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June 8, 2026
SGI# 2102145

Ms. Rory Johnson
Ms. Michele Minnix
3661 Sunswept Drive
Studio City, California 91604

Subject: Limited Geologic Investigation and Opinion Summary, Distressed Retaining Wall, 3661 North Sunswept Drive, APN 2376-003-005, Studio City, City of Los Angeles, California

INTRODUCTION

This opinion summary has been prepared by Southwest Geotechnical Inc. (SGI) for a possible remedial repair or reconstruction of a distressed retaining wall at the subject site. This summary provides an assessment of the distressed wall and associated geologic conditions, and to provide opinions to mitigate the conditions or reconstruct the wall. This report is not intended for submittal to the City of Los Angeles to obtain construction permits. SGI can be contracted in the future to complete a full geotechnical report for submittal which would be required in order to obtain permits as the site is located within a zone of potentially seismically unstable slopes. Additional exploration and testing may be appropriate depending on the ultimate scope of the project and location of possible walls.

FIELD EXPLORATION AND TESTING

A subsurface exploration was conducted at the subject site on May 13, 2026 consisting of four test holes located below the distressed retaining wall on the north and east sides of the building pad. The test holes consist of two 30-inch diameter test holes deepened by 4-inch diameter hand-augers (TH-1 and TH-2) and two four-inch diameter hand-augered test holes (TH-3 and TH-4). The test holes were extended to a maximum of 8.5 feet below grade. Earth materials exposed within the within the test holes and on the surface were mapped by visual and tactile examination.

The locations of the test holes was determined by existing landmarks (residence, retaining walls, property line fences/walls, etc.) and using tape measures and a folding ruler. The locations and elevations of the test holes should therefore be considered accurate only to the degree implied by the method used and does not constitute a survey level of accuracy.

Undisturbed samples of soils encountered were obtained at selected locations considered to be representative of the material type sampled, and returned to our laboratory for testing and analysis. Samples are obtained by hand-driving a thin-walled, steel sampler into the sampled soil. The soil is retained in brass rings of 2.4 inches inside diameter and 1.0 inch in height. The central portion of the sample is retained in close fitting, waterproof containers. No laboratory testing was conducted on the samples at this time, but could be conducted in the future as part of a full geotechnical investigation.

The Log and descriptions of the onsite earth materials presented herein reflect conditions observed onsite at the specific location and time of our field exploration only. The subsurface conditions in unexplored areas of the site may vary from those presented herein, and minor discrepancy in subsurface conditions can be anticipated and may be encountered in such unexplored areas within the subject property at the time of construction and/or grading.

RESEARCH

Prior to conducting subsurface investigation at the subject property, SGI conducted a review of selected available published and unpublished geotechnical information for the project site. Based on this preliminary research, it appears that the site is located within a zone of potentially seismically unstable slopes, so any new construction (retaining wall) would require gross slope stability analysis. No active faults are known to project towards or across the site. The site is not located within a zone of potential liquefaction and shallow groundwater. The site is located within a City of Los Angeles designated “hillside grading area,” which would require that a geologic and soils engineering reported be submitted to the City for review and approval in order to obtain permits for construction. Research was conducted on the Search Online Building Records database at the LADBS Website.

Permits

Per the permit information for the subject property, the residence was originally constructed in 1951. Additional permits were issued for a bedroom/bathroom addition (1958), foundation underpinning at the front of garage due to slope instability at the front of the property and for remedial grading of the slope (1978), for a spa (1979), for a second-story addition (1988), and for additional underpinning of garage following earthquake damage (1995).

Geotechnical Reports

Geotechnical reports for the subject site were reviewed and are summarized below:

On March 27, 1978, Kovacs-Byer and Associates Inc. (KBA) issued a report entitled, "Slope Restoration, 3661 Sunswept Drive, Studio City, California. The report was prepared following a slope failure that occurred following heavy rains. Test pits were excavated and are shown on the attached Geotechnical Map by SGI. They recommended that the slope be restored with fill placed on level benches and a keyway at the toe. They additionally recommended that the front of the garage be underpinned into bedrock which is located approximately 6-8 feet below grade.

On May 24, 1978, the City of Los Angeles Department of Building and Safety issued an Approval Letter for the above KBA report (3/27/78).

On July, 28 1988, Kovacs-Byer and Associates Inc. (KBA) issued a report entitled, "Preliminary Geologic and Soils Exploration, Proposed Second Story Addition, Lot 4, Tract 14570, 3661 Sunswept Drive, Studio City, California". This investigation consisted of one new test pit and mapping of bedrock exposures. Bedding plane measurements taken on the exposures indicated that the bedding had a northwesterly strike, dipping to the southwest. This matches the bedding mapped by SGI, and is deemed favorable to the stability of the site. Gross slope stability analysis was conducted and indicated the site is grossly stable. The report indicates that the proposed construction is feasible if the foundations are underpinned into bedrock.

