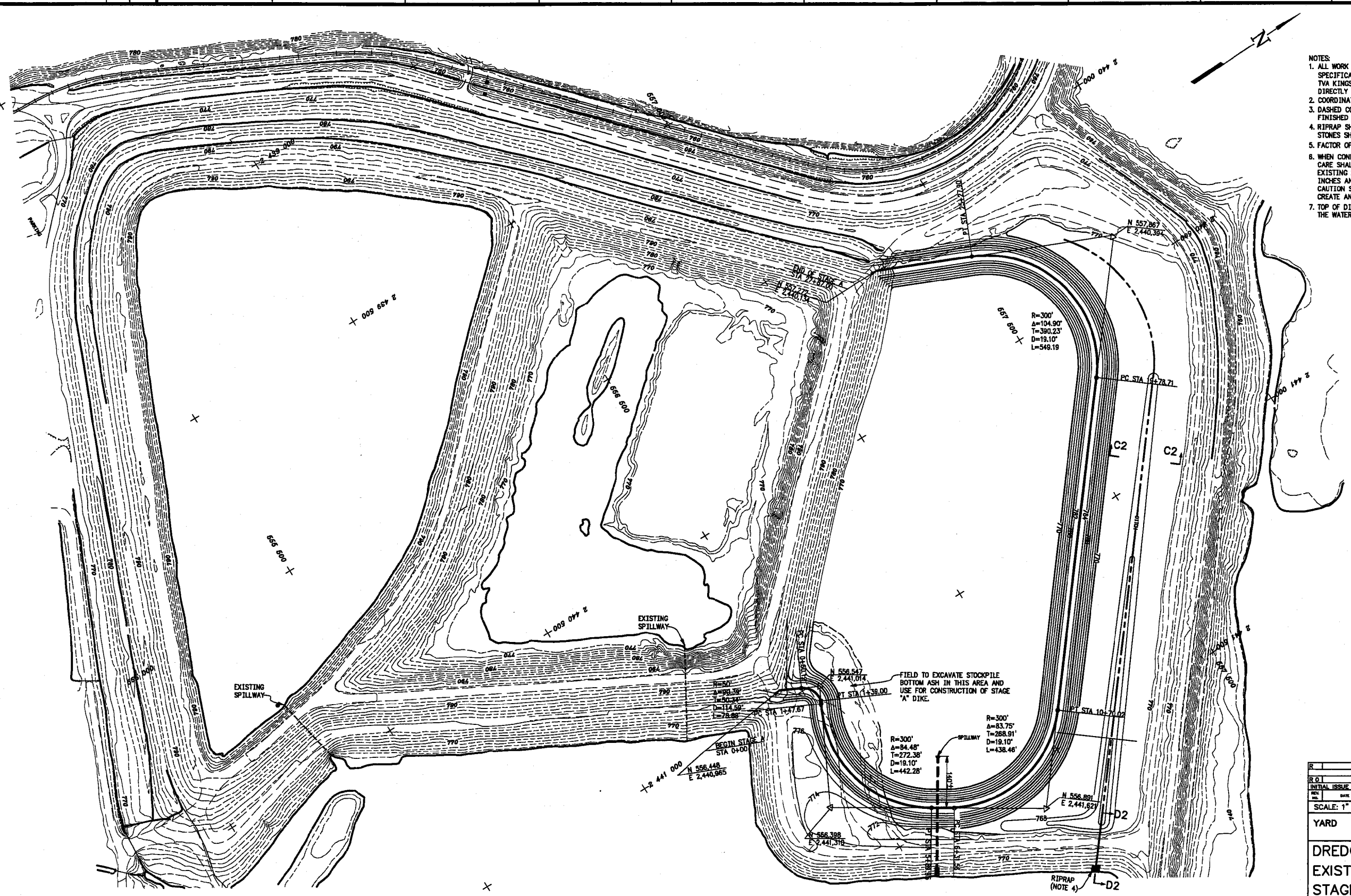


R 0 | BKE | GCL | HLP | HLP | KWB | RGJ | WDH | KF044 | D | ISSUED FOR CONSTRUCTION

INITIAL ISSUE

SCALE: 1" = 100' EXCEPT AS NOTED

YARD

DREDGE CELLS EXISTING CONTOURS AND STAGE A PLAN

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
B.K.ELDER	G.C.LAWSON	H.L.PETTY	H.L.PETTY	K.W.BURNETT	R.G.JOHNSON	W.D.HALL

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R12 | DATE | 36 | C | 10W425-1 | R 0

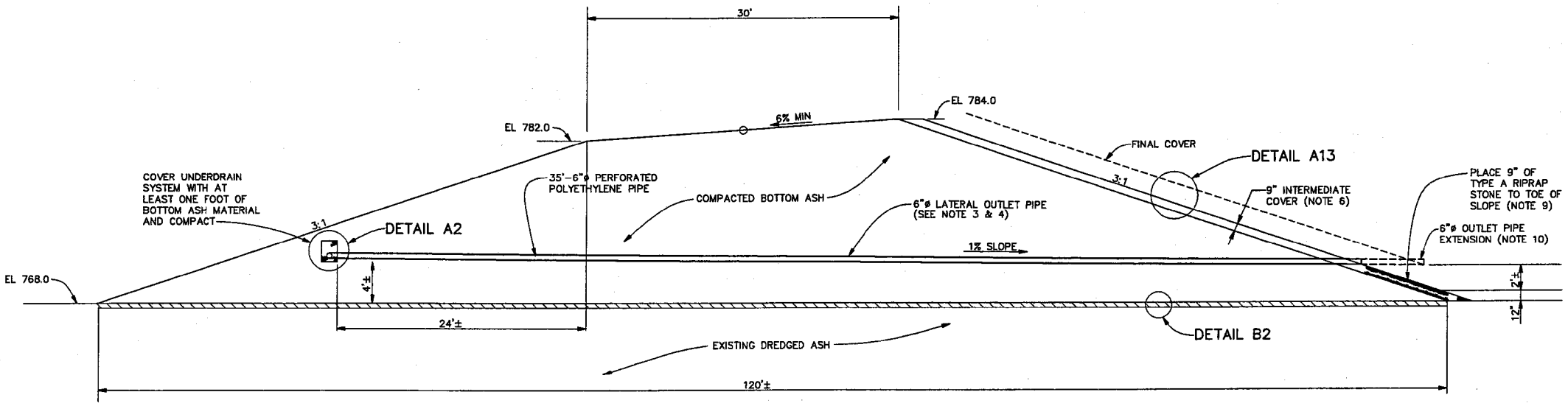
PLOT FACTOR:1=1
W_TVA

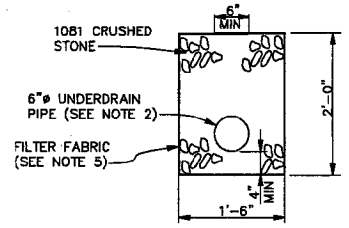
C.A.D. DRAWING
DO NOT ALTER MANUALLY

TASK COMPLETED BY: | REV NO.

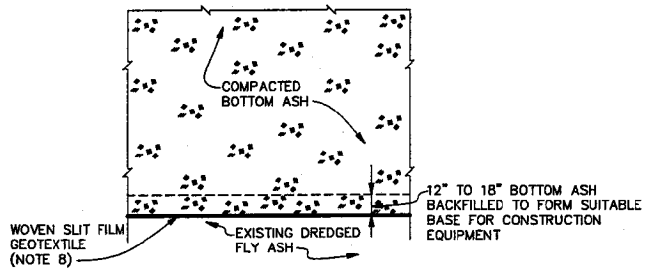
10W425-1

TVA-00002780

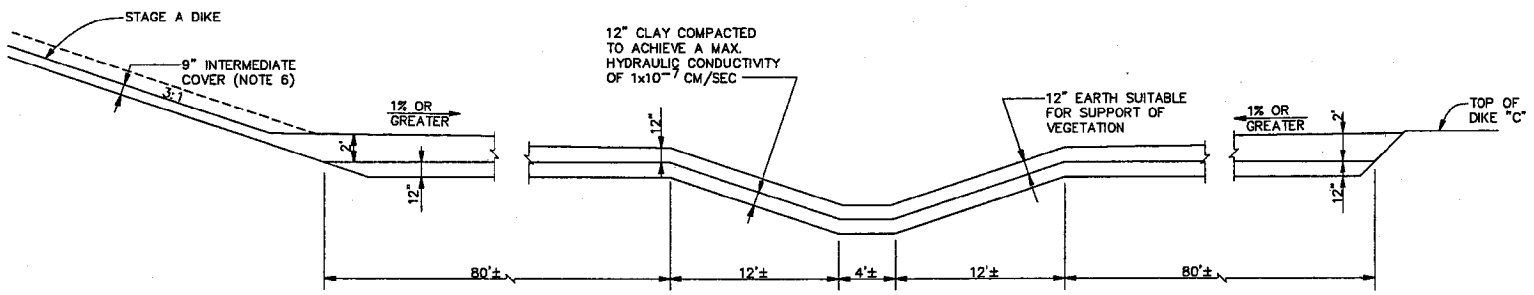




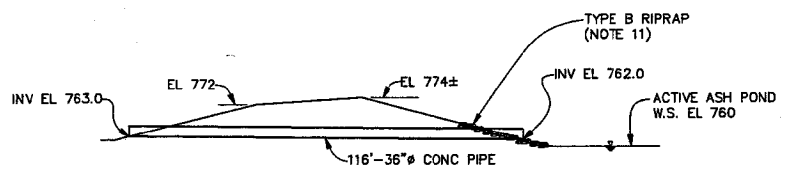
DETAIL A2
TYP UNDERDRAIN CROSS SECTION
1" = 1'-0"



DETAIL B2
1" = 5'



C2 – C2
1" = 5'



D2 – D2
1" = 20'

NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE T-1 GENERAL CONSTRUCTION SPECIFICATIONS AND THE CLOSURE/POST-CLOSURE PLAN – ASH POND AREA – TVA KINGSTON FOSSIL PLANT, UNLESS OTHERWISE NOTED. SECTION NUMBERS REFER DIRECTLY TO THE T-1 SPECIFICATION.
2. UNDERDRAIN PIPE SHALL BE PERFORATED POLYETHYLENE CORRUGATED TUBING AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, INC., COLUMBUS, OHIO (614) 457-3051 OR EQUAL. UNDERDRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 500.
3. LATERAL OUTLET PIPE SHALL BE NON-PERFORATED POLYETHYLENE CORRUGATED TUBING AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, INC., COLUMBUS, OHIO (614) 457-3051 OR EQUAL.
4. LATERAL OUTLET PIPES SHALL BE PLACED EVERY 200 FEET ON CENTER BEGINNING AT STATION 2+00 (TOTAL OF 13 FOR STAGE A).
5. FILTER FABRIC SHALL BE TREVIRA SPUNBOUND TYPE 1135 NON-WOVEN GEOTEXTILE OR EQUIVALENT AND SHALL BE INSTALLED ACCORDING TO SECTION 571.
6. INTERMEDIATE COVER SHALL BE PLACED INCREMENTALLY AND COINCIDENTALLY WITH DIKE CONSTRUCTION AND WILL CONSIST OF 9" OF EARTH SUITABLE FOR THE SUPPORT OF VEGETATION. AFTER PLACEMENT OF COVER, AREA SHALL BE SEEDED WITH SECTION 580 TYPE 6, MIX 9 (SPRING) OR TYPE 8, MIX 3 (FALL).
7. THE AREA FOR THE BASE OF THE DIKE IS TO BE CLEARED OF VEGETATION BY SCRAPING THE SURFACE ACCORDING TO SECTION 101.
8. BASE REINFORCEMENT SHALL CONSIST OF TYPE 300ST WOVEN SLIT FILM GEOTEXTILE AS PRODUCED BY SYNTHETIC INDUSTRIES, INC., CHATTANOOGA, TN (800) 621-0444 OR EQUIVALENT PLACED OVER THE DREDGED ASH SURFACE. 12" TO 18" OF BOTTOM ASH IS THEN TO BE BACKFILLED ONTO THE GEOTEXTILE TO PROTECT IT FROM TEARS BY THE HAULING EQUIPMENT. GEOTEXTILE IS TO BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
9. TYPE A RIPRAP SHALL BE 9" THICK. A MINIMUM OF 50% BY WEIGHT, OF THE STONES SHALL BE 25 LB. EACH AND IN ACCORDANCE WITH SECTION 575.
10. BEFORE FINAL COVER IS PLACED, OUTLET PIPES SHALL BE EXTENDED A MINIMUM OF 6' TO INSURE THAT THE END OF THE PIPE PROTRUDES BEYOND THE FINAL GRADE.
11. TYPE B RIPRAP SHALL BE 18" THICK. A MINIMUM OF 50% BY WEIGHT, OF THE STONES SHALL BE 100 LB. EACH AND IN ACCORDANCE WITH SECTION 575.
12. AREAS OF FINAL EARTH COVER SHALL BE SEEDED (TYPE 8, MIXTURE 3) AND MULCHED IN ACCORDANCE WITH SECTIONS 580 AND 582. FINAL COVER SHALL NOT BE PLACED UNTIL DREDGING IS COMPLETED AND FACILITY IS AT ULTIMATE ELEVATION.

R									
R 0	BKE	GCL	HLP	HLP	KWB	RGJ	WDH	KIF044	D
INITIAL ISSUE									
REV. NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST	REVISION

SCALE: 1"=5' EXCEPT AS NOTED

YARD

DREDGE CELLS
TYPICAL SECTIONS
STAGE A

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
B.K.ELDER	G.C.LAWSON	B.K.ELDER	H.L.PETTY	K.W.BURNETT	R.G.JOHNSON	W.D.HALL

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-2	R 0

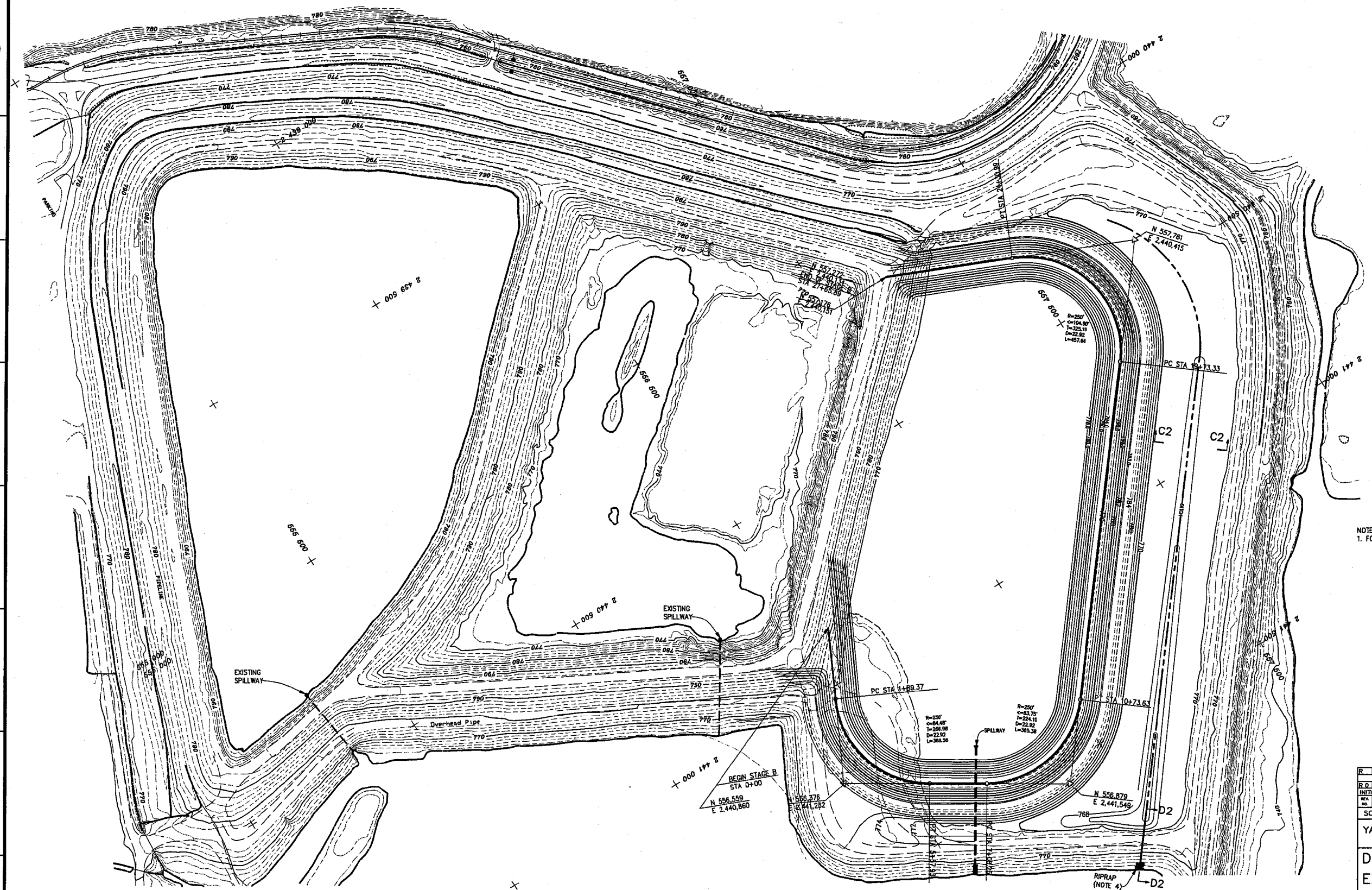
PLOT FACTOR: 1=1
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

TASK COMPLETED BY: | REV NO.

10W425-2

TVA-00002781



R										
R 0		BKE	GCL	HLP	HLP	KWB	RGJ	WDH	KIF044	D
INITIAL ISSUE										
REV. NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST

SCALE: 1"=100' EXCEPT AS NOTED

YARD

DREDGE CELLS EXISTING / FUTURE CONTOURS AND STAGE B PLAN

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
B.K.ELDER	G.C.LAWSON	B.K.ELDER	H.L.PETTY	K.W.BURNETT	R.G.JOHNSON	W.D.HALL

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

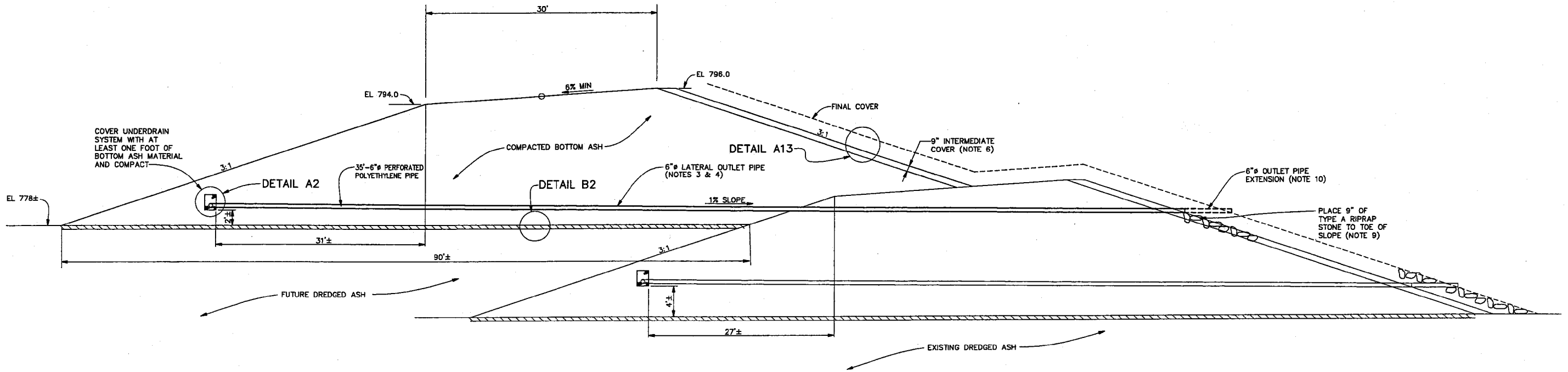
AUTOCAD R14	DATE	36	C	10W425-3	R 0

PLOT FACTOR:1=1
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

TASK COMPLETED BY: | REV NO.

10W425-3



NOTES:
1. FOR GENERAL NOTES SEE 10W425-2.

R										
R 0	BKE	GCL	BKE	HLP	KWB	RGJ	WDH	KF044		D
INITIAL ISSUE										
REV. NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST

SCALE: 1" = 5' EXCEPT AS NOTED

YARD

DREDGE CELLS TYPICAL SECTION STAGE B

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
B.K.ELDER	G.C.LAWSON	B.K.ELDER	H.L.PETTY	K.W.BURNETT	R.G.JOHNSON	W.D.HALL

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-4	R 0

PLOT FACTOR:1=1
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

TASK COMPLETED BY: REV NO.

10W425-4

TVA-00002783

PI	Lambert Coordinate North	Coordinate East	R (ft)	D (deg)	T (ft)	D	L (ft)	PC (sta)	PT (sta)
1C	556,548	2,440,937	115	90	116.28	49.83	176.09	0.00	176.09
2C	556,405	2,441,223	225	84.475	204.29	25.46	331.66	181.83	513.49
3C	556,873	2,441,518	225	83.745	201.69	25.46	328.50	687.89	1016.42
4C	557,744	2,440,424	225	104.896	292.68	25.46	412.04	1920.59	2332.63
5C	557,213	2,440,192	500	23.399	103.54	11.46	204.27	2515.69	2719.96
6C	556,264	2,439,174	500	16.902	74.29	11.46	147.55	3933.80	4081.35
7C	555,643	2,438,814	225	97.980	258.74	25.46	384.77	4466.10	4850.87
8C	555,104	2,440,140	250	83.235	222.10	22.92	363.20	5801.37	6164.57
10C	556,568	2,440,931	130	90	124.95	44.07	199.06	0	199.06
11C	556,424	2,441,218	210	84.475	190.67	27.28	309.55	204.85	514.40
12C	556,889	2,441,499	210	83.745	188.24	27.28	307.38	689.08	996.46
13C	557,719	2,440,430	210	104.896	273.16	27.28	384.29	1900.83	2285.12
14C	557,205	2,440,205	515	23.399	106.65	11.13	209.77	2466.92	2676.69
15C	556,255	2,439,187	485	16.902	72.06	11.81	142.70	3890.88	4033.58
16C	555,650	2,438,836	210	97.98	241.49	27.28	359.22	4419.55	4778.77
17C	555,123	2,440,133	235	83.235	208.77	24.38	341.26	5728.48	6069.74
19C	556,602	2,440,920	155	90	148.98	36.97	237.34	0	237.34
20C	556,456	2,441,208	185	84.475	167.97	30.97	262.03	254.05	516.08
21C	556,864	2,441,465	185	83.745	165.83	30.97	270.4	426.04	696.44
22C	557,679	2,440,440	185	104.896	240.64	30.97	338.59	1599.62	1938.21
23C	557,192	2,440,227	540	23.399	111.82	10.61	220.36	2117.5	2337.86
24C	556,241	2,439,207	460	16.902	68.35	12.46	135.75	3552.31	3688.063
25C	555,663	2,438,872	185	97.98	212.74	30.97	316.31	4075.06	4391.37
26C	555,155	2,440,121	210	83.235	186.56	27.28	305.03	5340.52	5645.55

NOTE:
TWO FOOT CONTOURS NOT SHOWN FOR STAGE C STACKING FOR CLARITY, SEE STAGE C TYPICAL SECTION. (10W425-6).

NOTES:
1. FOR GENERAL NOTES SEE 10W425-1.

EXTEND CURRENT SPILLWAY (SEE CROSS-SECTION ON 10W425-12)

EXTEND CURRENT SPILLWAY (SEE CROSS-SECTION ON 10W425-12)

0+00
N 556,463
E 2,440,843

℄ STAGE C3
℄ STAGE C2
℄ STAGE C1

SPILLWAY

Overhead Pipe

RIPRAP (NOTE 4)

SCALE: 1"=100' EXCEPT AS NOTED

YARD

DREDGE CELLS EXISTING / FUTURE CONTOURS AND STAGE C PLAN

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
B.K.ELDER	G.C.LAWSON	B.K.ELDER	H.L.PETTY	K.W.BURNETT	R.G.JOHNSON	W.D.HALL

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

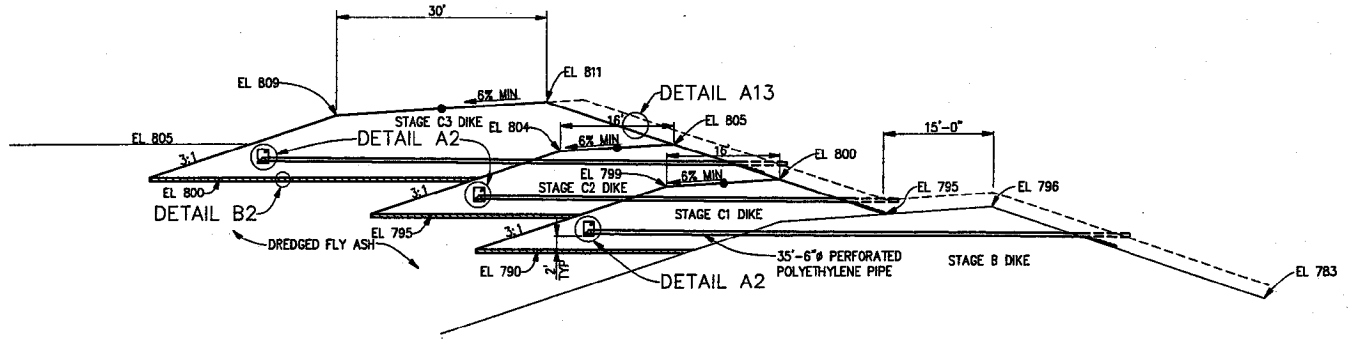
AUTOCAD R14 | 36 | C | 10W425-5 | R 0

PLOT FACTOR:1=1 W_TVA

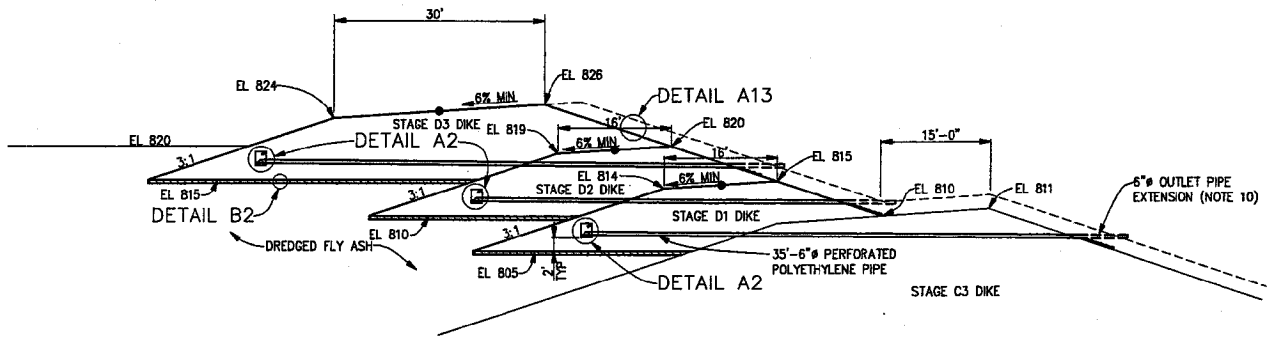
C.A.D. DRAWING DO NOT ALTER MANUALLY

TASK COMPLETED BY: | REV NO.

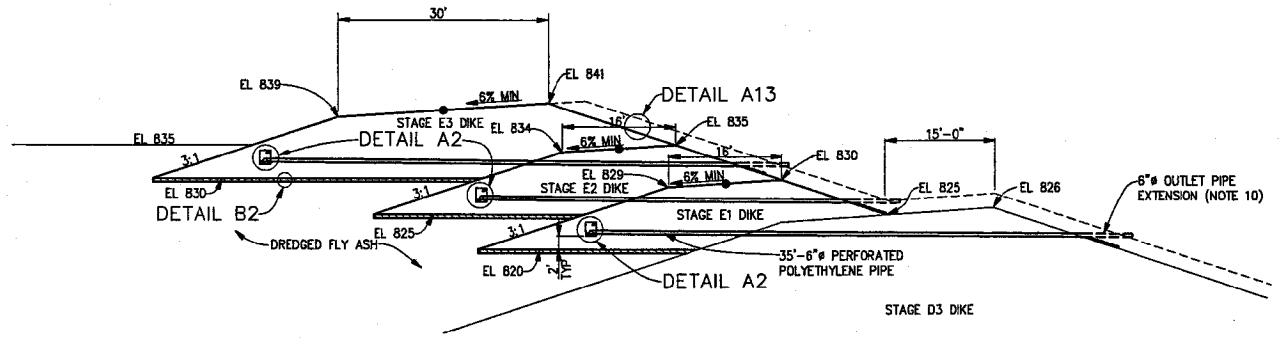
TVA-00002784



TYPICAL SECTION – STAGE C



TYPICAL SECTION – STAGE D



TYPICAL SECTION – STAGE E

NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE T-1 GENERAL CONSTRUCTION SPECIFICATIONS AND THE CLOSURE/POST-CLOSURE PLAN – ASH POND AREA – TVA KINGSTON FOSSIL PLANT, UNLESS OTHERWISE NOTED. SECTION NUMBERS REFER DIRECTLY TO THE T-1 SPECIFICATION.
2. UNDERDRAIN PIPE SHALL BE PERFORATED POLYETHYLENE CORRUGATED TUBING AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, INC., COLUMBUS, OHIO (614) 457-3051 OR EQUAL. UNDERDRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 500.
3. LATERAL OUTLET PIPE SHALL BE NON-PERFORATED POLYETHYLENE CORRUGATED TUBING AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, INC., COLUMBUS, OHIO (614) 457-3051 OR EQUAL.
4. LATERAL OUTLET PIPES SHALL BE PLACED EVERY 200 FEET ON CENTER BEGINNING AT STATION 2+00 (TOTAL OF 13 FOR STAGE A).
5. FILTER FABRIC SHALL BE TREVIRA SPUNBOUND TYPE 1145 NON-WOVEN GEOTEXTILE OR EQUIVALENT AND SHALL BE INSTALLED ACCORDING TO SECTION 571.
6. INTERMEDIATE COVER SHALL CONSIST OF 9" OF EARTH SUITABLE FOR THE SUPPORT OF VEGETATION. AFTER PLACEMENT OF COVER, AREA SHALL BE SEEDED WITH SECTION 580 TYPE 6, MIX 9 (SPRING) OR TYPE 8, MIX 3 (FALL).
7. THE AREA FOR THE BASE OF THE DIKE IS TO BE CLEARED OF VEGETATION BY SCRAPING THE SURFACE ACCORDING TO SECTION 101.
8. BASE REINFORCEMENT SHALL CONSIST OF TYPE 300ST WOVEN SLIT FILM GEOTEXTILE AS PRODUCED BY SYNTHETIC INDUSTRIES, INC., CHATTANOOGA, TN (800) 621-0444 OR EQUIVALENT PLACED OVER THE DREDGED ASH SURFACE. 12" TO 18" OF BOTTOM ASH IS THEN TO BE BACKFILLED ONTO THE GEOTEXTILE TO PROTECT IT FROM TEARS BY THE HAULING EQUIPMENT.
9. TYPE A RIPRAP SHALL BE 9" THICK. A MINIMUM OF 50% BY WEIGHT, OF THE STONES SHALL BE 25 LB. EACH AND IN ACCORDANCE WITH SECTION 575.
10. BEFORE FINAL COVER IS PLACED, OUTLET PIPES SHALL BE EXTENDED A MINIMUM OF 6' TO INSURE THAT THE END OF THE PIPE PROTRUDES BEYOND THE FINAL GRADE.
11. TYPE B RIPRAP SHALL BE 18" THICK. A MINIMUM OF 50% BY WEIGHT, OF THE STONES SHALL BE 100 LB. EACH AND IN ACCORDANCE WITH SECTION 575.

REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST	REV CD
R											
R D		BKE	GCL	HLP	HLP	KWB	RGJ	WDH	KIF044		D
INITIAL ISSUE											

SCALE: 1"=10' EXCEPT AS NOTED

YARD

DREDGE CELLS
TYPICAL SECTIONS
STAGES C, D, & E

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
B.K.ELDER	G.C.LAWSON	B.K.ELDER	H.L.PETTY	K.W.BURNETT	R.G.JOHNSON	W.D.HALL

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-6	R 0

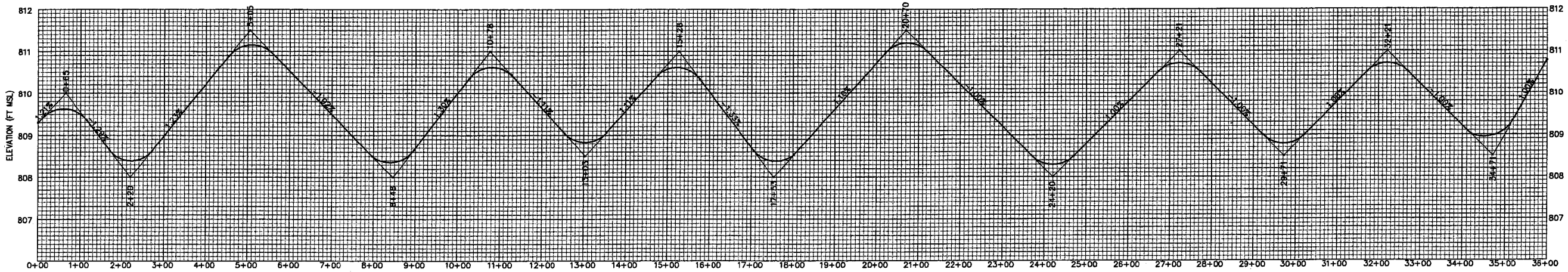
TASK COMPLETED BY: | REV NO.

