File #:

Town Use

TOWN OF JEROME, ARIZONA

600 Clark Street, P.O. Box 335, Jerome, AZ 86331
(928) 634-7943

General Land Use Application – Check all that apply

- [x] Site Plan Review $100
- [ ] Demolition $50/$200
- [ ] Time Extension $0
- [x] Design Review $50/$200
- [ ] Signage/Awning $50
- [ ] Variance $200
- [ ] Conditional Use Permit (CUP) $100
- [ ] Paint/Roofing $0
- [ ] Other: _____

Note: Refer to the corresponding Project Application Checklist/s for additional submittal requirements.

Applicant: Cynthia Barber & Eric Lerette	Owner: Barber / Lerette
Applicant address: 776 East Ave	Owner Mailing Address: PO Box 333 Jerome, Az. 86331
Applicant role/title: Owner Builder	
Applicant phone: 928-848-7541	Owner phone: 928-274-3508
Applicant email: →	Owner email: cidrbarber@gmail.
Project address: 776 East Ave	Parcel number: 401-07-099B
Describe project: Single family, 1664 sq.ft, two story home (residence)	

- I understand that review by the Jerome Design Review Board, Planning and Zoning Commission, and Town Council is discretionary.
- I understand that the application fee is due at submission and review will not be scheduled until fee is paid to the Town.
- I understand review criteria are used in evaluation by the Jerome Design Review Board and/or Planning and Zoning Commission. These criteria are included in the Jerome Zoning Ordinance.
- I understand that this application will not be scheduled for consideration until all required materials have been submitted and the application is determined to be complete.

Applicant Signature: _____ Date: _____

Owner Signature: Cynthia R. Barber Date: 10/27/2021

For Town Use Only

Received from: Cynthia Barber Date: 12/13/2021

Received the sum of $ 300.00 as: ☐ Check No. _____ ☐ Cash ☑ Credit Card

By: Kristen M. For: DRB & P:Z

Tentative Meeting Date/s - DRB: 01/03/2022 P&Z: 01/16/2022

E-mail completed forms and application information to: John Knight, Zoning Administrator j.knight@jerome.az.gov

Updated: 7/29/2020

Dec 13th, 2021

Eric Lerette
& Cynthia Barbe
PO Box 333
Jerome AZ
928-274-3508

Proposal to build a two story single family residence at 776 East Ave. The home would be a 1664 square foot building on a 5,032 square foot lot. The building would be 40% lot coverage including porches front and back.

Historicly there was a two story building on it up until 1960. The property has the original walkway and steps two partial concrete walls and a rock wall left of the original structure. It is of great importance to me to build a building that will fit in and look right in our historic neighborhood and follow the parameters of height, shape, building materials and setback criteria have been thought out carefully and brought forth in the building design.

This building would also fill a need for long term local housing which is being lost to vacation rentals.

Sincerely,
Cynthia Barbe

Proposed Building materials for Design Review

- Standing seam metal roof
- Horazontal lap siding
- Metal railing on porches
- Vinal double pane windows
- Exterior lighting to point down to protect - dark skies.
- Gravel parking area
- Wood look Trex decking for porches

Drainage

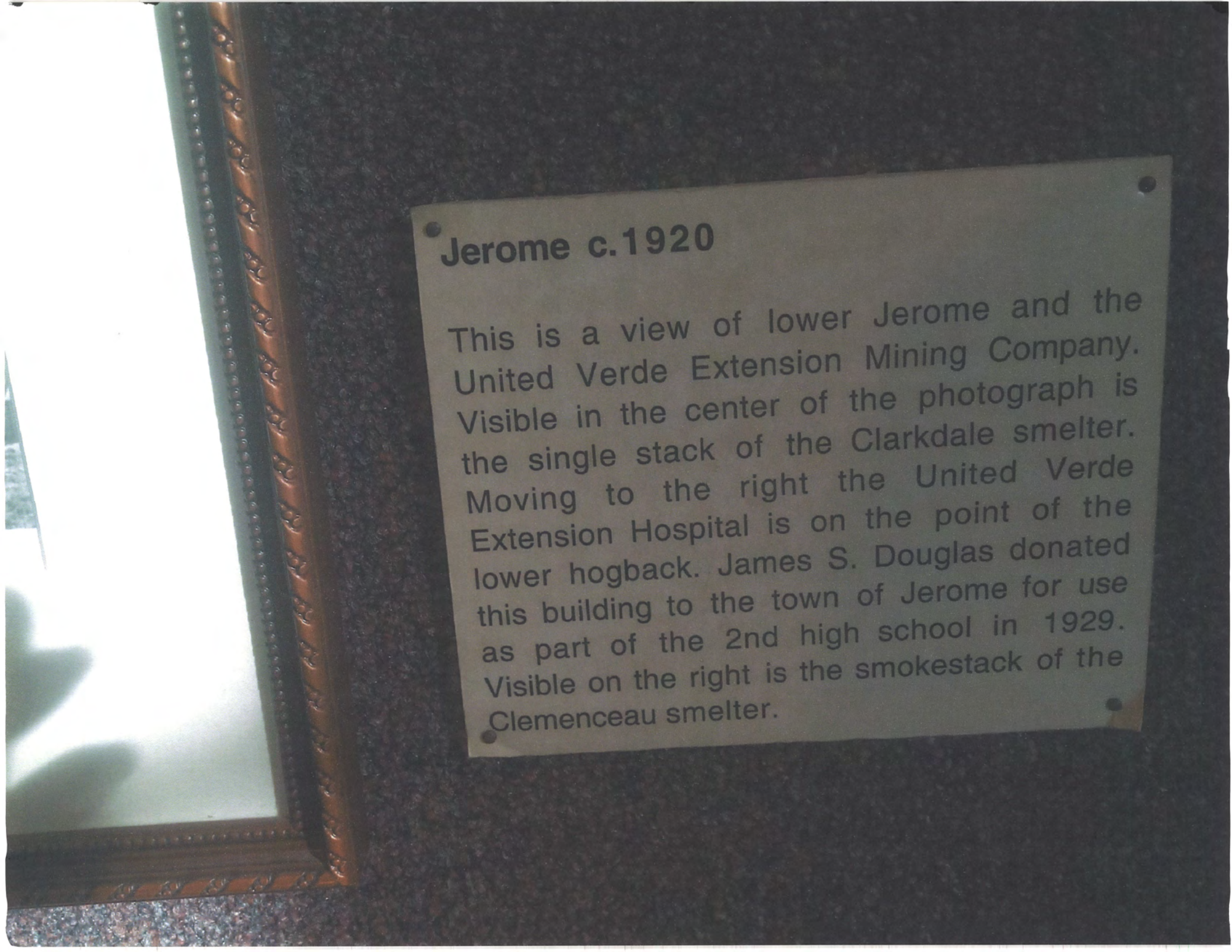
Direct gutters towards storm drain on East Aye There is also a storm drain below the property on Douglas Road.

Colors see color samples included

Picture at Douglas Mansion

HOGBACK. The WPA is also responsible for the large rock cobblestor
reets. This photograph is of an excellently built WPA solid rock wall. Je
nson reported finding a stash of old marbles hidden in an old rock
—which goes to show that at least one person lost his marbles in Jerom

Images of America Jerome
Midge Stuber & Jerome Historical Society


Jerome c.1920
This is a view of lower Jerome and the United Verde Extension Mining Company. Visible in the center of the photograph is the single stack of the Clarkdale smelter. Moving to the right the United Verde Extension Hospital is on the point of the lower hogback. James S. Douglas donated this building to the town of Jerome for use as part of the 2nd high school in 1929. Visible on the right is the smokestack of the Clemenceau smelter.

GENERAL NOTES AND SPECIFICATIONS

THE GENERAL CONTRACTOR SHALL FULLY COMPLY WITH THE 2012 IBC AND ALL ADDITIONAL STATE AND LOCAL CODE REQUIREMENTS.

THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY WORK KNOWINGLY PERFORMED CONTRARY TO SUCH LAWS, ORDINANCES, OR REGULATIONS. THE CONTRACTOR SHALL ALSO PERFORM COORDINATION WITH ALL UTILITIES AND STATE SERVICE AUTHORITIES.

WRITTEN DIMENSIONS ON THESE DRAWINGS SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE GENERAL CONTRACTOR SHALL VERIFY AND IS RESPONSIBLE FOR ALL DIMENSIONS (INCLUDING ROUGH OPENINGS) AND CONDITIONS ON THE JOB AND MUST NOTIFY THIS OFFICE OF ANY VARIATIONS FROM THESE DRAWINGS.

THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND PROPER FUNCTION OF PLUMBING, HVAC AND ELECTRICAL SYSTEMS. THE GENERAL CONTRACTOR SHALL NOTIFY THIS OFFICE WITH ANY PLAN CHANGES REQUIRED FOR DESIGN AND FUNCTION OF PLUMBING, HVAC AND ELECTRICAL SYSTEMS.

THIS OFFICE SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, ACTS OR OMISSIONS OF THE CONTRACTOR OR SUBCONTRACTOR, OR FAILURE OF ANY OF THEM TO CARRY OUT WORK IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS. AND DEFECT DISCOVERED IN THE CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THIS OFFICE BY WRITTEN NOTICE BEFORE PROCEEDING WITH WORK. REASONABLE TIME NOT ALLOWED THIS OFFICE TO CORRECT THE DEFECT SHALL PLACE THE BURDEN OF COST AND LIABILITY FROM SUCH DEFECT UPON THE CONTRACTOR.

DESIGN CRITERIA: 2006 IRC AND IBC
ROOF: 30 PSF SNOW LOAD
*8 PSF TOP CHORD DL.
*7 PSF BOTTOM CHORD DL.
*5 PSF NET WIND UPLIFT.
FLOOR: 40 PSF LL.
*15 PSF D.L.

SOIL: *1500 PSF ALLOWABLE (ASSUMED). TO BE AT TIME OF EXCAVATION
FROST DEPTH: *2'-0"
SEISMIC ZONE: C,
WIND: 90 MPH (90 MPH 3 SEC GUST), EXPOSURE C.

THIS STRUCTURE SHALL BE ADEQUATELY BRACED FOR WIND LOADS UNTIL THE ROOF, FLOOR AND WALLS HAVE BEEN PERMANENTLY FRAMED TOGETHER AND SHEATHED.

INSTALL POLYISOCYANURATE FOAM TYPE INSULATION AT FLOOR AND PLATE LINES, OPENINGS IN PLATES, CORNER STUD CAVITIES AND AROUND DOOR AND WINDOW ROUGH OPENING CAVITIES.

INSTALL WATERPROOF GYPSUM BOARD AT ALL WATER SPLASH AREAS TO MINIMUM 70" ABOVE SHOWER DRAINS.

INSULATE WASTE LINES FOR SOUND CONTROL.

EXHAUST ALL VENTS AND FANS DIRECTLY TO OUTSIDE VIA METAL DUCTS, PROVIDE 90 CFM (MIN) FANS TO PROVIDE 5 AIR CHANGES PER HOUR IN BATHS CONTAINING TUB AND / OR SHOWER AND IN LAUNDRY ROOMS.

ALL RECESSED LIGHTS IN INSULATED CEILINGS TO HAVE THE I.C. LABEL.

PROVIDE SOLID BLOCKING UNDER ALL BEARING WALLS PERPENDICULAR TO JOISTS AND OTHER BEARING POINTS NOT OTHERWISE PROVIDED WITH SUPPORT.

ELECTRICAL, DATA, & AUDIO NOTES:
HOME OWNER SHALL DO A WALK-THRU WITH RELEVANT INSTALLERS TO VERIFY THE EXACT LOCATION FOR OUTLETS, LIGHTS, SWITCHES, CABLE, DATA, PHONE, AUDIO, ETC.

ELECTRICAL NOTES:

1. ELECTRICAL RECEPTACLES IN BATHROOMS, KITCHENS AND GARAGES SHALL BE G.F.I. ORG.F.I.C. PER NATIONAL ELECTRICAL CODE REQUIREMENTS.
2. SMOKE DETECTORS MUST BE HARD WIRED AND INTERCONNECTED WITH BATTERY BACK UP. PROVIDE SMOKE DETECTOR IN EACH SLEEPING ROOM AND AT A POINT CENTRALLY LOCATED IN THE CORRIDOR OR AREA GIVING ACCESS TO EACH SEPARATE SLEEPING AREA. DETECTORS SHALL SOUND AN ALARM AUDIBLE IN ALL SLEEPING AREAS
3. BATH AND LAUNDRY FANS TO HAVE A MINIMUM OF 5 AIR CHANGES PER HOUR.
4. 2 OR MORE 20 AMP SMALL APPLIANCE CIRCUITS SHALL BE PROVIDED TO SERVE KITCHEN,BREAKFAST AREA AND DINING ROOM. CIRCUIT SHALL HAVE NO OTHER OUTLETS. W/ITH FLASHING AND CAP
5. AT KITCHEN COUNTERS LOCATE RECEPTACLES AT A MAX SPACING OF 48" O.C.. RECEPTACLES OUTLETS SHALL BE INSTALLED SO THAT AT NO POINT ALONG THE WALL LINE AN APPLIANCE WILL BE MOR THAN 24" FROM A RECEPTACLE OUTLET.
6. PROVIDE KITCHEN EXHAUST FAN A MIN. OF 100 CFM AT HOOD, CONNECTED TO A METAL DUCT UP THROUGH THE ROOF
7. OUTLETS BETWEEN GARAGE WALL AND DWELLING SHALL BE METAL OR U/L APPROVED FIRE RESISTANT PLASTIC. OUTLETS IN GARAGE SHALL BE METAL
8. CEILING FANS NOT EXCEEDING 35 POUNDS WITH OR WITHOUT ACCESSORIES MAY BE SUPPORTED BY OUTLET BOXES PROVIDED THE BOXES AR IDENTIFIED FOR AS SUCH.
9. PROVIDE 20 AMP DEDICATED CIRCUITS TO TOILET LAV COUNTER TOP RECEPTACLES.
10. CONVENIENCE OUTLETS ARE REQUIRED TO BE SPACED SO THAT NO APPLIANCE IS NO MORE THAN 6' FROM AN OUTLET AND 12' BETWEEN OUTLETS. NO OUTLETS SHALL BE PLACED 6' FROM ANY OPENING. THE FIXED GLASS PANEL OF A SLIDING GLASS DOOR SHALL BE CONSIDERED AS A WALL WHEN DETERMINING THE PLACEMENT OF OUTLETS. CONVENIENCE OUTLETS ARE REQUIRED TO BE PROVIDED ON WALLS 2' OR MORE IN LENGTH
11. ALL OUTLETS NOT LABELED AS GFCI OR W.P. GFCI OUTETS ARE TO BE TAMPER PROOF OUTLETS ON ARC-FAULT CIRCUIT INTERRUPTER CIRCUITS, AFCI
12. ARC FAULT CIRCUIT INTERRUPTION PROTECTION NEC 210.12 DWELLING UNITSNED 210.12 (B) : ALL 120 VOLT, SINGLE PHASE 15 AND 20 AMPERE BRANCH CIRCUITS SUPPLY OUTLETS INSTALLED IN DWELLING UNIT FAMILY ROOMS, DINNING ROOMS,LIVING ROOMS,PARLORS, LIBRARIES,DENS, BEDROOMS, SUN ROOMS, RECREATION ROOMS, CLOSETS,HALLWAYS,OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A LISTED ARC FAULT CIRCUIT INTERRUPTER, COMBINATION-TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT.
13. LIGHTS NOT LISTED UNDER COVER MUST BE LISTED FOR WET LOCATIONS.
14. LIGHTS UNDER PATIO MUST BE DAMP LISTED.
15. MINIMUM OF 20' UFER WIRE #4 SHALL BE EMBEDDED IN STEM OF FOUNDATION.
16. ELECTRICAL PANELS REQUIRE A 30" WIDE , 36" TALL AND 75" HIGH CLEAR WORKING .
17. COUNTERTOP OVERHANGS CANNOT EXTEND MORE THAN 6" PAST ITS BASE WHEN THERE ARE RECEPTACLES BELOW AND THE RECEPTACLES SHALL NOT EXTEND PAST 12" BELOW THE TOP PORTION OF THE COUNTERTOP BASE.