On August 5, 1988 the City of Los Angeles Department of Building and Safety issued an Approval Letter (Log # 6325) for the above KBA report (7/28/88).

On May 11, 1994 Keith W. Ehlert Consulting Engineering Geologist issued a report entitled, "Geologic Investigation Earthquake Damaged Garage 3661 Sunswept Drive, City of Los Angeles, CA". This investigation was conducted following the 1994 Northridge Earthquake. The report addresses the garage area only. Their investigation exposed the foundation of the garage and they observed that the foundation had not been underpinned as recommended by KBA.

Bedding measurements were taken on the outcrops and within the test holes and have been shown on the attached Geotechnical Map by SGI. The bedding exhibits a northwesterly strike and southwesterly dip. This orientation is deemed to be favorable to overall site stability. The test holes exposed artificial fill over natural soil underlain by siltstone, sandstone and shale bedrock. They attribute the distress to the garage as being caused by the Northridge earthquake but also due to creep and settlement, and that expansive soils may also be influencing the site.

On May 12, 1994 SWN Soiltech Consultants, Inc. issued the report, “Report of Soil Engineering Investigation Proposed Remedial Construction of Existing Residence 3661 Sunswept Drive Studio City Area, Los Angeles, California”. This report was prepared in conjunction with the Ehlert report discussed above. The report describes the distress to the property following the Northridge Earthquake. They observed up to 3 feet of artificial fill, but not that thicker fills may exist elsewhere on the site.

The fill is underlain by approximately 3 feet of soil, which is in turn is underlain by siltstone bedrock. They state that, although the distress to the site was exacerbated by the earthquake, that differential settlement and movement of the underlying fill and soils are ongoing issues. They state that the onsite soils are expansive and swelling and shrinking of the soils is also likely contributing to the distress. They recommended foundation underpinning into bedrock for the garage.

They suggested that the foundations be designed for creep loading as the fills and soils are subject to creep. Shear, consolidation and expansion potential testing was conducted on samples taken from the site. The consolidation testing shows that the fills and soils have moderate to high consolidation potential. The expansion index produced an E.I. of 41, indicating low expansion potential. Slope stability analysis of the slope was conducted with the Taylor method and indicate that the slopes are grossly stable.

The location of the previous test holes and bedding orientations by other consultants have been shown on the appended Geotechnical Map.

FINDINGS

The distressed retaining wall/patio slab is between approximately 1 and 3.5 feet high, though the majority of the wall is 2 feet high or less. The portion of the wall along the north side of the property is undergoing the most significant distress. The wall does not appear to have a subdrain. The wall consists of a combination of brick and CMU block construction. The block portions of the wall appear to have some steel reinforcement, however the cells have not been filled and the blocks are broken and separating in places. The fills appear to be settling and/or creeping downslope and causing the wall to rotate in the downslope direction. This downslope movement is causing separation of the bricks in the walkway and it is apparent that some attempts have been made to repair this with concrete patching. There are separations of the brick portion of the wall and its foundation of more than 2 inches.

The wall foundation, where explored, is embedded into artificial fill between 4 and 14 inches below existing grade, but portions of the footing are exposed and even above grade. The fills are loose, porous and prone to undue consolidation.

It is evident that the soils below the wall are settling as the upper portion of the footing is now exposed at grade. The backfill behind the walls is also settling, leading to settlement and cracking of the concrete decking and brick.

The two holes excavated along the north side (TH-1 and TH-2) exposed 4-4.5 feet of artificial fill overlying approximately 2.5 feet of residual soil and siltstone and shale bedrock. The two holes excavated on the east side (TH-2 and TH-4) were extended to a maximum depth of 8.5 feet and did not reach bedrock. This area exposes approximately 4-5 feet of artificial fill overlying residual soil.

Bedding plane measurements taken by SGI and by other geotechnical professionals discussed in the Research section of this Report, indicate that bedding has a northwesterly strike and southwesterly dip of approximately 18-35 degrees. This bedding plane orientation is favorable with respect to overall stability of the site.

OPINION SUMMARY

The retaining wall appears to be failing due to a combination of factors: Poor construction, lack of subdrain, poorly compacted backfill, and embedment of the foundation into poor quality and creep/settlement prone artificial fill. If the retaining wall is to be replaced with a new one, then SGI would recommend that all foundations be embedded into bedrock. The foundations would need to be deepened to meet the requirements for foundation setback from slopes and pile foundations should be anticipated (schematically shown on Cross Section A-A'). The retaining wall would need a subdrain and be backfilled with certified engineered compacted backfill to be tested and certified in a compaction report by geotechnical professionals.

Gross slope stability analysis would need to be conducted as part of a full geotechnical report. In the Research section of the report we discussed that slope stability analysis had been conducted in the past with favorable results, however as standards have changed it would need to be analyzed again. If the eastern (rear) portion of the wall is to be replaced this would trigger a need for stability analysis of the tall, steep easterly descending slope. This would require additional exploration as bedrock was not encountered at a depth of 8.5 feet, and the significant depth to bedrock could pose an issue with regard to stability. It is the opinion of SGI that it would be significantly more costly to replace the entire wall rather than to focus on the more significantly distressed northern portion only.

