

**CONSULTING SERVICES**  
**PROPOSED MEDIALOG FACILITY**  
**U.S. 27 AND OLD COUNTY ROAD**  
**PENDLETON COUNTY, KENTUCKY**

Prepared for: **Medialog, Inc.**

GJTA Project No.: **980336E**



CIVIL ENGINEERS

**G. J. Thelen & Associates, Inc.**

- 516 Enterprise Drive / Covington, Kentucky 41017-1595 / 606-341-1322 / Fax 606-341-0832
- 1310 Kemper Meadow Drive, Suite 600 / Forest Park, Ohio 45240-1651 / 513-825-4350 / Fax 513-825-4756



## G. J. Thelen & Associates, Inc.

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June 8, 1998

Medialog, Inc.  
14 East Main Street  
Alexandria, Kentucky 41001-1214

Attn: Mr. Dan Bell

Re: Consulting Services  
Proposed Medialog Facility  
U. S. 27 and Old County Road  
Pendleton County, Kentucky

Ladies and Gentlemen:

We are pleased to submit to you our report of the limited geotechnical exploration made at the site of the proposed Medialog Facility, U. S. 27 and Old County Road, Pendleton County, Kentucky. Our work was performed in accordance with our proposal-agreement dated April 29, 1998 and authorized by Mr. Dan Bell of Medialog, Inc. by signature on May 1, 1998.

### **SCOPE**

The purpose of our professional engineering services was to determine the general subsurface profile at the site and to relate the engineering properties of the soils, that is, their classification, strength and compressibility characteristics, to the foundation design of the proposed building and the intended construction.

### **PROJECT CHARACTERISTICS**

For the purposes of this report, U.S. 27 is assumed to be oriented in the north-south direction.

It is our understanding that the proposed development of the site includes an 80 foot by 125 foot plant building, the shorter side being aligned with U. S. 27, with two similarly sized additions planned adjacent to this building to the north. Parking will be located on the south and southeast sides of the initial building. An access drive will run from the parking area north along the east side of the proposed buildings. Although exact design details are not known at this time, it is presumed that the buildings will be steel-framed structures with estimated design

column loads on the order of 50 to 100 kips per column. Final grading plans and floor elevations are not known at this time.

### **SUBSURFACE EXPLORATION**

The subsurface conditions were explored by digging six (6) test pits. The locations of the test pits were selected in the field by the Project Geotechnical Engineer and are shown on the Test Pit Plan, Drawing 980336E-1 in the Appendix to this report. The ground surface elevations at the test pit locations were obtained with the use of a hand level relative to the top of the headwall for a culvert passing under U.S. 27, assigned El. 100.0 feet.

As the test pits were dug, the Project Geotechnical Engineer prepared field logs of the subsurface profile noting the soil descriptions, stratifications and groundwater conditions. Representative samples of the subsurface material were collected and sealed in properly labeled glass jars for transport to our Soil Mechanics Laboratory.

### **LABORATORY REVIEW**

Representative samples of the recovered material were selected for general soil classification tests including natural moisture content tests and Atterberg limits tests. A summary of the laboratory testing results is included in the Appendix.

Based upon visual review of the samples and pertinent lab data, the Project Geotechnical Engineer prepared finalized test pit logs, copies of which are included in the Appendix along with a Soil Classification Sheet which summarizes the terms and symbols used in the preparation of the logs.

### **SITE CONDITIONS**

The majority of the project site is unwooded and grass covered with grades trending downward toward the northwest corner of the site on the order of 2 to 3 percent. The northern end of the site is heavily wooded.

The general subsurface profile consists of topsoil over soft to medium stiff undisturbed silty clay soils over stiff to very stiff undisturbed clay and silty clay soils. The deepest test pit had a final depth of 11.5 feet.

The topsoil ranged in depth from 0.8 to 1.5 feet. The soft to medium stiff silty clay soils beneath the topsoil ranged in thickness from 1.0 to 1.5 feet. Natural moisture contents for this material are in the low thirties. A sample of this material classified CL according to the Unified Soil Classification System (USCS) with a liquid limit of 46 and a plasticity index of 19.

