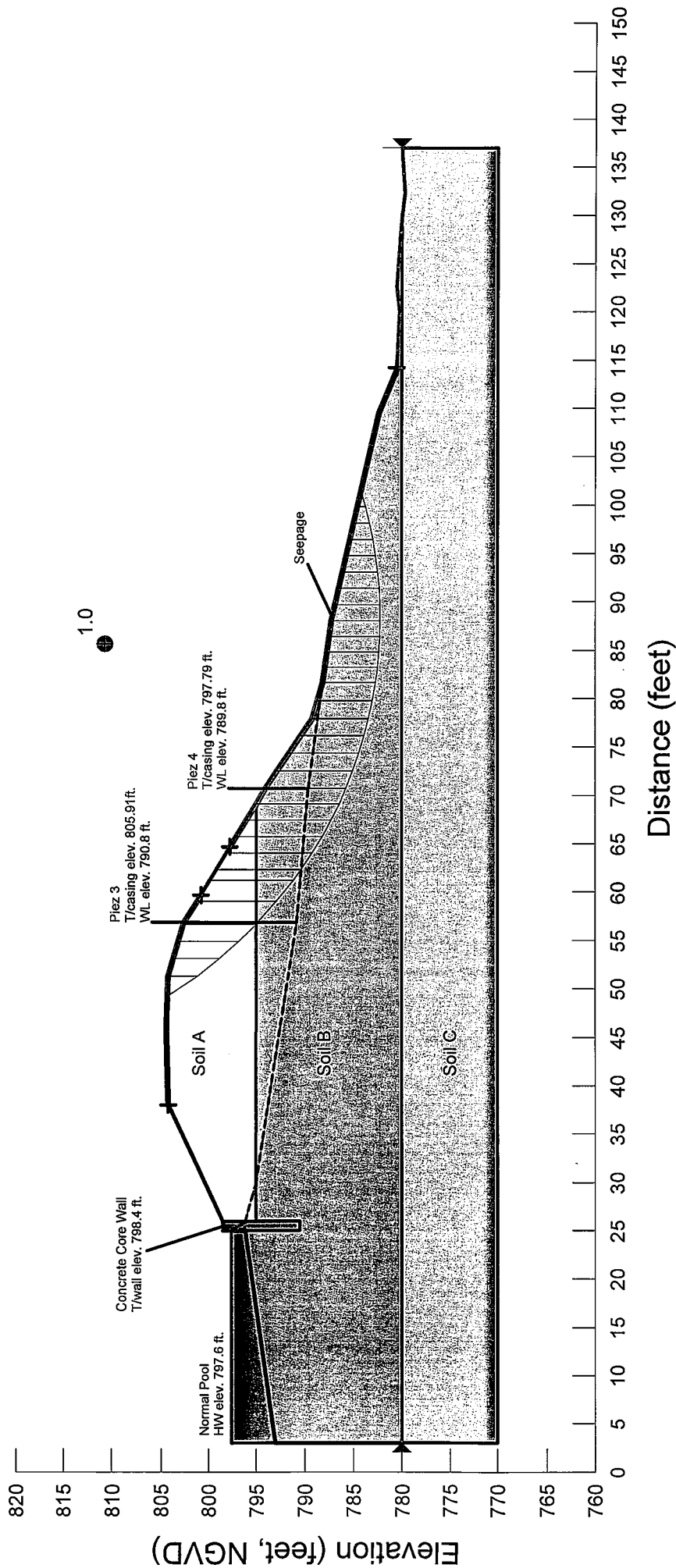


Appendix H

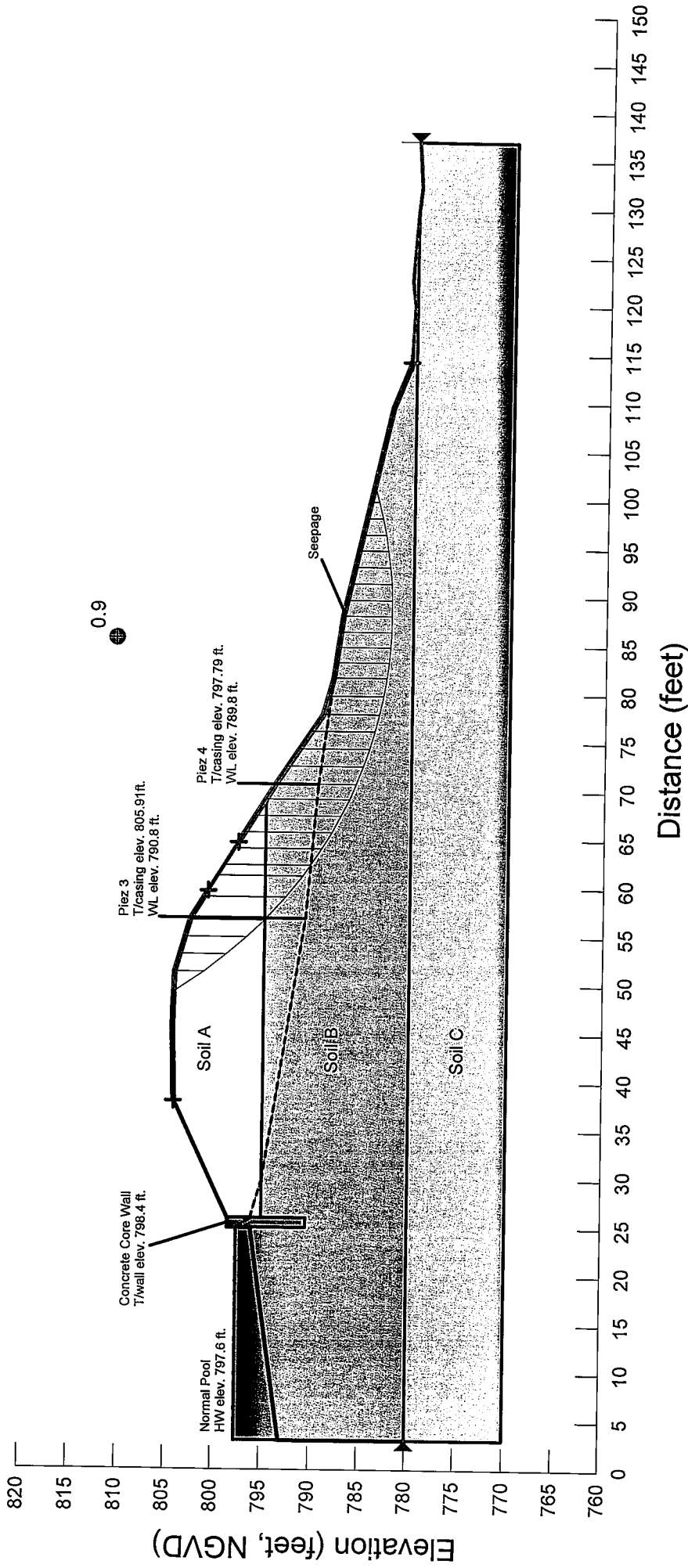
Embankment Stability Analyses



Material Properties

Soil A	Soil B	Soil C
Wt: 120	Wt: 115	Wt: 130
Cohesion: 0	Cohesion: 0	Cohesion: 0
Phi: 30	Phi: 28	Phi: 33
Unit Wt. Above WT: 115	Unit Wt. Above WT: 110	Unit Wt. Above WT: 125
Phi-B: 0	Phi-B: 0	Phi-B: 0
Anisotropic Fn: 0	Anisotropic Fn: 0	Anisotropic Fn: 0

Title: Brown Bridge Dam Stability Analysis
Comments: Steady State Seepage at Normal Pool Elevation
Name: Station 8+60 steady state normal pool-jdw.gsz
Date: 8/14/2008
Factor of Safety: 1.0
Method: Morgenstern-Price



