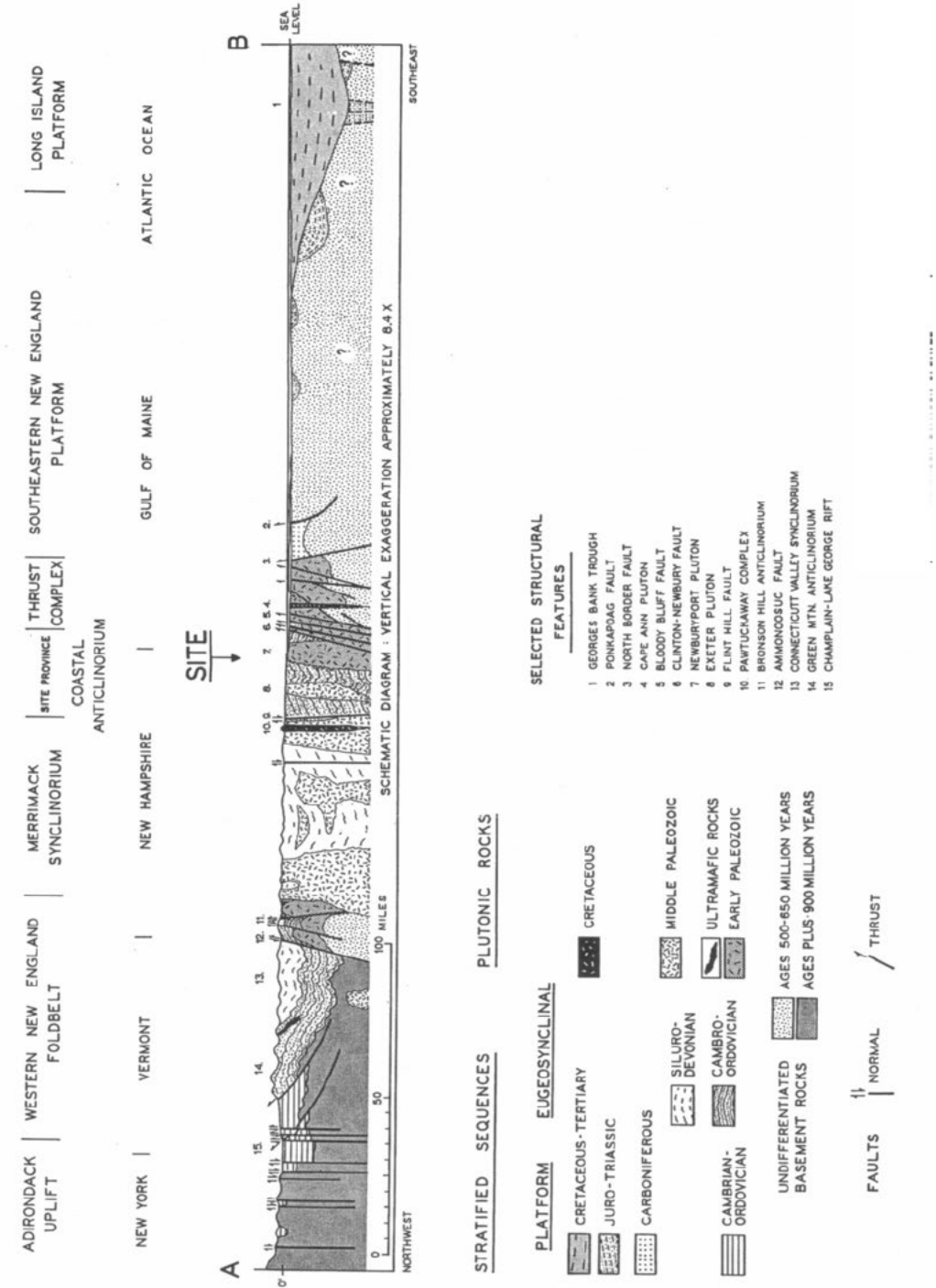


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UPDATED FINAL SAFETY  
ANALYSIS REPORT

