August 11, 2015
Project No. 601868006

Mr. Carlos Sanchez-Soria, PE
T.Y. Lin International
60 East Rio Salado Parkway, Suite 501
Tempe, Arizona 85281

Subject: Geotechnical Evaluation
Hunt Highway and Bella Vista Road Intersection Improvements
Pinal County, Arizona

Dear Mr. Sanchez-Soria:

In accordance with our proposal dated July 8, 2015, and your authorization on the same day, Ninyo & Moore has performed a geotechnical evaluation for the Hunt Highway and Bella Vista Road Intersection Improvements project in Pinal County, Arizona. This revised report presents our methodology, findings, and considerations regarding the rehabilitation of the pavement at the site. The recommendations in this report are to be used in conjunction with the recommendations presented in our report titled, "Geotechnical Evaluation, Hunt Highway – Gary Road to Bella Vista Road, Pinal County, Arizona", dated January 30, 2014.

SCOPE OF SERVICES

The scope of our services for the project generally included:

- Conducting a visual reconnaissance of the site and notifying Arizona of the boring locations prior to drilling.
- Coring the pavement at the intersection at two locations.
- Drilling, logging, and sampling two exploratory soil borings to a depth of approximately 5 feet below ground surface (bgs).
- Performing laboratory tests on selected samples obtained from our borings to evaluate the in-situ moisture content and dry density, gradation, and Atterberg limits.
- Preparing a report presenting our findings, considerations, and recommendations regarding the design and construction of the project.

Our scope of services did not include environmental consulting services such as hazardous waste sampling or analytical testing at the site. A detailed scope of services and estimated fee for such services can be provided upon request.

SITE AND PROJECT DESCRIPTION

The site is located at the intersection of Hunt Highway and Bella Vista Road in Pinal County, Arizona (Figure 1). At the time of our evaluation the site consisted of an asphalt concrete (AC)-paved roadway intersection with commercial development located near each corner of the intersection.

We understand the improvements to this intersection consist of rehabilitating the pavement by either performing a mill-and-overlay operation or removal of the existing pavement section and replacing it with a new pavement section consisting of 6 inches of AC over 8 inches of aggregate base (AB) placed on a trixial TX5 geogrid, or equivalent.

FIELD EXPLORATION

On July 23, 2015, Ninyo & Moore conducted a subsurface exploration at the site in order to evaluate the subsurface conditions and to collect soil samples for laboratory testing. Our evaluation consisted of coring the existing AC pavement at two locations and drilling, logging, and sampling two exploratory soil borings denoted as B-1 and B-2 (Figure 2) within the cored locations. The borings extended to depths of approximately 5 feet bgs and were drilled using manual hand-operated equipment.

Soil samples were collected at selected intervals and were logged in general accordance with the American Society of Testing Materials (ASTM) D 2488. Relatively undisturbed soil samples were collected using a modified split spoon sampler lined with rings. Descriptions of the soils encountered in our borings are presented on the boring logs in Appendix A.

LABORATORY TESTING

Selected samples were visually classified and tested in our laboratory to evaluate their engineering properties. Brief descriptions of laboratory test procedures used are presented in

Appendix B of this report. Individual test results are presented either on the boring log sheets or on Figures B-1 through B-3 in Appendix B of this report.

To aid in classifying the subsurface materials and to evaluate the general engineering characteristics, in-situ moisture content and dry density, gradation, and Atterberg limits tests were performed on the samples collected in our borings.

SUBSURFACE CONDITIONS

Our understanding of the subsurface conditions at the project site is based on the results of our field exploration, laboratory tests, and our experience. More detailed stratigraphic information is presented on the boring logs in Appendix A, attached to this report. The boring logs contain our field and laboratory test results, as well as our interpretation of conditions believed to exist between actual samples retrieved. Therefore, these boring logs contain both factual and interpretive information. Lines delineating subsurface strata on the boring logs are intended to group soils having similar engineering properties and characteristics. They should be considered approximate as the actual transition between soil types (strata) may be gradual. A key to the soil symbols and terms used on the boring logs is provided in Appendix A.

Asphalt Concrete and Aggregate Base

Asphalt concrete was encountered at the surface of our borings and was approximately 3 inches thick. Aggregate base was encountered underlying the AC pavement and ranged from approximately 4½ to 9 inches thick in our borings.

Fill Soils

Fill soils were encountered underlying the pavement section described above and were approximately 2 feet thick in our borings. The fill soils generally consisted of dense to very dense clayey sands in our borings.

Alluvium

Natural alluvial deposits were observed underlying the fill soils described above that extended to the termination depths of our borings. The alluvium generally consisted of very dense deposits of clayey and silty sands.

Groundwater

Groundwater was not encountered in our borings. Based on well data provided by the Arizona Department of Water Resources (ADWR), the regional groundwater table has historically been measured at approximately 340 feet bgs in nearby wells. Groundwater levels can fluctuate due to seasonal variations in precipitation, irrigation, groundwater withdrawal or injection, and in areas where the alignment crosses ephemeral washes. In general, groundwater is not anticipated to be a constraint to the design and construction of the project.