Material Properties

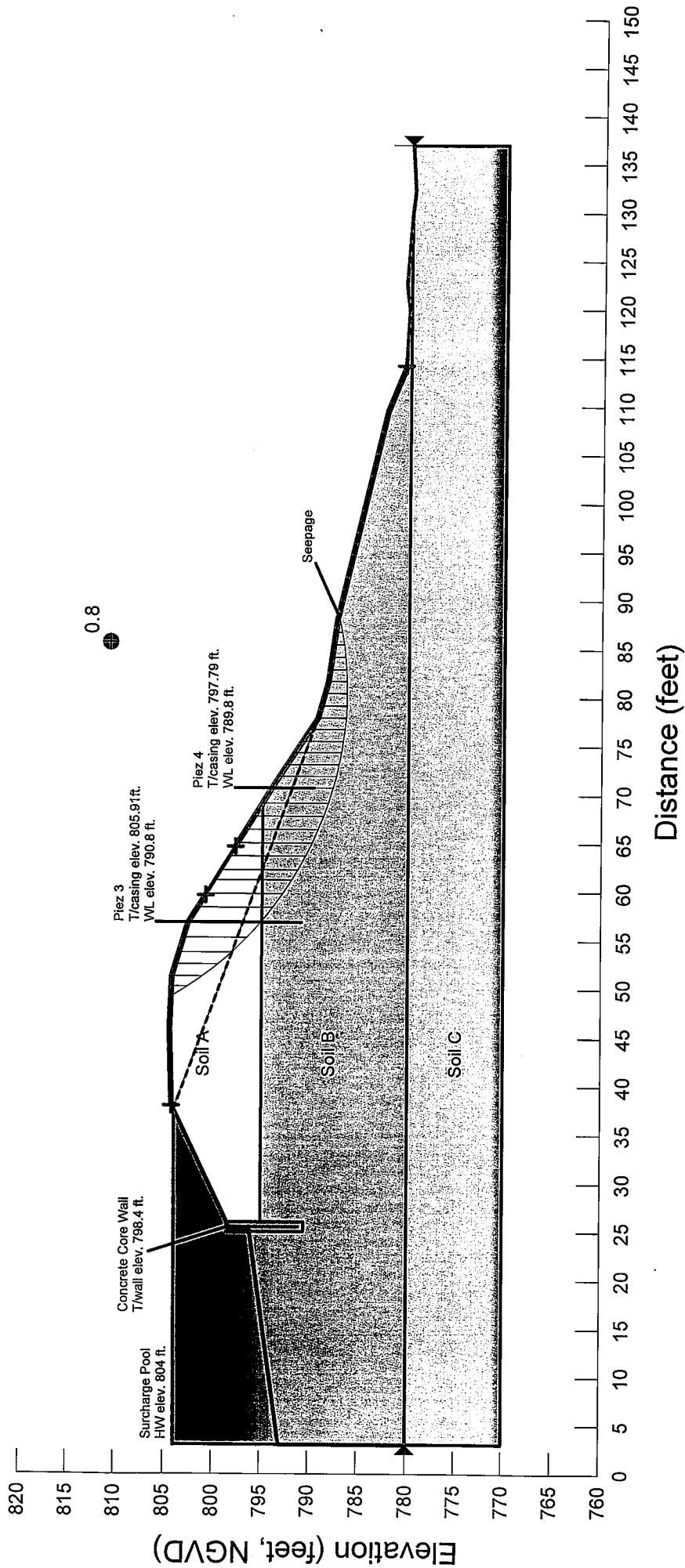
Soil A	Soil B	Soil C
Wt: 120	Wt: 115	Wt: 130
Cohesion: 0	Cohesion: 0	Cohesion: 0
Phi: 30	Phi: 28	Phi: 33
Unit Wt. Above WT: 115	Unit Wt. Above WT: 110	Unit Wt. Above WT: 125

Seismic Coefficients:

Horizontal: 0.05
Vertical: 0.05

Title: Brown Bridge Dam Stability Analysis
Comments: Steady State Seepage at Normal Pool Elevation w/Seismic
Name: Station 8+60 steady state normal pool seismic.gsz
Date: 8/14/2008