AUDIO:

1. LOCATE SPEAKERS AND AUDIO CONTROLS AS INDICATED IN THE PLAN; RUN CIRCUIT OF SPEAKER WIRING TO AUDIO HOME PANEL SPECIFIED BY FLOOR;
2. AUDIO SPEAKERS TO BE APPROVED BY HOME OWNER;
3. LOCATE JACKS AS INDICATED IN THE PLAN; INSTALL DATA / CABLE PANEL SIMILAR TO "ON Q". SYSTEM TO BE APPROVED BY HOME OWNER.

DATA / CABLE:
LOCATE SECURITY PANELS AS INDICATED IN THE PLAN; SYSTEM TO BE APPROVED BY HOME OWNER.

CARPENTRY:

SAWN LUMBER DESIGN IS BASED ON THE NATIONAL DESIGN SPECIFICATION, LATEST EDITION. SAWN LUMBER SHALL CONFORM TO WEST COAST LUMBER INSPECTION BUREAU OR WESTERN WOOD PRODUCTS ASSOCIATION GRADING RULES. ALL LUMBER NOT SPECIFICALLY NOTED TO BE D.F. #2 OR BETTER. ALL WOOD IN PERMANENT CONTACT WITH CONCRETE OR CMU SHALL BE PRESSURE TREATED UNLESS AN APPROVED BARRIER IS PROVIDED. FRAMING ACCESSORIES AND STRUCTURAL FASTENERS SHALL BE MANUFACTURED BY SIMPSON STRONG-TIE COMPANY (OR ENGINEER APPROVED EQUAL) AND OF THE SIZE AND TYPE SHOWN ON THE DRAWINGS. HANGERS NOT SHOWN SHALL BE SIMPSON HU OF SIZE RECOMMENDED FOR MEMBER. ALL HANGERS AND NAILS IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE SIMPSON Z-MAX HANGERS OR STAINLESS STEEL. ALL SHEAR WALL SHEATHING NAILS SHALL BE COMMON NAILS. ALL FRAMING NAILS SHALL BE COMMON NAILS OR HOT DIPPED GALVANIZED BOX NAILS. FRAMING NAILS SHALL BE PER IBC TABLE 2304.9.1 OR IRC TABLE R602.3(1).

PLYWOOD PANELS SHALL CONFORM TO THE REQUIREMENTS OF "U.S. PRODUCT STANDARD PS 1 FOR CONSTRUCTION AND INDUSTRIAL PLYWOOD" OR APA PRP-108 PERFORMANCE STANDARDS. UNLESS NOTED, PANELS SHALL BE APA RATED SHEATHING, EXPOSURE 1, OF THE THICKNESS AND SPAN RATING SHOWN ON THE DRAWINGS. PLYWOOD INSTALLATION SHALL BE IN CONFORMANCE WITH APA RECOMMENDATIONS. ALLOW 1/8" SPACING AT PANELS ENDS AND EDGES, UNLESS OTHERWISE RECOMMENDED BY THE PANEL MANUFACTURER.

ALL ROOF SHEATHING AND SUB-FLOORING SHALL BE INSTALLED WITH FACE GRAIN PERPENDICULAR TO SUPPORTS, EXCEPT AS INDICATED ON THE DRAWINGS. ROOF SHEATHING SHALL EITHER BE BLOCKED, TONGUE-AND-GROOVE, OR HAVE EDGES SUPPORTED BY PLYCLIPS. SHEAR WALL SHEATHING SHALL BE BLOCKED WITH 2X FRAMING AT ALL PANEL EDGES. NAILING NOT SPECIFICALLY IDENTIFIED ON THE DRAWINGS TO CONFORM WITH IRC TABLE R602.3(1).

GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH U.S. PRODUCT STANDARD PS 56, "STRUCTURAL GLUED LAMINATED TIMBER" AND AMERICAN INSTITUTE OF TIMBER CONSTRUCTION, AITC 117. EACH MEMBER SHALL BEAR AN AITC OR APA-EWS IDENTIFICATION MARK AND BE ACCOMPANIED BY A CERTIFICATE OF CONFORMANCE. ONE COAT OF END SEALER SHALL BE APPLIED IMMEDIATELY AFTER TRIMMING IN EITHER SHOP OR FIELD. GLULAM HANGERS NOT SHOWN SHALL BE SIMPSON EG. BEAMS SHALL BE VISUALLY GRADED WESTERN SPECIES INDUSTRIAL GRADE, AND OF THE STRENGTH INDICATED BELOW:

DEPTH	COMBINATION SYMBOL	SPECIES	USE
ALL	24F - V4	DF/DF	(SIMPLE SPAN)
ALL	24F - V8	DF/DF	(CONT. OR CANTILEVER)

PREMANUFACTURED WOOD JOISTS: PREMANUFACTURED WOOD JOISTS SHALL BE OF THE SIZE AND TYPE SHOWN ON THE DRAWINGS, MANUFACTURED BY THE TRUS JOIST COMPANY, OR AN ENGINEER APPROVED EQUAL. PROVIDE BRIDGING IN CONFORMANCE WITH THE MANUFACTURERS RECOMMENDATIONS. JOISTS AND BRIDGING SHALL BE CAPABLE OF RESISTING THE WIND UPLIFT NOTED ON THE DRAWINGS. THE JOIST MANUFACTURER SHALL VISIT JOB SITE AS REQUIRED AND VERIFY THE PROPER INSTALLATION OF JOISTS IN WRITING TO THE ARCHITECT/ENGINEER. PREMANUFACTURED WOOD JOIST ALTERNATES WILL BE CONSIDERED, PROVIDED THE ALTERNATE IS COMPATIBLE WITH THE LOAD CAPACITY, STIFFNESS, DIMENSIONAL, AND FIRE RATING REQUIREMENTS OF THE PROJECT, AND IS ICBO APPROVED.

LUMBER SPECIES:
A. POSTS, BEAMS, HEADERS, JOISTS, AND RAFTERS TO BE DF-#2

B. EXPOSED ARCH BEAMS TO BE DF-#1 OR BETTER

C. SILLS, PLATES BLOCKING, AND BRIDGING TO BE DF-#2.

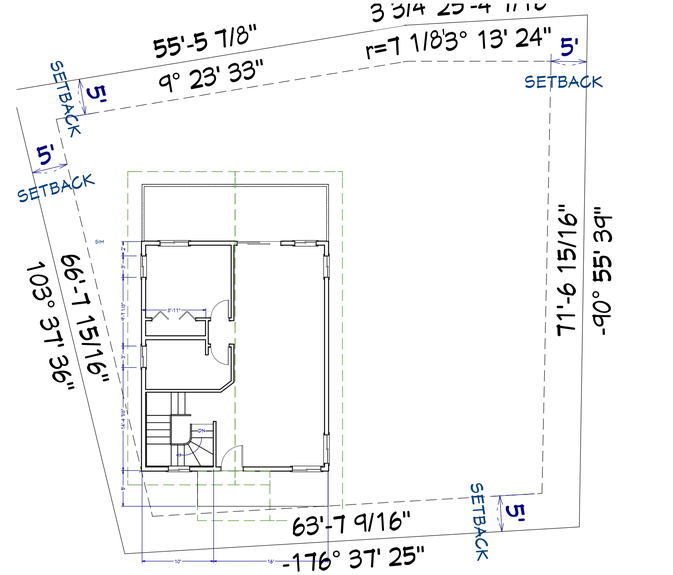
D. ALL STUDS TO BE DF#2 OR BETTER.

E. PLYWOOD SHEATHING SHALL BE AS FOLLOWS:
ROOF SHEATHING SHALL BE 1/2" CDX INT-APA RATED 32/16.
WALL SHEATHING SHALL BE 1/2" INT-APA RATED 32/16 OR 7/16" OSB.
FLOOR SHEATHING SHALL BE 3/4" T & G INT-APA RATED OSB.

F. ' I ' JOISTS SHALL BE MANUFACTURED BY TRUS JOIST OR ENGINEER APPROVED EQUAL.

G. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED.

LAYOUT PAGE TABLE			
LABEL	TITLE	DESCRIPTION	COMMENTS
A1	SITE PLAN		
A2	FLOOR PLANS	FLOOR PLANS	
A3	ELEVATIONS	ELEVATIONS	
A4	FOUNDATION PLAN		
A6	ROOF FRAMING PLAN		
E1	ELECTRICAL PLAN		



GENERAL NOTES

BARBER - LARETTE RESIDENCE
APN 401-07-099B
LOT 44 AND PORTION OF LOT 45
.12 ACRES
5039 SQ FT

N

2nd Floor

ARHD

REVISION TABLE

NUMBER	DATE	REVISED BY	DESCRIPTION

Barber-Larette Residence
776 EAST AVE.
Jerome,AZ

SITE PLAN

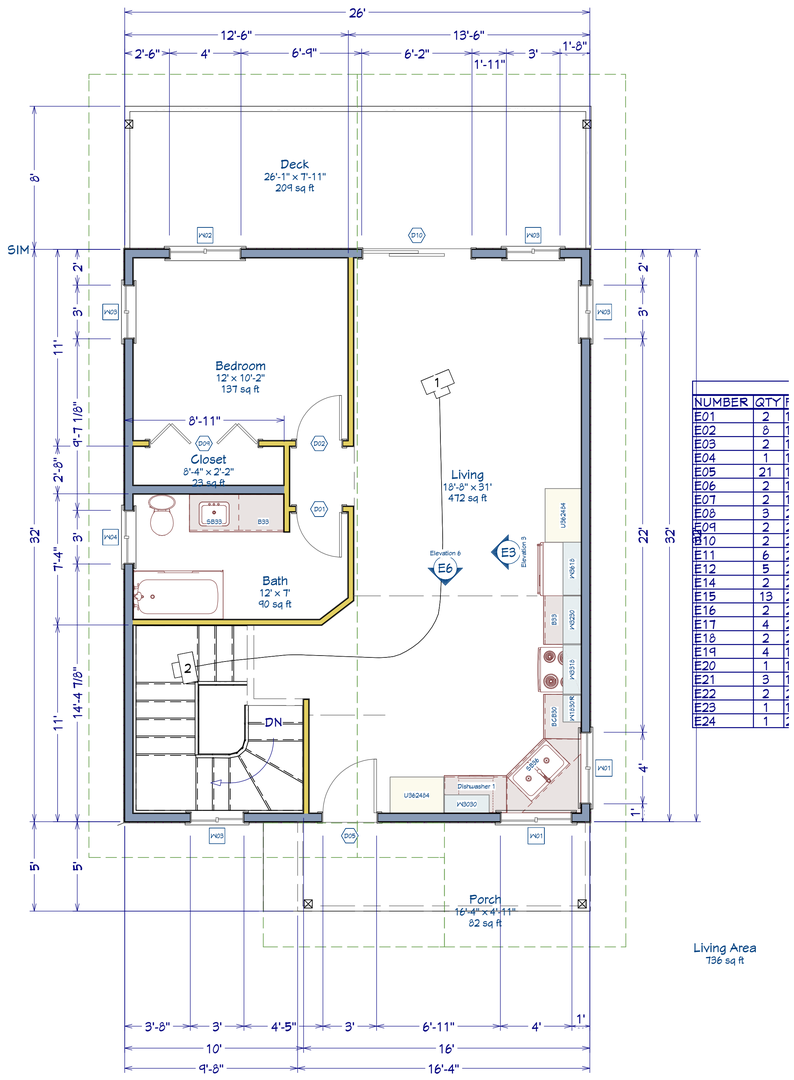
DRAWINGS PROVIDED BY:
ASPEN RIDGE HOME DESIGNS LLC
480-747-0249
jerome@aspenridgehomedesigns.com
https://aspenridgehomedesigns.com/

DATE:
9/14/2021

SCALE:

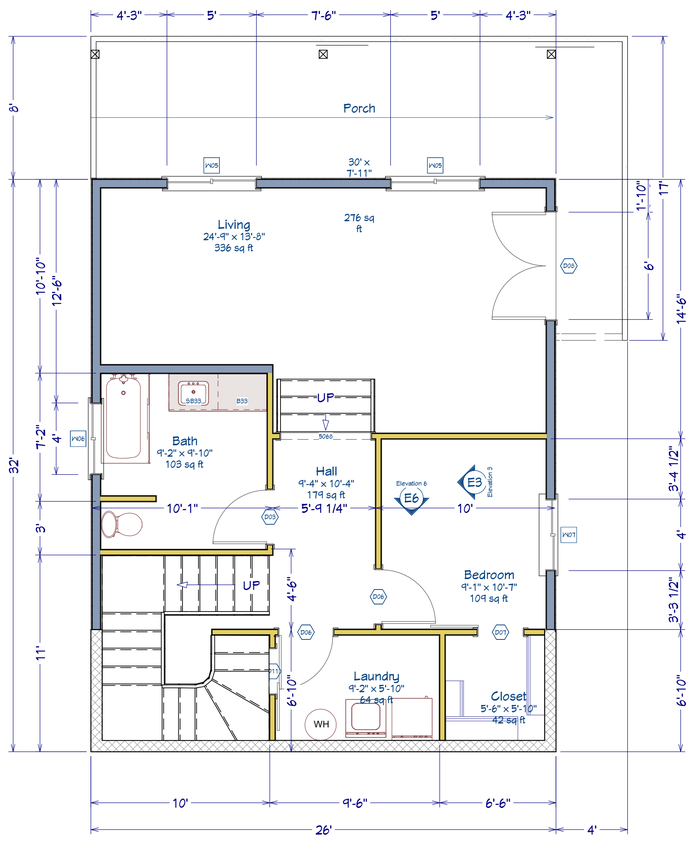
SHEET:
A1

LAYOUT PAGE TABLE			
LABEL	TITLE	DESCRIPTION	COMMENTS
A1	SITE PLAN		
A2	FLOOR PLANS	FLOOR PLANS	
A3	ELEVATIONS	ELEVATIONS	
A4	FOUNDATION PLAN		
A6	ROOF FRAMING PLAN		
E1	ELECTRICAL PLAN		

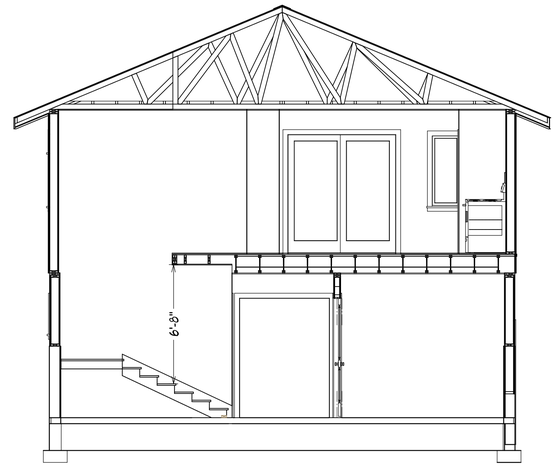


2nd Floor

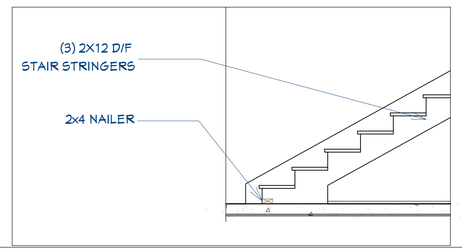
NUMBER	QTY	F
E01	2	1
E02	8	1
E03	2	1
E04	1	1
E05	21	1
E06	2	1
E07	2	1
E08	3	1
E09	2	1
E10	2	1
E11	6	1
E12	5	1
E14	2	1
E15	13	1
E16	2	1
E17	4	1
E18	2	1
E19	4	1
E20	1	1
E21	3	1
E22	2	1
E23	1	1
E24	1	1

