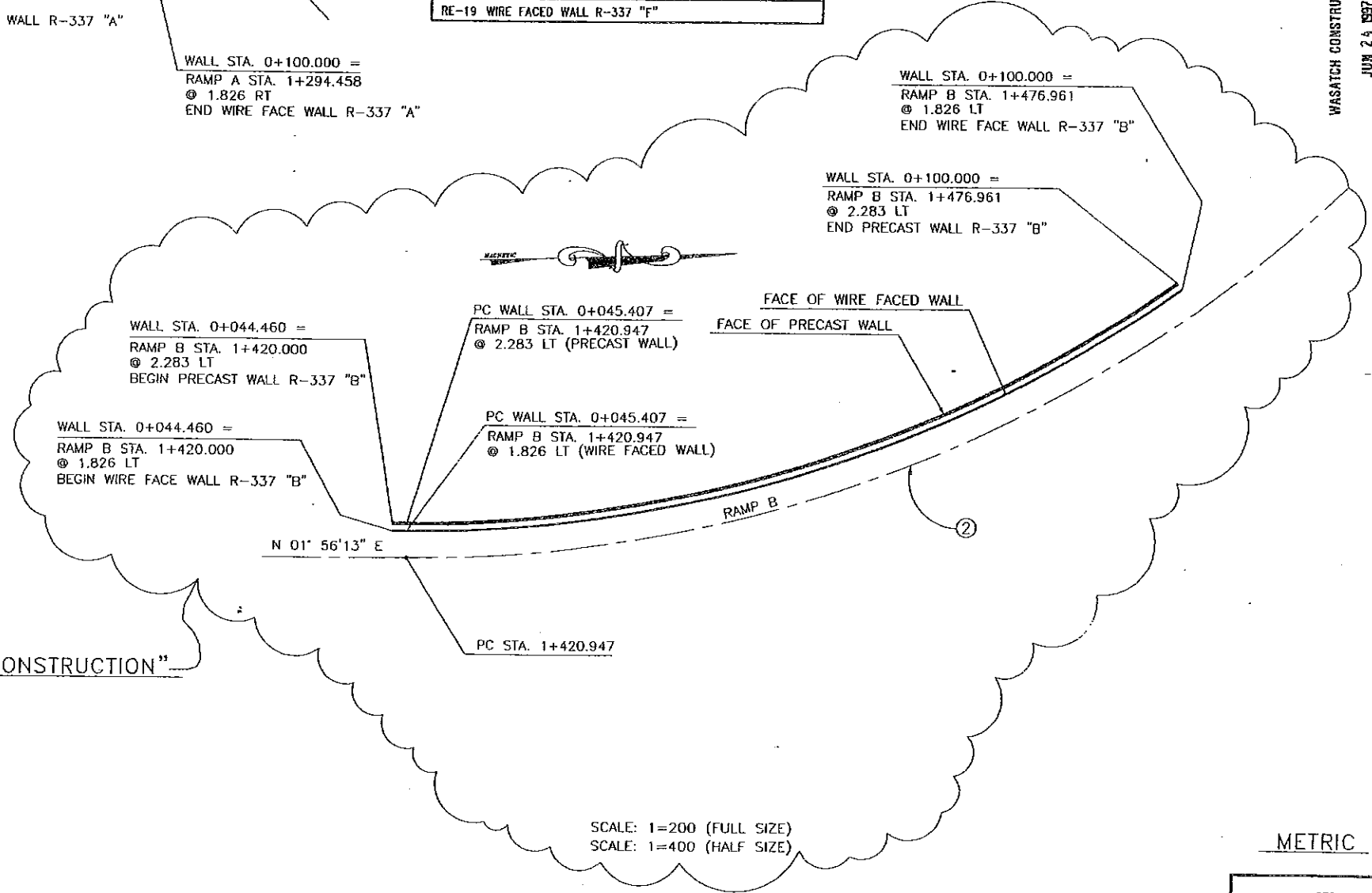
\*U.N.O.



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SCALE: 1=400 (HALF SIZE)

CURVE DATA				
No.	RADIUS	LENGTH	TANGENT	△
①	60.000	66.801	37.339	63°47'24"
②	90.000	79.187	42.362	50°24'43"

All Dimensions Are In Meters Unless Noted Otherwise

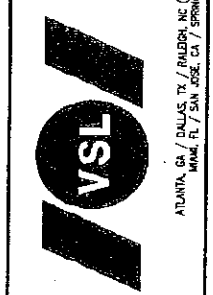


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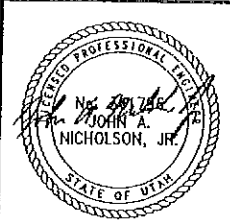
WASATCH CONSTRUCTORS  
JUN 24 1997  
RELEASED FOR CONSTRUCTION

YSL CORPORATION  
2840 Plaza Place, Suite 200  
Raleigh, NC 27612  
Telephone (919) 781-6272  
Fax (919) 781-8899



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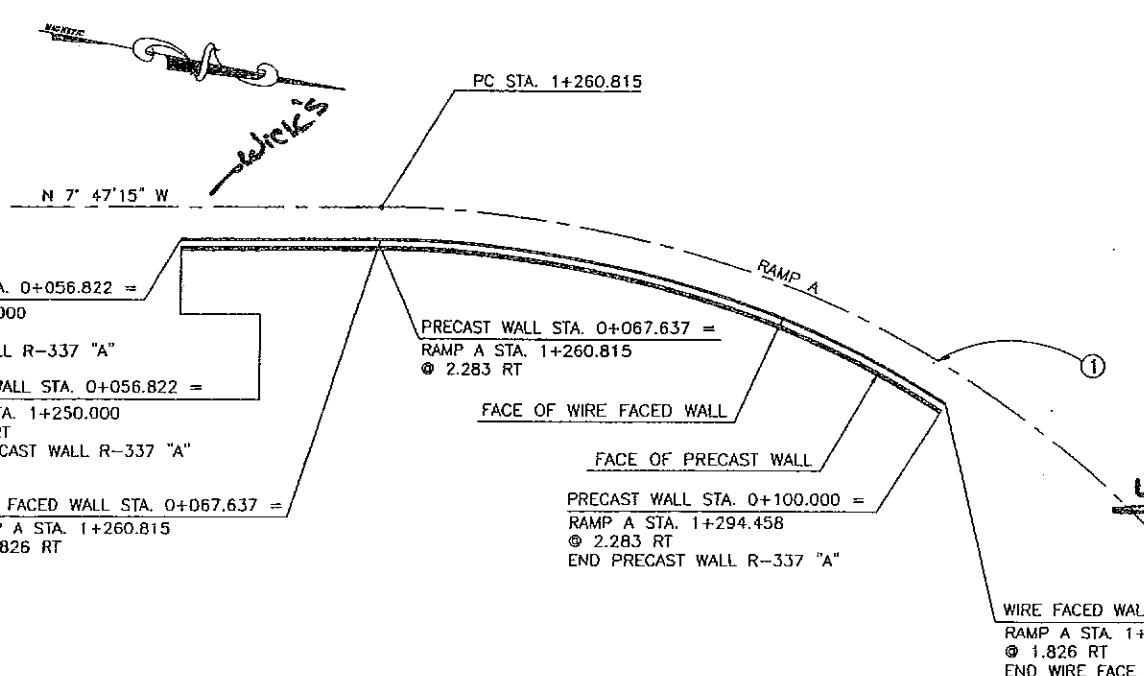
RETAINED EARTH™ WALLS  
PLAN VIEW WIRE WALLS "A" & "B"  
600 NORTH / I-15 INTERCHANGE  
SALT LAKE COUNTY, UTAH  
UTAH DEPARTMENT OF TRANSP.



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.

SCALE:  
JOB NO:  
239-0007  
RE-1

NO.	DATE	REVISION	BY
1			CHK



DESIGN PARAMETERS	
ANGLE OF INTERNAL FRICTION (SELECT) = 36°	
ANGLE OF INTERNAL FRICTION (BASE) = 30°	
ANGLE OF INTERNAL FRICTION (RANDOM) = 35°	
UNIT WEIGHT BACKFILL = 135 PCF.	
TRAFFIC SURCHARGE = 250 PSF	
DESIGN CRITERIA	
SAFETY FACTOR (OVERTURNING) = 2.0	
SAFETY FACTOR (SLIDING) = 1.5	
SAFETY FACTOR (PULLOUT) = 1.5	
DESIGN LIFE = 75 YEARS	
MAXIMUM BEARING CAPACITY = 2.5 TSF *	
*U.N.O.	

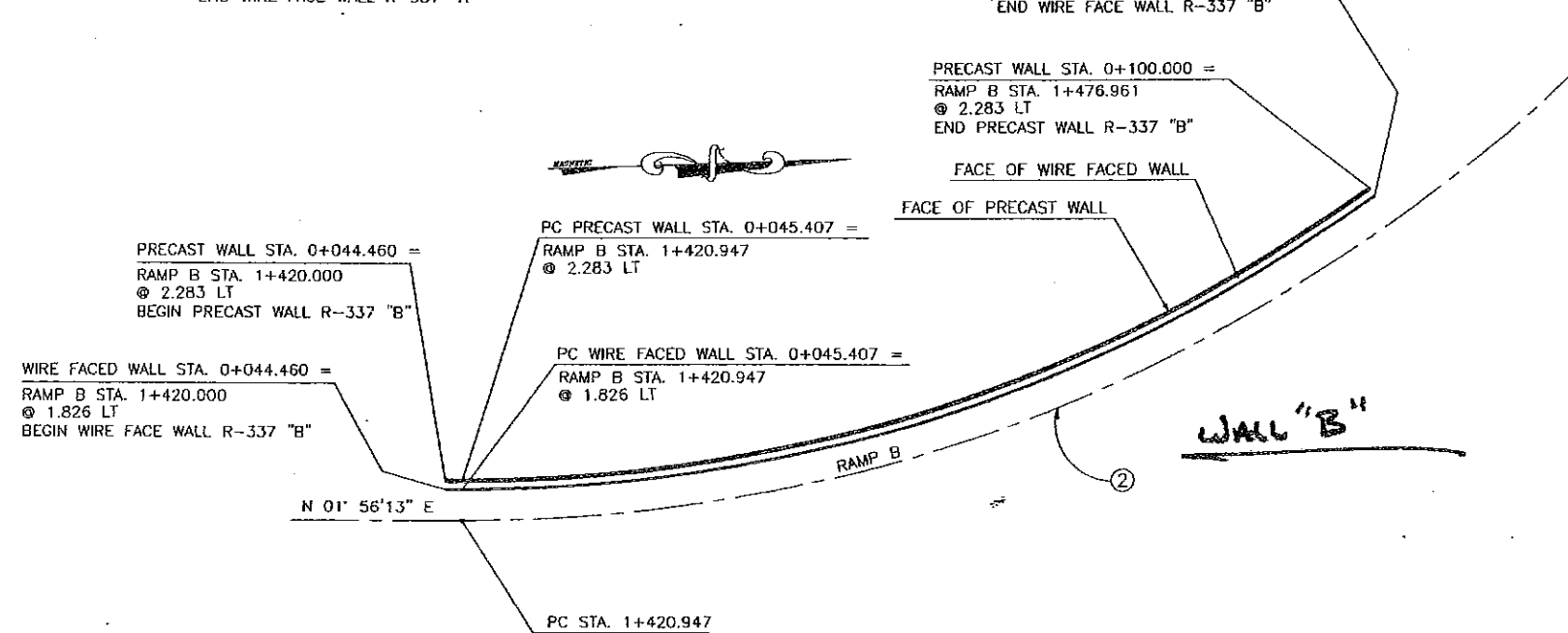
APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
△	6-23-97	RELEASE FOR 1ST STAGE CONST. WALLS A & C ONLY
△	6-26-97	RELEASE FOR 1ST STAGE CONST. WALLS B, D & F ONLY

RETAINED EARTH INDEX	
RE-1	PLAN WIRE FACE WALLS A & B, NOTES & DESIGN CRITERIA
RE-2	PLAN WIRE FACE WALLS C & D
RE-3	PLAN WIRE FACE WALLS E & F
RE-4	WALL CONNECTION DETAILS @ STAGE CONST.
RE-5	TYPICAL DETAILS
RE-6	TYPICAL CROSS SECTIONS @ WIRE FACED WALL
RE-7	TYPICAL CROSS SECTIONS
RE-8	CONCRETE BARRIER DETAILS @ STAGE CONST.
RE-9	TYPICAL CONCRETE BARRIER DETAILS
RE-10	WIRE FACED WALL R-337 "A"
RE-11	WIRE FACED WALL R-337 "B"
RE-12	WIRE FACED WALL R-337 "C"
RE-13	WIRE FACED WALL R-337 "D"
RE-14	WIRE FACED WALL R-337 "E"
RE-15	WIRE FACED WALL R-337 "F"
RE-16	WIRE FACED WALL R-337 "G"
RE-17	WIRE FACED WALL R-337 "H"
RE-18	WIRE FACED WALL R-337 "I"
RE-19	WIRE FACED WALL R-337 "J"
RE-20	WIRE FACED WALL R-337 "K"
RE-21	WIRE FACED WALL R-337 "L"

SCALE: 1=200 (FULL SIZE)  
SCALE: 1=400 (HALF SIZE)

CURVE DATA				
No.	RADIUS	LENGTH	TANGENT	△
①	60.000	66.801	37.339	63°47'24"
②	90.000	79.187	42.362	50°24'43"

All Dimensions Are In Meters Unless Noted Otherwise



SCALE: 1=200 (FULL SIZE)  
SCALE: 1=400 (HALF SIZE)

REVISION		DATE	BY	CHK

DES.	DRN.	CHK.	MM	LP	MM
6-19-97	6-19-97	6-19-97			

VSL CORPORATION  
2840 Ross Road, Suite 200  
Raleigh, NC 27612  
Telephone: (919) 781-6272  
Fax: (919) 781-4889

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

**VSL**

RETAINED EARTH™ WALLS  
PLAN VIEW WIRE WALLS "A" & "B"  
600 NORTH / I-15 INTERCHANGE  
SALT LAKE COUNTY, UTAH  
UTAH DEPARTMENT OF TRANSP.

SCALE:  
JOB NO:  
239-0007  
RE-1

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METRIC

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	8-20-97	RELEASE FOR 1ST STAGE CONST. WALLS E ONLY
2	8-27-97	RELEASE FOR 1ST STAGE CONST. WALL E ONLY

NO.	DATE	REVISION
1		
2		

NO.	DATE	REVISION
1		
2		

**VSL CORPORATION**  
 2810 Plaza Place, Suite 200  
 Raleigh, NC 27612  
 Telephone: (919) 761-6272  
 Fax: (919) 761-4663



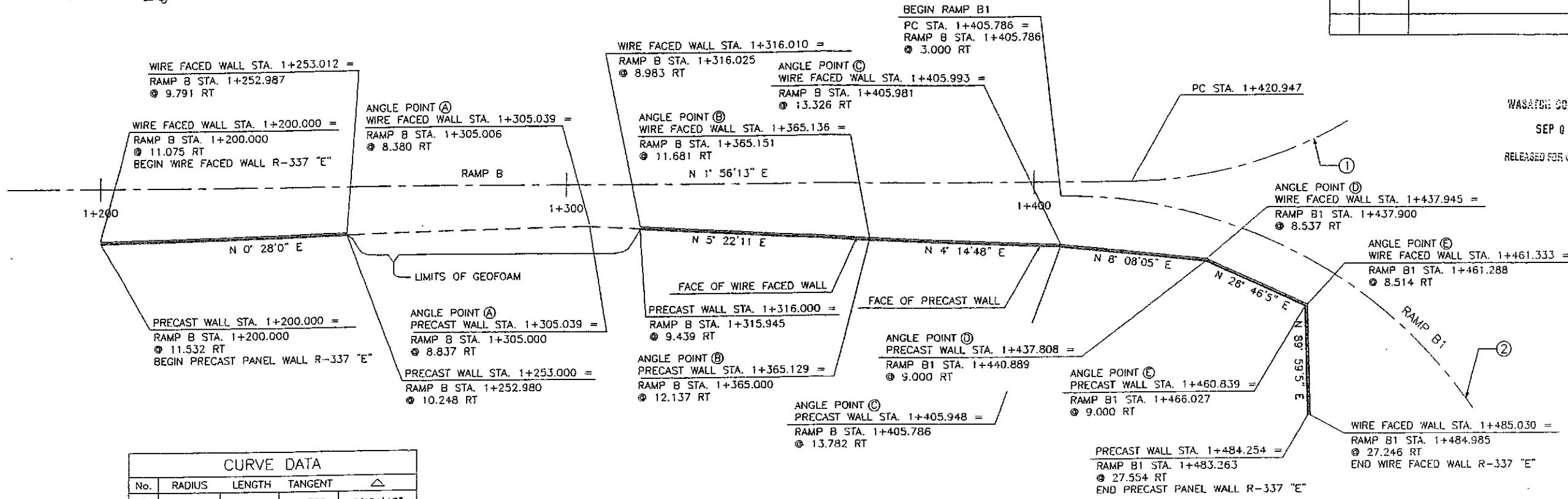
ATLANTA, GA / DALLAS, TX / BALTIMORE, MD (CORPORATE OFFICE)  
 BOULDER, CO / SPRINGFIELD, VA

VSL Corporation (VSL) is a global leader in the design and construction of retaining walls and earth retention systems. VSL's extensive experience and expertise in the design and construction of retaining walls and earth retention systems has earned it a reputation as the world's leading provider of retaining wall solutions. VSL's retaining wall solutions are designed to meet the specific needs of each project, ensuring long-term stability and performance. VSL's retaining wall solutions are designed to meet the specific needs of each project, ensuring long-term stability and performance.

**RETAINED EARTH™ WALLS**  
**PLAN VIEW WIRE WALLS "E" & "F"**  
**600 NORTH / I-15 INTERCHANGE**  
**SALT LAKE COUNTY, UTAH**  
**UTAH DEPARTMENT OF TRANSP.**

SCALE:	
JOB NO:	239-0007

3.3R-337-E.4

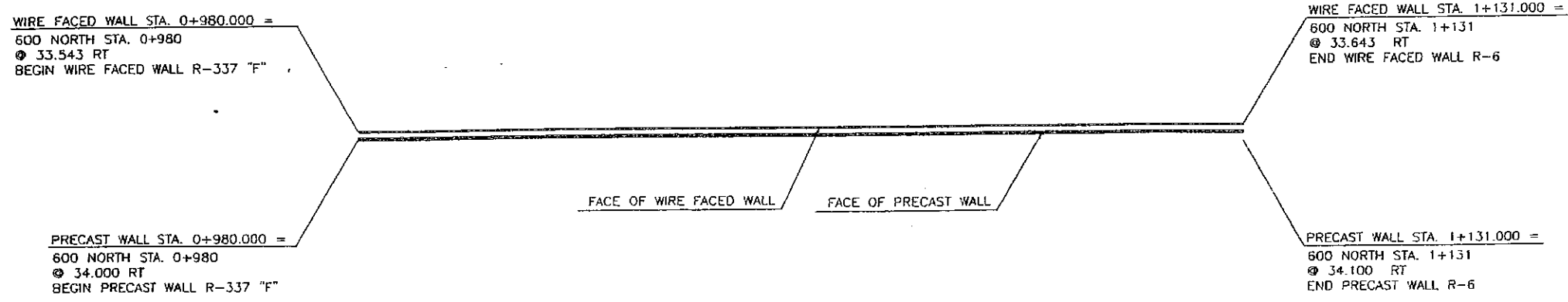


CURVE DATA				
No.	RADIUS	LENGTH	TANGENT	Δ
①	90.000	79.187	42.362	50°24'43"
②	110.000	164.819	102.307	85°50'58"

All Dimensions Are In Meters Unless Noted Otherwise

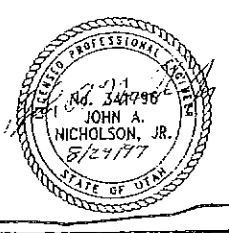
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 SCALE: 1=1000 (HALF SIZE)

S 89° 45' 34" E 600 NORTH



SCALE: 1=500 (FULL SIZE)  
 SCALE: 1=1000 (HALF SIZE)

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

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
▲	6-26-97	RELEASE FOR 1ST STAGE CONST. WALLS B, D & F ONLY

DES.	DRN.	CHK.	RETAINED EARTH	NO.	DATE	BY
6-23-97	6-23-97	6-23-97	<input checked="" type="checkbox"/>			

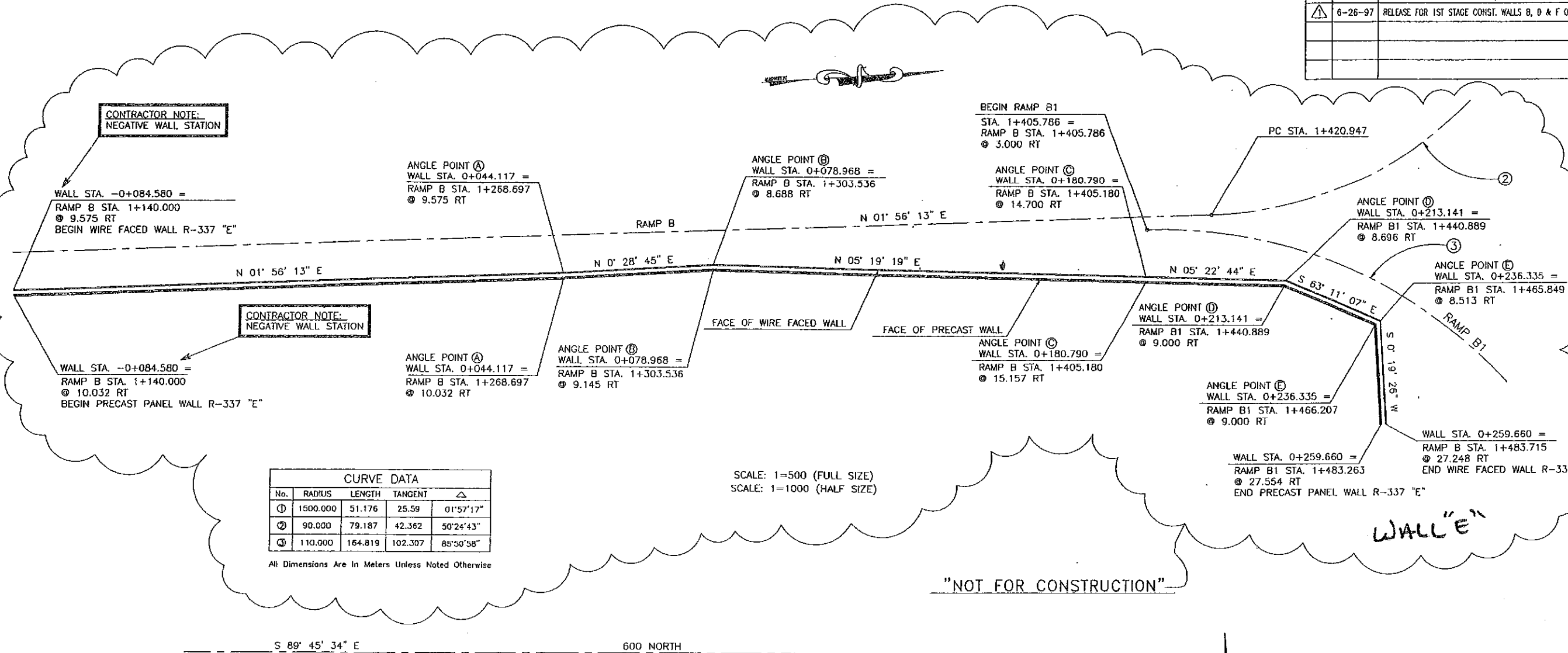
VSL CORPORATION  
 2840 Plaza Place, Suite 200  
 Raleigh, NC 27612  
 Telephone: (919) 781-8272  
 Fax: (919) 781-4589

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



RETAINED EARTH™ WALLS  
 PLAN VIEW WIRE WALLS "E" & "F"  
 600 NORTH / I-15 INTERCHANGE  
 SALT LAKE COUNTY, UTAH  
 UTAH DEPARTMENT OF TRANSP.

SCALE:  
 JOB NO:  
 239-0007  
 RE-3



CONTRACTOR NOTE:  
 NEGATIVE WALL STATION

CONTRACTOR NOTE:  
 NEGATIVE WALL STATION

CURVE DATA				
No.	RADIUS	LENGTH	TANGENT	Δ
①	1500.000	51.176	25.59	01°57'17"
②	90.000	79.187	42.362	50°24'43"
③	110.000	164.819	102.307	85°50'58"

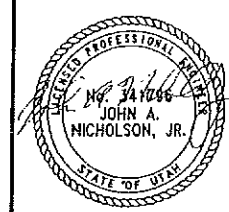
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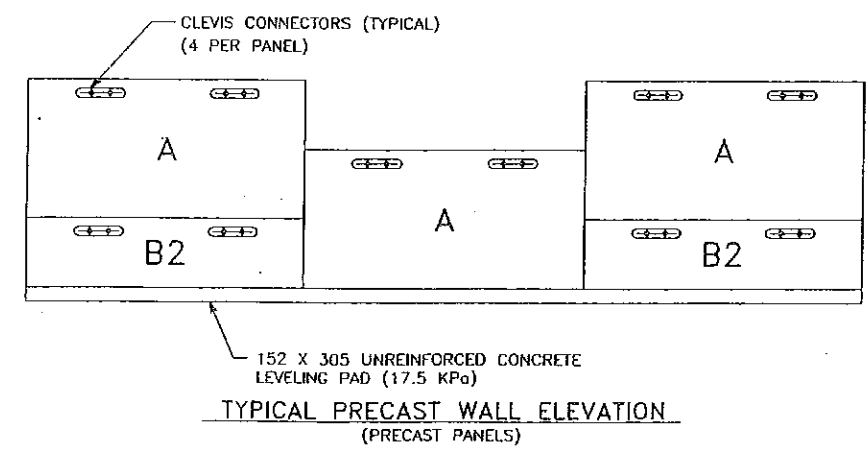
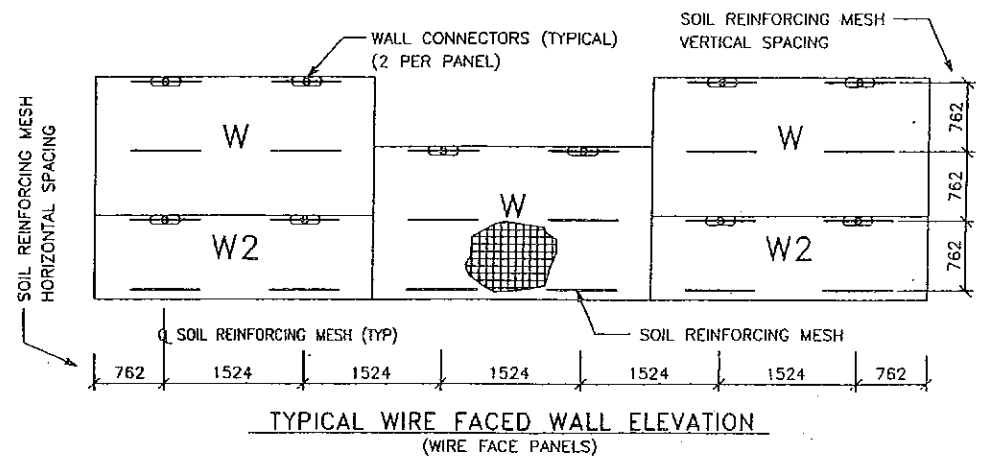
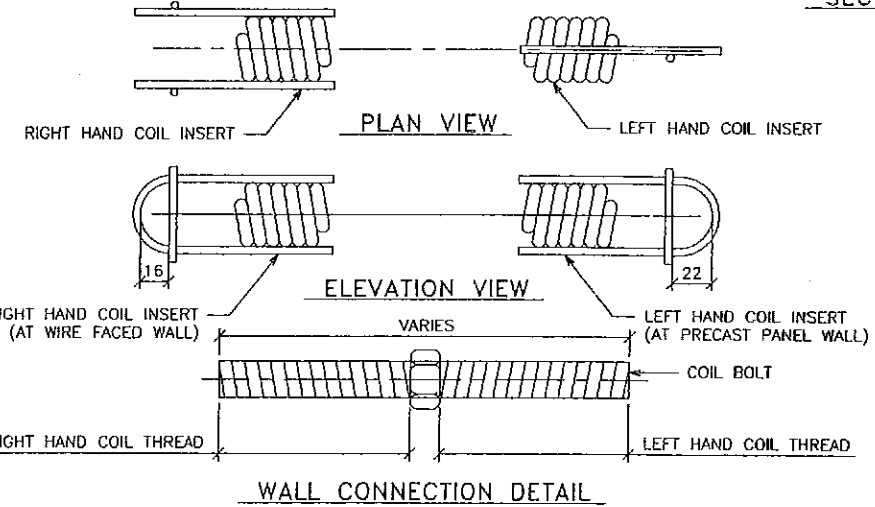
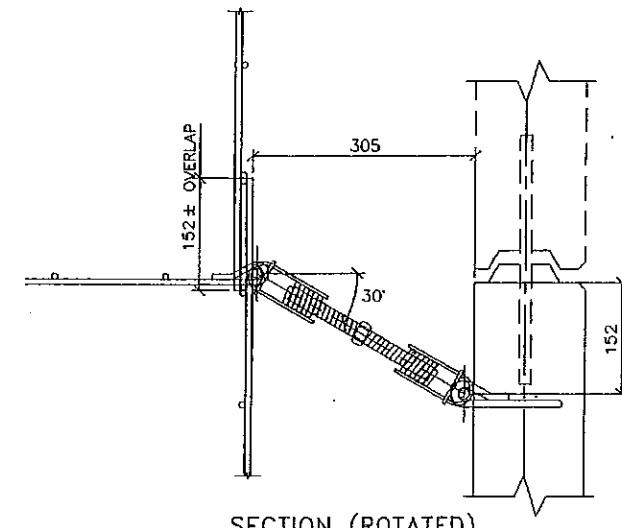
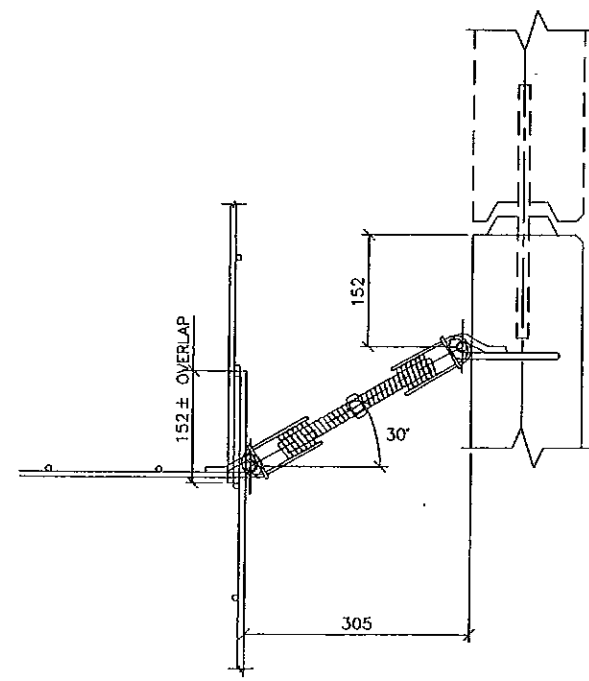
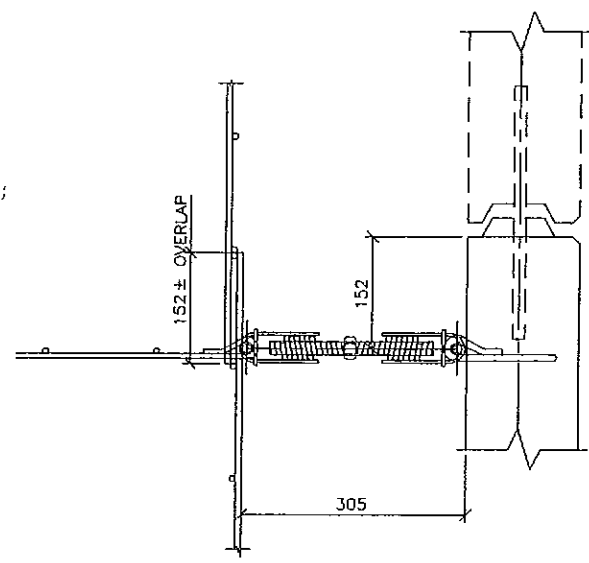
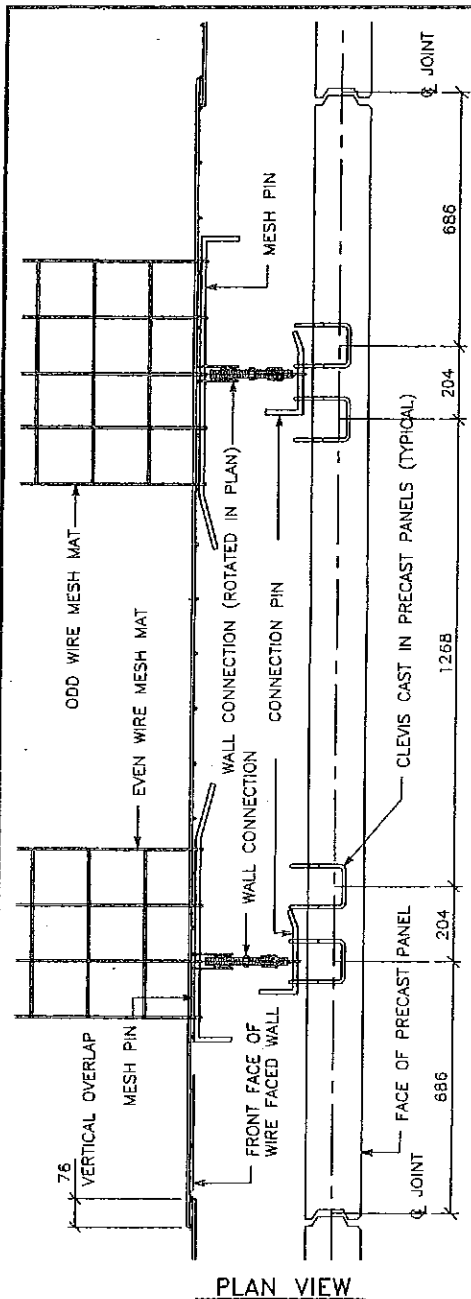
SCALE: 1=500 (FULL SIZE)  
 SCALE: 1=1000 (HALF SIZE)

"NOT 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.



WASATCH CONSTRUCTORS



APPROVED FOR CONSTRUCTION

NO.	DATE	DESCRIPTION
△	6-23-97	RELEASE FOR 1ST STAGE CONST. WALLS A & C ONLY
△	6-26-97	RELEASE FOR 1ST STAGE CONST. WALLS A, B, C, D & F ONLY

NO.	DATE	REVISION	BY	CHK

DES.	6-19-97	MM
DRN.	6-19-97	DDO
CHK.	6-19-97	MM

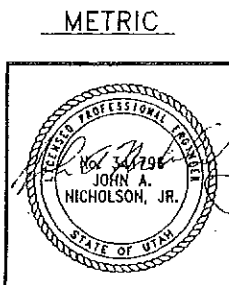
RETAINED EARTH™

VSL CORPORATION  
 2840 Plaza Pkwy, Salt Lake City, UT 84120  
 Telephone: (919) 781-6272  
 Fax: (919) 781-6869

ADJUTANT GENERAL / BUREAU OF MILITARY CONSTRUCTION  
 WASHINGTON, DC 20315

RETAINED EARTH™ WALLS  
 WALL CONNECTION DETAILS @ STAGE CONST.  
 600 NORTH / I-15 INTERCHANGE  
 SALT LAKE COUNTY, UTAH  
 UTAH DEPARTMENT OF TRANSP.

SCALE:  
 JOB NO.: 239-0007  
 RE-4

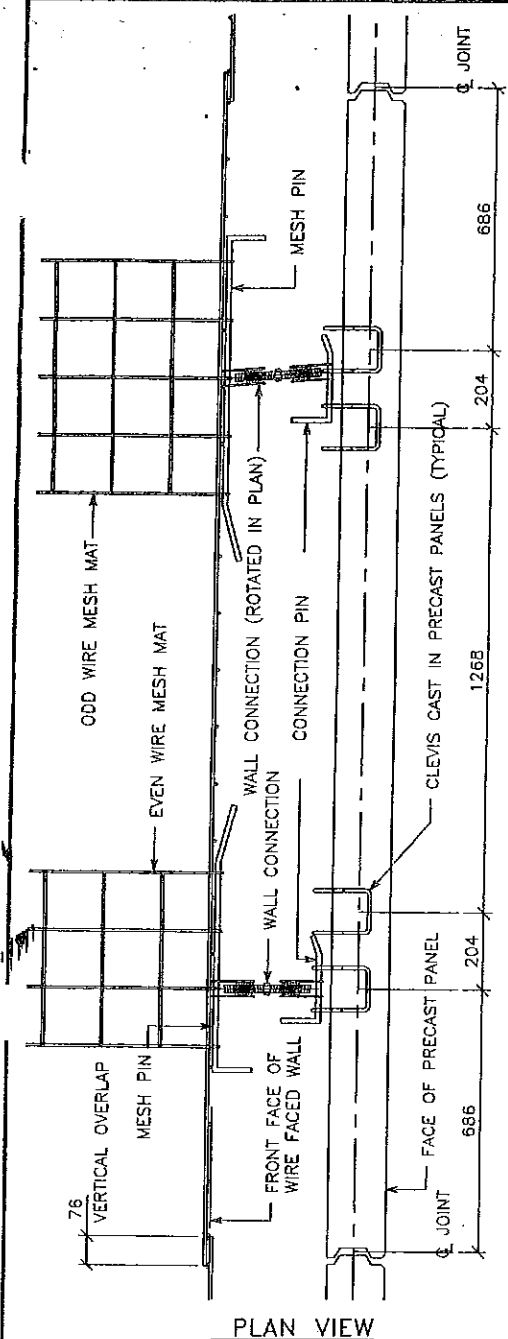


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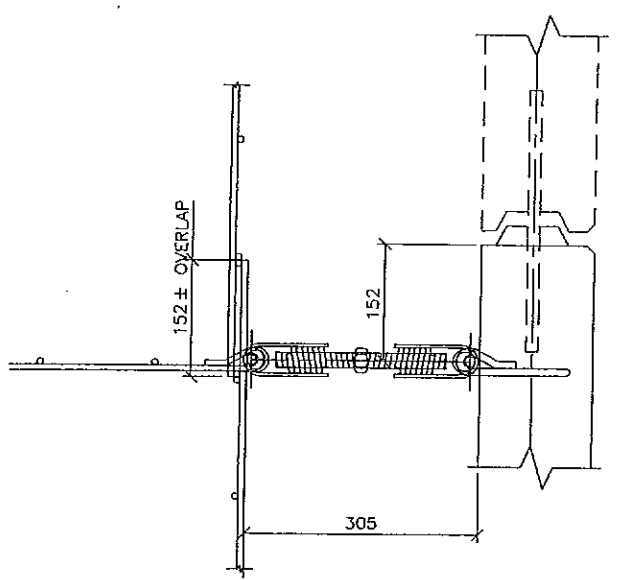
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06-19-97

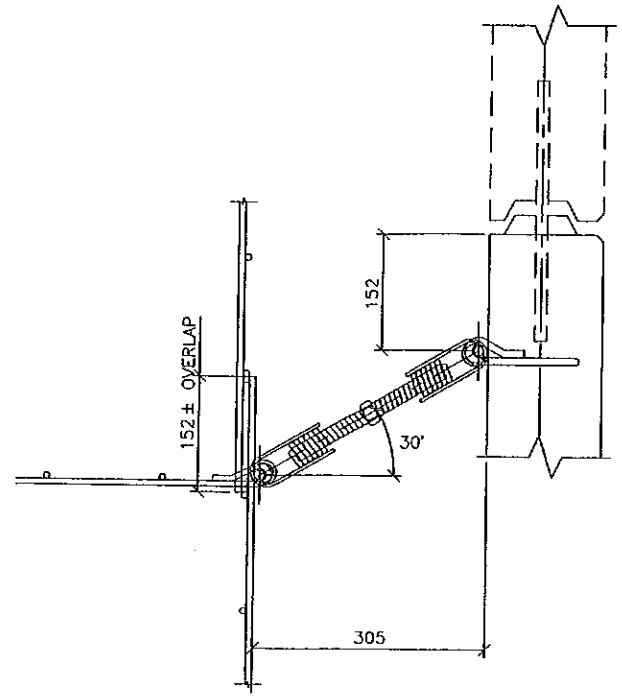
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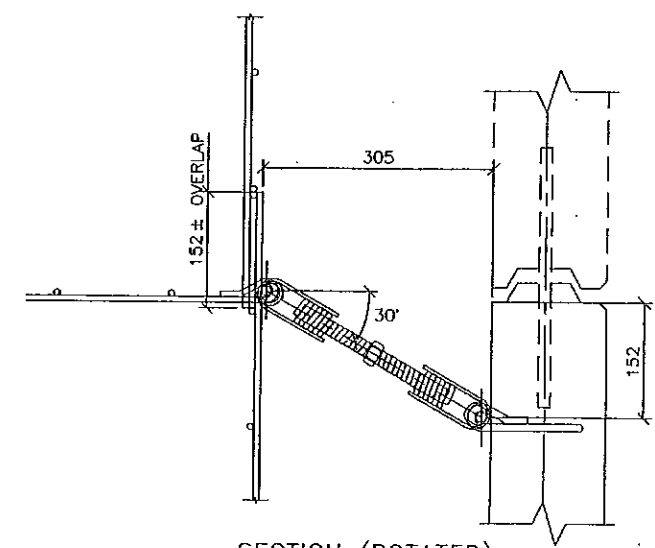
PLAN VIEW



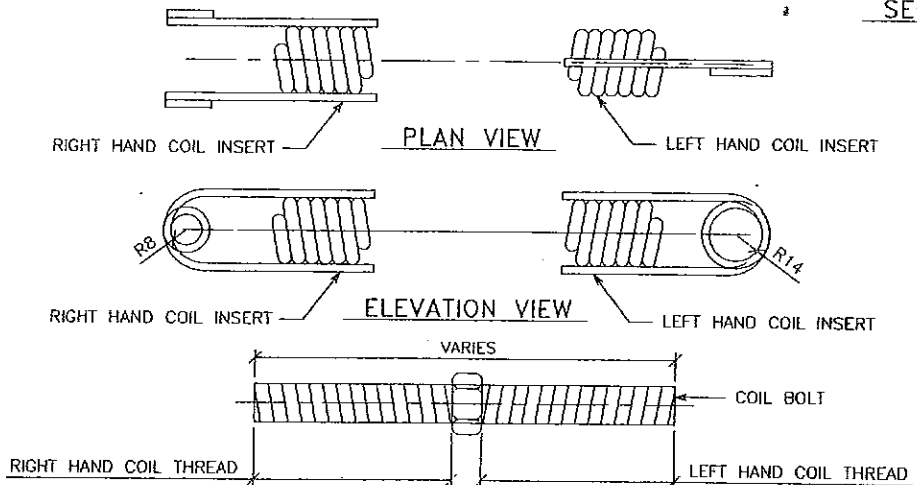
SECTION (FLAT)



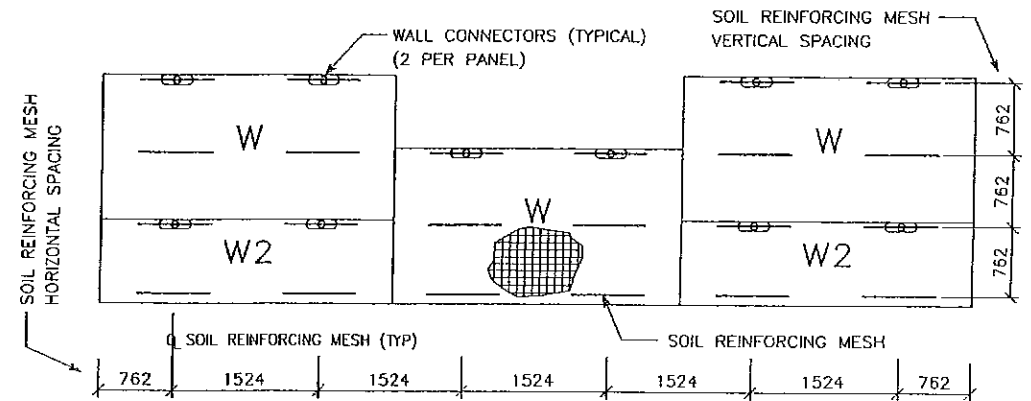
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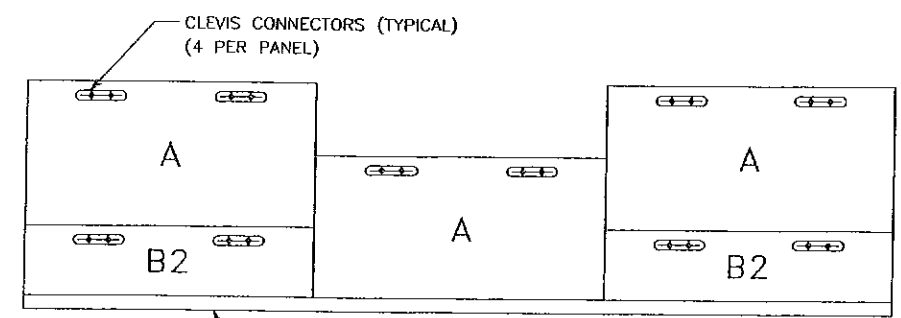
SECTION (ROTATED)



WALL CONNECTION DETAIL



TYPICAL WIRE FACED WALL ELEVATION (WIRE FACE PANELS)



TYPICAL PRECAST WALL ELEVATION (PRECAST PANELS)

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
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WASATCH CONSTRUCTORS  
JUN 24 1997  
RELEASED FOR CONSTRUCTION

DES.	MM	NO.	DATE	REVISION	BY	CHK
6-19-97	MM					
6-19-97	DDO					
6-19-97	MM					

VSL CORPORATION  
2840 Plaza Place, Suite 200  
Raleigh, NC 27612  
Telephone: (919) 781-6272  
Fax: (919) 781-6968

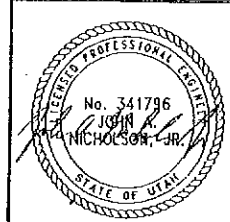


ATLANTA, GA / DALLAS, TX / HALDOR, NE (CORPORATE OFFICE)  
MADE IN / SAN JOSE, CA / SPRINGFIELD, VA

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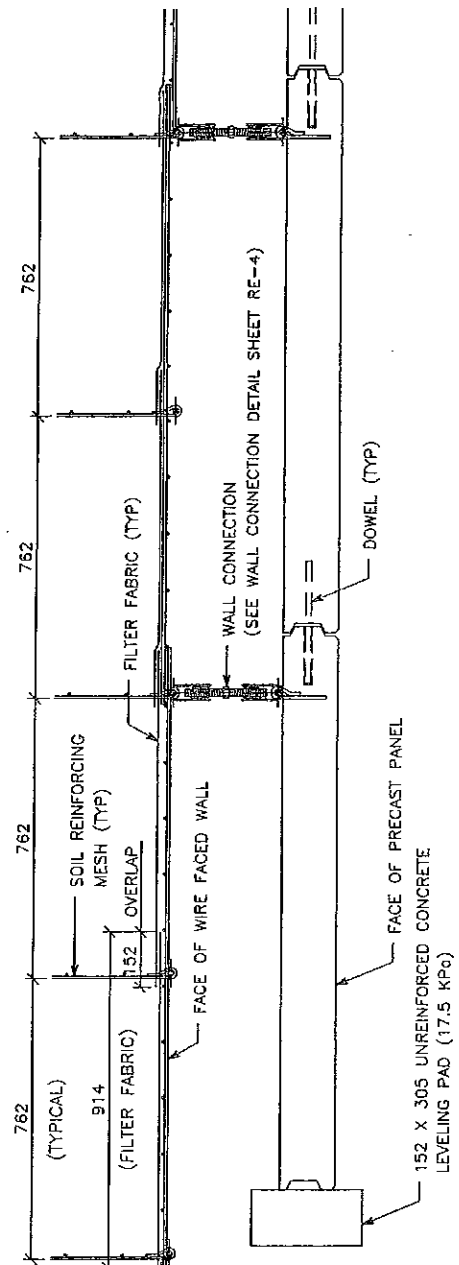
RETAINED EARTH™ WALLS  
WALL CONNECTION DETAILS @ STAGE CONST.  
600 NORTH / I-15 INTERCHANGE  
SALT LAKE COUNTY, UTAH  
UTAH DEPARTMENT OF TRANSP.