Overall, it is the opinion of SGI that the replacement of the distressed retaining wall is feasible. If SGI is needed to provide a full geologic and geotechnical engineering report then please contact us for a proposal.

If you have any questions regarding the information contained herein, or if you require additional input and services, please feel free to contact us.

Respectfully submitted,
SOUTHWEST GEOTECHNICAL, INC.

Dylan Jonic
Professional Geologist
P.G. #10324

Johnson-Minnix 2102145 Geologic Opinion Letter
DJ:OP

Distribution: Digital Only

Attachments:

- Geotechnical Map
- Geologic Cross Section A-A'
- Test Hole Logs TH-1-4
- Referenced Test Pit Logs

A'

af/rs/Tm

TH-1

TH-2

TH-3

TH-4

TP-1

TP-2

TP-3

26

33

28

20

18

23

25

21

950

960

970

980

990

940

930

920

910

Sunswept Dr

A

LEGEND

TH-1 Approximate Location of Test Holes (SGI)

TP-1 Approximate Location of Test Pits (KBA 1978)

TP-1 Approximate Location of Test Holes (KBA 1988)

TP-1 Approximate Location of Test Holes (Ehlert)

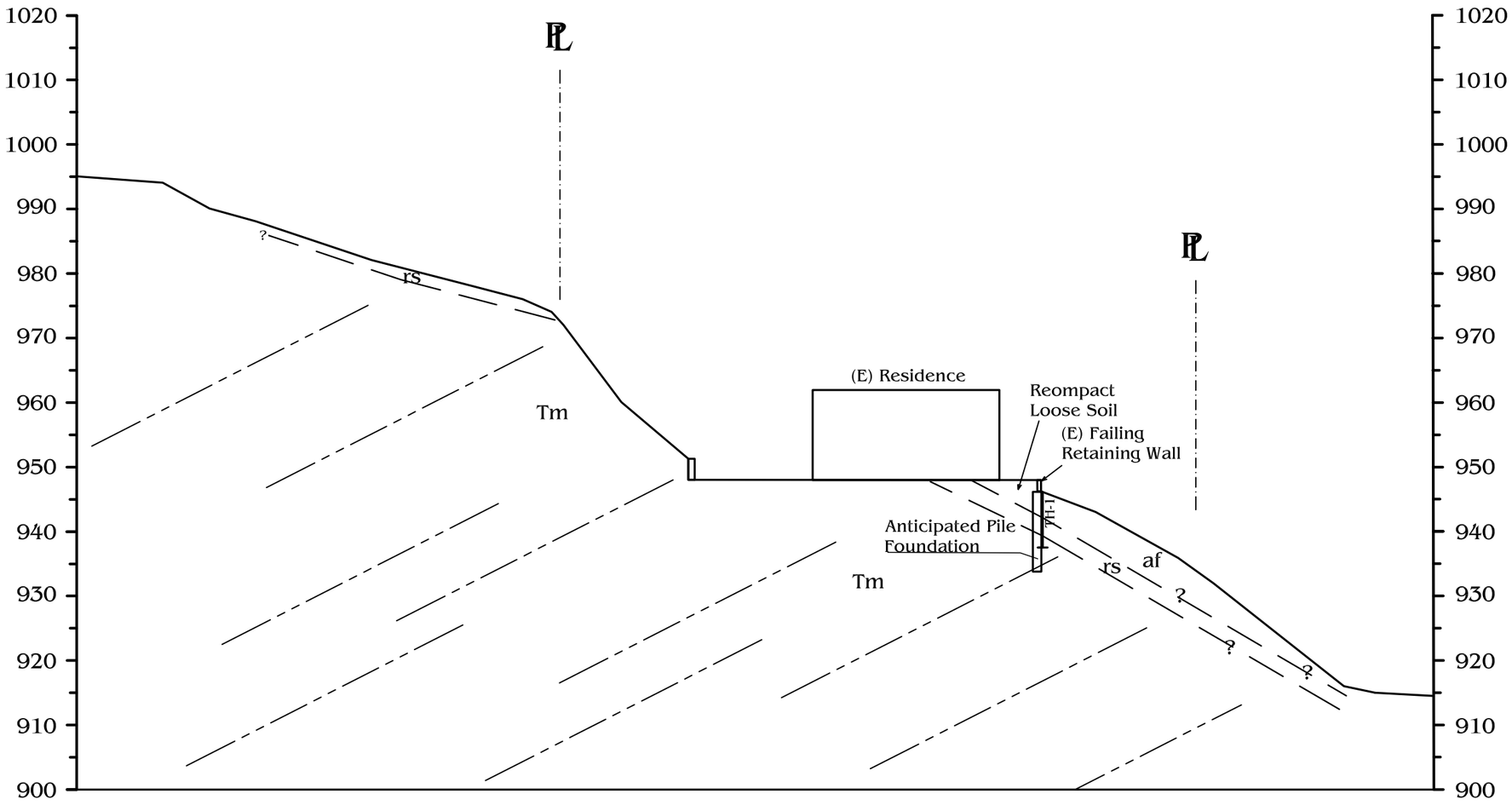
21 Strike and Dip of Bedding

af Artificial Fill

rs Residual Soil

Tm Monterey Formation Bedrock

Southwest Geotechnical, Inc.	
Geotechnical Map	
Project: 2102145	Scale: 1"=20'
Client: Johnson-Minnix	Date: 6/2026
Site: 3661 Sunswept Drive	



