www.guliker.ca
info@guliker.ca

CLIENT ADDRESS:

Ambstep Homes
9240 Young Road,
Chilliwack BC V2P 4R2

Lot 1 Collins Drive, Chilliwack, BC

perspective views

DRN:

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April 17, 2015

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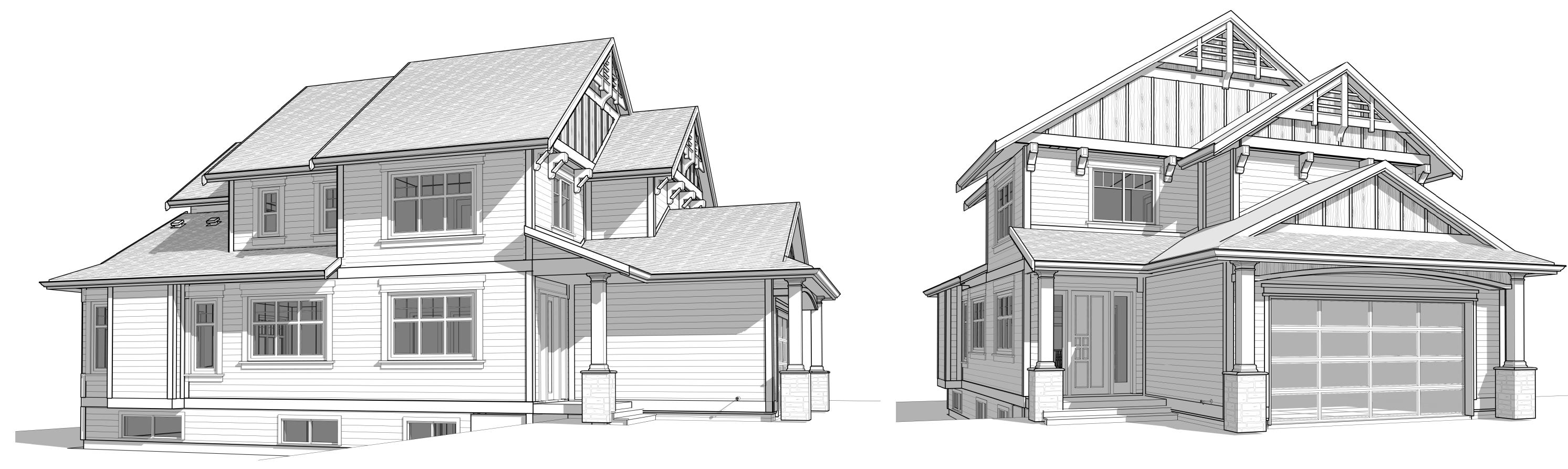
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DRAWING LIST & REVISIONS

NO. TITLE REV# REV. DATE REV. DESCRIPTION

a1.1 perspective views
a2.1 site plan
a3.1 foundation plan & basement floor plan
a3.2 main & upper floor plans
a3.3 roof plan
a4.1 building elevations
a5.1 building sections
a6.1 energy efficiency requirements
a7.1 3d floor plans



LEFT PERSPECTIVE VIEW

FRONT PERSPECTIVE VIEW



REAR PERSPECTIVE

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1. These drawings and the ideas contained in them are, and remain, the exclusive property of Guliker Design Group Inc. 2. The Builder shall check and verify all drawings and dimensions for accuracy prior to the commencement of construction 3. Drawings may be scaled, but written dimensions shall take precedence. 4. Construction materials and procedures shall conform to the requirements outlined in the B.C. Building code 2012 edition

and all addenda thereto, as well as any applicable local bylaws. 5. The contractor shall take precautions as outlined by the Canadian Construction Safety Code to ensure the Public's 6. The Contractor shall take adequate precautions to store materials properly on site to save them from damage.

7. Where applicable: read these drawings in conjunction with Structural, Mechanical, Electrical, Geotechnical, Civil and shop drawings prepared by other consultants. 8. The contractor shall be responsible for taking out all relevant permits, and shall call for all necessary inspections by the authority having jurisdiction.

B. SITE WORK Slope all finished grades away from the building at a minimum of 1% to facilitate run-off of surface water.
 The builder shall check and verify all drawings and dimensions for accuracy prior to commencement of construction. 3. Do not drain surface water onto adjacent properties. 4. Graded slopes shall not exceed the natural angle of repose for the type of material being used unless the builder shall take precautions as outlined by the Canadian Construction Safety to ensure the public approved counteracting measures

5. Building site survey is required prior to pouring foundation walls.

C. FOUNDATIONS

1. Footings shall rest on native, undisturbed, inorganic soil below frost penetration. 2. Allow openings in foundations for services as required and to be confirmed before pouring concrete. 3. Do not backfill before floor joists and subflooring are securely in place, or before concrete has reached its 28 day

4. Anchor all plates to foundation with 5/8"Ø X 8" long steel anchor bolts. 5. Protect wood members in contact with concrete with a dampproofing material.

D. FLOORS

1. Provide 2.5" rigid insulation (RSI 2.1) below all unheated concrete slabs above frost line.

E. FRAMING

1. All framing to be in accordance with the B.C. Building code or Structural Engineer. 2. All Engineered PSL, LVL, LSL etc...Beams and columns to be confirmed confirmed by a Structural Engineer. 3. Contractor shall provide truss shop drawings to Guliker Design Group Inc. for review prior to construction.

1. Provide 1:300 roof venting - 50% spread evenly around perimeter and 50% at ridge.

G. DOORS/WINDOWS AND VENTILATION 1. All windows and their installation shall comply with NAFS Standard specifications as per 9.7.4 of the 2012 B.C. Building

Install aluminum flashing over all unprotected exterior wall penetrations.
 Install screened covers to all vents, ducts, etc... designed to prevent entry of debris, insects, birds, or rain.
 Install screens to connections between gutters and downspouts (or roof and drains) to prevent entry of debris.

