

E. F. Thomas, Director of Power Production, 1005 EB-C (2)

J. R. Parrish, Director of Engineering Design, 505 UB-K

SEP 28 1971

KINGSTON STEAM PLANT - ANNUAL ASH DISPOSAL AREA INSPECTION

Attached is a memorandum report from J. P. H. Stivers to P. D. Stansberry dated September 22, 1971, of the September 1 joint field inspection at Kingston which includes recommendations for corrective work. I concur in these recommendations.

J. R. Parrish

JPHS:NCH

Attachment

CC: F. P. Lacy, 405 UB-K (3) - w/3 attachments
Power Manager's Files, 630 FRB-C

F. D. Stansberry, Head Civil Engineer (Highway and Railroad), 101 FB-K

J. P. H. Stivers, Civil Engineer (Highway and Railroad), 100 FB-K

September 22, 1971

KINGSTON STEAM PLANT - ANNUAL ASH DISPOSAL AREA INSPECTION

On September 1, 1971, Meigs Brewer of DPP in Chattanooga; L. B. Kennedy, Assistant Plant Superintendent; W. G. Lloyd, Assistant Mechanical Supervisor; and I inspected the ash disposal areas at Kingston Steam Plant and discussed our findings with A. O. Spencer, Plant Superintendent.

The attached print of drawing 10N400 shows the areas described and locations of pictures taken.

In general, the dikes are in good condition with no evident stability problems. The original dikes were constructed with earth. The dikes around the initial ash area were raised with ash.

The operation of the area has changed since last year. The sluice line still discharges into the initial area; but instead of going straight to the spillways of the initial area into the main area as before, most of the ash settles out in areas excavated by draglines for dry hauling. The water then goes through the spillways into the main area, then into Watts Bar Lake through two standard spillways. The effluent is very clear and the outfalls provide an excellent place to fish (picture 4).

Ash is being dry hauled from the initial area to the area adjacent to and north of the north dike.

The ash is excavated by draglines near the outfall, piled on top of the dike, allowed to dry, then hauled with earthmoving equipment and deposited as shown on the attached sketch.

Plant personnel have completed grassing slopes of the dikes that were constructed with earth as recommended in last year's report. They are continuing to remove the trash from the outside slopes of dike C as it is deposited by Watts Bar Lake.

All dikes have been raised to provide a minimum 4-foot freeboard between the water surface and the top of the dikes with the top kept smooth and sloped to the inside.

Widening of dike C to provide a base for future raising has progressed to near the spillways and should be completed.

F. D. Stansberry
September 22, 1971

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The north dike of the initial area has been widened and raised an additional eight to ten feet. The south slope and top of the north dike have been covered with four to six inches of soil, limed, fertilized, and seeded (pictures 1 and 2).

Our recommendations are:

1. Continue to operate the ash areas as is now being done, but care should be used to insure that the ash that has not settled out in the initial area does not fill the main area before the road dike and dike C are raised.
2. Complete the widening of dike C to form the base for future raising.