Regional Physiographic Map

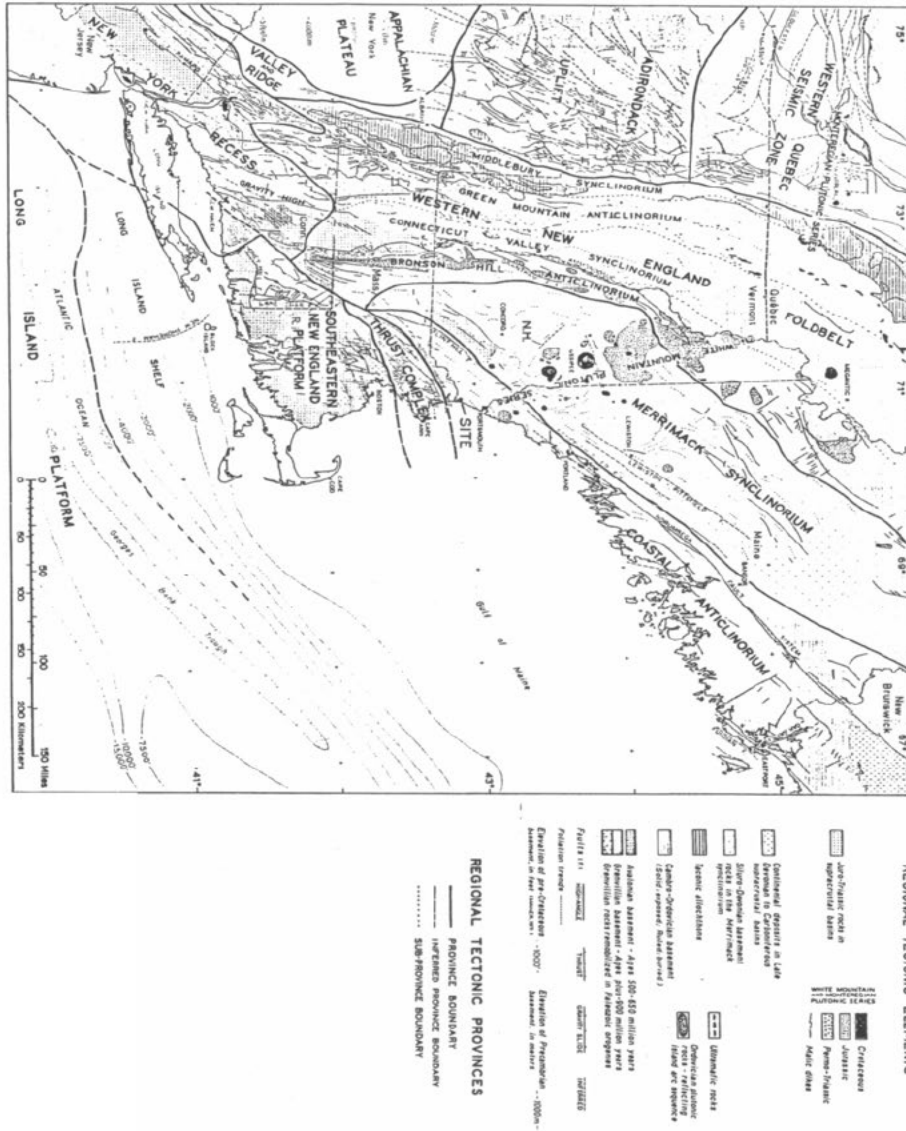
Figure 2.5 1



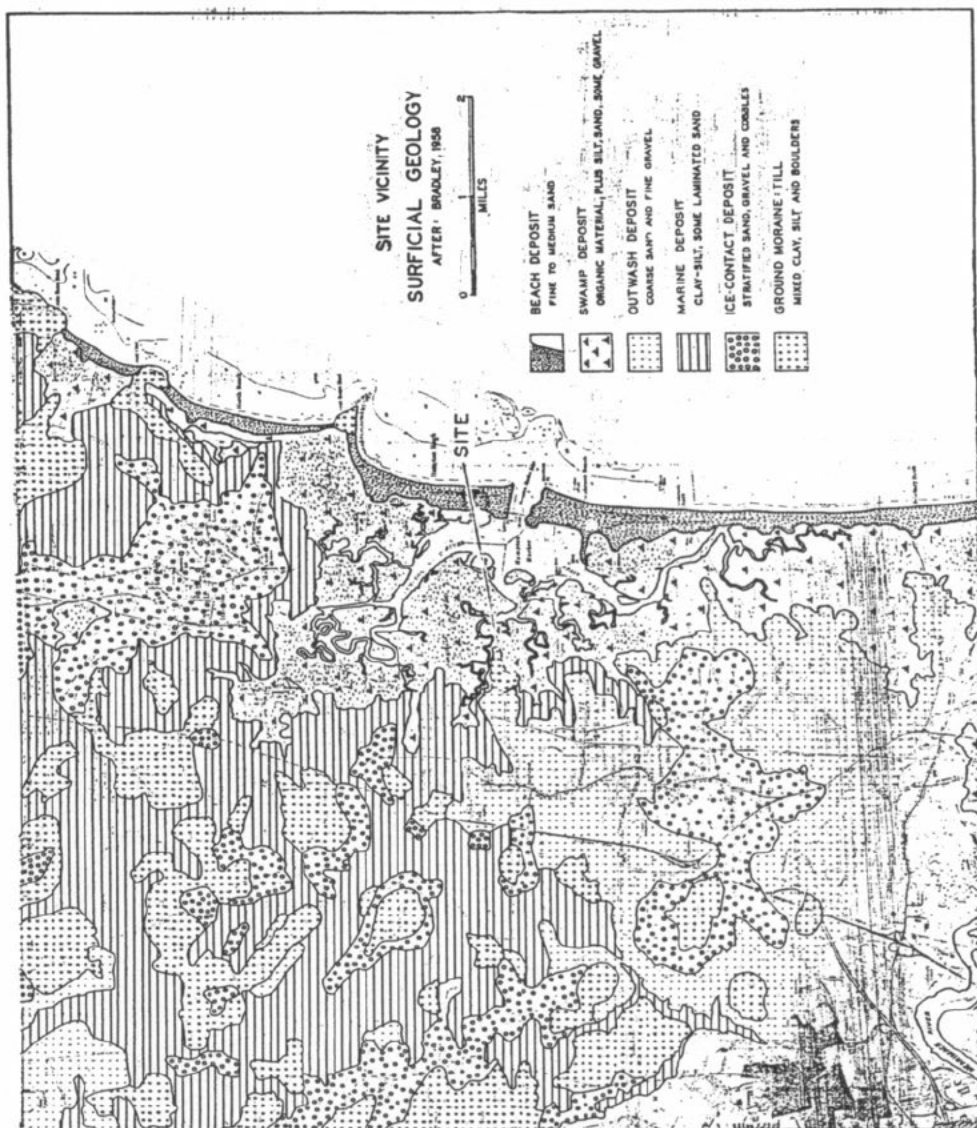


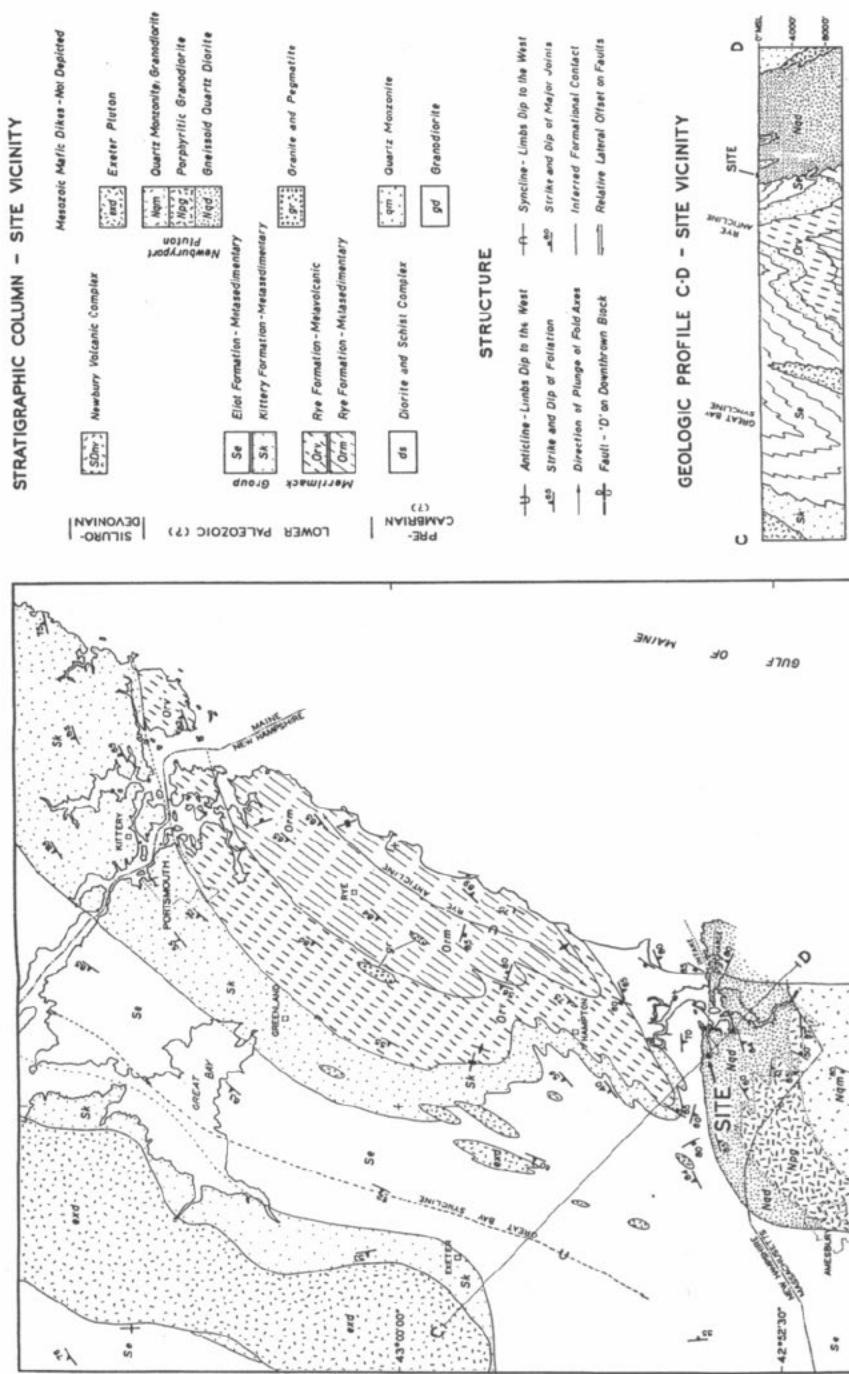






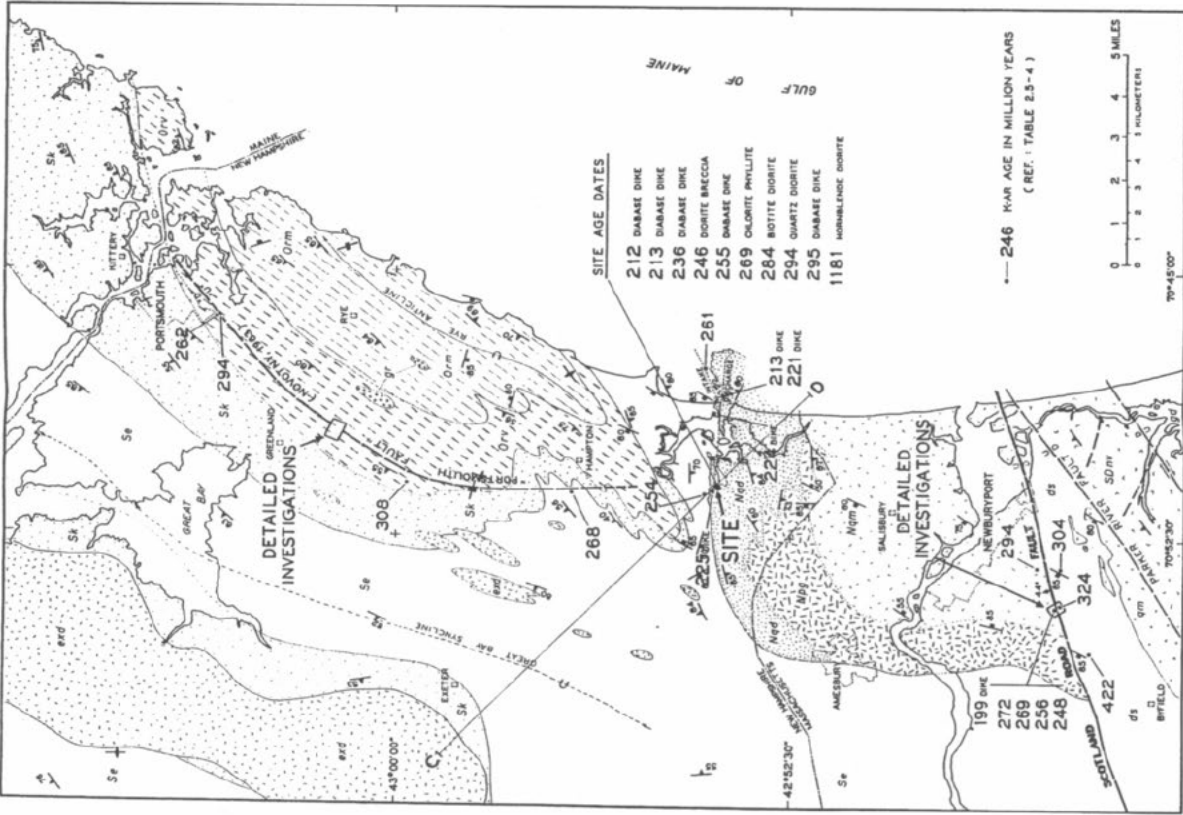
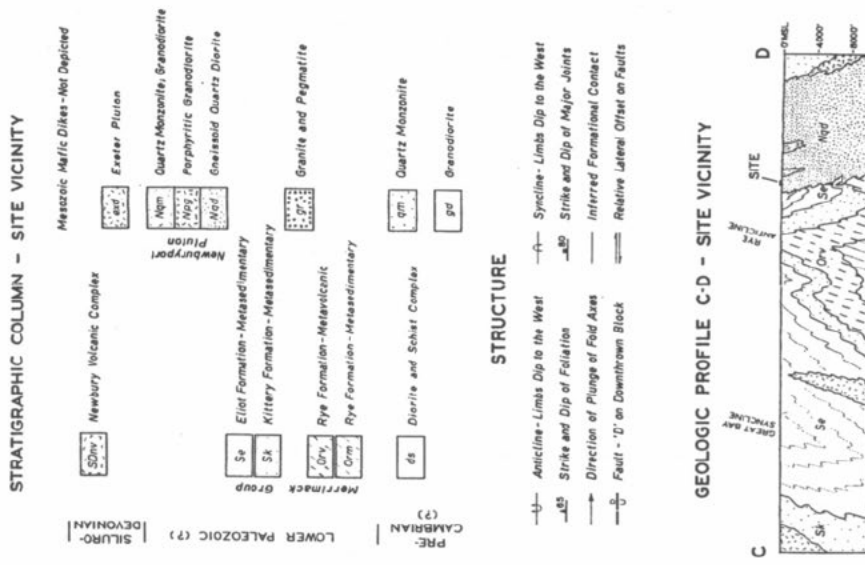
SEABROOK STATION UPDATED FINAL SAFETY ANALYSIS REPORT	Regional Tectonic Provinces	
		Figure 2.5-5





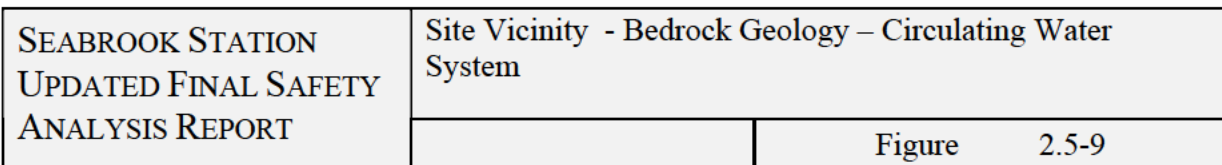
SEABROOK STATION UPDATED FINAL SAFETY ANALYSIS REPORT	Site Vicinity - Bedrock Geology	
		Figure 2.5-7





SEABROOK STATION UPDATED FINAL SAFETY ANALYSIS REPORT	Site Vicinity – Fault Investigations and Radiometric Dating	
	Figure	2.5-8





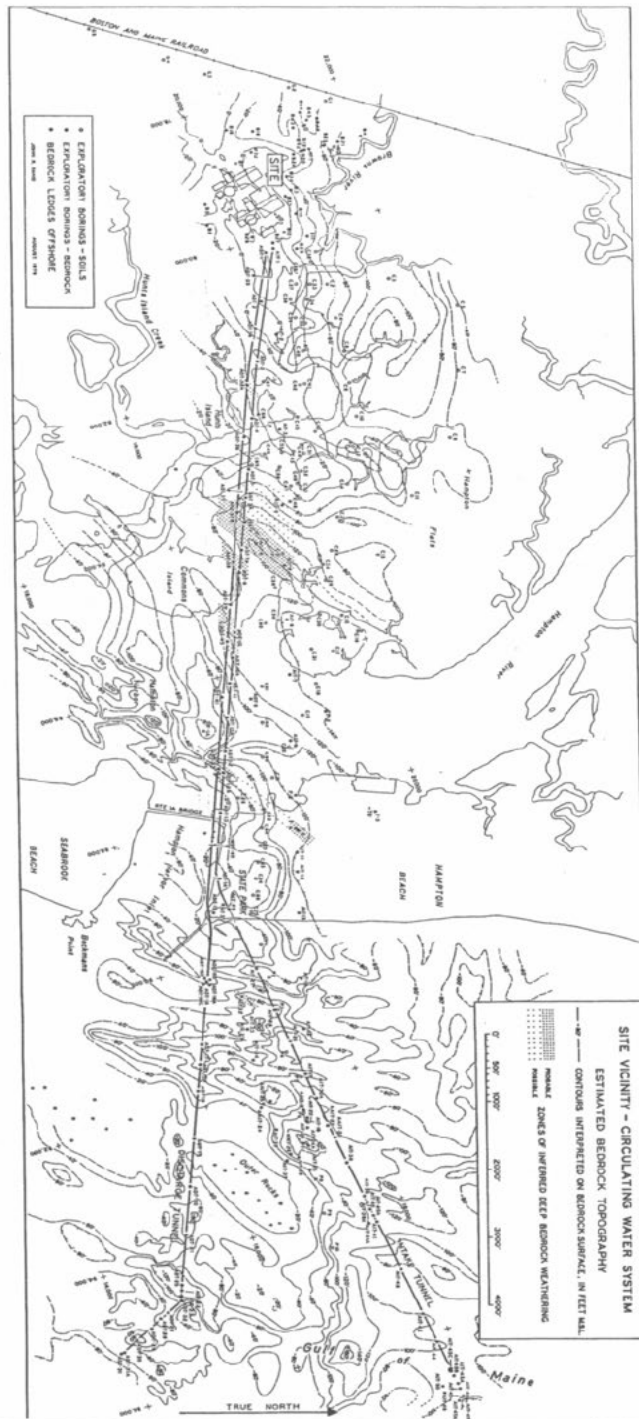








Figure 2.5-13

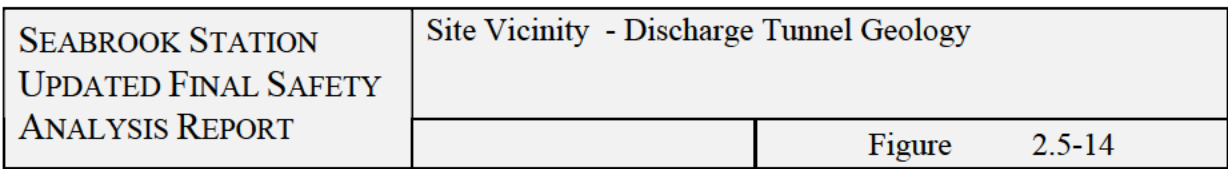
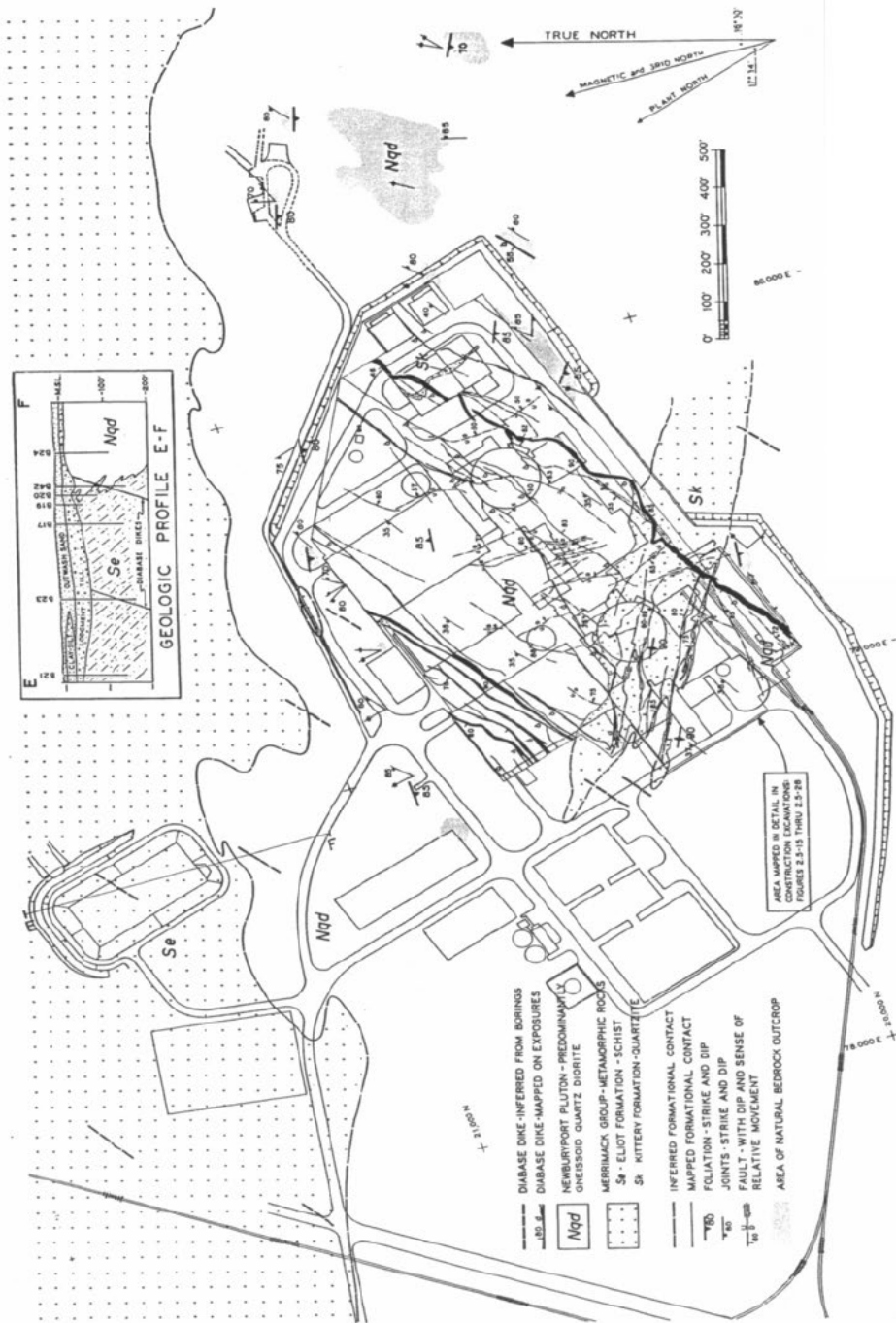


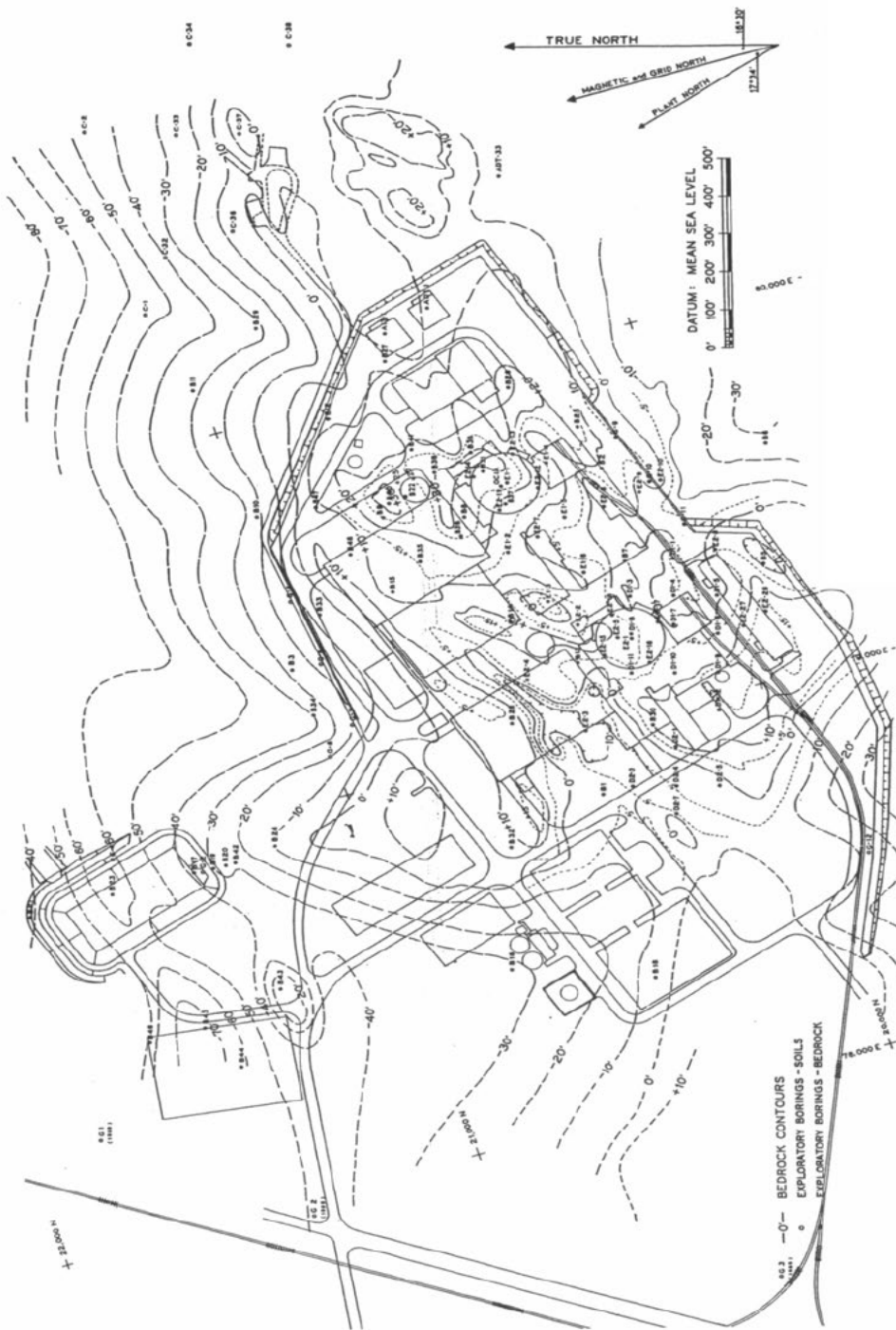
Figure 2.5-14



SEABROOK STATION UPDATED FINAL SAFETY ANALYSIS REPORT	ite Area – Plot Plan and Original Surface Topography	
		Figure 2.5-15



