# Vicente Residence

### **American Ranch Lot 29**

# **Elevation**



# Roject Information Steet Index

W. Alan Kenson & Assoc., P.C.

P.O. Box 11593

Prescott, AZ

100-18-034

Residential

Residential Group R

1st Floor Garage:

Basement Livable

Total Livable:

Covered Patio Back:

2018 International Residential Code

2018 International Plumbing Code

2018 International Fuel Gas Code 2018 International Electrical Code

2017 National Electrical Code

2018 International Mechanical Code

Covered Porch Front Entry: 577 S.F.

2006 International Energy Conservation Code

2018 International Fire Code

PAD

Prescott, AZ 86304

9970 N. Clear Fork Rd.

#### **CLIENT:** JP and Shawn Vicente

PREPARED BY

PARCEL NUMBER:

**ADDRESS**:

**ZONING:** 

SITE USE:

**OCCUPANCY** 

CONST. TYPE

**CURRENT CODE:** 

**AREA SUMMARY:** 

Contact: JP Vicente

Contact: Alan Kenson

WAKA@cableone.net

PH: 928-443-5812

#### **ARCHITECTURAL** PH: 928-925-9395

Cover Sheet / Project Information

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Building Sections

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Exterior Elevations

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P1.1 Basement Plumbing Plan

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E1.0 First Floor Electrical / Reflected

Basement Electrical / Reflected

### Cinity Map Caphic Standards EXISTING DOOR





3,833 S.F.

# Deferred Submittal

FIRE SPRINKLER SYSTEM SHALL BE INSTALLED. REFER TO FIRE SPRINKLER PLANS UNDER SEPARATE COVER

## PROPOSED DOOR DETAIL DESIGNATOR BUILDING SECTION DESIGNATOR GRID LINE DESIGNATOR **REVISION DESIGNATOR ELEVATION DESIGNATOR** DESCRIPTIVE NOTE DESIGNATOR ROOM NUMBER / FINISH DESIGNATOR DOOR NUMBER DESIGNATOR DOOR TYPE DESIGNATOR

### **Architect:**

WINDOW TYPE DESIGNATOR

WALL TYPE DESIGNATOR

## W. Alan Kenson & Associates, P.C.

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ARCHITECTURE & PLANNING



L.O. CHECKED BY W.A.K.

September 17th, 2021

**1**\ 11-18-2021

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# Vicente Residence

### **American Ranch**

# General Notes

- 1. A COPY OF THE YAVAPAI COUNTY APPROVED CONSTRUCTION DRAWINGS SHALL BE KEPT AT THE JOB SITE.
- 2. EXTERIOR WALLS: CONSTRUCTION, PROJECTIONS, OPENINGS AND PENETRATIONS OF EXTERIOR WALLS OF DWELLINGS AND ACCESSORY BUILDINGS SHALL COMPLY WITH IRC 2018TABLE 302.1.
- CEMENT. FIBER-CEMENT AND GLASS MAT GYPSUM BACKERS SHALL BE USED AS BACKERS FOR WALL TILE IN TUB AND SHOWER AREAS AND WALL PANELS IN SHOWER AREAS. SUCH WALL SURFACES SHALL EXTEND TO A HEIGHT OF NOT LESS THAN 6 FEET ABOVE THE FLOOR.
- 4. EVERY SLEEPING ROOM AND BASEMENT WITH HABITABLE SPACE SHALL HAVE AT LEAST ONE WINDOW WITH A NET CLEAR OPENING OF 5.7 SQUARE FEET (MIN. 5 SQUARE FEET NET CLEAR OPENING AT GRADE FLOOR), MINIMUM OPENING WIDTH OF 20" MINIMUM OPENING HEIGHT OF 24" AND THE FINISHED SILL HEIGHT SHALL NOT BE MORE THAN 44" ABOVE THE FLOOR, OR PROVIDE EXTERIOR DOOR FOR EMERGENCY EGRESS.
- 5. WINDOWS SHALL BE FLASHED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 6. GLAZING IN HAZARDOUS LOCATIONS SHALL COMPLY WITH IRC 308.
- 7. ALL INTERIOR AND EXTERIOR GLAZING IN BATHROOMS MUST BE SAFETY GLAZING WHEN THE BOTTOM EDGE IS LESS THAN FIFTY-SIX INCHES ABOVE THE FLOOR LEVEL. (BATHROOM SHALL BE DEFINED AS A ROOM PROVIDED WITH A TUB OR SHOWER.)
- CEILING INSULATION: R-38 CLOSED CELL SPRAY FOAM INSULATION AT TOP CHORD OF TRUSSES. MARKERS SHALL BE AFFIXED TO THE TRUSSES OR JOISTS AND MARKED WITH THE MINIMUM INSTALLED THICKNESS BY ONE (1) INCH HIGH NUMBERS. A MINIMUM OF ONE (1) MARKER SHALL BE INSTALLED FOR EVERY 300 SQUARE FEET OF AREA WITH NUMBERS TO FACE THE ATTIC ACCESS OPENING.
- 9. WOOD FRAMED WALLS: MINIMUM R-19 UNFACED BATT INSULATION.

- 10. AIR LEAKAGE THE CODE ALLOWS THE USE OF AIRFLOW RETARDERS (HOUSE WRAPS) OR OTHER SOLID MATERIALS AS ACCEPTABLE METHODS TO MEET THIS REQUIREMENT. TO BE EFFECTIVE, THE BUILDING THERMAL SEAL MUST BE:
- IMPERMEABLE TO AIR FLOW.
- CONTINUOUS OVER THE ENTIRE BUILDING ENVELOPE.
- ABLE TO WITHSTAND THE FORCES THAT MAY ACT ON IT DURING AND AFTER
- DURABLE OVER THE EXPECTED LIFETIME OF THE BUILDING. ALL SEAMS AND EDGES MUST BE SEALED/TAPED PER MANUFACTURER'S
- 11. BUILDING THERMAL ENVELOPE THE SEALING METHODS BETWEEN DISSIMILAR MATERIALS SHALL ALLOW FOR DIFFERENTIAL EXPANSION AND CONTRACTION. THE FOLLOWING SHALL BE CAULKED, GASKETED, WEATHER-STRIPPED OR OTHERWISE SEALED WITH AN AIR BARRIER MATERIAL, SUITABLE FILM OR SOLID MATERIAL:
- ALL JOINTS, SEAMS AND PENETRATIONS.
- SITE BUILT WINDOWS, DOORS AND SKYLIGHTS.
- OPENINGS BETWEEN WINDOW AND DOOR ASSEMBLIES AND THEIR RESPECTIVE JAMBS AND FRAMING.
- UTILITY PENETRATIONS.

SPECIFICATIONS.

- DROPPED CEILINGS OR CHASES ADJACENT TO THE THERMAL ENVELOPE.
- WALLS AND CEILINGS SEPARATING A GARAGE FROM CONDITIONED SPACES.
- BEHIND TUBS AND SHOWERS ON EXTERIOR WALLS.
- COMMON WALLS BETWEEN DWELLING UNITS.
- OTHER SOURCES OF INFILTRATION.
- 12. FENESTRATION AIR LEAKAGE WINDOW, SKYLIGHT AND SLIDING GLASS DOORS SHALL HAVE AN AIR INFILTRATION RATE OF NO MORE THAN 0.3 CFM PER SQUARE FOOT, AND SWINGING DOORS NO MORE THAN 0.5 CFM. SPECIFICATION SHALL BE LISTED ON THE MANUFACTURER LABEL. ALL WINDOWS AND EXTERIOR DOORS COMPRISING THE BUILDINGS THERMAL ENVELOPE, SHALL HAVE A FENESTRATION U-FACTOR OF NOT MORE THAN .40.

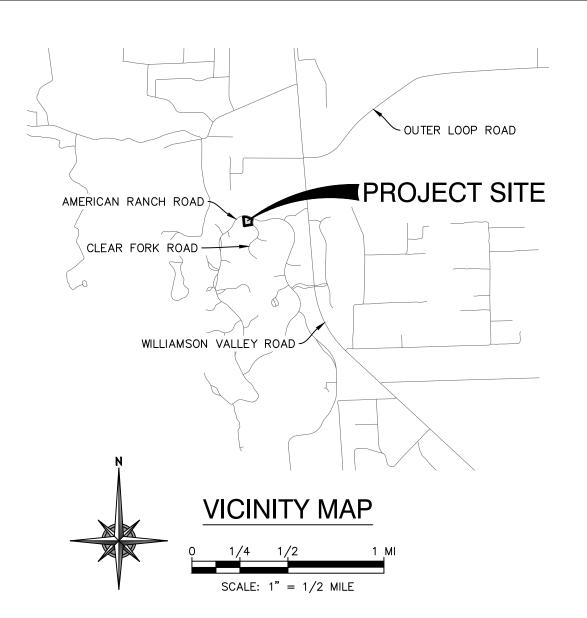
- 13. RECESSED LIGHTING RECESSED LUMINAIRES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE SEALED TO LIMIT AIR LEAKAGE BETWEEN CONDITIONED AND UNCONDITIONED SPACES BY BEING:
- IC-RATED AND LABELED WITH ENCLOSURES THAT ARE SEALED OR GASKETED TO PREVENT AIR LEAKAGE TO THE CEILING CAVITY OR UNCONDITIONED SPACE
- IC-RATED AND LABELED AS MEETING ASTM E283
- LOCATED INSIDE AIRTIGHT SEALED BOX WITH CLEARANCES OF AT LEAST 0.5 INCH FROM COMBUSTIBLE MATERIAL AND 3 INCHES FROM INSULATION.
- 14. ALL CIRCULATING SERVICE HOT WATER PIPING SHALL BE INSULATED TO AT LEAST R-2. ALL NEW RESIDENCES EXCEEDING 1,800 SQUARE FEET WITH TWO OR MORE BATHROOMS SHALL HAVE A CIRCULATING HOT WATER SYSTEM. CIRCULATING HOT WATER SYSTEMS SHALL INCLUDE AN AUTOMATIC OR READILY ACCESSIBLE MANUAL SWITCH THAT CAN TURN OFF THE HOT WATER CIRCULATING PUMP WHEN THE SYSTEM IS NOT IN USE. THERMAL SIPHONING SYSTEMS SHALL HAVE A VALVE TO REDUCE FLOW. ALTERNATE SYSTEM SHALL BE CONSIDERED.
- 15. A MINIMUM 0.019 INCH, CORROSION RESISTANT WEEP SCREED, WITH MINIMUM VERTICAL ATTACHMENT FLANGE OF 3-1/2 INCHES SHALL BE PROVIDED AT OR BELOW THE FOUNDATION PLATE LINE ON THE EXTERIOR STUD WALL IN ACCORDANCE WITH ASTM C 926. THE WEEP SCREED SHALL BE PLACED A MINIMUM OF 4 INCHES ABOVE THE EARTH OR 2 INCHES ABOVE PAVED AREAS AND SHALL BE OF A TYPE THAT WILL ALLOW TRAPPED WATER TO DRAIN TO THE EXTERIOR OF THE BUILDING. THE WEATHER RESISTANT BARRIER SHALL LAP THE ATTACHMENT FLANGE. THE EXTERIOR LATH SHALL COVER AND TERMINATE ON THE ATTACHMENT FLANGE OF THE WEEP SCREED.
- 16. THE GARAGE SHALL BE SEPARATED FROM THE RESIDENCE AND ITS ATTIC AREA BY NOT LESS THAT 1/2" GPDW APPLIED TO THE GARAGE SIDE.
- 17. A WATER HEATER RELIEF VALVE SHALL EXTEND OUTSIDE THE BUILDING WITH THE END OF PIPE NOT MORE THAN (2) TWO FEET OR LESS THAN (6) SIX INCHES ABOVE THE GROUND AND POINTING DOWNWARD.
- 18. MECHANICAL SYSTEM PIPING CAPABLE OF CARRYING FLUIDS ABOVE 105 F OR BELOW 55 F SHALL BE INSULATED TO A MINIMUM OF R-2.

N. Alan Kenson & Associates. P.O.

REVISIONS

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LEGEND

S45°45'45"W 45.00'

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— — — — SETBACKS

FOUND CAPPED REBAR WITH MARKINGS 35138

MEASURED DATA BASED ON FIELD SURVEY

10' PUE, SLOPE & DRAINAGE EASEMENT

CONSERVATION EASEMENT PER BK 46,

SUBJECT PARCEL LINE

ADJACENT PARCEL LINE

PER BK 46, PG 37 YCOR

EDGE OF PAVEMENT

WATER METER

FIRE HYDRANT

SEWER MANHOLE

ELECTRIC STUB

SEWER STUB

FOUND REBAR / PK WITH WASHER MARKED 53890

### **ESTIMATED EARTHWORK** RAW CUT ≈ 390 CY RAW FILL ≈ 1090 CY NET 550 CY (IMPORT)

### EARTHWORK NOTES

EARTHWORK SHALL FOLLOW RECOMMENDATIONS OF THE GEOTECHNICAL REPORT.

- EXCAVATION FOR SLAB ON GRADE ASSUMED TO BE 8" BELOW FFE.
- EXCAVATION FOR PAVED DRIVEWAY SECTION ASSUMED TO BE 8' BELOW FINAL GRADE.
- EXCAVATION NOT ACCOUNTED FOR FOUNDATION STEM OR
- CONTRACTOR SHALL OBTAIN SEPARATE GRADING PERMIT FOR SURPLUS MATERIAL PLACED OFF-SITE IN CONFORMANCE WITH THE

### **BASIS OF BEARINGS & BENCHMARKS**

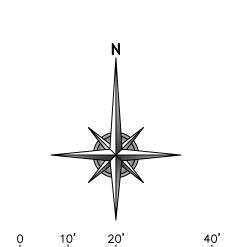
THE BASIS OF BEARING FOR THIS PROJECT IS \$80°41'45"W A DISTANCE OF 221.06 FEET ALONG THE SOUTH LINE OF THE SUBJECT PARCEL BETWEEN A REBAR / PK WITH WASHER MARKED 53890 AT THE SOUTHWEST CORNER AND A 1/2" REBAR WITH CAP MARKED 35138 AT THE SOUTHEAST CORNER.

REFERENCE MARK	NORTHING	EASTING	ELEVATION(8
RM 1	1341198.09	510931.30	5043.80
RM 2	1341233.84	511149.45	5026.88

# VICENTE RESIDENCE

## GRADING & DRAINAGE PLAN

APN: 100-18-034, LOT 29 OF AMERICAN RANCH PHASE 1 LOCATED IN SECTION 14. TOWNSHIP 15 NORTH, RANGE 3 WEST GILA AND SALT RIVER MERIDIAN YAVAPAI COUNTY, ARIZONA



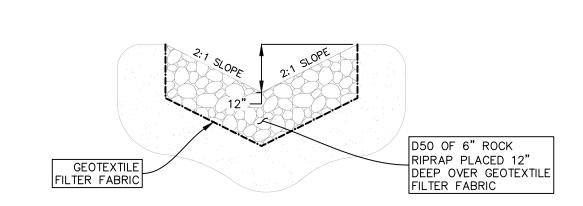
SCALE: 1" = 20'

- 1. THIS MAP DOES NOT REPRESENT THE RESULTS OF A BOUNDARY SURVEY, NO BOUNDARY SURVEY WAS PERFORMED OR IS IMPLIED BY THIS MAP.
- 2. PROPERTY BOUNDARY PER BOOK 46 OF MAPS AND PLATS, PAGE(S) 38, YCOR.
- 3. ALL EASEMENTS OF RECORD MAY NOT BE PLOTTED
- 4. TOPOGRAPHIC SURVEY PROVIDED BY GRANITE BASIN ENGINEERING, INC. SURVEY DATE: FEBRUARY 2020.
- 5. CONTOUR INTERVAL = 1'.
- 6. TOTAL DISTRUBANCE AREA: .44 AC.

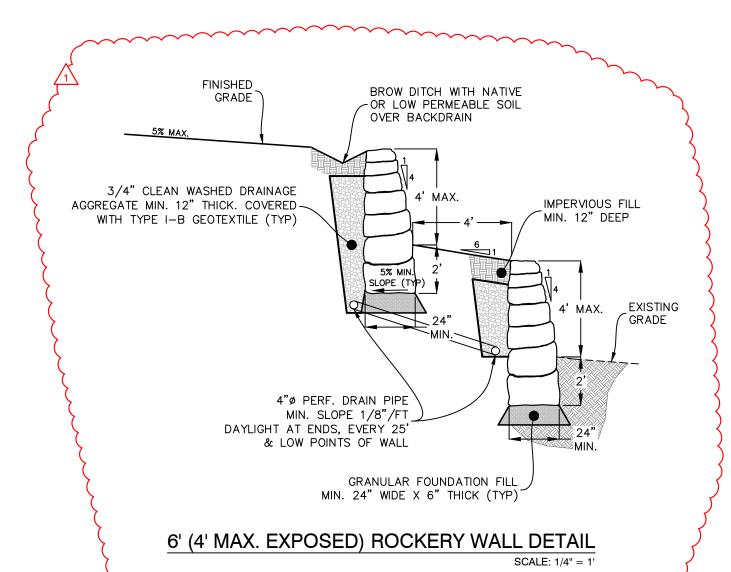
### ROCKERY WALL NOTES:

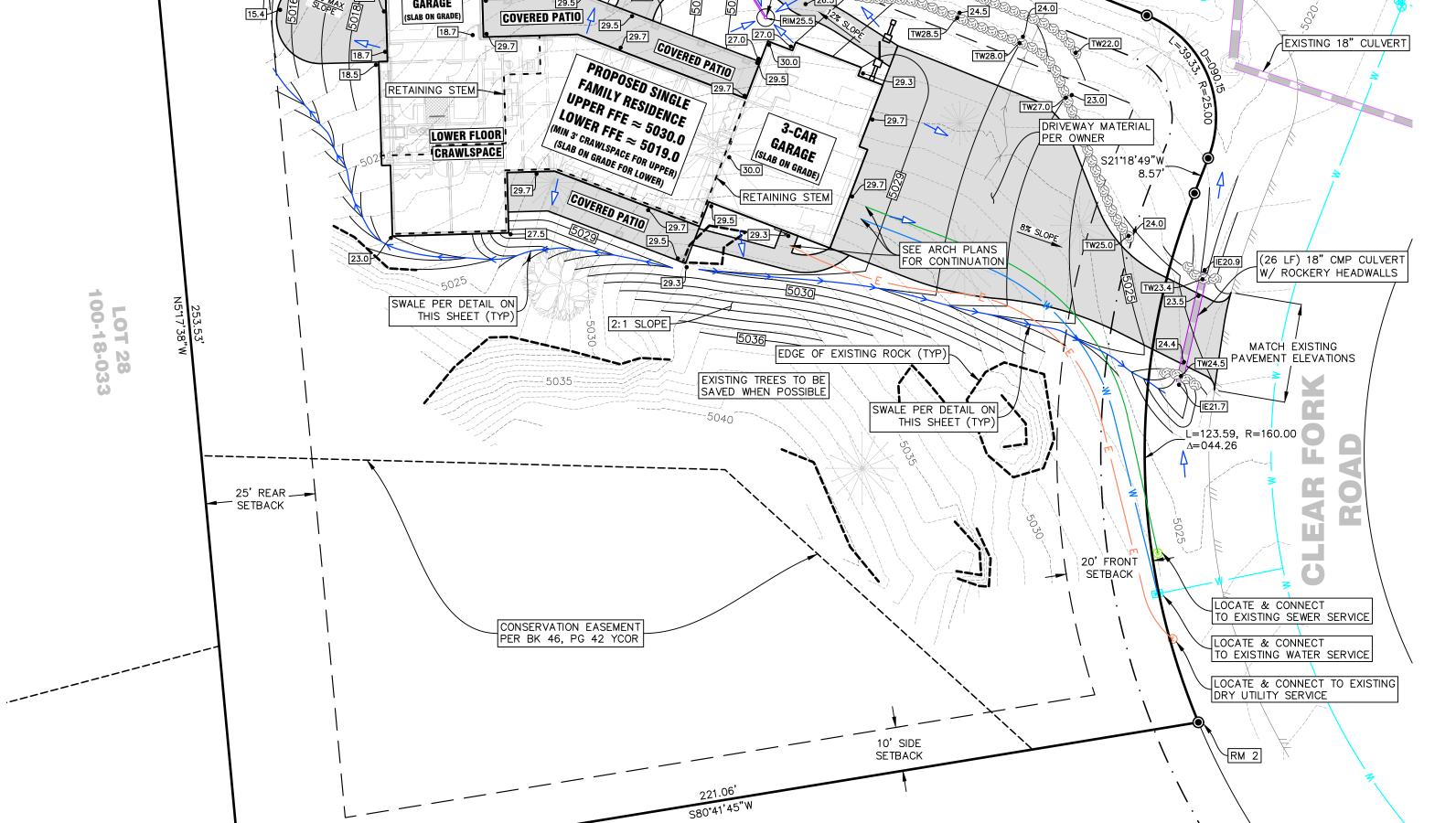
- 1. ROCKERY WIDTH (Rw) 2' MIN. ROCK UNIT WEIGHT 150 PCF
- 2. PLACE ROCKS WITH LONGEST DIMENSION PERPENDICULAR TO ROCKERY FACE WITH ROCK HEIGHT (RH) LESS THAN ROCK WIDTH  $(R_w)$ .
- 3. PLACE ROCKS INDIVIDUALLY WITH SUITABLE EQUIPMENT FOR LIFTING, MANIPULATING AND PLACEMENT. ENSURE ROCKS ARE FIRMLY SET AND SUPPORTED BY UNDERLYING MATERIAL AND ADJACENT ROCKS. REPOSITION OR REPLACE
- 4. ANY LOOSE, SOFT OR OTHERWISE UNSUITABLE FOUNDATION SOIL SHALL BE REMOVED AND REPLACED WITH GRANULAR FOUNDATION MATERIAL COMPACTED TO 95% STANDARD
- 5. STABILITY OF TEMPORARY CUT/FILL SLOPE IS THE CONTRACTOR'S RESPONSIBILITY. TEMPORARY CUT/FILL SLOPE SHOWN FOR EXHIBIT PURPOSES ONLY, ACTUAL
- 3RD PARTY SPECIAL INSPECTION IS REQUIRED FOR WALL

W/ #4 @ 3'-0" O.C. EACH WAY OVER ABC SLOPE MAY BE GREATER. MATCH EXISTING SHALL BE COLOR 'DAVIS' 641 PAVEMENT ELEVATIONS CONSTRUCTION PER YAVAPAI COUNTY. 17 LF) 18" CMP CULVERT W/ ROCKERY HEADWALLS ROCKERY FILL WALLS (4' MAX REVEAL) EVERY 7 1/2' (TYP) 8" NYLOPLAST INLINE DRAIN WITH DROP IN GRATE, 4" ADAPTER, 4" FLEX HDPE PIPE TO OUTLET UNDER WALLS (MAINTAIN MIN 1% SLOPE TO DAYLIGHT) LANDSCAPING PLANTER WALL APPROX 2' HEIGHT - DRAINAGE EASEMENT PER BK 46 PG 37 YCOR GARAGE (SLAB ON GRADE)



### TYPICAL SWALE DETAIL





#### **GENERAL NOTES:**

ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH YAVAPAI COUNTY DESIGN GUIDELINES, "MARICOPA ASSOCIATION OF GOVERNMENTS UNIFORM STANDARD" (MAG SPECS), "MARICOPA ASSOCIATION OF GOVERNMENTS UNIFORM STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION" (MAG DETAILS), AND GENERALLY ACCEPTED GOOD CONSTRUCTION

THE CONTRACTOR IS RESPONSIBLE TO OBTAIN COPIES OF QCSD AND MAG STANDARDS. AS WELL AS ALL OTHER STANDARDS AND SPECIFICATIONS WHICH MAY BE NECESSARY TO COMPLETELY AND ACCURATELY INTERPRET THESE PLANS.

THE CONTRACTOR AND ANY SUBCONTRACTORS SHALL HAVE A COMPLETE AND CURRENT SET OF PLANS ON-SITE AT ALL TIMES. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO SUPPLY ANY SUBCONTRACTORS WITH THESE PLANS.

THESE CONSTRUCTION PLANS ARE SUBJECT TO THE INTERPRETATION OF INTENT BY THE ENGINEER. ALL QUESTIONS REGARDING THESE PLANS SHALL BE DIRECTED TO THE ENGINEER. ANY INTERPRETATION OF THE PLANS BY ANYONE OTHER THAN THE ENGINEER SHALL BE RESPONSIBLE FOR ANY CONSEQUENCES THEREOF.

IF TWO OR MORE GIVEN SPECIFICATIONS DIFFER IN CONTENT, THE MORE RESTRICTIVE OR STRINGENT SPECIFICATION, IN THE OPINION OF THE ENGINEER WILL GOVERN.

THE OWNER AND/OR CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY VARIANCES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS.

THE CONTRACTOR SHALL VERIFY THE LOCATION, ELEVATION AND GENERAL CONDITION OF ALL EXISTING TIE-IN AND MATCHING POINTS OF PAVEMENT PRIOR TO ANY STREET CONSTRUCTION. SHOULD ANY LOCATIONS, ELEVATIONS, CROSS SLOPES, OR CONDITIONS DIFFER FROM WHAT IS SHOWN ON THE PLANS. THE CONTRACTOR SHALL CONTACT THE OWNERS AGENT IMMEDIATELY FOR APPROPRIATE CORRECTIVE ACTION. THE CONTRACTOR IS RESPONSIBLE FOR ANY COSTS INCURRED IF THIS PROCEDURE IS NOT FOLLOWED.

THE ENGINEER MAY ORDER ANY OR ALL WORKMANSHIP AND MATERIALS USED FOR THIS PROJECT TO BE TESTED ACCORDING TO APPLICABLE STANDARDS. THE CONTRACTOR SHALL SUPPLY ALL SAMPLES FOR THE TESTING AND CERTIFICATES OR RESULTS OF TESTING AT HIS

ANY WORK PERFORMED WITHOUT THE KNOWLEDGE AND APPROVAL OF THE ENGINEER OR HIS AUTHORIZED REPRESENTATIVE AND/OR ALL WORK AND MATERIALS NOT IN CONFORMANCE WITH THE SPECIFICATIONS IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S

ALL IMPROVEMENTS SHALL BE CONSTRUCTED BY CONTRACTOR(S) THAT ARE LICENSED BY THE ARIZONA STATE REGISTRAR OF CONTRACTORS, WITH A CLASS OF LICENSE(S) FOR THE SPECIFIC

THE CONTRACTOR IS REQUIRED TO COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS AND REGULATIONS APPLICABLE TO THE CONSTRUCTION OF THIS PROJECT.

THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION METHODS, SEQUENCING, AND

THE GENERAL CONTRACTOR AND ANY SUBCONTRACTORS PERFORMING WORK SHOWN ON THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH ALL APPLICABLE O.S.H.A. REGULATIONS.

THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR AND PROVIDE ALL NECESSARY WATER FOR HIS CONSTRUCTION OPERATION AT HIS OWN EXPENSE.

THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND COMPLYING WITH ANY REQUIRED PERMITS NECESSARY FOR CONSTRUCTION.

ISSUANCE OF A GRADING PERMIT IS REQUIRED FOR ANY EXCAVATION OR GRADING (INCLUDING PLACEMENT OF FILL). A RIGHT-OF-WAY PERMIT IS REQUIRED PRIOR TO COMMENCING ANY

BEGINNING AFTER FINAL ACCEPTANCE IS GIVEN BY THE ENGINEER. ANY DEFECTS WHICH APPEAR IN THE WORK WITHIN TWO YEARS FROM THE DATE OF ACCEPTANCE AND WHICH ARE DUE TO IMPROPER WORKMANSHIP OR INFERIOR MATERIALS SUPPLIED SHALL BE CORRECTED BY OR AT THE EXPENSE OF THE CONTRACTOR.

THE CONTRACTOR SHALL WARRANT ALL WORK FOR A MINIMUM OF A TWO YEAR PERIOD

THE CONTRACTOR SHALL GUARD AGAINST DAMAGE DURING CONSTRUCTION TO EXISTING PROPERTIES AND IMPROVEMENTS. ANY ITEMS DAMAGED BY THE CONSTRUCTION SHALL BE REPLACED IN KIND OR BETTER AT THE CONTRACTOR'S EXPENSE.

APPROVAL OF A PORTION OF THE WORK IN PROGRESS DOES NOT GUARANTEE ITS FINAL ACCEPTANCE. TESTING AND EVALUATION MAY CONTINUE UNTIL WRITTEN FINAL ACCEPTANCE OF A COMPLETE WORKABLE UNIT. ACCEPTANCE OF COMPLETED IMPROVEMENTS WILL NOT BE GIVEN UNTIL DEFECTIVE OR UNAUTHORIZED WORK IS REMOVED AND FINAL CLEAN-UP IS COMPLETE.

ALL MATERIALS SHALL BE INSTALLED PER MANUFACTURER'S GUIDELINES.

QUANTITIES OF CONSTRUCTION MATERIALS ARE PROVIDED AS A GUIDE AND FOR INFORMATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND PROVIDING ALL QUANTITIES

EXISTING 24" CULVERT

THESE PLANS REPRESENT A REASONABLE EFFORT TO SHOW LOCATIONS OF EXISTING UNDERGROUND UTILITIES WITHIN THE PROJECT LIMITS. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES CAUSED DURING CONSTRUCTION. THE CONTRACTOR IS TO VERIFY THE LOCATION AND THE ELEVATIONS OF ALL EXISTING UTILITIES PRIOR TO ANY EXCAVATION OR CONSTRUCTION. SHOULD ANY LOCATION OR ELEVATION DIFFER FROM THAT SHOWN ON PLANS, THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE PROPER UTILITY OWNER'S AGENT.

LOCATION OF UNDERGROUND UTILITIES SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ARS 40-360.22 PRIOR TO ANY EXCAVATION. CONTRACTOR PERFORMING EXCAVATING OPERATIONS IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES. BLUE STAKE SHALL BE CALLED AT 1-800-STAKE-IT FOR ACCURATE LOCATION OF UTILITIES AS NECESSARY AND PRIOR TO ANY EXCAVATION.

SIGNS, TREES, SHRUBS, MAILBOXES AND OTHER INCIDENTALS REQUIRING RELOCATION SHALL BE MOVED ONLY FAR ENOUGH TO ALLOW CONSTRUCTION OF THE PROJECT AND CAUSE THE LEAST DISRUPTION TO PRIVATE PROPERTY, AND LANDSCAPE. FINAL POSITIONS SHALL BE APPROVED BY THE ENGINEER PRIOR TO RELOCATION. ALL RELOCATED ITEMS SHALL CONTINUE TO WORK IN THEIR INTENDED CAPACITY AFTER THE RELOCATION HAS BEEN ACCOMPLISHED. NO SIGNS SHALL BE RELOCATED TO POSITIONS OUTSIDE DESIGNATED RIGHTS-OF-WAY. SAFETY SHALL BE A PRIMARY CONSIDERATION IN THE PLACEMENT OF SHRUBBERY AND SIGNS WHICH COULD POSSIBLY DISRUPT THE SIGHT DISTANCE OF MOTORISTS.

ALL FILL MATERIAL SHALL BE COMPACTED TO 95% STD. PROCTOR AND DENSITIES SHALL BE TESTED IN ACCORDANCE WITH M.A.G. SPECIFICATIONS.

EARTHWORK QUANTITIES ARE BASED ON FINISHED GRADES AND DO NOT ACCOUNT FOR SHRINK/SWELL, BUILDING SLAB THICKNESS, WALLS, FOOTINGS, ETC.

A. TESTING OF MATERIALS AND CONSTRUCTION PERFORMANCE BY AN APPROVED TESTING LAB IS REQUIRED.

B. THE GEOTECHNICAL ENGINEER WILL DETERMINE THE NUMBER AND TYPE OF TESTS

C. THE CONTRACTOR/OWNER SHALL NOTIFY THE TESTING LAB OF THE NEEDED TESTS, COORDINATE WITH THE INSPECTOR AND TESTING LAB AND PAY THE COSTS TO PERFORM THE

THE MAXIMUM SLOPE (H: V) IS 2:1 FOR CUT SECTIONS AND 2:1 FOR FILL SECTIONS U.N.O OR PER GEOTECHNICAL REPORT.

THE MAXIMUM LIFT THICKNESS IN FILL SECTIONS SHALL NOT EXCEED 12".

PREPARATION OF GROUND: THE AREA OVER WHICH FILLS ARE TO BE MADE SHALL BE CLEARED OF ALL TRASH, TREES, STUMPS, DEBRIS OR OTHER MATERIAL NOT SUITABLE AS A FOUNDATION

ALL DISTURBED AREA SHALL BE RE-VEGETATED WITH PLANTS AND LANDSCAPING PER

ALL FOOTINGS/FOUNDATIONS SHALL BEAR ON SUITABLE NATIVE GROUND OR ENGINEERED FILL IN ACCORDANCE WITH THE APPROVED GEOTECHNICAL REPORT.

THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM THE BUILDING DURING ALL PHASES OF CONSTRUCTION AND WITH FINAL GRADING OF LOT.

PRESENT AFTER FINAL LOT GRADING. ALL ROOF DRAINAGE SHALL BE DIRECTED AWAY FROM THE BUILDING. ROOF DRAINS SHALL

PONDING OF SURFACE WATER SHALL NOT BE PERMITTED DURING CONSTRUCTION OR BE

MINIMUM DISTANCE OF 10' TO AN APPROVED WATER DISPOSAL AREA.

DISCHARGE A MINIMUM OF 10' AWAY FROM BUILDING STRUCTURE. FINISHED GRADE DIRECTLY ADJACENT TO THE BUILDING SHALL BE A MINIMUM OF 8" BELOW THE FINISHED FLOOR ELEVATION AND SHALL SLOPE AWAY FROM THE BUILDING AT 5% FOR A REVISIONS

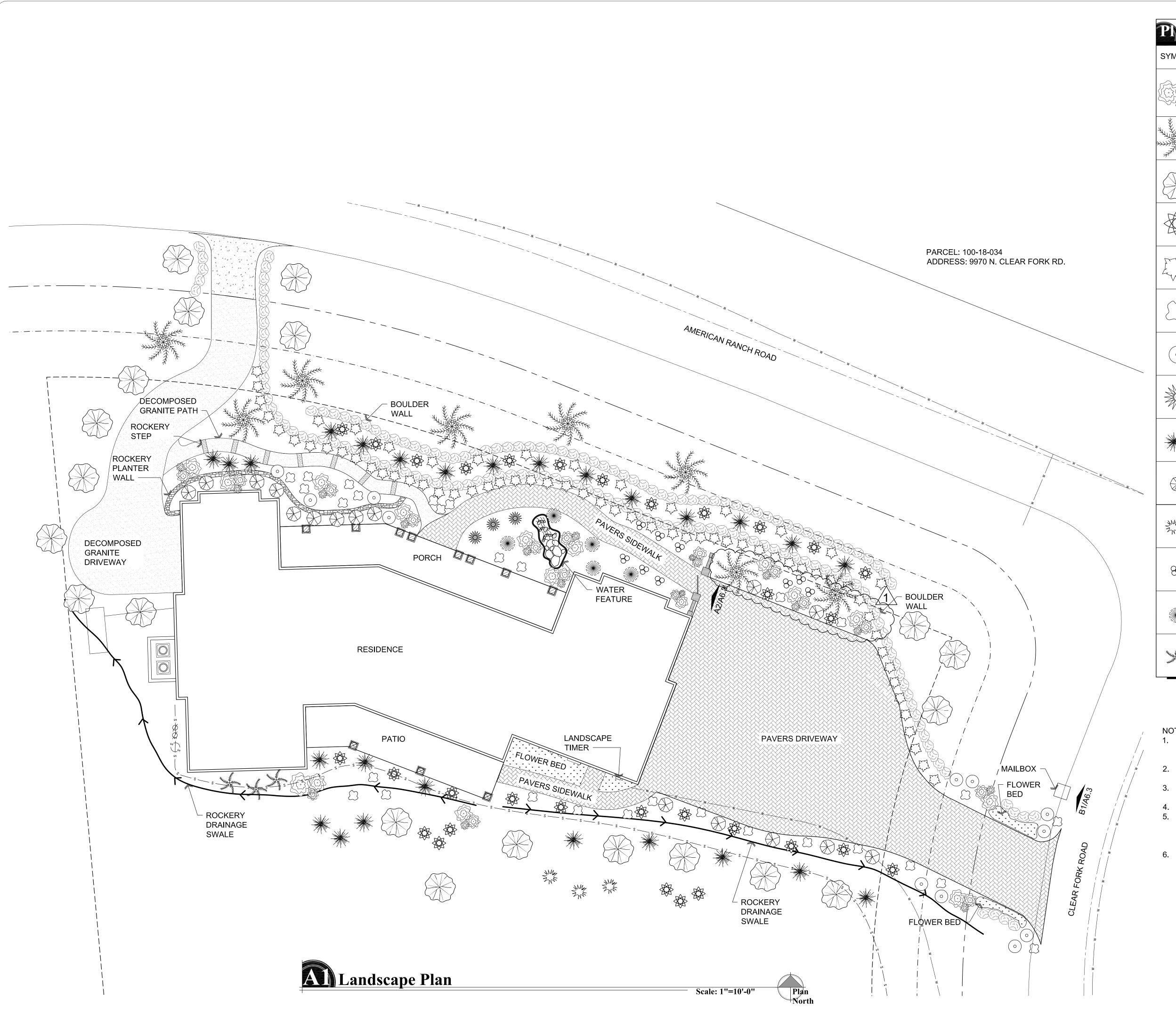
ADDED WALL DETAIL

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CHECKED BY BH

December 16, 2021 JOB NO. **768** SHEET



	t Scho		
SYMBOL	SIZE	TOTAL	NAME
	15 GAL	16	ASPEN CLUSTER
	24" BOX	8	COLORADO BLUE SPRUCE
	15 GAL	20	AUTUMN FANTASY MAPLE
	1 GAL	31	DAYLILLY
	1 GAL	67	VIRGINIA CREEPER
	5 GAL	29	SALVIA
0	5 GAL	12	POTENTILLA
	5 GAL	3	GRESSI
	1 GAL	26	FOUNTAIN GRASS
	1 GAL	16	ROSE OF SHARON
3m	1 GAL	3	HALLS HONEYSUCKLE
80	5 GAL	9	MAHONIA OREGON GRAPE
	5 GAL	5	RED BARBERRY
A STATE OF THE STA	5 GAL	3	BUTTERFLY BUSH

- NOTES:

  1. LANDSCAPE PLANTINGS SHALL BE WATERED VIA DRIP IRRIGATION SYSTEM ON LANDSCAPE TIME
- CLOCK.

  2. PROVIDE BACKFLOW PREVENTOR FOR DRIP
- IRRIGATION SYSTEM.

  3. SPRAY ALL GROUND COVER AREAS W/
- PRE-EMERGENT FOR WEED CONTROL.
- 4. PROVIDE WEED BARRIER IN ALL PLANTER AREAS. GROUND COVER IN ALL PLANTER AREAS SHALL BE 3/4" COLORED ROCK. WHERE SLOPES ARE TOO STEEP, PROVIDE 2" - 3" FRACTURED RIP RAP OF MATCHING COLOR.

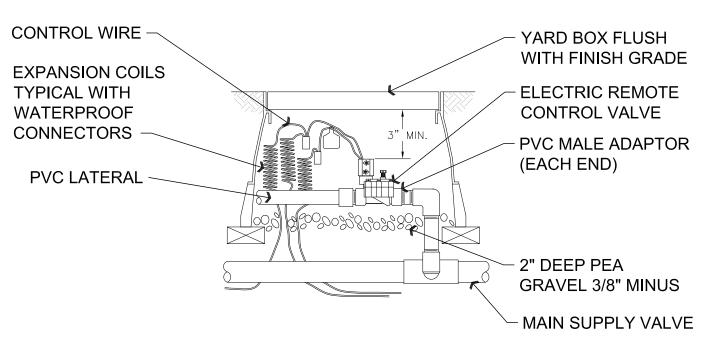
  6. REFER TO LANDSCAPE DETAILS, SHEET L1.1

DRAWN BY
L.O.
CHECKED BY <b>W.A.K.</b>
September 17th, 2021
JOB NO. <b>768</b>
SHEET

**/1**\ 12-20-2021

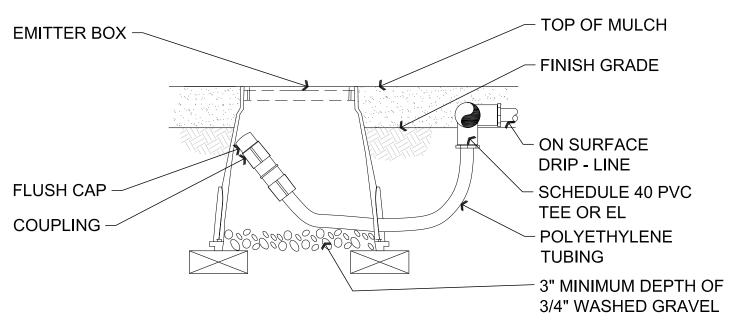
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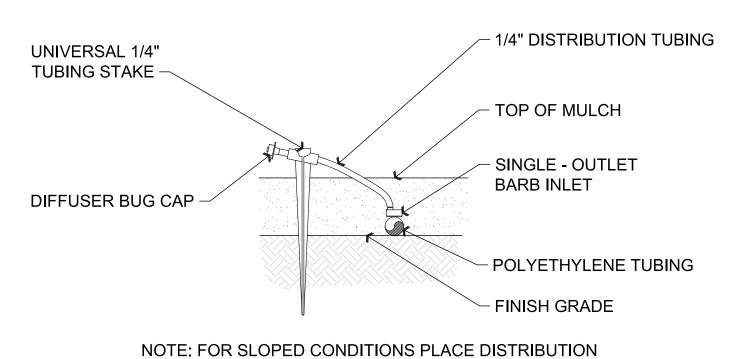
NOTE: SEAL ALL THREADED JOINTS / FITTINGS WITH APPROVED SEALANT PRIOR TO ASSEMBLY

## Typical Electric Remote Control Valve



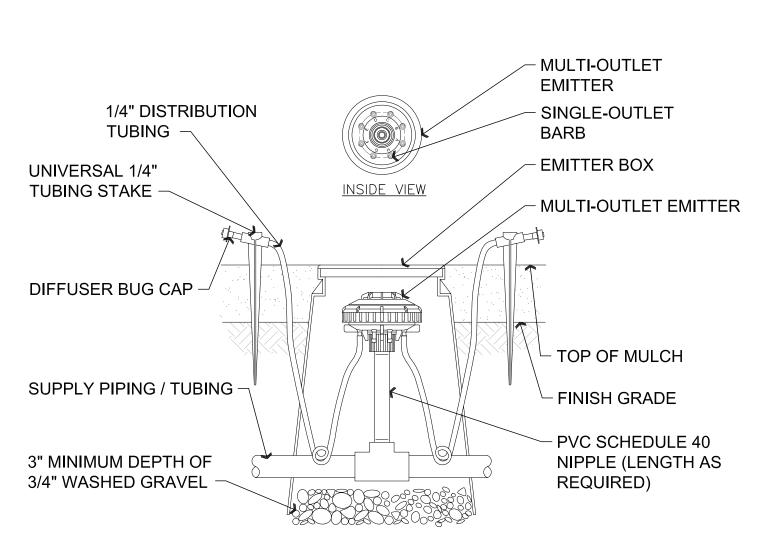
NOTE: ALLOW A MINIMUM 6" OF DRIP - LINE TUBING IN VALVE BOX IN ORDER TO DIRECT FLUSHED WATER OUTSIDE VALVE BOX.