J. P. H. Stivers

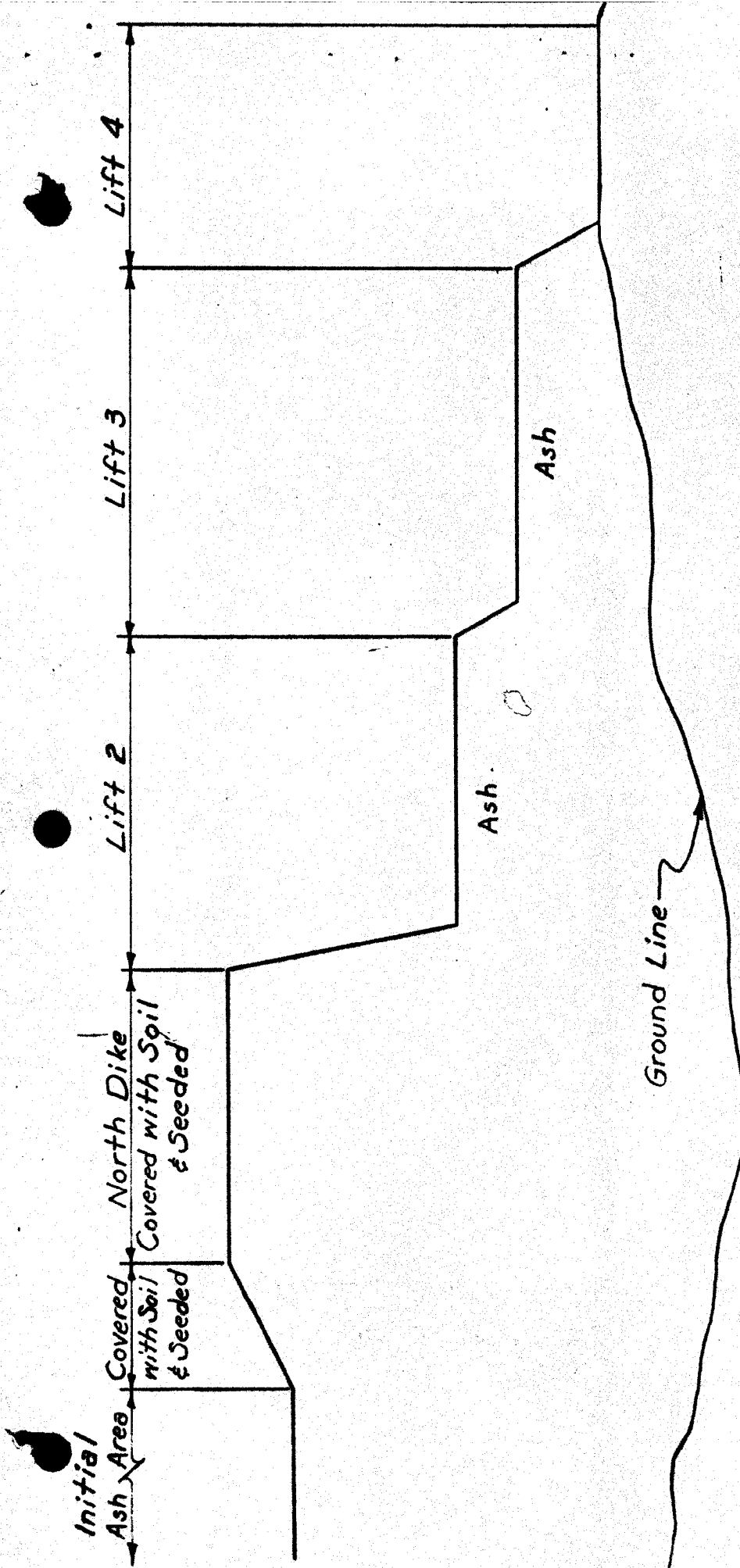
JPHS:NCH
Attachments

Concur: F. D. Stansberry

F. P. Lacy

FDS:NCH--9/22/71
CC (Attachments):
F. P. Lacy, 405 UB-K

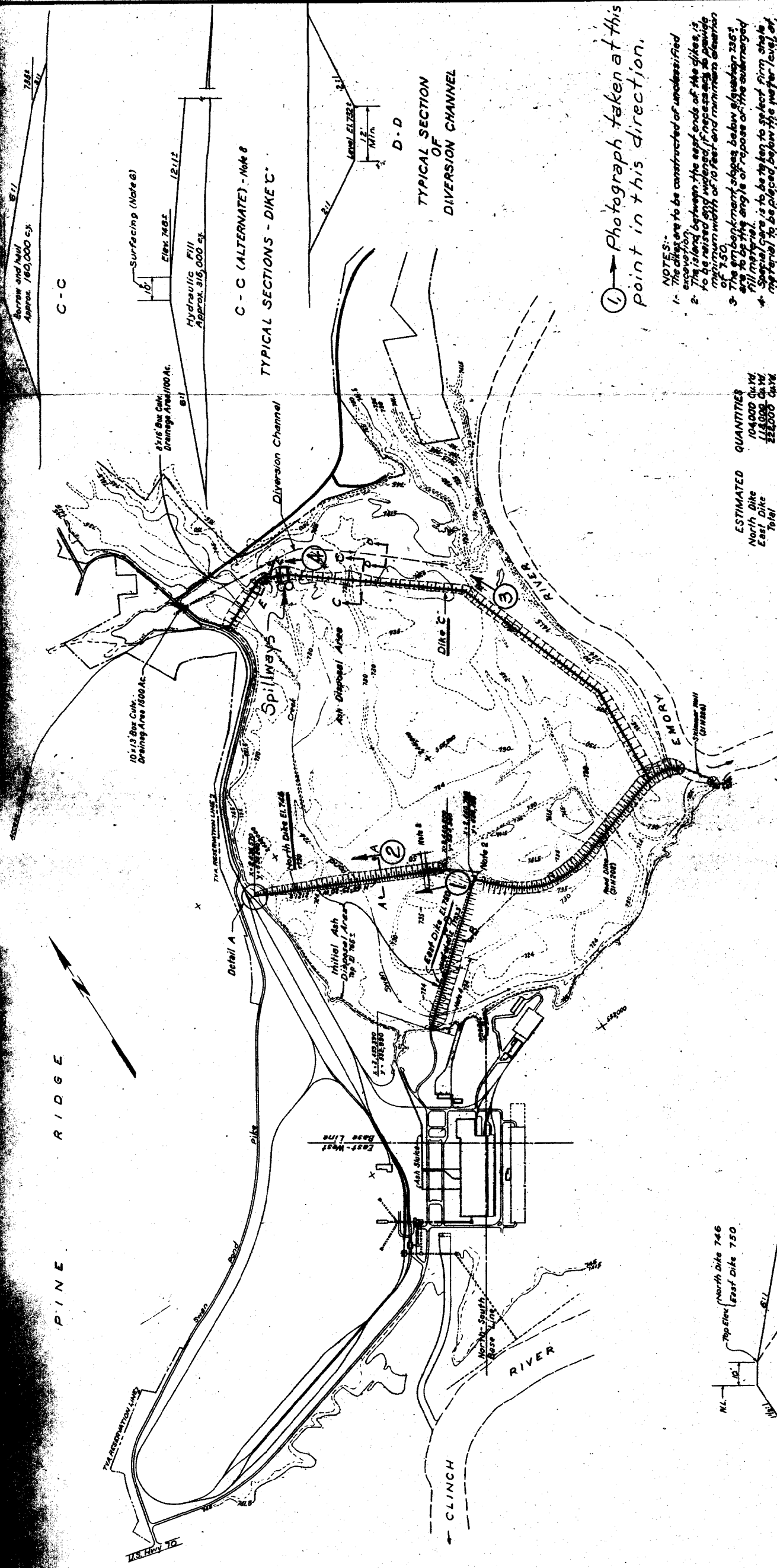
FPL:EW--9/22/71
CC (Attachments):
J. R. Parrish, 505 UB-K



Note: Lifts 2, 3 and 4 will be covered with soil, fertilized, limed and seeded when they reach the elevation of the North Dike.

SECTION THROUGH NORTH DIKE AND STORAGE AREA
N.T.S.