Factor of Safety: 0.9
Method: Morgenstern-Price

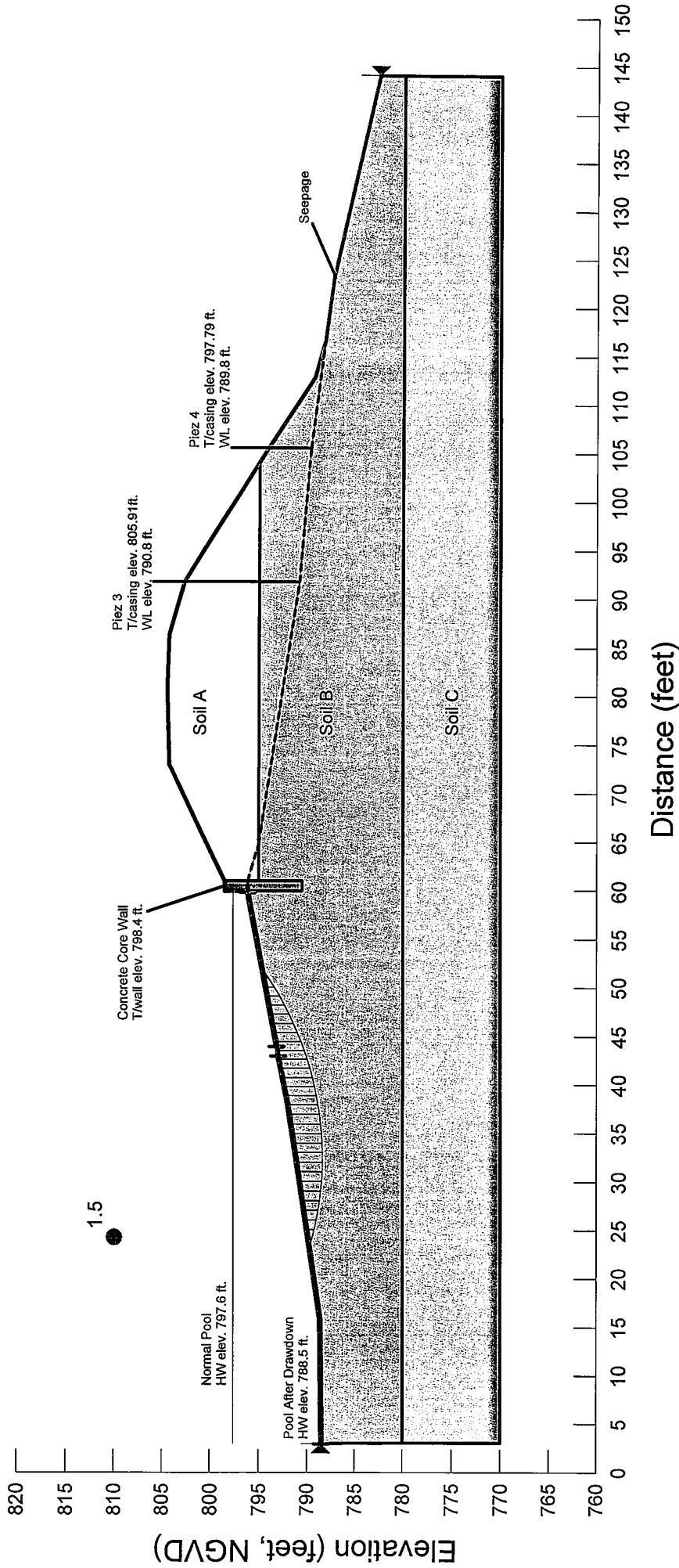


Material Properties

Soil A	Soil B	Soil C
Wt: 120	Wt: 115	Wt: 130
Cohesion: 0	Cohesion: 0	Cohesion: 0
Phi: 30	Phi: 28	Phi: 33
Unit Wt. Above WT: 115	Unit Wt. Above WT: 110	Unit Wt. Above WT: 125

Title: Brown Bridge Dam Stability Analysis
Comments: Steady State Seepage at Surcharge Pool Elevation
Name: Station 8+60 steady state surcharge pool-jdw.gsz
Date: 8/14/2008

