

PLANT SYSTEMS

3/4.7.5 ULTIMATE HEAT SINK

LIMITING CONDITION FOR OPERATION

3.7.5.1 The ultimate heat sink shall be OPERABLE with:

- a. A minimum water level at or above elevation 562.0 feet International Great Lakes Datum, and
- b. An average water temperature of $\leq 85^{\circ}\text{F}^*$

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With the requirements of the above specification not satisfied, be in at least HOT STANDBY within 2.5 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.7.5.1 The ultimate heat sink shall be determined OPERABLE at least once per 24 hours by verifying the average water temperature and water level to be within their limits.

* From August 18, 1995, 1800 hours, to September 17, 1995, 1800 hours, the ultimate heat sink shall be OPERABLE with an average water temperature of $\leq 90^{\circ}\text{F}$.

DAVIS-BESSE, UNIT 1

3/4 7-16

Amendment No.

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PLANT SYSTEMS

BASES

the flow path can be established. The ability for local, manual operation is demonstrated by verifying the presence of the handwheels for all manual valves and the presence of either handwheels or available power supply for motor operated valves.

3/4.7.2 STEAM GENERATOR PRESSURE/TEMPERATURE LIMITATION

The limitation on steam generator pressure and temperature ensures that the pressure induced stresses in the steam generators do not exceed the maximum allowable fracture toughness stress limits. The limitations of 110°F and 237 psig are based on a steam generator RT_{NDT} of 40°F and are sufficient to prevent brittle fracture.

3/4.7.3 COMPONENT COOLING WATER SYSTEM

The OPERABILITY of the component cooling water system ensures that sufficient cooling capacity is available for continued operation of safety related equipment during normal and accident conditions. The redundant cooling capacity of this system, assuming a single failure, is consistent with the assumptions used in the safety analyses.

3/4.7.4 SERVICE WATER SYSTEM

The OPERABILITY of the service water system ensures that sufficient cooling capacity is available for continued operation of safety related equipment during normal and accident conditions. The redundant cooling capacity of this system, assuming a single failure, is consistent with the assumptions used in the safety analyses.

3/4.7.5 ULTIMATE HEAT SINK

The limitations on the ultimate heat sink level and temperature ensure that sufficient cooling capacity is available to either 1) provide normal cooldown of the facility, or 2) to mitigate the effects of accident conditions within acceptable limits.

The limitations on minimum water level and maximum temperature are based on providing a 30 day cooling water supply to safety related equipment without exceeding their design basis temperature and is consistent with the recommendations of Regulatory Guide 1.27, "Ultimate Heat Sink for Nuclear Plants" March 1974.

3/4.7.6 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

The OPERABILITY of the control room emergency ventilation system ensures that 1) the ambient air temperature does not exceed the allowable temperature for continuous duty rating for the equipment and instrumentation cooled by this system and 2) the control room will remain habitable for operations personnel during and following all credible accident conditions. The OPERABILITY of this system in conjunction with control room design provisions is based on limiting the radiation exposure to personnel occupying the control room to 5 rem or less whole body, or its equivalent. This limitation is consistent with the requirements of General Design Criterion 19 of Appendix "A", 10 CFR 50.

ENVIRONMENTAL ASSESSMENT

Identification of Proposed Action

This proposed action involves the Davis-Besse Nuclear Power Station (DBNPS), Unit Number 1, Operating License Number NPF-3, Appendix A, Technical Specifications (TS). A license amendment is proposed to increase the allowable ultimate heat sink (UHS) average water temperature, as specified in TS Limiting Condition for Operation (LC0) 3.7.5.1.b, from $< 85^{\circ}\text{F}$ to $< 90^{\circ}\text{F}$, for a period from August 18, 1995, 1800 hours, to September 17, 1995, 1800 hours. The current TS Action statement requires that the plant be placed in Hot Standby (Mode 3) within 2.5 hours and Cold Shutdown (Mode 5) within the following 30 hours, in the event that UHS average temperature exceeds 85°F .

Need for the Proposed Action

The changes proposed are needed to allow continued plant operation in the event that UHS average temperature exceeds 85°F .

Environmental Impact of the Proposed Action

Toledo Edison has determined that the structures, systems and components which could be affected by the proposed increase in allowable UHS average temperature will continue to be capable of performing their safety functions. Therefore, removal of the requirement to shutdown the plant in the event the UHS average temperature exceeds 85°F , for a period from August 18, 1995, 1800 hours, to September 17, 1995, 1800 hours, has no adverse effect on safety.

