

CYGNA	
JOB NO. :	84002
DATE LOGGED:	6/7/84
LOG NO. :	#116 (77)
FILE:	11.1.1 Tech. Files
CROSS REF. FILE	11.1 Tech. Files Log

FRB-7R

1/6  
7/7

# REFINED RESPONSE SPECTRA FOR

## CONTAINMENT BUILDING

### COMANCHE PEAK STEAM ELECTRIC STATION NUCLEAR POWER PLANT

8411060484 840620  
PDR ADOCK 05000445  
A PDR

## GIBBS & HILL

## RECEIVED DECEMBER '82

JUN 7 1984

CYGNA - SAN FRANCISCO

## CPSES

### REFINED RESPONSE SPECTRA FOR CONTAINMENT BUILDING

Presented herewith are the refined floor response spectra for the Containment Building (references 2 and 3) based on existing response spectra (reference 1) and developed primarily for as-built piping analysis. These response spectra have been refined based upon improved curve smoothing techniques by use of computer, instead of by hand. Therefore, undue hand smoothing and digitizing have been eliminated. Also, improved interpolation has been used at lumped masses based on time history responses. The results are plotted in terms of accelerations versus frequencies for ease of use.

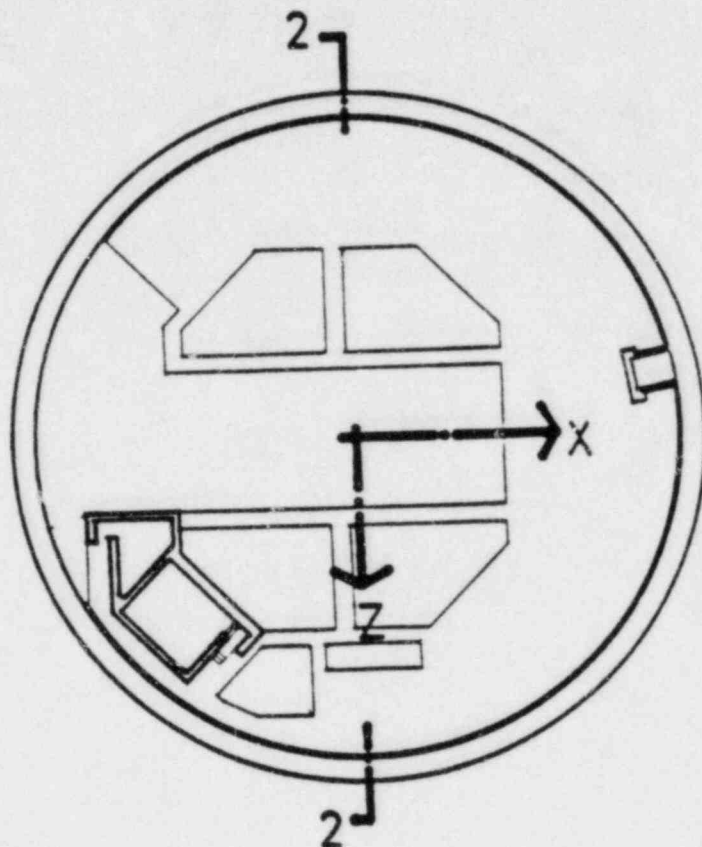
The results are presented in figures 1130-B through 1141-B and 1106-B through 1117-B which are summarized in Table nos. 2 and 3. Also the digitized values of the same spectra are included at the end of the book.

Each figure refers to a specific floor of the building, and contains three curves labeled Ax, Ay and Az, which represent the spectral accelerations in the x, y and z orthogonal directions respectively due to the combined effect of three simultaneous earthquakes at the specified % damping. Please note that Ax and Az are in the north-south and the east-west directions respectively while Ay is in the vertical direction based upon the plant's general coordinate system.

All spectra presented in this report include the coupling effects of non-symmetric structure. The curves shown are for the most critical location of the floor, considering the combined effect of translation and rotation.

#### References:

1. "Instructure Response Spectra for Containment Building," Gibbs & Hill report no. FRB-SR, August 1976.
2. "TUSI - Refined Response Spectra for Containment Building," calculation book no. FRB-2C, Rev. 0
3. "TUSI - Computer Output for Containment Building," computer output file no. FMI-1P Set 7, Rev. 0.



NOTE: ORIGIN OF COORDINATES IS AT EL. 805' - 6"

PLAN ELEVATION 905' 9"

**TUSI**  
REACTOR BUILDING

**Gibbs & Hill, Inc.**  
ENGINEERS, ARCHITECTS, CONSTRUCTORS  
NEW YORK

SCALE - 1/8" = 5'0"

SKETCH 1

JOB NO. 2323-A

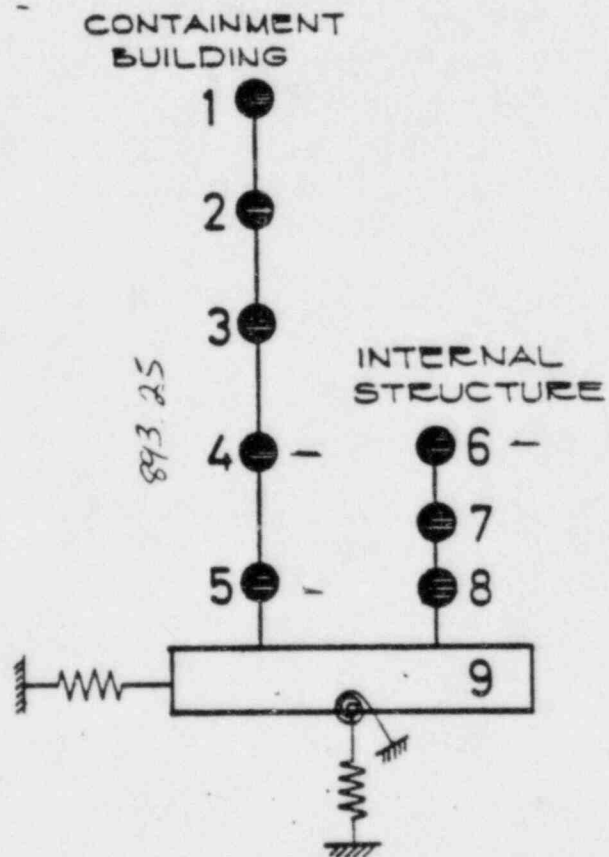
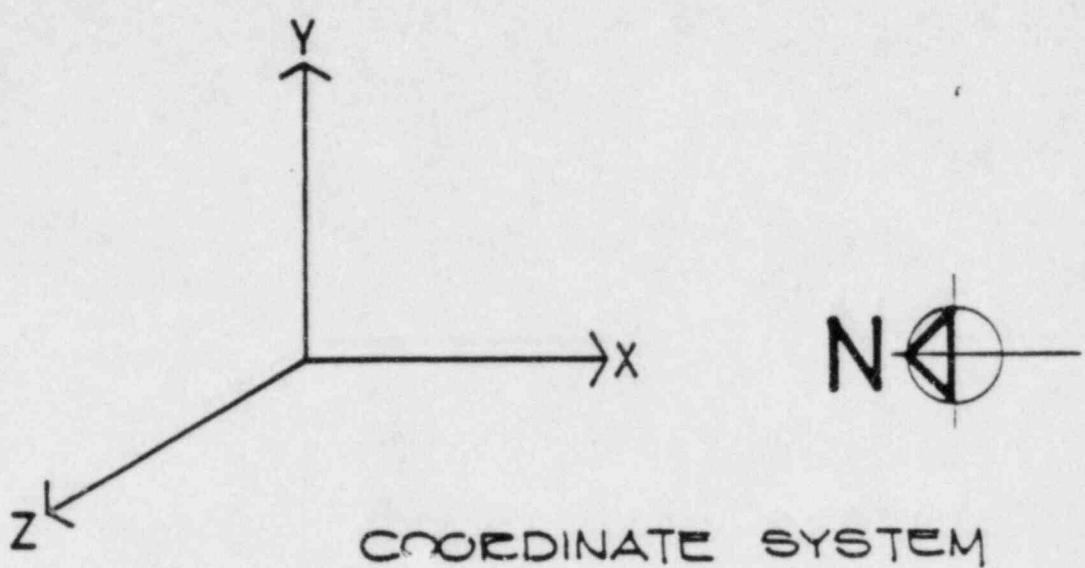
DATE	BY	CHKD	APP'D	DATE	BY	CHKD	APP'D	DATE	BY	CHKD	APP'D

ISSUED FOR

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DYNAMIC MODEL

<h1>TUSI</h1>	
REACTOR BUILDING	
<b>Gibbs &amp; Hill Inc.</b> ENGINEERS, DESIGNERS, CONSTRUCTORS NEW YORK	
SCALE -	SKETCH 3
JOB NO 2323-A	

DATE	BY	CHKD	APP'D	REV	DATE	BY	CHKD	APP'D	REV	DATE	BY	CHKD	APP'D	REV	DATE	BY	CHKD	APP'D	REV
APPROVALS										DESIGNED FOR									



## SUMMARY OF REFINED FLOOR RESPONSE SPECTRA

FIGURE NO.	FLOOR ELEVATION	DAMPING %	EARTHQUAKE	TYPE OF MOTION
1130-B	1000.50 FT.	1	1/2 SSE	TRANSL. & ROT.
1131-B	950.58 FT.	1	1/2 SSE	TRANSL. & ROT.
1132-B	905.75 FT.	1	1/2 SSE	TRANSL. & ROT.
1133-B	860.00 FT.	1	1/2 SSE	TRANSL. & ROT.
1134-B	805.50 FT.	1	1/2 SSE	TRANSL. & ROT.
1135-B	783.58 FT.	1	1/2 SSE	TRANSL. & ROT.
1136-B	1000.50 FT.	2	1/2 SSE	TRANSL. & ROT.
1137-B	950.58 FT.	2	1/2 SSE	TRANSL. & ROT.
1138-B	905.75 FT.	2	1/2 SSE	TRANSL. & ROT.
1139-B	860.00 FT.	2	1/2 SSE	TRANSL. & ROT.
1140-B	805.50 FT.	2	1/2 SSE	TRANSL. & ROT.
1141-B	783.58 FT.	2	1/2 SSE	TRANSL. & ROT.

TUSI

Containment Building

Gibbs &amp; Hill Inc.

DESIGN, ENGINEERING, CONSTRUCTION

CIVIL ENGINE

200 W. 2523

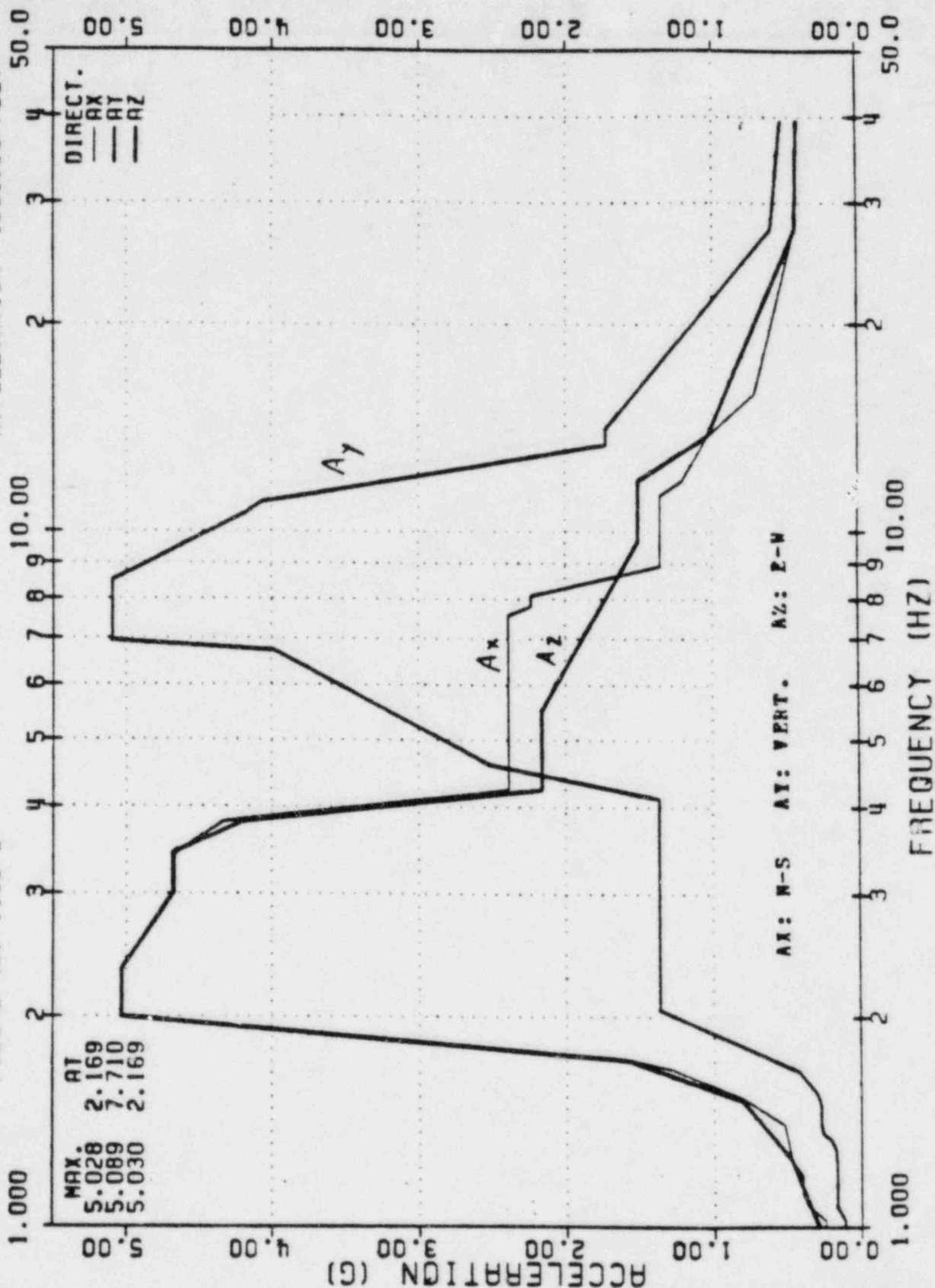
SCALE -

TABLE 2



TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG  
 FLOOR RESPONSE SPECTRA FOR 1/25SE,  
 FIGURE NO. 1130-B

DAMPING = 0.01  
 AT ELEVATION 1000.50 FEET



TUSI-CONTAINMENT BLDG.

REFINED RESPONSE SPECTRA

GIBBS & HILL, INC.

ENGINEERS, DESIGNERS, CONSTRUCTORS

JAN. NO. 2523

FIGURE-1130 B

0 1/2" x 11" x 11"

DATE PLT. 10/10/68

1000.50 FEET ELEVATION

1000.50 FEET



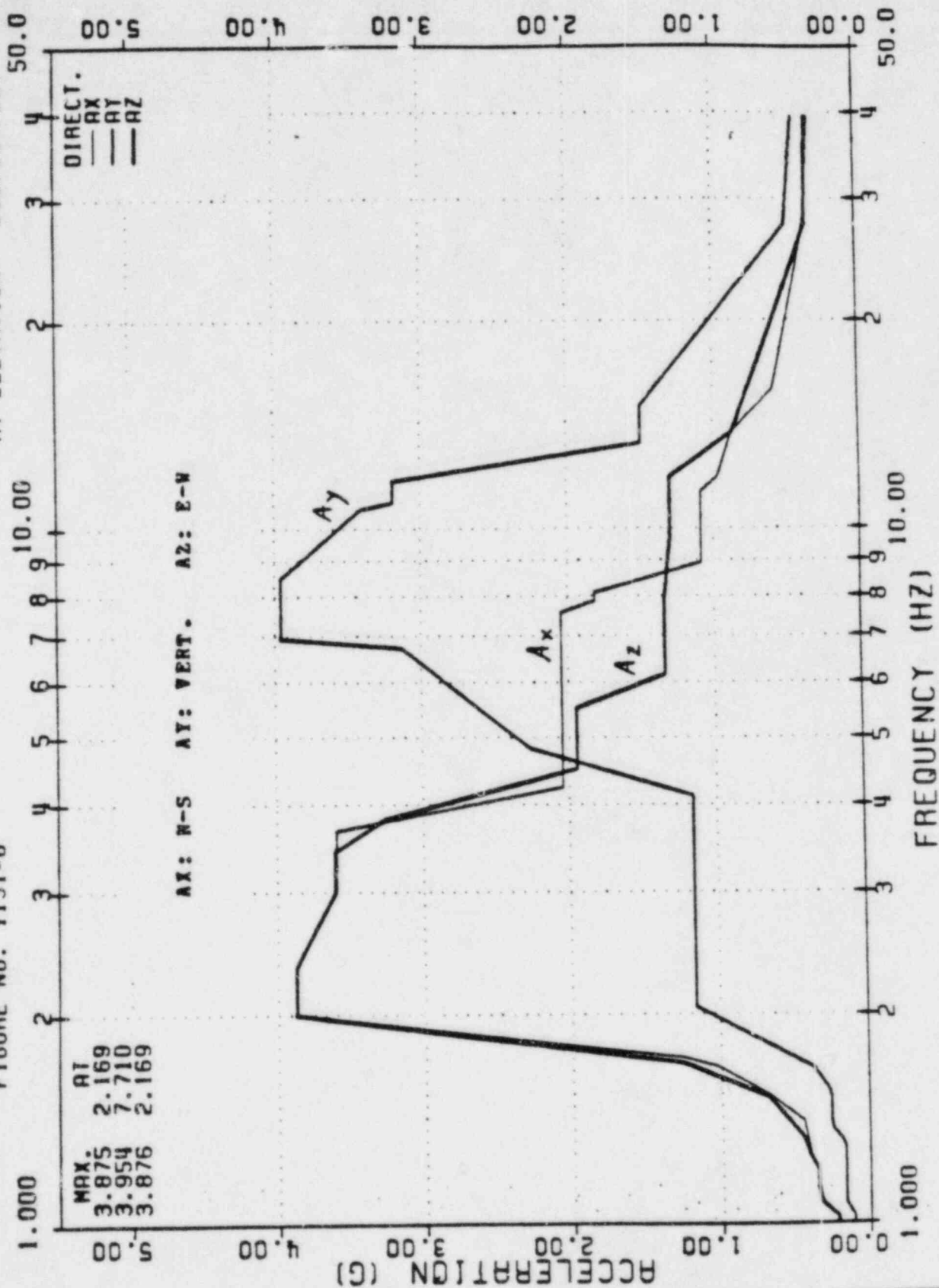
## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG

FLOOR RESPONSE SPECTRA FOR 1/2SSE:

FIGURE NO. 1131-B

DAMPING = 0.01

AT ELEVATION 950.58 FEET



TUSI-CONTAINMENT BLDG.

## REFINED RESPONSE SPECTRA

GIBBS & MILL, INC.

END 1 MAY 74, 0213 1040 74, COMBTRACT BR3  
END 74

JUN 19 2325

FIGURE-1131 B

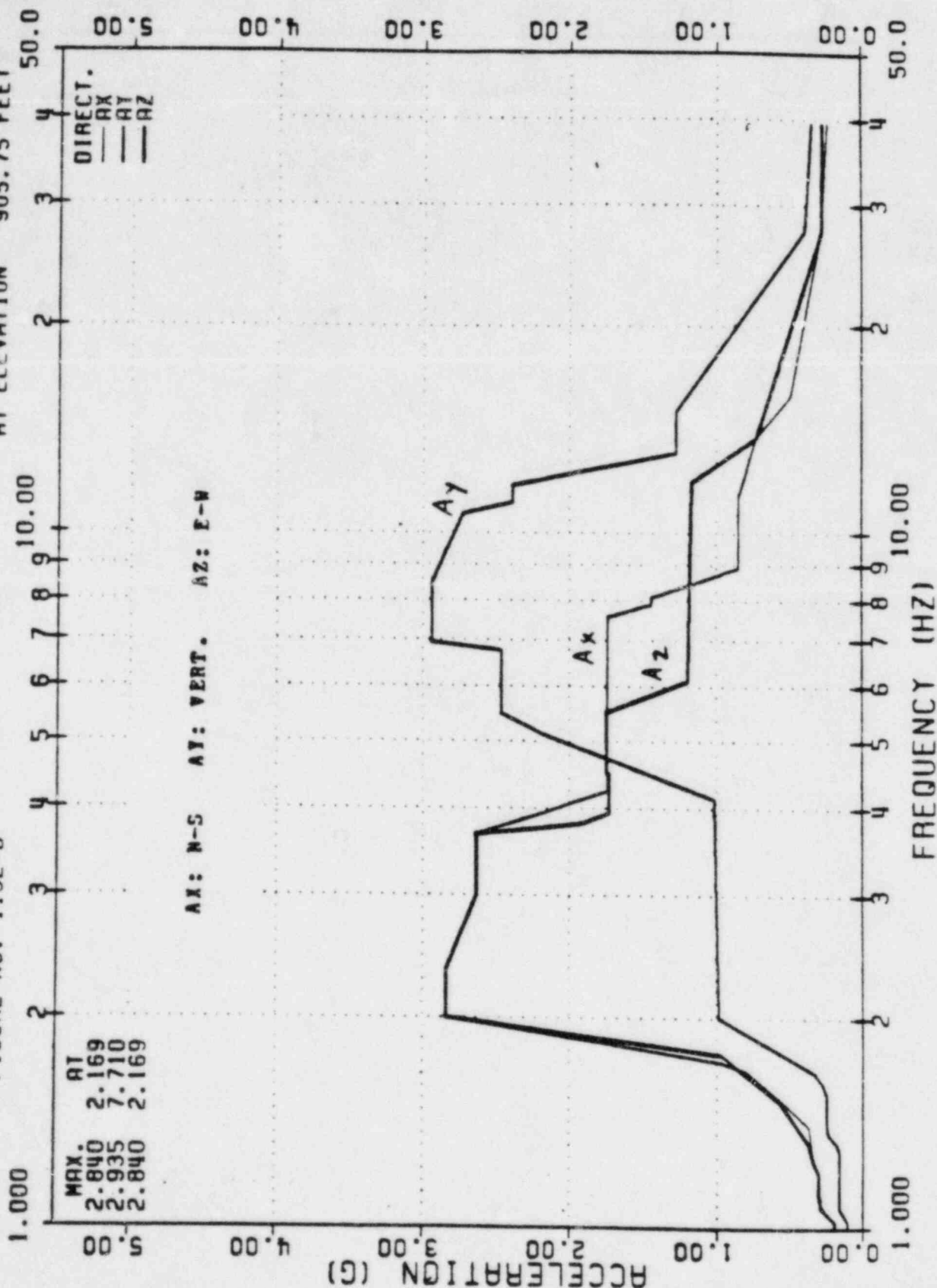
# TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG

FLOOR RESPONSE SPECTRA FOR 1/29SE;

FIGURE NO. 1132-B

DAMPING = 0.01

AT ELEVATION 905.75 FEET



TUSI-CONTAINMENT BLDG.

REFINED RESPONSE SPECTRA

GIBBS & HILL, INC.