## **B** Typical Drip Line Flush Box



POINT AT THE HIGH POINT OF THE PLANTING WELL



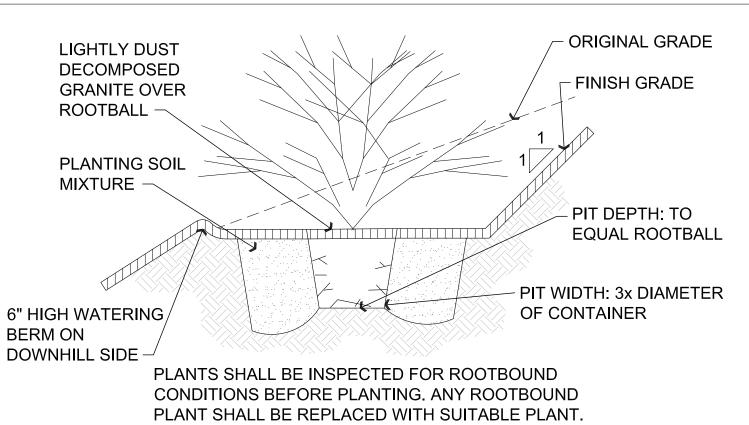


NOTE: COIL ADDITIONAL 9" OF TUBING IN EMITTER BOX TO FACILITATE MAINTENANCE.

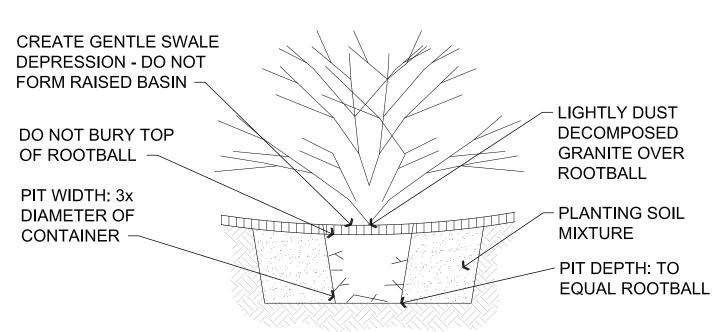
INSTALL A MINIMUM OF (1) MULTI-PORT EMITTER PER TREE - EQUALLY SPACED AROUND DRIP LINE OF TREE CANOPY TYPICAL. OPEN ADDITIONAL PORTS AND INSTALL SPAGHETTI DISTRIBUTION TUBING TO PROVIDE ADEQUATE WATER AS TREE MATURES, (TYP.)

FOR SLOPED CONDITIONS PLACE DISTRIBUTION POINT AT THE HIGH POINT OF PLANTING WELL.



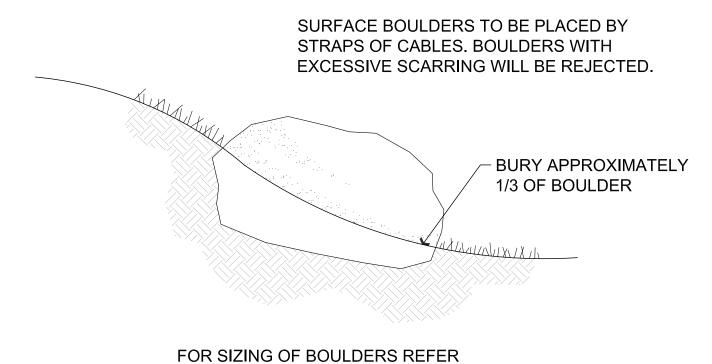


Typical Shrub Planting on Slope



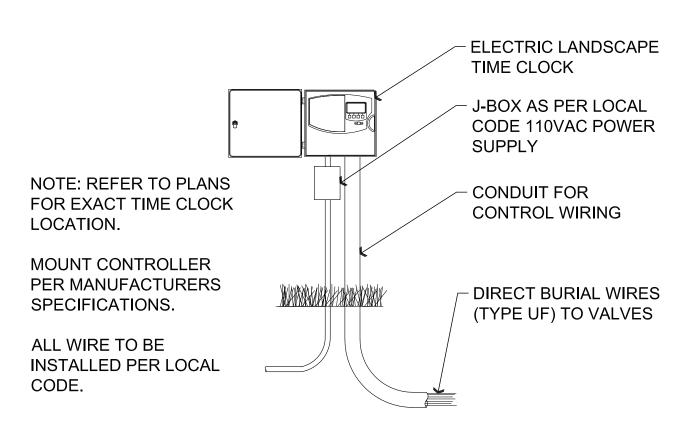
PLANTS SHALL BE INSPECTED FOR ROOTBOUND CONDITIONS BEFORE PLANTING. ANY ROOTBOUND PLANT SHALL BE REPLACED WITH SUITABLE PLANT.

## Typical Shrub Planting

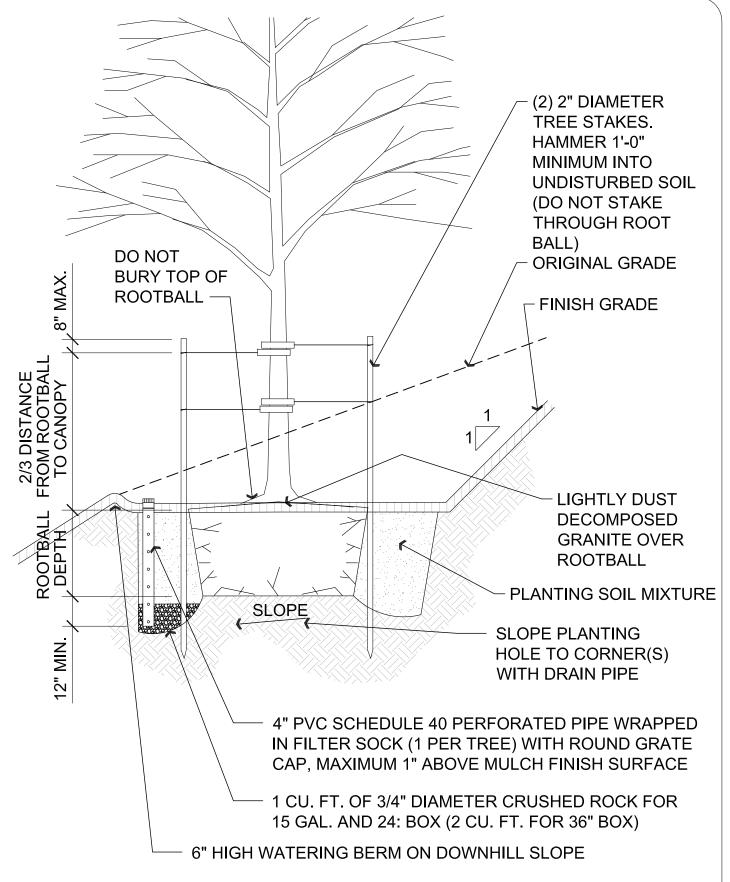


## Typical Boulder Detail

TO LANDSCAPE SCHEDULE



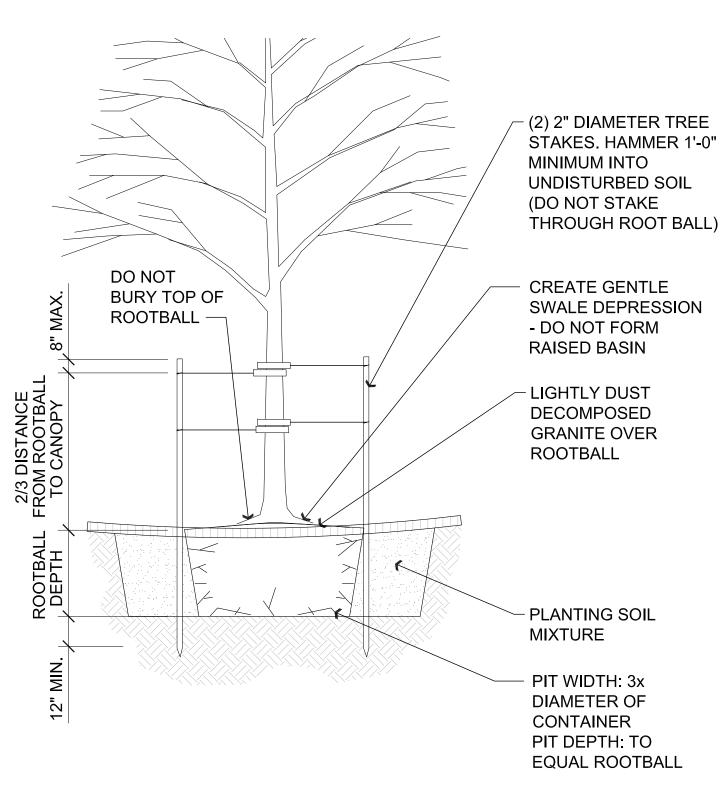
Typical Electric Landscape Time Clock



NOTE: STAKE TREE PERPENDICULAR TO DIRECTION OF PREVAILING WIND.

PLANTS SHALL BE INSPECTED FOR ROOTBOUND CONDITIONS BEFORE PLANTING.
ANY ROOTBOUND PLANT SHALL BE REPLACED WITH SUITABLE PLANT.

## Typical Tree Planting on Slope



NOTE: STAKE TREE PERPENDICULAR TO DIRECTION OF PREVAILING WIND.

PLANTS SHALL BE INSPECTED FOR ROOTBOUND CONDITIONS BEFORE PLANTING. ANY ROOTBOUND PLANT SHALL BE REPLACED WITH SUITABLE PLANT.



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P 928-443-5812 F 928-443-5815 email: waka

American Ranch Lot 29

/icente Residence Ar 9970 N. Clear Fork Rd. Prescott, AZ

PROJECT: Vicente F 9970 N. C Prescott,

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L.O.

CHECKED BY
W.A.K.

DATE
September 17th, 2021

JOB NO.
768

SHEET

L1.1

### Discriptive Keynotes

- PROPERTY LINE.
- 2. PROVIDE 1" WATER METER AT EXISTING YOKE IN METER BOX, REFER TO CIVIL PLANS.
- 3. PROPOSED UNDERGROUND PROPANE TANK LOCATION.
- 4. EXISTING DRY UTILITIES STUB OUT.
- 5. EXISTING ASPHALT PAVED ROAD.
- 6. CONCRETE PAVERS OVER 1" SAND OVER 4" COMPACTED A.B.C..
- 7. PROVIDE TWO WAY SEWER CLEAN
- 8. CONDENSING UNIT, REFER TO
- MECHANICAL PLANS.
- 9. 2" SCHEDULE 40 PVC WATER LINE. 10. 2" DB 120 ELECTRICAL CONDUIT FOR
- TELEPHONE CABLE. 11. DB 120 ELECTRICAL CONDUIT, SIZE TO BE DETERMINED BY ARIZONA PUBLIC
- SERVICE. 12. 2" SCHEDULE 40 PVC FORCE MAIN
- WASTE LINE. 13. PROVIDE BACKWATER VALVE.
- 14. 2" WATER SHUT OFF VALVE IN YARD
- 15. 2" DB 120 CATV CONDUIT.
- 16. BELOW GRADE SEWAGE EJECTION PUMP.
- 17. CATV TERMINAL BOX.
- 18. TELEPHONE TERMINAL BOX.
- 19. DRIP IRRIGATION LANDSCAPE TIME
- CLOCK. 20. 200 AMP ELECTRIC SERVICE
- ENTRANCE SECTION.
- 21. RIP RAP LINED DRAINAGE SWALE, REFER TO LANDSCAPE PLAN / CIVIL PLANS.
- 22. LANDSCAPE DRIP IRRIGATION BACKFLOW PREVENTION DEVICE WITH FREEZE RESISTANT COVER.
- 23. MAILBOX, REFER TO DETAIL B1 ON SHEET A6.3.
- 24. WATER FEATURE.
- 25. 1 1/4" POLYETHYLENE PROPANE LINE. 26. 4' TALL CONCRETE WALL WITH STONE VENEER, REFER TO STRUCTURAL PLANS.
- 27. COLORED CONCRETE APRON FROM STREET TO PROPERTY LINE, REFER TO CIVIL PLANS.
- 28. EASEMENT LINE, REFER TO CIVIL
- PLANS. 29. CONSERVATION AREA LINE, REFER TO
- CIVIL PLANS.

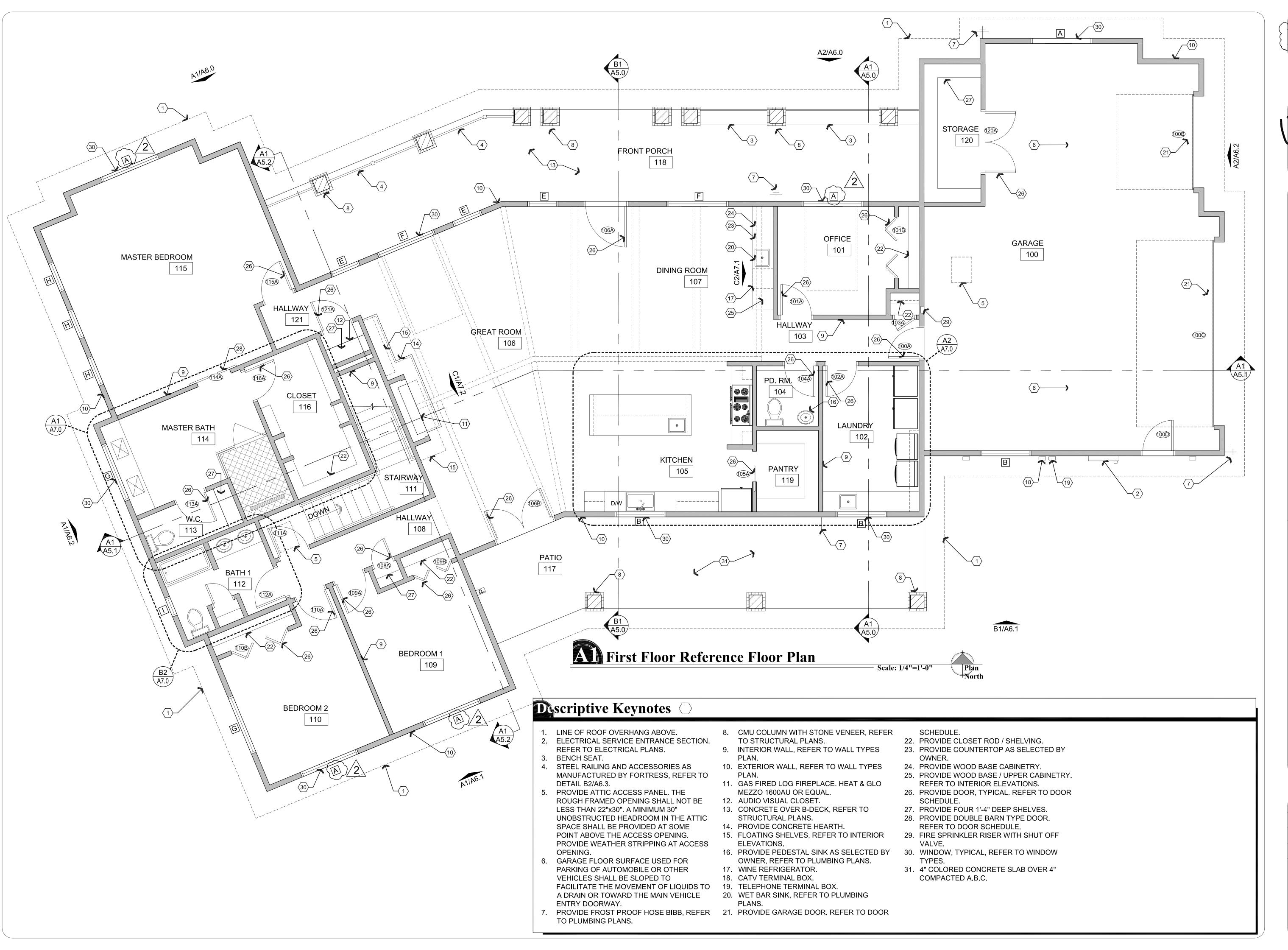
  30. DECOMPOSED GRANITE DRIVEWAY, REFER TO CIVIL PLANS.

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icente Residence 970 N. Clear Fork Rd. rescott, AZ

ROJECT: Vicente

PROJECT

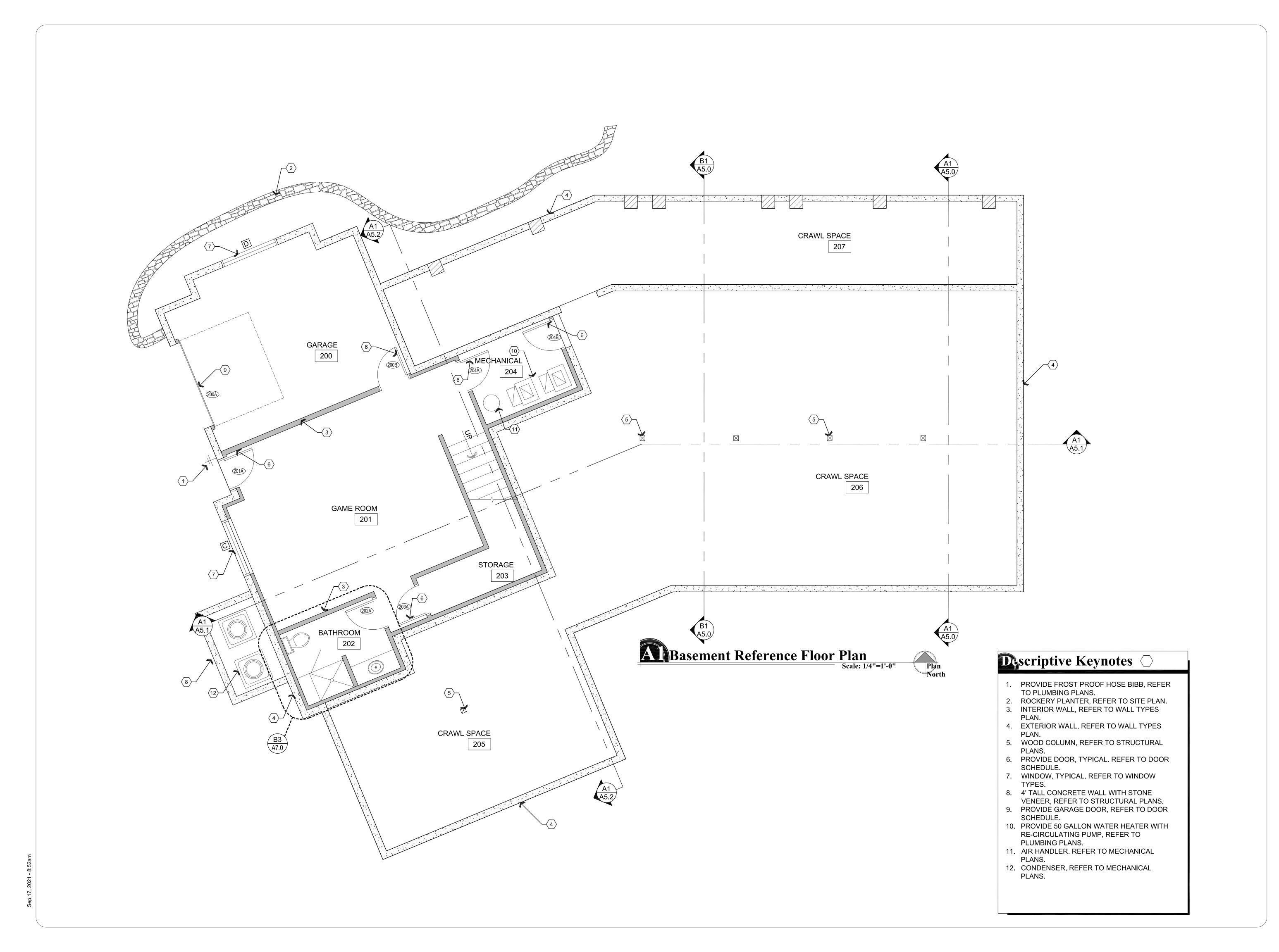
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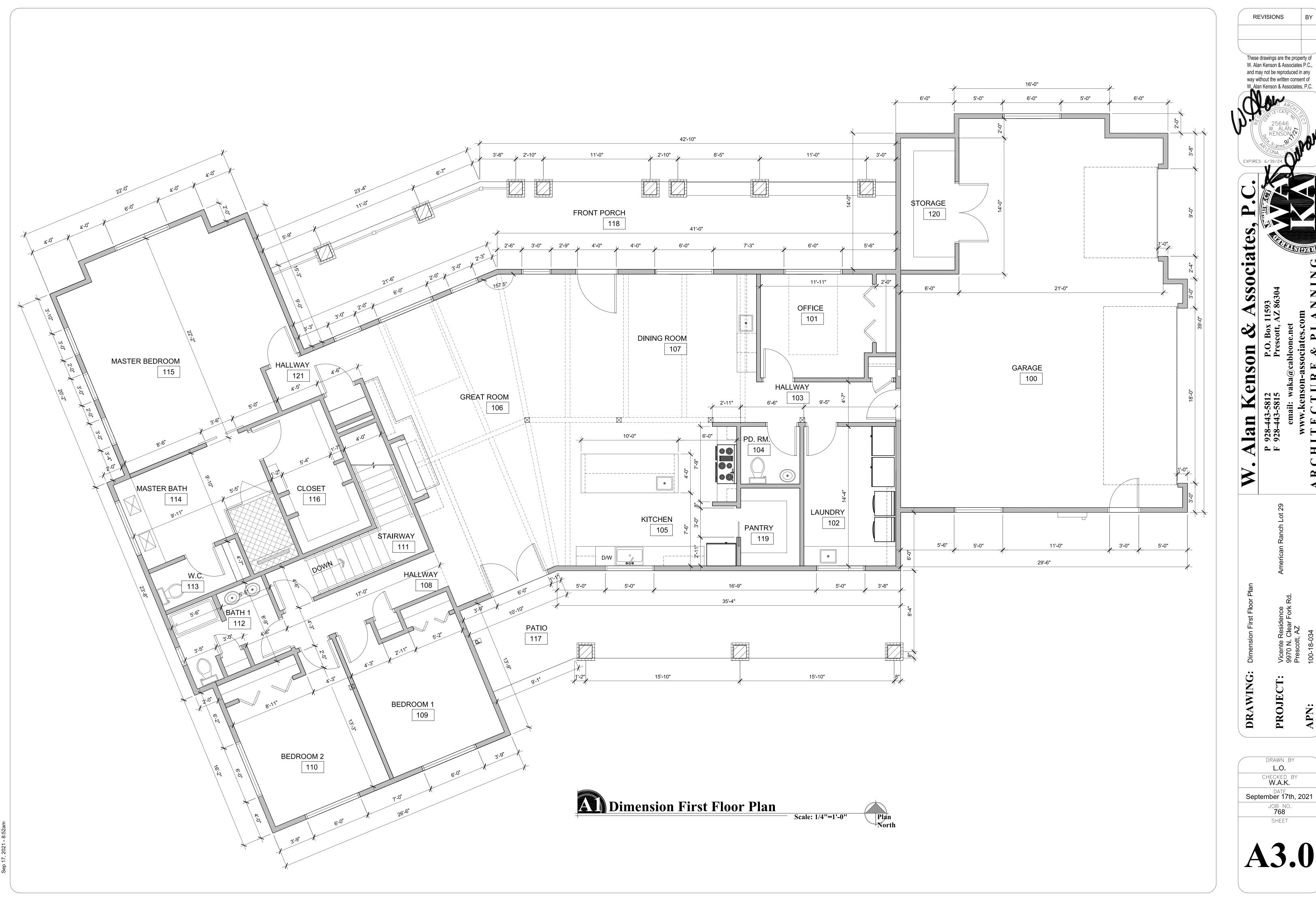
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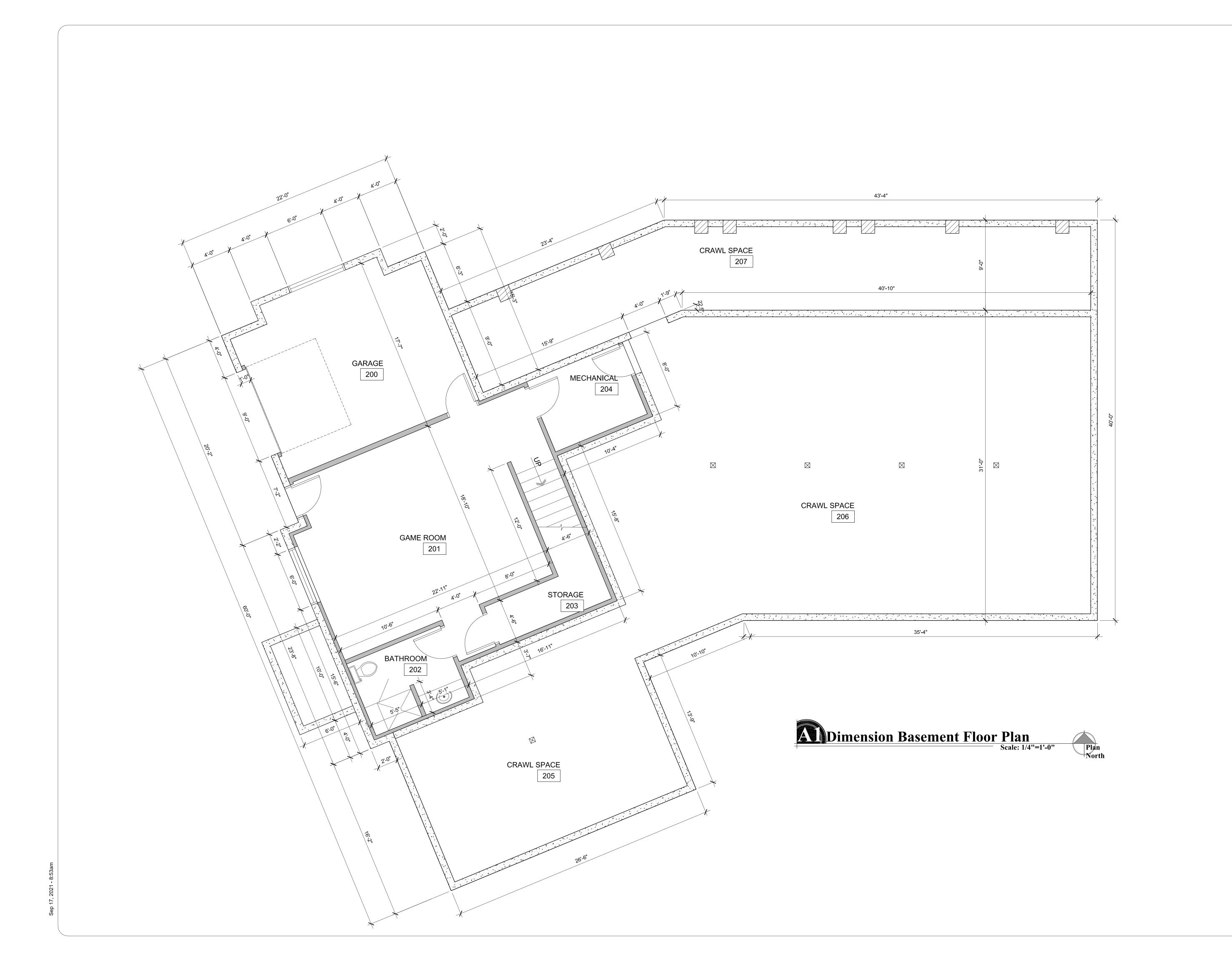
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lent Dimension Floor Plan

T: Vicente Residence 9970 N. Clear Fork Rd. Prescott, AZ

PROJECT A NAVAD

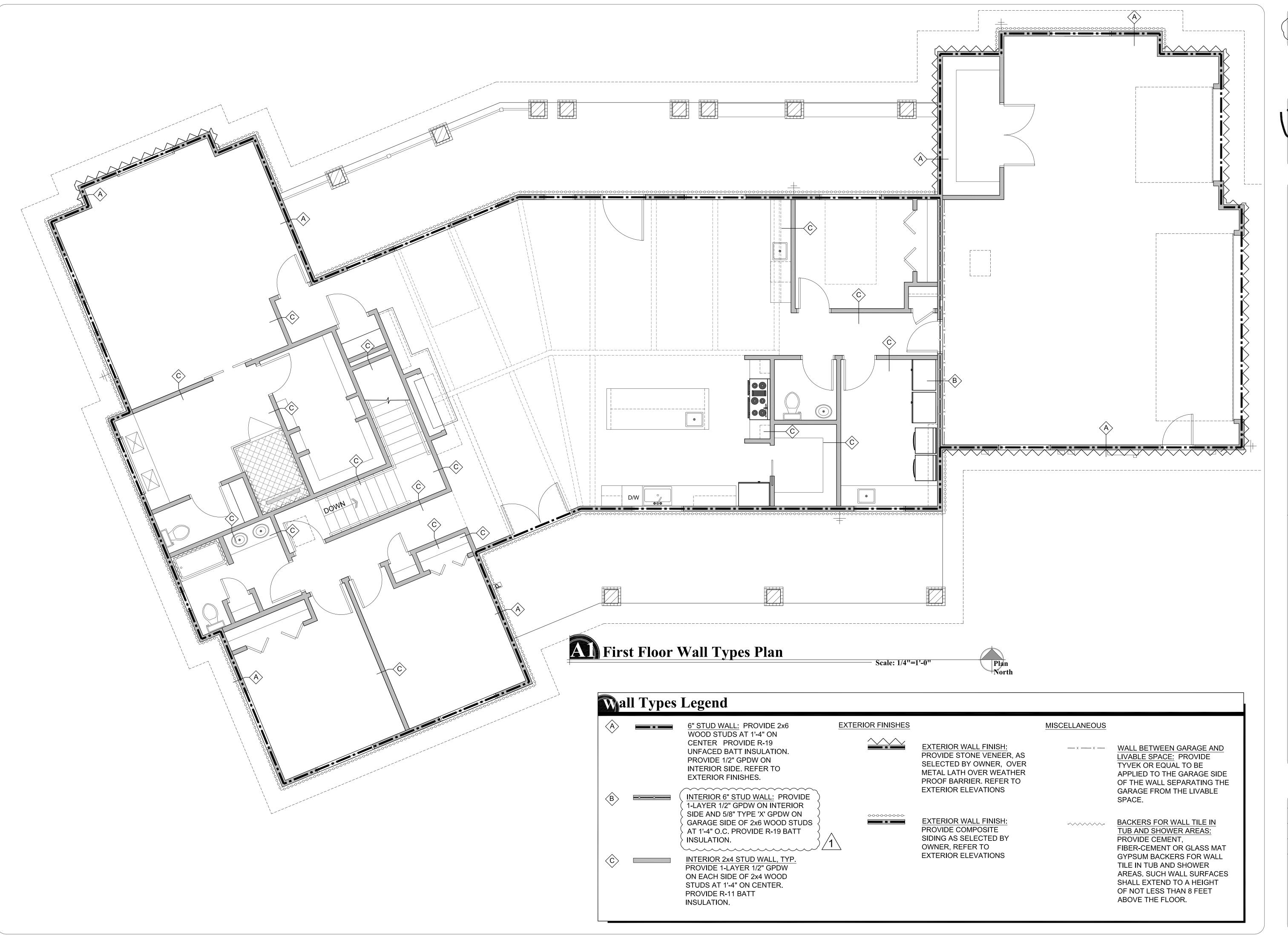
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A3.1



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SSOCiates, P.C. (230/54)

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nerican Ranch Lot 29

Residence Americal Clear Fork Rd. AZ

T: Vicente Residence 9970 N. Clear Fork F Prescott, AZ

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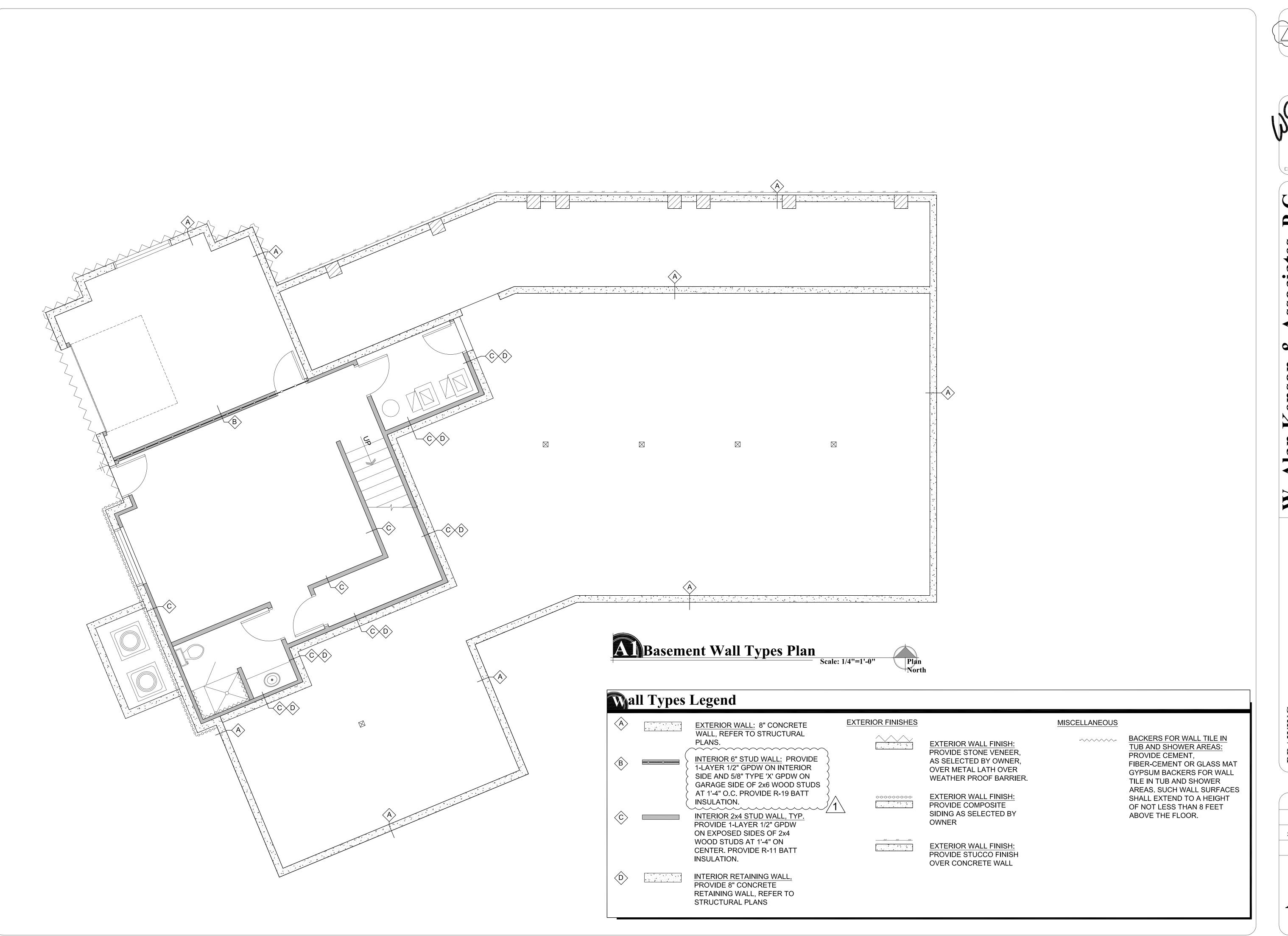
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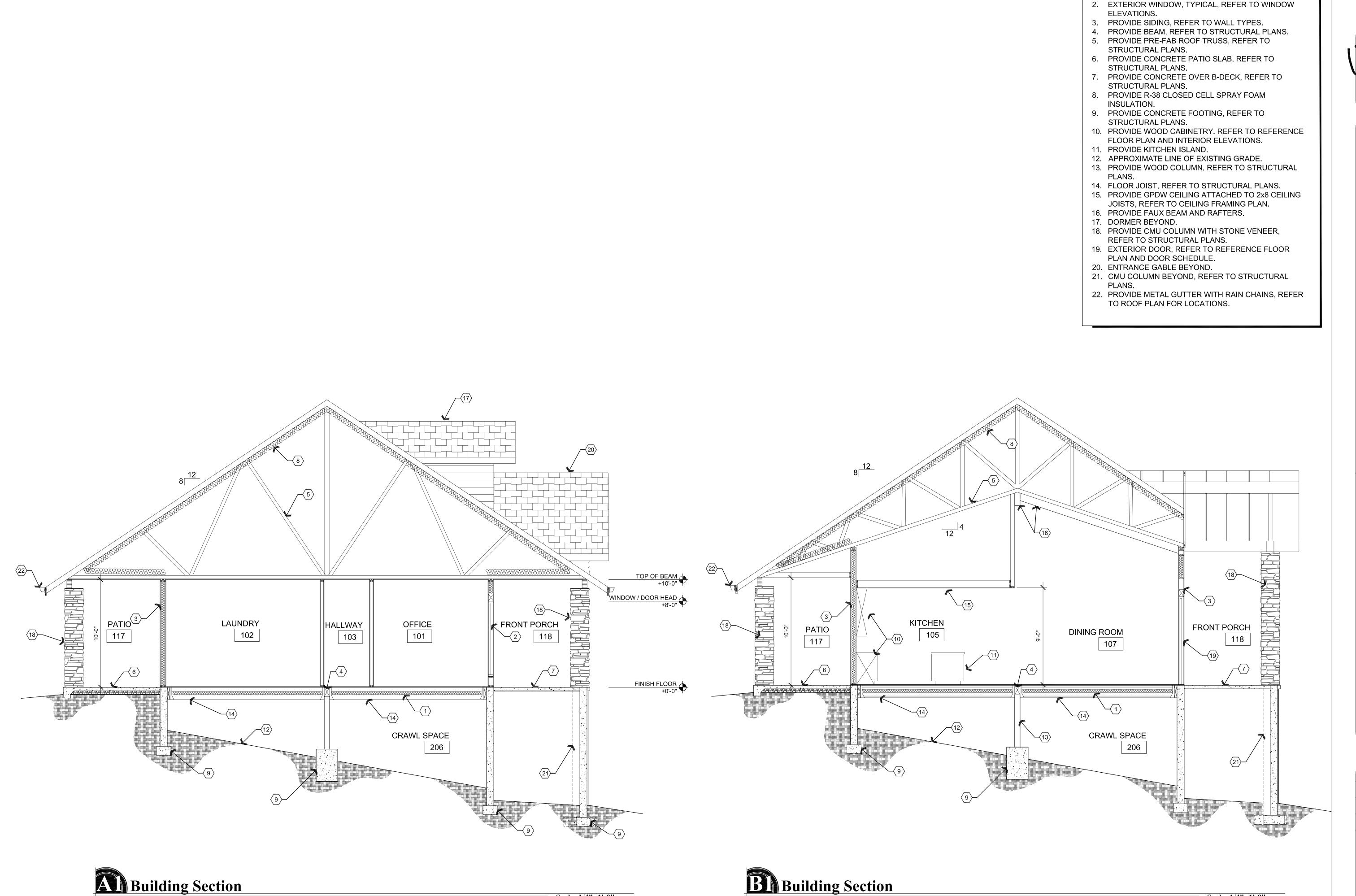
SHEET

A4.0



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JOB NO. **768** SHEET



REVISIONS

Discriptive Keynotes  $\bigcirc$ 

1. PROVIDE R-19 BATT INSULATION TIGHT AGAINST

FLOOR WITH INSULATION SUPPORT WIRE.

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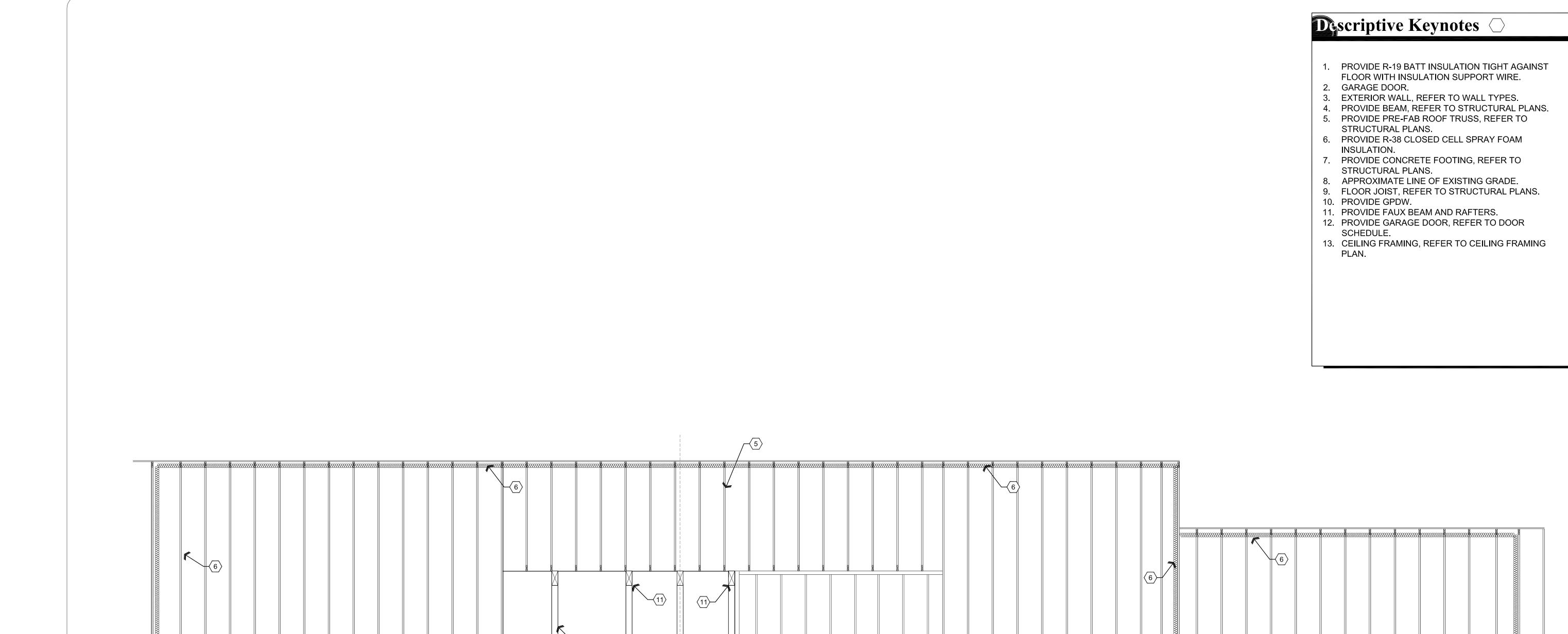
ates

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September 17th, 2021

**A5.0** 

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



KITCHEN 105



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dence American Ranch L r Fork Rd.

Vicente Residence 9970 N. Clear Fork Rd.

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A5.1

Building Section

CRAWL SPACE

206

GREAT ROOM

W.C.