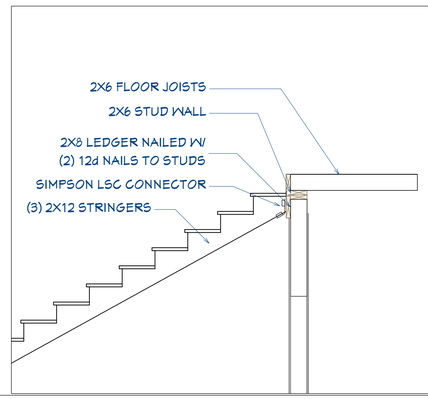


1st Floor



STAIR ELEVATION





STAIR DETAILS

WINDOW SCHEDULE										
NUMBER	LABEL	QTY	FLOOR	SIZE	WIDTH	HEIGHT	R/O	EGRESS	DESCRIPTION	HEADER
W01	4030LS	2	2	4030LS	48 "	36 "	49"X37"		LEFT SLIDING	2X6X52" (2)
W02	4040LS	1	2	4040LS	48 "	48 "	49"X49"		LEFT SLIDING	2X6X52" (2)
W03	3040LS	4	2	3040LS	36 "	48 "	37"X49"		LEFT SLIDING	2X6X40" (2)
W04	3010LS	1	2	3010LS	36 "	12 "	37"X13"		LEFT SLIDING	2X6X40" (2)
W05	5050LS	2	1	5050LS	60 "	60 "	61"X61"		LEFT SLIDING	2X6X64" (2)
W06	4020LS	1	1	4020LS	48 "	24 "	49"X25"		LEFT SLIDING	2X6X52" (2)
W07	4026	1	1	4026	48 "	30 "	49"X31"		LEFT SLIDING	2X6X52" (2)

DOOR SCHEDULE									
NUMBER	LABEL	QTY	FLOOR	SIZE	WIDTH	HEIGHT	R/O	DESCRIPTION	HEADER	THICKNESS
D01	2668	1	2	2668 L IN	30 "	80 "	32"X82 1/2"	HINGED-DOOR P04	2X6X35" (2)	1 3/8"
D02	2668	1	2	2668 R IN	30 "	80 "	32"X82 1/2"	HINGED-DOOR P04	2X6X35" (2)	1 3/8"
D03	3068	1	1	3068 L IN	36 "	80 "	38"X82 1/2"	HINGED-DOOR P04	2X6X41" (2)	1 3/8"
D05	3068	1	2	3068 R EX	36 "	80 "	38"X83"	EXT. HINGED-DOOR E02	2X6X41" (2)	1 3/4"
D06	3068	2	1	3068 R IN	36 "	80 "	38"X82 1/2"	HINGED-DOOR P04	2X6X41" (2)	1 3/8"
D07	2668	1	1	2668 L	30 "	80 "	32"X82 1/2"	BARN-DOOR P04	2X6X35" (2)	1 3/8"
D08	6068	1	1	6068 L/R EX	72 "	80 "	74"X83"	EXT. DOUBLE HINGED-DOOR E02	2X12X60" (3)	1 3/4"
D09	6068	1	2	6068 L/R	72 "	80 "	74"X82 1/2"	4 DR. BIFOLD-LOUVERED	2X10XT7" (2)	1 3/8"
D10	6068	1	2	6068 R EX	72 "	80 "	74"X83"	EXT. SLIDER-DOOR F01	2X10XT7" (2)	1 3/4"
D11	2668	1	1	2668 R	30 "	80 "	32"X82 1/2"	BARN-DOOR P04	2X6X35" (2)	1 3/8"

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Barber-Larette Residence
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Jerome,AZ

FLOOR PLANS

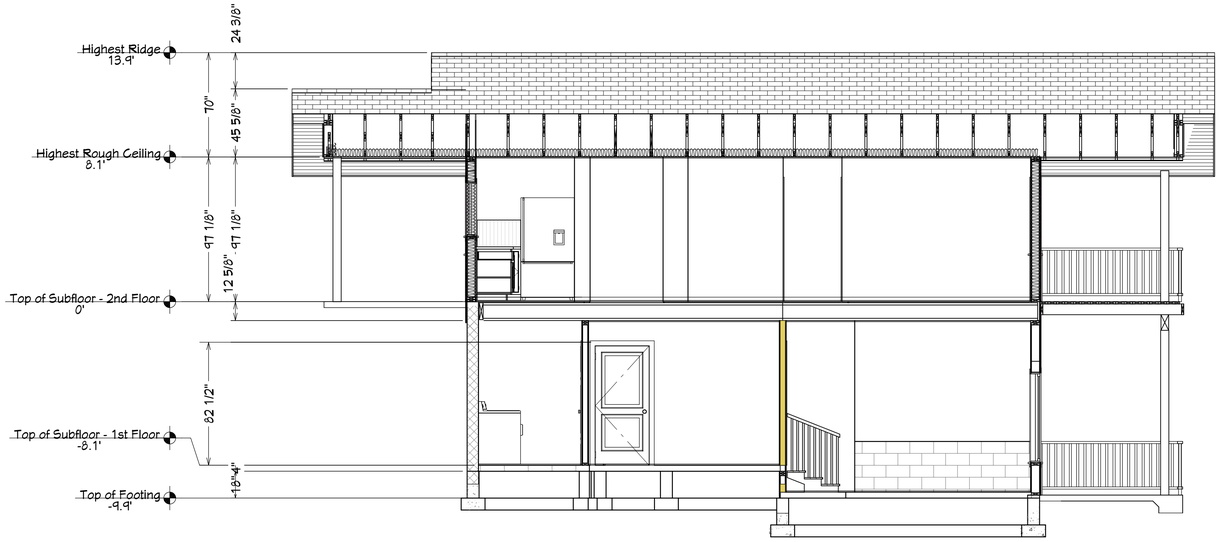
DRAWINGS PROVIDED BY:
ASPEN RIDGE HOME DESIGNS LLC
480-747-0244
jerome@aspenridgehomedesigns.com
https://aspenridgehomedesigns.com/

DATE:
9/14/2021

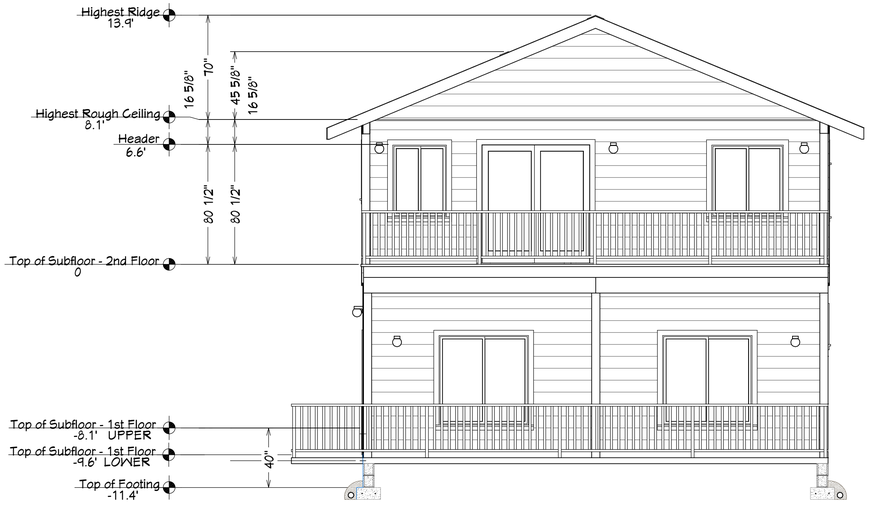
SCALE:
1/4" = 1'-0"

SHEET:
A2

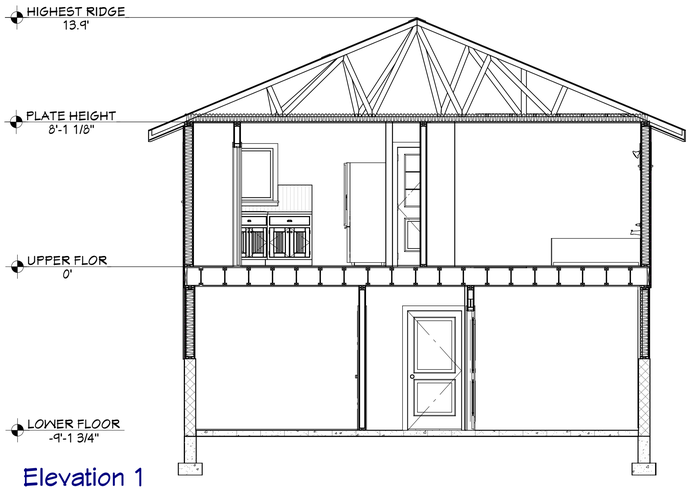
SOUTH ELEVATION



Elevation 3



NORTH ELEVATION



Elevation 1

EAST ELEVATION

ARHD

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Barber-Larette Residence
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Jerome,AZ

ELEVATIONS

DRAWINGS PROVIDED BY:
ASPEN RIDGE HOME DESIGNS LLC
480-747-0249
jerome@aspenridgehomedesigns.com
https://aspenridgehomedesigns.com/

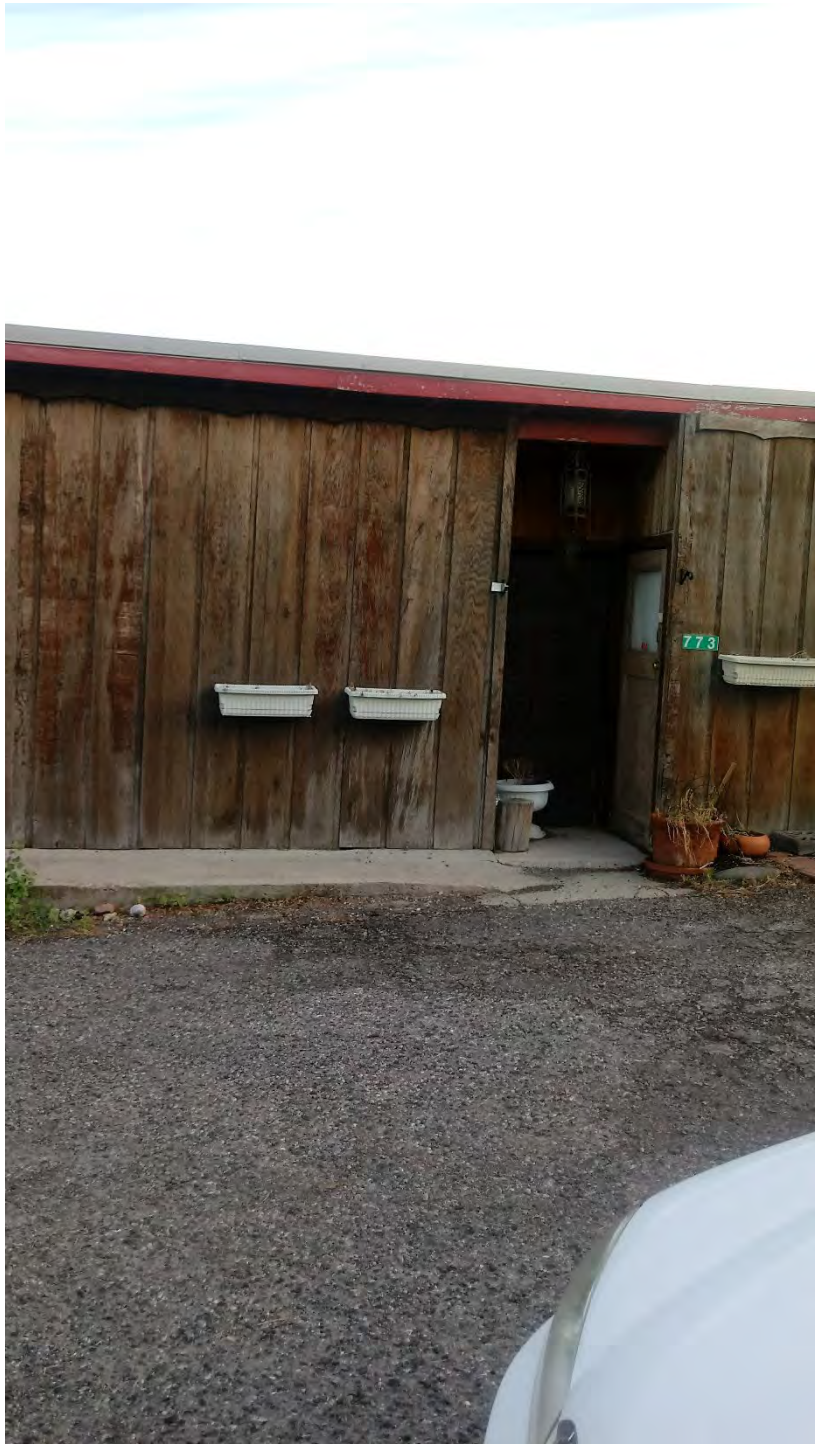
DATE:
9/14/2021

SCALE:
1/4" = 1'-0"

