

1957

Year

Job No.

06171

Changes \_\_\_\_\_

County

FRANKLIN

Bridge No.

FRB-62-0286

Section

FRH-62-1.42

Location

 over  under

Young Rd.

File No.

FES-6  
46-4070-065

00419

DESIGN BY \_\_\_\_\_

	RECON	AUGER	CORE	DRIVE ROD
By			SPICER ELLIS	WETZEL
Dates			2/22-26/57	2/12-13/57
No. of Holes or Soundings			2	4
Footage			101.0	155.0
Samples Tested			20	

SITE PLANS	
Date Rec'd	11-16-56
Revised Plan	

Topo Sheet \_\_\_\_\_

Transmittal Date 3-27-57

No. of Tracings \_\_\_\_\_

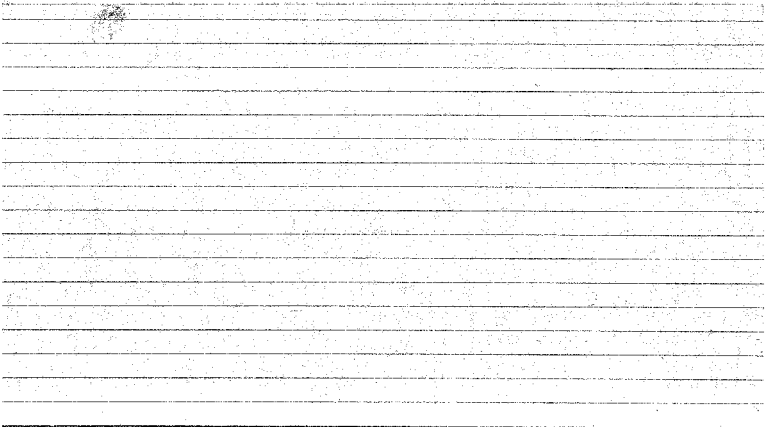
Filed with year \_\_\_\_\_

Revisions \_\_\_\_\_

Remarks \_\_\_\_\_

Refer To \_\_\_\_\_

Auger Data			Drive Rod		Core Data		
No. of Holes	Footage	Samples	No. of Soundings	Footage	No. of Holes	Footage	Samples
-	-	-	4	155.0	2	101.0	20





# FIELD DATA - ROD PENETRATION

Location No. 4 County: FRANKLIN  
BEAR Pier Abut. Bridge No. 62-028  
 Station: 19+36 <sup>UNDER</sup> ROAD ~~Clear:~~ Youngs Road  
 Offset: 14' LT.  
 Started: 2-13-57  
 Completed: 2-13-57 Equipment: 21-0-15

D.R. Diameter 1.35  
 Ground Line

Proposed Footer

Depth Feet	Penetration	Elevation
0		872.1
5	2" 3/4 2" 3/8 2" 1/8 1" 1/8 1" 1/16	867.1
10	3/4 5/4 13/16 13/16 15/16	862.1
15	3/4 11/16 3/4 5/8 11/16	857.1
20	3/4 11/16 3/4 11/16 1/2	852.1
25	1/2	847.1

Party S. H. ...

25	7/16 3/8 1/8 3/16	847.1
30	3/8 5/16 1/8 1/8 3/16	842.1
35	1/4 1/8 1/4 1/4	837.1
40	1/4 3/16 1/8 1/16	832.1
45		
50		
55		
60		

Rod Condition: 8' Rod Bent

Chief of Party S. H. ...

# FIELD DATA - ROD PENETRATION

Location No. 7 County: FRANKLIN  
FERNAND Pier ~~Atms.~~ Bridge No. 62-0286  
 Station: 20+63 <sup>under</sup> Over: YOUNG RD.  
 Offset: 14' LT.  
 Started: 2-12-57  
 Completed: 2-13-57 Equipment: 21-0-16

D.R. Diameter 1.35

Depth Feet	Penetration	Elevation
0	2 1/4	865.5
	2 3/8	
	1 1/2	
	1	
	3/8	
5	1 5/16	860.5
	1 1/8	
	3/4	
	1/2	
10	1 5/16	855.5
	3/4	
	5/8	
	1/2	
	5/8	
15	1/2	850.5
	3/8	
	1/2	
	3/16	
	1/2	
	3/16	
20	3/8	845.5
	1/8	
	3/16	
	1/8	
	3/8	
25	3/16	840.5

Party PERRY GLASS

25	3/8	840.5	
	1/8		
	3/8		
	5/8		
30	3/16	835.5	
	1/4		
	1/4		
	5/8		
	3/16		
35	1/8	830.5	1/8 OVER NITE CHECK
	1/8	829.5	
40			
45			
50			
55			
60			

Rod Condition: 20' ROD BENT

Chief of Party S. Stetzel

# FIELD DATA - ROD PENETRATION

Location No. 8 County: FRANKLIN  
 Forward Pier: Abut. Bridge No: 62-0286  
 Station: 20+76 <sup>UNDER</sup> ~~Over~~: Young Rd.  
 Offset: 14' RT.  
 Started: 2-12-57  
 Completed: 2-13-57 Equipment: 21-0-15

D.R. Diameter: 1.35

Ground Line

Proposed Footer

Depth Feet	Penetration	Elevation
0		870.9
5	2 1/4 2" 5 1/16 2" 5 1/16 1" 7 1/8 1 1/16 5 1/16	865.9
10	5 1/16 3 1/4 5 7/8 13 1/16 13 1/16	860.9
15	11 1/2 9 1/16 5 7/8 5 7/8 1 1/2	855.9
20	7 1/16 7 1/16 3 1/8 1 1/4 5 1/16	850.9
25	5 1/16	845.9

Party SCHIAPPA

25	845.9	
	5 1/16	
	3 1/16	
	1 1/4	
30	1 1/4	840.9
	3 1/16	
	3 1/16	
	3 1/16	
	3 1/16	
35	1 1/8	835.9
	1 1/8	834.9
40		
45		
50		
55		
60		

118+ OVERNIGHT CHECK.

