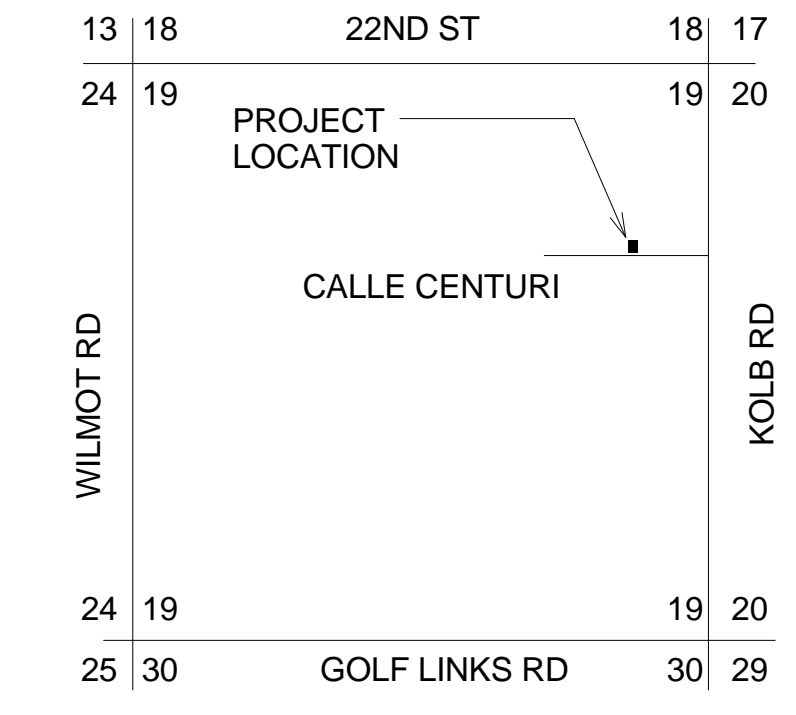


New Garage & Workshop For:

Jeffrey Citron



Location Map
3" = 1 MILE

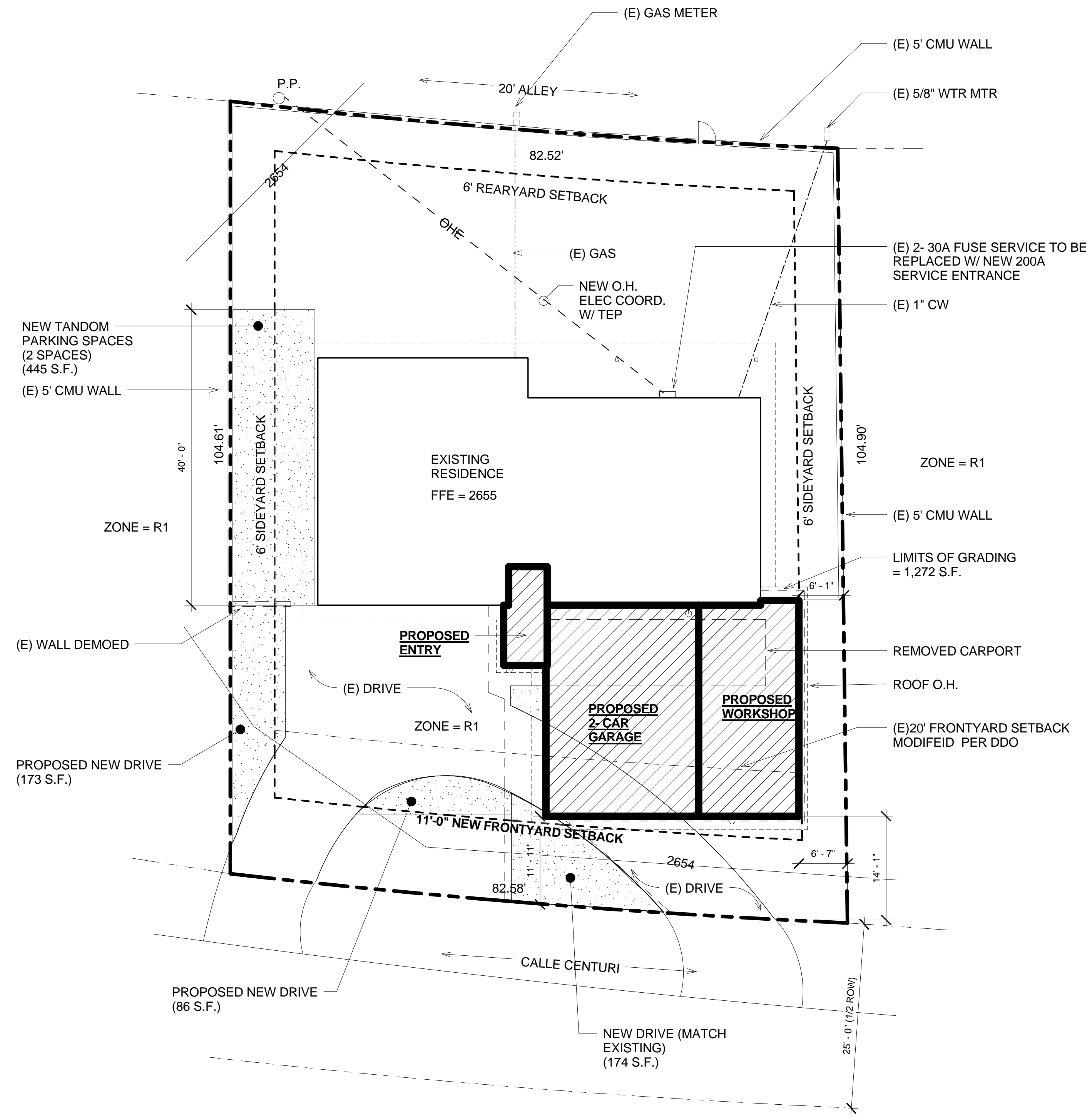
Project Data

OWNERS:	JEFFREY CITRON	
ADDRESS:	7025 E CALLE CENTURI	
LEGAL DESCRIPTION:	TERRA DEL SOL RESUB LOT 26 BLK 26	
LOT SIZE:	8,676 SF.	
SITE ZONING:	R-1	
SQUARE FOOTAGE:	(E) LIVING	= 1,759 S.F.
	(E) STG	= 54 S.F.
	(E) PATIO	= 194 S.F.
	(E) CARPORT REMOVED	= 271 S.F.
	(E) DRIVE TO REMAIN	= 1,357 S.F.
	NEW WORKSHOP	= 430 S.F.
	NEW GARAGE	= 542 S.F.
	NEW ENTRY	= 75 S.F.
	NEW DRIVE	= 878 S.F.
LOT COVERAGE	5560/8676	= 64%

Code Review

APPLICABLE CODES: 2012 IRC
 NUMBER OF STORIES: one
 HEIGHT TO TOP OF ROOF: 11'-4" A.F.F.
 FIRE PROTECTION: none required

Sheet Number	Drawing List	Sheet Name
GENERAL		
T1.0	Title Sheet	
ARCHITECTURAL		
D1.0	Demolition Plan	
A1.0	Dimensioned Floor Plan	
A2.0	Building Elevations	
A3.0	Building Sections	
STRUCTURAL		
S1.0	Structural Plan	
MECHANICAL		
MP1.0	Mechanical Plan	
ELECTRICAL		
E1.0	Power/Lighting Plan	



Site Plan
1" = 10'-0"

DRAWN BY: AE
 CHECKED BY: AE
 PROJECT NUMBER: 13115



New Garage & Workshop For:
 Jeffrey Citron
 7025 E Calle Centuri
 Tucson, Arizona
 Title Sheet

REVISION:	MARK:	DATE:	REMARK:

DRAWN BY: Author
 CHECKED BY: Checker
 PROJECT NUMBER: 13115

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New Garage & Workshop For:
 Jeffrey Citron
 7025 E Calle Centuri
 Tucson, Arizona
 Demolition Plan

REVISION:	MARK:	DATE:	REMARK:

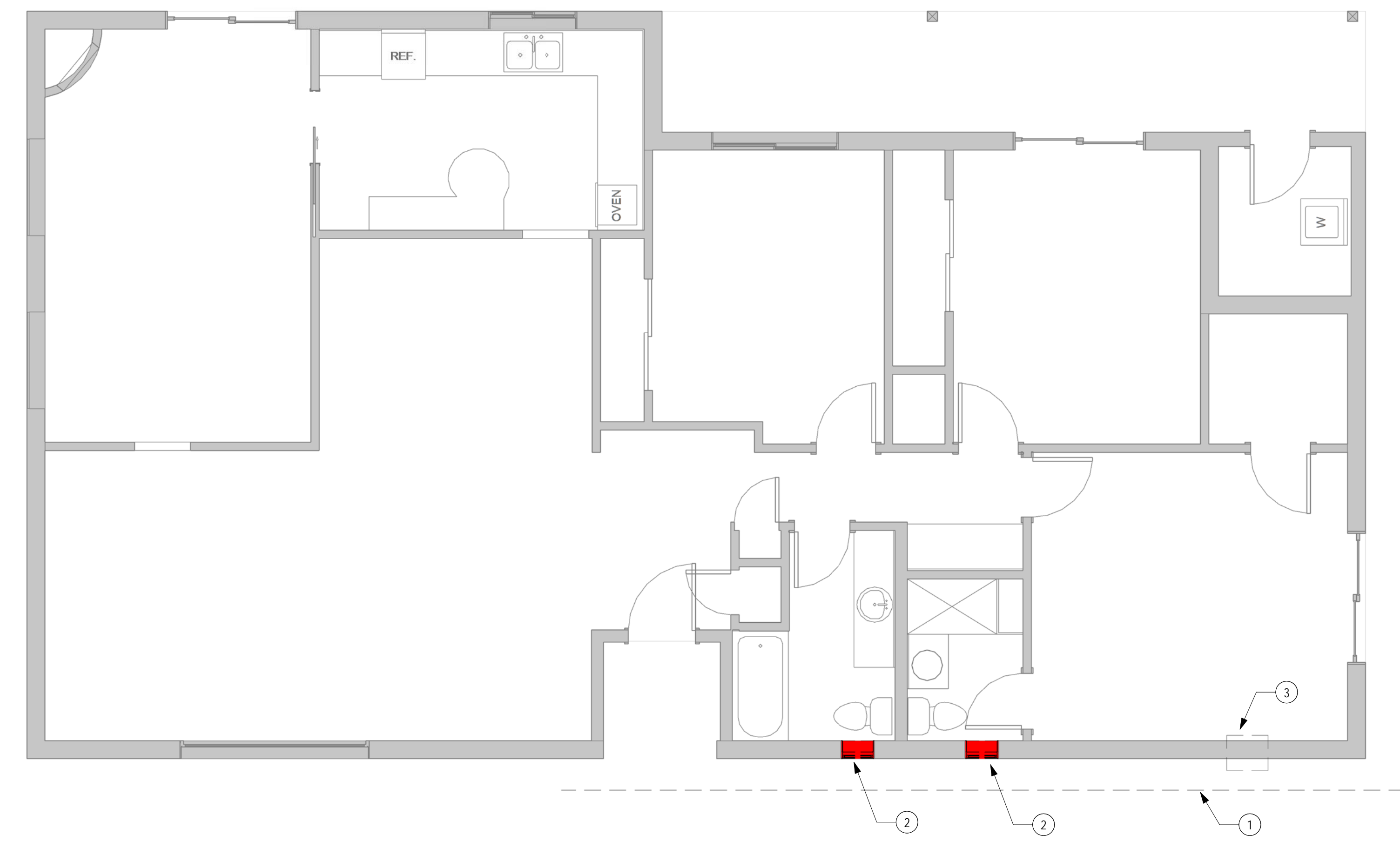
D1.0
 SHT OF

General Demolition Notes:

