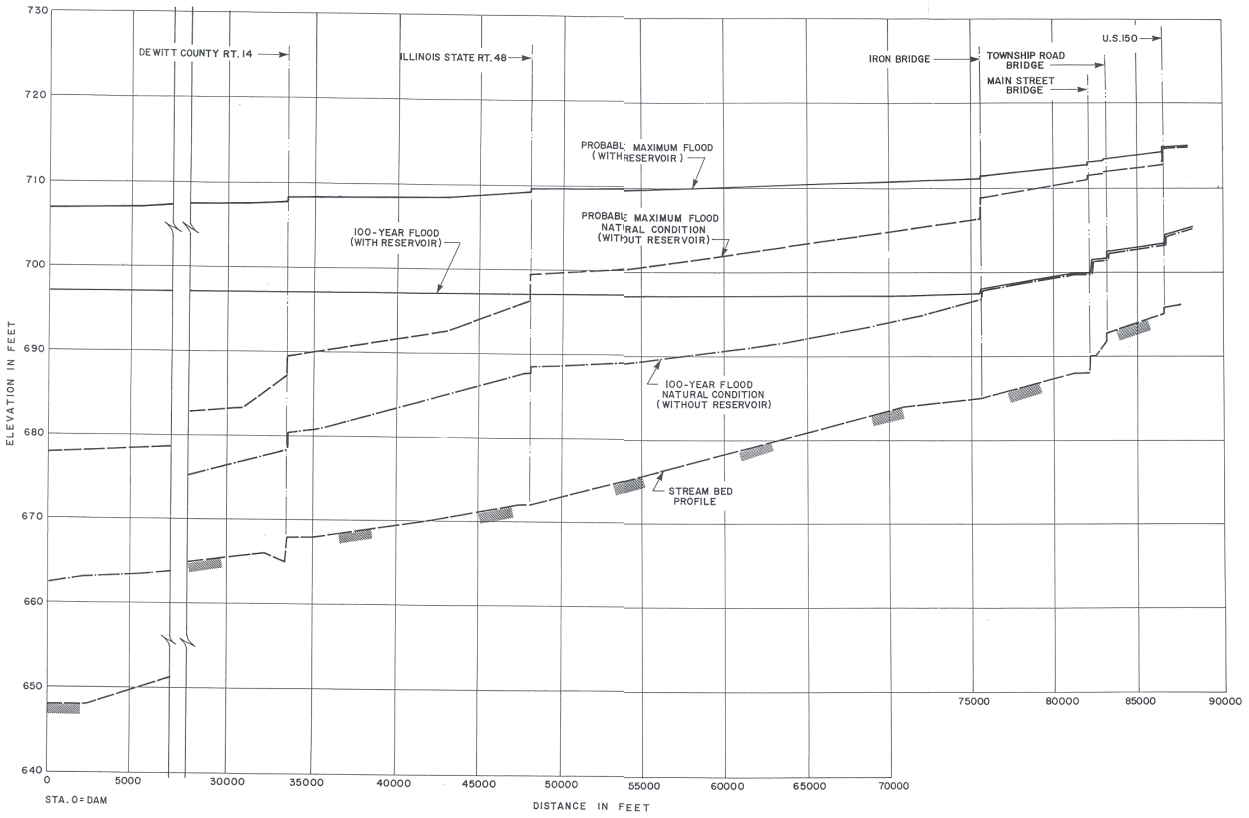


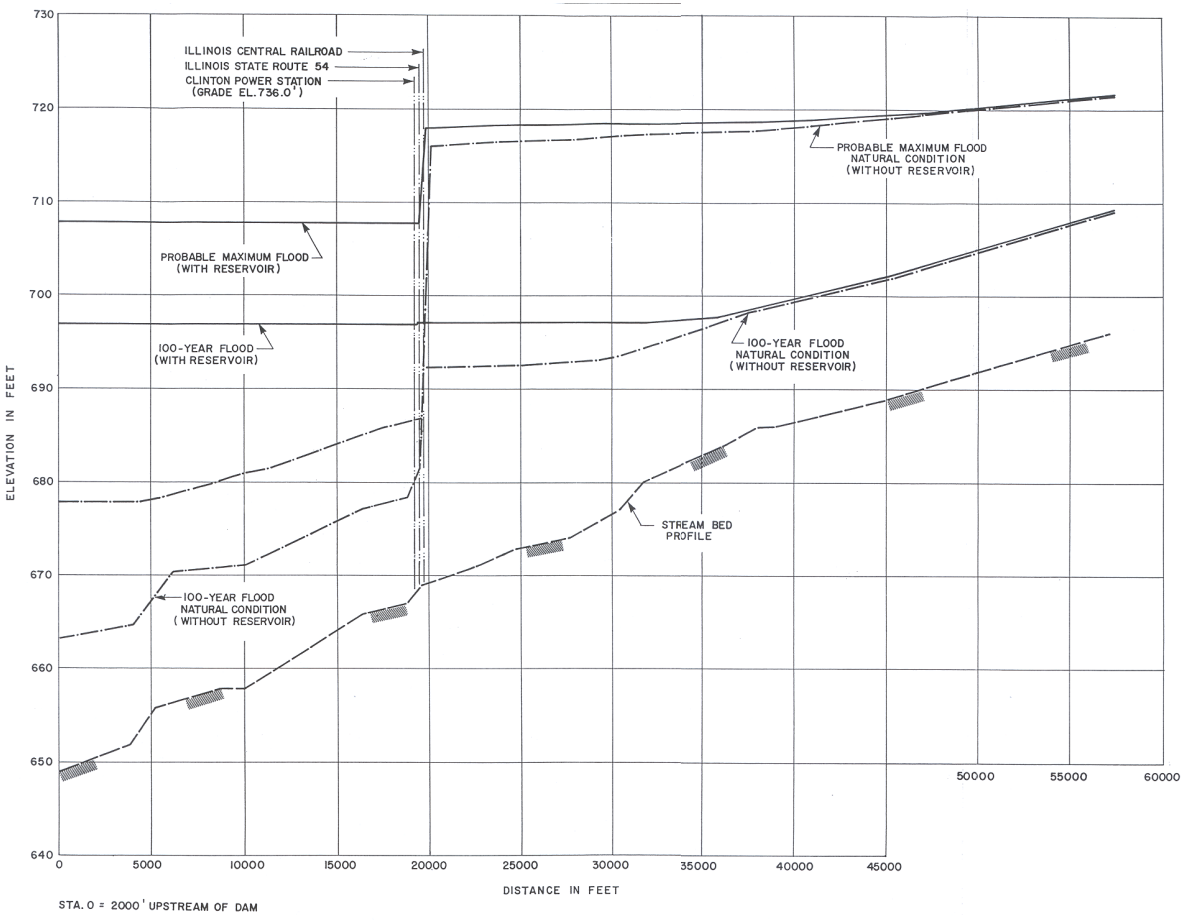
Site Safety Analysis Report for the EGC Early Site Permit