The proposed change will reduce the potential for unduly requiring cooldown and heatup transitions of plant equipment, thus preserving the cycling margin between plant design and actual operating history.

The proposed amendment involves a change to a requirement with respect to the use of facility components located within the restricted area as defined in 10CFR Part 20. As discussed in the Significant Hazards Consideration, this proposed amendment does not involve a significant hazards consideration. The proposed change to allow continued plant operation in the event the UHS average temperature exceeds 85°F does not alter source terms, containment isolation or allowable releases. In addition, the proposed change does not involve an increase in the amounts, and no change in the types, of any radiological effluents that may be allowed to be released offsite. Furthermore, there is no increase in the individual or cumulative occupational radiation exposure.

With regard to potential non-radiological impacts, the proposed amendment involves no increase in the amounts or change in types of any non-radiological effluents that may be released offsite, and has no other environmental impact.

Based on the above, Toledo Edison concludes that there are no significant radiological or non-radiological environmental impacts associated with the proposed amendment.

Alternatives to the Proposed Action

Since Toledo Edison has concluded that the environmental effects of the proposed action are not significant, any alternatives will have only similar or greater environmental impacts. The principal alternative would be not to amend the TS. This would not reduce the environmental impacts attributable to the facility. Furthermore, it would force a shutdown of the facility in accordance with the present TS in the event UHS average temperature exceeds 85°F during the 30-day period.

Alternative Use of Resources

This action does not involve the use of resources not previously considered in the Final Environmental Statement Related to the Operation of the Davis-Besse Nuclear Power Station, Unit Number 1 (NUREG 75/097).