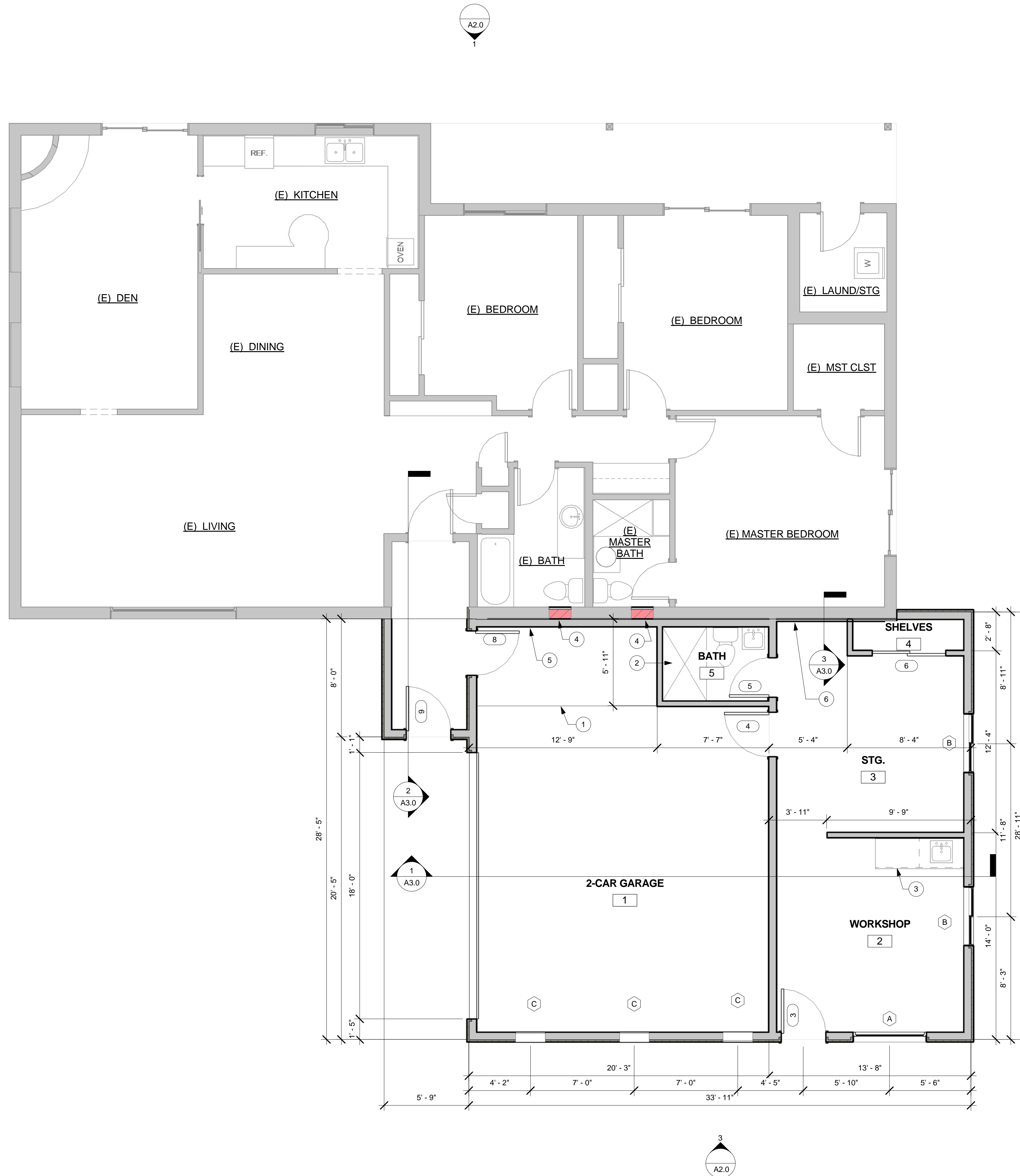
PROTECT EXISTING STRUCTURAL ELEMENTS AND LANDSCAPING TO REMAIN FROM DAMAGE OR DISCOMFORT BY EFFECTS OF WIND, RAIN, DUST, FUMES, DEBRIS AND DEMOLITION OPERATIONS. PROVIDE BARRICADES WHERE AND AS NECESSARY. DEMOLITION WASTE SHALL BE DISPOSED PER INSTRUCTION OF OWNER IN MANNER THAT DUST AND DEBRIS WILL NOT BE TRANSFERRED TO OTHER AREAS OF FACILITY. PROVIDE NECESSARY WATER CONNECTIONS FOR THIS WORK. TAKE EVERY PRECAUTION TO PREVENT INJURY AND SPILLING OF DUST AND DEBRIS ON ADJACENT AREAS AND PERSONNEL. CONTRACTOR IS RESPONSIBLE FOR ANY LAWSUITS BECAUSE OF FAILURE TO TAKE NECESSARY PROTECTION PRECAUTIONS. PROTECT EXISTING ROOF AREAS AND PROVIDE CATWALKS ON ROOF WHEN TRANSPORTING MATERIALS ACROSS ROOF. DO NOT OBSTRUCT REQUIRED CIRCULATION WITHOUT APPROVAL OF OWNER OR PROPER PERMITS. ITEMS NOTED AS LANDLORDS PROPERTY ARE TO BE SALVAGED AND RETURNED TO LANDLORD'S REPRESENTATIVE. ALL OTHER ITEMS ARE PROPERTY OF CONTRACTOR AND ARE TO BE DISPOSED OF OFF-SITE BY CONTRACTOR. PROVIDE REQUIRED WORK TO CONNECT NEW CONSTRUCTION TO EXISTING CONSTRUCTION. PERFORM WORK IN MANNER THAT WHEN RECONSTRUCTION WORK IS PERFORMED, DEMOLITION IS LEFT IN CLEAN CONDITION WITH NEAT EDGES AND ABLE TO BE JOINED WITHOUT UNDUE DIFFICULTY. PROVIDE REQUIRED SHORING AND PINNING TO ABSORB WEIGHT OF STRUCTURE DURING CUTTING OF NEW OPENINGS IN EXISTING FACILITIES. SHORING TO REMAIN UNTIL NEW STRUCTURE IS SECURE. REPAIR DAMAGE TO ADJACENT STRUCTURE OR FINISHES CAUSED AS A RESULT OF THIS WORK. REPAIR EXCESS DEMOLITION TO THAT REQUIRED, AT NO COST TO OWNER.

Demolition Keynotes:

- EXISTING ROOF TAILS CUT BACK TO BE FLUSH WITH WALL
- EXISTING WINDOW TO BE REMOVED - INFILL OPENING LIKE MATERIALS - ALIGN FINISHES
- EXISTING WINDOW MOUNT A/C UNIT TO BE REMOVED - EXISTING OPENING TO BE INFILLED W/ LIKE MATERIALS ALIGN FINISH



Demolition Plan
 1/4" = 1'-0"



Dimensioned Floor Plan
1/4" = 1'-0"

General Floor Plan Notes:

- ALL EXTERIOR WALLS TO BE 3-COAT STUCCO SYSTEM OVER EXT. SHEATHING (CLIENTS OPTION 5/8" EXT. GRADE T1-11 SIDING OVER 2x6 WD. STUDS @ 16" O.C. FILLED W/ R-21 BATT INSUL. W/ 1/2" GWB INT SIDE (U.N.O.)
- ALL INT. WALLS TO 2x4 WD. STUDS @ 16" O.C. W/ 1/2" GWB BOTH SIDES (U.N.O.)
- ALL FLOOR AND BASE FINISHES TO BE COORD. W/ OWNER
- ALL DOORS TO HAVE ADA COMPLIANT LEVER HANDLES

Floor Plan Keynotes:

Key Value	Keystone Text
1	CONC. WHEELSTOP
2	1/2" BACKERBOARD WITH CERAMIC TILE SHOWER/TUB ENCLOSURE UP TO 72" A.F.F. (TO COMPLY W/ 2012 IRC R702.3 & R702.4 & MANUFACTURERS INSTALLATIONS SPECS.
3	COUNTERTOP WITH BASE CABINETS SELECTED BY OWNER, CONTR. INSTALL
4	INFILL EXISTING OPENING W/ LIKE MATERIALS (ALIGN FINISH)
5	6" FURROUT (1/2" GWB OVER 2X6 WD STUDS AT 16" O.C.)

Energy Conservation Info
(TABLE N1102.1.2006 IRC)(NEW CONSTRUCTION ONLY)

GLAZING = .75 OR LOWER U FACTOR
 DOOR = .75 OR LOWER U FACTOR
 SHGC = .40 OR LOWER
 WALL INSULATION = R21 MIN.
 CEILING INSULATION = R30 MIN.

GENERAL NOTE:
 BUILDING THERMAL ENVELOPE SHALL COMPLY WITH IRC 2012 SECTIONS N1102.4.1.1 AND N1102.4.1.2. THE SEALING METHODS BETWEEN DISSIMILAR MATERIALS SHALL ALLOW FOR DIFFERENTIAL EXPANSION AND CONTRACTION

THE COMPONENTS OF THE BUILDING THERMAL ENVELOPE AS LISTED IN TABLE N1102.4.1.1 SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE CRITERIA LISTED IN TABLE N1102.4.1.1, AS APPLICABLE TO THE METHOD OF CONSTRUCTION. WHERE REQUIRED BY THE BUILDING OFFICIAL, AN APPROVED THIRD PARTY SHALL INSPECT ALL COMPONENTS AND VERIFY COMPLIANCE.

N1102.4.1.2 (R402.4.1.2) TESTING. 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). WHERE REQUIRED BY THE BUILDING OFFICIAL, 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.

DURING TESTING:

- EXTERIOR WINDOWS AND DOORS, FIREPLACE AND STOVE DOORS SHALL BE CLOSED, BUT NOT SEALED, BEYOND THE INTENDED WEATHERSTRIPPING OR OTHER INFILTRATION CONTROL MEASURES;
- DAMPERS INCLUDING EXHAUST, INTAKE, MAKEUP AIR, BACKDRAFT AND FLUE DAMPERS SHALL BE CLOSED, BUT NOT SEALED BEYOND INTENDED INFILTRATION CONTROL MEASURES;
- INTERIOR DOORS, IF INSTALLED AT THE TIME OF THE TEST, SHALL BE OPEN;
- EXTERIOR DOORS FOR CONTINUOUS VENTILATION SYSTEMS AND HEAT RECOVERY VENTILATORS SHALL BE CLOSED AND SEALED;
- HEATING AND COOLING SYSTEMS, IF INSTALLED AT THE TIME OF THE TEST, SHALL BE TURNED OFF; AND
- SUPPLY AND RETURN REGISTERS, IF INSTALLED AT THE TIME OF THE TEST, SHALL BE FULLY OPEN

Door Schedule					
Door Number	Door Type	Door Size	Door		Comments
			Finish	Frame	
3	DECORATIVE EXT.	36" x 80"	SC/WD	WD	
4	6 PANEL	36" x 80"	HC/WD	WD	
5	6 PANEL	32" x 80"	HC/WD	WD	
6	SLIDING CLOSET	60" x 80"	HC/WD	WD	
8	6 PANEL	36" x 80"	SC/WD	WD	20 MIN.
9	DECORATIVE EXT.	36" x 80"	SC/WD	WD	
10	GARAGE DR	18' x 7'	BY MFGR	WD	

Window Schedule						
Type Mark	Rough Opening		Type	Material	Finish	Comments
	Width	Height				
A	5' - 0"	4' - 0"	Picture	DBL PANE/LOW E	TINT	
B	4' - 0"	4' - 0"	Sliding	DBL PANE/LOW E	TINT	
C	2' - 0"	2' - 0"	Picture			

DRAWN BY: AE
 CHECKED BY: AE
 PROJECT NUMBER: 13115

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New Garage & Workshop For:
 Jeffrey Citron
 7025 E Calle Centuri
 Tucson, Arizona
 Dimensioned Floor Plan

REVISION: MARK: DATE: REMARK:

A1.0
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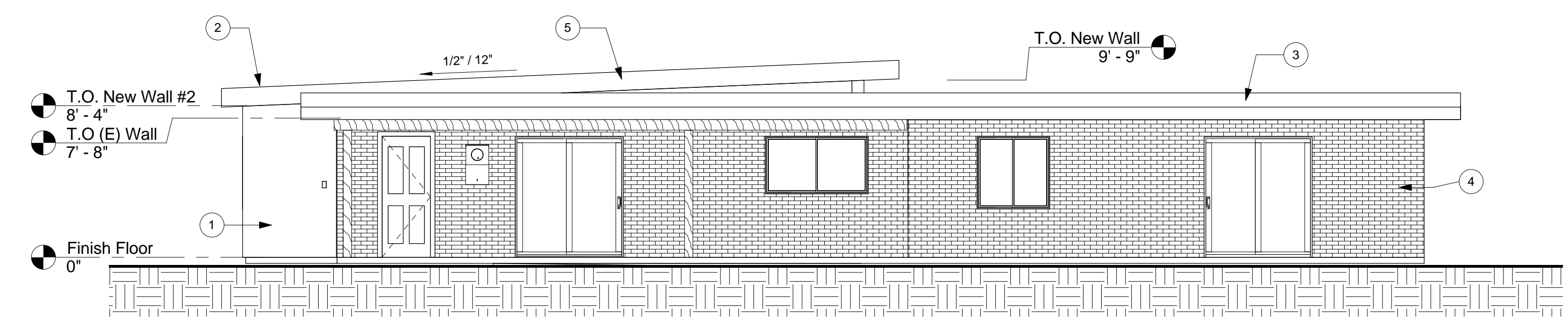
DRAWN BY: AE
 CHECKED BY: AE
 PROJECT NUMBER: 13115

Elevation Keynotes:

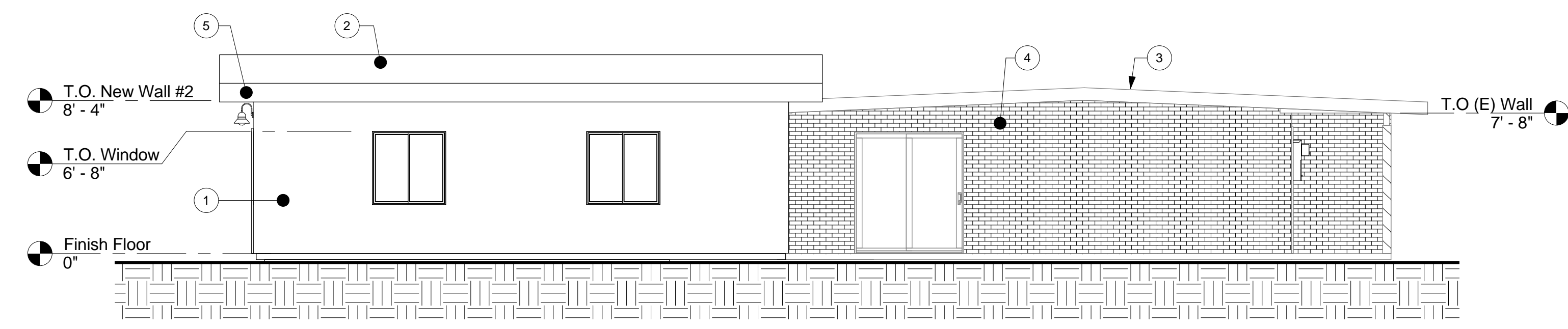
Key Value	Keynote Text
1	3- COAT STUCCO SYSTEM (DEC718, MESA TAN BY DUNN EDWARD LRV= 27) OVER EXT. SHEATHING OVER 2X6 WD. STUDS @ 16" O.C. FILLED W/ R-21 BATT INSUL. 5/8" GWB INT.
2	NEW 3-PLY BUILT-UP ROOF
3	EXISTING ASPHALT SHINGLE ROOF TO REMAIN
4	EXISTING BLOCK WALL TO REMAIN
5	2X FASCIA W/ MTL. DRIP EDGE