Rod Condition: BENT. 20' Rod

Chief of Party B. WETZEL

## SUMMARY OF SOIL TEST DATA ON FOUNDATION SAMPLES

County, Rt. No., Section

FRA-62-0286

Bridge No.

Lab. No. So.-	Field No.	Station No.	Repre- sents Feet	Mechanical Analysis					Physical Characteristics			Ohio Class.	Remarks
				Agg. %	C Sand %	F Sand %	Silt %	Clay %	L.I.	P.I.	Water Cont.		
59577	1	20+63, 14L	5-6	7	9	13	36	35	29	12	19	6a	OR SANDY CLAY
59578	2	"	10-11	28	10	11	29	22	22	7	11	6a	OR SANDY GRAV. SILT
59579	3	"	15-16	27	10	12	30	21	21	7	12	6a	OR SANDY GRAV. SILT
59580	4	"	20-21	13	11	16	36	24	20	3	11	6a	OR SANDY SILT
59581	5	"	25-26	16	12	16	32	24	20	5	12	6a	OR SANDY SANDY SILT
59582	6	"	30-31	12	10	14	31	33	21	4	12	6a	OR SANDY SILT
59583	7	"	35-36	34	16	12	20	18	18	3	14	6a	OR SILTY SANDY GRAVEL
59584	8	"	40-41	27	10	14	17	32	21	5	13	6a	OR SANDY GRAV. SILT
59585	9	"	45-46	81	5	4	7	3	NP		12	1-a	OR GRAVEL
59586	10	"	50-51	92	3	2	2	1			7	1-a	OR GRAVEL

## SUMMARY OF SOIL TEST DATA ON FOUNDATION SAMPLES

County, Rt. No., Section

FRA-62-0286

Bridge No.

Lab. No. So.-	Field No.	Station No.	Represents Feet	Mechanical Analysis					Physical Characteristics			Ohio Class.	Remarks
				Agg. %	C Sand %	F Sand %	Silt %	Clay %	L.L.	P.I.	Water Cont.		
59567	1	Hole No. 4	5-6	0	15	31	28	26	27	9	27	4a	SD SANDY SILT
59568	2	"	10-11	22	13	16	28	21	20	3	19	4a	SD GRAVELLY SANDY SILT
59569	3	"	15-16	21	12	13	36	18	19	4	12	4a	SD GRAVELLY SANDY SILT
59570	4	"	20-21	66	6	7	11	10	19	4	11	1-b	SD SILTY GRAVEL
59571	5	"	25-26	29	11	12	30	18	19	4	10	4a	SD SANDY GRAVELLY SILT
59572	6	"	30-31	34	12	11	28	20	19	7	11	4a	SD SANDY GRAVELLY SILT
59573	7	"	35-36	20	12	16	31	21	17	2	11	4a	SD GRAVELLY SANDY SILT
59574	8	"	40-41	18	9	14	35	24	20	4	11	4a	SD GRAVELLY SANDY SILT
59575	9	"	45-46	3	9	16	36	36	22	7	12	4a	SD SANDY SILT
59576	10	"	49-50	15	9	15	35	26	20	5	11	4a	SD SANDY SILT



STATE OF OHIO  
DEPARTMENT OF HIGHWAYS  
TESTING LABORATORY

SUMMARY OF SOIL TEST DATA

SAMPLE NUMBER	LABORATORY NUMBER SO-	PHYSICAL CHARACTERISTICS										WATER CONTENT	DESCRIPTION	
		% AGGREGATE RET. # 10	% COARSE SAND 2.0MM - 0.42MM	% FINE SAND 0.42MM - 0.075MM	% SILT 0.075MM - 0.005MM	% CLAY < 0.005MM	LIQUID LIMIT	PLASTICITY INDEX						
		LOG OF WILLIAMS AUGER BORING												
		STA 150+50	CL	GND.	EL.	870.9							Depth	
													0.0-0.3	SOD
56-2	52789	4	4	12	29	51	41	23	25				0.3-5.0	BROWN CLAY
57-2	52790	6	8	13	34	39	29	11	15				5.0-8.0	BROWN SANDY CLAY
														CORE SAMPLES
1	59567	0	15	31	28	26	27	9	27					BROWN SANDY SILT
2	59568	22	13	16	28	21	20	3	19					BR. GRAVELLY SANDY SILT
3	59569	21	12	13	36	18	19	4	12					GR. GRAVELLY SANDY SILT
4	59570	66	6	7	11	10	19	4	11					GRAY SILTY GRAVEL
5	59571	29	11	12	30	18	19	4	10					GR. SANDY GRAVELLY SILT
6	59572	34	12	11	23	20	19	7	11					GR. SANDY GRAVELLY SILT
7	59573	20	12	16	31	21	17	2	11					GR. GRAVELLY SANDY SILT
8	59574	18	9	14	35	24	20	4	11					GR. GRAVELLY SANDY SILT
9	59575	3	9	16	36	36	22	7	12					GRAY SANDY SILT
10	59576	15	9	15	35	26	20	5	11					GRAY SANDY SILT
1	59577	7	9	13	36	35	29	12	19					YELLOW-BROWN SANDY CLAY
2	59578	28	10	11	29	22	22	7	11					GR. SANDY GRAVELLY SILT
3	59579	27	10	12	30	21	21	7	12					GR. SANDY GRAVELLY SILT
4	59580	13	11	16	36	24	20	3	11					GRAY SANDY SILT
5	59581	16	12	16	32	24	20	5	12					GR. GRAVELLY SANDY SILT
6	59582	12	10	14	31	33	21	4	12					GRAY SANDY SILT
7	59583	34	16	12	20	18	18	3	14					GR. SILTY SANDY GRAVEL
8	59584	27	10	14	17	32	21	5	13					GR. SANDY GRAVELLY SILT
9	59585	81	5	4	7	3	NP	NP	12					GRAY GRAVEL
10	59586	92	3	2	2	1	NP	N	7					GRAY GRAVEL

