GENERAL NOTES 2019-12

SECTION 1 – GENERAL REQUIREMENTS

1. THE ARCHITECT IS THE AUTHOR OF THESE DOCUMENTS AND RETAINS ALL COMMON LAW, STATUTORY, AND OTHER RESERVED RIGHTS INCLUDING THE COPYRIGHT. THESE DOCUMENTS ARE FOR THE USE SOLELY ON THIS PROJECT. USE ON ANY OTHER PROJECT IS PROHIBITED WITHOUT WRITTEN CONSENT BY THE ARCHITECT.
2. ALL WORK SHALL BE PREFORMED IN COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE, AND NATIONAL CODES AND ORDINANCES AND ALL AUTHORITIES HAVING JURISDICTION.
3. WHILE THE ARCHITECT HAS TRIED THEIR BEST ON THE FOLLOWING NOTES TO CATEGORIZE THE INFORMATION UNDER A TITLE THAT PERTAINS TO A SPECIFIC TRADE OR SUPPLIER, THERE ARE MANY NOTES THAT APPLY TO SEVERAL DIFFERENT TRADES OR SUPPLIERS, SO IT IS IMPERATIVE THAT ALL NOTES BE REVIEWED BY ALL TO ASSURE THERE IS A CLEAR UNDERSTANDING TO THE ENTIRE PROJECT. FURTHERMORE, ALL SHEETS NOTED ON THE INDEX OF DRAWINGS, PLUS THE BUILDER'S SPECIFICATIONS, SHOULD BE REVIEWED AND USED BY TRADES AND SUPPLIERS TO BID AND CONSTRUCT FROM.
4. THIS SET OF CONSTRUCTION DOCUMENTS IS MEANT TO INDICATE THE GENERAL DESIGN INTENT, DIMENSIONS OF THE PROJECT, MAJOR DESIGN ELEMENTS, AND THE BASIC ORGANIZATION OF THE MECHANICAL, ELECTRICAL AND PLUMBING SYSTEMS. THESE DOCUMENTS DO NOT NECESSARILY DESCRIBE OR INDICATE ALL MATERIALS AND WORK REQUIRED FOR FULL PERFORMANCE OF THE BUILDING SYSTEMS AND THE FINAL COMPLETION OF THE PROJECT. THE CONTRACTOR AND SUB-CONTRACTORS ARE RESPONSIBLE FOR PROVIDING ALL ITEMS REQUIRED FOR PROPER EXECUTION AND COMPLETION OF THE PROJECT IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND ZONING CODES.
5. THE CONTRACTOR IS TO NOTIFY ARCHITECT IN WRITING OF ANY CHANGES OR DISCREPANCIES IN THE DRAWINGS, SPECIFICATIONS, OR EXISTING FIELD CONDITIONS UPON DISCOVERY OF DISCREPANCY AND PRIOR TO BIDDING, IF KNOWN, AND COMMENCEMENT OF ANY WORK IN QUESTION WHEN POSSIBLE. THE CONTRACTOR SHALL ALSO NOTIFY THE ARCHITECT IN WRITING IN A TIMELY MANNER OF ANY WORK REQUIRING SPECIAL DETAILING, WHICH HAS NOT BEEN INCLUDED WITHIN THE ISSUED SET OF DOCUMENTS.
6. DO NOT SCALE THE DRAWINGS. FIGURE DIMENSIONS SHALL TAKE PRECEDENCE.
7. ALL WALL DIMENSIONS ARE TO DRYWALL, TO FACE OF MASONRY, OR FACE OF EXTERIOR SHEATHING, UNLESS NOTED OTHERWISE.
8. ALL ANGLED WALLS ASSUMED TO BE 45 DEGREES, UNLESS NOTED OTHERWISE.
9. FINISHED DIMENSIONS AT CRITICAL AREAS INCLUDING BUT NOT LIMITED TO ANY CABINETRY, APPLIANCES, COUNTERTOPS, PLUMBING FIXTURES, STAIRWAYS, WINDOWS, DOORS, AND TRIM WORK IS RECOMMENDED TO BE FIELD VERIFIED PRIOR TO ANY ORDERING.
10. THE ARCHITECT HAS NOT BEEN HIRED IN A SUPERVISORY CAPACITY FOR THE CONSTRUCTION OF THIS PROJECT. THEREFORE, THE ARCHITECT SHALL BE HELD HARMLESS FOR ANY AND ALL REASONS AS IT RELATES TO:
    - 10.1. CONSTRUCTION ACTIVITIES, MEANS, METHODS, TECHNIQUES, SEQUENCE PROCEDURES OR SAFETY PRECAUTIONS IN CONNECTION WITH THE CONSTRUCTION OF THIS PROJECT. THESE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
    - 10.2. RESPONSIBILITY OR LIABILITY FOR ANY PROBLEMS, DELAYS OR COSTS ARISING FROM NEGLIGENCE OR FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS BY THE CONTRACTOR, SUB-CONTRACTORS, SUPPLIERS OR ANY OTHER TRADES PERSON IN CONNECTION WITH THIS PROJECT
    - 10.3. ANY PRODUCTS NOT PROPERLY FITTING AS IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR, SUB-CONTRACTORS, SUPPLIERS OR ANY OTHER TRADESMAN TO VERIFY ACTUAL FIELD CONDITIONS PRIOR TO ANY ORDERING AND THE COORDINATION OF PRODUCTS AND MATERIALS AND THEIR ULTIMATE PROPER INSTALLATION.
11. THE ARCHITECT SHALL NOT HAVE THE AUTHORITY NOR THE RESPONSIBILITY TO STOP THE WORK.
12. CONTRACTOR TO COORDINATE BETWEEN MECHANICAL, ELECTRICAL, AND PLUMBING CONTRACTORS PRIOR TO START OF ANY ROUGH MECHANICAL, ELECTRICAL, AND PLUMBING WORK AND MAP OUT AND COORDINATE ALL WORK BETWEEN THE TRADES SUCH THAT ALL WORK CAN BE CONTAINED WITHIN THE FRAMED WALLS AND FLOORS AND NO VERTICAL CHASES NEED TO BE CREATED AND NO SOFFITS NEED TO BE DROPPED BELOW THE CEILING. ANY CONFLICTS SHOULD BE BROUGHT TO THE ARCHITECTS ATTENTION AT THIS TIME AND PRIOR TO STARTING ANY ROUGH WORK. NO PLUMBING, MECHANICAL, OR ELECTRICAL INFORMATION IS TO BE SCALED FROM THE DRAWINGS.
13. ON-SITE VERIFICATION OF ALL DIMENSIONS AND CONDITIONS SHALL BE THE RESPONSIBILITY OF EACH CONTRACTOR.
14. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND SUBCONTRACTORS TO INITIATE, MAINTAIN, AND SUPERVISE ALL SAFETY MEASURES, PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE PROJECT.
15. ALL CONTRACTORS AND SUBCONTRACTORS SHALL BE LICENSED AND INSURED WITHIN THE JURISDICTION IN WHICH THE WORK IS TO BE DONE.
16. ALL COMPONENTS OF THE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE BEST PRACTICES OF THE PARTICULAR TRADE. BEFORE STARTING ANY WORK, EACH CONTRACTOR SHALL EXAMINE THE WORK PERFORMED BY OTHERS TO WHICH HIS WORK ADJOINS OR IS APPLIED AND WILL REPORT IN WRITING TO THE ARCHITECT ANY CONDITIONS THAT WILL PREVENT SATISFACTORY ACCOMPLISHMENT OF HIS CONTRACT. FAILURE TO NOTIFY THE ARCHITECT AND OWNER OF DEFICIENCIES OR FAULTS SHALL CONSTITUTE ACCEPTANCE THEREOF AND WAIVER OF ANY CLAIMS FOR IT UNSUITABILITY.
17. ALL MATERIALS SHALL BE USED AND INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. THIS INCLUDES VERIFYING ALL ROUGH OPENINGS, CLEARANCES, ATTACHMENT LOCATIONS, MECHANICAL/ELECTRICAL/PLUMBING REQUIREMENTS, FINISHING, ETC. PRIOR TO FRAMING AND AGAIN PRIOR TO INSTALL TO ASSURE PRODUCTS ARE INSTALLED PROPERLY.
18. THE CONTRACTOR SHALL DEFEND AND HOLD HARMLESS THE ARCHITECT AND THE ARCHITECT'S CONSULTANTS, THEIR RESPECTIVE SUB CONSULTANTS, OFFICERS, DIRECTORS, MEMBERS, EMPLOYEES AND AGENTS FROM AND AGAINST ANY AND ALL DAMAGES, LIABILITIES OR COSTS, INCLUDING REASONABLE ATTORNEY'S FEES AND DEFENSE COSTS, TO THE EXTENT ARISING OUT OF THE NEGLIGENT PERFORMANCE OF THE WORK BY THE CONTRACTOR, THE CONTRACTOR'S SUBCONTRACTOR, OR ANYONE FOR WHOM THE CONTRACTOR IS LEGALLY LIABLE. THE INDEMNIFICATION OBLIGATION UNDER THIS PARAGRAPH SHALL NOT BE LIMITED BY A LIMITATION ON THE AMOUNT OR TYPE OF DAMAGES, COMPENSATION OR BENEFITS PAYABLE BY OR FOR THE CONTRACTOR OR A SUBCONTRACTOR UNDER WORKERS' OR WORKMEN'S COMPENSATION ACTS, DISABILITY BENEFIT ACTS OR OTHER EMPLOYEE BENEFIT ACTS. THE CONTRACTOR SHALL NOT BE REQUIRED TO INDEMNIFY ANY PARTY FOR THAT PARTY'S OWN NEGLIGENCE.

SECTION 2 – EXCAVATION/SITE CLEARING

1. SITE EXCAVATION SHALL BE IN ACCORDANCE WITH CIVIL DRAWINGS THAT WERE REVIEWED AND APPROVED BY THE LOCAL AUTHORITY. CONTRACTOR TO REPORT ALL DEVIATIONS FROM DOCUMENTS TO THE ARCHITECT BEFORE BEGINNING ANY FURTHER WORK.

SECTION 3 – CONCRETE

1. ALL CONCRETE TO BE MIXED & PLACED IN ACCORDANCE WITH A.C.I. STANDARDS, BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE AND ASTM C150.
2. SOIL BEARING CAPACITY ASSUMED TO BE 3,000 PSF.
    - 2.1. ~~SOILS REPORT PROVIDED BY OTHERS.~~
3. COMPRESSIVE STRENGTH OF CONCRETE
    - 3.1. ALL CONCRETE SHALL ATTAIN A 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI EXCEPT,
    - 3.2. EXTERIOR PORCHES, STEPS & WALKS EXPOSED TO THE WEATHER AND GARAGE FLOOR SLABS SHALL ATTAIN A MINIMUM OF 3500 PSI
    - 3.3. ALL CONCRETE EXPOSED TO THE WEATHER, INCLUDING DURING CONSTRUCTION, SHALL HAVE A MINIMUM OF 5% AND A MAXIMUM OF 7% AIR ENTRAINED.
    - 3.4. PLEASE NOTE THAT IRC TABLE R402.2 ALLOWS SOME CONCRETE TO BE 2500 PSI, BUT THIS ARCHITECT PREFERS A MINIMUM REQUIREMENT FOR CONCRETE IS AS NOTED ABOVE.
4. ALL CONCRETE WORK SHALL BE POURED CONTINUOUSLY WHENEVER POSSIBLE.
5. PROVIDE CONCRETE CONTROL JOINTS RADIATING OUT FROM ALL INTERIOR STEEL COLUMNS & AS REQUIRED IN ALL LARGE POUR BASEMENT, GARAGE & DRIVEWAY SLABS, APPROX. 20 FT EACH WAY.
6. NO CONCRETE SHALL BE POURED WHEN THERE IS EXCESSIVE OR STANDING WATER OR WHEN THE TEMPERATURE OF THE SURROUNDING AIR IS LESS THAN 40 DEGREES F (WITHOUT CHEMICAL ADDITIVES). DO NOT USE ANY ADDITIVES WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT. ALL FORMS, GROUND & OTHER MATERIALS WITH WHICH CONCRETE WILL COME INTO CONTACT SHALL BE FREE OF FROST BEFORE POURING. PROTECT THE CONCRETE & SOIL FROM FREEZING & HEAT SHALL BE PROVIDED IF NEEDED.
7. ALL CONCRETE SHALL CURE A MINIMUM OF SEVEN DAYS BEFORE A LOAD MAY BE PLACED ON IT OR BACKFILL CAN OCCUR.
8. DO NOT BACKFILL FOUNDATION WALLS UNTIL CONCRETE HAS CURED FOR AT LEAST 7 DAYS. PROVIDE BRACING AS REQUIRED TO FOUNDATION WALLS DURING BACKFILL.
9. AT ALL STOOPS, PORCHES PATIOS AND GARAGE AREAS, BACKFILL WITH COMPACTED FILL PER BUILDER'S SPECIFIED BACKFILL MATERIAL AND AS ALLOWED PER LOCAL AUTHORITY.
10. PROVIDE AND INSTALL PERIMETER DRAIN TILE.
    - 10.1. THE DRAIN TILE SHALL BE INSTALLED ON THE EXTERIOR OF ALL BASEMENT FOOTINGS AND AROUND THE OUTSIDE PERIMETER OF CRAWL SPACES. PROVIDE MANUFACTURER'S SPLICES, CORNERS AND TEES AS REQUIRED. THE DRAIN TILE SHALL BE 4" PERFORATED FLEXIBLE PVC PIPE IN SLEEVE, BEDDED ON 2" WASHED GRAVED, PLACED ON THE SIDE OF THE FOOTING, COVERED WITH 12" WASHED GRAVEL TO A POINT NOT LESS THAN 3" ABOVE THE TOP OF THE FOOTING.
    - 10.2. PROVIDE WINDOW WELL DRAINS, WHICH SHALL BE 4" PVC IN SLEEVE CONNECTED TO THE FOOTING DRAIN BY MEANS OF A PVC TEE. THE TOP END OF THE DRAIN PIPE SHALL BE LOCATED A MINIMUM OF 3" BELOW THE BOTTOM OF THE WINDOW FRAME AND SHALL BE PROVIDED WITH A PVC GRATE. THE WELL SHALL BE PROVIDED WITH A COARSE STONE TO A LEVEL ADEQUATE TO COVER THE GRATE.
11. REINFORCE THE FOUNDATION WALLS AS NOTED ON THE DRAWINGS. REBAR SHALL HAVE A MINIMUM OF 2" CONCRETE COVER. REINFORCE THE FOOTINGS WITH #5 REBARS EXTENDING 18" EACH WAY WHEREVER THE FOOTING SPANS OVER TRENCHES. ALL REBAR SHALL BE PER ASTM A615-GRADE 60 AND WELD WIRE REINFORCING SHALL BE PER ASTM A185.
12. ALL COPPER PIPING WITHIN ANY CONCRETE SHALL BE WRAPPED WITH A CODE APPROVED MATERIAL.
13. FINISH CONCRETE AS FOLLOWS: VERTICAL EXPOSED FOUNDATION WALLS BY REMOVING FINS AND FILL ALL HOLES; EXTERIOR WALKS AND STOOPS WITH BROOM FINISH; AND INTERIOR SLABS WITH TROWEL FINISH. PROVIDE CONTROL JOISTS AS REQUIRED.

SECTION 4 – MASONRY

1. ALL MASONRY CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE "MASONRY TECHNICAL NOTES" BY THE "MASONRY ADVISORY COUNCIL"; INCLUDING ITS HOT AND COLD WEATHER PROCEDURES.
2. THE OWNER SHALL SELECT BRICK, STONE, AND MORTAR PRIOR TO STARTING FROM CONTRACTOR SUPPLIED SAMPLES. THE CONTRACTOR TO PROVIDE A UNIT COST OF EACH AT TIME OF BID.
3. ALL MASONRY MATERIAL SHALL BE THOROUGHLY WET BEFORE LAID. MAINTAIN FRESHLY PLACED MASONRY AT MINIMUM TEMPERATURE OF 50 DEGREES F AFTER PLACING.
4. MASONRY VENEER SHALL BE JOINED TO FRAME CONSTRUCTION WITH US 0.22 GAUGE CORROSION RESISTANT 1" CORRUGATED METAL TIES SPACED A MINIMUM OF 24" HORIZONTALLY AND 16" VERTICALLY. TIES SHALL BE FIRMLY ATTACHED THROUGH SHEATHING TO FRAME CONSTRUCTION BEHIND. A MINIMUM OF 1" AIR SPACE SHALL BE PROVIDED BETWEEN THE BRICK VENEER AND THE SHEATHING ON THE WOOD FRAMING.
5. PROVIDE CORROSION RESISTANT FLASHING AND INSTALLED AT ALL SHELF ANGLES, LINTELS, LEDGES, OTHER OBSTRUCTIONS TO THE DOWNWARD FLOW OF WATER IN THE WALL, AND WHERE SHOWN ON DRAWINGS AND AS NECESSARY TO PROVIDE A WEATHERPROOF RESULT.
6. WEEP HOLES SHALL BE PROVIDED AT THE MINIMUM OF 2'-0" O.C. AT THE BASE OF THE VENEER WALL FLASHING. PROVIDE PLASTIC TUBING, COTTON ROPE, OR POLYESTER ROPE WICK AT EACH WEEP HOLE WITH A MINIMUM LENGTH OF 24". TRIM WICK FLUSH WITH OUTSIDE FACE OF WALL AFTER MORTAR HAS SET
7. WASH AND CLEAN ALL BRICK AND STONE WITH A NON-ACIDIC CLEANING.
8. GROUT SOLID AROUND ANYTHING THAT PROJECTS INTO MASONRY, INCLUDING AROUND ALL METAL FLUES, LIGHTING FIXTURES, ELECTRICAL RECEPTACLES, HOSE BIBBS, PIPES, ETC. TO CREATE A WATERPROOF BARRIER.
9. ~~MASONRY FIREPLACE (IF ANY):~~
    - 9.1. ~~ALL FIRE BRICK SHALL CONFORM TO ASTM C64, AND SHALL BE LAID UP WITH MEDIUM-DUTY FIRECLAY MORTAR CONFORMING TO ASTM C105.~~
    - 9.2. ~~FIREPLACE FLUE LINER SHALL BE OF HARD BURNED TERRA COTTA, SIZE AND SHAPE AS REQUIRED FOR PER PROPER DRAW OR AS SHOWN ON DRAWINGS.~~
    - 9.3. ~~FIREPLACE DAMPER SHALL BE "HIGH FORMED" TYPE, WITH POKER CONTROL, SIZE AS REQUIRED. ASH DUMP AND CLEANOUT DOOR SHALL BE APPROXIMATELY 4"x9" CAST IRON. VERIFY SIZE AND IF NEEDED WITH OWNER PRIOR TO START.~~
    - 9.4. ~~UNLESS NOTED OTHERWISE, ALL CHIMNEYS SHALL BE TOPPED WITH A CONCRETE CAP AS SHOWN ON THE ELEVATIONS. PROVIDE A MINIMUM 1" SLOPE FROM THE FLUE TILE TO THE EDGE OF THE CHIMNEY. THE CAP TO BE HELD TIGHT TO FLUE TILES ALL AROUND. ALL FLUE TILES SHALL RECEIVE A BEAD OF SILICON SEALANT AND PROJECT A MINIMUM OF 4" ABOVE CAP.~~
10. ~~THE MASONRY FIREPLACE HAS BEEN DESIGNED ACCORDING TO STANDARD PRACTICE, HOWEVER, IT IS THE RESPONSIBILITY OF THE MASON TO ENSURE THAT THE FIREPLACE WILL DRAW PROPERLY. SHOULD THE MASON HAVE ANY MISGIVINGS ABOUT THE DESIGN OF THE FIREPLACE AND CHIMNEY, HE IS TO NOTIFY THE ARCHITECT BEFORE PROCEEDING WITH CONSTRUCTION.~~

SECTION 5 – STEEL

1. ALL STRUCTURAL STEEL SHALL BE SHOP PRIMED WITH FABRICATOR'S STANDARD LEAD-FREE AND CHRMATE-FREE, NON-ASPHALTIC, RUST-INHIBITING PRIMER.
2. All STRUCTURAL STEEL SHALL CONFORM TO THE SPECIFICATIONS OF ASTM AS FOLLOWS: W-SHAPES PER ASTM A992, CHANNELS, ANGLES, M-SHAPES, S-SHAPES, PLATES AND BARS PER ASTM A36, COLD FORMED HOLLOW STRUCTURAL SECTIONS PER ASTM A500, PIPE COLUMNS PER ASTM A53, TYPE E OR S, GRADE B, Fy=36 KSI, AND HIGH-STRENGTH BOLTS, NUT, AND WASHERS PER ASTM A325 WITH ½" DIAMETER MINIMUM, UNLESS NOTED OTHERWISE.
3. ALL STEEL SHALL BE FABRICATED, DETAILED, AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS, LATEST EDITION AND WITH THE AISC CODE OF STANDARD PRACTICE.
4. ALL UNFILLED PIPES SHALL HAVE MINIMUM ¼" CAP PLATES WITH WEATHER TIGHT WELDS ALL AROUND TO PREVENT ENTRY OF WATER.
5. PROVIDE ⅜" DIAMETER DRAIN HOLE ABOVE BASE PLATE IN UNFILLED PIPES TO ALL WATER TO EXIST.
6. ALL COLUMNS TO BE SET UPON NON-SHRINK GROUT WITH MINIMUM STRENGTH OF 9000 PSI AT 28 DAYS, USING SETTING PLATES, ¼" THICK AND SIZE AS BASE PLATE.
7. GROUT SOLID ALL BEAMS IN BEAM POCKETS AT CONCRETE FOUNDATION WALLS WITH NONMETALLIC, SHRINK RESISTANT GROUT PER ASTM C1107.

SECTION 6 – CARPENTRY

1. SEE DESIGN CRITERIA FOR LUMBER DESIGN VALUES.
2. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED.
3. MICROLAM LVL BEAMS TO BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS. WHERE TWO OR MORE MEMBERS ARE USED TOGETHER, NAIL OR BOLT THEM TOGETHER PER MANUFACTURER'S INSTRUCTIONS. FOLLOW MANUFACTURER'S INSTRUCTIONS AS TO BEARING LENGTHS REQUIRED.
4. PROVIDE BRIDGING EQUALLY SPACED BETWEEN BEARING POINTS AND AT 8'-0" O.C. MAX FOR DIMENSIONAL LUMBER FLOORS.
5. PROVIDE APPROVED BRIDGING AS REQUIRED BY ENGINEERED JOIST MANUFACTURER (IF ANY). REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS AND DETAILS.
6. PROVIDE (2)2x4 STIFF BACKS @ 8' OC @ ALL CEILING JOISTS SPANNING UNSUPPORTED MORE THAN 10'
7. ANY PLYWOOD OR OSB DAMAGED, DELAMINATED OR BUCKLING DUE TO WEATHER OR ABUSE SHALL BE SANDED DOWN OR REPLACED IF UNABLE TO SAND SMOOTH.
8. PROVIDE TREATED 2x6 WOOD SILL PLATES ON TOP OF FOUNDATIONS HELD IN PLACE WITH ANCHOR BOLTS AS DETAILED AND SITTING ON ¼" MINIMUM THICKNESS CLOSED CELL NEOPRENE FOAM SILL SEALER. IF THERE IS A SPACE BETWEEN THE SILL PLATE AND THE TOP OF FOUNDATION OF GREATER THAN ¼", THEN INSTALL PORTLAND NON-SHRINK GROUT AT ALL VOIDS AND LET CURE PRIOR TO CONSTRUCTION.
9. ALL FRAMED WALLS (BOTH LOAD BEARING AND NON-LOAD BEARING) SHALL HAVE DOUBLE TOP PLATES WITH LAPPED JOIST OF AT LEAST 24".
10. SET ROUGH CARPENTRY TO REQUIRED LEVELS AND LINES, WITH MEMBERS PLUMB, TRUE TO LINE, CUT AND FITTED. LOCATE NAILERS, BLOCKING, AND SIMILAR SUPPORTS TO COMPLY WITH REQUIREMENT FOR ATTACHING OTHER CONSTRUCTION, INCLUDING BLOCKING FOR STAIR RAILS, CABINETRY, CLOSET RODS, SHOWERS, SHOWER WALLS, TUBS, MIRRORS, BATHROOM ACCESSORIES, ETC. THE LOCATION OF BATHROOM ACCESSORIES, MIRRORS, & CLOSET RODS SHALL BE VERIFIED WITH BUILDER.
11. VERIFY ALL ROUGH OPENINGS WITH MANUFACTURER'S SPECIFICATIONS PRIOR TO FRAMING.
12. SECURELY ATTACH ROUGH CARPENTRY TO SUBSTRATES, COMPLYING WITH THE IRC. WHERE FASTENERS ARE EXPOSED TO WEATHER, IN CONTACT WITH THE GROUND, OR IN HIGH RELATIVE HUMIDITY, PROVIDE FASTENERS THAT ARE HOT-DIP ZINC COATED. ALL METAL FRAMING ANCHORS SHALL HOT-DIP ZINC COATED AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
13. ALL HIP AND VALLEY ROOF RAFTERS SHOULD BE CONTINUOUS MEMBERS.
14. ALL 45-DEGREE INTERIOR AND EXTERIOR CORNERS TO HAVE CONTINUOUS RIPPED WOOD BLOCKING FOR DRYWALL & CORNER BEAD NAILER. ALL EXPOSED HIPS AND VALLEYS TO HAVE RIPPED 2x CORNER FOR DRYWALL NAIL.
15. PROVIDE 1½" OF BEARING (MIN) AT ALL JOIST ENDS OR PROVIDE APPROVED JOIST HANGERS.
16. ENCLOSED ACCESSIBLE SPACE UNDER STAIRS SHALL HAVE WALLS AND SOFFITS PROTECTED ON THE ENCLOSED SIDE WITH ½" GYPSUM BOARD.
17. ALL WOOD BEAMS, JOISTS, STUDS, AND OTHER COMBUSTIBLE MATERIAL SHALL HAVE A CLEARANCE OF NOT LESS THAN 2" FROM THE FRONT AND SIDE FACES OF MASONRY FIREPLACES AND NOT LESS THAN 4" FROM THE BACK FACE.
18. ALL PLUMBING & HVAC WALLS TO BE DOUBLE 2x4 @ 16" O.C. OR 2x6 @ 16" O.C. WALLS AND NO HVAC OR PLUMBING SHALL BE LOCATED IN ANY EXTERIOR WALL.
19. COORDINATE INSTALLATION OF ALL FLOOR JOISTS WITH PLUMBING FIXTURES SUCH THAT WHEN INSTALLED, THERE IS ENOUGH CLEARANCE ALLOWED THAT CUTTING OR NOTCHING OF JOIST WILL NOT BE REQUIRED.
20. DOUBLE ALL JOISTS UNDER BATHTUBS, WHIRLPOOLS, & ALL BEARING WALLS PARALLEL TO THE FLOOR JOISTS (AND WHERE NOTED)

SECTION 7 – FIRE BLOCKING

1. FIRE BLOCKING (PER SECTION IRC R302.11) SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS, BOTH VERTICALLY AND HORIZONTALLY, AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES AND BETWEEN A TOP STORY AND THE ATTIC-ROOF SPACE.
2. IN CONCEALED SPACES OF STUD WALLS, FURRED SPACES, AND PARALLEL OR STAGGERED ROWS OF STUDS, PROVIDE FIRE BLOCKING VERTICALLY AT THE CEILING AND FLOOR LEVELS AND HORIZONTALLY AT INTERVALS NOT TO EXCEED 10'.
3. AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS, AND COVE CEILINGS
4. IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN.
    - 4.1. ENCLOSED SPACES UNDER STAIRS THAT IS ACCESSED BY A DOOR OR ACCESS PANEL SHALL HAVE THE WALLS, UNDER-STAIR SURFACE AND ANY SOFFITS PROTECTED ON THE ENCLOSED SIDE WITH ½" GYPSUM BOARD. (PER IRC R302.7)
5. AT OPENINGS AROUND VENTS, PIPES, DUCTS, CABLES, AND WIRES AT CEILNG AND FLOOR LEVEL, WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION.
6. FIRE BLOCKING MATERIAL SHALL CONSIST OF 2x LUMBER, (2) LAYERS OF 1x LUMBER WITH BROKEN LAP JOINTS, (1) LAYER OF ²³⁄₃₂" (MIN) WOOD STRUCTURAL PANELS WITH JOINTS BACKED WITH SAME, (1) LAYER OF ¾" (MIN) PARTICLE BOARD WITH JOINTS BACKED WITH SAME, ½" (MIN) GYPSUM BOARD, ¼" CEMENT-BASED MILLBOARD, BATTS/BLANKETS OF MINERAL WOOL OR GLASS FIBER OR OTHER APPROVED MATERIALS INSTALLED IN SUCH A MANNER AS TO BE SECURELY RETAINED IN PLACE, OR CELLULOSE INSULATION INSTALLED AS TESTED IN ACCORDANCE WITH ASTM E119 OR UP 263, FOR THE SPECIFIC APPLICATION.