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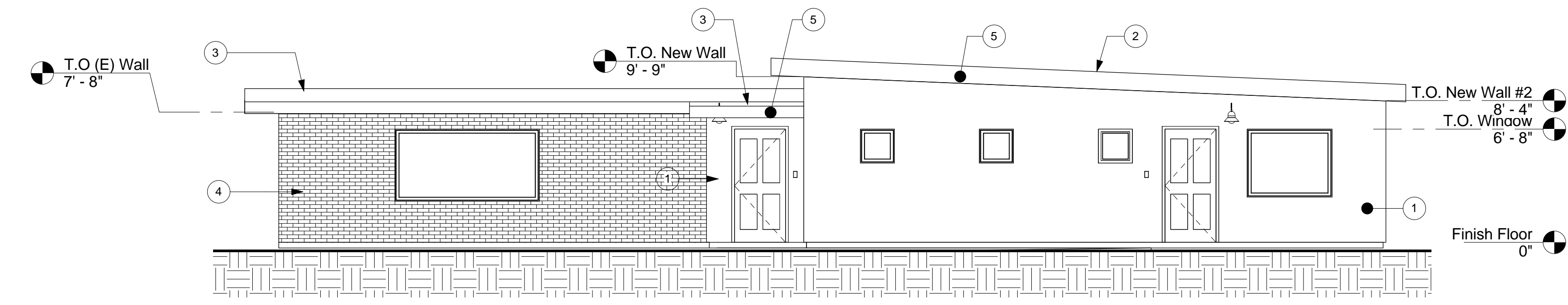
New Garage & Workshop For:
 Jeffrey Citron
 7025 E Calle Centuri
 Tucson, Arizona
 Building Elevations



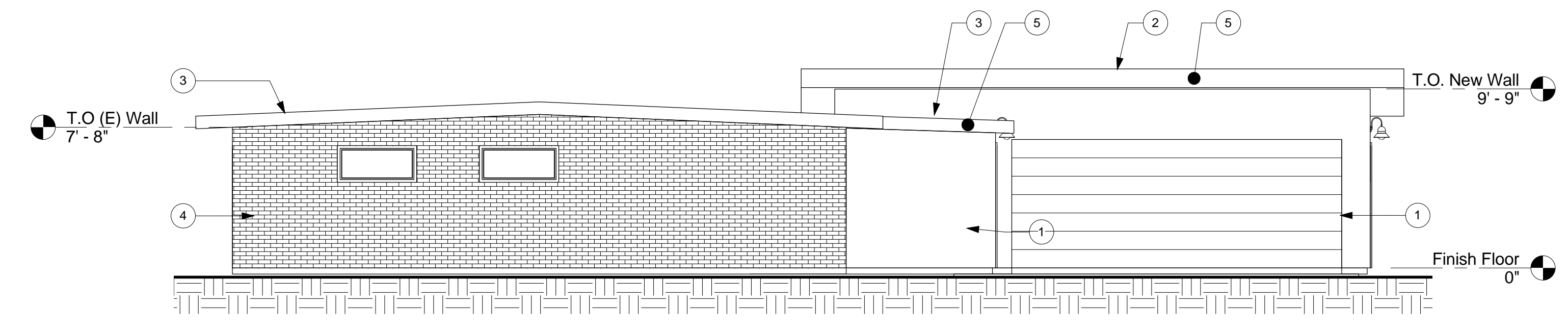
1 North Elevation
 3/16" = 1'-0"



2 East Elevation
 3/16" = 1'-0"



3 South Elevation
 3/16" = 1'-0"



4 West Elevation
 3/16" = 1'-0"

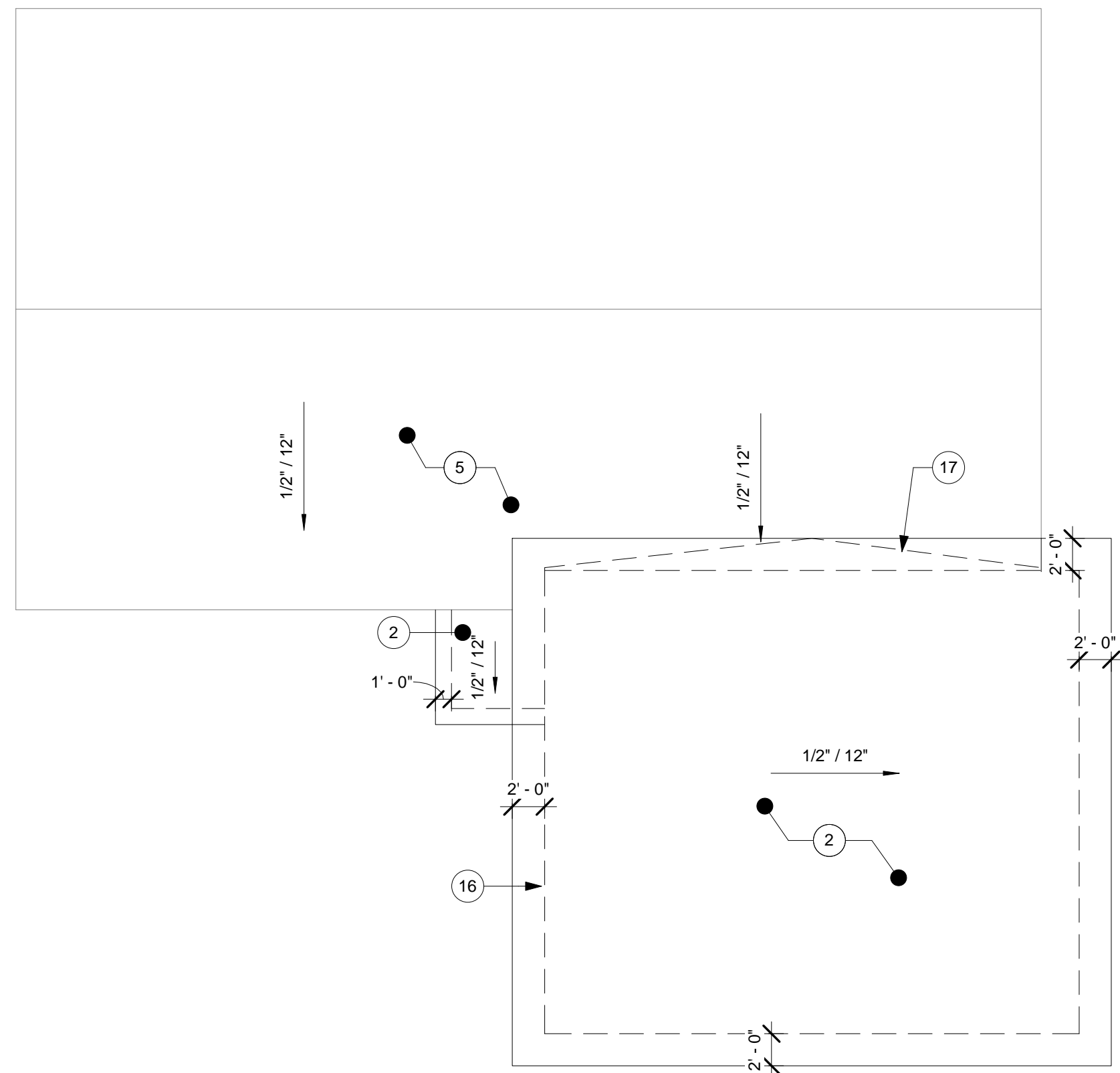
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Stucco Specifications

1. GENERAL
 - a. Stucco system shall be fiber reinforced over 1" polystyrene insulation board.
Acceptable systems include powerwall, western one coat, masterwall and diamond wall one coat stucco system.
 - b. Submit 2'-0" square sample of specified texture for finish coat.
 - c. Plaster work in accordance with ASA standard specifications for plastering and manufacturers current printed instructions.
2. PRODUCT@ WD. STUD
 - a. Weather resistive barrier - Minimum grade D 60 min. kraft building paper.
 - b. Insulation - 1" polystyrene Owen Corning "formular" or equal.
 - c. Metal lath: 1" x 20ga woven wire mesh.
 - d. Base coat: Fiber reinforced modified Portland cement exterior plaster.
 - e. Stucco finish coat: Elastec "extreme" elastomeric stucco coating.
 - f. Stucco stops: install metal stucco stops where stucco terminates against dissimilar materials, i.e. Door casings, window openings, horizontal surfaces etc. Use perforated metal at base of exterior walls where required.
3. EXECUTION
 - a. Basecoat on lath: 1 coat, 3/8" thick, over paper backed metal lath over building paper.
 - b. Texture: River Sand finish
 - c. Curing: Stucco shall be cured as follows:
 1. Damp curing period: Moistening of stucco to commence as soon as stucco has hardened sufficiently not to be damaged, apply water in a fine spray. Avoid soaking wall, apply only as much water as will be readily absorbed. Each coat kept damp continuously for at least 24 hours.
 - d. Stucco contractor shall install control joints in stucco to control cracking. See construction Documents for specific locations of control joints. If no joints are shown, contractor shall install control joints as required to control cracking as recommended by manufacturer of stucco type being installed. Consult architect before installation

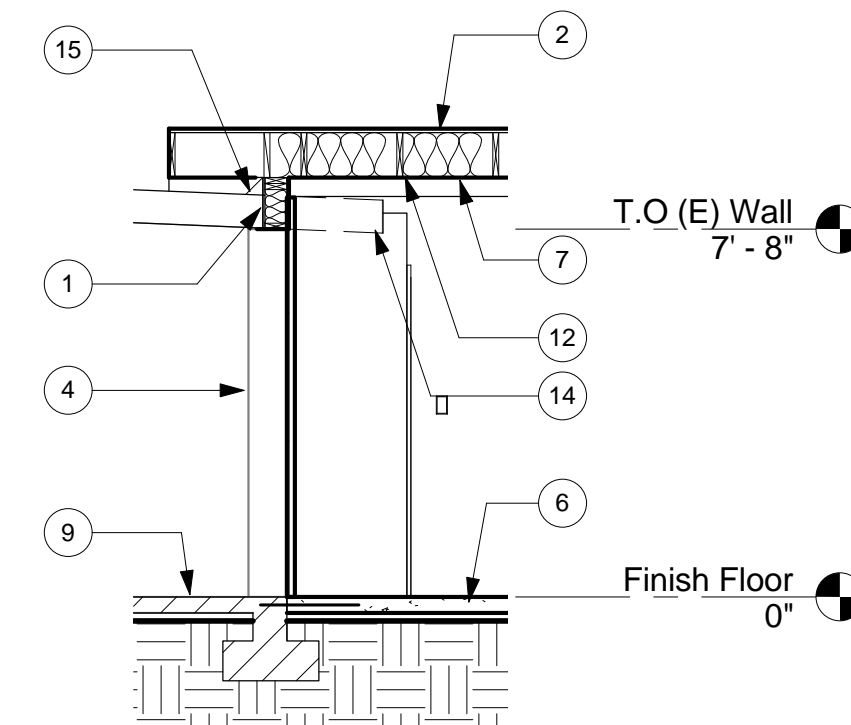


Roof Plan

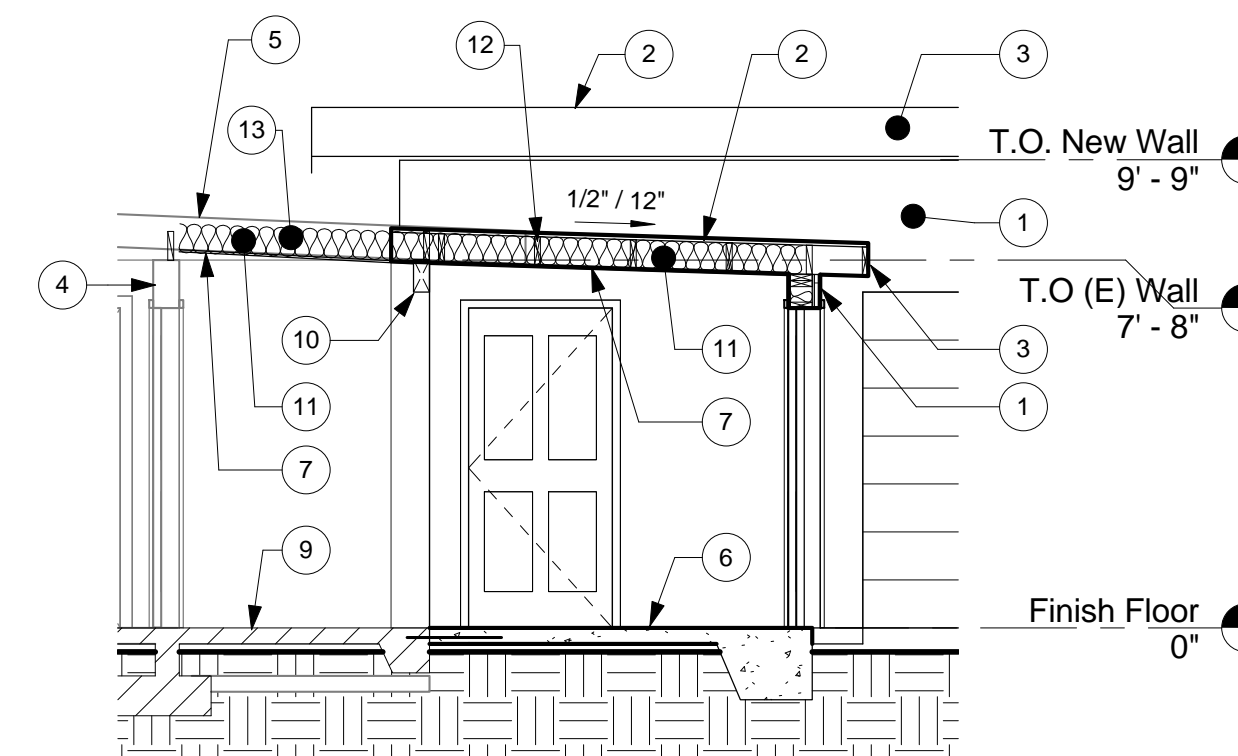
1/8" = 1'-0"

Building Section Keynotes:

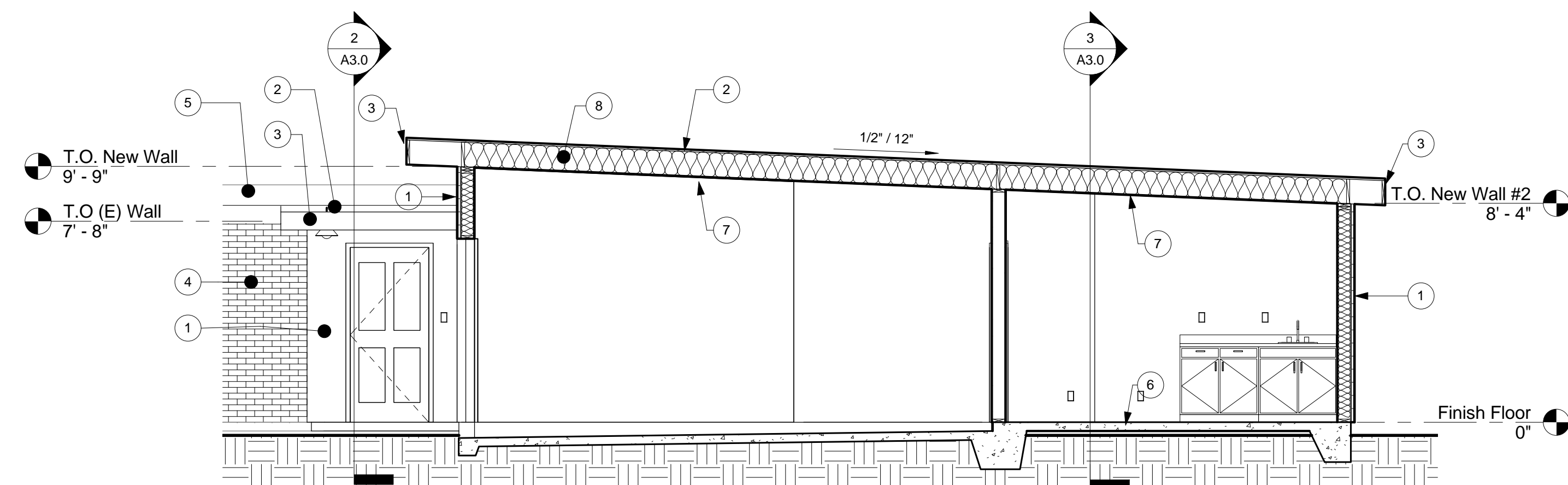
Key Value	Keynote Text
1	3-COAT STUCCO SYSTEM (DEC718, MESA TAN BY DUNN EDWARD LRV= 27) OVER EXT. SHEATHING OVER 2X6 WD. STUDS @ 16" O.C. FILLED W/ R-21 BATT INSUL. 5/8" GWB INT.
2	NEW 3-PLY BUILT-UP ROOF
3	2X FASCIA W/ MTL. DRIP EDGE
4	EXISTING BLOCK WALL TO REMAIN
5	EXISTING ASPHALT SHINGLE ROOF TO REMAIN
6	4" CONC. SLAB ON 4" ABC. REFER TO FOUNDATION PLAN
7	5/8" GWB (MOISTURE RESISTANT WET LOCATIONS)
8	R-38 BATT INSUL
9	EXISTING CONC. SLAB
10	EXISTING WD. BEAM TO REMAIN
11	R38C COMPRESSED IN 2X8 CAVITY TO MAKE R30
12	JOIST SEE STRUC.
13	EXISTING JOIST ROOF STRUCTURE TO REMAIN
14	EXISTING ROOF TAILS CUT BACK
15	FLASHING SEE 7/A6.0
16	LINE OF WALL BELOW
17	LINE OF NEW PLYWD. CRICKET BELOW ROOF



3 New Wall on Exist.
1/4" = 1'-0"



2 Entry Building Section
1/4" = 1'-0"



1 Garage and Workshop Building Section
1/4" = 1'-0"

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CHECKED BY: AE
PROJECT NUMBER: 13115

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New Garage & Workshop For:
Jeffrey Citron
7025 E Calle Centuri
Tucson, Arizona
Building Sections

REVISION: _____
MARK: _____
DATE: _____
REMARK: _____

A3.0

SHT OF

General Framing Notes

- All carpentry work shall comply with the requirements of the 2012 International Residential Code (I.R.C.) as adopted and amended by the local jurisdiction having authority.
- All framing lumber shall comply with the latest edition of the grading rules of the Western Wood Products Association utilizing in-grade stress values. Also all sawn lumber shall be stamped with the grade mark by an approved grading agency.
- All 2x stud framing at exterior walls shall be @ 16" o.c. and shall be douglas-fir #2 (or better).
- All sill plates shall be 2x lumber with a width to match the stud wall, and pressure treated for rot resistance. Grade stamps must be present indicating that lumber has been pressure treated for rot resistance.
- Do not notch or drill trusses, beams, headers, or load bearing studs without prior written approval of the Architect.
- Use double 2x trimmers under each end of all headers spanning more than 4'-0" or greater in bearing walls, u.n.o.
- All bearing double and triple 2x studs shall be face nailed with 16d's @ 8" o.c. staggered.
- Plywood:** All plywood shall be C-D interior sheathing with exterior glue and shall bear the stamp of an approved testing agency. Place roof sheathing with the face grain perpendicular to the trusses. Sheathing shall be continuous over 2 or more spans. All sheathing shall be of the following thickness, span index ratio, and shall be nailed with common nails as follows:
Roof: Thickness 1/2" S.I. Ratio 32/16
 Nailing: Edge = 8d @ 6" o.c. / Interm. = 8d @ 12" o.c.
 Alternate fastening: 14 Ga. x 1 3/4" x 7/16 o.d. galvanized wire staples may be used at the same spacing (NER-272).
Walls: Thickness 3/8" S.I. Ratio 32/16
 Nailing: Edge = 8d @ 6" o.c. / Interm. = 8d @ 12" o.c.

Oriented Strand Board may be used in lieu of plywood (NER-108).
 9. Nailing: All nailing shall conform to IRC 2012
 11. Design Loads:
 Roof Live Load 20 p.s.f.
 Roof Dead Load 10 p.s.f.

Header Schedule

HEADER MARK	SIZE	GRADE
H-1	(2) 2 X 6	#2 DOUGLAS FIR - LARCH
H-2	(2) X 8	#2 DOUGLAS FIR - LARCH

Braced Wall Panels

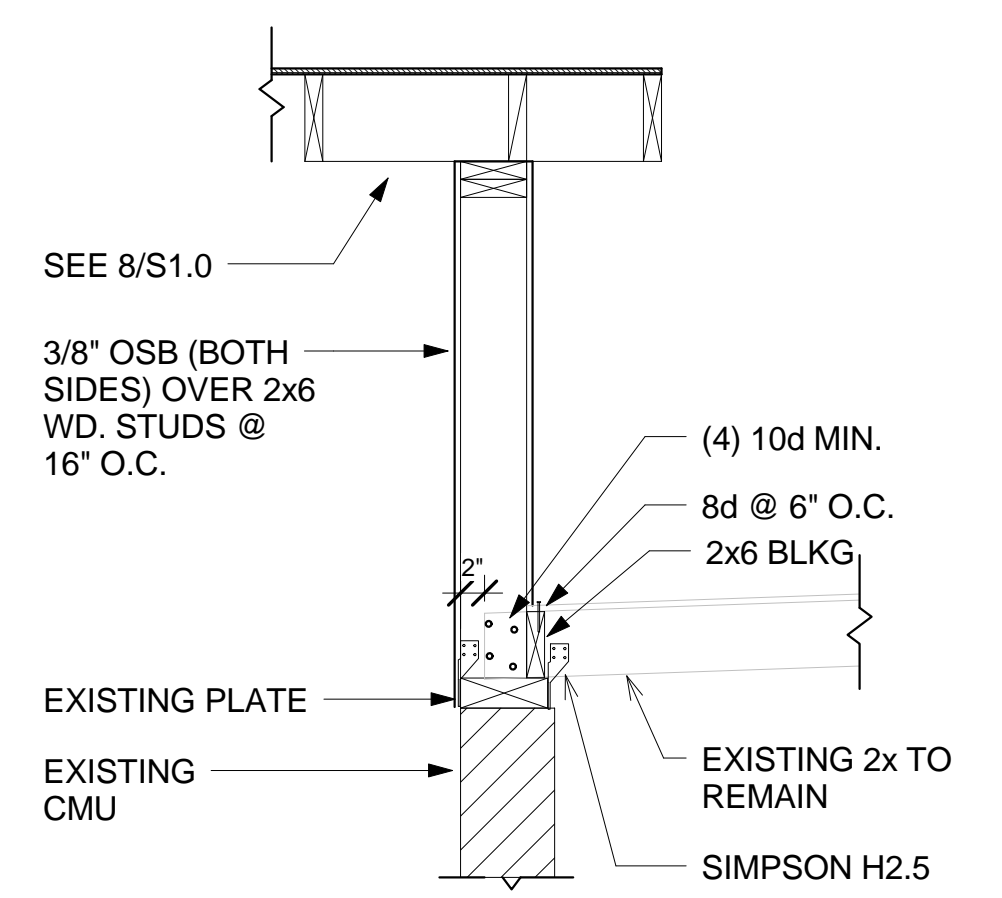
- ▲ 1) (MIN. 2'-8" PANEL) 3/8" EA. SIDE 8d (4-12) ALTERNATE BRACED WALL PANEL #1(R602.10.6.2)
- — SIMPSON STRONGWALL SSW12

General Foundation Notes:

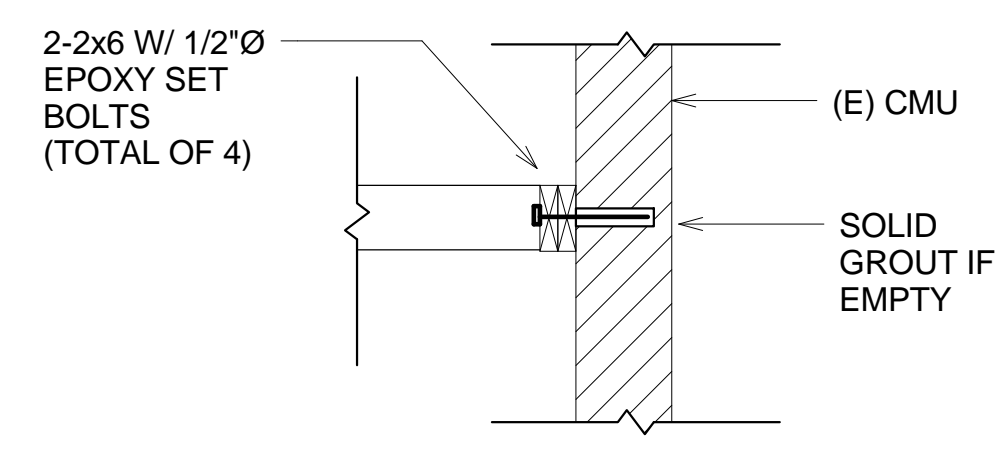
- All concrete and earth work shall comply with the requirements of the 2012 International Residential Code as adopted and amended by the local jurisdiction having authority. Concrete work shall be performed per the latest published edition of the A.C.I. Standards.
- The Architect assumes no liability for soils conditions at the site.
- All foundations shall bear 12" minimum into native undisturbed soil or into engineered fill. It is recommended that a soils engineer be consulted when engineered fill is used. The Architect assumes no liability for foundations when a soils report prepared by an engineer registered in the State of Arizona is not provided for review by the Architect. All engineered fill shall be tested by a qualified testing lab before placement for suitability and after placement for proper compaction based on the soils report.
- Slope finished grade away from the building @ a minimum of 5% for a distance of 10' (or half the distance from the property line if the property line is less than 10' from the building).
- Concrete: Material used for foundations, stems, building slabs, and exterior concrete flat work shall reach a minimum design strength in 28 days of 2,500 p.s.i. Maximum slump shall be 4 1/2". Mechanically vibrate all concrete for foundations (except for toe downs).
- Reinforcing Steel: All #4 bars and smaller shall be FY = 40,000 p.s.i. and all #5 bars or greater shall be FY = 60,000 p.s.i. (per ASTM A615). All reinforcing steel shall be deformed bars. No welding or heated bending of bars shall be allowed. Welded wire fabric shall be per ASTM A185.
- Assumed soil bearing pressure 1,500 p.s.i. per I.R.C. 2012
- Min. 95% compaction
- Treat soil under slabs for protection against termites. Provide 5 year written guarantee against infestation.

Hold Downs:

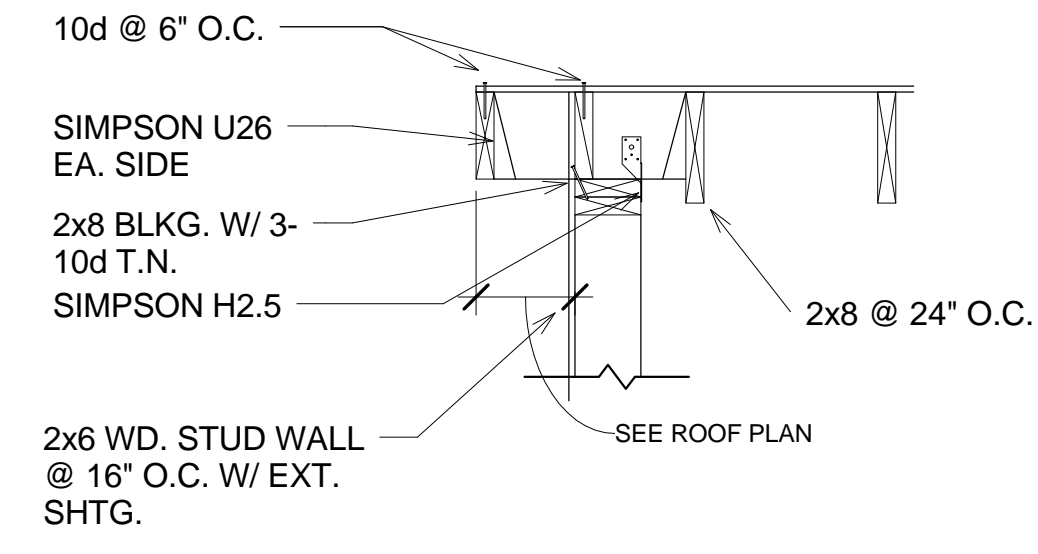
- HTT4



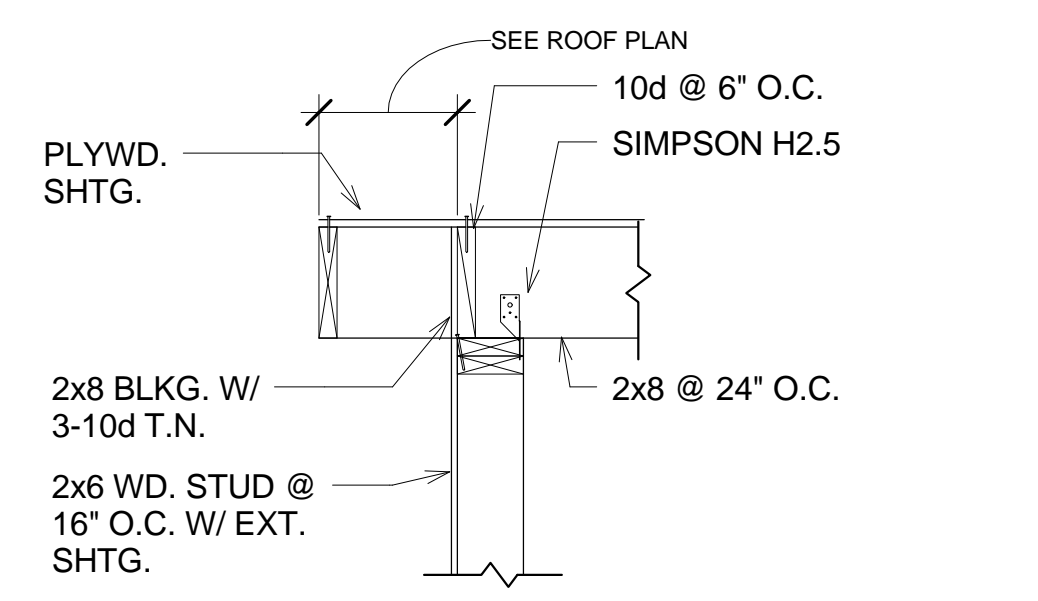
10 New Wall on Existing
 3/4" = 1'-0"