CO., RT. NO. SEC. FRANKLIN  
FRA-62-1.42  
-----  
FRA-62-0286  
US 62 UNDER YOUNG RD.  
-----  
SHEET NO. 1 OF 2 SHEETS

PC

3/1/57

STATE OF OHIO  
DEPARTMENT OF HIGHWAYS  
TESTING LABORATORY

## LOG OF BORING

CO., RT. NO. SEC. FRA-62-1.42 BRIDGE NO. FRA-62-0296  
 FEAR PIER US 62 UNDER YOUNG RD.  
 LOCATION: T.H. 4 STA. 19+36 OFFSET 14' FT. FED. NO.

ELEV.	DEPTH	NO. BLOWS	SAMPLE NO.	DESCRIPTION
872.1	0			
	2			
	4			
867.1	6	3	59567	BROWN SANDY SILT
	8			
862.1	10	17	59568	BROWN GRAVELLY SANDY SILT
	12			
	14			
857.1	16	9	59569	GRAY GRAVELLY SANDY SILT
	18			
852.1	20	26	59570	GRAY SILTY GRAVEL
	22			
	24			
847.1	26	43	59571	GRAY SANDY GRAVELLY SILT
	28			
842.1	30	44	59572	GRAY SANDY GRAVELLY SILT
	32			
	34			
837.1	36	32	59573	GRAY GRAVELLY SANDY SILT

## LOG OF BORING (CONTINUED)

BRIDGE NO. FRA-62-0286 T.H. 4

ELEV.	DEPTH	NO. BLOWS	SAMPLE NO.	DESCRIPTION
832.1	38	34	59574	GRAY GRAVELLY SANDY SILT
	40			
	42			
827.1	44	60	59575	GRAY SANDY SILT
	46			
	48			
822.1	50	140	59576	GRAY SANDY SILT
	52			BOTTOM OF HOLE
	54			
	56			
	58			
	60			
	62			
	64			
	66			
	68			
	70			
	72			
	74			
	76			
	78			
	80			
	82			

STATE OF OHIO  
DEPARTMENT OF HIGHWAYS  
TESTING LABORATORY

## LOG OF BORING

CO., RT. NO. SEC. FRA-62-1.42 BRIDGE NO. FRA-62-0286  
FORWARD PIER US 62 UNDER YOUNG RD.  
LOCATION: T.H. 7 STA. 20+63 OFFSET 14' LT. FED. NO.

ELEV.	DEPTH	NO. BLOWS	SAMPLE NO.	DESCRIPTION
871.5	0			
	2			BLACK SILTY CLAY-TOP SOIL
868.5	4			
866.5	6	9	59577	YELLOW-BROWN SANDY CLAY
	8			
861.5	10	38	59578	GRAY SANDY GRAVELLY SILT
	12			
	14			
856.5	16	20	59579	GRAY SANDY GRAVELLY SILT
	18			
851.5	20	30	59580	GRAY SANDY SILT
	22			
	24			
846.5	26	28	59581	GRAY GRAVELLY SANDY SILT
	28			
841.5	30	22	59582	GRAY SANDY SILT
	32			
	34			
836.5	36	27	59583	GRAY SILTY SANDY GRAVEL