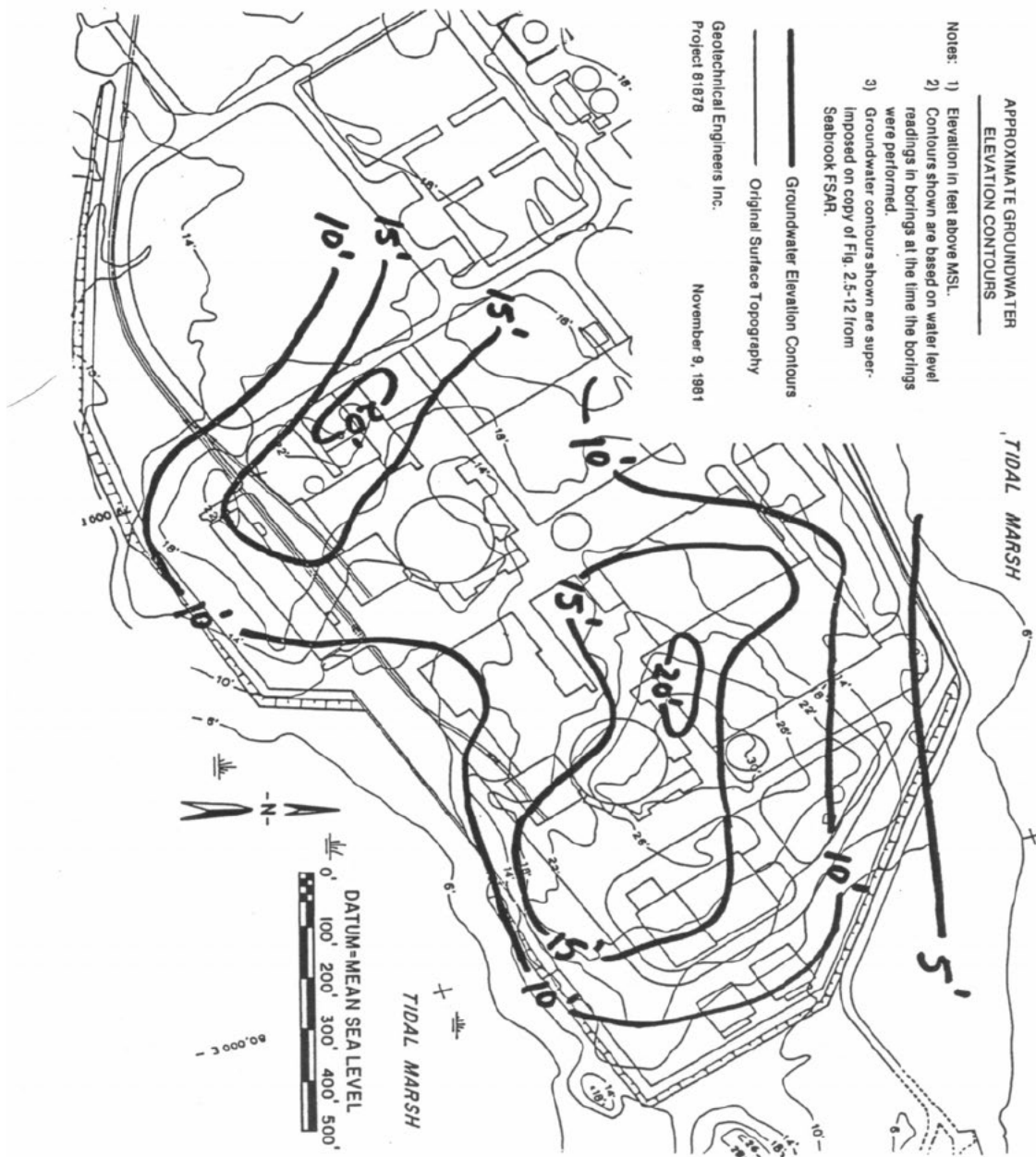




SEABROOK STATION  
UPDATED FINAL SAFETY  
ANALYSIS REPORT

Site Area – Boring Locations and Estimated Bedrock  
Topography

Figure 2.5-17

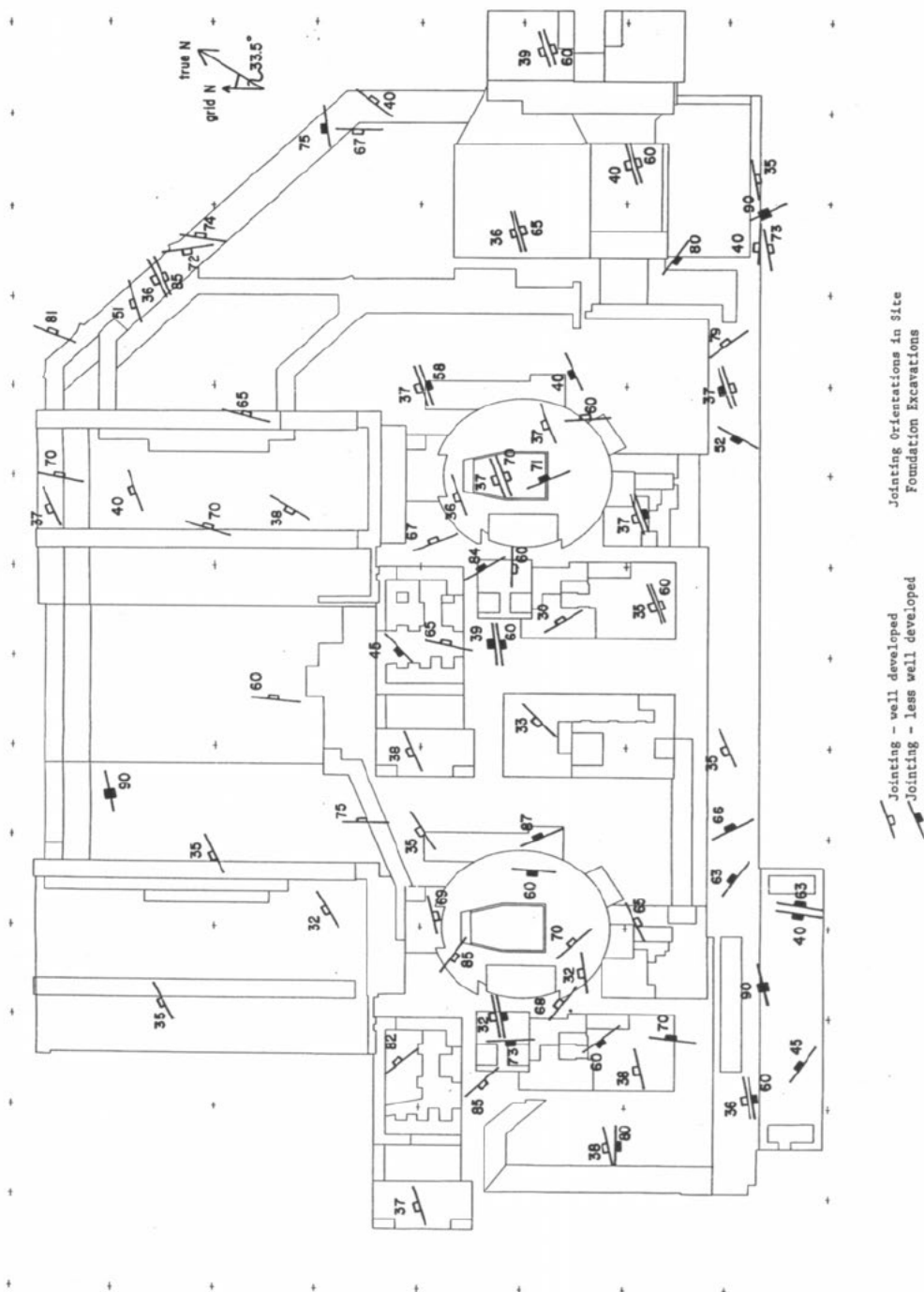


SEABROOK STATION UPDATED FINAL SAFETY ANALYSIS REPORT	Approximate Groundwater Elevation Contours	
		Figure 2.5-18







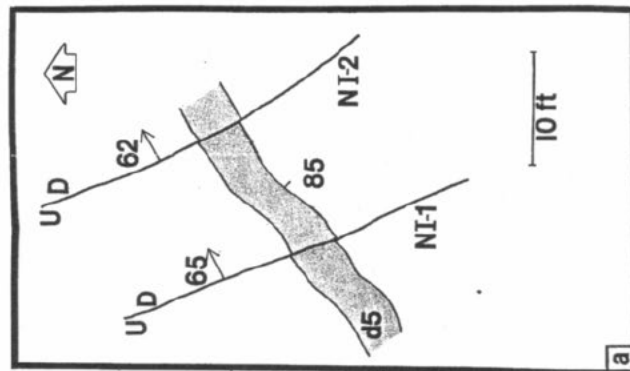
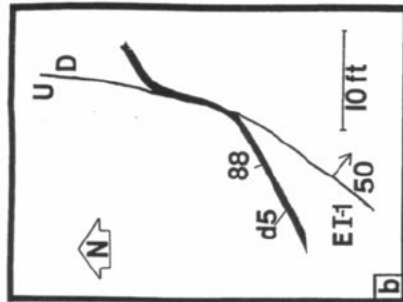
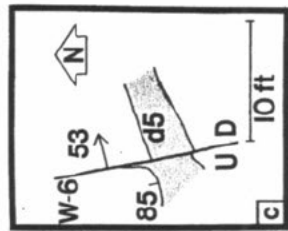


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 ANALYSIS REPORT

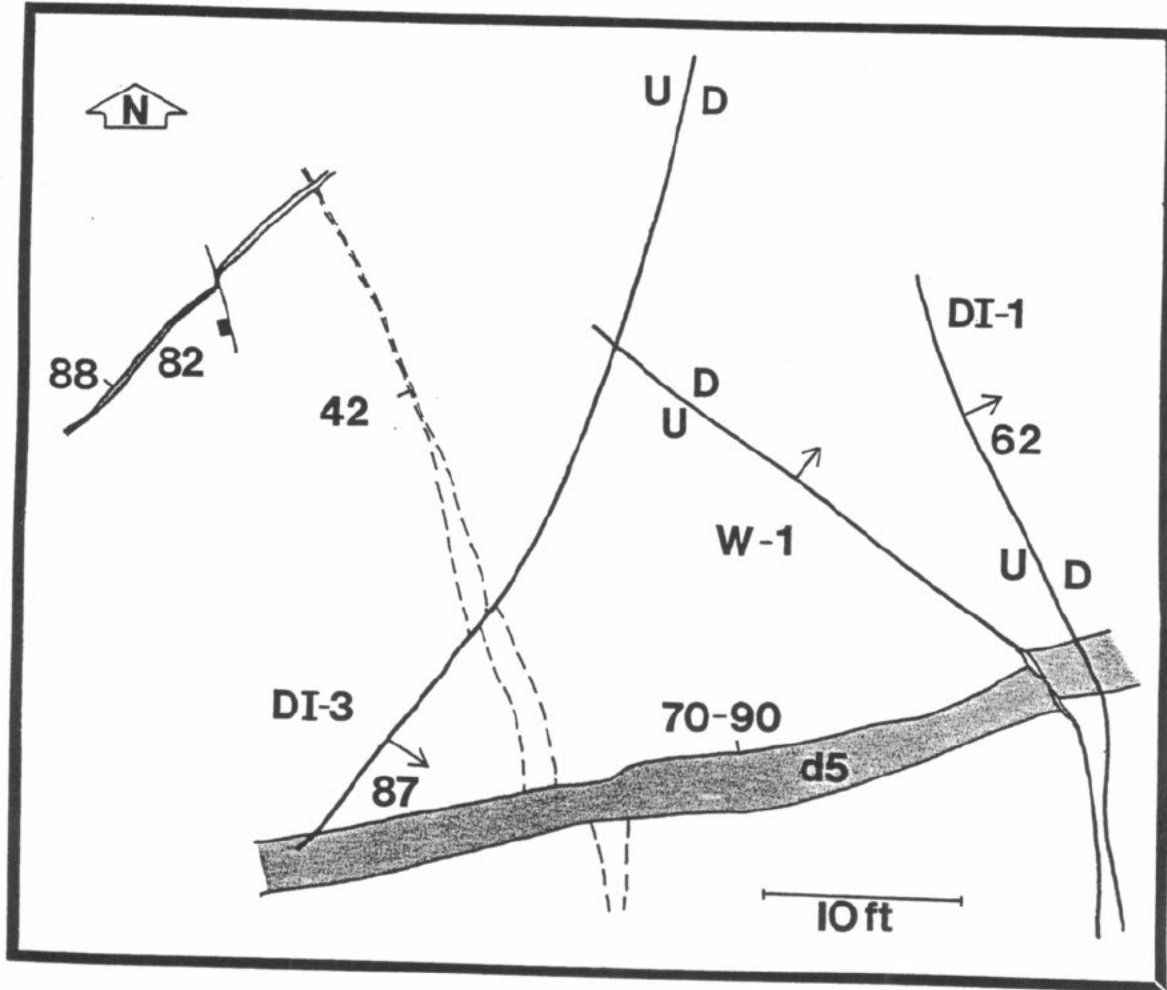
Jointing Orientations in Site Foundation Excavations

Figure 2.5-21

Figure 2.5-22

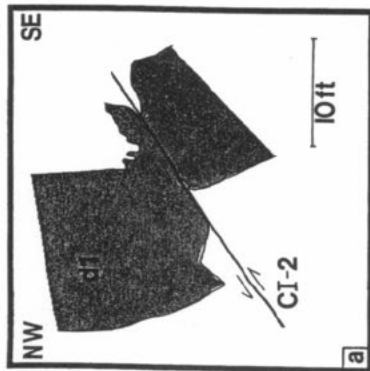
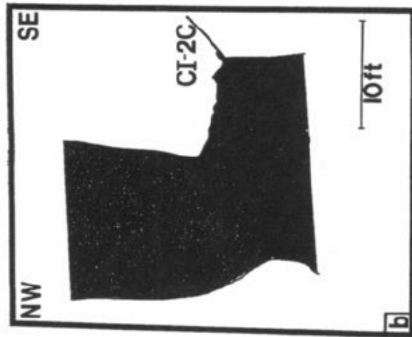
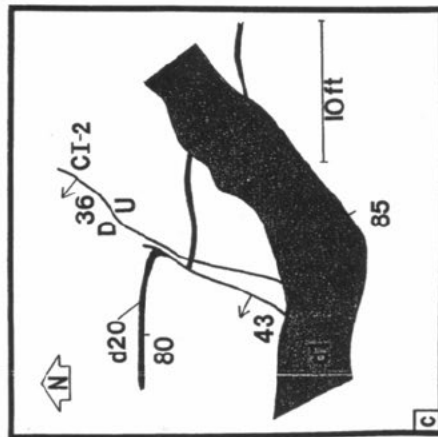


a. PLAN SKETCH FROM THE CBI. FAULTS NI-1 AND NI-2 CLEANLY OFFSET DIKE d5 AND THE HOST ROCK, NEWBURYPORT. b. PLAN SKETCH FROM DI. FAULT W-6 DEFLECTS AND OFFSETS DIKE d5 AND THE HOST ROCK, NEWBURYPORT. c. PLAN SKETCH FROM THE AREA BETWEEN THE CWI AND THE ESPFCI. DIKE d5 CROSS-CUTS FAULT EI-1.



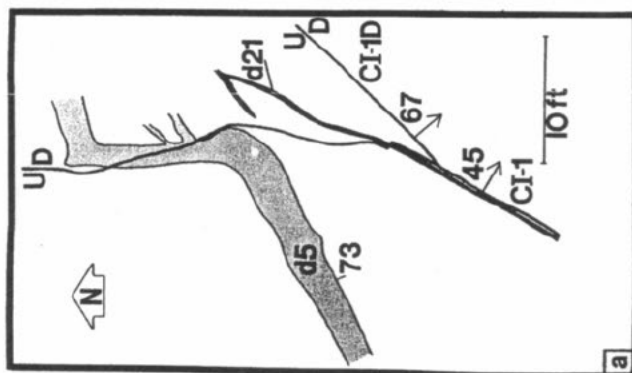
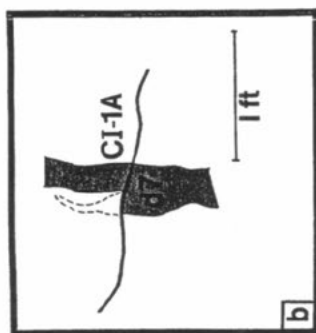
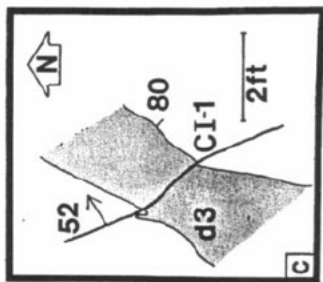
PLAN SKETCH FROM D1. FAULT DI-3 ENDS WITH DIKE d5. FAULT DI-1 APPARENTLY DISPLACES DIKE d5 ALTHOUGH THE FAULT NARROWS TO A SINGLE, NARROW, TIGHT FRACTURE BETWEEN TWO CALCITE PODS AT THE DIKE'S CENTER. FAULT DI-1 APPARENTLY DISPLACES d5 ALTHOUGH HEAVY CALCITE COATINGS PREVENT MEASUREMENT OF DIKE OFFSET. A DIKELET ASSOCIATED WITH d5 IS DEFLECTED ALONG A JOINT IN A MANNER WHICH MIMICS SOME APPARENT OFFSETS OF DIKES ALONG FAULTS OVER THE SITE. DILATION OPENING FOR d5 TOOK PLACE OTHER THAN AT RIGHT ANGLES TO DIKE CONTACTS. DIABASE DIKELET SHOWS PSEUDO-OFFSET ALONG JOINT. HOST ROCK IS NEWBURYPORT.





