GENERAL NOTES AND INFORMATION

ELECTRICAL

- OUTLETS BOXES IN GARAGE CLG. TO BE RATED FOR A ONE HOUR ASSEMBLY PENETRATION
- ALL CONVENIENCE OUTLETS IN KITCHEN, ON DECKS, PORCHES, AND BALCONIES TO BE G.F.C.I PER 1RC E3901.7.
- RECEPTACLES TO BE IN INTERCONNECTED IN EVERY KITCHEN, FAMILY ROOM, DINING ROOM, LIVING ROOM, PARLOR, LIBRARY, DEN, SUN ROOM, BEDROOM, OR SIMILAR ROOM OR AREA OF DWELLING UNITS. RECEPTACLE OUTLETS SHALL BE INSTALLED SO THAT NO POINT ALONG THE FLOOR LINE IN ANY UNBROKEN WALL SPACE IS MORE THAN 6'-0", MEASURED HORIZONTALLY, FROM AN OUTLET IN THAT SPACE, INCLUDING ANY WALL SPACE 2'-0" OR MORE IN WIDTH AND THE WALL WALL OCCUPIED BY FIX PANELS IN EXTERIOR WALLS, BUT EXCLUDING SLIDING PANELS IN EXTERIOR WALLS. THE WALL SPACE AFFORDED BY FIXED ROOM DIVIDERS, SUCH AS FREESTANDING BAR-TYPE COUNTERS OR RAILING , SHALL BE INCLUDED IN THE 6'-0" MEASUREMENT.
- RECEPTACLES INSTALLED IN THE KITCHEN TO SERVE COUNTERTOP SURFACES SHALL BE SUPPLIED BY NOT LESS THAN TWO SMALL APPLIANCE BRANCH CIRCUIT, EITHER OR BOTH OF WHICH SHALL ALSO BE PERMITTED TO SUPPLY RECEPTACLE OUTLETS IN THE KITCHEN AND OTHER ROOM SPECIFIED IN THE IRC. ADDITIONAL SMALL BRANCH CIRCUITS SHALL BE PERMITTED TO SUPPLY RECEPTACLE OUTLETS IN THE KITCHEN AND OTHER ROOMS SPECIFIED IN THE IRC.
- A RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH WALL COUNTER SPACE 12" OR WIDER. RECEPTACLE OUTLETS SHALL BE INSTALLED SO THAT NO POINT ALONG THE WALL LINE IS MORE THAN 24" MEASURED HORIZONTALLY FROM A RECEPTACLE OUTLET IN THAT SPACE.
- AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH PENINSULAR COUNTER SPACE WITH A LONG DIMENSION OF 24" OR GREATER AND A SHORT DIMENSION OF 12" OR GREATER A PENINSULAR COUNTERTOP IS MEASURED FROM THE CONNECTING EDGE.
- COUNTERTOP SPACES SEPARATED BY RANGE TOPS, REFRIGERATORS, OR SINKS SHALL BE CONSIDERED AS SEPARATE COUNTERTOP SPACE IN APPLYING THE REQUIREMENTS ABOVE.
- RECEPTACLE OUTLETS SHALL BE LOCATED NO MORE THAN 18" ABOVE THE COUNTERTOP. RECEPTACLE OUTLETS SHALL NOT BE INSTALLED IN THE FACE-UP POSITION IN THE WORK SURFACES OR COUNTERTOPS. RECEPTACLE OUTLETS REMOTED NOT READILY ACCESSIBLE BY APPLIANCES FASTENED IN PLACE, OR APPLIANCES OCCUPYING DEDICATED SPACE SHALL NOT BE CONSIDERED AS THESE REQUIRED OUTLETS.
- AT LEAST ONE WALL RECEPTACLE OUTLET SHALL BE INSTALLED IN BATHROOMS WITH IN 3'-0" FEET TO EACH BASIN LOCATION. BATHROOM RECEPTACLE OUTLETS SHALL BE SUPPLIED BY AT LEAST ONE 20-AMPERE BRANCH CIRCUIT. SUCH CIRCUITS SHALL HAVE NO OTHER OUTLETS. RECEPTACLE SHALL NOT BE INSTALLED IN A FACE-UP POSITION IN THE WORK SURFACES OR COUNTERTOPS IN A BATHROOM BASIN LOCATION.
- AT LEAST ONE RECEPTACLE OUTLET ACCESSIBLE AT GRADE LEVEL AND NO MORE THAN 6'-6" ABOVE GRADE SHALL BE INSTALLED AT THE FROM AND BACK OF THE DWELLING AND SHALL NOT BE CONNECTED TO THE SMALL APPLIANCE BRANCH CIRCUIT.
- AT LEAST ONE 20-AMPERE RECEPTACLE OUTLET SHALL BE INSTALLED FOR THE LAUNDRY & SHALL HAVE NO OTHER OUTLETS.
- AT LEAST ONE RECEPTACLE OUTLET, IN ADDITION TO ANY PROVIDED FOR LAUNDRY EQUIPMENT, SHALL BE IN EACH ATTACHED GARAGE AND IN EACH DETACHED GARAGE WITH ELECTRIC POWER.
- HALLWAYS OF 10'-0" OR MORE IN LENGTH SHALL HAVE AT LEAST ONE RECEPTACLE OUTLET.
- ALL 125-VOLT, SINGLE-PHASE, 15- AND 20- AMPERE RECEPTACLE INSTALLED IN THE LOCATIONS SPECIFIED BELOW SHALL HAVE GROUND-FAULT-CIRCUIT INTERRUPTER PROTECTION FOR PERSONNEL:
  - BATHROOMS.
  - GARAGES, GRADE-LEVEL AND PORTIONS OF UNFINISHED ACCESSORY BUILDINGS USED FOR STORAGE OR WORKS AREAS.
  - OUTDOORS.
  - CRAWL SPACES-WHERE THE CRAWL SPACES IS AT OR BELOW GRADE LEVEL.
  - UNFINISHED BASEMENTS - UNFINISHED BASEMENTS ARE DEFINED AS PORTIONS OR AREAS OF THE BASEMENT NOT INTENDED AS HABITABLE ROOMS AND LIMITED TO STORAGE AREAS, WORKS AREAS, AND THE LIKE.
  - KITCHENS - WHERE THE RECEPTACLES ARE INSTALLED TO SERVE THE COUNTERTOP SURFACES.
  - WET BAR SINKS - WHERE THE RECEPTACLES ARE INSTALLED TO SERVE THE COUNTERTOP SURFACES AND ARE LOCATED WITHIN 6'-0" THE OUTSIDE EDGE BY THE WET BAR SINK.
- OUTLET BOXES IN THE WALL BETWEEN THE DWELLING & THE GARAGE SHALL BE OF METAL OR U.L. APPROVED FIRE-RESISTIVE PLASTIC. SEPARATION OF OUTLETS BOXES ON OPPOSITE SIDES OF WALLS SHALL BE 24" MIN.
- SINGLE AND MULTIPLE-STATION SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS:
  - IN EACH SLEEPING ROOM
  - OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOM
  - ON EACH ADDITIONAL STORY OF THE DWELLINGS, INCLUDING BASEMENTS AND CELLARS BUT NOT INCLUDING CRAWL SPACES AND UNINHABITABLE ATTICS. IN DWELLING UNITS WITH SPLIT LEVELS AND WITHOUT AN INTERVENING DOOR BETWEEN THE ADJACENT LEVELS, A SMOKE ALARM INSTALLED ON THE UPPER LEVEL SHALL SURFICE FOR THE ADJACENT LOWER LEVEL PROVIDED THAT THE LOWER LEVEL IS LESS THAN ONE FULL STORY BELOW THE UPPER LEVEL.
  - WHERE CEILING HEIGHT OF A ROOM OPEN TO THE HALLWAY SERVING BEDROOMS EXCEEDS 24" WHEN MORE THAN ONE SMOKE ALARM IS REQUIRED TO BE INSTALLED WITHIN AN INDIVIDUAL D WELLING UNIT THE ALARM DEVICES SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF THE ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT.
- ALL SMOKE ALARMS SHALL BE LISTED AND INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THE IRC AND THE HOUSEHOLD FIRE WARNING EQUIPMENT PROVISIONS OF NFPA 72.
- WHEN INTERIOR ALTERATIONS, REPAIRS OR ADDITIONS REQUIRING A PERMIT OCCUR, OR WHEN ONE OR MORE SLEEPING ROOMS ARE ADDED OR CREATED IN EXISTING DWELLING, THE INDIVIDUAL DWELLING UNIT SHALL BE PROVIDED WITH SMOKE ALARMS LOCATED AS REQUIRED FOR NEW DWELLINGS. THE SMOKE ALARMS SHALL BE INTERCONNECTED AND HARD WIRED. EXCEPTIONS:
  - SMOKE ALARMS IN EXISTING AREAS SHALL NOT BE REQUIRED TO BE INTERCONNECTED AND HARD WIRED WHERE THE ALTERATIONS OR REPAIRS DO NOT RESULT IN THE REMOVAL OF INTERIOR WALL OR CEILING FINISHES EXPOSING THE HARD WIRING AND INTERCONNECTION WITHOUT THE REMOVAL OF INTERIOR FINISHES.
  - REPAIRS TO THE EXTERIOR SURFACES OF DWELLINGS ARE EXEMPT FROM THE REQUIREMENTS OF THIS SECTION.
- SMOKE DETECTORS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING AND ALSO HAVE BATTERY BACK-UP & EWT A SIGNAL WHEN BATTERIES ARE LOW.
- SMOKE DETECTORS - FOR ALL SLEEPING AREAS SHALL BE A MIN. OF 3'-0" FROM DUCT OPENINGS.
- J-BOXES SHALL BE U.L. LISTED
- FIXTURES IN CLOSETS SHALL BE PERMITTED TO BE INSTALLED AS FOLLOWS:
  - SURFACE-MOUNTED INCANDESCENT FIXTURES INSTALLED ON THE WALL ABOVE THE DOOR OR ON THE CEILING, PROVIDED THERE IS A MINIMUM CLEARANCE OF 12" BETWEEN THE FIXTURE AND THE NEAREST POINT OF A STORAGE SPACE.
  - SURFACE-MOUNTED FLUORESCENT FIXTURES INSTALLED ON THE WALL ABOVE THE DOOR OR ON THE CEILING, PROVIDED THERE IS A MINIMUM CLEARANCE OF 12" BETWEEN THE FIXTURE AND THE NEAREST POINT OF A STORAGE SPACE.
  - RECESSED INCANDESCENT FIXTURES WITH A COMPLETELY ENCLOSED LAMP INSTALLED IN THE WALL OR THE CEILING, PROVIDED THERE IS A MINIMUM CLEARANCE OF 6" BETWEEN THE FIXTURE AND THE NEAREST POINT OF A STORAGE SPACE.
  - RECESSED FLUORESCENT FIXTURES INSTALLED IN THE WALL OR ON THE CEILING, PROVIDED THAT THERE IS A MINIMUM CLEARANCE OF 6" BETWEEN THE FIXTURE AND THE NEAREST POINT OF A STORAGE SPACE.
- WHERE CEILING FANS ARE INSTALLED, ONLY APPROVED OUTLET BOXES SHALL BE USED.
- RANGES, CLOTHES DRYERS AND SIMILAR APPLIANCES SHALL BE OF THE 3-POLE WITH GROUNDING TYPE. FOUR-WIRE, GROUNDING-TYPE FLEXIBLE CORD SHALL BE SUPPLIED. THE BONDING JUMPER IS TO BE REMOVED FROM THE APPLIANCE JUNCTION BOX.
- ALL RECESSED FIXTURES SHALL BE INSTALLED PER THEIR LISTING AND SHALL HAVE CLEARANCES TO COMBUSTIBLES PER THE IRC OR APPROVED FOR DIRECT CONTACT PER THEIR LISTING.
- LIGHT FIXTURES IN CEILING ENVELOPE EITHER TYPE IC AIRTIGHT, TYPE IC MAX 2 CFM LEAKAGE, OR NON-IC IN AIRTIGHT BOX. NON-IC REQUIRES CLEARANCE TO COMBUSTIBLES.

PLUMBING

- HOSE BIBS SHALL HAVE INTEGRATED BACK FLOW PREVENTER TO COMPLY WITH THE PLUMBING CODE.
- AIR GAS FITTING FOR DISH WASHER SHALL BE INSTALLED AT OR ABOVE FLOOD LEVEL OF SINK.
- SEAL VOIDS AROUND PENETRATIONS THROUGH FLOOR SLABS TO COMPLY W/ THE PLUMBING CODE
- WATER HEATER PRESSURE RELIEF LINE TO BE FULL SIZE STEEL PIPE OR HARD DRAWN COPPER TUBING EXTENDING TO THE EXT. OF THE BLDG & TERMINATING IN A DOWN WARD POSITION MAXIMUM 6" ABOVE THE FLOOR OR WASTE RECEPTOR. THE PRESSURE RELIEF LINE SHALL NOT TERMINATE OVER WALKWAYS OR OTHER SIMILAR AREA AND SHALL BE A MIN. 3" FROM ANY ENTRANCE OR EXIT.
- ALL DRAIN, WASTE AND VENTING IS TO BE ABS SCHEDULE 40. 1/4" PER FT. SLOPE MIN.
- ALL COPPER TUBING IN WATER PIPING ABOVE SLAB TO BE A MIN. TYPE "M", & MIN. TYPE "L" BELOW SLAB & INSTALLED W/O JOINTS.
- PLUMBING FIXTURES TO COMPLY WITH LOW FLOW FIXTURE ORDINANCE AND INCLUDE THE FOLLOWING:
  - LAVATORY & SINK FAUCET, 2.2 GPM AT 60 PSI
  - SHOWER HEAD, 2.5 GPM AT PSI
  - WATER CLOSETS, 1.6 GALLONS PER FLUSHING CYCLE
- SHOWER & SHOWER TUB COMBINATION SHALL BE PROVIDED WITH INDIVIDUAL CONTROL, PRESSURE BALANCE OR THERMOSTATIC MIXING VALVE TYPE.
- ALL GAS PIPING (IF APPLICABLE) SHALL BE WROUGHT IRON OR STEEL
- SHOWERS SHALL HAVE A FINISHED INTERIOR OF NOT LESS THAN 900 SQ. IN MIN. AND BE CAPABLE OF ENCOMPASSING A 30" DIA. MIN. CIRCLE. PER P2708.1
- SUPPLY ARE APPROVED SHUT- OFF VALVE AT EACH GAS APPLIANCE.
- WHEN REQUESTED BY THE OWNER OR REQUIRED BY THE JURISDICTION, AN APPROVED FIRE SPRINKLER SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENTLY ADOPTED CODES OF THE JURISDICTION. THE MINIMUM REQUIREMENTS SHALL MEET OR EXCEED NFPA 130, 1996.
- AN APPROVED DIELECTRIC INSULATOR SHALL BE PROVIDED ON ALL DISSIMILAR METAL WATER PIPING CONNECTIONS OF WATER HEATERS AND RELATED WATER HEATING EQUIPMENT.
- ALL GAS PIPING SHALL BE INSTALLED PER 2012 IFGC.
- REQUIRED PRESSURE TESTS OF TEN (10) POUNDS OR LESS SHALL BE PERFORMED WITH GAUGES OF 1/10 POUND INCREMENTATIONS.
- MAXIMUM GAUGE RATING SHALL NOT EXCEED TWICE THE APPLIED TEST PRESSURE.
- PLUMBING BOXOUTS SHALL BE BACKFILLED WITH MINIMUM 3000 PSI CONCRETE.

MECHANICAL

- AIR HANDLER WHEN ATTIC MOUNTED SHALL INCLUDE:
  - 2" PLYWOOD PLATFORM FOR UNIT w/ CORE CLEARANCES
  - LIGHT SWITCHABLE @ UNIT & 110V OUTLET
  - 2 CONDENSER LINES
  - UNOBSTRUCTED 24" WIDE CATWALK TO UNIT NOT TO EXCEED 20'-0" IN LENGTH
- CONDENSATE FROM AIR-COOLING COILS, FUEL-BURNING CONDENSING APPLIANCES AND THE OVERFLOW FROM EVAPORATIVE COOLERS AND SIMILAR WATER-SUPPLIED EQUIPMENT SHALL BE COLLECTED AND DISCHARGED TO AN APPROVED PLUMBING FIXTURE OR DISPOSAL AREA. THE WASTE PIPE SHALL HAVE A SLOPE OF NOT LESS THAN 1/8" UNIT VERTICAL 12 UNITS HORIZONTAL AND SHALL BE OF APPROVED CORROSION-RESISTANT MATERIAL NOT SMALLER THAN THE OUTLET SIZE AS REQUIRED FOR AIR-COOLING COILS OR CONDENSING FUEL-BURNING APPLIANCES, RESPECTIVELY.
- CONDENSATE OR WASTE WATER SHALL NOT DRAIN OVER A PUBLIC WAY.
- 3/4" DIA COND. DRAIN (FROM EA. PAN) w/ P-TRAP & C.O. TO GRADE Φ + 6"
- WHEN A COOLING COIL OR COOLING UNIT IS LOCATED IN AN ATTIC OR FURRED SPACE WHERE DAMAGE MAY RESULT FROM CONDENSATE OVERFLOW, AN ADDITIONAL WATERTIGHT PAN OF CORROSION-RESISTANT METAL SHALL BE INSTALLED BENEATH THE COOLING COIL OR UNIT TOP TO CATCH THE OVERFLOW CONDENSATE DUE TO A CLOGGED PRIMARY CONDENSATE DRAIN, OR ONE PAN WITH A STANDING OVERFLOW AND SEPARATE SECONDARY DRAIN MAY BE PROVIDED IN LIEU OF THE SECONDARY DRAIN PAN. THE ADDITIONAL PAN THE STANDING OVERFLOW SHALL BE PROVIDED WITH A DRAIN PIPE, MINIMUM 3/4 NOMINAL PIPE SIZE, DISCHARGING AT A POINT WHICH CAN BE READILY OBSERVED.
- DOMESTIC DRYER VENT SHALL NOT EXCEED 35' MAXIMUM LENGTH WITH A REDUCTION OF 2.5 FEET FOR EVERY 45° DEGREE ELBOW AND 5'-0" FOR EACH 90° DEGREE ELBOW. PER M1502.4.4.1 & TABLE M 1502.4.4.1 PROVIDE MIN. 3'-0" CLEARANCE AT VENT CONDITION FROM ALL WINDOWS, OPENINGS AND SIDING.
- PROVIDE SCREENED COMBUSTION AIR OPENING WITHIN 12" OF CEILING & FLOOR PER PLAN FOR GAS WATER HEATER AND GAS DRYER. PROVIDE 100 SQ. IN. OF MAKEUP AIR FOR DRYER AND 50 SQ. IN. OF COMBUSTION AIR FOR WATER HEATER PER THE IRC.
- EXHAUST DUCTS SHALL HAVE A SMOOTH INTERIOR FINISH AND BE CONSTRUCTED OF METAL HAVING A MINIMUM THICKNESS OF 0.0157 INCHES (NO. 28 GAGE). THE DUCT SHALL BE 4 INCHES NOMINAL IN DIAMETER.
- EXHAUST DUCTS SHALL BE SUPPORTED AT INTERVALS NOT TO EXCEED 12 FEET AND SHALL BE SECURED IN PLACE. THE INSERT END OF THE DUCT SHALL EXTEND INTO THE ADJOINING DUCT OR FITTING IN THE DIRECTION OF AIRFLOW. EXHAUST DUCT JOINTS SHALL BE SEALED IN ACCORDANCE WITH SECTION M 1601.4.1 AND SHALL BE MECHANICALLY FASTENED. DUCTS SHALL NOT BE JOINED WITH SCREWS OR SIMILAR FASTENERS THAT PROTRUDE MORE THAN 1/8 INCH THE INSIDE OF THE DUCT.
- AIR EXHAUST OPENINGS SHALL TERMINATE NOT LESS THAN 3 FEET FROM PROPERTY LINES, 3 FEET FROM OPERABLE AND NONOPERABLE OPENINGS INTO THE BUILDING AND 10 FEET FROM MECHANICAL AIR INTAKES EXCEPT WHERE THE OPENING IS LOCATED 3 FEET ABOVE THE AIR INTAKE. OPENINGS SHALL COMPLY WITH SECTIONS R303.5.2 AND R303.6.
- SUPPLY DUCTS IN ATTICS SHALL BE INSULATED TO A MINIMUM OF R-8. ALL OTHER DUCTS SHALL BE INSULATED TO A MINIMUM OF R-6. EXCEPTION: DUCTS OR PORTIONS THEREOF LOCATED COMPLETELY INSIDE THE BUILDING THERMAL ENVELOPE.
- BUILDING FRAMING CAVITIES SHALL NOT BE USED AS DUCTS OR PLENUMS.