Southwest Geotechnical, Inc.	
Geotechnical Map	
Project: 2102145	Scale: 1"=20'
Client: Johnson-Minnix	Date: 6/2026
Site: 3661 Sunswept Drive	

SOUTHWEST GEOTECHNICAL, INC

Test Hole TH-1

Project No: 2102145	Date(s) Observed: 5/13/26	Equipment Used: Hand Labor
Client: Johnson-Minnix	Location: 3661 Sunswept Drive, Los Angeles	Logged By: DJ
Surface Description:		

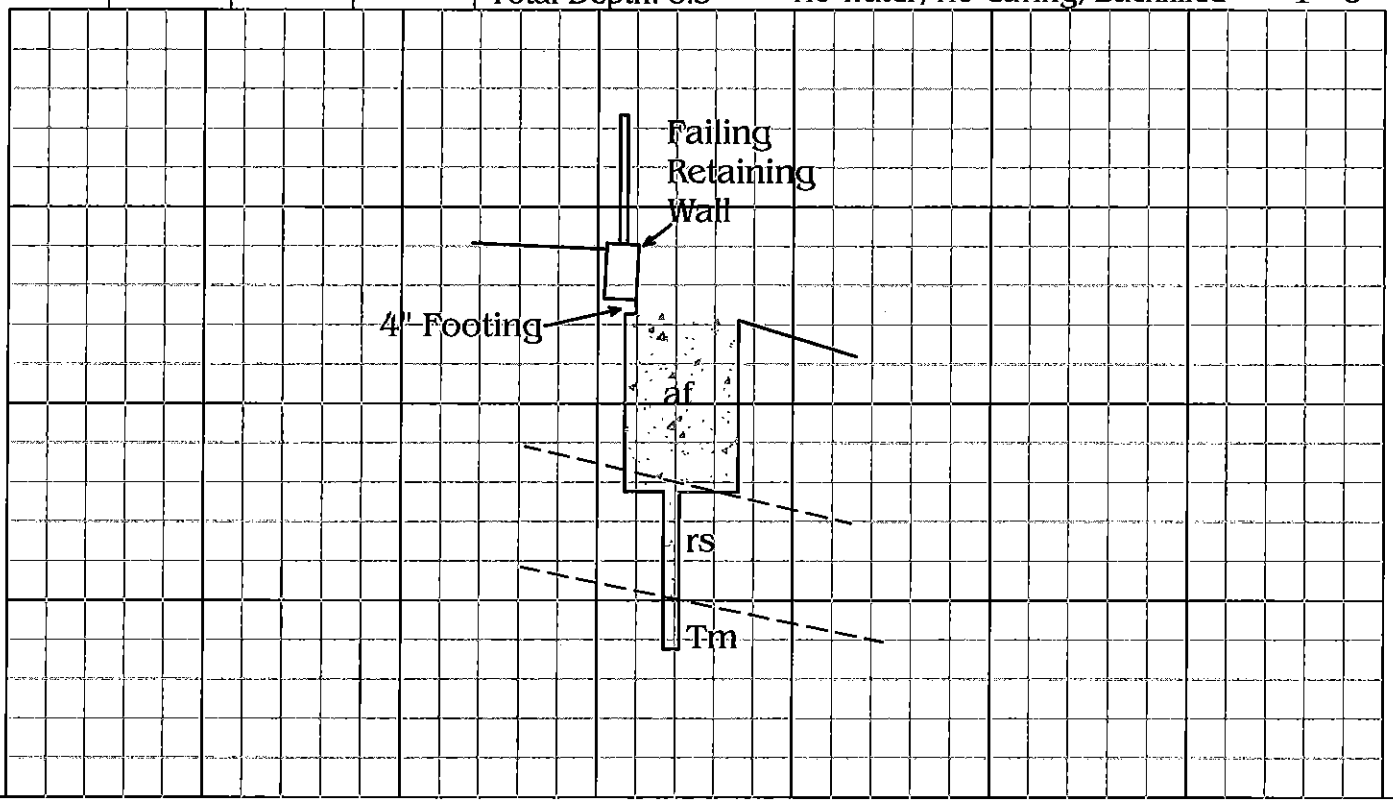
Sample Depth	Dry Density (pcf)	Insitu Moisture (%)	USCS

0'-4.5' Artificial Fill (af):
0'-2.5': Very loose fill, brown to dark brown with yellowish brown mottling, abundant bedrock fragments, porous, burrows.
2.5'-4.5': Silty clay, dark brown with tan to yellowish brown mottling, moderately stiff, slightly moist, bedrock fragments.