SECTION 8 – MOISTURE/THERMAL CONTROL

1. SEE SECTION 14 – I.E.C.C. #2, PLANS AND WALL SECTIONS FOR INSULATION REQUIREMENTS.
2. ALL INSULATION SHALL BE PER BUILDER'S SPECIFICATIONS AND AT A MINIMUM, AS ALLOWED BY CODE.
3. PROVIDE A VAPOR BARRIER ON THE WARM SIDE OF THE CONSTRUCTION, UNLESS NOTED OTHERWISE.
4. ALL GAPS AND SPACES AROUND EXTERIOR DOOR AND WINDOW FRAMES AND ALL HOLES PENETRATING INTO UNHEATED SPACES SHALL RECEIVE SAME INSULATION AS SURROUNDING AREA.
5. PROVIDE VENT CHUTES AT ROOF EAVES TO MAINTAIN AIR SPACE AT EAVE OR ALONG ENTIRE ROOF RAFTER AT LOCATIONS WHERE CEILING DOES NOT HAVE ATTIC SPACE ABOVE.
6. PROVIDE "TYVEK" (OR APPROVED EQUAL) BUILDING WRAP. APPLY BUILDING WRAP IMMEDIATELY AFTER SHEATHING IS INSTALLED. SEAL ALL SEAMS, EDGES, FASTENERS, AND PENETRATIONS WITH MANUFACTURER'S APPROVED TAPE. EXTEND BUILDING WRAP INTO JAMBS OF OPENINGS AND SEAL CORNERS WITH TAPE.
7. INSTALL FLASHING AS REQUIRED MAKE BUILDING WEATHER-TIGHT, INCLUDING ALL ROOF PENETRATIONS, ROOF-WALL INTERSECTIONS, WALL OPENINGS, ETC., MAKING SURE ALL FLASHING LAPS, JOINTS, AND SEAMS AREA PERMANENTLY WATER-TIGHT AND WEATHER-PROOF. CONCEAL FASTENERS WHERE POSSIBLE. SEPARATE NON-COMPATIBLE METALS OR CORROSIVE SUBSTRATES WITH A COATING OF ASPHALT MASTIC OR OTHER PERMANENT SEPARATION.
8. CAULK AND SEAL ALL JOINTS AS NECESSARY. WEATHER-STRIP EXTERIOR DOORS, WINDOWS, EXHAUST FANS, ETC. WHERE ANCHORS, ETC., PENETRATE FLASHING, FILL WITH SEALER TO ENSURE A WATERTIGHT CONDITION.
9. PROVIDE ALUMINUM GUTTERS AND DOWNSPOUTS, DRAIN TO GRADE. SEE BUILDER'S SPECIFICATIONS.
10. INSTALL ICE AND WATER SHIELD AT EAVES, VALLEYS AND AROUND CHIMNEY TO PREVENT ICE DAMS, ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
11. SEE TYPICAL WALL SECTION OR ROOF PLAN FOR TYPICAL SHINGLES

SECTION 9 – DOORS & WINDOWS

1. INSTALL WINDOWS AND DOORS PER MANUFACTURER'S REQUIREMENTS.
2. ALL WINDOWS AND DOORS PER BUILDER'S SPECIFICATIONS.
3. ALL WINDOWS SHALL BE DOUBLE-GLAZED INSULATED GLASS PER BUILDER'S SPECIFICATIONS. SEE SECTION 14 – I.E.C.C., #2.2 & #2.3 THE MAXIMUM THERMAL TRANSMITTANCE U-FACTOR.
4. PROVIDE TEMPERED SAFETY GLASS:
    - 4.1. FOR ANY WINDOW LOCATED WITHIN A 24" ARC OF A DOOR JAMB IN THE CLOSED POSITION AND BOTTOM EDGE OF GLAZING IS LESS THAN 60" AFF.
    - 4.2. FOR ANY WINDOW THAT MEETS ALL THE FOLLOWING; THE EXPOSED AREA OF AN INDIVIDUAL PANE IS LARGER THAN 9 SF; THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 18" AFF; THE TOPE EDGE OF THE GLAZING IS MORE THAN 36" AFF; & A WALKING SURFACE IS WITHIN 36" HORIZONALLY AND IN A STRAIGHT LINE.
    - 4.3. FOR ANY WINDOW WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THEN 36" ABOVE THE ADJACENT WALKING SURFACE AND WITHIN 60" OF THE STAIRS, LANDINGS AND RAMPS.
    - 4.4. FOR ANY WINDOW AT A BATHTUB OR SHOWER WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60" MEASURED VERTICALLY FROM WALKING SURFACE AND WITHIN 60" MEASURED HORIZONTALLY FROM THE EDGE OF THE BATH WATER OR SHOWER EDGE.
5. ALL EGRESS WINDOW: SHALL HAVE AT LEAST 5.7 S.F. OF CLEAR OPENING (EXCEPT GRADE LEVEL WINDOWS WHICH CAN HAVE 5.0 S.F) AND HAVE A MINIMUM CLEAR WIDTH OF 20" AND A MINIMUM CLEAR HEIGHT OF 24" AND THE TOP OF THE SILL CAN NOT BE ANY MORE THAN 44" ABOVE THE FLOOR. SEE SECTION 3 – CONCRETE #15 FOR BASEMENT EGRESS WINDOW.
6. WINDOW SILLS: WHERE THE OPENING OF AN OPERABLE WINDOW IS LOCATED MORE THAN 72" ABOVE THE FINISHED GRADE OR STRUCTURE BELOW ON THE EXTERIOR OF THE BUILDING, THE LOWEST PART OF THE CLEAR OPENING OF THE WINDOW SILL SHALL BE AT LEAST 24" AFF ON THE INSIDE OF THE BUILDING. IF THE CLEAR OPENING IS LESS THAN 24", THEN A WINDOW OPENING CONTROL DEVICE (W.O.C.D.) COMPLYING WITH ASTM F2090, SHALL BE PROVIDED ON THE WINDOW. THE W.O.C.D. SHALL ALLOW THE WINDOW TO OPEN NO MORE THAN WHAT WOULD NOT ALLOW A 4" SPHERE TO PASS THRU, BUT AFTER THE CONTROL DEVICE IS RELEASED, IT WOULD ALLOW THE WINDOW TO FULLY OPEN.
7. ALL EXTERIOR DOORS TO BE FULLY WEATHER-STRIPPED AND INSULATED.
8. COMMON WALL DOOR BETWEEN GARAGE AND LIVING SPACE SHALL BE 20 MINUTE (MIN.) LABELED DOOR WITH SELF CLOSING HINGES AND SELF LATCHING, U.N.O.
9. ALL DOORS & DOOR HARDWARE PER BUILDER'S SPECIFICATIONS.
10. IF ANY DEAD BOLTS INSTALLED, THEY MUST BE THUMB TURN AT INSIDE, KEY AT OUTSIDE.
11. PROVIDE JAMB EXTENSIONS FOR DOORS & WINDOWS LOCATED IN ALL WALLS THICKER THAN 2x4. VERIFY WITH FLOOR PLAN WALL THICKNESS.

SECTION 10 – HVAC

1. ALL HEATING AND COOLING EQUIPMENT SHALL BE SIZED BY HVAC CONTRACTOR USING MANUAL S & MANUAL J. SEE SECTION 14 – IECC, #12 FOR MORE INFORMATION.
2. THE HEATING SYSTEM SHALL BE DESIGNED TO OPERATE AT 72 DEGREES F INSIDE AT 4'-0" ABOVE THE FLOOR WHEN IT IS -10 DEGREES OUTSIDE WITH A 15 MPH WIND. AND THE COOLING SYSTEM MUST PROVIDE 70 DEGREES F COOLING WHEN THE OUTSIDE TEMPERATURE IS 95 DEGREES F.
3. HVAC SYSTEM SHALL BE PER BUILDER'S SPECIFICATIONS.
4. PROVIDE COMBUSTION AIR FOR ALL FUEL GAS APPLIANCES INCLUDING DRYERS, FURNACES, WATER HEATERS, BOILERS, ETC. IN COMPLIANCE WITH SECTION G2407. THE INSTALLATION OF A FULL LOUVERED DOOR OR TWO AIR TRANFER GRILLS (MINIMUM 100 SQ IN OF FREE AREA EACH AND LOCATED WITHIN 12" OF THE FLOOR AND CEILING) ARE CODE COMPLIANT
    - 4.1. FOR ENCLOSED LAUNDRY OR FURNACE ROOM, THE INSTALLATION OF A FULL LOUVERED DOOR OR TWO AIR TRANSFER GRILLS (MINIMUM 100 SQ IN OF FREE AREA EACH AND LOCATED WITHIN 12" OF THE FLOOR AND CEILING) ARE CODE COMPLIANT.
5. PROVIDE A PROGRAMMABLE THERMOSTAT FOR EACH FURNACE/BOILER.
6. ALL SUPPLY DUCTS IN ATTICS AND UN-HEATED SPACES SHALL BE SHEET METAL AND INSULATED, SEE SECTION 14 IECC.
7. ALL RETURN DUCTS SHALL BE IN SHEET METAL. USING STUD OR JOIST BAYS ARE NOT ALLOWED.
8. ALL DUCTWORK JOISTS SHALL BE TAPED AS ALLOWED BY CODE TO PREVENT AIR LEAKAGE.
9. THE DUCTWORK IS TO RUN BETWEEN JOISTS AS MUCH AS POSSIBLE TO KEEP THE BASEMENT CEILING AS CLEAN AS POSSIBLE.
10. PROVIDE ONE OR MORE SUPPLY REGISTERS IN THE BASEMENT TO ENSURE A WARM FLOOR AND PREVENT FREEZING OF THE HOSE BIB.
11. PROVIDE ANY NECESSARY ELECTRICAL AND GAS CONNECTIONS TO THE FURNACE, THERMOSTAT, ETC.
12. PROVIDE VENT TO EXTERIOR FOR NEW FURNACES AS REQUIRED AND AS SHOWN ON DRAWINGS.
13. CLASS B VENTS TO HAVE A MINIMUM 1" CLEARANCE TO ALL COMBUSTIBLES AND TO BE FIRESTOPPED AT FLOORS.
14. BATHROOM AND DRYER EXHAUST SHALL BE VENTED DIRECTLY TO THE EXTERIOR WITH FLUSH CAPS AND BACKDRAFT DAMPER, USING 4" CONTINUOUS SHEET METAL.
15. EXHAUST HOOD NOTE: INSTALL THE RANGE HOOD EXHAUST SYSTEM. INCLUDE ALL DUCTWORK (HARD PIPE ONLY), FLASHING, INSULATION, WEATHER-STRIPPING, BACKDRAFT DAMPER, ETC. AND EXHAUST DIRECTLY TO THE EXTERIOR.
    - 15.1. IT IS ASSUMED THAT KITCHEN EXHAUST HOOD TO PROVIDE A MINIMUM OF 100 CFM (INTERMITTENT) AND 400 CFM OF EXHAUST MAXIMUM.
    - 15.2. THE EXACT SIZE OF THE EXHAUST HOOD TO BE DETERMINED IN THE FIELD WHEN APPLIANCES FINALIZED.
    - 15.3. IN THE EVENT THAT THE HOOD EXHAUST IS GREATER THAN 400 CFM, THEN THE CONTRACTOR SHALL PROVIDE MAKEUP AIR AT A RATE APPROXIMATELY EQUAL TO THE EXHAUST AIR RATE. SUCH MAKE AIR SYSTEMS SHALL BE EQUIPPED WITH A MEANS OF CLOSURE AND SHALL BE AUTOMATICALLY CONTROLLED TO START AND OPERATE SIMULTANEOUSLY WITH THE EXHAUST HOOD. CONTRACTOR TO PROVIDE SPECIFICATIONS OF BOTH THE EXHAUST HOOD AND THE MAKEUP AIR SYSTEM (IF REQ'D) TO THE BUILDING OFFICIAL AT THE TIME OF THE INSPECTIONS.
16. TYING DUCT WORK OF MULTIPLE EXHAUST VENTS TOGETHER FOR SHARED EXHAUST TO EXTERIOR IS NOT ALLOWED.
17. HAVE COPY OF EQUIPMENT INSTALLATION MANUALS TIED TO GAS & ELECTRIC ON SITE AT TIME OF ROUGH INSPECTION, SEE SECTION 13 – ELECTRIC, #5.
18. SEE SECTION SECTION 17 – FINISHES, #1 & #2 FOR ADDITIONAL NOTES.
19. SEE SECTION 14 – I.E.C.C, #12 FOR WHOLE-HOUSE VENTILATION SYSTEM NOTES.

SECTION 11 – PLUMBING

1. ALL PLUMBING WORK SHALL BE PERFORMED UNDER THE SUPERVISION OF A LICENSED PLUMBER.
2. WORKMANSHIP SHALL BE THE BEST STANDARD PRACTICE OF THE TRADE.
3. WATER SUPPLY:
    - 3.1. VALVE SHALL BE APPROPRIATE TO USE & TO ADJACENT PIPING MATERIAL. PROVIDE SHUT OFF VALVES FOR ALL SUPPLY LINES AT EACH FURNACE, BOILER, APPLIANCE, OR FIXTURE.
    - 3.2. ALL WATER PIPES TO FIXTURES SHALL BE VALVED.
    - 3.3. UNDERGROUND WATER PIPING SHALL BE COPPER TYPE K WITH FLARED FITTINGS.
    - 3.4. SUSPENDED WATER PIPING SHALL BE COPPER TYPE L WITH LEAD-FREE SOLDER.
    - 3.5. PROVIDE FREEZE-PROOF HOSE BIBS WHERE INDICATED ON DRAWINGS WITH VACUUM BREAKERS.
    - 3.6. PROVIDE A GREY BOX WITH SILL FAUCETS AND ONE STANDPIPE AND 2" DRAIN FOR EACH CLOTHES WASHER. VERIFY EXACT LOCATION WITH BUILDER PRIOR TO ROUGH AND COORDINATE WITH SELECTED WASHER.
    - 3.7. PROVIDE A 12" AIR CHAMBER AT EVERY FIXTURE AND A 24" AIR CHAMBER AT THE TOP OF RISERS.
    - 3.8. WATER CLOSETS 1.6 GALLON PER FLUSH MAXIMUM, SHOWER, LAVS AND SINKS, 3 GALLON PER MINUTE FLOW CONTROL.
    - 3.9. AT DISHWASHER, PROVIDE WATER CONNECTION WITH SHUTOFF VALVE AND A METHOD OF DISCHARGE NOT THROUGH DISPOSAL.
    - 3.10. PROVIDE VALVE AT BOTH SIDES OF METER FOR DRAINAGE.
    - 3.10. PROVIDE WATER LINE TO ALL REFRIGERATORS AND ICE MAKERS WITH SHUT OFF AT APPLIANCE. FLEXIBLE COPPER TUBING ONLY ALLOWED FROM SHUT OFF TO APPLIANCE. NO TAP CONNECTIONS ALLOWED.
    - 3.11. PROVIDE HIGH EFFICIENT GAS DOMESTIC HOT WATER HEATERS WITH PVC DISCHARGE PER BUILDER'S SPECIFICATIONS. CONNECT WATER HEATERS IN SERIES IF MORE THAN ONE.
4. SEWER SYSTEM:
    - 4.1. INTERIOR ABOVE GROUND WASTE AND VENT PIPING AND FITTINGS SHALL BE PVC SCHEDULE 40.
    - 4.2. INTERIOR UNDER GROUND WASTE AND VENT PIPING AND FITTINGS SHALL BE PVC SCHEDULE 40.
    - 4.3. EXTERIOR WASTE PIPING SHALL BE 6" DIA. PVC SCHEDULE 40.
    - 4.4. PROVIDE CLEAN-OUTS IN WASTE AND SOIL LINE FOR EACH CHANGE OF DIRECTION GREATER THAN 45 DEGREES AND AT TOP OF EACH STACK.
    - 6.5. PROVIDE SEWAGE EJECTOR PIT WITH COVER FLUSH WITH BASEMENT SLAB IF BASEMENT WASTE LINES ARE LOWER THAN EXISTING SANITARY SEWER TO STREET OR AS OTHERWISE REQUIRED.
    - 6.6. PROVIDE SEWAGE PUMP AND SUMP PUMP PER BUILDER'S SPECIFICATIONS. SUMP PUMP TO INCLUDE PVC DISCHARGE LINES WITH CHECK VALVES AND DISCHARGE TO EXTERIOR. REFER TO BUILDER'S SPECIFICATIONS AND CIVIL ENGINEERING DRAWINGS FOR ANY EXTERIOR CONNECTIONS (IF ANY).
    - 6.7. CONNECT INTERIOR BASEMENT FLOOR DRAINS AND ANY BASEMENT PLUMBING TO THE EJECTOR PIT.
    - 6.8. CONNECT ALL EXTERIOR BASEMENT WINDOW WELL DRAINS TO PERIMETER DRAIN AND THE SUMP PIT.
    - 6.9. EACH STACK VENT EXTENSION THROUGH THE ROOF SHALL BE A MINIMUM OF 4".
7. OTHER SYSTEMS:
    - 7.1. PROVIDE AND INSTALL A PASSIVE RADON SYSTEM WITH A PIPE FROM THE BASEMENT SLAB TO THROUGH THE ROOF.
    - 7.2. PROVIDE GAS LINES WITH LOG LIGHTERS TO ALL FIREPLACES.
8. ~~PROVIDE A HIGH EFFICIENT GAS FIRED BOILER PER BUILDER'S SPECIFICATIONS TO PROVIDE IN-SLAB AND IN-FLOOR HEAT WITH MULTIPLE ZONES.~~
9. HAVE COPY OF EQUIPMENT INSTALLATION MANUALS TIED TO GAS & ELECTRIC ON SITE AT TIME OF ROUGH INSPECTION, SEE SECTION 14 – ELECTRIC, #4.
10. SEE SECTION SECTION 17 – FINISHES, #1 & #2 FOR ADDITIONAL NOTES.

SECTION 12 – ELECTRICAL

1. ELECTRICAL DRAWINGS ARE PROVIDED IN A SCHEMATIC NATURE, THE ELECTRICAL CONTRACTOR SHALL DO ELECTRICAL PANEL LOAD CALCULATIONS AND DETERMINE EXACT CIRCUITING PRIOR TO START OF PROJECT. THE ELECTRICAL CONTRACTOR SHALL PROVIDE A CIRCUIT DIAGRAM TO THE LOCAL AUTHORITY IF REQUIRED OR REQUESTED.
2. PROVIDE NEW 200 AMPERE SINGLE PHASE UNDERGROUND SERVICE WITH ONE 200-AMPERE PANEL WITH 40 POLE SPACES (MIN) AND MAIN SHUT OFF. PROVIDE BREAKERS AS REQUIRED.
    - 2.1. A MINIMUM OF 10% OF THE ELECTRIC PANEL SPACE SHOULD BE LEFT OPEN FOR FUTURE EXPANSION.
    - 2.2. EVERY CIRCUIT ON THE ELECTRICAL PANEL SHALL BE LEGIBLY IDENTIFIED AS TO ITS CLEAR, EVIDENT, AND SPECIFIC PURPOSE/USE. THE IDENTIFICATION SHALL BE INCLUDED WITHIN THE DOOR OF THE ELECTRICAL PANEL.
    - 2.3. MAINTAIN 36" DEPTH X 30" WIDTH x 78" HEIGHT MIN. CLEAR FLOOR SPACE IN FRONT OF ELECTRICAL PANEL.
    - 2.4. ELECTRICAL PANEL SHALL BE LOCATED A MINIMUM OF 5'-0" FROM SUMP PIT.
3. ALL WIRE TO BE COPPER WIRE THROUGHOUT AND INSTALLED IN METAL CONDUIT.
4. WEIGHT OF WIRING, CONDUITS, ETC. MUST BE SUPPORTED FROM THE STRUCTURE, INDEPENDENT FROM ANY SUSPENDED CEILINGS.
5. *ALL EQUIPMENT AND APPLIANCES, INCLUDING FURNACES, A/C UNITS, WATER HEATERS, WASHERS, DRYERS, RANGE HOODS, MICROWAVE OVENS, REFRIGERATORS, RANGES, DISHWASHERS, DISPOSALS, KITCHEN EXHAUST HOODS, ETC. SHALL BE INSTALLED PER THE MANUFACTURER'S INSTALLATION MANUAL (HAVE COPY ON SITE AT TIME OF ROUGH INSPECTION) AND COMPLY WITH LOCAL AUTHORITY CODES.
6. PROVIDE ELECTRIC POWER TO SUMP PUMPS AND SEWAGE EJECTOR PIT AS REQUIRED.
7. ALL 125-VOLT, SINGLE PHASE, 15A & 20A RECEPTACLES INSTALLED IN KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, OR SIMILAR ROOMS OR AREAS SHALL BE INSTALLED WITH AN ARCH FAULT CIRCUIT INTERRUPTER. (NEC 210.12.A)
8. ALL 125-VOLT 15A & 20A OUTLETS SHALL BE LISTED TAMPER RESISTANT.
9. PROVIDE DISCONNECTING MEANS AS REQUIRED BY CODE FOR FIXED APPLIANCES, INCLUDING FURNACES & DISHWASHER.
10. EACH FLOOR SHALL BE CIRCUITED SEPARATELY.
11. INTERIOR & EXTERIOR GARAGE APPLICATIONS SHALL BE CIRCUITED SEPARATELY.
12. OUTLETS (NEC 210.52, A)
    - 12.1. SHALL BE INSTALLED IN EVERY HABITABLE ROOM SUCH THAT NO POINT MEASURED HORIZONTALLY ALONG THE FLOOR LINE OF ANY WALL SPACE IS NO MORE THE 6' FROM AN OUTLET. A WALL SPACE SHALL BE INCLUDE ANY WALL 2' OR LONGER, INCLUDING AROUND CORNERS, AND UNBROKEN ALONG THE FLOOR LINE BY A DOOR OR SIMILAR OPENING, FIREPLACES AND FIXED CABINETS. FLOOR OUTLETS (IF ANY) 18" OR MORE DO NOT COUNT TOWARDS ANY REQUIRED OUTLET.
    - 12.2. ANY HALLWAY LONGER THAN 10' IN LENGTH, MEASURED ALONG CENTER OF HALLWAY, SHALL REQUIRE AT LEAST ONE OUTLET.
    - 12.3. FOYERS, NOT PART OF A HALLWAY AND WITH AN AREA GREATER THAN 60 SF SHALL HAVE OUTLET LOCATED IN EACH WALL SPACE 3' OR MORE IN WIDTH. (NEC 210.52.I)
    - 12.4. ALL 220 VOLT APPLIANCES SHALL HAVE A 4-PRONG CONFIGURATION, VERIFY WITH SELECTED APPLIANCE.
13. GROUND FAULT PROTECTED OUTLETS (NEC 210.8, A)
    - 13.1. ALL UNFINISHED BASEMENTS OR CRAWL SPACES AT OR BELOW GRADE AND DOES NOT INCLUDED FINISHED BASEMENT SPACES, SHALL BE 125-VOLT, SINGLE PHASE, 15A & 20A GFI PROJECTED OUTLETS.
    - 13.2. ALL BATHROOM OUTLETS SHALL BE GFI PROTECTED AND BE 20A DEDICATED. (NEC 210.11.C.3)
    - 13.3. ALL GARAGE OUTLETS SHALL BE GFI PROTECTED AND PROVIDE ONE FOR EACH CAR SPACE.
    - 13.4. GARAGE DOOR OPENER OUTLETS SHALL BE GFI PROTECTED.
    - 13.5. ANY AUTOMATIC GARAGE DOOR OPENERS SHALL BE LISTED IN ACCORDANCE WITH UL325 AND WIRED IN ACCORDANCE WITH THE PROVISIONS OF THE NEC.
    - 13.6. ANY OUTLET WITHIN 6' OF THE OUTSIDE EDGE OF THE SINK.
    - 13.7. ANY OUTLET IN A LAUNDRY AREA, INCLUDING WASHER & DRYER, SHALL BE GFI PROTECTED AND AT LEAST ONE DEDICATED 20A OUTLET FOR WASHER/DRYER. (NEC 210.11.C.2)
    - 13.8. ALL EXTERIOR OUTLETS SHALL BE GFI PROTECTED WITH WATER PROOF IN USE COVER.
14. KITCHEN OUTLETS (NEC 210.52, B, 3)
    - 14.1. ALL KITCHEN COUNTERTOP OUTLETS TO BE GFI PROTECTED AND PROVIDE AT LEAST (2)20A CIRCUITS. (NEC 210.11.C.1)
    - 14.2. ALL KITCHEN COUNTERTOP OUTLETS SHALL BE INSTALLED SO THAT NO POINT ALONG THE WALL LINE IS MORE THEN 24" FROM AN OUTLET, EDGE OF APPLIANCE OR EDGE OF COUNTERTOP.
    - 14.3. ANY COUNTERTOP LARGER THAN 24"X12" SHALL HAVE AT LEAST ONE OUTLET.
    - 14.4. ANY KITCHEN PENINSULA OR ISLAND SHALL HAVE AT LEAST ONE OUTLET.
    - 14.5. KITCHEN ISLANDS AND PENINSULAS WITH A SINK SHALL HAVE AT LEAST ONE OUTLET INSTALLED ON EACH SIDE OF THE SINK.
    - 14.6. ALL RECEPTACLES PLACED ABOVE COUNTERTOPS SHALL BE INSTALLED WITH THE LONG DIMENSION OF THE PLATE HORIZONTAL, UNLESS OTHERWISE NOTED.
    - 14.7. ANY DISHWASHER SHALL BE GFI PROTECTED.
15. ALL GFI OUTLETS SHALL BE L.E.D. TYPE.
16. ALL BATHROOM OUTLETS, SWITCHES, LIGHT FIXTURES, & FANS SHALL BE GFI PROTECTED.
17. ALL LIGHT FIXTURES OVER TUBS & SHOWERS SHALL BE WATER & VAPOR PROOF AND RATED FOR WET LOCATIONS.
18. ALL CEILING LIGHT BOXES SHALL BE CAPABLE OF SUPPORTING CEILING FANS.
19. PROVIDE ALL APPROPRIATE CONNECTIONS AND POWER FOR THE CONNECTION OF THE APPLIANCES, MECHANICAL EQUIPMENT, AND PLUMBING EQUIPMENT. COORDINATE WITH THE OTHER SUBCONTRACTORS. SEE BUILDER SPECIFICATIONS FOR LIST OF APPLIANCES TO BE HOOKED UP.
20. ALL CLOSET LIGHTS SHALL BE MOUNTED ON THE CEILING ABOVE THE DOOR AND IS A MINIMUM OF 18" AWAY FROM ALL SHELVING.
21. ALL DEVICES AND COVER PLATES TO BE PROVIDED PER BUILDER'S SPECIFICATIONS.
22. ALL INTERIOR RECESSED INCANDESCENT ("CAN") DOWNLIGHTS SHALL BE RATED FOR USE WITH DIRECT CONTACT TO INSULATION WITH TRIM RINGS AND BAFFLES.
23. ½" METAL CONDUIT SHALL BE RUN FROM WATER METER TO EXTERIOR OF BUILDING FOR THE WATER COMPANY'S REMOTE READER. VERIFY EXACT LOCATION IN THE FIELD WITH THE LOCAL BUILDING AUTHORITY FOR READER LOCATION.
24. PROVIDE DOOR BELL WITH ONE BUTTON AT FRONT DOOR.
25. SEE SECTION 13 – SMOKE & CO DETECTORS FOR ADDITIONAL NOTES.
26. SEE SECTION 14 – I.E.C.C. FOR ADDITIONAL NOTES.
27. SEE SECTION SECTION 17 – FINISHES, #1 & #2 FOR ADDITIONAL NOTES.
28. ELECTRICAL MOUNTING HEIGHTS ABOVE FINISHED FLOOR TO CENTER OF PLATE. ALL HEIGHTS SHOULD BE VERIFIED WITH BUILDER'S SPECIFICATIONS & COORDINATED WITH CABINET DESIGN & APPLIANCES.