METRIC

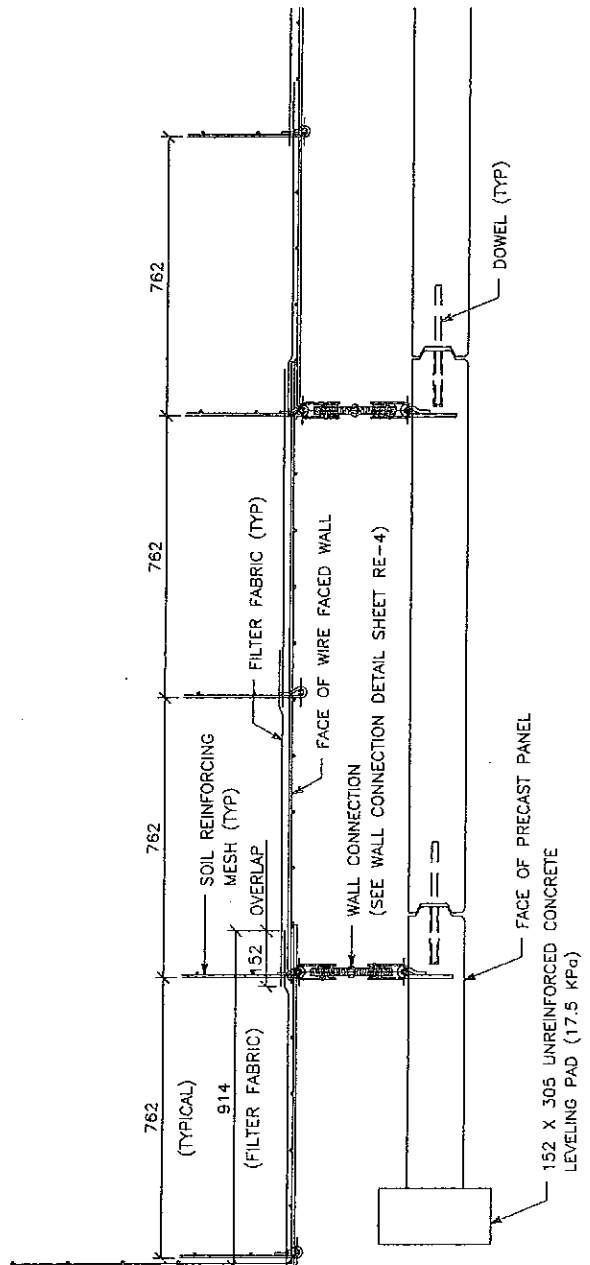


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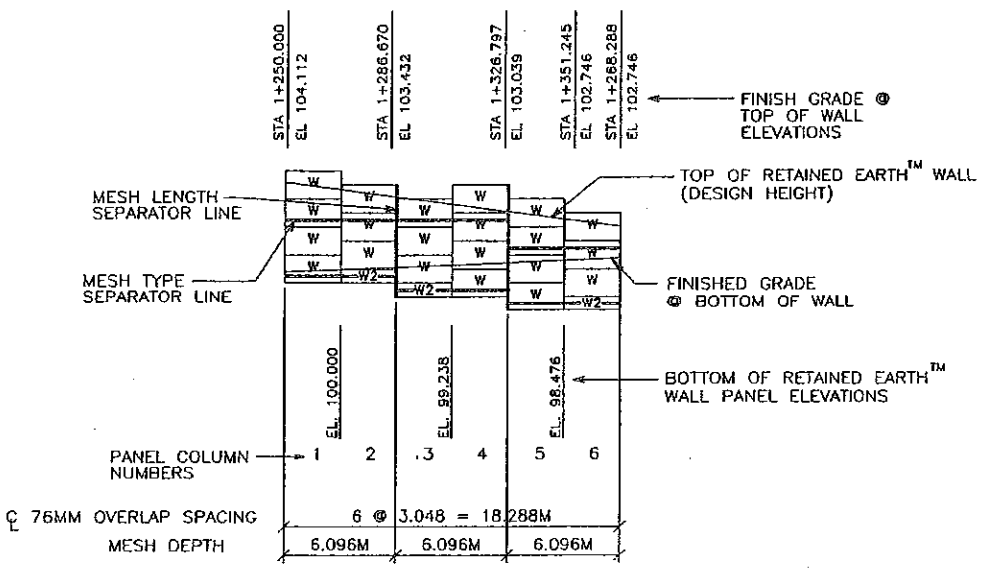
SCALE:	
JOB NO:	239-0007
	RE-4



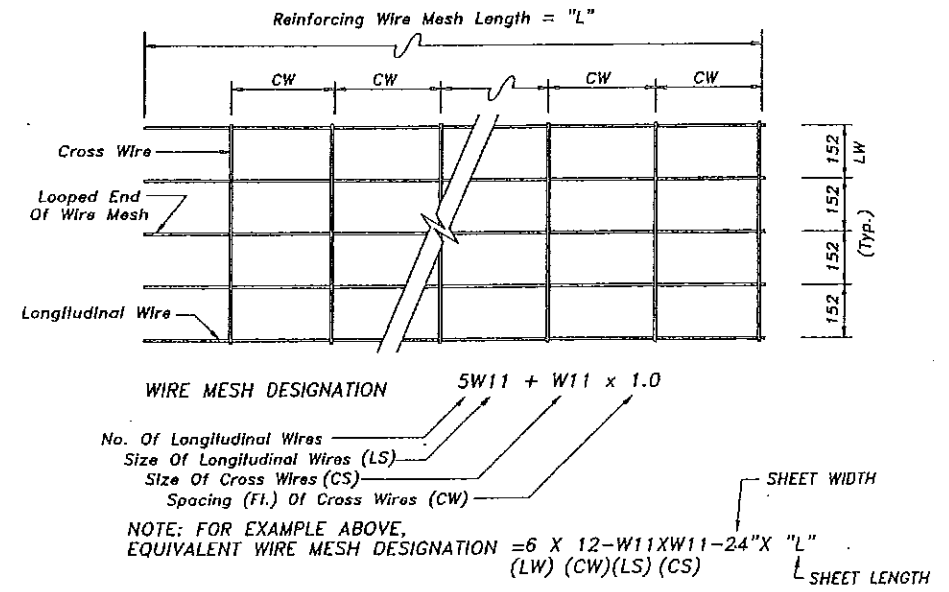
SECTION AT  
PRECAST PANEL TYPE "A"



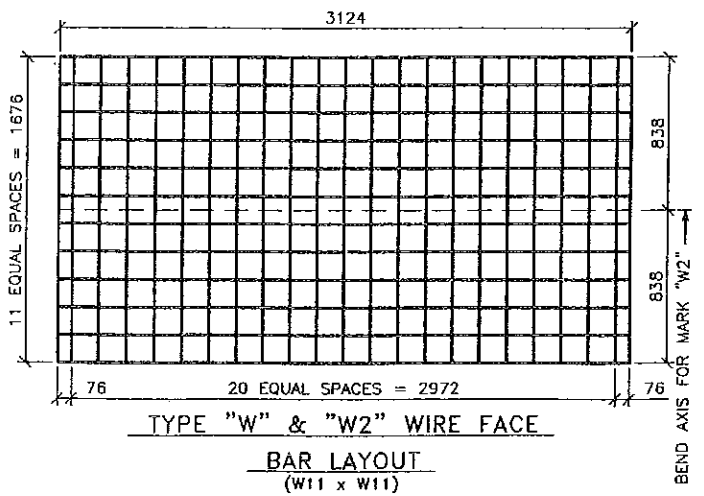
SECTION AT  
PRECAST PANEL TYPE "B2"



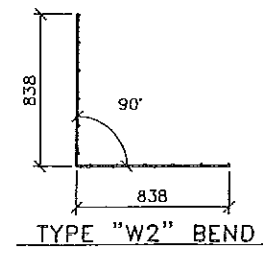
1 WIRE FACED WALL ELEVATION KEY  
(FRONT FACE SHOWN)



NOTE: W11 (71 sq mm) And W20 (129 sq mm) Steel Wire Material And Welding Of Cross Wires And Loops Shall Conform To ASTM A82 And ASTM 185, Fy = 448 MPa. Mesh Shall Be Galvanized To ASTM A-123 To A Minimum Effective Thickness Of 0.086 mm.



TYPE "W" & "W2" WIRE FACE  
BAR LAYOUT  
(W11 x W11)



TYPE "W2" BEND

**Soil Reinforcement Key**  
Mesh Types Are Designated Below Mesh Length Line. Heavy Horizontal Lines On Wall Elev. Separate Zones Of Different Mesh Types. Heavy Vertical Lines On Wall Elev. Separate Zones Of Different Mesh Lengths.  
Example:  
5W11+W11X1.0' (3 LAYERS)      MESH PIECE (TYP, SEE RE-4 FOR ADDITIONAL INFORMATION)  
4W11+W11X1.0' (1 LAYER)      5W11+W11X1.0' (2 LAYERS)  
4W11+W11X1.0' (1 LAYER)      4W11+W11X1.0' (1 LAYER)  
MESH LENGTH      L=3.048m      L=2.743m  
MESH TYPE (3) 5W11+W11X1.0' (2) 5W11+W11X1.0'  
(1) 4W11+W11X1.0' (1) 4W11+W11X1.0'

Contact VSL Corp. For Questions Concerning Placement Of Soil Reinforcement.

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
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VSL CORPORATION  
2940 Plaza Place, Suite 300  
Raleigh, NC 27617-7616-6772  
Telephone: (919) 781-1889  
Fax: (919) 781-1889

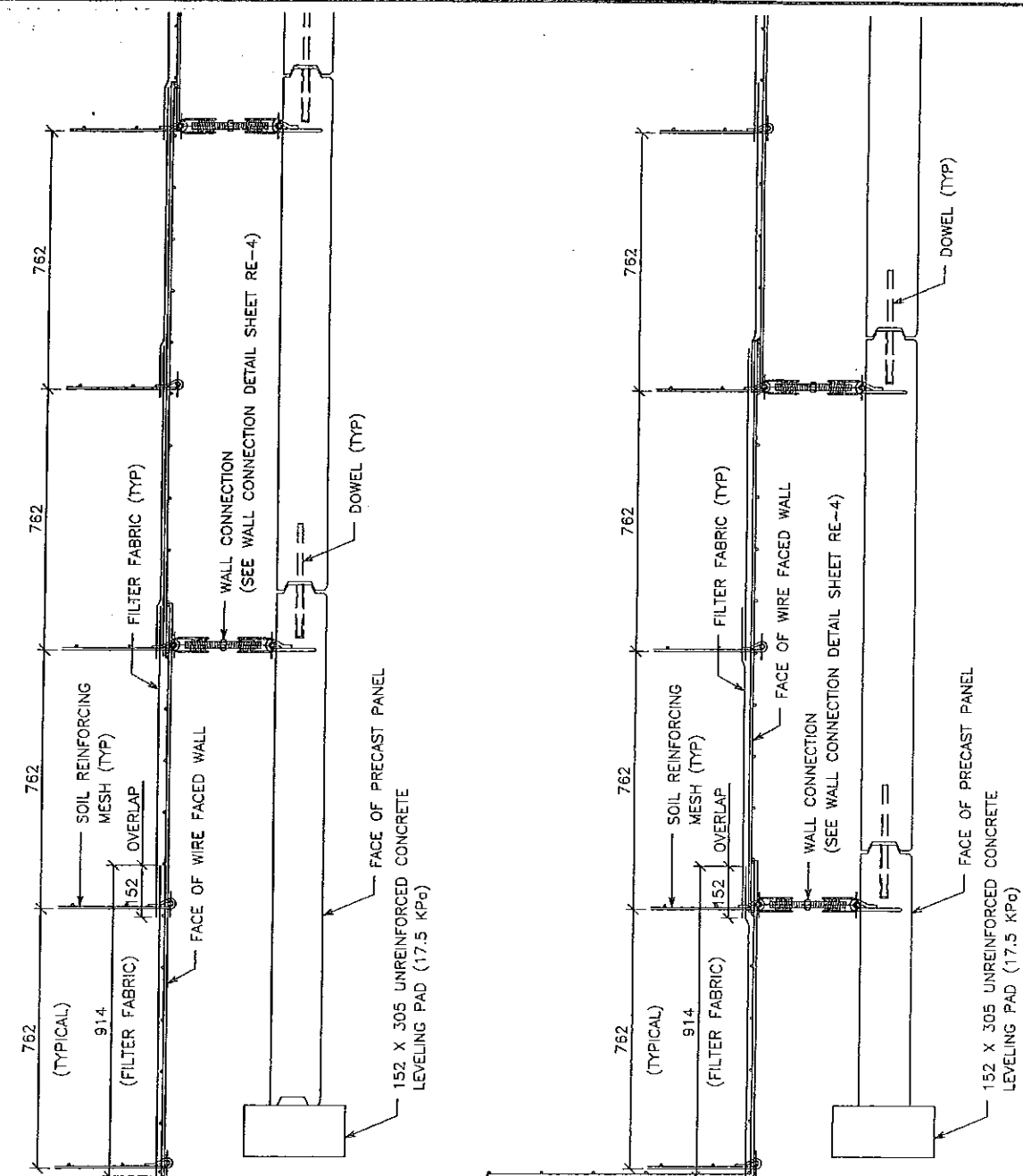
ATLANTA, GA / DALLAS, TX / HALDON, NC (CORPORATE OFFICE)  
MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA

RETAINED EARTH™ WALLS  
TYPICAL DETAILS

600 NORTH / I-15 INTERCHANGE  
SALT LAKE COUNTY, UTAH  
UTAH DEPARTMENT OF TRANSP.

SCALE:      JOB NO: 239-0007      RE-5

WASATCH CONSTRUCTORS



**Soil Reinforcement Key**

Mesh Types Are Designated Below Mesh Length Line. Heavy Horizontal Lines On Wall Elev. Separate Zones Of Different Mesh Types. Heavy Vertical Lines On Wall Elev. Separate Zones Of Different Mesh Lengths.

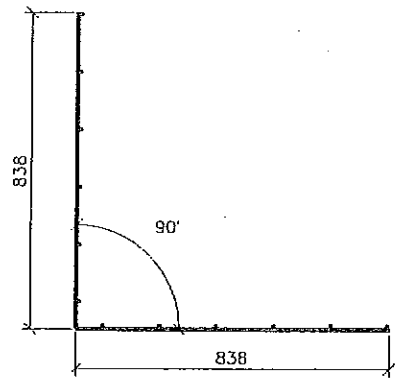
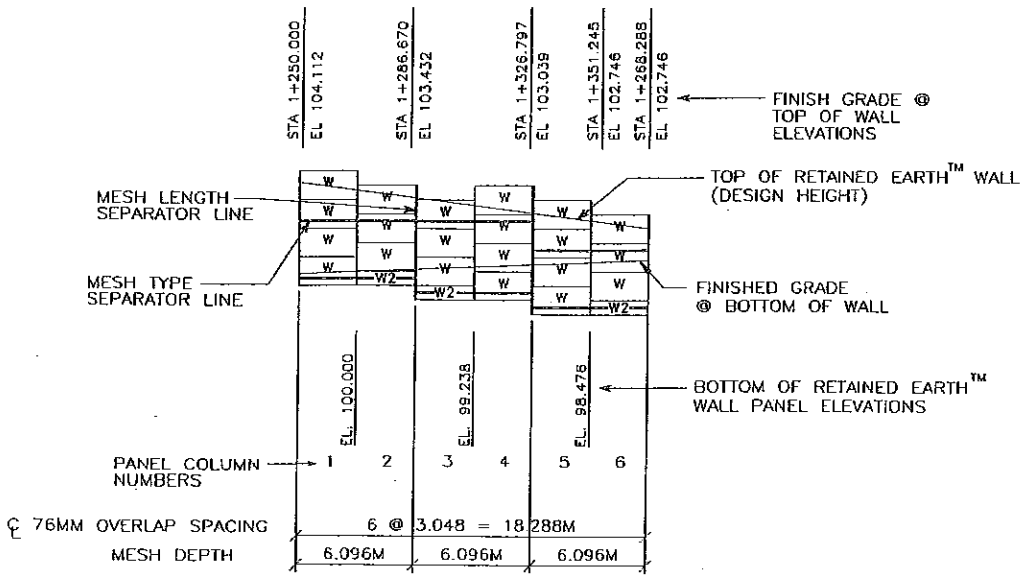
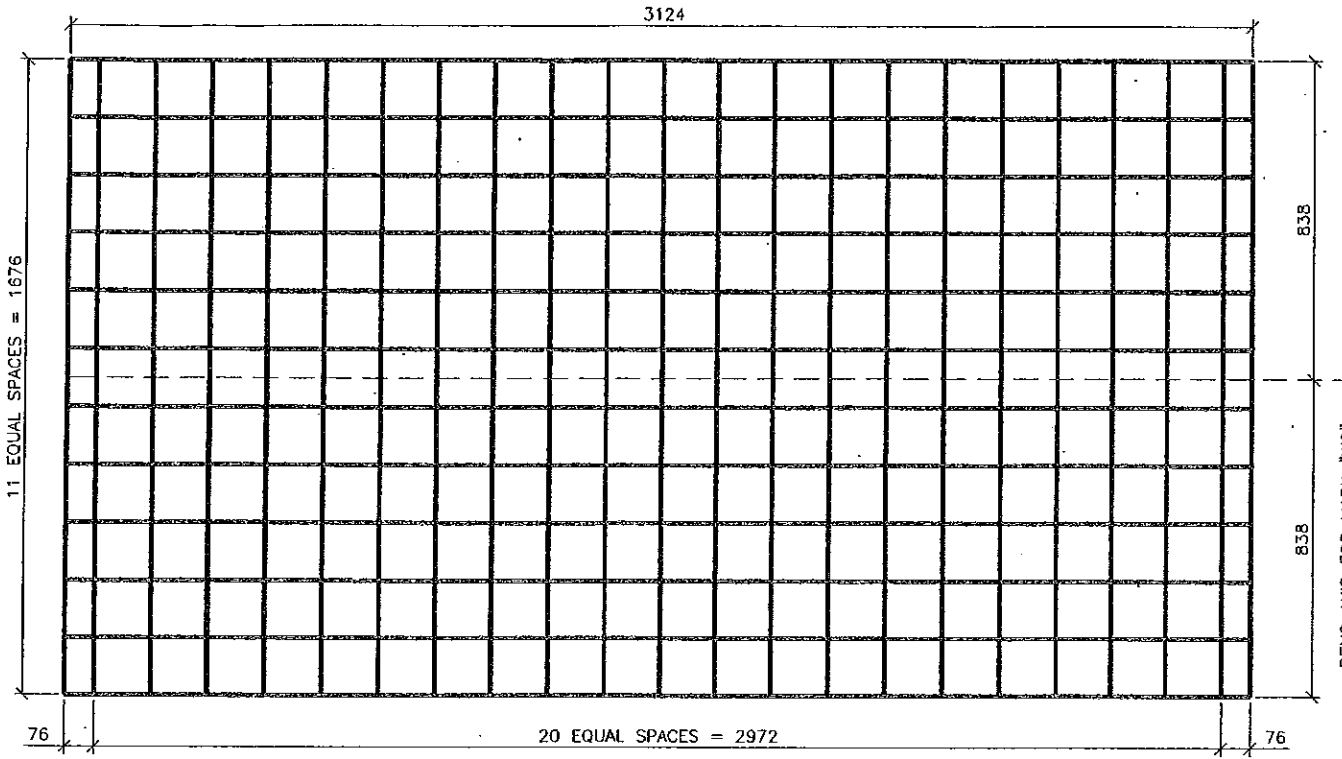
Example:

5W11+W11X1.0' (3 LAYERS)	W	W	W	MESH PIECE (TYP. SEE RE-4 FOR ADDITIONAL INFORMATION)	5W11+W11X1.0' (2 LAYERS)
4W11+W11X1.0' (1 LAYER)	W	W	W		4W11+W11X1.0' (1 LAYER)

MESH LENGTH: L=3.048m, L=2.743m

MESH TYPE: (3) 5W11+W11X1.0' (2) 5W11+W11X1.0' (1) 4W11+W11X1.0' (1) 4W11+W11X1.0'

Contact VSL Corp. For Questions Concerning Placement Of Soil Reinforcement.



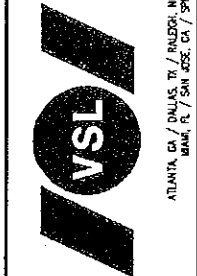
APPROVED FOR CONSTRUCTION

NO.	DATE	DESCRIPTION
△	6-23-97	RELEASE FOR 1ST STAGE CONST. WALLS A & C ONLY

WASATCH CONSTRUCTORS  
JUN 24 1997  
RELEASED FOR CONSTRUCTION

DES.	MM	NO.	DATE	REVISION	BY
6-19-97	MM				CHK
6-19-97	DDO				
6-19-97	MM				

VSL CORPORATION  
2940 Pecos Pkwy, Suite 200  
Raleigh, NC 27617 TEL: 919-877-4872  
FAX: 919-781-4858



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RETAINED EARTH™ WALLS  
TYPICAL DETAILS  
600 NORTH / I-15 INTERCHANGE  
SALT LAKE COUNTY, UTAH  
UTAH DEPARTMENT OF TRANSP.

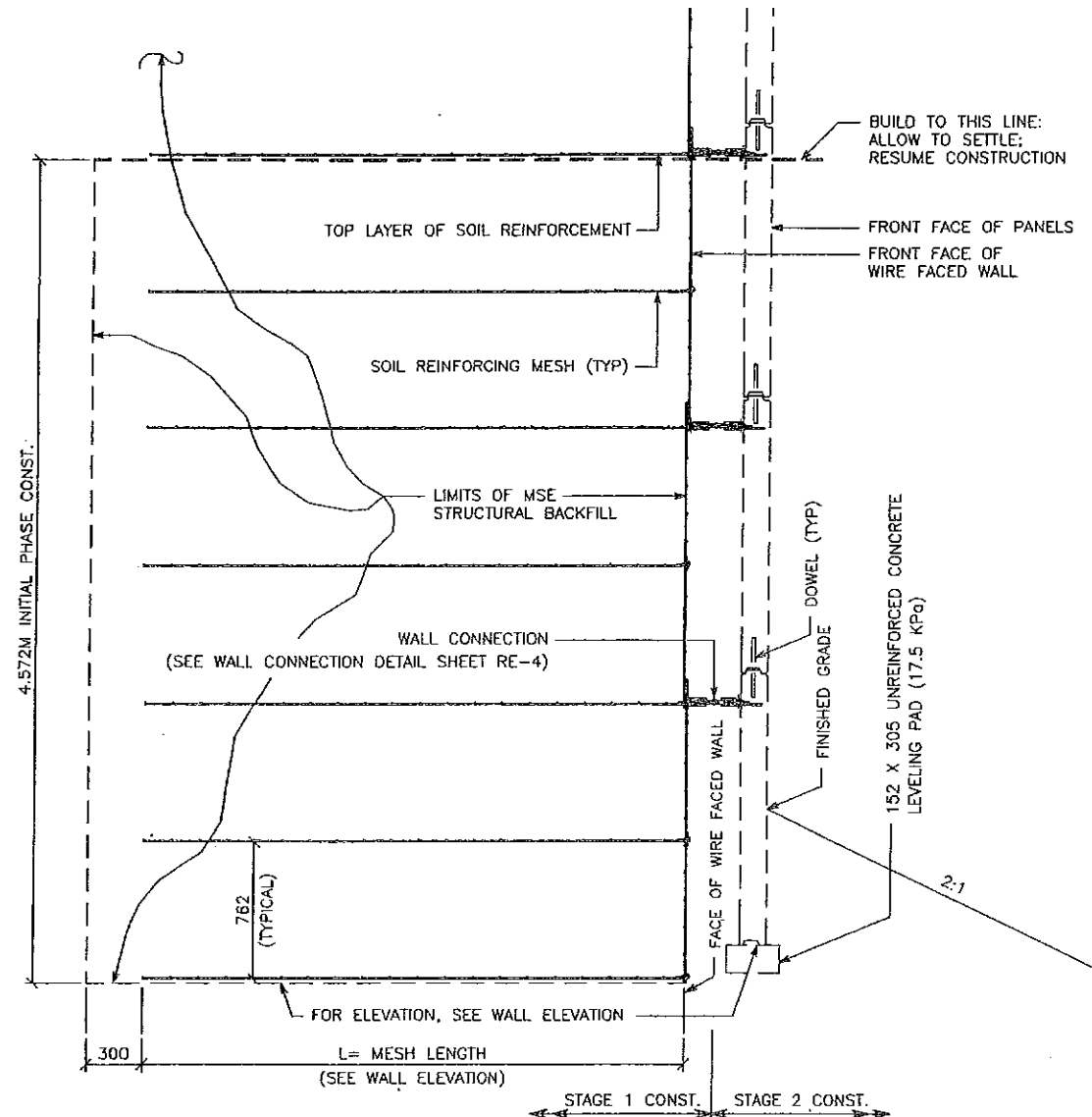
METRIC

SCALE:  
JOB NO:  
239-0007  
RE-5

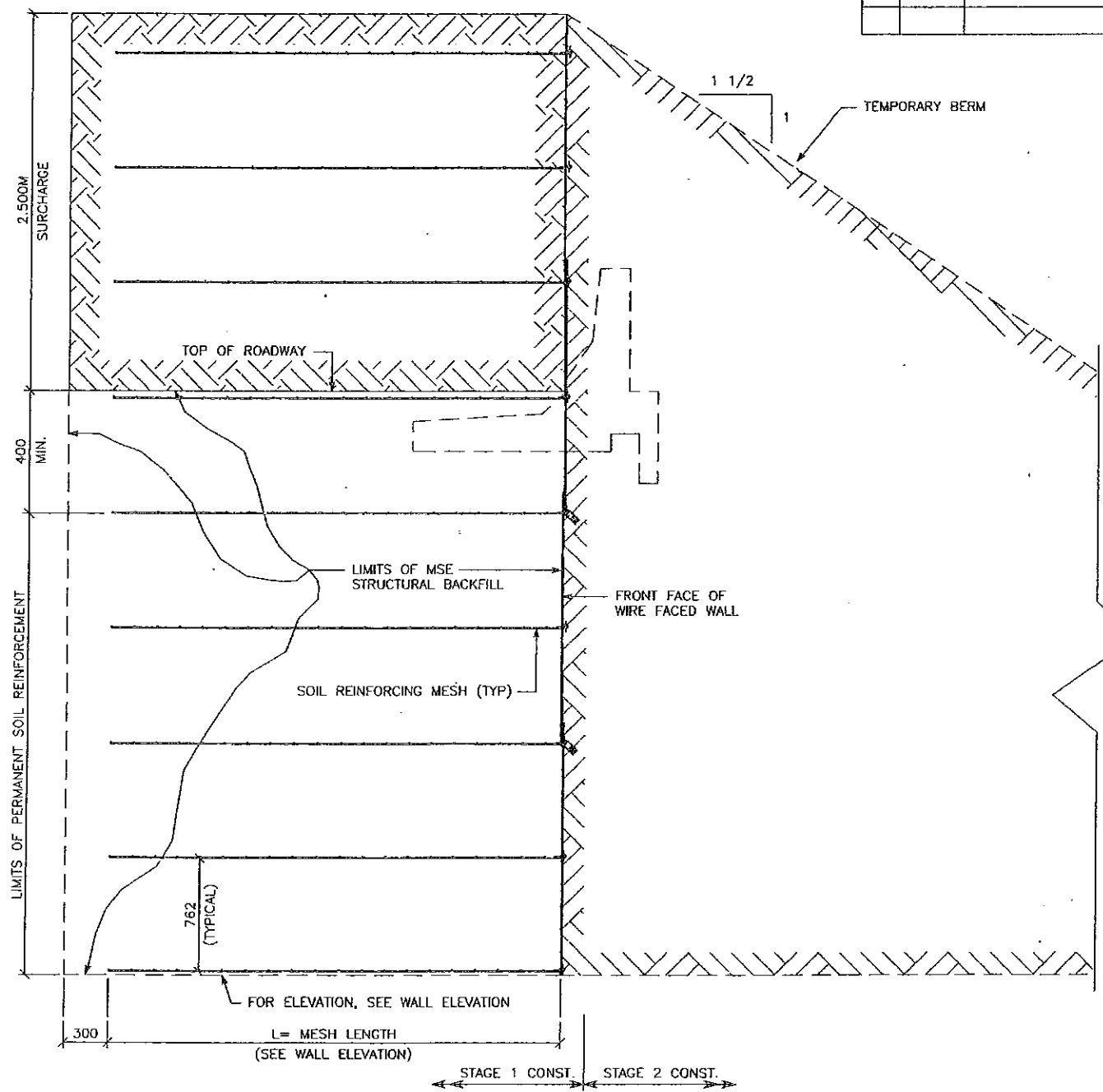
Professional Engineer  
No. 341796  
MICHAELSON, JR.  
STATE OF UTAH

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**TYPICAL CROSS SECTION  
AT VERTICAL PHASE CONST.**  
SCALE: 1:20 (FULL SIZE)  
SCALE: 1:40 (HALF SIZE)



**TYPICAL CROSS SECTION  
AT FINAL PHASE OF WIRE FACE WALL**  
SCALE: 1:20 (FULL SIZE)  
SCALE: 1:40 (HALF SIZE)

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
⚠	6-23-97	RELEASE FOR 1ST STAGE CONST. WALLS A & C ONLY
⚠	6-26-97	RELEASE FOR 1ST STAGE CONST. WALLS A, B, C, D & F ONLY

DES.	MM	DD	MM	NO.	DATE	REVISION	BY	CHK

VSL CORPORATION  
2840 Pines Plaza, Suite 200  
Raleigh, NC 27612  
Telephone: (919) 781-4272  
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ATLANTA, GA / DALLAS, TX / DENVER, CO (CORPORATE OFFICE)  
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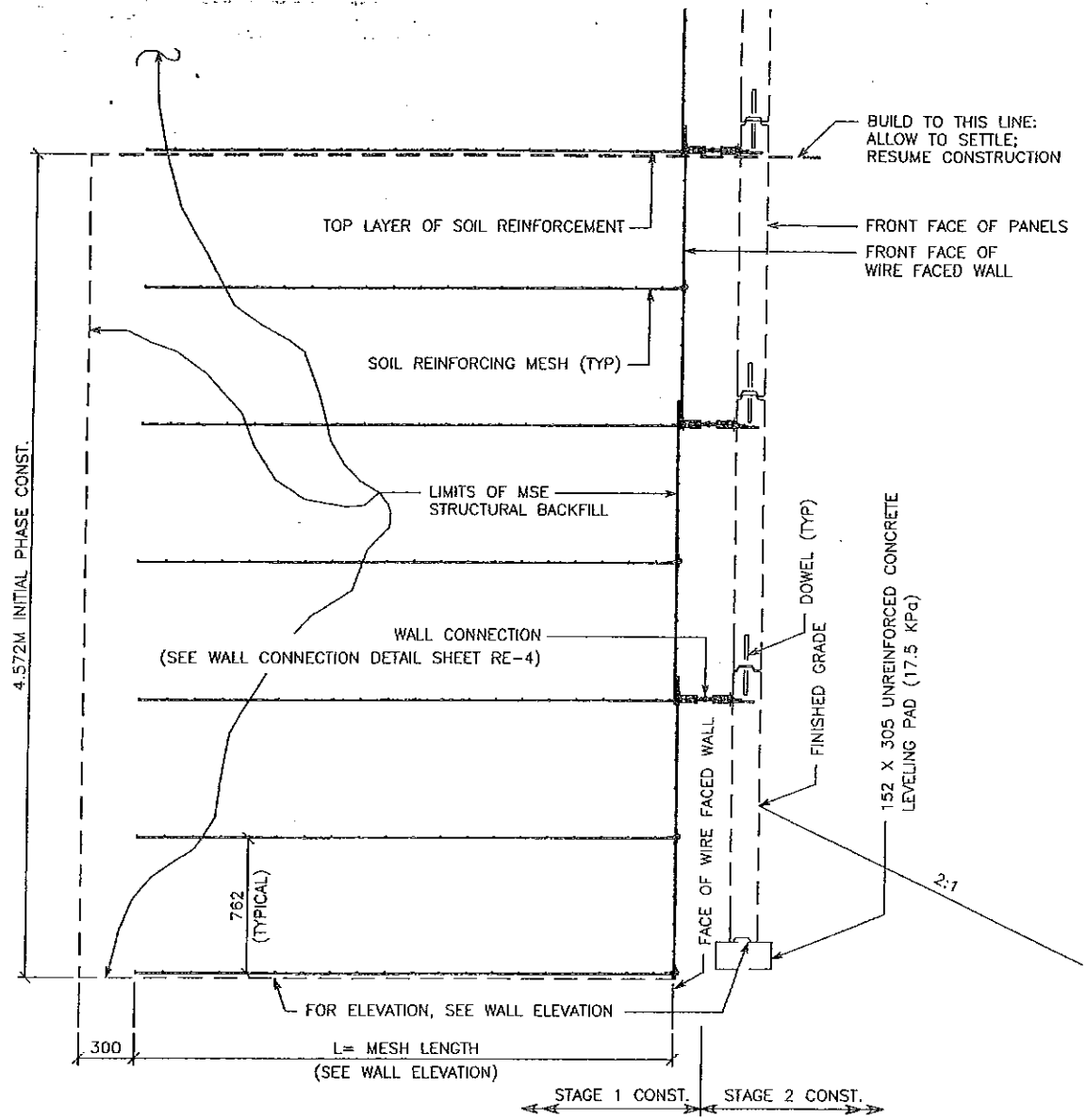
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RETAINED EARTH™ WALLS  
TYPICAL SECTIONS @ WIRE FACED WALL  
600 NORTH / I-15 INTERCHANGE  
SALT LAKE COUNTY, UTAH  
UTAH DEPARTMENT OF TRANSP.

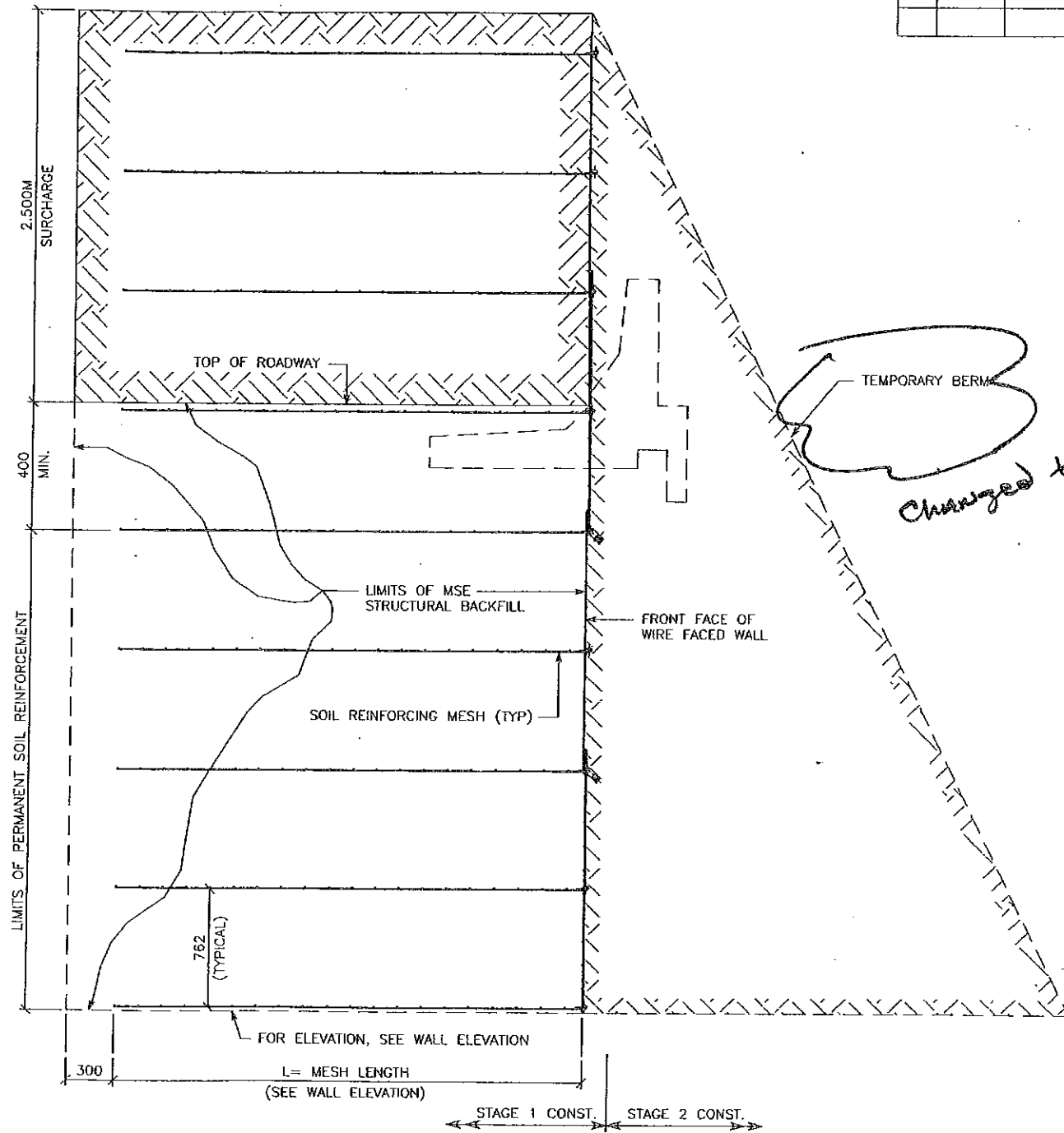
METRIC

SCALE:  
JOB NO:  
239-0007  
RE-6

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**TYPICAL CROSS SECTION  
AT VERTICAL PHASE CONST.**  
SCALE: 1:20 (FULL SIZE)  
SCALE: 1:40 (HALF SIZE)



**TYPICAL CROSS SECTION  
AT FINAL PHASE OF WIRE FACE WALL**  
SCALE: 1:20 (FULL SIZE)  
SCALE: 1:40 (HALF SIZE)

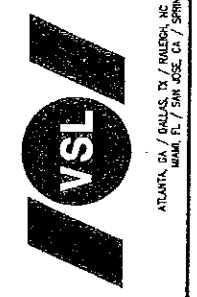
APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
▲	6-23-97	RELEASE FOR 1ST STAGE CONST. WALLS A & C ONLY

WASATCH CONSTRUCTORS  
JUN 24 1997  
RELEASED FOR CONSTRUCTION

*Changed to 1/2:1 slope  
7/9/97*

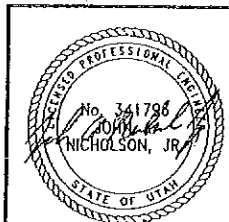
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6-19-97	MM	DDO	MM					
6-19-97	DDO	DDO	MM					
6-19-97	MM	MM	MM					

VSL CORPORATION  
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RETAINED EARTH™ WALLS  
TYPICAL SECTIONS @ WIRE FACED WALL  
600 NORTH / I-15 INTERCHANGE  
SALT LAKE COUNTY, UTAH  
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SCALE:	
JOB NO:	239-0007
	RE-6

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06-19-97

FINAL

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
▲	6-23-97	RELEASE FOR 1ST STAGE CONST. WALLS A & C ONLY

DES.	MM	DRN.	LP	CHK.	MM	RETAINED EARTH™	NO.	DATE	BY	CHK

WASATCH CONSTRUCTORS  
JUN 24 1997  
RELEASED FOR CONSTRUCTION

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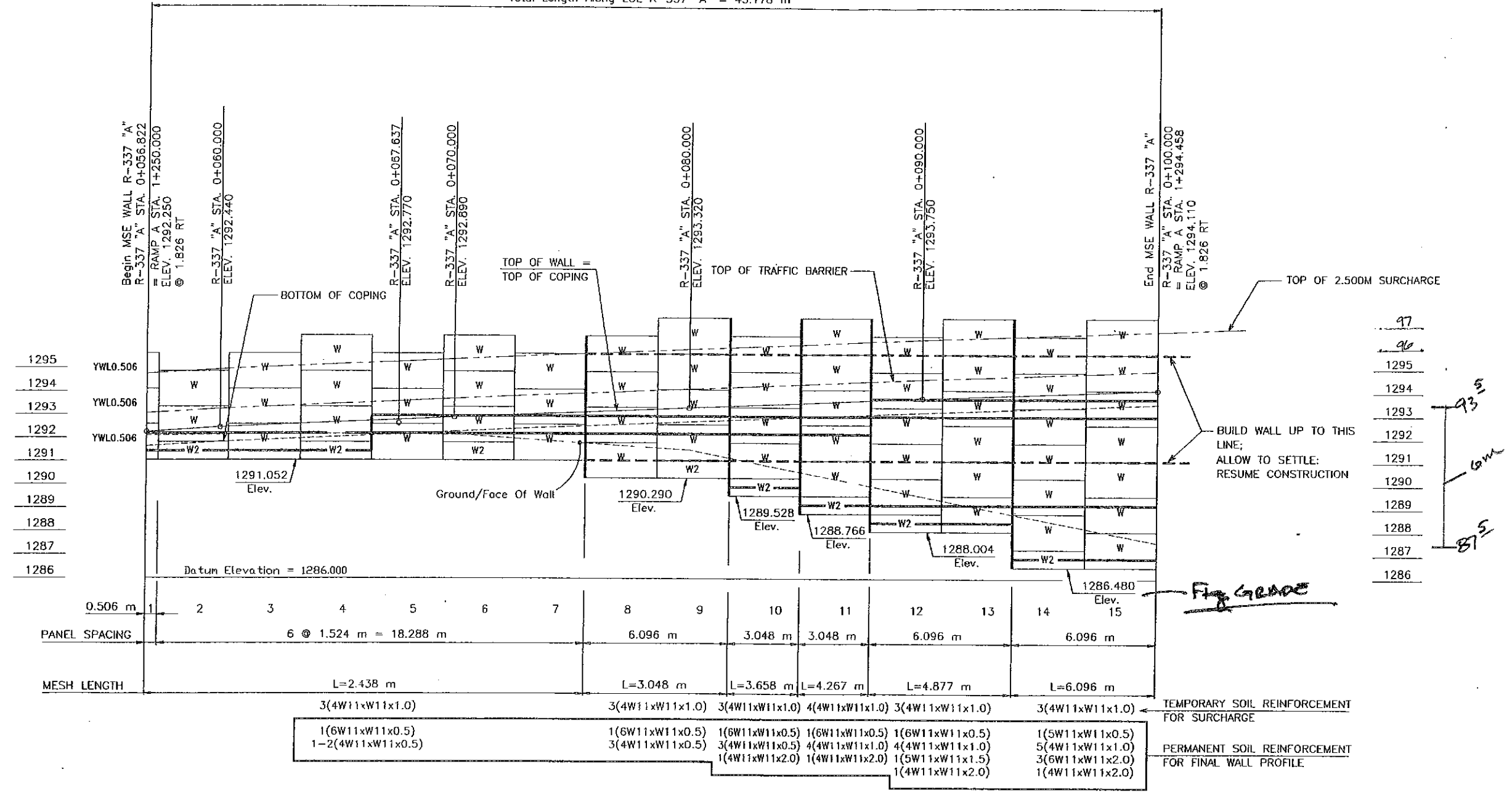
ATLANTA, GA / DALLAS, TX / FARGO, ND (OP)  
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RETAINED EARTH™ WALLS  
WALL R-337 "A" - 1ST STAGE: WIRE FACED WALL  
600 NORTH / I-15 INTERCHANGE  
SALT LAKE COUNTY, UTAH  
UTAH DEPARTMENT OF TRANSP.

SCALE:	
JOB NO:	239-0007
	RE-10

Total Length Along LOL R-337 "A" = 43.178 m



97  
96  
1295  
1294  
1293  
1292  
1291  
1290  
1289  
1288  
1287  
1286

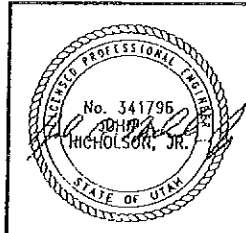
93'  
6m  
87'

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

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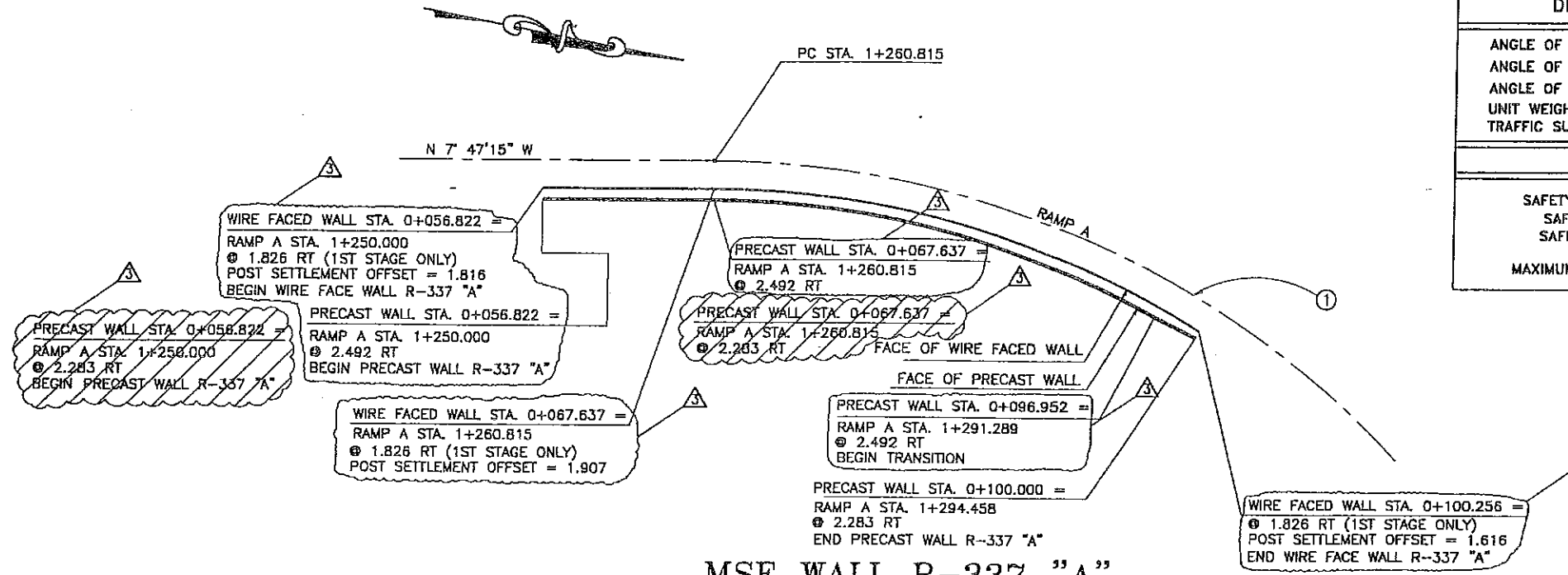
Wall "A"

METRIC



C:\PROJECT\239-0007\1998\STAGE\600N\WALL-A\SUBMTL-2  
 FINA JT 09-21-98

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
△	6-23-97	RELEASE FOR 1ST STAGE CONST. WALL A & C ONLY
△	6-26-97	RELEASE FOR 1ST STAGE CONST. WALL B, D, & F ONLY
△	9-21-98	RELEASE FOR 2ND STAGE CONST. WALL A, DELETED
		WALL B, ADDED DRW. NO. <i>10</i>



DESIGN PARAMETERS	
ANGLE OF INTERNAL FRICTION (SELECT)	= 36°
ANGLE OF INTERNAL FRICTION (BASE)	= 30°
ANGLE OF INTERNAL FRICTION (RANDOM)	= 35°
UNIT WEIGHT BACKFILL	= 135 PCF.
TRAFFIC SURCHARGE	= 250 PSF
DESIGN CRITERIA	
SAFETY FACTOR (OVERTURNING)	= 2.0
SAFETY FACTOR (SLIDING)	= 1.5
SAFETY FACTOR (PULLOUT)	= 1.5
DESIGN LIFE	= 75 YEARS
MAXIMUM BEARING CAPACITY	= 2.5 TSF *

**MSE WALL R-337 "A"**  
**PLAN VIEW**

SCALE: 1=200 (FULL SIZE)  
 SCALE: 1=400 (HALF SIZE)

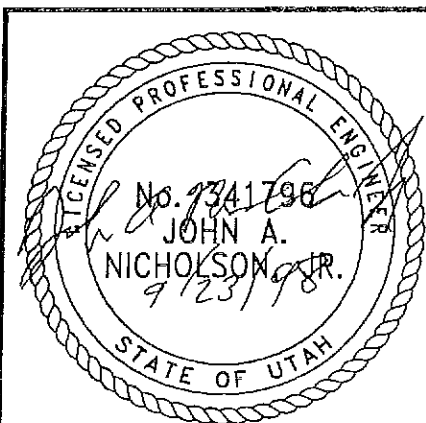
**2ND STAGE DESIGN**  
 BASED ON POST SETTLEMENT SURVEY OF WIRE FACE, LATERAL OUTWARD DISPLACEMENTS RANGED FROM -210 mm TO 159 mm MEASURED AT THE BASE OF THE WALL.