RECOMMENDATIONS

The following sections present our geotechnical recommendations and were developed based on our understanding of the proposed construction, the observed subsurface conditions, and our experience. The recommendations for earthwork and subgrade preparation are presented in our report titled, “Geotechnical Evaluation, Hunt Highway – Gary Road to Bella Vista Road, Pinal County, Arizona”, dated January 30, 2014.

Existing Pavement Conditions

At the time of our evaluation the existing pavement exhibited distresses at some locations within the intersection. Severe alligator cracking, raveling, polished aggregate, rutting, and bleeding were observed at the site during our evaluation. In our opinion, the distress observed along the project alignment indicates structural failure and is related to a combination of pavement age, traffic, subgrade type/condition, and environmental impacts.

Mill and Overlay

Based on our field observations and pavement core thicknesses, performing a mill and overlay is feasible at the site; however, some the underlying soils and AB at some locations may be exposed during milling.

We recommend that the existing pavement within the project limits be milled to a depth of 1.5 inches and overlain with 1.5 inches of rubberized AC or conventional hot-mix asphalt (HMA). Rubberized AC, however, tends to be more flexible and can retard reflection cracking better than HMA. It also has a tendency to reduce traffic-related noise.

If cracks larger than 1/4-inch wide are observed at the surface of the AC after the milling operation is finished, we recommend the cracks be cleaned from loose particles and sealed. A paving fabric or geotextile be incorporated into the pavement section. The paving fabric or geotextile should generally be centered on the crack, and should extend 6 inches or more laterally beyond the crack. For this application, we recommend a 1/2-inch layer of gap-graded AC be placed on the milled surface and the paving fabric or geotextile be placed over this thin lift of AC. This thin lift of AC is recommended because the paving fabric or geotextile may have difficulty adhering to the milled surface due to the dust and surface roughness. After the pavement fabric or geotextile is applied, the remainder of the pavement overlay can be constructed. The expected design life of this option is estimated to be on the order of 5 years, provided that regular maintenance techniques are followed.

Mill and Overlay Considerations

Based our site reconnaissance, some areas of the pavement exhibited severe fatigue cracking which suggests poor subgrade conditions (Figure 3). There may be difficulty performing a mill and overlay operation in these areas due to the thickness of the pavement being 3 inches, and the potential for the underlying soils or AB becoming exposed during milling operations. For these areas, we recommend that the pavement section be removed and replaced with a new pavement section. Prior to the placement of the new asphalt, the exposed subgrade and/or base should be evaluated for excessively loose or wet material. If

encountered, the unacceptable material should either be removed and replaced or re-compacted in place.

New Pavement Section

If a new pavement section is constructed for the intersection, we recommend removing the existing pavement section and replacing it with 6 inches of AC over 8 inches of AB supported on a triaxial TX-5 geogrid conforming to MAG Section 306, or better. The subgrade for new pavement sections should be prepared as discussed in our report titled, "Geotechnical Evaluation, Hunt Highway – Gary Road to Bella Vista Road, Pinal County, Arizona", dated January 30, 2014.

Pre-Construction Conference

We recommend a pre-construction conference be held. Representatives of the owner, civil engineer, the geotechnical consultant, and the contractor should be in attendance to discuss the project plans and schedule. Our office should be notified if the project description included herein is incorrect, or if the project characteristics are significantly changed.

Construction Observation and Testing

During construction operations, we recommend a qualified geotechnical consultant perform observation and testing services for the project. These services should be performed to evaluate exposed subgrade conditions, including the extent and depth of overexcavation, to evaluate the suitability of proposed borrow materials for use as fill and to observe placement and test compaction of fill soils. If another geotechnical consultant is selected to perform observation and testing services for the project, we request that the selected consultant provide a letter to the owner, with a copy to Ninyo & Moore, indicating that they fully understand our recommendations and they are in full agreement with the recommendations contained in this report. Qualified subcontractors utilizing appropriate techniques and construction materials should perform construction of the proposed improvements.

LIMITATIONS

The field evaluation, laboratory testing, and geotechnical analyses presented in this geotechnical report have been conducted in general accordance with current practice and the standard of care exercised by geotechnical consultants performing similar tasks in the project area. No warranty, expressed or implied, is made regarding the conclusions, recommendations, and opinions presented in this report. There is no evaluation detailed enough to reveal every subsurface condition. Variations may exist and conditions not observed or described in this report may be encountered during construction. Uncertainties relative to subsurface conditions can be reduced through additional subsurface exploration. Additional subsurface evaluation will be performed upon request. Please also note that our evaluation was limited to assessment of the geotechnical aspects of the project, and did not include evaluation of structural issues, environmental concerns, or the presence of hazardous materials.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires additional information or has questions regarding the content, interpretations presented, or completeness of this document.

This report is intended for design purposes only. It does not provide sufficient data to prepare an accurate bid by contractors. It is suggested that the bidders and their geotechnical consultant perform an independent evaluation of the subsurface conditions in the project areas. The independent evaluations may include, but not be limited to, review of other geotechnical reports prepared for the adjacent areas, site reconnaissance, and additional exploration and laboratory testing.