PLOT FACTOR:1=1
W_TVA

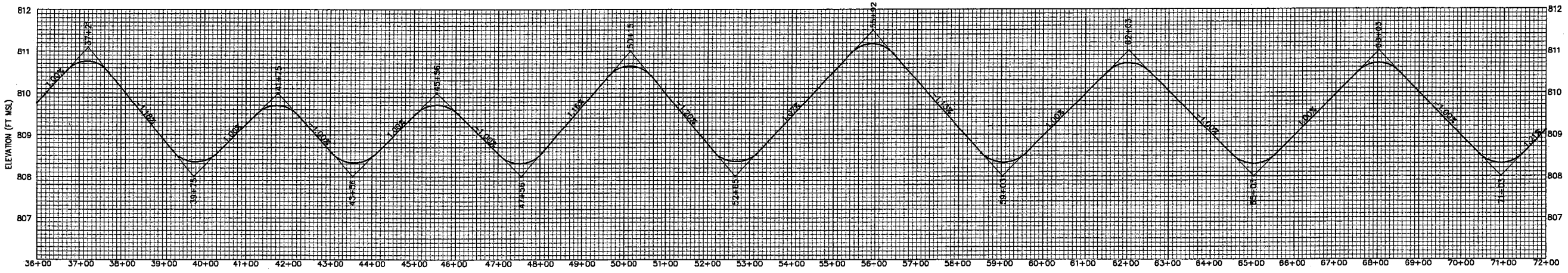
C.A.D. DRAWING
DO NOT ALTER MANUALLY

10W425-6

TVA-00002785



STAGE C3 STATION



STAGE C3 STATION

R

REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST	DISCIPLINE INTERFACE
R 0	INITIAL ISSUE.	BKE	GCL	HLP	HLP	KWB	RGJ	WDH	KIF044		D

SCALE: 1"=1' VERT. & 1"=100' HORIZ. EXCEPT AS NOTED

YARD

DREDGE CELLS
STAGE "C" PROFILE

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
B.K.ELDER	G.C.LAWSON	H.L.PETTY	H.L.PETTY	K.W.BURNETT	R.G.JOHNSON	W.D.HALL

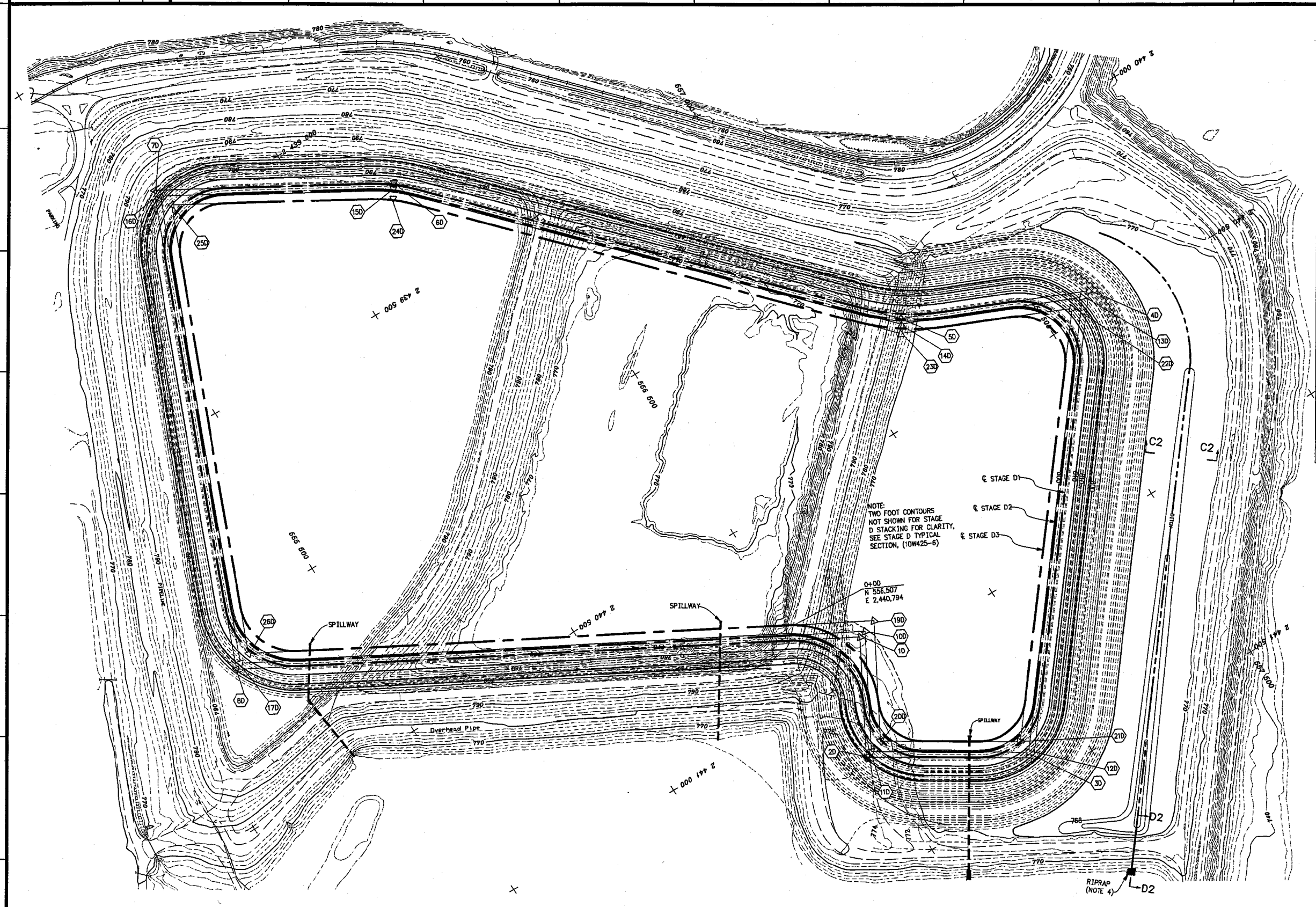
KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-7	R 0

TASK COMPLETED BY: | REV NO.

PLOT FACTOR:1=1
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY



PI	Lambert Coordinate North	Lambert Coordinate East	R (ft)	Δ (deg)	T (ft)	D	L (ft)	PC (sta)	PT (sta)
1D	556,638	2,440,914	170	90	170	33.70	267.04	0.00	267.04
2D	556,481	2,441,197	160	84.475	145.27	35.81	234.88	271.92	506.8
3D	556,858	2,441,434	160	83.745	143.42	35.81	233.66	657.38	891.04
4D	557,642	2,440,449	160	104.896	208.12	35.81	292.90	1798.63	2091.53
5D	557,178	2,440,246	565	23.399	117.00	10.14	230.49	2273.03	2503.52
6D	556,226	2,439,225	435	16.902	64.63	13.17	128.32	3718.00	3846.32
7D	555,674	2,438,905	160	97.980	183.99	35.81	273.75	4235.58	4509.33
8D	555,185	2,440,111	185	83.235	164.35	30.97	268.58	5462.34	5730.92
10D	556,657	2,440,908	185	90	185.00	30.97	290.60	0	290.60
11D	556,501	2,441,192	145	84.475	131.65	39.51	212.86	298.97	511.83
12D	556,855	2,441,415	145	83.745	129.98	39.51	215.20	668.99	884.19
13D	557,618	2,440,455	145	104.896	188.61	39.51	269.46	1787.37	2056.83
14D	557,171	2,440,260	580	23.399	120.11	9.88	235.78	2236.12	2471.9
15D	556,217	2,439,238	420	16.902	62.4	13.64	124.61	3686.35	3810.96
16D	555,681	2,438,927	145	97.98	166.74	39.51	251.73	4197.96	4449.69
17D	555,203	2,440,103	170	83.235	151.03	33.7	250.17	5398.84	5649.01
19D	556,693	2,440,896	210	90	210.00	27.28	329.87	0	329.87
20D	556,536	2,441,180	120	84.475	108.95	47.75	176.16	336.49	512.65
21D	556,851	2,441,379	120	83.745	107.57	47.75	175.5	669.8	845.3
22D	557,579	2,440,465	120	104.896	156.09	47.75	219.86	1749.8	1969.66
23D	557,157	2,440,281	605	23.399	125.28	9.47	247.22	2148.34	2395.56
24D	556,203	2,439,259	395	16.902	58.69	14.51	115.76	3609.97	3725.73
25D	555,894	2,438,963	120	97.98	138	47.75	205.36	4118.06	4323.42
26D	555,235	2,440,092	145	83.235	128.82	39.51	210.73	5275.09	5485.82

NOTES:
1. FOR GENERAL NOTES SEE 10W425-1.

R										
R 0	INITIAL ISSUE	BKE	GCL	HLP	HLP	KWB	RGJ	WDH	KFD44	D
REV. NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ENGR	AS CONST

SCALE: 1"=100' EXCEPT AS NOTED

YARD

DREDGE CELLS
EXISTING / FUTURE CONTOURS AND STAGE D PLAN

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
B.K.ELDER	G.C.LAWSON	B.K.ELDER	H.L.PETTY	K.W.BURNETT	R.G.JOHNSON	W.D.HALL

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-8	R 0

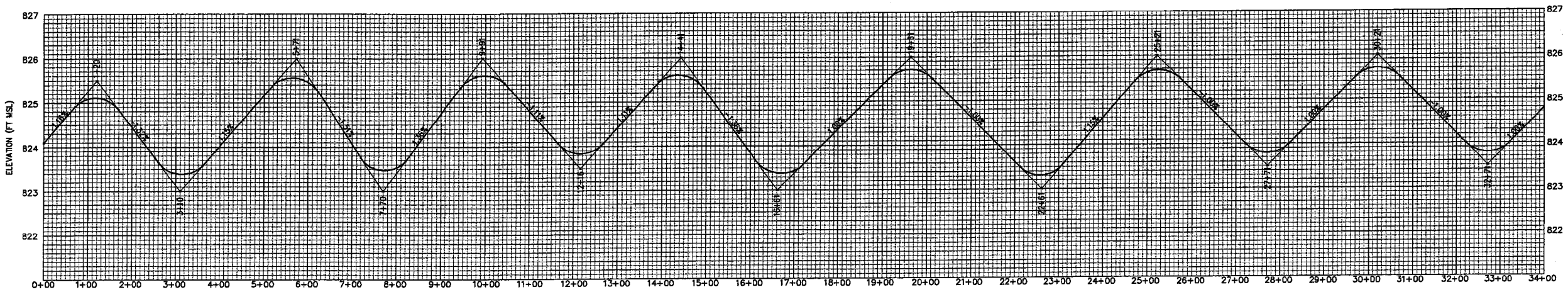
PLOT FACTOR:1=1
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

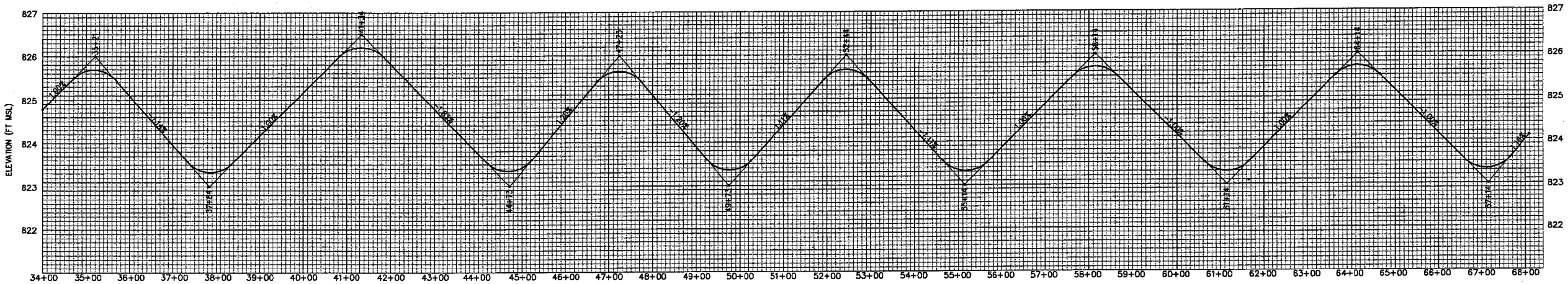
TASK COMPLETED BY: | REV NO.

10W425-9

TVA-00002787



STAGE D3 STATION



STAGE D3 STATION

R								
R 0	BKE	GCL	HLP	HLP	KWB	RGJ	WDH	KF044
INITIAL ISSUE								

SCALE: 1"=1' VERT. & 1"=100' HORIZ. EXCEPT AS NOTED

YARD

DREDGE CELLS
STAGE "D" PROFILE

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
B.K.ELDER	G.C.LAWSON	H.L.PETTY	H.L.PETTY	K.W.BURNETT	R.G.JOHNSON	W.D.HALL

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

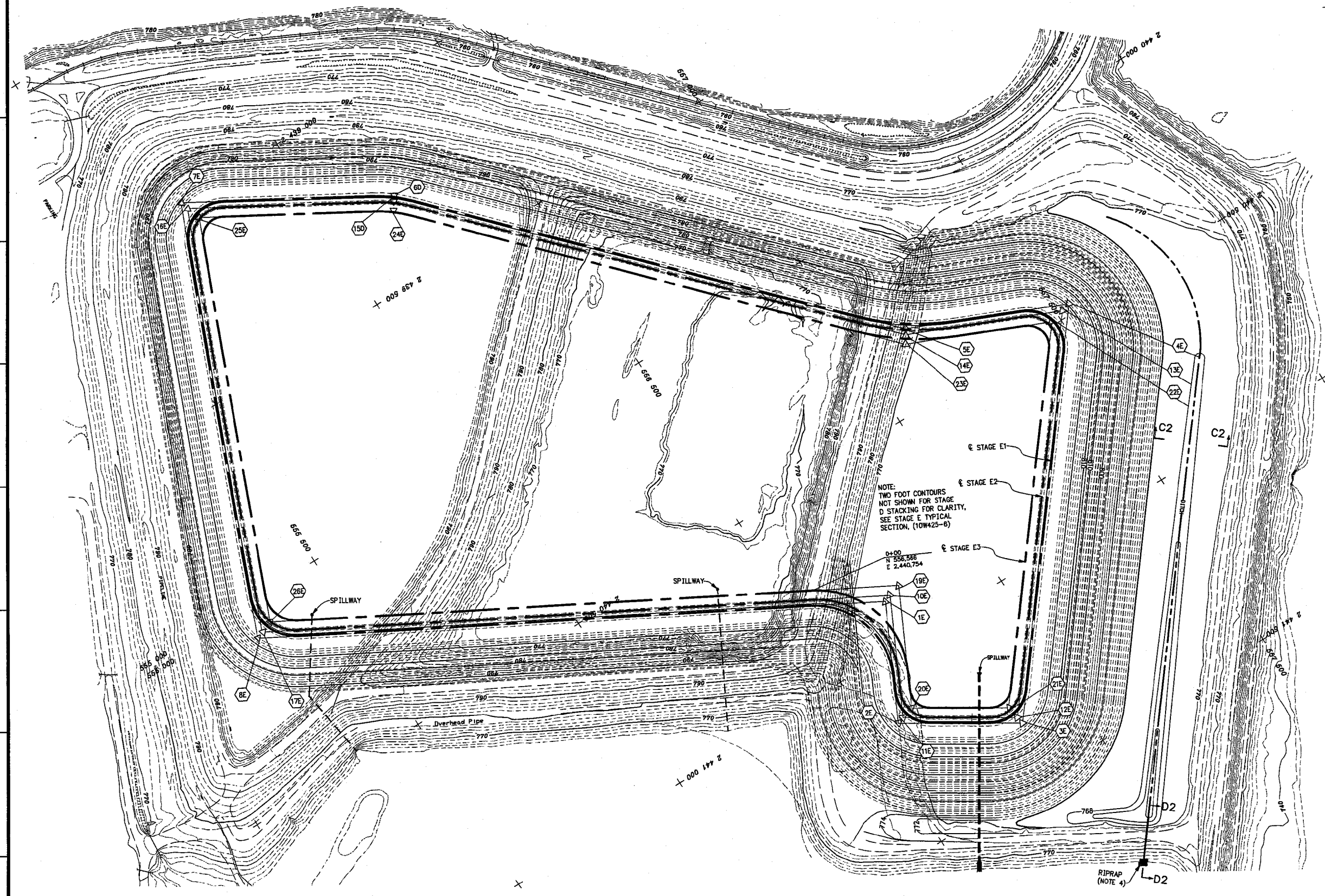
AUTOCAD R14	DATE	36	C	10W425-9	R 0

PLOT FACTOR:1=1
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

TASK COMPLETED BY: | REV NO.

10W425-8



PI	Lambert Coordinate North	Lambert Coordinate East	R (ft)	Δ (deg)	T (ft)	D	L (ft)	PC (sta)	PT (sta)
1E	556,714	2,440,882	210	90	200.49	27.29	320.14	0.00	320.14
2E	556,570	2,441,174	96	84.475	86.25	60.31	139.30	369.19	508.49
3E	556,846	2,441,348	95	83.745	85.16	60.31	138.70	663.97	802.67
4E	557,541	2,440,474	95	104.896	123.57	60.31	173.78	1710.92	1884.7
5E	557,142	2,440,299	630	23.399	130.46	9.09	256.12	2067.16	2323.28
6E	556,190	2,439,279	370	16.902	54.97	15.49	108.49	3534.04	3642.53
7E	555,705	2,438,997	95	97.980	109.25	60.31	162.58	4039.53	4202.11
8E	555,264	2,440,082	120	83.235	106.61	47.75	174.36	5157.27	5331.63
10E	556,734	2,440,875	215	90	205.26	26.65	327.76	0	327.76
11E	556,589	2,441,169	96	84.475	72.64	71.62	117.95	377.6	495.55
12E	556,842	2,441,329	80	83.745	71.71	71.62	117.32	650.38	767.7
13E	557,517	2,440,480	80	104.896	104.06	71.62	146.60	1676.0	1822.6
14E	557,135	2,440,314	645	23.399	133.57	8.88	264.72	2000.6	2265.32
15E	556,183	2,439,293	355	16.902	52.74	16.14	104.18	3474.58	3578.76
16E	555,712	2,439,019	80	97.98	92	71.62	136.94	3979.04	4115.98
17E	555,283	2,440,075	105	83.235	93.28	54.57	152.50	5070.38	5222.88
19E	556,767	2,440,885	240	90	229.13	23.88	365.87	0	365.87
20E	556,622	2,441,159	96	84.475	49.94	104.17	80.65	414.92	495.57
21E	556,837	2,441,295	55	83.745	49.3	104.17	80.42	651.24	731.66
22E	557,477	2,440,490	55	104.896	71.54	104.17	100.68	1639.22	1739.9
23E	557,120	2,440,334	670	23.399	138.74	8.55	273.60	1919.24	2192.84
24E	556,167	2,439,312	330	16.902	49.03	17.38	97.46	3402.41	3499.87
25E	555,725	2,439,056	55	97.98	63.25	104.17	94.00	3898.38	3992.38
26E	555,315	2,440,063	80	83.235	71.07	71.62	116.21	4945.4	5061.61

NOTES:
1. FOR GENERAL NOTES SEE 10W425-1.

R									
R 0	BKE	GCL	HLP	HLP	KWB	RGJ	WDH	KFD44	B
INITIAL ISSUE									

SCALE: 1"=100' EXCEPT AS NOTED

YARD

DREDGE CELLS EXISTING / FUTURE CONTOURS AND STAGE E PLAN

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
B.K.ELDER	G.C.LAWSON	B.K.ELDER	H.L.PETTY	K.W.BURNETT	R.G.JOHNSON	W.D.HALL

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-10	R 0

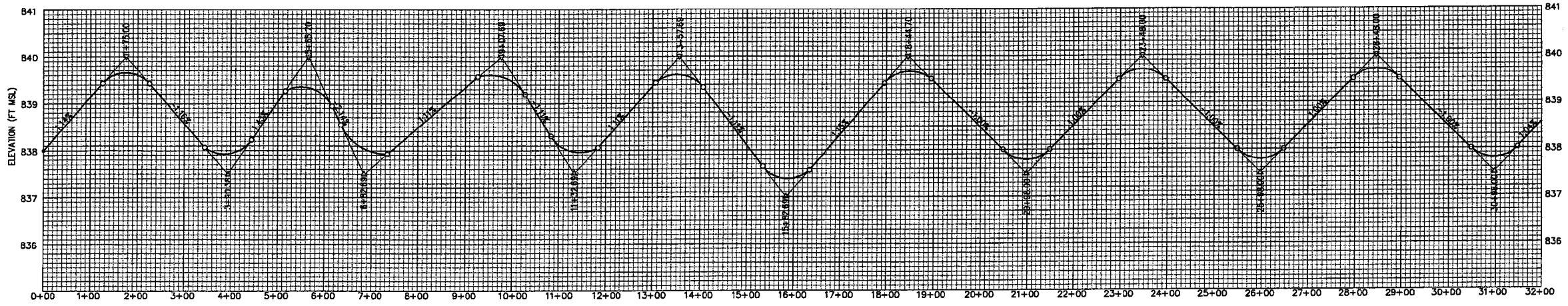
PLOT FACTOR:1=1
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

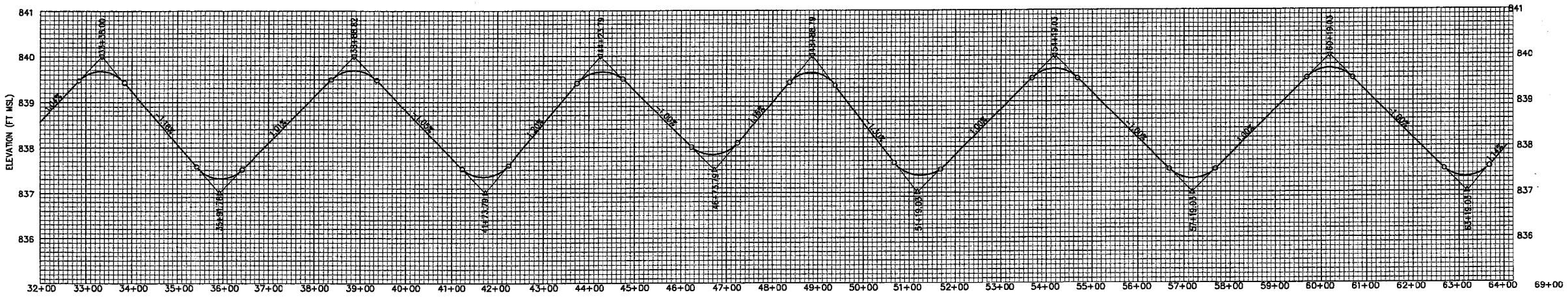
TASK COMPLETED BY: | REV NO.

10425-12

TVA-00002789



STAGE E3 STATION



STAGE E3 STATION

R										
R D		BKE	GCL	HLP	HLP	KWB	RGJ	WDH	KIFD44	D
INITIAL ISSUE										
REV. NO.	DATE	DSGN	DRWN	CHKD	SUPV	SYND	APPD	ISSD	PROJECT ID	AS CONST

SCALE: 1"=1' VERT. & 1"=100' HORIZ. EXCEPT AS NOTED

YARD

DREDGE CELLS
STAGE "E" PROFILE

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
B.K.ELDER	G.C.LAWSON	H.L.PETTY	H.L.PETTY	K.W.BURNETT	R.G.JOHNSON	W.D.HALL

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-11	R 0

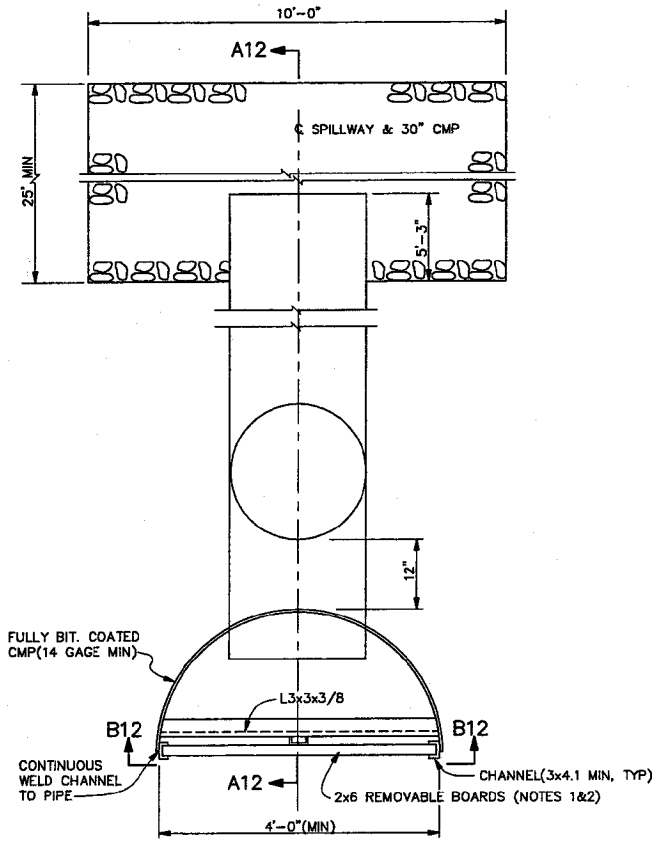
PLOT FACTOR:1=1
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

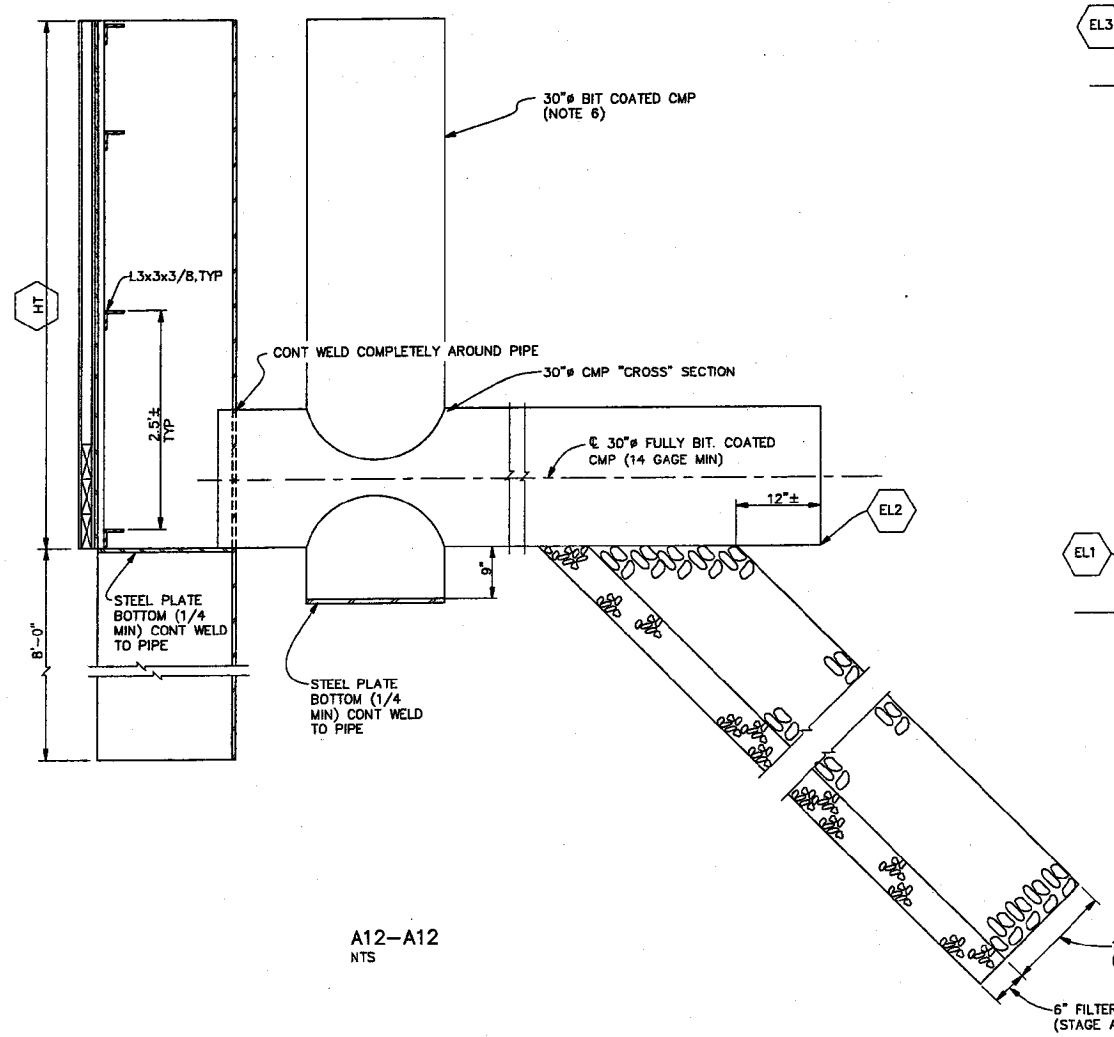
TASK COMPLETED BY: | REV NO.

10425-10

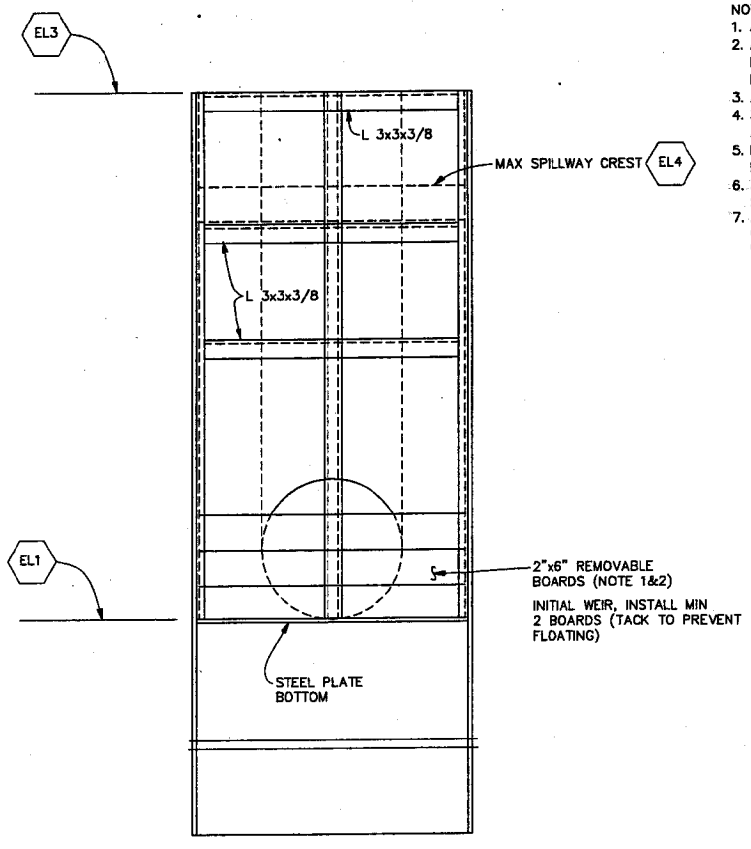
TVA-00002790



PLAN–METAL SPILLWAY
NTS



A12–A12
NTS

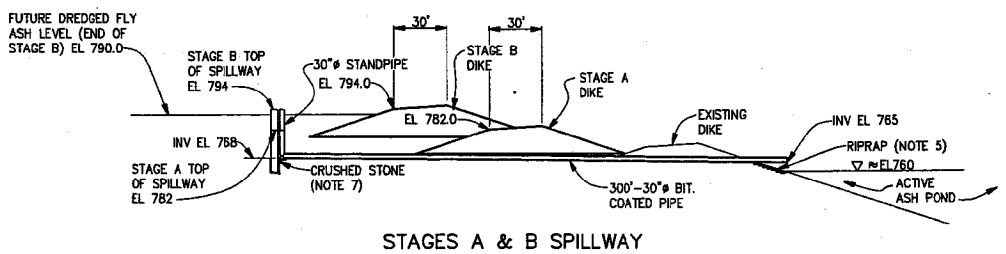


B12–B12
NTS

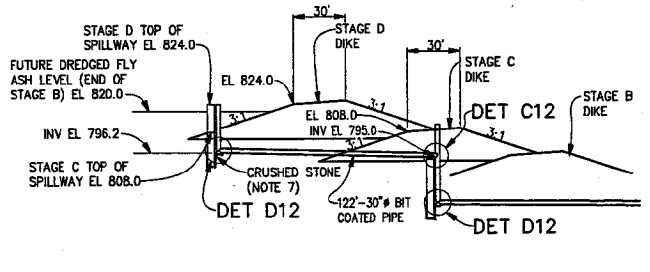
NOTES:
1. ALL TIMBER SHALL BE SOUTHERN PINE NO. 2 DENSE SELECT TIMBER.
2. ALL WOOD SHALL BE PRESSURE TREATED WITH 0.4–0.8 POUNDS OF PRESERAVATIVE PER CUBIC FOOT OF WOOD. THE PRESERVATIVE SHALL BE WOLMAN PRESERVATIVE CCA BY KOPPERS OR EQUAL.
3. ALL NAILS SHALL BE GALVANIZED.
4. 30 INCH CORRUGATED METAL PIPE SHALL BE FULLY BITUMINOUS COATED AND 14 GAGE (MIN) THICKNESS.
5. RIPRAP SHALL CONSIST OF 50% OF THE STONES WEIGHING 100 LBS EACH OR GREATER, PER SECTION 575.
6. 30 INCH CROSS SECTION AND STANDPIPE NOT REQUIRED FOR STAGE E SPILLWAY.
7. A 8' x 6' HOLE SHALL BE EXCAVATED TO A DEPTH OF 8' FOR PLACEMENT OF THE 48" HALF–PIPE, THE AREA IS TO BE BACKFILLED WITH 1032 CRUSHED STONE AND COMPACTED UNTIL A STABLE BASE IS ACHIEVED.