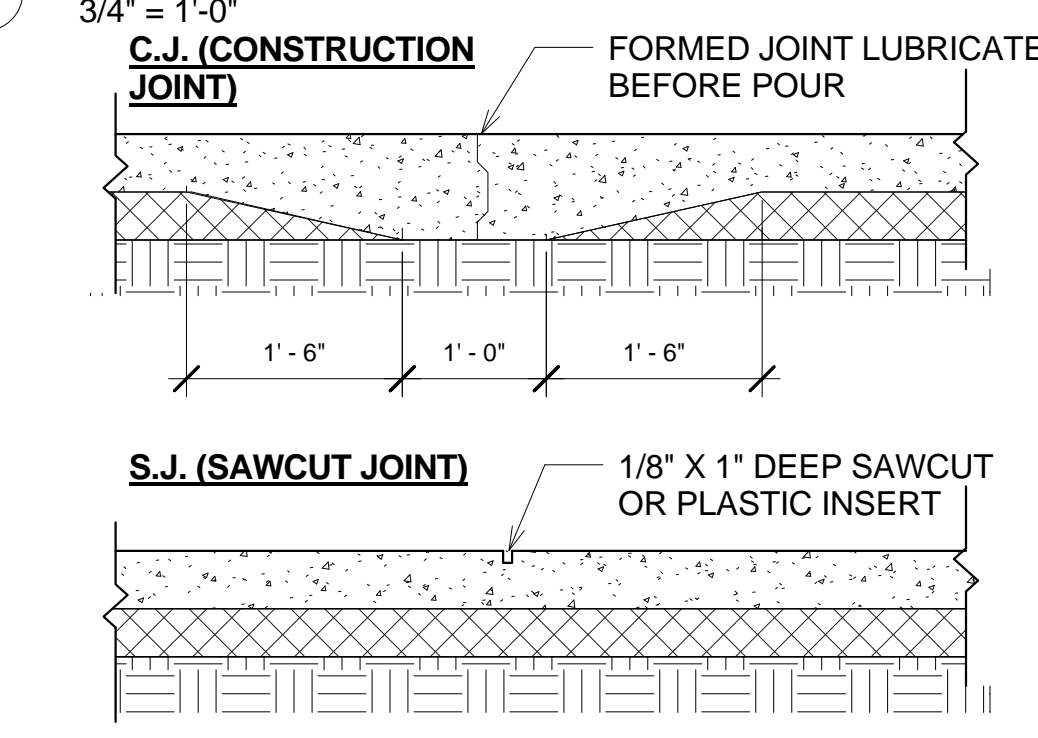
9 New Wall @ (E) Block Plan View
 3/4" = 1'-0"



8 Joist Parallel to Wd. Wall
 3/4" = 1'-0"

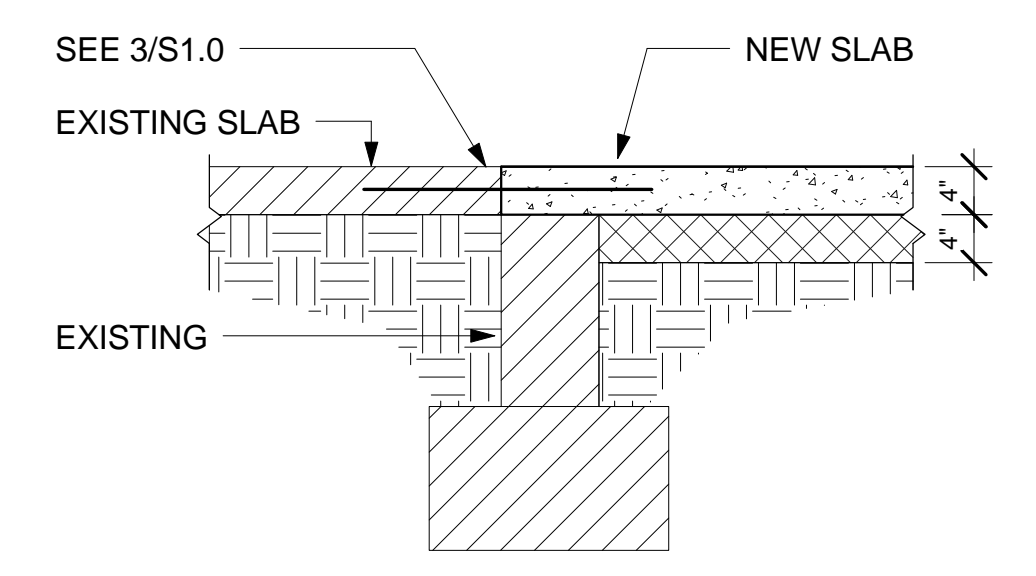


7 Joist Brg. on Wd. Wall
 3/4" = 1'-0"

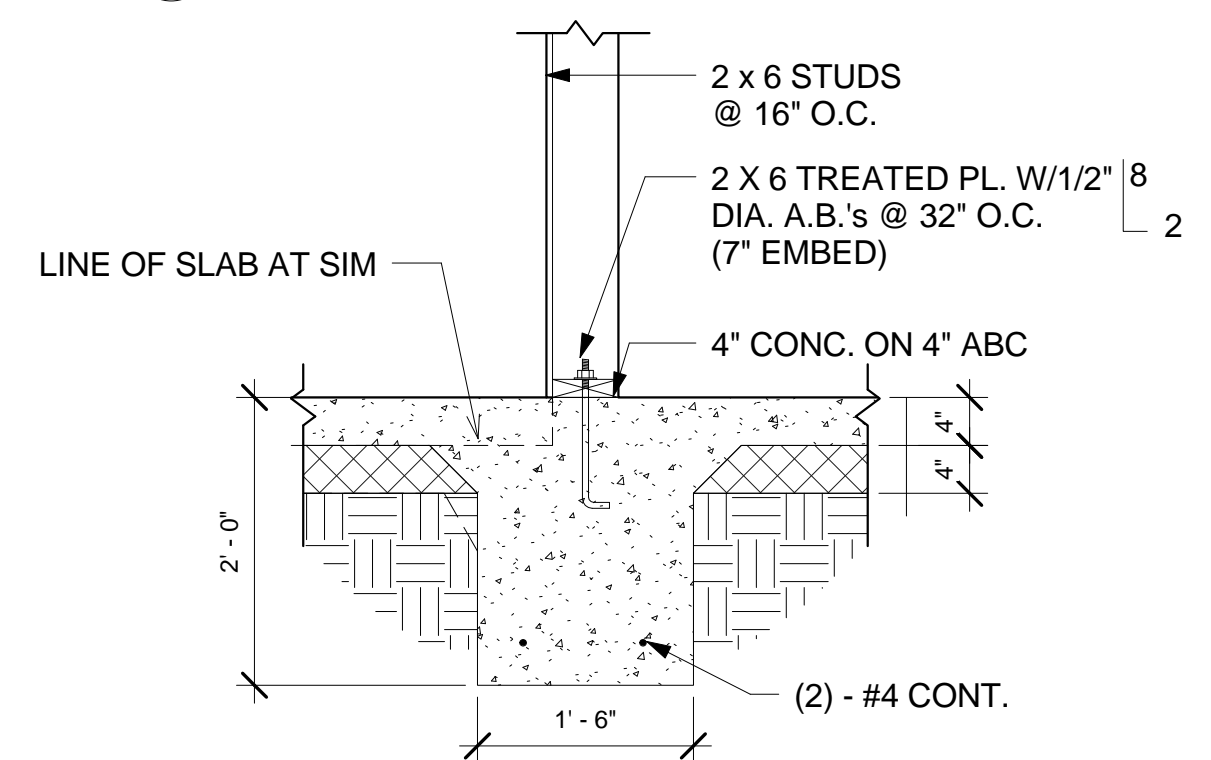


6 Construction Joint Detail
 3/4" = 1'-0"

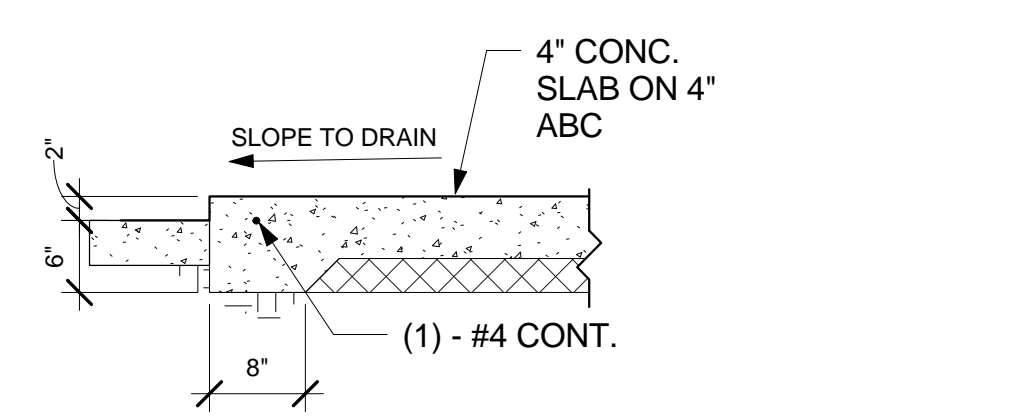
NOTE:
 KEYED JOINT MANDATORY AT ALL COLD JOINTS



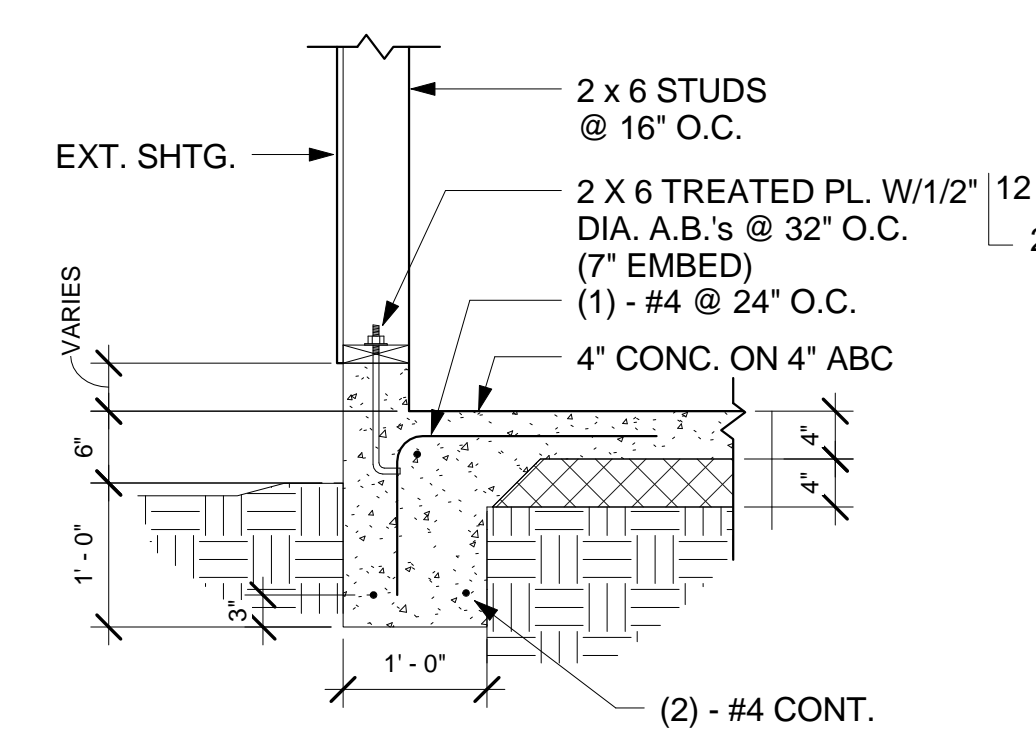
5 New Slab @ (E) Stem
 3/4" = 1'-0"



