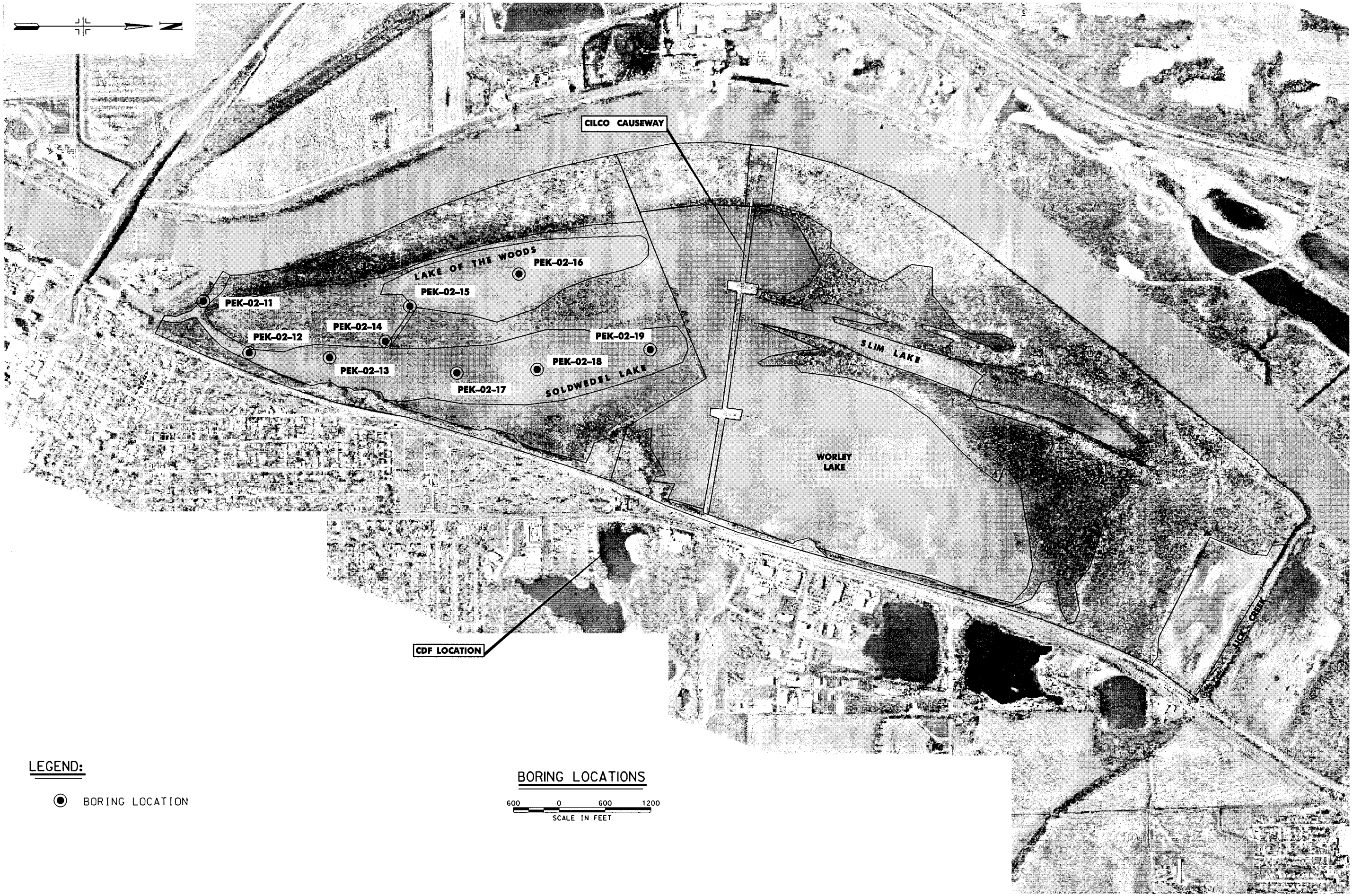

LEGEND:

◉ BORING LOCATION

BORING LOCATIONS

600 0 600 1200

SCALE IN FEET

US Army Corps of Engineers
Rock Island District

Symbol	Description	Date	Approved
	Revisions		

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ROCK ISLAND, ILLINOIS

Designed By: RSK	Date: 8 JULY 2002		
Drawn By: GBM/TPD	Scale: AS SHOWN		
Checked By: RSK	Project Code: 1w58		
Reviewed By: GJM	Solicitation Number: DACW25-XX-B-XXXX		

TAZEWELL COUNTY, ILLINOIS
ILLINOIS ECOSYSTEM RESTORATION
ILLINOIS RIVER
PEKIN LAKE

BORING LOCATIONS

PLATE C-1

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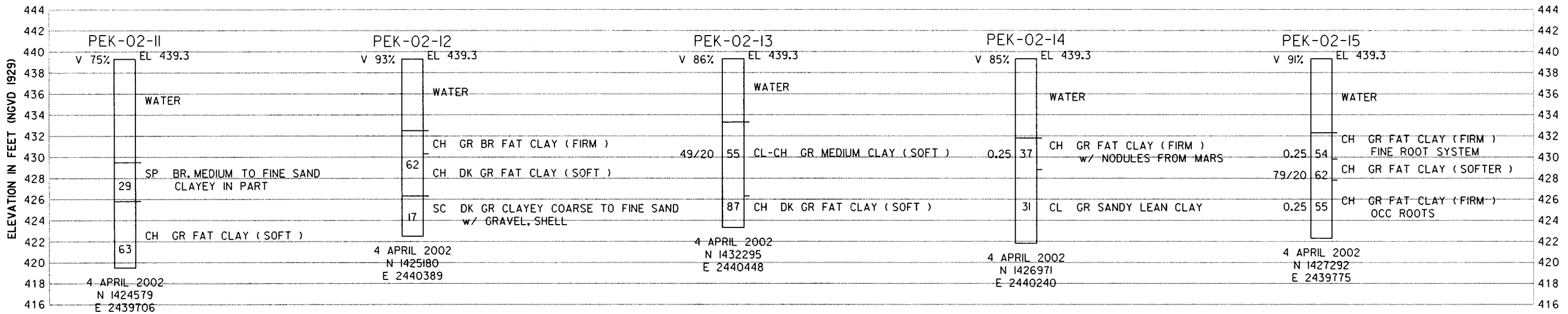

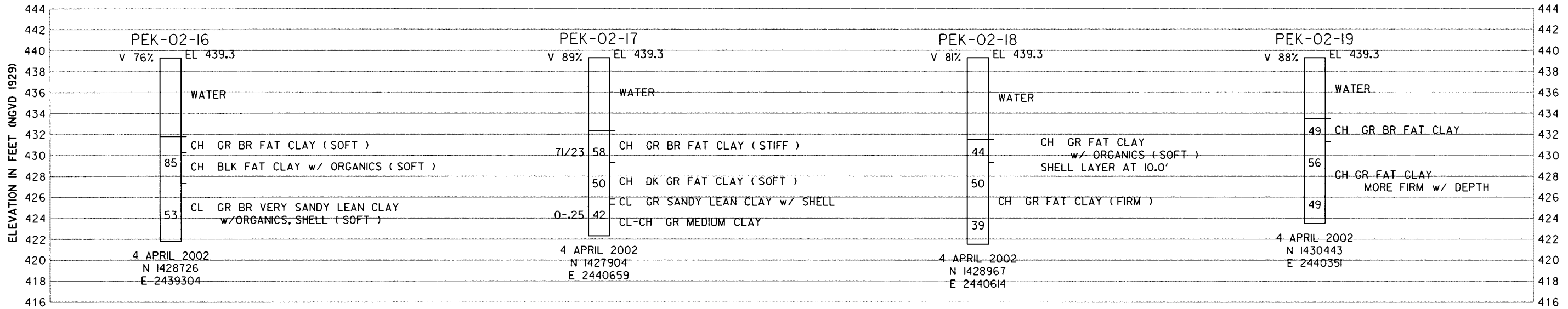

LEGEND

PEK-00-00 BORING NUMBER

HOLE ADVANCED USING :