The material beneath the silty clay in test pits 1, 2, 3 and 6 consisted of stiff to very stiff clay. Natural moisture contents range from the upper teens to upper twenties. A sample of this material classified CH according to USCS with a liquid limit of 54 and a plasticity index of 33.

The stiff to very stiff material below the softer uppermost silty clay in test pits 4 and 5 consisted of silty clay. Natural moisture contents are in the low to mid-twenties. A sample of this material classified CL according to USCS with a liquid limit of 41 and a plasticity index of 18.

Groundwater was noted seeping from the sides of the excavations at depths ranging from 2.5 to 4.0 feet in all of the test pits. These "seeps" were dry at the times of backfilling as noted at the bottoms of the test pit logs.

### **CONCLUSIONS AND RECOMMENDATIONS**

The conclusions and recommendations of this report have been derived by relating the general principles of the discipline of Geotechnical Engineering to the proposed construction outlined by the Project Characteristics section of this report. Because changes in surface, subsurface, climatic and economic conditions can occur with time and location, we recommend for our mutual interest that the use of this report be restricted to this specific project.

Our understanding of the proposed design and construction is based on the documents provided to us at the time this report was prepared and which are referenced in the Project Characteristics section of this report. We recommend that our office is retained to review the final design documents, plans and specifications, to assess any impact changes, additions or revisions in these documents may have on the conclusions and recommendations of this Geotechnical Report. Any changes or modifications which are made in the field during the construction phase which alter site grading, structure locations, infrastructure or other related site work should also be reviewed by our office prior to their implementation.

If conditions are encountered in the field during construction which vary from the facts of this report, we recommend that our office be contacted immediately to review the changed conditions in the field and make appropriate recommendations.

The scope of our services did not include any environmental assessment or investigation for the presence or absence of wetlands or hazardous or toxic materials in the soil, bedrock, surface water, groundwater or air, on or below or around this site.

We have reviewed the test pits and completed the laboratory tests for our evaluation of the site conditions and for the formulation of the conclusions and recommendations of this report. We assume no responsibility for the interpretation or extrapolation of the data by others.

The earthwork recommendations of this report presume that the earthwork will be monitored continuously by an Engineering Technician under the direction of a Registered Professional Geotechnical Engineer. We recommend that the Owner contract these services directly with G. J. Thelen & Associates, Inc.

We recommend that a preconstruction meeting be held at the site with the Owner's representative, the Design Civil Engineer, the General Contractor, the Excavating Contractor, the Geotechnical Engineer and any other interested parties to review the scope and schedule of the proposed earthwork and foundation installation.

Based upon our engineering reconnaissance of the site, the test pits, a visual examination of the samples, the laboratory tests, our understanding of the proposed construction, and our experience as Consulting Soil and Foundation Engineers in the Northern Kentucky - Greater Cincinnati Area, we have reached the following conclusions and make the following recommendations.

1. The initial site preparation for the proposed building and parking areas should include the removal of all surficial vegetation and topsoil. The topsoil should be wasted or stockpiled and used for landscaping purposes. The exposed ground surface should be proofrolled with a heavy piece of equipment in the presence of the Geotechnical Engineer or his representative to determine that the materials are firm and non-yielding. Any soft or yielding soils detected during proofrolling should be undercut to firm non-yielding soils. It is likely that the top two feet of the surface native soils will require reworking. The undercut and proofrolled surfaces should be scarified, moisture-conditioned to within 2 percent below to 3

percent above the optimum moisture content, and then be recompactd to a density not less than 95 percent of the standard Proctor maximum dry density, ASTM D698.