UNDERGROUND CONDUITS

- BURIED NONMETALLIC PIPING, CABLES, AND CONDUITS INSTALLED ON PRIVATE PROPERTY, TO BE DETECTIBLE (METALLIC) OR HAVE A DETECTIBLE UNDERGROUND LOCATION DEVICE (TRACER WIRE) ATTACHED TO IT. THIS INCLUDES, BUT IS NOT BE LIMITED TO, THE INSTALLATION OF NONMETALLIC UNDERGROUND FACILITIES SUCH AS:
  - NONMETALLIC COMMUNICATION CABLE, NONMETALLIC WATER LINES, NONMETALLIC SEWER LINES, AND NONMETALLIC GAS LINES.
  - NONMETALLIC LANDSCAPE IRRIGATION SPRINKLER PIPING GREATER THAN 2 INCH IN DIAMETER
  - ANY CABLE, PIPE, OR CONDUIT WHICH CONVEYS, OR IS DESIGNED TO CONVEY, WATER, SEWAGE, GAS, OIL, CHILLED WATER, REFRIGERANTS, SWIMMING POOL WATER, AND STEAM.
  - IT ALSO INCLUDES EMPTY NONMETALLIC PIPES AND CONDUITS. THEREFORE, EFFECTIVE IMMEDIATELY, ALL UNDERGROUND CABLE, PIPE, AND CONDUITS SHALL BE DETECTIBLE (METALLIC) OR HAVE A DETECTIBLE UNDERGROUND LOCATION DEVICE INSTALLED WITH IT. THE RECOMMENDED DETECTIBLE UNDERGROUND LOCATION DEVICE IS A AWG 18 OR LARGER COPPER TRACER WIRE SECURELY ATTACHED TO THE NONMETALLIC CABLE, PIPE, OR CONDUIT AT ABOUT D.C. IT SHALL HAVE 12 INCH OF TRACER WIRE ACCESSIBLE ABOVE GRADE AT ANY ABOVE GRADE TERMINATION. EFFECTIVE DECEMBER 31, 2006.

SUBSTITUTIONS

- THE SUBCONTRACTOR SHALL BASE HIS PROPOSAL ON THE EXAC BRANDS, SYSTEMS METHODS, AND MATERIALS SHOWN. IF THE SUBCONTRACTOR DESIRES TO MAKE SUBSTITUTIONS, HE SHALL LIST THEM W/ HIS BID & IN HIS CONTRACT. THE LISTING SHALL BE IN SUFFICIENT DETAIL TO AFFORD THE OWNER MEANS OF COMPARISON & MUST INCLUDE THE MONETARY DIFFERENCE IN CONTRACT PRICE IF THE SUBSTITUTION IS ACCEPTED. SUBSTITUTIONS AFTER SIGNING THE CONTRACT SHALL BE BY CHANGE ORDER ONLY.

ERRORS AND OMISSIONS

- IF ANY ERRORS OR OMISSIONS APPEAR IN THE DRAWINGS, SPECS, OR OTHER DOCUMENTS, THE SUBCONTRACTOR SHALL NOTIFY OWNER IN WRITING OF SUCH OMISSIONS OR ERRORS PRIOR TO PROCEEDING WITH ANY WORK WHICH APPEARS IN QUESTION. IN THE EVENT OF THE SUBCONTRACTORS FAILURE TO GIVE SUCH NOTICE, HE SHALL BE HELD RESPONSIBLE FOR THE RESULTS OF ANY SUCH ERRORS OR OMISSIONS AND THE COST OF RECTIFYING THE SAME. THE SUBCONTRACTOR SHALL HAVE ALL ITEMS OR DETAILS CLARIFIED W/OWNER PRIOR TO SUBMITTING A BID; OTHERWISE INTERPRETATION SHALL BE FINAL.

WINDOWS

- WINDOWS SHALL COMPLY WITH THE BUILDING CODE FOR ACCESS AND EGRESS
- ALL BEDROOM ESCAPE OR RESCUE WINDOWS SHALL HAVE A MIN. NET CLEAR OPENABLE AREA OF 5.7 SQ. FT. THE MIN. NET CLEAR OPENABLE HEIGHT DIMENSION SHALL BE 24 INCHES. THE MIN. NET CLEAR OPENABLE WIDTH DIMENSION SHALL BE 20 INCHES. WHEN WINDOWS ARE PROVIDED AS A MEAN OF ESCAPE OR RESCUE THEY SHALL HAVE A CLEAR WINDOW OPENING HEIGHT OF NO MORE THAN 44 INCHES ABOVE THE FINISHED FLOOR OR 24" ABOVE FINISH FLOOR WHEN LOCATED MORE THAN 72" ABOVE THE FINISH GRADE OR SURFACE BELOW.
- LIGHT & VENTILATION REQUIREMENTS FOR ALL WINDOWS ARE TO COMPLY W/ THE BUILDING CODE. GLASS IN HAZARDOUS AREAS AS DEFINED BY THE BUILDING CODE SHALL BE SAFETY GLAZING.
- R703.8 AT EXTERIOR WINDOW AND DOOR OPENINGS FLASHING SHALL BE INSTALLED PER MANUFACTURERS INSTALLATION INSTRUCTIONS OR PEGGTICTED DESIGN PROFESSIONAL.

ATTIC VENTILATION, ACCESS, AND VENTS

- ATTIC ACCESS SHALL BE NOT LESS THAN 22"X30" WITH 30" MIN. CLEAR HEADROOM ABOVE THE ACCESS OPENING. ATTIC ACCESS OPENINGS WHEN LOCATED IN A GRADE, SHALL COMPLY WITH THE BUILDING CODE FOR THE MODIFIED ONE HOUR OCCUPANCY SEPARATION AND THE JURISDICTION REQUIREMENTS.
- SEE ATTIC VENTILATION CALCULATIONS FOR BREAKDOWN OF VENTILATION CALCULATIONS.
- ROOF SHEATHING UNDER OVER-FRAMING SHALL BE REMOVED TO ALLOW VENTILATION THRU ATTIC AREAS AS REQUIRED BASED ON ATTIC VENTILATION CALCULATIONS.
- OPENINGS FOR VENTILATION SHALL BE COVERED WITH CORROSION-RESISTANT METAL MESH WITH MESH OPENINGS OF 1/8" IN DIAMENTION.

WATER RESISTANT APPLICATION

- CEMENT, FIBER-CEMENT OR GLASS MAT GYPSUM BACKERS IN COMPLIANCE WITH ASTM C 1288, C 1325 OR C 1178 AND INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS SHALL BE USED AS BACKERS FOR WALL TILE IN TUB AND SHOWER AREAS AN WALL PANELS IN SHOWER AREAS.
- EXTERIOR RATED GYP SO IS REQUIRED ON ALL WEATHER EXPOSED SURFACES. (PATIOS, PORCHES, CARPORTS, ETC. IF INSTALLED)

ADDRESS

- R319 BUILDING ADDRESS SHALL BE PERMANENT AND MINIMUM 4 INCH HIGH AND A HALF INCH STROKE

RELEASED FOR PERMITTING

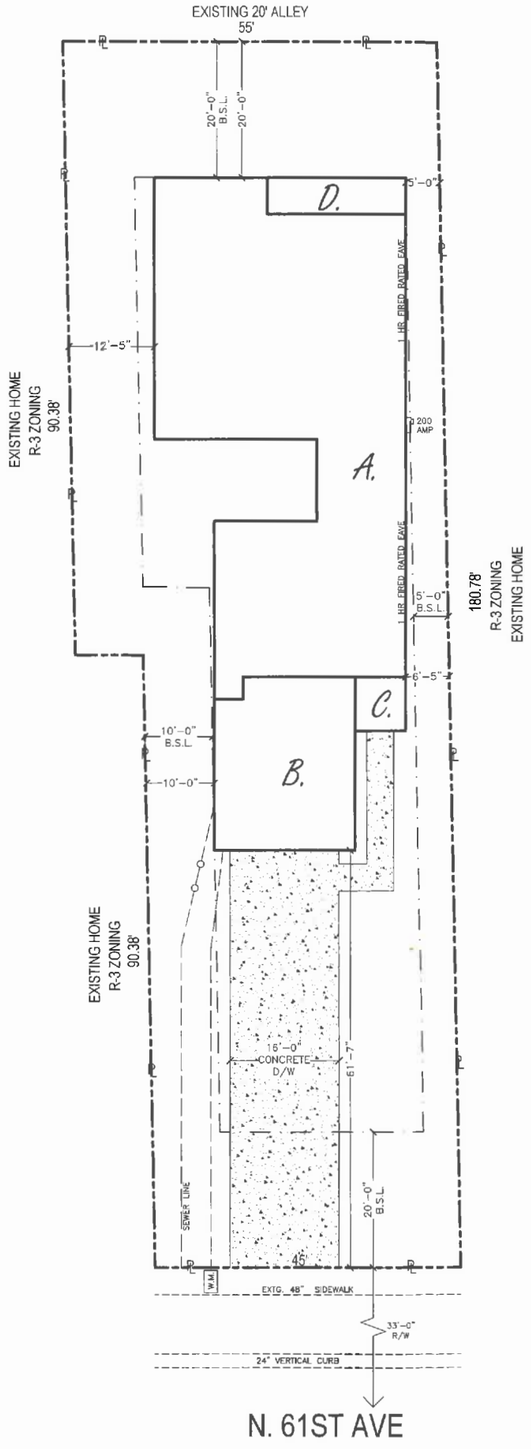
- THIS SET OF PLAN HAS BEEN REVIEWED FOR COMPLIANCE WITH CITY REQUIREMENTS PRIOR TO ISSUANCE OF CONSTRUCTION PERMITS. THE CITY NEITHER ACCEPTS OR ASSUMES ANY LIABILITY FOR ERRORS OR OMISSIONS. THIS COMPLIANCE APPROVAL SHALL NOT PREVENT THE CITY ENGINEER FROM REQUIRING CORRECTION OF ERRORS OR OMISSIONS IN PLANS FOUND TO BE IN VIOLATION OF ANY LAW OR ORDINANCE.

MODEL ENERGY CODE VALUES

COMPONENT:	U-FACTOR:	SHGC:
OPERABLE DOUBLE PANE WINDOW:	0.40	0.25
FIXED DOUBLE PANE WINDOW:	0.40	0.25
PATIO DOUBLE PANE DOORS:	0.40	0.25
EXTERIOR DOORS:	0.40	0.25
	R-VALUE:	
CEILING:	R-38	
EXTERIOR WALLS:	R-19	

CITY OF GLENDALE ADOPTED CODES

YEAR:	CODE:
2018	INTERNATIONAL BUILDING CODE
2018	INTERNATIONAL RESIDENTIAL CODE
2018	INTERNATIONAL MECHANICAL CODE
2018	INTERNATIONAL PLUMBING CODE
2018	INTERNATIONAL ENERGY CODE
2018	INTERNATIONAL FUEL CODE
2018	INTERNATIONAL FIRE CODE
2017	NATIONAL ELECTRIC CODE



BUILDING AREA SCHEDULE

MARK	DESCRIPTION	AREA
A	LIVABLE RESIDENCE	2,136 ft²
B	2 CAR GARAGE	515 ft²
C	COVERED PORCH	60 ft²
D	COVERED PATIO	108 ft²
	TOTAL	2,819 ft²
	LOT SIZE:	9,034 ft²
	LOT COVERAGE:	31.20 %

PARCEL INFORMATION

ADDRESS:	6707 N 61ST AVE GLENDALE 85301
PARCEL NUMBER:	144-10-151
SUBDIVISION:	ORCHARD ADD BLK 20-21-22, & 38-39-40 AMD
LOCAL JURISDICTION:	GLENDALE
ZONING DISTRICT:	R-3
LOT NUMBER:	14
FRONT SETBACK:	20'-0"
REAR SETBACK:	20'-0"
SIDE SETBACK:	5'-0"/10'-0"
MAX. ALLOWED COVERAGE:	50%
OWNER:	TMG INVESTMENT PROPERTIES LLC

SHEET INDEX

CONTACT INFO.

CONTACT: JUAN M. GUTIERREZ

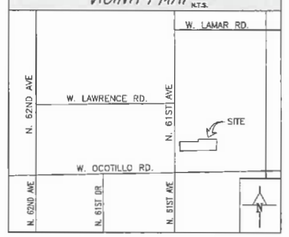
ADDRESS: 4316 W. BERRIDGE LN. GLENDALE ,AZ

PHONE: (480) 395-4305

EMAIL: juanblue2015@yahoo.com

VICINITY MAP

N.T.S.



N

SITE PLAN

SCALE: 1"=10'-0"

1' 5' 10'

BLUEPRINTS and DESIGN

DESIGNER:

JUAN MANUEL GUTTERREZ

ADDRESS: 4316 W. BERRIDGE LN. GLENDALE, AZ 85301

PHONE NUMBER: 480-395-4305

EMAIL: JUANBLUE2015@YAHOO.COM

PLANS DRAWN BY: V.L.S

PROJECT:19-205

61 ST AVE CUSTOM HOME

OWNER: TMG INVESTMENT PROPERTIES LLC

APN: 144-10-151

ADDRESS: 6707 N 61ST AVE GLENDALE, AZ 85301

19-205

DRAWINGS:

COVER SHEET

SITE PLAN

TO AVOID MISTAKES DURING CONSTRUCTION ANY DISCREPANCIES BETWEEN THE PLANS SHALL BE REPORTED TO THE OWNER AND GENERAL CONTRACTOR IN WRITING BEFORE PROCEEDING. IN ORDER TO AVOID MISTAKES READ AND CHECK ALL PLANS AND BIDS BEFORE CONSTRUCTION.

REVISIONS:

DELTA:	DATE:	REVIEWER:
1	---	---
2	---	---
3	---	---

SHEET:

CS

FLOOR PLAN KEYNOTES

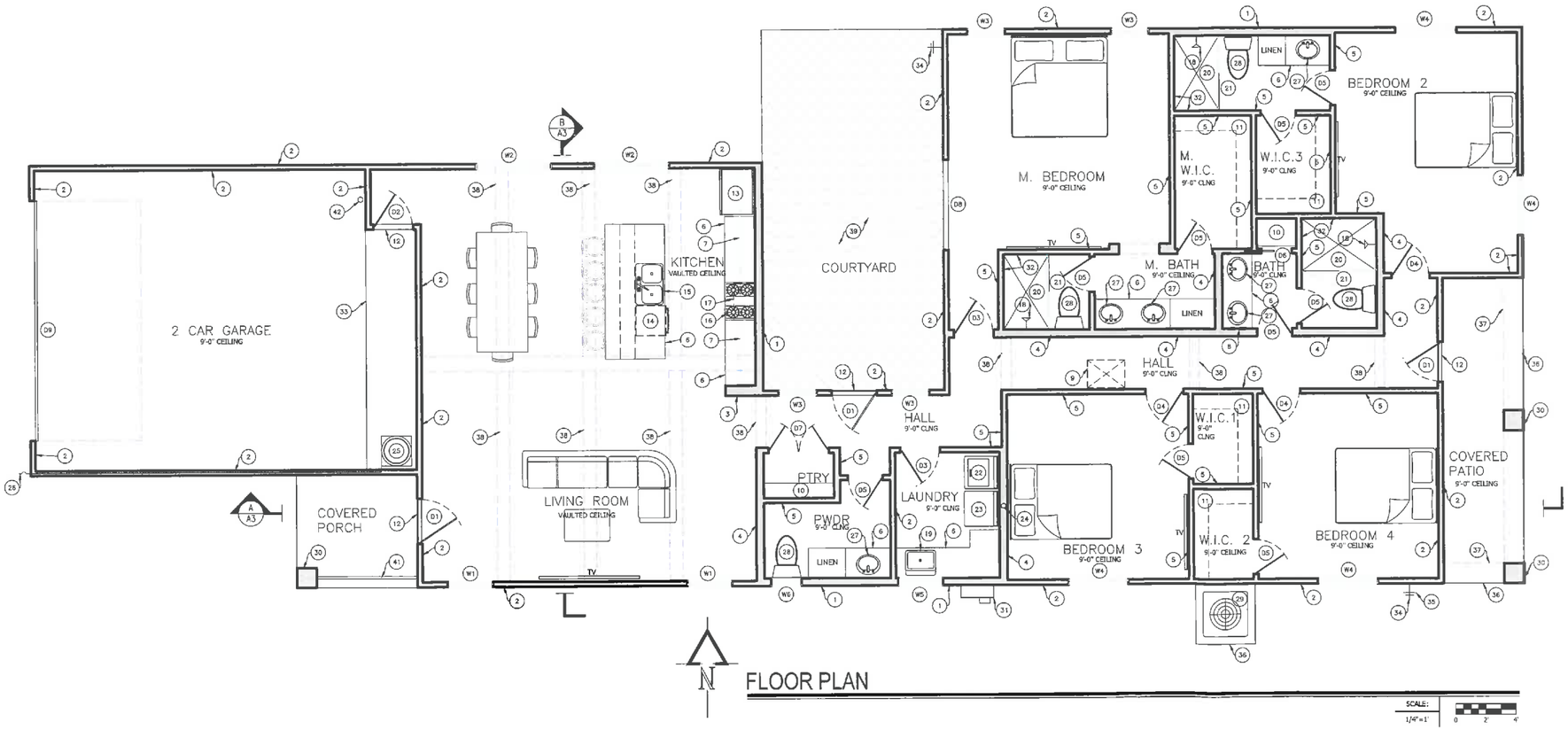
1	2X6 WALL W/ STUDS @ 16" O.C.
2	2X4 WALL W/ STUDS @ 16" O.C.
3	2X8 WALL W/ STUDS @ 24" O.C.
4	2X6 WALL W/ STUDS @ 24" O.C.
5	2X4 WALL W/ STUDS @ 24" O.C.
6	BASE CABINETS
7	UPPER CABINETS
8	RECESSED MEDICINE CABINET
9	ATTIC ACCESS
10	SHELVES
11	1 SHELF, 1 ROD
12	THRESHOLD
13	REFRIGERATOR
14	DISHWASHER
15	KITCHEN SINK W/ DISPOSAL
16	ELECTRIC COOK TOP
17	MICROWAVE W/ EXHAUST FAN
18	SHOWER HEAD (TYP.)
19	LAUNDRY TUB
20	SHOWER
21	SHOWER ENCLOSURE TEMP. GLASS
22	WASHER
23	ELECTRIC DRYER
24	DRYER VENT
25	50 ELECTRIC WATER HEATER W/ GALV. DRIP PAN (TYP.) & WOOD FRAMED PLATFORM RAISED 18" MIN. ABV. FINISHED FLOOR
26	TEMPERATURE AND RELIEF VALVE SHALL EXTEND OUTSIDE OF BLDG. T&P LINE TERMINATION SHALL NOT BE LESS THAN 6 INCHES AND NOT MORE THAN 12 INCHES ABOVE GRADE
27	LAVATORY
28	WATER CLOSET (ALLOW MIN. 15" TO EA. SIDE & 24" TO FRONT)
29	AIR CONDITIONING UNIT W/ PRE-FAB CONSENSER PAD
30	WOOD FRAMED COLUMN 1'4"X1'4"
31	200 AMP ELECTRICAL SERVICE PANEL
32	CEMENT, FIBER-CEMENT OR GLASS MAT GYPSUM BACKERS FOR WALL TILE IN TUB AND SHOWER AREAS AND WALL PANELS IN SHOWER AREAS. KERDI SYSTEM MAY BE USED AS BACKER PER ICC ESR-2467 AND MANUFACTURE INSTALLATION INSTRUCTIONS
33	CONCRETE STOP
34	HOSE BIB
35	WATER SERVICE MAIN SHUT-OFF VALVE
36	CONCRETE SLAB
37	SOFFIT
38	ORNAMENTAL BEAM EXPOSED
39	PAVERS
40	BOLLARD STEEL TYPE
41	WOOD FENCE RAIL

DOOR SCHEDULE

D1	3068 SOLID CORE W/ GRID TEMP. GLASS	3
D2	2868 S.C., SELF-CLOSING, MIN. 1 3/8" THICK	1
D3	2868 HOLLOW CORE	2
D4	2668 HOLLOW CORE	3
D5	2468 HOLLOW CORE	9
D6	2068 POCKET DOOR	1
D7	4068 DOUBLE HOLLOW CORE DOOR	1
D8	6068 XO G.S.D. W/ TEMP. GLASS	1
D9	18070 MOTORIZED GARAGE DOOR	1

WINDOW SCHEDULE

W1	3050 XO W/ GRID	2
W2	5050 XO W/ GRID	2
W3	2650 XO W/ GRID TEMP. GLASS	5
W4	4040 XO W/ GRID	4
W5	3030 XO W/ GRID	1
W6	2016 XO W/ GRID TEMP. GLASS	1



FLOOR PLAN

SCALE: 1/4"=1' (0, 2', 4')

BLUEPRINTS and DESIGN

DESIGNER:

JUAN MANUEL GUTTERREZ
ADDRESS: 4316 W. BERRIDGE LN. GLENDALE, AZ 85301
PHONE NUMBER: 480-395-4305
EMAIL: JUANBLUE2015@YAHOO.COM
PLANS DRAWN BY: VLS

PROJECT:19-205

61 ST AVE CUSTOM HOME

OWNER: TMG INVESTMENT PROPERTIES LLC
APN: 144-10-151
ADDRESS: 6707 N 61ST AVE GLENDALE, AZ 85301
19-205

DRAWINGS:

FLOOR PLAN
KEYNOTES

TO AVOID MISTAKES DURING CONSTRUCTION ANY DISCREPANCIES BETWEEN THE PLANS SHALL BE REPORTED TO THE OWNER AND GENERAL CONTRACTOR IN WRITING BEFORE PROCEEDING. IN ORDER TO AVOID MISTAKES READ AND CHECK ALL PLANS AND BIDS BEFORE CONSTRUCTION.