Our conclusions, recommendations, and opinions are based on an analysis of the observed site conditions. If geotechnical conditions different from those described in this report are encountered, our office should be notified and additional recommendations, if warranted, will be provided upon request. It should be understood that the conditions of a site could change with time as a result of natural processes or the activities of mankind at the subject site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may

occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control.

This report is intended exclusively for use by the Client. Any use or reuse of the findings, conclusions, and/or recommendations of this report by parties other than the Client is undertaken at said parties' sole risk.

We appreciate the opportunity to be of service to you during this phase of the project.

Sincerely,
NINYO & MOORE

Registered Professional Engineer (Civil)
CERTIFICATE NO. 60171
JEFFREY S. RODGERS
Date Signed 8/11/15
ARIZONA U.S.A.
Expires 9/30/18

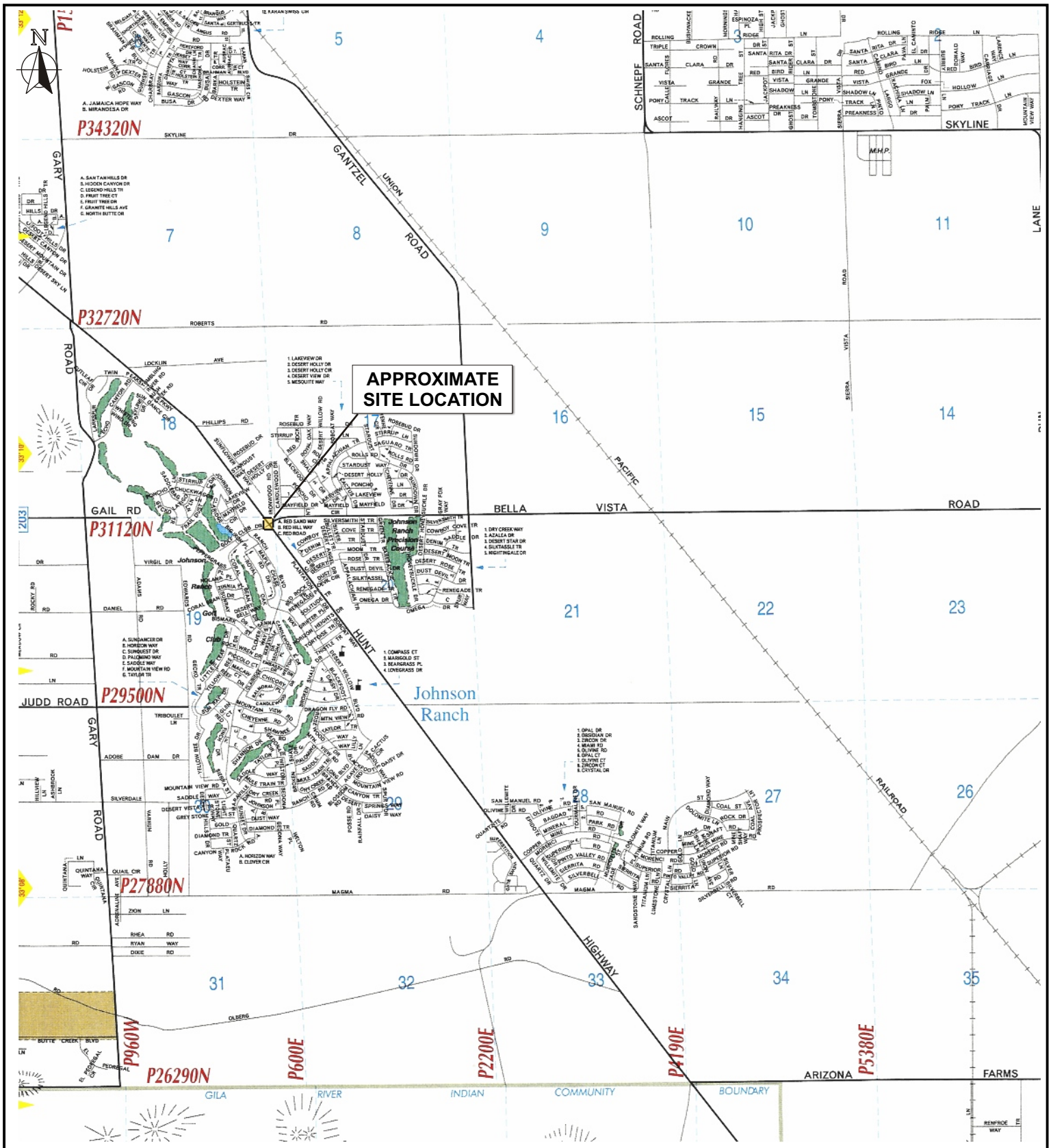
Jeffrey S. Rodgers, PE, PG
Senior Project Engineer

JSR/tlp

Distribution: (1) Addressee (Electronic Copy)

Figures
Figure 1 – Site Location
Figure 2 – Boring Locations
Figure 3 – Pavement Distress

Appendices
Appendix A – Boring logs
Appendix B – Laboratory Testing



Source: Phoenix Mapping Company, Phoenix Metro Edition, 2012.