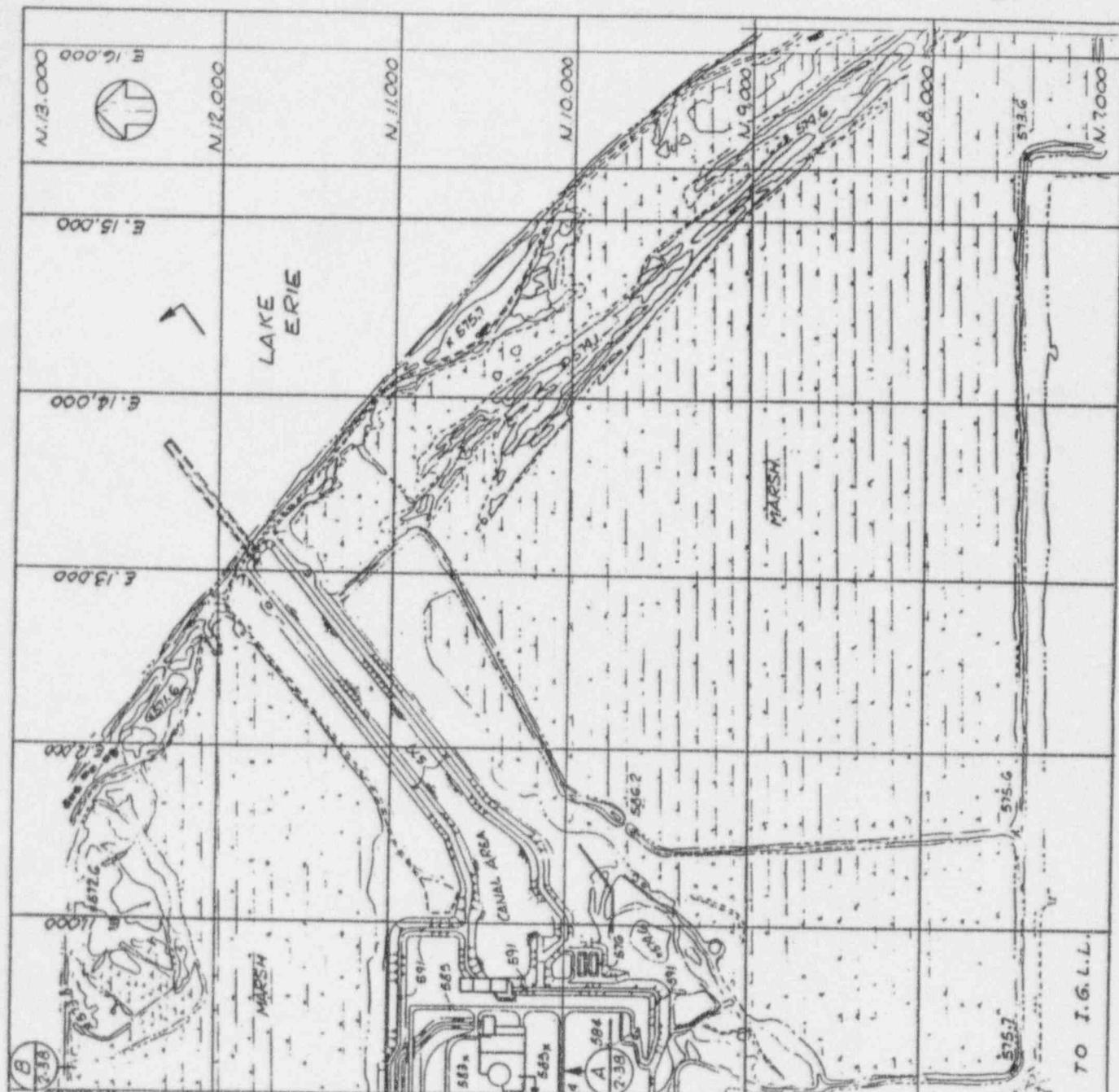
Finding of No Significant Impact

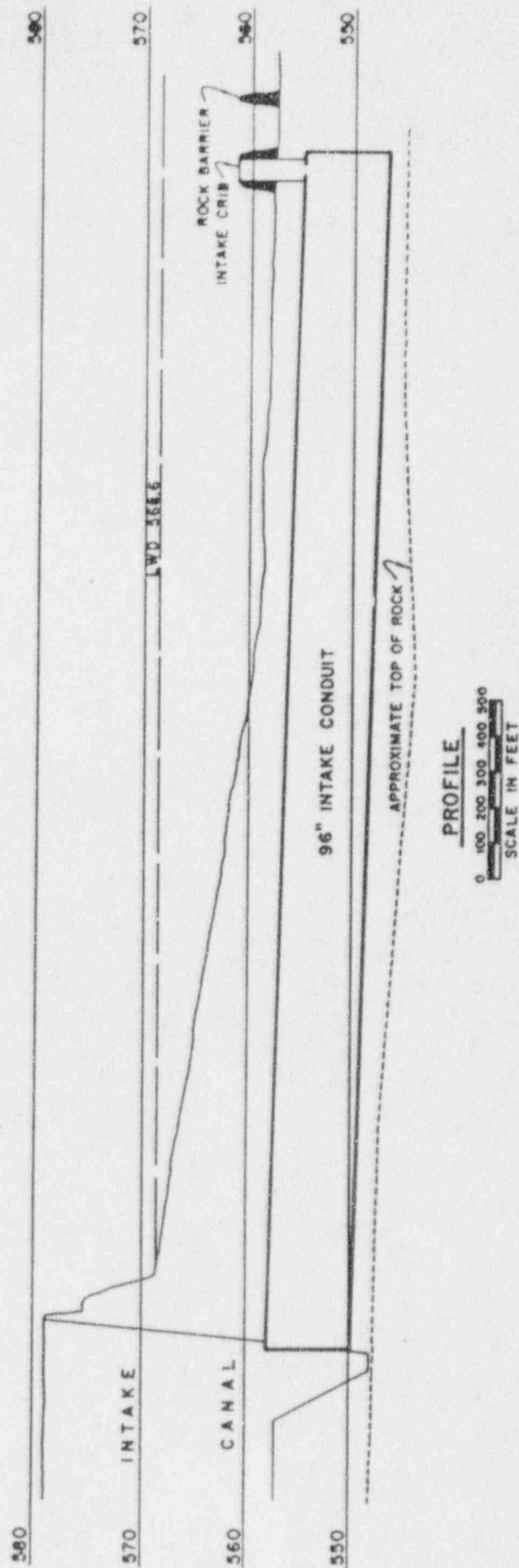
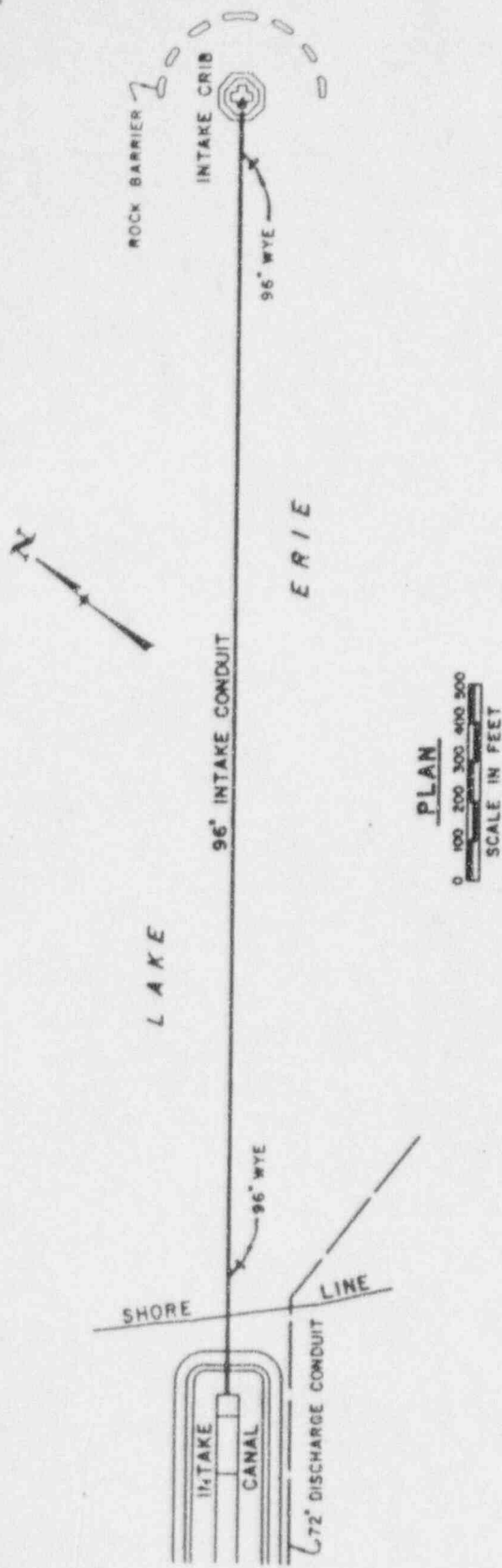
Toledo Edison has reviewed the proposed license amendment against the criteria of 10CFR51.30 for an environmental assessment. As demonstrated above, the proposed amendment does not involve a significant hazards consideration, does not increase the types or amounts of effluents that may be released offsite, and does not increase individual or cumulative occupational radiation exposures. Accordingly, Toledo Edison finds that the proposed license amendment, if approved by the Nuclear Regulatory Commission, will have no significant impact on the environment and that no Environmental Impact Statement is required.

