

SUBSURFACE EXPLORATION  
AND  
FOUNDATION ENGINEERING REPORT

PROPOSED CVS/PHARMACY STORE  
MAYSVILLE PIKE (U.S. RT. 22) & WEST LASALLE ST.  
SOUTH ZANESVILLE, OH

CLIENT: MR. FRANK PETRUZZIELLO (3)  
SKILKEN PROPERTIES CO.  
910 EAST BROAD STREET  
COLUMBUS, OHIO 43215

BY: GEOTECHNICAL CONSULTANTS, INC.  
GCI PROJECT NO. 7475  
AUGUST 27, 1998

SITE PREPARATIONS AND EARTHWORK

AS A GENERAL APPROACH TO THE SITE PREPARATION, THE FOLLOWING IS RECOMMENDED:

1. WHEN DEMOLISHING THE EXISTING STRUCTURES COMPLETELY REMOVE ALL FOUNDATIONS, WALLS AND SLABS FROM WITHIN THE PROPOSED BUILDING FOOTPRINT PLUS 10 FEET LATERALLY. REMOVAL MAY BE LIMITED TO 24 INCHES BELOW PROPOSED SUBGRADE IN PAVEMENT AREAS, PROVIDED ANY SLABS ARE SUFFICIENTLY BROKEN UP TO ALLOW DRAINAGE. REROUTE ANY UTILITIES THAT CROSS THE PROPOSED BUILDING FOOTPRINT AND REMOVE THE OLD LINE(S). CAP OPEN ENDS OF PIPE. CONTACT GCI IF ANY LINES ARE EXCESSIVELY DEEP WHICH MAY WARRANT ABANDONING THEM IN PLACE. PROPERTY BACKFILL ALL RESULTING EXCAVATIONS ACCORDING TO THE RECOMMENDATIONS OF THIS REPORT.

NOTE THAT AN ON-SITE SEPTIC SYSTEM MAY BE PRESENT ON THE SITE. PROPERLY ABANDON THESE ELEMENTS ACCORDING TO LOCAL, STATE AND FEDERAL REGULATIONS.

NON-ORGANIC BUILDING RUBBLE MAY BE INCORPORATED WITHIN STRUCTURAL FILLS IF FIRST BROKEN UP INTO PIECES NO LARGER THAN 4 INCHES IN MAXIMUM DIMENSION. THOROUGHLY MIX WITH SITE SOILS TO PREVENT VOIDS.

2. STRIP ALL SURFACE VEGETATION AND TOPSOIL, WHERE PRESENT. TOPSOIL MAY NOT BE USED AS STRUCTURAL FILL BUT SHOULD BE STOCKPILED FOR LATER USE IN SITE LANDSCAPING.

3. FOR FOUNDATION OPTION #1 (FOOTINGS AT NORMAL FROST CODE DEPTH): COMPLETELY REMOVE ALL EXISTING FILL AS WELL AS ANY TRAPPED TOPSOIL FROM UNDER THE PROPOSED BUILDING FOOTPRINT PLUS 10 FEET. IN PROPOSED PAVEMENT AREAS, REMOVAL MAY BE LIMITED TO 18 INCHES BELOW PROPOSED SUBGRADE IF REMAINING FILL IS STABLE UNDER PROOF ROLLING.

FOR FOUNDATION OPTION #2 (FOOTINGS EXTENDED TO NATURAL SILTY CLAY SOILS): REMOVAL OF FILL/TRAPPED TOPSOIL MAY BE LIMITED TO 18 INCHES ACROSS BOTH PROPOSED BUILDING AND PAVEMENT AREAS.

REMOVED MATERIAL MAY BE RE-USED AS STRUCTURAL FILL IF FIRST STRIPPED OF ANY ORGANIC COMPONENTS.

4. WHERE EXISTING FILL IS LEFT IN PLACE, THOROUGHLY PROOF ROLL THE UNDERCUT WITH A FULLY-LOADED TAND-AXLE DUMP TRUCK (OR EQUIVALENT) TO IDENTIFY SOFT AREAS REQUIRING FURTHER STABILIZATION. PROOF ROLLING IS WAIVED IN AREAS WHERE THE NATURAL SILTY CLAY SOILS ARE EXPOSED, BUT WE RECOMMEND CAREFUL OBSERVATION OF THE SUBGRADE AFTER THE FIRST LIFT OF STRUCTURAL FILL IS PLACED.