SHEET:
A3

West Elevation


SLOW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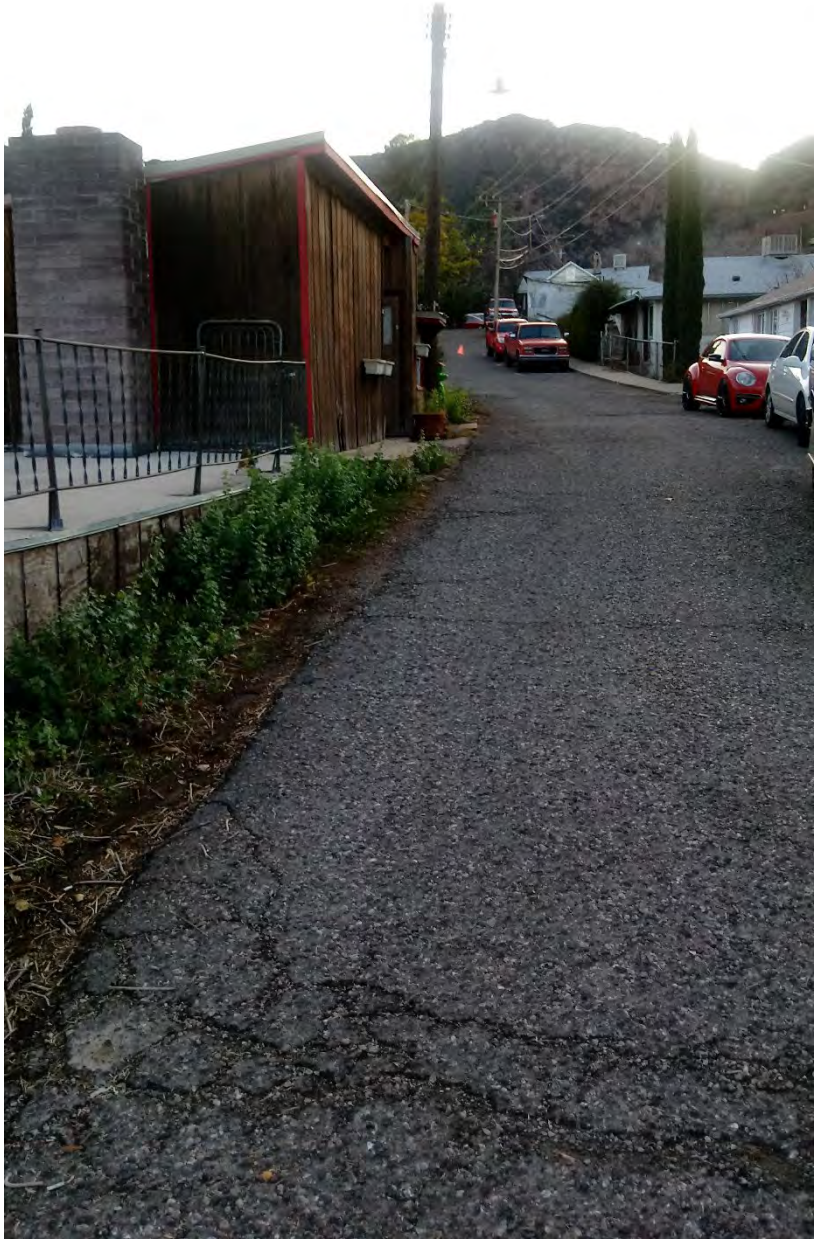
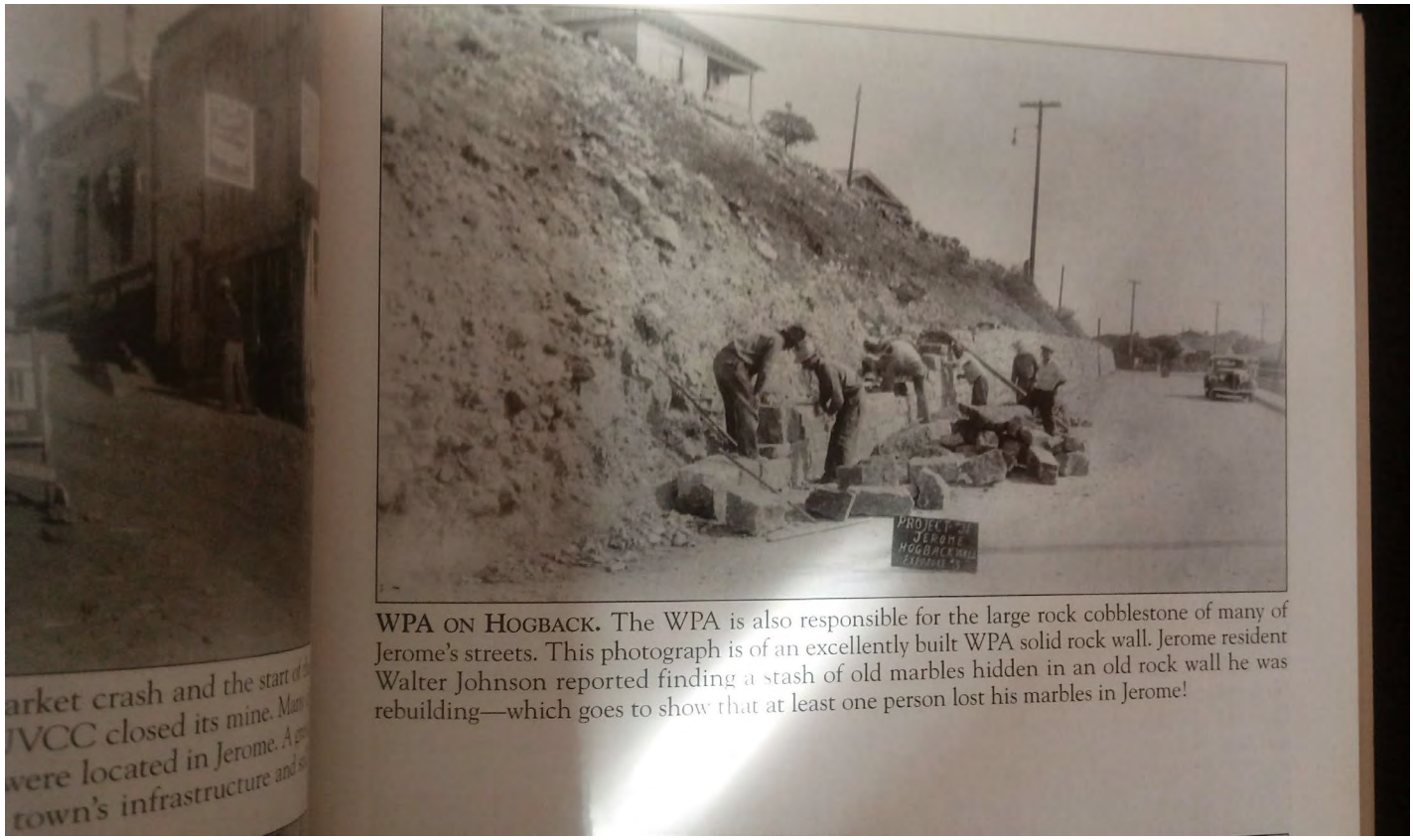
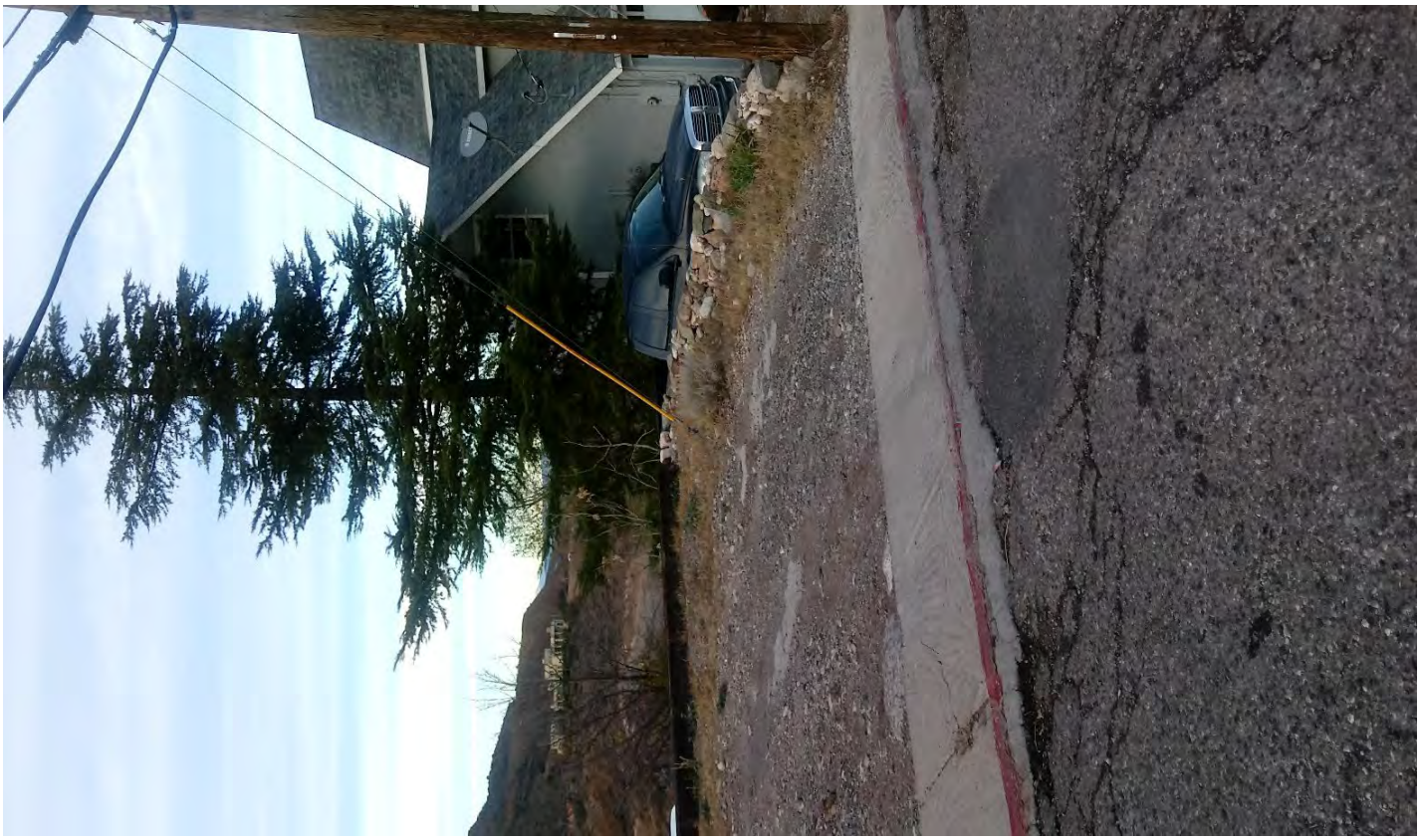


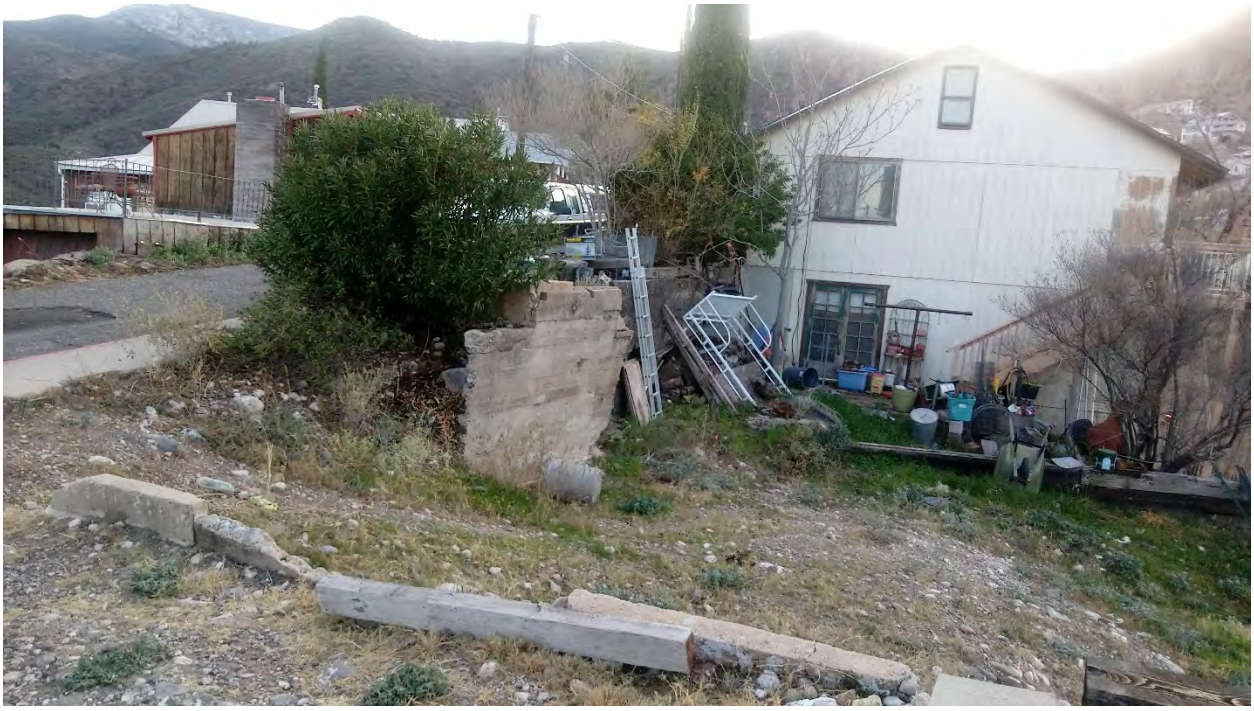


arket crash and the start of
IVCC closed its mine. Many
were located in Jerome. A gr
town's infrastructure and s

WPA ON HOGBACK. The WPA is also responsible for the large rock cobblestone of many of Jerome's streets. This photograph is of an excellently built WPA solid rock wall. Jerome resident Walter Johnson reported finding a stash of old marbles hidden in an old rock wall he was rebuilding—which goes to show that at least one person lost his marbles in Jerome!



Lot - facing north



Lot - facing southwest; East Ave on left

Lot - facing west

Lot -facing northwest

Old original wall on the lot

East side of lot (Douglas Rd below to left)

Looking toward bottom of lot - Douglas Rd below

North corner of lot

Looking toward west corner of lot

Douglas Rd

Where lot meets Douglas Rd below

Douglas Rd

View of lot from Douglas Rd

Property to the east

Property to the west

Looking toward East Ave and old original wall near southwest end of lot

REPORT OF GEOTECHNICAL INVESTIGATION

LERETTE RESIDENCE
776 EAST AVENUE
JEROME, ARIZONA 86331
ACS PROJECT NO. 1701535

PREPARED FOR:

Mr. Eric Lerette
P.O. Box 222
Jerome, Arizona 86331

PREPARED BY:

ACS Services LLC
2235 West Broadway Road
Mesa, Arizona 85202

Phone: 480-968-0190
Fax: 480-968-0156
www.acsservicesllc.com

November 7, 2017

November 7, 2017
Project 1701535 – Lerette Residence
776 East Avenue
Jerome, Arizona 86331

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Appendices

Appendix A Figures 1 and 2

Appendix B Boring Logs

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Appendix D Site Photos

ACS SERVICES LLC

ENGINEERING DESIGN • MATERIAL TESTING • CONSTRUCTION INSPECTION
DBE - SBE - WBE

November 7, 2017 Project 1701535

Mr. Eric Lerette
P.O. Box 222
Jerome, Arizona 86331

RE: GEOTECHNICAL INVESTIGATION REPORT
LERETTE RESIDENCE
776 EAST AVENUE
JEROME, ARIZONA 86331

Dear Eric:

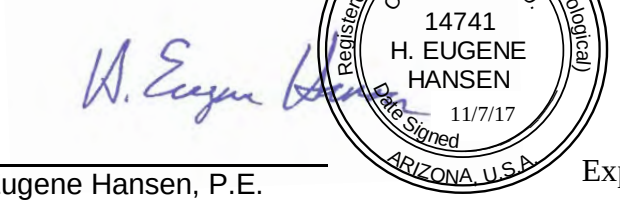
Transmitted herewith is a copy of the final report of the subsurface soil and foundation investigation on the above-mentioned project. The services performed provide an evaluation at selected locations of the subsurface soil conditions throughout the zone of significant foundation influence. As an additional service, this firm may review the project plans and structural notes for conformance to the intent of this report.

This firm possesses the capability to provide testing and inspection services during the course of construction. Such quality control/assurance activities may include, but are not limited to, compaction testing as related to fill control, foundation inspection, and concrete sampling. Please notify this firm if a proposal for such services is desired.

Should any questions arise concerning the content of this report, please feel free to contact this office at your earliest convenience.

Respectfully submitted,

ACS SERVICES LLC



Expires 3/31/18

H. Eugene Hansen, P.E.
Geotechnical and Materials Testing Engineer

cc: (1) Addressee via email (pdf copy)

SCOPE

This report is submitted following a geotechnical investigation conducted by this firm for the proposed **LERETTE RESIDENCE**, to be located at 776 East Avenue, in Jerome, Arizona 86331. The objectives of the investigation were to determine the physical characteristics of the soil underlying the site and to provide final recommendations for safe and economical foundation design and slab support. For purposes of foundation design, the maximum column and wall loads have been assumed to be as summarized below.

	Maximum Column Load (KIPS)	Maximum Wall Load (KLF)
Shallow Spread Foundations	98	6.0

Anticipated structural loads in excess of those stated above will need to be addressed in an addendum, i.e. they are not covered under the scope of work involved with this effort. The recommendations for site grading contained in this report do not address the presence or removal of contaminants from the site soils.

FIELD INVESTIGATION

On September 20, 2017, this firm advanced two (2) exploratory test borings (hand auger and sampling methods) for examination of the subsurface profile to depths ranging from 1.5 to 2.5 feet below the existing site grade. The soils or rock encountered were examined, visually classified and wherever applicable, sampled. Refer to the Boring Logs in Appendix B for a detailed description of the subsurface soil and rock conditions at the specified locations. Refer to Figure 2 in Appendix A for the approximate locations of the borings.

LABORATORY TESTING

Representative samples obtained during the field investigation were subjected to the following laboratory analyses:

Test	Sample(s)	Purpose
Sieve Analysis	Native subgrade soils (3)	Soil classification
Atterberg Limits	Native subgrade soils (2)	Soil classification
Proctor	Native subgrade soils (1)	Moisture-Density Relationship
Swell	Remolded subgrade soils (1)	Potential for heave upon wetting

Refer to Appendix C of this report for the results of the laboratory testing.

SITE CONDITIONS

General Notes:

(1) Topographic relief	The site is located on the west side of East Avenue, and steps down approximately 6 to 8 from East Avenue. An existing retaining wall is located at the southeast corner of the lot, along the west side of the proposed building area, and along the west side of the proposed garage area. The site slopes steeply downward approximately 22 feet to Douglas Road along the west side of the lot.
(2) Fill	No apparent existing fill was noted at the locations of the borings. Fill likely exists at locations not explored by the borings due to removal of previous foundations from a previous residence that existed on the site and behind the existing retaining wall on the west side of the site.
(3) Evidence of surface disturbance	The surface of the site at the locations of the borings has been significantly disturbed due to the previous foundation removals on the site.
(4) Site use	The site is currently a vacant residential lot.

GEOLOGIC HAZARDS

The following list represents a general summary of the on-site soil characteristics relative to engineering applications:

Depth to groundwater	- None encountered
Potential for soil expansion	- Low based on the swell test data for the upper native soils
Potential for soil collapse	- Low based on the field penetration blow counts for the white, very dense and strongly cemented clayey sand and gravel soils that exist below upper topsoil, fill, or disturbed soil
Existence of loose soil at foundation bearing elevation	- Not probable for foundations on the white very dense soils
Potential for excessive differential soil movement	- Low
Potential for earth subsidence fissures	- Not applicable
Frost line	- 1.0 feet (Minimum foundation depth of 1.5 feet)
Presence of caliche, bedrock or other hard stratum	- White, very dense and strongly cemented clayey sand and gravel soils were encountered immediately below the surface of the site at the location of Boring 1.
2009/2012/2015 IBC Site Class	- C, very dense soil or soft rock

RECOMMENDATIONS

The recommendations contained herein are based upon the properties of the surface and subsurface soils as described by the field and laboratory testing, the results of which are presented and discussed in this report. Alternate recommendations may be possible and will be considered upon request.