## LOG OF BORING (CONTINUED)

BRIDGE NO. FRA-62-0286

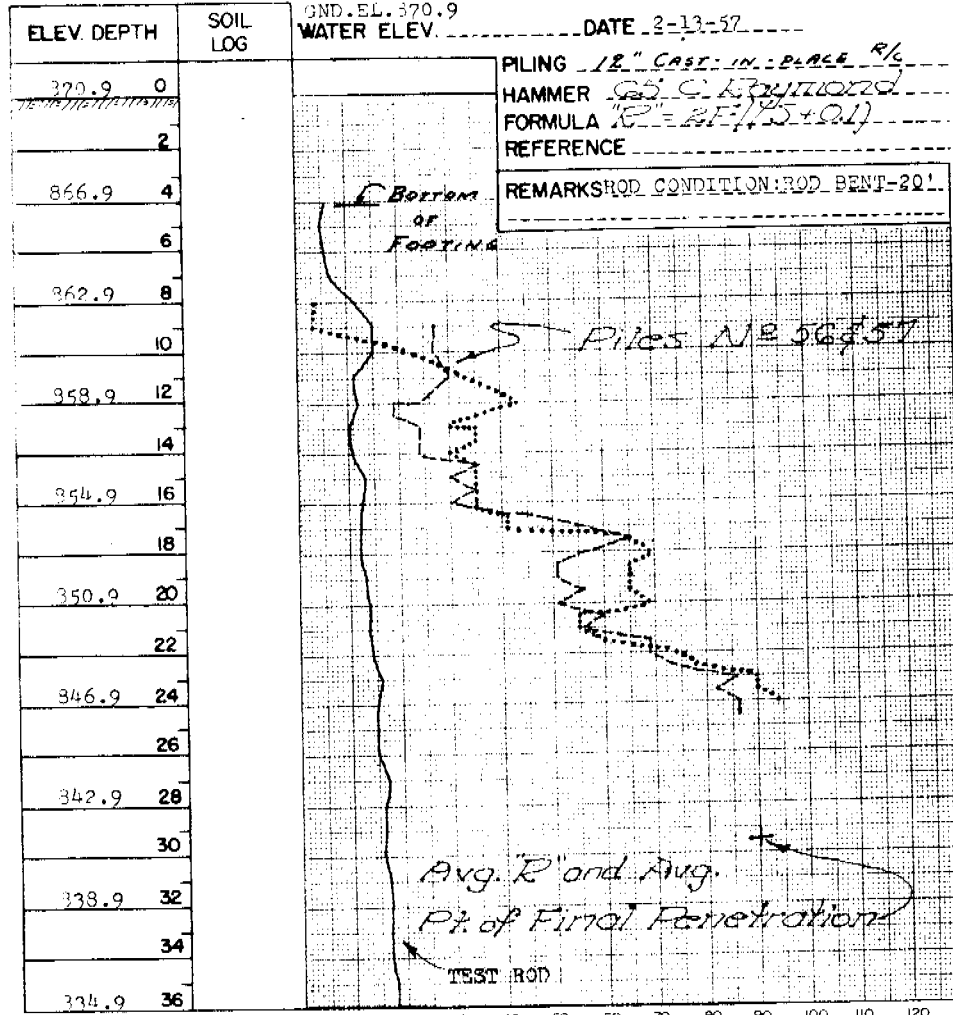
T.H. 7

ELEV.	DEPTH	NO. BLOWS	SAMPLE NO.	DESCRIPTION
831.5	38	29	59584	GRAY SANDY GRAVELLY SILT
	40			
	42			
826.5	44	32	59585	GRAY GRAVEL
	46			
	48			
821.5	50	34	59586	GRAY GRAVEL
	52			
	54			BOTTOM OF HOLE
	56			
	58			
	60			
	62			
	64			
	66			
	68			
	70			
	72			
	74			
	76			
	78			
	80			
	82			

STATE OF OHIO  
DEPARTMENT OF HIGHWAYS  
TESTING LABORATORY  
AND  
BUREAU OF BRIDGES

FOUNDATION DATA

CO., RT. NO., SEC. FRA-62-1.42 BRIDGE NO. FRA-62-0236  
FORWARD PIER US 62 UNDER YOUNG RD.  
 LOCATION TH. 8 STA. 20+76 OFFSET 14' RT. FED. NO. F-



CAPACITY "R" IN THOUSANDS OF POUNDS BY R.S. DATE 3-11-57.

11/23/56

J.S.M.

FRA-62 - 0286 Younger

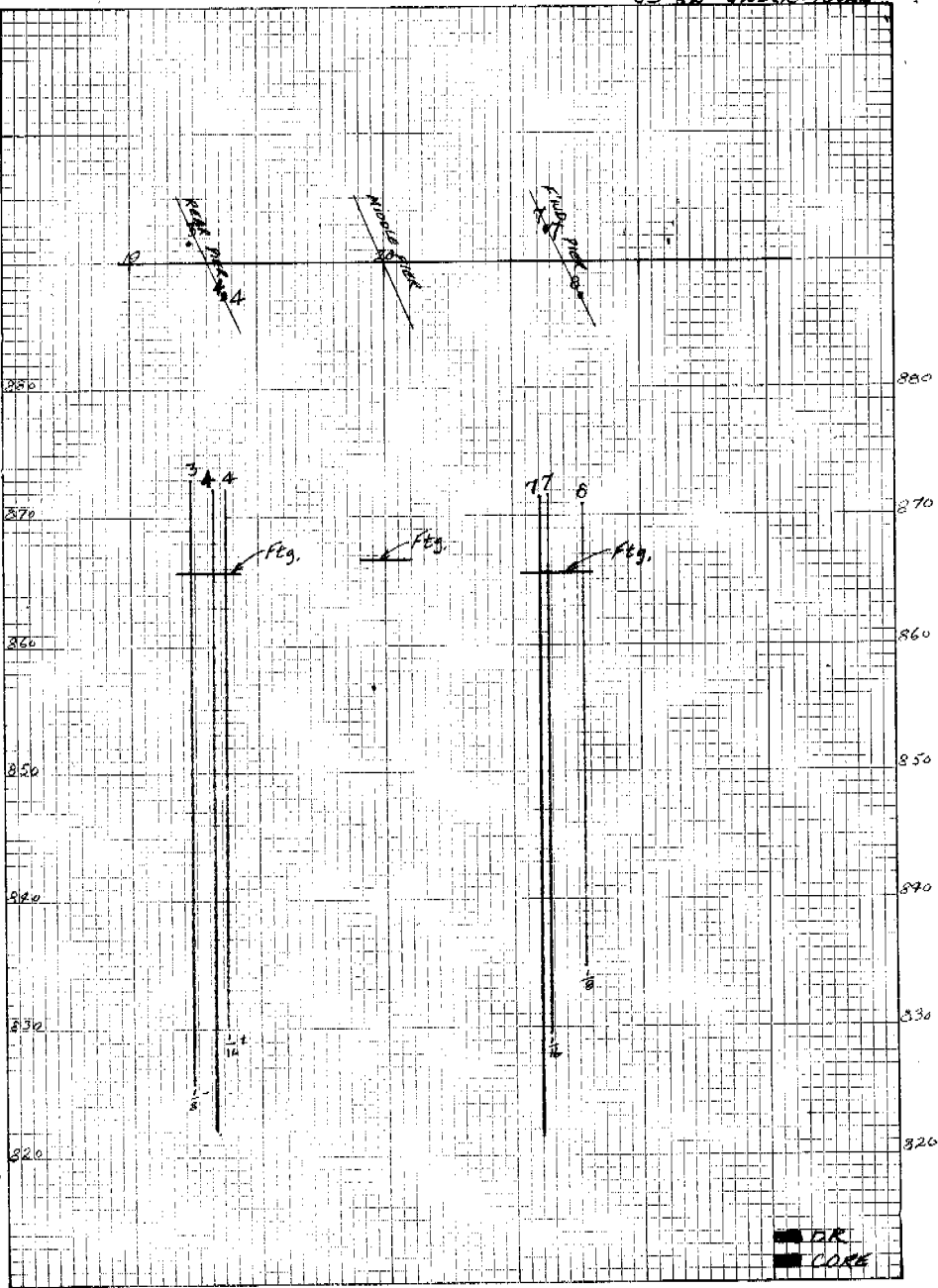
0464 Rte. 665

0625 Hoover Bld.

0808 Stringtown  
Rd.

All structures on this project lie far out on the glacial till plains in an area of thin to moderately thick drift of over 100 feet. At no place will the borings be expected to reach the underlying limestone unless possibly on the structures near Grove City.