DIMENSION	STAGE				
	A	B	C	D	E
EL1	768.0	768.0	796.2	796.2	825.5
EL2	765.0	765.0	795.0	795.0	825.0
EL3	782.0	794.0	808.0	824.0	840.0
EL4	780.0	792.0	806.0	822.0	838.0
HT	14.0'	26.0'	11.8'	27.8'	14.5'

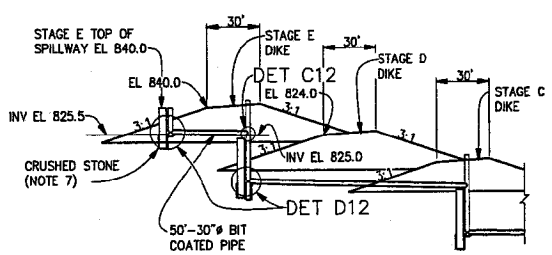
ITEM	A	B	STAGE C	D	E	UNIT
CHANNEL (C3X4.1 MIN)	42	36	36	48	44	LF
ANGLE (L3X3X3/4 MIN)	20	16	16	24	20	LF
STEEL PLATE (1/4" MIN)	114	---	114	---	114	LB
48" DIA. CMP	11	6	10	8	12	LF
30" DIA. CMP CROSS SECT	1	---	1	---	1	EA
30" DIA. CMP TEE SECT.	---	---	1	---	1	EA
30" DIA. CMP	312	12	134	16	62	LF
2" X 6" BOARD	96	96	80	128	96	LF



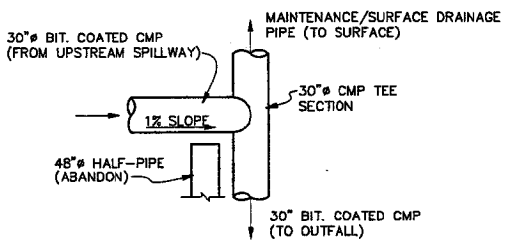
STAGES A & B SPILLWAY



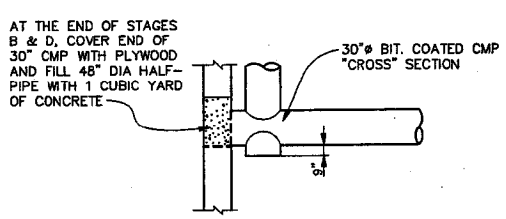
STAGES C & D SPILLWAY



STAGE E SPILLWAY



DETAIL C12
SPILLWAY CONNECTION
1"=5'



DETAIL D12
BOTTOM OF SPILLWAY
1"=5'

R									
R 0	BKE	GCL	HLP	HLP	KWB	RGJ	WDH	KFD44	D
INITIAL ISSUE									
REV. NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST	REV. NO.

SCALE: 1"=40' EXCEPT AS NOTED

YARD

DREDGE CELLS
SPILLWAY / SKIMMER DETAILS

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
B.K.ELDER	G.C.LAWSON	B.K.ELDER	H.L.PETTY	K.W.BURNETT	R.G.JOHNSON	W.D.HALL

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425–12	R 0

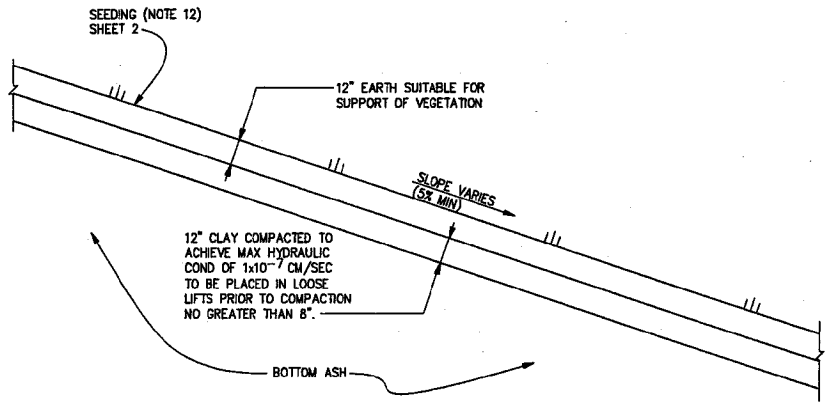
PLOT FACTOR:1=1 W_TVA

C.A.D. DRAWING DO NOT ALTER MANUALLY

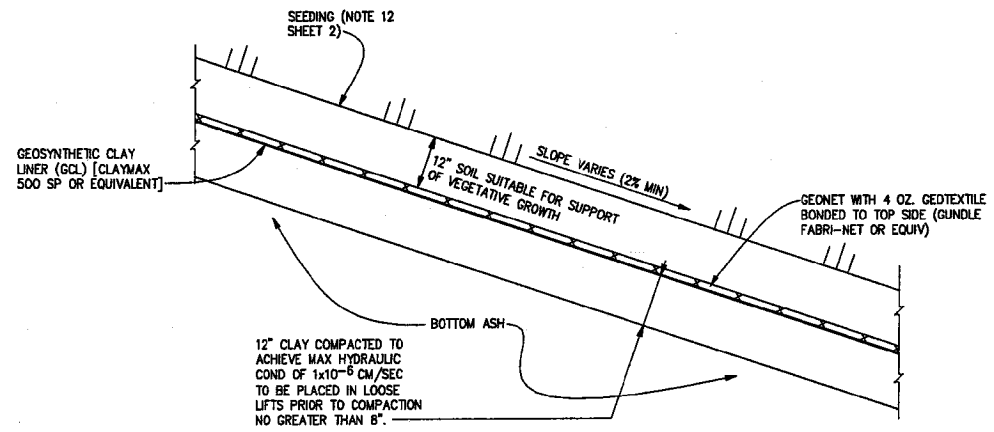
TASK COMPLETED BY: REV NO.

10425–14

TVA-00002791



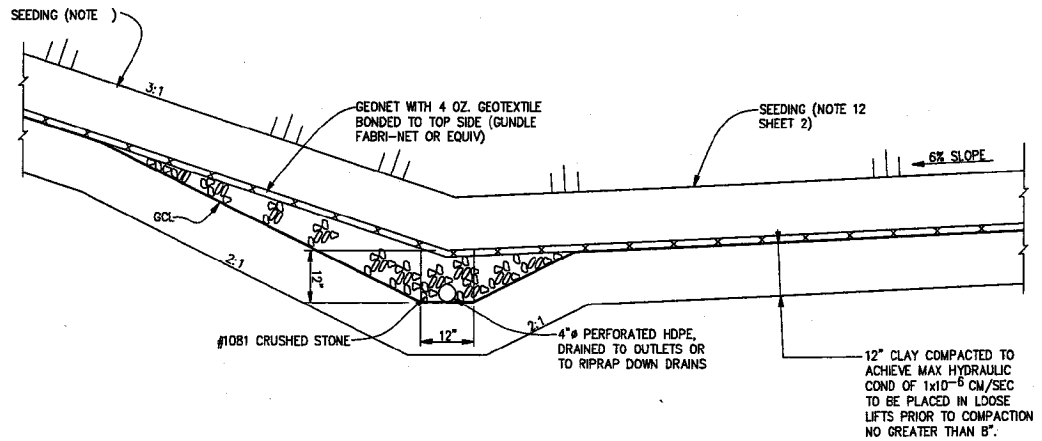
OPTION 1



OPTION 2
3/4" = 1'-0"

DETAIL A13

STAGE	INTERMEDIATE EARTH COVER (CY)	FINAL CLAY COVER (CY)	FINAL EARTH COVER (CY)
A	4,200	29,700	31,100
B	5,050	7,450	6,650
C	13,900	20,700	18,500
D	13,500	20,200	18,100
E	12,800	19,000	17,000
TOP	55,700	83,000	74,300
TOTAL	105,150	180,050	165,650



TYPICAL BERM DITCH CROSS SECTION
FOR OPTION 2 COVER
3/4" = 1'-0"

KIF DREDGE CELL
CHRONOLOGY FOR DIKE CONSTRUCTION
AND DREDGING

YEAR	BOT. ASH PROD. (CY)	DIKE STAGE	B. A. REQD FOR DIKE (CY)	YEAR	FLY ASH PROD. (CY)	DREDGE STAGE	VOL. AVAIL. FOR F. A. (CY)
Present	131,000	A	135,000	Present	281,823	CELLS 1&3	531,600
1995	70,864	A	4,000	1996	291,557	A	332,300
		B	160,000				
1997	70,176	B	93,136	1997	288,724	A	290,520
1998	71,535	B	22,960	1998	294,317	B	356,800
		C1	101,752				
1999	71,482	C1	53,177	1999	294,099	B	64,279
		C2	99,781	2000	290,830	C1	587,497
2000	70,688	C2	81,456				
2001	69,858	C2	10,678	2001	287,416	C1	66,847
		C3	156,652	2002	297,295	C2	565,065
2002	72,259	C3	97,562				
2003	72,347	C3	25,303	2003	297,658	C2	47,201
		D1	96,312	2004	297,222	C3	517,596
2004	72,241	D1	49,268			D1	495,131
		D2	94,385				
2005	72,771	D2	71,412	2005	299,401	D1	465,148
		D3	147,958	2006	303,905	D2	466,758
2006	73,866	D3	146,599				
2007	74,431	D3	72,733	2007	306,229	D2	328,600
		E1	90,859	2008	311,459	D3	429,137
2008	75,702	E1	89,161				
2009	74,625	E1	13,459	2009	307,028	D3	140,049
		E2	86,955	2010	307,246	E1	407,978
2010	74,678	E2	27,789			E2	381,426
		E3	139,285				
2011	74,678	E3	92,398	2011	307,246	E2	315,179
2012	74,678	E3	17,718	2012	307,246	E3	345,826
		STORE*	56,960				
2013	74,678	STORE*	74,678	2013	307,246	E3	46,513
2014	74,678	STORE*	74,678	2014	307,246	STORE*	567,979
TOTAL TO BE STORED			206,316				567,979

* EXCESS ASH TO BE DREDGED/SLUICED INTO A FUTURE ADJACENT CELL AND DRIED FOR STACKING ON TOP OF THE DREDGE CELLS. CELLS WILL BE CAPPED AT END OF FISCAL YEAR 2014.

NOTE: PRODUCTION OF BOTTOM ASH AND FLY ASH ARE BASED ON ESTIMATES PROVIDED BY TVA FOSSIL FUELS.

DIKE CONSTRUCTION/DREDGE OPERATIONS SEQUENCE

DIKE CONSTRUCTION
(BOTTOM ASH)

LIFTS BY LAYER DESIGNATION:																		
	A B	B	B C1	C1 C2	C2	C2 C3	C3	C3 D1	D1 D2	D2 D3	D3	D3 E1	E1	E1 E2	E2 E3	E3	E3	STORE	STORE

1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015

CELLS 1&3 A	A B	B C1	C1 C2	C2 C3 D1	D1 D2	D2 D3	D3 E1 E2	E2 E3	E3 STORE

DREDGE OPERATIONS
(FLY ASH)

NOTES:
1. FOR NOTES SEE 10W425-2.

R											
R 0		BKE	GCL	BKE	HLP	KWB	RGJ	WDH	KIF044		D
INITIAL ISSUE											

REV. NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ENGR	AS CONST	REV. NO.

SCALE: 3/8" = 1'-0" EXCEPT AS NOTED

YARD

DREDGE CELLS COVER DETAILS AND SCHEDULE

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
B.K.ELDER	G.C.LAWSON	B.K.ELDER	H.L.PETTY	K.W.BURNETT	R.G.JOHNSON	W.D.HALL

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-13	R 0

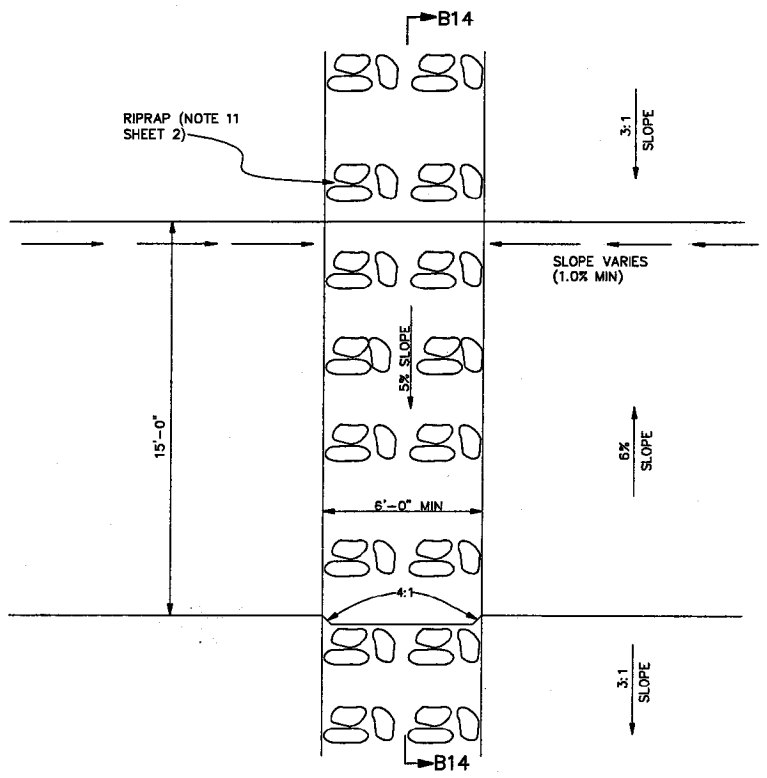
PLOT FACTOR:1=1
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

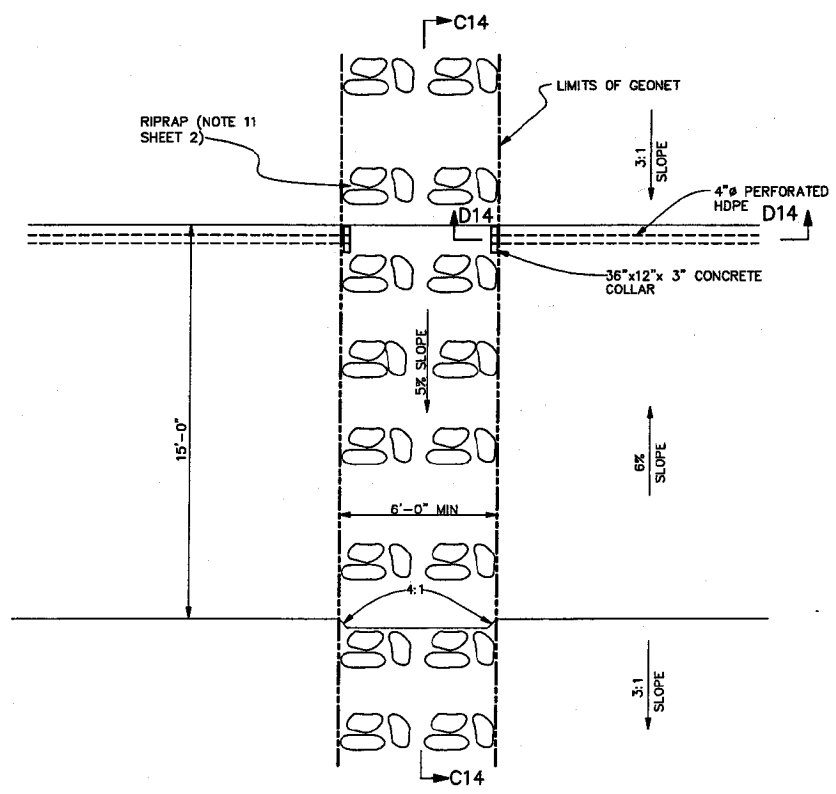
TASK COMPLETED BY: | REV NO.

10425-15

TVA-00002792

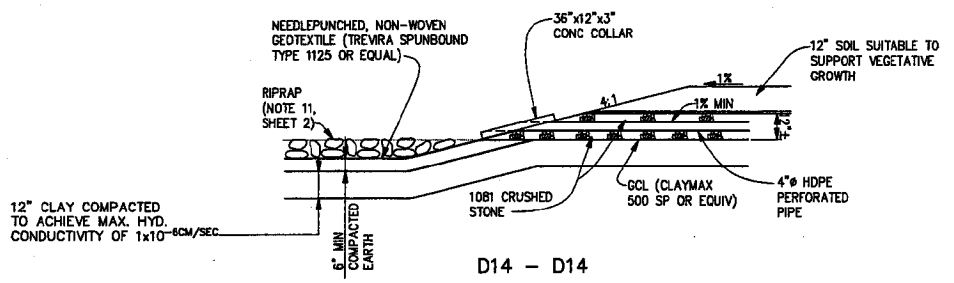


RIPRAP DOWN DRAIN COVER OPTION 1

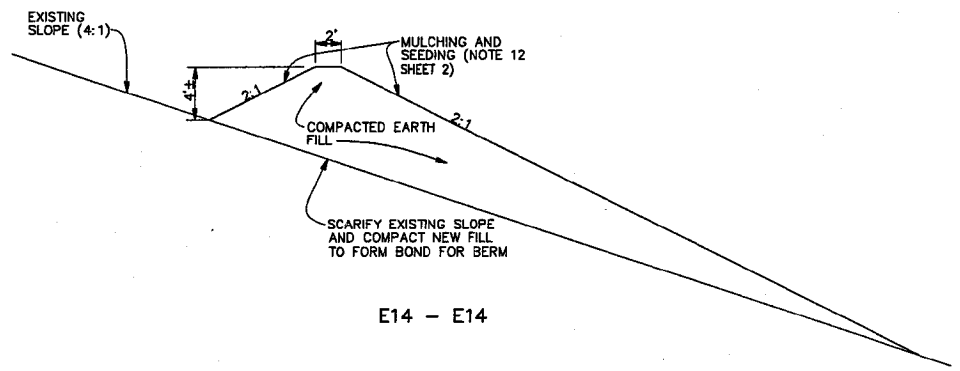


RIPRAP DOWN DRAIN COVER OPTION 2

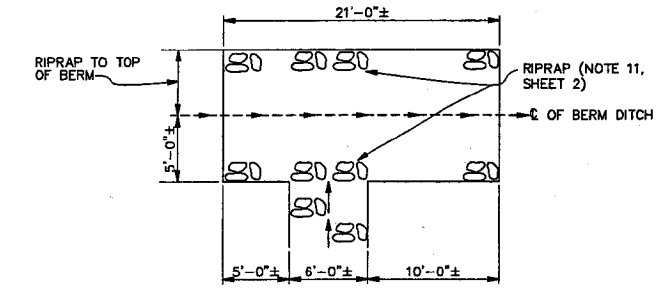
DETAIL A14



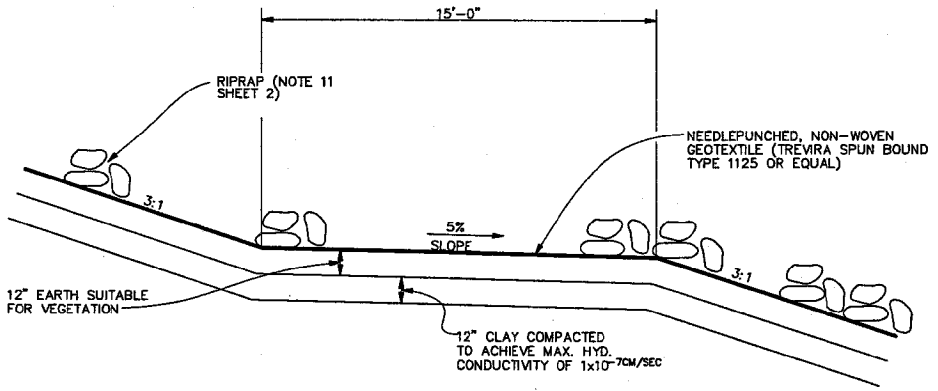
D14 – D14



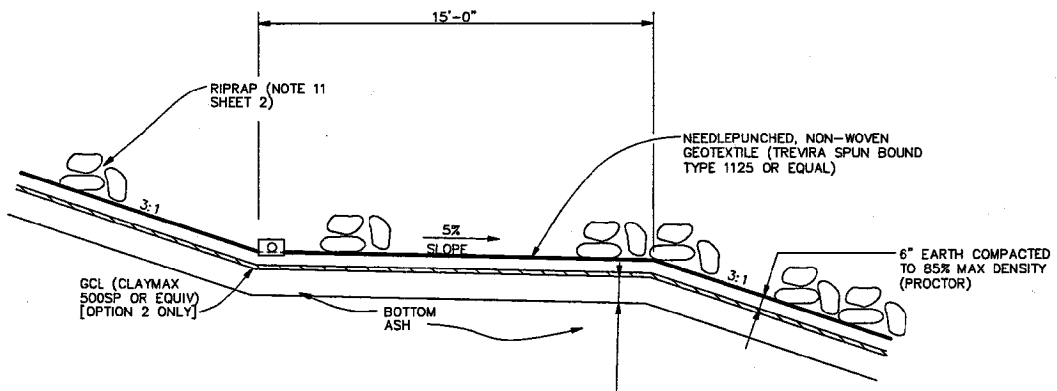
E14 – E14



DETAIL F14
3/16" = 1'-0"



B14 – B14



C14 – C14

R										
R 0		BKE	GCL	BKE	HLP	KWB	RGJ	WDH	KIF044	D
INITIAL ISSUE										
REV. NO.	DATE	DSGN	DRWN	CHKD	SUPV	REVWD	APPD	ISSD	PROJECT ID	AS CONST

SCALE: 3/8" = 1'-0" EXCEPT AS NOTED

YARD

DREDGE CELLS
TYPICAL DRAINAGE
DETAILS

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
B.K.ELDER	G.C.LAWSON	B.K.ELDER	H.L.PETTY	K.W.BURNETT	R.G.JOHNSON	W.D.HALL

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-14	R 0

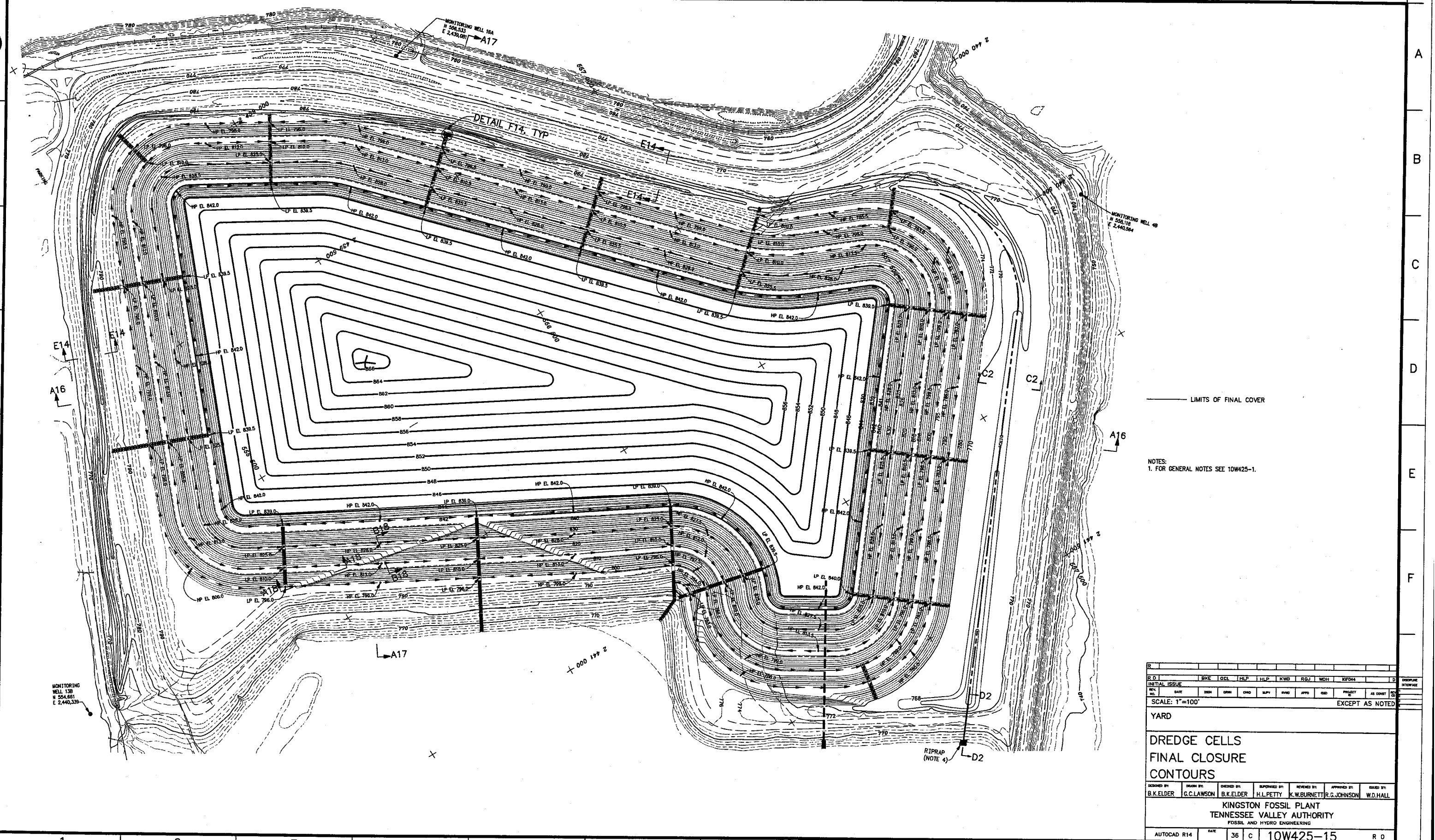
PLOT FACTOR:1=1
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

TASK COMPLETED BY: | REV NO.

10425-16

TVA-00002793



R												
R 0		BKE	GCL	HLP	HLP	KWB	RGJ	WDH	KFD44			D
INITIAL ISSUE												DISCIPLINE INTERFACE
REV. NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST	REV. NO.	

SCALE: 1"=100' EXCEPT AS NOTED

YARD

DREDGE CELLS FINAL CLOSURE CONTOURS

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
B.K.ELDER	G.C.LAWSON	B.K.ELDER	H.L.PETTY	K.W.BURNETT	R.G.JOHNSON	W.D.HALL

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

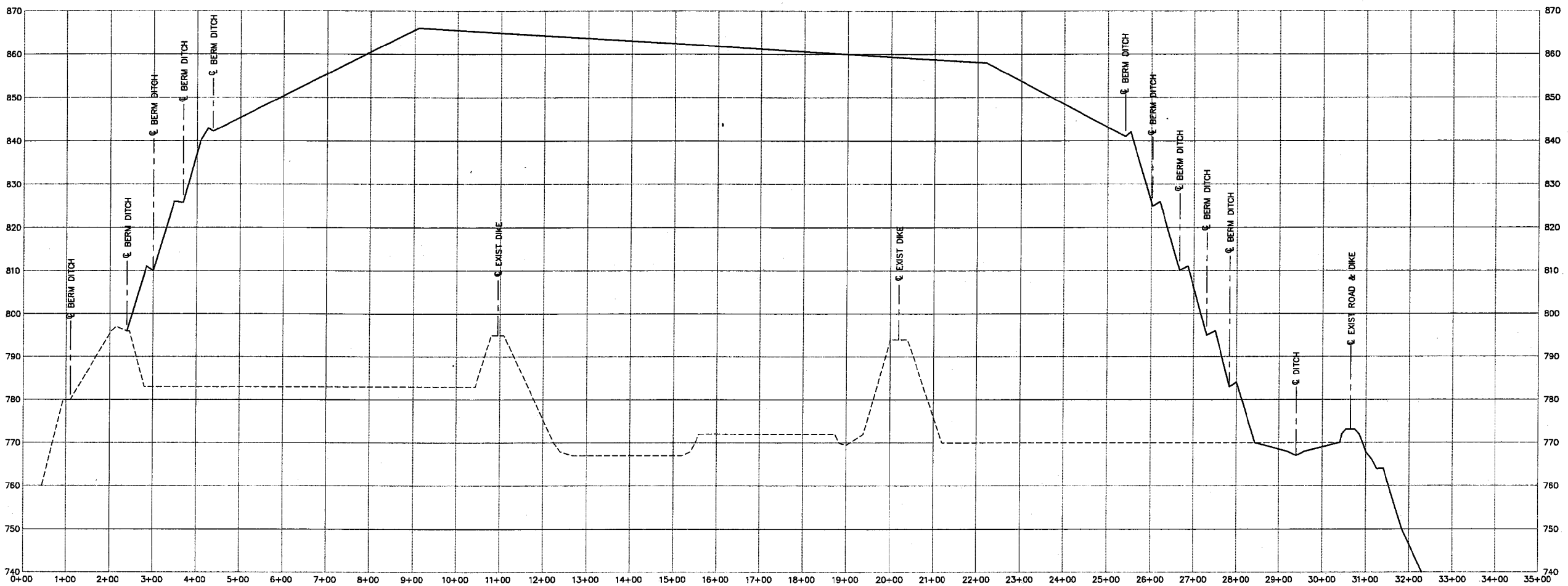
AUTOCAD R14	DATE	36	C	10W425-15	R 0

PLOT FACTOR:1=1
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

TASK COMPLETED BY:	REV NO.

10425-17



A16 – A16
1"=100' HORIZ
1"=10' VERT

R										
R 0 INITIAL ISSUE	BKE	GCL	HLP	HLP	KWB	RGJ	WDH	KIF044		D
REV. NO. / DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST	REV. NO.

SCALE: AS NOTED — EXCEPT AS NOTED

YARD

DREDGE CELLS
CROSS-SECTION

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
B.K.ELDER	G.C.LAWSON	H.L.PETTY	H.L.PETTY	K.W.BURNETT	R.G.JOHNSON	W.D.HALL

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

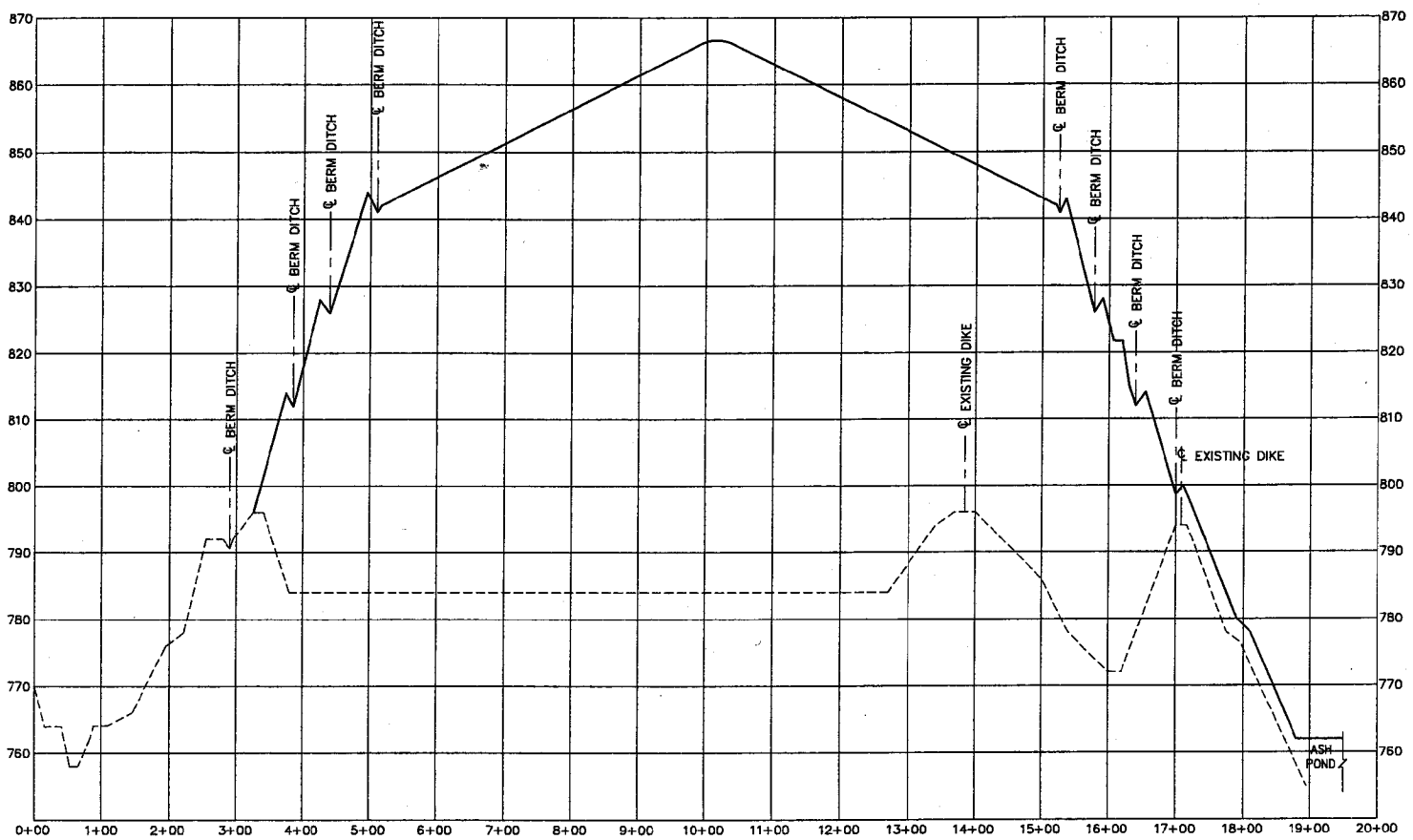
AUTOCAD R14	DATE	36	C	10W425-16	R 0

10426-18

TASK COMPLETED BY: | REV NO.