Note: Dimensions, directions, and locations are approximate.

Ninyo & Moore	SITE LOCATION	FIGURE
PROJECT NO: 601868006 / DATE: 8/15	HUNT HIGHWAY AND BELLA VISTA ROAD INTERSECTION IMPROVEMENTS PINAL COUNTY, ARIZONA	1

file no: 1868vmap0715

Source: NAVTEQ, 03/14/15.

N

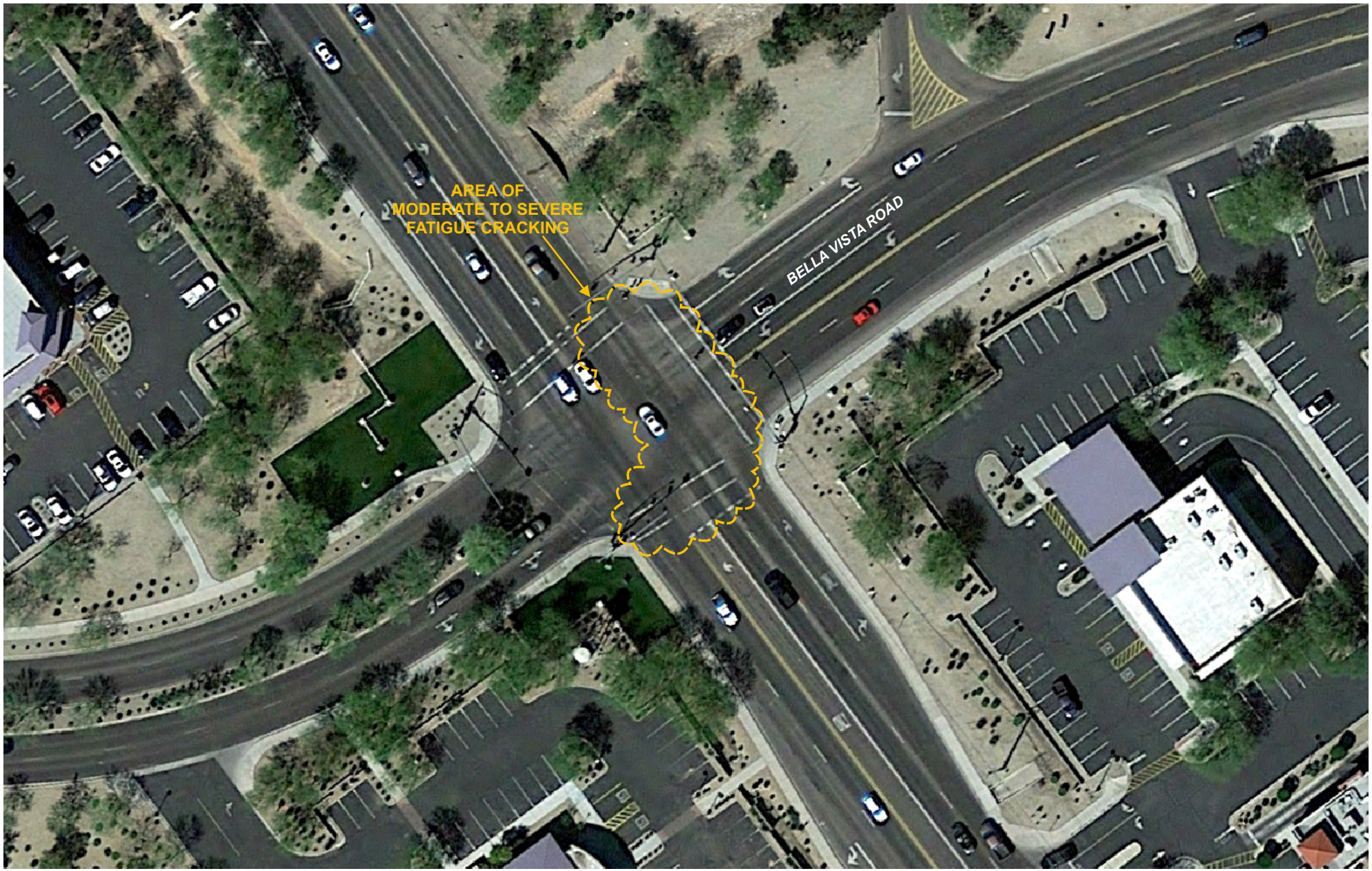
0 60

Approximate Scale:
1 inch = 60 feet

Note: Dimensions, directions, and locations are approximate.

Ninyo & Moore		BORING LOCATIONS	FIGURE
PROJECT NO: 601868006	DATE: 8/15	HUNT HIGHWAY AND BELLA VISTA ROAD INTERSECTION IMPROVEMENTS PINAL COUNTY, ARIZONA	2

file no: 1868blm0715



Source: NAVTEQ, 03/14/15.