Ohio State University Form ERS-A





Kear River

FIELD LOG  
CORE BORING  
(STRUCTURE)

T.H. <sup>Hole #4</sup> SURF. EL. 872.1 CO. Ft. Sec. Fri. 62  
Sta. 19496 Offset 1417 Bridge No. 0286  
Date started 2/22-57 Finished 2/26-57 Water El. \_\_\_\_\_  
Crew J. Evans S. Jones RD Sells  
General Notes \_\_\_\_\_

Depth	Elev.	No. Blows	Sample No.	Water Color	Description
5.0	867.1	3	#1	brown	sand some gravel
10.0	862.1	17	#2	brown	sand & gravel
15.0	857.1	9	#3	gray	gr. clay silt with sand & gravel
20.0	852.1	26	#4	gray	gr. clay silt with sand & gravel
25.0	847.1	43	#5	gray	gr. silt clay with gravels
30.0	842.1	44	#6	gray	gray clay silt with gravels & boulders
35.0	837.1	32	#7	gray	gray clay silt with gravels & boulders
40.0	832.1	34	#8	gray	gray silt clay with gravels - sand & gravel lens. At 37.0
45.0	827.1	60	#9	gray	gray silt clay with gravel
50.0	822.1	140	#10	gray	gray silt clay with gravel

25  
35

FIELD LOG  
CORE BORING  
(STRUCTURE)

T.H. 7 SURV. EL. 871.5 CO. Rt. Sec. FRA-62  
 Sta. 20763 Offset 142 Bridge No. 0286  
 Date started FEB 25 1957 Finished FEB 26 1957 Water El. \_\_\_\_\_  
 Crew AC STUE D. JONES

General Notes THIS GRAY TILL CONSISTS OF SOME LIMESTONE  
CHUNKS, SANDSTONE, BUT VERY LITTLE, ALSO SAMPLE # 10  
HAD A PIECE OF BLACK SHALE - PROBABLY 1 IN. THICK  
LAST 10' DRILLED VERY TOUGH, BUT CONSISTENT. PRESSURE  
WENT UP TO 200# - FISH TANKED ALL THE WAY -

Depth	Elev.	No. Blows	Sample No.	Water Color	Description
0-3				BLACK	BLACK SILTY CLAY - TOP SOIL
5-6	876.5	9	1		YELLOW-BROWN CLAY, SAND & GRAVEL
3-7	868.5	-	-	YELLOW	" " " " "
7'	864.5			GRAY	GRAY TILL
10-11	841.5	38	2	GRAY	" "
15-16	856.5	26	3	"	" "
20-21	851.5	30	4	"	" "
25-26	846.5	28	5	"	" "
30-31	841.5	22	6	"	" "
35-36	836.5	27	7	"	" "
40-41	831.5	29	8	"	" "
45-46	826.5	32	9	"	" "
50-51	821.5	34	10	"	" "

20' CASING USED

A COARSE TO MED. SAND AT 17' & JUST BELOW THAT WERE BULDERS - NO TROUBLE AFTER WE CASED THAT OFF.

T.P. 51' ELEV. 820.5

L. and L. Sprunt  
Geologist

March 27, 1957

Mr. Henry Overman, Engineer of Bridges

C. H. Altwater

R. R. Litchiser, Engineer of Tests Per: M. E. Mason

Report of Bridge Foundation Investigation  
FRA-62-0286 US 62 Under Young Rd.

File: 13-41  
Franklin

Transmitted herewith are the results of the foundation investigation made at the above structure site as well as the log of a Williams auger boring made in this vicinity at the time of the soil profile investigation. Drive rod soundings and drive sample borings were made between February 12 and 26, 1957.

The site is in an area of relatively thick glacial drift overlying limestone bedrock which is at such depth as to have no influence on the foundation design.

Borings disclose that the drift is dense and largely comprised of sand and silt with some gravelly and bouldery zones. Soundings and borings disclose the subsurface conditions to be relatively uniform in nature and were terminated in dense drift. No test penetrated to bedrock.

R. R. Litchiser  
Engineer of Tests

Per M. E. Mason  
M. E. Mason  
Assistant Engineer

NEM:DME:kt

Encl.

cc: G. W. Alsdorf(1) Attn: R. V. Wood (no encl.)  
H. W. Lochner and Co. Attn: Ed Vana  
150 N. Wacker Drive  
Chicago, Illinois  
File (1)  
Found (3)

7.12 1957  
June 28, 1957  
FRA-13-4-1  
FRA  
#6

G. H. Altwater, Assistant Engineer of  
Bridges - Preliminary Design

Franklin

FRA-62-1.42

Raymond A. Grover, Foundation Engineer

FRA-62-0286

Under Young Road

58B

R-

06171

Bridge Foundation Investigation Report

During the period of February 12 and 26, 1957, rod penetration tests and drive sample borings were made in the vicinity of the above structure site. The field and laboratory operations of the investigations were performed by the Foundation Exploration Section and the Soil Section of the State Highway Testing Laboratory.

This bridge site is in an area of relatively thick glacial drift. The underlying limestone bedrock is at a depth as to have no influence on the foundation design.

The attached sheets show a summary of the soil test data, the soil logs, and the rod penetration curves as submitted by the Testing Laboratory.