ENGINEERS, DESIGNERS, CONSULTANTS

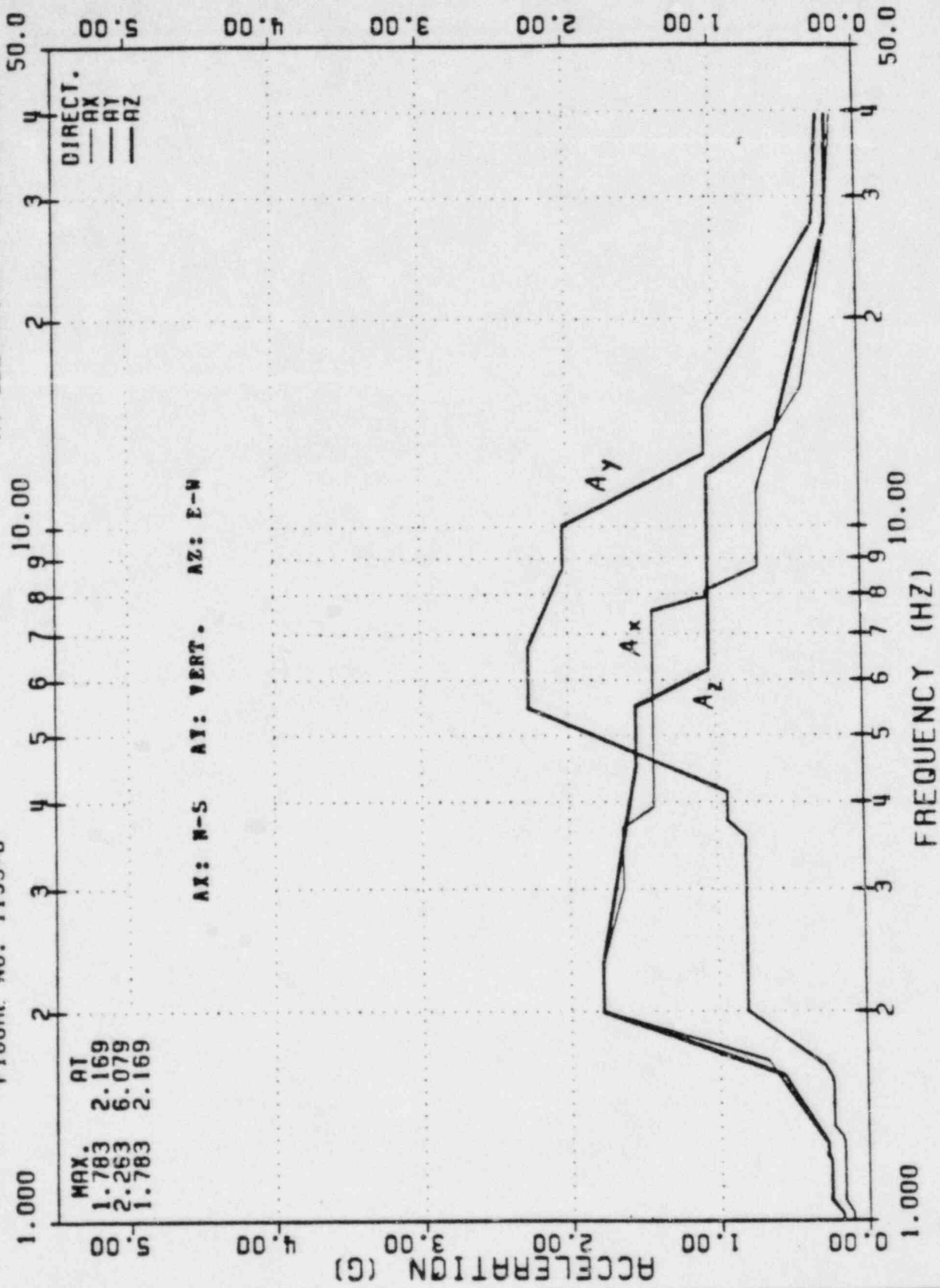
JOB NO. 2325

FIGURE-1132 B

DATE: 10/18/1960

ISSUED FOR

TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG  
 FLOOR RESPONSE SPECTRA FOR 1/2SSE;  
 DAMPING = 0.01  
 AT ELEVATION 860.00 FEET  
 FIGURE NO. 1133-B



TUSI-CONTAINMENT BLDG.	
REFINED RESPONSE SPECTRA	
GIBBS & HILL, INC.	
ENGINEERS, DESIGNERS, CONSTRUCTORS	
JAN 1964	
FIGURE-1133B	JOB NO. 2325

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99
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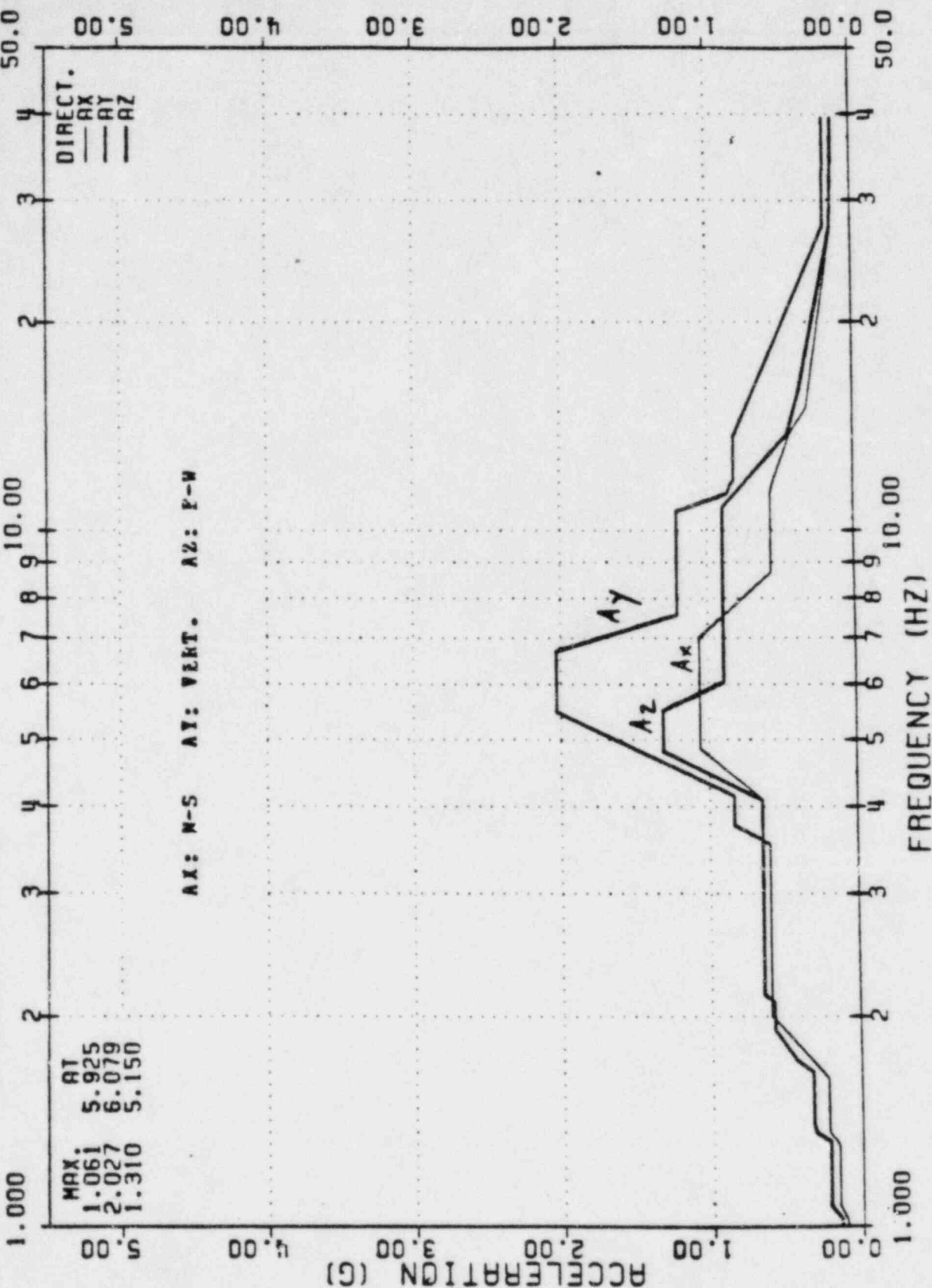
# TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG

FLOOR RESPONSE SPECTRA FOR 1/2SSE<sub>r</sub>

FIGURE NO. 1134-B

DAMPING = 0.01

AT ELEVATION 805.50 FEET



TUSI-CONTAINMENT BLDG.

REFINED RESPONSE SPECTRA

GIBBS & HILL, INC.

ENGINEERS, DESIGNERS, CONSTRUCTORS  
AND MORE

JOB NO. 2323

FIGURE-1134-B

0.01 DAMPING

DATE: 1/18/78

ISSUED FOR

ISSUED FOR







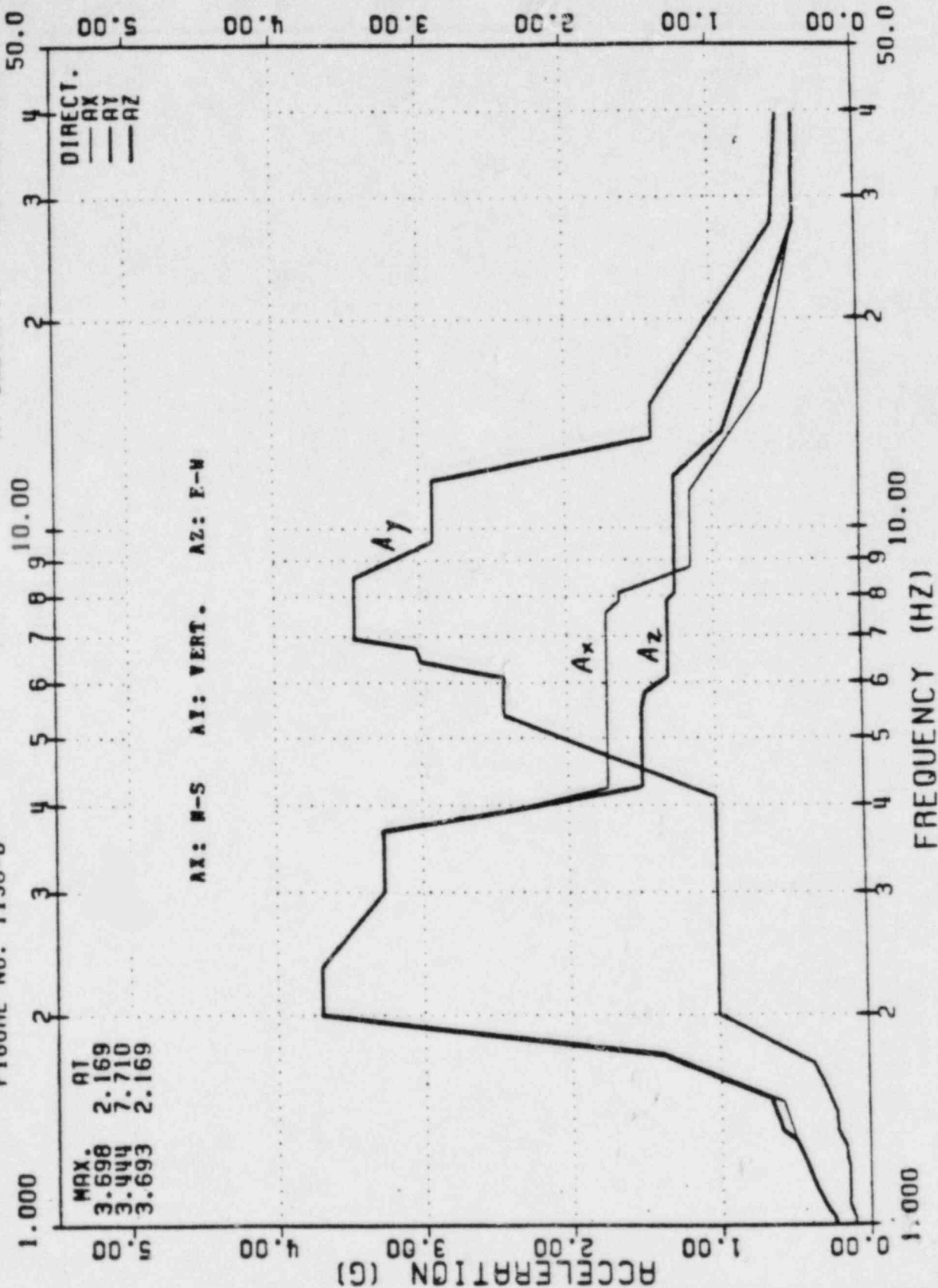
# TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG

FLOOR RESPONSE SPECTRA FOR 1/2SSE;

DAMPING = 0.02

FIGURE NO. 1136-B

AT ELEVATION 1000.50 FEET



TUSI-CONTAINMENT BLDG.

REFINED RESPONSE SPECTRA

GIBBS & HILL, INC.

ENGINEERS, DESIGNERS, CONSTRUCTORS

FIGURE-1136B

1000

DATE PLT. CHG.

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JOB NO. 2523

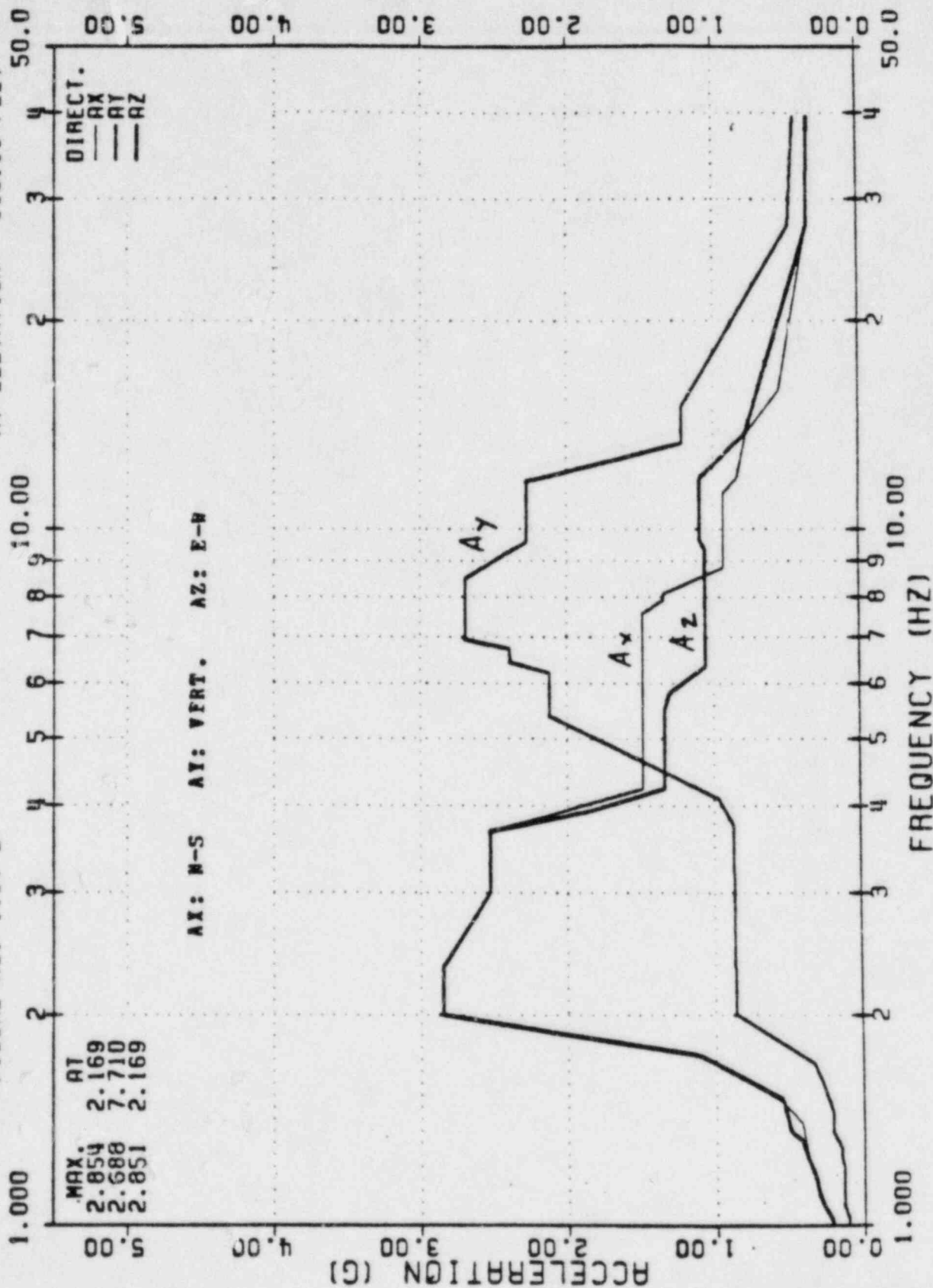
# TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG

FLOOR RESPONSE SPECTRA FOR 1/2SSE;

FIGURE NO. 1137-B

DAMPING = 0.02

AT ELEVATION 950.58 FEET



TUSI-CONTAINMENT BLDG.

REFINED RESPONSE SPECTRA

GIBBS & HILL, INC.

ENGINEERS, DESIGNERS, CONSTRUCTORS

JAN 1963

FIGURE-1137B

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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ISSUED FOR

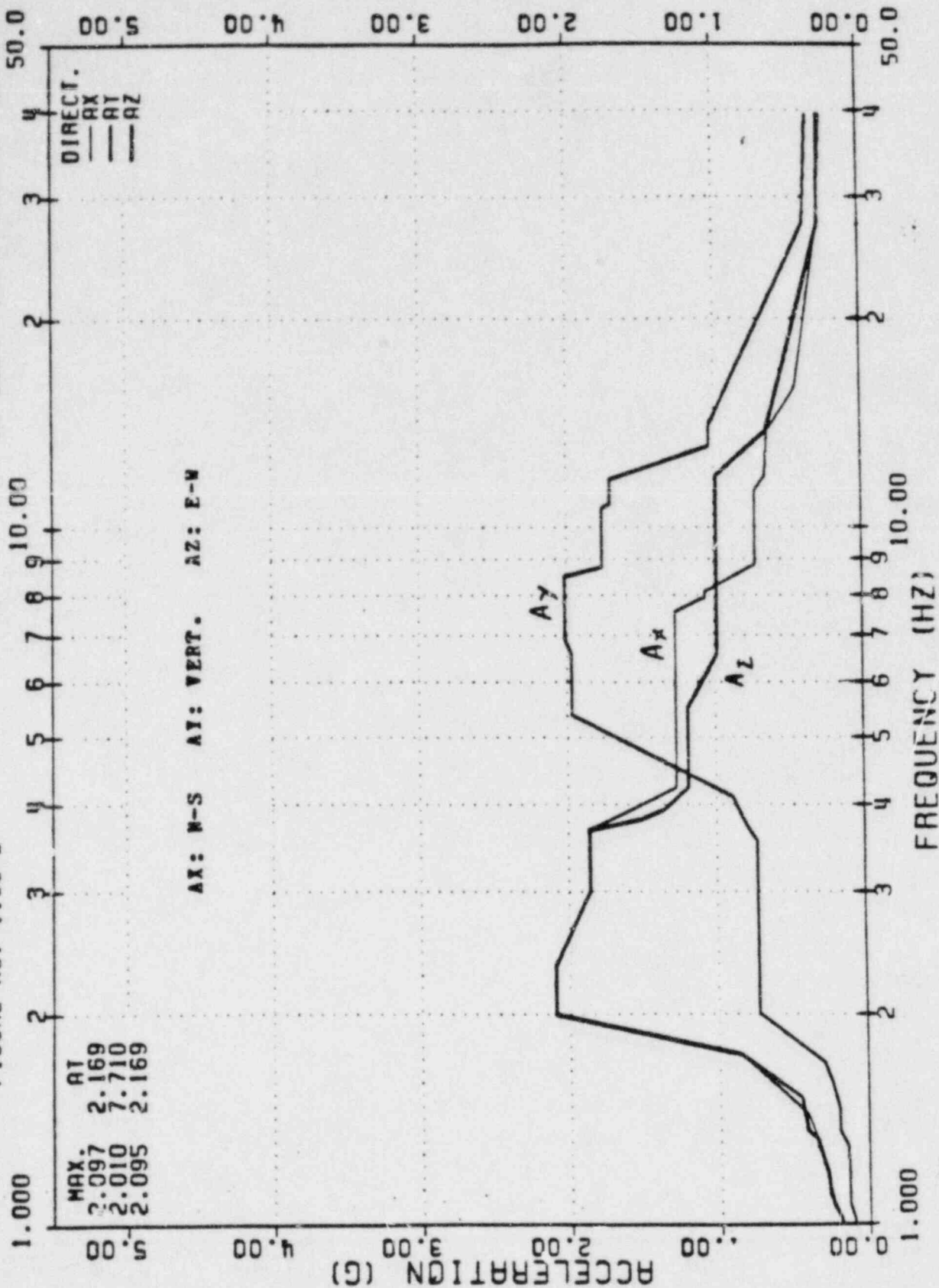
# TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG

FLOOR RESPONSE SPECTRA FOR 1/25SE1

DAMPING = 0.02

AT ELEVATION 905.75 FEET

FIGURE NO. 1138-B



TUSI-CONTAINMENT BLDG.

REFINED RESPONSE SPECTRA

GIBBS & MILL, INC.

ENGINEERS, ARCHITECTS, CONTRACTORS

JOB NO. 2525

FIGURE-1138 B

1000

DATE PLT. CHG.

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APPROVED

DATE

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ISSUED FOR

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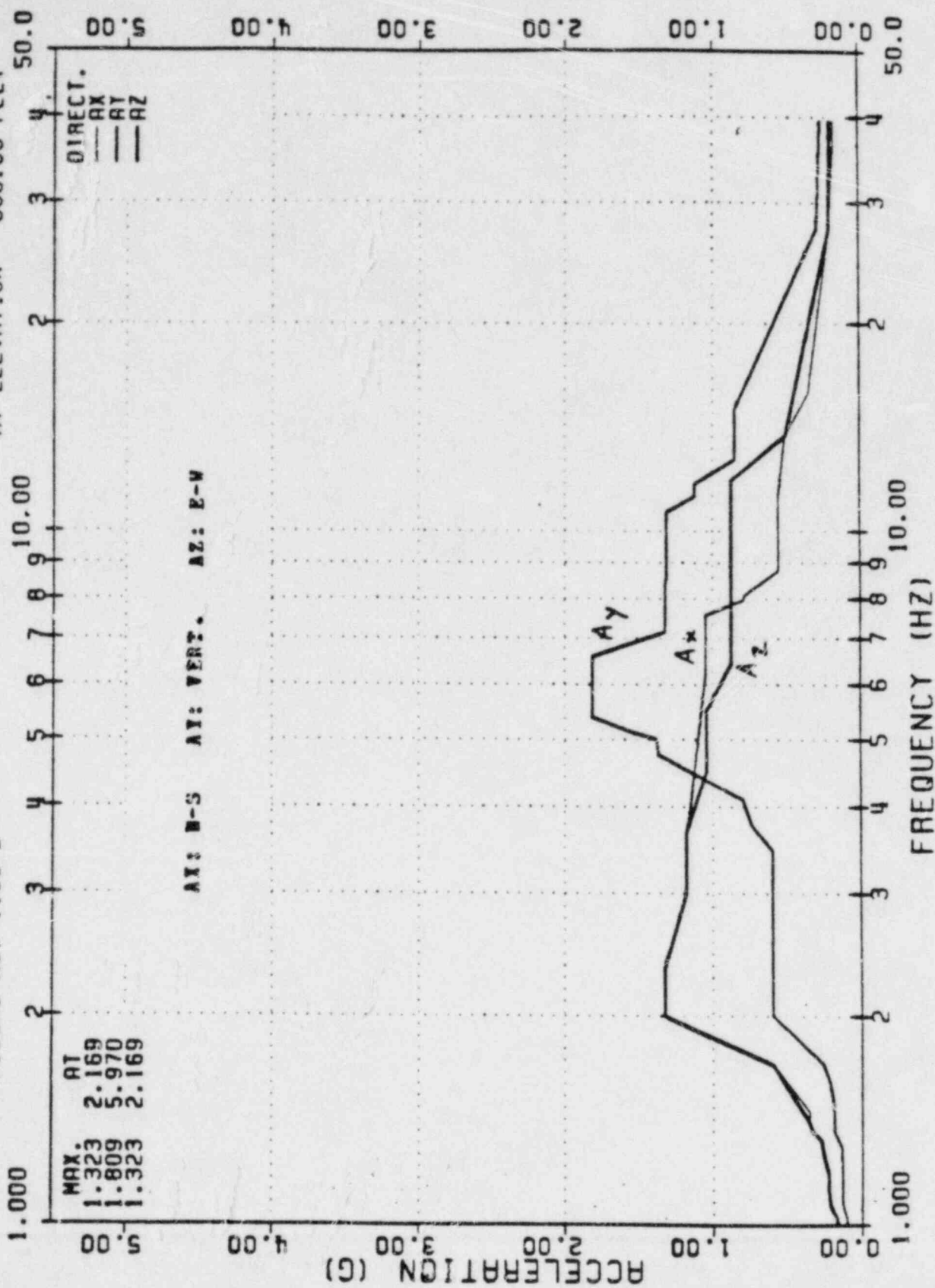
# TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG

FLOOR RESPONSE SPECTRA FOR 1/2SSE:

FIGURE NO. 1139-B

DAMPING = 0.02

AT ELEVATION 860.00 FEET



TUSI-CONTAINMENT BLDG.