Conventional Spread Foundation Recommendations

It is recommended that all perimeter foundations and isolated exterior foundations be embedded a minimum of 1.5 feet below the lowest adjacent finish pad or exterior grade within 5.0 feet of proposed exterior walls. Interior footings should be founded a minimum of 1.5 feet below finish floor level.

For all construction, 2.0 feet and 1.33 feet are recommended as the minimum width of spread and continuous footings, respectively.

The following tabulations may be used in the design of shallow spread (column) and continuous (wall) foundations for the proposed structures. The column labeled Bearing Stratum refers to the soil layer that the footing pad rests on, and does not mean to imply that the foundation be fully embedded into that particular stratum.

Surface Level Foundations Bearing on Native Undisturbed Soil Comprised of White, Very Dense and Strongly Cemented Clayey Sandy Gravel Soils:

			Allowable Load	
Foundation Embedment Depth (ft) - as defined herein	**Bearing Stratum**	**Allowable Soil Bearing Pressure**	**Wall (KLF)**	**Column (KIP)**
1.5*	Native undisturbed soil comprised of white, very dense and strongly cemented clayey sandy gravel soils	2000 PSF	6.0	98

*A mixture of 2-sack ABC/cement slurry may be utilized in the lower portions of foundation excavations for footings bearing on the white, very dense and strongly cemented clayey sandy gravel soils at depths in excess of 1.5 feet. If these soils are encountered at a depth of 2.5 feet, 1.0 feet of 2-sack ABC/cement slurry may underlie a conventional foundation depth of 1.5 feet (for an allowable soil bearing pressure of 2000 PSF).

Explanations

Foundation Embedment Depth - i.e.,

A) The depth below the lowest adjacent exterior pad grade within 5.0 feet of proposed exterior walls;

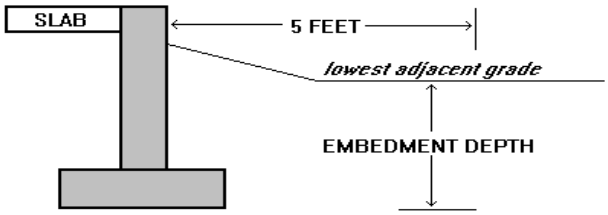
B) The depth below finish compacted pad grade provided that a sufficient pad blow-up (the lateral extent to which the building pad is constructed beyond the limits of the exterior walls

or other structural elements, inclusive of exterior column foundations) has been incorporated into the grading and drainage design (5.0 feet or greater);

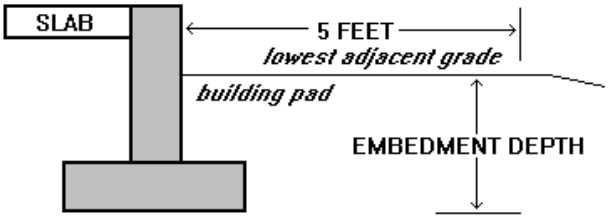
C) The depth below finish floor level for interior foundations.

FOUNDATION EMBEDMENT

Condition A



Condition B



For the west foundation of the lower level, foundations should not be over the backfill for existing retaining wall along the west side of the building area. It may be necessary to lower the west foundation of the lower level or place the foundation at least 5 feet away from the retaining wall. However, if the foundation will bear on the white, very dense and strongly cemented clayey sand and gravel soils, as required, the foundation should have no effect on the stability of the existing retaining wall.

The previously tabulated bearing values and the allowable wall and column loads associated with each are based on a total settlement of 1/2 inch. **It is anticipated that the magnitude of differential settlement will be roughly 1/4 inch** if construction is performed in accordance with locally accepted standards and the recommendations contained herein.

The allowable loads are based on maximum footing sizes of 3.0 and 7.0 feet for continuous and spread footings, respectively. Greater loads and larger footings may be accommodated by the listed bearing values, if there is toleration for increased settlements. This office should be contacted if this situation should arise.

The weight of the foundation below grade may be neglected in dead load computations.

The previously tabulated bearing capacities should be considered allowable maximums for dead plus design live loads and may be increased by one-third when considering total loads, including wind or seismic forces or other transient loading conditions.

Retaining wall or building foundations to be constructed in close proximity to retention basins (within 5.0 feet) should be embedded 1.0 feet deeper than the stated depths in the preceding bearing capacity tables.

Shallow foundations that are adjacent to lower foundation areas must be stepped down so that their base is below the lower backfill materials, and below a line projected upward from the nearest lower foundation edge at a 45 degree angle. In no case should ancillary structures be designed or constructed, whose foundations will bear into deeper, non-verified backfills.

This firm recommends that continuous footings and stem walls be reinforced, and bearing walls be constructed with frequent joints to better distribute stresses in the event of localized foundation movements. Similarly, all masonry walls should be constructed with both vertical and horizontal reinforcement.

It is strongly recommended that all foundation excavations be inspected (prior to the placement of slurry or reinforcing steel) by a representative of the project geotechnical engineer, **ACS Services LLC**, to ensure that they are free of loose soil which may have blown or sloughed into the excavations, the embedment depth is adequate, and the dimensions are in accordance with the project requirements.

It will also be necessary for the project geotechnical engineer, **ACS Services LLC**, to verify that the footings will bear upon native undisturbed soil comprised of the white, very dense and strongly cemented clayey sand and gravel soils at a minimum foundation depth of 1.5 feet to achieve an allowable soil bearing pressure of 2000 PSF.

A minimum of MAG A (3000 PSI), or equivalent, concrete with Type II cement should be used for footings and stem walls.

Rock Anchors for Conventional Foundations or Retaining Walls

This firm has evaluated the existing characteristics of the native soils comprised of white, very dense and strongly cemented clayey sand and gravel soils relative to utilizing rock anchors to provide resistance to uplift and lateral forces in the case where difficult excavation due to the presence of these materials prevents adequate foundation embedment due to their strongly cemented, caliche-like nature.

The following parameters are hereby submitted for the design and construction of such anchors in the white, very dense and strongly cemented clayey sand and gravel soils that exist at the site:

Hole diameter	- Sufficient diameter to allow for 1/8 inch minimum tolerance on all sides of the steel rebar (standard hole size for epoxy anchors in concrete)
Depth of core hole	- 1.5 feet min. (neglect the upper 1 foot in pullout and uplift resistance calculations)

Steel anchor	- #5, #6, or #7 rebar bonded with structural epoxy the full length of the hole
Bonding material	- Structural epoxy to fill the annular space between the rebar and inside wall of the drilled hole. The hole should comply to normal epoxy rebar anchor requirements.
Rock anchor bonding strength	**- 25 PSI may be used as the bonding strength between the epoxy and the white, very dense and strongly cemented clayey sand and gravel soils (below the zone of neglect**
Resistance to base shear	- 50 PSI may be used as the appropriate resistance to lateral load-applied only to the length of width of the actual steel (below the zone of neglect

The embedment depths of rebar anchors are based on the anticipated bonding strength between the bar and the white, very dense and strongly cemented clayey sand and gravel soils, but the rock anchor embedment should be a minimum of 1.5 feet into the strongly cemented caliche-like material.

The following table may be utilized for design of foundations for uplift and lateral resistance:

	#5 Rebar		#6 Rebar		#7 Rebar	
Embedment Depth (ft)	Base Shear Resistance (kips	Uplift Resistance (kips)	Base Shear Resistance (kips)	Uplift Resistance (kips)	Base Shear Resistance (kips)	Uplift Resistance (kips)
1.5	0.19	0.53	0.23	0.59	0.26	0.65
2.0	0.38	1.06	0.45	1.18	0.53	1.30
2.5	0.56	1.59	0.68	1.77	0.79	1.94
3.0	0.75	2.12	0.90	2.36	1.05	2.59

It is important that the installation of epoxy anchors into the white, very dense and strongly cemented clayey sand and gravel soils be observed by the project geotechnical engineer to verify that the rebar anchors are properly installed into these strongly cemented and caliche-like materials, if required.

Lateral Stability Analyses

The following tabulation presents recommendations for lateral stability analyses for native undisturbed soil comprised of white, very dense and strongly cemented clayey sand and gravel and controlled compacted fill:

[a]Foundation Toe Pressures.....1.33 x max. allowable

	Native Undisturbed Soil	Controlled Compacted Fill
[b]Lateral Backfill Pressures:		
Unrestrained walls	31 psf/ft.	34 psf/ft.
Restrained walls[c]	49 psf/ft.	52 psf/ft.
Lateral Passive Pressures For Surficial Soils:		
Continuous walls/footings	310 psf/ft.	240 psf/ft.
Spread columns/footings	462 psf/ft.	358 psf/ft.
Coefficient of Base Friction For Surficial Soils:		
Independent of passive resistance	0.73	0.62
In conjunction with passive resistance	0.49	0.42

Superscript Explanations

[a]Increase in allowable foundation bearing pressure (previously stated) for foundation toe pressures due to eccentric or lateral loading.

[b]Equivalent fluid pressures for vertical walls and horizontal backfill surfaces (maximum 12.0 feet in height). Pressures do not include temporary forces during compaction of the backfill, expansion pressures developed by overcompacted clayey backfill, hydrostatic pressures from inundation of backfill, or surcharge loads. Walls should be suitably braced during backfilling to prevent damage and excessive deflection.

[c]The backfill pressure can be reduced to the unrestrained value if the backfill zone between the wall and cut slope is a narrow wedge (width less than one-half height).

Excavation Cut Slope Stability

The construction of the two-level residence with an upper level entrance and lower level rear walkout or terrace will require excavation into the hillside to cut heights of up to a possible 10 feet to accommodate the lower level basement retaining wall along the front and sides of the residence. The following criteria are presented to aid in the development of mass excavation plans:

In the upper 0.0 to 2.5 feet of the site native soils, a 1.5:1 (horizontal:vertical) ratio may be used for temporary cut slopes. Below depths ranging from 0.0 to 2.5 feet, the cut slope may be steepened to a 1:1 (horizontal:vertical) ratio for temporary cut slopes. **Cut slopes steeper than recommended would require visual verification by the project geotechnical engineer to confirm that the cut slope is stable.**

10.0 feet is recommended as the maximum cut slope height.

This office should be contacted during construction to verify field conditions and inspect all cut slopes. Should conditions relative to the integrity of the soil or rock improve, noticeably, during site excavation, this firm may alter the above-recommended cut slopes to reflect the improvement. These slope designs were completed under the assumption that surcharge loads

will not be applied at the crest of any existing cut slope. All slopes should be cleared of loose materials. After construction, traffic on the crest of any cut slope should be limited to pedestrian foot traffic only, within 10.0 feet of the crest.

Very small flows of surface water may erode portions of the faces of the cut slopes and lead to localized slope movements. For this reason, all surface drainage should be controlled and directed away from any cut slopes.

There exists the possibility of rock falls associated with possible weathered upper portions of any exposed rock stratum. In other words, some localized rock movements should be anticipated. Any such occurrence will be accommodated by the utilization of buffer zones. No structure should be located within the specified buffer zone. At the base of any cut-slope (beyond the toe of the cut-slope), buffer zones should be maintained according to the following schedule:

Vertical Cut-Slope Height (feet)	Horizontal Buffer Zone Distance (feet)
5	2.5
10	5

Unforeseen conditions may develop during cutting operations. If conditions arise which were not addressed by this design, it is imperative that this firm be notified such that the situation can be addressed properly.

In all construction activities related to site grading, the concept of toe removal should become well understood. All slopes, whether they are natural or fill, have a toe (the lowest portion of the slope). When the toe is removed, the slope may become unstable. For purposes of construction, the entire site should be considered to exist on a slope. Any cut into the natural slope will result in the removal of the toe for the up-slope portion, resulting in the potential movement of the slope face.

In addition to cut operations, vibrations from heavy equipment can induce a seismic-like component to a cut or natural slope which may reduce the overall slope stability and decrease the factor of safety against sliding to below 1. Such vibrations can also dislodge material from a normally stable slope.

It should also be noted that it is beyond this firm's ability to predict the time and place such an event (rock fall or slope movement) will occur. It is well known that erosional processes and gravity work continuously to move rock and soil down-slope, and therefore, future slope movements should be anticipated whether small or large.

Retaining or Basement Wall Backfill and Subsurface Drainage

Retaining or basement wall backfill in building areas should be compacted to the density criteria presented herein. If backfills are not compacted as recommended, excessive settlement may result in areas adjoining backfilled retaining or basement walls, or over utilities. Excessive settlement of loose backfills has caused damage to pavements, floor slabs, pedestrian

walkways, planters, etc., which adjoin backfilled retaining or basement walls. Deep, compacted backfills will also tend to settle differently relative to the retaining or basement wall and should not be used for support of adjoining facilities prone to damage from differential settlements, or facilities attached to the main structure.

Backfills may consist of compacted fill or native soils. Backfill compaction should be accomplished by mechanical methods. Water jetting or flooding of loose, dumped backfills to increase moisture contents should be prohibited in all wall backfills and in utility trench backfills within 10.0 feet of structures.

Because of the critical factor of minimizing settlements of approach slabs, particularly careful quality control should be exercised over wall backfill operations. Even with proper backfill compaction (well compacted - 95% minimum), the wall backfill will have the potential for about 1.5 inches of settlement (for 12.0 feet of total backfill) in the event of wetting by irrigation or broken conduits. With moderately compacted backfill (90% minimum), the magnitude of wall backfill settlement may approach 3.6 inches (for 12.0 feet of total backfill). Further, with poorly compacted wall backfill (85% minimum), the approximate magnitude of wall backfill settlement may reach as much as 7.2 inches (for 12.0 feet of total wall backfill). The preceding estimates for wall backfill settlement are those which may occur through settlement of the backfill alone, without any surcharge or other structural loading condition.

Accordingly, it is recommended that where upper slabs are supported on grade over retaining or basement wall backfill, but are also tied to or connected to the retaining or basement wall, special construction details be utilized. Concrete slabs should be hinged or keyed at the base where they join the rigid structure in order to allow slight rotation of the slab. Consideration should be made to reinforcing concrete floor slabs to span over the wall backfill zone. These measures will reduce the likelihood that such slabs will crack or suffer noticeable deformations.

Because of the possibility of leakage from subsurface water lines or sewer lines, and seepage of surface water into the soils immediately behind the retaining or basement walls, below grade waterproofing will need to be provided to prevent efflorescence from forming on the exterior front face for exterior retaining walls or to prevent moisture intrusion into the interior of the residence for basement walls. For conventional, cast-in-place concrete walls with open cuts, conventional waterproofing may be applied to the back of the walls after the forms are removed.

Subsurface wall drainage can be efficiently provided by a geocomposite wall drain (filter fabric and drainage core) attached to the soil side of the retaining or basement wall. The geocomposite wall drain should extend to within 2 feet of the final ground surface or to the bottom of the interior floor slabs for a basement level. For conventional, cast-in-place concrete retaining walls with an open cut, the geocomposite wall drain system should be bonded or securely attached with adhesive to the waterproofing on the soil side of the retaining or basement wall prior to backfilling. Weep holes may be placed above the ground level in front of exterior retaining walls at an approximately 10 foot or less spacing to allow any subsurface water that collects in the geocomposite wall drain to exit. For interior retaining or basement walls, It will be necessary to interconnect the system to a small drain pipe at the base of the walls leading to a daylight outlet or sump. The drain pipe must be at an elevation that is at least 6 inches below the interior lower level floor slab elevation.

Surface Drainage

In unpaved areas, it is suggested that finished slopes extend a minimum of 5.0 feet horizontally from building walls and have a minimum vertical fall of 3.0 inches. Minimum grades of 2 percent should be maintained where the horizontal slope distance exceeds 5.0 feet. **In no case should long-term ponding be allowed near structures.** Backfill against footings, exterior walls, retaining walls, and in utility trenches should be well compacted to minimize the possibility of moisture infiltration through loose soil.

Conventional Slab Support

Site grading within the building areas should be accomplished as recommended herein. 4.0 inches of aggregate base course (ABC) floor fill should immediately underlie interior grade floor slabs with a typical thickness of 4.0 inches. The aggregate base material should conform to the requirements of Section 702 under Sub-section 702.2 "Crushed Aggregate" of the "Uniform Standard Specifications for Public Works Construction" sponsored by the Maricopa Association of Governments and all supplements which require a particle size grading as follows:

Sieve Size	Percent Passing
1-1/4”	100
#4	38-65
#8	25-60
#30	10-40
#200	3-12

Maximum Plasticity Index - 5

Special Note: To further reduce the potential for slab related damage, we recommend the following for conventional systems:

1. Placement of effective control joints on relatively close centers.
2. Proper moisture and density control during placement of subgrade fills.
3. Provision for adequate drainage in areas adjoining the slabs.
4. Use of designs which allow for the differential vertical movement described herein between the slabs and adjoining structural elements, i.e. ½ inch.

