GEOCON
INCORPORATED
GEOTECHNICAL ■ ENVIRONMENTAL ■ MATERIALS

Project No. 05870-32-27B
May 5, 2026

Sunrise Senior Living, LLC
7902 Westpark Drive
McLean, Virginia 22102

Attention: Mr. Joel Miller

Subject: TECHNICAL MEMORANDUM
SUNRISE SAN MARCOS
9 SAN ELIJO ROAD
SAN MARCOS, CALIFORNIA

Dear Mr. Miller:

In accordance with your request, we have prepared this technical memorandum to document the results of the supplemental trenching on the subject property. We observed the excavation of five trenches to evaluate the condition of the existing fill in areas where temporary back-cuts and stormwater BMPs are planned for the project. The approximate locations of the exploratory trenches are shown on the *Trench Location Plan*, Figure 1. Logs of the trenches, summarizing the soil conditions encountered, are presented below. Photographs of each trench will be included as an attachment to the email transmitting this correspondence.

Should you have any questions regarding this correspondence, or if we may be of further service, please contact the undersigned at your convenience.

Very truly yours,

GEOCON INCORPORATED

Ashty F. Rekani
CEG 2803
rekani@geoconinc.com

PROFESSIONAL GEOLOGIST
ASHTY F REKANI
No. 2803
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

Troy Reist
CEG 2408
reist@geoconinc.com

PROFESSIONAL GEOLOGIST
TROY K. REIST
No. 2408
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

AFR:TKR:am

(e-mail) Addressee

PROPOSED 2 STORY
RESIDENTIAL SENIOR
ASSISTED LIVING FACILITY

LOWER LEVEL
FF = 409'
PAD = 408.08'

UPPER LEVEL
FF = 422'
PAD = 421.08'

LOWER LEVEL
FF = 409'
PAD = 408.08'

GARAGE LEVEL
FF = 397'
PAD = 396.08'

LOADING ZONE
FF = 389'
PAD = 388.08

PROPOSED COURTYARD

PROPOSED COURTYARD

LIMIT OF FLOOD PLAIN
ZONE AE

6 SETS OF 6 RISERS
6.2" RISERS

13
5" RISERS

T-1

T-2

T-3

T-4

T-5

RUBBLE PILE

CITY OF SAN MARCOS

CITY OF CARLSBAD

EXISTING 8" HDPE SD

EXISTING 8" PVC SEWER

EXISTING 10" PVC WATER

EXISTING MONUMENT SIGN

NON-PERMEABLE PAVERS

FENCE 0.10' W OF R/W

SAN ELIJO ROAD

R/W

CL

PASEO PLOMO (PRIVATE)

GEOCON LEGEND

T-5 ..... APPROX. LOCATION OF TRENCH

0' 20' 40' 60' 80'

SCALE 1"=20' (On 36x24)

TRENCH LOCATION PLAN

SUNRISE SAN MARCOS
SAN MARCOS, CALIFORNIA

GEOCON INCORPORATED
GEOTECHNICAL ■ ENVIRONMENTAL ■ MATERIALS
6960 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121 - 2974
PHONE 858 558-6900 - FAX 858 558-6159

SCALE	1" = 20'	DATE	05 - 05 - 2026
PROJECT NO.	05870 - 32 - 27B	FIGURE	1
SHEET	1 OF 1		

Plotted:05/05/2026 10:21AM | By:JONATHAN WILKINS | File Location:Y:\PROJECTS\05870-32-27B Sunrise San Marcos\SHEETS\05870-32-27B TrenchLocationPlan_fnv.01.dwg

GEOCON

TRENCH NUMBER: T-1

PROJECT NAME Sunrise San Marcos
PROJECT NUMBER 05870-32-27B
DATE STARTED 04/27/2026 **COMPLETED** 04/27/2026
LATITUDE / LONGITUDE 33.100555, -117.220367
CONTRACTOR LB3
EQUIPMENT Deere 470G
METHOD -
LOCATION San Elijo Rd
LOGGED BY A. Rekani
DEPTH 15' **SURFACE ELEVATION** ~410'

Depth (ft)	Elevation (ft)	Water Levels	Graphic Log	USCS	Material Description
	410			GM	**PREVIOUSLY PLACED FILL - "SOIL-ROCK FILL" (Qpf)** Medium dense, moist, grayish brown, **Sandy GRAVEL**; gravel, cobble and boulder size rock fragments up to 2 feet with occasional boulders up to 4 feet, approximately 50% rock/50% soil; low cohesion
2					
					-Individual boulder approximately 10 feet long by 3 feet wide presat at 3 feet
4					-Moderate caving below 4 feet
	405				
6					
8					
					-Unable to dig below 9 feet, except within southern portion of trench, due to risk of trench collapse
10	400				-Becomes light reddish brown with increased amount of 2-4 foot boulders below 9 feet
12					
14					
	395				
					TRENCH TERMINATED AT 15 FEET

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN APPLIES ONLY TO THE SPECIFIC BORING OR TRENCH LOCATION AT THE DATE INDICATED AND MIGHT NOT REPRESENT SUBSURFACE CONDITIONS AT OTHER LOCATIONS OR TIMES. THE STRATIGRAPHY PRESENTED REPRESENTS THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; THESE...

GEOCON

TRENCH NUMBER: T-2

PROJECT NAME Sunrise San Marcos
PROJECT NUMBER 05870-32-27B
DATE STARTED 04/27/2026 **COMPLETED** 04/27/2026
LATITUDE / LONGITUDE 33.100687, -117.220416
CONTRACTOR LB3
EQUIPMENT Deere 470G
METHOD -
LOCATION San Elijo Rd
LOGGED BY A. Rekani
DEPTH 10' **SURFACE ELEVATION** ~405'

Depth (ft)	Elevation (ft)	Water Levels	Graphic Log	USCS	Material Description
	405			GM	**PREVIOUSLY PLACED FILL - "SOIL-ROCK FILL" (Qpf)** Medium dense, moist, grayish brown, **Sandy GRAVEL**; gravel, cobble and boulder size rock fragments up to 2 feet, approximately 50% rock/50% soil; low cohesion
2					
4					-Moderate caving below 4 feet
	400				
6					
8					-Becomes light reddish brown with boulders up to 4 feet below 9 feet
10	395				TRENCH TERMINATED AT 10 FEET

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN APPLIES ONLY TO THE SPECIFIC BORING OR TRENCH LOCATION AT THE DATE INDICATED AND MIGHT NOT REPRESENT SUBSURFACE CONDITIONS AT OTHER LOCATIONS OR TIMES. THE STRATIGRAPHY PRESENTED REPRESENTS THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; THESE...

GEOCON

TRENCH NUMBER: T-3

PROJECT NAME Sunrise San Marcos
PROJECT NUMBER 05870-32-27B
DATE STARTED 04/27/2026 **COMPLETED** 04/27/2026
LATITUDE / LONGITUDE 33.100896, -117.220479
CONTRACTOR LB3
EQUIPMENT Deere 470G
METHOD -
LOCATION San Elijo Rd
LOGGED BY A. Rekani
DEPTH 9' **SURFACE ELEVATION** ~397'

Depth (ft)	Elevation (ft)	Water Levels	Graphic Log	USCS	Material Description
	397				
2	395			GM	**PREVIOUSLY PLACED FILL - "SOIL-ROCK FILL"** (Qpf) Medium dense, moist, grayish brown, **Sandy GRAVEL**; gravel, cobble and boulder size rock fragments up to 2 feet; approximately 50% rock/50% soil; low cohesion
4					-Moderate caving below 4 feet
6	390				
8					
					TRENCH TERMINATED AT 9 FEET

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN APPLIES ONLY TO THE SPECIFIC BORING OR TRENCH LOCATION AT THE DATE INDICATED AND MIGHT NOT REPRESENT SUBSURFACE CONDITIONS AT OTHER LOCATIONS OR TIMES. THE STRATIGRAPHY PRESENTED REPRESENTS THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; THESE...

GEOCON

TRENCH NUMBER: T-4

PROJECT NAME Sunrise San Marcos
PROJECT NUMBER 05870-32-27B
DATE STARTED 04/27/2026 **COMPLETED** 04/27/2026
LATITUDE / LONGITUDE 33.101348, -117.220901
CONTRACTOR LB3
EQUIPMENT Deere 470G
METHOD -
LOCATION San Elijo Rd
LOGGED BY A. Rekani
DEPTH 10'
SURFACE ELEVATION ~386'

Depth (ft)	Elevation (ft)	Water Levels	Graphic Log	USCS	Material Description
	386				
	385			SM	**PREVIOUSLY PLACED FILL - "SOIL-ROCK FILL" (Qpf)** Medium dense, damp, light reddish brown, **Gravelly SAND** with little silt; gravel, cobble and boulder size rock fragments up to 2 feet with occasional boulders up to 4 feet, approximately 40% rock/60% soil
2					
					-Becomes moist below 3 feet
4					
	380				
6					
8					
10					TRENCH TERMINATED AT 10 FEET

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN APPLIES ONLY TO THE SPECIFIC BORING OR TRENCH LOCATION AT THE DATE INDICATED AND MIGHT NOT REPRESENT SUBSURFACE CONDITIONS AT OTHER LOCATIONS OR TIMES. THE STRATIGRAPHY PRESENTED REPRESENTS THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; THESE...

GEOCON

TRENCH NUMBER: T-5

PROJECT NAME Sunrise San Marcos
PROJECT NUMBER 05870-32-27B
DATE STARTED 04/27/2026 **COMPLETED** 04/27/2026
LATITUDE / LONGITUDE 33.100744, -117.220701
CONTRACTOR LB3
EQUIPMENT Deere 470G
METHOD -
LOCATION San Elijo Rd
LOGGED BY A. Rekani
DEPTH 10' **SURFACE ELEVATION** ~394'

Depth (ft)	Elevation (ft)	Water Levels	Graphic Log	USCS	Material Description
0	394			SM	**PREVIOUSLY PLACED FILL - "SOIL-ROCK FILL" (Qpf)** Medium dense, moist, grayish brown, **Gravelly SAND** with little silt; gravel, cobble and boulder size rock fragments up to 2 feet, approximately 40% rock/60% soil
4	390				-Becomes light reddish brown below 5 feet
9	385				
10					TRENCH TERMINATED AT 10 FEET

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN APPLIES ONLY TO THE SPECIFIC BORING OR TRENCH LOCATION AT THE DATE INDICATED AND MIGHT NOT REPRESENT SUBSURFACE CONDITIONS AT OTHER LOCATIONS OR TIMES. THE STRATIGRAPHY PRESENTED REPRESENTS THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; THESE...

UNIFIED SOIL CLASSIFICATION

MAJOR DIVISIONS			TYPICAL NAMES	
COARSE-GRAINED SOILS (MORE THAN HALF IS COARSER THAN NO. 200 SIEVE)	GRAVELS (MORE THAN HALF COARSE FRACTION IS LARGER THAN NO.4 SIEVE SIZE)	CLEAN GRAVELS WITH LITTLE OR NO FINES	GW	WELL GRADED GRAVELS WITH OR WITHOUT SAND, LITTLE OR NO FINES
			GP	POORLY GRADED GRAVELS WITH OR WITHOUT SAND, LITTLE OR NO FINES
		GRAVELS WITH OVER 12% FINES	GM	SILTY GRAVELS, SILTY GRAVELS WITH SAND
			GC	CLAYEY GRAVELS, CLAYEY GRAVELS WITH SAND
	SANDS (MORE THAN HALF COARSE FRACTION IS SMALLER THAN NO.4 SIEVE SIZE)	CLEAN SANDS WITH LITTLE OR NO FINES	SW	WELL GRADED SANDS WITH OR WITHOUT GRAVEL, LITTLE OR NO FINES
			SP	POORLY GRADED SANDS WITH OR WITHOUT GRAVEL, LITTLE OR NO FINES
		SANDS WITH OVER 12% FINES	SM	SILTY SANDS WITH OR WITHOUT GRAVEL
			SC	CLAYEY SANDS WITH OR WITHOUT GRAVEL
FINE-GRAINED SOILS (MORE THAN HALF IS FINER THAN NO. 200 SIEVE)	SILTS AND CLAYS (LIQUID LIMIT 50% OR LESS)		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTS WITH SANDS AND GRAVELS
			CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, CLAYS WITH SANDS AND GRAVELS, LEAN CLAYS
			OL	ORGANIC SILTS OR CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS (LIQUID LIMIT GREATER THAN 50%)		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS, FINE SANDY OR SILTY SOILS, ELASTIC SILTS
			CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH	ORGANIC CLAYS OR CLAYS OF MEDIUM TO HIGH PLASTICITY
	HIGHLY ORGANIC SOILS		PT	PEAT AND OTHER HIGHLY ORGANIC SOILS

BORING/TRENCH LOG LEGEND

- No Recovery (NOREC)
- Chunk Sample (CHK)
- Shelby Tube Sample (ST)
- Bulk Sample (B)
- Standard Penetration Test Sample (SPT)
- Modified California Sample (MC)
- Continuous Push (CP)
- Groundwater Level (At Time of Drilling)
- Groundwater Level (After Drilling)
- Groundwater Level (Seepage Encountered)

PENETRATION RESISTANCE

SAND AND GRAVEL			SILT AND CLAY			
RELATIVE DENSITY	BLOWS PER FOOT (SPT)*	BLOWS PER FOOT (MOD-CAL)*	CONSISTENCY	BLOWS PER FOOT (SPT)*	BLOWS PER FOOT (MOD-CAL)*	COMPRESSIVE STRENGTH (tsf)
VERY LOOSE	0 - 4	0 - 6	VERY SOFT	0 - 2	0 - 3	0 - 0.25
LOOSE	5 - 10	7 - 16	SOFT	3 - 4	4 - 6	0.25 - 0.50
MEDIUM DENSE	11 - 30	17 - 48	FIRM	5 - 8	7 - 13	0.50 - 1.0
DENSE	31 - 50	49 - 79	STIFF	9 - 15	14 - 24	1.0 - 2.0
VERY DENSE	OVER 50	OVER 79	VERY STIFF	16 - 30	25 - 48	2.0 - 4.0
			HARD	OVER 30	OVER 48	OVER 4.0

*NUMBER OF BLOWS OF 140 LB HAMMER FALLING 30 INCHES TO DRIVE LAST 12 INCHES

MOISTURE DESCRIPTIONS

FIELD TEST	APPROX. DEGREE OF SATURATION, S (%)	DESCRIPTION
NO INDICATION OF MOISTURE; DRY TO THE TOUCH	S<25	DRY
SLIGHT INDICATION OF MOISTURE	25≤S<50	DAMP
INDICATION OF MOISTURE; NO VISIBLE WATER	50≤S<75	MOIST
MINOR VISIBLE FREE WATER	75≤S<100	WET
VISIBLE FREE WATER	100	SATURATED

QUANTITY DESCRIPTIONS

APPROX. ESTIMATED PERCENT	DESCRIPTION
<5%	TRACE
5 - 10%	FEW
11 - 25%	LITTLE
26 - 50%	SOME
>50%	MOSTLY

GRAVEL/COBBLE/BOULDER DESCRIPTIONS

CRITERIA	DESCRIPTION
PASS THROUGH A 3-INCH SIEVE AND BE RETAINED ON A NO. 4 SIEVE (#4 TO 3")	GRAVEL
PASS A 12-INCH SQUARE OPENING AND BE RETAINED ON A 3-INCH SIEVE (3"-12")	COBBLE
WILL NOT PASS A 12-INCH SQUARE OPENING (>12")	BOULDER

BEDDING SPACING DESCRIPTIONS

THICKNESS/SPACING	DESCRIPTOR
GREATER THAN 10 FEET	MASSIVE
3 TO 10 FEET	VERY THICKLY BEDDED
1 TO 3 FEET	THICKLY BEDDED
3 5/8-INCH TO 1 FOOT	MODERATELY BEDDED
1 1/4-INCH TO 3 5/8-INCH	THINLY BEDDED
3/8-INCH TO 1 1/4-INCH	VERY THINLY BEDDED
LESS THAN 3/8-INCH	LAMINATED

STRUCTURE DESCRIPTIONS

CRITERIA	DESCRIPTION
ALTERNATING LAYERS OF VARYING MATERIAL OR COLOR WITH LAYERS AT LEAST 1/4-INCH THICK	STRATIFIED
ALTERNATING LAYERS OF VARYING MATERIAL OR COLOR WITH LAYERS LESS THAN 1/4-INCH THICK	LAMINATED
BREAKS ALONG DEFINITE PLANES OF FRACTURE WITH LITTLE RESISTANCE TO FRACTURING	FISSURED
FRACTURE PLANES APPEAR POLISHED OR GLOSSY, SOMETIMES STRIATED	SLICKENSIDED
COHESIVE SOIL THAT CAN BE BROKEN DOWN INTO SMALLER ANGULAR LUMPS WHICH RESIST FURTHER BREAKDOWN	BLOCKY
INCLUSION OF SMALL POCKETS OF DIFFERENT SOIL, SUCH AS SMALL LENSES OF SAND SCATTERED THROUGH A MASS OF CLAY	LENSED
SAME COLOR AND MATERIAL THROUGHOUT	HOMOGENOUS

CEMENTATION/INDURATION DESCRIPTIONS

FIELD TEST	DESCRIPTION
CRUMBLES OR BREAKS WITH HANDLING OR LITTLE FINGER PRESSURE	WEAKLY CEMENTED/INDURATED
CRUMBLES OR BREAKS WITH CONSIDERABLE FINGER PRESSURE	MODERATELY CEMENTED/INDURATED
WILL NOT CRUMBLE OR BREAK WITH FINGER PRESSURE	STRONGLY CEMENTED/INDURATED

IGNEOUS/METAMORPHIC ROCK STRENGTH DESCRIPTIONS

FIELD TEST	DESCRIPTION
MATERIAL CRUMBLES WITH BARE HAND	WEAK
MATERIAL CRUMBLES UNDER BLOWS FROM GEOLOGY HAMMER	MODERATELY WEAK
1/8-INCH INDENTATIONS WITH SHARP END FROM GEOLOGY HAMMER	MODERATELY STRONG
HAND-HELD SPECIMEN CAN BE BROKEN WITH **ONE** BLOW FROM GEOLOGY HAMMER	STRONG
HAND-HELD SPECIMEN CAN BE BROKEN WITH **COUPLE** BLOWS FROM GEOLOGY HAMMER	VERY STRONG
HAND-HELD SPECIMEN CAN BE BROKEN WITH **MANY** BLOWS FROM GEOLOGY HAMMER	EXTREMELY STRONG

IGNEOUS/METAMORPHIC ROCK WEATHERING DESCRIPTIONS

DEGREE OF DECOMPOSITION	FIELD RECOGNITION	ENGINEERING PROPERTIES
SOIL	DISCOLORED, CHANGED TO SOIL, FABRIC DESTROYED	EASY TO DIG
COMPLETELY WEATHERED	DISCOLORED, CHANGED TO SOIL, FABRIC MAINLY PRESERVED	EXCAVATED BY HAND OR RIPPING (Saprolite)
HIGHLY WEATHERED	DISCOLORED, HIGHLY FRACTURED, FABRIC ALTERED AROUND FRACTURES	EXCAVATED BY HAND OR RIPPING, WITH SLIGHT DIFFICULTY
MODERATELY WEATHERED	DISCOLORED, FRACTURES, INTACT ROCK-NOTICEABLY WEAKER THAN FRESH ROCK	EXCAVATED WITH DIFFICULTY WITHOUT EXPLOSIVES
SLIGHTLY WEATHERED	MAY BE DISCOLORED, SOME FRACTURES, INTACT ROCK-NOT NOTICEABLY WEAKER THAN FRESH ROCK	REQUIRES EXPLOSIVES FOR EXCAVATION, WITH PERMEABLE JOINTS AND FRACTURES
FRESH	NO DISCOLORATION, OR LOSS OF STRENGTH	REQUIRES EXPLOSIVES

IGNEOUS/METAMORPHIC ROCK JOINT/FRACTURE DESCRIPTIONS

FIELD TEST	DESCRIPTION
NO OBSERVED FRACTURES	UNFRACTURED/UNJOINTED
MAJORITY OF JOINTS/FRACTURES SPACED AT 1 TO 3 FOOT INTERVALS	SLIGHTLY FRACTURED/JOINTED
MAJORITY OF JOINTS/FRACTURES SPACED AT 4-INCH TO 1 FOOT INTERVALS	MODERATELY FRACTURED/JOINTED
MAJORITY OF JOINTS/FRACTURES SPACED AT 1-INCH TO 4-INCH INTERVALS WITH SCATTERED FRAGMENTED INTERVALS	INTENSELY FRACTURED/JOINTED
MAJORITY OF JOINTS/FRACTURES SPACED AT LESS THAN 1-INCH INTERVALS; MOSTLY RECOVERED AS CHIPS AND FRAGMENTS	VERY INTENSELY FRACTURED/JOINTED

GEOCON

KEY TO LOGS

Plotted:09/20/2024 2:38PM | By:RUBEN AGUILAR | File Location:Y:\Key to Logs-Boring and Trench Log Descriptions\KeyToLogs_GeoconLegend-Soil&RockDescriptions.dwg