PLOT FACTOR:1=1
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY



A17 – A17
1"=100' HORIZ
1"=10' VERT

R 0 | BKE | GCL | HLP | HLP | KWB | RGJ | WDH | KF044 | D
INITIAL ISSUE

SCALE: AS NOTED EXCEPT AS NOTED

YARD

DREDGE CELLS
CROSS-SECTION

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
B.K.ELDER	G.C.LAWSON	H.L.PETTY	H.L.PETTY	K.W.BURNETT	R.G.JOHNSON	W.D.HALL

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

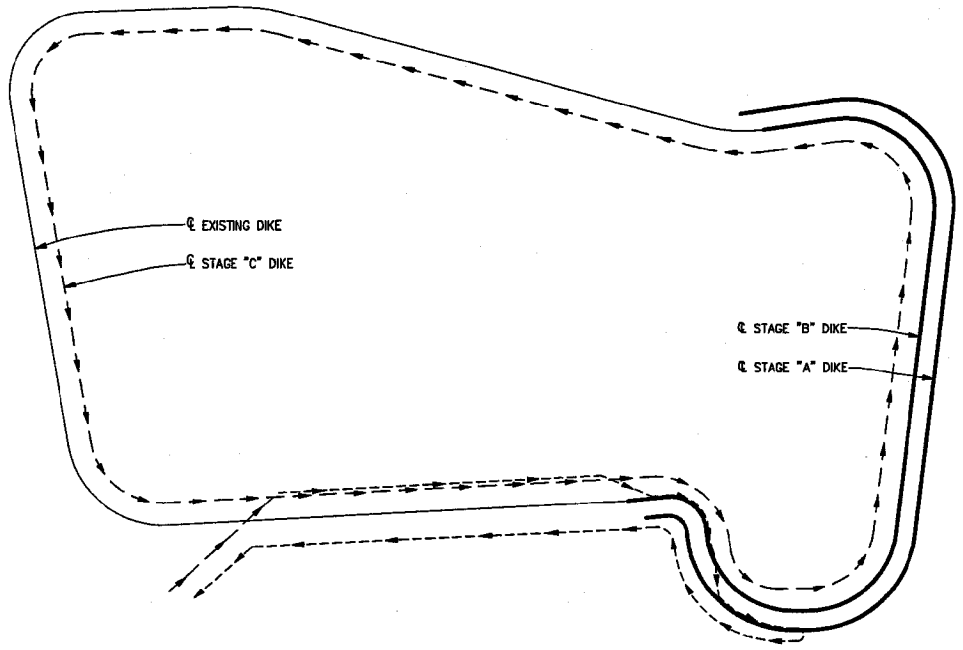
AUTOCAD R14 | DATE | 36 | C | 10W425-17 | R 0

10425-19

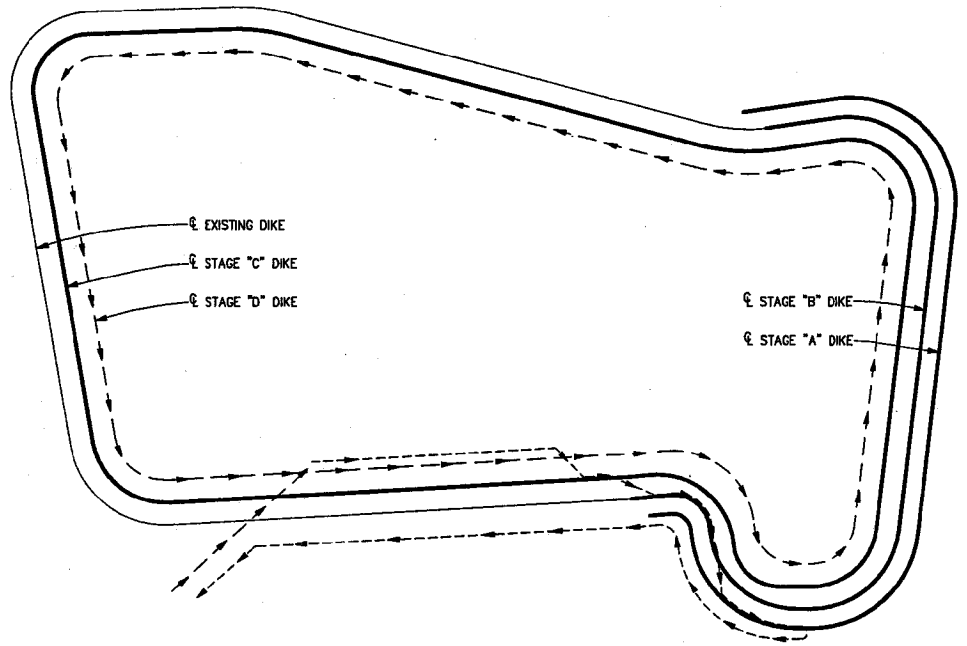
TASK COMPLETED BY: | REV NO.

PLOT FACTOR:1=1
W_TVA

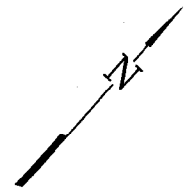
C.A.D. DRAWING
DO NOT ALTER MANUALLY

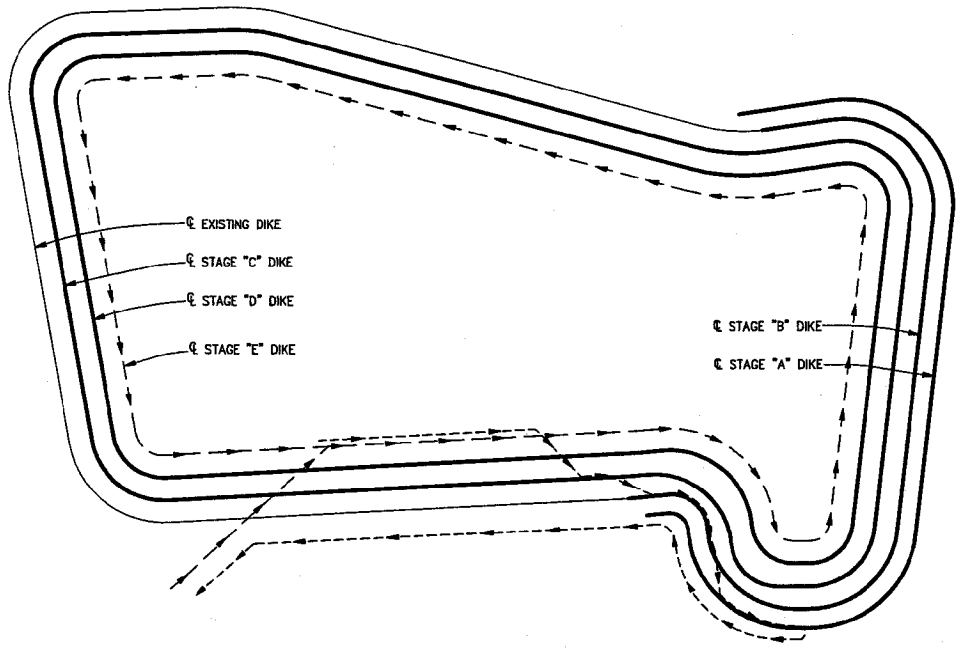


PLAN – STAGE "C"

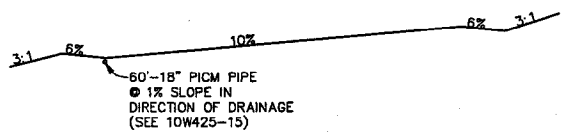


PLAN – STAGE "D"

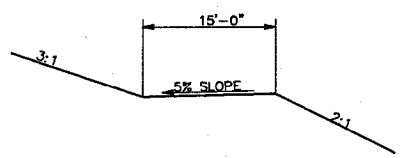




PLAN – STAGE "E"



A18 – A18
NTS



B18 – B18
NTS

RETURN (EMPTY) ROUTE
DELIVERY (FULL) ROUTE

R										
R.O.	BKE	GCL	HLP	HLP	KWB	RGJ	WDH	KF044		D
INITIAL ISSUE										

REV. NO.	DATE	DESCR	DRWN	CHKD	SUPV	SYSD	APPD	ISSD	PROJECT ENGR	AS CONST

SCALE: 1"=200' EXCEPT AS NOTED

YARD

DREDGE CELLS EQUIPMENT ROUTING AND HAUL ROAD DETAILS

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
B.K.ELDER	G.C.LAWSON	H.L.PETTY	H.L.PETTY	K.W.BURNETT	R.G.JOHNSON	W.D.HALL

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-18	R 0

PLOT FACTOR:1=1
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

TASK COMPLETED BY: | REV NO.

10425-20

DRAWING INDEX

DRAWING NO.	DRAWING TITLE
10W425-20	DREDGE CELL LATERAL EXPANSION INDEX AND LEGEND
10W425-21	DREDGE CELL LATERAL EXPANSION SITE LOCATION PLAN
10W425-22	DREDGE CELL LATERAL EXPANSION PHASING SHEET 1
10W425-23	DREDGE CELL LATERAL EXPANSION PHASING SHEET 2
10W425-24	PHASE 1 DREDGE CELL LATERAL EXPANSION LAYOUT PLAN SHEET 1
10W425-25	PHASE 2 DREDGE CELL LATERAL EXPANSION LAYOUT PLAN SHEET 2
10W425-26	DREDGE CELL EXISTING CONDITIONS AND DRAINAGE LAYER SHEET 1
10W425-27	DREDGE CELL EXISTING CONDITIONS AND DRAINAGE LAYER SHEET 2
10W425-28	DREDGE CELL EXISTING CONDITIONS AND DRAINAGE LAYER SHEET 3
10W425-29	DREDGE CELL EXISTING CONDITIONS AND DRAINAGE LAYER SHEET 4
10W425-30	DREDGE CELL EXISTING CONDITIONS AND DRAINAGE LAYER SHEET 5
10W425-31	DREDGE CELL EXISTING CONDITIONS AND DRAINAGE LAYER SHEET 6
10W425-32	DREDGE CELL EXISTING CONDITIONS AND DRAINAGE LAYER SHEET 7
10W425-33	DREDGE CELL EXISTING CONDITIONS AND DRAINAGE LAYER SHEET 8
10W425-34	DREDGE CELL LATERAL EXPANSION STAGE 1 SHEET 1 (665-780)
10W425-35	DREDGE CELL LATERAL EXPANSION STAGE 1 SHEET 2
10W425-36	DREDGE CELL LATERAL EXPANSION STAGE 1 SHEET 3
10W425-37	DREDGE CELL LATERAL EXPANSION STAGE 1 SHEET 4
10W425-38	DREDGE CELL LATERAL EXPANSION STAGE 2 SHEET 1 (780-810)
10W425-39	DREDGE CELL LATERAL EXPANSION STAGE 2 SHEET 2
10W425-40	DREDGE CELL LATERAL EXPANSION STAGE 2 SHEET 3
10W425-41	DREDGE CELL LATERAL EXPANSION STAGE 2 SHEET 4
10W425-42	EXISTING DREDGE CELL STAGE 3 SHEET 1 (810-840)
10W425-43	EXISTING DREDGE CELL STAGE 3 SHEET 2 (810-840)
10W425-44	DREDGE CELL LATERAL EXPANSION STAGE 3 SHEET 3 (810-840)
10W425-45	DREDGE CELL LATERAL EXPANSION STAGE 3 SHEET 4 (810-840)
10W425-46	DREDGE CELL LATERAL EXPANSION STAGE 3 SHEET 5 (810-840)
10W425-47	DREDGE CELL LATERAL EXPANSION STAGE 3 SHEET 6 (810-840)
10W425-48	EXISTING DREDGE CELL STAGE 4 SHEET 1 (840-868)
10W425-49	EXISTING DREDGE CELL STAGE 4 SHEET 2
10W425-50	DREDGE CELL LATERAL EXPANSION STAGE 4 SHEET 3 (840-870)
10W425-51	DREDGE CELL LATERAL EXPANSION STAGE 4 SHEET 4 (840-870)
10W425-52	DREDGE CELL LATERAL EXPANSION STAGE 4 SHEET 5
10W425-53	DREDGE CELL LATERAL EXPANSION STAGE 4 SHEET 6
10W425-54	DREDGE CELL LATERAL EXPANSION STAGE 5 SHEET 1 (EL 870-900)
10W425-55	DREDGE CELL LATERAL EXPANSION STAGE 5 SHEET 2 (EL 870-900)
10W425-56	DREDGE CELL LATERAL EXPANSION STAGE 5 SHEET 3
10W425-57	DREDGE CELL LATERAL EXPANSION STAGE 5 SHEET 4
10W425-58	DREDGE CELL LATERAL EXPANSION STAGE 6 SHEET 1 (900-960)
10W425-59	DREDGE CELL LATERAL EXPANSION STAGE 6 SHEET 2
10W425-60	DREDGE CELL LATERAL EXPANSION STAGE 6 SHEET 3
10W425-61	DREDGE CELL LATERAL EXPANSION STAGE 6 SHEET 4
10W425-62	DREDGE CELL LATERAL EXPANSION SECTIONS SHEET 1
10W425-63	DREDGE CELL DREDGED FLY ASH/DRY FLY ASH DISPOSAL OPTION SECTIONS SHEET 2
10W425-64	DREDGE CELL EXPANSION DREDGED FLY ASH/DRY FLY ASH DISPOSAL OPTION SHEET 1
10W425-65	DREDGE CELL LATERAL EXPANSION PHASE 2/3 TYPICAL CROSS SECTION & DETAILS
10W425-66	DREDGE CELL LATERAL EXPANSION DETAILS SHEET 1
10W425-67	DREDGE CELL LATERAL EXPANSION METAL SPILLWAY DETAILS SHEET 2
10W425-68	DREDGE CELL LATERAL EXPANSION PHASE 2/3 TYPICAL CROSS SECTION & DETAILS
10W425-69	DREDGE CELL LATERAL EXPANSION DETAILS WET CAST GYPSUM DIKE RAISING SHEET 4
10W425-70	ASH DISPOSAL AREA LATERAL EXPANSION WEIR & SKIMMER DETAILS
10W425-71	DREDGE CELL LATERAL EXPANSION DITCH DETAILS & MISC DETAILS SHEET 1
10W425-72	DREDGE CELL EXPANSION TYPICAL EXPANSION TYPICAL SECTIONS - FLY ASH OPTION STAGES 1-5
10W425-73	EXISTING DREDGE CELL UNDERDRAIN INSTALLATION ON EXISTING SLOPE EL 760-795
10W425-74	DREDGE CELL LATERAL EXPANSION COMPACTED CLAY DETAILS FINAL COVER
10W425-75	DREDGE CELL LATERAL EXPANSION GEOCOMPOSITE FINAL COVER DETAILS
10W425-76	DREDGE CELL LATERAL EXPANSION FINAL COVER DRAINAGE PLAN AND SCHEDULE
10W425-77	DREDGE CELL LATERAL EXPANSION WEIR REPLACEMENT OVERALL PLAN
10W425-78	DREDGE CELL LATERAL EXPANSION WEIR REPLACEMENT INTITIAL DIKE LAYOUT
10W425-79	DREDGE CELL LATERAL EXPANSION WEIR REPLACEMENT FINAL DIKE & WEIR LAYOUT
10W425-80	DREDGE CELL LATERAL EXPANSION WEIR REPLACEMENT CROSS SECTION & DETAILS
10W425-81	INLET WATER CONTROL STRUCTURE DETAIL

LEGEND

EXISTING		NEW
●	BENCH MARK	NA
580	GRADE CONTOUR	580
	ASPHALT ROAD	
	GRAVEL ROAD	
	RAILROAD TRACK	NA
SD-15"	STORM SEWER	SD-15"
	OVERHEAD ELECTRICAL UTILITY POLE	
•	LIGHT POLE	•
⊠	OVERHEAD ELECTRICAL UTILITY TOWER	NA
OE	OVERHEAD UTILITY LINES	OE
NA	ACCESS ROUTE	➔
NA	℄ DITCH	
NA	TERRACE DITCH	
NA	LET DOWN CHANNEL	
NA	METAL SPILLWAY	
NA	POND DISCHARGE WEIR W/SKIMMER	◎
NA	SURFACE WATER COMPLIANCE MONITORING POINT	●
NA	SILT FENCE	S S
× 436.5	SPOT ELEVATION	430.5
⊕	PIEZOMETER	⊕
⊕	SOIL BORING	◈
●	MONITORING WELL	NA
NA	PERMIT BOUNDARY	
NA	TOE DRAIN	UD-6"
NA	FORCEMAIN	FM
NA	MANHOLE	DMH
	TVA RESERVATION BOUNDARY	NA
NA	EARTH	
NA	ASH	
NA	GYPSUM	
NA	RANDOM SOIL	
NA	SELECT SOIL	
NA	CLAY	
NA	RIP RAP	
NA	FINAL COVER/ VEGATATIVE LAYER	

BENCH MARKS

STATION	NORTHING	EASTING	ELEVATION
ASH-10	N 555847.26	E 2440155.92	795.44
ASH-25	N 554992.49	E 2440317.38	795.07
ASH-26	N 556411.74	E 2440890.62	794.13
ASH-27	N 555650.29	E 2442663.70	763.48
ASH-28	N 553804.15	E 2441106.67	765.01
ASH-29	N 554404.56	E 2441901.34	763.58
ASH-3	N 554059.57	E 2442837.34	765.03
ASH-30	N 555663.76	E 2440392.74	804.90
ASH-4	N 555226.29	E 2442813.17	764.73
BM-3	N 554448.02	E 2441855.58	764.54

SOIL BORING NEW

STATION	NORTHING	EASTING	ELEVATION
B1	N 556952.5	E 2439763.5	781.8
B2	N 556902.7	E 2439813.7	795.2
B-3	N 556858.8	E 2439865.4	810.8
B-4	N 556619.1	E 2440896.8	810.6
B-5	N 555593.8	E 2440245.5	810.2
B-5A	N 555596.7	E 2440246.9	810.2
B-6	N 555292.2	E 2439807.8	809.5
B-8A	N 554787.1	E 2440526.3	773.6
B-9	N 554857.6	E 2442197.4	764.4
B-10	N 554428.1	E 2441665.3	762.6
B-11	N 554760.7	E 2442843.6	765.0
B-12	N 556266.2	E 2442463.6	763.9

MONITORING WELLS

STATION	NORTHING	EASTING
6A	N 554403	E 2442891
4B	N 558118	E 2440564
16A	N 556533	E 2439081
13B	N 554657	E 2440311

SOIL BORING EXISTING

STATION	NORTHING	EASTING	ELEVATION
SS-35	N 554375	E 2442873	795.44
SS-36	N 554516	E 2442871	795.07
SS-37	N 554271	E 2442874	794.13
SS-38	N 554439	E 2442892	763.48
AH-1	N 554084	E 2442869	765.01
AH-2	N 554714	E 2442873	763.58
AH-3	N 554917	E 442874	765.03
AH-4	N 555118	E 2442875	804.90
AH-5	N 555226	E 2442862	764.73
AH-6	N 555606	E 2442732	764.54
AH-7	N 555985	E 2442599	795.44
AH-8	N 556364	E 2442464	795.07
AH-9	N 556743	E 2442328	794.13
AH-10	N 557082	E 2441965	763.48
AH-11	N 557335	E 2441532	765.01
AH-12	N 557808	E 2440750	763.58
AH-13	N 553906	E 2442640	765.03
AH-14	N 553673	E 2441862	804.90

R 0 | DRS | BSI | WPT | HLP | REP | DLL
ISSUED FOR DREDGE CELL EXPANSION

SCALE: NONE EXCEPT AS NOTED

YARD

DREDGE CELL LATERAL EXPANSION INDEX AND LEGEND

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R.E. PURKEY	D.L. LUNDY	

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

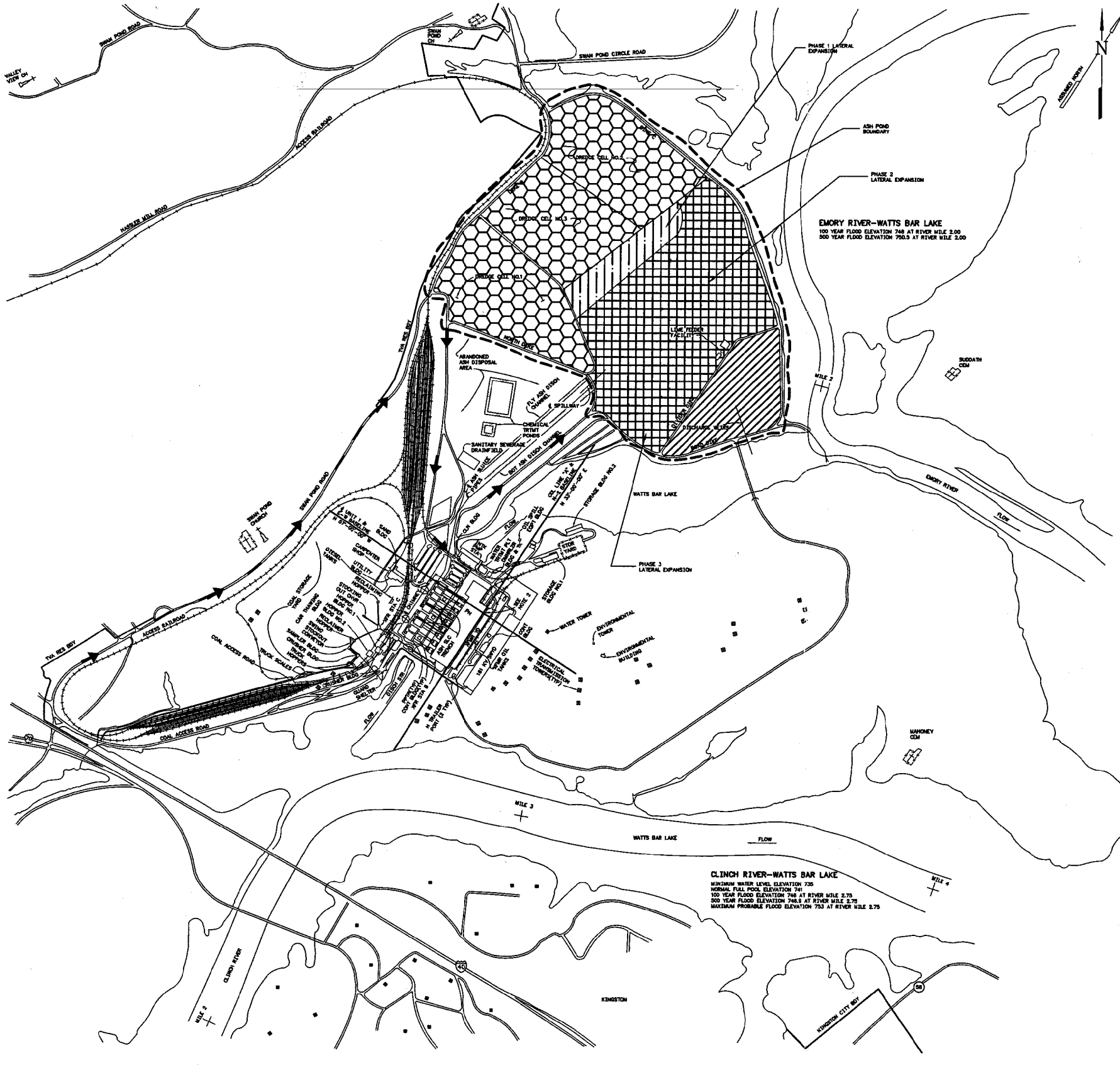
AUTOCAD R14 | DATE | 36 | C | 10W425-20 | R 0

PARSONS | 0
TASK COMPLETED BY: | REV NO.

PLOT FACTOR:1
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

TVA-00002798



TOPOGRAPHY TRACED BY M.P. TERMON 1/30/1981

SITE PLAN- KINGSTON FOSSIL PLANT

R												
R 0		DRS	BSB	WPT	HLP	REP	JGA					
ISSUED FOR DREDGE CELL EXPANSION												
REV. NO.	DATE	DESIGN	DRWN	CHKD	SUPV	REVWD	APPD	ISSD	PROJECT ID	AS CONST		

SCALE: 1"=100' EXCEPT AS NOTED

YARD

DREDGE CELL LATERAL EXPANSION SITE LOCATION PLAN

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R.E. PURKEY	J.G. ADAIR	

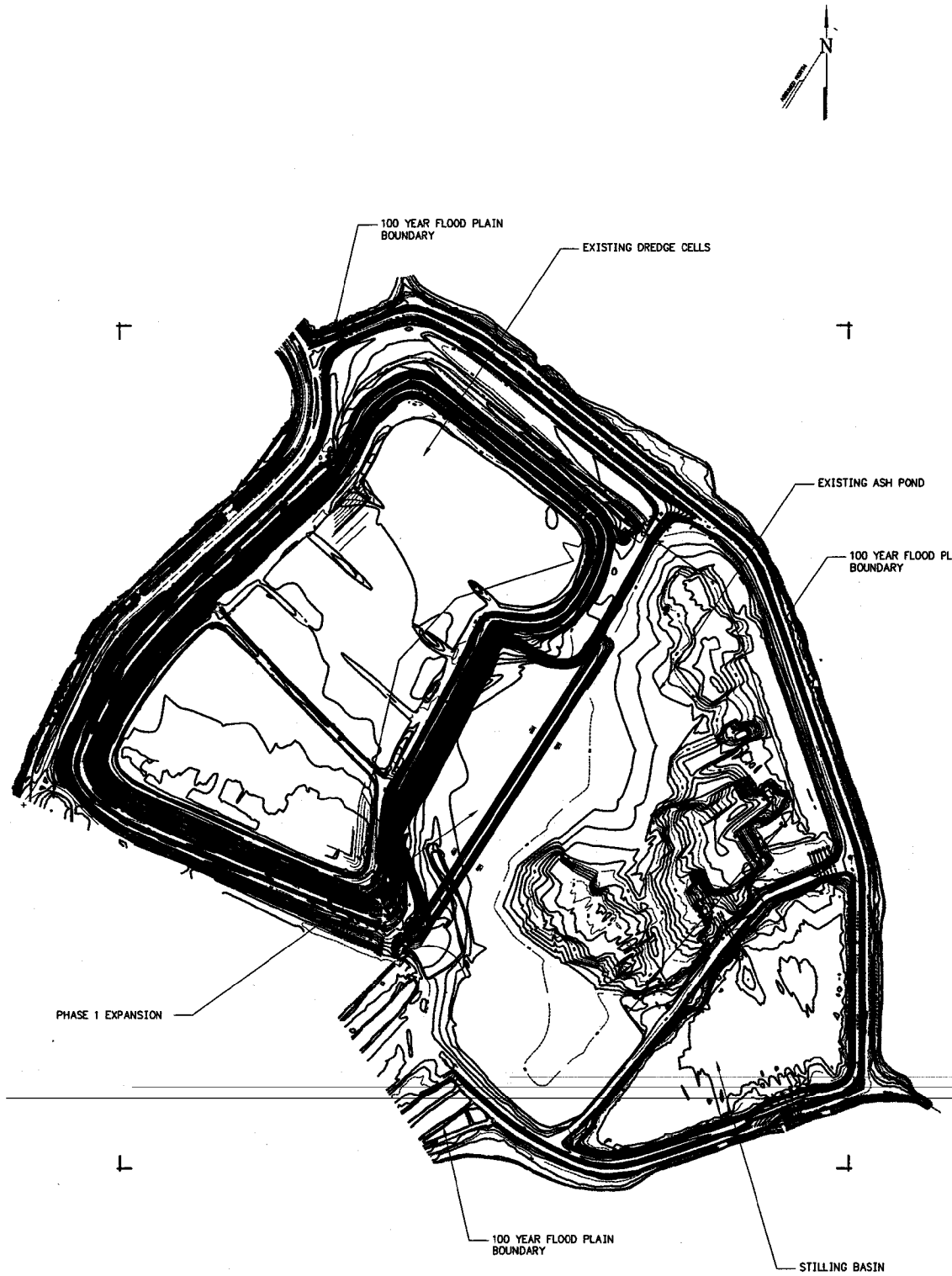
KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE 04/28/81	36	C	10W425-21	R 0

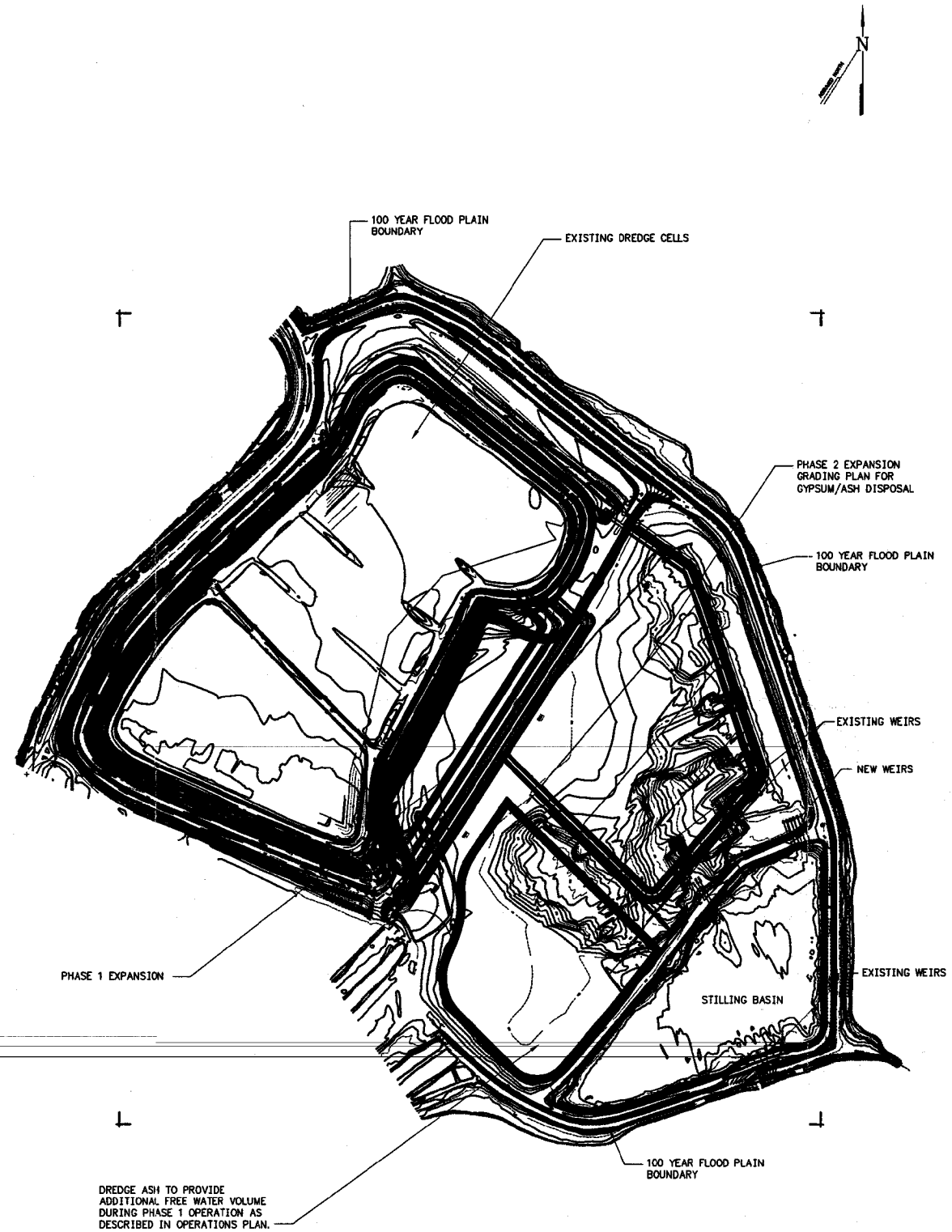
PARSONS	0	THIS DRAWING HAS BEEN DEVELOPED FROM : (10W200-01 R4)
TASK COMPLETED BY:	REV NO.	