N

0 60

Approximate Scale:
1 inch = 60 feet

Note: Dimensions, directions, and locations are approximate.

file no: 1868pav0815

Ninyo & Moore		PAVEMENT DISTRESS	FIGURE
PROJECT NO: 601868006	DATE: 8/15	HUNT HIGHWAY AND BELLA VISTA ROAD INTERSECTION IMPROVEMENTS PINAL COUNTY, ARIZONA	3

APPENDIX A

BORING LOGS

Field Procedure for the Collection of Disturbed Samples

Disturbed soil samples were obtained in the field using the following methods.

Bulk Samples

Bulk samples of representative earth materials were obtained from the exploratory borings. The samples were bagged and transported to the laboratory for testing.

Field Procedure for the Collection of Relatively Undisturbed Samples

Relatively undisturbed soil samples were obtained in the field using the following method.

The Split-Barrel Knocker Bar Sampler

The sampler, with an external diameter of 3.0 inches, was lined with 1-inch long, thin brass rings with inside diameters of approximately 2.4 inches. The sampler was manually driven into the ground with a hammer weighing approximately 35 pounds. The samples were removed from the sample barrel in the brass rings, sealed, and transported to the laboratory for testing.

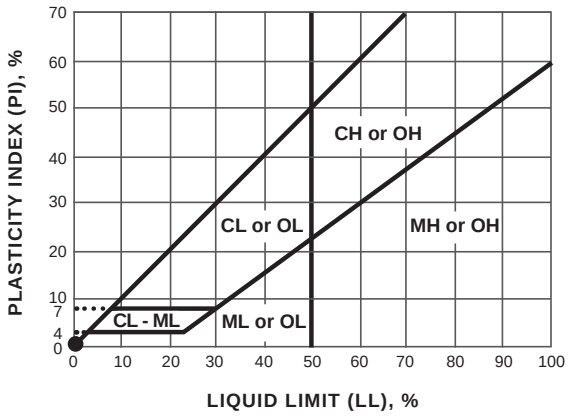
SOIL CLASSIFICATION CHART PER ASTM D 2488

PRIMARY DIVISIONS			SECONDARY DIVISIONS	
			GROUP SYMBOL	GROUP NAME
COARSE-GRAINED SOILS more than 50% retained on No. 200 sieve	**GRAVEL** more than 50% of coarse fraction retained on No. 4 sieve	CLEAN GRAVEL less than 5% fines	GW	well-graded GRAVEL
			GP	poorly graded GRAVEL
		GRAVEL with DUAL CLASSIFICATIONS 5% to 12% fines	GW-GM	well-graded GRAVEL with silt
			GP-GM	poorly graded GRAVEL with silt
			GW-GC	well-graded GRAVEL with clay
			GP-GC	poorly graded GRAVEL with clay
		GRAVEL with FINES more than 12% fines	GM	silty GRAVEL
			GC	clayey GRAVEL
			GC-GM	silty, clayey GRAVEL
	SAND 50% or more of coarse fraction passes No. 4 sieve	CLEAN SAND less than 5% fines	SW	well-graded SAND
			SP	poorly graded SAND
		SAND with DUAL CLASSIFICATIONS 5% to 12% fines	SW-SM	well-graded SAND with silt
			SP-SM	poorly graded SAND with silt
			SW-SC	well-graded SAND with clay
			SP-SC	poorly graded SAND with clay
		SAND with FINES more than 12% fines	SM	silty SAND
			SC	clayey SAND
			SC-SM	silty, clayey SAND
FINE-GRAINED SOILS 50% or more passes No. 200 sieve	**SILT and CLAY** liquid limit less than 50%	INORGANIC	CL	lean CLAY
			ML	SILT
			CL-ML	silty CLAY
		ORGANIC	OL (PI > 4)	organic CLAY
			OL (PI < 4)	organic SILT
	SILT and CLAY liquid limit 50% or more	INORGANIC	CH	fat CLAY
			MH	elastic SILT
		ORGANIC	OH (plots on or above "A"-line)	organic CLAY
			OH (plots below "A"-line)	organic SILT
	Highly Organic Soils		PT	Peat

GRAIN SIZE

DESCRIPTION		SIEVE SIZE	GRAIN SIZE	APPROXIMATE SIZE
Boulders		> 12"	> 12"	Larger than basketball-sized
Cobbles		3 - 12"	3 - 12"	Fist-sized to basketball-sized
Gravel	Coarse	3/4 - 3"	3/4 - 3"	Thumb-sized to fist-sized
	Fine	#4 - 3/4"	0.19 - 0.75"	Pea-sized to thumb-sized
Sand	Coarse	#10 - #4	0.079 - 0.19"	Rock-salt-sized to pea-sized
	Medium	#40 - #10	0.017 - 0.079"	Sugar-sized to rock-salt-sized
	Fine	#200 - #40	0.0029 - 0.017"	Flour-sized to sugar-sized
Fines		Passing #200	< 0.0029"	Flour-sized and smaller