4.5'-7.0' Residual Soil (rs): Silty clay with some sand, dark brown with common tan bedrock fragments, stiff, slightly moist.

7.0'-8.5' Monterey Formation Bedrock (Tm): Fine grained sandstone and siltstone, orangish brown, weathered in upper 1 foot.

Total Depth: 8.5' No Water, No Caving, Backfilled 1"=5'



SOUTHWEST GEOTECHNICAL, INC

Test Hole TH-2

Project No: 2102145	Date(s) Observed: 5/13/26	Equipment Used: Hand Labor
Client: Johnson-Minnix	Location: 3661 Sunswept Drive, Los Angeles	Logged By: DJ

Surface Description:

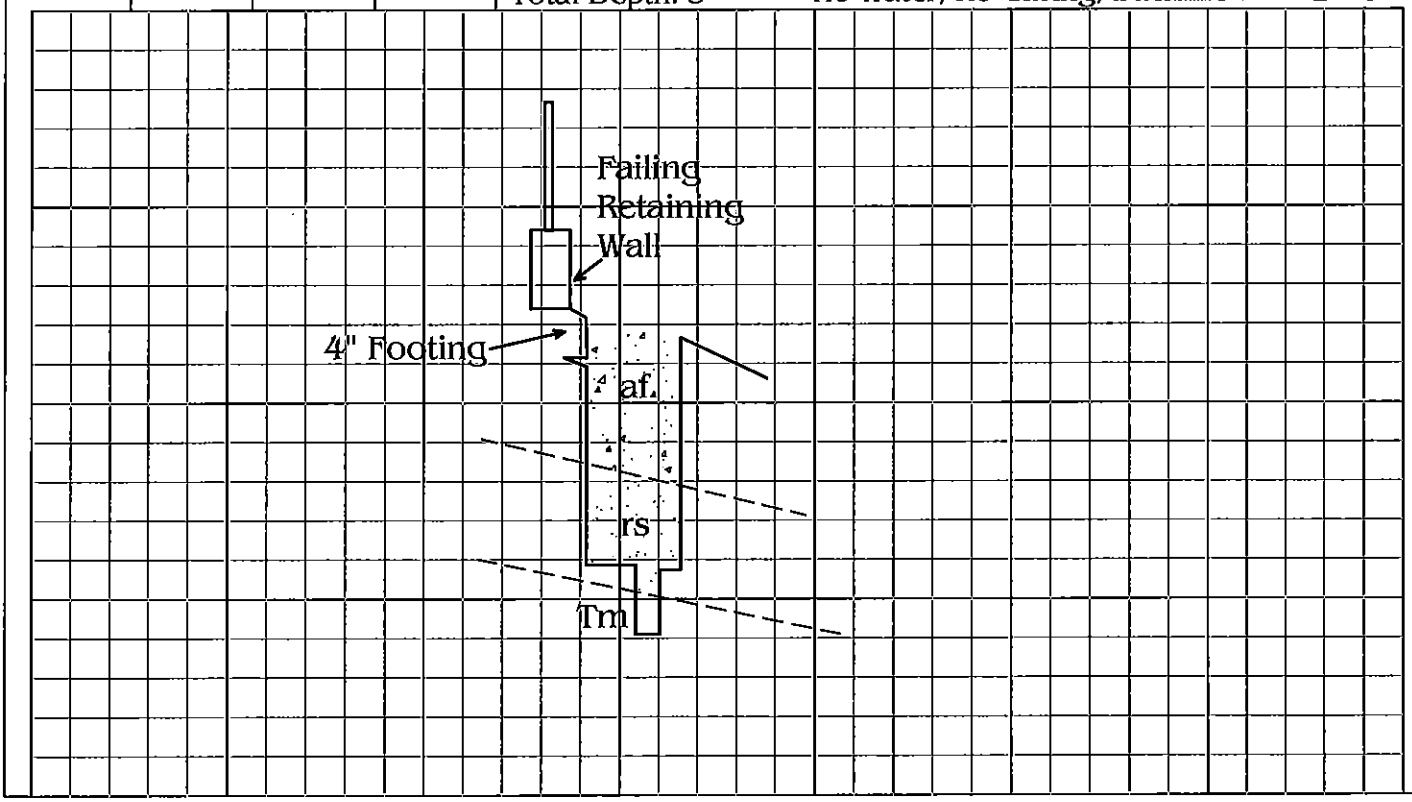
Sample Depth	Dry Density (pcf)	Insitu Moisture (%)	USCS

0'-4' Artificial Fill (af):
0'-2': Very loose fill, brown with yellowish brown mottling, bedrock fragments, highly porous, some construction debris.
2'-4': Silty clay, dark brown with tan to yellowish brown mottling, moderately stiff, slightly moist, bedrock fragments.