The use of vapor retarders may be considered for any slab-on-grade where the floor will be covered by products using water based adhesives, wood, vinyl backed carpet, vinyl tile, impermeable floor coatings (urethane, epoxy, or acrylic terrazzo),and moisture-sensitive rock tile products. When used, the design and installation should be in accordance with the recommendations given in ACI 302.1R-04, Section 3.2.3 Moisture protection.

Fill Slope Stability

The maximum fill slopes may conform to a 3:1 (horizontal:vertical) ratio if fill is placed in accordance with the recommendations contained herein.

EARTHWORK

The following final earthwork recommendations are presented as a guide in the compilation of construction specifications. The final recommendations are not comprehensive contract documents and should not be utilized as such.

Site Preparation

It is recommended that the existing buried concrete, foundation remnants, other construction debris, rock walls that require removal, any existing vegetation, any existing fill, and all other deleterious matter be removed from the proposed structure and pavement areas at the commencement of site grading activities.

All removed existing fill, disturbed soils and native soils are considered by this firm to be suitable for use as engineered fill provided that they are free of vegetation, debris, and oversized rock particles (greater the 3.0 inches).

Subsequent to the surface grubbing efforts and prior to the placement of subgrade or subbase fill or any required import fill, the exposed native ground surface should be prepared to a minimum depth of **6.0 inches** in all proposed building and pavement areas. Subgrade preparation should include some degree of moisture processing and/or scarification prior to compaction and should also incorporate a minimum pad blow-up of five (5) feet in all proposed building areas. **Scarification and compaction may not be possible and may be waived by the project geotechnical engineer, ACS Services LLC, if white, very dense and strongly cemented clayey sand and gravel is exposed after removals are complete or when the cut is to finish pad grade for the lower level.**

Complete removal and cleaning of any undesirable materials and proper backfilling of depressions or overexcavations will be necessary to develop support for the proposed facilities. Widen all depressions or overexcavations as necessary to accommodate compaction equipment and provide a level base for placing any fill. All fill shall be properly moistened and compacted as specified in the section on compaction and moisture content final recommendations.

All subbase fill required to bring the structure areas up to subgrade elevation should be placed in horizontal lifts not exceeding six inches compacted thickness or in horizontal lifts with thickness compatible with the compaction equipment utilized.

It is the understanding of this firm that various utility trenches may traverse the completed pad. The backfill of all utility trenches, if not in conformance with this report, may adversely impact the integrity of the completed pad. This firm recommends that all utility trench backfill crossing the pad be inspected and tested to ensure full conformance with this report. Untested utility trench backfill will nullify any as-built grading report regarding the existence of controlled compacted fill beneath the proposed building foundations and place the owner at greater risk in terms of potential unwanted foundation and floor slab movement.

Compaction and Moisture Content Recommendations

Compaction of backfill, subgrade soil, subbase fill, and base course materials for structural or pavement support should be accomplished to the following density criteria:

Material	Required Degree of Compaction (ASTM D698)
On-site existing fill and native soils:	
Building areas below foundation level	95 min.
Building areas above foundation level	95 min.
Below asphalt pavements	95 min.
Imported fill material:	
Building areas below foundation level	95 min.
Building areas above foundation level	95 min.
Below asphalt pavements	95 min.
Base course:	
Below asphalt pavements	100 min.
Below interior concrete slabs	95 min.

Increase the required degree of compaction to a minimum of 98 percent for fill materials greater than 5.0 feet below final grade.

During construction and prior to concrete placement, moisture contents should be controlled as follows:

Material	Compaction Moisture Content Range
On-site existing fill or native soils	
Below foundation level	optimum -2 to optimum +2%
Above foundation level	optimum -2 to optimum +2%
Below asphalt pavements	optimum -2 to optimum +2%
Imported fill material:	
Below foundation level	optimum -2 to optimum +2%
Above foundation level	optimum -2 to optimum +2%
Below asphalt pavements	optimum -2 to optimum +2%

Note: The recommendations previously tabulated under the heading entitled "Above Foundation Level" apply to the subgrade in exterior reinforced concrete patio, pool deck, sidewalk, or driveway slab areas.

Any soil disturbed during construction shall be compacted to the applicable percent compaction as specified herein.

Natural undisturbed soils or compacted soils subsequently disturbed or removed by construction operations should be replaced with materials compacted as specified above.

All imported fill material to be used as structural-supporting fill, should be free of vegetation, debris, and other deleterious material and meet the following requirements:

Maximum Particle Size	3 inches
Maximum Plasticity Index	15
Maximum Passing #200 Sieve	60 percent
Maximum Expansion	1.5 %*

* - Performed on a sample remolded to 95 percent of the maximum ASTM D698 density at roughly 2.0 percent below the optimum moisture content, under a 100 PSF surcharge.

Water settling and/or slurry shall not be used, in any case, to compact or settle surface soils, fill material, or trench backfill within 10.0 feet of any proposed structure.

Shrinkage

Assuming the average degree of compaction will approximate 95 percent of the standard maximum density, the approximate shrinkage of the reworked upper site soils should be 10 to 15 percent based on the field SPT blow count data. This may result in a vertical elevation change of approximately 0.10 to 0.15 feet following the pre-compaction effort.

Excavating Conditions

Excavations into the site subsurface soils, extending to depths ranging from 0.0 to 2.5 feet, should be possible with conventional excavating equipment. Heavier excavating equipment may be required below depths ranging from 0.0 to 2.5 feet due to the presence of white, very dense and strongly cemented clayey sand and gravel soils which are caliche-like.

Excavations greater than 4.0 feet should be sloped or braced as required to provide personnel safety and satisfy local safety code regulations.

CONSTRUCTION OBSERVATION

ACS Services LLC should be retained to provide documentation that the recommendations set forth are met. These include but are not limited to documentation of site clearing activities, verification of fill suitability and compaction, and inspection of footing excavations. Relative to field density testing, a minimum of 1 field density test should be taken for every 2500 square feet of building area, per 6.0-inch layer of compacted fill.

Prior to construction, we recommend the following:

1. Consultation with the design team in all areas that concern soils and rocks to ensure a clear understanding of all key elements contained within this report.
2. Review of the General Structural Notes to confirm compliance to this report and determination of which allowable soil bearing capacity has been selected by the project structural engineer (this directly affects the extent of earthwork and foundation preparation at the site).

3. This firm be notified of all specific areas to be treated as special inspection items (designated by the architect, structural engineer or governmental agency).

Relative to the involvement of **ACS Services LLC** with the project during the course of construction, we offer the following recommendations:

1. The site or development owner should be directly responsible for the selection of the geotechnical consultant to provide testing and observation services during the course of construction.
2. **ACS Services LLC** should be contracted by the owner to provide the course of construction testing and observation services for this project, as we are most familiar with the interpretation of the methodology followed herein.
3. All parties concerned should understand that there exists a priority surrounding the testing and observation services completed at the site. From a geotechnical perspective, it is imperative to understand the following priority list, presented in order of decreasing priority.

    A. Fill control for building pads (verification of overexcavation depths and lateral extents, compaction testing, and the general monitoring of fill placement).
    B. Foundation observations (compliance with the General Structural Notes, depths, bearing strata, etc.).
    C. Basement, structural or retaining wall backfill testing.
    D. Utility trench backfill
    E. Special inspections as dictated by the local municipality.
    F. Concrete sampling and testing for footings, stem walls and floor slabs.
    G. Subgrade testing for proposed pavement areas.
    H. ABC testing for proposed pavement areas.
    I. Asphaltic concrete testing for proposed pavement areas.
    J. Subgrade preparation for on-site sidewalk areas
    K. Grout sampling and testing, where applicable.
    L. Mortar sampling and testing, where applicable.
    M. Off-site subgrade, ABC, asphalt, curb, gutter and sidewalk testing.

Please understand that Item A above is the only area where ACS Services LLC has control on-site (once it has started) to verify or deny compliance with applicable standards, without the need for any entity to schedule testing activities with this office. Other than Item A, it shall be another entity's responsibility to schedule all testing and observation services, to coincide with the progress of construction. Since this firm is not a contributor to the construction schedule, we do not possess an inherent knowledge as to when our services shall be needed or required.

LIMITATIONS

Since our investigation is based upon review of background data, the site materials observed, selected laboratory testing and engineering analysis, the conclusions and recommendations are professional opinions. Our professional services have been performed using that degree and

skill ordinarily exercised, under similar circumstances, by reputable geotechnical engineers practicing in this or similar localities. These opinions have been derived in accordance with current standards of practice and no other warranty, express or implied, is made.

This report is not intended as a bidding document, and any contractor reviewing this report must draw his own conclusions regarding specific construction techniques to be used on this project.

The scope of services carried out by **ACS Services LLC** does not include an evaluation pertaining to environmental issues. If these services are required by the lender, we would be most pleased to discuss the varying degrees of environmental site assessments.

The materials encountered on the subject site and utilized in our laboratory analysis are believed to be representative of the total area; however, soil and rock materials do vary in character between points of investigation. The recommendations contained in this report are based on the assumption that the soil conditions do not deviate appreciably from those disclosed by the investigation. Should unusual material or conditions be encountered during construction, the soil engineer must be notified so that he may make supplemental recommendations if they should be required.

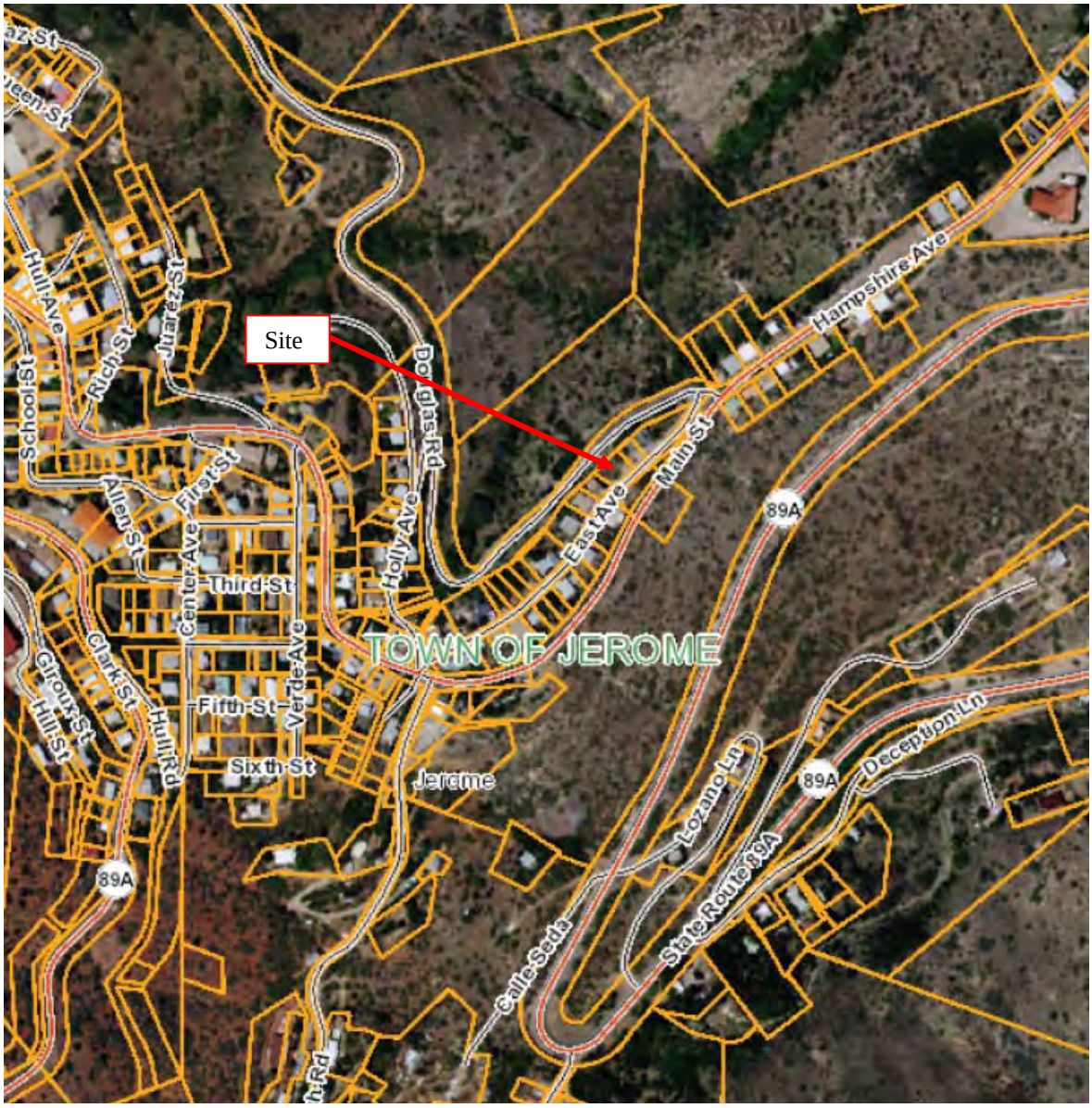
This report is issued with the understanding that it is the responsibility of the owner to see that its provisions are carried out or brought to the attention of those concerned. In the event that any changes of the proposed project are planned, the conclusions and recommendations contained in this report shall be reviewed and the report shall be modified or supplemented as necessary.

November 7, 2017
Project 1701535 – Lerette Residence
776 East Avenue
Jerome, Arizona 86331

DEFINITION OF TERMINOLOGY

Allowable Soil Bearing Capacity	The recommended maximum contact stress developed at the interface of the foundation element and the supporting material.
Aggregate Base Course (ABC)	A sand and gravel mixture of specified gradation, used for slab and pavement support.
Backfill	A specified material placed and compacted in a confined area.
Base Course	A layer of specified material placed on a subgrade or subbase.
Base Course Grade	Top of base course.
Bench	A horizontal surface in a sloped deposit.
Caisson	A concrete foundation element cased in a circular excavation, which may have an enlarged base. Sometimes referred to as a cast-in-place pier.
Concrete Slabs-on-Grade	A concrete surface layer cast directly upon a base, subbase, or subgrade.
Controlled Compacted Fill	Engineered Fill. Specific material placed and compacted to specified density and/or moisture conditions under observation of a representative of a soil engineer.
Differential Settlement	Unequal settlement between or within foundation elements of a structure.
Existing Fill	Materials deposited through the action of man prior to exploration of the site.
Expansive Potential	The potential of a soil to increase in volume due to the absorption of moisture.
Fill	Materials deposited by the action of man.
Finish Grade	The final grade created as a part of the project.
Heave	Upward movement due to expansion or frost action.
Native Grade	The naturally occurring ground surface.
Native Soil	Naturally occurring on-site soil.
Overexcavate	Lateral extent of subexcavation.
Rock	A natural aggregate of mineral grains connected by strong and permanent cohesive forces. Usually requires drilling, wedging, blasting, or other methods of extraordinary force for excavation.
Scarify	To mechanically loosen soil or break down the existing soil structure.
Settlement	Downward movement of the soil mass and structure due to vertical loading.
Soil	Any unconsolidated material composed of disintegrated vegetable or mineral matter, which can be separated by gentle mechanical means, such as agitation in water.
Strip	To remove from present location.
Subbase	A layer of specified material between the subgrade and base course.
Subexcavate	Vertical zone of soil removal and recompaction required for adequate foundation or slab support
Subgrade	Prepared native soil surface.

APPENDIX A



NORTH
N.T.S.

PROJECT NUMBER: 1701535

FIGURE 1

ACS SERVICES LLC
2235 W BROADWAY RD
MESA, ARIZONA 85202
(480) 968-0190
(480) 968-0156 FAX
WWW.ACSSERVICESLLC.COM

VICINITY MAP

Lerette Residence
776 East Avenue
Jerome, AZ 86331

NORTH
N.T.S.