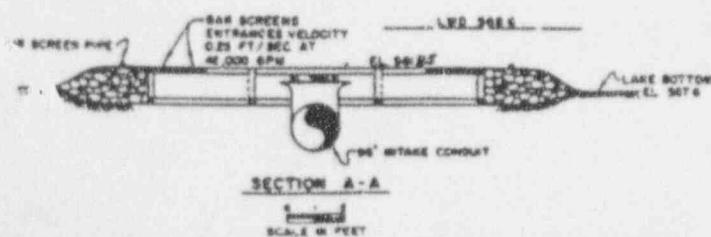
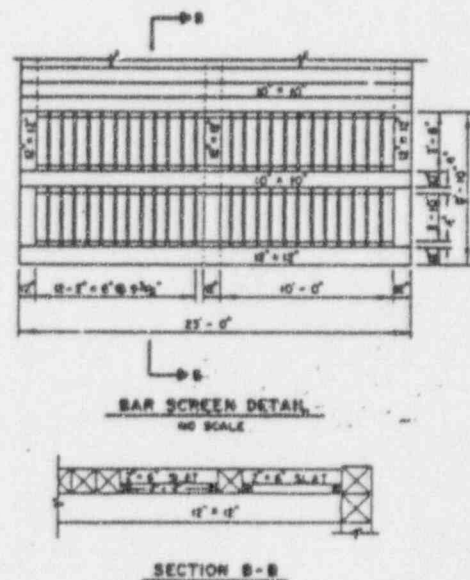
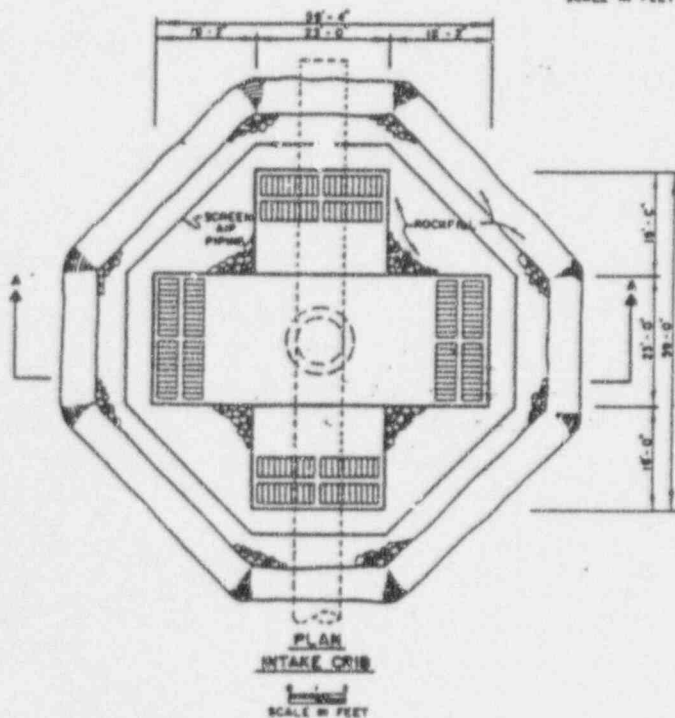
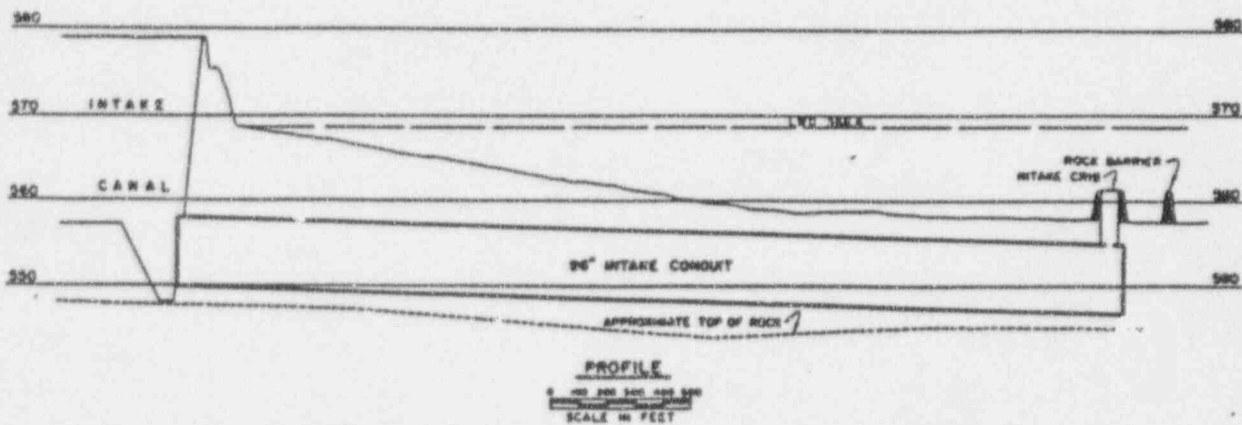
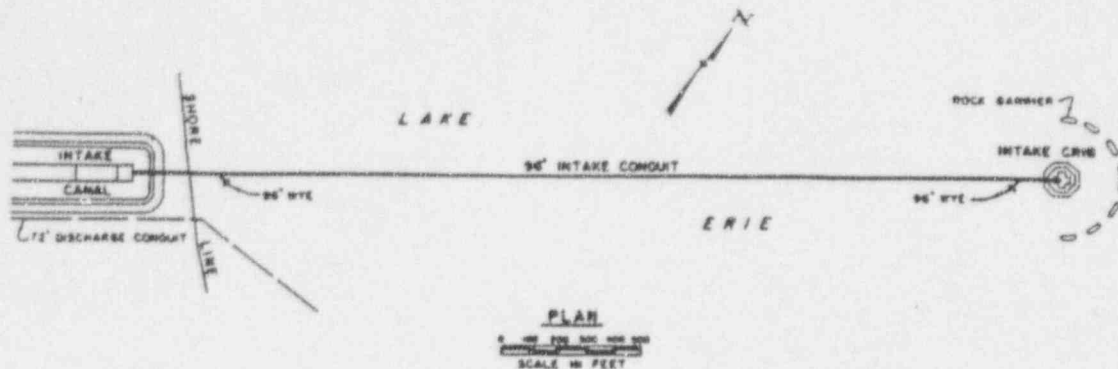
Docket Number 50-346
License Number NPF-3
Serial Number 2319
Attachment 3