CURVE DATA				
No.	RADIUS	LENGTH	TANGENT	△
①	60,000	66.801	37.339	63°47'24"

All Dimensions Are in Meters Unless Noted Otherwise

RETAINED EARTH INDEX	
RE-1A	PLAN WIRE FACE WALL A, NOTES & DESIGN CRITERIA
RE-2A	PRECAST WALL R-337 "A"
RE-3A	TYPICAL DETAILS
RE-4A	SPECIAL PANEL DETAILS

WASATCH CONSTRUCTORS  
 SEP 24 1998  
 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 INDEX		DES.	DRN.	CHK.	NO.	DATE	REVISION	BY	CHK
		6-19-97	6-19-97	6-19-97					

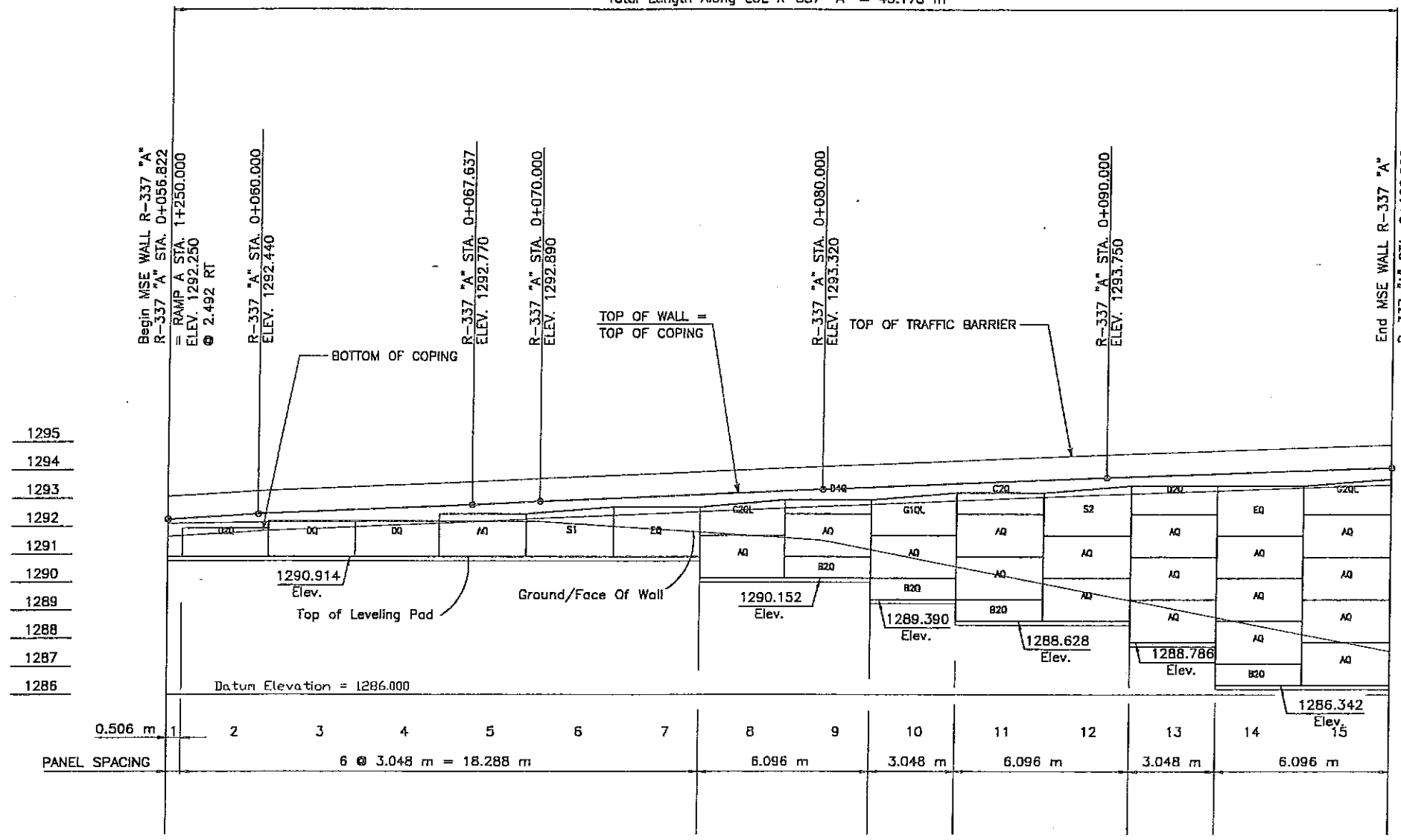
VSL CORPORATION  
 2040 Phoebe Place, Suite 200  
 Raleigh, NC 27617  
 Telephone: (919) 781-8272  
 Fax: (919) 781-4859

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

RETAINED EARTH™ WALLS  
 PLAN VIEW WIRE WALL "A"  
 600 NORTH / I-15 INTERCHANGE  
 SALT LAKE COUNTY, UTAH  
 UTAH DEPARTMENT OF TRANSP.

DWG. NO. 3.5R-337-A.1  
 JOB NO. 239-0007  
 SH. NO. RE-1A

Total Length Along LOL R-337 "A" = 43.178 m



**RETAINING WALL R-337 "A" - 1ST STAGE: PRECAST WALL**  
 (FRONT FACE SHOWN) SCALE 1:100 (FULL SIZE)  
 (TOTAL SURFACE AREA OF FACING = 142.91 SM) SCALE 1:200 (HALF SIZE)

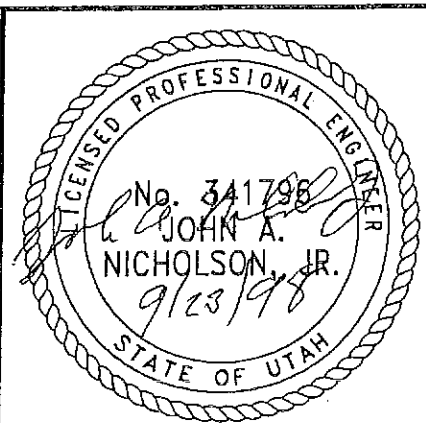
METRIC

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.

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	9-21-98	RELEASE FOR 2ND STAGE CONST. WALL A

1295
1294
1293
1292
1291
1290
1289
1288
1287
1286

WASATCH CONSTRUCTORS  
 SEP 24 1998  
 RELEASED FOR CONSTRUCTION

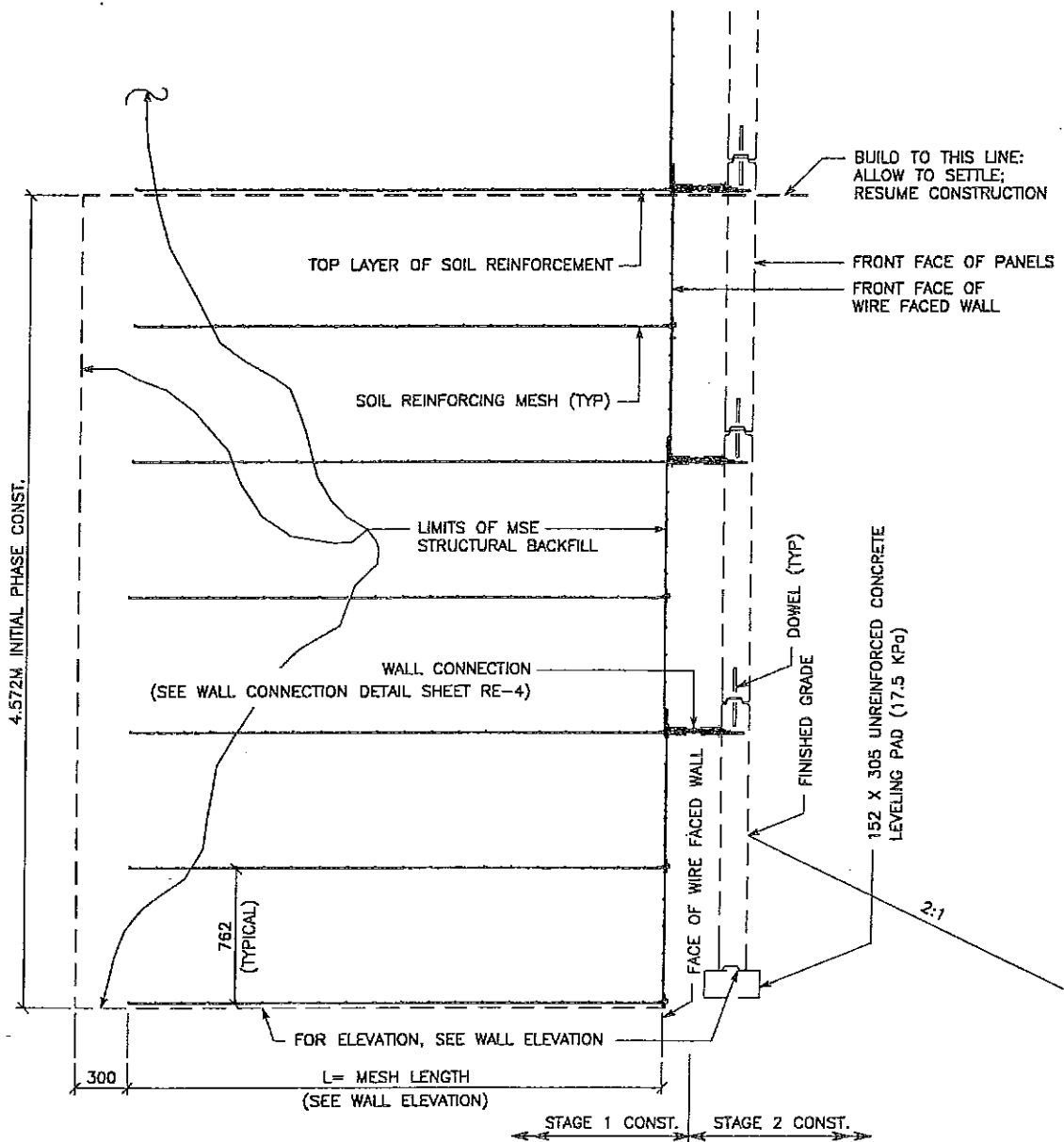


**VSL CORPORATION**  
 2840 Plaza Place, Suite 200  
 Raleigh, NC 27612  
 Telephone: (919) 781-5272  
 Fax: (919) 781-4868

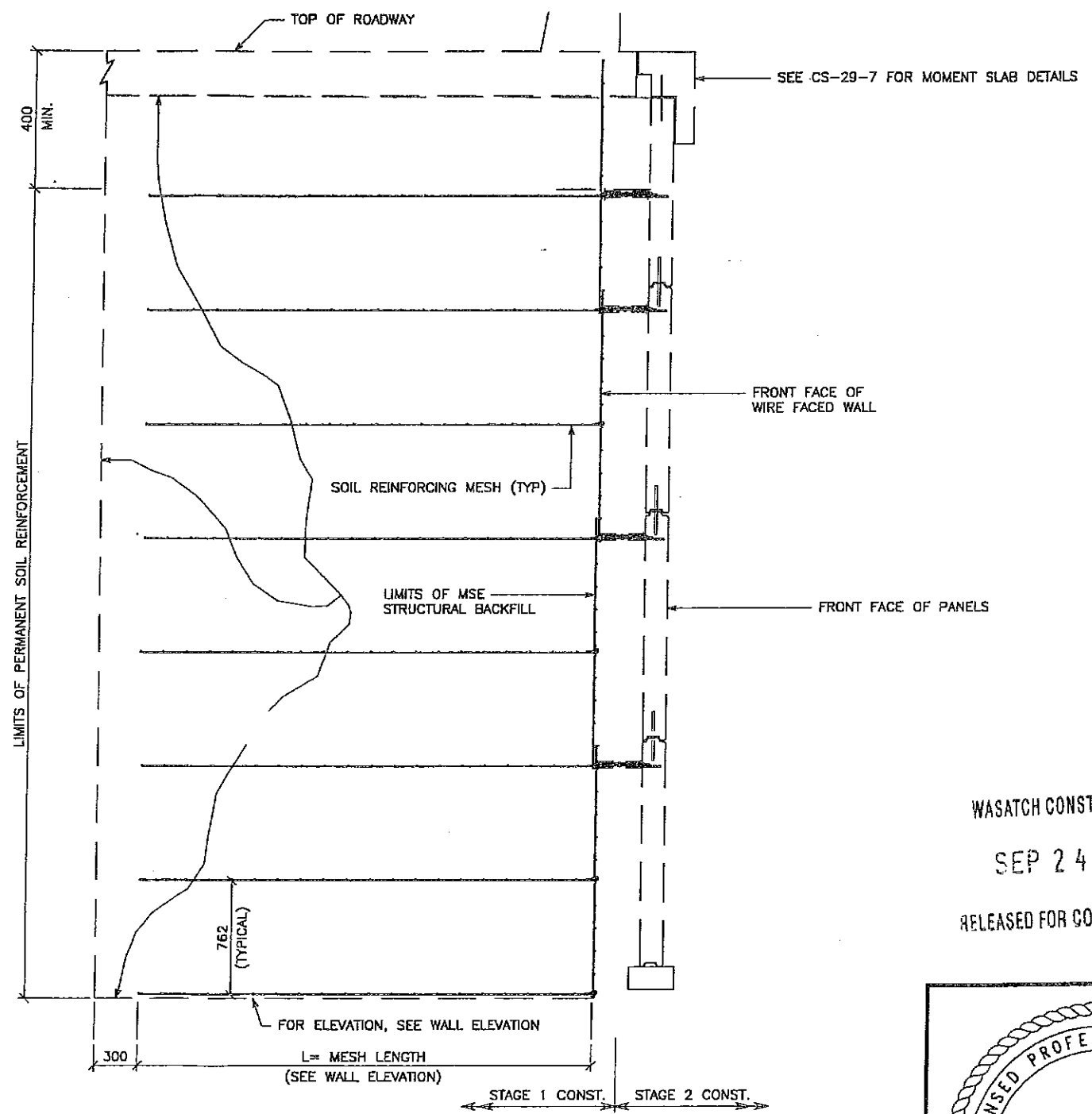
**VSL**  
 ATLANTA, GA / DALLAS, TX / EL PASO, TX (CORPORATE OFFICE)  
 MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA

**RETAINED EARTH™ WALLS**  
 WALL R-337 "A" - 1ST STAGE: PRECAST WALL  
 600 NORTH / I-15 INTERCHANGE  
 SALT LAKE COUNTY, UTAH  
 UTAH DEPARTMENT OF TRANSP.

DWG. NO.	3.3R-337-A.2
JOB NO.	239-0007
SHT. NO.	RE-2A



**TYPICAL CROSS SECTION AT VERTICAL PHASE CONST.**  
SCALE: 1:20 (FULL SIZE)  
SCALE: 1:40 (HALF SIZE)



**TYPICAL CROSS SECTION AT FINAL PHASE OF PRECAST FACE WALL**  
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
▲	9-21-98	RELEASE FOR 2ND STAGE CONST. WALL A

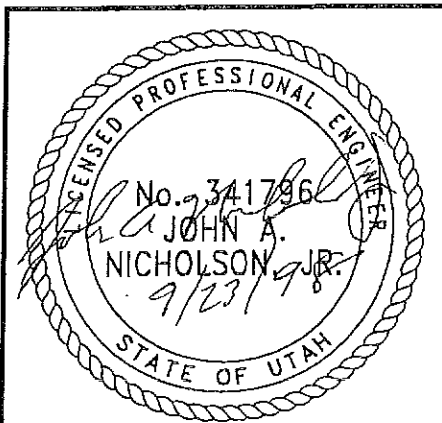
NO.	DATE	REVISION	BY

**VSL CORPORATION**  
2840 Plaza Place, Suite 200  
Raleigh, NC 27617  
Telephone: (919) 781-6272  
Fax: (919) 781-6859

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

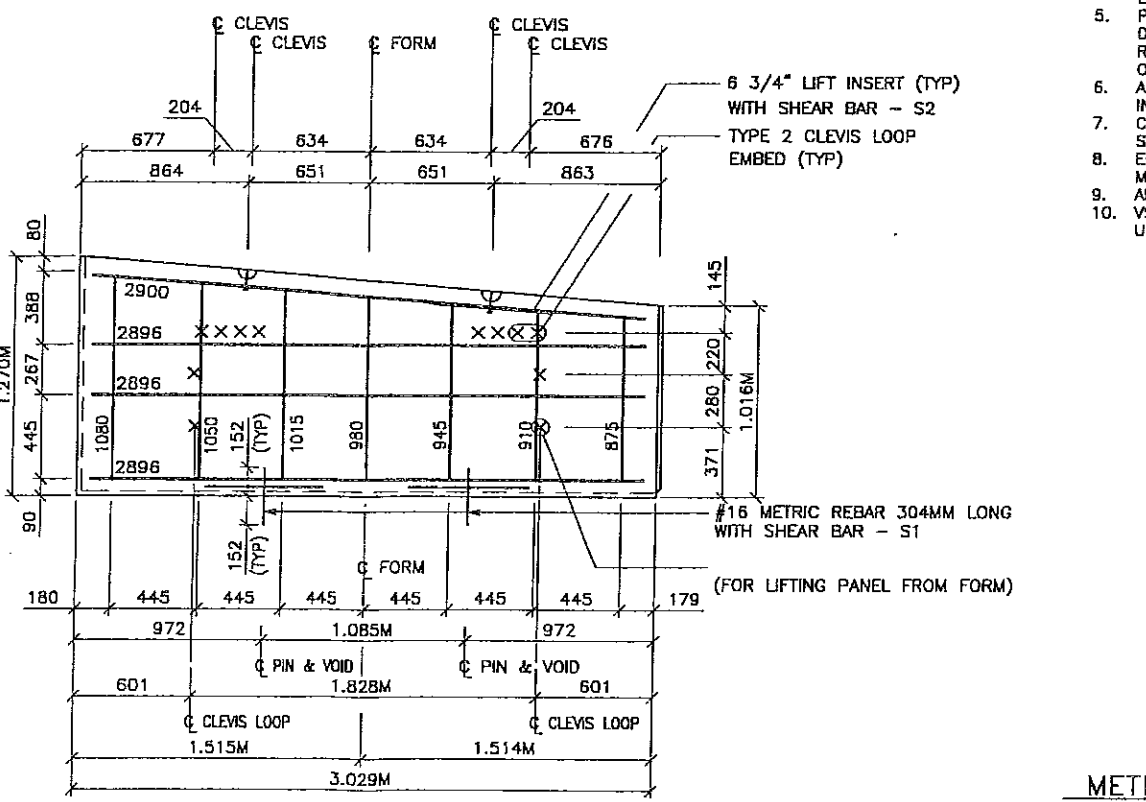
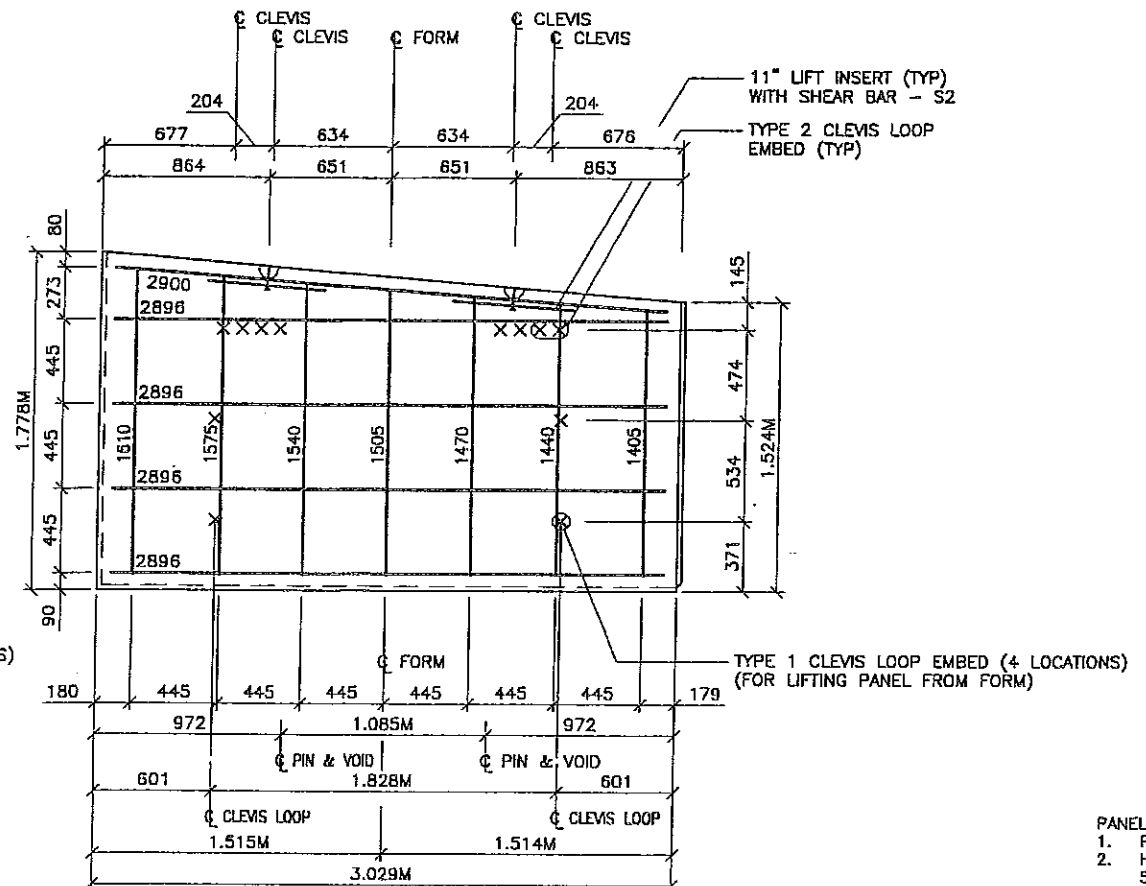
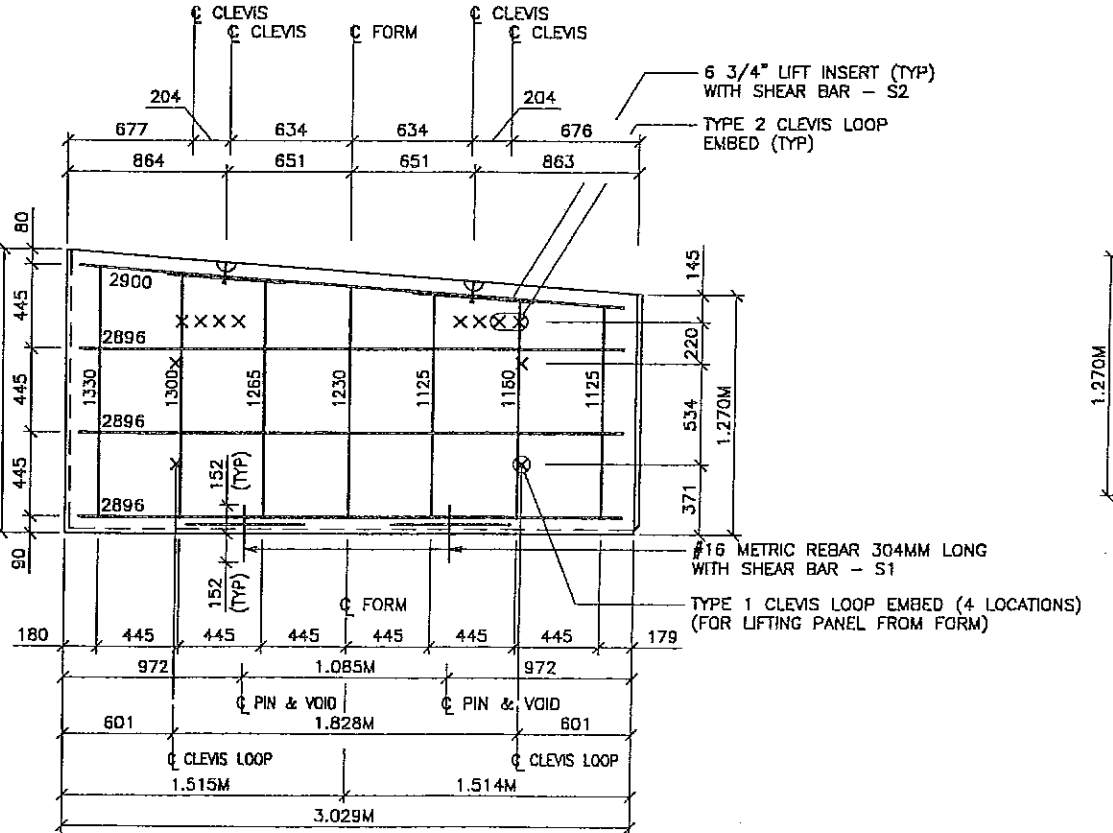
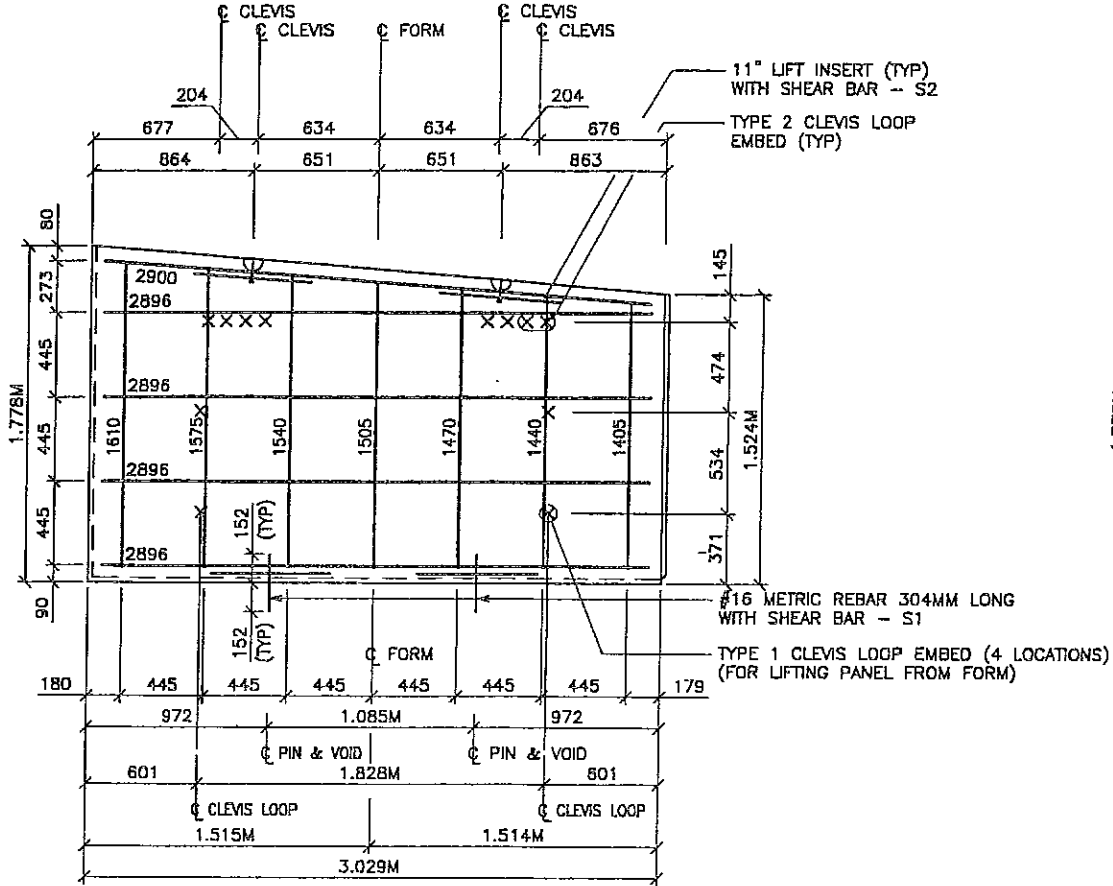
VSL Corporation (VSL) does a direct proprietary design and construction of retaining walls and structures. VSL is not responsible for the design or construction of any structure which is not designed or constructed in accordance with the VSL design and construction specifications. VSL is not responsible for the design or construction of any structure which is not designed or constructed in accordance with the VSL design and construction specifications.

WASATCH CONSTRUCTORS  
SEP 24 1998  
RELEASED FOR CONSTRUCTION



RETAINED EARTH™ WALLS  
TYPICAL SECTIONS @ WIRE FACED WALL  
600 NORTH / I-15 INTERCHANGE  
SALT LAKE COUNTY, UTAH  
UTAH DEPARTMENT OF TRANSP.

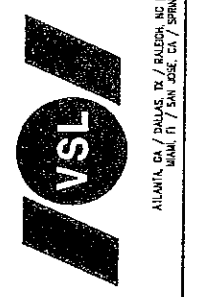
OWG. NO.	3.3R-337-A.3
JOB NO.	239-0007
SHT. NO.	RE-3A



APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
9-21-98	9-21-98	RELEASE FOR 2ND STAGE CONST. WALL A

DES	MM	RSW	DDO	RETAINED EARTH™	NO.	DATE	REVISION	BY
								CHK

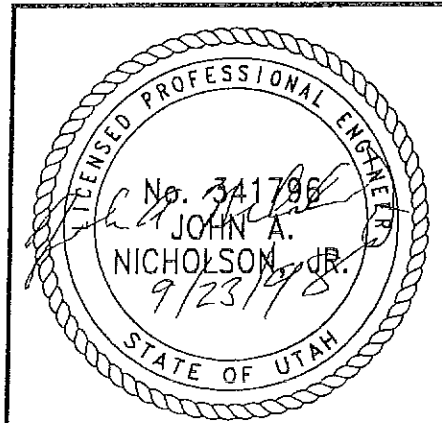
VSL CORPORATION  
2800 Plaza Place, Suite 200  
Raleigh, NC 27612  
Telephone: (919) 781-9572  
Fax: (919) 781-0995



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- 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 1.
  - 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.

WASATCH CONSTRUCTORS  
SEP 24 1998  
RELEASED FOR CONSTRUCTION



RETAINED EARTH™ WALLS  
SPECIAL PANEL DETAILS  
UTAH I-15 RECONSTRUCTION  
SALT LAKE COUNTY, UTAH  
UTAH DEPARTMENT OF TRANSP.

DWG. NO.	3.3R-337-A.4
JOB NO.	239-0007
SHT. NO.	RE-4A

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.

DESIGN PARAMETERS	
ANGLE OF INTERNAL FRICTION (SELECT) = 35°	
ANGLE OF INTERNAL FRICTION (BASE) = 30°	
ANGLE OF INTERNAL FRICTION (RANDOM) = 35°	
UNIT WEIGHT BACKFILL = 135 PCF.	
TRAFFIC SURCHARGE = 250 PSF	
DESIGN CRITERIA	
SAFETY FACTOR (OVERTURNING) = 2.0	
SAFETY FACTOR (SLIDING) = 1.5	
SAFETY FACTOR (PULLOUT) = 1.5	
DESIGN LIFE = 75 YEARS	
MAXIMUM BEARING CAPACITY = 2.5 TSF *	

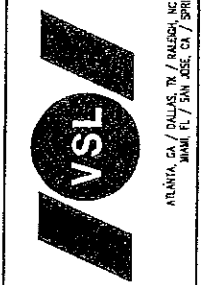
\*U.N.O.

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
⚠	6-23-97	RELEASE FOR 1ST STAGE CONST. WALL A & C ONLY
⚠	6-26-97	RELEASE FOR 1ST STAGE CONST. WALL B, D, & F ONLY
⚠	8-10-98	RELEASE FOR 2ND STAGE CONST. WALL B, DELETED
		WALL A, ADDED DRW. NO. <i>Revised Sat No.</i>

WASATCH CONSTRUCTORS  
 AUG 26 1998  
 RELEASED FOR CONSTRUCTION

DES.	DRN.	CHK.	NO.	DATE	REVISION	BY	CHK.
6-19-97							
6-19-97							
6-19-97							

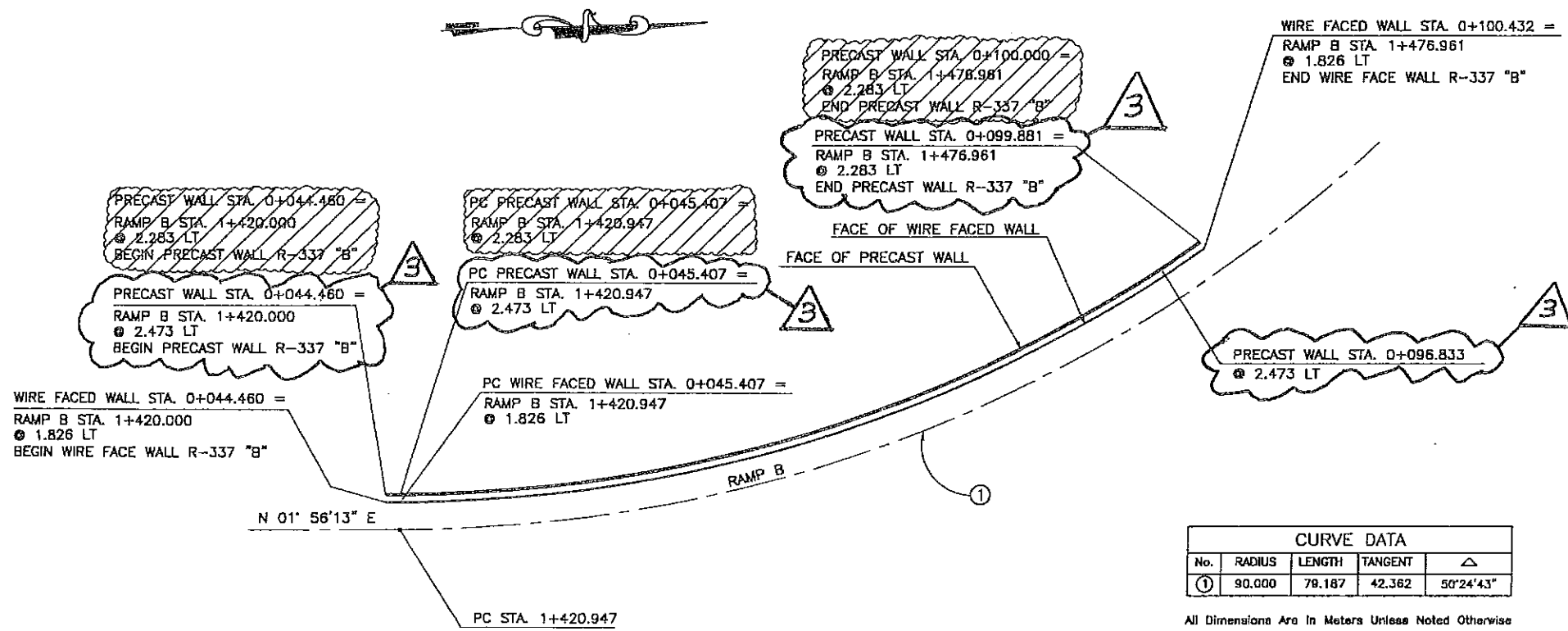
VSL CORPORATION  
 2800 Plaza Place, Suite 200  
 Raleigh, NC 27612  
 Phone: (919) 781-8272  
 Fax: (919) 781-9885



VSL CORPORATION hereby certifies that the design shown is a true and correct design as shown on the drawings, specifications and other documents forming a part of the contract. The use of this design is not to be construed as an endorsement or a guarantee of the safety or performance of the structure. Any user must consult with a qualified professional engineer or architect before using this design. VSL CORPORATION SHALL NOT BE RESPONSIBLE FOR ANY DAMAGE OR INJURY TO PERSONS OR PROPERTY ARISING FROM THE USE OF THIS DESIGN.

RETAINED EARTH™ WALLS  
 PLAN VIEW PRECAST WALL "B"  
 600 NORTH / I-15 INTERCHANGE  
 SALT LAKE COUNTY, UTAH  
 UTAH DEPARTMENT OF TRANSP.

DWG. NO.	3.3R-337-B.1
JOB NO.	239-0007
SHEET NO.	RE-1B



CURVE DATA				
No.	RADIUS	LENGTH	TANGENT	Δ
①	90,000	79.187	42.362	50°24'43"

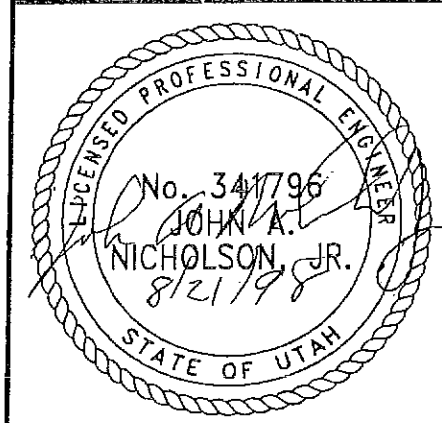
All Dimensions Are In Meters Unless Noted Otherwise

RETAINED EARTH INDEX	
RE-1	PLAN PRECAST WALL B, NOTES & DESIGN CRITERIA
RE-2	PRECAST WALL R-337 "B"

MSE WALL R-337 "B"  
 PLAN VIEW

SCALE: 1=200 (FULL SIZE)  
 SCALE: 1=400 (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.

3-2 (1/11)

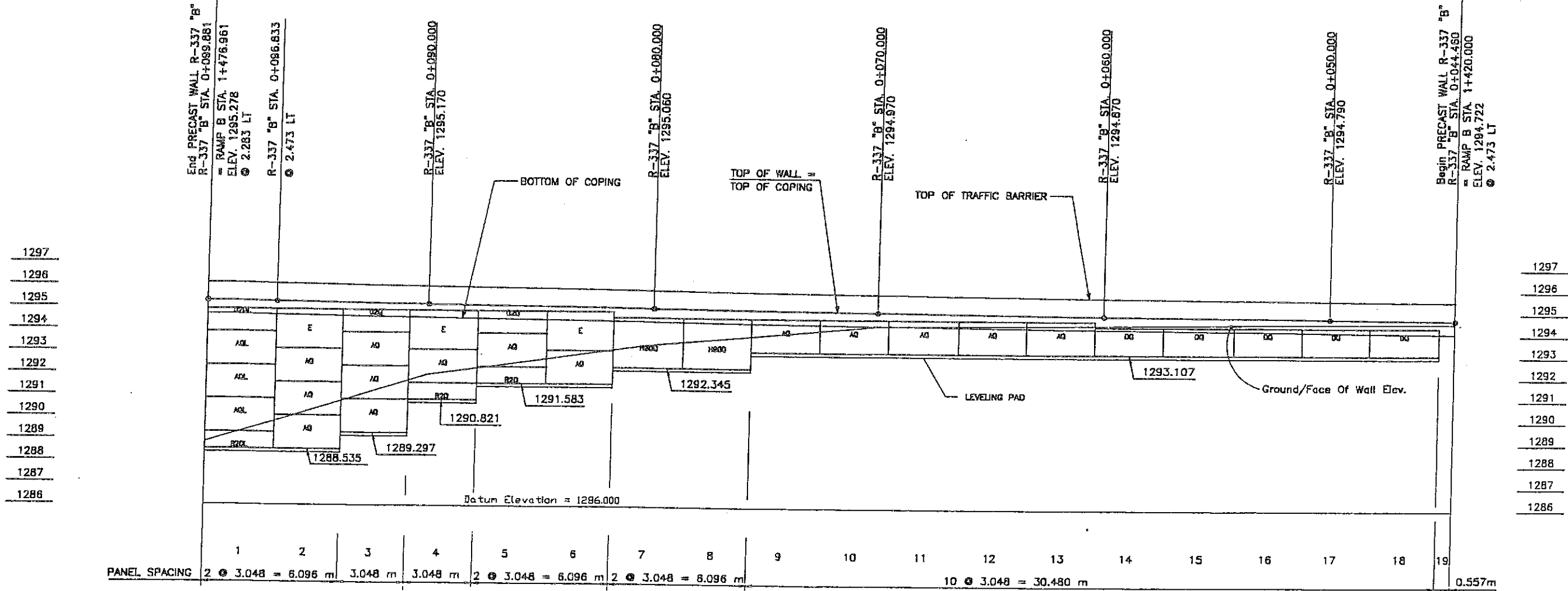


REFERENCE (X)-UTAH.DWG

WASATCH CONSTRUCTORS  
AUG 26 1998  
RELEASED FOR CONSTRUCTION

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
△	8-10-98	RELEASE FOR 2ND STAGE WALL B ONLY

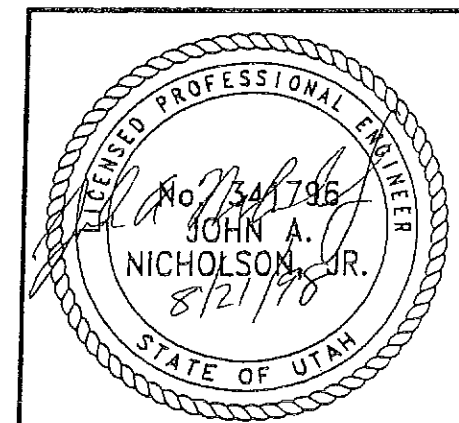
Total Length Along R-337 "B" LOL = 55.421m



**RETAINING WALL R-337 "B" - 2ND STAGE: PRECAST WALL**  
 (FRONT FACE SHOWN)  
 (TOTAL SURFACE AREA OF FACING = 144.86 SM)  
 SCALE 1:100

METRIC

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RETAINED EARTH™ WALLS  
 WALL R-337 "B" - 2ND STAGE: PRECAST WALL  
 600 NORTH / I-15 INTERCHANGE  
 SALT LAKE COUNTY, UTAH  
 UTAH DEPARTMENT OF TRANSP.

DRWG. NO.	3.3R-337-3.2
JOB NO.	239-0007
SHT. NO.	RE-2B

VSL CORPORATION  
 2910 Plaza Place, Suite 200  
 Raleigh, NC 27612  
 Telephone: (919) 811 8272  
 Fax: (919) 811 4869



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 Employer. Minorities and women  
 are encouraged to apply.  
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 Employer. Minorities and women  
 are encouraged to apply.  
 VSL is an Equal Opportunity  
 Employer. Minorities and women  
 are encouraged to apply.

D.S.	8-07-98	MM
URN	8-07-98	RSW
CHK	8-07-98	MM
DATE		
NO.		
REVISION		
BY		
CHK		

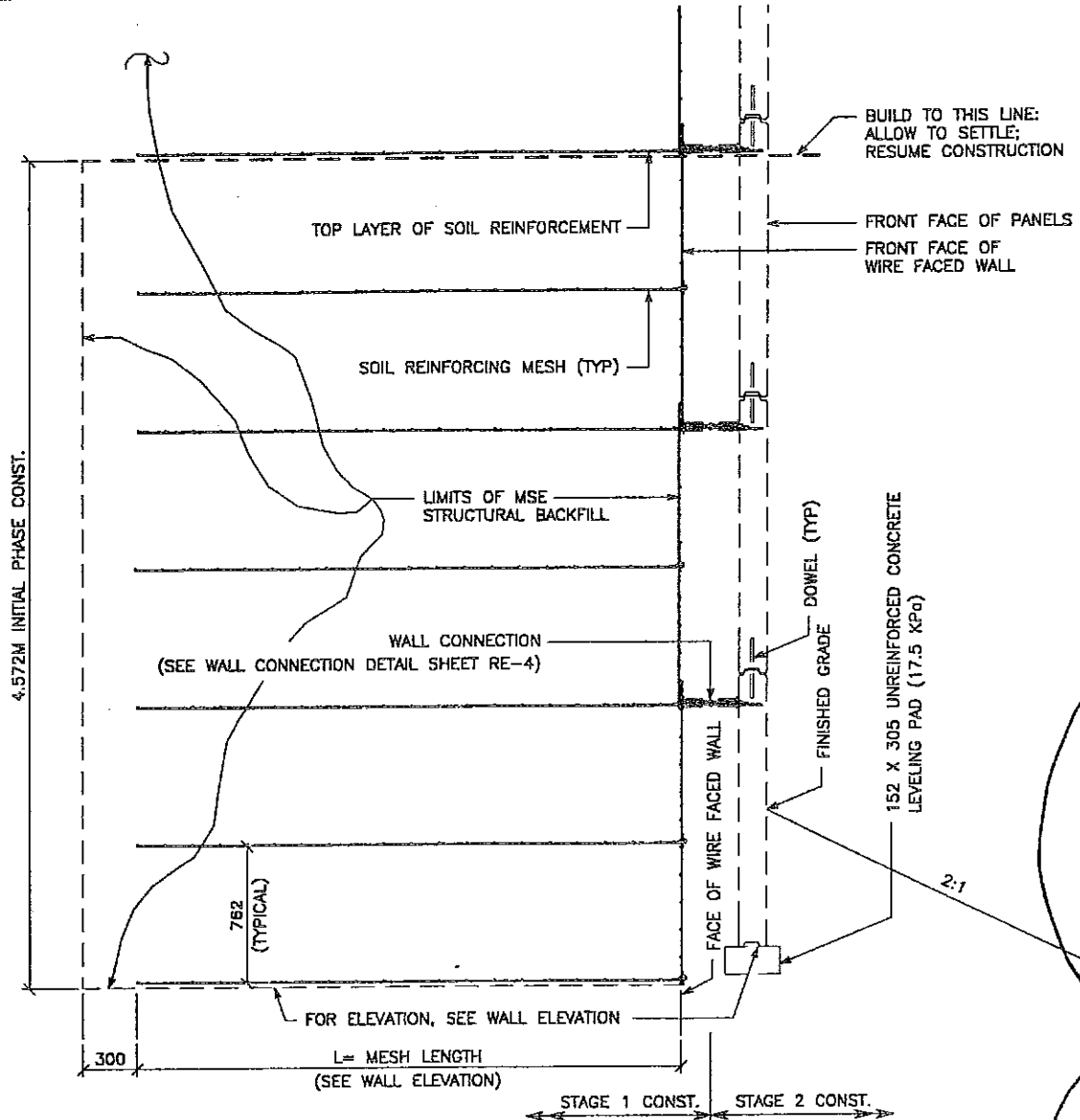
FINAL PLOT 06-25-97

WASATCH CONSTRUCTORS

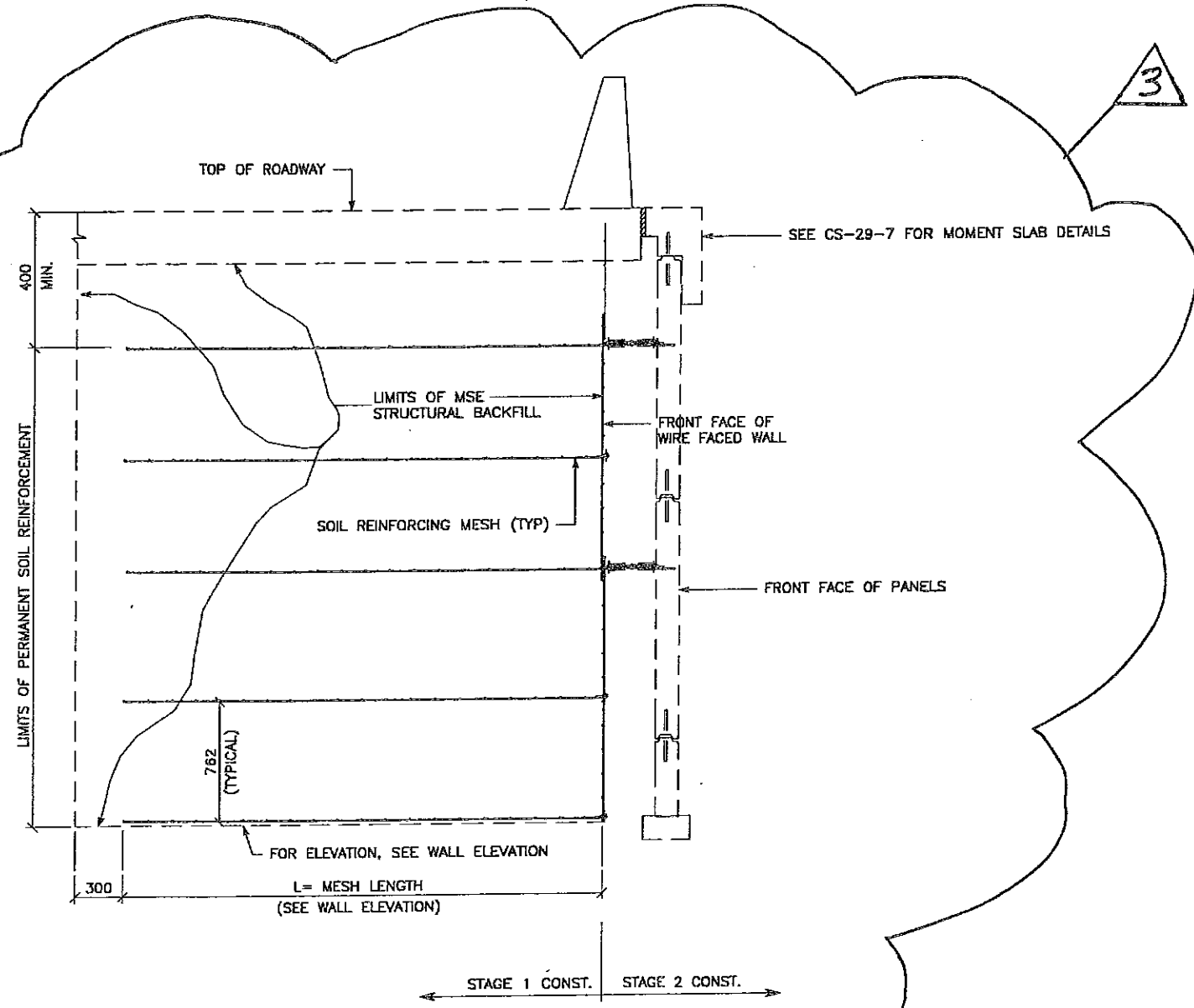
AUG 26 1998

RELEASED FOR CONSTRUCTION

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
⚠	6-23-97	RELEASE FOR 1ST STAGE CONST. WALLS A & C ONLY
⚠	6-26-97	RELEASE FOR 1ST STAGE CONST. WALLS A, B, C, D & F ONLY
⚠	8-10-98	RELEASE FOR 2ND STAGE WALL B ONLY, ADDED
DRW. NO., MODIFIED TYPICAL SECTION		



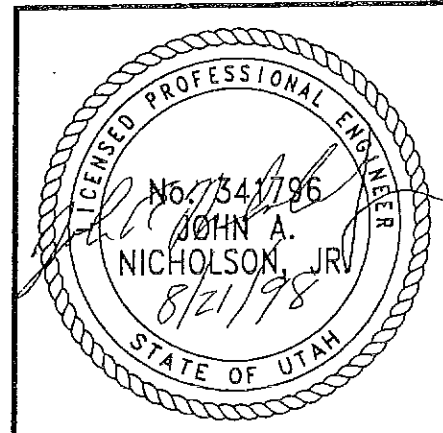
**TYPICAL CROSS SECTION  
AT VERTICAL PHASE CONST.**  
SCALE: 1:20 (FULL SIZE)  
SCALE: 1:40 (HALF SIZE)



**TYPICAL CROSS SECTION  
AT FINAL PHASE OF PRECAST FACE WALL**  
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.



**RETAINED EARTH™ WALLS**  
TYPICAL SECTIONS @ PRECAST WALL  
600 NORTH / I-15 INTERCHANGE  
SALT LAKE COUNTY, UTAH  
UTAH DEPARTMENT OF TRANSP.