2. Proposed grades for the building areas, defined by the building dimensions plus twice the depth of fill all around, can then be achieved by placing approved soils in level 6 to 8 inch thick lifts, compacted with an appropriate type of compaction equipment to densities not less than 98 percent of the standard Proctor maximum dry density, ASTM D698. The moisture content of the fill soils at the time of compaction should be within 2 percent below to 3 percent above the optimum moisture content as indicated by ASTM D698. Outside of building areas, the remaining fill should be compacted to at least 95 percent, ASTM D698.
3. We recommend that the excavated clayey materials be utilized as the compacted and tested fill, but that no topsoil material should be used as compacted fill. Any proposed off-site borrow material should be reviewed by our Project Geotechnical Engineer prior to it being used as fill.
4. We recommend that the proposed building and future additions be supported on conventional spread footings bearing in new compacted and tested fill or in the stiff to very stiff undisturbed clayey soils proportioned for a maximum allowable bearing pressure of 4000 pounds per square foot, full dead and full live load.
5. All footings should be located at a sufficient depth for frost protection, accepted as 30 inches below the proposed exterior grades in the Northern Kentucky Area.
6. Footing excavations should be made to neat lines and grades so that concrete can be placed directly against the sides of the excavations without forming. All loose, soft, wet, frozen, dry-crustd or otherwise disturbed materials should be skimmed from the bearing surfaces to expose the moist firm bearing materials before reinforcing steel and concrete are placed. The Project Geotechnical Engineer or his representative should review the bearing surfaces and materials to determine that they are consistent with the recommendations in this report before reinforcing steel and concrete are placed.
7. Footing excavations and utility trenches beneath the building should be backfilled with compacted clayey soils or lean concrete. Backfill should be placed in thin level layers, 6 to 8 inches in thickness, and each layer should be compacted near optimum moisture content to

at least 95 percent of maximum dry density per ASTM D698. Granular backfill should only be used as pipe bedding and to a maximum of 6 inches above pipes in utility trenches unless provisions are made to permanently drain the granular backfill. No backfill should be flushed to obtain compaction.

8. It is recommended that the floor type for the proposed building and future additions be a floating concrete slab-on-grade structurally isolated from the building foundations. The subgrade should be compacted to at least 98 percent of the standard Proctor maximum dry density, ASTM D698, immediately prior to placement of the slab. If a granular base is used beneath the floor slab, care should be taken to prevent saturation of the base prior to concrete placement. Also, the clay subgrade should be sloped to drain to a collector-outlet pipe.
9. Immediately prior to paving, the top 8 inches of subgrade should be compacted to no less than 100 percent of the standard proctor maximum dry density at moisture contents within 2 percent below to 2 percent above the optimum moisture content.
10. We recommend that all pavements be designed in accordance with the expected frequency of traffic, axle loads, and properties of the subgrade. For formal pavement designs, subgrade properties should be determined by field CBR or plate load tests after grading is completed or by correlation of field density tests to laboratory CBR tests. If an asphalt concrete pavement is used, it is recommended that it be full depth asphalt concrete. In dumpster areas and where trucks will be parked or turning sharply, full depth Portland cement concrete should be used.
11. Good surface drainage should be maintained during construction to prevent water from ponding in the footing excavations and on the floor subgrade. Paved areas should be sloped away from the building at least 2 percent or steeper for a distance of at least 10 feet, and non-paved areas should slope away from the building at 10 percent or steeper for at least 10 feet. Surface water should also be directed away from the edges of pavement. Final parking lot grades should be such that water falling on the pavements is collected by catch basins and directed into the project storm sewer system.
12. We recommend that erosion control be maintained during construction by staking straw bales or silt fences at appropriate locations. The purpose is to minimize migration of eroded

soils from the site. Following the completion of the grading activities, all scarified areas beyond buildings and pavements should be seeded and strawed or sodded for erosion control.

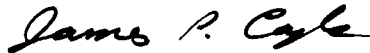
13. If any construction is undertaken during the winter or spring months of the year, we recommend that under no conditions should any concrete, asphalt or fill be placed over frozen or saturated soils. In addition, frozen soils should not be used as compacted fill or backfill.