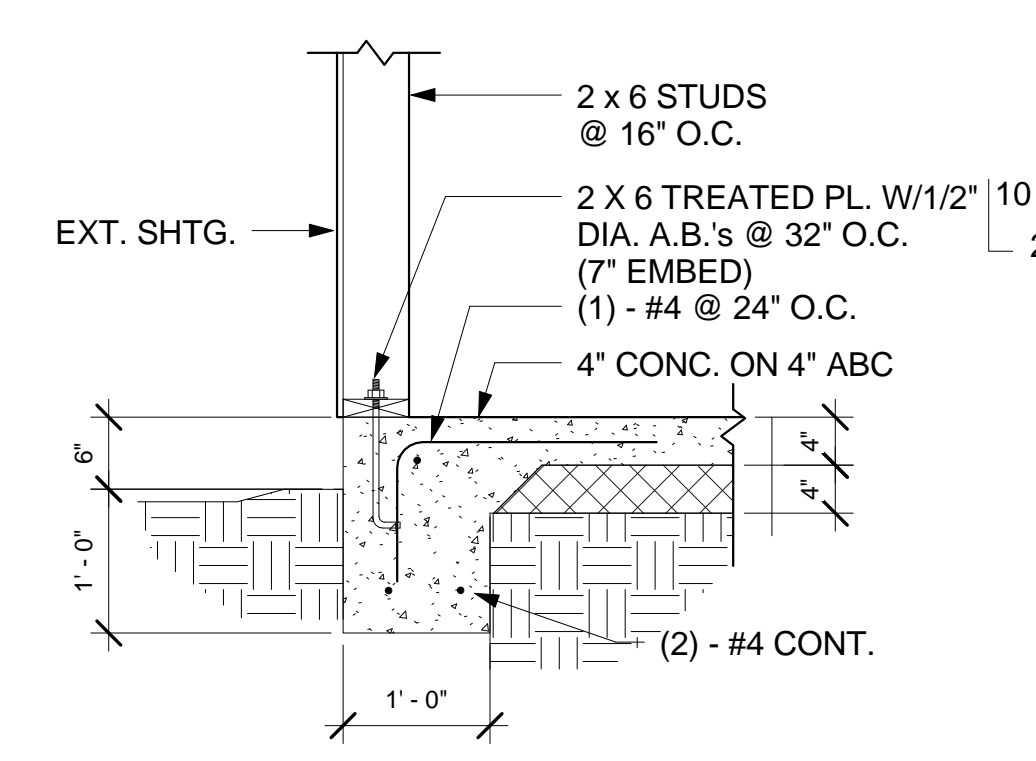
4 Interior Wall Ftg.
 3/4" = 1'-0"



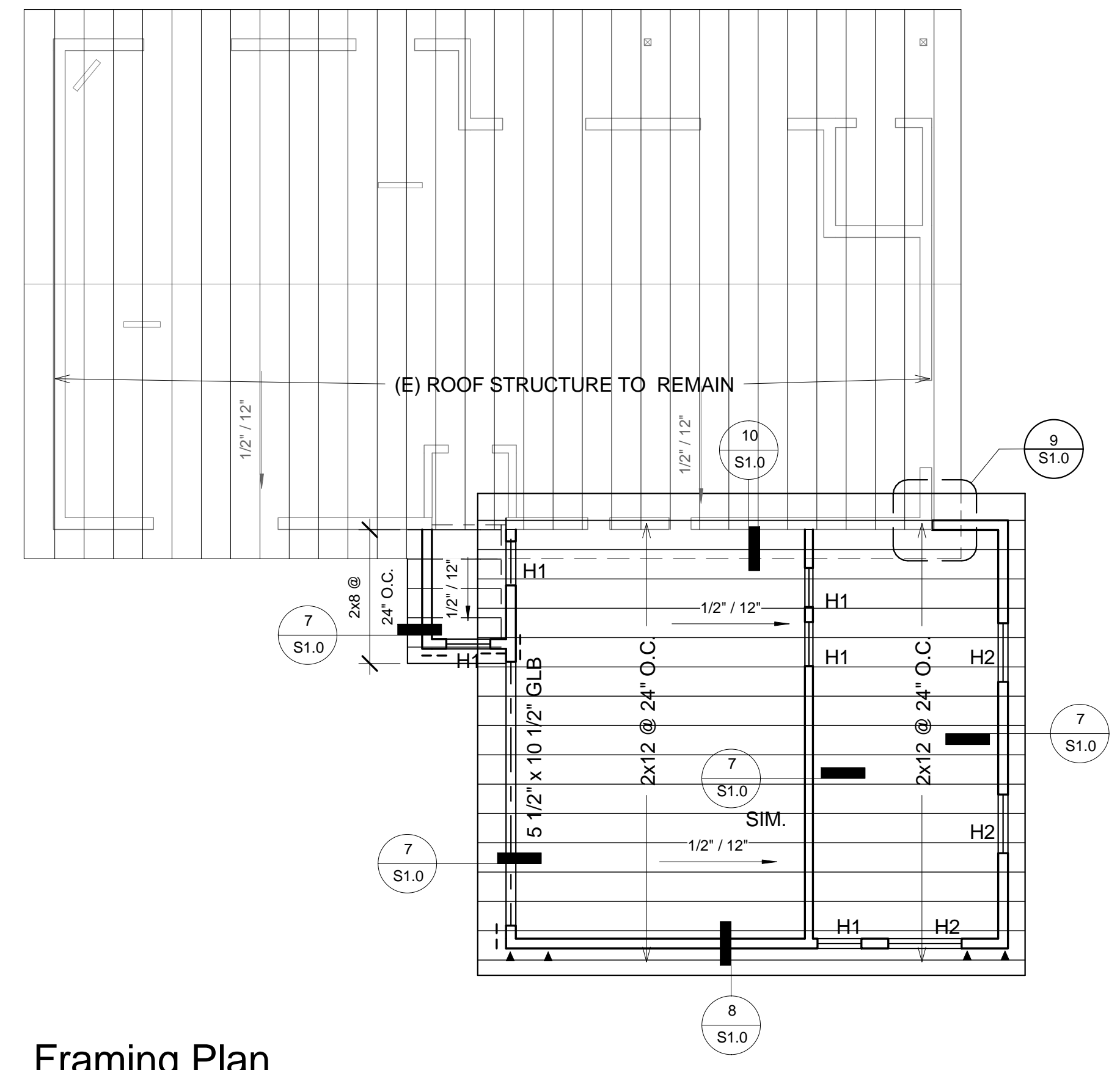
3 Toe Dn. Ftg.
 3/4" = 1'-0"



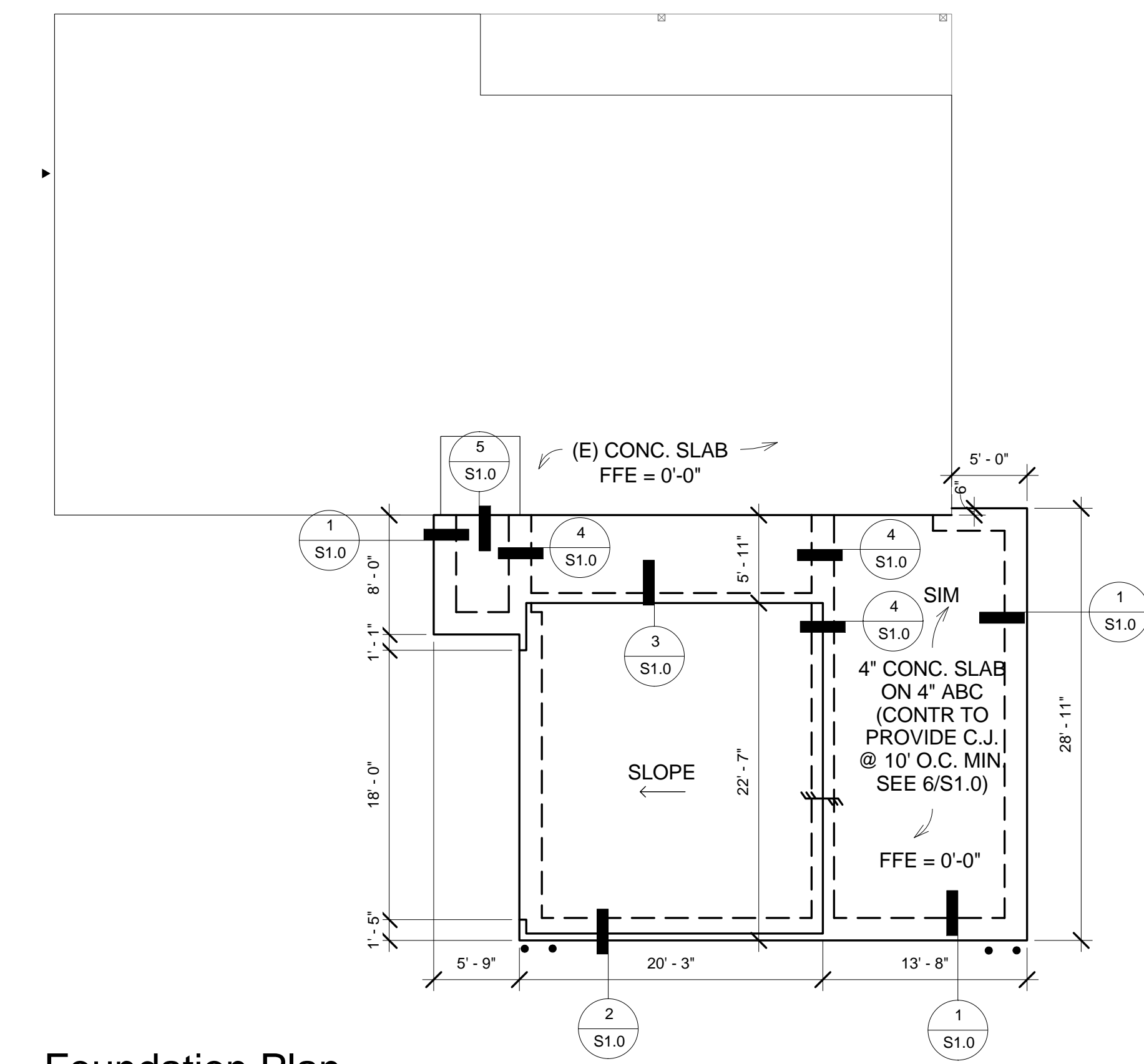
2 Ext. Ftg. @ Garage
 3/4" = 1'-0"



1 Typ. Ftg. Det.
 3/4" = 1'-0"



Framing Plan
 1/8" = 1'-0"



Foundation Plan
 1/8" = 1'-0"

Water Pressure Calc.

PRESSURE RANGE - 45 PSI (ASSUMED)
 DESIGN PRESSURE - 5 PSI (ELEVATION)
 - 15 PSI (THRU FIXTURE)
 - 3 PSI (THRU METER)
 22 PSI (REMAINING)

(PUMPING CONTRACTOR TO VERIFY WATER PRESSURE)

22 PSI X 100 FT = X ALLOW LOSS/100FT
 X
 PIPE SIZED @ 8 FT/SEC.

USE 1" METER
 W/ 1 1/2" BLDG. SERVICE

GAS CALC.

TOTAL GAS LOAD

(E) FURNACE = 60 CFH
 (E) W/H #1 = 50 CFH
 (E) RANGE = 65 CFH
 (E) DRYER (RELOCATED) = 35 CFH
 TOTAL CFH = 210 CFH
 TOTAL LENGTH = 80'-0" L.F.

* SIZED PER IRC TABLE G2413.4 (1)
 0.60 SPECIFIC GRAVITY W/ 0.5 INCH
 WATER COLUMN PRESSURE DROP
 MIN. 1" GAS SERVICE LINE (F.V.)

(E) Fixture Schedule

MARK	FIXTURE	QTY.	SEWER	TOTAL	WATER	TOTAL
	FULL BATH GROUP	2	5	10	3.6	7.2
	KIT. GROUP	1	2	2	2.5	2.5
	CLOTHES WASHER	1	2	2	1.4	1.4
HB	HOSE BIBB	3	-	-	2.5	7.5
	TOTAL			14		18.6

NEW Fixture Schedule

MARK	FIXTURE	QTY.	SEWER	TOTAL	WATER	TOTAL
P5	SINK	1	1	1	.7	.7
	FULL BATH GROUP	1	5	5	3.6	3.6
	TOTAL			6		4.3
	TOTAL			20		22.9

