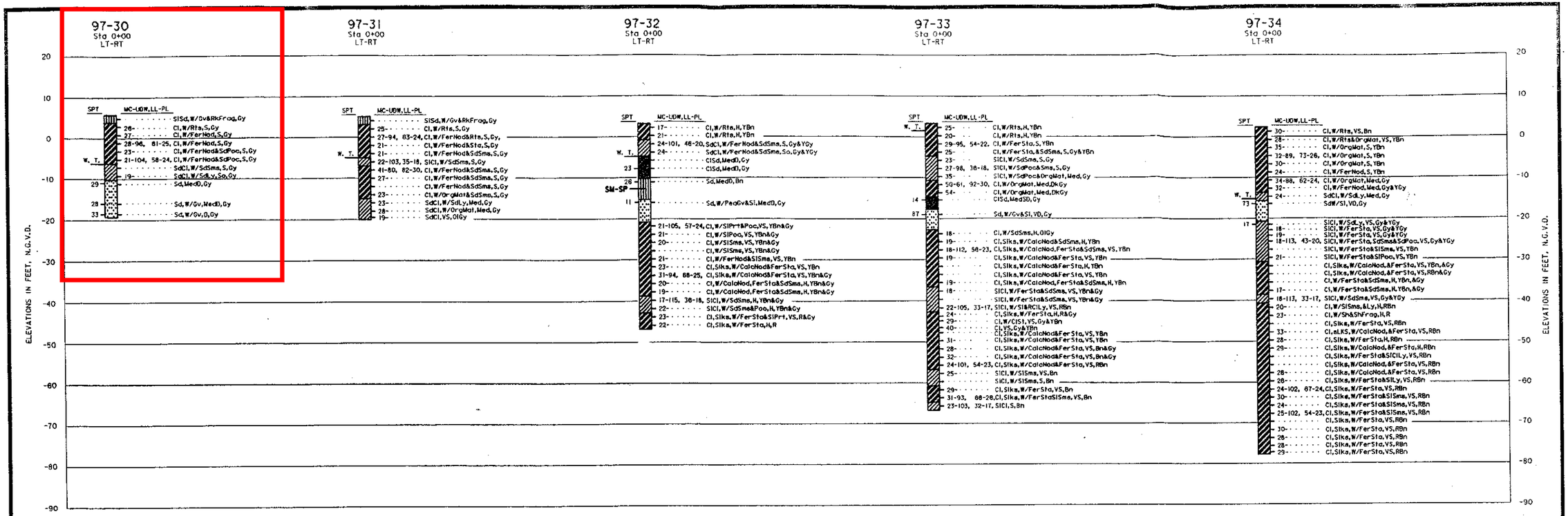

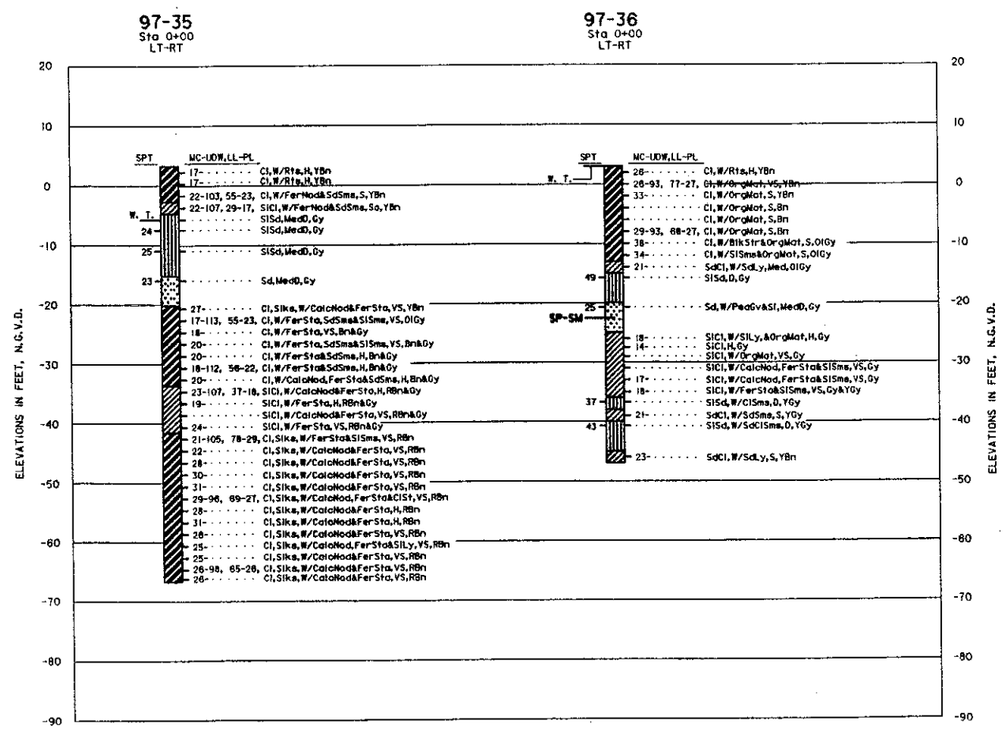

NOTES;