### CLOSURE

We have included in the Appendix to this report a reprint of "Important Information About Your Geotechnical Engineering Report" published by ASFE, Professional Firms Practicing in the Geosciences, which our firm would like to introduce to you at this time.

We appreciate the opportunity to provide the geotechnical engineering services for this project. If you have any questions regarding the findings, conclusions or recommendations in this report, or if we may be of any additional service to you at this time, please do not hesitate to contact us.

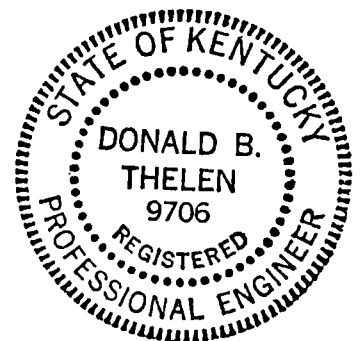
Respectfully submitted,  
G. J. THELEN & ASSOCIATES, INC.



James P. Coyle, E.I.T.  
Graduate Geotechnical Engineer



Donald B. Thelen, P.E.  
Principal Geotechnical Engineer



JPC/DBT:mg  
980336E

Copies submitted: 2 - Client



**APPENDIX**

ASFE Report Information

Tabulation of Laboratory Tests

Test Pit Plan, Drawing 980336E-1

Test Pit Logs

Soil Classification Sheet

# IMPORTANT INFORMATION ABOUT YOUR GEOTECHNICAL ENGINEERING REPORT

As the client of a consulting geotechnical engineer, you should know that site subsurface conditions cause more construction problems than any other factor. ASFE/The Association of Engineering Firms Practicing in the Geosciences offers the following suggestions and observations to help you manage your risks.

## **A GEOTECHNICAL ENGINEERING REPORT IS BASED ON A UNIQUE SET OF PROJECT-SPECIFIC FACTORS**

Your geotechnical engineering report is based on a subsurface exploration plan designed to consider a unique set of project-specific factors. These factors typically include: the general nature of the structure involved, its size, and configuration; the location of the structure on the site; other improvements, such as access roads, parking lots, and underground utilities; and the additional risk created by scope-of-service limitations imposed by the client. To help avoid costly problems, ask your geotechnical engineer to evaluate how factors that change subsequent to the date of the report may affect the report's recommendations.

Unless your geotechnical engineer indicates otherwise, do not use your geotechnical engineering report:

- when the nature of the proposed structure is changed, for example, if an office building will be erected instead of a parking garage, or a refrigerated warehouse will be built instead of an unrefrigerated one;
- when the size, elevation, or configuration of the proposed structure is altered;
- when the location or orientation of the proposed structure is modified;
- when there is a change of ownership; or
- for application to an adjacent site.

Geotechnical engineers cannot accept responsibility for problems that may occur if they are not consulted after factors considered in their report's development have changed.

## **SUBSURFACE CONDITIONS CAN CHANGE**

A geotechnical engineering report is based on conditions that existed at the time of subsurface exploration. Do not base construction decisions on a geotechnical engineering report whose adequacy may have been affected by time. Speak with your geotechnical consultant to learn if additional tests are advisable before construction starts. Note, too, that additional tests may be required when subsurface conditions are affected by construction operations at or adjacent to the site, or by natural events such as floods, earthquakes, or ground water fluctuations. Keep your geotechnical consultant apprised of any such events.

## **MOST GEOTECHNICAL FINDINGS ARE PROFESSIONAL JUDGMENTS**

Site exploration identifies actual subsurface conditions only at those points where samples are taken. The data were extrapolated by your geotechnical engineer who then applied judgment to render an opinion about overall subsurface conditions. The actual interface between materials may be far more gradual or abrupt than your report indicates. Actual conditions in areas not sampled may differ from those predicted in your report. While nothing can be done to prevent such situations, you and your geotechnical engineer can work together to help minimize their impact. Retaining your geotechnical engineer to observe construction can be particularly beneficial in this respect.