Plumbing General Notes

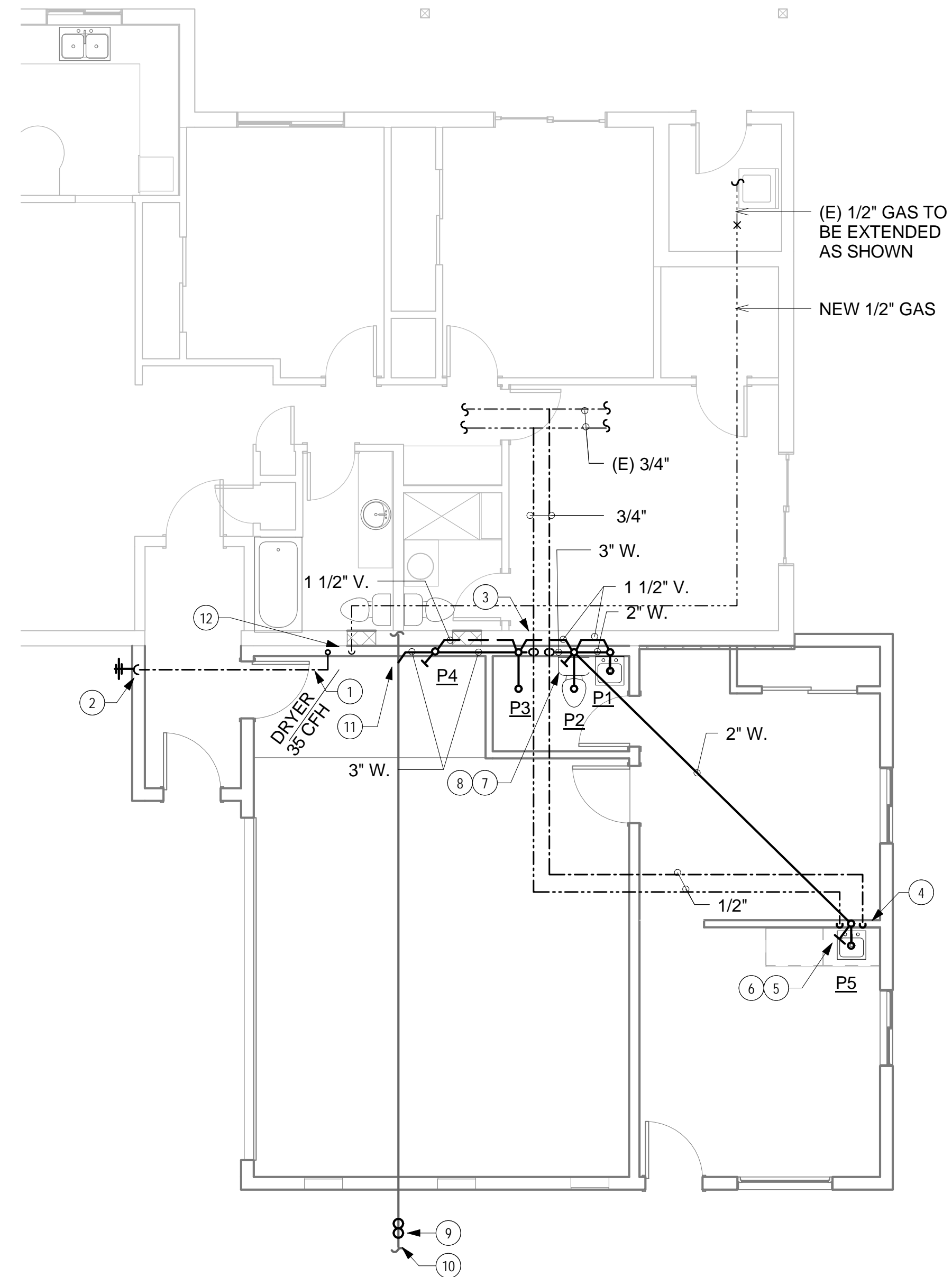
- All plumbing work shall be per the 2012 I.R.C. Code as adopted and amended by the local jurisdiction having authority.
- Where local water pressure is in excess of 80 PSI, a pressure regulating device shall be installed to reduce pressure to a maximum of 80 PSI.
- Hot water shall always be the left fitting at all faucets. In addition how water pipe shall be insulated w/ R3 at following conditions
 - Piping larger than 3/4-inch nominal diameter.
 - Piping serving more than one dwelling unit.
 - Piping from the water heater to kitchen outlets.
 - Piping located outside the conditioned space.
 - Piping from the water heater to a distribution manifold.
 - Piping located under a floor slab.
 - Buried piping.
 - Supply and return piping in recirculation systems other than demand recirculation systems.
 - Piping with run lengths greater than the maximum run lengths for the nominal pipe diameter. Per Table N1103.4.2
- Pipe size 3/8" 1/2" 3/4" >3/4"
 Maximum run length 30 20 10 5
- All remaining piping shall be insulated to at least R-3 or meet the run length requirements of Table N1103.4.2
- Provide all new hose bibbs with backflow preventers.
- All plumbing fixtures shall have the following flow rates:
 - Water Closets 1.50 gallons per flush maximum
 - Showers 2.50 gallons per minute maximum
 - Lavatory Faucets 2.20 gallons per minute maximum
 - Kitchen Sink 2.20 gallons per minute maximum
- All copper piping used under the floor slab must be type "L" minimum weight without joints.
- All copper piping used above the floor slab must be type "M" minimum weight.
- All ABS and PVC used in DWV must be schedule 40.
- Underground piping shall be protected per IRC 2012.
- Seal all voids around penetrations through on grade floor slabs.
- Solders and flux having a lead content in excess of two tenths of one percent shall not be used in the installation or repair of any plumbing in this project.
- Water hammer arrestor shall be installed where quick-closing valves are used. (IRC 2006 P2903.5)
- Contr. to install 2 clothes washer standpipes, one with an above grade stubout
- Gas fuel piping shall be wrought iron or steel - galvanized or black.
- Gas fuel piping is not allowed under structures or concrete slabs.
- All gas appliances shall have a shut-off valve.
- Underground gas piping systems shall be isolated from above ground systems by an approved isolation fitting installed at least 6" above grade.

Plumbing Plan Keynotes

- (E) 3/4" CW EXTENDED TO NEW HB LOCATIONS AS SHOWN
- 3/4" CW DN TO NEW HB LOCATION
- 3/4" CW, HW DN IN WALL (RUN 1/2" CW TO WTR CLST, 1/2" CW AND HW TO LAVS AND SHWR/TUB & WASHER)
- 1/2" CW AND HW DN IN WALL
- 2" WCO
- 1 1/2" VTR
- 2" VTR
- 3" WCO
- PROVIDE NEW 2-WAY GCO F.V EXACT LOCATION (LOCATED MIN. 3' FROM BUILDING)
- (E) 3" SEWER SEE SITE PLAN FOR CONT.
- NEW 3" WASTE TO CONN. TO EXISTING 3" WASTE F.V. LOCATION
- 1/2" GAS DN IN WALL

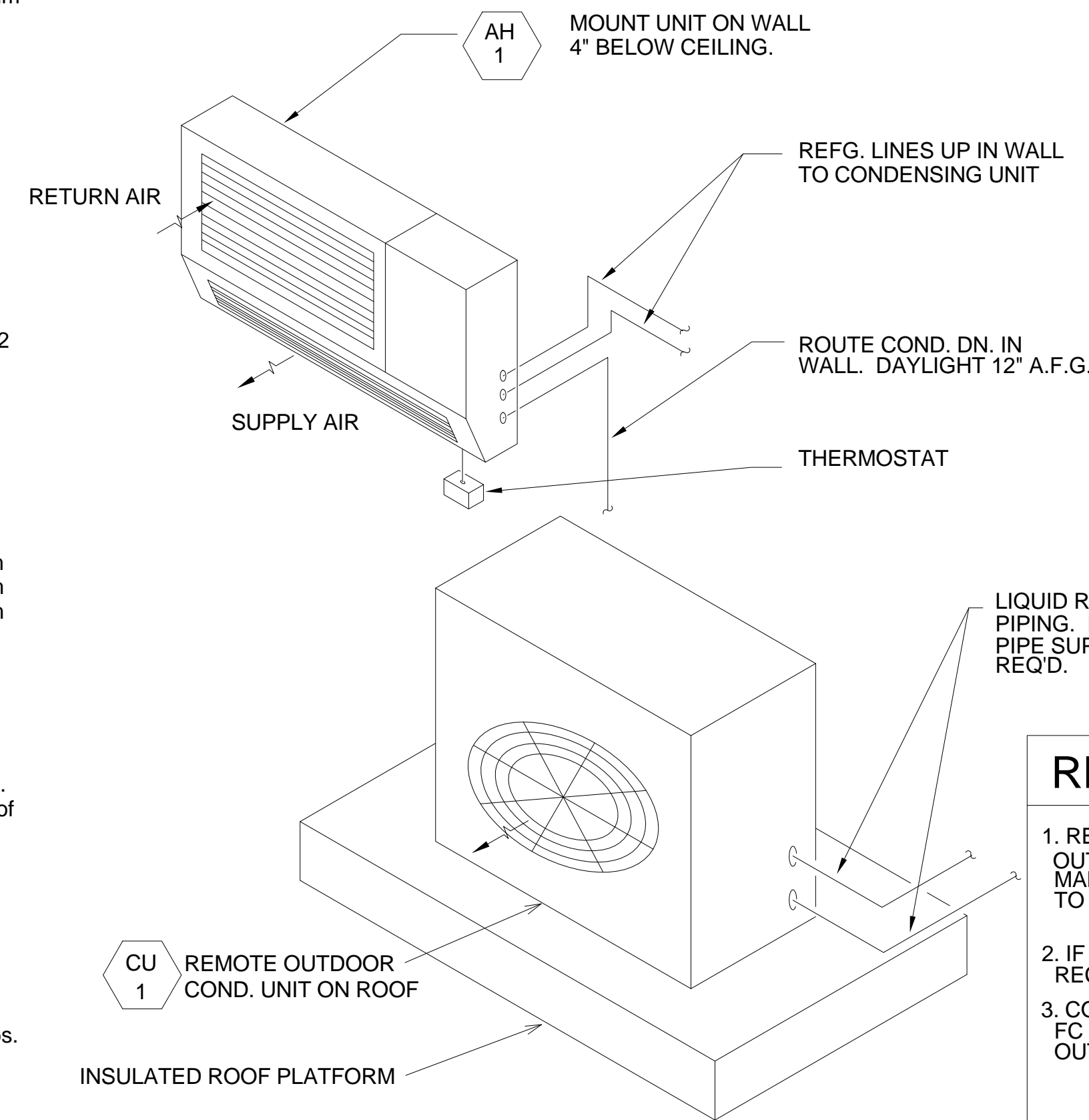
Plumbing Legend

---	CW	COLD WATER LINE
---	HW	HOT WATER LINE
---	S	SEWER LINE
⊥		HOSE BIBB
⊥		VALVE
⊥		CLEANOUT
⊥		AT GRADE
⊥		IN WALL



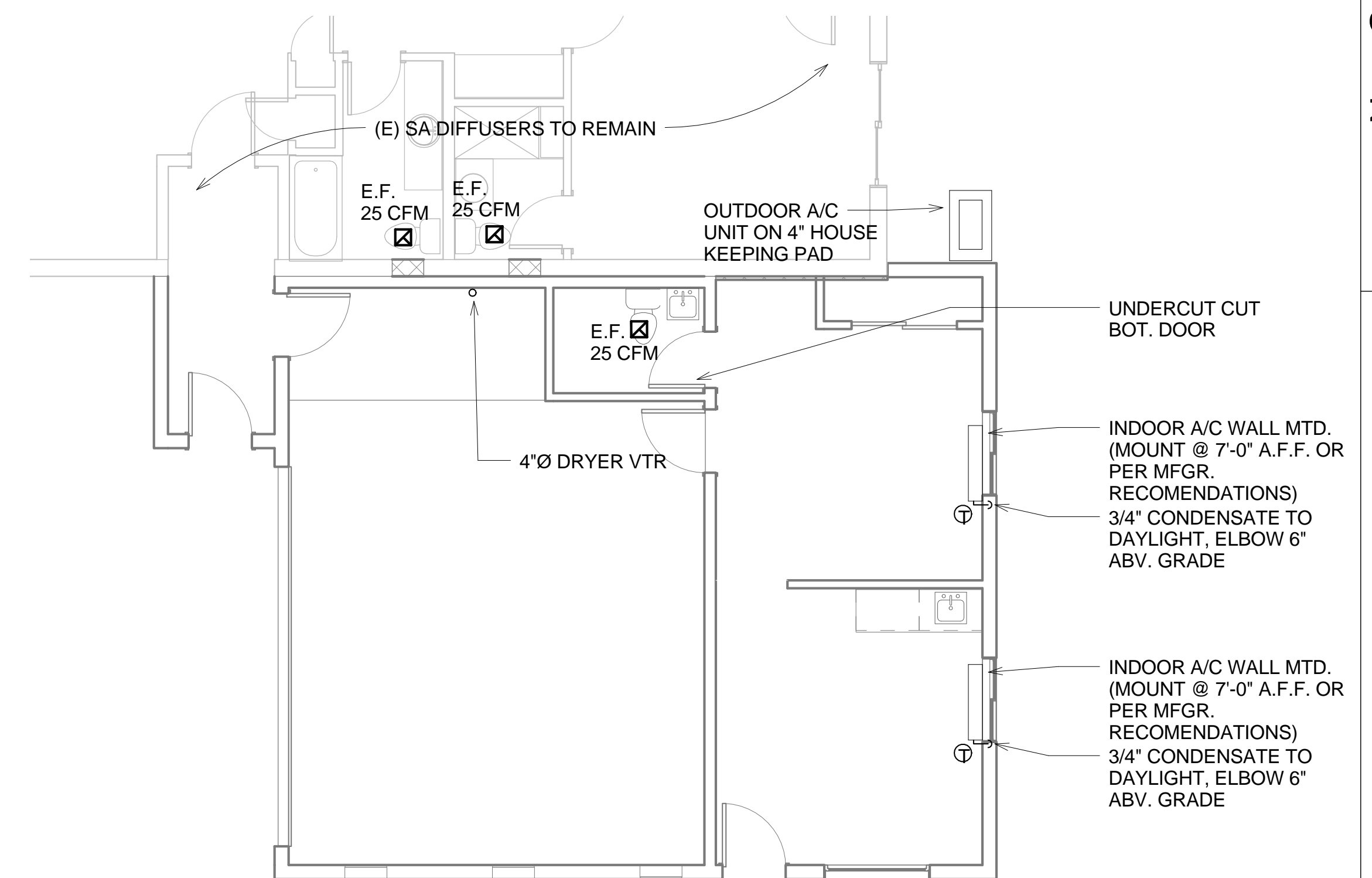
Plumbing Plan

3/16" = 1'-0"



Ductless System

3/4" = 1'-0"



Mechanical Plan

3/16" = 1'-0"

Mechanical Notes

- All mechanical work shall be per the 2006 I.R.C. as adopted and amended by the local jurisdiction having authority.
- All work is to be performed in a workman like manner with the most recent publications of SMACNA and ASHRAE used as installation standards

Mechanical Specs.

A/C SPECIFICATIONS

A/C #1 DUCTLESS WALL MTD. SPLIT SYSTEM
 M18DYF 1 TON SYSTEM
 FRIEDRICH # MW09Y3FM (INDOOR)
 C/U #1 HEAT PUMP MULTIZONE
 FRIEDRICH # MR24DY3FM (OUTDOOR)
 208/1/60, 15 MCA 16.5 SEER

OR EQUAL

EF-1 (EXHAUST FAN)

NUTONE, REFER TO PLAN FOR CFM, CLG. MTD.
 DECORATIVE EXHAUST FAN 115/1/60

EXHAUST UNITS NOTES

- PROVIDE MANUF'S DISCONNECT, BACKDRAFT DAMPER AND HANGING ISOLATION KIT.
- PROVIDE MANUF'S ROOF OR WALL CAPS.
- PROVIDE SEPARATE WALL SWITCH, COORDINATE WITH ELECTRICAL AND ARCHITECT.

REFRIGERANT PIPING NOTES

- REFRIGERANT'S LINES SIZES AND CONNECTIONS BETWEEN OUTDOOR UNITS AND FAN COIL UNITS SHALL BE PER MANUFACTURER'S RECOMMENDATIONS. ROUTING OF LINES TO BE FIELD VERIFY BY THE MECHANICAL CONTRACTOR.
- IF REFRIG. LINES DISTANCES EXCEED THE MANUFACTURER'S RECOMMENDATIONS PROVIDE LONG DISTANCE KIT.
- CONNECT REFRIGERANT PIPING TO EACH CORRESPONDING FC AND CU - COORDINATE EXACT LOCATIONS OF CU'S OUTDOORS WITH THE ARCHITECT. SEE DIAGRAM.