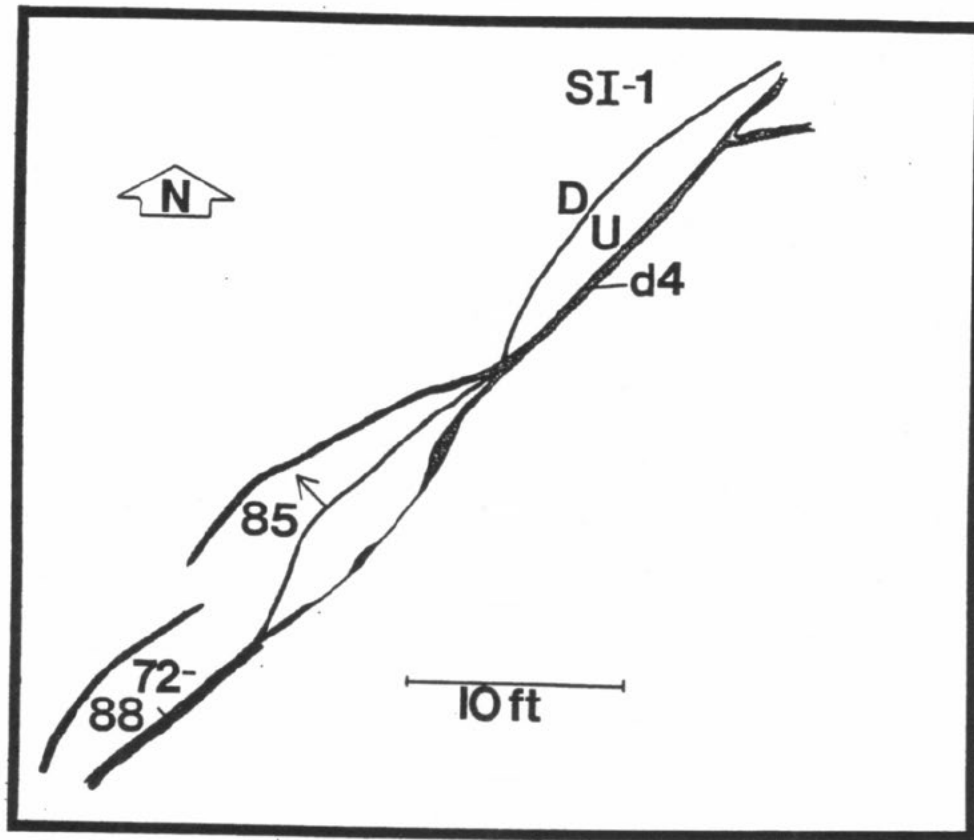
a. PROFILE SKETCH FROM THE NORTHEAST WALL OF E11. FAULT CI-2 DEFLECTS AND CROSS-CUTS BUT DOES NOT APPEAR TO DISPLACE DIKE d1. HOST ROCK IS THE NEWBURYPORT. b. PROFILE SKETCH FROM THE CWT'S EAST WALL ADJACENT TO THE CP. FAULT CI-20 DEFLECTS AND OFFSETS DIKE d1. APPARENT REVERSE MOTION SENSE RESULTS FROM DIKE FLOW DEFLECTION. HOST ROCK IS NEWBURYPORT. c. PLAN SKETCH FROM CWT SOUTH OF WPB. DIKE d1 CUTS DIKE d20. FAULT CI-2 OFFSETS AND DEFLECTS DIKE d20 AND ENDS AGAINST DIKE d1. HOST ROCK IS KITTEERY MIXED WITH SOME NEWBURYPORT.

SEABROOK STATION UPDATED FINAL SAFETY ANALYSIS REPORT	Sketches Detailing CI-2 and CI-2C	
		Figure 2.5-25



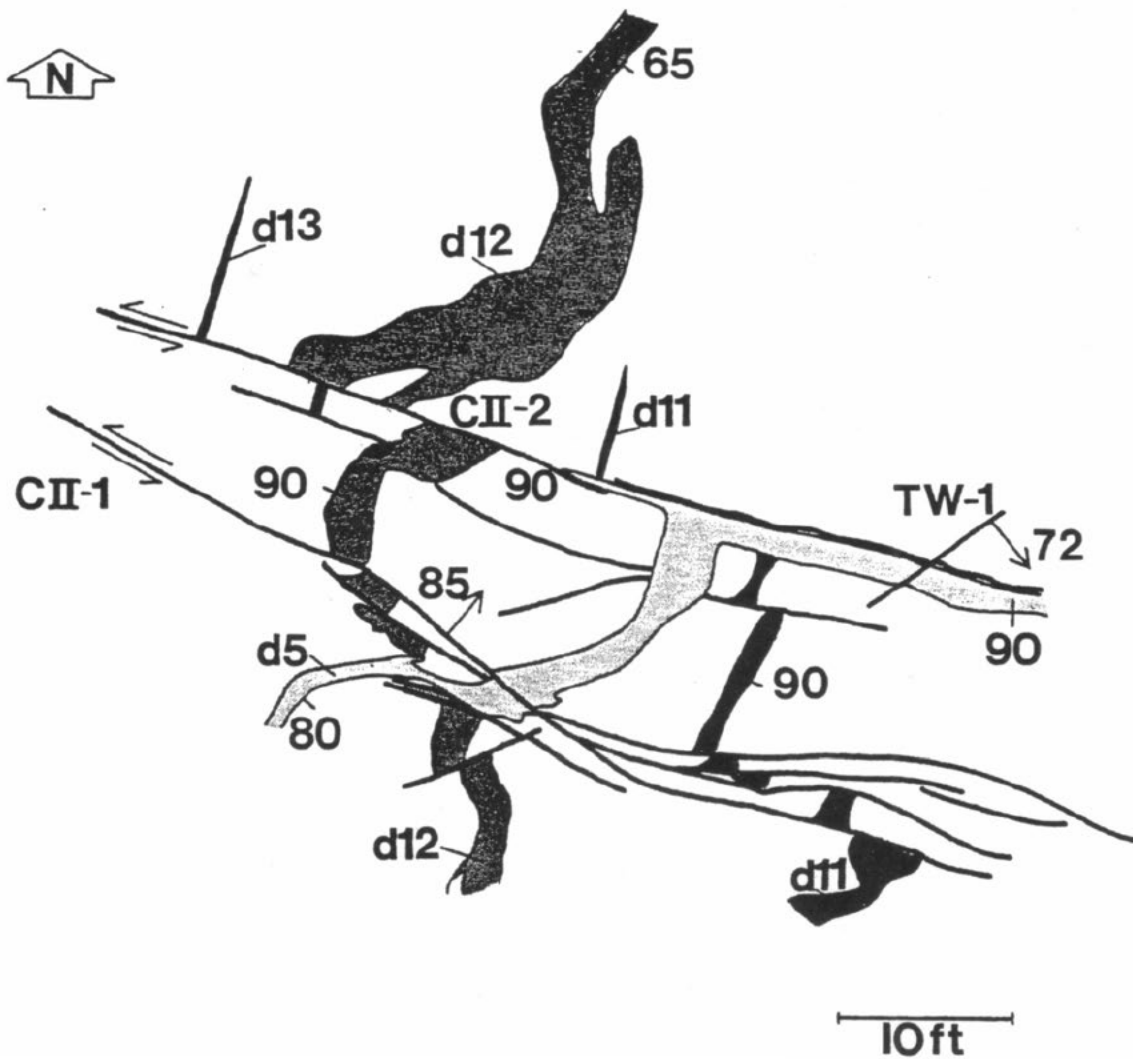
a. PLAN SKETCH FROM NORTHEAST QUADRANT OF CI AND ADJACENT EFFBI. DIKE d21 CROSS-CUTS FAULT CI-1. FAULT CI-1 DEFLECTS DIKE d5 AND TRENDS THROUGH THE DEFLECTED SEGMENT AS A TIGHT, NARROW FRACTURE, BUT DOES NOT OFFSET DIKE CONTACTS. FAULT CI-1D SPLAYS FROM CI-1. HOST ROCK IS NEWBURYPORT. b. FAULT CI-1A DEFLECTS DIKE d7 AND TRENDS THROUGH THAT DIKE AS A NARROW FRACTURE, BUT DOES NOT OFFSET DIKE CONTACTS. THE VUGGY CRACK ADJACENT TO THE d7 IS THE REMNANT OF THE ABANDONED DIKE PATH. HOST ROCK IS NEWBURYPORT. c. PLAN SKETCH FROM RI. FAULT CI-1 CUTS DIKE d3, OFFSETTING ONE DIKE CONTACT BUT APPARENTLY ONLY DEFLECTING AND NOT OFFSETTING THE OTHER CONTACT.

SEABROOK STATION UPDATED FINAL SAFETY ANALYSIS REPORT	Sketches Detailing CI-1, CI-1A and CI-1D	
		Figure 2.5-26



PLAN SKETCH FROM ESFPCI. DIKE d4 BOTH CROSS-CUTS AND WAS CHanneled ALONG FAULT SI-1. HOST ROCK IS NEWBURYPORT.

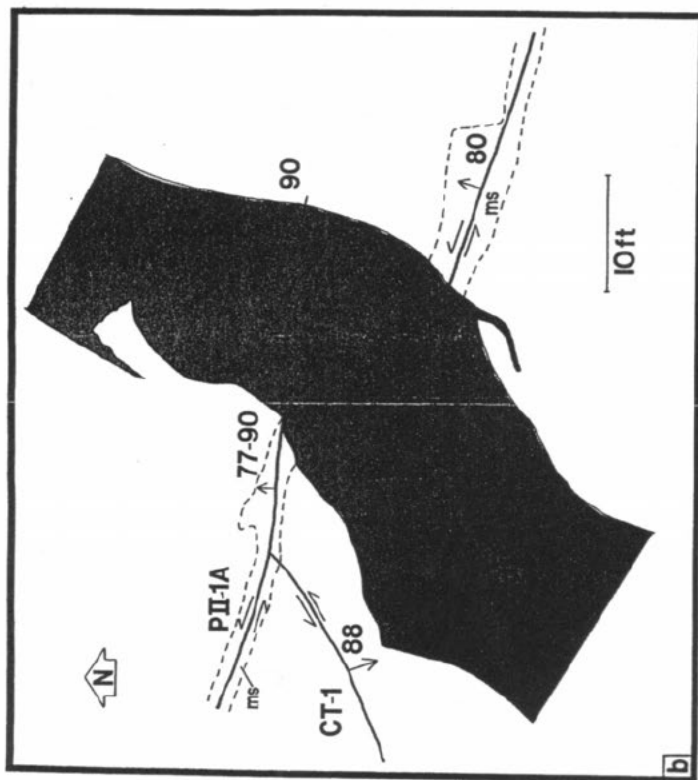
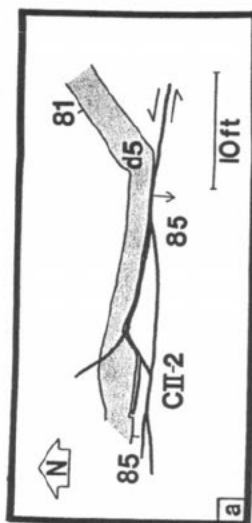
SEABROOK STATION UPDATED FINAL SAFETY ANALYSIS REPORT	Sketches Detailing SI-1	
		Figure 2.5-27



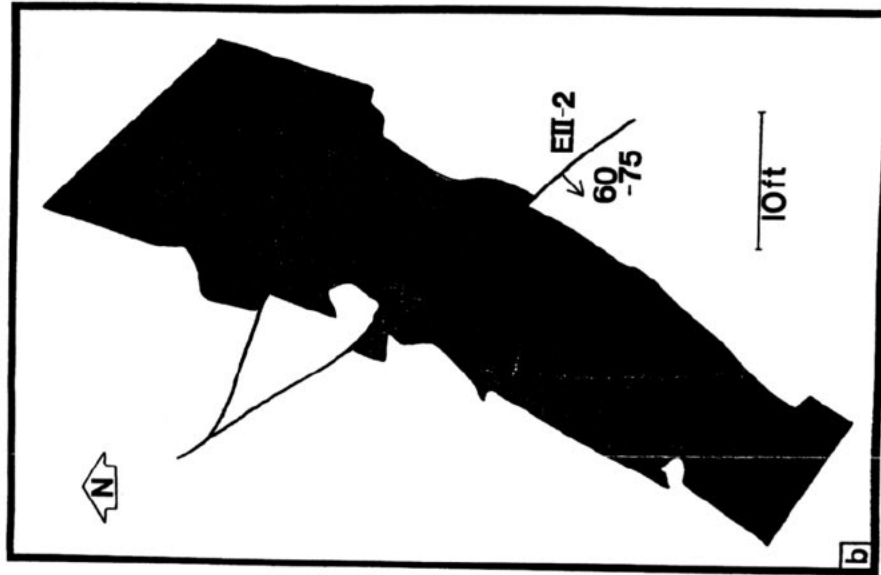
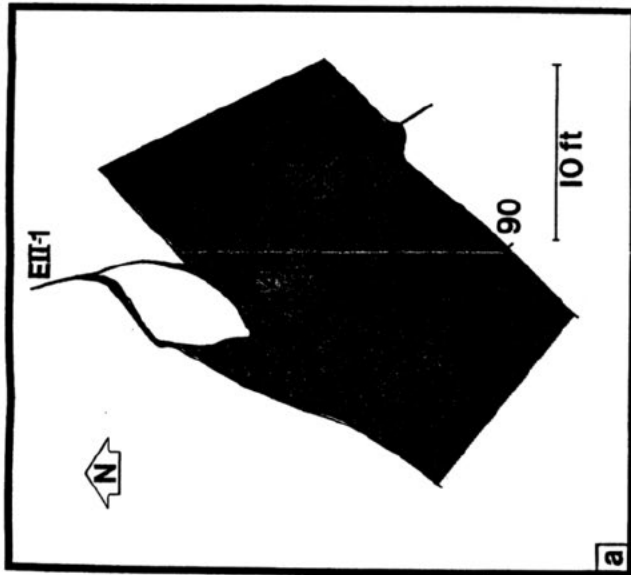
PLAN SKETCH FROM TWII. FAULT CII-1 OFFSETS DIKES d11, d12, d13, AND d5. FAULT CII-2 OFFSETS DIKES d11, d12, AND d13. FAULT TW-1 OFFSETS DIKE d5 AND FAULT CII-2. DIKE d5 CROSS-CUTS CII-2 AND PARTIALLY CROSS-CUTS CII-1. HOST ROCK IS KITTEERY WITH MINOR NEWBURYPORT.

SEABROOK STATION UPDATED FINAL SAFETY ANALYSIS REPORT	Sketches Detailing CII-1, CII-2 and TW-1	
		Figure 2.5-28





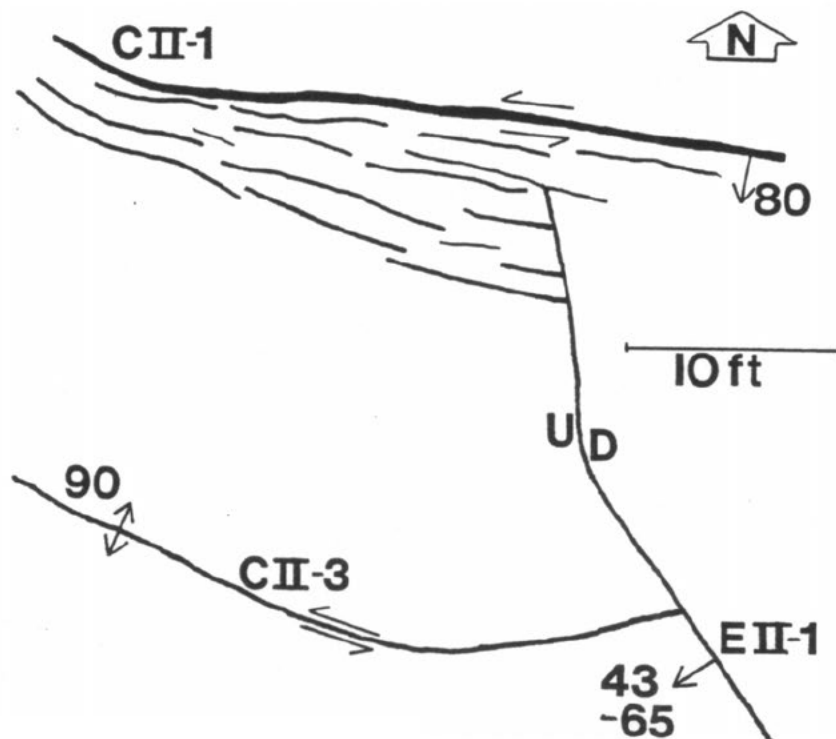
8. PLAN SKETCH FROM JUST WEST OF EFPBII. DIKE d5 TURNS AT AND IS CHANNELLED ALONG FAULT CII-2. HOST ROCK IS KITTEERY WITH SUBSTANTIAL NEWBURYPORT. b. PLAN SKETCH FROM SWT AT NORTH SIDE OF CT. DIKE d1 CROSS-CUTS FAULT PII-1A WITH VERY MINOR FRACTURING AT THE DIKE'S SOUTHEAST CONTACT. FAULT CT-2 ENDS AGAINST PII-1A. HOST ROCK IS MOSTLY NEWBURYPORT WITH KITTEERY (ms) AS SHOWN.



a. PLAN SKETCH FROM SWT NORTHEAST OF CT. FAULT EII-1 CROSS-CUTS DIKE d1. DEFLECTION OF DIKE CONTACTS PREVENTS PRECISE DEFINITION OF DISPLACEMENT. CONTRARY TO APPARENT MOTION OF EII-1 (NORMAL-RIGHT-LATERAL) ON OFFSET COOLING JOINT SUGGESTS REVERSE OR LEFT-LATERAL MOTION. HOST ROCK IS NEWBURYPORT.