PLASTICITY CHART



APPARENT DENSITY - COARSE-GRAINED SOIL

APPARENT DENSITY	SPOOLING CABLE OR CATHEAD		AUTOMATIC TRIP HAMMER	
	SPT (blows/foot)	MODIFIED SPLIT BARREL (blows/foot)	SPT (blows/foot)	MODIFIED SPLIT BARREL (blows/foot)
Very Loose	≤ 4	≤ 8	≤ 3	≤ 5
Loose	5 - 10	9 - 21	4 - 7	6 - 14
Medium Dense	11 - 30	22 - 63	8 - 20	15 - 42
Dense	31 - 50	64 - 105	21 - 33	43 - 70
Very Dense	> 50	> 105	> 33	> 70

CONSISTENCY - FINE-GRAINED SOIL

CONSIS-TENCY	SPOOLING CABLE OR CATHEAD		AUTOMATIC TRIP HAMMER	
	SPT (blows/foot)	MODIFIED SPLIT BARREL (blows/foot)	SPT (blows/foot)	MODIFIED SPLIT BARREL (blows/foot)
Very Soft	< 2	< 3	< 1	< 2
Soft	2 - 4	3 - 5	1 - 3	2 - 3
Firm	5 - 8	6 - 10	4 - 5	4 - 6
Stiff	9 - 15	11 - 20	6 - 10	7 - 13
Very Stiff	16 - 30	21 - 39	11 - 20	14 - 26
Hard	> 30	> 39	> 20	> 26

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USCS METHOD OF SOIL CLASSIFICATION

Explanation of USCS Method of Soil Classification

PROJECT NO.	DATE	FIGURE

BORING LOG EXPLANATION SHEET

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	
0	■							Bulk sample.
		■						Modified split-barrel drive sampler.
		☒						No recovery with modified split-barrel drive sampler.
		▬						Sample retained by others.
		◥						Standard Penetration Test (SPT).
5		⁄						No recovery with a SPT.
		▯	XX/XX					Shelby tube sample. Distance pushed in inches/length of sample recovered in inches.
		⁄						No recovery with Shelby tube sampler.
		▤						Continuous Push Sample.
				♀				Seepage.
10				▽				Groundwater encountered during drilling.
				▼				Groundwater measured after drilling.
						▦	SM	MAJOR MATERIAL TYPE (SOIL): Solid line denotes unit change.
						▨	CL	Dashed line denotes material change.
15								Attitudes: Strike/Dip b: Bedding c: Contact j: Joint f: Fracture F: Fault cs: Clay Seam s: Shear bss: Basal Slide Surface sf: Shear Fracture sz: Shear Zone sbs: Shear Bedding Surface
20								The total depth line is a solid line that is drawn at the bottom of the boring.

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BORING LOG

Explanation of Boring Log Symbols

PROJECT NO.	DATE	FIGURE

DATE DRILLED 07/23/15 BORING NO. B-1

GROUND ELEVATION 1,538' ± (MSL) SHEET 1 OF 1

METHOD OF DRILLING Manual

DRIVE WEIGHT -- DROP --

SAMPLED BY DM LOGGED BY DM REVIEWED BY JSR

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0								ASPHALT CONCRETE: Approximately 3 inches thick.
								AGGREGATE BASE: Approximately 9 inches thick.
				6.6	111.3		SC	FILL: Brown, dry, dense, clayey SAND; trace gravel.
							SC	ALLUVIUM: Brown, dry, very dense, clayey SAND; trace gravel.
5								Total Depth = 5 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 07/23/15 shortly after completion of drilling.
10								
15								
20								

Notes:
Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.

The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.

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BORING LOG

HUNT HIGHWAY AND BELLA VISTA ROAD INTERSECTION IMPROVEMENTS
PINAL COUNTY, ARIZONA

PROJECT NO.	DATE	FIGURE
601868006	8/15	A-1

DATE DRILLED 07/23/15 BORING NO. B-2

GROUND ELEVATION 1,537' ± (MSL) SHEET 1 OF 1

METHOD OF DRILLING Manual

DRIVE WEIGHT -- DROP --

SAMPLED BY DM LOGGED BY DM REVIEWED BY JSR

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0								ASPHALT CONCRETE: Approximately 3 inches thick.
								AGGREGATE BASE: Approximately 4 1/2 inches thick.
	■						SC	FILL: Brown, dry, very dense, clayey SAND; few gravel.
		■		7.8	114.9			
	■							
	■							
		■					SM	ALLUVIUM: Brown, dry, very dense, silty SAND; trace gravel.
	■							
5								Total Depth = 5 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 07/23/15 shortly after completion of drilling.
10								
15								
20								

Notes:
Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.

The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.

Ninyo & Moore

BORING LOG

HUNT HIGHWAY AND BELLA VISTA ROAD INTERSECTION IMPROVEMENTS
PINAL COUNTY, ARIZONA

PROJECT NO.	DATE	FIGURE
601868006	8/15	A-2

APPENDIX B

LABORATORY TESTING

In-Place Moisture and Density Tests

The moisture content and dry density of relatively undisturbed samples obtained from the exploratory borings were evaluated in general accordance with ASTM D 2937. The test results are presented on the logs of the exploratory borings in Appendix A.