POSSIBLE METHODS OF SUBGRADE STABILIZATION INCLUDE DISKING AND AIR DRYING WITH RECOMPACTION (WEATHER PERMITTING), UNDERCUTTING AND REPLACING WITH DRY STABLE FILL, OR ADDING LIME TO ENHANCE DRYING WITH RECOMPACTION.

5. PLACE STRUCTURAL FILL AS REQUIRED TO ACHIEVE DESIGN GRADES.

NATURAL NON-ORGANIC SITE SOILS ARE ACCEPTABLE FOR USE AS STRUCTURAL FILL. SOME MOISTURE ADJUSTMENT MAY BE NECESSARY, DEPENDING ON WEATHER CONDITIONS AT THE TIME OF EARTHWORK. HIGH MOISTURE WILL MAKE THE COHESIVE SITE SOILS PUMP EXCESSIVELY. BUILDING RUBBLE (CONCRETE, GRAVEL, ETC.) MEASURING 4 INCHES IN DIAMETER OR LESS MAY BE RE-USED IN CONTROLLED FILLS PROVIDED IT IS THOROUGHLY MIXED WITH SOIL TO PREVENT VOIDS. OFF-SITE MATERIAL SHOULD BE REVIEWED BY THIS OFFICE PRIOR TO USE AS STRUCTURAL FILL.

STRUCTURAL FILL SHOULD BE PLACED IN LOOSE LIFTS AND COMPACTED TO 98% OF THE MAXIMUM STANDARD PROCTOR DRY DENSITY. MOISTURE SHOULD BE CONTROLLED AT + 3% OF THE OPTIMUM MOISTURE. THE COHESIVE SITE SOILS WILL COMPACT BEST WITH A SHEEPSFOOT ROLLER. WHILE A VIBRATORY ROLLER SHOULD BE USED TO COMPACT GRANULAR MATERIALS. LIFT THICKNESSES SHOULD BE REDUCED TO 6" IN CONFINED AREAS WHERE HAND OPERATED COMPACTION EQUIPMENT IS USED (E.G., UTILITY TRENCHES).

6. AFTER ALL FILL PLACEMENT FOR THE BUILDING PAD IS COMPLETED, EXCAVATE FOR FOOTINGS. IF A BASE IN GRADES OF MORE THAN 1 FOOT ABOVE PRESENT SURFACE ELEVATIONS IS PLANNED IN THE PROPOSED BUILDING AREA, DELAY FOOTING CONSTRUCTION FOR 30 DAYS FOLLOWING COMPLETION OF FILL PLACEMENT.

APPROPRIATE BEARING FOR FOOTINGS IS EITHER (1) STRUCTURAL FILL PLACED DIRECTLY OVER STABLE NATURAL SOILS, WHERE ALL CURRENTLY EXISTING FILL HAS BEEN REMOVED AND EXCAVATIONS RESULTING FROM DEMOLITION OF THE EXISTING BUILDING HAVE BEEN PROPERLY BACKFILLED OR (2) THE MEDIUM STIFF NATURAL BROWN SILTY CLAY SOILS. UNDERCUT FOOTINGS AS NEEDED TO PROVIDE PROPER BEARING, WHICH COULD INCLUDE VERY SOFT NATURAL SOILS. THE DECISION TO UNDERCUT SHOULD BE MADE BY A QUALIFIED GEOTECHNICAL ENGINEER AT THE TIME OF CONSTRUCTION. UNDERCUTS CAN BE BACKFILLED WITH A CONTROLLED DENSITY FILL (CDF) SUCH AS K-KRETE TO ALLOW CONSTRUCTION OF FOUNDATIONS AT DESIGN GRADE.

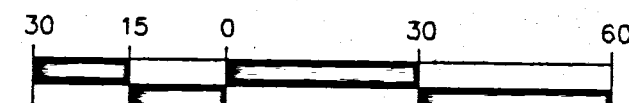
7. PAVEMENT AND BUILDING AREAS SHOULD BE STEEL-WHEEL ROLLED TO A SMOOTH SURFACE PRIOR TO PLACEMENT OF BASE OR UNDERSLAB AGGREGATE.

8. WE RECOMMEND THIS OFFICE BE RETAINED TO OBSERVE SITE DEMOLITION PROCEDURES AND UNDERCUTTING PROCEDURES, TO MONITOR FILL OPERATIONS, AND TO OBSERVE FOOTING OBSERVATIONS.