SWITCH	48" MAX.	OUTLET	15" MIN.
OUTLET ABOVE COUNTER	48" MAX.	TELEPHONE JACK	15" MIN.
GARAGE OUTLET	48"	TELEVISION JACK	15" MIN.
BASEMENT OUTLET	48"	THERMOSTAT	54"
WASHER/DRYER OUTLET	36"	EXHAUST HOOD FAN WHIP	66"
DISHWASHER WHIP	UNDER COUNTER	WALL MOUNTED MICROWAVE	76"
RANGE OUTLET	24"	REFRIGERATOR OUTLET	48"

SECTION 13 – SMOKE & CO DETECTORS*

1. PROVIDE AT LEAST ONE SMOKE DETECTOR (SD) AT EACH LEVEL, ONE IN EACH BEDROOM, AND ONE MUST BE OUTSIDE BEDROOM DOORS, BUT WITHIN A 15' RADIUS OF ANY BEDROOM DOOR.
    - 1.1. SMOKE DETECTORS SHALL BE 110V WITH BATTERY BACKUP AND INTERCONNECTED.
2. PROVIDE ONE CARBON MONOXIDE DETECTOR (CO) WITHIN 15' OF EVERY BEDROOM DOOR OPENING.
    - 2.1. THE CARBON MONOXIDE DETECTOR MAY BE BATTERY OPERATED OR HARDWIRED.
    - 2.2. A COMBINATION SMOKE & CO DETECTOR CAN BE USED IN LIEU OF CO ONLY DETECTORS.
3. ~~PROVIDE A 200 DEG HEAT DETECTOR IN EACH ATTACHED GARAGES AND BE UL LISTED, COMPLY WITH NFPA 72, BE PROVIDED WITH 110V POSER BACKUP, AND SHALL BE INTERCONNECTED WITH ALL OTHER SMOKE ALARMS IN THE BUILDING.~~

SECTION 14 – I.E.C.C. (2018)*

1. TO PROVIDE COMPLIANCE WITH THE 2018 INTERNATIONAL ENERGY CONSERVATION CODE, THIS PROJECT WILL BE CONSTRUCTED USING THE PERFORMANCE METHOD PER IECC R405 AND MANDATORY PROVISIONS OF IECC R401 THROUGH R404. (IECC R401.2)
    - 1.1. A PASSING COMPLIANCE REPORT SUBMITTED WITH THE APPLICATION FOR BUILDING PERMIT SHALL INCLUDE THE BUILDING STREET ADDRESS, OR OTHER BUILDING SITE IDENTIFICATION, A STATEMENT INDICATING THAT THE PROPOSED DESIGN COMPLIES WITH SECTION R405.3, AN INSPECTION CHECKLIST DOCUMENTING THE BUILDING COMPONENT CHARACTERISTICS OF THE PROPOSED DESIGN AS INDICATED IN TABLE R405.5.2(1), THE INSPECTION CHECKLIST SHALL SHOW RESULTS FOR BOTH THE STANDARD REFERENCE DESIGN AND THE PROPOSED DESIGN WITH USER INPUTS TO THE COMPLIANCE SOFTWARE TO GENERATE THE RESULTS, A SITE-SPECIFIC ENERGY ANALYSIS REPORT THAT IS IN COMPLIANCE WITH SECTION R405.3 AND THE NAME OF THE INDIVIDUAL PERFORMING THE ANALYSIS AND GENERATING THE REPORT, & THE NAME AND VERSION OF THE COMPLIANCE SOFTWARE TOOL.
2. *REFER TO FLOOR PLANS AND TYPICAL WALL SECTION FOR INSULATION R-VALUE REQUIREMENTS.
    - 2.1. CLIMATE ZONE 5 AND MARINE 4.
    - 2.2. *FENESTRATION (WINDOW) MAXIMUM U-VALUE IS 0.30.
    - 2.3. *SKYLIGHT MAXIMUM U-VALUE IS 0.55.
    - 2.4. GLAZED FENESTRATION SHGC IS NOT REQUIRED.
3. A PERMANENT CERTIFICATE SHALL BE COMPLETED BY THE BUILDER OR OTHER APPROVED PARTY AND POSTED ON A WALL IN THE SPACE WHERE THE FURNACE IS LOCATED OR AN APPROVED LOCATION INSIDE THE BUILDING. WHEN LOCATED ON AN ELECTRICAL PANEL, THE CERTIFICATE SHALL NOT COVER OR OBSTRUCT THE VISIBILITY OF THE CIRCUIT DIRECTORY LABEL, SERVICE DISCONNECT LABEL OR OTHER REQUIRED LABELS. THE CERTIFICATE SHALL INDICATE THE PREDOMINANT R-VALUES OF INSULATION INSTALLED IN OR ON CEILINGS, ROOFS, WALLS, FOUNDATION COMPONENTS SUCH AS SLABS, BASEMENT WALLS, CRAWL SPACE WALLS AND FLOORS AND DUCTS OUTSIDE CONDITIONED SPACES; ABD U-FACTORS OF FENESTRATION (THE SOLAR HEAT GAIN COEFFICIENT (SHGC) IS NOT REQUIRED), AND THE RESULTS FROM ANY REQUIRED DUCT SYSTEM AND BUILDING ENVELOPE AIR LEAKAGE TESTING PERFORMED ON THE BUILDING. WHERE THERE IS MORE THAN ONE VALUE FOR EACH COMPONENT, THE CERTIFICATE SHALL INDICATE THE VALUE COVERING THE LARGEST AREA. THE CERTIFICATE SHALL INDICATE THE TYPES AND EFFICIENCIES OF HEATING, COOLING AND SERVICE WATER HEATING EQUIPMENT. WHERE A GAS-FIRED UNVENTED ROOM HEATER, ELECTRIC FURNACE OR BASEBOARD ELECTRIC HEATER IS INSTALLED IN THE RESIDENCE, THE CERTIFICATE SHALL INDICATE "GAS-FIRED UNVENTED ROOM HEATER," "ELECTRIC FURNACE" OR "BASEBOARD ELECTRIC HEATER," AS APPROPRIATE. AN EFFICIENCY SHALL NOT BE INDICATED FOR GAS-FIRED UNVENTED ROOM HEATERS, ELECTRIC FURNACES AND ELECTRIC BASEBOARD HEATERS. (IECC R401.3)
4. PROVIDE A PROGRAMMABLE THERMOSTAT FOR EACH FURNACE/BOILER. (IECC R403.1)
5. A MINIMUM OF 90% OF THE LAMPS IN PERMANENTLY INSTALLED LIGHT FIXTURES SHALL BE HIGH EFFICIENCY LAMPS. (IECC R404.1)
6. A BLOWER DOOR TEST: THE BUILDING SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE NOT THREE AIR CHANGES PER HOUR. TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH RESNET/ICC 380, ASTM E779 OR ASTM E1827 AND REPORTED AT A PRESSURE OF 0.2 INCH W.G. TESTING SHALL BE CONDUCTED BY AN APPROVED THIRD PARTY. A SIGNED WRITTEN REPORT OF THE RESULTS SHALL BE PROVIDED TO THE CODE OFFICIAL. TESTING SHALL BE PERFORMED AT ANY TIME AFTER CREATION OF ALL PENETRATIONS OF THE BUILDING THERMAL ENVELOPE. (ICEE R402.4.1.2)
7. THE BUILDING THERMAL ENVELOPE SHALL COMPLY WITH IECC R402.4.1.1 AND R402.4.1.2. THE SEALING METHODS BETWEEN DISSIMILAR MATERIALS SHALL ALLOW FOR DIFFERENTIAL EXPANSION AND CONTRACTION. (IECC R402.4.1)
    - 7.1. WOOD-BURNING FIREPLACES SHALL HAVE TIGHT-FITTING FLUE DAMPERS OR DOORS, AND OUTDOOR COMBUSTION AIR. (IECC R402.4.2)
    - 7.2. WINDOWS, SKYLIGHTS AND SLIDING GLASS DOORS SHALL HAVE AN AIR INFILTRATION RATE OF NOT GREATER THAN 0.3 CFM/SF, AND FOR SWINGING DOORS, NOT GREATER THAN 0.5 CFM/SF. (IECC R402.4.3)
    - 7.3. WHERE OPEN COMBUSTION AIR DUCTS PROVIDE COMBUSTION AIR TO OPEN COMBUSTION FUEL BURNING APPLIANCES, THE APPLIANCES AND COMBUSTION AIR OPENING SHALL BE LOCATED OUTSIDE THE BUILDING THERMAL ENVELOPE OR ENCLOSED IN A ROOM THAT IS ISOLATED FROM INSIDE THE THERMAL ENVELOPE. SUCH ROOMS SHALL BE SEALED AND INSULATED IN ACCORDANCE WITH THE ENVELOPE REQUIREMENTS OF IECC TABLE R402.1.2, WHERE THE WALLS, FLOORS AND CEILINGS SHALL MEET NOT LESS THAN THE BASEMENT WALL R-VALUE REQUIREMENT. THE DOOR INTO THE ROOM SHALL BE FULLY GASKETED AND ANY WATER LINES AND DUCTS IN THE ROOM INSULATED IN ACCORDANCE WITH IECC R403. THE COMBUSTION AIR DUCT SHALL BE INSULATED WHERE IT PASSES THROUGH CONDITIONED SPACE TO AN R-VALUE OF NOT LESS THAN R-8. EXCEPTIONS: (A)DIRECT VENT APPLIANCES WITH BOTH INTAKE AND EXHAUST PIPES INSTALLED CONTINUOUS TO THE OUTSIDE; OR (2)FIREPLACES AND STOVES COMPLYING WITH IECC R402.4.2 & IRC R1006. (IECC R402.4.4)
    - 7.4. RECESSED LUMINAIRES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE SEALED TO LIMIT AIR LEAKAGE BETWEEN CONDITIONED AND UNCONDITIONED SPACES. RECESSED LUMINAIRES SHALL BE IC-RATED AND LABELED AS HAVING AN AIR LEAKAGE RATE OF NOT GREATER THAN 2.0 CFM WHEN TESTED IN ACCORDANCE WITH ASTM E283 AT A PRESSURE DIFFERENTIAL OF 1.57 PSF. RECESSED LUMINAIRES SHALL BE SEALED WITH A GASKET OR CAULKED BETWEEN THE HOUSING AND THE INTERIOR WALL OR CEILING COVERING. (IECC R402.4.5)
8. BUILDING FRAMING CAVITIES SHALL NOT BE USED AS DUCTS OR PLENUMS. (IECC R403.3.5)
9. DUCTS, AIR HANDLERS AND FILTER BOXES SHALL BE SEALED AT ALL JOINTS & SEAMS AND SHALL COMPLY WITH EITHER THE IMC OR IRC, AS APPLICABLE. DUCT TAPE OR ANY OTHER UNLISTED TAPE IS NOT PERMITTED. (IECC R403.3.2)
    - 9.1. AIR HANDLER. AIR HANDLERS SHALL HAVE A MANUFACTURER'S DESIGNATION FOR AN AIR LEAKAGE OF NOT GREATER THAN 2 PERCENT OF THE DESIGN AIRFLOW RATE WHEN TESTED IN ACCORDANCE WITH ASHRAE 193. (IECC R403.3.2.1)
    - 9.2. DUCTS SHALL BE PRESSURE TESTED TO DETERMINE AIR LEAKAGE BY ONE OF THE FOLLOWING METHODS, EITHER ROUGH-IN TEST OR POST CONSTRUCTION TEST PER IECC R403.3.3 AND A SIGNED WRITTEN REPORT OF THE TEST RESULTS SHALL BE PROVIDED TO THE LOCAL AUTHORITY. IF ALL DUCTS AND AIR HANDLERS ARE LOCATED INSIDE THE CONDITIONED SPACE, THEN NO TEST IS REQUIRED. (IECC R403.3.3)
10. MECHANICAL SYSTEM PIPING CAPABLE OF CARRYING FLUIDS ABOVE 105° F OR LESS THAN 55° F SHALL BE INSULATED TO A MINIMUM OF R3. (IECC R403.4)
11. ALL CIRCULATING SERVICE HOT WATER PIPING SHALL BE INSULATED TO A MINIMUM OF R3 WITH A READILY ACCESSIBLE MANUAL SWITCH THAT CAN TURN OFF THE HOT WATER CIRCULATING PUMP WHEN THE SYSTEM IS NOT IN USE. (IECC R403.5.1).
12. *WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM:
    - 12.1. THE WHOLE HOUSE VENTILATION SYSTEM SHALL BE DESIGNED IN ACCORDANCE WITH 2018 IECC AS AMENDED BY THE STATE OF ILLINOIS, SECTION R403.6.
    - 12.2. 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 OR SUPPLY FANS ARE PERMITTED TO SERVE SUCH A SYSTEM. OUTDOOR AIR DUCTS CONNECTED TO THE RETURN SIDE OF AN AIR HANDLER SHALL BE CONSIDERED TO PROVIDE SUPPLY VENTILATION.
    - 12.3. THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM SHALL BE PROVIDED WITH CONTROLS THAT ENABLE MANUAL OVERRIDE.
    - 12.4. WHEN THE AIR INFILTRATION RATE OF A BUILDING OR DWELLING UNIT IS 3 AIR CHANGES PER HOUR OR LESS WHEN TESTED IN ACCORDANCE WITH IECC R402.4.1.2, THE BUILDING SHALL BE PROVIDED WITH VENTILATION THAT MEETS THE REQUIREMENTS OF IECC R403.6,
    - 12.5. THE BUILDING SHALL BE PROVIDED WITH VENTILATION THAT COMPLIES WITH THE REQUIREMENTS OF THE IRC OR IMC, AS APPLICABLE, OR WITH OTHER APPROVED MEANS OF VENTILATION. ANY OUTDOOR AIR INTAKES AND EXHAUSTS SHALL HAVE AUTOMATIC OR GRAVITY DAMPERS THAT CLOSE WHEN THE VENTILATION SYSTEM IS NOT OPERATING. (IECC R403.6).
    - 12.1. FANS USED TO PROVIDE WHOLE-HOUSE MECHANICAL VENTILATION SHALL MEET THE EFFICACY REQUIREMENTS OF TABLE BELOW. (IECC R403.6.1), EXCEPT WHERE AN AIR HANDLER THAT IS INTEGRAL TO TESTED AND LISTED HVAC EQUIPMENT IS USED TO PROVIDE WHOLE-HOUSE MECHANICAL VENTILATION, THE AIR HANDLER SHALL BE POWERED BY AN ELECTRONICALLY COMMUTATED MOTOR.
    - 12.2. (TABLE R403.6.1) WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM FAN EFFICACY:

FAN LOCATION	MIN AIR FLOW	MINIM EFFICACY	MAX AIR FLOW
HRV OR ERV	ANY	1.2 CFM/WATT	ANY
RANGE HOODS	ANY	2.8 CFM/WATT	ANY
IN-LINE FAN	ANY	2.8 CFM/WATT	ANY
BATHROOM, UTILITY RM	10	1.4 CFM/WATT	<90
BATHROOM, UTILITY RM	90	2.8 CFM/WATT	ANY

    - 12.3. THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM SHALL PROVIDE OUTDOOR AIR AT A CONTINUOUS RATE OF NOT LESS THAN THAT DETERMINED IN ACCORDANCE WITH IRC TABLE M1505.4.3(1) (IECC R403.6 & IRC M1505). THE FOLLOWING IS TABLE IRC TABLE M1505.4.3(1)

FLOOR (IN SF)	NUMBER OF BEDROOMS (AIRFLOW IN CFM) 0-1	2-3	4-5	6-7	>7
~~<1500~~	~~30~~	~~45~~	~~60~~	~~75~~	~~90~~
~~1501-3000~~	~~45~~	~~60~~	~~75~~	~~90~~	~~10~~
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~~

    - 12.4. THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM IS PERMITED TO OPERATE INTERMITTENTLY WHERE THE SYSTEM HAS CONTROLS THAT ENABLE OPERATION FOR NOT LESS THAN 25% OF EACH 4-HOUR SEGMENT AND THE VENTILATION RATE PRESCRIBED IN TABLE DIRECTLY ABOVE OR IRC TABLE M1505.4.3(1) IS MULTIPLIED BY THE FACTOR DETERMINED IN ACCORDANCE WITH TABLE M1505.4.3(2). THE FOLLOWING IS TABLE IRC TABLE M1505.4.3(1)

RUN-TIME % IN EACH 4-HOUR SEGMENT	25%	33%	50%	66%	75%	100%
MULTIPLICATION FACTOR	4	3	2	1.5	1.3	1.0

13. *MANUAL J&S: HEATING AND COOLING EQUIPMENT SHALL BE SIZED IN ACCORDANCE WITH ACCA MANUAL S BASED ON BUILDING LOADS CALCULATED IN ACCORDANCE WITH ACCA MANUAL J OR OTHER APPROVED HEATING AND COOLING CALCULATION METHODOLOGIES. NEW OR REPLACEMENT HEATING AND COOLING EQUIPMENT SHALL HAVE AN EFFICIENCY RATING EQUAL TO OR GREATER THAN THE MINIMUM REQUIRED BY FEDERAL LAW FOR THE GEOGRAPHIC LOCATION WHERE THE EQUIPMENT IS INSTALLED. (IECC R403.7) AND A WRITTEN COPY OF THE SIZING FOR THE EQUIPMENT SHALL BE PROVIDE TO BUILDING DEPARTMENT.

SECTION 15 – ATTIC & CRAWL ACCESS

1. ATTIC ACCESS:
    - 1.1. PROVIDE A 22"X30" MIN ATTIC ACCESS PANEL TO ANY ATTIC SPACE THAT IS 30 SF OR LARGER WITH AT LEAST 30" HEAD CLEARANCE MEASURED FROM TOP OF JOISTS TO BOTTOM OF STRUCTURE ABOVE. (IRC 807) ACCESS MAY BE PROVIDED FROM A FLOOR, WALL OR CEILING
    - 1.2. ACCESS DOORS FROM CONDITIONED SPACES TO UNCONDITIONED SPACES SUCH AS ATTICS AND CRAWL SPACES SHALL BE WEATHER-STRIPPED AND INSULATED TO A LEVEL EQUIVALENT TO THE INSULATION ON THE SURROUNDING SURFACES. ACCESS THAT PREVENTS DAMAGING OR COMPRESSING THE INSULATION SHALL BE PROVIDED TO ALL EQUIPMENT. WHERE LOOSE-FILL INSULATION IS INSTALLED, A WOOD-FRAMED OR EQUIVALENT BAFFLE OR RETAINER SHALL BE INSTALLED TO PREVENT THE LOOSE-FILL INSULATION FROM SPILLING INTO THE LIVING SPACE WHEN THE ATTIC ACCESS IS OPENED. THE BAFFLE OR RETAINER SHALL PROVIDE A PERMANENT MEANS OF MAINTAINING THE INSTALLED R-VALUE OF THE LOOSE-FILL INSULATION.
    - 1.3. IF A VERTICAL DOOR IS PROVIDING ACCESS FROM CONDITIONED SPACES TO UNCONDITIONED SPACES THAT COMPLY WITH THE FENESTRATION REQUIREMENTS OF SECTION 14-I.E.C.C.
2. CRAWL ACCESS: PROVIDE 18"x24" MINIMUM ACCESS PANEL. IF ACCESS IS FROM CONDITION SPACE TO UNCONDITIONED SPACE, THEN PROVIDE SAME INSULATION AS REQUIRED FOR ATTIC ACCESS.

SECTION 16 – MISCELLANEOUS

1. SEE DESIGN CRITERIA ON FIRST FLOOR PLAN.
2. PRE-FAB (OR FACTORY BUILT) FIREPLACE (IRC R1004):
    - 2.1. FACTORY BUILT FIREPLACES SHALL BE TESTED IN ACCORANCE WITH UL127.
    - 2.2. CONTRACTOR TO PROVIDE MANUFACTURER SPECIFICATIONS AND INSTALLATION MANUAL TO LOCAL AUTHORITY AT TIME OF PERMIT AND HAVE THEM ON SITE AT TIME OF INSPECTIONS.
3. LAUNDRY CHUTE (IF ANY) SHALL HAVE SELF CLOSING LID OR DOORS.

SECTION 17 – FINISHES

1. *ALL FINISHES PER BUILDER'S SPECIFICATIONS AND WILL SUPERCEDE ANY FINISHES NOTED ON THESE DRAWINGS WITH THE EXCEPTION OF CODE REQUIRED FINISHES.
2. *VERIFY LOCATION OF ALL LIGHT SWITCHES, OUTLETS, LIGHT FIXTURES, HOSE BIBBS, GAS CONNECTIONS, APPLIANCES, SHOWER HEADS, EXHAUST FANS, EXHAUST HOODS, CEILING FANS, DRYER VENTS, FURNACES, WATER HEATERS, BOILERS (IF ANY), GENERATORS (IF ANY), ETC WITH BUILDER PRIOR TO ROUGH IN & INSTALLATION.
3. ADDRESS IDENTIFICATION SHALL BE LEGIBLE AND VISIBLE FROM THE STREET FRONTING THE PROPERTY. ADDRESS NUMBERS SHALL BE ARABIC NUMBERS OR ALPHABETICAL LETTERS AND NUMBERS SHALL NOT BE SPELLED OUT. EACH CHARACTER SHALL BE 5" (MIN) IN HEIGHT WITH A STROKE WIDTH OF AT LEAST ½" AND HAVE A CONTRASTING BACKGROUND (IRC R319)

SECTION 18 – NAPERVILLE NOTES

1. THE FOLLOWING LOCAL NOTES IN THIS SECTION SHALL SUPERSEDE ANY NOTES THAT MIGHT CONTRADICT ELSEWHERE IN THIS SET OF DRAWINGS.
2. DESIGN CRITERIA FOR CITY OF NAPERVILLE IS AS FOLLOWS:

CLIMATE & GEOGRAPHICAL DESIGN CRITERIA	MANUAL J DESIGN CRITERIA
GROUND SNOW LOAD= 30	ELEVATION= 706
WIND DESIGN:	LATITUDE= 41
SPEED (MPH)= 115	WINTER HEATING= -1°
TOPOGRAPHIC EFFECTS= NO	SUMMER COOLING= 91
SPECIAL WIND REGION= NO	ALTITUDE CORRECTION FACTOR= 0
WINDBORNE DEBRIS ZONE= NO	INDOOR DESIGN TEMP.= 72° F MAX.
SEISMIC DESIGN CATEGORY= A	DESIGN TEMP. COOLING= 75° F MIN.
SUBJECT TO DAMAGE FROM:	HEATING TEMP. DIFFERENCE= 73° F
WEATHERING= SEVERE	COOLING TEMP. DIFFERENCE= 16° F
FROST LINE DEPTH= 42"	WIND VELOCITY HEATING= 8.4 MPH
TERMITE= MODERATE TO HEAVY	WIND VELOCITY COOLING= 5.7 MPH
WINTER DESIGN TEMP= -4° F	COINCIDENT WET BULB= 76
ICE BARRIER UNDERLAYMENT REQUIRED= YES	DAILY RANGE= MEDIUM (16°-25° F)
FLOOD HAZARD= REFER TO LOCAL ORDINANCE	WINTER HUMIDITY= 30%
AIR FREEZING INDEX= 1635	SUMMER HUMIDITY= 50%
MEAN ANNUAL TEMPERATURE= 48.7° F	

3. PROVIDE SOLID WOOD BLOCKING IN ONE FIRST FLOOR BATHROOMS. INSTALL BETWEEN 33" TO 36" (MIN) AFF IN ALL WALLS ADJACENT TO TOILET, SHOWER STALL, OR TUBS.
4. ALL ACCESSIBLE FIRST FLOOR DOORWAYS SHALL PROVIDE A MINIMUM CLEAR OPENING OF 32" WITH THE DOOR OPEN 90 DEGRESS, MEASURED BETWEEN THE FACE OF THE DOOR AND THE OPPOSITE STOP.
5. NAPERVILLE ELECTRICAL NOTES & AMENDMENTS TO NEC:
    - 5.1. WALL SWITCHES ON THE FIRST FLOOR SHALL BE LOCATED AT A HEIGHT NOT TO EXCEED 48" ABOVE THE FINISHED FLOOR. MEASURE FROM THE FLOOR TO THE CENTER OF THE SWITCH.
    - 5.2. RECEPTACLES ON THE FIRST FLOOR SHALL BE LOCATED AT A HEIGHT OF NOT LESS THAN 15" ABOVE THE FINISHED FLOOR. MEASURE FROM THE FLOOR TO THE CENTER OF THE RECEPTACLE.
    - 5.3. THE WIRING METHODS SPECIFIED IN CHAPTER 3 OF THE NEC WILL BE PERMITTED EXCEPT:
        - 5.3.1. NONMETALLIC-SHEATHED CABLE: TYPE NM, TYPE NMC, AND TYPE NMS CABLES SHALL ONLY BE PERMITTED TO BE USED IN THE FOLLOWING: TEMPORARY WIRING IN ACCORDANCE WITH NEC ARTICLE 590 OR LOW VOLTAGE LIGHTING SYSTEMS LESS THAN 30 VOLTS IN ACCORDANCE WITH NEC ARTICLE 411.
        - 5.3.2. ARTICLE 338 – SERVICE-ENTRANCE CABLE: TYPE SE CABLES SHALL ONLY BE PERMITTED TO BE USED IN TEMPORARY WIRING IN ACCORDANCE WITH NEC ARTICLE 590.