PROJECT NUMBER: 1701535

FIGURE 2

ACS SERVICES LLC

2235 W BROADWAY RD
MESA, ARIZONA 85202
(480) 968-0190
(480) 968-0156 FAX
WWW.ACSSERVICESLLC.COM

SITE PLAN & APPROXIMATE BORING LOCATIONS

Lerette Residence
776 East Avenue
Jerome, AZ 86331

APPENDIX B

ACS Services LLC

BORING B-1

For: Eric Lerette
Project: Lerette Residence
Location: 776 East Avenue
Jerome, AZ

Date: 9/20/2017 **Project No.** 1701535
Type of Boring: Hand auger and sample
Field Engineer: Yutong Lu, EIT
Location: See Site Plan

Depth (Feet)	Blows per 6"	Moisture %	Dry Density (PCF)	USCS Soil Class	Remarks: Hand drive SPT sampler at 1.0 feet, only 2 inches Description of Subsurface Conditions
1	50/2"			GC	White clayey sandy GRAVEL, very dense, slightly damp, PI of 11 (strongly cemented, like caliche)
2					Terminated boring at 1.5 feet due to sampler refusal
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					

ACS Services LLC

BORING B-2

For: Eric Lerette
Project: Lerette Residence
Location: 776 East Avenue
Jerome, AZ

Date: 9/20/2017 **Project No.** 1701535
Type of Boring: Hand auger and sample
Field Engineer: Yutong Lu, EIT
Location: See Site Plan

Remarks: Hand drive SPT sampler from 1.0 to 2.5 feet

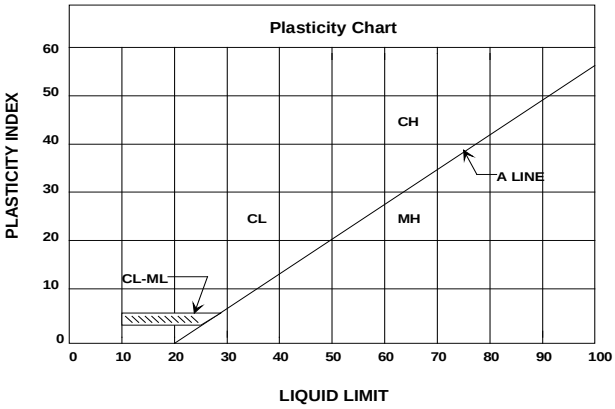
Depth (Feet)	Blows per 6"	Moisture %	Dry Density (PCF)	USCS Soil Class	Description of Subsurface Conditions
1		2.8		SC	Black clayey gravelly SAND, medium dense, slightly damp, PI of 11
2	15	5.1		SC-SM	Black clayey silty gravelly SAND, medium dense, slightly damp, low PI
	15				
3	25				Terminated boring at 2.5 feet
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					

November 7, 2017
Project 1701535 – Lerette Residence
776 East Avenue
Jerome, Arizona 86331

LEGEND

Major Divisions				Group Symbol	Typical Names
Coarse-Grained Soils (Less than 50% passes No. 200 sieve)	Gravels (50% or less or coarse fraction passes No. 4 sieve)	Clean Gravels (Less than 5% passes No. 200 sieve)		GW	Well graded gravels, gravel-sand mixtures, or sand-gravel-cobble mixtures.
				GP	Poorly graded gravels, gravel-sand mixtures, or sand-gravel-cobble mixtures.
		Gravels with Fines (More than 12% passes No. 200 sieve)	Limits plot below "A" line & hatched zone on Plasticity Chart.	GM	Silty gravels, gravel-sand-silt mixtures.
			Limits plots above "A" line & hatched zone on Plasticity Chart.	GC	Clayey gravels, gravel-sand-clay mixtures.
	Sands (More than 50% of coarse fraction passes No. 4 sieve)	Clean Sands (Less than 5% passes No. 200 sieve)		SW	Well graded sands, gravelly sands.
				SP	Poorly graded sands, gravelly sands.
		Sands with Fines (More than 12% passes No. 200 sieve)	Limits plots below "A" line & hatched zone on Plasticity Chart.	SM	Silty sands, sand-silt mixtures.
			Limits plots above "A" line & hatched zone on Plasticity Chart.	SC	Clayey sands, sand-clay mixtures.
Fine-Grained Soils (50% or more passes No. 200 sieve)	Silts-Plot below "A" line & hatched zone on Plasticity Chart	Silts of Low Plasticity (Liquid Limit Less Than 50)		ML	Inorganic silts, clayey silts with slight plasticity.
		Silts of High Plasticity (Liquid Limit More Than 50)		MH	Inorganic silts, micaceous or diatomaceous silty soils, elastic silts.
	Clays-Plot above "A" line & hatched zone on Plasticity Chart	Clays of Low Plasticity (Liquid Limit Less Than 50)		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
		Clays of High Plasticity (Liquid Limit More Than 50)		CH	Inorganic clays of high plasticity, fat clays, sandy clays of high plasticity.

Note: Coarse grained soils with between 5% & 12% passing the No. 200 sieve and fine grained soils with limits plotting in the hatched zone on the Plasticity Chart to have double symbol.



DEFINITIONS OF SOIL FRACTIONS

SOIL COMPONENT	PARTICLE SIZE RANGE
Cobbles	Above 3 in.
Gravel	3 in. to No. 4 sieve
Coarse gravel	3 in. to 3/4 in.
Fine gravel	3/4 in. to No. 4 sieve
Sand	No. 4 to No. 200
Coarse	No. 4 to No. 10
Medium	No. 10 to No. 40
Fine	No. 40 to No. 200
Fines (silt or clay)	Below No. 200 sieve

November 7, 2017
Project 1701535 – Lerette Residence
776 East Avenue
Jerome, Arizona 86331

TEST DRILLING EQUIPMENT & PROCEDURES

Drilling Equipment

ACS SERVICES LLC uses a CME-45 drill-rig capable of auger drilling to depths of 50 feet in southwestern soils. The drill is truck-mounted for rapid, low cost mobilization to the jobsite and on the jobsite. Drilling through soil or softer rock is performed with 6.625 inch O.D. hollow-stem auger. Carbide insert teeth are normally used on the auger bits so they can often penetrate rock or very strongly cemented soils that require blasting or very heavy equipment for excavation. The operation of well-maintained equipment by an experienced crew allows **ACS SERVICES LLC** to complete drilling jobs to a depth of 50 feet with minimum downtime and maximum efficiency.

Sampling Procedures

Dynamically driven tube samples are usually obtained at selected intervals in the borings by the ASTM D1586 procedure. In many cases, 2 inch O.D., $1^3/_8$-inch I.D. samplers are used to obtain the standard penetration resistance. Undisturbed" samples of firmer soils are often obtained with 3 inch O.D. samplers lined with 2.42 inch I.D. brass rings. The driving energy is generally recorded as a number of blows of a 140-pound hammer, utilizing a 30-inch free fall drop, per six inches of penetration. However, in stratified soils, driving resistance is sometimes recorded in 2 or 3-inch increments so that soil changes and the presence of scattered gravel or cemented layers can be readily detected and the realistic penetration values obtained for consideration in design. These values are expressed in blows per six inches on the logs. Undisturbed sampling of softer soils is sometimes performed with thin-walled Shelby tubes (ASTM D1587). Tube samples are labeled and placed in watertight containers to maintain field moisture contents for testing from auger cuttings.

Continuous Penetration Tests

Continuous penetration tests are performed by driving a 2-inch O.D. bullnose penetrometer adjacent to or in the bottom of test borings. The penetrometer is attached to $1^5/_8$-inch O.D. drill rods to provide clearance and thus minimize side friction so that penetration values are as nearly as possible a measure of end resistance. Penetration values are recorded as the number of blows of a 140 pound hammer, utilizing a 30 inch drop required to advance the penetrometer in six-inch increments or less.

Boring Records

Drilling operations are directed by our field engineer or geologist who examines soil recovery and prepares boring logs. Soils are visually classified in accordance with the Unified Soil Classification System (ASTM D2487) with appropriate group symbols being shown on the logs.

APPENDIX C

ACS Services LLC

Laboratory Soil Test Results

ACS PROJECT #	1701535	Material Type:	Native
ACS Lab #	17-3768-1	Supplier:	
Client:	Eric Lerette	Sample Date:	9/20/2017
Project Name:	Lerette Residence	Sampled By:	Yutong Lu, EIT
Project Address:	776 East Avenue	Test Date:	10/10/2017
Project City	Jerome, AZ	Tested By:	Yutong Lu, EIT
Sample Location:	B - 1 @ 0.0' - 1.0'	Reviewed By:	Gene Hansen

Sieve Analysis (ASTM C-139 / AASHTO T-27)

Sieve Size	% Retained	% Passed	Specs
6"	0	100	
3"	0	100	
2 1/2"	0	100	
2"	5	95	
1 1/2"	2	93	
1"	7	86	
3/4"	2	84	
1/2"	5	79	
3/8"	3	76	
1/4"	4	72	
#4	3	68	
#8	5	63	
#10	1	62	
#16	4	58	
#30	5	53	
#40	3	50	
#50	3	47	
#100	4	43	
#200	4	38.9	

Liquid Limit (AASHTO T-89)	36
Plastic Limit (AASHTO T-90)	25
Plasticity Index (AASHTO T-90)	11
Moisture Content (AASHTO T-255)	3.4
Fractured Faces (ARIZ 212)	
Soluble Salts (ARIZ 237)	
USCS Soil Classification	GC

Nathan Sorensen
Project Manager

Nathan Sorensen
Signature

ACS Services LLC

Laboratory Soil Test Results

ACS PROJECT #	1701535	Material Type:	Native
ACS Lab #	17-3768-2	Supplier:	
Client:	Eric Lerette	Sample Date:	9/20/2017
Project Name:	Lerette Residence	Sampled By:	Yutong Lu, EIT
Project Address:	776 East Avenue	Test Date:	10/10/2017
Project City	Jerome, AZ	Tested By:	Yutong Lu, EIT
Sample Location:	B - 2 @ 0.0' - 1.0'	Reviewed By:	Gene Hansen

Sieve Analysis (ASTM C-139 / AASHTO T-27)

Sieve Size	% Retained	% Passed	Specs
6"	0	100	
3"	0	100	
2 1/2"	0	100	
2"	10	90	
1 1/2"	0	90	
1"	4	85	
3/4"	4	82	
1/2"	6	76	
3/8"	3	72	
1/4"	5	67	
#4	4	63	
#8	8	56	
#10	2	54	
#16	6	48	
#30	7	41	
#40	3	38	
#50	3	35	
#100	5	29	
#200	5	24.4	

Liquid Limit (AASHTO T-89)	45
Plastic Limit (AASHTO T-90)	34
Plasticity Index (AASHTO T-90)	11
Moisture Content (AASHTO T-255)	2.8
Fractured Faces (ARIZ 212)	
Soluble Salts (ARIZ 237)	
USCS Soil Classification	SM

Nathan Sorensen
Project Manager

Nathan Sorensen
Signature

ACS Services LLC

Laboratory Soil Test Results

ACS PROJECT #	1701535	Material Type:	Native
ACS Lab #	17-3768-3	Supplier:	
Client:	Eric Lerette	Sample Date:	9/20/2017
Project Name:	Lerette Residence	Sampled By:	Yutong Lu, EIT
Project Address:	776 East Avenue	Test Date:	10/10/2017
Project City	Jerome, AZ	Tested By:	Yutong Lu, EIT
Sample Location:	B - 1 and B - 2 @ 1.0' - 2.5'	Reviewed By:	Gene Hansen

Sieve Analysis (ASTM C-139 / AASHTO T-27)

Sieve Size	% Retained	% Passed	Specs
6"	0	100	
3"	0	100	
2 1/2"	0	100	
2"	0	100	
1 1/2"	0	100	
1"	9	91	
3/4"	8	83	
1/2"	9	74	
3/8"	3	70	
1/4"	5	66	
#4	3	62	
#8	7	55	
#10	2	53	
#16	5	49	
#30	6	43	
#40	3	40	
#50	3	37	
#100	5	31	
#200	7	23.9	

Liquid Limit (AASHTO T-89)	
Plastic Limit (AASHTO T-90)	
Plasticity Index (AASHTO T-90)	
Moisture Content (AASHTO T-255)	5.1
Fractured Faces (ARIZ 212)	
Soluble Salts (ARIZ 237)	
USCS Soil Classification	SC-SM

Nathan Sorensen
Project Manager

Nathan Sorensen
Signature

ACS Services LLC

Maximum Dry Density & Optimum Moisture

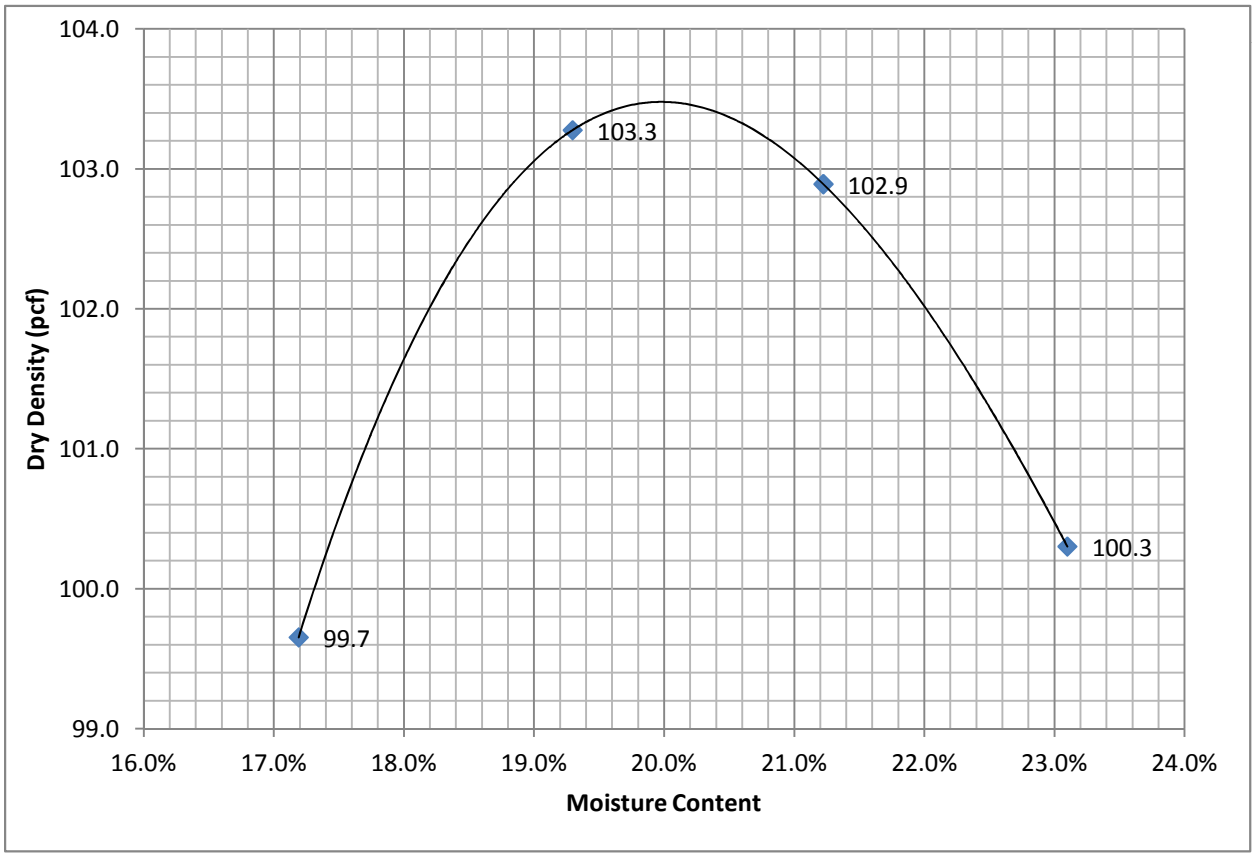
☑ AASHTO T-99 / ☐ AASHTO T-180

ACS Project #	1701535	Material Type:	Native
ACS Lab #	17-3768-1	Material Supplier:	
Client Name:	Eric Lerette	Sample Date:	9/20/2017
Project Name:	Lerette Residence	Sampled By:	Karl Kalliokoski, EIT
Project Address:	776 East Avenue	Date Tested:	10/5/2017
Project City:	Jerome, AZ	Tested By:	Matthew Eroh
		Reviewed By:	Gene Hansen

Sample Location: B - 1 @ 0.0' - 1.0'