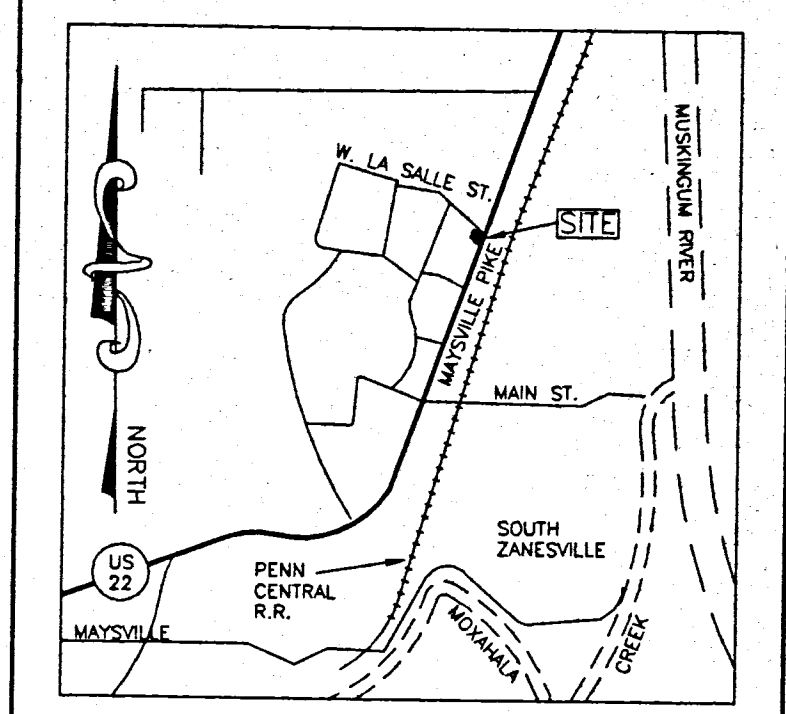
9. IF WORK IS PERFORMED IN THE WINTER (E.G. WHEN FREEZING TEMPERATURES OCCUR), SPECIAL PROTECTIVE MEASURES WILL BE REQUIRED DURING FILLING AND FOOTING CONSTRUCTION PROCEDURES. CONTACT GCI FOR ADDITIONAL COLD WEATHER RECOMMENDATIONS, AS NEEDED.

UNDERGROUND UTILITIES

TWO WORKING DAYS  
BEFORE YOU DIG  
CALL 1-800-362-2764 (TOLL FREE)  
OHIO UTILITIES PROTECTION SERVICE  
NON-MEMBERS  
MUST BE CALLED DIRECTLY



SCALE: 1" = 30'



LOCATION MAP  
NOT TO SCALE

LEGEND

---	PROPERTY LINE
---	SANITARY SEWER (EXISTING)
---	SANITARY SEWER
---	STORM SEWER (EXISTING)
---	STORM SEWER (PROPOSED)
---	WATER LINE
---	GAS LINE
---	OVERHEAD ELECTRIC (EXISTING)
---	OVERHEAD ELECTRIC (PROPOSED)
---	UNDERGROUND ELECTRIC
---	FIBER OPTIC LINE
---	FENCE
---	EX. CONTOURS (2' INTERVAL)
⊙	MANHOLE (EXISTING)
⊙	MANHOLE (PROPOSED)
⊙	CATCH BASIN (EXISTING)
⊙	CATCH BASIN (PROPOSED)
⊙	FIRE HYDRANT
⊙	UTILITY POLE
⊙	LIGHT POLE
⊙	WATER VALVE
⊙	GAS VALVE
⊙	TREE (8" OR LARGER)
⊙	IRON PIN FOUND
⊙	IRON PIN SET
⊙	CENTERLINE
⊙	RIGHT-OF-WAY
⊙	EDGE OF PAVEMENT
⊙	GUY WIRE
⊙	MONITORING WELL
⊙	DRAINAGE DITCH
⊙	PROPOSED GRADES