PLOT FACTOR:1200 W_TVA

C.A.D. DRAWING DO NOT ALTER MANUALLY



EXISTING CONDITIONS 2004



PHASE 2 EXPANSION

NOTES:

1. FOR DRAWING INDEX AND LEGEND, SEE DRAWING 10W425-20.

2. DRAWINGS 10W425-22 AND -23 DEPICT PHASING OF EXPANSION CONSTRUCTION. CONSTRUCTION DRAWINGS BEGIN WITH 10W425-26.

EMORY RIVER-WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00

REV NO.	DATE	DRN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST	REV NO.
R 0		DRS	BSB	WPT	HLP	REP	JGA			
ISSUED FOR DREDGE CELL EXPANSION										

DISCIPLINE INTERFACE

SCALE: 1"=300' EXCEPT AS NOTED

YARD

DREDGE CELL LATERAL EXPANSION PHASING SHEET 1

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R.E. PURKEY	J.G. ADAIR	

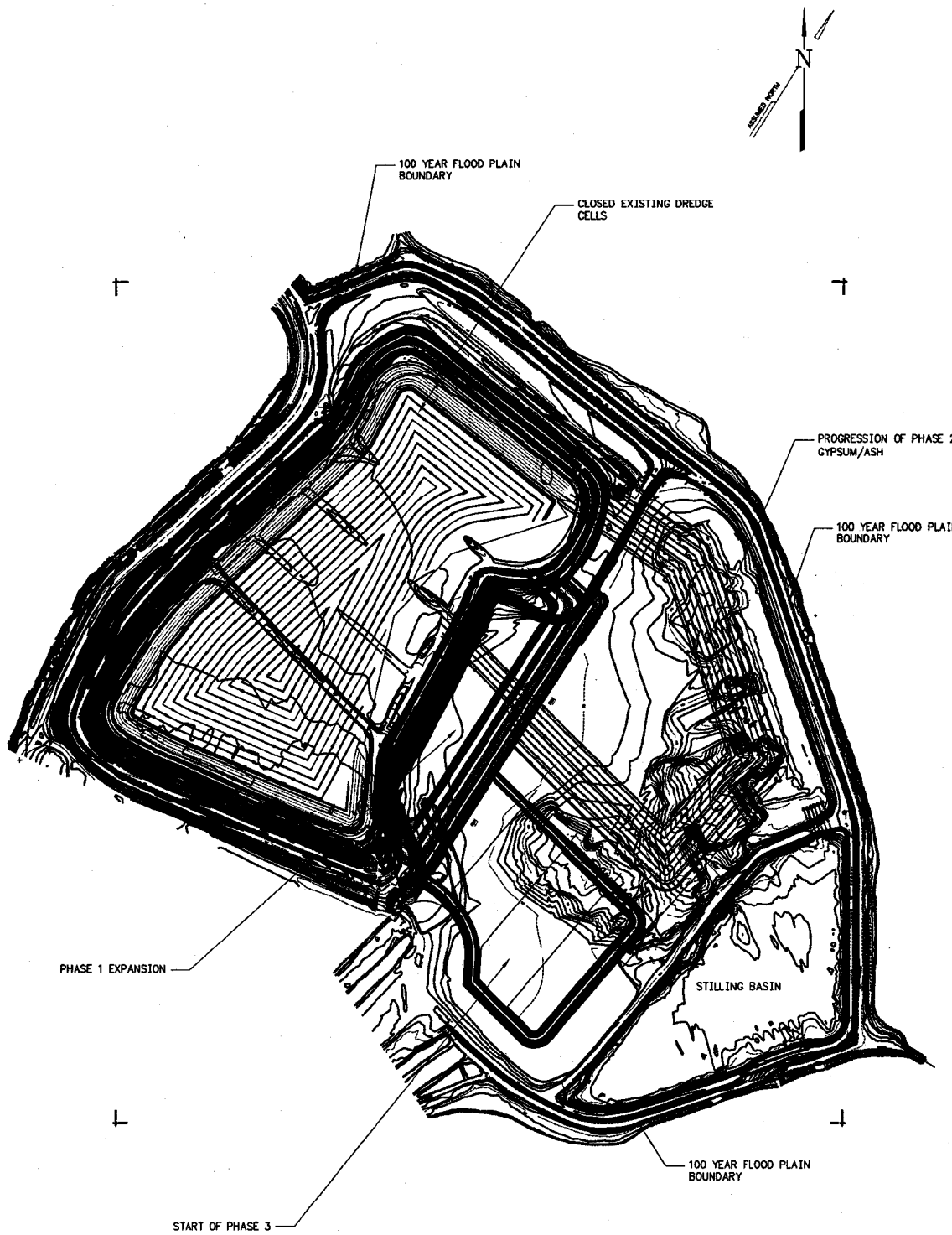
KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-22	R 0

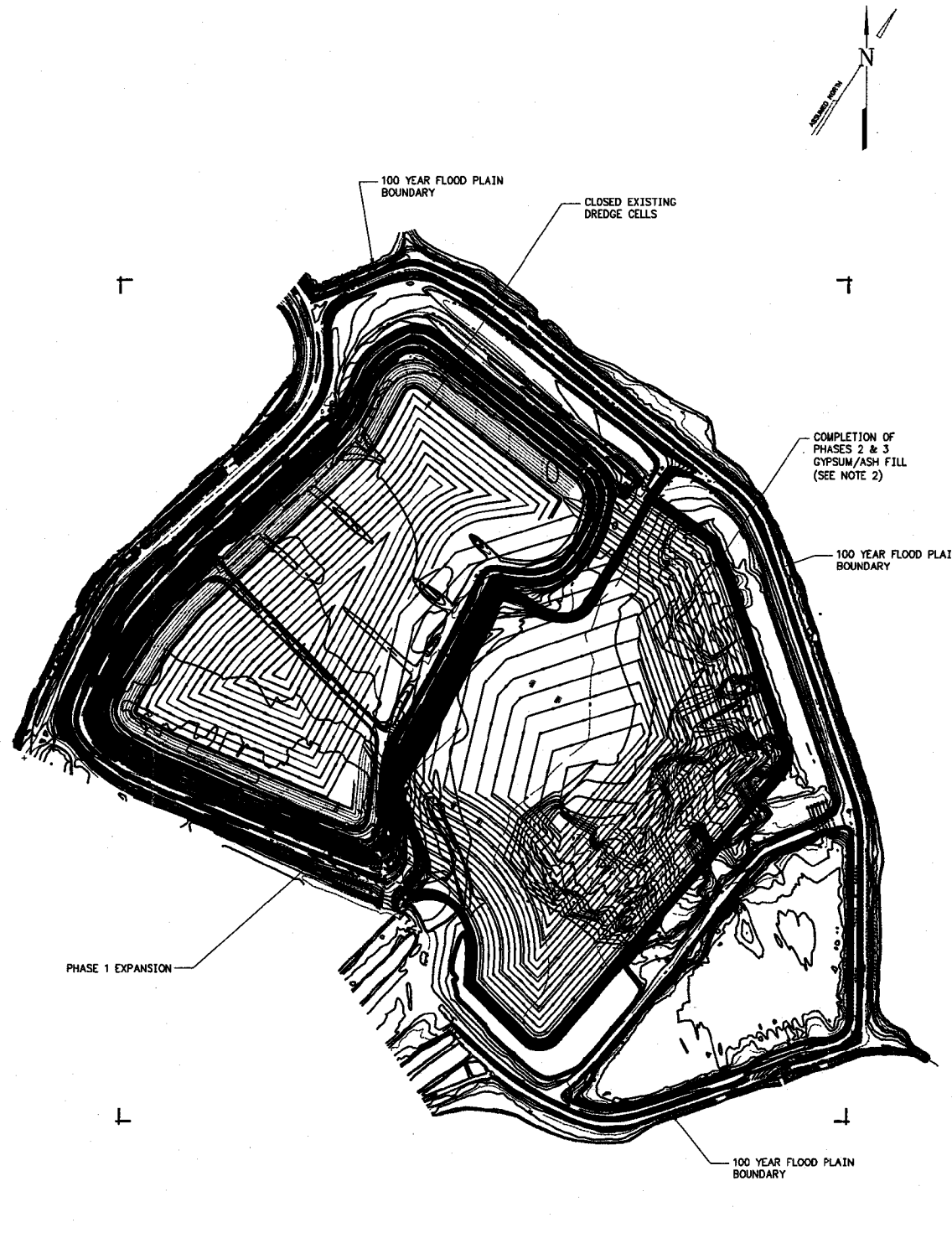
PARSONS	0
TASK COMPLETED BY:	REV NO.

PLOT FACTOR:300
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY



PHASE 2 – START OF PHASE 3 EXPANSION



PROPOSED FINAL GRADE OF LATERAL EXPANSION

NOTES:

1. FOR NOTES SEE 10W425-22.

2. PHASE 2/3 CAN BE FILLED WITH DREDGED FLY ASH AND DRY FLY ASH, SEE 10W425-64 FOR A CROSS SECTION DEPICTING FLY ASH PLACEMENT.

EMORY RIVER–WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00

REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APVD	ISSD	PROJECT ID	AS CONST	REV CK
R 0		DRS	BSB	WPT	HLP	REP	JGA				
ISSUED FOR DREDGE CELL EXPANSION											

DISCIPLINE INTERFACE

SCALE: 1"=300' EXCEPT AS NOTED

YARD

DREDGE CELL LATERAL EXPANSION PHASING SHEET 2

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R.E. PURKEY	J.G. ADAIR	

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

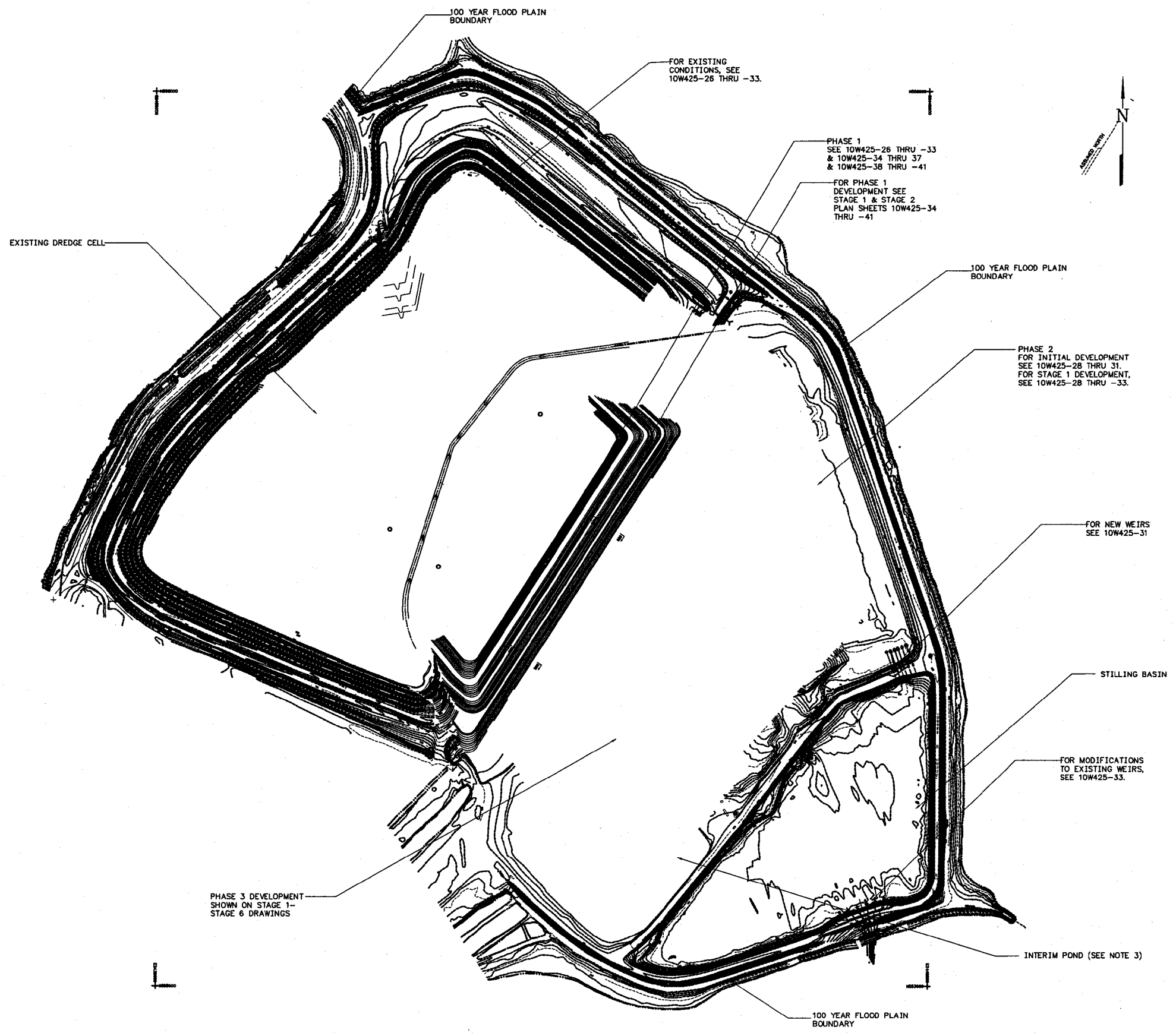
AUTOCAD R14	DATE	36	C	10W425-23	R 0

PARSONS	0
TASK COMPLETED BY:	REV NO.

PLOT FACTOR:300
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

TVA-00002801



NOTES:

1. FOR DRAWING INDEX AND LEGEND, SEE DRAWING 10W425-20.
2. DRAWINGS 10W425-24 AND -25 DEPICT PHASED CONSTRUCTION INFORMATION. INITIAL CONSTRUCTION DRAWINGS BEGIN WITH 10W425-26
3. FOR INTERIM POND DEVELOPMENT, SEE NOTE 3 ON 10W425-28.

EMORY RIVER-WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00

R	DES	DRS	BSB	WPT	HLP	REP	JGA
0	REVISED FOR DREDGE CELL EXPANSION						

REV. NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT SF	AS CONST	REV. NO.

SCALE: 1"=200' EXCEPT AS NOTED

YARD

PHASE 1 DREDGE CELL LATERAL EXPANSION DEVELOPMENT PLAN SHEET 1

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R.E. PURKEY	J.G. ADAIR	

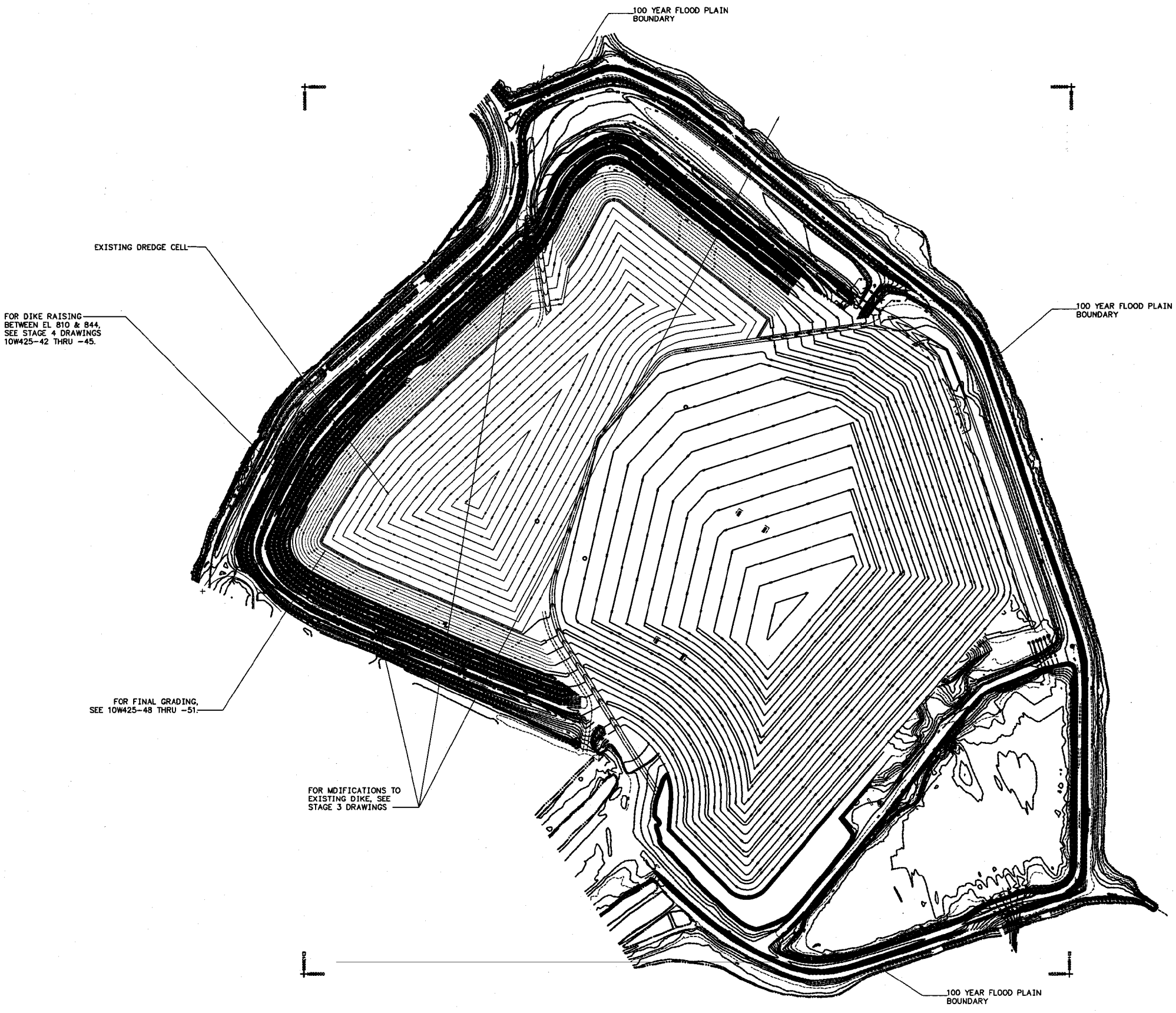
KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-24	R 0

PARSONS	0
TASK COMPLETED BY:	REV NO.

PLOT FACTOR:1200
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY



NOTES:

1. FOR NOTES SEE 10W425-24.

EMORY RIVER-WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00

REV NO.	DATE	DRWN	DSGN	CHKD	SURV	RVWD	APPD	ISSD	PROJECT ID	AS CONST	DISCIPLINE INTERFACE
R 0		DRS	BSB	WPT	HLP	REP	JGA				
REVISED FOR DREDGE CELL EXPANSION											

SCALE: 1"=200' EXCEPT AS NOTED

YARD

PHASE 2 DREDGE CELL LATERAL EXPANSION DEVELOPMENT PLAN SHEET 2

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVISED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R.E. PURKEY	J.G. ADAIR	

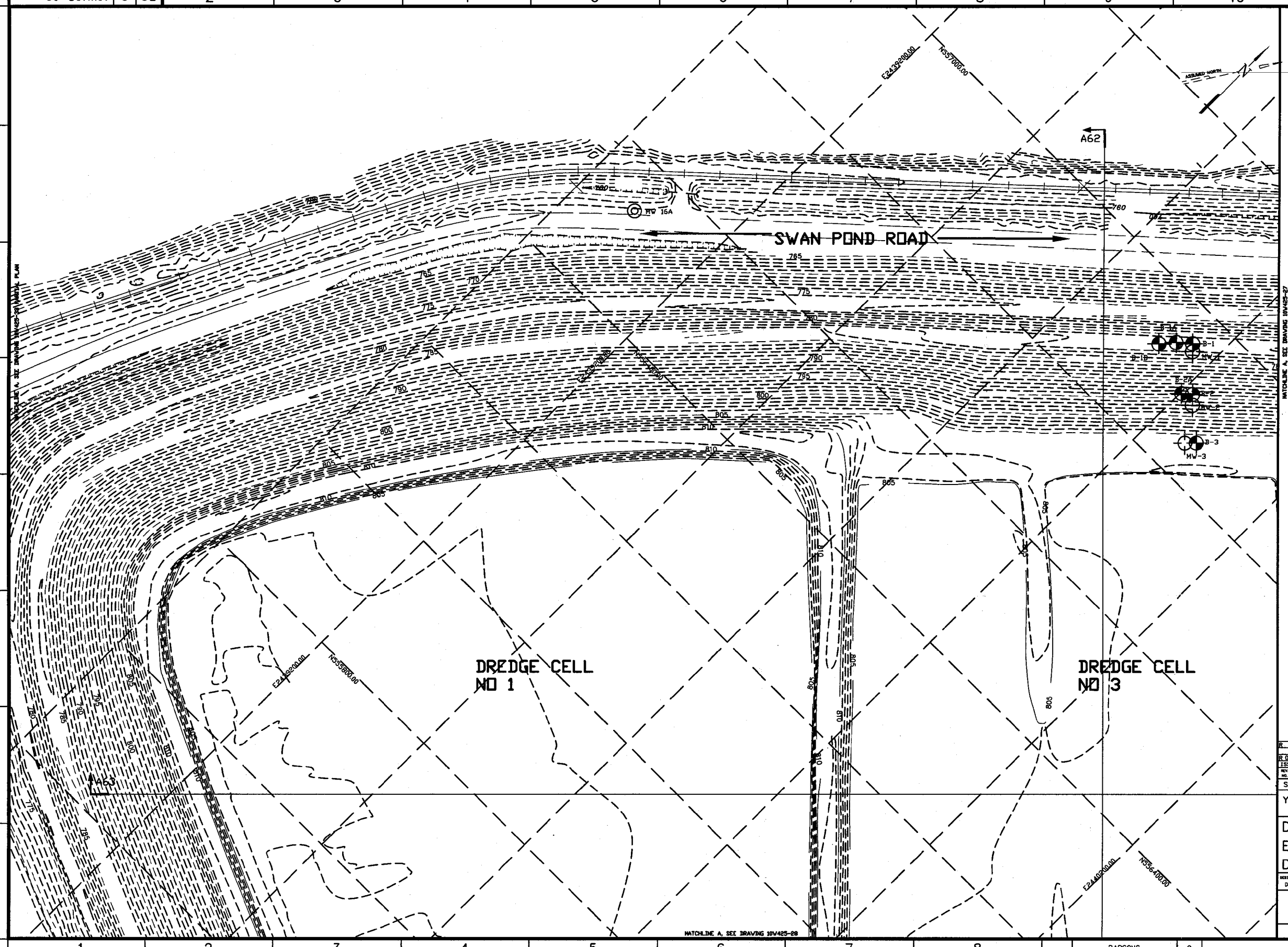
KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-25	R 0

PARSONS	0
TASK COMPLETED BY:	REV NO.

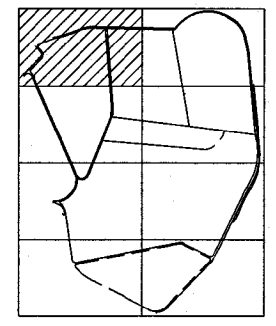
PLOT FACTOR:1200
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY



GENERAL NOTES

1. FOR DRAWING INDEX AND LEGEND, SEE DRAWING 10W425-20.
2. EXISTING TOPOGRAPHY AND SITE FEATURES OBTAINED FROM A SURVEY PERFORMED BY TVA, DATED OCTOBER 2003. SUPPLEMENTAL SURVEYING FOR PHASE 1 EXPANSION WERE PERFORMED MARCH 2004. EXISTING MONITORING WELL LOCATIONS WERE PROVIDED BY TVA. EXISTING ELEVATION CONTOURS ARE SHOWN AT 1-FOOT INTERVALS UNLESS NOTED OTHERWISE. ELEVATION CONTOURS FOR DREDGE CELL EXPANSION ARE SHOWN AT 2-FOOT INTERVALS UNLESS NOTED OTHERWISE.
3. SURVEY COORDINATES ARE REFERENCED TO TENNESSEE STATE PLANE COORDINATE SYSTEM, NAD 27. COORDINATES FOR UTILITY STRUCTURES AND PIPING ARE TO CENTERLINE OF STRUCTURE OR PIPE UNLESS NOTED OTHERWISE.
4. HORIZONTAL AND VERTICAL CONTROL SHALL BE ESTABLISHED BY USING THE EXISTING BENCHMARK LOCATIONS LISTED ON 10W425-20, AND DEPICTED ON THESE DRAWINGS.
FOR BENCHMARK DESCRIPTIONS, CONTACT TVA MAPPING, 1101 MARKET ST, CHATTANOOGA, TN 37402.
5. THE ASH POND HAS AN EXISTING STILLING BASIN TO PROVIDE SEDIMENTATION CONTROL DURING CONSTRUCTION AND OPERATION. EROSION CONTROL MEASURES (TEMPORARY SILT FENCING, CHECK DAMS) ARE NOT DEPICTED ON THE DRAWINGS BUT MAY BE UTILIZED BY THE CONSTRUCTOR AND OPERATOR TO CONTROL SEDIMENT DISCHARGE TO THE STILLING BASIN.
6. THE CONSTRUCTOR AND OPERATOR SHALL PROVIDE A MEANS TO CONTROL DUST DURING CONSTRUCTION AND OPERATION. CONTROLS MAY INCLUDE THE USE OF WATER TRUCKS, OR COMMERCIALLY AVAILABLE APPLIED SPRAY-ON MEMBRANE EROSION CONTROL PRODUCTS.
7. SECTION NUMBERS REFER DIRECTLY TO TVA SPECIFICATION T-1, UNLESS NOTED OTHERWISE.
8. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH TVA SPECIFICATION T-1, AND THE FOLLOWING ASH POND EXPANSION DOCUMENTS: OPERATIONS MANUAL; THE CLOSURE/POST CLOSURE PLAN; AND THE QA/QC PLAN.
9. WHERE ENCOUNTERED, VERIFY AMPLE CLEARANCE UNDER OVERHEAD ELECTRICAL LINES FOR CONSTRUCTION EQUIPMENT. CONSTRUCTOR SHALL NOTIFY CONSTRUCTION MANAGER BEFORE ANY WORK STARTS NEAR OVERHEAD ELECTRICAL LINES.
10. THE CONSTRUCTOR IS HEREBY ADVISED THAT THERE MAY UNDERGROUND UTILITIES PRESENT AT THIS SITE WHICH ARE NOT SHOWN ON THESE DRAWINGS. THE CONSTRUCTOR SHALL LOCATE AND VERIFY EXISTING UNDERGROUND UTILITIES THAT MAY NOT BE SHOWN ON THIS DRAWING THAT ARE WITHIN ANY AREA TO BE DISTURBED. THE CONSTRUCTOR SHALL VERIFY THAT ANY UNDERGROUND ELECTRICAL UTILITIES ARE LOCKED OUT/TAGGED OUT AND ARE NOT ACTIVATED PRIOR TO REMOVAL.
11. CONSTRUCTOR SHALL EXERCISE CARE TO PREVENT DAMAGE TO EXISTING MONITORING WELLS AND/OR EXISTING STRUCTURES.
12. DISPOSAL OF DEMOLISHED ITEMS SUCH AS EXISTING STORM SEWER PIPING OR OTHER MISCELLANEOUS ITEMS SHALL BE AS DIRECTED BY TVA.
13. FOR CONSTRUCTION OF THE PHASE 2 BASE AND STARTER DIKE SEE ON DRAWING 10W425-65 AND THE QA/QC PLAN.
14. ELEVATION CONTOURS SHOWN ON THE OUTER SLOPES OF THE PHASE 2 AND 3 EXPANSION ARE FINISHED GRADE.
15. ELEVATIONS SHOWN INSIDE THE PHASE 2 AND 3 STARTER DIKES ARE TO TOP OF THE FLY ASH BASE AS SHOWN ON TYPICAL CROSS SECTION SHOWN ON 10W425-65.
16. FOR COMPLIANCE MONITORING WELL CONSTRUCTION, SEE HYDROGEOLOGICAL REPORT.



KEY PLAN

EMORY RIVER-WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00

REV NO	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST
R 0	ISSUED FOR DREDGE CELL EXPANSION	DRS	BSB	WPT	HLP	REP	JGA			D

SCALE: 1"=50' EXCEPT AS NOTED

YARD

DREDGE CELL
EXISTING CONDITIONS &
DRAINAGE LAYER - SHEET 1

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R. E. PURKEY	J. G. ADAIR	

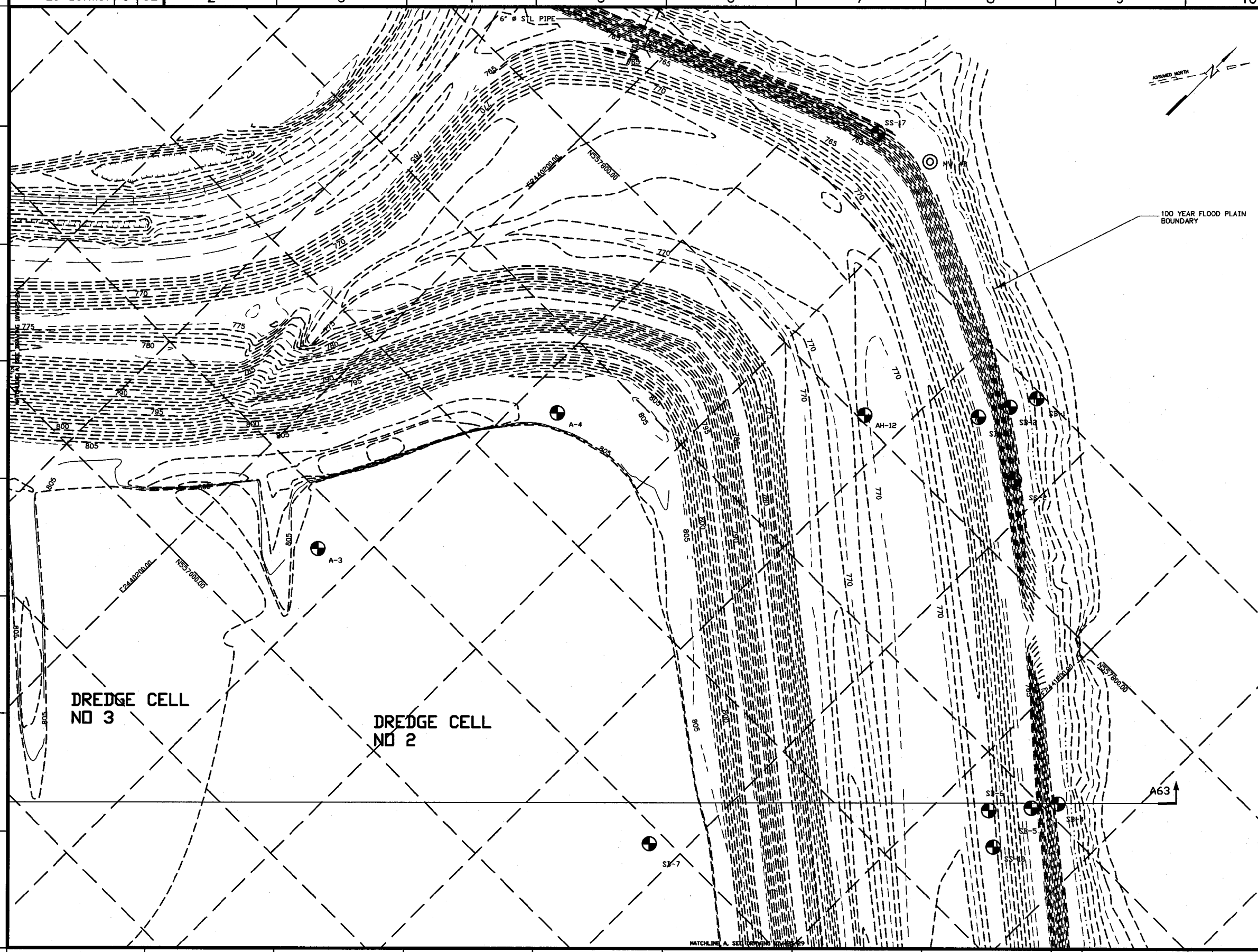
KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-26	R 0

PARSONS	0
TASK COMPLETED BY:	REV NO.

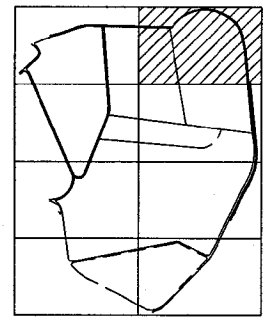
PLOT FACTOR:600
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY



GENERAL NOTES

1. FOR GENERAL NOTES SEE 10W425-26.



KEY PLAN

EMORY RIVER–WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00

REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST	REV NO.
R 0		DRS	BSB	WPT	HLP	REP	JGA				D
ISSUED FOR DREDGE CELL EXPANSION											

DISCIPLINE INTERFACE

SCALE: 1"=50' EXCEPT AS NOTED

YARD

DREDGE CELL EXISTING CONDITIONS & DRAINAGE LAYER – SHEET 2

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R. E. PURKEY	J. G. ADAIR	

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-27	R 0

PARSONS	0
TASK COMPLETED BY:	REV NO.

PLOT FACTOR:600
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

TVA-00002805

MATCHLINE A, SEE DRAWING 10W425-29

DREDGE CELL NO 1

DREDGE CELL NO 3

PHASE 1 LATERAL EXPANSION

PHASE 2 LATERAL EXPANSION

PHASE 3 (SEE NOTE 2)

TIE SOLID PIPE TO EXISTING UNDERDRAIN

ASSUMED NORTH

E2439800.00 N3556800.00

E2440200.00 N3556800.00

E2440800.00 N3556800.00

SB-10 SB-9 SB-8 SB-7 SB-6 SB-5 SB-4 SB-3 SB-2 SB-1

B-6 B-5A B-5

ASH-10 ASH-20 ASH-30 ASH-35

SS-13

MW 13B

A65 B68 B68

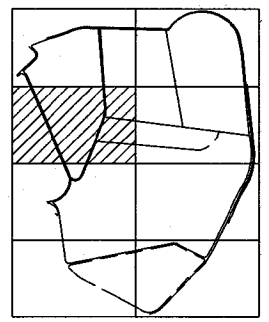
MATCHLINE A, SEE DRAWING 10W425-29

GENERAL NOTES

1. FOR GENERAL NOTES SEE 10W425-26.

2. PHASE 3 LATERAL EXPANSION SHOWN. PHASE 3 MAY BE BUILT AT LATER DATE. SEE DRAWING 10W425-22 FOR PHASING OF LATERAL EXPANSION.

3. CONCURRENT WITH PHASE 2 CONSTRUCTION, TVA WILL CONSTRUCT A POND SHOWN ON 10W425-24 TO MAINTAIN ADEQUATE FREE WATER VOLUME DURING WET ASH HANDLING OPERATIONS. SEE 10W425-22 FOR POND CONFIGURATION.



KEY PLAN

EMORY RIVER-WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00

REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST	REV NO.
R 0		DRS	BSB	WPT	HLP	REP	JGA				D

ISSUED FOR DREDGE CELL EXPANSION

DISCIPLINE INTERFACE

SCALE: 1"=50' EXCEPT AS NOTED

YARD

DREDGE CELL EXISTING CONDITIONS & DRAINAGE LAYER - SHEET 3

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R. E. PURKEY	J. G. ADAIR	

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-28	R 0

PLOT FACTOR:600
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

PARSONS	0
TASK COMPLETED BY:	REV NO.

