

1.0 GENERAL REQUIREMENTS

- 1.1 ALL WORK SHALL COMPLY WITH WITH ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES, ORDINANCES, REGULATIONS AND AMENDMENTS AND ALL OTHER AUTHORITIES HAVING JURISDICTION.
- 1.2 PROJECT REQUIREMENTS ARE SUBJECT TO REVIEW AND FIELD INSPECTION BY CONSTRUCTION CODE OFFICIALS.
- 1.3 ARCHITECT SHALL NOT HAVE CONTROL OR CHARGE OF, AND SHALL NOT BE RESPONSIBLE FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK AND SHALL NOT BE HELD RESPONSIBLE FOR THE FAILURE OF THE OWNER OR HIS CONTRACTORS, SUB-CONTRACTORS OR ANYONE PERFORMING THE WORK TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- 1.4 ON-SITE VERIFICATION OF ALL DIMENSIONS AND CONDITIONS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND EACH SUB-CONTRACTOR. DO NOT SCALE DRAWINGS.
- 1.5 THE GENERAL CONTRACTOR SHALL COORDINATE ALL WORK BETWEEN THE CARPENTRY AND THE PLUMBING, MECHANICAL AND ELECTRICAL (MEP) TRADES TO RESOLVE CONFLICTS PRIOR TO CONSTRUCTION.
- 1.6 THE GENERAL CONTRACTOR AND HIS SUB-CONTRACTORS SHALL COMPLY WITH THE PRODUCT MANUFACTURER'S OR FABRICATOR'S INSTRUCTIONS OR RECOMMENDATIONS WITH RESPECT TO THE PREPARATION OF SUBSTRATES AND THE INSTALLATION OF ALL BUILDING MATERIALS AND MEP SYSTEMS.
- 1.7 STAIRWAYS SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES, ORDINANCES, REGULATIONS AND AMENDMENTS REGARDING MINIMUM WIDTHS, MINIMUM RISER HEIGHT, MINIMUM TREAD LENGTH, GUARD RAIL HEIGHT, HANDRAIL HEIGHT, HEADROOM, COMPONENT SEPERATION, AND RAILING OR HANDRAIL LOCATIONS.
- 1.8 ALL INTERIOR FRAMED WALLS INDICATED ON THE PLANS (EXCEPT AS NOTED) ARE 3 1/2" IN WIDTH WITH 1/2" HIGH STRENGTH GYPSUM BOARD AND DIMENSIONED FROM FRAMING TO FRAMING. EXTERIOR AND BEARING WALLS ARE 5 1/2" IN WIDTH WITH HIGH STRENGTH GYPSUM BOARD, UNLESS OTHERWISE NOTED.
- 1.10 DRAINAGE LEADERS TO EXTEND 5' MIN. AWAY FROM THE BUILDING OR LONGER IF REQUIRED BY LOCAL CODE.

DESIGN LOADS AND CONDITIONS

- 1.10 HOUSE DESIGN LIVE LOAD (LL) DEAD LOAD (DL)

DWELLING ROOM: 40 PSF 15 PSF
 SLEEPING ROOM: 30 PSF 15 PSF
 DECK: 40 PSF 15 PSF
 ATTIC: 20 PSF 10 PSF
 ROOF: 40 PSF 10 PSF

AS REQUIRED BY THE LINCOLN, NEBRASKA LOCAL CODE JURISDICTION. FOR ALL OTHER LOCATIONS DESIGN CONDITIONS SHOULD MEET ALL LOCAL, STATE AND NATIONAL CODES, ORDINANCES REGULATIONS AND AMENDMENTS.
 1.11 THE THERMAL BUILDING ENVELOP OF THE HOME IS DESIGNED TO EXCEED THE MINIMUM REQUIREMENTS OF THE 2003 INTERNATIONAL ENERGY CONSERVATION CODE BY 30% FOR THE HEATING AND COOLING REQUIREMENTS OF LINCOLN NEBRASKA.

2.0 SITE AND WASTE REDUCTION REQUIREMENTS

- 2.1 THE GENERAL CONTRACTOR SHALL IMPLEMENT AND FOLLOW A CONSTRUCTION WASTE PROGRAM TO REDUCE, RECYCLE AND REUSE ALL POSSIBLE CONSTRUCTION MATERIALS AND WASTES. RECYCLE BINS WILL BE LOCATED ON SITE AND WILL BE UTILIZED BY ALL SUB-CONTRACTORS. BURYING OF CONSTRUCTION MATERIALS IS PROHIBITED.
- 2.2 ALL TREES AND NATURAL FEATURES LOCATED ON THE SITE WILL BE APPROPRIATELY PROTECTED DURING CONSTRUCTION.
- 2.3 ALL SITE TOP SOIL TO BE SAVED AND REUSED ON THE SITE.
- 2.4 ANY LANDSCAPE MULCH UTILIZED ON SITE WILL BE RECYCLED WASTE WOOD CONTENT.
- 2.5 LOW WATER USE FESCUE GRASS TO BE PLANTED.

3.0 CONCRETE

- 3.1 GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SIZE, LOCATION AND INSTALLATION OF REVISED STEEL REINFORCING PER LOCAL CODES OR SPECIFIC SOIL CONDITION, WHICHEVER IS MORE RESTRICTIVE.
- 3.2 3/8" DIAMETER ANCHOR BOLTS @ 6'-0" OC MAXIMUM WITH MINIMUM EMBEDMENT OF 8" IN CONCRETE OR 16" IN MASONRY; MINIMUM 2 BOLTS IN EACH LENGTH OF WALL PLATE, 12" AWAY MAX. FROM EACH END.
- 3.3 ALL CONCRETE FOOTINGS ARE TO BE DESIGNED TO BEAR ON THE MINIMUM SOIL AS REQUIRED BY THE CODE LOCAL JURISDICTION AND SHALL BE PLACED ON FIRM, UNDISTURBED SOIL. CONTRACTOR TO REINFORCE CONCRETE FOOTINGS AND POURED CONCRETE WALLS AS REQUIRED FOR SPECIFIC SOIL CONDITIONS OR LOCAL CODES, WHICHEVER IS MORE RESTRICTIVE.
- 3.4 ALL CONCRETE SHALL ATTAIN A 28-DAY COMPRESSIVE STRENGTH AS REQUIRED BY THE LOCAL CODE JURISDICTION AND HAVE A MINIMUM 15% COAL FLYASH CONTENT.
- 3.5 ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60, LAP SPLICES 24" MIN. OR A LENGTH EQUAL TO 30 TIMES THE DIAMETER OR LOCAL CODE REQUIREMENTS, WHICHEVER IS MORE RESTRICTIVE.
- 3.6 ALL SOIL ON WHICH CONCRETE SHALL BEAR SHALL BE UNDISTURBED OR COMPACTED SOIL TO AT LEAST 95% OF THE MODIFIED PROCTOR MAXIMUM DRYING DENSITY (ASTM-D-1557) AND HAVE THE MINIMUM ALLOWABLE BEARING CAPACITY REQUIRED BY LOCAL CODE.
- 3.7 FOOTINGS SHALL BE FORMED FOR ACCURATE FOUNDATION DIMENSIONS. SEE FOUNDATION PLANS FOR DETAILS.
- 3.8 PROVIDE MINIMUM 4" CONCRETE COVER AT UNDER SLAB UTILITY LOCATIONS. WHEN CONCRETE ENCASEMENT OF THE UTILITY LINES IS REQUIRED, INCREASE SLAB THICKNESS AT THE UTILITY LINE. INSTALL UTILITIES LINES WELL BELOW SLAB AND MEET ALL MINIMUM LOCAL CODE REQUIREMENTS.
- 3.9 SLABS ON GRADE SHALL HAVE CONTROL JOINTS AT 20 FT MAXIMUM WIDTH, BETWEEN POURS AND JOINT CUT OR FORMED TO 1/2 DEPTH OF SLAB AT 20 FT. OC. OR LOCAL CODE REQUIREMENTS, WHICHEVER IS MORE RESTRICTIVE.
- 3.10 PROVIDE ASPHALT IMPREGNATED ISOLATION JOINT MATERIAL BETWEEN FOUNDATION WALLS AND ALL SLABS, INCLUDING PATIO, PORCH AND SIDEWALKS.
- 3.11 EXTERIOR CONCRETE FOUNDATION WALLS ENCLOSING BASEMENTS SHALL BE DAMP-PROOFED BY APPLYING ONE COAT OF WATER-BASED MATERIAL APPLIED AT THE RECOMMENDED THICKNESS FROM THE FOOTING TO THE FINISH GRADE. FOUNDATION WALLS IN AREAS WITH HIGH WATER TABLES OR SEVERE SOIL-WATER CONDITIONS SHALL BE WATERPROOFED WITH AN APPROVED MEMBRANE EXTENDING FROM THE EDGE OF THE FOOTING TO THE FINISHED GRADE.

4.0 FRAMING

- 4.1 FLOOR AND ROOF TRUSS SYSTEMS DESIGN AND FABRICATION SHALL BE THE RESPONSIBILITY OF THE MANUFACTURER IN ACCORDANCE WITH TPI STANDARDS AND PERFORMED UNDER THE SUPERVISION OF A REGISTERED PROFESSIONAL ENGINEER. ALL TRUSSES AND BRACING SHALL BE INSTALLED AS PER MANUFACTURER'S INSTRUCTIONS.
- 4.2 HEADERS TO BE DESIGNED AND SPECIFIED AS PER SECTION 4.1.
- 4.3 ALL METAL FASTENERS SHALL BE LOAD RATED FOR THEIR INTENDED USE.
- 4.4 DRAFTSTOPPING TO BE PROVIDED WHERE REQUIRED AS PER APPLICABLE LOCAL CODE.
- 4.5 UNLESS OTHERWISE NOTED PROVIDE THE FOLLOWING OR MINIMUM LOCAL CODE REQUIREMENTS, WHICHEVER IS MORE RESTRICTIVE.
 - 4.5.1 HEADERS AND TRIMMERS AT ALL FLOOR OPENINGS DESIGNED AND SPECIFIED PER SECTION 4.1.
 - 4.5.2 5 1/2" WALL STUD DEPTH AT ALL BEARING WALLS.
 - 4.5.3 3/8" MIN. T & G OSB SUBFLOOR GLUED AND SCREWED, PANEL SPAN RATING SHALL BE APA 240, EXPOSURE 1, WITH SEALED EDGE, 1/2" UNDERLAYMENT (MINIMUM) UNDER VINYL OR TILE ON WOOD FRAME FLOOR SYSTEMS.
 - 4.5.4 BLOCKING BETWEEN FLOOR TRUSSES BENEATH CERAMIC TILE AS REQUIRED.
 - 4.5.5 3/4" MINIMUM OSB WOOD ROOF AND WALL SHEATHING, APA PANEL SPAN RATING SHALL BE 240, EXPOSURE 1, WITH SEALED EDGE AND SIMPSON PSCCL CLIPS OR EQUIVALENT.
 - 4.5.6 ALL STRUCTURAL MEMBERS FASTENED IN ACCORDANCE WITH THE CABO FASTENER SCHEDULE FOR STRUCTURAL MEMBERS.
 - 4.5.7 DOUBLE TOP AND SINGLE BOTTOM PLATES WITH VERTICAL LUMBER STUDS SPACED AT 24" OC. UNLESS NOTED OTHERWISE.
 - 4.6 ANY WOOD IN DIRECT CONTACT WITH CONCRETE OR MASONRY, BELOW GRADE OR WITHIN 8" OF GRADE SHALL BE TREATED WITH BORATE OR OTHER ENVIRONMENTALLY FRIENDLY TREATMENT.
 - 4.7 ALL EXTERIOR WOOD CONSTRUCTION SHALL BE PRESSURE-TREATED LUMBER, BORATE OR OTHER ENVIRONMENTALLY FRIENDLY TREATMENT, MAXIMUM 19% MOISTURE CONTENT) SECURED WITH HOT DIPPED GALVANIZED FASTENERS.
 - 4.8 LEDGERS SHALL BE BOLTED TO WALLS WITH 1/2" DIAMETER BOLTS AT 24" OC. MAXIMUM STAGGERED TOP AND BOTTOM, PROVIDE INTERMITTENT SPACER BLOCKING BETWEEN SHEATHING AND LEDGER.
 - 4.9 CONTRACTOR TO AVOID THE USE OF LARGE DIMENSION LUMBER (2X10 OR GREATER).
 - 4.10 CONTRACTOR TO UTILIZE FINGER-JOINTED LUMBER FOR STUDS AS WELL AS TOP AND BOTTOM PLATE MATERIAL.
 - 4.11 CONTRACTOR TO UTILIZE FINGER-JOINTED, MDF OR RECYCLED CONTENT TRIM.
 - 4.12 ALL CABINETS TO BE MADE WITH SOLID DOMESTIC HARDWOODS AND/OR FORMALDEHYDE-FREE PARTICLE BOARD OR MDF PRODUCTS. MANUFACTURER DOCUMENTATION TO BE PROVIDED.

5.0 STEEL

- 5.1 DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE LATEST A.I.S.C. SPECIFICATIONS AND LOCAL CODE REQUIREMENTS WHICHEVER IS STRICTER. ALL STRUCTURAL STEEL SHALL BE A.S.T.M. A-36 EXCEPT FOR COLUMNS THAT SHALL BE A.S.T.M. 46.
- 5.2 ALL BEAMS, LINTELS AND COLUMNS SHALL BE SHOP PRIMED.
- 5.3 ALL BOLTS SHALL CONFORM WITH ASTM A325 UNO.
- 5.4 ALL LINTELS SHALL BEAR ON SOLID MASONRY, MINIMUM 8" BEARING LENGTH OR WOOD POSTS AS INDICATED ON PLAN, MAX. DEFLECTION SHALL BE 1/700.
- 5.5 INSTALL ONE STEEL ANGLE FOR EACH 3 3/8" (4" NOMINAL) WIDTH OF MASONRY WALL THICKNESS.

7.0 THERMAL AND MOISTURE PROTECTION

- 7.1 LIGHT COLORED VINYL LAP SIDING OVER 1/2" MINIMUM OSB WALL SHEATHING ON AREAS SHOWN ON ELEVATIONS. COLOR TO BE APPROVED BY OWNER PRIOR TO INSTALLATION.
- 7.2 EXTERIOR TRIM SHALL BE PAINTED WOOD OR APPROVED EQUAL. ALL MATERIAL JOINTS SHALL BE SEALED AND CAULKED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- 7.3 ALL NON-FACTORY FINISH SURFACES SHALL BE PRIMED PRIOR TO APPLICATION BY CONTRACTOR.
- 7.4 ALL EXTERIOR PANEL MATERIAL SHALL BE 15/32" APA MEDIUM DENSITY OVERLAY PLYWOOD, ALL EDGES SHALL BE PRIMED PRIOR TO INSTALLATION WITH NO HORIZONTAL JOINTS.
- 7.5 A WEATHER BARRIER OR 15# WEIGHT BUILDING PAPER SHALL BE APPLIED ON ALL EXTERIOR WALLS. INSTALL AS PER MANUFACTURER'S REQUIREMENTS.
- 7.6 30-YEAR WARRANTY, 235#, CLASS A, 3-TAB, SELF-SEALING FIBERGLASS SHINGLES ON 30# ROOFING FELT ON 1/2" MINIMUM SQUARE EDGE OSB. SHEATHING SHALL HAVE MINIMUM APA PANEL SPAN RATING OF 240, EXPOSURE 1, ICE AND WATER BARRIER MEMBRANE AT EAVE OF DOWN SLOPE TO EXTEND UP 36" (HORIZONTAL DISTANCE) FROM OUTSIDE WALL.
- 7.7 NAILS TO BE USED FOR ROOF SHINGLE ATTACHMENT. NO STAPLES ALLOWED.
- 7.8 GUTTER TO BE 5", .027" THICK ALUMINUM OGEE SHAPED WITH BAKED ENAMEL FINISH. DOWNSPOUTS TO BE 3"x4", .024" ALUMINUM TO DRAIN TO SPLASH BLOCK AND SHALL DIVERT RAINWATER A MINIMUM OF 10' FROM BUILDING.
- 7.9 PROVIDE CONTINUOUS SOFFIT AND ROOF VENTS AS SHOWN ON PLANS, ELEVATIONS AND SECTIONS SO AS TO PROVIDE CONTINUOUS UNINTERRUPTED CROSS VENTILATION, A MINIMUM OF 1:150 OF THIS AREA TO BE VENTILATED, EXCEPT WHERE MECHANICAL VENT IS IN SOFFIT, 24" IN BOTH DIRECTIONS.

FLASHING

7.10 PROVIDE GALVANIZED SHEET METAL OR ALUMINUM FLASHING AND COUNTER FLASHING UNLESS NOTED OTHERWISE AS REQUIRED AT ALL VALLEYS, RIDGES, ROOF-TOP-WALL INTERSECTIONS AND EDGES OF ROOFING.

7.11 FLASH AND CAULK ALL EXTERIOR OPENINGS, INCLUDING WINDOWS AND DOORS, AND BUILDING CORNERS WITH WATERPROOF BUILDING PAPER TO EXTEND A MINIMUM OF 4" OVER WEATHER BARRIER MATERIAL.

INSULATION AND AIR SEALING

- 7.12 CONTRACTOR SHALL INSTALL CONSTRUCTION ADHESIVE OR CLOSED CELL COMPRESSIBLE FOAM GASKET AT UNDERSIDE OF BOTTOM WALL PLATES AND SILLS. UPPER SIDE OF TOP PLATE AND RIM JOISTS.
- 7.13 CAULK OPENINGS IN GYPSUM BOARD (NON-FLAMMABLE CAULK OR GYPSUM JOINT COMPOUND AT ELECTRICAL FIXTURES) SO AS TO PROVIDE A CONTINUOUS AIR SEAL BETWEEN THE GYPSUM BOARD AND WALL AND FLOOR CAVITIES.

- 7.14 FOUNDATION WALL INSULATION SHALL BE A 2" RIGID INSULATION - THERMAX (R-13), OR EQUAL, MECHANICALLY ATTACHED.
- 7.15 ATTIC INSULATION SHALL BE BLOWN-IN, FORMALDEHYDE-FREE FIBERGLASS WITH A MINIMUM OF 15% RECYCLED CONTENT OR TREATED CELLULOSE.
- 7.16 EXTERIOR WALL INSULATION SHALL BE BLOWN-IN-BLANKET, JOHNS MANSVILLE CLIMATE PRO, FORMALDEHYDE-FREE, FIBERGLASS WITH A MINIMUM OF 15% RECYCLED CONTENT, INSTALLED AT 1.05 LB/SQ. FT., R-VALUE 23 OR APPROVED EQUAL TREATED CELLULOSE.
- 7.17 ALL VAPOR BARRIERS TO FACE WARM SIDE IN WINTER.
- 7.18 ATTIC INSULATION MARKERS SHALL BE INSTALLED AT 300 SQ. FT. INTERVALS.

8.0 WINDOWS AND DOORS

- 8.1 ALL WINDOWS AND GLASS DOOR UNITS SHALL BE THERMALLY WELDED VINYL FRAMES WITH SOFTCOAT LOW-E GLAZING, HALF SCREENS, HAVE A MAXIMUM NFRC TESTED U-VALUE OF 0.33 AND HAVE A MAXIMUM NFRC TESTED SHGC OF 0.36.
- 8.2 ALL GLAZING SHALL BE SAFETY GLAZING IN SLIDING OR SWINGING EGRESS DOORS. IN ADJACENT PANELS WHOSE NEAREST VERTICAL EDGE IS WITHIN 24" OF A DOOR AND WHOSE BOTTOM EDGE IS LESS THAN 60" ABOVE THE WALKING SURFACE, AND IN SHOWER/BATHTUB DOOR AND ENCLOSURES OR AS OTHERWISE REQUIRED BY CODE.
- 8.3 EVERY SLEEPING ROOM SHALL BE PROVIDED WITH AN EGRESS WINDOW WITH A MAXIMUM SILL HEIGHT OF 44" AND A MINIMUM NET CLEAR OPENING OF 5.7 SQ. FT. A MINIMUM CLEAR WIDTH OF 20" AND HEIGHT OF 24" OR LOCAL CODE REQUIREMENT, WHICHEVER IS MORE RESTRICTIVE.
- 8.4 THERE SHALL BE NO LOCKABLE DOORS EN ROUTE TO AN ESCAPE WINDOW.
- 8.5 ALL BASEMENTS SHALL BE PROVIDED WITH DIRECT ACCESS TO THE OUTSIDE BY MEANS OF A DOOR OR WINDOW WITH A CLEAR OPENING AREA OF 24" WIDTH AND 30" HEIGHT WITH A SILL HEIGHT NOT TO EXCEED 36" A.F.F. WITH LADDER.
- 8.6 ALL WINDOWS AND DOOR OPENINGS SHALL BE CONTINUOUSLY CAULKED OVER BACKER MATERIAL SO AS TO MINIMIZE WATER AND AIR INFILTRATION.
- 8.7 UNDERCUT ALL DOORS 1 1/2" ABOVE THE ROUGH FLOOR.
- 8.8 ALL INTERIOR DOORS TO BE RECONSTITUTED OR RECYCLE-CONTENT WITH LOW TOXIC BINDERS. MANUFACTURER DOCUMENTATION TO BE PROVIDED.
- 8.9 NO LUAN (TROPICAL HARDWOOD) DOORS TO BE INSTALLED.

9.0 FINISHES

- 9.1 WALLS: 1/2" HIGH STRENGTH GYPSUM BOARD AT STUD WALLS. MOISTURE RESISTANT GYPSUM BOARD AT BATHROOMS.
- 9.2 CEILINGS: 1/2" HIGH STRENGTH GYPSUM BOARD.
- 9.3 GARAGE: 5/8" TYPE X GYPSUM BOARD ON BOTH SIDES.
- 9.4 BELOW STAIR: 5/8" TYPE X GYPSUM BOARD FIRE TAPED WITH NO PENETRATIONS.
- 9.5 GYPSUM BOARD TO HAVE RECYCLED PAPER FACING AND RECYCLED OR SYNTHETIC FIBER INTEGRATED INTO THE GYPSUM. MANUFACTURE DOCUMENTATION REQUIRED.
- 9.6 ALL GYPSUM BOARD TO BE INSTALLED USING UNITED STATES GYPSUM COMPANY ALL PURPOSE JOINT COMPOUND OR APPROVED EQUAL IN MEETING MINIMUM ECOLOGICAL TOXICITY LEVELS REGARDING EXPOSURE.
- 9.7 ALL INTERIOR PAINTS AND FINISHES TO CONTAIN 250 GRAMS/LITER OF VOC'S OR LESS. MANUFACTURER DOCUMENTATION TO BE PROVIDED.
- 9.8 CARPETING TO BE TACKED, NOT GLUED, THROUGHOUT THE HOME.
- 9.9 ALL FLOOR AND INTERIOR COLOR SELECTIONS TO BE APPROVED BY OWNER PRIOR TO INSTALLATION.
- 9.10 CARPETING AND CARPET PAD USED THROUGHOUT THE HOME TO BE RECYCLED CONTENT. MANUFACTURER DOCUMENTATION TO BE PROVIDED.

12.0 FURNISHINGS

- 12.1 BUILT-IN ENERGYSTAR RATED DISHWASHER TO BE PROVIDED.
- 12.2 ENERGYSTAR RATED REFRIGERATOR TO BE PROVIDED.
- 12.3 BUILT-IN MICROWAVE OVEN TO BE PROVIDED.

15.0 MECHANICAL

- 15.1 ALL WORK SHALL COMPLY WITH THE 2003 INTERNATIONAL PLUMBING CODE, THE 2003 INTERNATIONAL RESIDENTIAL CODE, THE 2003 INTERNATIONAL MECHANICAL CODE AND ALL STATE AND LOCAL CODES AND AMENDMENTS.
- 15.2 ALL WORK SHALL BE INSTALLED IN COMPLIANCE WITH GOVERNING CODES. THE DRAWINGS ARE DIAGRAMATIC. CONTRACTOR SHALL PROVIDE ALL NECESSARY COMPONENTS TO PROVIDE FOR A COMPLETE HVAC SYSTEM.
- 15.3 UNLESS OTHERWISE NOTED, DUCTWORK SHALL BE FABRICATED OF GALVANIZED SHEET METAL IN ACCORDANCE WITH THE LATEST SMACNA AND ASHRAE STANDARDS.
- 15.4 NO PANNED DUCTWORK SHALL BE PERMITTED.
- 15.5 RETURN PATHS FROM BEDROOMS WITHOUT A DUCTED RETURN SHALL BE PROVIDED BY OVERDOOR TRANSFER GRILLES. UNDERCUTTING OF DOORS SHAL NOT BE USED AS A RETURN PATH.
- 15.6 DOOR IN ROOMS WHERE NO DUCTWORK IS PROVIDED SHALL BE UNDERCUT A MINIMUM OF 3/4" ABOVE FINISHED FLOOR.
- 15.7 NO NATURAL DRAFT APPLIANCES MAY BE INSTALLED IN THE HOME. INSTALL ONLY DIRECT-VENTED EQUIPMENT.
- 15.8 BASED ON THE COMBUSTION EQUIPMENT SPECIFIED AND THE BASEMENT VOLUME, HIGH AND LOW AIR INLETS FOR COMBUSTION, VENTILATION AND DILUTION OF FLUE GASES ARE NOT REQUIRED BY CODE. IF APPLIANCES ARE ENCLOSED, INSTALL A Louvered DOOR COMPLIANT WITH THE 2003 INTERNATIONAL FUEL GAS CODE.
- 15.9 HEATING AND COOLING EQUIPMENT AND APPLIANCES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND ALL CODE REQUIREMENTS.
- 15.10 APPLIANCES SHALL BE ACCESSIBLE FOR INSPECTION, SERVICE, REPAIR AND REPLACEMENT WITHOUT REMOVING PERMANENT CONSTRUCTION. A MINIMUM OF 30 INCHES OF WORKING SPACE SHALL BE PROVIDED IN FRONT OF THE CONTROL SIDE TO SERVICE AN APPLIANCE.
- 15.11 CENTRAL FURNACES WITH COMPARTMENTS SHALL HAVE A MINIMUM 3 INCHES ALONG THE SIDES, BACK AND TOP WITH A TOTAL WIDTH OF THE ENCLOSING SPACE BEING AT LEAST 12 INCHES WIDER THAN THE FURNACE.
- 15.12 APPLIANCES INSTALLED IN A COMPARTMENT, ALCOVE, BASEMENT OR SIMILAR SPACE SHALL BE ACCESSED BY AN OPENING OR DOOR AND UNOBSTRUCTED PASSAGEWAY NO LESS THAN 24 INCHES WIDE AND LARGE ENOUGH TO ALLOW REMOVAL OF THE LARGEST APPLIANCE.

- 15.13 ALL DUCTS SHALL BE TIGHTLY SEALED WITH MASTIC OR UL-181-A RATED METAL TAPE IN COMPLIANCE WITH SECTION M601.3.1 OF THE INTERNATIONAL RESIDENTIAL CODE. FLEXIBLE DUCT IS NOT ALLOWED.
- 15.14 ALL APPLIANCES AND EXHAUST FANS SHALL TERMINATE OUTSIDE OF THE BUILDING. EACH EXHAUST DUCT SHALL BE EQUIPPED WITH A BACK-DRAFT DAMPER. THIS INCLUDES BATH FANS, DRYER VENTS, RANGE HOODS, ETC. UNDER NO CIRCUMSTANCES SHALL VENTS BE TERMINATED IN THE ATTIC AREA.
- 15.15 CONTRACTORS SHALL PROVIDE AND INSTALL AN ENERGYSTAR RATED BATH ROOM EXHAUST FAN IN EACH BATHROOM REFLECTED ON THE FLOOR PLANS. THE MAIN BATHROOM OF EACH UNIT SHALL HAVE AN UPGRADED BATH FAN WITH AN ASSOCIATED TIMER CONTROL, WHICH WILL PROVIDE LOCAL EXHAUST, AS WELL AS WHOLE HOUSE VENTILATION. SPECIFICATIONS FOR THE FAN AND TIMER CONTROL ARE SHOWN ON THE MECHANICAL DRAWINGS. EACH ADDITIONAL BATHROOM SHALL HAVE A CONTRACTOR-GRADE, ENERGYSTAR RATED BATHROOM EXHAUST FAN RATED FOR 50 CUBIC FEET PER MINUTE (CFM) AND A TIMER CONTROL SWITCH.

16.0 ELECTRICAL

- 16.1 ALL WORK SHALL COMPLY WITH THE 2002 NATIONAL ELECTRIC CODE AND LOCAL AMENDMENTS.
- 16.2 ALL ELECTRICAL WIRING SHALL BE IN ROMEX WITH COPPER AS THE CONDUCTOR.
- 16.3 THE ELECTRICAL METER AND SERVICE SHALL BE AS INDICATED ON PLANS PREPARED BY OTHERS
- 16.4 THE ELECTRICAL SERVICE SHALL BE 200 AMP, 208 V, 1 PHASE, 3W. PANEL(S) SHALL BE SIZED BY THE CONTRACTOR TO ACCOMMODATE ALL CIRCUITS.
- 16.5 SMOKE DETECTORS SHALL BE INSTALLED A MAXIMUM OF 10 FEET FROM SEPARATE SLEEPING AREAS AND ON ALL FLOORS INCLUDING THE BASEMENT. SMOKE DETECTORS SHALL BE INTERCONNECTED, HAVE BATTERY BACK-UP POWER AND AC PRIMARY POWER AND BE INSTALLED AS PER MANUFACTURER'S INSTRUCTIONS OR LOCAL CODE REQUIREMENTS, WHICHEVER IS MORE RESTRICTIVE. CO DETECTORS SHOULD BE LOCATED BY THE CONTRACTOR AS REQUIRED BY LOCAL CODE.
- 16.6 PROVIDE SEPARATE 20 AMP BRANCH CIRCUITS FOR EACH OF THE FOLLOWING LOCATIONS: BATHROOM, GARAGE DOOR OPENER, FURNACE, CLOTHESWASHER AND DRYER.
- 16.7 PROVIDE POWER FOR OUTSIDE AIR CONDITIONING CONDENSING UNIT.
- 16.8 ANY WALL 2" OR LARGER WILL HAVE A RECEPTACLE AND NO POINT ALONG THE WALL SHALL BE MORE THAN 6' FROM A RECEPTACLE FOR HABITABLE SPACES.
- 16.9 ALL RECESSED LIGHT FIXTURES SHALL BE IC COMPLIANT AND AIR SEALED.
- 16.10 KITCHEN, BATHROOM, BASEMENT, LAUNDRY AND UTILITY AREAS TO HAVE FLUORESCENT LIGHTING FIXTURES. ALL EXTERIOR LIGHTING FIXTURES TO BE PHOTOCELL CONTROLLED. BALLASTS SHALL BE LOW HARMONIC ELECTRONIC TYPE SIZED FOR THE FIXTURE.
- 16.11 SWITCHES FOR THE MOST EFFICIENT LIGHTING FIXTURE TO BE LOCATED NEAREST EACH DOOR.
- 16.12 ALL CEILING FANS TO BE ENERGYSTAR RATED UNITS. MANUFACTURER DATA TO BE PROVIDED.

17.0 PLUMBING

- 17.1 ALL WORK SHALL COMPLY WITH THE 2003 INTERNATIONAL PLUMBING CODE, THE 2003 INTERNATIONAL RESIDENTIAL CODE AND WITH ALL STATE AND LOCAL CODES AND AMENDMENTS.
- 17.2 PLUMBER SHALL PROVIDE THE GAS PIPE SIZING INFORMATION. COPPER PIPE OR TUBING IS NOT ALLOWED.
- 17.3 PLUMBER SHALL PROVIDE DRAINAGE IN BASEMENT AS PER LOCAL CODE.
- 17.4 ALL TOILETS OR WATER CLOSETS SHALL BE LOW FLOW FLUSH TYPE, MAXIMUM 1.6 GALLONS PER FLUSH. PROVIDE 24" MINIMUM CLEARANCE IN FRONT OF WATER CLOSETS AND A COMPARTMENT WIDTH OF NO LESS THAN 30". KITCHEN FAUCET TO BE 2.0 GPM. MANUFACTURER DOCUMENTATION TO BE PROVIDED.
- 17.5 MAIN PLUMBING STACKS SHALL RUN UNDIMENSIONED IN SIZE (3" MIN) AND DIRECT AS POSSIBLE FROM THE MAIN DRAIN TO THE OPEN AIR ABOVE THE ROOF. NO PLUMBING VENT SHALL TERMINATE LESS THAN 10' HORIZONTALLY OR 3' ABOVE ANY GRAVITY OR POWER AIR INLET.
- 17.6 AT LEAST ONE HOSE BIB SHALL BE PROVIDED PER UNIT. FREEZELESS, ANTI-SIPHON AND BACKFLOW PREVENTATIVE HOSE BIBS TO BE INSTALLED.
- 17.7 SHOWER HEADS TO HAVE A 2.5 GALLON PER MINUTE MAXIMUM OUTPUT. MANUFACTURER DOCUMENTATION TO BE PROVIDED.
- 17.8 PLUMBING VENTS NOT TO BE FLAG POLED. SLIP JOINT PLUMBING NOT ALLOWED IN CONCEALED SPACES W/O 24" X 24" ACCESS.
- 17.9 ANTI-SCALD FAUCETS REQUIRED ON ALL SHOWERS AND SHOWER/TUB COMBINATIONS.
- 17.10 FLOOR DRAINS SHALL BE OF DEEP SEAL TRAP OR TRAP SEAL PRIMER TYPE.
- 17.11 HEAT TRAPS OR LOOPS ARE TO BE INSTALLED ON HOT AND COLD WATER PIPE CONNECTIONS TO WATER HEATER.
- 17.12 1/2" INSULATION TO BE INSTALLED ON ALL HOT WATER LINES.

18.0 WINDOW WELLS

- ESCAPE AND RESCUE WINDOW WITH A FINISHED SILL HEIGHT BELOW THE ADJACENT GROUND ELEVATION SHALL HAVE A WINDOW WELL. WINDOW WELLS AT ESCAPE OR RESCUE WINDOWS SHALL COMPLY WITH THE FOLLOWING:
 - 18.1 THE CLEAR HORIZONTAL DIMENSION SHALL ALLOW THE WINDOW TO BE FULLY OPEN AND PROVIDE A MINIMUM ACCESSIBLE CLEAR OPENING OF 9 SQ. FT. WITH A MINIMUM DIMENSION OF 36".
 - 18.2 WINDOW WELLS WITH A VERTICAL DEPTH OF MORE THAN 44" SHALL BE EQUIPPED WITH A PERMANENTLY AFFIXED LADDER OR STAIRS THAT ARE ACCESSIBLE WITH THE WINDOW IN THE FULLY OPEN POSITION. THE LADDER OR STAIR SHALL NOT ENCRDACH INTO THE REQUIRED DIMENSIONS OF THE WINDOW WELL BY MORE THAN 6".
 - 18.3 WINDOW WELL REQUIREMENTS SHALL COMPLY WITH THE 2003 INTERNATIONAL RESIDENTIAL CODE OR LOCAL CODE REQUIREMENTS, WHICHEVER ARE MORE RESTRICTIVE.

Nebraska Affordable - 3 Bedroom Ranch w/ Basement

Nebraska Energy Office
GREEN BUILT/BUILDING AMERICA PROGRAM

E.N.E.R.G.Y.

1111 'D' STREET, SUITE 223

REVISIONS:

REV. 1:

REV. 2:

REV. 3:

REV. 4:

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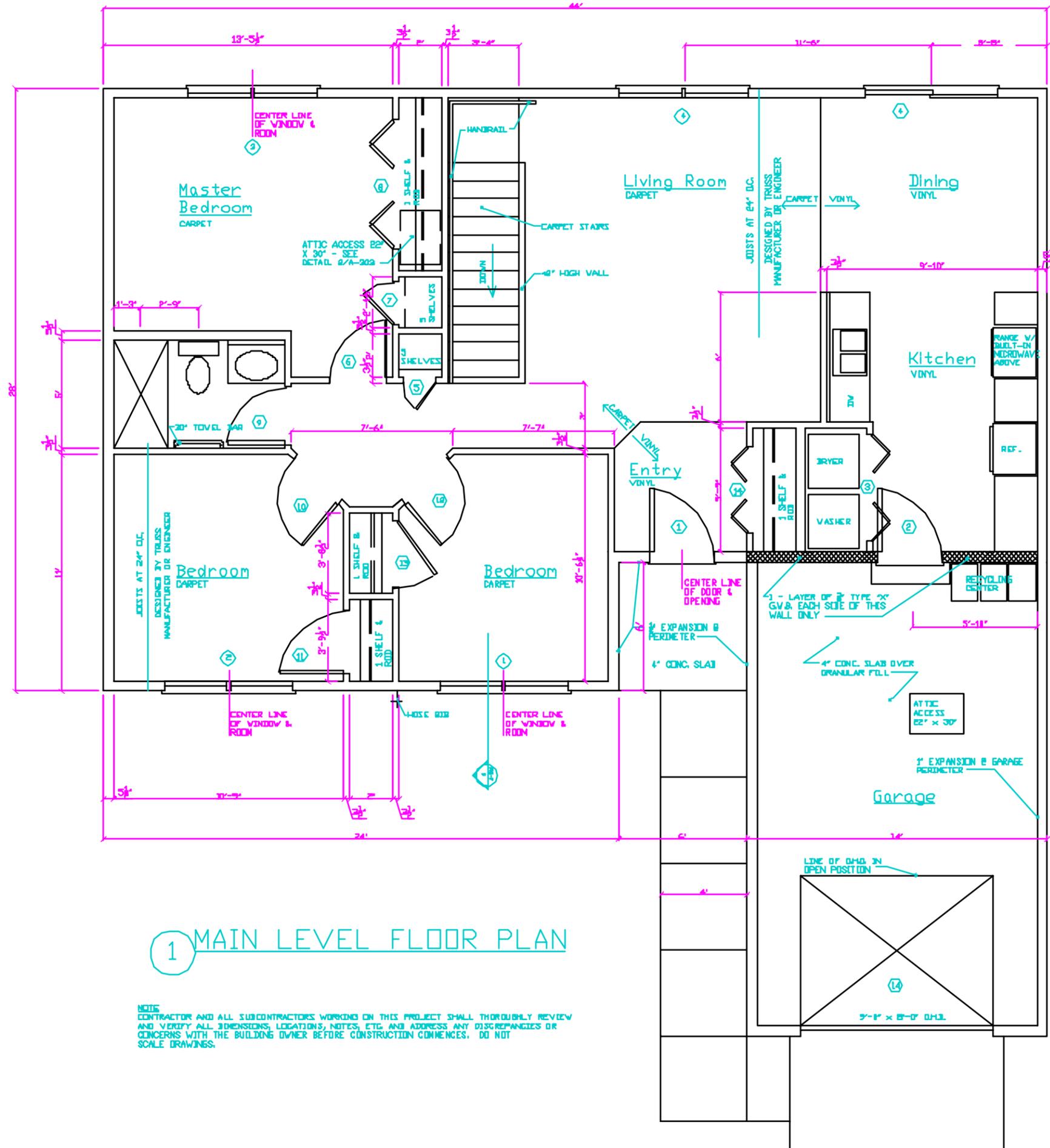
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GENERAL NOTES

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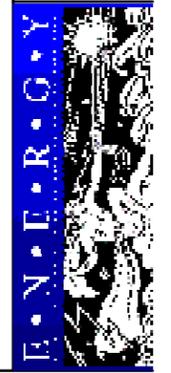


1 MAIN LEVEL FLOOR PLAN

NOTE:
 CONTRACTOR AND ALL SUBCONTRACTORS WORKING ON THIS PROJECT SHALL THOROUGHLY REVIEW AND VERIFY ALL DIMENSIONS, LOCATIONS, NOTES, ETC. AND ADDRESS ANY DISCREPANCIES OR CONCERNS WITH THE BUILDING OWNER BEFORE CONSTRUCTION COMMENCES. DO NOT SCALE DRAWINGS.

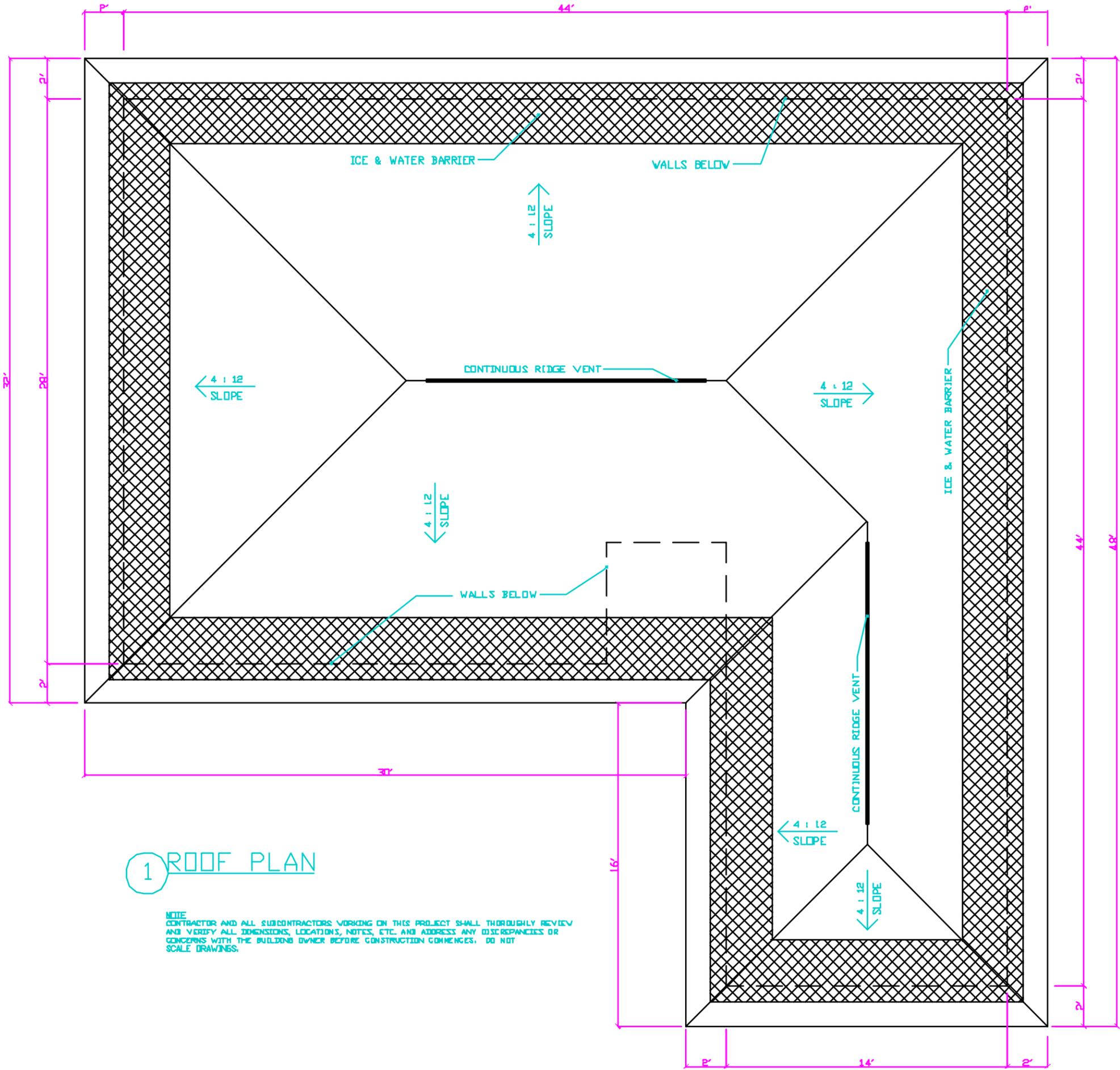
Nebraska Affordable - 3 Bedroom Ranch w/
 Basement

Nebraska Energy Office
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 LINCOLN, NE 68509
 PHONE: (402) 471-2867



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FLOOR PLAN
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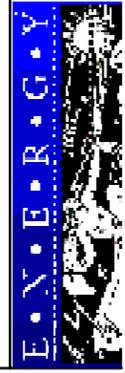


1 ROOF PLAN

NOTE
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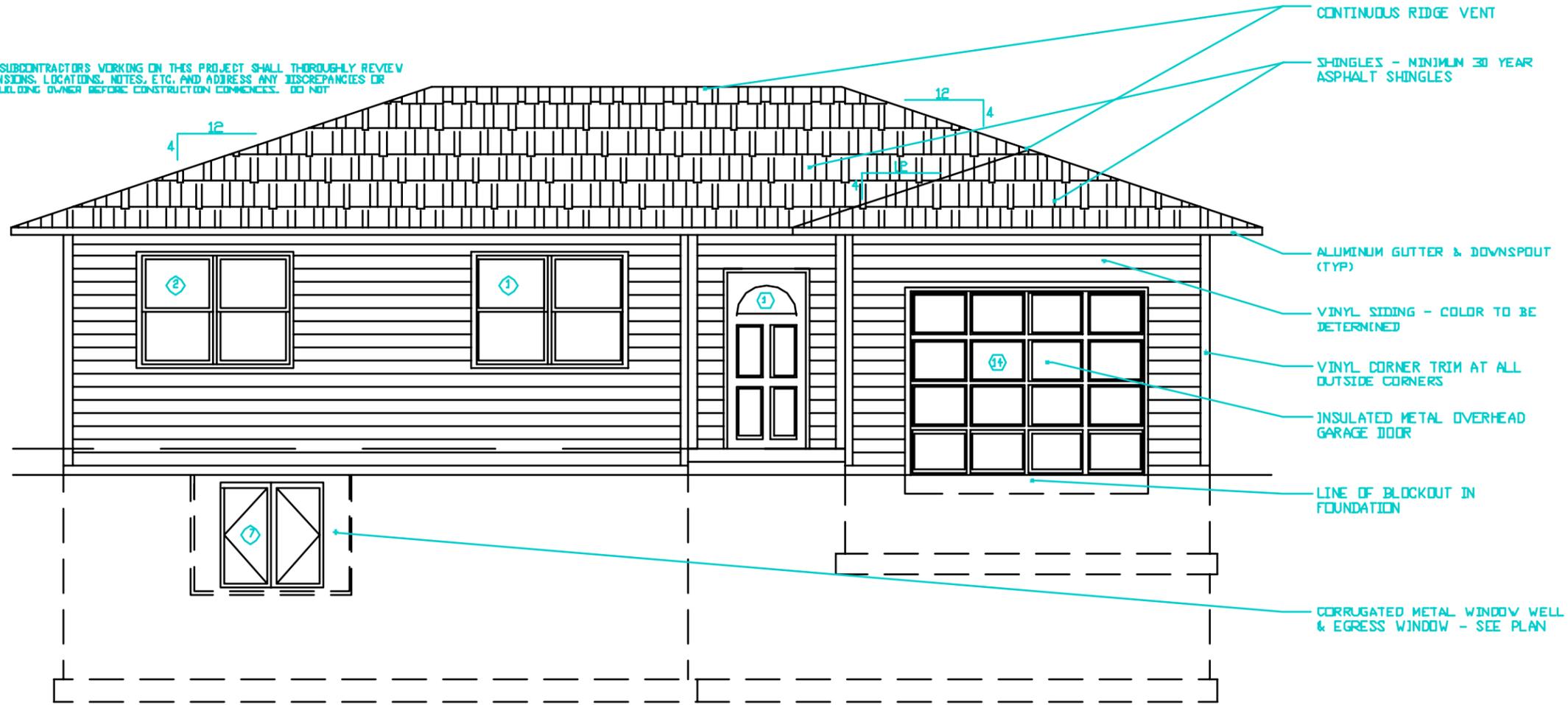
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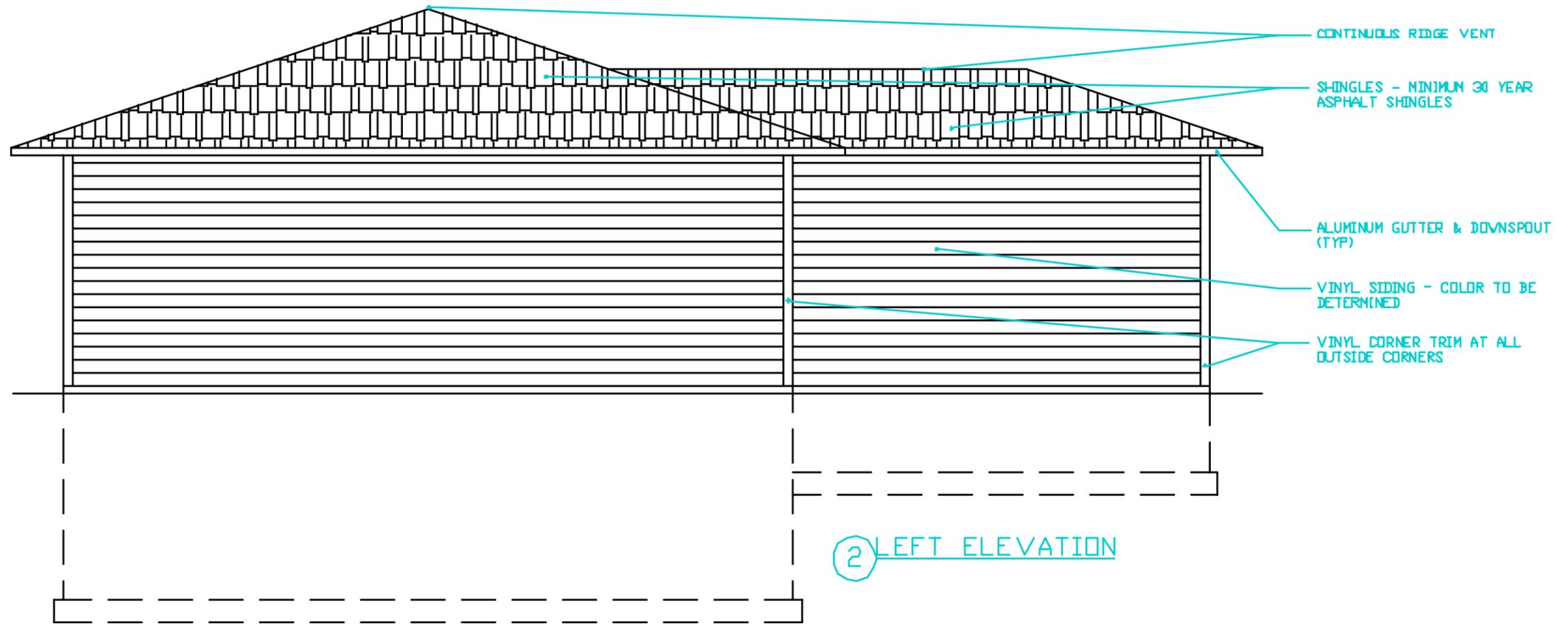
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A-10

NOTE
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① FRONT ELEVATION



② LEFT ELEVATION

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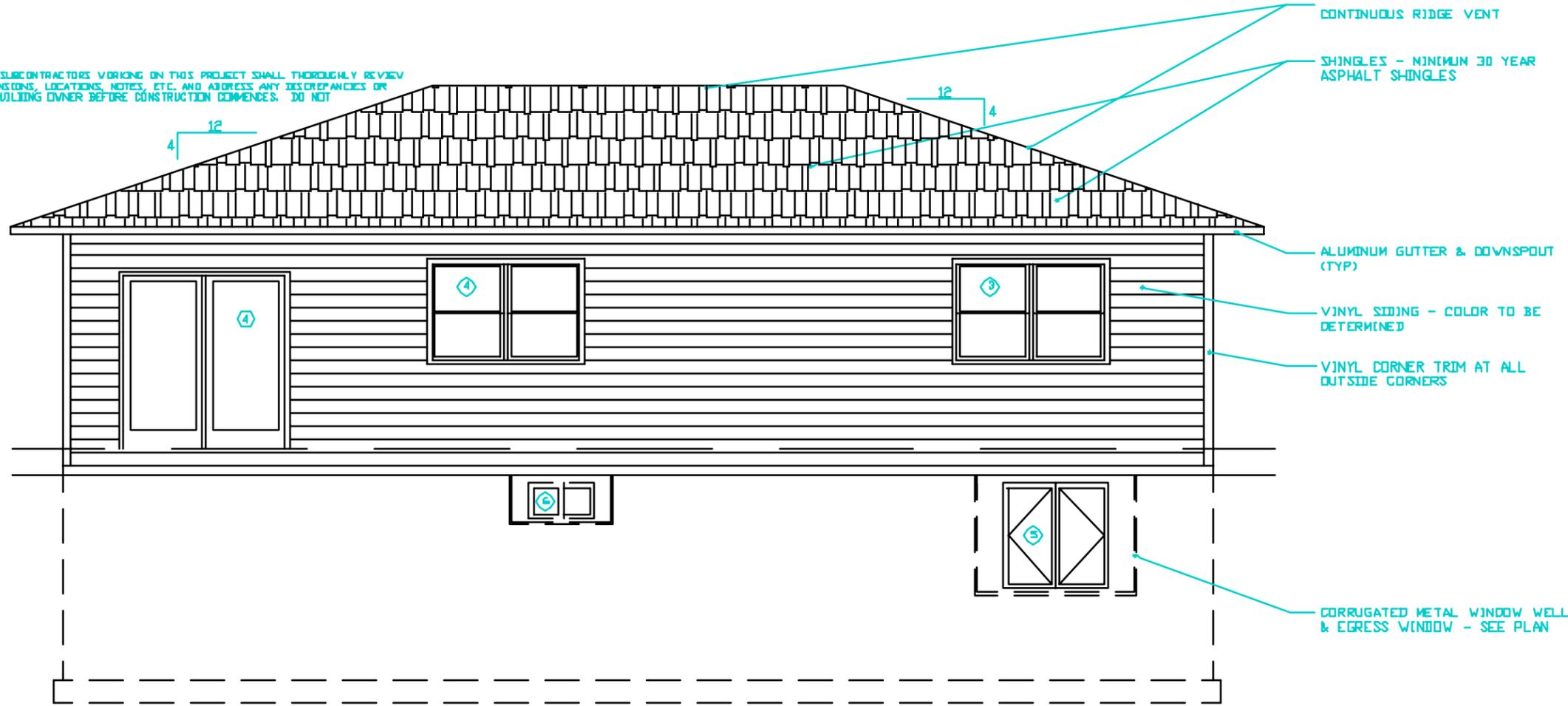
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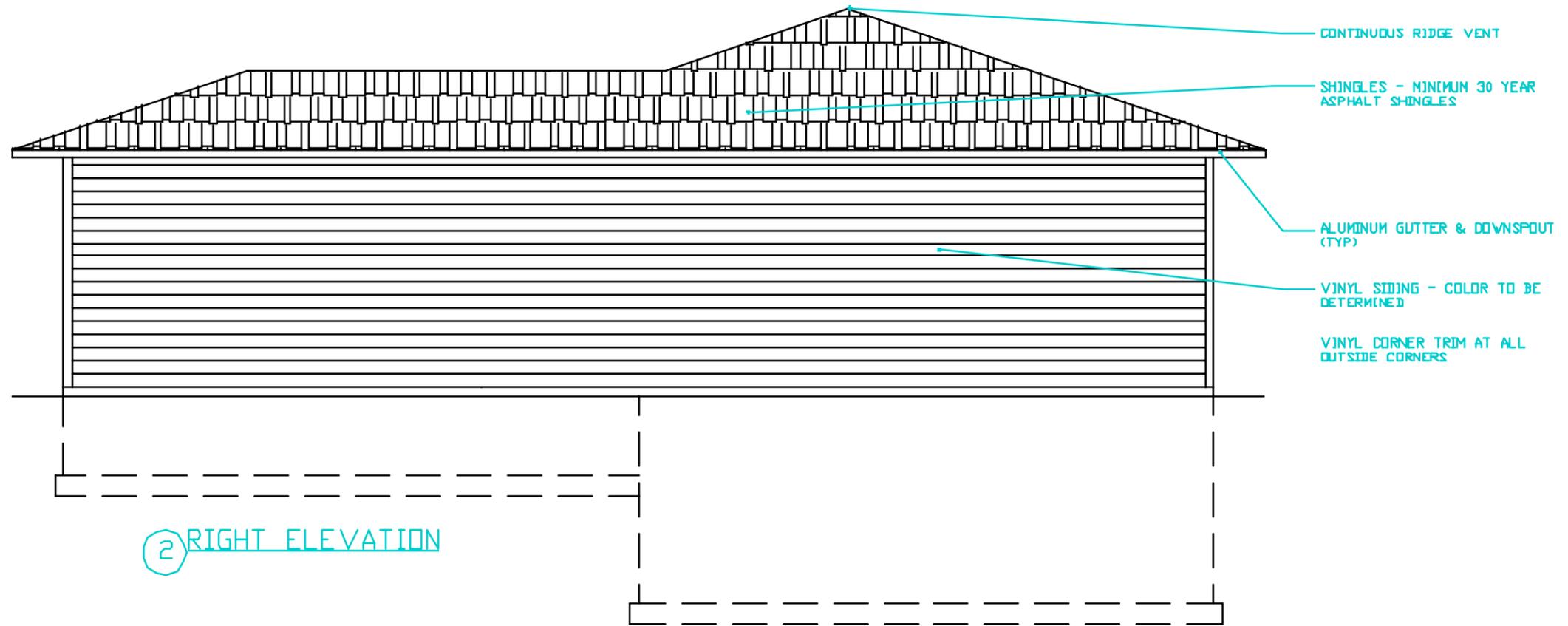
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SHEET NO:

A-20

NOTE:
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① BACK ELEVATION



② RIGHT ELEVATION

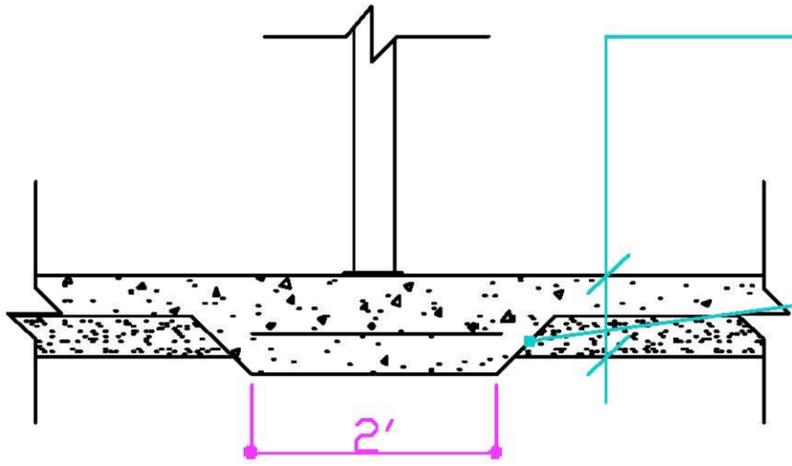
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TYPICAL SLAB ON GRADE FLOOR

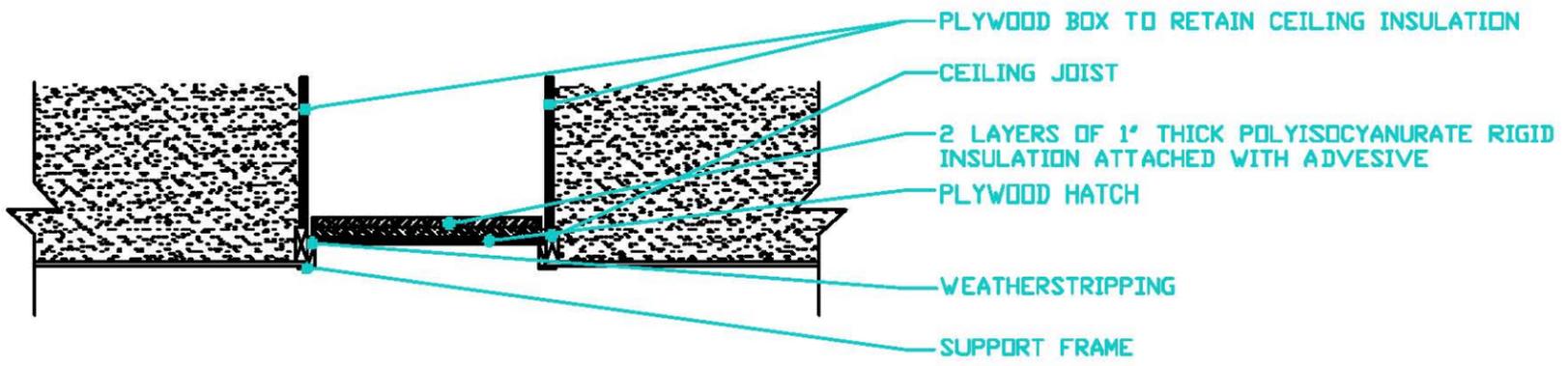


4" CONCRETE SLAB W/ 15% MIN FLY ASH CONTENT, 6X6-W1.4XW1.4 WWM OR FIBER REINFORCEMENT ADMIXTURE.
 24" x 24" x 10" CONCRETE FOUNDATION UNLESS NOTED OTHERWISE W/ (3) #4 IN BOTH DIRECTIONS, 6 MIL POLYETHYLENE VAPOR BARRIER, 4" CRUSHED STONE OR GRAVEL BASE OVER A BED OF COMPACTED SUBGRADE

1:1 SLOPE

COLUMN FOOTING

1



PLYWOOD BOX TO RETAIN CEILING INSULATION

CEILING JOIST

2 LAYERS OF 1" THICK POLYISOCYANURATE RIGID INSULATION ATTACHED WITH ADVESIVE

PLYWOOD HATCH

WEATHERSTRIPPING

SUPPORT FRAME

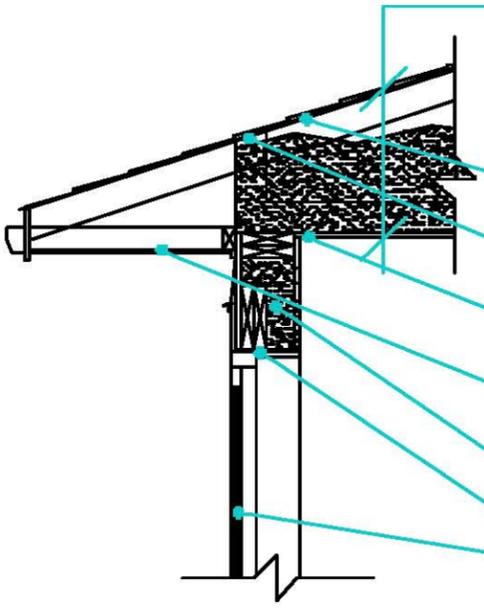
ATTIC HATCH DETAIL

2

NOTE
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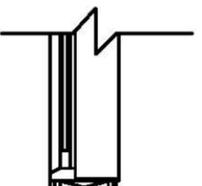
SHEET NO: A-303	DETAIL SECTIONS	ISSUED DATE:	DRAWN BY:	REV. 5:	REV. 4:	REV. 3:	REV. 2:	REV. 1:	REVISIONS:	Nebraska Affordable - 3 Bedroom Ranch W/ Basement	
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TYPICAL ROOF ASSEMBLY



- NO. 30 ASPHALT SATURATED ORGANIC FELT, FIBERGLASS SHINGLES, CLASS A, 30 YEAR WARRANTY, 1/2" ORIENTED STRAND BOARD SHEATHING W/ CLIPS, ENERGY HEEL ROOF TRUSSES SPACED AT 24" OC, R-45 BLOWN-IN FIBERGLASS WITH A MIN. OF 15% RECYCLED CONTENT OR R-45 BLOWN CELLULOSE, 1/2" HIGH STRENGTH GYPSUM
- ICE AND WATER BARRIER MEMBRANE INSTALLED FROM EAVE TO 36" WITHIN INTERIOR FACE OF EXTERIOR WALL
- INSTALL CORRUGATED BAFFLE OR EQUIVALENT TO MAINTAIN 2" CLEAR AIRSPACE BETWEEN INSULATION AND UNDERSIDE OF SHEATHING
- DRYWALL CLIPS @ 24" OC OR VD BLK, DO NOT NAIL CEILING TO TRUSS W/IN 16" OF WALLS
- VINYL PERFORATED SOFFIT - 2' SOLID SHEET IN BOTH DIRECTIONS WHERE MECHANICAL VENTING IS LOCATED
- 3" MIN. SPRAY APPLIED POLYURETHANE INSULATION OR EQUIVALENT
- HEADER CLIP AS PER PLAN
- LOW-E WINDOW AS PER WINDOW SCHEDULE

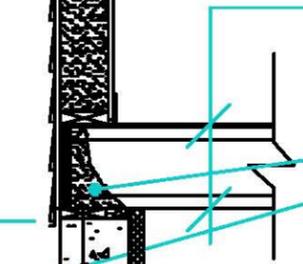
TYPICAL EXTERIOR WALL ASSEMBLY



VINYL SIDING AS INDICATED ON THE ELEVATIONS, HOUSEWRAP, 1/2" NOMINAL ORIENTED STRAND BOARD SHEATHING, 2X6 WOOD STUDS @ 24" OC, WITH SINGLE BOTTOM, DOUBLE TOP PLATES UNLESS OTHERWISE NOTED, R-22 BLOWN-IN FIBERGLASS WITH A MIN. OF 15% RECYCLED CONTENT OR EQUIVALENT, 1/2" HIGH STRENGTH GYPSUM BOARD

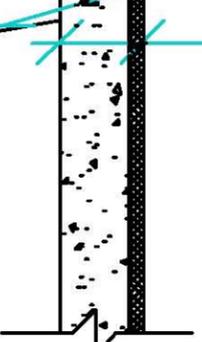
TYPICAL FLOOR ASSEMBLY

2'-0" MAX.



- FINISH FLOORING AS SPECIFIED, 3/4" NOMINAL T&G PLYWOOD DECKING, GLUED AND SCREWED W/1/2", SINGLE RIM JOIST @ BUILDING PERIMETER AS PER PLANS, JOISTS SPACED @ 24" OC FLOOR FRAMING AS PER PLAN, 1/2" HIGH STRENGTH GYPSUM BOARD CEILING AND WALLS UNLESS OTHERWISE NOTED
- 3" MIN. SPRAY APPLIED POLYURETHANE INSULATION OR EQUIVALENT
- FINISH GRADE VARIES, SLOPE 1:12 AWAY FROM BUILDING

TYPICAL EXTERIOR FOUNDATION WALL ASSEMBLY



2X6 PRESSURE TREATED SILL PLATE W/ SILL SEALER, ANCHOR TO FDN. W/ 1/2" DIA ANCHOR BOLTS X 10" MIN. @ 32" OC AND NOT MORE THAN 12" FROM CORNERS, 8" CONCRETE W/15% MIN. FLY ASH CONTENT, CONTINUOUS #4 VERTICAL REBAR SPACED 24" OC AND (6) #4 CONTINUOUS HORIZONTAL REBAR, WATER-BASED, NON-LEACHING WATERPROOFING - FOOTING OF WALL ENTIRE HEIGHT BELOW GRADE, MAXIMUM UNBALANCED FILL NOT TO EXCEED 8 FEET, 2" POLYISOCYANURATE RIGID INSULATION BOARD FOIL-FACED BOTH SIDES FROM TOP OF SILL TO 1/2" ABOVE FINISHED FLOOR ATTACHED WITH CONSTRUCTION ADHESIVE

1/2" ISOLATION JOINT MATERIAL

TYPICAL FOOTING



10" X 20" CONTINUOUS FOOTING W/ 15% MIN. FLY ASH CONTENT, (2) CONTINUOUS 3" REBAR AND #3 HOOK DOVL AT 2'-0" OC TO EXTEND 18" W/IN WALL, BEARING ON VIRGIN OR COMPACTED SOIL

TYPICAL SLAB ON GRADE FLOOR

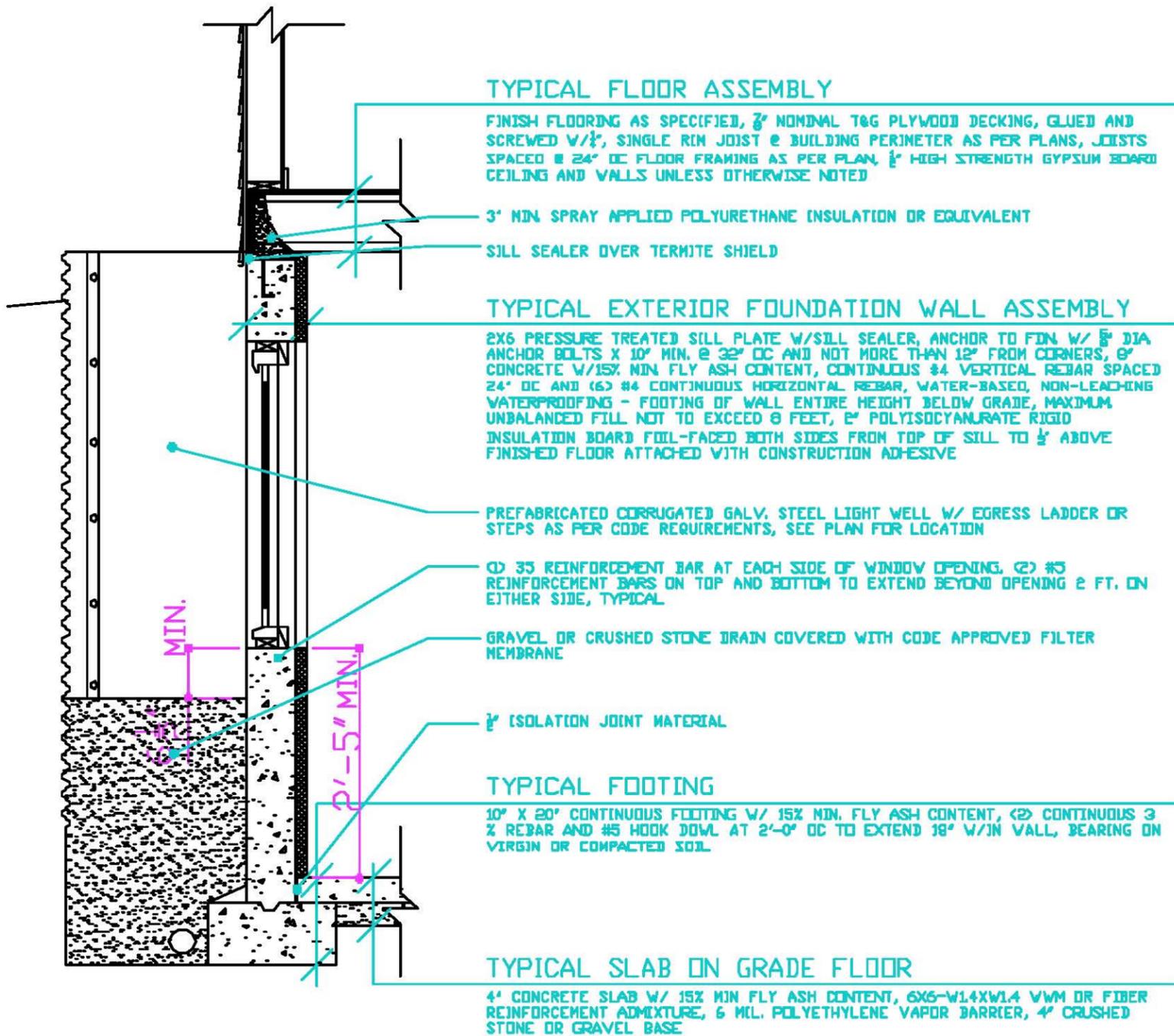


4" CONCRETE SLAB W/ 15% MIN FLY ASH CONTENT, 6X6-W1.4XV14 W/M OR FIBER REINFORCEMENT MIXTURE, 6 MIL. POLYETHYLENE VAPOR BARRIER, 4" CRUSHED STONE OR GRAVEL BASE

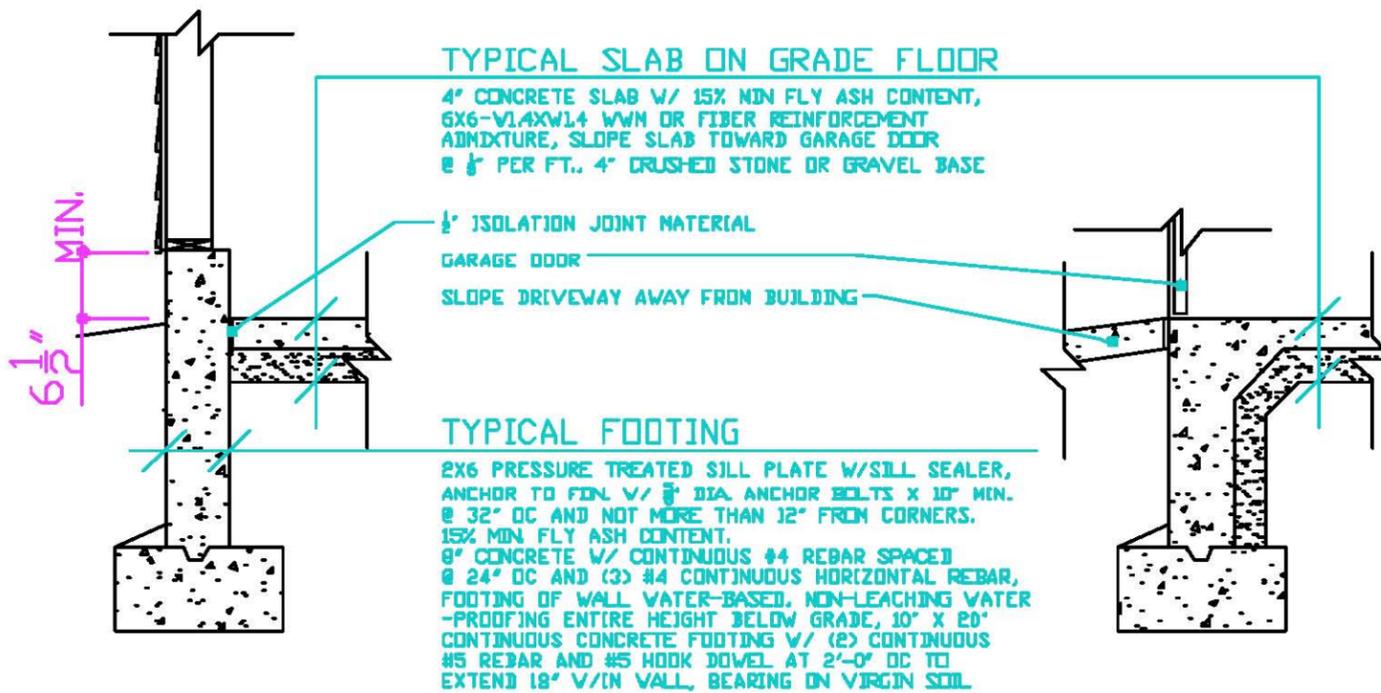
1 TYPICAL WALL SECTION

NOTE
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A-301	SHEET NO.	WALL SECTION	ISSUED DATE:	DRAWN BY:	REV. 5:	REV. 4:	REV. 3:	REV. 2:	REV. 1:	REVISIONS:	Nebraska Affordable - 3 Bedroom Ranch W/ Basement	
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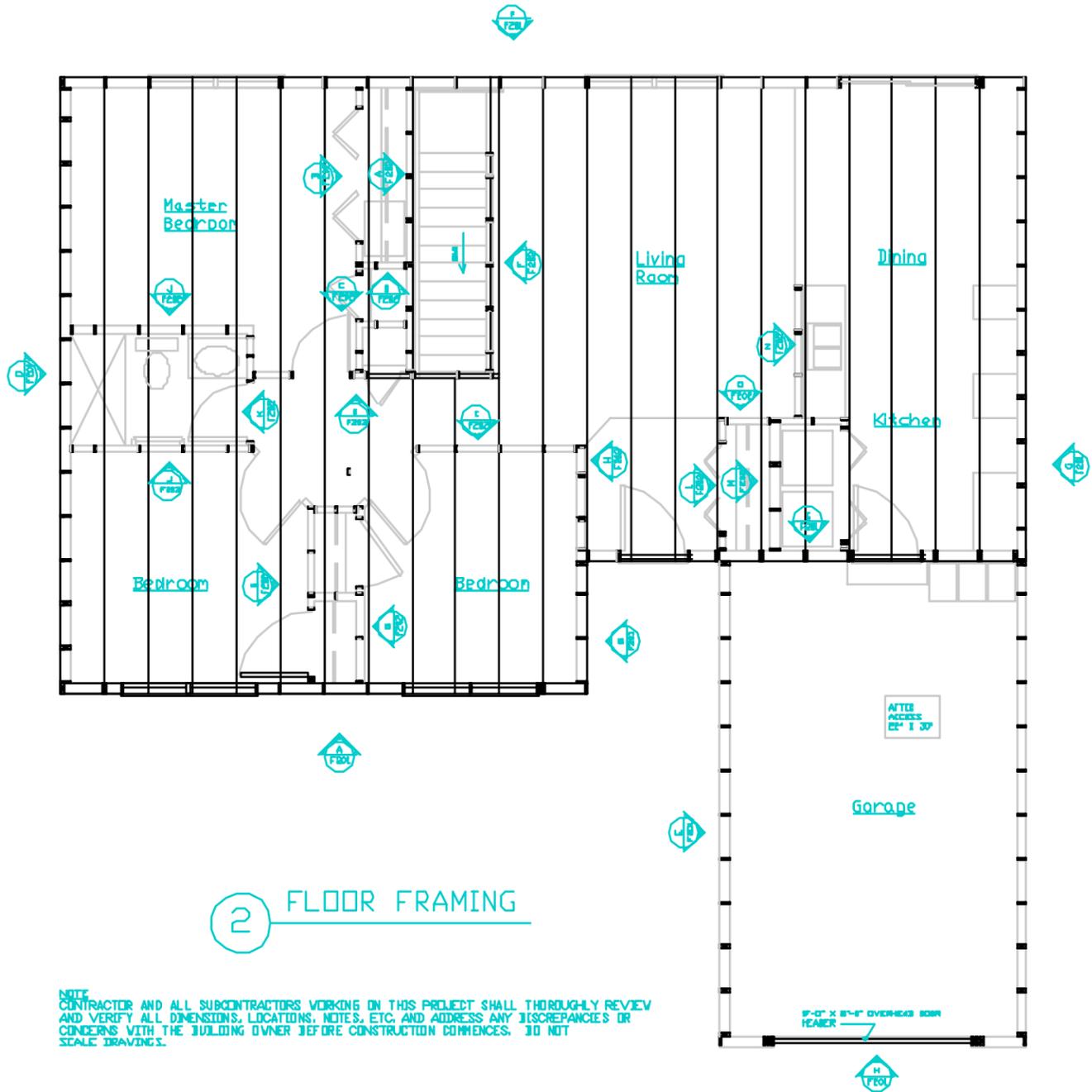
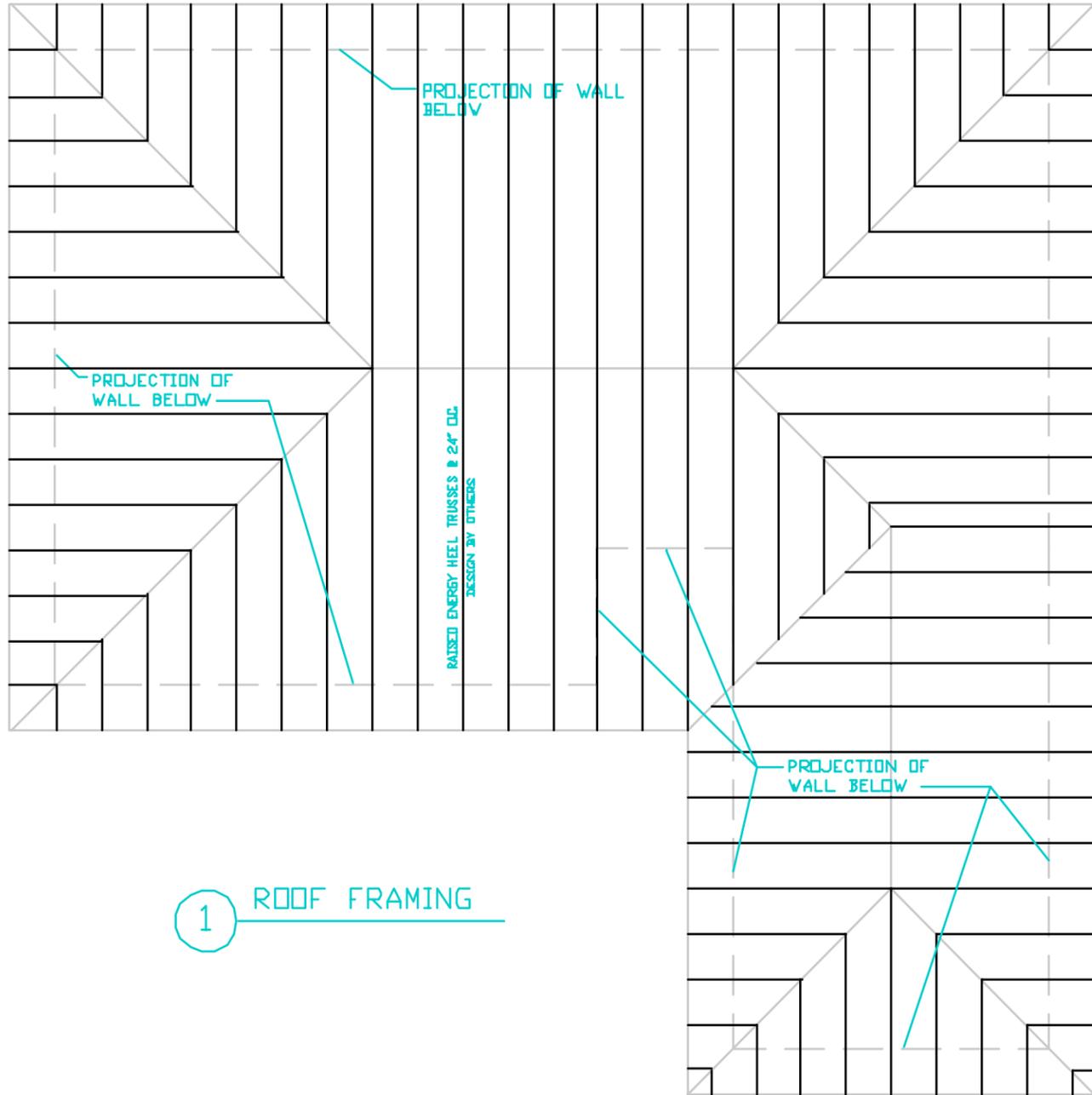
1 WINDOW WELL SECTION



2 GARAGE FOOTING SECTION

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A-302	SHEET NO.	DETAIL SECTIONS	ISSUED DATE:	DRAWN BY:	REV. 5	REV. 4	REV. 3	REV. 2	REV. 1	REVISIONS:	Nebraska Affordable - 3 Bedroom Ranch W/ Basement	
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Nebraska Affordable - 3 Bedroom Ranch w/
Basement



Nebraska Energy Office
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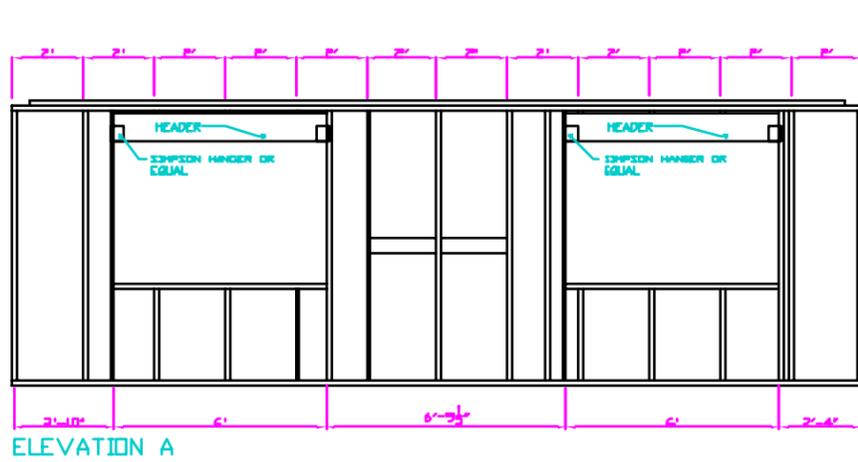
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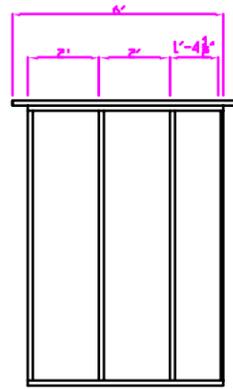
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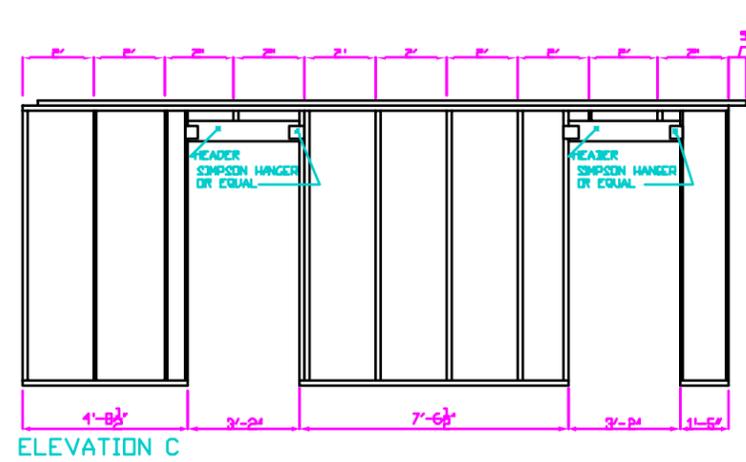
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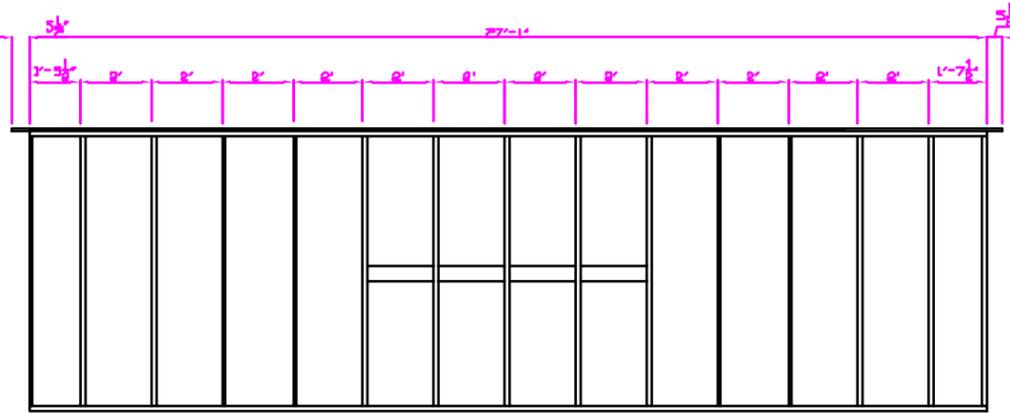
ELEVATION A



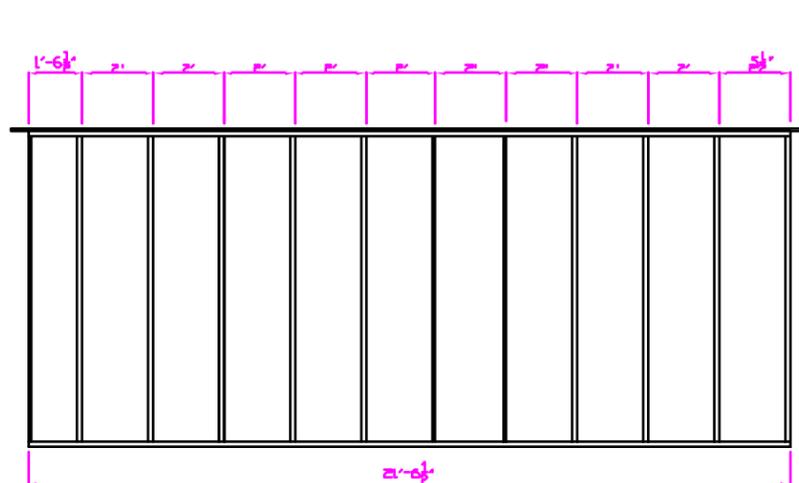
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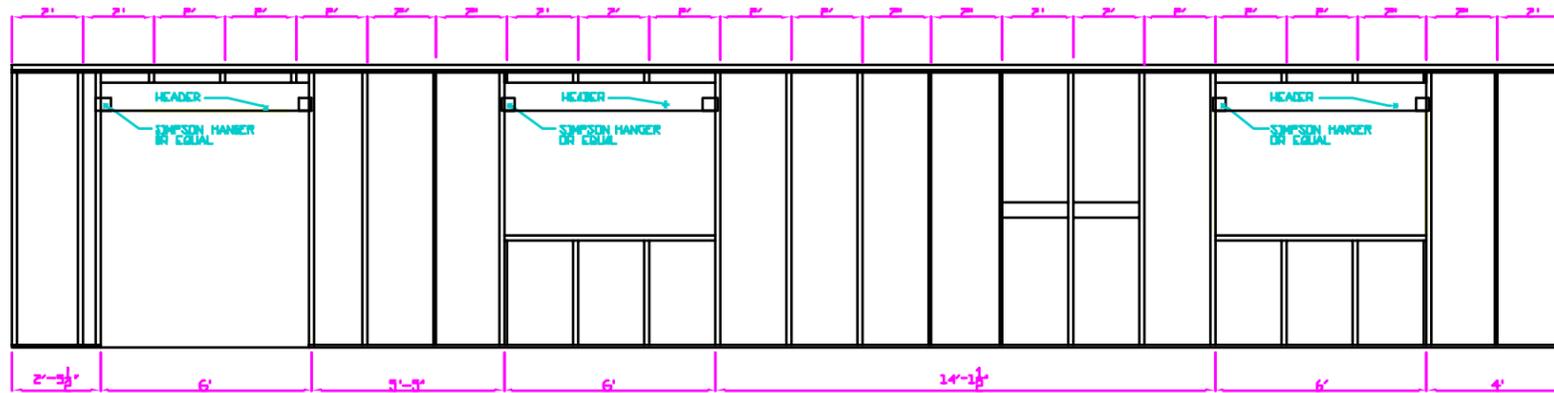
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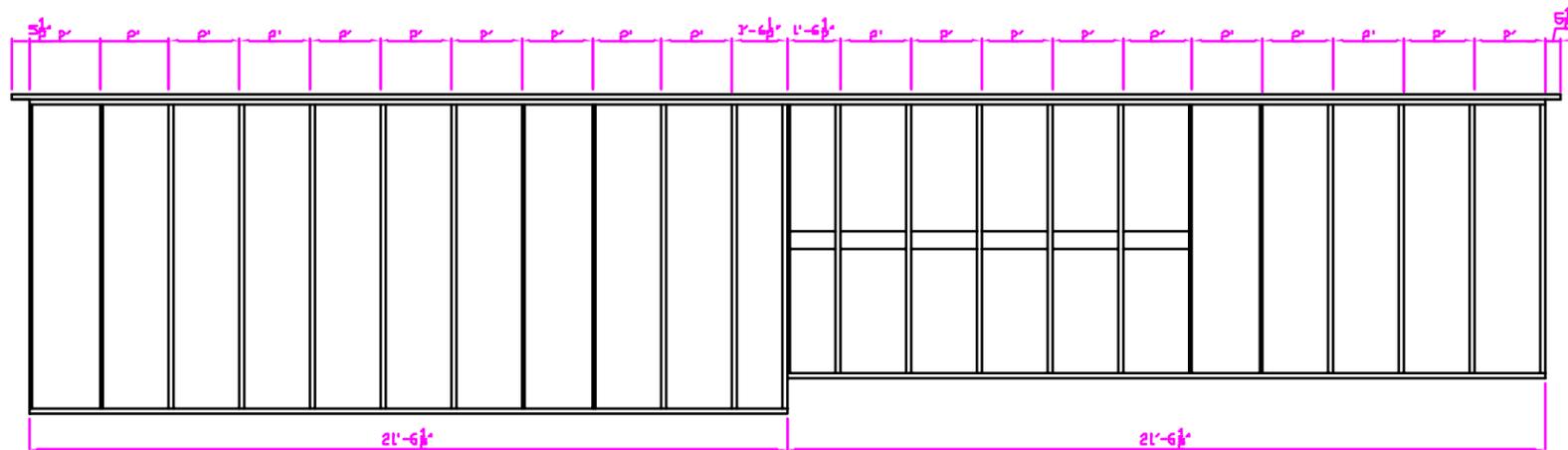
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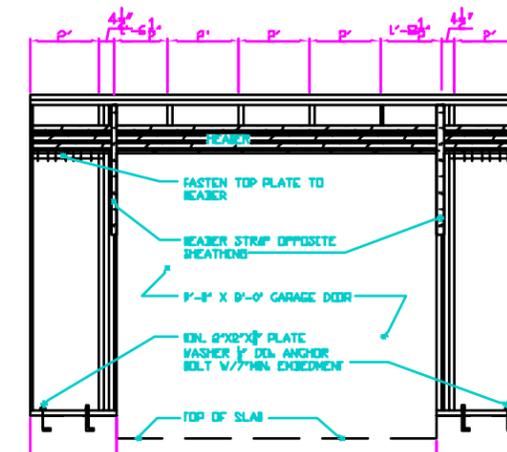
ELEVATION E



ELEVATION F



ELEVATION G



ELEVATION H

Nebraska Affordable - 3 Bedroom Ranch W/
Basement

Nebraska Energy Office
GREEN BUILT/BUILDING AMERICA PROGRAM



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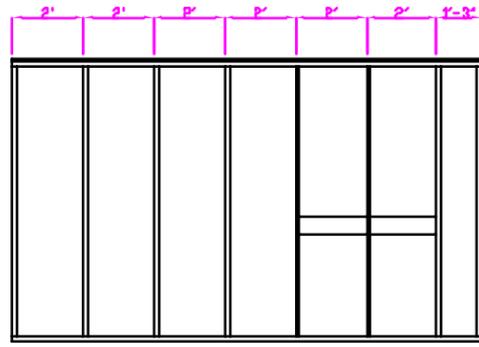
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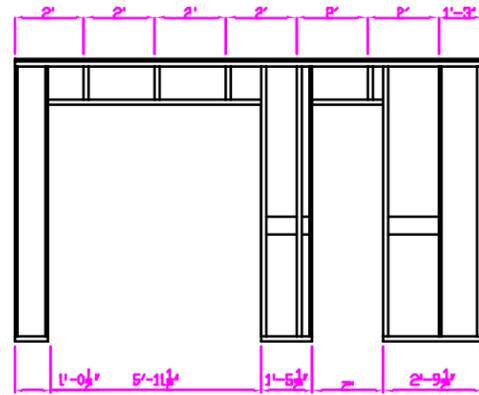
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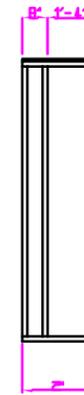
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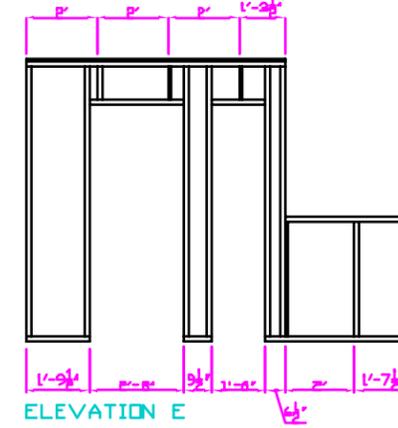
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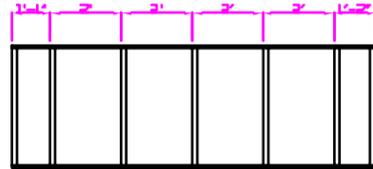
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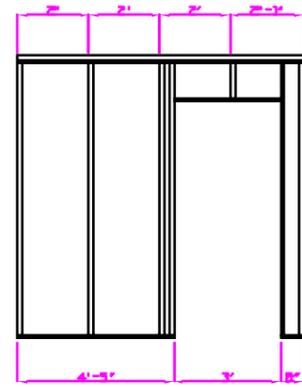
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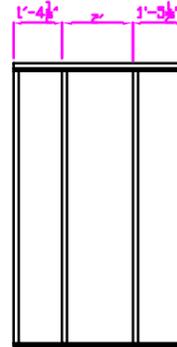
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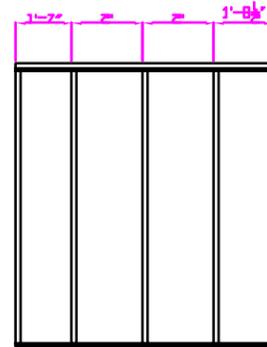
ELEVATION F



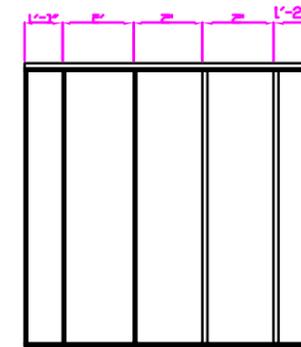
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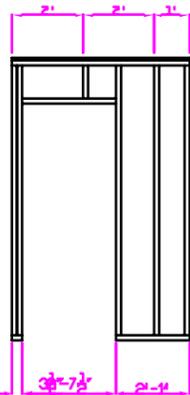
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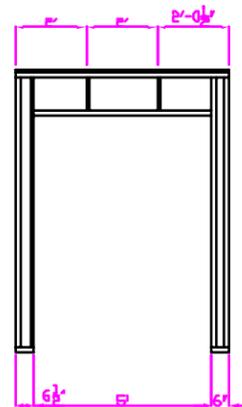
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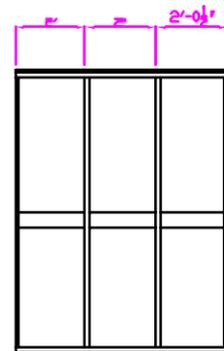
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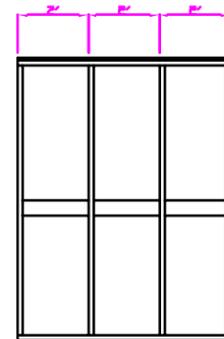
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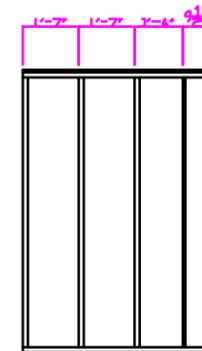
ELEVATION L



ELEVATION M



ELEVATION N



ELEVATION O

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FRAMING
ELEVATION

SHEET NO:

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General Mechanical Notes

- HVAC, DUCT SIZING AND VENTILATION ARE BASED ON AN INFILTRATION RATE OF 1200 CFM @ 50 PASCALS - BLOWER DOOR TEST & PROPOSED LEAK FREE DUCTWORK.
- ALL SUPPLY AND RETURN BRANCHES AND TRUNKS SHALL BE HARD-DUCTED.
- ALL DUCTWORK SHALL BE TIGHTLY SEALED WITH MASTIC AND MESH TAPE OR METAL TAPE HAVING A UL-181-A RATING - NO SUBSTITUTIONS.
- ALTERNATE EQUIPMENT MUST BE APPROVED BY THE BUILDING OWNER.

Register And Diffuser Notes

- HART & COOLEY, MODEL 421, 2 X 14 FLOOR DIFFUSER, OR EQUAL, DESIGNED FOR 60 CFM @ 500 FT./MIN. (QUANTITY = 5)
- HART & COOLEY, MODEL 420, 2 X 14 TDE SPACE GRILLE, OR EQUAL, DESIGNED FOR 60 CFM @ 500 FT./MIN. (QUANTITY = 1)
- HART & COOLEY, MODEL 651, 10 X 4 REGISTER, OR EQUAL, DESIGNED FOR 60 CFM @ 500 FT./MIN. (QUANTITY = 1)
- HART & COOLEY, MODEL 421, 2 X 10 FLOOR DIFFUSER, OR EQUAL, DESIGNED FOR 30 CFM @ 500 FT./MIN. (QUANTITY = 1)
- HART & COOLEY, MODEL 16, 6 INCH ROUND CEILING DIFFUSER, OR EQUAL, DESIGNED FOR 60 CFM @ 500 FT./MIN. (QUANTITY = 5)
- HART & COOLEY, MODEL 659, 20 X 20 RETURN AIR FILTER GRILLE, OR EQUAL, DESIGNED FOR 660 CFM @ 400 FT./MIN. (QUANTITY = 1). NOTE SEPERATE GRILLE AND FILTER HOLDER MAY BE USED PROVIDED GRILLE VELOCITY IS 400 FT./MIN. OR LESS, FILTER AREA IS 400 SQ. IN. OR MORE, AND FILTER HOLDER IS PROVIDED WITH A DOOR AND FILTER SUPPORT ALONG THE DOOR ON THE FURNACE SIDE OF THE FILTER. (QUANTITY = 1)
- TAMARACK, MODEL RAP 14.8, RETURN AIR PATHWAY (RAP). NOTE: MUST BE PROVIDED ABOVE DOOR TO MAIN FLOOR BATHROOM FOR EXHAUST VENTILATION. (QUANTITY = 6)

Mechanical Ventilation Notes

- (E1) EXHAUST FAN #1: AIR KING (MODEL AKB0LSL) 80 CFM FAN/LIGHT COMBINATION OR EQUIVALENT, RATED FOR RELIABLE TIMED HOURLY OPERATION. FAN TO BE VENTED WITH 4" INSULATED DUCT THROUGH THE ROOF. CONNECT TO TIMER CONTROL "C" (BELOW) LOCATED NEAR BREAKER PANEL AND IN PARALLEL WITH STANDARD OCCUPANT TIMER IN SWITCH ON BATHROOM WALL.
- (E2) EXHAUST FAN #2: LOCATED IN BASEMENT RESTROOM, 50 CFM FAN, ON A STANDARD TIMER SWITCH LOCATED IN WALL. PROVIDE 4" INSULATED VENT PIPING ONLY, CAPPED AT BASEMENT AND ABOVE ROOF.
- (C) REMOTE-WIRED GRASSLIN PIN TIMER CONTROL, MODEL #KMA ST-1G SET FOR MINIMUM RUN TIME OF 40 MIN./HR OR 53 CFM/HR. LOCATE NEXT TO BREAKER PANEL.
- (T) PROGRAMMABLE THERMOSTAT.

EQUIPMENT SCHEDULE

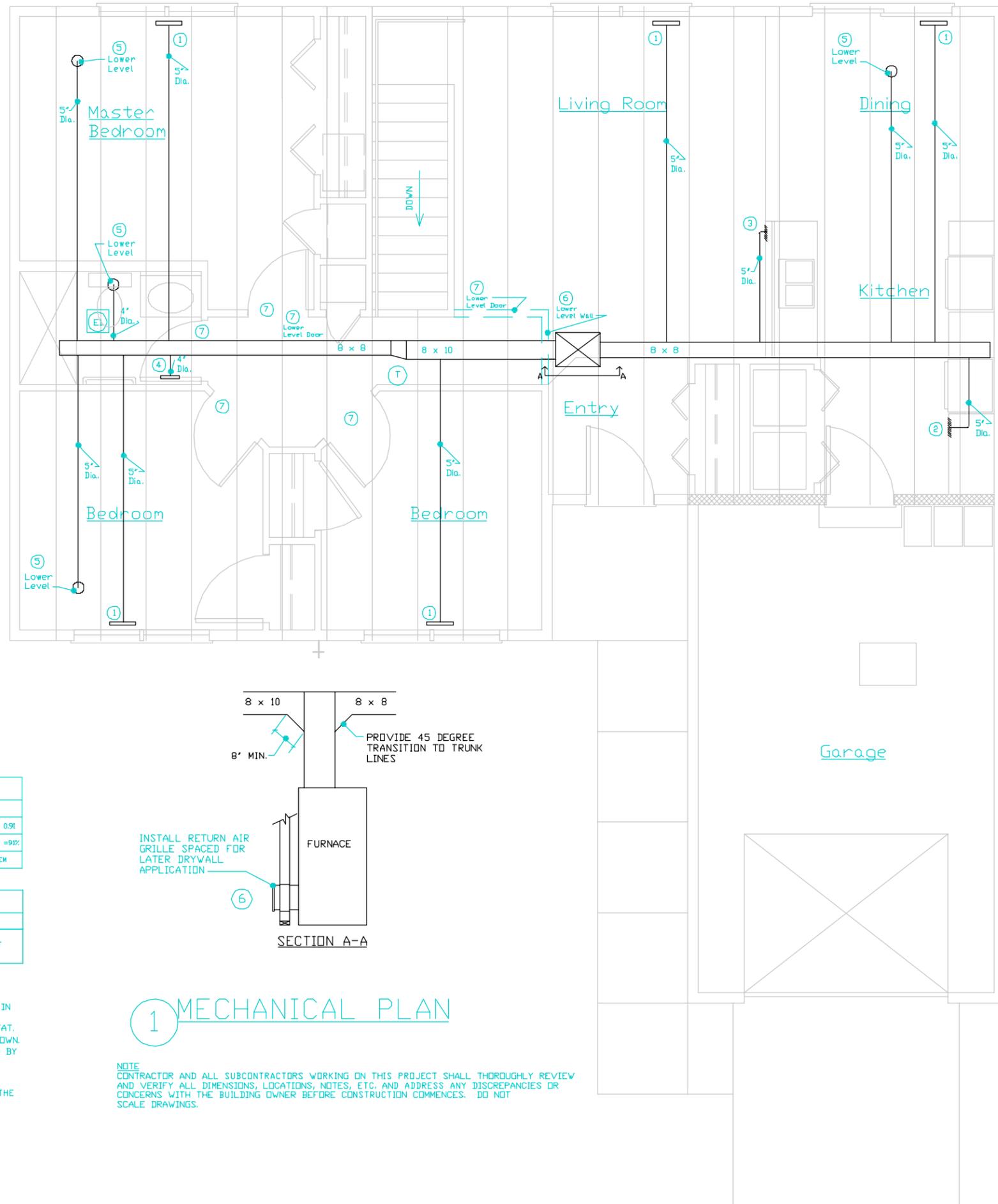
TAG	DESCRIPTION	MANUF.	MODEL	NOTES
(A)	ELECTRIC WATER HEATER	AJ SMITH	ECT-40	MINIMUM EF = 0.91
(B)	DIRECT-VENT FURNACE	CARRIER	59MCB040	MINIMUM AFUE = 91%
(C)	SEER 13 CONDENSING UNIT	CARRIER	24ACA	1.5 TON SYSTEM

ALT. EQUIPMENT SCHEDULE

TAG	DESCRIPTION	NOTES
(A)	AIR SOURCE HEATPUMP	MIN SEER = 14.0, MIN HSPF = 8.5, 1.5 TON SYSTEM, MAX 10 KW ELECTRIC BACK-UP HEAT

Mechanical Equipment Notes

- NO ATMOSPHERIC GAS APPLIANCES SHALL BE INSTALLED IN THIS HOME.
- CONTRACTOR SHALL INSTALL A PROGRAMMABLE THERMOSTAT.
- FURNACE AND WATER HEATER SHALL BE LOCATED AS SHOWN.
- ALTERNATE, EQUIVALENT EQUIPMENT MUST BE APPROVED BY THE BUILDING OWNER.
- 1.5 TON A/C SYSTEM WITH R-410A REFRIGERANT, DESIGN AIRFLOW = 690 CFM AT 0.5 INCHES EXTERNAL PRESSURE.
- FURNACE SHALL BE CONCENTRICALLY VENTED THROUGH THE ROOF, USING APPROVED KIT.



1 MECHANICAL PLAN

NOTE
CONTRACTOR AND ALL SUBCONTRACTORS WORKING ON THIS PROJECT SHALL THOROUGHLY REVIEW AND VERIFY ALL DIMENSIONS, LOCATIONS, NOTES, ETC. AND ADDRESS ANY DISCREPANCIES OR CONCERNS WITH THE BUILDING OWNER BEFORE CONSTRUCTION COMMENCES. DO NOT SCALE DRAWINGS.

Nebraska Affordable - 3 Bedroom Ranch w/
Basement



Nebraska Energy Office
GREEN BUILT/BUILDING AMERICA PROGRAM

1111 'D' STREET, SUITE 223
LINCOLN, NE 68509
DUMFRIES, (402) 471-2067

REVISIONS:

REV. 1:

REV. 2:

REV. 3:

REV. 4:

REV. 5:

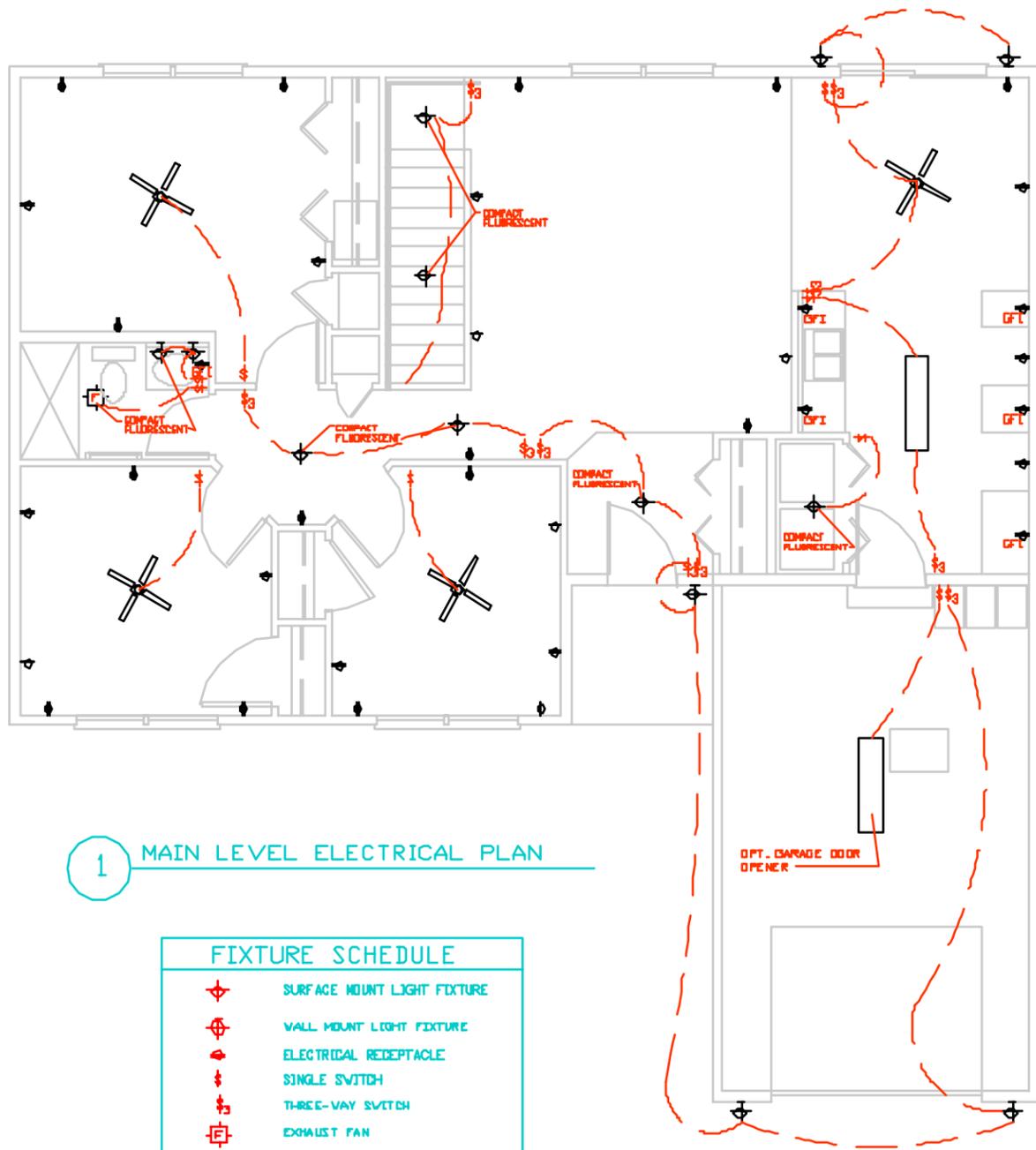
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MECHANICAL
PLAN

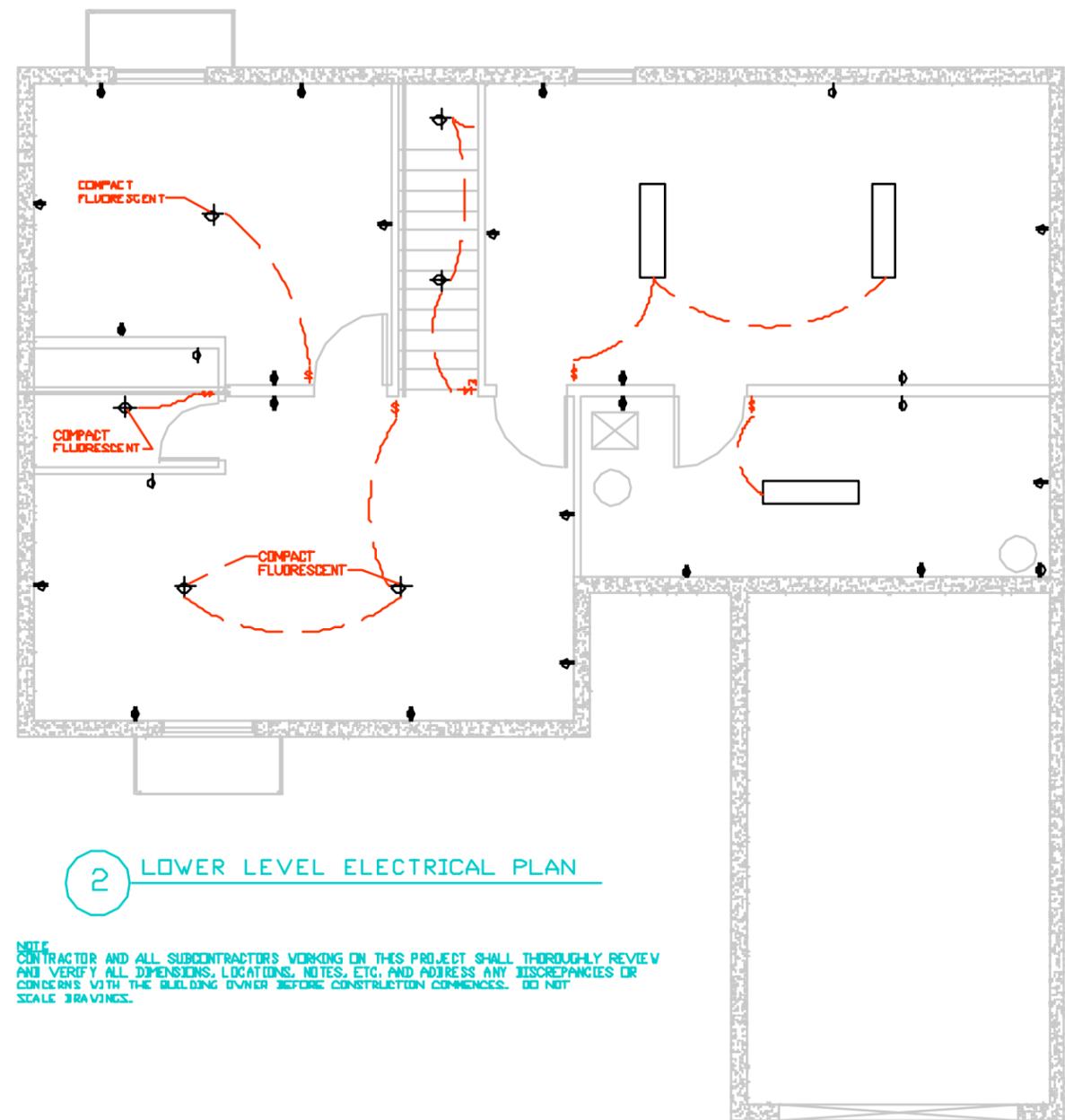
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M-101



1 MAIN LEVEL ELECTRICAL PLAN

FIXTURE SCHEDULE	
	SURFACE MOUNT LIGHT FIXTURE
	WALL MOUNT LIGHT FIXTURE
	ELECTRICAL RECEPTACLE
	SINGLE SWITCH
	THREE-WAY SWITCH
	EXHAUST FAN
	FLUORESCENT LIGHT FIXTURE
	ENERGY STAR RATED CEILING FAN



2 LOWER LEVEL ELECTRICAL PLAN

NOTE: CONTRACTOR AND ALL SUBCONTRACTORS WORKING ON THIS PROJECT SHALL THOROUGHLY REVIEW AND VERIFY ALL DIMENSIONS, LOCATIONS, NOTES, ETC. AND ADDRESS ANY DISCREPANCIES OR CONCERNS WITH THE BUILDING OWNER BEFORE CONSTRUCTION COMMENCES. DO NOT SCALE DRAWINGS.

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ELECTRIC
PLANS

SHEET NO:

E-10