REFINED RESPONSE SPECTRA

GIBBS & HILL, INC.

ENGINEERS, DESIGNERS, CONSTRUCTORS

JOB NO. 2323

FIGURE-1139B



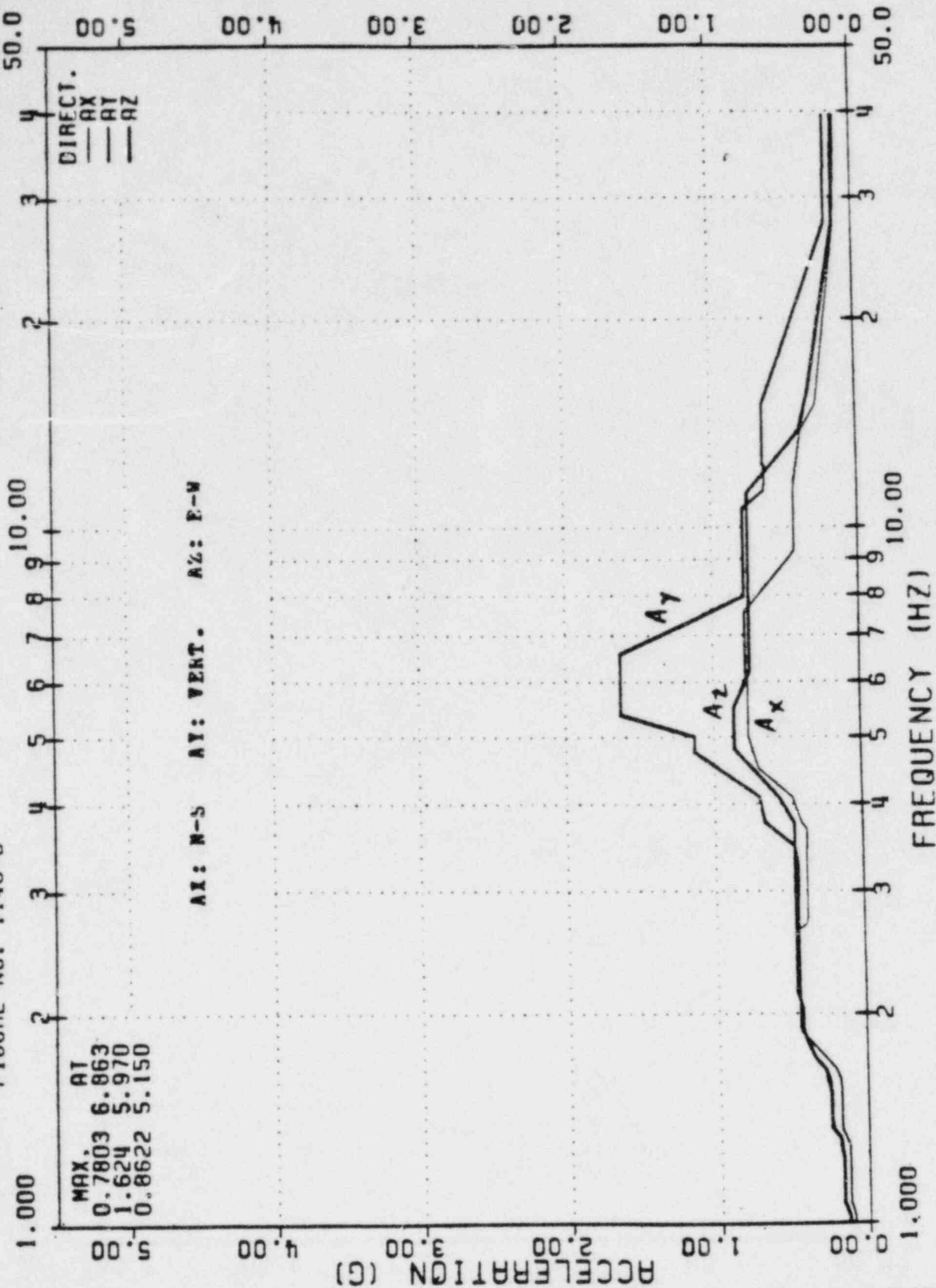
# TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG

FLOOR RESPONSE SPECTRA FOR 1/2SSE;

FIGURE NO. 1140-B

DAMPING = 0.02

AT ELEVATION 805.50 FEET



TUSI-CONTAINMENT BLDG.

REFINED RESPONSE SPECTRA

GIBBS & HILL, INC.

ENGINEERS, DESIGNERS, CONSTRUCTORS

JOB NO. 2523

FIGURE-1140B

DATE PLT. CHG. 1/60

ISSUE NO. 1

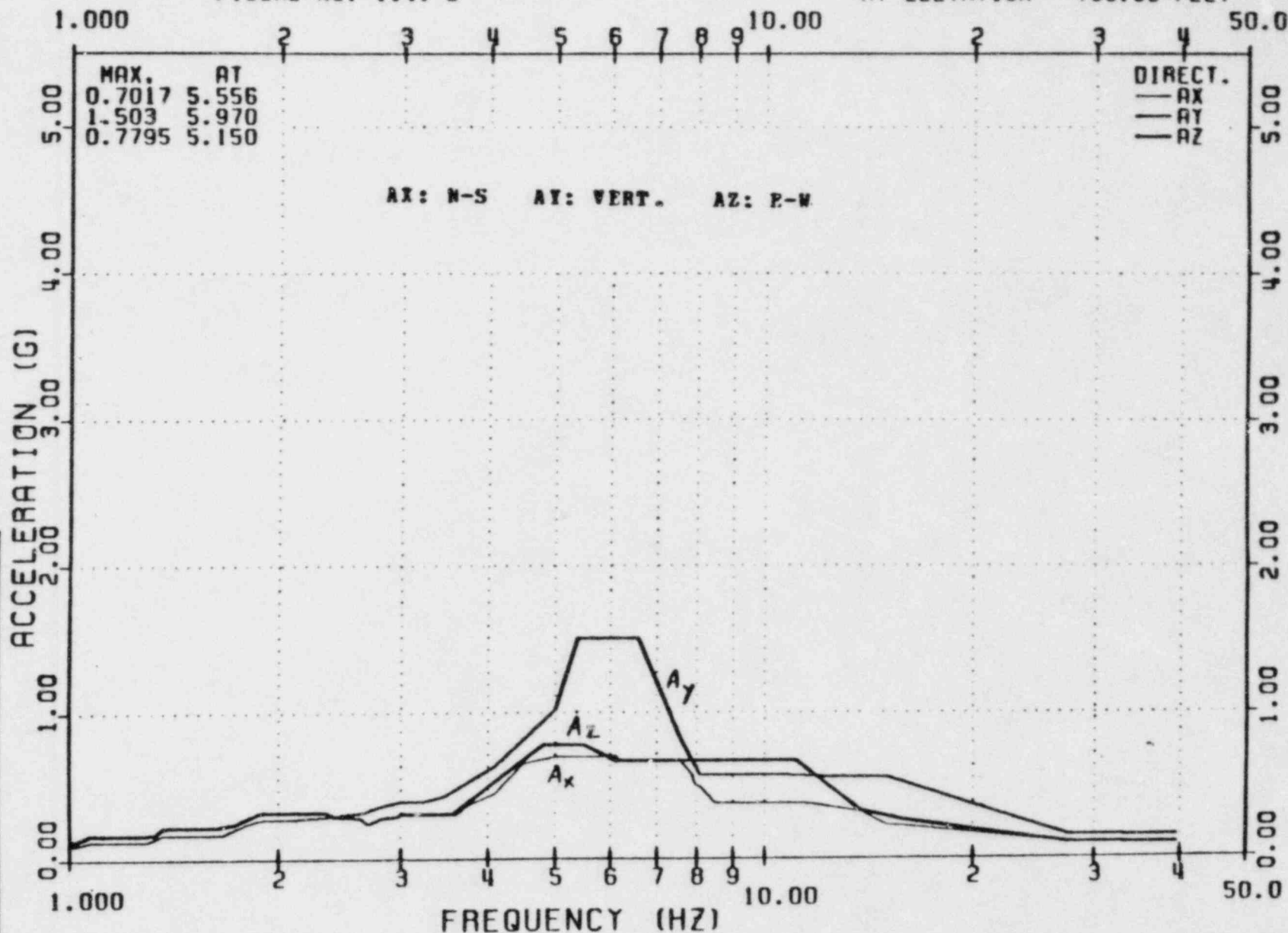
REVISIONS

ISSUED FOR



TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG  
 FLOOR RESPONSE SPECTRA FOR 1/2SSE;  
 FIGURE NO. 1141-B

DAMPING = 0.02  
 AT ELEVATION 783.58 FEET



TUSI-CONTAINMENT BLDG.

REFINED RESPONSE SPECTRA

GIBBS & HILL, INC.

ENGINEERING, DESIGN, CONSTRUCTION

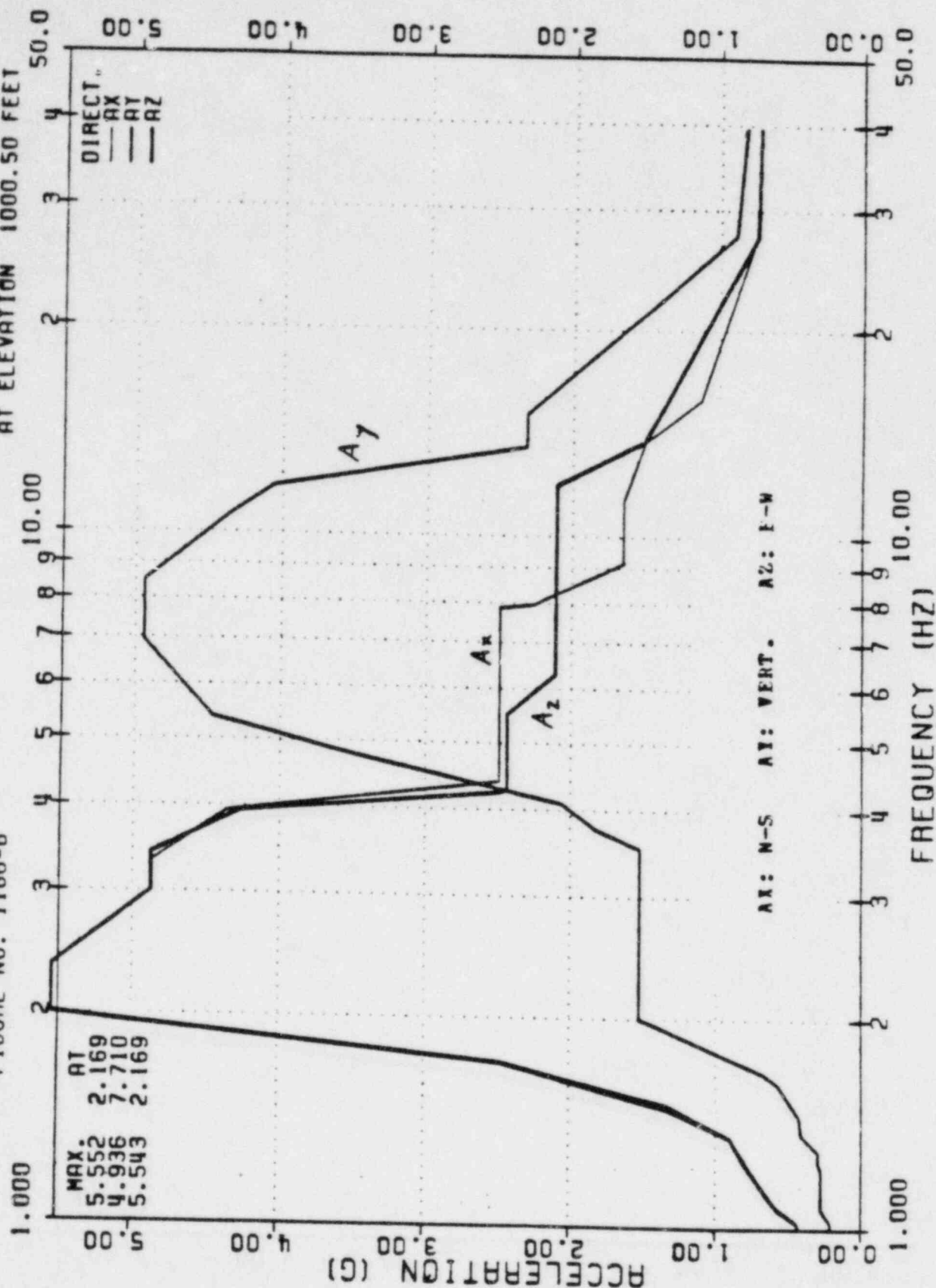
JAN 88 2323

FIGURE-1141B

# TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG

FLOOR RESPONSE SPECTRA FOR SSE;  
FIGURE NO. 1106-B

DAMPING = 0.02  
AT ELEVATION 1000.50 FEET



TUSI-CONTAINMENT BLDG.

REFINED RESPONSE SPECTRA

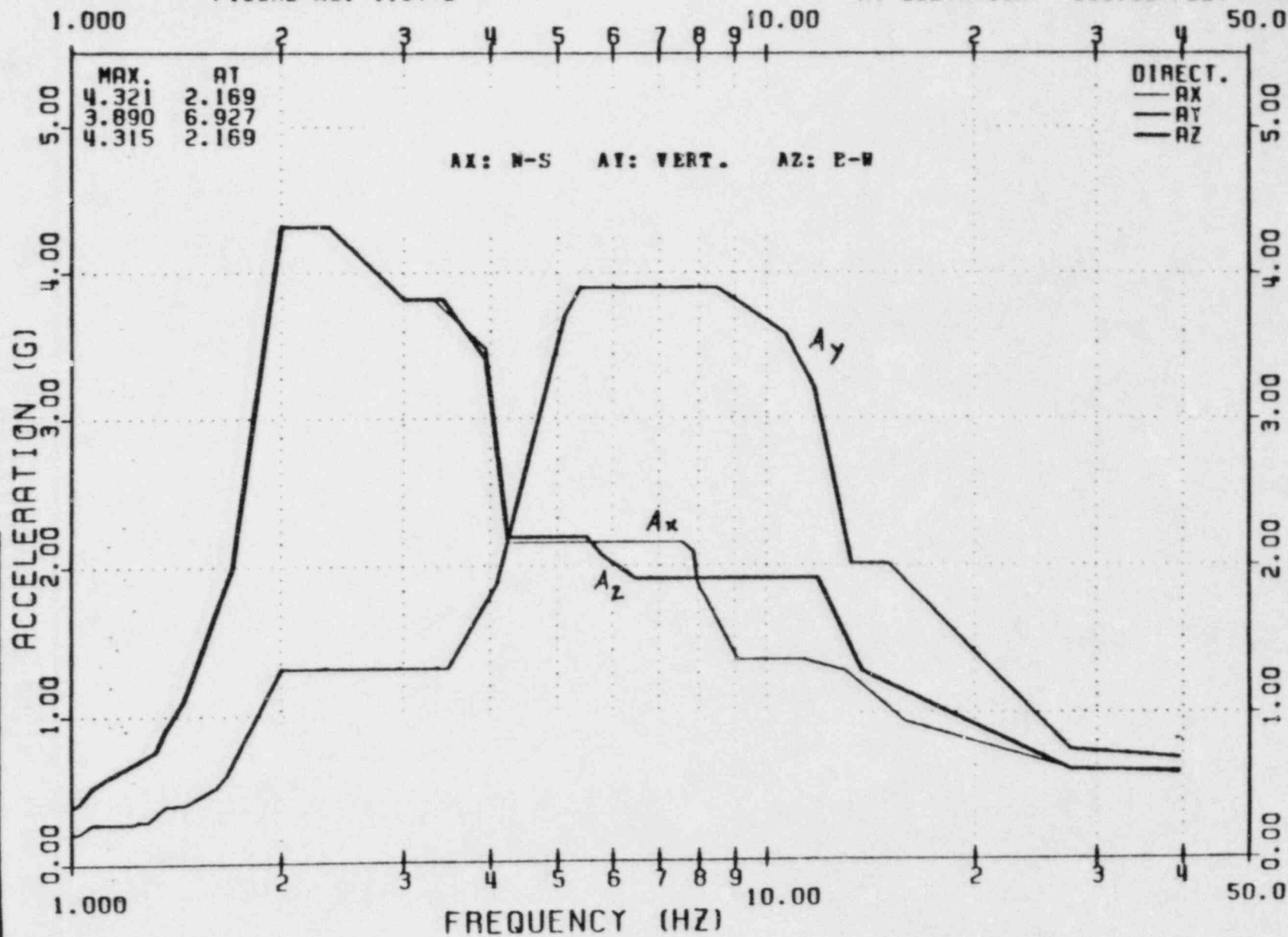
GIBBS & MILL, INC.

ENGINEERS, DESIGNERS, CONTRACTORS  
AND ARCHITECTS

JAN 68 2323

FIGURE-1106 B

TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG  
 FLOOR RESPONSE SPECTRA FOR SSE; DAMPING = 0.02  
 FIGURE NO. 1107-B AT ELEVATION 950.58 FEET



TUSI-CONTAINMENT BLDG.

REFINED RESPONSE SPECTRA

GIBBS & HILL, INC.

6001 REDON, 10011 10011, 10011 10011

FIGURE-1107 B

2523

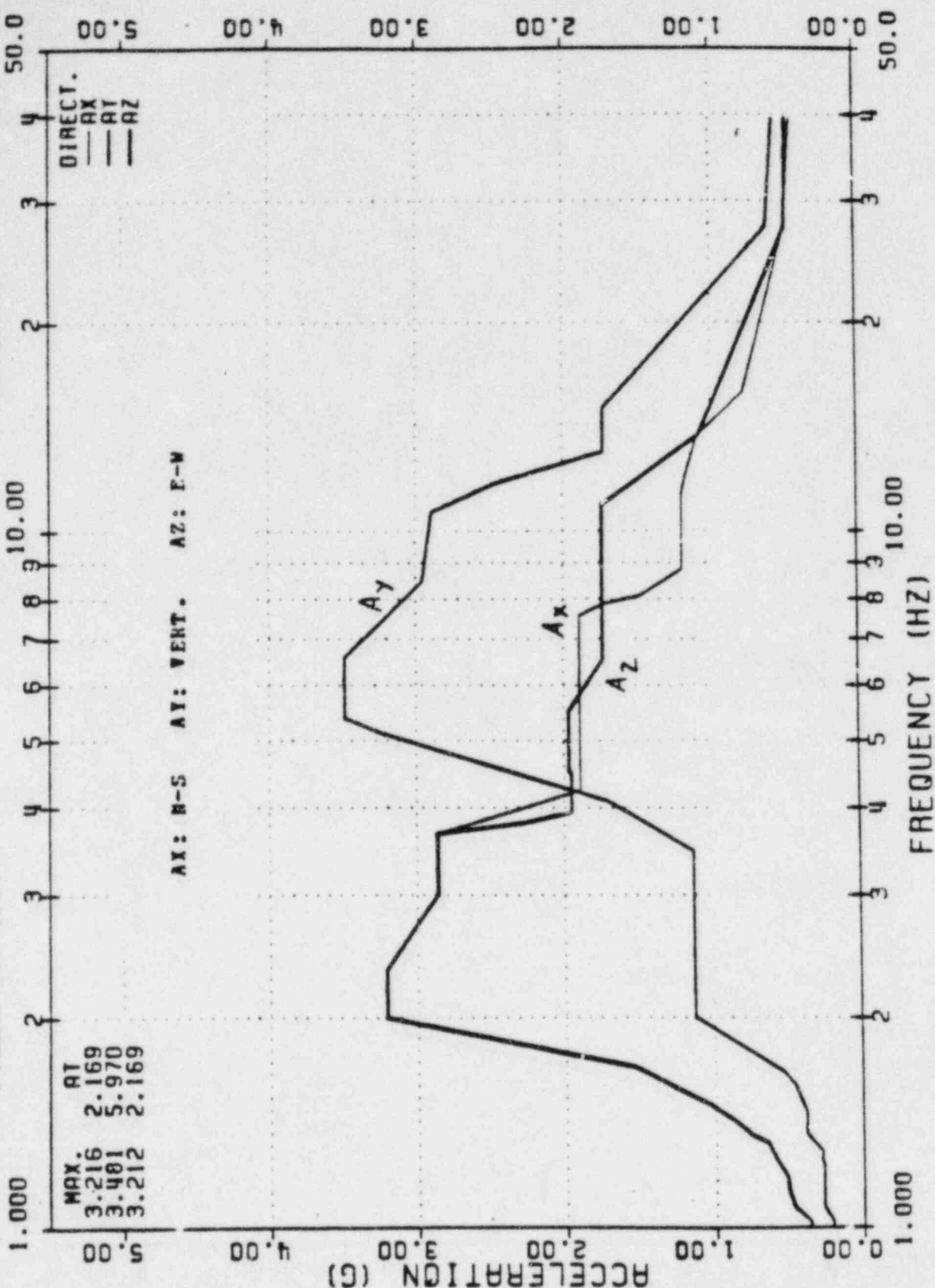
# TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG

FLOOR RESPONSE SPECTRA FOR SSE:

FIGURE NO. 1108-B

DAMPING = 0.02

AT ELEVATION 905.75 FEET



TUSI-CONTAINMENT BLDG.

REFINED RESPONSE SPECTRA

GIBBS & HILL, INC.

ENGINEERS, DESIGNERS, CONTRACTORS

JOB NO. 2313

FIGURE-1108B



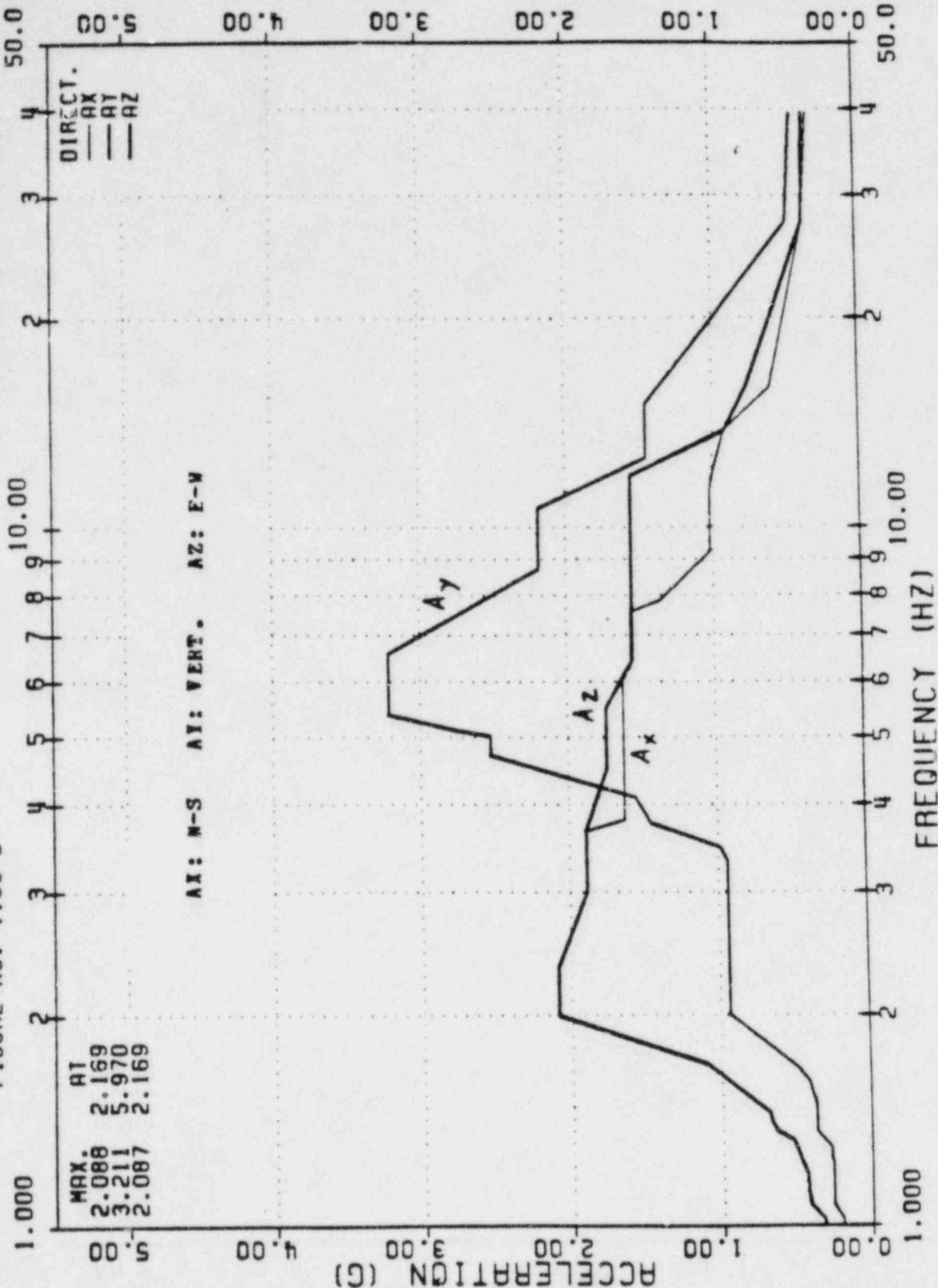
# TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG

FLOOR RESPONSE SPECTRA FOR SSE,

FIGURE NO. 1109-B

DAMPING = 0.02

AT ELEVATION 860.00 FEET



TUSI-CONTAINMENT BLDG.

REFINED RESPONSE SPECTRA

GIBBS & HILL, INC.

ENGINEERS, DESIGNERS, CONSTRUCTORS

JOB NO. 2323

FIGURE-1109B

DATE PLT/CHKD BY: APPROVED: ISSUED FOR:



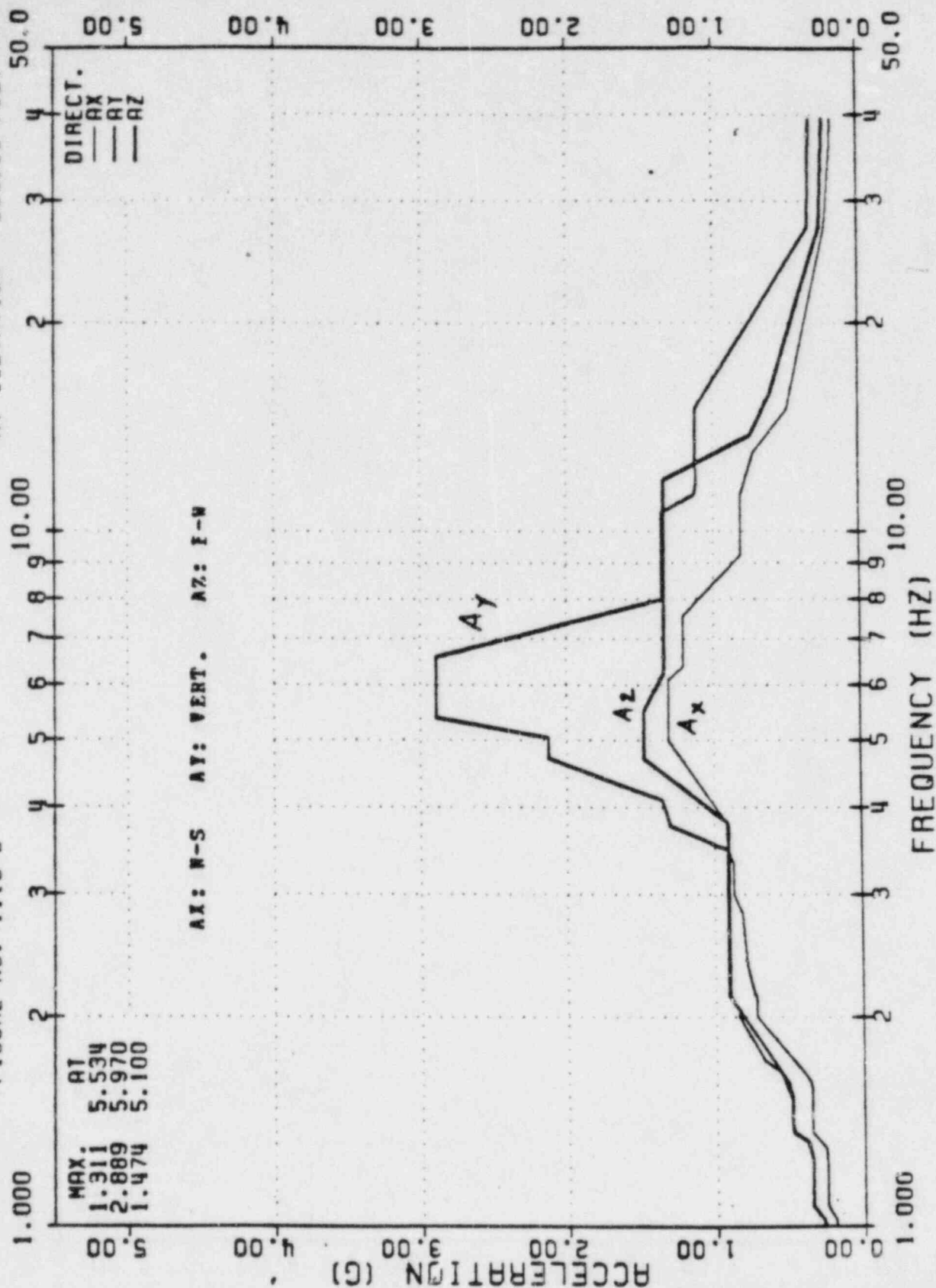
## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG

FLOOR RESPONSE SPECTRA FOR SSE;

FIGURE NO. 1110-B

 $\text{DAMPING} = 0.02$ 

AT ELEVATION 805.50 FEET



TUSI-CONTAINMENT BLDG.

## REFINED RESPONSE SPECTRA

GIBBS & HILL, INC.

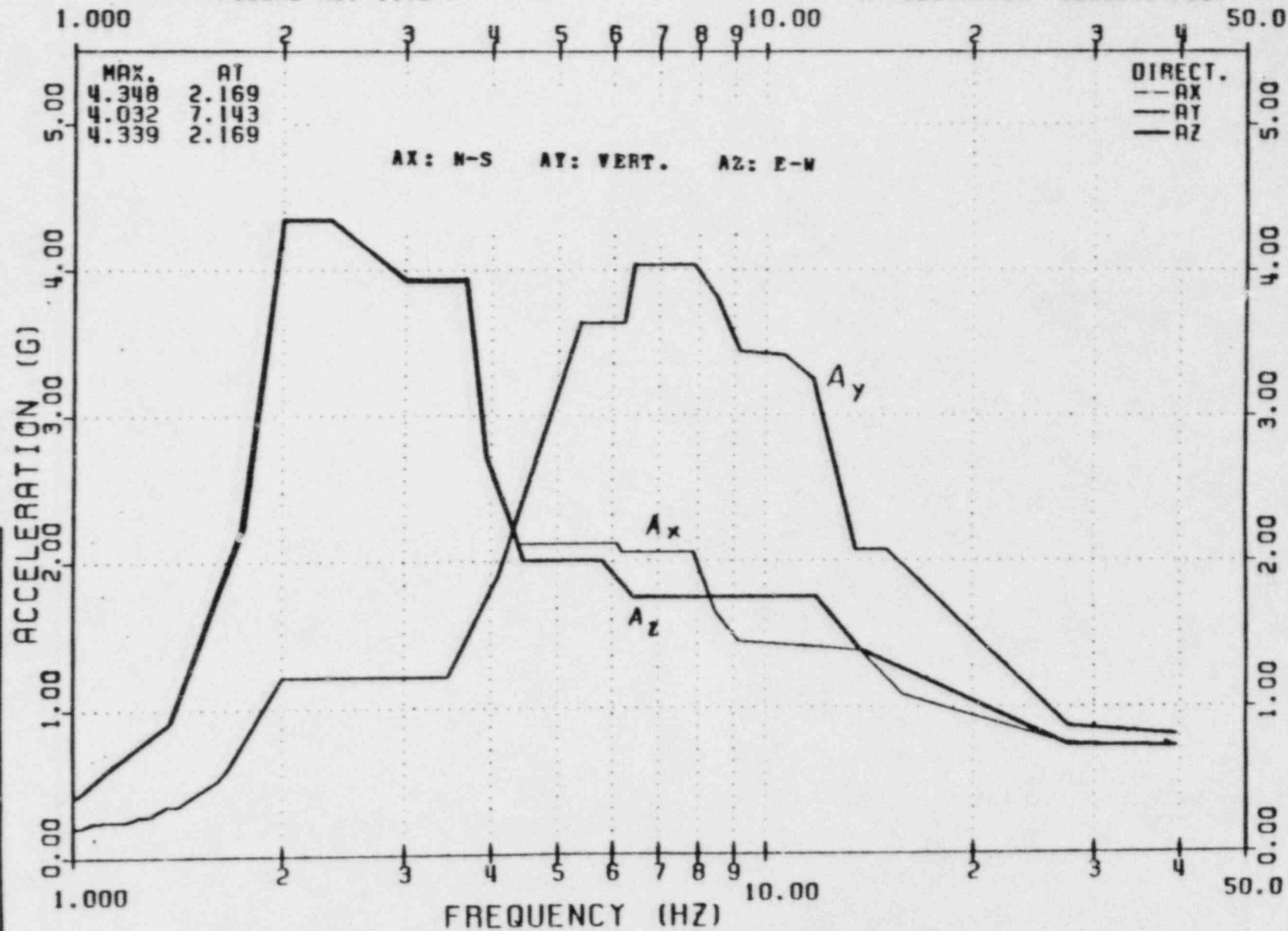
ENGINEERS, DRAFTSMEN, CONSTRUCTORS  
SEE US

2323

FIGURE-1110 B



**TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG**  
**FLOOR RESPONSE SPECTRA FOR SSE;** DAMPING = 0.03  
**FIGURE NO. 1112-B** AT ELEVATION 1000.50 FEET



**TUSI-CONTAINMENT BLDG.**

**REFINED RESPONSE SPECTRA**

**GIBBS & HILL, INC.**

ENGINEERING, ARCHITECTURE, CONSULTANTS

JOB NO. 2525

**FIGURE- 1112 B**

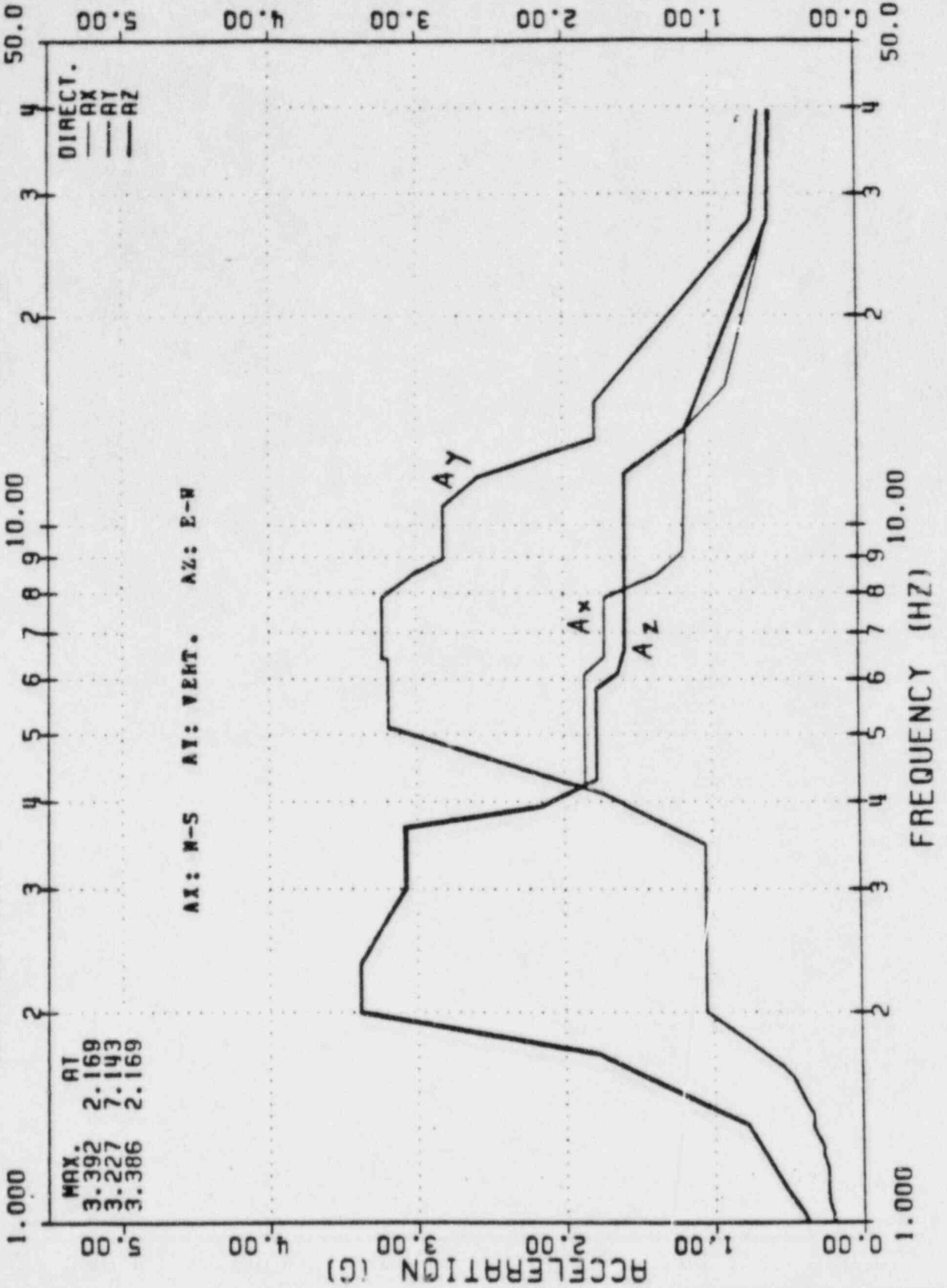
# TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG

FLOOR RESPONSE SPECTRA FOR SSE:

FIGURE NO. 1113-B

DAMPING = 0.03

AT ELEVATION 950.58 FEET



TUSI-CONTAINMENT BLDG.

REFINED RESPONSE SPECTRA

GIBBS & HILL, INC.

ENGINEERS, DESIGNERS, CONSTRUCTORS

JOB NO. 2523

FIGURE-1113B

DATE PLT. APPROVED: 10/10/68

ISSUED FOR



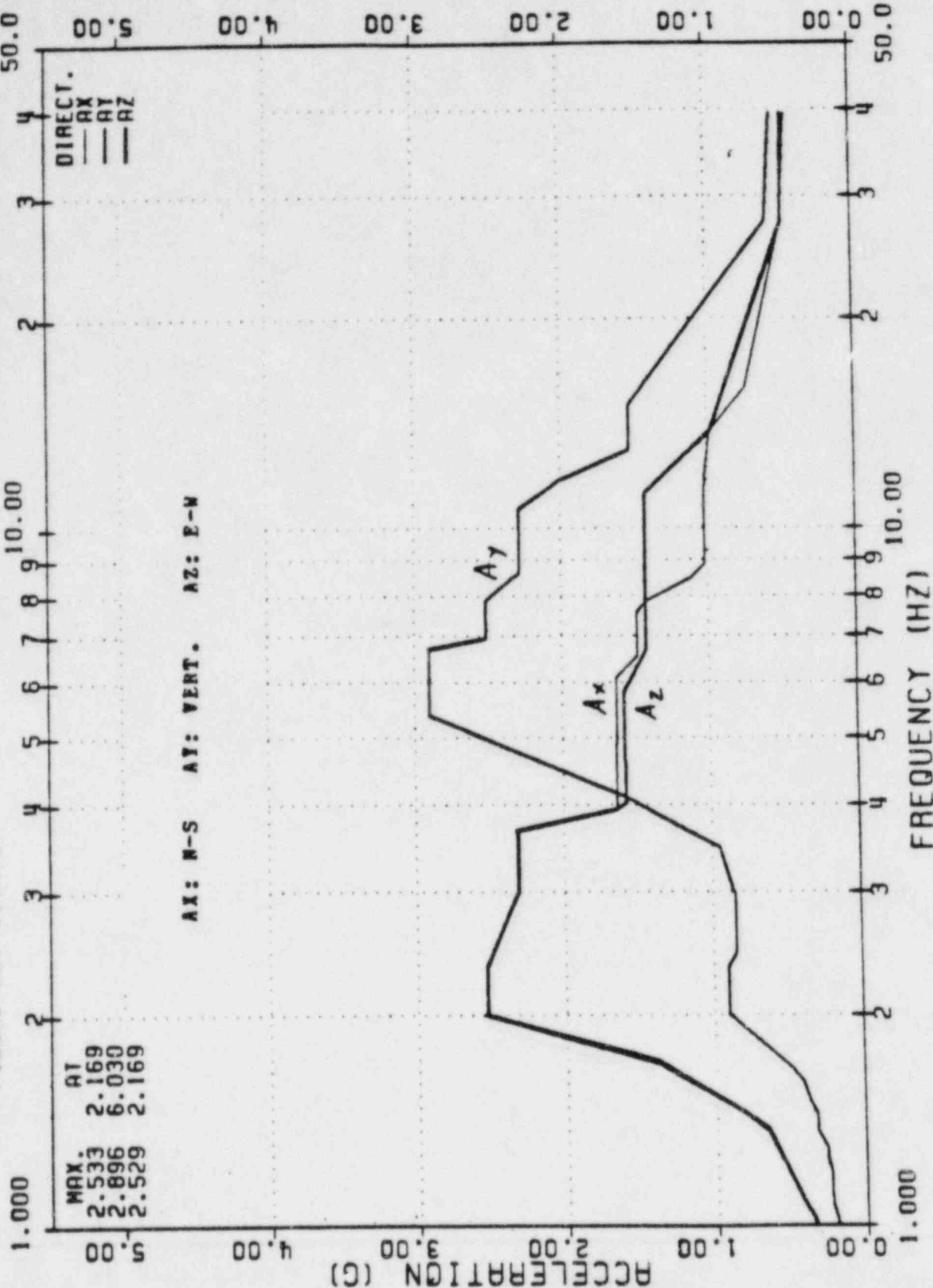
# TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG

FLOOR RESPONSE SPECTRA FOR SSE;

DAMPING = 0.03

AT ELEVATION 905.75 FEET

FIGURE NO. 1114-B



TUSI-CONTAINMENT BLDG.

REFINED RESPONSE SPECTRA

GIBBS & HILL, INC.

ENGINEERS, DESIGNERS, CONSTRUCTORS

JAN 68 2321

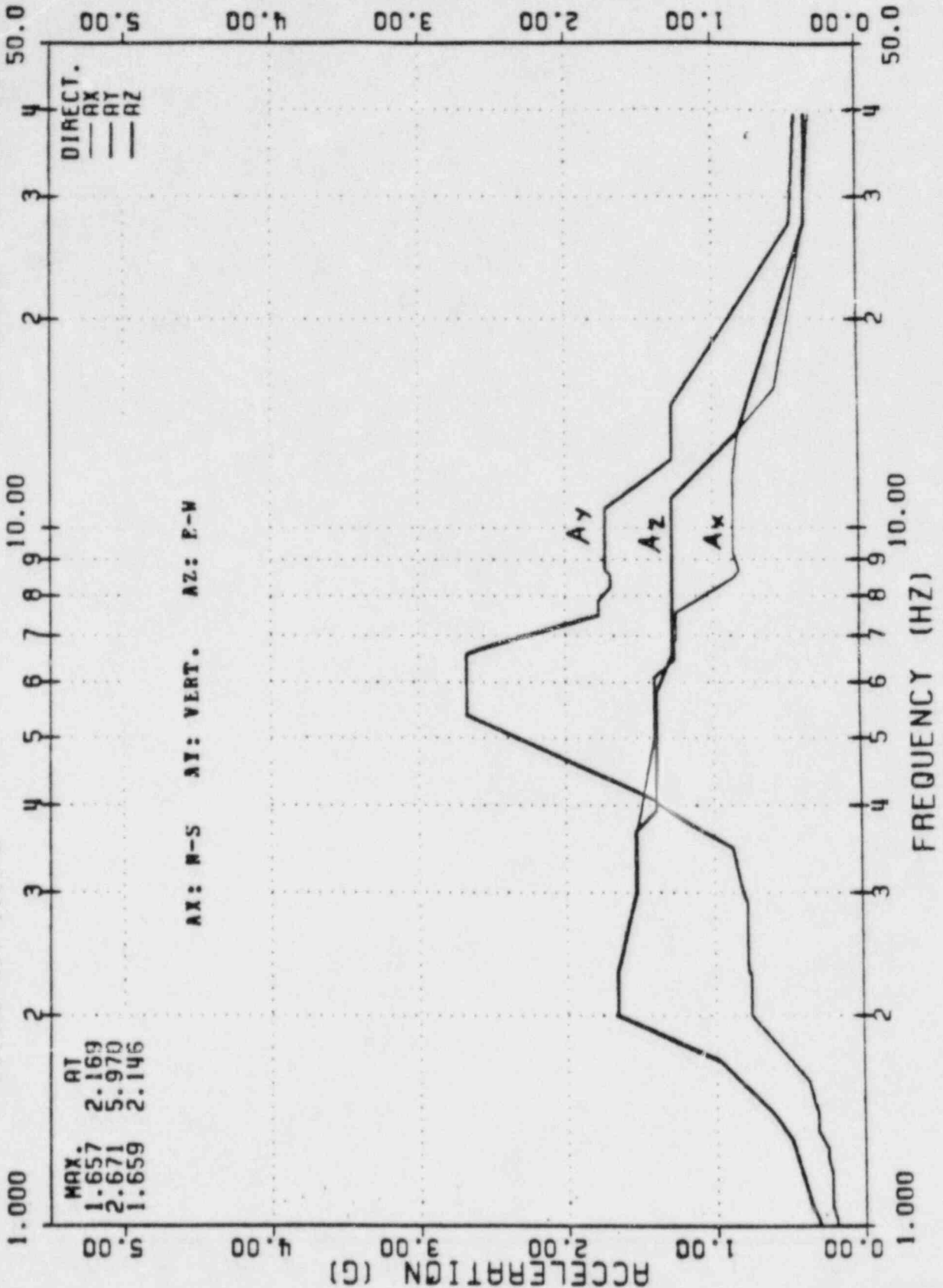
FIGURE-1114 B

10-10

100'100' FOR

# TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG

FLOOR RESPONSE SPECTRA FOR SSE;  
DAMPING = 0.03  
AT ELEVATION 860.00 FEET  
FIGURE NO. 1115-B



TUSI-CONTAINMENT BLDG.

REFINED RESPONSE SPECTRA

GIBBS & HILL, INC.

ENGINEERS, DESIGNERS, CONSTRUCTORS

JOB NO. 2323

FIGURE-1115 B

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DATE PLT/CHK

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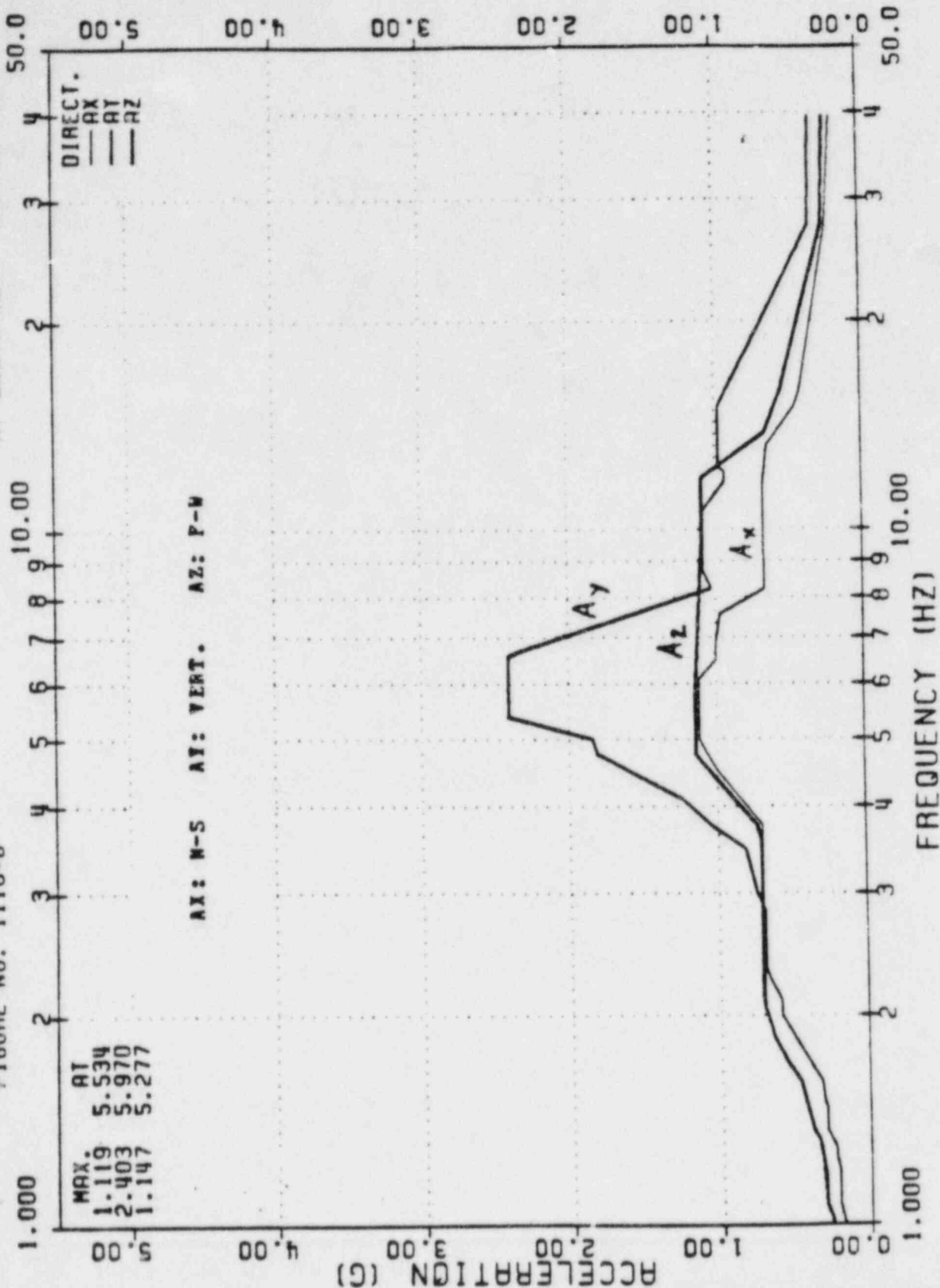
# TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG

FLOOR RESPONSE SPECTRA FOR SSE:

FIGURE NO. 1116-B

DAMPING = 0.03

AT ELEVATION 805.50 FEET



TUSI-CONTAINMENT BLDG.

REFINED RESPONSE SPECTRA

GIBBS & HILL, INC.

ENGINEERS, DESIGNERS, CONSTRUCTORS

JOB NO. 2523

FIGURE-1116 B

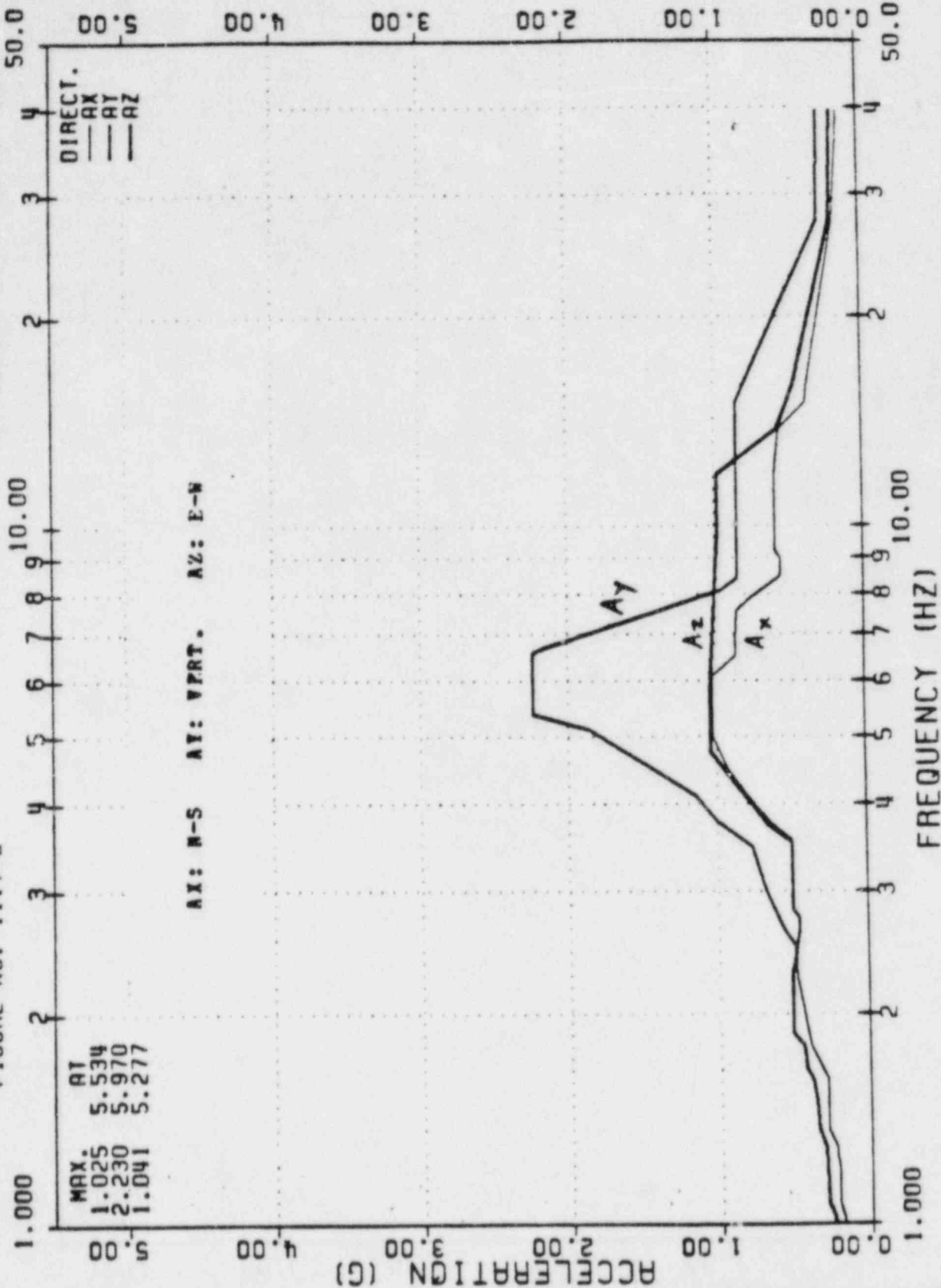
# TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG

FLOOR RESPONSE SPECTRA FOR SSE1

DAMPING = 0.03

AT ELEVATION 783.58 FEET

FIGURE NO. 1117-B



TUSI-CONTAINMENT BLDG.

REFINED RESPONSE SPECTRA

GIBBS & HILL, INC.

ENGINEERS, DESIGNERS, CONSTRUCTORS

JOB NO 2323

FIGURE-1117 B

ISSUE DATE 11/18/68

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## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AX ; DAMPING = 0.01

SET NO. = 2

FIGURE NO. 1130-B

DIRECTION 1

AT ELEVATION 1000.50 FEET

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1130

DEGREE OF FREEDOM = 1

NUMBER OF GRIDS = 27

DAMPING VALUE = 0.010

1	0.9000	0.20576	2	0.9783	0.23937	3	1.0228	0.24749	4	1.0714	0.36095
5	1.1250	0.39835	6	1.1842	0.40081	7	1.2500	0.47306	8	1.4000	0.52445
9	1.5300	0.81136	10	1.6800	1.28083	11	1.7300	1.56610	12	2.0000	5.02801
13	2.3384	5.02801	14	3.0000	4.66597	15	3.4000	4.66597	16	3.8000	4.33000
17	4.2308	2.38300	18	7.5497	2.38264	19	7.7920	2.22986	20	8.0763	2.22986
21	8.9100	1.35330	22	11.2820	1.35330	23	11.8535	1.20659	24	13.7500	1.03210
25	15.8273	0.70505	26	27.5000	0.43242	27	39.5000	0.40524			

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AX ; DAMPING = 0.01

SET NO. = 3

FIGURE NO. 1131-B

DIRECTION 1

AT ELEVATION 950.58 FEET

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1131

DEGREE OF FREEDOM = 1

NUMBER OF GRIDS = 27

DAMPING VALUE = 0.010

1	0.9000	0.18793	2	0.9783	0.21542	3	1.0228	0.22079	4	1.0714	0.32299
5	1.1250	0.34771	6	1.1891	0.34771	7	1.2500	0.40203	8	1.4000	0.44514
9	1.5300	0.68362	10	1.6800	1.02504	11	1.7300	1.24922	12	2.0000	3.87497
13	2.3384	3.87497	14	3.0000	3.59091	15	3.6666	3.59091	16	4.2308	2.04400
17	7.5497	2.04372	18	7.8572	1.81685	19	7.8577	1.81553	20	8.0763	1.81553
21	8.9166	1.08493	22	11.2820	1.08493	23	11.8535	0.96997	24	13.7500	0.87193
25	15.8273	0.59236	26	27.5000	0.35255	27	39.5000	0.31334			

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AX ; DAMPING = 0.01

SET NO. = 4

FIGURE NO. 1132-B

DIRECTION 1

AT ELEVATION 905.75 FEET

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1132

DEGREE OF FREEDOM = 1

NUMBER OF GRIDS = 26

DAMPING VALUE = 0.010

1	0.9000	0.17192	2	0.9783	0.19391	3	1.0228	0.19682	4	1.0714	0.28890
5	1.1250	0.30225	6	1.1991	0.30225	7	1.2500	0.33824	8	1.4000	0.37393
9	1.5300	0.56893	10	1.6800	0.79535	11	1.7300	0.96466	12	2.0000	2.83951
13	2.3384	2.83951	14	3.0000	2.62547	15	3.6666	2.62547	16	4.2308	1.73940
17	7.5497	1.73943	18	7.8572	1.48217	19	7.8742	1.44347	20	8.0763	1.44347
21	8.9249	0.84428	22	11.2820	0.84428	23	13.7500	0.72808	24	15.8273	0.49118
25	27.5000	0.28137	26	39.5000	0.23545						

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AX ; DAMPING = 0.01

SET NO. = 5

FIGURE NO. 1133-B

DIRECTION 1

AT ELEVATION 860.00 FEET

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1133

DEGREE OF FREEDOM = 1

NUMBER OF GRIDS = 26

DAMPING VALUE = 0.010

1	0.9000	0.15559	2	0.9783	0.17197	3	1.0228	0.17236	4	1.0714	0.25414
5	1.1250	0.25586	6	1.2165	0.25586	7	1.2500	0.27317	8	1.2857	0.27377
9	1.7000	0.67430	10	2.0000	1.78281	11	2.3384	1.78281	12	3.0000	1.64025
13	3.6666	1.64025	14	3.9285	1.42902	15	7.5497	1.42902	16	7.8572	1.14063
17	7.8937	1.06379	18	8.0763	1.06379	19	8.7371	0.70321	20	11.2820	0.70321
21	11.6897	0.68305	22	13.7500	0.58131	23	15.8273	0.38796	24	27.5000	0.20983
25	36.3036	0.17562	26	39.5000	0.16710						

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AX; DAMPING = 0.01  
FIGURE NO. 1134-B DIRECTION 1 AT ELEVATION

805.50 FEET

SET NO. = 6  
NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1134

	1	2	0.9783	0.14585	3	1.0245	0.14585	26	DAMPING VALUE =	0.010
1	0.9000	0.13615	0.9783	0.14585	3	1.0245	0.14585	26	4	1.0714
5	1.3206	0.21499	6	1.3235	7	1.3637	0.21683	7	8	1.4062
9	1.6594	0.32352	10	1.6667	0.32858	11	1.7308	0.43378	12	1.9132
13	2.0976	0.57789	14	2.1429	0.63779	15	4.0909	0.63780	16	4.0500
17	7.0000	1.06078	18	8.7041	0.57150	19	11.2820	0.57146	20	11.6897
21	11.8535	0.54333	22	13.7500	0.43612	23	15.0273	0.31579	24	27.5000
25	35.3223	0.12109	26	39.5000	0.12109					0.13747

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AX; DAMPING = 0.01  
FIGURE NO. 1135-B DIRECTION 1 AT ELEVATION

783.58 FEET

SET NO. = 7  
NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1135

	1	2	0.9783	0.13537	3 <th>1.0252</th> <th>0.13537</th> <th>36</th> <th>DAMPING VALUE =</th> <th>0.010</th>	1.0252	0.13537	36	DAMPING VALUE =	0.010
1	0.9000	0.13042	2	0.9783	3	1.0252	0.13537	36	4	1.0714
5	1.3252	0.20433	6	1.3637	0.28966	7	1.4062	0.29753	8	1.7052
9	1.7308	0.32136	10	1.8750	0.40016	11	1.9132	0.44461	12	2.3384
13	2.4280	0.38874	14	2.6191	0.38874	15	2.6523	0.33845	16	2.8125
17	2.9605	0.35112	18	3.0000	0.41653	19	3.6850	0.41653	20	3.7500
21	4.0909	0.51585	22	4.9000	1.00080	23	5.5000	1.00080	24	5.6663
25	7.1000	0.96262	26	8.0763	0.68075	27	8.4811	0.49642	28	9.1465
29	9.2308	0.51017	30	11.2820	0.51017	31	11.6897	0.49111	32	13.7500
33	15.0273	0.26565	34	27.5000	0.11734	35	32.8132	0.11734	36	39.5000

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AY; DAMPING = 0.01  
FIGURE NO. 1130-B DIRECTION 2 AT ELEVATION

1000.50 FEET

SET NO. = 9  
NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1130

	1	2	1.0233	0.10972	3 <th>1.0714</th> <th>0.16739</th> <th>24</th> <th>DAMPING VALUE =</th> <th>0.010</th>	1.0714	0.16739	24	DAMPING VALUE =	0.010
1	1.0000	0.10972	2	1.0233	3	1.0714	0.16739	24	4	1.2454
5	1.2500	0.16974	6	1.2857	0.17078	7	1.3235	0.19633	8	1.3637
9	1.4062	0.27237	10	1.4932	0.27237	11	1.5517	0.29380	12	1.6667
13	2.0400	1.35964	14	4.1095	1.35964	15	4.6000	2.51315	16	6.7164
17	6.9391	5.08889	18	8.4811	5.08889	19	10.6383	4.16913	20	11.0000
21	13.3673	1.72630	22	14.1000	1.72630	23	27.5000	0.59018	24	39.5000

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AY; DAMPING = 0.01  
FIGURE NO. 1131-B DIRECTION 2 AT ELEVATION

950.58 FEET

SET NO. = 10  
NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1131

	1	2	1.0236	0.10770	3 <th>1.0714</th> <th>0.16383</th> <th>23</th> <th>DAMPING VALUE =</th> <th>0.010</th>	1.0714	0.16383	23	DAMPING VALUE =	0.010
1	1.0000	0.10770	2	1.0236	3	1.0714	0.16383	23	4	1.2860
5	1.3235	0.18835	6	1.3637	0.24659	7	1.4062	0.25710	8	1.5178
9	1.5517	0.26549	10	1.6667	0.36610	11	2.0400	1.15993	12	4.1141
13	4.8200	2.26285	14	6.7164	3.12952	15	6.9391	3.95393	16	8.4811
17	10.6383	3.40717	18	10.8953	3.17912	19	11.6897	3.17912	20	13.2392
21	15.0273	1.46808	22	27.5000	0.46554	23	39.5000	0.42437		1.48804

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AY; DAMPING = 0.01  
FIGURE NO. 1132-B DIRECTION 2 AT ELEVATION

905.75 FEET

SET NO. = 11  
NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1132						DEGREE OF FREEDOM = 2		NUMBER OF GRIDS = 24		DAMPING VALUE = 0.010	
1	1.0000	0.10543	2	1.0233	0.10543	3	1.0714	0.16082	4	1.2905	0.16082
5	1.3235	0.18178	6	1.3637	0.23715	7	1.4062	0.24433	8	1.5576	0.24433
9	1.6071	0.26889	10	1.6667	0.32361	11	2.0000	0.98187	12	4.1195	1.01088
13	5.1049	2.17295	14	5.4711	2.46070	15	6.7522	2.46070	16	6.9391	2.93527
17	8.4811	2.93527	18	10.6383	2.72358	19	11.0603	2.38553	20	11.6897	2.38553
21	13.0482	1.27590	22	15.0273	1.27590	23	27.5000	0.39164	24	39.5000	0.34036

TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.  
 FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AY ; DAMPING = 0.01  
 FIGURE NO. 1133-B DIRECTION 2 AT ELEVATION 860.00 FEET

SET NO. = 12

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1133						DEGREE OF FREEDOM = 2		NUMBER OF GRIDS = 23		DAMPING VALUE = 0.010	
1	0.9000	0.10359	2	0.9783	0.10415	3	1.0238	0.10415	4	1.0714	0.15792
5	1.2946	0.15792	6	1.3235	0.17572	7	1.3637	0.22840	8	1.4062	0.23237
9	1.5802	0.23237	10	1.6071	0.23834	11	1.6667	0.28251	12	2.0000	0.80256
13	3.5554	0.80256	14	3.7500	0.92672	15	4.1270	0.92672	16	5.4711	2.26258
17	6.6869	2.26258	18	8.7041	2.02734	19	10.0000	2.02734	20	12.7266	1.06226
21	15.0273	1.06226	22	27.5000	0.29595	23	39.5000	0.25473			

TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.  
 FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AY ; DAMPING = 0.01  
 FIGURE NO. 1134-B DIRECTION 2 AT ELEVATION 805.50 FEET

SET NO. = 13

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1134						DEGREE OF FREEDOM = 2		NUMBER OF GRIDS = 22		DAMPING VALUE = 0.010	
1	0.9000	0.10167	2	0.9783	0.10321	3	1.0247	0.10321	4	1.0714	0.15599
5	1.3009	0.15599	6	1.3235	0.16945	7	1.3637	0.21929	8	1.6325	0.21980
9	2.0000	0.59509	10	3.5237	0.59509	11	3.7500	0.83010	12	4.1401	0.83010
13	5.4711	2.02667	14	6.6869	2.02667	15	7.5561	1.20307	16	10.6383	1.20307
17	11.2820	0.86179	18	11.6897	0.82918	19	11.7571	0.81471	20	13.6000	0.81471
21	27.5000	0.18711	22	39.5000	0.18002						

TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.  
 FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AY ; DAMPING = 0.01  
 FIGURE NO. 1135-B DIRECTION 2 AT ELEVATION 783.58 FEET

SET NO. = 14

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1135						DEGREE OF FREEDOM = 2		NUMBER OF GRIDS = 30		DAMPING VALUE = 0.010	
1	0.9000	0.10092	2	0.9783	0.10233	3	1.0253	0.10233	4	1.0714	0.15446
5	1.3047	0.15446	6	1.3235	0.16465	7	1.3637	0.21282	8	1.6896	0.21282
9	1.7308	0.25166	10	1.8000	0.30913	11	1.8750	0.34629	12	1.9129	0.34693
13	2.0962	0.34693	14	2.1429	0.38320	15	2.4411	0.38320	16	2.5000	0.40716
17	2.6882	0.40716	18	2.8125	0.48615	19	3.0000	0.54140	20	3.5102	0.54140
21	3.7500	0.78051	22	4.1603	0.78051	23	5.4711	1.86960	24	6.6869	1.86960
25	7.9538	0.87358	26	10.6393	0.87368	27	12.2951	0.71858	28	14.0000	0.71858
29	27.5000	0.15316	30	39.5000	0.14938						

TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.  
 FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AZ ; DAMPING = 0.01  
 FIGURE NO. 1130-B DIRECTION 3 AT ELEVATION 1000.50 FEET

SET NO. = 16

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1130						DEGREE OF FREEDOM = 3		NUMBER OF GRIDS = 16		DAMPING VALUE = 0.010	
1	0.9000	0.20441	2	1.2500	0.47396	3	1.5200	0.81200	4	1.7300	1.56904
5	2.0000	5.02959	6	2.3379	5.02959	7	3.0000	4.68016	8	3.4200	4.68016
9	3.8009	4.19000	10	4.2308	2.16243	11	5.5000	2.16243	12	9.6983	1.50687
13	11.8535	1.50687	14	13.7500	1.02779	15	27.5000	0.42352	16	39.5000	0.41320

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AZ ; DAMPING = 0.01

FIGURE NO. 1131-B

DIRECTION 3

AT ELEVATION 950.58 FEET

SET NO. = 17

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1131

DEGREE OF FREEDOM = 3

NUMBER OF GRIDS = 24

DAMPING VALUE = 0.010

1	0.9000	0.18725	2	0.9783	0.21600	3	1.0228	0.22168	4	1.0714	0.32481
5	1.1250	0.34871	6	1.1898	0.34871	7	1.2500	0.40279	8	1.3235	0.44705
9	1.5200	0.68408	10	1.7000	1.25182	11	2.0000	3.87595	12	2.3379	3.87595
13	3.0000	3.60205	14	3.4200	3.60205	15	3.8009	3.26000	16	4.5000	1.94357
17	5.5000	1.94357	18	6.1484	1.34110	19	7.8572	1.34110	20	9.6983	1.29424
21	11.8535	1.29424	22	13.7500	0.86727	23	27.5000	0.34560	24	39.5000	0.33739

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AZ ; DAMPING = 0.01

FIGURE NO. 1132-B

DIRECTION 3

AT ELEVATION 905.75 FEET

SET NO. = 18

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1132

DEGREE OF FREEDOM = 3

NUMBER OF GRIDS = 24

DAMPING VALUE = 0.010

1	0.9000	0.17185	2	0.9783	0.19442	3	1.0228	0.19750	4	1.0714	0.29031
5	1.1250	0.30329	6	1.1997	0.30329	7	1.2500	0.33889	8	1.3235	0.37579
9	1.5200	0.56923	10	1.7700	0.96697	11	2.0000	2.83993	12	2.3379	2.83993
13	3.0000	2.63389	14	3.6666	2.63389	15	3.8009	1.91106	16	3.9285	1.72903
17	4.4915	1.72903	18	4.5000	1.74728	19	5.5000	1.74728	20	6.1112	1.19362
21	11.8535	1.17133	22	13.7500	0.72313	23	27.5000	0.27562	24	39.5000	0.26931

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AZ ; DAMPING = 0.01

FIGURE NO. 1133-B

DIRECTION 3

AT ELEVATION 860.00 FEET

SET NO. = 19

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1133

DEGREE OF FREEDOM = 3

NUMBER OF GRIDS = 19

DAMPING VALUE = 0.010

1	0.9000	0.15614	2	0.9783	0.17240	3	1.0228	0.17285	4	1.0714	0.25513
5	1.1250	0.25695	6	1.2174	0.25695	7	1.2500	0.27370	8	1.2857	0.27394
9	1.3235	0.30308	10	1.6200	0.56255	11	2.0000	1.78267	12	2.3379	1.78267
13	4.5000	1.54728	14	5.5000	1.54728	15	6.2182	1.04593	16	11.8535	1.04593
17	13.7500	0.57603	18	27.5000	0.20883	19	39.5000	0.20101			

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AZ ; DAMPING = 0.01

FIGURE NO. 1134-B

DIRECTION 3

AT ELEVATION 805.50 FEET

SET NO. = 20

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1134

DEGREE OF FREEDOM = 3

NUMBER OF GRIDS = 23

DAMPING VALUE = 0.010

1	0.9000	0.13744	2	0.9783	0.14619	3	1.0246	0.14619	4	1.0714	0.21418
5	1.3194	0.21418	6	1.3235	0.21677	7	1.3637	0.31232	8	1.4062	0.32547
9	1.6601	0.32547	10	1.6667	0.33021	11	1.7308	0.43657	12	1.9129	0.57833
13	2.0932	0.57833	14	2.1429	0.64445	15	4.0909	0.64445	16	4.8000	1.30968
17	5.5000	1.30968	18	6.0472	0.89657	19	10.8000	0.89657	20	13.7500	0.45088
21	15.8273	0.36407	22	27.5000	0.14206	23	39.5000	0.12647			

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AZ ; DAMPING = 0.01

FIGURE NO. 1135-B

DIRECTION 3

AT ELEVATION 783.58 FEET

SET NO. = 21

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1135

DEGREE OF FREEDOM = 3

NUMBER OF GRIDS = 20

DAMPING VALUE = 0.010

1	0.9000	0.12987	2	0.9783	0.13558	3	1.0254	0.13558	4	1.0714	0.20319
5	1.3248	0.20319	6	1.3637	0.28910	7	1.4062	0.29969	8	1.7068	0.29969
9	1.7308	0.32171	10	1.9129	0.44447	11	3.7500	0.47743	12	4.0909	0.59939
13	4.8000	1.19533	14	5.5000	1.19533	15	5.9841	0.79130	16	10.8000	0.80150
17	13.7500	0.38443	18	15.8273	0.30625	19	27.5000	0.11131	20	39.5000	0.09718



## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AX ; DAMPING = 0.02

FIGURE NO. 1136-B DIRECTION 1 AT ELEVATION 1000.50 FEET

SET NO. = 2

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1136

DEGREE OF FREEDOM = 1

NUMBER OF GRIDS = 24

DAMPING VALUE = 0.020

1	0.9000	0.19458	2	0.9783	0.22792	3	1.0228	0.24501	4	1.0714	0.30945
5	1.1250	0.35774	6	1.2500	0.44523	7	1.3235	0.49871	8	1.5000	0.58202
9	1.7600	1.38601	10	2.0000	3.69833	11	2.3384	3.69833	12	3.0000	3.26436
13	3.6666	3.26436	14	3.9285	2.35658	15	4.2308	1.72921	16	7.5497	1.72921
17	7.8572	1.64084	18	7.8582	1.63980	19	8.0763	1.63980	20	8.7919	1.15401
21	11.2320	1.15401	22	15.8273	0.65469	23	27.5000	0.43164	24	39.5000	0.41530

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AX ; DAMPING = 0.02

FIGURE NO. 1137-B DIRECTION 1 AT ELEVATION 950.58 FEET

SET NO. = 3

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1137

DEGREE OF FREEDOM = 1

NUMBER OF GRIDS = 25

DAMPING VALUE = 0.020

1	0.9000	0.17743	2	0.9783	0.20477	3	1.0228	0.21843	4	1.0714	0.27584
5	1.1250	0.31010	6	1.2500	0.37727	7	1.4000	0.42000	8	1.5200	0.57296
9	1.7500	1.10435	10	2.0000	2.85446	11	2.3384	2.85446	12	3.0000	2.52065
13	3.6666	2.52065	14	4.2308	1.48610	15	7.5497	1.48610	16	7.8572	1.36259
17	7.8844	1.33815	18	8.0763	1.33815	19	8.8081	0.92808	20	11.2820	0.92808
21	11.8535	0.83531	22	13.7500	0.76924	23	15.8273	0.54652	24	27.5000	0.35117
25	39.5000	0.32876									

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AX ; DAMPING = 0.02

FIGURE NO. 1138-B DIRECTION 1 AT ELEVATION 905.75 FEET

SET NO. = 4

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1138

DEGREE OF FREEDOM = 1

NUMBER OF GRIDS = 26

DAMPING VALUE = 0.020

1	0.9000	0.16204	2	0.9783	0.18399	3	1.0228	0.19457	4	1.0714	0.24567
5	1.1250	0.26733	6	1.1842	0.27781	7	1.2500	0.31626	8	1.3235	0.34933
9	1.4400	0.41298	10	1.7500	0.85143	11	2.0000	2.09664	12	2.3384	2.09664
13	3.0000	1.85277	14	3.6666	1.85277	15	4.2308	1.26785	16	7.5497	1.26785
17	7.8572	1.11271	18	7.9119	1.06727	19	8.0763	1.06727	20	8.8294	0.72548
21	11.2820	0.72548	22	11.8535	0.65518	23	13.7500	0.63971	24	15.8273	0.44941
25	27.5000	0.27892	26	39.5000	0.25106						

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AX ; DAMPING = 0.02

FIGURE NO. 1139-B DIRECTION 1 AT ELEVATION 860.00 FEET

SET NO. = 5

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1139

DEGREE OF FREEDOM = 1

NUMBER OF GRIDS = 29

DAMPING VALUE = 0.020

1	0.9000	0.14634	2	0.9783	0.16279	3	1.0228	0.17023	4	1.0714	0.21489
5	1.1250	0.22369	6	1.1842	0.22652	7	1.2500	0.25401	8	1.3235	0.27724
9	1.3637	0.33140	10	1.4062	0.35303	11	1.4535	0.35303	12	1.7000	0.59335
13	2.0000	1.32327	14	2.3384	1.32327	15	3.0000	1.17123	16	3.6666	1.17123
17	6.1771	1.04522	18	7.5497	1.04522	19	7.8572	0.85773	20	7.9447	0.79085
21	8.0763	0.79085	22	8.7614	0.55322	23	11.2820	0.55322	24	11.6897	0.54689
25	13.7500	0.50759	26	15.8273	0.35034	27	27.5000	0.20522	28	36.3036	0.17691
29	39.5000	0.17305									

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AX ; DAMPING = 0.02

FIGURE NO. 1140-B

DIRECTION 1

AT ELEVATION

805.50 FEET

SET NO. = 6

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1140

DEGREE OF FREEDOM = 1

NUMBER OF GRIDS = 40

DAMPING VALUE = 0.020

1	0.9000	0.12765	2	0.9783	0.13755	3	1.0228	0.14125	4	1.0714	0.17825
5	1.2423	0.17825	6	1.2500	0.17991	7	1.3235	0.19273	8	1.3637	0.24148
9	1.4062	0.24568	10	1.5122	0.24568	11	1.6667	0.28787	12	1.7308	0.35551
13	1.8750	0.42191	14	1.9132	0.43071	15	2.0336	0.43071	16	2.1429	0.46177
17	2.6191	0.46177	18	2.6849	0.39453	19	2.7500	0.36447	20	2.7521	0.38398
21	2.7567	0.38278	22	3.4375	0.38278	23	3.4479	0.38151	24	3.6771	0.38151
25	3.7500	0.41314	26	4.0909	0.47573	27	4.5000	0.70038	28	5.0000	0.76256
29	6.1054	0.76256	30	6.1771	0.78027	31	7.5497	0.78027	32	9.2308	0.43400
33	11.2820	0.43400	34	11.6897	0.42940	35	11.8535	0.42558	36	13.7500	0.37936
37	15.0273	0.27443	38	27.5000	0.12656	39	36.3036	0.10984	40	39.5000	0.10917

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AX ; DAMPING = 0.02

FIGURE NO. 1141-B

DIRECTION 1

AT ELEVATION

783.58 FEET

SET NO. = 7

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1141

DEGREE OF FREEDOM = 1

NUMBER OF GRIDS = 41

DAMPING VALUE = 0.020

1	0.9000	0.12228	2	0.9783	0.12743	3	1.0228	0.12964	4	1.0714	0.16808
5	1.2692	0.16808	6	1.3235	0.17737	7	1.3637	0.22289	8	1.6296	0.22289
9	1.6667	0.23589	10	1.7308	0.24300	11	1.8750	0.31768	12	1.9132	0.32695
13	2.3384	0.32695	14	2.3913	0.29907	15	2.6191	0.28551	16	2.6781	0.24642
17	2.7042	0.24642	18	2.8125	0.28432	19	3.0000	0.30748	20	3.5960	0.30748
21	3.7500	0.37287	22	4.0909	0.44908	23	4.5000	0.65701	24	5.0000	0.70173
25	6.1112	0.70173	26	6.1857	0.67399	27	7.5497	0.67399	28	7.8572	0.57862
29	7.9538	0.50703	30	8.0763	0.49735	31	8.4811	0.38412	32	8.5085	0.37941
33	11.2820	0.37941	34	11.6897	0.37431	35	11.8535	0.37029	36	13.7500	0.32727
37	15.0273	0.23084	38	15.8273	0.22349	39	27.5000	0.10484	40	39.0041	0.10484
41	39.5000	0.10510									

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AY ; DAMPING = 0.02

FIGURE NO. 1136-B

DIRECTION 2

AT ELEVATION

1000.50 FEET

SET NO. = 9

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1136

DEGREE OF FREEDOM = 2

NUMBER OF GRIDS = 27

DAMPING VALUE = 0.020

1	0.9000	0.10028	2	1.0228	0.10725	3	1.0714	0.13896	4	1.2089	0.13896
5	1.2500	0.15415	6	1.2865	0.15415	7	1.3637	0.21301	8	1.4516	0.21811
9	1.6071	0.30821	10	1.7000	0.37001	11	2.0000	1.00008	12	4.1000	1.00008
13	5.3731	2.42863	14	6.1018	2.42863	15	6.1771	2.57913	16	6.4286	2.99034
17	6.7164	3.02450	18	6.9391	3.44396	19	8.4811	3.44396	20	9.5643	2.90401
21	11.6897	2.90401	22	11.8535	2.75922	23	13.4496	1.41360	24	15.0273	1.41360
25	15.8273	1.34383	26	27.5000	0.56990	27	39.5000	0.52486			

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AY ; DAMPING = 0.02

FIGURE NO. 1137-B

DIRECTION 2

AT ELEVATION

950.58 FEET

SET NO. = 10

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1137

DEGREE OF FREEDOM = 2

NUMBER OF GRIDS = 26

DAMPING VALUE = 0.020

1	0.9000	0.09812	2	1.0228	0.10495	3	1.0714	0.13549	4	1.2146	0.13549
5	1.2500	0.14756	6	1.2882	0.14756	7	1.3637	0.20271	8	1.4526	0.20271
9	1.6071	0.27403	10	1.7000	0.32653	11	2.0000	0.85418	12	3.7500	0.86424
13	4.0909	0.96607	14	5.3731	2.11637	15	6.2125	2.11637	16	6.4286	2.37753
17	6.7164	2.38457	18	6.9391	2.68812	19	8.4811	2.68812	20	9.5643	2.26873
21	11.6897	2.26873	22	11.8535	2.15567	23	13.2890	1.21172	24	15.0273	1.21172

25 27.5000 0.46799 26 39.5000 0.42994

TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.  
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AY ; DAMPING = 0.02  
FIGURE NO. 1138-B DIRECTION 2 AT ELEVATION 905.75 FEET

SET NO. = 11

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1138				DEGREE OF FREEDOM = 2		NUMBER OF GRIDS = 26		DAMPING VALUE = 0.020			
1	0.9000	0.09626	2	1.0228	0.10302	3	1.0714	0.13257	4	1.2198	0.13257
5	1.2500	0.14214	6	1.2898	0.14214	7	1.3637	0.19427	8	1.4658	0.19427
9	1.6071	0.24467	10	1.7000	0.28901	11	2.0000	0.72457	12	3.5412	0.72457
13	3.7500	0.79904	14	4.0909	0.88163	15	5.3731	1.96432	16	6.5671	1.96432
17	6.9391	2.00984	18	8.4811	2.00984	19	8.7545	1.75633	20	10.6383	1.75633
21	10.8023	1.69844	22	11.6897	1.69844	23	13.0623	1.03176	24	14.0000	1.03176
25	27.5000	0.37652	26	39.5000	0.34474						

TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.  
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AY ; DAMPING = 0.02  
FIGURE NO. 1139-B DIRECTION 2 AT ELEVATION 860.00 FEET

SET NO. = 12

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1139				DEGREE OF FREEDOM = 2		NUMBER OF GRIDS = 31		DAMPING VALUE = 0.020			
1	0.9000	0.09444	2	1.0228	0.10119	3	1.0714	0.12979	4	1.2250	0.12979
5	1.2500	0.13712	6	1.2915	0.13712	7	1.3637	0.18654	8	1.4875	0.18654
9	1.5000	0.18995	10	1.6071	0.21654	11	1.7000	0.25292	12	2.0000	0.59462
13	3.4616	0.59462	14	3.7500	0.73412	15	4.0909	0.79616	16	4.7493	1.36407
17	5.0000	1.38209	18	5.1049	1.53642	19	5.3731	1.80920	20	6.5671	1.80920
21	6.6869	1.70993	22	7.1491	1.31891	23	8.4811	1.31891	24	8.4978	1.30824
25	10.6383	1.30824	26	11.2296	1.11704	27	11.6897	1.11704	28	12.6789	0.85031
29	15.0273	0.85031	30	27.5000	0.28328	31	39.5000	0.25787			

TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.  
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AY ; DAMPING = 0.02  
FIGURE NO. 1140-B DIRECTION 2 AT ELEVATION 805.50 FEET

SET NO. = 13

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1140				DEGREE OF FREEDOM = 2		NUMBER OF GRIDS = 35		DAMPING VALUE = 0.020			
1	0.9000	0.09249	2	1.0228	0.09921	3	1.0714	0.12833	4	1.2365	0.12833
5	1.2500	0.13193	6	1.2933	0.13193	7	1.3637	0.17868	8	1.5466	0.17868
9	1.6071	0.18664	10	1.6667	0.21438	11	1.8000	0.35724	12	1.8750	0.42887
13	1.9129	0.44572	14	2.3379	0.44572	15	2.3384	0.44565	16	2.3386	0.44555
17	2.8948	0.44555	18	2.9650	0.43770	19	3.2931	0.43770	20	3.4616	0.46013
21	3.7500	0.65956	22	4.0909	0.69563	23	4.7493	1.13030	24	5.0000	1.13148
25	5.3731	1.62450	26	6.5671	1.62450	27	7.9538	0.77933	28	10.6383	0.77933
29	11.2820	0.63737	30	11.6897	0.62944	31	12.2436	0.62944	32	12.2951	0.63963
33	15.0273	0.63963	34	27.5000	0.18698	35	39.5000	0.18210			

TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.  
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AY ; DAMPING = 0.02  
FIGURE NO. 1141-B DIRECTION 2 AT ELEVATION 783.58 FEET

SET NO. = 14

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1141				DEGREE OF FREEDOM = 2		NUMBER OF GRIDS = 32		DAMPING VALUE = 0.020			
1	0.9000	0.09174	2	1.0228	0.09756	3	1.0714	0.12688	4	1.2483	0.12688
5	1.2500	0.12730	6	1.2938	0.12730	7	1.3637	0.17169	8	1.6614	0.17169
9	1.6667	0.17305	10	1.8000	0.24740	11	1.8750	0.27151	12	1.9129	0.27368
13	2.1179	0.27368	14	2.1429	0.27920	15	2.3220	0.28772	16	2.6471	0.32188
17	2.8125	0.36280	18	3.0000	0.39283	19	3.2227	0.39283	20	3.4616	0.43015
21	4.0909	0.63150	22	5.0000	1.01395	23	5.1049	1.16908	24	5.3731	1.50316
25	6.5671	1.50316	26	7.5497	0.82064	27	8.0642	0.56936	28	10.6383	0.56936
29	12.2951	0.55711	30	15.0273	0.55711	31	27.5000	0.15384	32	39.5000	0.15106

1  
TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.  
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AZ ; DAMPING = 0.02  
FIGURE NO. 1136-B DIRECTION 3 AT ELEVATION 1000.50 FEET

BROADENED SPECTRUM FOR MODE=1136		DEGREE OF FREEDOM =		NUMBER OF GRIDS = 26		DAMPING VALUE = 0.020	
1	0.9000	0.19323	2	0.9783	0.22875	3	1.0714
5	1.1250	0.35844	6	1.2500	0.44624	7	1.3637
9	1.5200	0.66053	10	1.7500	0.8869	11	2.3379
13	3.0000	3.26707	14	3.6666	3.26707	15	4.2308
17	4.2644	1.49756	18	5.5000	1.49756	19	6.1261
21	7.8572	1.32173	22	8.0630	1.26441	23	13.7500
25	27.5000	0.42524	26	39.5000	0.41759	24	0.92544

SET NO. = 16  
NO. OF SPECTRA = 1

1  
TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.  
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AZ ; DAMPING = 0.02  
FIGURE NO. 1137-B DIRECTION 3 AT ELEVATION 950.58 FEET

BROADENED SPECTRUM FOR MODE=1137		DEGREE OF FREEDOM =		NUMBER OF GRIDS = 26		DAMPING VALUE = 0.020	
1	0.9000	0.17676	2	0.9783	0.20550	3	1.0714
5	1.1250 <td>0.31060 <td>6</td> <td>1.1842 <td>0.32847 <td>7</td> <td>1.3235</td> </td></td></td>	0.31060 <td>6</td> <td>1.1842 <td>0.32847 <td>7</td> <td>1.3235</td> </td></td>	6	1.1842 <td>0.32847 <td>7</td> <td>1.3235</td> </td>	0.32847 <td>7</td> <td>1.3235</td>	7	1.3235
9	1.3637 <td>0.49441 <td>10</td> <td>1.5200 <td>0.55132 <td>11</td> <td>2.0000</td> </td></td></td>	0.49441 <td>10</td> <td>1.5200 <td>0.55132 <td>11</td> <td>2.0000</td> </td></td>	10	1.5200 <td>0.55132 <td>11</td> <td>2.0000</td> </td>	0.55132 <td>11</td> <td>2.0000</td>	11	2.0000
13	2.3379	2.85094 <td>14</td> <td>3.0000 <td>2.52396 <td>15</td> <td>3.9285</td> </td></td>	14	3.0000 <td>2.52396 <td>15</td> <td>3.9285</td> </td>	2.52396 <td>15</td> <td>3.9285</td>	15	3.9285
17	4.2308	1.33460 <td>18</td> <td>5.5000</td> <td>1.33460 <td>19</td> <td>6.3447</td> </td>	18	5.5000	1.33460 <td>19</td> <td>6.3447</td>	19	6.3447
21	9.3497	1.05555	22	9.6983	1.08812 <td>20</td> <td>13.7500</td>	20	13.7500
25	27.5000	0.34727	25	39.5000	0.34111	24	0.77643

SET NO. = 17  
NO. OF SPECTRA = 1

1  
TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.  
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AZ ; DAMPING = 0.02  
FIGURE NO. 1138-B DIRECTION 3 AT ELEVATION 905.75 FEET

BROADENED SPECTRUM FOR MODE=1138		DEGREE OF FREEDOM =		NUMBER OF GRIDS = 24		DAMPING VALUE = 0.020	
1	0.9000	0.16197	2	0.9783	0.18463	3	1.0714
5	1.1250 <td>0.26766 <td>6</td> <td>1.1842 <td>0.27838 <td>7</td> <td>1.3235</td> </td></td></td>	0.26766 <td>6</td> <td>1.1842 <td>0.27838 <td>7</td> <td>1.3235</td> </td></td>	6	1.1842 <td>0.27838 <td>7</td> <td>1.3235</td> </td>	0.27838 <td>7</td> <td>1.3235</td>	7	1.3235
9	1.3637 <td>0.41430 <td>10</td> <td>1.5200 <td>0.45326 <td>11</td> <td>2.0000</td> </td></td></td>	0.41430 <td>10</td> <td>1.5200 <td>0.45326 <td>11</td> <td>2.0000</td> </td></td>	10	1.5200 <td>0.45326 <td>11</td> <td>2.0000</td> </td>	0.45326 <td>11</td> <td>2.0000</td>	11	2.0000
13	2.3379 <td>2.09476 <td>14</td> <td>3.0000 <td>1.85663 <td>15</td> <td>3.8009</td> </td></td></td>	2.09476 <td>14</td> <td>3.0000 <td>1.85663 <td>15</td> <td>3.8009</td> </td></td>	14	3.0000 <td>1.85663 <td>15</td> <td>3.8009</td> </td>	1.85663 <td>15</td> <td>3.8009</td>	15	3.8009
17	3.9285	1.34993 <td>18</td> <td>4.2308 <td>1.18839 <td>16</td> <td>6.5647</td> </td></td>	18	4.2308 <td>1.18839 <td>16</td> <td>6.5647</td> </td>	1.18839 <td>16</td> <td>6.5647</td>	16	6.5647
21	11.8535	0.98357	22	13.7500	0.64261 <td>20</td> <td>39.5000</td>	20	39.5000
						24	0.27242

SET NO. = 18  
NO. OF SPECTRA = 1

1  
TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.  
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AZ ; DAMPING = 0.02  
FIGURE NO. 1139-B DIRECTION 3 AT ELEVATION 860.00 FEET

BROADENED SPECTRUM FOR MODE=1139		DEGREE OF FREEDOM =		NUMBER OF GRIDS = 23		DAMPING VALUE = 0.020	
1	0.9000	0.14689	2	0.9375	0.15516	3	1.0228
5	1.0714 <td>0.21476 <td>6</td> <td>1.1250 <td>0.22385 <td>7</td> <td>1.2500</td> </td></td></td>	0.21476 <td>6</td> <td>1.1250 <td>0.22385 <td>7</td> <td>1.2500</td> </td></td>	6	1.1250 <td>0.22385 <td>7</td> <td>1.2500</td> </td>	0.22385 <td>7</td> <td>1.2500</td>	7	1.2500
9	1.3235 <td>0.27750 <td>10</td> <td>1.3637 <td>0.33259 <td>11</td> <td>1.4062</td> </td></td></td>	0.27750 <td>10</td> <td>1.3637 <td>0.33259 <td>11</td> <td>1.4062</td> </td></td>	10	1.3637 <td>0.33259 <td>11</td> <td>1.4062</td> </td>	0.33259 <td>11</td> <td>1.4062</td>	11	1.4062
13	2.0000 <td>1.32308 <td>14</td> <td>2.3379 <td>1.32308 <td>15</td> <td>3.0000</td> </td></td></td>	1.32308 <td>14</td> <td>2.3379 <td>1.32308 <td>15</td> <td>3.0000</td> </td></td>	14	2.3379 <td>1.32308 <td>15</td> <td>3.0000</td> </td>	1.32308 <td>15</td> <td>3.0000</td>	15	3.0000
17	4.5000 <td>1.03936 <td>18</td> <td>5.5000 <td>1.03936 <td>16</td> <td>3.6666</td> </td></td></td>	1.03936 <td>18</td> <td>5.5000 <td>1.03936 <td>16</td> <td>3.6666</td> </td></td>	18	5.5000 <td>1.03936 <td>16</td> <td>3.6666</td> </td>	1.03936 <td>16</td> <td>3.6666</td>	16	3.6666
21	13.7500	0.50605	22	27.5000	0.20581 <td>20</td> <td>11.8535</td>	20	11.8535
						24	0.87691

SET NO. = 19  
NO. OF SPECTRA = 1

1  
TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.  
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AZ ; DAMPING = 0.02  
FIGURE NO. 1140-B DIRECTION 3 AT ELEVATION 805.50 FEET

BROADENED SPECTRUM FOR MODE=1140		DEGREE OF FREEDOM =		NUMBER OF GRIDS = 28		DAMPING VALUE = 0.020	
1	0.9000	0.14689	2	0.9375	0.15516	3	1.0228
5	1.0714 <td>0.21476 <td>6</td> <td>1.1250 <td>0.22385 <td>7</td> <td>1.2500</td> </td></td></td>	0.21476 <td>6</td> <td>1.1250 <td>0.22385 <td>7</td> <td>1.2500</td> </td></td>	6	1.1250 <td>0.22385 <td>7</td> <td>1.2500</td> </td>	0.22385 <td>7</td> <td>1.2500</td>	7	1.2500
9	1.3235 <td>0.27750 <td>10</td> <td>1.3637 <td>0.33259 <td>11</td> <td>1.4062</td> </td></td></td>	0.27750 <td>10</td> <td>1.3637 <td>0.33259 <td>11</td> <td>1.4062</td> </td></td>	10	1.3637 <td>0.33259 <td>11</td> <td>1.4062</td> </td>	0.33259 <td>11</td> <td>1.4062</td>	11	1.4062
13	2.0000 <td>1.32308 <td>14</td> <td>2.3379 <td>1.32308 <td>15</td> <td>3.0000</td> </td></td></td>	1.32308 <td>14</td> <td>2.3379 <td>1.32308 <td>15</td> <td>3.0000</td> </td></td>	14	2.3379 <td>1.32308 <td>15</td> <td>3.0000</td> </td>	1.32308 <td>15</td> <td>3.0000</td>	15	3.0000
17	4.5000 <td>1.03936 <td>18</td> <td>5.5000 <td>1.03936 <td>16</td> <td>3.6666</td> </td></td></td>	1.03936 <td>18</td> <td>5.5000 <td>1.03936 <td>16</td> <td>3.6666</td> </td></td>	18	5.5000 <td>1.03936 <td>16</td> <td>3.6666</td> </td>	1.03936 <td>16</td> <td>3.6666</td>	16	3.6666
21	13.7500	0.50605	22	27.5000	0.20581 <td>20</td> <td>11.8535</td>	20	11.8535
						24	0.87691

SET NO. = 20  
NO. OF SPECTRA = 1



1	0.9000	0.12894	2	0.9375	0.13394	3	0.9783	0.13799	4	1.0228	0.14119
5	1.0714	0.17734	6	1.2364	0.17734	7	1.2500	0.18010	8	1.3235	0.19277
9	1.3637	0.24092	10	1.4062	0.24772	11	1.5298	0.24772	12	1.6071	0.26066
13	1.6667	0.28926	14	1.7308	0.35619	15	1.8750	0.42334	16	1.9129	0.43159
17	2.0302	0.43159	18	2.1429	0.46706	19	3.7500	0.46706	20	4.0909	0.56657
21	4.8000	0.86223	22	5.5000	0.86223	23	6.2171	0.74989	24	11.2000	0.74989
25	13.7500	0.39065	26	15.8273	0.31923	27	27.5000	0.13688	28	39.5000	0.12738

TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

SET NO. = 21

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AZ ; DAMPING = 0.02

FIGURE NO. 1141-B

DIRECTION 3

AT ELEVATION 783.58 FEET

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1141				DEGREE OF FREEDOM =			3		NUMBER OF GRIDS =		33		DAMPING VALUE =		0.020	
1	0.9000	0.12167	2	0.9375	0.12537	3	0.9783	0.12778	4	1.0228	0.12933					
5	1.0714	0.16785	6	1.2674	0.16785	7	1.3235	0.17730	8	1.3637	0.22212					
9	1.4062	0.22425	10	1.6335	0.22425	11	1.6667	0.23679	12	1.7308	0.24354					
13	1.8750	0.31833	14	1.9129	0.32720	15	2.3379	0.32720	16	2.3384	0.32695					
17	2.3913	0.29714	18	2.6191	0.28605	19	2.6787	0.24800	20	2.7029	0.24800					
21	2.8125	0.28594	22	2.9615	0.29467	23	3.0700	0.31392	24	3.5638	0.31392					
25	3.7500	0.39714	26	4.8000	0.77948	27	5.5000	0.77948	28	6.1054	0.67083					
29	11.1000	0.67083	30	13.7500	0.33168	31	15.8273	0.26698	32	27.5000	0.10619					
33	39.5000	0.09768														

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AX ; DAMPING = 0.02

FIGURE NO. 1106-B

DIRECTION 1

AT ELEVATION 1000.50 FEET

SET NO. = 2

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1106

DEGREE OF FREEDOM = 1

NUMBER OF GRIDS = 24

DAMPING VALUE = 0.020

1	0.9000	0.36265	2	1.0228	0.44336	3	1.0714	0.57818	4	1.1250	0.66031
5	1.3500	0.89778	6	1.4800	1.32803	7	1.7200	2.47364	8	2.0000	5.55227
9	2.3384	5.55227	10	3.0000	4.86325	11	3.3200	4.86325	12	3.9285	4.35000
13	4.3902	2.48800	14	7.8572	2.48800	15	7.9538	2.24912	16	8.0763	2.19354
17	9.1666	1.64192	18	9.1692	1.64192	19	9.2308	1.65085	20	11.2820	1.65085
21	13.7500	1.51215	22	15.8273	1.12643	23	27.5000	0.74989	24	39.5000	0.72246

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AX ; DAMPING = 0.02

FIGURE NO. 1107-B

DIRECTION 1

AT ELEVATION 950.58 FEET

SET NO. = 3

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1107

DEGREE OF FREEDOM = 1

NUMBER OF GRIDS = 25

DAMPING VALUE = 0.020

1	0.9000	0.33493	2	1.0228	0.40117	3	1.0714	0.52096	4	1.1250	0.57826
5	1.2500	0.69212	6	1.3235	0.76447	7	1.3637	0.89916	8	1.4516	1.09910
9	1.5000	1.28925	10	1.7000	1.98295	11	2.0000	4.32139	12	2.3384	4.32139
13	3.0000	3.80302	14	3.3200	3.80302	15	3.9285	3.47000	16	4.2308	2.15395
17	7.5497	2.15395	18	7.8572	2.08758	19	7.9538	1.88380	20	9.1057	1.36349
21	11.2820	1.36349	22	13.0000	1.28325	23	15.8273	0.94128	24	27.5000	0.61135
25	39.5000	0.57345									

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AX ; DAMPING = 0.02

FIGURE NO. 1108-B

DIRECTION 1

AT ELEVATION 905.75 FEET

SET NO. = 4

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1108

DEGREE OF FREEDOM = 1

NUMBER OF GRIDS = 28

DAMPING VALUE = 0.020

1	0.9000	0.31005	2	0.9783	0.34505	3	1.0228	0.36329	4	1.0714	0.46959
5	1.1250	0.50460	6	1.1842	0.52132	7	1.2500	0.58750	8	1.3235	0.64478
9	1.3637	0.76714	10	1.4062	0.83482	11	1.5000	1.03098	12	1.7000	1.54232
13	2.0000	3.21603	14	2.3384	3.21603	15	3.0000	2.85093	16	3.6666	2.85093
17	4.2308	1.88993	18	7.5497	1.88993	19	7.8572	1.72800	20	8.0763	1.48721
21	8.8179	1.19428	22	11.2820	1.19428	23	11.6897	1.18125	24	11.8535	1.17357
25	13.7500	1.08531	26	15.8273	0.77504	27	27.5000	0.48694	28	39.5000	0.43965

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AX ; DAMPING = 0.02

FIGURE NO. 1109-B

DIRECTION 1

AT ELEVATION 860.00 FEET

SET NO. = 5

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1109

DEGREE OF FREEDOM = 1

NUMBER OF GRIDS = 29

DAMPING VALUE = 0.020

1	0.9000	0.28467	2	0.9783	0.31159	3	1.0228	0.32465	4	1.0714	0.41719
5	1.1250	0.42946	6	1.1842	0.43270	7	1.2500	0.48092	8	1.3235	0.52267
9	1.3637	0.63247	10	1.4062	0.66986	11	1.4516	0.68383	12	1.7000	1.09271
13	2.0000	2.08804	14	2.3384	2.08804	15	3.0000	1.87939	16	3.6666	1.87939
17	3.8009	1.62489	18	6.1112	1.62489	19	6.2969	1.56469	20	7.5497	1.56469
21	7.8572	1.36107	22	9.2308	1.02181	23	11.2820	1.02181	24	11.6897	1.01039
25	11.8535	1.00340	26	13.7500	0.92099	27	15.8273	0.60543	28	27.5000	0.36001
29	39.5000	0.31752									

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AX ; DAMPING = 0.02

FIGURE NO. 1110-B DIRECTION 1 AT ELEVATION 805.50 FEET

SET NO. = 6

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1110

DEGREE OF FREEDOM = 1

NUMBER OF GRIDS = 27

DAMPING VALUE = 0.020

1	0.9000	0.25445	2	0.9783	0.27175	3	1.0228	0.27865	4	1.0714	0.35480
5	1.2520	0.35480	6	1.3235	0.38237	7	1.3637	0.48037	8	1.4062	0.48851
9	1.5164	0.48851	10	1.6667	0.56740	11	1.7308	0.67551	12	2.0000	0.84666
13	2.0392	0.84666	14	2.1429	0.90206	15	3.7500	0.90206	16	4.9806	1.31060
17	6.0874	1.31060	18	6.1112	1.30960	19	6.3813	1.21055	20	7.5497	1.21055
21	9.2308	0.81685	22	11.2820	0.81685	23	13.0000	0.72530	24	15.0273	0.49003
25	27.5000	0.22558	26	36.3036	0.18523	27	39.5000	0.17902			

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AX ; DAMPING = 0.02

FIGURE NO. 1111-B DIRECTION 1 AT ELEVATION 783.58 FEET

SET NO. = 7

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1111

DEGREE OF FREEDOM = 1

NUMBER OF GRIDS = 31

DAMPING VALUE = 0.020

1	0.9000	0.24504	2	0.9783	0.25583	3	1.0228	0.26028	4	1.0714	0.33567
5	1.2689	0.33567	6	1.3235	0.35449	7	1.3637	0.44569	8	1.6273	0.44569
9	1.6667	0.47220	10	1.8000	0.54783	11	1.8750	0.63801	12	1.9132	0.65183
13	3.6198	0.65183	14	3.7500	0.73827	15	4.0909	0.90059	16	4.8000	1.22752
17	5.5000	1.22752	18	6.0874	1.20805	19	6.1112	1.20497	20	6.3838	1.07860
21	7.5497	1.07860	22	9.2308	0.72407	23	11.2820	0.72407	24	11.6897	0.71362
25	11.8535	0.70714	26	13.7500	0.63616	27	15.0273	0.42049	28	15.8273	0.40524
29	27.5000	0.19610	30	36.3036	0.15251	31	39.5000	0.15209			

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY ; DAMPING = 0.02

FIGURE NO. 1106-B DIRECTION 2 AT ELEVATION 1000.50 FEET

SET NO. = 9

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1106

DEGREE OF FREEDOM = 2

NUMBER OF GRIDS = 24

DAMPING VALUE = 0.020

1	0.9000	0.19749	2	1.0228	0.20968	3	1.0714	0.27409	4	1.2170	0.27409
5	1.2500	0.29672	6	1.2880	0.29672	7	1.3637	0.40864	8	1.4516	0.42488
9	1.6071	0.56741	10	1.6667	0.66663	11	2.0000	1.52593	12	3.5208	1.52593
13	3.7500	1.82568	14	4.0909	2.06376	15	4.8000	3.55509	16	5.3731	4.45455
17	6.9391	4.93648	18	8.4811	4.93648	19	10.6383	4.34390	20	11.6897	4.05393
21	13.4581	2.31652	22	15.0273	2.31652	23	27.5000	0.88974	24	39.5000	0.82082

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY ; DAMPING = 0.02

FIGURE NO. 1107-B DIRECTION 2 AT ELEVATION 950.58 FEET

SET NO. = 10

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1107

DEGREE OF FREEDOM = 2

NUMBER OF GRIDS = 23

DAMPING VALUE = 0.020

1	0.9000	0.19388	2	1.0228	0.20598	3	1.0714	0.26818	4	1.2219	0.26818
5	1.2500	0.28606	6	1.2895	0.28606	7	1.3637	0.39193	8	1.4516	0.39564
9	1.5000	0.43233	10	1.6071	0.50842	11	1.6667	0.59335	12	2.0000	1.31159
13	3.4707	1.31159	14	4.0909	1.87797	15	5.1049	3.69880	16	5.3731	3.88952
17	8.4811	3.88953	18	10.6383	3.57482	19	11.6897	3.21150	20	13.2662	2.00508
21	15.0273	2.00508	22	27.5000	0.74092	23	39.5000	0.68146			

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY ; DAMPING = 0.02

FIGURE NO. 1108-B DIRECTION 2 AT ELEVATION 905.75 FEET

SET NO. = 11

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1108

DEGREE OF FREEDOM = 2

NUMBER OF GRIDS = 25

DAMPING VALUE = 0.020

1	0.9000	0.19073	2	1.0228	0.20286	3	1.0714	0.26314	4	1.2262	0.26314
5	1.2500	0.27725	6	1.2909	0.27725	7	1.3637	0.37821	8	1.4629	0.37821
9	1.5000	0.40076	10	1.6071	0.45809	11	1.6667	0.53063	12	2.0000	1.12259
13	2.3379	1.12259	14	3.4616	1.12259	15	4.0909	1.71225	16	5.1049	3.23238
17	5.3731	3.48145	18	6.5671	3.48145	19	8.4811	2.95000	20	10.6383	2.88482
21	11.6897	2.45544	22	12.9664	1.72736	23	15.0273	1.72736	24	27.5000	0.60738
25	39.5000	0.55641									

# TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY ; DAMPING = 0.02

FIGURE NO. 1109-B

DIRECTION 2

AT ELEVATION 860.00 FEET

SET NO. = 12

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1109				DEGREE OF FREEDOM =		2		NUMBER OF GRIDS =		27		DAMPING VALUE =		0.020	
1	0.9000	0.18762	2	1.0228	0.19989	3	1.0714	0.25829	4	1.2305	0.25829				
5	1.2500	0.25909	6	1.2922	0.26908	7	1.3637	0.36562	8	1.4883	0.36562				
9	1.5000	0.37098	10	1.6071	0.41030	11	1.6667	0.47091	12	2.0000	0.93529				
13	3.3141	0.93529	14	3.4616	0.97823	15	3.7500	1.43773	16	4.0909	1.54461				
17	4.7000	2.51961	18	5.0141	2.51961	19	5.1049	2.75768	20	5.3731	3.21082				
21	6.5671	3.21082	22	8.7041	2.18196	23	10.6383	2.18196	24	12.5646	1.44701				
25	15.0273	1.44701	26	27.5000	0.47132	27	39.5000	0.47132							

# TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY ; DAMPING = 0.02

FIGURE NO. 1110-B

DIRECTION 2

AT ELEVATION 805.50 FEET

SET NO. = 13

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1110				DEGREE OF FREEDOM =		2	NUMBER OF GRIDS =		34	DAMPING VALUE =		0.020
1	0.9000	0.18403	2	1.0228	0.19662	3	1.0714	0.25555	4	1.2401	0.25555	
5	1.2500	0.26053	6	1.2937	0.26053	7	1.3637	0.35268	8	1.5680	0.35268	
9	1.6071	0.36005	10	1.6667	0.40803	11	2.0000	0.72553	12	2.1322	0.72553	
13	2.1429	0.73405	14	2.3684	0.78563	15	2.8125	0.81288	16	3.0000	0.86793	
17	3.3211	0.86793	18	3.4616	0.90474	19	3.7500	1.29651	20	4.0909	1.34762	
21	4.7000	2.11813	22	5.0378	2.11813	23	5.1049	2.29563	24	5.3731	2.88859	
25	6.5671	2.88859	26	7.9713	1.34921	27	10.6383	1.34921	28	11.2820	1.12976	
29	11.6897	1.11718	30	12.2846	1.11718	31	12.2951	1.12030	32	15.0273	1.12030	
33	27.5000	0.33369	34	39.5000	0.32622							

# TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY ; DAMPING = 0.02

FIGURE NO. 1111-B

DIRECTION 2

AT ELEVATION 783.58 FEET

SET NO. = 14

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1111				DEGREE OF FREEDOM =		2	NUMBER OF GRIDS =		32	DAMPING VALUE =		0.020
1	0.9000	0.18266	2	1.0228	0.19414	3	1.0714	0.25301	4	1.2496	0.25301	
5	1.2500	0.25321	6	1.2933	0.25321	7	1.3235	0.29286	8	1.3637	0.34159	
9	1.6656	0.34159	10	1.6667	0.34210	11	1.8000	0.47319	12	1.8750	0.50576	
13	2.0573	0.50576	14	2.1429	0.54282	15	2.3249	0.54282	16	2.8125	0.71784	
17	3.0000	0.78381	18	3.2475	0.78381	19	3.4616	0.84899	20	3.7500	1.22362	
21	4.0909	1.23390	22	4.7000	1.90495	23	5.0083	1.90495	24	5.1049	2.15054	
25	5.3731	2.68380	26	6.5671	2.68380	27	8.1427	1.01303	28	10.6383	1.01303	
29	12.2951	0.98738	30	15.0273	0.98738	31	27.5000	0.27965	32	39.5000	0.27531	

# TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AZ ; DAMPING = 0.02

FIGURE NO. 1106-B

DIRECTION 3

AT ELEVATION 1000.50 FEET

SET NO. = 16

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1106				DEGREE OF FREEDOM =		3	NUMBER OF GRIDS =		21	DAMPING VALUE =		0.020
1	0.9000	0.36078	2	1.0228	0.44536	3	1.0714	0.58027	4	1.1250	0.66049	
5	1.2500	0.80928	6	1.3500	0.90050	7	1.5000	1.32766	8	1.7200	2.47803	



9	2.0000	5.54266	10	2.3379	5.54266	11	3.0000	4.87593	12	3.4000	4.87593
13	3.9285	4.26000	14	4.2308	2.48999	15	4.2774	2.43526	16	5.5000	2.43526
17	6.2923	2.10542	18	11.8535	2.10542	19	13.7500	1.51327	20	27.5000	0.73931
21	39.5000	0.72563									

TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG. SET NO. = 17  
 FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AZ ; DAMPING = 0.02  
 FIGURE NO. 1107-B DIRECTION 3 AT ELEVATION 950.58 FEET NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1107				DEGREE OF FREEDOM = 3		NUMBER OF GRIDS = 22		DAMPING VALUE = 0.020			
1	0.9000	0.33400	2	1.0228	0.40261	3	1.0714	0.52231	4	1.1250	0.57842
5	1.2500	0.69274	6	1.3235	0.76723	7	1.3637	0.90065	8	1.4516	1.09913
9	1.7000	1.98676	10	2.0000	4.31482	11	2.3379	4.31482	12	3.0000	3.81386
13	3.4000	3.81386	14	3.9285	3.40000	15	4.2308	2.18841	16	5.5000	2.18841
17	5.8047	2.06614	18	6.4751	1.90969	19	11.8535	1.90969	20	13.7500	1.28180
21	27.5000	0.60262	22	39.5000	0.59227						

TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG. SET NO. = 18  
 FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AZ ; DAMPING = 0.02  
 FIGURE NO. 1108-B DIRECTION 3 AT ELEVATION 905.75 FEET NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1108				DEGREE OF FREEDOM = 3		NUMBER OF GRIDS = 26		DAMPING VALUE = 0.020			
1	0.9000	0.30996	2	0.9783	0.34567	3	1.0228	0.36424	4	1.0714	0.47028
5	1.1250	0.50473	6	1.1842	0.52177	7	1.2500	0.58811	8	1.3235	0.64757
9	1.3637	0.76853	10	1.4062	0.83466	11	1.5000	1.03179	12	1.7000	1.54561
13	2.0000	3.21220	14	2.3379	3.21220	15	3.0000	2.86012	16	3.6666	2.86012
17	3.8009	2.27241	18	3.9285	1.95152	19	4.4898	1.95152	20	4.5000	1.96708
21	5.5000	1.96708	22	6.5223	1.73394	23	10.9000	1.73394	24	13.7500	1.07394
25	27.5000	0.47988	26	39.5000	0.47161						

TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG. SET NO. = 19  
 FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AZ ; DAMPING = 0.02  
 FIGURE NO. 1109-B DIRECTION 3 AT ELEVATION 860.00 FEET NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1109				DEGREE OF FREEDOM = 3		NUMBER OF GRIDS = 25		DAMPING VALUE = 0.020			
1	0.9000	0.28543	2	0.9783	0.31215	3	1.0228	0.32509	4	1.0714	0.41721
5	1.1250	0.42957	6	1.1842	0.43374	7	1.2500	0.48137	8	1.3235	0.52550
9	1.3637	0.63376	10	1.4062	0.66964	11	1.4516	0.68460	12	1.7000	1.07547
13	2.0000	2.08700	14	2.3379	2.08700	15	3.0000	1.88688	16	3.6666	1.88688
17	4.5000	1.74166	18	5.5000	1.74166	19	6.4376	1.55464	20	9.6983	1.55464
21	11.8535	1.55464	22	13.7500	0.91399	23	15.8273	0.76560	24	27.5000	0.35861
25	39.5000	0.35039									

TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG. SET NO. = 20  
 FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AZ ; DAMPING = 0.02  
 FIGURE NO. 1110-B DIRECTION 3 AT ELEVATION 805.50 FEET NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1110				DEGREE OF FREEDOM = 3		NUMBER OF GRIDS = 21		DAMPING VALUE = 0.020			
1	0.9000	0.25624	2	0.9375	0.26484	3	0.9783	0.27224	4	1.0228	0.27849
5	1.0714	0.35404	6	1.2471	0.35404	7	1.3235	0.38291	8	1.3637	0.47976
9	1.4062	0.49081	10	1.5312	0.49081	11	1.6071	0.51620	12	2.1429	0.90977
13	3.8000	0.49777	14	4.7000	1.47405	15	5.5000	1.47405	16	6.2393	1.34113
17	11.8535	1.34113	18	13.7500	0.74385	19	15.8273	0.60639	20	27.5000	0.25815
21	39.5000	0.23721									

TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG. SET NO. = 21

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AZ ; DAMPING = 0.02 FIGURE NO. 1111-B DIRECTION 3 AT ELEVATION 703.58 FEET									
NO. OF SPECTRA = 1									
BROADENED SPECTRUM FOR MODE=1111	DEGREE OF FREEDOM =	NUMBER OF GRIDS =	DAMPING VALUE =						
1 0.9000	0.24440	2	0.9375	3	0.9783	0.25691	4	1.0228	0.25963
5 1.0714	0.33549	6	1.2769	7	1.3235	0.35501	8	1.3637	0.44491
9 1.4062	0.44657	10	1.6285	11	1.6667	0.47434	12	1.8000	0.55186
13 1.8750	0.63963	14	1.9129	15	3.5893	0.65085	16	3.7500	0.78249
17 4.0909	0.98266	18	4.7000	19	5.5000	1.35025	20	6.1748	1.20991
21 11.8535	1.20991	22	13.7500	23	15.8273	0.51865	24	27.5000	0.21082
25 39.5000	0.19114								

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AX ; DAMPING = 0.03

SET NO. = 2

FIGURE NO. 1112-B DIRECTION 1 AT ELEVATION 1000.50 FEET

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1112

DEGREE OF FREEDOM = 1

NUMBER OF GRIDS = 24

DAMPING VALUE = 0.030

1	0.9000	0.34117	2	1.0228	0.42989	3	1.1250	0.60111	4	1.3800	0.91346
5	1.7400	2.22755	6	2.0000	4.34765	7	2.3384	4.34765	8	3.0000	3.91460
9	3.6666	3.91460	10	3.8009	3.29357	11	3.9285	2.70195	12	4.2308	2.30528
13	4.3582	2.11853	14	6.0874	2.11853	15	6.1112	2.11137	16	6.1975	2.05892
17	7.8572	2.05892	18	8.4811	1.64972	19	9.1666	1.45117	20	11.2820	1.42013
21	13.7500	1.38475	22	15.8273	1.07771	23	27.5000	0.75017	24	39.5000	0.72487

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AX ; DAMPING = 0.03

SET NO. = 3

FIGURE NO. 1113-B DIRECTION 1 AT ELEVATION 950.58 FEET

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1113

DEGREE OF FREEDOM = 1

NUMBER OF GRIDS = 22

DAMPING VALUE = 0.030

1	0.9000	0.31473	2	1.0228	0.38862	3	1.1250	0.52475	4	1.3800	0.77706
5	1.4516	0.99611	6	1.7400	1.78169	7	2.0000	3.39151	8	2.3384	3.39151
9	3.0000	3.06433	10	3.6666	3.06433	11	3.9285	2.14347	12	4.2308	1.86243
13	6.0874	1.86243	14	6.1112	1.85382	15	6.4661	1.72428	16	7.8572	1.72428
17	8.4811	1.36851	18	9.1666	1.18754	19	13.7500	1.16988	20	15.8273	0.89686
21	27.5000	0.61120	22	39.5000	0.57765						

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AX ; DAMPING = 0.03

SET NO. = 4

FIGURE NO. 1114-B DIRECTION 1 AT ELEVATION 905.75 FEET

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1114

DEGREE OF FREEDOM = 1

NUMBER OF GRIDS = 24

DAMPING VALUE = 0.030

1	0.9000	0.29099	2	1.0228	0.35156	3	1.0714	0.40902	4	1.3800	0.65460
5	1.4516	0.80930	6	1.7000	1.38131	7	2.0000	2.53287	8	2.3384	2.53287
9	3.0000	2.30078	10	3.6666	2.30078	11	3.9285	1.64197	12	6.0874	1.63256
13	6.5390	1.48823	14	7.5497	1.48823	15	7.8572	1.42378	16	8.4811	1.11599
17	8.8783	1.01879	18	11.2820	1.01879	19	11.6897	1.01676	20	11.8535	1.01416
21	13.7500	0.97953	22	15.8273	0.73447	23	27.5000	0.48641	24	39.5000	0.44546

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AX ; DAMPING = 0.03

SET NO. = 5

FIGURE NO. 1115-B DIRECTION 1 AT ELEVATION 850.00 FEET

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1115

DEGREE OF FREEDOM = 1

NUMBER OF GRIDS = 29

DAMPING VALUE = 0.030

1	0.9000	0.26678	2	0.9375	0.28182	3	1.0228	0.31376	4	1.0714	0.36212
5	1.3235	0.49058	6	1.4516	0.61870	7	1.7200	0.97277	8	2.0000	1.65697
9	2.3384	1.65697	10	3.0000	1.52164	11	3.6666	1.52164	12	4.9806	1.39817
13	6.0874	1.39817	14	6.4603	1.25765	15	6.8750	1.25765	16	6.9032	1.25104
17	7.5497	1.25104	18	7.8572	1.11714	19	8.4811	0.85833	20	8.6520	0.82020
21	8.7041	0.82020	22	9.2308	0.86132	23	11.2820	0.86132	24	11.6897	0.86019
25	11.8535	0.85799	26	13.7500	0.82679	27	15.8273	0.56879	28	27.5000	0.35910
29	39.5000	0.32059									

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

SET NO. = 6

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AX ; DAMPING = 0.03  
 FIGURE NO. 1116-B DIRECTION 1 AT ELEVATION 805.50 FEET NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1116 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 32 DAMPING VALUE = 0.030

1	0.9000	0.23795	2	0.9375	0.24865	3	1.0228	0.26875	4	1.0714	0.30630
5	1.1842	0.30743	6	1.3235	0.35227	7	1.3637	0.38632	8	1.6071	0.46866
9	1.6667	0.51726	10	1.7308	0.56589	11	1.8000	0.60826	12	1.8750	0.65168
13	2.0454	0.69830	14	2.1429	0.70718	15	3.7500	0.70718	16	4.5000	1.00037
17	4.7493	1.06561	18	4.9806	1.11935	19	6.0874	1.11935	20	6.4849	1.00089
21	6.8750	1.00089	22	7.5497	0.96880	23	8.2090	0.66862	24	9.1601	0.66862
25	9.2308	0.67415	26	11.6897	0.67415	27	11.8535	0.67243	28	13.2000	0.64491
29	15.0273	0.44915	30	15.8273	0.40884	31	27.5000	0.22404	32	39.5000	0.18617

TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.  
 FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AX ; DAMPING = 0.03  
 FIGURE NO. 1117-B DIRECTION 1 AT ELEVATION 783.58 FEET SET NO. = 7  
 NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1117 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 39 DAMPING VALUE = 0.030

1	0.9000	0.22895	2	0.9375	0.23602	3	1.0228	0.25078	4	1.0714	0.29034
5	1.2857	0.30670	6	1.3637	0.35033	7	1.5000	0.36584	8	1.6071	0.38663
9	1.6667	0.42722	10	1.8000	0.44127	11	1.8750	0.51559	12	2.2916	0.51559
13	2.5000	0.47575	14	2.6131	0.46377	15	2.7433	0.46377	16	2.8125	0.50496
17	3.5501	0.50496	18	3.7500	0.64032	19	4.0909	0.78786	20	4.5000	0.92955
21	4.7493	0.98172	22	4.9806	1.02515	23	6.0874	1.02515	24	6.5208	0.86499
25	6.8750	0.86499	26	7.5497	0.85452	27	7.8572	0.77049	28	8.4811	0.55663
29	8.9903	0.55663	30	9.2308	0.59065	31	11.2820	0.59065	32	11.6897	0.58971
33	11.8535	0.58766	34	13.7500	0.56246	35	15.0273	0.37823	36	15.8273	0.36958
37	27.5000	0.17998	38	36.3036	0.14322	39	39.5000	0.14196			

TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.  
 FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY ; DAMPING = 0.03  
 FIGURE NO. 1112-B DIRECTION 2 AT ELEVATION 1000.50 FEET SET NO. = 9  
 NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1112 DEGREE OF FREEDOM = 2 NUMBER OF GRIDS = 27 DAMPING VALUE = 0.030

1	0.9000	0.18154	2	1.0228	0.20209	3	1.0714	0.23551	4	1.1250	0.24015
5	1.1902	0.24015	6	1.2500	0.27323	7	1.2857	0.27572	8	1.3637	0.34714
9	1.4134	0.34714	10	1.5000	0.42554	11	1.6071	0.51623	12	1.6667	0.60071
13	2.0000	1.21140	14	3.4616	1.21140	15	4.0909	1.88811	16	5.3731	3.63246
17	6.2283	3.63246	18	6.4286	4.03222	19	7.8572	4.03222	20	8.4811	3.80351
21	9.1666	3.42965	22	10.6383	3.40748	23	11.6897	3.24636	24	13.5310	2.06882
25	15.0273	2.06882	26	27.5000	0.86635	27	39.5000	0.80154			

TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.  
 FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY ; DAMPING = 0.03  
 FIGURE NO. 1113-B DIRECTION 2 AT ELEVATION 950.58 FEET SET NO. = 10  
 NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1113 DEGREE OF FREEDOM = 2 NUMBER OF GRIDS = 27 DAMPING VALUE = 0.030

1	0.9000	0.17833	2	1.0228	0.19841	3	1.0714	0.22946	4	1.1250	0.23327
5	1.1915	0.23327	6	1.2500	0.26269	7	1.2857	0.26329	8	1.3637	0.33188
9	1.4238	0.33188	10	1.5000	0.39165	11	1.6071	0.46200	12	1.6667	0.53496
13	2.0000	1.04505	14	3.4616	1.04505	15	4.0909	1.72090	16	5.1049	3.18561
17	6.3987	3.18561	18	6.4286	3.22668	19	7.8572	3.22668	20	8.4811	3.02150
21	8.9507	2.80947	22	10.6383	2.80947	23	11.6897	2.57450	24	13.2892	1.78293
25	15.0273	1.78293	26	27.5000	0.71916	27	39.5000	0.66540			

TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.  
 FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY ; DAMPING = 0.03 SET NO. = 11



FIGURE NO. 1114-B DIRECTION 2 AT ELEVATION 905.75 FEET

BROADENED SPECTRUM FOR MODE=1114			DEGREE OF FREEDOM = 2			NUMBER OF GRIDS = 37			NO. OF SPECTRA = 1		
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY; DIRECTION 2	FIGURE NO. 1115-B	DAMPING = 0.03	FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY; DIRECTION 2	FIGURE NO. 1115-B	DAMPING = 0.03	FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY; DIRECTION 2	FIGURE NO. 1115-B	DAMPING = 0.03	FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY; DIRECTION 2	FIGURE NO. 1115-B	DAMPING = 0.03
1	0.9000	0.17555	2	1.0228	0.19529	3	1.0714	0.22433	4	1.1250	0.22757
5	1.1926	0.22757	6	1.2500	0.25398	7	1.2869	0.25398	8	1.3235	0.28612
9	1.3637	0.31946	10	1.4359	0.31946	11	1.5000	0.36304	12	1.6071	0.41568
13	1.6667	0.47870	14	2.0000	0.89860	15	2.3379	0.89860	16	2.3384	0.89846
17	2.4487	0.84657	18	2.9753	0.84657	19	3.0000	0.85310	20	3.4616	0.94725
21	3.7500	1.25519	22	4.0909	1.57154	23	5.3731	2.89649	24	6.6869	2.89649
25	6.9410	2.50397	26	7.8572	2.50397	27	8.2090	2.39256	28	8.4811	2.31974
29	8.6079	2.27299	30	10.6383	2.27299	31	11.2820	2.10352	32	11.6897	1.99826
33	11.8535	1.93409	34	12.9349	1.52779	35	15.0273	1.52779	36	27.5000	0.58707
37	39.5000	0.54142									

TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.  
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY; DAMPING = 0.03

FIGURE NO. 1115-B DIRECTION 2 AT ELEVATION 860.00 FEET

BROADENED SPECTRUM FOR MODE=1115			DEGREE OF FREEDOM = 2			NUMBER OF GRIDS = 35			NO. OF SPECTRA = 1		
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY; DIRECTION 2	FIGURE NO. 1115-B	DAMPING = 0.03	FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY; DIRECTION 2	FIGURE NO. 1115-B	DAMPING = 0.03	FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY; DIRECTION 2	FIGURE NO. 1115-B	DAMPING = 0.03	FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY; DIRECTION 2	FIGURE NO. 1115-B	DAMPING = 0.03
1	0.9000	0.17282	2	1.0228	0.19230	3	1.0714	0.21944	4	1.1250	0.22227
5	1.1935	0.22227	6	1.2500	0.24590	7	1.2887	0.24590	8	1.3235	0.27670
9	1.3637	0.30818	10	1.4520	0.30818	11	1.5000	0.33612	12	1.6071	0.37164
13	2.0000	0.75374	14	2.2783	0.75374	15	2.3190	0.76935	16	2.3220	0.77003
17	2.3684	0.77424	18	2.9000	0.77424	19	3.0000	0.80317	20	3.4616	0.87103
21	3.7500	1.15909	22	4.0909	1.42015	23	5.3731	2.67099	24	6.5671	2.67099
25	6.6869	2.58157	26	7.4881	1.76796	27	7.8572	1.76796	28	8.2090	1.68793
29	8.5411	1.68793	30	8.7041	1.72658	31	10.6383	1.72658	32	12.5254	1.26996
33	15.0273	1.26996	34	27.5000	0.45242	35	39.5000	0.41518			

TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.  
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY; DAMPING = 0.03

FIGURE NO. 1116-B DIRECTION 2 AT ELEVATION 805.50 FEET

BROADENED SPECTRUM FOR MODE=1116			DEGREE OF FREEDOM = 2			NUMBER OF GRIDS = 39			NO. OF SPECTRA = 1		
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY; DIRECTION 2	FIGURE NO. 1116-B	DAMPING = 0.03	FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY; DIRECTION 2	FIGURE NO. 1116-B	DAMPING = 0.03	FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY; DIRECTION 2	FIGURE NO. 1116-B	DAMPING = 0.03	FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY; DIRECTION 2	FIGURE NO. 1116-B	DAMPING = 0.03
1	0.9000	0.17033	2	1.0228	0.18900	3	1.0714	0.21685	4	1.1250	0.21737
5	1.1960	0.21737	6	1.2500	0.23745	7	1.2905	0.23745	8	1.3235	0.26697
9	1.3637	0.29680	10	1.4768	0.29680	11	1.5000	0.30785	12	1.6071	0.32527
13	2.0000	0.59198	14	2.1031	0.59198	15	2.2517	0.66693	16	2.3190	0.68708
17	2.3220	0.68758	18	2.3684	0.69060	19	2.8225	0.69060	20	3.0000	0.74749
21	3.4616	0.81642	22	3.7500	1.04911	23	4.0909	1.24168	24	4.7000	1.76478
25	4.7493	1.80643	26	5.0000	1.84059	27	5.3731	2.40253	28	6.5671	2.40253
29	6.6869	2.32196	30	8.2090	1.02810	31	8.3021	1.02810	32	8.7041	1.07939
33	10.6383	1.07939	34	11.6897	0.92841	35	12.0751	0.92841	36	12.2951	0.96898
37	15.0273	0.96898	38	27.5000	0.33268	39	39.5000	0.32550			

TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.  
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY; DAMPING = 0.03

FIGURE NO. 1117-B DIRECTION 2 AT ELEVATION 783.50 FEET

BROADENED SPECTRUM FOR MODE=1117			DEGREE OF FREEDOM = 2			NUMBER OF GRIDS = 31			NO. OF SPECTRA = 1		
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY; DIRECTION 2	FIGURE NO. 1117-B	DAMPING = 0.03	FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY; DIRECTION 2	FIGURE NO. 1117-B	DAMPING = 0.03	FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY; DIRECTION 2	FIGURE NO. 1117-B	DAMPING = 0.03	FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY; DIRECTION 2	FIGURE NO. 1117-B	DAMPING = 0.03
1	0.9000	0.16921	2	1.0228	0.18651	3	1.0714	0.21441	4	1.1250	0.21455
5	1.2036	0.21455	6	1.2500	0.23016	7	1.2900	0.23016	8	1.3235	0.25627
9	1.3637	0.28660	10	1.6125	0.28660	11	1.8000	0.39570	12	1.9132	0.41866
13	2.2517	0.47815	14	2.3190	0.48527	15	2.3220	0.48547	16	2.3684	0.48704
17	2.5000	0.48946	18	2.6471	0.56391	19	3.0000	0.67317	20	3.4616	0.76641
21	3.7500	0.98797	22	4.0909	1.13478	23	5.1049	1.85434	24	5.3731	2.23028
25	6.5671	2.23028	26	6.6869	2.14966	27	8.0763	0.96672	28	8.4066	0.84600
29	15.0273	0.84600	30	27.5000	0.27937	31	39.5000	0.27511			

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AZ ; DAMPING = 0.03

FIGURE NO. 1112-B

DIRECTION 3

AT ELEVATION 1000.50 FEET

SET NO. = 16

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1112

DEGREE OF FREEDOM = 3

NUMBER OF GRIDS = 21

DAMPING VALUE = 0.030

1	0.9000	0.33931	2	1.0228	0.43192	3	1.1250	0.60140	4	1.3800	0.91513
5	1.7600	2.23163	6	2.0000	4.33931	7	2.3379	4.33931	8	3.0000	3.93299
9	3.6666	3.93299	10	3.8009	3.31417	11	3.9285	2.70951	12	4.2308	2.31175
13	4.4517	2.00381	14	5.5000	2.00381	15	5.8047	2.00027	16	6.1112	1.87346
17	6.4416	1.75163	18	11.8535	1.75163	19	13.7500	1.39135	20	27.5000	0.74130
21	39.5000	0.72808									

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AZ ; DAMPING = 0.03

FIGURE NO. 1113-B

DIRECTION 3

AT ELEVATION 950.58 FEET

SET NO. = 17

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1113

DEGREE OF FREEDOM = 3

NUMBER OF GRIDS = 22

DAMPING VALUE = 0.030

1	0.9000	0.31380	2	1.0228	0.38993	3	1.0714	0.45652	4	1.1250	0.52497
5	1.3800	0.77842	6	1.7400	1.78523	7	2.0000	3.38573	8	2.3379	3.38573
9	3.0000	3.07913	10	3.6666	3.07913	11	3.9285	2.14769	12	4.2308	1.84372
13	4.2934	1.77950	14	4.5000	1.77950	15	4.7493	1.78117	16	5.8047	1.78117
17	6.1112	1.63456	18	6.6025	1.58259	19	11.8535	1.58259	20	13.7500	1.17231
21	27.5000	0.60415	22	39.5000	0.59338						

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AZ ; DAMPING = 0.03

FIGURE NO. 1114-B

DIRECTION 3

AT ELEVATION 905.75 FEET

SET NO. = 18

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1114

DEGREE OF FREEDOM = 3

NUMBER OF GRIDS = 20

DAMPING VALUE = 0.030

1	0.9000	0.29090	2	1.0228	0.35223	3	1.0714	0.40980	4	1.3637	0.65569
5	1.4516	0.80968	6	1.7200	1.38437	7	2.0000	2.52938	8	2.3379	2.52938
9	3.0000	2.31237	10	3.6666	2.31237	11	3.9285	1.64319	12	4.0169	1.57830
13	4.5000	1.57830	14	4.7493	1.58470	15	5.8047	1.58470	16	6.6655	1.43083
17	11.2000	1.43083	18	13.7500	0.97562	19	27.5000	0.48100	20	39.5000	0.47243

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AZ ; DAMPING = 0.03

FIGURE NO. 1115-B

DIRECTION 3

AT ELEVATION 860.00 FEET

SET NO. = 19

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1115

DEGREE OF FREEDOM = 3

NUMBER OF GRIDS = 18

DAMPING VALUE = 0.030

1	0.9000	0.26754	2	0.9375	0.28294	3	1.0228	0.31377	4	1.0714	0.36215
5	1.3235	0.49056	6	1.4516	0.61961	7	1.7200	0.97534	8	2.0000	1.65922
9	2.2916	1.65922	10	3.0000	1.52993	11	3.6666	1.52993	12	3.9285	1.38460
13	5.8047	1.38460	14	6.5743	1.27600	15	11.0000	1.27600	16	13.7500	0.81898
17	27.5000	0.35533	18	39.5000	0.34900						

## TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AZ ; DAMPING = 0.03

FIGURE NO. 1116-B

DIRECTION 3

AT ELEVATION 805.50 FEET

SET NO. = 20

NO. OF SPECTRA = 1

## BROADENED SPECTRUM FOR NODE=1116

DEGREE OF FREEDOM = 3

NUMBER OF GRIDS = 25

DAMPING VALUE = 0.030

1	0.9000	0.23974	2	0.9375	0.25074	3	1.0228	0.26799	4	1.0714	0.30544
5	1.2500	0.32884	6	1.3235	0.35150	7	1.3637	0.38636	8	1.6071	0.46915
9	1.6667	0.51984	10	1.7308	0.56772	11	1.8000	0.61034	12	1.8750	0.65452
13	1.9129	0.65957	14	2.0454	0.70605	15	2.1429	0.71369	16	3.5916	0.71369

17	3.7500	0.73982	18	4.7493	1.14704	19	5.8047	1.14704	20	9.6983	1.09164
21	11.8535	1.09164	22	13.7500	0.66011	23	15.8273	0.54471	24	27.5000	0.24897
25	39.5000	0.23042									

TUSI-REFINED RESPONSE SPECTRA FOR CONTAINMENT BLDG.

FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AZ ; DAMPING = 0.03

FIGURE NO. 1117-B

DIRECTION 3

AT ELEVATION

783.58 FEET

SET NO. = 21

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE=1117

DEGREE OF FREEDOM = 3

NUMBER OF GRIDS = 28

DAMPING VALUE = 0.030

1	0.9000	0.22846	2	0.9375	0.23770	3	1.0228	0.24946	4	1.0714	0.28987
5	1.2857	0.30584	6	1.3637	0.35024	7	1.5000	0.36596	8	1.6071	0.38626
9	1.6667	0.42913	10	1.7308	0.43719	11	1.8000	0.44383	12	1.8750	0.51702
13	2.2916	0.51702	14	2.3379	0.49944	15	2.5000	0.48227	16	2.6294	0.46586
17	2.7450	0.46586	18	2.8125	0.50715	19	3.5261	0.50715	20	3.7500	0.66533
21	4.7493	1.04108	22	5.8047	1.04108	23	9.6983	0.98066	24	11.8535	0.98066
25	13.7500	0.56903	26	15.8273	0.46241	27	27.5000	0.20220	28	39.5000	0.18476