DRAWN BY: AE

CHECKED BY: AE

PROJECT NUMBER: 13115

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New Garage & Workshop For:
 Jeffrey Citron
 7025 E Calle Centuri
 Tucson, Arizona
 Mechanical Plan

REVISION: MARK: DATE: REMARK:

MP1.0

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ELECTRICAL PANEL A					
PANEL = "A"		VOLTAGE 120/240V		BUS 200A MAIN MAIN	
TYPE PLUG - ON		SHORT CIRCUIT		10KAIC SURFACE MOUNTED	
#	ROOM NAME	⊕ A	⊕ B	ROOM NAME	#
1	EXISTING HOUSE SERVICE 1	2		EXISTING HOUSE SERVICE 2	2
3		40			4
5	NEW A/C	2		DRYER	6
7		40			8
9	INDOOR A/C	1	30	INDOOR A/C	10
11	EXT. LTS	1	20	GARAGE RCPT.	12
13	GARAGE DR.	1	20	EXT. WP/GFI	14
15	GARAGE LTS	1	20	WASHER	16
17	BATH GFI	1	20	LTS & RCPT	18
19	APPLIANCE GFI	1	20	APPLIANCE GFI	20
21	SMK DET.	1	20	REF.	22
23					24
25					26
27					28
29					30
31					32
33					34
35					36
37					38
39					40
41					42

SEE LOAD CALCULATIONS

Electrical Load Calculations

PANEL "A" (SERVICE)	
2,301 SF X 3VA	= 6,903VA
RANGE	= (GAS)
WTR HTR	= (GAS)
1 DRYER	= 4,500 VA
8 (20 AMP CIR.)	= 12,000VA
SUBTOTAL	= 23,403VA
1ST 10,000VA @ 100%	= 10,000VA
13,403 @ 40%	= 5,361 VA
CALCULATED TOTAL LOAD	= 15,361VA
15361VA / 240V	= 64A
NEW AC #1	= 15A
TOTAL	= 79A

Outdoor Lighting Code

1. OUTDOOR LIGHTING CODE AREA: E3
2. TOTAL SITE AREA: .20 ACRES
3. ALLOWABLE LU:
 - FULLY SHIELDED = 55,000x.2 = 11,000
 - UNSHIELDED = 11,000x.2 = 2,200
4. ACTUAL INSTALLED LU = 11,000 > 1000 OK
2,200 > 2000 OK

FIXTURE TYPE	QUANTITY	LU/EA	SHIELDED	UNSHIELDED
A	2	1000	-	2000
EXISTING	1	1000	1000	-

NOTE:
ALL EXISTING EXPOSED EXT. ELECTRICAL LINES TO BE PLACED IN METAL CONDUIT PER IRC SEC. 3804 2012

General Electrical Notes

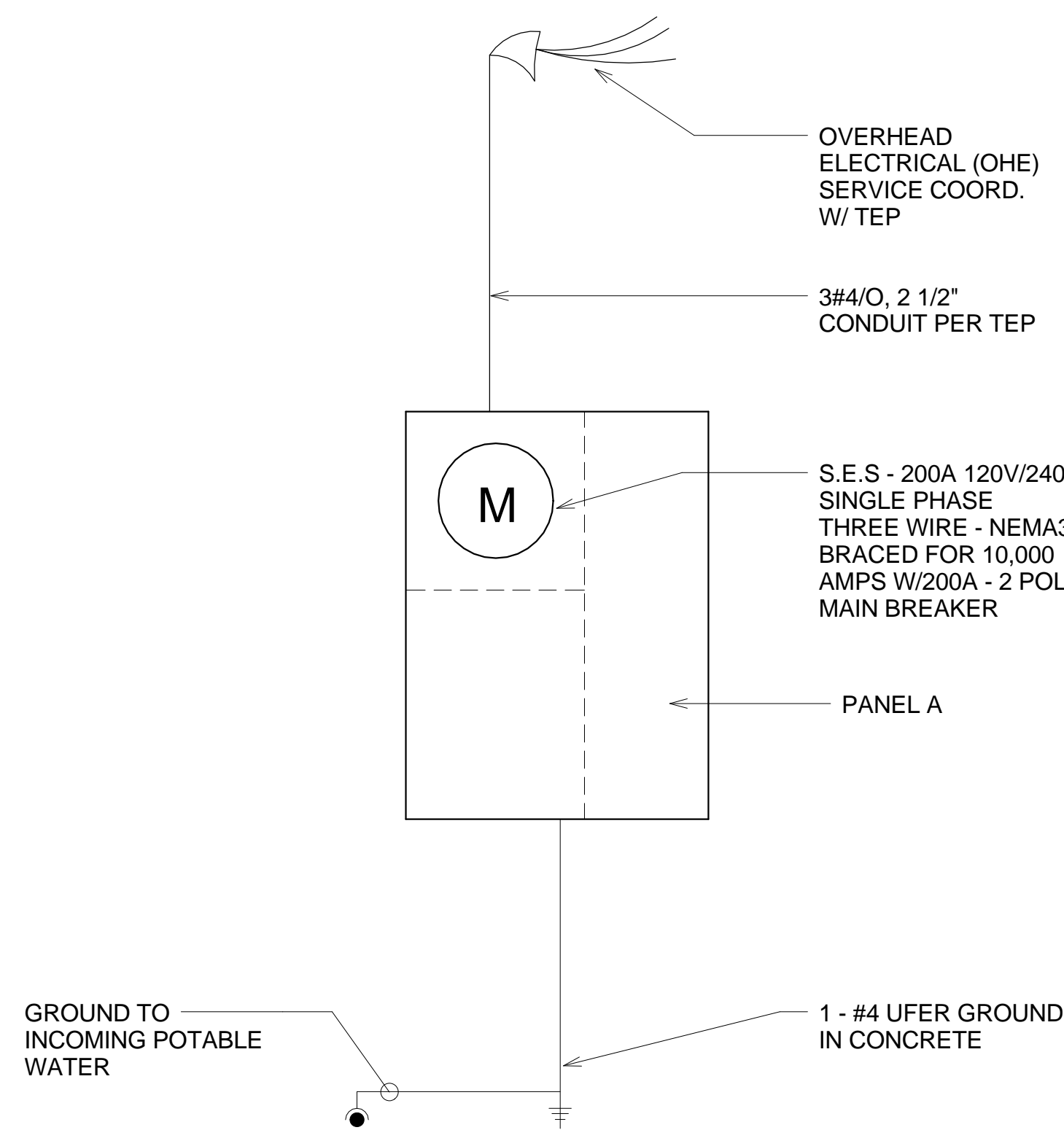
1. All electrical work shall comply with the requirements of the 2012 I.R.C. as adopted and amended by the local jurisdiction having authority.
2. Receptacle placement and spacing shall comply with the 2012 I.R.C.
3. Receptacles in Bathrooms, receptacles located within 6' of a sink, and outdoor receptacles shall be protected by a ground fault interrupting circuit (GFCI). Outdoor receptacles shall in addition receive a weather proof enclosure.
4. All counter receptacles are to be GFCI protected.
5. Two or more 20 amp small appliance circuits shall be provided to serve the Kitchen. Such circuits shall have no other receptacles. Provide a separate 120 volt, 20 amp circuit in the laundry Room for the washing machine. This circuit is to have no other outlets.
6. Junction boxes supporting future ceiling fans must be listed, approved and installed for this application.
7. All surface mounted ceiling fixtures in closets shall be installed 24" minimum from all shelving.
8. Smoke detectors shall be installed per the manufacturer's instructions. Detectors shall be permanently wired, interconnected, and equipped with battery back-up. Detectors shall be a minimum of 5' feet from duct openings. All installed smoke detectors located outside of bedroom shall have a built in carbon monoxide alarm.
9. All interior metallic water and gas pipe which may become energized shall be bonded together and made electrically continuous. A bond (bare copper #4 wire) shall be made between the bonded piping systems, the grounding electrode conductor and the service equipment enclosure ground buss.
10. The grounding electrode conductor shall be not less than 20' of bare copper wire conductor no smaller than #4 encased by at least 2" of concrete and located within the bottom of a concrete foundation footing that is in direct contact with the earth.
11. The telephone service shall be grounded per the 2012 I.R.C.
12. All light fixtures shall be incandescent fixtures.
13. All new receptacles to be arc fault protected that are not designated as GFI or WP/GFI as well as all receptacles shall be tamper proof per E4002.14
14. All luminaries located above tubs and showers are to be listed for wet/damp locations
15. Min. 75% all permanently installed light fixtures shall have a High Efficiency lamp installed. See plan for Locations

Electrical Wire Sizes

100A	= #2
60A	= #6
40A	= #8
30A	= #10
20A	= #12
15A	= #14

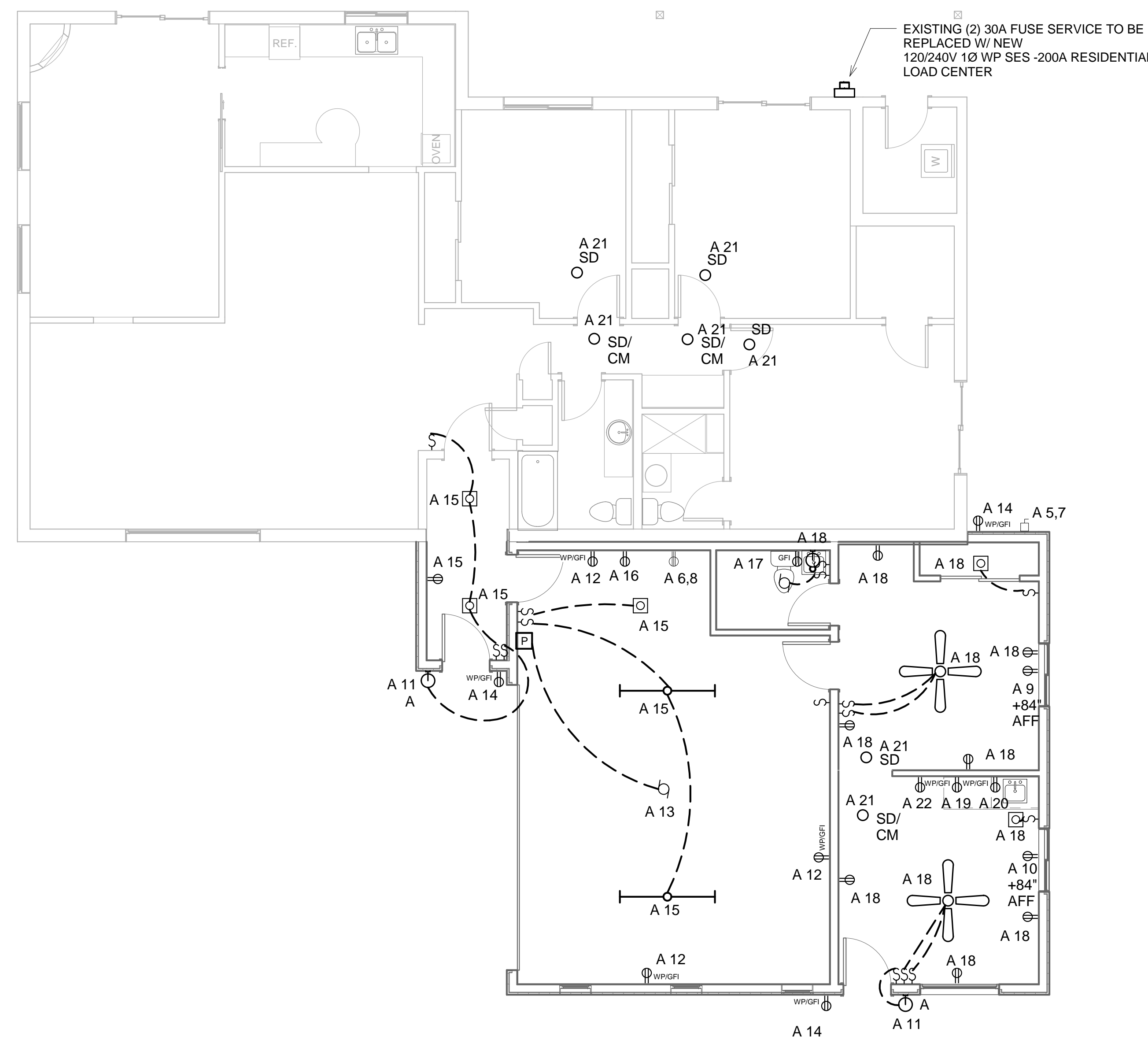
Electrical Legend

\$	Light Switch
\$	3-Way Light Switch
\$ ³	4-Way Light Switch
⊕ ₁₉	Receptacle (number indicates circuit, typ.)
⊕ ₁₉	Weather Proof/GFCI Receptacle
⊕ _{6,8}	240 Volt Receptacle (numbers indicate circuits, typ.)
⊕	Floor Receptical
SD	Smoke Detector
SD/CM	Smoke Detector with Carbon Monoxide Alarm
⊕ ₁₅	Ceiling Mounted Incandescent Light Fixture
⊕ ₁₅	Recessed Can Light Light Fixture
⊕ ₅	Wall Mounted Incandescent Light Fixture
F	Low Voltage Door Bell Chime
□	Door Bell Button
⊕ ₂₀	Motor (Exhaust Fan/Garage door)
⊕ ₁₃	Ceiling Mounted Incandescent Light Fixture. J Box is to be labeled for ceiling fan use so that future ceiling fan can be installed.
2,4	Disconnect Switch
△	Telephone Jack
△	Television Jack
HE	High Efficiency Lamp installed on light fixture



Electrcial Riser Diag

1:1



Power Plan

3/16" = 1'-0"

DRAWN BY: AE

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PROJECT NUMBER: 13115

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New Garage & Workshop For:
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Tucson, Arizona
Power/Lighting Plan

REVISION: MARK: DATE: REMARK:

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