IECC DESIGN: PERFORMANCE METHOD USED

THE DESIGN OF THIS BUILDING USED THE PERFORMANCE METHOD AS DEFINED IN SECTION R401 OF THE 2018 INTERNATIONAL ENERGY CONSERVATION CODE AND THE PERFORMANCE REPORT SHALL BE SUBMITTED BY OTHERS

~~IECC DESIGN: PRESCRIPTIVE METHOD USED~~

~~THE DESIGN OF THIS BUILDING USED THE PRESCRIPTIVE METHOD AS DEFINED IN SECTION R401 OF THE 2018 INTERNATIONAL ENERGY CONSERVATION CODE, SO NO RES-CHECK SHALL BE NEEDED AS DEFINED UNDER 2018 IECC, SECTION R401.2.~~

2018 IECC NOTE 2019-12

ABBREVIATIONS

#	NUMBER	LT	LAUNDRY TUB
1ST	FIRST	LVL	LAMINATED VENEER LUMBER
2ND	SECOND	MAX	MAXIMUM
AFF	ABOVE FINISHED FLOOR	MIN	MINIMUM
ASF	ABOVE SUB FLOOR	MT	MOUNT/MOUNTED
B/FLUSH	BOTTOM FLUSH	OC	ON CENTER
B/O	BOTTOM OF	OH	OVERHEAD
BD	BOARD	PKT	POCKET
BSMT	BASEMENT	PR	PAIR
CAB	CABINET(S)	R/D	REMOVE AND DISPOSE
CFM	CUBIC FEET PER MINUTE	R/R	REMOVE AND REINSTALL
CJ	CEILING JOIST	R/S	REMOVE AND SAVE
CLG	CEILING	REFR	REFRIGERATOR
CO	CASED OPENING	REQ	REQUIRE
COL	COLUMN	REQ'D	REQUIRED
CPT	CARPET / CARPETING	RO	ROUGH OPENING
CT	CERAMIC TILE	RR	ROOF RAFTER
D	DEEP / DEPTH	S&R	SHELF AND ROD
DBL	DOUBLE	SIM	SIMILAR
DED	DEDICATED	SF	SQUARE FEET / SQUARE FOOT
DISP	GARBAGE DISPOSAL	SQ	SQUARE
DN	DOWN	STL	STEEL
DW	DISHWASHER	STRU	STRUCTURE / STRUCTURAL
EL/ELEV	ELEVATION	T/FLUSH	TOP FLUSH
EO	EVERY OTHER	T/O	TOP OF
EP	ELECTRIC PANEL	TEMP	TEMPERED/TEMPERED GLASS
EQ	EQUAL	TYP	TYPICAL / TYPICALLY
EX	EXIST / EXISTING	UNO	UNLESS NOTED OTHERWISE
FD	FLOOR DRAIN	VAN	VANITY
FLR	FLOOR	VOL	VOLUME
FND	FOUNDATION	W	WIDE / WIDTH
FP	FROST PROOF	W/	WITH
FT	FEET / FOOT	W/D	WASHER AND DRYER
GA	GAUGE	W/O	WITHOUT
GAL	GALLON	WGFI	WATER PROOF GFI
GFI/GFCI	GROUND FAULT INTERRUPT	WP	WATER PROOF
GYP	GYPSUM		
HDR	HEADER		
HDWD	HARDWOOD		
H	HIGH		
HT	HEIGHT		
HWL	HIGH WATER LEVEL		
IC	IN CONSTRUCTION		
JT	JOIST/JOISTS		
LB	POUND		

LEGEND 2019-12

NAPERVILLE HEIGHT TABLE

LINE SEGMENT	DESCRIPTION	VALUE
A	DATUM POINT (AVERAGE ELEVATION OF BOTH PROPERTY LINES AT FRONT YARD SETBACK	675.65'
	ELEVATION #1 (USED ABOVE AT FRONT YARD SETBACKS)	676.10'
	ELEVATION #2 (USED ABOVE AT FRONT YARD SETBACKS)	675.20'
GI	HEIGHT OF ROOF (BOTTOM OF CEILING JOIST OR TOP OF PLATE TO TALLEST PEAK)	15.12'
AG+(0.5*GI)	MEAN HEIGHT	22.51'
AC	DATUM POINT TO BASEMENT CEILING	3.35'
AD	DATUM POINT TO FIRST STORY FINISHED FLOOR	4.35'
AB	HEIGHT OF FOUNDATION	2.35'
BC	HEIGHT OF KNEEWALL ABOVE FOUNDATION	1.00'
DF	HEIGHT OF FIRST STORY (TOP OF FLOOR JOIST TO TOP OF FLOOR JOIST)	10.08'
FG	HEIGHT OF SECOND STORY (TOP OF FLOOR JOIST TO BOTTOM OF CEILING JOIST)	8.08'
AI	PEAK HEIGHT	37.63'

COLUMN	DESCRIPTION	VALUE
1	FOOTPRINT OF PRINCIPLE STRUCTURE (LESS 1-STORY PORCH = 3,564-57=)	3,104 SF
2	FOOTPRINT OF DETACHED GARAGE (692 S.F. LESS 480 S.F. = 212 S.F.)	0 SF
3	TOTAL LOT SQUARE FOOTAGE	14,175 SF
4	BUILDING COVERAGE = (COLUMN 1 + COLUMN 2) / COLUMN 3)	0.22
5	GROSS SQUARE FOOTAGE OF FIRST FLOOR	2,166 SF
6	GROSS SQUARE FOOTAGE OF SECOND FLOOR	1,831 SF
7	GROSS SQUARE FOOTAGE OF ANY 1/2 STORY	0 SF
8	GROSS SQUARE FOOTAGE (COLUMN 5 + COLUMN 6 + COLUMN 7)	3,997 SF
9	FINISHED BASEMENT SPACE	0 SF
10	UNFINISHED BASEMENT SPACE (TO OUTSIDE OF FOUNDATION)	2172 SF
11	GARAGE SPACE (ATTACHED + DETACHED)	863 SF

Strauch Residence

4279 Lacebark Ln, (Lot 166 Ashwood Park S.) Naperville IL. 60564

LEGEND

ELECTRICAL SYMBOLS

CA	CABLE/ANTENNA JACK	U/L	LIGHT FIXTURE UNDERCABINET LIGHT
	CEILING FAN/LIGHT COMBINATION FIXTURE: SURFACE MOUNTED		LIGHT FIXTURE: WALL MOUNTED
	CEILING FAN FIXTURE: SURFACE MOUNTED		PHONE JACK
			PHONE JACK: RECESSED IN FLOOR
			PHONE JACK: WALL MOUNTED PHONE
CO	DETECTOR: CARBON MONOXIDE		RECEPTACLE: DUPLEX
H	DETECTOR: HEAT	DED	RECEPTACLE: DEDICATED DUPLEX
SD	DETECTOR: SMOKE	GFI	RECEPTACLE: GROUND FAULT INTERRUPT
F 80 CFM	EXHAUST FAN (REQ'D CFM OF FAN)		RECEPTACLE: DUPLEX RECESSED IN CEILING
F/L 80 CFM	EXHAUST FAN & LIGHT (REQ'D CFM OF FAN)		RECEPTACLE: DUPLEX RECESSED IN FLOOR W/BRASS COVER, U.N.O.
	JUNCTION BOX (POWER CONNECTION)		RECEPTACLE: DUPLEX WITH ONE LEG SWITCHED
H	LIGHT FIXTURE: RECESSED HALOGEN		RECEPTACLE: QUADRUPLEX
	LIGHT FIXTURE: RECESSED INCANDESCENT		RECEPTACLE: SIMPLEX
	LIGHT FIXTURE: SURFACE MOUNTED		SWITCH WIRING
P	LIGHT FIXTURE: PENDENT MOUNTED		WALL SWITCH
PC	LIGHT FIXTURE: SURFACE MOUNTED PULL CHAIN	3	WALL SWITCH: 3-WIRE (IF 4, 4-WIRE)

+72" THIS NUMBER DESIGNATION TIED TO A SYMBOL SIGNIFIES THAT THE FIXTURE TO BE MOUNTED AT A SPECIFIC HEIGHT (IN INCHES) ABOVE THE FINISHED FLOOR. MEASUREMENT IS TO CENTERLINE OF THE FIXTURE. IF NO NUMBER IS GIVEN, THEN THE FIXTURE TO BE MOUNTED AT A STANDARD BUILDING PRACTICE HEIGHT AND MUST MEET ALL APPLICABLE CODES.

MECHANICAL/PLUMBING SYMBOLS

FD	FLOOR DRAIN	GAS	GAS KEY LOCATION
	GAS CONNECTION WITH SHUT-OFF VALVE		FROST PROOF HOSE BIBB

STRUCTURAL SYMBOLS

	FRAMED STUD WALL		STRUCTURAL BEAM/HEADER (SIZE AS NOTED)
	INTERIOR FRAMED STUD BEARING WALL	■	WOOD POST (BLOCK SOLID UNDER TO FRAMING, STEEL OR FND BELOW)
	FRAMED STUD WALL WITH CAVITY INSULATION	☒	WOOD POST ABOVE
		2x10 F.J. @ 16" O.C.	FRAMING NOTE: JOIST SIZE/TYPE JOIST SPACING/NOTE

SYMBOLS

X KEY NOTE – SEE ASSOCIATED NUMBERS

INDEX OF DRAWINGS:

SEE SURVEY OR CIVIL DRAWINGS FOR PROPERTY LEGAL DESCRIPTION

CERTIFICATION OF THE DRAWINGS

BY SIGNING AND SEALING THESE DRAWINGS, I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED UNDER MY PERSONAL SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF COMPLY WITH THE ACCESSIBILITY STANDARDS OF THE STATE OF ILLINOIS AND COMPLY WITH THE ORDINANCES OF: CITY OF NAPERVILLE, ILLINOIS

INDEX 2019-12

CODES for NAPERVILLE ILLINOIS

ALL WORK IS TO CONFORM TO THE FOLLOWING CODES:

2018	INTERNATIONAL RESIDENTIAL CODE (IRC) W/AMENDMENTS
2018	INTERNATIONAL PROPERTY MAINTENANCE CODE (IPMC) W/AMENDMENTS
2018	INTERNATIONAL FIRE CODE (IFC) W/AMENDMENTS
2018	INTERNATIONAL FUEL GAS CODE (IFGC) W/AMENDMENTS
2018	INTERNATIONAL MECHANICAL CODE (IMC) W/AMENDMENTS
2018	INTERNATIONAL PLUMBING CODE (IPC) W/AMENDMENTS
2017	NATIONAL ELECTRICAL CODE (NEC) W/AMENDMENTS
2018	LIFE SAFETY CODE W/AMENDMENTS
2018	INTERNATIONAL ENERGY CONSERVATION CODE (IECC) W/AMENDMENTS
CURRENT	NATIONAL FIRE CODE (NFC) W/AMENDMENTS
CURRENT	STATE OF ILLINOIS PLUMBING CODE (IL-PC) W/AMENDMENTS
CURRENT	STATE OF ILLINOIS ACCESSIBILITY CODE (IAC) W/AMENDMENTS
NOTE:	ABBREVIATION FOR CODE IS IN PARENTHESIS (XX).

ZONING REQUIREMENTS:

DESCRIPTION	REQUIRED	ACTUAL
ZONING USE	R1A	–
FRONT YARD SETBACK	30'	30.25'
CORNER YARD SETBACK	30'	N/A
SIDE YARD SETBACK	8' W/TOTAL OF 20'	15.58'/8.5'
REAR YARD SETBACK	25% UP TO 30'	61.25'
BUILDING COVERAGE	35%	
LOT COVERAGE	50%	22.03'
FLOOR AREA RATIO (FAR)	N/A	N/A
MAXIMUM BUILDING HEIGHT (RIDGE)	40'	
MAXIMUM BUILDING HEIGHT (MEAN)	35'	29'-2½"±
MAXIMUM EAVE HEIGHT	N/A	N/A
LOT AREA = 15,570± S.F. (REFER TO CIVIL DRAWINGS)		

CODES 2019-12

BUILDING AREA INFORMATION

ITEM	AREA IN SQUARE FEET (SF)	DESCRIPTION	
1	3,123	FOOTPRINT OF PRINCIPLE STRUCTURE	SITE AREA
2	0	FOOTPRINT OF DETACHED GARAGE	
3	14,175	TOTAL LOT SQUARE FOOTAGE	
4	22.03%	BUILDING COVERAGE = (ITEM 1 + ITEM 2) / ITEM 3	
5	2,172	GROSS AREA OF BASEMENT (TO OUTSIDE FACE OF FND)	
6	2,166	GROSS LIVING AREA FOR FIRST FLOOR (TO FLOOR BOX)	LIVING AREA
7	1,831	GROSS LIVING AREA FOR SECOND FLOOR (TO FLOOR BOX)	
8	0	GROSS LIVING AREA FOR ANY 1/2 STORY (TO FLOOR BOX)	
9	3,997	TOTAL GROSS LIVING AREA = (6+7+8)	
10	863	GROSS AREA OF GARAGE (ATTACHED)	OTHER AREA
11	57	GROSS AREA OF UNHEATED OPEN PORCH	
12	0	GROSS AREA OF UNHEATED ENCLOSED PORCHES	
13	920	TOTAL GROSS EXTERIOR ROOFED AREA = (10+11+12)	
14	4,917	TOTAL UNDER ROOF AREA = (9+13)	

BUILDING AREA SCHEDULE 2019-04

2009062-A0.10.DWG

ARCHITECT

CraftStone Architects, Inc.
14150 S. Route 30, Suite 201, Plainfield, Illinois 60544
Phone: (815) 609-1997 Fax: (815) 327-8827
www.CraftstoneArchitects.com
Professional Design Firm #: 184-005597

BUILDER

King's Court Builders
the confidence builder

Seal

MICHAEL A. BUHR
001-015688

11-09-2020 | 11-30-2022
DATED | EXPIRES

ISSUANCE

11-09-2020 | PERMIT-BID
DATE

Strauch Residence
4279 Lacebark Lane
Lot 166 Ashwood Park South, Naperville, IL
for
Kings Court Builders
P.O. Box 5070 Naperville, IL. 60567-5070

TITLE SHEET-INDEX OF DRAWINGS-NOTES

DRAWN BY:
EAO

CHECKED BY:
MAB

PROJECT NUMBER:
2009062

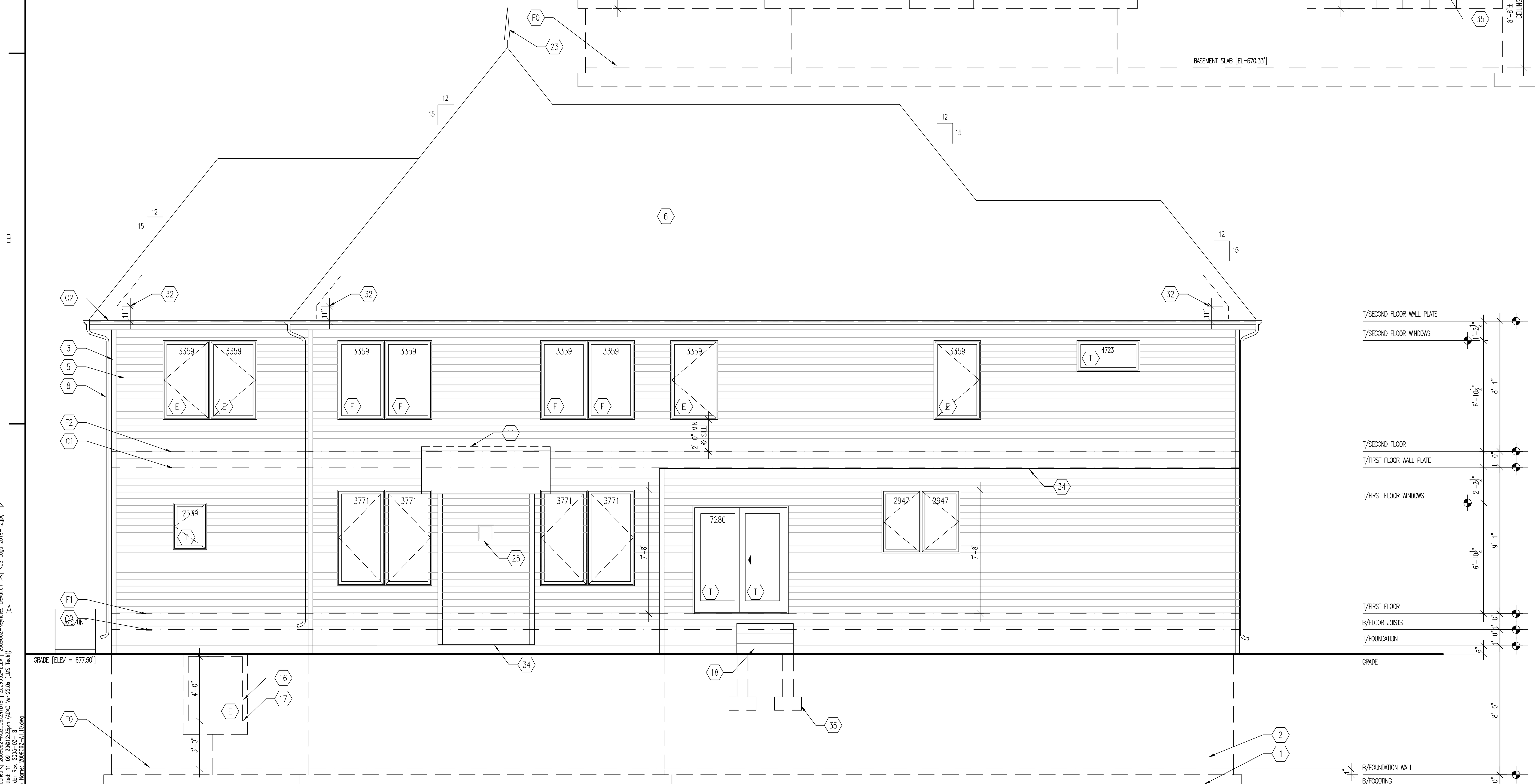
SHEET NUMBER:

A0.10

OF 8 SHEETS

Plotted: 11-09-20@12:25pm (ACAD Ver.22.0s (LMS Tech))
Border Rev: 2005-03-18
File Name: 2009062-A0.10.dwg

C1 FRONT ELEVATION
1/4" = 1'-0"



A1 REAR ELEVATION
1/4" = 1'-0"

2009062-A1.10.DWG

ARCHITECT

CraftStone Architects, Inc.
14150 S. Route 30, Suite 201, Plainfield, Illinois 60544
Phone: (815) 609-1997 Fax: (815) 327-8827
www.CraftstoneArchitects.com
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BUILDER

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Seal
LICENSED ARCHITECT
MICHAEL A. BUHR
001-015688
STATE OF ILLINOIS

11-09-2020 | 11-30-2022
DATED | EXPIRES

ISSUANCE

DATE	
11-09-2020	PERMIT-BID

Strauch Residence
4279 Lacebark Lane
Lot 166 Ashwood Park South, Naperville, IL
for
Kings Court Builders
P.O. Box 5070 Naperville, IL. 60567-5070

EXTERIOR ELEVATIONS-FRONT & REAR

DRAWN BY:
EAO

CHECKED BY:
MAB

PROJECT NUMBER:
2009062

SHEET NUMBER:
A1.10

OF 8 SHEETS

EXTERIOR ELEVATION KEYNOTE LEGEND:

1 FOUNDATION FOOTING
2 FOUNDATION WALL
3 CONTINUOUS CORNER BOARDS
4 1x8 HARDIE BOARD FREIZE
5 HORIZONTAL SIDING
6 ASPHALT SHINGLES
7 STONE SILL
8 ALUMINUM GUTTERS AND DOWNSPOUTS
9 CONCRETE STEPS TO GRADE (NO RAILING REQUIRED)
10 STONE
11 CONCEALED METAL FLASHING @ ROOF & WALL INTERSECTIONS (TYP ALL)
12 DECORATIVE GABLE VENT W/ 1x6 TRIM
13 1x2 ON 1x8 ROOF RAKE
14 ADJUST SIDEWALK AS REQUIRED TO MAINTAIN 3 RISERS (7¾" MAX RISER) FROM PORCH
15 CONCRETE PORCH
16 BASEMENT WINDOW & WELL AREA
17 EGRESS LADDER REQUIRED
18 LANDING & STEPS TO GRADE (NO RAILING REQUIRED)
19 4x8 HARDIE BOARD STUCCO PANELS
20 BRICK
21 BRICK SOLDIER COURSE
22 BRICK HEADER COURSE
23 FINIAL PER BUILDERS SPEC
24 EXPOSED FLASHING @ MASONRY WALL & ROOF INTERSECTIONS
25 DIRECT VENT FIREPLACE EXHAUST
26 ROOF SADDLE
27 1x8 FASCIA
28 BRICK ARCHED SOLDIER COURSE W/ 6" RISE FROM SPRING LINE
29 STONE ARCHED SOLDIER COURSE W/ 6" RISE FROM SPRING LINE
30 BRICK STACK COURSE
31 STONE STACK COURSE
32 MODIFIED ROOF BEARING
33 DEPRESSED FOUNDATION @ OVERHEAD DOORS
34 PROVIDE SOFFIT MATERIAL (NON-VENTED) AT UNDERSIDE OF CANTILEVER W/R30 INSULATION
35 CONCRETE WING WALL TO SUPPORT LANDING STAIRS
36 INTERIOR WALL LINE BEHIND
37 ROOF LINE BEHIND

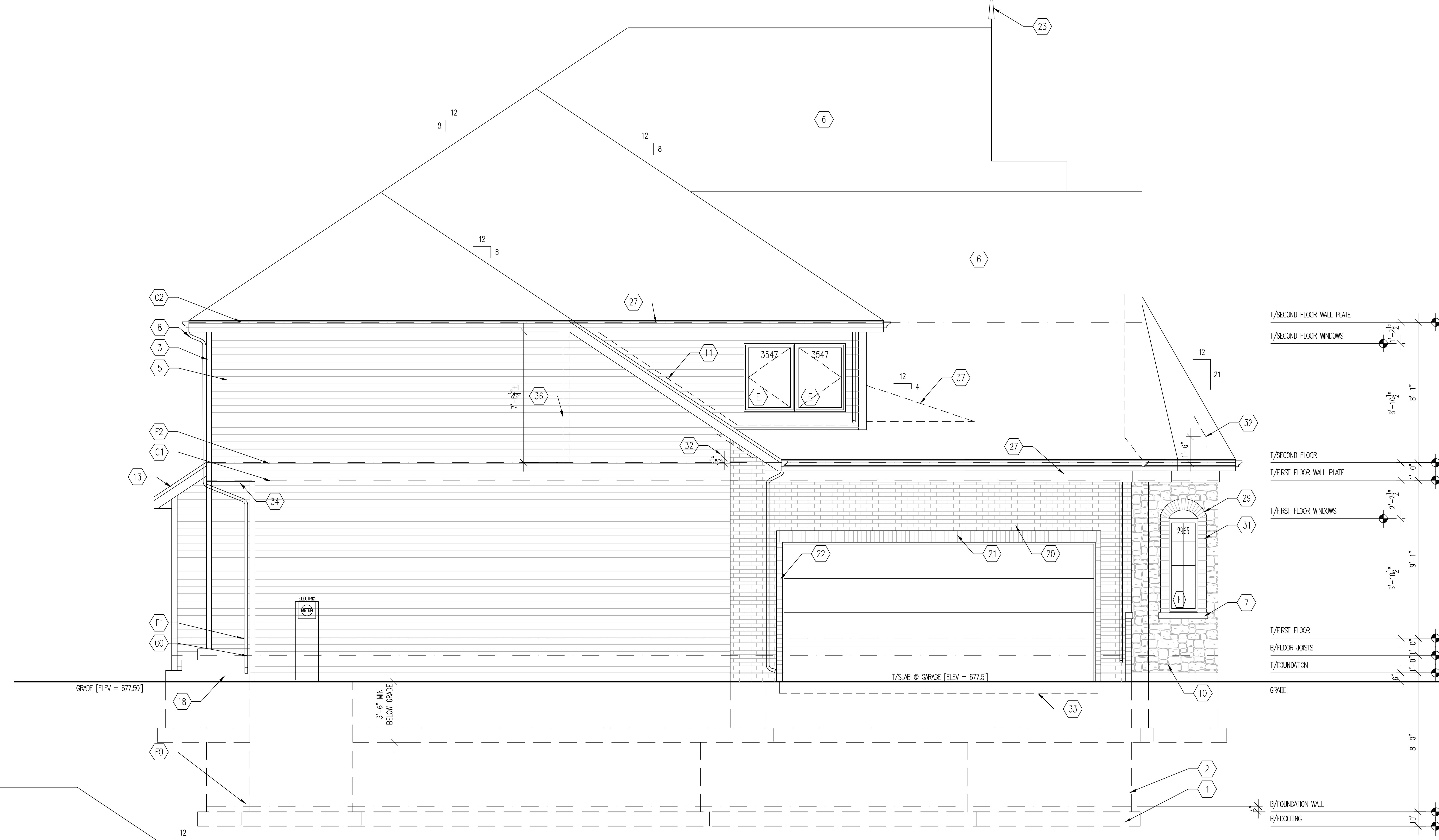
E EGRESS
F FIXED
T TEMPERED
U UP-CHARGE TO BASE BID