NOTES

1. OUPS REFERENCE NUMBER 811-037-014.
2. PROPERTY IS NOT WITHIN FLOOD ZONE "A". PER FLOOD HAZARD BOUNDARY MAP H-01, FOR THE VILLAGE OF SOUTH ZANESVILLE, COMMUNITY NUMBER 390860A, EFFECTIVE 20 OCTOBER, 1978.
3. THIS BOUNDARY SURVEY IS BASED UPON RECORDED DATA, AN ACTUAL FIELD SURVEY OF THE SITE, AND INFORMATION FURNISHED BY COMMONWEALTH LAND TITLE INSURANCE COMPANY AS LISTED IN TITLE COMMITMENTS NUMBERED BT0497A, EFFECTIVE 25 AUGUST 1998 AT 7:00 A.M., AND BT0497B, EFFECTIVE 25 AUGUST, 1998 AT 7:00 A.M.
4. THE LOCATIONS OF EXISTING UTILITIES HAVE BEEN SHOWN ON THIS PLAN IN ACCORDANCE WITH AVAILABLE RECORDS. IT IS BELIEVED THAT THESE LOCATIONS ARE ESSENTIALLY CORRECT. HOWEVER THE CONTRACTOR SHALL INVESTIGATE AND LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE OHIO UTILITIES PROTECTION SERVICE AT 1-800-362-2764 AT LEAST TWO WORKING DAYS PRIOR TO BEGINNING WORK. NON-MEMBERS WILL BE CALLED DIRECTLY.
5. THIS PLAN WAS PREPARED FOR THE EXCLUSIVE USE OF THE PERSONS OR ENTITY NAMED IN THE TITLE BLOCK OR CERTIFICATION HEREON. SAID CERTIFICATION DOES NOT EXTEND TO ANY UNNAMED PERSONS OR ENTITY WITHOUT AN EXPRESS RECERTIFICATION BY THE SURVEYOR OR ENGINEER NAMING SAID ENTITY.
6. BENCHMARKS:  
1) REFERENCE BENCHMARK: TOP OF A 5/8" REBAR AT PC STATION 521 + 79.98 (75' RT.), AS SHOWN ON MUS-C.R.-719, PLANS FOR 715 BYPASS (1986). PLAN ELEV. 737.75  
2) SITE BENCHMARK: TOP OF THE NORTH BOLT IN THE TOP FLANGE OF A FIRE HYDRANT LOCATED ON THE SOUTHWEST CORNER OF THE INTERSECTION OF W. BERKLEY STREET AND MAYSVILLE PIKE. ELEV. 741.95  
7. THIS SITE IS CURRENTLY NOT ZONED. SITE LAYOUT SHALL BE REVIEWED BY JIM WAXNER OF MUSKINGUM COUNTY CODE ENFORCEMENT (740)-455-7200.  
8. UTILITIES:  
ELECTRIC- AMERICAN ELECTRIC POWER  
215 N. FRONT STREET  
COLUMBUS, OHIO 43215  
1-800-872-2231  
LOCAL CONTACT: FRED L. MILLER  
740-455-4699  
GAS- COLUMBIA GAS OF OHIO  
200 CIVIC CENTER DRIVE  
COLUMBUS, OH 43215  
NEW CONSTRUCTION  
1-800-440-8111  
NATIONAL GAS & OIL  
ROGER IDEN  
TELEPHONE- AMERITECH  
56 E. LONG STREET  
COLUMBUS, OH 43215  
1-800-880-3000  
LOCAL CONTACT: CHUCK BRUCKELMEYER  
740-454-3514  
WATER/SEWER- VILLAGE OF SOUTH ZANESVILLE  
7 SHAWNEE AVENUE  
P.O. BOX 1828  
SOUTH ZANESVILLE, OHIO 43702-1828  
(740) 454-3514  
CABLE- TCI CABLEVISION OF OHIO, INC.  
737 HOWARD STREET  
ZANESVILLE, OHIO 43701  
(740) 450-8095  
9. ALL ROOF DRAINS ARE TO BE CONNECTED TO THE UNDERGROUND STORM SYSTEM.  
10. STATE OF OHIO STANDARD CONSTRUCTION DRAWINGS LISTED ON THIS PLAN SHALL BE CONSIDERED A PART THEREOF:  
CDDT DRAWINGS  
MW-3(48" BASE)  
CB-2-2-B  
CB-2-3 (WITH NO SIDE INLETS)  
HW-2

STORM GRADING PLAN  
FOR  
CVS PHARMACY

MAYSVILLE RD. & W. LA SALLE ST.  
SOUTH ZANESVILLE  
MUSKINGUM CO., OHIO

DATE:  
3 FEBRUARY, 1999

SCALE:  
1" = 30'