1. SOILS HAVE BEEN CLASSIFIED IN ACCORDANCE WITH ASTM 2487-93 "CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES, ("UNIFIED SOILS CLASSIFICATION SYSTEM". CONSISTENCY OF SOILS SUCH AS SOFT, MEDIUM, HARD, LOOSE, DENSE, ETC., ARE RELATIVE TERMS BASED ON ESTIMATED UNDISTURBED SHEAR STRENGTH OF THE MATERIAL AS DETERMINED BY VISUAL CLASSIFICATION, POCKET PENETROMETER TESTS, AND PENETRATION RESISTANCE DURING SAMPLING.
2. FIGURES TO THE RIGHT OF BORING LOGS ARE WATER CONTENTS IN PERCENT OF THE DRY WEIGHT, DRY DENSITY, LIQUID LIMIT, AND PLASTIC LIMIT. (MC-UDW), (LL-PL). FIGURES TO THE LEFT OF BORING LOGS ARE BLOWS PER FOOT OF PENETRATION FROM STANDARD PENETRATION TESTING.
3. BORINGS WERE DRILLED USING WET ROTARY DRILLING TECHNIQUES AND UNDISTURBED SAMPLES WERE RECOVERED WITH A 3-INCH DIAMETER THIN WALL SAMPLER WHERE COHESIVE MATERIALS WERE ENCOUNTERED. WHERE COHESIONLESS MATERIALS WERE ENCOUNTERED, DISTURBED SAMPLES WERE TAKEN WITH A SPLIT SPOON SAMPLER DURING PERFORMANCE OF STANDARD PENETRATION TESTING.
4. WATER TABLE LEVELS SHOWN ON BORING LOGS WERE DETERMINED AFTER DRILLING BORINGS BY MEASURING THE TOP OF FLUID LEVELS IN THE BORINGS. INASMUCH AS WET ROTARY DRILLING TECHNIQUES AND DRILLING MUD WERE USED TO DRILL THE HOLES, THE LEVEL OF DRILLING FLUIDS IN THE BORE HOLES MAY NOT HAVE STABILIZED TO THE LEVEL OF THE ACTUAL WATER TABLE. ADDITIONALLY, WATER TABLES IN THE FIELD ARE LIKELY TO FLUCTUATE DEPENDING ON WEATHER CONDITIONS. THEREFORE, SOME VARIATION SHOULD BE ANTICIPATED BETWEEN WATER TABLES INDICATED AND WATER TABLES ENCOUNTERED IN THE FIELD.

LABORATORY CLASSIFICATIONS:

- CH INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS.
- CL INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, LEAN CLAYS.
- SC CLAYEY SANDS, SAND-CLAY MIXTURES.
- SM SILTY SANDS, SAND-SILT MIXTURES.
- SP POORLY GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES.

VISUAL CLASSIFICATIONS:

Blk Blockey	Gy Gray(ish)	Pea Pea	Slks Slicken Sides
Bn Brown(ish)	H Hard	Poc Pocket(s)	Sms Seams
Calc Calcareous	Ly Layer(s)	R Red(dish)	So Soft
Cl Clay(ey)	Med Medium	Rk Rock(s)	St Stone(s)
D Dense	Mot Mottled	Rts Root(s)	V Very
Dk Dark	Nod Nodules	S Stiff	W With
Fer Ferrous	Org Organic	Sd Sand(y)	Y Yellow(ish)
Frag Fragment(s)	Ol Olive	Sh Shell(y)	
Gv Gravel(ly)	Prt Particle(s)	Si Silty	

REVISION	DATE	DESCRIPTION	BY

OFFICE OF THE DISTRICT ENGINEER
U.S. ARMY ENGINEER DISTRICT, GALVESTON
CORPS OF ENGINEERS
GALVESTON, TEXAS

DRAWN BY: P. N.
DESIGNED BY: P. N.
CHECKED BY: I. B.
SUBMITTED BY:
CHIEF:
APPROVED:
APPROVED:
CHIEF, ENGINEERING DIVISION
DATE: X
(*) AS REQUIRED BY ENGINEER CIRCULAR NO. 1110-1-1152)
SCALE: AS SHOWN
SPEC. DATE:
Prepared under the direction of
Eric R. Potts, Col., C.E.,
District Engineer
DRAWING NUMBER
X
SHEET 1 OF X
FILE NO. X

NECHES RIVER AND TERMINALS, TEXAS
NECHES RIVER SALT WATER BARRIER

LOGS OF BORINGS

X

EXHIBIT A-1