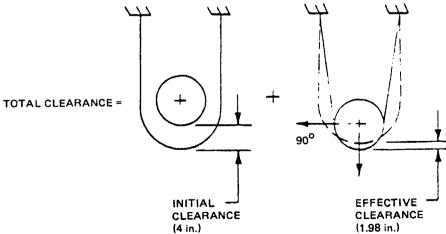
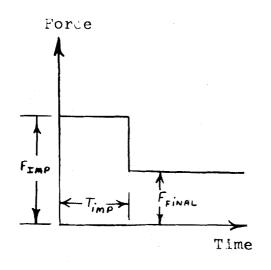


FOR CLINTON, σ=8.194, WHICH DEFINES THE UPPER LOAD LIMIT FOR PIPE RESTRAINT

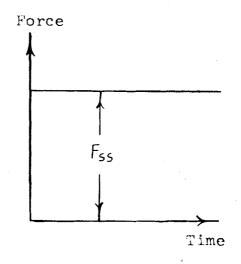


CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-2 TYPICAL RESTRAINT FORCE-DEFLECTION CURVE



 $F_{ss} \leq F_{imp}$



Fss >Fimp

PIPE THRUST RESULTING FROM A CIRCUMFERENTIAL BREAK

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

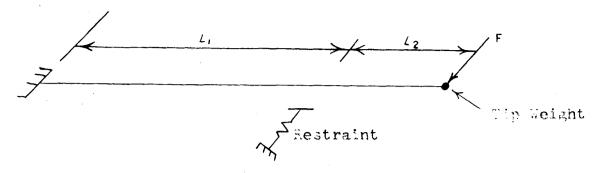
FIGURE 3.6-3

PIPE THRUST

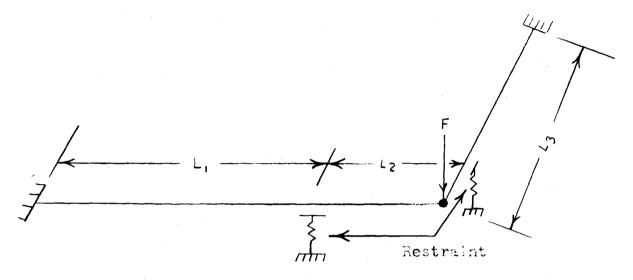
CPS/USAR

FIGURE 3.6-4 HAS BEEN DELETED

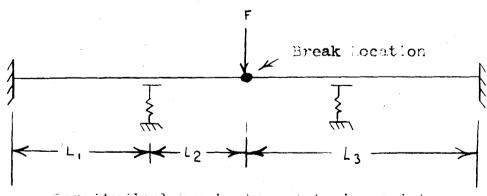
CHAPTER 03 REV. 12, JAN 2007



Circumferential Break at Albow



Longitudinal Break at an Elbow



Tongitudinal Break at an Interior Point

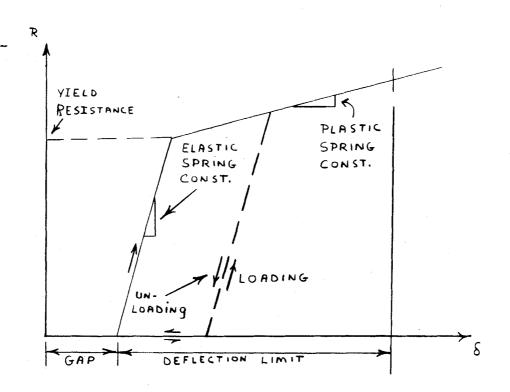
FIGURE 3.6-5

PIPE WHIP MODELS - FINITE DIFFERENCE METHOD

CPS/USAR

FIGURE 3.6-6 HAS BEEN DELETED

CHAPTER 03 REV. 12, JAN 2007



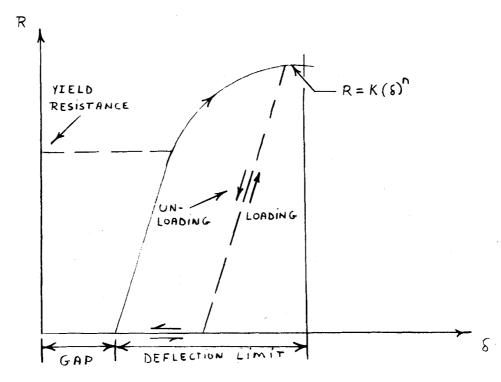
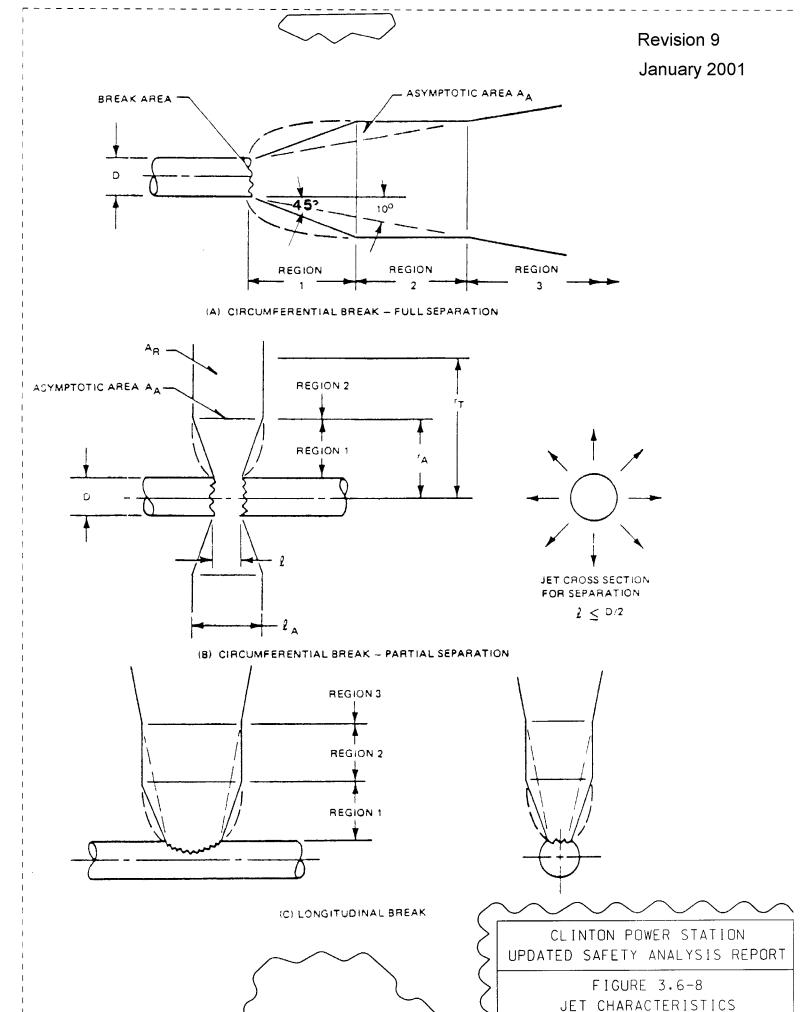


FIGURE 3.6-7

RESTRAINT PROPERTIES



CPS/USAR

FIGURES 3.6-9 AND 3.6-10 HAVE BEEN DELETED

CHAPTER 03 REV. 12, JAN 2007

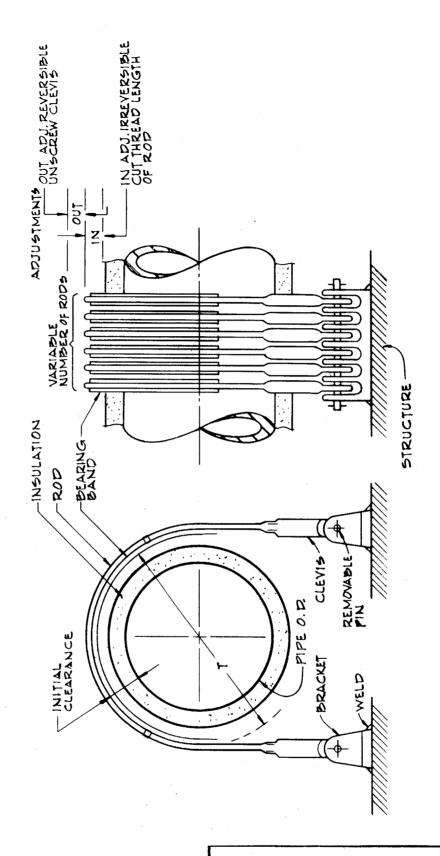


FIGURE 3.6-11

TYPICAL TENSION RESTRAINT

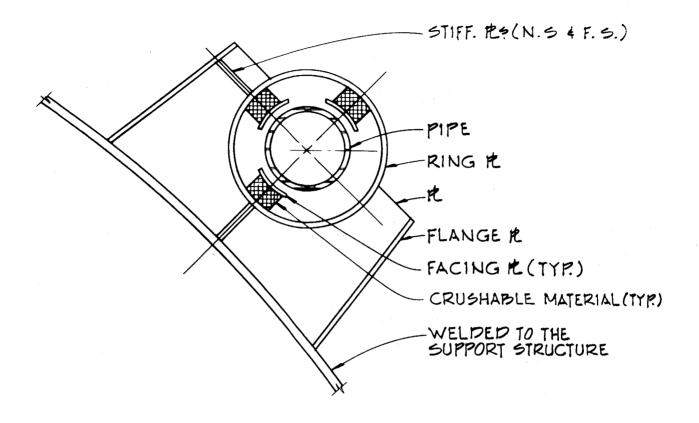


FIGURE 3.6-12

TYPICAL CRUSHABLE MATERIAL RESTRAINT

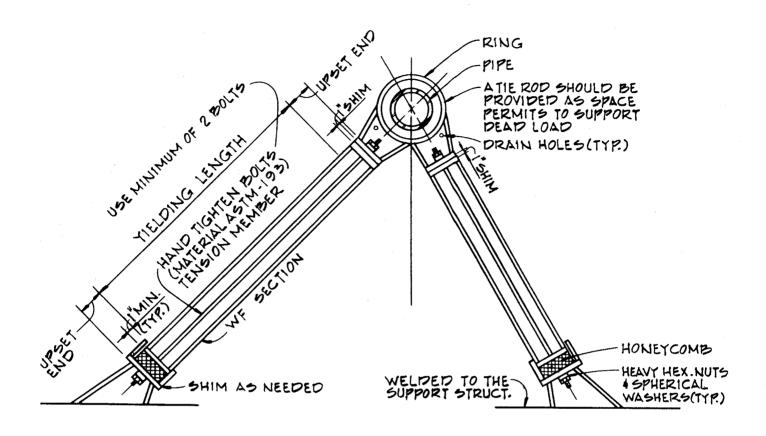


FIGURE 3.6-13

TYPICAL TWO-LEGGED RESTRAINT

CPS/USAR

Figure 3.6-14 Deleted

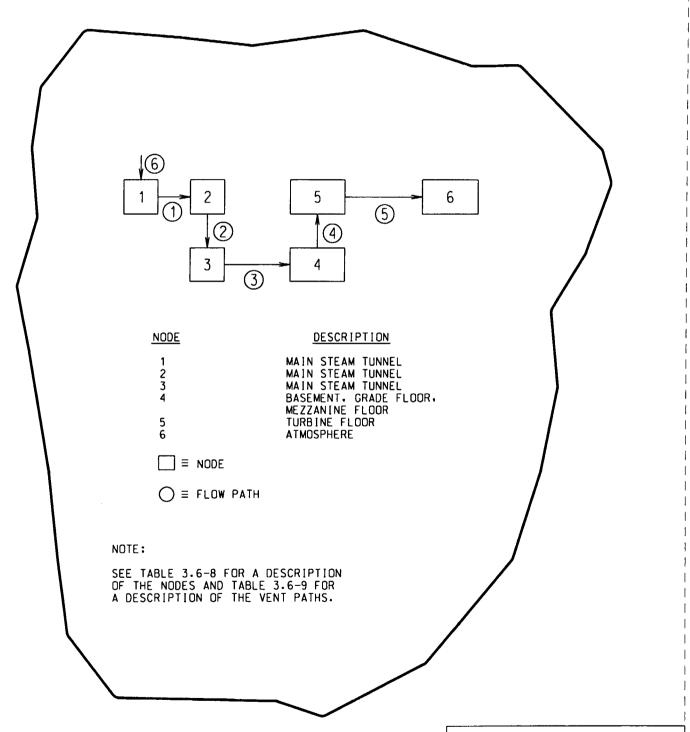


FIGURE 3.6-15
NODALIZATION SCHEMATIC FOR
SIMULTANEOUS MAIN STEAMLINE AND
FEEDWATER LINE BREAK IN
THE STEAM TUNNEL

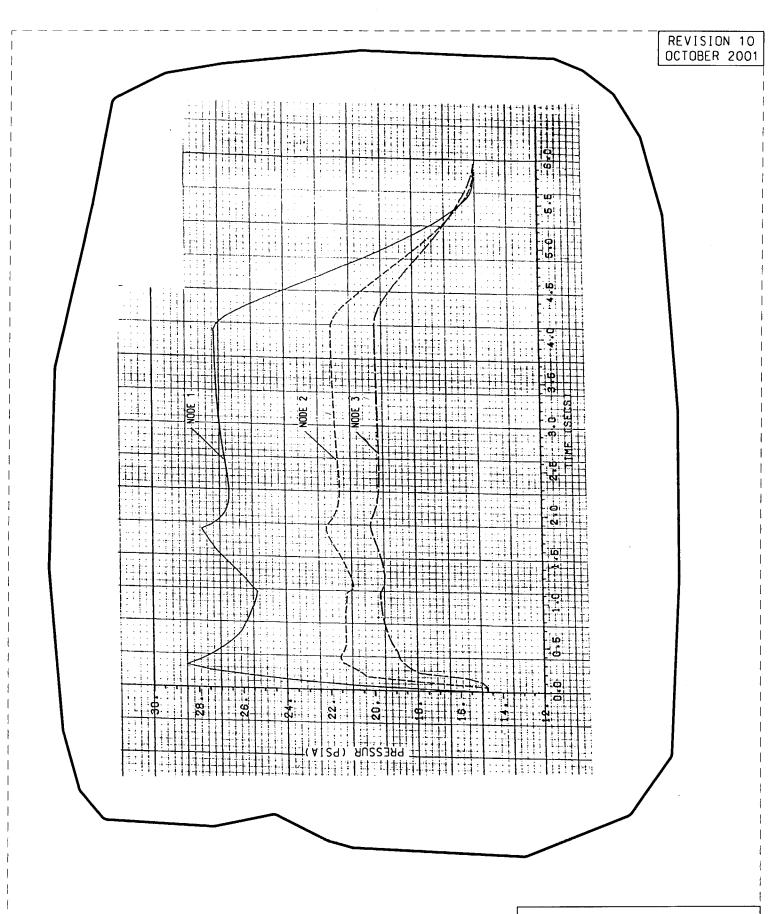
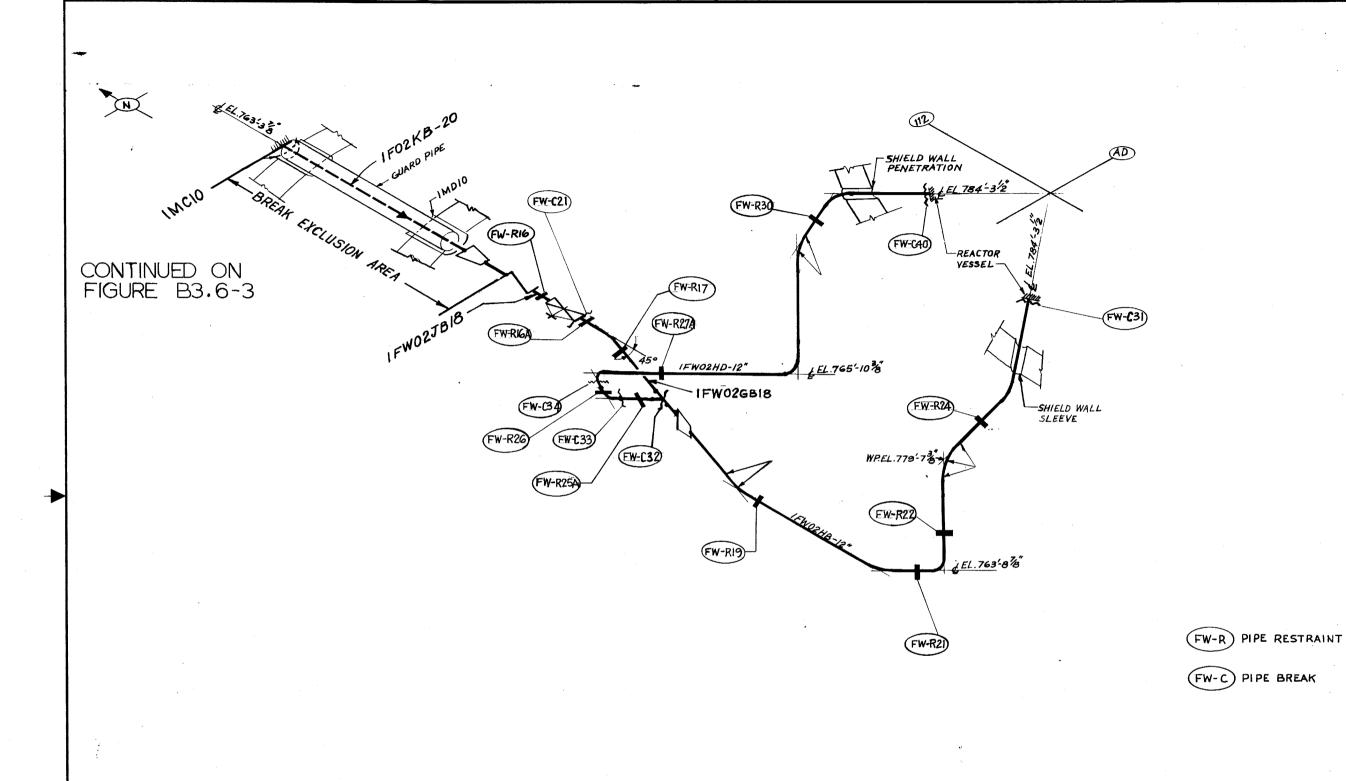


FIGURE 3.6-16
PRESSURE VS. TIME LINE BREAK IN STEAM TUNNEL



FIGURES B3.6-1

POSTULATED BREAKS AND RESTRAINT LOCATIONS FEEDWATER SUBSYSTEM FW-01 INSIDE CONTAINMENT

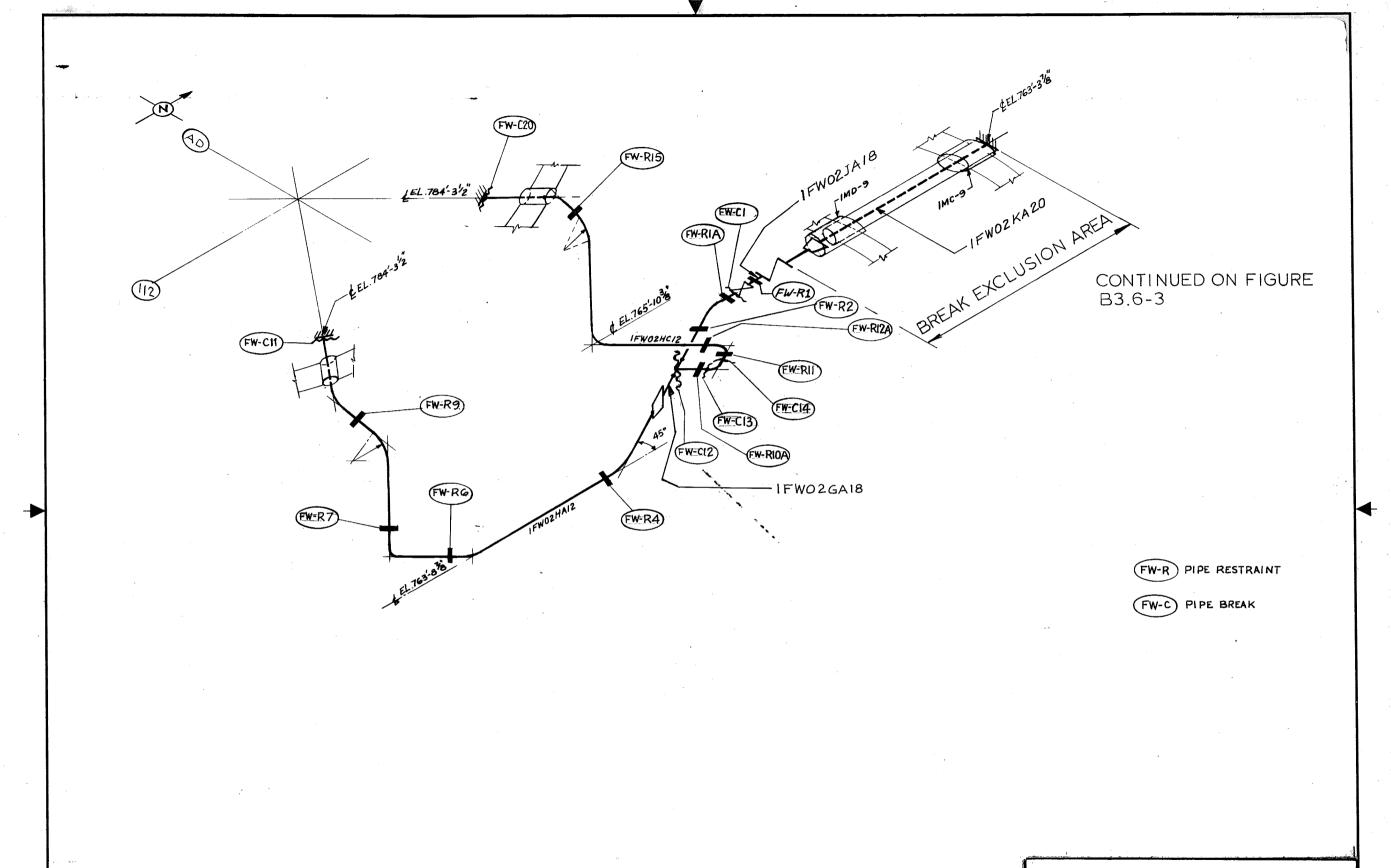
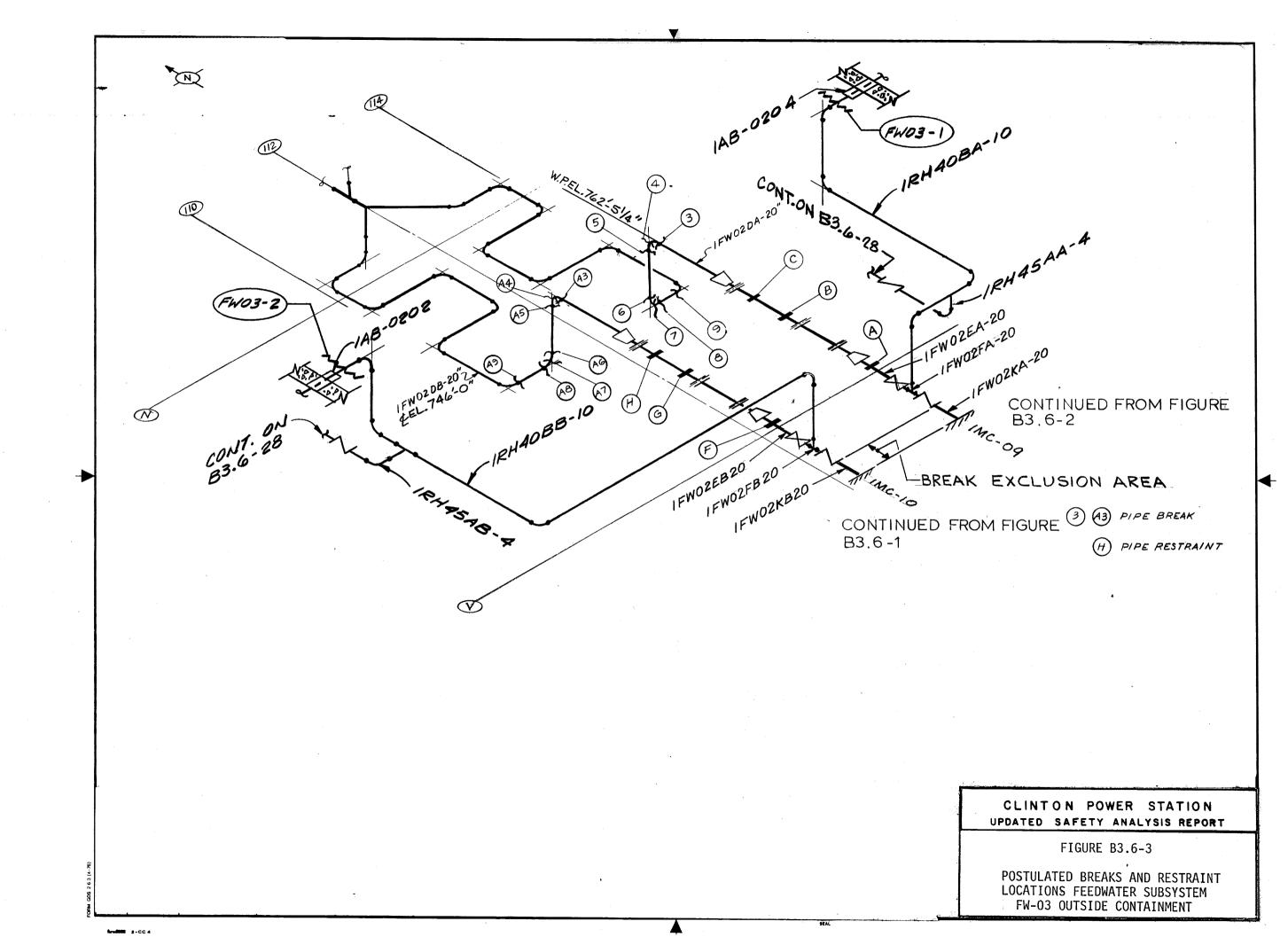
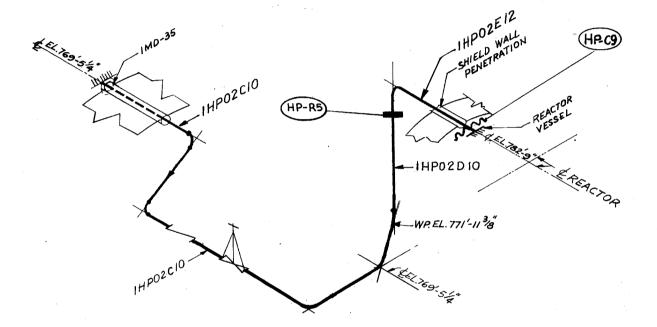


FIGURE B3.6-2

POSTULATED BREAKS AND RESTRAINT LOCATIONS FEEDWATER SUBSYSTEM FW-02 INSIDE CONTAINMENT



N



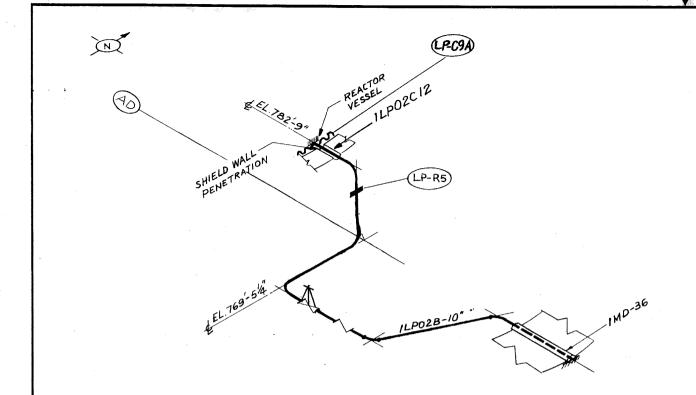
HP-R PIPE RESTRAINT

(HP-C) PIPE BREAK

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE B3.6-4

POSTULATED BREAKS AND RESTRAINT LOCATION HPCS SUBSYSTEM HP-01 INSIDE CONTAINMENT



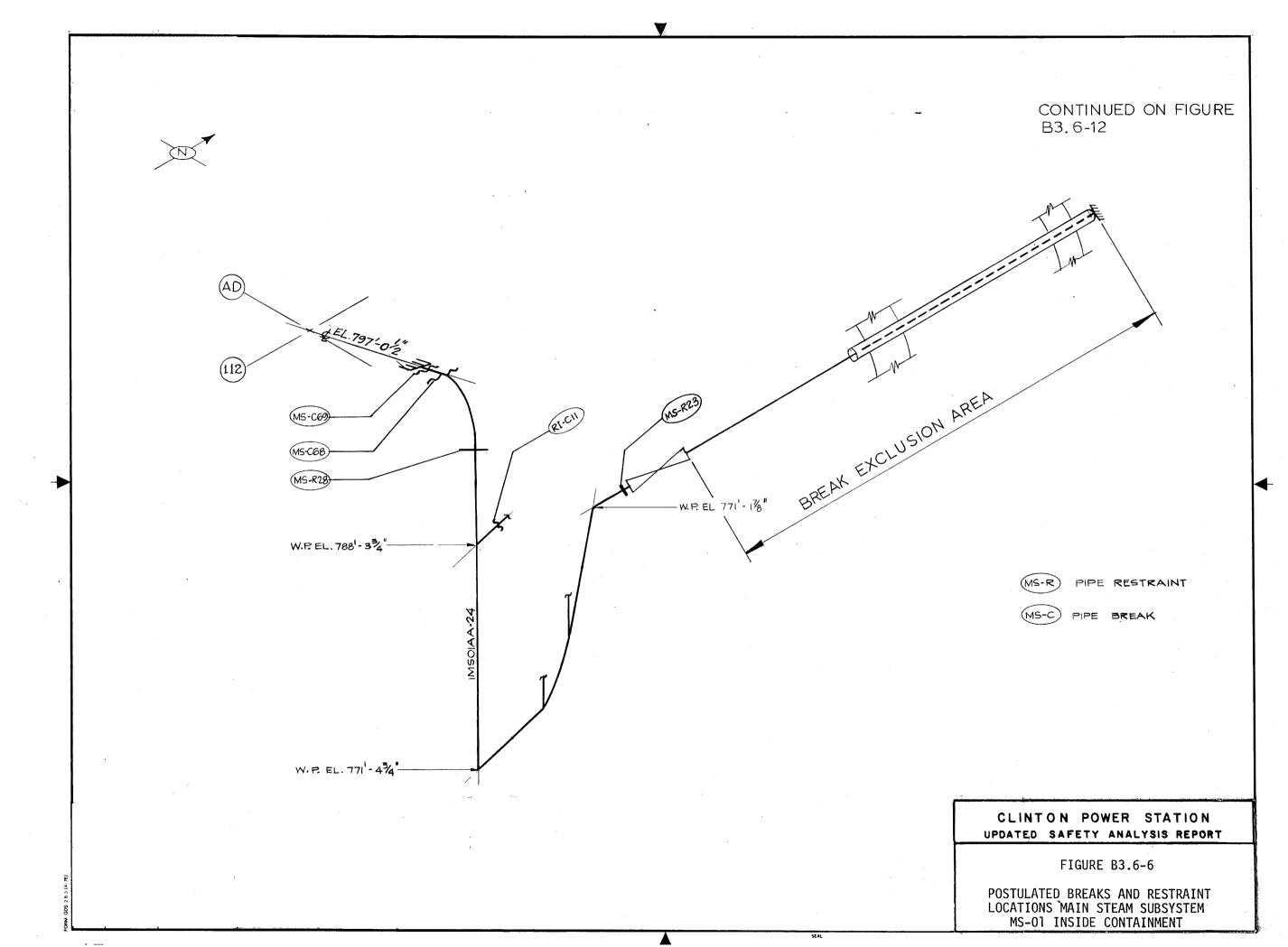
LP-R PIPE RESTRAINT

LP-C PIPE BREAK

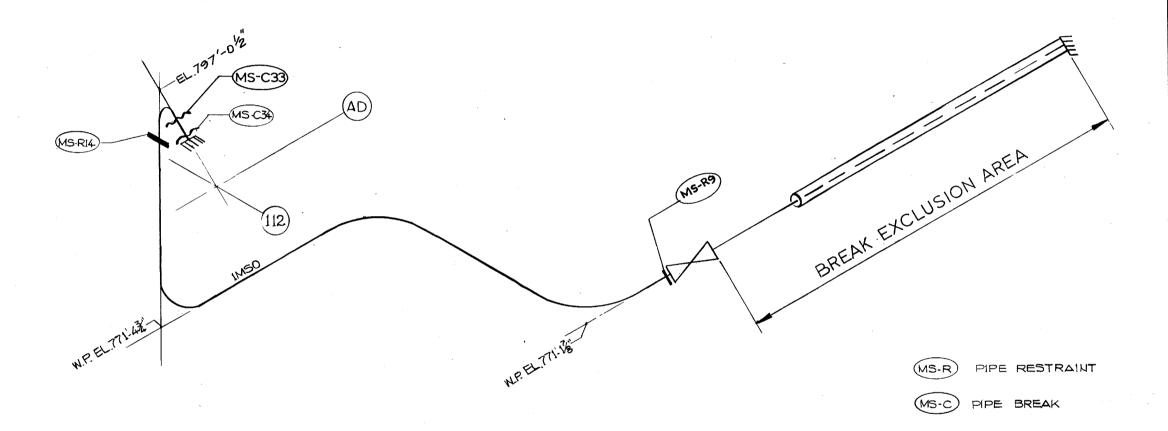
CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE B3.6-5

POSTULATED BREAKS AND RESTRAINT LOCATIONS LPCS SUBSYSTEM LP-01 INSIDE CONTAINMENT



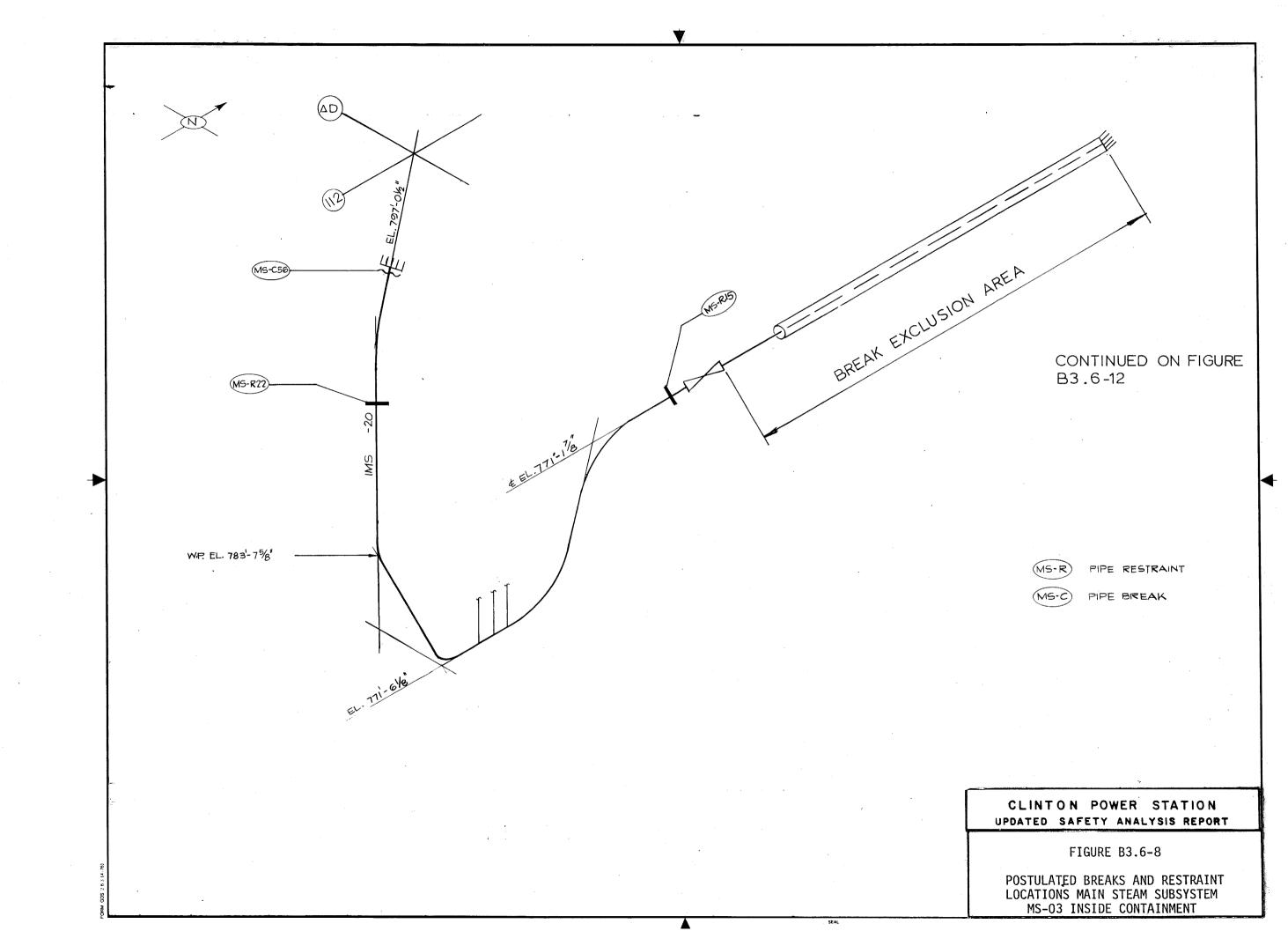
CONTINUED ON FIGURE B3.6-12

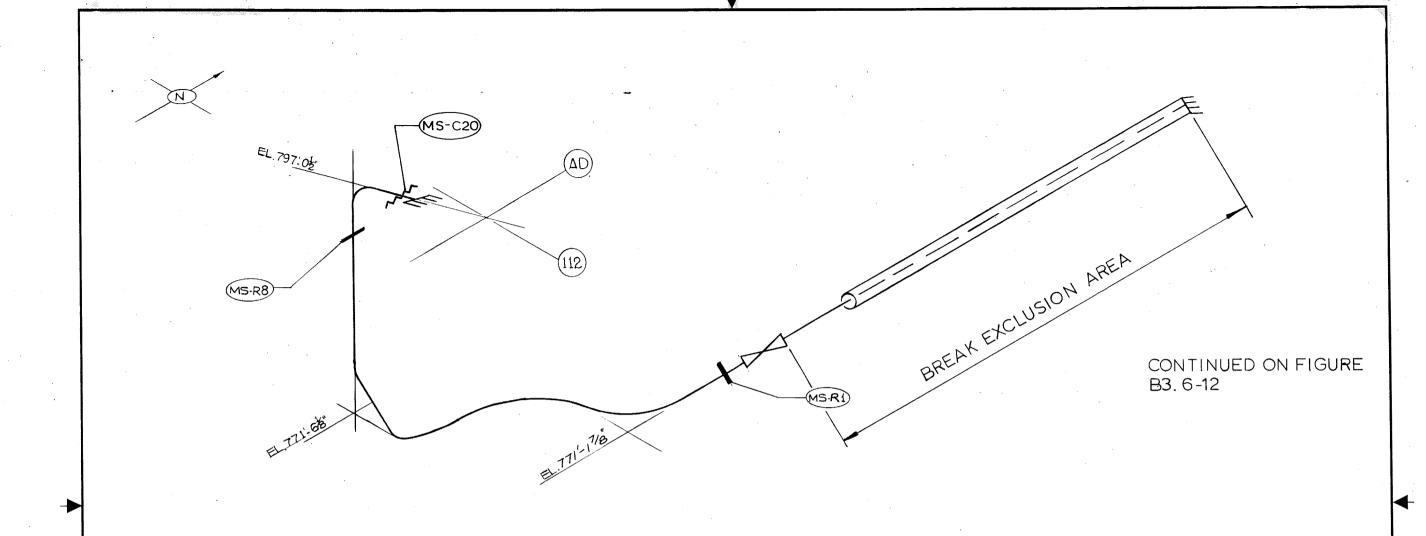


CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE B3.6-7

POSTULATED BREAKS AND RESTRAINT LOCATIONS MAIN STEAM SUBSYSTEM MS-02 INSIDE CONTAINMENT





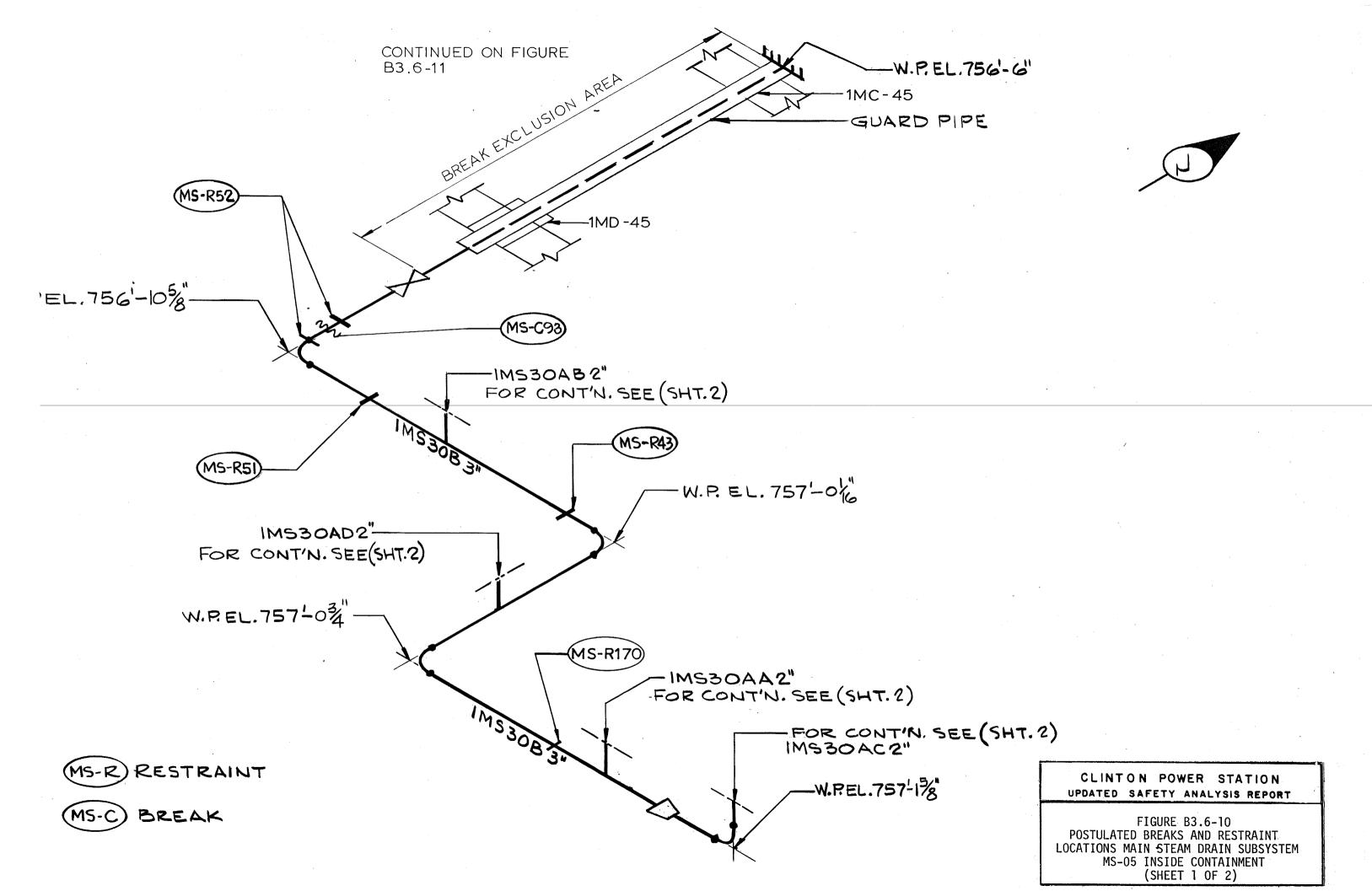
(MS-R) PIPE RESTRAINT

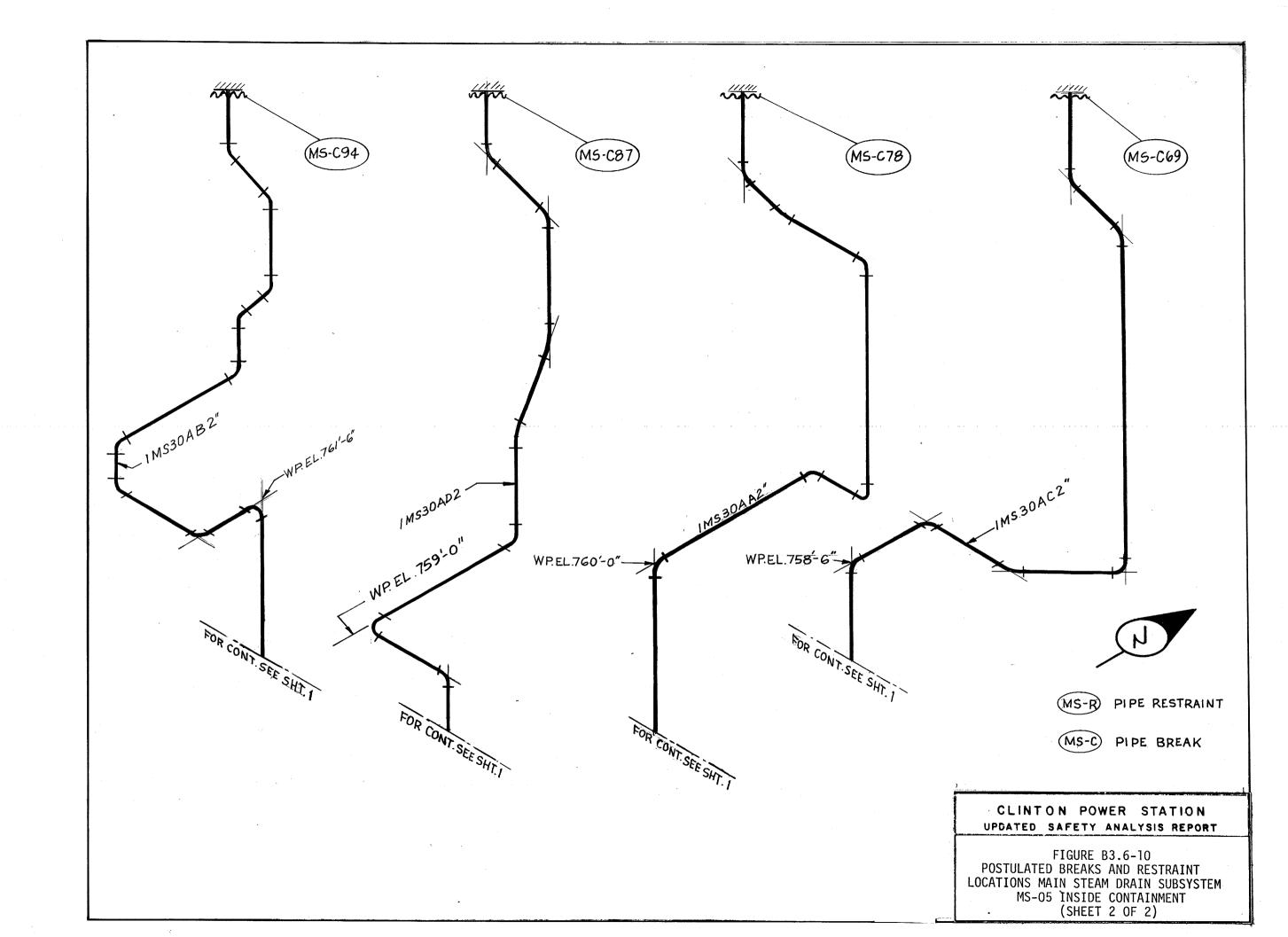
MS-C PIPE BREAK

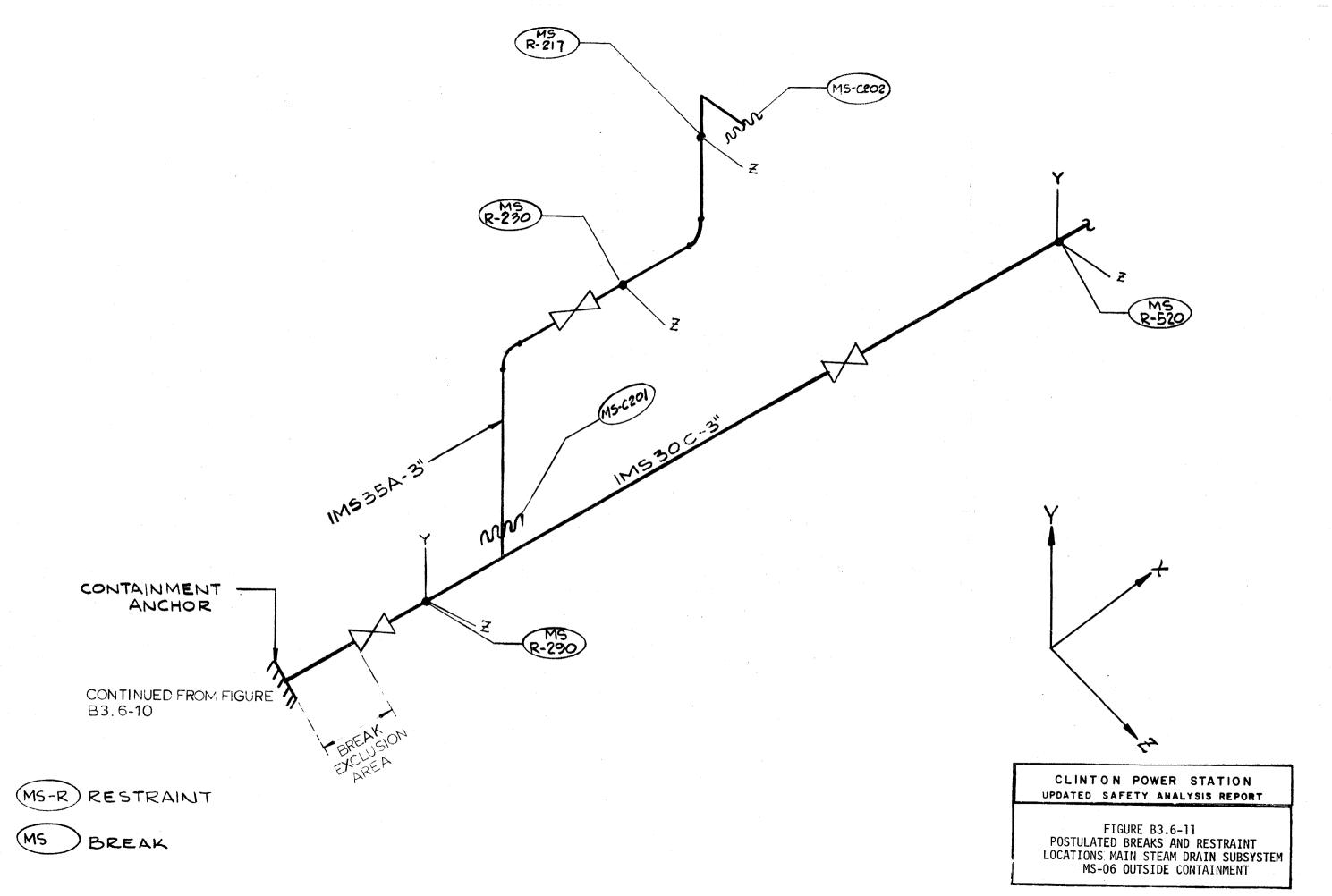
CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

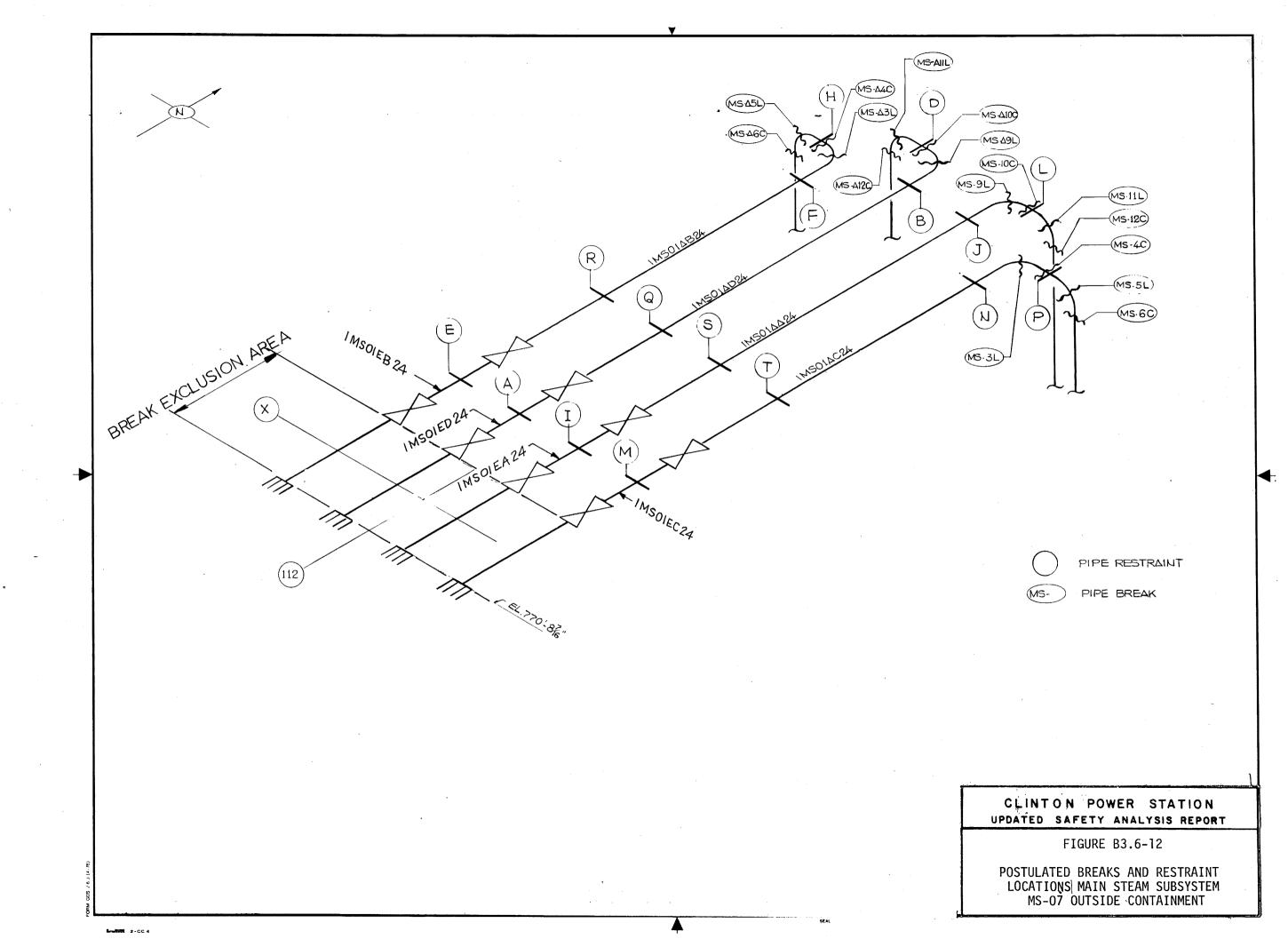
FIGURE B3.6-9

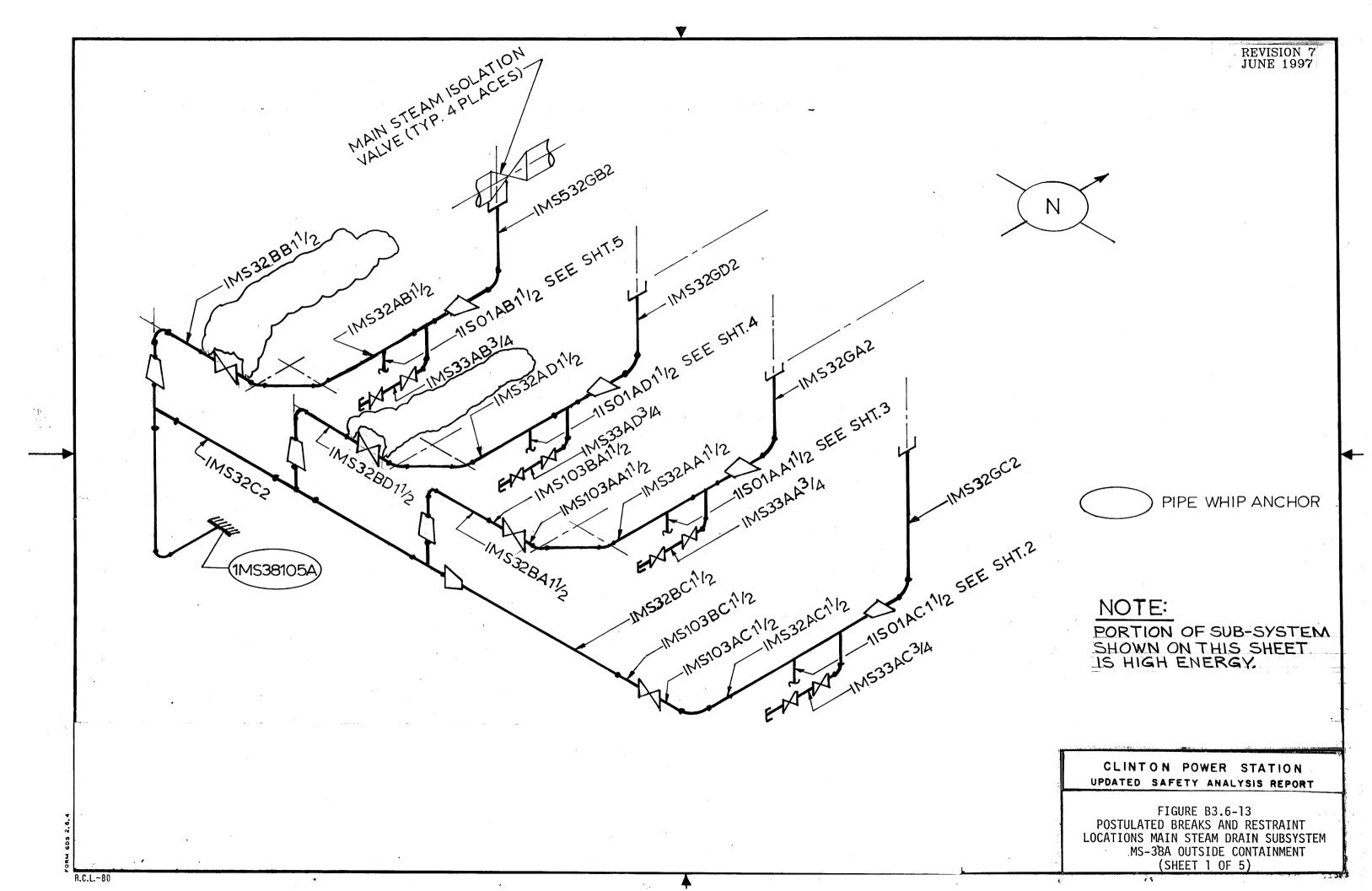
POSTULATED BREAKS AND RESTRAINT LOCATIONS MAIN STEAM SUBSYSTEM MS-04 INSIDE CONTAINMENT

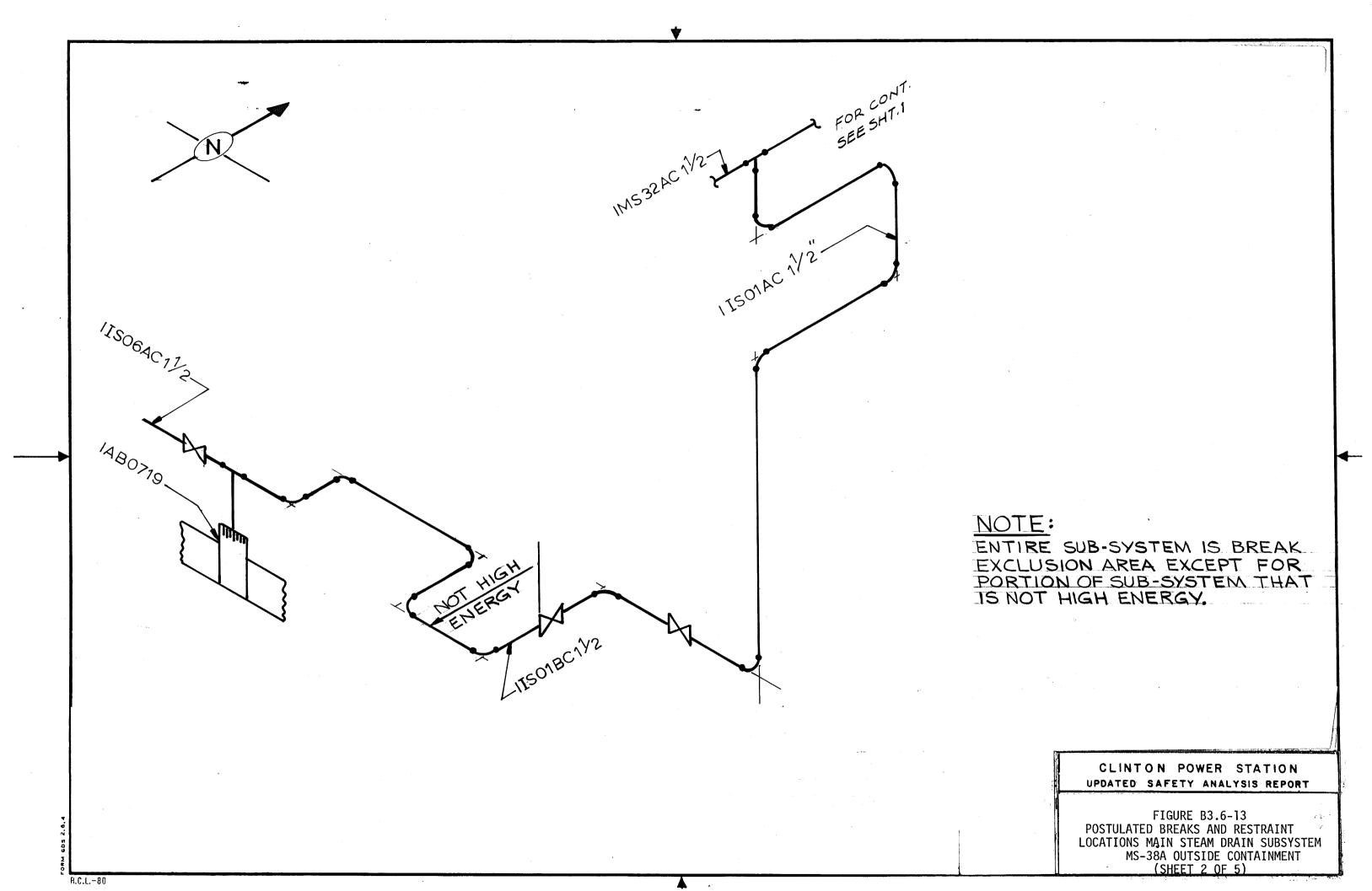


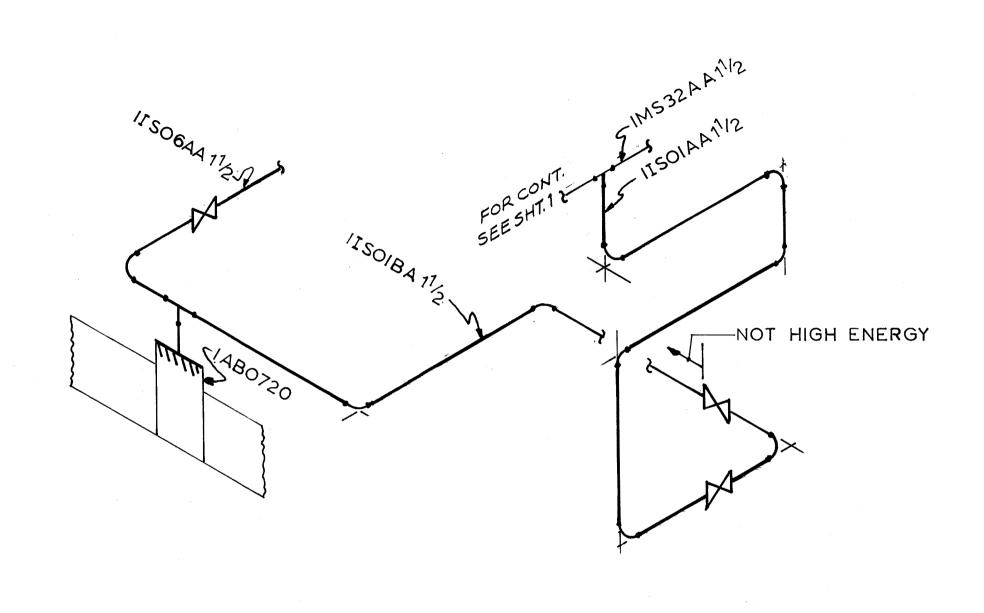












NOTE:

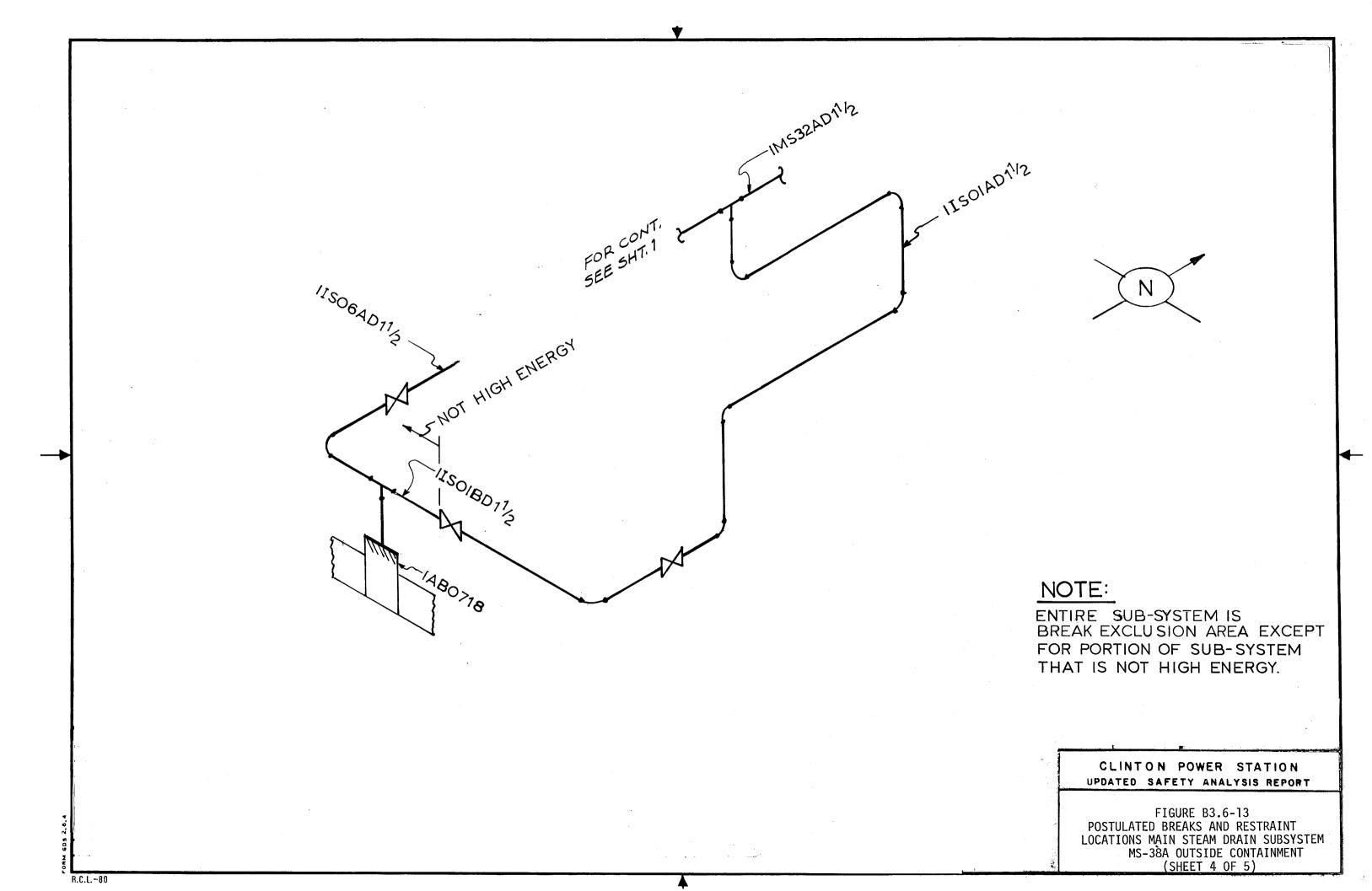
ENTIRE SUB-SYSTEM IS BREAK EXCLUSION AREA EXCEPT FOR PORTION OF SUB SYSTEM, THAT IS NOT HIGH ENERGY.

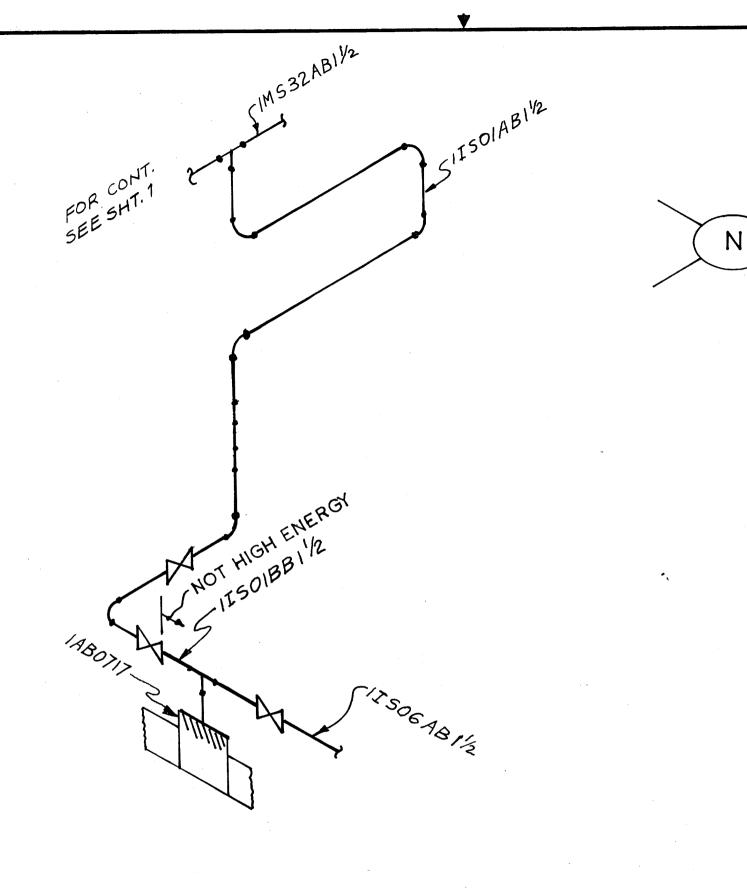
CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE B3.6-13
POSTULATED BREAKS AND RESTRAINT
LOCATIONS MAIN STEAM DRAIN SUBSYSTEM
MS-38A OUTSIDE CONTAINMENT
(SHEET 3 OF 5)

105 2.6.4

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NOTE:

ENTIRE SUB-SYSTEM IS BREAK EXCLUSION AREA EXCEPT FOR PORTION OF SUB SYSTEM THAT IS NOT HIGH ENERGY.

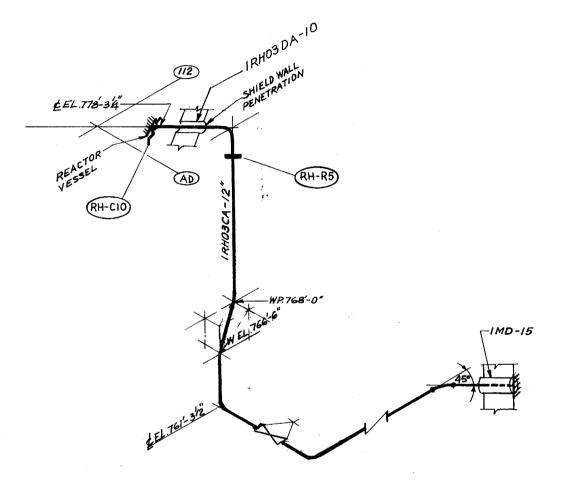
CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE B3.6-13
POSTULATED BREAKS AND RESTRAINT
LOCATIONS MAIN STEAM DRAIN SUBSYSTEM
MS-38A OUTSIDE CONTAINMENT
(SHEET 5 OF 5)

RM GDS 2.

R.C.L.-80



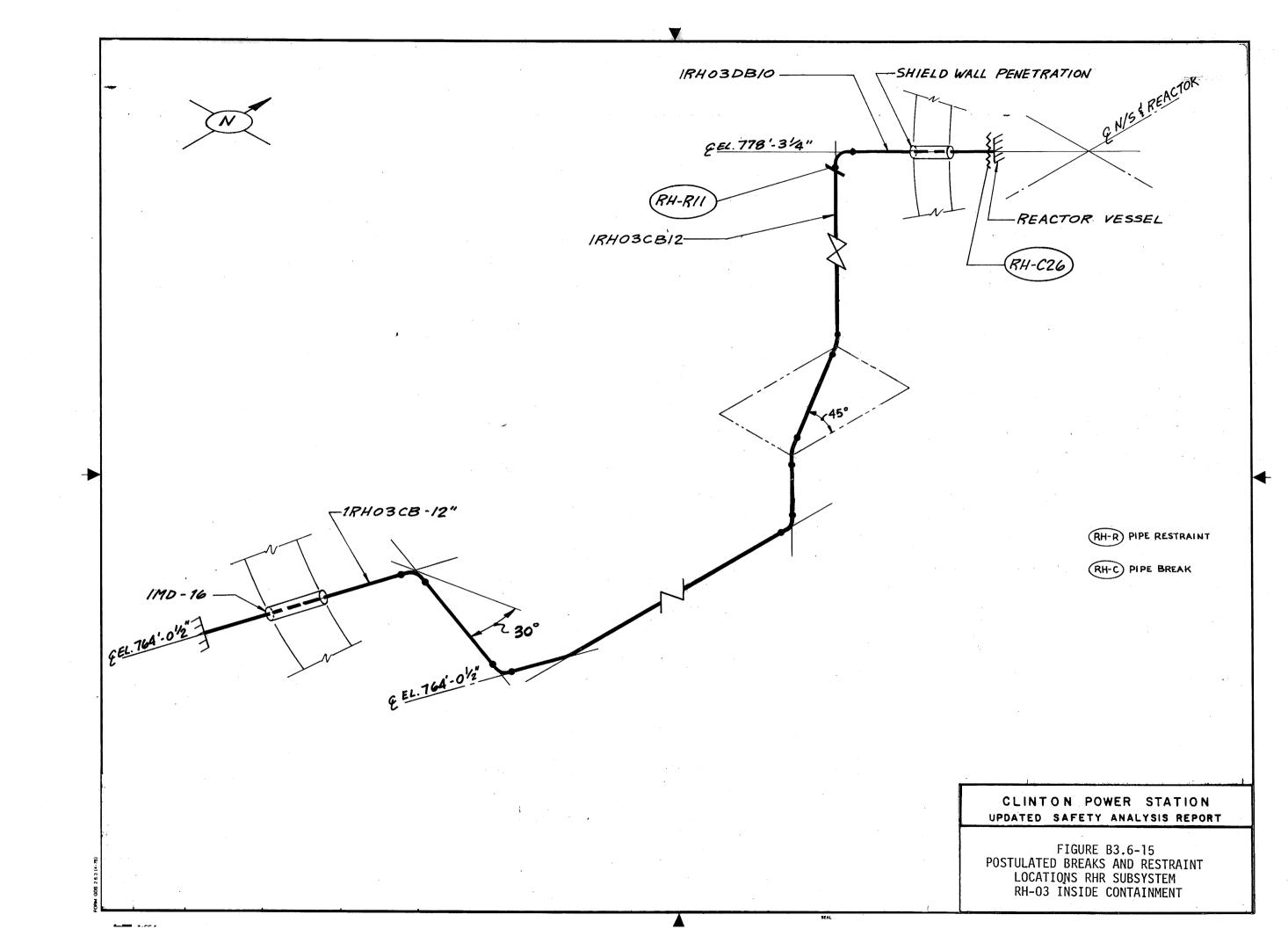




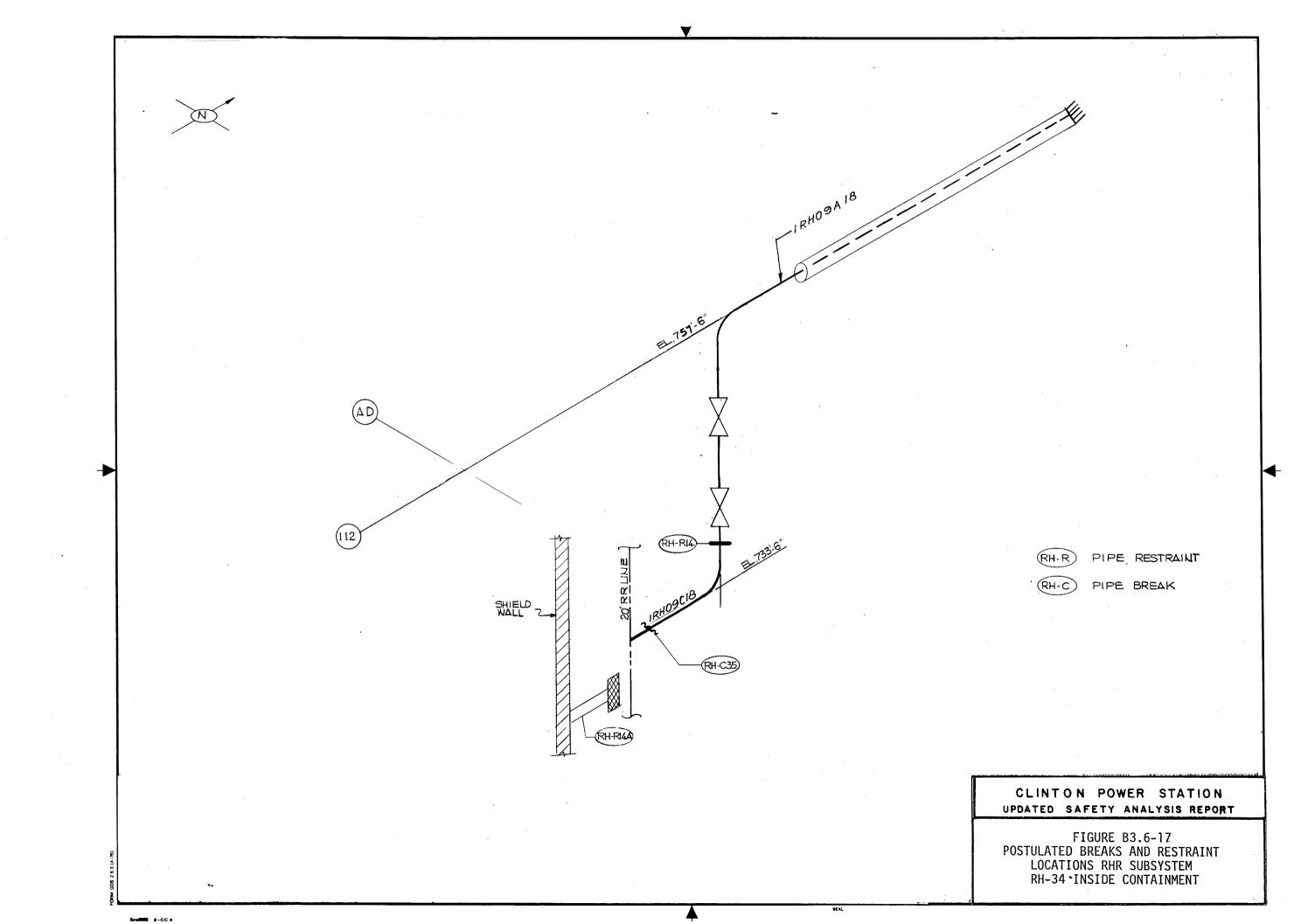
(RH-C) PIPE BREAK

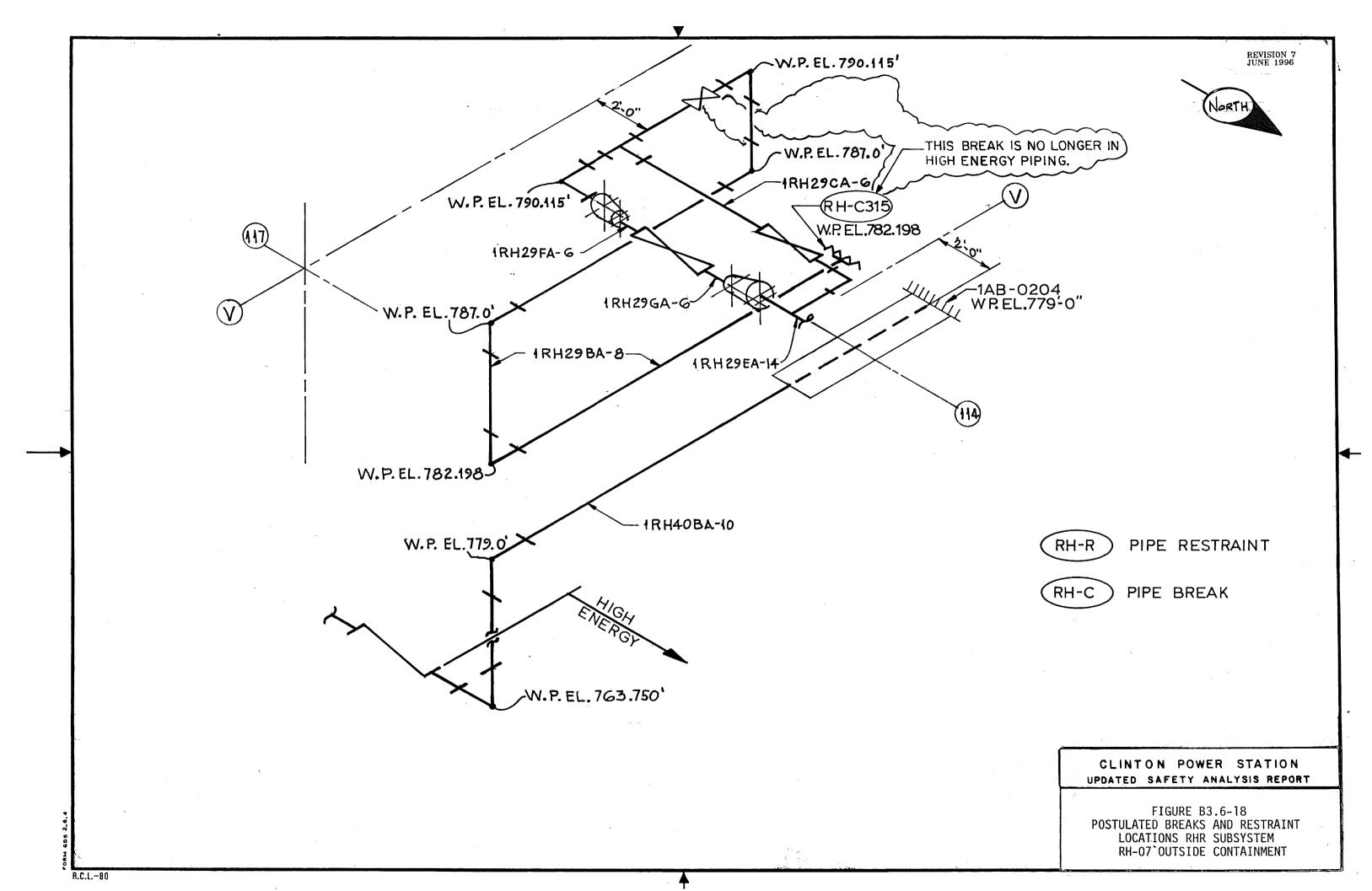
CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

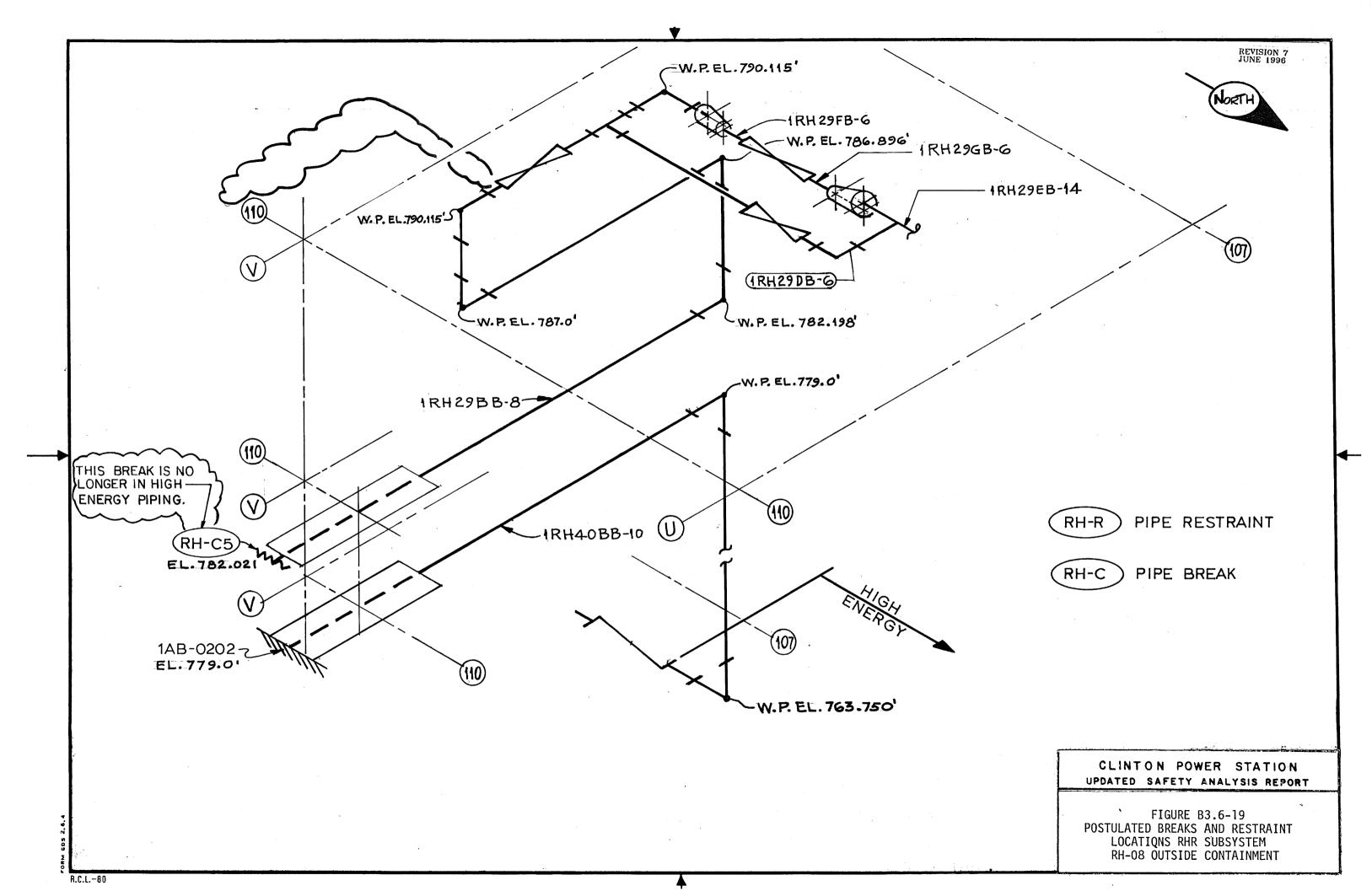
FIGURE B3.6-14
POSTULATED BREAKS AND RESTRAINT
LOCATIONS RHR SUBSYSTEM
RH-01 INSIDE CONTAINMENT

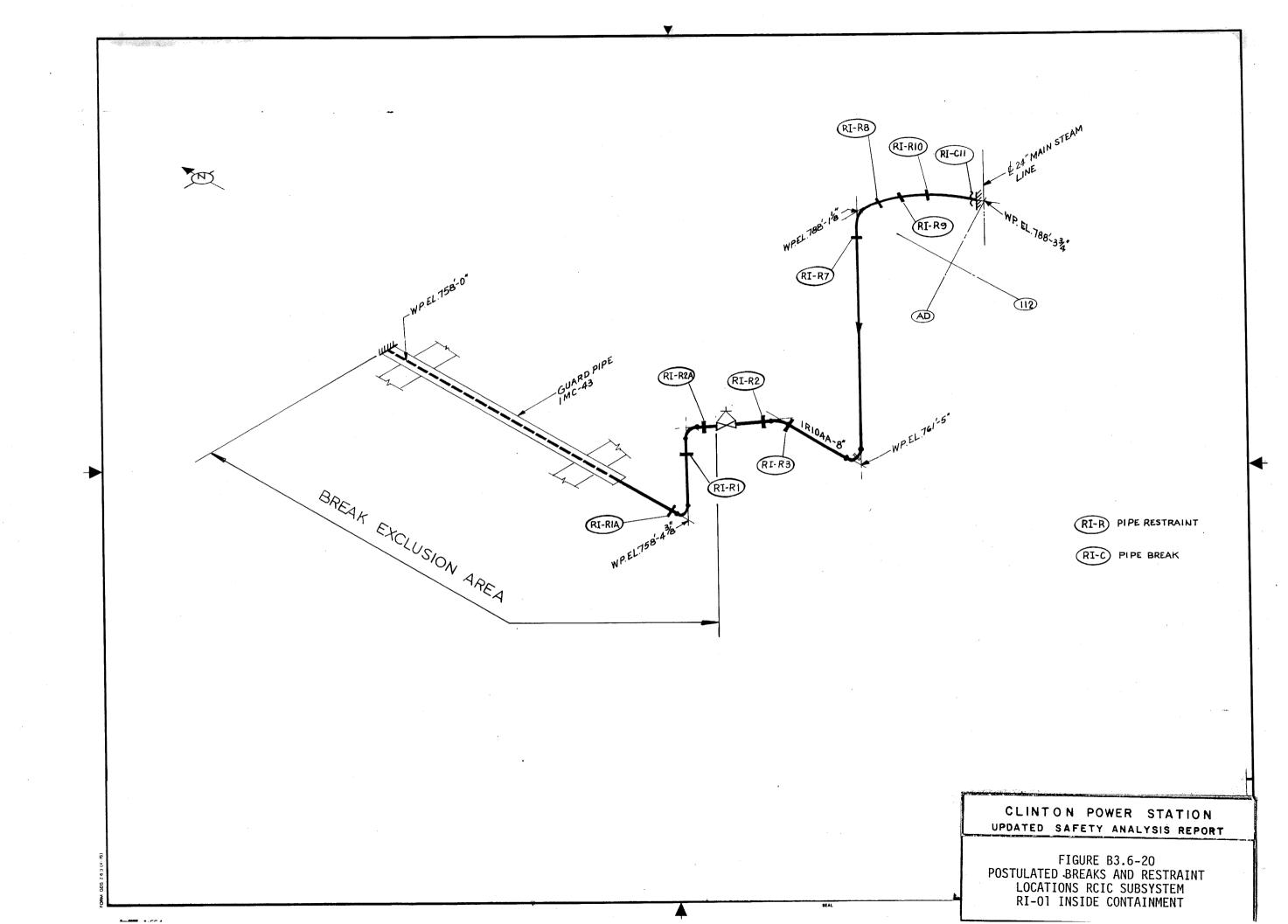


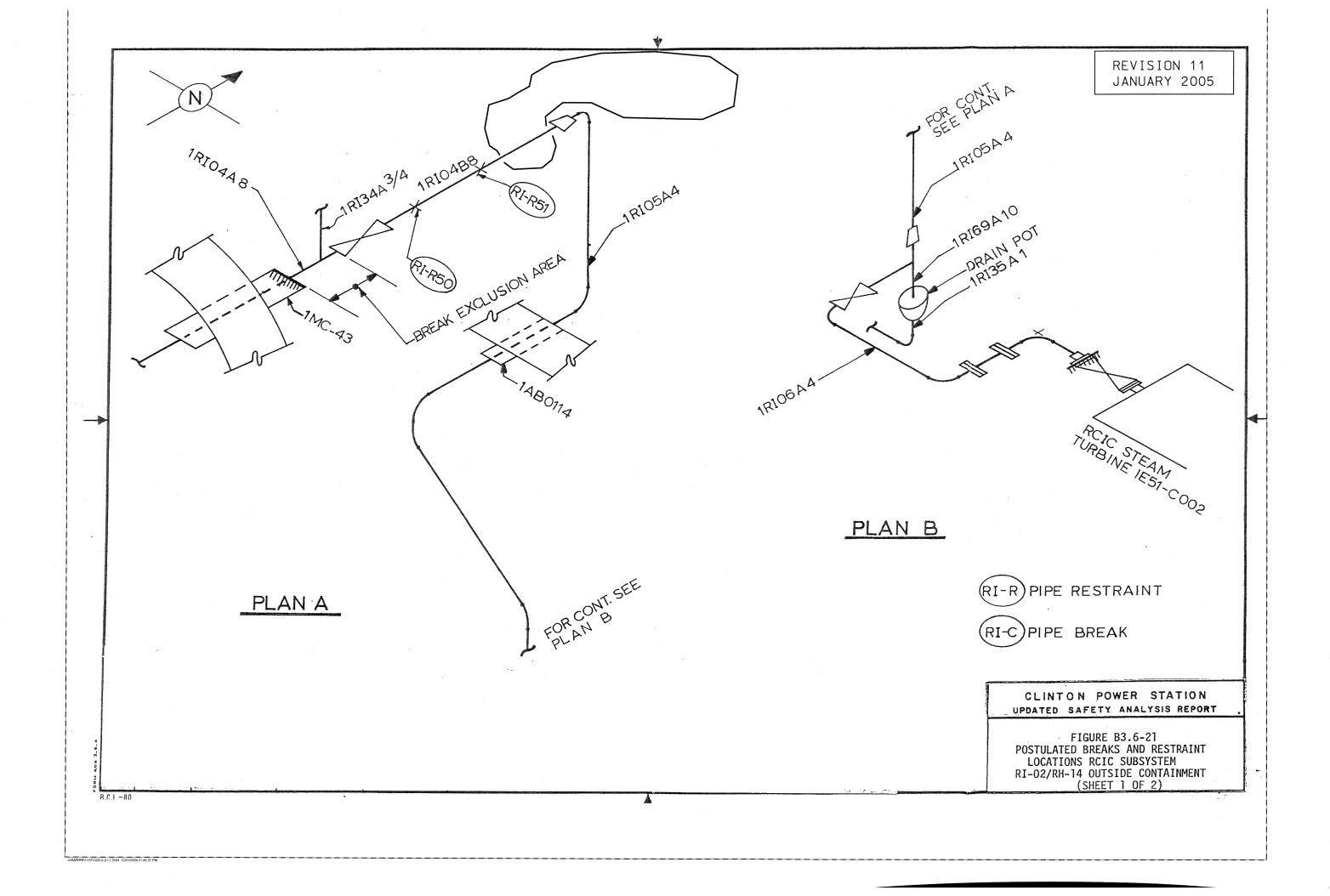
RH-C18) RH-R8 - IRHO4B12" RH-R PIPE RESTRAINT (RH-C) PIPE BREAK - WP.EL.764'-01/2 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE B3.6-16
POSTULATED BREAKS AND RESTRAINT
LOCATIONS RHR SUBSYSTEM
RH-05 INSIDE CONTAINMENT

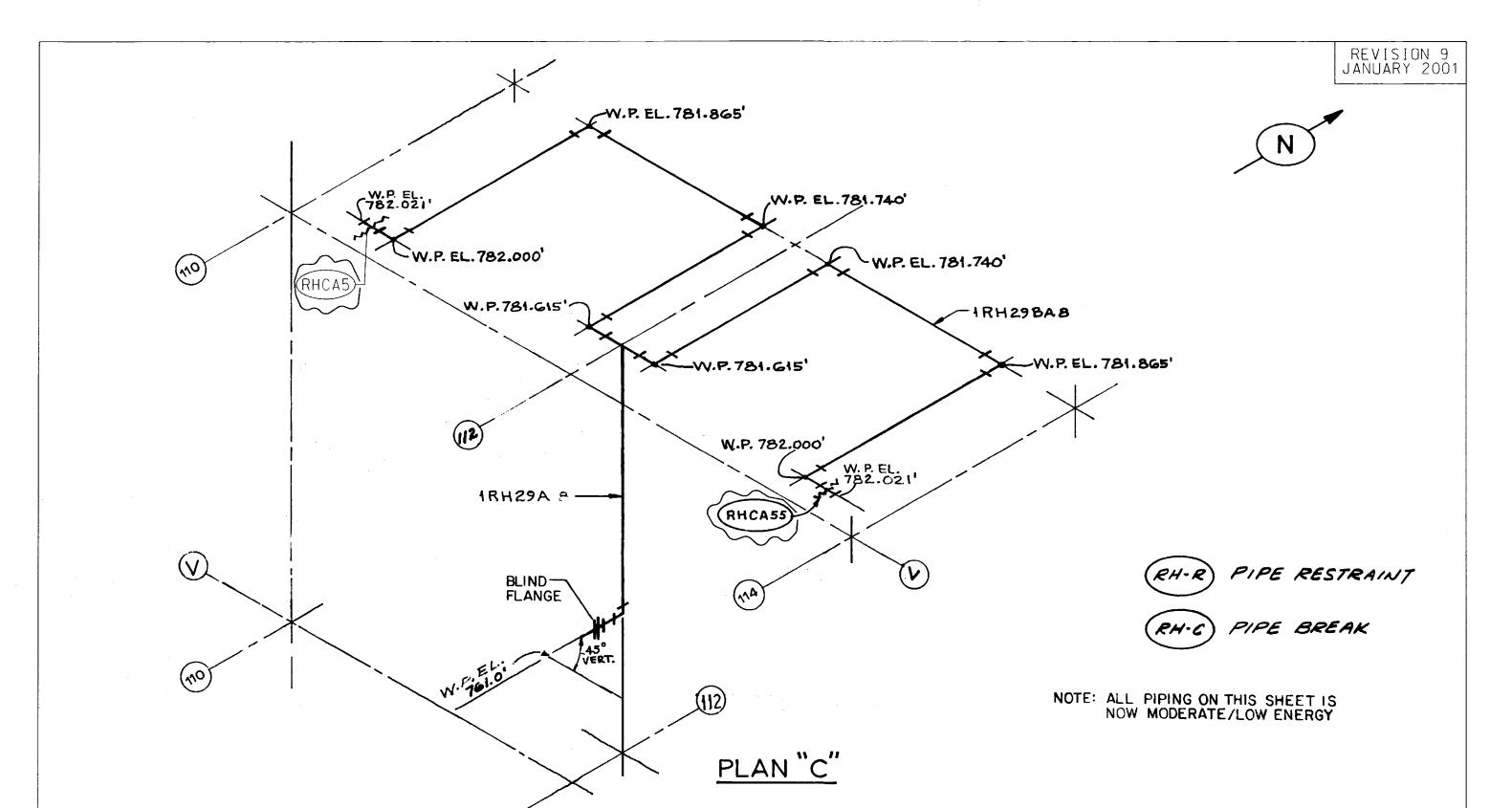






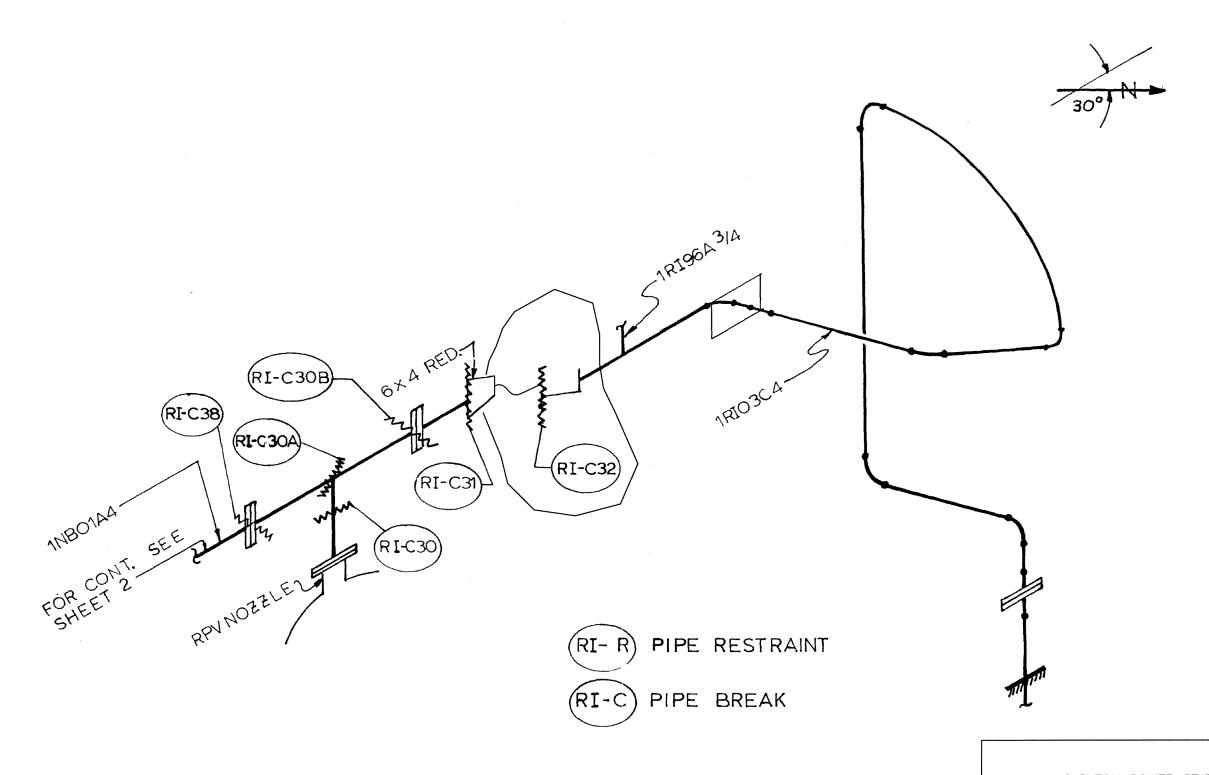






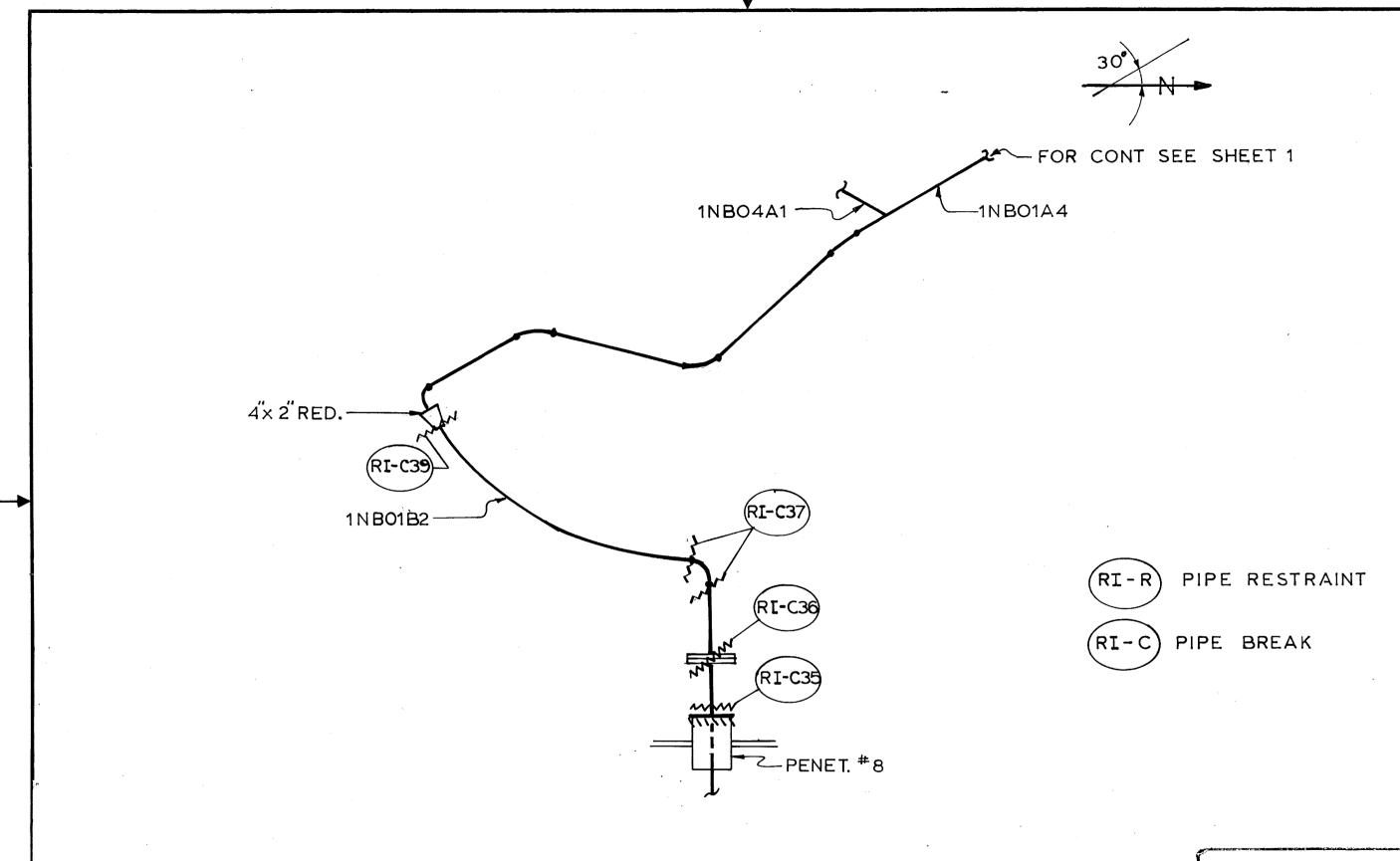
CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE B3.6-21
POSLATED BREAKS AND RESTRAINT
LOCATIONS RCIC SUBSYSTEM
RI-02/RH-14 OUTSIDE CONTAINMENT
(SHEET 2 OF 2)



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

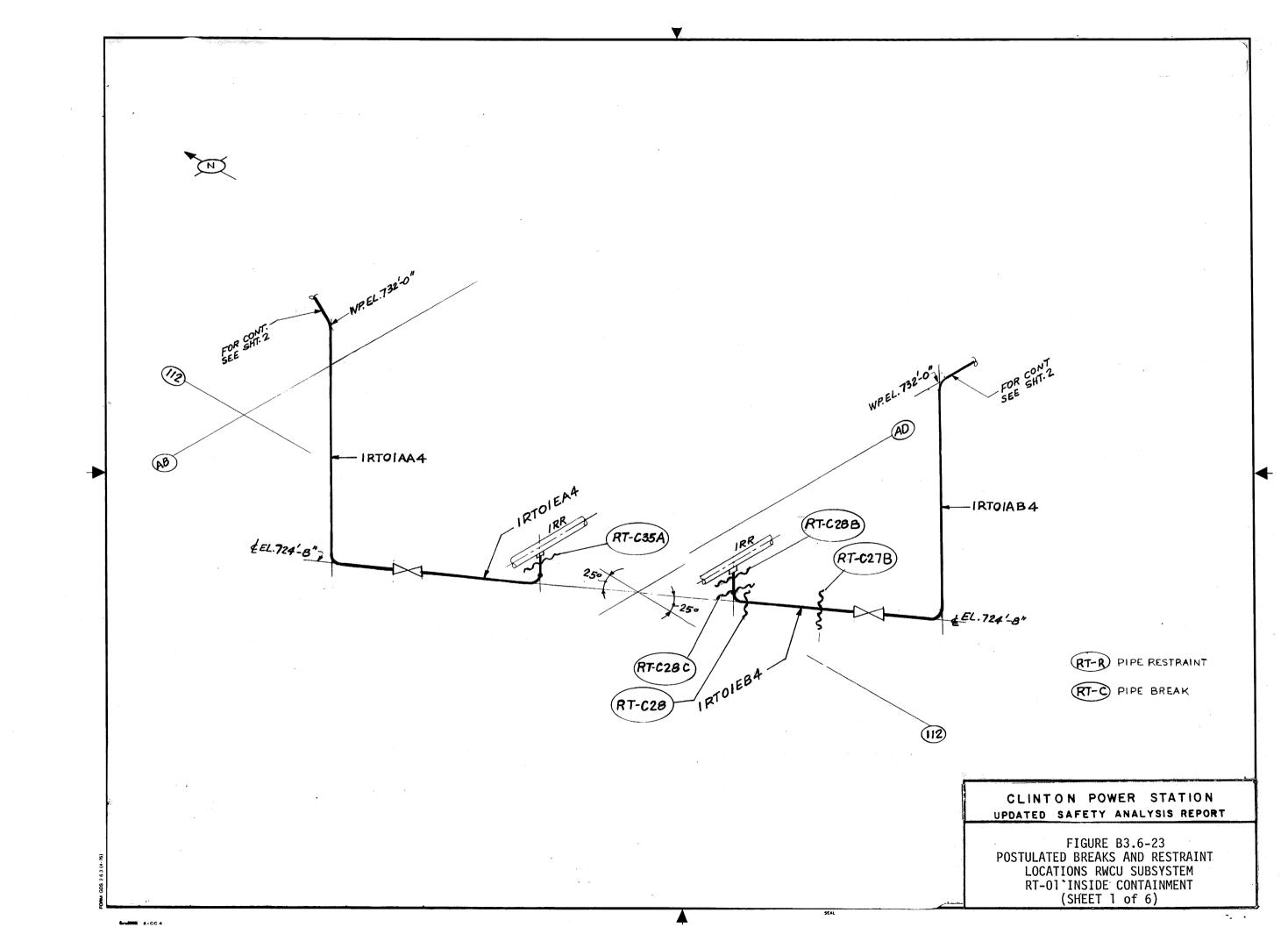
FIGURE B3.6-22
POSTULATED BREAKS AND RESTRAINT
LOCATIONS RCIC HEAD SPRAY
SUBSYSTEM RI-11 INSIDE CONTAINMENT
SHEET 1 OF 2

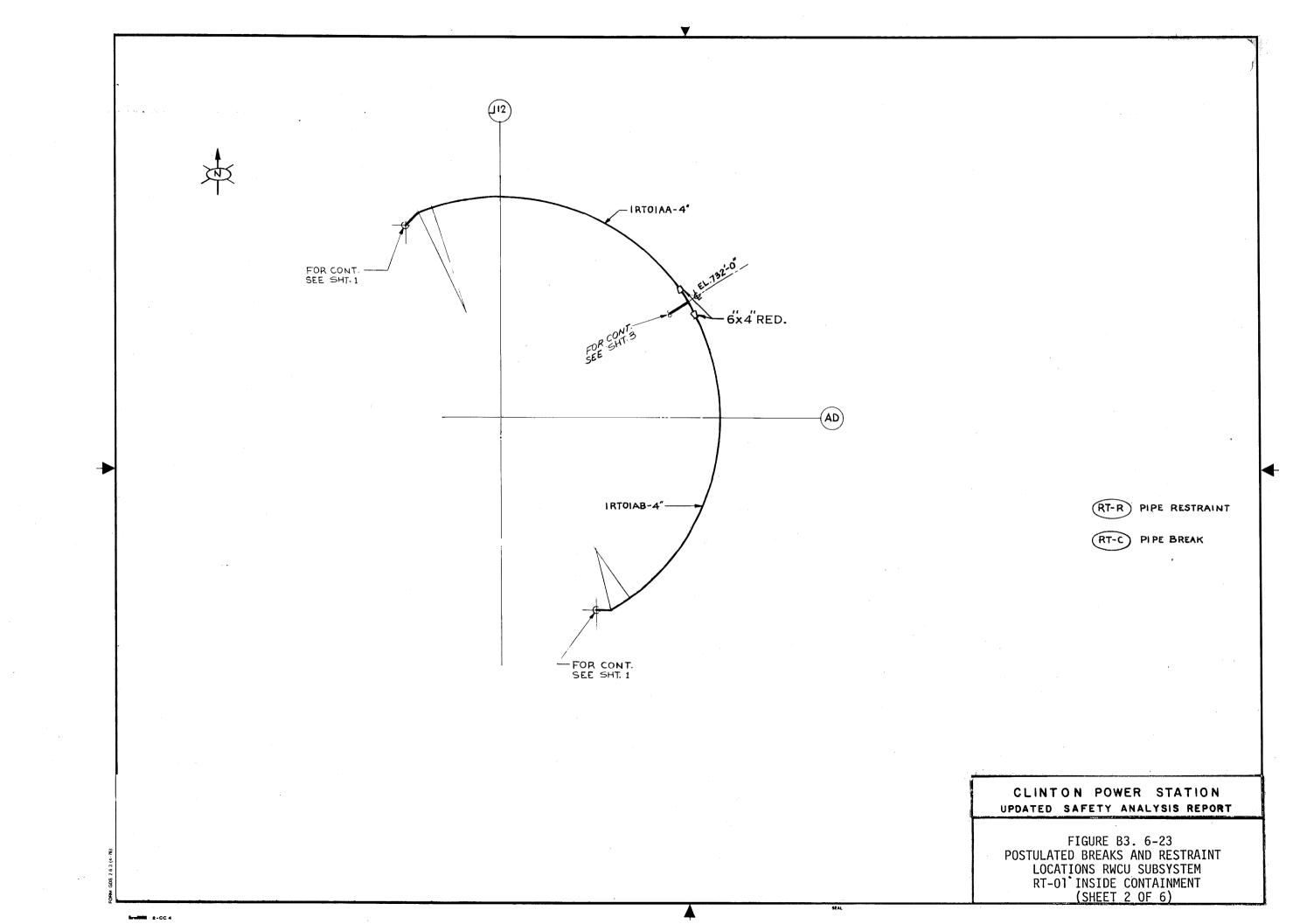


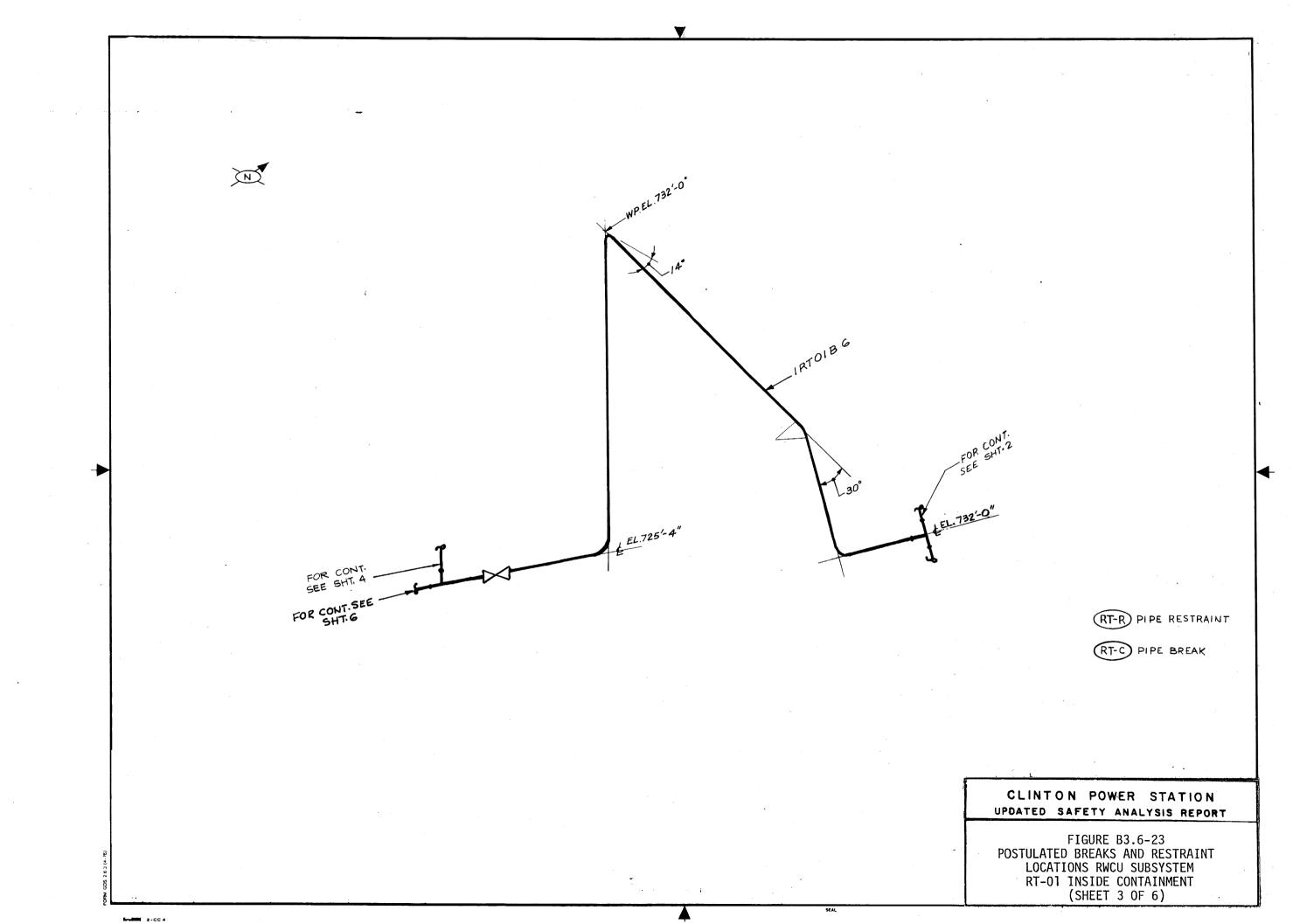
CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE B3.6-22