Figure 2.4-7
Water Surface Profiles
Salt Creek

Legend

Data Source:
CPS, 1982

Not to Scale



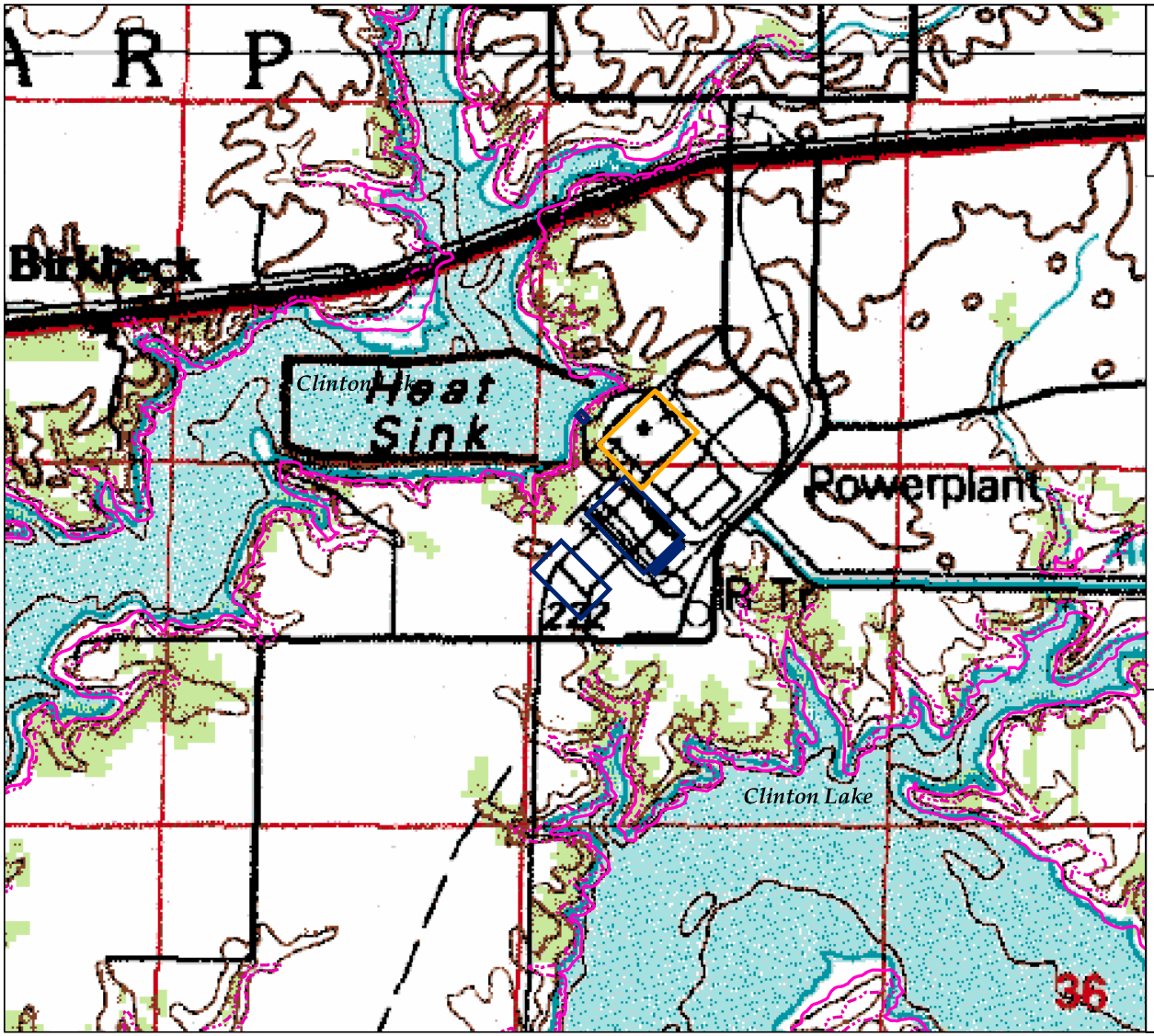
Site Safety Analysis Report for the EGC Early Site Permit

Figure 2.4-8
Water Surface Profiles of North Fork Salt Creek

Legend

Data Source:
CPS, 1982

Not to Scale



Site Safety Analysis Report for the EGC Early Site Permit

Figure 2.4-9
Flood Prone Area

Legend

- CPS Facility
- Proposed Areas for EGC ESP Facility Structures
- 100-year Flood Zone Boundary
- Probable Maximum Flood Zone Boundary (708.9 ft)

Note: The Probable Maximum Flood Zone Boundary and the 100-year Flood Zone Boundary were derived form USGS National Digital Elevation Model Data. The Probable Maximum Flood Elevation is 708.9 ft (216 m). The 100-year flood is 697 ft (212 m). Variations in mapping accuracy between the map base and the flood boundaries derived from the USGS Digital Elevation Model are apparent in locations on the map.