GAME ROOM 201 CLOSET

116

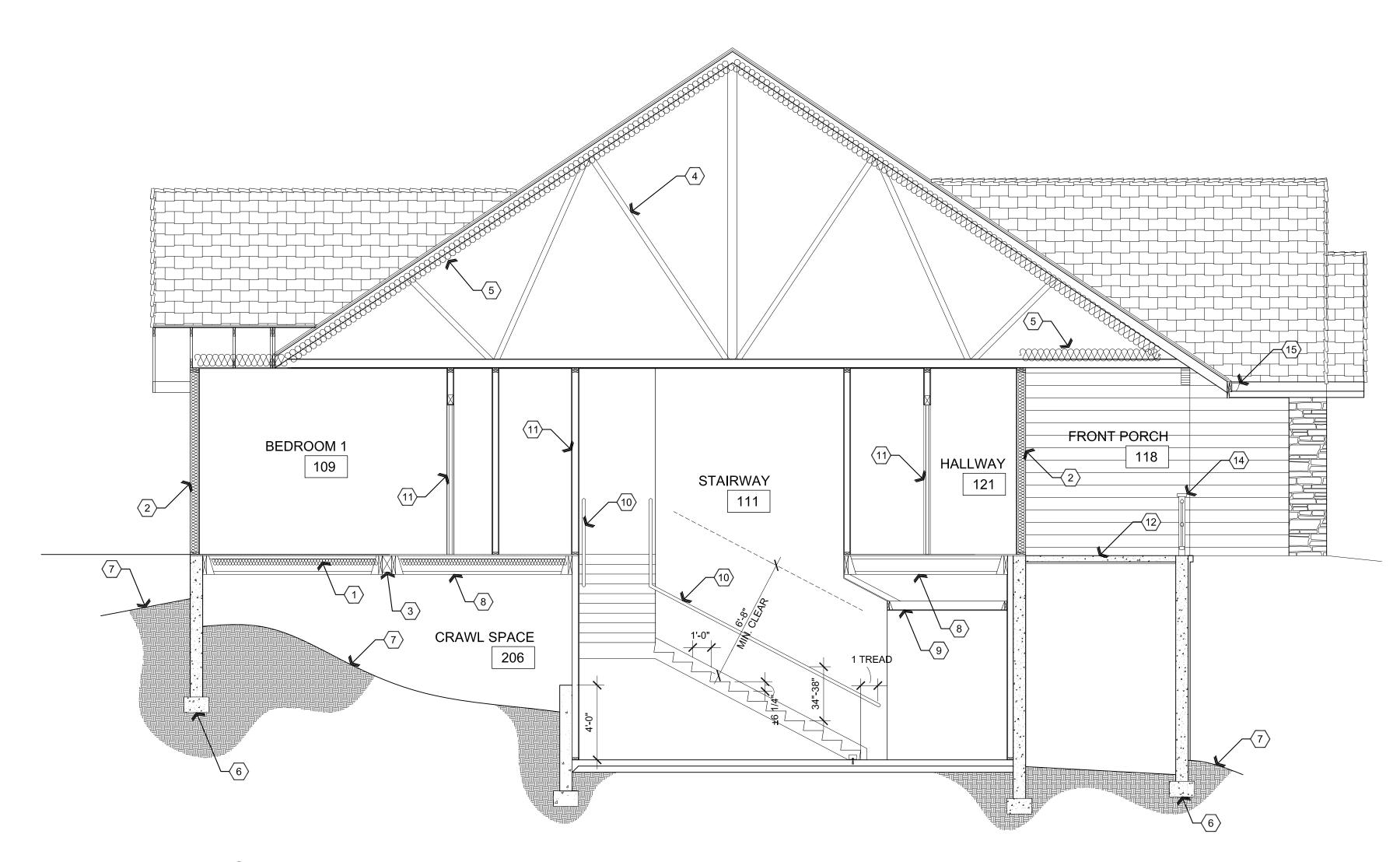
LAUNDRY 102

GARAGE 100

PD. RM.

104

- 1. PROVIDE R-19 BATT INSULATION TIGHT AGAINST FLOOR WITH INSULATION SUPPORT WIRE.
- 2. EXTERIOR WALL, REFER TO WALL TYPES.
- 3. PROVIDE BEAM, REFER TO STRUCTURAL PLANS.
- 4. PROVIDE PRE-FAB ROOF TRUSS, REFER TO STRUCTURAL PLANS.
- PROVIDE R-38 CLOSED CELL SPRAY FOAM INSULATION.
- 6. PROVIDE CONCRETE FOOTING, REFER TO STRUCTURAL PLANS.
- 7. APPROXIMATE LINE OF EXISTING GRADE.
- 8. FLOOR JOIST, REFER TO STRUCTURAL PLANS.
- CEILING FRAMING, REFER TO CEILING FRAMING PLAN.
- 10. PROVIDE HANDRAIL @ 36" ABOVE STAIR NOSING AND MIN. 1-1/2" CLEARANCE FROM WALL.
- 11. INTERIOR WALL, REFER TO WALL TYPES PLAN.
- 12. PROVIDE CONCRETE OVER B-DECK, REFER TO STRUCTURAL PLANS.
- 13. PROVIDE METAL GUTTER WITH RAIN CHAINS, REFER TO ROOF PLAN.
- 14. PROVIDE IRON RAILING PER DETAIL B2/A6.3.
- 15. PROVIDE METAL GUTTER WITH RAIN CHAINS, REFER TO ROOF PLAN FOR LOCATIONS.





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

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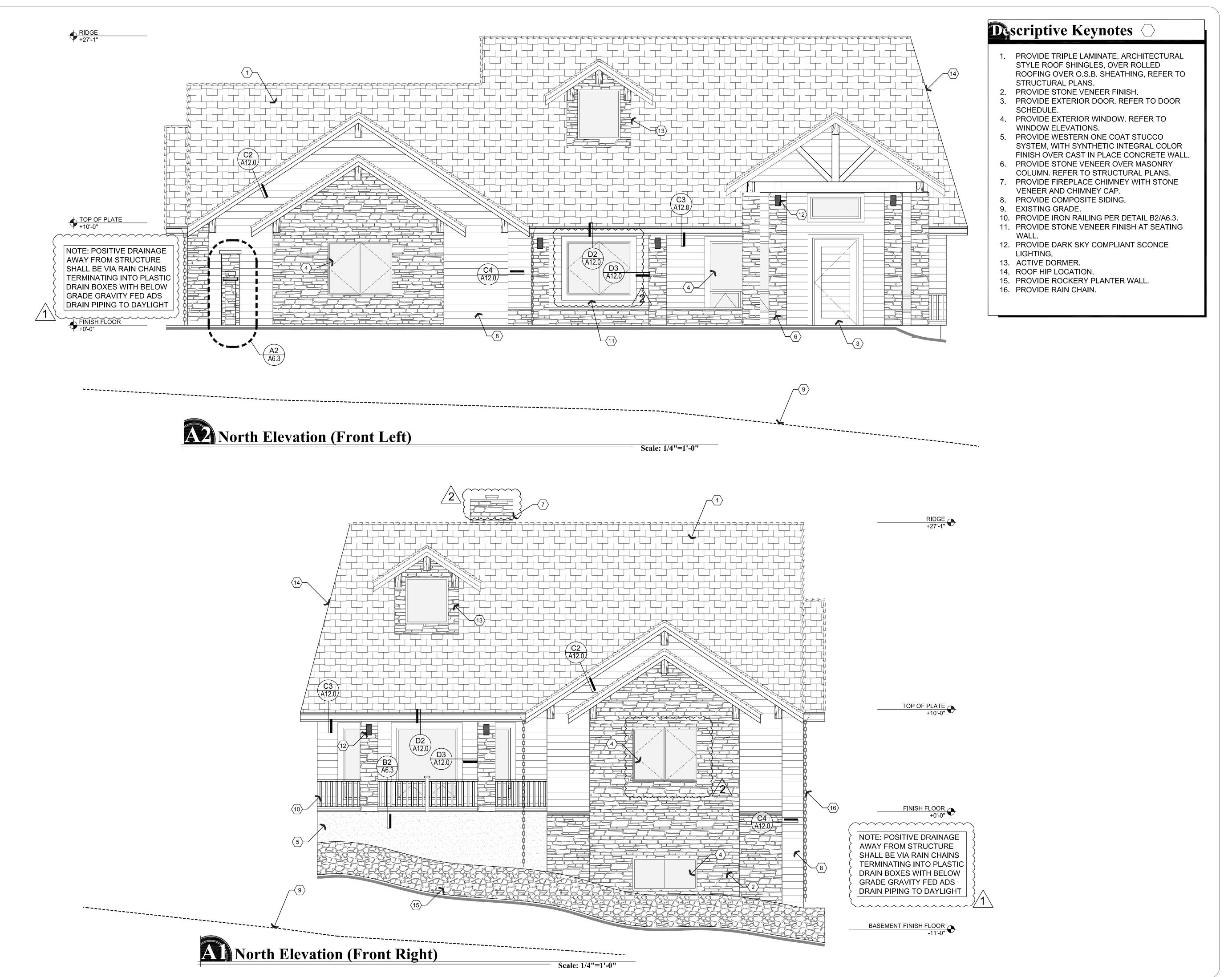
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A5.2



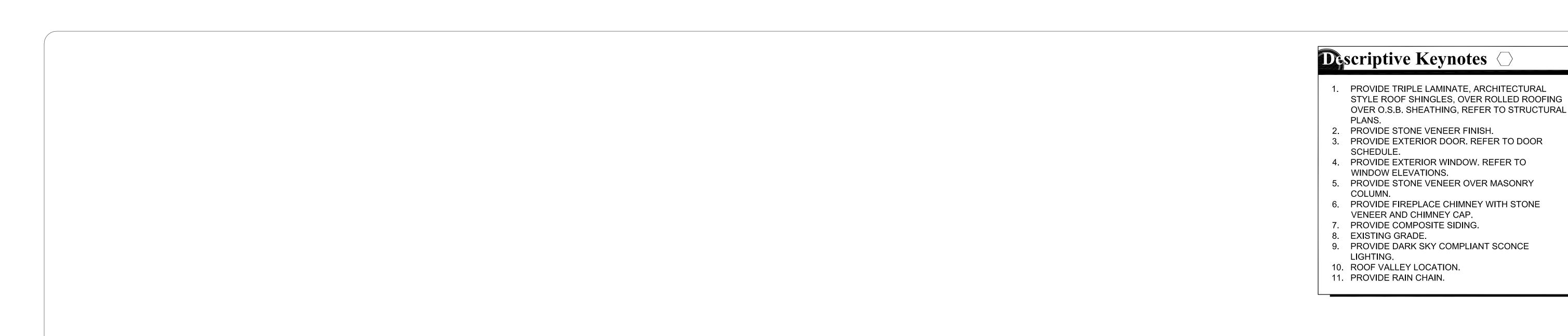
11-18-2021 LO

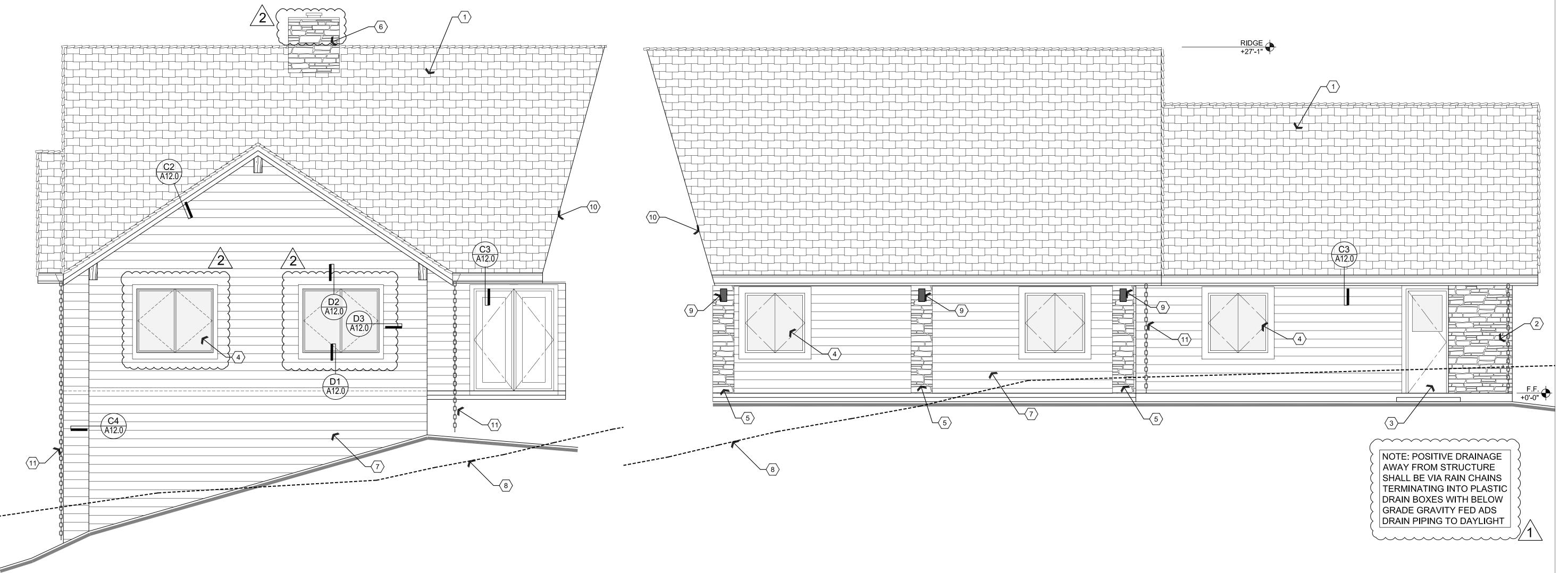
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Scale: 1/4"=1'-0"

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ficente Residence 970 N. Clear Fork Rd. Prescott, AZ

ROJECT: Vicente Re

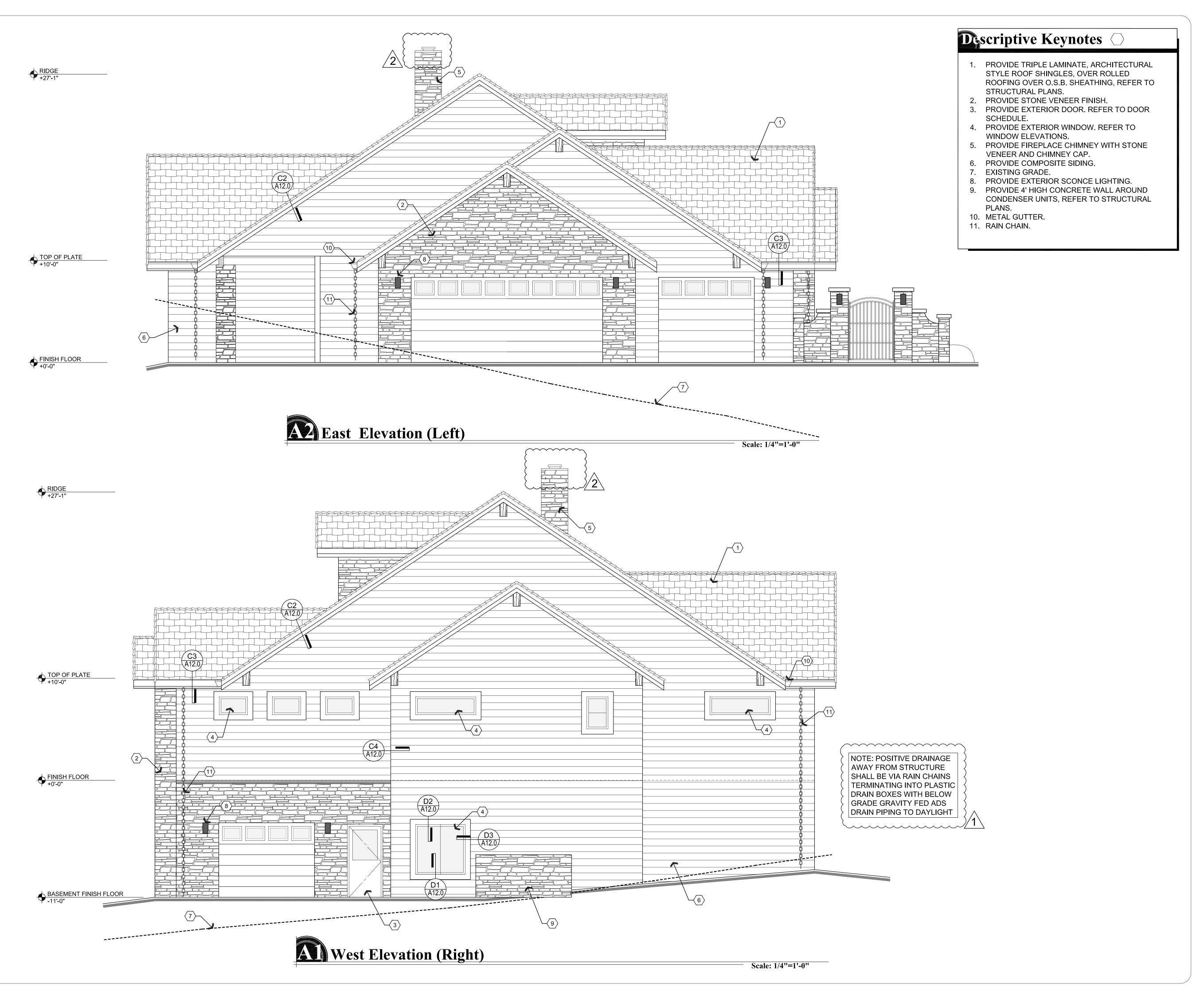
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**1 1** 



2 1-03-2022 LO

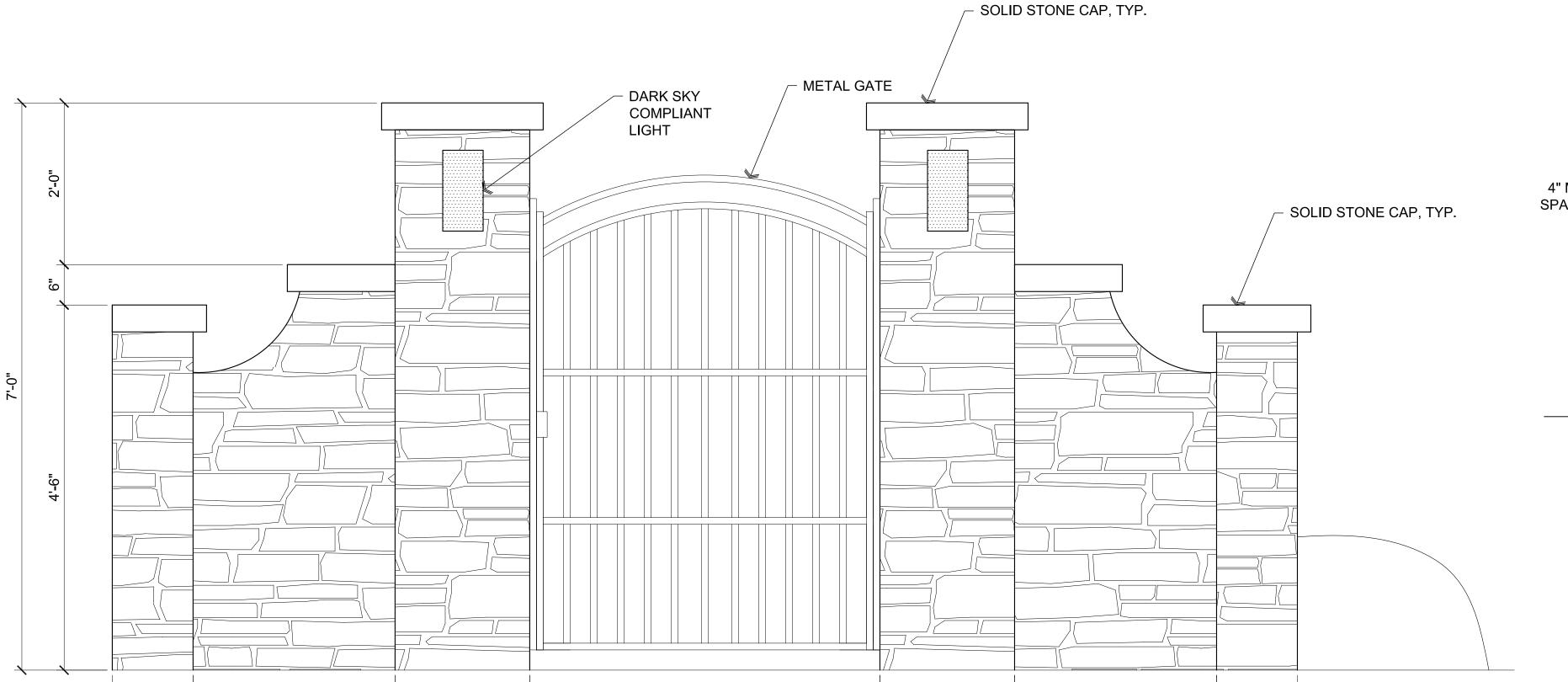
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2'-6"

1'-8"

Scale: 1"=1'-0"

Scale: 1"=1'-0"

1'-0"

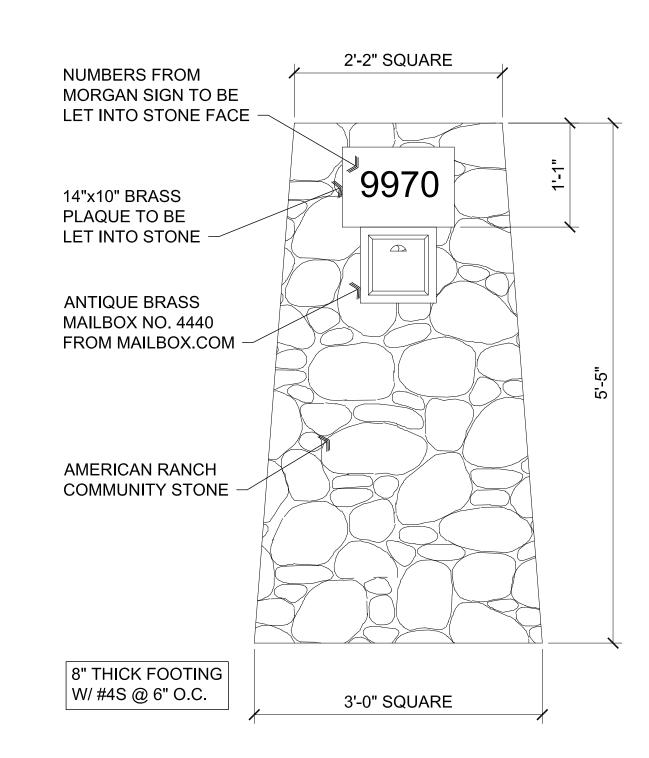
COLONIAL ACCENT ROUND TOP RAIL

4" MAX
SPACING

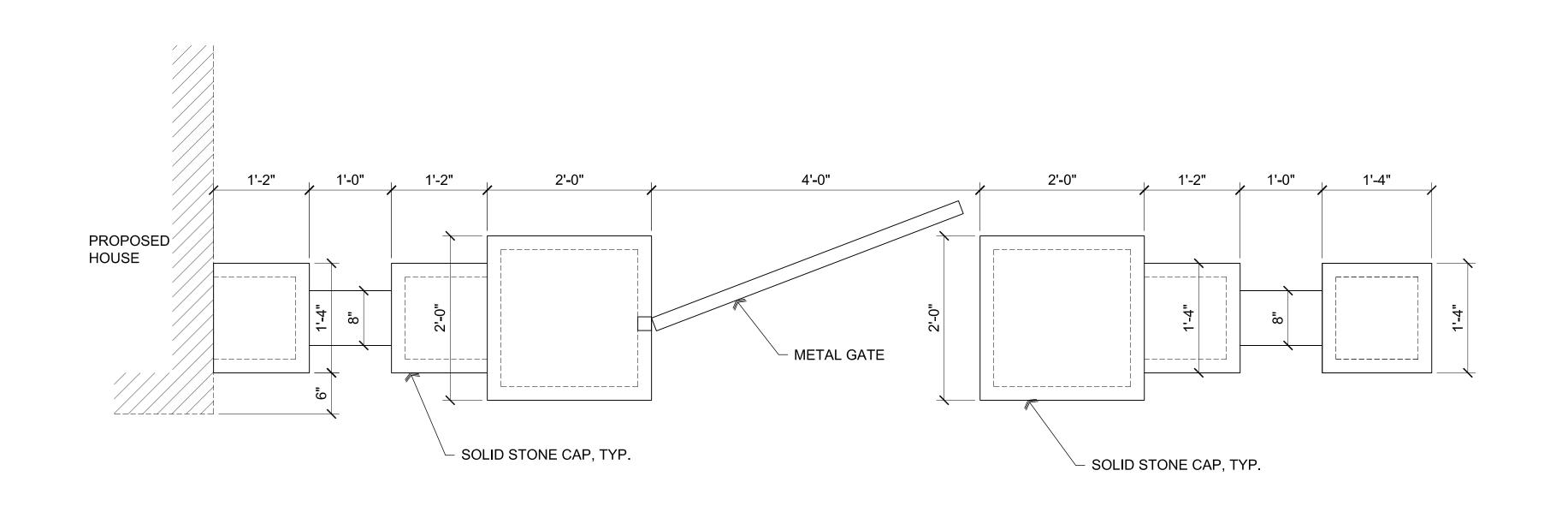
KUCKLE
ACCESSORY

STEEL RAILING PANELS AND ACCESSORIES AS MANUFACTURED BY FORTRESS

# **Ba** Guard Rail Elevation & Section Scale: 1"=1'-0"



B Mailbox Front Elevation
Scale: 1"=1'-0"



4'-4"

1'-0"

2'-6"

1'-8"

**Gate Elevation** 

**Gate Plan** 

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x Details
ce
American Ranch Lot 29
ork Rd.

Vicente Residence 9970 N. Clear Fork Rd. Prescott, AZ

PROJECT: Vicente 9970 N.

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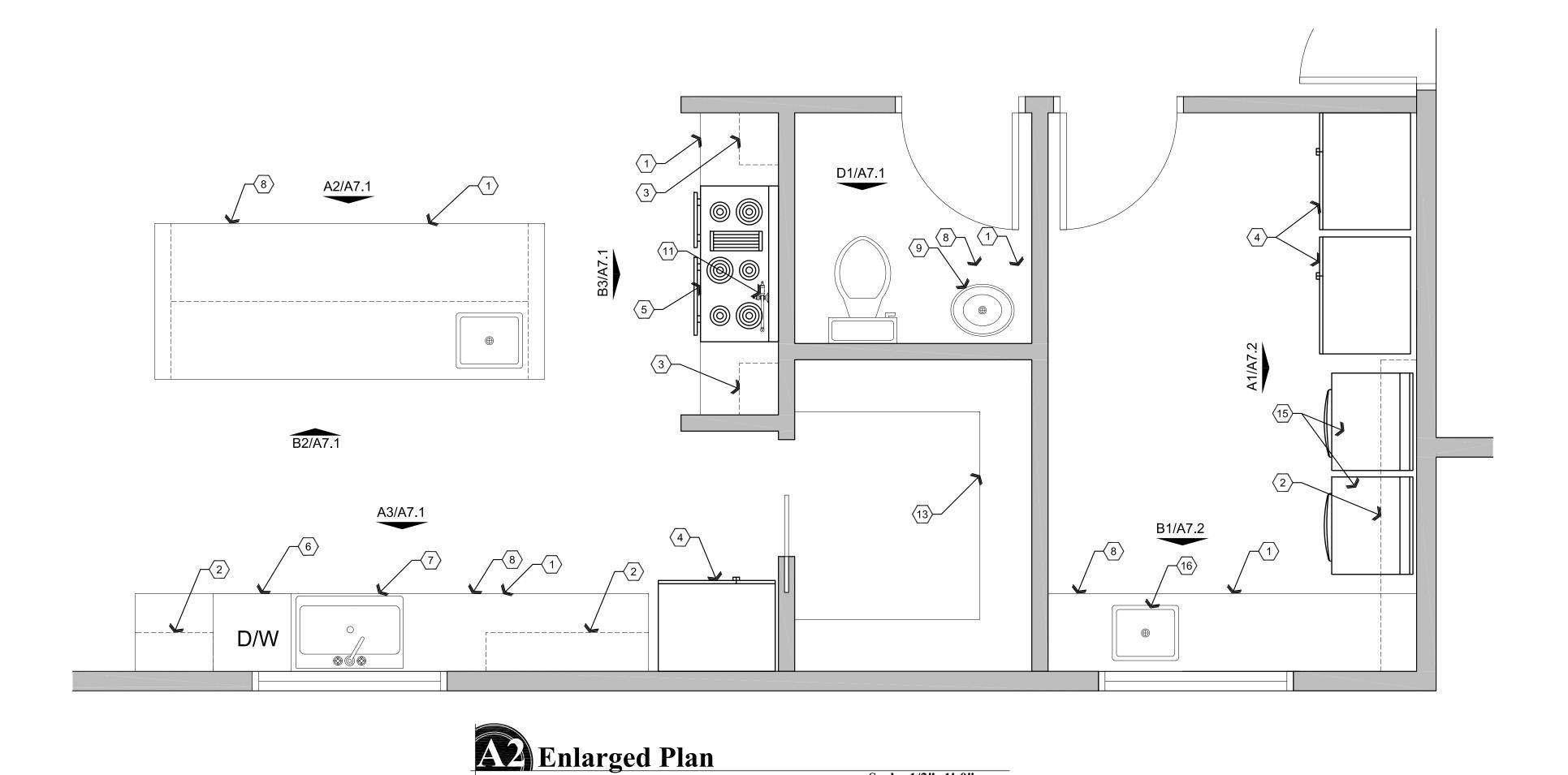
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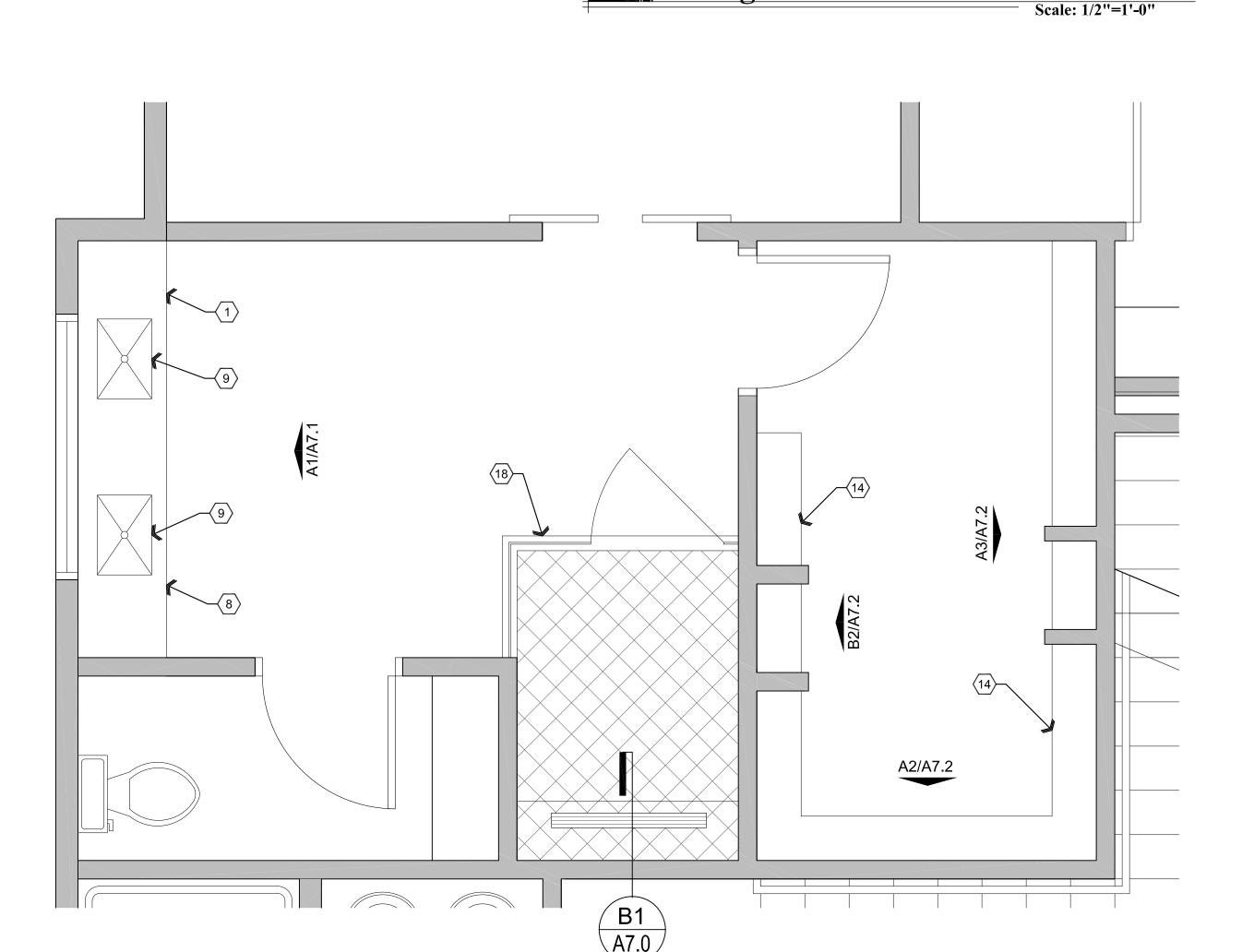
September 17th, 2021

JOB NO.
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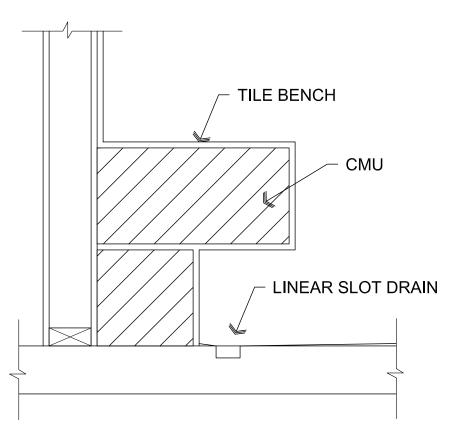
SHEET

A6.3





Enlarged Plan Master Bathroom
Scale: 1/2"=1'-0"



B Shower Bench Detail

SCALE: 1 1/2" = 1'-0"

Discriptive Keynotes  $\bigcirc$ 

1. PROVIDE WOOD BASE CABINETRY.

2. PROVIDE WOOD UPPER CABINETRY.

3. PROVIDE 'FLOATING' SHELVES. 4. REFRIGERATOR/FREEZER BY OWNER.

5. PROVIDE 48" RANGE WITH EXHAUST HOOD. KITCHENAID KDRS483VSS (RANGE) AND KXW9748YSS (HOOD) OR EQUAL.

6. PROVIDE DISHWASHER.

7. PROVIDE FARMHOUSE KITCHEN SINK, REFER TO PLUMBING PLANS.

8. PROVIDE QUARTZITE COUNTERTOP. 9. PROVIDE INTEGRAL LAVATORY.

10. PROVIDE BATHTUB WITH TILE SURROUND.

11. PROVIDE POT FILLER.

12. PROVIDE CERAMIC TILE SHOWER WITH 16"

13. PROVIDE PANTRY SHELVING.

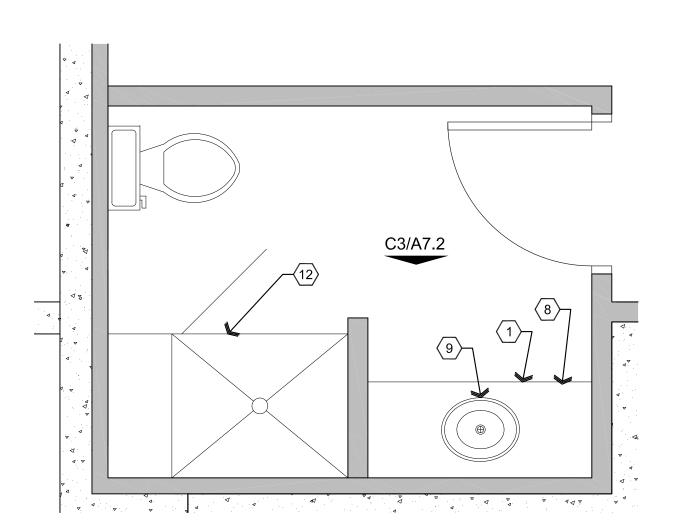
14. PROVIDE CLOSET ROD / SHELVING.

15. WASHING MACHINE AND DRYER PROVIDED BY OWNER.

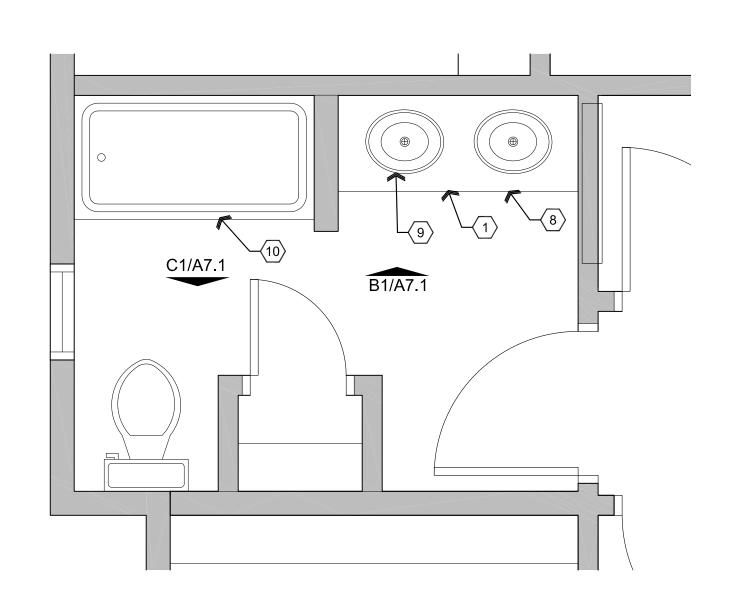
16. UTILITY SINK SET INTO COUNTERTOP. 17. PROVIDE SAFETY GLASS SHOWER

DOOR/PARTITION.

18. PROVIDE TILED SHOWER WITH TILED CEILING AND SAFETY GLASS PARTITION WITH DOOR TO CEILING, ENCLOSING ENTIRE SHOWER. STEAM SHOWER TO BE INSTALLED UNDER TILED SEAT. PROVIDE LINEAR SLOT DRAIN AND RAIN SHOWER HEAD.







Enlarged Plan First Floor Bathroom
Scale: 1/2"=1'-0"

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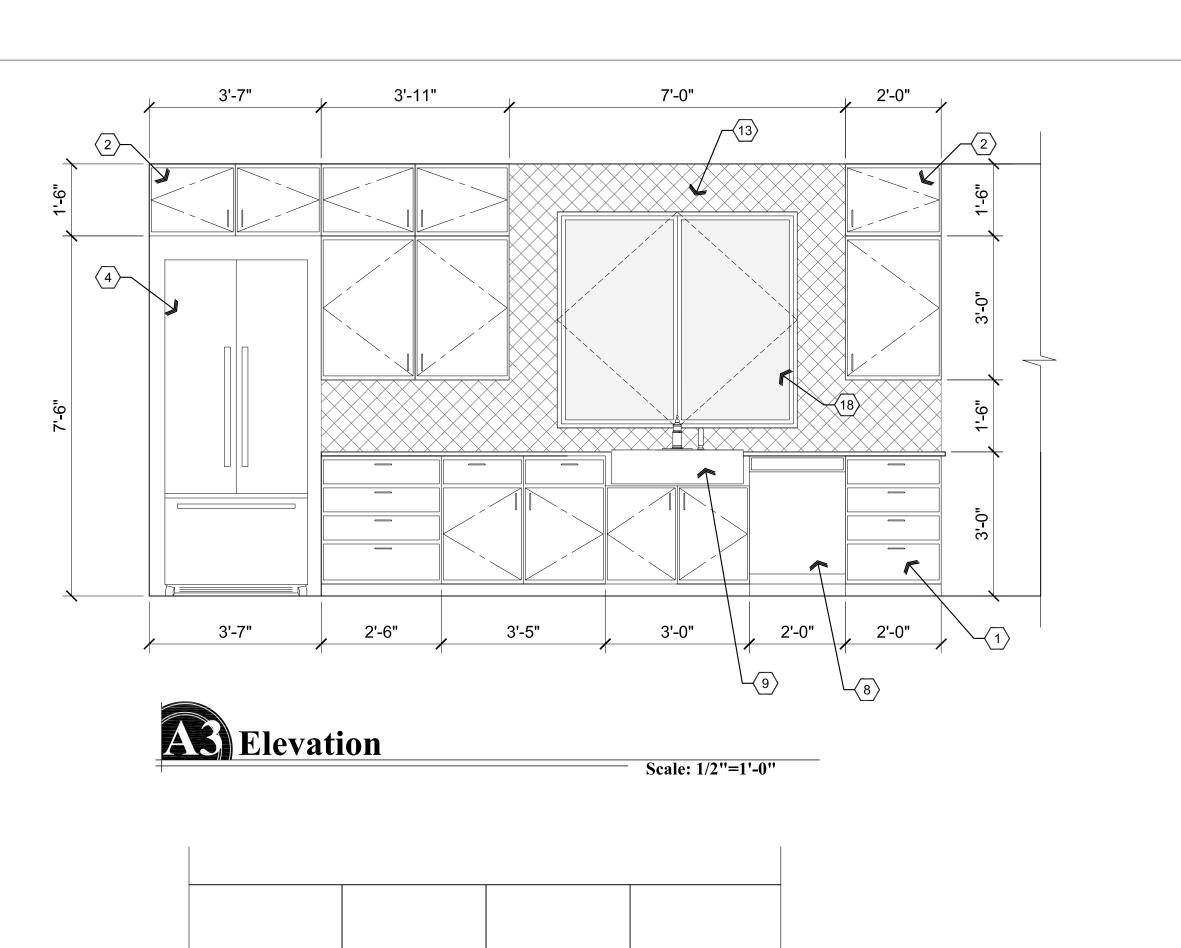
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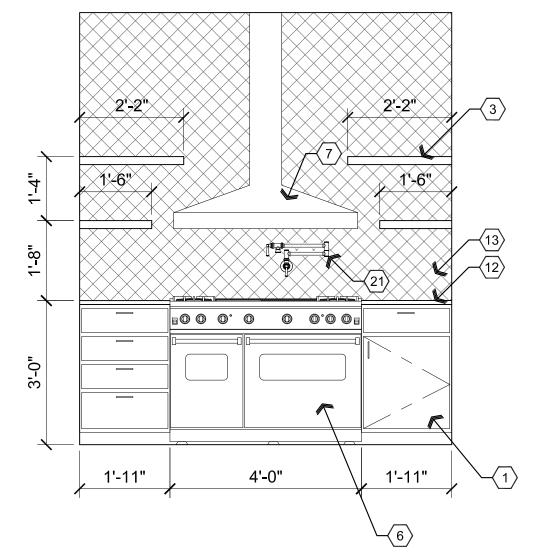
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A7.0





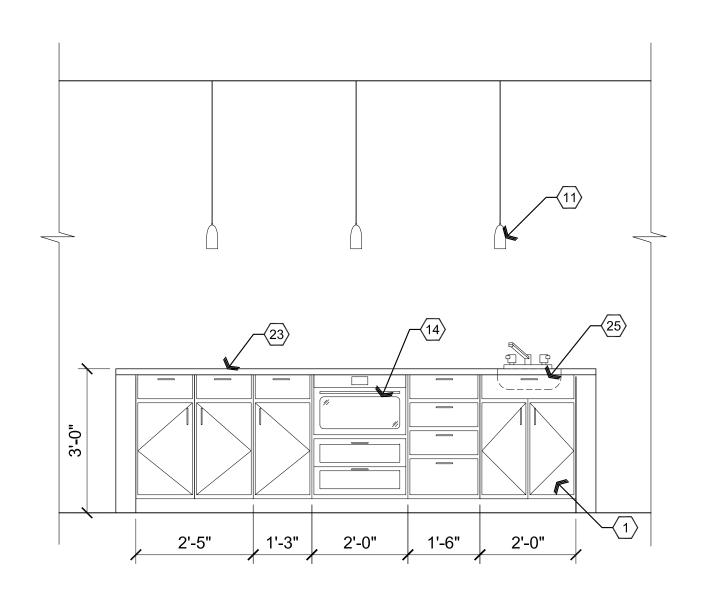


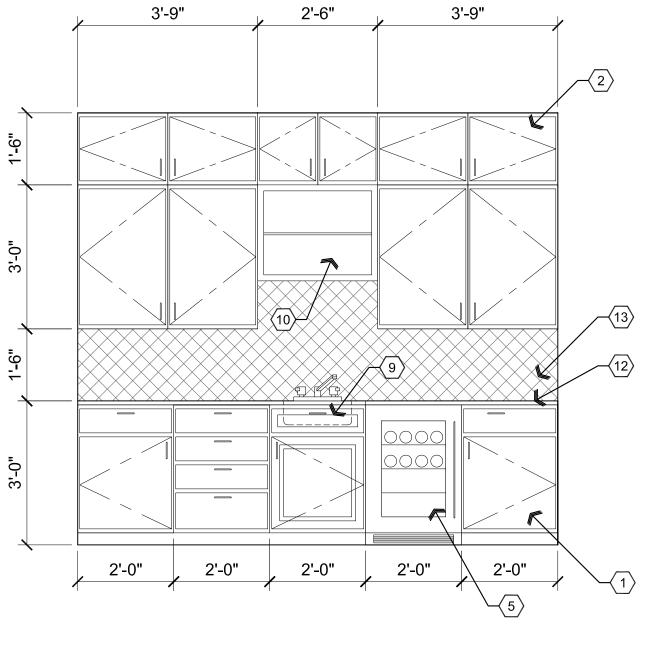
- PROVIDE WOOD UPPER CABINETRY.
- PROVIDE 'FLOATING' SHELVES.
- REFRIGERATOR/FREEZER BY OWNER.
- BELOW COUNTER WINE COOLER BY OWNER.
- 6. STOVE BY OWNER.
- RANGE HOOD BY OWNER.
- DISHWASHER BY OWNER.
- 9. PROVIDE FARMHOUSE SINK.
- 10. PROVIDE OPEN SHELVING CABINETRY. 11. PROVIDE PENDANT LIGHTING, REFER TO
- REFLECTED CEILING PLAN.
- 13. PROVIDE TILE BACKSPLASH.
- 12. PROVIDE QUARTZ COUNTERTOP.
- 14. MICROWAVE DRAWER BY OWNER.

