

BHM - 1A35 (10)

GENERAL INFORMATION

GEOLOGY OF THE SITE

THE STRUCTURE IS LOCATED IN THE DISSECTED, GLACIATED UPLAND PLANES OF THE ALLEGHENY PLATEAU PHYSIOGRAPHIC PROVINCE WHERE SHALLOW GLACIAL DRIFT OVERLIES QUYAHOGA SHALE BEDROCK OF MISSISSIPPIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF DRIVE SAMPLE BORINGS MADE BY MEANS OF TRUCK MOUNTED DRILLING EQUIPMENT UTILIZING HOLLOW STEM FLIGHT AUGERS THROUGH THE PAVEMENT, THE OVERBURDEN SOILS AND SOFT ROCK.

INVESTIGATION FINDINGS AND OBSERVATIONS

TEST BORINGS B-1 AND B-5 DISCLOSED THE EXISTING PAVEMENT TO CONSIST OF 2" ASPHALT OVERLYING 18" OF PORTLAND CEMENT CONCRETE AND 4.5" OF ASPHALT CONCRETE, RESPECTIVELY. WEATHERED SHALE WAS ENCOUNTERED IN THE TEST BORINGS AT BETWEEN APPROXIMATE ELEVATIONS OF 593' AND 594' ±. THE OVERBURDEN SOILS CONSISTED OF HETEROGENEOUS MIXTURES OF SAND, GRAVEL, SILT, OR SILT AND CLAY SOILS. BELOW ELEVATIONS RANGING BETWEEN 624' AND 631', HIGHLY OVERCONSOLIDATED GLACIAL TILL ("HARDPAN") WAS PRESENT.

GENERAL INFORMATION DRIVE SAMPLE/CORE BORINGS

DRIVE SAMPLE BORINGS ARE MADE BY MECHANICALLY-POWERED ROTARY TYPE DRILLING MACHINE EMPLOYING A 2" O.D., 1-3/8" I.D. SPLIT SPOON SAMPLING DEVICE, AT 2-1/2 OR 5 FOOT INTERVALS DRIVEN BY MEANS OF A 140 POUND DROP HAMMER WITH A FREEFALL OF 30 INCHES. THE NUMBER OF BLOW REQUIRED TO DRIVE THE SAMPLING DEVICE 12 INCHES AFTER AN INITIAL 6.0" SEATING PENETRATION IS TERMED THE STANDARD PENETRATION TEST.

THE BORING LOG SHEETS DISPLAY GRAPHIC PLOTS OF THE INFORMATION OBTAINED, INCLUDING DEPTH AND ELEVATION OF THE SAMPLE, TYPE OF SAMPLE, BLOW COUNTS ON DRIVE SAMPLER IN 6.0" INCREMENTS, SAMPLE NUMBERS AND SAMPLE DESCRIPTIONS. THE SAMPLE DESCRIPTIONS WERE BASED ON LABORATORY TESTS ON REPRESENTATIVE SAMPLES INCLUDING GRADATION, PLASTICITY AND MOISTURE CONTENT DETERMINATIONS. IN ADDITION, ALL SAMPLE MATERIALS OBTAINED IN THE BORINGS WERE CLASSIFIED VISUALLY PER ASTM 2488.

NOTE: GEOTECHNICAL ENGINEERING REPORT FOR THIS PROJECT WAS PREPARED BY APPLIED CONSTRUCTION TECHNOLOGIES, INC. COPIES OF THIS INFORMATION MAY BE INSPECTED IN THE DISTRICT DEPUTY DIRECTOR'S OFFICE, THE BUREAU OF TESTS AT 1600 WEST BROAD STREET, THE PAVEMENT AND SOILS SECTION OF THE BUREAU OF LOCATION AND DESIGN OR IN THE BRIDGE BUREAU AT 25 SOUTH FRONT STREET.