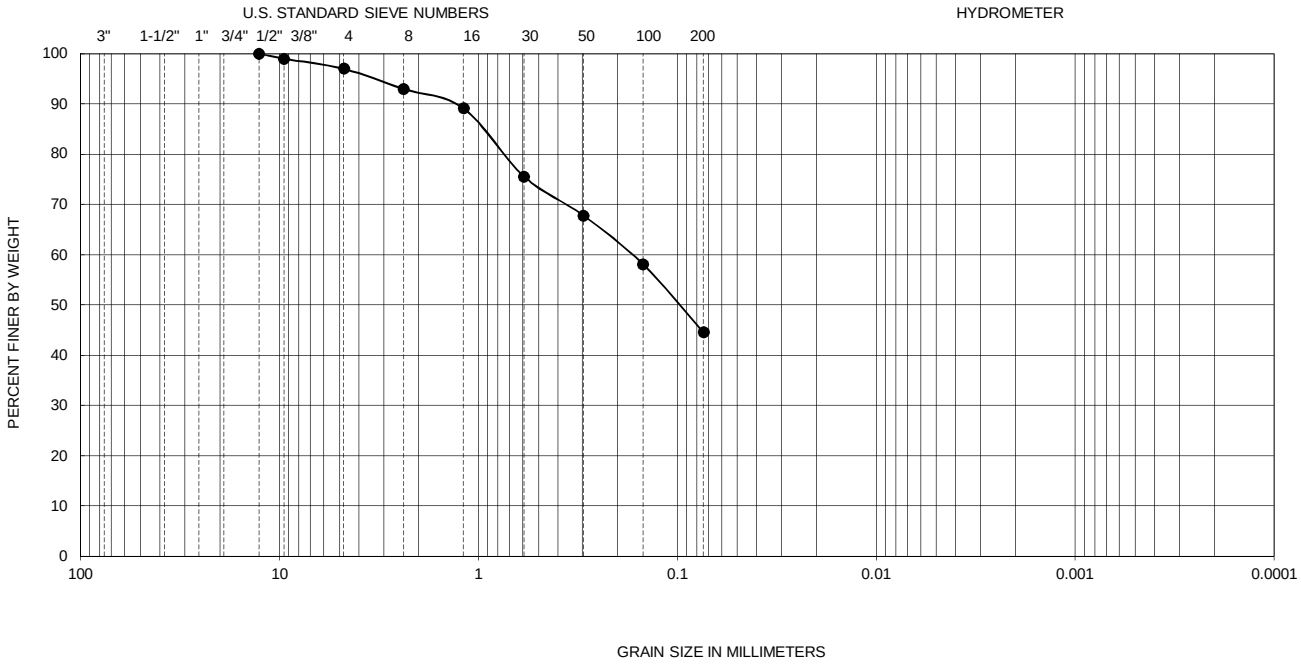
Gradation Analysis

Gradation analysis tests were performed on selected representative soil samples in general accordance with ASTM D 422. The grain-size distribution curves are shown on Figures B-1 and B-2. These test results were utilized in evaluating the soil classifications in accordance with the Unified Soil Classification System (USCS).

Atterberg Limits

Tests were performed on selected representative fine-grained soil samples to evaluate the liquid limit, plastic limit, and plasticity index in general accordance with ASTM D 4318. These test results were utilized to evaluate the soil classification in accordance with the Unified Soil Classification System (USCS). The test results and classifications are shown on Figure B-3.