## **A REPORT'S RECOMMENDATIONS CAN ONLY BE PRELIMINARY**

The construction recommendations included in your geotechnical engineer's report are preliminary, because they must be based on the assumption that conditions revealed through selective exploratory sampling are indicative of actual conditions throughout a site. Because actual subsurface conditions can be discerned only during earthwork, you should retain your geotechnical engineer to observe actual conditions and to finalize recommendations. Only the geotechnical engineer who prepared the report is fully familiar with the background information needed to determine whether or not the report's recommendations are valid and whether or not the contractor is abiding by applicable recommendations. The geotechnical engineer who developed your report cannot assume responsibility or liability for the adequacy of the report's recommendations if another party is retained to observe construction.

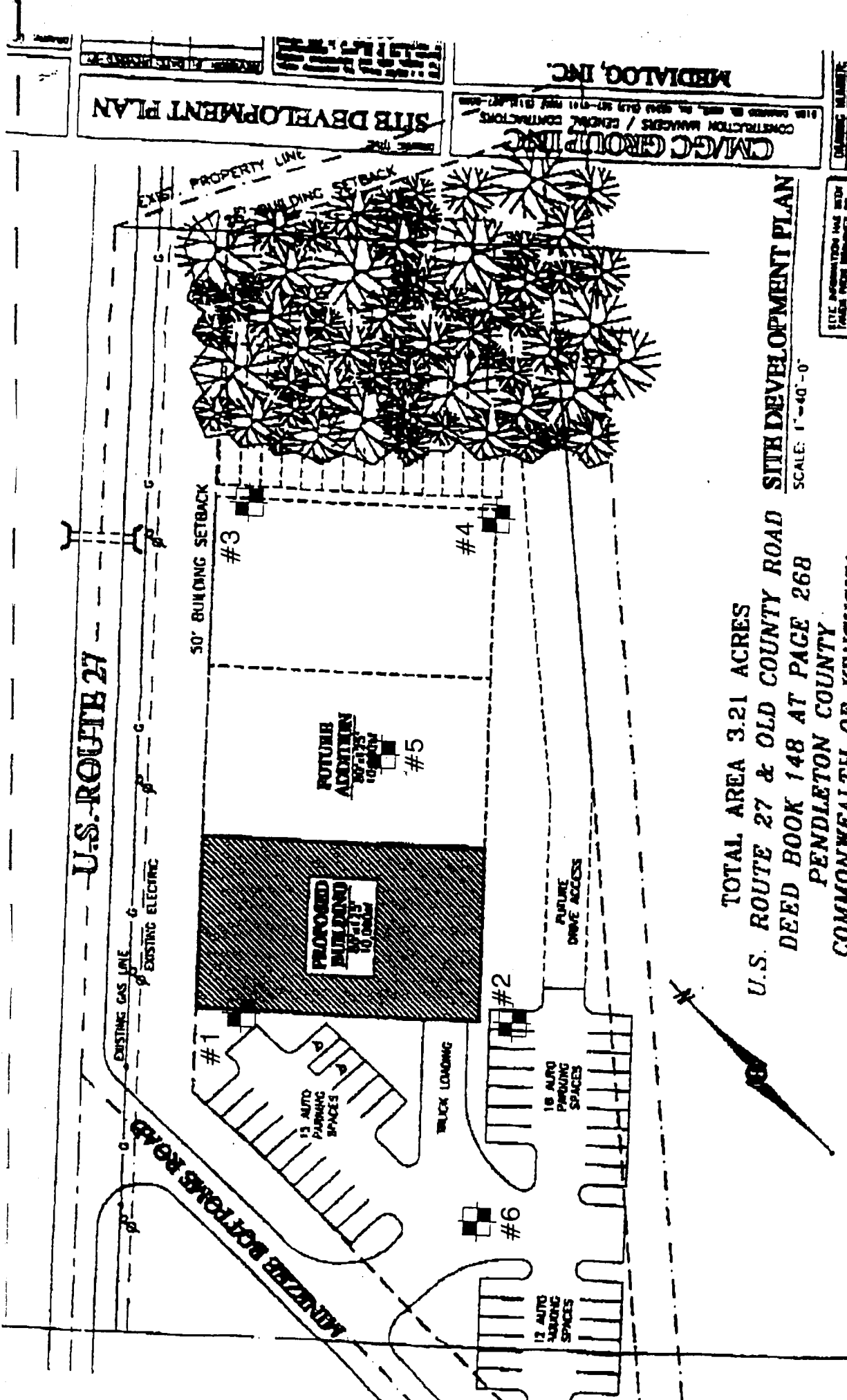
## **GEOTECHNICAL SERVICES ARE PERFORMED FOR SPECIFIC PURPOSES AND PERSONS**

Consulting geotechnical engineers prepare reports to meet the specific needs of specific individuals. A report prepared for a civil engineer may not be adequate for a construction contractor or even another civil engineer. Unless indicated otherwise, your geotechnical engineer prepared your report expressly for you and expressly for purposes you indicated. No one other than you should apply this report for its intended purpose without first conferring with the geotechnical engineer. No party should apply this report for any purpose other than that originally contemplated without first conferring with the geotechnical engineer.

## **GEOENVIRONMENTAL CONCERNS ARE NOT AT ISSUE**

Your geotechnical engineering report is not likely to relate any findings, conclusions, or recommendations