- 15. PROVIDE LAVATORY SINK.
- 16. PROVIDE SCONCE LIGHTING, REFER TO
- ELECTRICAL PLAN.
- 17. PROVIDE MIRROR.
- 18. PROVIDE WINDOW, REFER TO REFERENCE FLOOR
- PLAN AND WINDOW TYPES. 19. TILE TUB SURROUND.
- 20. PROVIDE BATHTUB.
- 21. PROVIDE POT FILLER.
- 22. PROVIDE PEDESTAL SINK.
- 23. PROVIDE QUARTZ WATERFALL COUNTERTOP.
- 24. PROVIDE QUARTZ BACKSPLASH.
- 25. PROVIDE VEGETABLE SINK.
- 26. PROVIDE WATER CLOSET, REFER TO PLUMBING
- PLANS.

**B** Elevation

Scale: 1/2"=1'-0"





**Elevation** 

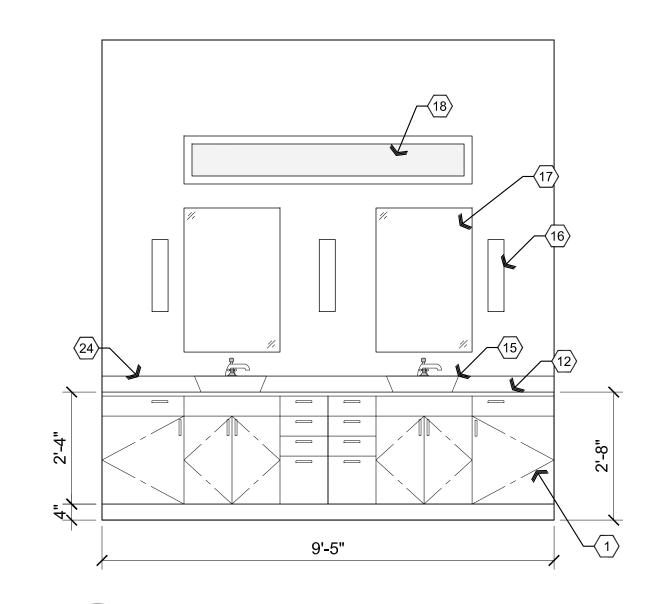
EQUAL

EQUAL

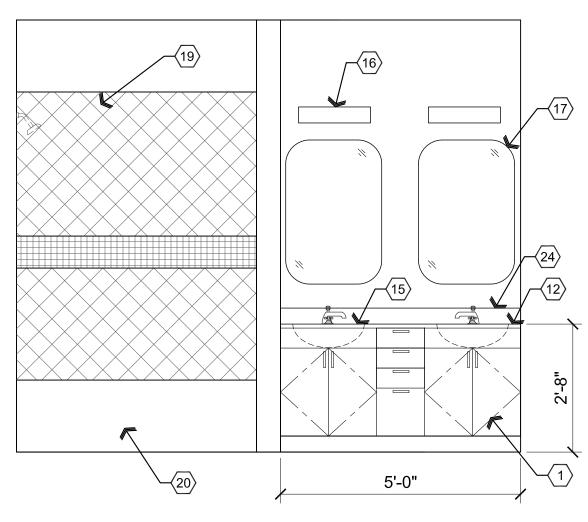
**B** Elevation

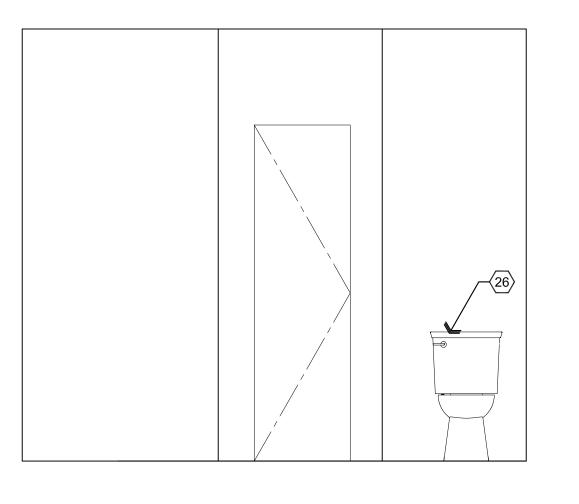
**C2** Elevation

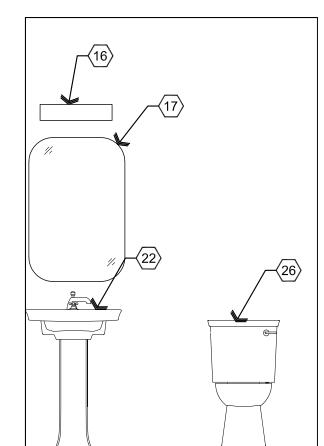
Scale: 1/2"=1'-0"



**Elevation** 





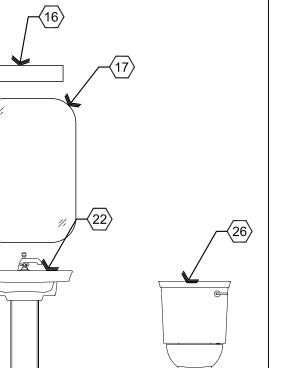


Blevation
Scale: 1/2"=1'-0"



**D** Elevation

Scale: 1/2"=1'-0"



A7.1

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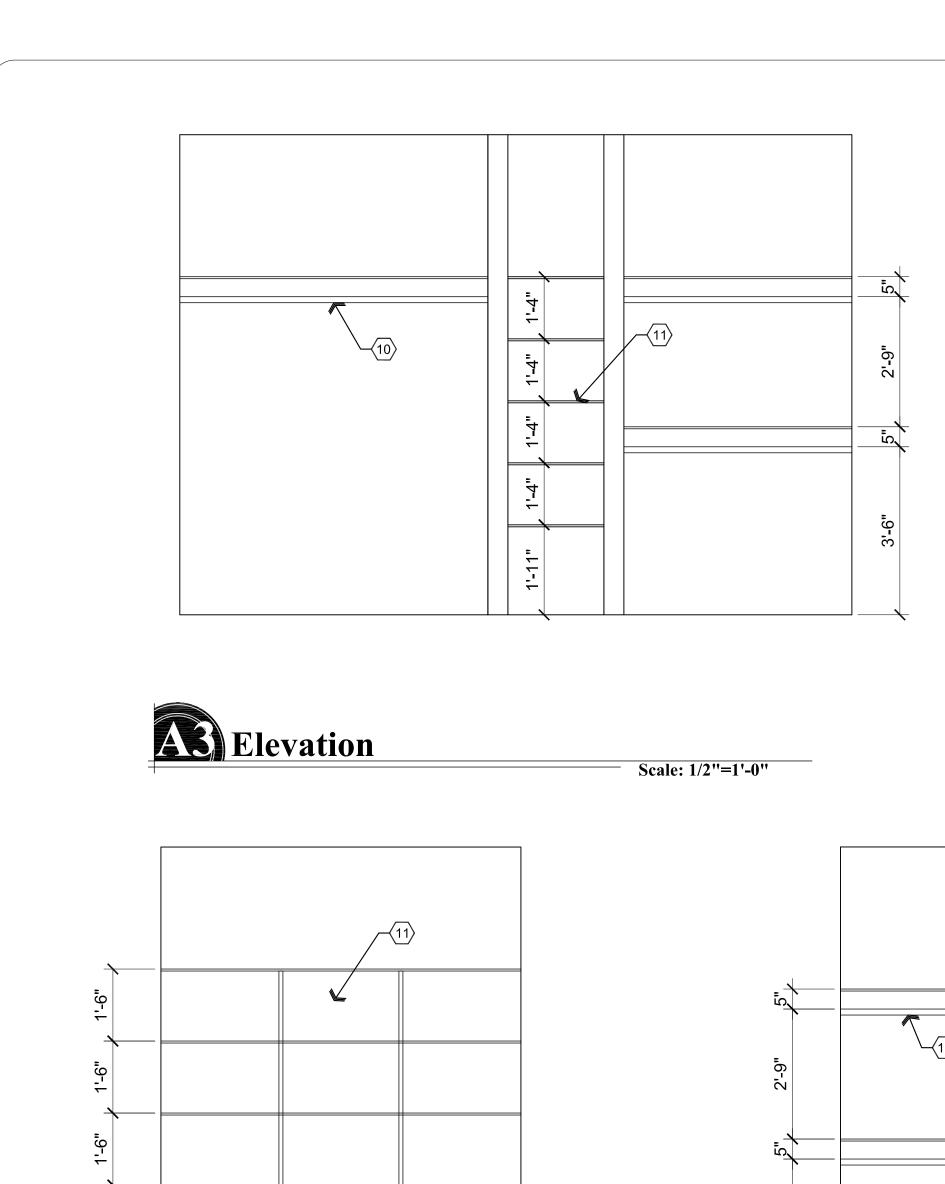
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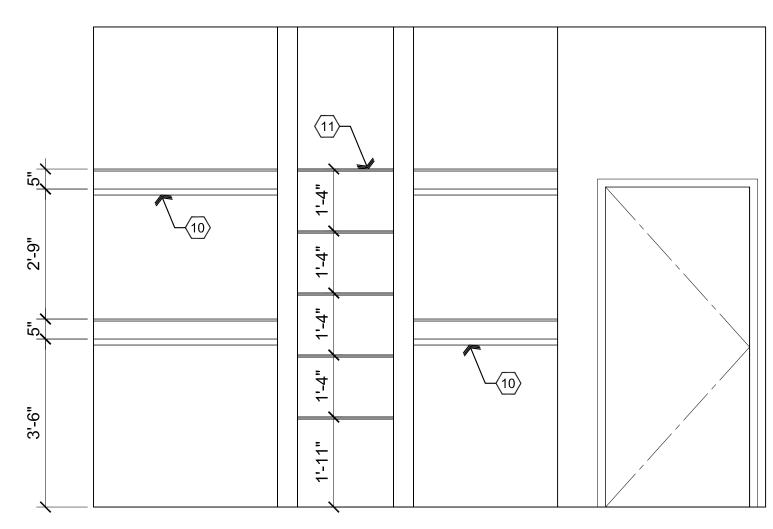
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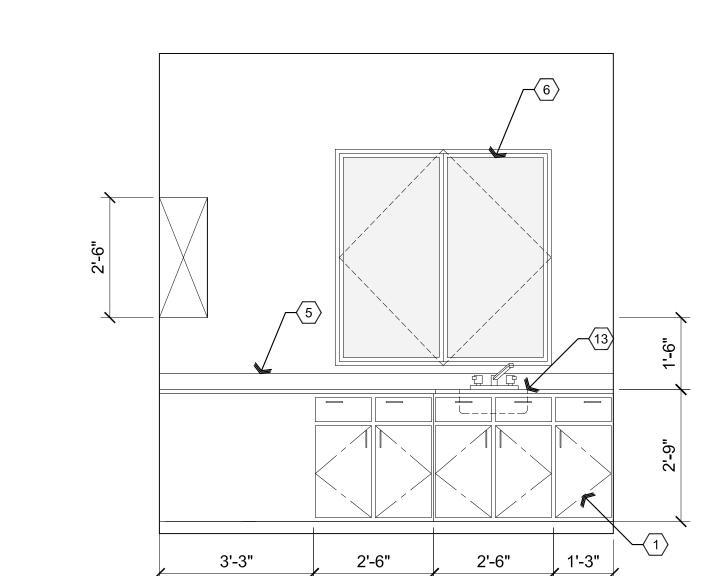


**EQUAL** 

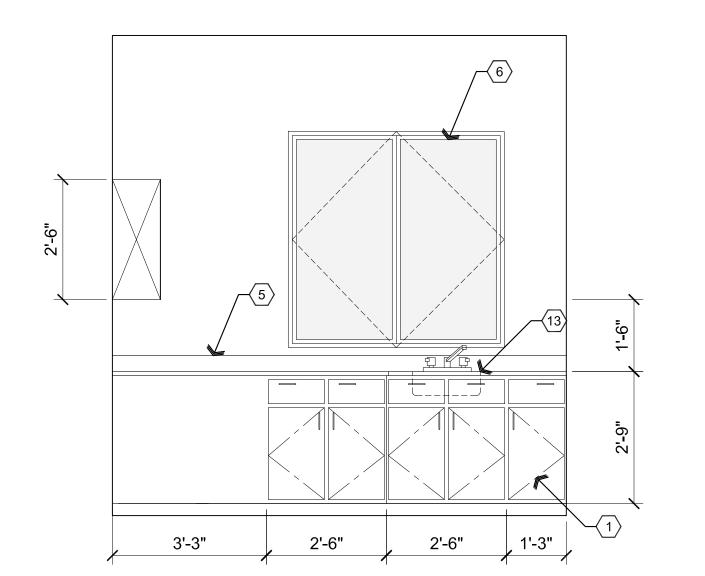
6'-4"

FREEZER SPACE

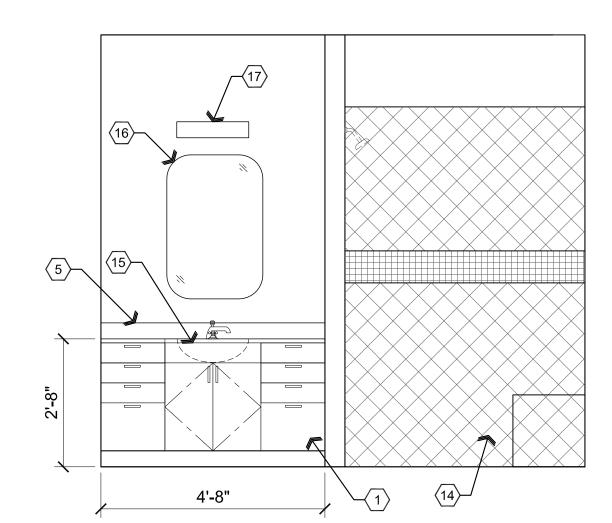
**Elevation** 



**B2** Elevation



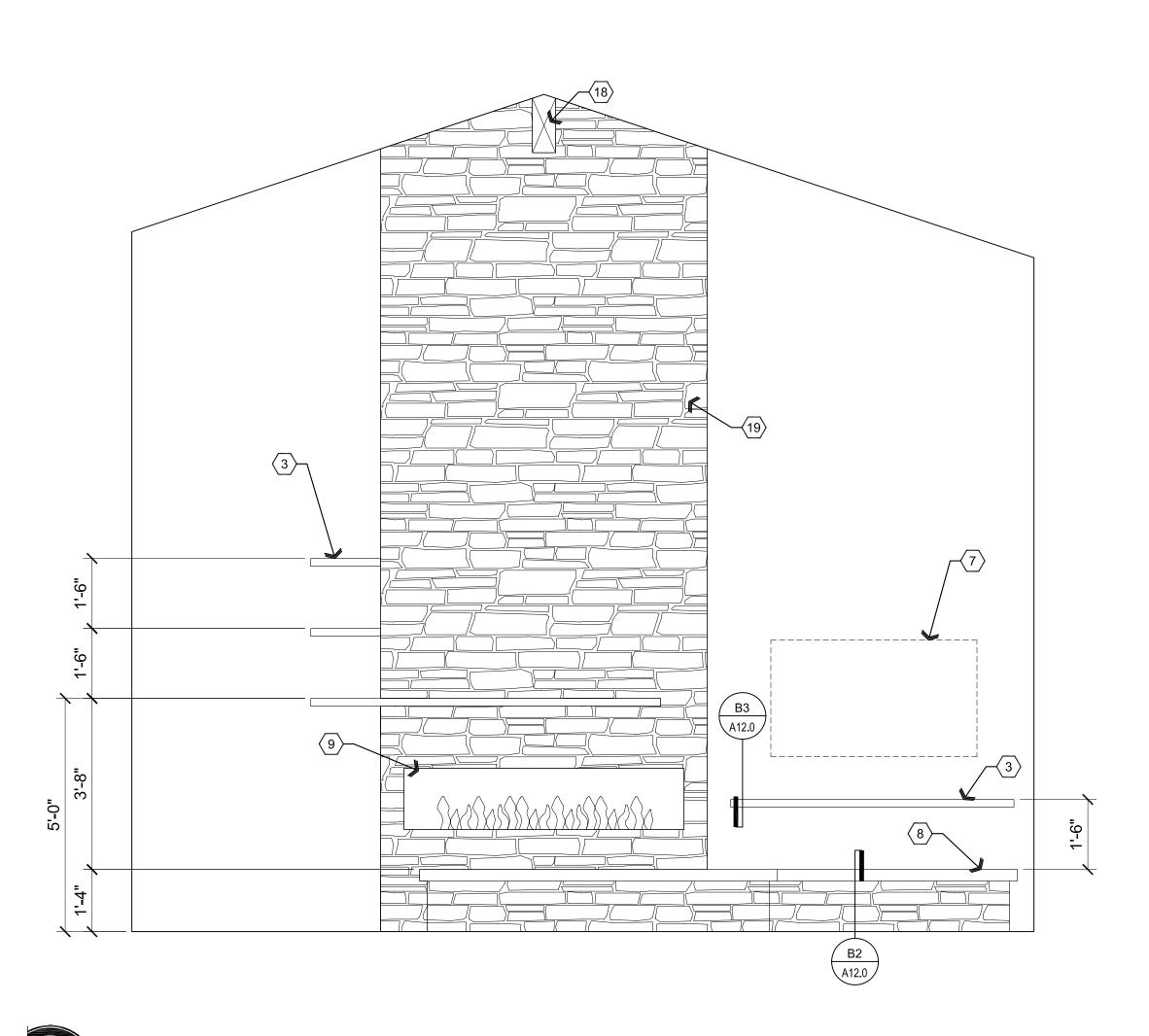






### Discriptive Keynotes $\bigcirc$

- 1. PROVIDE WOOD BASE CABINETRY.
- 2. PROVIDE WOOD UPPER CABINETRY.
- 3. PROVIDE WOOD 'FLOATING' SHELVES, REFER TO DETAIL B3/A12.0.
- 4. WASHER AND DRYER BY OWNER.
- 5. PROVIDE QUARTZ COUNTERTOP WITH 4" BACK SPLASH TO MATCH AS SELECTED BY OWNER.
- 6. PROVIDE WINDOW, REFER TO REFERENCE FLOOR PLAN AND WINDOW TYPES.
- TELEVISION BY OWNER.
- 8. PROVIDE CONCRETE HEARTH, REFER TO DETAIL B2/A12.0.
- 9. PROVIDE GAS FIREPLACE, REFER TO MANUFACTURERS WRITTEN INSTRUCTIONS FOR INSTALLATION, REFER TO REFERENCE FLOOR
- 10. PROVIDE CLOSET ROD.
- 11. PROVIDE CLOSET SHELVING.
- 12. REFRIGERATOR / FREEZER BY OWNER.
- 13. PROVIDE UTILITY SINK MOUNTED IN QUARTZITE COUNTERTOP.
- 14. PROVIDE TILED SHOWER WITH SEAT AND SAFETY GLASS PARTITION WITH DOOR.
- 15. PROVIDE LAVATORY SINK, REFER TO PLUMBING PLANS..
- 16. PROVIDE MIRROR.
- 17. PROVIDE SCONCE LIGHTING.
- 18. FALSE BEAM, REFER TO REFLECTED CEILING
- 19. STONE VENEER AS SELECTED BY OWNER OVER SCRATCH COAT WITH METAL LATH.





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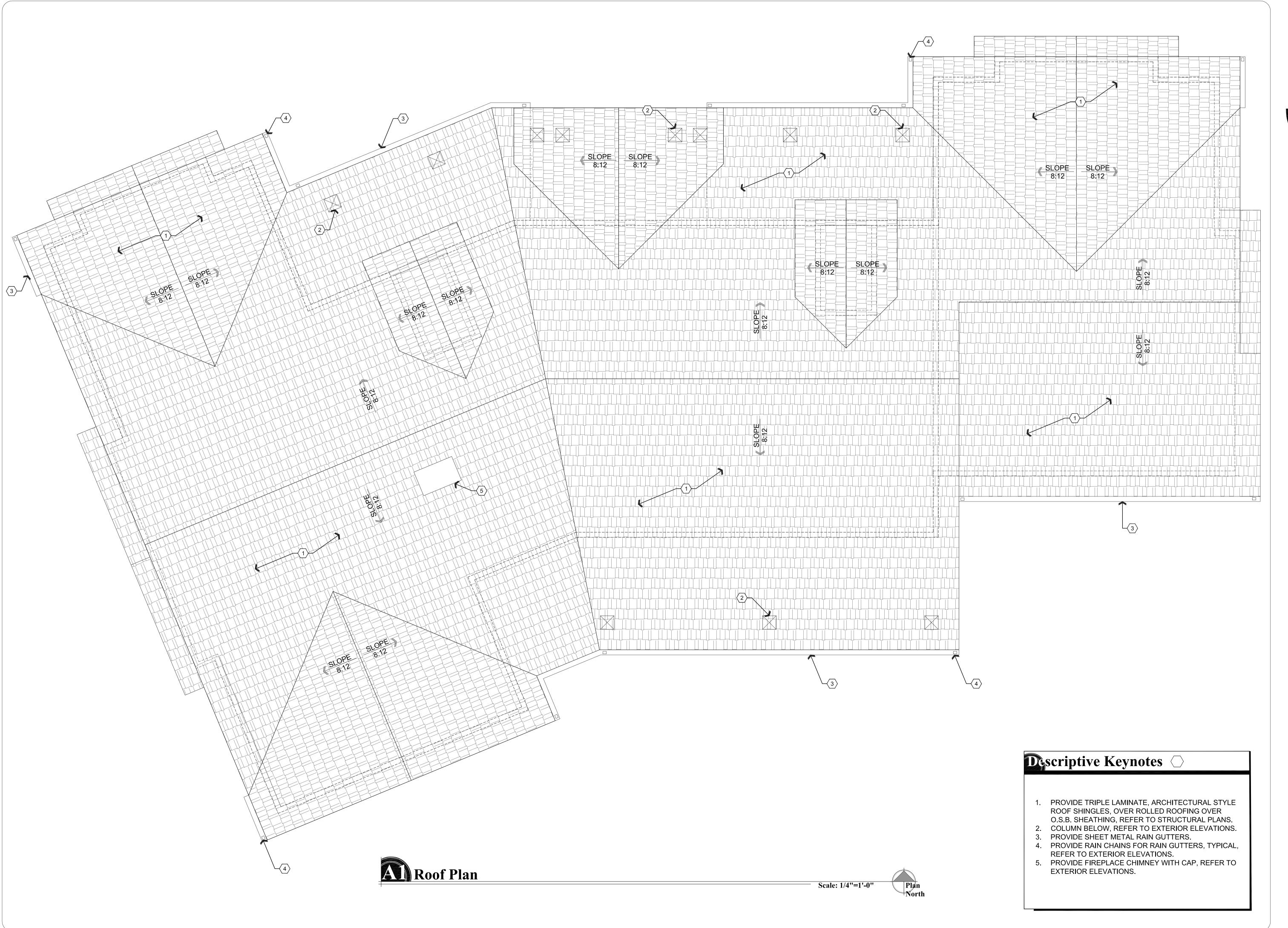
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Scale: 1/2"=1'-0"

**C** Elevation

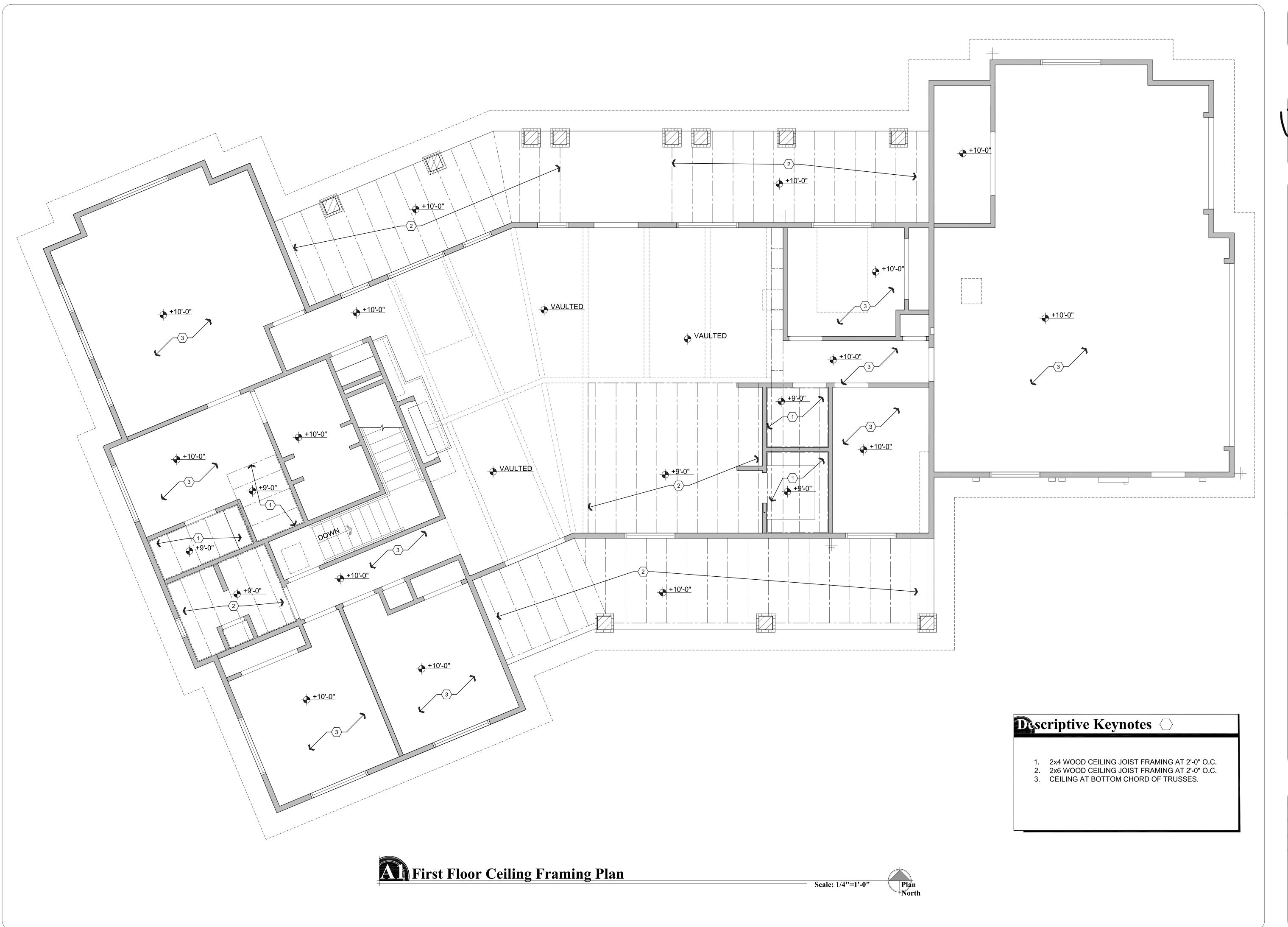


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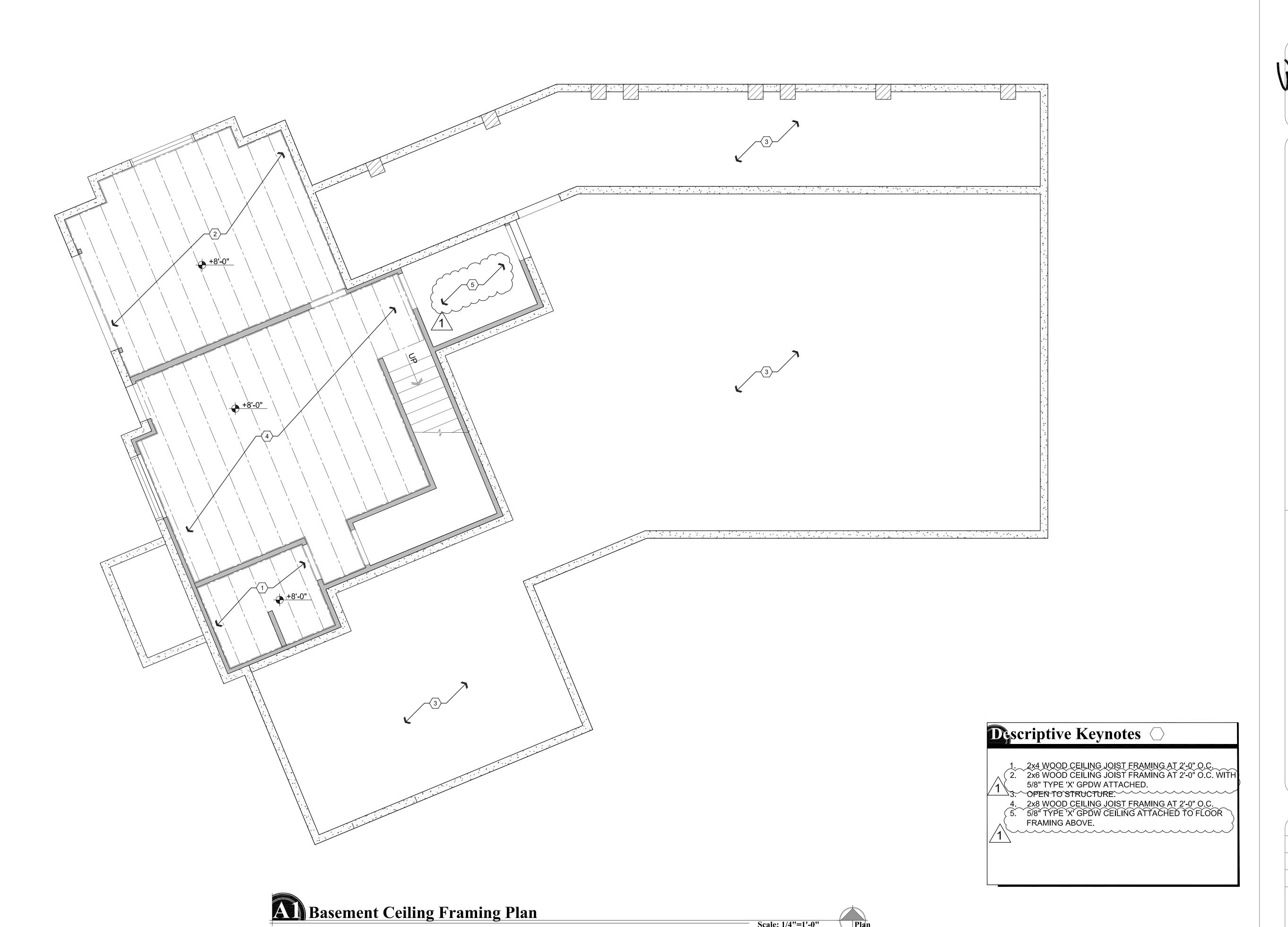
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**A8.0** 



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American Ranch Lot 29

ente Residence 0 N. Clear Fork Rd. scott, AZ

**CT:** Vicente Residence 9970 N. Clear Fork Prescott A7

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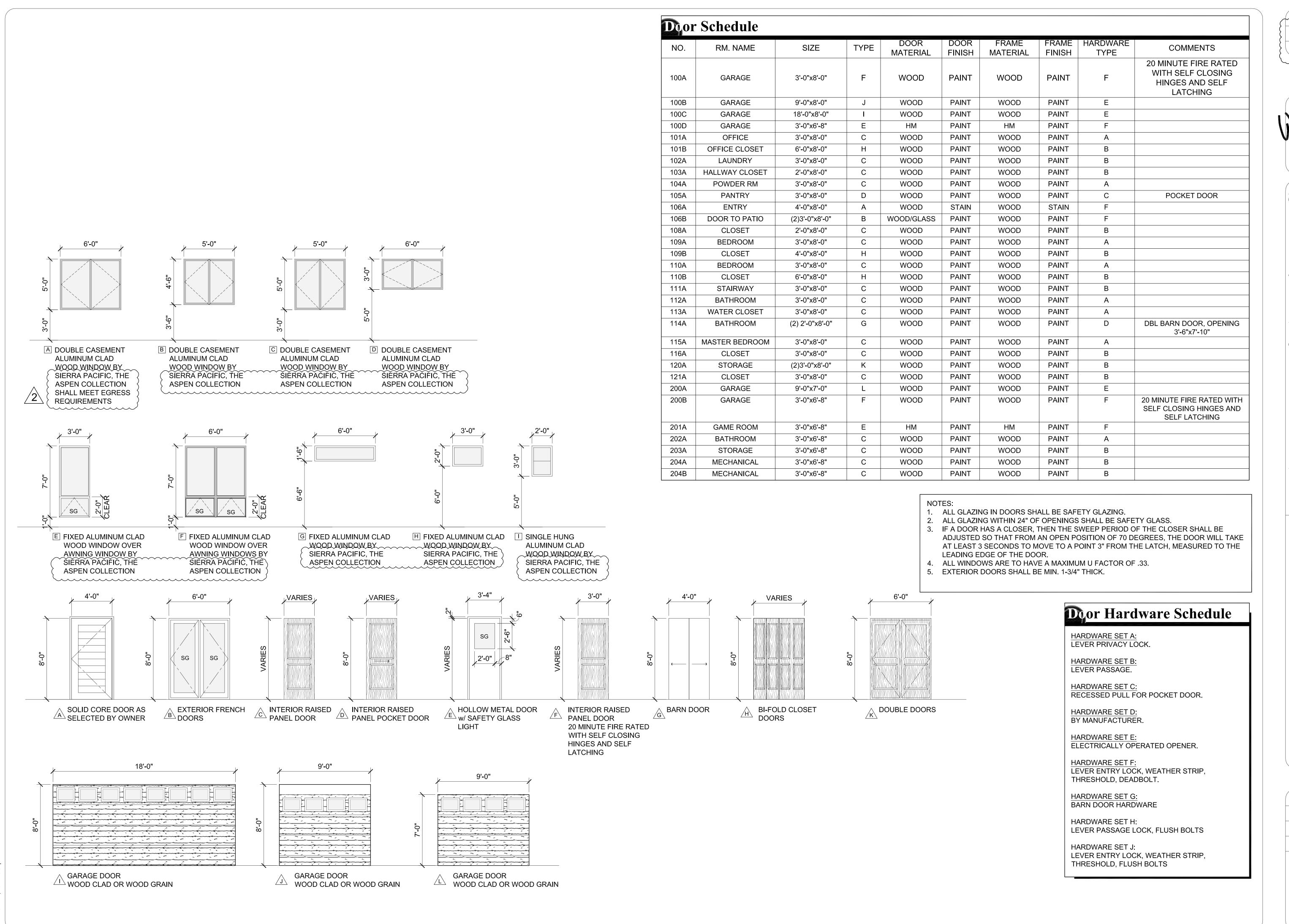
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American Ranch Lot 29

e Residence N. Clear Fork Rd. ott, AZ

OJECT: Vicente Resi 9970 N. Clea Prescott, AZ

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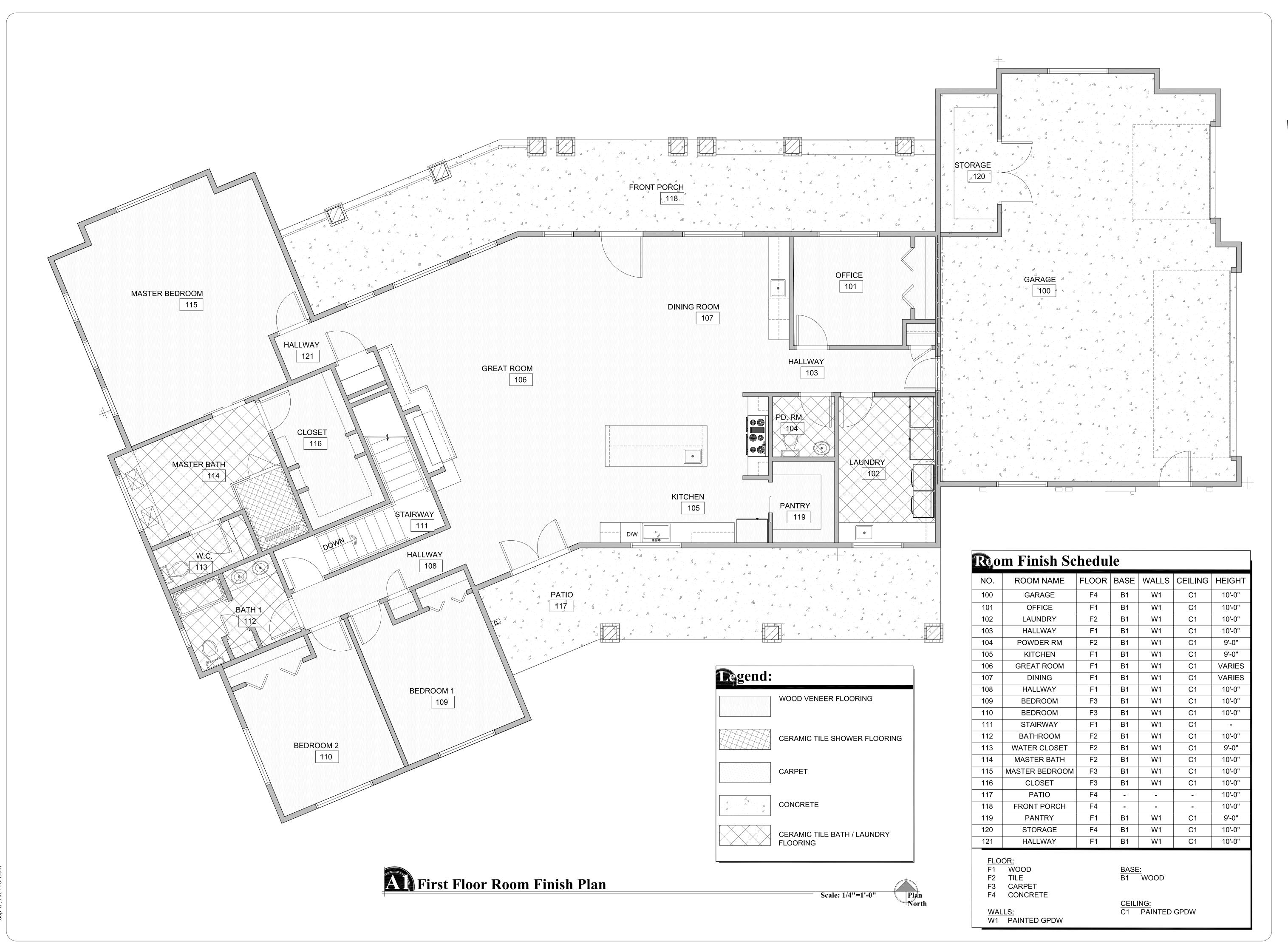
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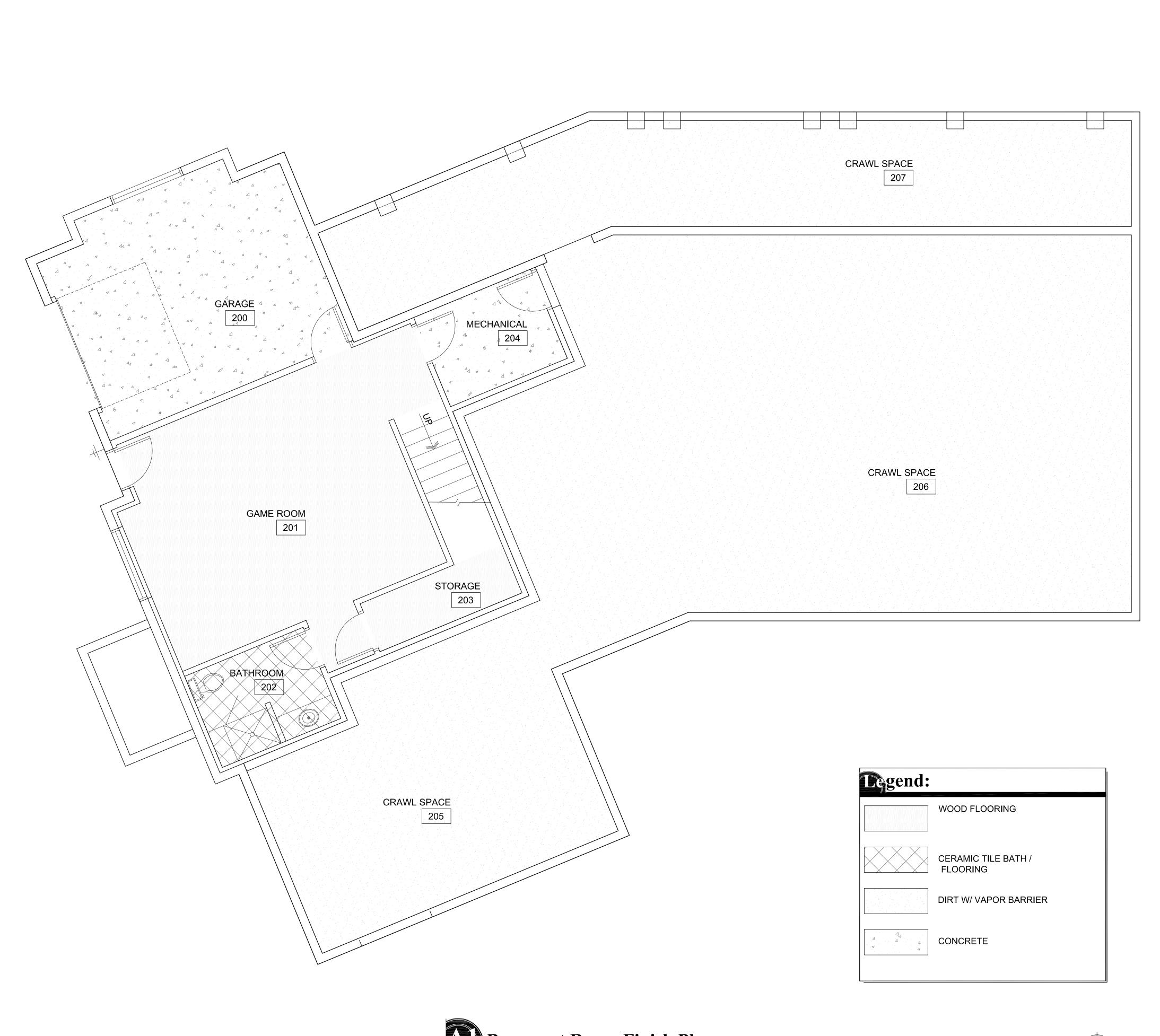
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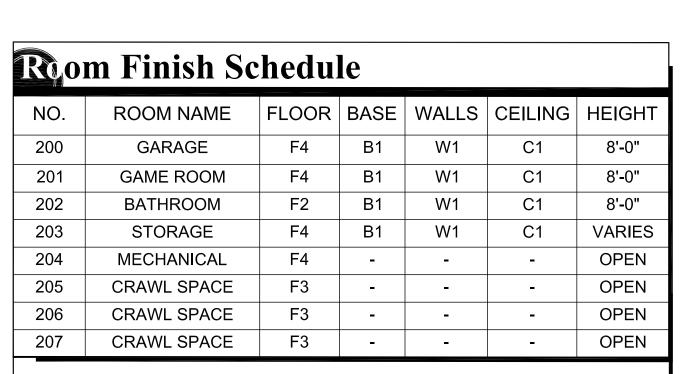
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DATE
September 17th, 2021