F0 BASEMENT FLOOR LINE
F1 FIRST FLOOR LINE
F2 SECOND FLOOR LINE
F3 STAIR LANDING

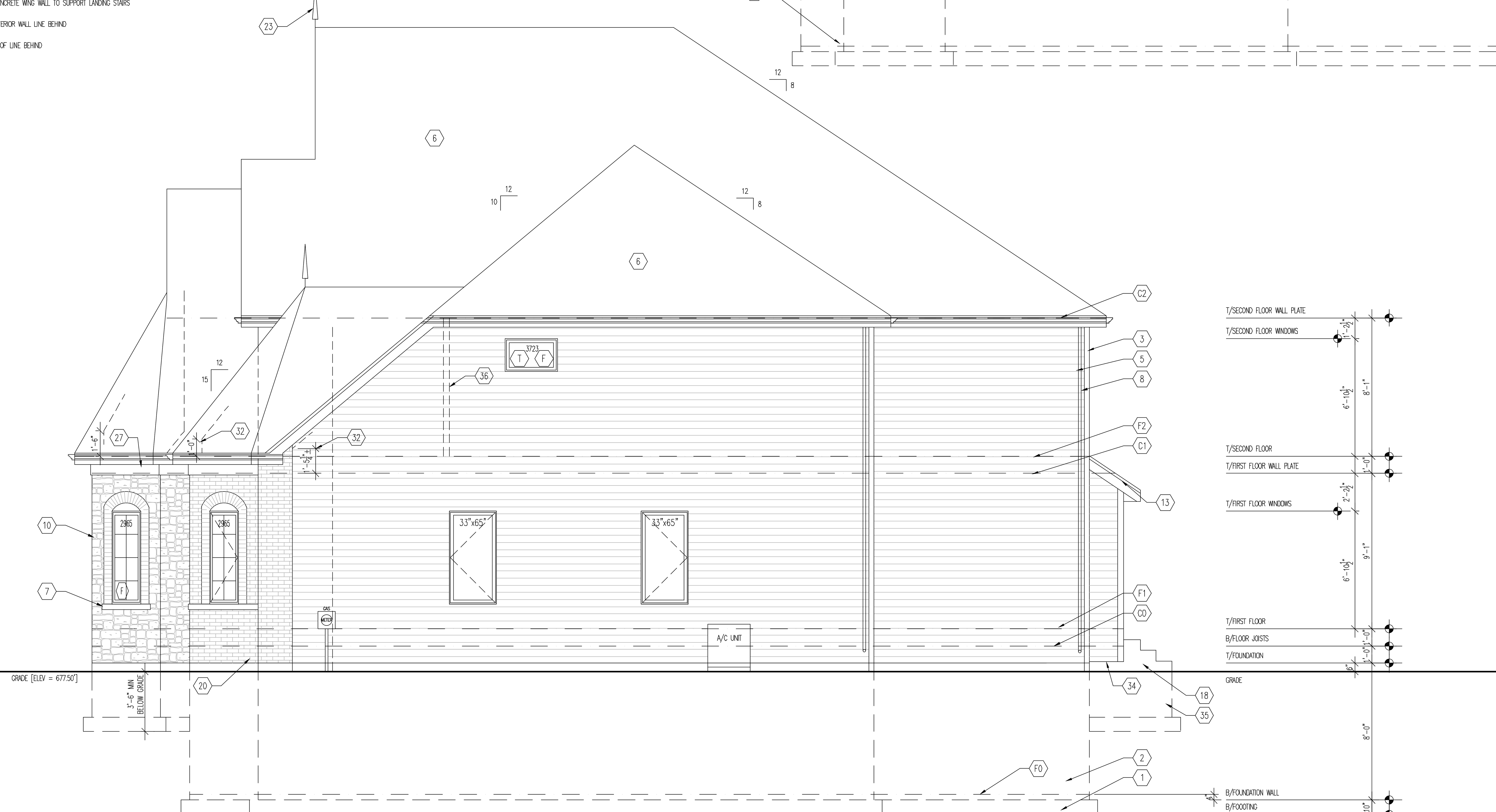
C0 BASEMENT CEILING LINE
C1 FIRST FLOOR CEILING LINE
C2 SECOND FLOOR CEILING LINE

EGRESS WINDOW NOTE:
EGRESS WINDOWS SHALL HAVE AT LEAST 5.7 S.F. OF CLEAR OPENING (EXCEPT GRADE LEVEL WINDOWS WHICH CAN HAVE 5.0 S.F) AND HAVE A MINIMUM CLEAR WIDTH OF 20" AND A MINIMUM CLEAR HEIGHT OF 24" AND THE TOP OF THE SILL CAN NOT BE ANY MORE THAN 44" ABOVE THE FLOOR. (SEE WINDOW SILL NOTE).

WINDOW SILL NOTE:
WHERE THE OPENING OF AN OPERABLE WINDOW IS LOCATED MORE THAN 72" ABOVE THE FINISHED GRADE, THE LOWEST PART OF THE CLEAR OPENING SHALL BE AT LEAST 24" A.F.F. – ADJUST WINDOW HEIGHT AS REQUIRED.



C1 LEFT SIDE ELEVATION
1/4" = 1'-0"



A1 RIGHT SIDE ELEVATION
1/4" = 1'-0"

2009062-A1.20.DWG

ARCHITECT
CraftStone Architects, Inc.
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4279 Lacebark Lane
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for
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P.O. Box 5070 Naperville, IL 60567-5070

EXTERIOR ELEVATIONS-LEFT & RIGHT SIDE

DRAWN BY: EAO
CHECKED BY: MAB

PROJECT NUMBER: 2009062

SHEET NUMBER:
A1.20
OF 8 SHEETS

DESIGN CRITERIA NOTES:

1. DESIGN LOADS – MINIMUM UNIFORMED DISTRIBUTED LIVE LOADS (IRC TABLE R301.5)

AREA	LIVE LOAD (PSF)	DEAD LOAD (PSF)
FIRST FLOOR	40	10
SECOND FLOOR	40	10
SLEEPING AREAS	30	10
STAIRS	40	10
UNINHABITABLE ATTICS W/O STORAGE	10	10
UNINHABITABLE ATTICS W/LIMITED STORAGE	20	10
HABITABLE ATTICS/ATTICS WITH FIXED STAIR	30	10
EXTERIOR BALCONIES & DECKS	40	10
FIRE ESCAPES	40	10
GUARDRAILS & HANDRAILS	200	
GUARD IN-FILL COMPONENTS	50	
PASSENGER VEHICLE GARAGES	50	

2. ALLOWABLE DEFLECTIONS (IRC TABLE R301.7)

AREA	ALLOWABLE DEFLECTION
FLOOR JOISTS	L/360
CEILING JOISTS	L/240
ROOF RAFTERS (NO CEILING ATTACHED)	L/180
LINTELS SUPPORTING MASONRY	L/600

3. LUMBER DESIGN SPECIFICATIONS

SIZE	LENGTHS	SPECIES	GRADE	Fb	E x10^6
2x4	ALL	SPF	#2 OR BETTER	875	1.1
2x6	ALL	SPF	#2 OR BETTER	875	1.1
2x8	ALL	SPF	#2 OR BETTER	875	1.1
2x10	<20'	SPF	#2 OR BETTER	875	1.1
2X10	20' TO 32'	DOUG-FIR/HEM-FIR	#2 OR BETTER	875	1.3
2X12	<20'	SPF	#2 OR BETTER	875	1.1
2X12	20' TO 32'	DOUG-FIR/HEM-FIR	#2 OR BETTER	875	1.3
LVL BEAMS	ALL	BOISE-CASCADE	OR EQUAL	3,100	2.0
LVL POSTS	ALL	BOISE-CASCADE	OR EQUAL	2,750	1.8

4. FLOOR JOIST SPANS – 40 PSF LIVE / 10 PSF DEAD (FT-IN)

SPACING	SPECIES & GRADE	2x6	2x8	2x10	2x12
	DOUG-FIR #2	10-9	14-2	17-9	20-7
12"	HEM-FIR #2	10-0	13-2	16-10	20-4
	SPF #2	10-3	13-6	17-3	20-7
	DOUG-FIR #2	9-9	12-7	15-5	17-10
16"	HEM-FIR #2	9-1	12-0	15-2	17-7
	SPF #2	9-1	12-3	15-5	17-10

5. FLOOR JOIST SPANS – 30 PSF LIVE / 10 PSF DEAD (FT-IN)

SPACING	SPECIES & GRADE	2X6	2X8	2X10	2X12
	DOUG-FIR #2	11-10	15-7	19-10	23-0
12"	HEM-FIR #2	11-0	14-6	18-6	22-6
	SPF #2	11-3	14-11	19-0	23-0
	DOUG-FIR #2	10-9	12-1	19-11	19-11
16"	HEM-FIR #2	10-0	13-2	19-8	19-8
	SPF #2	10-3	13-6	19-11	19-11

6. CEILING JOIST SPANS – 20 PSF LIVE / 10 PSF DEAD (FT-IN)

SPACING	SPECIES & GRADE	2X4	2X6	2X8	2X10
	DOUG-FIR #2	9-10	15-0	19-1	23-3
12"	HEM-FIR #2	9-2	14-5	18-6	22-7
	SPF #2	9-5	14-9	18-9	22-11
	DOUG-FIR #2	8-11	13-0	16-6	20-2
16"	HEM-FIR #2	8-4	12-8	16-0	19-7
	SPF #2	8-7	12-10	16-3	19-10

7. ROOF RAFTERS SPANS – 30 PSF LIVE / 10 PSF DEAD (FT-IN)

SPACING	SPECIES & GRADE	2X4	2X6	2X8	2X10	2X12
	DOUG-FIR #2	8-7	13-6	17-8	21-7	25-1
12"	HEM-FIR #2	9-0	12-7	16-7	21-0	24-4
	SPF #2	8-3	12-11	17-0	21-4	24-8
	DOUG-FIR #2	7-10	12-1	15-4	18-9	21-8
16"	HEM-FIR #2	7-3	11-5	14-11	18-2	21-1
	SPF #2	7-6	11-9	15-1	18-5	21-5

8. TREATED DECK JOIST SPANS – 40 PSF LIVE / 10 PSF DEAD (FT-IN)

SPACING	SPECIES & GRADE	2X6	2X8	2X10	2X12
12"	SOUTHERN PINE	10-3	13-6	16-2	19-1
16"	SOUTHERN PINE	9-4	11-10	14-0	16-6

8. MORE
9.

GENERAL PLAN NOTES:

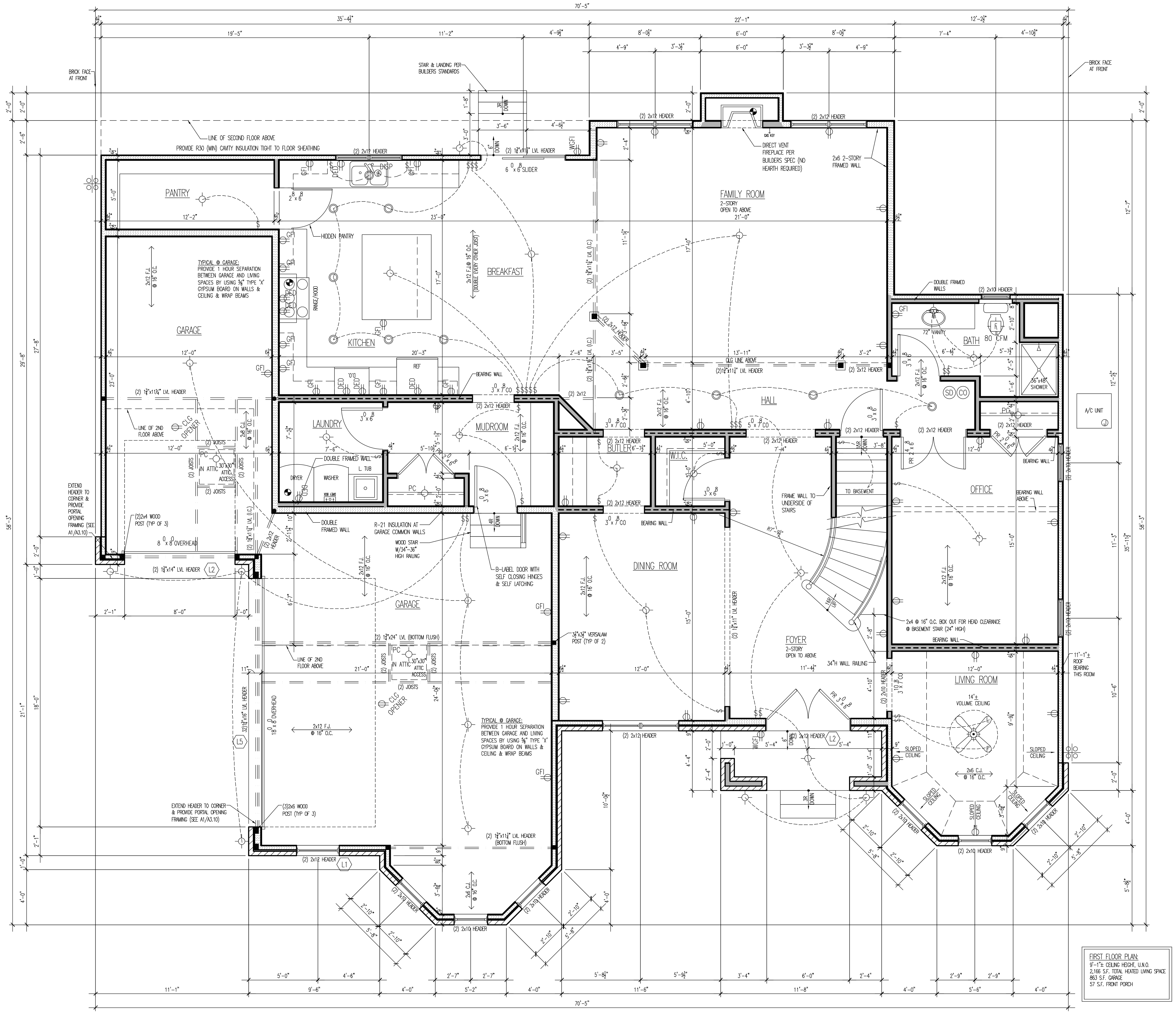
1. REFER TO ALL NOTES ON SHEET A0.10 FOR ADDITIONAL INFORMATION, INCLUDING:
   - 1.1. SECTION 1 FOR GENERAL REQUIREMENTS
   - 1.2. SECTION 2 & 3 FOR EXCAVATION NOTES AND CONCRETE NOTES
   - 1.3. SECTION 4 FOR MASONRY NOTES
   - 1.4. SECTION 5 FOR STEEL NOTES
   - 1.5. SECTION 6, 7, 8, & 9 FOR CARPENTRY, FIRE BLOCKING, MOISTURE CONTROL & DOOR-WINDOW NOTES.
   - 1.6. SECTION 10, 11, 12 & 13 FOR MECHANICAL, PLUMBING, ELECTRICAL & SMOKE/CO DETECTOR NOTES.
   - 1.7. SECTION 14 FOR IECC NOTES
   - 1.8. SECTION 15, 16 & 17 FOR ATTIC/CRAWL ACCESS, MISCELLANEOUS & FINISH NOTES.
   - 1.9. SECTION 18 FOR NAPERVILLE SPECIFIC NOTES.
2. SEE TYPICAL WALL SECTION(S) ON SHEET A3.10.
3. AN AUTOMATIC RESIDENTIAL SPRINKLER SYSTEM SHALL NOT BE REQUIRED FOR NEW CONSTRUCTION WHEN BOTH THE FOLLOWING APPLY: (1) THE UNDERSIDE OF ALL INTERIOR STAIRS ARE PROTECTED WITH AT LEAST ½" GYPSUM BOARD OR EQUAL. & (2) EACH ONE- & TWO-FAMILY DWELLING UNIT SHALL HAVE AT LEAST 2 MEANS OF EGRESS
4. PROVIDE PASSIVE RADON SYSTEM – SEE FOUNDATION PLAN.
5. ~~ALL JOIST/RAFTERS NOTED AS BCI ARE ENGINEERED I-JOIST BY BOISE-CASCADE AND ALL SIZING AND SPACING IS BASED ON MANUFACTURER'S RECOMMENDATIONS WITH A DEFLECTION OF L/480. PLEASE NOTE THAT A SERIES DESIGNATION IS ALSO PROVIDED AND THERE MAY BE MORE THAN ONE SERIES SPECIFIED. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. IF NO SERIES IS SPECIFIED, IT IS ASSUMED TO BE 6500S SERIES BCI.~~
6. FOR TYPICAL HEADERS, SEE DETAIL C4/A3.10.
7. FOR TYPICAL STAIRS, SEE DETAIL C1/A3.10.
8. FOR TYPICAL FRAMING, SEE DETAIL C4/A3.10
9. FOR ADVANCE FRAMING, SEE DETAIL C3/A3.10.
10. FOR NOTCHING OR DRILLING OF WALLS & JOISTS, SEE D3/A3.10, D4/A3.10 & D5/A3.10.
11. UNDER A BEARING WALL PARALLEL WITH THE FLOOR JOISTS PROVIDE DOUBLE JOISTS OR AS NOTED ON THE DRAWINGS. SEE DETAIL C5/A3.10.
12. SEE THIS SHEET FOR ALLOWABLE SPANS FOR JOISTS/RAFTER. ALL LUMBER IS ASSUMED TO BE SPECIES SPF #2 OR BETTER, UNLESS NOTED OTHERWISE.
13. JOIST HANGERS
   - 13.1. FOR SINGLE JOISTS TIED TO SIDE OF IN CONSTRUCTION BEAM OR DO NOT HAVE AT LEAST 1½" BEARING, USE SIMPSON STRONG-TIE JOIST HANGERS #LUS210 (18 GA) OR EQUAL, TYP., U.N.O.
   - 13.2. FOR DOUBLE JOISTS TIED TO SIDE OF IN CONSTRUCTION BEAM OR DO NOT HAVE AT LEAST 1½" BEARING, USE SIMPSON STRONG-TIE LUS210-2 (18 GA) OR EQUAL, TYP., U.N.O.
   - 13.3. FOR TRIPLE JOISTS TIED TO SIDE OF IN CONSTRUCTION BEAM, USE SIMPSON STRONG-TIE HGUS210-3 (12 GA) OR EQUAL, TYP., U.N.O.
14. BEAM BOLT NOTE (IF ANY): ½" DIA CARRIAGE BOLT (W/NUT, LOCK WASHER, WASHER) @ 16" O.C. x BEAM WIDTH + 2" STAGGERED TOP & BOTTOM W/BOLT @ TOP & BOTTOM @ EACH BEARING END (HOLD IN 2" @ EACH EDGE)
15. ADJUST JOIST SPACING AS REQUIRED FOR PLUMBING FIXTURES ABOVE
16. WALL BRACING METHOD NOTES:
   - 16.1. CONTINUOUS SHEATHING METHOD (CS-WSP) PER 2015 IRC.
   - 16.2. BWL IS ABBREVIATION FOR BRACED WALL LINE.
   - 16.3. BWP IS ABBREVIATION FOR BRACED WALL PANEL.
   - 16.4. FOR BWL 1, 3, 4, A, B & C AT LEAST 5.5 LF OF BRACED WALL PROVIDED.
   - 16.5. FOR BWL 2 USE GYPSUM BOARD METHOD AND AT LEAST 11.5 LF OF BRACED WALL PROVIDED.
   - 16.6. BRACED WALL PANEL (BWP) SHALL BEGIN WITHIN 10' OF EACH END BRACED WALL LINE AND DISTANCE BETWEEN ADJACENT EDGES ALONG A BRACED WALL LINE SHALL BE NO GREATER THAN 20'
   - 16.7. BWP DIMENSION SHOWN WITH LENGTH OF BWP IN THAT LOCATION.
   - 16.8. BWP OF WOOD STRUCTURAL PANELS SHALL BE 7/16" MINIMUM WOOD STRUCTURAL PANELS NAILED TO 16" O.C. WOOD STUDS WITH 8D COMMON NAILS AT 6" O.C. AT EDGE AND 12" O.C. AT THE FIELD AREA.
   - 16.9. GB-BWP OF INTERIOR GYPSUM BOARD SHALL BE ½" MINIIMUM GYPSUM BOARD PANELS SCREWED TO 16" O.C. WOOD STUDS WITH 13 GAGE, 1⅝" LONG, 19/64" HEAD, 0.098: DIAMETER DRYWALL SCREWS AT 7" O.C. AT EDGES AND AT FIELD AREAS.
17.

BRICK OR STONE LINTELS

TAG	SPAN	LINTEL SIZE
L1	6'0" OR LESS	3" x 3" x ¼" STEEL ANGLE
L2	8'0" OR LESS	4" x 3" x ¼" STEEL ANGLE
L3	10'0" OR LESS	5" x 3½" x 5/16" STEEL ANGLE
L4	14'0" OR LESS	6" x 3 ½" x 5/16" STEEL ANGLE
L5	18'0" OR LESS	2-6" x 3 ½" x 5/16" STEEL ANGLE (RUN STEEL ANGLE IN 2 ROWS)

GENERAL LINTEL NOTES:
1. LONG LEG OF LINTEL SHALL ALWAYS BE RUN VERTICALLY, U.N.O.
2. LINTELS SHALL HAVE A BEARING LENGTH OF 8" MINIMUM.
3. LINTELS SHALL HAVE A SHOP COATED RUST-INHIBITIVE PAINT

LINTEL SCHEDULE 2019-04



FIRST FLOOR PLAN:
9'-1"± CEILING HEIGHT, U.N.O.
2,166 S.F. TOTAL HEATED LIVING SPACE
863 S.F. GARAGE
57 S.F. FRONT PORCH

A3 FIRST FLOOR PLAN
1/4" = 1'-0"

2009062-A2.10.DWG

ARCHITECT
CraftStone Architects, Inc.
14150 S. Route 30, Suite 201, Plainfield, Illinois 60544
Phone: (815) 609-1997 Fax: (815) 327-8827
www.CraftstoneArchitects.com
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MICHAEL A. BUHR
001-015688
STATE OF ILLINOIS
11-09-2020 | 11-30-2022
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Lot 166 Ashwood Park South, Naperville, IL
for
Kings Court Builders
P.O. Box 5070 Naperville, IL. 60567-5070

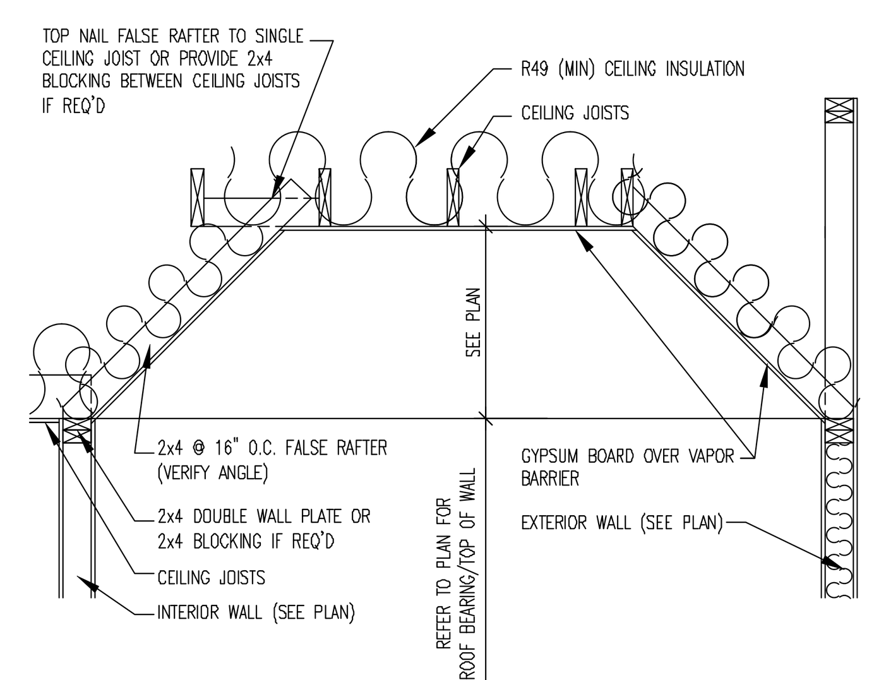
FIRST FLOOR PLAN

DRAWN BY: EAO
CHECKED BY: MAB

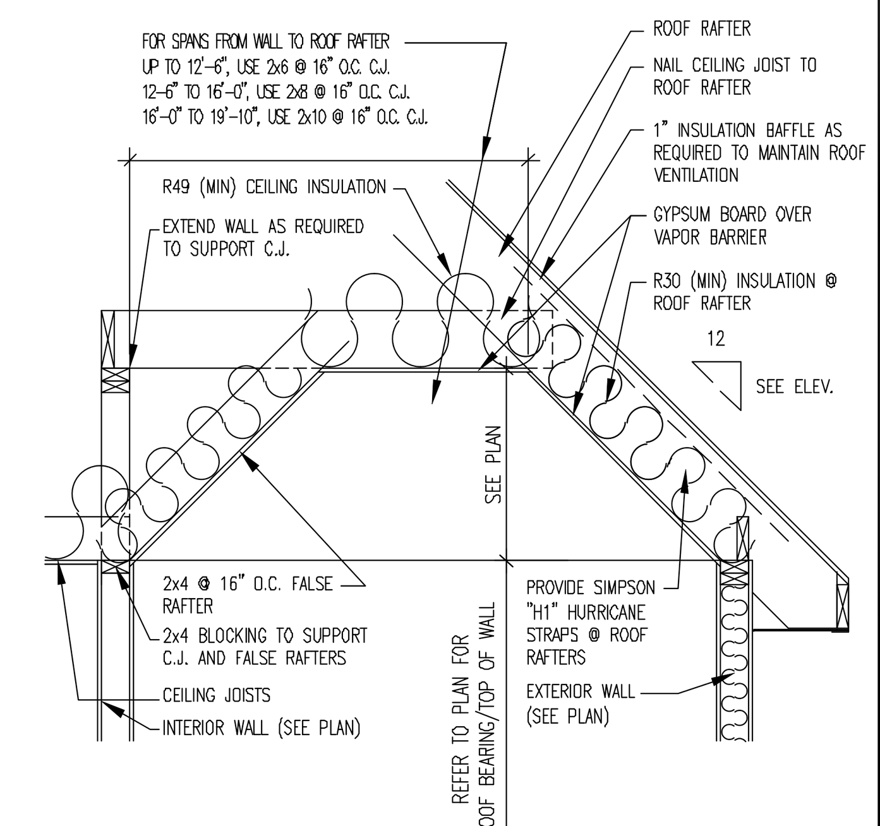
PROJECT NUMBER: 2009062

SHEET NUMBER: A2.10

OF 8 SHEETS

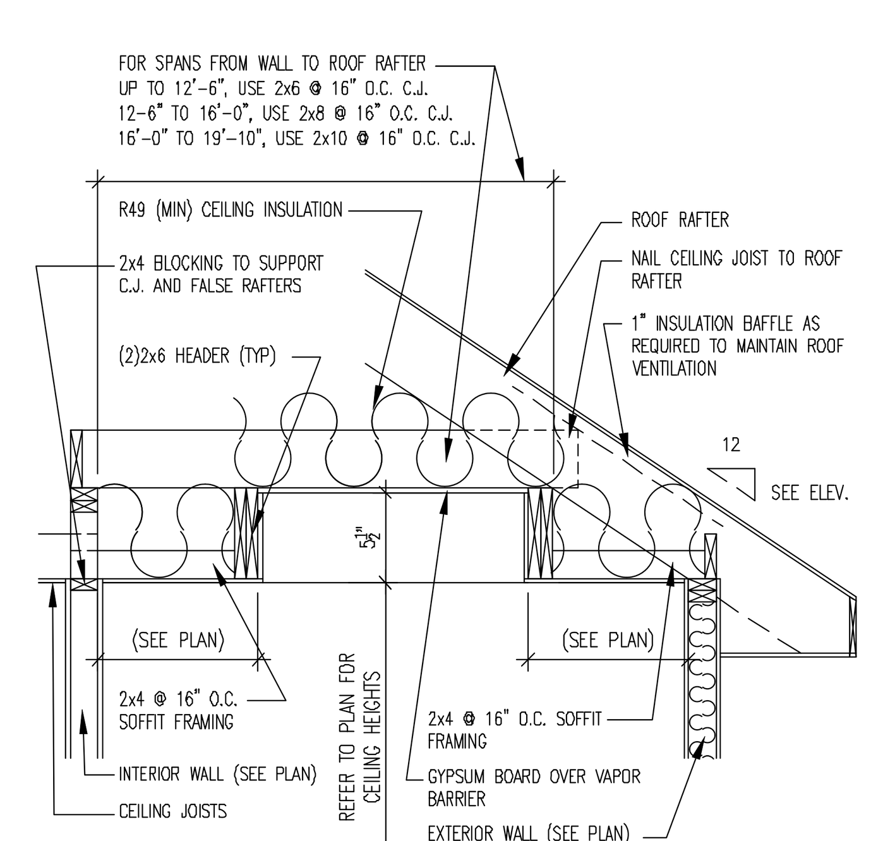


D1 CEILING DETAIL
1/2" = 1'-0"



C1 CEILING DETAIL
1/2" = 1'-0"

B1 CEILING DETAIL
1/2" = 1'-0"



A1 CEILING DETAIL
1/2" = 1'-0"

GENERAL PLAN NOTES:

1. REFER TO ALL NOTES ON SHEET A0.10 FOR ADDITIONAL INFORMATION.
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   - 1.8. SECTION 15, 16 & 17 FOR ATTIC/CRAWL ACCESS, MISCELLANEOUS & FINISH NOTES.
   - 1.9. SECTION 18 FOR NAPERVILLE SPECIFIC NOTES.
2. SEE GENERAL PLAN NOTES ON FIRST FLOOR SHEET FOR ADDITIONAL INFORMATION.