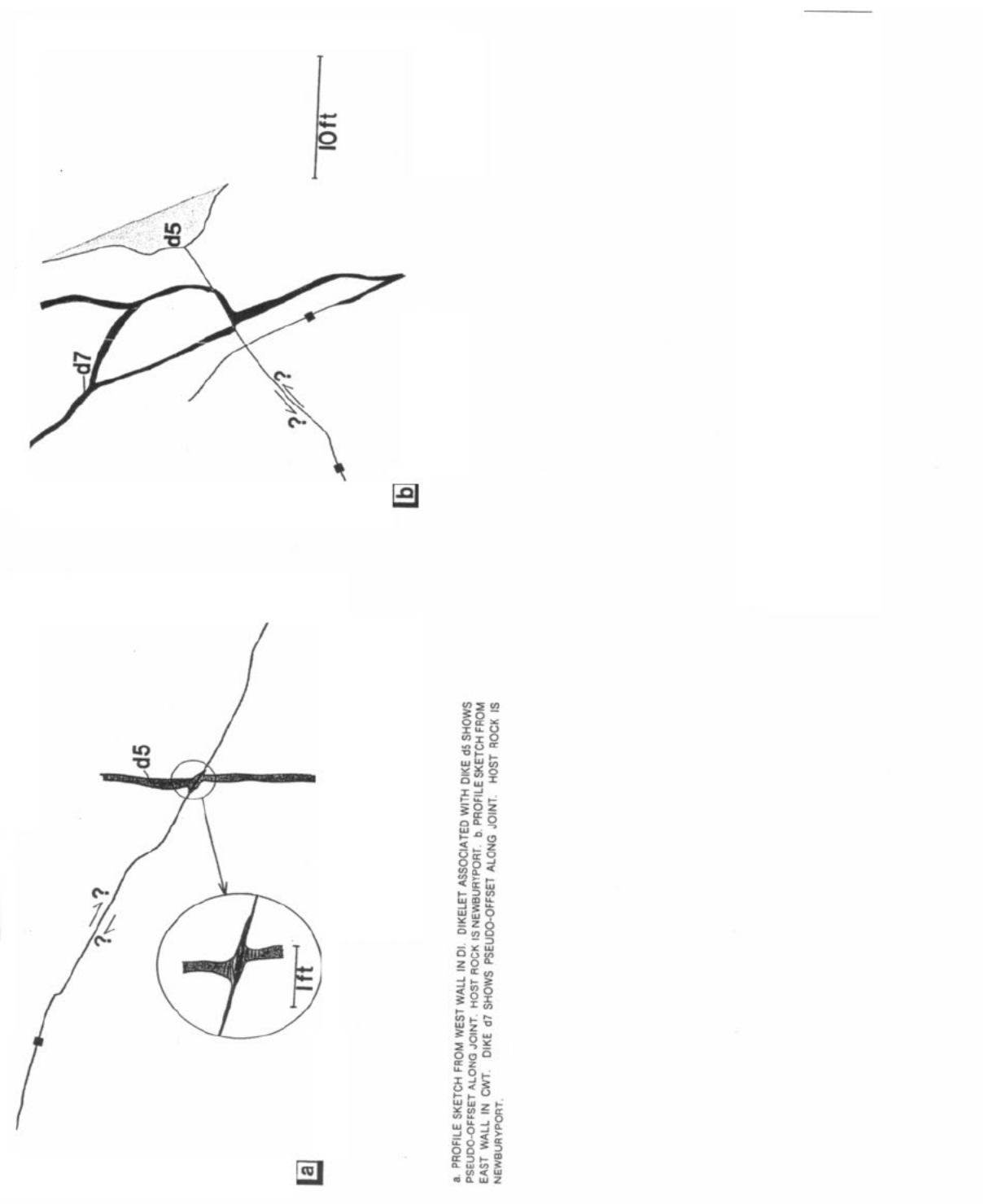
b. PLAN SKETCH FROM SWT SOUTHEAST OF WPB. FAULT EII-2 OFFSETS DIKE d1.

SEABROOK STATION UPDATED FINAL SAFETY ANALYSIS REPORT	Sketches Detailing EII-1 and EII-2	
		Figure 2.5-30



PLAN SKETCH FROM SOUTHEAST OF CII. FAULT CII-1 OFFSETS FAULT EII-1. THE CONTINUATION OF EII-1 EMERGES FROM CII-1 TO THE WEST; EII-1, HOWEVER, DOES PARTIALLY CROSS-CUT PART OF THE ZONE REPRESENTING THE MORE ANCIENT MOTION ON CII-1. CII-3 ENDS AGAINST EII-1. ROCK IS KITTERY WITH MINOR NEWBURYPORT.

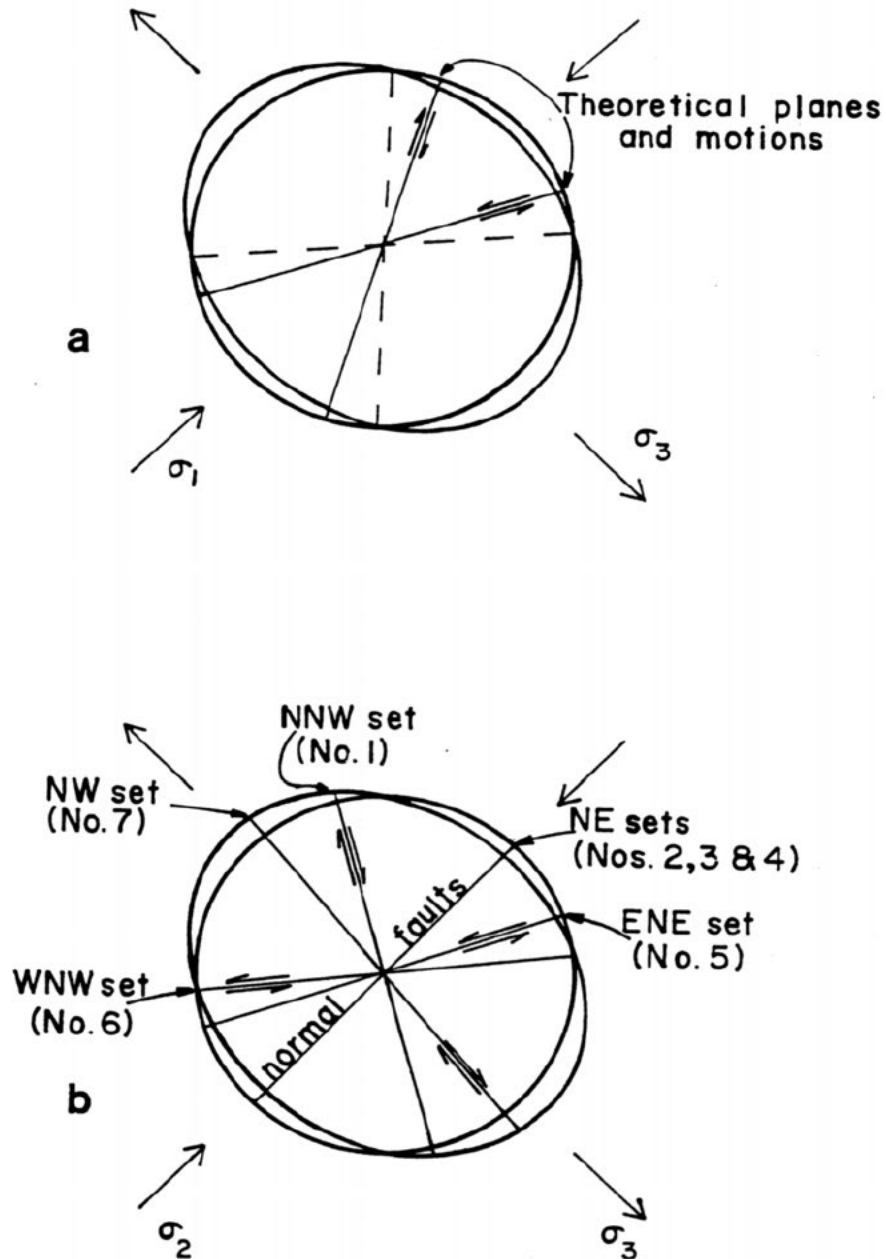
SEABROOK STATION UPDATED FINAL SAFETY ANALYSIS REPORT	Sketch Detailing CII-1, CII-3 and EII-1	
		Figure 2.5-31



a. PROFILE SKETCH FROM WEST WALL IN DI. DIKELET ASSOCIATED WITH DIKE d5 SHOWS PSEUDO-OFFSET ALONG JOINT. HOST ROCK IS NEWBURYPORT. b. PROFILE SKETCH FROM EAST WALL IN CWT. DIKE d7 SHOWS PSEUDO-OFFSET ALONG JOINT. HOST ROCK IS NEWBURYPORT.

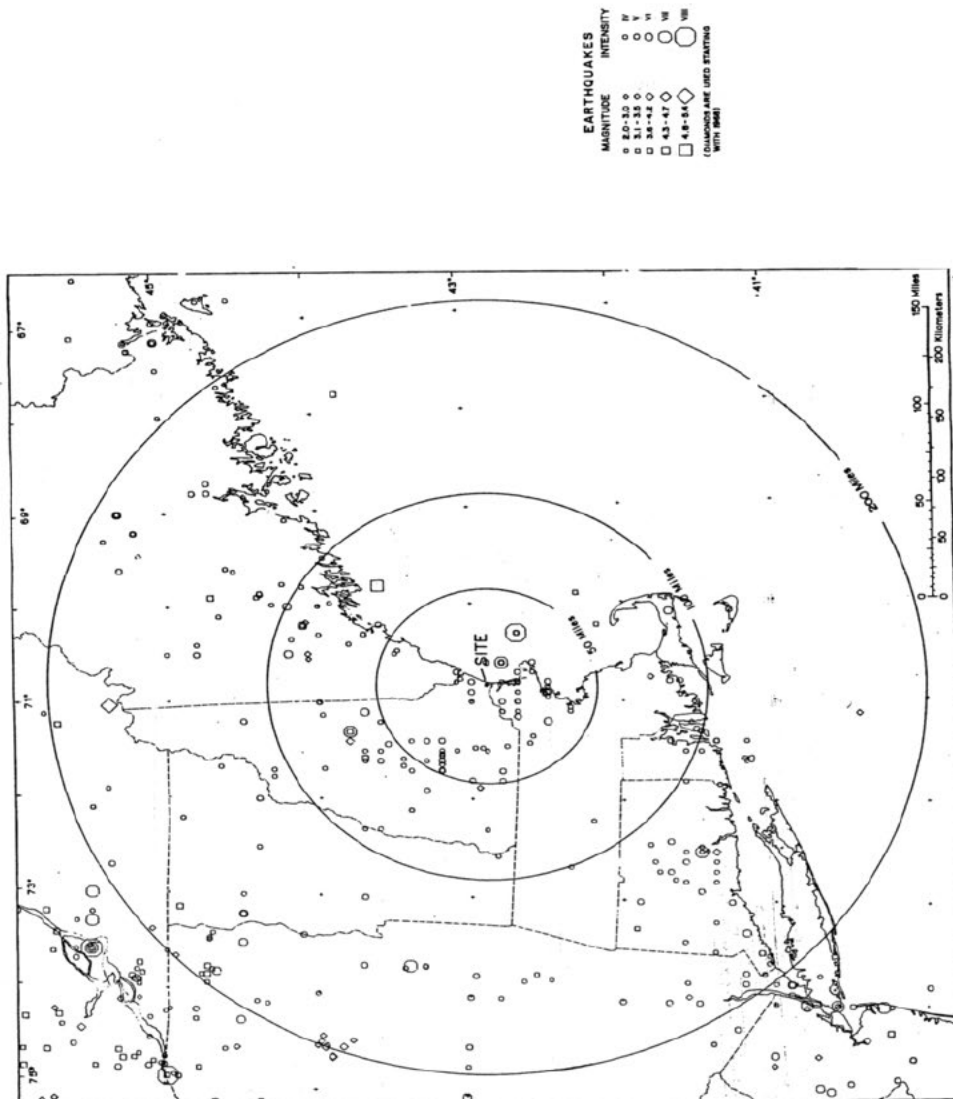
SEABROOK STATION UPDATED FINAL SAFETY ANALYSIS REPORT	Sketch Detailing Pseudo-Offset of Dikes	
		Figure 2.5-32



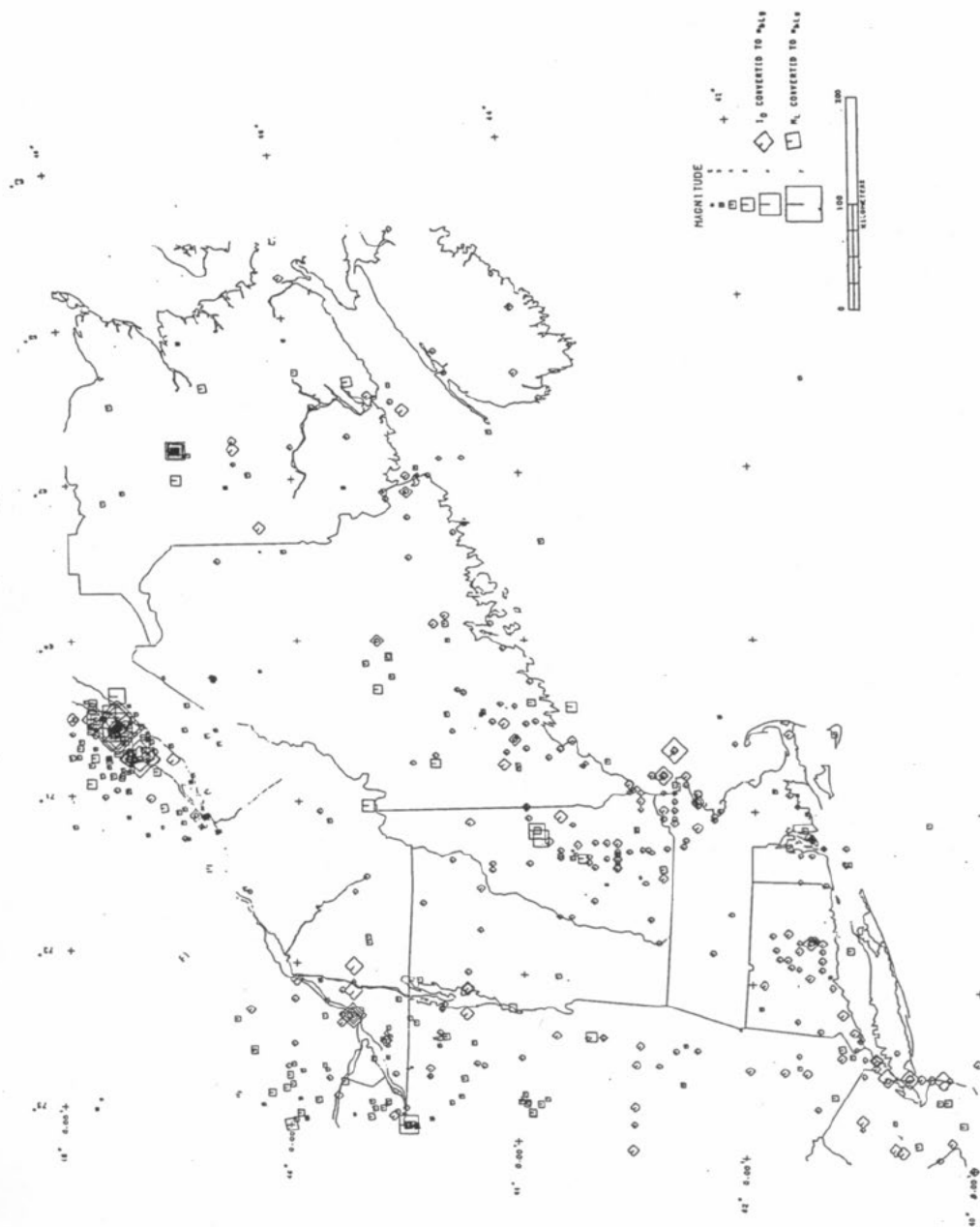


a. FAILURE PLANES AND MOTIONS AS PREDICTED BY "STRAIN THEORY" (BADGLEY, 1962) FOR NW-SE TENSIONAL STRESS FIELD. b. ACTUAL FAULT PLANES WITH LATERAL MOTION COMPONENTS OBSERVED IN SITE EXCAVATIONS. OBSERVED MOTIONS CONFORM TO PREDICTIONS IN a. FAULT MOTIONS AND INTRUSION OF NE-TRENDING DIKES ARE BOTH CONSISTENT WITH A NW-SE TENSIONAL STRESS.