VSL CORPORATION  
2840 Plaza Place, Suite 200  
Raleigh, NC 27612  
Telephone: (919) 781-8272  
Fax: (919) 781-4868

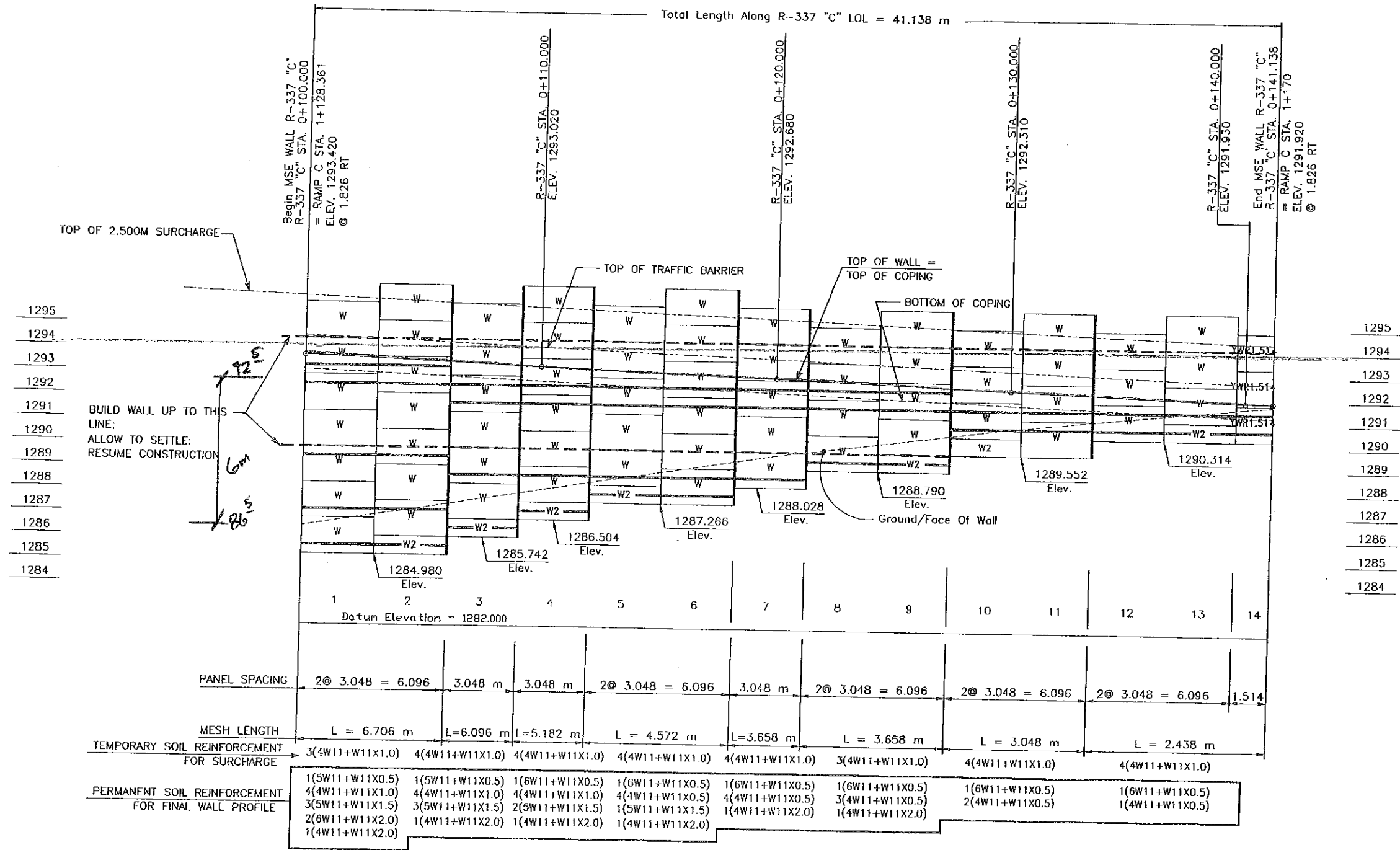
DES. 6-19-97 MM  
DRN. 6-19-97 DDO  
CHK. 6-19-97 MM

DATE  
NO.  
REVISION  
BY CHK

DWG. NO. 3.5R-337-B.6  
JOB NO. 239-0007  
SHEET NO. RE-6B

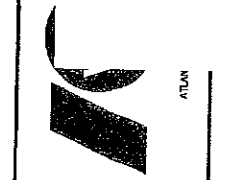


APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	6-23-97	RELEASE FOR 1ST STAGE CONST. WALLS A & C ONLY



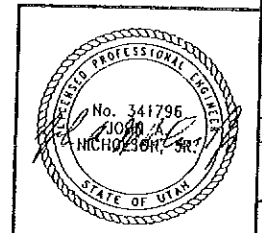
WASATCH CONSTRUCTORS  
JUN 24 1997  
RELEASED FOR CONSTRUCTION

VSL CORPORATION  
2540 Plaza Place, Suite 200  
Tomball, TX 77375  
Tel: (281) 781-6572  
Fax: (281) 781-6583



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RETAINED EARTH™ WALLS  
WALL R-337 "C" - 1ST STAGE: WIRE FACED WALL  
600 NORTH / I-15 INTERCHANGE  
SALT LAKE COUNTY, UTAH  
UTAH DEPARTMENT OF TRANSP.



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.

SCALE:  
JOB NO:  
239-0007  
RE-12

BY: CHK  
REVISION

NO. DATE

DES. 6-19-97 MM  
DRN. 6-19-97 LP  
CHK. 6-19-97 MM

RETAINED EARTH™  
VSL

ATLAIN

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

Wall "C"

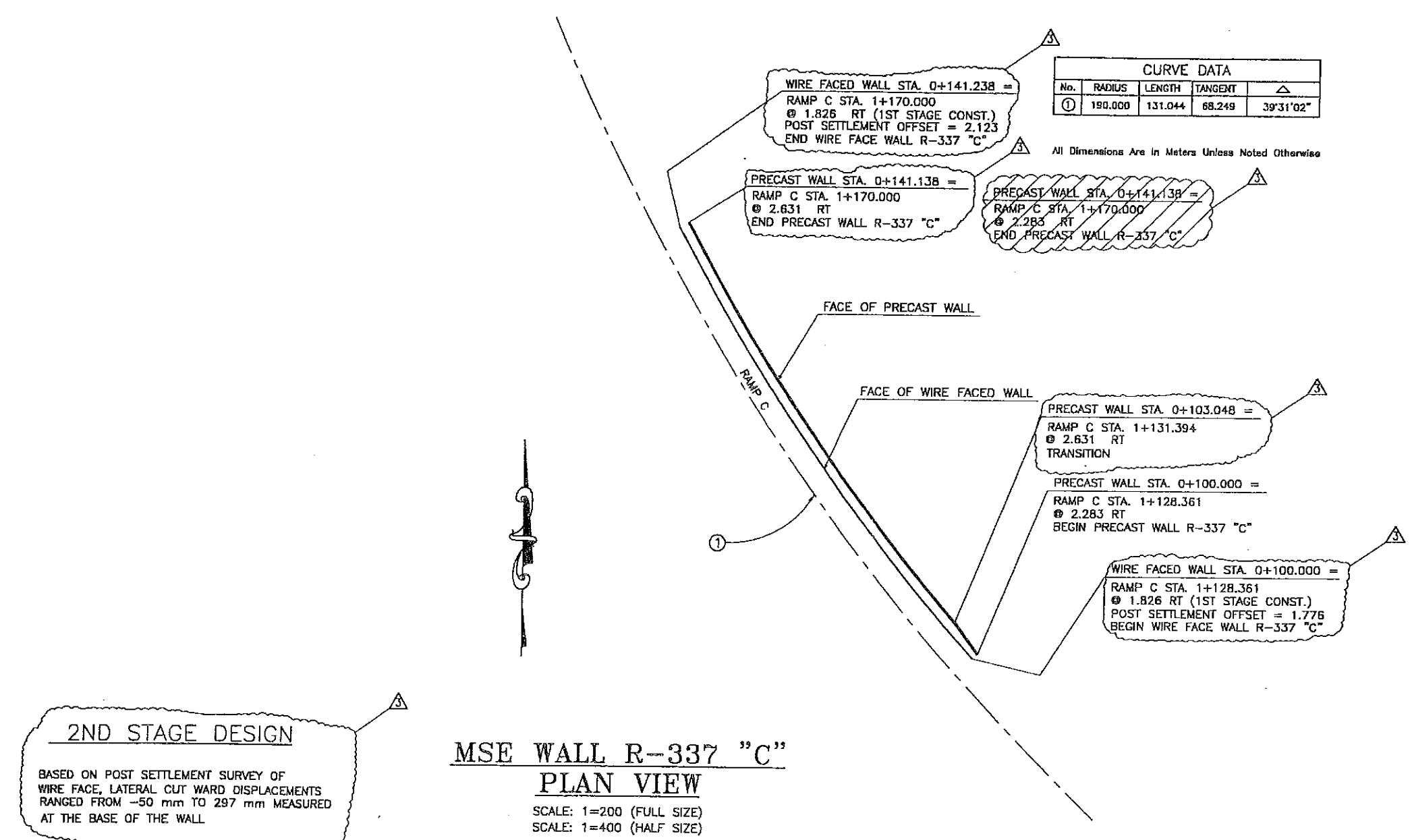
METRIC

REFERENCE (X-UTAH.DWG)

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	6-23-97	RELEASE FOR 1ST STAGE CONST. WALLS A & C ONLY
2	6-26-97	RELEASE FOR 1ST STAGE CONST. WALLS B, D & F ONLY
3	9-21-98	RELEASE FOR 2ND STAGE CONST. WALL C, DELETED WALL D, ADDED DRAWING NO. <i>W</i>

CURVE DATA			
No.	RADIUS	LENGTH	TANGENT
1	190.000	131.044	68.249

All Dimensions Are in Meters Unless Noted Otherwise



**2ND STAGE DESIGN**

BASED ON POST SETTLEMENT SURVEY OF WIRE FACE, LATERAL CUT WARD DISPLACEMENTS RANGED FROM -50 mm TO 297 mm MEASURED AT THE BASE OF THE WALL

**MSE WALL R-337 "C"**

**PLAN VIEW**

SCALE: 1=200 (FULL SIZE)  
SCALE: 1=400 (HALF SIZE)

WASATCH CONSTRUCTORS  
SEP 22 1998  
RELEASED FOR CONSTRUCTION

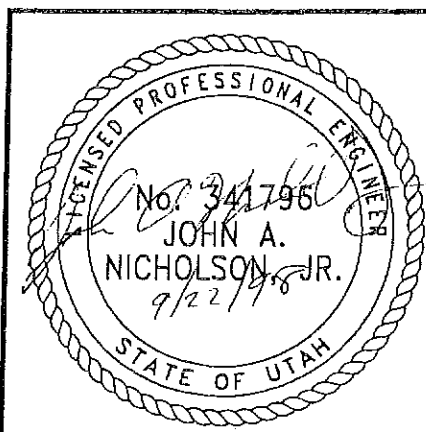
VSL CORPORATION  
2600 Plaza Place, Suite 200  
Raleigh, NC 27602  
Tel: (919) 981-6172  
Fax: (919) 981-4589



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RETAINED EARTH™ WALLS  
PLAN VIEW WIRE WALL "C"

600 NORTH / I-15 INTERCHANGE  
SALT LAKE COUNTY, UTAH  
UTAH DEPARTMENT OF TRANSP.



DWG. NO. 3.3R-337-C.2  
JOB NO. 239-0007  
SHEET NO. RE-2C

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METRIC

PLOT 08-24-98

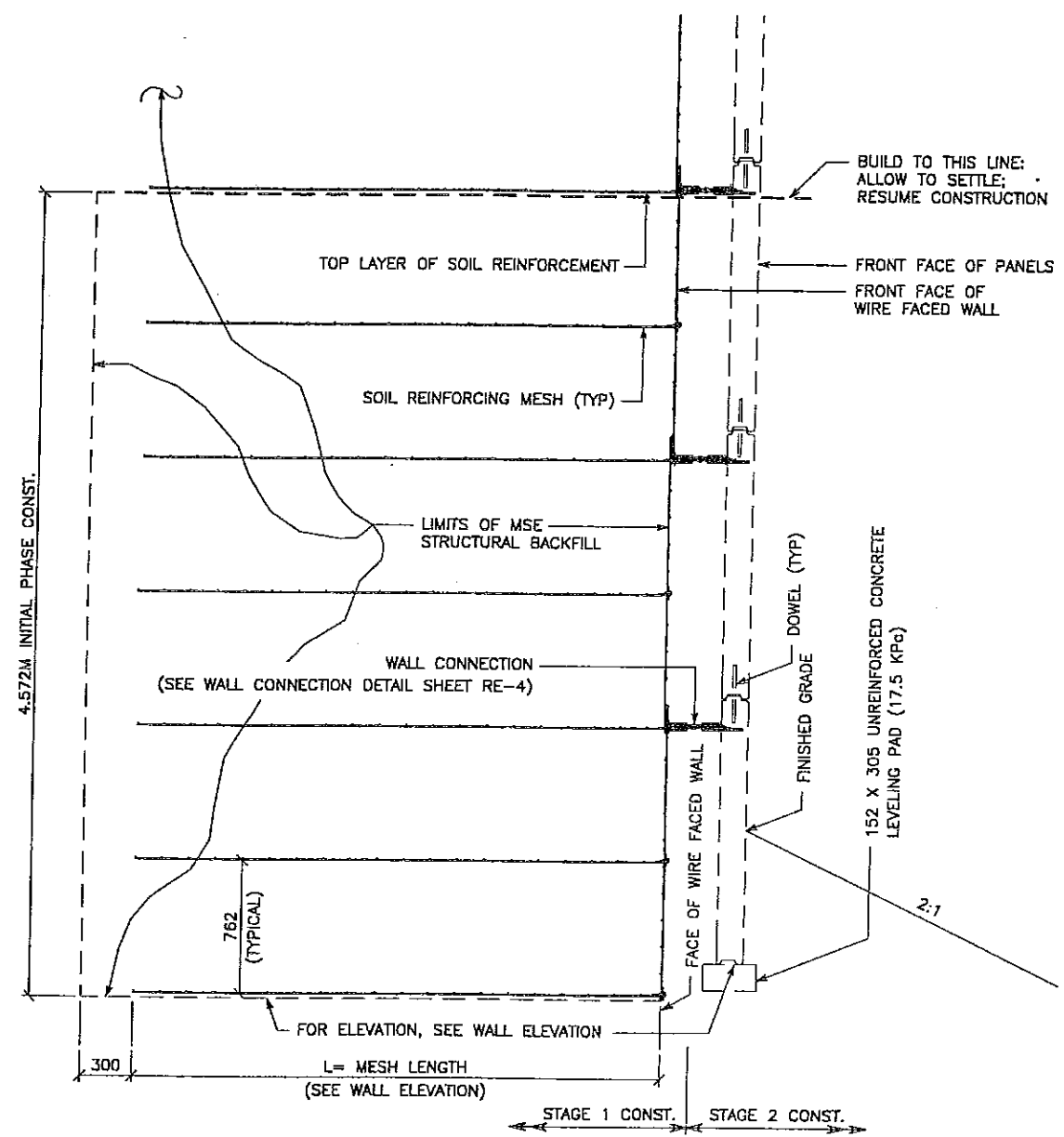


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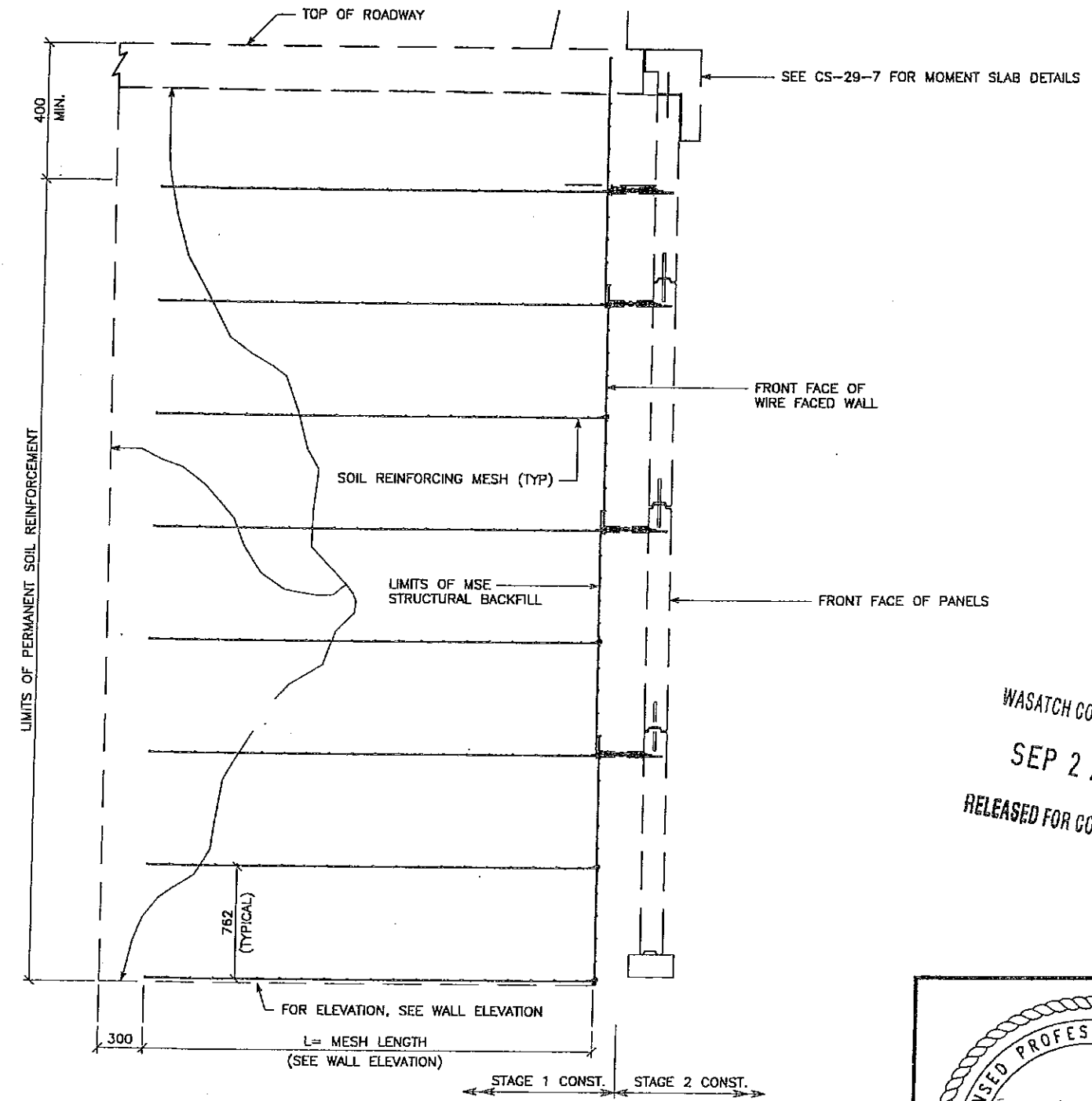
E:\PROJECT\239- \RE-6

FIN. LOT 09-21-98

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
Δ	9-21-98	RELEASE FOR 2ND STAGE CONST. WALL C



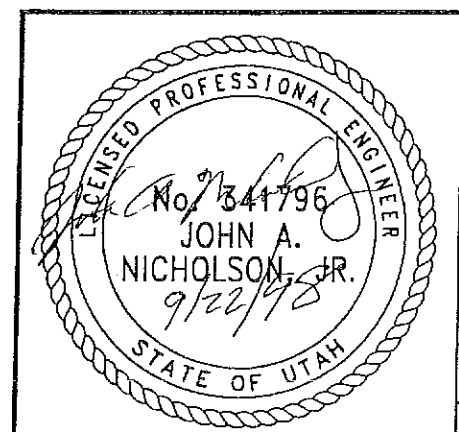
**TYPICAL CROSS SECTION  
AT VERTICAL PHASE CONST.**  
SCALE: 1:20 (FULL SIZE)  
SCALE: 1:40 (HALF SIZE)



**TYPICAL CROSS SECTION  
AT FINAL PHASE OF PRECAST FACE WALL**  
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.



WASATCH CONSTRUCTORS  
SEP 22 1998  
RELEASED FOR CONSTRUCTION

REVISION		NO.	DATE	CHK

DEC.	6-19-97	MM
DRN	6-19-97	DOO
CHK	6-19-97	MM

RETAINED EARTH™

VSL CORPORATION  
2410 Potts Road, Suite 200  
Raleigh, NC 27617  
Telephone: (919) 781-8777  
Fax: (919) 781-8989

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

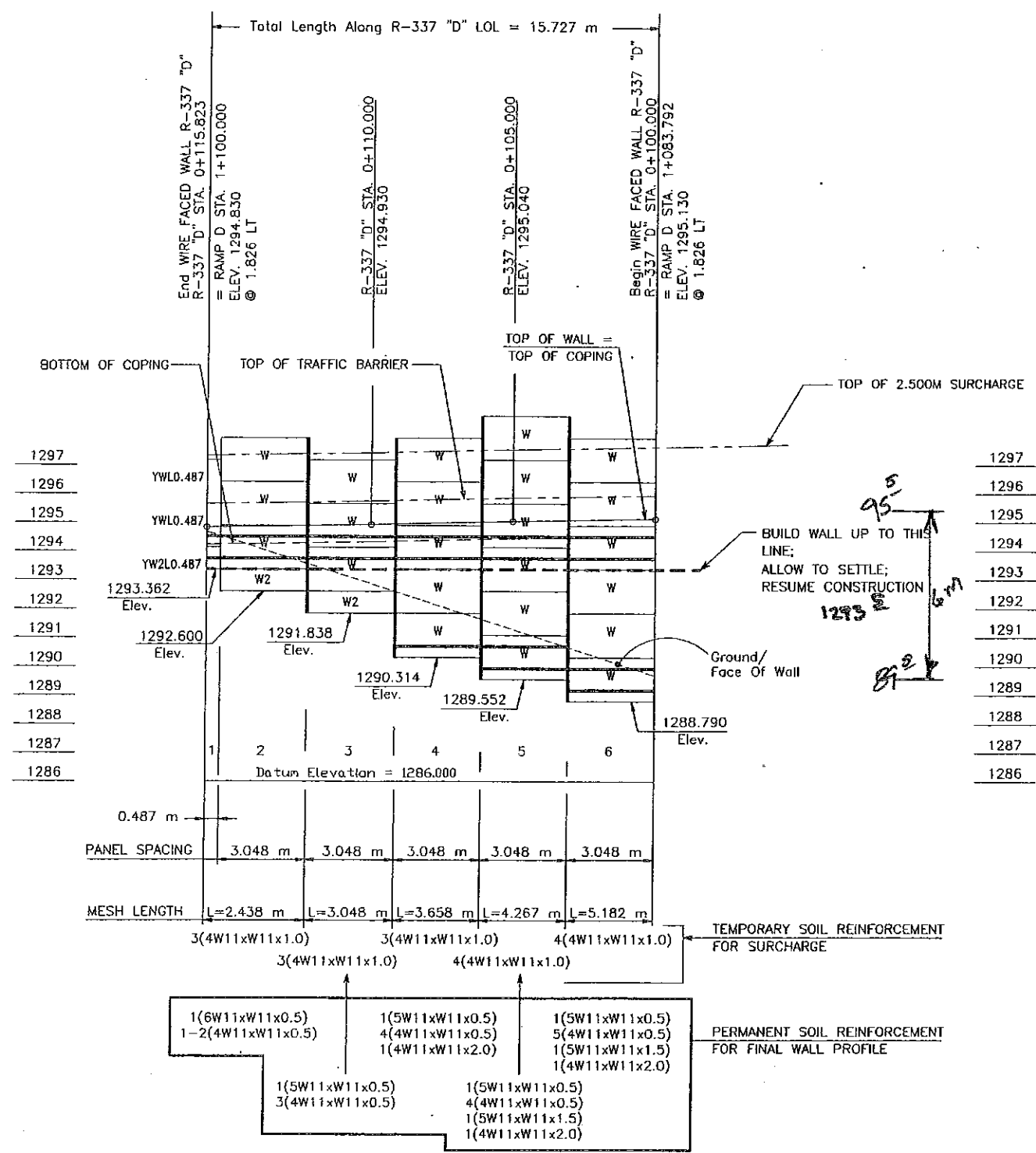
RETAINED EARTH™ WALLS  
TYPICAL SECTIONS @ PRECAST WALL  
600 NORTH / I-15 INTERCHANGE  
SALT LAKE COUNTY, UTAH  
UTAH DEPARTMENT OF TRANSP.

DWG. NO.  
3.3R-337-C.4

JOB NO.  
239-0007

SHT. NO.  
RE-4C

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	6-26-97	RELEASE FOR 1ST STAGE CONST. WALLS B, D & F ONLY



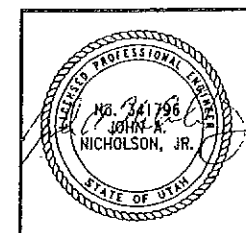
DES.	MM	LP	MM	NO.	DATE	REVISION	CHK
6-16-97	MM	LP	MM				
6-16-97	LP						
6-16-97	MM						

VSL CORPORATION  
 2840 Plaza Place, Suite 200  
 Raleigh, NC 27612  
 Telephone: (919) 781-6272  
 Fax: (919) 781-6869



VSL Corporation ("VSL") makes a single proprietary retained earth wall system. Customers are not to be held responsible for any failure of such structures in whole or in part, or any damage to property or persons, or any injury to persons, or any loss of life, or any other liability, arising from the use of the system, or any other liability, arising from the use of the system, or any other liability, arising from the use of the system. VSL DISCLAIMS ALL LIABILITY THEREFOR.

RETAINED EARTH™ WALLS  
 WALL R-337 "D" - 1ST STAGE: WIRE FACED WALL  
 600 NORTH / I-15 INTERCHANGE  
 SALT LAKE COUNTY, UTAH  
 UTAH DEPARTMENT OF TRANSP.



SCALE:	
JOB NO:	239-0007
RE-13	

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.



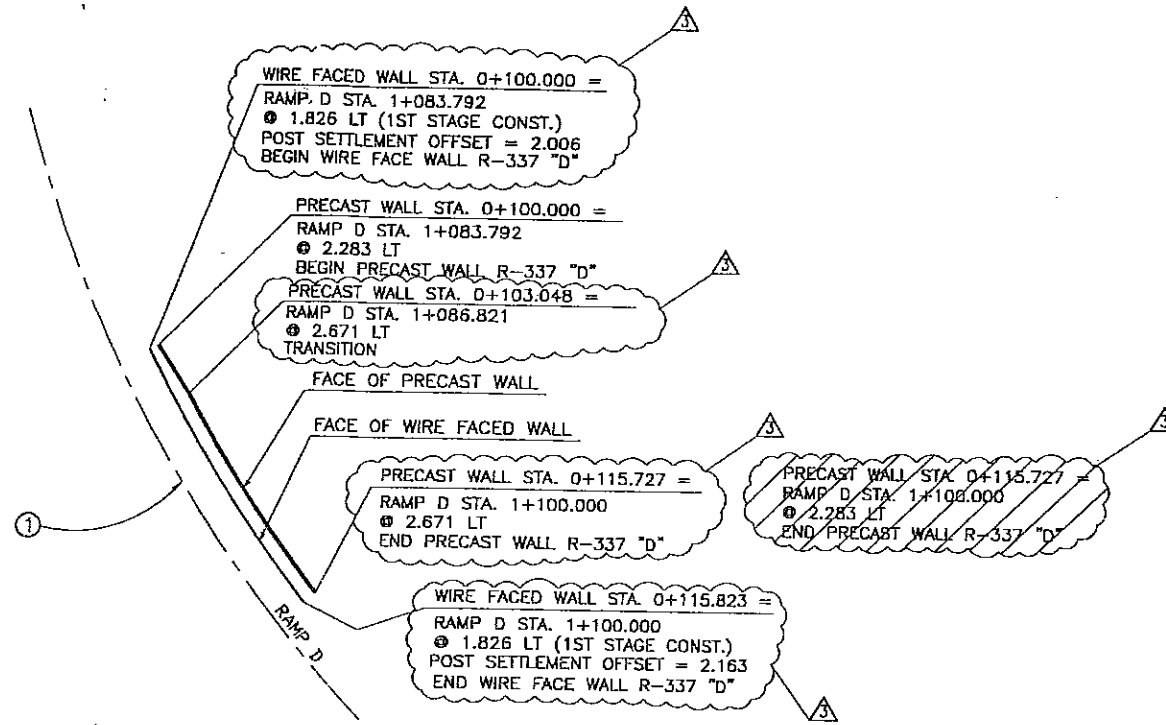
CURVE DATA				
No.	RADIUS	LENGTH	TANGENT	Δ
①	77.000	168.888	150.051	125°40'12"

All Dimensions Are In Meters Unless Noted Otherwise

**2ND STAGE DESIGN**  
 BASED ON POST SETTLEMENT SURVEY OF WIRE FACE, LATERAL CUT WARD DISPLACEMENTS RANGED FROM 53 mm TO 337 mm MEASURED AT THE BASE OF THE WALL.

**MSE WALL R-337 "D"**  
**PLAN VIEW**

SCALE: 1=200 (FULL SIZE)  
 SCALE: 1=400 (HALF SIZE)

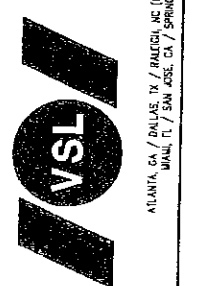


APPROVED FOR CONSTRUCTION

NO.	DATE	DESCRIPTION
△	6-23-97	RELEASE FOR 1ST STAGE CONST. WALLS A & B ONLY
△	6-26-97	RELEASE FOR 1ST STAGE CONST. WALLS B, D & F ONLY
△	9-21-98	RELEASE FOR 2ND STAGE CONST. WALLS D DELETED WALL C, ADDED DRAWING NO.

DES.	DRN.	CHK.	RETAINED EARTH™	NO.	DATE	BY	CHK
B-24-98	B-24-98	B-24-98	MM				

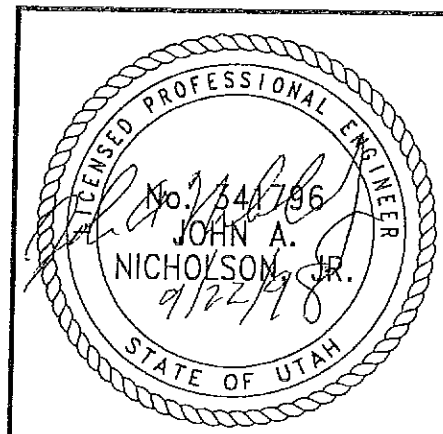
VSL CORPORATION  
 2800 Plaza Plaza, Suite 200  
 Raleigh, NC 27617  
 Tel: (919) 781-1672  
 Fax: (919) 781-6653



WASATCH CONSTRUCTORS  
 SEP 22 1998  
 RELEASED FOR CONSTRUCTION

VSL Corporation (VSL) is a Swiss corporation and does not have a direct proprietorship in the United States. The design and construction of the structure shown on this drawing is the responsibility of the engineer of record, who is not responsible for any errors or omissions in this drawing. The user of this drawing is advised that it is not to be used for any purpose other than that for which it was prepared and that the user assumes all liability for any damage or injury resulting from its use. THEREFORE, THE USER ASSUMES ALL LIABILITY.

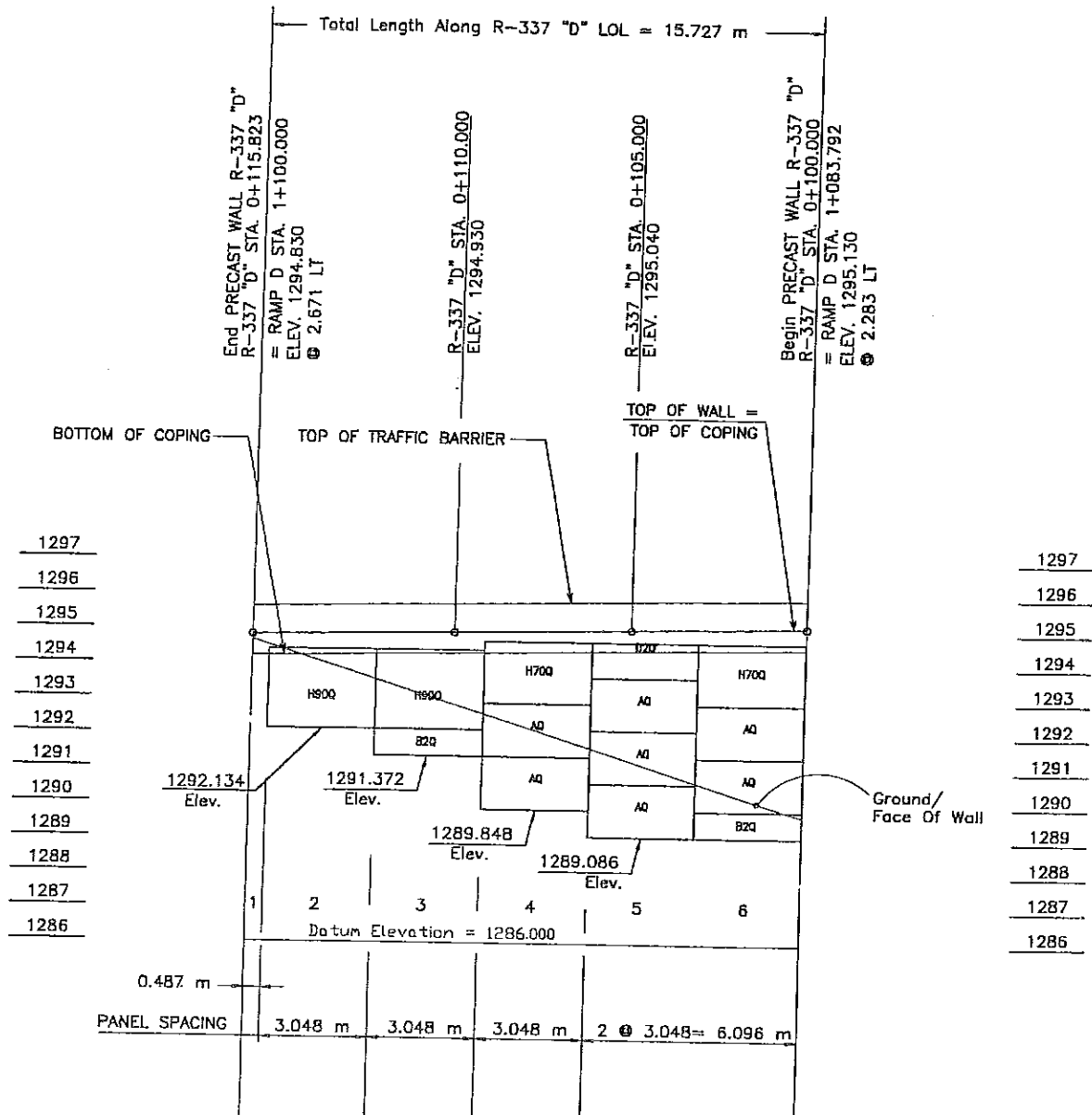
RETAINED EARTH™ WALLS  
 PLAN VIEW WIRE WALL "D"  
 600 NORTH / I-15 INTERCHANGE  
 SALT LAKE COUNTY, UTAH  
 UTAH DEPARTMENT OF TRANSP.



DWG. NO.	3.3R-337-D.2
JOB NO.	239-0007
SHT. NO.	RE-2D

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



**RETAINING WALL R-337 "D" - 2ND STAGE: PRECAST WALL**  
 (FRONT FACE SHOWN) SCALE 1:100  
 (TOTAL SURFACE AREA OF FACING = 65.07 SM)

METRIC

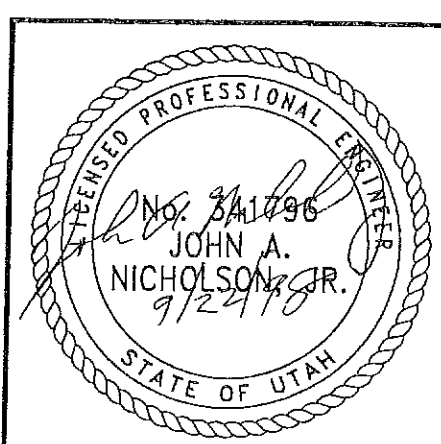
CERTIFIED FOR INTERNAL STABILITY OF RETAINED EARTH™ STRUCTURES ONLY. EXTERNAL STABILITY, INCLUDING BUT NOT LIMITED TO FOUNDATION AND SLOPE STABILITY, IS THE RESPONSIBILITY OF THE OWNER. DESIGN IS BASED ON THE ASSUMPTION THAT THE MATERIAL WITHIN THE RETAINED EARTH™ MASS, METHODS OF CONSTRUCTION, AND QUALITY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

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
△	9-21-98	RELEASE FOR 2ND STAGE CONST. WALL D

**VSL CORPORATION**  
 2840 Plaza Place, Suite 200  
 Raleigh, NC 27617  
 Telephone: (919) 781-6777  
 Fax: (919) 781-4859

ALANTA, GA / DALLAS, TX / BALTIMORE, MD (CORPORATE OFFICE)  
 MADE IN / SAN JOSE, CA / SPRINGFIELD, VA

**WASATCH CONSTRUCTORS**  
 SEP 22 1998  
 RELEASED FOR CONSTRUCTION



RETAINED EARTH™ WALLS

WALL R-337 "D" - 2ND STAGE: PRECAST WALL

600 NORTH / I-15 INTERCHANGE  
 SALT LAKE COUNTY, UTAH  
 UTAH DEPARTMENT OF TRANSP.

OWG. NO.	3.3R-337-0.3
JOB NO.	239-0007
SHT. NO.	RE-3D

VSL Corporation (VSL) is a registered provider of continuing education for engineers and architects. The course is approved for 1.0 CEU. The course is intended for use in the design of retaining walls. The course is not intended to be used for design or construction of retaining walls. The course is not intended to be used for design or construction of retaining walls. The course is not intended to be used for design or construction of retaining walls.

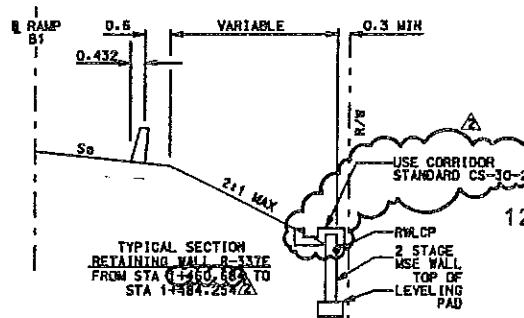
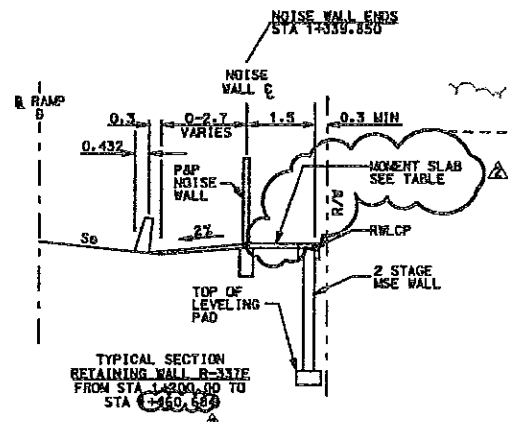
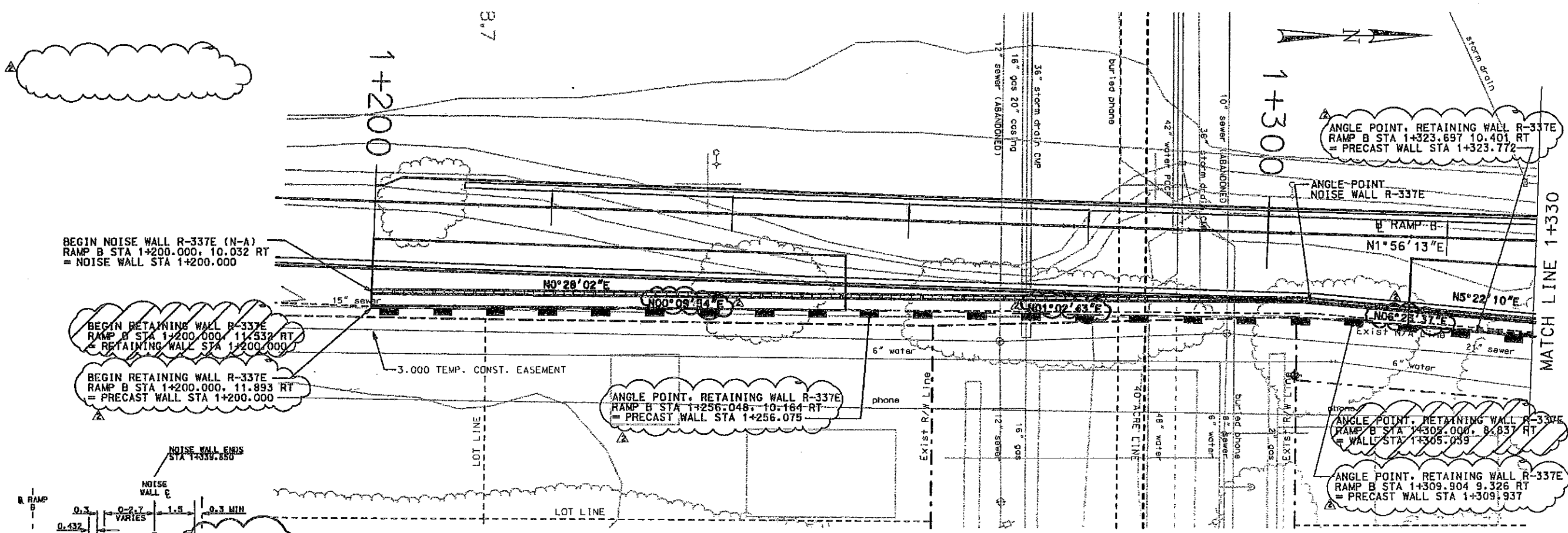
DES.	B-14-98	MM
DRN.	B-14-98	RSW
CHK.	B-14-98	MM

RETAINED EARTH™

NO.	DATE	REVISION	CHK

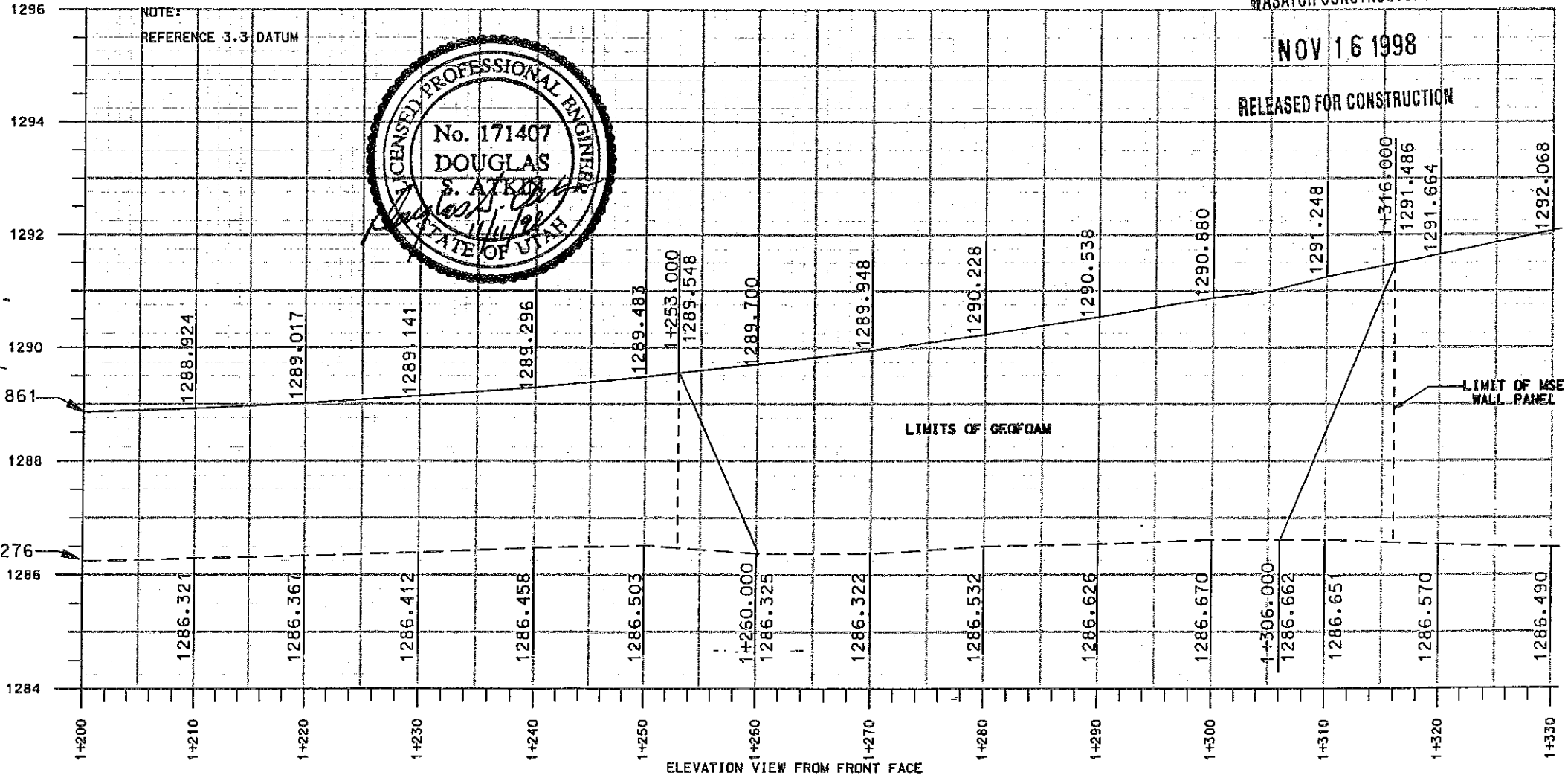


User: ruan.coyfe@in Date: 1-NOV-1998 Time: 15:20 File: c:\vgn\15\_cadd\61\_97\_temp\337e.dgn



**MOMENT SLAB AND COPING**

"RAMP B" STATIONS	REFERENCE
1+200.000 TO 1+253.000	3.3R-337E-03B
1+253.000 TO 1+316.000	3.3R-337E-03C
1+316.000 TO 1+339.906	3.3R-337E-03A
1+339.906 TO 1+388.000	CS-29
1+388.000 TO 1+433.000	CS-27-1
1+433.000 TO 1+466.000	CS-29



WASATCH CONSTRUCTORS  
 NOV 16 1998  
 RELEASED FOR CONSTRUCTION

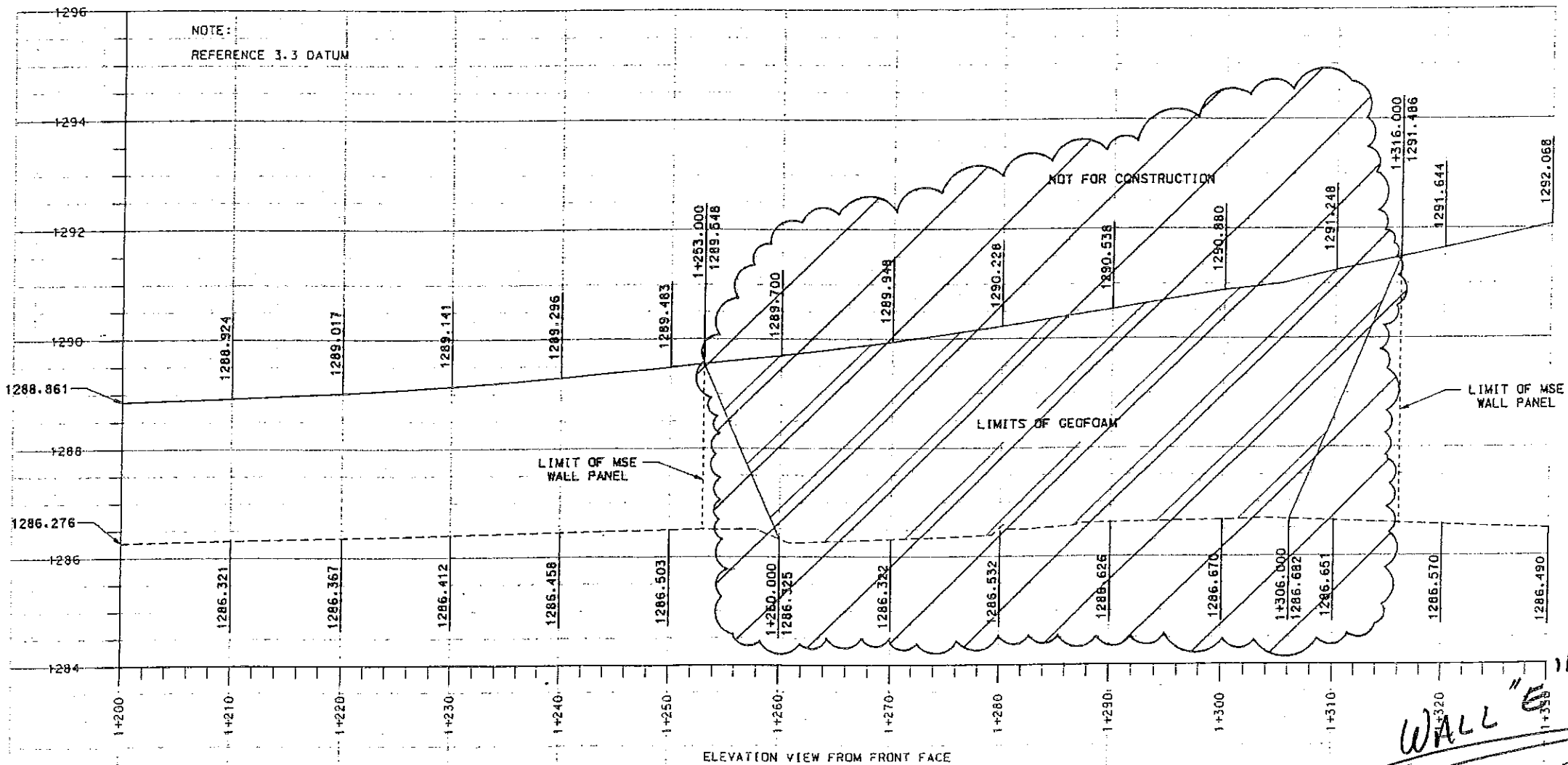
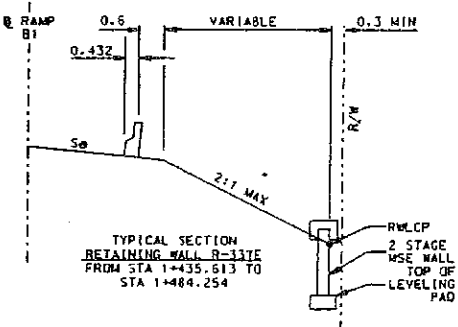
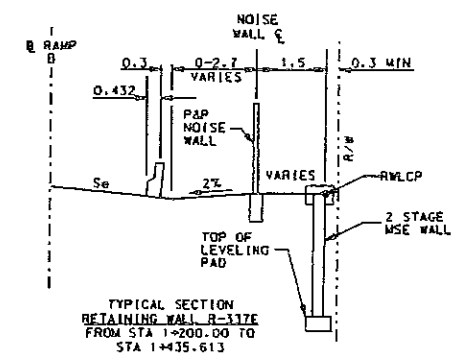
APPROVED FOR CONSTRUCTION		DESCRIPTION	
NO.	DATE	NO.	DATE
1	8-29-97	1	11-11-98
INITIAL RELEASE		FON 3-0394 & NDC 0227	
UTAH DEPARTMENT OF TRANSPORTATION URS Greiner SVERDRUP/DE LEUW			
I-15 CORRIDOR RECONSTRUCTION		DESIGN R/C	
SITUATION LAYOUT RET WALL R-337E		DRAWN P/R	
SECTION 3.3		PROJECT DESIGN ENGINEER	
PROJECT NUMBER #SP-15-7(135)296		APPROVED DATE	
SALT LAKE COUNTY		SECTION MANAGER	
DWG. NO. 3.3-R-337E-01		DATE	
SHT. _____ OF _____		QUANT.	