Data Sources:
USGS, 1984 and 1989
USGS, 1999
ISWS, 1996
CPS, 2002

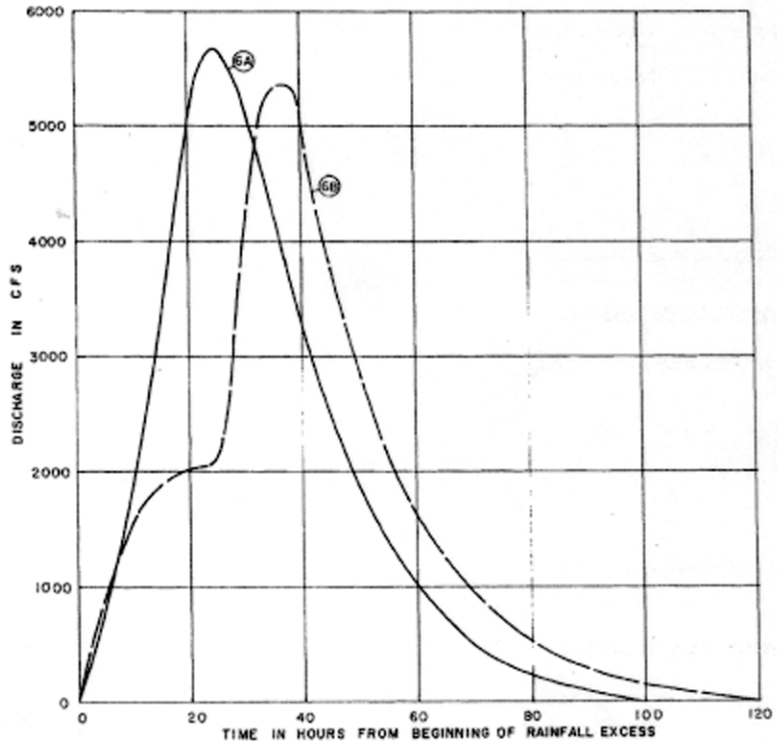
N

Feet
0 1,000 2,000 4,000

Site Safety Analysis Report for the EGC Early Site Permit

Figure 2.4-10

Unit Hydrographs for Salt Creek at Dam Site Under Natural River Conditions



UNIT GRAPH DESIGNATION	UNIT DURATION HOURS	LOCATION	DRAINAGE AREA SQ. MILES	REMARKS
6A	2	DAM SITE	296	DERIVED FROM SYNTHETIC METHOD IN "UNIT HYDROGRAPHS IN ILLINOIS" BY W. D. MITCHELL
6B	2	DAM SITE	296	DERIVED FROM ROWELL STATION UNIT HYDROGRAPH ADJUSTED BY AREA RATIO OF 296/334 (FROM "UNIT HYDROGRAPHS IN ILLINOIS" BY W. D. MITCHELL