SEABROOK STATION UPDATED FINAL SAFETY ANALYSIS REPORT	Strain Ellipsoid for NW-SE Tensional Stress	
		Figure 2.5-33



SEABROOK STATION UPDATED FINAL SAFETY ANALYSIS REPORT	Cumulative Seismicity Map	
		Figure 2.5-34

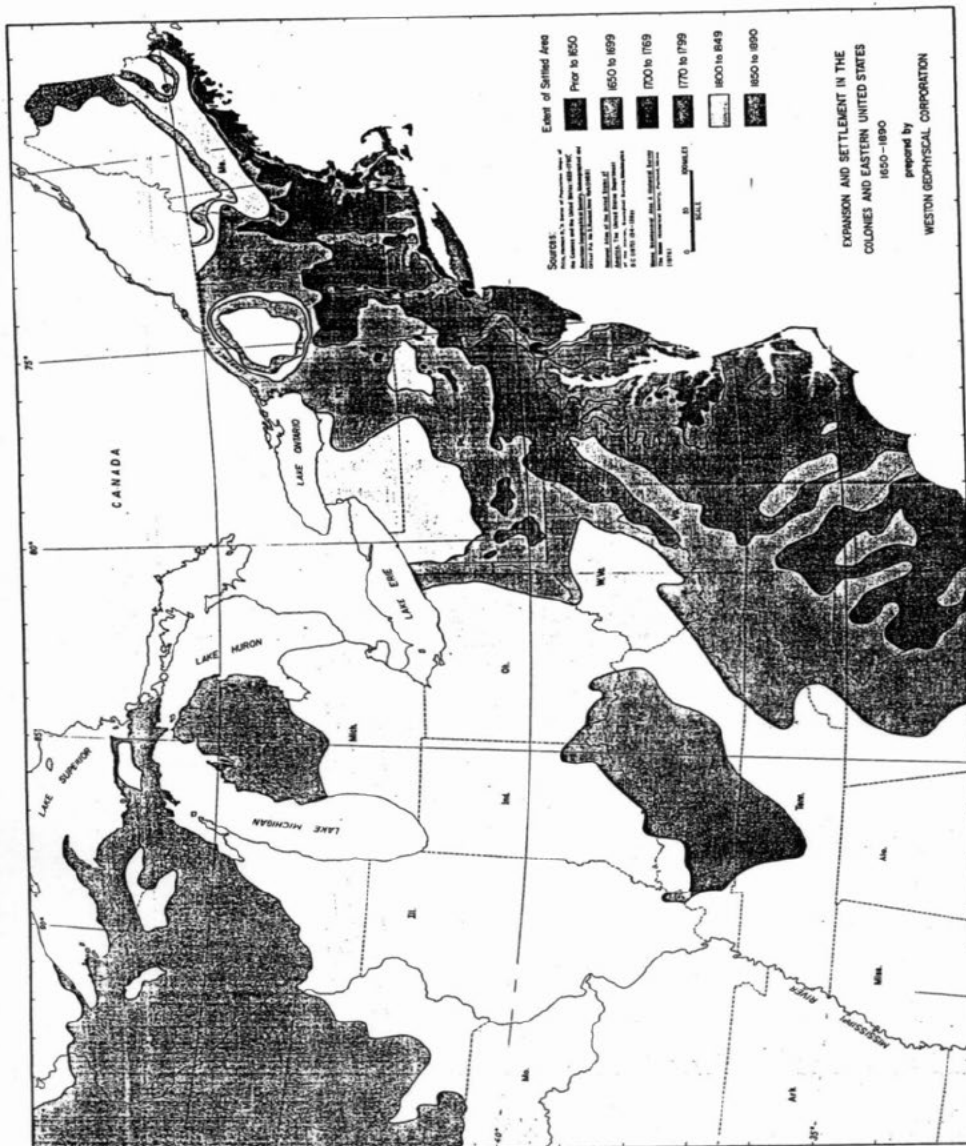


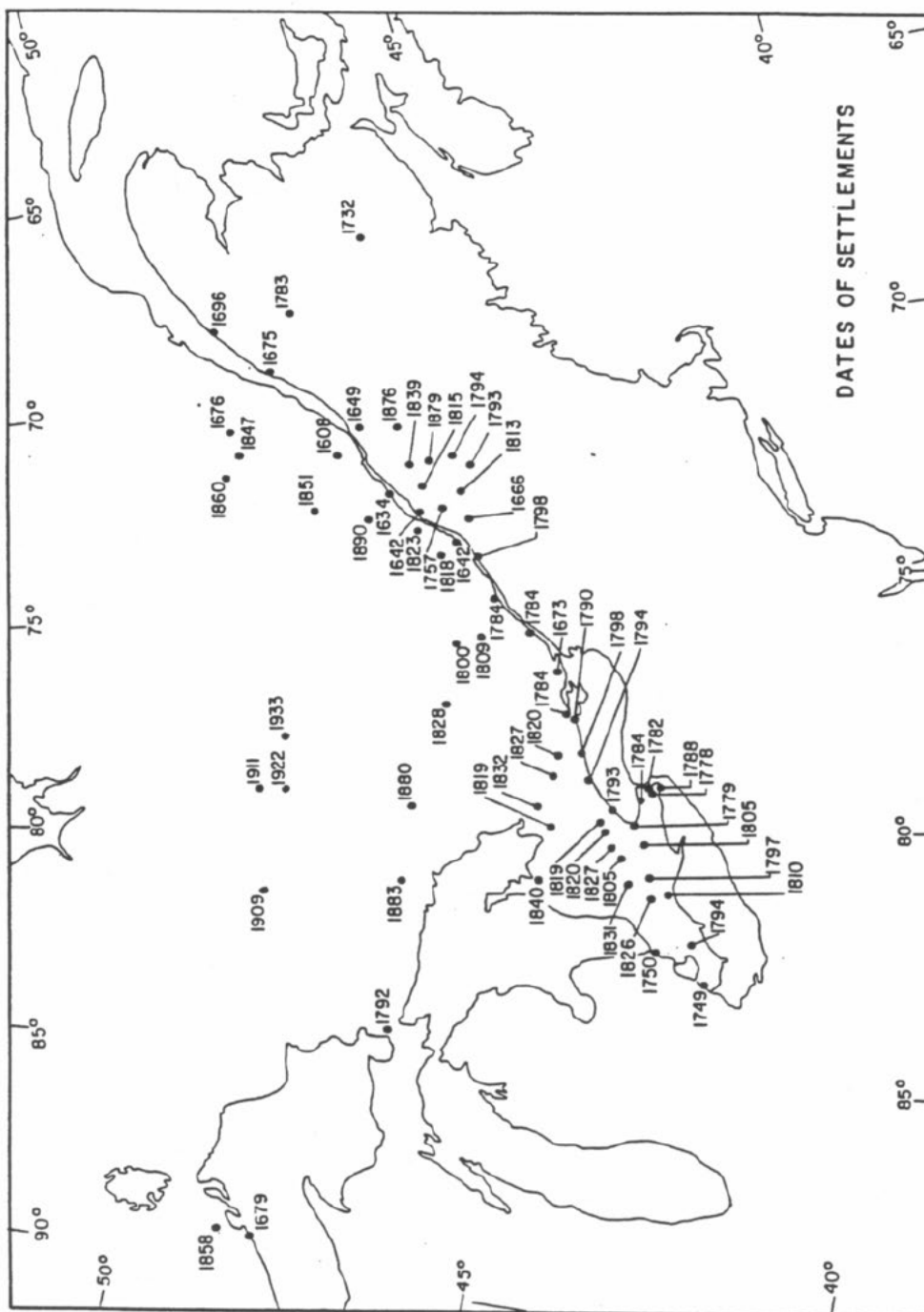
SEABROOK STATION UPDATED FINAL SAFETY ANALYSIS REPORT	Regional Seismicity Map	
		Figure 2.5-35



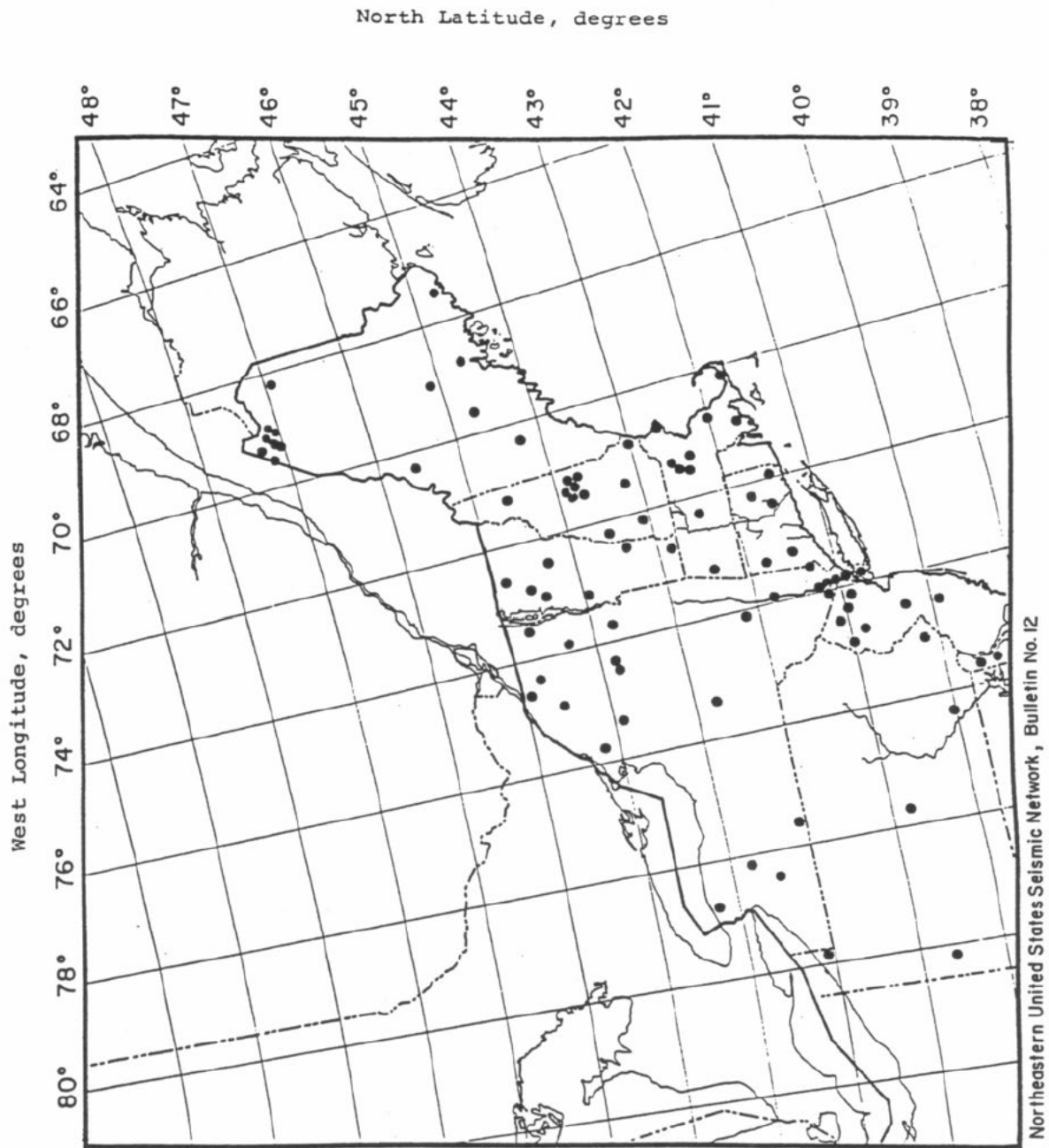








SEABROOK STATION UPDATED FINAL SAFETY ANALYSIS REPORT	Settlement in Canada	
		Figure 2.5-39

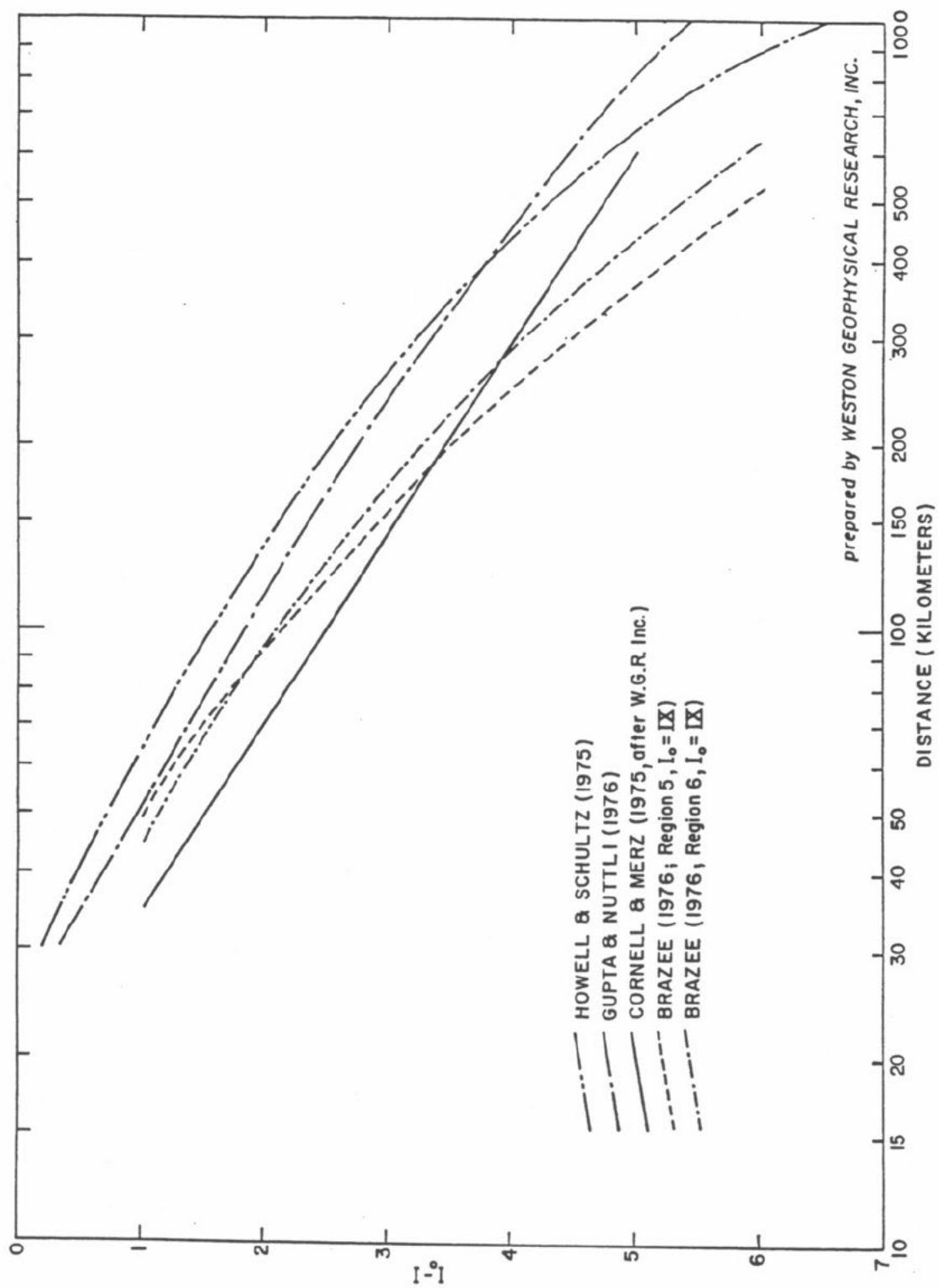


SEABROOK STATION  
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 ANALYSIS REPORT