DREDGE CELL NO 3

DREDGE CELL NO 2

PHASE 1 LATERAL EXPANSION

PHASE 2 LATERAL EXPANSION

MATCHLINE A, SEE DRAWING 10W425-27

MATCHLINE A, SEE DRAWING 10W425-31

ASSUMED NORTH

100 YEAR FLOOD PLAIN BOUNDARY

DETAIL E66 EROSION PROTECTION

CURVE #10 R220.0'

EROSION PROTECTION CHANNEL FOR INITIAL GYPSUM FILL

GEOTEXTILE W/ 3" STONE PLACED 1' THICK TO PREVENT EROSION

SEE NOTES 13 & 14 10W425-26

SEE NOTE 15, DRW 10W425-26

TIE SOLID PIPE TO EXISTING PHASE 1 UNDERDRAINS

B-4 A-1 A-2 ASH-26 PT-519 SS-13 SS-14 SS-15 SS-16 SS-17 SS-18 SS-19 SS-20 SS-21 SS-22 SS-23 SS-24 SS-25 SS-26 SS-27 SS-28 SS-29 SS-30 SS-31 SS-32 SS-33 SS-34 SS-35 SS-36 SS-37 SS-38 SS-39 SS-40 SS-41 SS-42 SS-43 SS-44 SS-45 SS-46 SS-47 SS-48 SS-49 SS-50 SS-51 SS-52 SS-53 SS-54 SS-55 SS-56 SS-57 SS-58 SS-59 SS-60 SS-61 SS-62 SS-63 SS-64 SS-65 SS-66 SS-67 SS-68 SS-69 SS-70 SS-71 SS-72 SS-73 SS-74 SS-75 SS-76 SS-77 SS-78 SS-79 SS-80 SS-81 SS-82 SS-83 SS-84 SS-85 SS-86 SS-87 SS-88 SS-89 SS-90 SS-91 SS-92 SS-93 SS-94 SS-95 SS-96 SS-97 SS-98 SS-99 SS-100 SS-101 SS-102 SS-103 SS-104 SS-105 SS-106 SS-107 SS-108 SS-109 SS-110 SS-111 SS-112 SS-113 SS-114 SS-115 SS-116 SS-117 SS-118 SS-119 SS-120 SS-121 SS-122 SS-123 SS-124 SS-125 SS-126 SS-127 SS-128 SS-129 SS-130 SS-131 SS-132 SS-133 SS-134 SS-135 SS-136 SS-137 SS-138 SS-139 SS-140 SS-141 SS-142 SS-143 SS-144 SS-145 SS-146 SS-147 SS-148 SS-149 SS-150 SS-151 SS-152 SS-153 SS-154 SS-155 SS-156 SS-157 SS-158 SS-159 SS-160 SS-161 SS-162 SS-163 SS-164 SS-165 SS-166 SS-167 SS-168 SS-169 SS-170 SS-171 SS-172 SS-173 SS-174 SS-175 SS-176 SS-177 SS-178 SS-179 SS-180 SS-181 SS-182 SS-183 SS-184 SS-185 SS-186 SS-187 SS-188 SS-189 SS-190 SS-191 SS-192 SS-193 SS-194 SS-195 SS-196 SS-197 SS-198 SS-199 SS-200 SS-201 SS-202 SS-203 SS-204 SS-205 SS-206 SS-207 SS-208 SS-209 SS-210 SS-211 SS-212 SS-213 SS-214 SS-215 SS-216 SS-217 SS-218 SS-219 SS-220 SS-221 SS-222 SS-223 SS-224 SS-225 SS-226 SS-227 SS-228 SS-229 SS-230 SS-231 SS-232 SS-233 SS-234 SS-235 SS-236 SS-237 SS-238 SS-239 SS-240 SS-241 SS-242 SS-243 SS-244 SS-245 SS-246 SS-247 SS-248 SS-249 SS-250 SS-251 SS-252 SS-253 SS-254 SS-255 SS-256 SS-257 SS-258 SS-259 SS-260 SS-261 SS-262 SS-263 SS-264 SS-265 SS-266 SS-267 SS-268 SS-269 SS-270 SS-271 SS-272 SS-273 SS-274 SS-275 SS-276 SS-277 SS-278 SS-279 SS-280 SS-281 SS-282 SS-283 SS-284 SS-285 SS-286 SS-287 SS-288 SS-289 SS-290 SS-291 SS-292 SS-293 SS-294 SS-295 SS-296 SS-297 SS-298 SS-299 SS-300 SS-301 SS-302 SS-303 SS-304 SS-305 SS-306 SS-307 SS-308 SS-309 SS-310 SS-311 SS-312 SS-313 SS-314 SS-315 SS-316 SS-317 SS-318 SS-319 SS-320 SS-321 SS-322 SS-323 SS-324 SS-325 SS-326 SS-327 SS-328 SS-329 SS-330 SS-331 SS-332 SS-333 SS-334 SS-335 SS-336 SS-337 SS-338 SS-339 SS-340 SS-341 SS-342 SS-343 SS-344 SS-345 SS-346 SS-347 SS-348 SS-349 SS-350 SS-351 SS-352 SS-353 SS-354 SS-355 SS-356 SS-357 SS-358 SS-359 SS-360 SS-361 SS-362 SS-363 SS-364 SS-365 SS-366 SS-367 SS-368 SS-369 SS-370 SS-371 SS-372 SS-373 SS-374 SS-375 SS-376 SS-377 SS-378 SS-379 SS-380 SS-381 SS-382 SS-383 SS-384 SS-385 SS-386 SS-387 SS-388 SS-389 SS-390 SS-391 SS-392 SS-393 SS-394 SS-395 SS-396 SS-397 SS-398 SS-399 SS-400 SS-401 SS-402 SS-403 SS-404 SS-405 SS-406 SS-407 SS-408 SS-409 SS-410 SS-411 SS-412 SS-413 SS-414 SS-415 SS-416 SS-417 SS-418 SS-419 SS-420 SS-421 SS-422 SS-423 SS-424 SS-425 SS-426 SS-427 SS-428 SS-429 SS-430 SS-431 SS-432 SS-433 SS-434 SS-435 SS-436 SS-437 SS-438 SS-439 SS-440 SS-441 SS-442 SS-443 SS-444 SS-445 SS-446 SS-447 SS-448 SS-449 SS-450 SS-451 SS-452 SS-453 SS-454 SS-455 SS-456 SS-457 SS-458 SS-459 SS-460 SS-461 SS-462 SS-463 SS-464 SS-465 SS-466 SS-467 SS-468 SS-469 SS-470 SS-471 SS-472 SS-473 SS-474 SS-475 SS-476 SS-477 SS-478 SS-479 SS-480 SS-481 SS-482 SS-483 SS-484 SS-485 SS-486 SS-487 SS-488 SS-489 SS-490 SS-491 SS-492 SS-493 SS-494 SS-495 SS-496 SS-497 SS-498 SS-499 SS-500 SS-501 SS-502 SS-503 SS-504 SS-505 SS-506 SS-507 SS-508 SS-509 SS-510 SS-511 SS-512 SS-513 SS-514 SS-515 SS-516 SS-517 SS-518 SS-519 SS-520 SS-521 SS-522 SS-523 SS-524 SS-525 SS-526 SS-527 SS-528 SS-529 SS-530 SS-531 SS-532 SS-533 SS-534 SS-535 SS-536 SS-537 SS-538 SS-539 SS-540 SS-541 SS-542 SS-543 SS-544 SS-545 SS-546 SS-547 SS-548 SS-549 SS-550 SS-551 SS-552 SS-553 SS-554 SS-555 SS-556 SS-557 SS-558 SS-559 SS-560 SS-561 SS-562 SS-563 SS-564 SS-565 SS-566 SS-567 SS-568 SS-569 SS-570 SS-571 SS-572 SS-573 SS-574 SS-575 SS-576 SS-577 SS-578 SS-579 SS-580 SS-581 SS-582 SS-583 SS-584 SS-585 SS-586 SS-587 SS-588 SS-589 SS-590 SS-591 SS-592 SS-593 SS-594 SS-595 SS-596 SS-597 SS-598 SS-599 SS-600 SS-601 SS-602 SS-603 SS-604 SS-605 SS-606 SS-607 SS-608 SS-609 SS-610 SS-611 SS-612 SS-613 SS-614 SS-615 SS-616 SS-617 SS-618 SS-619 SS-620 SS-621 SS-622 SS-623 SS-624 SS-625 SS-626 SS-627 SS-628 SS-629 SS-630 SS-631 SS-632 SS-633 SS-634 SS-635 SS-636 SS-637 SS-638 SS-639 SS-640 SS-641 SS-642 SS-643 SS-644 SS-645 SS-646 SS-647 SS-648 SS-649 SS-650 SS-651 SS-652 SS-653 SS-654 SS-655 SS-656 SS-657 SS-658 SS-659 SS-660 SS-661 SS-662 SS-663 SS-664 SS-665 SS-666 SS-667 SS-668 SS-669 SS-670 SS-671 SS-672 SS-673 SS-674 SS-675 SS-676 SS-677 SS-678 SS-679 SS-680 SS-681 SS-682 SS-683 SS-684 SS-685 SS-686 SS-687 SS-688 SS-689 SS-690 SS-691 SS-692 SS-693 SS-694 SS-695 SS-696 SS-697 SS-698 SS-699 SS-700 SS-701 SS-702 SS-703 SS-704 SS-705 SS-706 SS-707 SS-708 SS-709 SS-710 SS-711 SS-712 SS-713 SS-714 SS-715 SS-716 SS-717 SS-718 SS-719 SS-720 SS-721 SS-722 SS-723 SS-724 SS-725 SS-726 SS-727 SS-728 SS-729 SS-730 SS-731 SS-732 SS-733 SS-734 SS-735 SS-736 SS-737 SS-738 SS-739 SS-740 SS-741 SS-742 SS-743 SS-744 SS-745 SS-746 SS-747 SS-748 SS-749 SS-750 SS-751 SS-752 SS-753 SS-754 SS-755 SS-756 SS-757 SS-758 SS-759 SS-760 SS-761 SS-762 SS-763 SS-764 SS-765 SS-766 SS-767 SS-768 SS-769 SS-770 SS-771 SS-772 SS-773 SS-774 SS-775 SS-776 SS-777 SS-778 SS-779 SS-780 SS-781 SS-782 SS-783 SS-784 SS-785 SS-786 SS-787 SS-788 SS-789 SS-790 SS-791 SS-792 SS-793 SS-794 SS-795 SS-796 SS-797 SS-798 SS-799 SS-800 SS-801 SS-802 SS-803 SS-804 SS-805 SS-806 SS-807 SS-808 SS-809 SS-810 SS-811 SS-812 SS-813 SS-814 SS-815 SS-816 SS-817 SS-818 SS-819 SS-820 SS-821 SS-822 SS-823 SS-824 SS-825 SS-826 SS-827 SS-828 SS-829 SS-830 SS-831 SS-832 SS-833 SS-834 SS-835 SS-836 SS-837 SS-838 SS-839 SS-840 SS-841 SS-842 SS-843 SS-844 SS-845 SS-846 SS-847 SS-848 SS-849 SS-850 SS-851 SS-852 SS-853 SS-854 SS-855 SS-856 SS-857 SS-858 SS-859 SS-860 SS-861 SS-862 SS-863 SS-864 SS-865 SS-866 SS-867 SS-868 SS-869 SS-870 SS-871 SS-872 SS-873 SS-874 SS-875 SS-876 SS-877 SS-878 SS-879 SS-880 SS-881 SS-882 SS-883 SS-884 SS-885 SS-886 SS-887 SS-888 SS-889 SS-890 SS-891 SS-892 SS-893 SS-894 SS-895 SS-896 SS-897 SS-898 SS-899 SS-900 SS-901 SS-902 SS-903 SS-904 SS-905 SS-906 SS-907 SS-908 SS-909 SS-910 SS-911 SS-912 SS-913 SS-914 SS-915 SS-916 SS-917 SS-918 SS-919 SS-920 SS-921 SS-922 SS-923 SS-924 SS-925 SS-926 SS-927 SS-928 SS-929 SS-930 SS-931 SS-932 SS-933 SS-934 SS-935 SS-936 SS-937 SS-938 SS-939 SS-940 SS-941 SS-942 SS-943 SS-944 SS-945 SS-946 SS-947 SS-948 SS-949 SS-950 SS-951 SS-952 SS-953 SS-954 SS-955 SS-956 SS-957 SS-958 SS-959 SS-960 SS-961 SS-962 SS-963 SS-964 SS-965 SS-966 SS-967 SS-968 SS-969 SS-970 SS-971 SS-972 SS-973 SS-974 SS-975 SS-976 SS-977 SS-978 SS-979 SS-980 SS-981 SS-982 SS-983 SS-984 SS-985 SS-986 SS-987 SS-988 SS-989 SS-990 SS-991 SS-992 SS-993 SS-994 SS-995 SS-996 SS-997 SS-998 SS-999 SS-1000

GENERAL NOTES

1. FOR GENERAL NOTES SEE 10W425-26.

KEY PLAN

EMORY RIVER–WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00

REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST	REV ID
R 0		DRS	BSB	WPT	HLP	REP	JGA				0
ISSUED FOR DREDGE CELL EXPANSION											

SCALE: 1"=50' EXCEPT AS NOTED

YARD

DREDGE CELL
EXISTING CONDITIONS &
DRAINAGE LAYER – SHEET 4

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R. E. PURKEY	J. G. ADAIR	

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

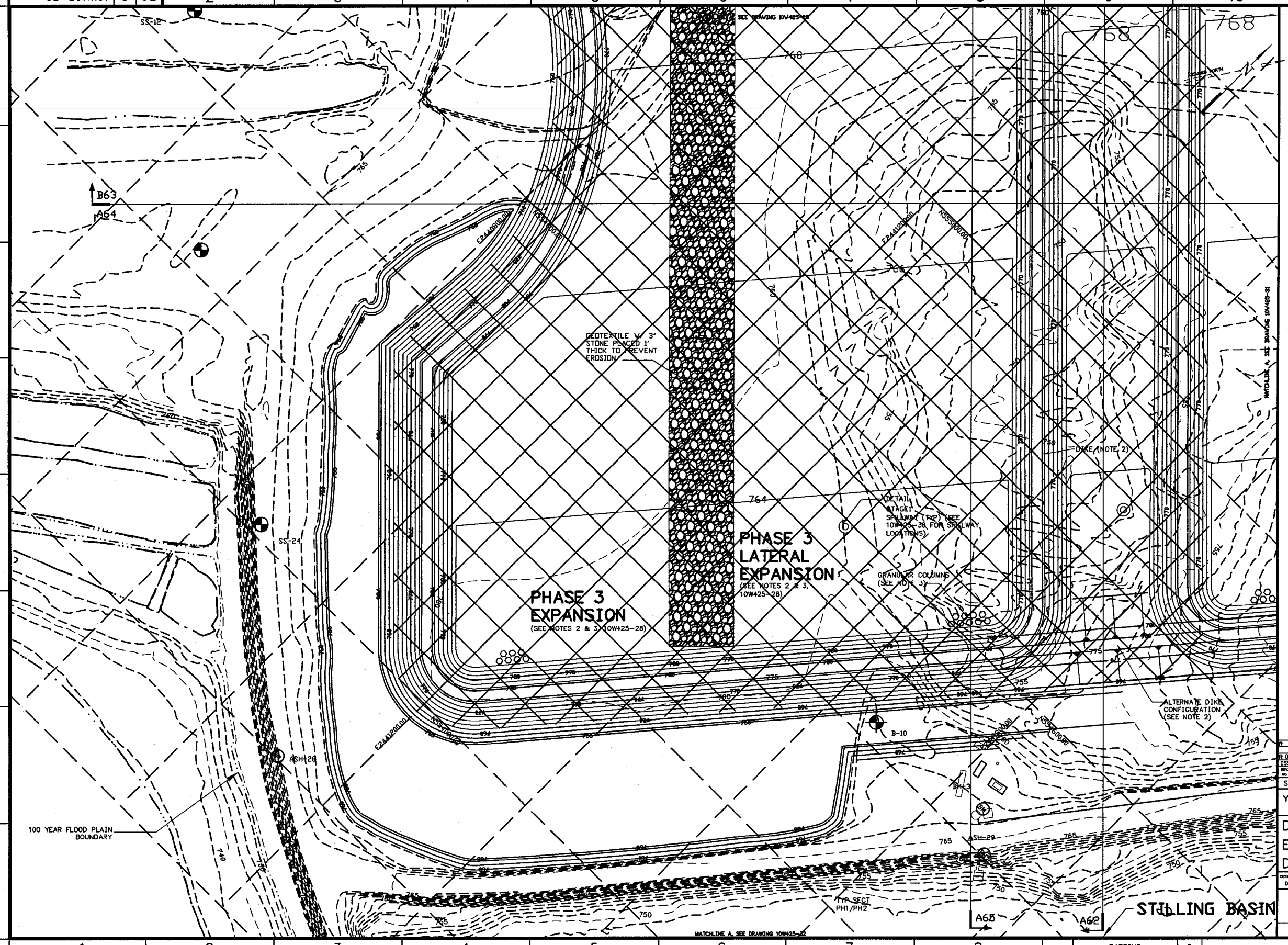
AUTOCAD R14	DATE	36	C	10W425–29	R 0

PARSONS	0
TASK COMPLETED BY:	REV NO.

PLOT FACTOR:600
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

TVA-00002807



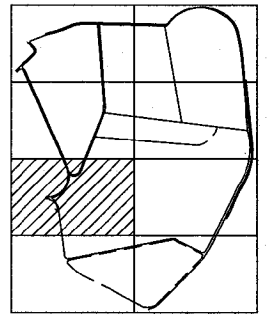
GENERAL NOTES

1. FOR GENERAL NOTES SEE 10W425-26.

2. PHASE 3 DIKE SHOWN. IF ALTERNATE DIKE IS CONSTRUCTED, PHASE 3 DIKE MAY NOT BE REQUIRED.

3. INSTALL GRANULAR COLUMNS IN ACCORDANCE WITH 10W425-65. GRANULAR COLUMNS SHALL BE INSTALLED AFTER CONSTRUCTION OF FLY ASH BASE.

EMORY RIVER–WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00



KEY PLAN

R										
R 0		DRS	BSB	WPT	HLP	REP	JGA			D
ISSUED FOR DREDGE CELL EXPANSION										
NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST

SCALE: 1"=50' EXCEPT AS NOTED

YARD

DREDGE CELL EXISTING CONDITIONS & DRAINAGE LAYER – SHEET 5

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R. E. PURKEY	J. G. ADAIR	

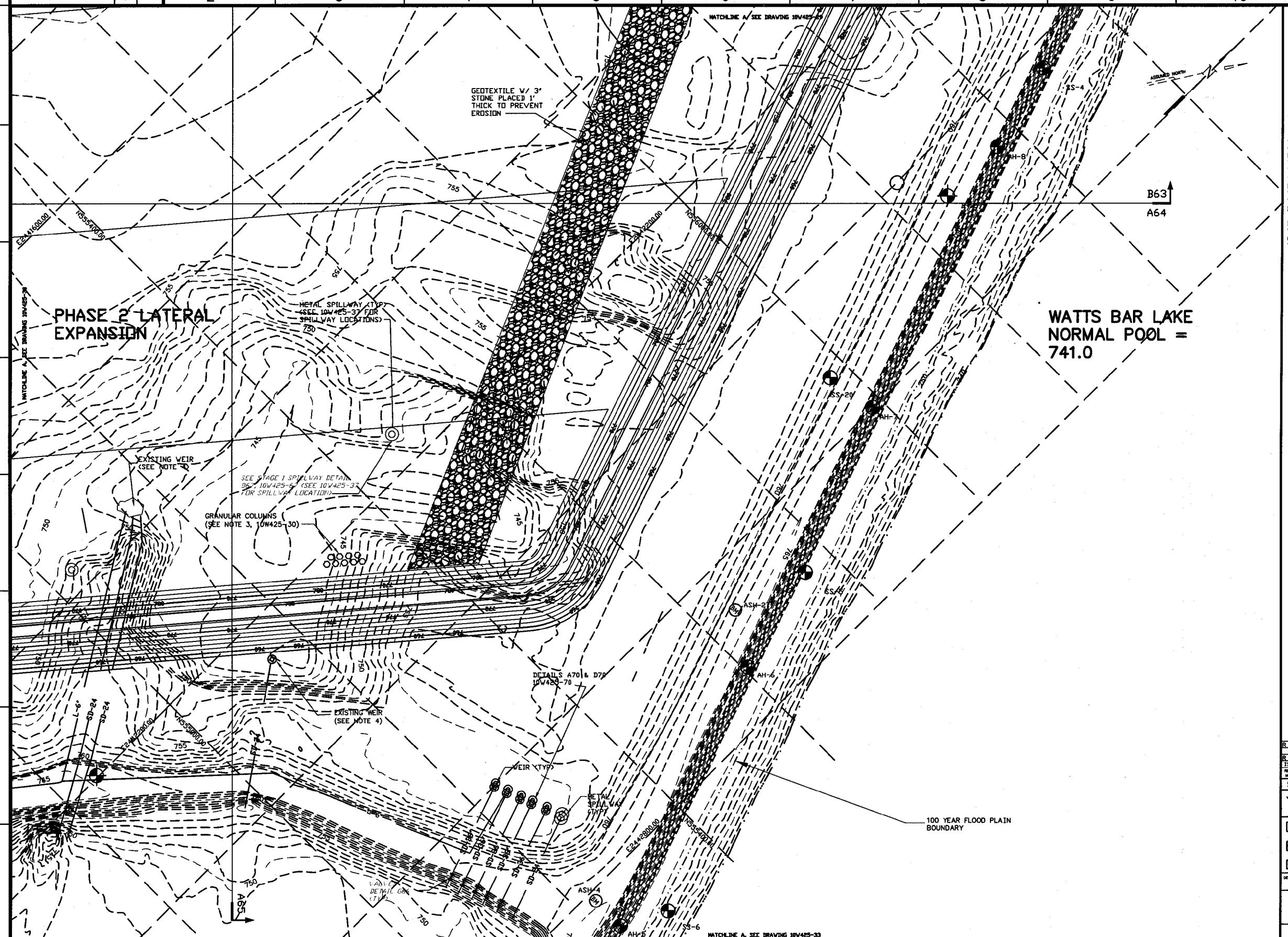
KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-30	R 0

PARSONS	0
TASK COMPLETED BY:	REV NO.

PLOT FACTOR:600
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY



NOTES:

1. FOR GENERAL NOTES SEE 10W425-26.

2. PRIOR TO CONSTRUCTING DIKES FOR PHASE 2, REMOVE EXISTING STORMDRAIN WHERE SHOWN AND BACKFILL WITH SOIL MEETING THE REQUIREMENTS OF RANDOM SOIL AS DEFINED IN THE OA/OC PLAN. REGRADE AREA AS SHOWN AND INSTALL NEW STORMDRAIN TO DIRECT DRAINAGE TO EXISTING ASH POND.

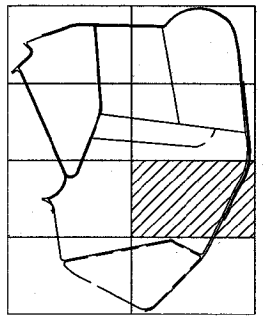
3. WEIRS MAY BE FIELD LOCATED PROVIDED THAT REQUIREMENTS SHOWN ON WEIR INSTALLATION DETAILS (10W425-70) ARE MET. PROVIDE MINIMUM 40' SPACING BETWEEN WEIRS.

4. AFTER INSTALLATION OF NEW WEIRS, TREMIE GROUT STORM DRAINS CONNECTED TO EXISTING WEIRS. GROUT SHALL CONSIST OF A MIXTURE OF FLY ASH, PORTLAND CEMENT TYPE II, & BENTONITE CLAY PROPORTIONED AS REQUIRED BY TVA FES. MIXTURE SHALL BE PUMPABLE, YET STIFF ENOUGH TO INSTALL UNDERWATER. INSTALL TREMIE PIPE & VERIFY FULL PENETRATION TO OUTLET END OF STORM DRAIN. SEAL WELD 1/4" THICK A36 STEEL PLATE TO END OF STORMDRAIN TO PREVENT FLOWING WATER. PUMP GROUT MIXTURE INTO PIPE AND GRADUALLY WITHDRAW TREMIE PIPE DURING FILLING. MAINTAIN TREMIE PIPE WITHIN GROUT TO PREVENT THE FORMATION OF AIR POCKETS OR HONEYCOMB AREAS.

5. INSTALL METAL SPILLWAY & PLACE STOP LOGS TO EL 760. CLOSE VALVES WHEN POND NEEDS TO BE TEMPORARILY RAISED DURING OPERATION. DON NOT LEAVE POND RAISED FOR EXTENDED PERIODS OF TIME.

EMORY RIVER-WATTS BAR LAKE

100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00



KEY PLAN

REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST
R 0	ISSUED FOR DREDGE CELL EXPANSION	DRS	BSB	WPT	HLP	REP	JGA			D

SCALE: 1"=50' EXCEPT AS NOTED

YARD

DREDGE CELL EXISTING CONDITIONS & DRAINAGE LAYER – SHEET 6

DESIGNED BY	DRAWN BY	CHECKED BY	SUPERVISED BY	REVIEWED BY	APPROVED BY	ISSUED BY
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R. E. PURDEY	J. G. ADAIR	

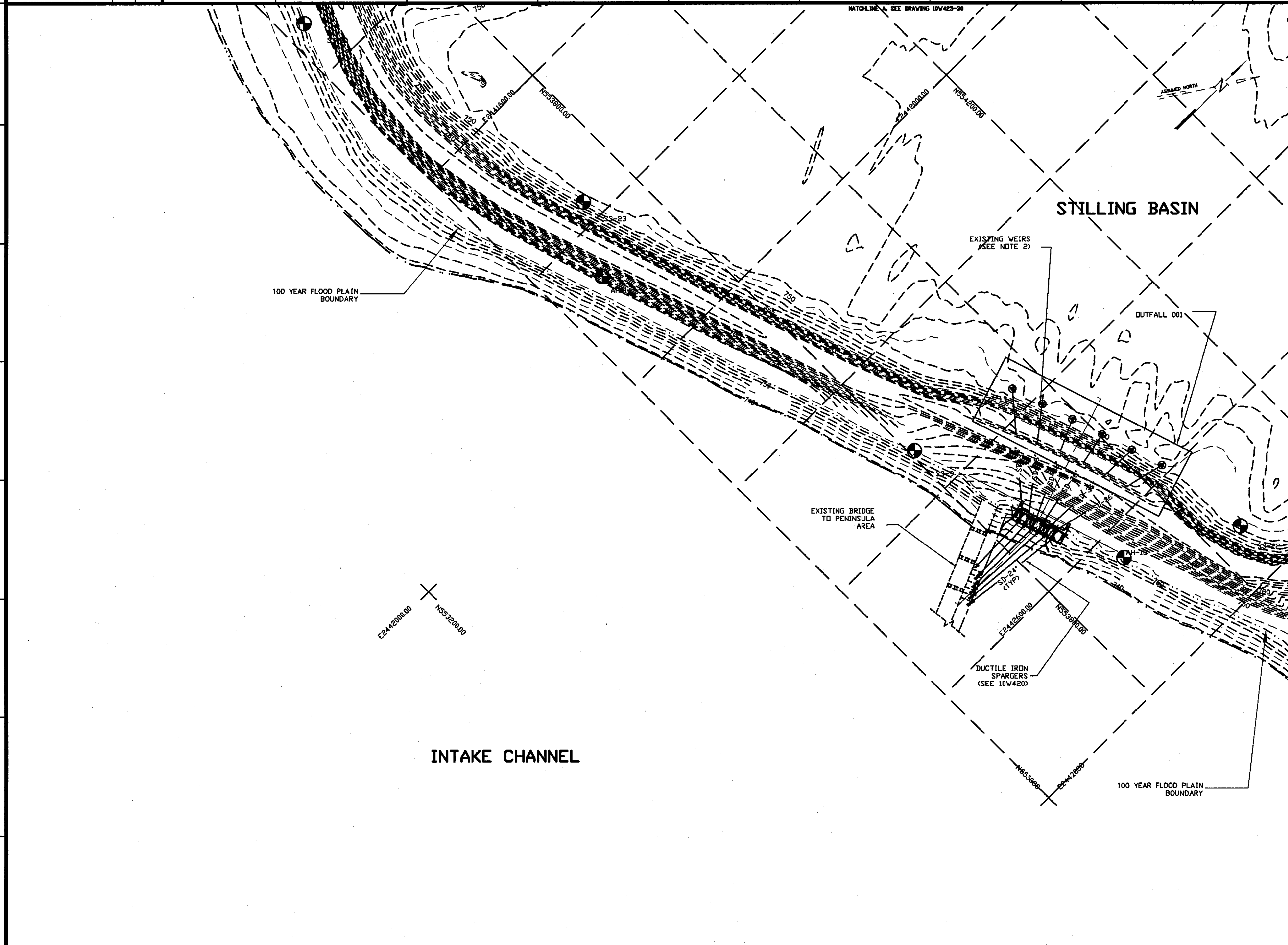
KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-31	R 0

PARSONS	0
TASK COMPLETED BY:	REV NO.

PLOT FACTOR:600
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY



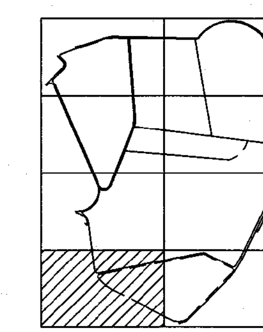
NOTES:

1. FOR GENERAL NOTES SEE 10W425-26.

2. PRIOR TO CONSTRUCTING DIKES FOR PHASE 2, RAISE EXISTING WEIRS TO ELEVATION 757.

EMORY RIVER-WATTS BAR LAKE

100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00



KEY PLAN

REV. NO.	DATE		DSGN	DRWN	CHKD	SUPV	RVWD	APPS	ISSD	PROJECT ID	AS CONST	REV CD
R 0	ISSUED FOR DREDGE CELL EXPANSION		DRS	BSB	WPT	HLP	REP	JGA				D

SCALE: 1"=50' EXCEPT AS NOTED

YARD

DREDGE CELL
EXISTING CONDITIONS &
DRAINAGE LAYER – SHEET 7

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R. E. PURKEY	J. G. ADAIR	

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

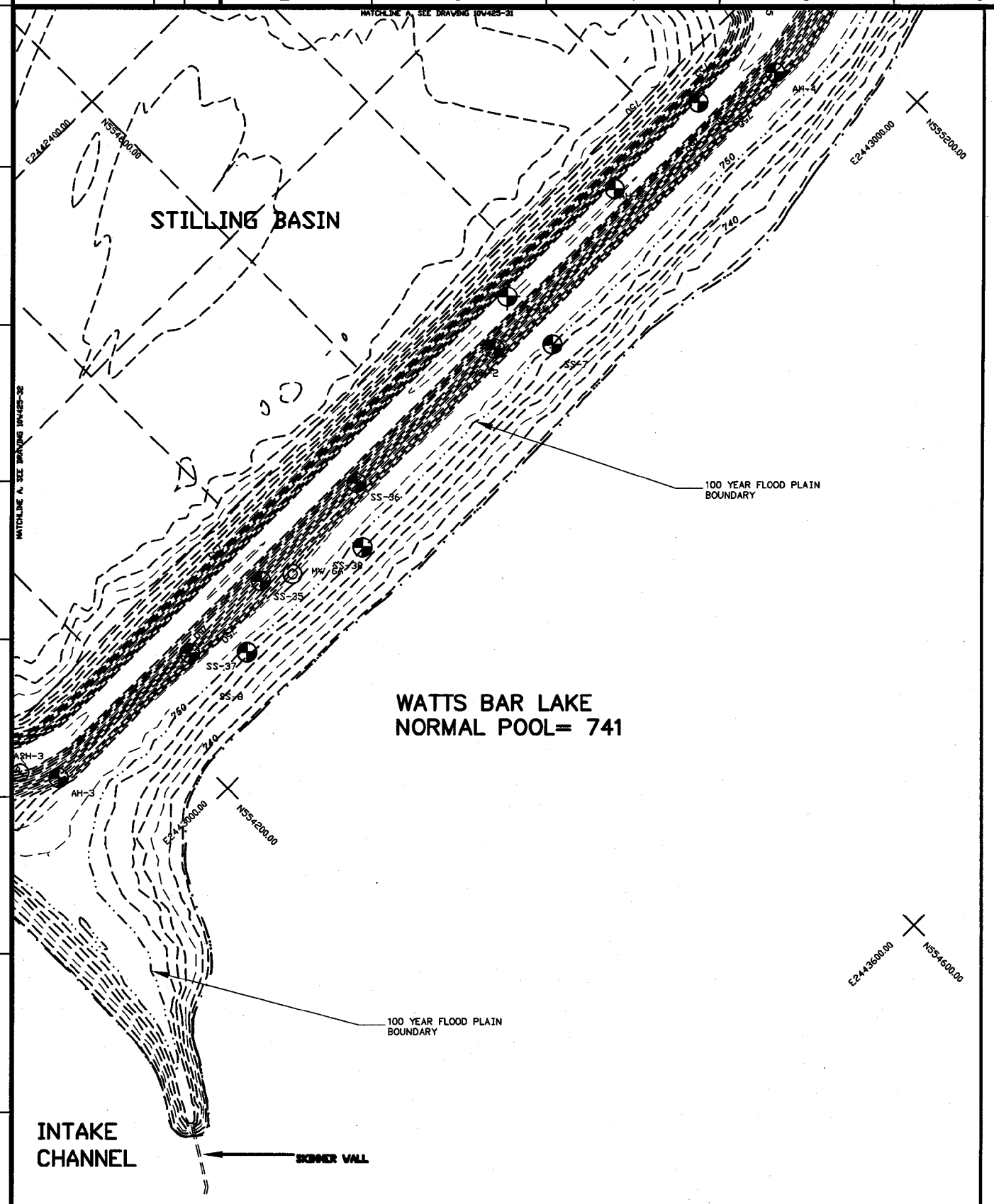
AUTOCAD R14 | DATE | 36 | C | 10W425–32 | R 0

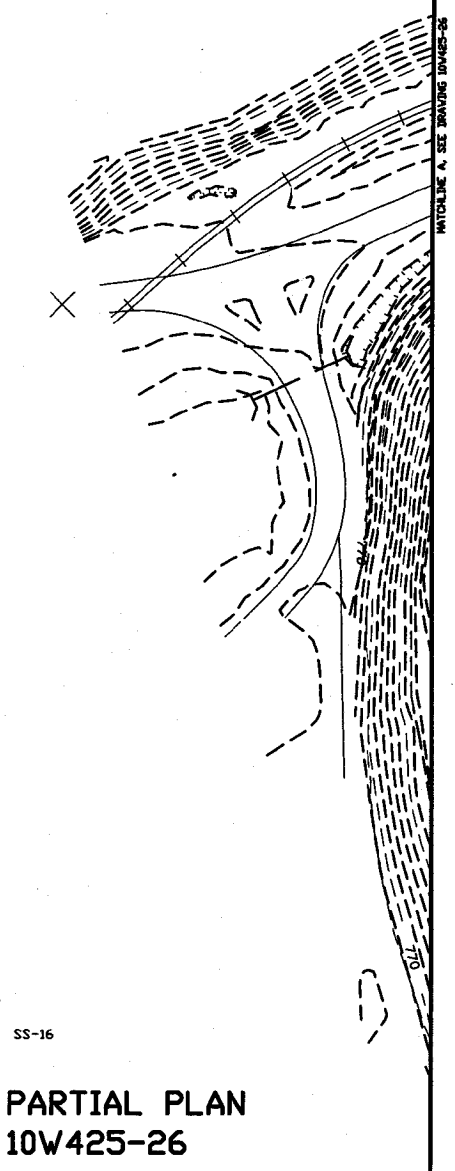
PLOT FACTOR:600
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

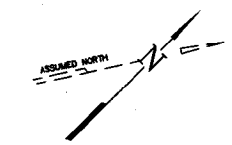
PARSONS | 0
TASK COMPLETED BY: | REV NO.