TOTAL AREA 3.21 ACRES  
 U.S. ROUTE 27 & OLD COUNTY ROAD  
 DEED BOOK 148 AT PAGE 268  
 PENDELTON COUNTY  
 COMMONWEALTH OF KENTUCKY



INDICATES TEST PIT LOCATION

**SITE DEVELOPMENT PLAN**  
 SCALE: 1"=40'-0"

THE INFORMATION HAS BEEN  
 PREPARED BY THE ENGINEER

**CMGC GROUP, INC.**  
 CIVIL ENGINEERS  
 G. J. THELEN & ASSOCIATES, INC.  
 516 Enterprise Drive  
 Covington, Kentucky 41017

**TEST PIT PLAN**

For: Medialog, Inc.      Scale: 1"=60'  
 Project: Proposed Medialog Facility      Date: 5/7/98  
 Location: Pendleton County, Kentucky      No: 980336E-1

**SITE DEVELOPMENT PLAN**

**CMGC GROUP, INC.**  
 CIVIL ENGINEERS  
 CONSTRUCTION MANAGERS / GENERAL CONTRACTORS  
 1100 HENNING DR., SUITE 200, CINCINNATI, OH 45240  
 (513) 521-1100

**MEDIALOG, INC.**



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## LOG OF TEST PIT

CLIENT: Medialog, Inc. TEST PIT #: 1  
 PROJECT: Consulting Services, U.S. 27 and Old County Road, Pendleton County, Ky. JOB #: 980336E  
 LOCATION OF TEST PIT: As shown on Test Pit Plan, Drawing 980336E-1

ELEV.	SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRATA DEPTH feet	DEPTH SCALE feet	SAMPLE	
				No.	TYPE
104.3	SURFACE	0.0			
103.5	TOPSOIL	0.8	1	1	Jar sample by hand
102.3	Brown very moist soft to medium stiff SILTY CLAY with trace hairlike roots.	2.0	2		
	Mottled brown and gray moist stiff to very stiff CLAY with trace iron oxide stains. (CH)		3		
			4		
			5		
			6	2	Jar sample by hand
			7		
			8		
95.3		9.0	9		
	Bottom of test pit at 9.0 feet.		10		
			11		
			12		
			13		
			14		

DATUM Relative  
 SURF. ELEV. 104.3 ft.  
 BUCKET WIDTH 24 in.  
 DATE STARTED 5/5/98

GROUND WATER DEPTH  
 FIRST NOTED 2.0 ft.  
 AT COMPLETION Dry ft.  
 AFTER \_\_\_\_\_ hrs. \_\_\_\_\_ ft.