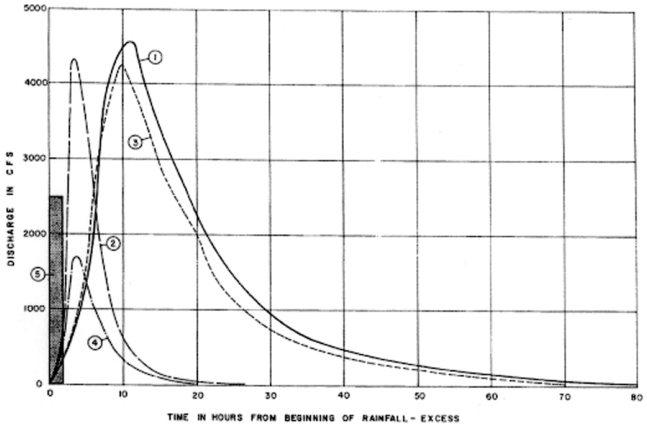
Legend

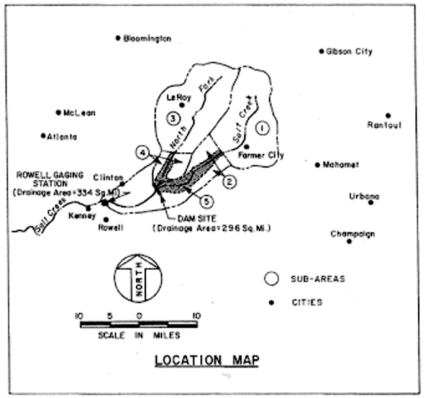
Data Source
CPS, 2002

Not to Scale

Site Safety Analysis Report for the EGC Early Site Permit

Figure 2.4-11
Unit Hydrographs for Sub-Basin Areas





UNIT GRAPH NO.	UNIT DURATION HOURS	AREA REPRESENTED IDENTIFICATION	SQ.MI.	REMARKS
①	2	SUB-AREA ①	126	BASIN ABOVE HEAD OF SALT CREEK FINGER
②	2	SUB-AREA ②	36	LOCAL AREA OF SALT CREEK FINGER
③	2	SUB-AREA ③	111	BASIN ABOVE HEAD OF NORTH FORK FINGER
④	2	SUB-AREA ④	15	LOCAL AREA OF NORTH FORK FINGER
⑤	2	SUB-AREA ⑤	8	RESERVOIR SURFACE AREA

Legend

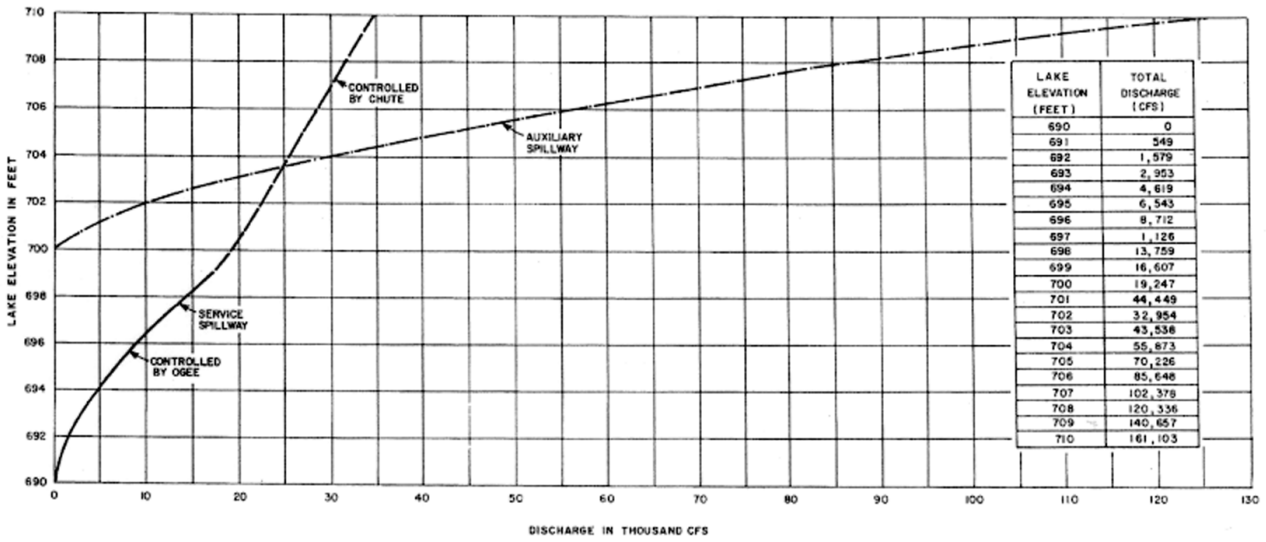
Data Source
CPS, 2002

N

Not to Scale

Site Safety Analysis Report for the EGC Early Site Permit

Figure 2.4-12
Spillway Rating Curves

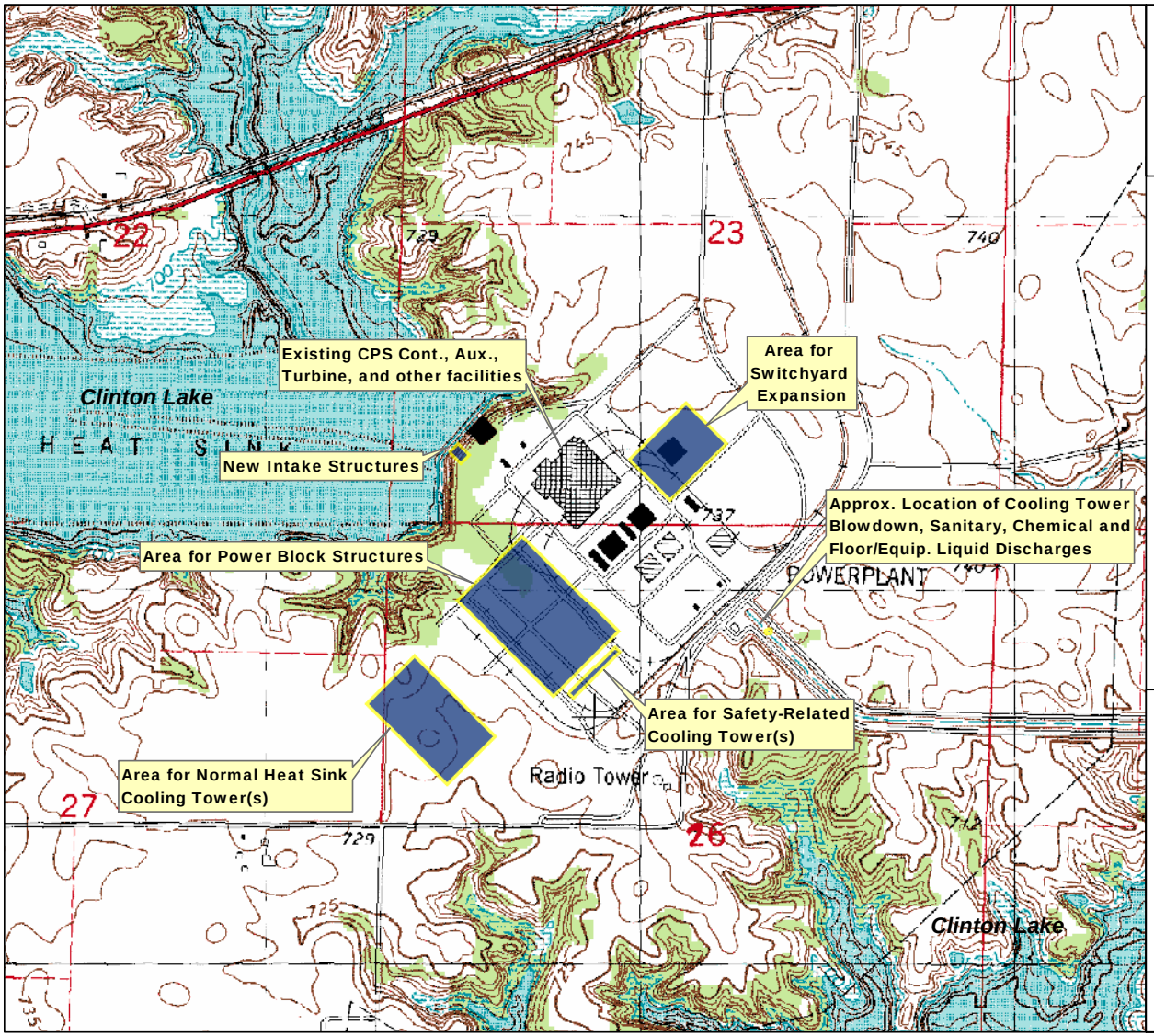


LAKE ELEVATION (FEET)	TOTAL DISCHARGE (CFS)
690	0
691	549
692	1,579
693	2,953
694	4,619
695	6,543
696	8,712
697	11,126
698	13,759
699	16,607
700	19,247
701	44,449
702	32,954
703	43,538
704	55,873
705	70,226
706	85,648
707	102,378
708	120,336
709	140,657
710	161,103