4.0'-6.5' Residual Soil (rs): Silty clay with some sand, dark brown with common tan bedrock fragments, stiff, slightly moist.

6.5'-8' Monterey Formation Bedrock (Tm): Siltstone and shale, yellowish brown, weathered in upper 8"-12".

Total Depth: 5' No Water, No Caving, Backfilled 1"=5'



SOUTHWEST GEOTECHNICAL, INC

Test Hole TH-3

Project No: 2102145	Date(s) Observed: 5/13/26	Equipment Used: Hand Labor
Client: Johnson-Minnix	Location: 3661 Sunswept Drive, Los Angeles	Logged By: DJ

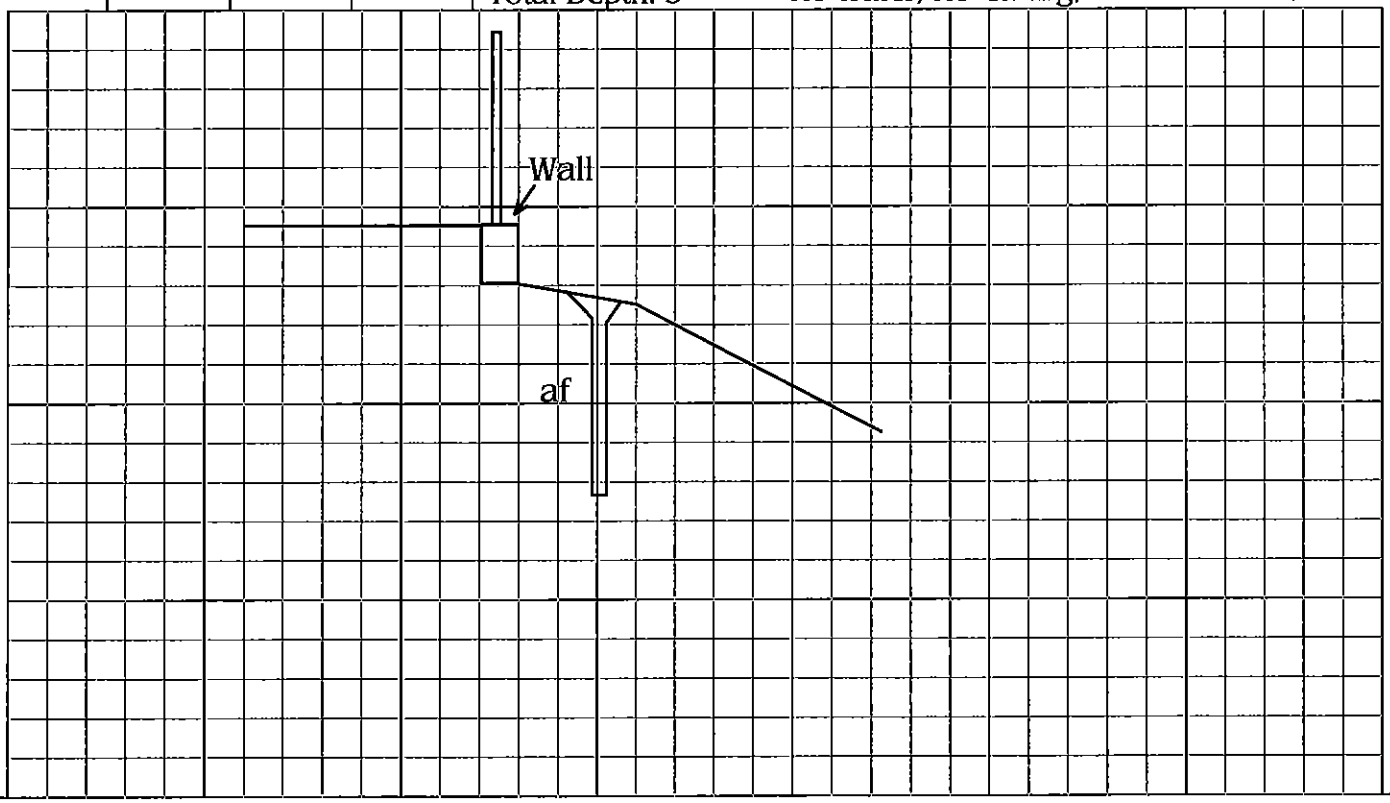
Surface Description:

Sample Depth	Dry Density (pcf)	Insitu Moisture (%)	USCS

0'-5' Artificial Fill (af): Clayey silt to silty clay with some sand, angular bedrock fragments, light brown to brown, minor trash, dry to slightly moist.