A11.0





FLOOR:
F1 WOOD
F2 TILE
F3 DIRT W/ VAPOR BARRIER
F4 CONCRETE

WALLS: W1 PAINTED GPDW

CEILING: C1 PAINTED GPDW

BASE: B1 WOOD

Basement Room Finish Plan

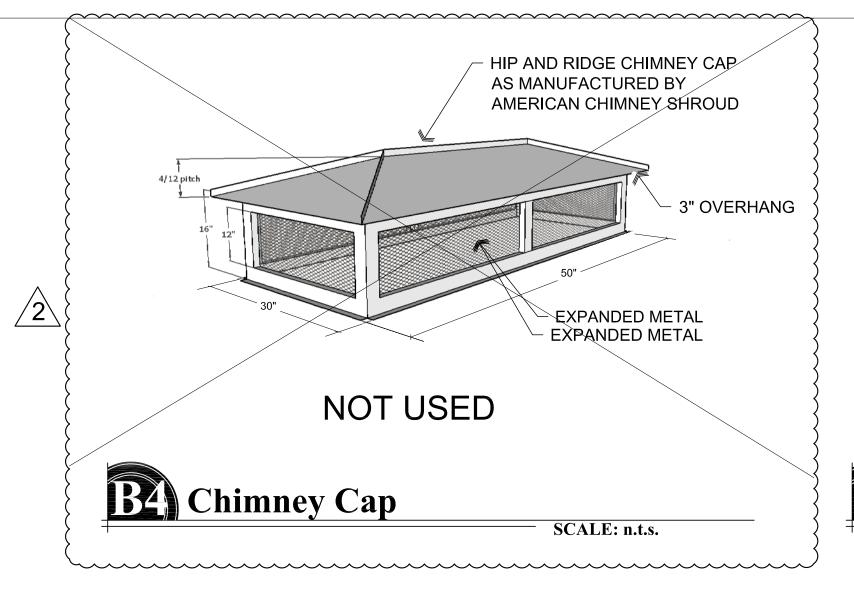


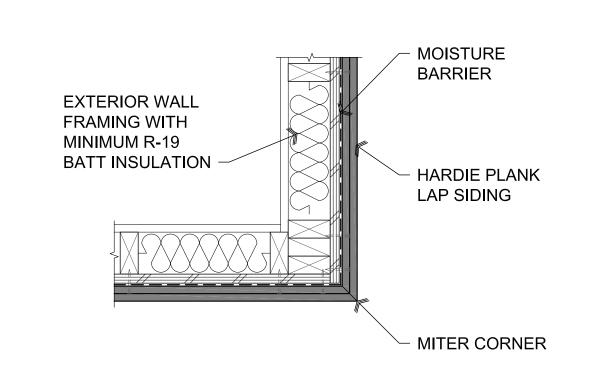
September 17th, 2021

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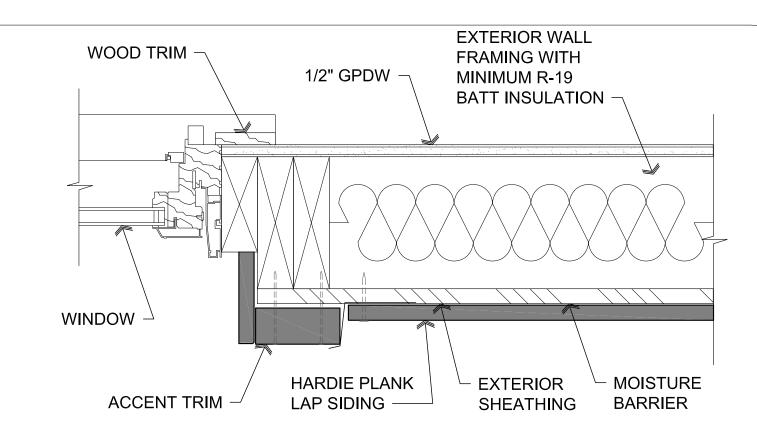
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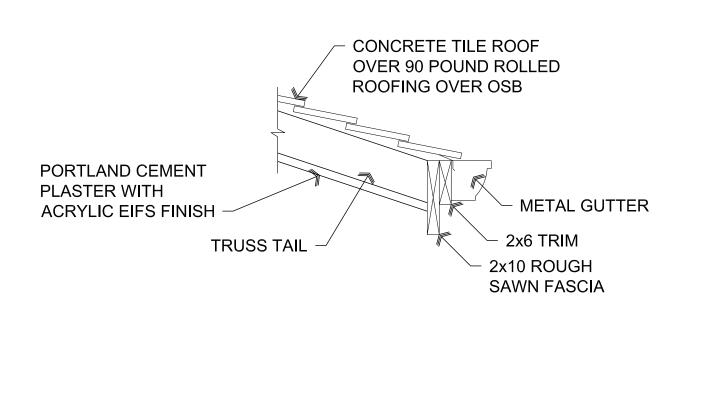


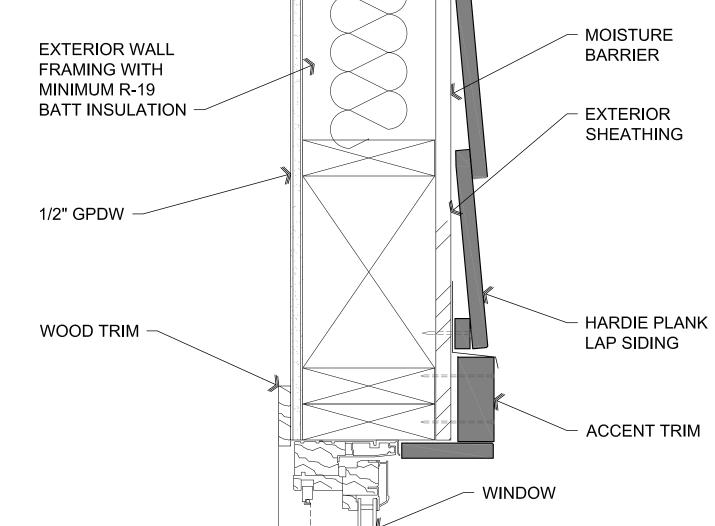






# Window Jamb at Siding







SOLID WOOD

BACKING

8"x8"x16" SOLID GROUT CMU

SCALE: 1 1/2" = 1'-0"

WOODED FLOATING SHELF

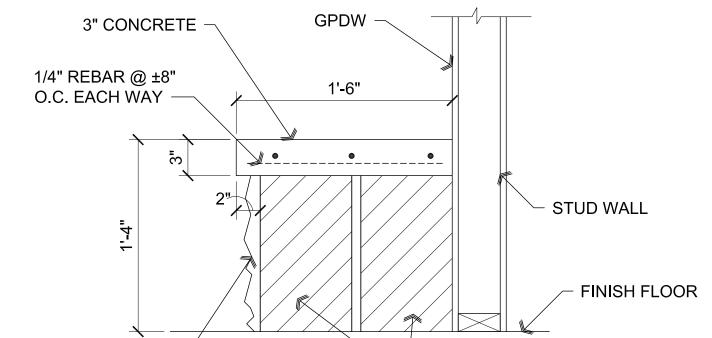
STONE VENEER

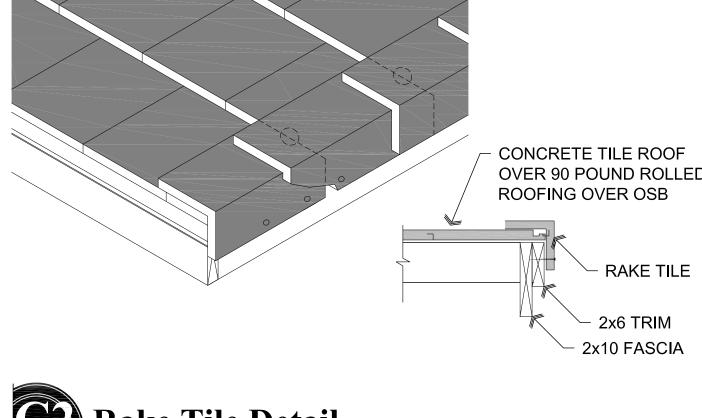
B2 Hearth Detail

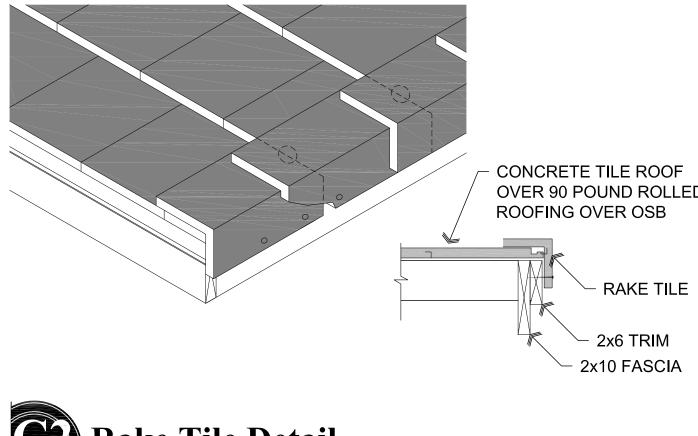
SOLID STEEL TUBE

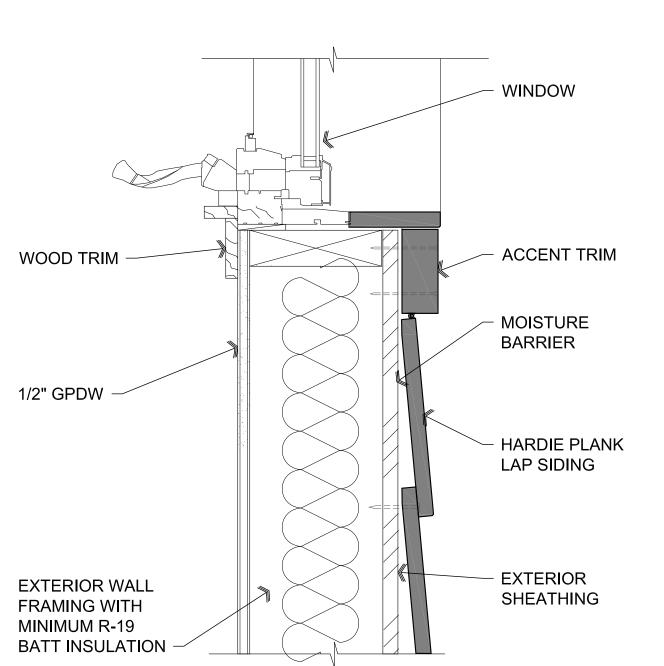
2"x4"x3/16" PLATE W/

(2) 2-1/2"x1/4" LAG

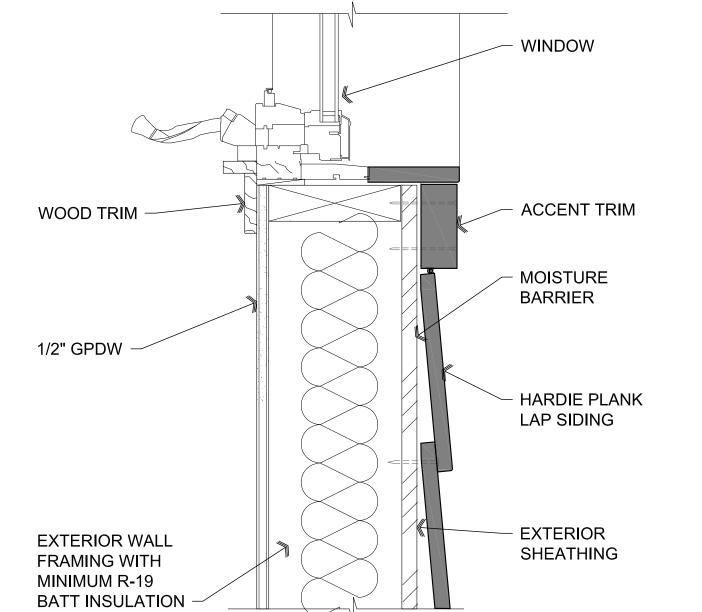


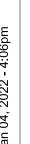












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**2**\ 1-03-2022

Window Head at Siding - CONCRETE TILE ROOF OVER 90 POUND ROLLED ROOFING OVER OSB

Fascia / Soffit Detail

Rake Tile Detail

**SCALE: 1" = 1'-0"** 

SCALE: 1" = 1'-0"

### **GENERAL REQUIREMENTS:**

- 1. THESE DRAWINGS, AND THEIR ASSOCIATED STRUCTURAL CALCULATIONS, HAVE BEEN PERFORMED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY REPUTABLE STRUCTURAL ENGINEER'S IN THIS OR SIMILAR LOCALITIES. THEY NECESSARILY ASSUME THAT THE WORK DEPICTED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR AND/OR WORKMEN WHO HAVE A WORKING KNOWLEDGE OF THE INTERNATIONAL BUILDING CODE CONVENTIONAL FRAMING REQUIREMENTS AND OF INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OR FRAMING ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN ON THESE DRAWINGS, IT IS UNDERSTOOD THAT THE CONTRACTOR WILL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR ALL MISCELLANEOUS WORK NOT EXPLICITLY SHOWN.
- 2. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED CONSTRUCTION SUCH THAT DESIGN LIVE LOAD PER SQUARE FOOT AS STATED HEREIN IS NOT EXCEEDED. OPTIONS ARE FOR CONTRACTOR'S CONVENIENCE, IF AN OPTION IS USED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CHANGES, AND SHALL COORDINATE ALL DETAILS, AT NO ADDITIONAL COST TO OWNER.
- 3. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL STRUCTURAL NOTES AND SPECIFICATIONS, THE GREATER REQUIREMENTS SHALL GOVERN. TYPICAL DETAILS AND NOTES ARE NOT NECESSARILY INDICATED ON THE PLANS, BUT SHALL APPLY NONE-THE-LESS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT. DETAILS MAY SHOW ONLY ONE SIDE OF CONNECTION OR MAY OMIT INFORMATION FOR CLARITY.
- 4. ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL WITH APPROPRIATE TRADES, DRAWINGS AND SUBCONTRACTORS PRIOR TO CONSTRUCTION CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. RESOLVE ANY DISCREPANCY WITH THE ARCHITECT AND STRUCTURAL
- 5. ANY INSPECTIONS, SPECIAL (IBC CHAPTER 17) OR OTHERWISE THAT ARE REQUIRED BY THE BUILDING CODES, LOCAL BUILDING DEPARTMENTS, OR BY THESE PLANS SHALL BE DONE BY AN INDEPENDENT INSPECTION COMPANY OR THE BUILDING DEPARTMENT, SITE VISITS BY THE STRUCTURAL ENGINEER DO NOT CONSTITUTE AN OFFICIAL INSPECTION, UNLESS SPECIFICALLY CONTRACTED FOR.

### BASIS FOR DESIGN:

RISK CATEGORY = II

- 1. BUILDING CODE: 2018 EDITION OF THE IBC WITH CITY/COUNTY AMENDMENTS.
- 2. VERTICAL LOADS:

LOCATION	LIVE / SNOW LOAD	DEAD LOAD
ROOF	30 PSF	23 PSF
FLOOR (WOOD FRAMED)	40 PSF	12 PSF
FLOOR (CONCRETE)	60 PSF	55 PSF

#### 3. SEISMIC DESIGN PARAMETERS:

EQUIVALENT LATERAL FORCE PROCEDURE
le = 1.00
D
С
Sms = 0.532, Sm1 = 0.255
Sds = 0.355, Sd1 = 0.170
S:
R = 6.5
R = 3.5
R = 6.5
R = 4.0

### 4. WIND DESIGN PARAMETERS (STRENGTH):

ULTIMATE WIND SPEED	115 MPH (3 SECOND GUST)
WIND EXPOSURE	С
INTERNAL PRESSURE COEFFICIENT	+/-0.18
COMPONENT AND CLADDING PRESSURE	37.6 PSF
NET UPLIFT ON ROOF	15.1 PSF

### FOUNDATION NOTES:

- 1. FOUNDATIONS DESIGNED IN CONFORMANCE WITH RECOMMENDATIONS BY: ENGINEERING TESTING CONSULTANTS, INC. REPORT NO. 7518 DATED MAY 21, 2010.
- 2. SITE PREPARATION AND GRADING REQUIREMENTS OF THE SOIL REPORT AND ANY ADDENDUM'S SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF FOUNDATIONS. ANY TESTS OR INSPECTIONS REQUIRED BY THE SOIL REPORT SHALL BE PERFORMED PRIOR TO PLACEMENT OF FOUNDATION REINFORCING STEEL OR CONCRETE. ALTERATIONS TO SITE PREPARATION OR GRADING SHALL BE REPORTED TO THE GEOTECHNICAL ENGINEER PRIOR TO FOUNDATION CONSTRUCTION.
- THE SOIL DESIGN VALUES FOR THE FOLINDATION ARE:

THE SOIL DESIGN VALUES FOR THE FOUNDATION ARE.		
ALLOWABLE BEARING PRESSURE	2000 PSF	
ALLOWABLE LATERAL BEARING PRESSURE	400 PSF/FT	
ALLOWABLE LATERAL SLIDING COEFFICIENT	0.40	
LATERAL BACKFILL PRESSURE (UNRESTRAINED)	36 PSF/FT	
LATERAL BACKFILL PRESSURE (RESTRAINED)	57 PSF/FT	
SITE CLASS	D	

3. A ONE-THIRD INCREASE IN BEARING PRESSURES IS ALLOWED WITH SEISMIC OR WIND LOAD COMBINATIONS. LATERAL BEARING AND LATERAL SLIDING RESISTANCE MAY BE COMBINED.

FOL	JNDATION BEARING	DEPTH	
18"	BELOW FINISHED	GRADE	

- 4. ALL FOUNDATIONS SHALL BEAR ON UNDISTURBED NATURAL SOIL OR COMPACTED ENGINEERED FILL 18 INCHES MINIMUM BELOW FINISH GRADE. GRADE IS DEFINED AS TOP OF SLAB FOR INTERIOR FOOTINGS AND LOWEST ADJACENT GRADE WITHIN 5 FEET OF THE BUILDING FOR PERIMETER FOOTINGS. WHERE EXTERIOR PAVING OR CONCRETE IS DIRECTLY ADJACENT TO BUILDING, GRADE IS DEFINED AS TOP OF EXTERIOR PAVING AT LEAST 5 FEET FROM BUILDING. CONCRETE FOOTING EXCAVATIONS SHALL BE CLEAN AND FREE OF LOOSE DEBRIS OR UN-COMPACTED MATERIAL AT TIME OF CONCRETE PLACEMENT.
- 5. CONCRETE SLABS ON GRADE SHALL BE SUPPORTED ON A 4 INCH LAYER OF SELECT FILL MATERIAL ACCORDING TO THE SPECIFICATIONS OF THE SOIL REPORT. FILL MATERIAL SHOULD BE MOISTENED, BUT NOT SATURATED JUST PRIOR TO PLACING CONCRETE.

### CONCRETE:

1. MINIMUM 28 DAY CONCRETE STRENGTH SHALL BE AS FOLLOWS:

USE:	CONCRETE STRENGTH:	REMARKS:
FOUNDATIONS	2500 PSI	DESIGNED FOR 2500 PSI
CONCRETE SLABS ON GRADE	3000 PSI	W/O INSPECTION
WALL(S)	3000 PSI	
CONCRETE TOPPING O/STEEL DECK	3500 PSI	

- 2. ALL NORMAL WEIGHT CONCRETE SHALL BE REGULAR WEIGHT OF 150 POUNDS PER CUBIC FOOT USING HARD-ROCK AGGREGATES. AGGREGATE USED IN CONCRETE SHALL CONFORM TO ASTM C67 FOR 34". ASTM C57 FOR 1" AND ASTM C467 FOR 1½" AGGREGATE.
- 3. TENSION LAP SPLICES OF REINFORCING STEEL IN CONCRETE SHALL BE AS FOLLOW:

REBAR SIZE	STANDARD LAP
#3	20"
#4	32"
#5	39"

LAP SPLICES FOR BEAMS AND FLOOR SLABS SHALL BE ACCORDING TO CHAPTER 12 OF ACI 318 OR LAP SCHEDULE ON THESE DRAWINGS.

NO TACK WELDING OF REINFORCING BARS ALLOWED WITHOUT PRIOR REVIEW OF PROCEDURE WITH THE STRUCTURAL ENGINEER. LATEST ACI CODE AND DETAILING MANUAL APPLY. PROVIDE BENT CORNER BARS TO MATCH AND LAP WITH HORIZONTAL BARS AT ALL CORNERS AND INTERSECTIONS PER TYPICAL DETAILS. VERTICAL WALL BARS SHALL BE SPLICED AT OR NEAR

4. ALL DIMENSIONS SHOWING THE LOCATION OF REINFORCING STEEL NOT NOTED AS "CLEAR" OR "CLR" ARE TO CENTER OF STEEL MINIMUM COVER FOR NON-PRESTRESSED CONCRETE REINFORCING SHALL BE AS FOLLOWS:

LOCATION:	MINIMUM COVER	TOLERANCE
CAST AGAINST EARTH (FOOTINGS)	3"	± 3/8"
SLABS ON GRADE	1½"	± 1/4"
EXPOSED TO EARTH OR WEATHER — #5 AND SMALLER	1½"	± ¾"
EXPOSED TO EARTH OR WEATHER - #6 AND LARGER	2"	± ¾"
STRUCTURAL SLABS AND WALLS	3/4"	1/8"

- 5. MAXIMUM SLUMP FOR ALL CONCRETE SHALL BE 4". SLUMP FOR EXTERIOR SLABS SHALL BE 6". PORTLAND CEMENT SHALL CONFORM TO ASTM C150. TYPE V CEMENT SHALL BE USED FOR CONCRETE IN CONTACT WITH ALKALINE SOIL, AND TYPE II ELSEWHERE.
- 6. NO MORE THAN 90 MINUTES SHALL ELAPSE BETWEEN CONCRETE BATCHING AND CONCRETE PLACEMENT UNLESS APPROVED BY THE TESTING AGENCY.
- 7. CONCRETE PLACEMENT AND QUALITY SHALL BE PER RECOMMENDATIONS IN ACI 614, ACI 301 AND ACI 318. MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED, EXCEPT THAT SLABS ON GRADE NEED BE VIBRATED ONLY AROUND AND UNDER FLOOR DUCTS, ETC. CAST CLOSURE POUR, WHERE SHOWN ON PLANS AROUND COLUMNS AFTER COLUMN DEAD LOAD IS APPLIED. REMOVE ALL DEBRIS FROM FORMS BEFORE PLACING CONCRETE.

ALL ITEMS TO BE CAST IN CONCRETE SUCH AS REINFORCING, DOWELS, BOLTS, ANCHORS, PIPES, SLEEVES, ETC., SHALL BE SECURELY POSITIONED IN THE FORMS BEFORE PLACING THE CONCRETE.

8. ALL CONCRETE SLABS ON GRADE SHALL BE DIVIDED INTO AREAS BY CONTROL JOINTS (KEYED OR SAW CUT) SUCH THAT ONE SLAB AREA DOES NOT EXCEED 250 SQUARE FEET, OR BE MORE THAN TWO TIMES LONGER THAN THE SLAB AREA WIDTH. THE FOUNDATION PLAN SHOWS A SUGGESTED METHOD OF CONTROL JOINT LAYOUT. IT IS RECOMMENDED THAT SAW CUTS BE MADE WITHIN 16 HOURS OF CONCRETE BATCHING.

KEYED CONTROL JOINTS NEED ONLY OCCUR AT EXPOSED EDGES DURING POURING, ALL OTHER JOINTS MAY BE SAW CUT.

- 9. HORIZONTAL PIPES AND ELECTRICAL CONDUITS SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE AND SLABS ON GRADE EXCEPT WHERE SPECIFICALLY APPROVED OR NOTED BY THE STRUCTURAL ENGINEER. PIPES AND CONDUITS SHALL NOT IMPAIR THE STRENGTH OF THE WORK.
- 10. FLY ASH MAY BE USED ONLY IF PERMITTED BY ARCHITECTURAL SPECIFICATIONS AND SHALL BE LIMITED TO 18 PERCENT OF CEMENTITIOUS MATERIALS AND SHALL HAVE A REPLACEMENT FACTOR OF 1.2 RELATIVE TO CEMENT REPLACED. NO FLY ASH ADDITIVES SHALL BE USED IN FLATWORK OR ARCHITECTURALLY EXPOSED CONCRETE.
- 11. COLD/HOT WEATHER CONCRETE CONSTRUCTION: PROTECT CONCRETE FROM DAMAGE OR REDUCED STRENGTH IN COMPLIANCE WITH ACI 305 AND 306.

### GENERAL STRUCTURAL NOTES

(APPLY UNLESS NOTED OTHERWISE ON PLANS/DETAILS)

### MASONRY (CONCRETE BLOCK):

MINIMUM 28 DAY MASONRY STRENGTH SHALL BE 1500 PSI.

1. VERTICAL REINFORCING: SIZE AND SPACING PER PLAN SCHEDULES, CENTERED IN GROUTED CELL AND AT ALL WALL INTERSECTIONS, CORNERS, WALL ENDS, JAMBS, OVER LINTELS, AND EACH SIDE OF CONTROL JOINTS (MINIMUM UNLESS NOTED OTHERWISE ON PLANS/DETAILS). TIE AT 8'-0" VERTICALLY, WITH SINGLE WIRE LOOP TIE OR EQUIVALENT. DOWEL ALL REINFORCING TO FOUNDATION WITH DOWELS TO MATCH AND LAP VERTICAL WALL OR COLUMN REINFORCING.

2. TENSION LAP SPLICES OF REINFORCING STEEL IN MASONRY SHALL BE AS FOLLOWS:

REBAR SIZE	STANDARD LAP
#4	24"
#5	30"

- REINFORCING PLACEMENT TOLERANCES: ALL DIMENSIONS SHOWING THE LOCATION OF REINFORCING STEEL NOT NOTED AS "CLEAR" OR "CLR" ARE TO CENTER OF STEEL. TOLERANCES FOR PLACEMENT OF VERTICAL REINFORCING SHALL BE  $(\pm)$  ½" PERPENDICULAR TO WALL AND (±) 2" ALONG THE LENGTH OF THE WALL. PROVIDE 1/2" CLEARANCE BETWEEN MASONRY UNITS AND REINFORCING, AND REINFORCING RUNNING IN THE SAME DIRECTION. LAPS MAY BE BESIDE OR OVER THE REINFORCING BEING SPLICED.
- 4. BLOCK QUALITY: CONCRETE BLOCK SHALL BE HOLLOW LIGHTWEIGHT LOAD-BEARING CONCRETE MASONRY UNITS CONFORMING TO ASTM 90-75 WITH A MINIMUM COMPRESSIVE STRENGTH OF 1900 PSI. USE BOND BEAM UNITS AT HORIZONTAL REINFORCING.
- 5. MORTAR: MORTAR MIX SHALL CONFORM TO REQUIREMENTS OF THE IBC STANDARDS, TYPE M OR S. MORTAR SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 1800 PSI
- 6. GROUT: GROUT SHALL CONFORM TO REQUIREMENTS OF CHAPTER 21 OF THE IBC FOR COARSE GROUT. USE SUFFICIENT WATER FOR GROUT TO FLOW INTO ALL JOINTS OF THE MASONRY WITHOUT SEGREGATION. GROUT SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AT 28 DAYS. ALL CELLS IN CONCRETE BLOCKS CONTAINING REINFORCING SHALL BE FILLED SOLID WITH GROUT. ALL MASONRY BELOW FINISHED FLOOR OR GRADE SHALL BE GROUTED SOLID. ALL GROUT SHALL BE MECHANICALLY VIBRATED.
- GROUT LIFTS OF 5 FEET OR LESS IS RECOMMENDED. FOR HIGHER GROUT LIFTS, CLEANOUTS (3"X3") AT THE BOTTOM OF ALL VERTICALLY REINFORCED CELLS SHALL BE PROVIDED. IN ADDITION, MECHANICAL DEVICES SHALL BE USED TO POSITION AND SECURE REINFORCING WHEN GROUT LIFTS EXCEED 5 FEET IN HEIGHT. IN SOLID GROUTED MASONRY, CLEANOUTS SHALL NOT BE SPACED MORE THAN 32" O.C.
- 7. BLOCK CONSTRUCTION: ALL BLOCKS SHALL BE PLACED IN RUNNING BOND CONSTRUCTION (UNLESS OTHERWISE NOTED) WITH ALL VERTICAL CELLS IN ALIGNMENT.

### **REINFORCING STEEL:**

- 1. ASTM A615 GRADE 60 (FY = 60 KSI) DEFORMED BARS FOR ALL BARS #5 AND LARGER. ASTM A615 GRADE 40 (FY = 40 KSI) DEFORMED BARS FOR ALL BARS #4 AND SMALLER. GRADE 60 DEFORMED BARS SHALL BE USED FOR CONCRETE WALLS, BEAMS, ELEVATED SLABS AND COLUMN REINFORCING.
- 2. WELDING OF REINFORCING BARS SHALL BE MADE ONLY TO ASTM A706 GRADE 60 BARS AND ONLY USING E90 SERIES RODS. WELDING OF REINFORCING BARS SHALL BE MADE ONLY AT LOCATIONS SHOWN ON PLANS
- REINFORCING BAR SPACING GIVEN ARE MAXIMUM ON CENTERS. ALL BARS PER CRSI SPECIFICATIONS AND HANDBOOK. DOWEL ALL VERTICAL REINFORCING TO FOUNDATION. SECURELY TIE ALL BARS IN LOCATION BEFORE PLACING CONCRETE.

- 1. MATERIALS: ROLLED W SHAPES, SHALL CONFORM TO ASTM A992 (FY=50 KSI). ALL OTHER STRUCTURAL STEEL SHAPES, ROLLED SECTIONS, BARS AND PLATES SHALL CONFORM TO ASTM A36 (FY = 36 KSI). ALL PIPE STEEL SHALL BE ASTM A501 (FY = 36 KSI) OR ASTM A53, TYPE E OR S, GRADE B (FY = 35 KSI). ALL TUBULAR STEEL SHALL BE ASTM A500 (FY = 46 KSI).
- 2. ALL BOLTS AND STUDS SHALL BE ASTM A307, UNLESS NOTED OTHERWISE. ALL EXPANSION BOLTS TO HAVE CURRENT ICBO RATING FOR MATERIAL INTO WHICH INSTALLATION TAKES PLACE. HEADED STUDS SHALL CONFORM TO ALL REQUIREMENTS OF THE LATEST EDITION OF THE "RECOMMENDED PRACTICES FOR STUD WELDING" AND THE "STRUCTURAL WELDING CODE" PUBLISHED BY AWS. ALL BOLTS, ANCHOR BOLTS, EXPANSION BOLTS, ETC. SHALL BE INSTALLED WITH STEEL WASHERS AT FACE OF WOOD OR AT SLOTTED HOLES IN STEEL SECTIONS.
- 3. ALL STRUCTURAL AND MISCELLANEOUS STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, LATEST EDITION.
- 4. WELDING SHALL BE BY WELDERS HOLDING VALID CERTIFICATES AND HAVING CURRENT EXPERIENCE IN THE TYPE OF WELD SHOWN ON THE DRAWINGS OR NOTES. ALL WELDING SHALL USE E70 SERIES LOW HYDROGEN RODS UNLESS NOTED OTHERWISE. ALL WELDING PER LATEST AMERICAN WELDING SOCIETY STANDARDS ALL WELDS ON DRAWINGS ARE SHOWN AS SHOP WELDS. CONTRACTOR MAY SHOP WELD OR FIELD WELD AT HIS DISCRETION. ALL FULL PENETRATION WELDS SHALL BE TESTED AND CERTIFIED BY AN INDEPENDENT TESTING LABORATORY.
- 5. STEEL TO STEEL BOLTED CONNECTIONS: HIGH STRENGTH BOLTS SHALL BE ASTM A325N AND SHALL BE INSTALLED AS BEARING-TYPE CONNECTIONS WITH THREADS INCLUDED IN SHEAR PLANE (TYPE "N" CONNECTION). BOLTS MAY BE TIGHTENED USING ANY AISC APPROVED METHOD.
- DRYPACK SHALL BE 5.000 PSI FIVE STAR NON-SHRINK GROUT OR EQUIVALENT, INSTALL DRYPACK UNDER BEARING PLATES BEFORE FRAMING MEMBER IS INSTALLED. AT COLUMNS, INSTALL DRYPACK UNDER BASE PLATES AFTER COLUMN HAS BEEN PLUMBED BUT PRIOR TO FLOOR OR ROOF INSTALLATION

### STEEL DECKING (ICBO #2078):

- 3. COMPOSITE FLOOR DECK(B-FORMLOK): DECK SHALL BE 1½" DEEP, 36" WIDE, 22 GAGE GALVANIZED STEEL, WITH MINIMUM YIELD STRESS OF 50 KSI, WITH MINIMUM S = 0.176IN^3 AND I = 0.177 IN^4 PER FOOT OF WIDTH. DECK USING HEADED STUDS SHALL BE CAPABLE OF DEVELOPING THE FULL STUD SHEAR CAPACITY. CONCRETE TOPPING OVER DECK SHALL BE AS SPECIFIED UNDER CONCRETE REQUIREMENTS.
- COMPOSITE FLOOR DECK ATTACHMENT: DECK SHALL BE ERECTED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AS 1 SPAN MINIMUM AND SHALL BE ATTACHED FOR A MINIMUM DIAPHRAGM SHEAR CAPACITY OF 2418 PLF. WELD DECK TO SUPPORTING MEMBERS WITH %" DIAMETER PUDDLE WELDS AT 36/4 WELD PATTERN AT SHEET ENDS, END LAPS AND AT INTERMEDIATE SUPPORTS, AND AT 12" ON CENTER AT PERIMETER BEAMS AND OPENING EDGES RUNNING PARALLEL TO THE DECK. SIDE SEAM ATTACHMENT SHALL BE BUTTON PUNCHES AT 36" ON CENTER. ALL WELDING SHALL BE PERFORMED BY WELDERS EXPERIENCED IN LIGHT GAGE STEEL DECK WORK.

### WOOD:

1. SAWN LUMBER: FRAMING LUMBER SHALL COMPLY WITH THE LATEST EDITION OF THE GRADING RULES OF THE WESTERN WOOD PRODUCTS ASSOCIATION (WWPA) OR THE WEST COAST LUMBER INSPECTION BUREAU (WCLIB). ALL SAWN LUMBER SHALL BE STAMPED WITH THE GRADE MARK OF AN APPROVED LUMBER GRADING AGENCY. SAWN LUMBER SHALL HAVE THE FOLLOWING MINIMUM GRADE UNLESS NOTED OTHERWISE IN SCHEDULES:

MATERIAL:	USE:
HEM-FIR NO. 2	2X STUDS
DOUGLAS-FIR NO. 2 OR BETTER	JOISTS, TOP PLATES AND ALL OTHER SAWN LUMBER
DOUGLAS-FIR NO. 2 OR BETTER	BEAMS AND POSTS
DOUGLAS-FIR NO. 2 OR BETTER	SAWN LUMBER

2. PLYWOOD: ALL PLYWOOD SHALL BE C-D OR C-C SHEATHING CONFORMING TO STANDARD PS 1-09. LAY UP PLYWOOD WITH FACE GRAIN IN PERPENDICULAR TO SUPPORTS (ON ROOFS WHERE PLYWOOD IS LAID UP WITH FACE GRAIN PARALLEL TO SUPPORTS, USE A MINIMUM OF 5-PLY PLYWOOD, STAGGER JOINTS). ALL NAILING, COMMON NAILS. BLOCKING AT PANEL EDGES WHERE INDICATED ON PLANS. ALL PLYWOOD SHALL BE OF THE FOLLOWING NOMINAL THICKNESS, SPAN/INDEX RATING AND SHALL BE NAILED AS FOLLOWS UNLESS NOTED OTHERWISE ON THE PLANS:

LOCATION:	NOMINAL THICKNESS:	SPAN INDEX RATING:	EDGE ATTACHMENT:	FIELD ATTACHMENT:
WALLS	½" OR ¾"	24/0	8d AT 6" O.C.	8d AT 12" O.C.
ROOF	5/8"	40⁄20	10d AT 6" O.C.	10d AT 12" O.C.
FLOOR	3 <sub>4</sub> " T&G	48/24	#8 SCREWS AT 6" O.C.	#8 SCREWS AT 12" O.C.

SCREWS AT FLOOR SHEATHING SHALL BE #8 SCREWS AND SHALL PENETRATE AT LEAST 11/2" INTO THE SUPPORTING MEMBER. ALL FLOOR SHEATHING SHALL BE GLUED TO SUPPORTING MEMBERS WITH ANAPA AFG-01 QUALIFIED GLUE.

- PLYWOOD ALTERNATE: AMERICAN PLYWOOD ASSOCIATION PERFORMANCE RATED SHEATHING MAY BE USED AS AN ALTERNATE TO PLYWOOD WITH PRIOR APPROVAL OF OWNER, ARCHITECT AND ROOFER. IT MAY NOT BE USED ON ROOFS WHERE BUILT-UP ROOF SYSTEM IS TO BE GUARANTEED BY ROOFER. RATED SHEATHING SHALL COMPLY WITH DOC PS 2-10 EXPOSURE 1, AND SHALL HAVE A SPAN RATING EQUIVALENT TO OR BETTER THAN THE PLYWOOD IT REPLACES. ATTACHMENT AND THICKNESS (WITHIN  $\frac{1}{32}$ ") Shall be the same as the plywood it replaces. Install per MANUFACTURER'S RECOMMENDATIONS.
- 3. GLUED-LAMINATED BEAMS (GLULAM): GLUED-LAMINATED BEAMS SHALL BE DOUGLAS FIR COMBINATION AT 24F-V4 AT SIMPLE SPAN BEAMS AND 24F-V8 AT CANTILEVERED BEAMS WITH THE FOLLOWING MINIMUM PROPERTIES: FB = 2,400 PSI, FV = 190 PSI, FC (PERPENDICULAR) = 650 PSI, E =1,800 KSI. ALL BEAMS SHALL BE FABRICATED USING WATERPROOF GLUE. FABRICATION AND HANDLING PER LATEST AITC AND WCLA STANDARDS. BEAMS TO BEAR GRADE STAMP AND AITC STAMP AND CERTIFICATE. CAMBER AS SHOWN ON DRAWINGS. STANDARD CAMBER IS BASED ON A RADIUS OF CURVATURE OF 2000 FEET.
- 4. LAMINATED VENEER LUMBER: DESIGN, FABRICATION AND ERECTION IN ACCORDANCE WITH LATEST EDITION OF ICC ESR 1387, OR OTHER EQUIVALENT REPORT. LAMINATED VENEFR LUMBER SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: FB = 2,600 PSI, FV = 285 PSI, E = 1,900 KSI.
- 5. PARALLEL STRAND LUMBER: DESIGN, FABRICATION AND ERECTION IN ACCORDANCE WITH LATEST EDITION OF ICC ESR 1387, OR OTHER EQUIVALENT REPORT. LAMINATED VENEER LUMBER SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: FB = 2,900 PSI, FV = 290 PSI, E = 2,000 KSI.
- 6. SILL PLATES RESTING ON CONCRETE OR MASONRY WITHIN 12" OF SOIL SHALL BE OF TREATED FIR OR FOUNDATION GRADE REDWOOD. SHEAR WALLS AND EXTERIOR WALL SILLS AT CONCRETE SLAB SHALL HAVE A MINIMUM OF (2) 1/8" ANCHOR BOLTS PER PIECE. PROVIDE ANCHOR BOLT AT 9" MAXIMUM, 4" MINIMUM FROM THE END OF EACH PIECE AT SPLICE OR END OF WALL. MAXIMUM ANCHOR BOLT SPACING SHALL BE 72" ON CENTER UNLESS NOTED OTHERWISE ON PLANS OR DETAILS. ALL ANCHOR BOLTS (OTHER THAN BOLTS FOR HOLDOWNS) SHALL EMBED 7" INTO CONCRETE. ANCHOR BOLTS FOR HOLDOWNS SHALL NOT BE CONSIDERED AS PART OF REQUIRED ANCHOR BOLTS ON SHEAR WALLS. ALL EXTERIOR WALLS SHALL BE SECURED WITH MINIMUM ANCHOR BOLTS. INTERIOR WALLS MAY BE SECURED TO CONCRETE WITH EITHER ANCHOR BOLTS OR POWER DRIVEN SHOT PINS UNLESS NOTED OTHERWISE ON PLANS.
- 7. GENERAL: DO NOT NOTCH OR DRILL JOISTS, BEAMS OR LOAD BEARING STUDS WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER THROUGH THE ARCHITECT. DOUBLE UP FLOOR JOISTS AND BLOCKING UNDER PARTITIONS. PROVIDE 2" (NOMINAL) SOLID BLOCKING AT SUPPORTS OF ALL JOISTS. UNLESS NOTED OTHERWISE ON PLANS/DETAILS PROVIDE 2X SOLID BLOCKING AT MID-HEIGHT OF BEARING STUD WALLS. ALL NAILING NOT NOTED SHALL BE ACCORDING TO IBC TABLE 2304.9.1. JOIST HANGERS AND OTHER MISCELLANEOUS FRAMING ANCHORS SHALL BE AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INC. OR OTHER MANUFACTURER WITH CURRENT ICBO APPROVAL.
- 8. BOLTING: ALL BOLTS IN WOOD CONNECTIONS SHALL CONFORM TO ASTM A307. BOLTS SHALL BE INSTALLED IN HOLES BORED WITH A BIT  $\frac{1}{16}$ " LARGER THAN THE Ø (DIAMETER) OF THE BOLT. BOLTS AND NUTS SEATING ON WOOD SHALL HAVE CUT STEEL WASHERS UNDER HEADS AND NUTS. NICK THREADS TO PREVENT LOOSENING.
- 9. PREFABRICATED WOOD TRUSSES: PREFABRICATED WOOD TRUSSES SHALL BE DESIGNED TO SUPPORT SELF WEIGHT PLUS LIVE LOAD AND SUPERIMPOSED DEAD LOADS. WHERE ATTIC SPACE CAN BE USED FOR STORAGE, A 40 PSF LIVE LOAD ON THE BOTTOM CHORD SHALL BE INCLUDED IN THE ANALYSIS. BRIDGING SIZE AND SPACING BY TRUSS MANUFACTURER UNLESS NOTED OTHERWISE. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS WITH DESIGN CALCULATIONS SEALED BY A REGISTERED ENGINEER FOR REVIEW PRIOR TO MANUFACTURE.

PREFABRICATED WOOD TRUSSES SHALL BE HANDLED, STORED, ERECTED, AND BRACED DURING ERECTION IN ACCORDANCE WITH TRUSS PLATE INSTITUTE (TPI) AND WOOD TRUSS COUNCIL OF AMERICA (WTCA) BUILDING COMPONENT SAFETY INFORMATION (BCSI) GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, RESTRAINING, AND BRACING OF METAL PLATE CONNECTED WOOD TRUSSES, 2013 EDITION. PERMANENT BRACING, IF REQUIRED, TO BE IN ACCORDANCE WITH TRUSS MANUFACTURER DRAWINGS/CALCULATIONS.

SHOP DRAWINGS SHALL SHOW ANY SPECIAL DETAILS REQUIRED AT BEARING POINTS. ALL CONNECTORS SHALL HAVE CURRENT ICBO APPROVAL. ADDITIONAL TRUSSES SHALL BE SUPPLIED AS REQUIRED TO SUPPORT MECHANICAL EQUIPMENT. PER IBC SECTION 2303.4 AND TPI-1: FACH TRUSS SHALL BE LEGIBLY BRANDED, MARKED OR OTHERWISE HAVE PERMANENTLY AFFIXED THERETO THE IDENTITY OF THE COMPANY MANUFACTURING THE TRUSS, THE DESIGN LOADS, AND THE TRUSS SPACING - WITHIN TWO FEET OF THE CENTER OF THE SPAN ON THE FACE OF THE BOTTOM CHORD. TOTAL LOAD DEFLECTIONS SHALL BE LIMITED TO SPAN/240. FLOOR LIVE LOAD DEFLECTIONS SHALL BE LIMITED TO SPAN/480.