Legend

Data Source
CPS, 2002

Not to Scale



Site Safety Analysis Report for the EGC Early Site Permit

Figure 2.4-13
Proposed Areas for EGC ESP Structures

Legend

Proposed Areas for EGC ESP Facility Structures

Data Sources:
USGS, 1979

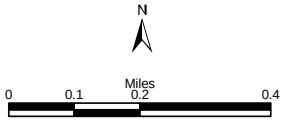
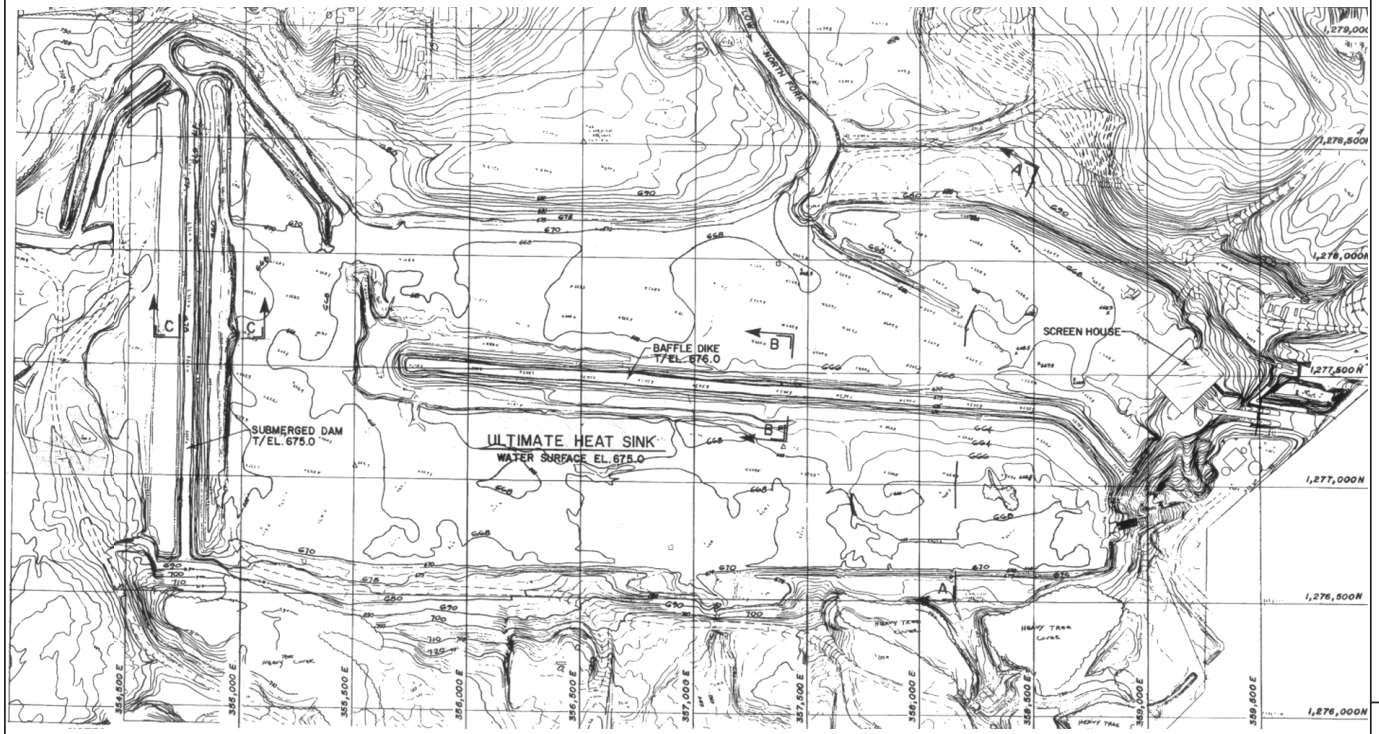