From a study of the Laboratory's report, the recommendations for the foundation design are as follows:

1. Both abutments shall be placed on footings, without piles, seated in the fill embankment four feet below the earth benches. The maximum allowable soil pressure should be considered as 2 1/2 tons per square foot.
2. The footings for each pier shall be placed on 12" cast-in-place reinforced concrete piles driven to a bearing capacity equal to the design load, which should be approximately 35 or 40 tons per pile.
3. The estimated average pay length of the piles is 25 feet for the rear and forward piers and 23 feet for the center pier.

RAG:bn

Knols. (9)

cc: Merle I. Johnson (Attach.)  
Ralph V. Wood (Attach.)  
Neil Mason ✓ (Attach.)  
August Schefer (Attach.)  
H. W. Lochner & Co. (Attach.)  
B.P.I. File

Raymond A. Grover

November 16, 1956

R. R. Litehiser, Engineer of Tests

#6

J. G. Joslin, Soils Engineer

Franklin

FRA-62-1.42

D. H. Overman, Engineer of Bridges

Raymond A. Grover, Foundation Engr.

FRA-62-0286

Under Yound Road

F-

58B

06171

REQUEST FOR INVESTIGATION OF  
BRIDGE FOUNDATION CONDITIONS

The Soil Section of the Testing Laboratory is hereby requested to make test borings and soundings to determine the subsoil conditions existing at the above structure site. The data thus obtained is to be forwarded to this office for use in the structural design.

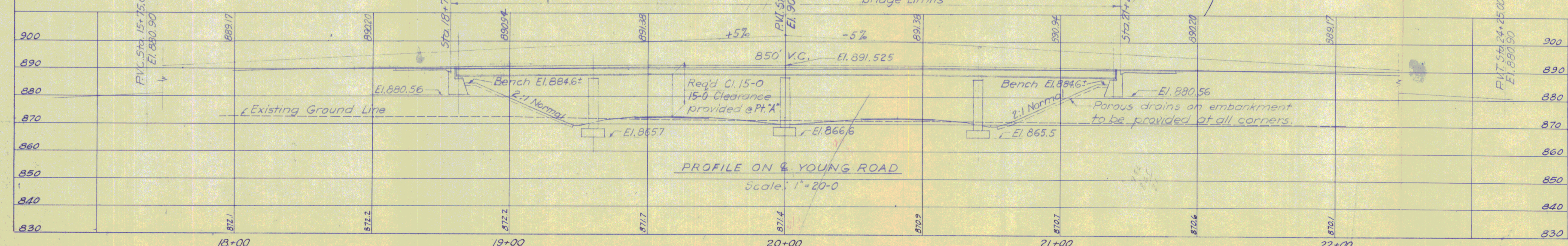
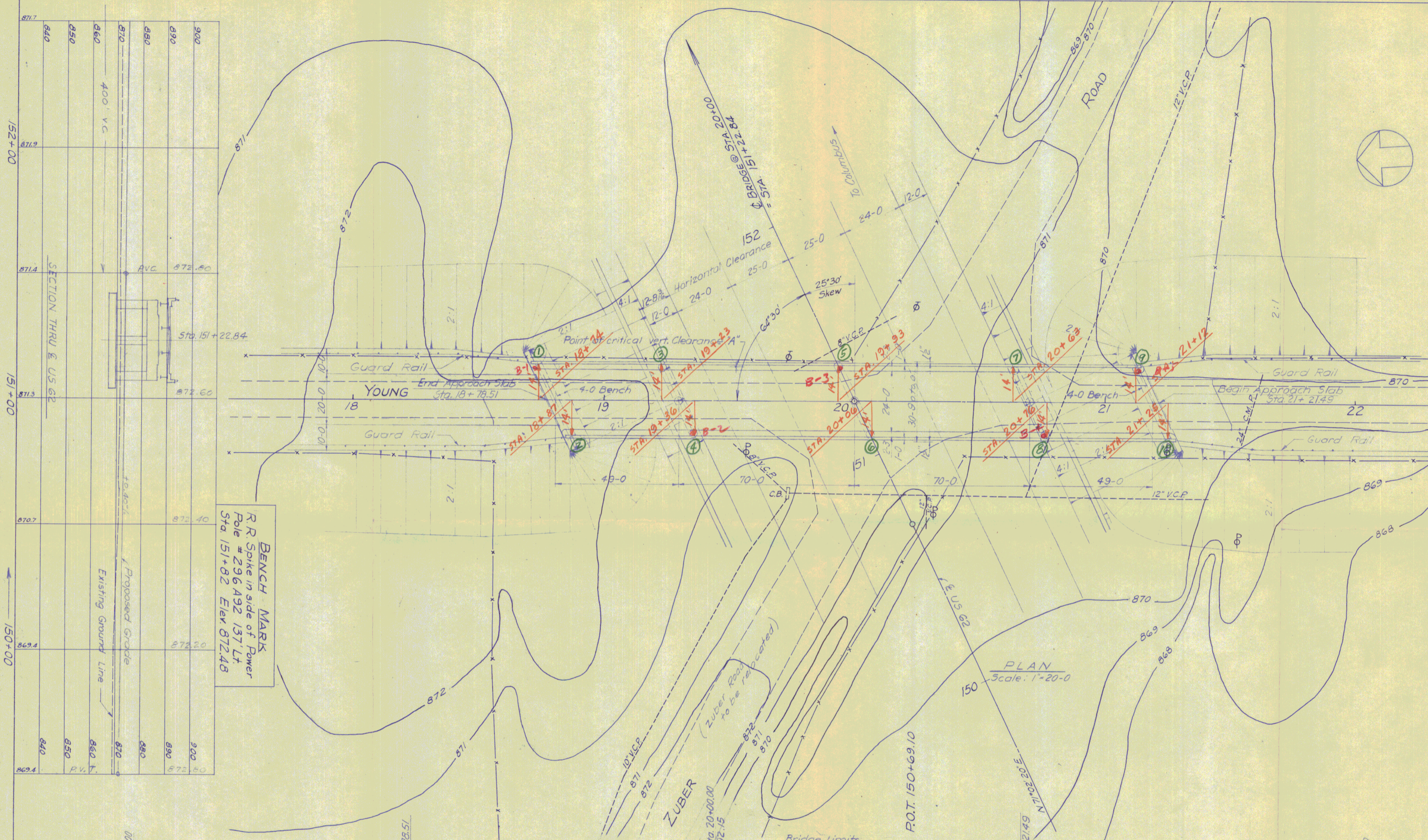
The recommended locations for the proposed tests have been shown by station and offset on one copy of the four attached prints of the site plan.