REVISIONS:

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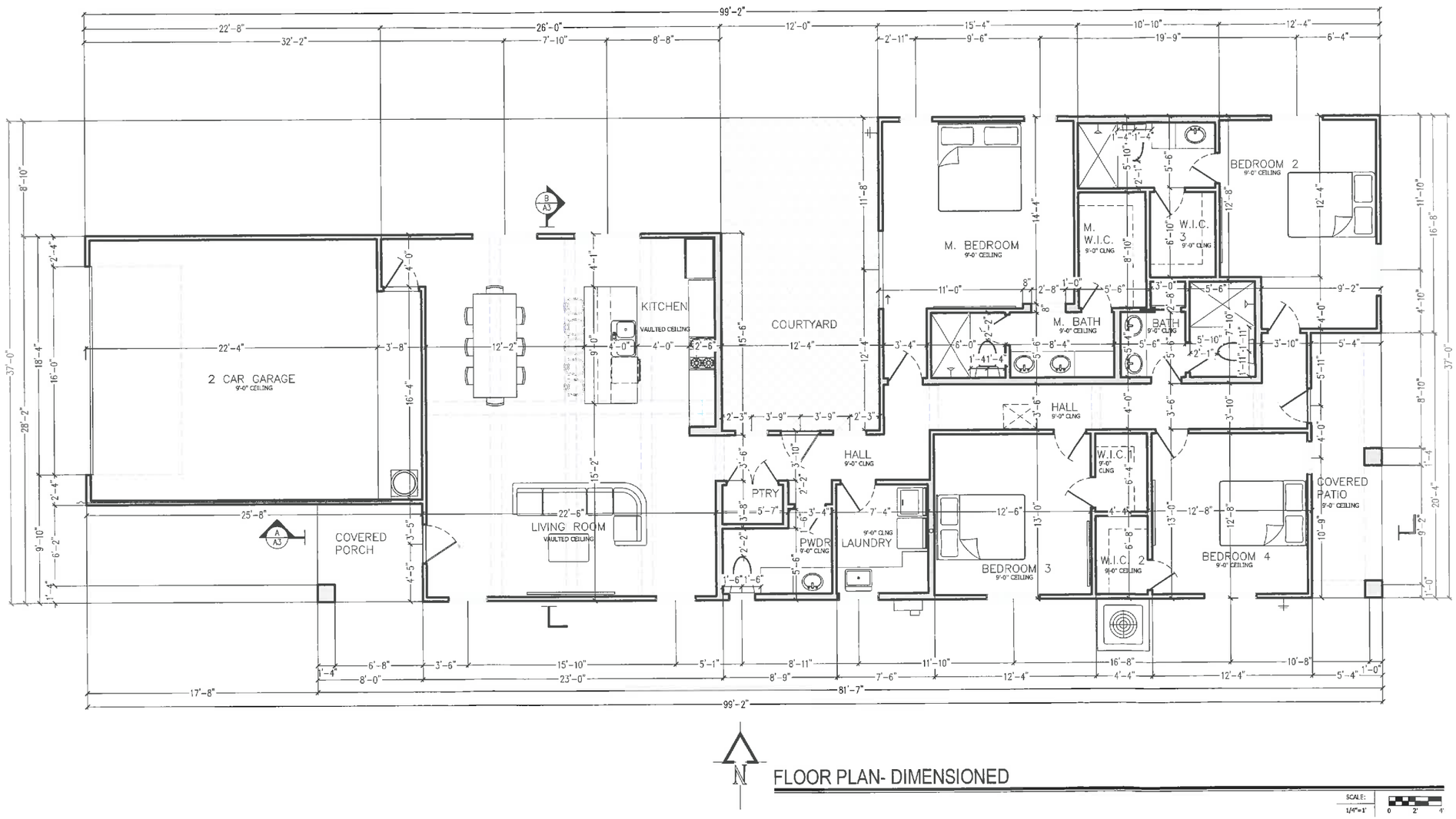
SHEET:

A1



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FLOOR PLAN
DIMENSIONED

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SHEET:

A2

FRONT ELEVATION

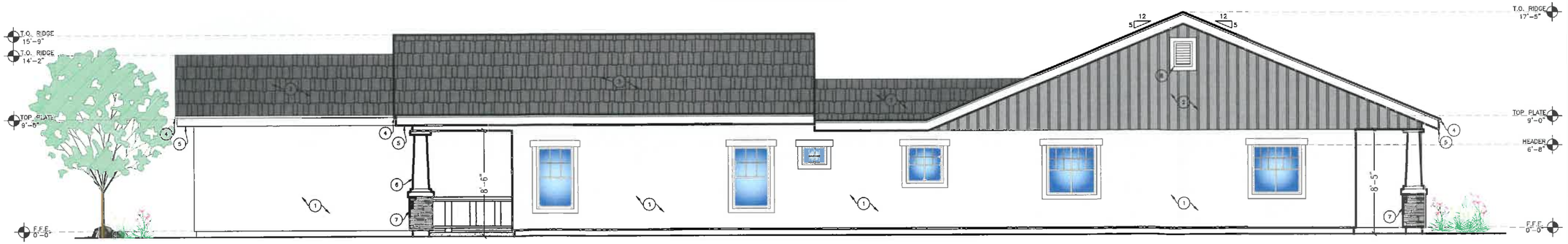
SCALE: 1/4"=1' 0 2' 4'

REAR ELEVATION

SCALE: 1/4"=1' 0 2' 4'

SHEET KEYNOTES

1	SAN-KOTE STUCCO SYSTEM PER ESR #2729 REPORT TYPICALLY REQUIRED MINIMUM OF 1 LAYER OF NO. 15 ASPHALT FELT COMPLYING WITH ASTM D 226 TYPE I WITH ON OPEN STUDS OR WHERE APPLIED OVER WOOD-BASED SHEATHING, SHALL BE 2 LAYERS PF GRADE D PAPER (FEDERAL SPECIFICATION UU-B790A) WITH MINIMUM 2 INCH HORIZONTAL EDGE LAP AND 6 INCH VERTICAL EDGE LAPS.
2	⅜ PLYWOOD W/ 1X2 @24"
3	FLAT ROOF TILE ICC ESR-1647
4	2X1 WOOD TRIM
5	2X10 FASCIA
6	WOOD FRAMED COLUMN
7	STONE VENEER PER ICC ESR-3151
8	ATTIC VENT



RIGHT ELEVATION

SCALE: 1/4"=1' 0 2' 4'

BLUEPRINTS and DESIGN

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DRAWINGS:

ELEVATIONS

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REVISIONS:

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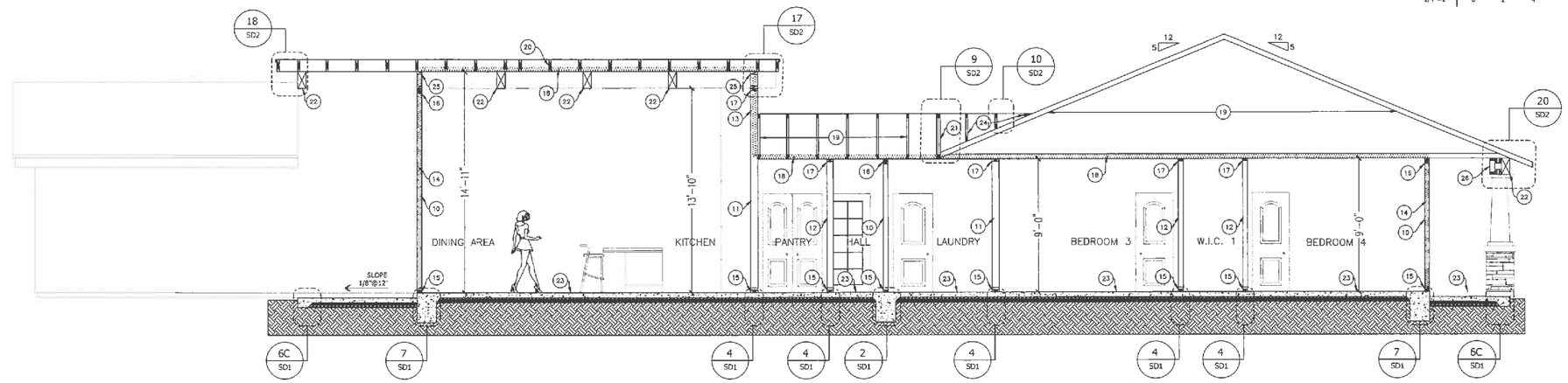
SHEET:

A3

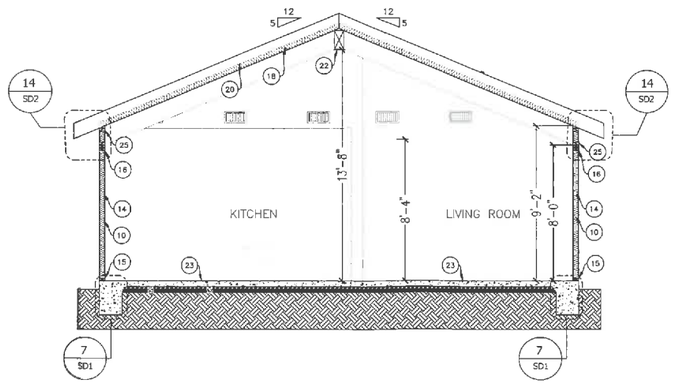
LEFT ELEVATION

SCALE: 1/4"=1' 0 2' 4'



SECTION A

SCALE: 1/4"=1' 0 2' 4'



SECTION B

SCALE: 1/4"=1' 0 2' 4'

SHEET KEYNOTES

1	SAN-KOTE STUCCO SYSTEM PER ESR #2729 REPORT TYPICALLY REQUIRED MINIMUM OF 1 LAYER OF NO. 15 ASPHALT FELT COMPLYING WITH ASTM D 226 TYPE I WITH ON OPEN STUDS OR WHERE APPLIED OVER WOOD-BASED SHEATHING, SHALL BE 2 LAYERS PF GRADE D PAPER (FEDERAL SPECIFICATION UU-B790A) WITH MINIMUM 2 INCH HORIZONTAL EDGE LAP AND 6 INCH VERTICAL EDGE LAPS.
2	½ PLYWOOD W/ 1X2 @24"
3	FLAT ROOF TILE ICC ESR-1647
4	2X1 WOOD TRIM
5	2X10 FASCIA
6	WOOD FRAMED COLUMN
7	ATTIC VENT
8	STONE VENEER PER ICC ESR-3151
9	2X6 WALL W/ STUDS @ 16" O.C.
10	2X4 WALL W/ STUDS @ 16" O.C.
11	2X6 WALL W/ STUDS @ 24" O.C.
12	2X4 WALL W/ STUDS @ 24" O.C.
13	R-19 BATT INSULATION
14	R-13 BATT INSULATION
15	PRESSURE TREATED BOTTOM PLATE
16	CONTINUOUS DOUBLE TOP PLATE
17	CONTINUOUS SINGLE TOP PLATE
18	R-38 BATT INSULATION
19	PRE-FAB TRUSSES @ 24" O.C.
20	2X10 RAFTERS @ 24" O.C.
21	GIRDER TRUSS
22	WOOD BEAM
23	CONCRETE SLAB
24	OVERFRAMED
25	2X SOLID BLOCKING
26	SOFFIT

BLUEPRINTS and DESIGN

DESIGNER:

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DRAWINGS:

- ELEVATION
- SECTION A
- SECTION B
- -----

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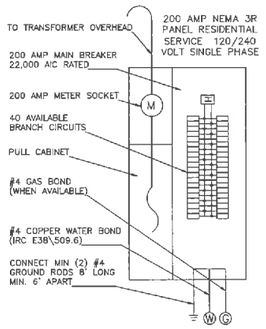


E3902.16
ARC-FAULT CIRCUIT-INTERRUPTER PROTECTION

BRANCH CIRCUITS THAT SUPPLY 120- VOLT, SINGLE-PHASE, 15- AND 20- AMPERE OUTLETS INSTALLED IN KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATIONS ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS AND SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY ANY OF THE FOLLOWING 210.12(A)

ELECTRICAL KEY

	VAPOR PRROF LIGHT
	EXHAUST FAN TO OUTSIDE
	STD. 220 V. OUTLET
	GROUND FAULT INTERRUPTER RECEPTACLE
	CEILING MOUNTED LIGHT FIXTURE
3	3-WAY WALL SWITCH
CO	CARBON MONOXIDE ALARM
	DUPLEX OUTLET (GROUNDED TYPE)
S	SINGLE POLE WALL SWITCH
SD	SMOKE DETECTOR
	CEILING FAN W/ LIGHT
	RECESSED CAN LIGHT
	WALL MOUNTED LIGHT FIXTURE
T	THERMOSTAT
	WP GFCI
F	FUSED DISCONNECT SWITCH
	CHANDELIER
	PENDANT LIGHT FIXTURE
TV	TELEVISION
D	INTERNET
LV	LOW VOLTAGE
P	PUSH BUTTON
	DOOR BELL CHIMES
	DUPLEX OUTLET, ½ SWITCHED
4	4-WAY SWITCH
LVP	LOW VOLTAGE PANEL

LOAD CALCULATIONS

LOAD ARE BASED ON STANDARD TABLE VALUES. THE CONTRACTOR SHALL VERIFY ACTUAL LOADS FOR ALL EQUIPMENT AND DEVICES AND SHALL ADJUST CIRCUIT BREAKER SIZES AND CONDUCTOR SIZES AS NECESSARY TO MEET MANUFACTURES' REQUIREMENTS.

1.	DWELLING, AREA IN SQ.FT. 2,136 X 3 WATTS PER SQ. FT.	6,408
2.	KITCHEN APPLIANCE CIRCUITS (2 X1,500 EACH)	3,000
3.	MICROWAVE (1 X 1,500 EACH)	1,500
4.	GARBAGE DISPOSAL / DISHWASHER (1 X 1,500 EACH)	1,500
5.	LAUNDRY CIRCUIT (1 X 1,500 EACH)	1,500
6.	BATHROOM RECEPTACLE CIRCUIT	1,500
7.	WATER HEATER	4,500
8.	RANGE	12,000
9.	DRYER	5,000
	TOTAL	36,908

TOTAL AMPS WATTS 29,763/240 VOLTS **124 AMPS** USE 100 AMP PANEL

1ST 10,000 watts at 100%	10,000
REMAINDER AT 40% TOTAL	10,763
COOLING, UNITS	9,000
	29,763

TYP. ELECTRICAL PANEL SCHEDULE

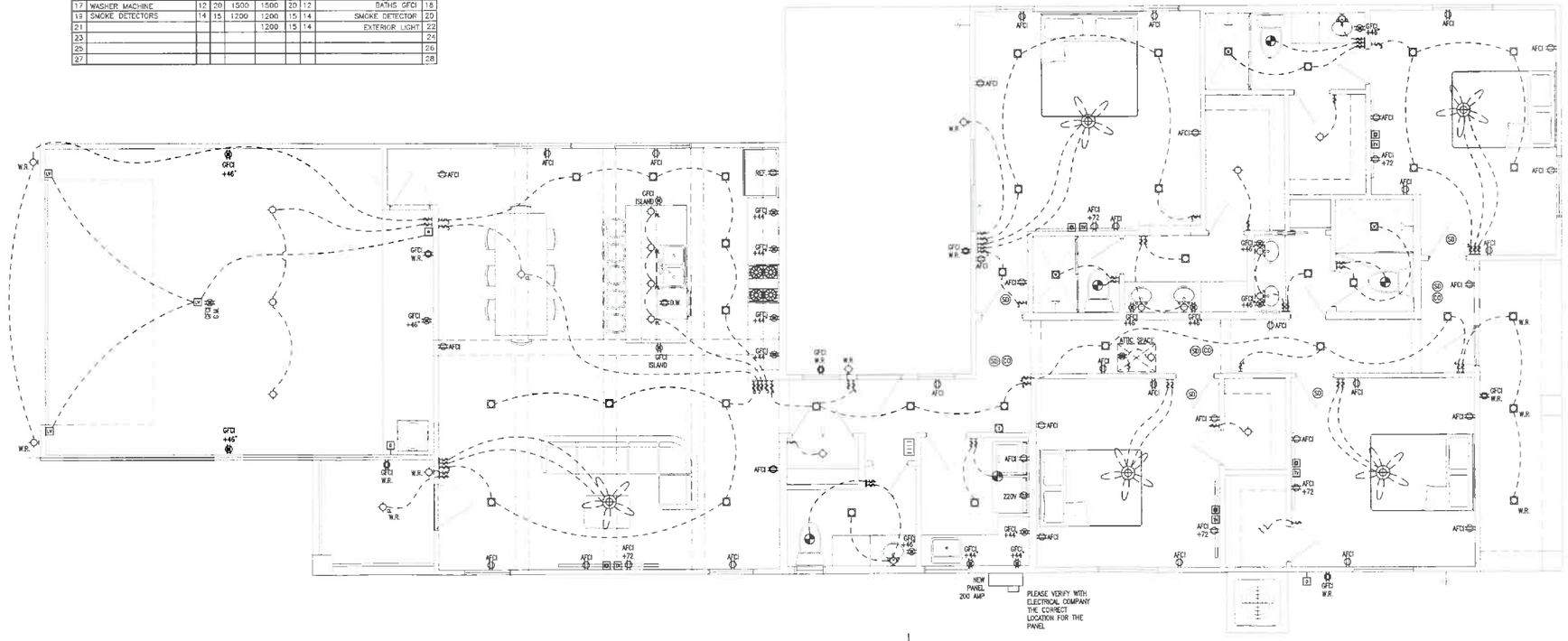
No	DESCRIPTION		W	AMP	LOAD	LOAD	AMP	W	DESCRIPTION	No
1	AC UNIT			40	7500	5000	30		DRYER	2
3			Ø					10		4
5	NEW KITCHEN APPLICANCE		12	20	1500	4500	30		WATER HEATER	6
7	NEW KITCHEN APPLICANCE		12	20	1500			10		8
9	MICROWAVE		12	20	1500	1200	15	14	M. BEDROOM AFCI	10
11	LIVING ROOM	AFCI	14	15	1200	1200	15	14	BED 2 AFCI	12
13	DINING AREA	AFCI	14	15	1200	1200	15	14	BED 3 AFCI	14
15	LAUNDRY		12	20	1500	1200	15	14	BED 4 AFCI	16
17	WASHER MACHINE		12	20	1500	1500	20	12	BATHS GFCI	18
19	SMOKE DETECTORS		14	15	1200	1200	15	14	SMOKE DETECTOR	20
21						1200	15	14	EXTERIOR LIGHT	22
23										24
25										26
27										28