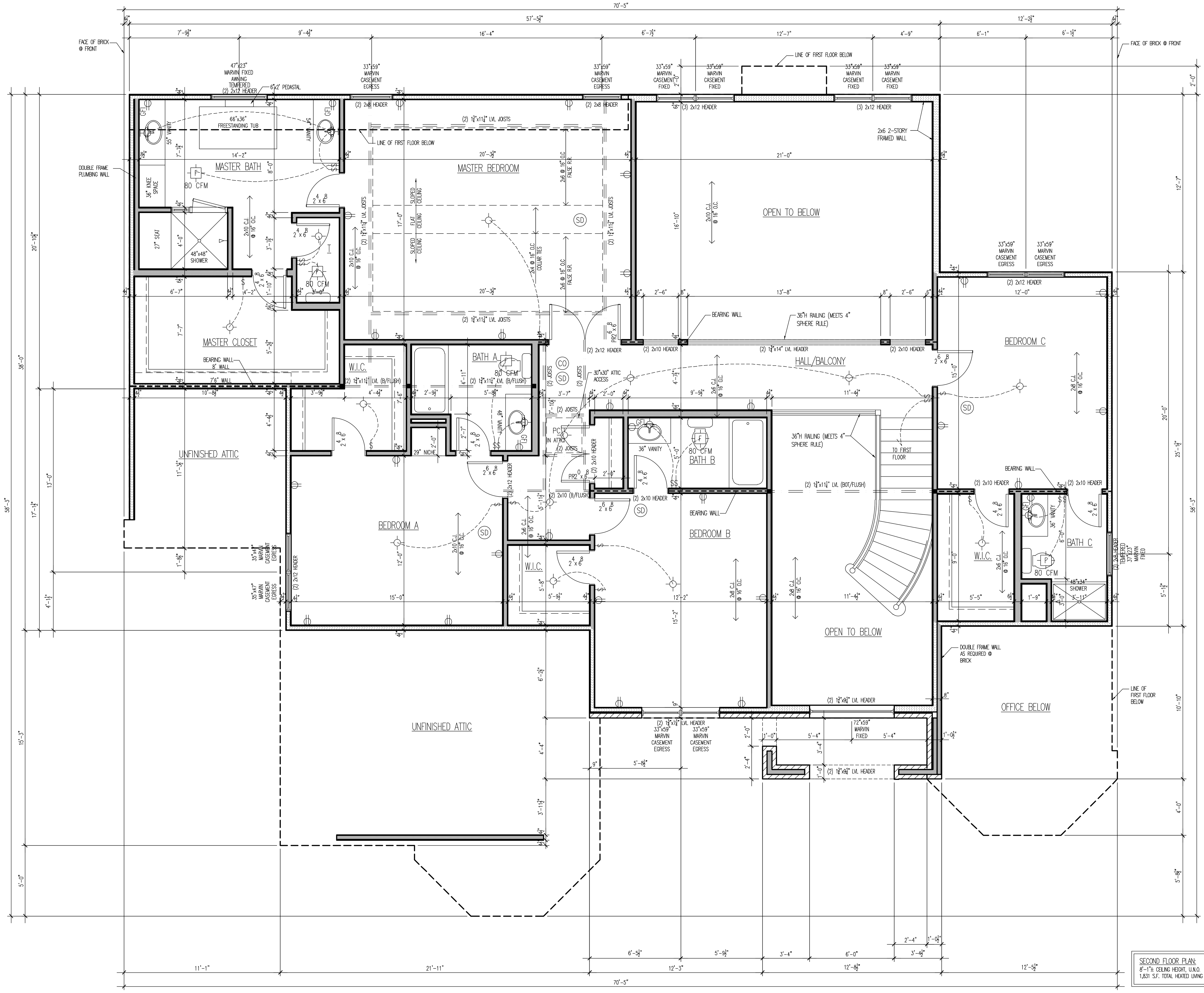
LIGHT/VENT SCHEDULE

8% NATURAL LIGHT
4% NATURAL VENT

ROOM NAME	AREA(s.f.)	LIGHT		VENT	
		REQ'D	ACT	REQ'D	ACT
FIRST FLOOR:					
LIVING ROOM	152	12.2	48.6	6.1	25.9
DINING ROOM	195	15.6	37.1	7.8	25.9
STUDY	176	14.1	23.0	7.1	24.2
FAMILY ROOM	340	27.2	147.4	13.6	28.1
KITCHEN/BREAK/SUN RM	603	48.3	103.3	24.2	107.7
SECOND FLOOR:					
MASTER BEDROOM	346	27.7	17.9**	13.9	18.9
BEDROOM A	176	14.1	23.0	7.1	24.2
BEDROOM B	165	13.2	23.0	6.6	24.2
BEDROOM C	215	17.2	13.2**	8.6	14.1

* PROVIDE AN APPROVED MECHANICAL VENTILATION SYSTEM CAPABLE OF PRODUCING 0.35 AIR CHANGES PER HOUR IN THIS ROOM OR A WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM CAPABLE OF SUPPLYING OUTDOOR VENTILATION AIR OF 15 CFM PER OCCUPANT COMPUTED ON THE BASIS OF 2 OCCUPANTS FOR THE FIRST BEDROOM AND 1 OCCUPANT FOR EACH ADDITIONAL BEDROOM.

** PROVIDE ARTIFICIAL LIGHTING CAPABLE OF PRODUCING AN AVERAGE OF 6 FOOTCANDLES OVER THE AREA OF THE ROOM AT A HEIGHT OF 30" ABOVE THE FLOOR LEVEL.



A3 SECOND FLOOR PLAN
1/4" = 1'-0"

ARCHITECT
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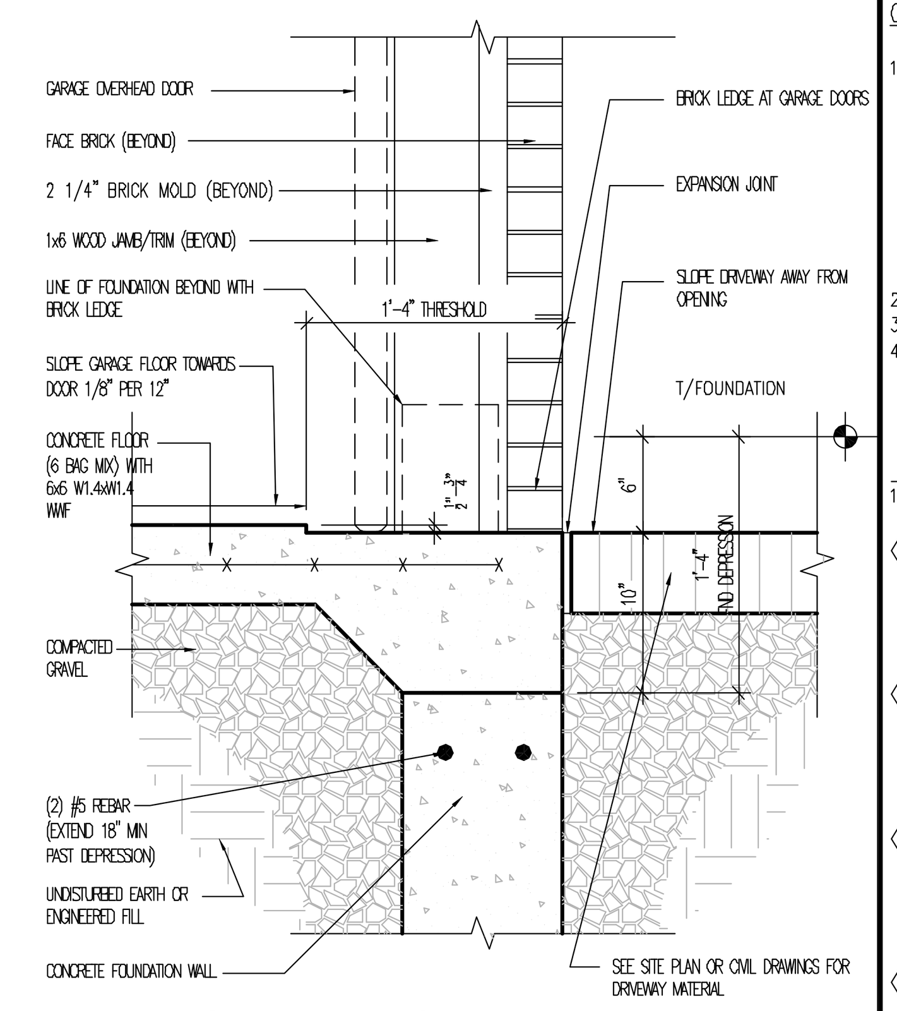
SECOND FLOOR PLAN

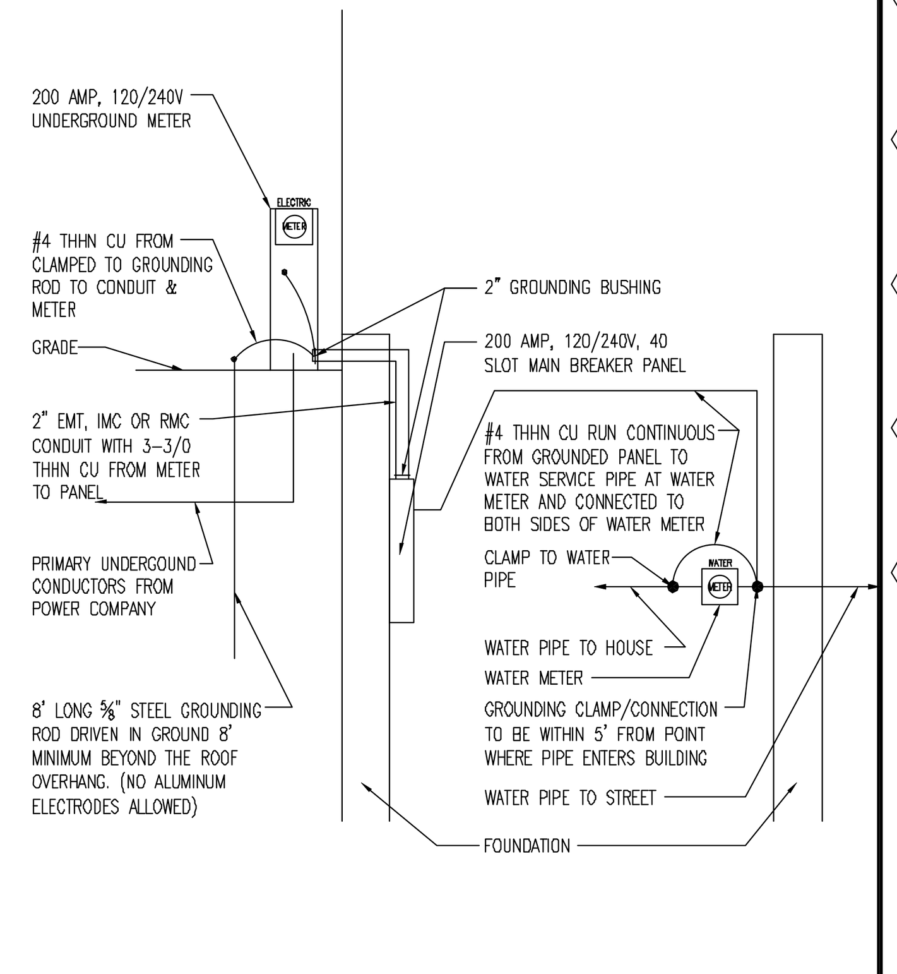
DRAWN BY:
EAO
CHECKED BY:
MAB

PROJECT NUMBER:
2009062

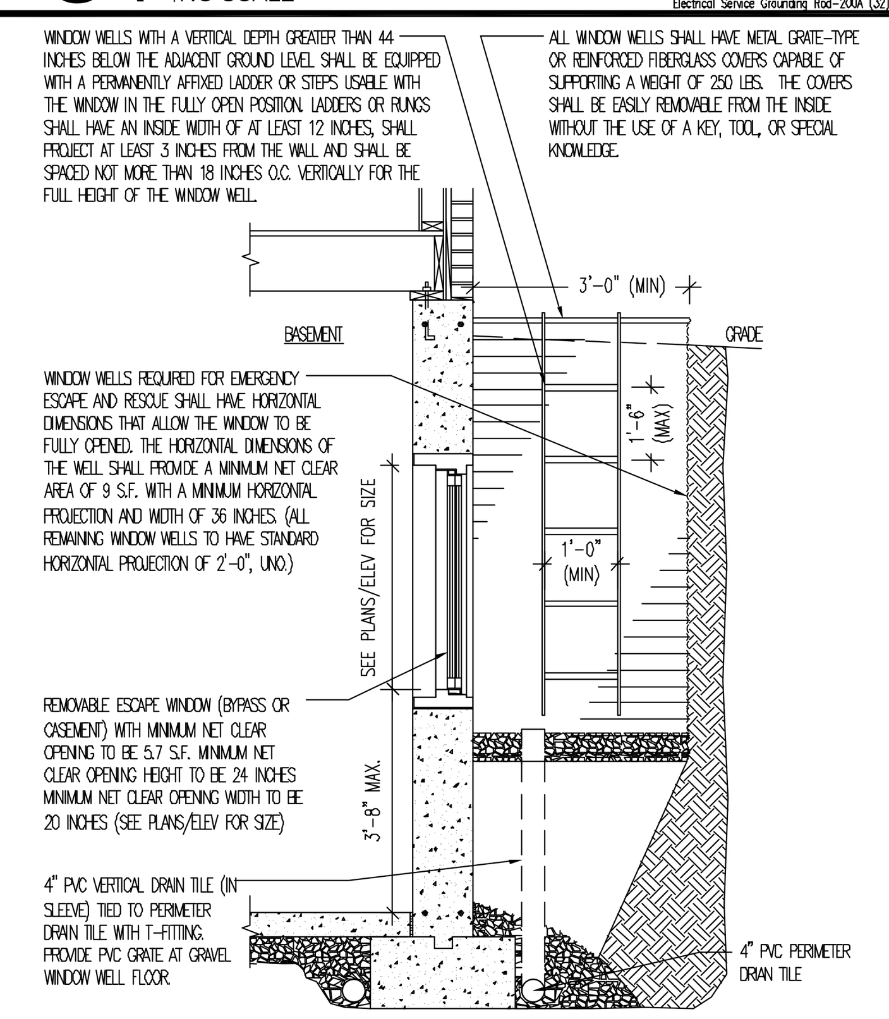
SHEET NUMBER:
A2.20
OF 8 SHEETS



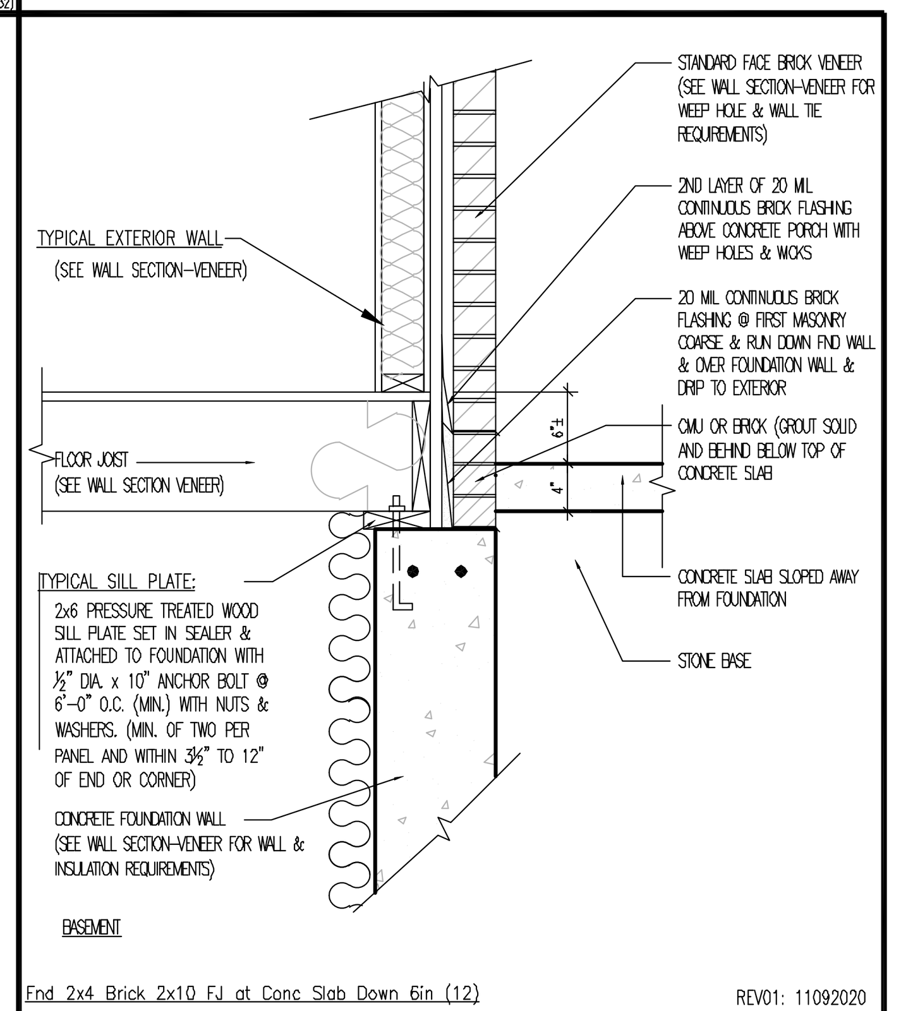
D1 FOUNDATION DETAIL
1" = 1'-0"



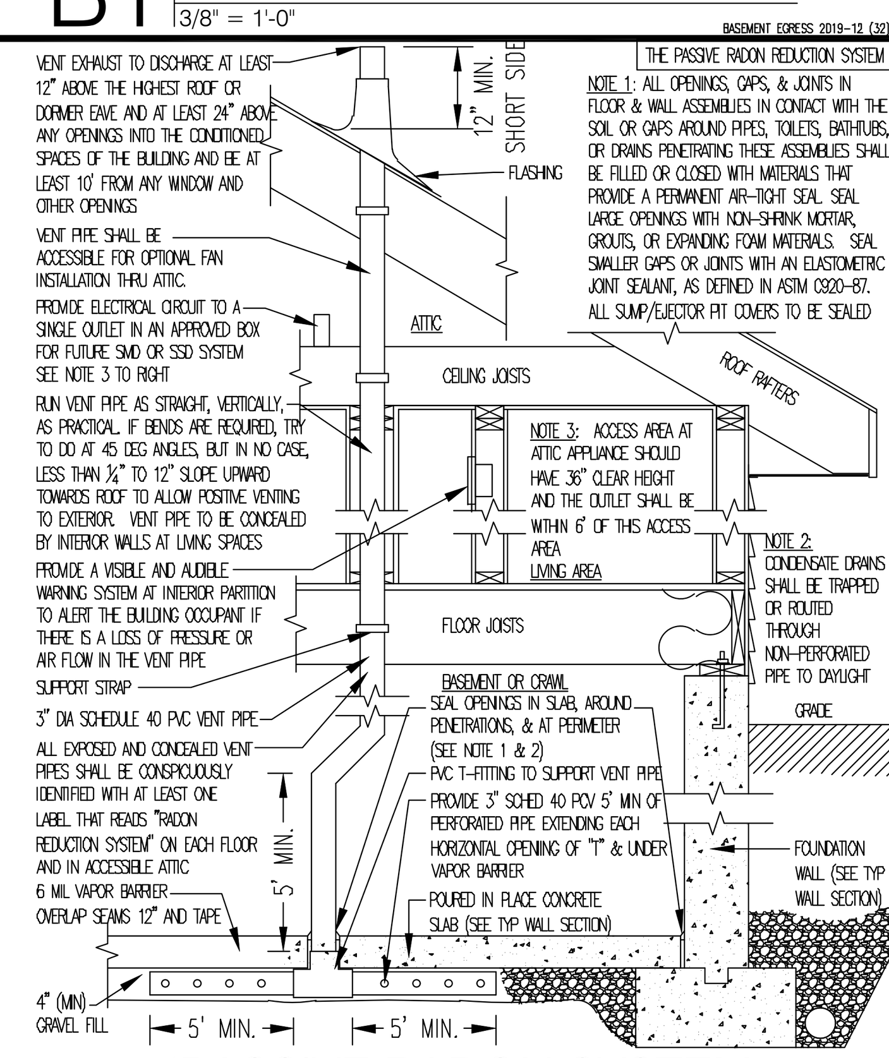
C1 ELECTRIC GROUNDING
NO SCALE



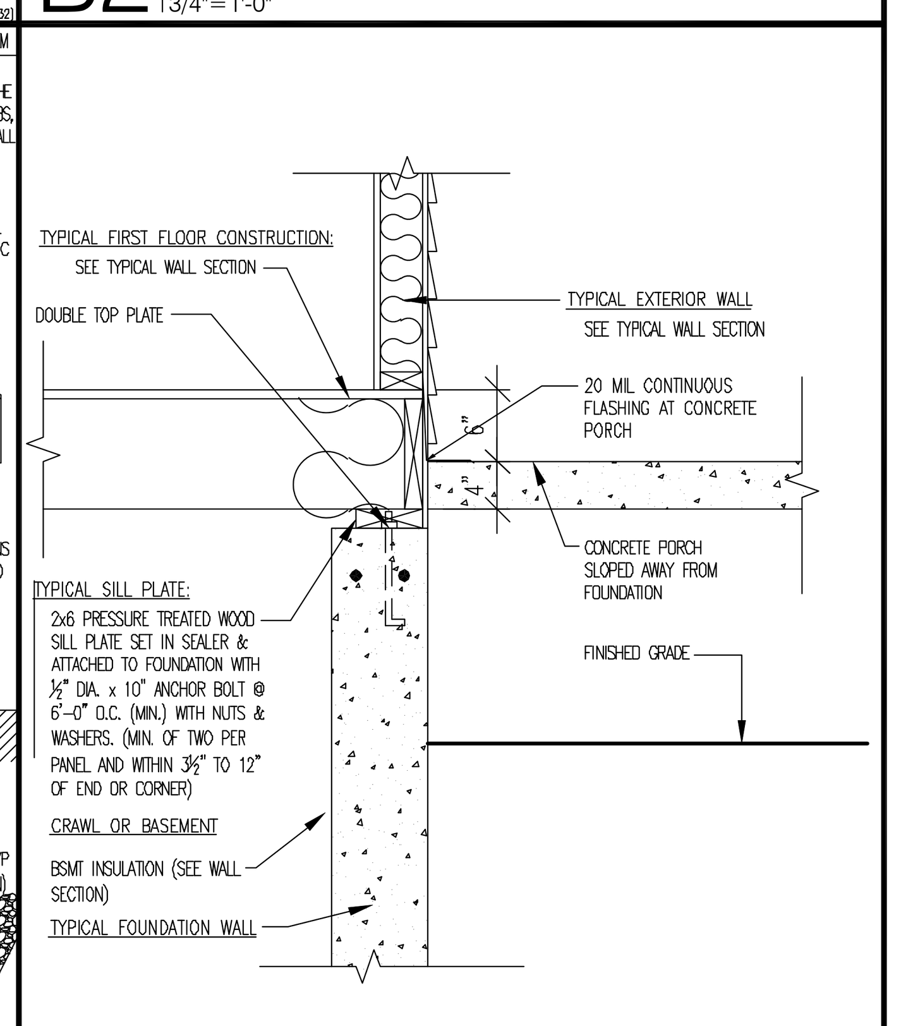
B1 BASEMENT EGRESS
3/8" = 1'-0"



B2 PORCH DETAIL
3/4"=1'-0"



A1 PASSIVE RADON SYSTEM
NO SCALE



A2 PORCH DETAIL
3/4"=1'-0"

GENERAL FOUNDATION PLAN NOTES:

1. ALL CONTRACTORS TO REFER TO ALL NOTES ON SHEET A0.10 FOR ADDITIONAL INFORMATION.
   - 1.1. SECTION 1 FOR GENERAL REQUIREMENTS
   - 1.2. SECTION 2 & 3 FOR EXCAVATION NOTES AND CONCRETE NOTES
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   - 1.9. SECTION 18 FOR NAPERVILLE SPECIFIC NOTES.
2. FOR BASEMENT EGRESS WINDOWS – SEE DETAIL B1/A2.30.
3. PROVIDE PASSIVE RADON SYSTEM – SEE DETAIL A1/A2.30
4. ALL STRUCTURAL STEEL COLUMNS TO BE 3 1/2" DIA. CONCRETE FILLED PIPE COLUMNS WITH STEEL BEARING PLATES TOP AND BOTTOM. TOP PLATES TO BE BOLT CONNECTED TO BEAM ABOVE AND BOTTOM PLATE TO BE "REDHEAD" ANCHORED INTO CONCRETE FOOTING. BASEMENT FLOOR SLAB TO PROVIDE FINAL ANCHORING.

FOUNDATION KEYNOTES:

1. SOIL BEARING CAPACITY ASSUMED TO BE 3,000 PSF.

C1 3½" DIA CONCRETE FILLED COLUMN ON STEEL LEVELING PLATES ON 36"x36"x12" CONCRETE FOOTING WITH (4) #4 REBAR (EQUALLY SPACED) EACH WAY (SEE DETAIL A4/A3.10)
ACTUAL LOADS = 17.6 KIPS MAX. CAPACITY = 27.0 KIPS

C2 3½" DIA CONCRETE FILLED COLUMN ON STEEL LEVELING PLATES ON 36"x36"x12" CONCRETE FOOTING WITH (4) #4 REBAR (EQUALLY SPACED) EACH WAY (SEE DETAIL A4/A3.10)
ACTUAL LOADS = 8.8 KIPS MAX. CAPACITY = 27.0 KIPS

C3 3½" DIA CONCRETE FILLED COLUMN ON STEEL LEVELING PLATES ON 36"x36"x12" CONCRETE FOOTING WITH (4) #4 REBAR (EQUALLY SPACED) EACH WAY (SEE DETAIL A4/A3.10)
ACTUAL LOADS = 6.2 KIPS MAX. CAPACITY = 27.0 KIPS

C4 3½" DIA CONCRETE FILLED COLUMN ON STEEL LEVELING PLATES ON 36"x36"x12" CONCRETE FOOTING WITH (4) #4 REBAR (EQUALLY SPACED) EACH WAY (SEE DETAIL A4/A3.10)
ACTUAL LOADS = 12.4 KIPS MAX. CAPACITY = 27.0 KIPS

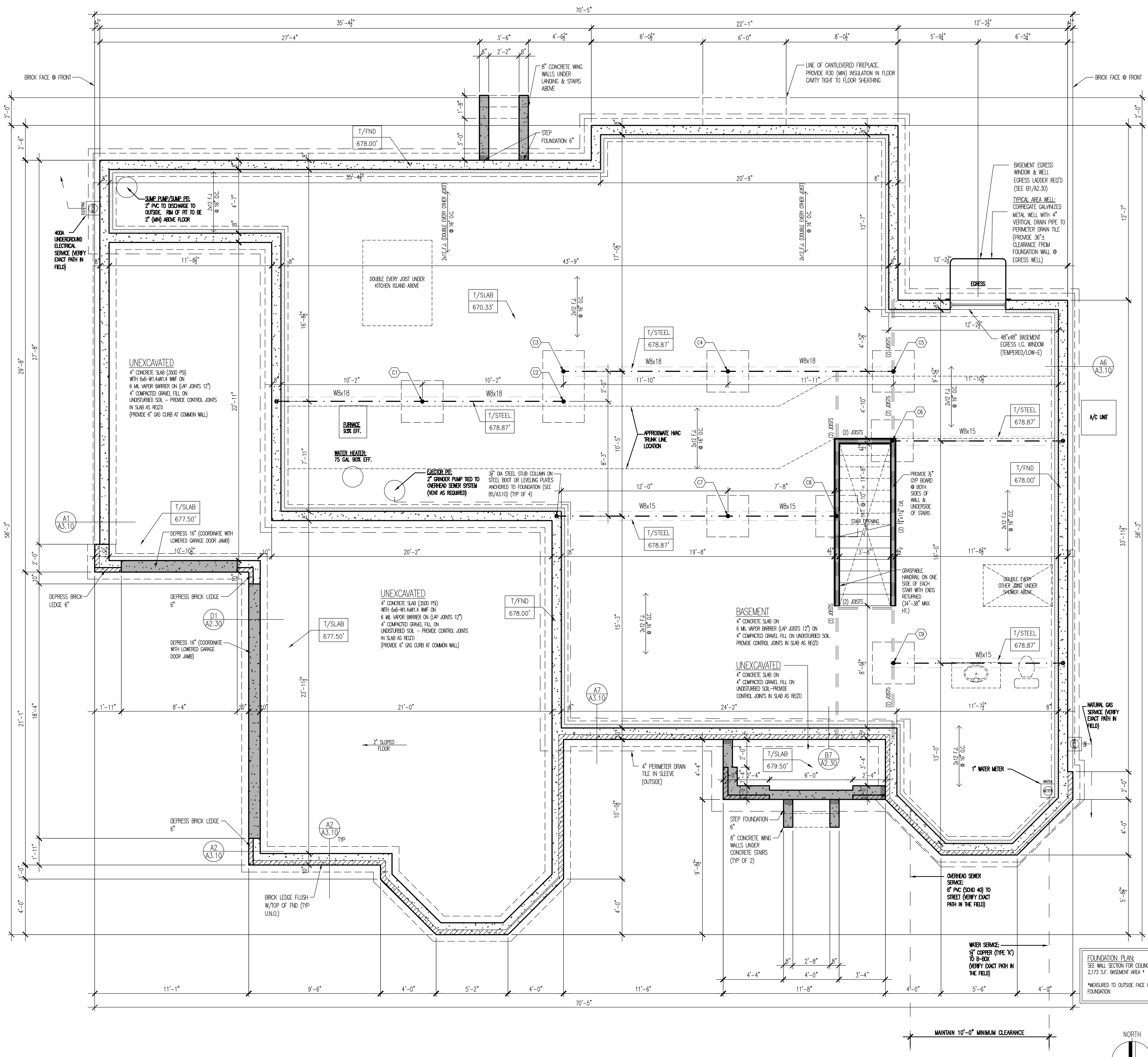
C5 3½" DIA CONCRETE FILLED COLUMN ON STEEL LEVELING PLATES ON 36"x36"x12" CONCRETE FOOTING WITH (4) #4 REBAR (EQUALLY SPACED) EACH WAY (SEE DETAIL A4/A3.10)
ACTUAL LOADS = 6.4 KIPS MAX. CAPACITY = 27.0 KIPS

C6 3½" DIA CONCRETE FILLED COLUMN ON STEEL LEVELING PLATES ON 36"x36"x12" CONCRETE FOOTING WITH (4) #4 REBAR (EQUALLY SPACED) EACH WAY (SEE DETAIL A4/A3.10)
ACTUAL LOADS = 6.2 KIPS MAX. CAPACITY = 27.0 KIPS

C7 3½" DIA CONCRETE FILLED COLUMN ON STEEL LEVELING PLATES ON 36"x36"x12" CONCRETE FOOTING WITH (4) #4 REBAR (EQUALLY SPACED) EACH WAY (SEE DETAIL A4/A3.10)
ACTUAL LOADS = 9.6 KIPS MAX. CAPACITY = 27.0 KIPS

C8 3½" DIA CONCRETE FILLED COLUMN ON STEEL LEVELING PLATES ON 36"x36"x12" CONCRETE FOOTING WITH (4) #4 REBAR (EQUALLY SPACED) EACH WAY (SEE DETAIL A4/A3.10)
ACTUAL LOADS = 3.8 KIPS MAX. CAPACITY = 27.0 KIPS

C9 3½" DIA CONCRETE FILLED COLUMN ON STEEL LEVELING PLATES ON 36"x36"x12" CONCRETE FOOTING WITH (4) #4 REBAR (EQUALLY SPACED) EACH WAY (SEE DETAIL A4/A3.10)
ACTUAL LOADS = 6.4 KIPS MAX. CAPACITY = 27.0 KIPS



A3 FOUNDATION PLAN
1/4" = 1'-0"

2009062-A2.30.DWG

ARCHITECT
CraftStone Architects, Inc.
14150 S. Route 30, Suite 201, Plainfield, Illinois 60544
Phone: (815) 609-1997 Fax: (815) 327-8827
www.CraftstoneArchitects.com
Professional Design Firm #: 184-005597

BUILDER
King's Court Builders
the confidence builder

Seal
LICENSED ARCHITECT
MICHAEL A. BUHR
001-015688
STATE OF ILLINOIS

11-09-2020 | 11-30-2022
DATED | EXPIRES

ISSUANCE
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DATE

Strauch Residence
4279 Lacebark Lane
Lot 166 Ashwood Park South, Naperville, IL
for
Kings Court Builders
P.O. Box 5070 Naperville, IL. 60567-5070

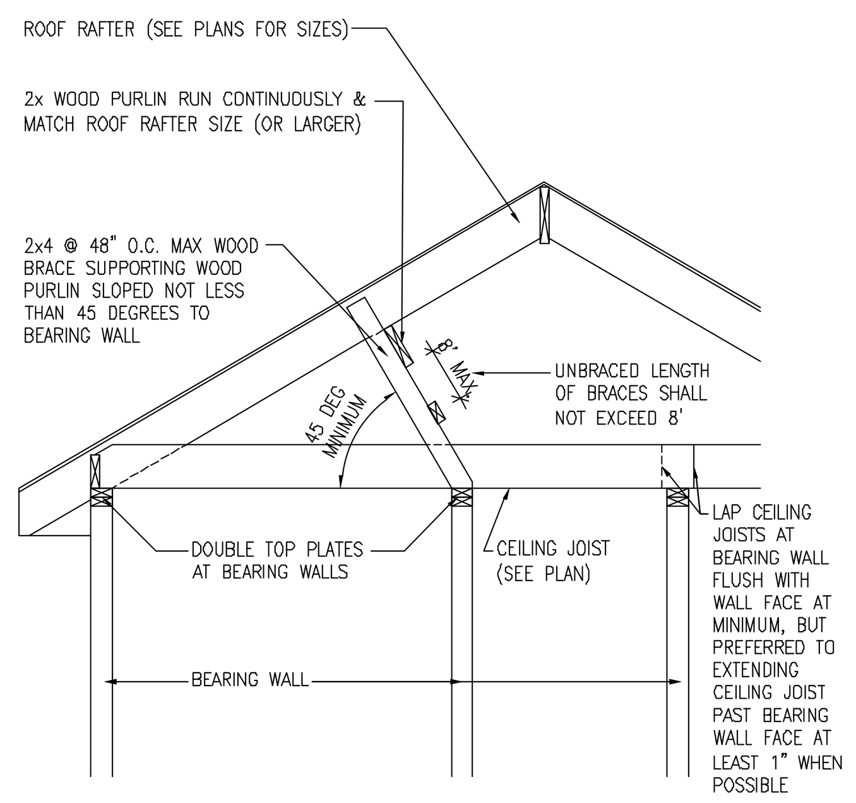
FOUNDATION PLAN

DRAWN BY: EAO
CHECKED BY: MAB

PROJECT NUMBER: 2009062

SHEET NUMBER: A2.30
OF 8 SHEETS

GENERAL ROOF PLAN NOTES:
1. REFER TO ALL NOTES ON SHEET A0.10 FOR ADDITIONAL INFORMATION.
   1.1. SECTION 1 FOR GENERAL REQUIREMENTS
   1.2. SECTION 2 & 3 FOR EXCAVATION NOTES AND CONCRETE NOTES
   1.3. SECTION 4 FOR MASONRY NOTES
   1.4. SECTION 5 FOR STEEL NOTES
   1.5. SECTION 6, 7, 8, & 9 FOR CARPENTRY, FIRE BLOCKING, MOISTURE CONTROL & DOOR-WINDOW NOTES.
   1.6. SECTION 10, 11, 12 & 13 FOR MECHANICAL, PLUMBING, ELECTRICAL & SMOKE/CO DETECTOR NOTES.
   1.7. SECTION 14 FOR IECC NOTES
   1.8. SECTION 15, 16 & 17 FOR ATTIC/CRAWL ACCESS, MISCELLANEOUS & FINISH NOTES.
   1.9. SECTION 18 FOR NAPERVILLE SPECIFIC NOTES.
2. ICE & WATER SHIELD NOTE: PROVIDE ICE & WATER SHIELD AT EAVES ALL TO POINT THAT IS 24" FROM INSIDE OF HEATED WALL LINE, AT ALL VALLEYS RUN 18" EACH WAY AND AT ALL LOW SLOPED ROOFS (LESS THAN 4:12) AND AT ALL WALL ROOF INTERSECTIONS UNDER FLASHING (RUN 18" EACH WAY)
3. ATTIC VENTILATION NOTE: INSULATION SHALL NOT BLOCK THE FREE FLOW OF AIR FROM THE EAVE INTO THE ATTIC. FOR AIR IMPERMEABLE INSULATIONS IN VENTED ATTICS, A BAFFLE MUST BE INSTALLED BETWEEN EACH RAFTER ALONG THE SIDE AND OVER THE INSULATION
4. FRAMING NOTE: ROOF CONTAINS DIFFERENT SIZE RAFTERS, CONTRACTOR CAN ADJUST BEARING HEIGHT BY ADDED WOOD PLATES OR INCREASING RAFTER HEEL CUT OR COMBINATION OF BOTH TO KEEP EAVE FACE IN LINE. CONTRACTOR HAS OPTION TO UPSIZE ALL RAFTERS TO THE SAME SIZE
5. PURLIN NOTE: PURLIN SHALL MATCH ROOF RAFTER SIZE IT SUPPORTS & SHALL BE CONTINOUS AND SUPPORTED BY 2x4@48" OC BRACES ANGLED DOWN NO LESS THAN 45' FROM HORIZONTAL TO BEARING WALLS. PROVIDE 2x6 HORIZONTAL BRACING ON 2x4@8'-0" OC MAX. SEE PURLIN DETAIL THIS SHEET.
6. SIMPSON H2.5 HURRICANE TIE-DOWNS AT 48" O.C. MIN TO BE PROVIDED PER IRC. H2.5 CLIPS TO BE PROVIDED AT ALL CATHEDRAL RAFTERS, TRAY CEILING RAFTERS, BARREL VAULT RAFTERS, AS WELL AS ANY RAFTERS ATTACHED WITH LOOKOUTS.
7. PROVIDE FLASHING AT ALL WALL AND ROOF INTERSECTIONS WHEREVER THERE IS A CHANGE IN ROOF SLOPE OR DIRECTION AND AROUND ROOF OPENINGS.
8. ROOF VENTS TO BE LOCATED ON BACK SLOPE OF ROOF. NUMBER AND LOCATIONS SHALL BE BASED ON 1/300 TOTAL AREA OF VENTS PER IRC.



D1 PURLIN DETAIL
N.T.S.

FRAMING-PURLIN DETAIL (32)

ROOF VENTILATION CALCULATIONS				
ROOF AREA DESCRIPTION:		MAIN ROOF		
TOTAL AREA OF ROOF:		3,489 SF		
TOTAL REQUIRED FREE AREA @ 1:300 (= AREA/300):		11.63 SF		
RIDGE - FREE AREA REQUIRED (REQ'D FREE AREA/2):		5.82 SF		
RIDGE - ACTUAL FREE AREA (SEE CALCS BELOW):		5.90 SF		
CONT. RIDGE VENT (L.F. OF RIDGE):		0 LF		
CONT. RIDGE VENT FREE AREA:	(LF x 12.5 Sq.In./LF)/144	0 SF		
ROOF VENT (NUMBER @ RIDGE):		17		
ROOF VENT FREE AREA:	(# x 50 Sq.In./EA)/144	5.90 SF		
LARGE ROOF VENT (NUMBER @ RIDGE):		0		
LARGE ROOF VENT FREE AREA:	(LF x 144 Sq.In./LF)/144	0 SF		
EAVE - FREE AREA REQUIRED (REQ'D FREE AREA/2):		5.82 SF		
EAVE - ACTUAL FREE AREA (SEE CALCS BELOW):		10.44 SF		
PERFORATED PANEL (L.F. OF EAVE):		167' LF		
PERFORATED PANEL FREE AREA:	(LF x 9 Sq.In./LF)/144	10.44 SF		
CONTINUOUS VENT (L.F. OF EAVE):		0.0 LF		
CONTINUOUS VENT FREE AREA:	(LF x 9.0 Sq.In./LF)/144	0.0 SF		
DOES VENTILATION MEET OR EXCEED MIN REQ'TS:		YES		

PERFORATED PANELS @ EAVE ASSUMES: 9 SQ IN / L.F.
CONTINUOUS VENT @ EAVE ASSUMES 9 SQ. IN. / L.F.
CONT. RIDGE VENT @ RIDGE ASSUMES 12.5 SQ. IN. / L.F.
ROOF VENT @ RIDGE ASSUMES 50 SQ. IN. / EACH
LARGE ROOF VENT @ RIDGE ASSUMES 144 SQ. IN. / EACH

------ COPPER HOT WATER PIPE
——— COPPER COLD WATER PIPE

SEE PLUMBING SECTION ON SHEET A0.10 FOR ADDITION INFORMATION

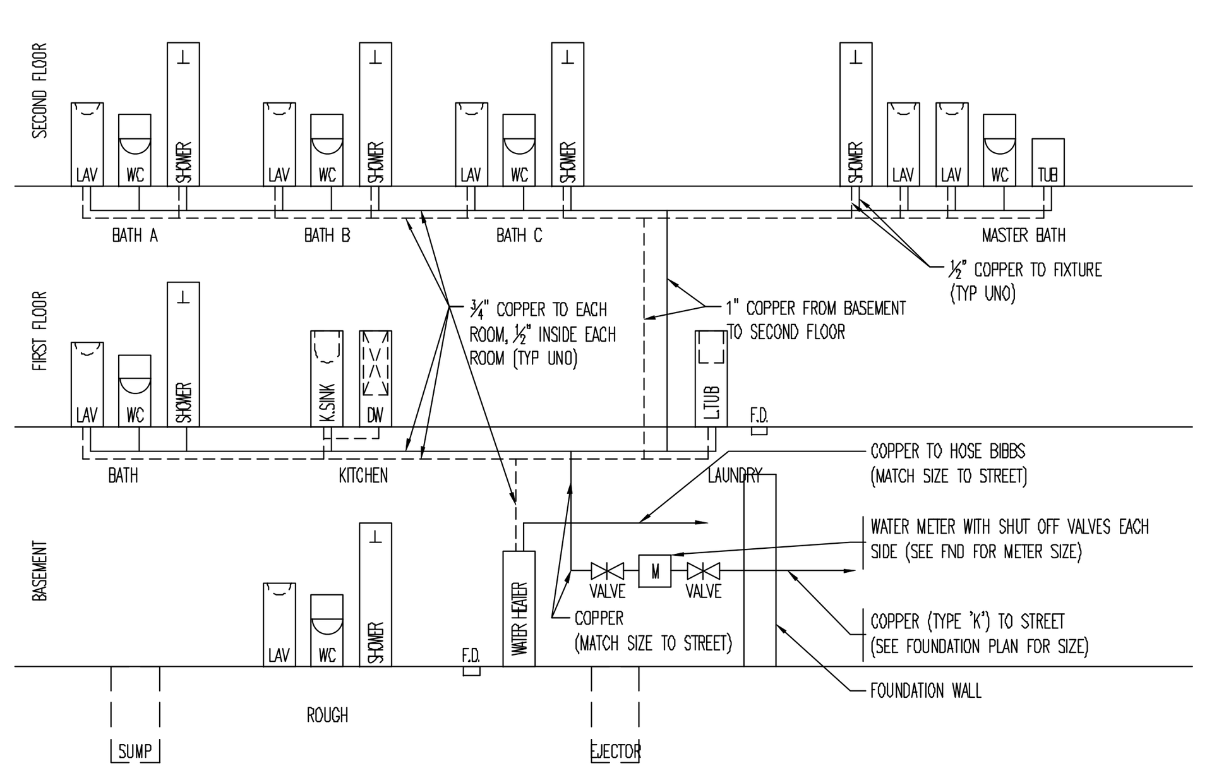
PLUMBING FIXTURE COUNTS:

QTY EXIST	QTY NEW	FIXTURE TYPE	UNIT	TOTAL
	0	WATER CLOSET (FLUSH VALVE)	10	
	6	WATER CLOSET (FLUSH TANK)	3	18
	7	LAVATORY - FAUCET	1	7
	3	BATHTUB - FAUCET	2	6
	4	SHOWER - MIXING VALVE	2	8
	1	KITCHEN SINK - FAUCET	2	2
	1	LAUNDRY TRAYS - FAUCET	3	3
	1	DISHWASHER - AUTOMATIC	1	1
	1	LAUNDRY MACHINE - AUTOMATIC	2	2
	22	TOTALS	-	47

	PIPE SIZE	METER SIZE	
REQUIRED SIZE	1¼"	1"	
SIZE PROVIDED	1½"	1"	<- USE THIS

ALLOWABLE FIXTURE UNITES FOR PIPE SIZE & METER SIZE

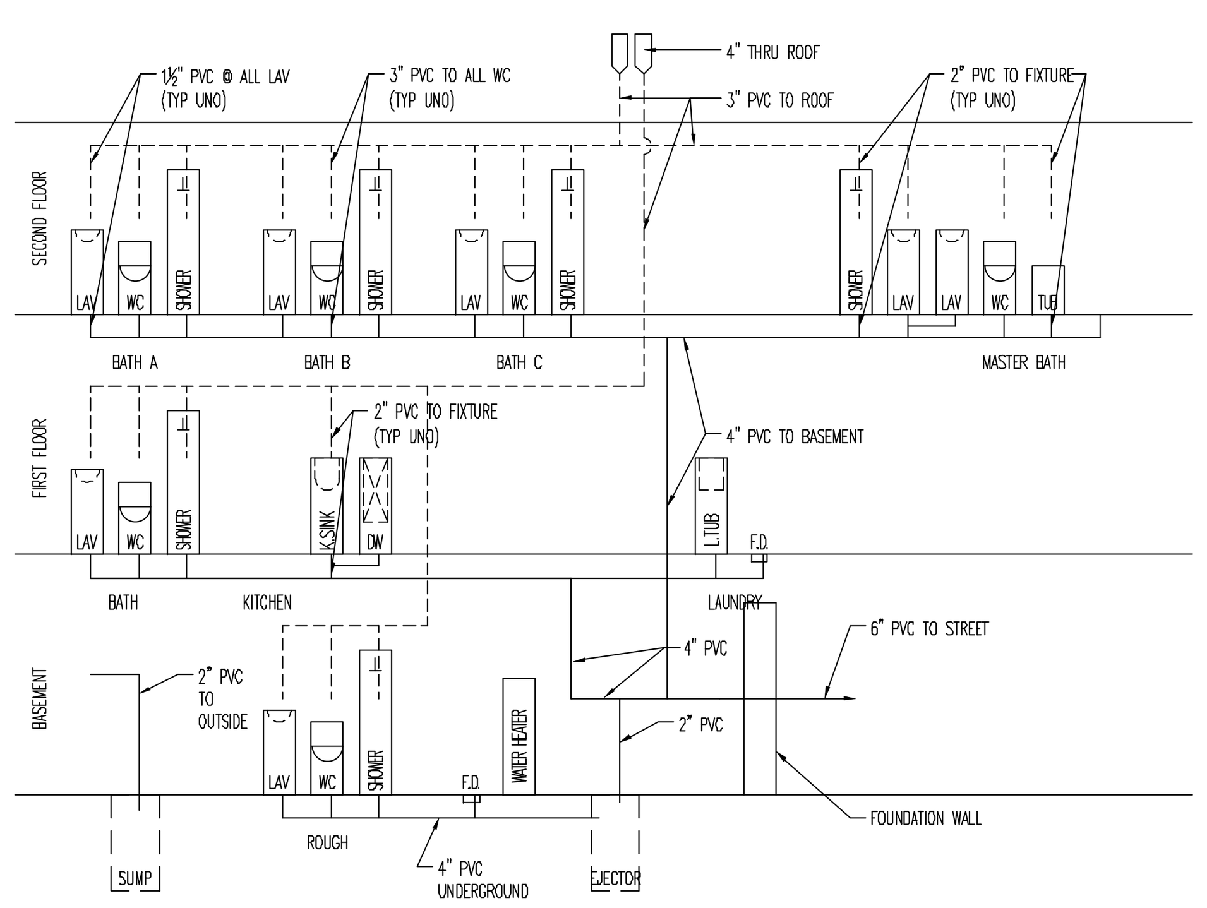
WSFU	PIPE SIZE	METER SIZE
16 WSFU	¾"	¾"
25 WSFU	1"	¾"
30 WSFU	1"	1"
50 WSFU	1¼"	1"
90 WSFU	1½"	1½"
100 WSFU	1½"	2"
225 WSFU	2"	2"