WALL STA POST LOCATIONS AT 4m CENTER TO CENTER

1+200	RAMP B STA 1+200.000	10.032 RT.
1+304	RAMP B STA 1+303.911	7.366 RT.
1+308	RAMP B STA 1+307.908	7.515 RT.
1+364	RAMP B STA 1+363.807	10.868 RT.
1+368	RAMP B STA 1+367.809	11.032 RT.
1+404	RAMP B STA 1+403.790	12.219 RT.
1+408	RAMP B1 STA 1+407.969	9.485 RT.
1+432	RAMP B1 STA 1+434.186	8.740 RT.

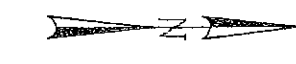
BEGIN NOISE WALL R-337E (N-A)  
RAMP B STA 1+200.000, 10.032 RT.  
= NOISE WALL STA 1+200.000

BEGIN RETAINING WALL R-337E  
RAMP B STA 1+200.000, 11.532 RT.  
= RETAINING WALL STA 1+200.000



ELEVATION VIEW FROM FRONT FACE

WALL "E"  
3.32-337-E.1



MATCH LINE 1+330

APPROVED FOR CONSTRUCTION

NO.	DATE	DESCRIPTION
1	8-29-91	INITIAL RELEASE

UTAH DEPARTMENT OF TRANSPORTATION  
URS Greiner  
SVERDRUP/DE LEUW

APPROVAL REGION	DATE	BY	FOR	DESIGNER	DATE	BY	FOR	SECTION MANAGER
8/97	8/97	R/LN	CHAPMAN	8/97	8/97	8/97	8/97	8/97

I-15 CORRIDOR RECONSTRUCTION  
SITUATION LAYOUT RET WALL R-337E  
SECTION 3.3

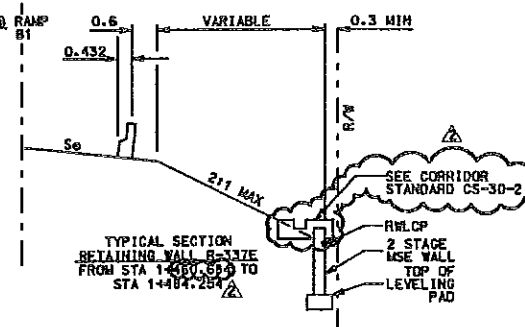
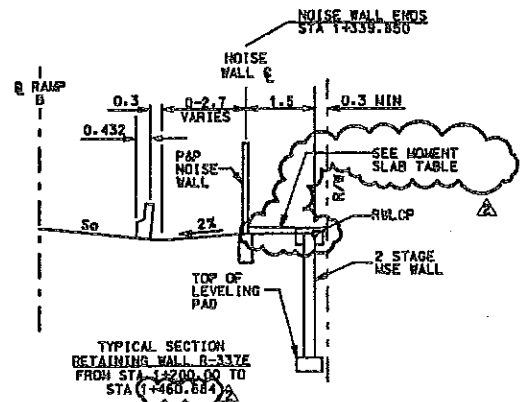
PROJECT NUMBER	•SP-15-7(135)296
DATE	

SALT LAKE COUNTY	NO. 20
PROJECT NO.	3.3 R-337E
SHEET	OF

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Second Reference File Levels (1-64)  
Third Reference File Levels (1-64)  
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Date: 28-AUG-1997 Time: 20:02 Username: mockkw

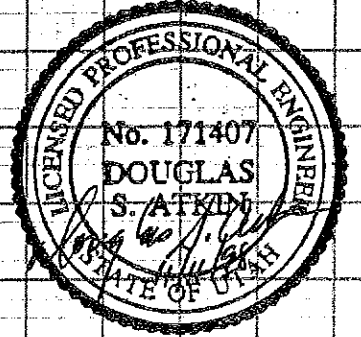
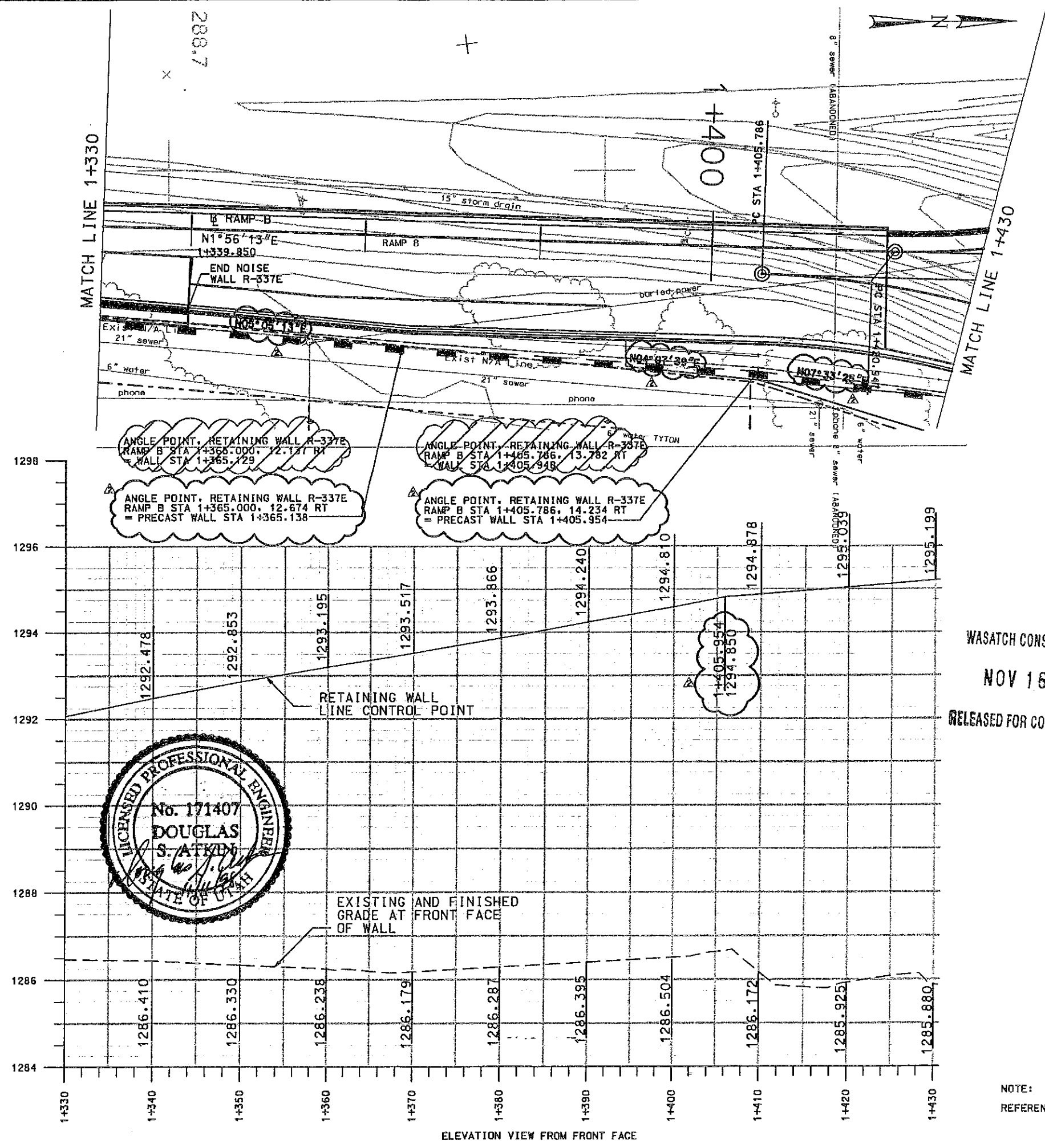


Date: 11-NOV-1998 Time: 15:22 User: nmas:coyle/jm



**MOMENT SLAB AND COPING**

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1+293.000 TO 1+316.000	3.3R-337E-03C
1+316.000 TO 1+339.906	3.3R-337E-03A
1+339.906 TO 1+388.000	CS-29
1+388.000 TO 1+433.000	CS-27-1
1+433.000 TO 1+468.000	CS-29



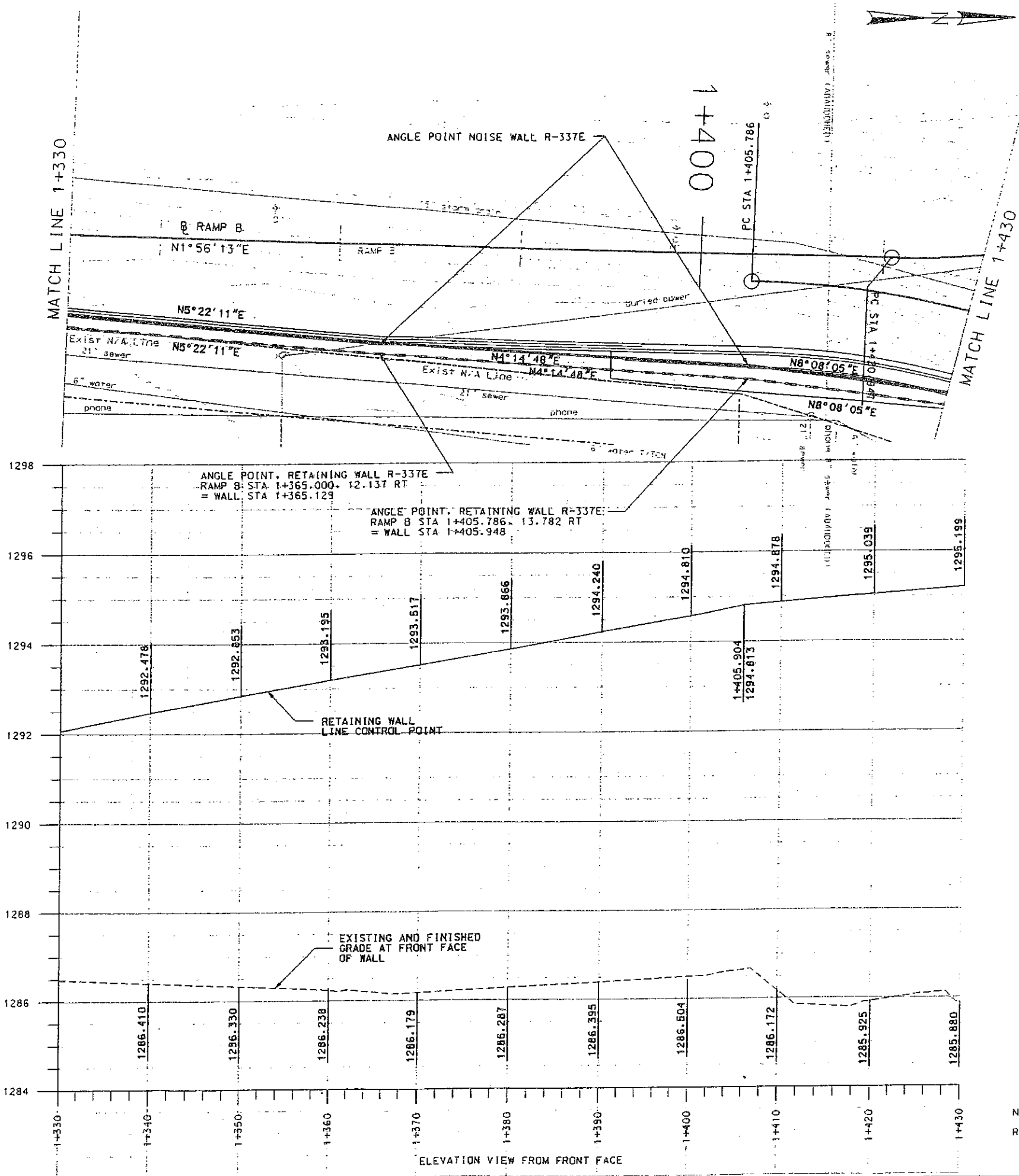
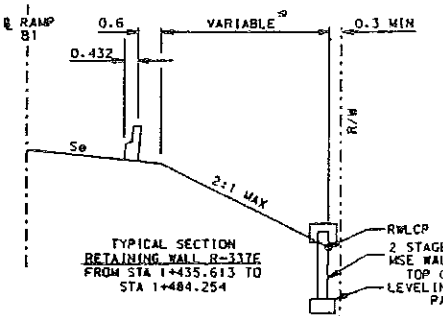
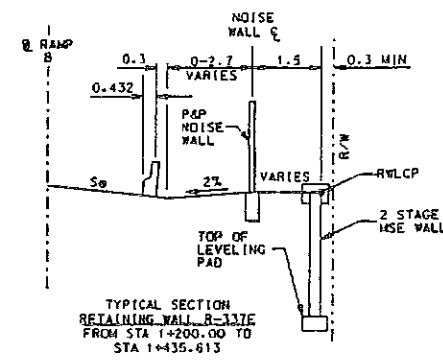
**WASATCH CONSTRUCTORS**  
**NOV 16 1998**  
**RELEASED FOR CONSTRUCTION**

NOTE:  
REFERENCE 3.3 DATUM

<b>UTAH DEPARTMENT OF TRANSPORTATION</b>		APPROVED FOR CONSTRUCTION	
URS Grøinger SVENDRUP/DE LEUW		DESCRIPTION	
NO.	DATE	NO.	DATE
I-15 CORRIDOR RECONSTRUCTION		INITIAL RELEASE	
SITUATION/LAYOUT RET WALL R-337E		8-29-97	
SECTION 3.3		11-11-98 FDM 3.0394 & NDC 0221	
PROJECT #SP-15-7(135)296			
SALT LAKE COUNTY			
DWG. NO. 3.3-R-337E-02			
SHT. OF			

WALL STA POST LOCATIONS AT 4m CENTER TO CENTER

1+200	RAMP B STA 1+200.000, 10.032 RT.
1+304	RAMP B STA 1+303.911, 7.366 RT.
1+308	RAMP B STA 1+307.908, 7.515 RT.
1+364	RAMP B STA 1+363.807, 10.868 RT.
1+368	RAMP B STA 1+367.809, 11.032 RT.
1+404	RAMP B STA 1+403.790, 12.219 RT.
1+408	RAMP B1 STA 1+407.969, 9.485 RT.
1+432	RAMP B1 STA 1+434.186, 8.740 RT.



WAS FOR CONSTRUCTORS  
SEP 02 1997  
RELEASED FOR CONSTRUCTION

UTAH DEPARTMENT OF TRANSPORTATION		APPROVED FOR CONSTRUCTION	
URS Greiner SVERDRUP/DE LEUW		NO.	DATE
DESIGN: TRC 7/97		INITIAL	RELEASE
DRAWN: PHV 8/97			
CHECK: JUE 8/97			
PROJECT DESIGN ENGINEER			
PROJECT CHIEF			
SECTION MANAGER			
1-15 CORRIDOR RECONSTRUCTION		SALT LAKE COUNTY	
SITUATION/LAYOUT RET WALL R-337E		DWG. NO. 33R-337E-02	
SECTION 3.3		PROJECT NUMBER *SP-15-7035/296	
APPROVAL RECORD		DATE	
APPROVED		DATE	
SHT. _____		OF _____	

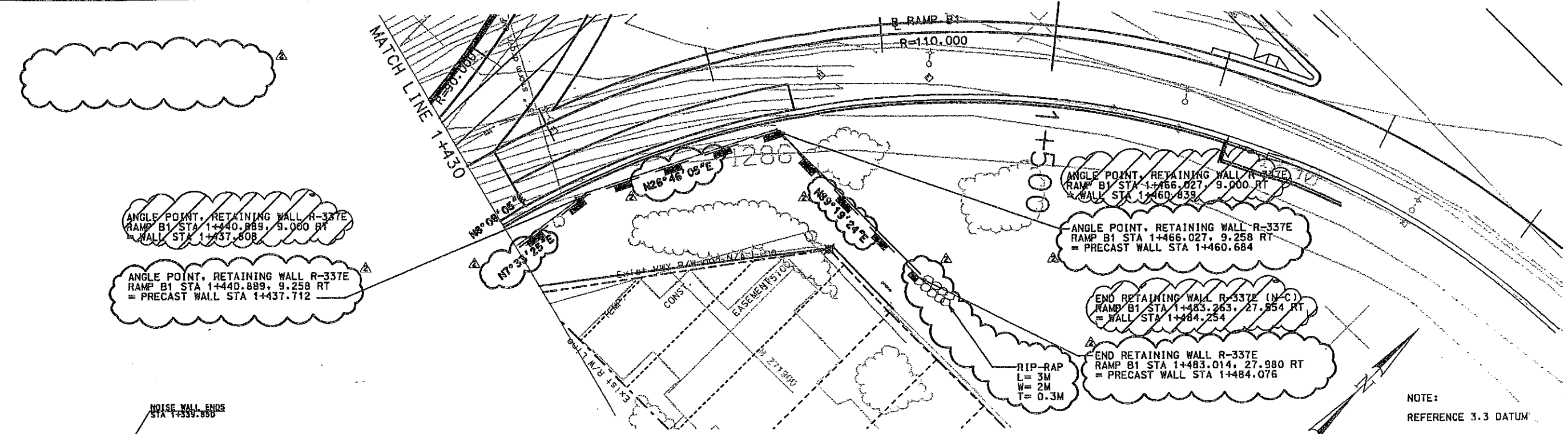
NOTE:  
REFERENCE 3.3 DATUM

33R-337-E.2

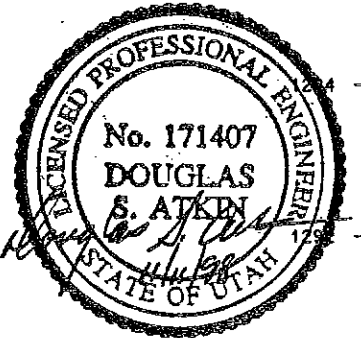
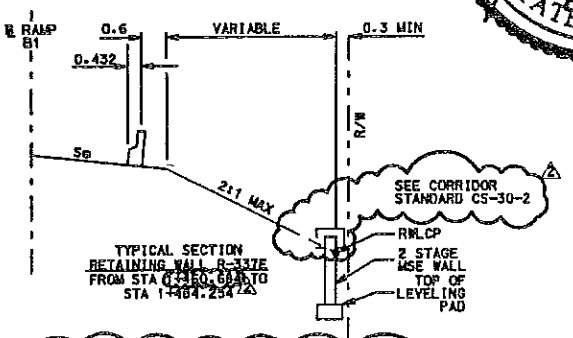
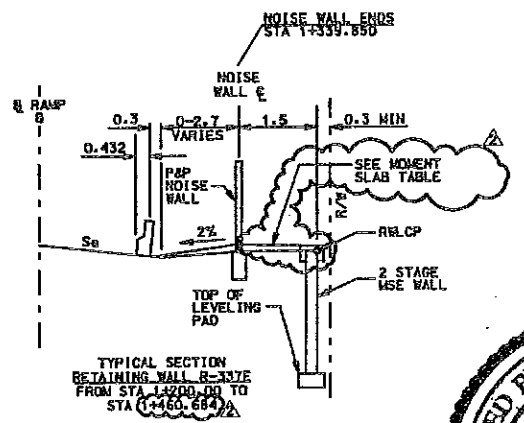
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Date: 28-AUG-1997 Time: 20:00  
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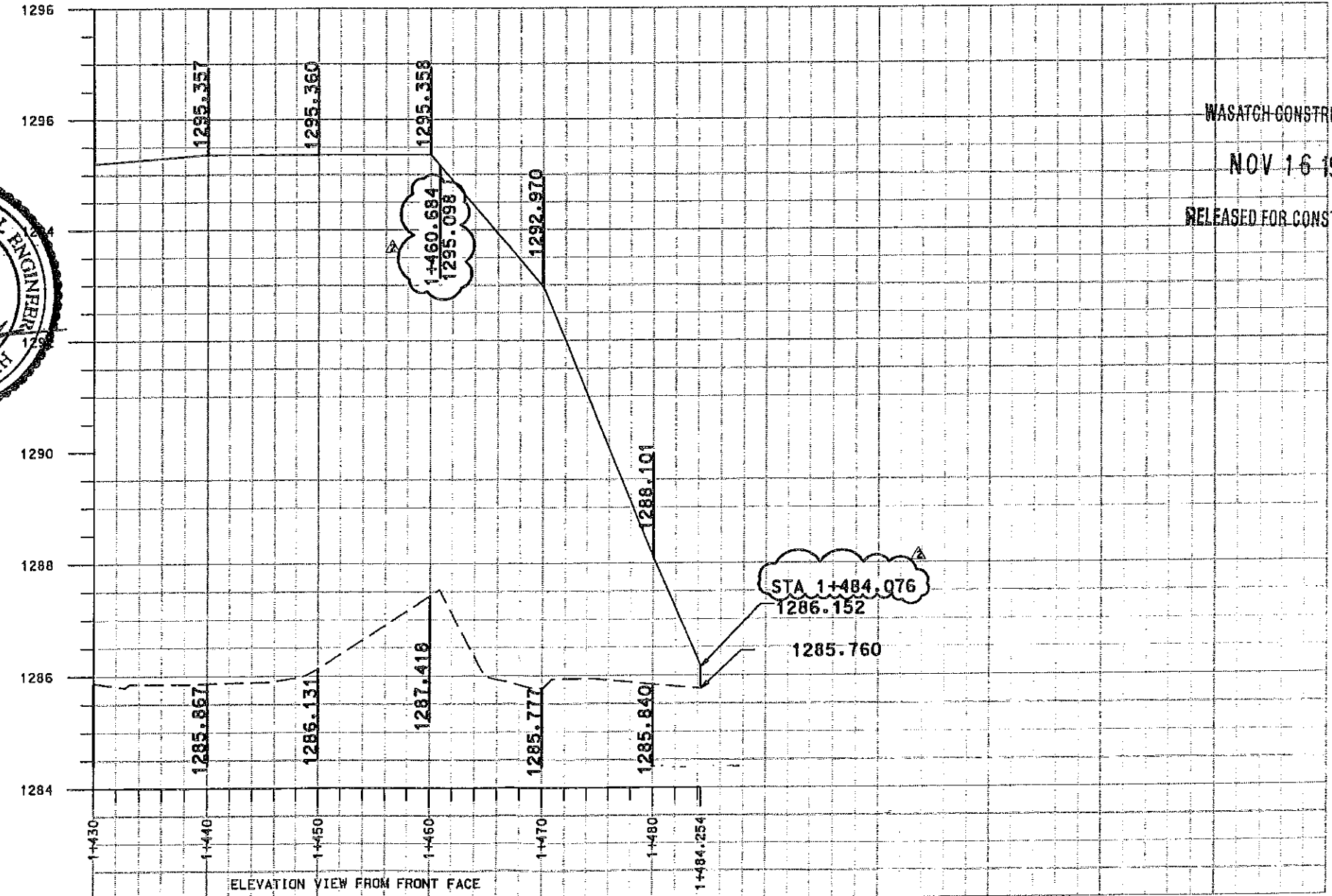
NOTE: REFERENCE 3.3 DATUM



**MOMENT SLAB AND COPING**

"RAMP B" STATIONS	REFERENCE
1+200.000 TO 1+253.000	3.3R-337E-03B
1+253.000 TO 1+316.000	3.3R-337E-03C
1+316.000 TO 1+339.906	3.3R-337E-03A
1+339.906 TO 1+388.000	CS-29
1+388.000 TO 1+433.000	CS-27-1
1+433.000 TO 1+468.000	CS-29

SCALE IN METERS



WASATCH CONSTRUCTORS  
NOV 16 1998  
RELEASED FOR CONSTRUCTION

UTAH DEPARTMENT OF TRANSPORTATION  
URS Greiner  
SVRORUP/DE LEUW

APPROVED FOR CONSTRUCTION

NO.	DATE	DESCRIPTION
A	8-29-97	INITIAL RELEASE
A	11-11-98	FORM 3-0394 & NDC 0227

DESIGN: JAC 7/97 CHECK: JBE 8/97  
DRAWN: PRV 8/97 CHECK: JBE 8/97  
APPROVAL: DON GRANT PROJECT DESIGN ENGINEER  
APPROVED: RICK CHAPMAN DATE SECTION MANAGER

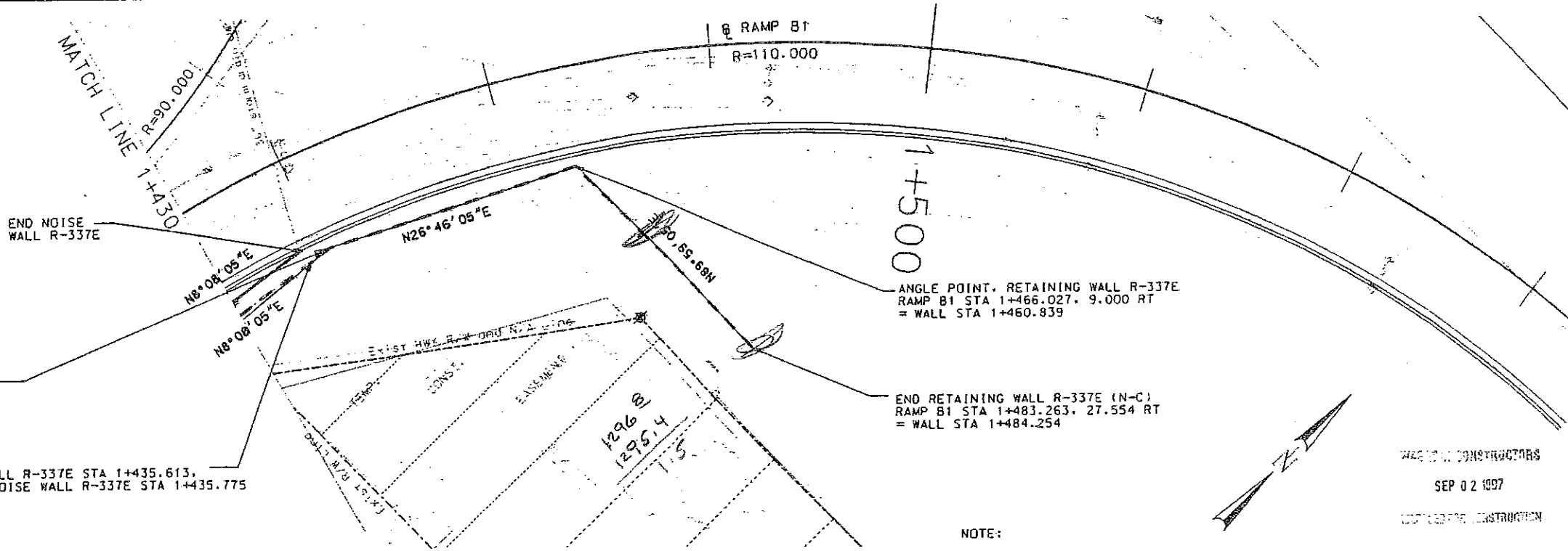
I-15 CORRIDOR RECONSTRUCTION  
SITUATION/LAYOUT RET WALL R-337E  
SECTION 3.3  
PROJECT NUMBER #SP-15-7(135)296

SALT LAKE COUNTY  
DWG. NO. 3.3-R-337E-03  
SHT. OF



WALL STA POST LOCATIONS AT 4m CENTER TO CENTER

1+200	RAMP B STA 1+200.000, 10.032 RT.
1+304	RAMP B STA 1+303.911, 7.366 RT.
1+308	RAMP B STA 1+307.908, 7.515 RT.
1+364	RAMP B STA 1+363.807, 10.868 RT.
1+368	RAMP B STA 1+367.809, 11.032 RT.
1+404	RAMP B STA 1+403.790, 12.219 RT.
1+408	RAMP B1 STA 1+407.969, 9.485 RT.
1+432	RAMP B1 STA 1+434.186, 8.740 RT.



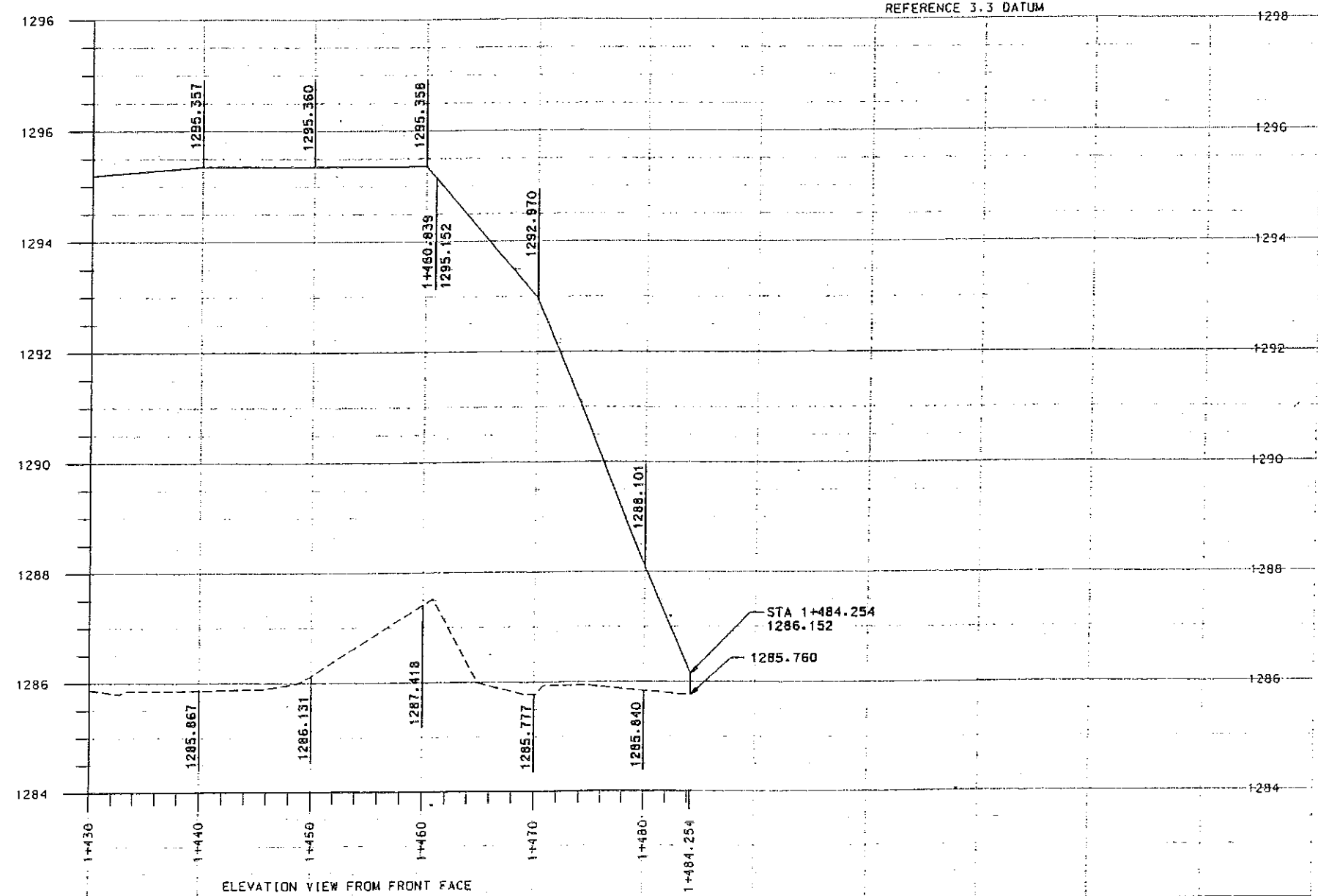
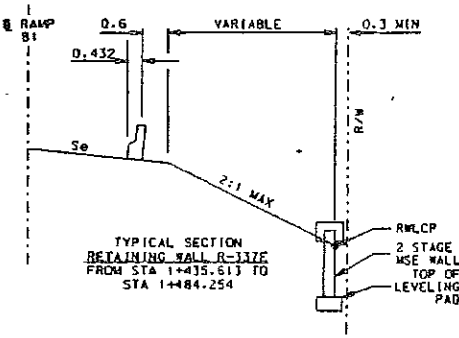
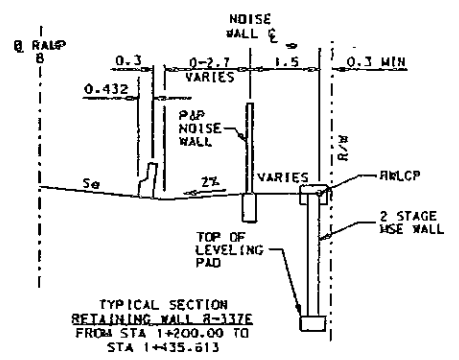
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RAMP B1 STA 1+440.889, 9.000 RT  
= WALL STA 1+437.808

RETAINING WALL R-337E STA 1+435.613,  
1.362 LT = NOISE WALL R-337E STA 1+435.775

ANGLE POINT, RETAINING WALL R-337E  
RAMP B1 STA 1+466.027, 9.000 RT  
= WALL STA 1+460.839

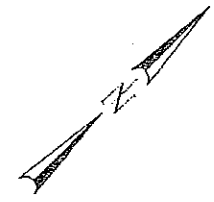
END RETAINING WALL R-337E (N-C)  
RAMP B1 STA 1+483.263, 27.554 RT  
= WALL STA 1+484.254

NOTE:  
REFERENCE 3.3 DATUM



ELEVATION VIEW FROM FRONT FACE

WAGNER CONSTRUCTORS  
SEP 02 1997  
DESIGNED FOR CONSTRUCTION



APPROVED FOR CONSTRUCTION

NO.	DATE	DESCRIPTION
Δ	8-29-97	INITIAL RELEASE

UTAH DEPARTMENT OF TRANSPORTATION

I-15 CORRIDOR RECONSTRUCTION  
SITUATION/LAYOUT RET WALL R-337E  
SECTION 3.3

SALT LAKE COUNTY

337E-03
---------

URS Greiner  
SVERDRUP/DE LEUW

DESIGN	CHECK	DATE
RAC	JBE	8/97
DRAWN	CHECK	DATE
PHV	JBE	8/97
APPROVED	DATE	SECTION MANAGER
PHV	7/97	

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

3.3R-337-E.3

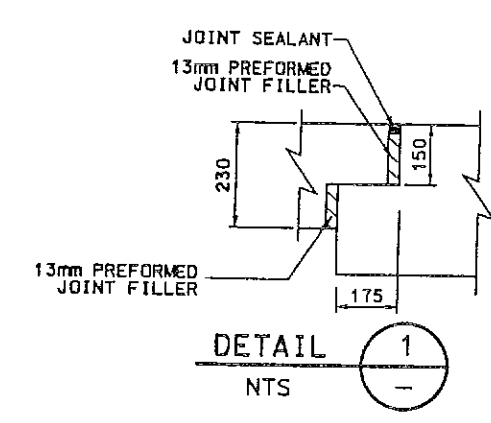
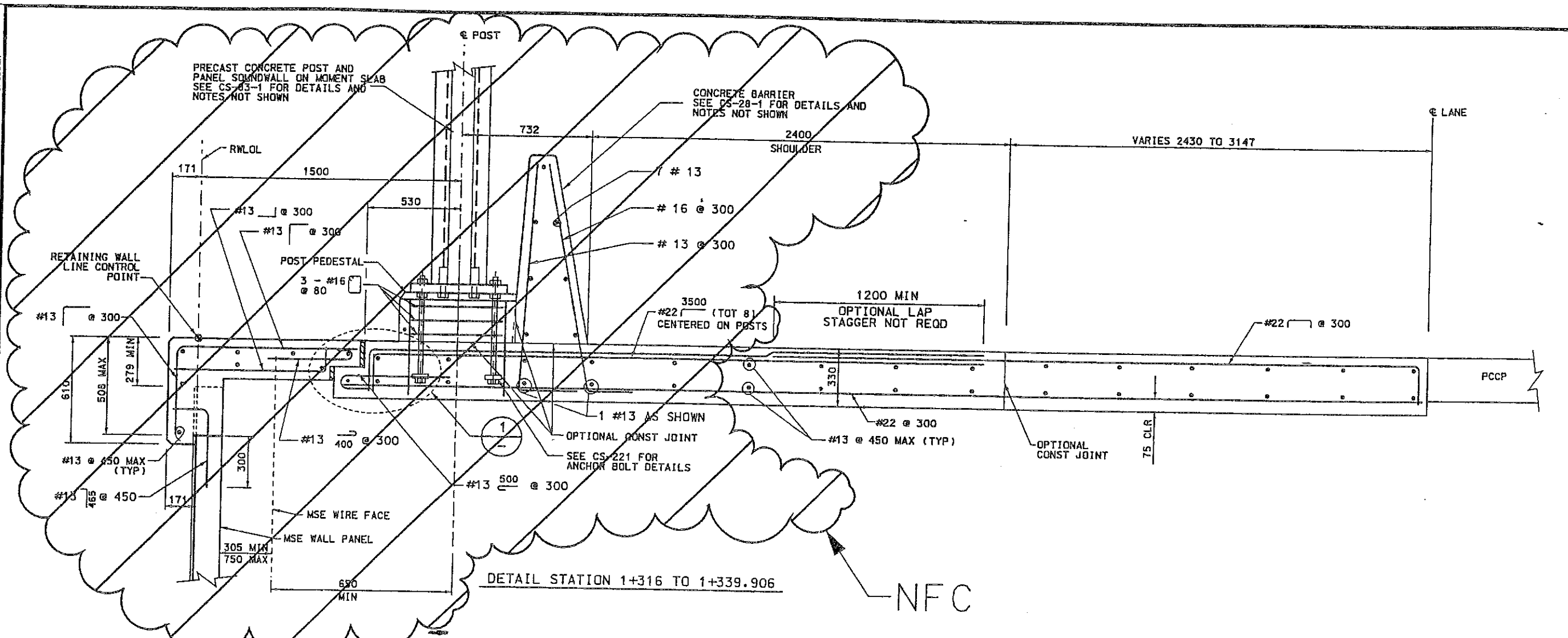
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First Reference File Levels: 1-20, 22, 24-30, 32, 34, 35, 37-62, 64  
Second Reference File Levels: 1-20, 22, 24-30, 32, 34, 35, 37-62, 64  
Third Reference File Levels: 1-64  
Fourth Reference File Levels: 1-64

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Date: 28-AUG-1997 Time: 11:58  
User: name1\mccrkv





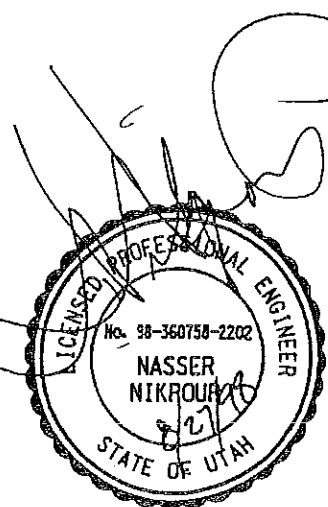
Filename: o:\dgn\15.03a.dgn, 15.97, sheet: files\corridor\_atd\15.33\_r-337e\_03a.dgn Date: 27-AUG-1998 Time: 16:21 User: nme:crabek



NFC

**NOTES:**

- 1) ALL CAST-IN-PLACE CONCRETE SHALL BE CLASS AA (AE) EXCEPT WHERE OTHERWISE NOTED.  $f'_c = 28\text{MPa}$ . CHAMFER ALL EXPOSED CONCRETE CORNERS 20mm OR 13mm RADIUS. PROVIDE 50mm COVER TO REINFORCING STEEL EXCEPT WHERE SPECIFIED OTHERWISE.
- 2) ALL DIMENSIONS ARE IN MILLIMETERS EXCEPT AS OTHERWISE INDICATED.



WASATCH CONSTRUCTORS

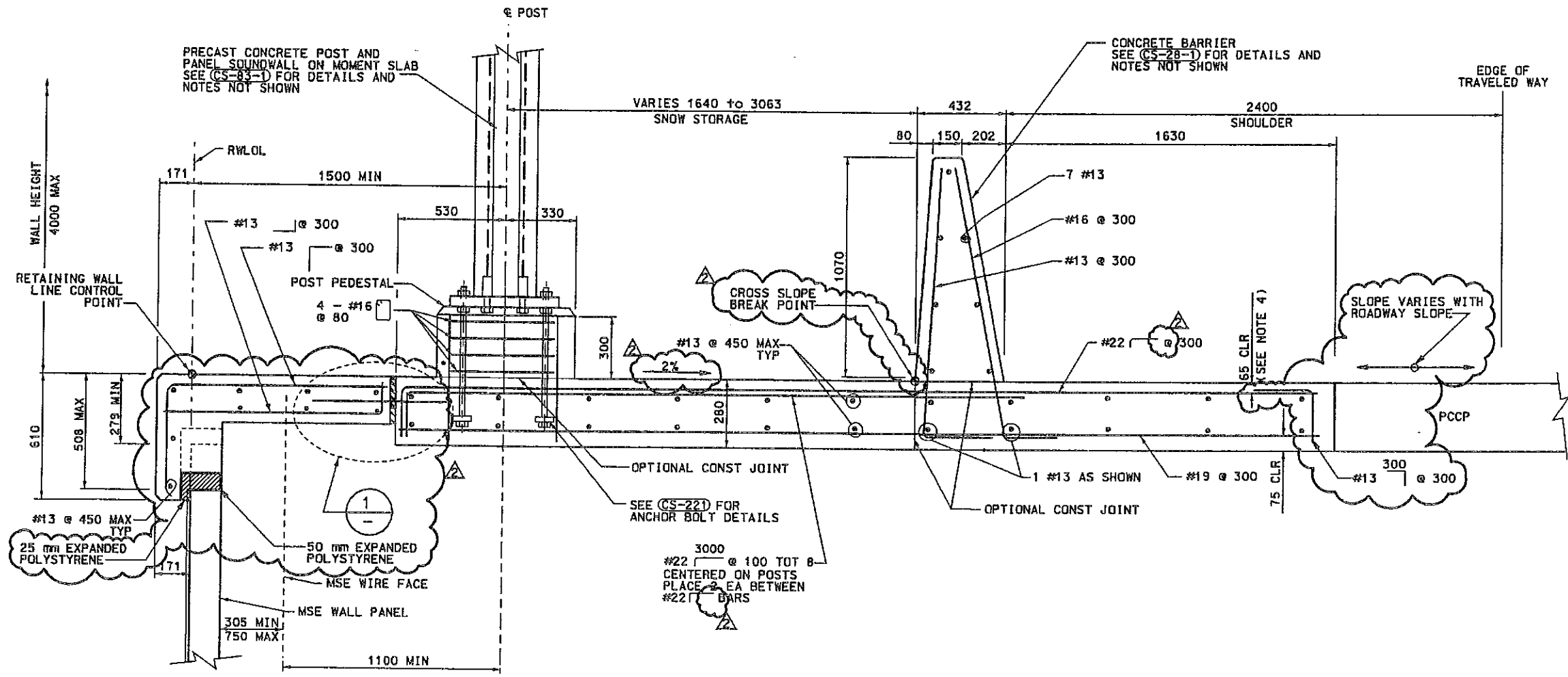
AUG 27 1998

RELEASED FOR CONSTRUCTION

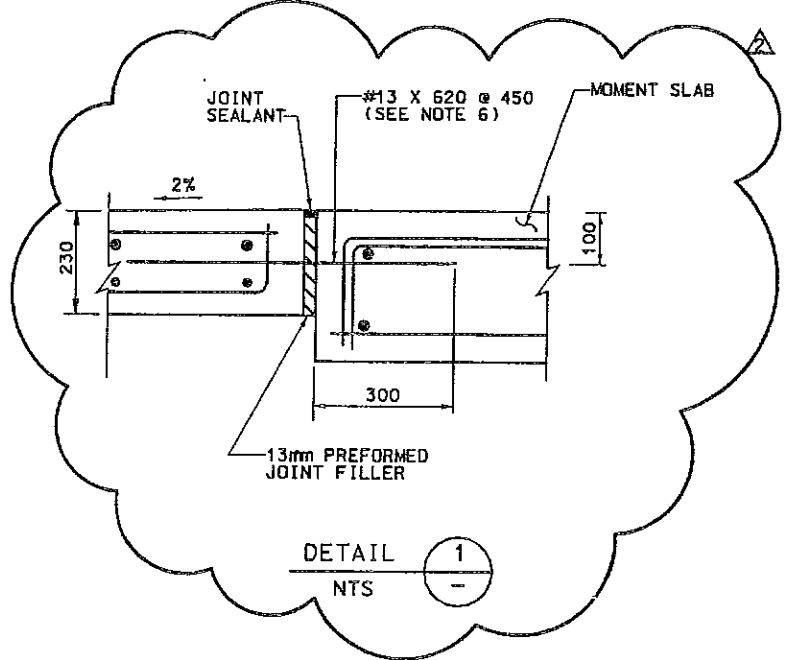
APPROVED FOR CONSTRUCTION		DESCRIPTION	
NO.	DATE	NO.	DATE
Δ	08/27/98		
INITIAL RELEASE			
UTAH DEPARTMENT OF TRANSPORTATION DE LEUW CATHER SVENDRUP/DE LEUW			
APPROVAL RECORD:	DESIGN NN	08/98	CHECK
PROJECT DESIGN ENGINEER	STAN POLASIK		
DATE			
APPROVED	DRAWN SDP	08/98	CHECK
DATE	JAMES KLEMZ		
	SECTION MANAGER		
I-15 CORRIDOR RECONSTRUCTION			
SITUATION/LAYOUT RET WALL R-337E			
SECTION 3.3			
PROJECT NUMBER #SP-15-7(135)296			
SALT LAKE COUNTY			
DWG. NO. 3.3-R-337E-03A			

DocId: 18-101-998 Times: 1/4/09 User: namer.coyle.jm

File: namer.coyle\115.ecad\115.97\sheet\_files\corridor\_atd\115.r337e\_03b.dgn



DETAIL STATION 1+200 TO 1+253

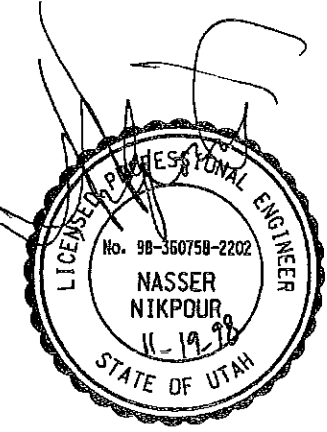


DETAIL 1 NTS

WASATCH CONSTRUCTORS  
 DEC 0 2 1998  
 RELEASED FOR CONSTRUCTION

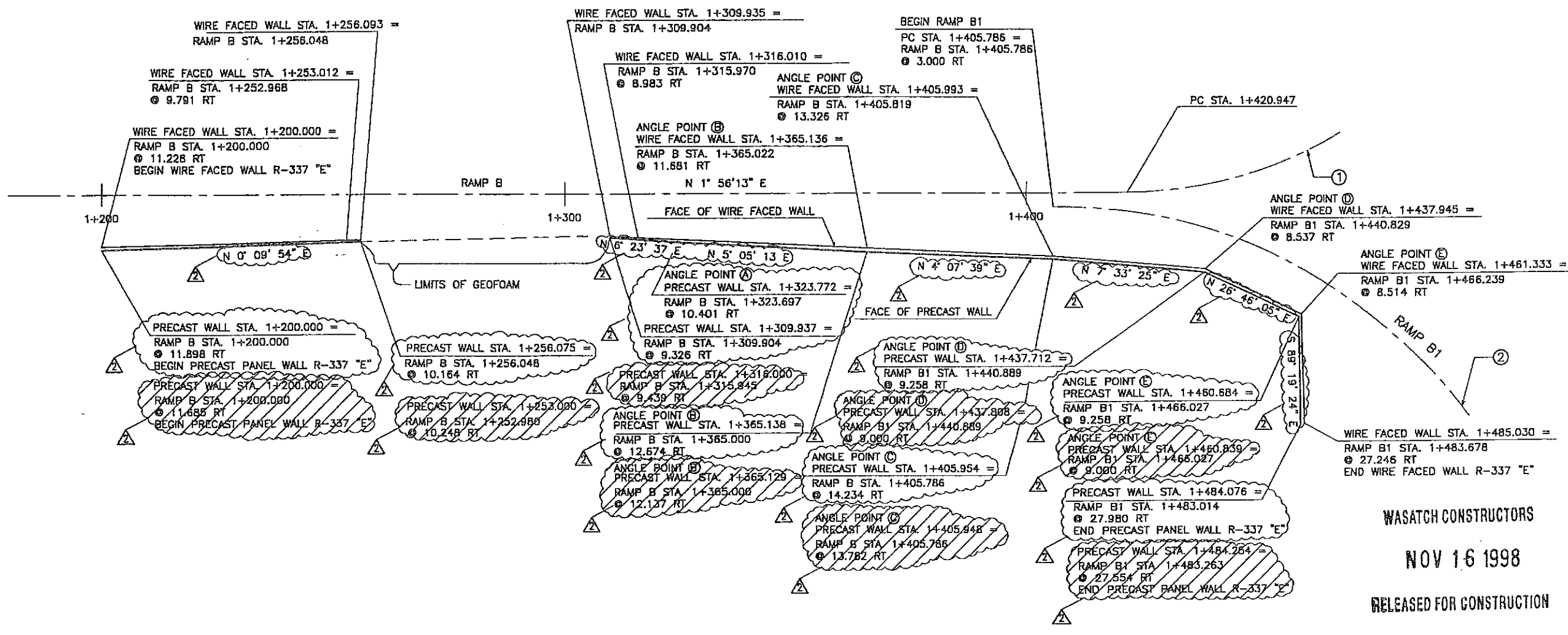
NOTES:

- 1) ALL CAST-IN-PLACE CONCRETE SHALL BE CLASS AA (AE) EXCEPT WHERE OTHERWISE NOTED.  $f'_{c} = 28\text{MPa}$ . CHAMFER ALL EXPOSED CONCRETE CORNERS 20mm OR 13mm RADIUS. PROVIDE 50mm COVER TO REINFORCING STEEL EXCEPT WHERE SPECIFIED OTHERWISE.
- 2) ALL DIMENSIONS ARE IN MILLIMETERS EXCEPT AS OTHERWISE INDICATED.
- 3) TRANSVERSE BARS MAY OPTIONALLY BE LAPPED ( $60d_b$ ) WITHOUT STAGGERING AT THE SLAB CONSTRUCTION JOINT.
- 4) INCLUDES 15mm MAX FOR GRINDING AND WEAR.
- 5) GRANULAR BORROW OR MSE BACKFILL MATERIAL IS ACCEPTABLE FOR THE FULL DEPTH OF PAVEMENT UNDER THE MOMENT SLAB.
- 6) IF NECESSARY, DRILL AND BOND #13 BARS IN THE MOMENT SLAB TO DEVELOP FULL ULTIMATE CAPACITY OF THE BAR.