Factor of Safety: 0.8
Method: Morgenstern-Price



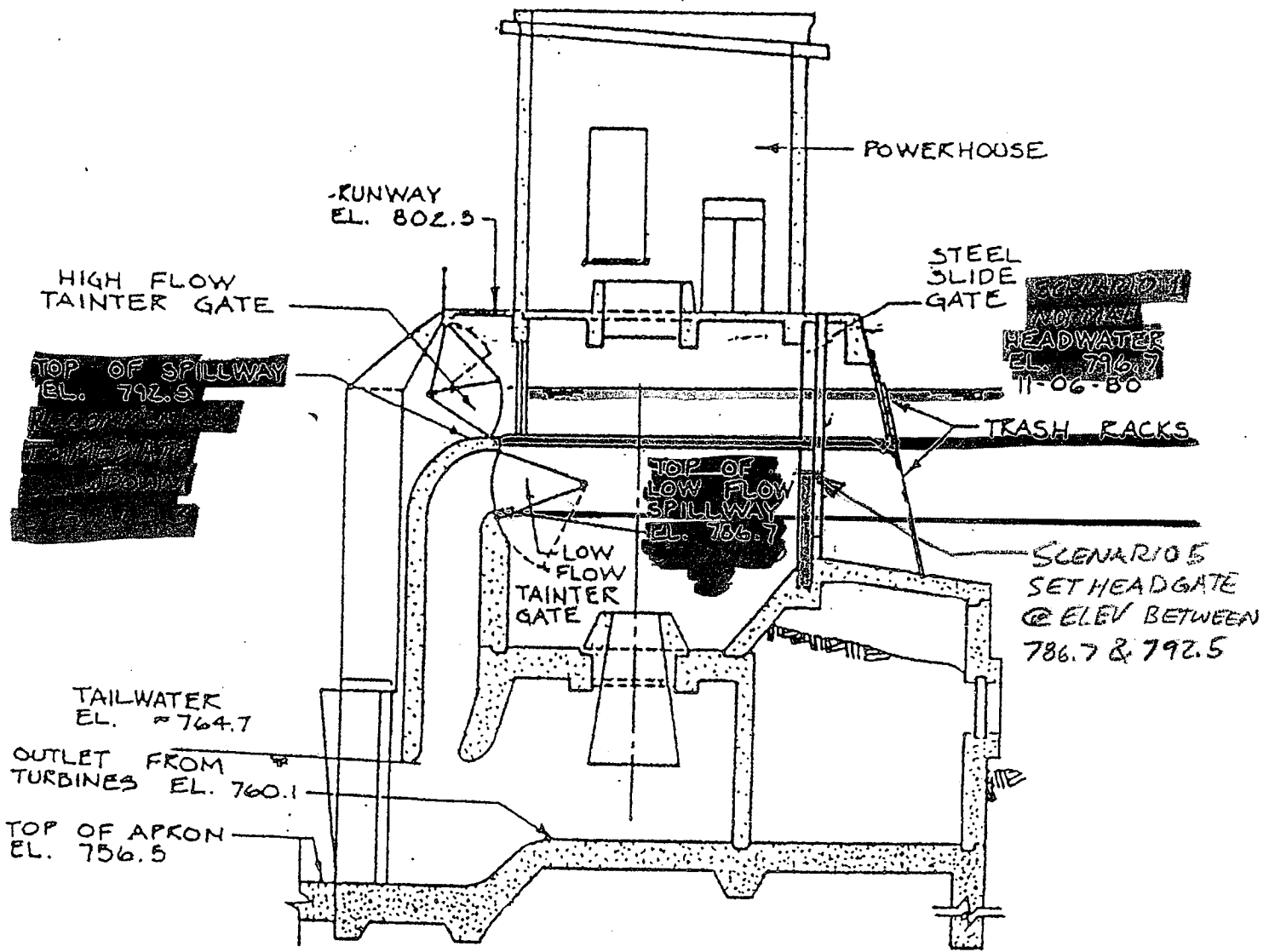
Material Properties

Soil A	Soil B	Soil C
Wt: 120	Wt: 115	Wt: 130
Cohesion: 0	Cohesion: 0	Cohesion: 0
Phi: 30	Phi: 28	Phi: 33
Unit Wt. Above WT: 115	Unit Wt. Above WT: 110	Unit Wt. Above WT: 125

Title: Brown Bridge Dam Stability Analysis
Comments: Steady State Seepage after Rapid Drawdown
Name: Station 8+60 steady rapid drawdown pool-jdw.gsz
Date: 8/14/2008
Factor of Safety: 1.5
Method: Morgenstern-Price