FOREMAN JPC  
 ENGINEER JPC/DBT  
 BACKFILLED 3 hrs.  
 DATE COMPLETED 5/5/98



# G. J. Thelen & Associates, Inc.

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## LOG OF TEST PIT

CLIENT: Mediolog, Inc. TEST PIT #: 2  
 PROJECT: Consulting Services, U.S. 27 and Old County Road, Pendleton County, Ky. JOB #: 980336E  
 LOCATION OF TEST PIT: As shown on Test Pit Plan, Drawing 980336E-1

ELEV.	SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRATA DEPTH feet	DEPTH SCALE feet	SAMPLE	
				No.	TYPE
104.5	SURFACE	0.0			
103.5	TOPSOIL	1.0	1		
102.5	Brown very moist soft to medium stiff SILTY CLAY with trace hairlike roots.	2.0	2	1	Jar sample by hand
	Mottled brown and gray moist stiff to very stiff CLAY with trace iron oxide stains and concretions.		3		
			4		
			5		
			6		
			7		
			8		
			9		
			10	2	Jar sample by hand
93.0		11.5	11		
	Bottom of test pit at 11.5 feet.		12		
			13		
			14		

DATUM Relative  
 SURF. ELEV. 104.5 ft.  
 BUCKET WIDTH 24 in.  
 DATE STARTED 5/5/98

GROUND WATER DEPTH  
 FIRST NOTED 4.0 ft.  
 AT COMPLETION Dry ft.  
 AFTER \_\_\_\_\_ hrs. \_\_\_\_\_ ft.

FOREMAN JPC  
 ENGINEER JPC/DBT  
 BACKFILLED 2.5 hrs.  
 DATE COMPLETED 5/5/98



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 1310 Kemper Meadow Drive, Suite 600 / Forest Park, Ohio 45240-1651 / 513-825-4350 / Fax 513-825-4756

## LOG OF TEST PIT

CLIENT: Mediolog, Inc. TEST PIT #: 3  
 PROJECT: Consulting Services, U.S. 27 and Old County Road, Pendleton County, Ky. JOB #: 980336E  
 LOCATION OF TEST PIT: As shown on Test Pit Plan, Drawing 980336E-1

ELEV.	SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRATA DEPTH feet	DEPTH SCALE feet	SAMPLE	
				No.	TYPE
99.9	SURFACE	0.0			
89.9	TOPSOIL	1.0	1		
97.4	Brown very moist soft SILTY CLAY with trace hairlike roots.	2.5	2	1	Jar sample by hand
	Mottled brown and gray moist stiff to very stiff CLAY, localized heavy iron oxide stains.		3		
			4		
			5		
			6		
			7		
			8	2	Jar sample by hand
90.9		9.0	9		
	Bottom of test pit at 9.0 feet.		10		
			11		
			12		
			13		
			14		

DATUM Relative  
 SURF. ELEV. 99.9 ft.  
 BUCKET WIDTH 24 in.  
 DATE STARTED 5/5/98

GROUND WATER DEPTH  
 FIRST NOTED 3.5 ft.  
 AT COMPLETION Dry ft.  
 AFTER \_\_\_\_\_ hrs. \_\_\_\_\_ ft.

FOREMAN JPC  
 ENGINEER JPC/DBT  
 BACKFILLED 2.0 hrs.  
 DATE COMPLETED 5/5/98



CIVIL ENGINEERS

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## LOG OF TEST PIT

CLIENT: Mediolog, Inc. TEST PIT #: 4

PROJECT: Consulting Services, U.S. 27 and Old County Road, Pendleton County, Ky. JOB #: 980336E

LOCATION OF TEST PIT: As shown on Test Pit Plan, Drawing 980336E-1

ELEV.	SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRATA DEPTH feet	DEPTH SCALE feet	SAMPLE	
				No.	TYPE
103.2	SURFACE	0.0			
102.2	TOPSOIL	1.0	1		
100.7	Brown very moist soft SILTY CLAY with trace hairlike roots.	2.5	2	1	Jar sample by hand
	Mottled brown and gray moist stiff to very stiff SILTY CLAY.		3		
			4	2	Jar sample by hand
			5		
			6		
96.2		7.0	7		
	Reddish brown, some gray moist stiff to very stiff SILTY CLAY with trace fine sand.		8		
			9	3	Jar sample by hand
			10		
			11		
92.7		10.5	12		
	Bottom of test pit at 10.5 feet.		13		
			14		

DATUM Relative

SURF. ELEV. 103.2 ft.