POSTULATED BREAKS AND RESTRAINT
LOCATIONS RCIC HEAD SPRAY
SUBSYSTEM RI-11 INSIDE CONTAINMENT
(SHEET 2 OF 2)







WPEL 732-10

FOR CONT. SEE SHT. 6

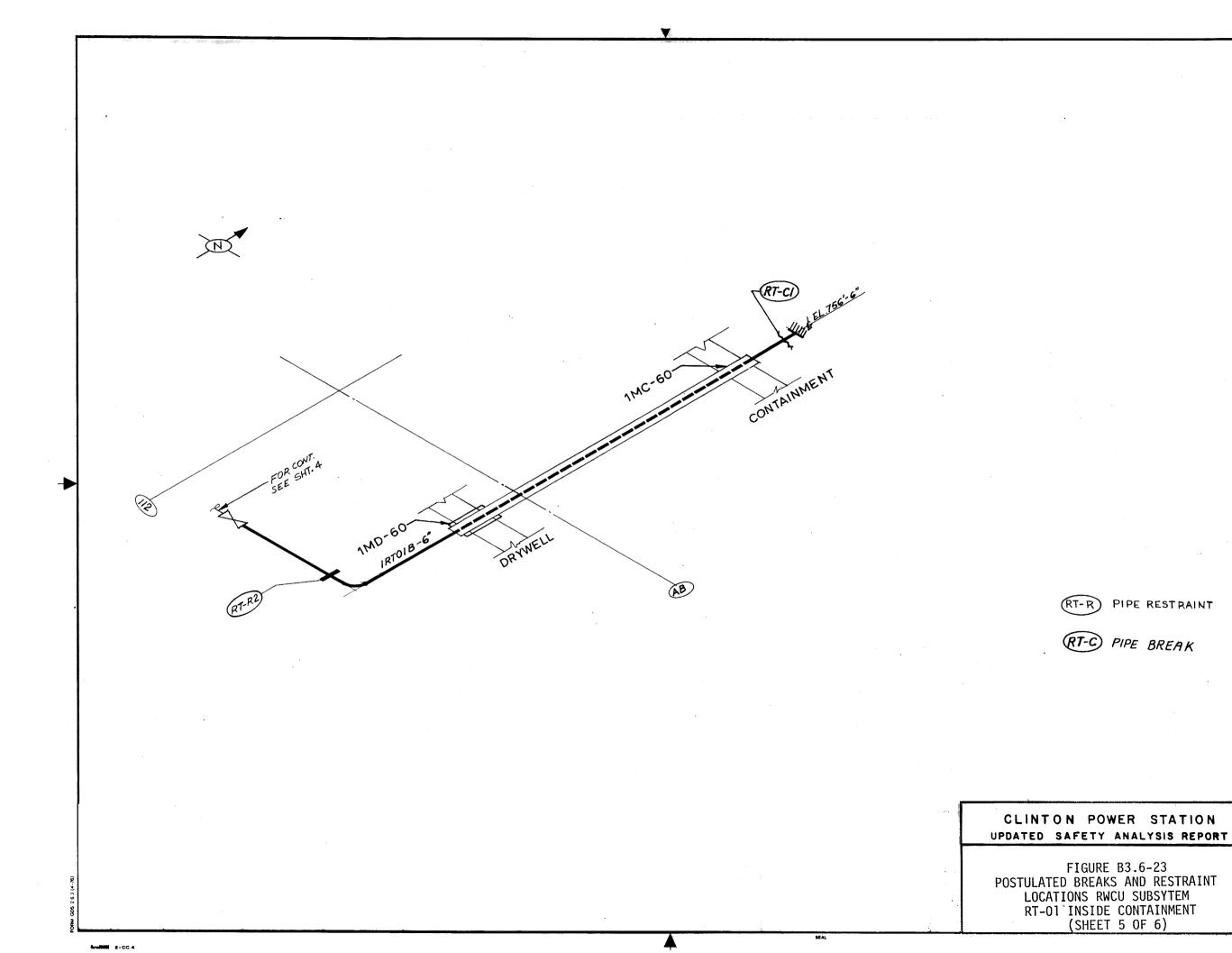
RI-R PIPE RESTRAINT

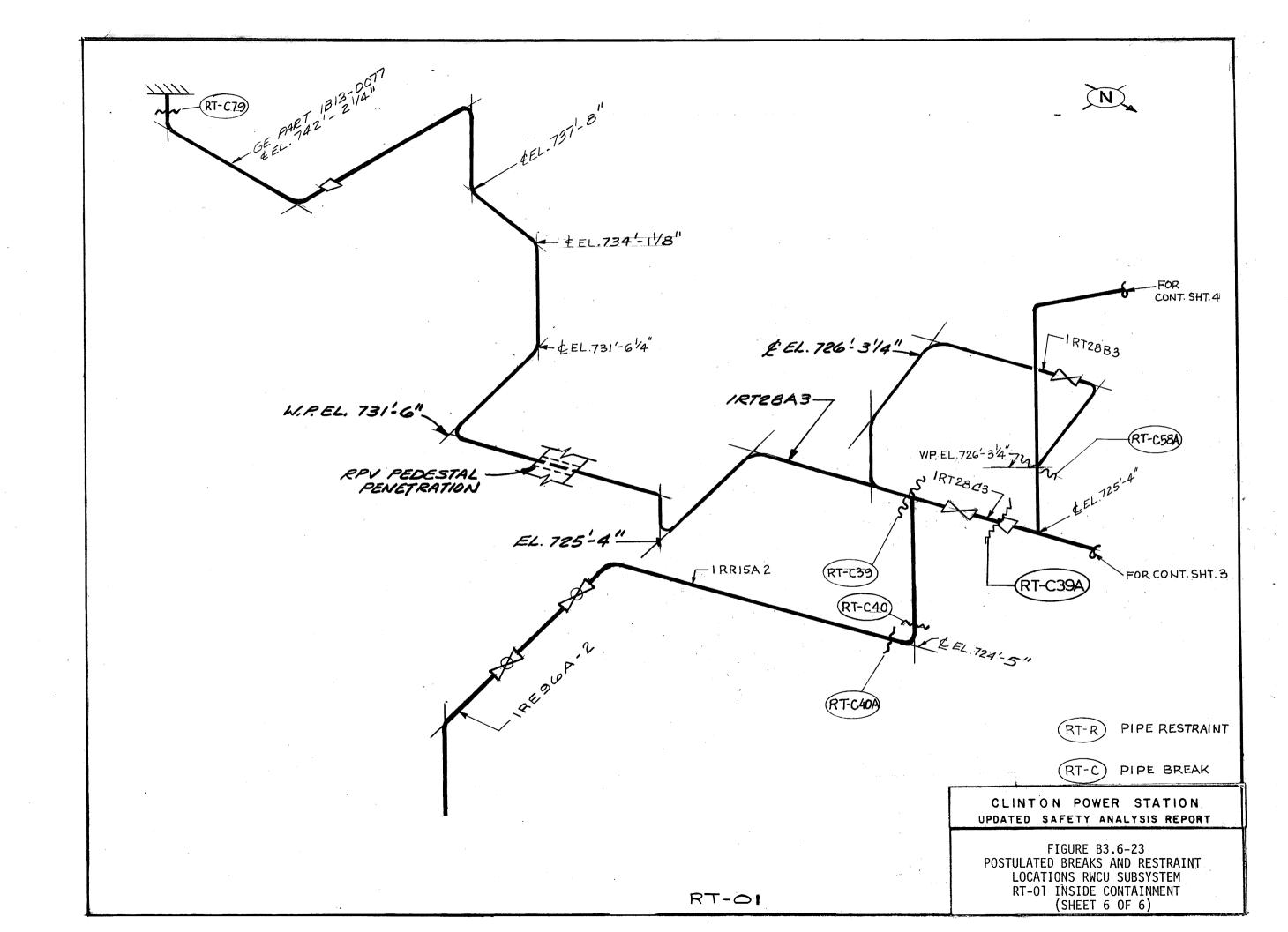
RI-C PIPE BREAK

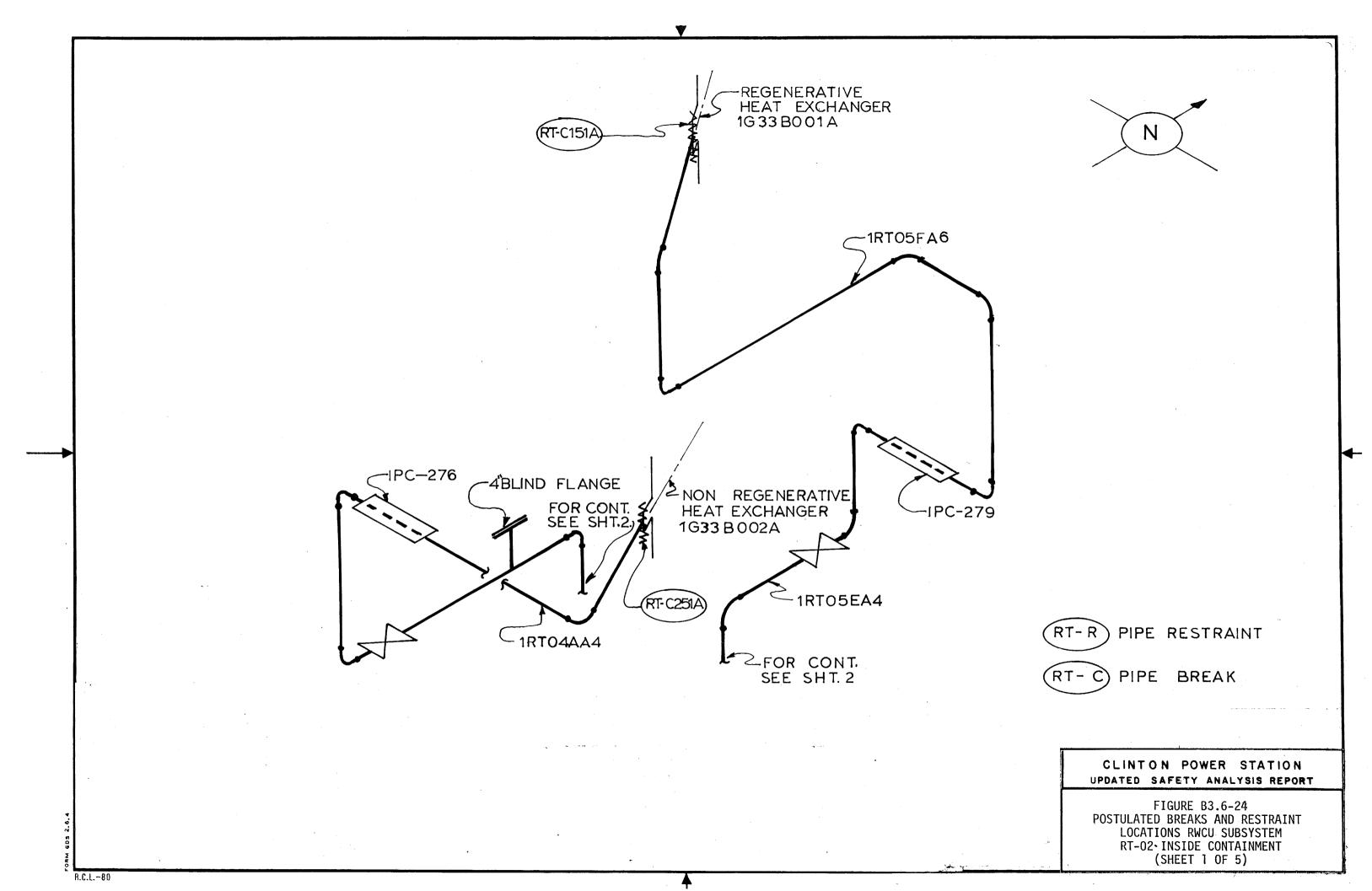
CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

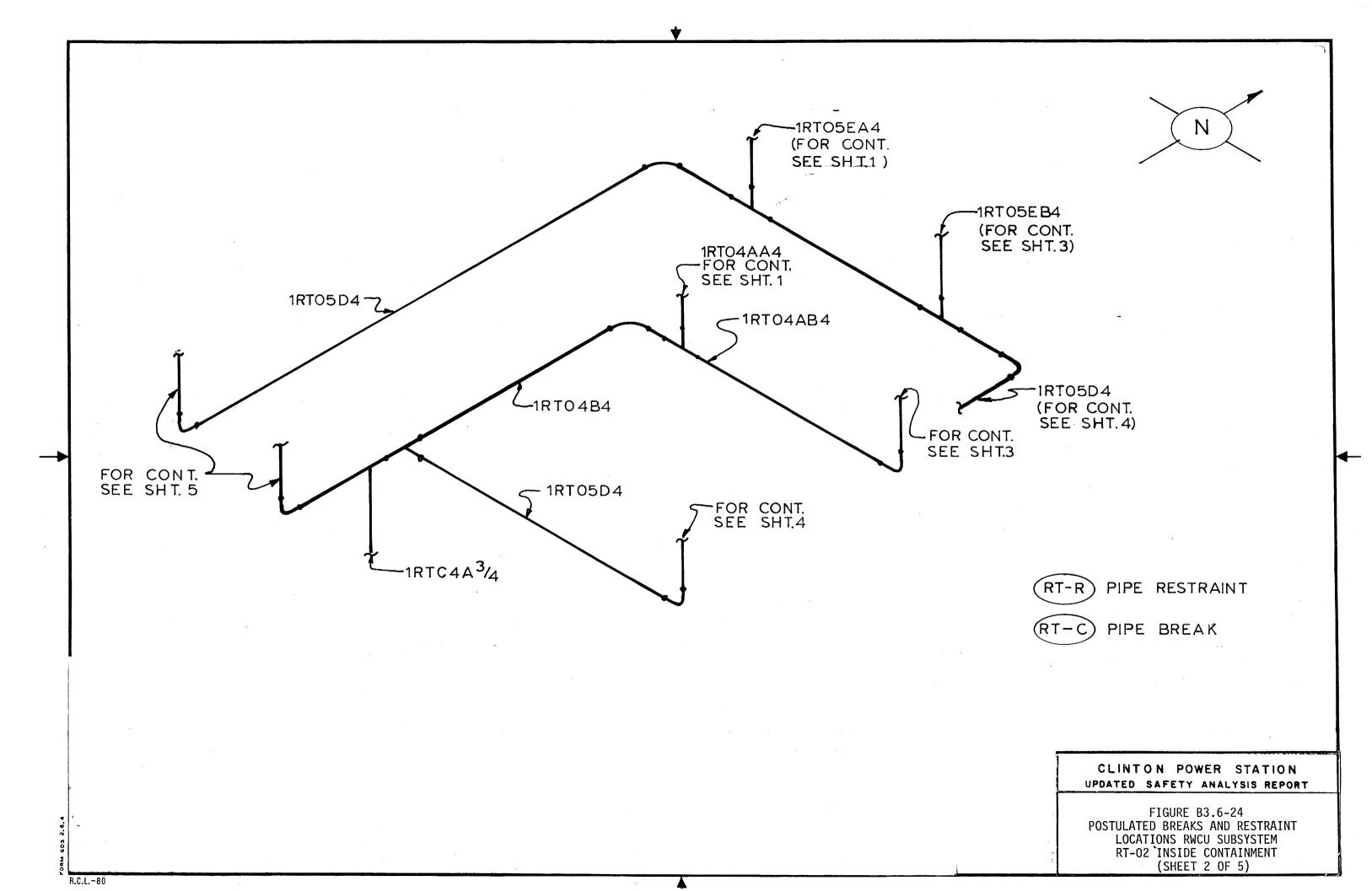
FIGURE B3.6-23
POSTULATED BREAKS AND RESTRAINT
LOCATIONS RWCU SUBSYTEM
RT-01 INSIDE CONTAINMENT
(SHEET 4 OF 6)

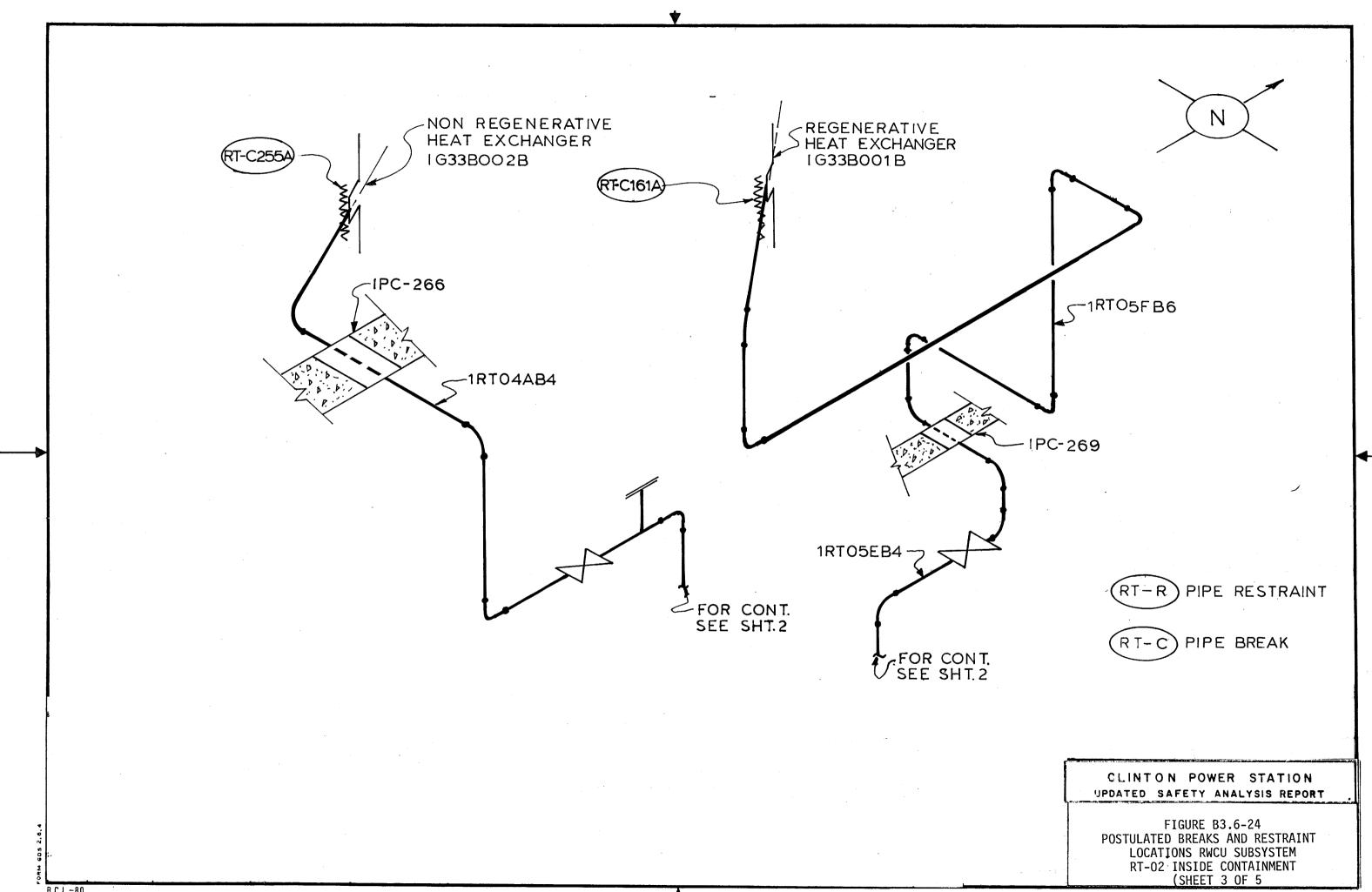
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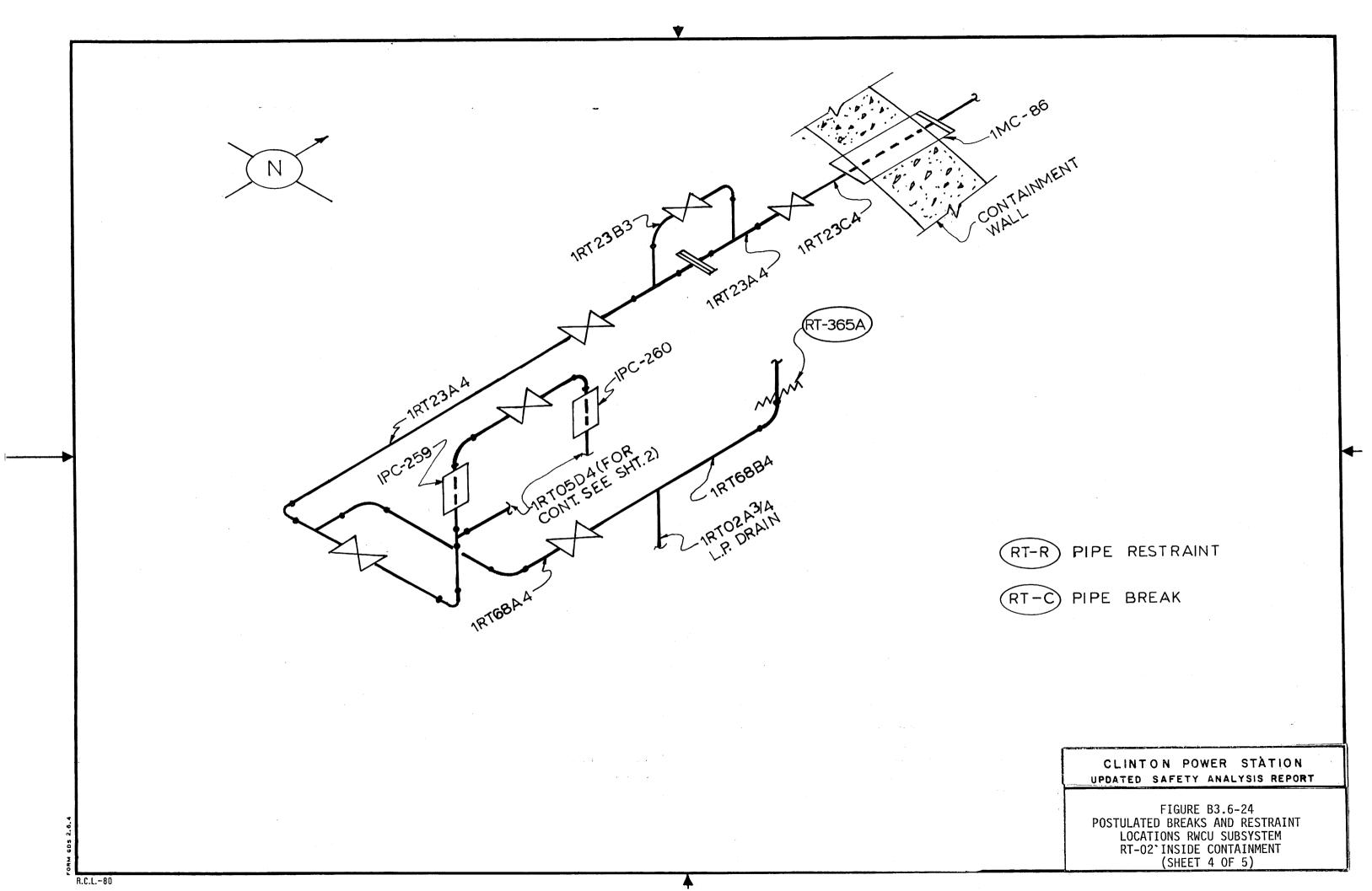


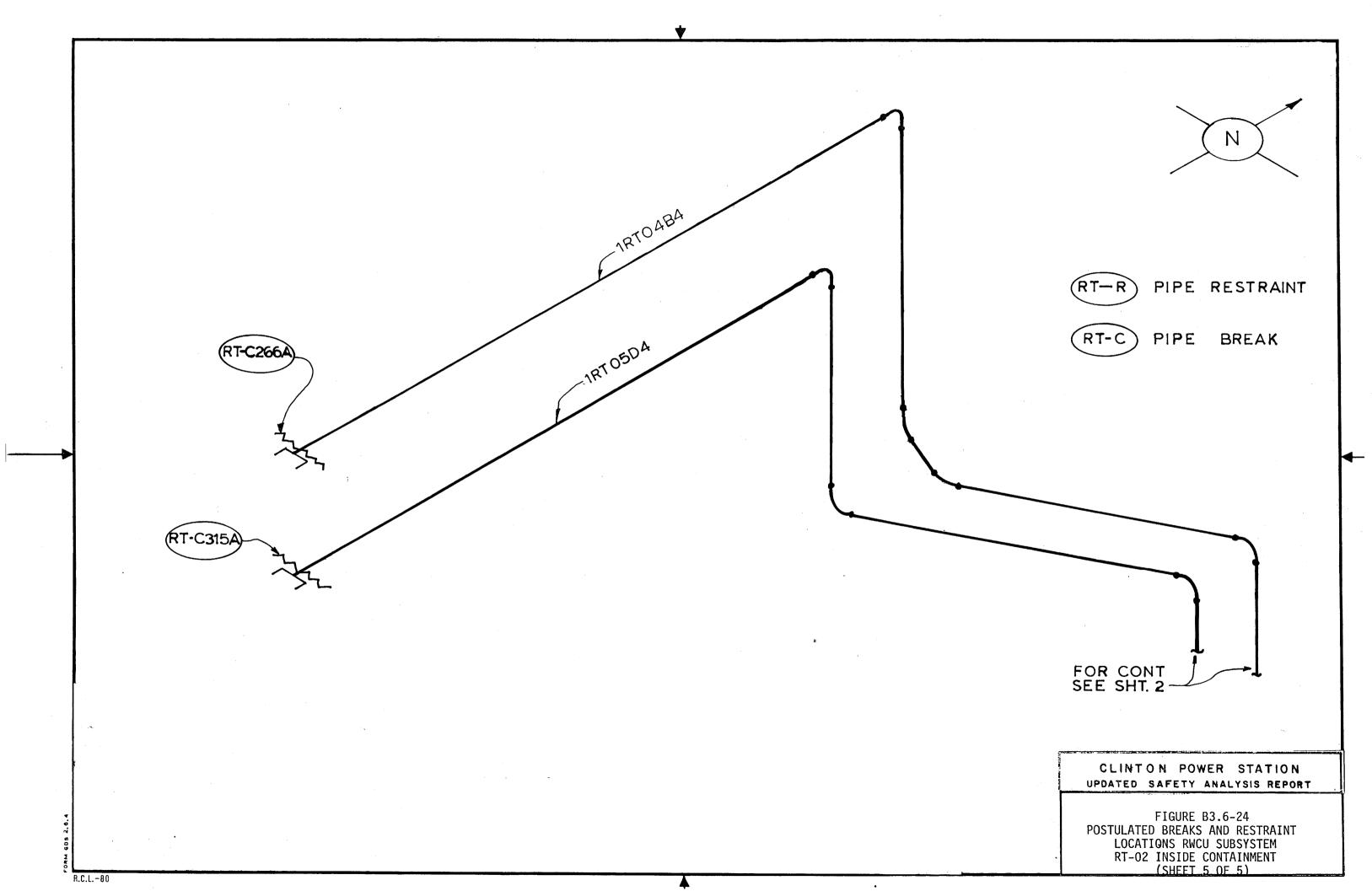


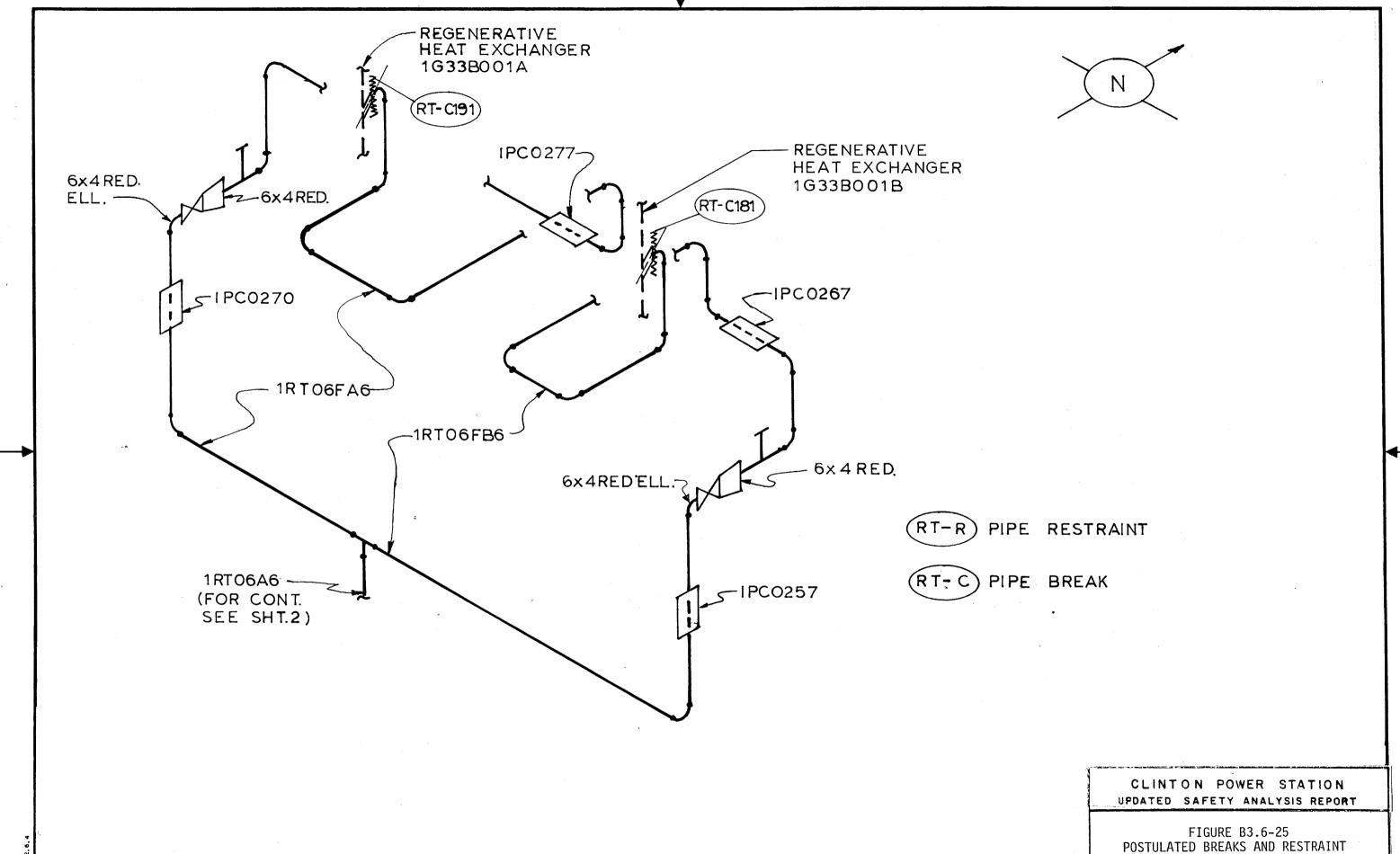




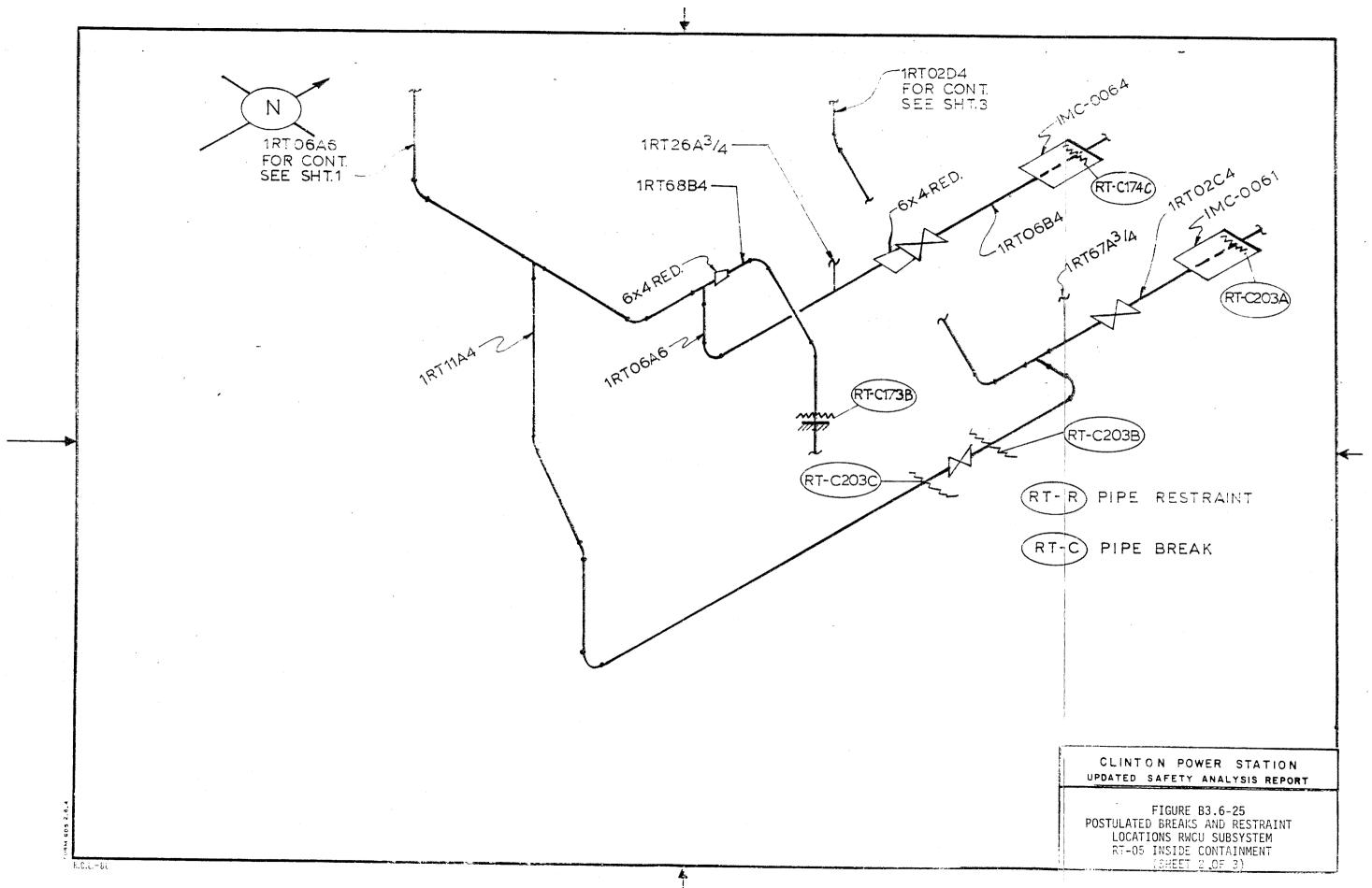


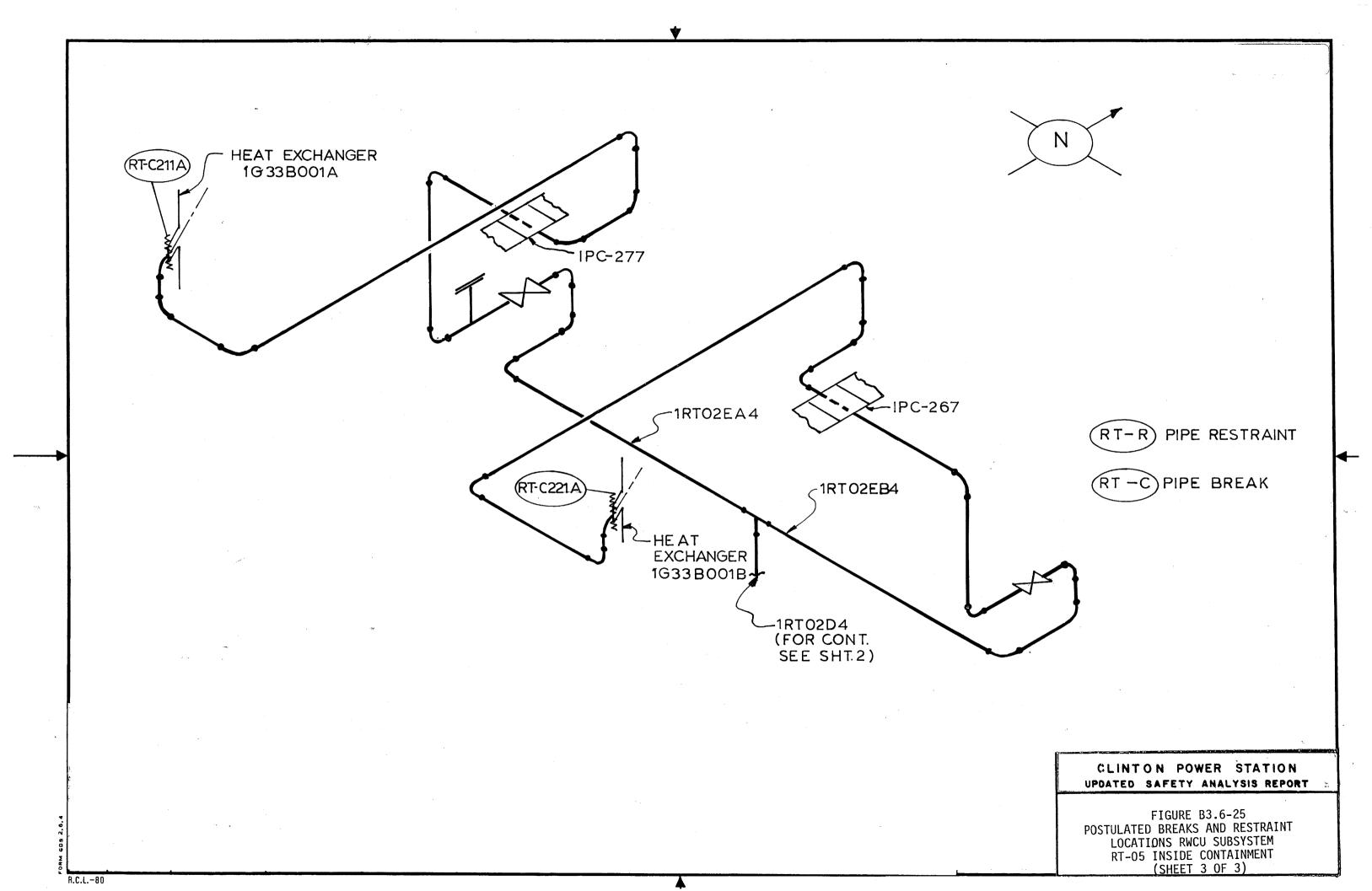






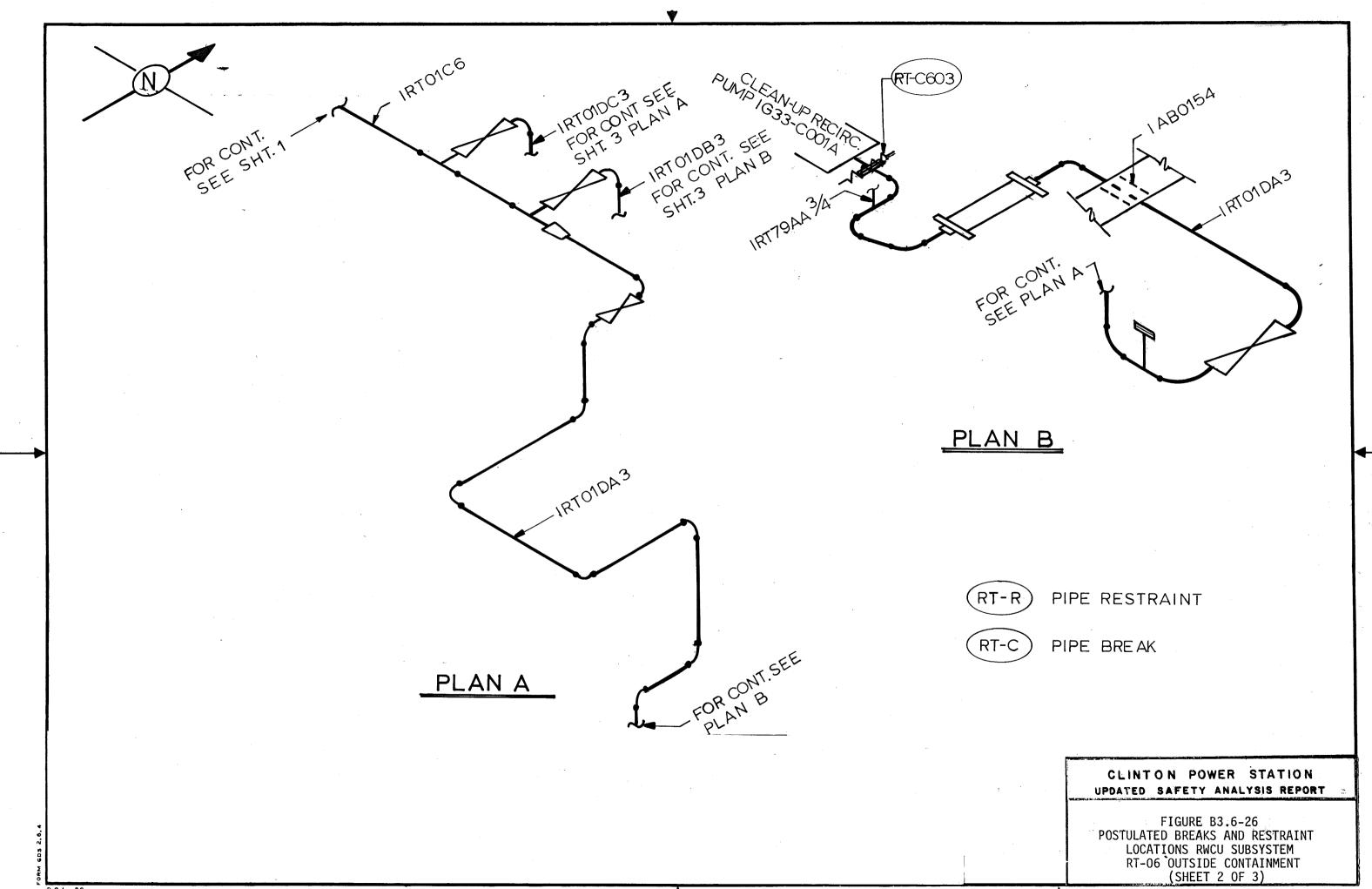
OSTULATED BREAKS AND RESTRAINT LOCATIONS RWCU SUBSYSTEM RT-05 INSIDE CONTAINMENT (SHEET 1 OF 3)





BREAK EXCLUSION AREA. FOR CONT. SEE PLAN A SHT. 2 PIPE RESTRAINT PIPE BREAK CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE B3.6-26
POSTULATED BREAKS AND RESTRAINT
LOCATIONS RWCU SUBSYSTEM
RT-06 OUTSIDE CONTAINMENT
(SHEET 1 OF 3)



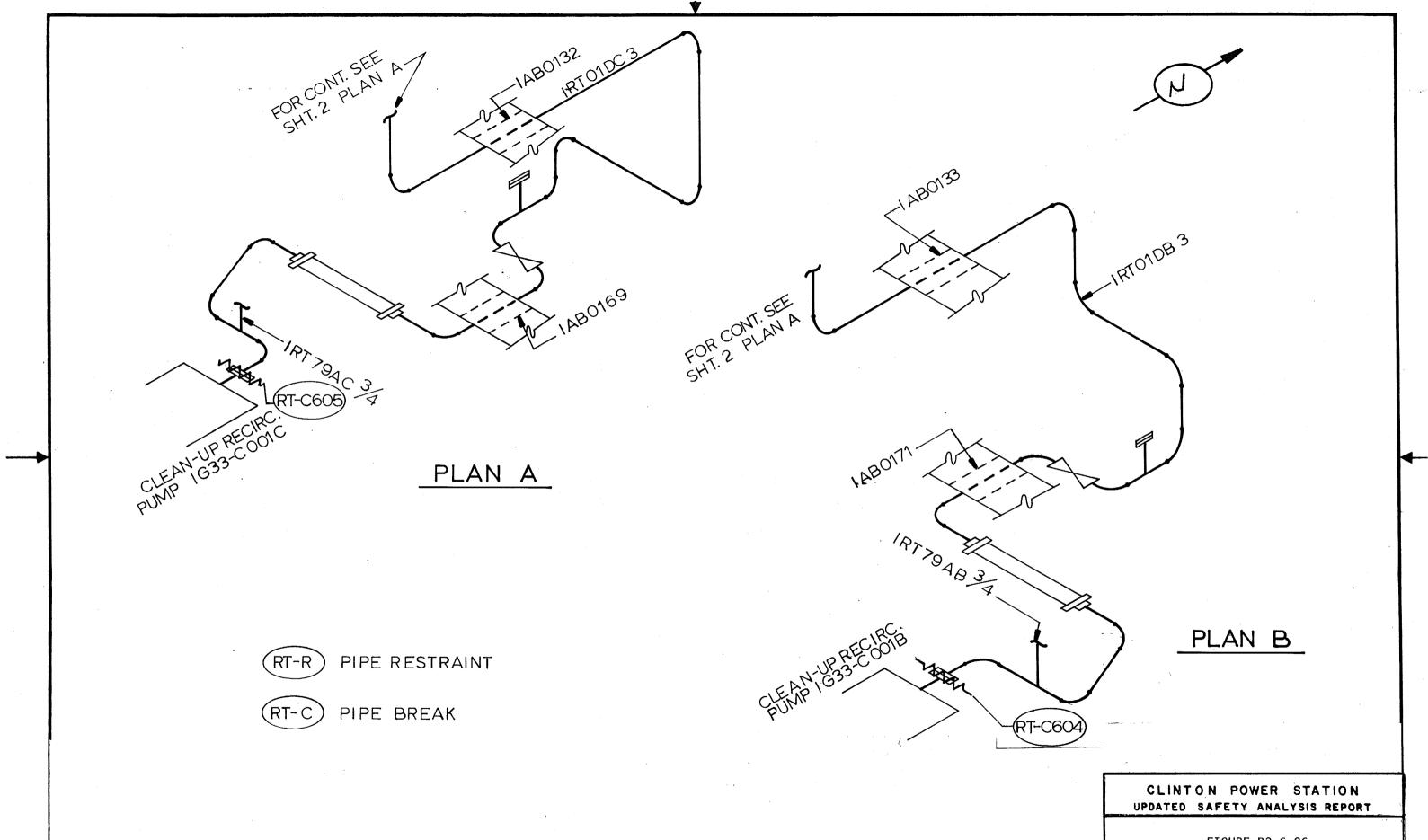
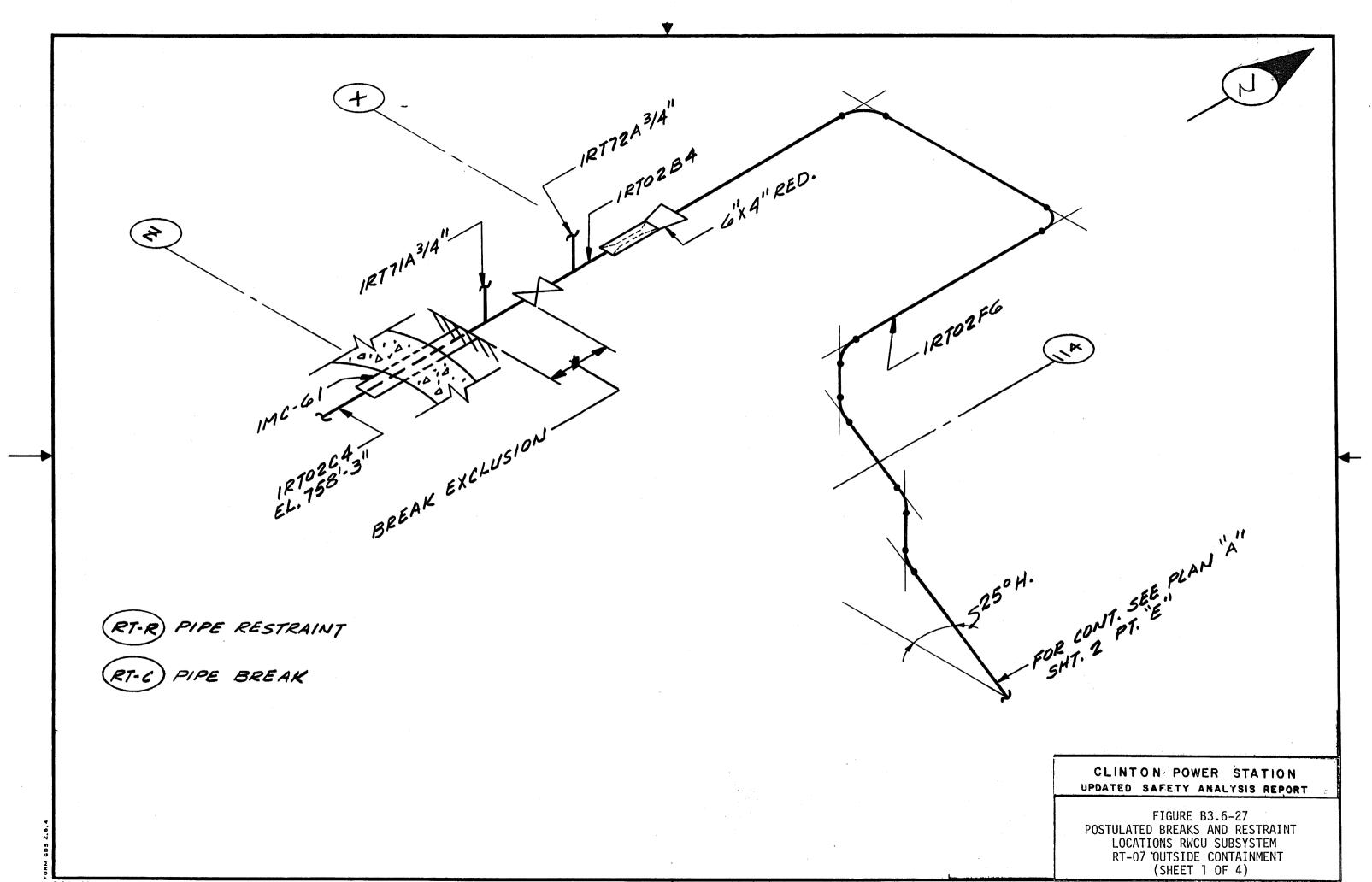
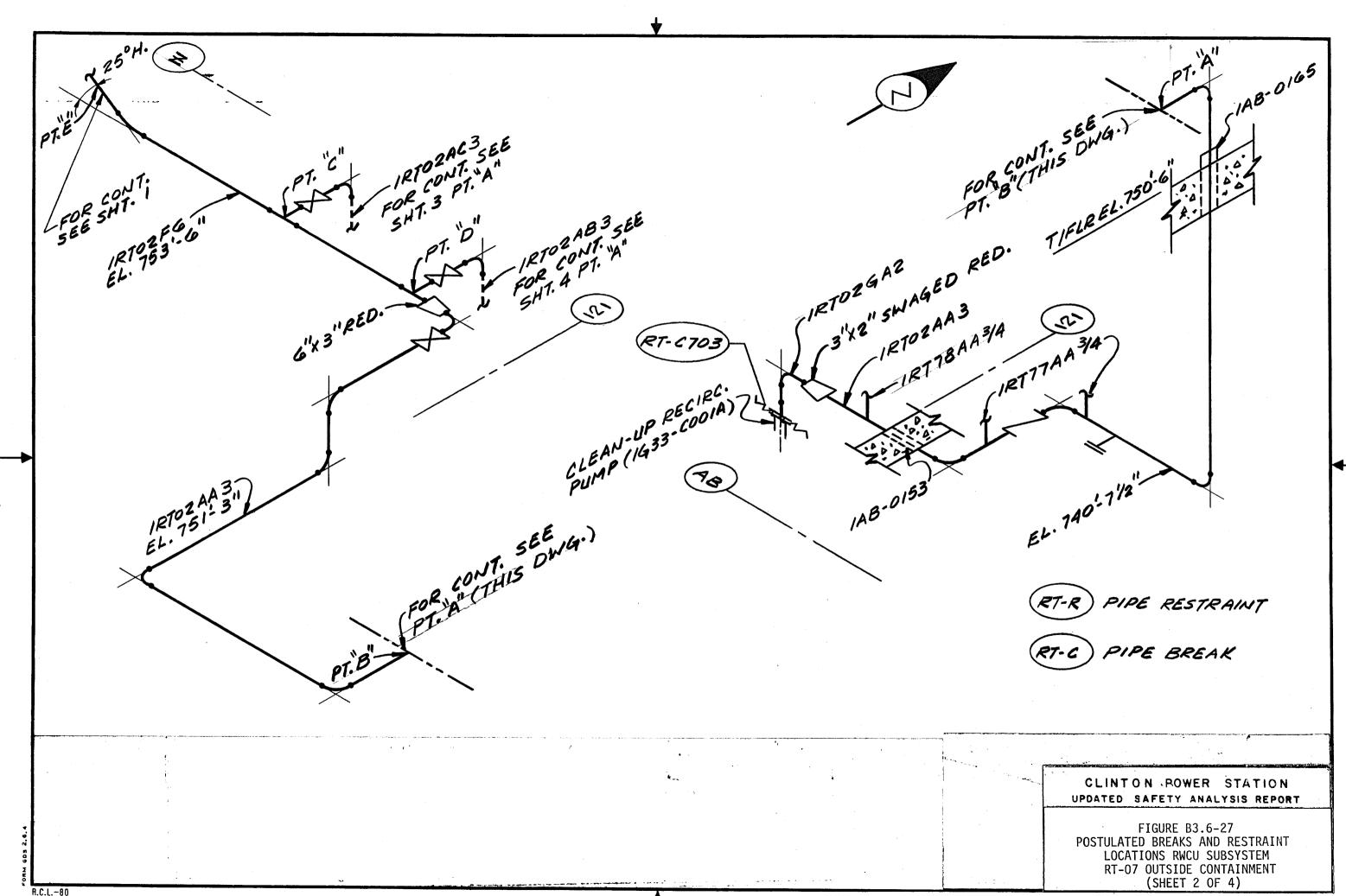
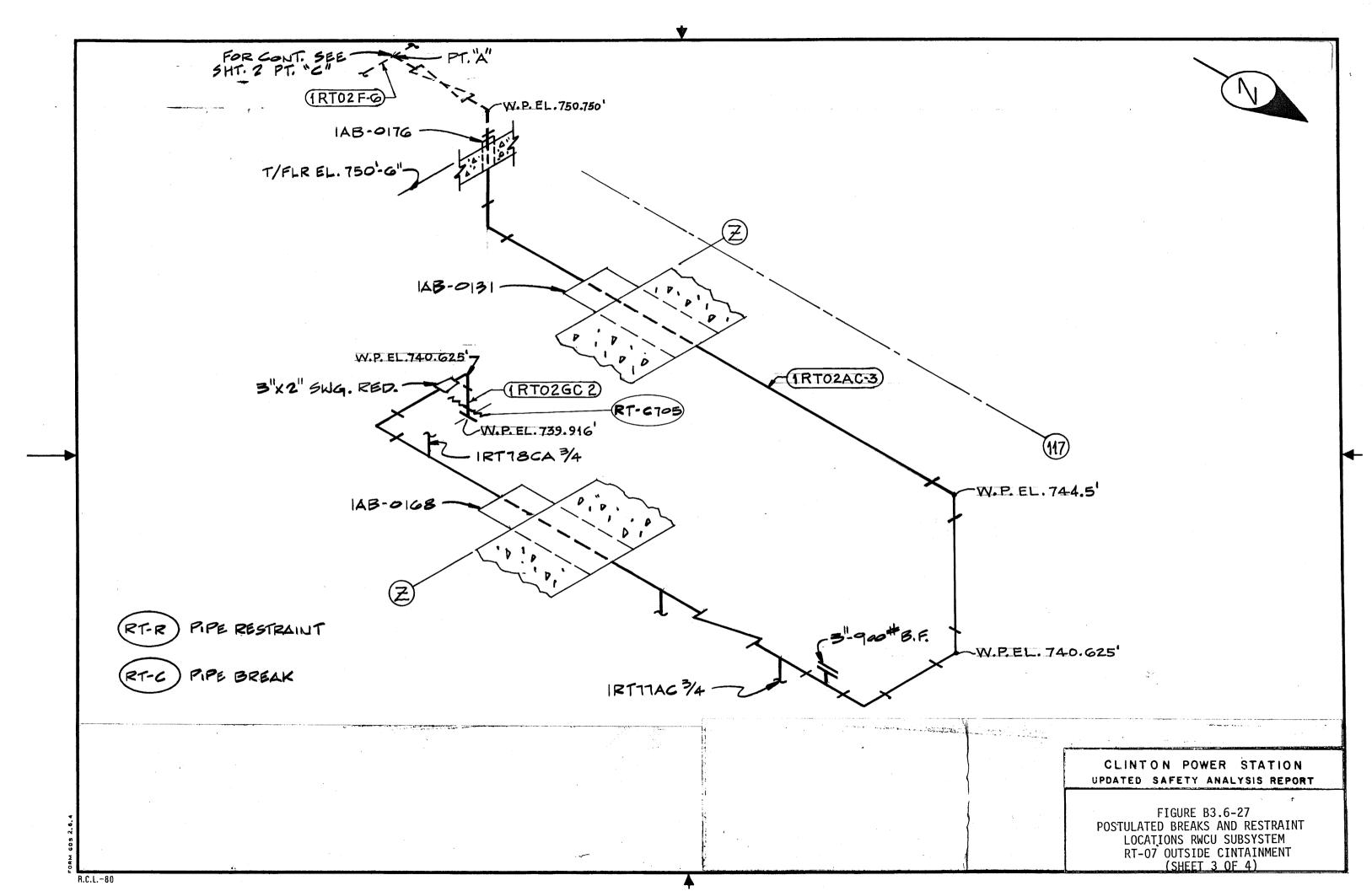
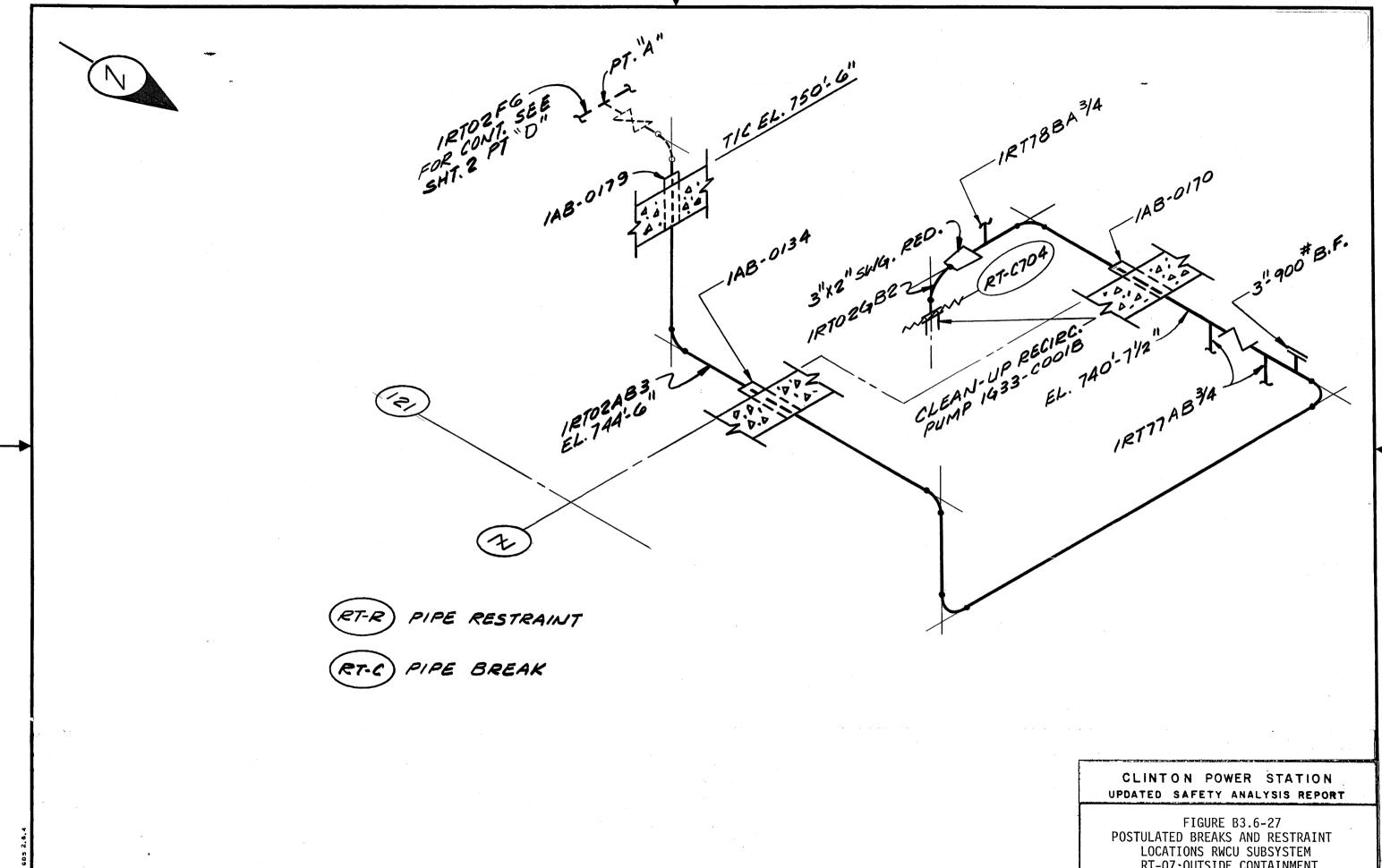


FIGURE B3.6-26
POSTULATED BREAKS AND RESTRAINT
LOCATIONS RWCU SUBSYSTEM
RT-06 OUTSIDE CONTAINMENT
(SHEET 3 OF 3)



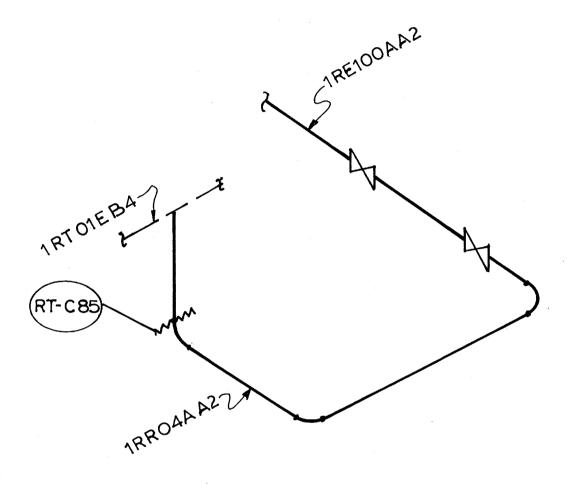






LOCATIONS RWCU SUBSYSTEM RT-07-OUTSIDE CONTAINMENT (SHEET 4 OF 4)

N

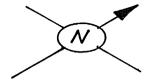


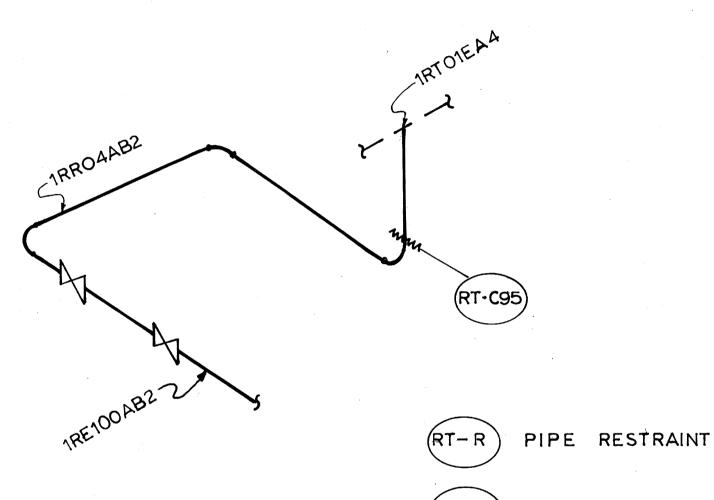
RT-R) PIPE RESTRAINT

RT-C) PIPE BREAK

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE B3.6-29
POSTULATED BREAKS AND RESTRAINT
LOCATIONS RWCU DRAIN SUBSYSTEM
RR-32 INSIDE CONTAINMENT



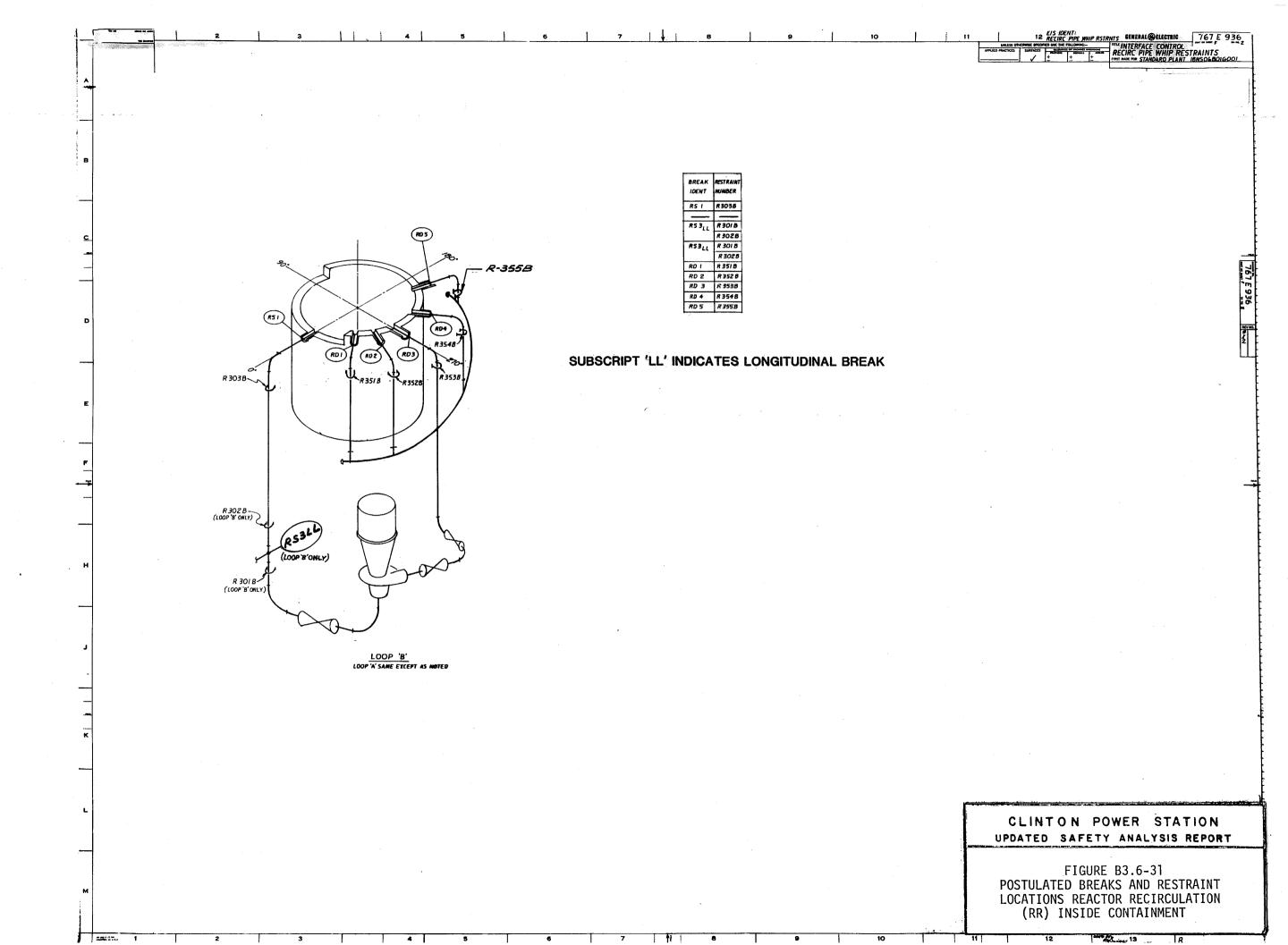


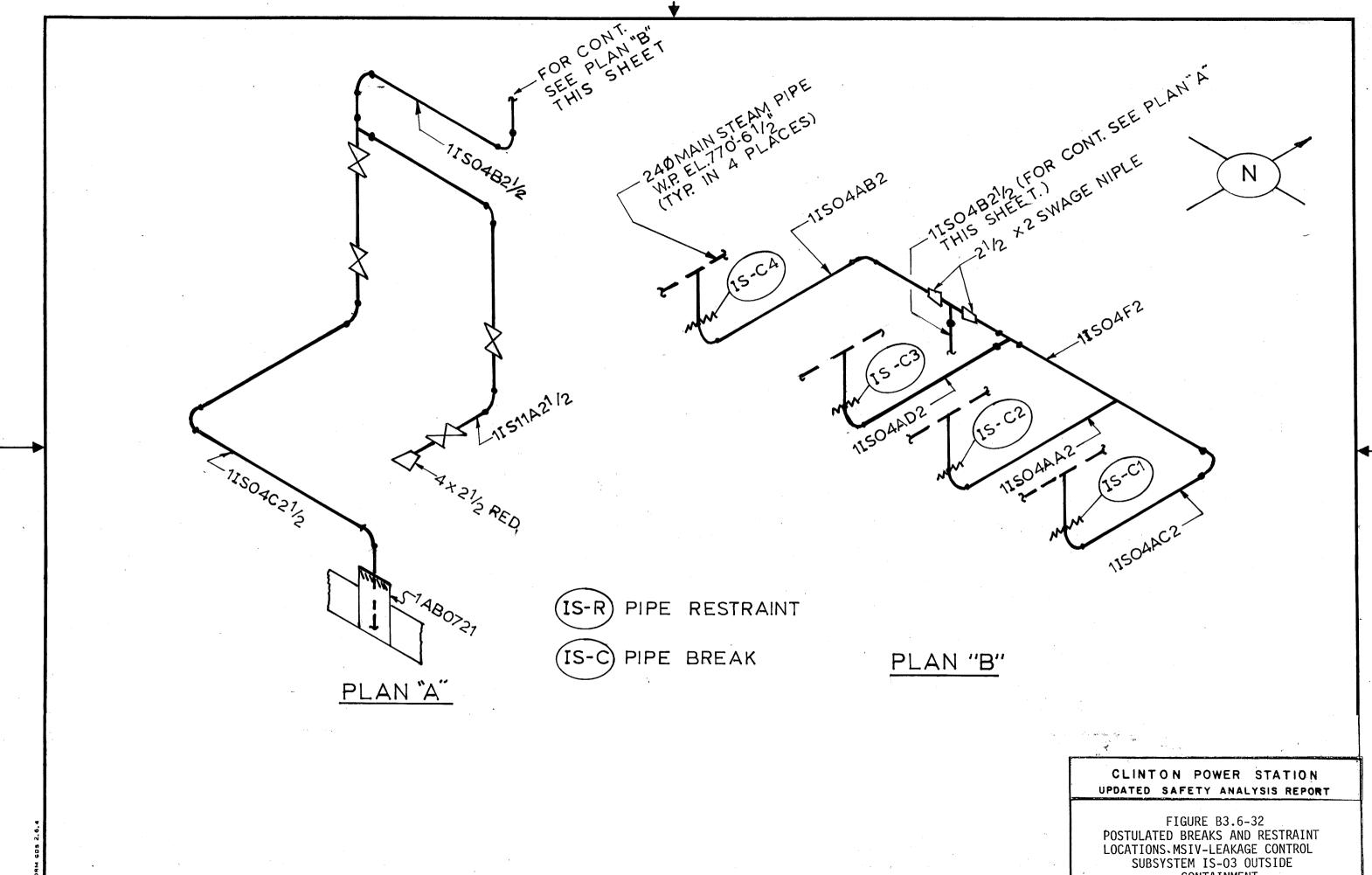
PIPE BREAK

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

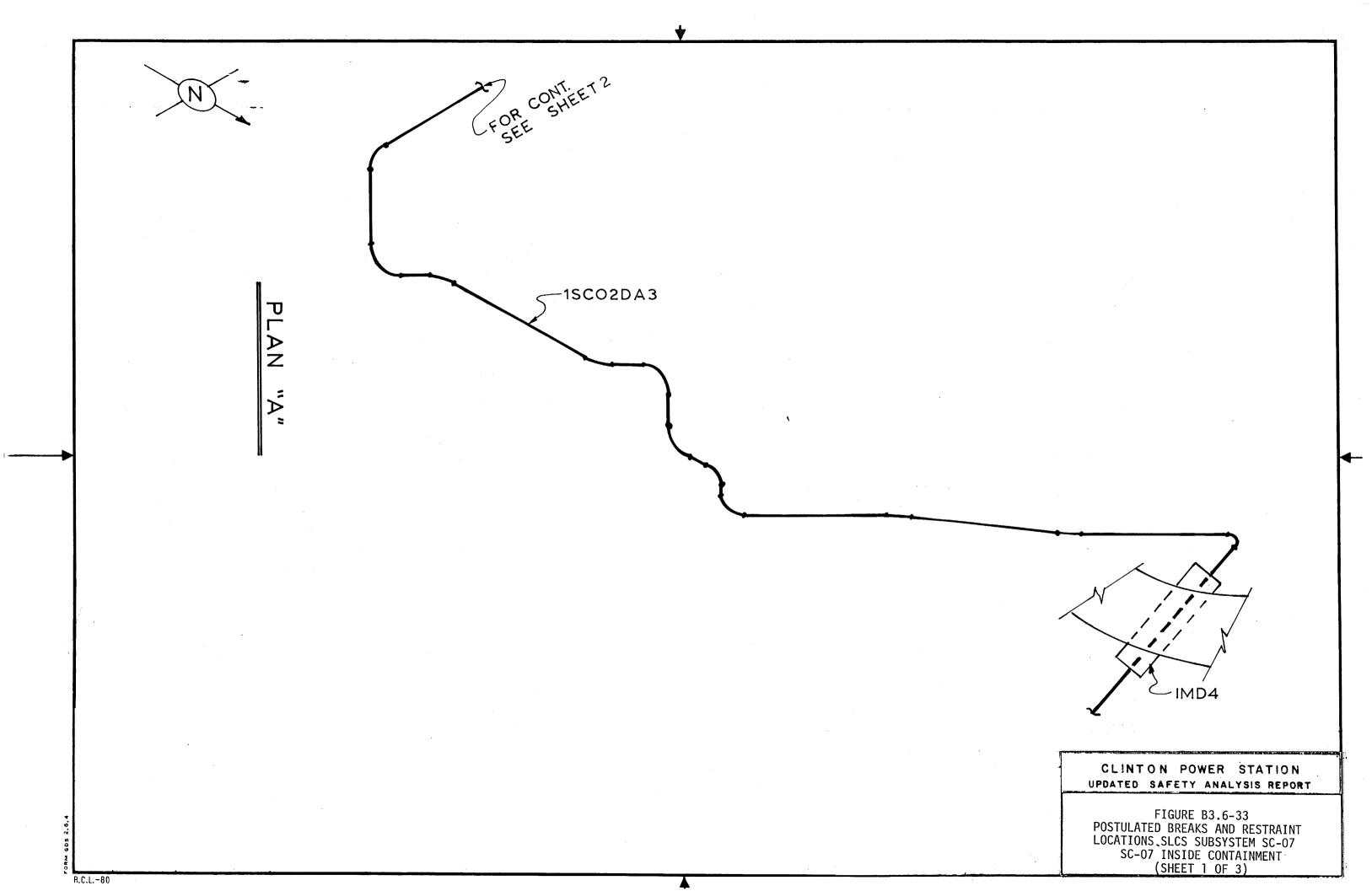
FIGURE B3.6-30
POSTULATED BREAKS AND RESTRAINT
LOCATIONS RWCU DRAIN SUBSYSTEM
RR-33 INSIDE CONTAINMENT

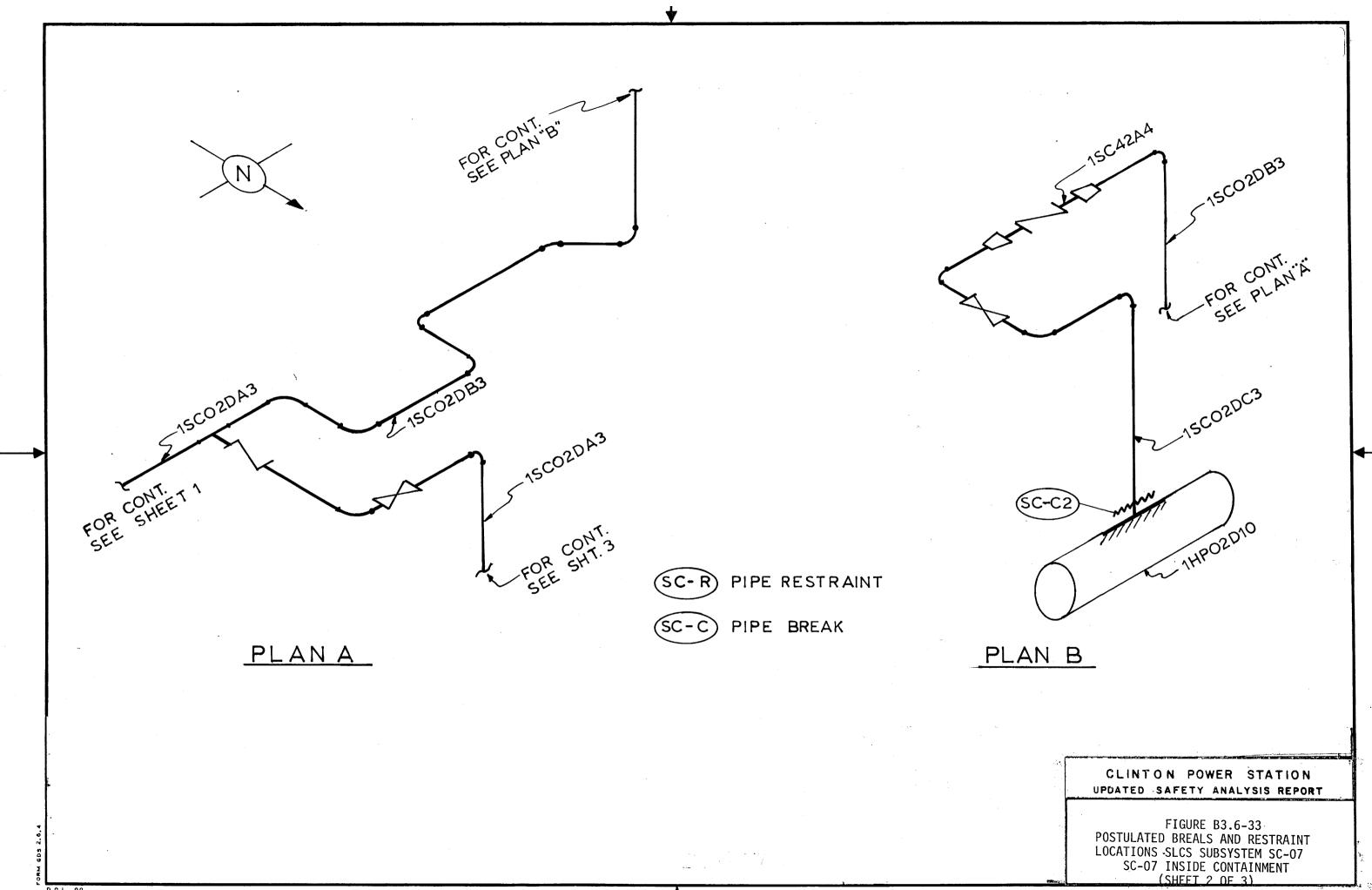
RM GDS 2.

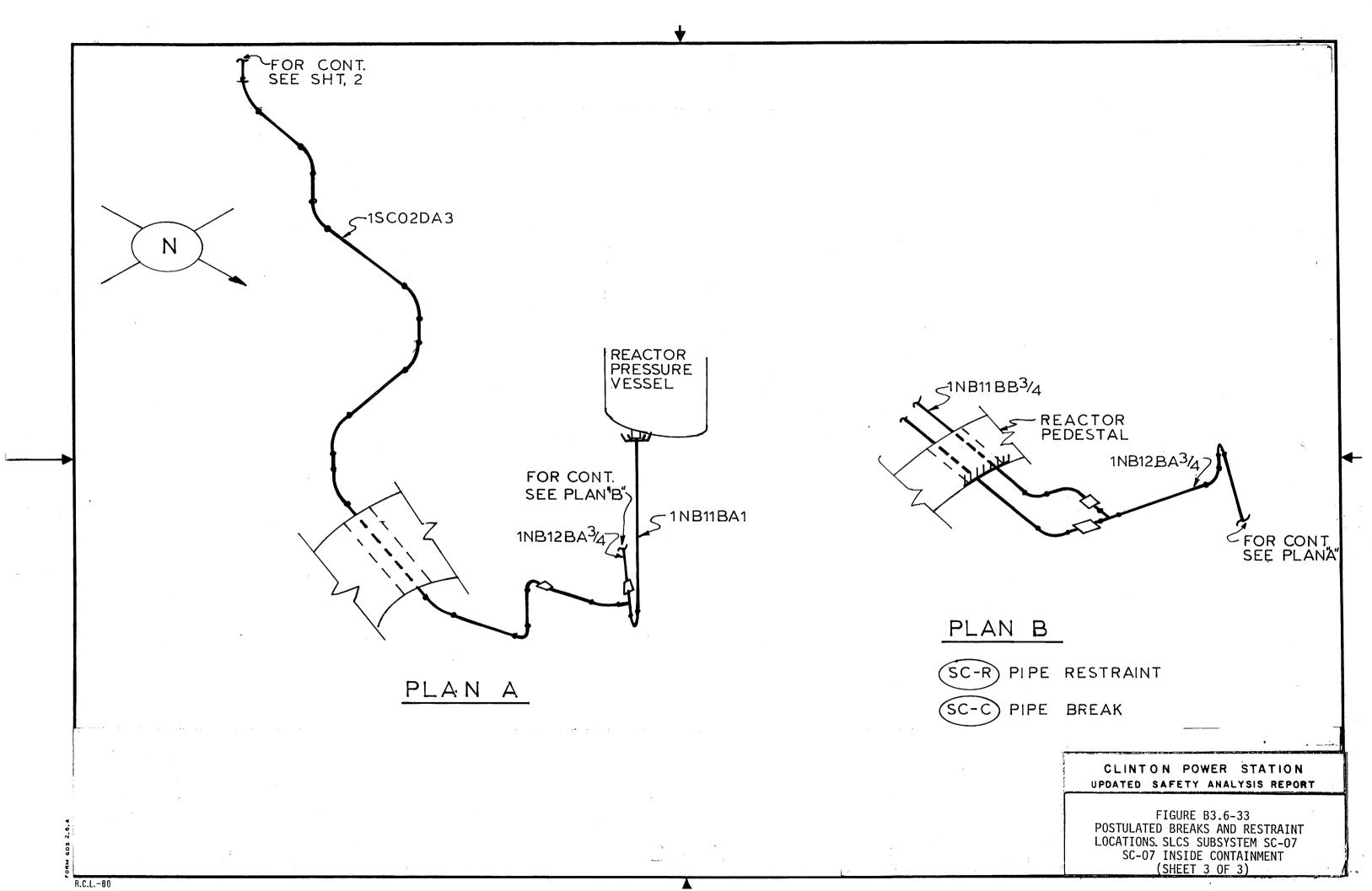


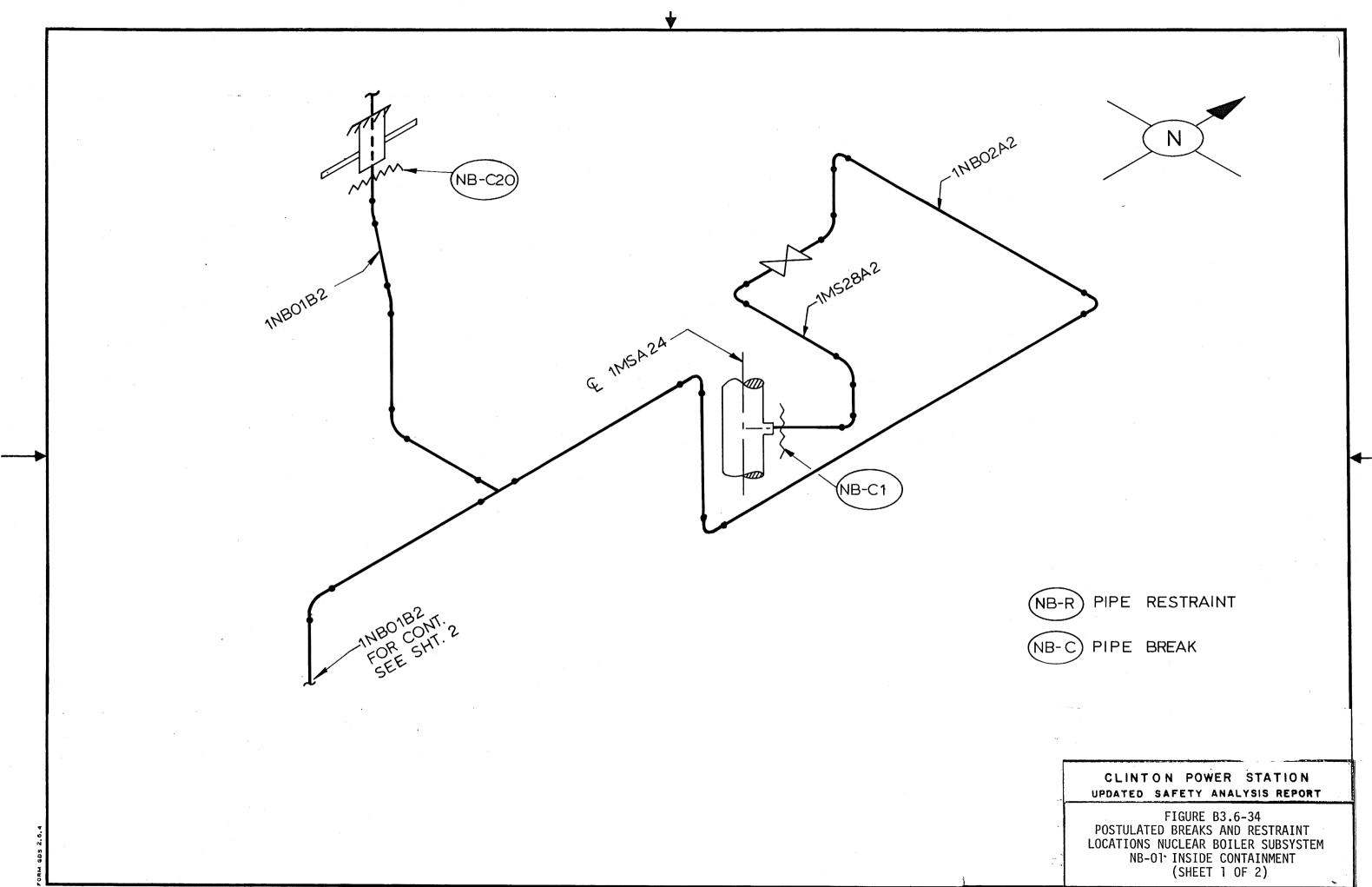


CONTAINMENT

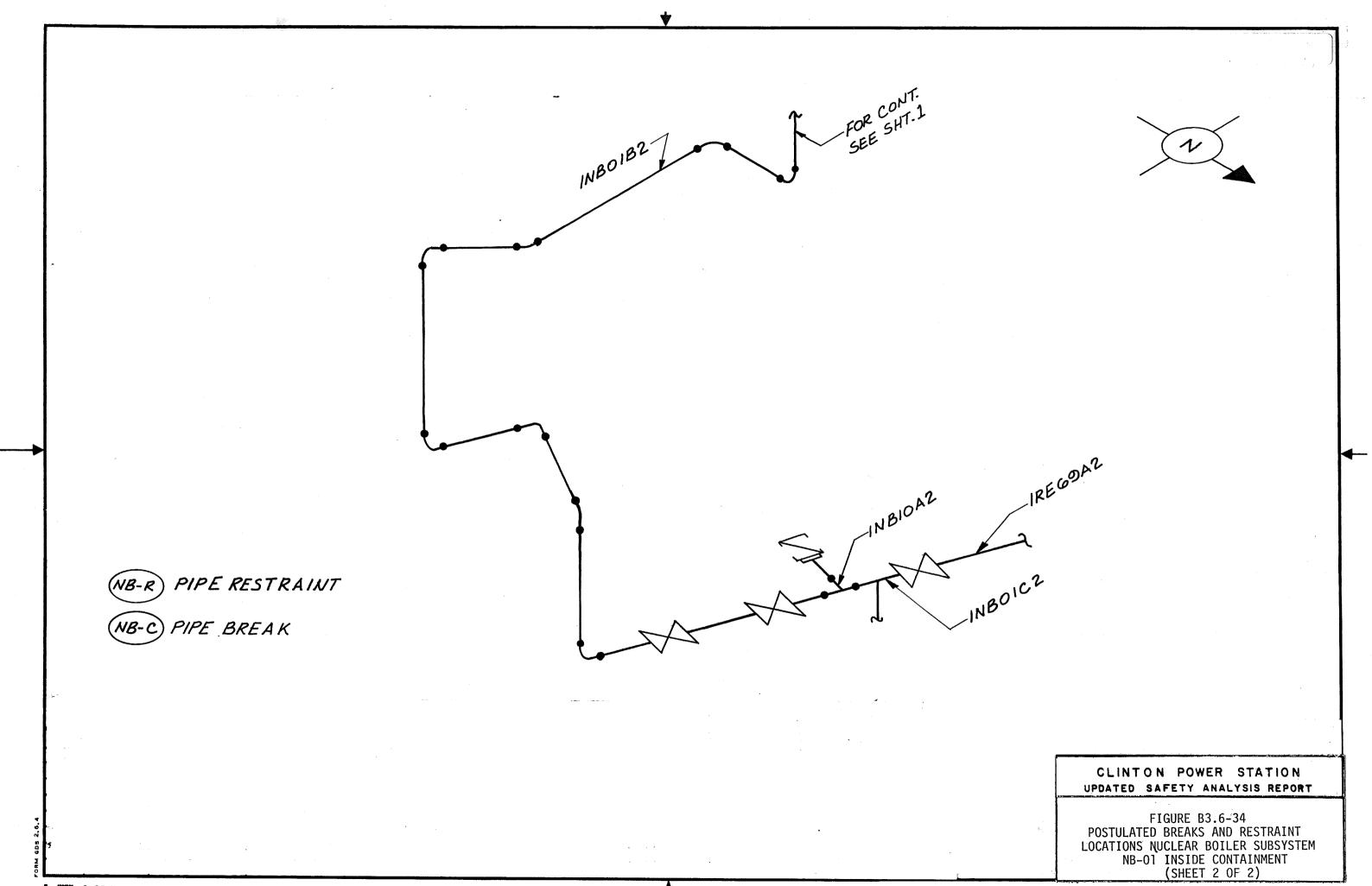




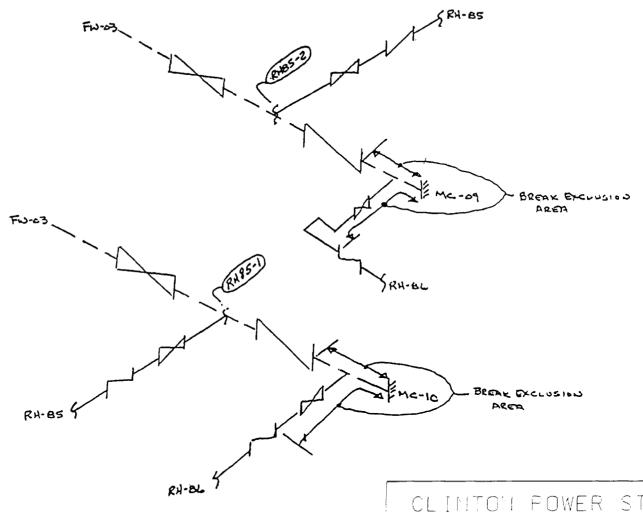




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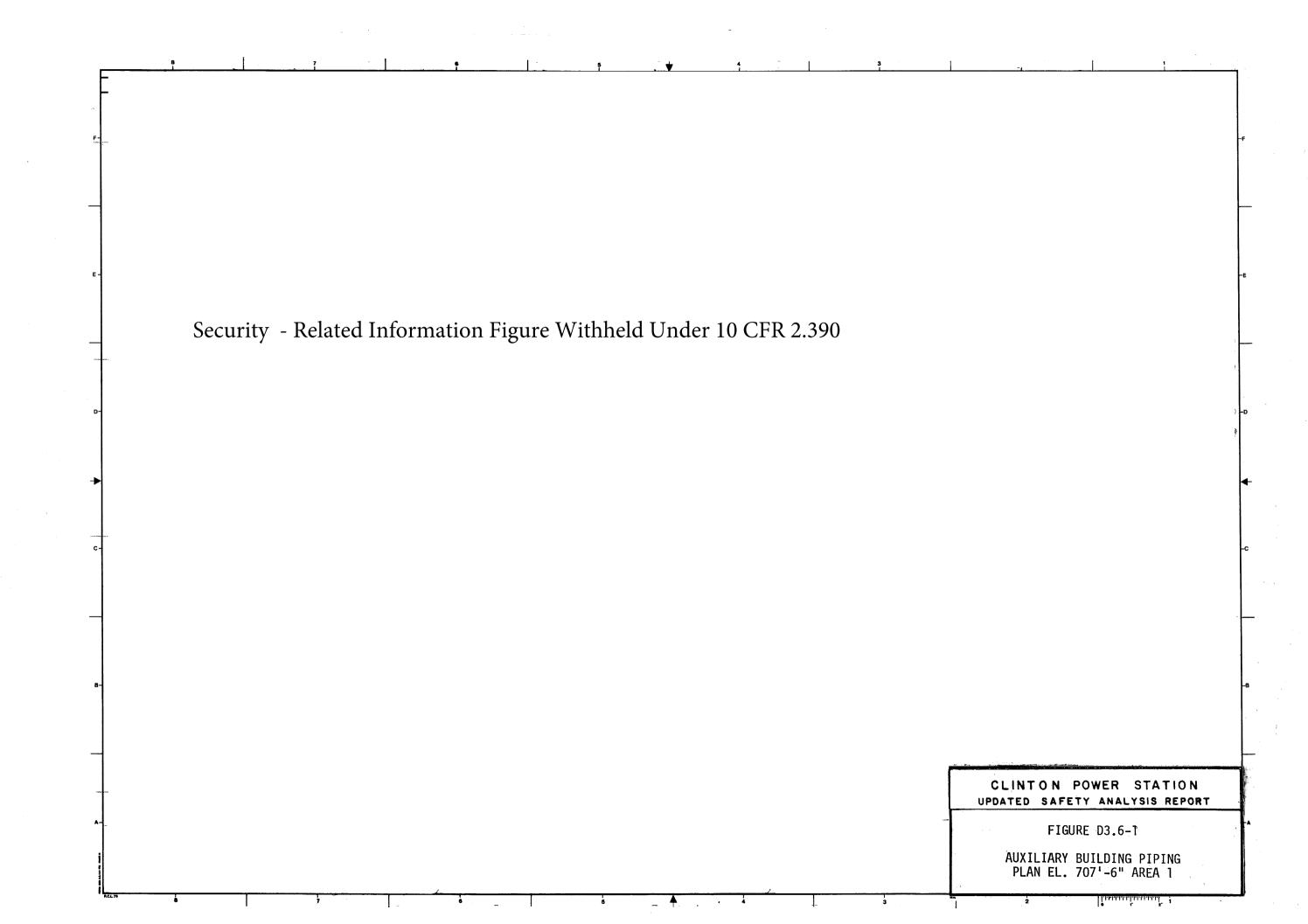
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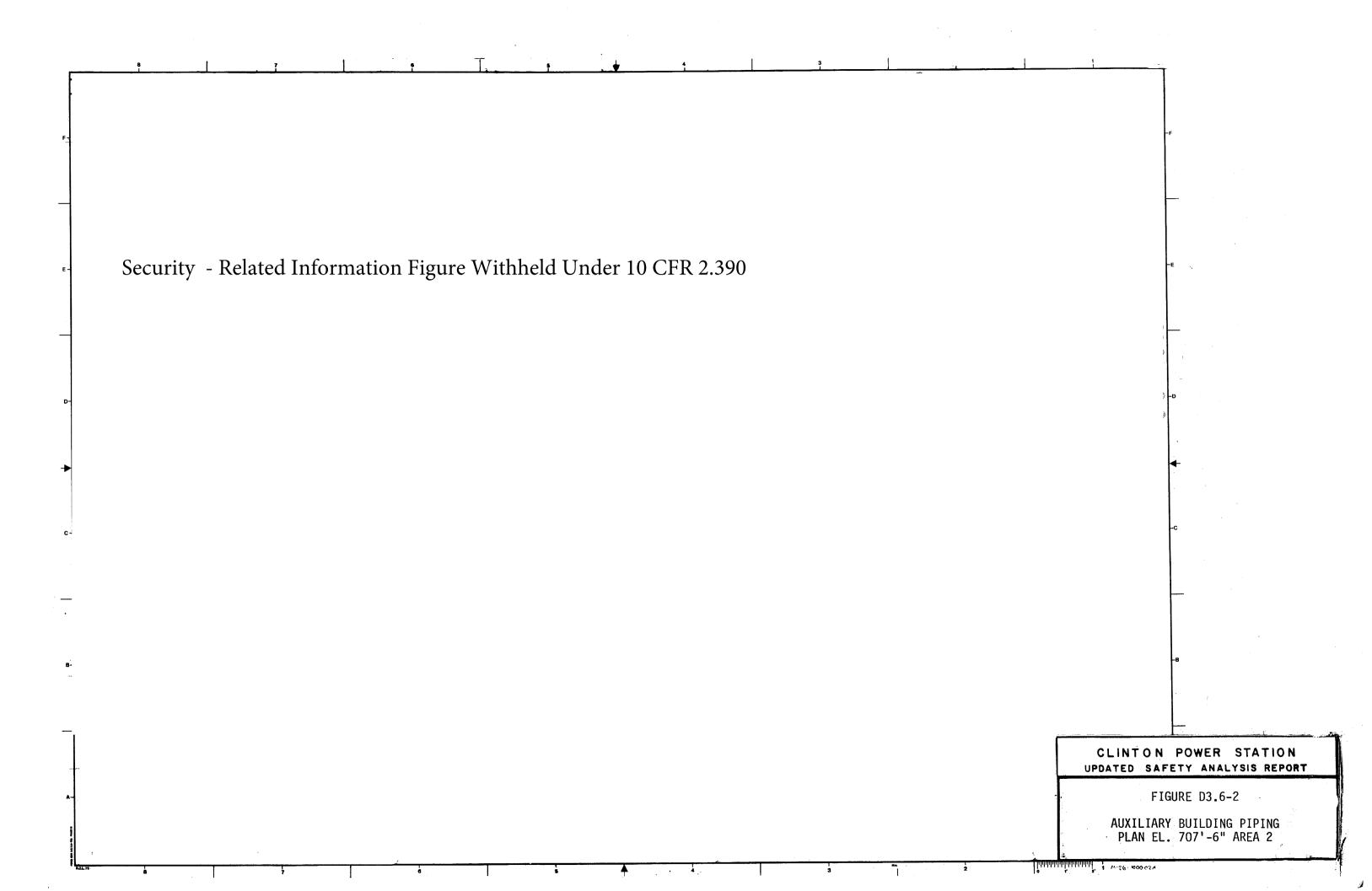


CLINTON FOWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE B3.6-35

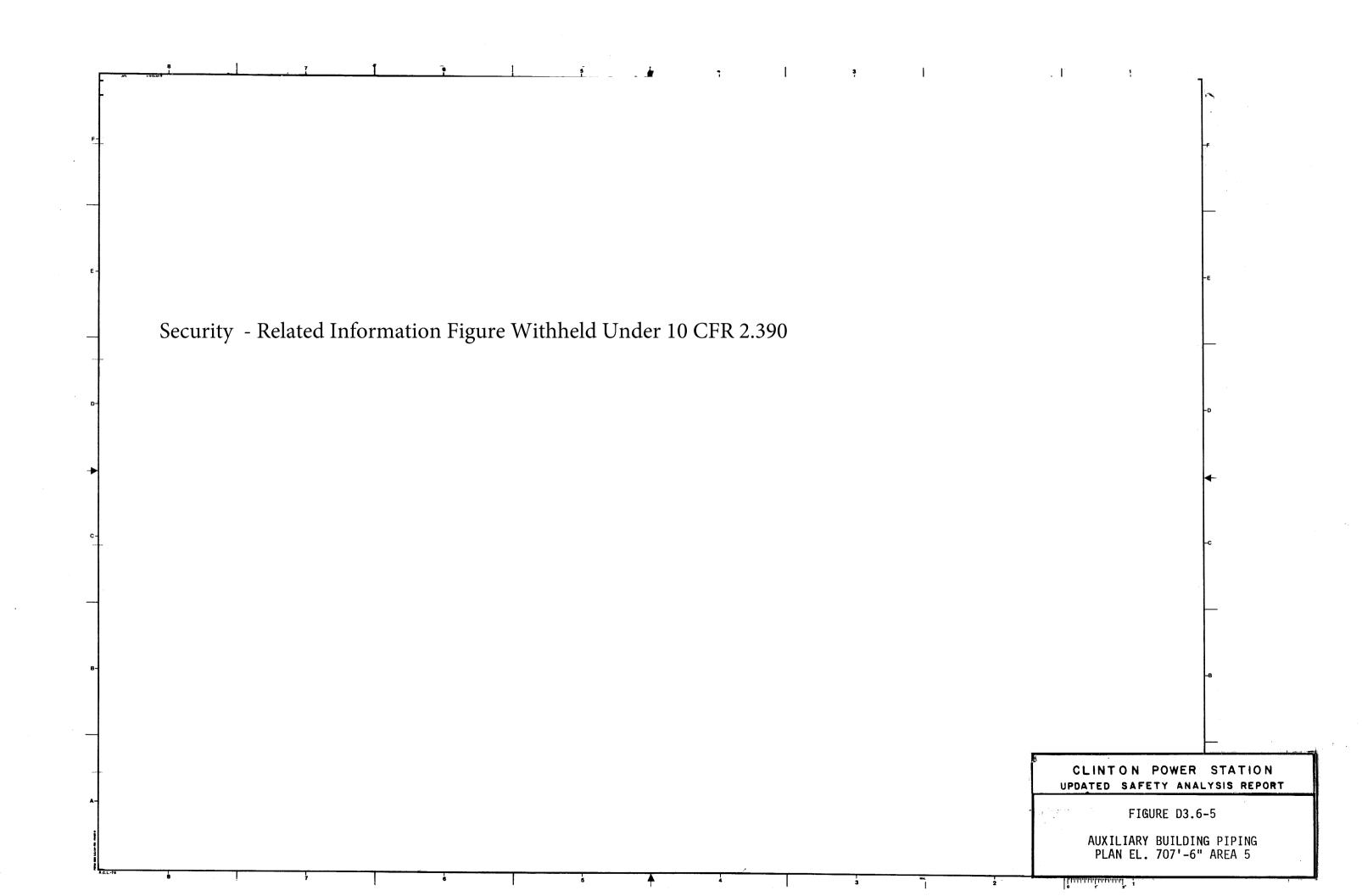
FOSTULATED BREAKS AND FESTRAINT LOCATION FWLCS SUBSYSTEMS RH-85 AND RH-86





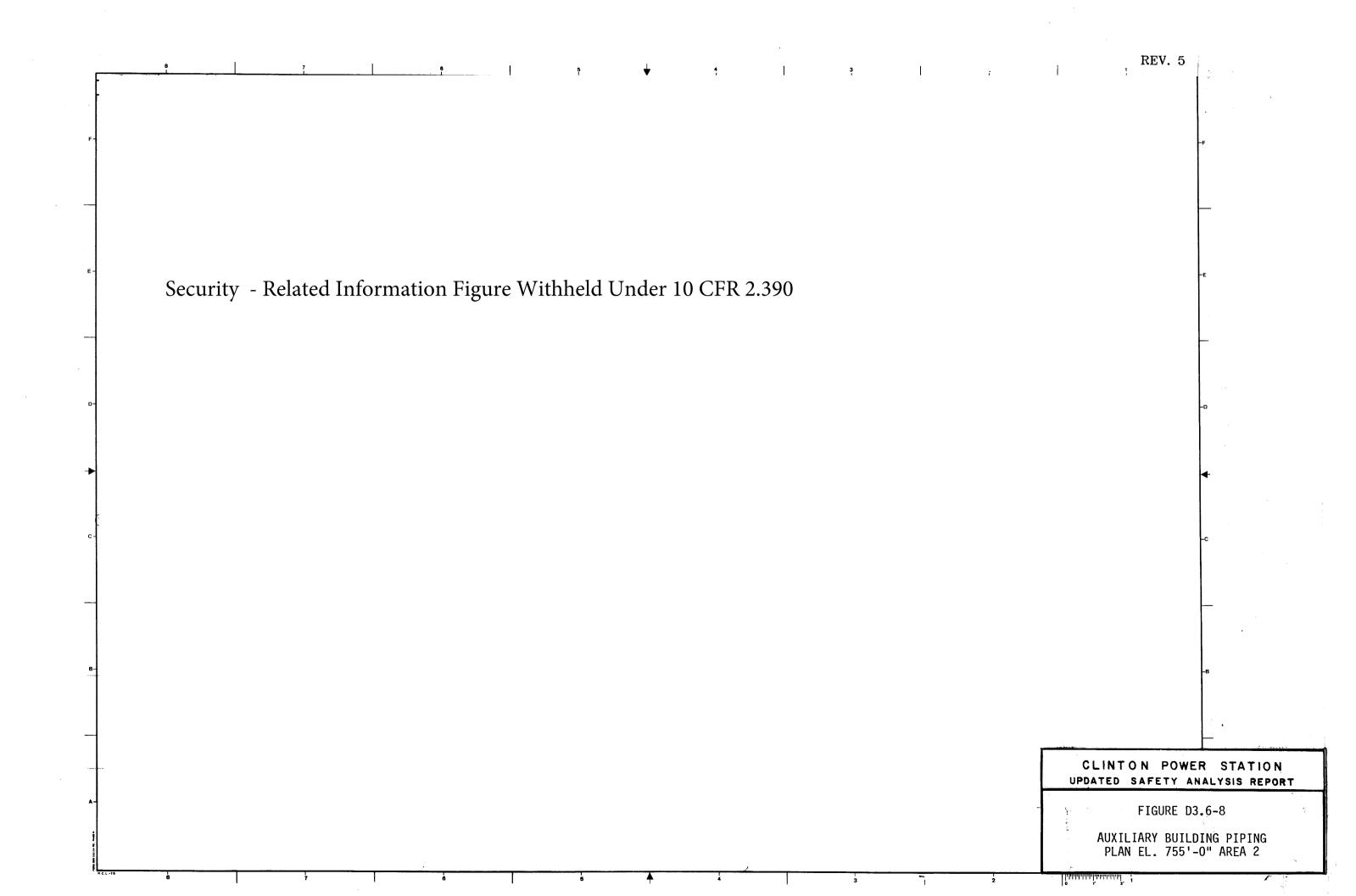
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-3 AUXILIARY BUILDING PIPING PLAN EL. 707'-6" AREA 3

Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-4 AUXILIARY BUILDING PIPING PLAN EL. 707'-6" AREA 4

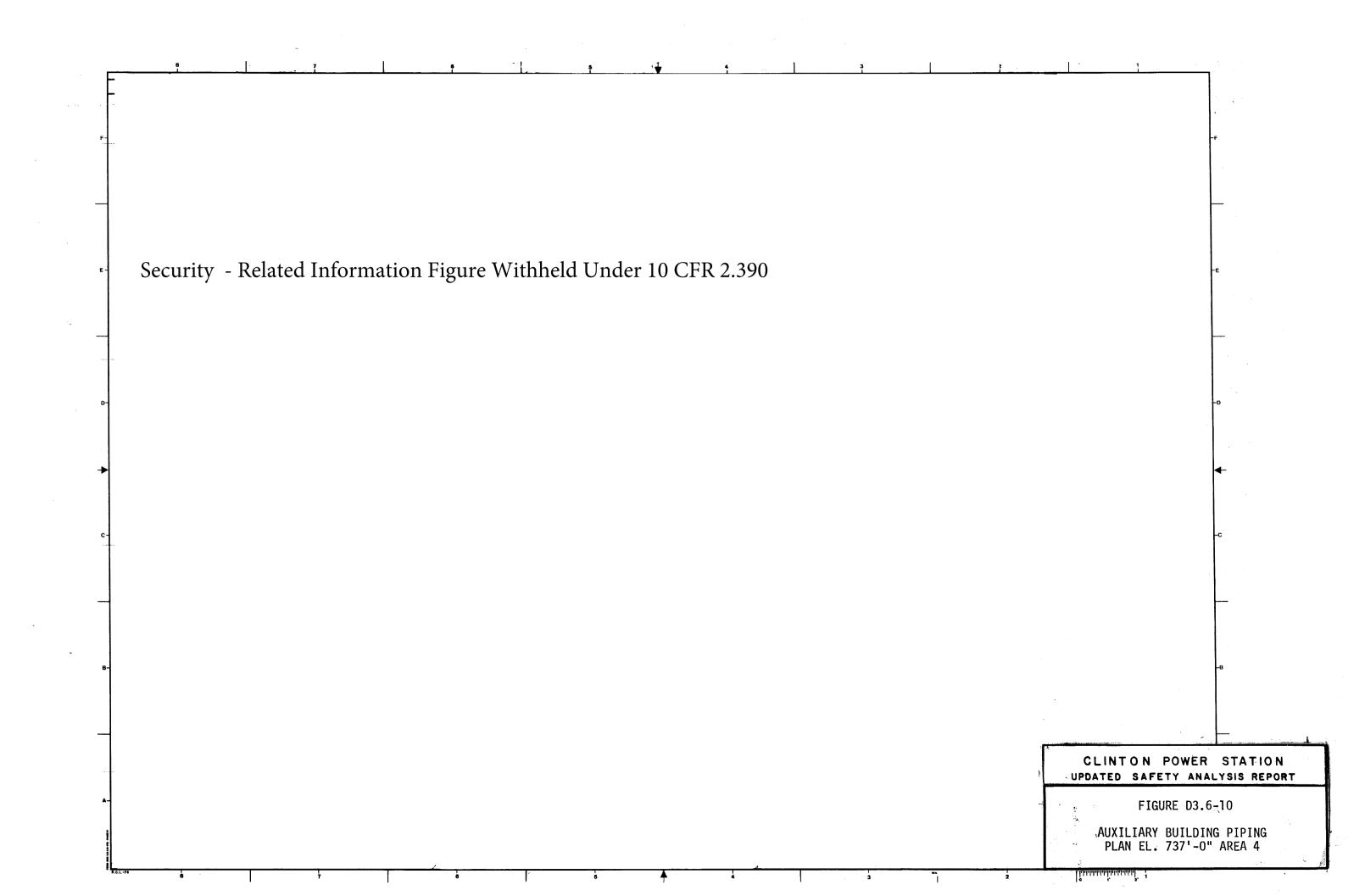


Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-6 AUXILIARY BUILDING PIPING PLAN EL. 737'-0" AREA 1