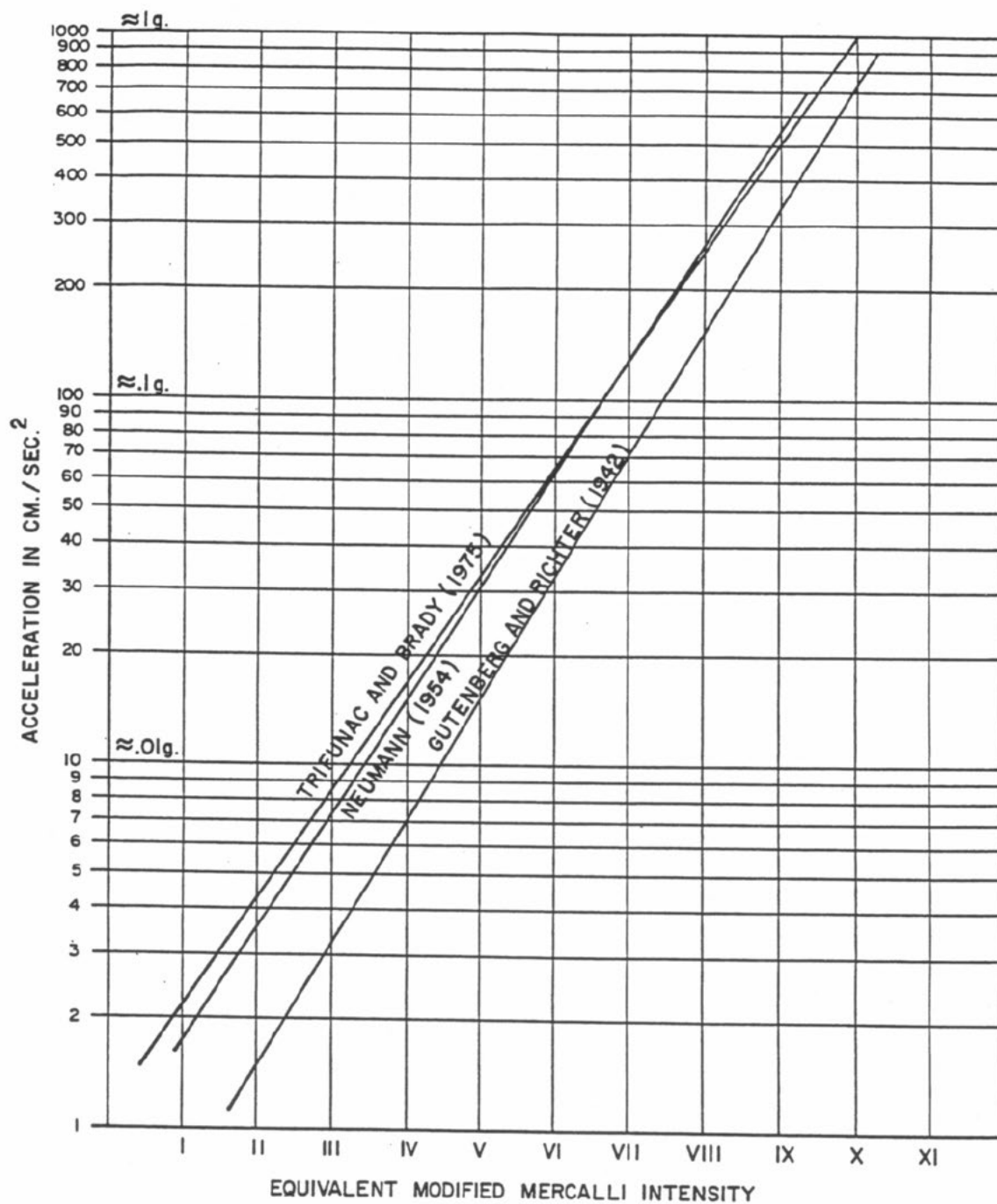
Northeastern U.S. Seismic Network, Bulletin No. 12

Figure 2.5-40





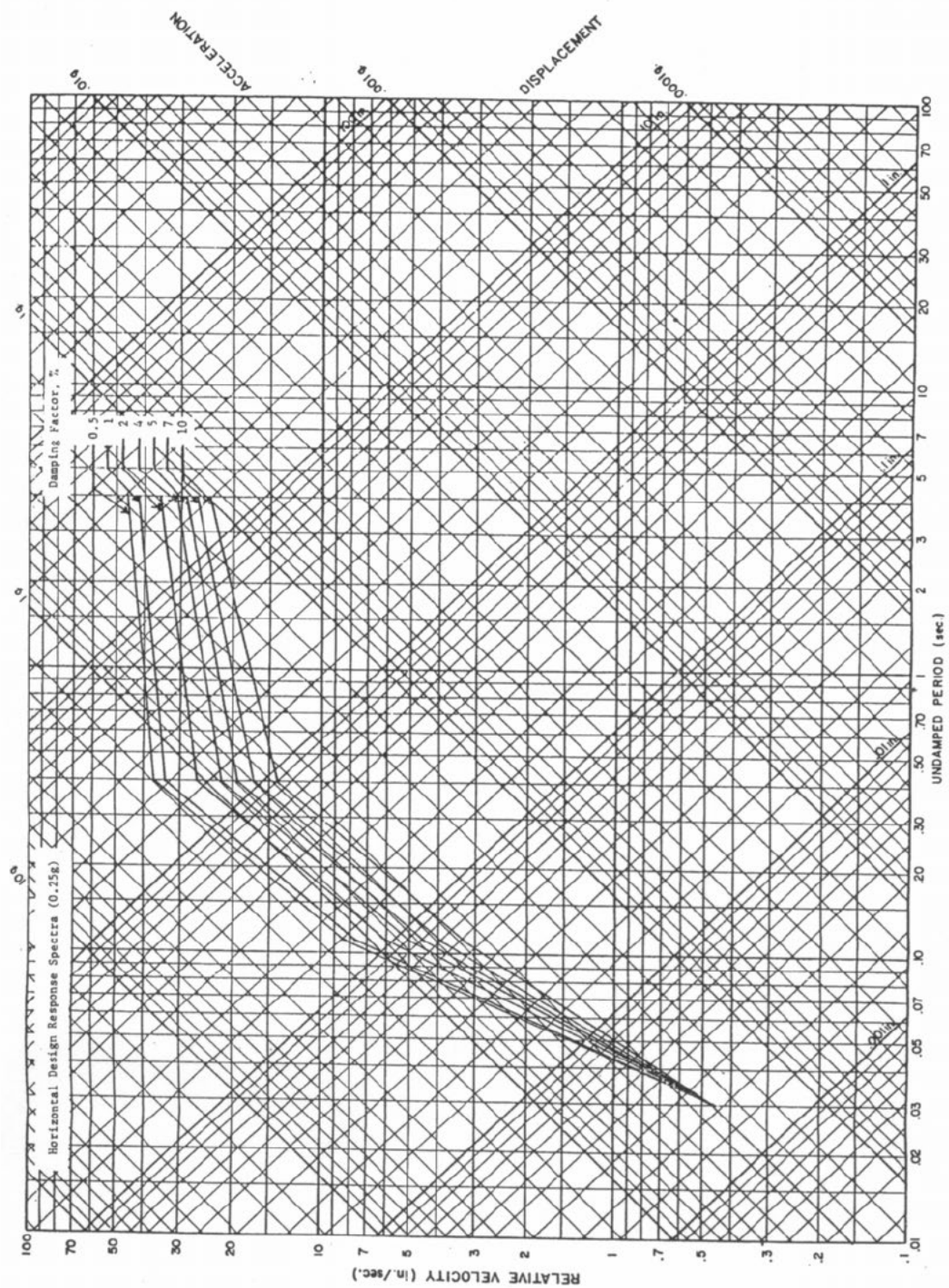




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UPDATED FINAL SAFETY  
ANALYSIS REPORT