Request for location and elevation stakes to be sent to:

H. W. Lochner & Co.  
150 N. Wacker Dr.  
Chicago, Illinois

Raymond A. Grover

RAG:rm  
Enc. ✓ 4 Site Plans  
cc: ✓ H. Mason  
C. H. Altvater  
B. F. I. File



**PROPOSED STRUCTURE**  
 Type: 4 span continuous steel beams with reinforced concrete deck and reinforced concrete substructure.  
 Spans: 49-0, 70-0, 70-0, 49-0 c.to c.  
 Roadway: 24-0 with 2-0 safety curbs.  
 Load Frequency: CF=30(5)  
 Skew: 25°30' R.F.  
 Wearing Surface: 2" Monolithic concrete  
 Approach slabs: AS-1-54(25' long)  
 Alignment: Tangent

Note:  
 Type and length of piles, if any, to be determined after foundation survey has been completed.

*Soundings 1, 5, 7, 10, 3, 4, 7, 8  
 all locations accessible from roadway  
 CORE No 4 to ~~be~~ done samples at 5' intervals to 50' or 10' into rock.*

H.W. LOCHNER AND CO.  
 CONSULTING ENGINEERS  
 150 N. WACKER DRIVE  
 CHICAGO, ILLINOIS

**SITE PLAN**  
 BRIDGE NO. FRA-62-0286  
 U.S. 62 UNDER YOUNG RD.  
 FRANKLIN COUNTY U.S. 62  
 SEC. FRA.-62- STA. 151+22.84

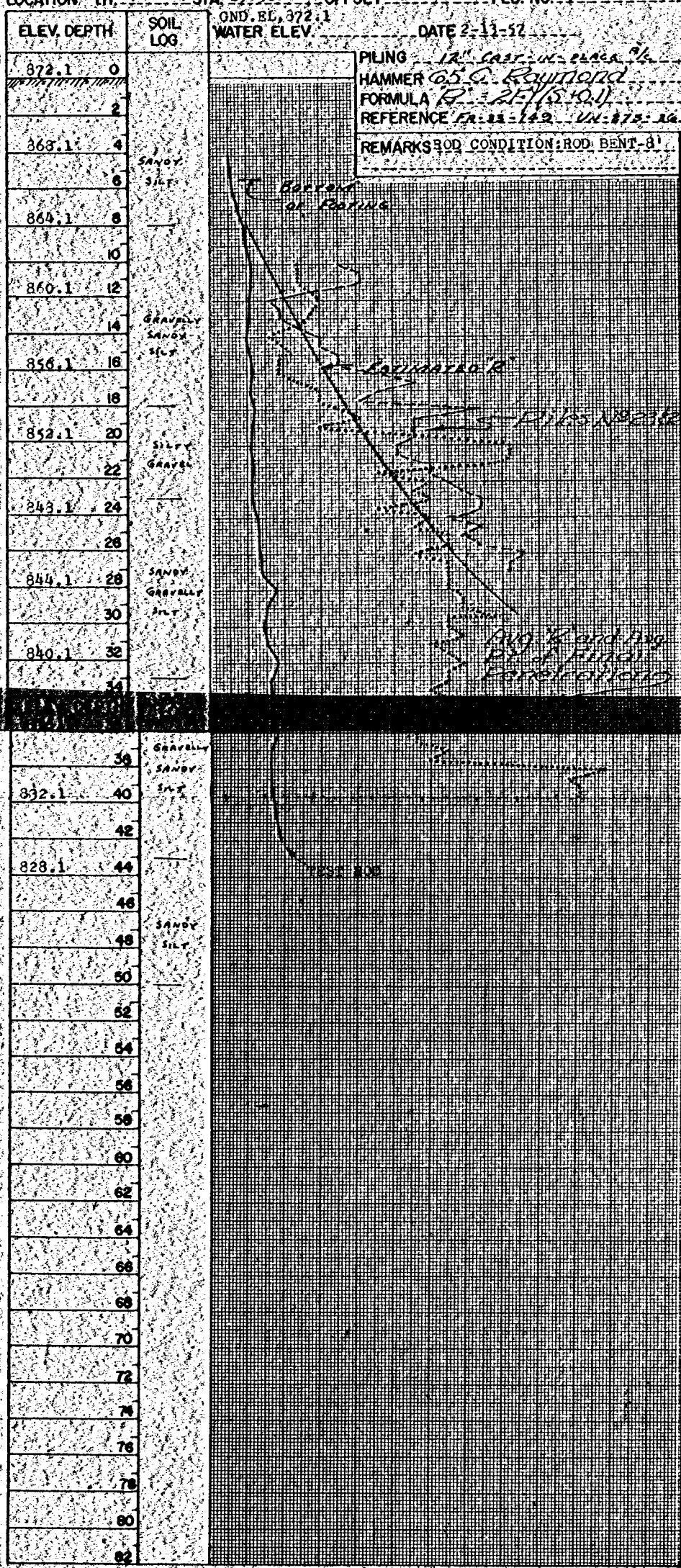
PRESENT TOPOGRAPHY	PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED
Field Survey	Field Survey	HN	HN	KA
				REVIEWED
				10-16-50 KA

