

FHWA REGION	STATE	PROJECT
5	OHIO	

2
2

LOG OF BORING LAKE COUNTY
LAK - 84 - 30.85

BORING NO. 201
STATION 4+84, 12.6' LT.
SURFACE ELEV. 714.9
DATE STARTED: 1/8/82
DATE COMPLETED: 1/8/82

ELEV.	DEPTH	SAMPLES/ CORES			CONSIST./ REL. DENSITY	DESCRIPTION	LAB TESTS									
		BLOWS PER FT.	REC. %	R.Q.D. %			% Agg.	% C.S.	% F.S.	% S.L.T.	% CLAY	LL	P.I.	% W.C.		
713.1	1					ROADWAY SHOULDER-Black sand and gravel										
	2	1/1/1			Loose-Firm											
	3															
	4															
	5	3/3/4			Loose-Firm	SAND-Medium to fine, silty clayey brown. Non-plastic to slightly plastic. Trace coarse sand and rounded gravel to 1/2".	244	24.2	18.9			32.5				16
	6															
	7															
	8															
	9	5/5/6			Medium-Dense		524	23.9	10.3			13.4				11
	10															
	11															
	12															
	13	4/4/5			Loose	SAND: Coarse to fine, silty gray, little rounded gravel to 1/2".										
	14					(Encountered water at 13' while augering.)										
	15															
	16															
	17															
	18															
695.2	19	5/6/50 1/2"			Medium-Dense	SHALE-Soft weathered, clayey, gray @ 19.5'										9

Bottom of boring 19.7'
Notes: Stream water level @ 703.0 (Eq. Depth 11.9')
Auger deflecting at 19.7'. Unable to core.