PREFABRICATED PLYWOOD WEB I-JOIST/PURLINS (TJI SERIES OR EQUAL): DESIGN, FABRICATION AND ERECTION IN ACCORDANCE WITH THE LATEST EDITION ICBO REPORT NER-119. CONNECTIONS AND BEARING MATERIAL TO BE DESIGNED AND FURNISHED BY JOIST FABRICATOR. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS WITH DESIGN CALCULATIONS SEALED BY A REGISTERED STRUCTURAL ENGINEER FOR REVIEW PRIOR TO MANUFACTURE. ADDITIONAL I-JOISTS SHALL BE SUPPLIED AS REQUIRED TO SUPPORT MECHANICAL EQUIPMENT. TOTAL LOAD DEFLECTIONS SHALL BE LIMITED TO SPAN/240. FLOOR LIVE LOAD DEFLECTIONS SHALL BE LIMITED TO SPAN/480.

### SPECIAL INSPECTION ITEMS:

1. THE OWNER SHALL EMPLOY A SPECIAL INSPECTOR DURING CONSTRUCTION OF CERTAIN TYPES OF WORK. PER IBC SECTION 1704 AND THE STRUCTURAL ENGINEER OF RECORD, SPECIAL INSPECTION IS (IS NOT) REQUIRED AS FOLLOWS:

TYPE OF WORK:	REQUIRED:	REMARKS:
SOIL BEARING SUBGRADE	YES	PER GEOTECHNICAL REPORT
CONCRETE SLAB ON GRADE	NO	DESIGN BASED ON f'c=2500 PSI
CONCRETE FOUNDATIONS	NO	DESIGN BASED ON f'c=2500 PSI
CONCRETE WALLS	YES	DURING PLACEMENT OF CONCRETE
REINFORCING STEEL FOR ALL CONCRETE/ MASONRY THAT REQUIRES INSPECTION	YES	PRIOR TO PLACEMENT OF CONCRETE OR GROUT
CONCRETE TOPPING OVER STEEL DECK	YES	DURING PLACEMENT AND WHILE TAKING TEST SPECIMENS
FIELD WELDING	YES	AFTER WORK IS COMPLETE
MASONRY (CMU)	YES	DURING PLACEMENT OF GROUT

SPECIAL INSPECTIONS NOT LISTED ABOVE ARE NOT REQUIRED BY FSE HOWEVER. ADDITIONAL SPECIAL INSPECTIONS MAY BE REQUIRED BY THE BUILDING OFFICIAL.

- 2. DESIGNATION OF SPECIAL INSPECTOR: A SPECIAL INSPECTION CERTIFICATE - CORRESPONDING TO THE REQUIREMENTS IN THE TABLE ABOVE HAS BEEN PROVIDED WITH THESE DRAWINGS BY FSE FOR PERMITTING PURPOSES.
- A. ACCORDING TO THE SI CERTIFICATE, THE SPECIAL INSPECTOR SHALL BE, OR WORK UNDER THE DIRECT SUPERVISION OF THE STRUCTURAL ENGINEER OF RECORD -FROST STRUCTURAL ENGINEERING(FSE) (928)776-4757. FSE IS NOT RESPONSIBLE FOR SPECIAL INSPECTIONS IF WE ARE NOT CONTACTED OR CONTRACTED TO DO
- B. TO SCHEDULE ANY SPECIAL INSPECTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE SPECIAL INSPECTOR AT LEAST ONE DAY IN ADVANCE.
- AN ALTERNATE SPECIAL INSPECTOR MAY BE USED BY OBTAINING A NEW SI CERTIFICATE, AND MAKE THE NECESSARY NOTIFICATIONS TO ALL PARTIES INVOLVED. THE ALTERNATE SPECIAL INSPECTOR SHALL BE AN ARIZONA LICENSED CIVIL OR STRUCTURAL ENGINEER OR AN ICC CERTIFIED SPECIAL INSPECTOR.
- D. FOR GEOTECHNICAL ITEMS LISTED ABOVE, THE SPECIAL INSPECTOR SHALL BE, OR WORK UNDER THE DIRECT SUPERVISION OF A GEOTECHNICAL ENGINEER OR THE BUILDING OFFICIAL.
- 3. QUALITY ASSURANCE PROGRAM:
- A. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED TO BE CERTAIN IT CONFORMS WITH THE APPROVED DESIGN DRAWINGS AND SPECIFICATIONS.
- B. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE STRUCTURAL ENGINEER OF RECORD. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF UNCORRECTED, TO THE DESIGN AUTHORITY AND THE BUILDING OFFICIAL.
- UPON COMPLETION OF THE ASSIGNED WORK THE STRUCTURAL ENGINEER SHALL COMPLETE AND SIGN THE APPROPRIATE FORMS CERTIFYING THAT TO THE BEST OF HIS KNOWLEDGE THE WORK IS IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE INTERNATIONAL BUILDING CODE.

	DRAWING INDEX	
SHEET	DESCRIPTION	DETAILS
S1	GENERAL STRUCTURAL NOTES	
S1.1	TYPICAL DETAILS	T-SERIES
S1.2	PLAN SCHEDULES	
S2	FOUNDATION PLAN	
<b>S</b> 3	FLOOR FRAMING/ UPPER FOUNDATION PLAN	
S3.1	MAIN FLOOR SHEARWALL PLAN	
S3.2	MAIN ROOF/ HIGH ROOF FRAMING PLANS	
<b>S4</b>	FOUNDATION DETAILS	100-SERIES
S5	FRAMING DETAILS	200-SERIES
S5.1	MORE FRAMING DETAILS	200-SERIES

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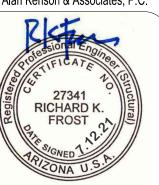
JOB NO.: 2021-064 PROJECT MANAGER: ANDY K. CAD OPERATOR: MJS

### FROST STRUCTURAL ENGINEERING

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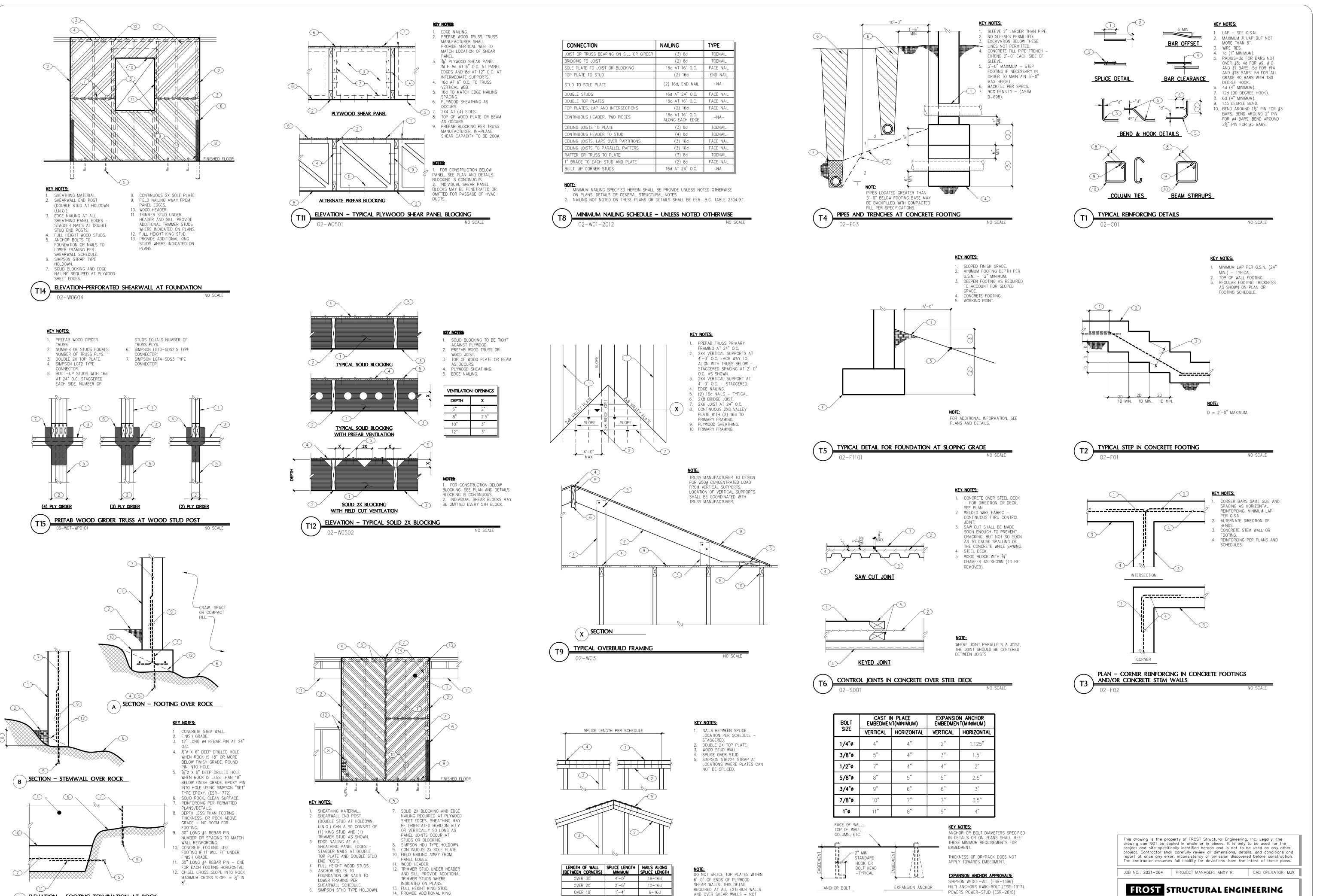


**M W** 

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MJS CHECKED BY ANDY K. PLOT DATE 7/12/21

2021-064



REQUIRED AT ALL EXTERIOR WALLS

REQUIRED AT INTERIOR NON-SHEAR

AND OVER SHEAR WALLS - NOT

POWERS POWER-STUD (ESR-2818)

\ TYPICAL ANCHOR BOLT, AND EXPANSION BOLT SCHEDULE

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Prescott, Arizona 86305

phone: 928.776.4757 info@frost-structural.com

1'-4" 6-16d

1'-4" 4-16d

ELEVATION - TYPICAL TOP PLATE SPLICE

LESS THAN 10'

6. SIMPSON STHD TYPE HOLDOWN.

STUDS WHERE INDICATED ON

ELEVATION-TYPICAL 1-STORY SHEARWALL AT DOOR/WINDOW

C ELEVATION - FOOTING TERMINATION AT ROCK

CONCRETE FOOTING AT ROCK

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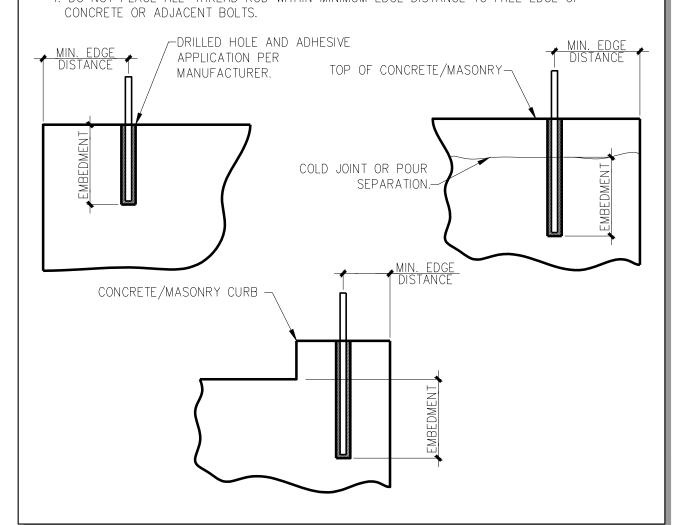
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ALTERNATE EPOXY ANCHOR SCHEDULE				
SPECIFIED ANCHOR	ALTERNATE ANCHOR	DRILLED HOLE	MINIMUM EDGE DISTANCE	
SIMPSON SSTB16	15" LONG X %"ø A307 THREADED ROD	¾"ø X 12" DEEP	1 ¾"	
SIMPSON SSTB24	23" LONG X %"ø A307 THREADED ROD	¾"ø X 20" DEEP	1 ¾"	
SIMPSON SSTB28	27" LONG X %"ø A307 THREADED ROD	1"ø X 24" DEEP	1 34"	

### SCHEDULE NOTES:

1. CLEAN ALL DRILLED HOLES WITH COMPRESSED AIR.

- 2. CONCRETE: USE HILTI HIT-RE 500-SD ADHESIVE (ESR-2322) OR SIMPSON SET-XP (ESR-2508). MASONRY: USE SIMPSON "SET" ADHESIVE (ESR-1772).
- 3. INSTALL ALL SYSTEMS ACCORDING TO MANUFACTURERS RECOMMENDATIONS.
- 4. DO NOT PLACE ALL-THREAD ROD WITHIN MINIMUM EDGE DISTANCE TO FREE EDGE OF



MATERIAL: ½" SHEARWALL O	r roof sheathing
SPECIFIED FASTENER	ALTERNATE FASTENER
	16 GA STAPLE AT 12" O.C.
8d COMMON AT 12" O.C.	15 GA STAPLE AT 12" O.C.
od COMMON AT 12 O.C.	14 GA STAPLE AT 12" O.C.
	13 GA STAPLE AT 12" O.C.
	16 GA STAPLE AT 4" O.C.
8d COMMON AT 6" O.C.	15 GA STAPLE AT 5" O.C.
Ca common /// c c.c.	14 GA STAPLE AT 6" O.C.
	13 GA STAPLE AT 6" O.C.
	16 GA STAPLE AT 2.5" O.C.
8d COMMON AT 4" O.C.	15 GA STAPLE AT 3" O.C.
	14 GA STAPLE AT 4" O.C.
	13 GA STAPLE AT 5" O.C.
	15 GA STAPLE AT 2" O.C.
8d COMMON AT 3" O.C.	14 GA STAPLE AT 3" O.C.
	13 GA STAPLE AT 4" O.C.
	16 GA STAPLE AT 12" O.C.
10d COMMON AT 12" O.C.	15 GA STAPLE AT 12" O.C.
	14 GA STAPLE AT 12" O.C.
	13 GA STAPLE AT 12" O.C.
	16 GA STAPLE AT 3" O.C.
10d COMMON AT 6" O.C.	15 GA STAPLE AT 4" O.C.
	14 GA STAPLE AT 5" O.C.
	13 GA STAPLE AT 6" O.C.
	16 GA STAPLE AT 2" O.C.
10d COMMON AT 4" O.C.	15 GA STAPLE AT 2.5" O.C.
	14 GA STAPLE AT 3" O.C.
	13 GA STAPLE AT 4" O.C.
10d COMMON AT 3" O.C.	14 GA STAPLE AT 2.5" O.C.
	13 GA STAPLE AT 3" O.C.
10d COMMON AT 2" O.C.	13 GA STAPLE AT 2" O.C.

	SHEARWALL HOLDOWN SCHEDULE					
MARK	HOLDOWN	SHEARWALL END POST	DETAIL REFERENCE	ALTERNATE DETAIL		
1	SIMPSON HDU2 OR LSTHD8	(2) 2X STUDS	115	111		
2	SIMPSON HDU5 OR STHD14	(2) 2X STUDS	116	110		
3	SIMPSON HDU8	(2) 2X STUDS	116	110		
4	SIMPSON HDU4 OR STHD10	(2) 2X STUDS	115	111		

3. ALL STAPLES SHALL HAVE 1 ½" LONG LEGS MINIMUM. 4. STAPLE SIZES AND SPACING PER REPORT NO. NER-272.

### FOUNDATION PLAN NOTES VERIFY ALL DIMENSIONS WITH ALL ARCHITECTURAL

ALL SCHEDULED MARK DESIGNATIONS MAY NOT NECESSARILY BE FOUND ON THIS PLAN. SCHEDULES ARE TYPICAL TO THIS PROJECT.

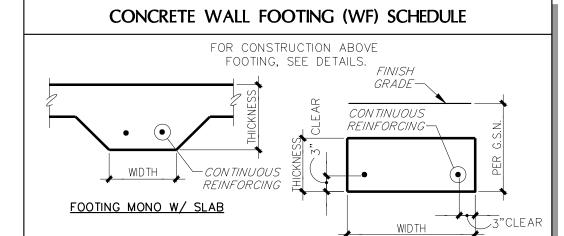
DRAWINGS.

- THE DEPTH OF FOOTING DIMENSION INDICATED IN THE G.S.N. IS A MINIMUM. FOUNDATION CONTRACTOR SHALL COORDINATE WITH THE SOILS REPORT AND OTHER TRADES TO INSURE THAT THESE MINIMUMS ARE SUFFICIENT FOR THE WORK. SEE TYPICAL DETAILS FOR ADDITIONAL
- WF1, WF2, ETC. AS SHOWN ON PLAN INDICATES A CONTINUOUS WALL FOOTING. SEE WALL FOOTING SCHEDULE FOR ADDITIONAL INFORMATION.
- F1, F2, ETC. AS SHOWN ON PLAN INDICATES A CONCRETE FOOTING. SEE FOOTING SCHEDULE FOR ADDITIONAL INFORMATION.
- W1, W2, ETC. AS SHOWN ON PLAN INDICATES WALL REINFORCING. SEE
- WALL REINFORCING SCHEDULE FOR ADDITIONAL INFORMATION. MC1, MC2, ETC. - AS SHOWN ON PLAN INDICATES A MASONRY COLUMN.

SEE MASONRY COLUMN SCHEDULE FOR ADDITIONAL INFORMATION.

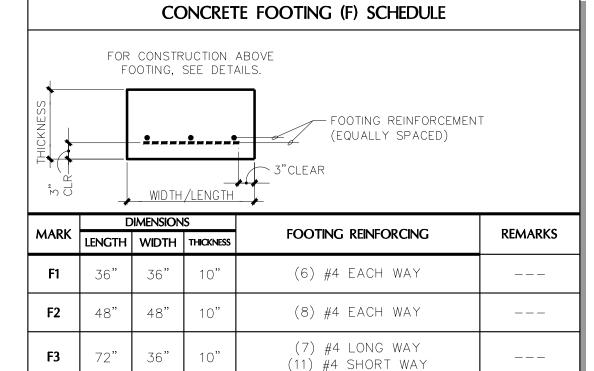
- 1 2 AS SHOWN ON PLAN INDICATES A SHEARWALL HOLDOWN.
  SEE HOLDOWN SCHEDULES AND DETAILS FOR ADDITIONAL
- CCJ AS SHOWN ON PLAN INDICATES LOCATION OF EITHER A KEYED OR A SAW CUT CONTROL JOINT IN THE SLAB ON GRADE AT CONTRACTOR'S
- OPTION. SEE GENERAL STRUCTURAL NOTES AND DETAIL 101. VERIFY EXACT SIZE AND LOCATION OF DEPRESSED AND/OR RAISED SLABS
- WITH ARCHITECTURAL DRAWINGS. FOR SIDEWALK AND LANDING LOCATIONS, SEE ARCHITECTURAL DRAWINGS.
- MCJ AS SHOWN ON PLAN INDICATES A MASONRY CONTROL JOINT IN A MASONRY WALL. SEE GENERAL STRUCTURAL NOTES AND TYPICAL DETAIL.

STRIP FOOTING



INFORMATION.

A A DIZ	DIMEN	ISIONS		FOOTING
MARK	WIDTH	THICKNESS	FOOTING REINFORCING	TYPE
WF1	16"	10"	(2) #4 CONTINUOUS	STRIP
WF2		SE	STRIP	
WF3	SEE DETAIL 112			
WF4	24"	10"	(3)#4 CONTINUOUS	STRIP
WF5	16"	10"	(2)#4 CONTINUOUS	[ MONO W/ SLAB ]



MASONRY COLUMN (MC) SCHEDULE				
MARK	SIZE	REINI VERTICAL	FORCING TIES	REMARKS
MC1	16"X16"	(4) #4	#2 AT 8"	

	WALL REINFORCING (W) SCHEDULE				
MARK	THICKNESS	REINFORCING	REMARKS		
W1	8" CONCRETE	SEE DETAIL 113 AND 114			
W2	8" CONCRETE	SEE DETAIL 112			
W3	8" CONCRETE	#4 AT 18" O.C. CENTERED			
W4	8" CONCRETE	SEE DETAIL 105			

### FLOOR FRAMING PLAN NOTES

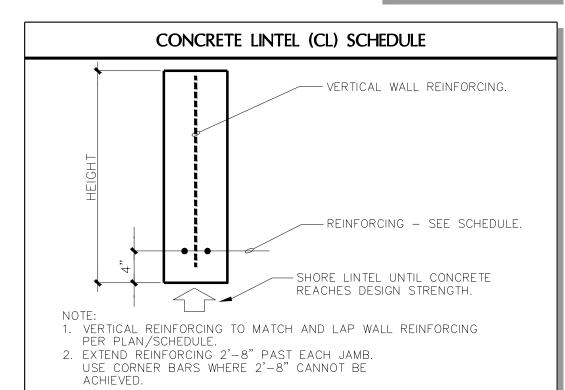
- VERIFY ALL DIMENSIONS WITH ALL ARCHITECTURAL DRAWINGS.
- ALL SCHEDULED MARK DESIGNATIONS MAY NOT NECESSARILY BE FOUND ON THIS PLAN. SCHEDULES ARE TYPICAL TO THIS PROJECT.
- W1, W2, ETC. AS SHOWN ON PLAN INDICATES WALL REINFORCING. SEE WALL REINFORCING SCHEDULE FOR ADDITIONAL INFORMATION.
- FJ1, FJ2, ETC. AS SHOWN ON PLAN INDICATES FLOOR JOISTS. SEE FLOOR JOIST SCHEDULE FOR ADDITIONAL INFORMATION.
- B1, B2, ETC. AS SHOWN ON PLAN INDICATES A BEAM. SEE BEAM SCHEDULE FOR ADDITIONAL INFORMATION.
- H1, H2, ETC. AS SHOWN ON PLAN INDICATES A HEADER. SEE HEADER SCHEDULE FOR ADDITIONAL INFORMATION.
- ML1, ML2, ETC. AS SHOWN ON PLAN INDICATES A MASONRY LINTEL. SEE MASONRY LINTEL SCHEDULE FOR ADDITIONAL INFORMATION.
- . FOR MISCELLANEOUS LINTELS NOT SHOWN, SEE G.S.N. MASONRY CONTRACTOR SHALL COORDINATE WITH OTHER TRADES FOR SIZES AND LOCATIONS.
- L1, L2, ETC. AS SHOWN ON PLAN INDICATES A LEDGER. SEE LEDGER SCHEDULE FOR ADDITIONAL INFORMATION.
- . MCJ AS SHOWN ON PLAN INDICATES A MASONRY CONTROL JOINT IN A MASONRY WALL. SEE G.S.N. AND TYPICAL DETAIL. JOINTS MAY BE SHOWN,
- BUT NOT NOTED ON THIS PLAN. SEE FOUNDATION PLAN FOR NOTED . FOR CLARITY, DETAILS MAY SHOW ONLY ONE SIDE OF FRAMING CONDITION.
- 2. 1 2 AS SHOWN ON PLAN INDICATES A SHEARWALL HOLDOWN.
  SEE HOLDOWN SCHEDULES AND DETAILS FOR ADDITIONAL
- 3. CONTRACTOR TO VERIFY AND BE RESPONSIBLE FOR VARIATIONS IN CONCRETE QUANTITY DUE TO CAMBER, CONSTRUCTION DEAD LOAD DEFLECTIONS AND/OF STRUCTURAL STEEL TOLERANCES OF STEEL DECK.

	FLOOR JOIST (FJ) SCHEDU	JLE
MARK	JOIST	REMARKS
FJ1	11%" TJI 210 SERIES AT 16" O.C.	

LEDGER (L) SCHEDULE				
MARK	SIZE	CONNECTION		
L1	3X8	%"ø ANCHOR BOLTS AT 48" O.C.		
L2	3X12	(2)%"ø ANCHOR BOLTS AT 32" O.C.		
L3	2X12	(3) SIMPSON TIMBER-HEX SCREWS AT 32" O.C.		
L4	L3X3X1⁄4	(1)%"ø x 5" long titen hd at 24" o.c.		

### TRIMMER (T) AND (K) KING STUD SCHEDULE

(2X6 STUD WALL)				
WALL HEIGHT 10 FT				
OPENING WIDTH	T	К		
UP TO 4 FT	1	1		
UP TO 6 FT	2	1		
UP TO 9 FT	2	2		
UP TO 18 FT	2	3		



MARK	HEIGHT	REINFORCING
CL1	36"	(2) #4 HORIZONTAL

SHEARWALL HOLDOWN FASTENERS				
HOLDOWN	HOLDOWN CONNECTS TO STRUCTURE BELOW WITH:	HOLDOWN CONNECTS TO SHEARWALL ENDPOST WITH:		
SIMPSON HDU2	CAST-IN-PLACE SIMPSON SSTB16 ANCHOR BOLT	(6) ¼"øx2.5" SDS SCREWS		
SIMPSON HDU4	CAST-IN-PLACE SIMPSON SSTB16 ANCHOR BOLT	(10) ¼"øX2.5" SDS SCREWS		
SIMPSON HDU5	CAST-IN-PLACE SIMPSON SSTB16 ANCHOR BOLT	(14) ¼"øX2.5" SDS SCREWS		
SIMPSON HDU8	CAST-IN-PLACE SIMPSON SSTB28 ANCHOR BOLT	(20) ¼"øX2.5" SDS SCREWS		
SIMPSON LSTHD8	CAST-IN-PLACE SIMPSON	(16) 16d SINKERS		
SIMPSON STHD10	CAST-IN-PLACE SIMPSON	(20) 16d SINKERS		
SIMPSON STHD14	CAST-IN-PLACE SIMPSON	(24) 16d SINKERS		

### ROOF FRAMING PLAN NOTES

- VERIFY ALL DIMENSIONS WITH ALL ARCHITECTURAL DRAWINGS.
- ALL SCHEDULED MARK DESIGNATIONS MAY NOT NECESSARILY BE FOUND ON THIS PLAN. SCHEDULES ARE TYPICAL TO THIS PROJECT.
- B1, B2, ETC. AS SHOWN ON PLAN INDICATES A BEAM. SEE BEAM SCHEDULE FOR ADDITIONAL INFORMATION.
- H1, H2, ETC. AS SHOWN ON PLAN INDICATES A HEADER. SEE HEADER SCHEDULE FOR ADDITIONAL INFORMATION.
- FOR CLARITY, DETAILS MAY SHOW ONLY ONE SIDE OF FRAMING CONDITION.
- FOR CLARITY, ALL ROOF OPENINGS MAY NOT BE SHOWN ON THE ROOF FRAMING PLAN. FOR EXACT SIZE, NUMBER AND LOCATION OF OPENINGS, SEE ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS. FOR FRAMING AT OPENINGS, SEE TYPICAL DETAILS.
- OR IN ATTIC SPACE. SEE TYPICAL DETAILS FOR FRAMING INFORMATION.
- VERIFY EXACT SIZE AND WEIGHT OF EQUIPMENT ON ROOF WITH MECHANICAL CONTRACTOR.

BEAM (B) SCHEDULE				
MARK	SIZE	CAMBER		
B1	5½ X 12 GLB	STANDARD		
B2	5½ X 12 GLB	STANDARD		
В3	8¾ X 12 GLB	STANDARD		
B4	3% X 12 GLB	STANDARD		

HEADER (H) SCHEDULE					
MARK	SIZE	REMARKS			
H1	4X6	OR (2) 2X6			
H2	5% X 7.5 GLB				
НЗ	5% X 12 GLB				

### SHEARWALL SCHEDULE

(ALL EXTERIOR WALLS ARE 5 UNLESS NOTED OTHERWISE)

SHEARWALL TYPES LISTED BELOW ARE NOT JOB SPECIFIC. SOME TYPES MAY NOT BE USED ON PLANS. BLOCK ALL PANEL EDGES WHERE INDICATED ON SCHEDULE. EDGE NAIL SHEATHING AT BLOCKED EDGES. 3. FRAMING MEMBER SUPPORTING MATERIAL SHALL BE SPACED AT 16" ON CENTER MAXIMUM.

- 4. ANCHOR BOLTS TO FOUNDATION SHALL BE 10 LONG AND SHALL BE EMBEDDED 7 INCHES INTO CONCRETE. EXPANSION BOLTS OR SHOT PINS MAY BE USED AT INTERIOR WALLS (AWAY FROM EDGE OF SLAB OR SLAB STEPDOWN) PER SUPPLEMENTAL
- 5. A MINIMUM OF 2 ANCHOR BOLTS SHALL BE USED ON EACH BASE PLATE PIECE. PROVIDE 1 ANCHOR BOLT MINIMUM WITHIN 9 INCHES OF EACH END OF EACH PIECE.

  5. PROVIDE CONTINUOUS DOUBLE 2X PLATE TOP PLATE AT ALL SHEAR WALLS AND EXTERIOR WALLS. UNLESS NOTED OTHERWISE, LAP SPLICE TOP PLATE A MINIMUM OF 6'-0" WITH 16d NAILS STAGGERED AT 4" ON CENTER (18-16d NAILS
- TOTAL BETWEEN SPLICE JOINTS).

  7 DROWNE FULL HEIGHT DOUBLE STUDS AT ENDS OF SHEAR WALLS UNLESS NOTED OTHERWISE ON PLANS OR DETAILS.

/.	PROVIDE FULL HEIGHT DOUBLE STUDS AT ENDS OF SHEAR WALLS UNLESS NOTED OTHERWISE ON PLANS OR DETAILS.	
8.	ELEVATED SHEAR WALLS TO BE FRAMED OVER DOUBLE JOIST OR SOLID BLOCKING UNLESS NOTED OTHERWISE.	
9.	"L=P.P." DESIGNATES LENGTH OF SHEARWALL $(\pm 3)$ .	
		_

MARK	SHEATHING MATERIAL	EDGE NAILING	FIELD NAILING	BOTTOM PLATE ATTACHMENT
1	½" GYPBOARD (UNBLOCKED) ONE SIDE OF WALL	5d COOLER AT 7" O.C. OR #6 SCREWS AT 6" O.C.	5d COOLER AT 7" O.C.	CONCRETE: ½"ø A.B. AT 72" O.C.
L=P.P.			OR #6 SCREWS AT 12" O.C.	WOOD: 16d AT 16" O.C.
<u>^2</u>	%" GYPBOARD (UNBLOCKED)	5d COOLER AT 7" O.C.	5d COOLER AT 7" O.C.	CONCRETE: ½"ø A.B. AT 72" O.C.
L=P.P.	ONE SIDE OF WALL	OR #6 SCREWS AT 6" O.C.	OR #6 SCREWS AT 12" O.C.	WOOD: 16d AT 12" O.C.
<u>3</u>	1 BOTH SIDES	5d COOLER AT 7" O.C. OR #6 SCREWS AT 6" O.C.	5d COOLER AT 7" O.C. OR #6 SCREWS AT 12" O.C.	CONCRETE: ½"ø A.B. AT 48" O.C.
L=P.P.				WOOD: 16d AT 8" O.C.
4	1 ONE SIDE	SEE ABOVE	SEE ABOVE	CONCRETE: ½"ø A.B. AT 36" O.C.
L=P.P.	2 OTHER SIDE			WOOD: 16d AT 6" O.C.
<b>5</b> L=P.P.	½" OR ¾" PLYWOOD OR OSB (BLOCKED) ONE SIDE OF WALL	8d COMMON AT 6" O.C.	8d COMMON AT 12" O.C.	CONCRETE: ½"ø A.B. AT 36" O.C.
L=P.P.				WOOD: 16d AT 6" O.C.
<b>6.</b> L=P.P.	½" OR ¾" PLYWOOD OR OSB (BLOCKED) ONE SIDE OF WALL		8d COMMON AT 12" O.C.	CONCRETE: ½"ø A.B. AT 24" O.C.
L=P.P.				WOOD: 16d AT 4" O.C.
<u></u>	½" OR ¾" PLYWOOD OR OSB (BLOCKED) ONE SIDE OF WALL		8d COMMON AT 12" O.C.	CONCRETE: ½"ø A.B. AT 18" O.C.
L=P.P.				WOOD: 16d AT 3" O.C.

### PERFORATED SHEARWALL TYPES

SHEARWALL TYPES LISTED BELOW ARE NOT JOB SPECIFIC. SOME TYPES MAY NOT BE USED ON THE PLANS.

FRAMING MEMBER SUPPORTING MATERIAL SHALL BE SPACED AT 16" O.C. MAXIMUM. ANCHOR BOLTS TO FOUNDATION SHALL BE 10" LONG AND SHALL BE EMBEDDED 7" INTO CONCRETE. WASHERS SHALL BE 2" SQUARE X 1/4" THICK AND PLACED ON TOP OF BOTTOM PLATE. . A MINIMUM OF 2 ANCHOR BOLTS SHALL BE USED ON EACH BASE PLATE PIECE. PROVIDE 1 ANCHOR BOLT MINIMUM WITHIN 9"

OF EACH END OF EACH PIECE. PROVIDE CONTINUOUS DOUBLE 2X PLATE TOP PLATE AT ALL SHEAR WALLS AND EXTERIOR WALLS. UNLESS NOTED OTHERWISE, LAP SPLICE TOP PLATE A MINIMUM OF 6'-0" WITH 16d NAILS STAGGERED AT 4" ON CENTER (18-16d NAILS TOTAL BETWEEN SPLICE

PROVIDE FULL HEIGHT DOUBLE STUDS AT ENDS OF SHEAR WALLS UNLESS NOTED OTHERWISE ON PLANS OR DETAILS. ONE TRIMMER/ONE KING STUD EACH SIDE OF EACH OPENING.

8. PLYWOOD SHEATHING SHALL CONTINUE ABOVE AND BELOW OPENING.

5. E-1.1. DESIGNATES EENOTH OF SHEARWALE (±5).				
MARK	SHEATHING MATERIAL	EDGE NAILING	FIELD NAILING	BOTTOM PLATE ATTACHMENT
13	½" OR ¾" PLYWOOD OR OSB	" OR 3/8" PLYWOOD OR OSB 8d COMMON AT 6" O.C.	8d COMMON AT 12" O.C.	CONCRETE: ½"ø A.B. AT 28" O.C.
L=P.P.	ONE SIDE OF WALL		80 COMMON AT 12 O.C.	WOOD: 16d STAGGERED AT 6" O.C.

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JOB NO.: 2021-064 PROJECT MANAGER: ANDY K. CAD OPERATOR: MJS

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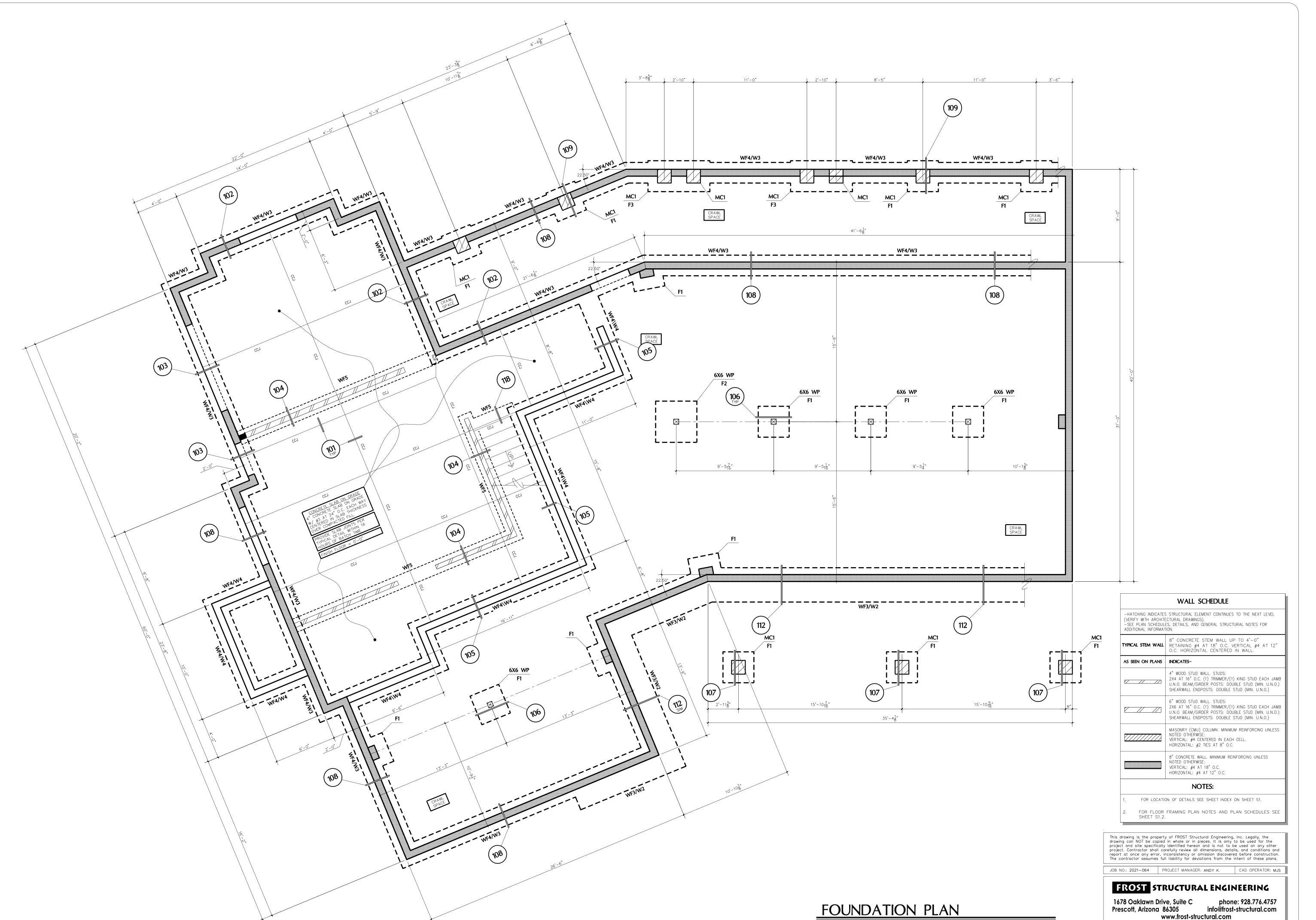
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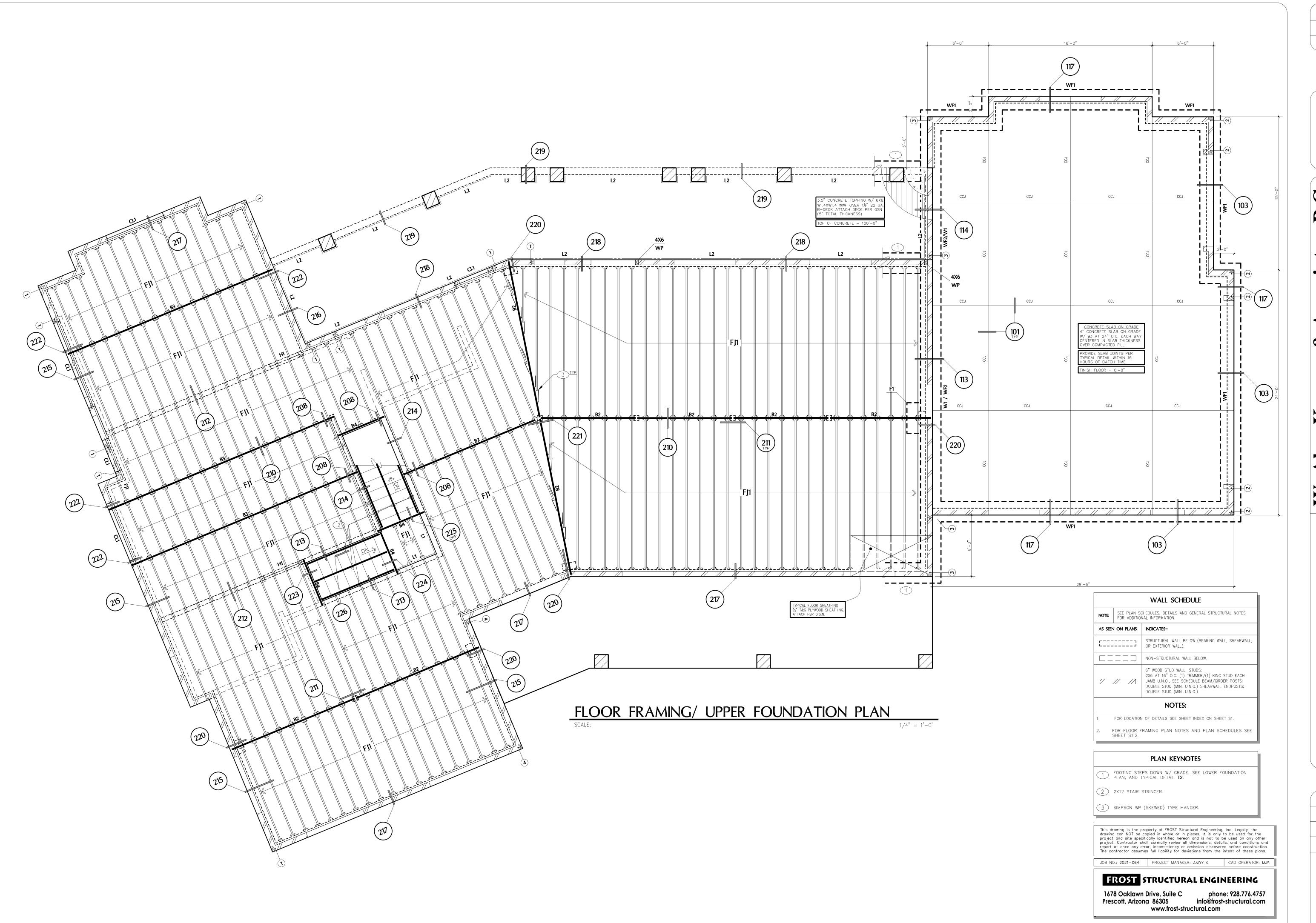
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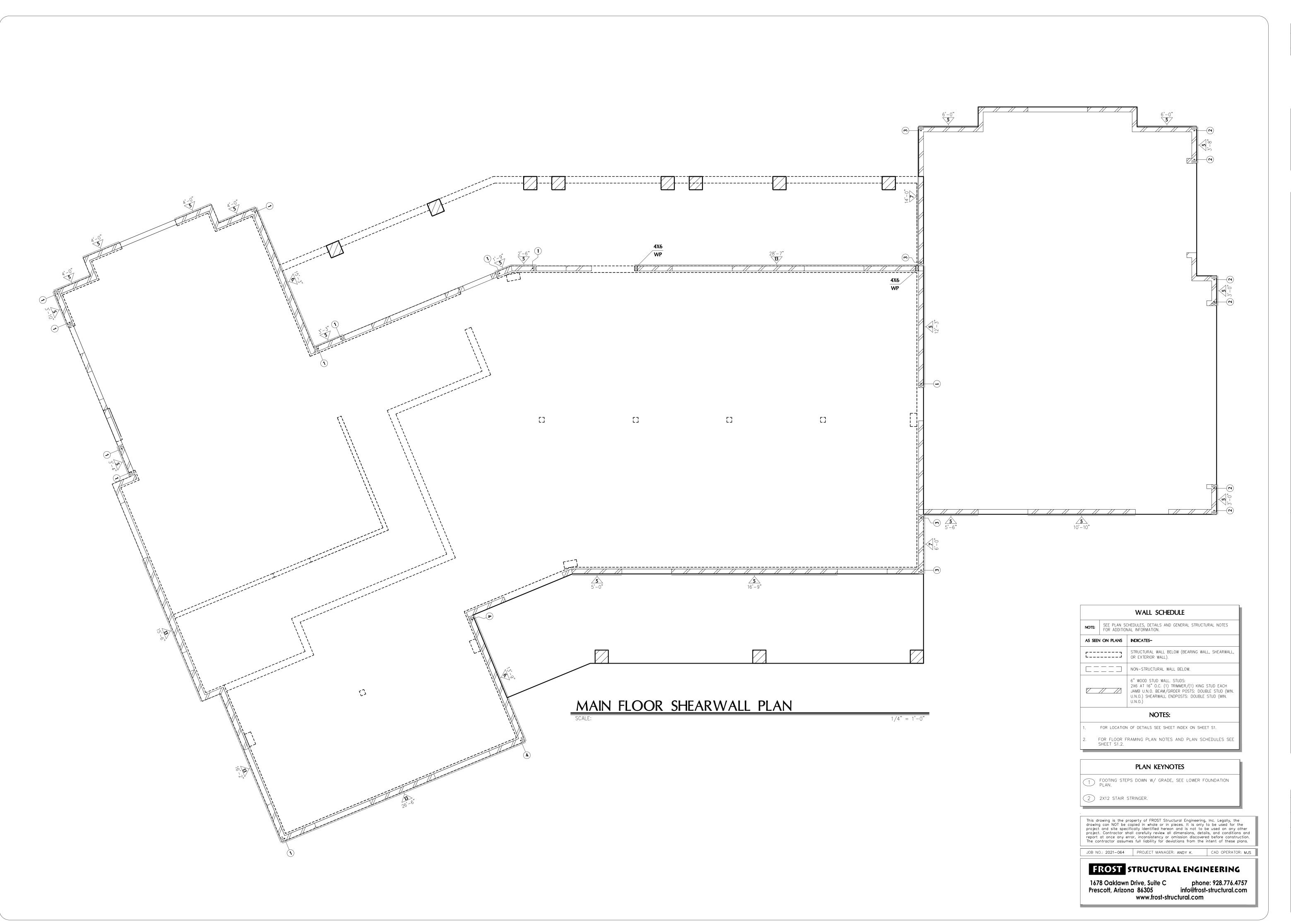
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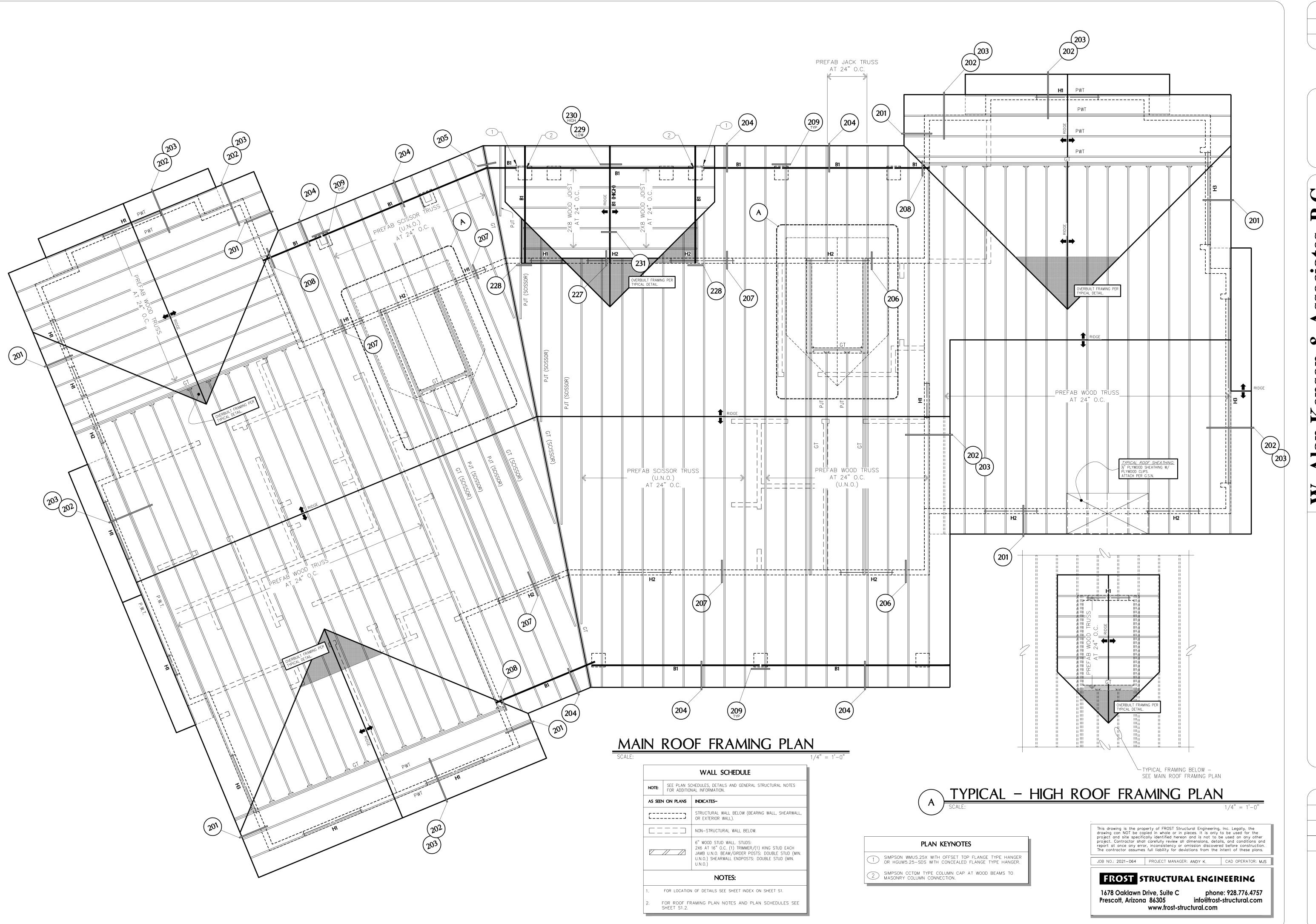