APPROVED FOR CONSTRUCTION		DESCRIPTION	
NO.	DATE	INITIAL	RELEASE
Δ	09/04/98		
Δ	11/19/98	NDC	0265
UTAH DEPARTMENT OF TRANSPORTATION			
DE LEUW CATHER SVERDRUP/DE LEUW			
DESIGN	NN	08/98	CHECK BS 09/98
DRAWN	DKC	08/98	CHECK
PROJECT	DESIGN ENGINEER		CHECK
APPROVED	DATE	SECTION MANAGER	QUANT.
STAN POLASIK		JAMES KLENZ	
I-15 CORRIDOR RECONSTRUCTION			
SITUATION/LAYOUT RET WALL R-337E			
SECTION 3.3			
PROJECT NUMBER #SP-15-7(135)296			
SALT LAKE COUNTY			
DWG. NO. 3.3-R-337E-03B			
SHT. _____ OF _____			

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
⚠	8-27-97	RELEASE FOR 1ST STAGE CONST. WALL E ONLY
⚠	11-10-98	RELEASE FOR 2ND STAGE CONST. WALL E ONLY



CURVE DATA				
No.	RADIUS	LENGTH	TANGENT	Δ
①	90.000	79.187	42.362	50°24'43"
②	110.000	164.819	102.307	85°50'58"

All Dimensions Are in Meters Unless Noted Otherwise

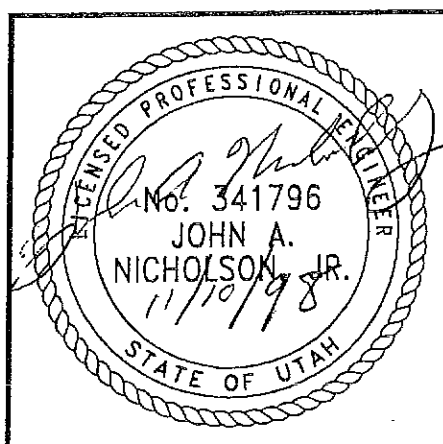
**NOTE:**  
 THE WALL CONNECTIONS ON WALL E MAY BE ROTATED A MAXIMUM OF 55 DEGREES VERTICALLY. SEE DETAIL "SECTION ROTATED" ON VSL STANDARD DRAWING NO. 18 FOR MORE INFORMATION.

### MSE WALL R-337 "E" PLAN VIEW

SCALE: 1=500 (FULL SIZE)  
 SCALE: 1=1000 (HALF SIZE)

**2ND STAGE DESIGN**  
 BASED ON POST SETTLEMENT SURVEY OF WIRE FACE, LATERAL OUT WARD DISPLACEMENTS RANGED FROM -42mm TO 472mm MEASURED AT THE BASE OF THE WALL

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  
 NOV 16 1998  
 RELEASED FOR CONSTRUCTION

DES.	MM	08-30-98	RETAINED EARTH™	NO.	DATE	BY	CHK
DRN.	RSW	09-30-98					
CHK.	MM	09-30-98					

VSL CORPORATION  
 2840 Pines Plaza, Suite 200  
 Raleigh, NC 27612  
 Telephone: (919) 791-9272  
 Fax: (919) 791-4869

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

RETAINED EARTH™ WALLS  
 PLAN VIEW PRECAST WALLS E  
 600 NORTH / I-15 INTERCHANGE  
 SALT LAKE COUNTY, UTAH  
 UTAH DEPARTMENT OF TRANSP.

DWG. NO. 3.3R-337-E.4  
 JOB NO. 239-0007  
 SHE. NO. RE-1



FINAL 08-27-97

END GEOFOAM  
BEGIN WIRE FACED WALL R337-E  
WIRE FACED WALL STA 1+316.010 =  
RAMP B STA 1+316.025  
@ 8.983 RT

ANGLE POINT (B)  
WIRE FACED WALL STA 1+365.136 =  
RAMP B STA 1+365.151  
@ 11.681 RT

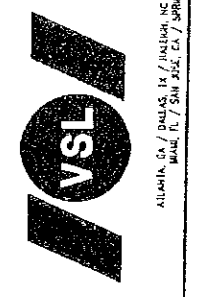
APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	8-27-97	RELEASE FOR 1ST STAGE CONST. WALL E ONLY

NO.	DATE	REVISION	BY	CHK

WASHINGTON CONSTRUCTORS  
SEP 02 1997  
RELEASED FOR CONSTRUCTION

DIS	MM	DD	HH	NO	DATE
08-13-97	08-13-97	000	000		

VSL CORPORATION  
2810 Plaza Place, Suite 200  
Raleigh, NC 27612  
Telephone (919) 781-6772  
Fax (919) 781-1800

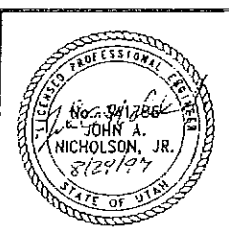


ALUMINA, GA / DALLAS, TX / HANOVER, NC (CORPORATE OFFICE)  
MADE IN USA

RETAINED EARTH™ WALLS  
WALL "R337-E" - 1ST STAGE: WIRE FACED WALL  
UTAH I-15 INTERCHANGE  
SALT LAKE COUNTY, UTAH  
UTAH DEPARTMENT OF TRANSP.

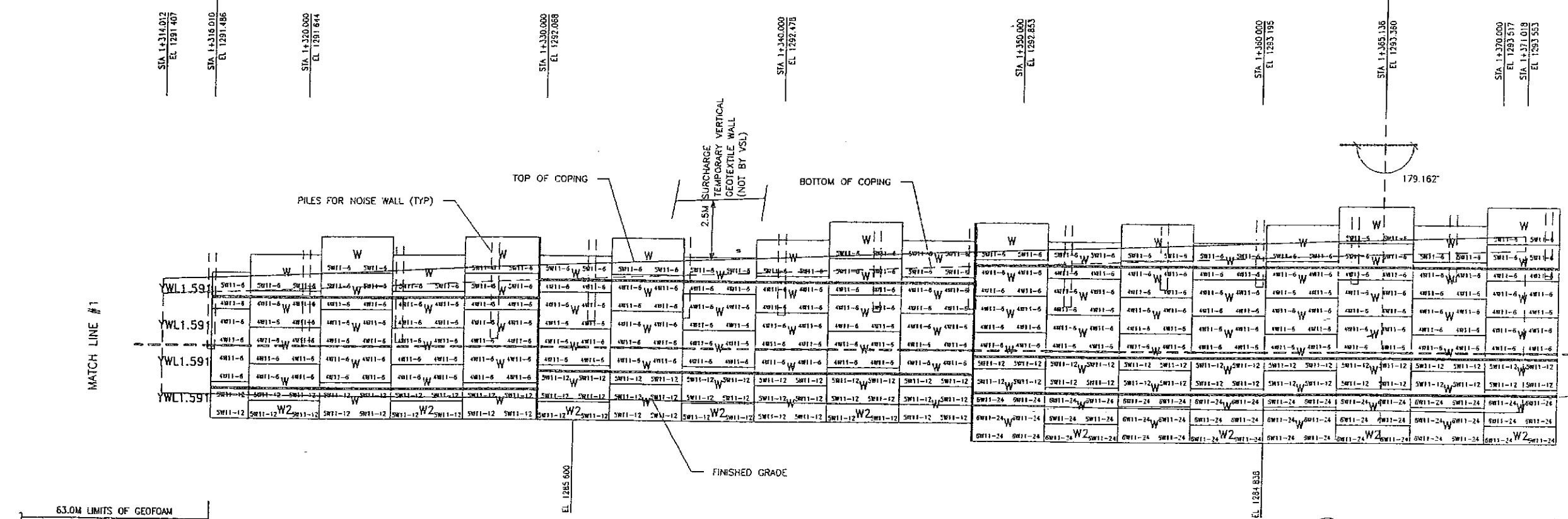
SCALE:	
JOB NO:	239-0007

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.

3.32-337-E.6



STATION	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	
MESH DEPTH			4.877M					5.486M												
PANEL SPACING						32.071										24.384				

63.04M LIMITS OF GEOFOAM

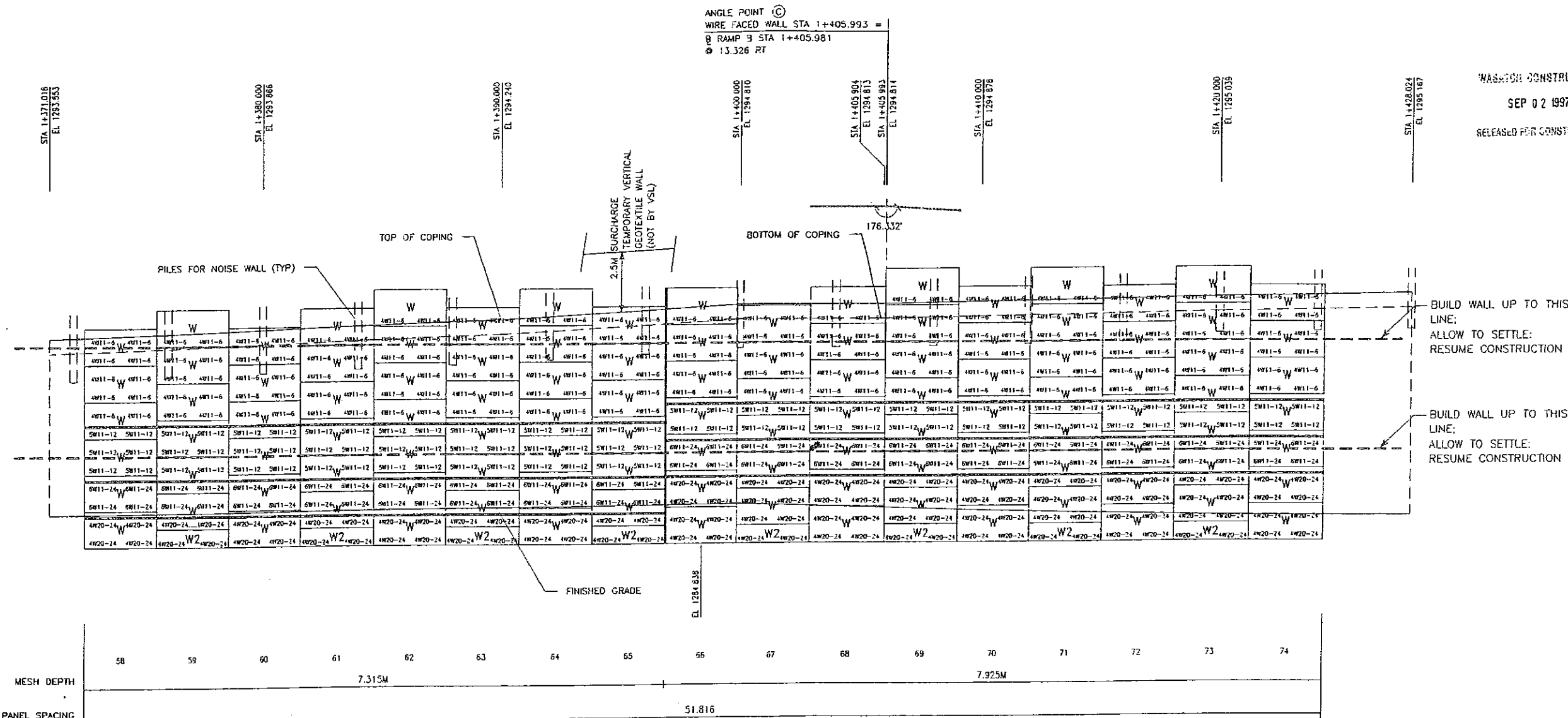
MATCH LINE #1

MATCH LINE #2

BUILD WALL UP TO THIS  
LINE;  
ALLOW TO SETTLE;  
RESUME CONSTRUCTION

FINAL

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	8-27-97	RELEASE FOR 1ST STAGE CONST. WALL E ONLY



WASHINGTON CONSTRUCTORS  
 SEP 02 1997  
 RELEASED FOR CONSTRUCTION

DES.	CHK.	DATE	NO.	DATE	REVISION
DES. 08-15-97	MM				
DES. 08-13-97	DKK				
CHK. 08-13-97	MM				

VSL CORPORATION  
 2540 Pinedale Plaza, Suite 200  
 Raleigh, NC 27612  
 Telephone (919) 781-6272  
 Fax (919) 781-4869

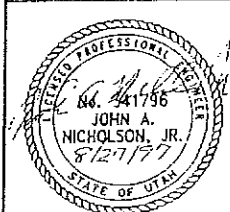
ALABAMA, CA / ILLINOIS, IN / MICHIGAN, NE (CONCRETE OFFICE)  
 MAINE, NY / SAN JUAN, TX / VIRGINIA, VA

BUILD WALL UP TO THIS LINE;  
 ALLOW TO SETTLE;  
 RESUME CONSTRUCTION

BUILD WALL UP TO THIS LINE;  
 ALLOW TO SETTLE;  
 RESUME CONSTRUCTION

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.

332-337-E.7

RETAINED EARTH™ WALLS	SCALE:
WALL "R337-E" - 1ST STAGE: WIRE FACED WALL	JOB NO:
UTAH I-15 INTERCHANGE	239-0007
SALT LAKE COUNTY, UTAH	RE 16
UTAH DEPARTMENT OF TRANSP.	

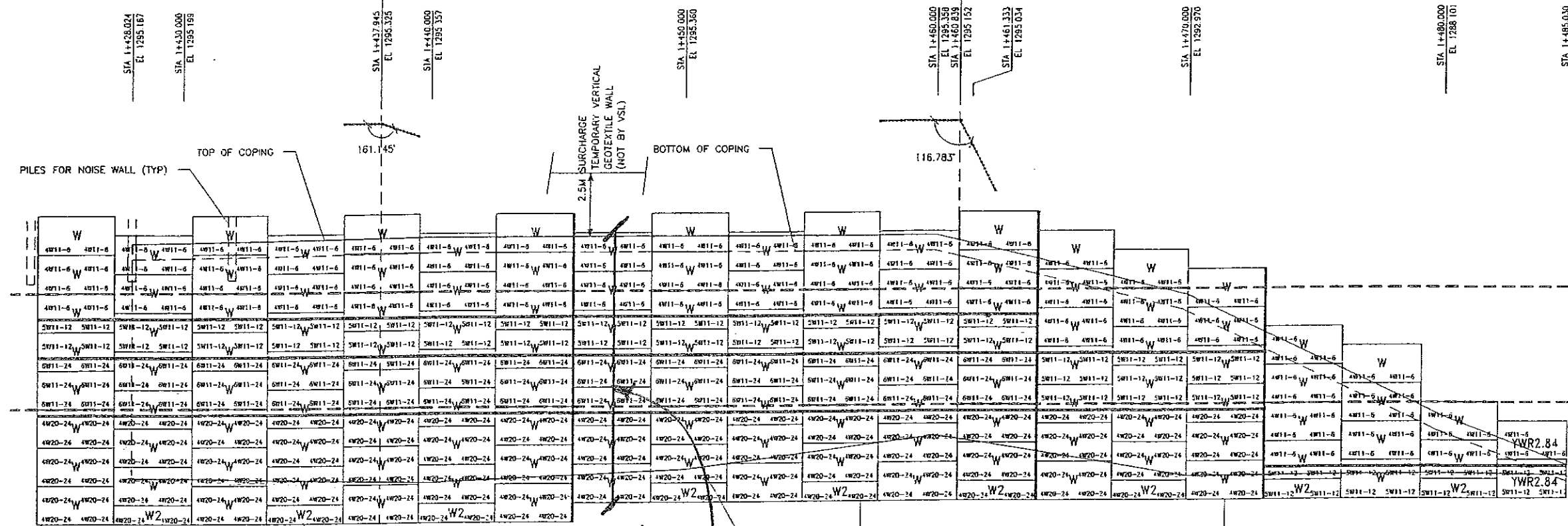


APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
⚠	8-27-97	RELEASE FOR 1ST STAGE CONST. WALL E ONLY <i>SW</i>

ANGLE POINT ①  
WIRE FACED WALL STA 1+437.945 =  
B RAMP B1 STA 1+437.900  
⊙ 8.537 RT

ANGLE POINT ②  
WIRE FACED WALL STA 1+461.333 =  
B RAMP B1 STA 1+461.288  
⊙ 9.514 RT

END WIRE FACED WALL R-337 E  
WIRE FACED WALL STA 1+485.030 =  
B RAMP B1 STA 1+484.985  
⊙ 27.246 RT



MESH DEPTH	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94								
MESH DEPTH	9.144M																			8.534M			7.319M			4.877M		
PANEL SPACING	21.336																			13.288			21.128					

*Grass 10m Ht  
1295.36  
1286.13  
9.22 m (30')*

*WALL + SURCH.  
1295.36  
1284.84  
10.52 m (34')*

*1/2 FILL Elev 1296.8  
+ 2.5 m  
13.02m (42.7')*

WASHINGTON CONSTRUCTORS  
SEP 02 1997  
RELEASED FOR CONSTRUCTION

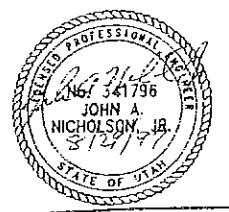
BUILD WALL UP TO THIS LINE:  
ALLOW TO SETTLE:  
RESUME CONSTRUCTION

BUILD WALL UP TO THIS LINE:  
ALLOW TO SETTLE:  
RESUME CONSTRUCTION



VSL CORPORATION (USA)  
2840 Plaza Pkwy, Suite 200  
Raleigh, NC 27607  
Telephone: (919) 781-6272  
Fax: (919) 781-6600

RETAINED EARTH™ WALLS  
WALL "R337-E" - 1ST STAGE: WIRE FACED WALL  
UTAH I-15 INTERCHANGE  
SALT LAKE COUNTY, UTAH  
UTAH DEPARTMENT OF TRANSP.



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.

3.3R-337-E.8

SCALE:	
JOB NO:	239-0007
REV #	#7

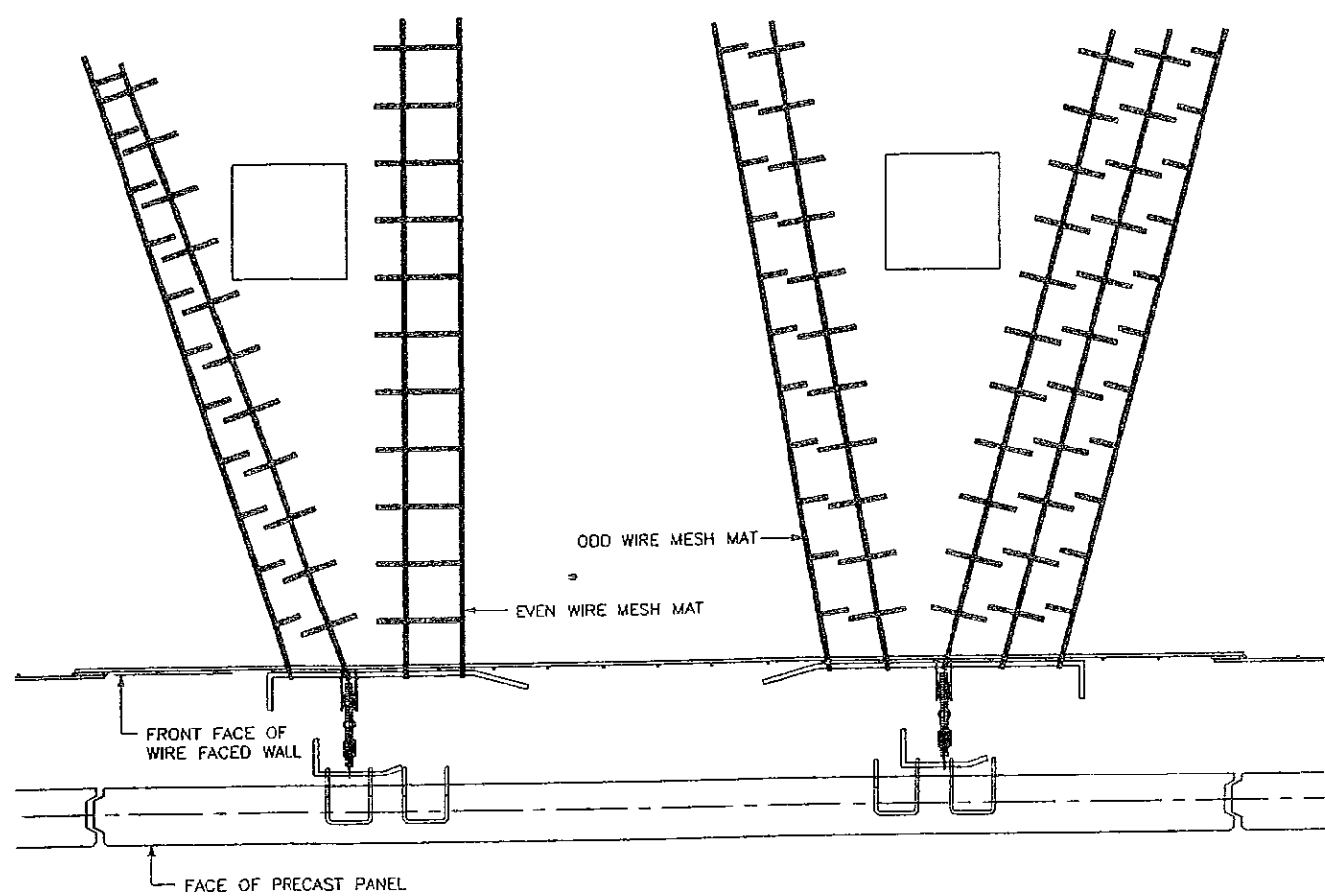
NO.	DATE	DESCRIPTION	BY	CHK

ATLANTA, GA / HULLS, TX / WASHINGTON, DC (CORPORATE OFFICE)  
WALL ST / SUNBELT / SPRINGFIELD, VA

OBSTRUCTION SHALL BE CONSTRUCTED BEFORE WALL INSTALLATION OR, VOID FORMER SHALL BE INSTALLED DURING BACKFILL PLACEMENT.

VOID FORMER NOT SUPPLIED BY VSL CORPORATION.

FIELD CUT & SKEW SOIL REINFORCING AROUND OBSTRUCTION. DAMAGED GALVANIZING SHALL BE COATED WITH ZINC RICH PAINT.



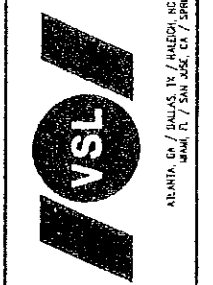
60 OBSTRUCTION (VERTICAL)

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
△	8-27-97	RELEASE FOR 1ST STAGE CONST. WALL E ONLY <i>Spe</i>

WASHINGTON CONSTRUCTORS  
 SEP 02 1997  
 RELEASED FOR CONSTRUCTION

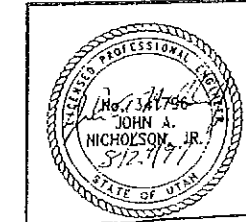
NO	DATE	REVISION	BY

VSL CORPORATION  
 2600 Plaza Place, Suite 200  
 Raleigh, NC 27617  
 Phone: (919) 791-5072  
 Fax: (919) 791-4889



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METRIC



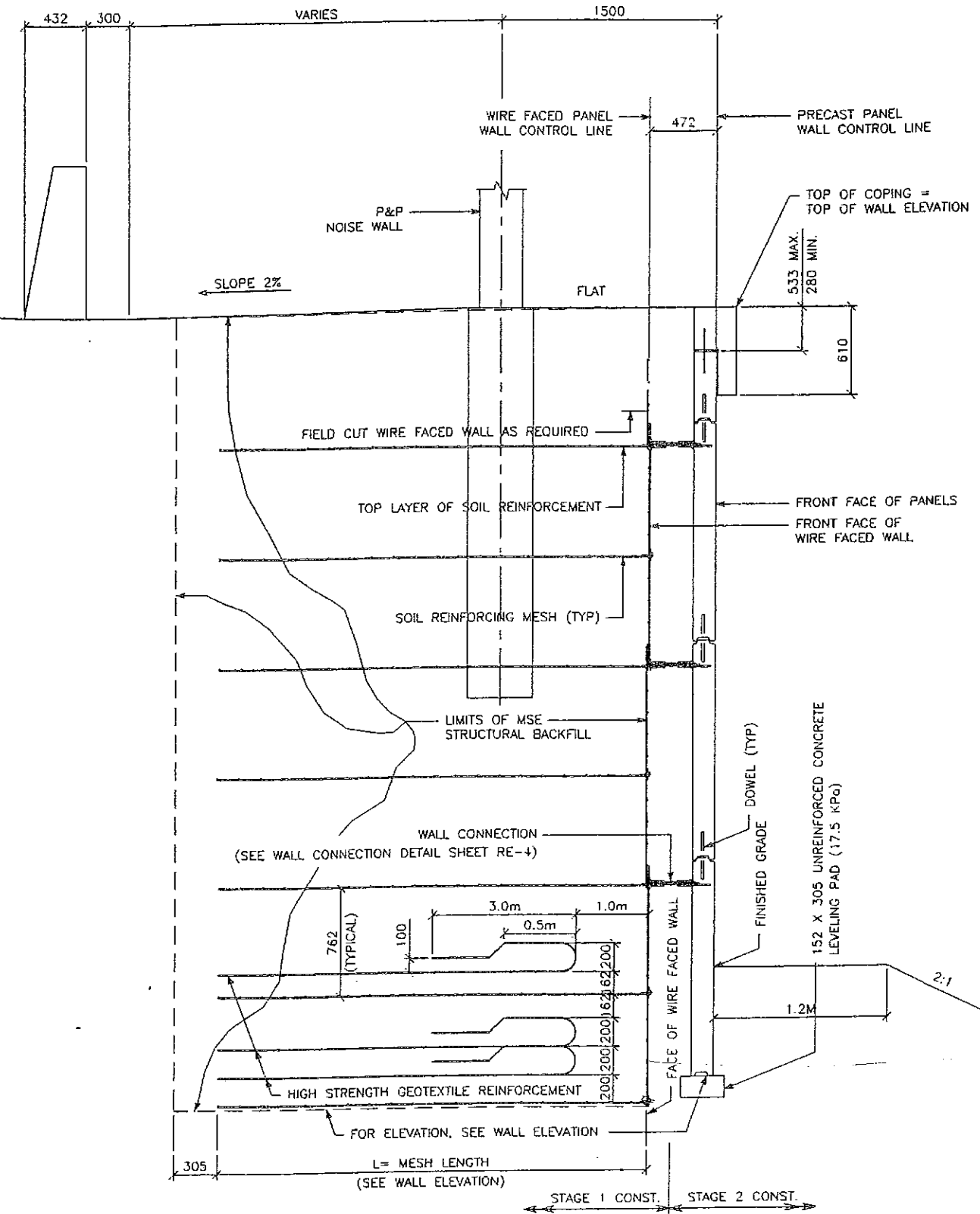
RETAINED EARTH™ WALLS  
 OBSTRUCTION DETAIL  
 600 NORTH / I-15 INTERCHANGE  
 SALT LAKE COUNTY, UTAH  
 UTAH DEPARTMENT OF TRANSP.

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.

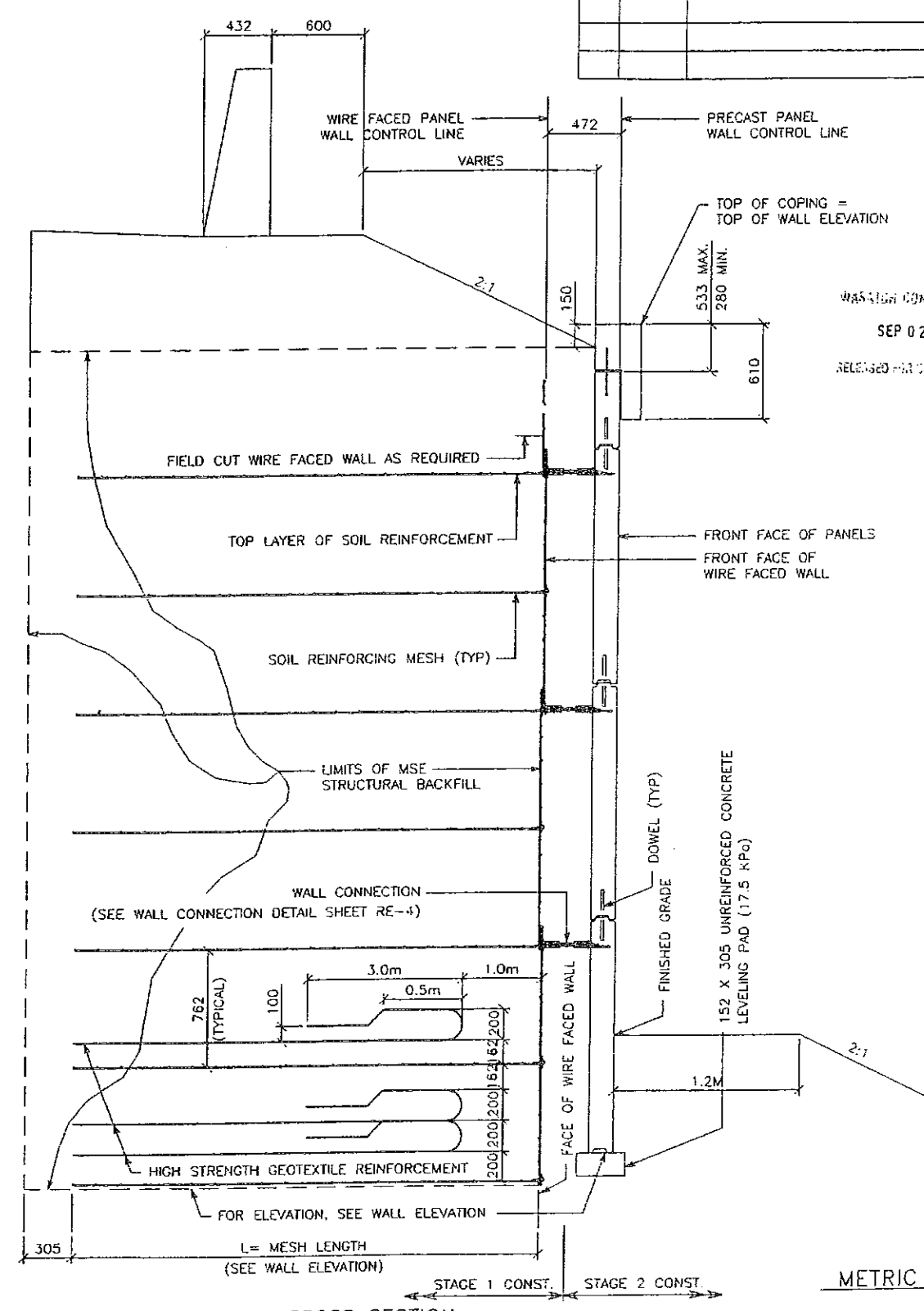
3.32-331-E.9

SCALE:	
JOB NO:	239-0007
	RE 18

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
△	8-27-97	RELEASE FOR 1ST STAGE CONST. WALL E ONLY

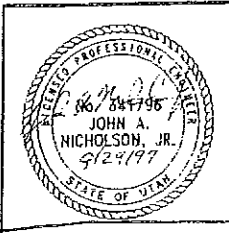


**TYPICAL CROSS SECTION**  
**MSE WALL "E" (STA 1+200.00 TO STA 1+435.613)**  
 SCALE: 1:20 (FULL SIZE)  
 SCALE: 1:40 (HALF SIZE)



**TYPICAL CROSS SECTION**  
**MSE WALL "E" (STA 1+435.613 TO STA 1+490.160)**  
 SCALE: 1:20 (FULL SIZE)  
 SCALE: 1:40 (HALF SIZE)

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

WASATCH CONSTRUCTORS  
 SEP 02 1997  
 RELEASED FOR CONSTRUCTION

REVISION		NO	DATE

DES. DB-13-97  
 URM 18-13-97  
 CHK 18-13-97

VSL CORPORATION  
 2840 Katy Place, Suite 200  
 Raleigh, NC 27617-7812  
 Telephone: (919) 781-8272  
 Fax: (919) 781-8989

ALABAMA, CA / DALLAS, TX / RALEIGH, NC (CORPORATE OFFICE)  
 MIAMI, FL / SPRINGFIELD, VA

**VSL**

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RETAINED EARTH™ WALLS  
 TYPICAL CROSS SECTIONS  
 600 NORTH / I-15 INTERCHANGE  
 SALT LAKE COUNTY, UTAH  
 UTAH DEPARTMENT OF TRANSP.

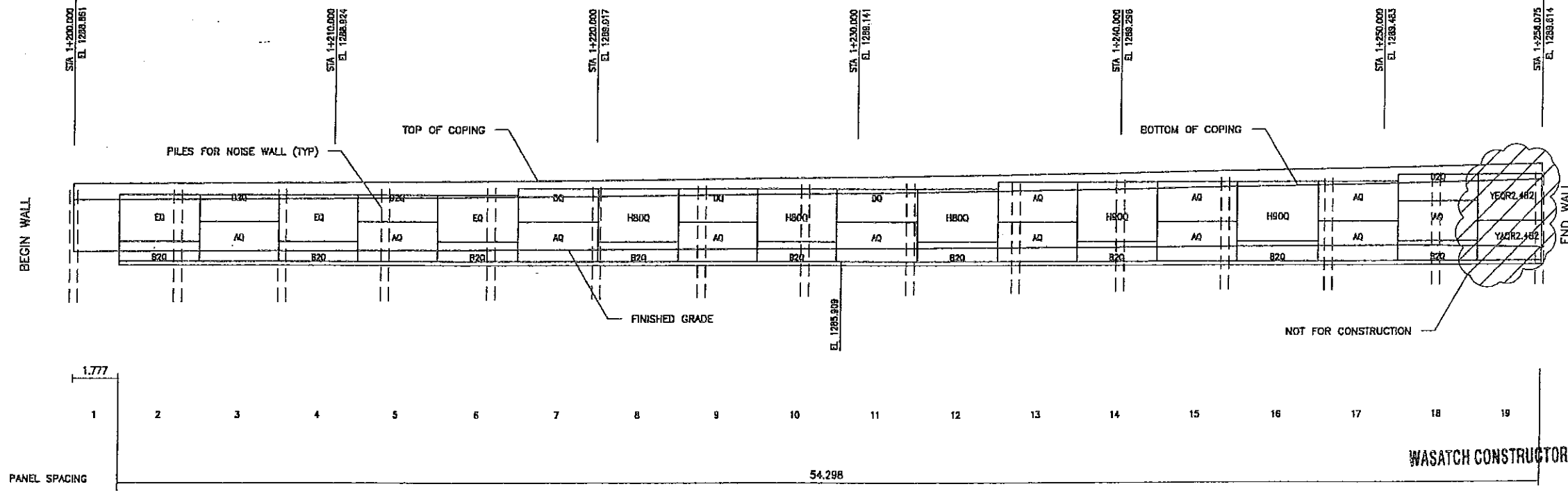
SCALE:  
 JOB NO:  
 239-0007

3.3 2-337-E.10

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
△	11-10-98	RELEASE FOR 2ND STAGE CONST. WALL E ONLY

BEGIN PRECAST WALL R337-E  
 PRECAST WALL STA 1+200.000 =  
 RAMP B STA 1+200.000  
 @ 11.748 RT

END PRECAST WALL R337-E  
 BEGIN GEOFOAM  
 PRECAST WALL STA 1+256.075 =  
 RAMP B STA 1+256.048  
 @ 10.464 RT



PANEL SPACING	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	1.777																		
										54.298									

DES.	DRN.	CHK.	MM	RSW	MM	RETAINED EARTH™	NO.	DATE	REVISION	BY	CHK
09-29-98	09-29-98	09-29-98									

**VSL CORPORATION**  
 2810 Pines Road, Suite 200  
 Raleigh, NC 27617  
 Telephone: (919) 781-6272  
 Fax: (919) 781-1969

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

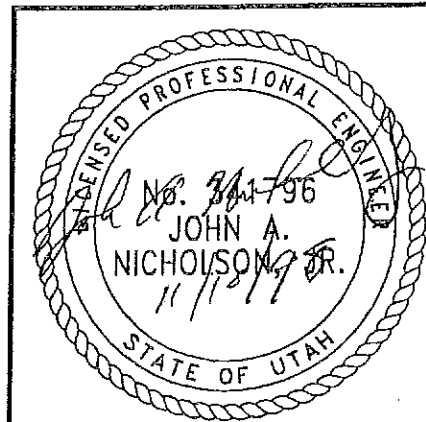
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**WASATCH CONSTRUCTORS**  
 NOV 16 1998  
 RELEASED FOR CONSTRUCTION

**RETAINING WALL "R337-E" - 2ND STAGE: PRECAST WALL**  
 (FRONT FACE SHOWN) SCALE 1:100 (FULL SIZE)  
 (TOTAL SURFACE AREA OF FACING = 1,524.34 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.



RETAINED EARTH™ WALLS
WALL "R337-E" - 2ND STAGE: PRECAST WALL
UTAH I-15 INTERCHANGE
SALT LAKE COUNTY, UTAH
UTAH DEPARTMENT OF TRANSP.
DWG. NO. 3.3R-337-E.13
JOB NO. 239-0007
SHT. NO. RE-10

ANCE (X-UTAH) (MWS)

FINAL 11-10-98

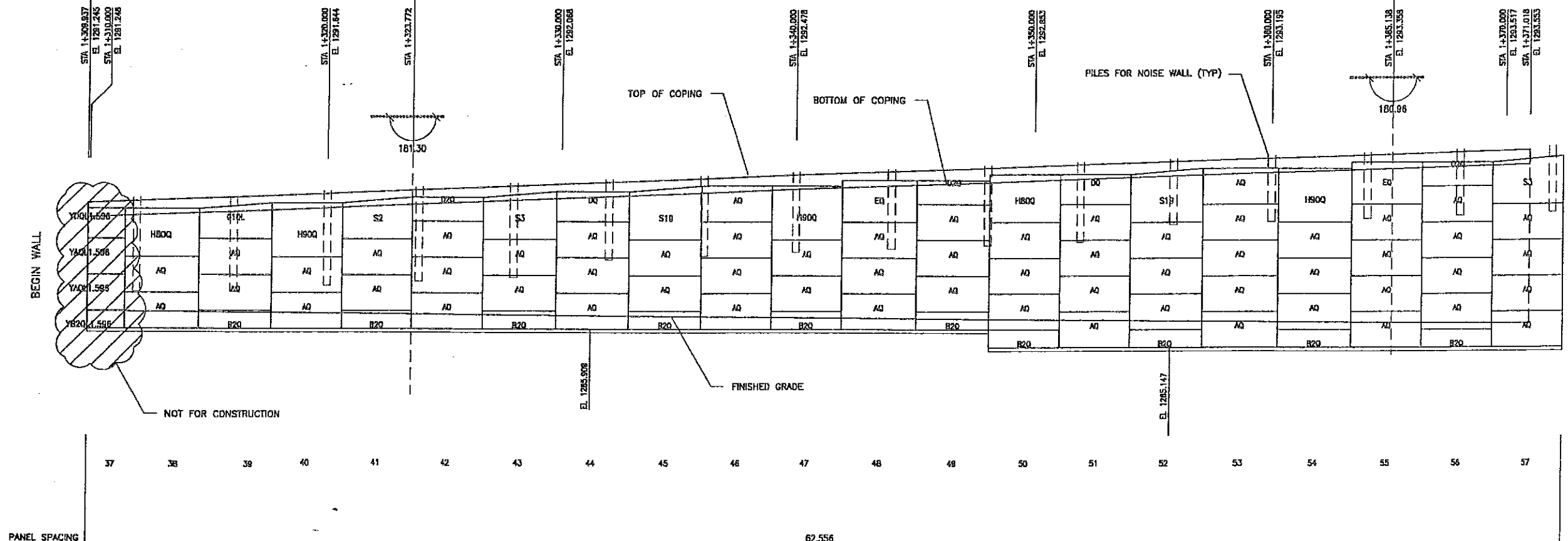
APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
△	11-10-98	RELEASE FOR 2ND STAGE CONST. WALL E ONLY

WASATCH CONSTRUCTORS  
 NOV 16 1998  
 RELEASED FOR CONSTRUCTION

END GEOFOAM  
 BEGIN PRECAST WALL R337-E  
 PRECAST WALL STA 1+309.837 =  
 RAMP B STA 1+309.904  
 @ 9.326 RT

ANGLE POINT A  
 PRECAST WALL STA 1+323.772 =  
 RAMP B STA 1+323.697  
 @ 10.401 RT

ANGLE POINT B  
 PRECAST WALL STA 1+365.138 =  
 RAMP B STA 1+365.000  
 @ 12.674 RT

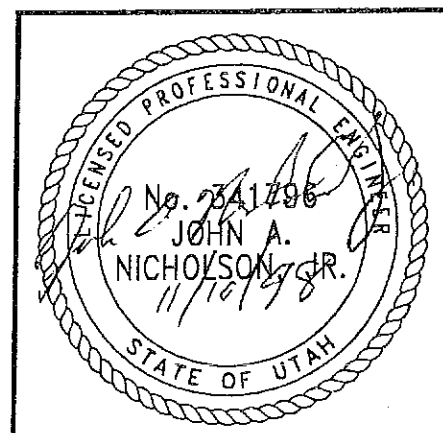



**RETAINING WALL "R337-E" - 2ND STAGE: PRECAST WALL**  
 (FRONT FACE SHOWN)  
 (TOTAL SURFACE AREA OF FACING = 1,524.34 SM)

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.

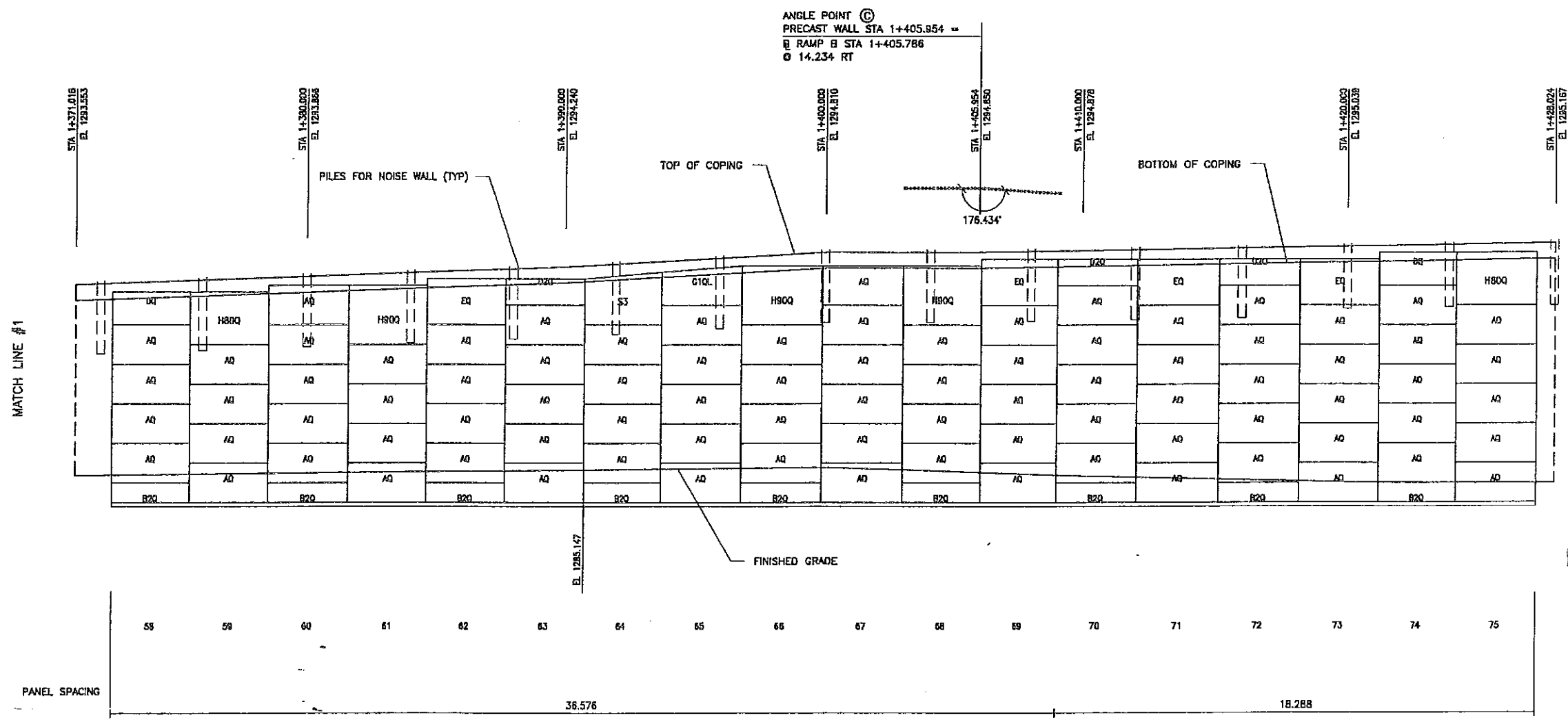


DES.	09-29-98	MM
DRN.	09-29-98	RSW
CHK.	09-29-98	MM
RETAINED EARTH™		
VSL CORPORATION 9840 Plaza Ridge, Suite 200 Raleigh, NC 27617 Telephone: (919) 781-5272 Fax: (919) 781-4859		
ALABAMA, GA. / CALIF. / FL. / ILLINOIS, IN. / IOWA, KY. / MICHIGAN, NC. / OHIO, PA. / SOUTH CAROLINA, VA. / WISCONSIN, WY.		
		
RETAINED EARTH™ WALLS WALL "R337-E" - 2ND STAGE: PRECAST WALL UTAH I-15 INTERCHANGE SALT LAKE COUNTY, UTAH UTAH DEPARTMENT OF TRANSP.		
DWG. NO.	3,3R-337-E.14	
JOB NO.	239-0007	
SHT. NO.	RE-11	

VENICE (X-UTAH.DWG)

FINAL T 11-10-98

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
▲	11-10-98	RELEASE FOR 2ND STAGE CONST. WALL E ONLY



DES.	DRN.	CHK.	RETAINED EARTH™	NO.	DATE	BY	CHK
MM	MM	MM	MM				
RSW	RSW	RSW	RSW				
MM	MM	MM	MM				

VSL CORPORATION  
 2800 Plaza Place, Suite 200  
 Raleigh, NC 27617  
 Telephone: (919) 781-6272  
 Fax: (919) 781-6865

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

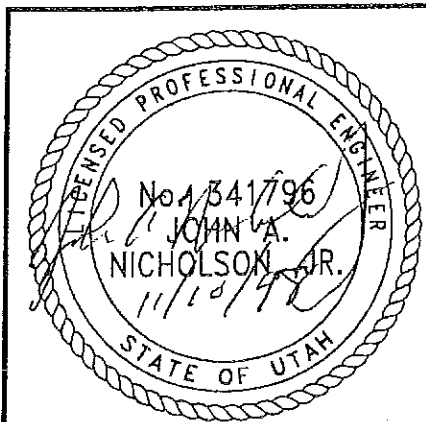
WASATCH CONSTRUCTORS  
 NOV 16 1998  
 RELEASED FOR CONSTRUCTION

**RETAINING WALL "R337-E" - 2ND STAGE: PRECAST WALL**  
 (FRONT FACE SHOWN)  
 (TOTAL SURFACE AREA OF FACING = 1,524.34 SM)

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

METRIC

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RETAINED EARTH™ WALLS  
 WALL "R337-E" - 2ND STAGE: PRECAST WALL  
 UTAH I-15 INTERCHANGE  
 SALT LAKE COUNTY, UTAH  
 UTAH DEPARTMENT OF TRANSP.