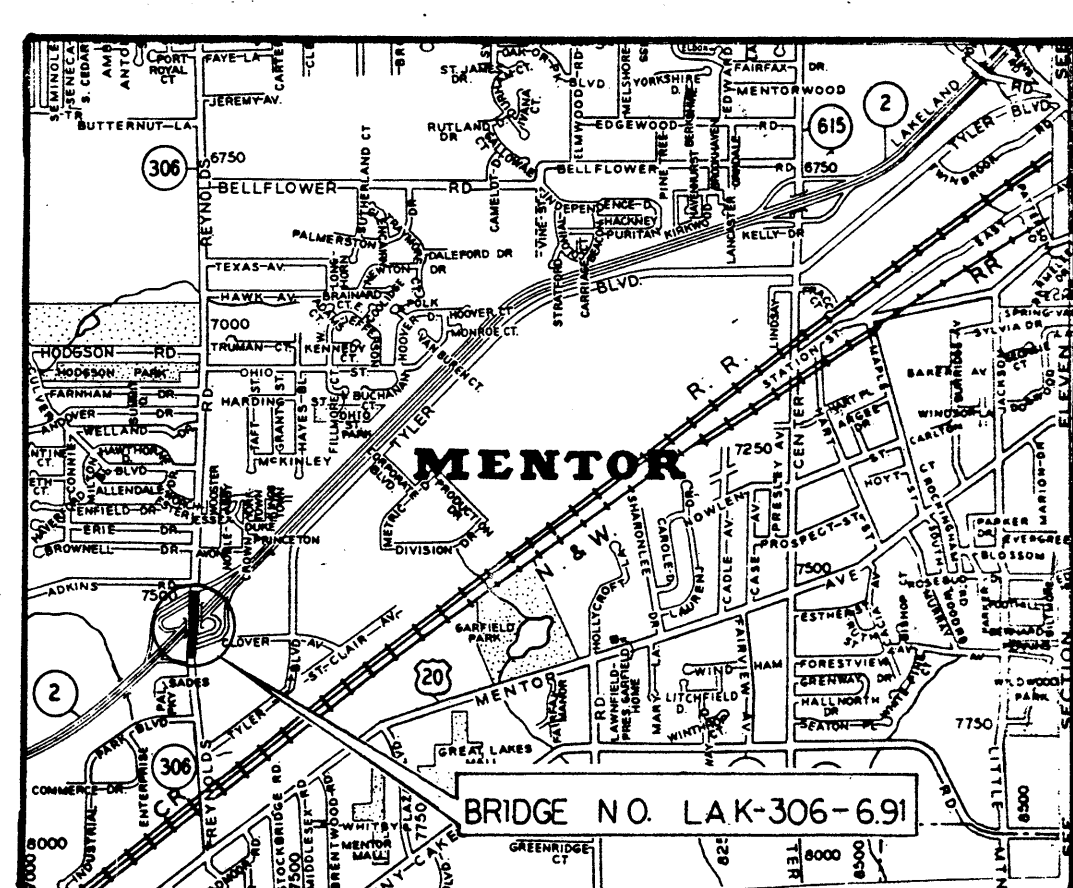
THE GEOTECHNICAL ENGINEERING REPORT MAY CONTAIN SUBSURFACE INVESTIGATION RESULTS AND TEST DATA NOT SPECIFICALLY SHOWN ON THE STRUCTURE FOUNDATION INVESTIGATION SHEETS.

LEGEND

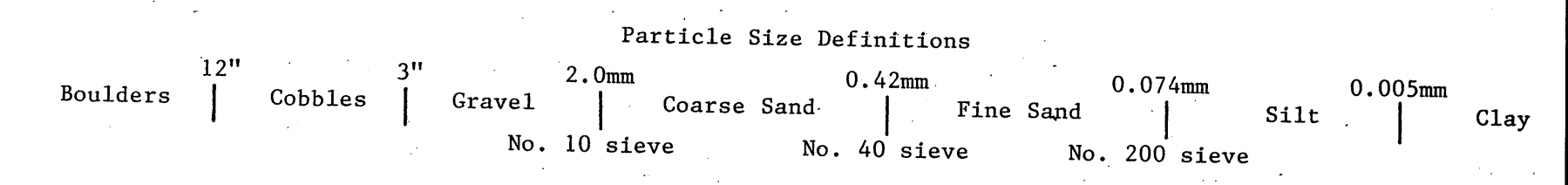
- AUGER BORING LOCATION - PLAN VIEW
- PRESS AND/OR DRIVE SAMPLE AND/OR CORE BORING LOCATION - PLAN VIEW
- TR** TOP OF ROCK
- CAPPED PILE
- FOOTING
- FOOTING ON PILE
- HORIZONTAL BAR ON BORING LOG INDICATES THE DEPTH THE SAMPLE WAS TAKEN
- X/Y/Z** FIGURES BESIDE THE BORING LOG IN THE PROFILE INDICATE THE NUMBER OF BLOWS FOR STANDARD PENETRATION TEST
 X=NO. BLOWS FOR FIRST 6"
 Y=NO. BLOWS FOR SECOND 6"
 Z=NO. BLOWS FOR THRID 6"
- INDICATES FREE WATER ELEVATION
- INDICATES STATIC WATER ELEVATION
- R/W** INDICATES RIGHT OF WAY

SYMBOLS OF ROCK TYPES

- COAL
- WEATHERED MUDSTONE
- MUDSTONE
- WEATHERED SHALE
- SHALE
- CLAYSTONE
- SILTSTONE
- WEATHERED SANDSTONE
- SANDSTONE
- LEACHED DOLOMITE
- DOLOMITE
- LEACHED LIMESTONE
- LIMESTONE
- BOULDERS & COBBLES



SITE LOCATION MAP



APPLIED CONSTRUCTION TECHNOLOGIES, INC. 1619 BROOKPARK ROAD, CLEVELAND, OHIO		
STRUCTURE FOUNDATION INVESTIGATION		
BRIDGE LAK-306-6.91 OHIO STATE ROUTE 306 MENTOR, OHIO LAKE COUNTY		
CLIENT: C.T. CONSULTANTS, INC.		
DATE 4-28-89	SCALE	DRAWN BY 19
PROJECT NO. 8809.37	DRAWING NO.	