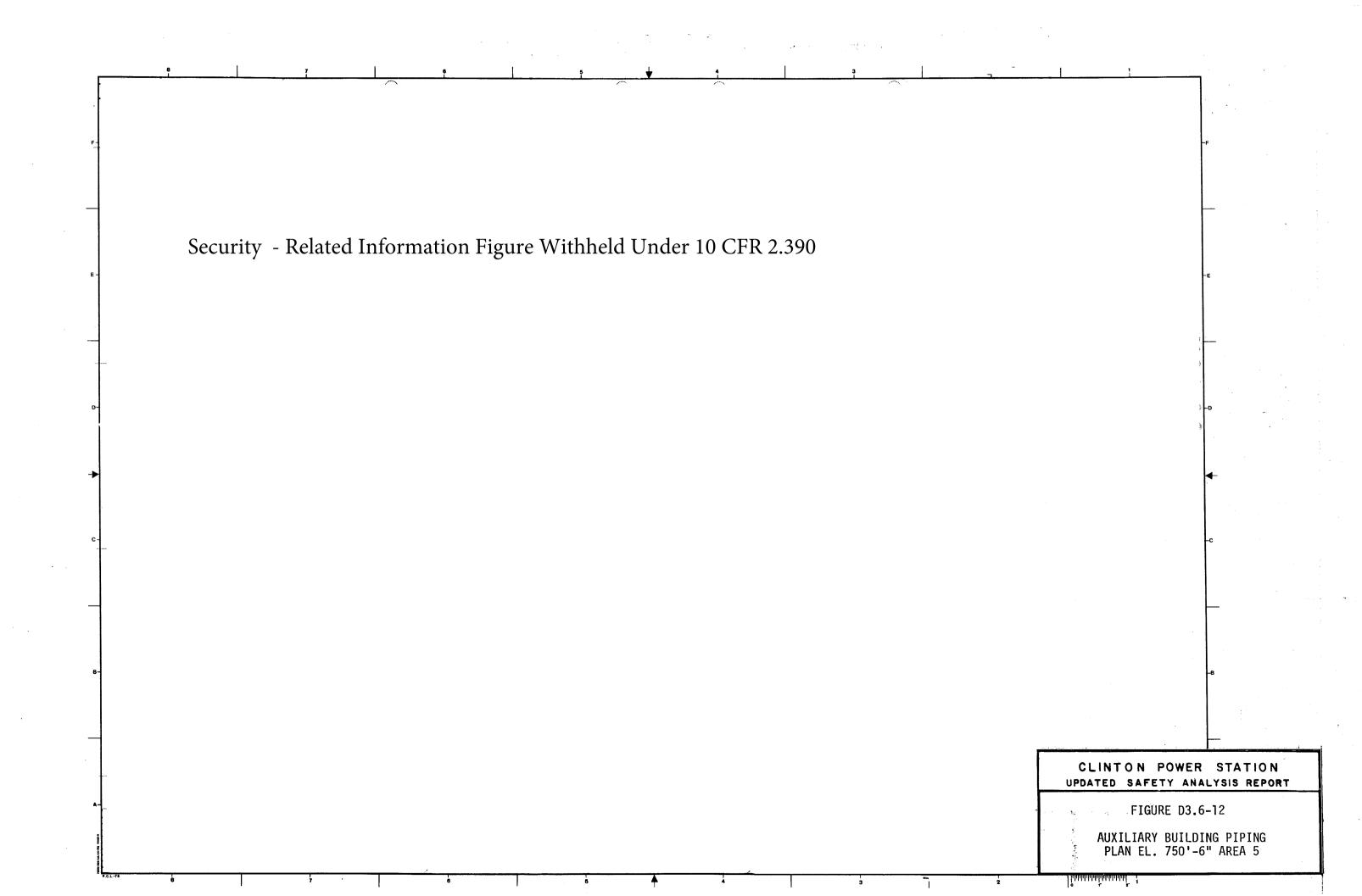
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-7 AUXILIARY BUILDING PIPING PLAN EL. 737'-0" AREA 2



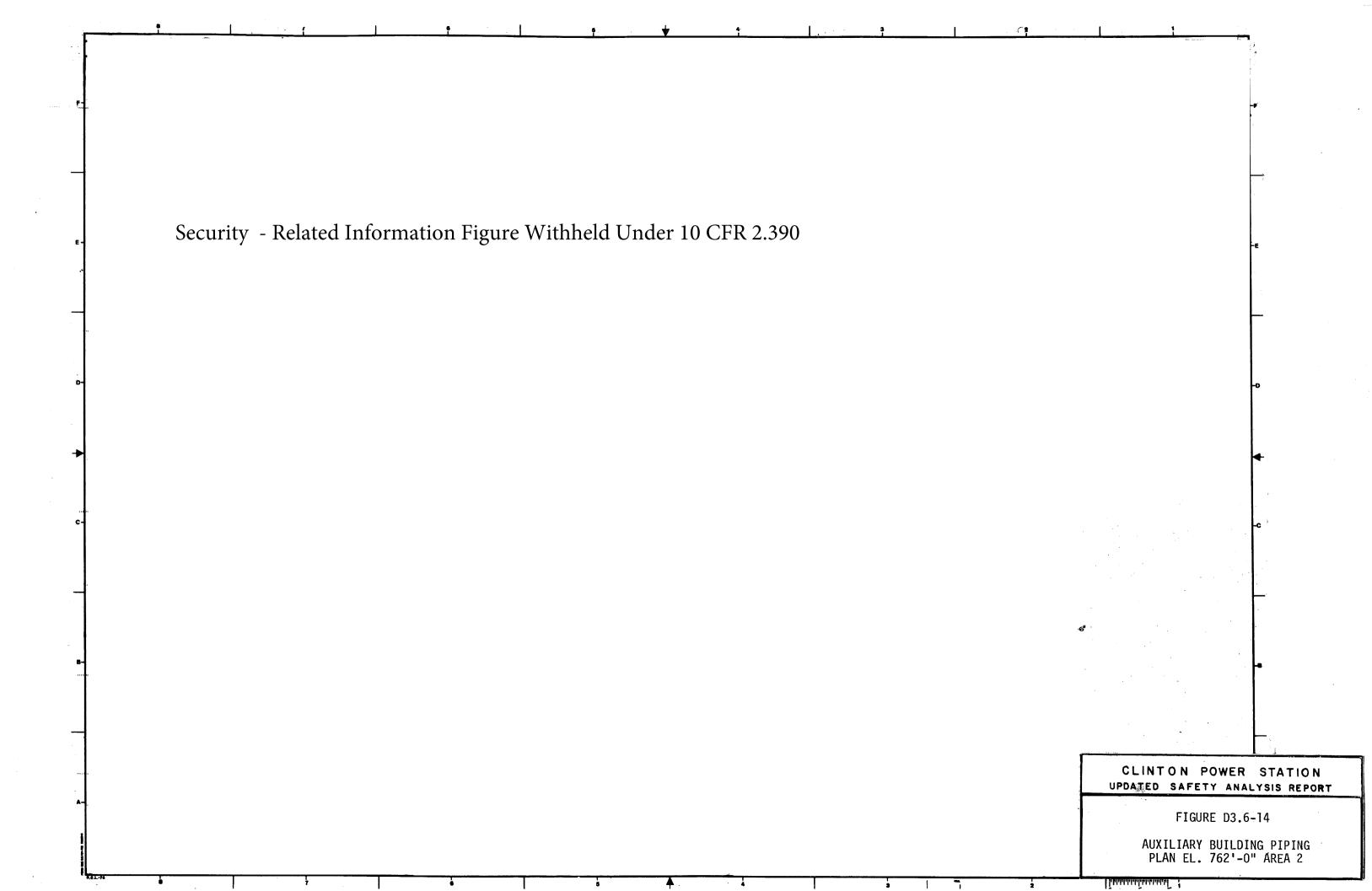
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-9 AUXILIARY BUILDING PIPING PLAN EL. 737'-0" AREA 3



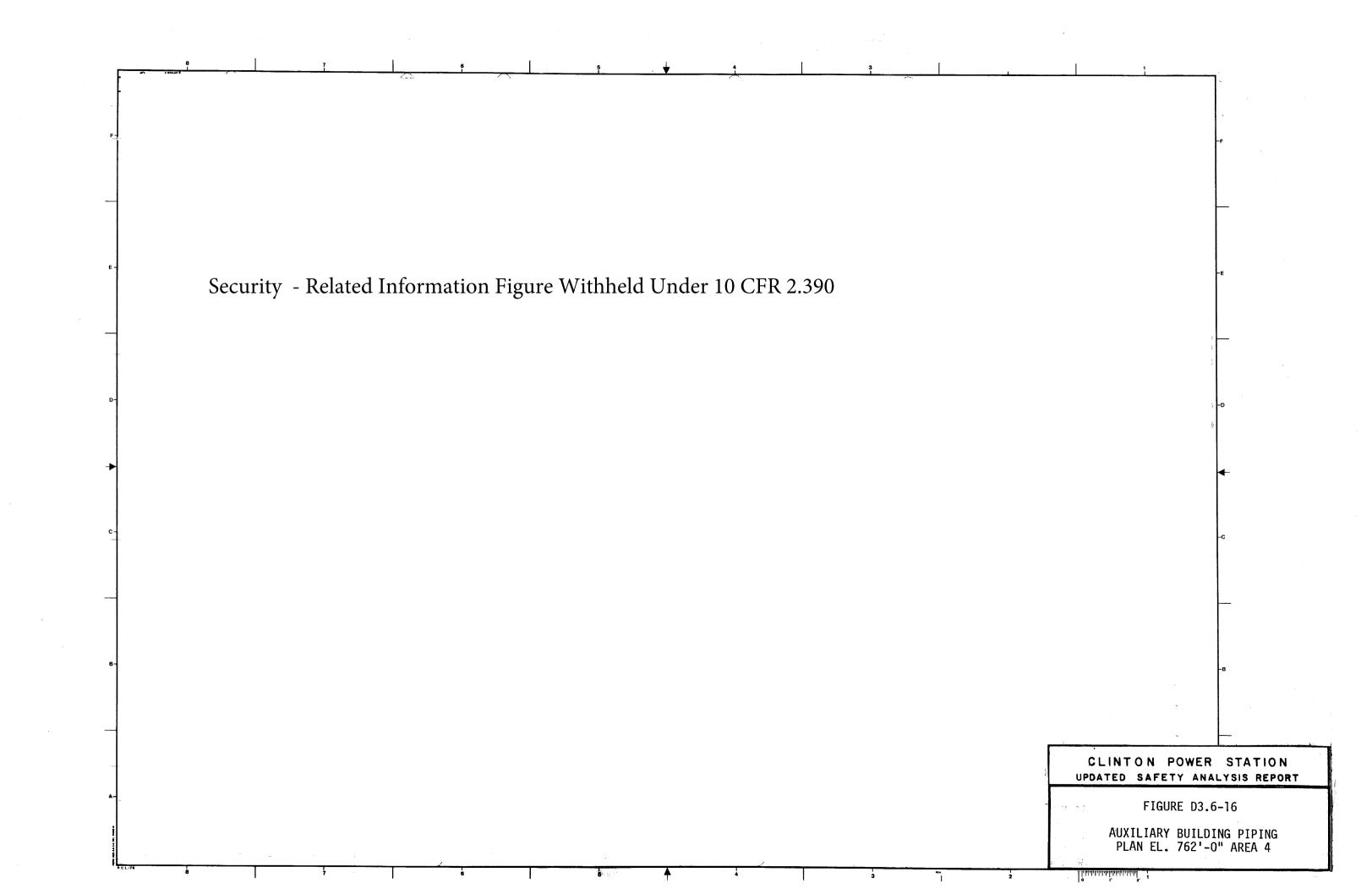
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3:6-11 AUXILIARY BUILDING PIPING PLAN EL. 737'-0" AREA 5



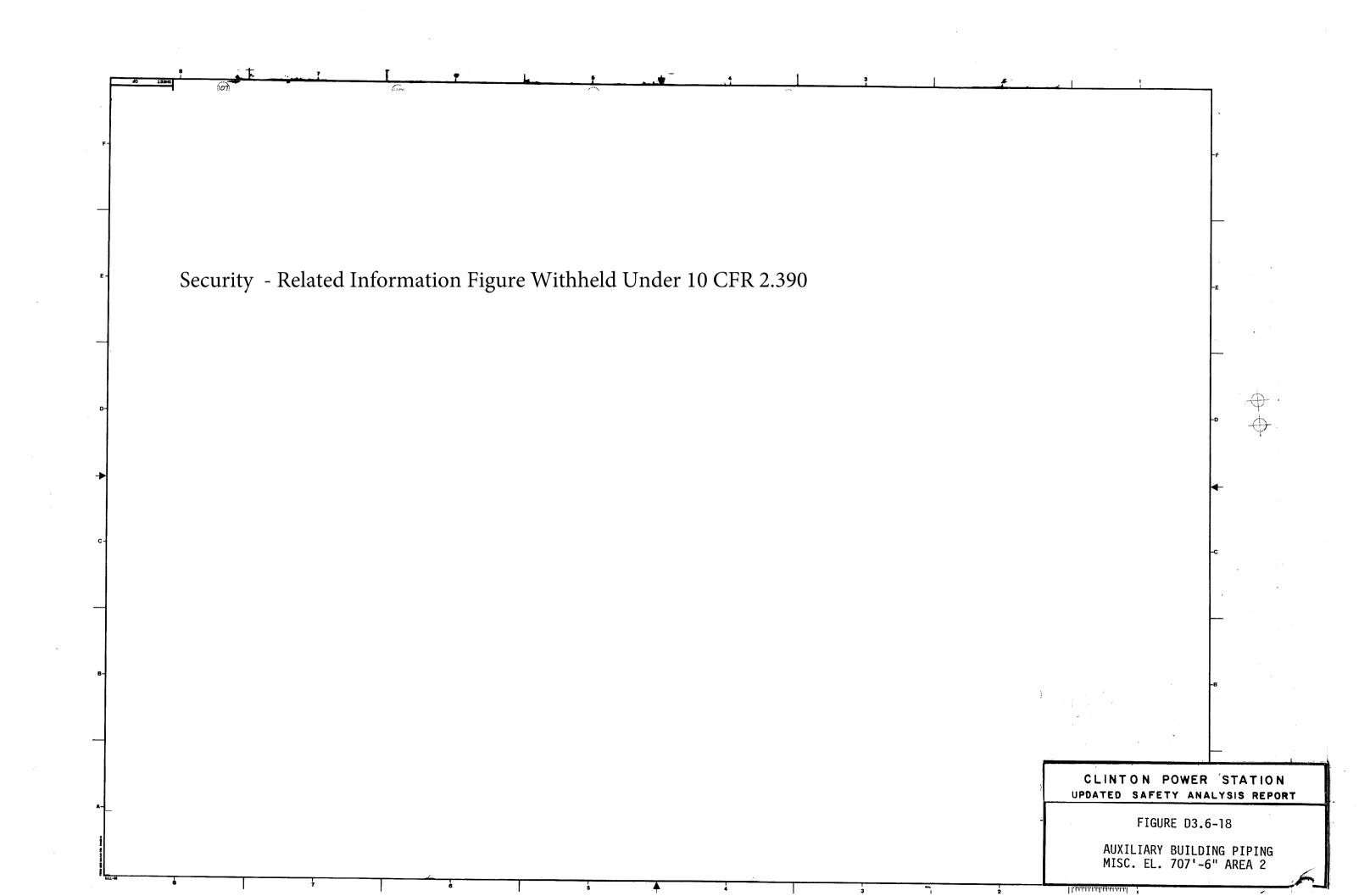
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-13 AUXILIARY BUILDING PIPING PLAN EL. 762'-0" AREA 1



Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-15 AUXILIARY BUILDING PIPING PLAN EL. 762'-0" AREA 3

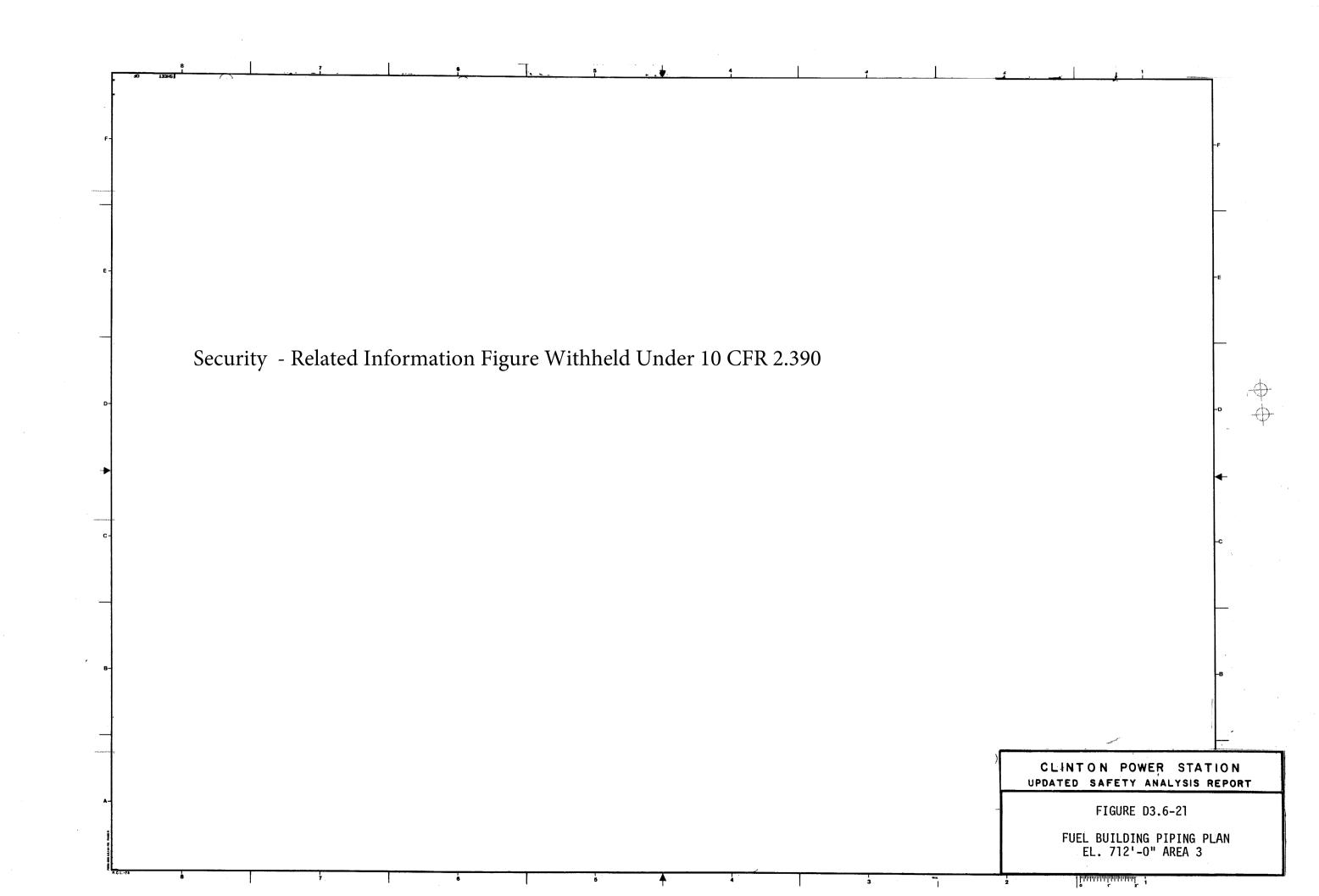


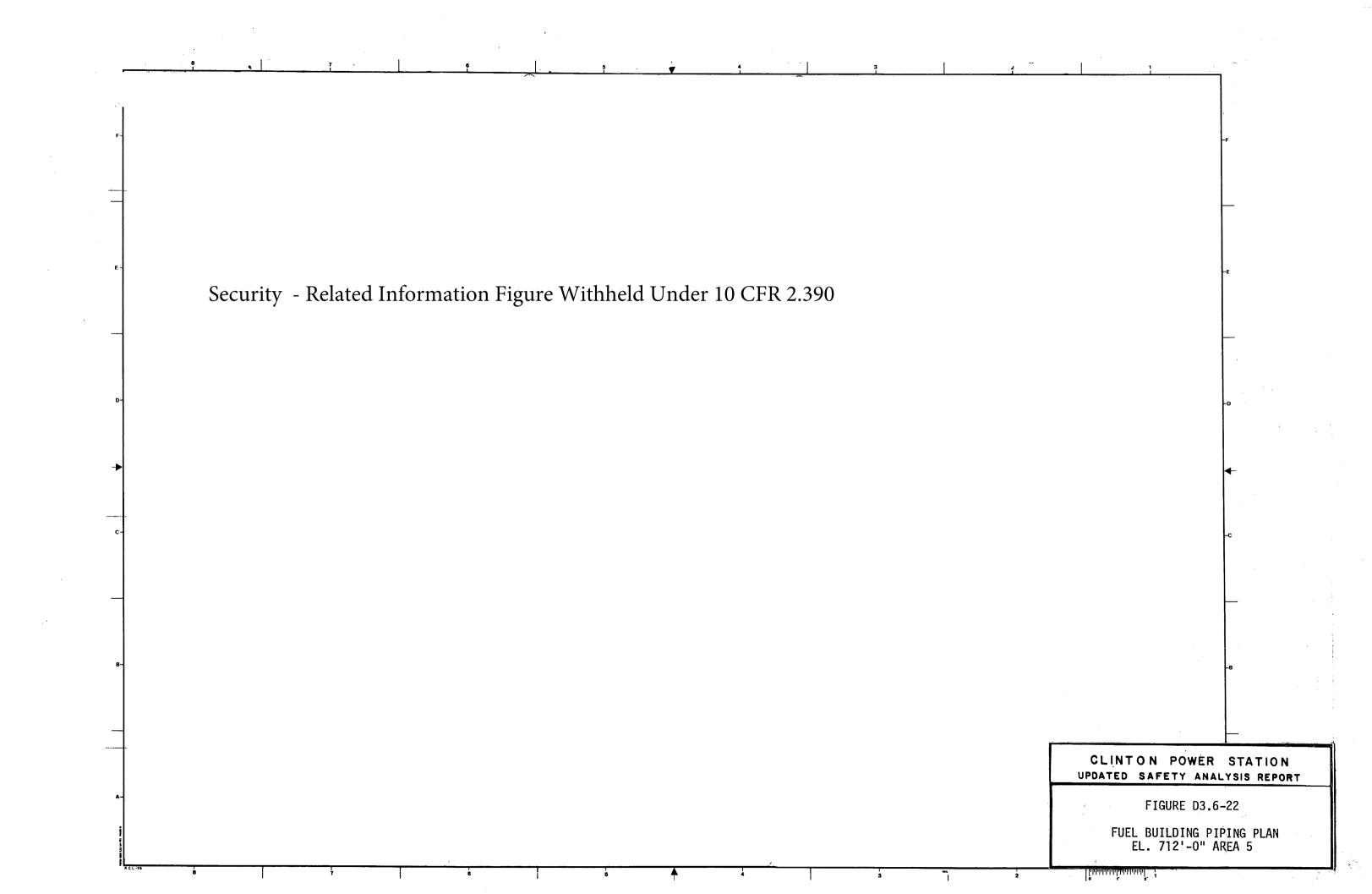
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-17 AUXILIARY BUILDING PIPING PLAN EL. 762'-0" AREA 5



Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-19 FUEL BUILDING PIPING PLAN EL. 712'-0" AREA 1

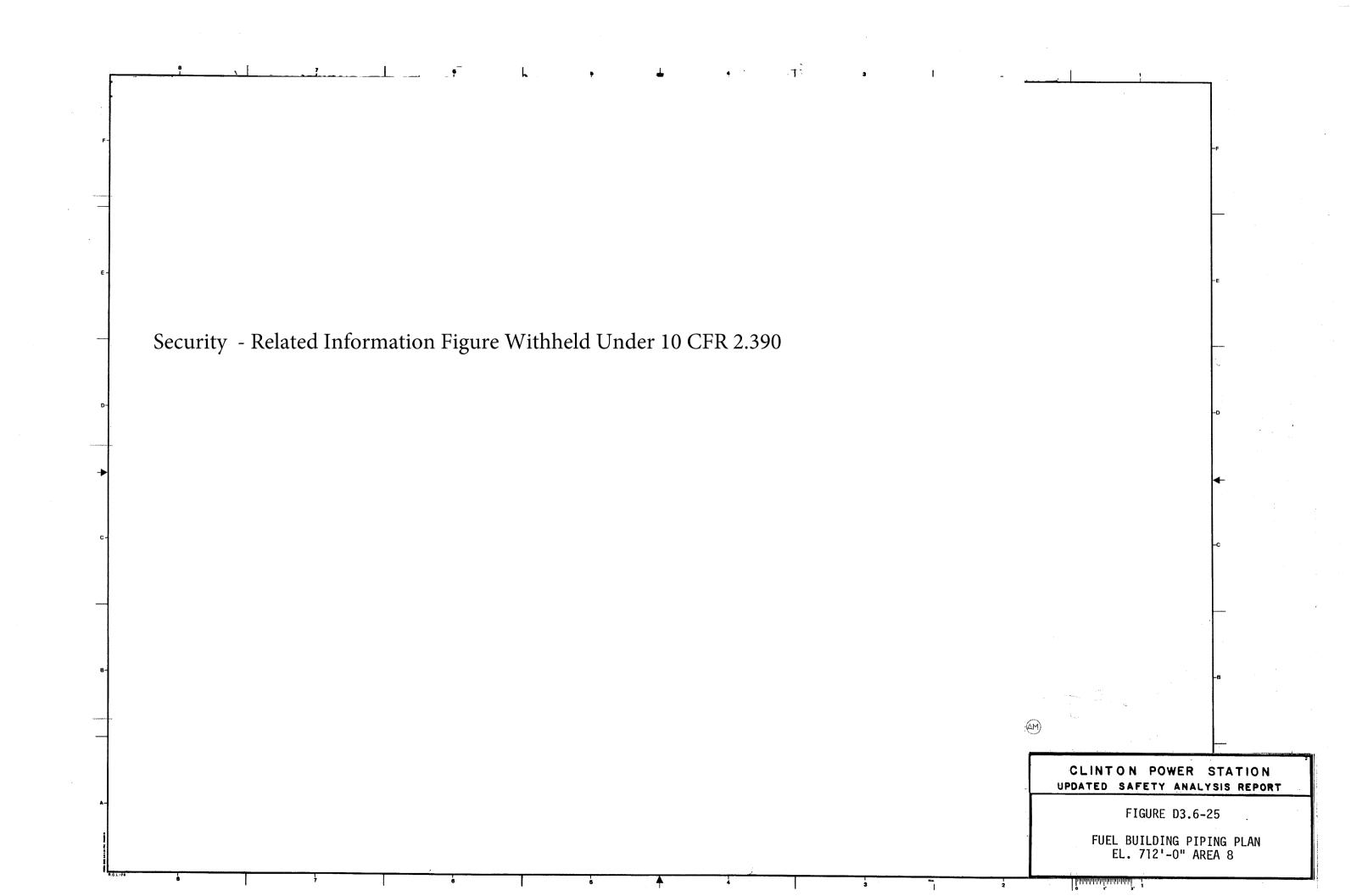
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-20 . FUEL BUILDING PIPING PLAN EL. 712'-0" AREA 2

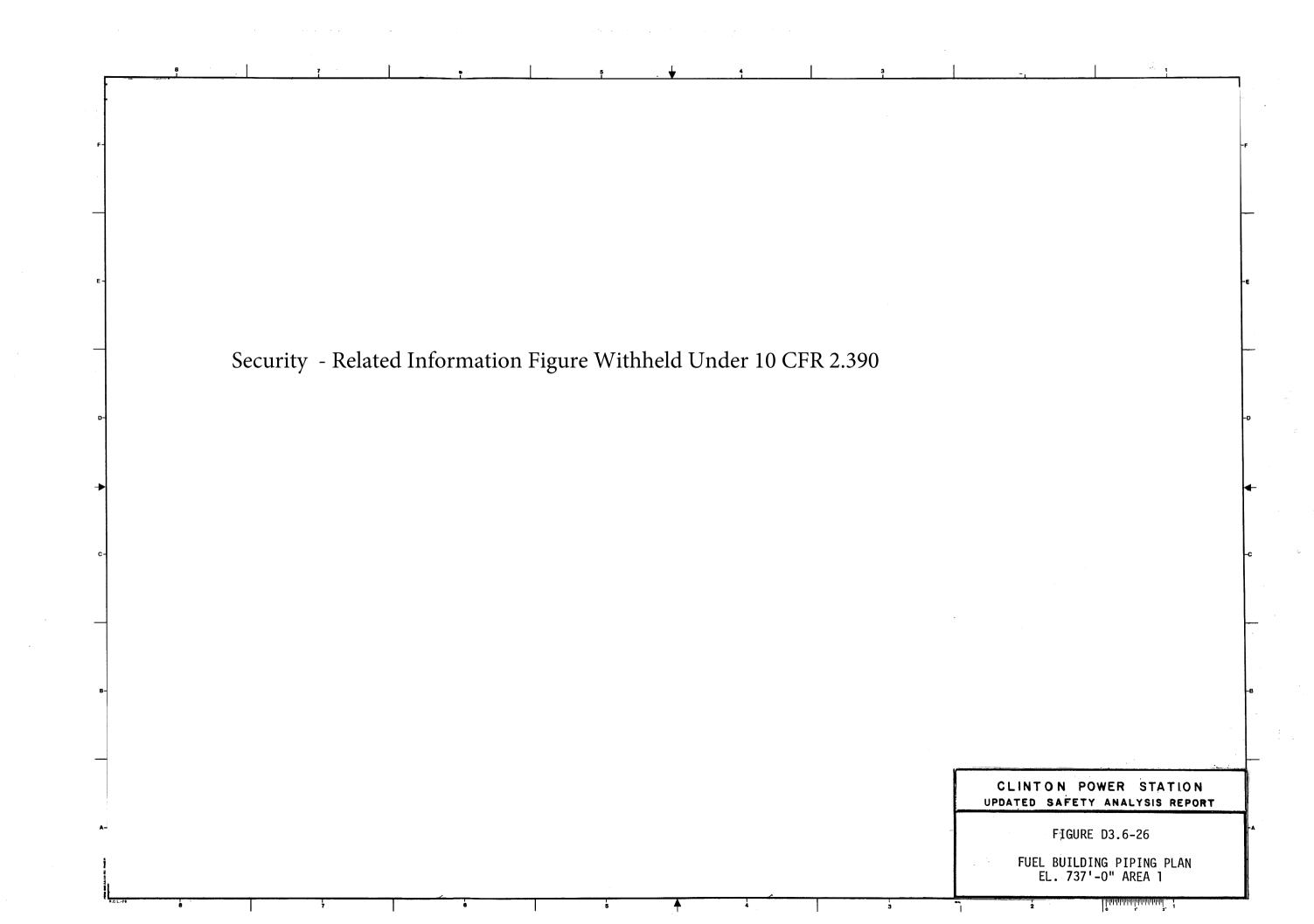




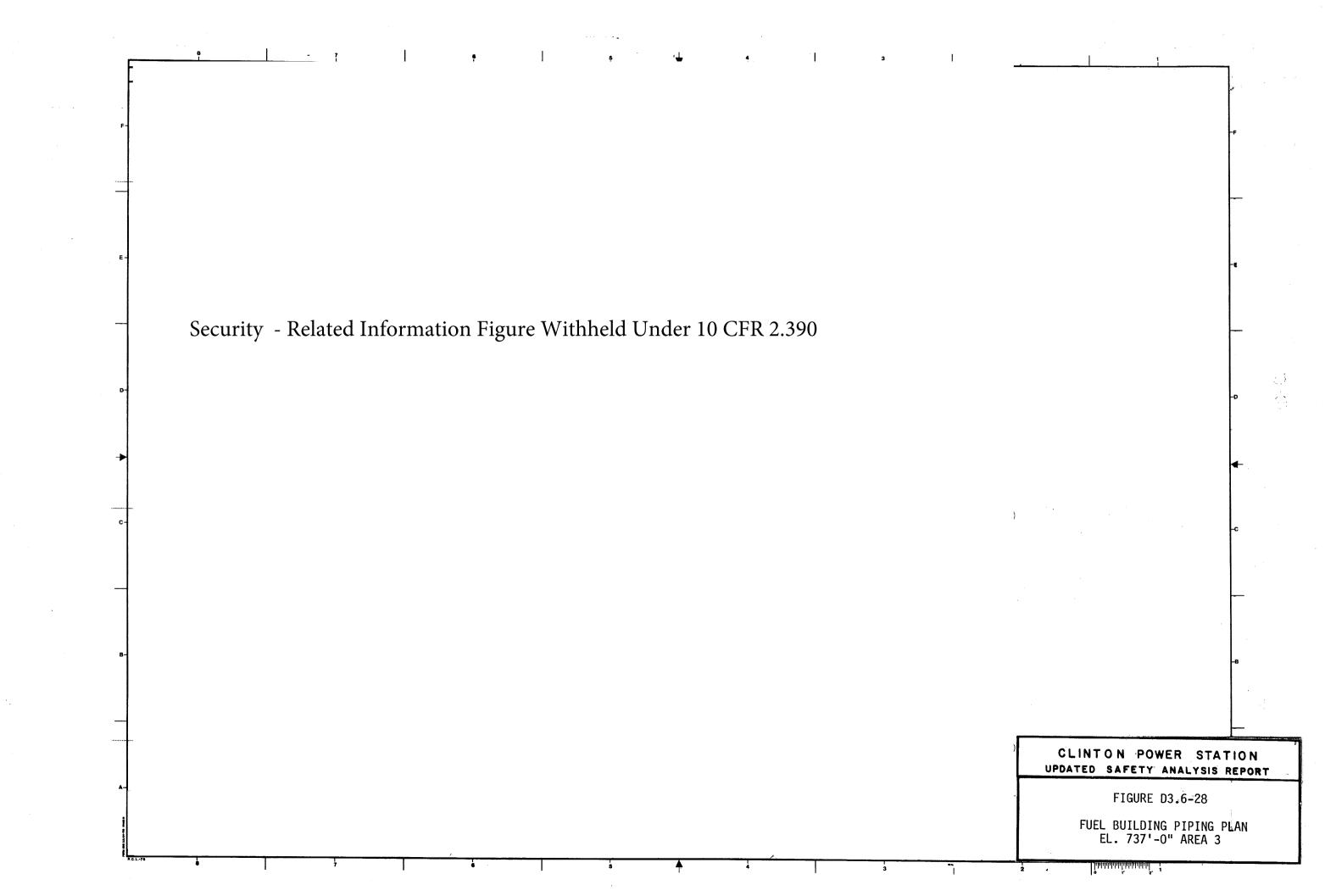
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-23 FUEL BUILDING PIPING PLAN EL. 712'-0" AREA 6

Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-24 FUEL BUILDING PIPING PLAN EL. 712'-0" AREA 5

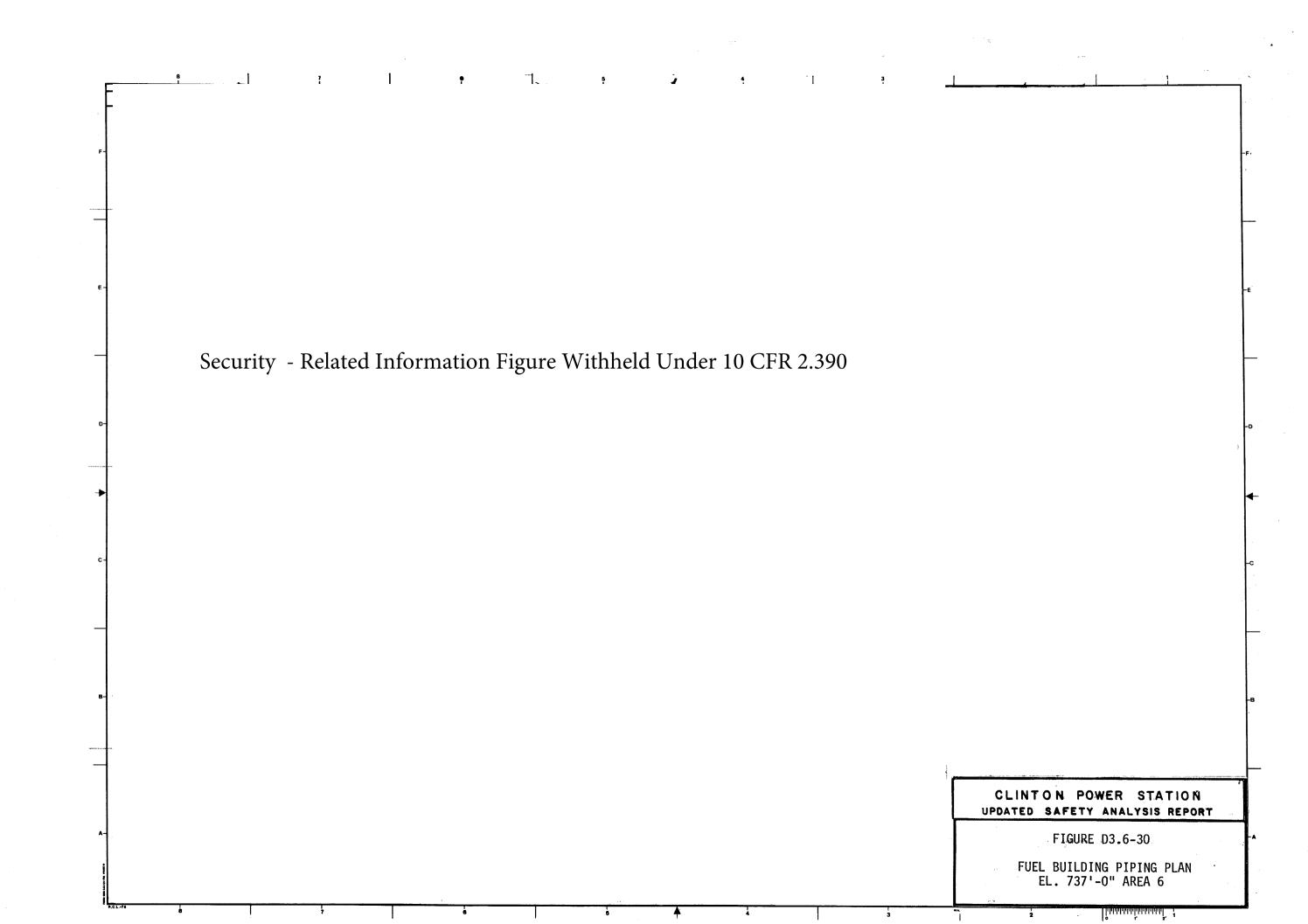


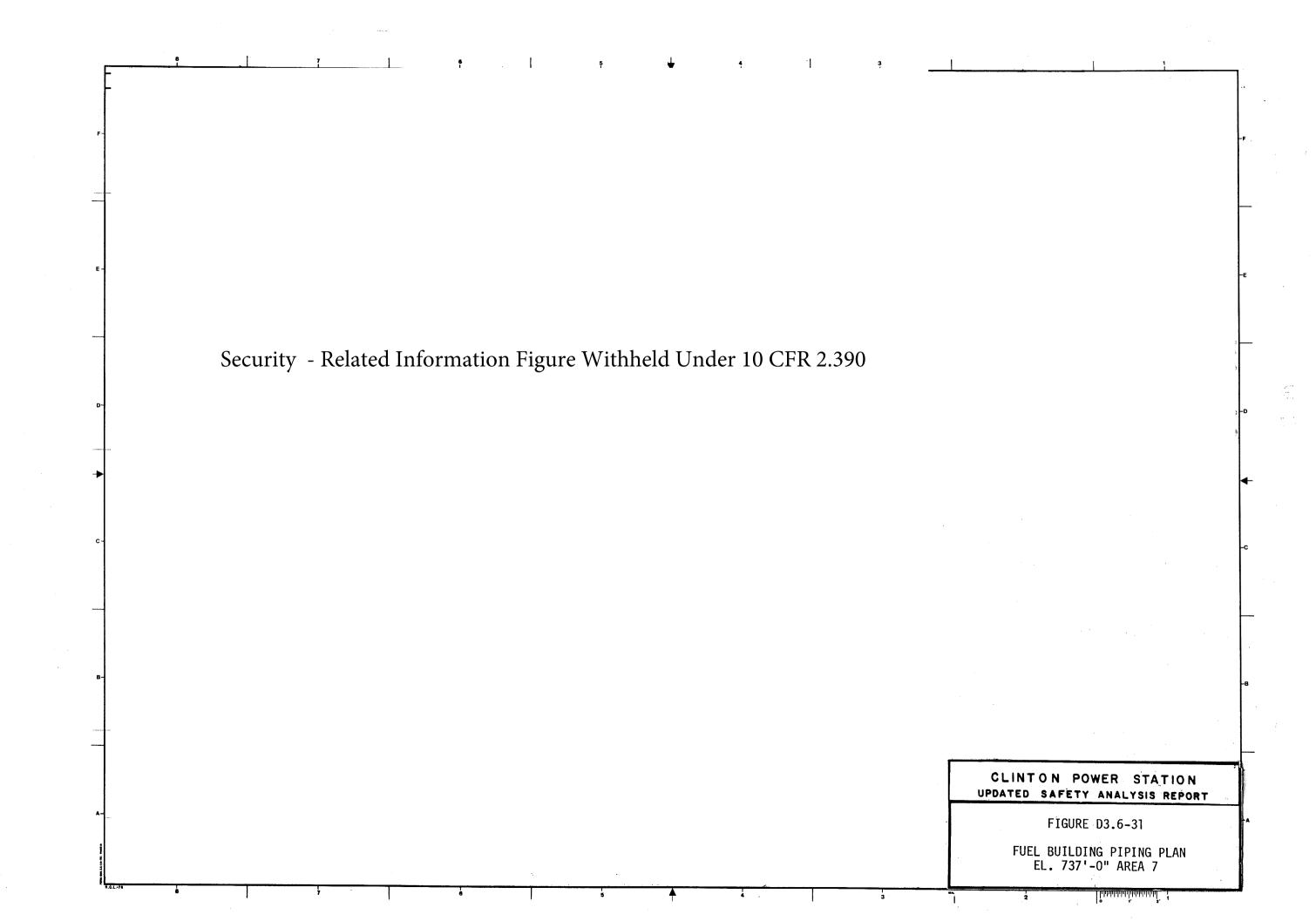


Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-27 FUEL BUILDING PIPING PLAN EL. 737'-0" AREA 2



Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-29 FUEL BUILDING PIPING PLAN EL. 737'-O" AREA 5





Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-32 FUEL BUILDING PIPING PLAN EL. 737'-0" AREA 8

Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-33 FUEL BUILDING PIPING PLAN EL. 755'-O" AREA 1

Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-34 FUEL BUILDING PIPING PLAN EL. 755'-O" AREA 2

Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-35 FUEL BUILDING PIPING PLAN EL. 755'-0" AREA 3

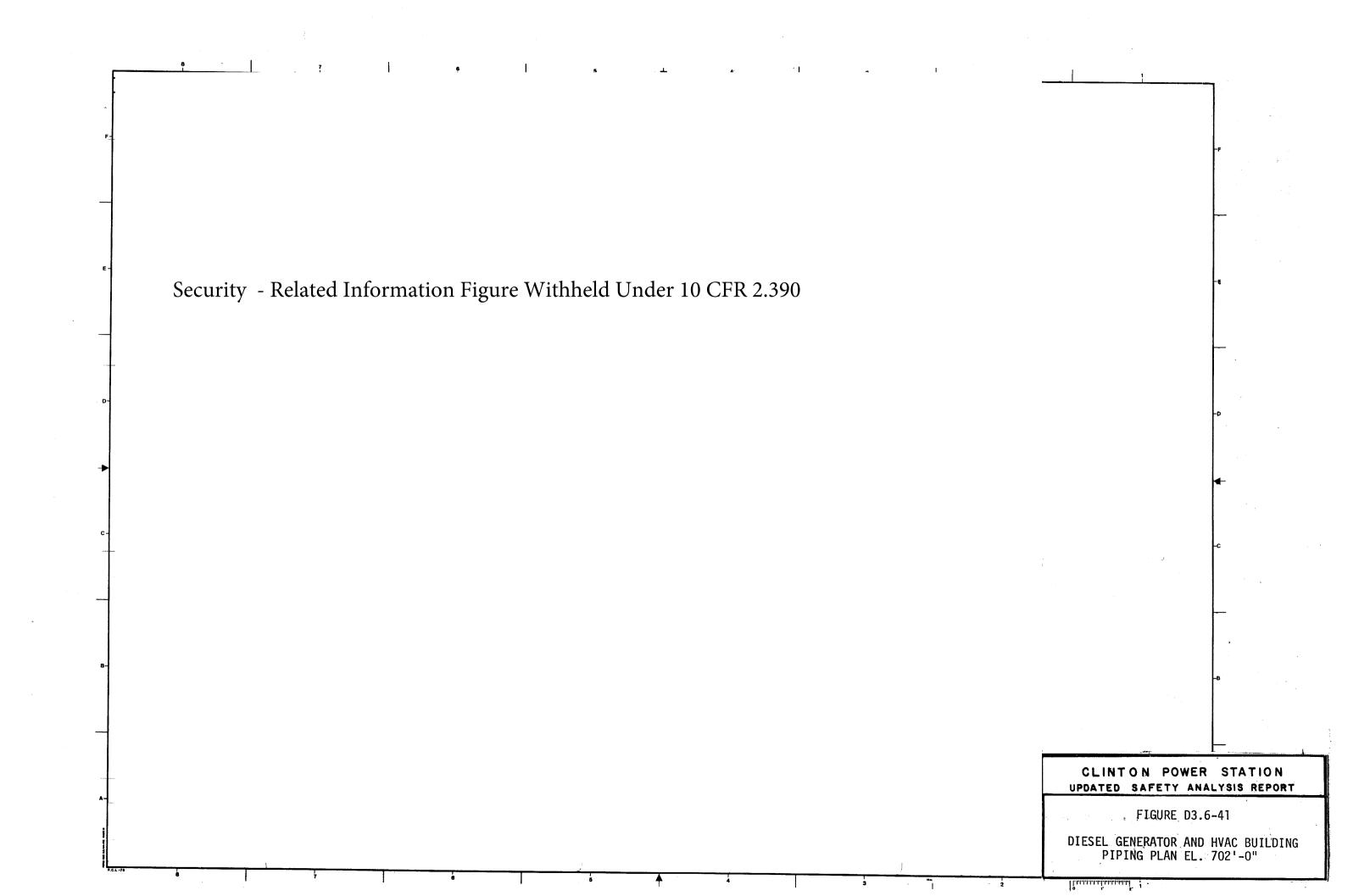
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-36 FUEL BUILDING PIPING PLAN EL. 755'-O" AREA 4

Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-37 FUEL BUILDING PIPING PLAN EL. 755'-O" AREA 5

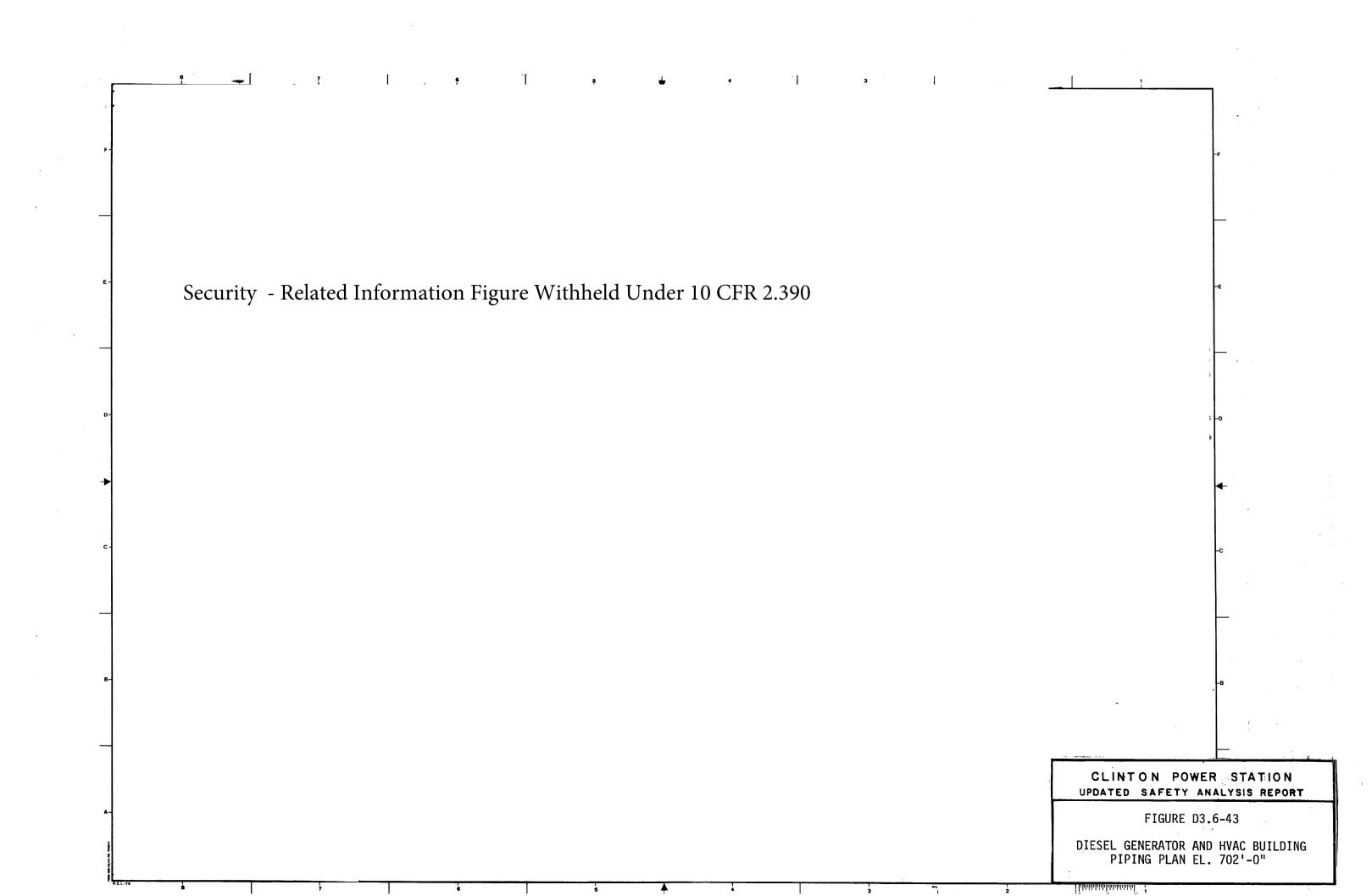
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-38 FUEL BUILDING PIPING PLAN EL. 781'-0" AREA 1

Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-39 FUEL BUILDING PIPING PLAN EL. 781'-O" AREA 2

Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-40 FUEL BUILDING PIPING PLAN EL. 781'-0" AREA 3

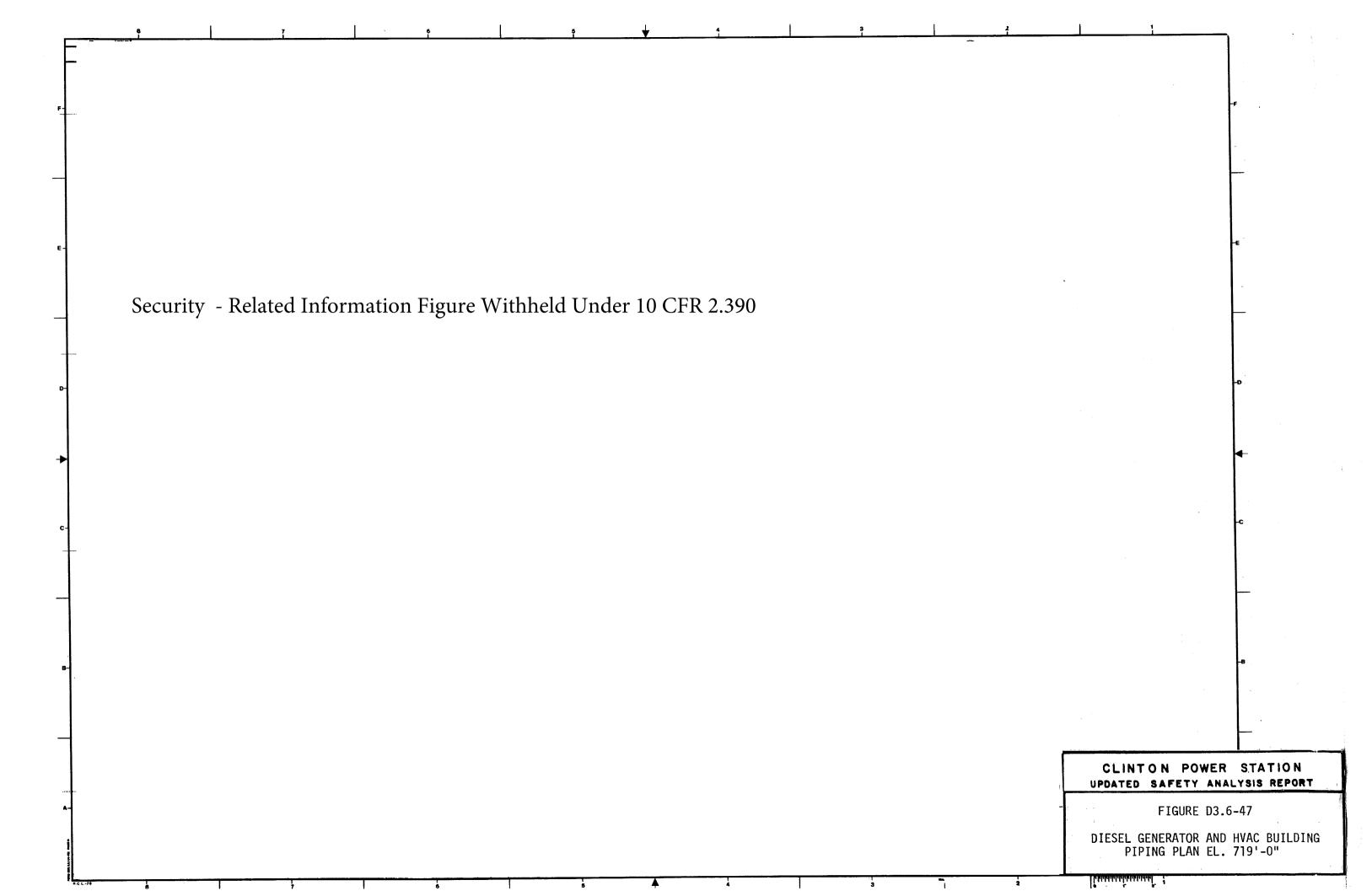


Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-42 DIESEL GENERATOR AND HVAC BUILDING PIPING PLAN EL. 702'-0"

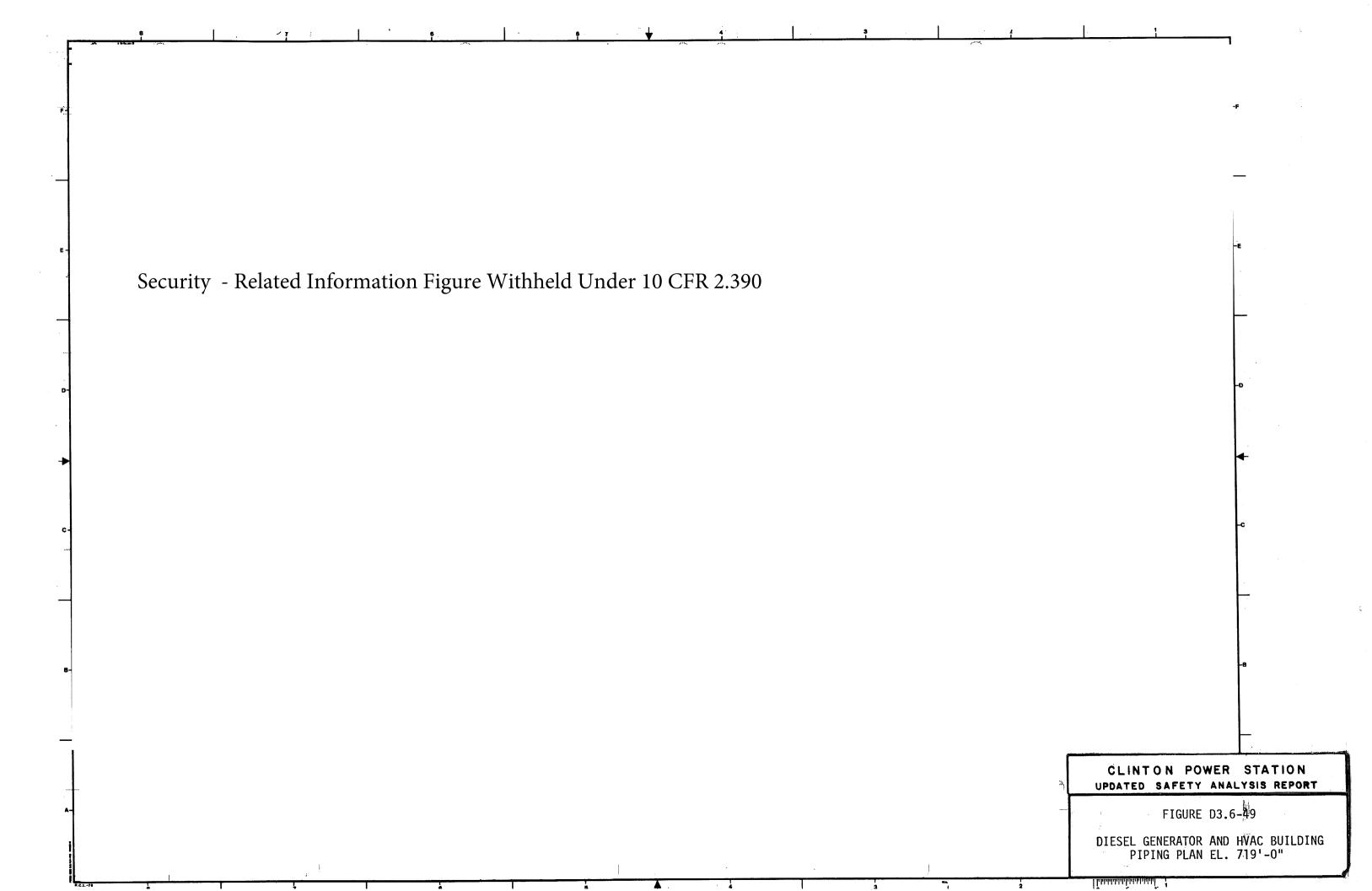


Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-44 DIESEL GENERATOR AND HVAC BUILDING PIPING PLAN EL. 712'-0" liganatalanani 1

Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-45 DIESEL GENERATOR AND HVAC BUILDING PIPING PLAN EL. 712'-0" Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-46 DIESEL GENERATOR AND HVAC BUILDING PIPING PLAN EL. 712'-0"



Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-48 DIESEL GENERATOR AND HVAC BUILDING PIPING PLAN EL. 719'-0"



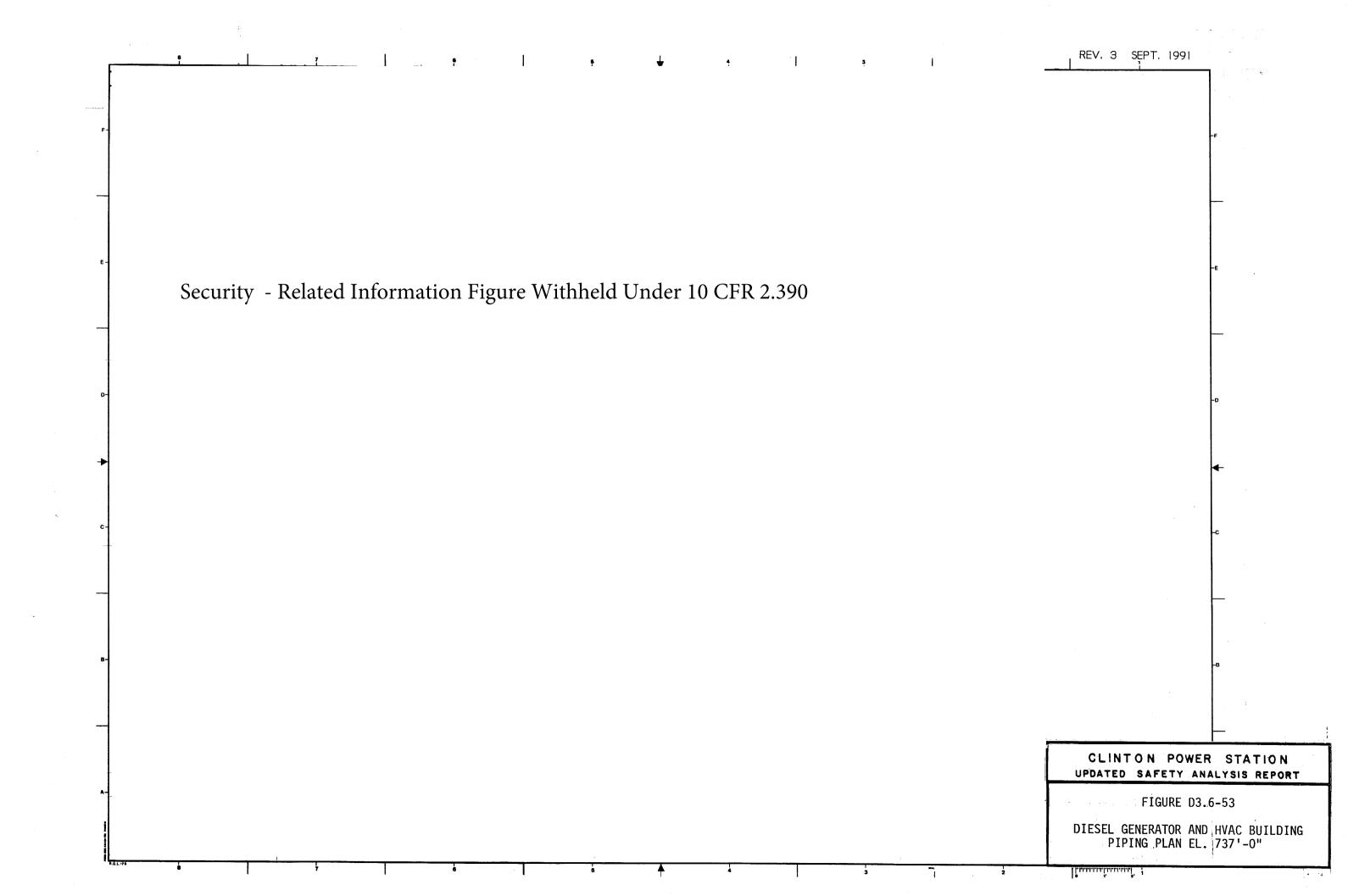
Security - Related Information Figure Withheld Under 10 CFR 2.390

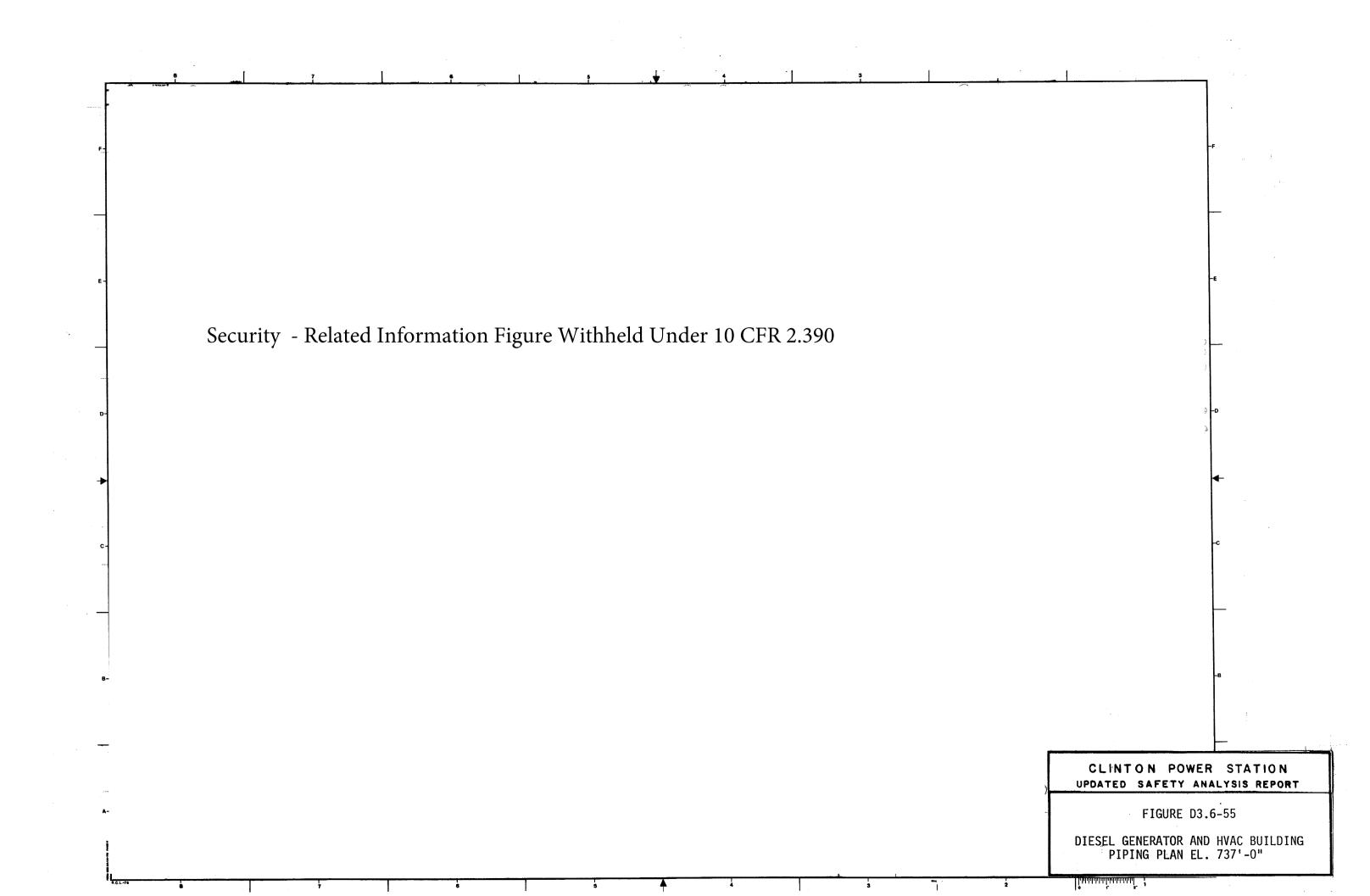
CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

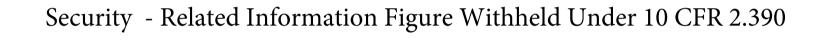
FIGURE D3.6-50

DIESEL GENERATOR AND HVAC BUILDING PIPING PLAN EL. 719'-0"

Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-52 DIESEL GENERATOR AND HVAC BUILDING PIPING PLAN EL. 719'-0"







CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE D3.6-56

DIESEL GENERATOR AND HVAC BUILDING PIPING PLAN EL. 737'-0"

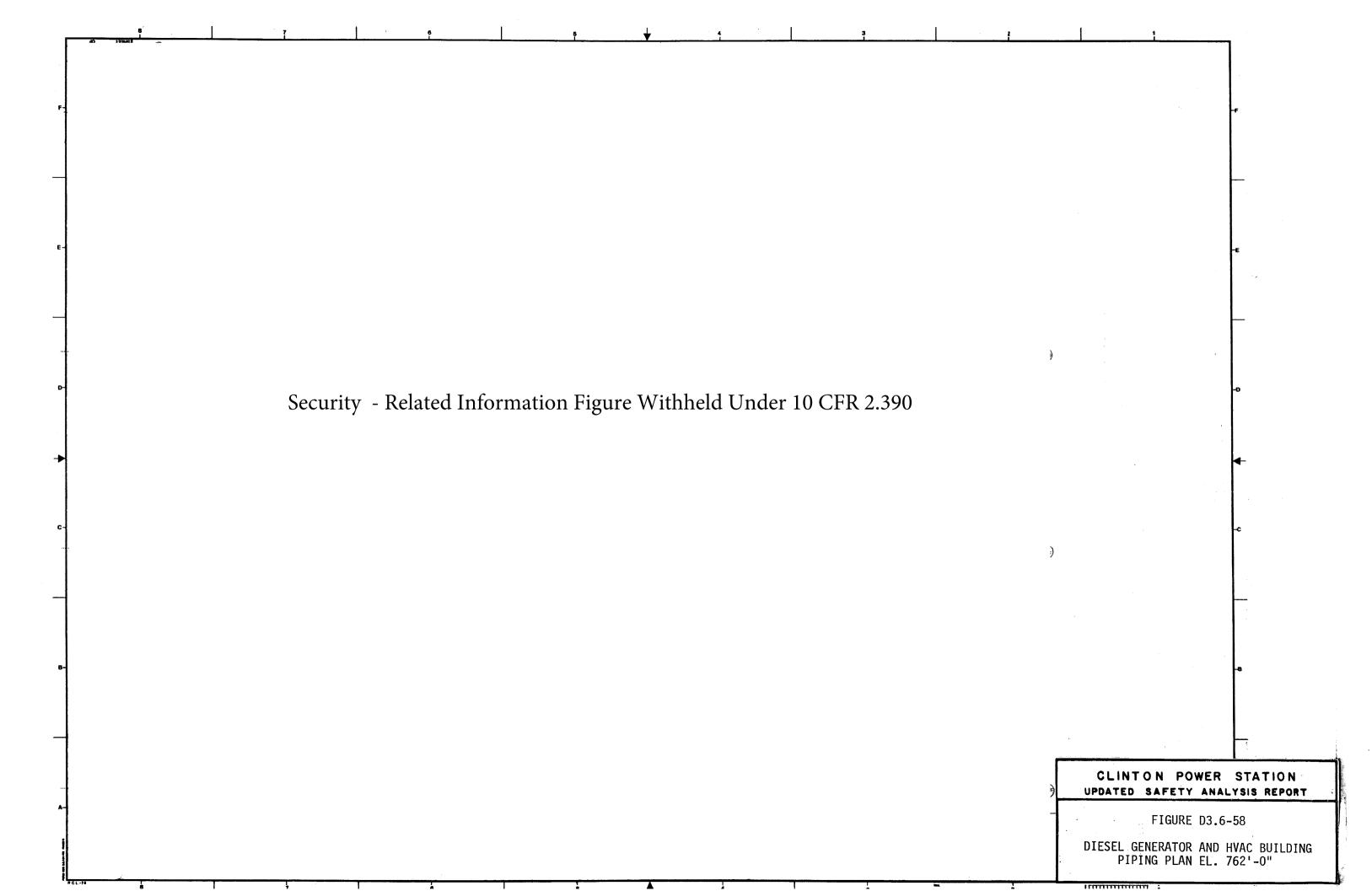
Security - Related Information Figure Withheld Under 10 CFR 2.390

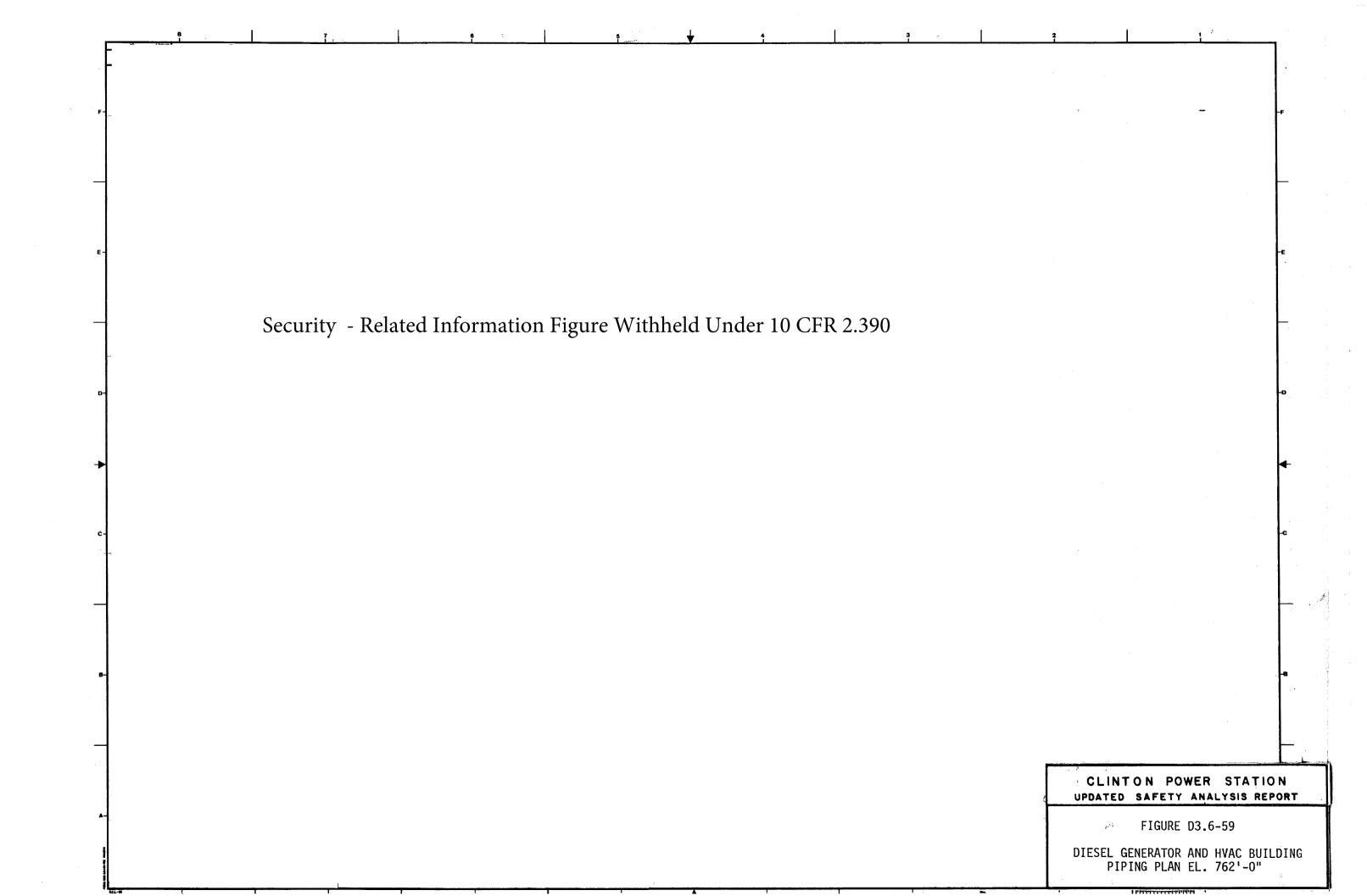
CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

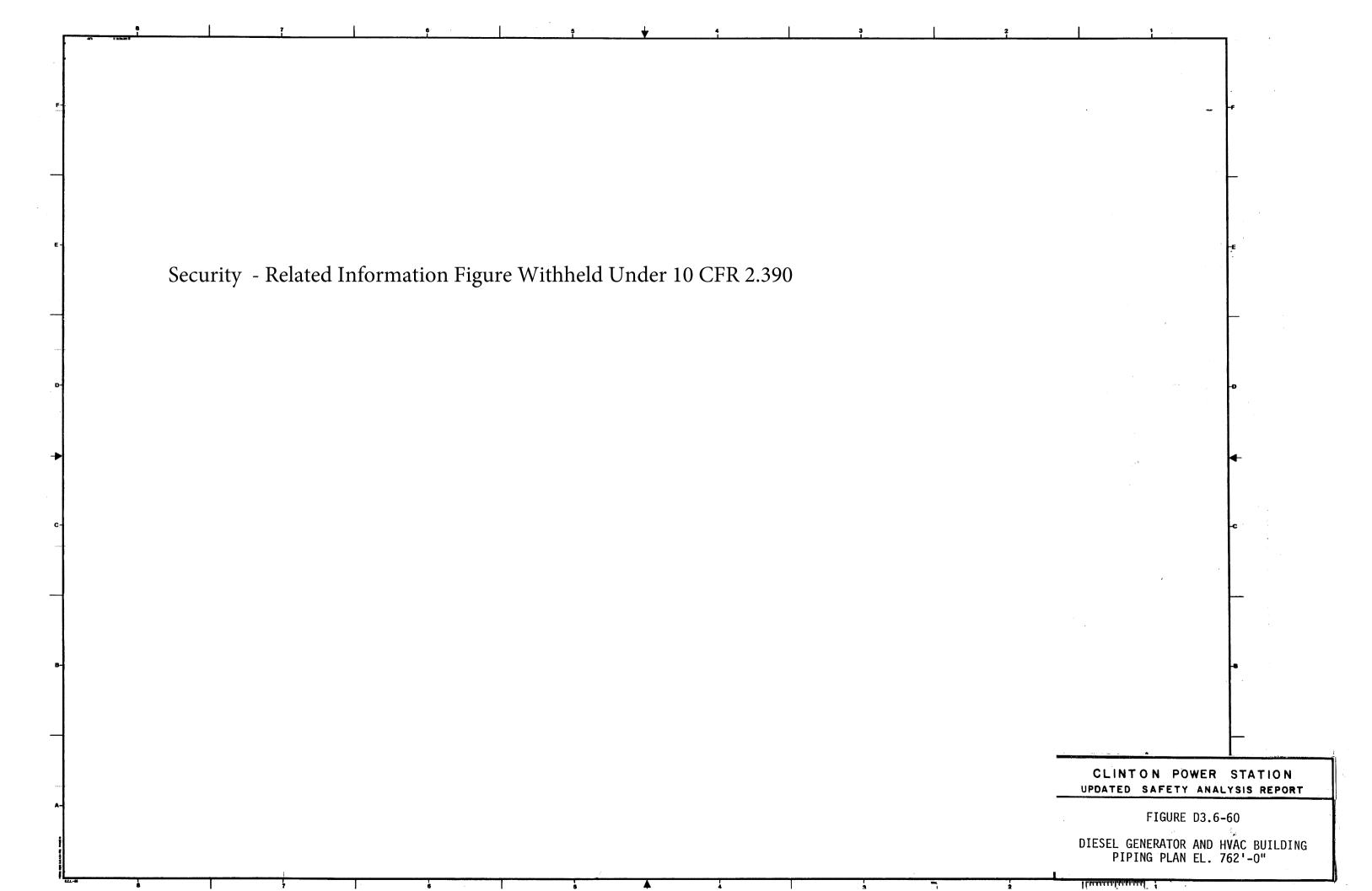
FIGURE D3.6-57

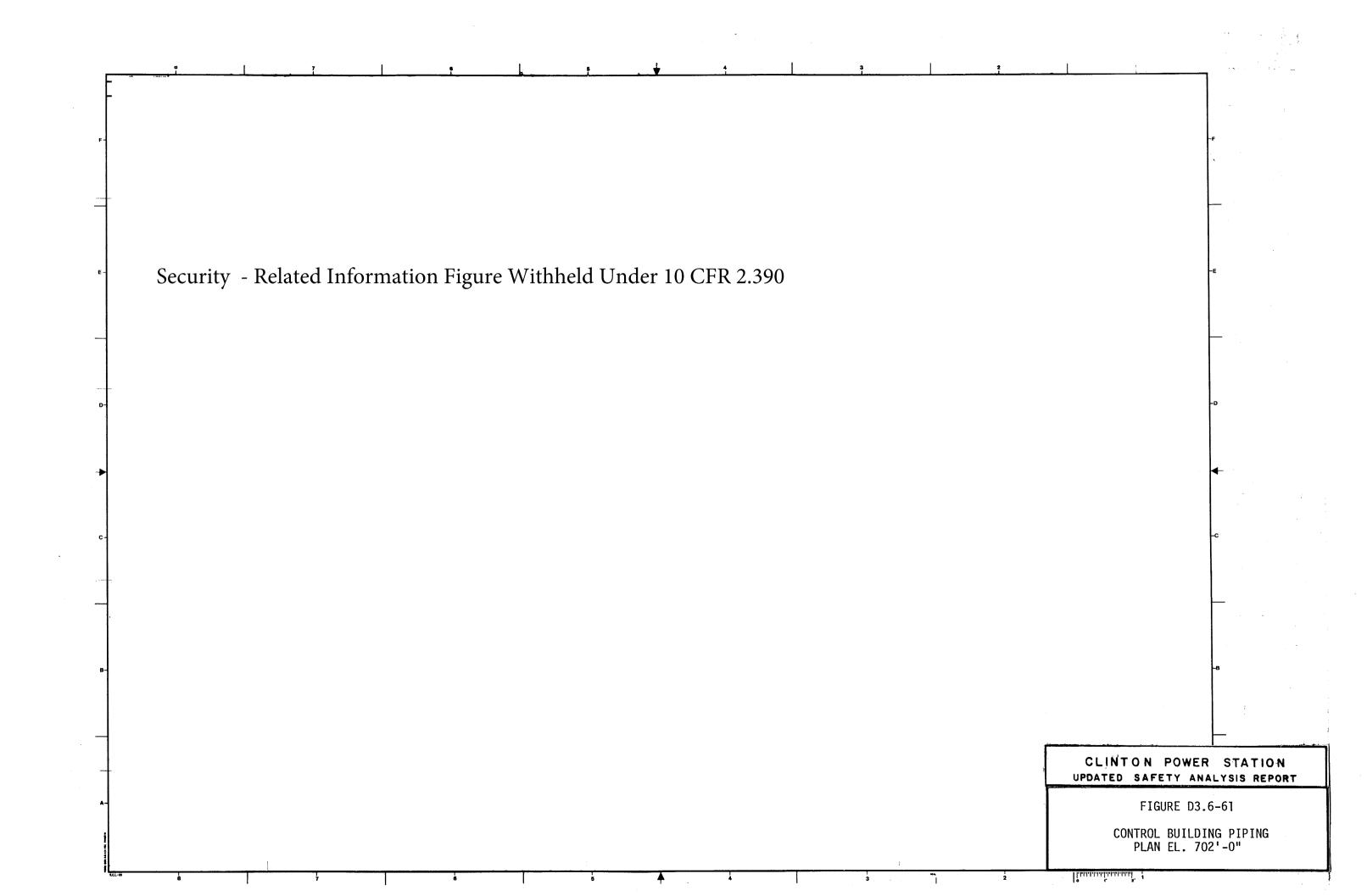
DIESEL GENERATOR AND HVAC BUILDING PIPING PLAN EL. 737'-0"

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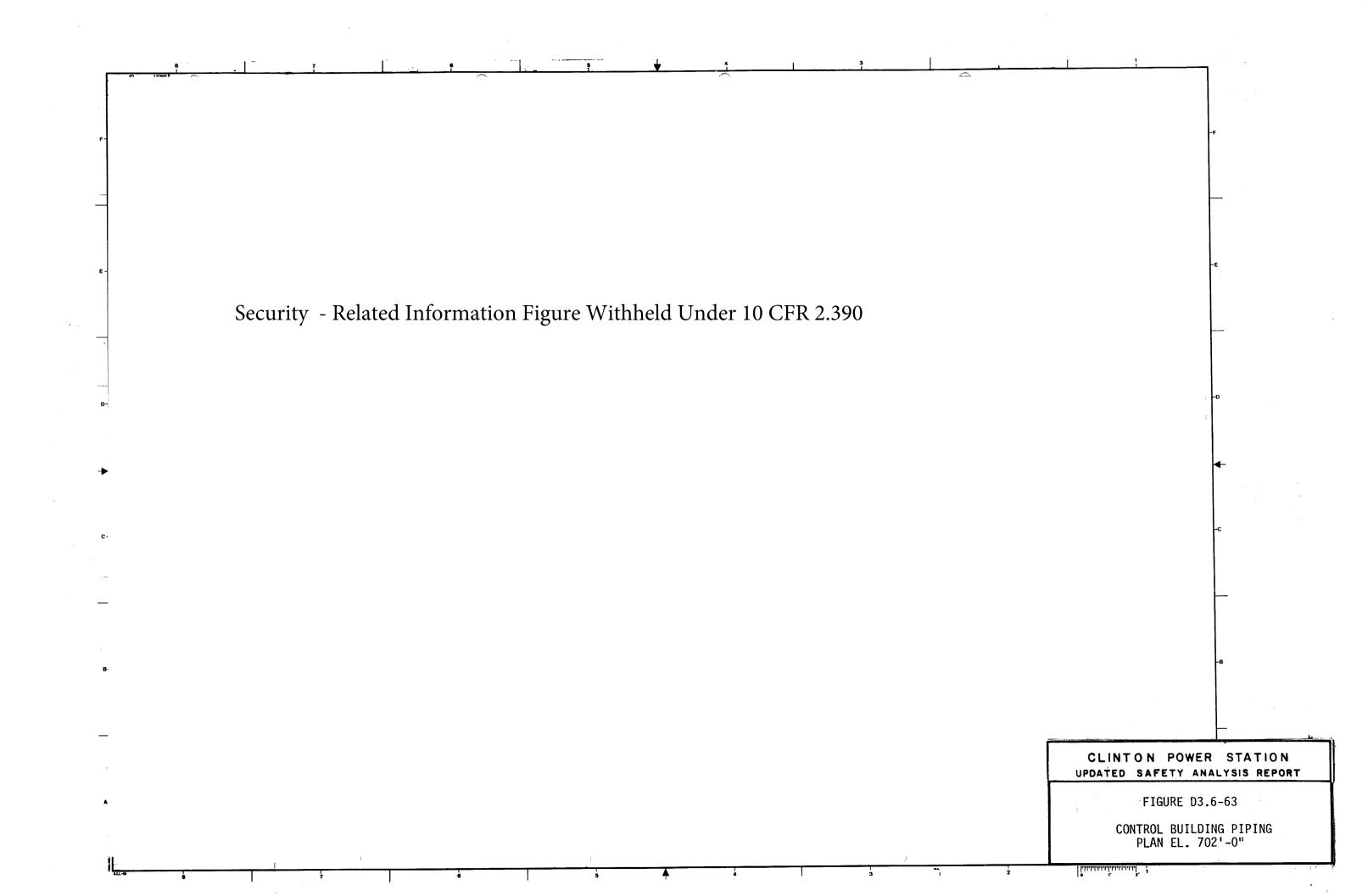








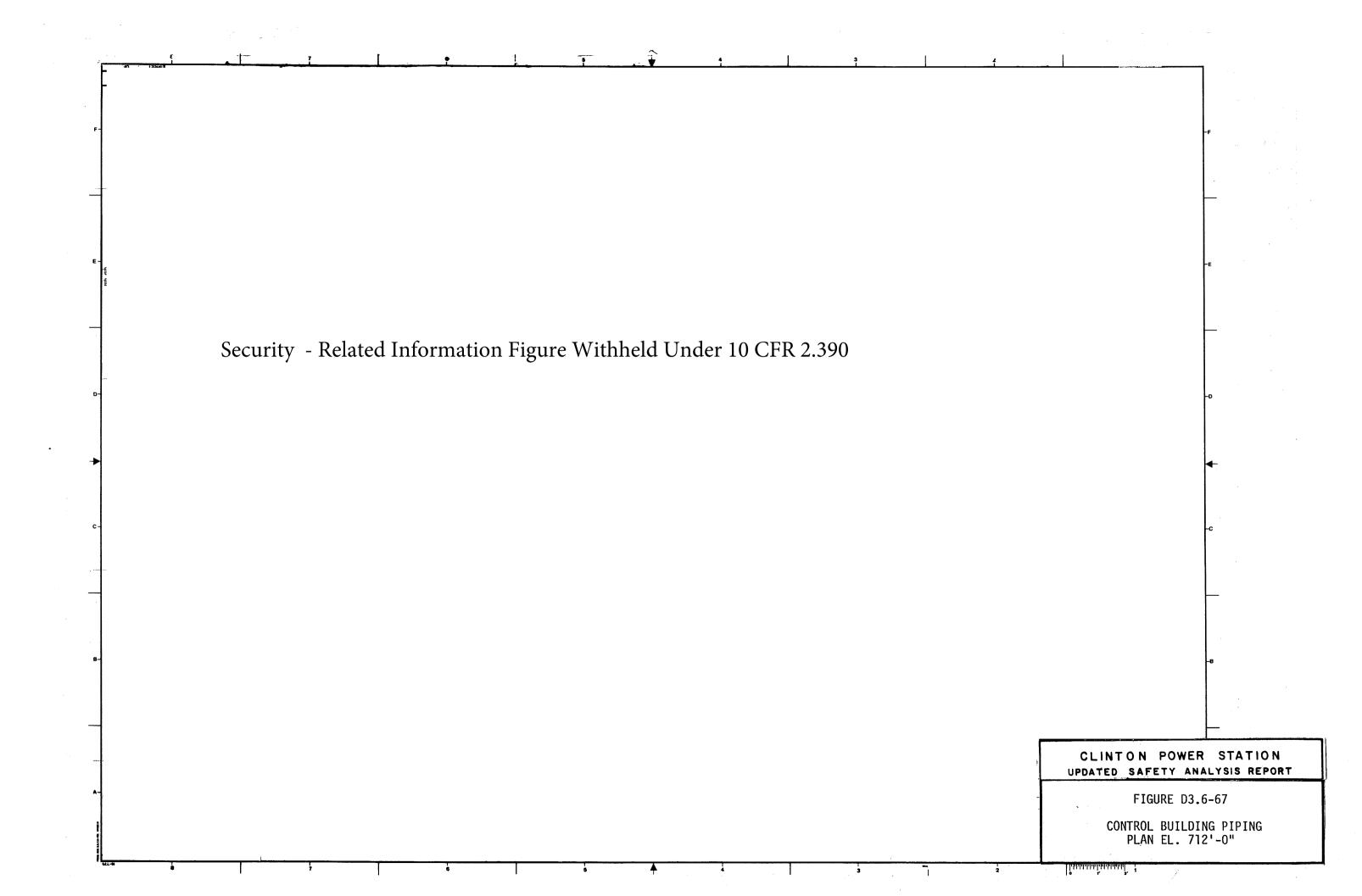
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-62 CONTROL BUILDING PIPING PLAN EL. 702'-0"

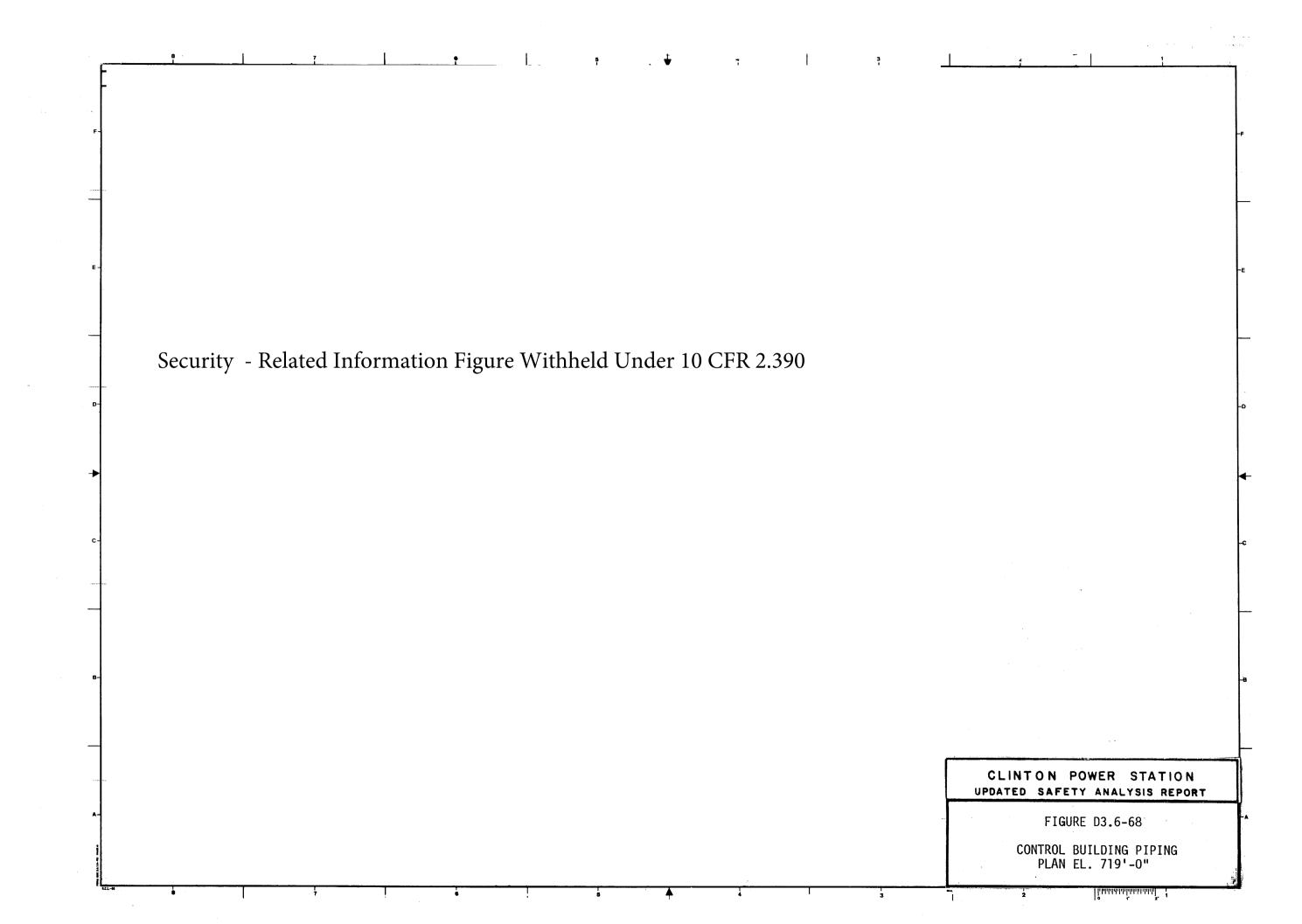


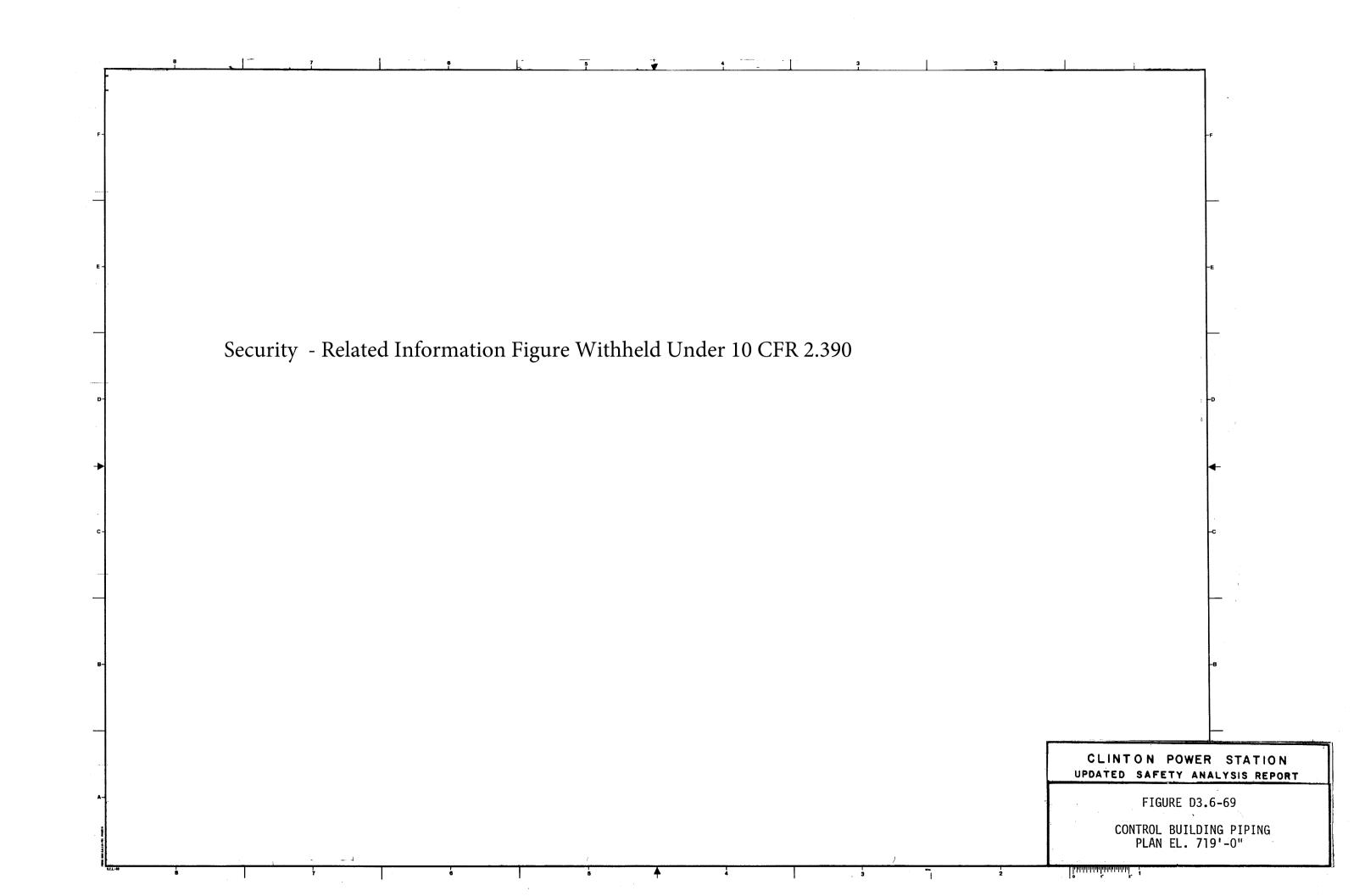
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-64 CONTROL BUILDING PIPING PLAN EL. 702'-0"

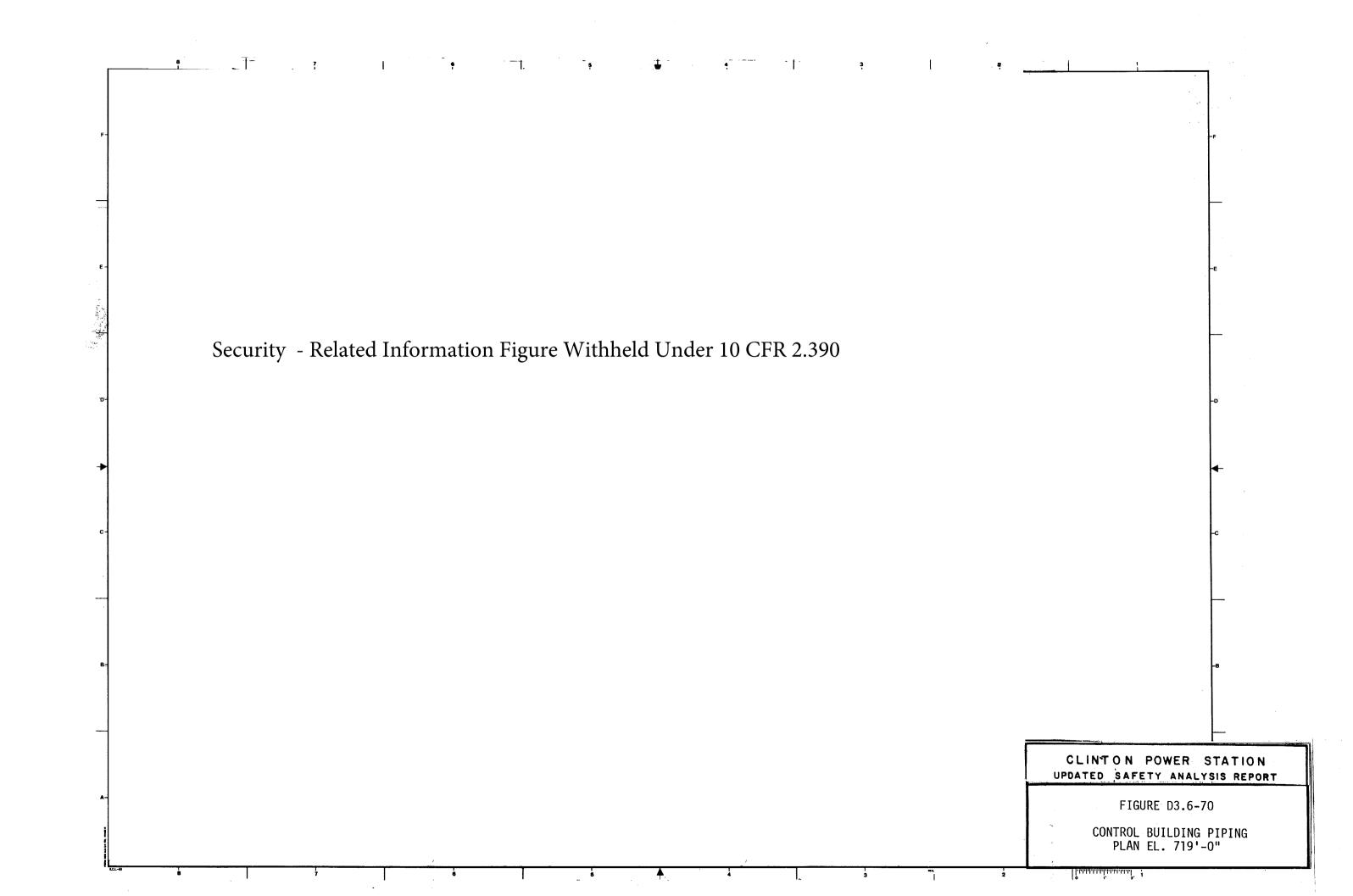
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-65 CONTROL BUILDING PIPING PLAN EL. 702'-0"

Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-66 CONTROL BUILDING PIPING PLAN EL. 702'-0"

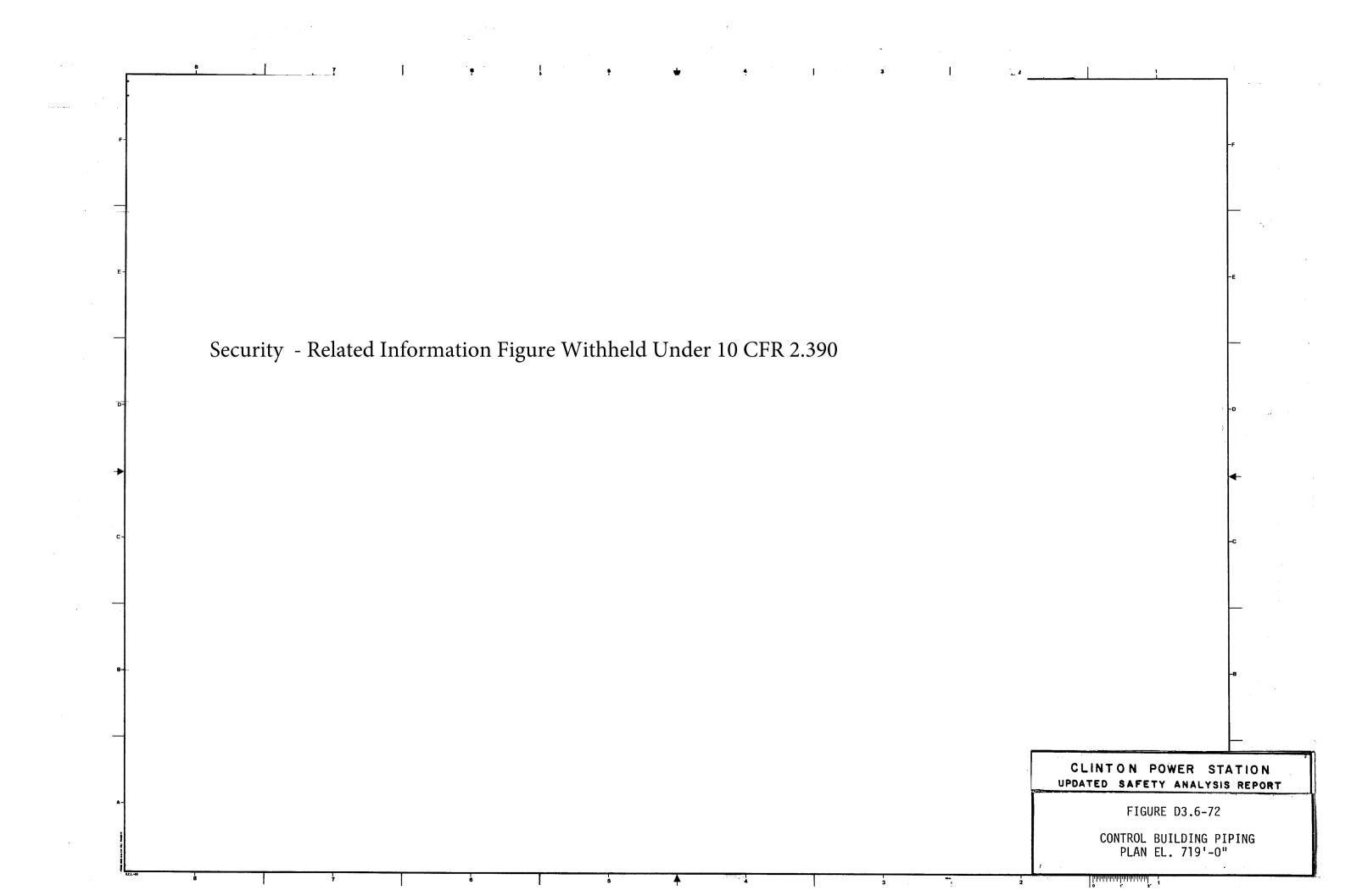


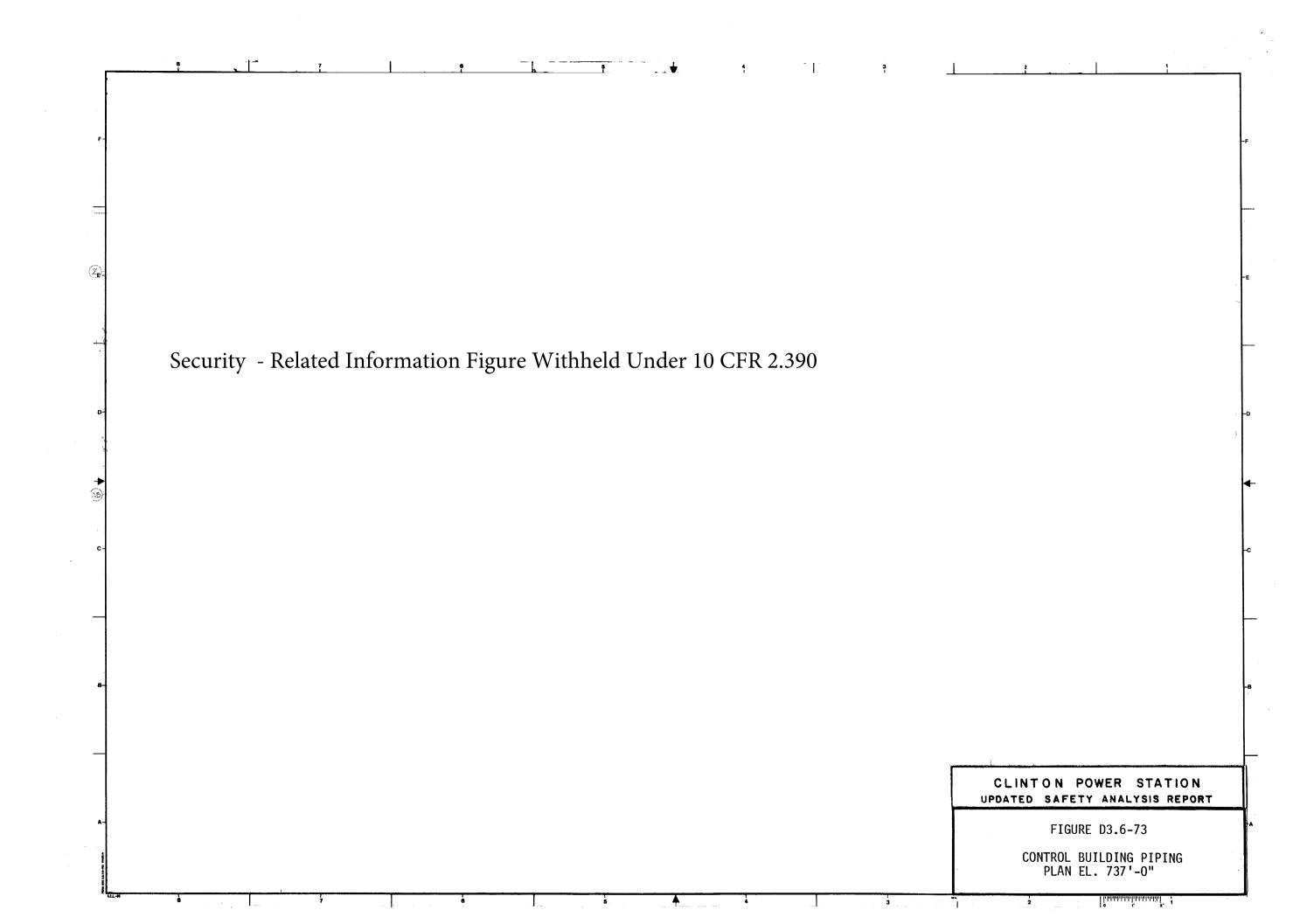






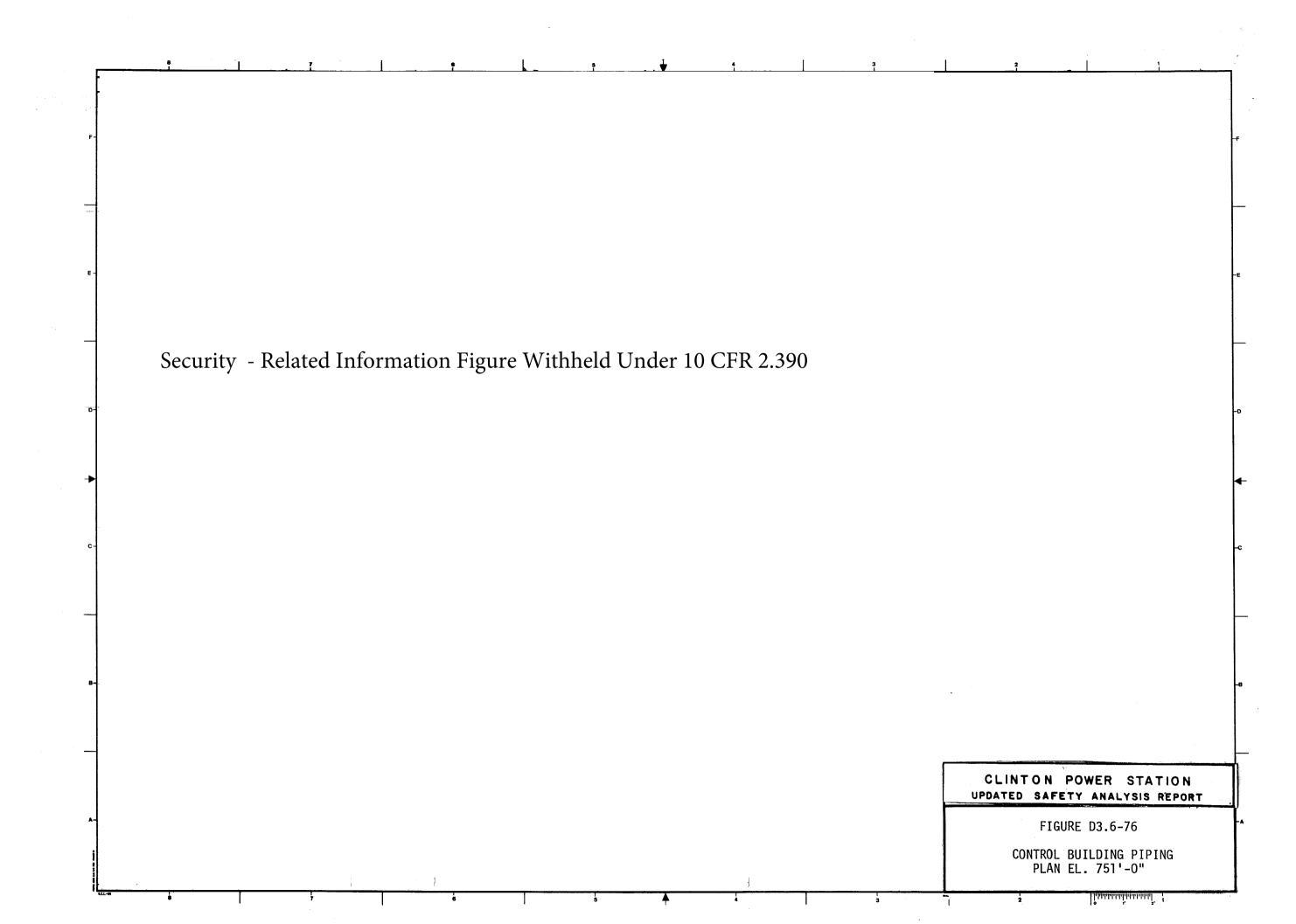
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-71 CONTROL BUILDING PIPING PLAN EL. 719'-0"