5. Principal ventilation exhaust fan to be provided at a rate of 42 L/s for 380m² of floor area and bedrooms as per B.C.

H. BUILDING ENVELOPE

• ALL EXTERIOR ASSEMBLIES MUST MEET, OR EXCEED THE FOLLOWING REQUIREMENTS: RSI 1.99 (R 11.31) Foundation walls: Foundation walls Below frost line: Foundation walls above frost line: RSI 1.96 (R 11.14) S.O.G. (integral footing) RSI 1.96 (R 11.14) Heated floors: RSI 2.32 (R 13.18) Heated floors RSI 2.32 (R 13.18) Unheated floors on permafrost RSI 1.96 (R 11.1) Unheated floors above frost line: RSI 2.78 (R 15.78) Exterior walls RSI 4.67 (R 26.52) Floors over unheated spaces: RSI 2.32 (R 13.17 Heated floors Skylight Shafts RSI 2.78 (R 15.8) Cathedral Ceilings & Flat Roofs RSI 4.67 (R 26.5)

Ceilings below attics RSI 6.91 (R 39.2) Skylights Fenestration & Doors RSI 1.1 (R 6.25) Door to garage Access hatch RSI 2.6 (U 0.46) Front Doors Glass Block USI 2.9 (U 0.51)

• Where two planes of insulation are separated by a building envelope assembly, one of the planes of insulation must be extended to overlap four times the thickness of the separation • A reduction in the thermal resistance of the attic insulation at the perimeter is permitted, provided the insulation is constrained only by the roof slope and venting req'ts and the minimum thermal resistance value above the exterior wall is • Door and window installers to ensure the joints and junctions between walls and other components match the R-value of

the lower of the adjoining components. • The interface between window head/jamb/sill and between doors and skylights must be made airtight by sealing all joints and junctions between the air barrier material in the wall and window. • All Mechanical, electrical and plumbing components placed within and parallel to an exterior wall are required to be insulated to the effective thermal resistance required for the wall at the projected area of the system component.

• All potlights and other protrusions through the vapor barrier must be sealed to stop air leakage.

· All joints at the transition between the foundation wall and the above grade wall must be made air-tight by sealing all joints and junctions between the structural components or covering the structural components with an air barrier material. · Where piping is installed outside the plane of insulation, additional insulation is required to achieve a thermal resistance equivalent to exterior above grade wall requirements defined in 9.36.2 B.C.B.C

EXPOSED

FG

EXTERIOR FLOOR DRAIN

FINISHED GRADE FRONT LOT LINE FROST PROTECTION

FIBERGLASS REINFORCED PANELS A-BOLT ANCHOR BOLT GYPSUM BOARD A.B. ARCH A-ROD ANCHOR BOLT HECTARES ARCHITECTURAL DRAWINGS HOLLOW CORE HDGS H.1.E H.2.E HM ANCHOR ROD HOT DIPPED GALVANIZED STEEL HOOK ONE END AREA DRAIN HOOK TWO ENDS ABOVE FINISHED FLOOR HOLLOW METAL ALUM ALUMINUM HOUR HARDWOOD ACOUSTICAL TILE HOT WATER TANK **BOTTOM UPPER LAYER** INSULATED **BOTTOM LOWER LAYER** INTERIOR SIDE LOT LINE B.W.B BRACED WALL BAND B.W.P LAM LAV BRACED WALL PANEL LAMINATE LAVATORY SINK B.C.B.C. BC BUILDING CODE LIVE LOAD BOTTOM CHORD LONG LEG VERTICAL BIFOLD DOOR LLH LOC. **BUILDING PAPER** LOCATIONS METERS FLUSH BEAM MECH MECHANICAL DROPPED BEAM MINIMUM EXTERIOR SIDE LOT LINE ESLL METAL NOT APPLICABLE LSL PSL LAMINATED STRAND LUMBER NUMBER PARALLEL STRAND LUMBER LVL LAMINATED VENEER LUMBER ON CENTRE ON CENTRE T.U.L T.L.L O/H PEMB TOP UPPER LAYER OVERHEAD PRE-ENGINEERED METAL BUILDING TOP LOWER LAYER C'SINK COUNTER SINK POCKET DOOR CHL CHLG PROPERTY LINE CHAIN LINK P.O. P.T. CHAIN LINK GATE POST OVER CMU CONC. CONCRETE MASONRY UNIT PRESSURE TREATED CONCRETE REQUIREMENT CP CPT CPTT COMPLETE PENETRATION REAR LOT LINE CARPET TILE REINFORCED WITH CT CERAMIC TILE ROUGH OPENING COMPLETE WITH or COMES WITH ROD AND SHELF SMOKE DETECTOR DECK DRAIN SQUARE METERS DIAMETER S.O.G SLAB ON GRADE DEAD LOAD SQFT SST SW T&G DRAWING SQUARE FEET/FOOT DRAWINGS SIMPSON STRONG TIE E/S **EACH SIDE** SHEAR WALL TONGUE AND GROOVE EACH END EA. EACH THICK **EPOXY COATING** TYPICAL UNLESS NOTED **EXISTING GRADE** EXISTING GYPSUM BOARD UNLESS NOTED OTHERWISE ELEC EWP EXTG EXP EXT. UNDERSIDE EXISTING WALL PANEL VAPOR BARRIER EXISTING WITH

(_)

QUANTITY

DRAWING LEGEND SYMBOLS

DIRECTION OF BUILDING OR WALL ELEVATION 1 ELEVATION NUMBER A1.1 - SHEET LOCATION OF ELEVATION

DIRECTION OF BUILDING OR WALL ELEVATION ELEVATION NUMBER S0.0 SHEET LOCATION OF ELEVATION

1 — CALLOUT NUMBER A1.1 - SHEET LOCATION OF CALLOUT

→ EXTEND OF CALLOUT / DETAIL

1 DOOR NUMBER SYMBOL WINDOW NUMBER SYMBOL

W1 > WALL TYPE

SPOT ELEVATION SD- SMOKE DETECTOR

SEXHAUST FAN

1\ REVISION NUMBER

FLOOR CONSTRUCTION ASSEMBLY ROOF CONSTRUCTION

ASSEMBLY TAG F1 FOOTING TAG

SW1 SHEARWALL TAG HOLD DOWN

J1 JOIST TAG

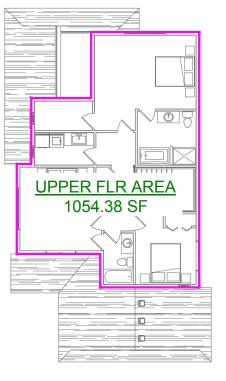
FP1 FLOOR PANEL TYPE TAG

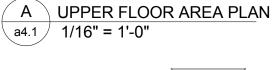
ARROW DIRECTION LIGHT (P1) WALL PANEL NUMBER

A PILE NUMBER

STRAP SYMBOL POINT LOAD ON ACTIVE LEVEL

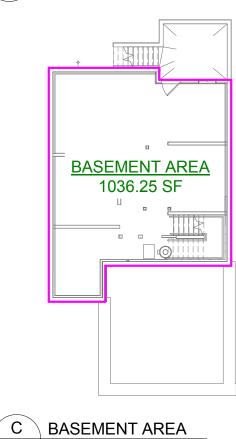
→ POINT LOAD FROM ABOVE TRUE NORTH DIRECTION PROJECT NORTH DIRECTION



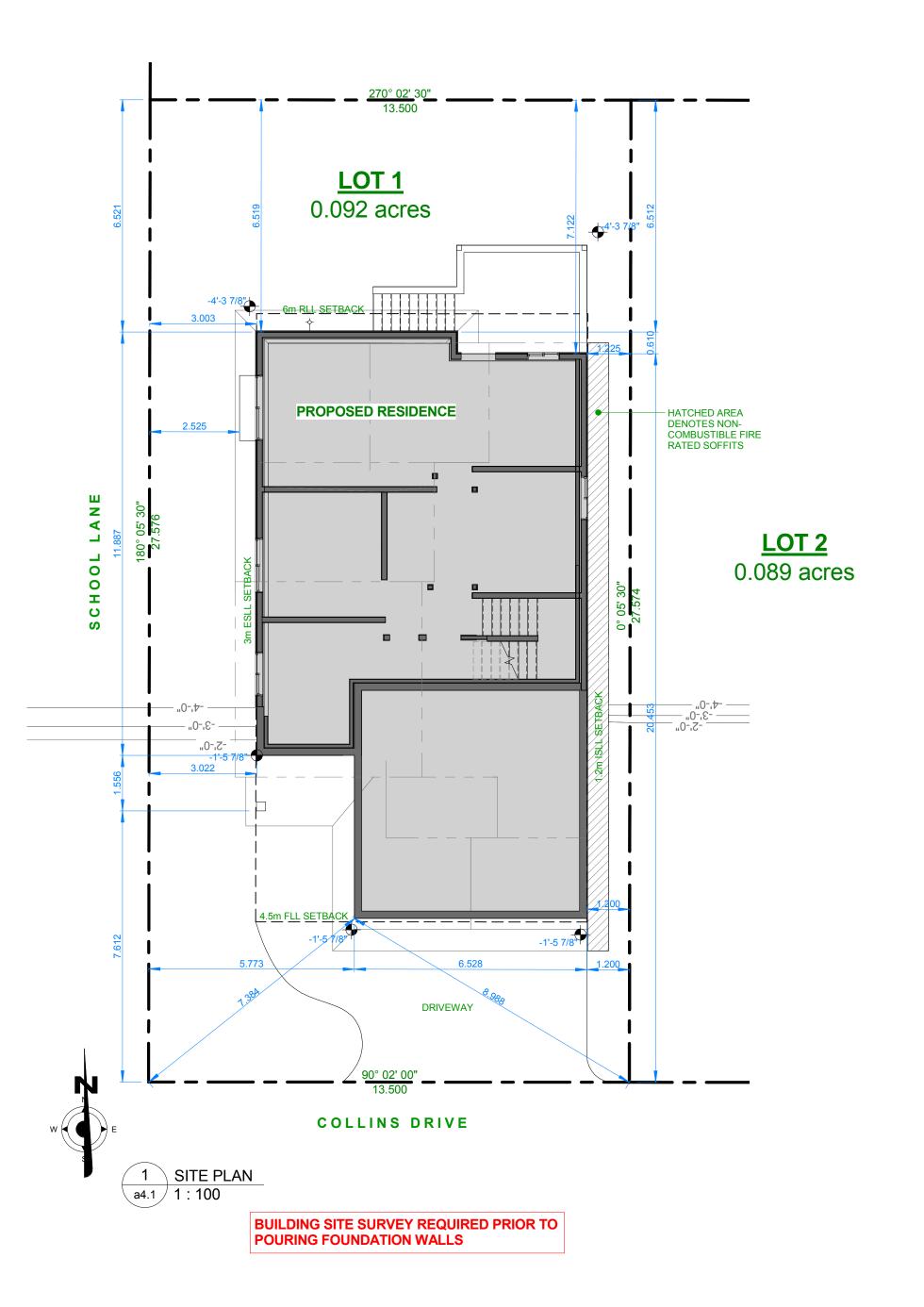












KEYNOTE LEGEND

DESCRIPTION

Eo tep C E E

590

DESIGN GROUP INC 604.824.2774 www.guliker.ca info@guliker.ca

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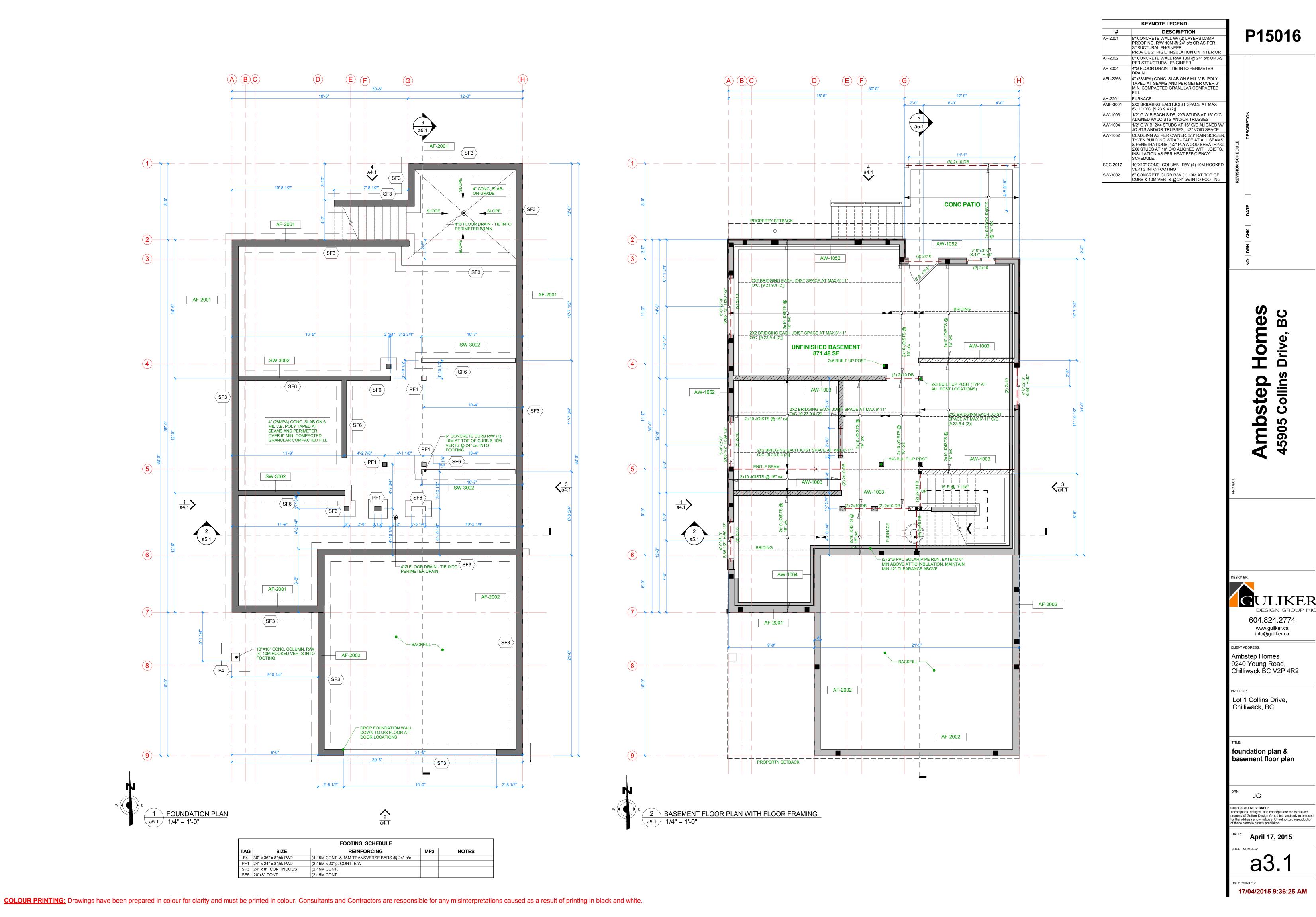
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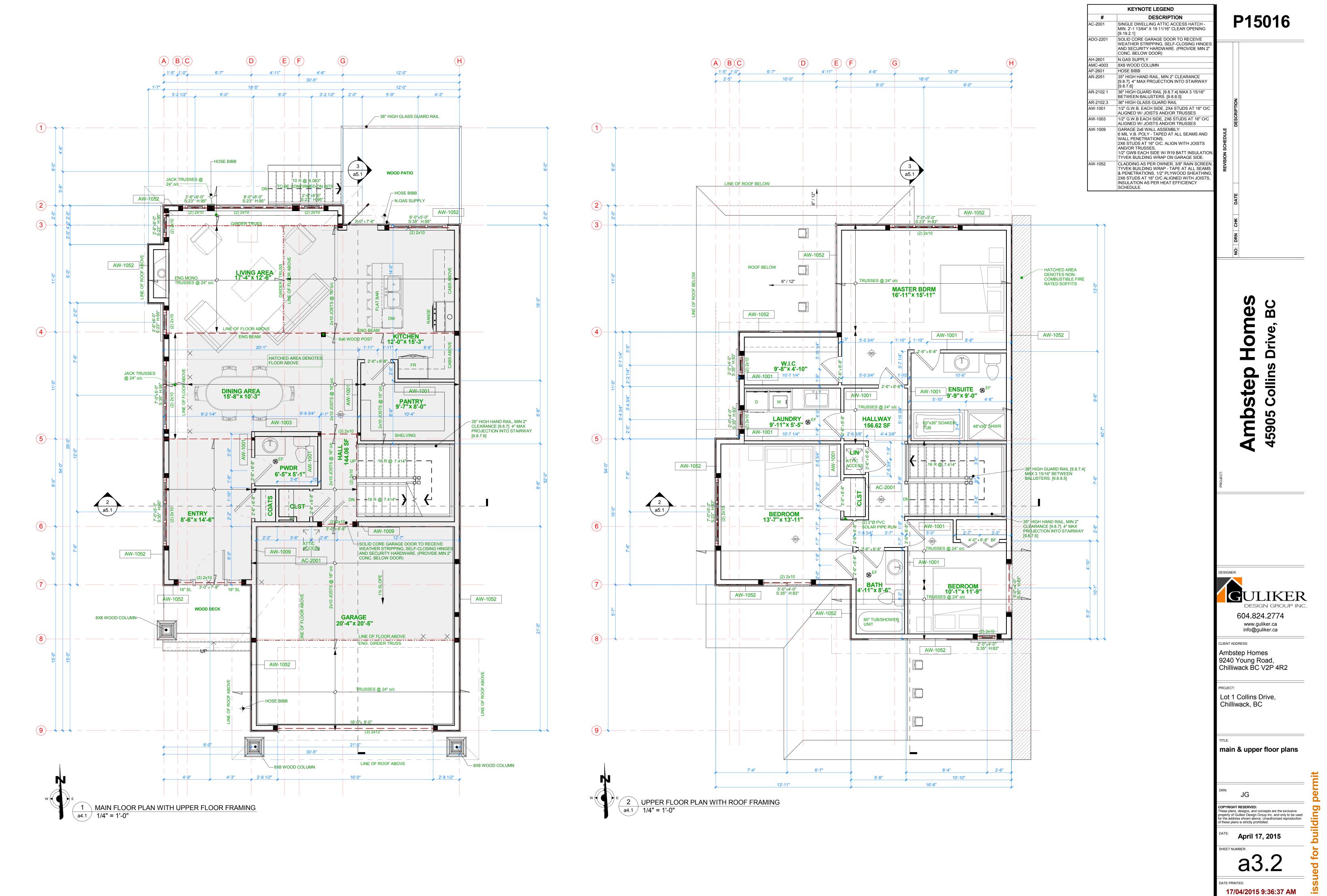
site plan

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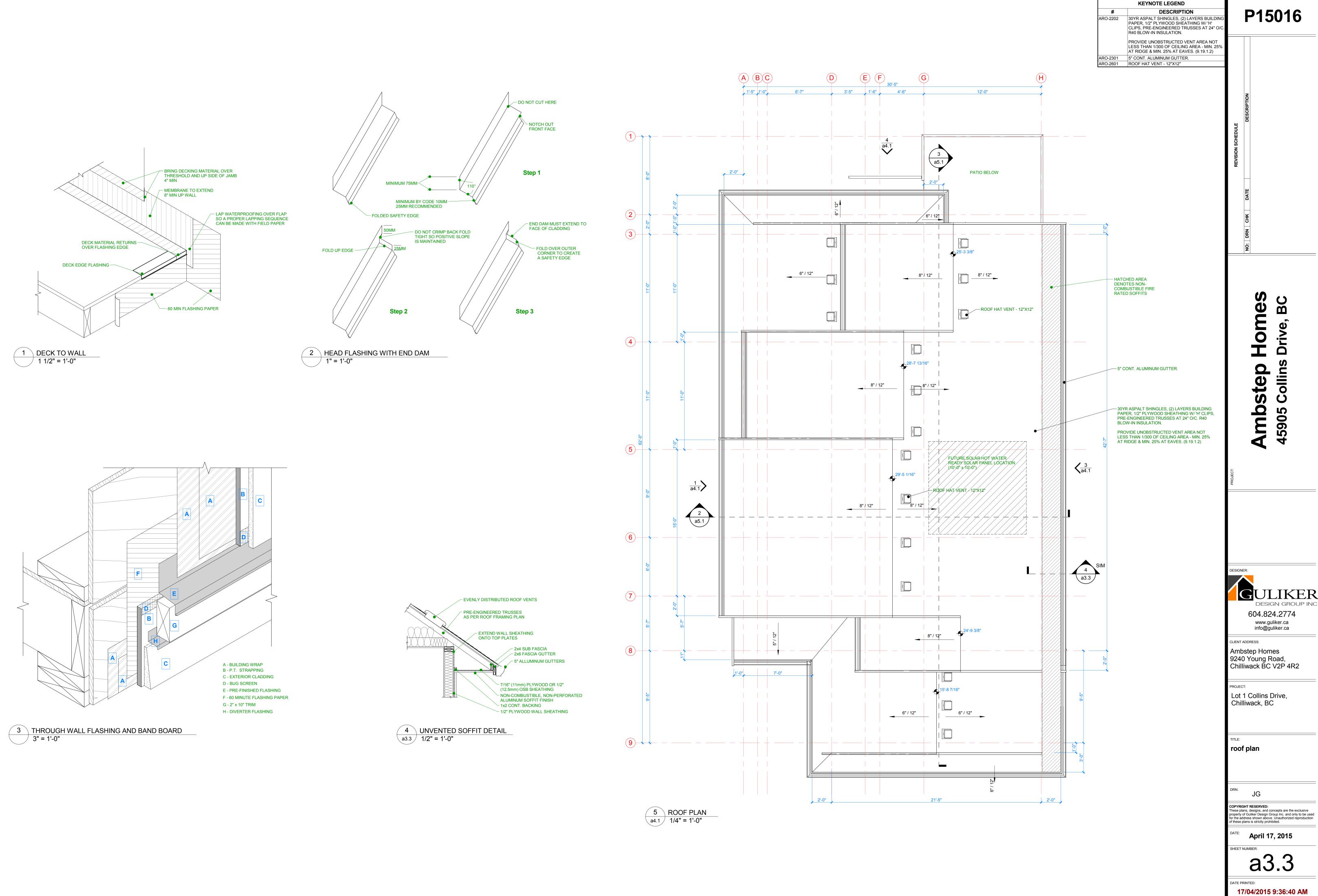
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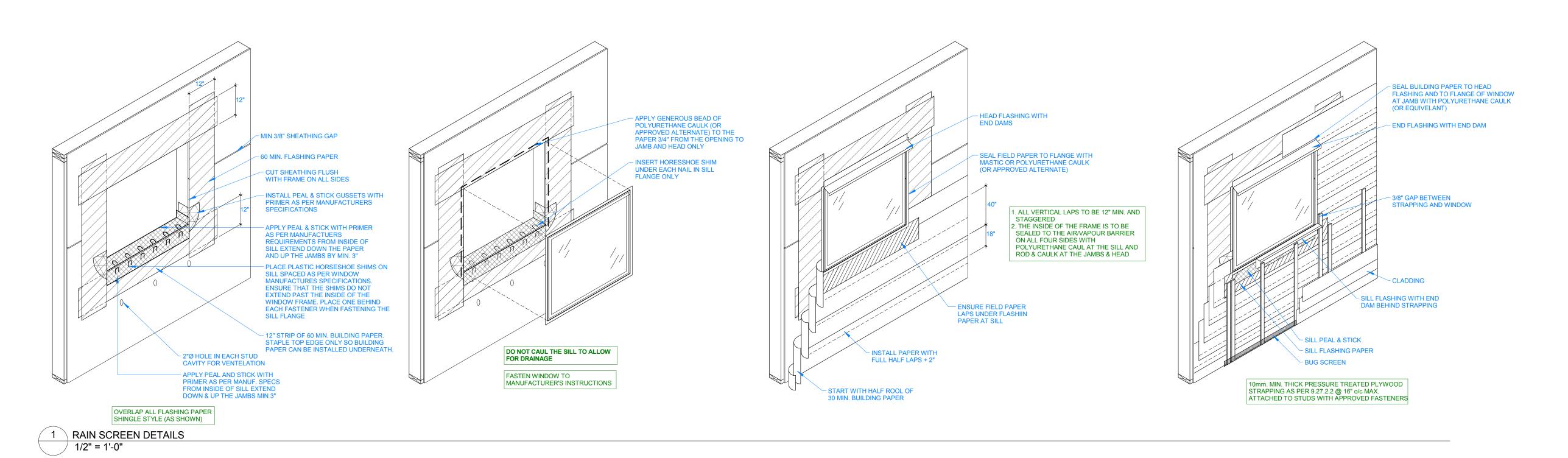


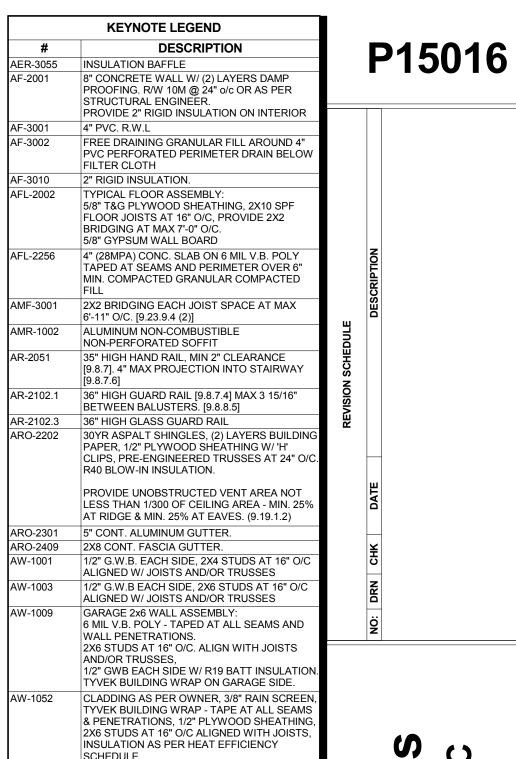
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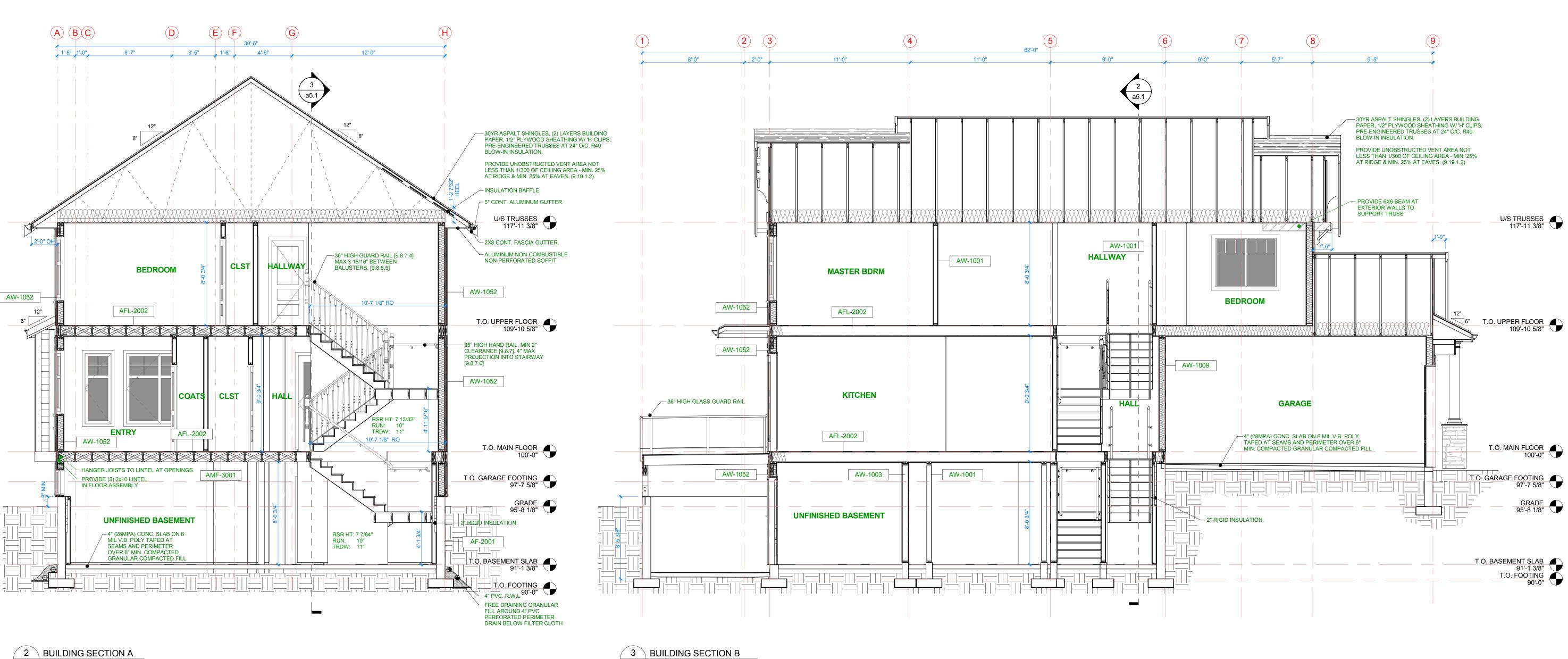
Collins

45905









Ambstep Homes 45905 Collins Drive, BC

DESIGNER:

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Ambstep Homes 9240 Young Road, Chilliwack BC V2P 4R2

Lot 1 Collins Drive, Chilliwack, BC

building sections

DRN:

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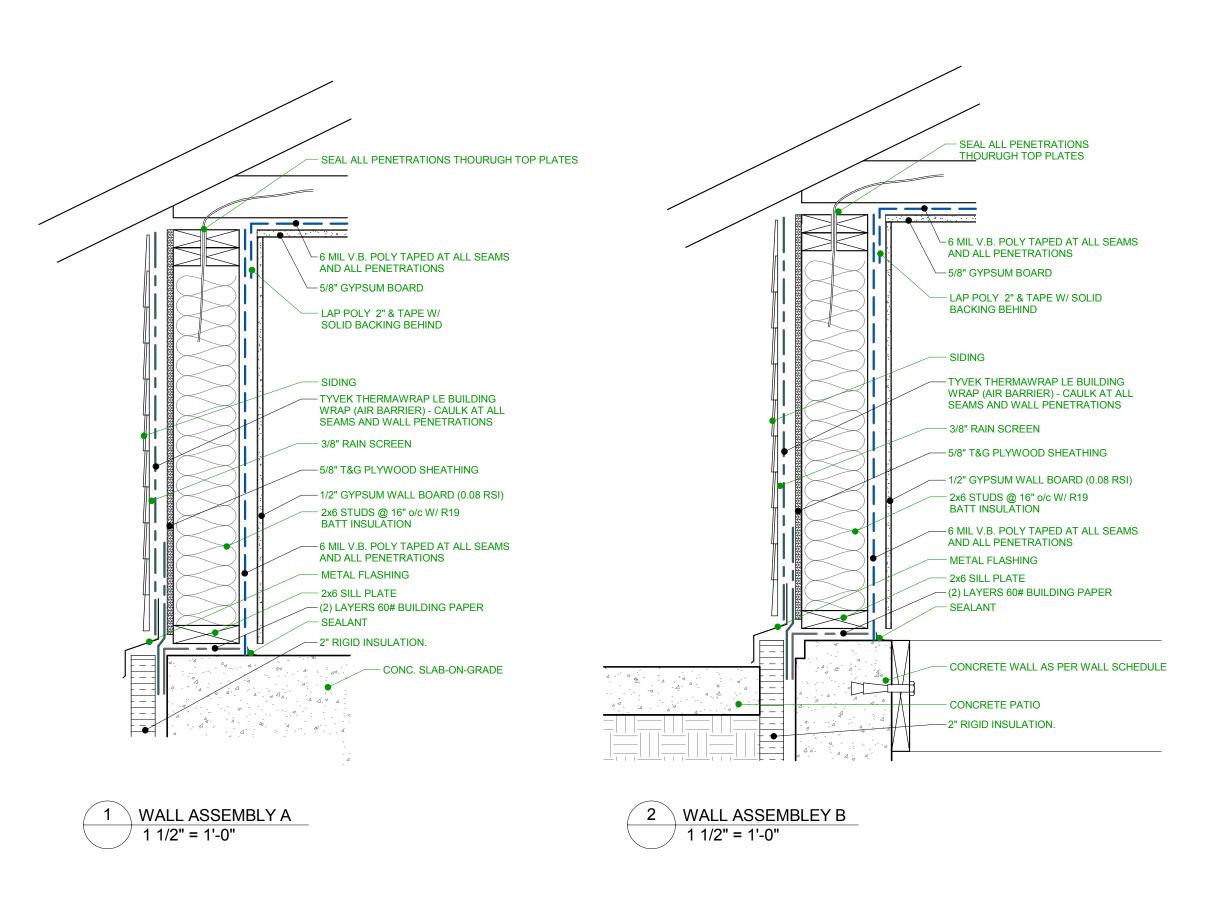
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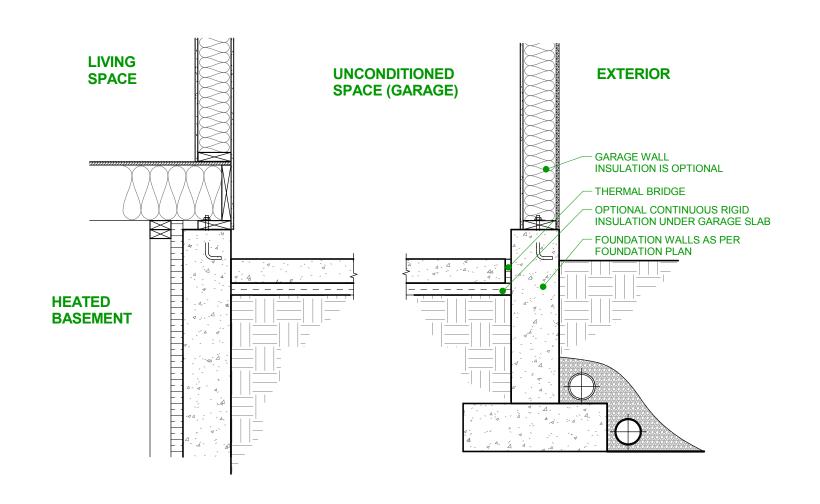
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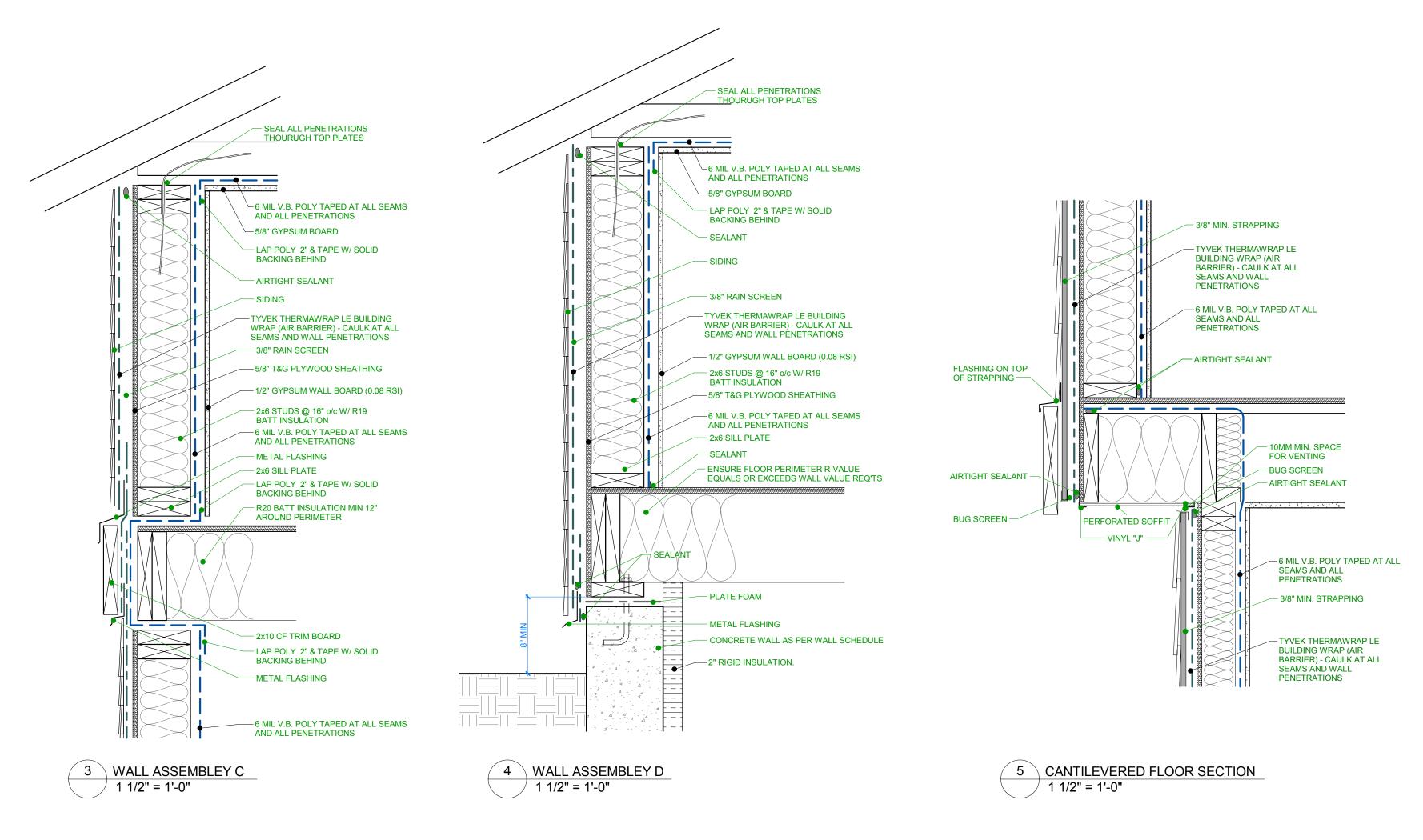
3 BUILDING SECTION B
a3.1 1/4" = 1'-0"

a3.1 1/4" = 1'-0"





6 FOUNDATION OVER UNHEATED SPACE 3/4" = 1'-0"



ENERGY REQUIREMENTS

GENERAL INFORMATION

Zone: 4 < 3000

Compliance Path: Prescriptive Heating Type: Forced air Heat - recovery unit: Min R Values (Without HRV): Foundation walls: RSI 1.99 (R 11.31) Foundation walls Below frost line: Foundation walls above frost line: RSI 1.96 (R 11.14) RSI 1 96 (R 11 14) S.O.G. (integral footing) RSI 2.32 (R 13.18) Heated floors: RSI 2.32 (R 13.18) Heated floors Unheated floors on permafrost: uninsulated RSI 1.96 (R 11.1) Unheated floors above frost line: Exterior walls RSI 2.78 (R 15.78) Floors over unheated spaces: RSI 4.67 (R 26.52) Heated floors RSI 2.32 (R 13.17) RSI 2 78 (R 15 8 Skylight Shafts Cathedral Ceilings & Flat Roofs RSI 4.67 (R 26.5 Ceilings below attics RSI 6.91 (R 39.2)

Skylights
Fenestration & Doors
Door to garage
Access hatch
Front Doors
Glass Block

REQUIREMENTS

Ducts located outside the thermal enclosure are to be sealed and insulated to the exterior wall insulation requirements.
 Install dampers at air inlets and exhausts where required.
 Piping for heating or cooling systems is located within the thermal enclosure or are fully insulated.
 HVAC equipment is located within thermal enclosure or designated to be installed outside of thermal enclosure.
 Temperature controls are installed on heating and cooling equipment.
 Indoor pools are covered or have an HRV/dehumidifier.
 HVAC and SWH equipment meet minimum performance requirements determined in Tables 9.36.3.10 and 9.36.4.2 of the B.C.B.C 2012
 Service water heating and pipes are insulated at the inlet and outlet of storage tanks.
 Service water heaters have temperature controls.
 Door manufacturers to ensure all exterior doors meet a minimum U value of

11. Skylight manufacturers to ensure all skylights meet a minimum U value of

RSI 1.1 (R 6.25)

RSI 2.6 (U 0.46)

USI 2.6 (U 0.46)

USI 2.9 (U 0.51)

OTAL RSI

OTAL R

MATERIAL Interior Air Film 0.03 0.17 Exterior Air Film 0.00 0.00 2 Paint - 1 coat latex primer & paint 0.88 5.00 Foam board - Expanded polystyrene - 1" thk Foam board - Extruded Polystyrene - 2" thk 1.76 10.00 Foam board - Extruded Polystyrene - 3" thk 2.64 15.00 Foam board - Extruded Polystyrene - 4" thk 3.52 20.00 Sypsum Wall Board - 1/2" thk 0.08 0.45 Sypsum Wall Board - 5/8" thk 0.1 0.56 0.00 0.00 Polyethylene (6 mil) vapor barrier 9.20 1.62 Studs/Joists (2x4) @ 16"o/c w/ R14 batt insulation 1.70 Studs/Joists (2x4) @ 24"o/c w/ R14 batt insulation Studs/Joists (2x6) @ 16"o/c w/ R19 batt insulation 2.36 Studs/Joists (2x6) @ 16"o/c w/ low density foam 2.58 Studs/Joists (2x6) @ 16"o/c w/ medium density foam 3.00 Studs/Joists (2x8) @ 16"o/c w/ R28 batt insulation 3.29 18.68 Studs/Joists (2x10) @ 16"o/c w/ R28 batt insulation 4.33 24.59 0.069 0.39 sed on 150lb/FT^3 (R0.065/inch) Concrete - 6" cast-in-place 0.092 0.52 ased on 150lb/FT^3 (R0.065/inch) Concrete - 8" cast-in-place 0.114 0.65 sed on 150lb/FT^3 (R0.065/inch) Concrete - 10" cast-in-place Plywood Sheathing - 1/2" thk 0.11 0.62 Plywood Sheathing - 5/8" thk 0.137 0.78 Plywood Sheathing - 3/4" thk 0.16 0.93 OSB Sheathing - 7/16" thk 0.11 0.62 0.01 0.06 Building Paper (60#) (2 layers) 0.35 2.00 Building Wrap (60#) (Tyvek ThurmaWrap LE) 5.28 30.0 0.88 5.00 Building Wrap (60#) (Tyvek ThurmaWrap R5.0) EPDM membrane 0.08 0.44 Asphalt shingles 0.17 0.97 Wood shingles 0.00 Rain Screen - 3/8" Lathe Hardi Cladding 0.11 0.62 Vynal Cladding (no air space) 0.11 0.62 ased on 1.75" thickness Cultured Stone 0.07 0.40 Brick - fired clay 4" (102mm)^2

2.91 | 3.16 | 3.16 | 1.96 | 2.0 | 2.0

16.53 17.94 17.94 11.15 11.37 11.37 28.22

EXTERIOR WALL SCHEDULE

P15016

BEAUSION SCHEDULE

DESCRIPTION

CHK DATE DESCRIPTION

Ambstep Homes 45905 Collins Drive, BC

DESIGNER:

DESIGN GROUP INC

604.824.2774

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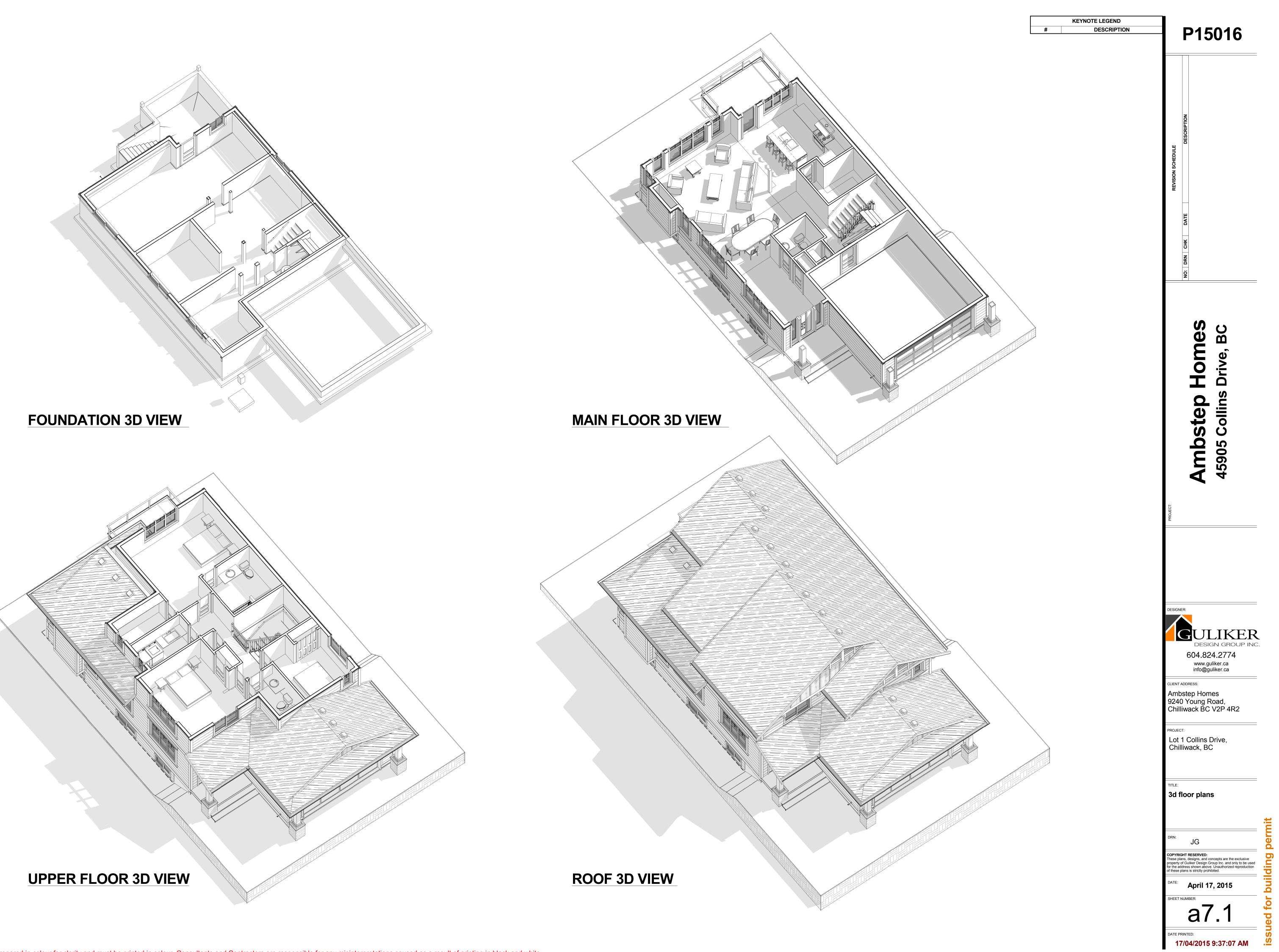
energy efficiency requirements

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