BUCKET WIDTH 24 in.

DATE STARTED 5/5/98

### GROUND WATER DEPTH

FIRST NOTED 3.0 ft.

AT COMPLETION Dry ft.

AFTER \_\_\_\_\_ hrs. \_\_\_\_\_ ft.

FOREMAN JPC

ENGINEER JPC/DBT

BACKFILLED Immed. hrs.

DATE COMPLETED 5/5/98





CIVIL ENGINEERS

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## LOG OF TEST PIT

CLIENT: Mediolog, Inc. TEST PIT #: 5  
 PROJECT: Consulting Services, U.S. 27 and Old County Road, Pendleton County, Ky. JOB #: 980336E  
 LOCATION OF TEST PIT: As shown on Test Pit Plan, Drawing 980336E-1

ELEV.	SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRATA DEPTH feet	DEPTH SCALE feet	SAMPLE	
				No.	TYPE
102.2	SURFACE	0.0			
100.7	TOPSOIL	1.5	1		
99.4	Brown very moist soft to medium stiff SILTY CLAY with trace hairlike roots. (CL)	2.8	2	1	Jar sample by hand
95.2	Mottled brown and gray moist stiff to very stiff SILTY CLAY with trace iron oxide stains. (CL)	7.0	4	2	Jar sample by hand
93.2	Mottled brown and gray moist stiff to very stiff CLAY with trace iron oxide stains.	9.0	9	3	Jar sample by hand
	Bottom of test pit at 9.0 feet.		10		
			11		
			12		
			13		
			14		

DATUM Relative  
 SURF. ELEV. 102.2 ft.  
 BUCKET WIDTH 24 in.  
 DATE STARTED 5/5/98

GROUND WATER DEPTH  
 FIRST NOTED 3.0 ft.  
 AT COMPLETION Dry ft.  
 AFTER \_\_\_\_\_ hrs. \_\_\_\_\_ ft.

FOREMAN JPC  
 ENGINEER JPC/DBT  
 BACKFILLED 1 hrs.  
 DATE COMPLETED 5/5/98



CIVIL ENGINEERS

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## LOG OF TEST PIT

CLIENT: Mediolog, Inc. TEST PIT #: 6  
 PROJECT: Consulting Services, U.S. 27 and Old County Road, Pendleton County, Ky. JOB #: 980336E  
 LOCATION OF TEST PIT: As shown on Test Pit Plan, Drawing 980336E-1

ELEV.	SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRATA DEPTH feet	DEPTH SCALE feet	SAMPLE	
				No.	TYPE
104.4	SURFACE	0.0			
103.4	TOPSOIL	1.0	1		
102.2	Brown very moist soft to medium stiff SILTY CLAY with trace hairlike roots.	2.2	2	1	Jar sample by hand
	Mottled brown and gray moist stiff CLAY.		3	2	Jar sample by hand
99.4		5.0	5		
	Bottom of test pit at 5.0 feet.		6		
			7		
			8		
			9		
			10		
			11		
			12		
			13		
			14		

DATUM Relative  
 SURF. ELEV. 104.4 ft.  
 BUCKET WIDTH 24 in.  
 DATE STARTED 5/5/98

GROUND WATER DEPTH  
 FIRST NOTED 2.5 ft.  
 AT COMPLETION Dry ft.  
 AFTER \_\_\_\_\_ hrs. \_\_\_\_\_ ft.

FOREMAN JPC  
 ENGINEER JPC/DBT  
 BACKFILLED 0.5 hrs.  
 DATE COMPLETED 5/5/98