Appendix I

Operational Scenario Sketches



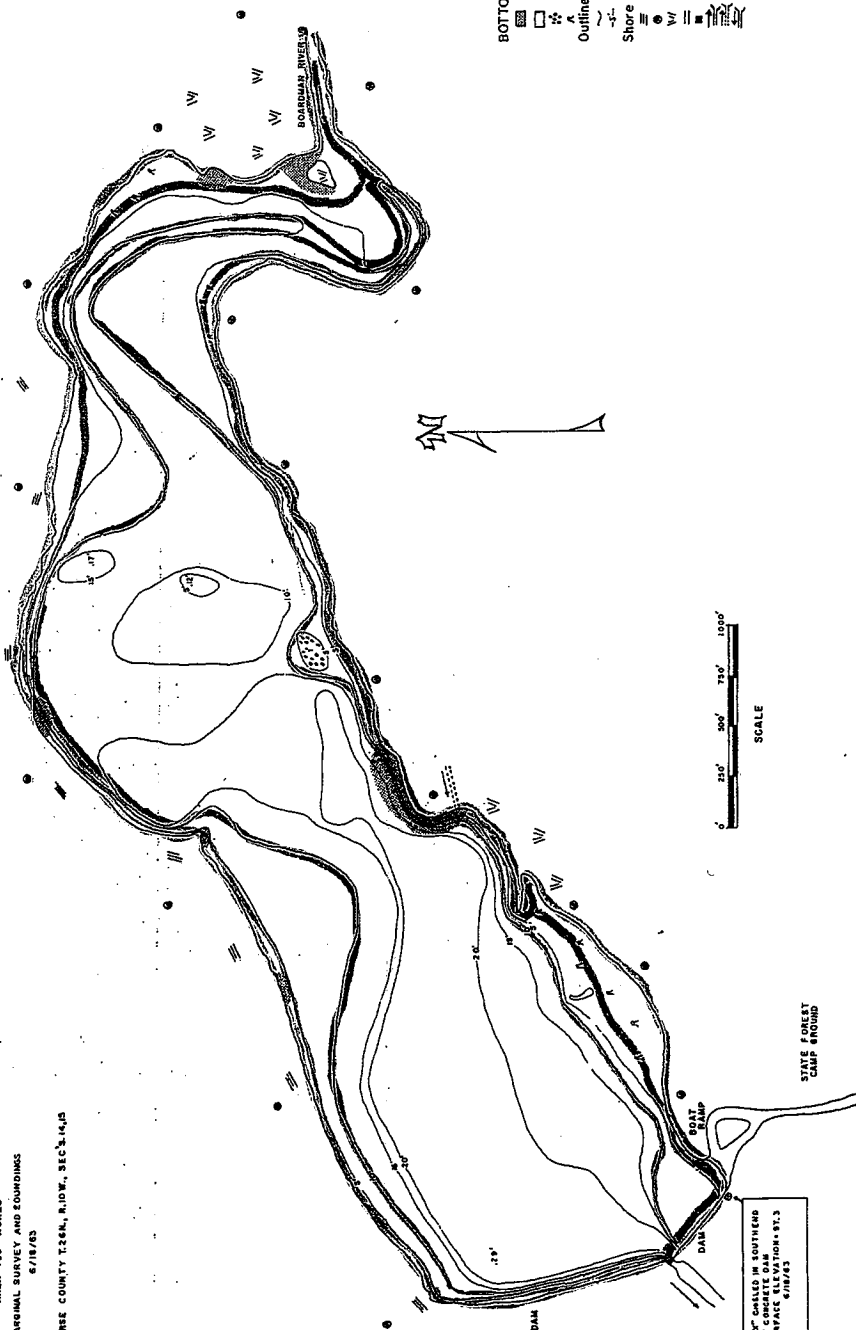
SECTION THROUGH POWERHOUSE
BROWN BRIDGE DAM

DEPICTING POSSIBLE
DRAWDOWN SCENARIOS

- Historic Normal Pool - ELEV 796.7'
- Recommended Immediate Drawdown - ELEV 792.5'
- Scenario 4 - Alternate Lower Drawdown - ELEV 786.7'

INSTITUTE FOR FISHERIES RESEARCH
 DIVISION OF FISHERIES MICHIGAN CONSERVATION DEPT.
 LAKE INVENTORY MAP
BROWN BRIDGE POND
 MARGINAL SURVEY AND SOUNDINGS
 6/19/83

GRAND TRAVERSE COUNTY T.26N., R.10W., SEC. 14, 15



LEGEND

- BOTTOM**
- Sand
 - Organic
 - Gravel
 - Stump
- Outline & Features**
- Shoreline
 - Contours
 - Shore Features
 - Steep Slope
 - Marsh
 - Wooded
- Infrastructure**
- Improved Road
 - Dam
 - Inlet
 - Intermittent Inlet
 - Outlet