#### GFD ARCHITECTURAL DESIGN



### FULL DETAILED PLAN PACKAGE SAMPLE

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This package is our full detailed plan package. It has the electrical mechanical sheets as well as more project specific details. Be sure to check with you local building official to be sure of the Residential Plan Submittal requirements. It varies from State to State and in some States jurisdiction by jurisdiction.

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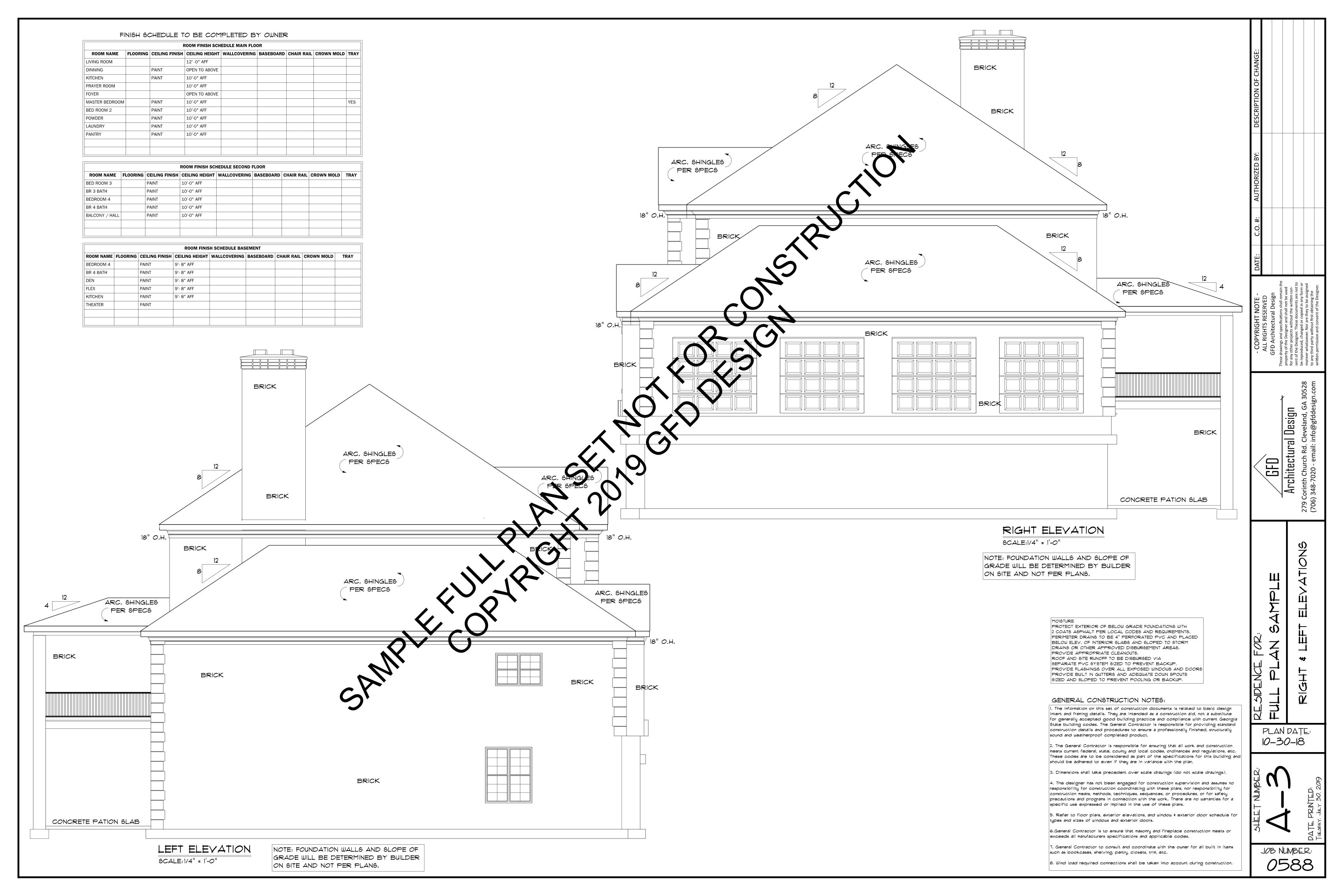
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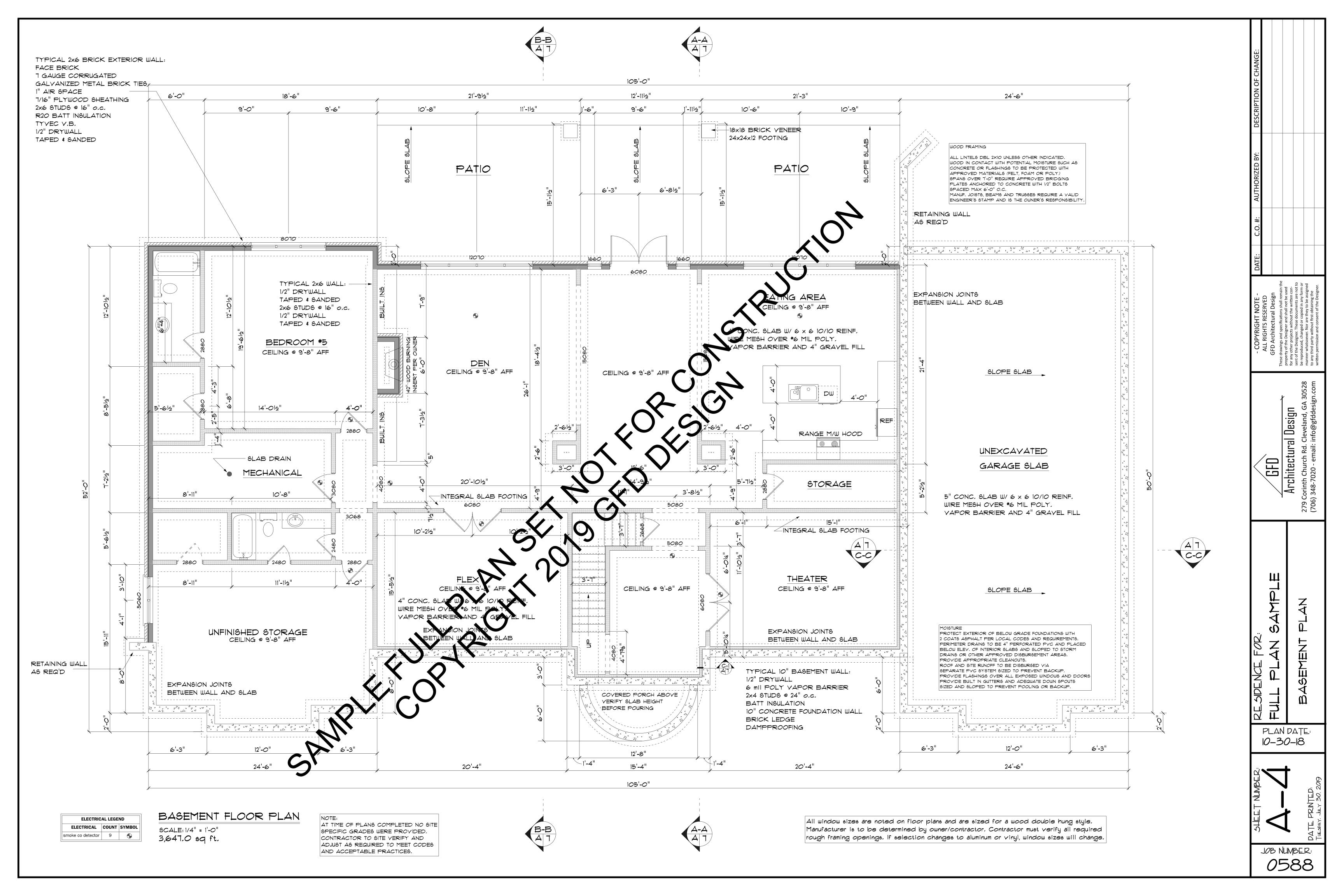
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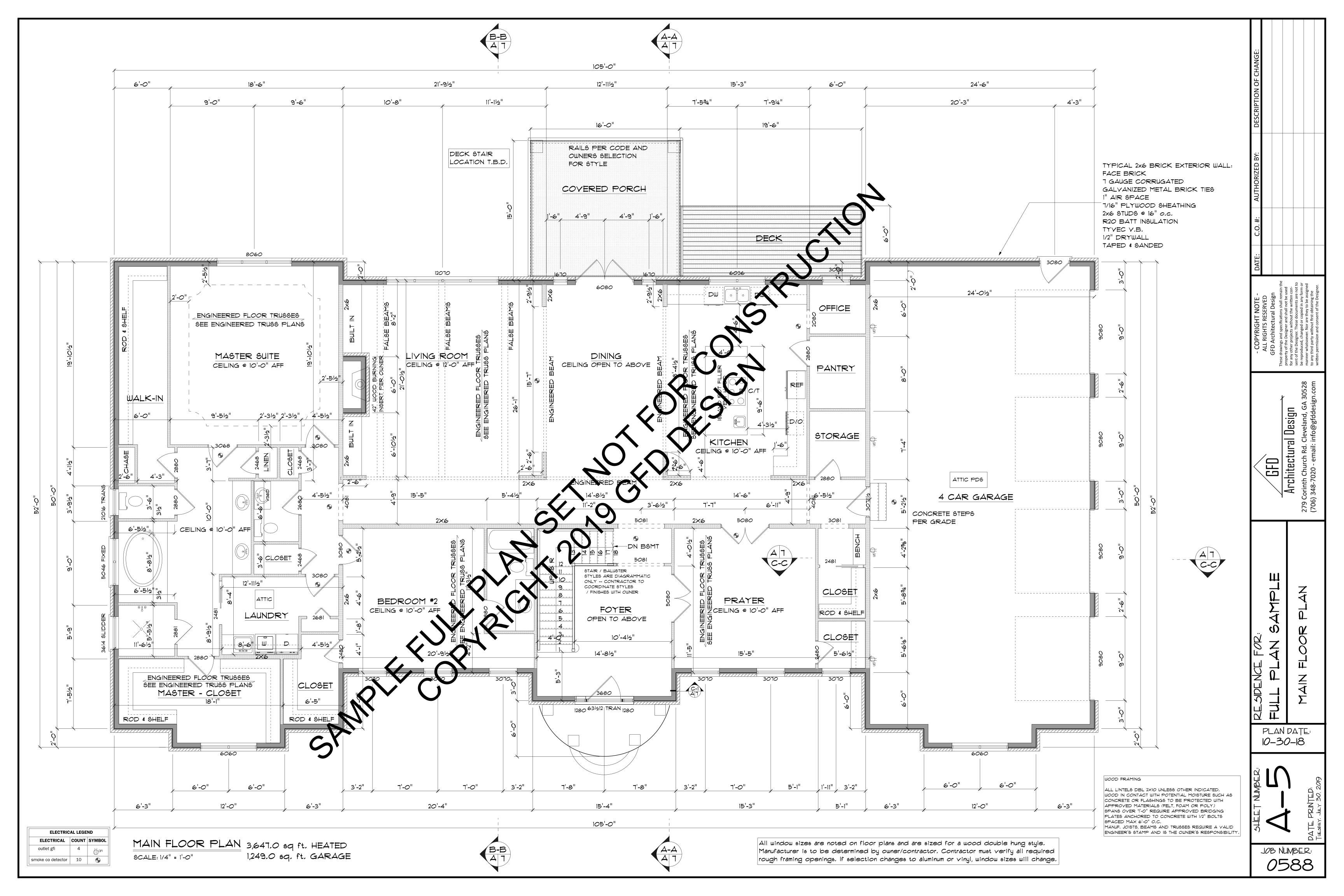
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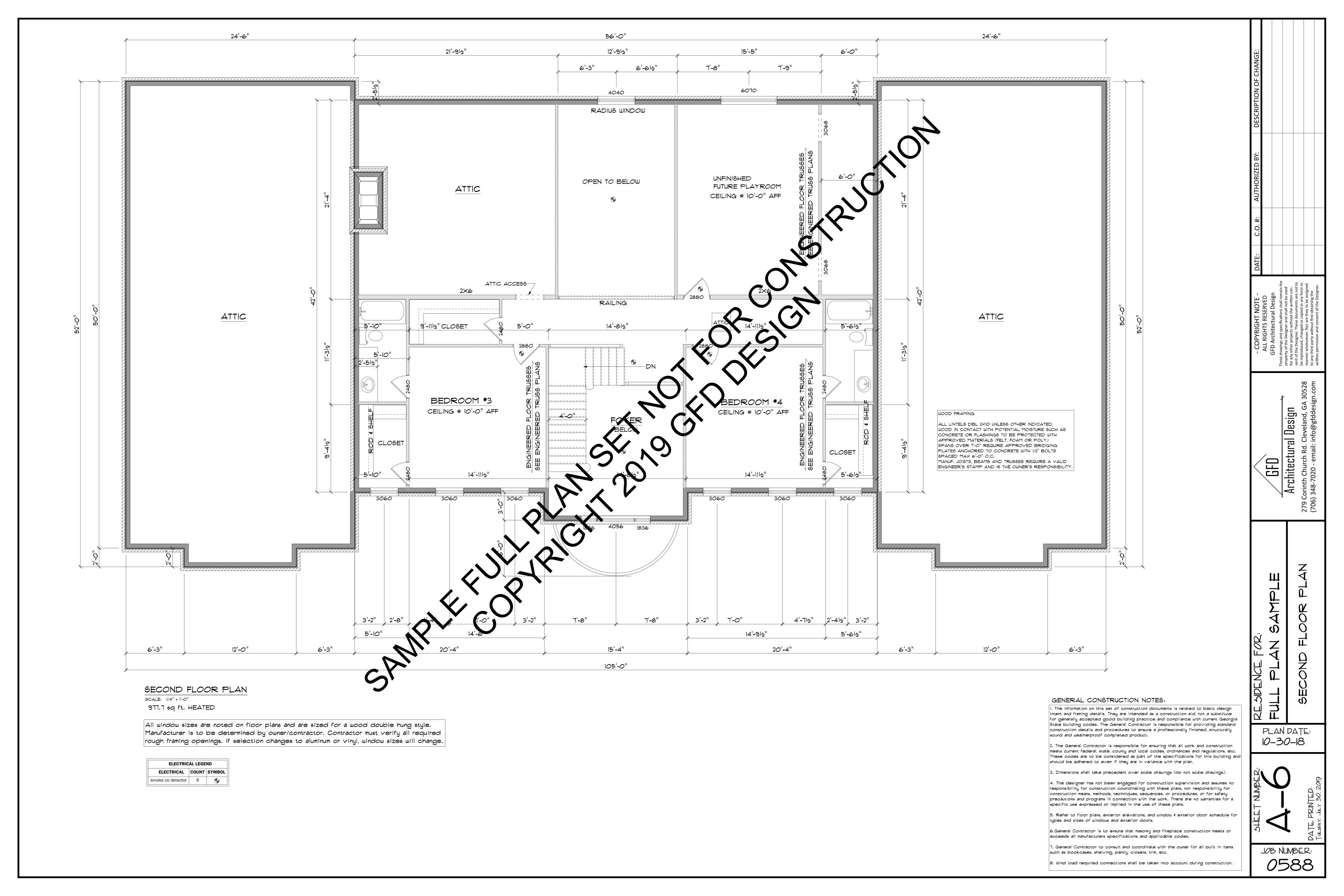


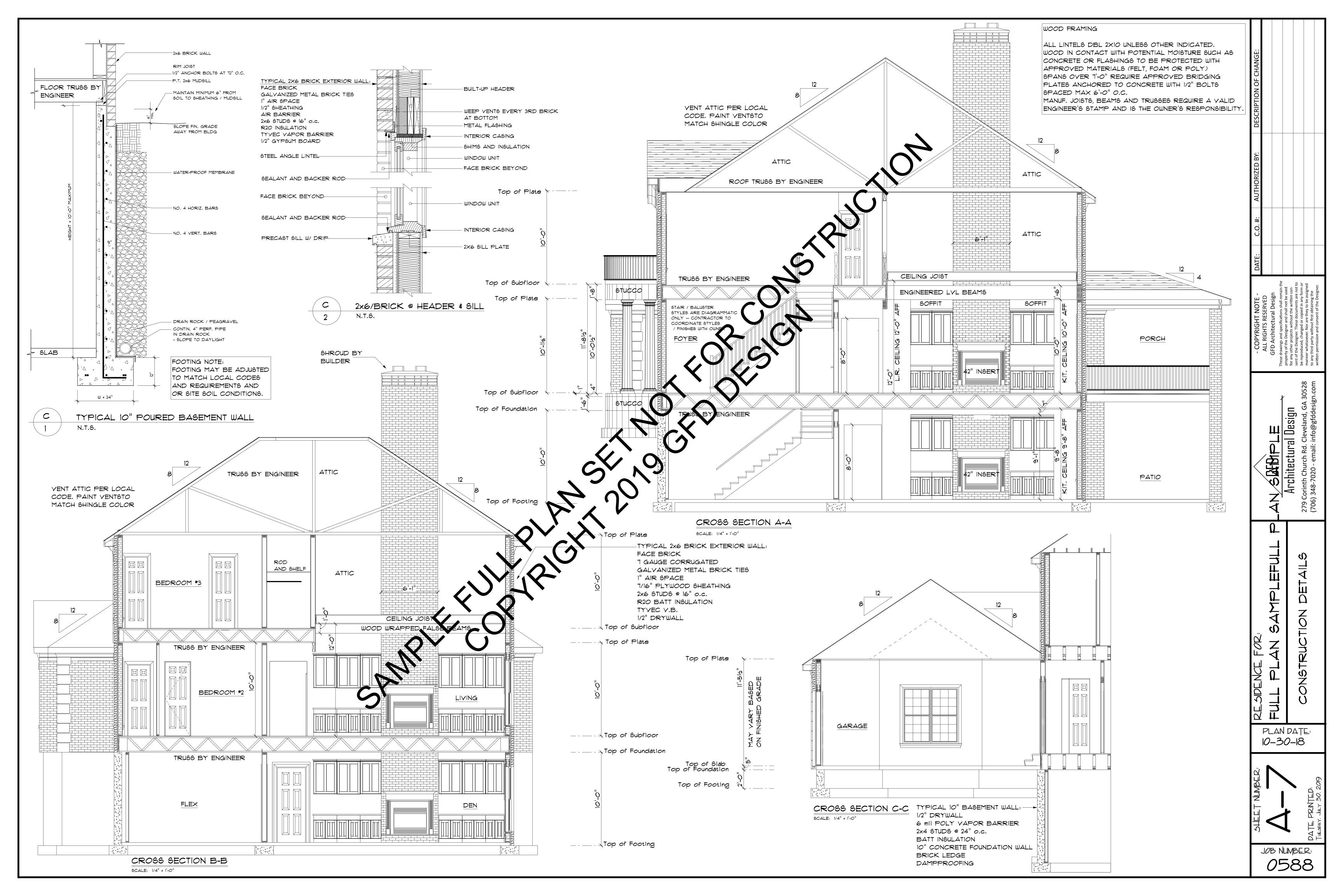


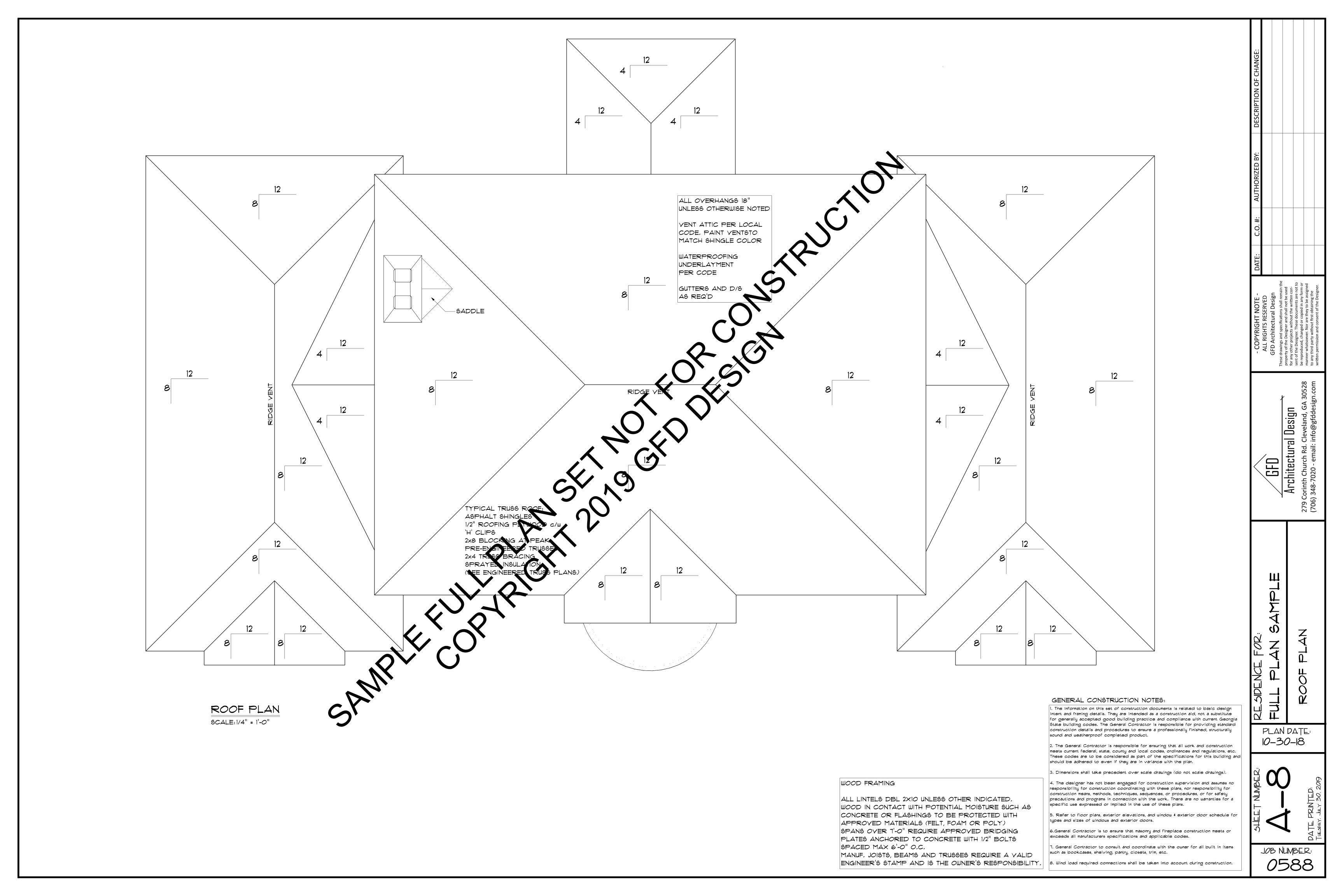












#### GENERAL COMMENT

The notes, recommendation, and considerations included herein are offered in good faith for the Contractor's reference. These notes are not all-inclusive and do not, by any means, include all the information necessary to cover all aspects of the construction project. These notes are superseded by the Contractor:s experience, best judgment, and local applicable building codes. The drawings, illustrations, and diagrams included this package are design of the building and improvements and are to be used in coordination of work. The Contractor is responsible for the integrity of all assemblies and all work is to conform to accepted residential construction standards.

#### CONCRETE

All material and workmanship shall conform to ACI 318. All detailing, fabrication, accessories, and placement of reinforcing shall conform to the ACI Manual of Standard Practice for Detailing Reinforced Concrete Structures. Concrete shall be normal weight gray concrete and develop a minimum compressive strength of 3000 PSI at 28 days. Basement and Foundation wall are to be constructed with poured in place steel reinforced concrete. All slabs on grade shall bear on 4" compacted granular fill with 6c6 - 1-x1- welded wire mesh (WWM) conforming to ASTM A185. Overlap WWM minimum of 6" at all splices.

Interior slabs shall have 6 mil., Polyethylene vapor barrier underneath.

All 24"x24"x12" concrete pads to have four #4 rods each way.

Foundations bolts must be anchored to sill plate with 1/2: bolts embedded 15" into concrete foundation wall. Anchor bolts to conform to ASTM A 307. Bolts spaced 6'-0" O.C.

Lap all reinforcing bars a length of 30 bar diameters, minimum. Provide on corner bar, lapped 30 bar diameters each way, for each piece of continuous reinforcing. All construction joints are to be rough surface and cleaned before the next pour. No horizontal construction joints.

permitted in foundation walls Provide expansion joints where required by local codes and for requirements.

Control joints in concrete slabs shall be located so that the maximum area within joints is 6005F or less, and the ratio of side dimensions is no more than 2:1.

#### STEEL

All material and workmanship shall conform to the AISC Specifications for the design, fabrication, and erection of structural steel.

All structural steel for beams and plates shall comply with ASTM A 572 Grade 50.

All structural steel columns shall comply with ASTM A 615 Grade 60.

All welds shall be made with ETOXX electrodes. All butt welds shall be full penetration. Minimum size of fillet welds shall conform to AISC Specifications.

#### WOOD FRAMING

All wood framing and materials shall comply with the National Design Specifications for Wood Construction published by the National Forest Products Association

Unless noted otherwise, all framing lumber to be Him Fir #2, Southern Pine No.2, or equal.

Lumber for 2x4 or 2x6 stud partitions shall be Stud grad Spruce-Pine-Fir or equal.

All exterior stud walls are to be constructed of 2x4 or 2x6 studs at 16" O.C. All stud walls taller than 9'-0" are to be blocked solid twice at the third heights.

All headers and beams are to be supported by build-up framing lumber or columns. Support is to be continuous

All knee-wall construction to be diagonally braced at 4'-0" O.C. maximum.

Any structural and/or framing members not indicated on the plan are to be sized by the Contractor. Consult with a licensed structural engineered where necessary.

Lumber to be in contact with concrete or masonry shall be pressure-treated lumber.

All exterior walls are dimensioned to outside of 1/2" plywood sheeting. All interior walls are dimensioned to face of studs.

All exterior wall, including garage are to have 1/2" rigid insulation on exterior face.

All trusses to be engineered and constructed by a TPI member truss manufacturer. Install temporary and permanent bridging per truss manufactures recommendations.

One row of 1x4 wood cross-bracing or solid blocking on all spans, over 16'-0",

Collar ties are to be spaced at 4' O.C.

All purlins and kickers are to be 2"x6" unless noted otherwise.

Any hip or valley rafters of 28'-0" or greater span are to be Laminated Yeneer Lumber (LYL).

## DESIGN LOADS

Floor: 40 PSF Live Load 15 PSF Dead Load Roof: 45 PSF Snow Load 15 PSF Dead Load

Attic: 30 PSF in Storage Areas 10 PSF where no storage Assumed Soil Bearing Capacity: 2000 PSF Verify soil bearing capacity on site.

## MISCELLANEOUS

The General Contractor shall obtain all necessary surveys needed to locate existing sits utility services and shall coordinate with all utility companies regarding the disconnection of existing services and the reconnection of new systems. The Contractor shall obtain all necessary building permits prior to commentment of work. Noted dimensions take precedence over scaled dimensions.

Foundation wall are not to be backfilled until house is completely framed and roof of structure is in place. Backfill shall be free of deleterious material and shall have a minimum of 90% Standard Proctor Density.

Bottom of footings to be below frost depth. Provide termite protection as required by HUD minimum property standards.

Prefabricated fireplaces and flues are to be U.L. approved and installed per manufacturer's recommendations. All materials, supplies and equipment are to be installed per manufacturer's specifications and as per local codes

1/2" water-resistant drywall around shower and tubs.

1/2" drywall on interior walls and ceilings unless noted otherwise.

5/8" Type-X gypsum wallboard on garage walls and ceilings

The Contractor is responsible that all Mechanical and Electrical systems are designed and installed per applicable codes. All subcontractors shall be responsible to coordinate with the General Contractor as well as all other trades as necessary. The General Contractor will coordinate with the Owner.

with regard to the location of fixtures and mechanical system components.

The Contractor is responsible to verify all dimensions in the field.

"V.I.F." - Verify In Field. Dimension may be variable or may be determined by related factors.

#### ELECTRICAL NOTES

ELECTRICAL RECEPTACLES SHALL BE NO MORE THAN 12 FT. APART INCLUDING ANY WALL 2 FT. OR WIDER (BATHROOMS AND UTILITY ROOMS EXCEPTED)

ALL 120 YOLT, SINGLE PHASE, 15 AND 20 AMP

HORIZONTALLY OF THE KITCHEN SINK, IN BATHROOMS RECEPTACLES INSTALLED WITHIN 6 FT., MEASURED IN GARAGES, OUTDOORS OR IN LAUNDRY ROOMS SHALL HAVE GROUND FAULT CIRCUIT INTERRUPT PROTECTION.

RECEPTACLES AT CONSTRUCTION POST, GARAGE AND BATHS TO BE G.F.I.C.

ALL SLEEPING ROOMS SHALL BE PROVIDED WITH AT LEAST ONE BEDSIDE OUTLET CONTROLLED BY SWITCH. (IF SHOWN ON PLAN)

BATHROOMS SHALL BE PROVIDED WITH SWITCHES CONTROLLING LIGHT FIXTURES AND MECHANICAL VENTILA EXTERIOR LIGHT FIXTURES SHALL BE PROVIDED AT ALL DOORS TO THE EXTERIOR. SWITCHES SHALL BE PROVIDED NEAR DOORS CONTROLLING OUTDOOR LIGHT FIXTURES

A BARE COPPER WIRE (20 FT, OF #2) SHALL BE WRAPPED AROUND THE LOWEST PIECE OF FORTI REBAR AND SHALL TERMINATE WITH ENOUG REACH THE ELECTRICAL SERVICE PANEL FOR L A GROUND SOURCE.

PRE-WIRE FOR PHONE AND T.Y. 200-400 AMP MAIN PANEL WITH MINIMUM 12 GAUGE WIRE THROUGH REINFORCE ALL CEILING AND/OR DEVICES. PROVIDE FRONT DOOR

AND FLASHING & A

FOR CORAGE OR WHERE EQUIPMENT

LOCATED, AND AT BASEMENT CLES ARE REQUIRED AT THE FRONT AND

THE HOME, AND THEY MUST BE WITHIN 6'-6" E, AND WEATHERPROOF GFCI PROTECTED.

EXHAIGT FANS SHALL HAVE BACKDRAFT DAMPERS OR AUTOMATIC DAMPERS.

ELECTRICAL LIGHTING FIXTURES IN CLOTHES CLOSET SHALL BE INSTALLED WITH A MINIMUM OF 18 INCHES CLEARANCE TO COMBUSTIBLE MATERIALS, FIXTURES SHALL BE VERTICALLY CLEAR TO FLOOR OR RECESSED. INSTALLATION INSTRUCTIONS FOR ALL LISTED EQUIPMENT SHALL BE PROVIDED TO THE FIELD INSPECTOR AT TIME OF INSPECTION.

# FIRE-WARNING SYSTEMS

PROVIDE MINIMUM OF ONE SMOKE DETECTOR PER FLOOR SMOKE DETECTORS TO BE PROVIDED ABOVE DOOR AT EACH SLEEPING ROOM.

CONNECT SMOKE DETECTORS TO HOUSE POWER AND INSTALL INTERCONNECT SO THAT WHEN ANY ONE IS TRIPPED, ALL UNITS WILL SOUND.

PROVIDE BATTERY BACK-UP FOR ALL UNITS.

60% HOLE OK ON BEARING WALL IF THROUGH ONLY 2-DOUBLE SUCCESSIVE STUDS, ALL HOLES MUST BE MINIMUM 5/8 INCH FROM EDGE.

## SOUND INSULATION

PROVIDE SOUND INSULATION IN ALL WALLS BETWEEN BATHROOMS AND ADJACENT ROOMS.

CONTRACTOR TO LOCATE EXACTLY THE FOLLOWING AS REQ'D LBASEMENT WINDOWS 2. FOUNDATION DRAIN TILES SWATER & FURNACE FOOR DRAIN IC OR SEWER LINE LOCATION

WELL OR CITY WATER LOCATION HOLDING TANK & SUMP PIT

### INSULATION

ALL EXPOSED INSULATION MATERIALS INCLUDING FACINGS, SUCH AS YAPOR BARRIERS OR BREATHER PAPERS INSTALLED WITH IN FLOOR-CEILING ASSEMBLIES, ROOF-CEILING ASSEMBLIES WALL ASSEMBLIES, CRAWL SPACES AND ATTICS SHAL HAVE A FLAME-SPREAD RATING NOT TO EXCEED 25 WITH A ACCOMPANYING SMOKE DEVELOPED FACTOR NOT TO EXCEED 450 WHEN TESTED IN ACCORDANCE ASTM E 84. EXCEPTION: WHEN SUCH MATERIALS ARE INSTALLED IN CONCEALED SPACES THE FLAME-SPREAD AND SMOKE-DEVELOPMENT LIMITATIONS DO NOT APPLY TO THE FACINGS, PROVIDED THAT THE FACING IS INSTALLED IN SUBSTANTIAL CONTACT WITH THE UNEXPOSED SURFACE OF THE CEILING FLOOR OR WALL FINISH.

#### PLUMBING NOTES

PLUMBING FIXTURES: WATER CLOSET = 1.28 GALLONS PER FLUSH MAX. SHOWERHEAD = 2.5 GPM MAX. LAYATORY FAUCETS = 1.5 GPM MAX.

KITCHEN SINK FAUCETS = 2,0 GPM MAX, WATER USAGE LABELS SHALL BE LEFT ON PLUMBING FIXTURES UNTIL FINAL INSPECTION HAS BEEN DONE SO THAT PROOF OF WATER USAGE COMPLIANCE CAN BE VERIFIED BY THE BUILDING DEPARTMENT.

SHOWERS AND TUB-SHOWER COMBINATIONS SHALL BE PROVIDED WITH INDIVIDUAL CONTROLS YALVES OF THE PRESSURE BALANCE OR THE THERMOSTATIC MIXING YALVE TYPE, HANDLE POSITION STOPS SHALL BE PROVIDED ON SUCH VALVES AND SHALL BE ADJUSTED PER MANUFACTURER'S INSTRUCTIONS TO DELIVER A MAXIMUM MIXED WATER SETTING OF 120 DEG. F. THE WATER HEATER THERMOSTAT SHALL NOT BE CONSIDERED A SUITABLE CONTROL FOR MEETING THIS PROVISION.

WATER HEATER SHALL BE PROVIDED WITH A TEMPERATURE AND PRESSURE RELIEF VALVE HAVING A FULL-SIZED DRAIN OF GALVANIZED STEEL OR HARD DRAWN COPPER TO THE OUTSIDE OF THE BUILDING WITH THE END OF THE PIPE NOT MORE THAN 2 FT. OR LESS THAN 6 IN. ABOYE THE GRADE, POINTING DOWNWARD,

PROVIDE COMBUSTION AIR VENTS (WITH SCREEN AND BACK DAMPER) FOR ANY APPLIANCE WITH OPEN FLAME PROVIDE INDIVIDUAL SHUT-OFF YALVE FOR AT MAXIMUM 3 FEET FROM EVERY GAS APPLIANCE

UNDERGROUND FERROUS GAS PIPING SHALL SHALL BE ELECTRICALLY ISOLATED FROM TO REST OF THE GAS SYSTEM WITH LISTED ISOLATION FITTINGS INSTALLED A MINIMUM OF 6 IN. ABOYE GRADE,

ALL EXTERIOR HOSE BIBS TO HAVE NON-REMOVABLE BACKFLOW PREVENTION DEVICES. PROVIDE AN ACCESS DOOR, 18" x 24" MINIMUM, WITHIN

20 FT, OF THE PLUMBING CLEANOUT, ALL DISHWASHER WASTE LINES SHALL BE PROVIDED

WITH AN APPROYED AIRGAP SEPARATION DEVICE. PROVIDE MIN. 30 INCH WIDE SPACE AT WATER CLOSET, EXTENDING AT LEAST 30 INCHES IN FRONT.

NO GAS PIPING SHALL BE INSTALLED IN OR ON THE GROUND UNDER ANY BUILDING OR STRUCTURE, ALL EXPOSED GAS PIPING SHALL BE KEPT AT LEAST 6 IN, ABOYE GRADE OR STRUCTURE,

INSTALLATION INSTRUCTIONS FOR ALL LISTED EQUIPMENT SHALL BE PROVIDED TO THE FIELD INSPECTOR AT TIME OF INSPECTION.

Design 

Archite orinth Chui

PLAN DATE:

10-30-18

JOB NUMBER: 0588