FIGURES

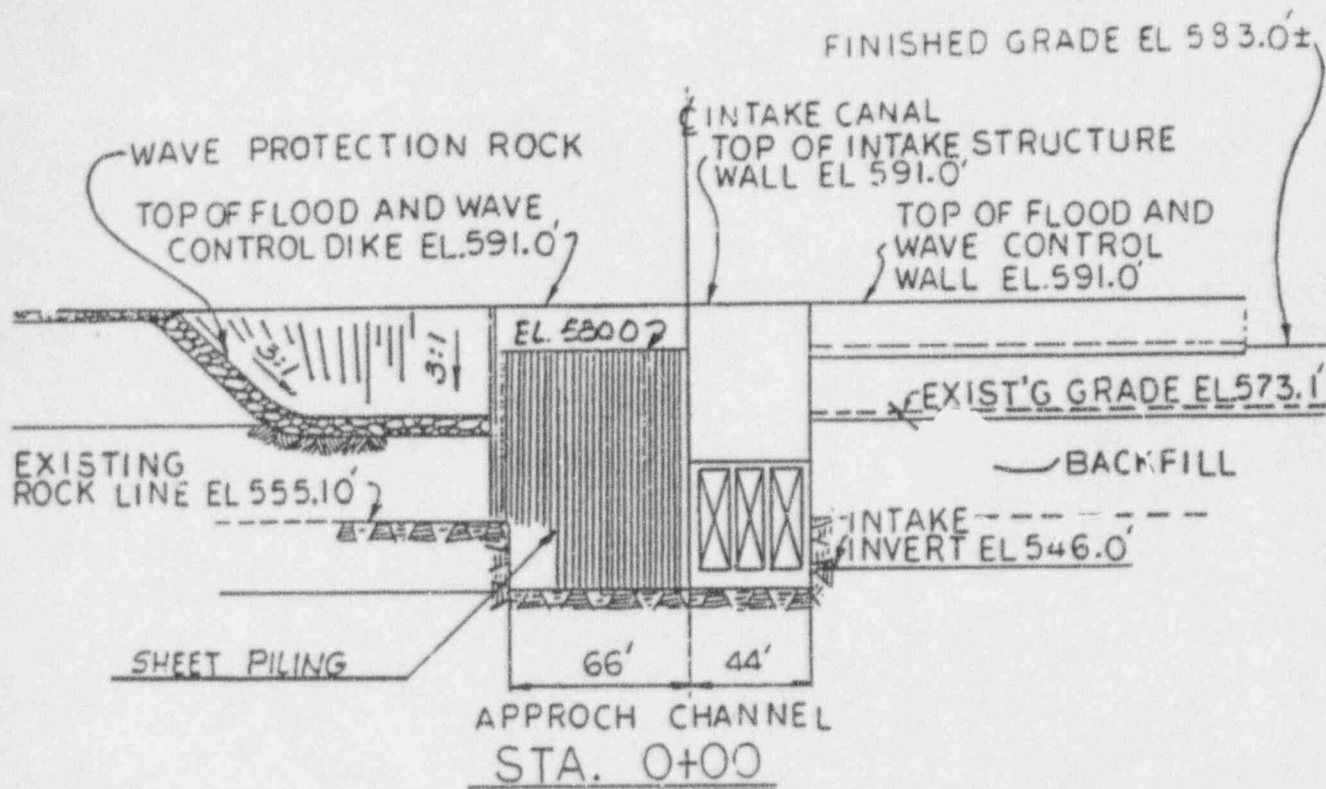
DAVIS-BESSE NUCLEAR POWER STATION
FINISHED SITE TOPOGRAPHY
FIGURE 2.4-2







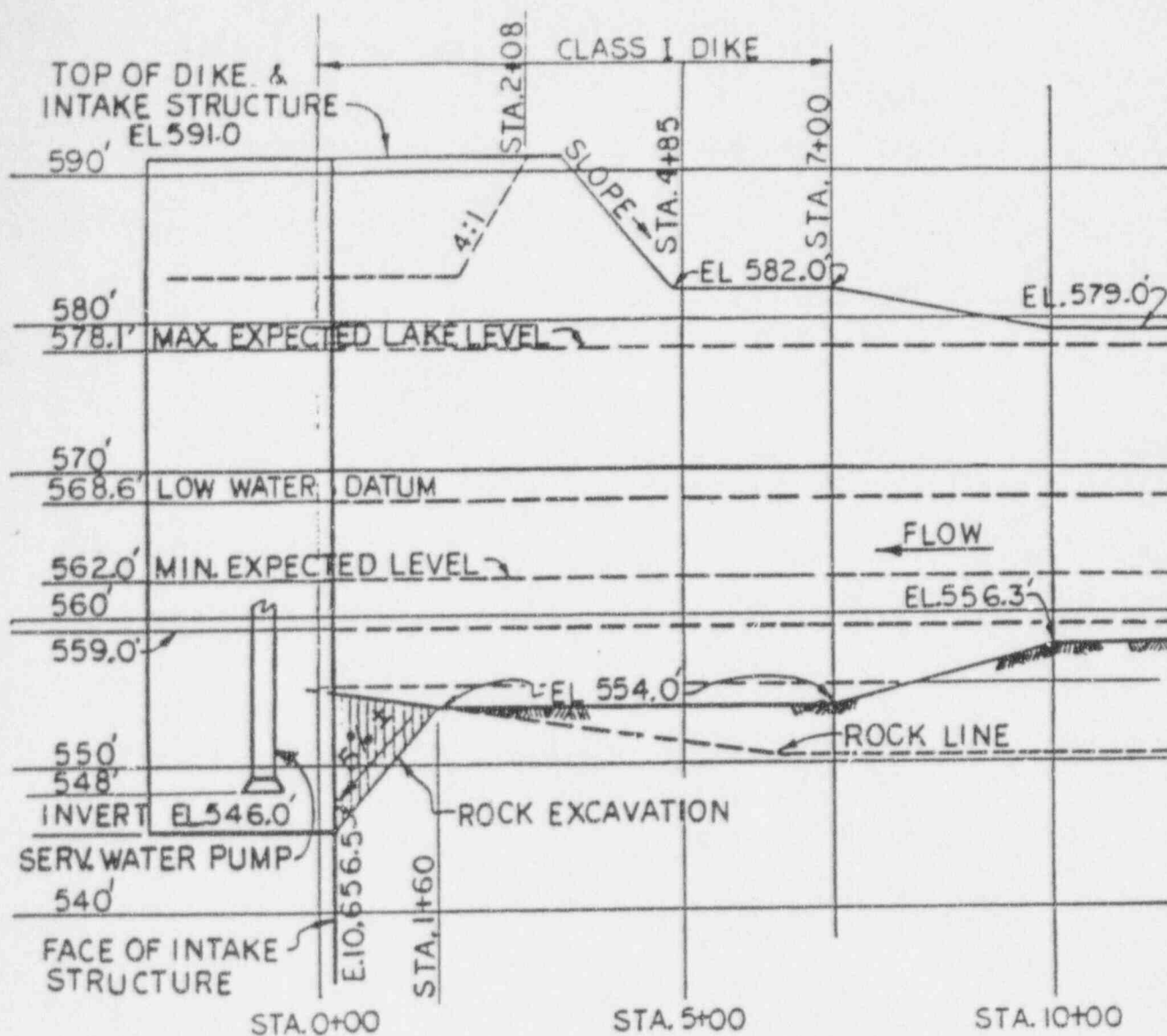
DAVIS-BESSE NUCLEAR POWER STATION
INTAKE ARRANGEMENT



NOTE :

ALL ELEVATIONS
ARE REFERRED
TO I.G.L.D.

DAVIS-BESSE NUCLEAR POWER STATION
CROSS SECTION @ STA. 0+00
INTAKE CANAL



WATER EL.	VOL. (GALS)	SURF. AREA (SF)
568.6'	19,780,000	216,900
562.0'	10,119,000	175,400
560.0'	7,559,000	167,000
559.0'	6,325,500	162,800
557.0'	3,954,000	154,400
555.0'	1,692,000	141,800
554.0'	631,300	19,400
553.0'	494,800	17,200
548.0'	59,100	6,200

NOTE :

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ARE REFERRED
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DAVIS-BESSE NUCLEAR POWER STATION
PROFILE ALONG THE CENTER
LINE OF THE INTAKE CANAL