Job #06171

STATE OF OHIO  
DEPARTMENT OF HIGHWAYS  
TESTING LABORATORY  
AND  
BUREAU OF BRIDGES

FOUNDATION DATA

CO., RT. NO. SEC. FRA-62-1.42 BRIDGE NO. FRA-62-0286  
 REAR PIER US 62 UNDER YOUNG RD.  
 LOCATION TH. 4 STA. 19+26 OFFSET 14 FT. FED. NO. F-  
 GND. EL. 372.1 DATE 2-11-57  
 WATER ELEV. \_\_\_\_\_



CAPACITY "R" IN THOUSANDS OF POUNDS

STATE OF OHIO  
DEPARTMENT OF HIGHWAYS  
TESTING LABORATORY  
AND  
BUREAU OF BRIDGES

FOUNDATION DATA

CO. RT. NO. SEC. FRA-62-1.42 BRIDGE NO. FRA-62-0286  
 FORWARD PIER US 62 UNDER YOUNG RD.  
 LOCATION TH. 17 STA. 20+67 OFFSET 14 LT. F FED. NO. F

ELEV. DEPTH.	SOIL LOG	OND. EL. <u>871.5</u> WATER ELEV.	DATE <u>2-13-57</u>
<u>371.5</u> 0			PILING <u>18" cast-in-place #6</u> HAMMER <u>G. C. Raymond</u> FORMULA <u>R = 2F / (S + 0.1)</u> REFERENCE <u>FD-38-182 Vol. 215-86</u> REMARKS <u>ROD CONDITION: ROD BENT 20'</u>
	SILTY CLAY		
	2		
<u>867.5</u> 4			
	6	SANDY CLAY	
<u>863.5</u> 8			
	10		
<u>859.5</u> 12	SANDY		
	14	GRAVELLY	
<u>855.5</u> 16	SILT		
	18		
<u>851.5</u> 20	SANDS		
	22	SILT	
<u>847.5</u> 24			
	26	GRAVELLY SANDY	
<u>843.5</u> 28	SILT		
	30	SANDY	
<u>839.5</u> 32	SILT		
	34		
	36	GRAVELLY	
<u>831.5</u> 40	SANDY GRAVELLY		
	42	SILT	
<u>827.5</u> 44			
	46		
	48	GRAVEL	
	50		
	52		
	54		
	56		
	58		
	60		
	62		
	64		
	66		
	68		
	70		
	72		
	74		
	76		
	78		
	80		
	82		



STATE OF OHIO  
DEPARTMENT OF HIGHWAYS  
TESTING LABORATORY  
AND  
BUREAU OF BRIDGES

FOUNDATION DATA

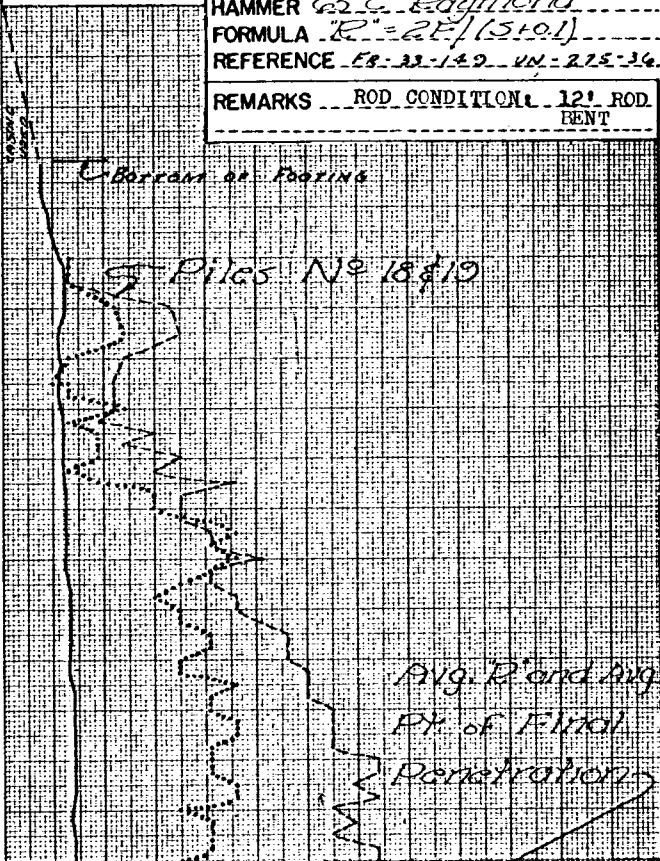
CO., RT. NO., SEC. FRA-62-1.42 BRIDGE NO. FRA-62-0236  
REAR PIER US 62 UNDER YOUNG RD.

LOCATION TH. 3 STA. 19+23 OFFSET 8' LT. FED. NO. E

GND. BL. 372.9 DATE 2-13-57  
WATER ELEV. \_\_\_\_\_

ELEV. DEPTH SOIL LOG  
372.9 0  
2  
363.9 4  
6  
364.9 8  
10  
360.9 12  
14  
356.9 16  
18  
352.9 20  
22  
343.9 24  
26  
344.9 28  
30  
340.9 32  
34  
ELEV. DEPTH SOIL LOG  
340.9 34

PIILING 12" Cast-iron pipe 9/16  
HAMMER G.C. Raymond  
FORMULA R = 2E / (S + 0.1)  
REFERENCE ES-33-149 UN-215-36  
REMARKS ROD CONDITION 12" ROD BENT



ELEV. DEPTH	SOIL LOG
340.9	34
	36
	38
332.9	40
	42
328.9	44
	46
324.9	48
	50
	52
	54
	56
	58
	60
	62
	64
	66
	68
	70
	72
	74
	76
	78
	80
	82

CAPACITY "R" IN THOUSANDS OF POUNDS