Dry Density	99.7	103.3	102.9	100.3
Moisture Content	17.2%	19.3%	21.2%	23.1%

Uncorrected Dry Density	103.5	Uncorrected Moisture Content	20.0
% Rock	45	% Passing	55
Rock Corrected Dry Density	**124.6**	Rock Corrected Moisture Content	**11.9**



Nathan Sorensen

Project Manager

ACS SERVICES LLC

ENGINEERING DESIGN • MATERIAL TESTING • CONSTRUCTION INSPECTION

**** One Dimensional Swell Test @ 100 psf***

ACS Project No.:	**1701535**		
Lab No.:	17-3768-1	Material Type:	Native
Client:	Eric Lerette	Extraction Date:	9/20/2017
Project Name:	Lerette Residence	Extracted By:	Yutong Lu, EIT
Project Address:	776 East Avenue	Laboratory Test Date:	10/9/2017
Project City:	Jerome, AZ	Laboratory Tested By:	Geoffrey Matthew
Material Source:	B - 1 @ 0.0 - 1.0'	Reviewed By:	Gene Hansen

Standard Proctor Information

Maximum Dry Density	103.5 pcf
Optimum Moisture Content	20.0 %

Ring Mold Information

Diameter of Ring (D)	2.421 inches
Height of Ring (h)	1 inches
Volume of Ring = $(\pi)(r^2)(h)$ = 3.142 $(1.2165)^2$ (0.998)	
Volume of Ring = 4.604 in^3 = 0.002664 ft^3	

Initial Moisture Content of Soil Sample

Weight of Wet Soil Sample	119.0 grams
Weight of Dry Soil Sample	113.4 grams
Moisture % of Soil Sample (w)	4.9 %

Soil Sample's Remolded Density Information

Weight of Ring Mold	46.8 grams
Weight of Soil+Ring Mold	171.3 grams
Weight of Soil+Water+Ring Mold	186.9 grams
Wet Density of Soil Sample = $\frac{\text{Weight of Soil+Water}}{\text{Volume of Ring Mold}}$	
Wet Density of Soil Sample (γ)	115.9 pcf
Dry Density of Soil Sample = $\frac{\gamma}{1 + w}$	
Dry Density of Soil Sample (γ_d)	98.3 pcf
Compaction of Sample	**95%**
Moisture Content of Sample	**18.0%**

Dial Readings During Test

Time	Dial Reading
hours	inches
0 (with seating pressure)	0.000
0 (with load applied)	0.000
30 seconds	0.001
1 minute	0.002
2 minutes	0.004
4 minutes	0.006
8 minutes	0.008
15 minutes	0.011
30 minutes	
1 hour	0.013
2 hours	0.014
4 hours	0.014
8 hours	
15 hours	0.016
24 hours	0.016
Swell =	1.60%

APPENDIX D

September 20, 2017
Project 1701535 – Lerette Residence
776 East Avenue
Jerome, Arizona 86331

Photo 1 – View looking south across the site of the proposed residence.

Photo 2 – View looking north across the site at the area of the main residence. The location of Boring 1 is in the foreground. Note the white very dense and strongly cemented clayey sand gravel soils which are exposed on the surface at this location. These soils were not encountered at the location of Boring 2, but likely exist at a depth greater than 2.5 feet at that location.

Photo 3 – View looking south along the west side of the proposed building area where a small retaining exists. The foundations for the new residence should be at least 5 feet behind this wall.

Photo 4 – View looking upward across the site from the southwest corner. Some foundations from a previous residence have been removed. Note the existing driveway where the car is parked at the northeast corner of the lot. This will be the location of the new driveway.

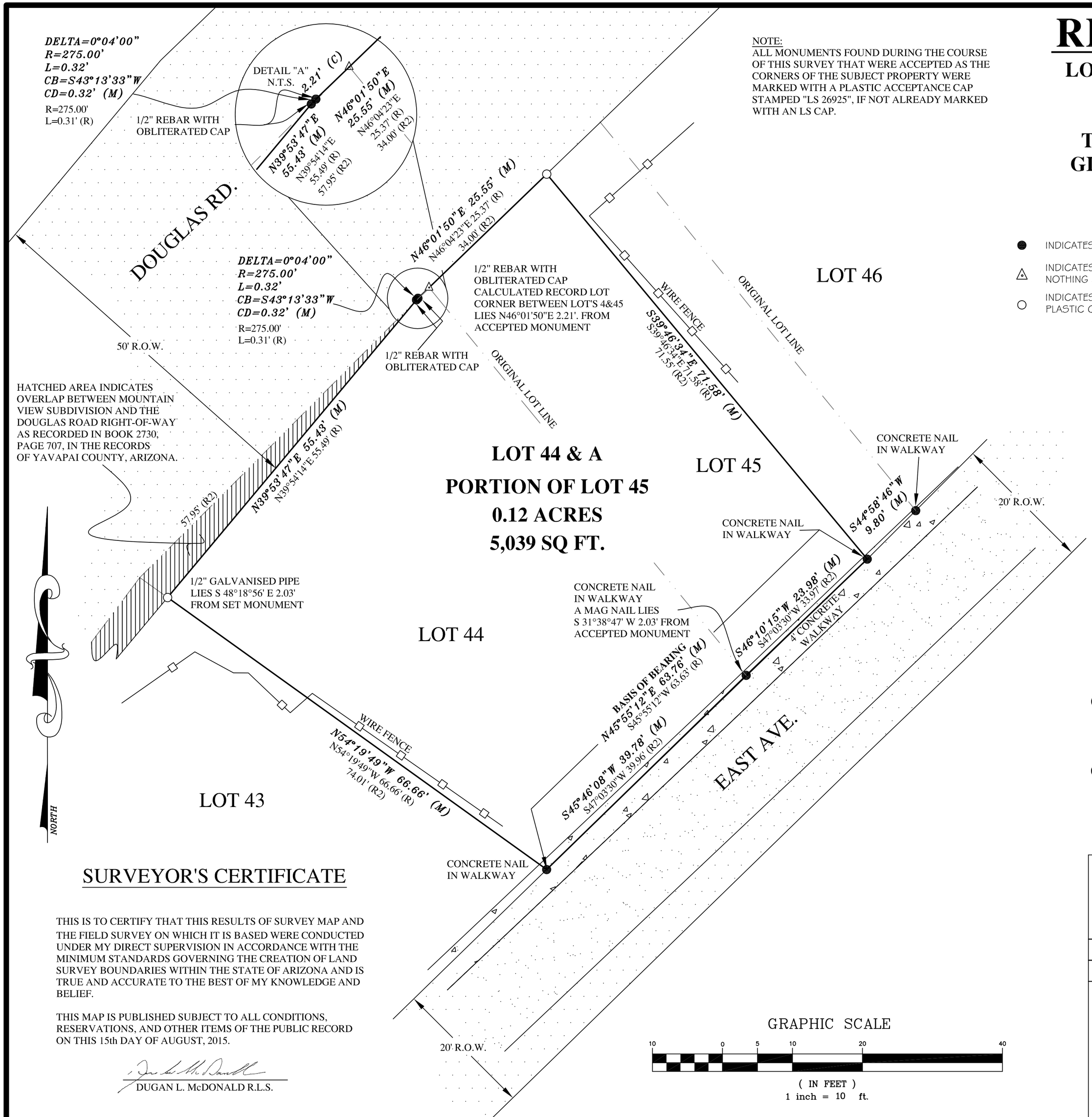
Photo 5 – View looking north along a retaining wall below an existing driveway on the north side of the area for the proposed residence.

Photo 6 – View of existing retaining wall that is being undermined at the southeast corner of the lot, which is to remain. A new retaining wall will be required in front to provide support to East Avenue above the retaining wall.

Photo 7 – View looking at a roadway cut below the site of the proposed residence, showing the very dense and strongly cemented clayey sandy gravel that exists below the site. This material was encountered in Boring 1 near the surface, but was not encountered at the location of Boring 2. Foundations should bear on this material.

RESULTS OF SURVEY

LOT 44 & A PORTION OF LOT 45 BLOCK 5 MOUNTAIN VIEW SUBDIVISION LOCATED IN SECTION 23, TOWNSHIP 16 NORTH, RANGE 2 EAST, GILA & SALT RIVER BASE & MERIDIAN, YAVAPAI COUNTY, ARIZONA



NOTE:
ALL MONUMENTS FOUND DURING THE COURSE OF THIS SURVEY THAT WERE ACCEPTED AS THE CORNERS OF THE SUBJECT PROPERTY WERE MARKED WITH A PLASTIC ACCEPTANCE CAP STAMPED "LS 26925", IF NOT ALREADY MARKED WITH AN LS CAP.

- ● INDICATES FOUND MONUMENT AS NOTED
- △ INDICATES RECORD LOCATION, NOTHING SET OR FOUND
- ○ INDICATES SET 1/2" REBAR WITH PLASTIC CAP STAMPED "LS 26925"

- (CB) INDICATES CHORD BEARING
- (CD) INDICATES CHORD DISTANCE
- (C) INDICATES CALCULATED DIMENSION
- (M) INDICATES MEASURED FIELD DIMENSION

SURVEYOR'S NOTES

1. THIS SURVEY WAS PERFORMED BY MY ASSIGNS IN AUGUST OF THE YEAR 2015. THE CREW WAS COMPRISED OF JESSE SHARP & RITCHIE WATSON. THIS RESULTS OF SURVEY WAS PREPARED BY ME OR MY ASSIGNS BASED UPON THE INFORMATION OBTAINED IN THAT SURVEY.
2. THE PARCEL WAS NOT OCCUPIED AT THE TIME OF SURVEY.
3. ALL EASEMENTS MAY NOT BE SHOWN ON THIS DRAWING.
4. THE WORD CERTIFY AS SHOWN OR USED HEREON MEANS AN EXPRESSION OR PROFESSIONAL OPINION REGARDING THE FACTS OF THE SURVEY AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE EXPRESSED OR IMPLIED.
5. DECLARATION IS MADE TO THE ORIGINAL PURCHASER OF THIS SURVEY. IT IS NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.
6. THE INTENT OF THIS SURVEY IS TO VERIFY THE BOUNDARIES OF THE REFERENCED PARCEL.
7. THE PROPERTY AS DEPICTED HEREON REPORT THE CONDITION IN WHICH IT EXIST IN THE FIELD. VARIOUS MONUMENTS WERE FOUND AS SHOWN.
8. THE FOLLOWING DOCUMENTS WERE USED IN THE PERFORMANCE OF THIS SURVEY. REFERENCE CAN BE MADE TO THESE DOCUMENTS FOR RECORD INFORMATION.

(R) INDICATES RECORD DIMENSION FOUND ON THAT DEED, RECORDED IN BOOK 4260, PAGE 374, IN THE RECORDS OF YAVAPAI COUNTY, ARIZONA

(R2) INDICATES RECORD DIMENSION FOUND ON THAT PLAT OF "MOUNTAIN VIEW SUBDIVISION", RECORDED IN BOOK 2, PAGE 65, IN THE RECORDS OF YAVAPAI COUNTY, ARIZONA

SURVEYOR'S CERTIFICATE

THIS IS TO CERTIFY THAT THIS RESULTS OF SURVEY MAP AND THE FIELD SURVEY ON WHICH IT IS BASED WERE CONDUCTED UNDER MY DIRECT SUPERVISION IN ACCORDANCE WITH THE MINIMUM STANDARDS GOVERNING THE CREATION OF LAND SURVEY BOUNDARIES WITHIN THE STATE OF ARIZONA AND IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

THIS MAP IS PUBLISHED SUBJECT TO ALL CONDITIONS, RESERVATIONS, AND OTHER ITEMS OF THE PUBLIC RECORD ON THIS 15th DAY OF AUGUST, 2015.

DUGAN L. McDONALD R.L.S.

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

JOB # 15-0805LS	SHEET 1 OF 1
DATE: 08/15/2015	DRAWN BY: J. S.

Registered Land Surveyor
CERTIFICATE NO.
26925
DUGAN L.
McDONALD
DATE SIGNED 08/17/2015
ARIZONA, U.S.A.

EXPIRES 3-31-2017

HERITAGE
LAND SURVEYING & MAPPING INC.
DUGAN L. McDONALD R.L.S.
PO BOX 3270
CAMP VERDE, AZ 86322
928-567-9170

401-07-099B

TOWN OF JEROME

Post Office Box 335, Jerome, Arizona 86331 (928) 634-7943

P&Z Resolution No. 2022-02

Approving preliminary and final site plan for a new single-family home at 776 East Avenue

Whereas the Town of Jerome has received an application for Preliminary and Final Site Plan Review from Cynthia Barber and Eric Lerette to construct a new home at 776 East Avenue (APN 401-07-099B); and

Whereas the property is in the R1-5 zoning district;

Whereas the proposed project consists of an approximately 1,664-square-foot single-family home;

Whereas a notice was posted at the site on December 23, 2021, in accordance with Jerome Zoning Ordinance Section 303.1C;

Whereas the Design Review Board reviewed and approved this application at their January 3, 2022 meeting;

Whereas the Planning and Zoning Commission finds that the site plan does not adversely affect the public health, safety, and general welfare of the Town of Jerome, and so protects the environment and the town's historical character.

Now, therefore, be it resolved by the Planning and Zoning Commission of the Town of Jerome, Arizona, that the Preliminary and Final Site Plan submitted for an approximately 1,664-square-foot single-family home at 776 East Avenue is hereby approved, subject to the following conditions:

1. **Parking –** A minimum of two (2) parking spaces shall be provided for the proposed use. The parking spaces are required to be provided prior to final occupancy.
2. **Height –** The building height shall not exceed 25 feet above existing average grade.
3. **Setbacks –** A front setback of five (5) feet shall be provided on East Avenue, which is comparable to the setbacks of buildings nearby, and permitted per the Zoning Ordinance: *Section 505.D.1) the applicant can reduce the setback to that of any building within one hundred feet of the lot*; a minimum five (5)-foot setback shall be provided on the side lots, and a minimum 20-foot setback shall be provided for the rear yard.
4. **Construction Hours and Noise –** Construction and noise shall be limited between 8:00 pm and 7:00 am in accordance with Section 10-1-13.C. of the Jerome Town Code.
5. **Engineering Reports –** Prior to issuance of a building permit, the applicant shall provide the necessary engineering reports demonstrating the site is suitable for the improvements proposed. This may include geotechnical, structural, and/or soils engineering reports as determined by the Planning & Zoning Commission.
6. **Water Extension –** Prior to occupancy, a water connection shall be provided to 776 East Avenue to serve the proposed improvements.
7. **Sewer Extension –** Prior to occupancy, a sewer line shall be extended to 776 East Avenue to serve the proposed improvements.
8. **Other Improvements/Changes –** Any subsequent modifications or changes to the plans, including but not limited to changes in setbacks, square footage, fences, siding, roofing, height, etc., will require additional review by the Planning and Zoning Commission and/or the Design Review Board.

9. **Drainage –** The building permit submittal shall indicate both existing and proposed drainage. This includes, but is not limited to, how drainage will be collected (such as from roof drains) and directed to protect neighboring properties. This may include splash blocks, swales, detention basins, and gravel catchments to help dissipate hydraulic energy. Roof drains shall not be directed over any public sidewalks.
10. **Grading –** Grading shall comply with the requirements of Section 303.3 of the Zoning Ordinance. Grading plans shall include, but not be limited to, adequate dust control measures, erosion control/drainage, and fencing to protect sensitive features (such as trees to be saved).
11. **Home Occupations –** Any proposed use of the property for a Home Occupation shall be incidental to the primary use of the property and in compliance with Section 502.M. of the Zoning Ordinance.
12. **Building Permit Submittal and Code Requirements –** The applicant shall consult with the building inspector and submit detailed drawings for building permits that clearly demonstrate compliance with all code requirements, including, but not limited to, coverage, height, parking, and setbacks (Section 505).
13. **Conditions on Plans –** The building permit plan submittal shall include a sheet with a list of the approved conditions.
14. **Expiration of Approval –** This approval shall become null and void if a building permit is not issued within six (6) months of final Planning and Zoning and Design Review Board Approval of this application. If necessary, the applicants may request an extension by the approval body if the extension is submitted prior to approval expiration.

ADOPTED AND APPROVED by a majority vote of the Planning and Zoning Commission on the 19th day of January 2022.

ATTEST: APPROVED:

_____ _____

Rosa Cays, Deputy Town Clerk Chairman Lance Schall