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	Silt	Clay

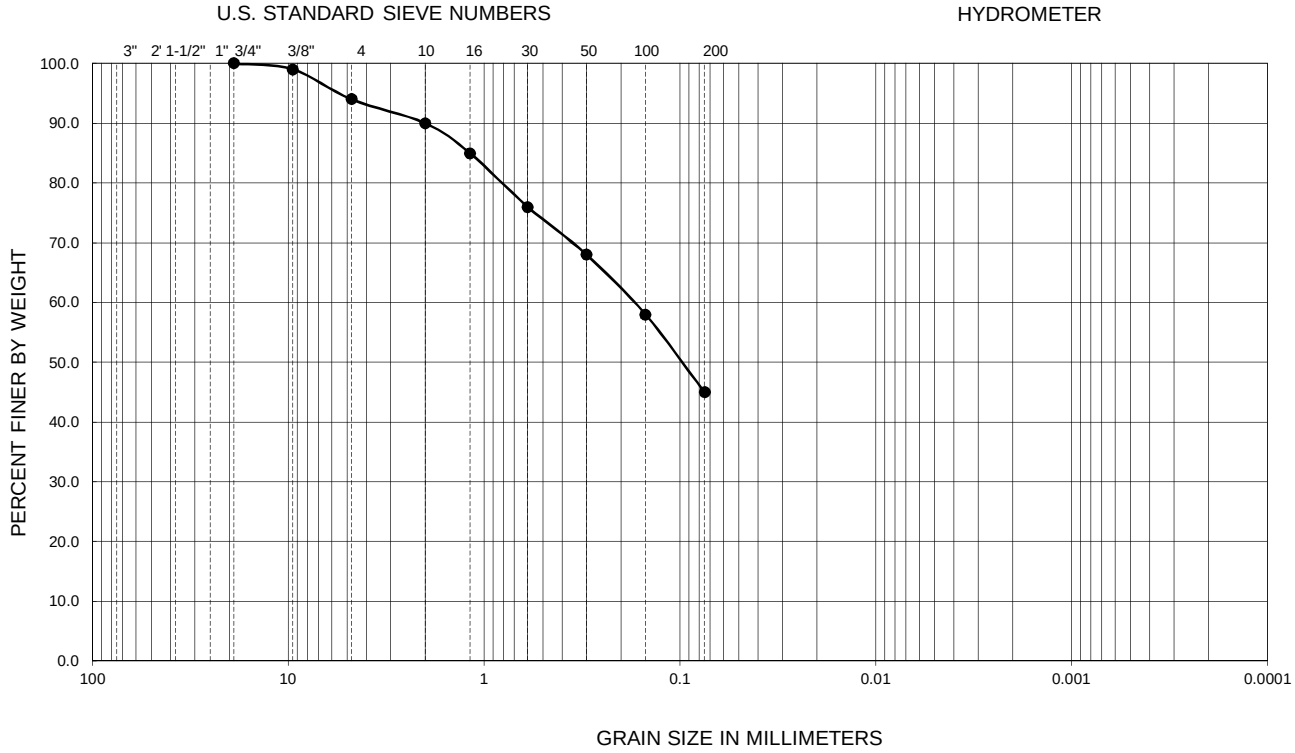


Symbol	Hole No.	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D_{10}	D_{30}	D_{60}	C_u	C_c	Passing No. 200 (%)	U.S.C.S
●	B-1	2.0-5.0	24	16	8	--	--	--	--	--	45	SC

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 422

Ninyo & Moore	GRADATION TEST RESULTS	FIGURE
PROJECT NO. / DATE	HUNT HIGHWAY AND BELLA ROAD INTERSECTION IMPROVEMENTS PINAL COUNTY, ARIZONA	B-1
601868006 / 8/15		

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	SILT	CLAY

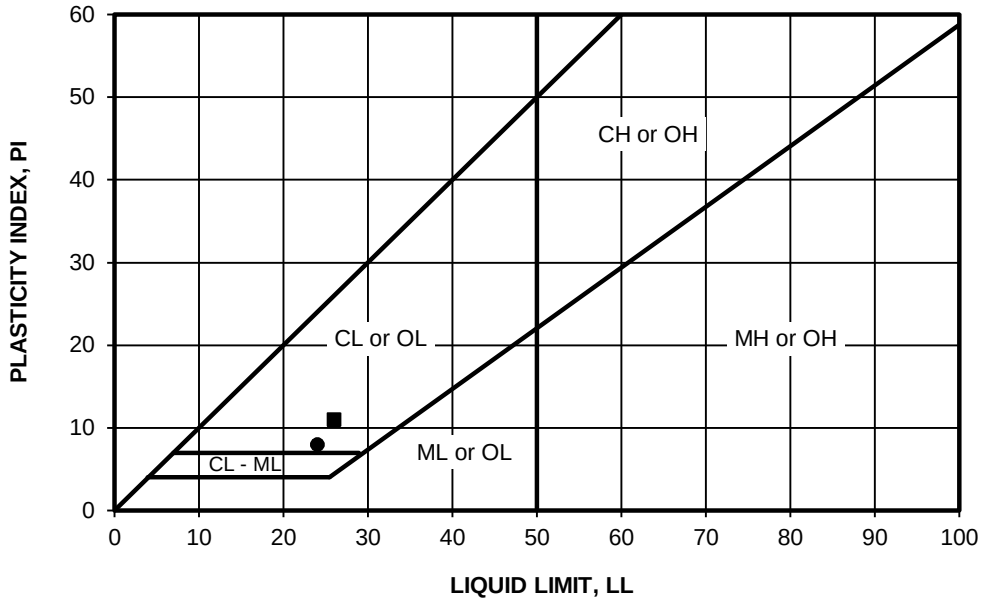


Symbol	Sample Location	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D_{10}	D_{30}	D_{60}	C_u	C_c	Passing No. 200 (%)	USCS
●	B-2	1.0-1.4	26	15	11	--	--	--	--	--	45	SC

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 422

Ninyo & Moore	GRADATION TEST RESULTS	FIGURE
PROJECT NO. / DATE	HUNT HIGHWAY AND BELLA ROAD INTERSECTION IMPROVEMENTS PINAL COUNTY, ARIZONA	B-2
601868006 / 8/15		

SYMBOL	LOCATION	DEPTH (FT)	LIQUID LIMIT, LL	PLASTIC LIMIT, PL	PLASTICITY INDEX, PI	USCS CLASSIFICATION (Fraction Finer Than No. 40 Sieve)	USCS (Entire Sample)
●	B-1	2.0-5.0	24	16	8	CL	SC
■	B-2	1.0-1.4	26	15	11	CL	SC



PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 4318

Ninyo & Moore	ATTERBERG LIMITS TEST RESULTS	FIGURE
PROJECT NO. / DATE	HUNT HIGHWAY AND BELLA ROAD INTERSECTION IMPROVEMENTS PINAL COUNTY, ARIZONA	B-3
601868006 / 8/15		