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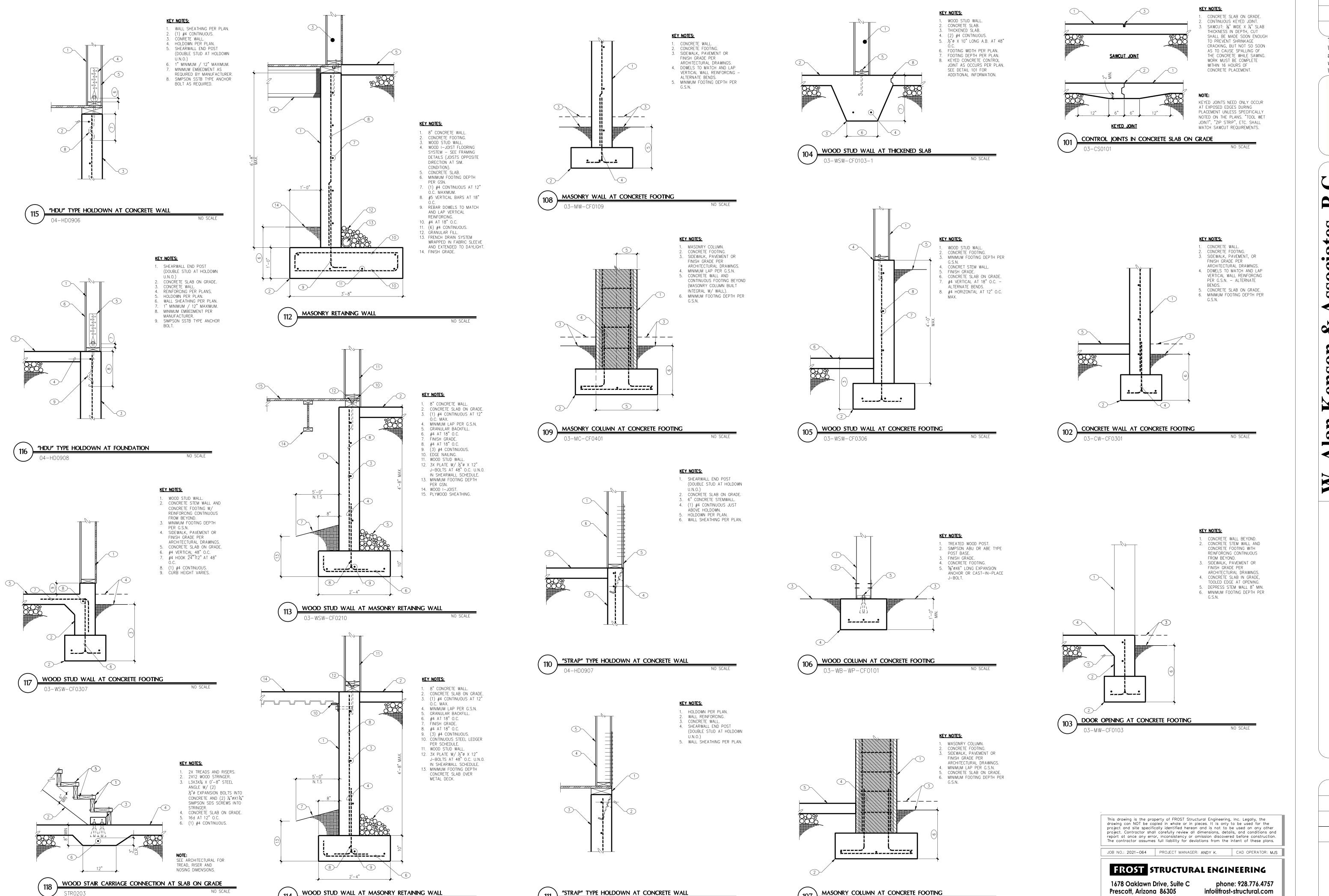


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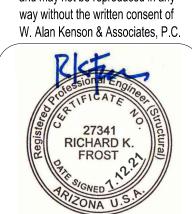


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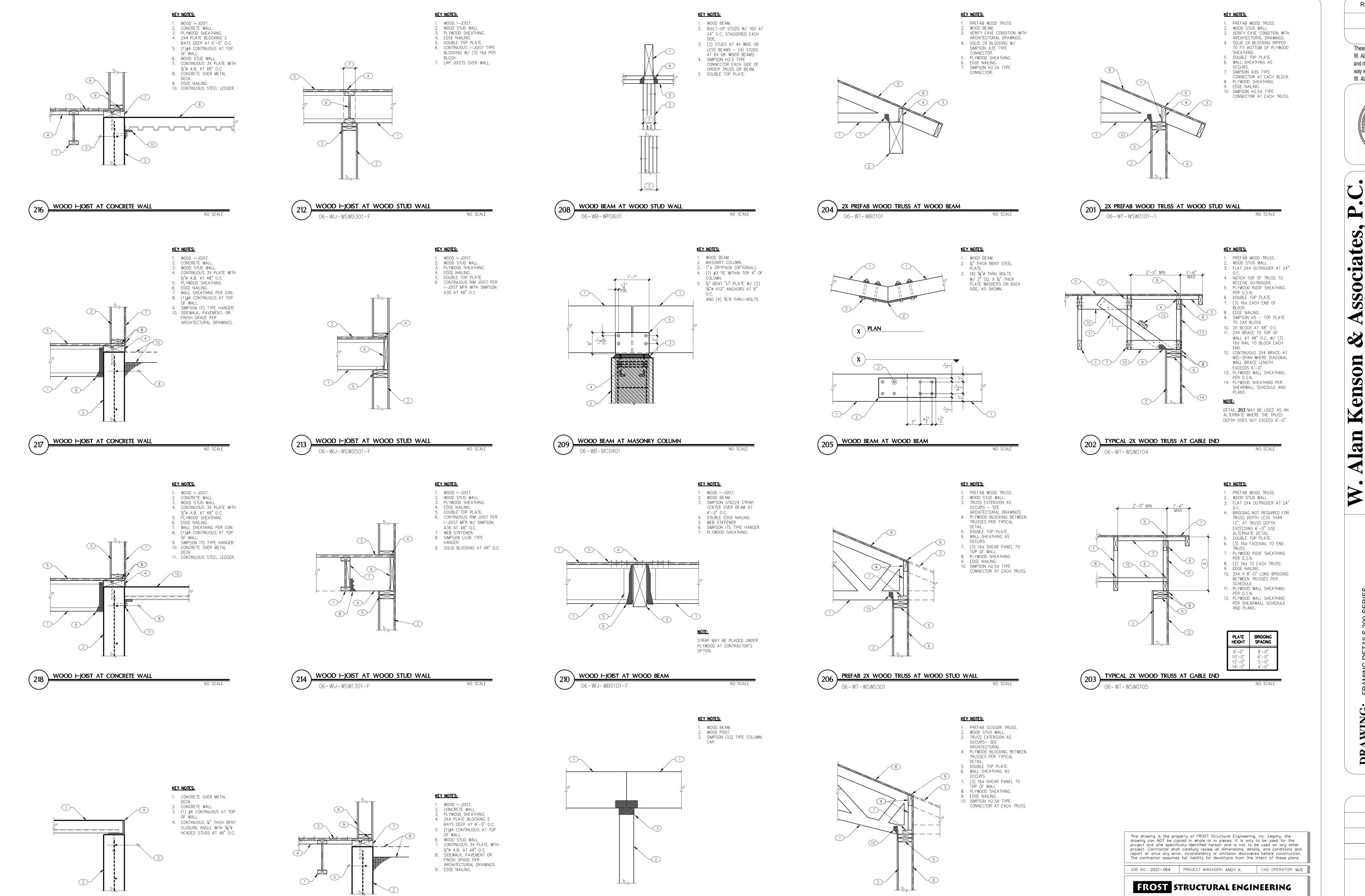


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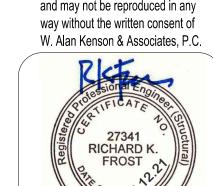


CONCRETE OVER METAL DECK AT CONCRETE WALI

WOOD I-JOIST AT CONCRETE WALI

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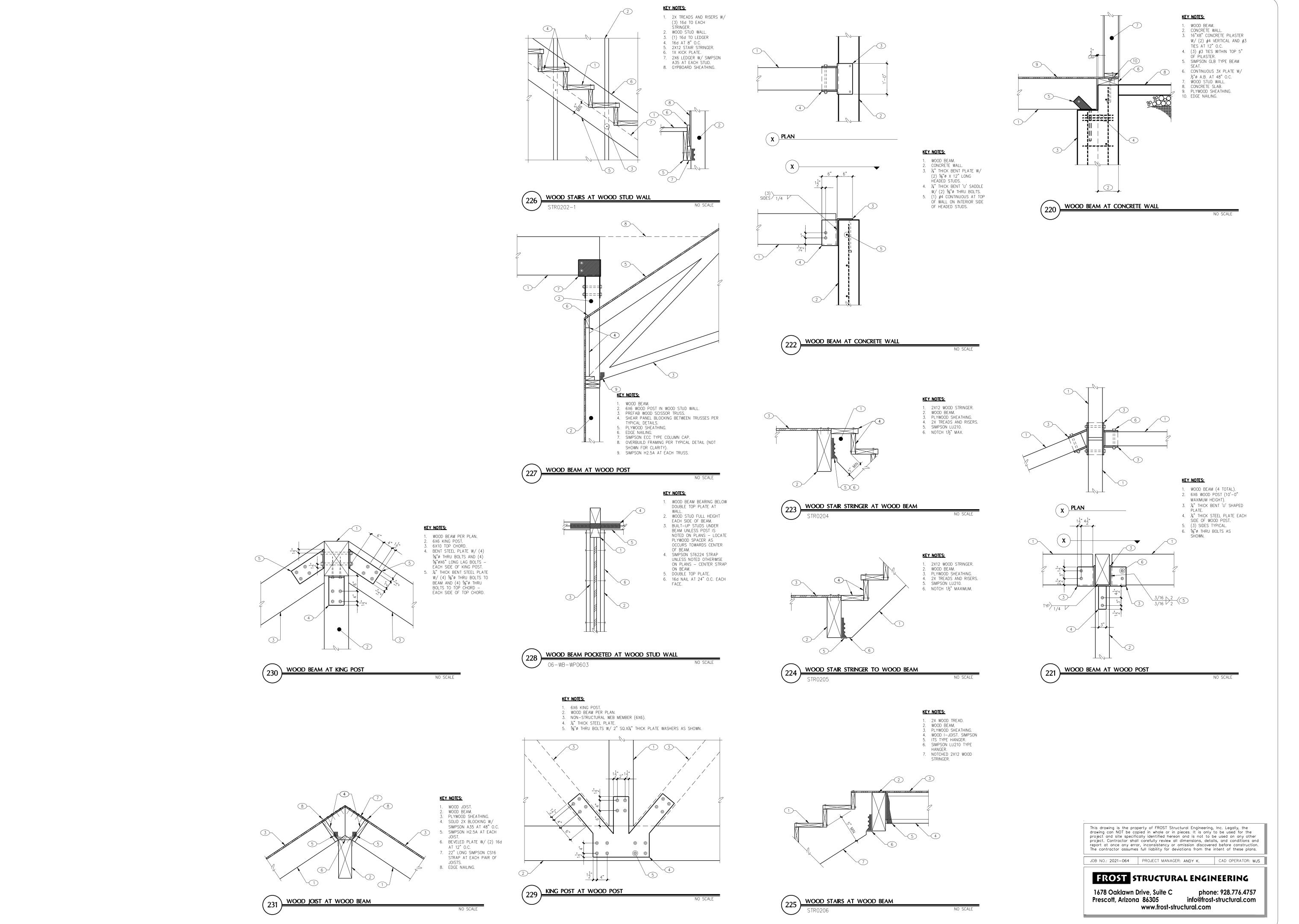
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PREFAB 2X WOOD TRUSS AT WOOD STUD WALL

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2021-064

SHEET

DR

## **MECHANICAL SPECIFICATIONS**

<u>DRAWINGS AND DATA</u>
DRAWINGS ARE GENERALLY DIAGRAMMATIC AND ARE INTENDED TO CONVEY SCOPE OF WORK AND TO INDICATE GENERAL ARRANGEMENT OF EQUIPMENT. THEY ARE NOT INTENDED TO SHOW EVERY OFFSET OR FITTINGS OR EVERY STRUCTURAL DIFFICULTY THAT MAY BE ENCOUNTERED DURING INSTALLATION OF THE WORK. LOCATION OF ALL ITEMS NOT DEFINITELY FIXED BY DIMENSIONS ARE APPROXIMATE ONLY. EXACT LOCATIONS NECESSARY TO SECURE BEST CONDITIONS AND RESULTS MUST BE DETERMINED AT PROJECT AND SHALL HAVE APPROVAL OF ARCHITECT BEFORE BEING INSTALLED. DO NOT SCALE DRAWINGS. IF SO DIRECTED BY ARCHITECT, WITHOUT EXTRA CHARGE, MAKE REASONABLE MODIFICATIONS IN LAYOUT AS NEEDED TO PREVENT CONFLICT WITH WORK OF OTHER TRADES OR FOR PROPER EXECUTION OF WORK. INCLUDE MINOR DETAILS NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR PROPER INSTALLATION AND OPERATION OF A SYSTEM OR PIECE OF EQUIPMENT.

INCLUDE IN WORK, WITHOUT EXTRA COST TO OWNER. LABOR, MATERIALS, SERVICES, APPARATUS, DRAWINGS (IN ADDITION TO CONTRACT DRAWINGS AND DOCUMENTS) REQUIRED TO COMPLY WITH APPLICABLE LAWS, ORDINANCES, RULES AND REGULATIONS. DRAWINGS AND SPECIFICATIONS TAKE PRECEDENCE WHEN THEY ARE MORE STRINGENT THAN CODES, ORDINANCES, STANDARDS AND STATUTES. CODES, ORDINANCES, STANDARDS AND STATUES TAKE PRECEDENCE WHEN THEY ARE MORE STRINGENT OR CONFLICT WITH DRAWINGS OR SPECIFICATIONS. FOLLOWING INDUSTRY STANDARDS, SPECIFICATIONS AND CODES ARE MINIMUM REQUIREMENTS:

A. APPLICABLE CITY, COUNTY, AND STATE MECHANICAL, ELECTRICAL, GAS, PLUMBING, HEALTH AND SANITARY CODES, LAWS AND ORDINANCES. B. UNDERWRITER'S LABORATORIES, INC. STANDARDS. 2018 INTERNATIONAL RESIDENTIAL CODE WITH LOCAL AMENDMENTS. D 2018 INTERNATIONAL PLUMBING CODE WITH STATE

E. 2018 INTERNATIONAL MECHANICAL CODE WITH STATE AMENDMENTS. G. 2018 INTERNATIONAL FUEL GAS CODE WITH STATE AMENDMENTS.

GENERAL
THE WORK INCLUDED UNDER THIS SECTION CONSISTS OF FURNISHING ALL LABOR, MATERIALS, AND EQUIPMENT TO PROVIDE A COMPLETE FUNCTIONING HVAC SYSTEM AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN. THE SYSTEM SHALL INCLUDE REQUIRED UNITS, THERMOSTATS, DUCTWORK, FANS, CONDENSATE DRAINS, REFRIGERANT PIPING, INSULATION, CLEAN FILTERS, FLUES AND ALL APPURTENANCES AS REQUIRED. WHERE MORE THAN ONE UNIT IS REQUIRED OF ANY ITEM, FURNISHED BY THE SAME MANUFACTURER, EXCEPT WHERE SPECIFIED OTHERWISE. INSTALL MATERIAL AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

INSTRUCT THE OWNER AS TO PROPER OPERATION AND CARE OF THE EQUIPMENT AFTER START-UP AND CHECK-OUT. PROVIDE THE OWNER WITH ALL WARRANTY AND OPERATING INSTRUCTIONS AT THE COMPLETION OF THE PROJECT.

EACH COMPLETE SYSTEM GUARANTEED BY CONTRACTOR FOR A PERIOD OF ONE YEAR, FROM DATE OF ACCEPTANCE OF WORK BY OWNER IN WRITING, TO BE FREE OF DEFECTS OF MATERIALS AND WORKMANSHIP, AND TO PERFORM SATISFACTORILY UNDER ALL CONDITIONS OF LOAD OR SERVICE. THE GUARANTEES PROVIDE THAT ANY ADDITIONAL CONTROLS, PROTECTIVE DEVICES, OR EQUIPMENT BE PROVIDED AS NECESSARY TO MAKE THE SYSTEM OF EQUIPMENT OPERATE SATISFACTORILY, AND THAT ANY FAULTY MATERIALS OR WORKMANSHIP BE REPLACED OR REPAIRED. LOSS OF REFRIGERANT IS CONSIDERED A DEFECT IN WORKMANSHIP AND/OR EQUIPMENT. TO BE CORRECTED AS REQUIRED AT NO EXTRA COST TO THE OWNER.

REGULATIONS, PERMITS & INSPECTIONS
COMPLY WITH ALL APPLICABLE CODES, RULES AND REGULATIONS. ALL MATERIALS, EQUIPMENT AND WORK MUST CONFORM TO THE INTERNATIONAL RESIDENTIAL CODE. OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND LICENSES. WHEN REQUIRED BY CODE, ALL WORK

MUST BE INSPECTED AND APPROVED BY LOCAL

AUTHORITIES.

ALL DUCTWORK TO BE GALVANIZED LOCK FORMING SHEET METAL. SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS. CONSTRUCT ALL DUCTWORK AND FITTINGS TO PROVIDE MINIMUM RESISTANCE AND NOISE LEVELS. DUCTWORK SHALL BE FABRICATED AND INSTALLED BY SKILLED MECHANICS IN A WORKMANLIKE MANNER USING THE LATEST EDITION OF THE "SMACNA" MANUAL AS A GUIDELINE. SEAL ALL SUPPLY AIR DUCTWORK AND RETURN AIR PLATFORMS/PLENUMS AIRTIGHT WITH APPROVED DUCT SEALER. TURNING VANES SHALL BE INSTALLED IN ALL MITERED ELBOWS.

UPON APPROVAL BY ARCHITECT, CONTRACTOR MAY USE FIBER GLASS DUCT BOARD FOR ABOVE GROUND SUPPLY AND RETURN DUCT SYSTEMS. FIBER GLASS DUCT BOARD SHALL BE OWENS CORNING "ENDURAGOLD", TYPE 800, 1-1/2" THICK. (OR APPROVED EQUAL)

FLEXIBLE DUCT MAY BE USED FOR FINAL CONNECTION TO AIR DISTRIBUTION DEVICES, BUT SHALL NOT EXCEED 8 FEET IN LENGTH. FLEXIBLE DUCT SHALL HAVE A MINIMUM R-8 INSULATION VALUE.

DUCT SIZES ON DRAWINGS ARE "CLEAR INSIDE." INCREASE SHEET METAL SIZES ACCORDINGLY FOR LINED DUCTWORK. ADHESIVE AND INSULATING MATERIALS SHALL HAVE COMPOSITE FIRE AND SMOKE HAZARD RATINGS MAXIMUM 25 FOR FLAME SPREAD AND 50 FOR SMOKE DEVELOPED. ADHESIVES SHALL

DUCTS IN FLOOR TRUSSES OR OTHER CONDITIONED LINED DUCTWORK - SEMI-RIGID GLASS FIBER

INSULATION, 1 1/2 PCF, 1 1/2" THICK, THERMAL CONDUCTIVITY AT 75°. MAXIMUM 0.17 BTU/IN./SQ. FT./DEG./HR. MINIMUM "R-VALUE" SHALL BE 6.0.

WRAPPED DUCTWORK - FIBER GLASS BLANKET WITH FRK VAPOR RETARDING FACING. 1 1/2 PCF, 2" THICK, WITH A MINIMUM INSTALLED "R-VALUE" OF 6.0. (ASSUMES 25% COMPRESSION)

DUCTS IN ATTICS OR OTHER UNCONDITIONED SPACE: LINED DUCTWORK - SEMI-RIGID GLASS FIBER INSULATION, 1 1/2 PCF, 2" THICK, THERMAL CONDUCTIVITY AT 75°. MAXIMUM 0.13 BTU/IN./SQ. FT./DEG./HR. MINIMUM "R-VALUE" SHALL BE 8.0.

WRAPPED DUCTWORK - FIBER GLASS BLANKET WITH FRK VAPOR RETARDING FACING. 0.75 PCF, 3" THICK, WITH A MINIMUM INSTALLED "R-VALUE" OF 8.0. (ASSUMES 25% COMPRESSION)

#### **GRILLES AND DIFFUSERS**

ACCEPTABLE MANUFACTURERS ARE TITUS, ANEMOSTAT KRUEGER, CARNES, BARBERCOMAN, AGITAIR, E.A.P.C., METAL-AIR OR HART AND COOLEY. CONFIRM FINISHED AND COLOR WITH ARCHITECT. ALL GRILLES AND DIFFUSERS SHALL BE SUBMITTED TO ARCHITECT FOR FINAL APPROVAL.

FURNISH AND INSTALL EXHAUST FANS AS REQUIRED BY ARCHITECTURAL DRAWINGS. PROVIDE FANS WITH FACTORY ROOF OR WALL CAPS AS SHOWN. PROVIDE ALL EXHAUST FANS WITH BACKDRAFT DAMPER. MAXIMUM NOISE RATING 4.0 SONES. ACCEPTABLE MANUFACTURER'S ARE "BROAN", "NUTONE" OR "GREENHECK" OR AS APPROVED BY ARCHITECT.

CONDENSATE DRAIN PIPING SHALL BE SCHEDULE 40 PVC. RUN DRAIN LINE FULL SIZE TO NEAREST PLANTER AREA, FLOOR DRAIN, OR P-TRAP. INSTALL TRAPS IN LINES AS REQUIRED BY EQUIPMENT MANUFACTURER. COORDINATE SPECIAL REQUIREMENTS FOR DRAIN AND WATER LINES THAT MAY BE REQUIRED WITH SPECIAL EQUIPMENT WITH PLUMBING CONTRACTOR PRIOR TO COMPLETION OF ROUGH-IN.

#### REFRIGERANT PIPING

ABOVE GROUND, WITHIN BUILDING PIPING SHALL BE TYPE ACR DRAWN-TEMPER COPPER TUBE WITH WROUGHT COPPER UNIONS. PIPING BELOW GROUND SHALL BE TYPE L ANNEALED COPPER TUBING. EXPOSED SUCTION PIPING SHALL HAVE 1-1/2" INSULATION, CONCEALED SUCTION PIPING SHALL HAVE 1" INSULATION. INSULATION SHALL BE "ARMAFLEX" FLEXIBLE ELASOMERIC, OR EQUAL.

SPLIT SYSTEM AIR CONDITIONER AND FURNACE AIR CONDITIONING EQUIPMENT SHALL BE AS SPECIFIED ON SCHEDULES UNLESS SPECIFICALLY ALLOWED BY OWNER OR ARCHITECT.

#### THERMOSTAT AND CONTROLS

FURNISH AND INSTALL PROGRAMMABLE THERMOSTATS AS REQUIRED BY THE EQUIPMENT MANUFACTURER OR AS SPECIFIED ON THE EQUIPMENT SCHEDULES. FIELD VERIFY EXACT LOCATION AND MOUNTING HEIGHT FOR CONTROLS WITH ARCHITECT AND GENERAL CONTRACTOR.

## VENTILATION BALANCING

AT A MINIMUM CONTRACTOR SHALL PROVIDE BALANCING OF ALL FRESH AIR SYSTEMS TO ENSURE COMPLIANCE WITH IRC M1505 AND A COMFORT BALANCE ON THE AIR DISTRIBUTION SYSTEM THROUGHOUT THE RESIDENCE. CONTRACTOR SHALL PROVIDE BALANCING DAMPERS AND/OR OBD'S AS MAY BE REQUIRED.

## **GUEST HOUSE** 2018 IRC M1505 VENTILATION CALC

TABLE M1505.4.3(1)

CONTINUOUS WHOLE—HOUSE MECHANICAL VENTIALTION SYSTEM AIRFLOW RATE REQUIREMENTS

DWELLING UNIT		NUMB	ER OF BEDR	ROOMS	
FLOOR AREA	0-1	2-3	4-5	6-7	7+
(SQUARE FEET)			AIR	FLOW IN CF	М
< 1,500	30	45	60	75	90
1,501 - 3,000	45	60	75	90	105
3,001 - 4,500		75	90	105	120
4,501 - 6,000	75	90	105	120	135
6,001 - 7,500	90	105	120	135	150
> 7,500	105	120	135	150	165

DWELLING UNIT FLOOR AREA = 3.440NUMBER OF BEDROOMS

ZONE 1 (BEDROOMS) FLOOR AREA

=1,860 (54% OF TOTAL DWELLING) ZONE 2 (GREAT ROOM & KITCHEN) FLOOR AREA =1.580 (46% OF TOTAL DWELLING)

MECHANICAL VENTILATION REQUIRED = 75 CFM (PER TABLE TABLE M1507.3.3(1)

VENTILATION TO EACH ZONE  $ZONE 1 = 75 \times 54\% = 41 CFM$ 

 $ZONE 2 = 75 \times 46\% = 34 CFM$ 

EACH INTAKE SHALL BE BALANCED TO 100 CFM. SINCE PROVIDED AIR EXCEEDS THAT REQUIRED. HOURLY RUNTIME CAN BE REDUCED:

#### VENTILATION HOURLY RUN TIME

ZONE 1 (F-1) = 41 CFM / 100 CFM X 60 MINUTES = 25 MINUTES ZONE 2 (F-2) = 34 CFM / 100 CFM X 60 MINUTES = 20 MINUTES

# **Residential Requirements**

THE FOLLOWING ITEMS ARE REQUIRMENTS OF 2018 IRC AND ARE THE RESPONSIBILITY OF THE MECHANICL CONTRACTOR. THE ITEMS BELOW SHALL TAKE PRECEDENT OVER THE PLANS AND SPECIFICATION HEREIN WHERE ANY DISCREPENCY MAY OCCUR.

- Exterior wall penetrations by pipes, ducts or conduits shall be caulked.
- 2. Supply and return ducts shall be insulated to a minimum R-8. Ducts in floor trusses shall be insulated to minimum R-6. (N1103.3).
- 3. Registers, diffusers and grilles shall be mechanically fastened to rigid supports or structural members on at least two opposite sides in addition to being connected to the ductwork they serve
- 4. Dryer exhaust ducts shall conform to the requirements of Sections (M1502.4.5), M1502.4.1 thru M1502.4.6.
- 5. Exhaust air from kitchens, bathrooms and toilet rooms shall not be re-circulated within a residence or to another dwelling unit, shall not discharge into an attic and/or crawl space and shall be exhausted directly to the outdoors. (M1505.2).
- 6. Provide outside combustion air to all indoor fireplaces, with air intake located not higher than the firebox. (R1006.2).
- 7. At least one thermostat shall be provided for each separate heating and cooling system. (N1103.1).
- 8. The building shall be provided with ventilation that meets the requirements of Section M1505 or with other approved means of ventilation. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating. (N1103.6).
- 9. The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding 5 air changes per hour. Testing shall be conducted with a blower door at a pressure of 0.2 inches w.g. (50 Pascals). Testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the building official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope. (N1102.4.1.2).
- 10. Ducts, air handlers, and filter boxes shall be sealed. Joints and seams shall comply with Section M1601.4.1, (N1103.3.3). Duct tightness shall be verified by either of the following:
- 1. Post-construction test: Total leakage shall be less than or equal to 4 cfm (113.3 L/min) per 100 square feet (9.29 m2) of conditioned floor area when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. All register boots shall be taped or otherwise sealed during the test.
- 2. Rough—in test: Total leakage shall be less than or equal to 4 cfm (113.3 L/min) per 100 ft2 (9.29 m2) of conditioned floor area when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the system, including the manufacturer's air handler enclosure. All registers shall be taped or otherwise sealed during the test. If the air handler is not installed at the time of the test, total leakage shall be less than or equal to 3 cfm (85 L/min) per 100 square feet (9.29 m2) of conditioned floor area.

#### **MECHANICAL SHEET INDEX**

**MECHANICAL CODE COMPLIANCE MECHANICAL BASEMENT FLOOR PLAN MECHANICAL FIRST FLOOR PLAN** 

MECHANICAL SCHEDULES **MECHANICAL DETAILS** 

## **MECHANICAL DESIGN CRITERIA**

## **IMPORTANT NOTICE**

MECHANICAL SYSTEMS SPECIFIED ON THESE DRAWINGS HAVE BEEN SIZED AND DESIGNED BASED ON A SPECIFIC DESIGN CRITERIA TO MEET THE ENERGY CONSERVATION REQUIREMENTS OF THE 2012 INTERNATIONAL RESIDENTIAL CODE.

INSULATION AND/OR WINDOW VALUES DIFFERENT FROM THOSE SHOWN BELOW MAY IMPACT THE SIZING OF THE MECHANICAL SYSTEMS WHICH SHOULD BE CONSIDERED AND EVALUATED BEFORE IMPLEMENTATION.

SUMMER OUTDOOR TEMP 96°F **SUMMER INDOOR TEMP** 75°F WINTER OUTDOOR TEMP 20°F WINTER INDOOR TEMP 70°F

**ROOF INSULATION** R-19 **WALL INSULATION U-VALUE** 

WINDOWS

**GLASS DOORS U-VALUE** 

#### **MECHANICAL SYMBOLS AND ABBREVIATIONS**

SYMBLE	DESCRIPTION	SYMBLE	DESCRIPTION
X	CEILING SUPPLY DIFFUSER	<b>2</b> -0	CEILING EXHAUST FAN W/ DUCT UP THROUGH ROOF
	CEILING RETURN GRILLE	<b>=</b>	REFRIGERANT PIPING UP IN WALL
	LINEAR BAR GRILLE	©	THERMOSTAT
	SIDEWALL SUPPLY GRILLE	CD	CEILING DIFFUSER
	SUPPLY AIR DUCT UP	CU	CONDENSING UNIT
	SUPPLY AIR DUCT DOWN	EF	EXHAUST FAN
	RETURN AIR DUCT UP	F	FURNACE
	RETURN AIR DUCT DOWN	RG	RETURN GRILLE

### **ENERGY CONSERVATION**

HEATING/COOLING LOAD CALCULATIONS
HEATING AND COOLING CALCULATIONS WERE DETERMINED USING HEATING COOLING LOAD CALCULATION SOFTWARE UTILIZING ASHRAE'S COOLING LOAD TEMPERATURE DIFFERENCE (CLTD) METHOD, BY A REGISTER MECHANICAL ENGINEER.

EQUIPMENT SIZING EQUIPMENT SIZING MEETS IECC AND ACCA MANUAL S SIZING REQUIREMENTS AND DOES NOT EXCEED THE DESIGN COOLING LOAD BY MORE THAN 15%.

#### **EQUIPMENT SIZING**

UNIT	SERVES	CALC'D COOLING	COOLING PROVIDED	+/- SIZING PRECENTAGE	COMPLY (YES/NO)
F-1/CU-1	BEDROOMS	26.4	30.2	+14%	YES
F-2/CU-2	GREAT ROOM & KITCHEN	31.1	32.4	+4%	YES

#### **DUCT SIZING**

SUPPLY AND RETURN DUCTWORK HAS BEEN SIZED AND DESIGNED IN ACCORDANCE WITH ASHRAE FUNDAMENTALS AND SMACNA GUIDELINES BY A REGISTERED ARIZONA MECHANICAL ENGINEER. ANY ALTERATIONS SHALL COMPLY WITH ACCA MANUAL D.

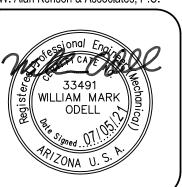
### **DUCT INSULATION**

SUPPLY AND RETURN DUCTWORK LOCATED IN UNCONDITIONED SPACE OR ATTIC SHALL BE INSULATED TO A MINIMUM R-8. DUCTS LOCATED WITHIN CONDITIONED SPACES (I.E. FLOOR TRUSSES) SHALL BE INSULATED TO A MINIMUM R-6.

> Consulting Engineers

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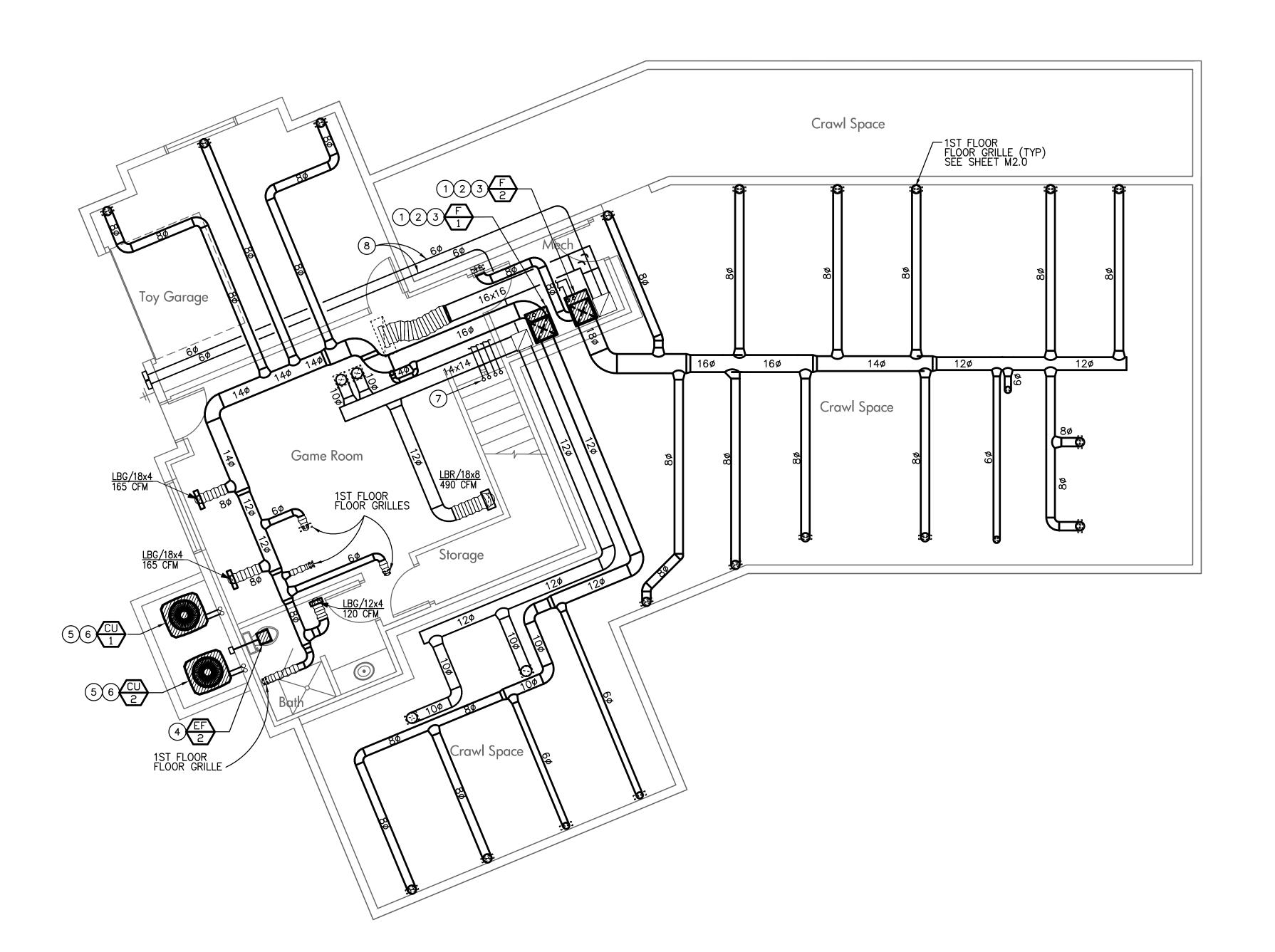


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DRAWN BY CHECKED BY DATE March 24th, 2021

> **JOB NO.** 768 SHEET



# Mechanical Basement Floor Plan 3/16" = 1'-0" NORTH



- VERTICAL, UPFLOW, SEALED COMBUSTION PROPANE FURNACE ON 18" HIGH RETURN AIR PLENUM WITH RETURN DUCT UP FROM PLENUM. PLENUM SHALL BE CONSTRUCTED AIR TIGHT TO AVOID LEAKAGE. COORDINATE UNDERGROUND DUCT ROUTING WITH PLUMBING AND STRUCTURAL COMPONENTS. FINAL LOCATION OF FURNACE SHALL BE COORDINATED WITH ARCHITECT AND STRUCTURAL ENGINEER.
- (2) PROVIDE WITH FRESH AIR VENTILATION DAMPER CAPABLE OF PROVIDING VENTILATION PER IMC M1505. SYSTEM SHALL INCLUDE OUTDOOR AIR SENSOR AND BE CAPABLE OF LOCKING OUT FRESH AIR VENTILATION WHEN AMBIENT TEMPERATURE IS ABOVE 100°F.
- 3 EXTEND FULL SIZE CONDENSATE DRAIN PIPING FROM UNIT DRAIN CONNECTION TO CONDENSATE PUMP.
- CEILING MOUNTED EXHAUST FAN WITH BACK DRAFT DAMPER. 4 FAN SHALL HAVE INDEPENDENT WALL SWITCH. ROUTE EXHAUST DUCT UP THROUGH ROOF TO MANUFACTURER'S ROOF DISCHARGE CAP.
- 5 OUTDOOR CONDENSING UNIT ON PRE-MANUFACTURED LIGHT WEIGHT CONCRETE EQUIPMENT PAD. PAD SHALL BE A MINIMUM OF 1" LARGER ON ALL SIDES OF UNIT. DO NOT PLACE CONDENSING UNIT UNDER ROOF DRIP EDGE OR VALLEYS. COORDINATE FINAL LOCATION WITH ARCHITECT. PROVIDE CLEARANCES PER MANUFACTURER'S RECOMMENDATIONS.
- 6) ROUTE REFRIGERANT PIPING UNDERGROUND FOR ONLY THE MINIMUM LENGTH NEEDED IN PVC CARRIER PIPE AND THEN IN WALLS OR ATTIC AS NECESSARY FROM CONDENSING UNIT TO CORRESPONDING FAN COIL. SIZE, INSULATED AND INSTALL PIPING PER MANUFACTURER'S RECOMMENDATIONS. FOLLOW MANUFACTURER'S PIPING GUIDE FOR ANY PIPING LENGTHS OVER 50 FEET. INSULATE REFRIGERANT PIPING PER SPECIFICATIONS.
- MANUFACTURER'S RECOMMENDATIONS. REFER TO SCHEDULE FOR UNITS THAT ARE SEALED COMBUSTION. (8) VENTILATION DUCT ROUTED AS SHOWN FOR CLARITY. CONTRACTOR MAY FIELD ROUTE AS POSSIBLE TO AVOID

CRAWL SPACE.