DWG. NO. 3.3R-337-E.15  
 JOB NO. 239-0007  
 SHL. NO. RE-12

ANCE (X-UTAH.DWG)

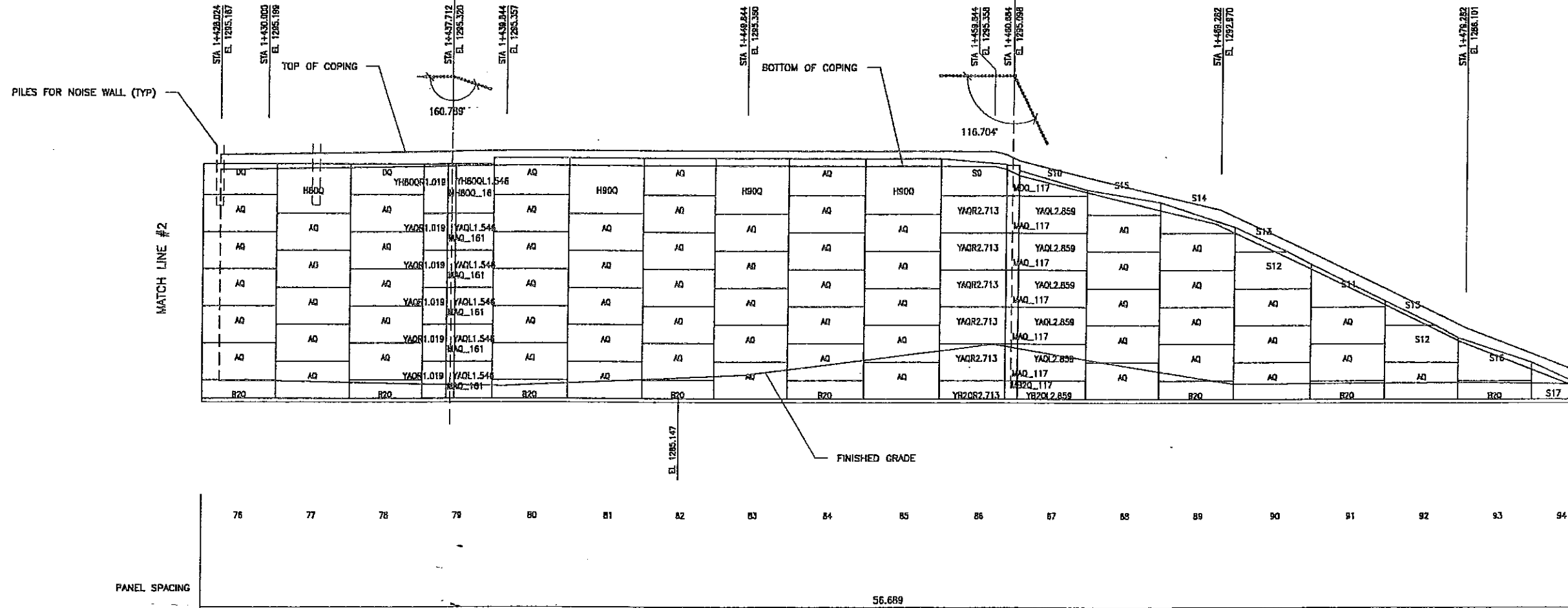
FINAL 11-10-98

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	11-10-98	RELEASE FOR 2ND STAGE CONST. WALL E ONLY

ANGLE POINT **D**  
 PRECAST WALL STA 1+437.712 =  
 RAMP B1 STA 1+440.889  
 @ 9.258 RT

ANGLE POINT **E**  
 PRECAST WALL STA 1+460.884 =  
 RAMP B1 STA 1+466.027  
 @ 9.258 RT

END PRECAST WALL R-337 E  
 PRECAST WALL STA 1+484.076 =  
 RAMP B1 STA 1+483.014  
 @ 27.980 RT



WASATCH CONSTRUCTORS  
 NOV 16 1998  
 RELEASED FOR CONSTRUCTION

DES.	MM	RSW	MM	RETAINED EARTH™
05-25-98	MM	RSW	MM	VSL
08-29-98	MM	RSW	MM	VSL
08-29-98	MM	RSW	MM	VSL

VSL CORPORATION  
 2840 Plaza Place, Suite 200  
 Raleigh, NC 27612  
 Telephone: (919) 781-8272  
 Fax: (919) 781-6589

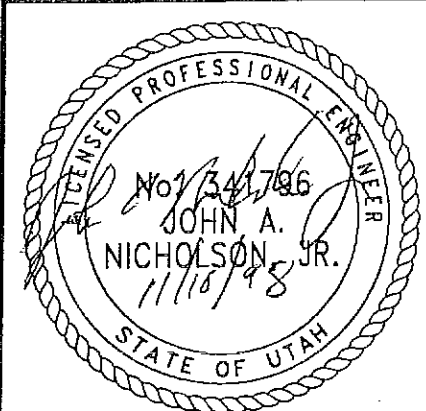
ATLANTA, GA / DALLAS, TX / RALEIGH, NC (CORPORATE OFFICE)  
 MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA

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**RETAINING WALL "R337-E" - 2ND STAGE: PRECAST WALL**  
 (FRONT FACE SHOWN) SCALE 1:100 (FULL SIZE)  
 (TOTAL SURFACE AREA OF FACING = 1,524.34 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.



RETAINED EARTH™ WALLS
WALL "R337-E" - 2ND STAGE: PRECAST WALL
UTAH I-15 INTERCHANGE
SALT LAKE COUNTY, UTAH
UTAH DEPARTMENT OF TRANSP.
DWG. NO. 3.3R-337-E.16
JOB NO. 239-0007
SHT. NO. RE-13



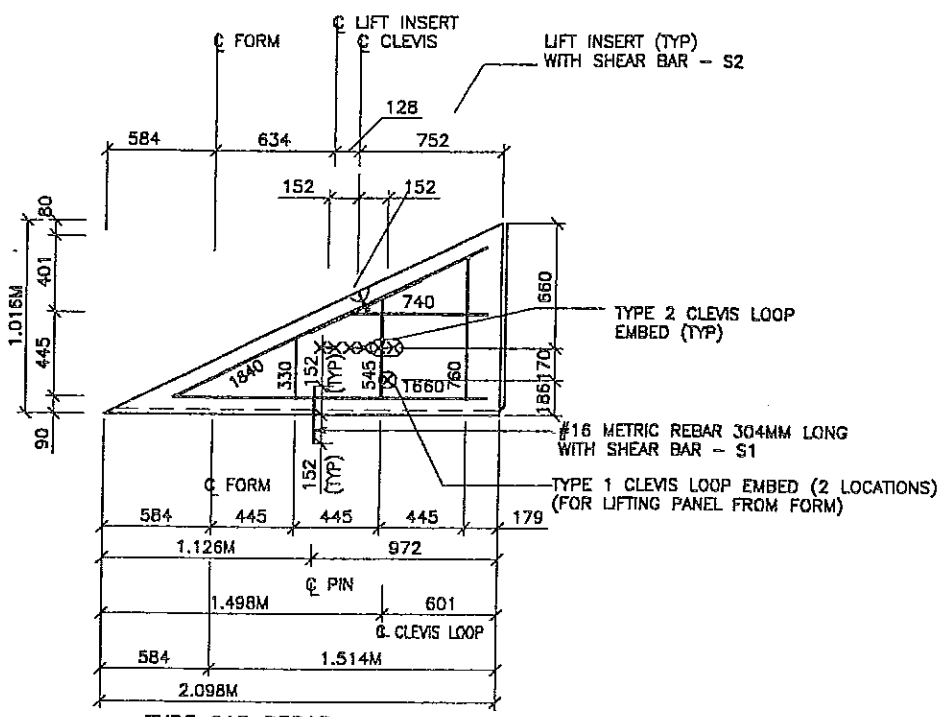


ENCE (X-UTAH.DWG)

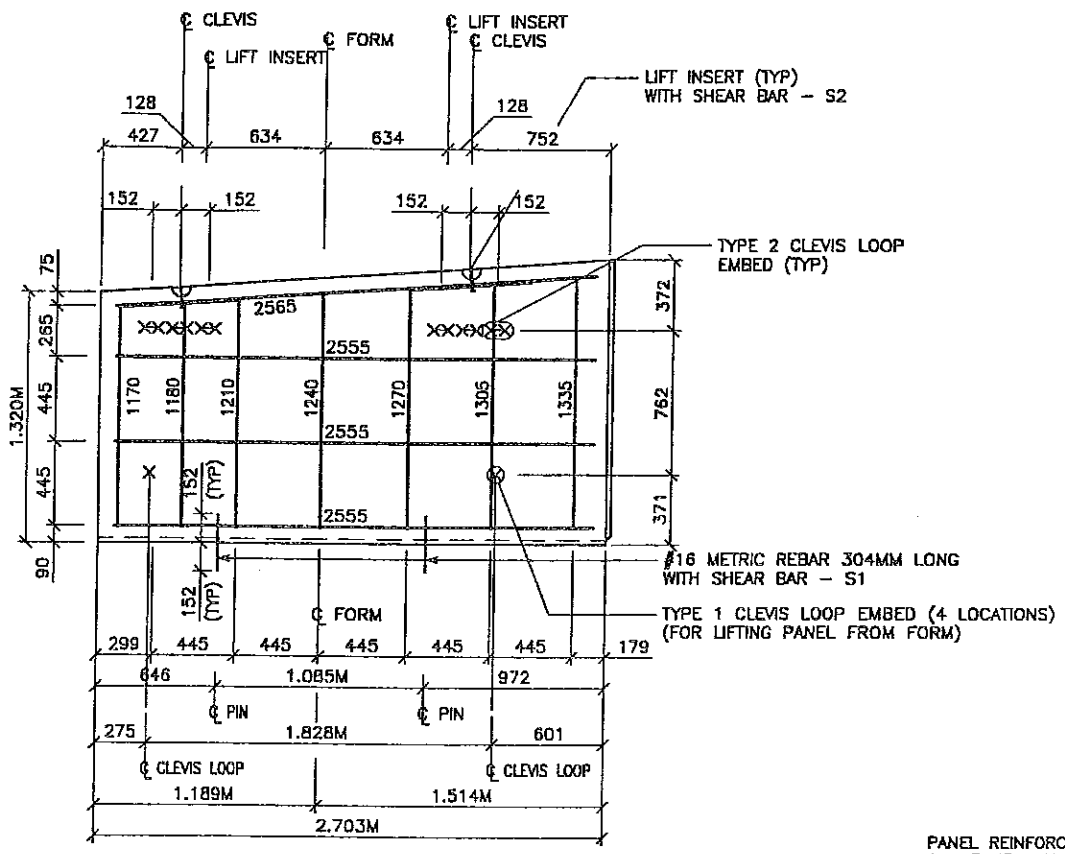
FINA JT 11-10-98

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	11-10-98	RELEASE FOR 2ND STAGE CONST. WALL E ONLY

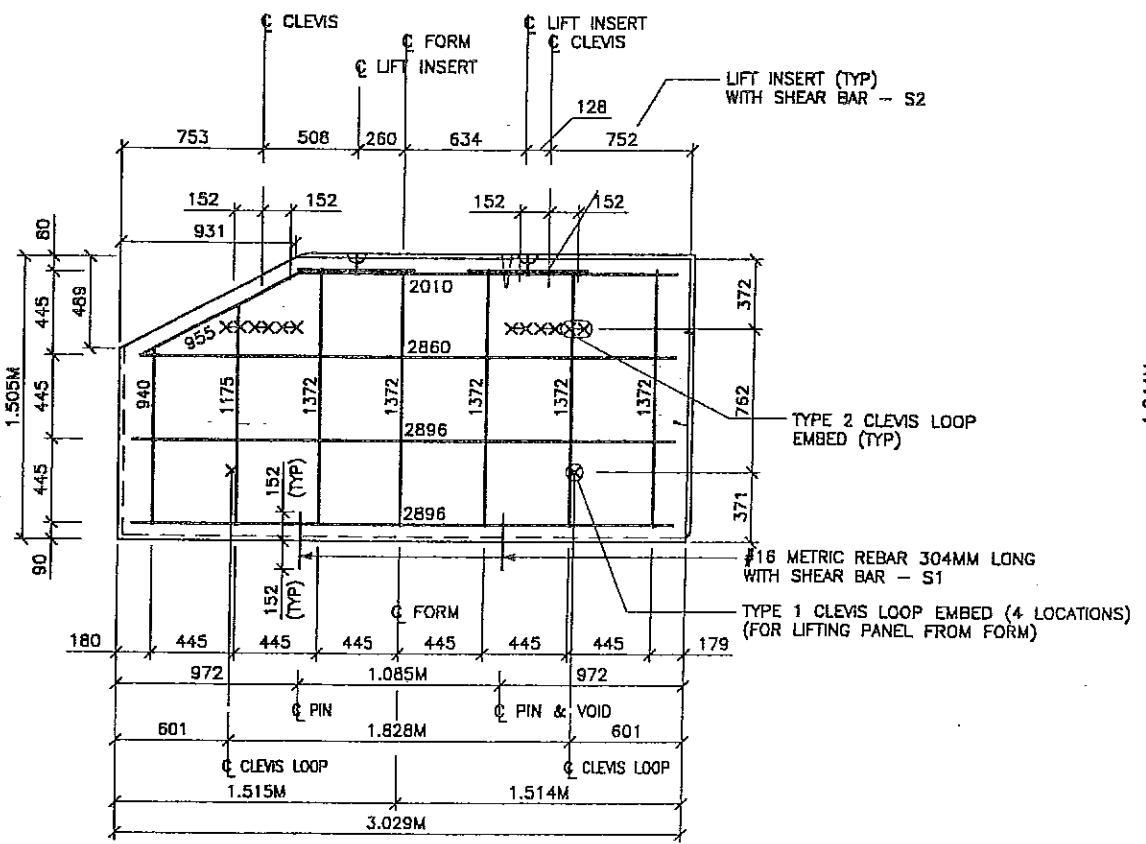
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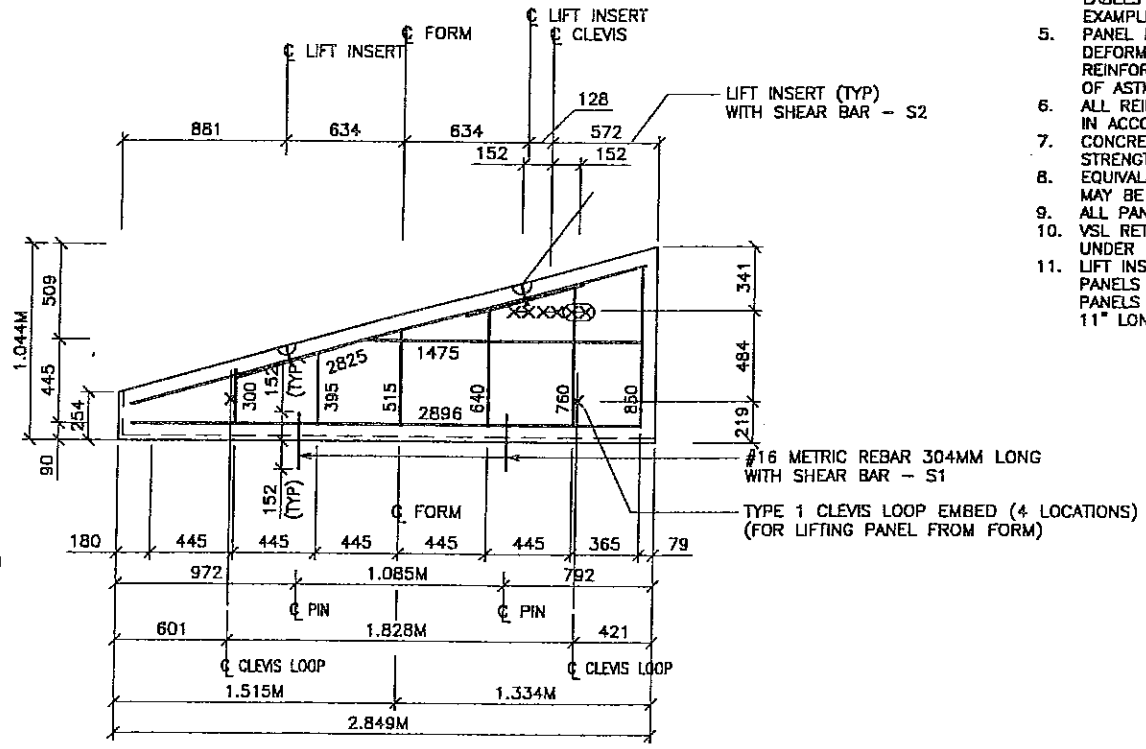
**TYPE S13 REBAR**  
(AREA = 1.07 SQ.M)



**TYPE S9 REBAR**  
(AREA = 3.83 SQ.M)



**TYPE S12 REBAR**  
(AREA = 4.40 SQ.M)

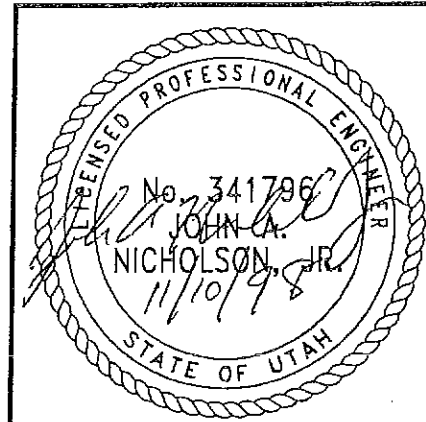


**TYPE S10 REBAR**  
(AREA = 1.86 SQ.M)

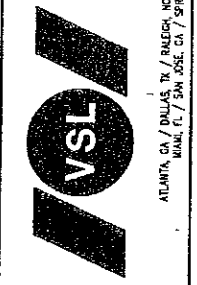
- PANEL REINFORCEMENT NOTES:**
1. PANELS ARE SHOWN BACK FACE.
  2. HORIZONTAL REINFORCEMENT SHALL HAVE 50 mm MINIMUM COVER TO THE BACK FACE.
  3. ALL REINFORCEMENT SHALL HAVE 50 mm MINIMUM COVER TO THE SIDES.
  4. ALL REINFORCING BARS ARE #13 METRIC. LABELS ON EACH BAR INDICATE LENGTH. EXAMPLE: 1345 IS A #13 BAR 1345 mm LONG.
  5. PANEL REINFORCEMENT BARS SHALL BE DEFORMED BILLET STEEL BARS FOR CONCRETE REINFORCEMENT CONFORMING TO THE SPECIFICATIONS OF ASTM DESIGNATION A615, GRADE 60.
  6. ALL REINFORCING STEEL TO BE GALVANIZED IN ACCORDANCE WITH ASTM 767 CLASS 1.
  7. CONCRETE PANELS TO HAVE 28 DAY COMPRESSIVE STRENGTH OF 27,500 KPa.
  8. EQUIVALENT WELDED WIRE FABRIC MAY BE USED.
  9. ALL PANELS TO USE 9.5mm WIDE CLEVIS LOOPS.
  10. VSL RETAINED EARTH™ IS PROTECTED UNDER PATENT 4,725,170.
  11. 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.

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.



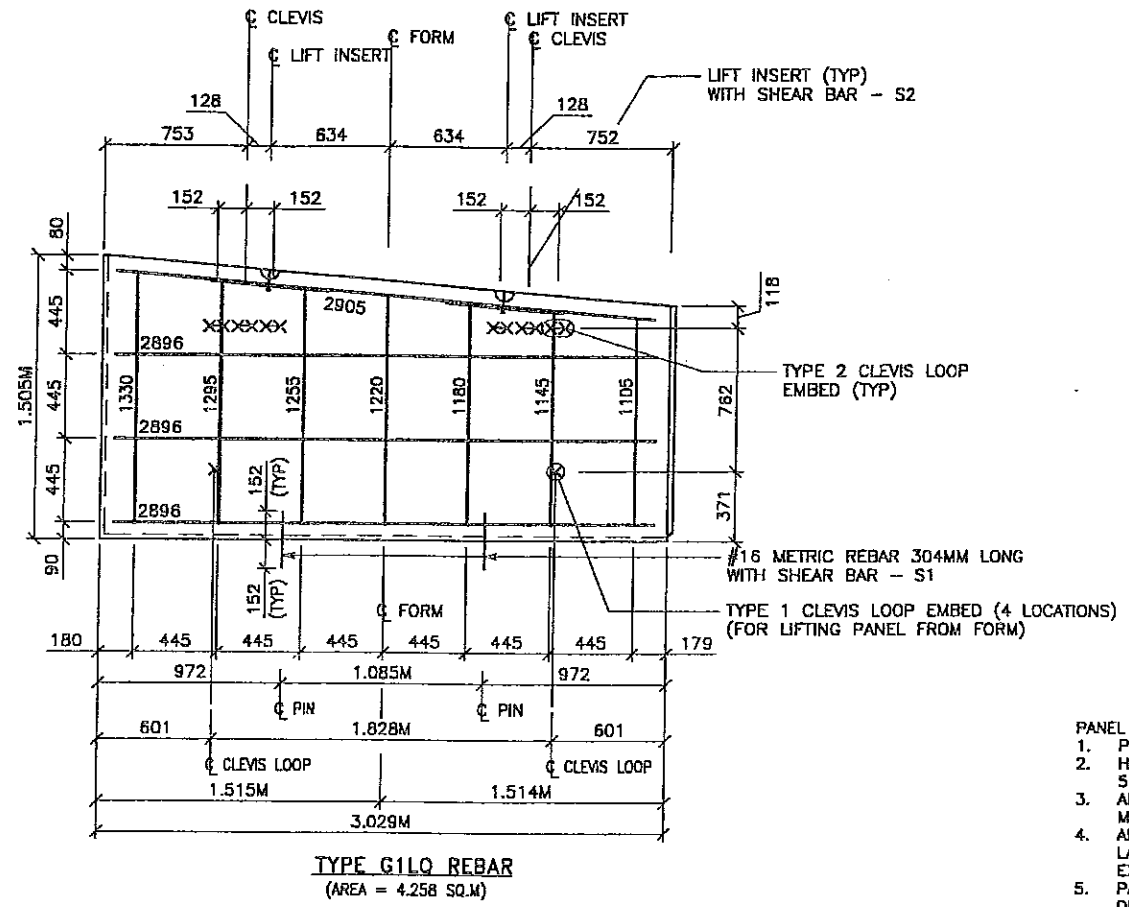
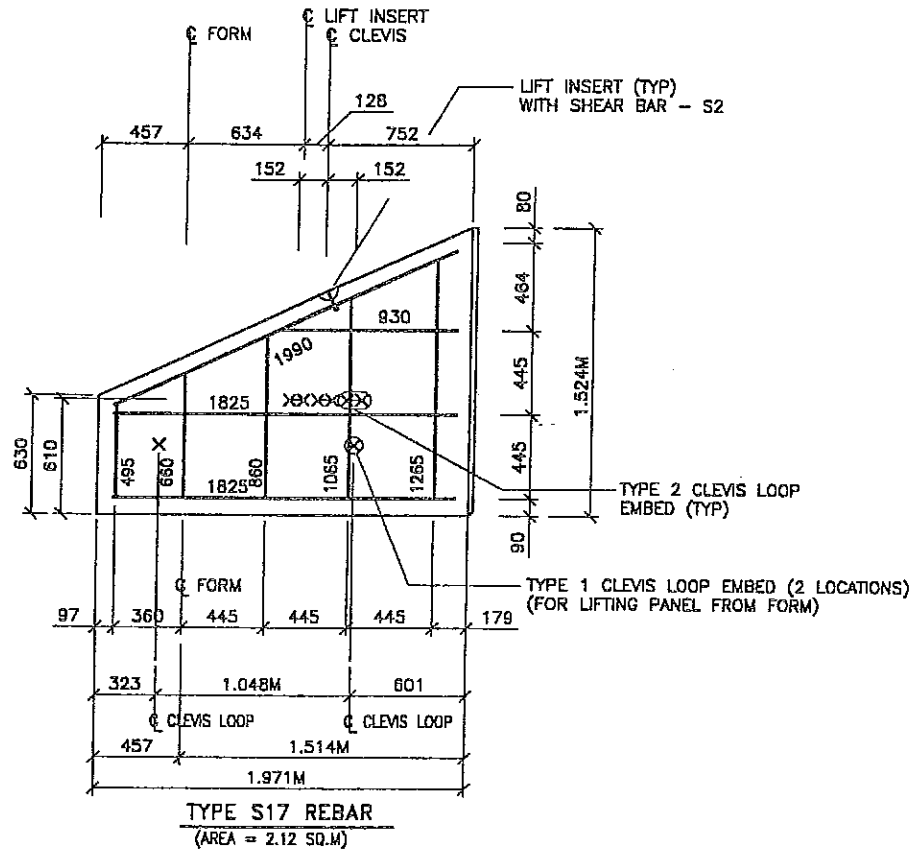
VSL CORPORATION  
2810 Plaza Place, Suite 200  
Raleigh, NC 27617  
Telephone: (919) 781-6272  
Fax: (919) 781-6888



RETAINED EARTH™ WALLS  
WALL "E"  
2-STAGE PANEL REINFORCEMENT  
600 NORTH / I-15 INTERCHANGE  
SALT LAKE COUNTY, UTAH  
UTAH DEPARTMENT OF TRANSP.

DWG. NO.	3.3R-337-E.1B
JOB NO.	239-0007
SHEET NO.	RE-15

FINISH (X-UTAH) (DING)



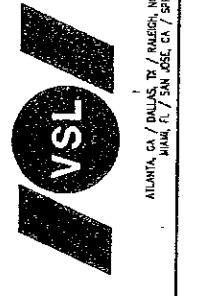
APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	11-10-98	RELEASE FOR 2ND STAGE CONST. WALL E ONLY

NO.	DATE	REVISION	CHK

WASATCH CONSTRUCTORS  
NOV 16 1998  
RELEASED 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 80.
  - ALL REINFORCEMENT SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM 767 CLASS 1.
  - 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 $\phi$  WIDE 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.

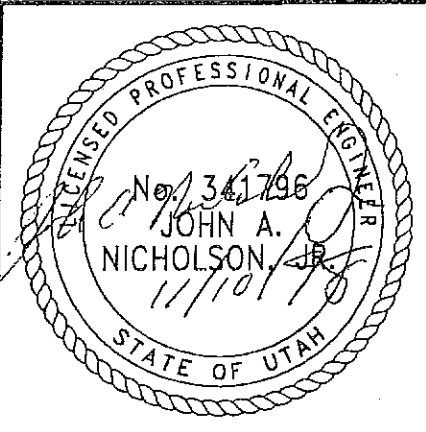
VSL CORPORATION  
2700 Park Plaza, Suite 200  
Raleigh, NC 27615  
Telephone: (919) 781-8272  
Fax: (919) 781-6659



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RETAINED EARTH™ WALLS  
2-STAGE PANEL REINFORCEMENT  
600 NORTH / I-15 INTERCHANGE  
SALT LAKE COUNTY, UTAH  
UTAH DEPARTMENT OF TRANSP.

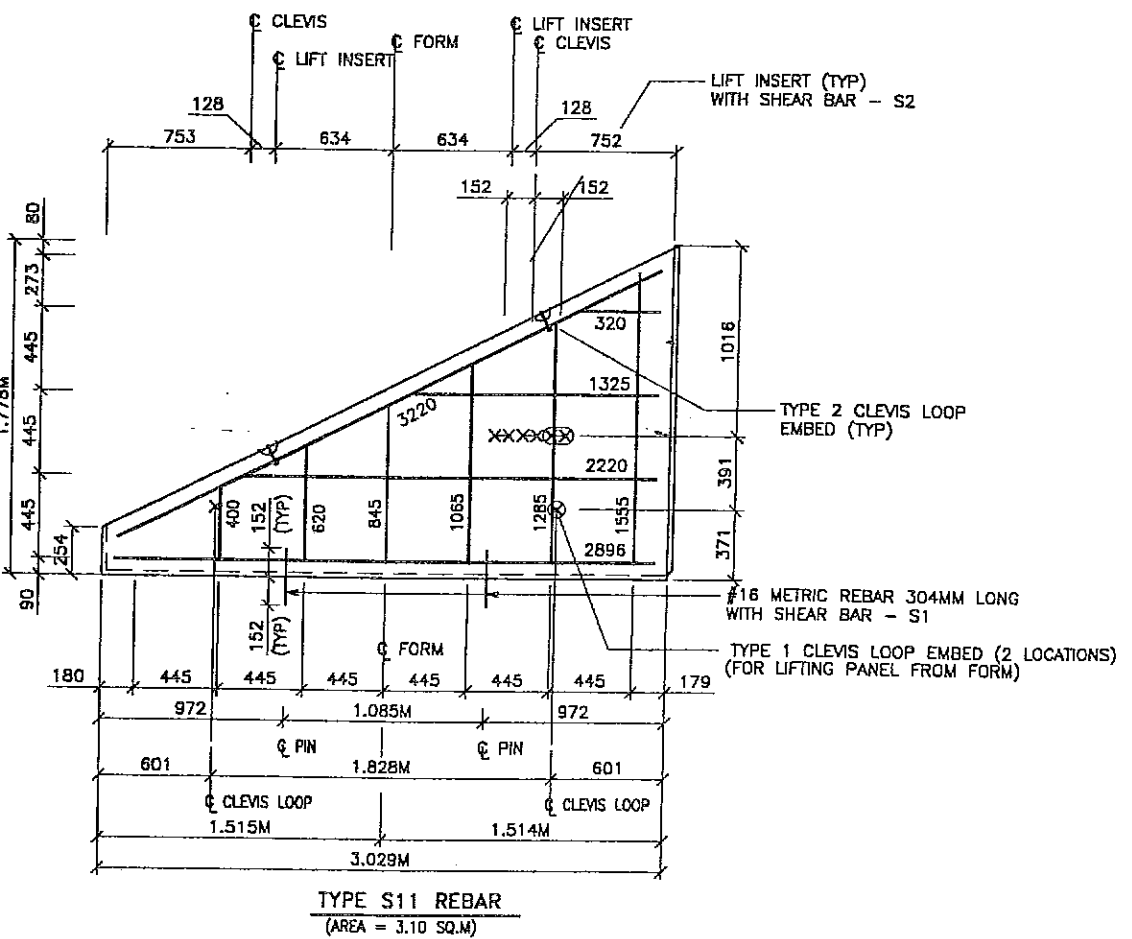
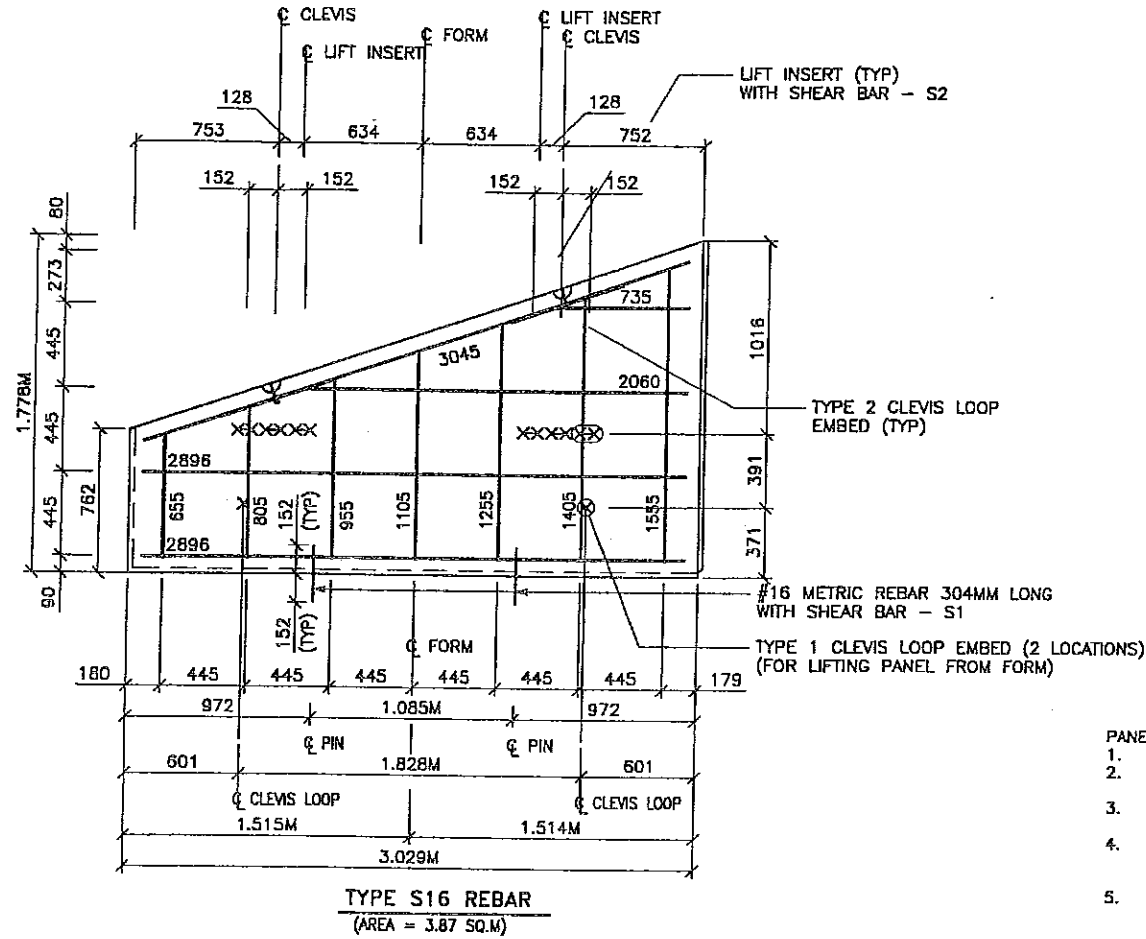
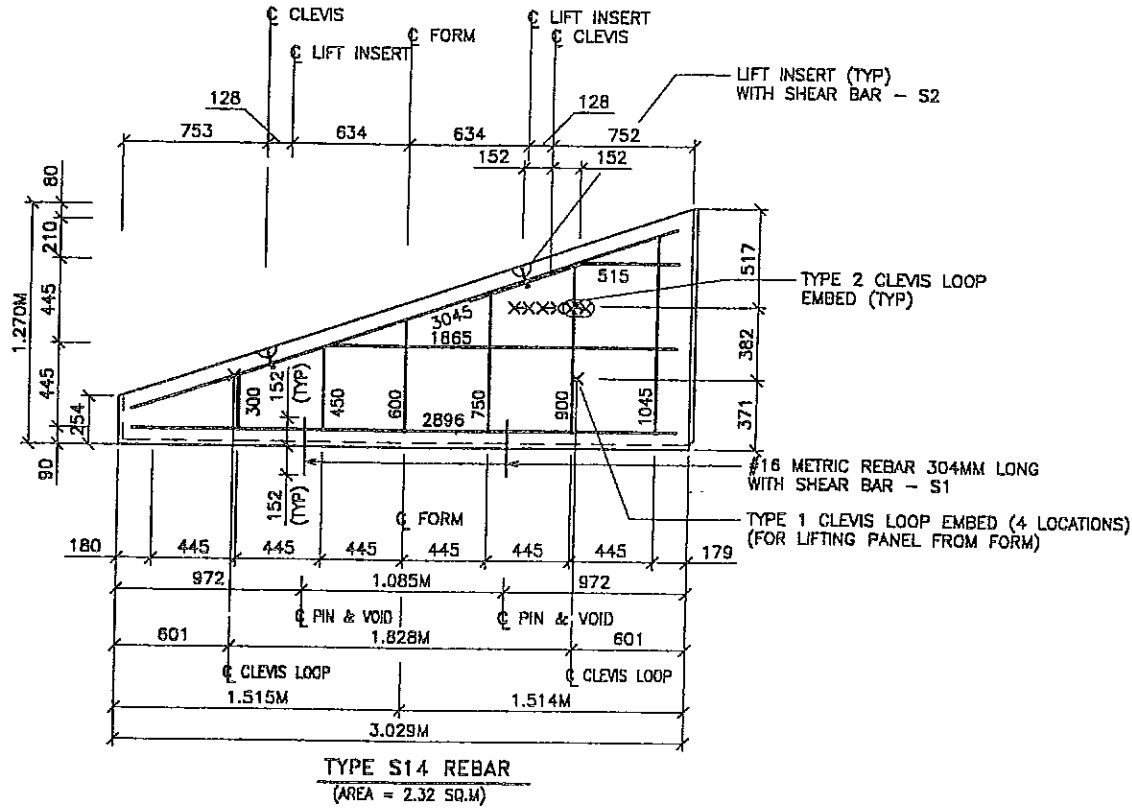
OWG. NO.	3.3R-337-E.19
JOB NO.	239-0007
SHT. NO.	RE-16



METRIC

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FINAL 11-10-98



APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	11-10-98	RELEASE FOR 2ND STAGE CONST. WALL E ONLY

WASATCH CONSTRUCTORS  
 NOV 16 1998  
 RELEASED FOR CONSTRUCTION

- PANEL REINFORCEMENT NOTES:
1. PANELS ARE SHOWN BACK FACE.
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  5. PANEL REINFORCEMENT BARS SHALL BE DEFORMED BILLET STEEL BARS FOR CONCRETE REINFORCEMENT CONFORMING TO THE SPECIFICATIONS OF ASTM DESIGNATION A615, GRADE 60.
  6. ALL REINFORCING STEEL TO BE GALVANIZED IN ACCORDANCE WITH ASTM 767 CLASS I.
  7. CONCRETE PANELS TO HAVE 28 DAY COMPRESSIVE STRENGTH OF 27,500 KPa.
  8. EQUIVALENT WELDED WIRE FABRIC MAY BE USED.
  9. ALL PANELS TO USE 9.5mm WIDE CLEVIS LOOPS.
  10. VSL RETAINED EARTH™ IS PROTECTED UNDER PATENT 4,725,170.
  11. 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.

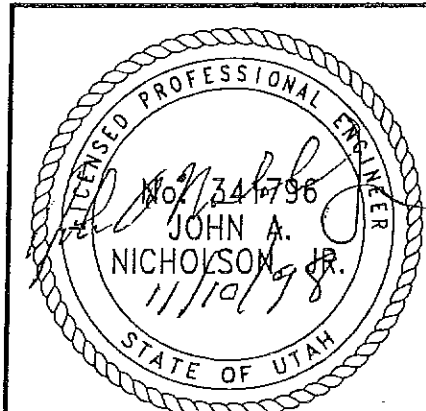
NO.	DATE	REVISION	BY	CHK

VSL CORPORATION  
 7840 Plaza Place, Suite 200  
 Raleigh, NC 27617 761-6272  
 Telephone: (919) 761-6272  
 Fax: (919) 761-6869

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

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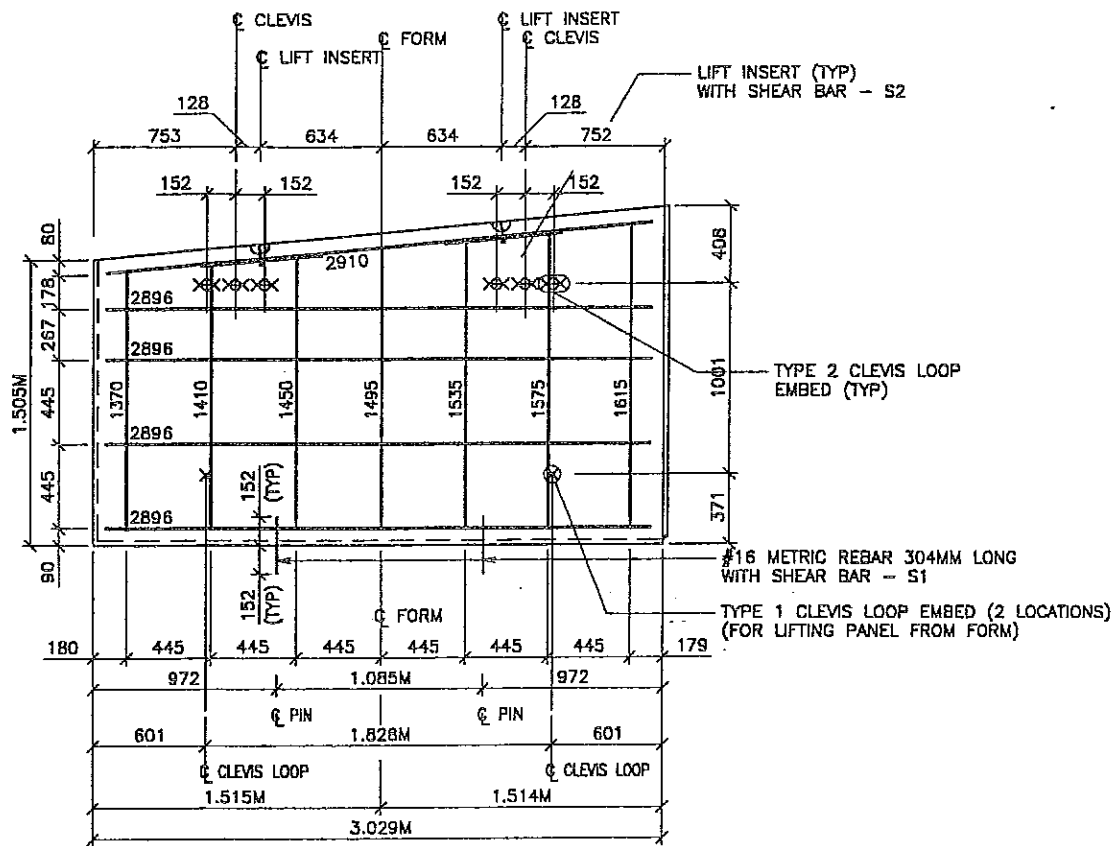
RETAINED EARTH™ WALLS  
 WALL REINFORCEMENT  
 2-STAGE PANEL REINFORCEMENT  
 600 NORTH / I-15 INTERCHANGE  
 SALT LAKE COUNTY, UTAH  
 UTAH DEPARTMENT OF TRANSP.



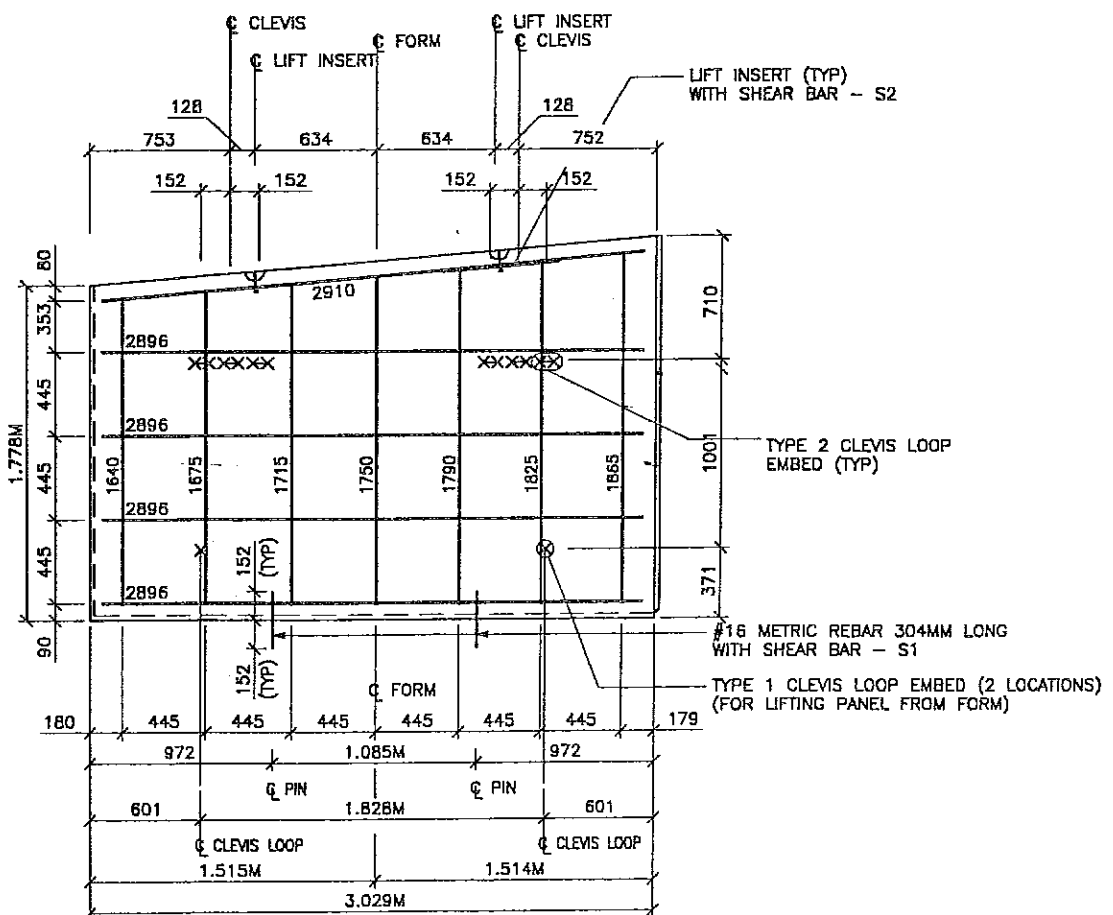
CERTIFIED FOR INTERNAL STABILITY OF RETAINED EARTH™ STRUCTURES ONLY. EXTERNAL STABILITY, INCLUDING BUT NOT LIMITED TO FOUNDATION AND SLOPE STABILITY, IS THE RESPONSIBILITY OF THE OWNER. DESIGN IS BASED ON THE ASSUMPTION THAT THE MATERIAL WITHIN THE RETAINED EARTH™ MASS, METHODS OF CONSTRUCTION, AND QUALITY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

DWG. NO.	3.3R-337-E.20
JOB NO.	239-0007
SH. NO.	RE-17

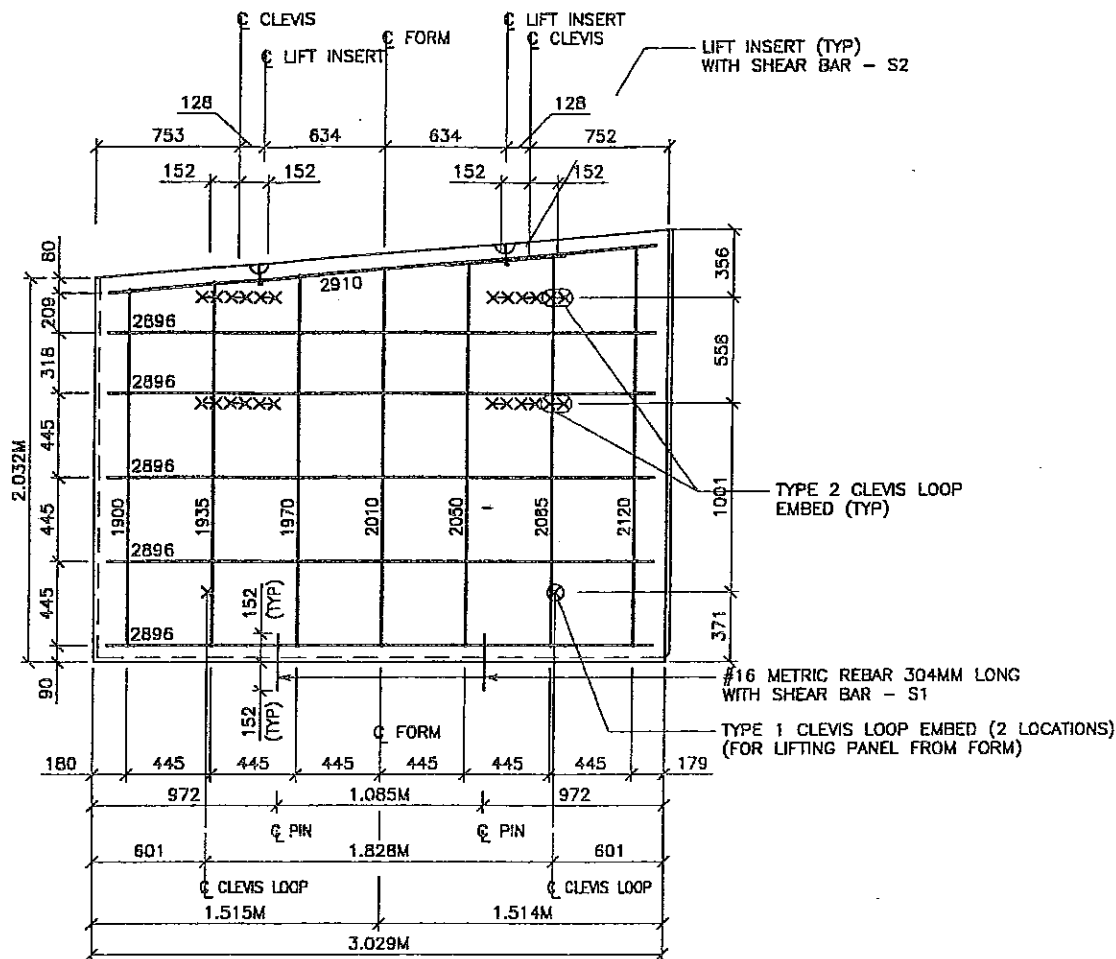
RENCE (X-JT-AH.DWG)



TYPE S2 REBAR  
(AREA = 5.419 SQ.M)



TYPE S3 REBAR  
(AREA = 6.194 SQ.M)



TYPE S19 REBAR  
(AREA = 6.968 SQ.M)

PANEL REINFORCEMENT NOTES:

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

METRIC

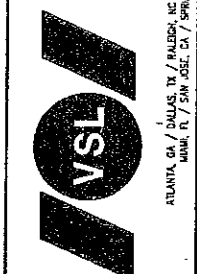
CERTIFIED FOR INTERNAL STABILITY OF RETAINED EARTH™ STRUCTURES ONLY. EXTERNAL STABILITY, INCLUDING BUT NOT LIMITED TO FOUNDATION AND SLOPE STABILITY, IS THE RESPONSIBILITY OF THE OWNER. DESIGN IS BASED ON THE ASSUMPTION THAT THE MATERIAL WITHIN THE RETAINED EARTH™ MASS, METHODS OF CONSTRUCTION, AND QUALITY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

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
△	11-10-98	RELEASE FOR 2ND STAGE CONST. WALL E ONLY

NO.	DATE	REVISION

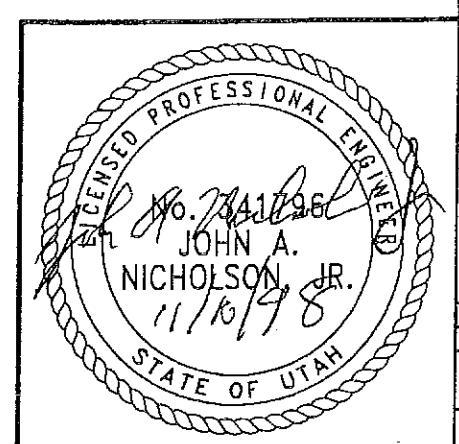
WASATCH CONSTRUCTORS  
NOV 16 1998  
RELEASED FOR CONSTRUCTION

VSL CORPORATION  
2840 Plaza Place, Suite 200  
Raleigh, NC 27612  
Telephone: (919) 781-6772  
Fax: (919) 781-6788



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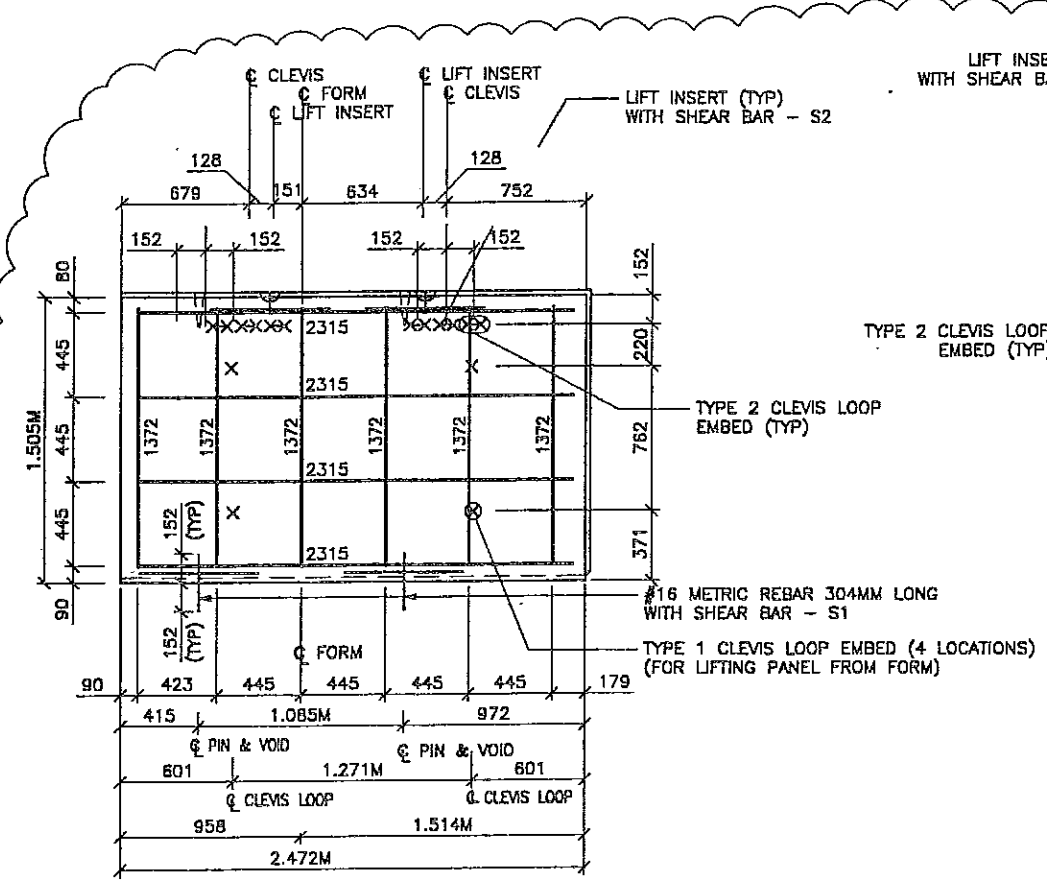
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WALL "E"  
2-STAGE PANEL REINFORCEMENT  
600 NORTH / I-15 INTERCHANGE  
SALT LAKE COUNTY, UTAH  
UTAH DEPARTMENT OF TRANSP.