Figure 2.4-14
CPS Ultimate Heat Sink Plan



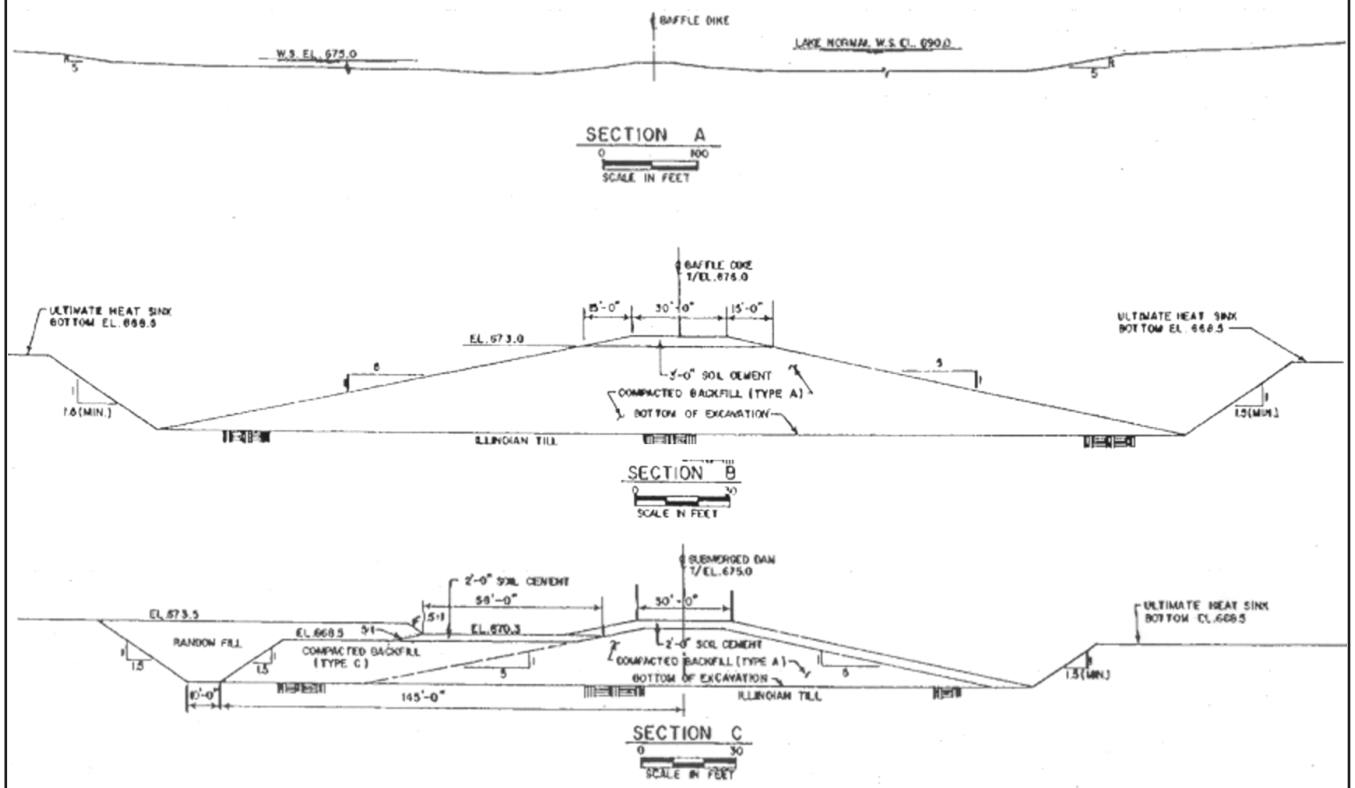
Legend

NOTES:
1. Topographic map of ultimate heat sink after construction (Oct. 17, 1977).
2. Refer to Figure 2.4-15 for sections.

Data Source:
CPS, 2002

Not to Scale

Figure 2.4-15
CPS Ultimate Heat Sink Sections



Legend

NOTES:

1. Refer to Figure 2.4-14 for sections.

Data Source:
CPS, 2002

Not to Scale