Intensity-Acceleration Relationship

Figure 2.5-42

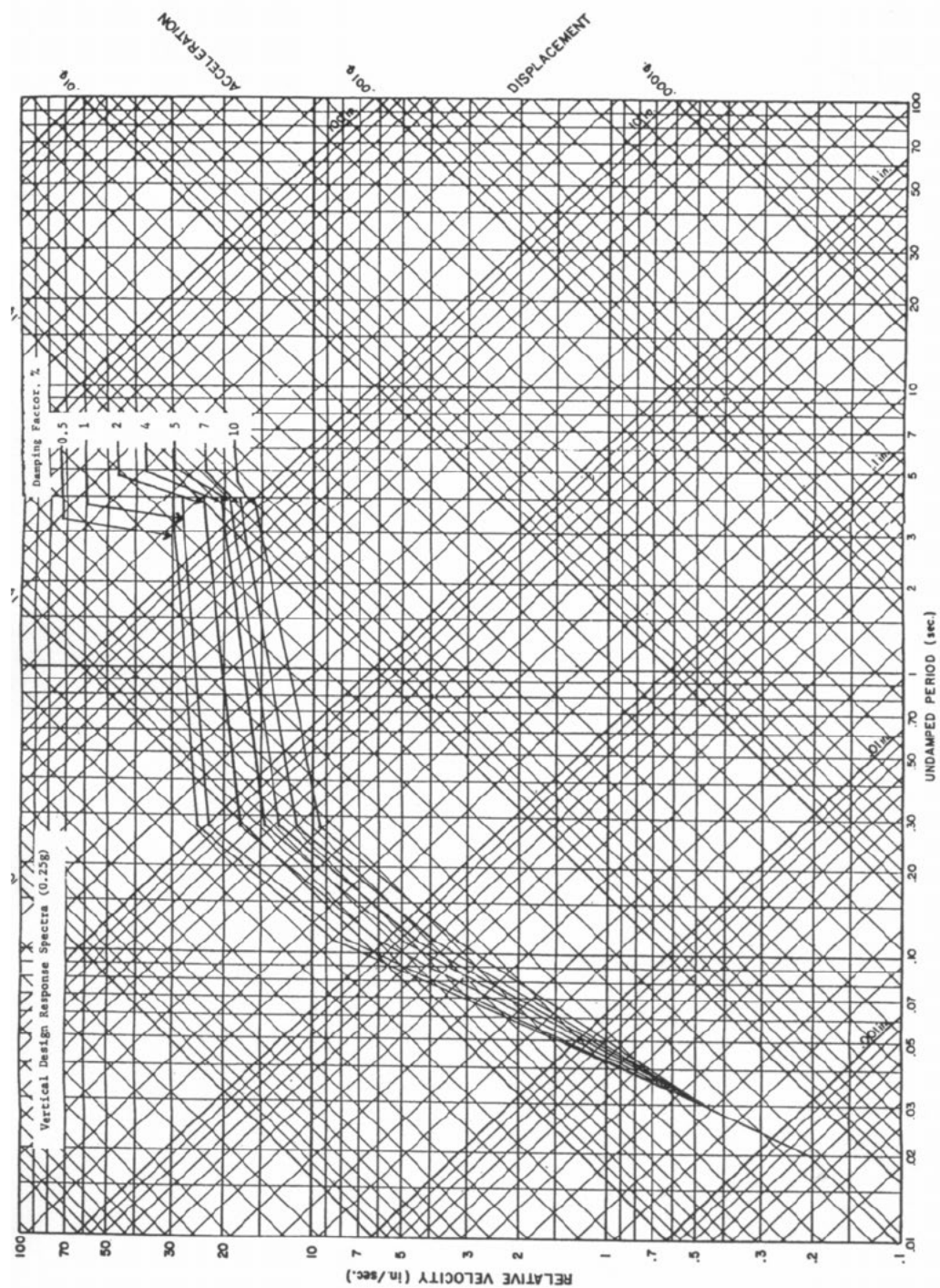


SEABROOK STATION  
UPDATED FINAL SAFETY  
ANALYSIS REPORT

Safe Shutdown Earthquake Design Response Spectra,  
Horizontal Motion

Figure 2.5-43

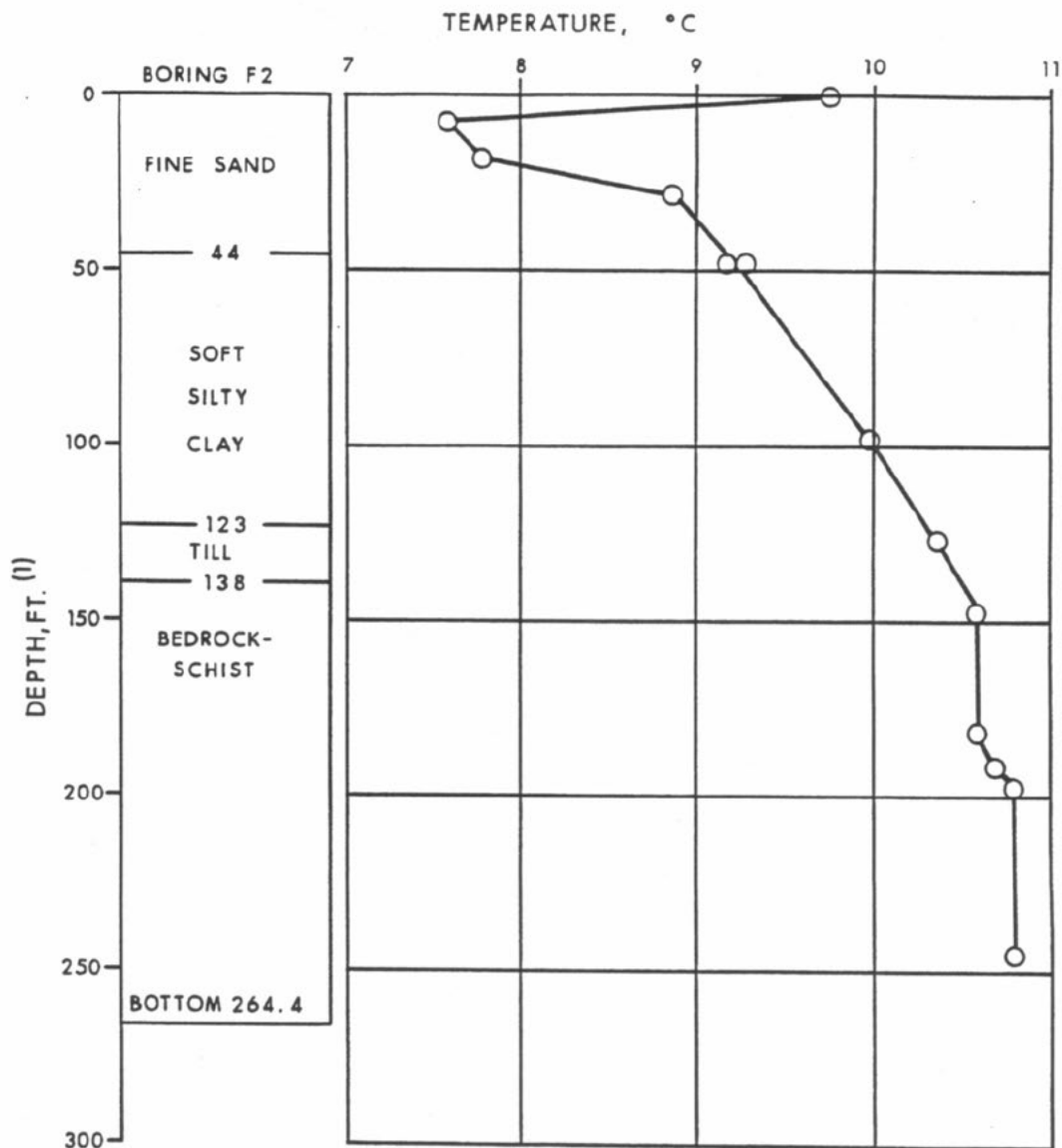




SEABROOK STATION  
UPDATED FINAL SAFETY  
ANALYSIS REPORT

Safe Shutdown Earthquake Design Response Spectra,  
Vertical Motion

Figure 2.5-44



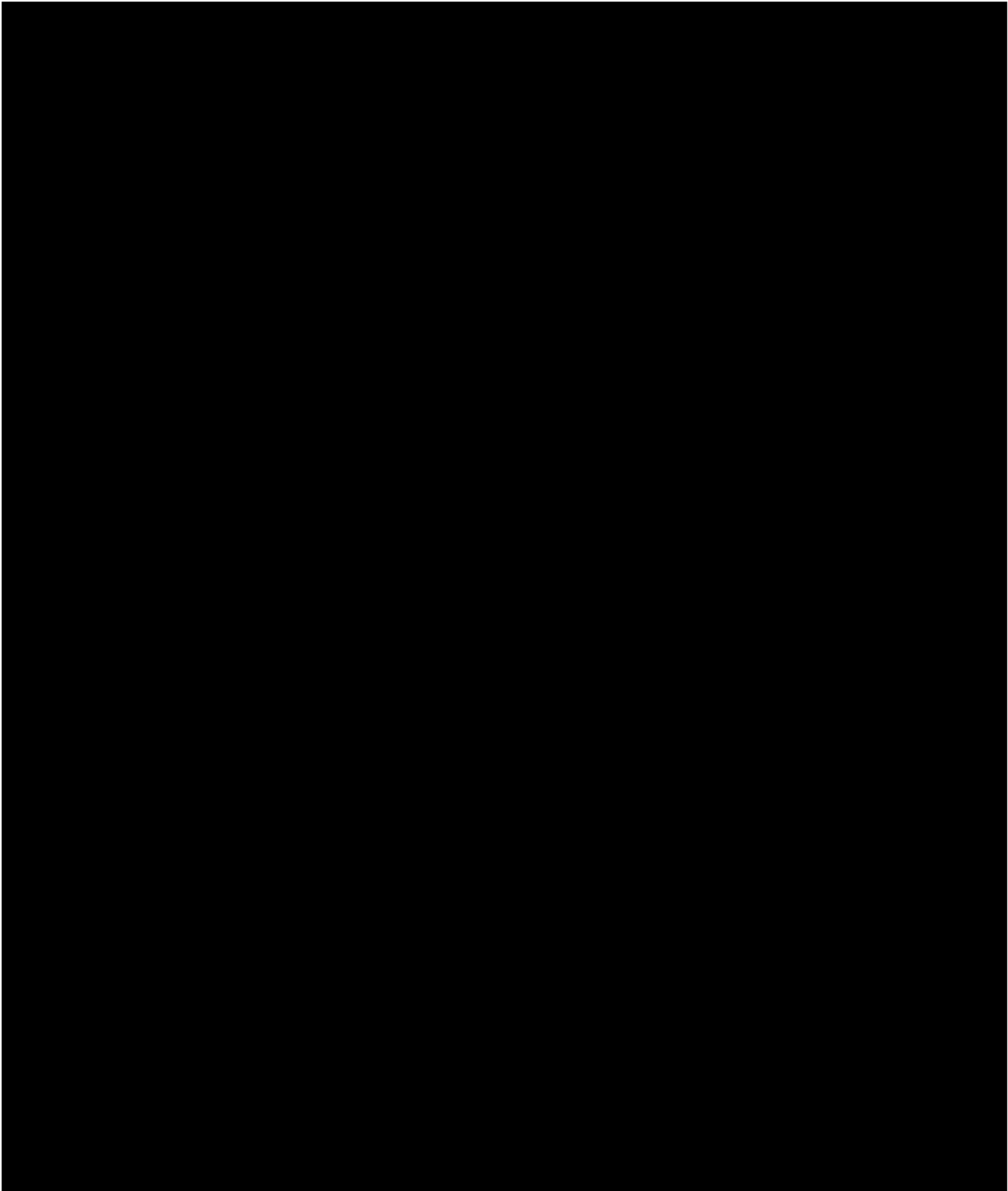
NOTE: DATA RECORDED MAY 16, 1973 ON DAY AFTER DRILLING OF BOREHOLE WAS COMPLETED.

(1) GROUND ELEVATION = -1.4 (MSL=0)

SEABROOK STATION  
UPDATED FINAL SAFETY  
ANALYSIS REPORT

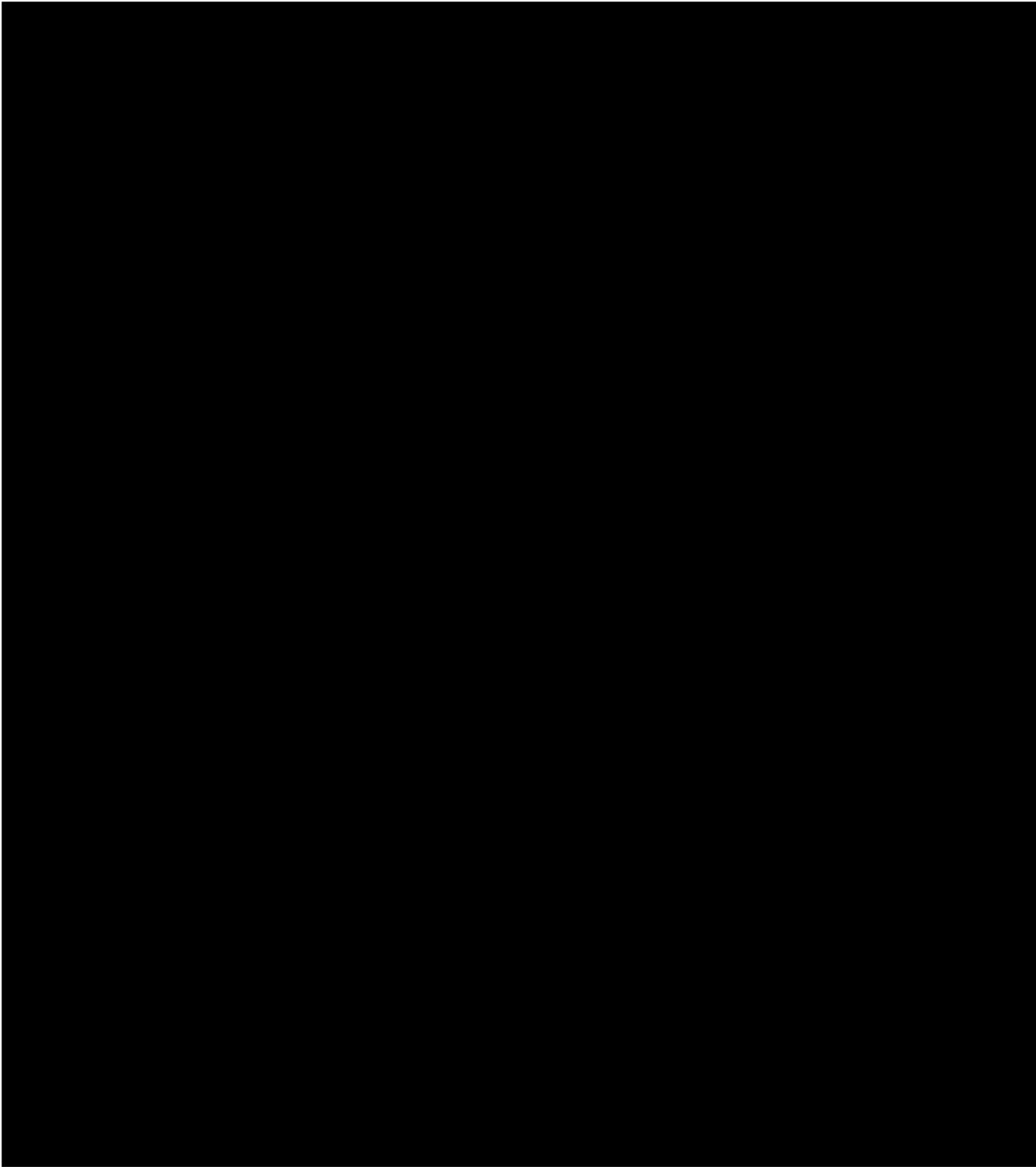
In Situ Temperature vs. Depth, Boring F2

Figure 2.5-45

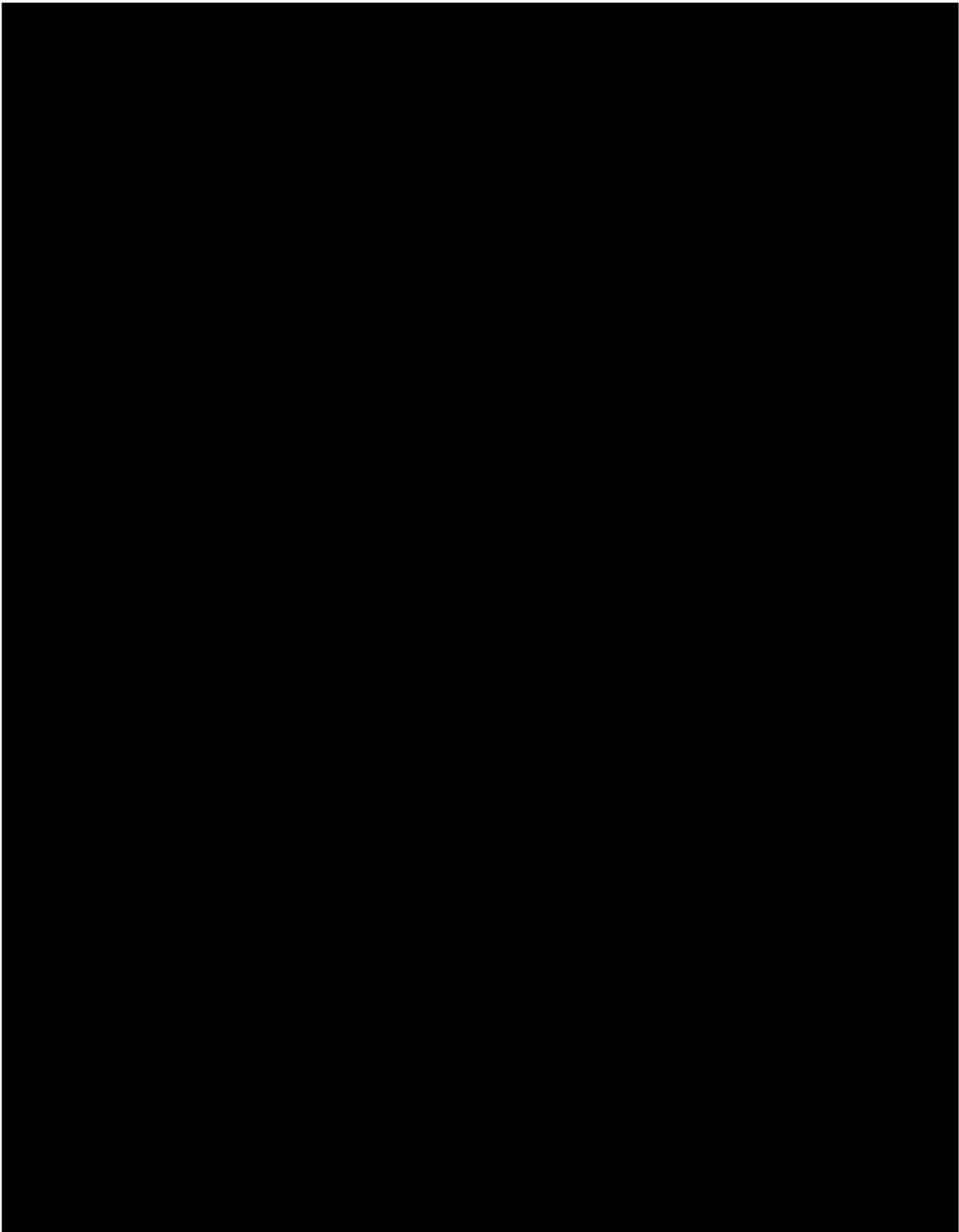


SEABROOK STATION UPDATED FINAL SAFETY ANALYSIS REPORT	Extent of Excavation	
		Figure 2.5-46

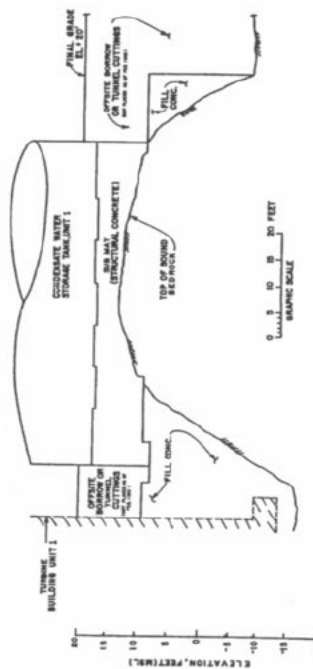
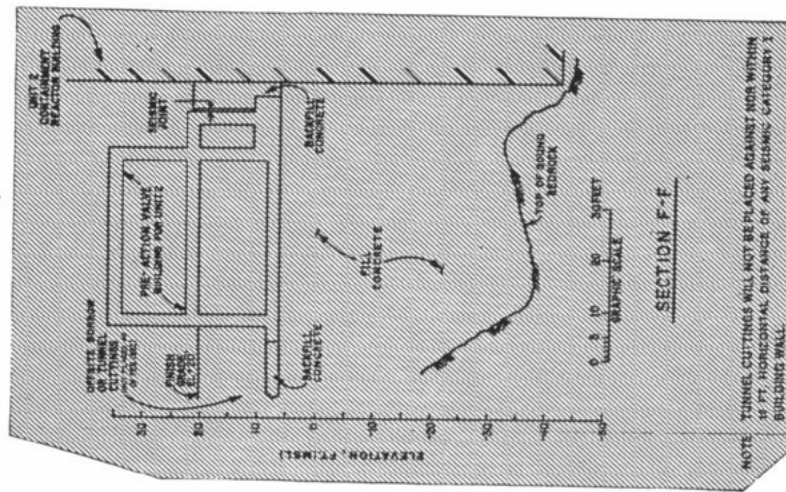
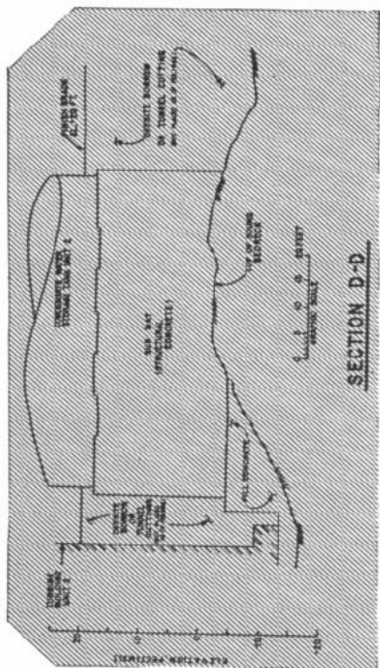




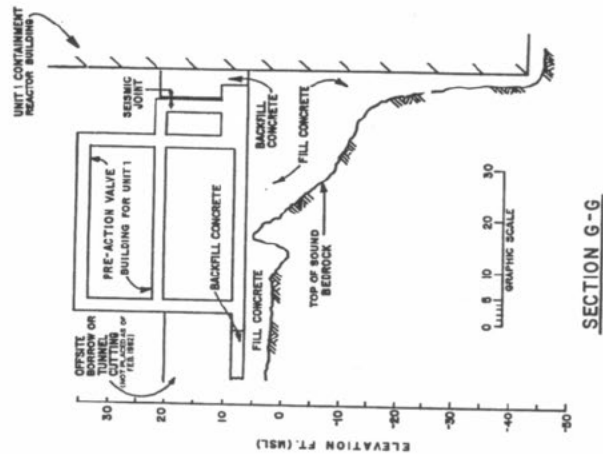
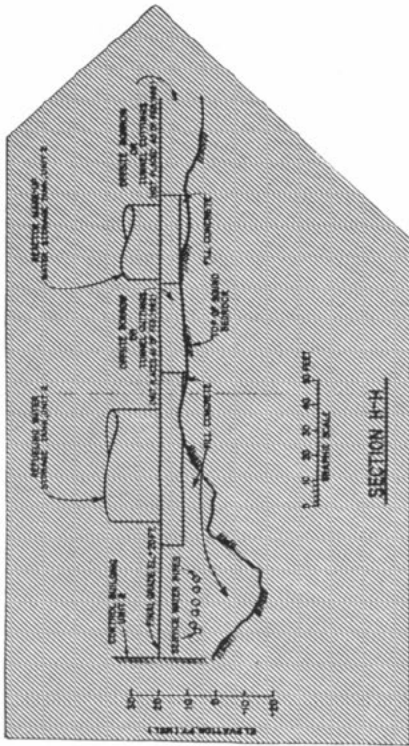
SEABROOK STATION UPDATED FINAL SAFETY ANALYSIS REPORT	Locations of Additional Sections – Building and Utility Foundations	
		Figure 2.5-47



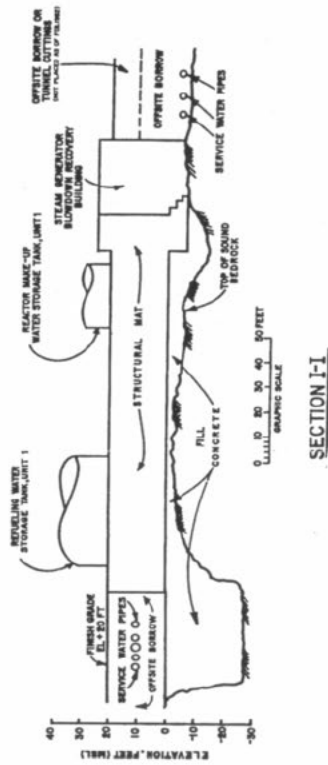
SEABROOK STATION UPDATED FINAL SAFETY ANALYSIS REPORT	Extent of Excavation	
		Figure 2.5-48



IDENTIFIES CANCELLED UNIT #2.



NOTE: TUNNEL CUTTINGS WILL NOT BE PLACED AGAINST NOR WITHIN 10 FT. HORIZONTAL DISTANCE OF ANY SEISMIC CATEGORY I BUILDING WALL.



IDENTITIES CANCELLED UNIT #2.