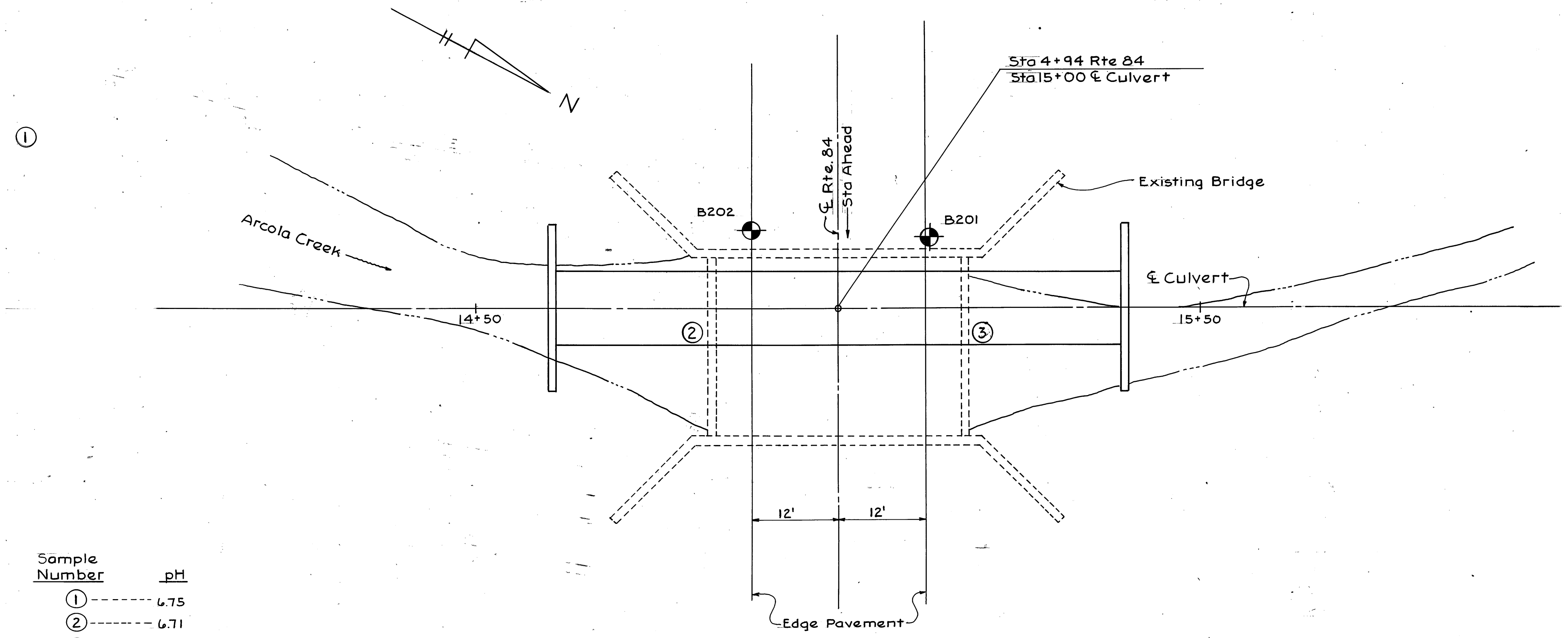
LOG OF BORING

BORING NO. 202
STATION 4+83, 12.0' RT.
SURFACE ELEV. 714.9
DATE STARTED: 1/7/82
DATE COMPLETED: 1/8/82

ELEV.	DEPTH	SAMPLES/ CORES			CONSIST./ REL. DENSITY	DESCRIPTION	LAB TESTS									
		BLOWS PER FT.	REC. %	R.Q.D. %			% Agg.	% C.S.	% F.S.	% S.L.T.	% CLAY	LL	P.I.	% W.C.		
712.6	1					ROADWAY SHOULDER-Black sand and gravel										
	2															
	3	2/1/1			Soft	CLAY AND SAND: AT 3'-Sandy, silty brown clay and coarse to fine clayey brown sand with some rounded gravel to 1/2".	8.9	11.3	23.5			56.3				17
	4															
	5															
	6	3/2/2			Medium	At 6'-Silty brown clay and gray medium to fine clayey sand with little rounded gravel to 1/4".										
	7															
	8															
	9															
	10	4/12/50 6.2'			Moist											
	11															
	12															
	13															
	14	4/5/5			Medium-Dense	SAND: Coarse to fine, silty gray, some rounded gravel to 1". Trace small shale fragments.										12
	15					(Encountered water at 13' while augering.)										
	16															
	17															
	18															
	19	3/4/5			Loose	Twisted off/sheared auger with tip at 18.5'. Boulder? Unable to retrieve auger. Moved back 2.0' (Sta 4+81) Augered to 18.5', sampled and continued boring. (Auger refusal at 21.5')										
	20															
	21															
	22															
	23															
	24															
	25															
	26															
687.9	27					SHALE-Hard, sandy, gray horizontal thin to massive bedded. Trace vertical to 70° joints. Trace weathered at 24.0' and 25.7'. Some weathered at 24.5', 25.2' and 26.2'										

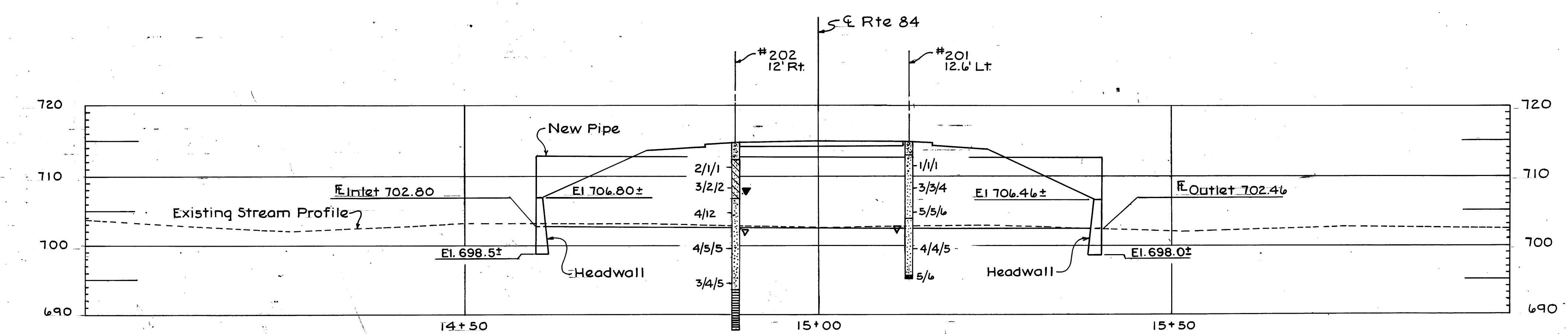
Bottom of boring 27.0'
Note: Stream water level at El. 703.0 (Eq. Depth 11.9')

CR 07/1/82
M 8 888



Sample Number	pH
①	6.75
②	6.71
③	6.70
④	6.75

NOTE: pH measurements were made using a Fisher Scientific Model #104 digital, temperature compensated portable pH meter. All measurements taken on February 5, 1982, at 1:20 P.M. Air temperature, 22°F; water temperature, 29°F. Stream flow between abutments: 1.5 feet deep at 2' per second (flow velocity and depth are approximate)



CAPITOL ENGINEERING ASSOCIATES
CONSULTING CIVIL ENGINEERS
PAINESVILLE, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. LAK-84-30.86
OVER ARCOLA CREEK
LAKE COUNTY STA 2+73± TO STA 7+00±

PLAN, PROFILE & LOGS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
EWB	DPR	TAP	NGE	3/19/82		