- 4" VIBROCORE WITH PERCENT RECOVERY — V 87%
- 3¼" HOLLOW STEM AUGER — HS
- 3" ROLLER BIT W/ BENTONITE MUD — RB
- DIO IN NON COHESIVE SOILS, Qp IN COHESIVE SOILS — 0.25
- LIQUID AND PLASTIC LIMITS — 46/20
- PERCENT PASSING #200 SEIVE — (5.4)
- STANDARD PENETRATION TEST BLOW COUNTS OBTAINED W/ CME AUTO HAMMER (22) REFER TO ETL-1110-1-138

TOP ELEVATION IN FEET (NGVD 1929)

MAJOR STRATA BREAK

MINOR STRATA BREAK

56 NATURAL MOISTURE CONTENT IN PERCENT DRY WEIGHT

DATE OF DRILLING

LOCATION COORDINATES OF BORING (ILLINOIS WEST 83, IN FEET)

US Army Corps of Engineers
Rock Island District

Symbol	Description Revisions	Date	Approved

Designed By: RSK	Drawn By: GBM	Checked By: RSK	Reviewed By: CJM
Date: 8 JULY 2002	Scale: AS SHOWN	Project Code: iw58	Solicitation Number: DACW25-02-B-XXXX

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ROCK ISLAND, ILLINOIS

TAZEWELL COUNTY, ILLINOIS
ILLINOIS ECOSYSTEM RESTORATION
ILLINOIS RIVER
PEKIN LAKE

BORING LOGS

PLATE C-2

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FLOCCULENT SETTLING DATA

Pekin Lake Sample #1
TSS (g/L) vs. Time (hours)

SAMPLE PORTS

TIME (hours)	13	12	11	10	9	8	7	6	5	4	3	2
0.0	149.2	156.8	151.1	152.2		150.4	154.4	151.2	153.8	152.7	154.9	156.1
3.0	1.420	*	*	*	*	*	*	*	*	*	*	*
4.5	0.658	1.350	*	*	*	*	*	*	*	*	*	*
7.0	0.411	0.471	1.050	*	*	*	*	*	*	*	*	*
11.0	@	0.847	0.576	0.430	*	*	*	*	*	*	*	*
24.2	@	0.164	0.206	0.195	0.688	*	*	*	*	*	*	*
56.7	@	0.281	0.184	0.167	0.107	*	*	*	*	*	*	*
77.7	@	0.305	0.097	0.102	0.069	0.073	*	*	*	*	*	*
98.0	@	@	0.205	0.098	0.092	0.361	*	*	*	*	*	*
241.6	@	@	0.046	0.020	0.027	0.049	0.062	*	*	*	*	*
361.0	@	@	0.012	0.032	0.019	0.053	0.046	*	*	*	*	*

* Indicates port depth is below the sediment line.