ELECTRICAL GENERAL NOTES

1. SEE MECHANICAL PLAN FOR LOCATION OF THERMOSTAT
2. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION OF MECHANICAL UNITS AND REQUIREMENTS PRIOR TO ROUGH-IN.
3. SEE STRUCTURAL DRAWINGS FOR EXACT LOCATION OF ATTIC ACCESS AND AIR HANDLER PLATFORMS.
4. ALL CIRCUITS IN ELECTRIC PANELS SHALL BE IDENTIFIED PER NEC 408:4
5. LABEL PANEL: "CAUTION-SERIES RATED SYSTEM RATED 22K/10K AMPERES, IDENTIFIED REPLACEMENT COMPONENTS REQUIRED " SEE 240.86 (B) FOR INTERRUPTING RATING MARKING FOR END -USE EQUIPMENT
6. PROVIDE CARBON MONOXIDE DETECTOR WITH GAS APPLIANCES AND OUTSIDE OF ALL SLEEPING AREAS PER IRC (R315)
7. ALL BRANCH CIRCUITS THAT SUPPLY 125-VOLT, SINGLE-PHASE, 15 AND 20 AMPHERE RECEPTACLE OUTLETS, LIGHTING AND SMOKE DETECTORS INSTALLED IN DWELLING UNIT SHALL BE PROTECTED BY A COMBINATION TYPE OR BRANCH/FEEDER TYPE ARC-FAULT CIRCUIT INTERRUPTER(S) INSTALLED TO PROVIDE PROTECTION OF THE ENTIRE BRANCH CIRCUIT. (IRC SECTION E3802.12)
8. PROVIDE MINIMUM OF (2) 20-AMPERE - RATED BRANCH CIRCUITS FOR RECEPTACLES LOCATED IN THE KITCHEN, PANTRY, BREAKFAST AND DINING AREAS, SEPARATE 20-AMPHERE - RATED BRANCH CIRCUIT TO THE LAUNDRY AND SEPARATE 20 - AMPHERE - RATED BRANCH CIRCUIT FOR BATHROOM RECEPTACLE(S).
9. RECEPTACLE OUTLETS FOR RANGES AND CLOTHES DRYERS SHALL BE 3-POLE WITH GROUNDING TYPE, FOUR-WIRE, GROUNDING TYPE FLEXIBLE CORD WILL BE REQUIRED FOR CONNECTION OR RANGES AND CLOTHES DRYERS. THE BONDING JUMPER SHALL NOT BE CONNECTED BETWEEN THE NEUTRAL AND THE FRAME OF THE APPLIANCE.
10. CEILING FANS OR LIGHTS SHALL HAVE PROPER LISTED BOXES, WHEN INSTALLED UNDER COVERS MUST BE LISTED FOR WET LOCATIONS
11. BATHROOM RECEPTACLES SHALL BE SUPPLIED BY AY LEAST ONE (1) 20 AMP BRANCH CIRCUIT & SHALL HAVE NO OTHER OUTLETS.
12. SMOKE DETECTORS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING AND BE EQUIPPED WITH BATTERY BACKUP DETECTORS SHALL SOUND AN ALARM AUDIBLE IN ALL SLEEPING AREAS OF THE DWELLING IN WHICH THEY ARE LOCATED. SMOKE DETECTORS SHALL BE INTERCONNECTED AND HARD WIRED.
13. LUMINARIES INSTALLED IN WET OR DAMP LOCATIONS SHALL BE INSTALLED SO THAT WATER CANNOT ENTER OR ACCUMULATE IN WIRING COMPARTMENTS, LAMPHOLDERS OR OTHER ELECTRICAL TARTS. ALL LUMINARIES INSTALLED IN WET LOCATIONS SHALL BE MARKED "SUITABLE FOR WET LOCATIONS"ALL LUMINARIES INSTALLED IN DAMP LOCATIONS SHALL BE MARKED "SUITABLE FOR WET LOCATIONS" OR SUITABLE FOR DAMP LOCATIONS"
14. PER E4002.14: IN AREAS SPECIFIED IN SECTION E3901.1, 125-VOLT, 15 AND 20 - AMPERE RECEPTACLE SHALL BE LISTED TAMPER-RESISTANT.
15. PER-WIRED FUTURE LIGHTING BOXES TO BE FAN RATED PER IRC E3908.5.
16. PER N1104.1 (R404.1)A MINIMUM OF 75 PERCENT OF THE LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURE SHALL BE HIGH-EFFICACY LAMPS OR A MINIMUM OF 75 PERCENT OF THE PERMANENTLY INSTALLED LIGHTING FIXTURE SHALL CONTAIN ONLY HIGH-EFFICACY LAMPS.
17. ALL EXTERIOR FIXTURES TO BE WATERPROOF /WEATHERPROOF.
18. NO ALUMINUM CONDUCTORS OR COPPER CLAD ALUMINUM (WIRES) ARE PERMITTED TO BE USED WITHIN THE CITY OF PHOENIX ALL ELECTRICAL CONDUCTORS ARE TO BE SOLID OR STRANDED COPPER ONLY. (PER CITY OF PHOENIX DEVELOPMENT CODE).

ALL RECEPTACLES OUTLETS (GFCI & AFCI) SHALL BE TAMPER-RESISTANT.
ALL OUTDOOR GFCI RECEPTACLES OUTLETS SHALL BE:
WATER PROTECTED (WP)
WATER RESISTANT (WR)
TAMPER RESISTANT (TR)

NOTE: RECESSED LIGHT FIXTURES SHALL BE IC LISTED OR THERMALLY PROTECTED.



N

ELECTRICAL PLAN

SCALE: 1/4" =1' (0 2 4')

BLUEPRINTS and DESIGN

DESIGNER:
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DRAWINGS:
ELECTRICAL PLAN

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1	----	----
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SHEET:
E1

THE DWELLING MUST BE PROVIDED WITH HEATING AND COOLING CAPABLE OF MAINTAINING A ROOM TEMPERATURE BETWEEN 70 AND 90 DEGREES AT A POINT 3 FEET ABOVE THE FLOOR, AND 2 FEET FROM EXTERIOR WALLS (IRC R303.9 AS AMENDED)

DUCT LEAKAGE TEST OR ROUGH-IN DUCT LEAKAGE TEST WILL BE PERFORMED, PER SECTION N1102.2.2.

THE WHOLE HOUSE MECHANICAL VENTILATION IS REQUIRED, PER SECTION N1103.5 AND TABLE M1507.3.3.(1)

THE FAN MOTOR FOR THE MECHANICAL WHOLE HOUSE FAN TO COMPLY WITH MINIMUM EFFICACY RATINGS, PER TABLE 1102.5.1.

THE BLOWER DOOR TEST IS REQUIRED, PER SECTION N1102.4.1.2.

M1502.1 GENERAL. DRYER EXHAUST SHALL BE INDEPENDENT OF ALL OTHER SYSTEMS, AND SHALL CONVEY THE MOISTURE TO THE OUTDOORS.

M1502.2 DUCT TERMINATION. EXHAUST DUCTS SHALL TERMINATE ON THE OUTSIDE OF THE BUILDING. EXHAUST DUCT TERMINATION SHALL BE IN ACCORDANCE WITH THE DRYER MANUFACTURER'S INSTALLATION INSTRUCTIONS. EXHAUST DUCTS SHALL TERMINATE NOT LESS THAN 3 FEET IN ANY DIRECTIONS SHALL BE EQUIPPED WITH A BACKDRAFT DAMPER. SCREENS SHALL NOT BE INSTALLED AT THE DUCT TERMINATION.

M1502.3. DUCT SIZE. THE DIAMETER OF THE EXHAUST DUCT SHALL BE AS REQUIRED BY THE CLOTHES DRYER'S LISTING AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

M1502.4. TRANSITION DUCTS. TRANSITION DUCTS SHALL NOT BE CONCEALED WITHIN CONSTRUCTION. FLEXIBLE TRANSITION DUCTS USED TO CONNECT THE DRYER TO THE EXHAUST DUCT SYSTEM SHALL BE LIMITED TO SINGLE LENGTHS, NOT TO EXCEED 8 FEET AND SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 2158A

M1502.5. EXHAUST DUCTS SHALL BE CONSTRUCTED OF MINIMUM 0.016-INCH9THICK (0.4mm) RIGID METAL DUCTS, HAVING SMOOTH INTERIOR SURFACES WITH JOINTS RUNNING IN THE DIRECTION OF AIR FLOW. EXHAUST DUCTS SHALL NOT BE CONNECTED WITH SHEET-METAL SCREWS OR FATTENING MEANS WHICH EXTEND INTO THE DUCT.

M1502.4.4.1 DUCT LENGTH. THE MAXIMUM LENGTH OF A CLOTHES DRYER EXHAUST DUCT SHALL NO EXCEED 35 FEET (7620 mm) FROM THE DRYER LOCATION TO THE WALL OR ROOF TERMINATION. THE MAXIMUM LENGTH OF THE DUCT SHALL BE REDUCED 2.5 FEET (762 mm) FOR EACH 45 degree (0.8 rad) BEND AND 5 FEET (1524 mm) FOR EACH 90 degree (1.6 rad) BEND. THE MAXIMUM LENGTH OF THE EXHAUST DUCT DOES NOT INCLUDE THE TRANSITION DUCT.

REFRIGERANT CIRCUIT ACCESS PORT CAPS SHALL BE FITTED WITH LOCKING-TYPE TAMPER RESISTANT CAPS OR OTHERWISE SECURED TO PREVENT UNAUTHORIZED ACCESS.

WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM SHALL BE DESIGNED IN ACCORDANCE WITH SECTIONS M1507.3.1 THROUGH M1507.3.3.

M1507.3.1 SYSTEM DESIGN. THE WHOLE HOUSE VENTILATION SYSTEM SHALL CONSIST OF ONE OR MORE SUPPLY OR EXHAUST FANS, OR A COMBINATION OF SUCH, AND ASSOCIATED DUCTS AND CONTROLS. LOCAL EXHAUST OF SUPPLY FANS ARE PERMITTED TO SERVE AS SUCH A SYSTEM. OUTDOOR AIR DUCTS CONNECTED TO THE RETURN SIDE OF AN AIR HANDLER SHALL BE CONSIDERED TO PROVIDE SUPPLY VENTILATION.

M1507.3.2 SYSTEM CONTROL. THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM SHALL BE PROVIDED WITH CONTROL THAT ENABLE MANUAL OVERRIDE.

M1507.3.3 MECHANICAL VENTILATION RATE. THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM SHALL PROVIDE OUTDOOR AIR AT A CONTINUOUS RATE OF NOT LESS THAN THAT DETERMINED IN ACCORDANCE WITH TABLE M1507.3.3 (1)

MECHANICAL LEGEND

10X10	AIR DROP FROM CEILING
	RETURN AIR
	EXHAUST FAN
	R-8 FLEX DUCTS
	AIR HANDLER
	CONDENSER

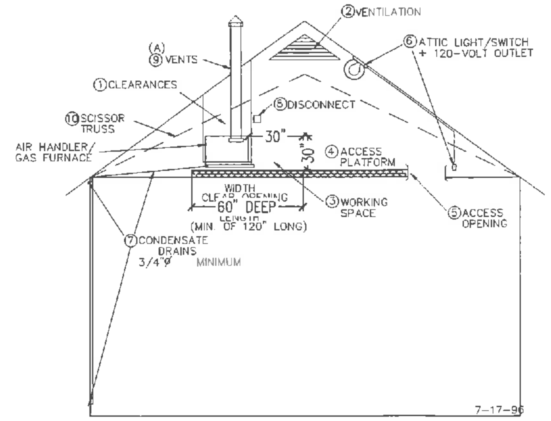


TABLE M1507.3.3(1) CONTINUOUS WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM AIRFLOW RATE REQUIREMENTS					
DWELLING UNIT FLOOR AREA (SQUARE FEAT)	NUMBER OF BEDROOMS				
	0-1	2-3	4-5	6-7	>7
	AIRFLOW IN CFM				
<1500	30	45	60	75	90
1501-3000	45	60	(75)	90	105
3001-4500	60	75	90	105	120
4501-6000	75	90	105	120	135
6001-7500	90	105	120	135	150
>7500	105	120	135	150	165

EQUIMENT SCHEDULE

	MARK:	QTY:	SEER:	MODEL#	AMP:	TONS:	MANUFACTURE:	SYSTEM:
AIR HANDLER	1	1	14	ASPT61D14	15	0	GOODMAN	1
CONDENSER	2	1	14	GSX140601	50	5.0	GOODMAN	1

NOTE:
LUMINAIRE AT OR NEAR THE APPLIANCE SHALL BE PROTECTED FROM DAMAGE BY LOCATION OR LAMP GUARDS

REQUIREMENTS FOR ATTIC AIR HANDLER OR GAS FURNACE

1. CLEARANCES FROM COMBUSTABLE MATERIALS FOR GAS FIRED FURNACES MUST BE AS SPECIFIED IN THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND APPLICABLE LOCAL BUILDING CODES. (A)

2. VENTILATION – THE NET Free VENTILATION AREA SHALL NOT BE LESS THAN 1/150 of the area OF THE SPACE VENTILATED. EXCEPTIONS: THE AREA MAY BE 1/300 OF THE AREA OF THE SPACE VENTILATED PROVIDED 50 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE VENTILATED AT LEAST 3 FEET ABOVE EAVE OR CORNICE VENTS WITH THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVE OR CORNICE VENTS.
* REQUIRED ATTIC VENTILATION EXCEEDS REQUIREMENTS FOR FURNACE COMBUSTION AIR. (A)

3. WORKING SPACE – A WORKING PLATFORM must NOT be LESS THAN 30 inches in depth FOR THE ENTIRE SERVICE SIDE OF THE FURNACE WITH A minimum height of 30 inches head clearance.

4. access platform – the access platform must be a minimum of 24 inches wide continuous floor not more than 20 feet in length unless the entire AIR HANDLER/furnace can be serviced from the attic access opening.
* make provisions for proper insulation to be installed under the platforms when required.

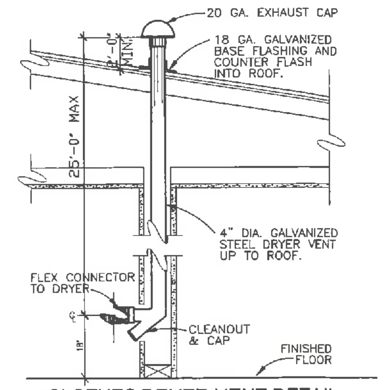
5. access opening – attic openings and passageways to the AIR HANDLER/furnace must be 30 INCHES X 30 INCHES. exception: the access opening into the space may be 22 inches by 30 inChes provided the largest piece of equipment can be removed through this opening.

6. attic light – a permanent 120-volt receptical outlet and lighting fixture controlled by a switch located at the required passage way opening shall be provideD at or near the AIR HANDLER/furnace.

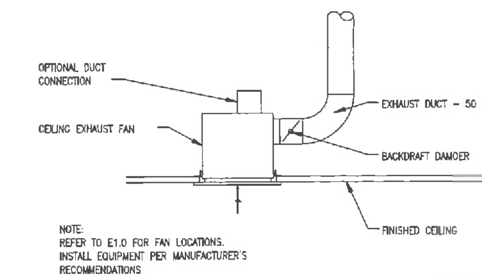
7. condensate drains – a secondary drain pan must be installed under the coil section to prevent damage to the ceiling below. the secondary drain must be installed with a minimum grade of 1/8 inch per 12 inches of horizontal run and [illegible] must be located at or near the AIR HANDLER/furnace.

9. vents– type b vent, size per furnace manufactures specifications. vents must terminate in accordance to u.m.c. requirements provided they are at least 8 feet from any vertical wall of 45 DEGREES or more and terminate not less that 2 feet higher than the highest point they pass through. (A)

10. if furnace is located below scissor truss the recommend insulating proceedure is along ceiling LINE below the furnace not along scissor above to provide proper combustion AIR with out COMPROMISING the integrity of the thermal envelope by penetrating it with combustion ducts. (A)

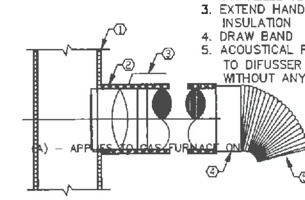


CLOTHES DRYER VENT DETAIL

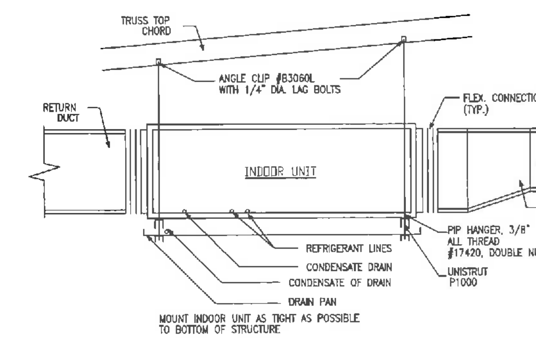


CEILING MOUNTED EXHAUST FAN DETAIL

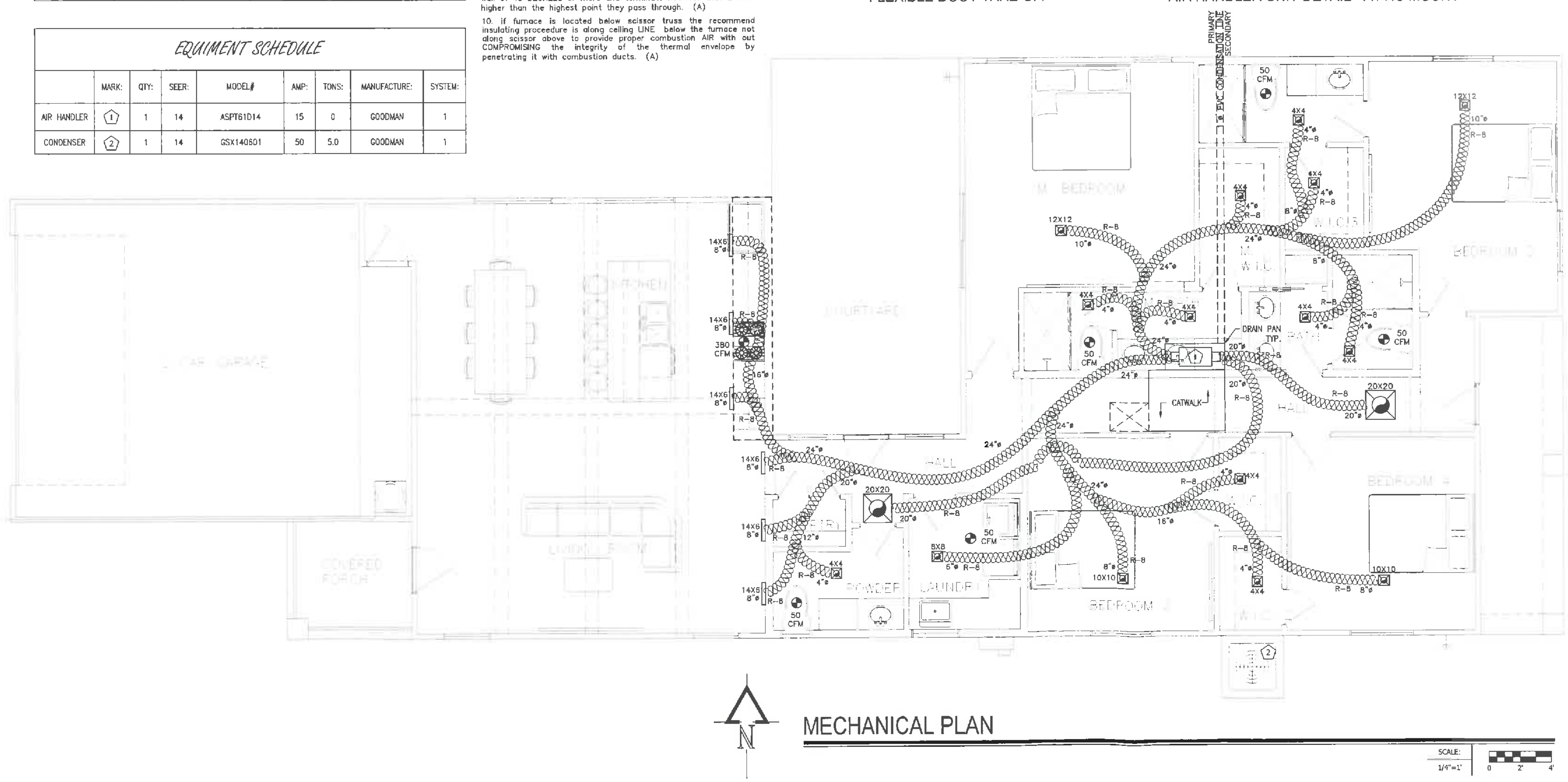
KEYNOTES
1. DUCT INSTALLATION TYPICAL
2. "SPIN-IN" FITTING & VOLUME DAMPER WITH LOCKING QUADRANT. DAMPER SHAFT PARALLEL TO MAIN FLOW
3. EXTEND HANDLE ABOVE INSULATION
4. DRAW BAND
5. ACOUSTICAL FLEXIBLE DUCT TO DIFUSSER MAX 4" STRAIGH WITHOUT ANY TURN



FLEXIBLE DUCT TAKE-OFF



AIR HANDLER UNIT DETAIL - ATTIC MOUNT



MECHANICAL PLAN

SCALE: 1/4"=1'

DESIGNER:
JUAN MANUEL GUTIERREZ
ADDRESS: 4316 W. BERRIDGE LN. GLENDALE, AZ 85301
PHONE NUMBER: 480-395-4305
EMAIL: JUANBLUE2015@YAHOO.COM
PLANS DRAWN BY: VLS

PROJECT:19-205
61 ST AVE CUSTOM HOME
OWNER: TMG INVESTMENT PROPERTIES LLC
APN: 144-10-151
ADDRESS: 6707 N 61ST AVE GLENDALE, AZ 85301
19-205

DRAWINGS:
MECHANICAL PLAN

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REVISIONS:

DELTA:	DATE:	REVIEWER:
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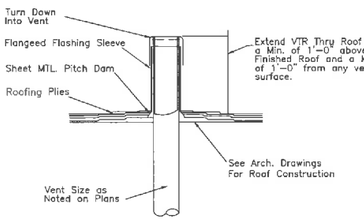
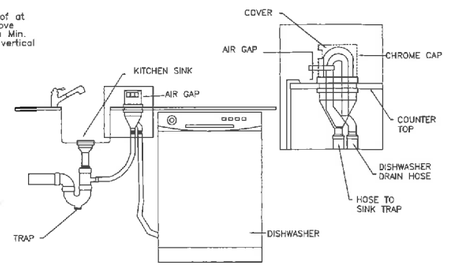
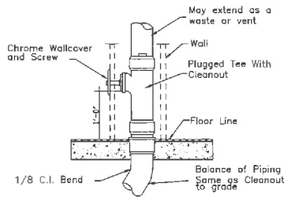


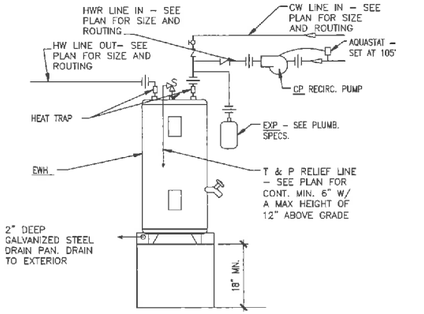
VENT THRU ROOF DIAGRAM



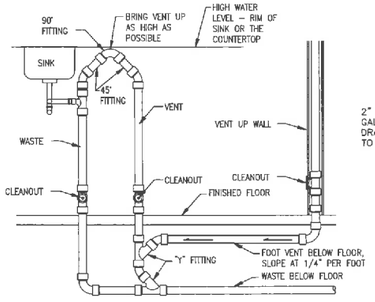
AN AIR GAP FOR THE DISHWASHER IS VERY IMPORTANT TO PREVENT BACKFLOW.



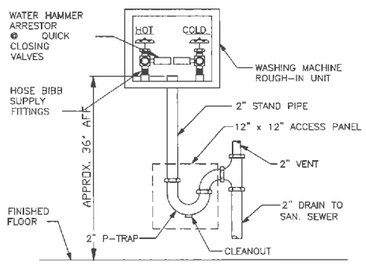
WALL CLEANOUT DIAGRAM (WCO)



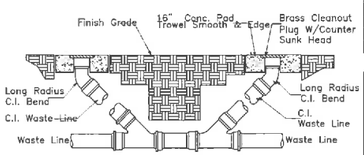
ELECTRIC WATER HEATER DETAIL



TWO-WAY CLEANOUT DETAIL



WASHING MACHINE HOOK-UP DETAIL



Two-Way Cleanout
To Grade Diagram (COTG)

SUPLY FIXTURE COUNT				
TYPE OF FIXTURE OR GROUP OF FIXTURE	FIXTURE		FIXTURE UNIT VALUE	TOTAL FIXTURE UNIT
	EXIST.	NEW		
BATH TUB(WITH/WITHOUT OVERHEAD SHOWER	0	0	1.4	0.00
CLOTHES WASHER	0	0	1.4	0.00
DISHWASHER	0	0	1.4	0.00
FULL BATH GROUP WITH BATHTUB (WITH OR WITHOUT SHOWER HEAD OR SHOWER STALL	0	3	3.6	10.80
HALF BATH GROUP (WATER CLOSET & LAVATORY)	0	1	2.6	2.60
HOSE BIB (INCLUDE ONLY 2)	0	2	2.5	5.00
KITCHEN GROUP (DISHWASHER AND SINK WITH OR WITHOUT GARBAGE DISPOSAL)	0	1	2.5	2.50
KITCHEN SINK	0	0	1.4	0.00
BAR SINK	0	0	1	0.00
LAUNDRY GROUP (CLOTHES WASHER STANDPIPE AND LAUNDRY TUB) LAUNDRY TUB	0	1	2.5	2.50
LAVATORY	0	2	0.7	1.40
SHOWER STALL	0	0	1.4	0.00
WATER CLOSET (TANK TYPE)	0	0	2.2	0.00
OTHER		0		
			TOTAL	24.80

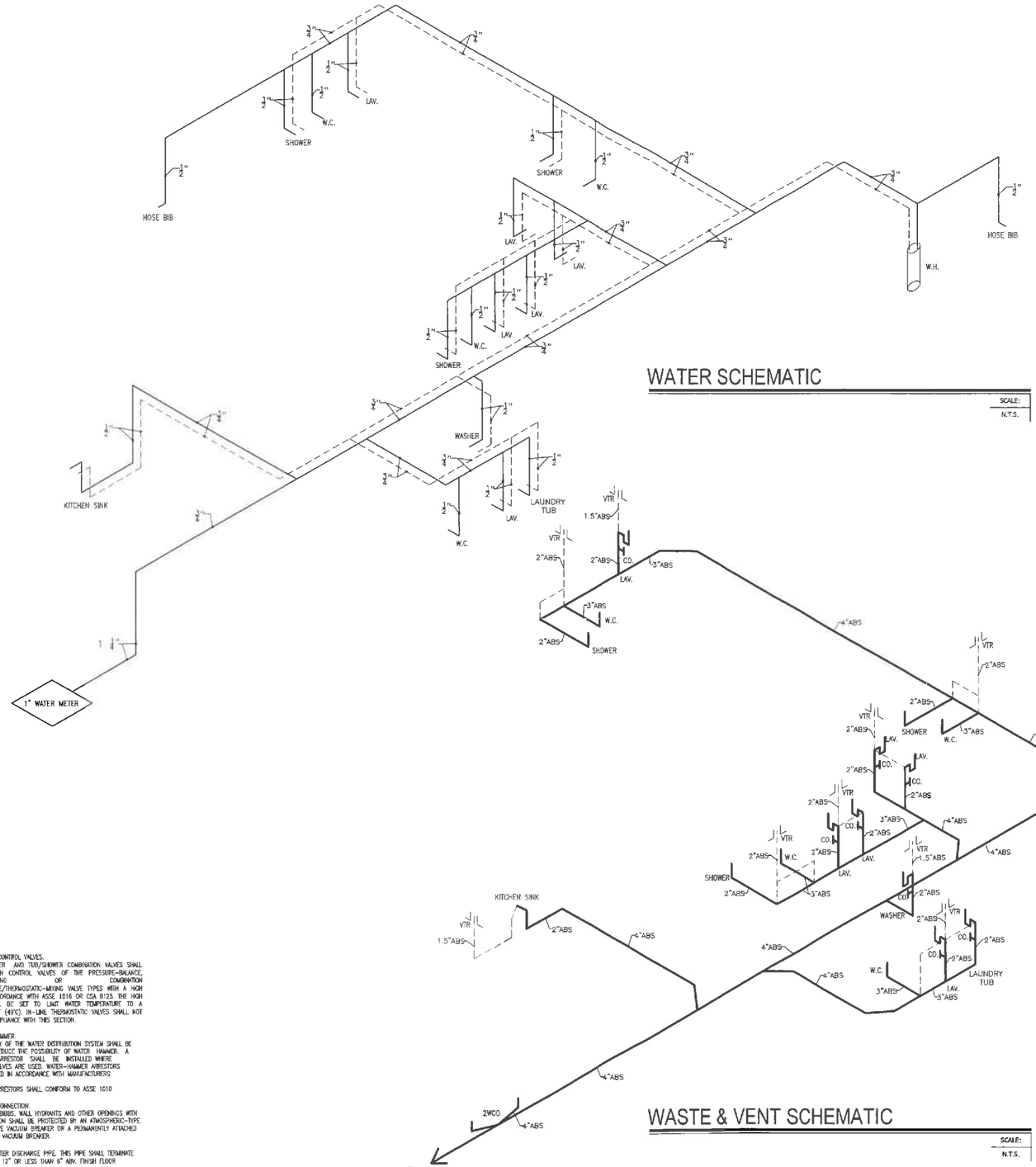
1 1/4" BUILDING SUPPLY
1" WATER METER
DEVELOPED LENGTH FROM METER FARTHEST FIXTURE = 205'–0"
GREATER THAN 40–49 PSI PRESSURE

P2708.3 SHOWER CONTROL VALVES.
INDIVIDUAL SHOWER AND TUB/SHOWER COMBINATION VALVES SHALL BE EQUIPPED WITH CONTROL VALVES OF THE PRESSURE–BALANCE, THERMOSTATIC–MIXING OR COMBINATION PRESSURE–BALANCE/THERMOSTATIC–MIXING VALVE TYPES WITH A HIGH LIMIT STOP IN ACCORDANCE WITH ASSE 1016 OR CSA B125. THE HIGH LIMIT STOP SHALL BE SET TO LIMIT WATER TEMPERATURE TO A MAXIMUM OF 122F (49°C). IN–LINE THERMOSTATIC VALVES SHALL NOT BE USED FOR COMPLIANCE WITH THIS SECTION.

P2903.5 WATER HAMMER.
THE FLOW VELOCITY OF THE WATER DISTRIBUTION SYSTEM SHALL BE CONTROLLED TO REDUCE THE POSSIBILITY OF WATER HAMMER. A WATER–HAMMER ARRESTOR SHALL BE INSTALLED WHERE QUICK–CLOSING VALVES ARE USED. WATER–HAMMER ARRESTORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
WATER–HAMMER ARRESTORS SHALL CONFORM TO ASSE 1010

P2902.4.3 HOSE CONNECTION.
SILLCOCKS, HOSE BIBBS, WALL HYDRANTS AND OTHER OPENINGS WITH A HOSE CONNECTION SHALL BE PROTECTED BY AN ATMOSPHERIC–TYPE OR PRESSURE–TYPE VACUUM BREAKER OR A PERMANENTLY ATTACHED HOSE CONNECTION VACUUM BREAKER.

NOTE: WATER HEATER DISCHARGE PIPE. THIS PIPE SHALL TERMINATE NOTE MORE THAN 12" OR LESS THAN 6" ABV. FINISH FLOOR



WATER SCHEMATIC

SCALE: N.T.S.

WASTE & VENT SCHEMATIC

SCALE: N.T.S.

BLUEPRINTS and DESIGN

DESIGNER:

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PLANS DRAWN BY: VLS

PROJECT:19-205

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OWNER: TMG INVESTMENT PROPERTIES LLC
APN: 144-10-151
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19-205

DRAWINGS:

PLUMBING
SCHEMATIC

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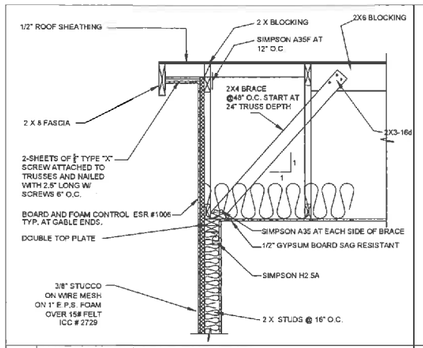
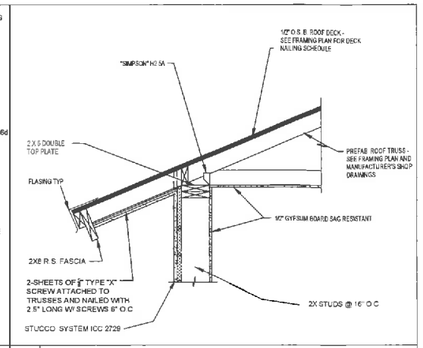
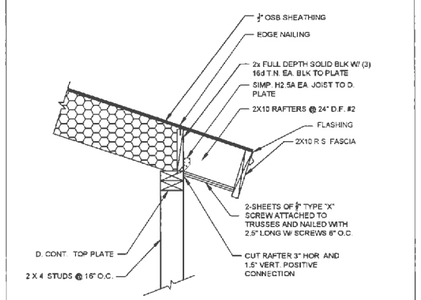


22 1HR RATED GABLE END (TYP) SCALE: NTS



21 1 HR FIRED RATED EAVE SCALE: NTS



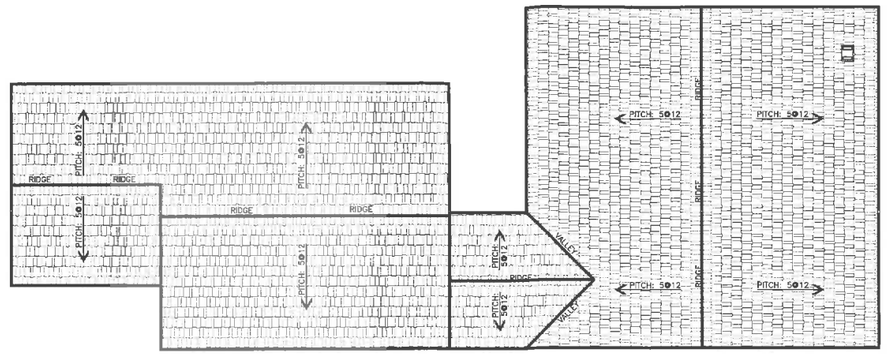
23 ROOF JOISTS AT EXTERIOR WALL SCALE: NTS

POST SCHEDULE	
P1	(2) 2X6
P2	(2) 2X4
P3	(2) 2X4 W 1 KING STUD
P4	(3) 2X4

BEAM SCHEDULE	
B1	(2) 2X6
B2	(2) 2X8
B3	3 ½" x 12 G.L.B.
B4	5 ¼"X12" G.L.B
B5	6 ¼"X13 ½" G.L.B. (EXPOSED)
B6	8X6 (EXPOSED)

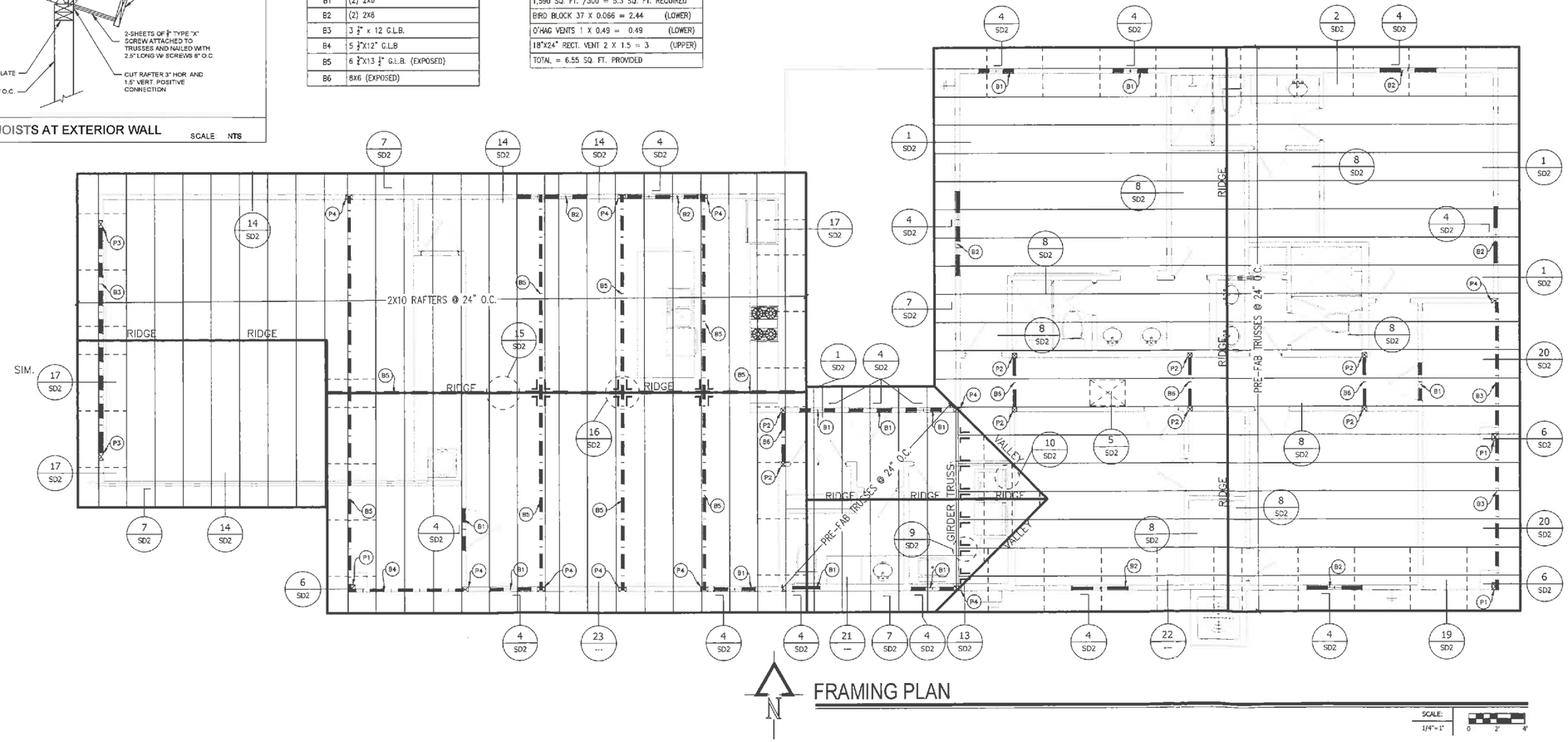
LEGEND	
JL	HUS/HHUS/HGUS
— ' —	HEADER

ATTIC VENT CALCULATION	
1,590 SQ. FT. /300 = 5.3 SQ. FT. REQUIRED	
BIRD BLOCK 37 X 0.066 = 2.44	(LOWER)
0'HAG VENTS 1 X 0.49 = 0.49	(LOWER)
18"X24" RECT. VENT 2 X 1.5 = 3	(UPPER)
TOTAL = 6.55 SQ. FT. PROVIDED	



ROOF PLAN

SCALE: 1/8"=1'



FRAMING PLAN

SCALE: 1/4"=1'

BLUEPRINTS and DESIGN

DESIGNER:

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ADDRESS: 4316 W. BERRIDGE LN. GLENDALE, AZ 85301
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PROJECT:19-205

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19-205

DRAWINGS:

FRAMING PLAN
ROOF PLAN

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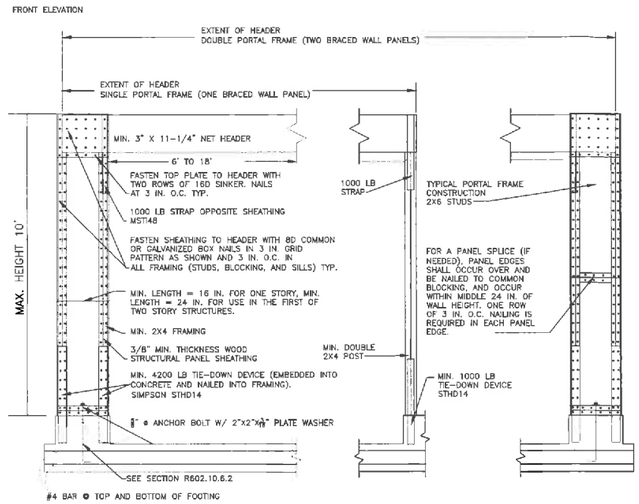
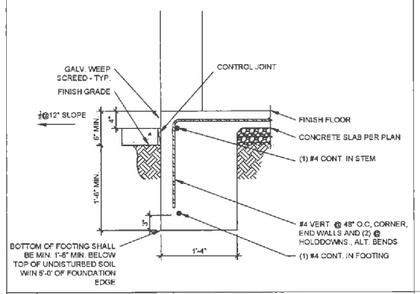
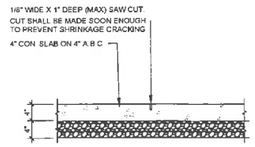


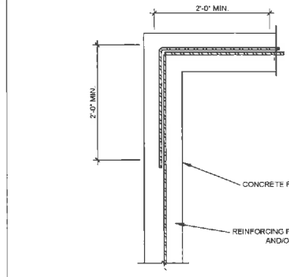
10 **ALTERNATE BRACED WALL PANEL ADJACENT TO A DOOR OR WINDOW OPENING METHOD PFH**



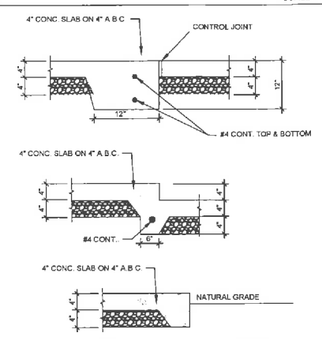
9 **TYPICAL FOOTING AT DOOR OPEN'G** SCALE: NTS



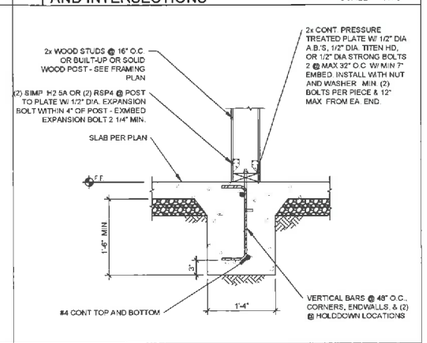
5 **CONTROL JOINT** SCALE: NTS



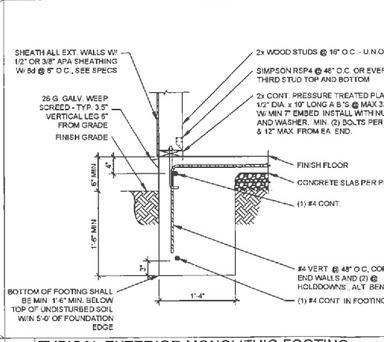
1 **TYP. LAPS AT CORNERS AND INTERSECTIONS** SCALE: NTS



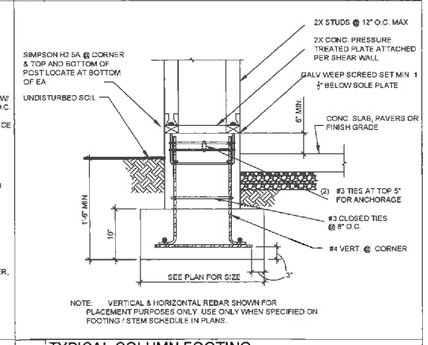
6 **CONCRETE SLAB**



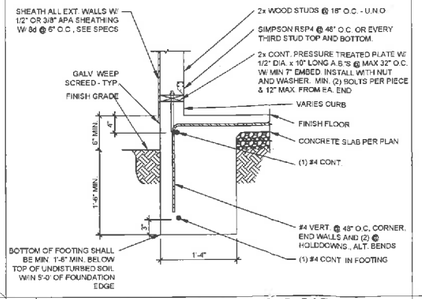
2 **BEARING WALL MONO FOOTING** SCALE: NTS



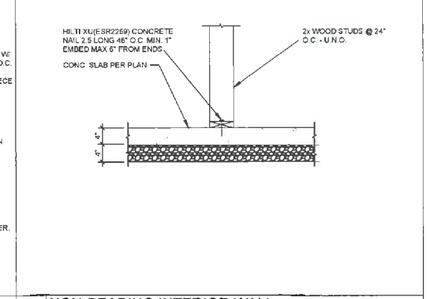
7 **TYPICAL EXTERIOR MONOLITHIC FOOTING** SCALE: NTS



3 **TYPICAL COLUMN FOOTING** SCALE: NTS



8 **TYPICAL MONOLITHIC FOOTING @ GARAGE** SCALE: NTS



4 **NON-BEARING INTERIOR WALL** SCALE: NTS

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61 ST AVE CUSTOM HOME

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19-205

DRAWINGS:

STRUCTURAL DETAILS

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1	----	----
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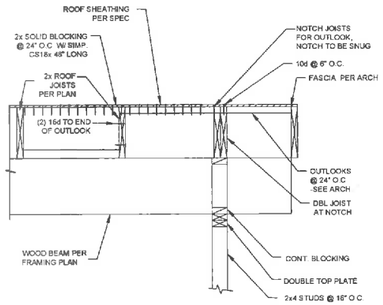
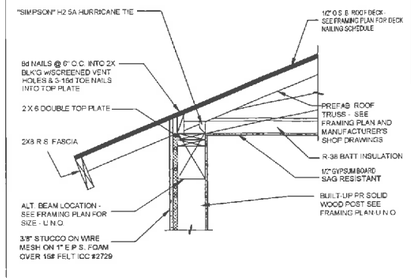
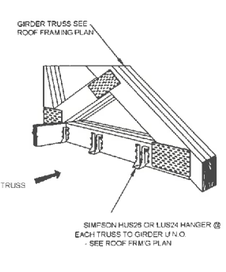
SD1



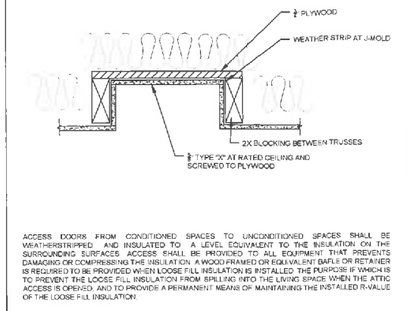
17 ROOF JOISTS AT EXTERIOR WALL SCALE: NTS



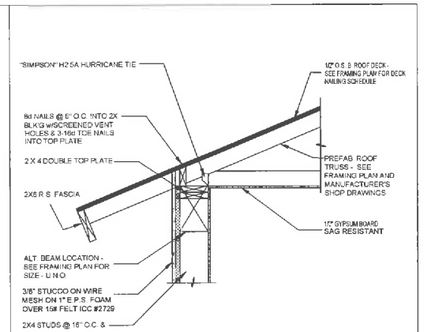
13 GIRDER TRUSS TO WALL SCALE: NTS



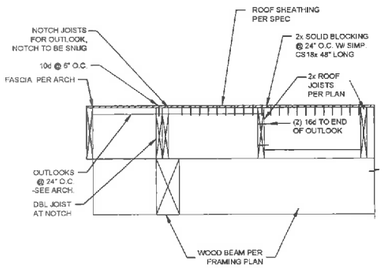
9 TRUSS TO GIRDER TRUSS SCALE: NTS



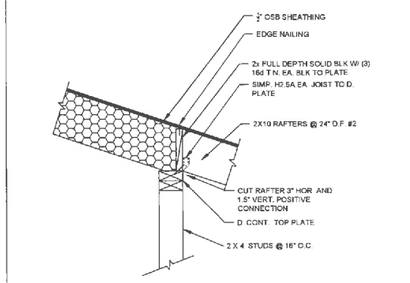
5 TYPICAL ATTIC ACCESS SCALE: NTS



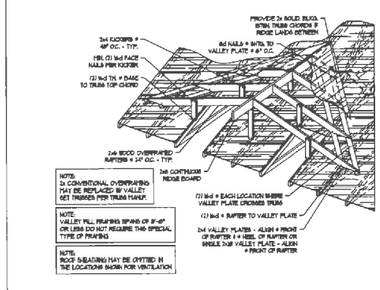
1 TRUSS TO WALL SCALE: NTS



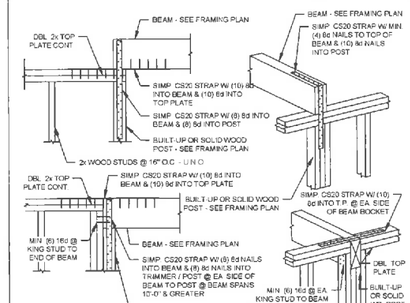
18 ROOF JOISTS AT BEAM SCALE: NTS



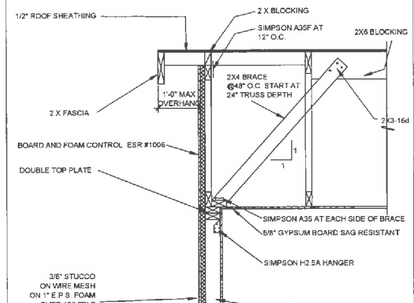
14 ROOF JOISTS AT EXTERIOR WALL SCALE: NTS



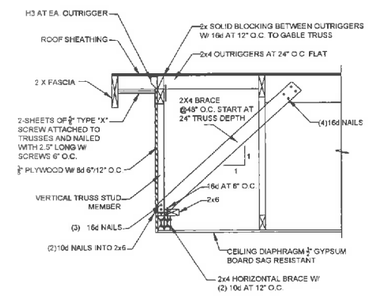
10 SUPPORT OF VALLEY RAFTERS AT OVERFRAMED ROOF SCALE: NTS



6 BEAM AT WALL CONNECTIONS SCALE: NTS



2 GABLE END (TYP) SCALE: NTS



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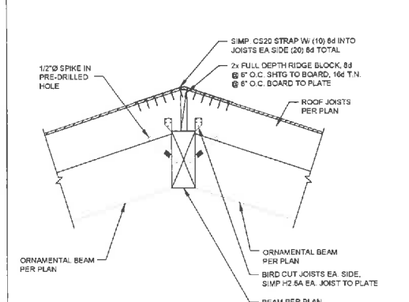
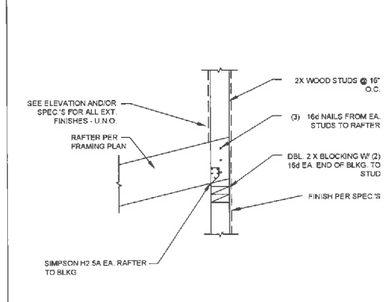
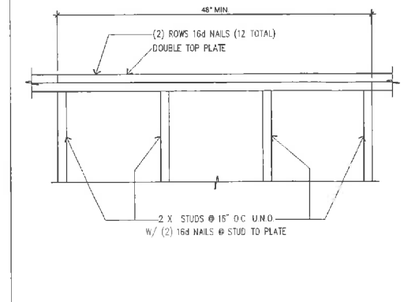


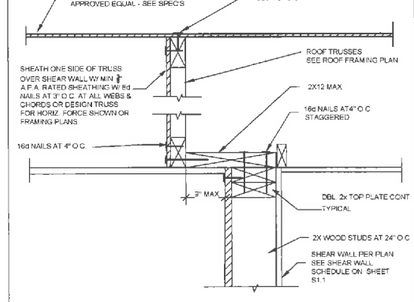
15 ROOF JOISTS AT RIDGE BEAM SCALE: NTS



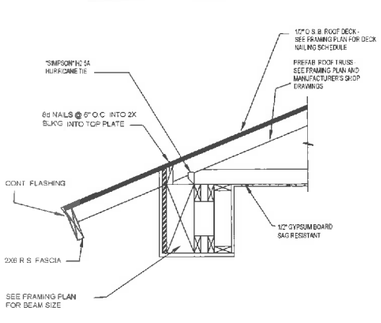
11 RAFTERS TO WALL SCALE: NTS



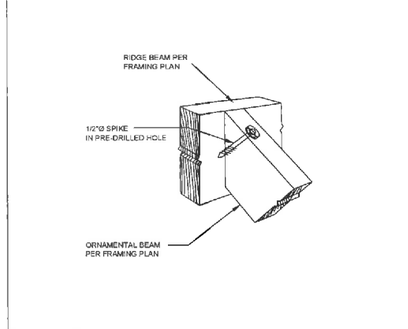
7 TOP PLATE SPLICE SCALE: NTS



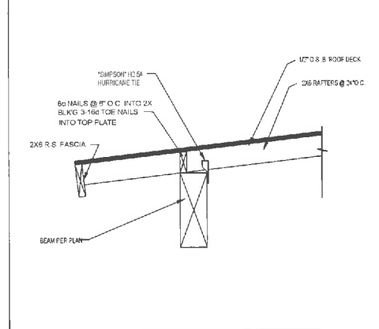
3 TRUSSES / WALL / SHEAR TRANSFER SCALE: NTS



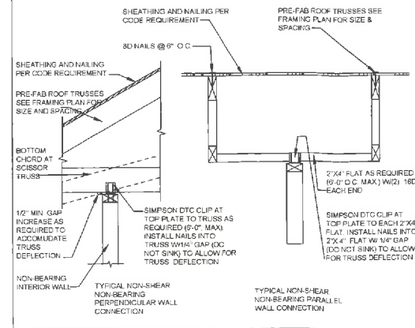
20 TRUSS TO BEAM SCALE: NTS



16 ORNAMENTAL BEAM TO BEAM



12 RAFTERS TO BEAM SCALE: NTS



8 NON-LOAD BEARING WALLS @ TOP SCALE: NTS

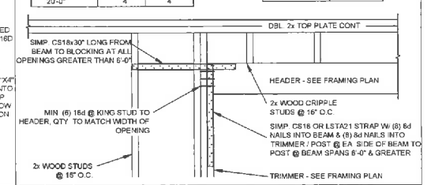
USE THIS SCHEDULE WHEN KING STUDS NOT NOTED ON PLAN

2x6 STUD WALL(D.F. #2)

NUMBER OF KING STUDS REQUIRED, D.F. #2		
OPENING WIDTH	10'-1" PLT.	14'-1" PLT.
UP TO 2'-0"	1	1
4'-0"	1	2
5'-0"	1	2
6'-0"	1	2
8'-0"	2	2
12'-0"	2	3
14'-0"	3	4
16'-0"	3	4
18'-0"	3	4
20'-0"	4	4

2x4 D.F. #2 STUD WALL

# OF KING STUDS REQUIRED,	
OPENING WIDTH	9'-1" PLT
UP TO 3'-0"	1
4'-0"	1
5'-0"	2
6'-0"	2
7'-0"	2
8'-0"	2
9'-0"	2
10'-0"	3
12'-0"	3



4 WINDOW AND OR DOOR HEADER, K.S. SCHEDUEL SCALE: NTS

DESIGNER:

JUAN MANUEL GUTIERREZ

ADDRESS: 4316 W. BERRIDGE LN. GLENDALE, AZ 85301
PHONE NUMBER: 480-395-4305
EMAIL: JUANBLUE2015@YAHOO.COM
PLANS DRAWN BY: VLS

PROJECT:19-205

61 ST AVE CUSTOM HOME

OWNER: TMG INVESTMENT PROPERTIES LLC
APN: 144-10-151
ADDRESS: 6707 N 61ST AVE GLENDALE, AZ 85301
19-205

DRAWINGS:

STRUCTURAL DETAILS

TO AVOID MISTAKES DURING CONSTRUCTION ANY DISCREPANCIES BETWEEN THE PLANS SHALL BE REPORTED TO THE OWNER AND GENERAL CONTRACTOR IN WRITING BEFORE PROCEEDING. IN ORDER TO AVOID MISTAKES READ AND CHECK ALL PLANS AND BIDS BEFORE CONSTRUCTION.

REVISIONS:

DELTA:	DATE:	REVIEWER:
1	----	----
2	----	----
3	----	----

SHEET:

SD2

STRUCTURAL NOTES

DESIGN CRITERIA
CODE: 2018 IBC/IRC
ROOF LOADS
DEAD LOAD: 24 PSF
ROOF LIVE LOAD: 20 PSF DEFLECTION: L/240, L/360 LIVE
FLOOR LOADS
DEAD LOAD: 25 PSF (WOOD OR CARPET) (15 PSF T.C. DL, 10 PSF B.C. DL)
FLOOR LIVE LOAD: 40 PSF: DEFLECTION L/300 TOTAL, L/480 LIVE

WIND DESIGN DATA:
1. BASIC WIND SPEED (3-SECOND GUST) – 115 MPH, EXP B
2. BUILDING CATEGORY – II

GENERAL CONSTRUCTION NOTES:

GENERAL REQUIREMENTS METHOD OF CONSTRUCTION:

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION.

TYPICAL DETAILS
UNLESS NOTED OTHERWISE, DETAILS ON STRUCTURAL DRAWINGS ARE TYPICAL AS INDICATED BY CUTS, REFERENCES, OR TITLES. ALL DETAILS SHOWN SHALL BE IMPORTED INTO THE PROJECT AT ALL APPROPRIATE LOCATIONS, WHETHER SPECIFICALLY INDICATED OR NOT. TYPICAL DETAILS MAY OR MAY NOT BE REFERENCED ON THE DOCUMENTS, BUT SHALL APPLY AT ALL LOCATIONS, UNLESS NOTED OTHERWISE. WHERE NO DETAIL CUTS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK SHOWN ELSEWHERE ON THE PROJECT. FOR BIDDING PURPOSES, WHERE ANY SHOWN MEMBER OR STRUCTURAL ELEMENT IS NOT SIZED ON THE DOCUMENTS, THE LARGEST SIMILAR MEMBER USED IN THE PROJECT SHALL BE UTILIZED.

DISCREPANCIES:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS AND CONDITIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL INFORM THE ARCHITECT OR ENGINEER OF ANY DISCREPANCIES OR OMISSIONS NOTED ON THE DRAWINGS. ANY SUCH DISCREPANCIES, OMISSIONS, OR VARIATION NOT REPORTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

BIDDING
IN CASE OF CONFLICTS, MORE COSTLY REQUIREMENTS GOVERN FOR BIDDING. SUBMIT CLARIFICATION REQUEST PRIOR TO PROCEEDING WITH WORK.

SHORING:
IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO DESIGN AND PROVIDE ADEQUATE SHORING, BRACING, FORM-WORK, ETC., AS REQUIRED FOR THE PROTECTION OF LIFE AND PROPERTY DURING THE CONSTRUCTION. IMPOSED LOADS SHALL NOT EXCEED THE DESIGN LIVE LOAD FOR THE STRUCTURE.

OTHER TRADES:
ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL WITH APPROPRIATE TRADES. DRAWINGS AND SUBCONTRACTOR PRIOR TO CONSTRUCTION.

DESIGN LOAD
IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND OWNER TO VERIFY THE WEIGHTS OF BUILDING MATERIALS BEING USED INCLUDING FINISHES (IE ROOF TILE/ FLOORING) DO NOT EXCEED THE LOADS STATED ABOVE ON THIS SHEET AND THAT DEFLECTION REQUIREMENTS DO NOT EXCEED L/360 LIVE LOAD DEFLECTION AND L/240 TOTAL LOAD DEFLECTION, IF SUCH LOADING OR REQUIREMENTS IS GREATER THAN WHAT IS STATED ON THIS SHEET, THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD PRIOR TO STARTING CONSTRUCTION AND SHALL NOT PROCEED UNTIL RECEIVING WRITTEN DOCUMENTATION OF NEW DESIGN AND ALLOWABLE LOADS

MISCELLANEOUS
CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING THE DESIGN OF MEMBERS AND CONNECTIONS FOR ANY PORTIONS OF THE STRUCTURE NOT INDICATED ON DESIGN DRAWINGS INCLUDED BUT NOT LIMITED TO SHOP DRAWINGS, SHORING, FORM WORK, STEEL AND WOOD MEMBERS

CONCRETE :

DESIGNED FOR 2500 P.S.I. U.N.O. – HOWEVER, MIX DESIGNED AS FOLLOWS:

1. CONVENTIONAL FOUNDATIONS – 3000 P.S.I. @ 28 DAYS, TYPE II CONC. -5 BAG MIN., MAX SLUMP = 4", MAX W/C RATIO OF .59
2. FLOOR SLABS – 4" THICK W/ 3000 P.S.I. @ 28 DAYS, MAX. SLUMP = 2" PRIOR TO ADDITION OF ADMIXTURES, USE FIBERMESH 650 OR TUF-STRAND SF MACRO FIBER REINFORCING @ 3 LBS/C.Y., MAX W/C RATIO OF .56
3. PROVIDE CONTROL JOINTS @ 12'-0" O.C. MAX., SAW CUT SLAB WITHIN 6 HOURS OF POURING OF CONCRETE. MAX RATIO OF 1/1.5 BETWEEN JOINTS PERPENDICULAR TO EACH OTHER.
4. WALKS & DRIVES – 3000 P.S.I. @ 28 DAYS, NO FLY ASH. MAX. SLUMP = 2" PRIOR TO ADDITION OF ADMIXTURES, USE FIBERMESH 650 OR TUF-STRAND SF MACRO FIBER REINFORCING @ 3 LBS/C.Y., MAX W/C RATIO OF .56
5. MAXIMUM SIZE OF AGGREGATE SHALL BE 1 1/2" INCH PER ASTM C57 OR C33.
6. SEE LAP SPLICES AND EMBEDMENT SCHEDULE THIS SHEET FOR LENGTHS
7. PORTLAND CEMENT SHALL CONFORM TO ASTM C-150, TYPE II.
8. MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED, EXCEPT THAT SLABS ON GRADE NEED BE VIBRATED ONLY AROUND SLEEVES, DUCTS AND WHERE REINFORCING IS REQUIRED.
9. NO MORE THAN 90 MINUTES SHALL ELAPSE BETWEEN CONCRETE BATCHING AND CONCRETE PLACEMENT UNLESS APPROVED BY TESTING AGENCY.
10. COLD/HOT WEATHER CONCRETING: PROTECT CONCRETE FROM DAMAGE OR REDUCED STRENGTH IN COMPLIANCE WITH ACI 305 AND ACI 306.
11. CONCRETE MIXES SHALL BE DESIGNED BY A CERTIFIED INDEPENDENT LABORATORY AND APPROVED BY THE ENGINEER.
12. RECOMMENDED CURING PROCEDURE FOR ALL CONCRETE SLABS WHERE ARCHITECTURAL OR HIGH GRADE FINISH IS REQUIRED:
    CURE UNCOVERED SLABS ON GRADE AND CONCRETE OVER METAL DECK WITH POLYETHYLENE FOR 5 DAYS. TAPE JOINTS WITH 6 INCH LAPS AND COVER WITH SAND. CURING COMPOUND FOR OTHER WORK SHALL BE COMPATIBLE WITH APPLIED FINISH, CONFORM TO ASTM C-309 AND SHALL BE CLEAR ON UNCOVERED STRUCTURE AND WHITE PIGMENTED ON COVERED STRUCTURE. APPLY AT A RATE SUFFICIENT TO RETAIN MOISTURE, BUT NOT LESS THAN 1 GALLON PER 200 SQUARE FEET.

REINFORCING STEEL :

1. ASTM A-615, NO TWIST, FY = 40 KSI. #3 & SMALLER, FY = 60 KSI #4 & LARGER.
2. ALL VERTICAL AND HORIZONTAL STEEL IN MASONRY AND CONCRETE SHALL BE TIED WITH METAL WIRE TIES AT ITS NOTED LOCATION AS SHOWN ON THE STRUCTURAL DETAILS. TIES SHALL BE PLACED AT CLOSE ENOUGH SPACING TO PREVENT MOVEMENT OF STEEL DURING PLACEMENT OF CONCRETE OR GROUT. WHEN THE LOCATION OF THE REINFORCING STEEL IS NOT NOTED, CONTACT STRUCTURAL ENGINEER OR ARCHITECT FOR CLARIFICATION BEFORE PROCEEDING.
3. MASONRY VENEER SHALL BE ANCHORED PER ONE OF THE METHODS SPECIFIED IN THE CURRENT ADOPTED I.B.C. WITH A MINIMUM OF ONE 22 GA. GALVANIZED METAL ANCHOR FOR EACH TWO SQUARE FEET OF WALL AREA.
4. THE MINIMUM COVER FOR REINFORCING STEEL SHALL BE AS WHAT IS NOTED ON THE STRUCTURAL DETAILS BUT NO LESS THAN WHAT IS SHOWN BELOW. WHEN NO SPECIFICATION IS NOTED, THE FOLLOWING MINIMUM COVER SHALL BE USED:
    4.1. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
    4.2. EXPOSED TO EARTH OR WEATHER IN #6 BARS AND SMALLER: 1 1/2"
    4.3. EXPOSED TO EARTH OR WEATHER IN #6 BARS AND LARGER: 2"
    4.4. NOT EXPOSED TO WEATHER/EARTH IN BEAMS, GIRDERS, OR COLUMNS: 1 1/2"
    4.5. NOT EXPOSED TO WEATHER/EARTH IN SLABS, WALLS OR JOINTS: 3/4"

DRY PACK

DRY PACK IN SPACES LARGER THAN 3/8" SHALL BE ONE PART CEMENT AND 2–1/2 PARTS SAND WITH JUST ENOUGH WATER TO HYDRATE CEMENT AND FORM A BALL SHOWING MOISTURE ON THE SURFACE WHEN SQUEEZED. IT SHALL BE RAMMED IN TIGHT TO MAXIMUM DENSITY ATTAINABLE. MINIMUM 28 DAY STRENGTH TO BE 5,000 P.S.I.

SHEATHING :

ROOF SHEATHING
ROOF SHEATHING SHALL BE 15/32" CDX STD. GRADE SHEATHING (5–PLY) W/ EXTERIOR GLUE. SPAN INDEX RATIO 32/16 W/ STAMP OF APPROVED TESTING AGENCY ALL ROOF SHEATHING SHALL HAVE: 8d COMMON AT 6" O.C. AT EDGES, BOUNDARY, BLOCKING, LEDGERS, SHEAR WALLS AND PLATES, 8d AT 12" O.C. AT INTERMEDIATE FRAMING MEMBERS. USE PSCA OR PSCL CLIPS AT 24" O.C. AT EDGES NOT DIRECTLY OVER TRUSSES/JOISTS. CLIPS TO MATCH SHEATHING THICKNESS

FLOOR SHEATHING
FLOOR SHEATHING TO BE 3/4" TONGUE AND GROOVE UNDER–LAYMENT. (48/24) GROUP 1 W/ EXTERIOR GLUE WITH STAMP OF AN APPROVED TESTING AGENCY. ALL FLOOR SHEATHING SHALL HAVE: 2 1/2" LONG SIMPSON WSNTL212S 6" O.C. AT EDGES, BOUNDARY, BLOCKING, SHEAR WALLS, BEAMS, AND PLATES, 12" O.C. AT INTERMEDIATE FRAMING MEMBERS

WALL/SHEAR SHEATHING
EXTERIOR WALL AND SHEAR WALL SHEATHING TO BE 3/8" OR 1/2" APA RATED SHEATHING W/ SPAN INDEX RATIO 24/0 W/ STAMP OF APPROVED TESTING AGENCY. BLOCK ALL PANEL EDGES ALL WALL SHEATHING SHALL HAVE: 8d COMMON NAILS AT 6" O.C. AT EDGES, BOUNDARY, BLOCKING, LEDGERS, SHEAR WALLS AND PLATES, 8d AT 12" O.C. AT INTERMEDIATE FRAMING MEMBERS.

TRUSSES

ALL TRUSSES MUST BE DESIGNED FOR THE LOADS SPECIFIED UNDER DESIGN CRITERIA.

1. ALL TRUSSES TO BE FABRICATED BY AN ARIZONA APPROVED FABRICATOR.
2. ALL GIRDER TRUSSES SHALL BE 2–PLY MINIMUM WITH A BOTTOM CHORD COMPOSED OF DOUGLAS FIR LARCH LUMBER OR W/ A SPECIFIC GRAVITY NO LESS THAN .5
3. DESIGN SHALL BE SUBMITTED AND SEALED BY AN ENGINEER REGISTERED IN THE STATE WHERE THE STRUCTURE IS TO BE ERECTED.
4. CUTTING OF TRUSSES IS NOT PERMITTED. ALL TRUSS REPAIRS MUST BE APPROVED BY THE ENGINEER OF RECORD.
5. DRAG TRUSSES MUST BE DESIGNED FOR THE REQUIRED DRAG LOAD AS SPECIFIED ON THE FRAMING PLAN
6. ALL GABLE END WALL TRUSSES SHALL BE FULLY SHEATHED ON ONE SIDE W/ 3/8" APA RATED SHEATHING NAILED WITH 8d (.131" DIA. x 2" LONG) AT EDGES AND BOUNDARY AND 12" FIELD. MAXIMUM SPACING OF VERTICALS IN GABLED END WALL TRUSS SHALL BE 16" O.C.
7. TRUSSES SHALL BE DESIGNED TO SUPPORT SOLAR PANELS FOR BOTH UPLIFT AND DOWNWARD FORCES AT A SINGLE POINT. MINIMUM 2–350# (WIND) MOVING POINT LOAD

FRAMING :

1. JOIST HANGERS AND OTHER MISCELLANEOUS FRAMING ANCHORS SHALL BE AS MANUFACTURED BY SIMPSON COMPANY OR APPROVED EQUAL
2. ALL EXT. BEARING WALLS TO BE 2X6 D.F. #2 STUDS @ 16" O.C. AT PLATES UP TO 14'–1" AND 12" O.C AT PLATES UP TO 16'–1"
3. ALL BEARING PARTITIONS SHALL HAVE DOUBLE TOP PLATES
4. ROOF AND FLOOR PLYWOOD SHEATHING PANEL EDGES SHALL BEAR ON FRAMING MEMBERS AND BUTT ALONG THEIR CENTER LINES WITH PANEL EDGES STAGGERED AND FACE GRAIN PERPENDICULAR TO SUPPORT.
5. SEE FRAMING PLAN(S) FOR HEADERS OVER ALL OPENINGS IN EXTERIOR WALLS – UNLESS NOTED OTHERWISE.
6. USE DBL. STUDS UNDER BRG. POINTS OF GIRDER AND BEAMS, BUT BUILT UP STUD WITH NO LESS THAN WIDTH OF BEAM/GIRDER – U.N.O. ON PLANS.
7. ALL FRAMING MEMBERS SHALL BE BLOCKED AND BRIDGED PER CURRENT CODE.

LUMBER :

1. ALL SAWN LUMBER SHALL BEAR STAMP OF WWPA OR APPR'D. TESTING AGENCY, AND CONSIST OF MAXIMUM MOISTURE CONTENT OF 19% AT TIME OF FABRICATION. ALL LUMBER IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED.
2. ROOF JOISTS, FLOOR JOISTS, BEAMS, LEDGERS, AND PLATES TO BE DOUGLAS–FIR #2 OR BETTER, U.N.O.
3. ALL INT. & EXT. BRG. STUDS TO BE DOUGLAS–FIR #2 OR BETTER SPACED PER FRAMING PLAN., U.N.O
4. AT NON–BRG. STUDS TO BE DOUGLAS–FIR #2 OR BETTER AT 24" O.C.
5. ALL BUILT UP POSTS TO BE SAME GRADE AS WALL STUDS; NAILED WITH (2) 16d @ 12" O.C. FOR FULL HEIGHT.
6. ALL SOLID POSTS TO BE OF #1 OR BETTER.
7. TRIMMERS SHOULD BE NAILED TO KING STUDS W/ (2) 16d @ 12" O.C. FOR FULL HEIGHT.
8. ALL POSTS ON HIGHER LEVELS TO BE EXTENDED TO THE LOWER LEVELS UP TO FOUNDATION WITH BLOCKING TO THE FULL DEPTH OF FLOOR CAVITY.
9. 4x AND 6x SOLID SAWN BEAMS MAY BE USED IN LIEU OF (2) PLY AND (3) PLY BEAMS RESPECTIVELY AS LONG AS THE BEAM DEPTHS ARE THE SAME AND GRADE D.F. #1 IS USED
10. ALL LAG BOLTS/SCREWS SHALL HAVE 33% OF THEIR HOLES FILLED WITH EPOXY PRIOR TO DRIVING LAG INTO MEMBER

STRUCTURAL STEEL

1. ASTM A992 GRADE 50 FOR ALL WIDE FLANGE SECTIONS AND ASTM A–36 FOR ALL OTHER SECTIONS EXCEPT AS FOLLOWS: PIPE STEEL: ASTM A–53 GRADE B OR A–501. TUBE STEEL: ASTM A–500 GRADE B (FY = 46 KSI) FOR SIZES UP TO 5/8" THICK. ASTM A572 GRADE 50 FOR MEMBERS SPECIFICALLY MARKED ON PLANS AND SCHEDULES WITH SYMBOL (50).
2. BOLTS: ASTM A325 OR A490. ALL BOLTS USED WITH WOOD SHALL USE STANDARD WASHERS (ASTM F844) BOLTS IN CONCRETE (ANCHOR BOLTS) STANDARD (ASTM F1554 GRADE 36) OR HIGH STRENGTH (HS) (ASTM A449) HIGH STRENGTH BOLTS SHALL BE TIGHTENED TO "SNUG TIGHT" CONDITION PER AISC, UNLESS SPECIFICALLY CALLED OUT TO BE "TORQUED AND TESTED" BY A CALIBRATED TORQUE WRENCH. OPEN WEB JOISTS PER STEEL JOIST INSTITUTE SPECIFICATIONS. LATEST AISC MANUAL PARTS 1 THROUGH 4 AND AISC SPECIFICATIONS APPLY (EXCEPT SECTION A7 AND CHAPTER N) AND EXCLUDING SECTIONS 3 AND 4 OF THE 'AISC CODE OF STANDARD PRACTICE.
3. ALL BOLTS (INCLUDING ANCHOR BOLTS) SHALL BE "FULL DIAMETER".
4. ALL STRUCTURAL STEEL BE FABRICATED BY A FABRICATOR APPROVED IN ACCORDANCE WITH I.B.C. SECTION 1704.2. APPROVED FABRICATORS SHALL MAINTAIN CURRENT CERTIFICATION BY ONE OF THE FOLLOWING AGENCIES: AISC.
5. FABRICATORS NOT CERTIFIED BY ONE OF THE ABOVE AGENCIES SHALL SUBMIT WRITTEN PROCEDURAL AND QUALITY CONTROL PROCEDURES FOR REVIEW AND APPROVAL PRIOR TO FABRICATION. PERIODIC IN–SHOP INSPECTIONS SHALL BE MADE BY AN APPROVED TESTING LAB PER I.B.C. SECTION 1704.3.
6. PROVISIONS FOR TEMPERATURE EXPANSION DURING ERECTION: STRUCTURAL STEEL SHALL BE SO DETAILED AND ERECTED SO THAT DURING ERECTION, BEFORE THE DECK IS COVERED AND INSULATED, TEMPERATURE CHANGES ANTICIPATED, DO NOT CAUSE UNACCEPTABLE PERMANENT MISALIGNMENT AND DO NOT THRUST OR PULL AGAINST WALLS OR OTHER ADJOINING CONSTRUCTION TO CAUSE THEM TO BE OVERSTRESSED OR DAMAGED. SUCH PROVISIONS CAN BE MADE BY PROVIDING TEMPORARY SLIP CONNECTIONS AT SUFFICIENT INTERVALS..

WELDING:

1. ALL CONSTRUCTION AND TESTING PER AMERICAN WELDING SOCIETY CODES AND RECOMMENDATIONS. ALL WELDING SHALL BE BY WELDERS HOLDING CURRENT CERTIFICATES VALIDATED BY AN INDEPENDENT LAB & HAVING CURRENT EXPERIENCE IN TYPE OF WELD CALLED FOR. THE CONTRACTOR SHALL SUBMIT WELDING CERTIFICATES FOR EACH WELDER PRIOR TO COMMENCING THE WORK.
2. WELDING RODS TO BE LOW HYDROGEN TYPE, E70 SERIES, PER AWS D1.1 TYPICALLY EXCEPT E–6010 SERIES FOR STEEL SHEET METAL PER AWS D1.3 AND REINFORCING WELDMENTS PER AWS D1.4. USE E90 SERIES WELDING RODS FOR A706 REBAR.
3. ALL FULL–PENETRATION GROOVE OR BUTT WELDED SPLICES IN MATERIAL THICKER THAN 5/16" SHALL BE INSPECTED BY AN INDEPENDENT TESTING LABORATORY, WHICH SHALL TEST ULTRASONICALLY A SUFFICIENT NUMBER OF WELDS BUT NOT LESS THAN 25 PERCENT OF TOTAL PER WELDER, TO CERTIFY ALL SPLICES AS MEETING OR EXCEEDING STRENGTH OF MATERIAL SPLICED. TWO COPIES OF ALL TEST REPORTS AND A LETTER OF SUCH CERTIFICATION SHALL BE SUBMITTED TO THE ENGINEER OF RECORD.
4. FIELD INDICATED WELDS MAY BE DONE IN SHOP. SHOP INDICATED WELDS MAY BE DONE IN FIELD ONLY IF APPROVED PRIOR TO CONSTRUCTION.

SOIL :

SOILS REPORT: NOT PROVIDED

1. TREAT ALL AREAS UNDER FLOOR SLAB ON GRADE & ADJACENT TO ALL STEM WALLS FOR TERMITE PROTECTION. PROVIDE A WRITTEN 5 YEAR GUARANTEE AGAINST TERMITE INFESTATION TO BEGIN AT DATE OF SUBSTANTIAL COMPLETION; OR PER THE CURRENT ADOPTED IRC/IBC AND LOCAL BUILDING CODES.
2. FOUNDATION DESIGN BASED ON 1500 PSF BEARING CAPACITY AT 1'–6" BELOW TOP OF UNDISTURBED SOIL
3. ALL FOOTINGS SHALL BE MINIMUM 1'–6" BELOW FINISH GRADE WITHIN 5'–0" OF FOUNDATION EDGE
4. ALL FOOTING EXCAVATIONS SHALL BE PROPERLY STEPPED IN MAXIMUM 12" INCREMENTS WITH LEVEL BOTTOMS AND SHALL BE FREE OF ALL LOOSE, SATURATED, OR OTHERWISE UNSTABLE SOIL
5. FINISH GRADE ON ALL SIDES OF ALL STRUCTURES SHALL SLOPE AWAY A MINIMUM 5%. (6" DROP IN 10'–0"). IF OTHER CONDITIONS EXIST CONTACT ARCHITECT AND SOILS ENGINEER FOR APPROVAL.
6. POSITIVE DRAINAGE AWAY FROM THE STRUCTURE SHALL BE MAINTAINED DURING ALL PARTS OF CONSTRUCTION AND DURING THE LIFE OF THE BUILDING. COVER ALL TRENCHES, FOOTING EXCAVATIONS AND OTHER DEPRESSIONS TO PREVENT COLLECTION OF WATER NEXT TO STRUCTURE DURING CONSTRUCTION
7. ALL UTILITY TRENCHES AND EXCAVATION SHALL BE RE–COMPACTED TO A MINIMUM 98% OPTIMUM PER ASTM D698 IN MAXIMUM 6" LIFTS.

NAILING SCHEDULE : TABLE 2304.9.1 FASTENING SCHEDULE

CONNECTION	FASTENING	LOCATION
1. JOIST TO SILL OR GIRDER	3-8d COMMON 3-3" x 0.131" NAILS	TOENAIL
2. BRIDGING TO JOIST	2-8d COMMON 2-3" x 0.131" NAILS	TOENAIL
3. 1" x 6" SUBFLOOR OR LESS TO EACH JOIST	2-8d COMMON	FACE NAIL
4. WIDER THAN 1" x 6" SUBFLOOR TO EACH JOIST	3-8d COMMON	FACE NAIL
5. 2" SUBFLOOR TO JOIST OR GIRDER	2-16d COMMON	BLIND AND FACE NAIL
6. SOLE PLATE TO JOIST OR BLOCKING SOLE PLATE TO JOIST OR BLOCKING AT BRACED WALL PANEL	16d AT 16" O.C 3" x 0.131" NAILS AT 8" O.C. 3-16d AT 16" O.C. 4-3" x 0.131" NAILS AT 16"	TYPICAL FACE NAIL BRACED WALL PANELS
7. TOP PLATE TO STUD	2-16d COMMON 3-3" x 0.131" NAILS	END NAIL
8. STUD TO SOLE PLATE	4-8d COMMON 4-3" x 0.131" NAILS 2-16d COMMON 3-3" x 0.131" NAILS	TOENAIL END NAIL
9. DOUBLE STUDS	16d AT 24" O.C. 3" x 0.131" NAIL AT 8" O.C	FACE NAIL
10. DOUBLE TOP PLATES DOUBLE TOP PLATES	16d AT 16" O.C. 3" x 0.131" NAILS AT 12" O.C 8-16d COMMON 12-3" x 0.131" NAILS	TYPICAL FACE NAIL LAP SPLICE
11. BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE	3-16d SINKER	TOENAIL
12. RIM JOIST TO TOP PLATE	8d AT 6" O.C. 3" x 0.131" NAIL AT 6" O.C.	TOENAIL
13. TOP PLATES, LAPS AND INTERSECTIONS	2-16d .148x 3"	FACE NAIL
14. CONTINUOUS HEADER, TWO PIECES	16d COMMON	16" O.C. ALONG EDGE
15. CEILING JOIST TO PLATE	3-8d COMMON 5-3" x 0.131" NAILS	TOENAIL
16. CONTINUOUS HEADER TO STUD	4-8d COMMON	TOENAIL
17. CEILING JOIST, LAPS OVER PARTITIONS	3-16d COMMON MIN 4-3" x 0.131" NAILS	FACE NAIL
18. RAFTER OR TRUSS TO PLATE	3-8d COMMON 3-3" x 0.131" NAILS	TOENAIL
19. BUILT-UP CORNER STUDS	16d COMMON 3" x 0.131" NAILS	24" O.C 16" O.C.
20. BUILT-UP GIRDER AND BEAMS	2-0N AT 32" O.C. 3" x 0.131" NAILS AT 24" O.C. 2-20d COMMON 3-3" x 0.131" NAILS	FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES FACE NAIL AT ENDS AND AT EACH SPLICE
21. 2" PLANKS	16d COMMON	AT EACH BEARING
22. COLLAR TIE TO RAFTER	3-10d COMMON 4-3" x 0.131" NAILS	FACE NAIL
23. JACK RAFTER TO HIP	3-10d COMMON 4-3" x 0.131" NAILS 2-16d COMMON 3-3" x 0.131" NAILS	TOENAIL FACE NAIL
24. ROOF RAFTER TO 2-BY RIDGE BEAM	2-16d COMMON 3-3" x 0.131" NAILS 2-16d COMMON 3-3" x 0.131" NAILS	TOENAIL FACE NAIL
25. JOIST TO BAND JOIST	3-16d COMMON 5-3" x 0.131" NAILS	FACE NAIL
26. LEDGER STRIP	3-16d COMMON 4-3" x 0.148" NAILS	FACE NAIL

NAIL SIZES — 2 7/8" LONG

20d COMMON	.192" DIA X 4" LONG	16d SINKER:	
16d COMMON	.162" DIA X 3 1/2" LONG	.148" DIA	ALL NAIL TYPES
10d COMMON	.148" DIA X 3" LONG	X 3 1/4" LONG	NOT SPECIFIED
8d COMMON	.131" DIA X 2 1/2" LONG	10d SINKER:	SHALL BE 12" DIA X COMMON

GR. 60 STEEL	HOOK EMBEDMENT			EXTENSION	STRAIGHT BAR		
BAR SIZE	3000 PSI	4000 PSI	5000 PSI	90 DEG.	3000 PSI	4000 PSI	5000 PSI
#3	6	6	6	4.5	16	14	13
#4	8	7	6	6	22	19	17
#5	10	8	7	7.5	27	24	21
#6	12	10	9	9	33	28	26
#7	13	12	10	10.5	48	42	37
#8	15	13	12	12	55	47	43

NOTES:
1. EMBEDMENT LENGTH IS BASED ON 2 1/2" MINIMUM SIDE COVER AND 2" MINIMUM END COVER
2. CONTACT STRUCTURAL ENGINEER IF CENTER TO CENTER SPACING OF REINFORCING IS LESS THAN OR EQUAL TO 3 BAR DIAMETERS <3 Db OR 2 Db CLEAR SPACING BETWEEN BARS
3. WHERE CLEAR COVER <db, MULTIPLY EMBEDDMENT AND STRAIGHT BAR DEVELOPMENT BY 1.5
4. EMBEDMENT IS THE LENGTH FROM EDGE OF CONCRETE TO THE BAR HOOK, EXTENSION IS THE LENGTH OF THE BAR FROM THE END OF THE BEND

GR. 60 STL.	CLASS B TENSIONS SPLICE LENGTHS					
CONC. PSI	fc= 2,500 & 3000 PSI		fc = 4000 PSI		fc = 5000 PSI	
BAR LOC.	REGULAR	TOP	REGULAR	TOP	REGULAR	TOP
#3	24	31	19	24	17	22
#4	32	41	25	33	23	29
#5	39	51	31	41	28	36
#6	47	61	37	49	34	43
#7	69	89	54	71	49	63
#8	78	102	62	81	56	72

NOTES:
1. TOP BARS ARE ANY HORIZONTAL BARS PLACED SO THAT MORE THAN 12" OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE REINFORCEMENT
2. UNLESS NOTED OTHERWISE, LAP SPLICES IN CONCRETE BEAMS, SLABS, COLUMNS AND WALLS SHALL BE CLASS "B" TENSION SPLICES
3. CONTACT STRUCTURAL ENGINEER IF CENTER TO CENTER SPACING OF REINFORCING IS LESS THAN OR EQUAL TO 3 BAR DIAMETERS LESS THAN 3bd OR 2bd CLEAR SPACING BETWEEN BARS.
4. WHERE CLEAR COVER < Db MULTIPLY TENSION LAP SPLICE BY 1.5
5. ALL SPLICES MUST BE FULL CONTACT

GLUE LAMINATED BEAMS/COLUMNS (GLB)

1. WEST COAT DOUG FIR/DOUG FIR SPECIES 24F–V8 Fb=2400 PSI 1.8E, SP/SP SPECIES 26F–V5 Fb=2600 PSI 1.9E , SP/SP SPECIES 26F–E2 Fb = 2800 PSI 2.1E, SP/SP SPECIES 30F–E2 3000 PSI 2.1E, FOR ALL BEAMS EXCEPT SIMPLE SPANS OVER NO MORE THAN (2) SUPPORTS WITH NO CANTILEVER ENDS WHERE 24F–V4 MAY BE USED
2. ALL GLUE LAMINATED COLUMNS SHALL BE 24F–V8 or 26F–V5 (BALANCED) MEMBERS
3. USE ARCHITECTURAL OR ROUGH SAWN GRADE BEAMS WHEN REQUIRED BY ARCHITECTURAL PLANS OR WHEN EXPOSED
4. USE WATER PROOF GLUE FOR ALL BEAMS EXPOSED DIRECTLY TO RAIN AND AT ALL EXTERIOR APPLICATIONS WHERE THE BEAM IS NOT COVERED BY SOFFIT FRAMING OR OTHER ENCAPSULATING MEASURES
5. ALL BEAMS TO BEAR AITC STAMP AND CERTIFICATION AND GRADE
6. CAMBER ALL BEAMS TO THE DEAD LOAD DEFLECTION AS SHOWN IN STRUCTURAL CALCULATIONS OR PLANS BUT NOT LESS THAN R=5000'
7. ALL GLB SHALL HAVE A MAXIMUM MOISTURE CONTENT OF 16% AT TIME OF FABRICATION

SPECIAL INSPECTION

SPECIAL STRUCTURAL INSPECTION IS TO BE PROVIDED FOR THE FOLLOWING ITEMS IN ADDITION TO THE INSPECTIONS CONDUCTED BY THE BUILDING SAFETY DEPARTMENT. ALL SPECIAL INSPECTIONS TO BE PERFORMED AS PER THE REQUIREMENTS OF IBC

SPECIAL INSPECTOR SHALL PROVIDE INSPECTION REPORTS TO THE BUILDING OFFICIAL AND TO THE ENGINEER OF RECORD FOR APPROVAL. THE ENGINEER OF RECORD SHALL COMPLETE AND SIGN THE SPECIAL INSPECTION CERTIFICATE CERTIFYING THAT TO THE BEST OF HIS KNOWLEDGE THE WORK HAS BEEN PERFORMED ACCORDING TO THE APPROVED PLANS, SPECIFICATIONS AND ALL THE APPLICABLE CODE REQUIREMENTS.

ITEMS REQUIRING SPECIAL INSPECTION
1. EXPANSION AND EPOXY ANCHORS
2. FIELD WELDING

ALL INSPECTIONS SHALL BE PERFORMED PRIOR TO THE INSTALLATION OF FINISH MATERIAL ON WALLS, FLOORS, OR CEILINGS THAT WOULD COVER ANY STRUCTURAL CONNECTION

SHOP DRAWINGS

1. SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL STRUCTURAL ITEMS IN ADDITION TO ANY ITEMS REQUIRED BY THE ARCHITECTURAL SPECIFICATIONS. CONSTRUCTION DOCUMENTS SHALL NOT BE REPRODUCED FOR USE AS SHOP DRAWINGS.
2. THE GENERAL CONTRACTOR SHALL REVIEW AND STAMP ALL SHOP DRAWINGS AND PRODUCT DATA FOR CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS PRIOR TO SUBMITTAL. ANY SHOP DRAWINGS OR PRODUCT DATA NOT REVIEWED AND STAMPED BY THE GENERAL CONTRACTOR WILL BE RETURNED WITHOUT REVIEW. THE CONTRACTOR SHALL CLOUD OR FLAG ALL ITEMS NOT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND LENGTHS OF MEMBERS.
3. ANY CHANGES, SUBSTITUTIONS, OR DEVIATIONS FROM THE ORIGINAL CONTRACT DRAWINGS SHALL BE CLOUDED BY THE MANUFACTURER OR FABRICATOR. ANY CHANGES, SUBSTITUTIONS OR DEVIATIONS THAT ARE NOT CLOUDED OR FLAGGED BY SUCH PARTIES, SHALL NOT BE CONSIDERED ALLOWED AFTER THE ENGINEER'S REVIEW, UNLESS NOTED ACCORDINGLY BY THE STRUCTURAL ENGINEER.
4. THE STRUCTURAL ENGINEER RESERVES THE RIGHT TO ALLOW OR NOT ALLOW ANY CHANGES TO THE ORIGINAL CONTRACT DRAWINGS AT ANY TIME BEFORE OR AFTER SHOP DRAWING REVIEW.
5. THE SHOP DRAWINGS DO NOT REPLACE THE ORIGINAL CONTRACT DRAWINGS. ITEMS OMITTED OR SHOWN INCORRECTLY AND WHICH ARE NOT NOTED AS ALLOWED BY THE STRUCTURAL ENGINEER OR ARCHITECT ARE NOT TO BE CONSIDERED CHANGES TO THE ORIGINAL CONTRACT DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ITEMS OMITTED OR SHOWN INCORRECTLY ARE CONSTRUCTED IN ACCORDANCE WITH THE ORIGINAL CONTRACT DRAWINGS.
6. ALL ENG

NOTE:
MINIMUM SOIL BEARING CAPACITY PER R401.4.1 MIN. 1000 PSF CLAYEY SAND
CONCRETE f'c = 2500 PSI (PER IRC-R402.2)
4" CONCRETE SLAB OVER 4" A.B.C. FILL ON TERMITE TREATED SOIL

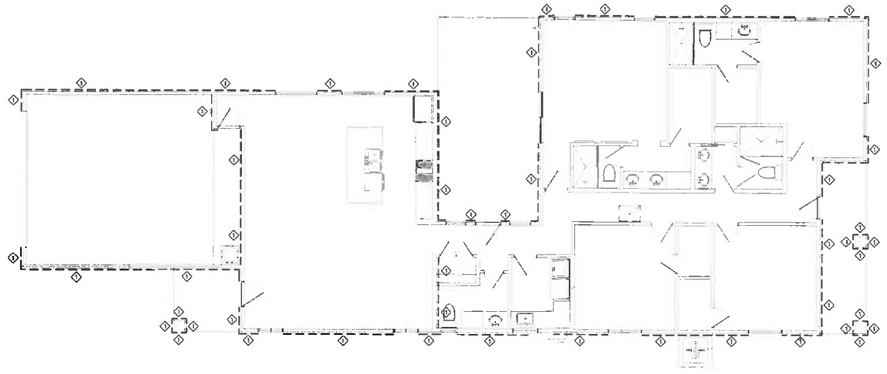
FOOTING SCHEDULE	
F1	3' SQ., 18" DEPTH W/ (3) #5 E.W.
F2	2'-6" SQ., 18" DEPTH W/ (3) #5 E.W.

SYMBOLS	
▲	STHD14

CALL TWO WORKING DAYS BEFORE YOU DIG
BLUE STAKE AT
1-800-STAKE-IT.

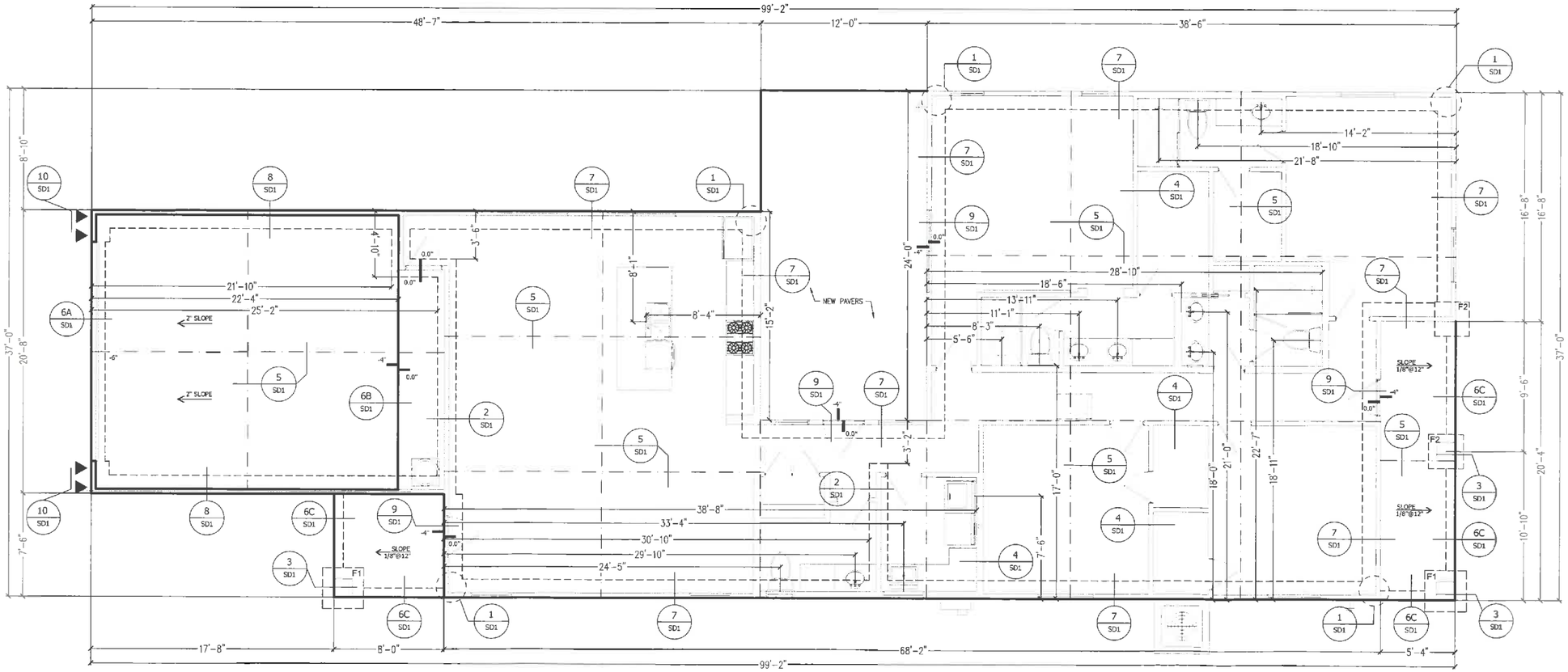
SHEAR WALL SCHEDULE	
1	½" OR ⅜" A.P.A. RATED SHEATHING W/8D @ 6" O.C. @ EDGES, 12" O.C. IN FIELD (Fv=280 plf)

FDN ANCHORAGE/SILL PLATE NAILING
EXTERIOR: ½" ø A.B. @ 32" O.C. OR 16d @ 6" O.C.
INTERIOR: 16d @ 6" O.C. OR ½" ø SIMPSON STRONG BOLT, 3 ¾" EMBEDMENT, @ 48" O.C.
CONTINUOUS SHEATHING METHODS REQUIRE STRUCTURAL PANEL SHEATHING TO BE USED ON ALL SHEATHABLE SURFACES ON ONE SIDE OF A BRACED WALL LINE INCLUDING AREAS ABOVE AND BELOW OPENINGS AND GABLE END WALLS MEETING THE REQUIREMENTS OF SECTION R602.10.7



SHEAR WALL PLAN

SCALE: 1/8"=1' 0 2' 4'



N

FOUNDATION PLAN

SCALE: 1/4"=1' 0 2' 4'

BLUEPRINTS and DESIGN

DESIGNER:

JUAN MANUEL GUTTERREZ
ADDRESS: 4316 W. BERRIDGE LN. GLENDALE, AZ 86301
PHONE NUMBER: 480-395-4305
EMAIL: JUANBLUE2015@YAHOO.COM
PLANS DRAWN BY: VLS

PROJECT: 19-205

61 ST AVE CUSTOM HOME
OWNER: TMG INVESTMENT PROPERTIES LLC
APN: 144-10-151
ADDRESS: 6707 N 61ST AVE GLENDALE, AZ 85301
19-205

DRAWINGS:

FOUNDATION PLAN
SHEAR WALL PLAN

TO AVOID MISTAKES DURING CONSTRUCTION ANY DISCREPANCIES BETWEEN THE PLANS SHALL BE REPORTED TO THE OWNER AND GENERAL CONTRACTOR IN WRITING BEFORE PROCEEDING. IN ORDER TO AVOID MISTAKES READ AND CHECK ALL PLANS AND BIDS BEFORE CONSTRUCTION.

REVISIONS:

DELTA:	DATE:	REVIEWER:
1	----	----
2	----	----
3	----	----

SHEET:

S1

March 17, 2020

VAR20-01 | 6707 North 61st Avenue

Project Narrative

We are requesting a variance for the property located at 6707 North 61st Avenue. The variance is a request to reduce side building setbacks to 10 feet on the north side and 5 feet on the south side of the property. The current R-3 zoning for the property requires 20 feet. We plan to build a single-story residential home with an approximate size of 2,125 sq. ft. plus a 2-car garage, with a 30-foot width in the front. Due to the irregular shape of the property this will leave only 15 feet of side setbacks and will take up 31.79% of lot coverage of the 9,034 sq. ft. lot. The approval of this variance will result in a house that fits in with the neighborhood and will be practical and livable for its occupants.

Response to 3.706B Findings for Variance

The Board of Adjustment shall make the following findings based on the evidence in the record prior to granting a variance:

1. There are special circumstances or conditions applicable to the property including its size, shape, topography, location, or surroundings which were not self-imposed by the owner;

The irregular shape of the property does not allow for the required 20-foot side setbacks. The included site plan shows the restrictions of property and the proposed 10-foot northern side setback and 5-foot southern side setback. This neighborhood primarily consists of single family homes and should be zoned R1-6 or comparable. If the property was zoned single family residential, then the variance would not be necessary.

2. Due to the special circumstances, the strict application of the Zoning Ordinance would deprive the property of privileges enjoyed by other properties in the same classification in same zoning district;

The surrounding properties do not have the issues of irregular shapes (aside from the property to the north) and thus do not have issues with complying with the zoning ordinance. Our building footprint would need to be significantly smaller should we be required to comply with the 20-foot side yard setbacks.

3. The variance is the minimum necessary to alleviate the property hardship; and

Our variance application requests a 10-foot side setback to the north and 5 foot setback to the south. This would be similar to the property immediately north of our site. The property north of our site has a similar irregular size and has side yard setbacks of less than 20 feet.

4. Granting the variance will not have a detrimental effect on the property, adjoining property, the surrounding neighborhood, or the City in general.

The approval of this variance will result in a house that fits in with the neighborhood and will be practical and livable for its occupants and represents a significant investment in the area. It will help make the neighborhood more attractive due to the property no longer remaining vacant.