36 | C | 10W425–32





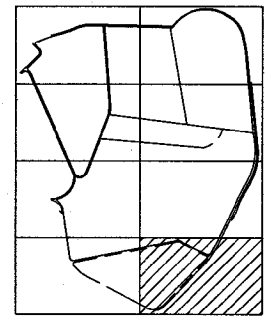
PARTIAL PLAN
10W425-26



NOTES:

1. FOR GENERAL NOTES SEE 10W425-26.

EMORY RIVER-WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00



KEY PLAN

REV NO.	DATE	DRWN	DSGN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST	REV NO.
R 0		DRS	BSB	WPT	HLP	REP	JGA				D
ISSUED FOR DREDGE CELL EXPANSION											

DISCIPLINE INTERFACE

SCALE: 1"=50' EXCEPT AS NOTED

YARD

DREDGE CELL EXISTING CONDITIONS & DRAINAGE LAYER - SHEET 8

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R. E. PURKEY	J. G. ADAIR	

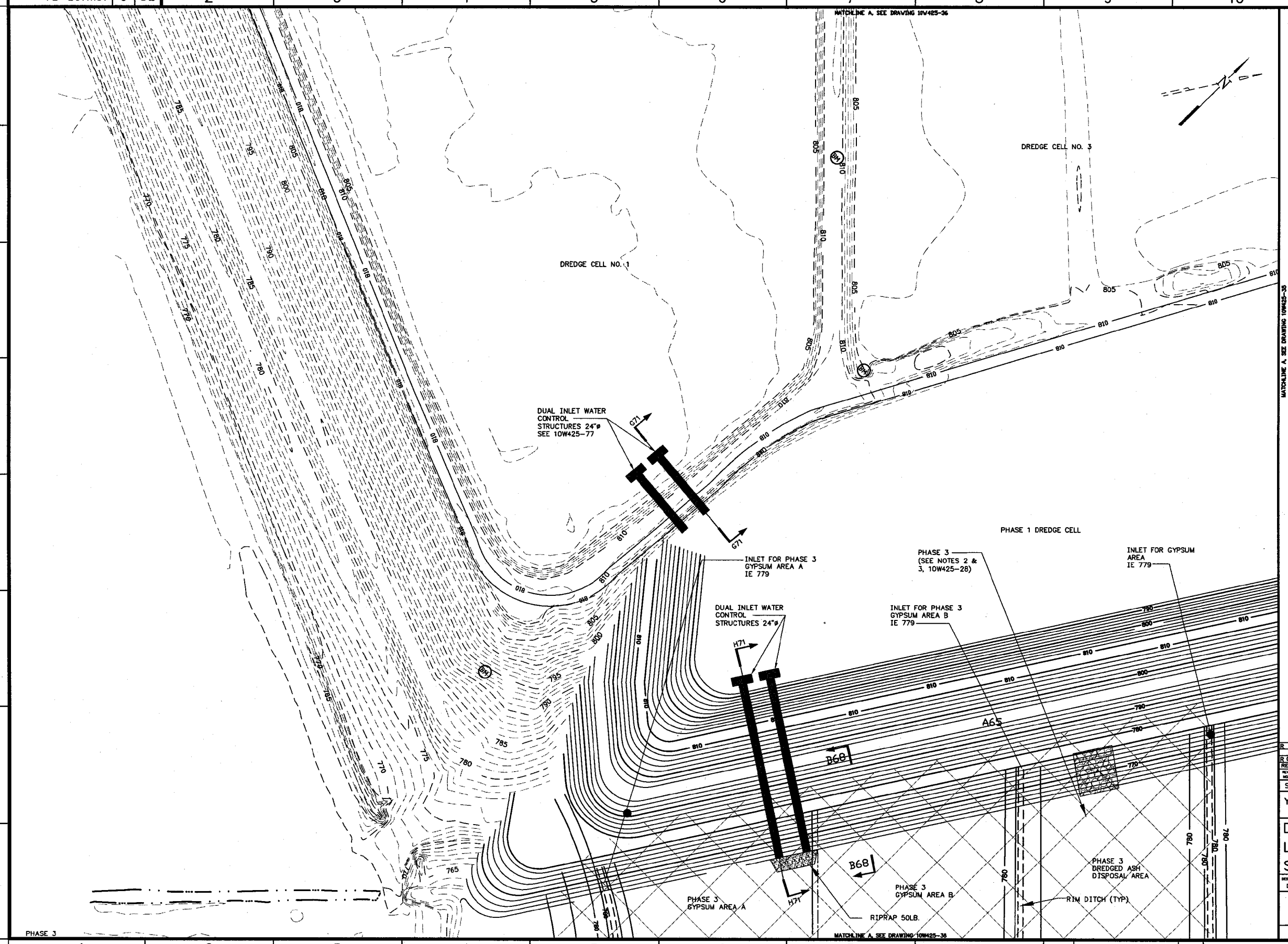
KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-33	R 0

PARSONS	0
TASK COMPLETED BY:	REV NO.

PLOT FACTOR:600
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY



DIKE RAISING NOTES:
1. FOR DRAWING INDEX AND LEGEND, SEE DRAWING 10W425-20.
2. FOR GENERAL NOTES SEE 10W425-26.
3. PROVIDE A MINIMUN OF TWO (2) FEET OF FREEBOARD TO THE FINISHED DIKE ELEVATION DURING ASH DREDGING/ GYPSUM PLACEMENT ACTIVITIES.
4. LOCATE METAL SPILLWAYS SO THAT THEY COINCIDE WITH PERMANENT LETDOWN CHANNELS.
5. PROPOSED CONTOUR ELEVATIONS SHOWN FOR THE OUTER 3:1 SLOPES ARE FINISHED SURFACE ELEVATIONS (INCLUDING FINAL COVER).
6. FINAL CLOSURE GRADE WILL BE PLACED AT TWO (2) FEET PLUS OR MINUS OF THE ACTUAL GRADE SHOWN.
7. SLOPES SHALL BE 3:1 (HORIZONTAL TO VERTICAL) OR FLATTER, UNLESS NOTED OTHERWISE.
8. FOR CONSTRUCTION OF AND RAISING OF GYPSUM DIKES, SEE DETAIL A68 ON DRAWING 10W425-68. FOR RAISING FLY ASH DIKES, SEE DETAIL A72, 10W425-72.
9. PERIMETER DRAINS WITHIN THE OUTER WET-CAST GYPSUM DIKES AND COMPACTED ASH DIKES ARE NOT SHOWN ON THESE DRAWINGS. SEE DIKE CONSTRUCTION DETAILS REFERENCED IN NOTE.

EMORY RIVER–WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00

KEY PLAN

REV NO.	DATE	DESCRIPTION	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST
R 0		REVISED FOR DREDGE CELL EXPANSION PH2	DRS	BSB	WPT	HLP	REP	JGA		D

SCALE: 1"=50' EXCEPT AS NOTED

YARD

DREDGE CELL LATERAL EXPANSION STAGE 1 SHEET 1 (665–780)

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R. E. PURKEY	J. G. ADAIR	

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425–34	R 0

PARSONS	0
TASK COMPLETED BY:	REV NO.

PLOT FACTOR:600
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

TVA-00002812

MATCHLINE A, SEE DRAWING 10W425-37

DUAL INLET WATER CONTROL STRUCTURES 24"ø SEE 10W425-77

ABANDON EXISTING INLET CONTROL STRUCTURE

DUAL INLET WATER CONTROL STRUCTURES 24"ø

EROSION PROTECTION DETAIL E86

RIPRAP 50LB.

100 YEAR FLOOD PLAIN BOUNDARY

RIM DITCH (TYP)

IE 777.4

INLET FOR GYPSUM INTO AREA B IE 779

PHASE 2 GYPSUM AREA

PHASE 2 DREDGED ASH DISPOSAL AREA

PHASE 2 GYPSUM AREA B

MATCHLINE A, SEE DRAWING 10W425-37

NOTES:

1. FOR GENERAL NOTES SEE 10W425-26.
2. FOR DIKE RAISING NOTES, SEE 10W425-34.

EMORY RIVER-WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00

KEY PLAN

REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST
R 0	REVISED FOR DREDGE CELL EXPANSION PH2	DRS	BSB	WPT	HLP	REP	JGA			D

SCALE: 1"=50' EXCEPT AS NOTED

YARD

DREDGE CELL LATERAL EXPANSION STAGE 1 SHEET 2

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R. E. PURKEY	J. G. ADAIR	

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14 | DATE | 36 | C | 10W425-35 | R 0

PARSONS | 0
TASK COMPLETED BY: | REV NO.

PLOT FACTOR:600
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

TVA-00002813

PHASE 3 EXPANSION (SEE NOTES 2 & 3, 10W425-30)

MATCHLINE A, SEE DRAWING 10W425-34

RIM DITCH (TYP)

PHASE 3 GYPSUM AREA A

PHASE 3 GYPSUM AREA B

PHASE 3 DREDGED ASH DISPOSAL AREA

RIM DITCH (TYP)

DETAIL B7 (STAGE 1 SPILLWAY)(TYP)

IE 776.4

RIM DITCH CORNER (SEE NOTE 3)

IE 775.6

IE 775.6

IE 776.4

IE 774.8

PHASE 3 EXPANSION (SEE NOTES 2 & 3, 10W425-30)

100 YEAR FLOOD PLAIN BOUNDARY

B63

A64

A65

A62

MATCHLINE A, SEE DRAWING 10W425-32

MATCHLINE A, SEE DRAWING 10W425-37

NOTES:

1. FOR GENERAL NOTES SEE 10W425-26.
2. FOR DIKE RAISING NOTES, SEE 10W425-34.
3. WHERE RIM DITCHES HAVE SHARP TURNS, WIDEN DITCH IN THE TURN TO 10 FT.

KEY PLAN

EMORY RIVER-WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00

REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST
R										
R 0		DRS	BSB	WPT	HLP	REP	JGA			D

REVISED FOR DREDGE CELL EXPANSION PH2

SCALE: 1"=50' EXCEPT AS NOTED

YARD

DREDGE CELL LATERAL EXPANSION STAGE 1 SHEET 3

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.P. PETTY	R. E. PURKEY	J. G. ADAIR	

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-36	R 0

PARSONS	0
TASK COMPLETED BY:	REV NO.

PLOT FACTOR:600
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

PHASE 2
GYPSUM
AREA A

PHASE 2
GYPSUM
AREA B

GYPSUM DIKE
SEPARATING
ASH/GYPSUM (TYP)

RIM DITCH
(TYP)

SEE NOTE 5
10W425-34

RIM DITCH CORNER
(SEE NOTE 3,
10W425-36)

METAL SPILLWAY,
DETAIL D67 (TYP)

WEIR (TYP)

METAL
SPILLWAY
(TYP)

SD-36"

SD-24"

IE 774

IE 775.7

IE 774.7

100 YEAR FLOOD PLAIN
BOUNDARY

WATTS BAR LAKE
NORMAL POOL=741

B63

A64

A65

MATCHLINE A, SEE DRAWING 10W425-35

MATCHLINE A, SEE DRAWING 10W425-36

MATCHLINE A, SEE DRAWING 10W425-38

NOTES:

1. FOR GENERAL NOTES SEE 10W425-26.
2. FOR DIKE RAISING NOTES, SEE 10W425-34.
3. WHERE RIM DITCHES HAVE SHARP TURNS, WIDEN DITCH IN THE TURN TO 10 FT.

EMORY RIVER-WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00

KEY PLAN

REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST
R 0		DRS	BSB	WPT	HLP	REP	JGA			D
REVISED FOR DREDGE CELL EXPANSION PH2										

SCALE: 1"=50' EXCEPT AS NOTED

YARD

DREDGE CELL
LATERAL EXPANSION STAGE 1
SHEET 4

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R. E. PURKEY	J. G. ADAIR	

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-37	R 0

PARSONS	0
TASK COMPLETED BY:	REV NO.

PLOT FACTOR:600
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

TVA-00002815

MATCHLINE A, SEE DRAWING 10W425-26

ASSUMED NORTH

DIKE RAISING NOTES:
1. FOR DRAWING INDEX AND LEGEND, SEE DRAWING 10W425-20.
2. FOR GENERAL NOTES SEE 10W425-26.
3. PROVIDE A MINIMUM OF TWO (2) FEET OF FREEBOARD TO THE FINISHED DIKE ELEVATION DURING ASH DREDGING/ GYPSUM PLACEMENT ACTIVITIES.
4. LOCATE METAL SPILLWAYS TO TIE INTO EXISTING METAL SPILLWAYS FOR PREVIOUS STAGE AS SHOWN ON 10W425-67.
5. PROPOSED CONTOUR ELEVATIONS SHOWN FOR THE OUTER 3:1 SLOPES ARE FINISHED SURFACE ELEVATIONS (INCLUDING FINAL COVER).
6. FINAL CLOSURE GRADE WILL BE PLACED AT TWO (2) FEET PLUS OR MINUS OF THE ACTUAL GRADE SHOWN.
7. SLOPES SHALL BE 3:1 (HORIZONTAL TO VERTICAL) OR FLATTER UNLESS NOTED OTHERWISE.
8. FOR CONSTRUCTION OF AND RAISING OF GYPSUM DIKES, SEE DETAIL A68 ON DRAWING 10W425-68. FOR RAISING COMPACTED ASH DIKES, SEE DETAIL A72, 10W425-72.
9. PERIMETER DRAINS WITHIN THE OUTER WET-CAST GYPSUM DIKES AND COMPACTED ASH DIKES ARE NOT SHOWN ON THESE DRAWINGS. SEE DIKE CONSTRUCTION DETAILS REFERENCED IN NOTE 8.
10. RIM DITCH WIDTHS ARE SHOWN LARGER FOR CLARITY.
11. WIDEN RIM DITCHES IN CORNERS TO 10 FEET.
12. THE LAYOUT DEPICTED FOR COMBINED ASH & GYPSUM DISPOSAL IS SHOWN FOR STAGE 2. LAYOUTS ARE DEPICTED FOR STAGE 1 AND STAGES 3-5 ON OTHER PLAN SHEETS. THESE LAYOUTS ARE SUBJECT TO CHANGE DEPENDING UPON THE RATE OF GYPSUM GENERATED AS EXPLAINED IN THE OPERATIONS PLAN. TVA FES AND YARD OPERATIONS WILL EVALUATE AND MODIFY THESE LAYOUTS AS NECESSARY.

EMORY RIVER–WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00

INLET FOR PHASE 3 GYPSUM AREA A IE 809

IE 802.6

IE 809

IE 802.6

B68

B68

A85

PHASE 3 GYPSUM AREA A

PHASE 3 GYPSUM AREA B

RIM DITCH (TYP)

FUTURE DREDGED ASH DISPOSAL AREA

MATCHLINE A, SEE DRAWING 10W425-39

MATCHLINE A, SEE DRAWING 10W425-40

KEY PLAN

R	DRS	ESB	WPT	HLP	REP	JGA		D
0	ISSUED FOR DREDGE CELL EXPANSION PH2							

REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWR	APPD	ISSD	PROJECT ID	AS CONST	REV NO.

SCALE: 1"=50' EXCEPT AS NOTED

YARD

DREDGE CELL LATERAL EXPANSION STAGE 2 SHEET 1 (780–810)

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R. E. PURKEY	J. G. ADAIR	

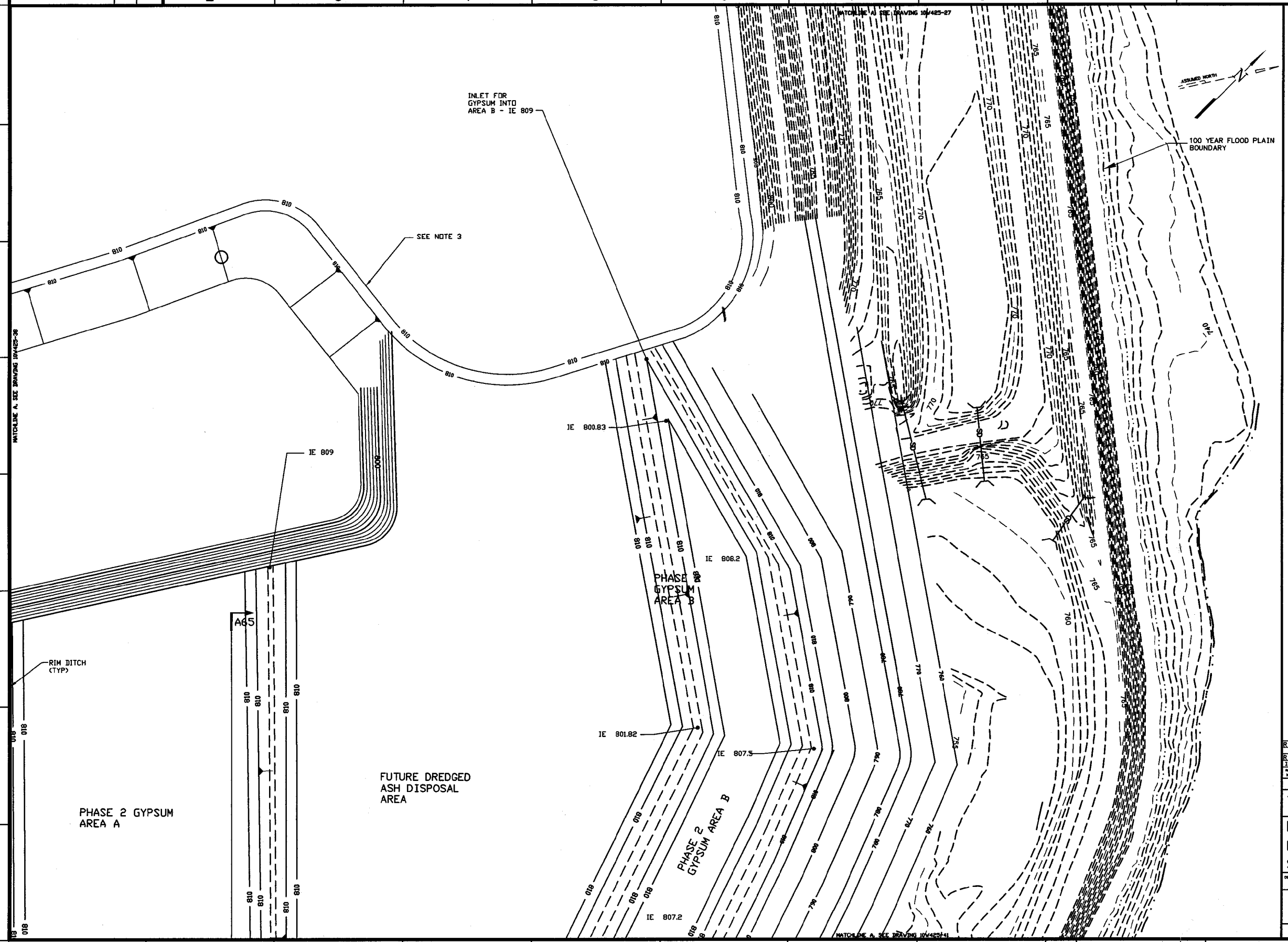
KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425–38	R 0

PARSONS	0
TASK COMPLETED BY:	REV NO.

PLOT FACTOR:600
W_TVA

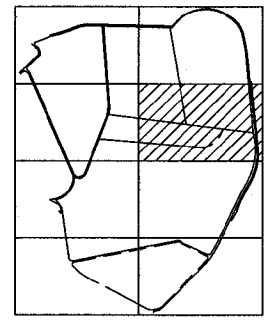
C.A.D. DRAWING
DO NOT ALTER MANUALLY



NOTES:

1. FOR GENERAL NOTES SEE 10W425-26.
2. FOR DIKE RAISING NOTES, SEE 10W425-38.
3. EXISTING DREDGE CELL SHOWN TO ELEVATION 810. TVA MAY RAISE EXISTING DREDGE CELL TO ELEVATION 840 OR HIGHER PRIOR TO DEVELOPING PHASE 2 TO ELEVATION 810.

EMORY RIVER–WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00



KEY PLAN

R													
R 0		DRS	BSB	WPT	HLP	REP	JGA						D
ISSUED FOR DREDGE CELL EXPANSION PH2													DISCIPLINE INTERFACE
REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST			

SCALE: 1"=50' EXCEPT AS NOTED

YARD

DREDGE CELL
LATERAL EXPANSION STAGE 2
SHEET 2

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R.E. PURKEY	J.G. ADAIR	

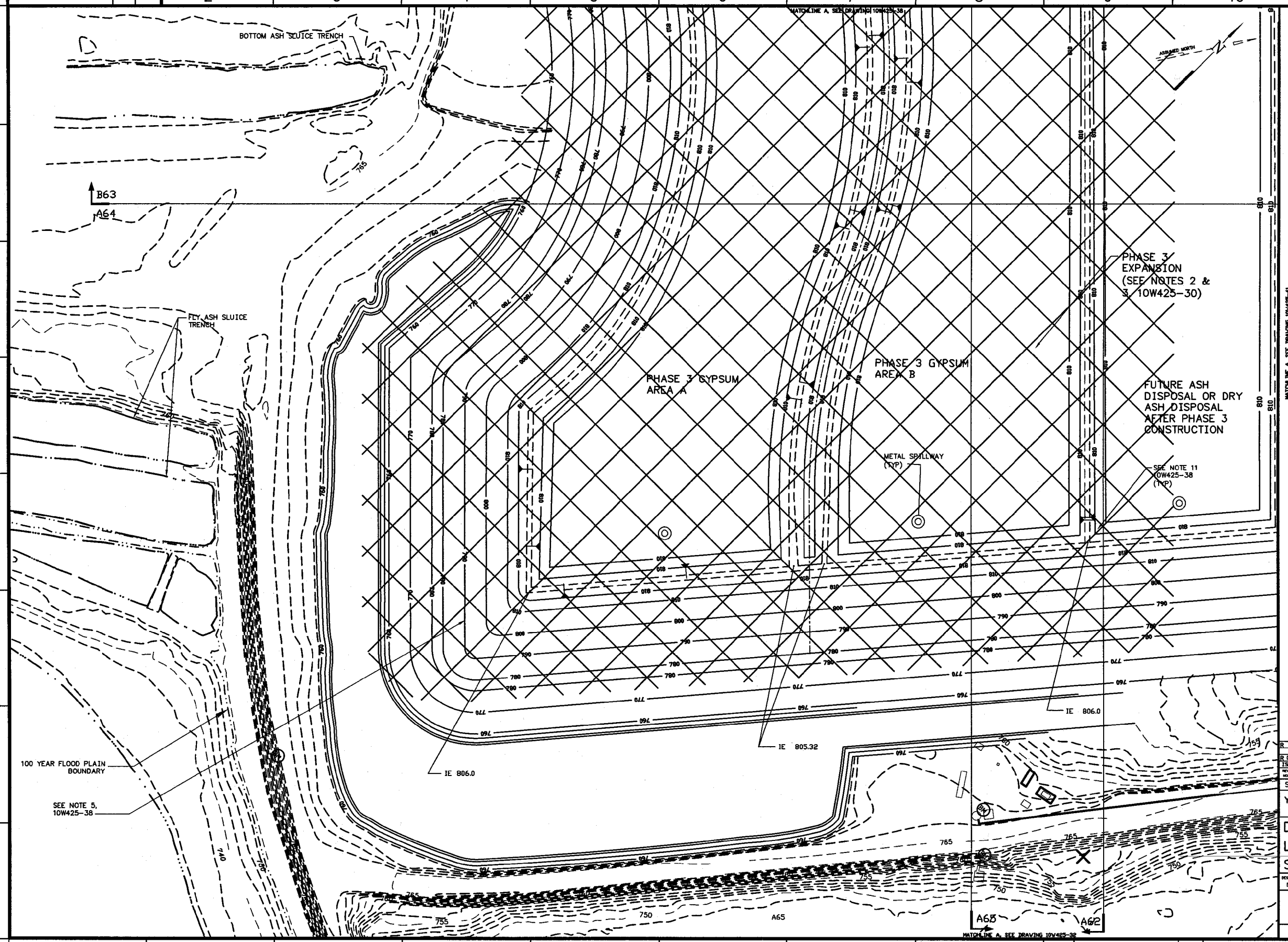
KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-39	R 0

PARSONS	0
TASK COMPLETED BY:	REV NO.

PLOT FACTOR:600
W_TVA

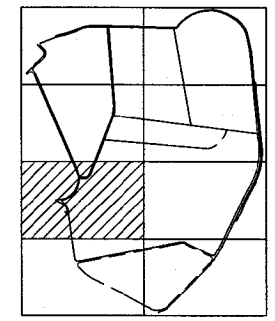
C.A.D. DRAWING
DO NOT ALTER MANUALLY



NOTES:

1. FOR GENERAL NOTES SEE 10W425-26.
2. FOR DIKE RAISING NOTES, SEE 10W425-38.

EMORY RIVER–WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00



KEY PLAN

REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST	DISCIPLINE INTERFACE
R 0	ISSUED FOR DREDGE CELL EXPANSION PH2	DRS	BSB	WPT	HLP	REP	JGA				D

SCALE: 1"=50' EXCEPT AS NOTED

YARD

DREDGE CELL
LATERAL EXPANSION STAGE 2
SHEET 3

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R.E. PURKEY	J.G. ADAIR	

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-40	R 0

PARSONS	0
TASK COMPLETED BY:	REV NO.

PLOT FACTOR:600
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

RIM DITCH (TYP)

GYPSUM DIKE SEPARATING ASH/GYPSUM (TYP)

INNER DIKE (TYP)

PHASE 2 GYPSUM AREA A

FUTURE ASH DISPOSAL OR DRY ASH DISPOSAL AFTER PHASE 3 CONSTRUCTION

PHASE 2 GYPSUM AREA B

METAL SPILLWAY (TYP)

RIM DITCH (TYP)

IE 805.32

IE 804.9

IE 804.45

IE 836.0

METAL SPILLWAY (TYP)

METAL SPILLWAY (TYP)

WEIR, TYPICAL (UNLESS NOTED OTHERWISE)

MATCHLINE A, SEE DRAWING 10W425-39

MATCHLINE A, SEE DRAWING 10W425-33

B63

A64

A65

100 YEAR FLOOD PLAIN BOUNDARY

ASSUMED NORTH

WATTS BAR LAKE
NORMAL POOL=741

NOTES:

1. FOR GENERAL NOTES SEE 10W425-26.
2. FOR DIKE RAISING NOTES, SEE 10W425-38.

EMORY RIVER-WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00

KEY PLAN

REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST
R 0		DRS	BSB	WPT	HLP	REP	JGA			D
ISSUED FOR DREDGE CELL EXPANSION PH2										

SCALE: 1"=50' EXCEPT AS NOTED

YARD

DREDGE CELL
LATERAL EXPANSION STAGE 2
SHEET 4

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R.E. PURKEY	J.G. ADAIR	

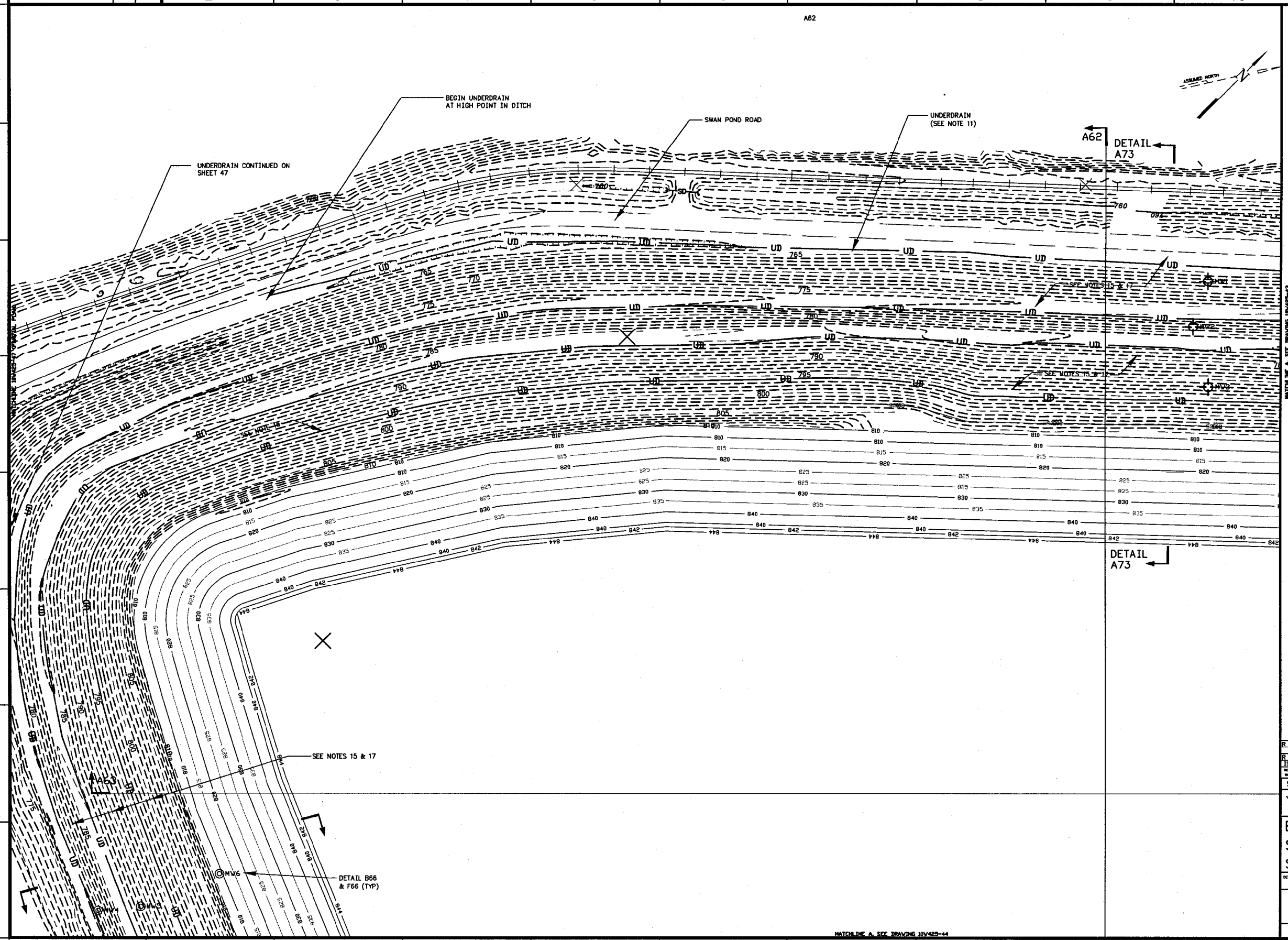
KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-41	R 0

PARSONS	0
TASK COMPLETED BY:	REV NO.

PLOT FACTOR:600
W_TVA

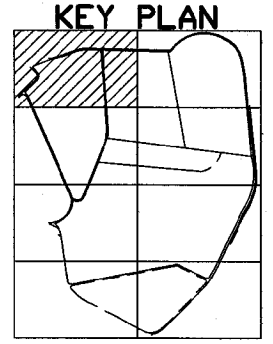
C.A.D. DRAWING
DO NOT ALTER MANUALLY



DIKE RAISING NOTES:
1. FOR DRAWING INDEX AND LEGEND, SEE DRAWING 10W425-20.
2. FOR GENERAL NOTES SEE 10W425-26.
3. PROVIDE A MINIMUM OF TWO (2) FEET OF FREEBOARD TO THE FINISHED DIKE ELEVATION DURING ASH DREDGING/ GYPSUM PLACEMENT ACTIVITIES.
4. LOCATE METAL SPILLWAYS TO TIE INTO EXISTING METAL SPILLWAYS FOR PREVIOUS STAGE AS SHOWN ON 10W425-67.
5. PROPOSED CONTOUR ELEVATIONS SHOWN FOR THE OUTER 3:1 SLOPES ARE FINISHED SURFACE ELEVATIONS (INCLUDING FINAL COVER).
6. FINAL CLOSURE GRADE WILL BE PLACED AT TWO (2) FEET PLUS OR MINUS OF THE ACTUAL GRADE SHOWN.
7. SLOPES SHALL BE 3:1 (HORIZONTAL TO VERTICAL) OR FLATTER, UNLESS NOTED OTHERWISE.
8. FOR CONSTRUCTION OF AND RAISING OF WET CAST GYPSUM DIKES, SEE DETAIL A68 ON DRAWING 10W425-68. FOR CONSTRUCTION OF AND RAISING OF COMPACTED ASH DIKES, SEE DETAIL A72 ON DRAWING 10W425-72.
9. PERIMETER DRAINS WITHIN THE OUTER WET-CAST GYPSUM DIKES AND ASH DIKES ARE NOT SHOWN ON THESE DRAWINGS. SEE DETAILS REFERENCED IN NOTE 8.
10. INSTALL UNDERDRAINS FOR EXISTING DREDGE CELL SLOPE PRIOR TO RAISING DIKES ABOVE EL 810, AND PRIOR TO RESUMPTION OF DREDGING OPERATIONS.
11. NOTIFY TENNESSEE ONE CALL (800) 351-1111 PRIOR TO EXCAVATING FOR INSTALLATION.
12. PRIOR TO RESUMPTION OF DREDGING OPERATIONS, INSTALL MW-4 THRU MW-9.
13. WHEN DREDGING OPERATIONS RESUME, MONITOR WATER SURFACE ELEVATION AT MW 1-9 ON A WEEKLY BASIS WHILE DREDGE POND IS BEING FILLED. REPORT OBSERVATIONS TO TVA FOSSIL ENGINEERING SERVICE (FES). FES WILL NOTIFY WHEN TO INCREASE FREQUENCY OF, OR SUSPEND MONITORING.
14. REPORT IMMEDIATELY TO TVA FES ANY SIGNS OF SEEPAGE THRU THE DIKE, OR IF SATURATED GROUND CONDITIONS SUDDENLY EXIST.
15. INSTALL UNDER DRAIN AS SHOWN ON DETAIL A73 ON 10W425-73. SLOPE UNDERDRAIN 1% MIN SLOPE & PROVIDE OUTLET PIPE ON APPROXIMATE 200 FT SPACING. PLACE OUTLETS AT LOW POINTS OF ELEVATION.
16. TERRACE AT EL. 795± NOT SHOWN. INSTALL UNDERDRAIN AT THIS TERRACE.
17. PRIOR TO FINAL CLOSURE, STRIP EXISTING COVER SOIL AND VEGETATION AND INSTALL GEOCOMPOSITE DRAINAGE LAYER BENEATH LOW PERMEABLE CLAY LAYER OR GEOMEMBRANE, AS SHOWN ON FINAL COVER DETAILS.