Refusal @ 5'

Total Depth: 5' No Water, No Caving, Backfilled 1"=5'



SOUTHWEST GEOTECHNICAL, INC

Test Hole TH-4

Project No: 2102145	Date(s) Observed: 5/13/26	Equipment Used: Hand Labor
Client: Johnson-Minnix	Location: 3661 Sunswept Drive, Los Angeles	Logged By: DJ

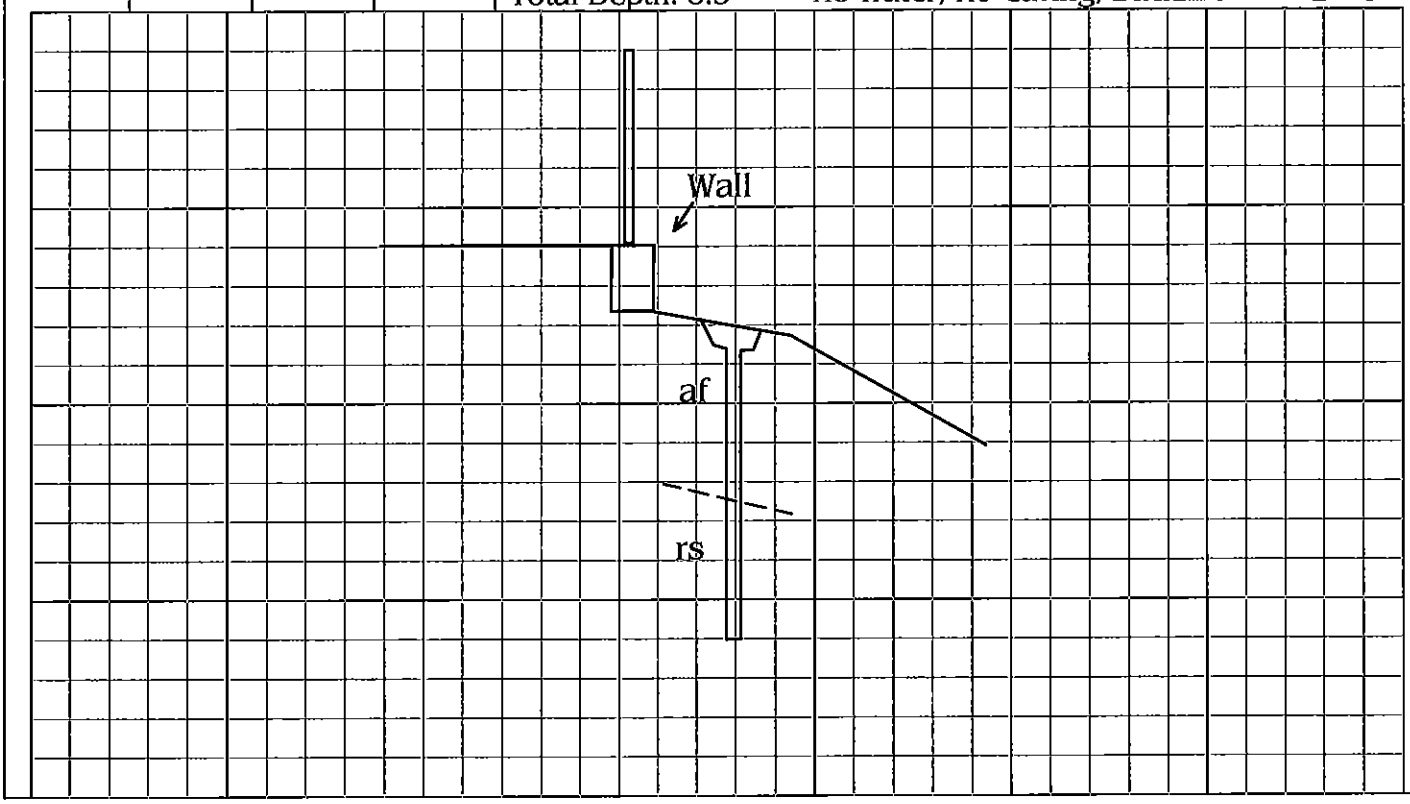
Surface Description:

Sample Depth	Dry Density (pcf)	Insitu Moisture (%)	USCS

0'-4.5' Artificial Fill (af): Clayey silt to silty clay with some sand, angular bedrock fragments, light brown to brown.

4.5'-8.5' Residual Soil (rs): silty clay to clayey silt with some sand and common angular bedrock fragments, brown to dark brown with tan mottling, dense, slightly moist.

Total Depth: 8.5' No Water, No Caving, Backfilled 1"=5'



BORING LOG NUMBER Test Pit 1

Drilling Date 3/20/78 Elevation _____

Project Minnix - KB 3877

Sample Depth ft	Blows per ft.	Moisture Content %	Dry Unit Weight p.c.f.	Depth in feet	Graphic Log	Description Surface Conditions
				1		FILL: Sandy Clay, moist, medium dense, brown to dark brown
				5		
						BEDROCK: Sandstone, moist, tight, tan-rust
				10		End at 9 feet No Water No Caving Fill to 8 feet