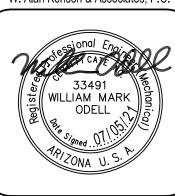
7) PVC VENT/INTAKE PIPING UP TO MANUFACTURER'S ROOF

TO ROUTE THROUGH ROOF, SIZE AND INSTALL PER

TERMINATION. OFFSET IN MECHANICAL ROOM AS NECESSARY

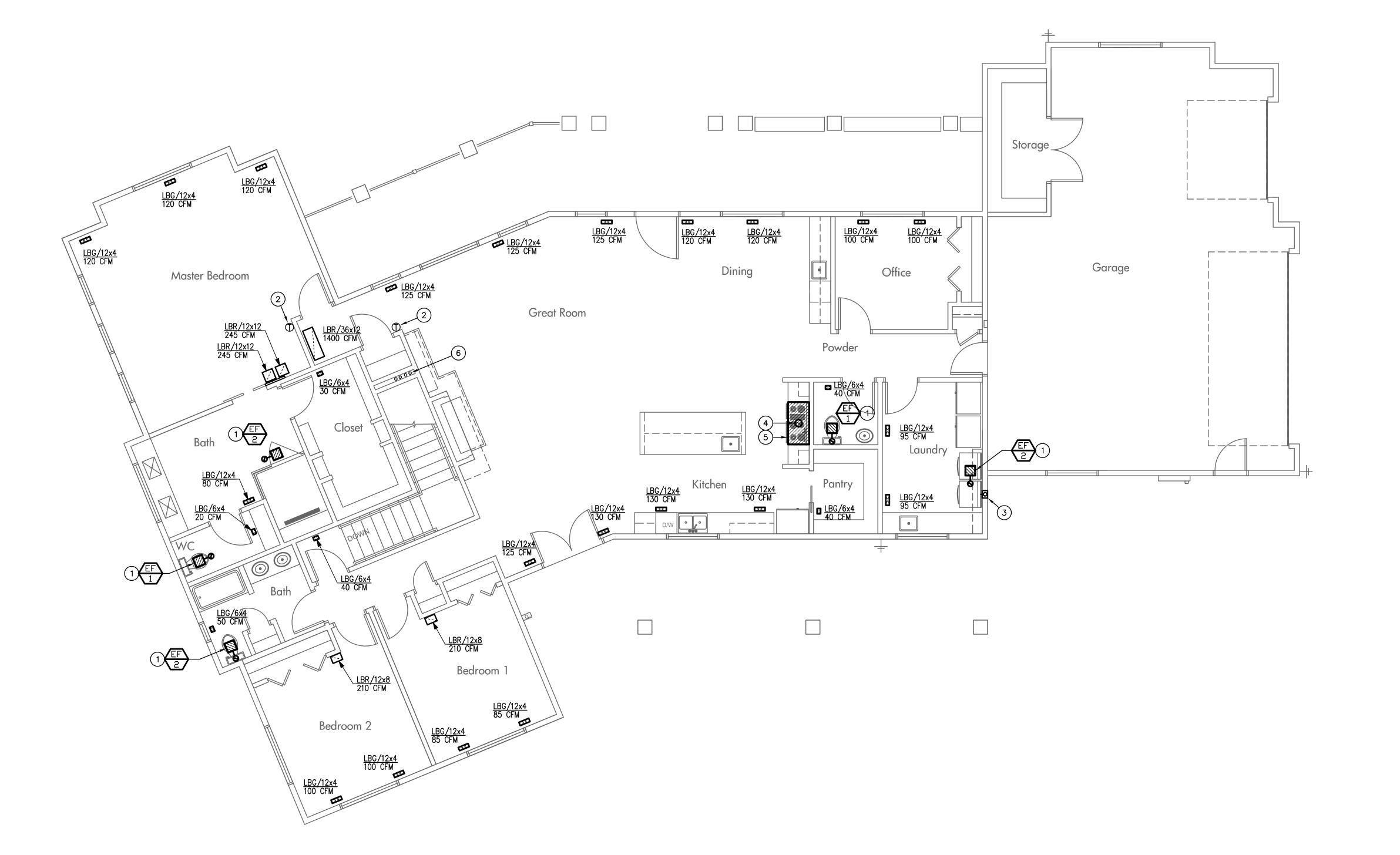
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**DATE** March 24th, 2021



## **KEYNOTES**

- 1 CEILING MOUNTED EXHAUST FAN WITH BACK DRAFT DAMPER. FAN SHALL HAVE INDEPENDENT WALL SWITCH. ROUTE EXHAUST DUCT UP THROUGH ROOF TO MANUFACTURER'S ROOF DISCHARGE CAP.
- 2 TOUCH SCREEN PROGRAMMABLE THERMOSTAT MOUNTED 48" ABOVE FLOOR. VERIFY FINAL LOCATION WITH ARCHITECT.
- 3 4"ø RIGID DRYER DUCT WITH RECESSED DRYER BOX RECEPTACLE. INSTALL PER CODE TO WALL DISCHARGE. MAXIMUM LENGTH SHALL NOT EXCEED 35 FEET (EXCEPT AS ALLOWED BY DRYER MANUFACTURER'S INSTALLATION INSTRUCTIONS). EXHAUST DUCT SHALL BE SECURED TO FRAMING MEMBERS WITH STRAPS AND NOT CONNECTED OR SECURED USING SCREWS OR OTHER FASTENING MEANS WHICH EXTEND INTO DUCT. PROVIDE DRYER DISCHARGE CAP, WITH BACKDRAFT DAMPER. DRYER BOX INSTALLATION SHALL MAINTAIN WALL FIRE RATING.
- 4) 8"ø GALVANIZED STEEL EXHAUST DUCT UP FROM 48" RANGE HOOD. ROUTE AS INDICATED THROUGH ROOF TO HIGH CAPACITY ROOF DISCHARGE CAP.
- 5 KITCHEN HOOD SHALL BE SPECIFIED BY ARCHITECT AND INSTALLED BY MECHANICAL CONTRACTOR. CAPACITY AND DUCT SIZE SHALL BE DESIGNED BY INSTALLING CONTRACTOR AS COORDINATED WITH KITCHEN RANGE HOOD SELECTED BY
- (2) SETS OF 3" PVC VENT & INTAKE VENT PIPING UP IN CHASE FROM FURNACES IN BASEMENT AND UP TO MANUFACTURER'S ROOF TERMINATION.

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**M2.0** 

Mechanical First Floor Plan
3/16" = 1'-0"

NORTH

### **COORDINATION NOTES**

1 - COORDINATE OPENING'S FOR GRILLES, REGISTERS, DIFFUSERS AND DUCTWORK WITH FRAMING CONTRACTOR PRIOR TO ROUGH-IN.

2 - COORDINATE EXACT LOCATION OF ALL GRILLES, REGISTERS AND DIFFUSERS WITH ARCHITECTURAL

3 - LIGHTING & SPRINKLER HEADS TAKE PRECEDENCE OVER DIFFUSER LOCATION. CONTRACTOR SHALL MAKE NECESSARY ADJUSTMENTS TO DIFFUSERS TO AVOID ANY CONFLICT WITH LIGHTING LAYOUT & SPRINKLER HEADS

4 - CONTRACTOR TO COORDINATE THERMOSTAT LOCATIONS WITH OWNER & ARCHITECT PRIOR TO

5 — ALL THERMOSTATS ARE TO BE MOUNTED AT A HEIGHT OF 48" ABOVE THE FLOOR LEVEL FOR DISABLED ACCESS.

#### GENERAL REQUIREMENTS

1 — PROVIDE CLEARANCES AS PER MANUFACTURER'S RECOMMENDATIONS.

2 - PITCH CONDENSATE DRAIN LINE 1/8" PER 12" RUN TOWARDS TERMINATION. INSULATE IN CONDENSATE DRAIN LINE WITH 3/8" CLOSED CELL "ARMIFLEX" TUBE INSULATION, TO PREVENT CONDENSATE DRIP.

3 — PRIOR TO THE CONTRACTOR ORDERING OR SETTING ANY AIR CONDITIONING EQUIPMENT, DUCTWORK, OR AIR DEVICE, HE SHALL VERIFY LOCATION OF PLACEMENT WITH STRUCTURAL DRAWINGS AND CONFIRM WEIGHTS, DISCHARGE CONFIGURATION, SIZES, ELECTRICAL CHARACTERISTICS AND ANY OTHER DIMENSIONAL DATA WHICH MIGHT AFFECT THE SUCCESSFUL INSTALLATION OF THE EQUIPMENT.

4 - KEEP ALL VENTS THROUGH ROOF AND EXHAUST DISCHARGE DUCTS A MINIMUM OF 10'-0" FROM OUTSIDE AIR INTAKES OR WINDOWS AND FROM ALL VERTICAL PORTIONS OF THE BUILDING.

5 — MECHANICAL EQUIPMENT AND APPLIANCES SHALL BE SIZED PER ACCA MANUAL "S" AND MANUAL "J".

# DUCT CONSTRUCTION NOTES

1 — ALL DUCTWORK SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH "ASHRAE GUIDE" AND "SMACNA STANDARDS" AND IN CONFORMANCE WITH REQUIREMENTS OF LOCAL BUILDING, MECHANICAL AND ENERGY CONSERVATION CODES. WHERE MORE THAN ONE REGULATION OR CODE APPLIES, THE MORE STRINGENT REQUIREMENT SHALL GOVERN.

2 — FLEXIBLE DUCTWORK SHALL COMPLY WITH THE CLASS I REQUIREMENTS OF THE NFPA BULLETIN NO. 90A AND SHALL BE INSULATED WITH 1" FIBERGLASS, SUPPORTED BY HELICALLY WOUND STEEL WIRE WITH REINFORCED METALIZED OUTER JACKET RATED FOR USE IN PLENUMS. ATTACHMENT SHALL BE WITH WORM DRIVE CLAMPS. LENGTH SHALL NOT EXCEED 6'—0"

3 - PROVIDE MANUAL BALANCING DAMPER AT EACH BRANCH DUCT TAKE OFF.

4 - ALL DUCTWORK JOINTS SHALL BE SEALED WITH WATER-BASED MASTIC.

5 — ALL AIR SUPPLY AND RETURN DUCTS LOCATED IN UNCONDITIONED SPACES (OR ATTIC) SHALL HAVE A MIN. R-8 INSULATION VALUE.

6 — PROVIDE RADIUS ELBOWS, TURNING VANES, AND SPLITTER DAMPERS IN BRANCHES AND EXTRACTORS WHERE APPLICABLE.

7 — TURNING VANES SHALL BE INSTALLED IN ALL MITERED ELBOWS.

8 — BRANCH DUCT SERVING DIFFUSERS SHALL BE SIZE AS INDICATED. PROVIDE INCREASER OR SHEET METAL PLENUM TO CONNECT TO DIFFUSER AS REQUIRED.

9 — ALL DUCT DIMENSIONS SHOWN ARE INSIDE CLEAR DIMENSIONS. IF DUCT LINER IS USED FOR INSULATION, CONTRACTOR SHALL INCREASE DUCT SIZE ACCORDINGLY.

10 — HANGERS FOR SHEET METAL DUCTWORK SHALL BE INSTALLED AS REQUIRED BY IMC.

## FURNACE SCHEDULE

MARK AREA SERVED		NOMINAL		NOMINAL	NOMINAL	MEGID	MODEL #	0514	E.S.P.	HEATII	NG CAP.		IG CAP.	FLUE	FUEL	A F 11 F	ELECTRIC	CAL DATA	FILTER	FILTER	NOTES
MARK	AREA SERVED	TONS	MFG'R	MODEL #	CFM	("W.G.)		OUTPUT		OUTPUT	SIZE	FUEL	A.F.U.E.	H.P.	V/Ø/Hz	SIZE	TYPE	NOTES			
F-1	MASTER SUITE	3 1/2	TRANE	"XV95" TUH2C100	1400	0.50	57,192	54,333	87,988	83,589	3"	PROPANE	95	3/4	120/1/60	20x25	HIGH VELOCITY	1234567			
F-2	KITCHEN & GREAT RM	4	TRANE	"XV95" TUH2C100	1600	0.50	57,192	54,333	87,988	83,589	3"	PROPANE	95	3/4	120/1/60	20x25	HIGH VELOCITY	1234567			

1) INSTALL WITH CLEARANCES PER MANUFACTURER'S RECOMMENDATIONS.

(2) SIZE AND INSTALL 2 PIPE VENT PIPING PER MANUFACTURER'S INSTRUCTIONS FOR ACTUAL INSTALLED LENGTHS. PROVIDE CONCENTRIC ROOF TERMINATION.

3 PROVIDE WITH TRANE "PERFECT FIT" FILTER ENCLOSURE SUITABLE FOR UNIT SIZE AND ORIENTATION. FILTER ENCLOSURE SHALL ACCEPT 1" STANDARD, 5" HIGH EFFICIENCY AND ELECTRONIC FILTER CELLS. INSTALL WITH 5" HIGH EFFICIENCY PLEATED FILTER.

4) PROVIDE CONDENSATE PUMP W/ SAFETY SHUT OFF SWITCH WIRED TO FURNACE. PUMP SHALL BE "LITTLE GIANT" MODEL #VCC-20, OR SIMILAR

(5) PROVIDE LEFT OR RIGHT CONNECTIONS AS REQUIRED FOR ACCESS IN MECHANICAL ROOMS.

REQUIRED VENTILATION — UNIT SHALL BE PROVIDED WITH "S&P" #MD6—ES24VK OUTSIDE AIR MOTORIZED DAMPER KIT OR APRILAIRE #8126X VENTILATION CONTROL SYSTEM, OR SIMILAR THAT ALLOWS CONTROLLED TIME SHIFTING OF VENTILATION WITH TEMPERATURE AND HUMIDITY RESTRICTIONS. SEE DETAILS AND SPECIFICATIONS.

7 INPUT RATINGS SHOWN HAVE BEEN DERATED FOR 5,000 FT ELEVATION. INPUT RATE CHANGES FROM STANDARD CAN BE MADE BY ADJUSTING MANIFOLD PRESSURE (MIN 3.0 - MAX 3.7) OR BY CHANGING ORIFICE.

# CONDENSING UNIT SCHEDULE

MARK	NOMINAL	MECID	MFG'R	MODEL #	Cooling	Capacity	DESIGN COND.	INDOOR	COIL ENT. AIR	E	LECTRICAL	. DATA	MINIMUM	REFRIGERANT	NOTES
MARK	TONS	WFGR	MODEL #	TOTAL	SENS.	DB/WB	COIL MODEL#	DB/WB	MCA	FUSE	V / Ø	SEER	REFRIGERANI	NOTES	
CU-1	3 1/2	TRANE	4TTX6042	36.6	30.2	115/63	SELECTED BY MFG.	78 <b>°/</b> 63 <b>°</b>	21	35	208/230 1ø	16	R-410A	1234567	
CU-2	4	TRANE	4TTX6049J1000A	41.5	32.4	115/63	SELECTED BY MFG.	78°/63°	26	40	208/230 1ø	16	R-410A	1234567	

1) INSTALL UNIT PER MANUFACTURER'S WRITTEN DIRECTIONS. SLEEVE PIPING PENETRATIONS THROUGH EXTERIOR WALL, SEAL WATERTIGHT AND PROVIDE ESCUTCHEONS.

(2) UNIT SHALL BE PROVIDED WITH COMFORT LINK II CONTROL SYSTEM AND THERMOSTATS.

(3) PROVIDE 10-YEAR COMPRESSOR WARRANTY AND 5-YEAR FOR OTHER COMPONENTS.

(4) PROVIDE UNIT COMPLETE WITH ALL NECESSARY DISCONNECTS, OVERLOADS AND CONTROL COMPONENTS.

5 SIZE AND INSTALL ALL REFRIGERANT PIPING PER MFG'RS. INSTRUCTIONS.

(6) PROVIDE LOW AMBIENT CONTROL KIT FOR OPERATION DOWN TO 30°F.

(7) CAPACITIES SHOWN HAVE BEEN ADJUSTED FOR JOB SITE ELEVATION OF 5,000 FT.

# EXHAUST FAN SCHEDULE

		<del></del>										
MARK	MOUNTING	MANUFACTURER	MODEL	CFM	E.S.P.	SONES	MOTOR		BAROM.	WIRE	DRIVE	REMARKS
WARK	/LOCATION	MANOFACTORER	MODEL	Grivi	LIGIFI	@ 0.1"	AMPS	V/PH	DAMPER	SCREEN	DRIVE	REWIARNS
EF-1	CEILING	NUTONE	QTXEN80	65	0.3"	0.3	0.4	120/1	YES	YES	DIRECT	123
EF-2	CEILING	NUTONE	QTXEN150	125	0.3"	1.4	0.5	120/1	YES	YES	DIRECT	123

PROVIDE UNIT WITH FACTORY SUPPLIED EXHAUST GRILLE.

 PROVIDE EXHAUST FAN WITH BACK DRAFT DAMPER.

3 PROVIDE WITH BROAN-NUTON "SENSAIRE" HUMIDITY SENSING WALL CONTROL SWITCH.

### **GRILLES AND REGISTERS SCHEDULE**

GKI	GRILLES AND REGISTERS SCHEDULE												
MARK	SIZE	DESCRIPTION	MFG.	MODEL # FRAME MAX. NC AT DAMPER COLOR		MATERIAL	REMARKS						
			0.	FLOOR	CEILING	TYPE	DESIGN CFM	(OBD)					
LBG/X	PER PLAN	LINEAR BAR GRILLE	HART & COOLEY	LF300	LS300	SURFACE	25	YES	SATIN ANODIZED	ALUMINUM	LENGTH AND WIDTH PER PLAN PROVIDE W/ PLENUM		
LBR/X	PER PLAN	LINEAR BAR RETURN GRILLE	HART & COOLEY	LF100	LS100	SURFACE	25	NO	SATIN ANODIZED	ALUMINUM	SIZED PER PLAN, W/ PLENUM		

NOTES:

NECK SIZE SHOWN ON PLANS AND CORRESPONDS TO DUCT CONNECTION SIZE.
CONTRACTOR SHALL PROVIDE SQUARE TO ROUND ADAPTERS AS REQUIRED FOR INSTALLATION.

MOUNTING HEIGHT AND EXACT LOCATION TO BE DETERMINED BY THE ARCHITECT.
 VERIFY COLOR OF ALL DEVICES WITH ARCHITECT.

W. Alan Kenson

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WILLIAM MARK

ODELL N

Vicente Residence 9970 N. Clear Fork R.

PROJECT:

DRAWN BY

DATE
March 24th, 2021

JOB NO.
768

SHEET

**M3.0** 

Design Group, LLC

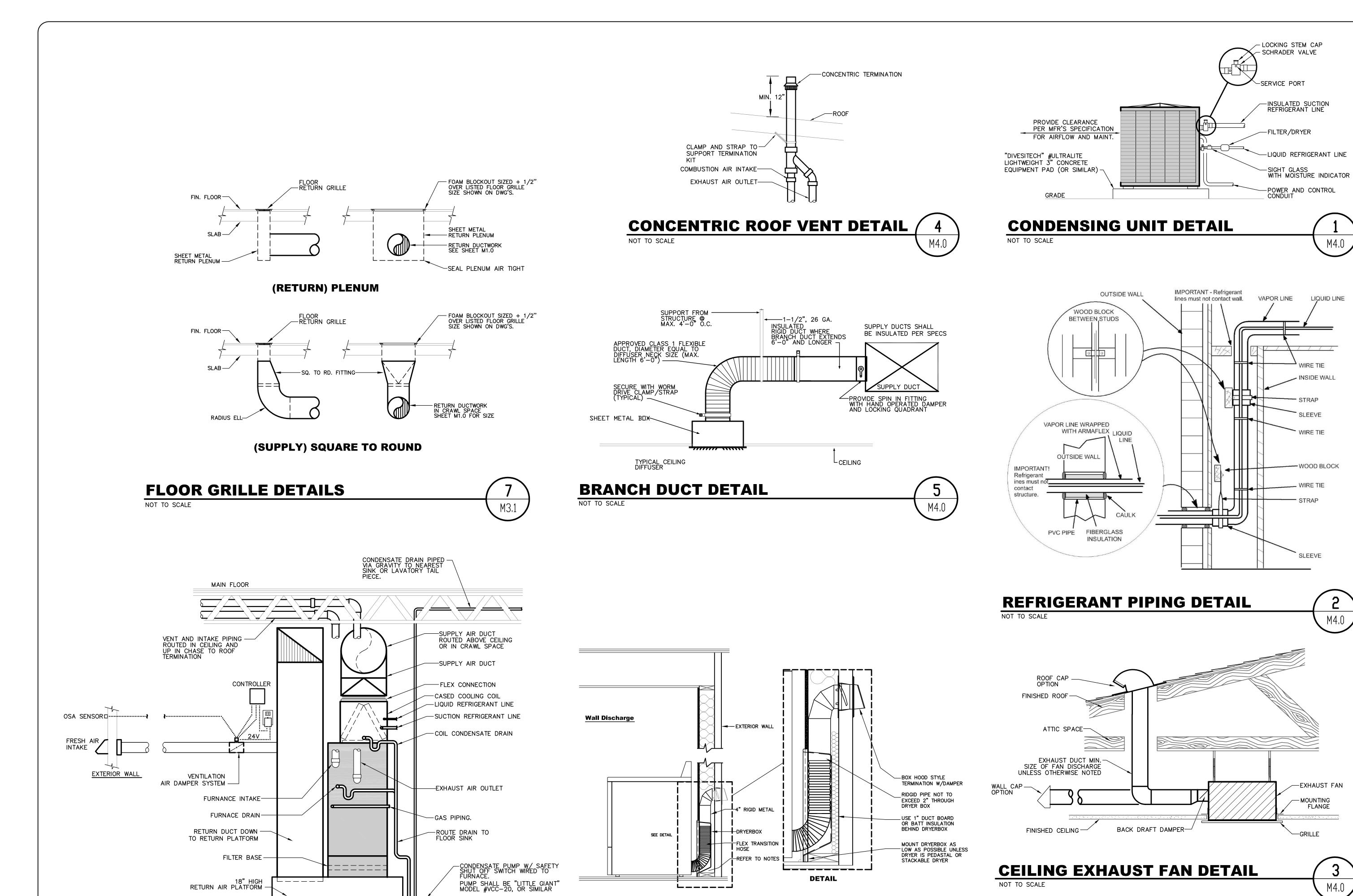
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Mar 29, 2021 - 12:53pr



DRYERBOX RECEPTACLE SHALL BE METAL AND BE INSTALLED AS TO PERMIT THE PROPER AND SAFE COLLECTION OF THE DRYER TRANSITION HOSE. DRYERBOX SHOULD BE RESTING ON THE BOTTOM PLATE AND BE LOCATED AT OR NEAR THE CENTERLINE OF THE PROPOSED DRYER APPLIANCE. DRYER BOX TO BE "IN-O-VATE TECHNOLGIES" DRYERBOX MODEL

FLOOR

**VERTICAL GAS FURNACE DETAIL** 

NOT TO SCALE

DB-425, OR SIMILAR.

NOT TO SCALE

**DRYER BOX DETAIL** 

ciates, ASSO **PROJEC** DR DRAWN BY

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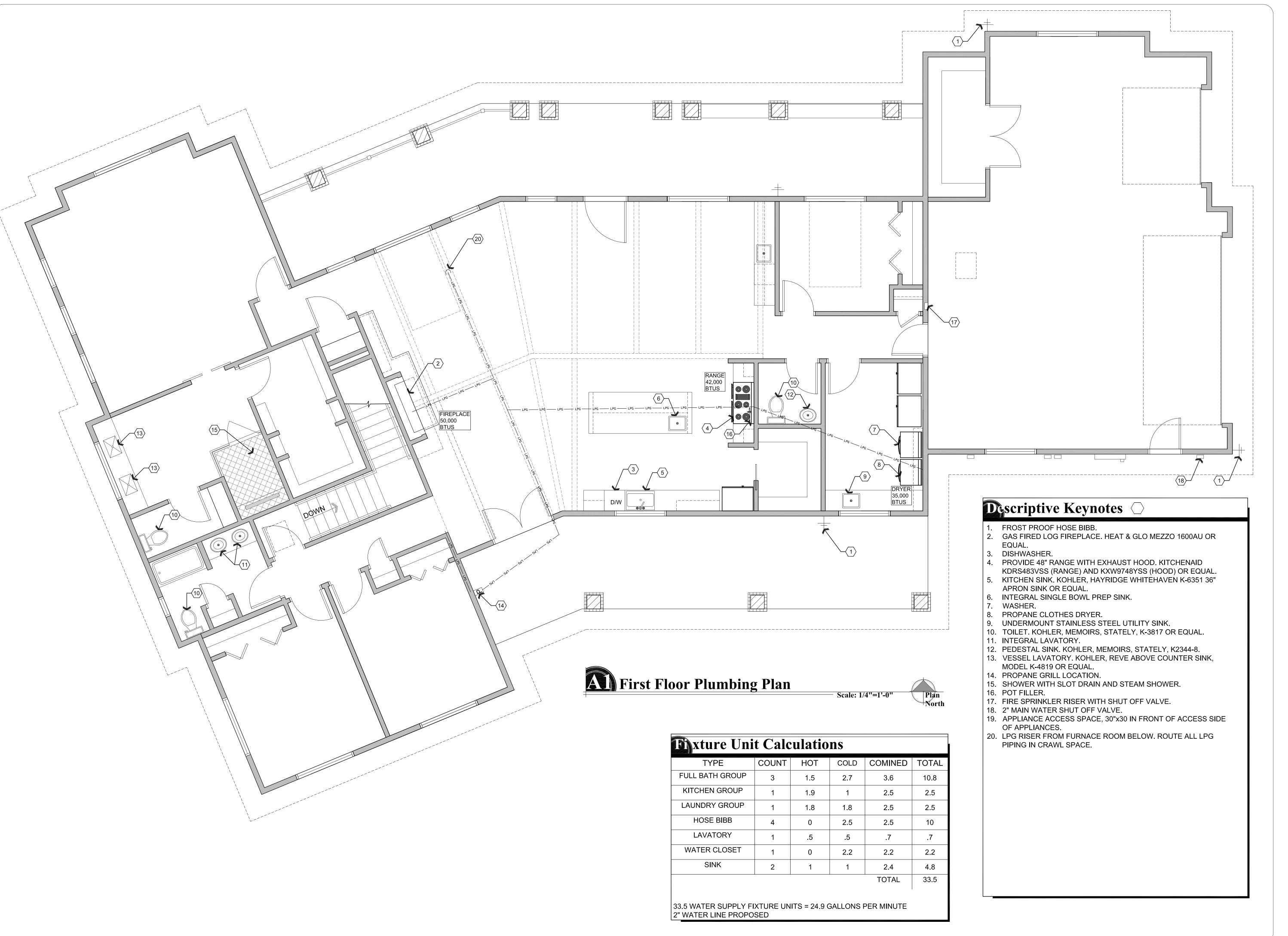
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Consulting Engineers



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email: waka@cal

American Ranch Lot 29

icente Residence 970 N. Clear Fork Rd. rescott, AZ

PROJECT: Vicente

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L.O.
CHECKED BY
W.A.K.

DATE

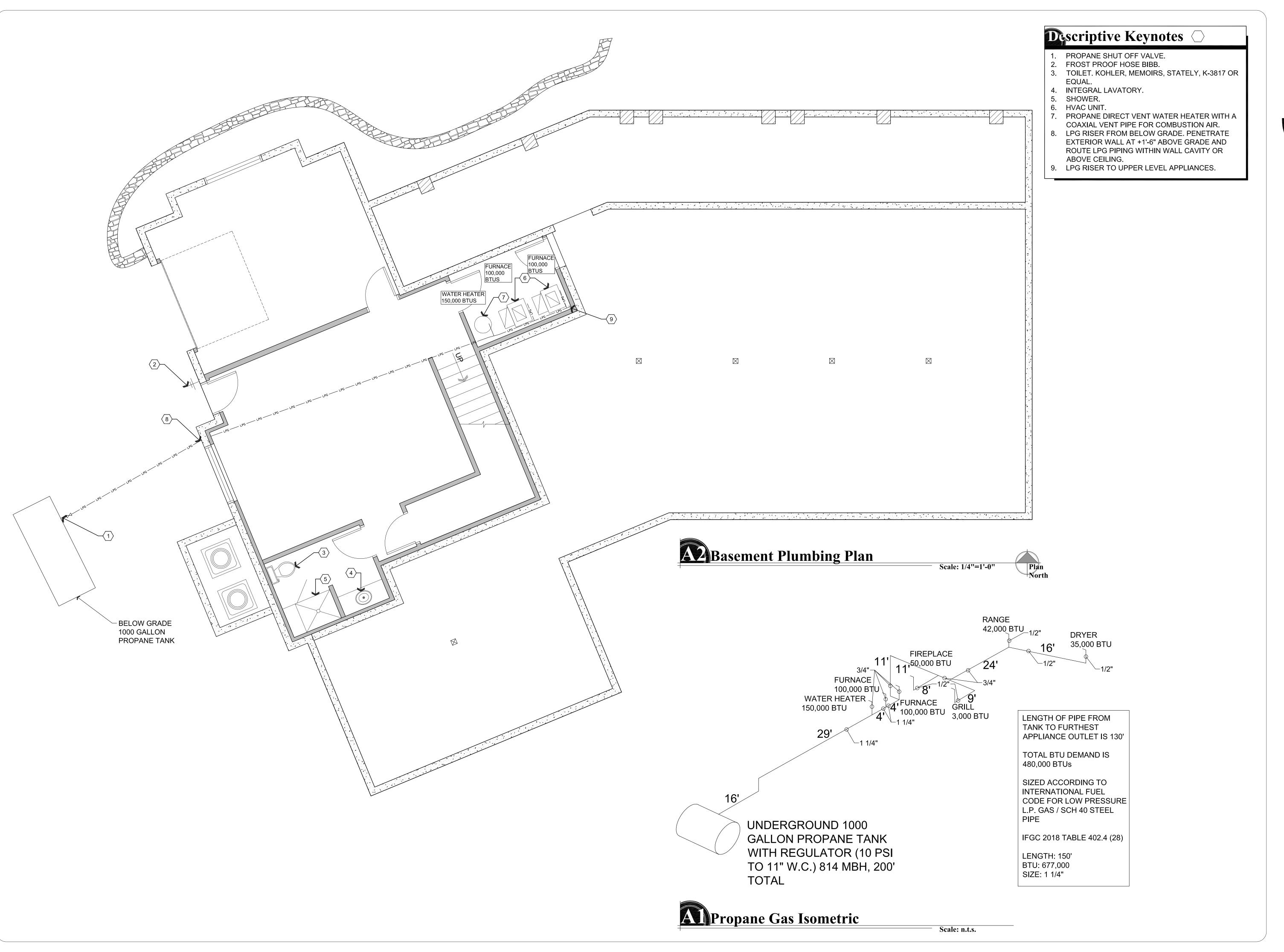
W.A.K.

September 17th, 2021

JOB NO.
768

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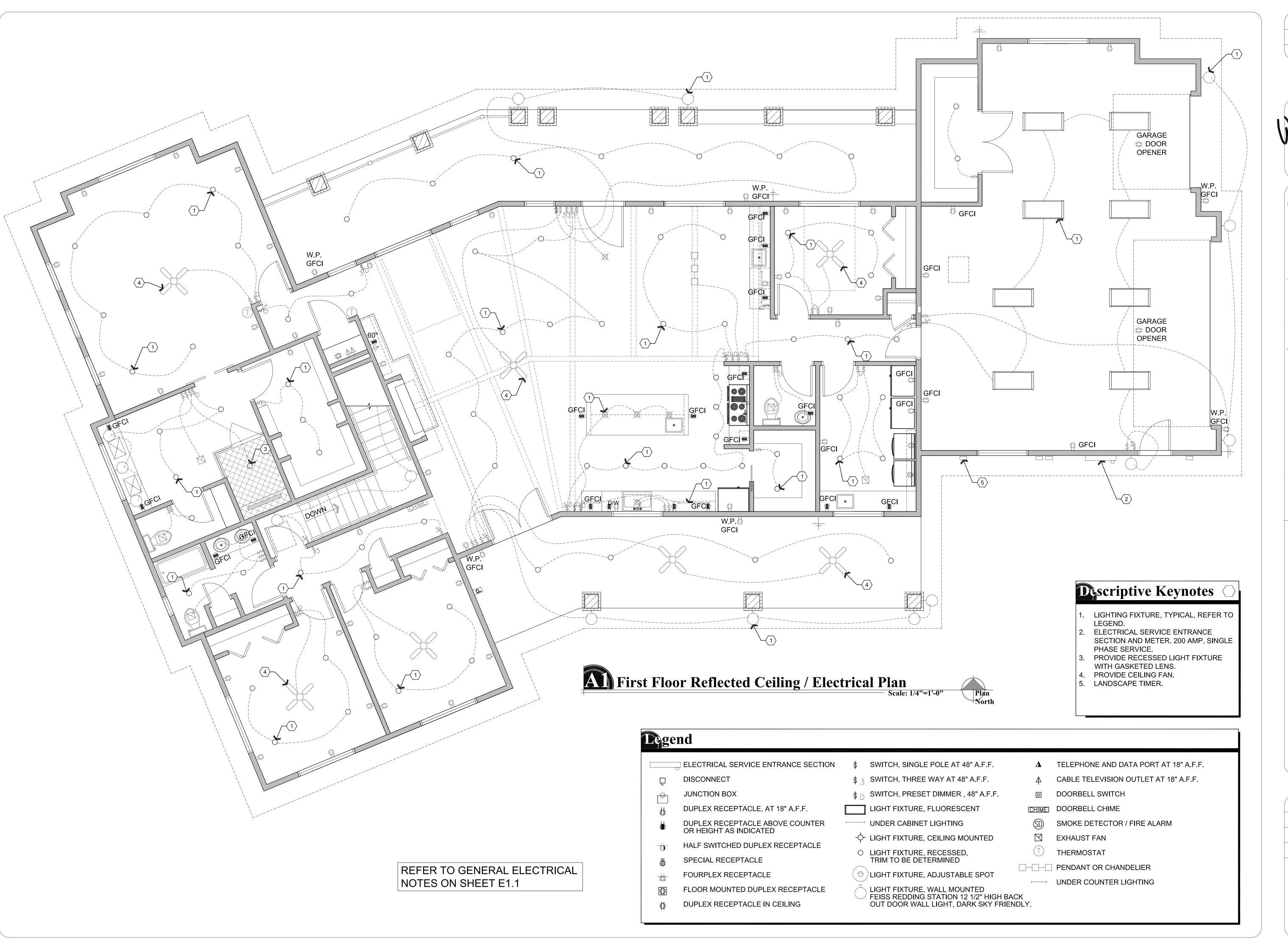
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PROJECT: Vicente Residence

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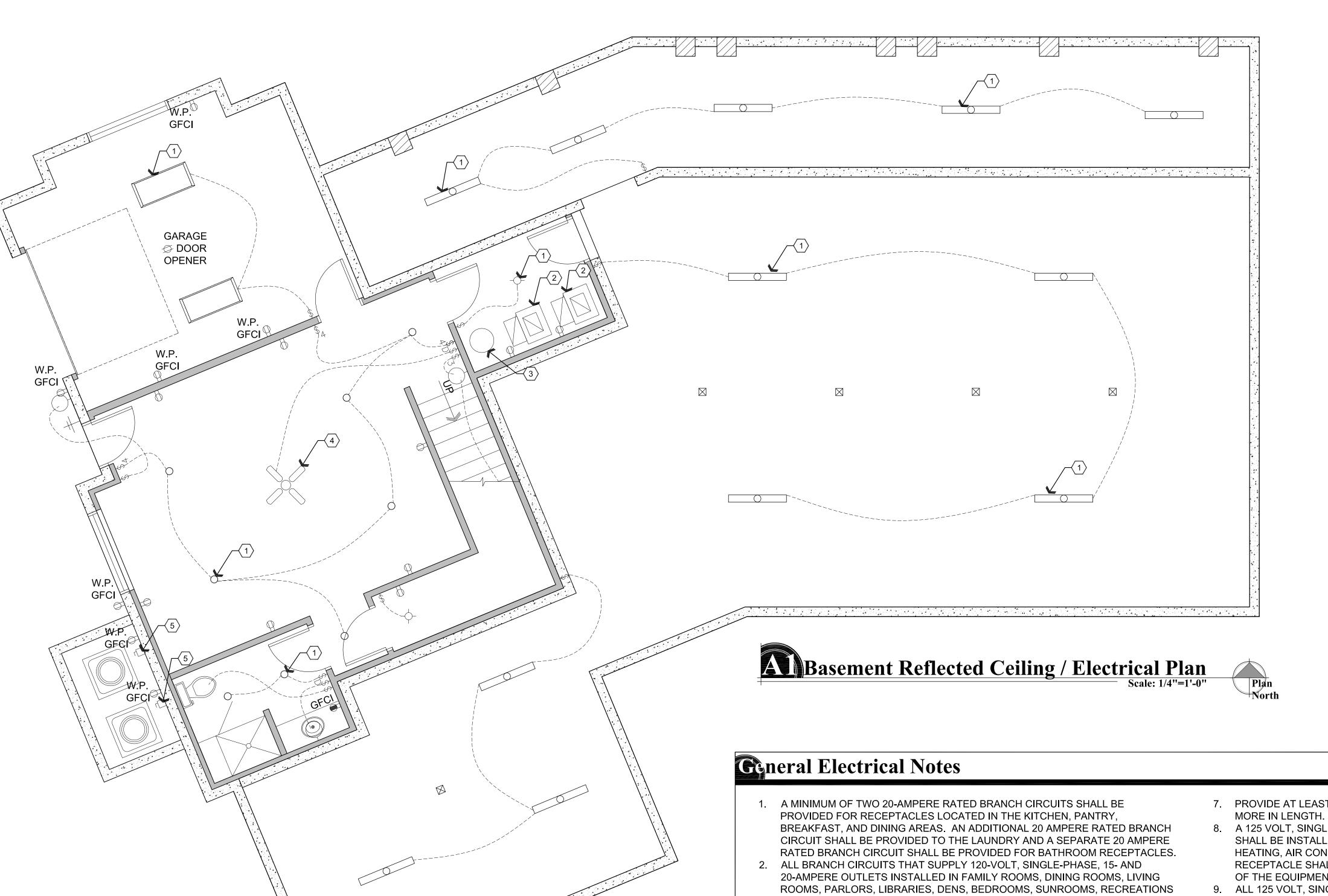
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September 17th, 2021

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# Discriptive Keynotes

- 1. PROVIDE LIGHT FIXTURE, TYPICAL, REFER TO
- LEGEND FOR TYPE.
- 2. FURNACE / AC.
- 3. PROVIDE WATER HEATER WITH
- RE-CIRCULATING PUMP. 4. PROVIDE CEILING FAN.
- PROVIDE POWER TO CONDENSING UNIT.

# Digend

] ELECTRICAL SERVICE ENTRANCE SECTION

DISCONNECT

JUNCTION BOX

DUPLEX RECEPTACLE, AT 18" A.F.F.

- DUPLEX RECEPTACLE ABOVE COUNTER OR HEIGHT AS INDICATED
- HALF SWITCHED DUPLEX RECEPTACLE
- SPECIAL RECEPTACLE
- FOURPLEX RECEPTACLE
- FLOOR MOUNTED DUPLEX RECEPTACLE
- DUPLEX RECEPTACLE IN CEILING
- SWITCH, SINGLE POLE AT 48" A.F.F.
- SWITCH, THREE WAY AT 48" A.F.F.
- SWITCH, PRESET DIMMER, 48" A.F.F.
- LIGHT FIXTURE, FLUORESCENT

UNDER CABINET LIGHTING

- LIGHT FIXTURE, RECESSED, TRIM TO BE DETERMINED
- LIGHT FIXTURE, ADJUSTABLE SPOT
- LIGHT FIXTURE, WALL MOUNTED
- ▲ TELEPHONE AND DATA PORT AT 18" A.F.F
- CABLE TELEVISION OUTLET AT 18" A.F.F.
- DOORBELL SWITCH

[CHIME] DOORBELL CHIME

- (SD) SMOKE DETECTOR / FIRE ALARM
- (T) THERMOSTAT

PENDANT OR CHANDELIER

4'-0" LED STRIP FIXTURE

- ROOMS, CLOSETS, HALLWAYS AND SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A COMBINATION TYPE ARC-FAULT CIRCUIT INTERRUPTER INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT.
- 3. IN EVERY KITCHEN, FAMILY ROOM, DINING ROOM, LIVING ROOM, PARLOR, LIBRARY, DEN, SUN ROOM, BEDROOM, RECREATION ROOM, OR SIMILAR ROOM OR AREA OF DWELLING UNITS, RECEPTACLES SHALL BE INSTALLED SO THAT NO POINT ALONG THE FLOOR LINE IN ANY WALL SPACE IS MORE THAT 6 FEET, MEASURED HORIZONTALLY, FROM AN OUTLET IN THAT SPACE, INCLUDING ANY WALL SPACE 2 FEET OR MORE IN WIDTH.
- 4. IN KITCHEN AND DINING ROOMS, AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH ISLAND OR PENINSULAR COUNTER SPACE WITH A LONG DIMENSION OF 24 INCHES OR GREATER AND A SHORT DIMENSION OF 12 INCHES.
- 5. IN KITCHEN AND DINING ROOMS, AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH WALL COUNTER SPACE 12 INCHES OR WIDER SO THAT NO POINT ALONG THE WALL IS MORE THAN 24 INCHES FROM A RECEPTACLE OUTLET AND SHALL BE GFCI PROTECTED.
- 6. PROVIDE AT LEAST ONE WEATHERPROOF RECEPTACLE OUTLET, NOT MORE THAT 6 FEET 6 INCHES ABOVE GRADE AND GFCI PROTECTED, AT THE FRONT AND BACK OF EACH DWELLING. ALL RECEPTACLES INSTALLED OUTDOORS MUST BE GFCI PROTECTED.

- 7. PROVIDE AT LEAST (1) ONE RECEPTACLE OUTLET IN HALLWAYS 10 FEET OR
- 8. A 125 VOLT, SINGLE PHASE, 15 OR 20 AMPERE RATED RECEPTACLE OUTLET SHALL BE INSTALLED AT AN ACCESSIBLE LOCATION FOR THE SERVICING OF HEATING, AIR CONDITIONING AND REFRIGERATION EQUIPMENT. THE RECEPTACLE SHALL BE LOCATED ON THE SAME LEVEL AND WITHIN 25 FEET OF THE EQUIPMENT.
- 9. ALL 125 VOLT, SINGLE PHASE, 15 AND 20 AMPERE RECEPTACLES IN THE FOLLOWING LOCATIONS SHALL BE GFCI PROTECTED: BATHROOMS, GARAGES, UNFINISHED ACCESSORY BUILDINGS, CRAWL SPACES, UNFINISHED BASEMENTS, BAR SINKS (WITHIN 6 FEET) AND LAUNDRY ROOM SINKS (WITHIN
- 10. PROVIDE AT LEAST (1) ONE WALL MOUNTED SWITCH CONTROLLED LIGHTING OUTLET IN EVERY HABITABLE ROOM AND BATHROOM.
- 11. PROVIDE A LIGHTING OUTLET ON THE EXTERIOR SIDE OF ALL EXITS/ENTRANCES.
- 12. A RECEPTACLE SHALL NOT BE INSTALLED WITHIN A BATHTUB OR SHOWER
- 13. FIXTURES, FITTINGS, BOXES AND RECEPTACLES LOCATED IN DAMP OR WET LOCATIONS SHALL BE "LISTED" TO BE SUITABLE FOR SUCH LOCATION.
- 14. PROVIDE INTERCONNECTED SMOKE ALARMS IN EACH SLEEPING ROOM, IMMEDIATELY OUTSIDE EACH SLEEPING ROOM, ON EACH ADDITIONAL STORY INCLUDING BASEMENTS, AND IN THE HALLWAY. SMOKE ALARMS SHALL BE HARD WIRED WITH BATTERY BACKUP.
- 15. PROVIDE A GROUNDING ELECTRODE SYSTEM. PROVIDE BONDING TO THE INTERIOR WATER PIPING AND ABOVE GROUND PORTION OF GAS PIPING
- 16. EXTERIOR LIGHTING SHALL BE DARK SKY COMPLIANT.

REVISIONS

11-18-2021

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