@ Indicates port is above the water level

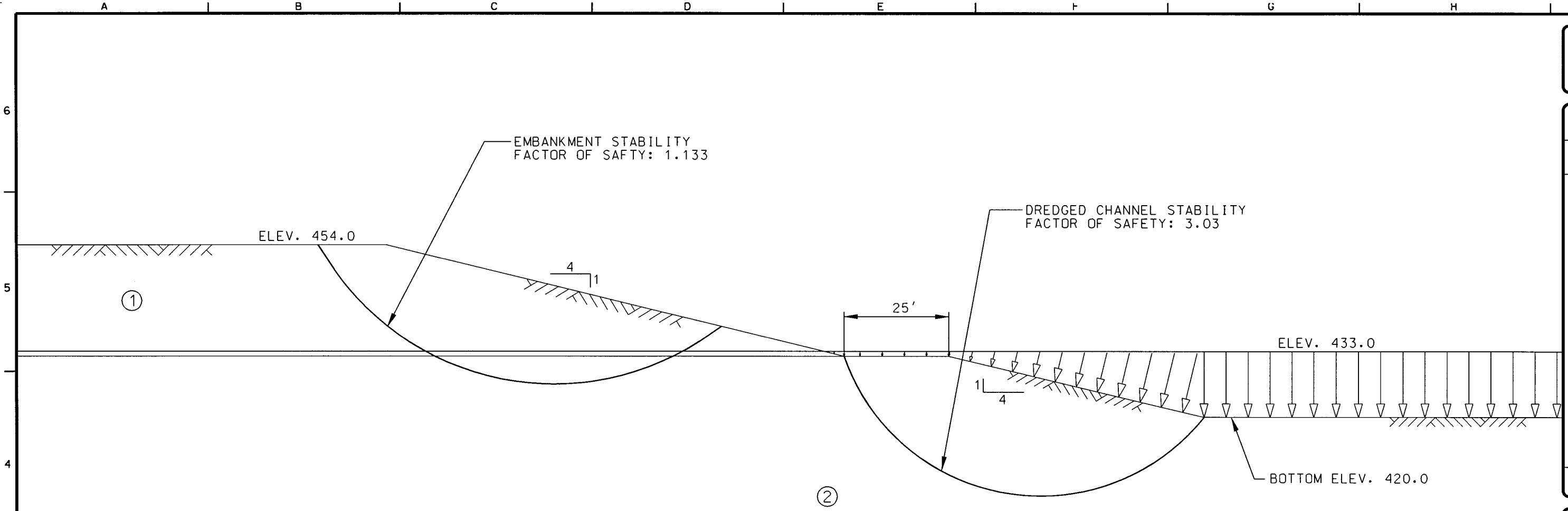
PLATE C-3

ZONE/COMPRESSION SETTLING DATA

Pekin Lake #1

Water and Sediment Height (in.) vs. Time (hrs.)

Time hours	days	Water Height	Sed. Height
0.0	0.00	84.0	84.0
0.5	0.02	80.0	80.0
1.0	0.04	80.0	79.5
2.0	0.08	80.0	77.5
3.0	0.13	80.0	73.5
4.5	0.19	80.0	70.0
7.0	0.29	79.0	63.0
9.0	0.38	78.0	56.5
11.0	0.46	77.0	55.0
24.2	1.01	75.0	51.0
56.7	2.36	74.0	47.0
77.7	3.24	72.0	46.0
98.0	4.08	70.0	43.25
241.6	10.07	69.0	40.5
361.0	15.04	66.0	39.0



SLOPE STABILTY ANALYSES

NO SCALE

NO.	DESCRIPTION	UNIT WEIGHT	SHEAR STRENGTH	PORE PRESSURE
1	Embankment	120	Cohesion: 250 Friction angle: 0	Piezometric Line no. 1
2	Foundation	120	Cohesion: 300 Friction angle: 0	Piezometric Line no. 1

US Army Corps of Engineers
Rock Island District

Revisions: Symbol | Description | Date | Approved

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ROCK ISLAND, ILLINOIS

Designed By: RSK | Date: 8 JULY 2002
Drawn By: TPD | Scale: AS SHOWN
Checked By: RSK | Project Code: iw58
Reviewed By: GJM | Solicitation Number: DACW25-XX-B-XXXX

TAZEWELL COUNTY, ILLINOIS
ILLINOIS ECOSYSTEM RESTORATION
ILLINOIS RIVER
PEKIN LAKE

SLOPE STABILITY ANALYSES

PLATE C-5

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