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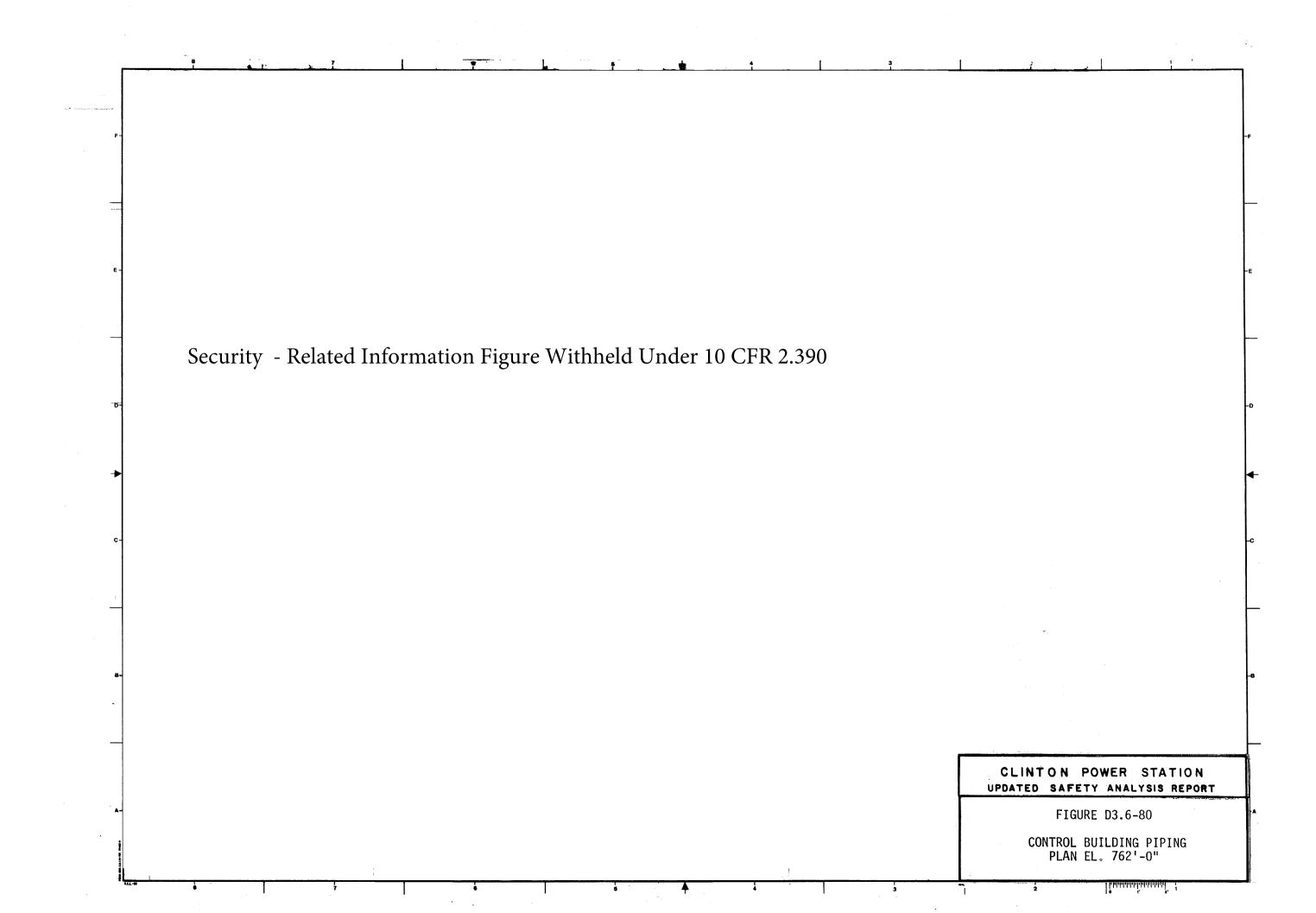
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-75 CONTROL BUILDING PIPING PLAN EL. 737, -0"

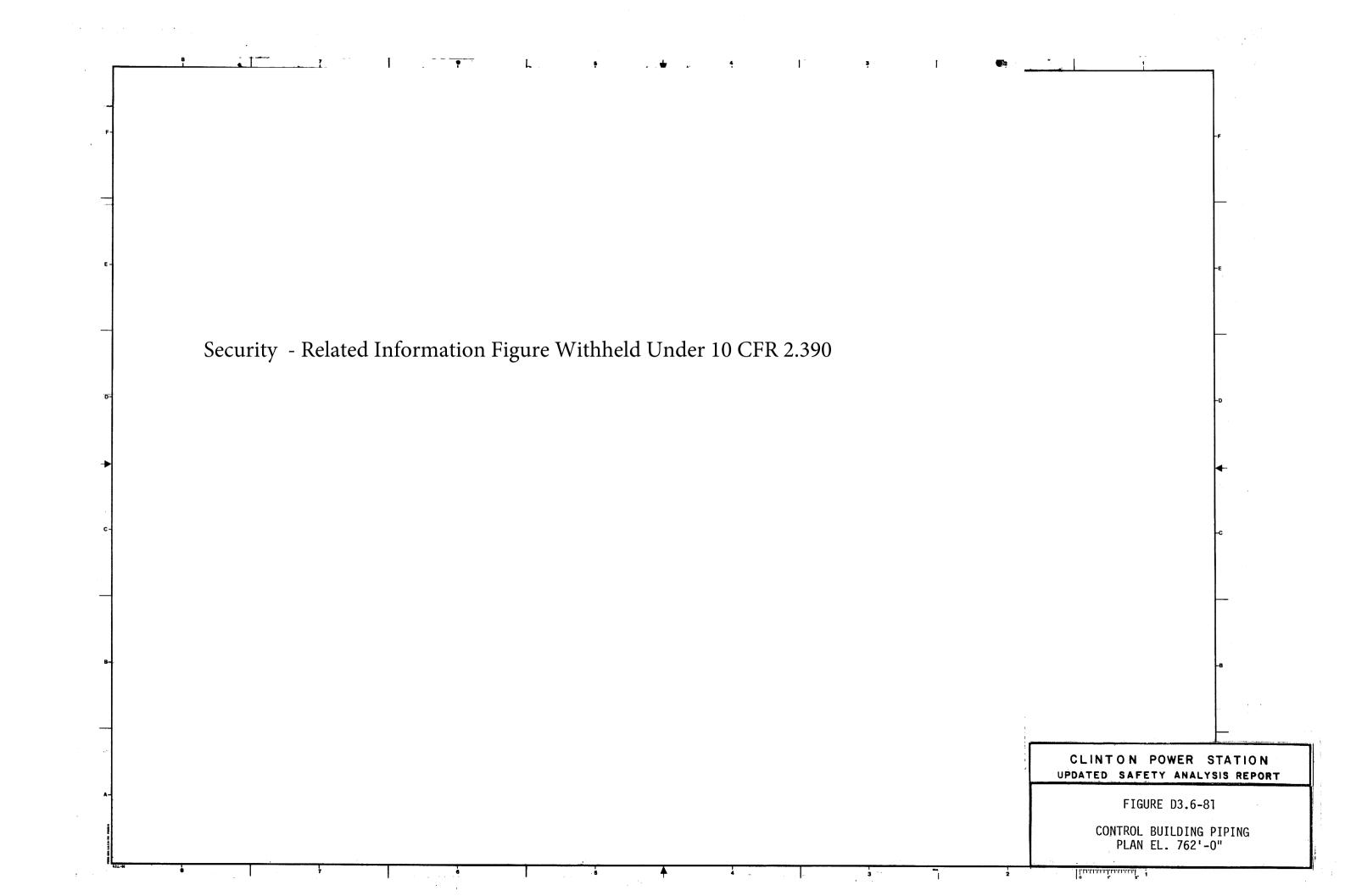


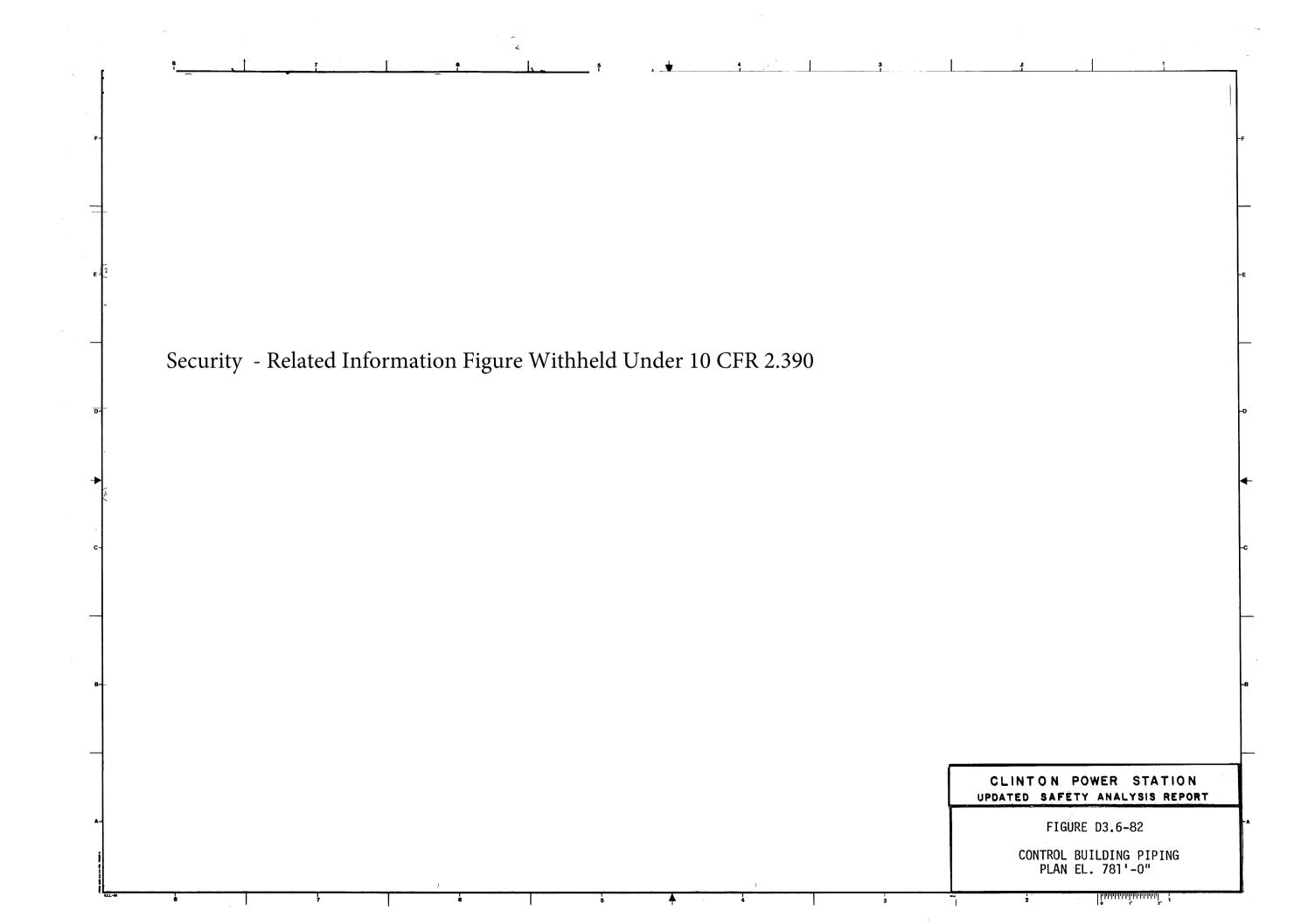
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-77 CONTROL BUILDING PIPING PLAN EL. 737'-0"

Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-78 CONTROL BUILDING PIPING PLAN EL. 751'-0"

Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-79 CONTROL BUILDING PIPING PLAN EL. 762'-0"







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CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE D3.6-83

CONTROL BUILDING PIPING PLAN EL. 781'-0"

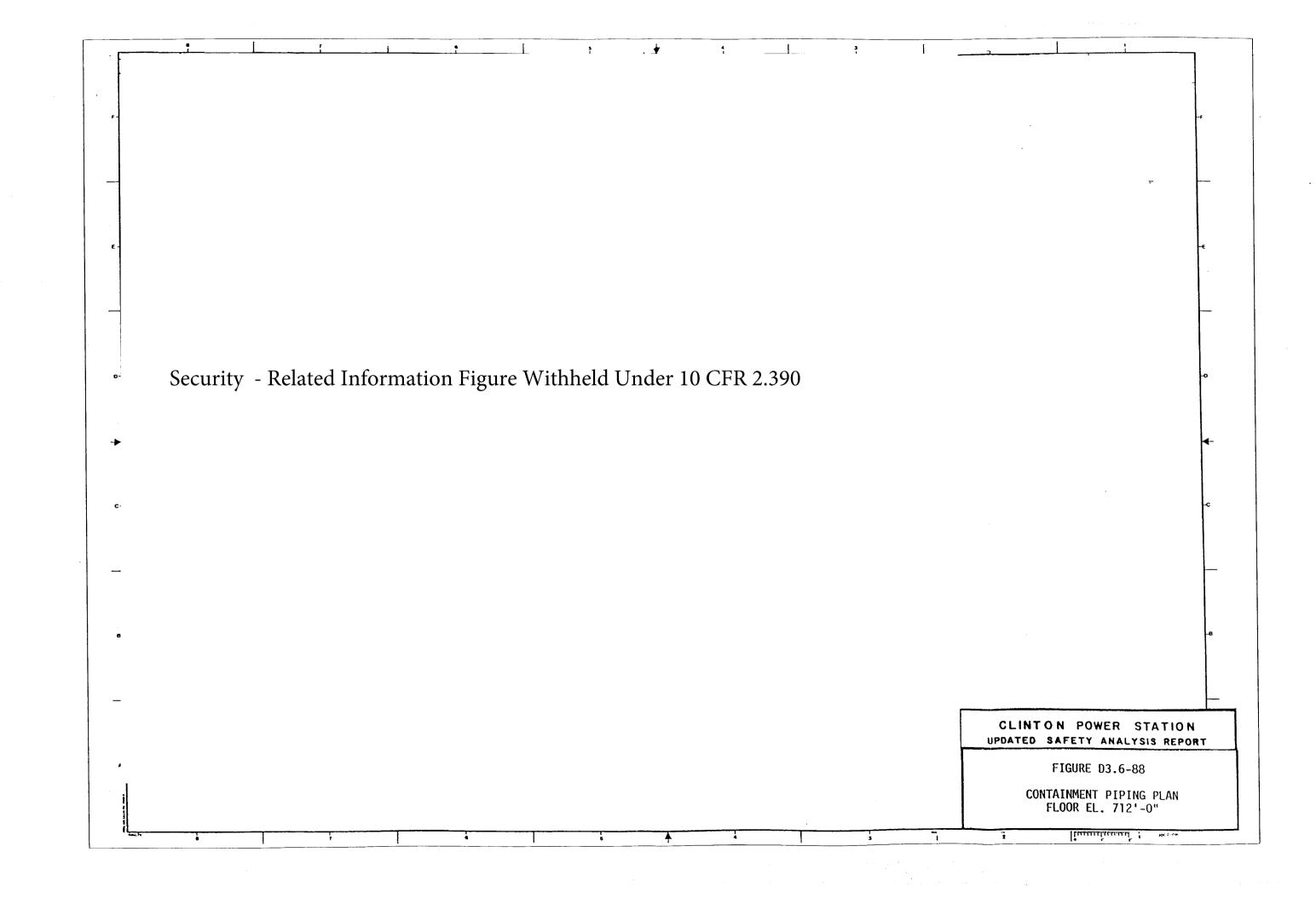
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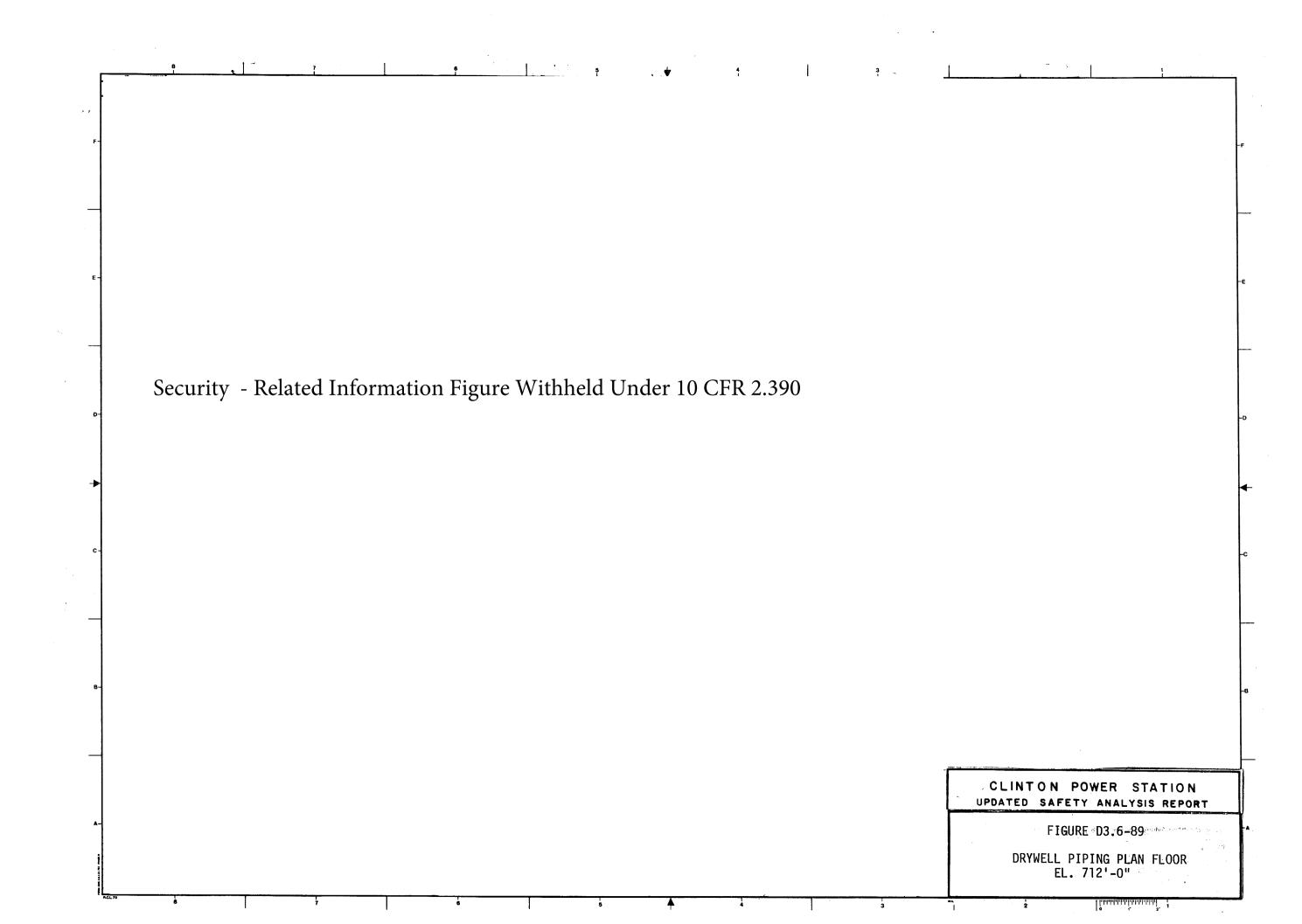
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-84 CONTROL BUILDING PIPING PLAN EL. 781'-0"

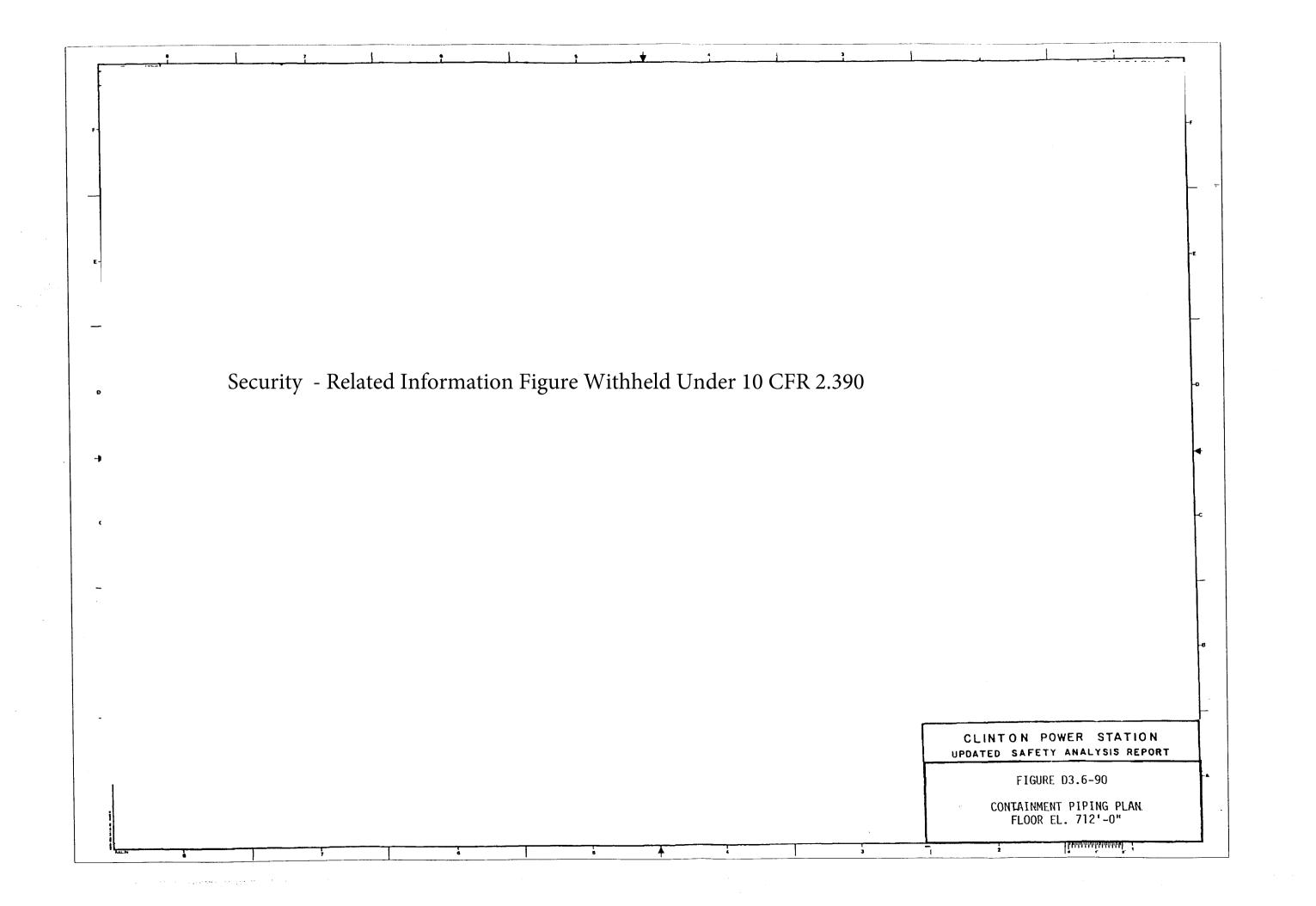
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-85 CONTROL BUILDING PIPING PLAN EL. 800'-0"

Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-86 CONTROL BUILDING PIPING PLAN EL. 800'-0"

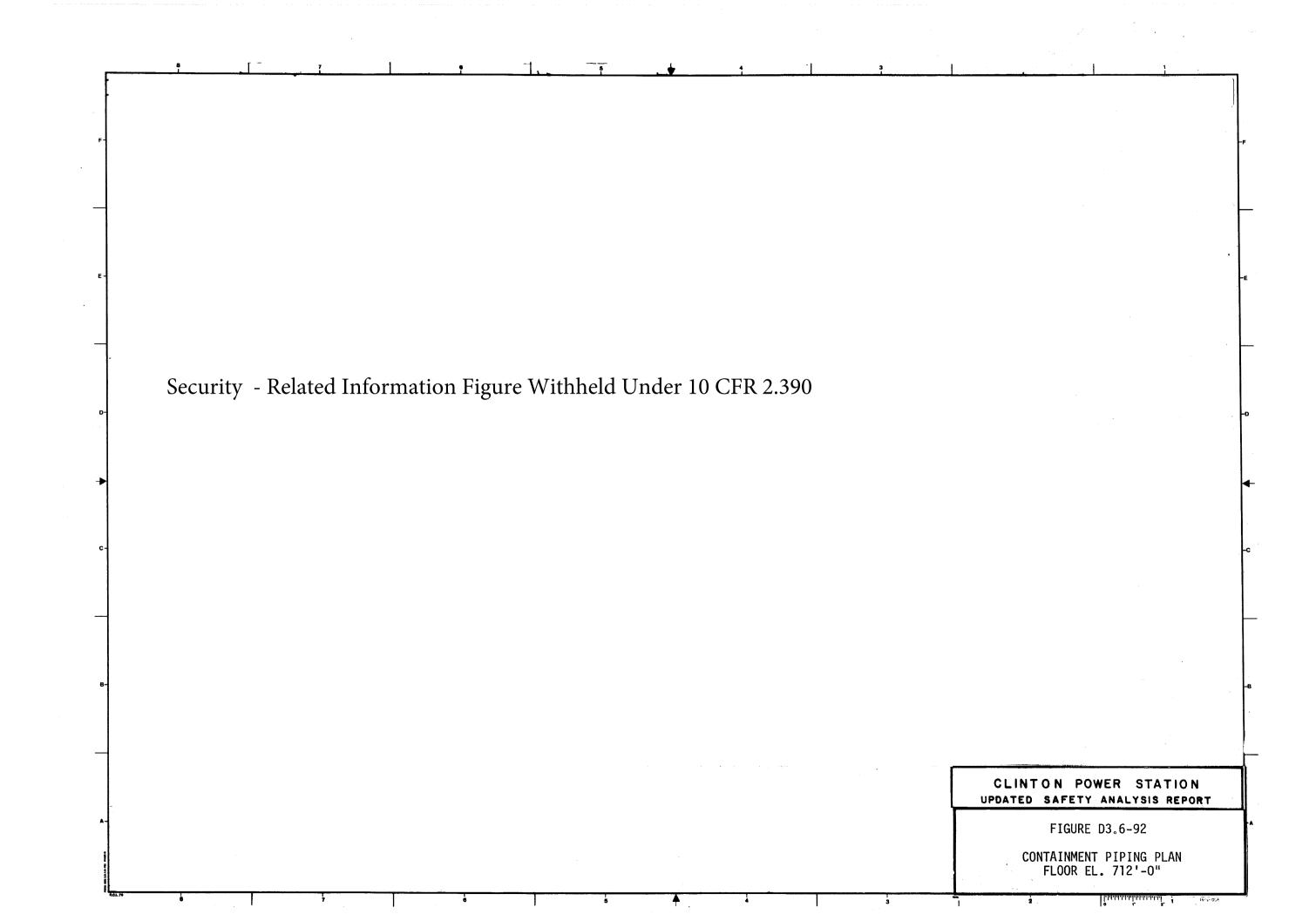
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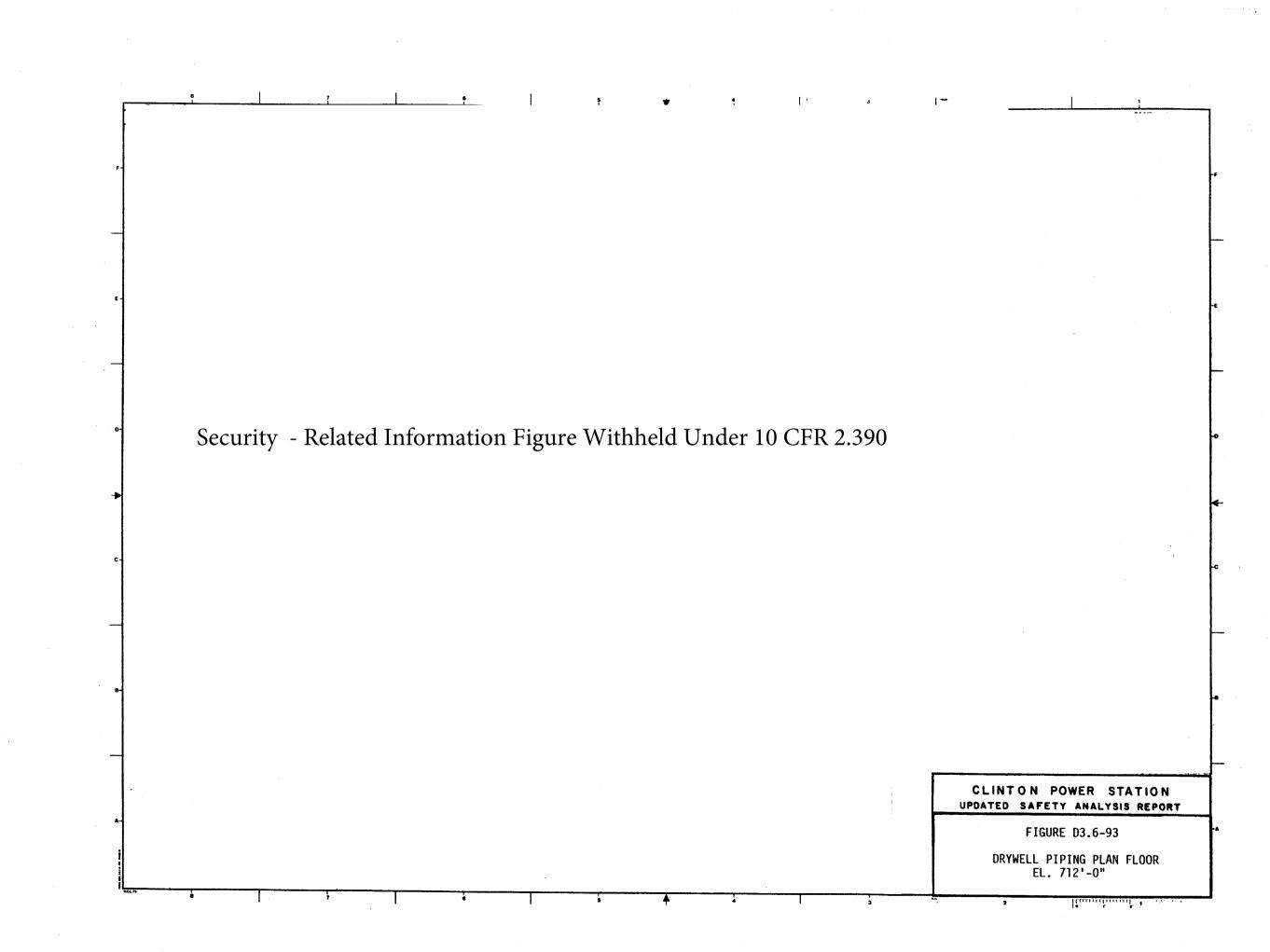


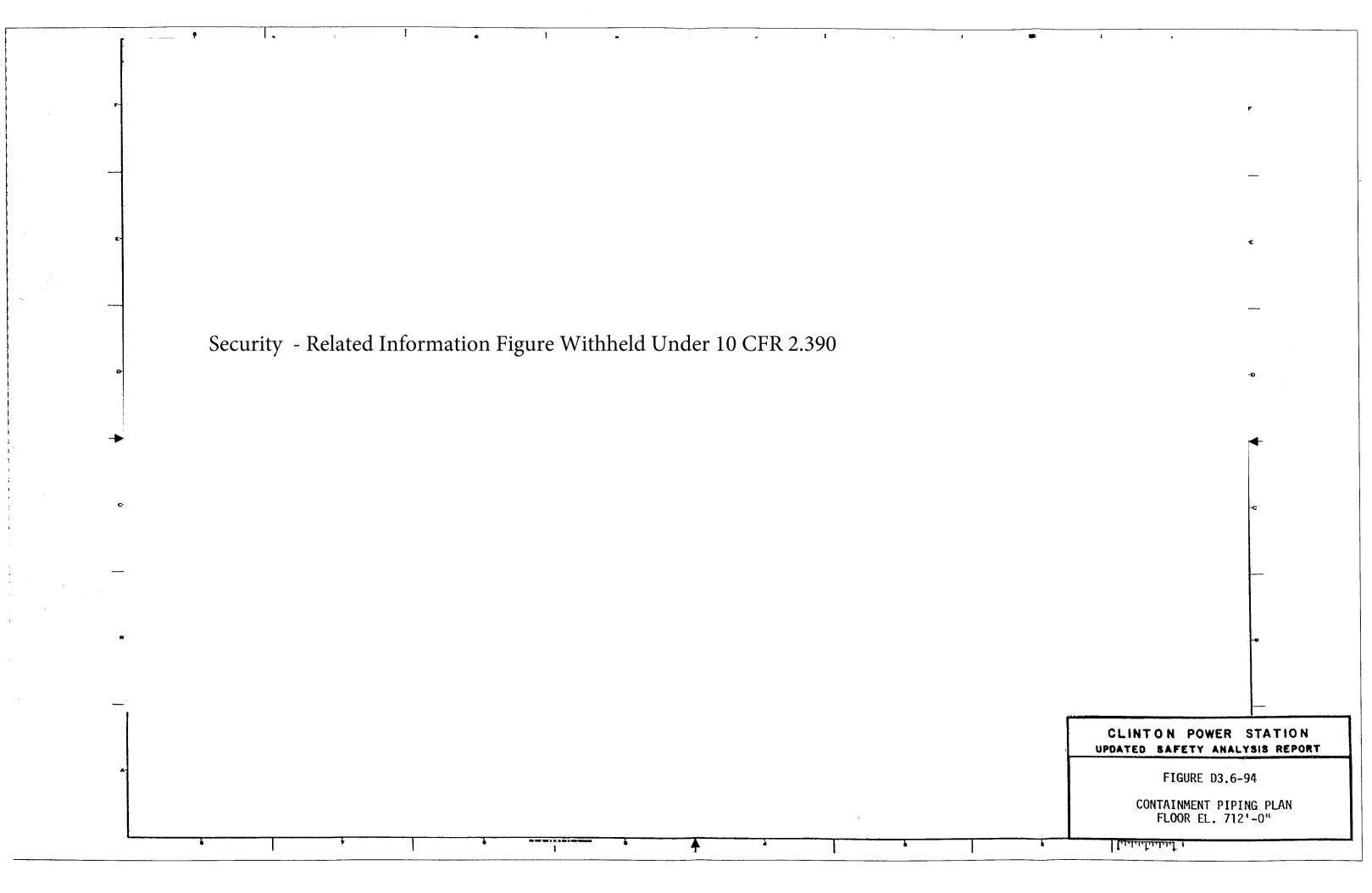


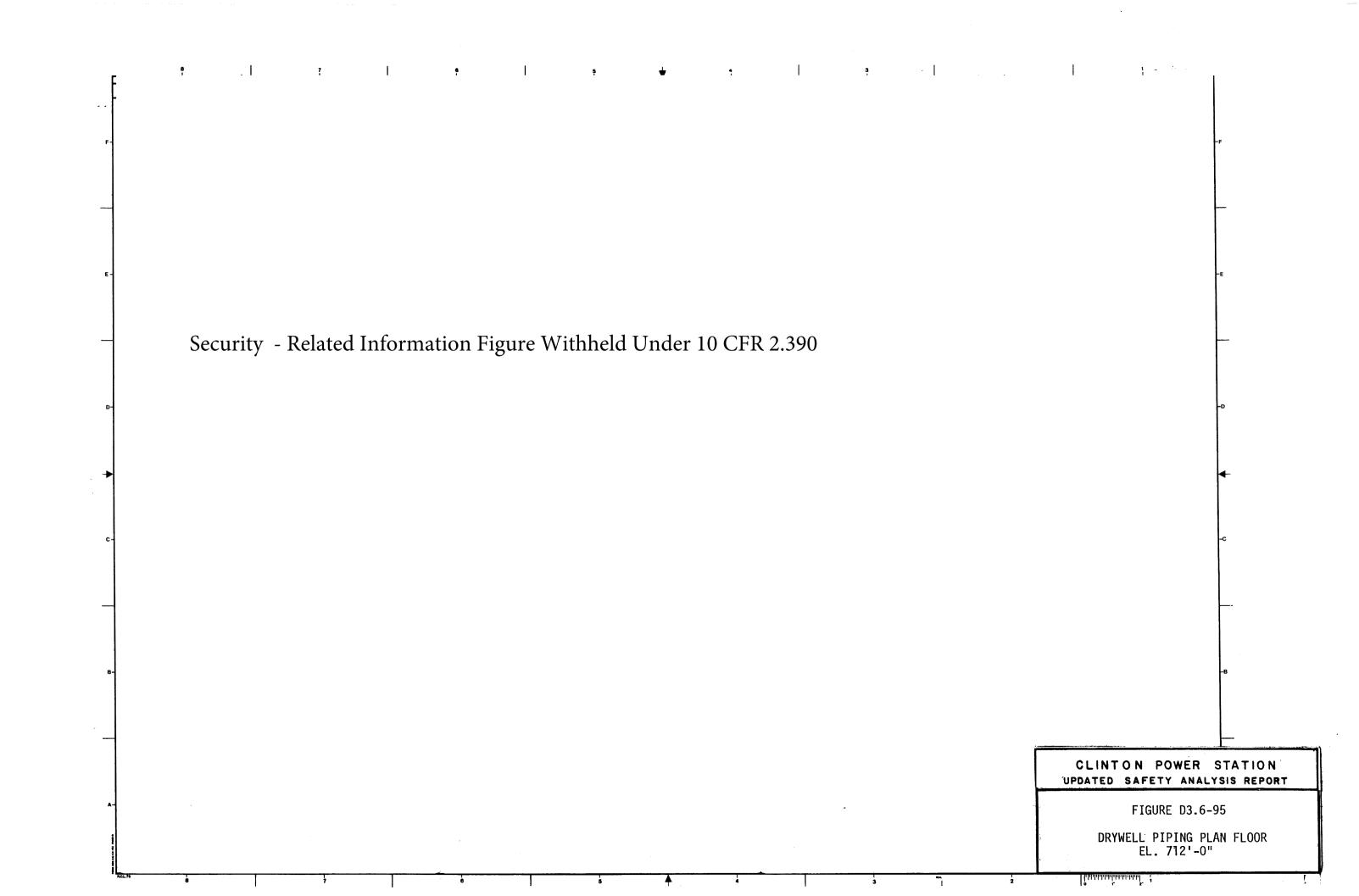


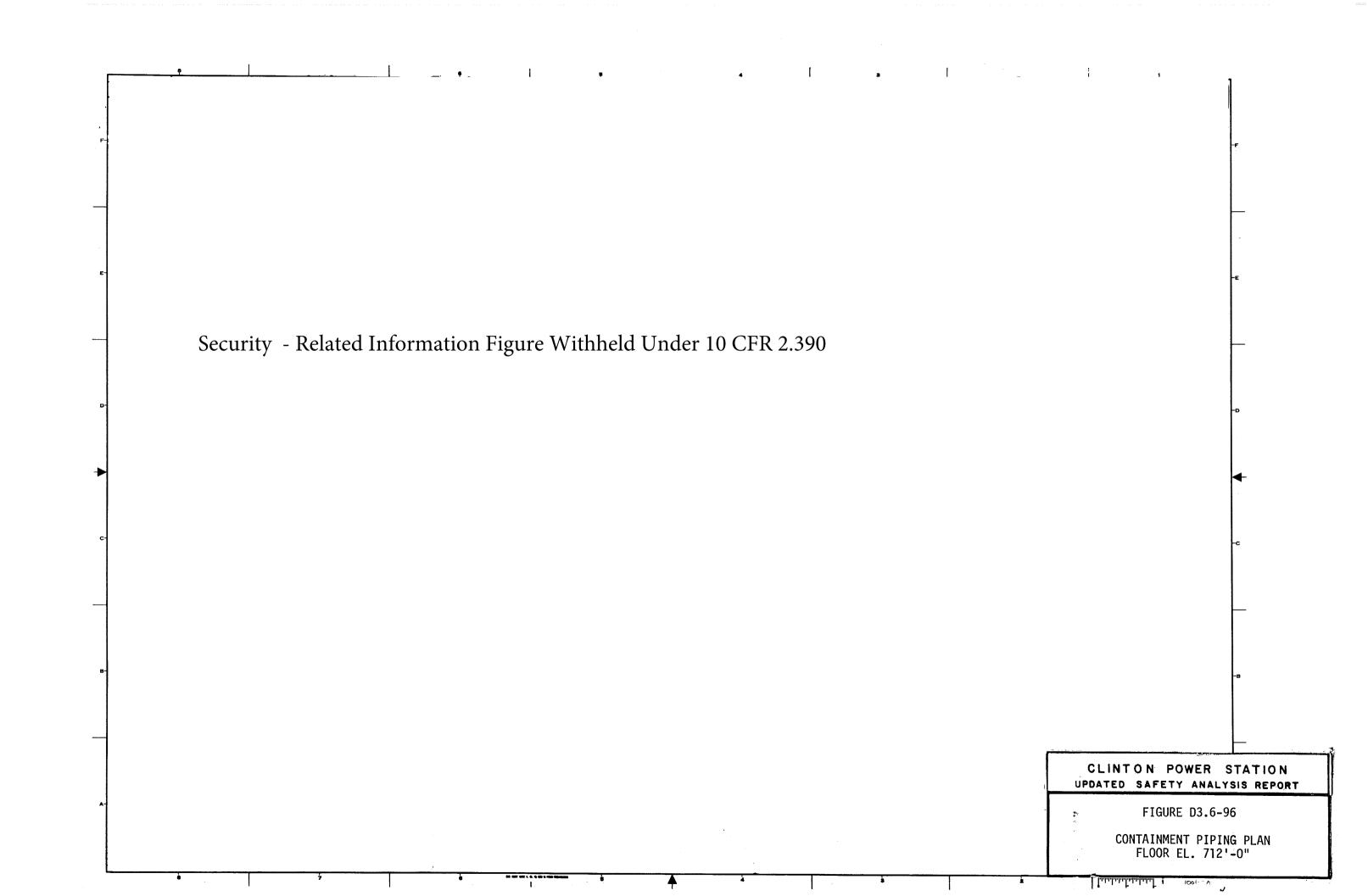
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-91 DRYWELL PIPING PLAN FLOOR EL. 712'-0"

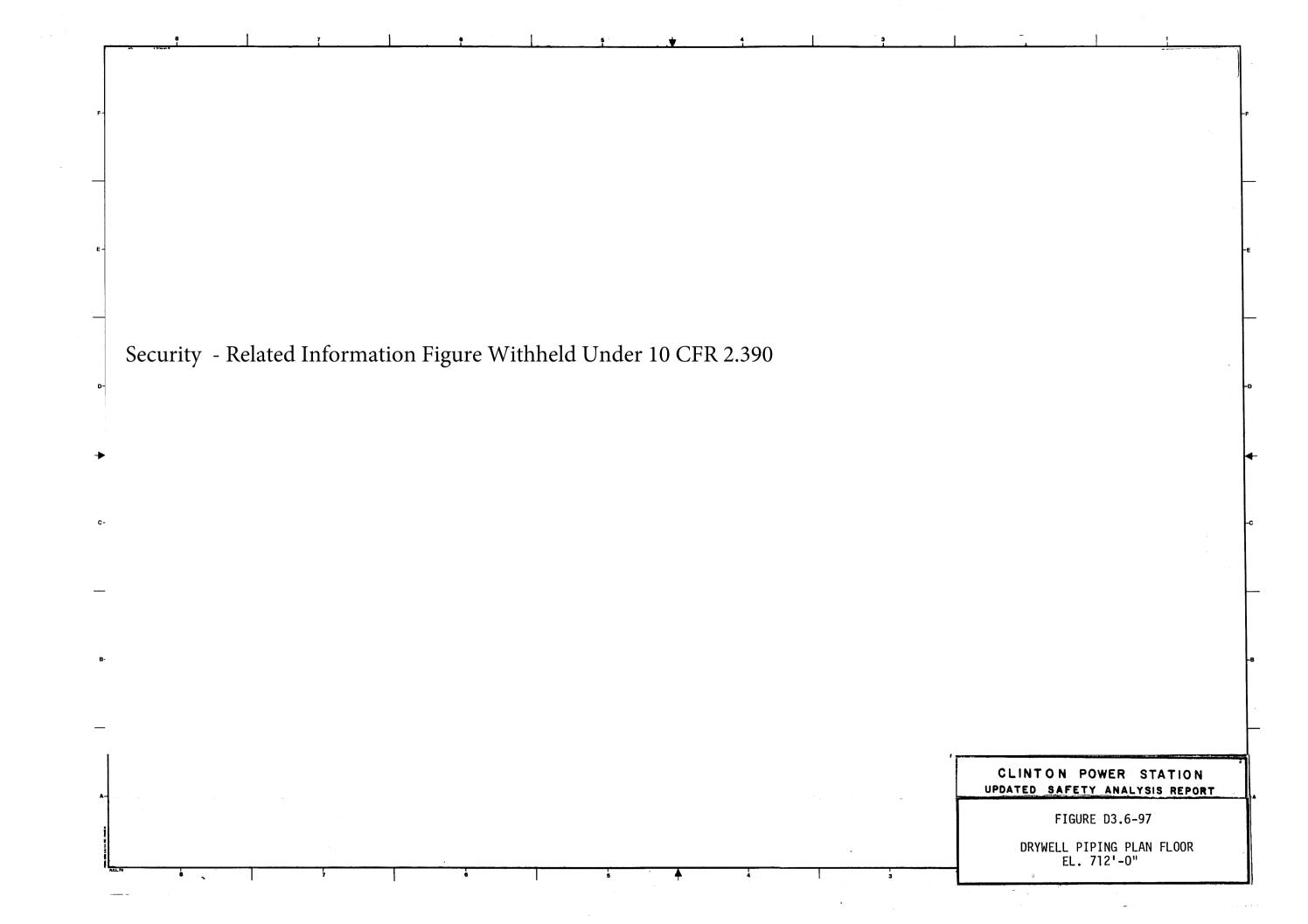




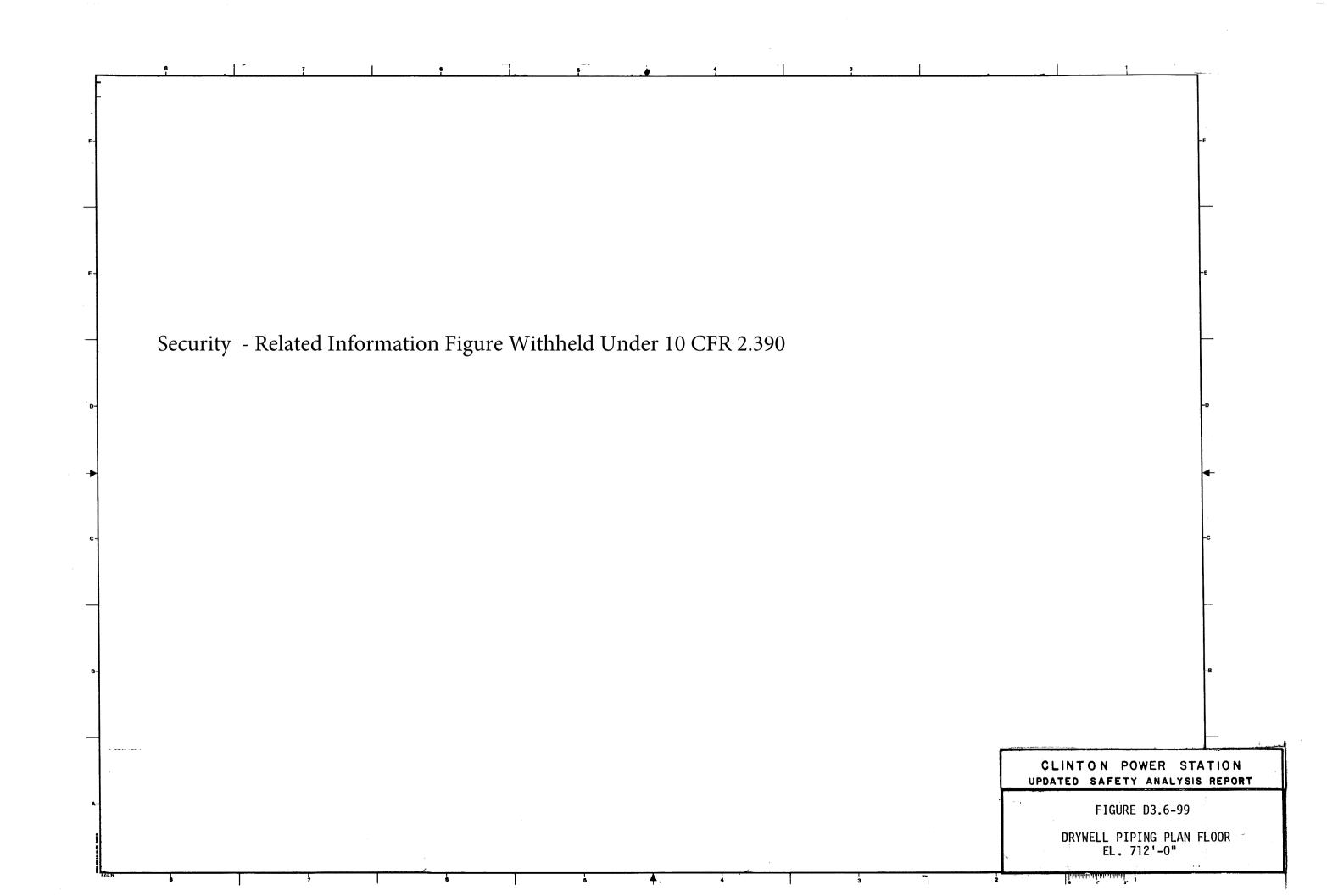




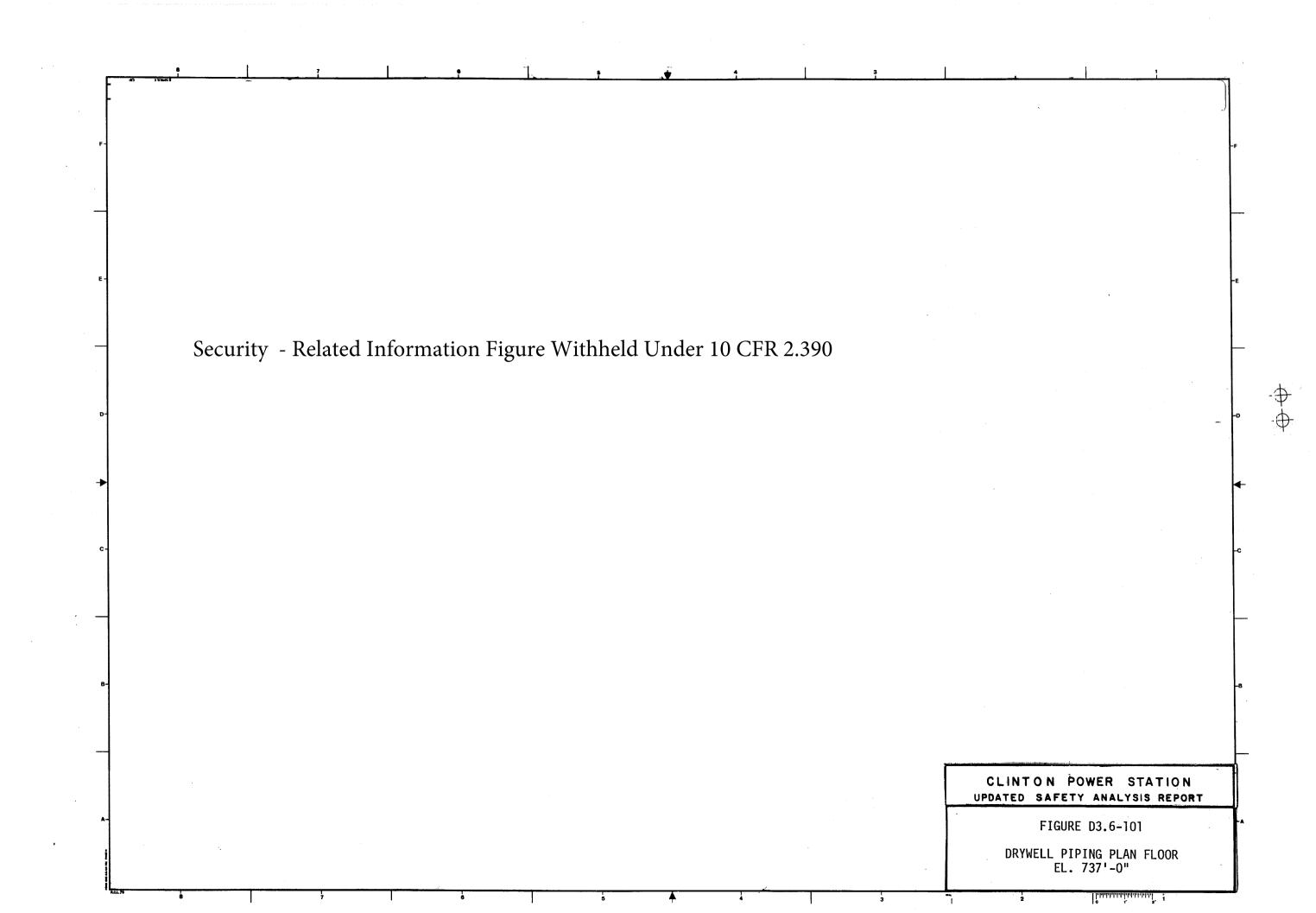




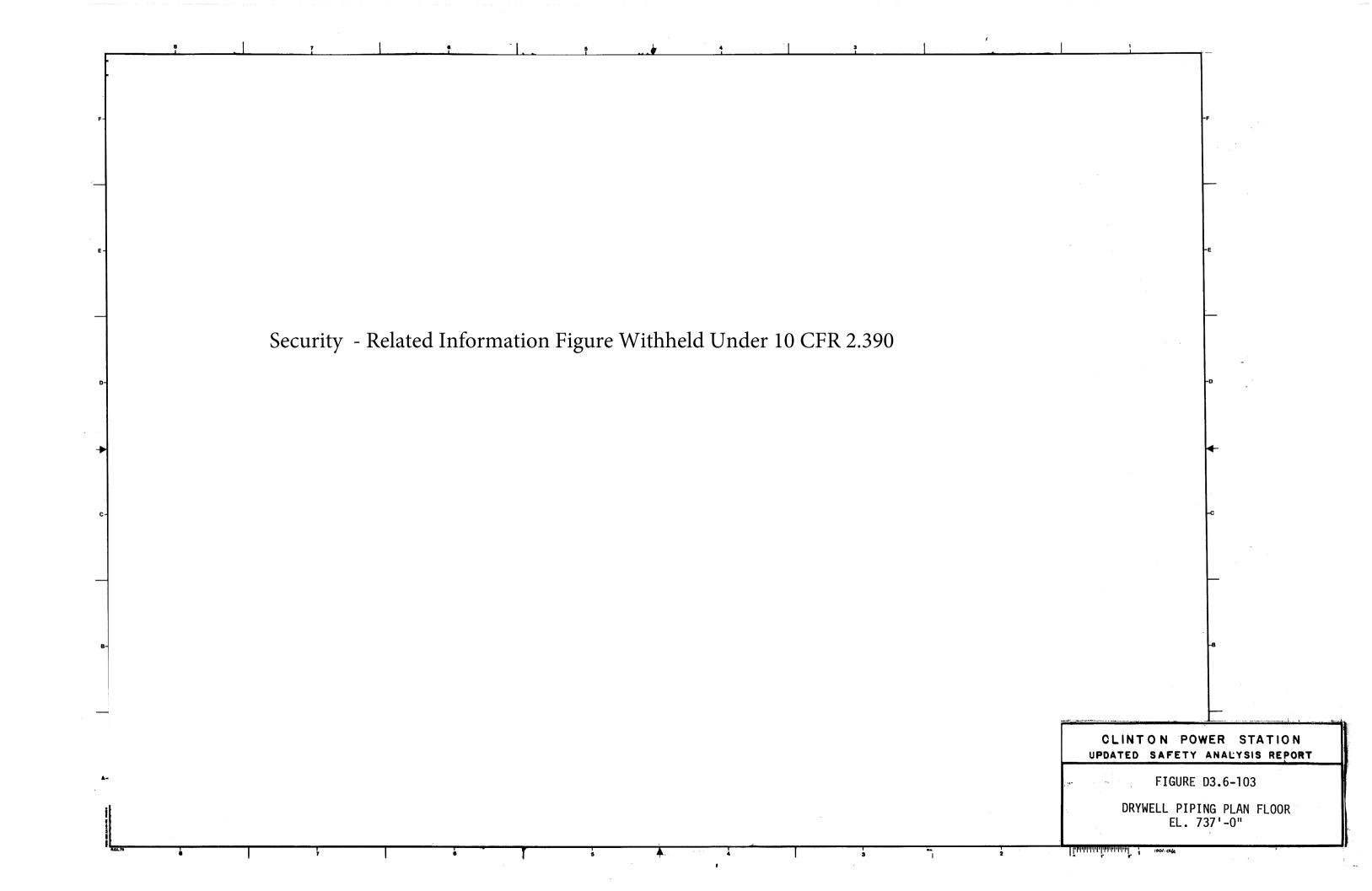
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-98 CONTAINMENT PIPING PLAN FLOOR EL. 712'-0"

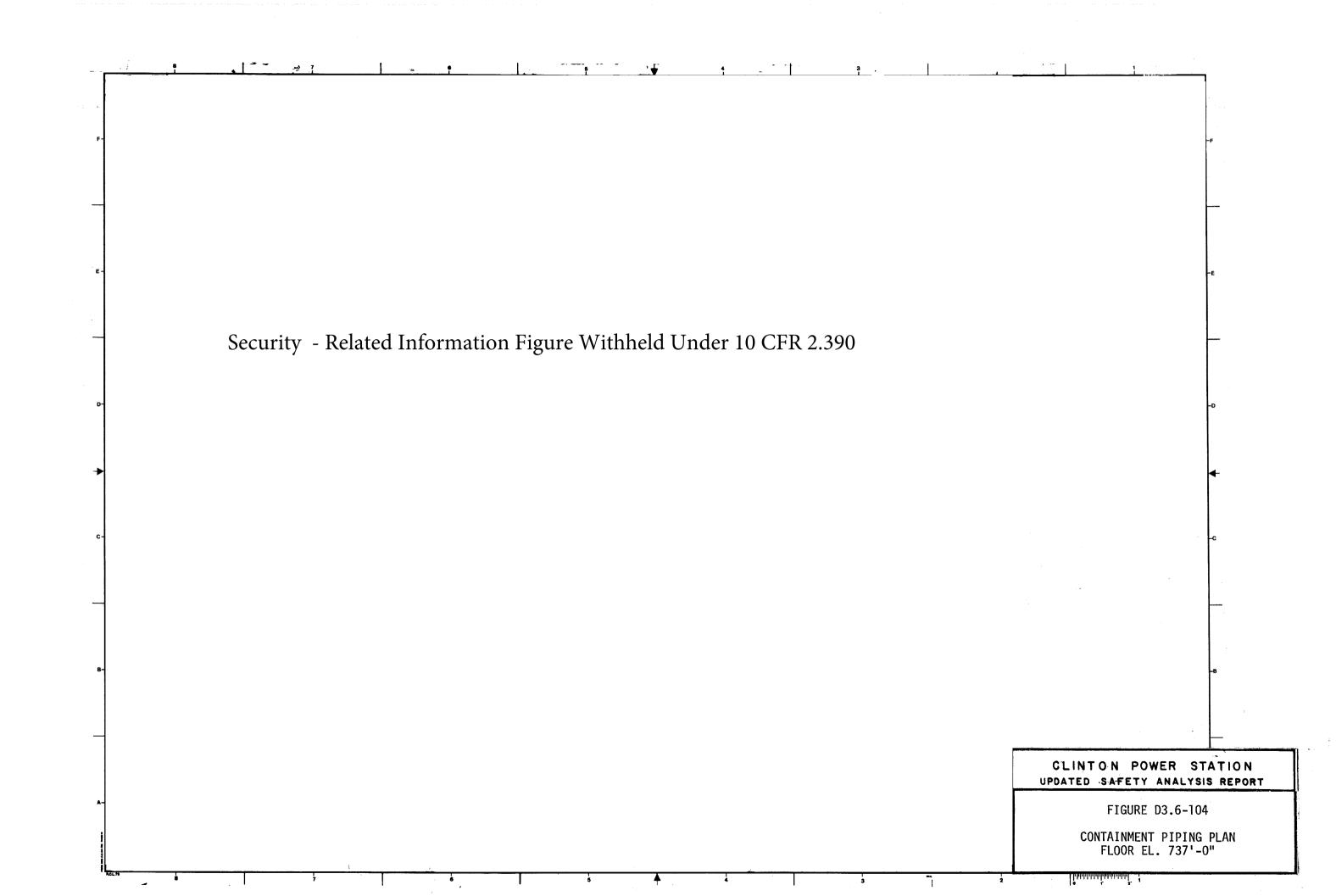


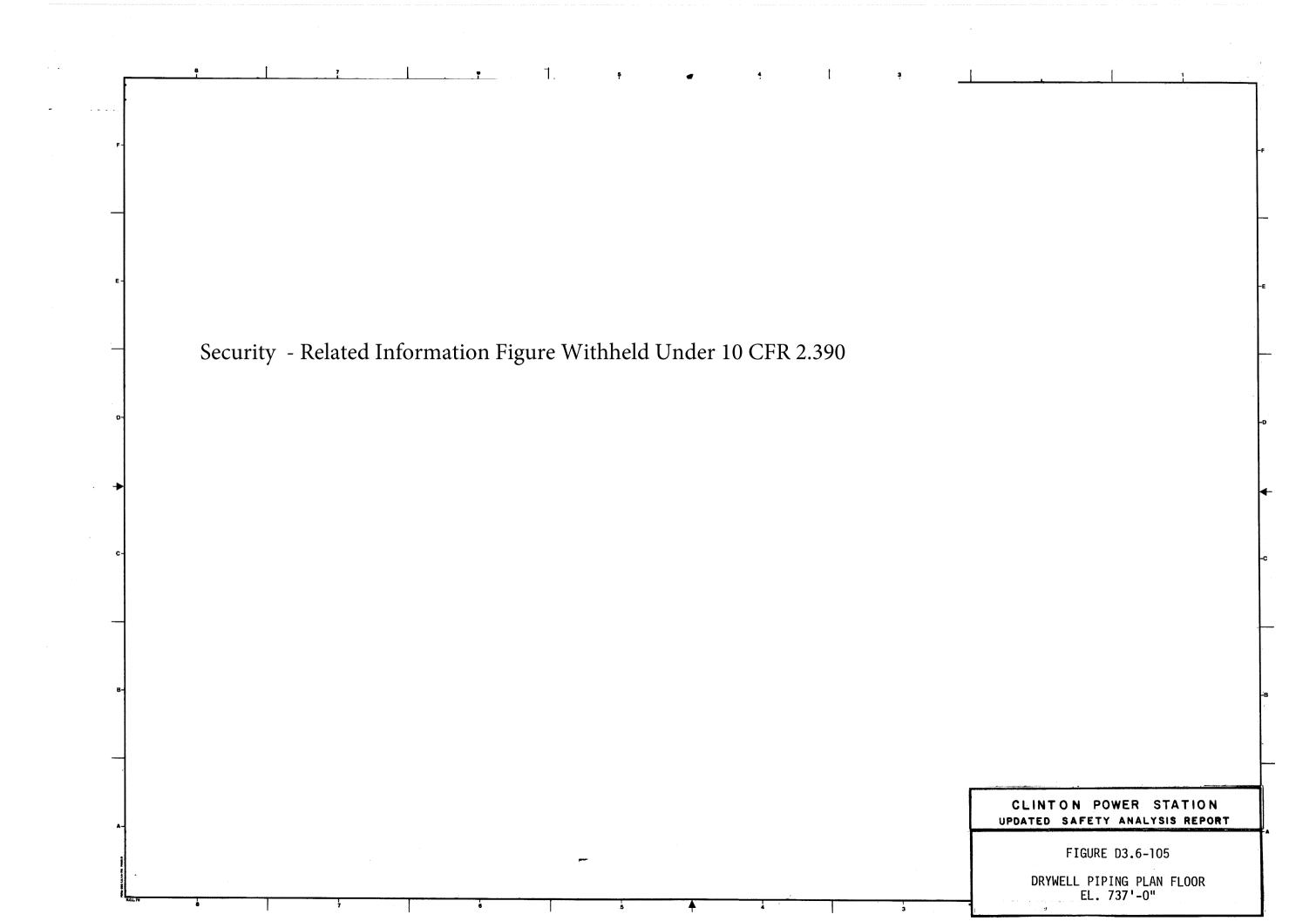
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-100 CONTAINMENT PIPING PLAN FLOOR EL. 737'-0"

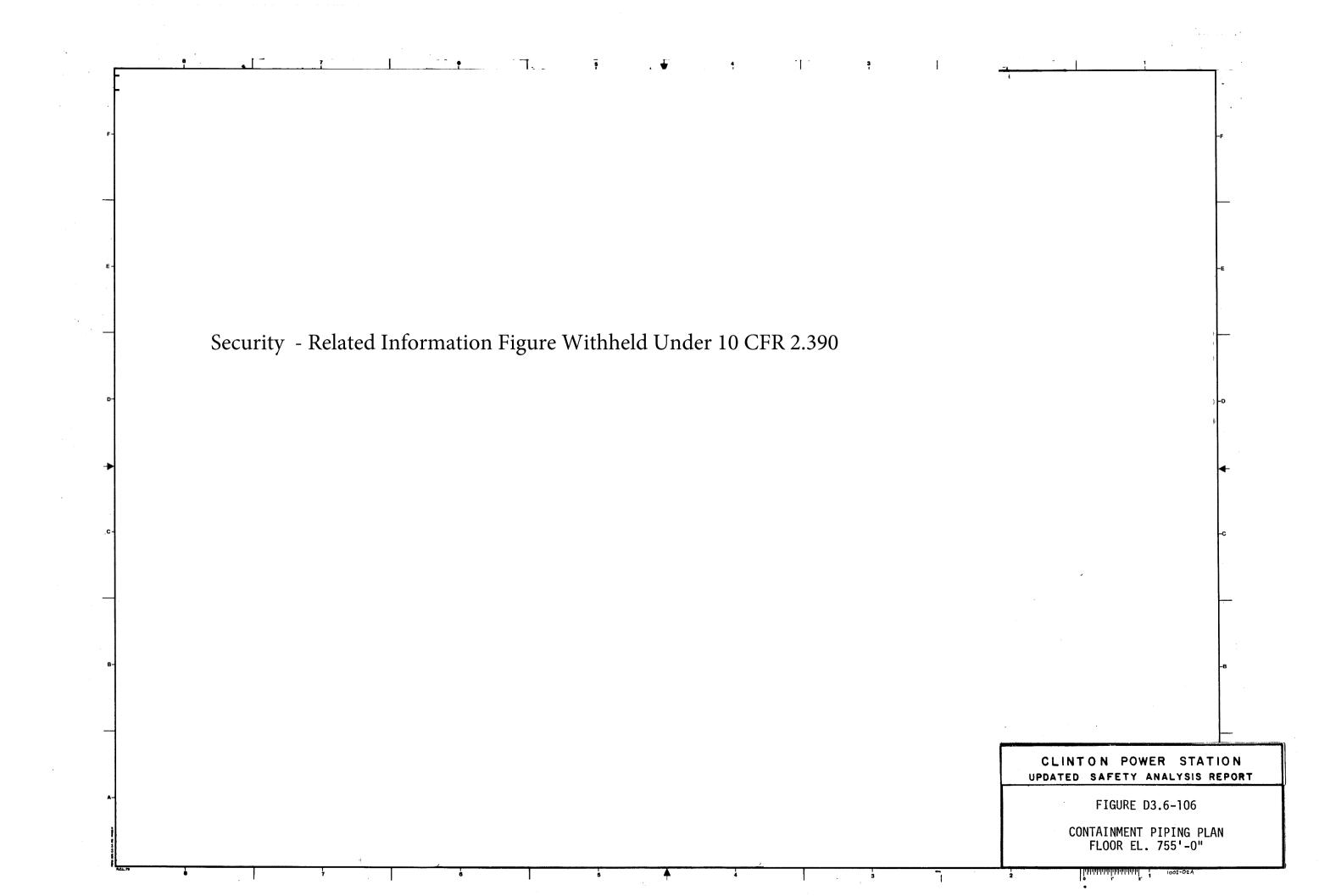


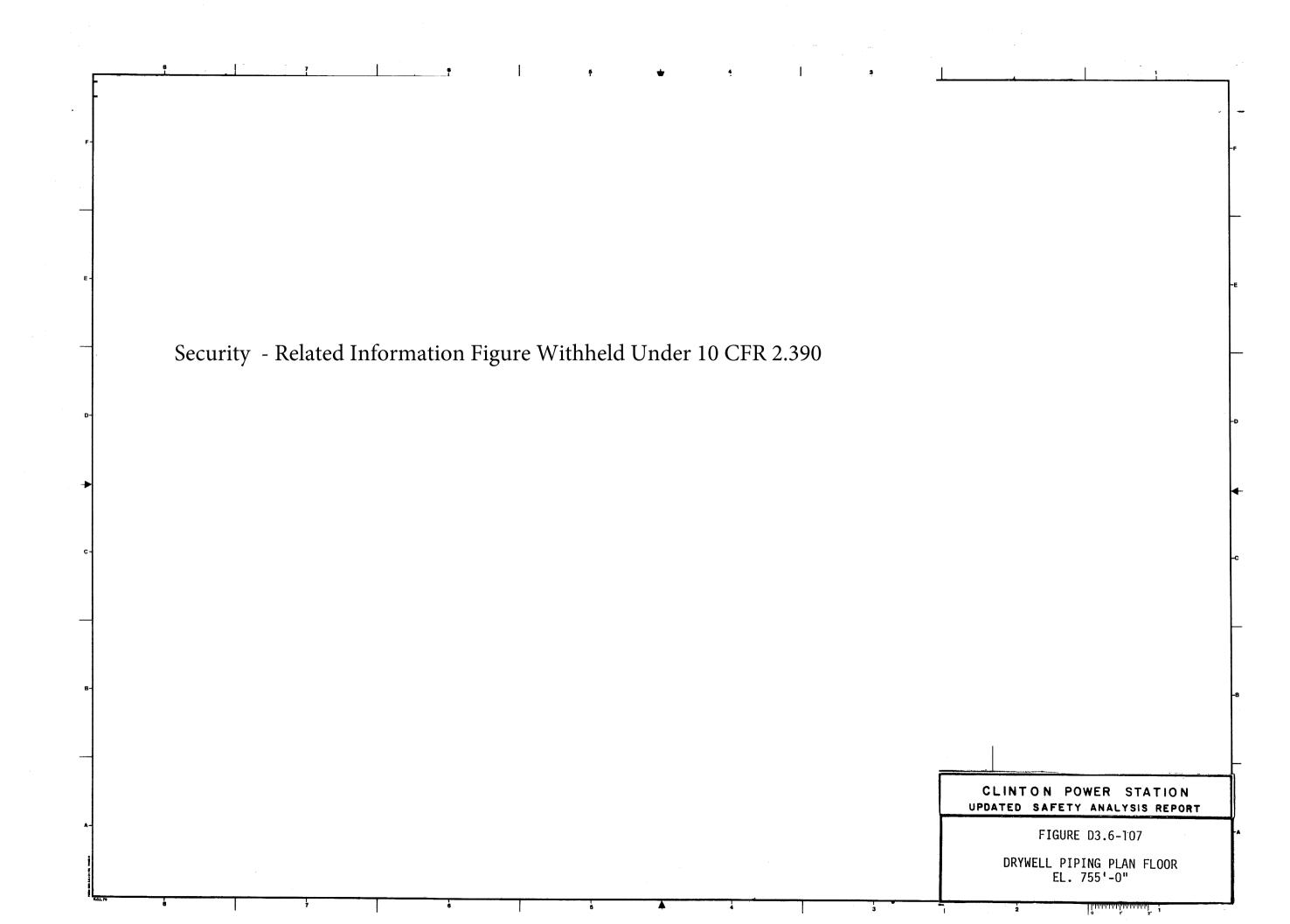
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-102 CONTAINMENT PIPING PLAN FLOOR EL. 737'-0"

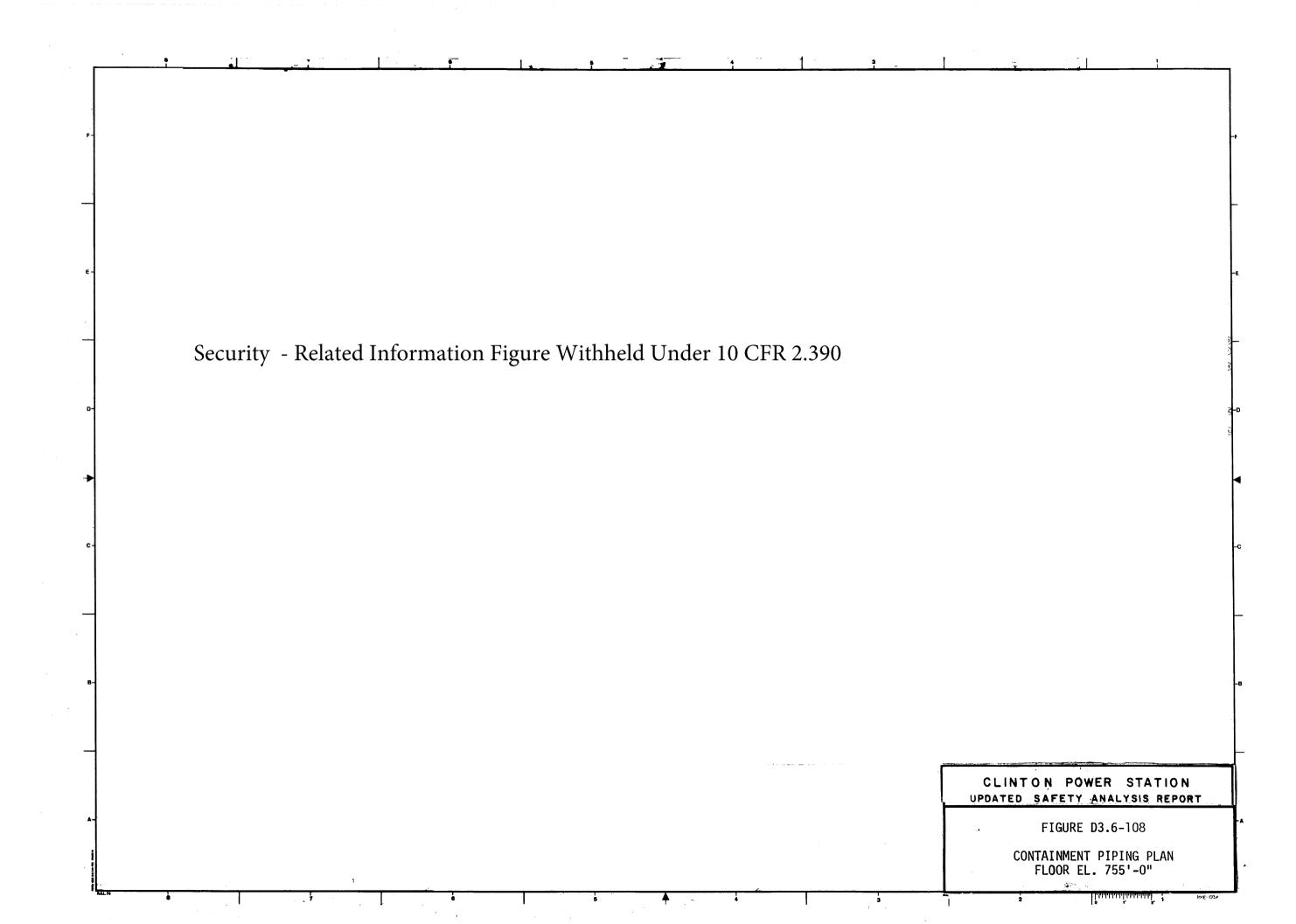


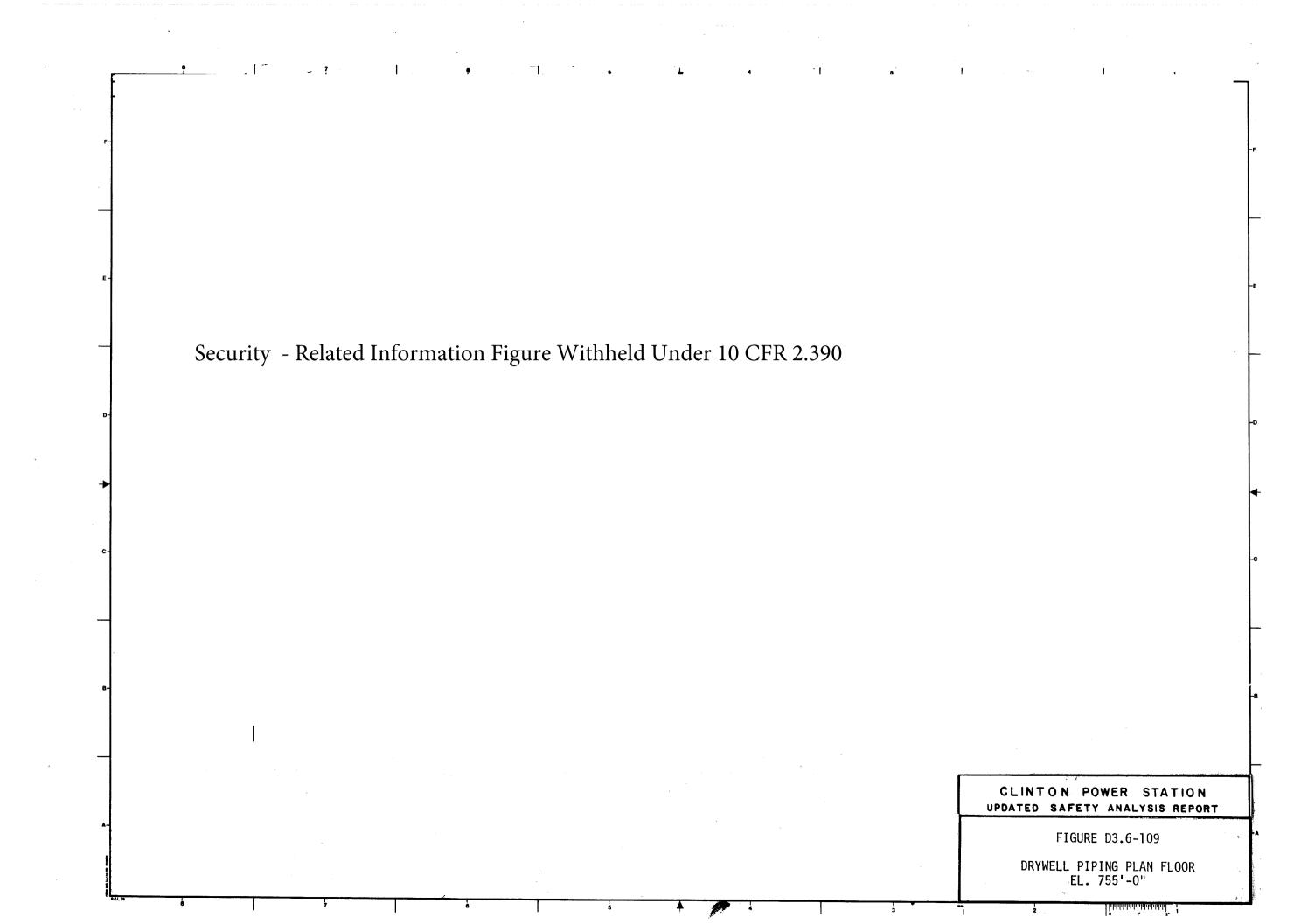


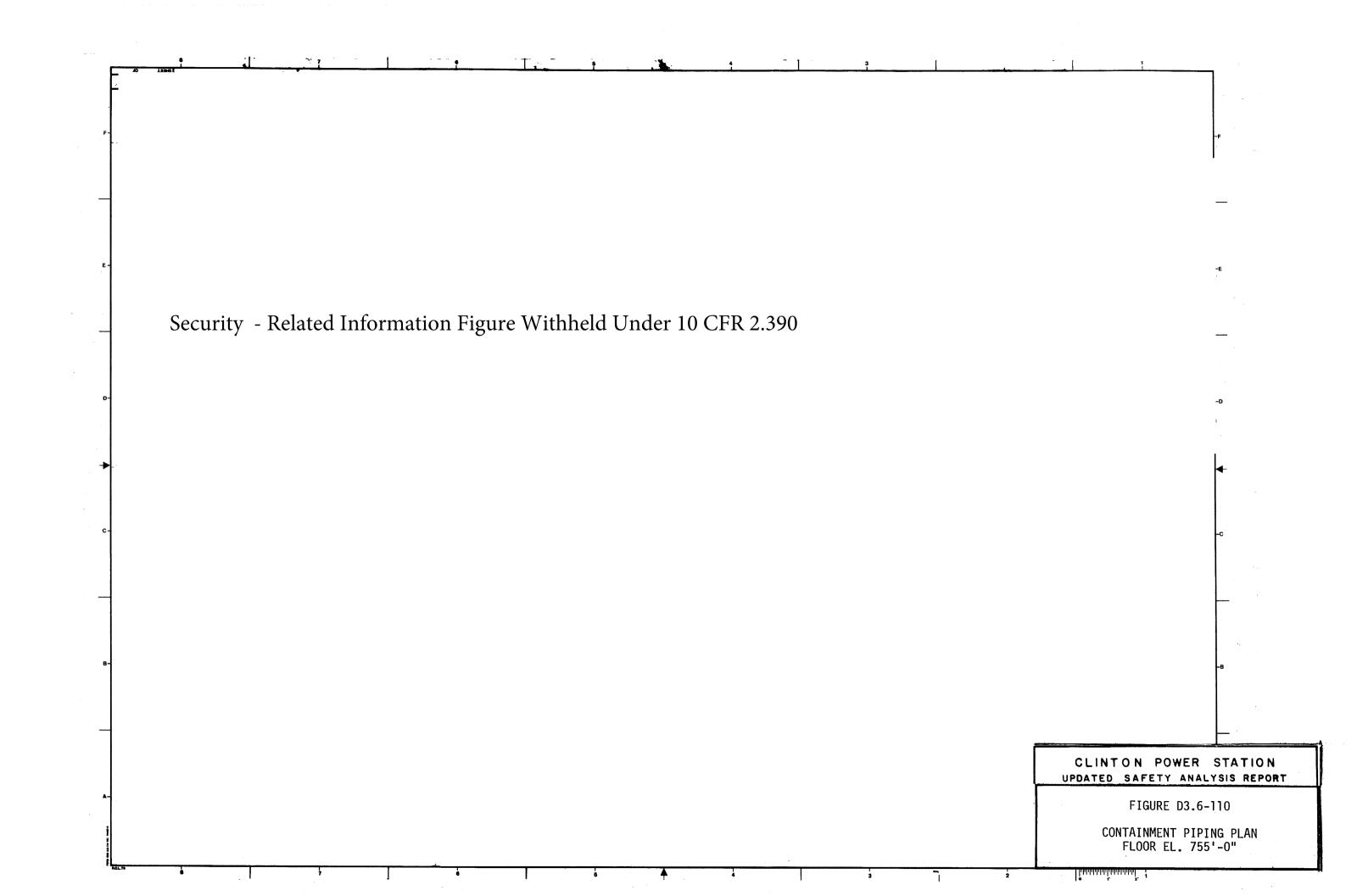


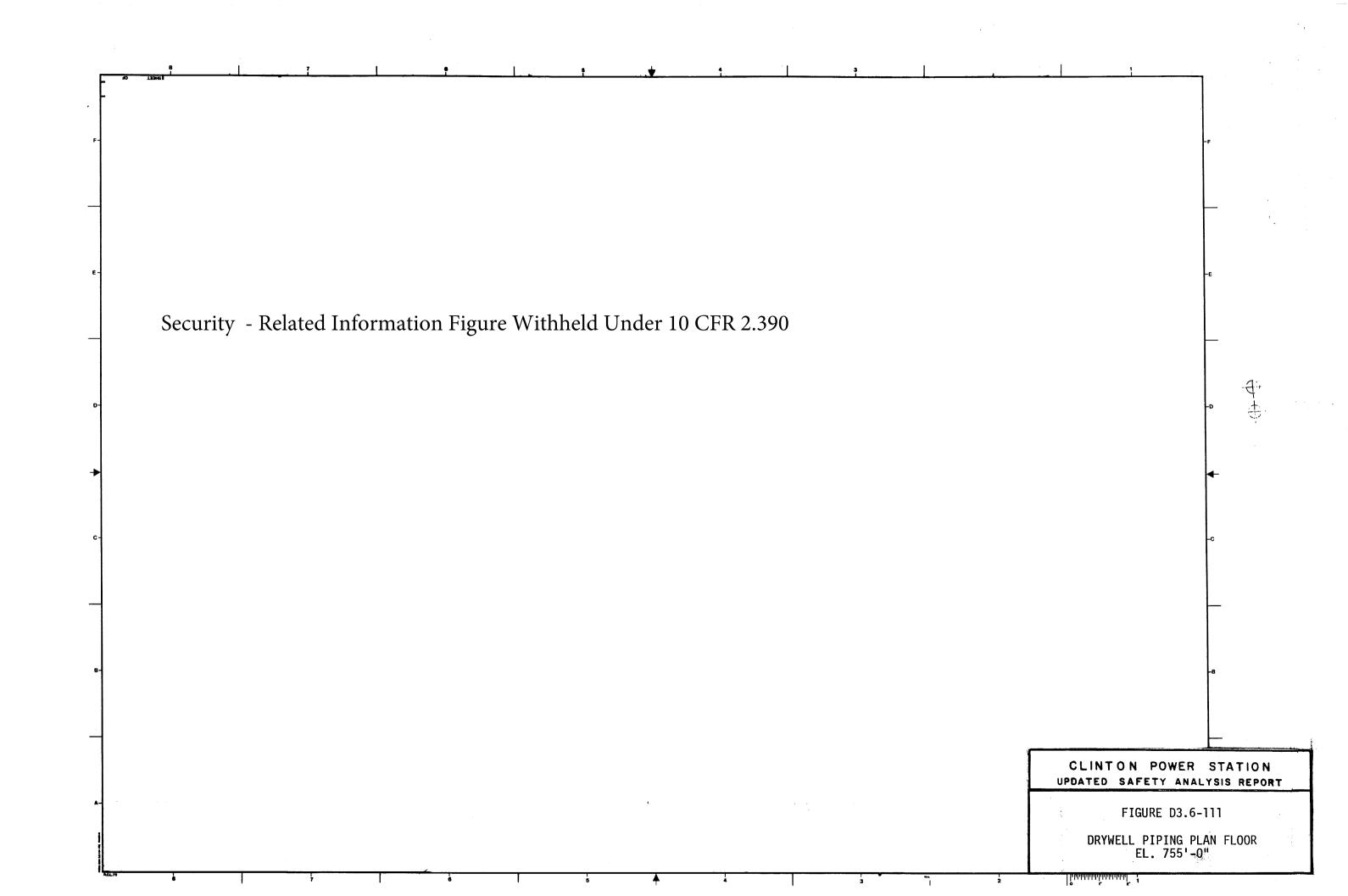


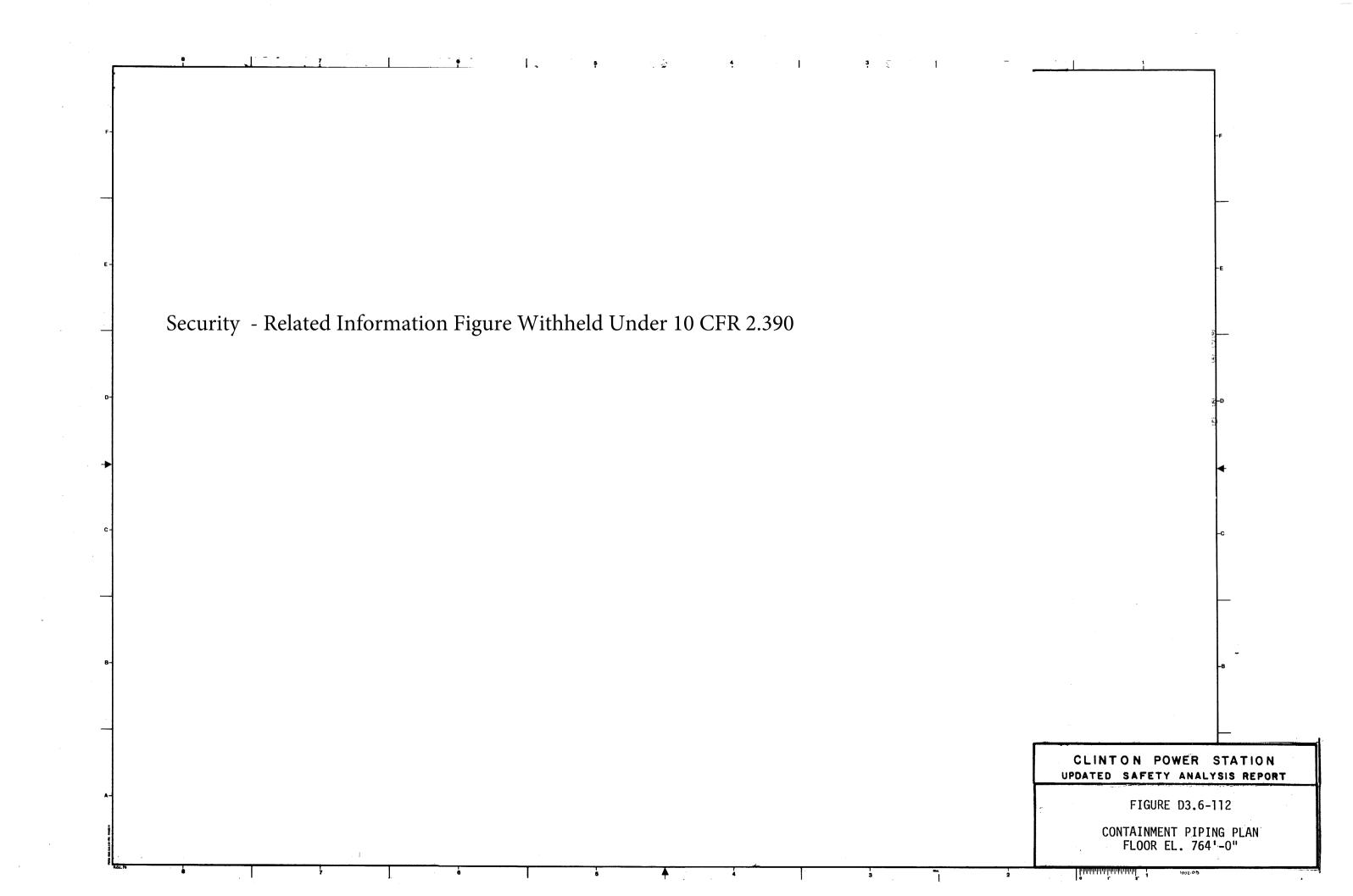


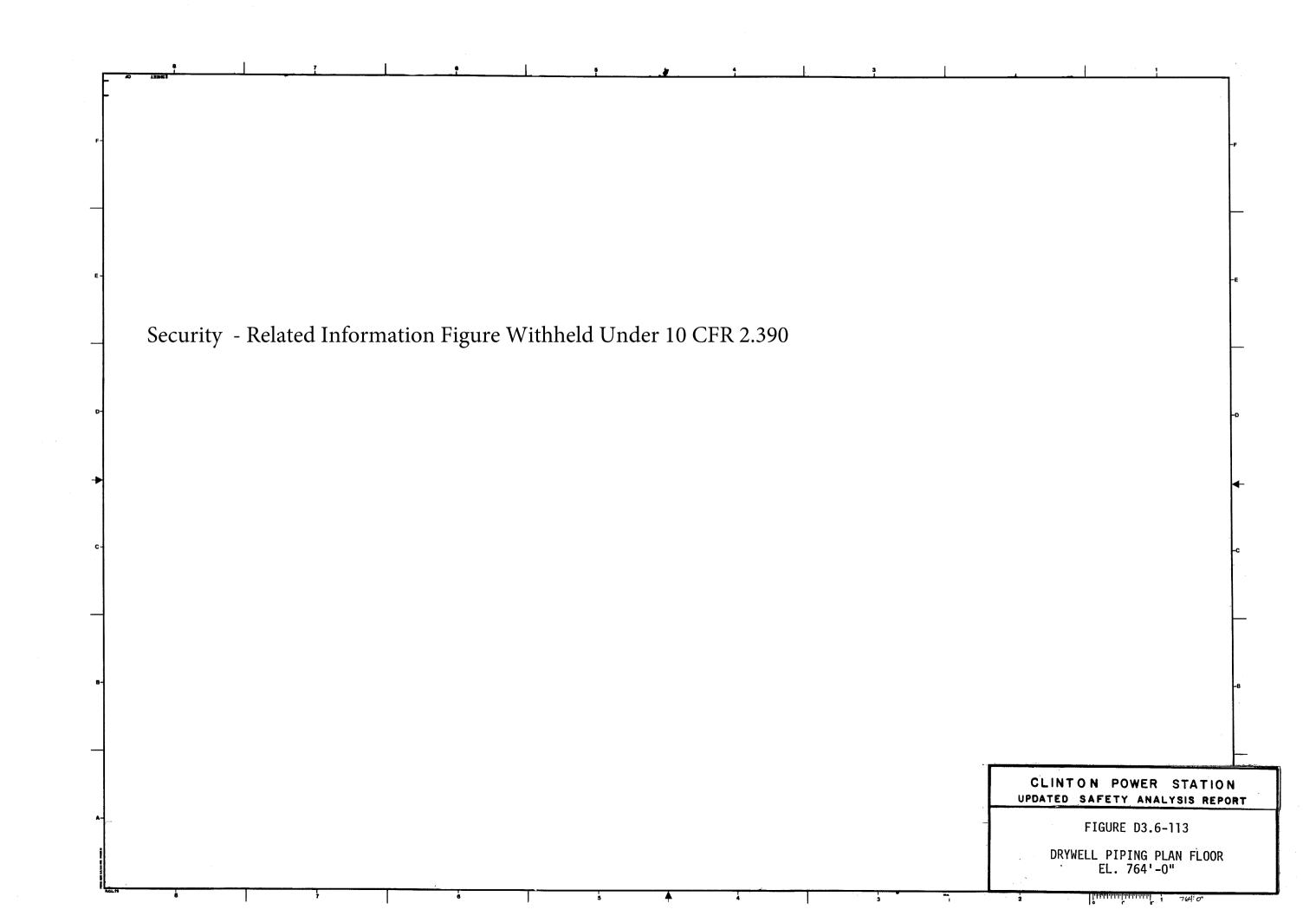




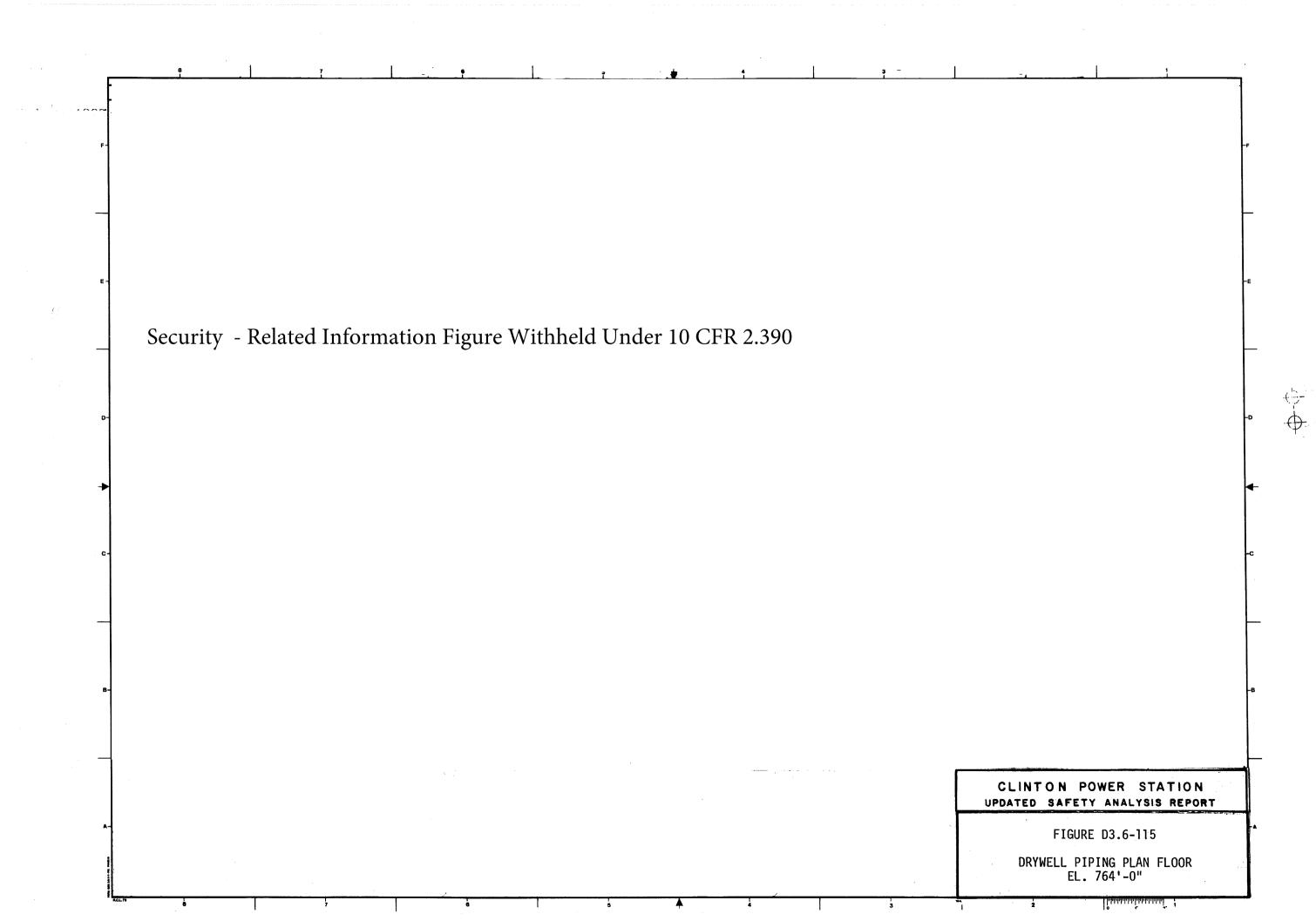


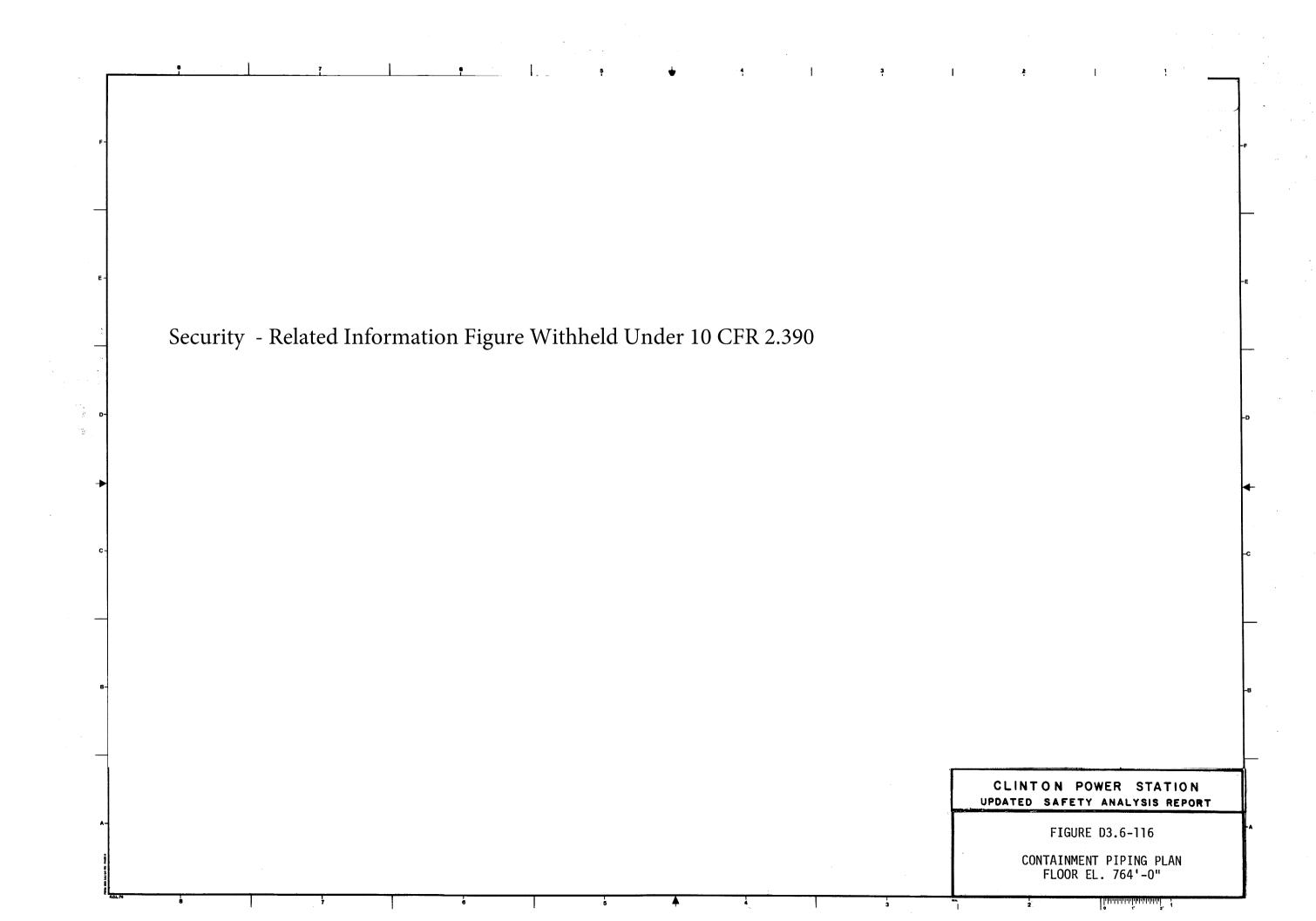




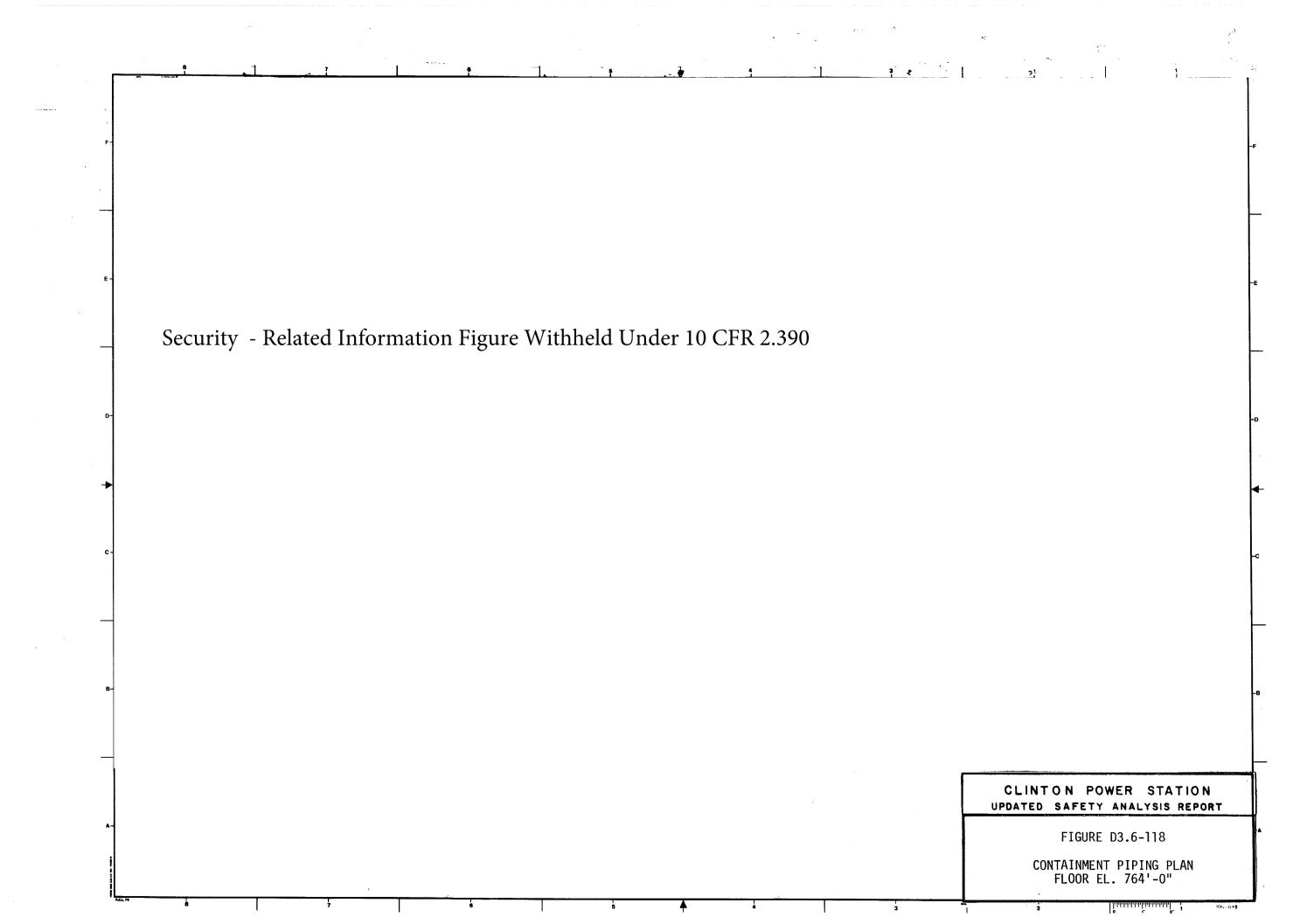


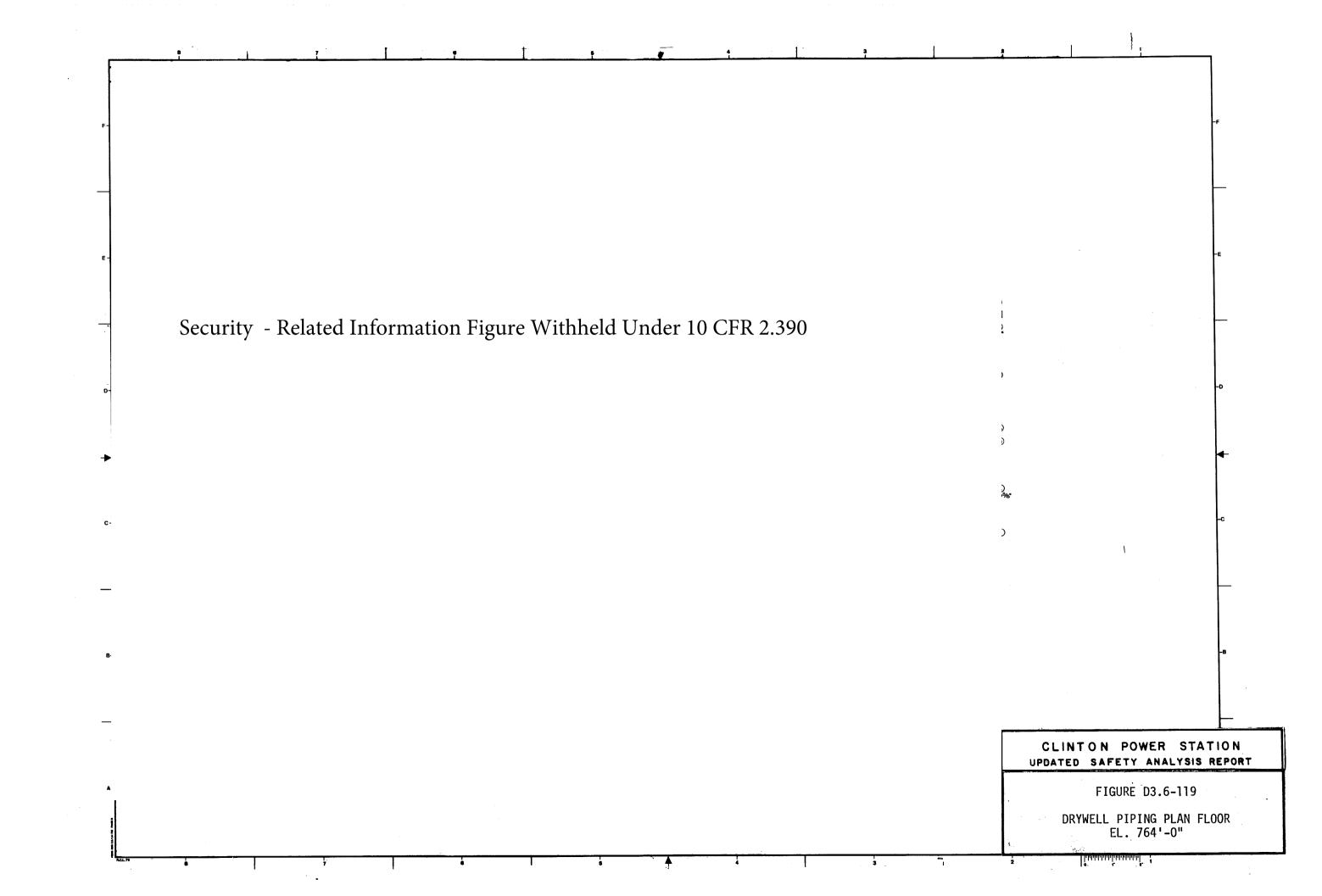
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-114 CONTAINMENT PIPING PLAN FLOOR EL. 764'-0"

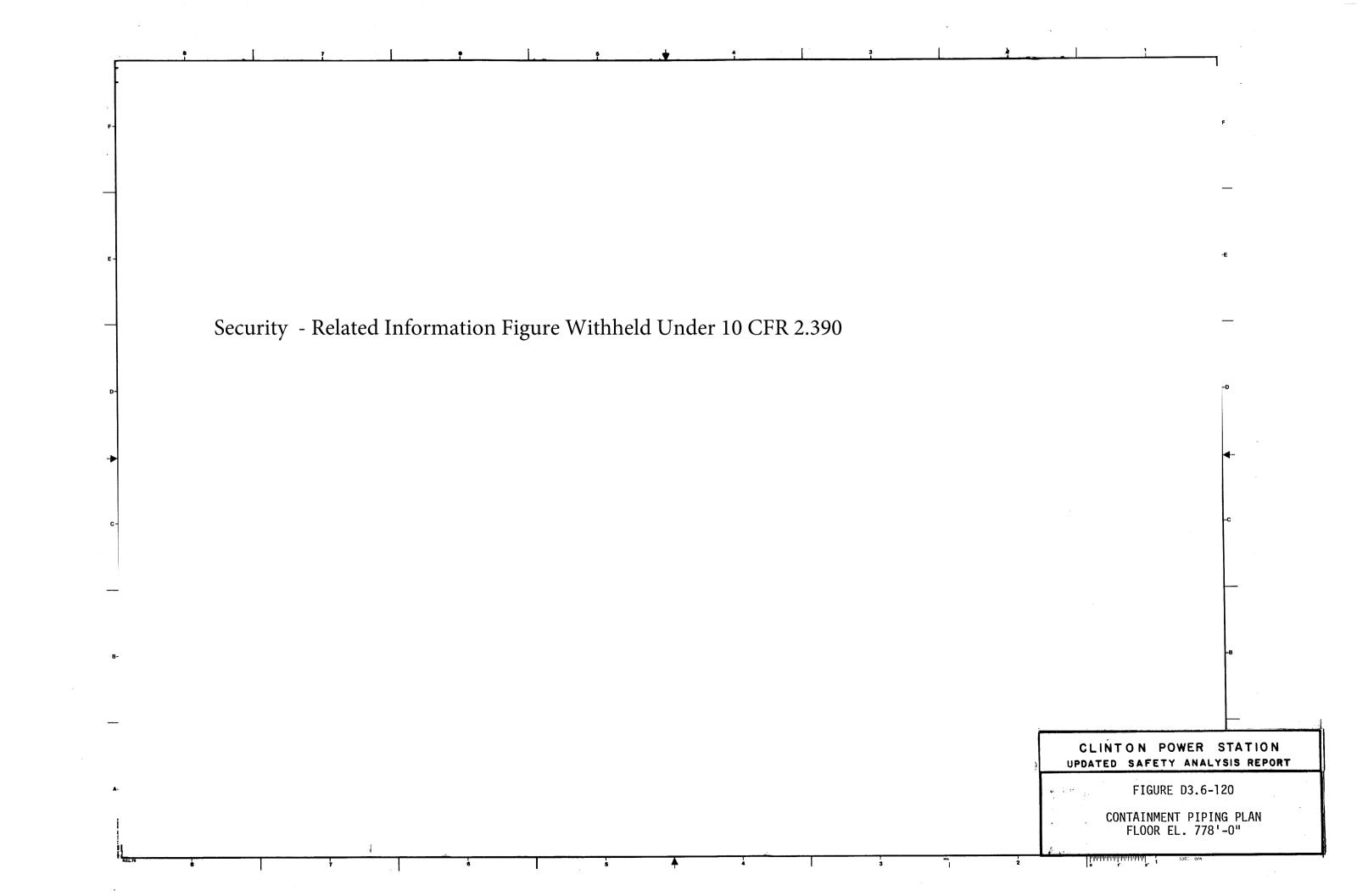


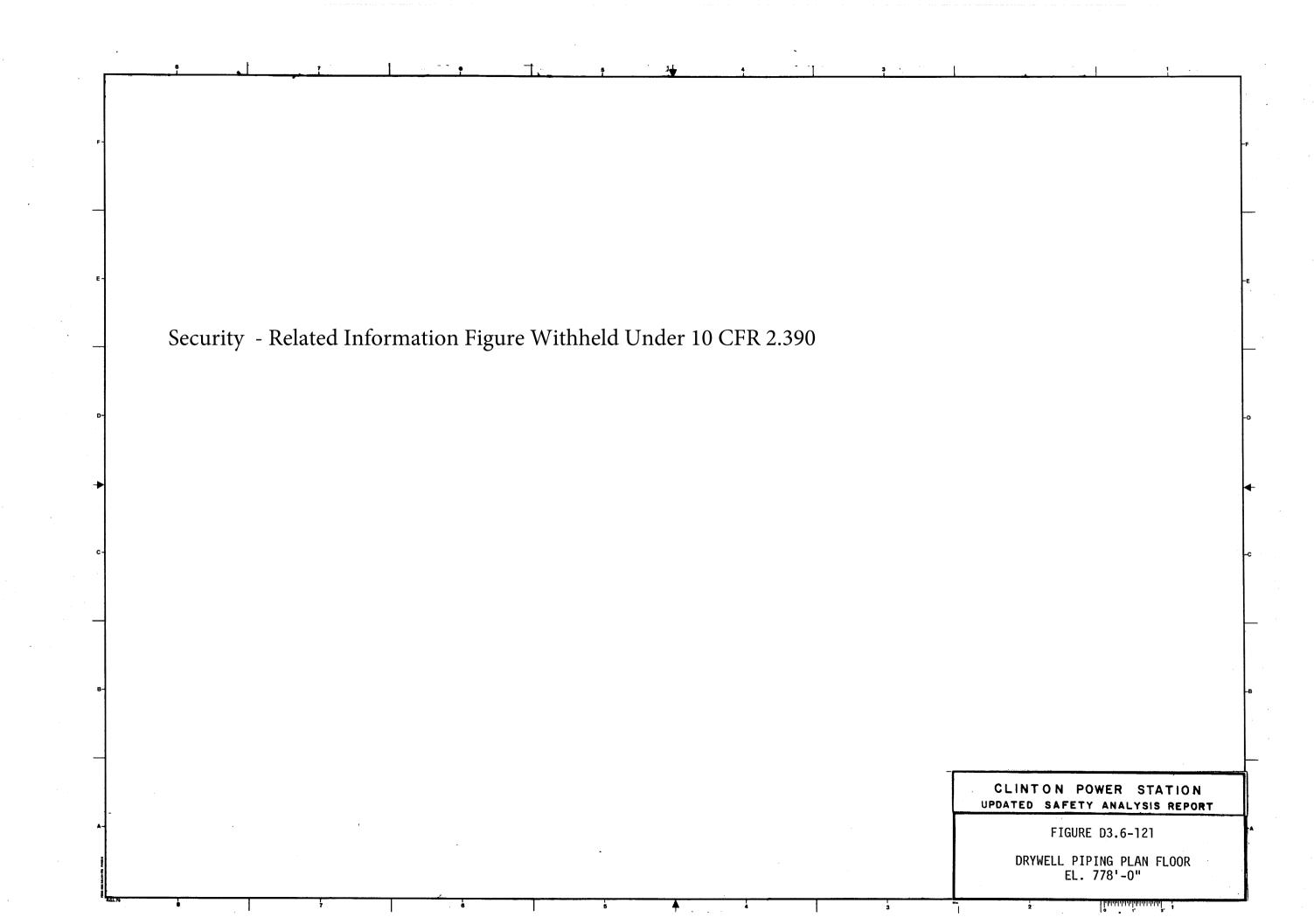


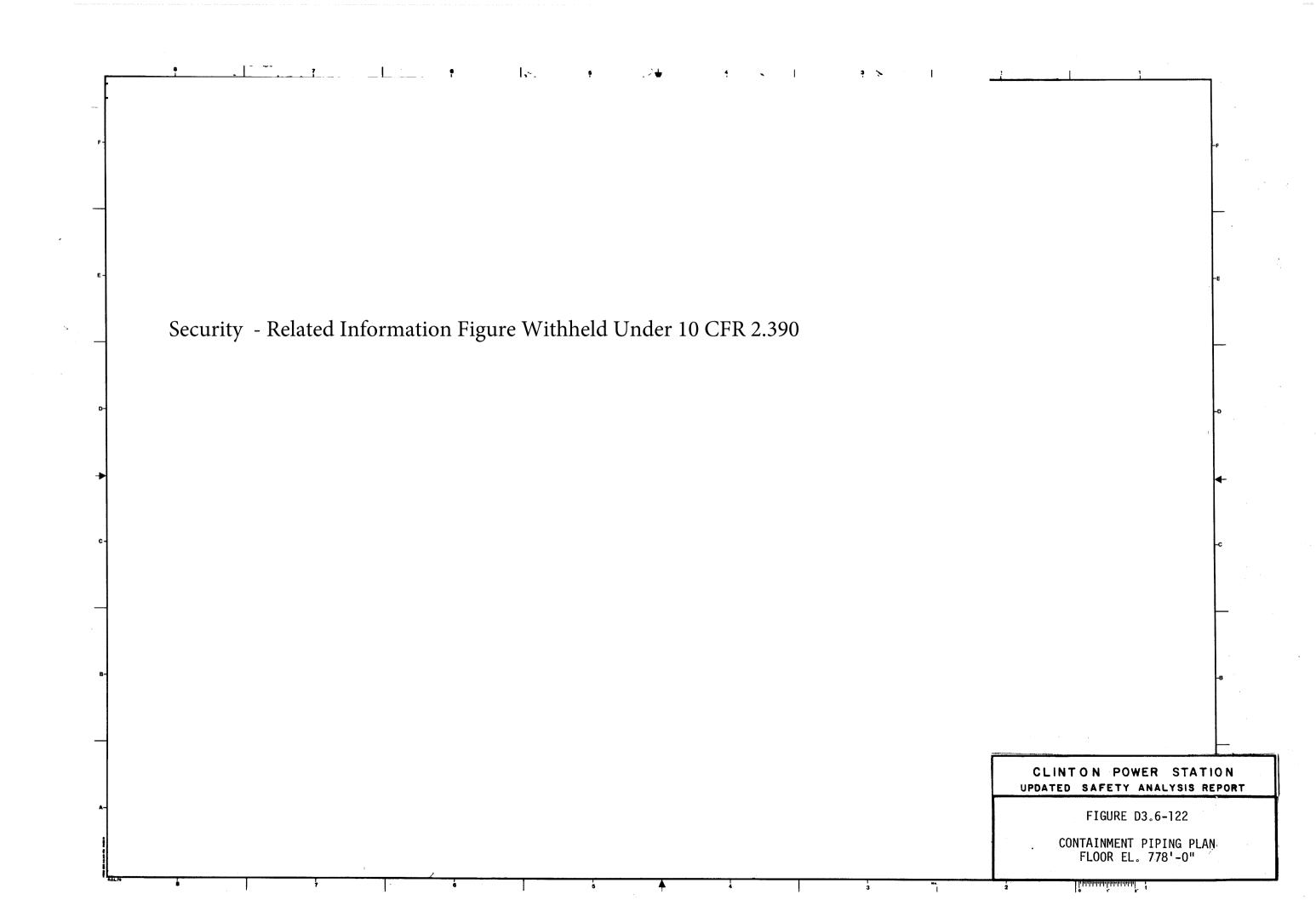
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-117 DRYWELL PIPING PLAN FLOOR EL. 764'-0"





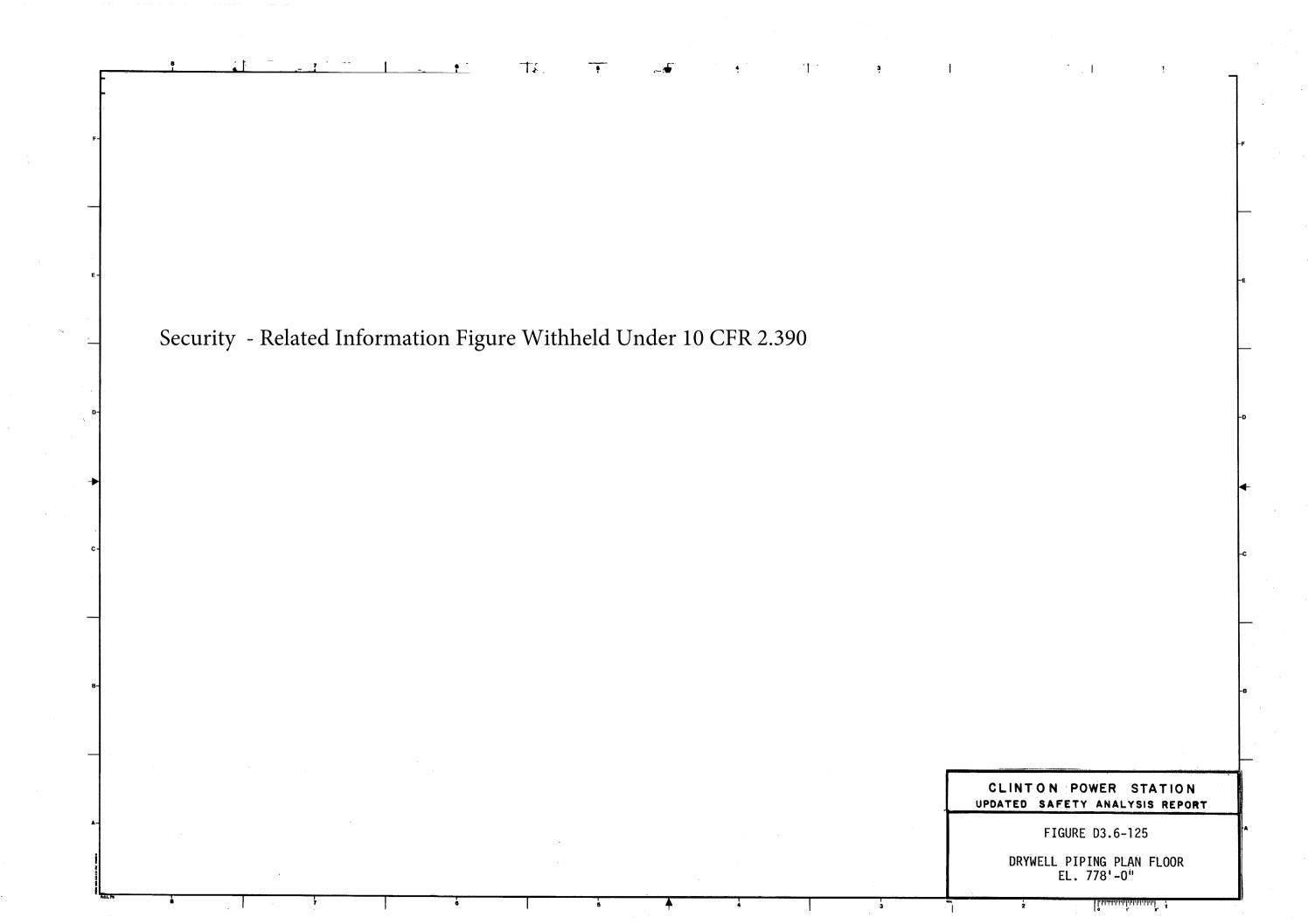


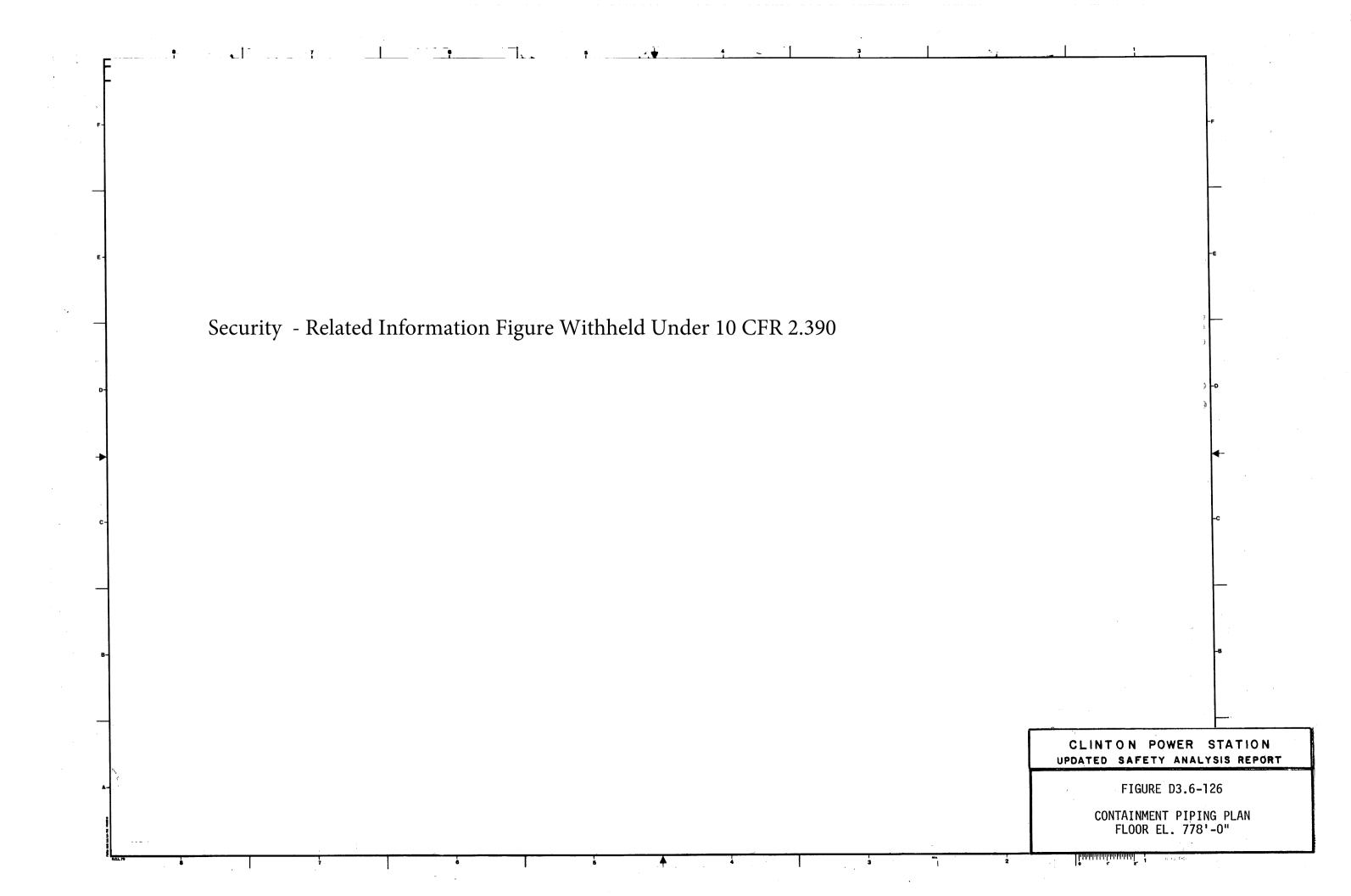


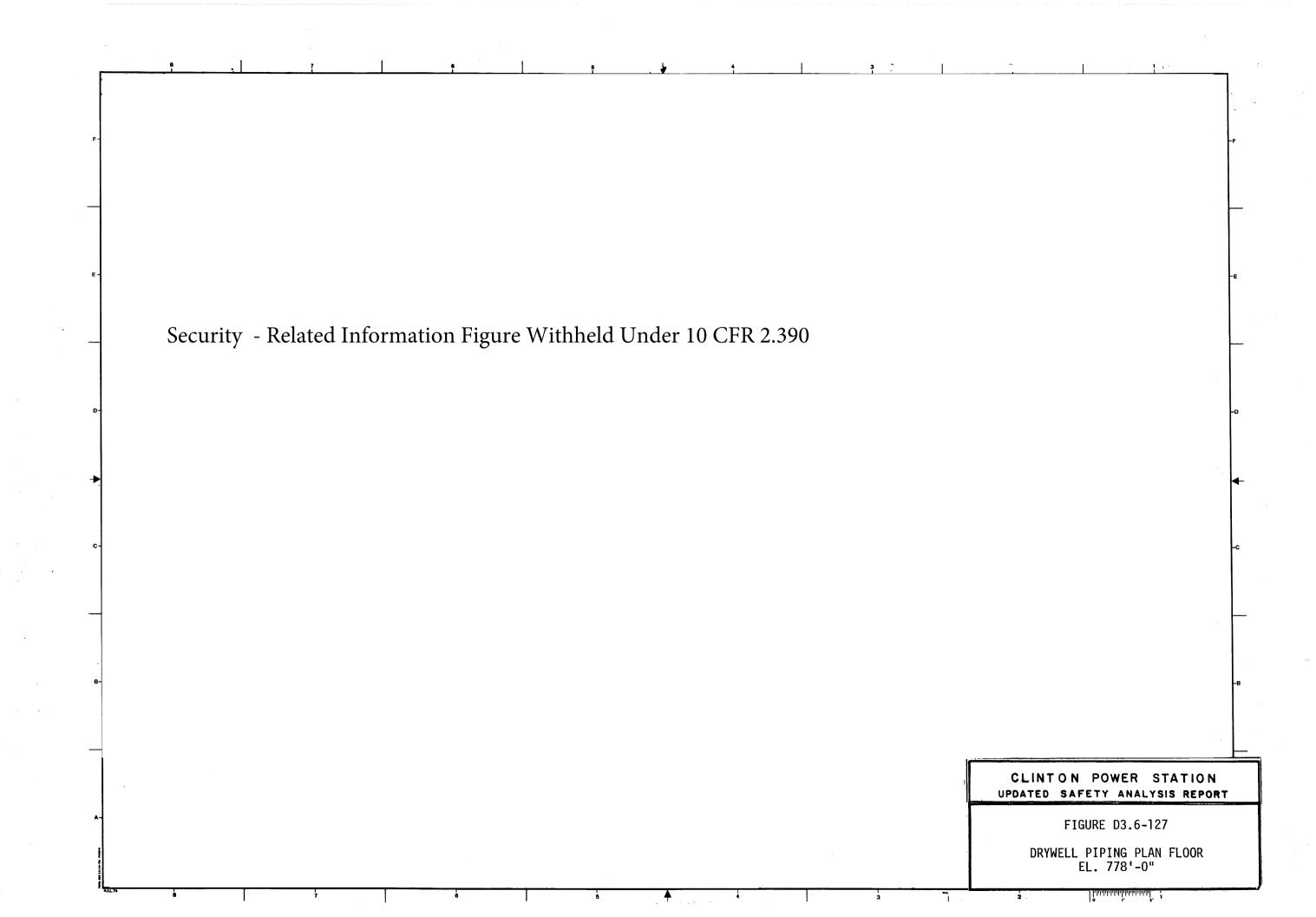


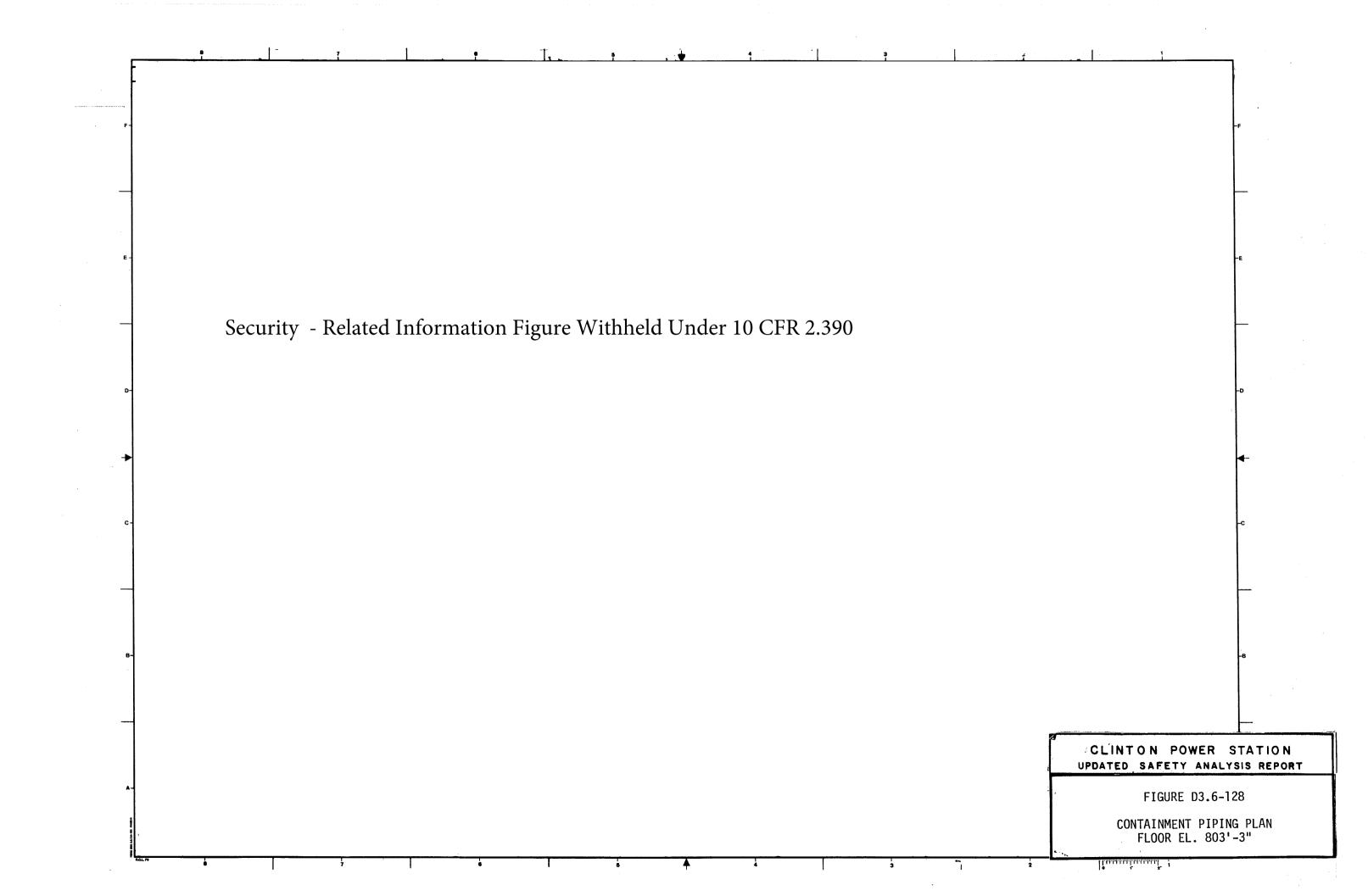
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-123 DRYWELL PIPING PLAN FLOOR EL. 778'-0"

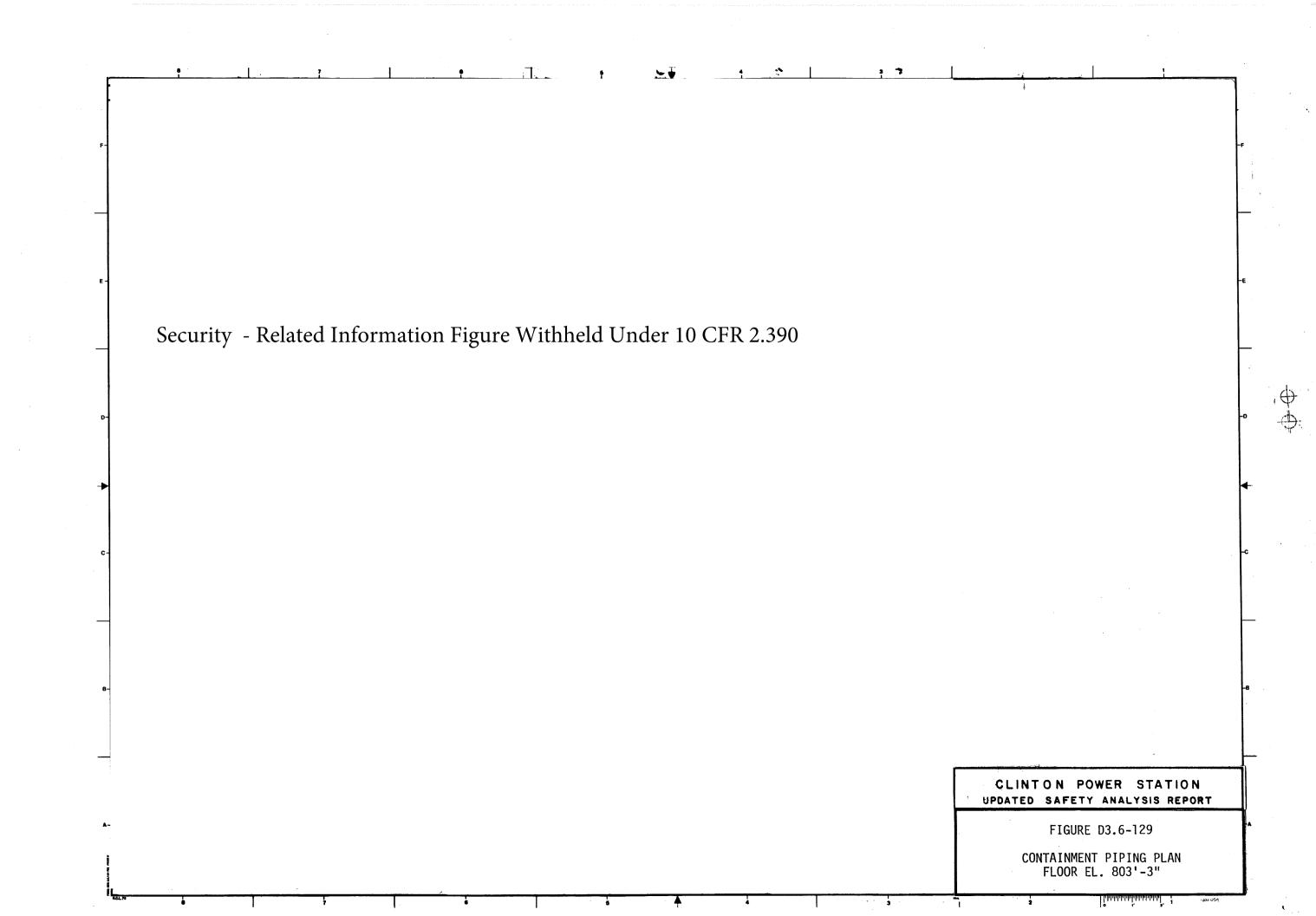
Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION FIGURE D3.6-124 CONTAINMENT PIPING PLAN FLOOR EL. 778'-0"

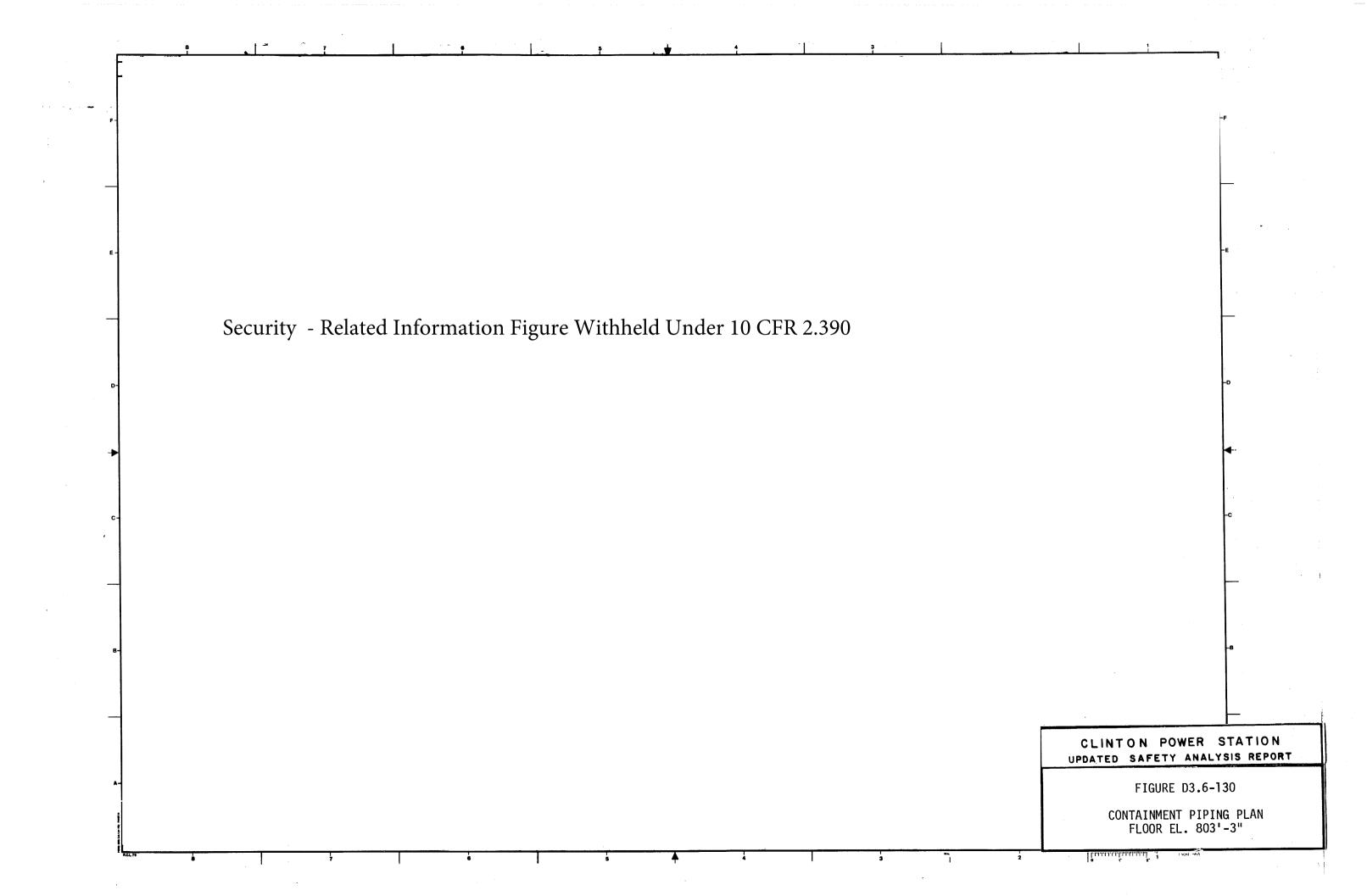




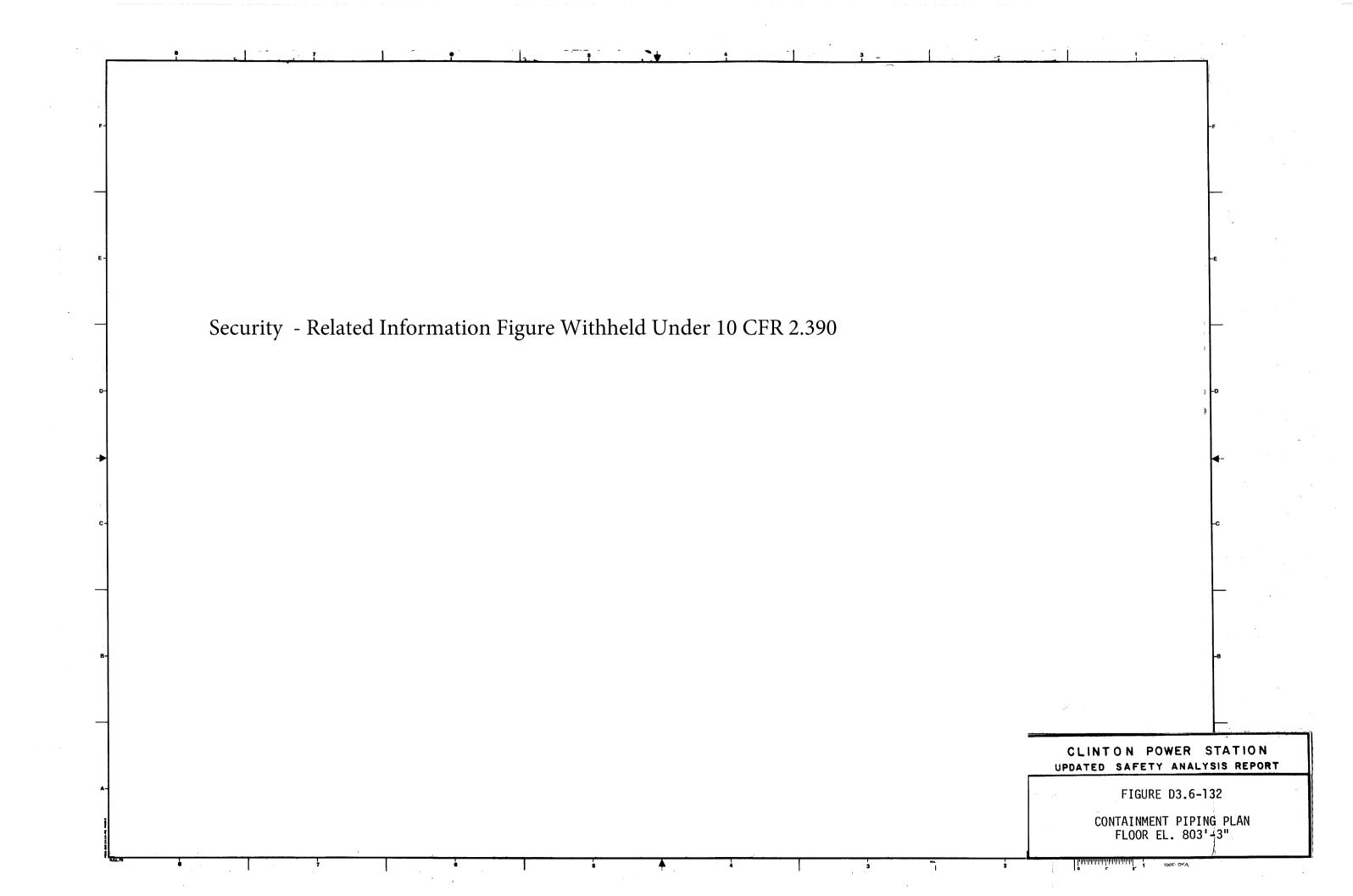


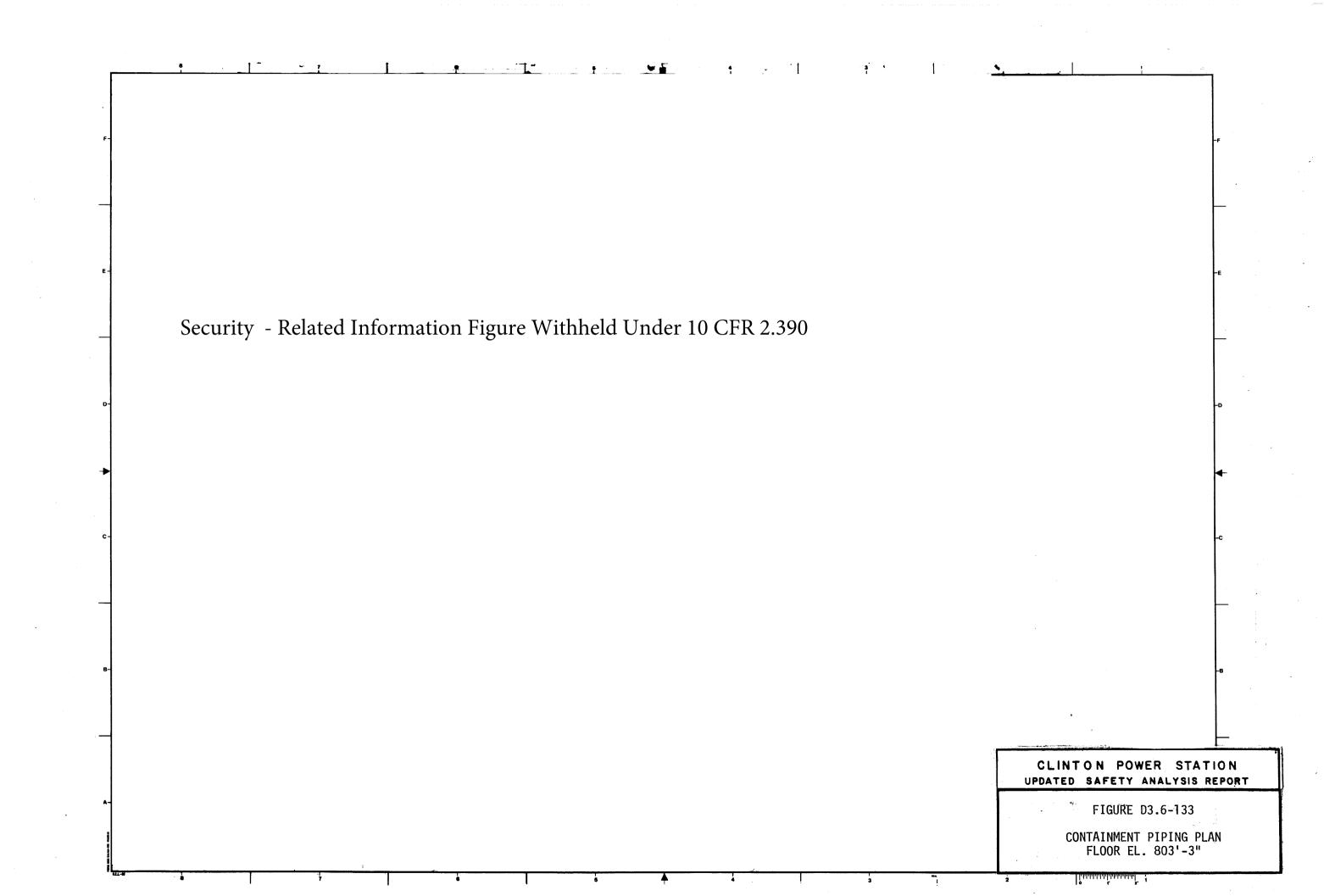






Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE D3.6-131 CONTAINMENT PIPING PLAN FLOOR EL. 803'-3"



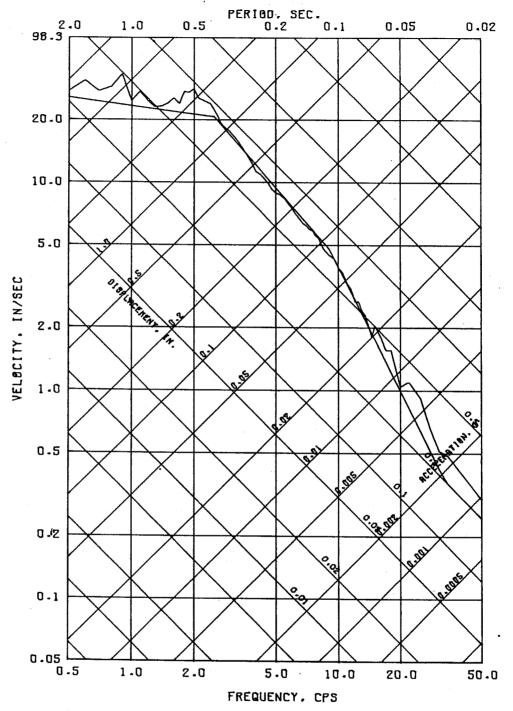


Security - Related Information Figure Withheld Under 10 CFR 2.390

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE D3.6-134

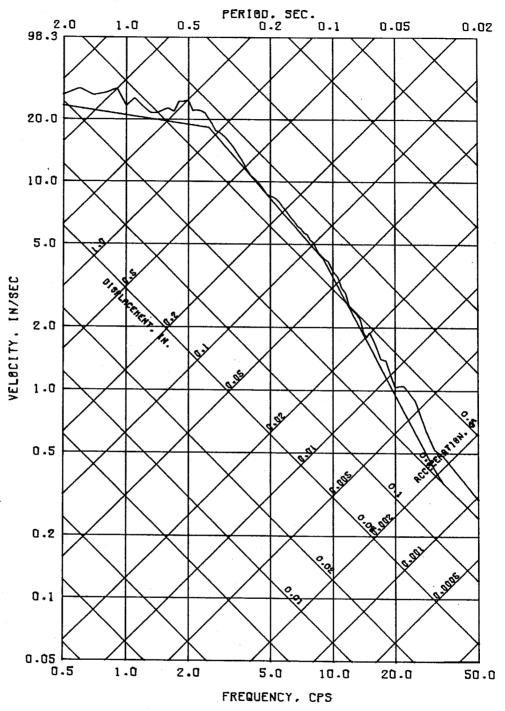
FLOOD PROTECTION ARRANGEMENT OF CIRC. WATER SCREEN HOUSE



SLH MATCH WITH HORIZ R.G. SPEC 2 PER DAMP

FIGURE 3.7-1

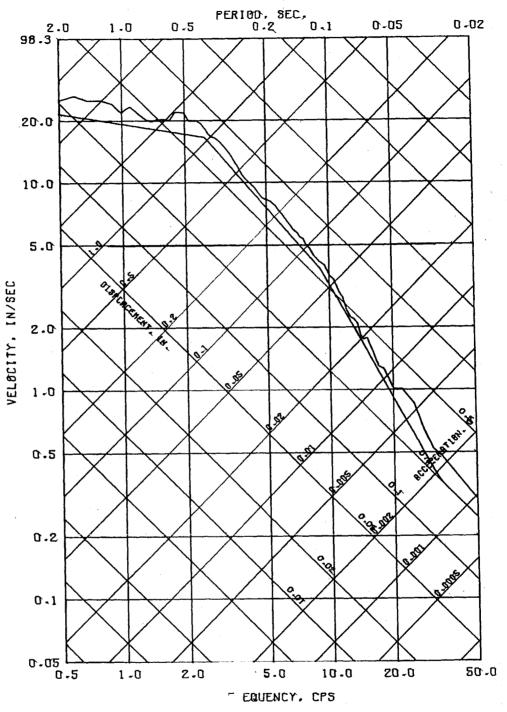
HORIZONTAL RESPONSE SPECTRA (2% DAMPING)



SLH MATCH WITH HORIZ R.G. SPEC 3 PER DAMP

FIGURE 3.7-2

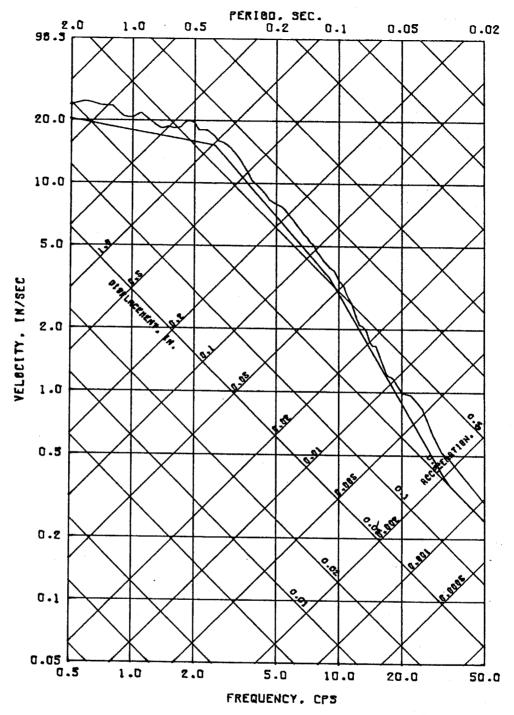
HORIZONTAL RESPONSE SPECTRA (3% DAMPING).



SLH MATCH WITH HORIZ R.G. SPEC 4 PER DAMP

FIGURE 3.7-3

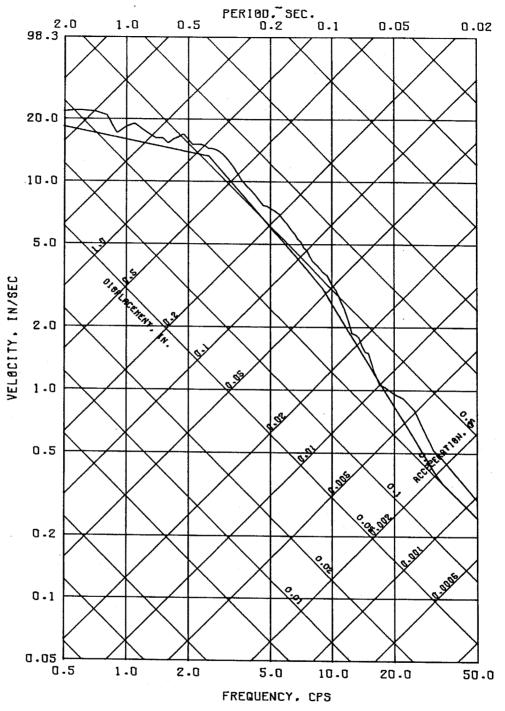
HORIZONTAL RESPONSE SPECTRA (4% DAMPING)



SLH MATCH WITH HORIZ R.G. SPEC 5 PER DAMP

FIGURE 3.7-4

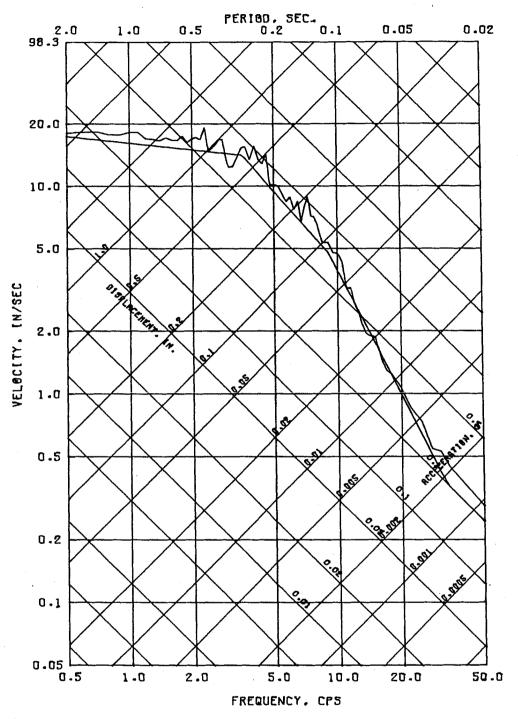
HORIZONTAL RESPONSE SPECTRA (5% DAMPING)



SLH MATCH WITH HORIZ R.G. SPEC 7 PER DAMP

FIGURE 3.7-5

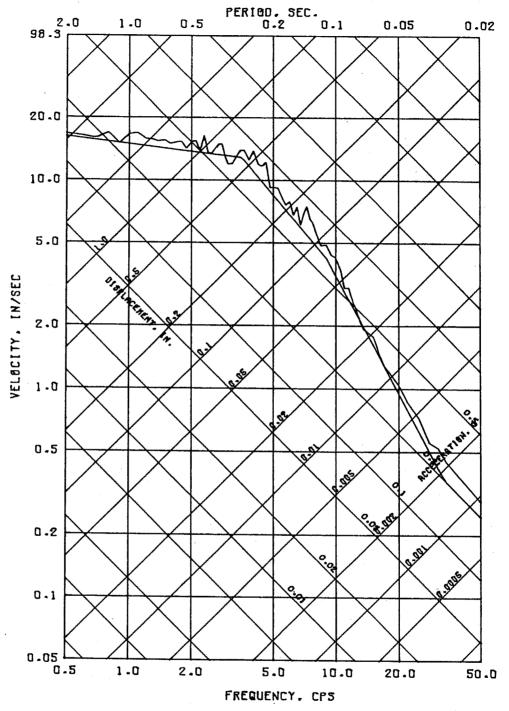
HORIZONTAL RESPONSE SPECTRA (7% DAMPING)



SLV MATCH WITH VERT R.G. SPEC 2 PER DAMP

FIGURE 3.7-6

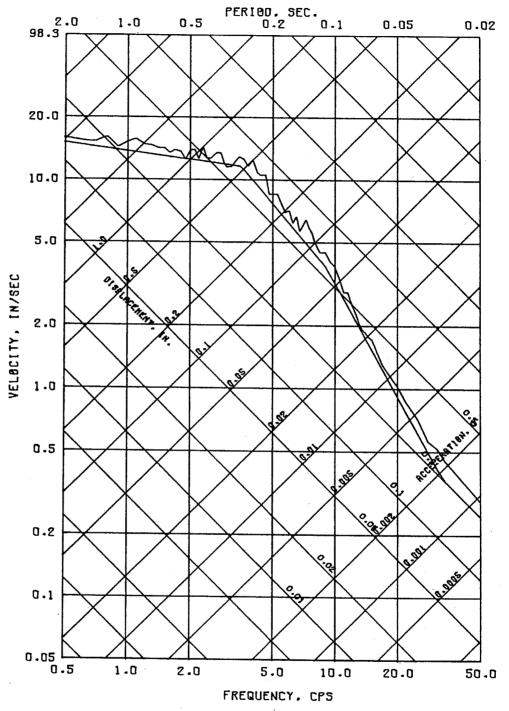
VERTICAL RESPONSE SPECTRA (2% DAMPING)



SLV MATCH WITH VERT R.G. SPEC 3 PER DAMP

FIGURE 3.7-7

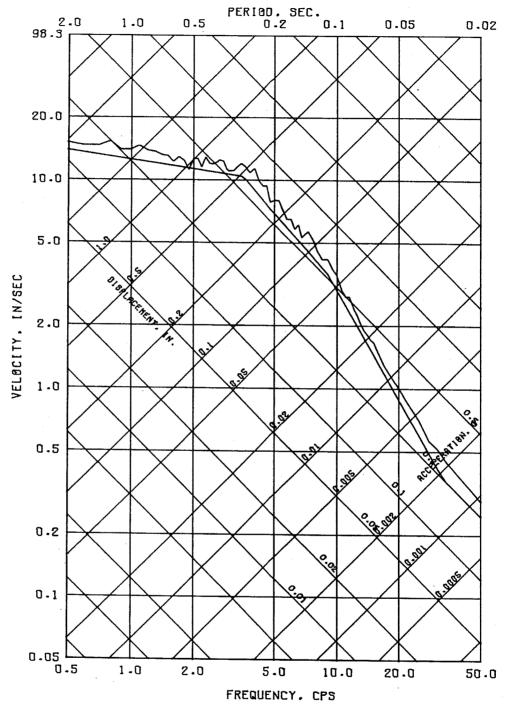
VERTICAL RESPONSE SPECTRA (3% DAMPING)



SLV MATCH WITH VERT R.G. SPEC 4 PER DAMP

FIGURE 3.7-8

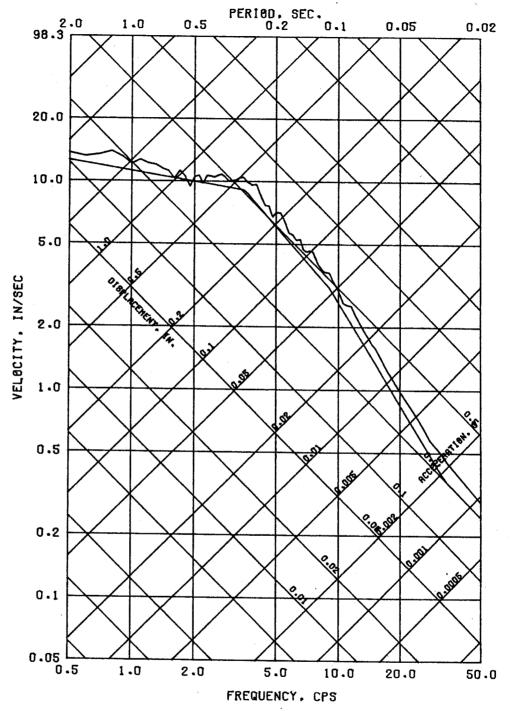
VERTICAL RESPONSE SPECTRA (4% DAMPING)



SLV MATCH WITH VERT R.G. SPEC 5 PER DAMP

FIGURE 3.7-9

VERTICAL RESPONSE SPECTRA (5% DAMPING)



SLV MATCH WITH VERT R.G. SPEC 7 PER DAMP

FIGURE 3.7-10

VERTICAL RESPONSE SPECTRA (7% DAMPING)

6 & 6' WISCONSIN GLACIAL TILL	7 4 @ 5' INTER GLACIAL DEPOSITS	1407 1/2' ILLINOIAN GLACIAL TILL	I @ IO' LACUSTRINE DEPOSITS	5 @ 15' PRE-ILLINOIAN TILL	WROCK WILLIAM
36'	20	105	<u>o</u>	75	

FIGURE 3.7-11

SOIL LAYERING MODEL USED IN SHAKE



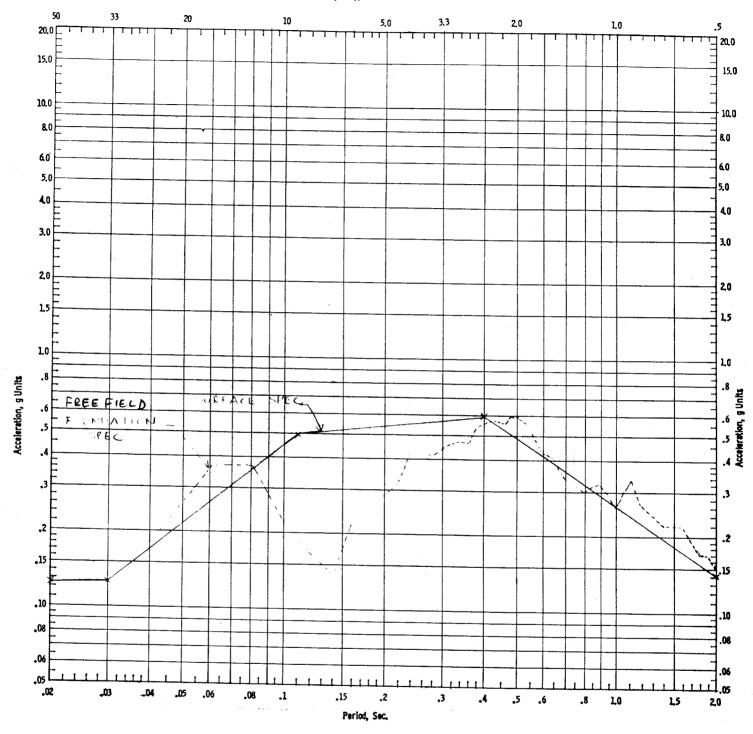


FIGURE 3.7-12

COMPARISON BETWEEN FREE FIELD FOUNDATION AND SURFACE SPECTRA FOR OBE HORIZONTAL 1% DAMPING

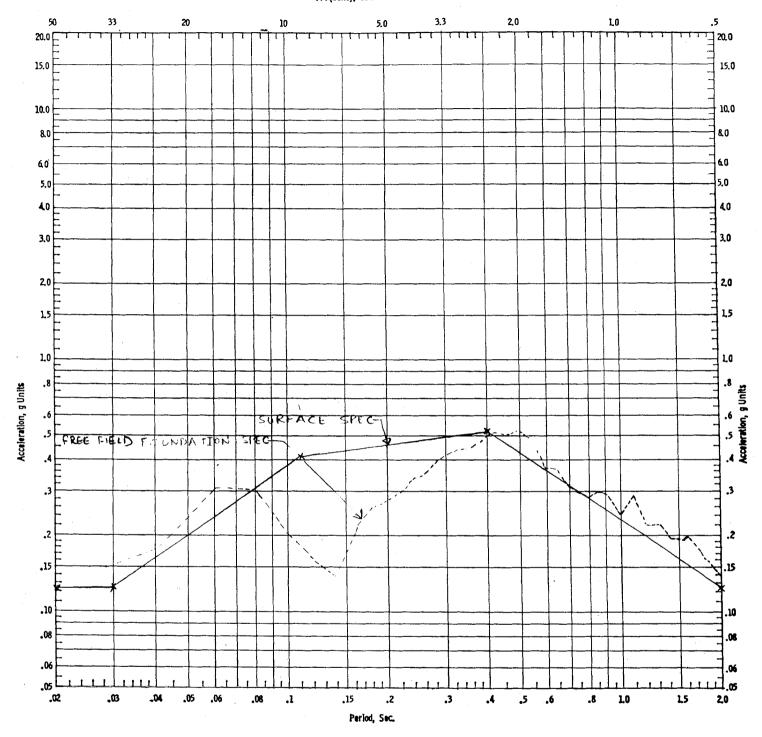


FIGURE 3.7-13

COMPARISON BETWEEN FREE FIELD FOUNDATION AND SURFACE SPECTRA FOR OBE HORIZONTAL 2% DAMPING

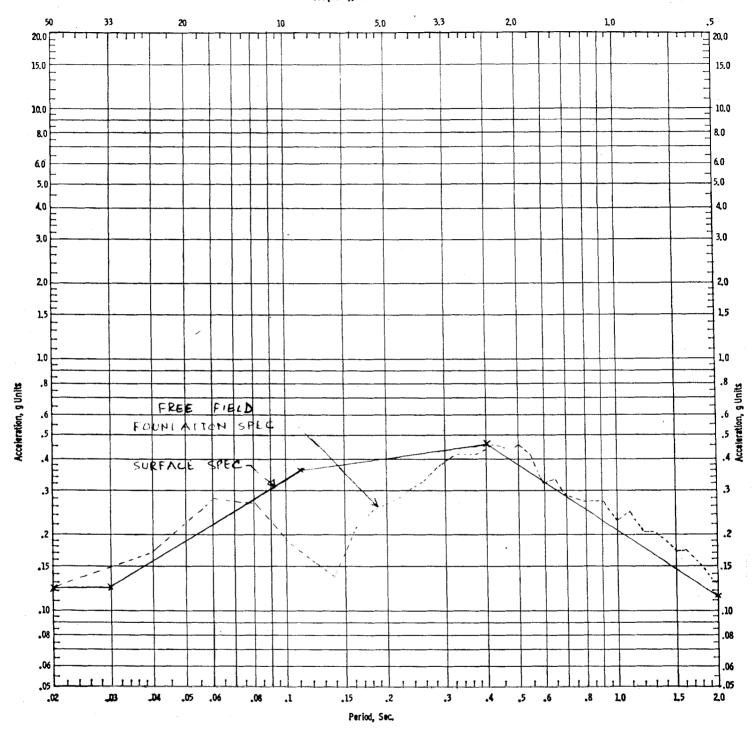


FIGURE 3.7-14

COMPARISON BETWEEN FREE FIELD FOUNDATION AND SURFACE SPECTRA FOR OBE HORIZONTAL 3% DAMPING

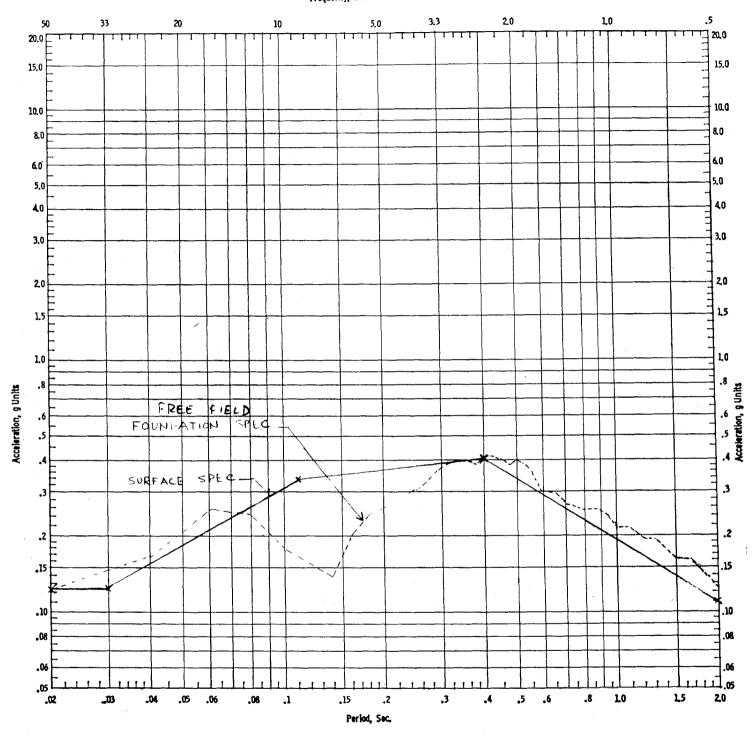


FIGURE 3.7-15

COMPARISON BETWEEN FREE FIELD FOUNDATION AND SURFACE SPECTRA FOR OBE HORIZONTAL 4% DAMPING

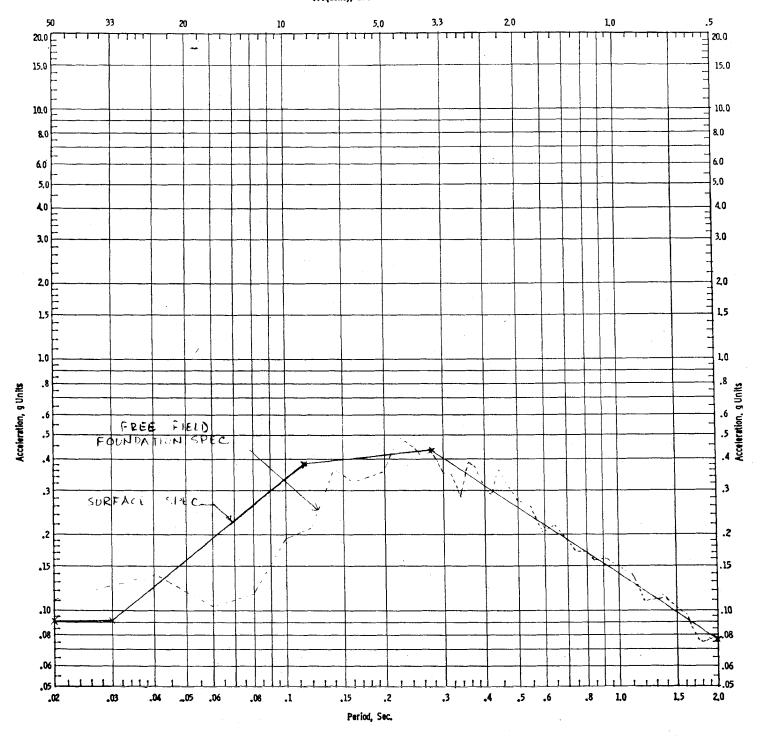


FIGURE 3.7-16

COMPARISON BETWEEN FREE FIELD FOUNDATION AND SURFACE SPECTRA FOR OBE VERTICAL 1% DAMPING

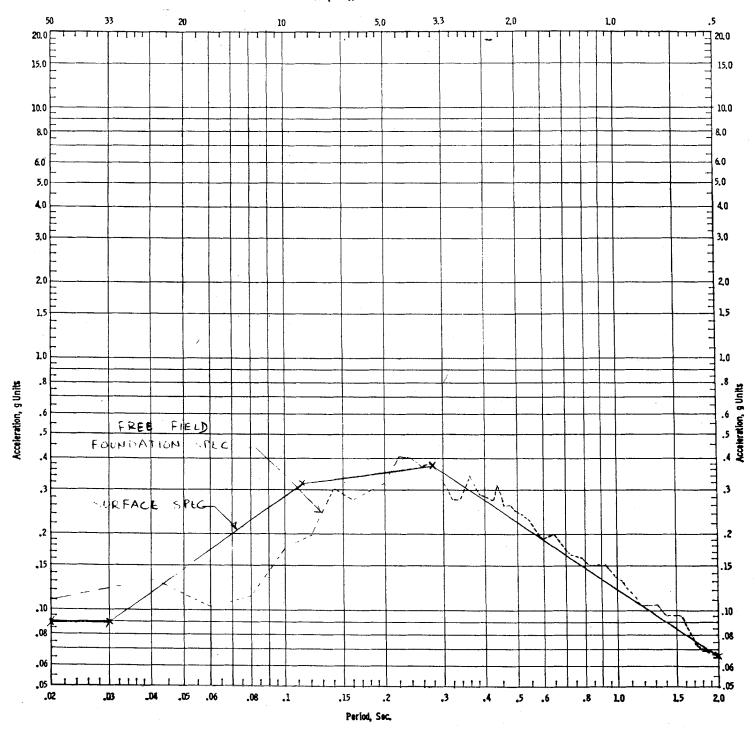


FIGURE 3.7-17

COMPARISON BETWEEN FREE FIELD FOUNDATION AND SURFACE SPECTRA FOR OBE VERTICAL 2% DAMPING

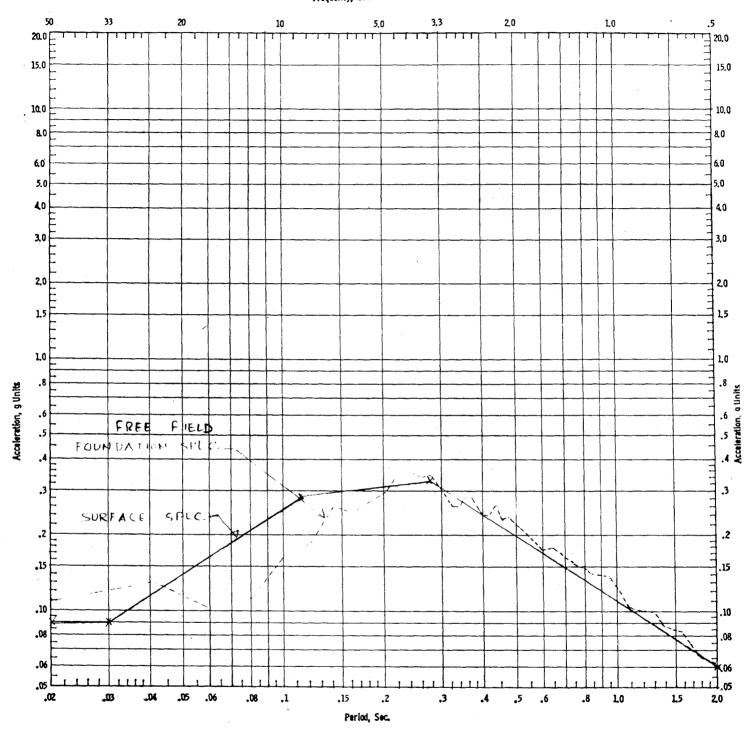


FIGURE 3.7-18

COMPARISON BETWEEN FREE FIELD FOUNDATION AND SURFACE SPECTRA FOR OBE VERTICAL 3% DAMPING

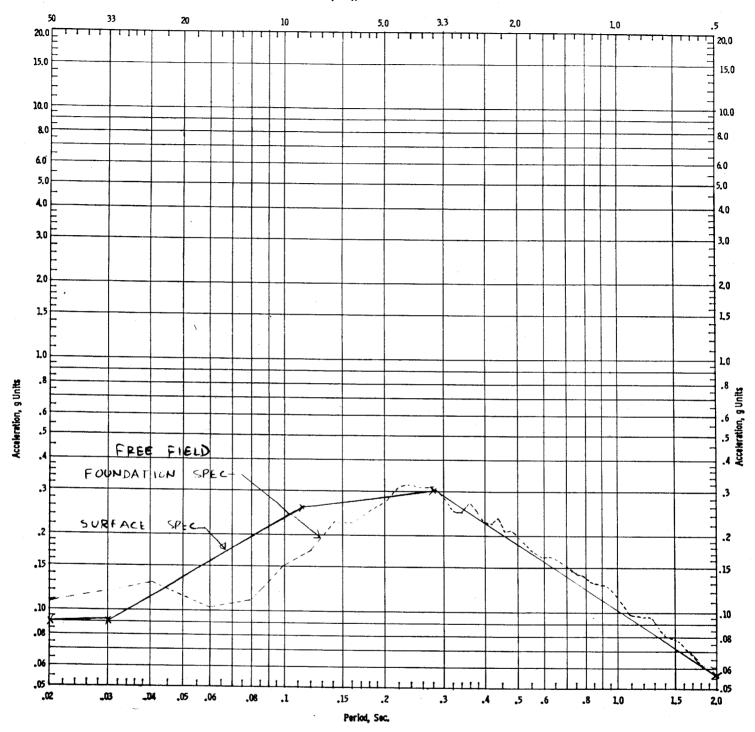


FIGURE 3.7-19

COMPARISON BETWEEN FREE FIELD FOUNDATION AND SURFACE SPECTRA FOR OBE VERTICAL 4% DAMPING



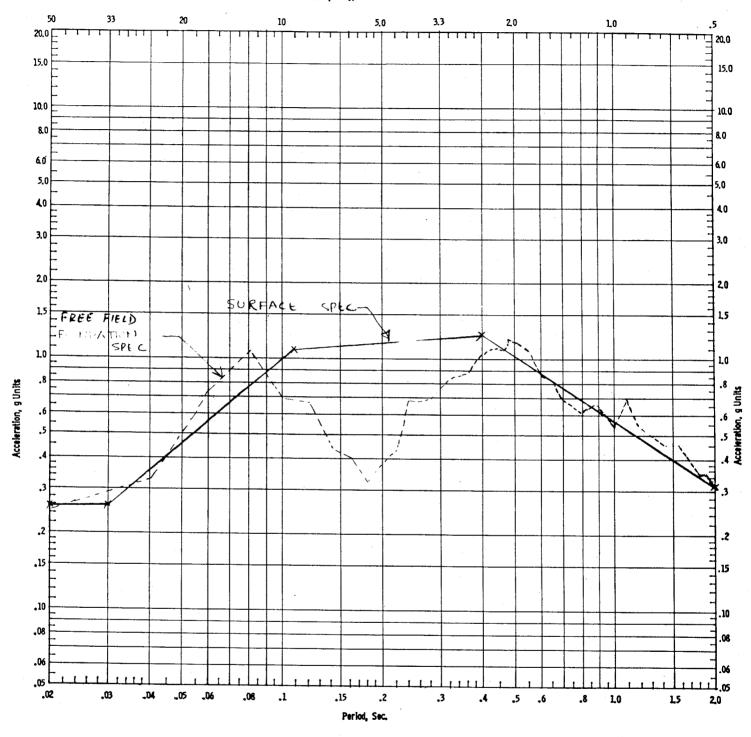


FIGURE 3.7-20

COMPARISON BETWEEN FREE FIELD FOUNDATION AND SURFACE SPECTRA FOR SSE HORIZONTAL 1% DAMPING



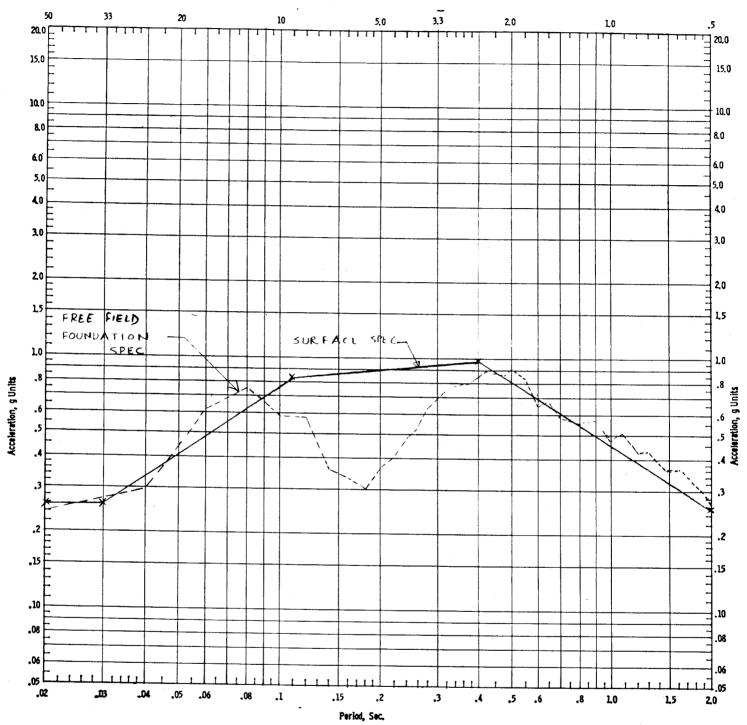


FIGURE 3.7-21

COMPARISON BETWEEN FREE FIELD FOUNDATION AND SURFACE SPECTRA FOR SSE HORIZONTAL 3% DAMPING

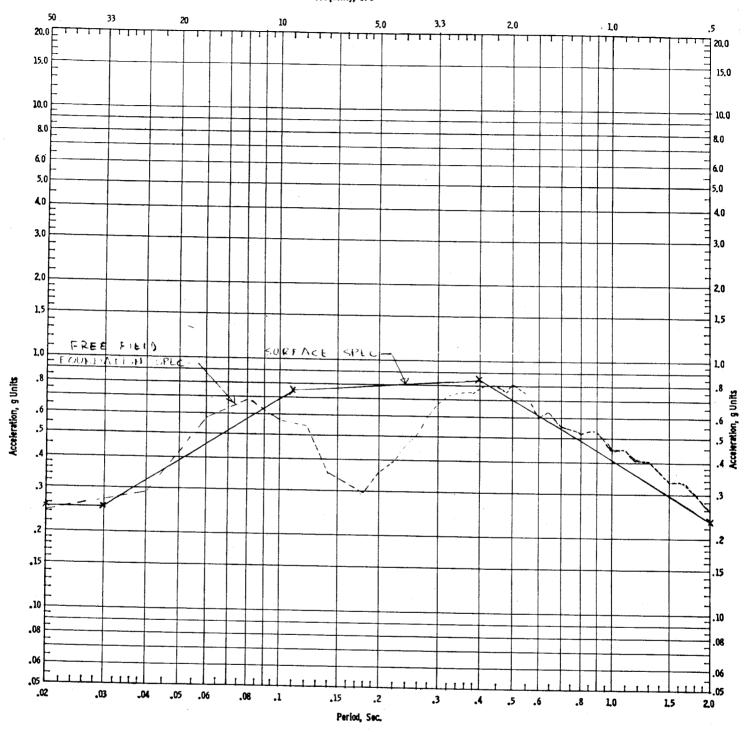


FIGURE 3.7-22

COMPARISON BETWEEN FREE FIELD FOUNDATION AND SURFACE SPECTRA FOR SSE HORIZONTAL 4% DAMPING



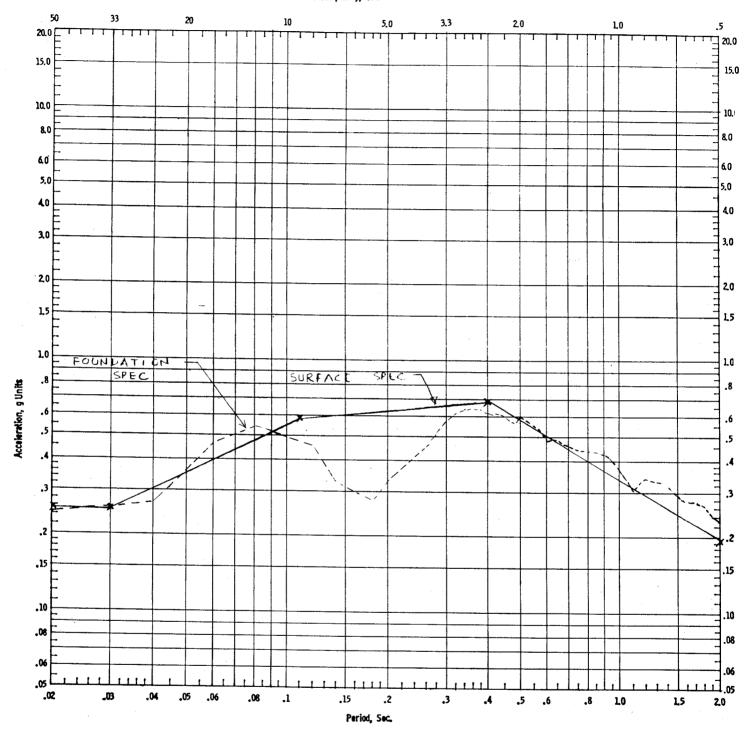


FIGURE 3.7-23

COMPARISON BETWEEN FREE FIELD FOUNDATION AND SURFACE SPECTRA FOR SSE HORIZONTAL 7% DAMPING



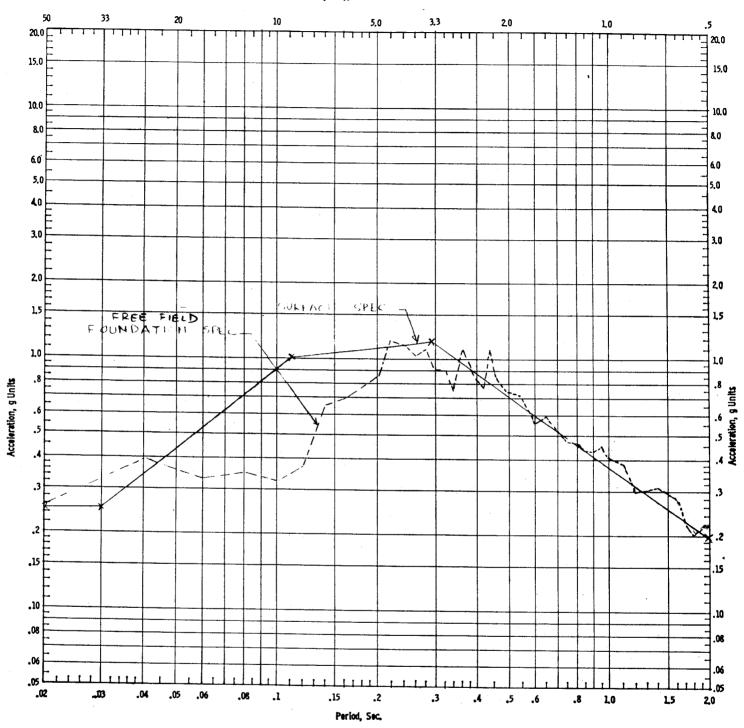


FIGURE 3.7-24

COMPARISON BETWEEN FREE FIELD FOUNDATION AND SURFACE SPECTRA FOR SSE VERTICAL 1% DAMPING



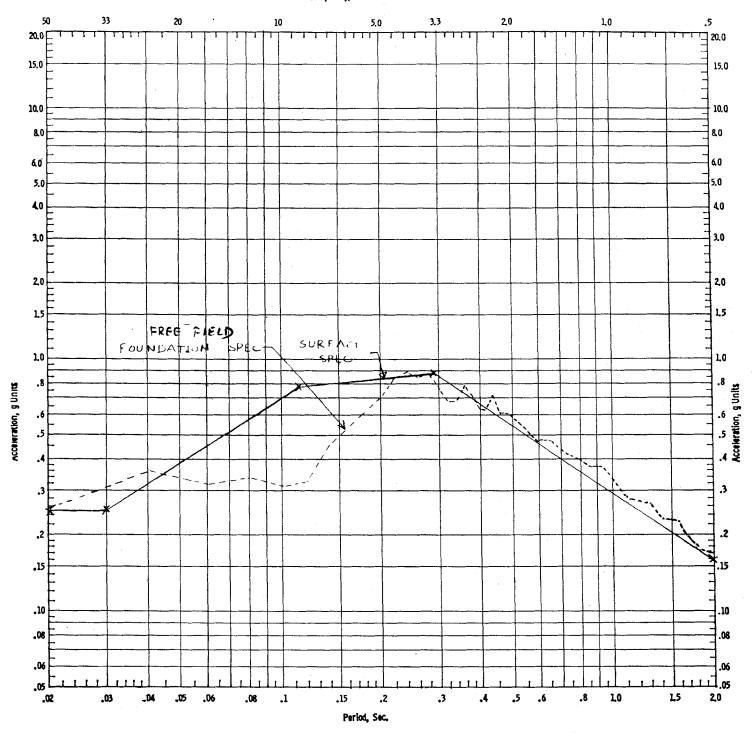


FIGURE 3.7-25

COMPARISON BETWEEN FREE FIELD FOUNDATION AND SURFACE SPECTRA FOR SSE VERTICAL 3% DAMPING



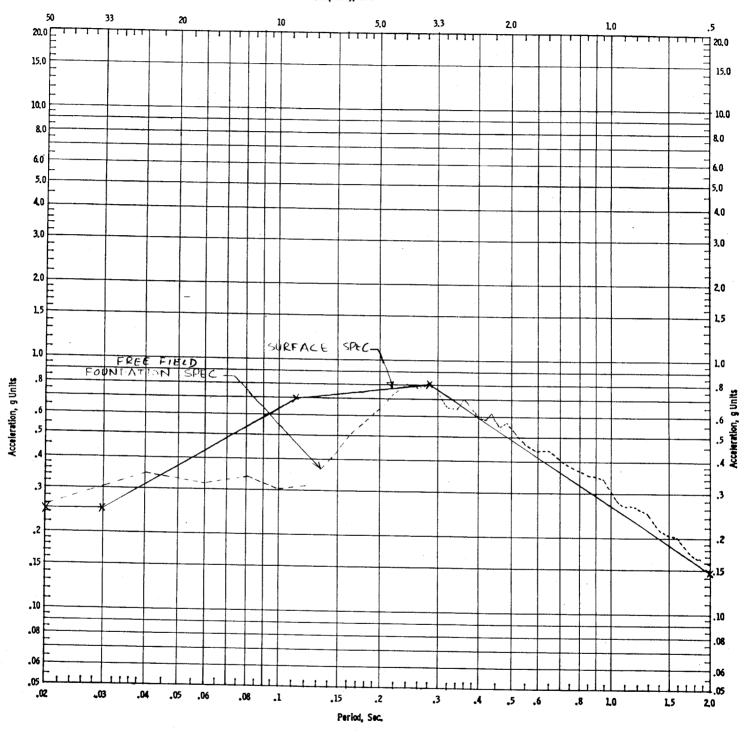


FIGURE 3.7-26

COMPARISON BETWEEN FREE FIELD FOUNDATION AND SURFACE SPECTRA FOR SSE VERTICAL 4% DAMPING

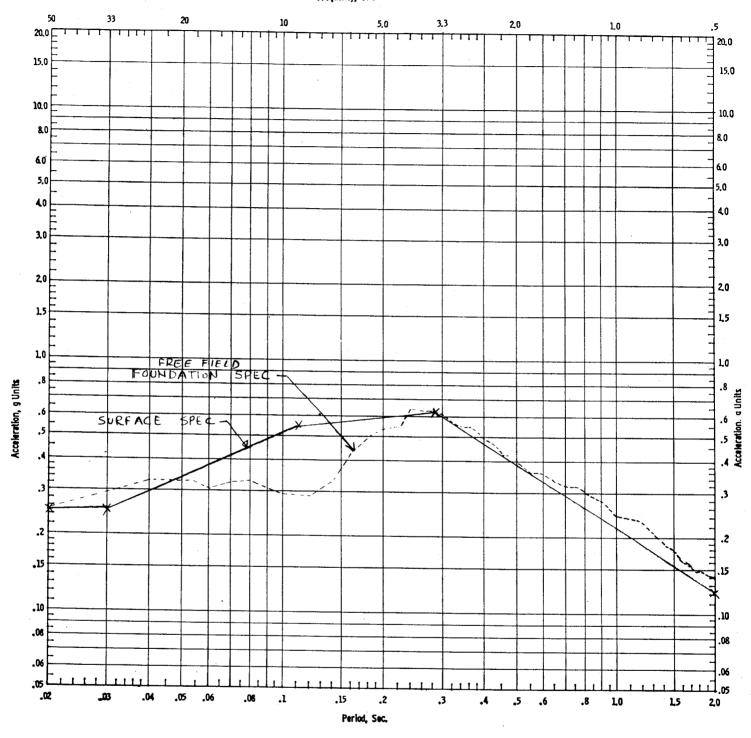


FIGURE 3.7-27

COMPARISON BETWEEN FREE FIELD FOUNDATION AND SURFACE SPECTRA FOR SSE VERTICAL 7% DAMPING

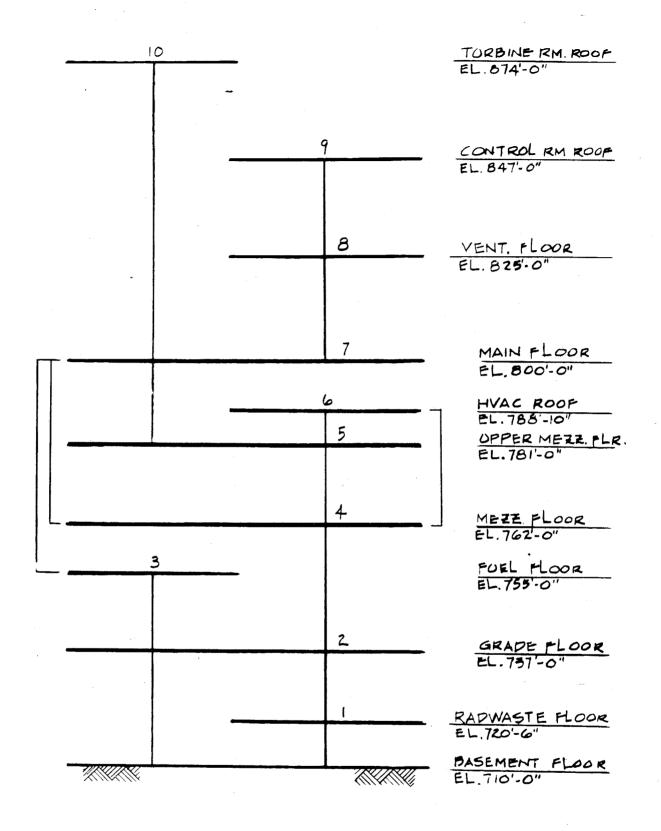
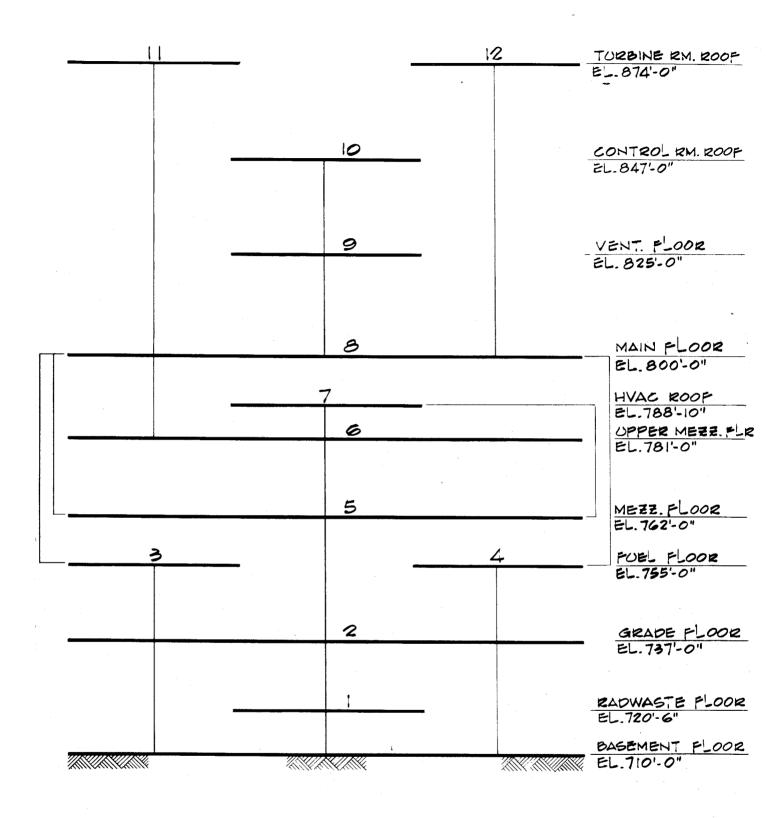


FIGURE 3.7-28

ONE UNIT - HORIZONTAL BUILDING MODEL



NOTE: UNIT 2 HAS BEEN CANCELLED.

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-29

TWO UNIT - HORIZONTAL BUILDING MODEL

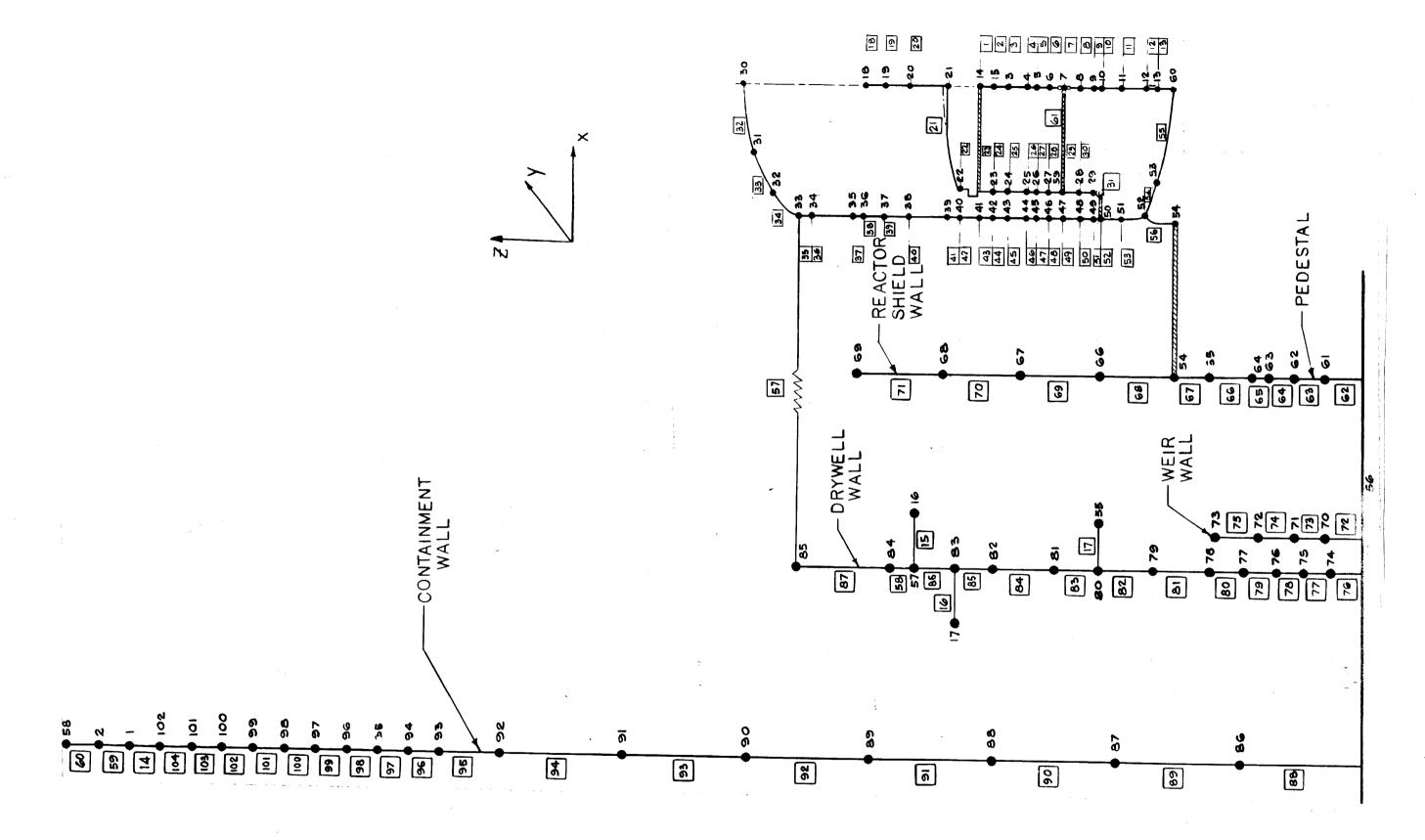
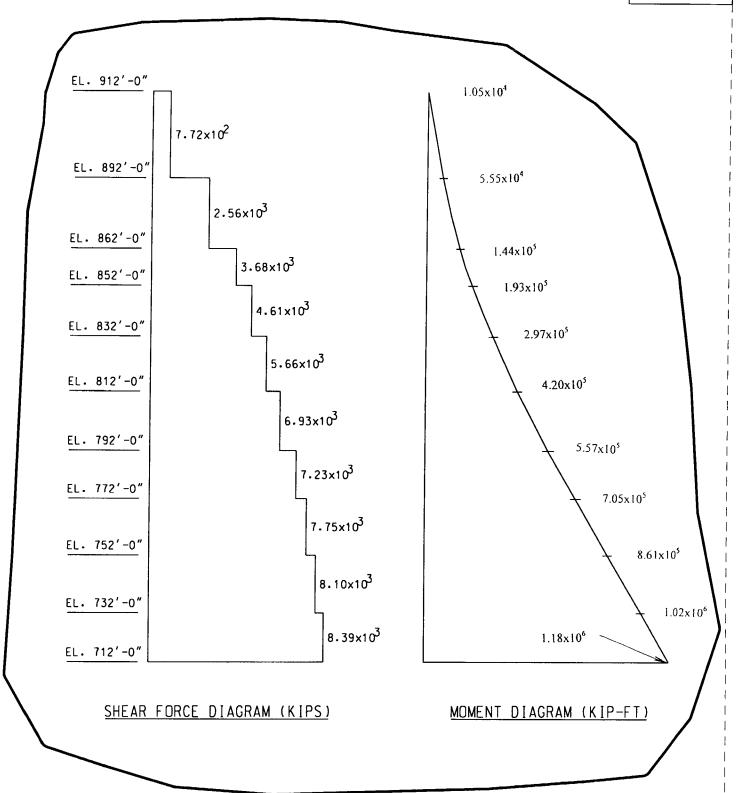


FIGURE 3.7-30

CONTAINMENT BUILDING HORIZONTAL MODEL

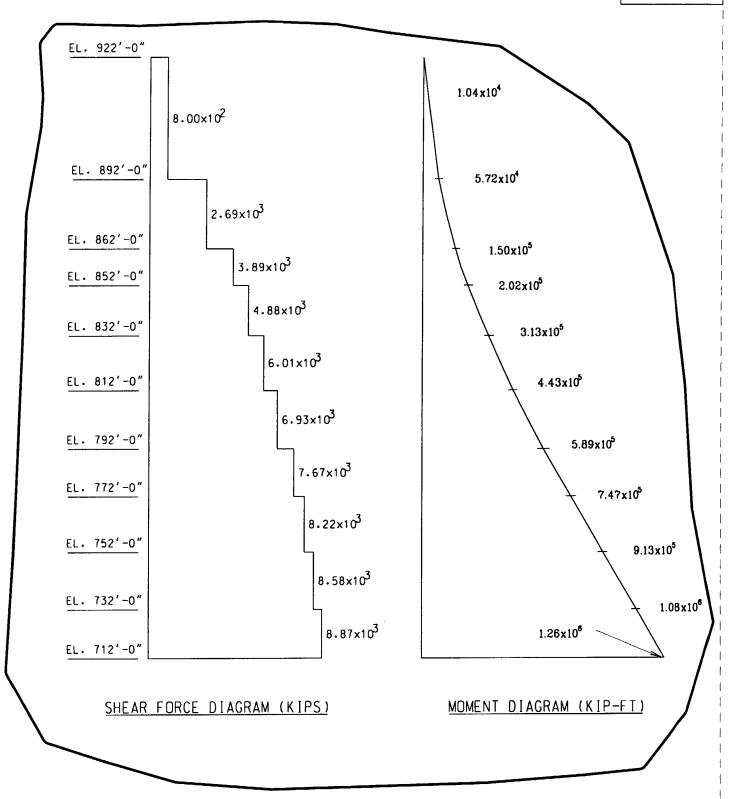
REVISION 10 OCTOBER 2001



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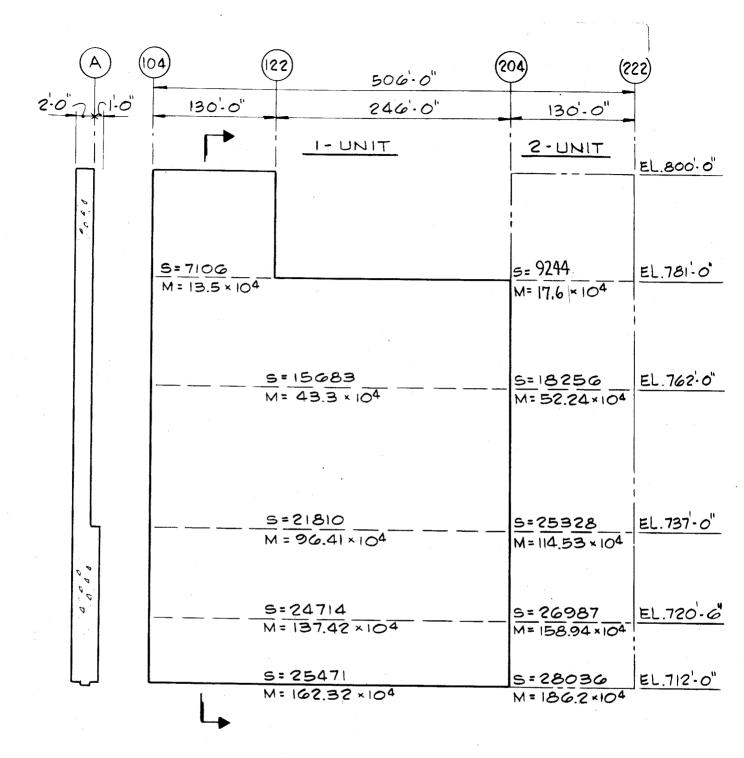
FIGURE 3.7-31
SEISMIC RESPONSE LOADS (E-W)
FOR SSE FOR THE CONTAINMENT

REVISION 10 OCTOBER 2001



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FIGURE 3.7-32
SEISMIC RESPONSE LOADS (N-S)
FOR SSE FOR THE CONTAINMENT



ELEVATION OF SHEAR WALL ALONG COLUMN ROW "A"

NOTES:

1. S' DENOTES SHEAR FORCE (KIPS)

"M" DENOTES OVERTURNING MOMENTS (KIP-FT.)

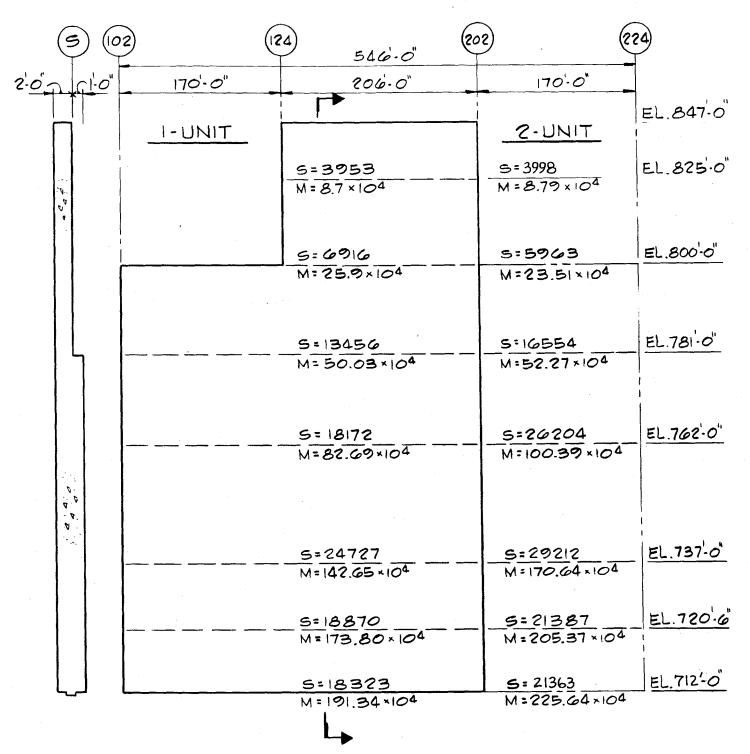
2. SHEAR FORCES AND MOMENTS SHOWN ARE FOR SSE LOADING.

NOTE: UNIT 2 HAS BEEN CANCELLED.

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-33

SEISMIC RESPONSE LOADS FOR SSE FOR SHEAR WALLS - COLUMN ROW "A"



ELEVATION OF SHEAR WALL ALONG COLUMN ROW "S"

NOTES:

1."S" DENOTES SHEAR FORCE (KIPS)

"M" DENOTES OVERTURNING MOMENTS (KIP-FT.) 2.SHEAR FORCES AND MOMENTS SHOWN ARE FOR

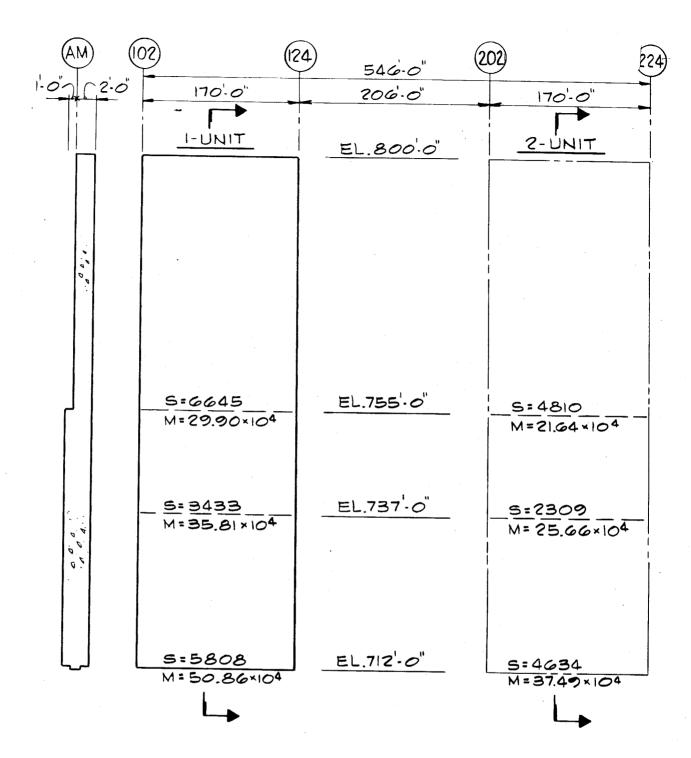
SSE LOADING.

NOTE: UNIT 2 HAS BEEN CANCELLED.

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FIGURE 3.7-34

SEISMIC RESPONSE LOAD FOR SSE FOR SHEAR WALLS - COLUMN ROW "S"



ELEVATION OF SHEAR WALLS ALONG COLUMN ROW "AM"

NOTES:

1. S DENOTES SHEAR FORCE (KIPS)

'M" DENOTES OVERTURNING MOMENTS (KIP-FT.) 2 SHEAR FORCES AND MOMENTS SHOWN ARE FOR

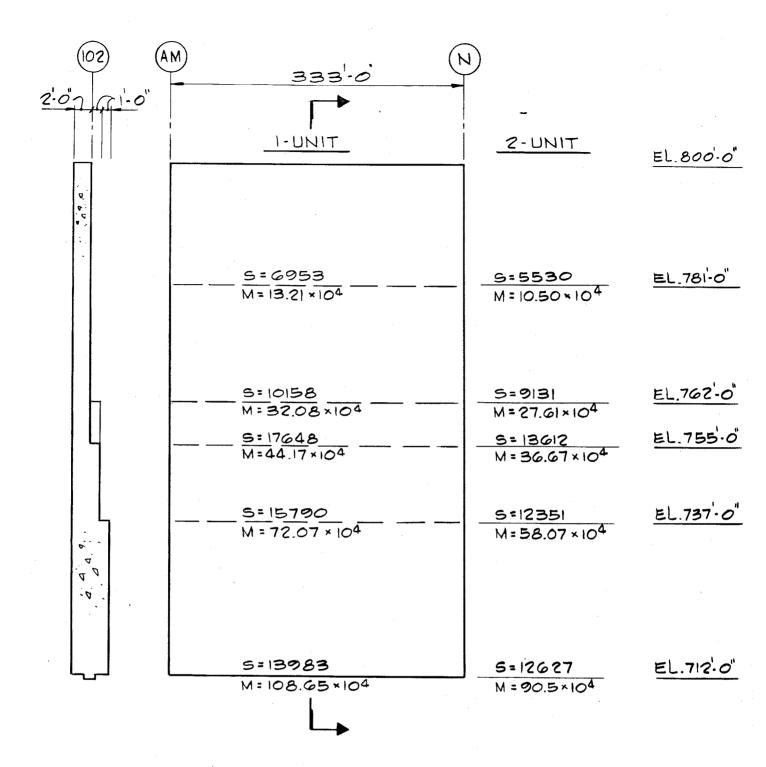
SSE LOADING.

NOTE: UNIT 2 HAS BEEN CANCELLED.

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FIGURE 3.7-35

SEISMIC RESPONSE LOAD FOR SSE FOR SHEAR WALLS - COLUMN ROW "AM"



ELEVATION OF SHEAR WALL ALONG COLUMN ROW "102"

NOTES:

1. 5 DENOTES SHEAR FORCE (KIPS).

"M" DENOTES OVERTURNING MOMENTS (KIP-FT).

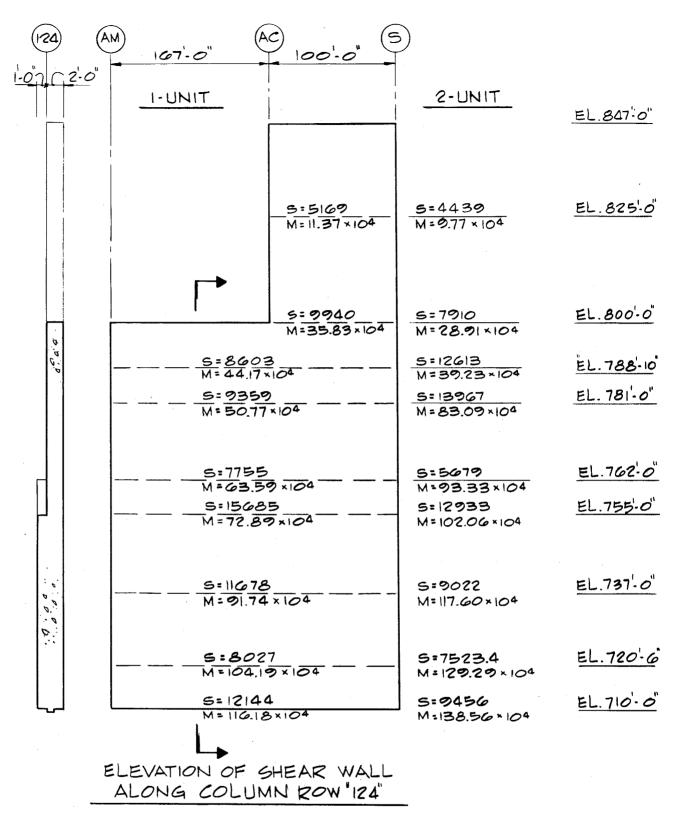
2. SHEAR FORCES AND MOMENTS SHOWN ARE FOR SSE LOADING.

NOTE: UNIT 2 HAS BEEN CANCELLED.

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-36

SEISMIC RESPONSE LOAD FOR SSE FOR SHEAR WALLS - COLUMN ROW "102"



NOTES:

1. S" DENOTES SHEAR FORCE (KIPS)

"M" DENOTES OVERTURNING MOMENTS (KIP- FT.)

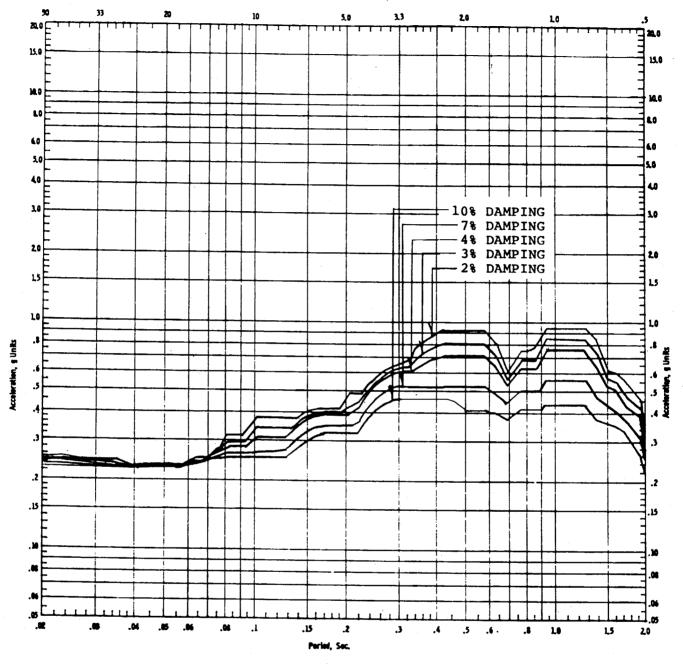
2. SHEAR FORCES AND MOMENTS SHOWN ARE FOR SSE LOADING.

NOTE: UNIT 2 HAS BEEN CANCELLED.

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-37

SEISMIC RESPONSE LOAD FOR SSE FOR SHEAR WALLS - COLUMN ROW "124"



LOCATION Aux., Fuel, Control, Diesel, Radwaste & Turbine Bldgs.

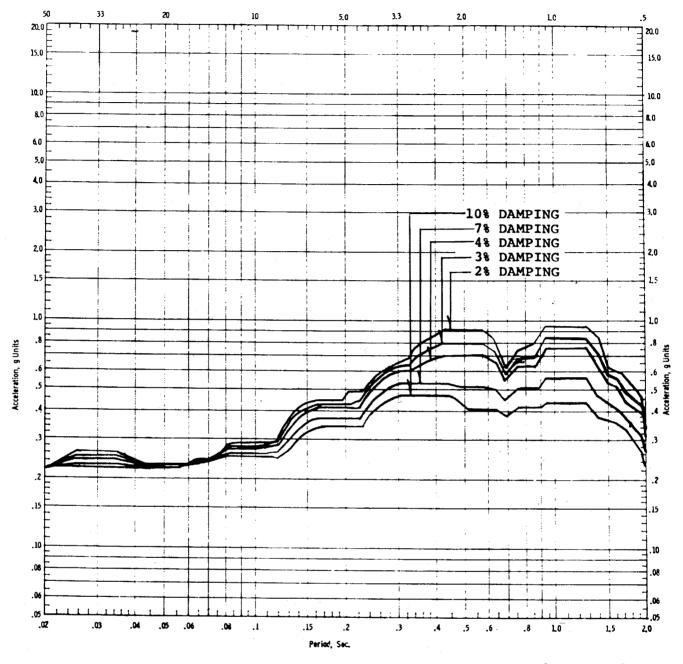
ELEVATION: Basemat Floor

SPECTRA NO. 100-SS-EW 200-SS-EW

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FIGURE 3.7-38

HORIZONTAL SSE RESPONSE SPECTRA AT BASE MAT FLOOR - X DIRECTION



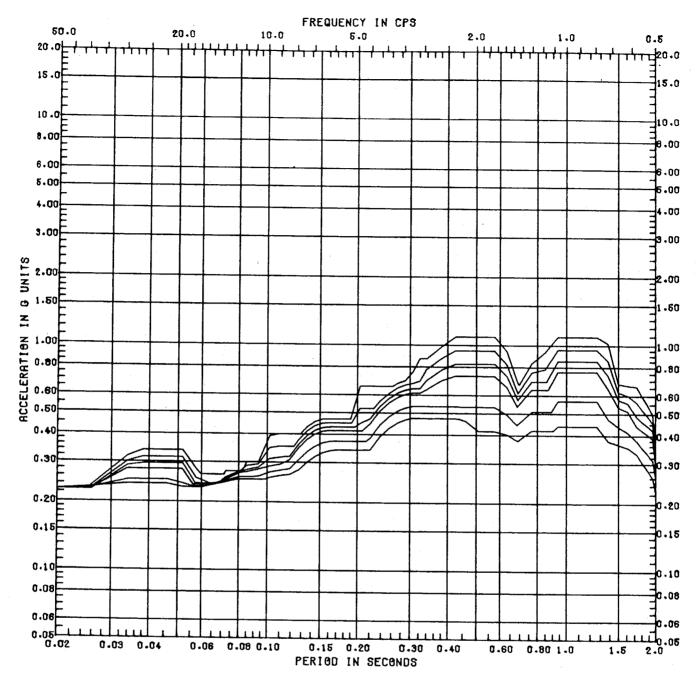
SPECTRA NO. 100-SS-NS 200-SS-NS.

LOCATION: Aux., Fuel, Control,
Diesel, Radwaste & Turbine
ELEVATION Bldgs.

Basemat Floor

FIGURE 3.7-39

HORIZONTAL SSE RESPONSE SPECTRA AT BASE MAT FLOOR - Y DIRECTION



HORIZ.

RESPONSE SPECTRA

SPECTRA NO. 317-SS-EW

ELEVATION

742'-8"

322-SS-EW

LOCATION Sacrificial Shield,

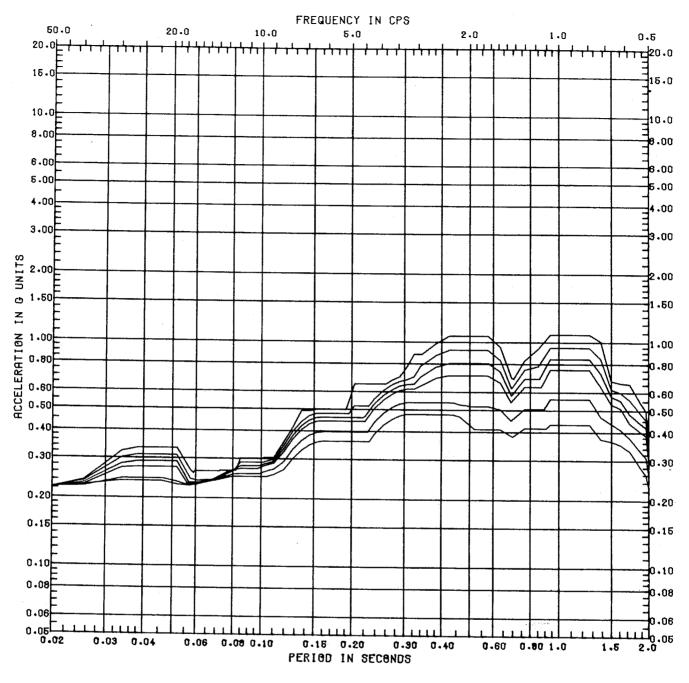
REVISION NO 02

Pedestal (RPV)

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-40

HORIZONTAL SSE RESPONSE SPECTRA AT 742'-8," SACRIFICIAL SHIELD PEDESTAL - X DIRECTION



HORIZ

RESPONSE SPECTRA

ELEVATION

742'-8"

LOCATION

Sacrificial Shield, Pedestal (RPV) SPECTRA NO. 317-SS-NS

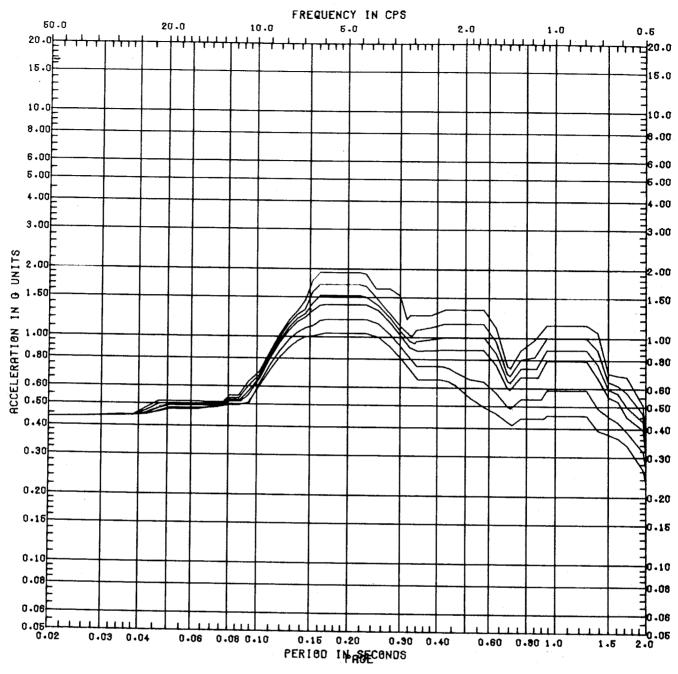
322-SS-NS

REVISION NO.02

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-41

HORIZONTAL SSE RESPONSE SPECTRA AT 742'-8", SACRIFICIAL SHIELD PEDESTAL - Y DIRECTION



HORIZ.

RESPONSE SPECTRA

ELEVATION

803'-3", 828'-3"

LOCATION

Drywell

SPECTRA NO. 315-SS-EW

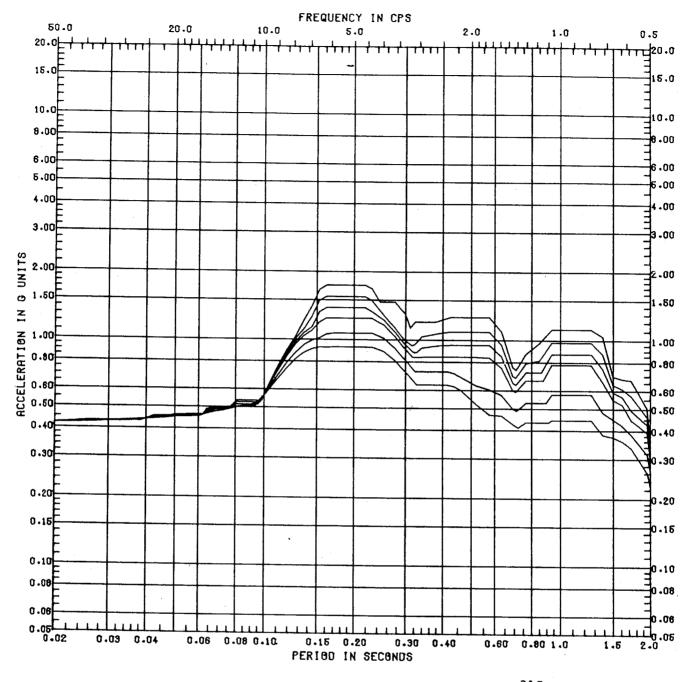
316-SS-EW

REVISION NO. 02

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-42

HORIZONTAL SSE RESPONSE SPECTRA AT 803'-3" AND 828'-3", DRYWELL - X DIRECTION



HORIZ.

RESPONSE SPECTRA

SPECTRA NO. 315-SS-NS 316-SS-NS

ELEVATION 803'-3", 828'-3"

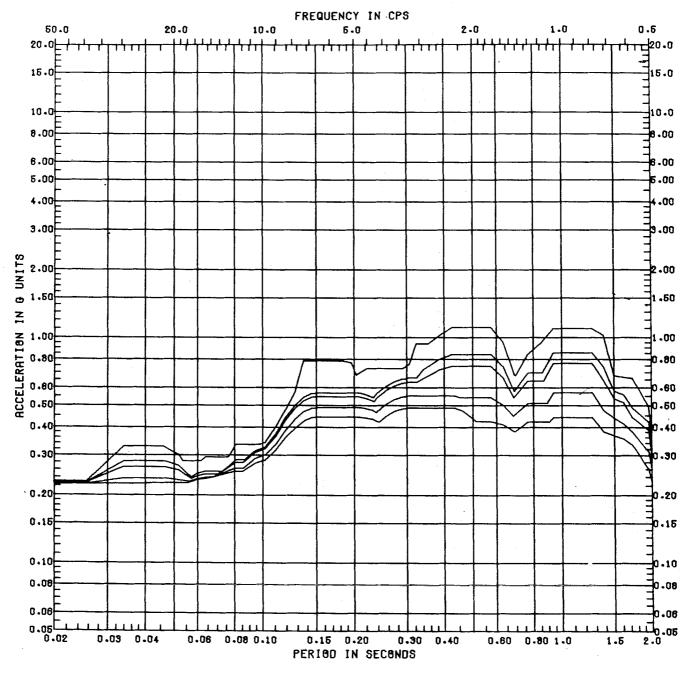
LOCATION Drywell

REVISION NO. 02

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-43

HORIZONTAL SSE RESPONSE SPECTRA AT 803'-3" AND 828'-3", DRYWELL - Y DIRECTION



HORIZ

LBCATION

RESPONSE SPECTRA

SPECTRA NG 102 to 102e-SS-EW 202-SS-EW

ELEVATION 737'-0"

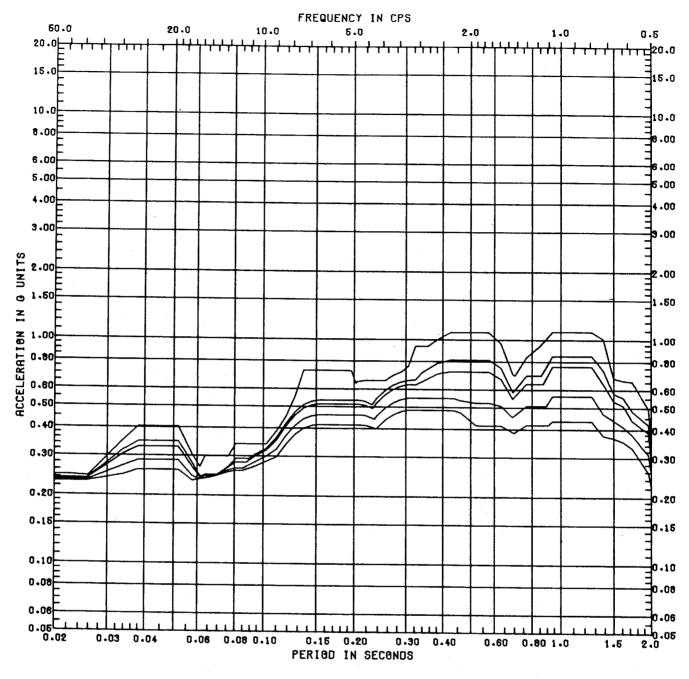
Aux., Fuel, Control, Diesel, Radwaste, & Turbine Bldgs.

REVISION NO.02

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-44

HORIZONTAL SSE RESPONSE SPECTRA AT 737'-0" MAIN BUILDING - X DIRECTION



HORIZ.

RESPONSE SPECTRA

SPECTRA NO 102 to 102e-SS-NS 202-SS-NS

ELEVATION 7371_

737'-0"

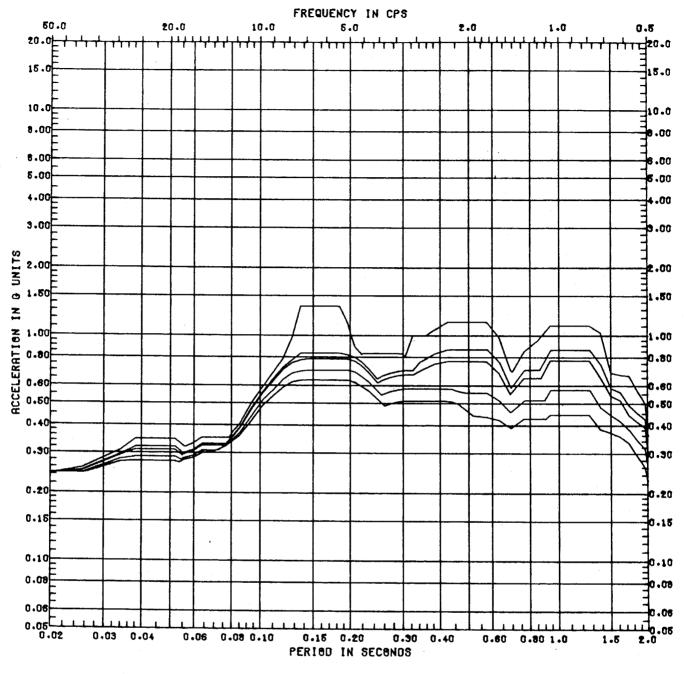
LOCATION

Aux., Fuel, Control, Diesel, Radwaste, & Turbine Bldgs. REVISION NO -02

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-45

HORIZONTAL SSE RESPONSE SPECTRA AT 737'-0" MAIN BUILDING - Y DIRECTION



HORIZ.

RESPONSE SPECTRA

SPECTRR NO.105 to 105d-SS-EW

205-SS-EW

ELEVATION 762

762'-0"

REVISION NO. 02

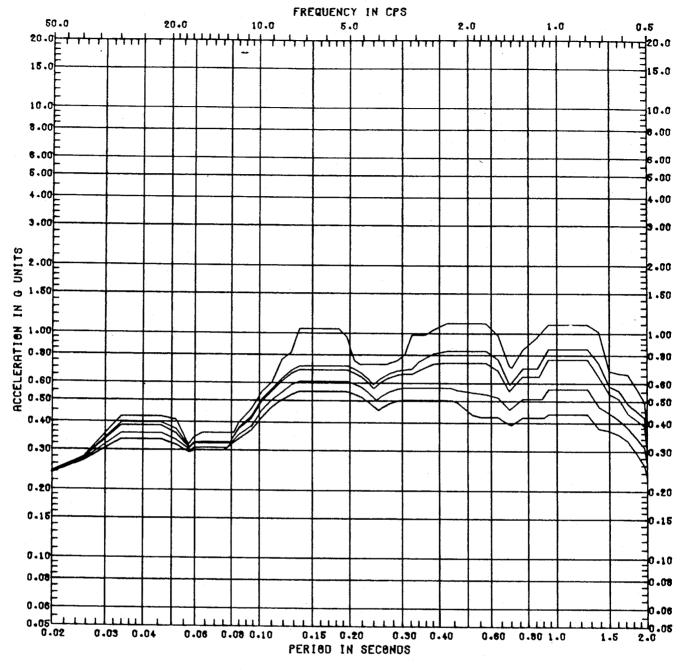
LECATION AUX COR

Aux., Control, Diesel, Radwaste & Turbine Bldgs.

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-46

HORIZONTAL SSE RESPONSE SPECTRA AT 762'-0" MAIN BUILDING - X DIRECTION



HORIZ.

RESPONSE SPECTRA

SPECTRA NO.105 to 105d-SS-NS 205-SS-NS

ELEVATION 762'-0"

REVISION NO.02

LOCATION Aux., Control, Diesel, Radwaste & Turbine Bldgs

> CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

> > FIGURE 3.7-47

HORIZONTAL SSE RESPONSE SPECTRA AT 762'-0" MAIN BUILDING - Y DIRECTION

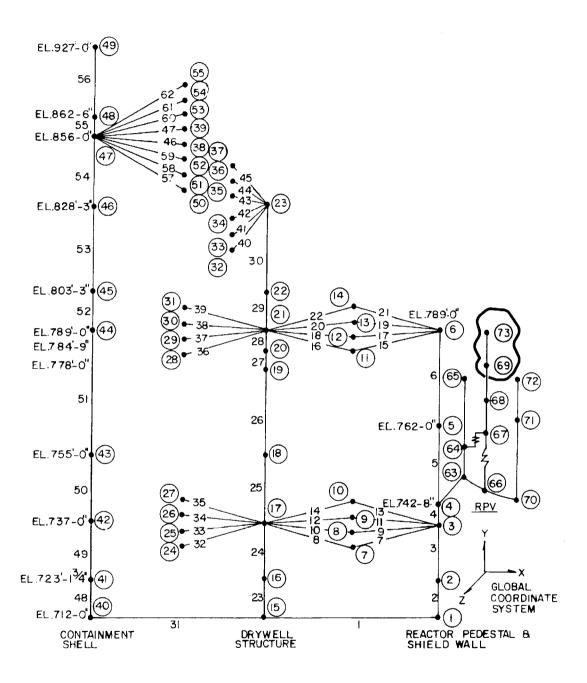


FIGURE 3.7-48
CONTAINMENT BUILDING
MODEL FOR VERTICAL EXCITATION

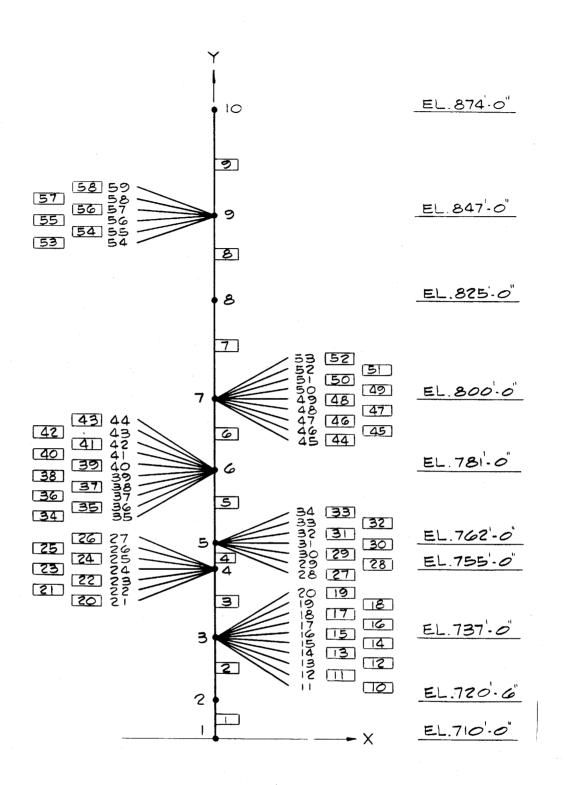


FIGURE 3.7-49

MAIN BUILDING MODEL FOR VERTICAL EXCITATION

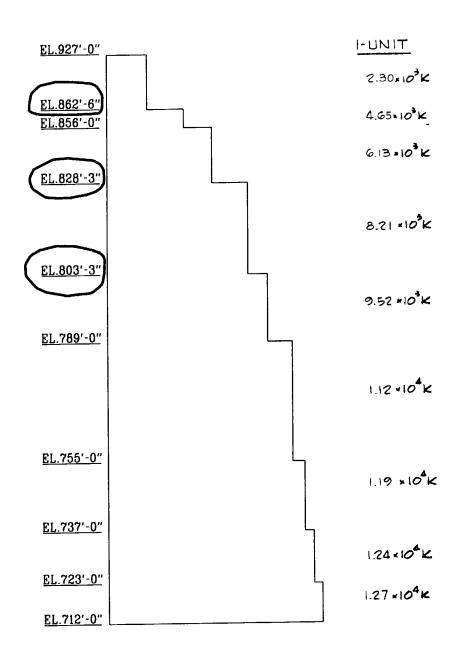
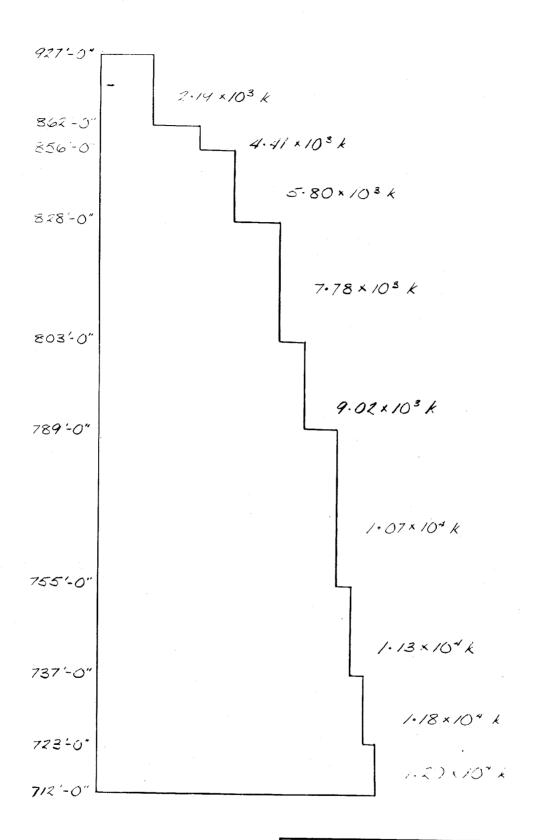


FIGURE 3.7-50
SEISMIC SSE LOAD FOR AXIAL
FORCES FOR CONTAINMENT-1-UNIT

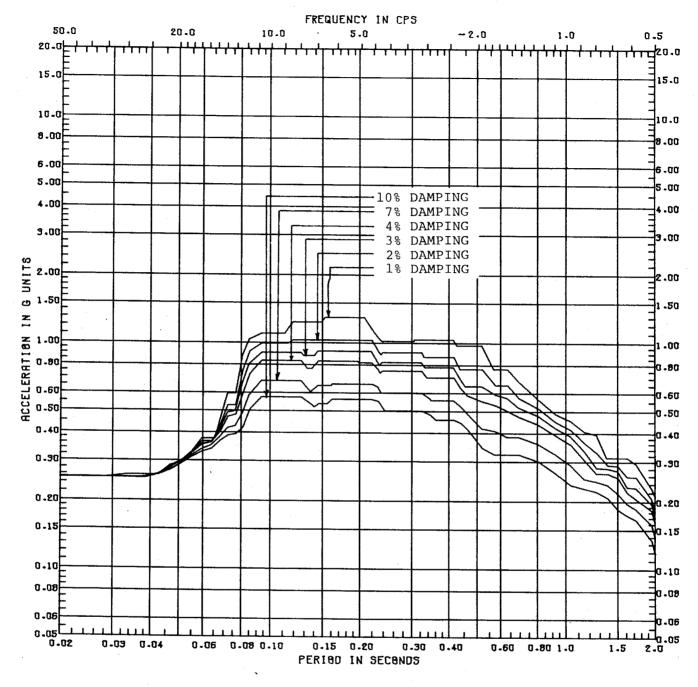


NOTE: UNIT 2 HAS BEEN CANCELLED.

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-51

TOTAL AXIAL FORCE - CONTAINMENT 2-UNIT VERTICAL SSE



SPECTRA NO. 100-SS-VS & VII

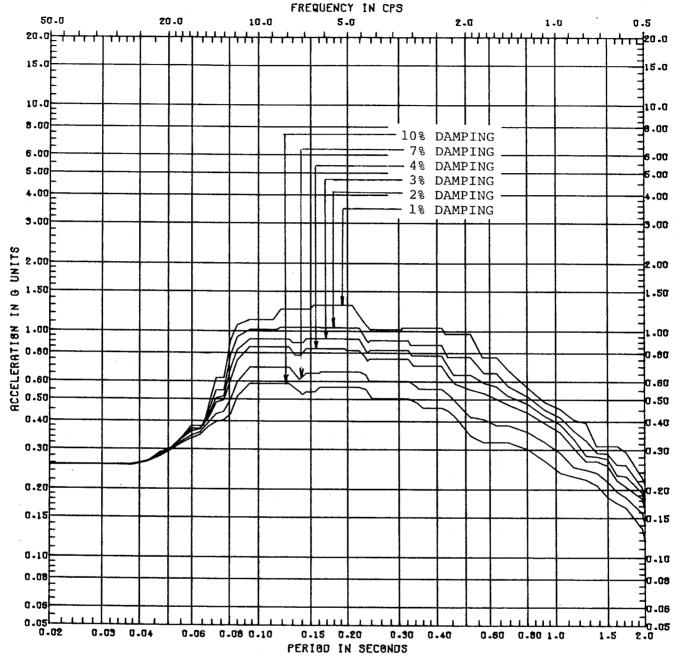
ELEVATION Basemat Floor

LOCATION Aux., Fuel, Control, Diesel, REVISION NO. 05
Radwaste & Furbine Bldgs.

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-52

VERTICAL SSE RESPONSE SPECTRA AT BASE MAT FLOOR



317-SS-VW 8 NO. 322-SS-VW

ELEVATION 742'-8"

SPECTRA NO.

400-SS-VW

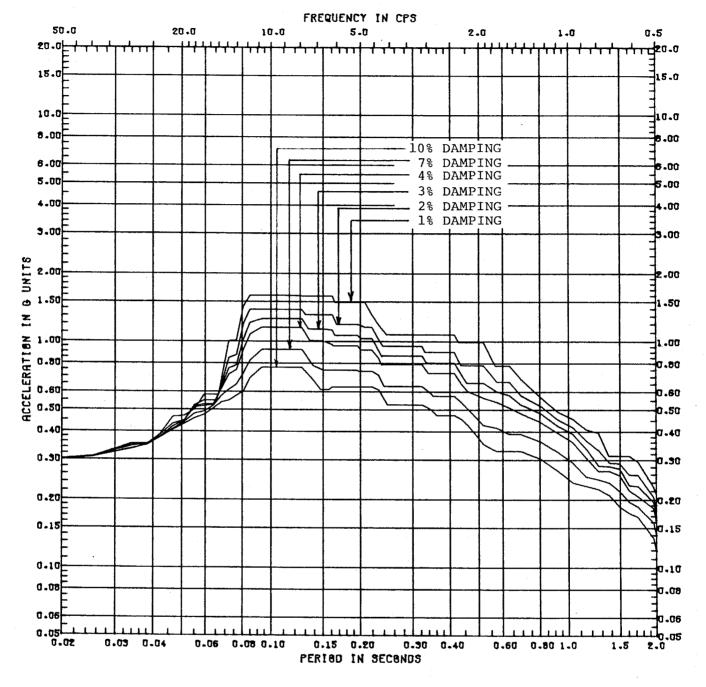
LOCATION Sacrif:

Sacrificial Shield, Pedestal, RPV Base REVISION NO. 05

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-53

VERTICAL SSE RESPONSE SPECTRA AT 742'-8", SACRIFICIAL SHIELD PEDESTAL RPV BASE



SPECTRA NO. 315-SS-VW

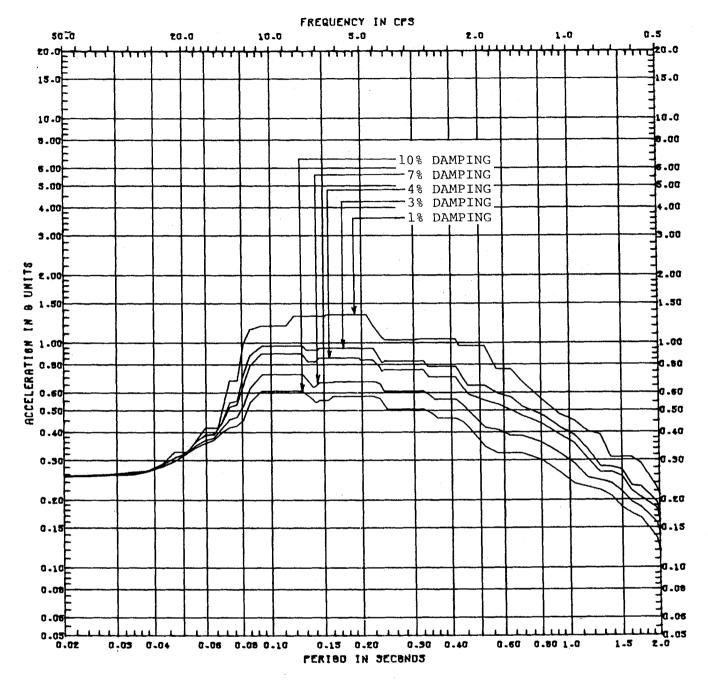
ELEVATION 803'-3"
LOCATION Drywell

REVISION No. 05

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FIGURE 3.7-54

VERTICAL SSE RESPONSE SPECTRA AT 803'-3" DRYWELL



SPECTRA NO. 102 to 102e-SS-VW

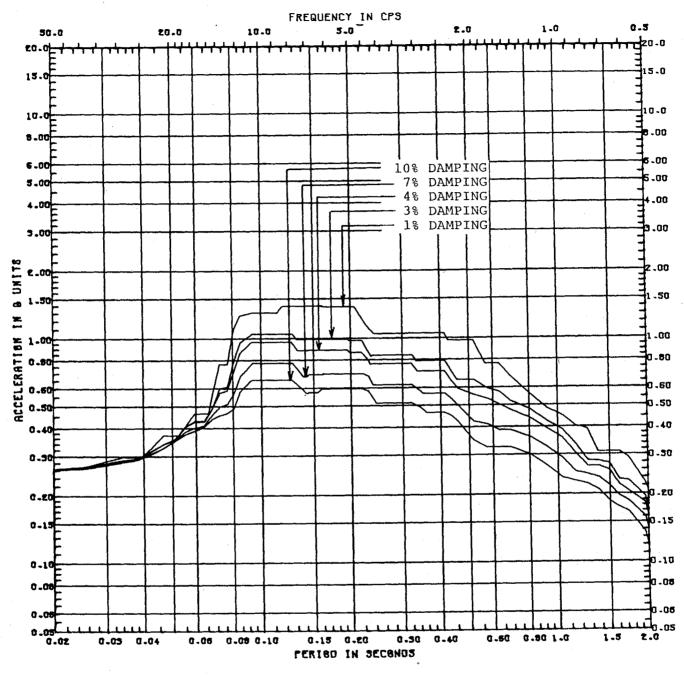
ELEVATION 737'-0"

LECATION Aux, Fuel, Control, Radwaste, REVISION No. 05 Diesel Bldgs.

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FIGURE 3.7-55

VERTICAL SSE RESPONSE SPECTRA AT 737'-O" MAIN BUILDING



SPECTRA NE. 105 to 105d-SS-VW

ELEVATION

7621-0"

LECATION

Aux., Control, Radwaste, Diesel Bldgs.

REVISION NO. 05

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FIGURE 3.7-56

VERTICAL SSE RESPONSE SPECTRA AT 762'-0" MAIN BUILDING

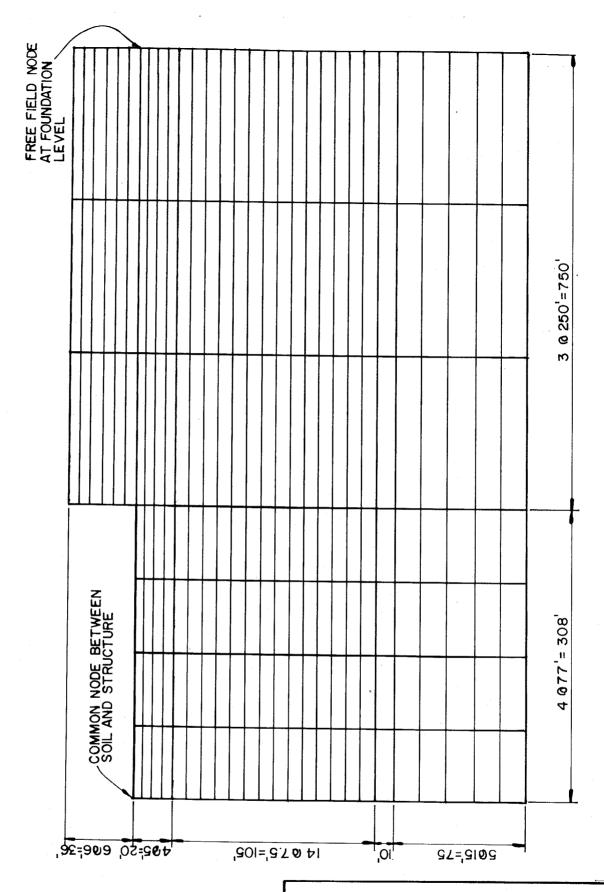


FIGURE 3.7-57

3-D AXISYMMETRIC FINITE ELEMENT DYNAX SOIL MODEL

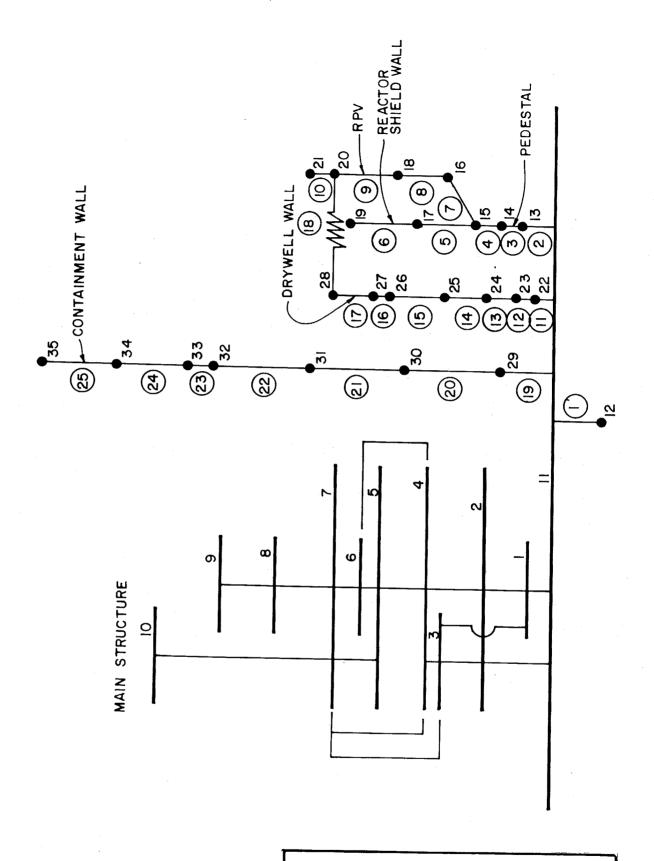
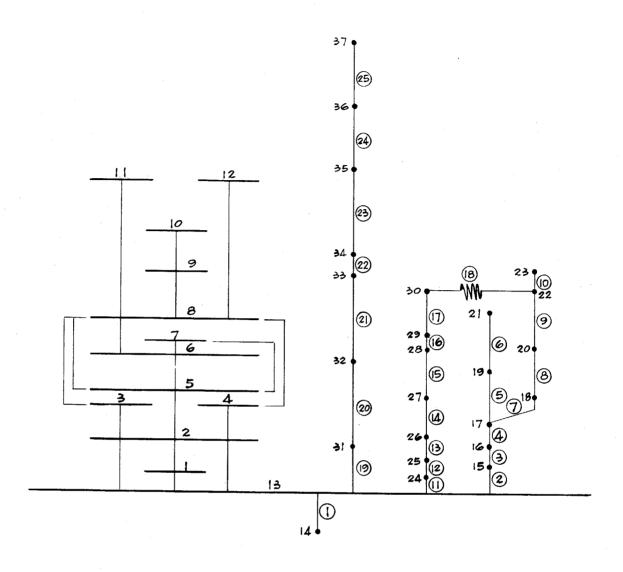


FIGURE 3.7-58

HORIZONTAL 1-UNIT BUILDING MODEL FOR SOIL STRUCTURE INTERACTION



NOTE: UNIT 2 HAS BEEN CANCELLED.

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FIGURE 3.7-59

HORIZONTAL 2-UNIT BUILDING MODEL FOR SOIL STRUCTURE INTERACTION

CPS/USAR

FIGURES 3.7-60 THROUGH 3.7-67
HAVE BEEN DELETED

CHAPTER 03 REV. 11, JAN 2005

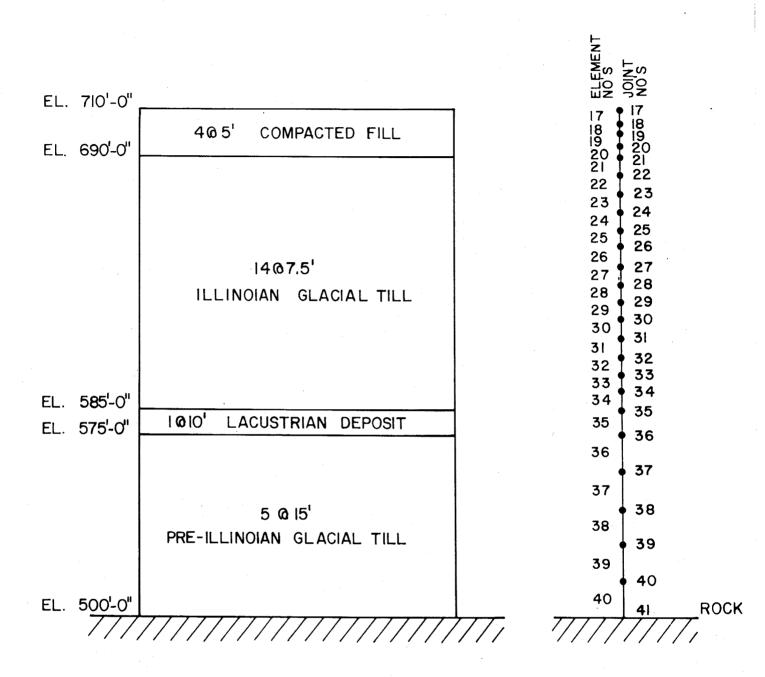


FIGURE 3.7-68

VERTICAL SOIL MODEL FOR SOIL STRUCTURE INTERACTION

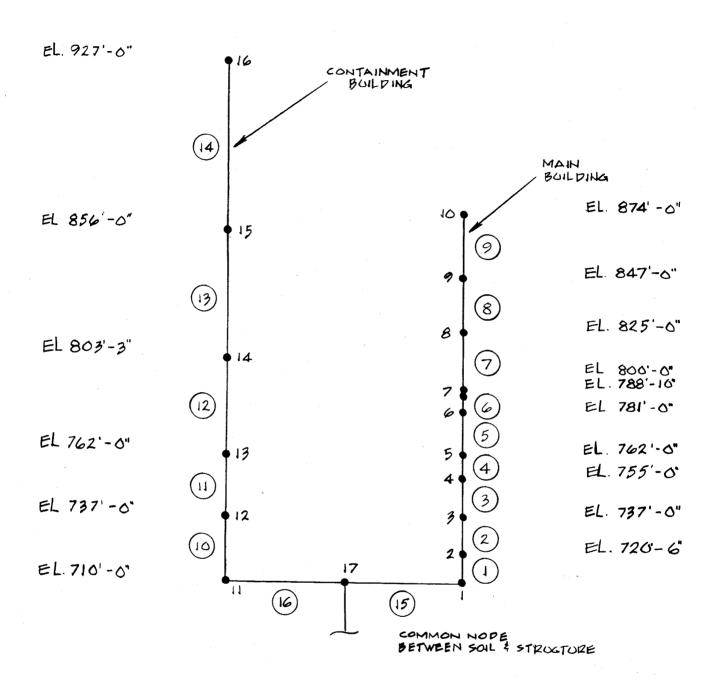
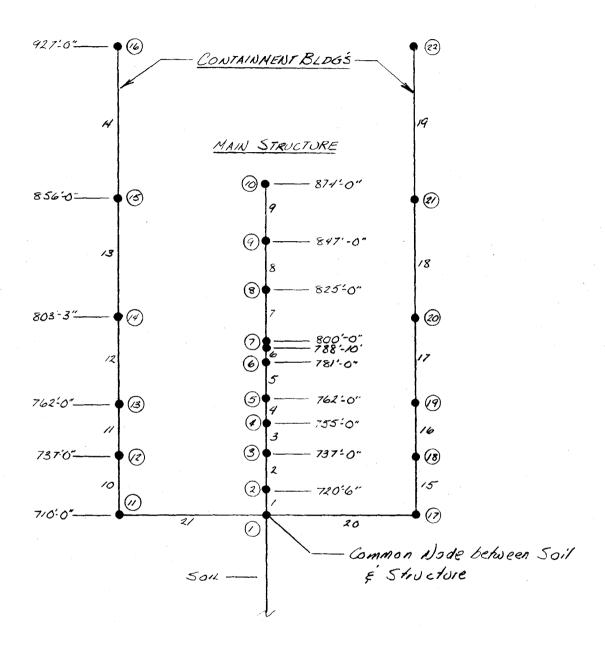


FIGURE 3.7-69

1-UNIT BUILDING MODEL FOR VERTICAL SOIL-STRUCTURE INTERACTION



NOTE: UNIT 2 HAS BEEN CANCELLED.

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FIGURE 3.7-70

2-UNIT BUILDING MODEL FOR VERTICAL SOIL STRUCTURE INTERACTION

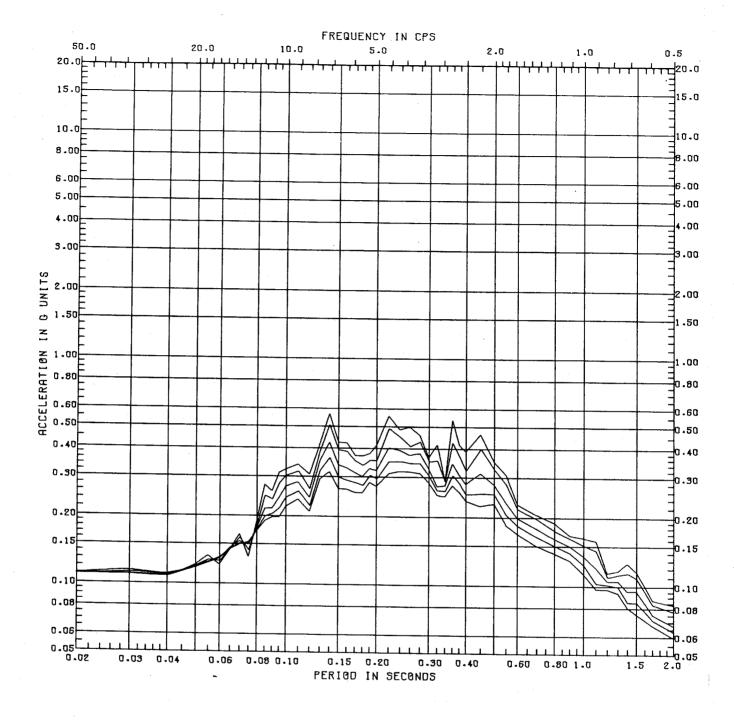


FIGURE 3.7-71

OBE VERTICAL FOUNDATION INTERACTION SPECTRA FOR 1-UNIT BUILDING MODEL

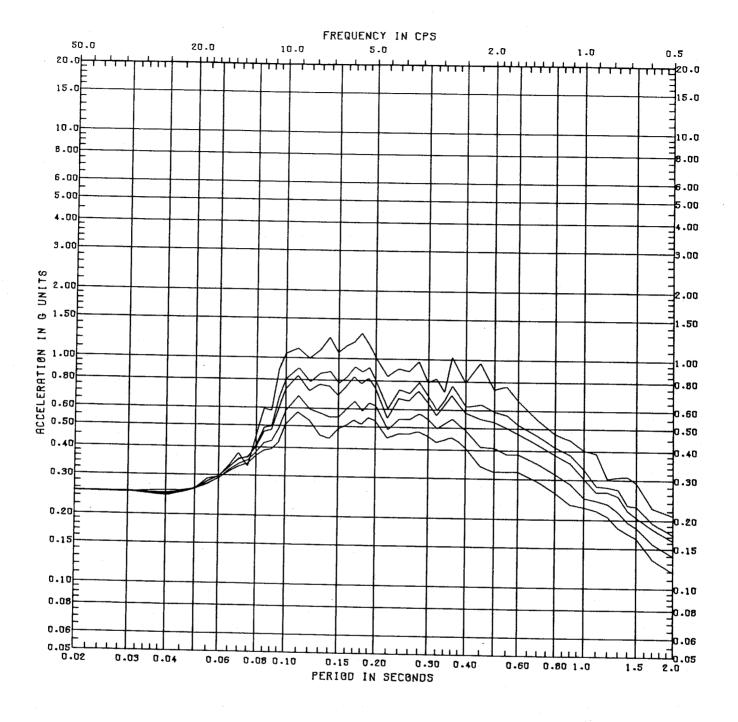
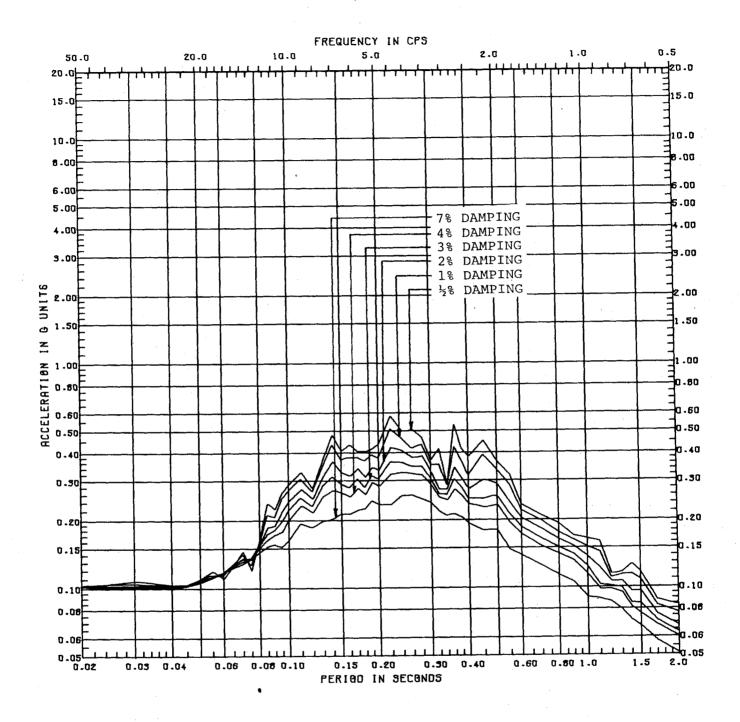


FIGURE 3.7-72

SSE VERTICAL FOUNDATION INTERACTION SPECTRA FOR 1-UNIT BUILDING MODEL

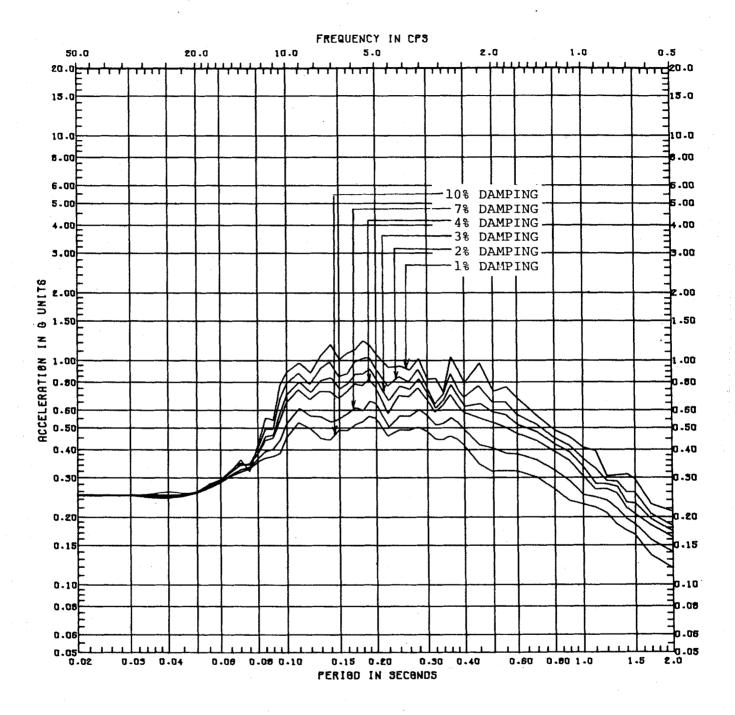


NOTE: UNIT 2 HAS BEEN CANCELLED.

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FIGURE 3.7-73

OBE VERTICAL FOUNDATION INTERACTION SPECTRA FOR 2-UNIT BUILDING MODEL

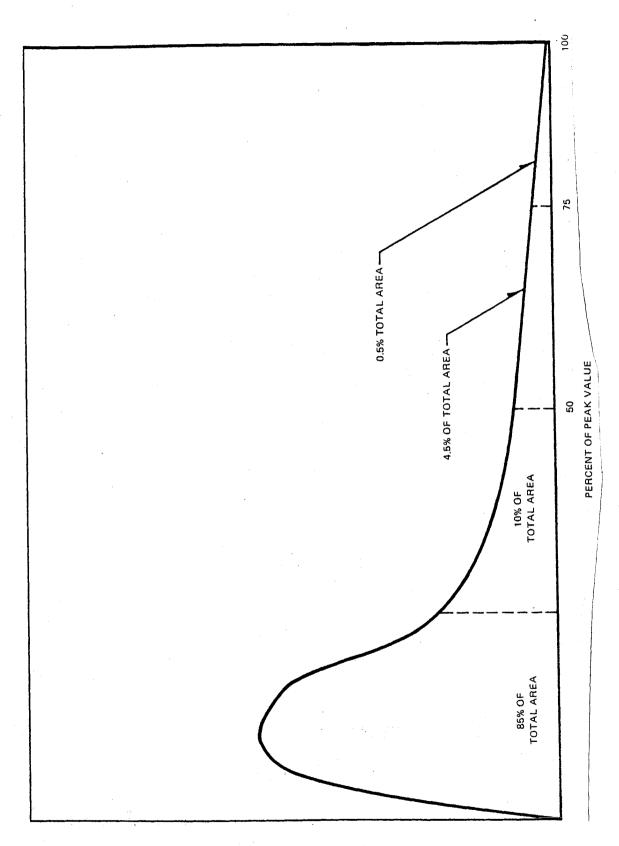


NOTE: UNIT 2 HAS BEEN CANCELLED.

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FIGURE 3.7-74

SSE VERTICAL FOUNDATION INTERACTION SPECTRA FOR 2-UNIT BUILDING MODEL



NUMBER OF STRESS REVERSALS

FIGURE 3.7-75 DENSITY OF STRESS REVERSALS

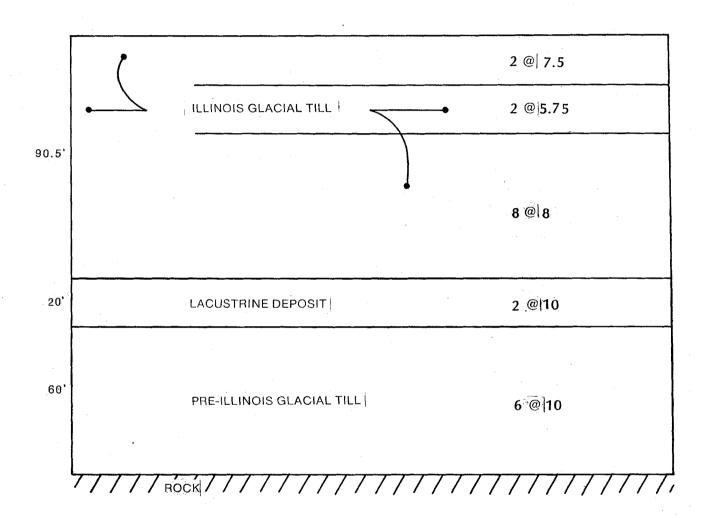


FIGURE 3.7-76

SHAKE SOIL MODEL FOR CIRCULATING WATER SCREEN HOUSE ANALYSIS

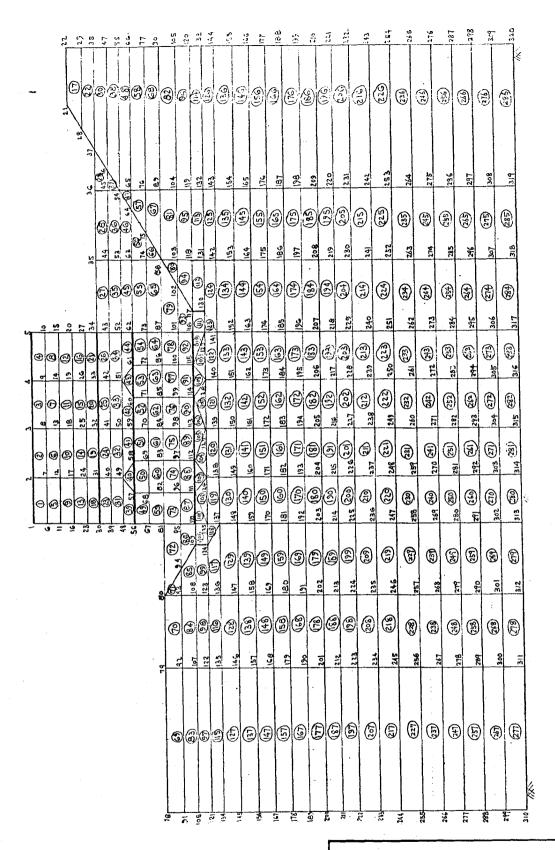


FIGURE 3.7-77

EAST-WEST HORIZONTAL SOIL STRUCTURE INTERACTION MODEL FOR CWSH

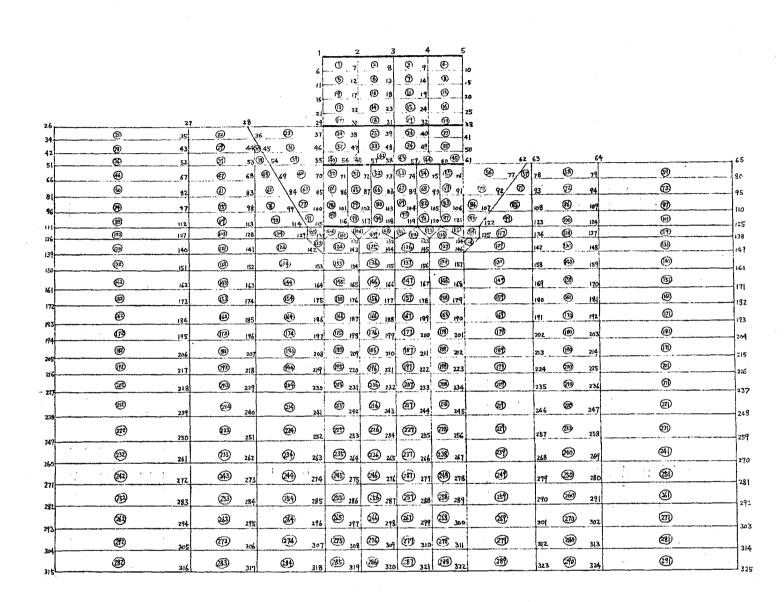
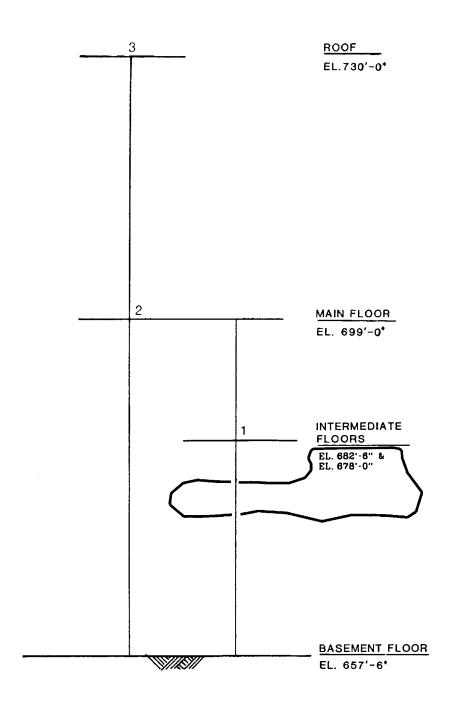


FIGURE 3.7-78

NORTH-SOUTH HORIZONTAL SOIL STRUCTURE INTERACTION MODEL FOR CWSH

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FIGURE 3.7-79

HORIZONTAL MODEL FOR CWSH

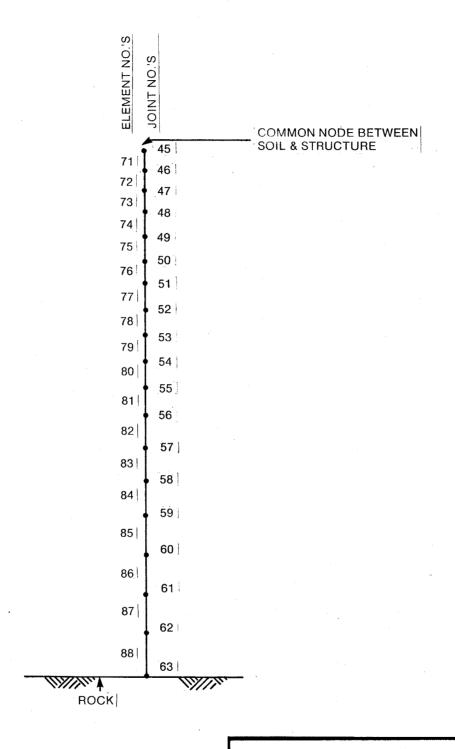
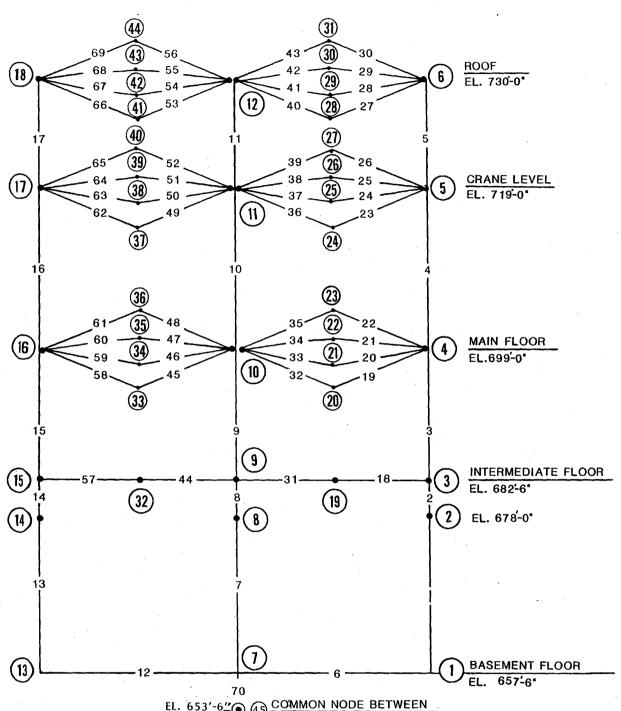


FIGURE 3.7-80

SOIL COLUMN FOR VERTICAL CWSH ANALYSIS



EL. 653'-6"

(45) COMMON NODE BETWEEN

SOIL & STRUCTURE

FIGURE 3.7-81 VERTICAL MODEL FOR CWSH

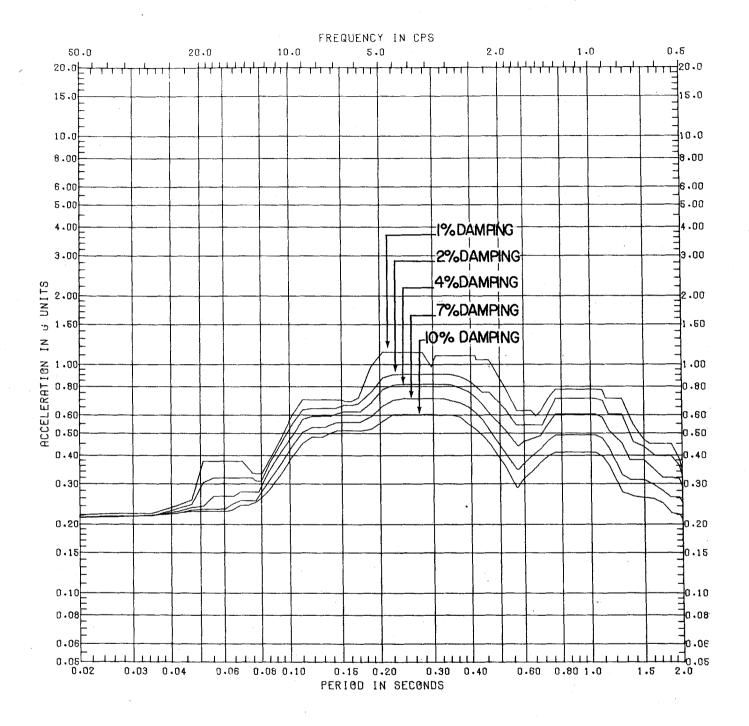


FIGURE 3.7-82

HORIZONTAL
SSE RESPONSE SPECTRA CWSH BASE ELEVATION 653'-6" N-S

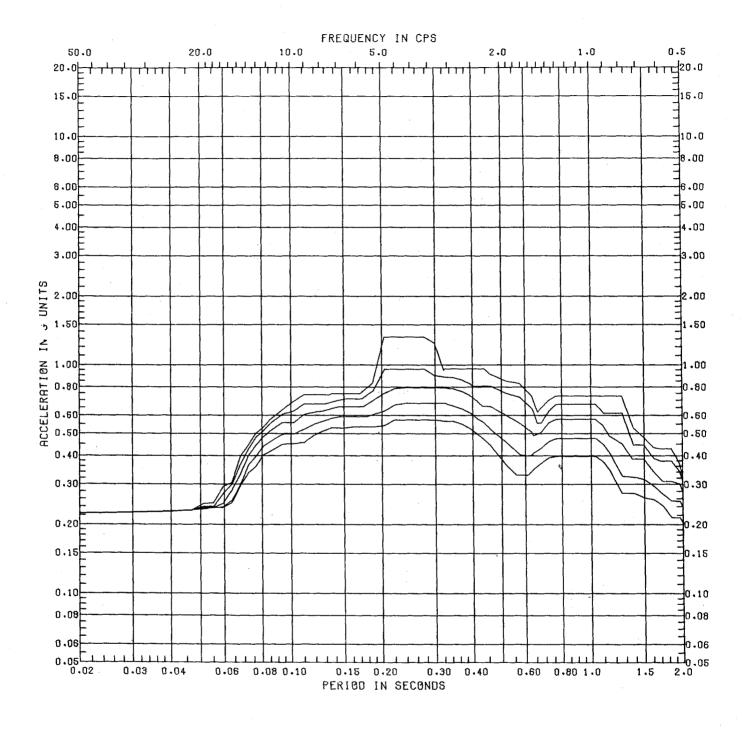


FIGURE 3.7-83

HORIZONTAL
SSE RESPONSE SPECTRA CWSH BASE ELEVATION 653'-6" E-W

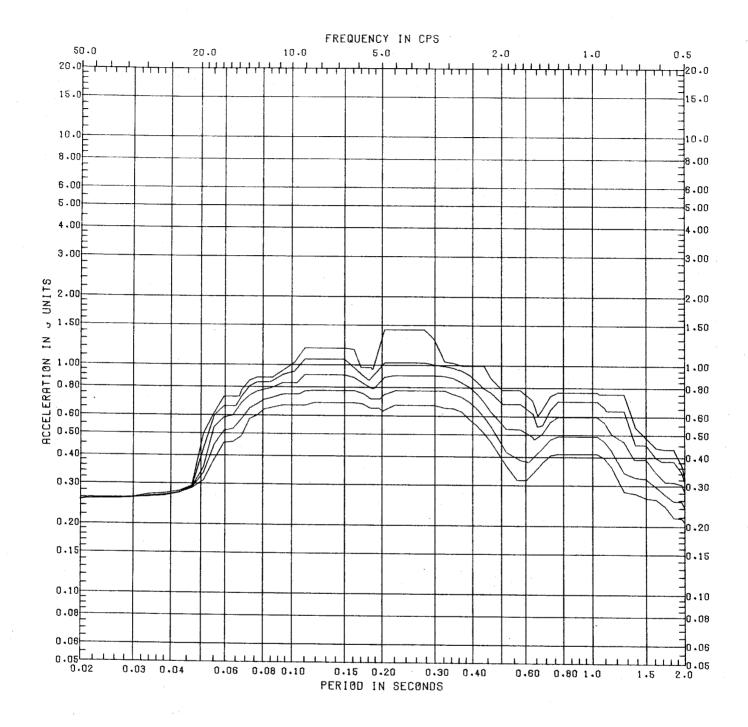


FIGURE 3.7-84

HORIZONTAL SSE RESPONSE SPECTRA CWSH -MAIN FLOOR ELEVATION 699'-0" N-S

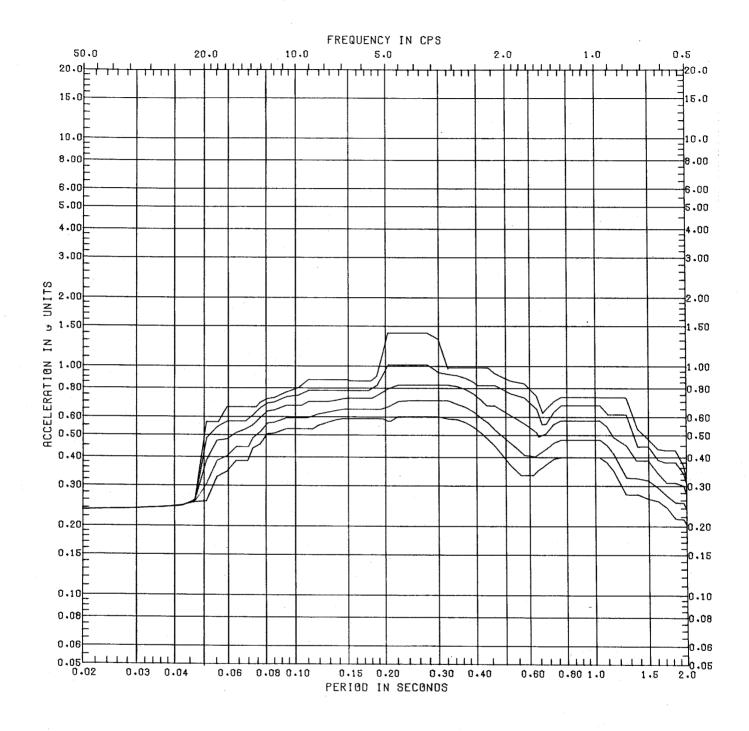


FIGURE 3.7-85

HORIZONTAL
SSE RESPONSE SPECTRA CWSH MAIN FLOOR ELEVATION 699'-0" E-W

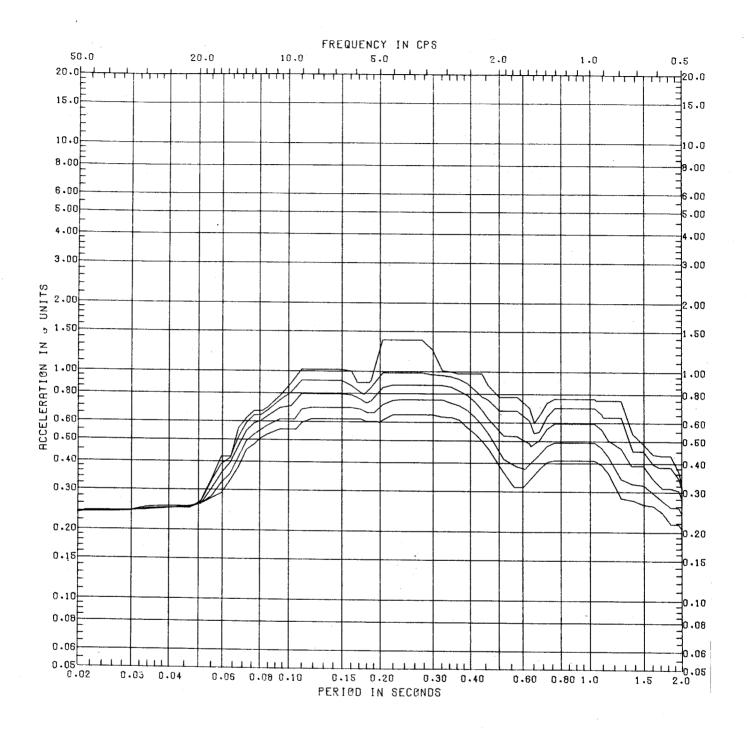


FIGURE 3.7-86

HORIZONTAL
SSE RESPONSE SPECTRA CWSH INTERMEDIATE FLOOR
ELEVATION 682'-6" N-S

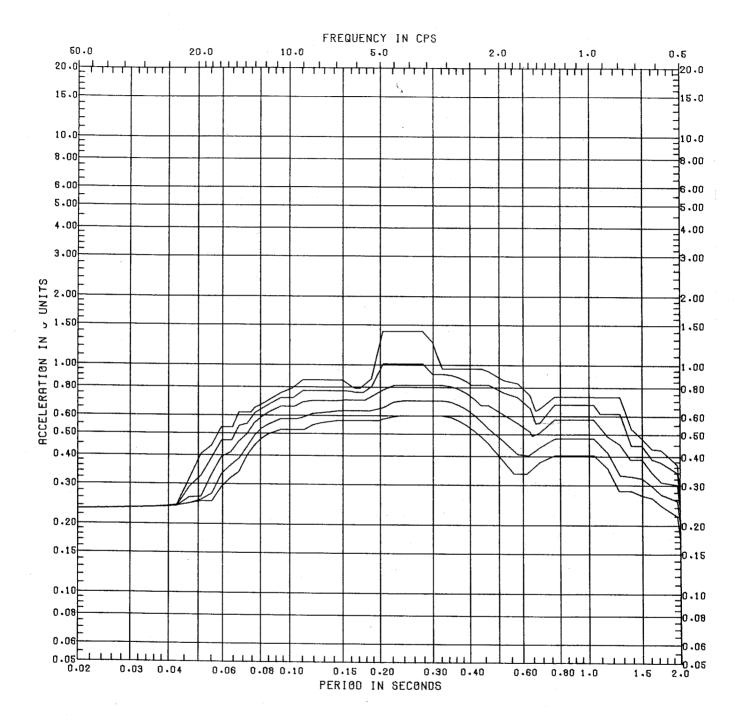


FIGURE 3.7-87

HORIZONTAL
SSE RESPONSE SPECTRA CWSH INTERMEDIATE FLOOR
ELEVATION 682'-6" E-W

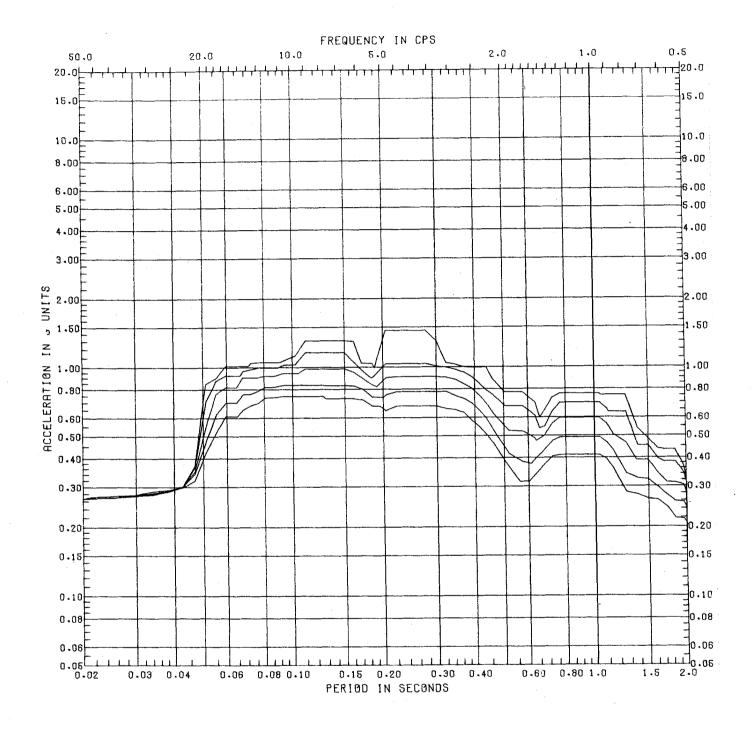


FIGURE 3.7-88

HORIZONTAL
SSE RESPONSE SPECTRA CWSH ROOF ELEVATION 730'-0" N-S

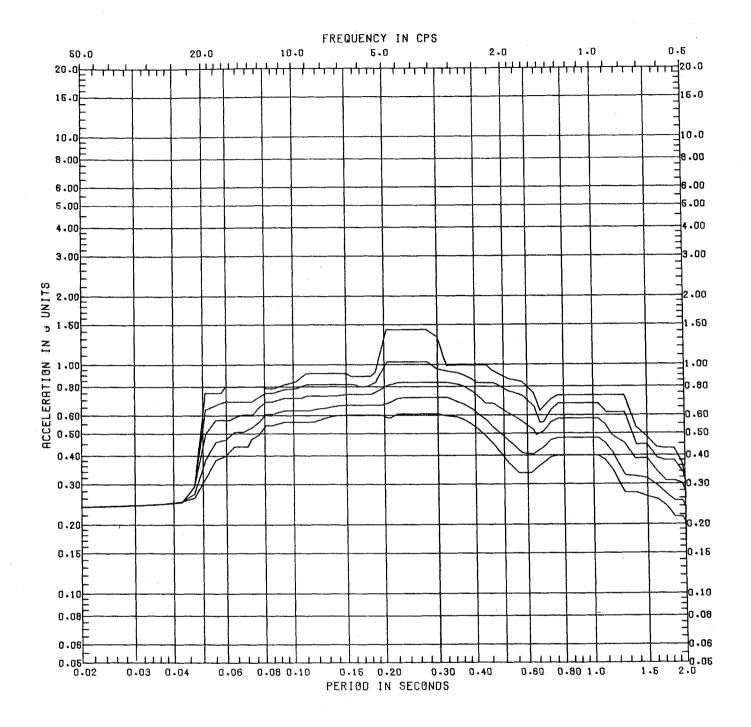
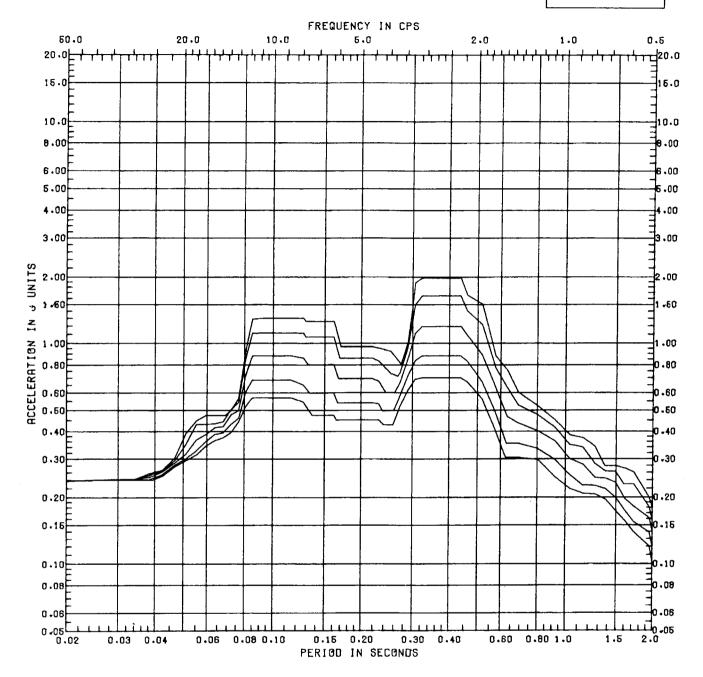


FIGURE 3.7-89

HORIZONTAL SSE RESPONSE SPECTRA CWSH -ROOF ELEVATION 730'-0" E-W

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FIGURE 3.7-90

SSE RESPONSE SPECTRA CWSH-BASE ELEVATION 657'-6" VERTICAL WALL

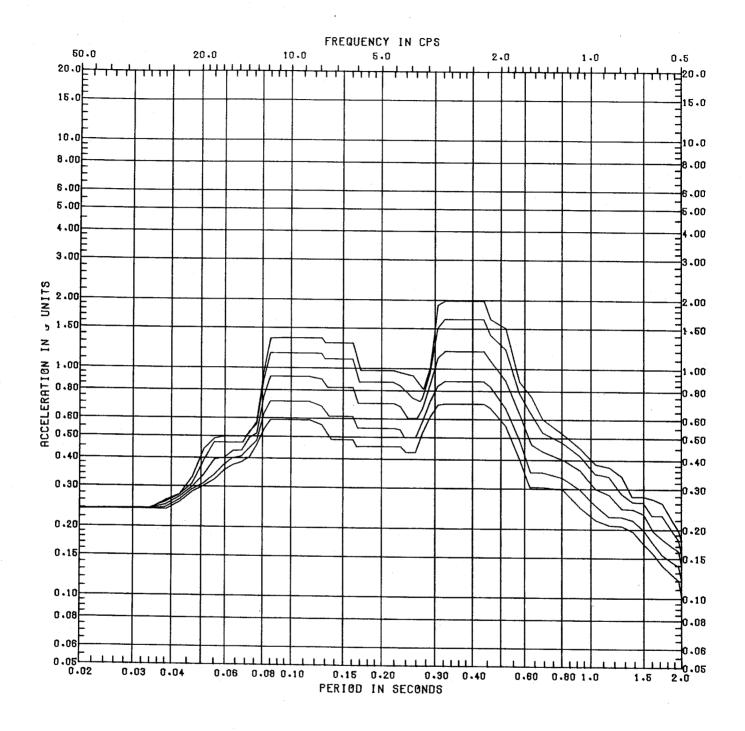


FIGURE 3.7-91

SSE RESPONSE SPECTRA CWSH INTERMEDIATE FLOOR
ELEVATION 682'-6"
VERTICAL WALL

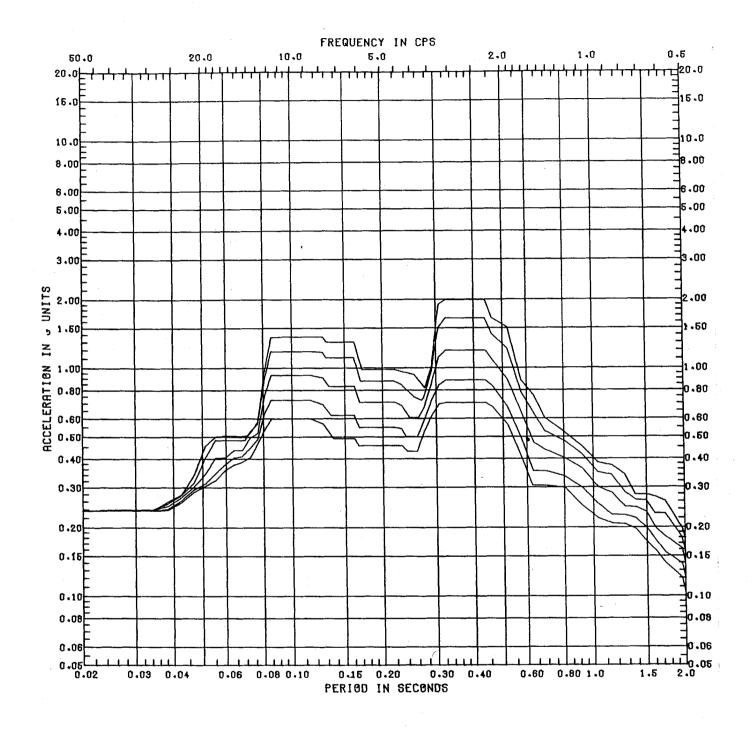


FIGURE 3.7-92

SSE RESPONSE SPECTRA CWSH - MAIN FLOOR ELEVATION 699'-0" VERTICAL WALL

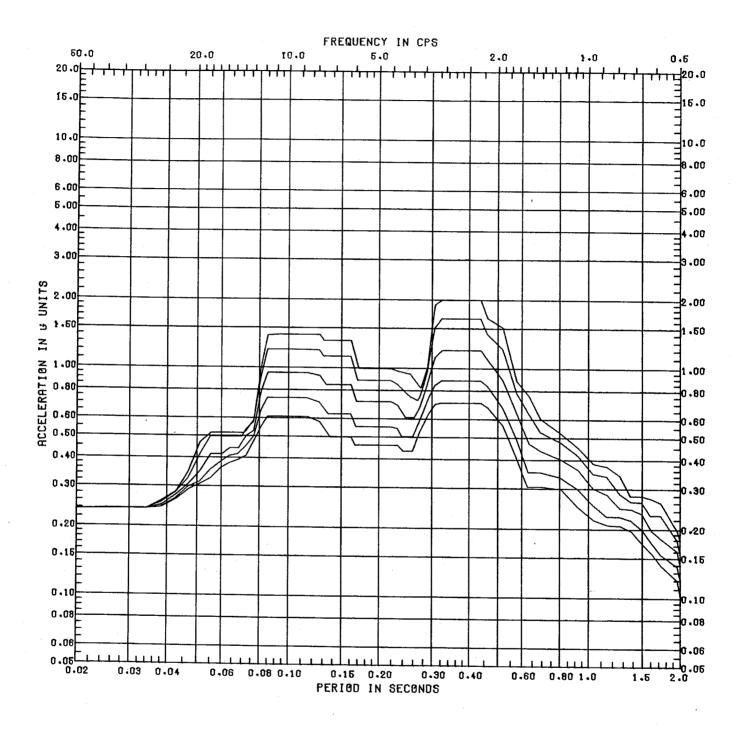


FIGURE 3.7-93

SSE RESPONSE SPECTRA CWSH - CRANE LEVEL ELEVATION 719'-0"
VERTICAL WALL

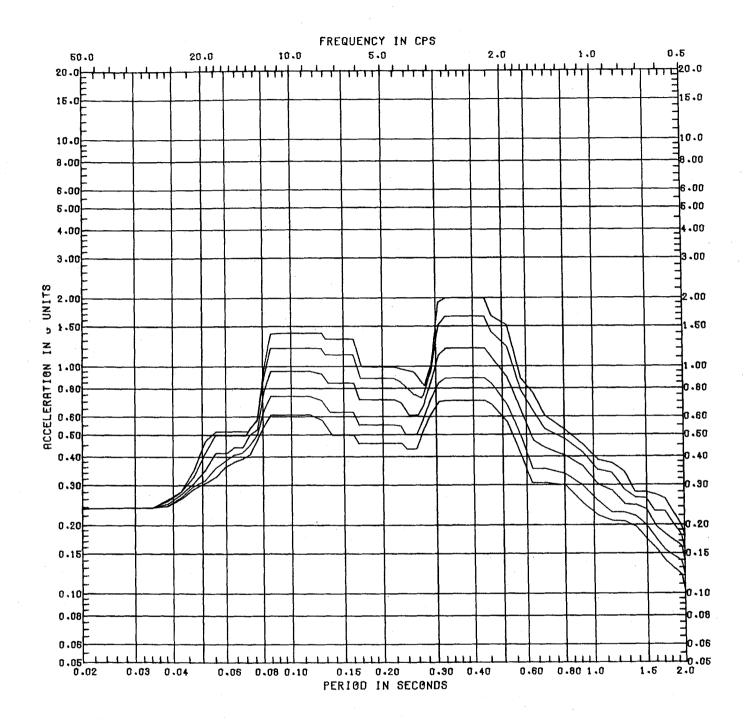


FIGURE 3.7-94

SSE RESPONSE SPECTRA CWSH -ROOF ELEVATION 730'-0" VERTICAL WALL

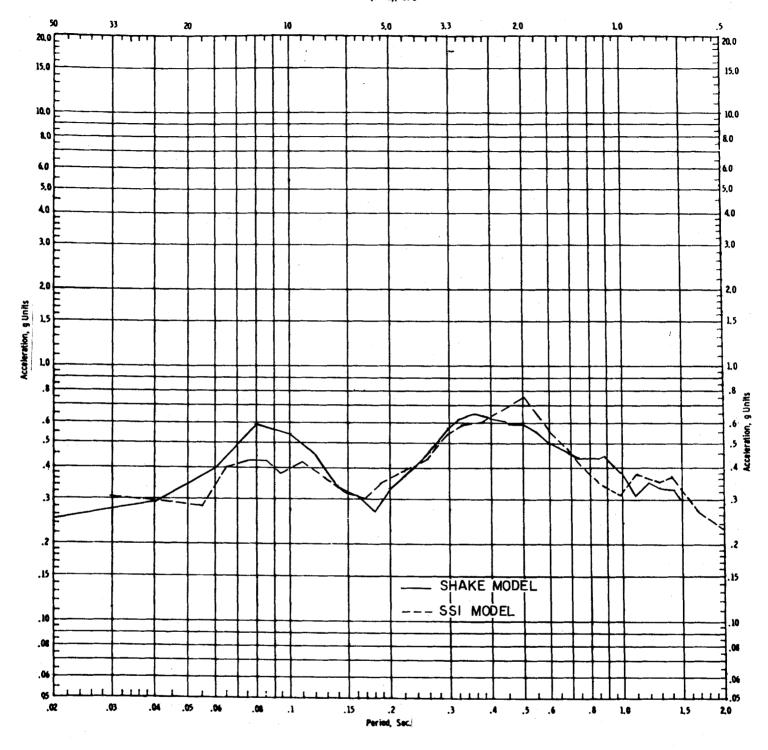


Figure 3.7.95 (Q&R 220.24) COMPARISON OF FREE FIELD FOUNDATION LEVEL SPECTRA FROM THE SHAKE AND SSI ANALYSIS

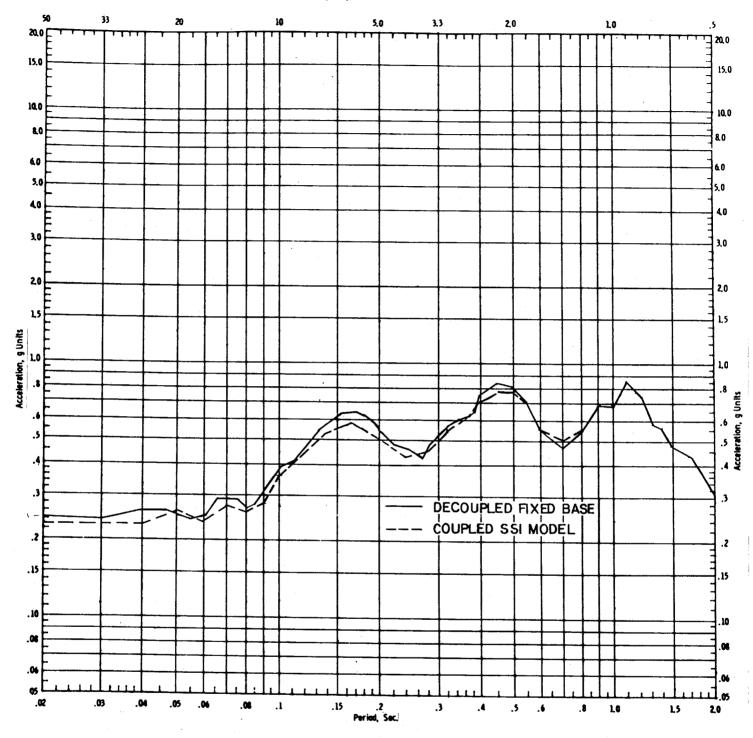


Figure 3.7-96
(Q&R 220.25)

COMPARISON OF DECOUPLED FIXED BASE
AND COUPLED SSI MODEL RESPONSES
AT ELEVATION 781'-0"
(UPPER MEZZANINE FLOOR)

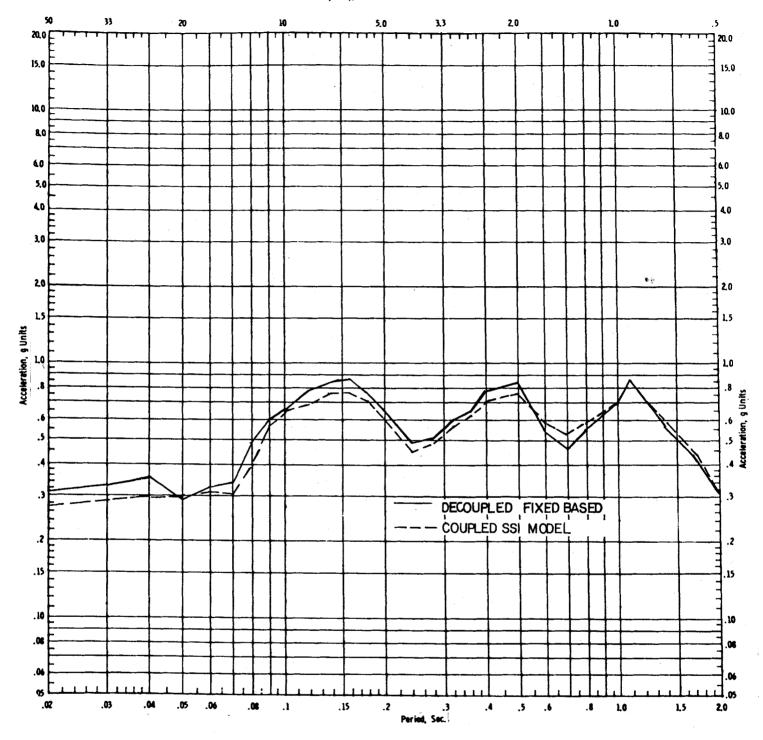


Figure 3.7-97
(Q&R 220.25)

COMPARISON OF DECOUPLED FIXED BASE
AND COUPLED SSI MODEL RESPONSES
AT ELEVATION 825'-0"
(VENT. FLOOR)

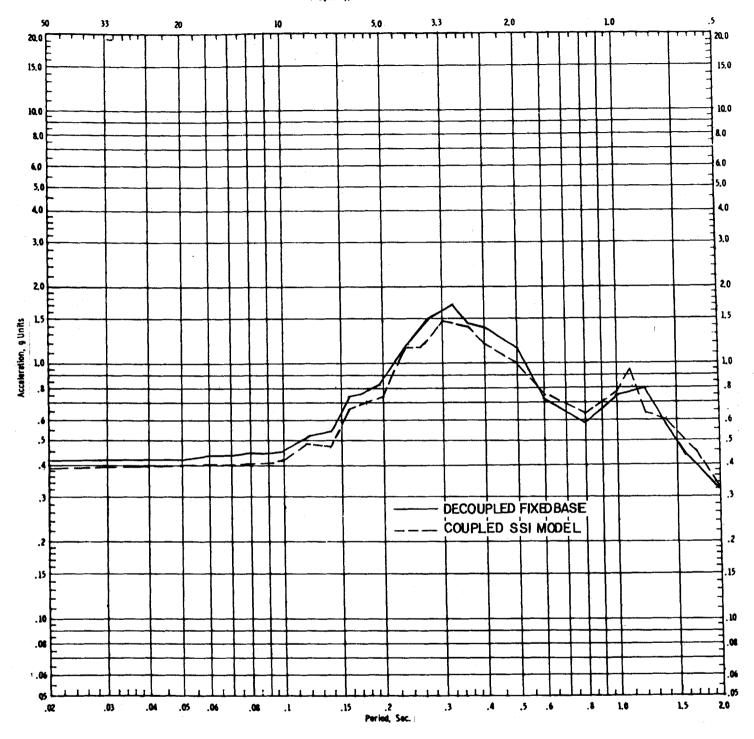


Figure 3.7-98 (Q&R 220.25)

COMPARISON OF DECOUPLED FIXED BASE AND COUPLED SSI MODEL RESPONSES AT ELEVATION 874'-0" (TURBINE ROOM ROOF)

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Figure 3.7-99 (Q&R 220.36)

DETAIL OF PIPE ATTACHMENT

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Figure 3.7-100 (Q&R 220.36)

ELECTRICAL MANHOLE CONNECTION DETAILS

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Figure 3.7-101 (Q&R 220.36) TYPICAL DUCT DETAIL AT MANHOLE WALL (CATEGORY I)

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FIGURE 3.8-1

CONTAINMENT SYSTEM

(SHEET 1 of 2)

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FIGURE 3.8-1

CONTAINMENT SYSTEM

(SHEET 2 of 2)

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FIGURE 3.8-2

CONTAINMENT FRAMING PLAN

(SHEET 1 of 6)

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-2

CONTAINMENT FRAMING PLAN

(SHEET 2 of 6)

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-2

CONTAINMENT FRAMING PLAN

(SHEET 3 of 6)

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-2

CONTAINMENT FRAMING PLAN

(SHEET 4 of 6)

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-2

CONTAINMENT FRAMING PLAN

(SHEET 5 of 6)

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FIGURE 3.8-2

CONTAINMENT FRAMING PLAN

(SHEET 6 of 6)

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FIGURE 3.8-3

CONTAINMENT WALL & DOME REINFORCING DETAILS

(SHEET 1 of 2)

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FIGURE 3.8-3

CONTAINMENT WALL & DOME REINFORCING DETAILS

(SHEET 2 of 2)

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-4

PERSONNEL AND EQUIPMENT HATCH REINFORCING DETAILS (CONTAINMENT)

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FIGURE 3.8-5

BASE MAT TOP REINFORCING PLAN CONTAINMENT AND FUEL BUILDING

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FIGURE 3.8-6

BASE MAT TOP REINFORCING PLAN CONTAINMENT AND AUXILIARY BUILDING

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FIGURE 3.8-7

BASE MAT BOTTOM REINFORCING PLAN CONTAINMENT AND FUEL BUILDING

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-8

BASE MAT BOTTOM REINFORCING PLAN CONTAINMENT AND AUXILIARY BUILDING

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-9

BASE MAT SECTION REINFORCING DETAIL

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-10

CONTAINMENT DEVELOPED ELEVATION

(SHEET 1 of 4)

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-10

CONTAINMENJ DEVELOPED ELEVATION

(SHEET 2 of 4)

CLINTON POWER STATION 'UPDATED SAFETY ANALYSIS REPORT.

FIGURE 3.8-10

CONTAINMENT DEVELOPED ELEVATION

(SHEET 3 of 4)

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-10

CONTAINMENT DEVELOPED ELEVATION

(SHEET 4 of 4)

Security - Related Information Figure Withheld Under 10 CFR 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE 3.8-11 CONTAINMENT BUILDING PENETRATIONS

Revision 10 October 2001 Security - Related Information Figure Withheld Under 10 CFR_ 2.390 CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT FIGURE 3.8-12 **ELECTRICAL PENETRATIONS**



Security - Related Information Figure	Withheld Under 10 CFR 2.390
results result	**************************************
	CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT
	FIGURE 3.8-13
	PERSONNEL AND EQUIPMENT HATCH DETAILS (SHEET 2 of 2)

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-14
CONTAINMENT LINER DETAILS

(SHEET 1 of 2)

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-14

CONTAINMENT LINER DETAILS

(SHEET 2 of 2)

CLINTON POWER STATION-UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-15

DOME LINER

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-16

CRANE GIRDER BRACKET EMBEDMENT DETAIL

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-17

FORCE PLOTS - CONTAINMENT WALL

(SHEET 1 of 4)

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-17

FORCE PLOTS - CONTAINMENT WALL

(SHEET 2 of 4)

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-17

FORCE PLOTS - CONTAINMENT WALL

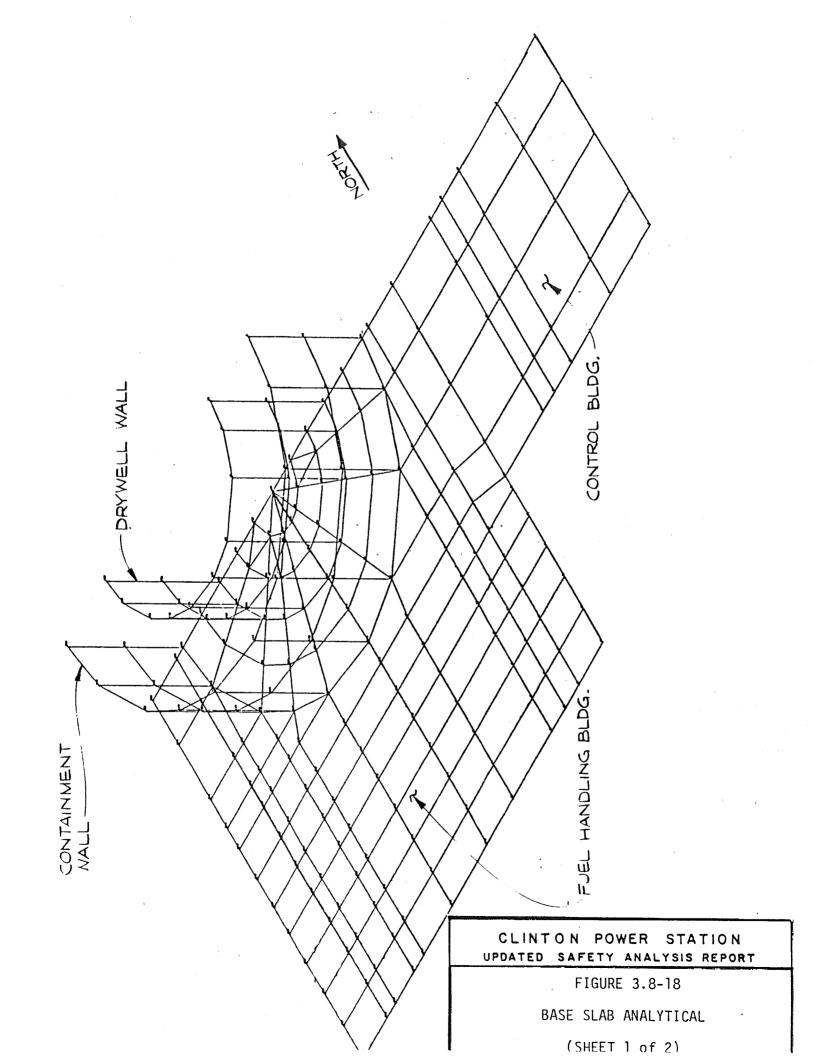
(SHEET 3 of 4)

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-17

FORCE PLOTS - CONTAINMENT WALL

(SHEET 4 of 4)



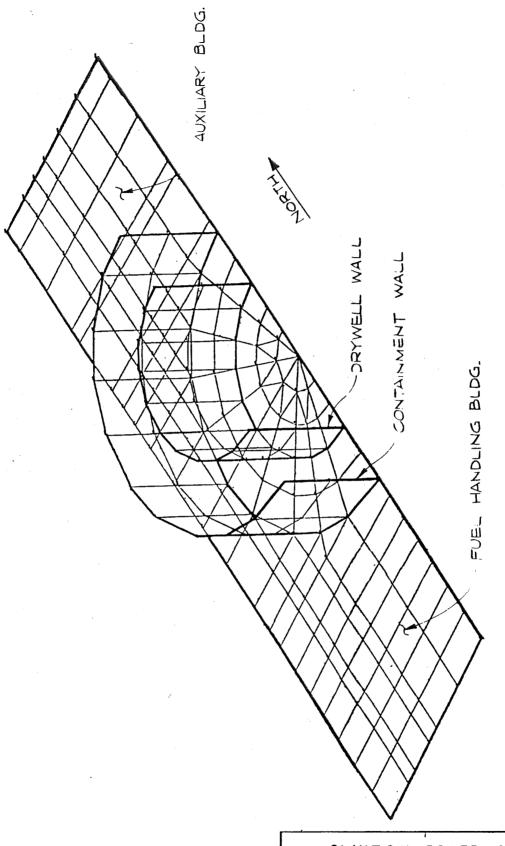
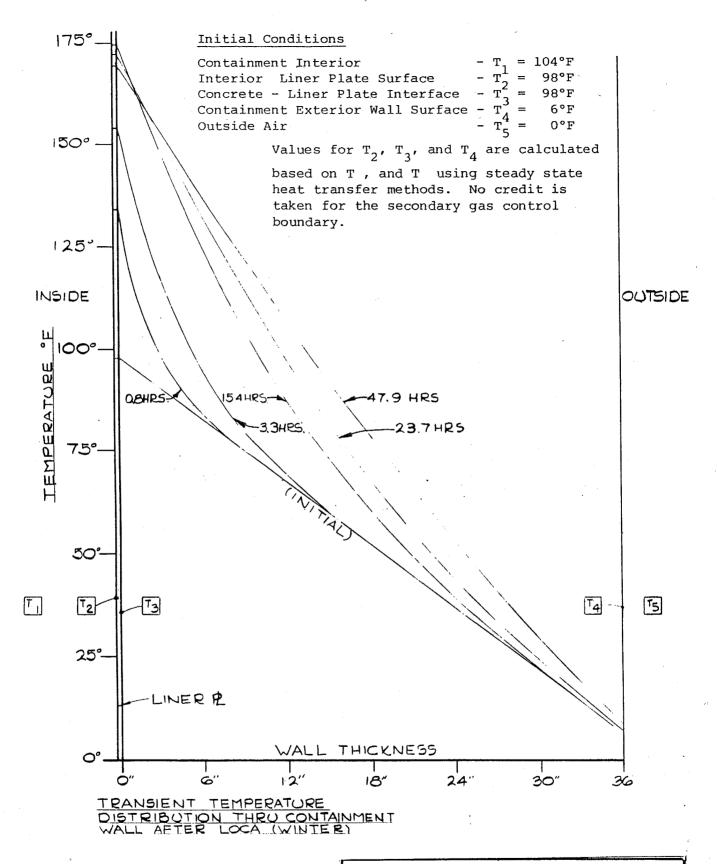


FIGURE 3.8-18

BASE SLAB ANALYTICAL

(SHEET 2 of 2)



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT
FIGURE 3.8-19
THERMAL GRADIENTS
(SHEET 1 of 3)

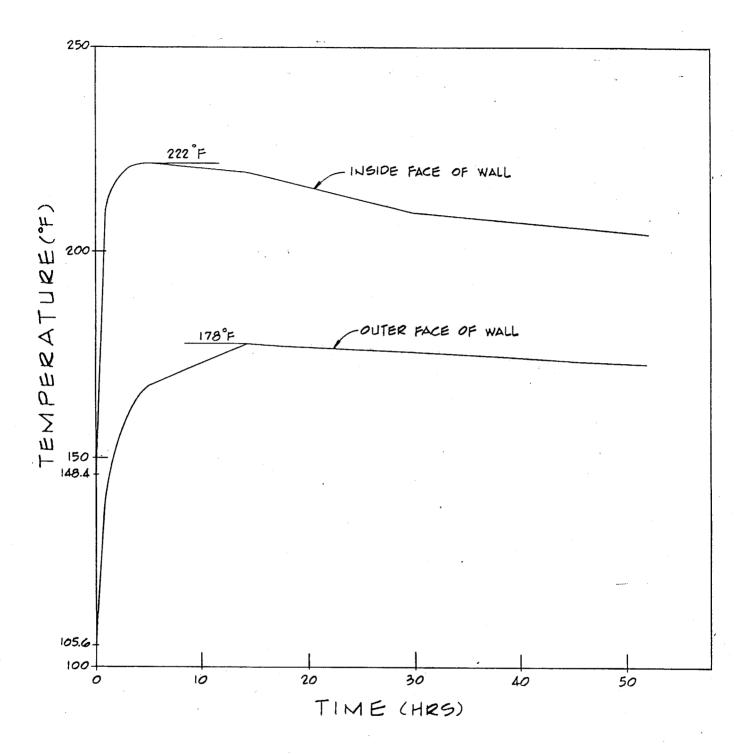
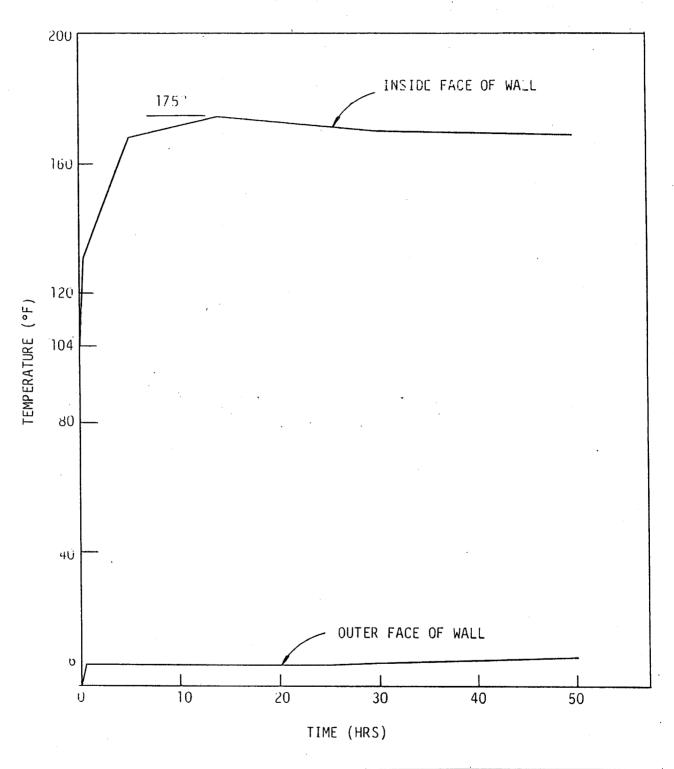
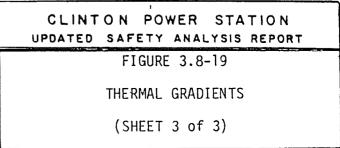


FIGURE 3.8-19

THERMAL GRADIENTS

(SHEET 2 of 3)





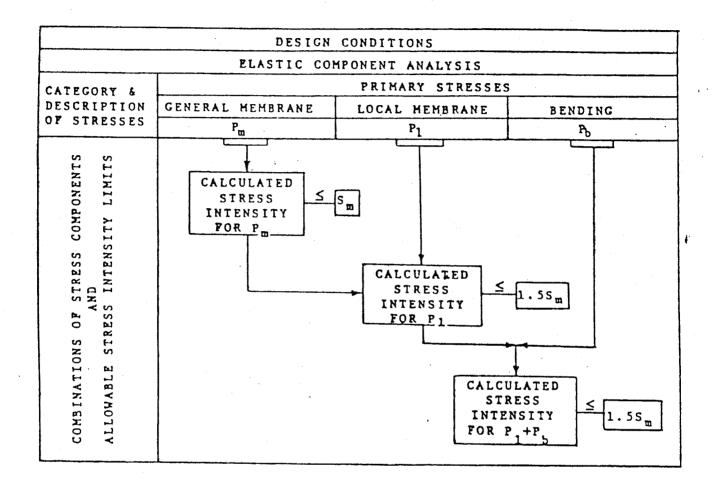


FIGURE 3.8-20

STRESS CATEGORIES AND STRESS INTENSITY LIMITS FOR DESIGN CONDITIONS

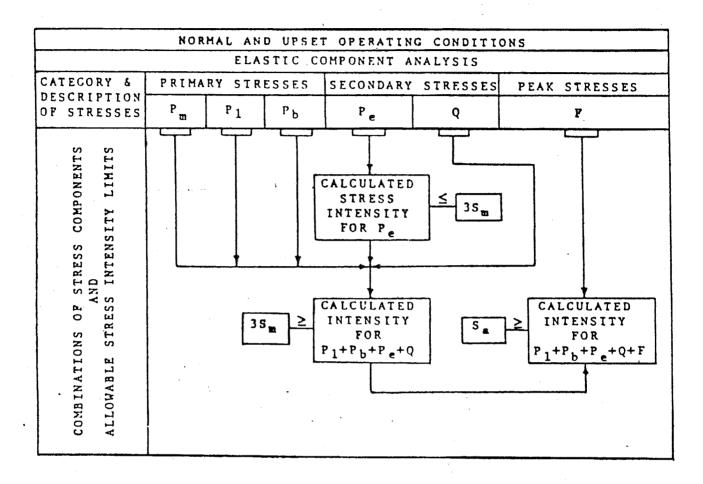


FIGURE 3.8-21

STRESS CATEGORIES AND STRESS INTENSITY LIMITS FOR NORMAL AND UPSET CONDITIONS

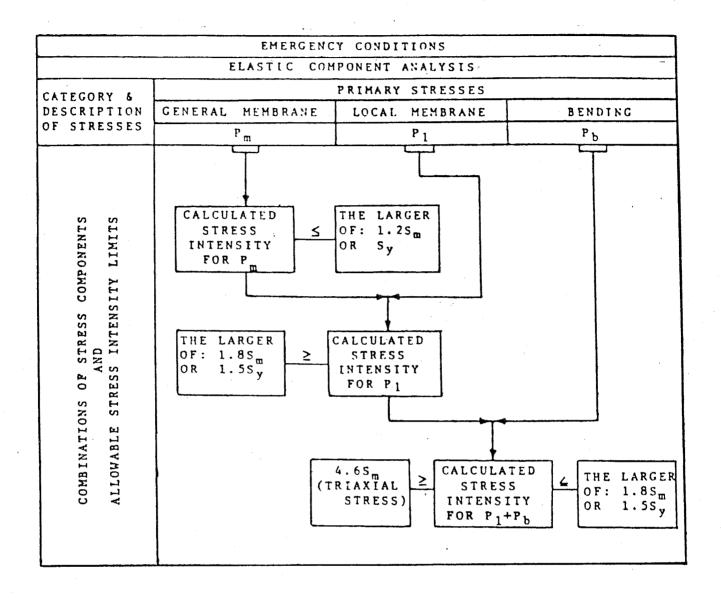


FIGURE 3.8-22

STRESS CATEGORIES AND STRESS INTENSITY LIMITS FOR EMERGENCY CONDITIONS

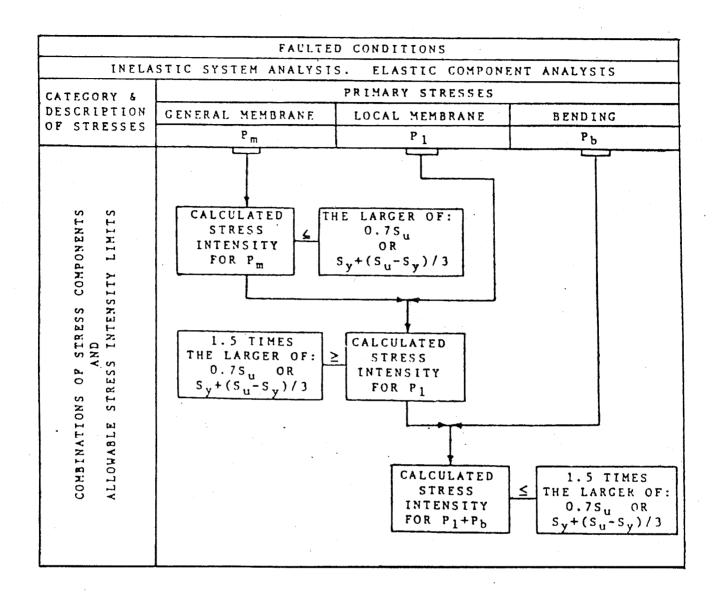


FIGURE 3.8-23

STRESS CATEGORIES AND STRESS INTENSITY LIMITS FOR FAULTED CONDITIONS

CPS/USAR

Figure 3.8-24 Deleted

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FIGURE 3.8-25

REACTOR SHIELD WALL

(SHEET 1 of 2)

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-25

REACTOR SHIELD WALL

(SHEET 2 of 2)

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-26

REACTOR PEDESTAL DETAILS

(SHEET 1 of 2)

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-26

REACTOR PEDESTAL DETAILS

(SHEET 2 of 2)

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-27

DRYWELL REINFORCING DETAILS

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

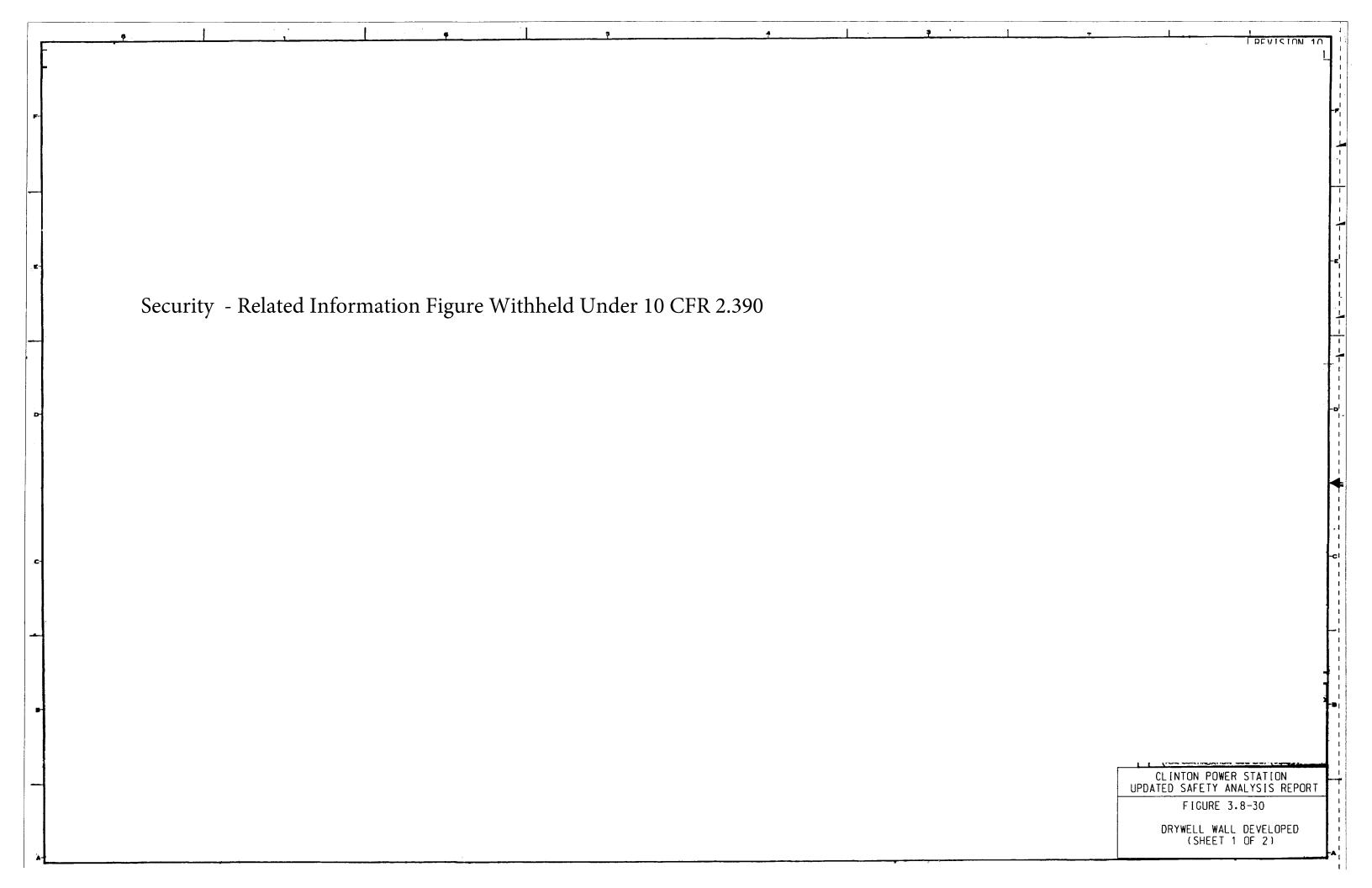
FIGURE 3.8-28

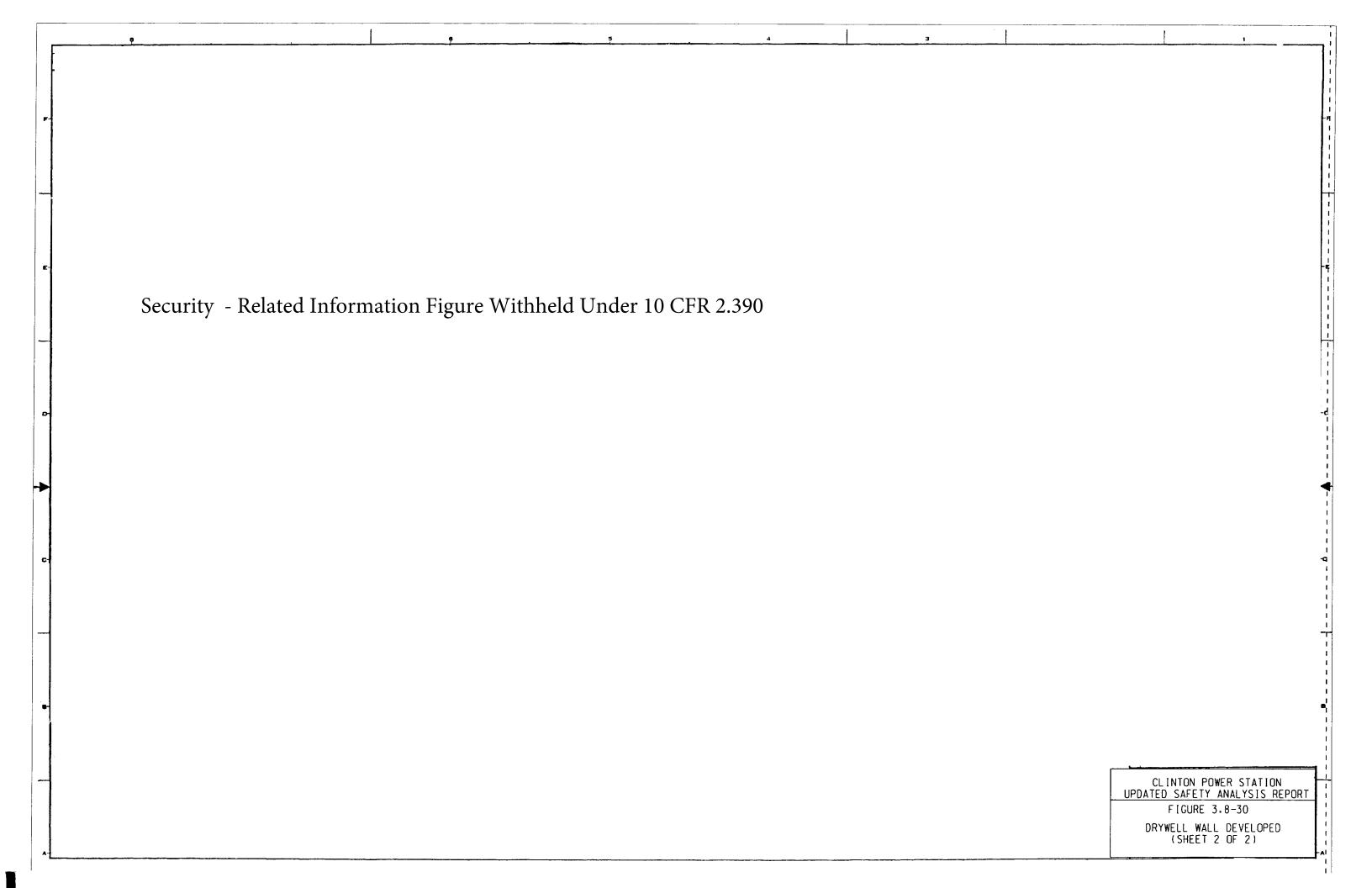
PERSONNEL & EQUIPMENT HATCHES
REINFORCING DETAILS - DRYWELL WALL

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-29

MAIN STEAMLINE REINFORCING -DRYWELL WALL



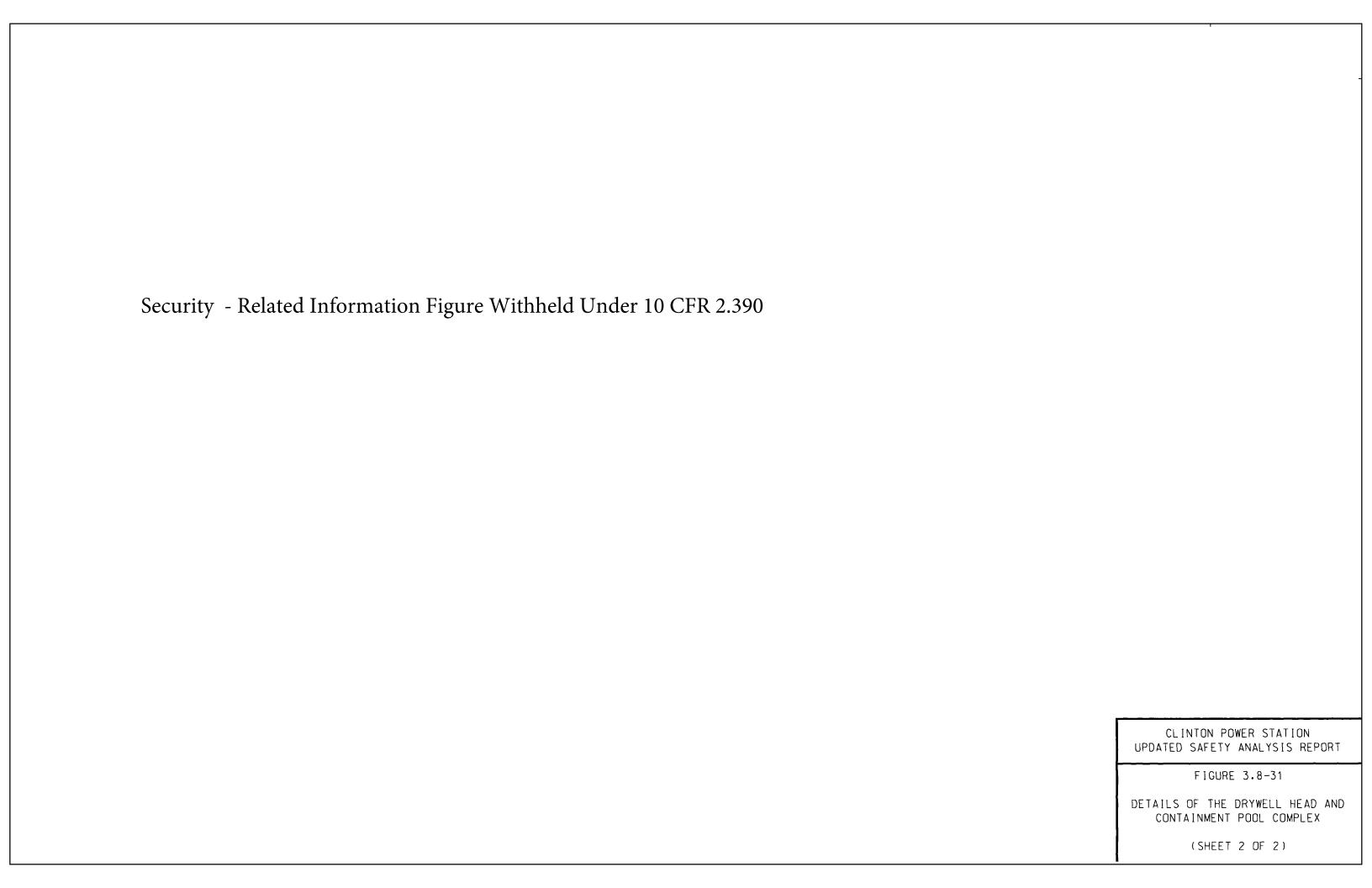


CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-31

DETAILS OF THE DRYWELL HEAD AND CONTAINMENT POOL COMPLEX

(SHEET 1 of 2)



CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-32

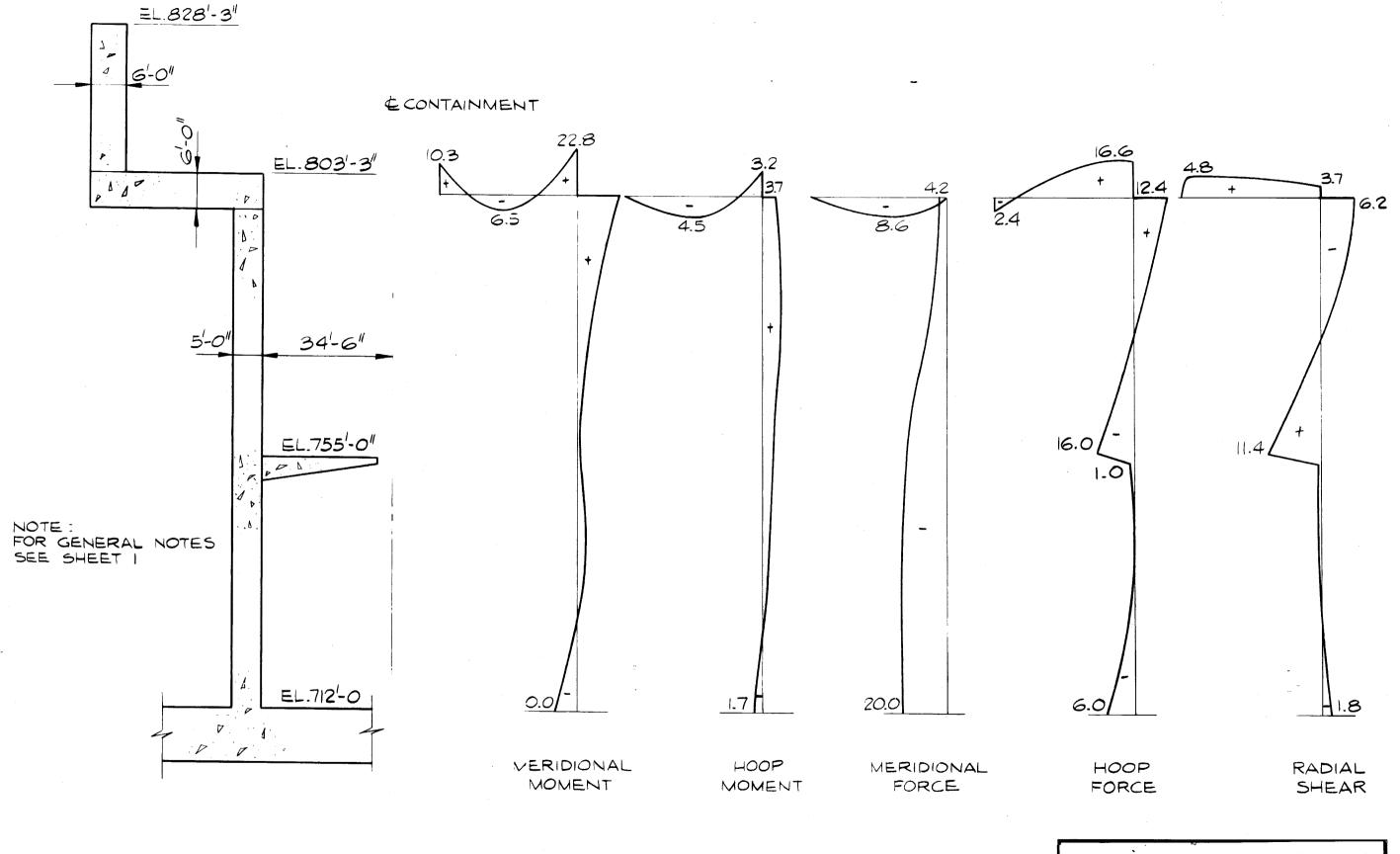
REACTOR PEDESTAL DEVELOPED

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-33

FORCE & MOMENT PLOTS - DRYWELL

(SHEET 1 of 4)



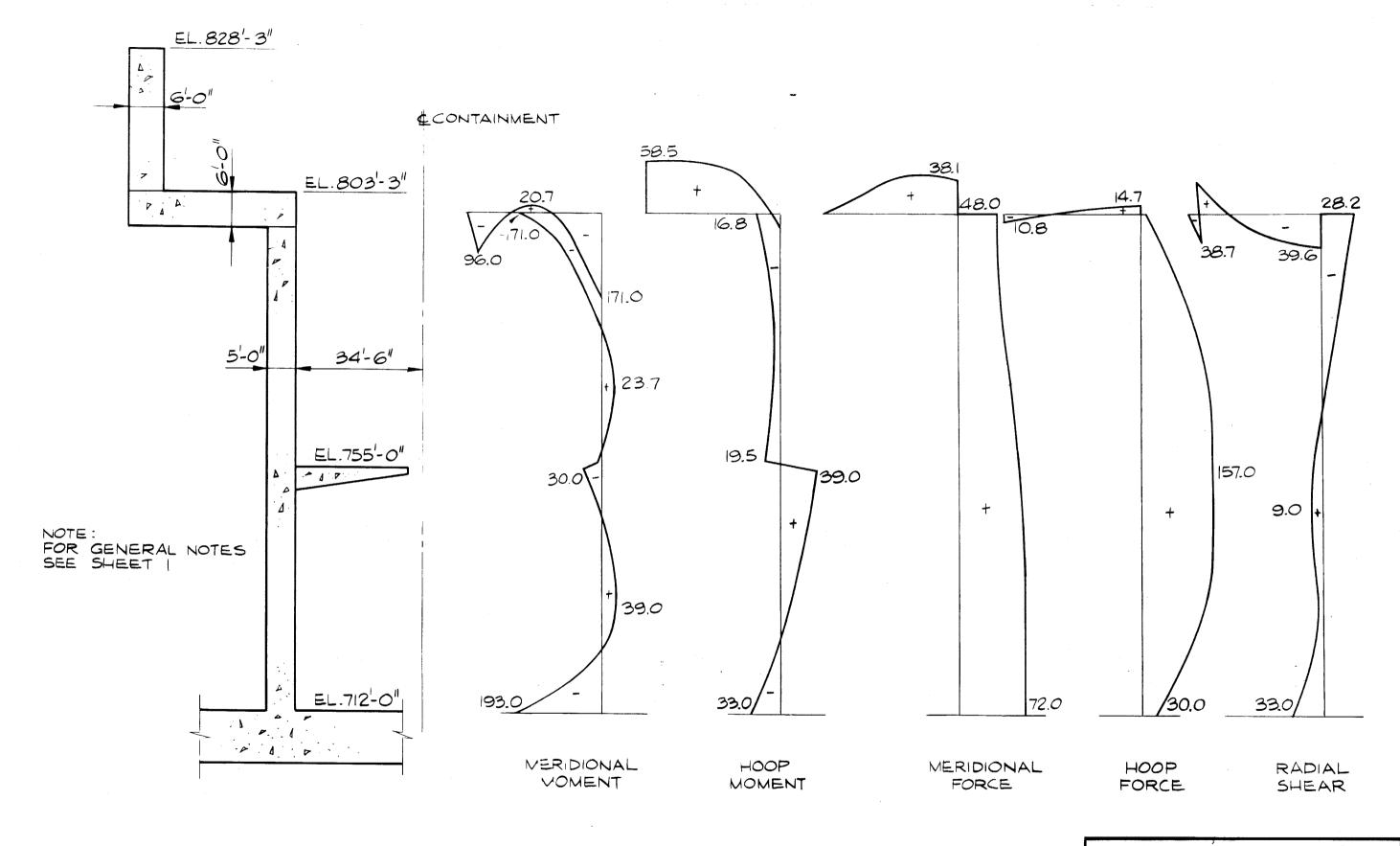
POOL WATER LOADING (H)
AZIMUTH 90°

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-33

FORCE & MOMENT PLOTS - DRYWELL

(SHEET 2 of 4)



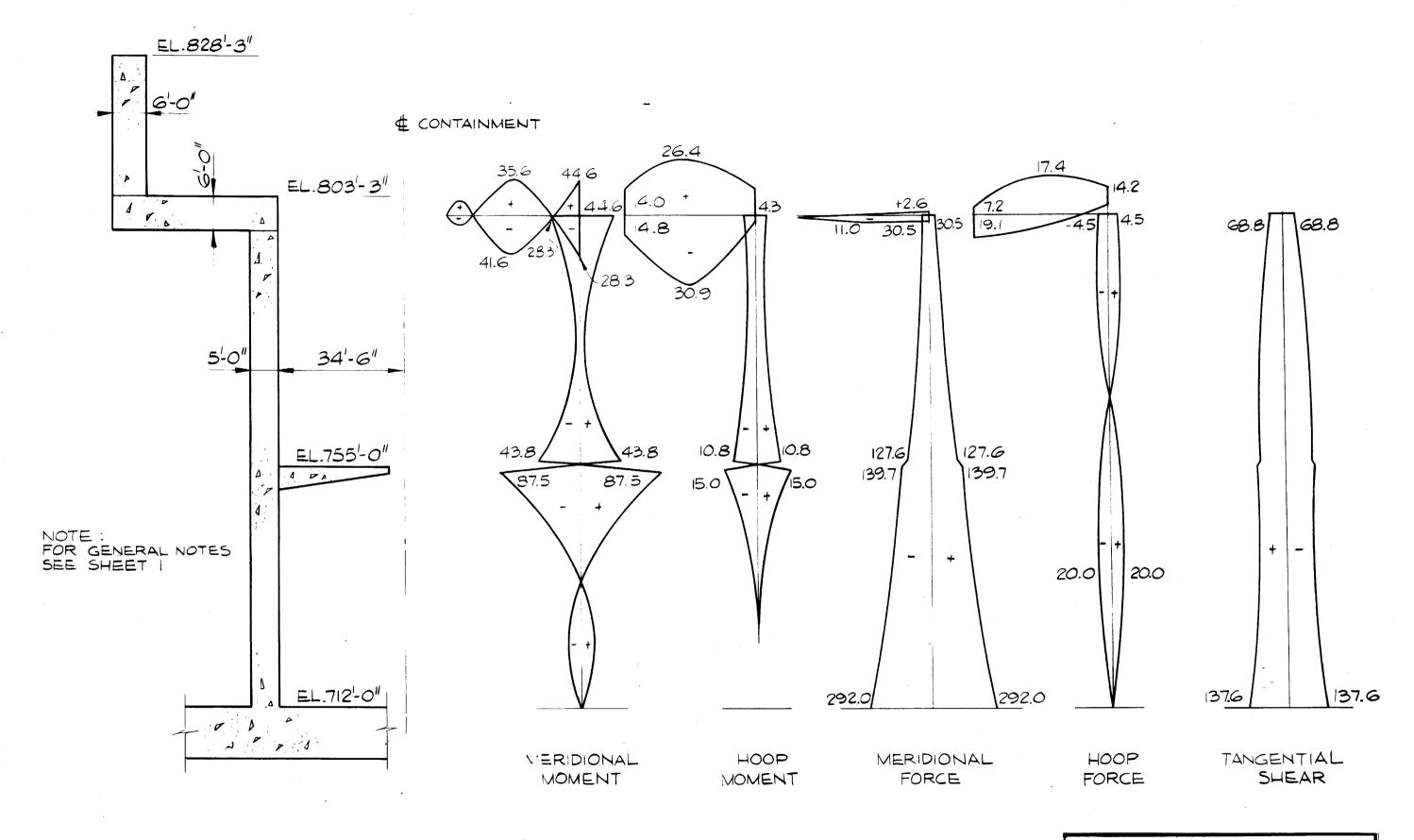
ACCIDENT PRESSURE (Pa) LOADING
AZIMUTH 90°

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-33

FORCE & MOMENT PLOTS - DRYWELL

(SHEET 3 of 4)



SAFE SHUTDOWN EARTHQUAKE LOADING (E')
AZIMUTH 90°

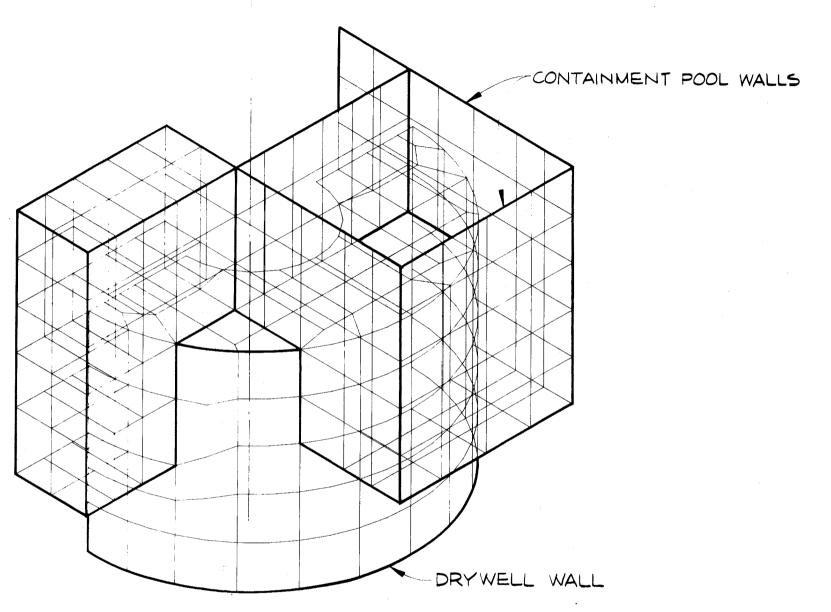
CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-33

FORCE & MOMENT PLOTS - DRYWELL

(SHEET 4 of 4)

CONTAINMENT BLDG.



CLINTON POWER STATION UPDATED SAFETY 1 ALYSIS REPORT

FIGURE 1.8-34

ANALYTICAL MODEL IF IPPER PORTION OF DRYWELL ITRUCTURE

CPS/USAR

FIGURE 3.8-35
HAS BEEN DELETED

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-36

TYPICAL BEAM REINFORCING DETAILS

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-37

TYPICAL REINFORCING DETAILS
(SHEET 1 of 4)

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-37

TYPICAL REINFORCING DETAILS

(SHEET 2 of 4)

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-37

TYPICAL REINFORCING DETAILS

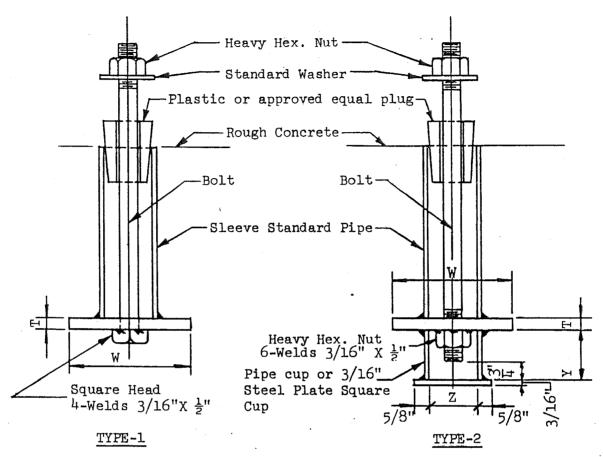
(SHEET 3 of 4)

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-37

TYPICAL REINFORCING DETAILS

(SHEET 4 of 4)



TYPE 1 AND 2 BOLTS													
BOLT DIAM.		5/8"	3/4"	7/8"	1"	1 <u>1</u> "	1 1 "	1 3 "	2"	2 <u>1</u> "	2 <u>1</u> "	2 3 "	3"
SLEEVE		1 <u>1</u> "	2"	2"	2 <u>1</u> "	3"	3"	3 1 "	3 <u>1</u> "	ĵ†11	5"	5"	5" [']
SQUARE PLATE WASHER	Т	3/8"	3/8"	1/2"	1/2"	5/8"	3/4"	3/4"	3/4"	7/8"	7/8"	l"	14"
	W	3 <u>분</u> "	<u> </u>	5"	5"	6"	6"	8"	8"	9"	10"	11"	12"
CUP	Z	1 <u>1</u> "	2"	2"	2 1 "	3"	3"	3 <mark>분</mark> "	74''	5"	5"	5"	6"
	Y	2"	2 <u>1</u> "	2 <u>1</u> "	2 ½ "	3"	3"	3 2 "	3 1 2"	Цn	ኒ "	4 <u>1</u> "	4 <u>분</u> "

Note: The plastic plug will be removed and the pipe sleeve filled with grout after the equipment has been set in place.

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-38

TYPICAL ANCHOR BOLT DETAILS FOR SEISMIC CATEGORY I EQUIPMENT

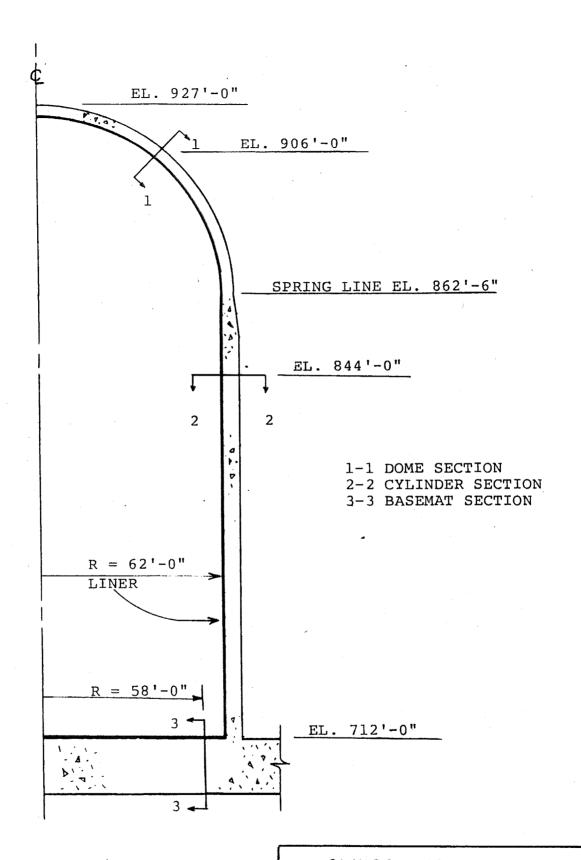
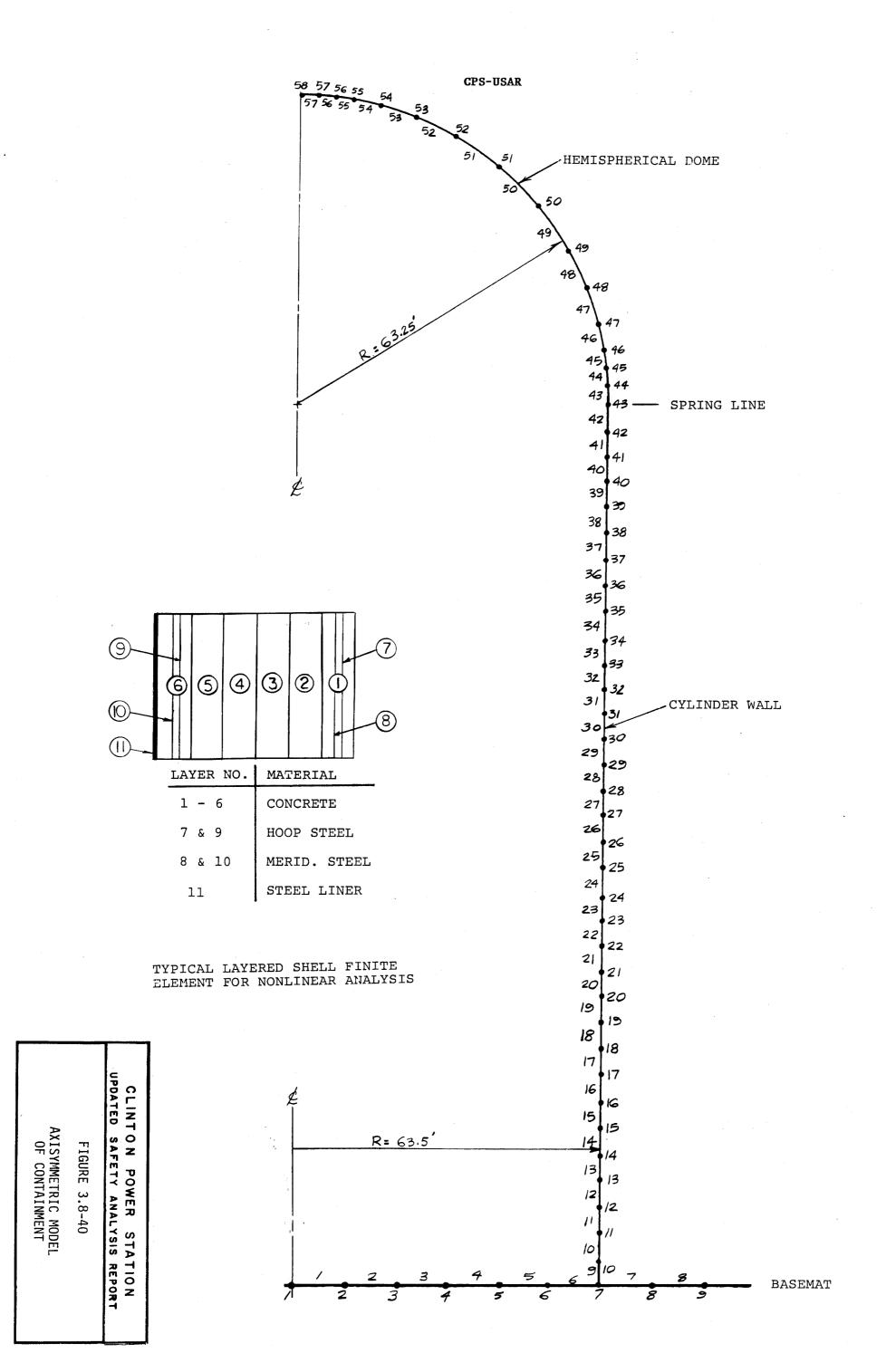
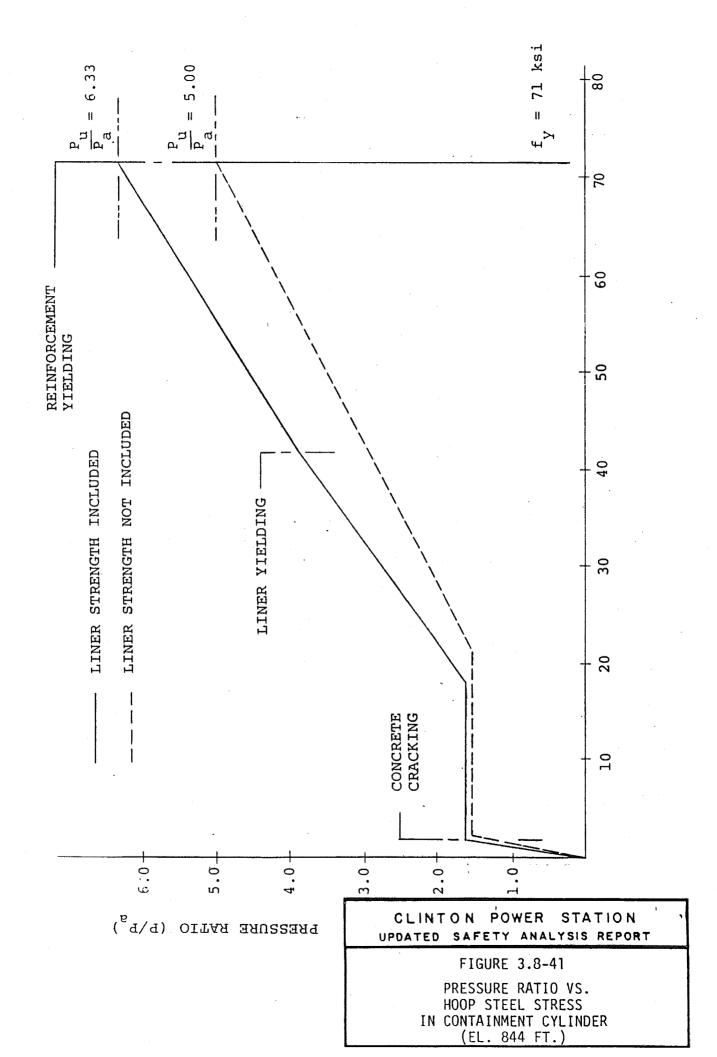
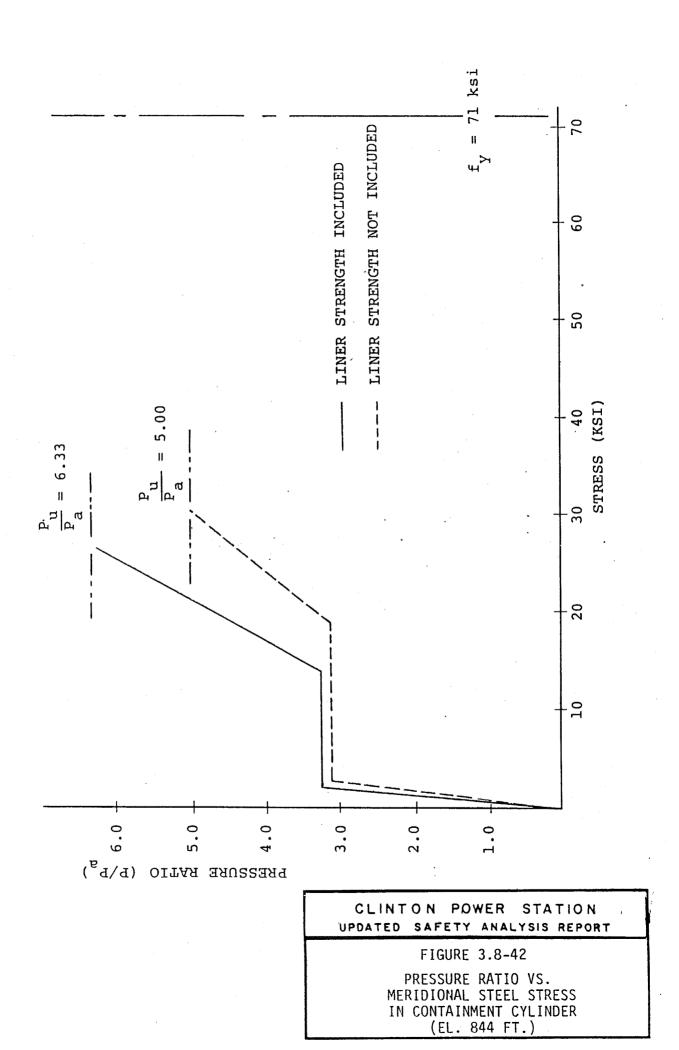


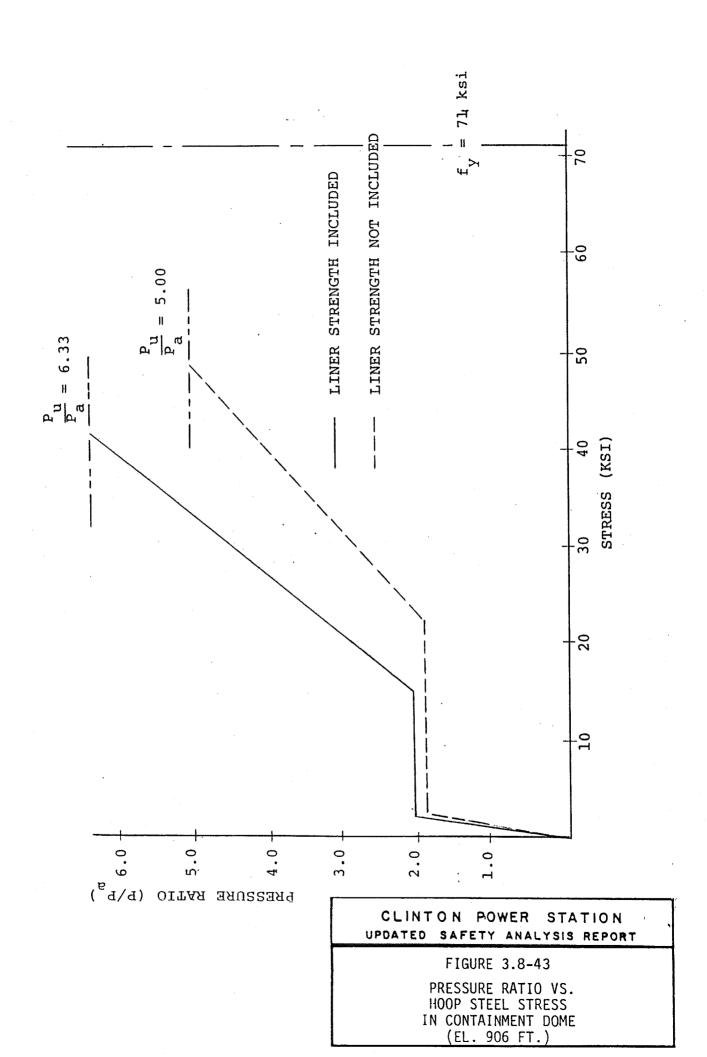
FIGURE 3.8-39

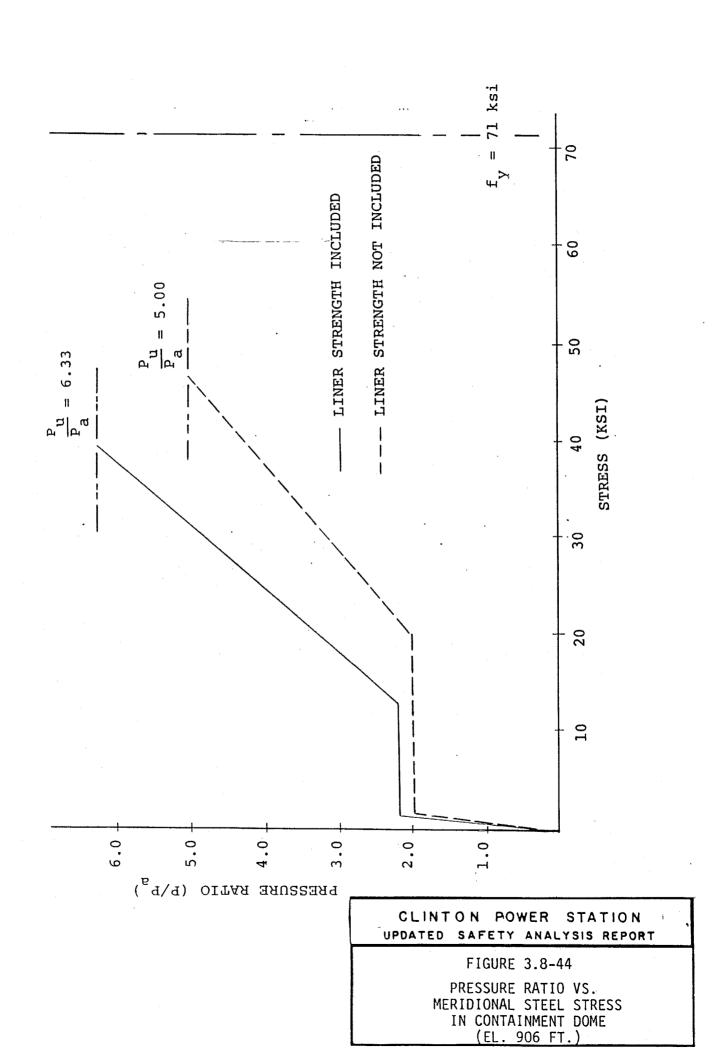
CRITICAL SECTIONS
IN CONTAINMENT STRUCTURE

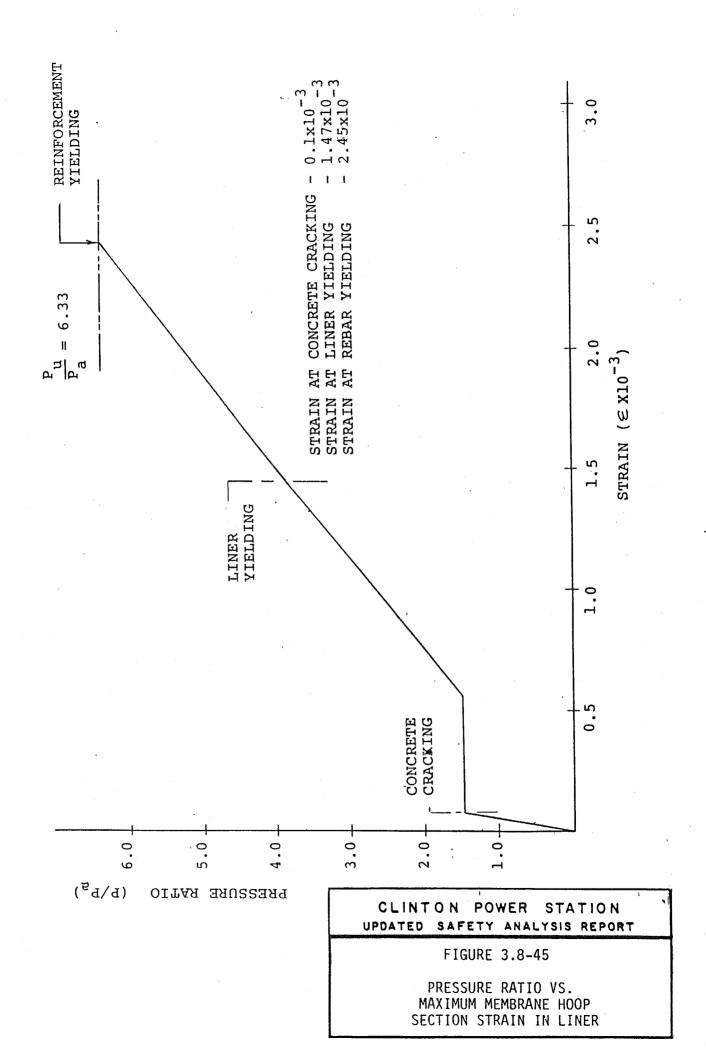












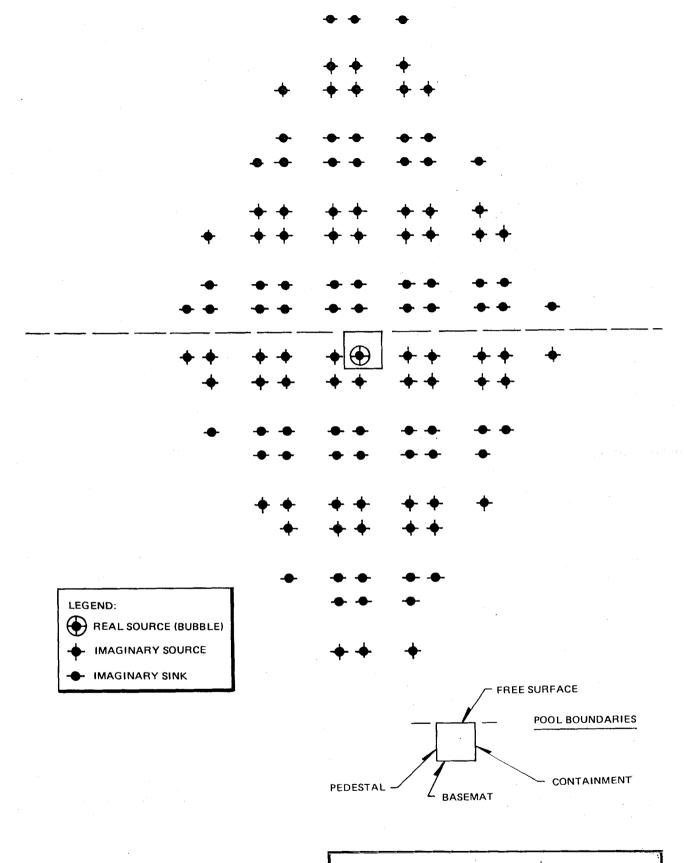
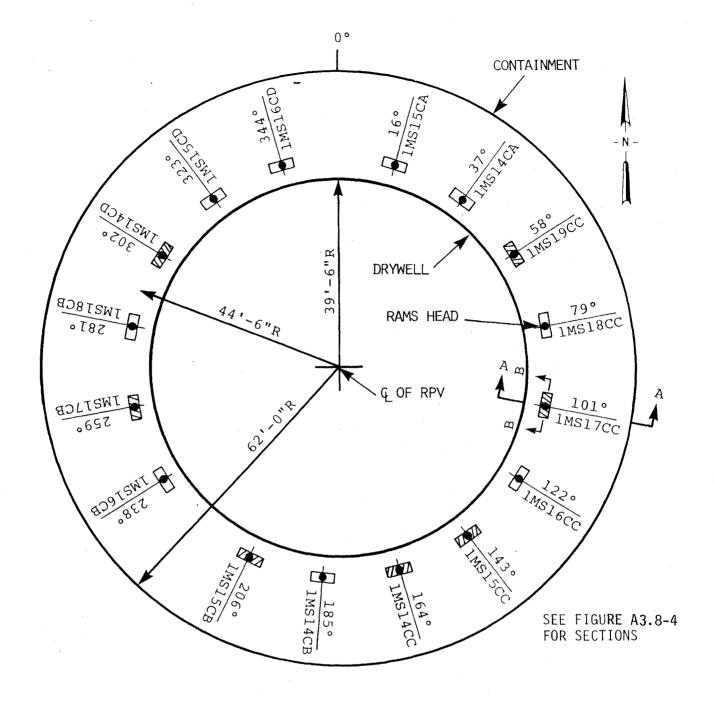


FIGURE A3.8-1

ARRAY OF IMAGINARY SOURCES AND SINKS FOR METHOD OF IMAGES MODEL OF SUPPRESSION POOL



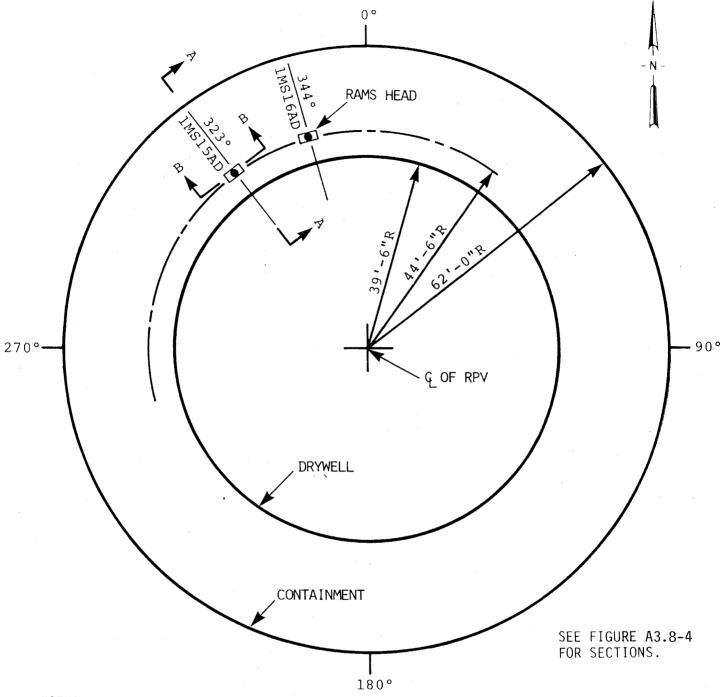
NOTES:

- 1. NOT TO SCALE.
- 2. CROSS HATCHED VENTS ARE ATTACHED TO ADS VALVES.
- 3. RAMS HEADS ARE ORIENTED CIRCUMFERENTIALLY.

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE A3.8-2

PLAN OF CLINTON SUPPRESSION POOL SHOWING THE VENTS ACTIVE IN THE SYMMETRIC LOADING CASE



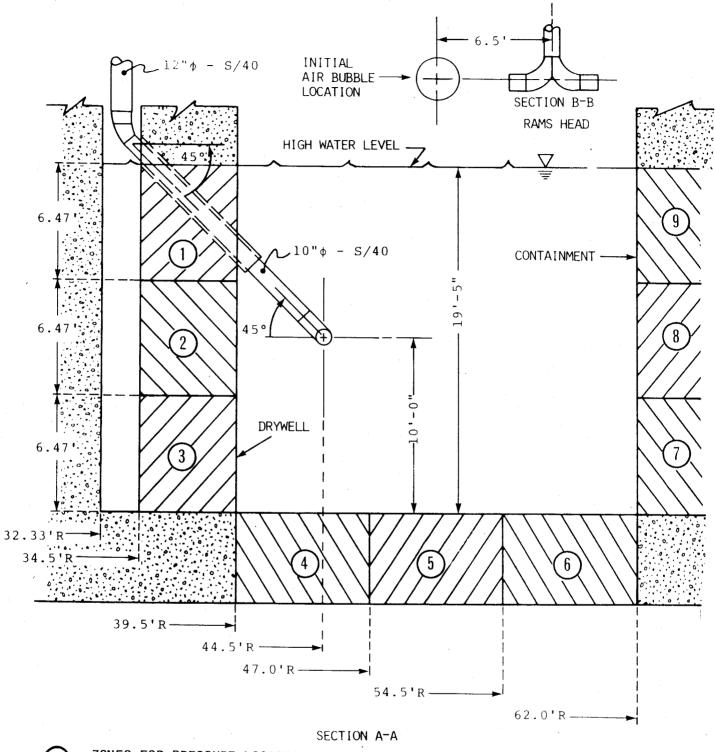
NOTES:

- 1. NOT TO SCALE.
- 2. RAMS HEADS ARE ORIENTED CIRCUMFERENTIALLY.

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE A3.8-3

PLAN OF CLINTON SUPPRESSION POOL SHOWING THE VENTS ACTIVE IN THE ASYMMETRIC LOADING CASE



O - ZONES FOR PRESSURE LOADING ON POOL BOUNDARY.

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE A3.8-4

CROSS SECTION OF SUPPRESSION POOL

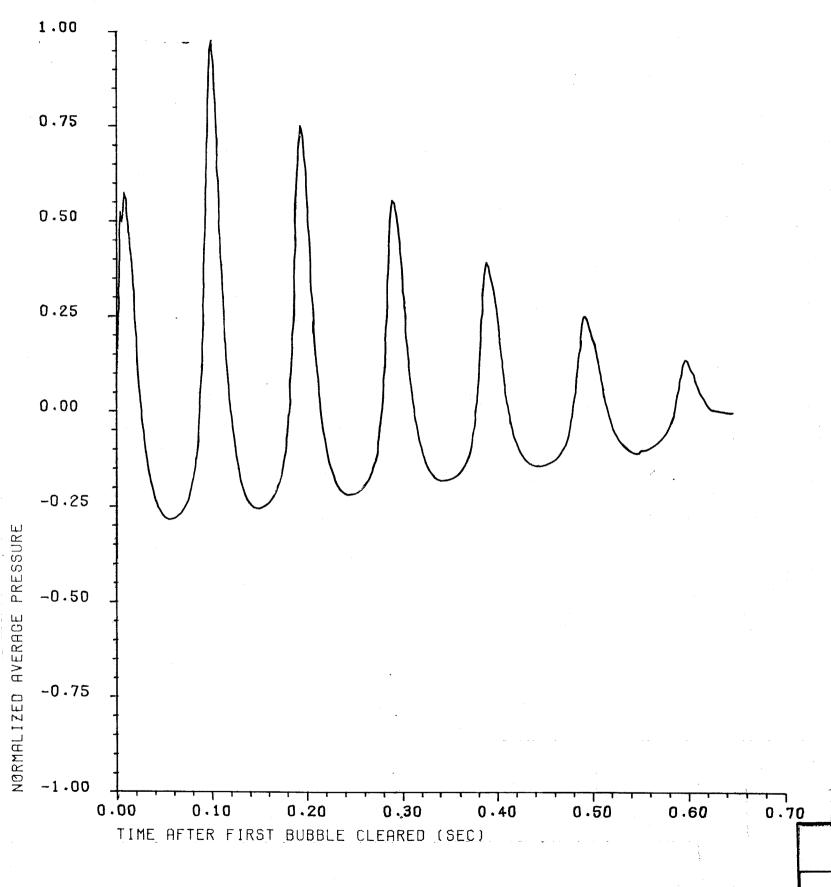


FIGURE A3.8-5

SYMMETRIC WALL LOADING ZONE 4 NORMALIZED AVERAGE PRESSURE

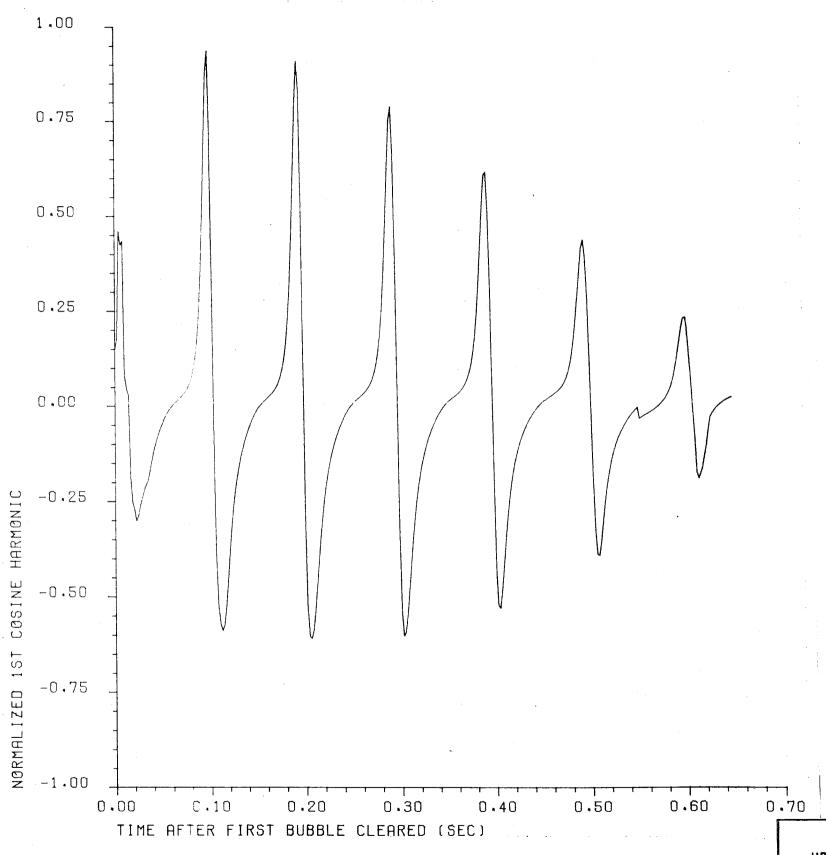


FIGURE A3.8-6

SYMMETRIC WALL LOADING
ZONE 4
NORMALIZED 1st COSINE HARMONIC

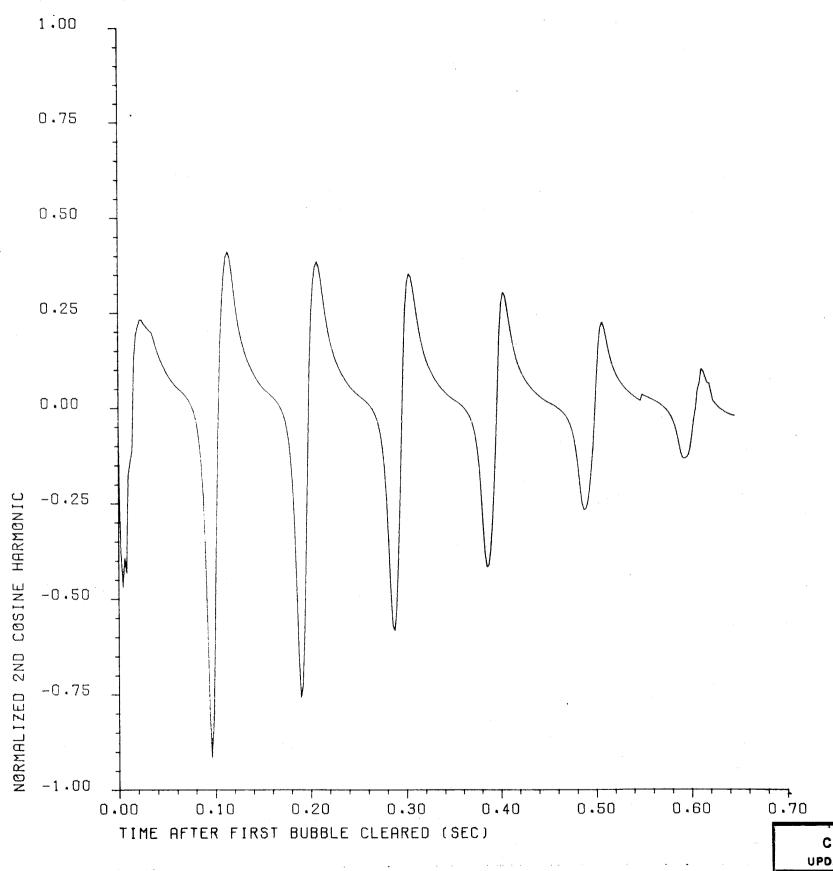


FIGURE A3.8-7

SYMMETRIC WALL LOADING
ZONE 4
NORMALIZED 2nd COSINE HARMONIC

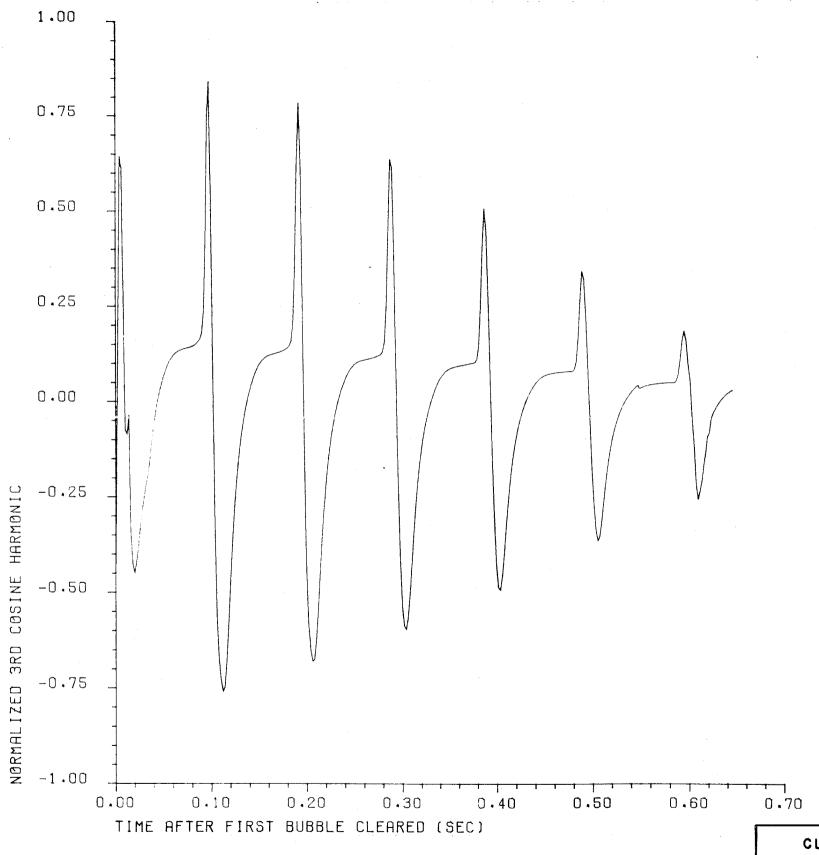


FIGURE A3.8-8

SYMMETRIC WALL LOADING
ZONE 4
NORMALIZED 3rd COSINE HARMONIC

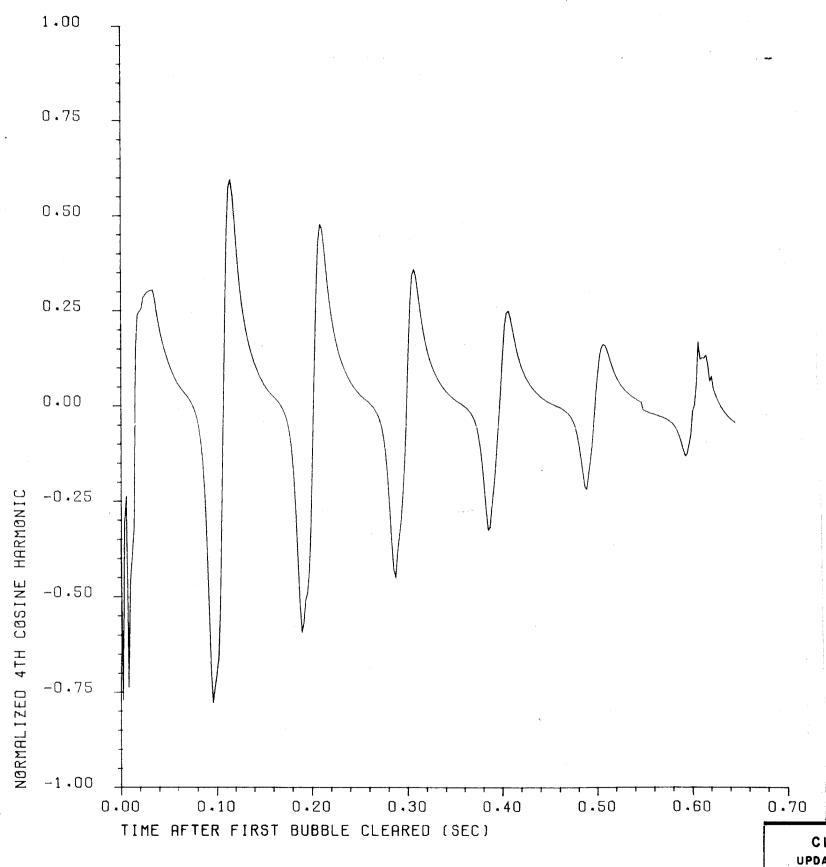
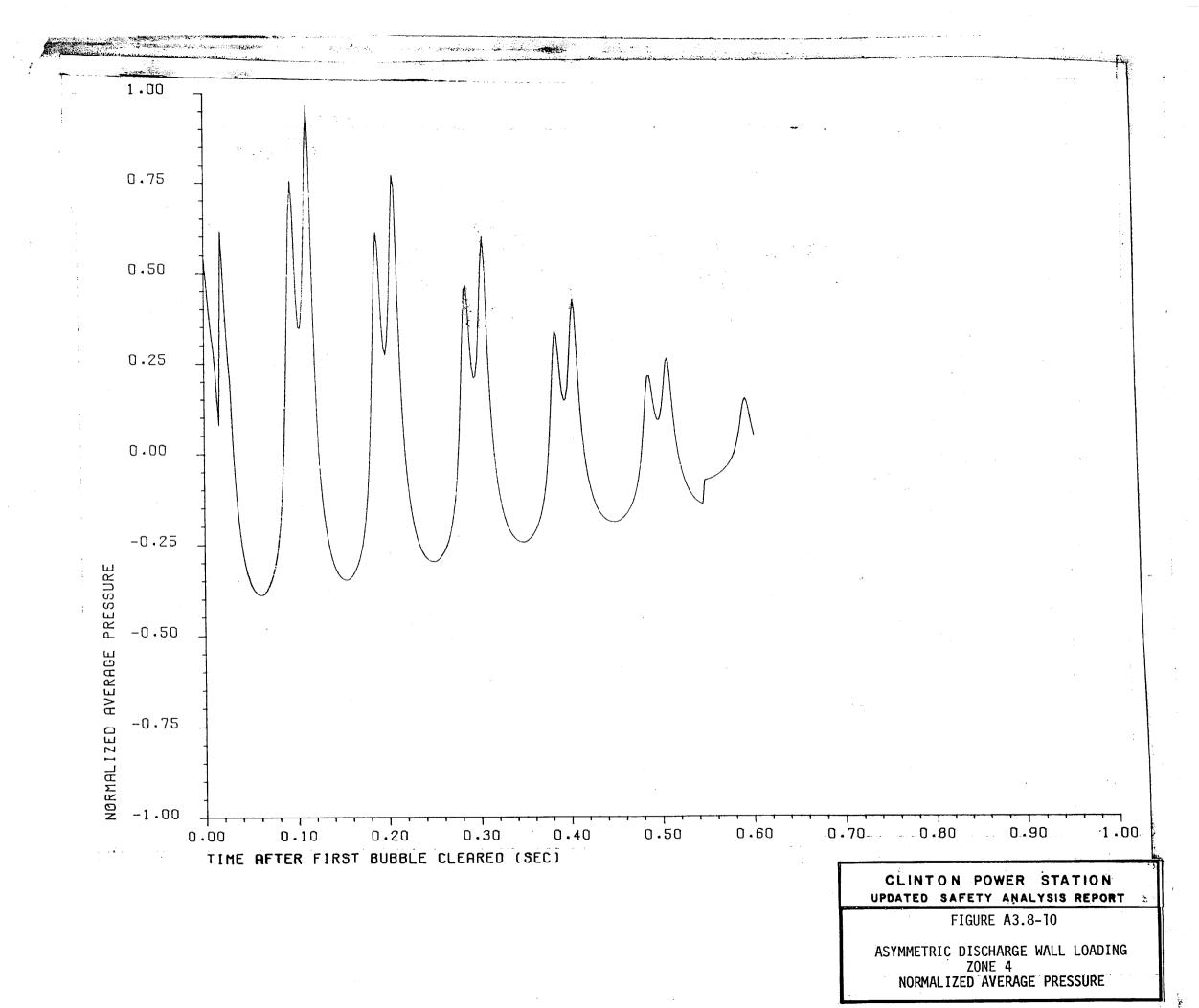


FIGURE A3.8-9

SYMMETRIC WALL LOADING
ZONE 4
NORMALIZED 4th COSINE HARMONIC



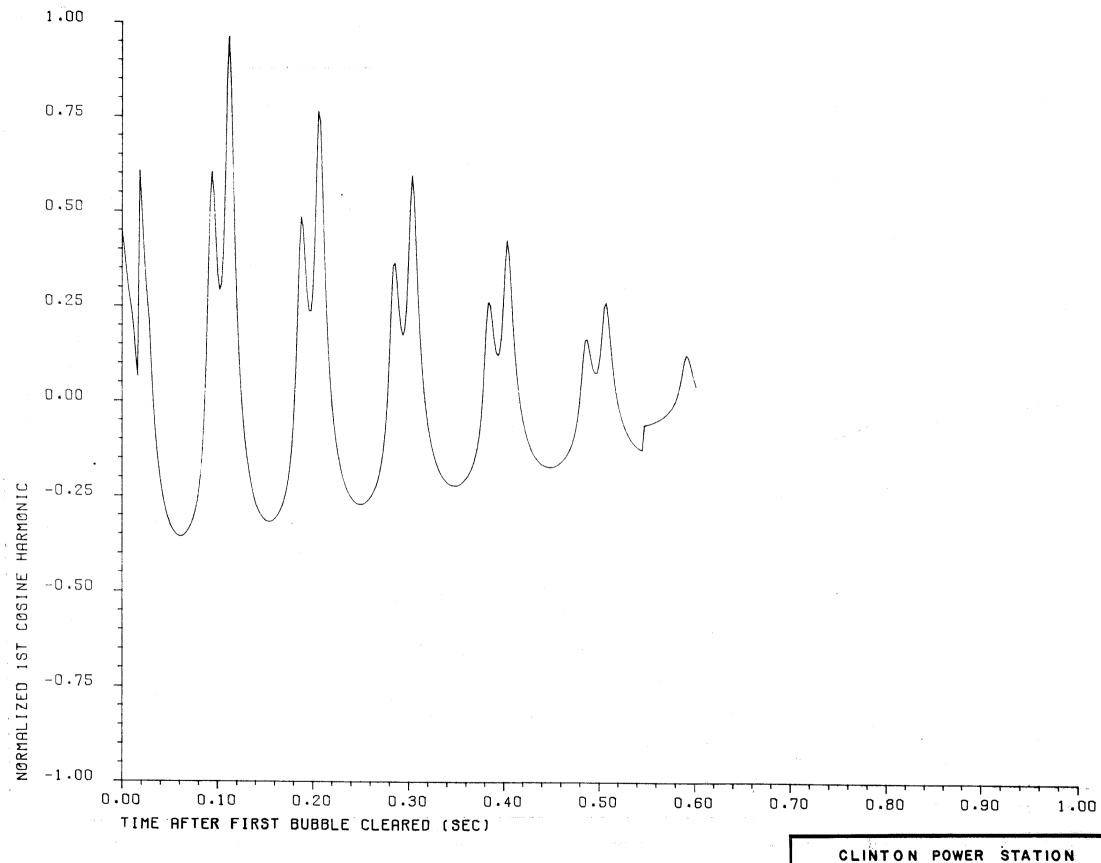


FIGURE A3.8-11

ASYMMETRIC DISCHARGE WALL LOADING

ZONE 4

NORMALIZED 1st COSINE HARMONIC

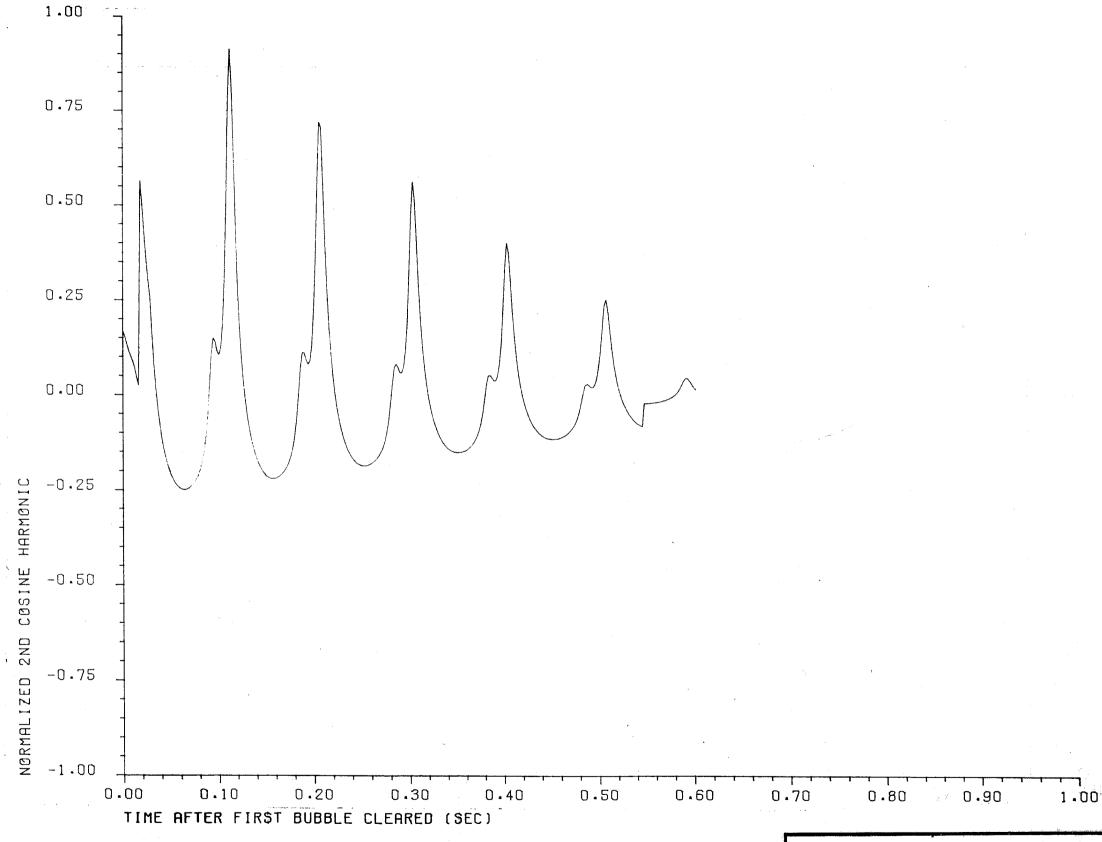
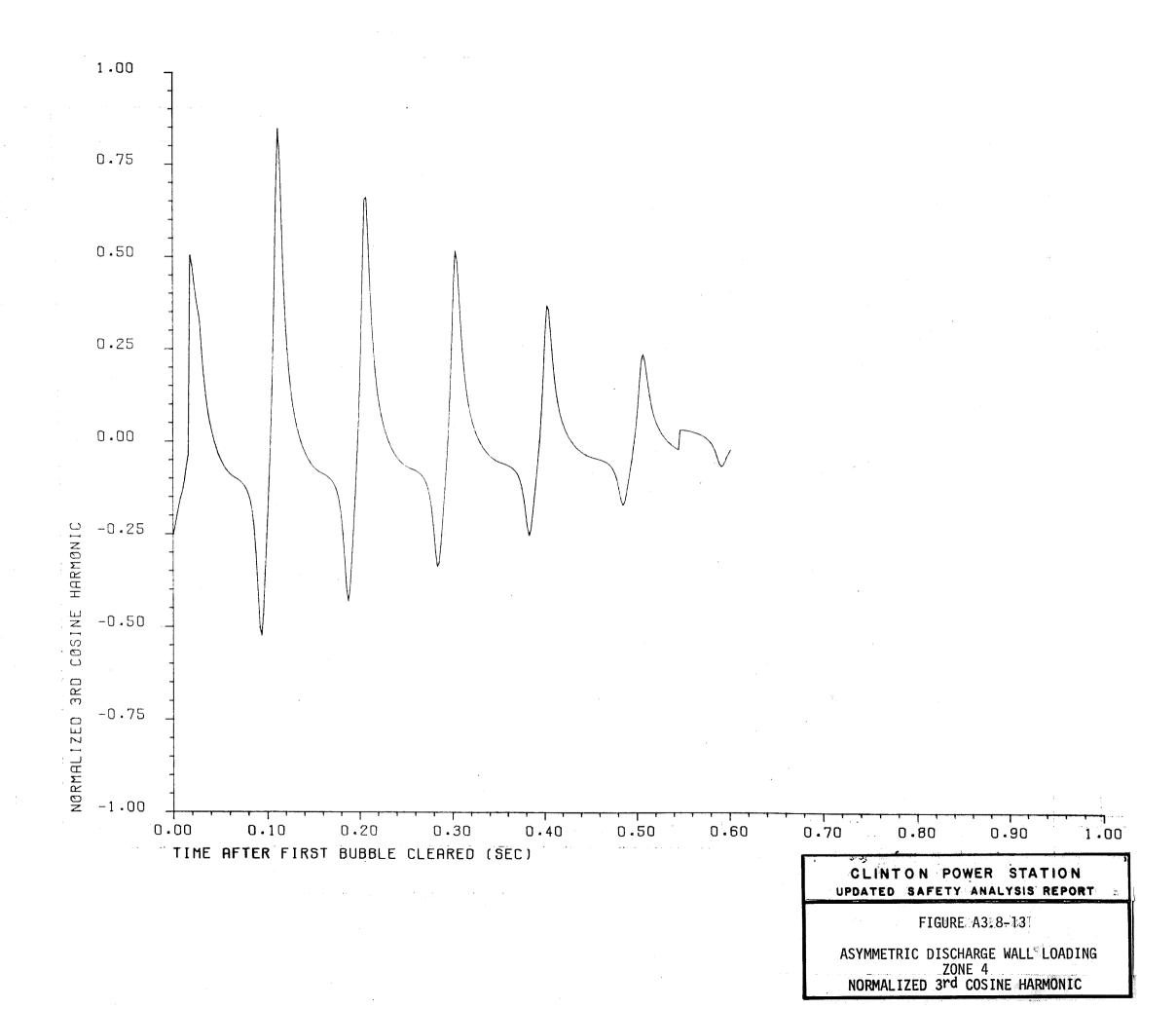


FIGURE A3.8-12

ASYMMETRIC DISCHARGE WALL LOADING
ZONE 4
NORMALIZED 2nd COSINE HARMONIC



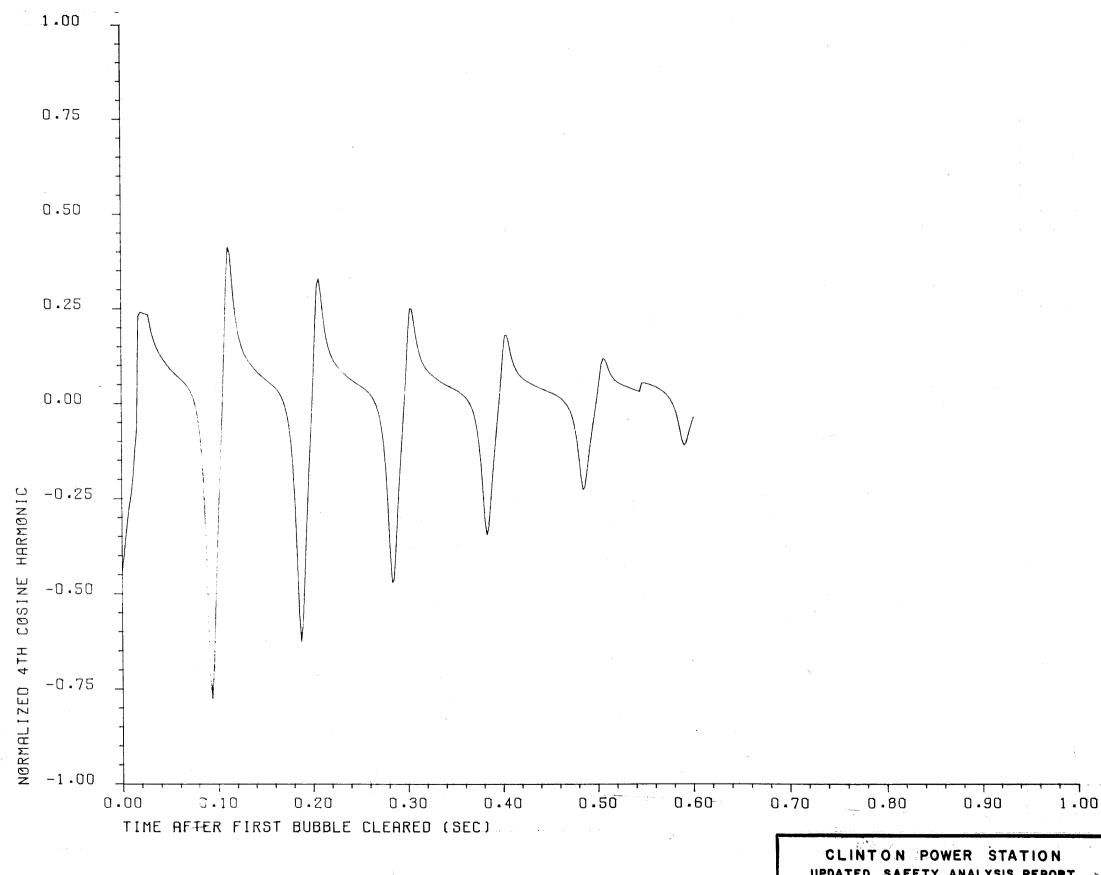
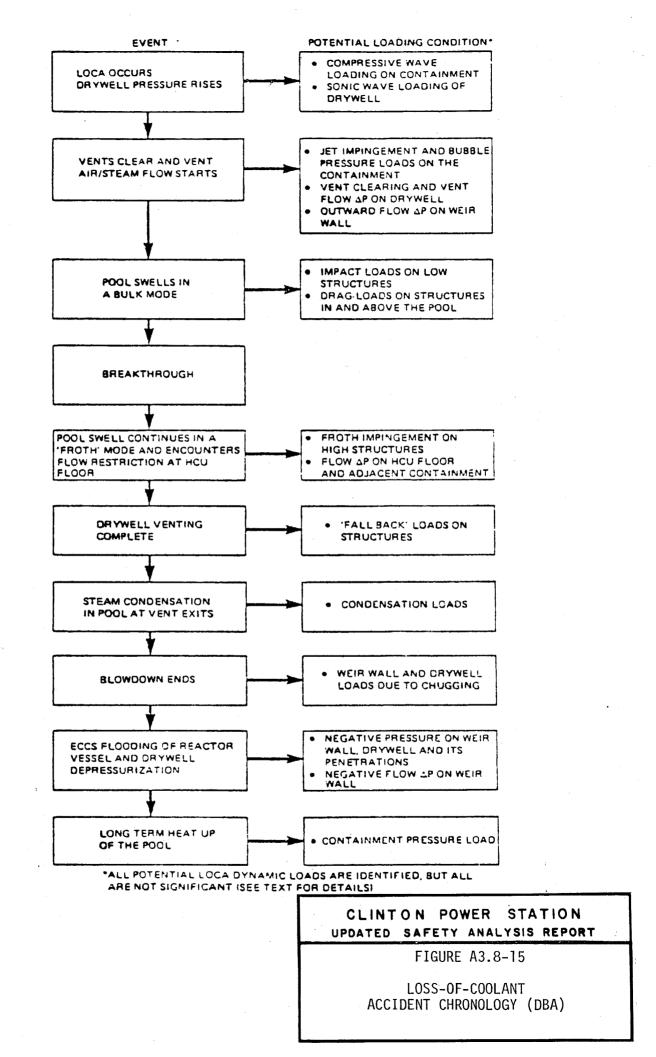


FIGURE A3.8-14

ASYMMETRIC DISCHARGE WALL LOADING
ZONE 4
NORMALIZED 4th COSINE HARMONIC



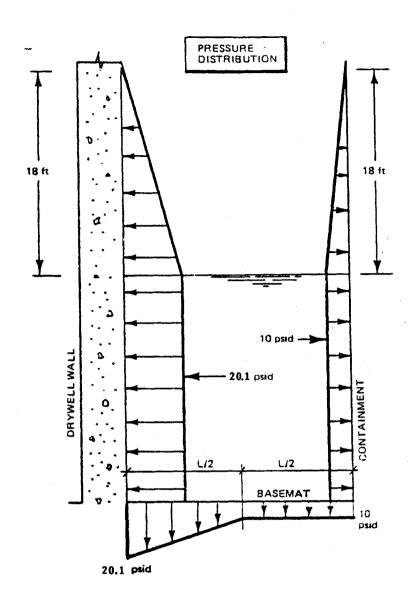
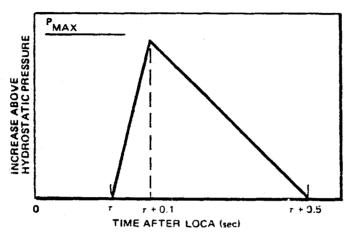


FIGURE A3.8-16

PRESSURE DISTRIBUTION ON SUPPRESSION POOL WETTED SURFACE





FOR $y \le y_0$, r = 1.0 sec FOR $y > y_0$, $r = 1.0 + (y - y_0)/40$ (sec)

WHERE

- 7 = DELAY DUE TO FINITE POOL SWELL VELOCITY
- y = HEIGHT ABOVE BASEMAT, ft
- yo = INITIAL POOL DEPTH, ft (BASED UPON 40 fps POOL SWELL VELOCITY)

y_{MAX} = y₀ + 18 ft

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FIGURE A3.8-17

DYNAMIC LOADS ASSOCIATED WITH INITIAL BUBBLE FORMATION IN THE POOL

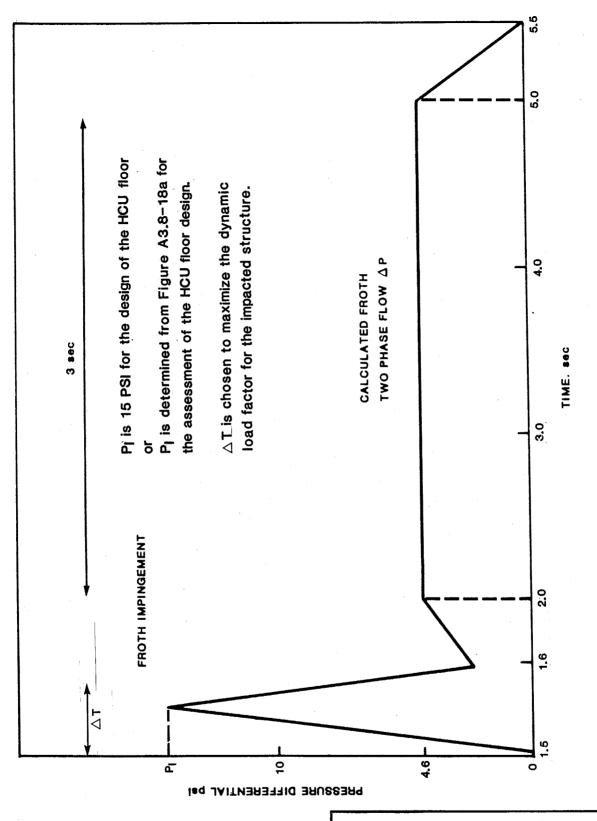


FIGURE A3.8-18

LOADS AT HCU FLOOR ELEVATION DUE TO POOL SWELL FROTH IMPACT AND TWO PHASE FLOW

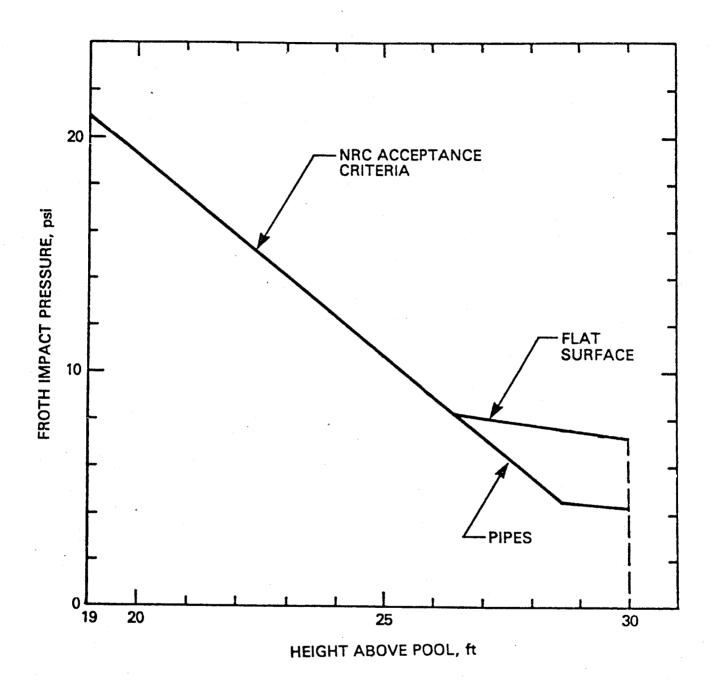


FIGURE A3.8-18a

NRC ACCEPTANCE CRITERIA FOR FROTH IMPACT: PEAK AMPLITUDE OF PRESSURE PULSE

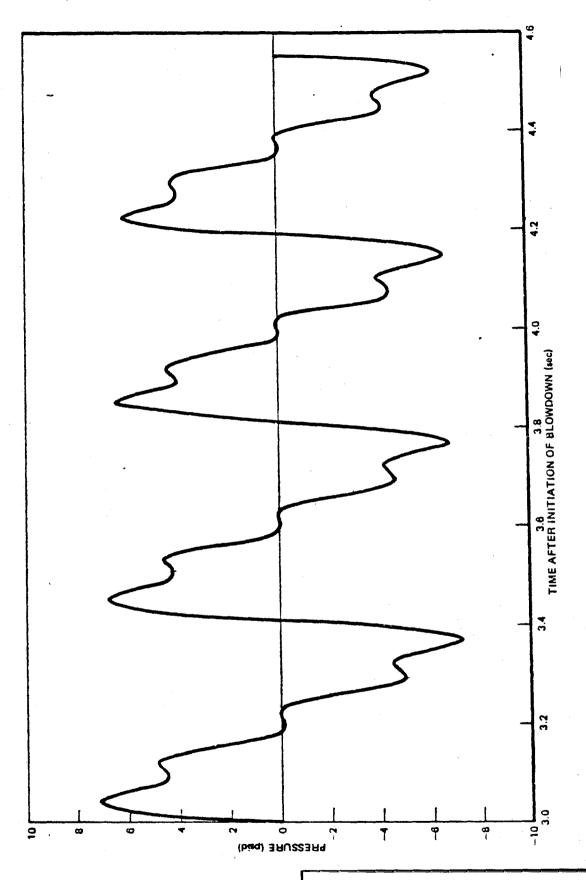


FIGURE A3.8-19

CONDENSATION OSCILLATION FORCING FUNCTION ON THE DRYWELL WALL O.D. ADJACENT THE TOP VENT

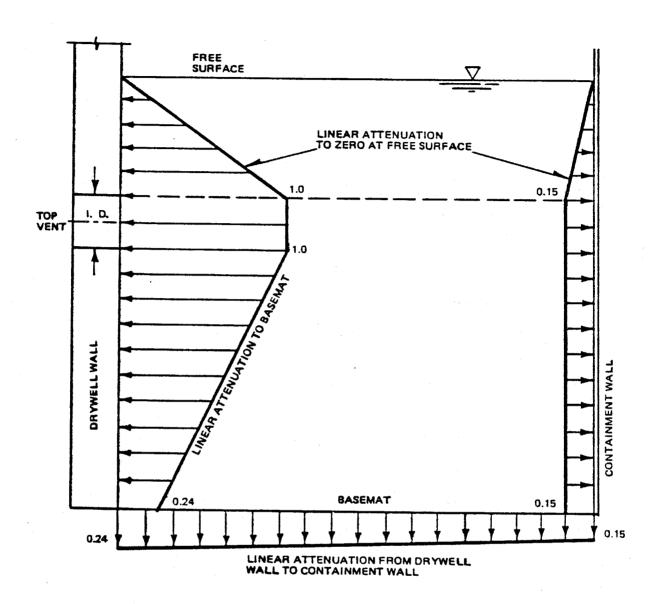
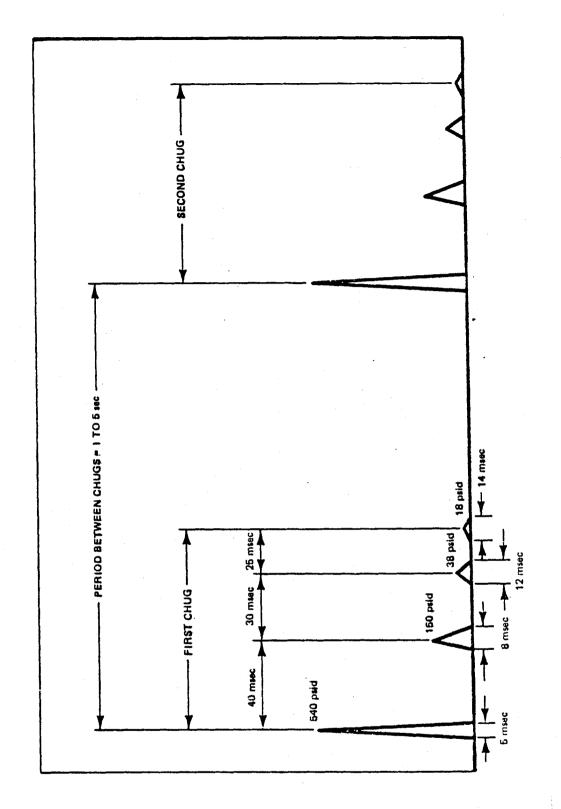


FIGURE A3.8-20

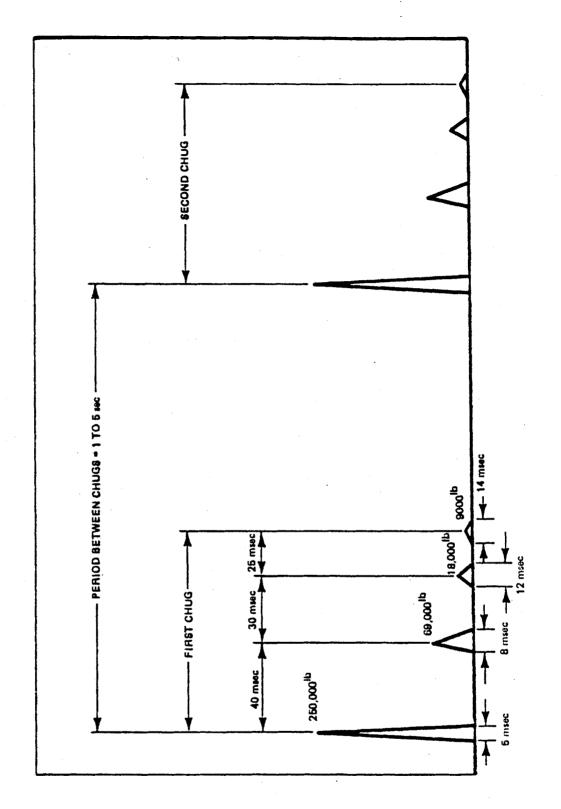
CONDENSATION OSCILLATION LOAD SPATIAL DISTRIBUTION ON THE DRYWELL WALL, CONTAINMENT WALL AND BASE MAT



AMPLITUDE (psid)

FIGURE A3.8-21

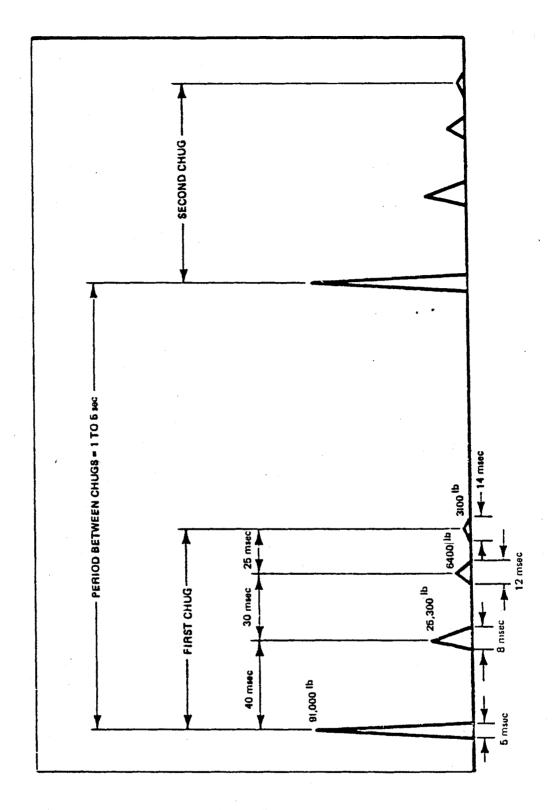
PEAK PRESSURE PULSE TRAIN IN TOP VENT DURING CHUGGING



AMPLITUDE (1b)

FIGURE A3.8-22

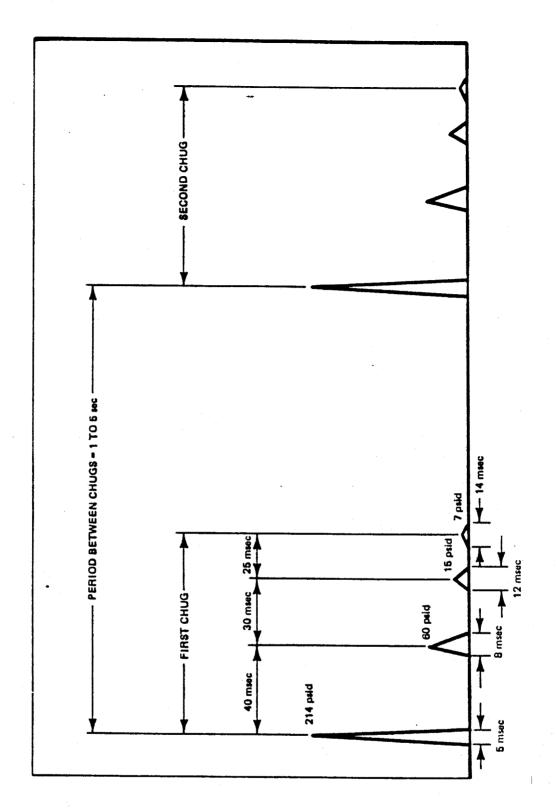
PEAK FORCE PULSE TRAIN IN TOP VENT DURING CHUGGING



(di) EQUITITAMA

FIGURE A3.8-23

AVERAGE FORCE PULSE TRAIN IN TOP VENT DURING CHUGGING



(biaq) BOUTIJ9MA

FIGURE A3.8-24

AVERAGE PRESSURE PULSE TRAIN IN TOP VENT DURING CHUGGING

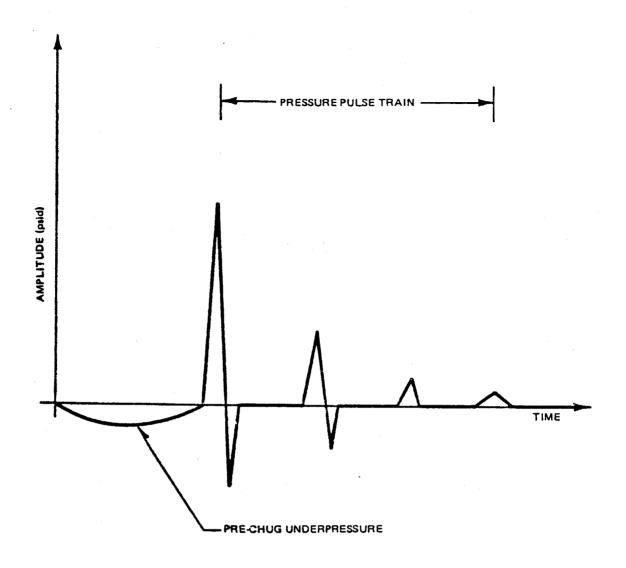


FIGURE A3.8-25

TYPICAL PRESSURE TIME-HISTORY FOR WEIR ANNULUS DURING CHUGGING

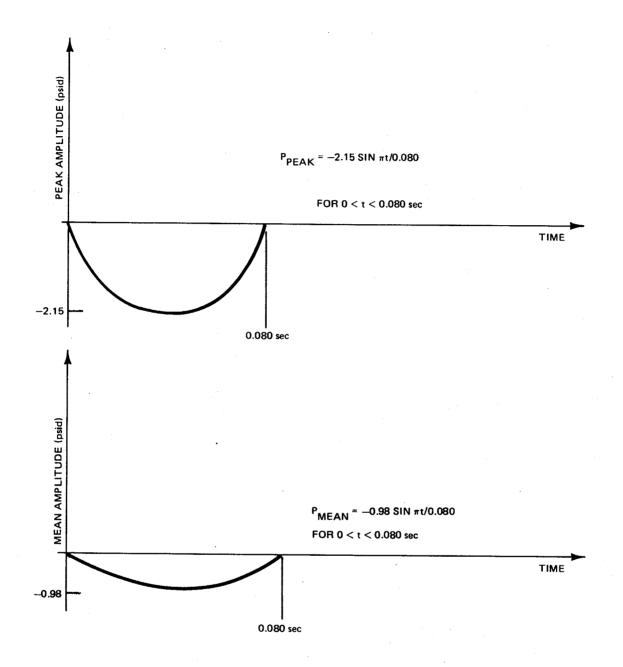


FIGURE A3.8-26

UNDERPRESSURE DISTRIBUTION ON THE WEIR WALL AND DRYWELL I.D. WALL DURING CHUGGING

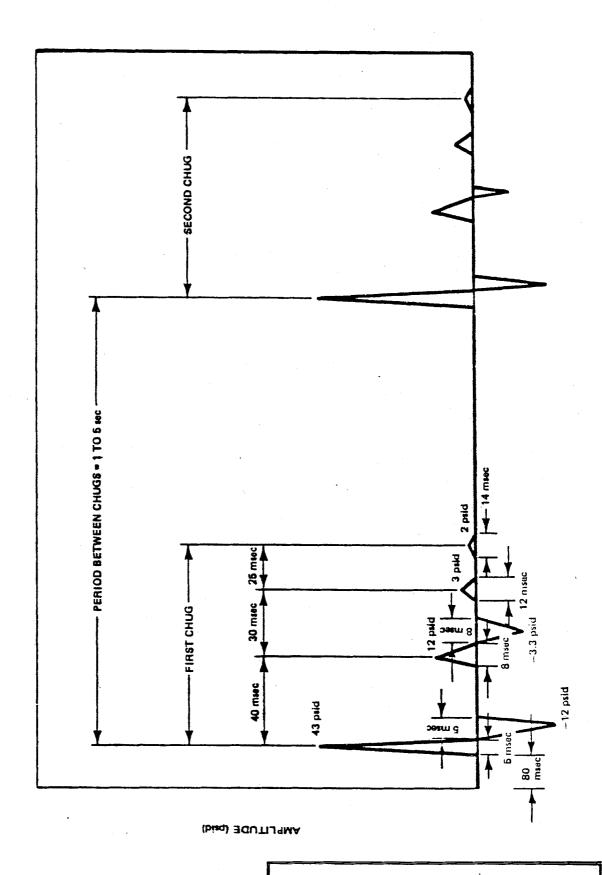


FIGURE A3.8-27

PEAK PRESSURE PULSE TRAIN ON THE WEIR WALL AND DRYWELL I.D. WALL DURING CHUGGING

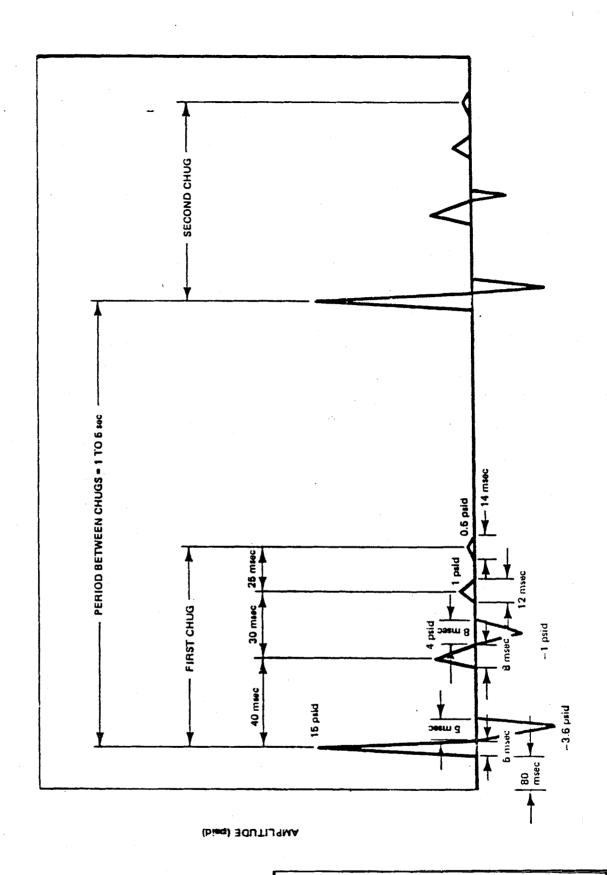


FIGURE A3.8-28

MEAN PRESSURE PULSE TRAIN ON THE WEIR WALL AND DRYWELL I.D. WALL DURING CHUGGING

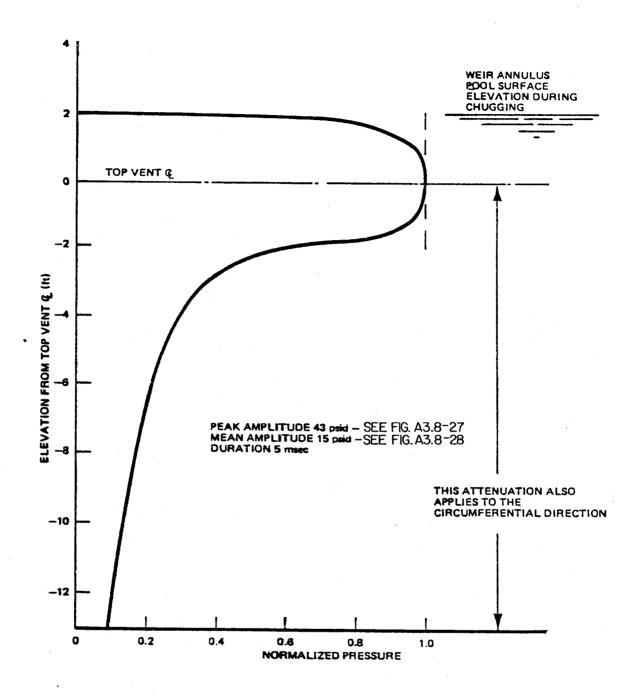


FIGURE A3.8-29

NORMALIZED WEIR ANNULUS PRESSURE PULSE ATTENUATION

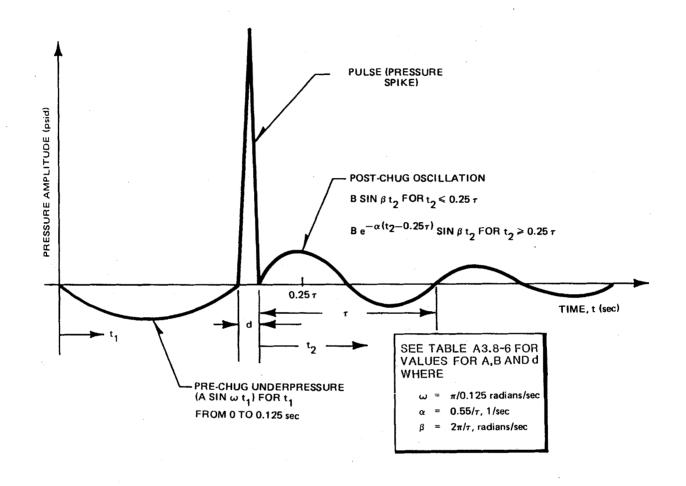


FIGURE A3.8-30

TYPICAL PRESSURE TIME-HISTORY ON THE POOL BOUNDARY DURING CHUGGING

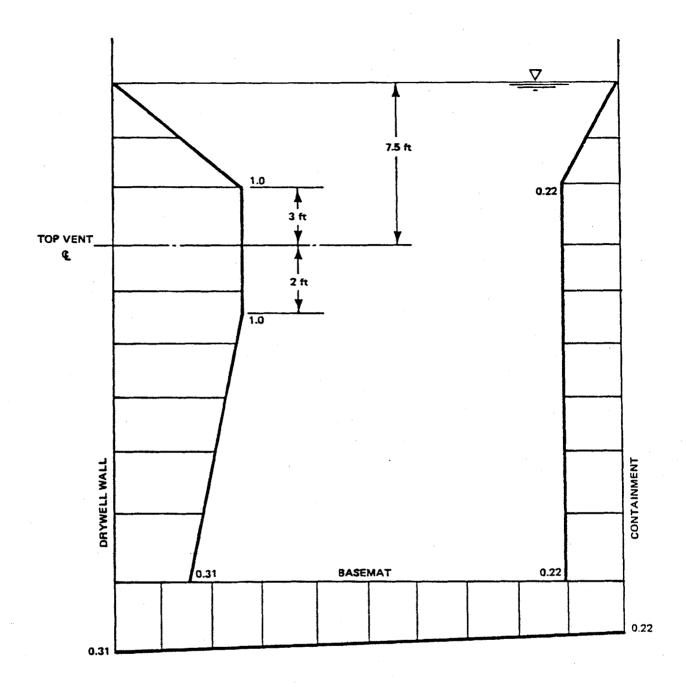


FIGURE A3.8-31

SUPPRESSION POOL CHUGGING NORMALIZED PEAK UNDERPRESSURE ATTENUATION

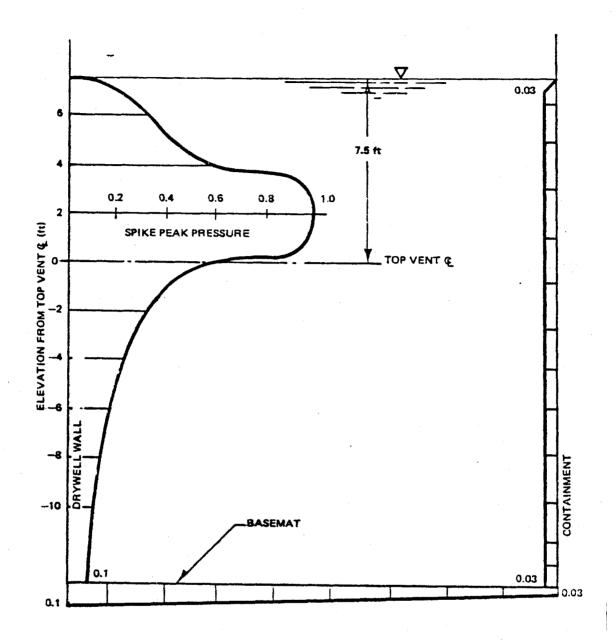


FIGURE A3.8-32

SUPPRESSION POOL CHUGGING NORMALIZED SPIKE ATTENUATION

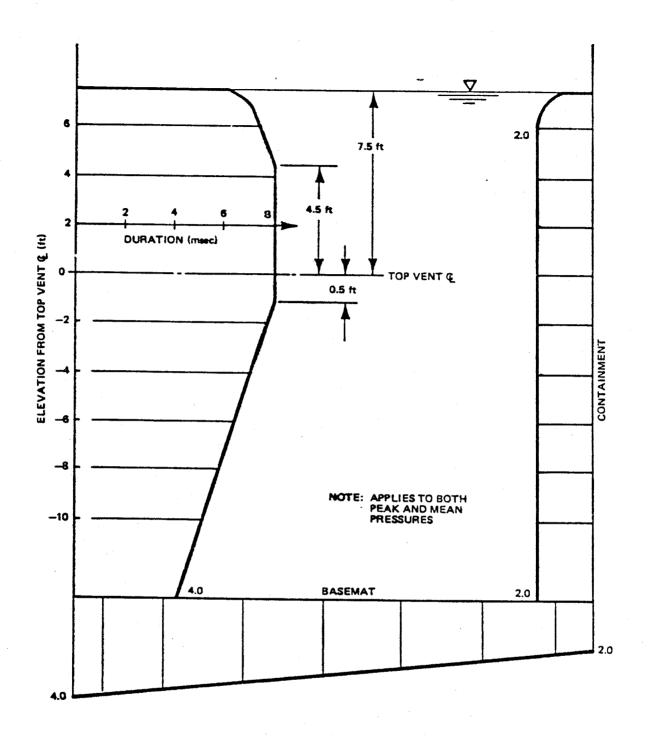


FIGURE A3.8-33

SUPPRESSION POOL CHUGGING SPIKE DURATION "d" AS A FUNCTION OF LOCATION IN THE POOL

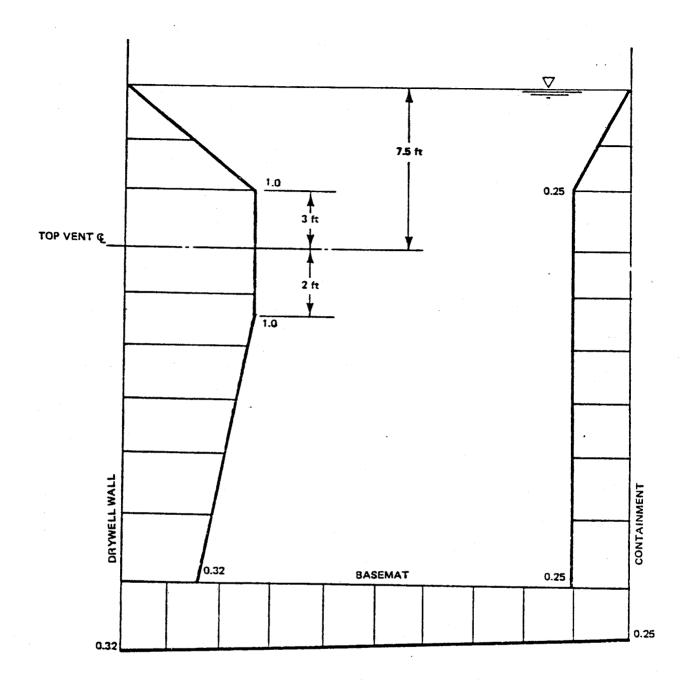


FIGURE A3.8-34

SUPPRESSION POOL CHUGGING NORMALIZED PEAK POST CHUG OSCILLATIONS

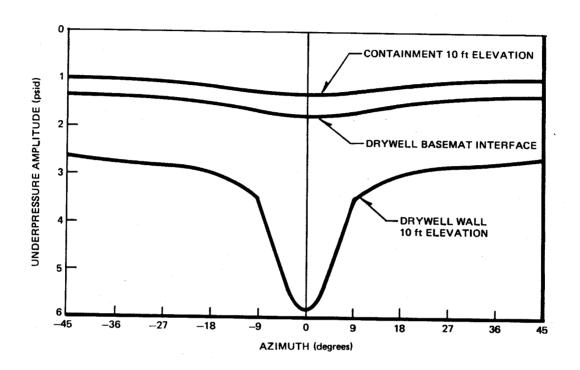


FIGURE A3.8-35

CIRCUMFERENTIAL UNDERPRESSURE AMPLITUDE ATTENUATION

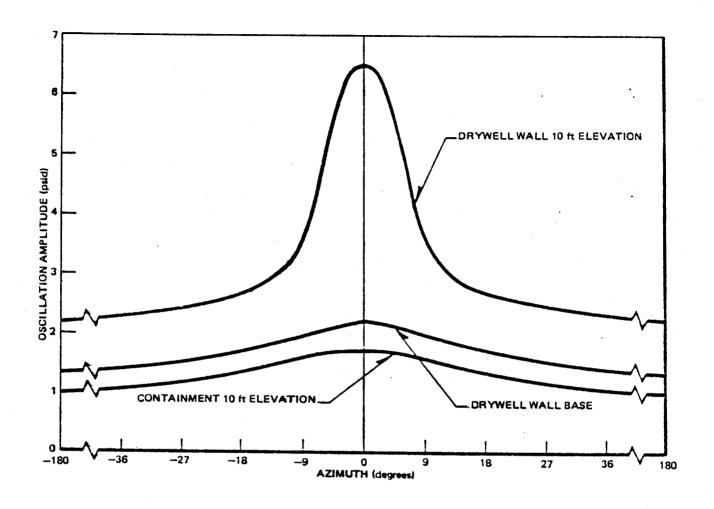


FIGURE A3.8-36

CIRCUMFERENTIAL POST CHUG OSCILLATION AMPLITUDE ATTENUATION

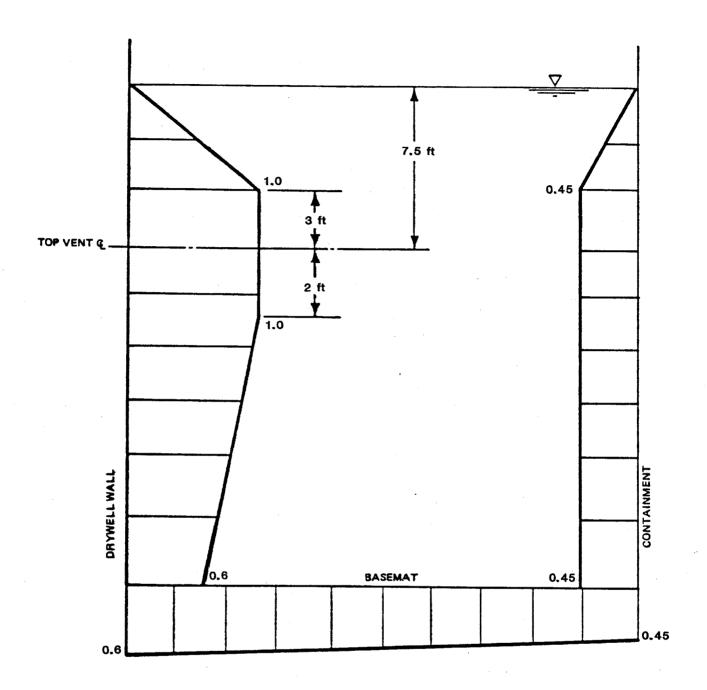
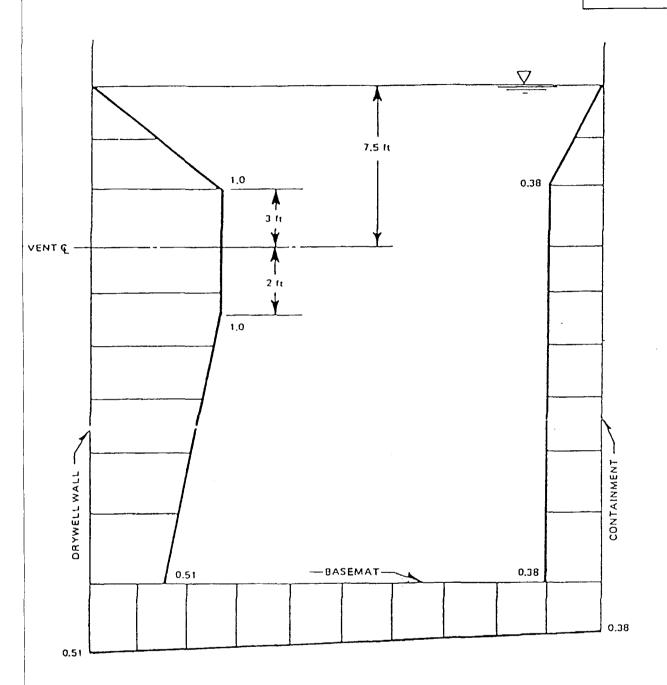


FIGURE A3.8-37

SUPPRESSION POOL CHUGGING NORMALIZED POST CHUG OSCILLATIONS ATTENUATION



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FIGURE A3.8-37A
SUPPRESSION POOL CHUGGING
NORMALIZED POST MEAN
UNDERPRESSURE ATTENUATION

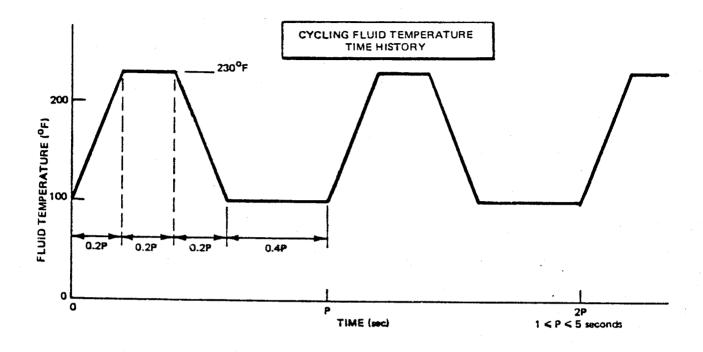


FIGURE A3.8-38

DRYWELL TOP VENT CYCLIC TEMPERATURE PROFILE AND AREA OF APPLICATION DURING CHUGGING

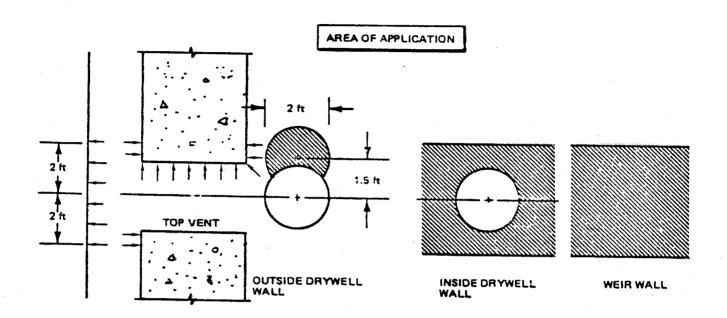


FIGURE A3.8-39

DRYWELL TOP VENT CYCLIC TEMPERATURE PROFILE DURING CHUGGING

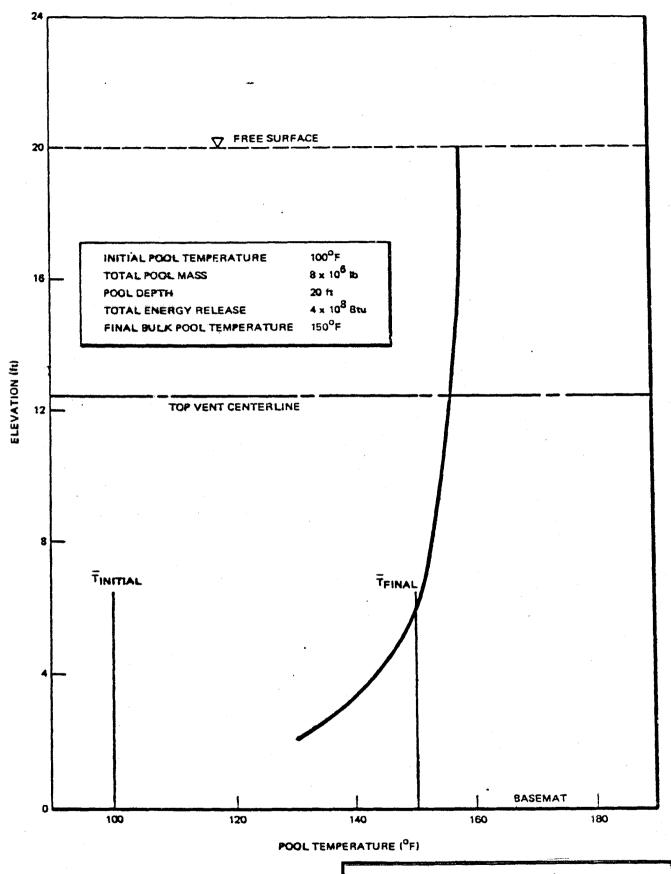


FIGURE A3.8-40

SUPPRESSION POOL TEMPERATURE PROFILE FOR LARGE BREAKS

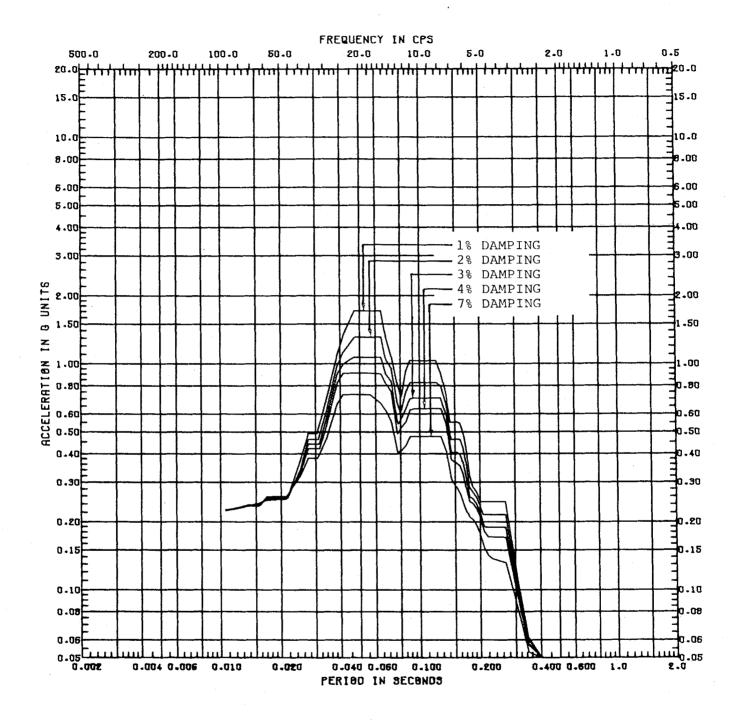


FIGURE A3.8-41

SRV QUENCHER ALL VALVE VERTICAL RESPONSE SPECTRA FOR CONTAINMENT WALL, ELEVATION 712'-0"

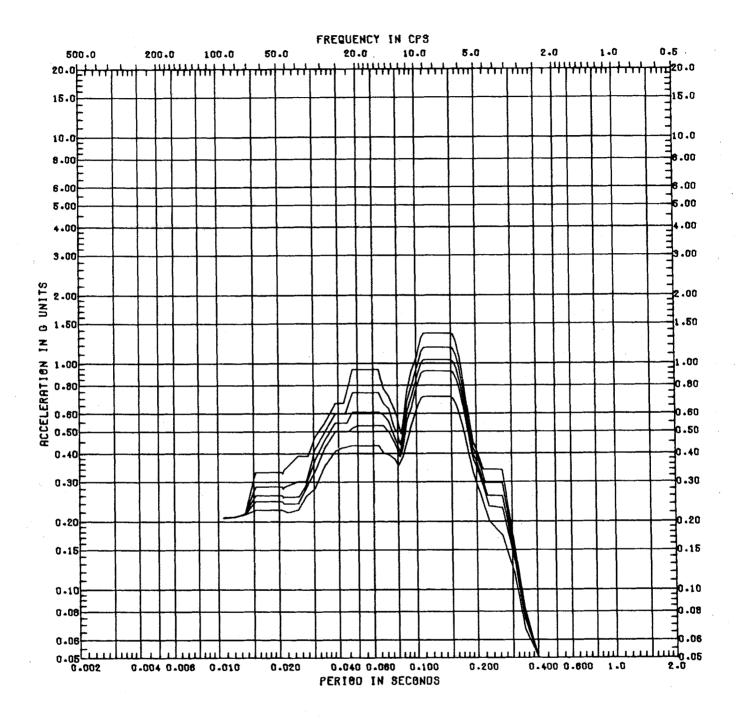


FIGURE A3.8-42

SRV QUENCHER ALL VALVE VERTICAL RESPONSE SPECTRA FOR DRYWELL WALL, ELEVATION 712'-0"

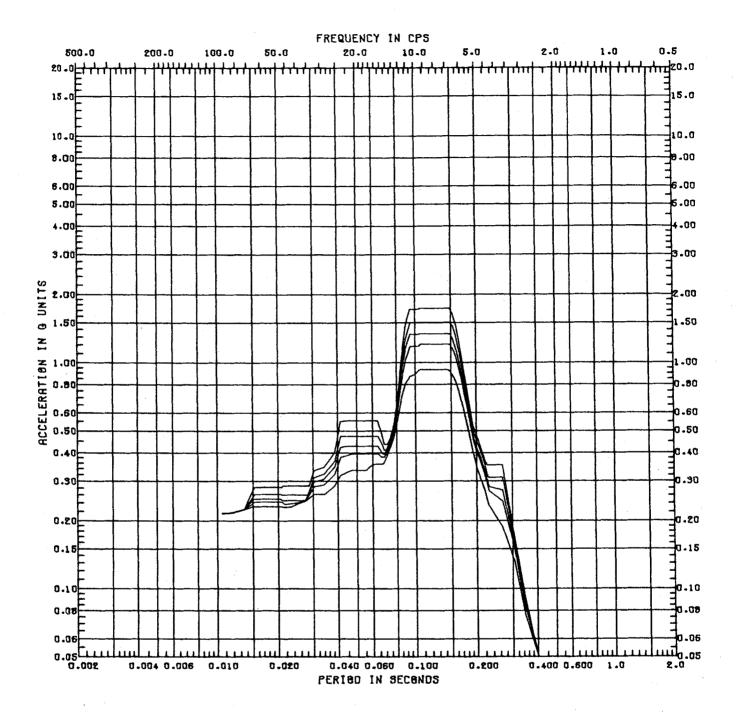


FIGURE A3.8-43

SRV QUENCHER ALL VALVE
VERTICAL RESPONSE SPECTRA
FOR PEDESTAL, ELEVATION 724'-1 3/4"

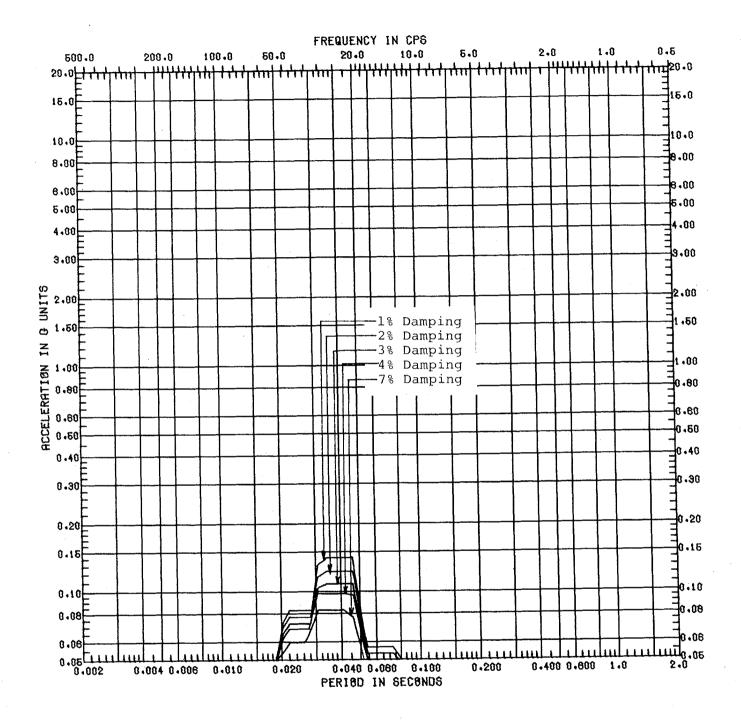


FIGURE A3.8-44

LOCA BUBBLE HORIZONTAL RESPONSE SPECTRA FOR CONTAINMENT WALL ELEVATION 712'-0"

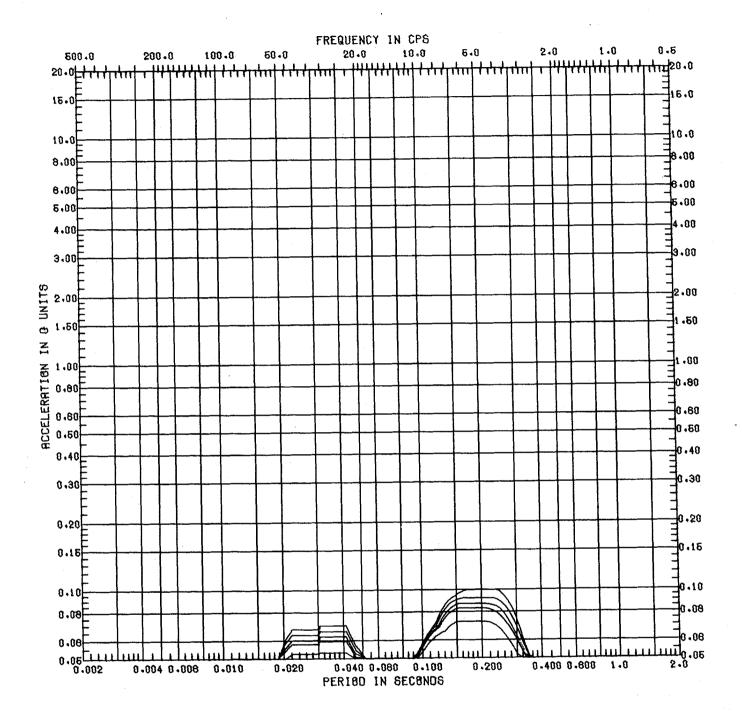


FIGURE A3.8-45

LOCA BUBBLE VERTICAL RESPONSE SPECTRA FOR DRYWELL WALL ELEVATION 712'-0"

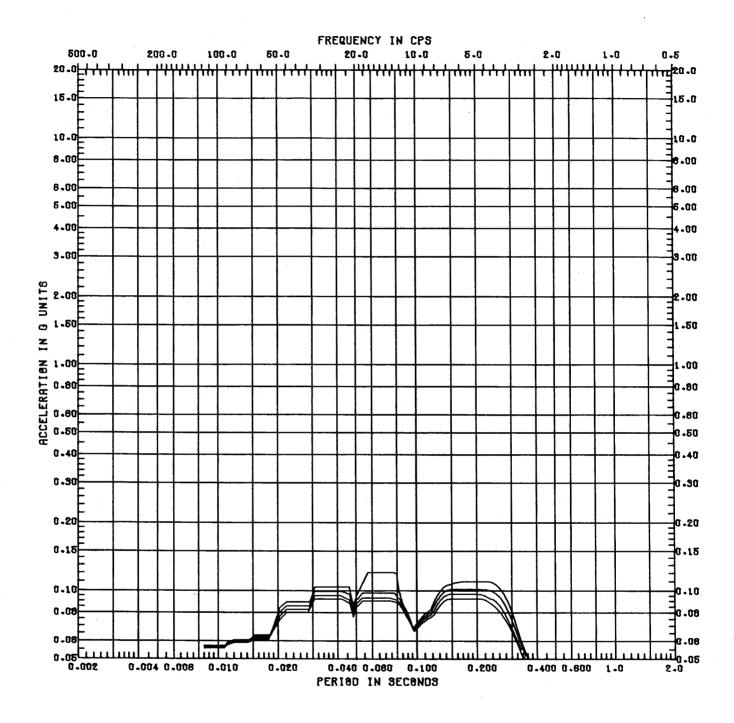


FIGURE A3.8-46

LOCA BUBBLE VERTICAL RESPONSE SPECTRA FOR RPV, ELEVATION 753'-3 3/8"

CPS/USAR

FIGURE A3.8-47
HAS BEEN DELETED

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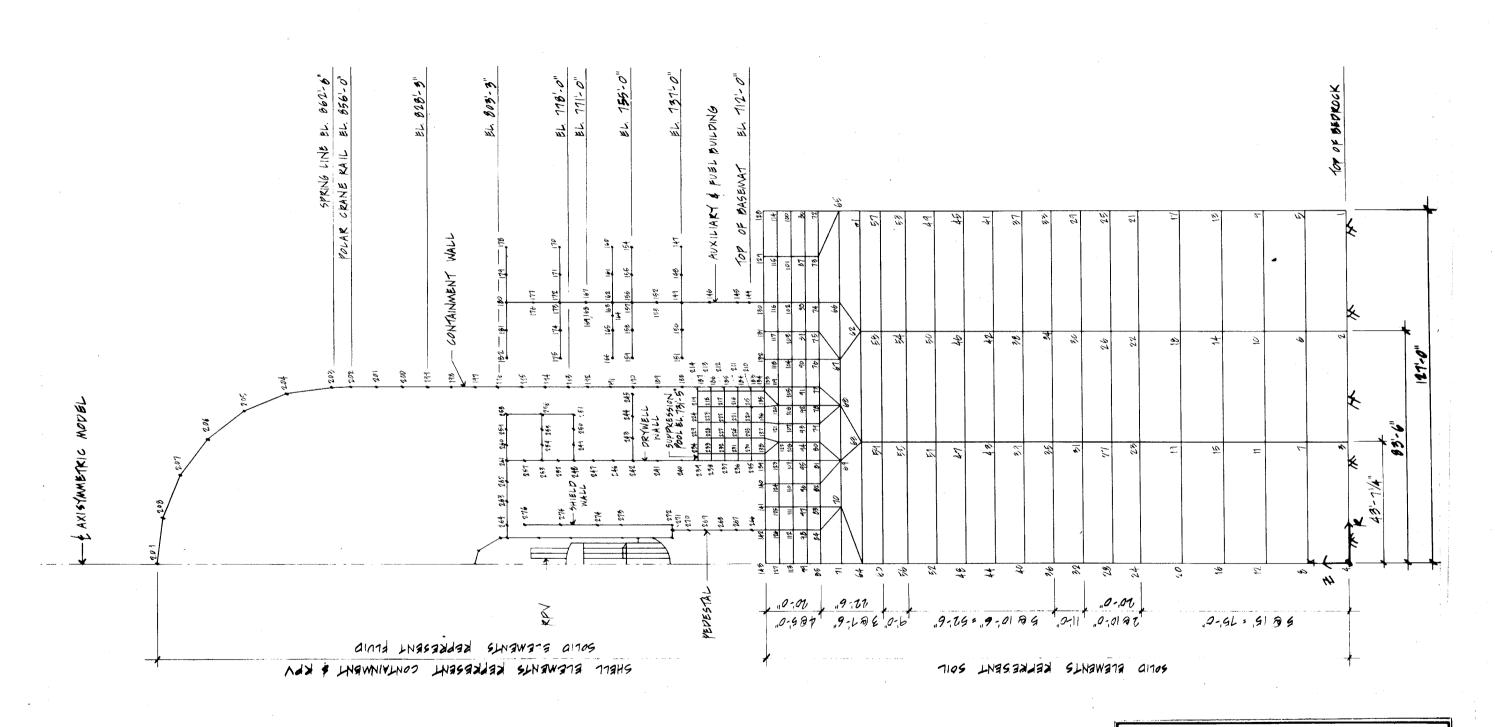
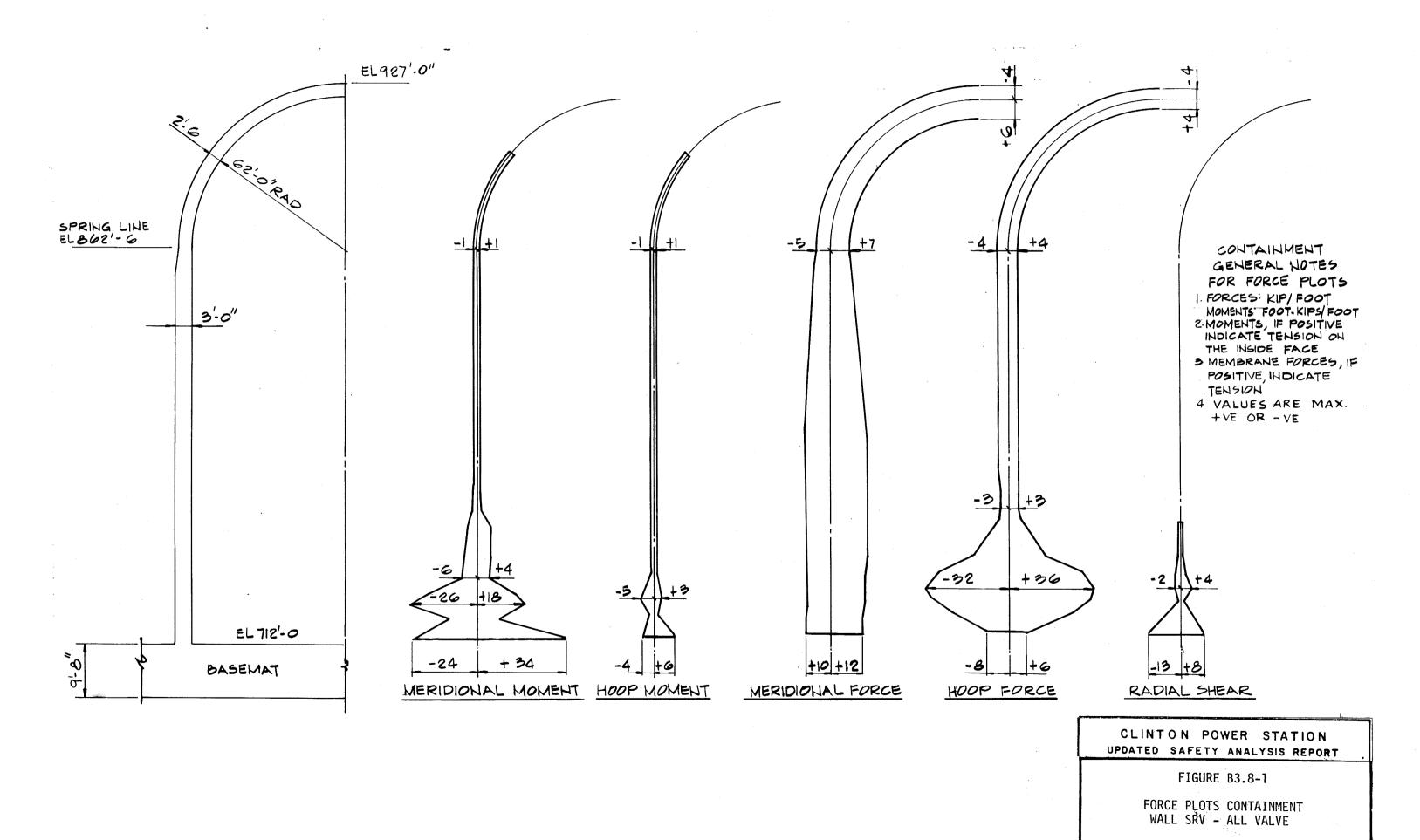


FIGURE A3.8-48

FINITE ELEMENT MODEL (USED FOR QUENCHER AND LOCA ANALYSIS)



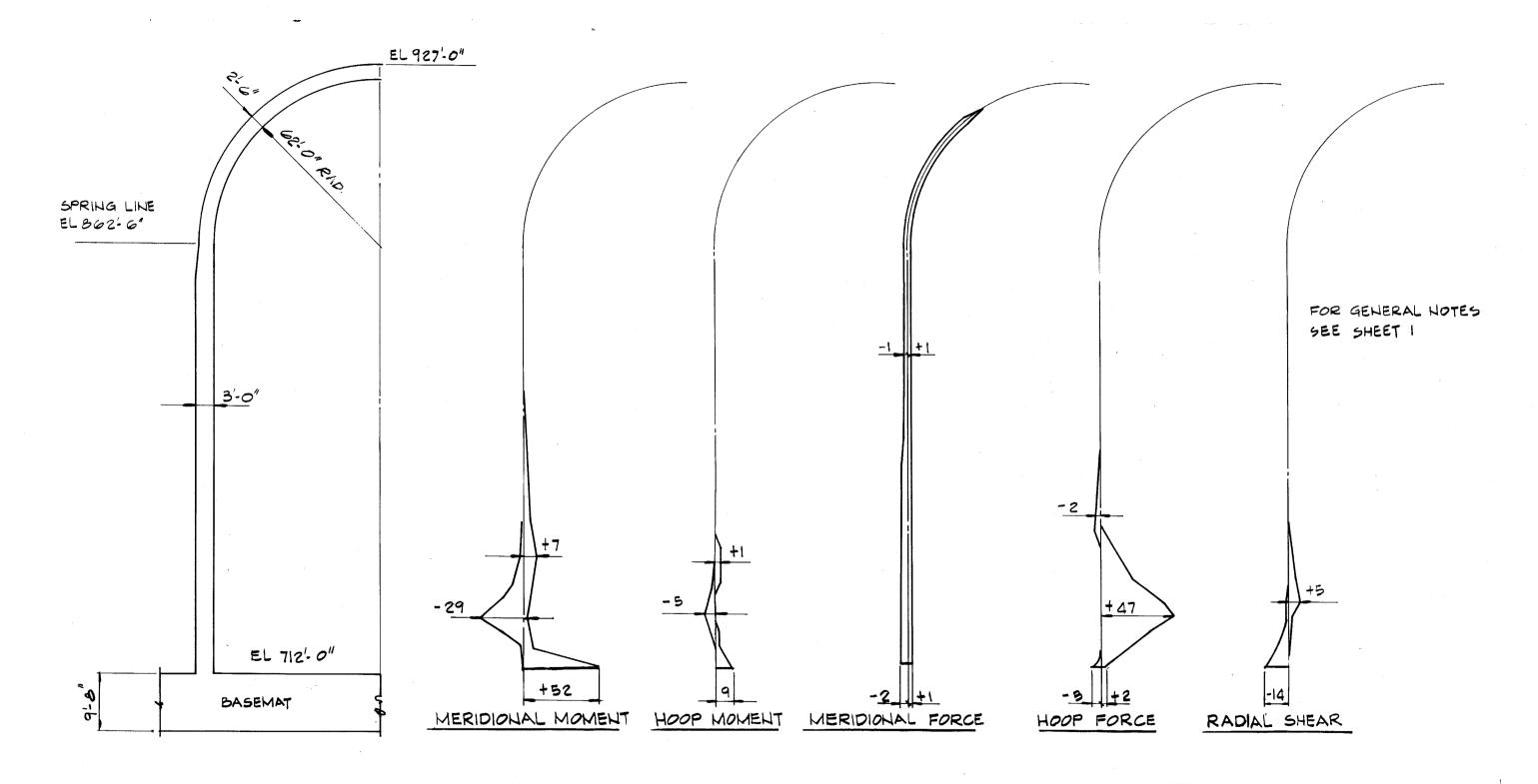
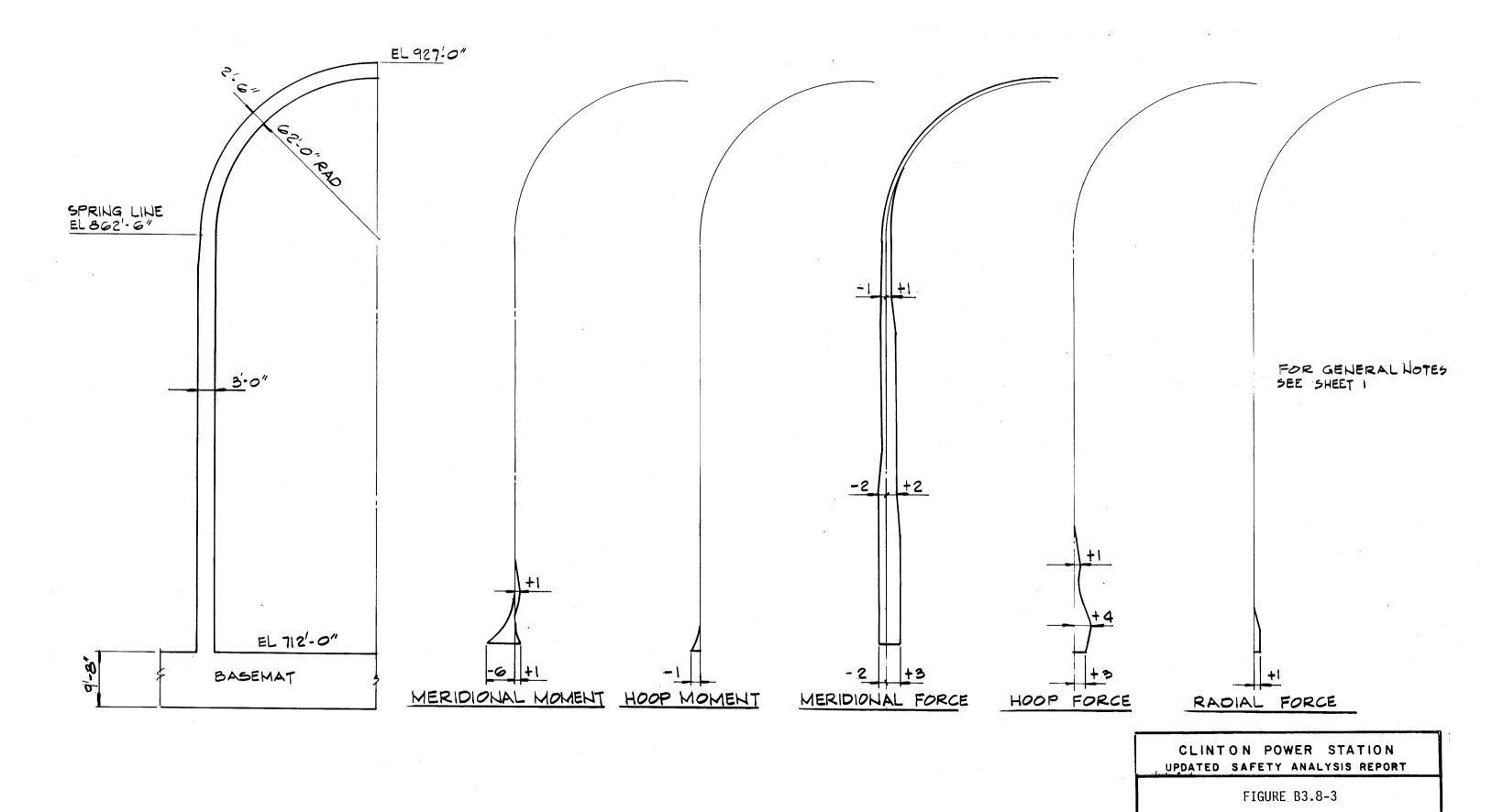


FIGURE B3.8-2

FORCE PLOTS CONTAINMENT WALL - LOCA BUBBLE



FORCE PLOTS CONTAINMENT WALL - LOCA - FROTH IMPINGEMENT

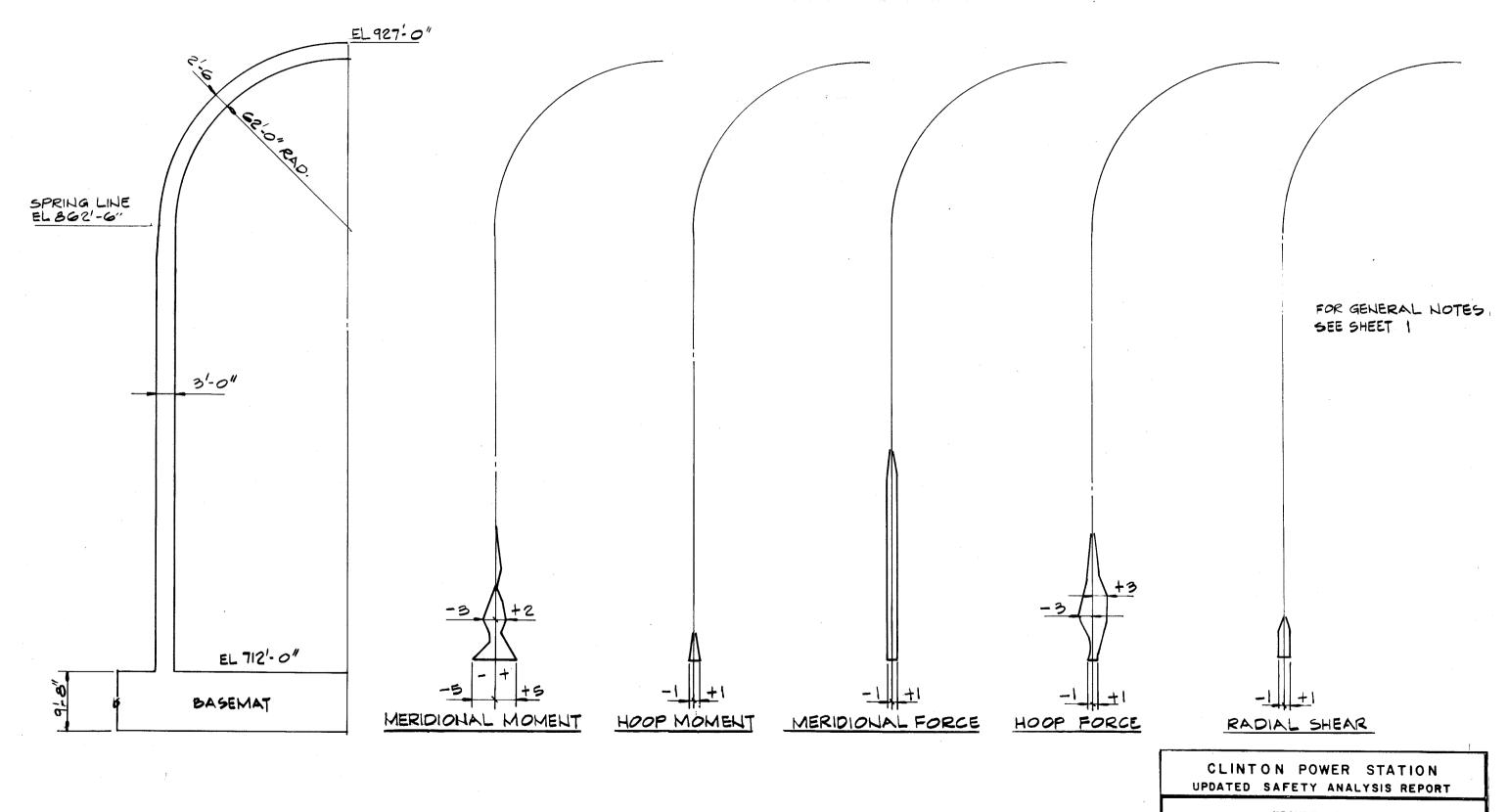
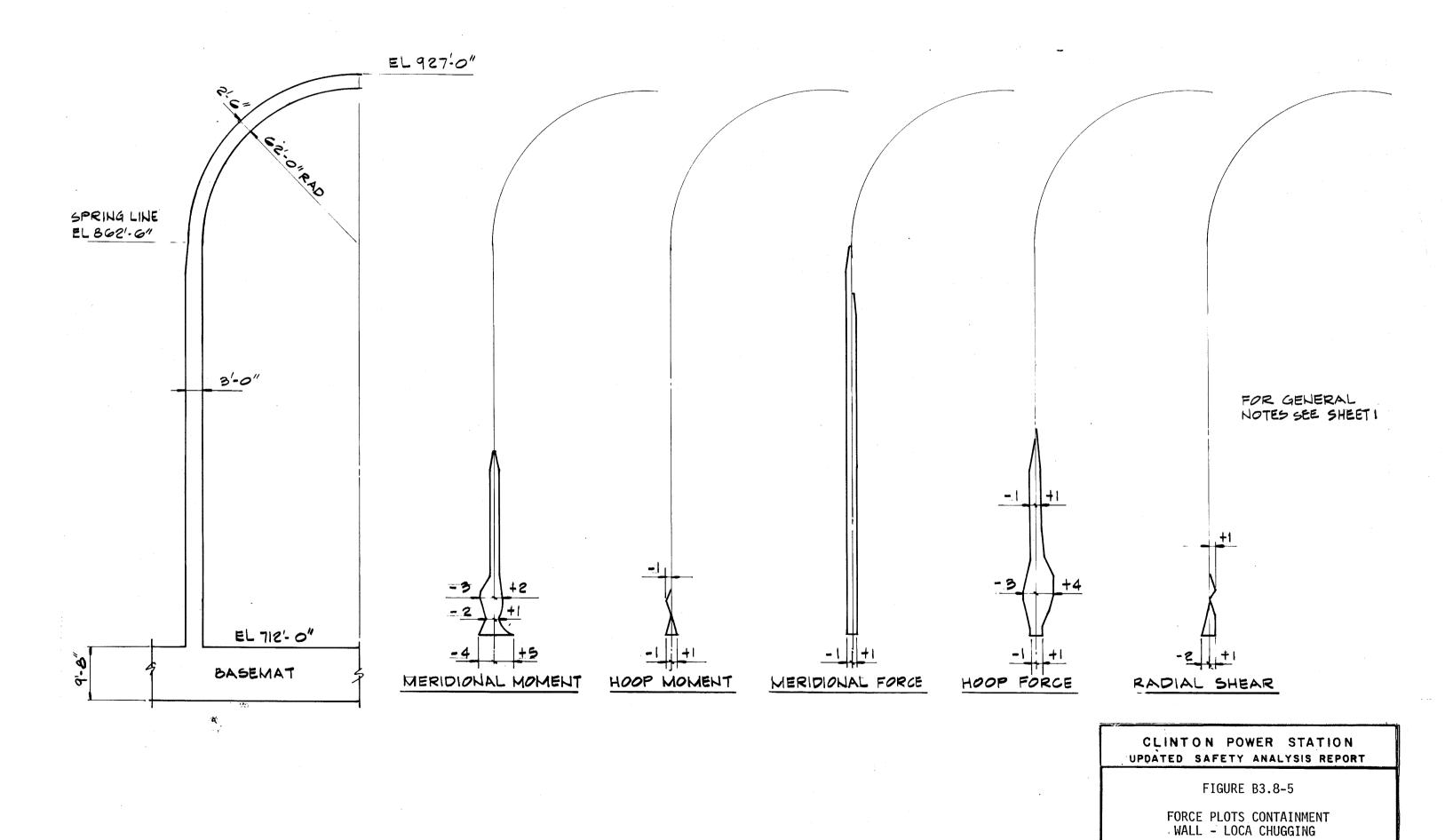
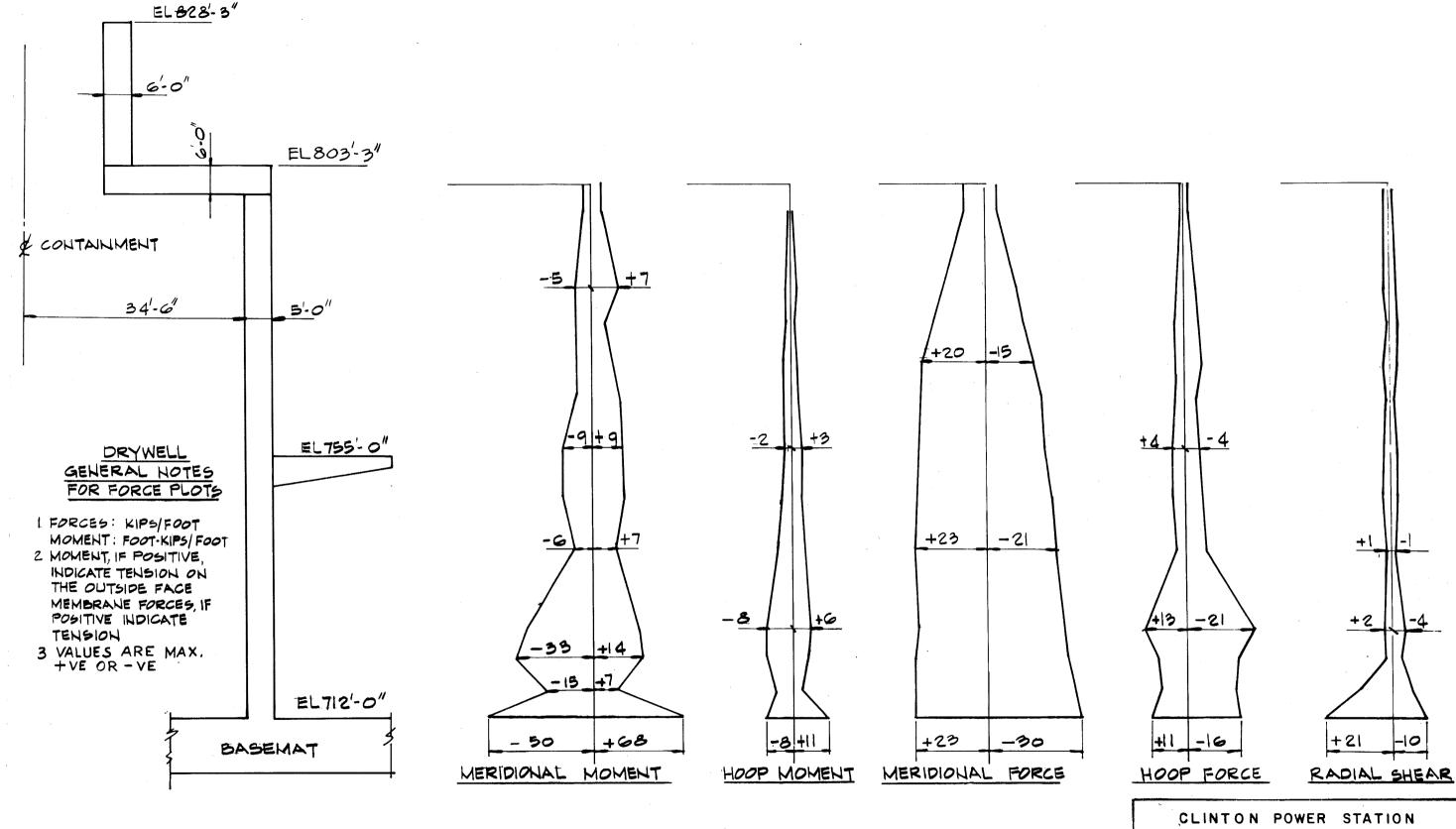


FIGURE B3.8-4

FORCE PLOTS CONTAINMENT WALL -LOCA - CONDENSATION OSCILLATION

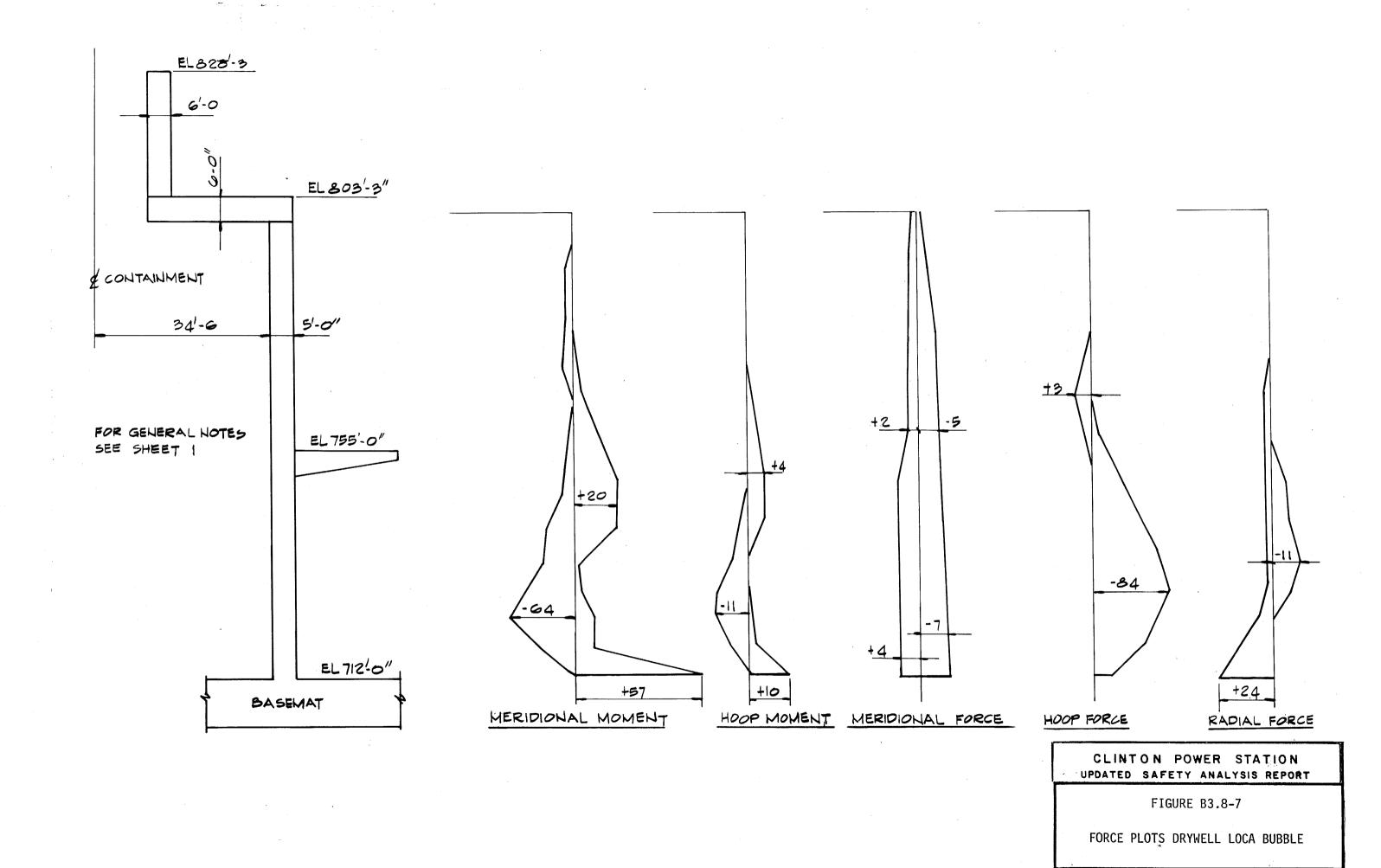


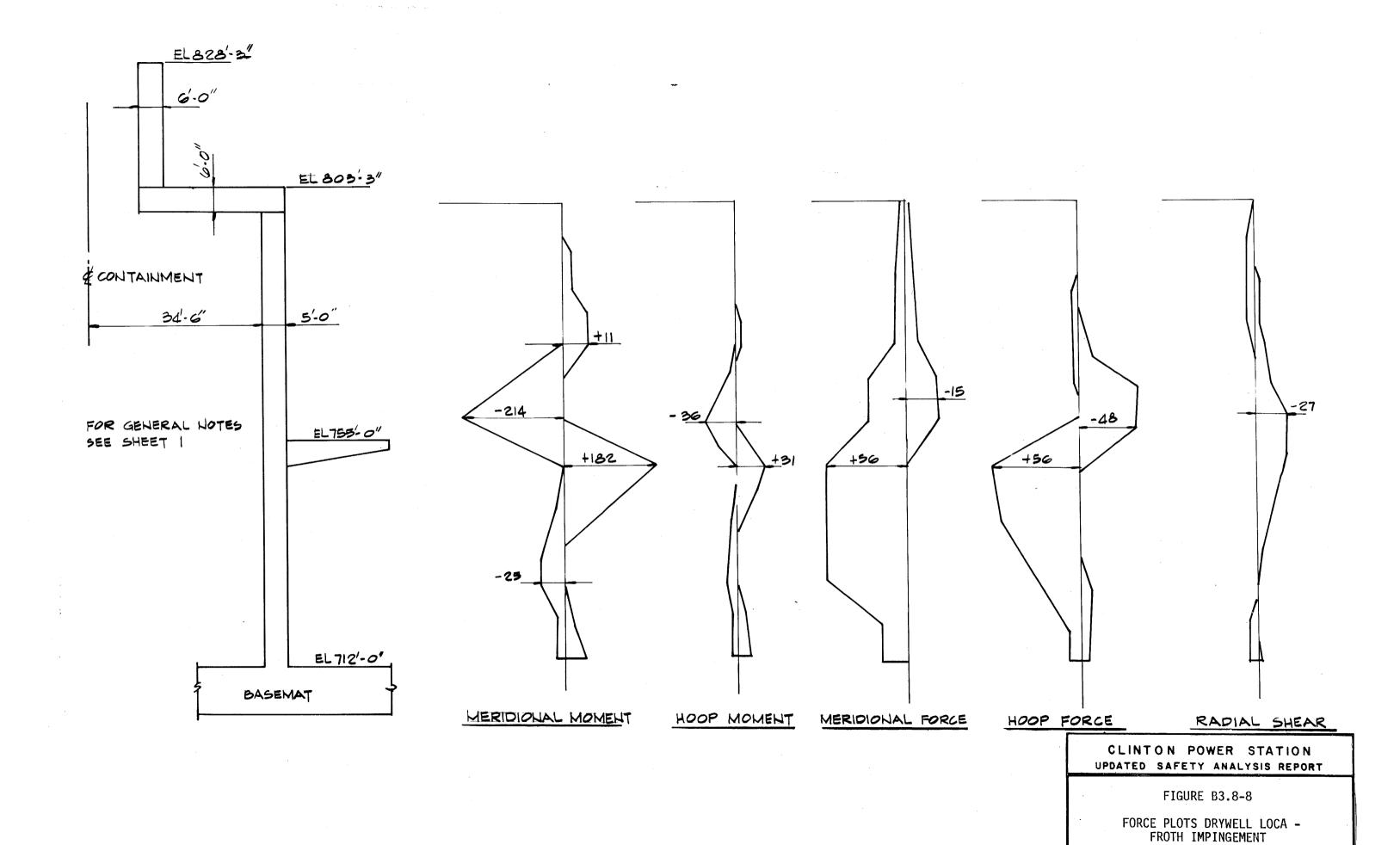


UPDATED SAFETY ANALYSIS REPORT

FIGURE B3.8-6

FORCE PLOTS DRYWELL SRV -ALL VALVE





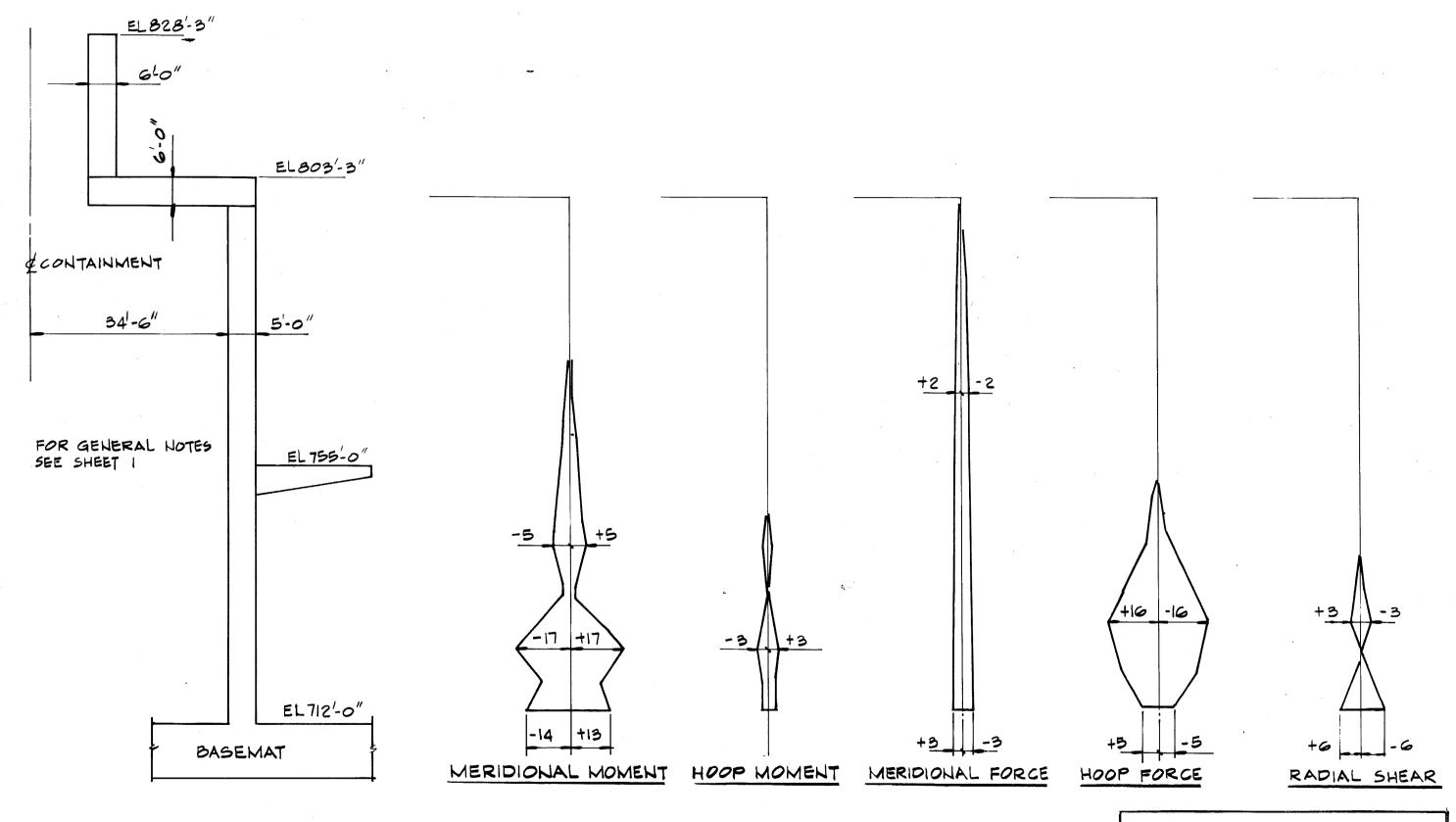
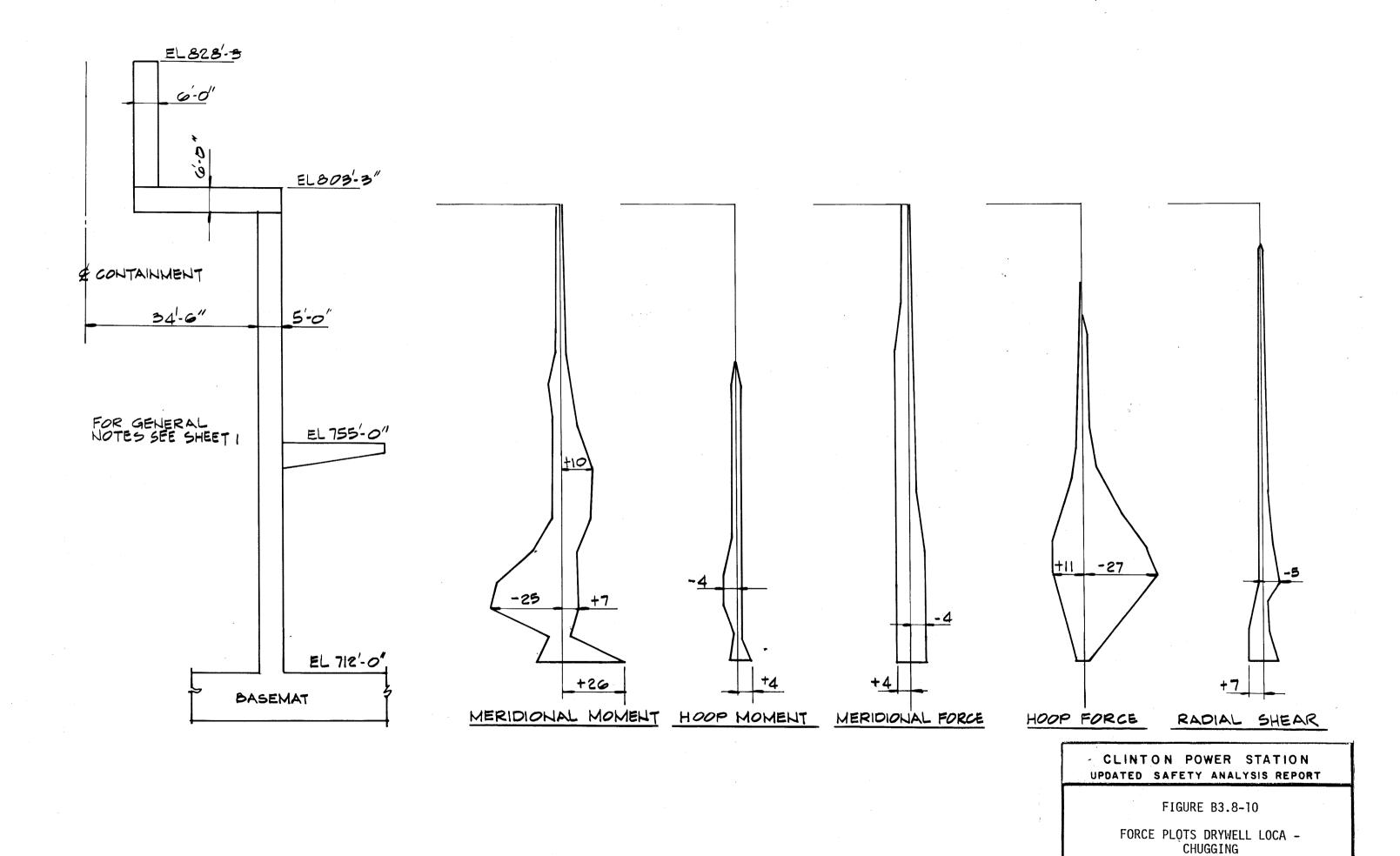
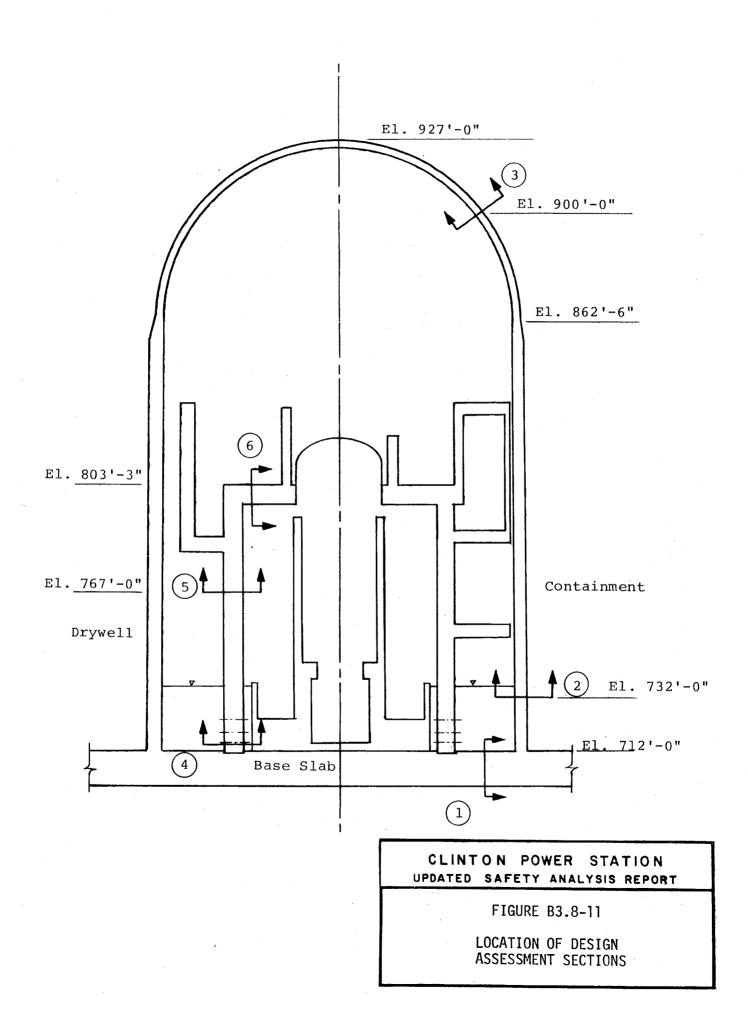


FIGURE B3.8-9

FORCE PLOTS DRYWELL LOCA - CONDENSATION OSCILLATION





CPS/USAR

FIGURES 3.9-1 THROUGH 3.9-5
HAVE BEEN DELETED

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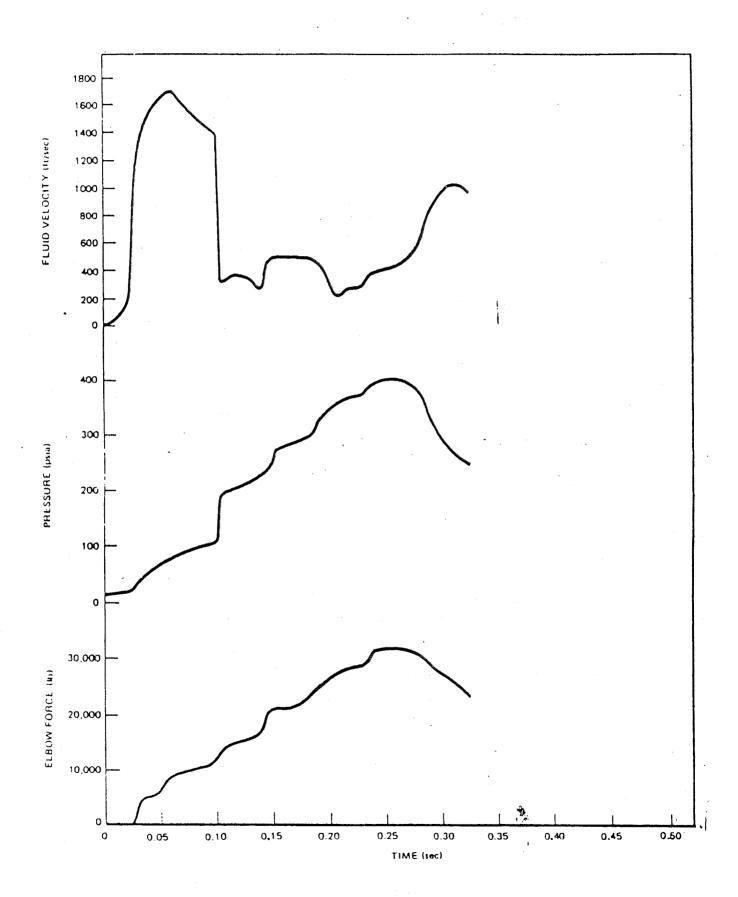


Figure 3.9-6. Typical Relief Valve Transient

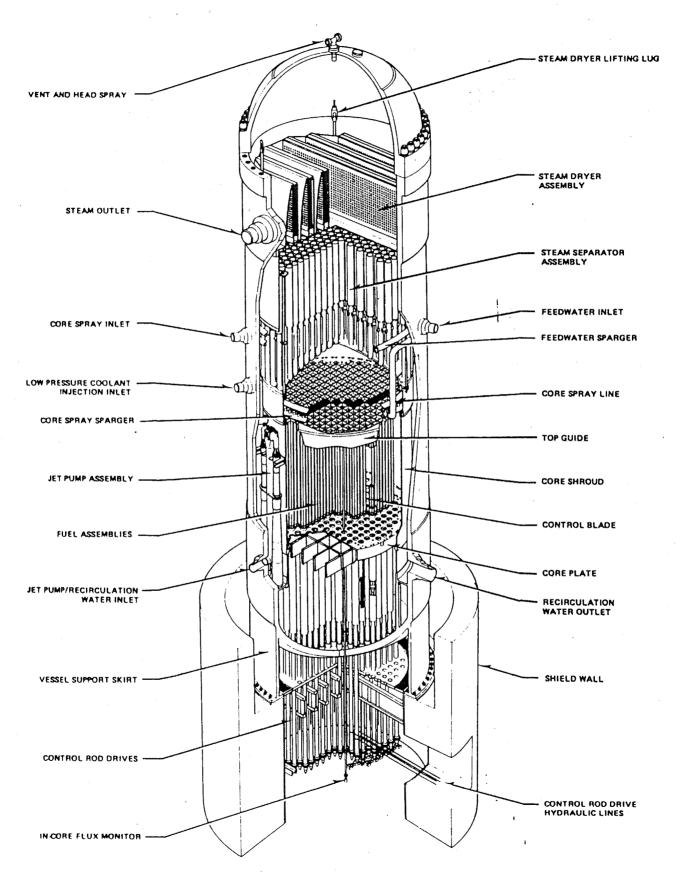


Figure 3.9-7. Reactor Vessel Cutaway

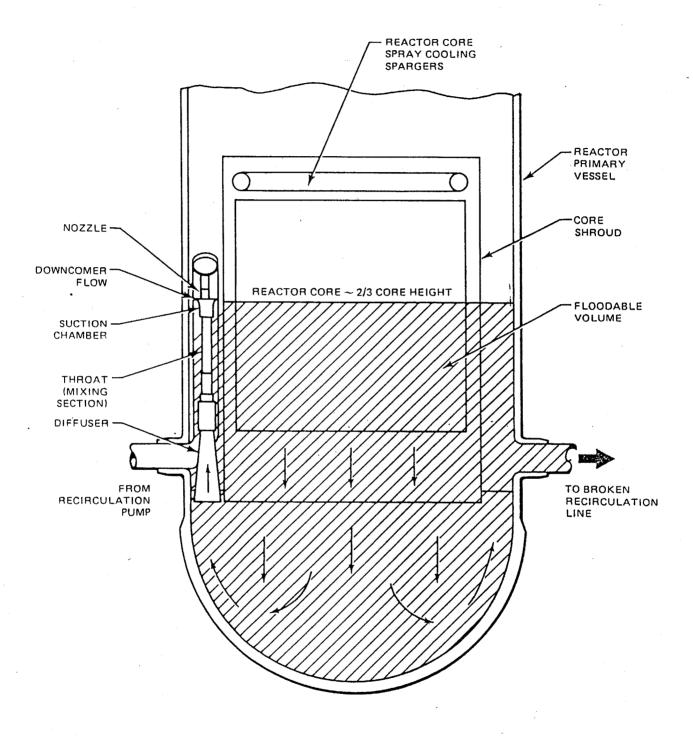


Figure 3.9-8 REACTOR INTERNALS FLOW PATHS

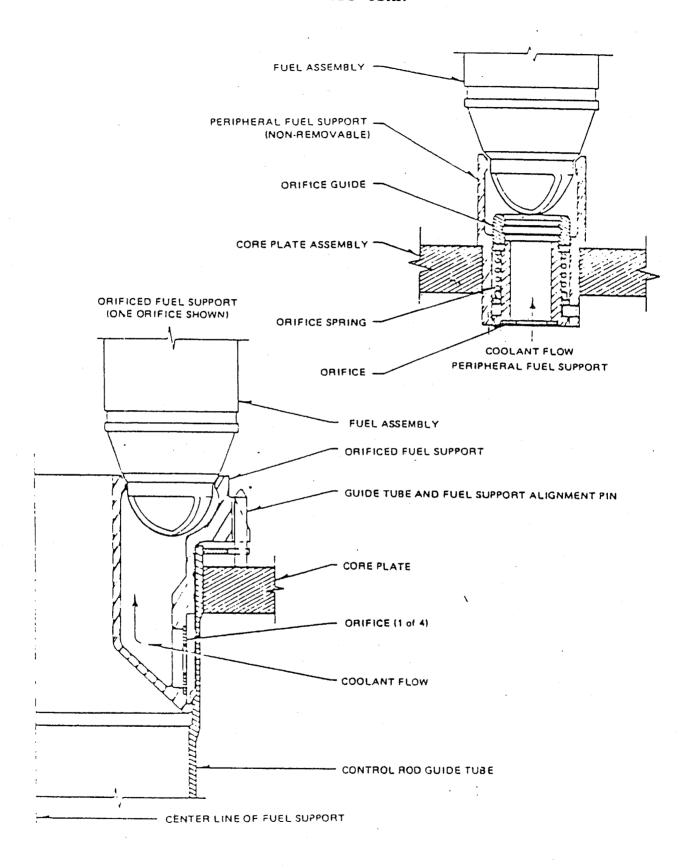


Figure 3.9-9. Fuel Support Pieces

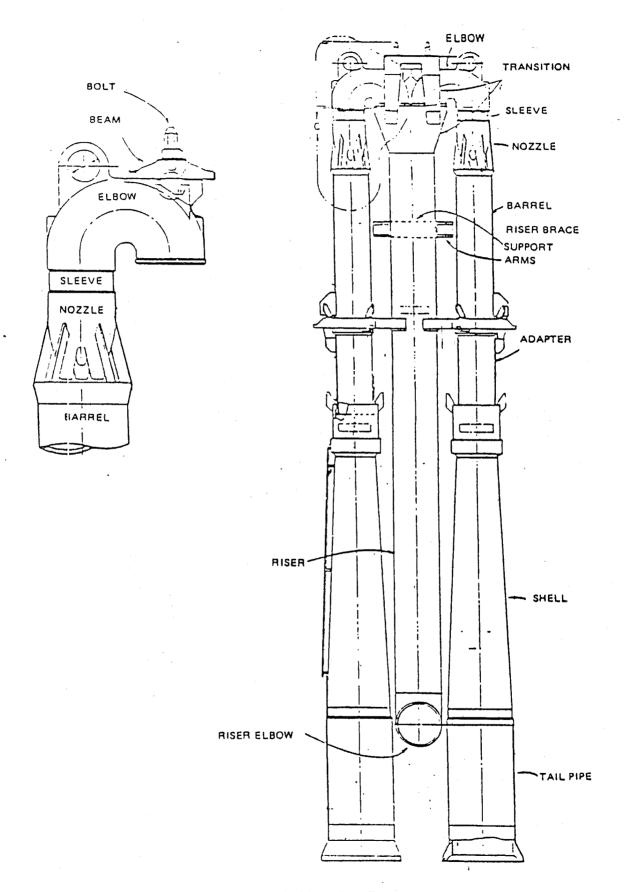


Figure 3.9-10. Jet Pump

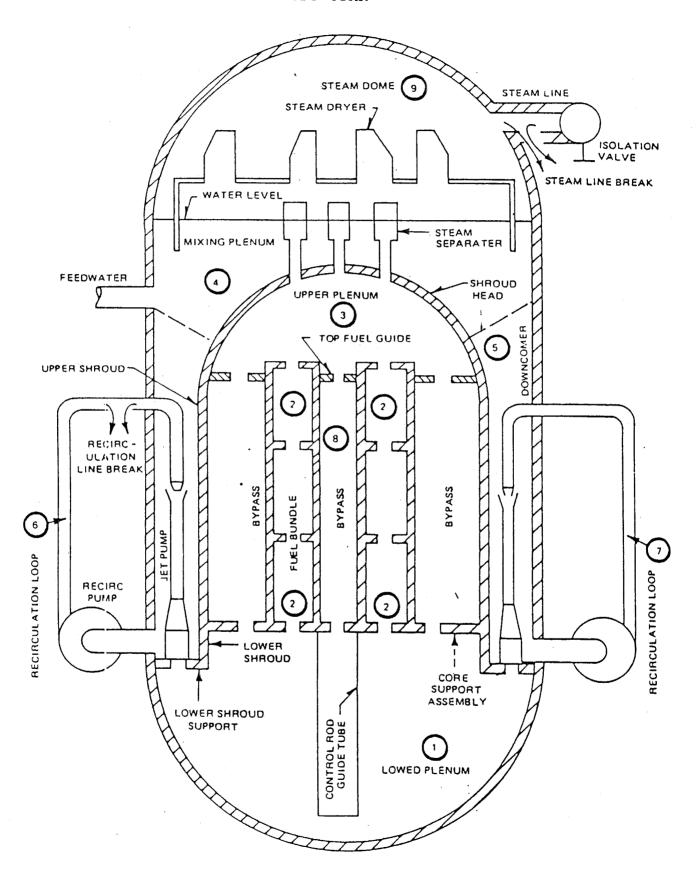
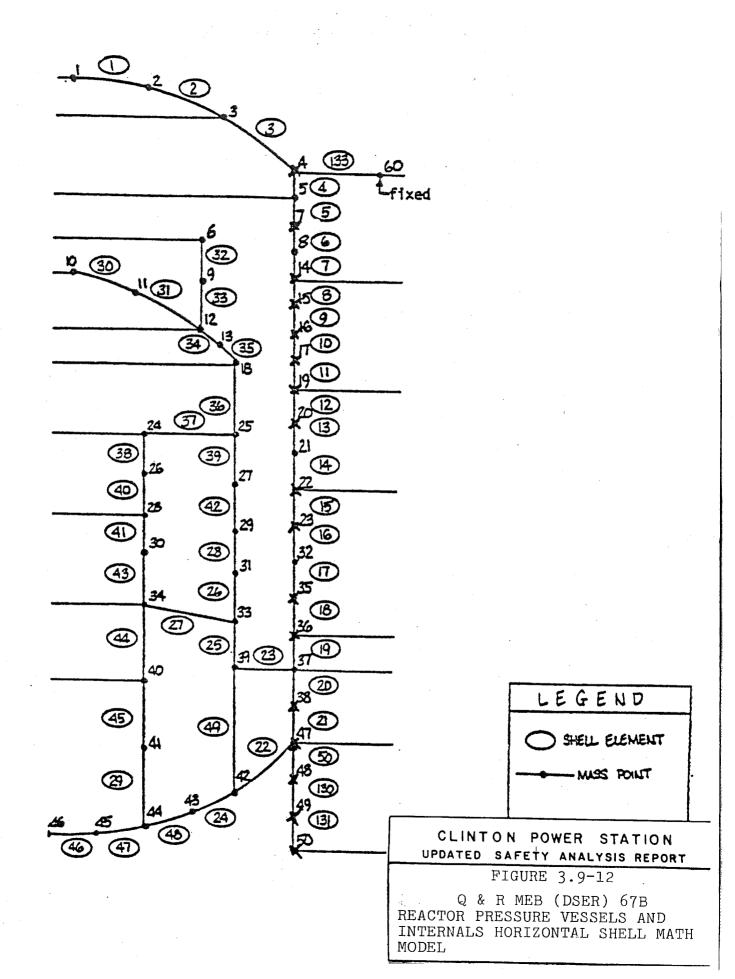


Figure 3.9-11. Pressure Nodes Used for Depressurization Analysis



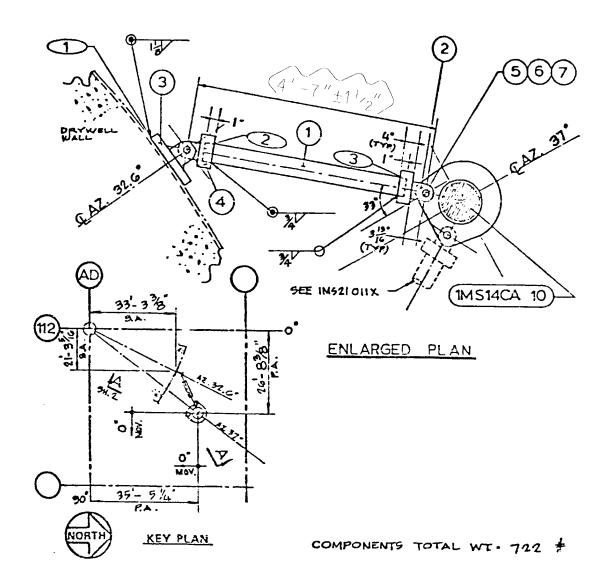


Figure 3.9-13 (Q & R 210.01)

SRV DISCHARGE LINE SUPPORT WELDED ATTACHMENT DETAIL SHEET 1 OF 4

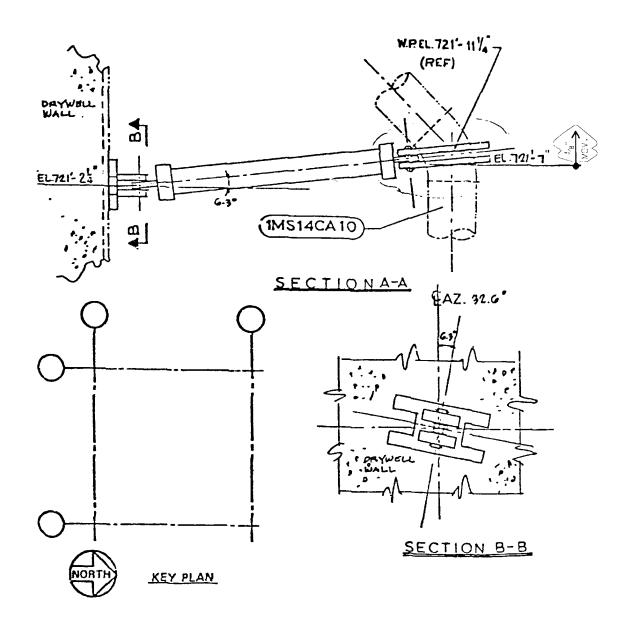


Figure 3.9-13 (Q & R 210.01)

SRV DISCHARGE LINE SUPPORT WELDED ATTACHMENT DETAIL SHEET 2 OF 4

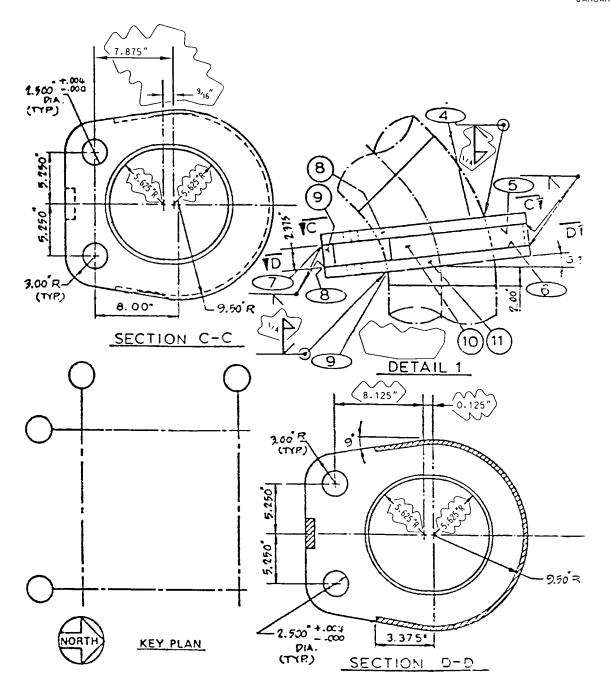


Figure 3.9-13 (Q & R 210.01) SRV DISCHARGE LINE SUPPORT WELDED ATTACHMENT DETAIL

SHEET 3 OF 4

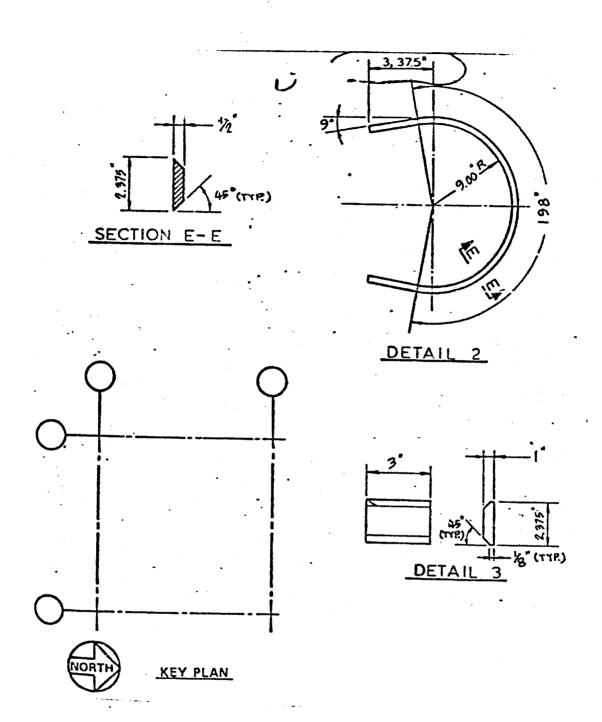


Figure 3.9-13 (Q & R 210.01)

SRV DISCHARGE LINE SUPPORT WELDED ATTACHMENT DETAIL SHEET 4 OF 4

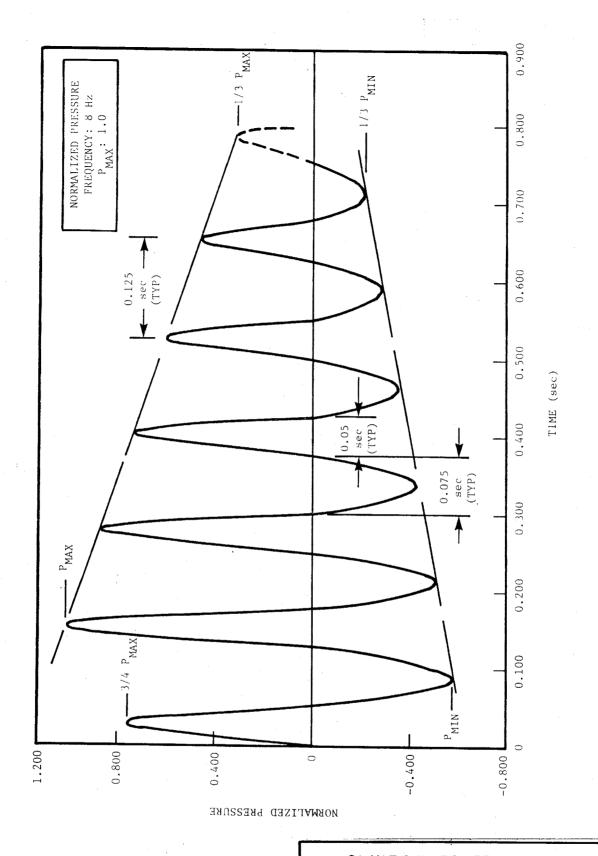


FIGURE A3.9-1

QUENCHER BUBBLE PRESSURE TIME HISTORY

LEGEND: ADS = \bigcirc

NOTES: 16 S/R VALVES

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE A3.9-2

S/R VALVE DISCHARGE LOCATIONS FOR 218-624 PLANT

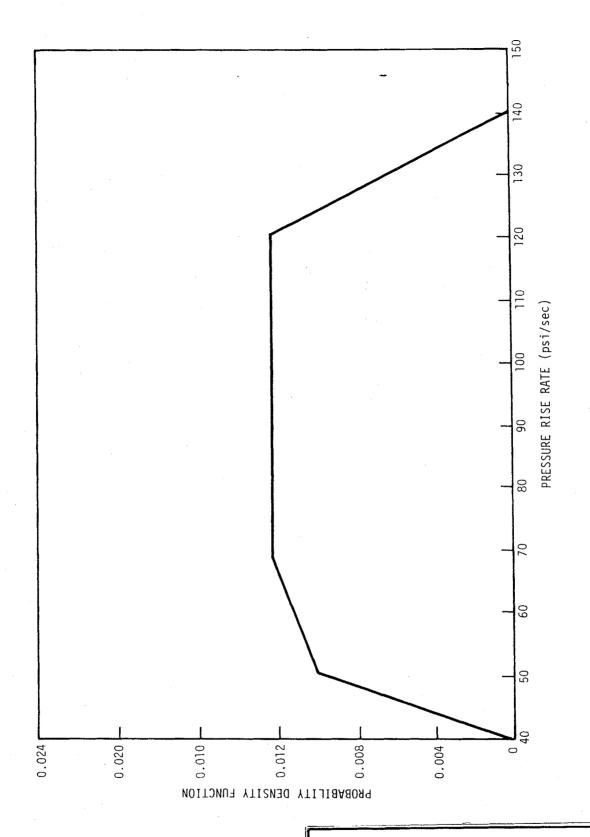


FIGURE A3.9-3

PROBABILITY DENSITY FUNCTION VS. PRESSURE RISE RATE

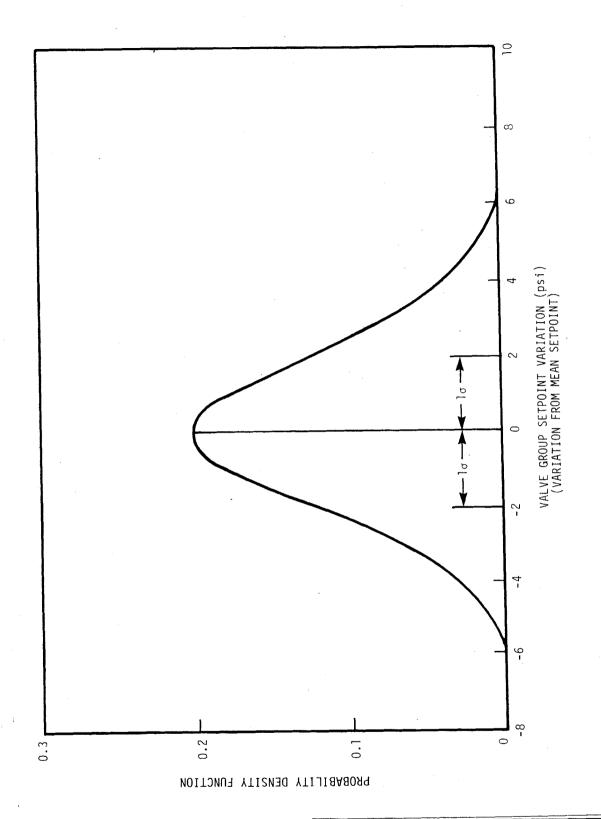


FIGURE A3.9-4

PROBABILITY DENSITY FUNCTION VS. VALVE GROUP SETPOINT VARIATION

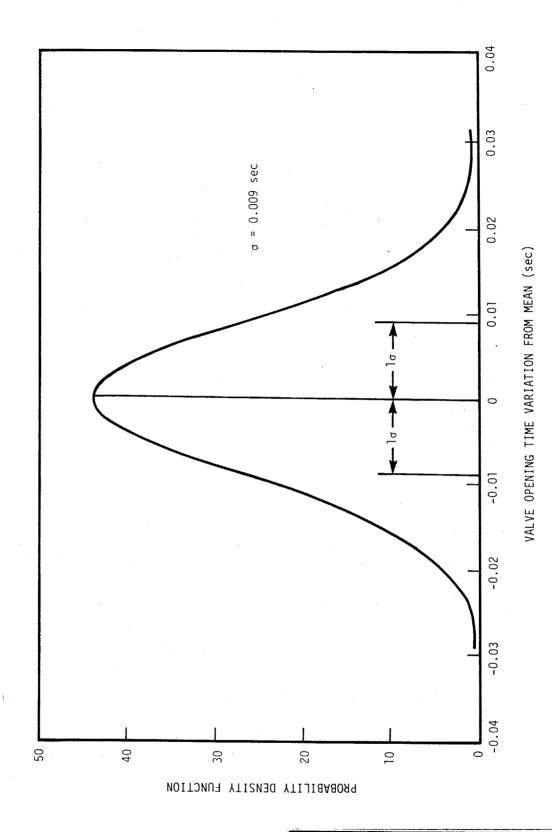
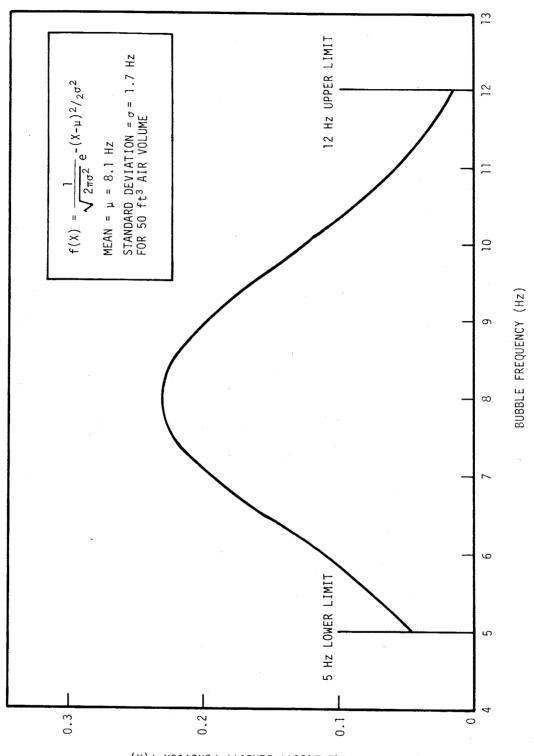


FIGURE A3.9-5

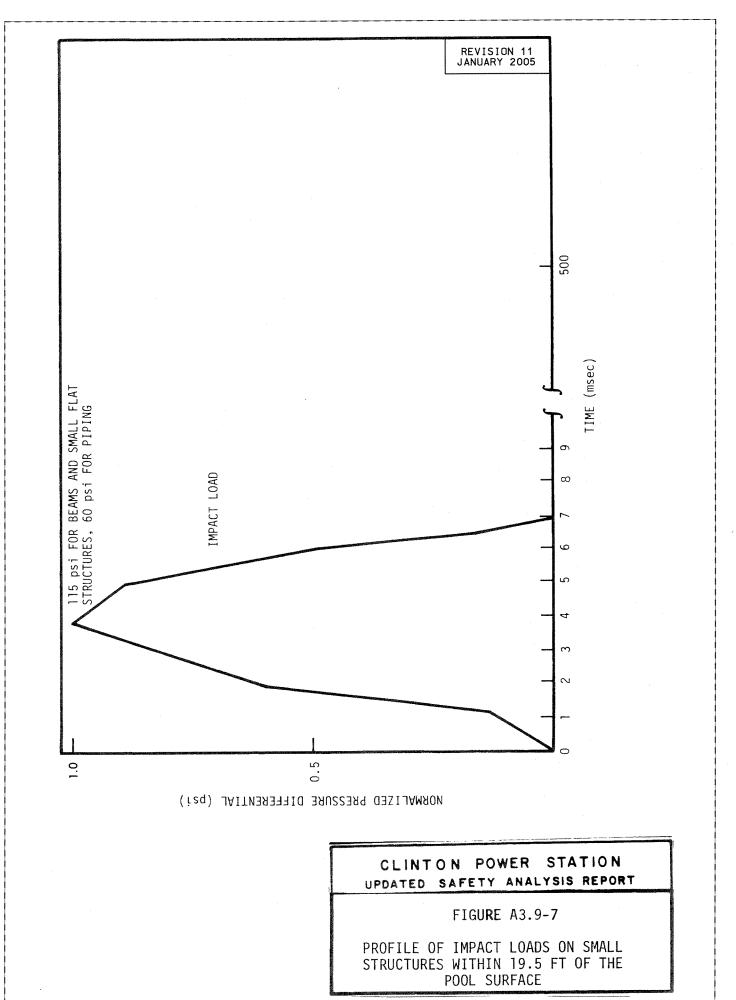
PROBABILITY DENSITY FUNCTION VS.
VALVE OPENING TIME VARIATION
(DIKKERS VALVES)

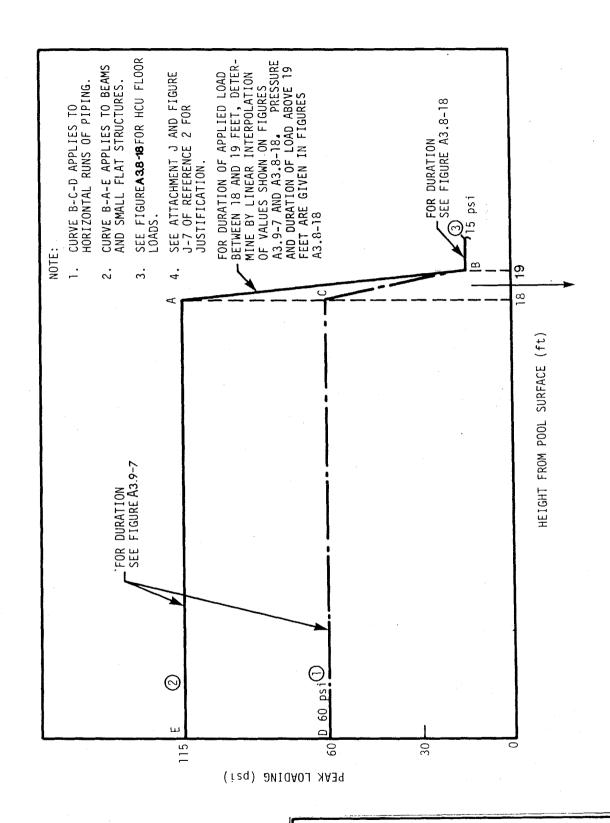


PROBABILITY DENSITY FUNCTION f(X)

FIGURE A3.9-6

PROBABILITY DENSITY FUNCTION VS. BUBBLE FREQUENCY





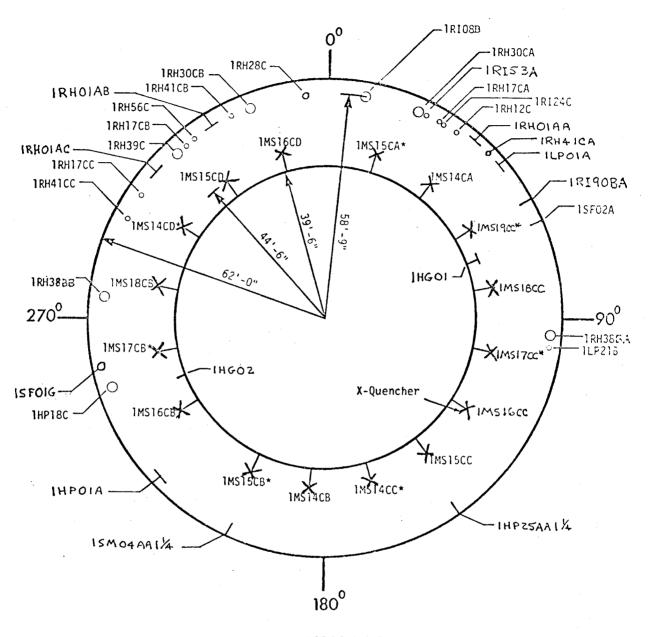
NOTE

ONLY DRAG LOADS ARE
APPLIED ABOVE THE HCU FLOOR
FROM VELOCITY DETERMINED
BY DECELERATION WITH ELEVATION. NO FROTH IMPACT OR
DRAG LOAD ABOVE 30 ft.

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE A3.9-8

SUMMARY OF POOL SWELL LOADING SPECIFICA-TIONS FOR SMALL STRUCTURES IN THE CON-TAINMENT ANNULUS (NOT APPLICABLE TO THE STEAM TUNNEL OR EXPANSIVE HCU FLOORS)



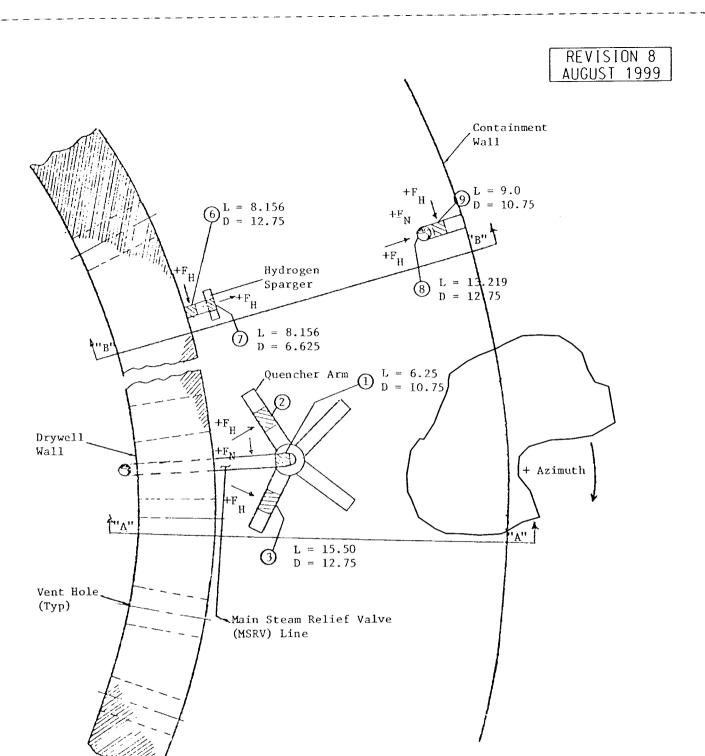
* - ADS FUNCTION

NOT TO SCALE

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE A3.9-9

PLAN OF SUPPRESSION POOL SHOWING RELATIVE LOCATIONS OF SRV LINES, QUENCHERS, AND MAJOR SUBMERGED PIPING



SYMBOL

O - Node Number

 $+\boldsymbol{F}_{\boldsymbol{H}}$ - Positive Horizontal Direction

 $+F_{N}$ - Positive Normal Direction

L - Node Length \sim Inches

D - Node Diameter ~Inches

Notes: 1. Not to scale

2. Not actual azimuthal locations of submerged structures

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE A3.9-10

SCHEMATIC OF SUPPRESSION POOL

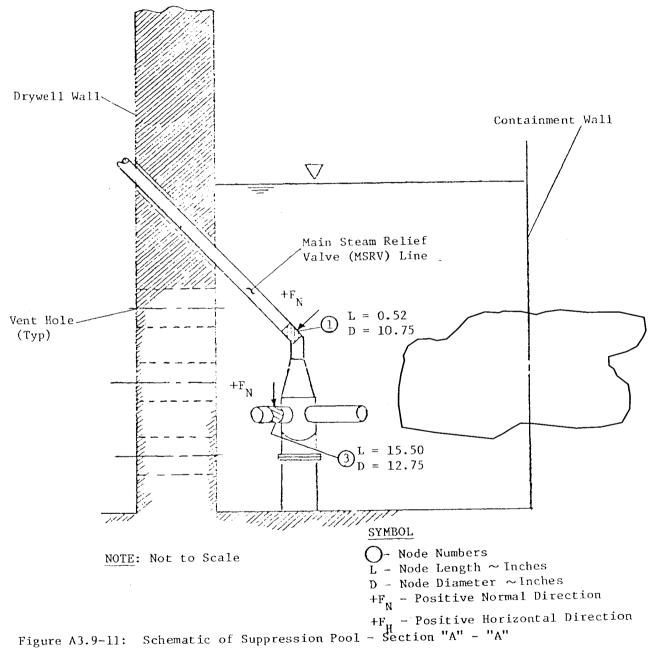
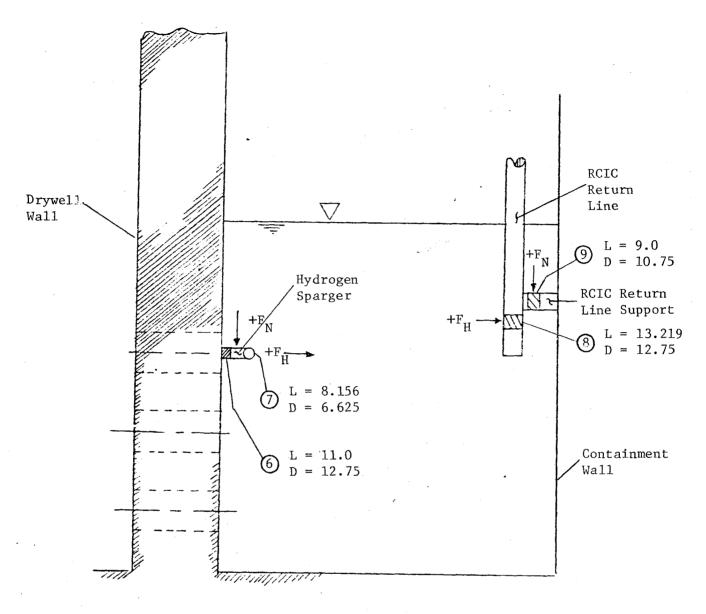


FIGURE A3.9-11

SCHEMATIC OF SUPPRESSION POOL SECTION A-A



NOTE: Not to Scale

SYMBOL

 $\overline{)}$ - Node Number L - Node Length \sim Inches

 $D = Diameter \sim Inches$

 $+F_{\mathrm{H}}$ - Positive Horizontal Direction

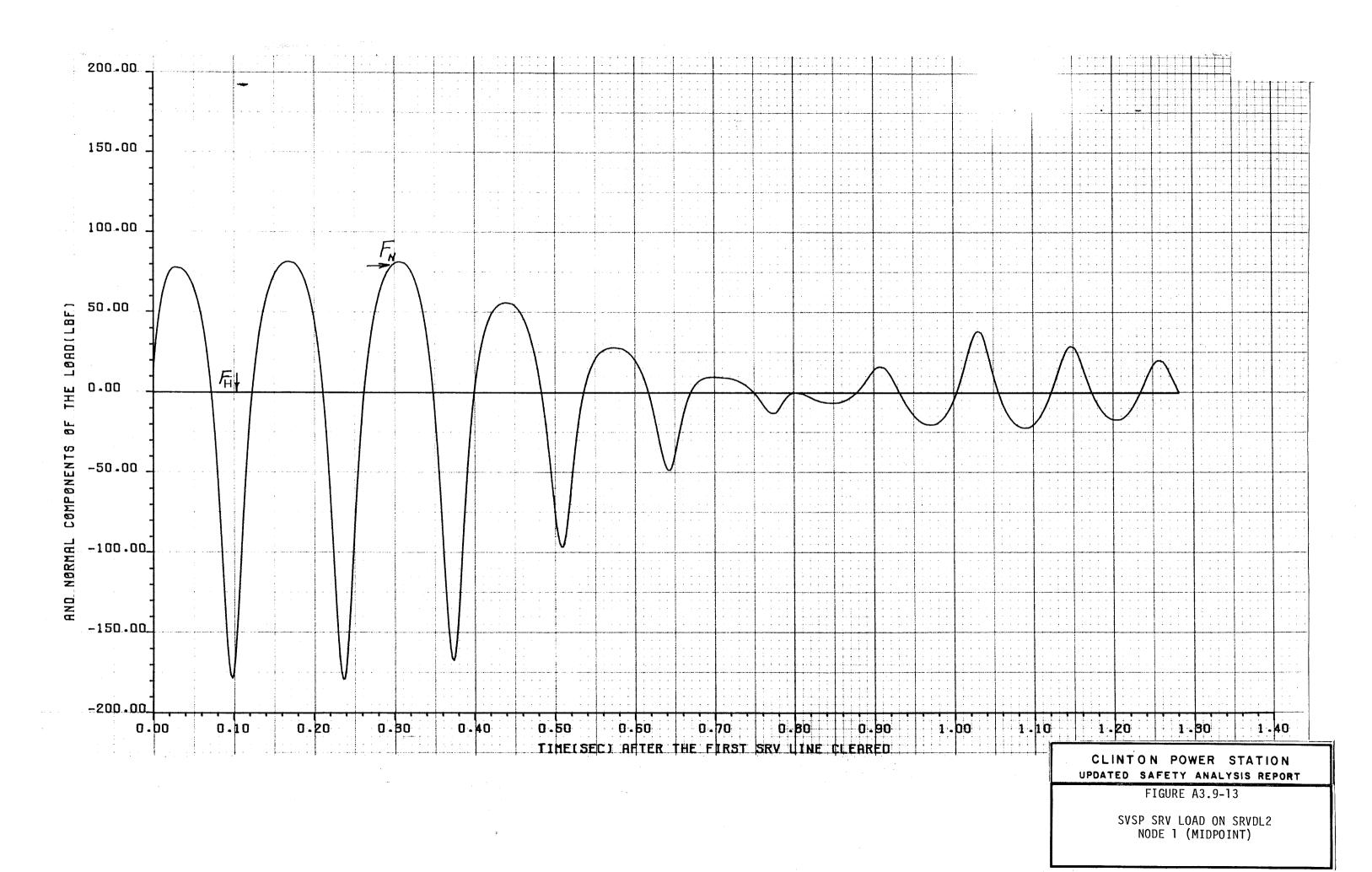
 $+F_N$ - Positive Normal Direction

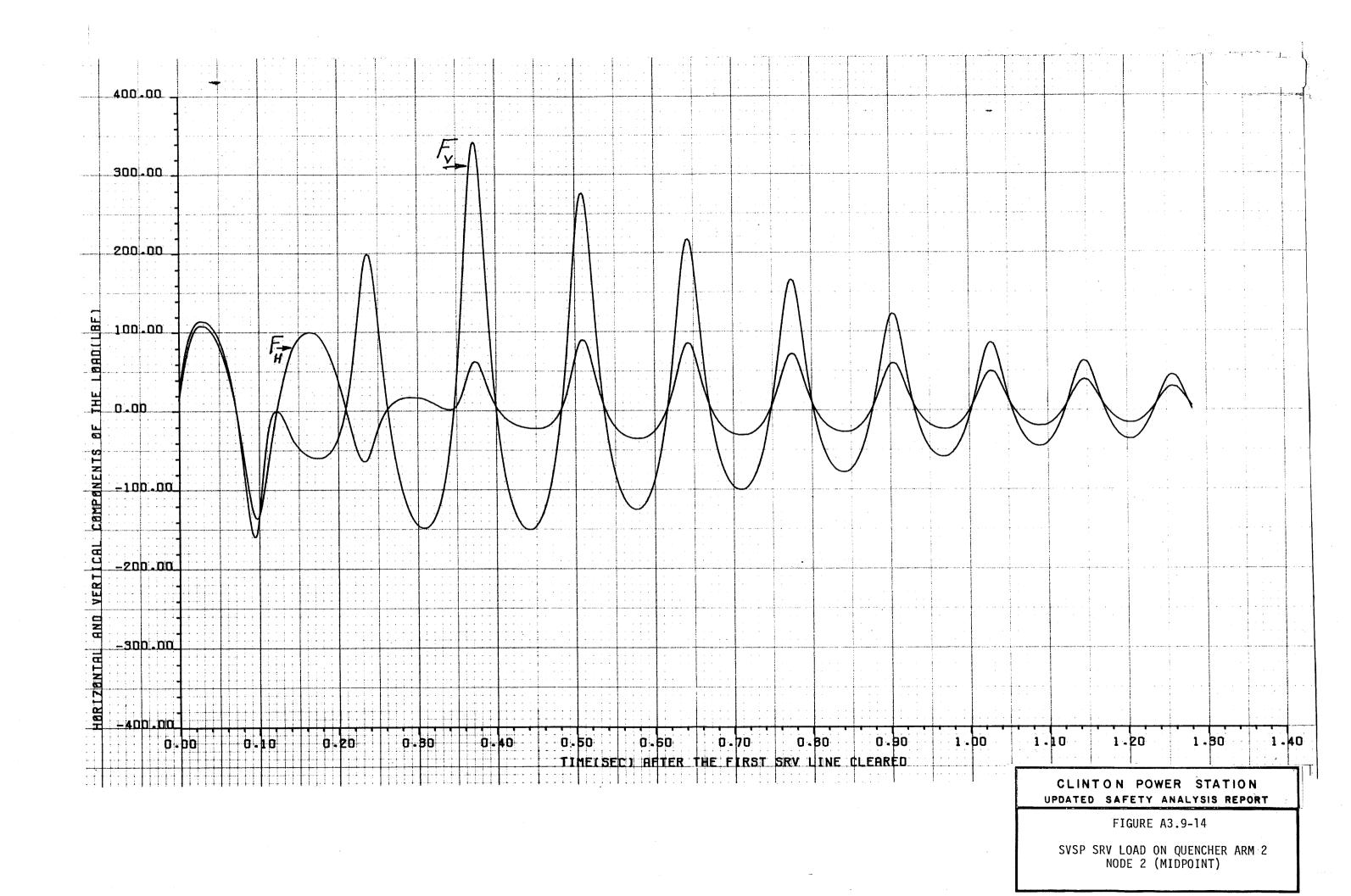
Figure A3.9-12: Schematic of Suppression Pool - Section "B" - "B"

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE A3.9-12

SCHEMATIC OF SUPPRESSION POOL SECTION B-B

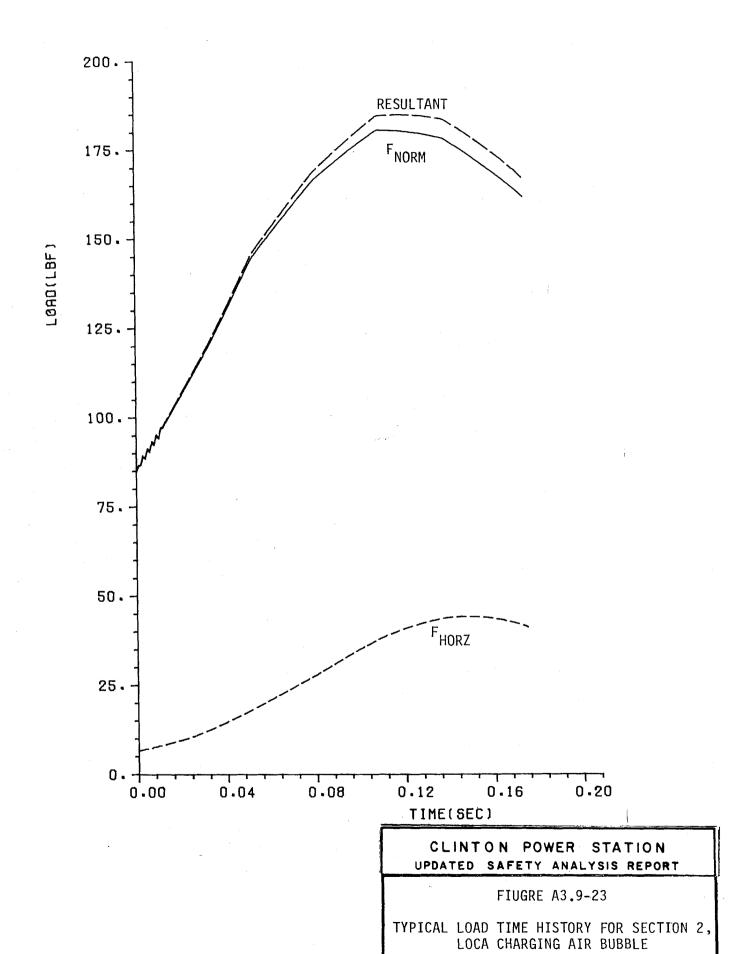




CPS/USAR

FIGURES A3.9-15 THROUGH A3.9-22
HAVE BEEN DELETED

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LOCATION 'A'

LOCATION 'B'

LOCATION C

LOCATION 'D'

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE B3.9-1

CLINTON X-QUENCHER . CRITICAL LOCATIONS

Q&R 210.02

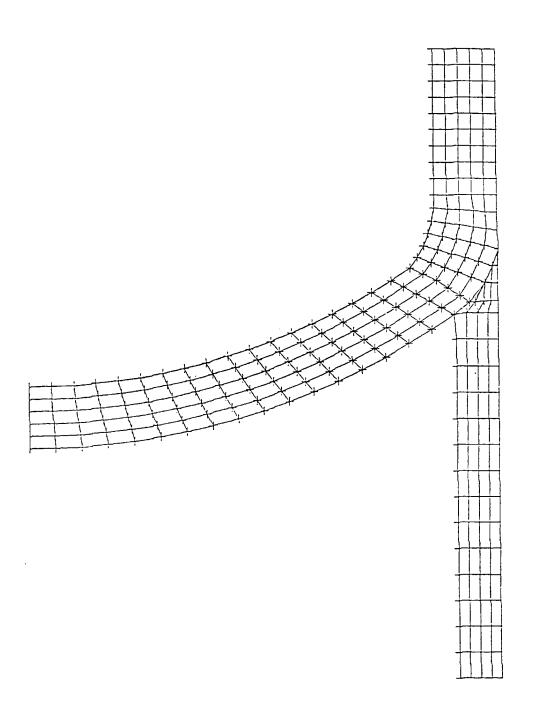


FIGURE B3.9-2

FINITE ELEMENT MODEL OF LOCATION "D"

O&R 210.02

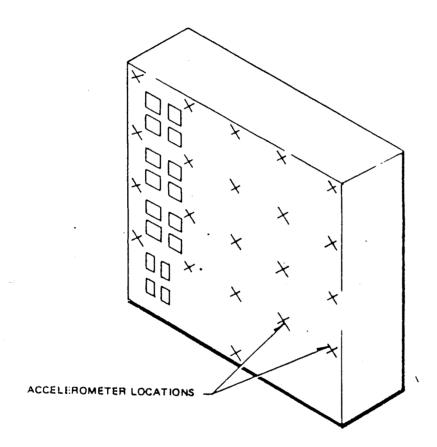


Figure 3.10-1. Typical Vertical Board (Benchboard Would be the Same with a Bench Section Protruding Out About Half-way Down)

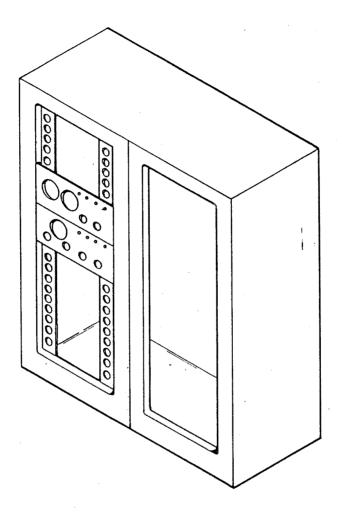


Figure 3.10-2. Instrument Rack (Cabinet would Contain Pages or Other Special Instruments instead of Simple Drawer Type Instruments)

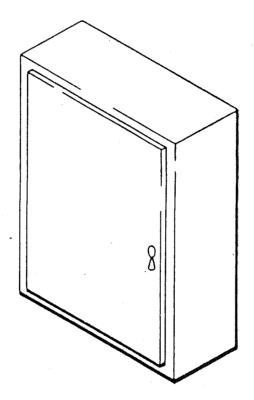


Figure 3.10-3. NEMA Type-12 Enclosure (Instruments Mounted Inside on Internal Membrane Mounted on Standoffs Attached to Back)

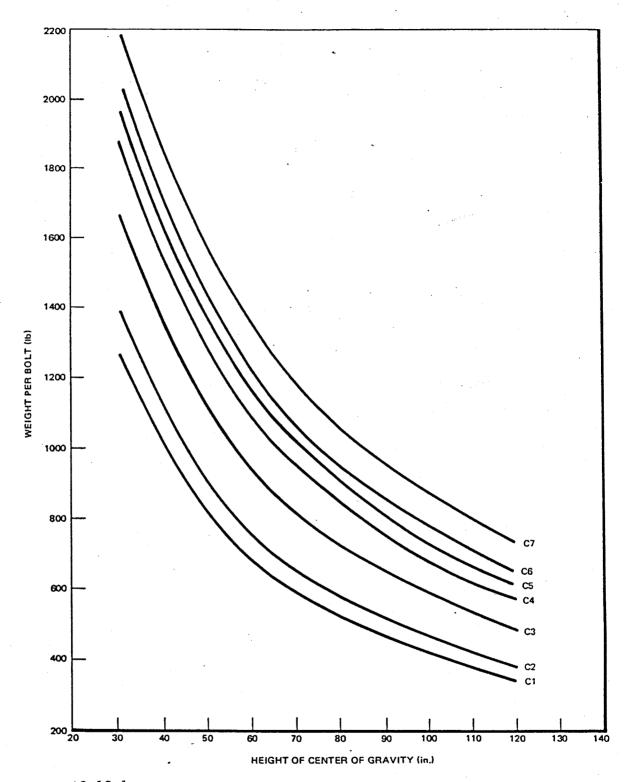


Figure A3.10-1 $_{\rm Maximum}$ Safe Weight per Bolt for Standard Enclosure as a Function of the Height of the Center of Gravity

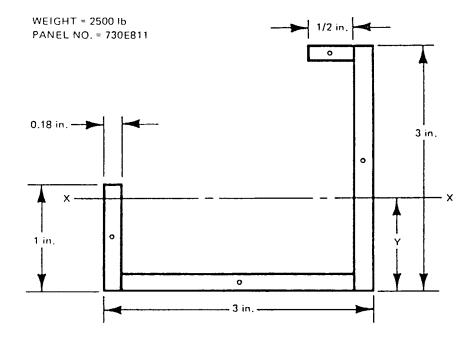


Figure B3.10-1. Corner Post

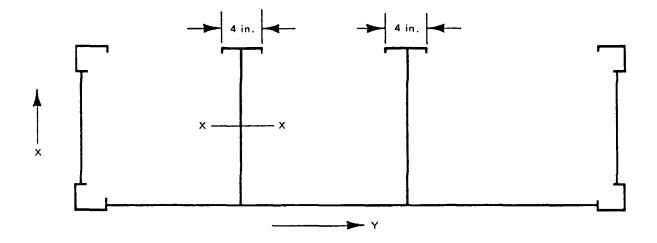


Figure B3.10-2. Plan View of Panel

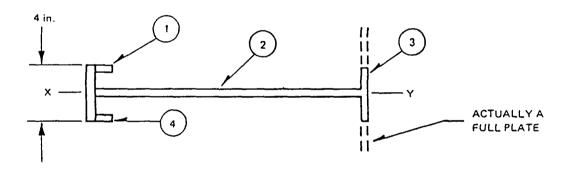


Figure B3.10-3. Barrier With Two End Plates

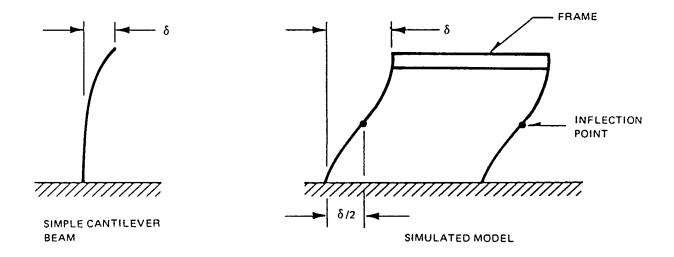


Figure B3.10-4. Panel Deflections

CPS/USAR

Figures 3.11-1 through 3.11-15 Deleted

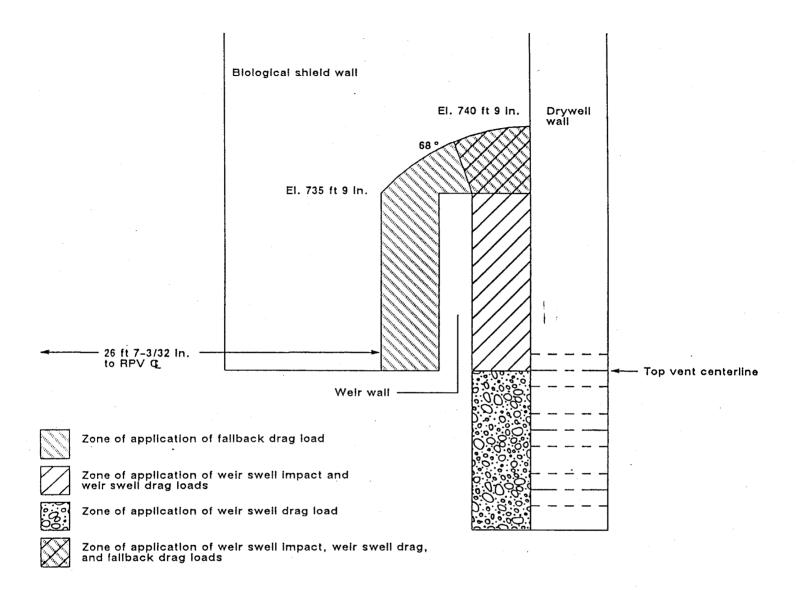


FIGURE 3.11-16

WEIR SWELL IMPACT,
DRAG AND FALLBACK DRAG ZONES