BORING LOG NUMBER Test Pit 2

Drilling Date 3/20/78 Elevation _____

Project Minnix - KB 3877

Sample Depth ft	Blows per ft	Moisture Content %	Dry Unit Weight p.c.f.	Depth in feet	Graphic Log	Description Surface Conditions
				1		FILL: Sandy Clay, moist, medium dense, brown to dark brown
				5		BEDROCK: Sandstone, moist, tight, tan-rust
						End at 7 feet No Water No Caving Fill to 6 feet
				10		

BORING LOG NUMBER Test Pit 3

Drilling Date 3/20/78 Elevation _____

Project Minnix - KB 3877

Sample Depth ft	Blows per ft.	Moisture Content %	Dry Unit Weight p.c.f.	Depth in feet	Graphic Log	Description Surface Conditions
				1		FILL: Sandy Clay, moist, dense, brown to dark brown
				5		
						BEDROCK: Sandstone, moist, dense, tan-rust
				10		End at 9 feet No Water No Caving Fill to 7 feet

0 1 2 0 1 1 0 0 0 9 7

KOVACS - BYER and ASSOCIATES INC.

PLATE A-3

December 29, 1987
KB 11212-G

TABLE I

LOG OF TEST PITS

Number	(Feet)	Description
1	0 - 8"	brick and concrete layer
	8" - 20"	FILL: Sandy Silt, mottled brown and light brown, dry, firm, shale fragments
	20" - 5 1/2'	BEDROCK: Shale; brown, fractured, very weathered moderately hard, thinly bedded
	5 1/2 - 6 1/2	becomes less weathered, harder, slightly cemented

End at 6 1/2 feet; No Water; No Caving;
Fill to 20 inches.

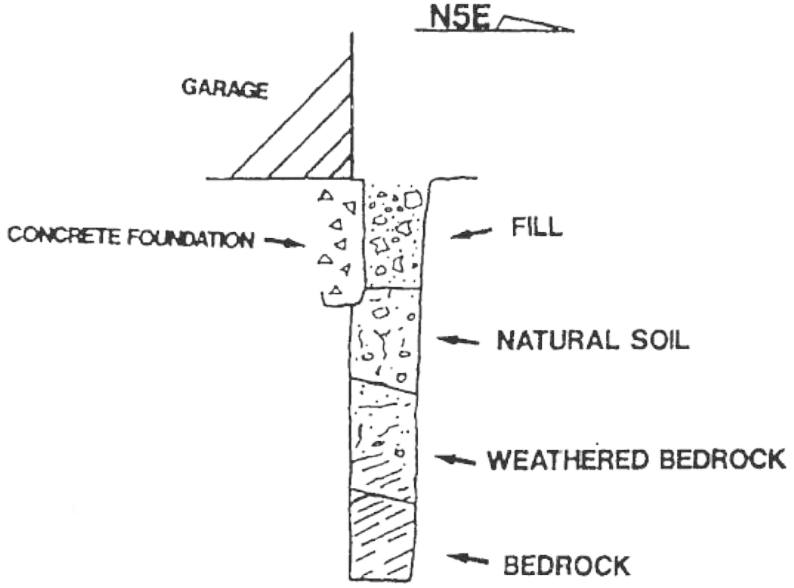
BEDDING: N65W; 35SW
Footing exposed, founded 24" below grade.
Four inches into bedrock; approximately
12 inches wide.
Note: Fill thickens to 2 1/2 feet thick on back side of test pit.

NOTE: The stratification depths represent the approximate boundary between earth types; the transition may be gradual.

3295-94

LOG OF TEST PIT 1

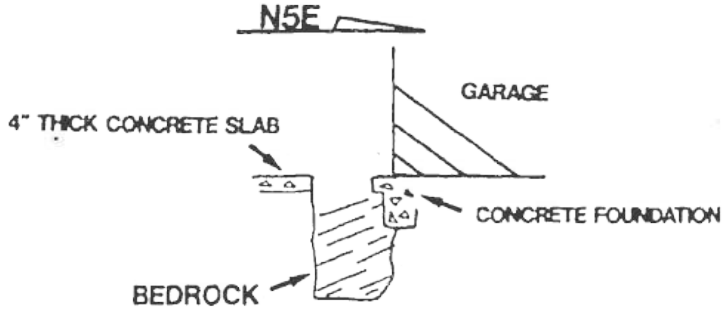
Scale: 1" = 5'



Depth (ft)	Description
0 - 3	Fill: Brown clayey silt, relatively dry, loose, abundant rock fragments, scattered roots.
3 - 6	Natural Soil: Dark brown clayey silt, porous, abundant roots, scattered rock fragments.
6 - 11	Bedrock: Light brown siltstone, upper three feet is weathered with no bedding observed, firm, clayey, tight. Lower two feet is well bedded with attitudes of N62W 33S and N70W 26S. Bedrock is slightly sandy siltstone, hard, tight, moderately jointed.

LOG OF TEST PIT 2

Scale: 1" = 5'



Depth (ft)	Description
0 - 3.5	Bedrock: Light brown siltstone, well bedded with attitudes of N56W 26S and N63W 26S. Bedrock is slightly sandy siltstone, hard, tight, moderately jointed.