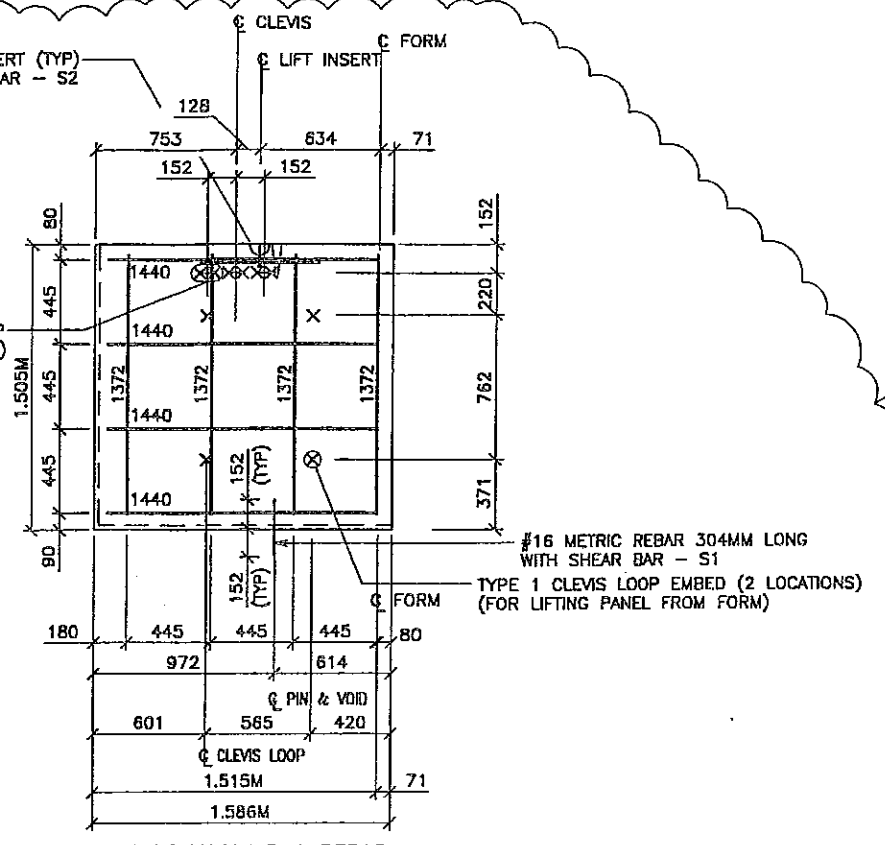
DWG. NO.	3.3R-337-E.21
JOB NO.	239-0007
SHEET NO.	RE-18

FINAL JT 11-10-98

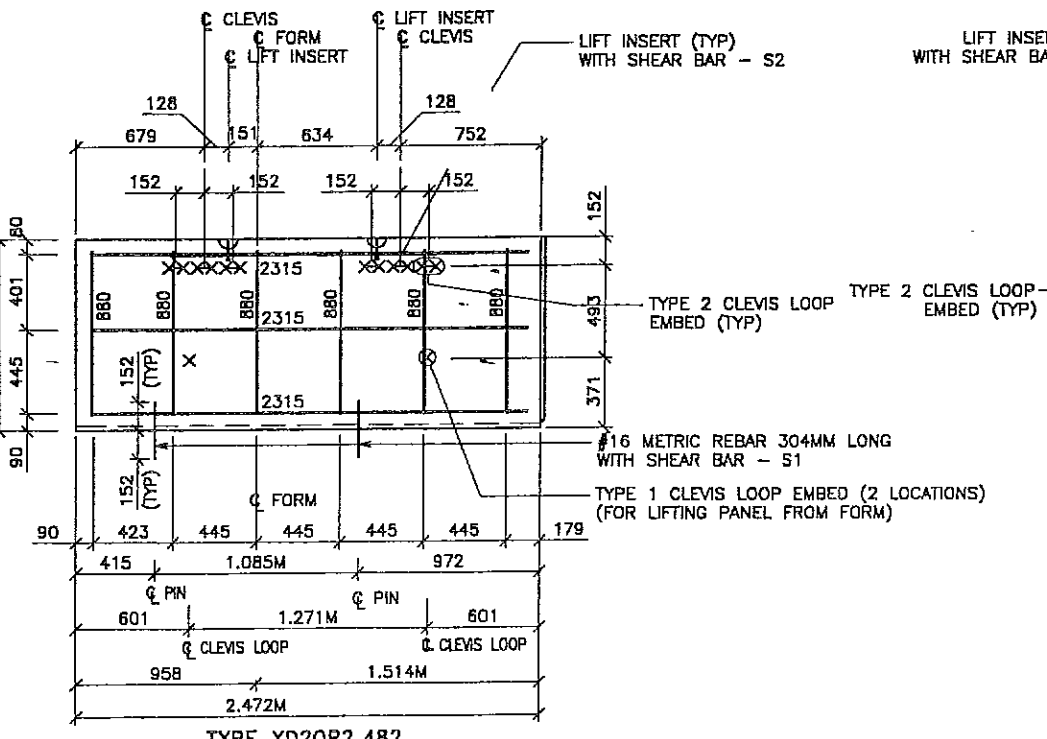
APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
△	9-29-98	RELEASE FOR 2ND STAGE CONST. WALL E ONLY



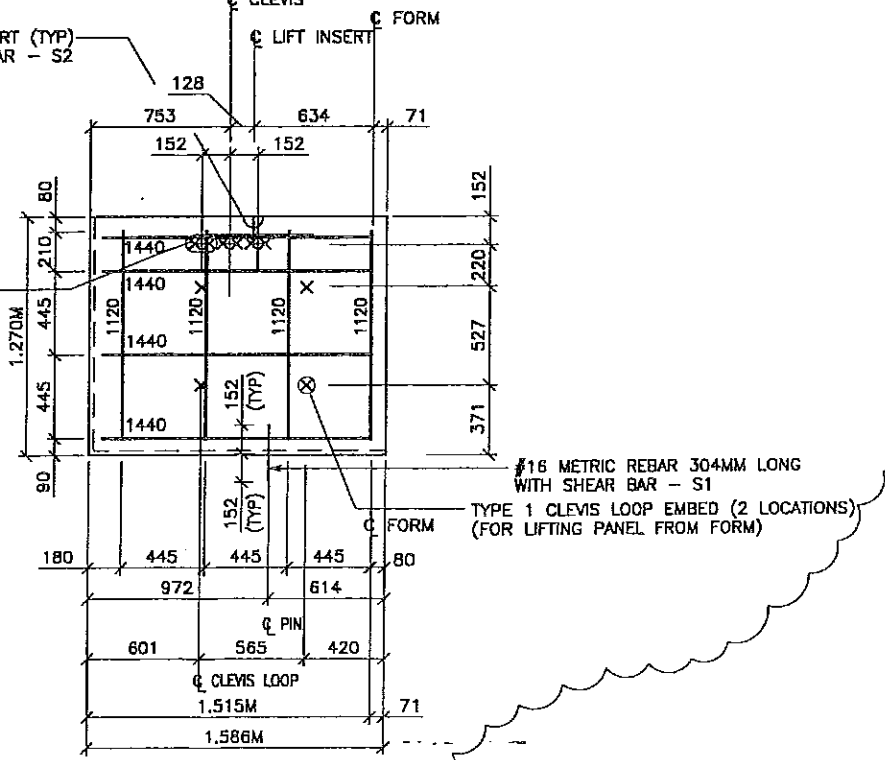
**TYPE YAQR2.482**  
(AREA = 3.077 SQ.M)



**TYPE YAQL1.596 REBAR**  
(AREA = 5.419 SQ.M)



**TYPE YDQR2.482**  
(AREA = 3.077 SQ.M)



**TYPE YDQL1.596 REBAR**  
(AREA = 5.419 SQ.M)

NOT FOR CONSTRUCTION

WASATCH CONSTRUCTORS  
NOV 15 1998  
RELEASED FOR CONSTRUCTION

REVISION		DATE	BY	CHK

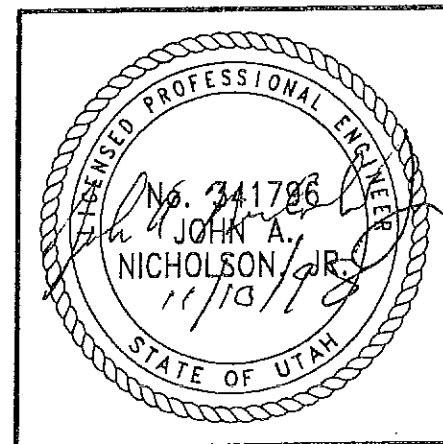
DES.	MM	MM	MM
DRN.	RSW	RSW	RSW
CHK.	MM	MM	MM

RETAINED EARTH™

VSL CORPORATION  
2840 Ross Place, Suite 200  
Raleigh, NC 27612  
Telephone: (919) 791-8272  
Fax: (919) 791-8869

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MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA

RETAINED EARTH™ WALLS  
2-STAGE WALL REINFORCEMENT  
UTAH I-15 INTERCHANGE  
SALT LAKE COUNTY, UTAH  
UTAH DEPARTMENT OF TRANSP.



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METRIC

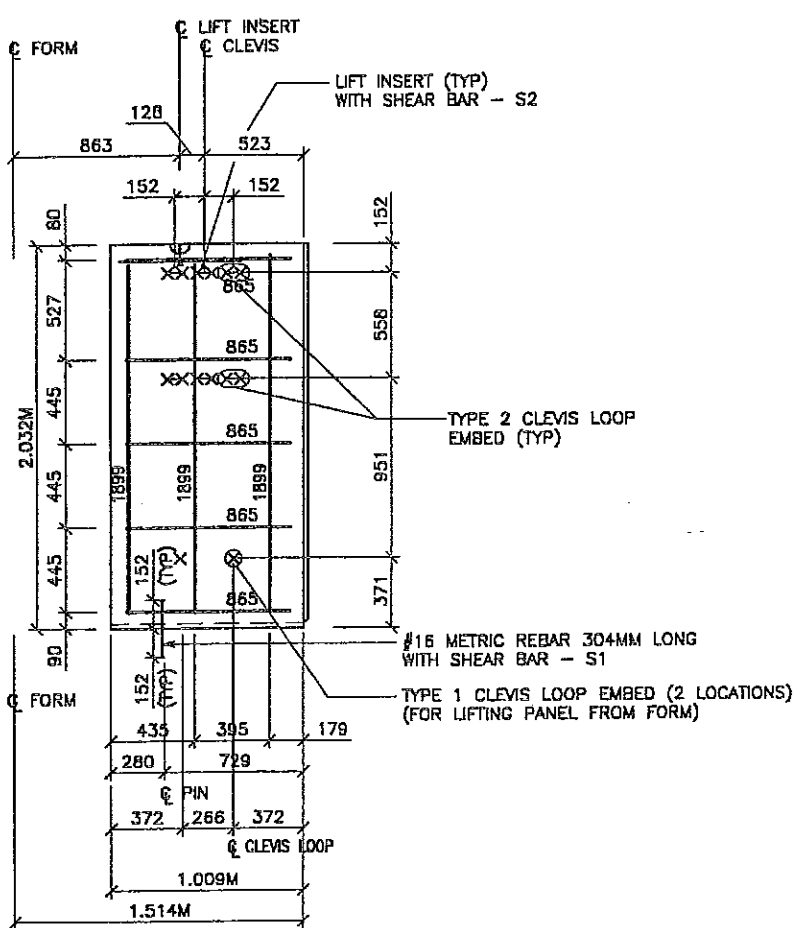
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JOB NO.	239-0007
SHT. NO.	RE-19

REFERENCE (X-UTAH.DWG)

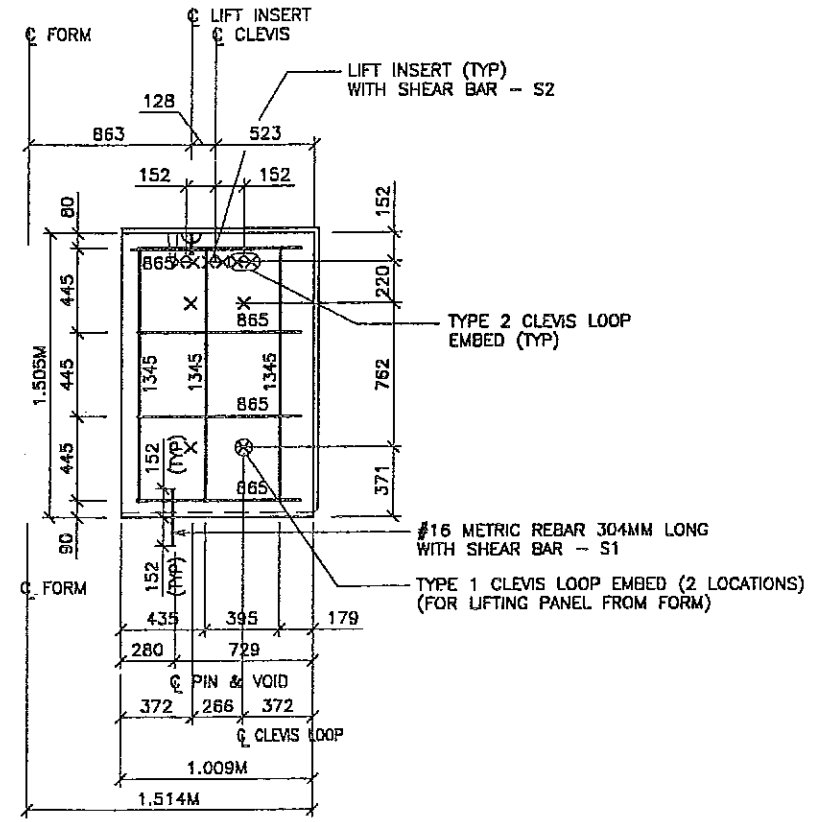
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FINA JT 11-10-98

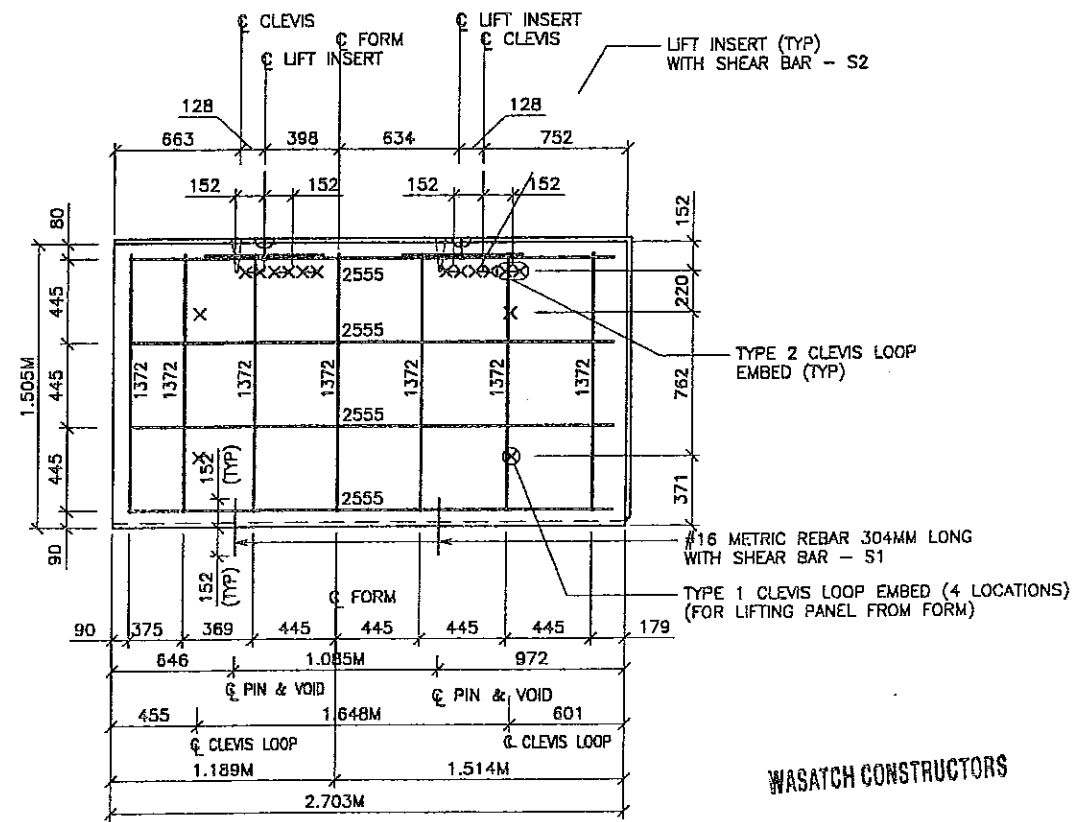
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NO.	DATE	DESCRIPTION
△	9-29-98	RELEASE FOR 2ND STAGE CONST. WALL E ONLY



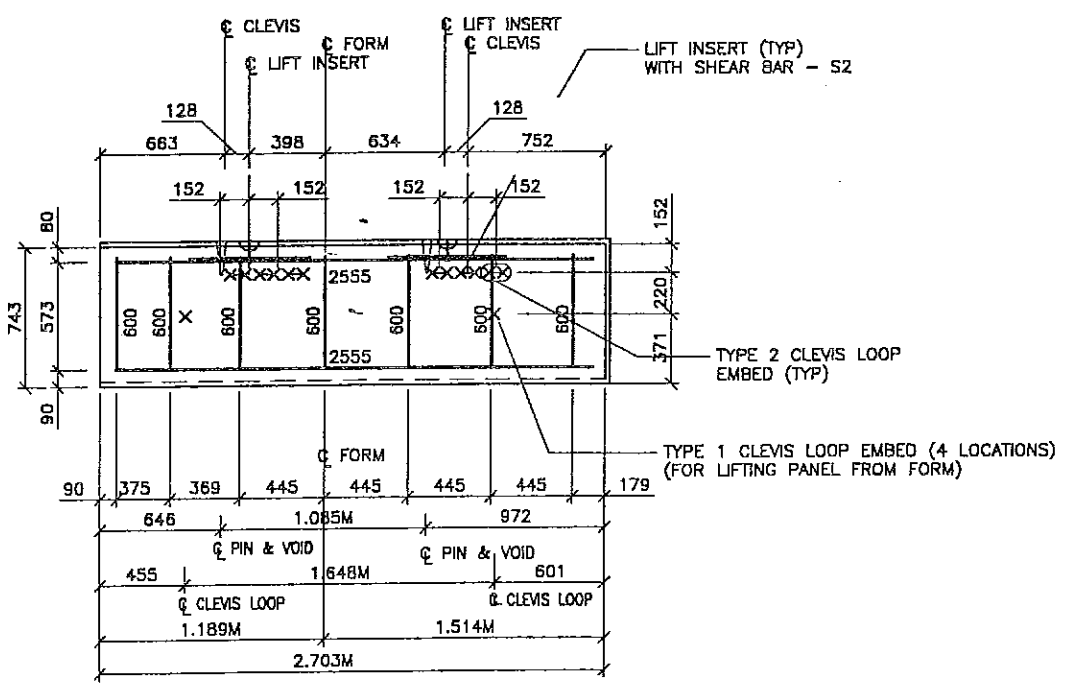
TYPE YH80QR1.019  
(AREA = 3.077 SQ.M)



TYPE YAQR1.019  
(AREA = 3.077 SQ.M)



TYPE YAQR2.713  
(AREA = 3.077 SQ.M)



TYPE YAQR2.713  
(AREA = 3.077 SQ.M)

WASATCH CONSTRUCTORS  
NOV 15 1998  
RELEASED FOR CONSTRUCTION

NO.	DATE	REVISION	BY

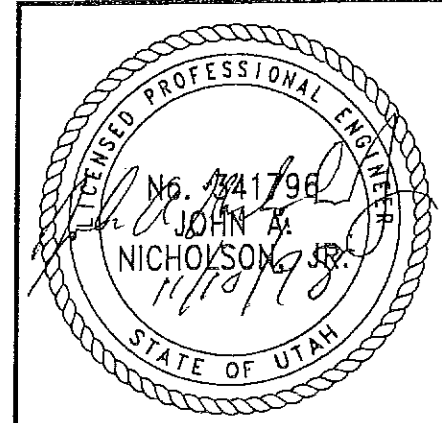
VSL CORPORATION  
3810 Peach Street, Suite 200  
San Jose, CA 95134  
Tel: (415) 781-4872  
Fax: (415) 781-4868

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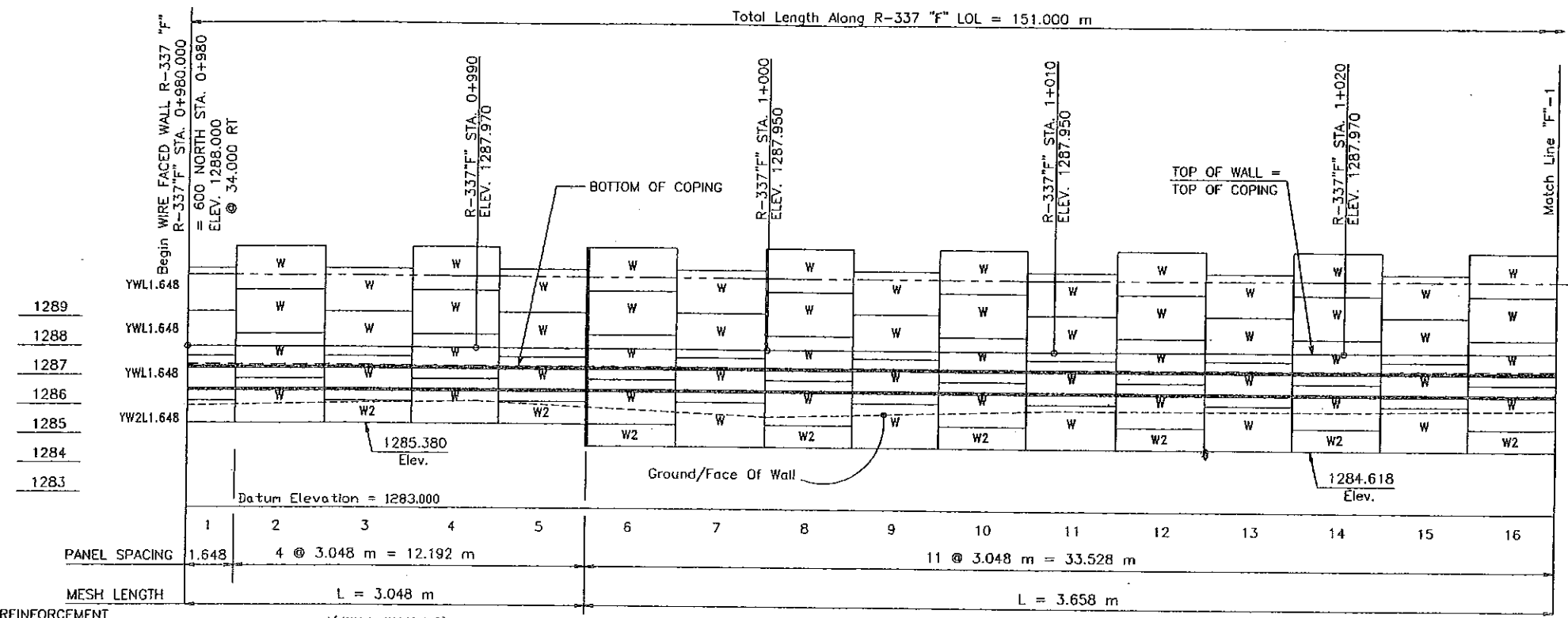
RETAINED EARTH™ WALLS  
2-STAGE PANEL REINFORCEMENT  
UTAH 1-15 INTERCHANGE  
SALT LAKE COUNTY, UTAH  
UTAH DEPARTMENT OF TRANSP.

DWG. NO. 3.3R-337-E.23  
JOB NO. 239-0007  
SIT. NO. RE-20



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METRIC



APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
△ 6-26-97		RELEASE FOR 1ST STAGE CONST. WALLS B, D & F ONLY

DES.	MM	DRN.	LP	CHK.	RETAINED EARTH™	NO.	DATE	REVISION	BY	CHK
6-16-97		6-16-97		6-16-97						

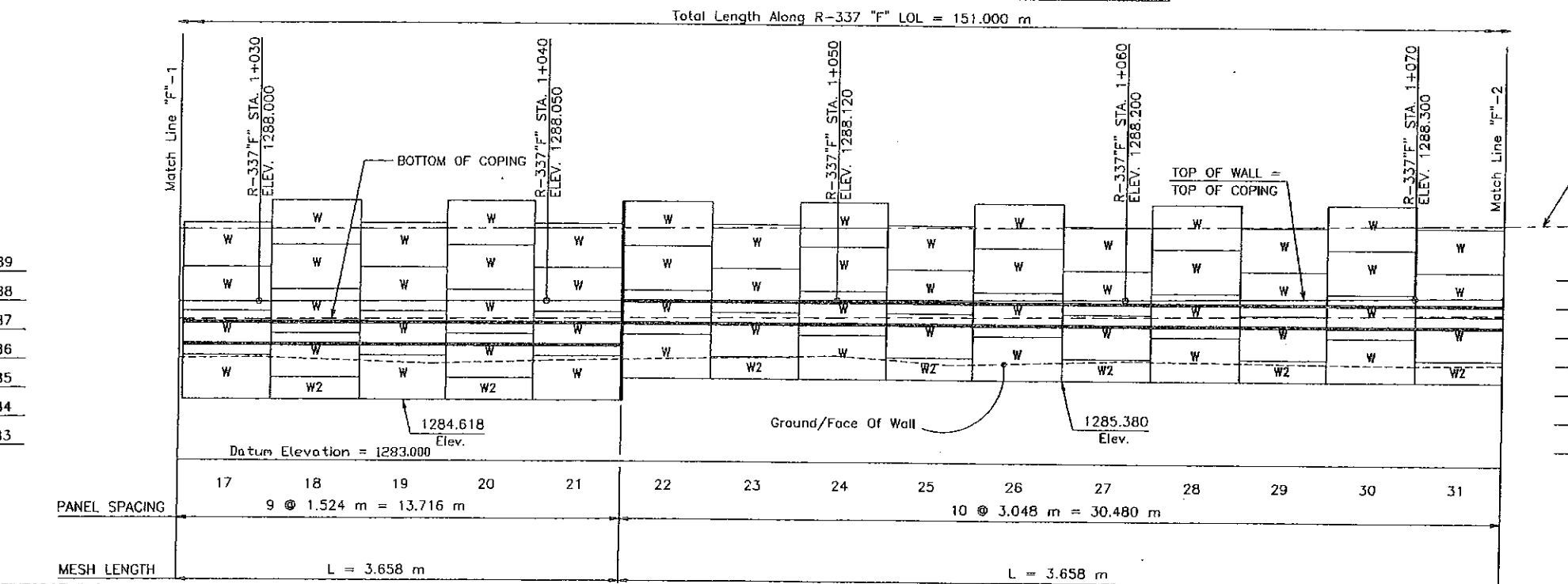
VSL CORPORATION  
 2840 Place Place, Suite 200  
 Raleigh, NC 27612  
 Telephone: (919) 781-6272  
 Fax: (919) 781-4669

ATLANTA, GA / DALLAS, TX / BALDWIN, NC (CORPORATE OFFICE)  
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RETAINED EARTH™ WALLS  
 WALL R-337 "F" - 1ST STAGE: WIRE FACED WALL  
 600 NORTH / I-15 INTERCHANGE  
 SALT LAKE COUNTY, UTAH  
 UTAH DEPARTMENT OF TRANSP.

SCALE:  
 JOB NO:  
 239-0007  
 RE-20



APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
△ 6-26-97		RELEASE FOR 1ST STAGE CONST. WALLS B, D & F ONLY

DES.	MM	DRN.	LP	CHK.	RETAINED EARTH™	NO.	DATE	REVISION	BY	CHK
6-16-97		6-16-97		6-16-97						

VSL CORPORATION  
 2840 Place Place, Suite 200  
 Raleigh, NC 27612  
 Telephone: (919) 781-6272  
 Fax: (919) 781-4669

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TEMPORARY SOIL REINFORCEMENT FOR SURCHARGE → 4(4W11+W11X1.0)      4(4W11+W11X1.0)

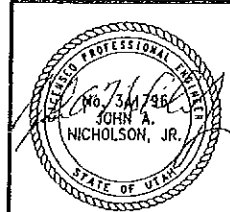
PERMANENT SOIL REINFORCEMENT FOR FINAL WALL PROFILE → 1(6W11+W11X0.5) 2(4W11+W11X1.0)      1(6W11+W11X0.5) 3(4W11+W11X1.0)

TEMPORARY SOIL REINFORCEMENT FOR SURCHARGE → 4(4W11+W11X1.0)      3(4W11+W11X1.0)

PERMANENT SOIL REINFORCEMENT FOR FINAL WALL PROFILE → 1(6W11+W11X0.5) 3(4W11+W11X1.0)      1(5W11+W11X0.5) 3(4W11+W11X1.0)

SCALE 1:100

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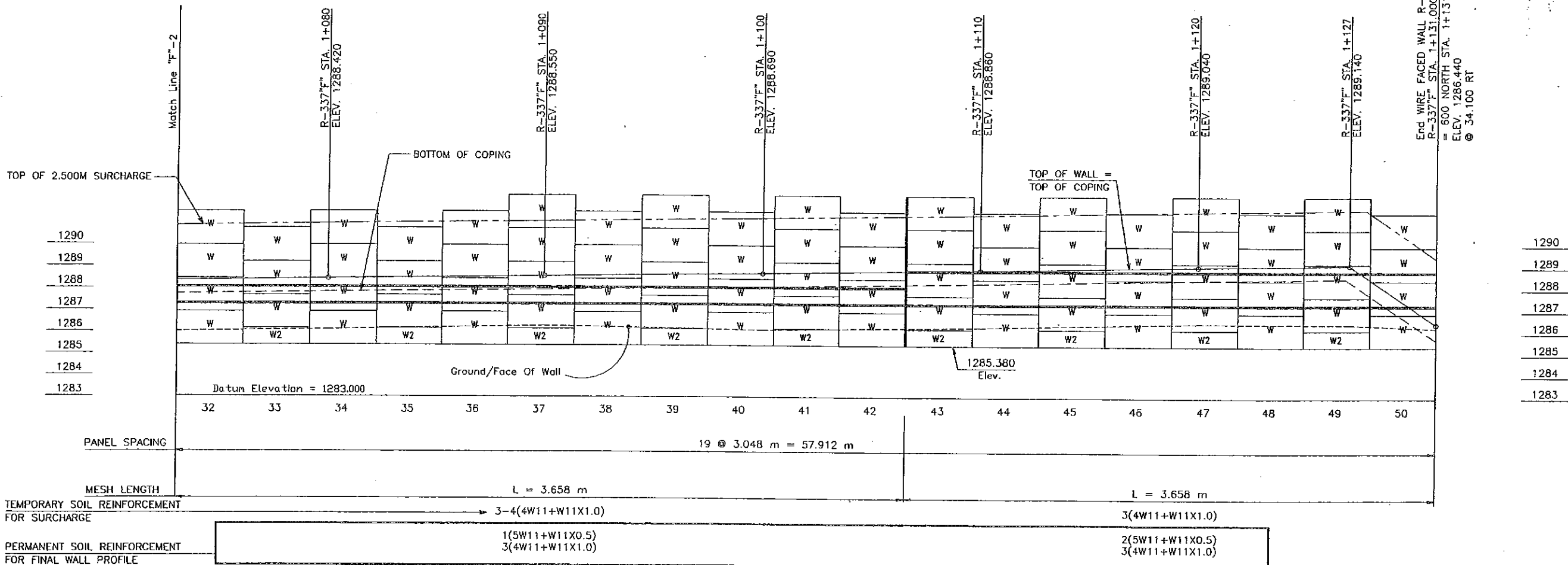
WALL "F"

METRIC

WASATCH CONSTRUCTORS  
 09 1997

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
▲	6-26-97	RELEASE FOR 1ST STAGE CONST. WALLS B, D & F ONLY

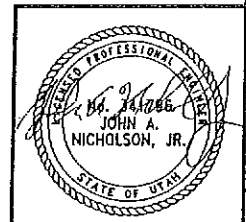
Total Length Along R-337 "F" LOL = 151.000 m



SCALE 1:100

Wall "F"

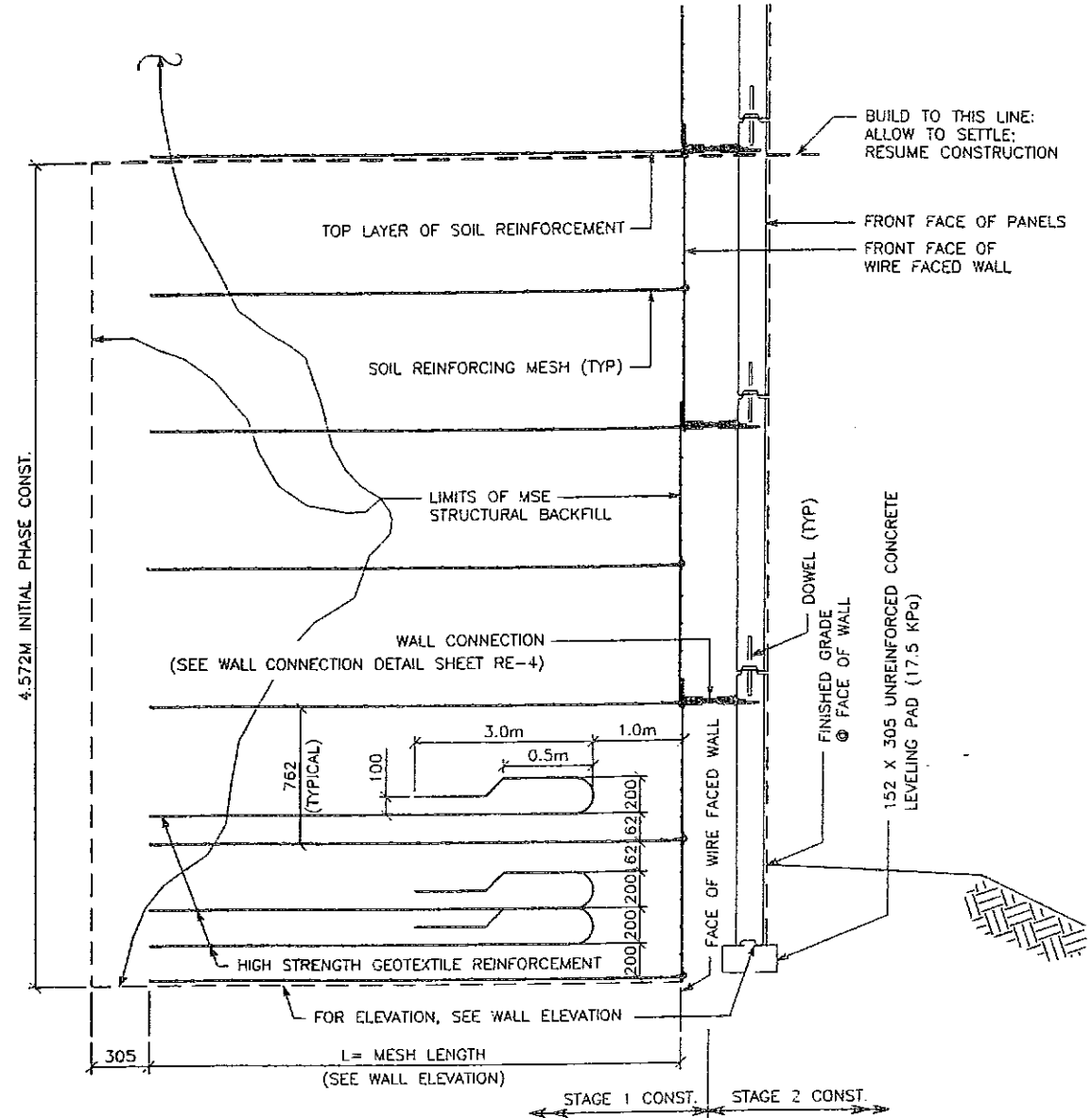
METRIC



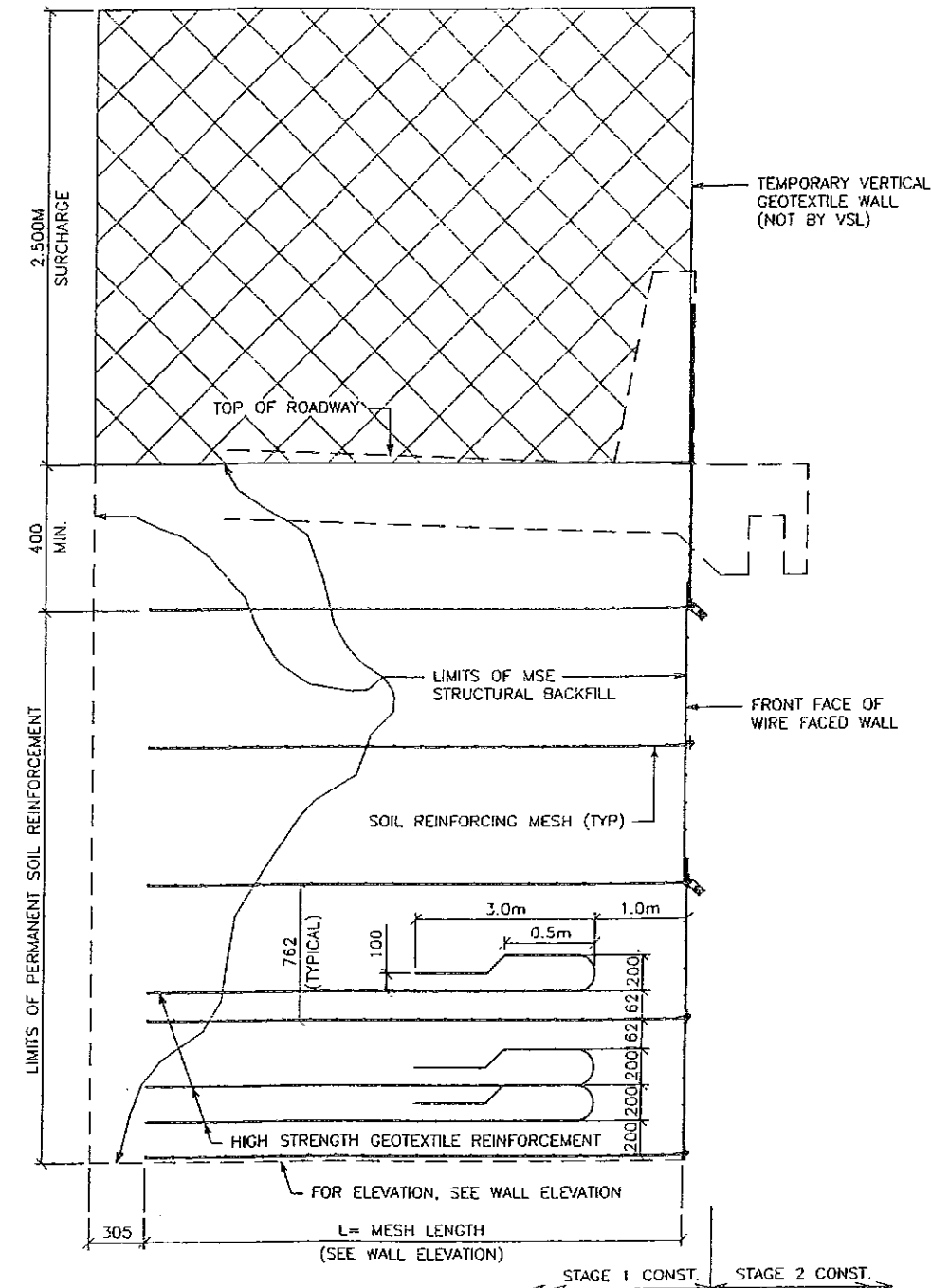
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DES. 6-16-97 MM		RETAINED EARTH™ VSL	NO. DATE	REVISION	BY
DSN. 6-16-97 LP					
CHK. 6-16-97 MM					
<p>VSL CORPORATION 2840 Plaza Place, Suite 200 Raleigh, NC 27612 Telephone: (919) 781-8272 Fax: (919) 781-4869</p> <p>ATLANTA, GA / DALLAS, TX / RALEIGH, NC (CORPORATE OFFICE) MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA</p>					
<p>RETAINED EARTH™ WALLS WALL R-337 "F" - 1ST STAGE: WIRE FACED WALL 600 NORTH / I-15 INTERCHANGE SALT LAKE COUNTY, UTAH UTAH DEPARTMENT OF TRANSP.</p>					
SCALE:					
JOB NO:					
239-0007					
RE-21					





**TYPICAL CROSS SECTION  
AT VERTICAL PHASE CONST.**  
SCALE: 1:20 (FULL SIZE)  
SCALE: 1:40 (HALF SIZE)



**TYPICAL CROSS SECTION  
AT FINAL PHASE OF WIRE FACE WALL**  
SCALE: 1:20 (FULL SIZE)  
SCALE: 1:40 (HALF SIZE)

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APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	8-27-97	RELEASE FOR 1ST STAGE CONST. WALL E ONLY

REVISIONS  
DATE  
NO.  
BY  
DATE

NO.	DATE	DESCRIPTION

VSL CORPORATION  
2500 Pinedale Dr., Suite 200  
Pittsburgh, PA 15201-7611-5272  
Fax: (412) 761-4559

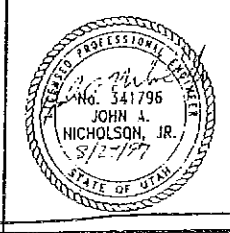


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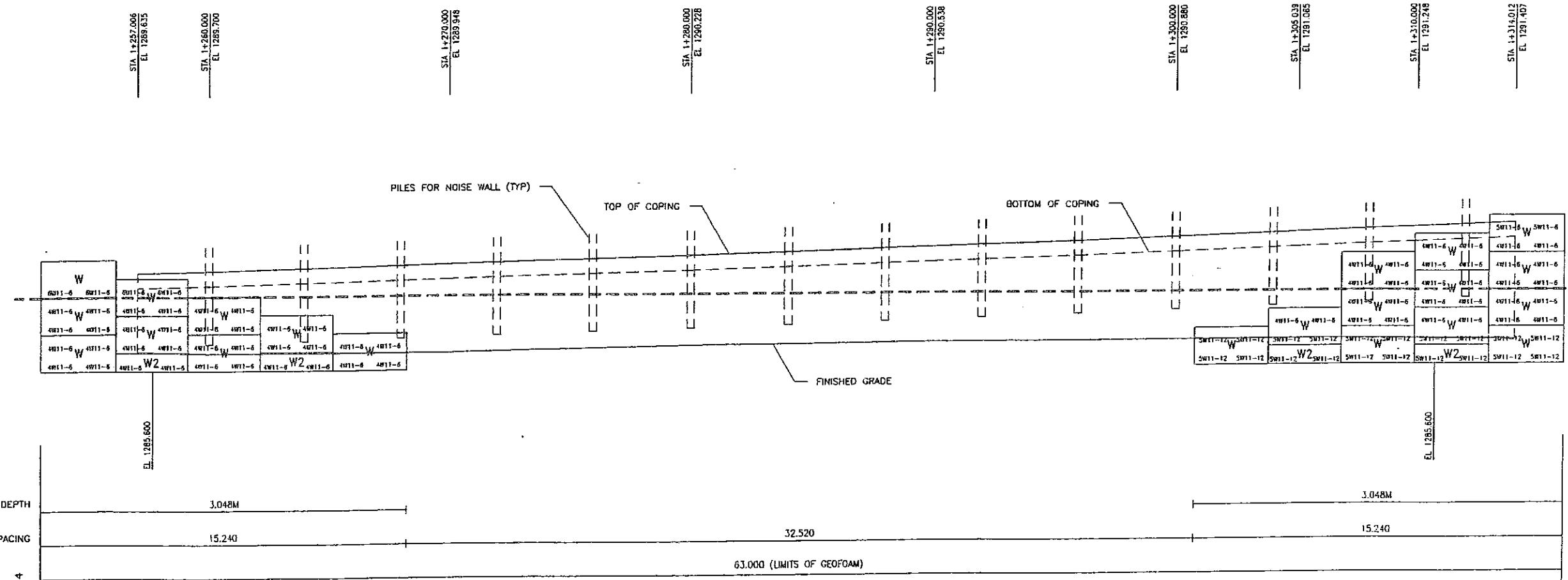
RETAINED EARTH™ WALLS  
WIRE FACED WALL™ R337-E  
TYPICAL SECTIONS @ WIRE FACED WALL  
600 NORTH/1-15 INTERCHANGE  
SALT LAKE COUNTY, UTAH  
UTAH DEPARTMENT OF TRANSP.

METRIC



SCALE:	
JOB NO:	239-0007
DATE:	8/2/97

3.3R-337-E.11



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

METRIC

MATCH PERMANENT WALL ON SHEET RE-14

MATCH PERMANENT WALL ON SHEET RE-15

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	8-27-97	RELEASE FOR 1ST STAGE CONST. WALL E ONLY <i>SPC</i>

MANAGE CONSTRUCTORS  
SEP 02 1997  
RELEASED FOR CONSTRUCTION

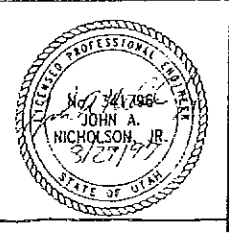
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08-27-97	MM	08-27-97	1000		
08-27-97	MM	08-27-97	1000		
08-27-97	MM	08-27-97	1000		

VSL CORPORATION  
2840 Park Plaza, Suite 200  
Raleigh, NC 27612  
Telephone (919) 761-6212  
Fax (919) 781-4993

ALABAMA, CA, ILLINOIS, IN, MISSOURI, NE, OREGON, OH, OKLAHOMA, PA, SOUTH CAROLINA, TEXAS, VA, WISCONSIN, WYOMING

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RETAINED EARTH™ WALLS  
WALL "R337-E" - 1ST STAGE: WIRE FACED WALL  
UTAH I-15 INTERCHANGE  
SALT LAKE COUNTY, UTAH  
UTAH DEPARTMENT OF TRANSP.



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3.32-337-E.12

SCALE:	
JOB NO:	239-0007
DATE:	8-27-97