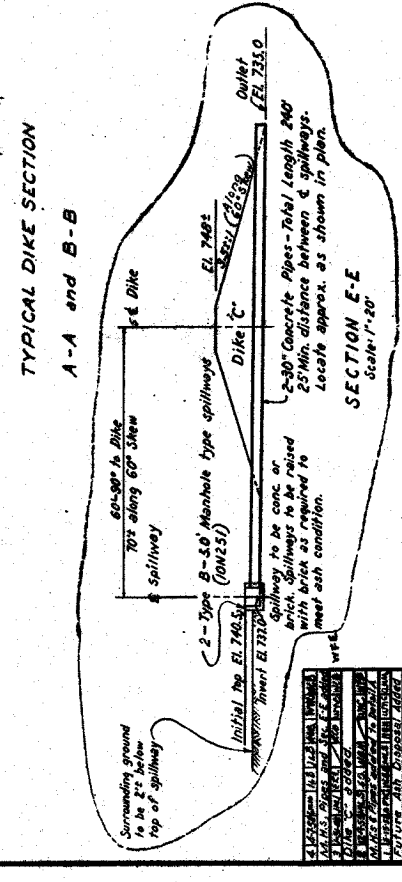
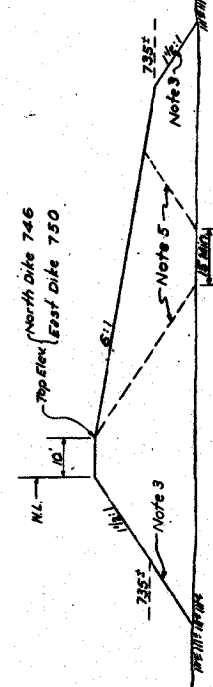
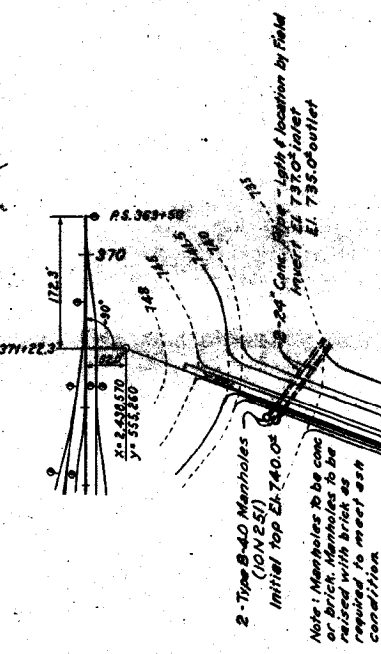
KINGSTON STEAM PLANT



① Photograph taken at this point in this direction.

- NOTES:
- The dikes are to be constructed of undisturbed excavation.
 - The island between the east ends of the dikes is to be raised and widened, if necessary, to provide minimum width of 70 feet and minimum elevation of 750.
 - The embankment slopes below elevation 735 are to be 1:1.
 - Special care is to be taken to select firm stable material to be placed above the top of dike, and the top surface of dike to be compacted thoroughly.
 - The top of dike is to be surfaced with slag and ashes, compacted hydraulically.
 - Quantities shown for Dike C are net fill for section shown and do not include shrinkage etc.
 - Section C-C is the minimum section to be used. The slope shown for the hydraulic fill section are assumed and may be steeper if material can be placed on steeper slopes.
 - Remove existing dike for minimum width of 50 ft and to elevation 742 of lower after Dike C has been completed to at least elevation 745.

ESTIMATED QUANTITIES
 North Dike 104,000 cu yd
 East Dike 118,000 cu yd
 Total 222,000 cu yd



GENERAL	
ASH DISPOSAL AREA	
KINGSTON STEAM PLANT TENNESSEE VALLEY AUTHORITY	
SUBMITTED	RECOMMENDED APPROVED
R. M. [Signature]	R. M. [Signature]
NOXVILLE	6-8-51 38 C 1 ION400 24

DATE	10-12-51	BY	W. H. [Signature]
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①
*Spillway in initial ash disposal area
and North Dike. Note earth on top
and slope.*



②
*North Dike: Note earth placed on
top of dike.*

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③
Dike C showing riprap and vegetation.



④
Outlet of spillways. Note concrete endwall and railing, vegetation on slope and the areas where fishermen have worn the grass out.