EMORY RIVER-WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00

KEY PLAN



REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ENGR	AS CONST
R 0	ISSUED FOR DREDGE CELL EXPANSION	DRS	BSB	WPT	HLP	REP	JGA			

DISCIPLINE INTERFACE

SCALE: 1"=50' EXCEPT AS NOTED

YARD

EXISTING DREDGE CELL
STAGE 3
SHEET 1 (810-840)

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	N.L. PETTY	R.E. PURKEY	J.G. ADAIR	

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

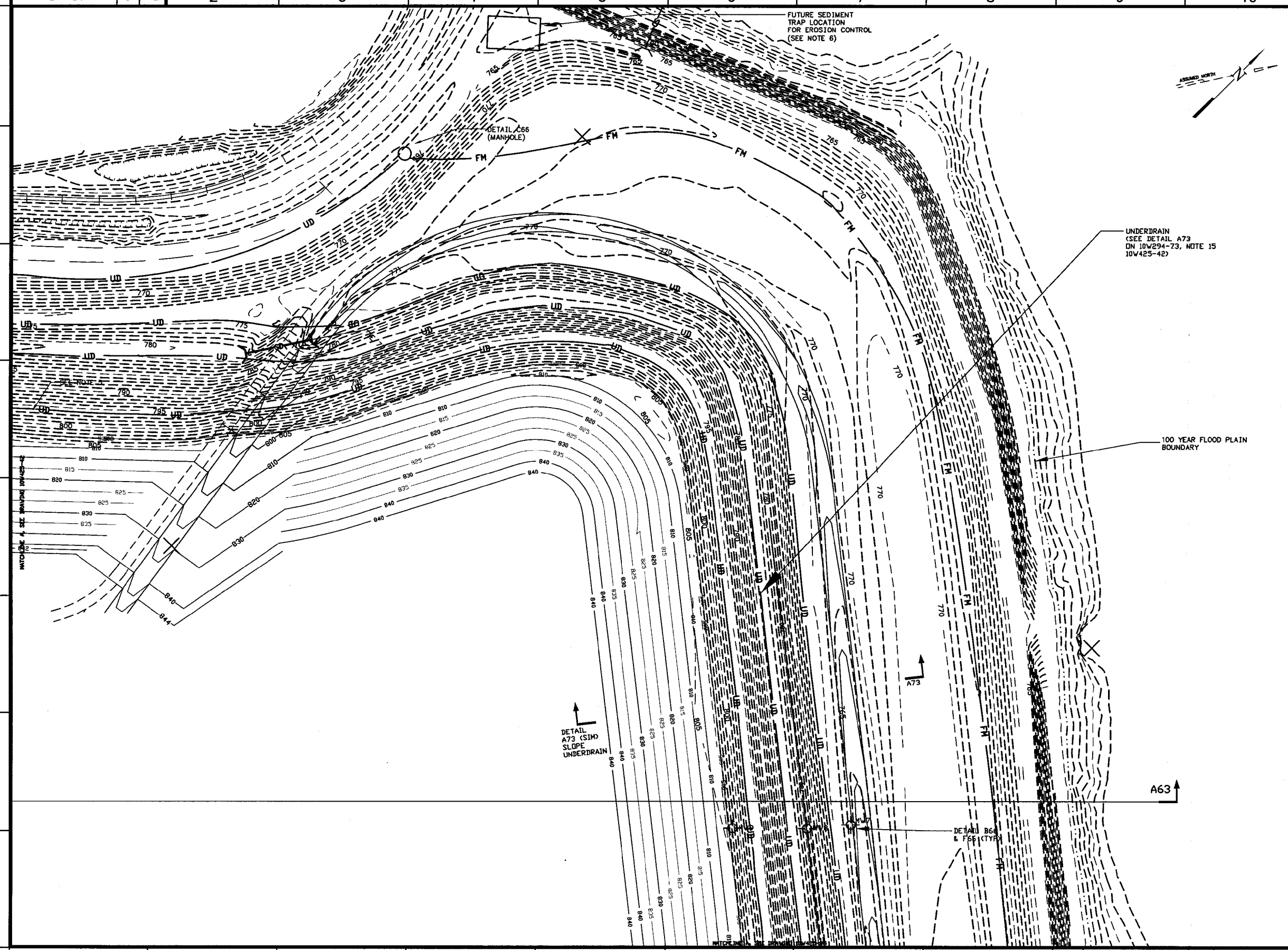
AUTOCAD R14	DATE	36	10W425-42	R 0

PARSONS	0
TASK COMPLETED BY:	REV NO.

PLOT FACTOR:600
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

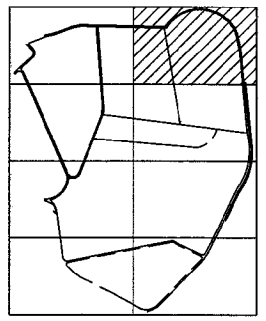
TVA-0000820



NOTES:
1. FOR GENERAL NOTES SEE 10W425-26.
2. FOR DIKE RAISING NOTES, SEE 10W425-42.
3. REGRADE DITCH AS SHOWN PRIOR TO RAISING EXISTING DREDGE CELL FROM 810-840.
4. INSTALL UNDERDRAIN AND FORCE MAIN PRIOR TO RAISING DIKES FROM 810-840. LOCATION AND CONFIGURATION OF UNDERDRAIN SYSTEM, FORCE MAIN, AND MANHOLES/PUMPS WILL BE PROVIDED LATER.
5. TERRACE AT EL. 795 NOT SHOWN.
6. PROVIDE EROSION CONTROLS INTAKE AREA DURING UNDERDRAIN INSTALLATION AND FINAL CLOSURE. STORMWATER POLLUTION PLAN (SWPPP) TO BE PREPARED BY TVA FES (LATER).

EMORY RIVER-WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00

KEY PLAN



REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST
R 0		DRS	BSB	WPT	HLP	JCA	REP	JCA		
ISSUED FOR DREDGE CELL EXPANSION										

SCALE: 1"=50' EXCEPT AS NOTED

YARD

EXISTING DREDGE CELL
STAGE 3
SHEET 2 (810-840)

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R.E. PURKEY	J.G. ADAIR	

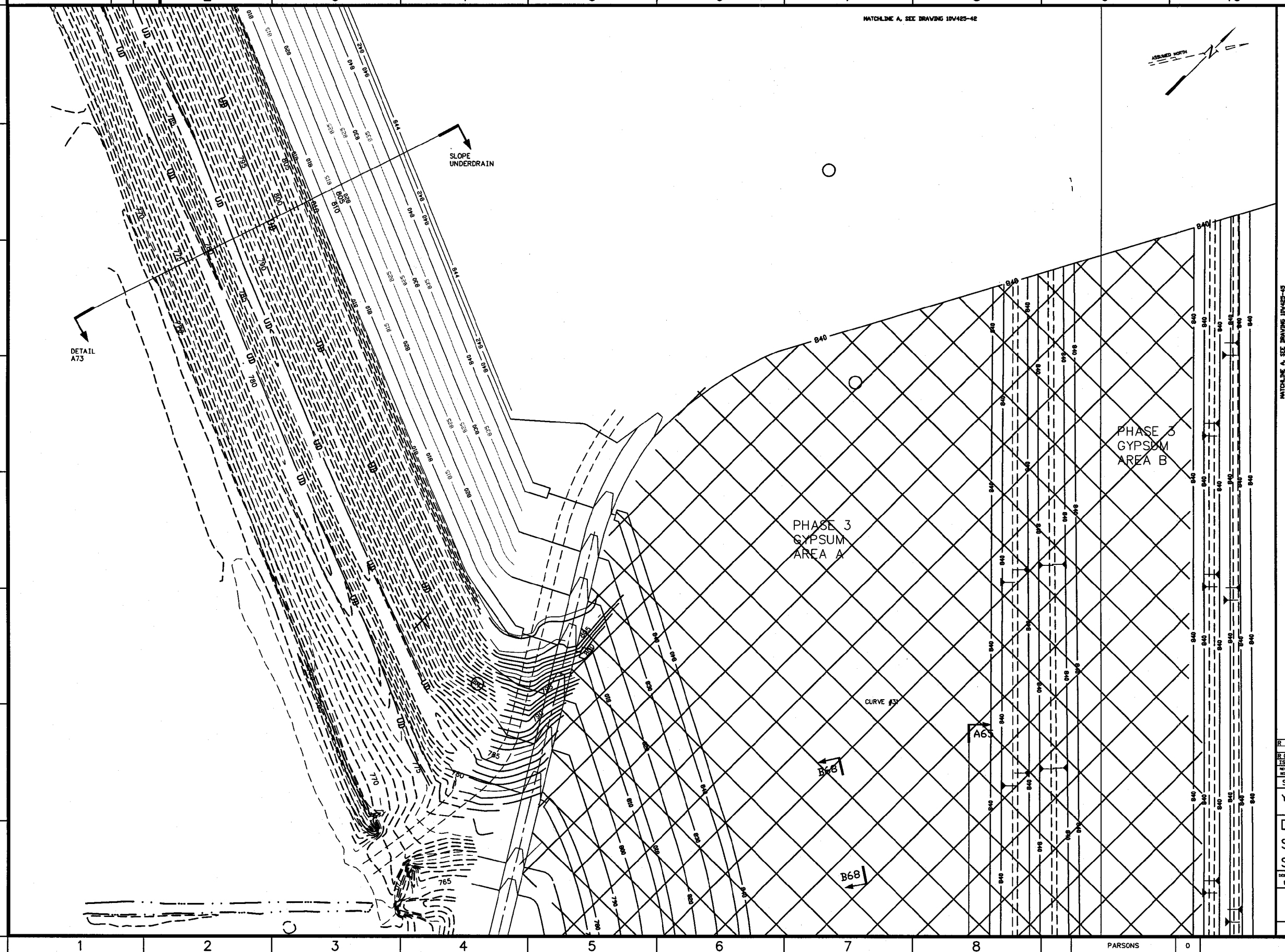
KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14 | DATE | 36 | C | 10W425-43 | R 0

PARSONS | 0
TASK COMPLETED BY: | REV NO.

PLOT FACTOR:600
W_TVA

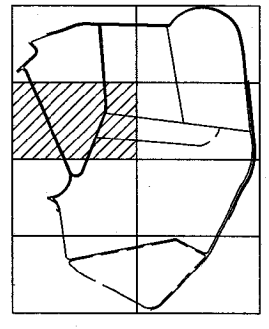
C.A.D. DRAWING
DO NOT ALTER MANUALLY



NOTES:
1. FOR GENERAL NOTES SEE 10W425-26.
2. FOR DIKE RAISING NOTES, SEE 10W425-42.
3. RIM DITCH ELEVATIONS ARE NOT SHOWN. IN GENERAL, INLET ELEVATIONS WILL BE LOWER THAN DIKE ELEVATION, WITH A NOMINAL 0.5% SLOPE.
4. AREA 3 EXPANSION SHOWN CONCURRENT WITH PHASE 2 EXPANSION. SEE PHASED CONSTRUCTION DRAWINGS 10W425-22 & -23, AND OPERATION PLAN FOR DESCRIPTION OF DEVELOPMENTS.

EMORY RIVER–WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00

KEY PLAN



REV NO.	DATE	DRS	BSB	WPT	HLP	REP	JGA	DISCIPLINE INTERFACE
R 0	ISSUED FOR DREDGE CELL EXPANSION PH2							D

SCALE: 1"=50' EXCEPT AS NOTED

YARD

DREDGE CELL LATERAL EXPANSION
STAGE 3
SHEET 3 (810–840)

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R.E. PURKEY	J.G. ADAIR	

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14 | DATE | 36 | C | 10W425-44 | R 0

PARSONS	0
TASK COMPLETED BY:	REV NO.

PLOT FACTOR:600
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

MATCHLINE A, SEE DRAWING 10W425-43

PHASE 2
DREDGED
FLY ASH

PHASE 2
GYPSUM
AREA A

DREDGED ASH
DISPOSAL
PHASE 1 (SEE
NOTE 3
(TYP),
10W425-47)

RIM DITCH
(SEE NOTE 3 (TYP),
10W425-44)

RIM DITCH
(SEE NOTE 3 (TYP),
10W425-44)

A65

B68

B68

100 YEAR FLOOD PLAIN
BOUNDARY

DRAINAGE
CHANNEL

ASSUMED NORTH

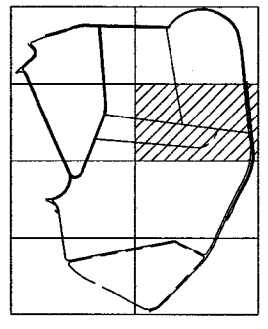
MATCHLINE A, SEE DRAWING 10W425-44

MATCHLINE A, SEE DRAWING 10W425-47

NOTES:
1. FOR GENERAL NOTES SEE 10W425-26.
2. FOR DIKE RAISING NOTES, SEE 10W425-42.

EMORY RIVER-WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00

KEY PLAN



R													
R 0		DRS	BSB	WPT	HLP	REP	JGA						D
ISSUED FOR DREDGE CELL EXPANSION PH2													DISCIPLINE INTERFACE
REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST			

SCALE: 1"=50' EXCEPT AS NOTED

YARD

DREDGE CELL LATERAL EXPANSION
STAGE 3
SHEET 4 (810-840)

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R.E. PURKEY	J.G. ADAIR	

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

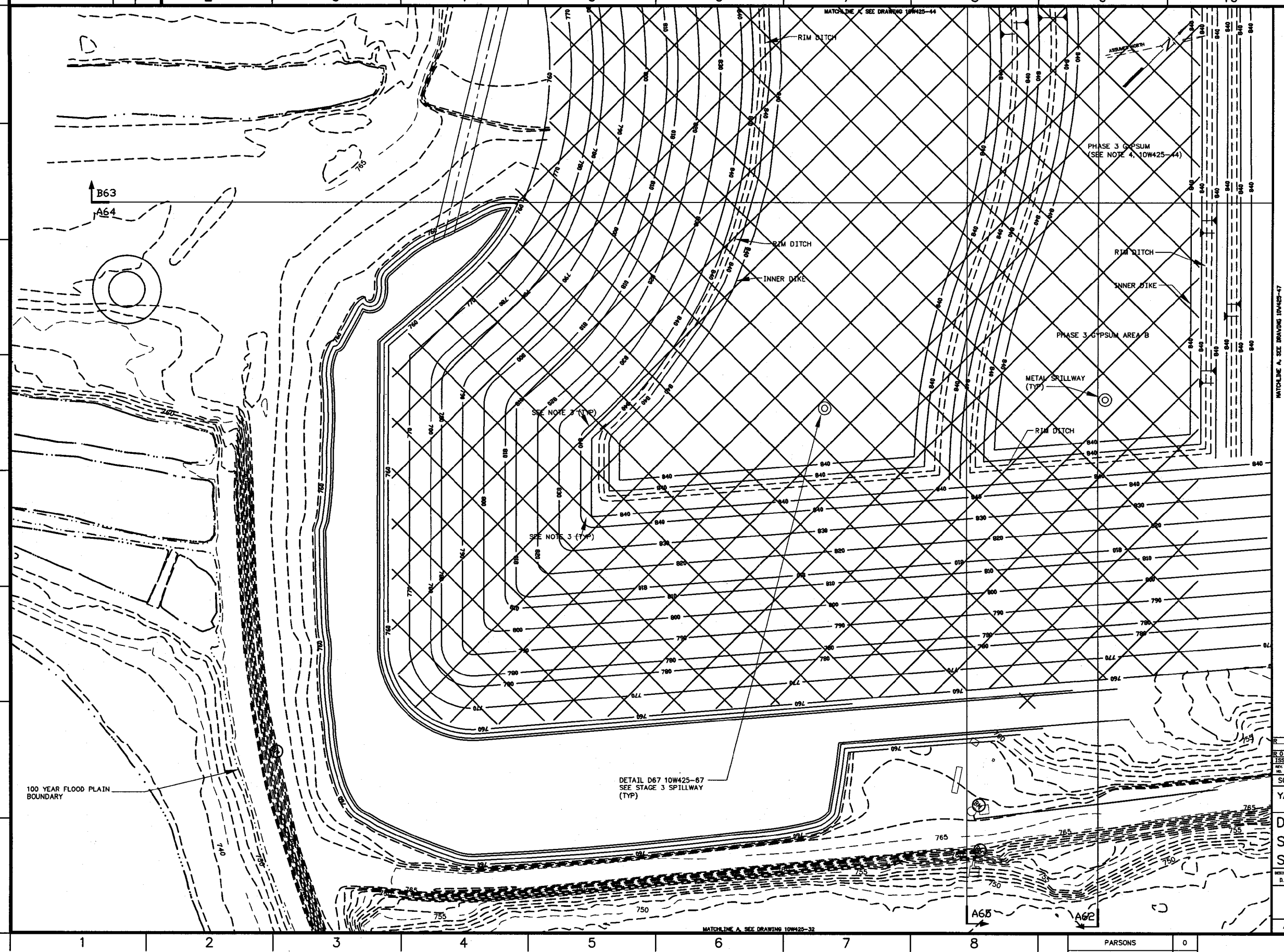
AUTOCAD R14	DATE	36	C	10W425-45	R 0

PLOT FACTOR:600
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

PARSONS	0
TASK COMPLETED BY:	REV NO.

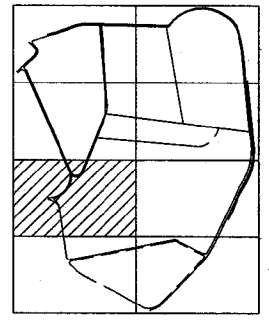
TVA-00002823



NOTES:
1. FOR GENERAL NOTES SEE 10W425-26.
2. FOR DIKE RAISING NOTES, SEE 10W425-42.
3. WIDEN RIM DITCH IN CORNERS.

EMORY RIVER–WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00

KEY PLAN



REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST	REV NO.
R 0		DRS	BSB	WPT	HLP	REP	JGA				D

ISSUED FOR DREDGE CELL EXPANSION PH2

SCALE: 1"=50' EXCEPT AS NOTED

YARD

DREDGE CELL LATERAL EXPANSION
STAGE 3
SHEET 5 (EL 810–840)

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R.E. PURKEY	J.G. ADAIR	

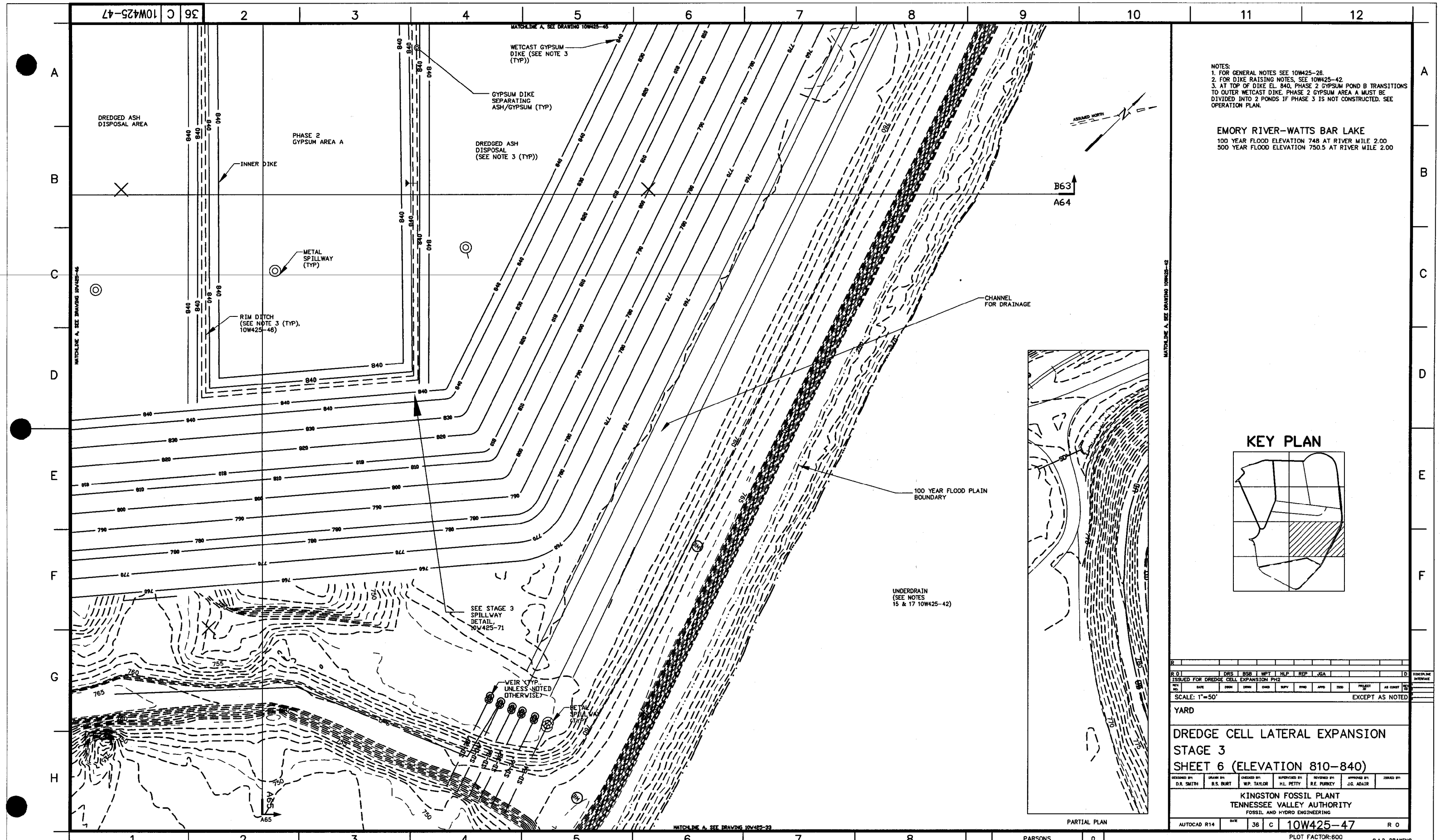
KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425–46	R 0

PARSONS	0
TASK COMPLETED BY:	REV NO.

PLOT FACTOR:600
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY



NOTES:
1. FOR GENERAL NOTES SEE 10W425-26.
2. FOR DIKE RAISING NOTES, SEE 10W425-42.
3. AT TOP OF DIKE EL. 840, PHASE 2 GYPSUM POND B TRANSITIONS TO OUTER WETCAST DIKE. PHASE 2 GYPSUM AREA A MUST BE DIVIDED INTO 2 PONDS IF PHASE 3 IS NOT CONSTRUCTED. SEE OPERATION PLAN.

EMORY RIVER–WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00

PARTIAL PLAN

KEY PLAN

REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	HYRD	APVD	ISSD	PROJECT ID	AS CONST	REV ID
R 0		DRS	BSB	WPT	HLP	RTP	JGA				D

ISSUED FOR DREDGE CELL EXPANSION PH2

SCALE: 1"=50' EXCEPT AS NOTED

YARD

DREDGE CELL LATERAL EXPANSION STAGE 3 SHEET 6 (ELEVATION 810–840)

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R.E. PURKEY	J.G. ADAIR	

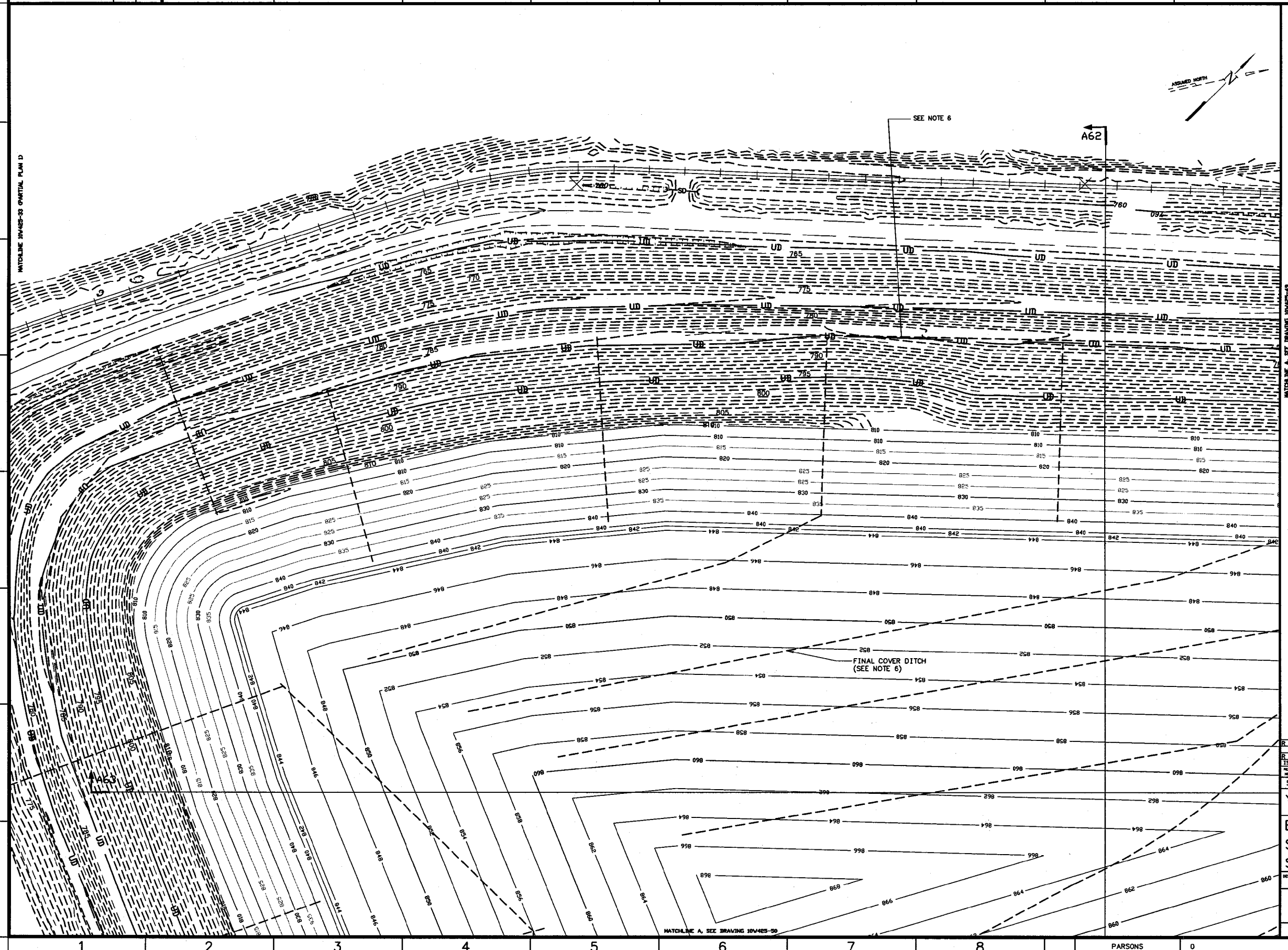
KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-47	R 0

PARSONS | 0
TASK COMPLETED BY: | REV NO.

PLOT FACTOR:600
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

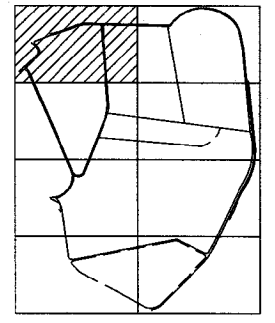


NOTES:

1. FOR GENERAL NOTES SEE 10W425-26.
2. FOR DIKE RAISING NOTES, SEE 10W425-49.
3. ASH PLACED ABOVE EL. 840 SHALL BE DRY ASH. SEE OPERATIONS PLAN PER DESCRIPTION.
4. SLOPE UNDERDRAINS NOT SHOWN.
5. GRADING SHOWN FOR EXISTING DREDGE CELL IS FINAL GRADE.
6. FOR DITCHES CONSTRUCTED AS PART OF THE FINAL CONSTRUCTION, SEE DRAWING 10W425-78.

EMORY RIVER-WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00

KEY PLAN



REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ENGR	AS CONST	DISCIPLINE INTERFACE
R											
R 0		DRS	BSB	WPT	HLP	REP	JGA				
ISSUED FOR DREDGE CELL EXPANSION											

SCALE: 1"=50' EXCEPT AS NOTED

YARD

EXISTING DREDGE CELL
STAGE 4
SHEET 1 (840-868)

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R.E. PURKEY	J.G. ADAIR	

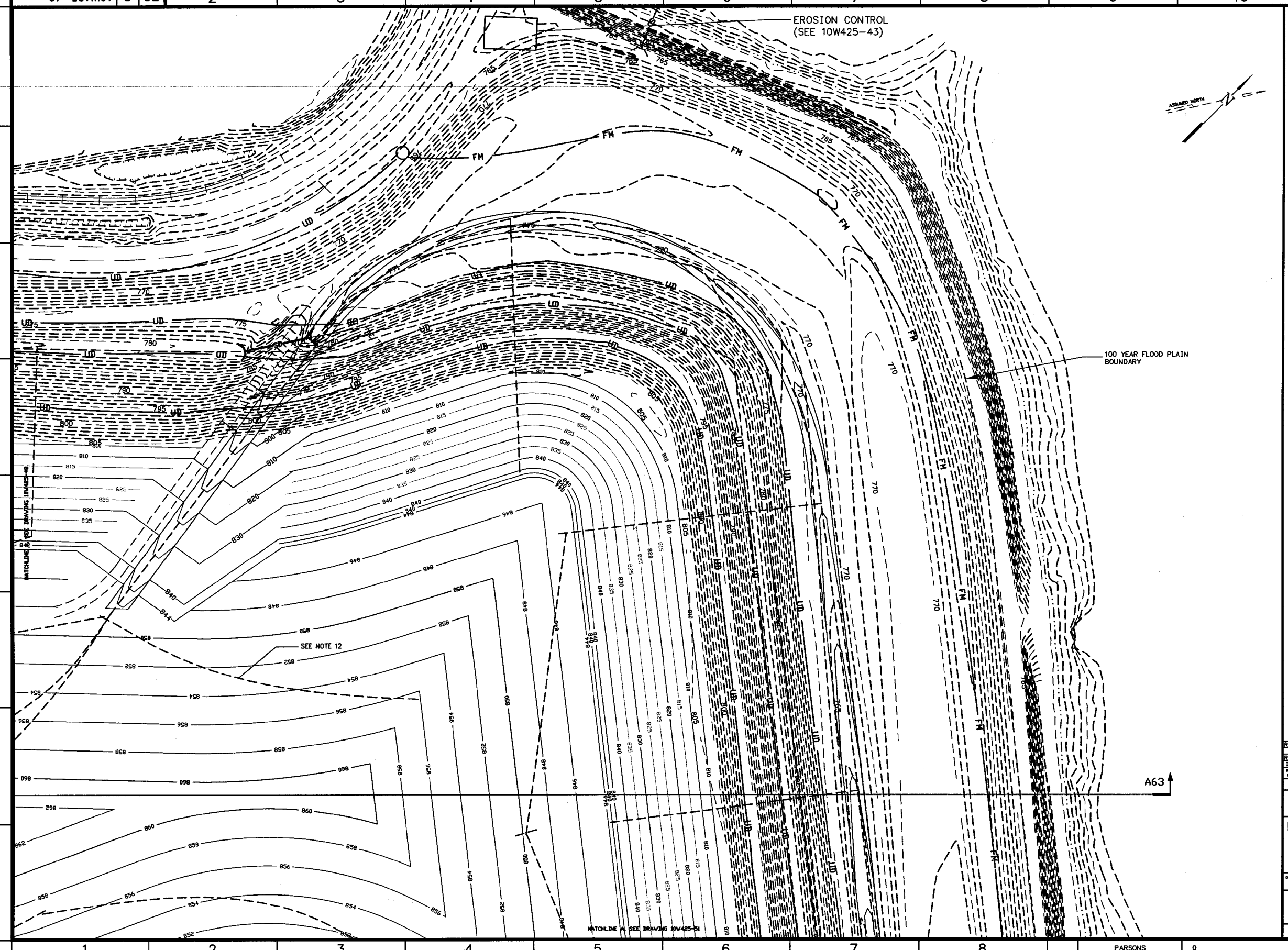
KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-48	R 0

PARSONS	0
TASK COMPLETED BY:	REV NO.

PLOT FACTOR:600
W_TVA

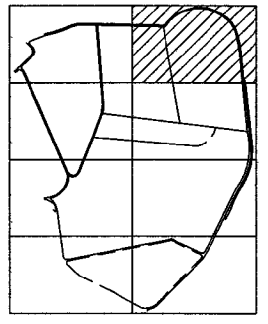
C.A.D. DRAWING
DO NOT ALTER MANUALLY



1. FOR DRAWING INDEX AND LEGEND, SEE DRAWING 10W425-20.
2. FOR GENERAL NOTES SEE 10W425-26.
3. PROVIDE A MINIMUM OF TWO (2) FEET OF FREEBOARD TO THE FINISHED DIKE ELEVATION DURING ASH DREDGING/ GYPSUM PLACEMENT ACTIVITIES.
4. LOCATE METAL SPILLWAYS TO TIE INTO EXISTING METAL SPILLWAYS FOR PREVIOUS STAGE AS SHOWN ON 10W425-67.
5. PROPOSED CONTOUR ELEVATIONS SHOWN FOR THE OUTER 3:1 SLOPES ARE FINISHED SURFACE ELEVATIONS (INCLUDING FINAL COVER).
6. FINAL CLOSURE GRADE WILL BE PLACED AT TWO (2) FEET PLUS OR MINUS OF THE ACTUAL GRADE SHOWN.
7. MAXIMUM SLOPE SHALL BE 3:1 (HORIZONTAL TO VERTICAL).
8. FOR CONSTRUCTION OF AND RAISING OF DIKES, SEE DETAIL A69 ON DRAWING 10W425-69.
9. PERIMETER DRAINS WITHIN THE OUTER WET-CAST GYPSUM DIKES ARE NOT SHOWN ON THESE DRAWINGS. SEE DETAIL A69 ON DRAWING 10W425-69.
10. CONSTRUCTION OF THE FINAL COVER OVER THE EXISTING DREDGE CELL SHALL BE IN ACCORDANCE WITH THE QA/QC PLAN AND SPECIFICATIONS APPENDED TO THE OPERATION PLAN.
11. SLOPE UNDERDRAINS ARE NOT SHOWN.
12. FOR DITCHES CONSTRUCTED AS PART OF THE FINAL CONSTRUCTION, SEE DRAWING 10W425-76.

EMORY RIVER-WATTS BAR LAKE
100 YEAR FLOOD ELEVATION 748 AT RIVER MILE 2.00
500 YEAR FLOOD ELEVATION 750.5 AT RIVER MILE 2.00

KEY PLAN



REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST	DISCIPLINE INTERFACE
R 0		DRS	BSB	WPT	HLP	REP	JGA				
ISSUED FOR DREDGE CELL EXPANSION											

SCALE: 1"=50' EXCEPT AS NOTED

YARD

EXISTING DREDGE CELL
STAGE 4
SHEET 2

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
D.R. SMITH	B.S. BURT	W.P. TAYLOR	H.L. PETTY	R.E. PURKEY	J.G. ADAIR	

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	36	C	10W425-49	R 0

PARSONS	0
TASK COMPLETED BY:	REV NO.

PLOT FACTOR:600
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY