REPORT OF

GEOTECHNICAL INVESTIGATION AND PERCOLATION TESTING

PROPOSED COMMERCIAL/WAREHOUSE BUILDING PROJECT

APN: 329-020-033, 034, 044, 046

SOUTHWEST CORNER OF TRUMBLE ROAD AND MAPES ROAD

PERRIS, CALIFORNIA 92571

FOR

BLUE MARQUISE INVESTMENTS, LLC

PROJECT NO. 21-673-02

DECEMBER 10, 2021

December 10, 2021 21-673-02

Blue Marquise Investments, LLC
6300 Wilshire Blvd, Suite 1420
Los Angeles, California 90048

Attention: Mr. Kamran Benji

Subject: Geotechnical Investigation
Proposed New Commercial/Warehouse Building Project
APN: 329-020-033, 034, 044, 046
Southwest Corner of Trumble Road and Mapes Road
Perris, California 92571

Gentlemen:

INTRODUCTION

This report presents the results of a geotechnical investigation and percolation testing for the subject project. During the course of this investigation, the engineering properties of the subsurface materials were evaluated in order to provide recommendations for design and construction of foundations and grading. The investigation included subsurface exploration, soil sampling, laboratory testing, engineering evaluation and analysis, consultation, and preparation of this report.

During the course of this investigation, the provided conceptual site plan was used as reference. The plan was prepared by the offices of HPA Architecture.

The enclosed Drawing No. 1, entitled Site Plan, shows the approximate locations of the exploratory borings in relation to the site boundaries and the proposed new building. This drawing also shows approximate location of test pits where percolation testing was performed.

Figure No. 1 shows the Site Vicinity Map. Figure No. 2 shows the Regional Topographic Map. Figure No. 3 shows the Regional Geologic Maps.

The attached Appendix I, describes the method of field exploration. Figure Nos. I-1 and I-10 present summaries of the soils encountered at the location of our exploratory borings. Figure No. I-11 presents a key to the log of exploratory borings.

Appendix II describes the laboratory testing procedures. Figure Nos. II-1 and II-2 present the results of direct shear and consolidation tests performed on selected undisturbed samples.

PROJECT CONSIDERATIONS

It is our understanding that the proposed project will consist of construction of a new commercial warehouse building at the subject site. The proposed development will consist of offices and warehouse totaling 427,320 square feet.

The proposed building is expected to be a one-story steel frame structure. The flooring system will be in a form of concrete grade slabs established at or near the present grade. No basement is planned.

Parking for the proposed facility will be provided in a form of open parking lot. Some 400 parking spaces will be provided. The setback from Mapes and Trumble roads is expected to be 10 feet. The approximate location of the proposed building and parking with respect to the site boundaries is shown on the enclosed Site Plan; Drawing No. 1.

Structural loading data was not available during the course of preparation of this report. For the purpose of this report, however, it is assumed that the magnitude of the collected load would be on the order of 100 kips, combined dead, plus frequently applied live loads. Wall loads are expected to be on the order of 10 kips per lineal foot.

ANTICIPATED SITE GRADING WORK

Site grading for the proposed project will involve removal and recompaction of the existing fill. As part of the site grading work, some utility trenches will be backfilled.

In the building area, the zone of removal should be extended beyond the exterior walls of the proposed building a horizontal distance equal to the thickness of removal. The recompacted fill will be used for support of structural foundations and grade slabs. Debris and rocks larger than 4 inches in diameter should be excluded from the areas of new compacted fill.

The removal and recompaction of the fill in parking lot areas can be limited to 12 inches. The remaining 12 inches of the fill should be scarified and compacted in-place.

The excavated materials from the site may be reused in the areas of compacted fill. Note that some 10 percent shrinkage should be assumed when reusing the existing fill in the areas of new compacted fill. Therefore, import soils will be required to accomplish the site grading work. All imported soils should be non-expansive and granular in nature.

The existing fill were found to be fine grained in nature and potentially expansive. Such soils, where reused in the areas of new fill, should be placed back at some 3 percent higher than the optimum moisture content. The grade slabs also should be designed for expansive soil conditions.

SITE CONDITIONS

SITE SURFACE CONDITIONS

The site of the proposed development is located on Southwest corner of Trumble Road and Mapes Road in Perris, California. The site is irregular in shape and covers a plan area of 20.7 acres (902,107 square feet). See the enclosed Site Plan; Drawing No. 1 for the site location.

At the time of our investigation, the site was vacant. The site is slightly sloped down in the northwest direction. No slope occurs in the close vicinity of the subject site.

SUBSURFACE CONDITIONS

Correlation of the subsoil between the test borings was considered to be good. Generally, the site, to the depths explored, was found to be covered with surficial fill consisting of silty sand underlain by predominantly sandy soils with little to no fines and variable amounts of gravel. Thickness of the surficial fill was found to be on the order of 2 to 3 feet in our borings. Deeper fill, however, may be present beneath the existing structures and in old utility lines.

The existing fill should not be used for support of new fill, structural foundations, and grade slabs at their present state. Such soils, however, can be excavated and reused in the areas of new compacted fill, provided that any debris and rocks larger than 4 inches in diameter are removed.

The underlying native soils were found to be medium dense to dense in-place and adequate to receive new fill for support of grade slabs and structural foundations. The results of our laboratory testing indicated that the site native soils within the zone of influence of foundation pressure were of relatively high strength and low compression.

The existing fill were found to be fine grained in nature and potentially expansive. The expansion index of the existing fill was found to be 42.

During the course of our field investigation, no water was found in our borings drilled to a maximum depth of 21 feet. The State Maps for Perris Quadrangle are not available to show the historically highest groundwater level in the vicinity of the subject site. It is estimated that it can be greater than 100 feet below ground surface.

Due to the method of drilling (use of continuous auger) caving was not detected during the course of our field exploration. Because the site upper soils have appreciable amounts of fines, forming is expected not to be necessary during foundation construction.

SEISMIC DESIGN CONSIDERATIONS

In accordance with the ASCE7-16, corresponding to California Building Code (CBC 2019), the project site can be classified as site “D”. The mapped spectral accelerations of S_S= 1.434 (short period) and S_1 =0.533 (1-second period) can be used for this project. These parameters correspond to site Coefficients values of F_a =1.0 and F_V = null (see the Note below), respectively.

The seismic design parameters would be as follows:

$\mathbf{S_{MS}}$= F_a (S_S) = 1.0 (1.434) = 1.434	$\mathbf{S_{M1}}$=F_v (S_1) = null (see Note below)
$\mathbf{S_{DS}}$=2/3 (S_{MS}) = 2/3 (1.434) = 0.956	$\mathbf{S_{D1}}$=2/3 (S_{M1}) = null (see Note below)

Note: Since the seismic factor S_1 is greater than 0.2 site-specific ground motion hazard analyses may be required. The project structural engineer shall determine if an exemption can be applied in accordance with ASCE7-16 Section 11.4.8. If an exemption applies, a long period coefficient (F_v) of 1.7 may be utilized for calculation of the seismic parameters $\mathbf{S_{M1}}$ and $\mathbf{S_{D1}}$ in the above Table.

DISCUSSION OF LIQUEFACTION POTENTIAL

During the course of our investigation, no groundwater was found in our borings to the maximum depth of 21 feet explored. The State Maps for Perris Quadrangle are not available to show the historically highest groundwater level in the vicinity of the subject site. It is estimated that it can be greater than 100 feet below ground surface. Additionally, Perris area is not a designated liquefaction zone. On this basis, it is our opinion that soil liquefaction will not occur at the subject site.

STATEMENT 111

For the purpose of the subject project, it is our opinion that when the proposed grading and construction is made as planned, following the recommendations of this report, the site will be safe against the hazards of landsliding, settlement or slippage. The proposed construction and grading will not have adverse effect on the geologic stability of the existing properties outside the boundaries of the subject site.

SOIL CHEMICAL IMPURITIES AND CORROSION CONSIDERATIONS

After the proposed finished grades are established, samples of the subgrade materials in contact with foundations and utility lines should be tested for chemical impurity (soil corrosivity). For the purpose of this report, however, it should be assumed that the site soils are corrosive. Subject to the results of chemical testing during construction, the design may be changed.

EVALUATION AND RECOMMENDATIONS

GENERAL

Based on the geotechnical engineering data derived from this investigation, the site can be developed as planned. The existing fill soils are considered to be inadequate for support of new fill, structural foundations, grade slabs at their present state. Such fill soils, however, can be excavated and reused in the areas of new fill. The zone of removal should be extended beyond the exterior walls of the proposed building a horizontal distance equal to the thickness of removal. The new fill will be used for support of grade slabs and foundations.

The existing fill were found to be fine grained in nature and potentially expansive. Such soils, where reused in the areas of new fill, should be placed back at

some 3 percent higher than the optimum moisture content. The grade slabs also should be designed for expansive soil conditions.

After proper site grading, conventional spread footing foundation system can be used for support of the proposed building. The foundation bearing materials should consist of medium dense to dense native and/or properly compacted fill soils.

Grade slabs can be supported on the finished grades which would be properly compacted granular fill soils. Due to potentially expansive character of the site upper soils, it is recommended that the concrete grade slabs for this project to have a minimum section of 5 inches and be reinforced with #4 bars placed at every 16 inches on center, each way. In the areas of pedestrian concrete walkways, the above recommendation can be changed to a minimum section of 4 inches.

The following sections present our specific recommendations for grading, site surface drainage, foundations, lateral design, grade slabs, temporary excavation, pavement design, and observations during construction.

GRADING RECOMMENDATIONS

Site grading for the proposed project will involve removal and recompaction of the existing fill and utility trench backfilling. In the building area, the zone of removal should be extended beyond the exterior walls of the proposed building a horizontal distance equal to the thickness of removal. The recompacted fill will be used for support of structural foundations and grade slabs. Debris and rocks larger than 4 inches in diameter should be excluded from the areas of new compacted fill.

The removal and recompaction of the fill in the parking lot areas can be limited to 12 inches. The remaining 12 inches of the fill should be scarified and compacted in-place.

For utility trench backfill, place clean sand around and above the utility lines using jetting. The sand should be brought up to 12 inches above utility lines. Above the sand, normal soils from the site can be used. All utility backfills should be placed at a minimum relative compaction of 90% at optimum moisture content.

The excavated materials from the site may be reused in the areas of compacted fill. Note that some 10 percent shrinkage should be assumed when reusing the existing fill in the areas of new compacted fill. Therefore, import soils will be required to

accomplish the site grading work. All imported soils should be non-expansive and granular in nature.

The existing fill were found to be fine grained in nature and potentially expansive. Such soils, where reused in the areas of new fill, should be placed back at some 3 percent higher than the optimum moisture content. The grade slabs also should be designed for expansive soil conditions.

Prior to placement of any fill on the site, the Soil Engineer should observe the excavation bottoms. The areas to receive compacted fill should be scarified to a depth of about 8 inches and compacted to at least 90 percent of the maximum dry density as determined by the ASTM Designation D 1557 Compaction Method. The moisture content of the fine grained soils should be brought up to at least 3 percent higher than the optimum moisture content.

All import soils should be free of organic matter and rocks larger than 4 inches in diameter. Before import soils are brought to the site, a 40-pound sample of the proposed import soils should be submitted to the Soil Engineer (at least 48 hours in advance) so that the maximum density and expansion character of the import materials can be determined.

General guidelines regarding site grading are presented below in an itemized form which may be included in the earthwork specification. It is recommended that all fill be placed under engineering observation and in accordance with the following guidelines:

1. All vegetation and debris should be collected and hauled off-site. In the areas of new fill, the existing fill should be excavated until native soils are exposed.

2. The excavated areas should be observed and approved by the Soil Engineer prior to placing any fill.

3. The excavated sandy materials from the site are considered to be satisfactory for reuse in the compacted fill areas.

4. Fill material, approved by the Soil Engineer, should be placed in controlled layers. Each layer should be compacted to at least 90 percent of the maximum unit weight as determined by ASTM designation D 1557 for the material used.

5. The fill material shall be placed in layers which, when compacted, shall not exceed 8 inches per layer. Each layer shall be spread evenly and shall be thoroughly mixed during the spreading to insure uniformity of material in each layer.

6. When moisture content of the fill material is too low to obtain adequate compaction, water shall be added and thoroughly dispersed until the moisture content is near optimum.

7. When the moisture content of the fill material is too high to obtain adequate compaction, the fill material shall be aerated by blading or other satisfactory methods until near optimum moisture condition is achieved.

8. Inspection and field density tests should be conducted by the Soil Engineer during grading work to assure that adequate compaction is attained. Where compaction of less than 90 percent is indicated, additional compactive effort should be made with adjustment of the moisture content or layer thickness, as necessary, until at least 90 percent compaction is obtained.

SURFACE DRAINAGE

Adequate site drainage should be provided to divert roof and surface waters away from the proposed building and from the property through non-erodible drainage devices. In no case should the surface waters be allowed to pond adjacent to the buildings or anywhere on the building pads. A minimum surface slope of one and two percent are recommended for paved and unpaved areas, respectively.

The site drainage recommendations should also include the following:

1. Having positive slope away from the buildings, as recommended above.
2. Installation of roof drains, area drains and catch basins with appropriate connecting lines.
3. Managing landscape watering.
4. Regular maintenance of the drainage devices.
5. Installing waterproofing or damp proofing, whichever appropriate, beneath concrete grade slabs.
6. The owners should be familiar with the general maintenance guidelines of the city requirements.

FOUNDATIONS

Conventional spread footings can be used for support of the proposed building. The foundation bearing materials will be native and/or properly compacted fill soils.

New footings should be at least 18 inches wide and be placed at a minimum depth of 24 inches below the lowest adjacent final grades. Properly designed and constructed spread footings may be based on an allowable maximum bearing pressure of 2,200 pounds per square foot. This value can be increased at a rate of 100 and 200 pounds per square for each additional foot of footing width and depth, to a maximum value of 2,700 pounds per square foot.

The above given values are for the total of dead and frequently applied live loads. For short duration transient loading, such as wind or seismic forces, these values may be increased by one-third.

Under the allowable maximum soil pressure, footings with assumed collected loads of 100 kips is expected to settle about 5/8 of one inch. Wall footings, with loads of about 10 kips per lineal foot are expected to settle on the order of 1/2 of one inch. Maximum differential settlements are expected to be on the order of 1/4 of an inch. The major portions of the settlements are expected to occur during construction.

LATERAL DESIGN

Lateral resistance at the base of footings in contact with native soils may be assumed to be the product of the dead load forces and a coefficient of friction of 0.35. Passive pressure on the face of footings may also be used to resist lateral forces. A passive pressure of zero at the finished grades and increasing at a rate of 250 pounds per square foot per foot of depth to a maximum value of 1,500 pounds per square foot may be used for footings poured against properly compacted fill soils.

GRADE SLABS

New concrete grade slabs can be supported on the finished grades which would be properly compacted fill soils. Due to potentially expansive character of the site upper soils, it is recommended that new grade slabs for this project be at least 5 inches thick and be reinforced with # 4 bars placed at every 16 inches on center, each way.

For pedestrian concrete walkways, the above recommendation can be changed to a minimum section of 4 inches.

In the areas where moisture sensitive floor covering is used and slab dampness cannot be tolerated, a vapor-barrier should be used beneath the slabs. This normally consists of a 10-mil polyethylene film covered with 2 inches of clean sand.

TEMPORARY EXCAVATION

Unshored Excavations: As part of the installation of underground utilities, temporary shoring will be made. Such cuts are expected to reach several feet. Based upon the engineering characteristics of the site upper soils, it is our opinion, as a minimum, that temporary excavation slopes in accordance with the following table should be used:

Maximum Depth of Cut (Ft)	Maximum Slope Ratio (Horizontal:Vertical)
0-3	Vertical
>3	1:1

Water should not be allowed to flow over the top of the excavation in an uncontrolled manner. No surcharge should be allowed within a 45-degree line drawn from the bottom of the excavation. Excavation surfaces should be kept moist but not saturated to retard raveling and sloughing during construction.

It would be advantageous, particularly during wet season construction, to place polyethylene plastic sheeting over the slopes. This will reduce the chances of moisture changes within the soil banks and material wash into the excavation.

Shoring: In lieu of shaving (1:1) the upper portion of the cuts exceeding 3 feet, cross bracing system can be used as shoring (underground utility trenches, etc.).

PAVEMENT DESIGN

Using an assumed “R” value of 50, the minimum pavement section alternatives for Traffic Index (TI) values ranging from 4 to 7 were calculated. The results are shown on the enclosed Calculation Sheet.

The lower TI value of 4 is normally used for passenger cars, including pickup trucks. The higher TI value of 7 is normally used for heavier traffic (trucks, including garbage trucks).

The presumed R-value used for this project was for the upper soils which are sandy silt and silty sand. At the time of grading, a representative sample of soils should be tested to determine the actual “R” value and the recommended designed pavement section be modified as necessary.

Before pavement sections are placed, the surficial fill to a maximum depth of 12 inches should be removed and recompacted. The remaining 12 inches of the fill should be scarified and compacted in-place. The new fill should be placed under engineering observation and testing, as presented in the preceding sections of this report.

This office should be notified if increased traffic loading condition is expected so that modification to the above given recommendations can be made. A Traffic Engineer should be consulted for design and use of proper pavement sections in the alley and roadway leading to parking entrances.

The base course should be compacted to a relative compaction of 95 percent per relative compaction. The soil engineer should verify the compaction degree of the pavement section subgrade and base course.

ON-SITE PERCOLATION TESTING

Horizontal Drain System “Trench”

The procedure for trench system design included performing the following tasks per the Administrative Manual County of Los Angeles Department of Public Works Geotechnical and Materials Engineering Division: Guidelines for Geotechnical Investigation and Reporting Low Impact Development Stormwater Infiltration (GS200.2), at the subject site:

1. Excavate two test pits (TP-1 and TP-2) to a depth of about 4.5 feet.
2. Extending a one cubic foot (1’ X 1 ’X 1’) hole at the bases of the test pits.
3. Pre-saturating the one cubic foot hole prior to the percolation testing.
4. Determining time interval for recording water drop between readings by conducting standard water drop test over 10 minutes.

5. Once interval is determined, add water to 12 inches about bottom (starting water level must be this initial water depth);
6. Conduct percolation test by taking readings of water drop from initial water level per determined time interval.
7. Fill excavation back to initial water depth and record the time of filling.
8. Repeat percolation tests a minimum of eight times or until a stabilized rate of drop is obtained, whichever occurs first. (Stabilized rate in the highest and lowest readings within 10% of each other for three consecutive tests.);
9. Making engineering evaluation/analysis/calculations and report preparation.

Field percolation tests were conducted on November 18, 2021 using Excavation Percolation Test Procedure outlined on page 4 of the Administrative Manual, Guidelines for Design, Investigation and Reporting, Low Impact Development Stormwater Infiltration. The enclosed Site Plan; Drawing No. 1, shows the approximate location of the test pits within which the percolation test was conducted.

One cubic foot hole (1' X1' X 1') was excavated at the bottom of each test pit. The one cubic foot hole was then presoaked and standard test interval rate conducted prior to the actual in-situ percolation testing. The one cubic foot hole at the base of the test pit was completely filled, to the rim, with water. However, our test results indicated that a horizontal drain system is not feasible, and water did not percolate. The materials within the percolation zone consisted of very dense silty sand soils and appreciable amount of fines.

Based on the above, the subject site is considered to be a poor candidate for on-site infiltration. Therefore, the stormwater should be diverted to areas of planters and any excess water should be carried to the curb side, after going through the required on-site filtration process.

OBSERVATION DURING CONSTRUCTION

The presented recommendations in this report assume that all foundations will be established in native soils. All footing excavations should be observed and accepted by a representative of this office before reinforcing is placed.

Site grading work should be conducted under observation and testing by a representative of this firm. For proper scheduling, please notify this office at least 24 hours before any observation work is required.

CLOSURE

The findings and recommendations presented in this report were based on the results of our field and laboratory investigations combined with professional engineering experience and judgment. The report was prepared in accordance with generally accepted engineering principles and practice. We make no other warranty, either express or implied.

It is noted that the conclusions and recommendations presented are based on exploration "window" borings and excavations which is in conformance with accepted engineering practice. Some variations of subsurface conditions are common between "windows" and major variations are possible.

-oOo-

The following Figures and Appendices are attached and complete this report:

Pavement Design Calculation Sheet
Drawing No. 1 - Site Plan
Figure No. 1 - Site Vicinity Map
Figure No. 2 - Regional Topographic Map
Figure No. 3 - Regional Geologic Map
Appendix I-Method of Field Exploration
Log of Borings Figure Nos. I-1 through I-10
Unified Soil Classification System Figure No. I-11
Appendix II- Methods of Laboratory Testing
Figure Nos. II-1 through II-2.2

Respectfully Submitted,

APPLIED EARTH SCIENCES

Reviewed by:

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Distribution: (4) Addressee

R-Value (Assumed)

50

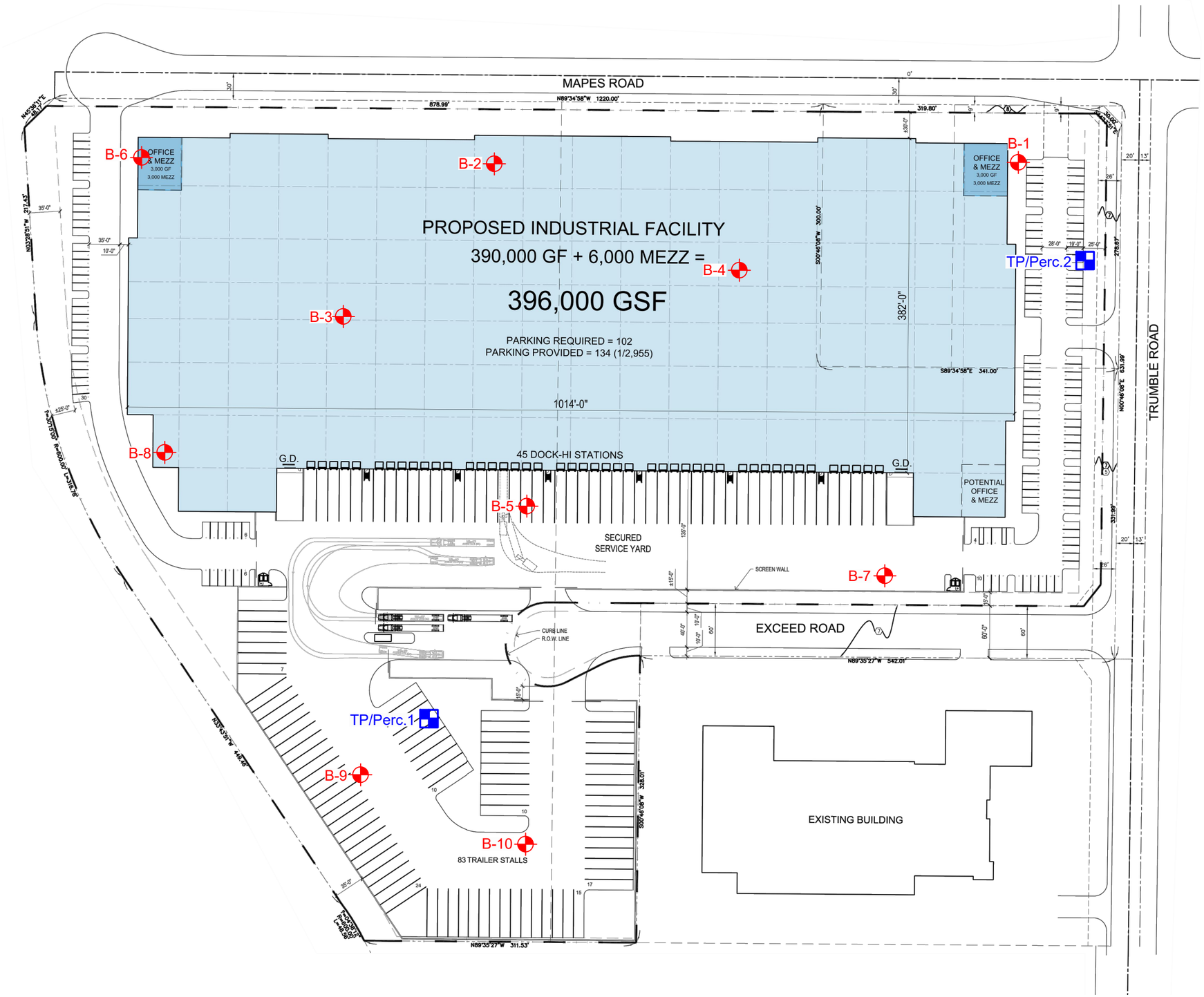
Traffic Index (TI)	Gravel Equivelence Factor (G_f)	Gravel Equivelence (GE)
4	2.50	0.256
5	2.50	0.320
6	2.32	0.414
7	2.14	0.523

Pavement Section Thickness (inches)				
Traffic Index (TI)	Full Tac*		Alternative No. 1	
	Tac*(in)	Tbc** (in)	Tac*(in)	Tbc** (in)
4	4	0	3	3
5	5	0	4	3
6	6	0	5	4
7	7	0	6	4

* Tac=Thickness of Asphalt Concrete (2.5" Minimum)

**Tbc= Thickness of Base Course (Class III) with R-Value of 78 or Better (4" Minimum)

Flexible Pavement Design Data



N

Scale: 1" = 120'

LEGEND:

B-10 = Location & Number of Boring

TP/Perc.2 = Percolation Test, Shallow Trench System

Note:

Site plan prepared by using plan provided by:
-Architecture Design Relationships

SITE PLAN

PROJECT No:	21-673-02
DATE:	11 / 18 / 2021
DRAWN BY:	TG
CHECKED BY:	CM
DRAWING No:	1

DESCRIPTION: Proposed Commercial/ Warehouse Building Project

FOR: Blue Marquise Investments, LLC

ADDRESS: SW Corner of Trumble Road & Mapes Road, Perris, CA 92571

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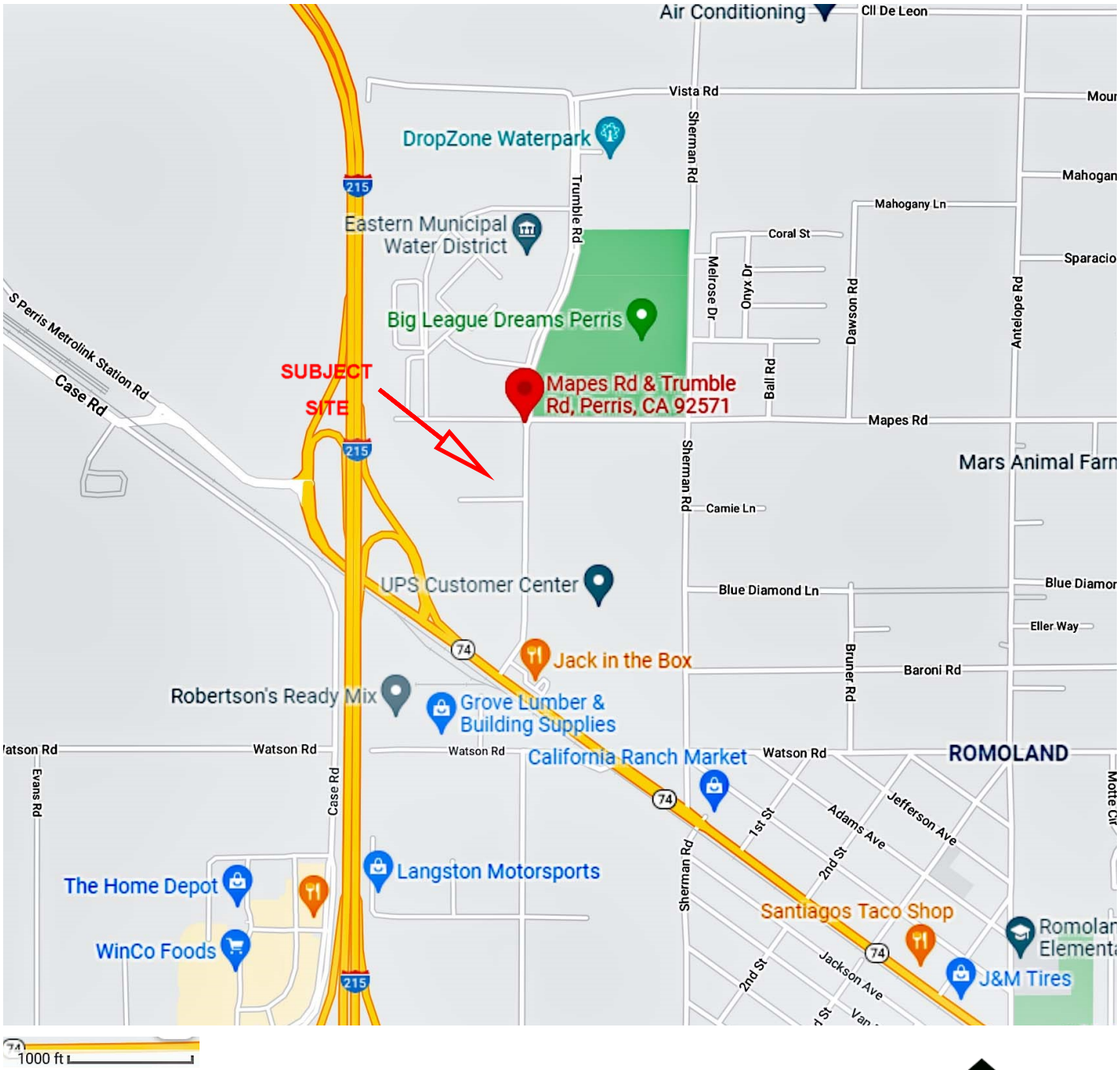
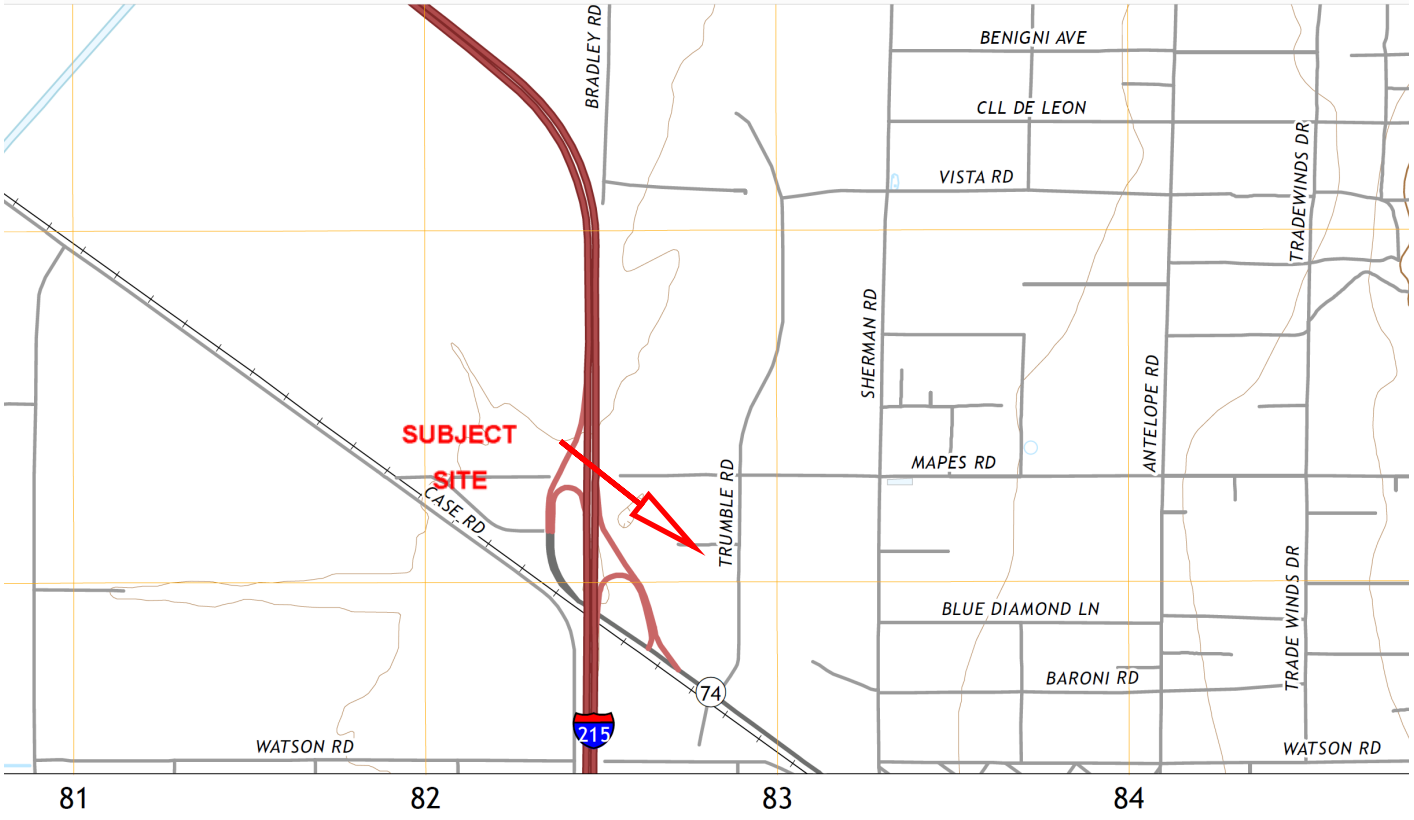


Reference: Portion of Google Maps

SITE VICINITY MAP

Proposed Commercia/l Warehouse Building Project	SW Corner of Trumble Road & Mapes Road, Perris, CA 92571
FOR Blue Marquise Investments, LLC	DATE 11 / 18 / 2021
PROJECT No. 21-673-02	
APPLIED EARTH SCIENCES GEOTECHNICAL . GEOLOGY . ENVIRONMENTAL ENGINEERING CONSULTANTS	FIGURE No. 1



1 0.5 0 KILOMETERS 1 2

1000 500 0 METERS 1000 2000

1 0.5 0 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 FEET

N

Reference: USGC Topo Map

REGIONAL TOPOGRAPHIC MAP

Proposed Commercia/l Warehouse Building Project	SW Corner of Trumble Road & Mapes Road, Perris, CA 92571

FOR	DATE	PROJECT No.
Blue Marquise Investments, LLC	11 / 18 / 2021	21-673-02

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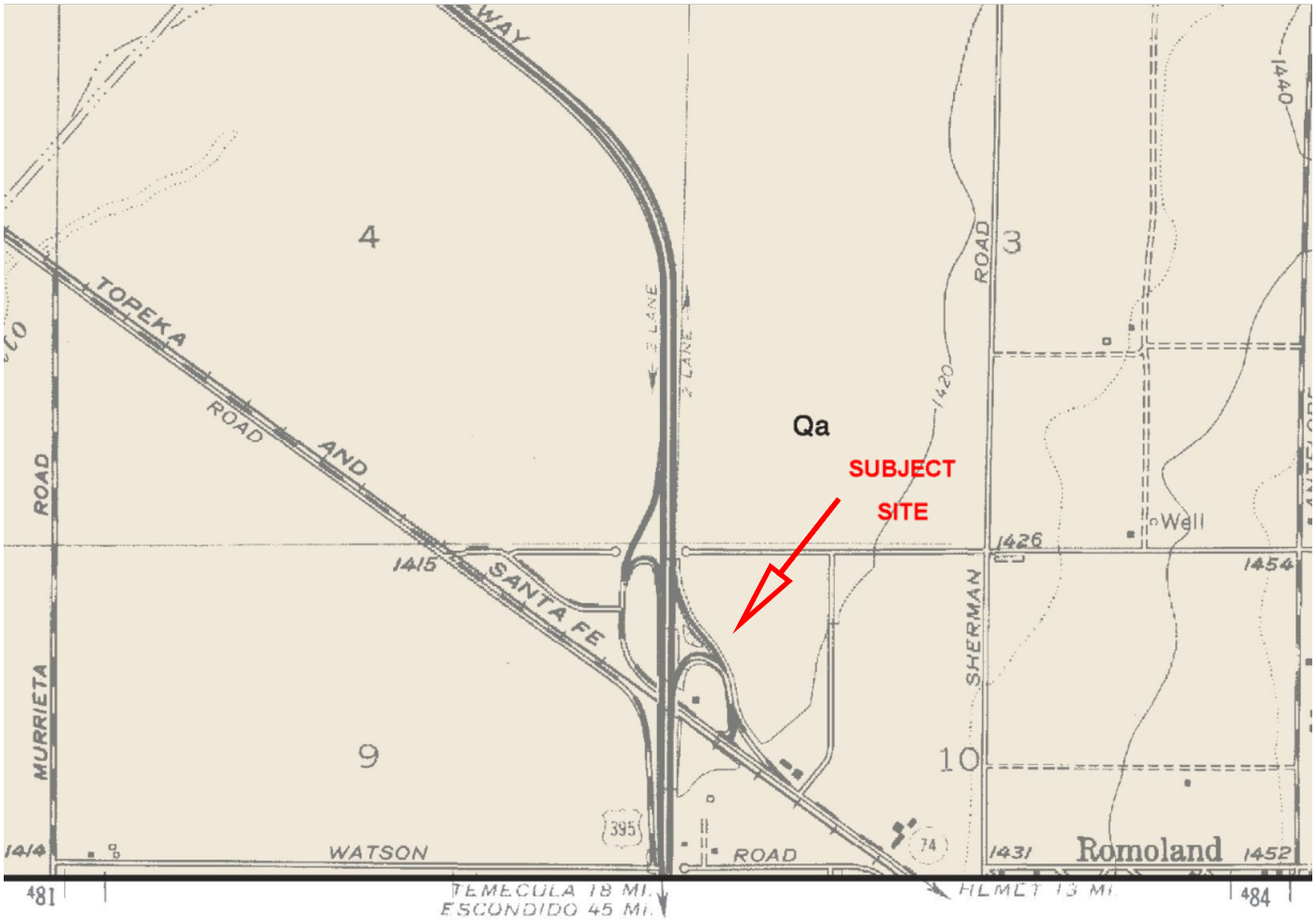
FIGURE No. 2



Alluvial sediments, unconsolidated, undissected

Qa *Alluvial sand and clay of valley areas, covered by gray soil*

N

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

Reference: Dibblee Geologic Map of the Perris Quadrangle

REGIONAL GEOLOGIC MAP

Proposed Commercia/l Warehouse Building Project	SW Corner of Trumble Road & Mapes Road, Perris, CA 92571

FOR	DATE	PROJECT No.
Blue Marquise Investments, LLC	11 / 18 / 2021	21-673-02

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FIGURE No. 3

APPENDIX I

METHOD OF FIELD EXPLORATION

In order to define subsurface conditions, ten borings were drilled on the site using hollow stem auger equipment to a maximum depth of 21 feet. The approximate locations of the exploratory borings are shown on the enclosed Site Plan.

Logs of the subsurface materials, as encountered in the borings, were recorded in the field and are presented Figure Nos. I-1 through I-10. These figures also show the number and approximate depths of each of the recovered soil samples.

Relatively undisturbed samples of the subsoils were obtained by driving a steel sampler with successive drops of a 140-pound standard sampling hammer free-falling a vertical distance of about 30 inches. The number of blows required for one foot of sampler penetration was recorded at the time of drilling and are shown on the log of exploratory borings. The relatively undisturbed soil samples were retained in brass liner rings 2.5 inches in diameter and 1.0 inch in height.

Field investigation for this project was performed on October 14 through 15, 2021. The material excavated from the borings was placed back and compacted upon completion of the field work. Such material may settle. The owner should periodically inspect these areas and notify this office if the settlement creates a hazard to persons or property.

LOG OF BORING NO.1

21-673-02

SW Corner of Trumble Road & Mapes Road, Perris, CA 92571

Type: Hollow Stem Auger, With 140 Lb Hammer Logged by: Daniel

Location: *See Site Plan*

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	SPT BLOWS/FT	BLOWS PER FT	% Moisture	UNIT DRY WT LB/CU FT	% -200 - △ % Moisture - ● 20 40 60 80	% -200
0			(ML) FILL: Silt, moderately compact, slightly moist, medium brown, sandy silt.						
			(SM) SAND: Very dense, moist, brown, silty fine to medium grained sand.		50/3"	10	119		
5			(SM) Grades to lighter brown, more silty.		50/2"	11	118		
10			(SM) Grades to dark brown, slightly silty, fine to coarse grained sand with gravel.		58	7	125		
15			(SM) Grades to light yellowish brown, silty fine to medium grained sand, less gravelly.		65	9	123		
20			(ML) SILT: Very stiff, moist, yellowish brown, sandy silt.		63	13	113		
			End of Boring @ 21' No Groundwater Encountered Hole Backfilled.						
25									
30									
35									

COMPLETION DEPTH: 21 DEPTH TO WATER> INITIAL:

DATE: October 20, 2021 FINAL:

LOG OF BORING NO.2

21-673-02

SW Corner of Trumble Road & Mapes Road, Perris, CA 92571

Type: Hollow Stem Auger, With 140 Lb Hammer Logged by: Daniel

Location: *See Site Plan*

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	SPT BLOWS/FT	BLOWS PER FT	% Moisture	UNIT DRY WT LB/CU FT	% -200 - △ % Moisture - ● 20 40 60 80	% -200
0			(ML) FILL: Silt, moderately compact, slightly moist, light brown, sandy silt.						
			(SM) SAND: Very dense, moist, brown, silty fine to medium grained sand with fine gravel.		50/5"	7	131		
5			(SM) Grades to slightly more silty.		50/4"	11	127		
10			(SM) Grades to yellowish brown, less silty, less gravelly.		61	13	117		
15			(SM) Grades to orange brown, more silty.		71	15	114		
20			(ML) SILT: Very stiff, moist, pale olive, slightly clayey, sandy silt.		40	20	113		
			End of Boring @ 21'						
25			No Groundwater Encountered						
			Hole Backfilled.						
30									
35									

COMPLETION DEPTH: 21 DEPTH TO WATER> INITIAL:

DATE: October 20, 2021 FINAL:

LOG OF BORING NO.3

21-673-02

SW Corner of Trumble Road & Mapes Road, Perris, CA 92571

Type: Hollow Stem Auger, With 140 Lb Hammer Logged by: Daniel

Location: *See Site Plan*

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	SPT BLOWS/FT	BLOWS PER FT	% Moisture	UNIT DRY WT LB/CU FT	% -200 - △ % Moisture - ● 20 40 60 80	% -200
0			(ML) FILL: Silt, moderately compact, slightly moist, medium brown, sandy silt.						
			(SM) SAND: Very dense, dry to slightly moist, light brown to brown, silty fine to medium grained sand.		50/3"	3	117		
5			(SM) Grades to moist, brown, gravelly.		70	7	134		
10			(SP/SM) Grades to brownish yellow, fine to coarse grained sand, some fines.		80	6	127		
15			(SM-ML) Grades to dense, pale yellow, silt-fine grained sand mixture.		32	18	115		
20			(SP/SM) Grades to very dense, slightly moist to moist, light yellowish brown, fine to medium grained sand, some fines, fine gravel.		52	7	119		
25			End of Boring @ 21' No Groundwater Encountered Hole Backfilled.						
30									
35									

COMPLETION DEPTH: 21 DEPTH TO WATER> INITIAL:

DATE: October 20, 2021 FINAL:

LOG OF BORING NO.4

21-673-02

SW Corner of Trumble Road & Mapes Road, Perris, CA 92571

Type: Hollow Stem Auger, With 140 Lb Hammer Logged by: Daniel

Location: *See Site Plan*

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	SPT BLOWS/FT	BLOWS PER FT	% Moisture	UNIT DRY WT LB/CU FT	% -200 - △ % Moisture - ● 20 40 60 80	% -200
0			(ML) FILL: Silt, moderately compact, dry to slightly moist, medium brown, sandy silt, few gravel.		50/3"	11	117		
			(SM) SAND: Very dense, moist, brown, silty fine to medium grained sand.						
5			(SM) Grades to lighter brown, more silty, slightly gravelly.		65	9	122		
10			(SM) Grades to dark brown, slightly silty, fine to coarse grained sand.		68	9	125		
15			(SM) Grades to orange brown, more silty, more gravelly.		50/3"	9	134		
			End of Boring @ 16' No Groundwater Encountered Hole Backfilled.						
20									
25									
30									
35									

COMPLETION DEPTH: 16 DEPTH TO WATER> INITIAL:

DATE: October 20, 2021 FINAL:

LOG OF BORING NO.5

21-673-02

SW Corner of Trumble Road & Mapes Road, Perris, CA 92571

Type: Hollow Stem Auger, With 140 Lb Hammer Logged by: Daniel

Location: *See Site Plan*

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	SPT BLOWS/FT	BLOWS PER FT	% Moisture	UNIT DRY WT LB/CU FT	% -200 - △ % Moisture - ● 20 40 60 80	% -200
0			(SM) FILL: Sand, moderately compact, slightly moist, brown, silty sand, few gravel.		50/3"	9	130		
5			(SM) SAND: Very dense, moist, brown, silty fine to coarse grained sand with gravel. (SM) Grades to slightly more silty.		64	10	133		
10			(SM) Grades to less silty, slightly more gravelly.		70	6	132		
15			(SM) Grades to orange brown to light yellowish brown.		50/3"	11	121		
20			End of Boring @ 16' No Groundwater Encountered Hole Backfilled.						
25									
30									
35									

COMPLETION DEPTH: 16 DEPTH TO WATER> INITIAL:

DATE: October 20, 2021 FINAL:

LOG OF BORING NO.6

21-673-02

SW Corner of Trumble Road & Mapes Road, Perris, CA 92571

Type: Hollow Stem Auger, With 140 Lb Hammer Logged by: Daniel

Location: *See Site Plan*

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	SPT BLOWS/FT	BLOWS PER FT	% Moisture	UNIT DRY WT LB/CU FT	% -200 - △ % Moisture - ● 20 40 60 80	% -200
0			(ML) FILL: Silt, moderately compact, dry to slightly moist, light brown, sandy silt.						
		■	(SM) SAND: Very dense, moist, brown, silty fine to coarse grained sand with gravel.		50/3"	9	129		
5		■	(SM) Grades to silty fine to medium grained sand, less gravelly.		49	10	121		
10		■	(SM) Grades to brownish yellow, less silty, slightly more gravelly.		71	9	128		
15			(SM-ML) Grades to orange brown, silt-fine grained sand mixture.		76	19	109		
			End of Boring @ 16'						
20			No Groundwater Encountered						
			Hole Backfilled.						
25									
30									
35									

COMPLETION DEPTH: 16 DEPTH TO WATER> INITIAL:

DATE: October 20, 2021 FINAL:

LOG OF BORING NO.7

21-673-02

SW Corner of Trumble Road & Mapes Road, Perris, CA 92571

Type: Hollow Stem Auger, With 140 Lb Hammer Logged by: Daniel

Location: *See Site Plan*

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	SPT BLOWS/FT	BLOWS PER FT	% Moisture	UNIT DRY WT LB/CU FT	% -200 - △ % Moisture - ● 20 40 60 80	% -200
0			(ML) FILL: Silt, moderately compact, slightly moist, medium brown, sandy silt.						
			(SM) SAND: Very dense, dry to slightly moist, light brown, silty fine to medium grained sand with gravel.		82	2	131		
5			(SM) Grades to slightly moist to moist, brownish yellow, less silty, less gravelly.		50/5"	7	123		
10			(SM) Similar as above.		74	10	120		
			End of Boring @ 11'						
			No Groundwater Encountered						
15			Hole Backfilled.						
20									
25									
30									
35									

COMPLETION DEPTH: 11 DEPTH TO WATER> INITIAL:

DATE: October 20, 2021 FINAL:

LOG OF BORING NO.8

21-673-02

SW Corner of Trumble Road & Mapes Road, Perris, CA 92571

Type: Hollow Stem Auger, With 140 Lb Hammer Logged by: Daniel

Location: *See Site Plan*

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	SPT BLOWS/FT	BLOWS PER FT	% Moisture	UNIT DRY WT LB/CU FT	% -200 - △ % Moisture - ● 20 40 60 80	% -200
0			(ML) FILL: Silt, moderately compact, slightly moist, medium brown, sandy silt with lots of rootlets.		68	6	127		
5			(SM) SAND: Very dense, slightly moist to moist, brown, silty fine to medium grained sand with gravel.		75	11	125		
			(SM) Grades to moist, dark brown, silty fine to coarse grained sand.						
10			(SM) Grades to yellowish brown, silty fine to medium grained sand.		50/3"	8	130		
			End of Boring @ 11'						
15			No Groundwater Encountered						
			Hole Backfilled.						
20									
25									
30									
35									

COMPLETION DEPTH: 11 DEPTH TO WATER> INITIAL:

DATE: October 20, 2021 FINAL:

LOG OF BORING NO.9

21-673-02

SW Corner of Trumble Road & Mapes Road, Perris, CA 92571

Type: Hollow Stem Auger, With 140 Lb Hammer Logged by: Daniel

Location: *See Site Plan*

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	SPT BLOWS/FT	BLOWS PER FT	% Moisture	UNIT DRY WT LB/CU FT	% -200 - △ % Moisture - ● 20 40 60 80	% -200
0			(ML) FILL: Silt, moderately compact, slightly moist, medium brown, sandy silt.						
		■	(SM) SAND: Very dense, moist, brown, silty fine to medium grained sand with gravel.		50/5"	12	120		
5		■	(SM) Grades to more silty, less gravelly.		50/6"	10	114		
10		■	(SM) Grades to dark brown, more gravelly.		55	13	130		
			End of Boring @ 11'						
			No Groundwater Encountered						
15			Hole Backfilled.						
20									
25									
30									
35									

COMPLETION DEPTH: 11 DEPTH TO WATER> INITIAL:

DATE: October 20, 2021 FINAL:

LOG OF BORING NO.10

21-673-02

SW Corner of Trumble Road & Mapes Road, Perris, CA 92571

Type: Hollow Stem Auger, With 140 Lb Hammer Logged by: Daniel

Location: *See Site Plan*

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	SPT BLOWS/FT	BLOWS PER FT	% Moisture	UNIT DRY WT LB/CU FT	% -200 - △ % Moisture - ● 20 40 60 80	% -200
0			(SM) FILL: Sand, moderately compact, slightly moist, brown, silty sand with gravel, debri.		32	2	129		
			(SM) Grades to compact, dark gray, fragments of asphalt.						
5			(SM) SAND: Very dense, moist, dark brown, silt fine to coarse grained sand with gravel.		50/3"	8	121		
10			(SM) Grades to more silty, more gravelly.		62	9	135		
			End of Boring @ 11' No Groundwater Encountered Hole Backfilled.						
15									
20									
25									
30									
35									

COMPLETION DEPTH: 11 DEPTH TO WATER> INITIAL:

DATE: October 20, 2021 FINAL:

MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAME
COARSE GRAINED SOILS (More than 50% of material is LARGER than No. 200 sieve size)	GRAVELS (More than 50% of coarse fraction is LARGER than the No. 4 sieve size)	CLEAN GRAVELS (Little or no fines)	GW	Well graded gravels, gravel - sand mixtures, little or no fines.
			GP	Poorly graded gravels or gravel-sand mixtures, little or no fines.
		GRAVELS WITH FINES (Appreciable amt. of fines)	GM	Silty gravels, gravel-sand-silt mixtures.
			GC	Clayey gravels, gravel-sand-clay mixtures.
	SANDS (More than 50% of coarse fraction is SMALLER than the No. 4 sieve size)	CLEAN SANDS (Little or no fines)	SW	Well graded sands, gravelly sands, little or no fines.
			SP	Poorly graded sands or gravelly sands, little or no fines.
		SANDS WITH FINES (Appreciable amt. of fines)	SM	Silty sands, sand-silt mixtures.
			SC	Clayey sands, sand-clay mixtures.
FINE GRAINED SOILS (More than 50% of material is SMALLER than No. 200 sieve size)	SILTS AND CLAYS (Liquid limit LESS than 50)		ML	Organic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
			CL	Organic clay of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
			OL	Organic silts and organic silty clays of low plasticity.
	SILTS AND CLAYS (Liquid limit GREATER than 50)		MH	Organic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
			CH	Organic clays of high plasticity, fat clays.
			OH	Organic clays of medium to high plasticity, organic silts.
HIGHLY ORGANIC SOILS			Pt	Peat and other highly organic soils.

BOUNDARY CLASSIFICATIONS: Soils possessing characteristics of two groups are designated by combinations of group symbols.

PARTICLE SIZE LIMITS

SILT OR CLAY	SAND			GRAVEL		COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE		

NO. 200 NO. 40 NO. 10 NO. 4 ¾ in. 3 in. (12 in.)

U. S. STANDARD SIEVE SIZE

UNIFIED SOIL CLASSIFICATION SYSTEM

JOB NAME : Proposed New Commercial Warehouse Building
South West Corner of Trumble Road & Mapes Road,
Perris, CA 92571

JOB No. 21-673-02

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FIGURE No. I-11

APPENDIX II
LABORATORY TESTING PROCEDURES

Moisture Density

The moisture-density information provides a summary of soil consistency for each stratum and can also provide a correlation between soils found on this site and other nearby sites. The tests were performed using ASTM D 2216-04 Laboratory Determination of water content Test Method. The dry unit weight and field moisture content were determined for each undisturbed sample, and the results are shown on log of exploratory borings.

Shear Tests

Shear tests were made with a direct shear machine at a constant rate of strain. The machine is designed to test the materials without completely removing the samples from the brass rings. The rate of shear was determined through determination of the rate of consolidation of the foundation bearing materials.

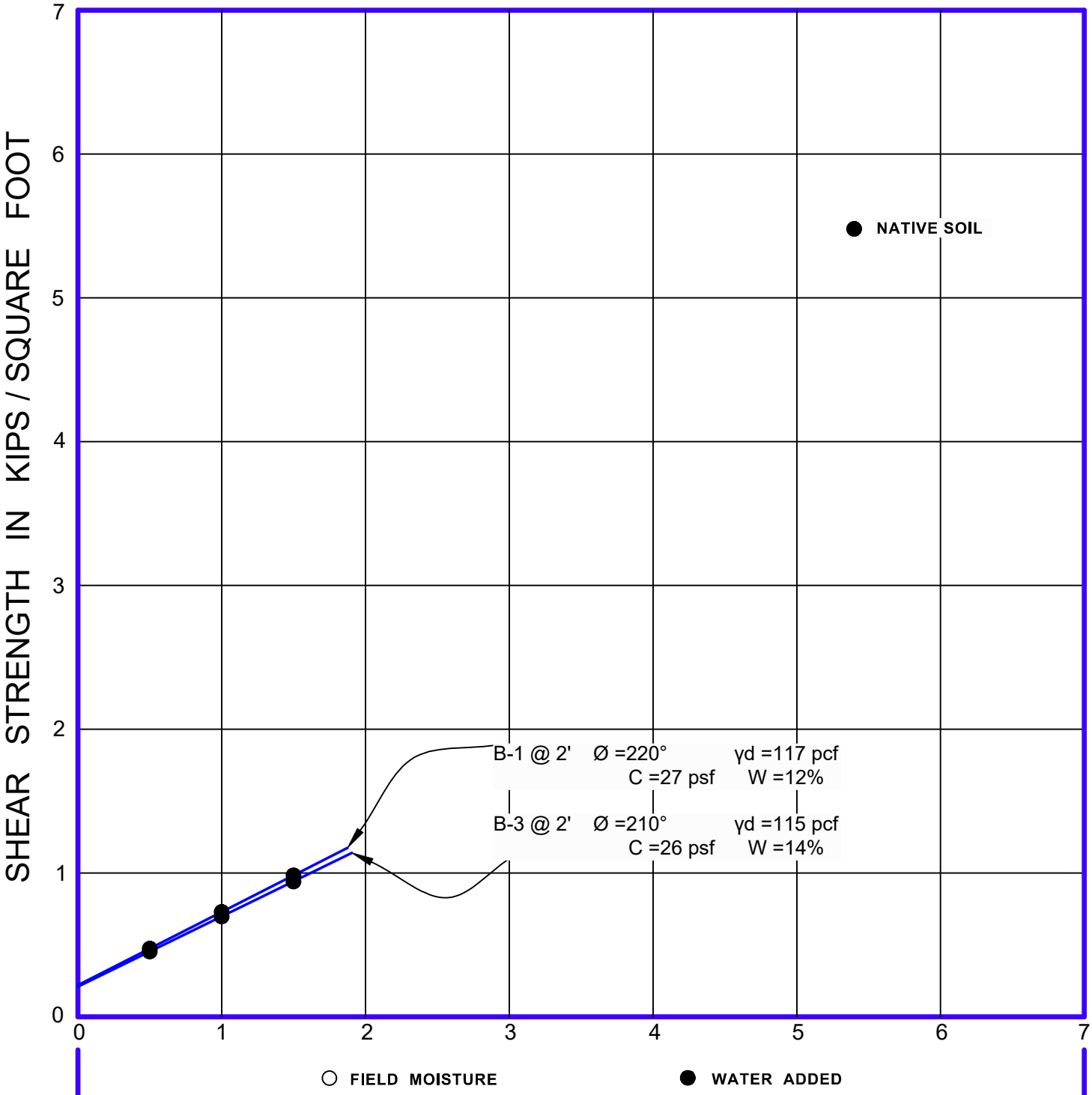
A range of normal stresses was applied vertically, and the shear strength was progressively determined at each load in order to determine the internal angle of friction and the cohesion. The tests were performed using ASTM D 3080-04 Laboratory Direct Shear Test Method. The Ultimate shear strength results of direct shear tests are presented on Figure No. II-1 within this Appendix.

Consolidation

The apparatus used for the consolidation tests is designed to receive the undisturbed brass ring of soil as it comes from the field. Loads were applied to the test specimen in several increments, and the resulting deformations were recorded at time intervals. Porous stones were placed in contact with the top and bottom of the specimen to permit the ready addition or release of water. ASTM D 2435-04 Laboratory Consolidation Test Method.

Undisturbed specimens were tested at the field and added water conditions. The test results are shown on Figure No. II-2 within this Appendix.

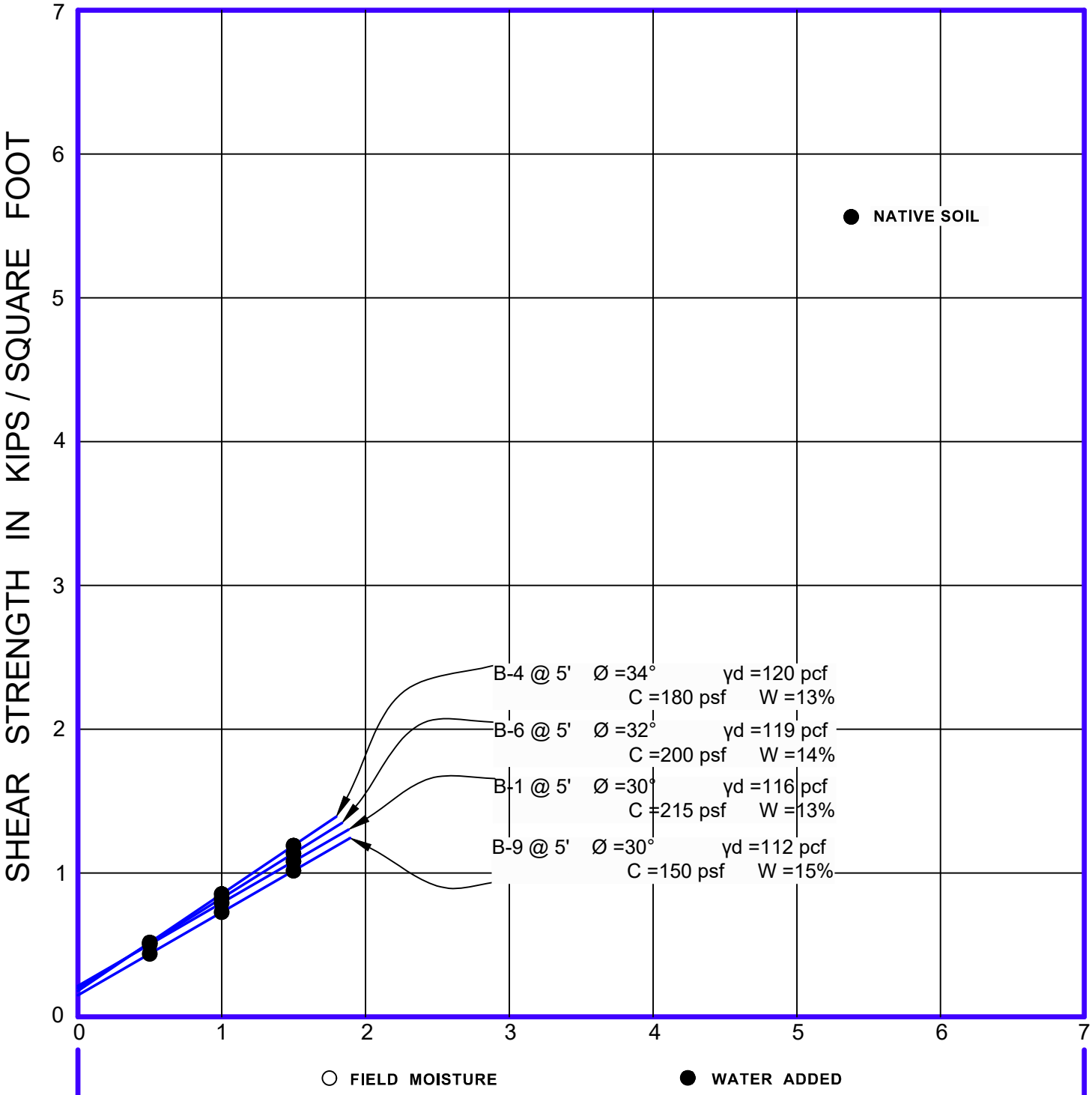
NORMAL STRESS IN KIPS / SQUARE FOOT



DIRECT SHEAR TESTS

JOB NAME : Proposed New Commercial Warehouse Building South West Corner of Trumble Road & Mapes Road, Perris, CA 92571	JOB No. 21-673-02
Applied Earth Sciences GEOTECHNICAL . GEOLOGY . ENVIRONMENTAL ENGINEERING CONSULTANTS www.aessoil.com (818) 552-6000	FIGURE No. II - 1.1

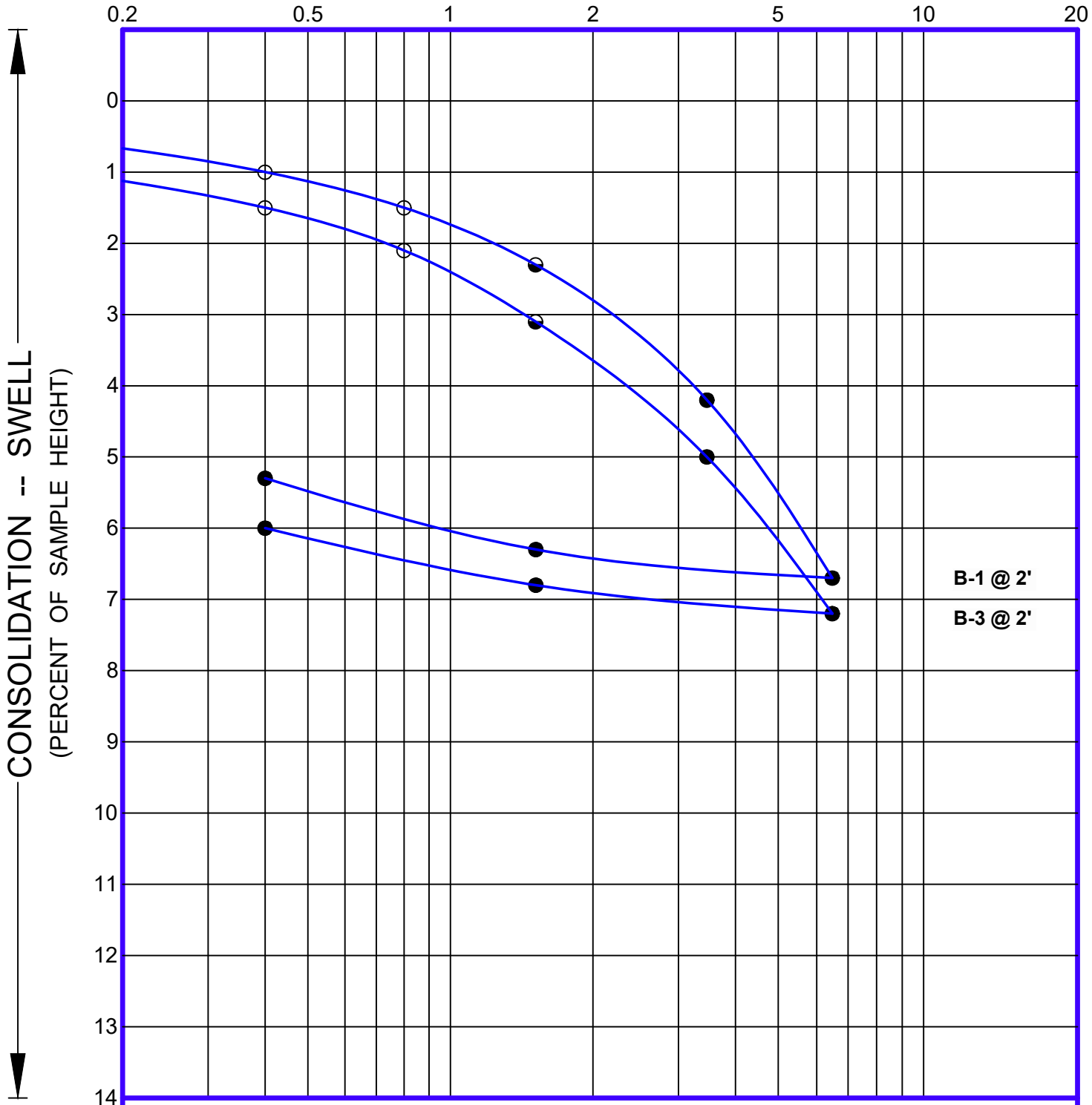
NORMAL STRESS IN KIPS / SQUARE FOOT



DIRECT SHEAR TESTS

JOB NAME : Proposed New Commercial Warehouse Building South West Corner of Trumble Road & Mapes Road, Perris, CA 92571	JOB No. 21-673-02
Applied Earth Sciences GEOTECHNICAL . GEOLOGY . ENVIRONMENTAL ENGINEERING CONSULTANTS www.aessoil.com (818) 552-6000	FIGURE No. II - 1.2

PRESSURE IN KIPS PER SQUARE FOOT



SWELL - CONSOLIDATION TESTS

JOB NAME : Proposed New Commercial Warehouse Building
South West Corner of Trumble Road & Mapes Road,
Perris, CA 92571

JOB No. 21-673-02

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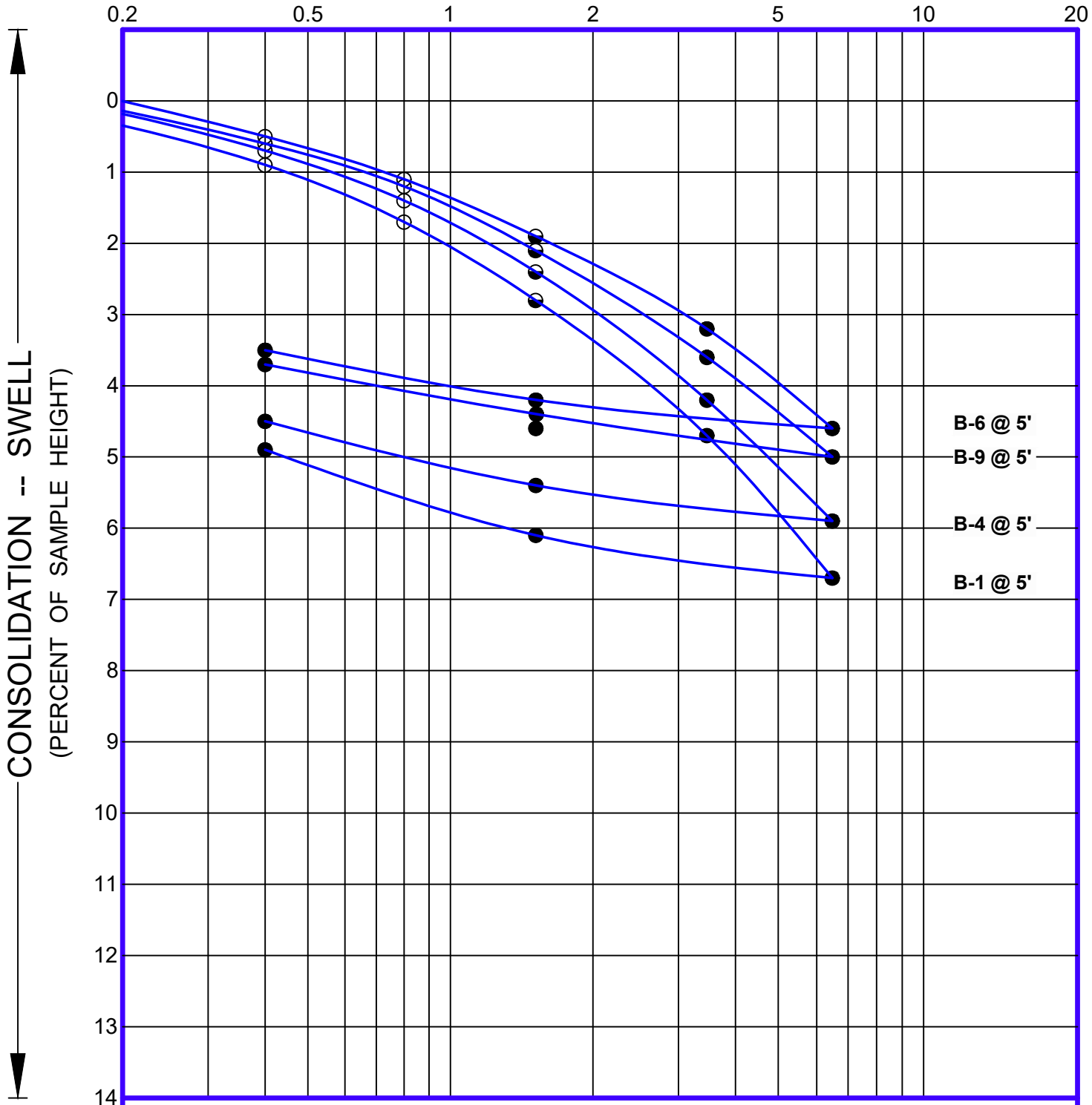
FIGURE No. II - 2.1

PRESSURE IN KIPS PER SQUARE FOOT



SWELL - CONSOLIDATION TESTS

JOB NAME : Proposed New Commercial Warehouse Building South West Corner of Trumble Road & Mapes Road, Perris, CA 92571	JOB No. 21-673-02
Applied Earth Sciences GEOTECHNICAL . GEOLOGY . ENVIRONMENTAL ENGINEERING CONSULTANTS www.aessoil.com (818) 552-6000	FIGURE No. II - 2.2

November 14, 2022 21-673-02

Blue Marquise Investments, LLC
6300 Wilshire Blvd., Suite 1420
Los Angeles, California 90048

Attention: Mr. Kamran Benji

Subject: Supplement No. 1
Response to General Comments
Proposed New Commercial/Warehouse Building Project
APN: 329-020-033, 034, 044, 046
Southwest Corner of Trumble Road and Mapes Road
Perris, California 92571

Ladies/Gentlemen:

INTRODUCTION

We are pleased to submit this Supplement No. 1 report as a response to the general comments made by the offices of Cadence Environmental Consultants. A copy of the review letter is included as attachment.

SITE DESCRIPTION

The site of the proposed development is located on Southwest corner of Trumble Road and Mapes Road in Perris, California. The project site is currently vacant.

PROJECT DESCRIPTION

The proposed development involves construction of a new commercial warehouse building at the subject site. The proposed development will consist of offices and warehouse totaling 427,320 square feet. The building is expected to be constructed with concrete tilt-up walls. The flooring system will be in a form of concrete grade slabs established at or near the present grade. No basement is planned.

In the following section, we are providing our responses to the general comments received:

RESPONSE TO COMMENTS

General Comments

It is our understanding that the Geotechnical Report will be reviewed by the City Engineer. The City Engineer may have comments that need to be addressed before the Draft IS/MND is distributed for public review.

Page 2 of the Geotechnical Report assumes that the proposed building is expected to be a one-story steel frame structure. However, the building elevations provided in the IS/MND show that the building will be constructed with concrete tilt-up walls. Please confirm if the change in building type would change any of the analysis or conclusions of the Geotechnical Report.

Response

The soil conditions are adequate for the use of conventional spread footing foundations for support of the interior and exterior tilt-up wall panels. Therefore, all our recommendations in the original will remain valid.

Thank you for the opportunity to be of continued service on this project. Should you have any questions regarding this Supplement No. 1, or wish to discuss the project further, please do not hesitate to call us.

Respectfully Submitted,

APPLIED EARTH SCIENCES

Fereidoun "Fred" Jahani
Project Engineer
RE62875

REGISTERED PROFESSIONAL ENGINEER
FEREIDOUN JAHANI
C62875
CIVIL
STATE OF CALIFORNIA

Reviewed by:

Arsham "Marshall" Hayrikian
Project Engineer
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LICENSED PROFESSIONAL ENGINEER
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CIVIL
STATE OF CALIFORNIA

FJ/AMH/sv

Enclosure: Cadence Environmental Consultants - General Comment Page

Distribution: (2)

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Geology and Soils

Geotechnical Investigation and Percolation Testing

General Comments

It is our understanding that the Geotechnical Report will be reviewed by the City Engineer. The City Engineer may have comments that need to be addressed before the Draft IS/MND is distributed for public review.

Page 2 of the Geotechnical Report assumes that the proposed building is expected to be a one-story steel frame structure. However, the building elevations provided in the IS/MND show that the building will be constructed with concrete tilt-up walls. Please confirm if the change in building type would change any of the analysis or conclusions of the Geotechnical Report.

Greenhouse Gas Emissions and Climate Change

General Comment

The information in this section will need to be updated based on the comments identified above for the Air Quality, Energy, and Greenhouse Gas Analysis.

Hydrology and Water Quality

Project Specific Water Quality Management Plan, Preliminary Hydrology Report, and Offsite Flood Analysis

General Comment

It is our understanding that the Project Specific Water Quality Management Plan, Preliminary Hydrology Report, and Offsite Flood Analysis will be reviewed by the City Engineer. The City Engineer may have comments that need to be addressed before the Draft IS/MND is distributed for public review.

Land Use and Planning

Comment on the Checklist Item b discussion: This discussion needs to evaluate the consistency of the project with each of the adopted policies from the City of Perris General Plan that address potential impacts from new industrial development projects (as currently specified under CEQA - traffic LOS policies are now excluded). This is required of all individual projects within the City.