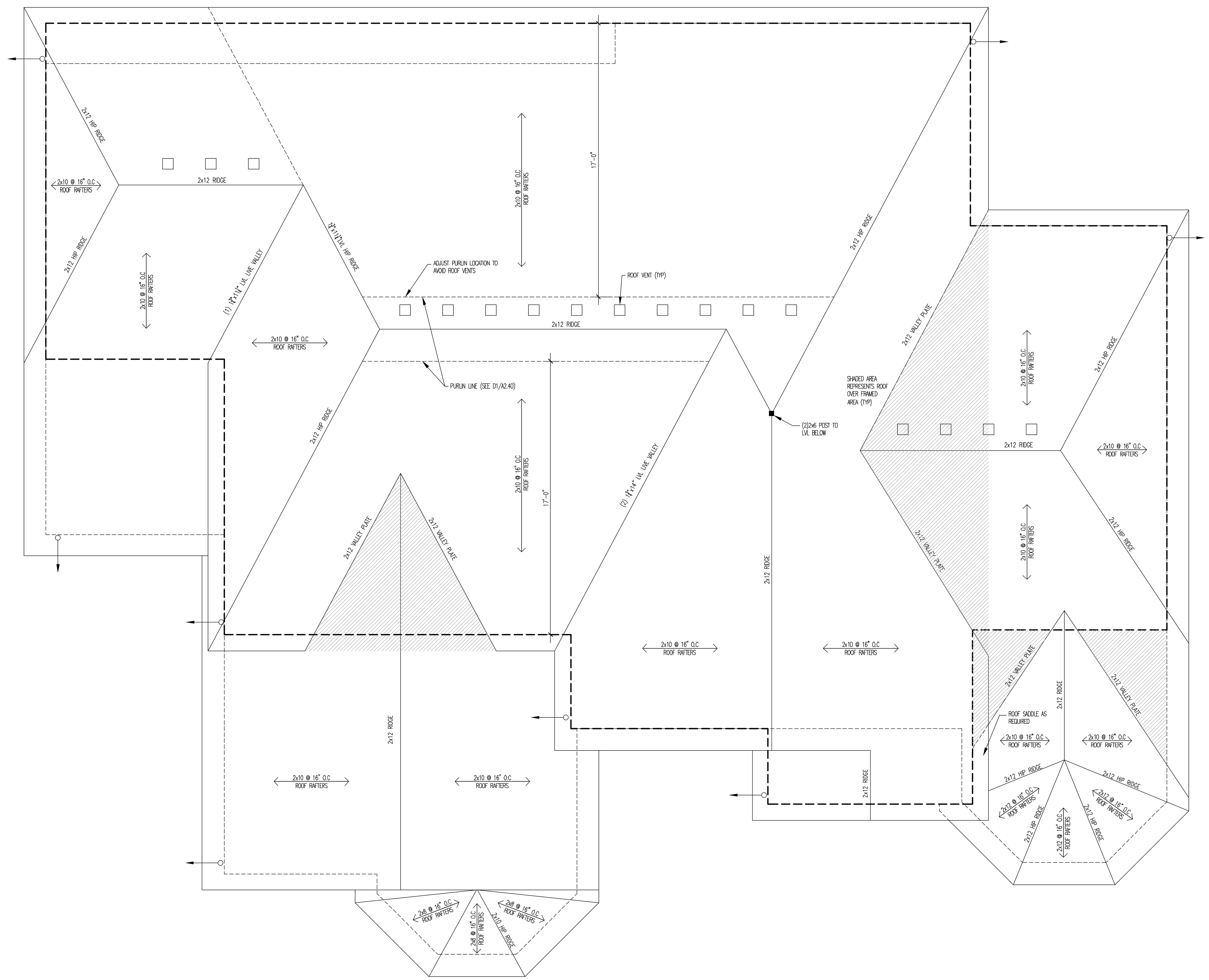
B1 RISER DIAGRAM - WATER & PLUMBING FIXTURE UNITS
NO SCALE

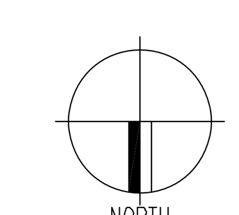
------ PVC (SCH3 40) VENT PIPE
——— PVC (SCH3 40) WASTE PIPE

SEE PLUMBING SECTION ON SHEET A0.10 FOR ADDITION INFORMATION



A1 RISER DIAGRAM - WASTE
3/4" = 1'-0"





A3 ROOF PLAN
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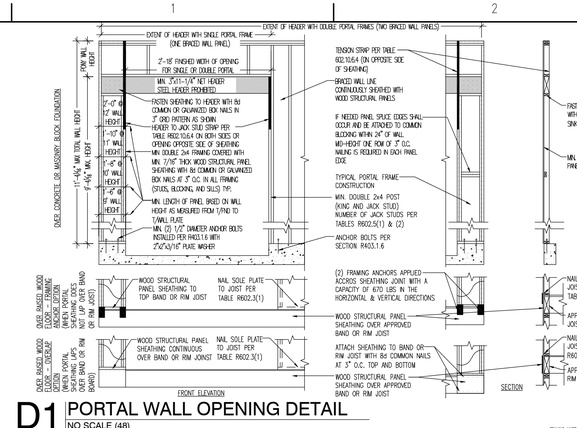
ROOF PLAN

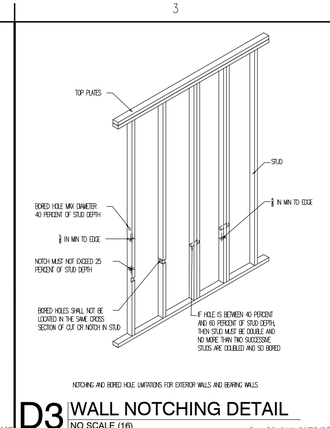
DRAWN BY: EAO
CHECKED BY: MAB

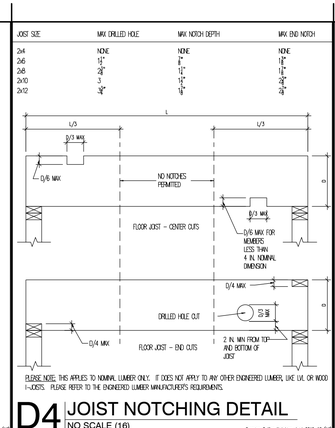
PROJECT NUMBER: 2009062

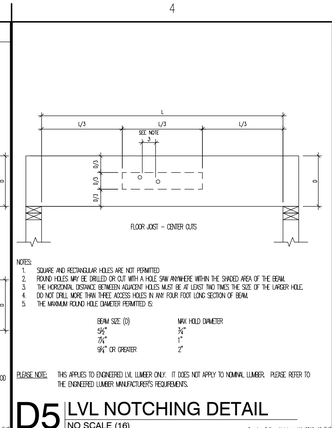
SHEET NUMBER: A2.40

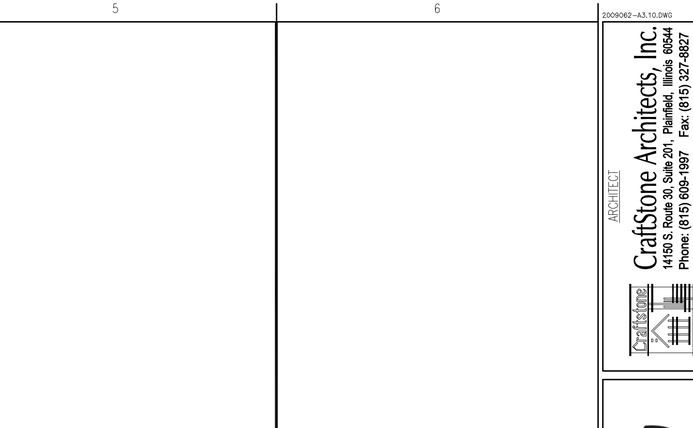
OF 8 SHEETS

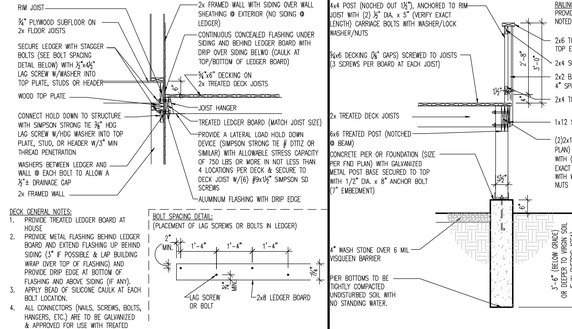


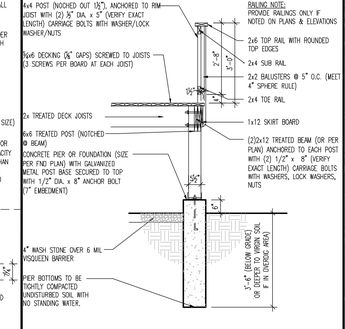


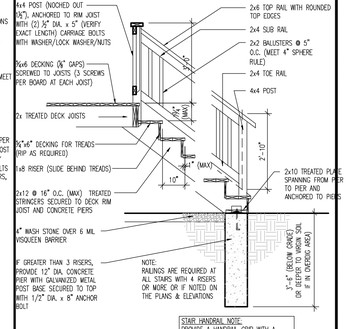


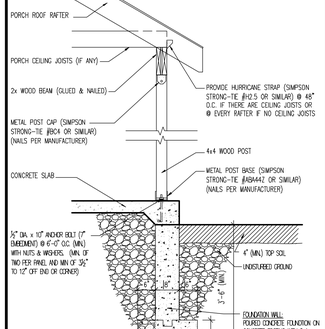


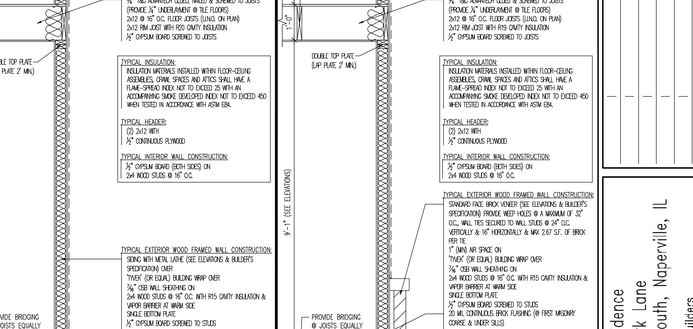












D1 PORTAL WALL OPENING DETAIL
NO SCALE (48)

FRAMING-NARROW WALL PORTAL OPENING 2019-12 (48)

NOTCHING AND BORED HOLE LIMITATIONS FOR EXTERIOR WALLS AND BEARING WALLS

D3 WALL NOTCHING DETAIL
NO SCALE (16)

Framing-Drilling Notching-Wall 2019-12 (16)

JOIST SIZE	MAX DRILLED HOLE	MAX NOTCH DEPTH	MAX END NOTCH
2x4	NONE	NONE	NONE
2x6	1 1/2"	7/8"	1 3/8"
2x8	2 3/8"	1 1/4"	1 7/8"
2x10	3	1 1/2"	2 3/8"
2x12	3 3/4"	1 7/8"	2 7/8"

PLEASE NOTE: THIS APPLIES TO NOMINAL LUMBER ONLY. IT DOES NOT APPLY TO ANY OTHER ENGINEERED LUMBER, LIKE LVL OR WOOD I-JOISTS. PLEASE REFER TO THE ENGINEERED LUMBER MANUFACTURER'S REQUIREMENTS.

D4 JOIST NOTCHING DETAIL
NO SCALE (16)

Framing-Drilling Notching-Joist 2019-12 (16)

NOTES:
1. SQUARE AND RECTANGULAR HOLES ARE NOT PERMITTED
2. ROUND HOLES MAY BE DRILLED OR CUT WITH A HOLE SAW ANYWHERE WITHIN THE SHADED AREA OF THE BEAM.
3. THE HORIZONTAL DISTANCE BETWEEEN ADJACENT HOLES MUST BE AT LEAST TWO TIMES THE SIZE OF THE LARGER HOLE.
4. DO NOT DRILL MORE THAN THREE ACCESS HOLES IN ANY FOUR FOOT LONG SECTION OF BEAM.
5. THE MAXIMUM ROUND HOLE DIAMETER PERMITTED IS:

BEAM SIZE (D)	MAX HOLD DIAMETER
5 1/2"	3/4"
7 1/4"	1"
9 1/4" OR GREATER	2"

PLEASE NOTE: THIS APPLIES TO ENGINEERED LVL LUMBER ONLY. IT DOES NOT APPLY TO NOMINAL LUMBER. PLEASE REFER TO THE ENGINEERED LUMBER MANUFACTURER'S REQUIREMENTS.

D5 LVL NOTCHING DETAIL
NO SCALE (16)

Framing-Drilling Notching-LVL 2019-12 (16)

STAIR CONSTRUCTION GENERAL NOTES:
1. ALL STAIRS TO COMPLY WITH IRC AND ANY STAIRS WITH MORE THAN 3 RISERS SHALL REQUIRE A RAILING.
2. EACH STAIR IS TO HAVE AT LEAST ONCE CONTINUOUS HANDRAIL RUN ENTIRE LENGTH OF STAIR (TOP TO BOT) ALONG ONE SIDE.
3. TREAD DIMENSION IS MEASURED FROM NOSE TO NOSE.
4. LEADING EDGE OF TREAD TO HAVE A CURVATURE NO GREATER THAN 9/16"
5. NOSING SHALL PROJECT 3/4" MIN. TO 1 1/4" MAX.
6. HANDRAILS LOCATED ADJACENT TO A WALL SHALL HAVE A CLEAR SPACE OF AT LEAST 1 1/2".
7. HANDRAIL GRIP SIZE SHALL HAVE AN OUTSIDE DIAMETER OF AT LEAST 1 1/4", BUT NOT GREATER THAN 2" FOR CIRCULAR RAILINGS OR HAVE AN OUTSIDE PERIMETER OF AT LEAST 4", BUT NOT GREATER THAN 6 1/4" AND A MAX CROSS SECTION OF 2 1/4" IF A NON-CIRCULAR RAILING.
8. ALL RAILINGS TO WITHSTAND A SINGLE CONCENTRATED LOAD APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP OF THE RAILING OF 200 LBS/SQ. FT.
9. ALL RAILING IN-FILL COMPONENTS (BALUSTERS & PANEL FILLERS) SHALL BE DESIGNED TO WITHSTAND A HORIZONTALLY APPLIED LOAD OF 50 LBS ON AN AREA EQUAL TO 1 SQ. FT.
10. "MEETS 4" SPHERE RULE" FOR THESE DOCUMENTS MEANS THAT SPACING WILL NOT ALLOW THE PASSAGE OF A 4" SPHERE.
11. REFER TO BUILDER'S SPEC. FOR STAIR MATERIALS & FINISHES.

NOTE: IF WINDER TREAD, PROVIDE MIN. TREAD DEPTH OF 6" & MAX. OF 12" AT ANY POINT. MIN TREAD DEPTH SHALL BE 10" AS MEASURED FROM A POINT 12" FROM NARROW SIDE.

C1 STAIR DETAIL
NO SCALE (48)

STAIR 2018 IRC 2019-12 (48)

C2
" = 1'-0"

C3 ADVANCED FRAMING
NO SCALE (24)

Framing-Corner Details 2019-12 (24)

TYPICAL HEADER NOTES:
1. TYPICAL HEADER: (2)2x12 WITH 1/2" SPACER WITH JACK STUDS AS FOLLOWS AND (1) KING STUD EACH SIDE EXTEND FULL HEIGHT OF WALL FROM SILL TO TOP PLATE AND NAILED TO ENDS OF HEADER, U.N.O.
2. TYPICAL JACK STUDS (UNDER HEADER ON EACH SIDE)
   - 2.1. (1) 2x4 JACK STUD FOR HEADERS LESS THAN 6' WIDTH
   - 2.2. (2) 2x4 JACK STUDS FOR HEADERS BETWEEN 6' TO 10'
   - 2.3. (3) 2x4 JACK STUDS FOR HEADERS BETWEEN 10' & 16'
   - 2.4. (1) 3 1/2"x5 1/4" VERSALAM JACK STUDS FOR HEADERS OVER 16'

NOTE: FROM STARTING POINE, ATTEMPT TO MAINTAIN A 16"O.C. STUD SPACING, EVEN IF INTERRUPTED BY OPENING

C4 FRAMING DETAIL
NO SCALE (32)

Framing-OPEN FRAMING 2019-12 (32)

NOTE: EITHER TECHNIQUE ABOVE OR BELOW MAY BE USED IF CALLED OUT AS (2)JOISTS

C5 DOUBLE JOIST DETAIL
3/4" = 1'-0"

DOUBLE JOIST DETAIL 2019-12 (16)

DECK GENERAL NOTES:
1. PROVIDE TREATED LEDGER BOARD AT HOUSE
2. PROVIDE METAL FLASHING BEHIND LEDGER BOARD AND EXTEND FLASHING UP BEHIND SIDING (3" IF POSSIBLE & LAP BUILDING WRAP OVER TOP OF FLASHING) AND PROVIDE DRIP EDGE AT BOTTOM OF FLASHING AND ABOVE SIDING (IF ANY).
3. APPLY BEAD OF SILICONE CAULK AT EACH BOLT LOCATION.
4. ALL CONNECTORS (NAILS, SCREWS, BOLTS, HANGERS, ETC.) ARE TO BE GALVANIZED & APPROVED FOR USE WITH TREATED LUMBER
5. SEE DIAGRAM TO RIGHT FOR LEDGER BOARD BOLT PLACEMENT REQUIREMENTS.

BOLT SPACING DETAIL:
(PLACEMENT OF LAG SCREWS OR BOLTS IN LEDGER)

B1 DECK LEDGER DETAIL
3/8" = 1'-0"

DECK-STEP DOWN_2X1D (32)

RAILING NOTE:
PROVIDE RAILINGS ONLY IF NOTED ON PLANS & ELEVATIONS

B2 DECK BEAM DETAIL
3/8" = 1'-0"

DECK-STEP DOWN_2X1D (32)

NOTE:
RAILINGS ARE REQUIRED AT ALL STAIRS WITH 4 RISERS OR MORE OR IF NOTED ON THE PLANS & ELEVATIONS

STAIR HANDRAIL NOTE:
PROVIDE A HANDRAIL GRIP WITH A CIRCULAR CROSS SECITON OF AT LEAST 1 1/4" (MIN) AND 2" (MAX) AT ALL STAIRS.

B3 DECK STAIR DETAIL
3/8" = 1'-0"

DECK-STEP DOWN_2X1D (32)

B4
" = 1'-0"

B5 PORCH SECTION
1/2" = 1'-0"

Porch Section 2019-12 (24)

A1 GARAGE WALL SECTION
3/4" = 1'-0"

Garage Fnd-2x4Frame 8in fnd no rebar w_4in slab (16)

A2 GARAGE WALL SECTION
3/4" = 1'-0"

A3
" = 1'-0"

A4 STEEL COLUMN @ FOOTING
NO SCALE (12)

STL BEAM-COL-FOOTING (12)

A5 STEEL COLUMN @ FND
NO SCALE (12)

STL BEAM-COL-FND (12)

TYPICAL ROOF CONSTRUCTION:
2x12 HIP/RIDGE RAFTER (BLOCK RAFTERS SOLID WITH 2x)
2x4 COLLAR TIES @ 48" O.C.
30 YEAR (250# MIN) SELF SEALING ASPHALT "ARCHITECTURAL" SHINGLES ON 15# ROOFING FELT
7/16" EXTERIOR GRADE ("CDX") OSB ROOF SHEATHING
2x10 WOOD RAFTERS @ 16" O.C. (U.N.O.)
2x8 WOOD CEILING JOISTS @ 16" O.C. (U.N.O.)
1/2" GYPSUM BOARD SCREWED TO JOISTS
R38 (MIN.) INSULATION W/VAPOR BARRIER AT GYP. BD.

PROVIDE ICE & WATER GUARD FROM EAVE'S EDGE TO A POINT 24" INSIDE THE EXTERIOR WALL LINE.

TYPICAL ROOF EAVE CONSTRUCTION:
1" INSULATION BAFFLE @ INSULATION
1x8 HARDIE BOARD FASCIA ON
2x6 SUB-FASCIA WITH
HARDIE BOARD SOFFIT PANELS (VENTED)
ALUMINUM GUTTER WITH ALUMINUM DRIP EDGE FLASHING
INSTALLED UNDER ICE & WATER SHIELD AT EAVES

TYPICAL SECOND FLOOR CONSTRUCTION:
3/4" T&G ADVANTECH GLUED, NAILED & SCREWED TO JOISTS
(PROVIDE 1/4" UNDERLAYMENT @ TILE FLOORS)
2x12 @ 16" O.C. FLOOR JOISTS (U.N.O. ON PLAN)
2x12 RIM JOIST WITH R20 CAVITY INSULATION
1/2" GYPSUM BOARD SCREWED TO JOISTS

TYPICAL INSULATION:
INSULATION MATERIALS INSTALLED WITHIN FLOOR-CEILING ASSEMBLIES, CRAWL SPACES AND ATTICS SHALL HAVE A FLAME-SPREAD INDEX NOT TO EXCEED 25 WITH AN ACCOMPANYING SMOKE DEVELOPED INDEX NOT TO EXCEED 450 WHEN TESTED IN ACCORDANCE WITH ASTM E84.

TYPICAL HEADER:
(2) 2x12 WITH
1/2" CONTINUOUS PLYWOOD

TYPICAL INTERIOR WALL CONSTRUCTION:
1/2" GYPSUM BOARD (BOTH SIDES) ON
2x4 WOOD STUDS @ 16" O.C.

TYPICAL EXTERIOR WOOD FRAMED WALL CONSTRUCTION:
SIDING WITH METAL LATHE (SEE ELEVATIONS & BUILDER'S SPECIFICATION) OVER
'TYVEK' (OR EQUAL) BUILDING WRAP OVER
7/16" OSB WALL SHEATHING ON
2x4 WOOD STUDS @ 16" O.C. WITH R15 CAVITY INSULATION & VAPOR BARRIER AT WARM SIDE
SINGLE BOTTOM PLATE
1/2" GYPSUM BOARD SCREWED TO STUDS

TYPICAL FIRST FLOOR CONSTRUCTION:
3/4" T&G ADVANTECH GLUED, NAILED & SCREWED TO JOISTS
(PROVIDE 1/4" UNDERLAYMENT @ TILE FLOORS)
2x12 @ 16" O.C. FLOOR JOISTS (U.N.O. ON PLAN)
2x12 RIM JOIST WITH R20 CAVITY INSULATION

TYPICAL CRIPPLE WALL CONSTRUCTION:
SIDING, BUILDING WRAP & SHEATHING (SAME AS ABOVE)
2x6 WOOD STUDS @ 16" O.C. WITH R21 CAVITY INSULATION & VAPOR BARRIER (INSULATION RATED TO BE EXPOSED IN UNFINISHED AREAS)

FINISHED GRADE - 4" (MIN) TOP SOIL
COMPACTED BACKFILL

TYPICAL SILL PLATE:
2x6 TREATED WOOD MUD SILL PLATE
SET IN SEALER & ATTACHED TO FOUNDATION WITH
1/2" DIA. x 10" ANCHOR BOLT @ 6'-0" O.C. (MIN.) WITH NUTS & WASHERS. (MIN. OF TWO PER PANEL AND 3 1/2" TO 12" OFF END CORNER)

TYPICAL BASEMENT INSULATION (U.N.O.):
R11 BASEMENT INSULATION BLANKETS (RATED TO BE EXPOSED) TO FULL HT OF WALL (HOLD 6"± OFF FLOOR SLAB) AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS

TYPICAL FOUNDATION WALL:
POURED CONCRETE WALL (3000 PSI) WITH
- (2)#4 REBAR HORIZ. (TOP & BOT.) WITHIN 12" OF TOP & BOT. OF WALL &
- (2)ROWS OF (1)#4 REBAR HORIZ. @ 1/3-POINTS OF WALL &
- (1) #6 REBAR VERTICALLY @ 43" O.C. (U.N.O.)
- PLACE REBAR NEAR INSIDE FACE OF WALL & PROVIDE 2" MIN CONCRETE COVER WITH

GREY WALL WATER-PROOFING / DAMP-PROOFING ON THE EXTERIOR SIDE OF WALL (T/FOOTING TO GRADE)

TYPICAL BASEMENT FLOOR (U.N.O.):
4" POURED CONCRETE SLAB ON 6 MIL VAPOR BARRIER (LAP JOISTS 12" MIN) ON 4" (MIN.) COMPACTED GRAVEL FILL ON UNDISTURBED SOIL (CAULK/SEAL ALL JOINTS IN FLOOR SLAB)

TYPICAL PERIMETER DRAIN TILE (U.N.O.):
4" DIA. PERFORATED DRAIN TILE IN SLEEVE (OUTSIDE ONLY) (CONNECTED TO SUMP PIT) IN 1" WASH STONE BED (6" COVER)

TYPICAL FOOTING:
POURED CONCRETE FOOTING WITH 2x4 KEYWAY ON UNDISTURBED SOIL OR ENGINEERED FILL

A6 WALL SECTION - SIDING
1/2" = 1'-0"

Sect-2St_Fnd_8_Cripple 2x6_Wall 2x4_Siding 2020-01 (12)

TYPICAL ROOF CONSTRUCTION:
2x12 HIP/RIDGE RAFTER (BLOCK RAFTERS SOLID WITH 2x)
2x4 COLLAR TIES @ 48" O.C.
30 YEAR (250# MIN) SELF SEALING ASPHALT "ARCHITECTURAL" SHINGLES ON 15# ROOFING FELT
1/2" EXTERIOR GRADE ("CDX") OSB ROOF SHEATHING
2x10 WOOD RAFTERS @ 16" O.C. (U.N.O.)
2x8 WOOD CEILING JOISTS @ 16" O.C. (U.N.O.)
1/2" GYPSUM BOARD SCREWED TO JOISTS
R38 (MIN.) INSULATION W/VAPOR BARRIER AT GYP. BD.

PROVIDE ICE & WATER GUARD FROM EAVE'S EDGE TO A POINT 24" INSIDE THE EXTERIOR WALL LINE.

TYPICAL ROOF EAVE CONSTRUCTION:
1" INSULATION BAFFLE @ INSULATION
1x8 HARDIE BOARD FASCIA ON
2x6 SUB-FASCIA WITH
HARDIE BOARD SOFFIT PANELS (VENTED)
ALUMINUM GUTTER WITH ALUMINUM DRIP EDGE FLASHING
INSTALLED UNDER ICE & WATER SHIELD AT EAVES

TYPICAL FLASHING & WEEP HOLE REQUIREMENTS:
PROVIDE CONTINUOUS CORROSION-RESISTIVE FLASHING AT TOP OF ALL EXTERIOR WINDOWS, DOOR, AND OTHER OPENINGS, AT THE INTERSECTION OF CHIMNEYS OR OTHER MASONRY CONSTRUCTION WITH FRAME WALLS, UNDER AND AT ENDS OF MASONRY, WOOD, OR METAL COPINGS AND SILLS, CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIM, WHERE PORCHES, DECKS OR STAIRS ATTACH TO A WALL OR FLOOR ASSEMBLY OF WOOD-FRAME CONSTRUCTION, AT WALL AND ROOF INTERSECTIONS. WEEP HOLES ARE TO BE PROVIDED DIRECTLY ABOVE FLASHING WITH A MIN DIAMETER OF 3/16" AND SPACED @ A MAXIMUM OF 32" O.C. WITH COTTON ROPE WICK RUN UP THE WALL 12" MIN, THROUGH WEEP HOLE, EXTENDED PAST THE FACE OF THE MASONRY AND EXPOSED TO EXTERIOR.

TYPICAL SECOND FLOOR CONSTRUCTION:
3/4" T&G ADVANTECH GLUED & SCREWED TO JOISTS
(PROVIDE 1/4" UNDERLAYMENT @ TILE FLOORS)
2x12 @ 16" O.C. FLOOR JOISTS (U.N.O. ON PLAN)
2x12 RIM JOIST WITH R19 CAVITY INSULATION
1/2" GYPSUM BOARD SCREWED TO JOISTS

TYPICAL INSULATION:
INSULATION MATERIALS INSTALLED WITHIN FLOOR-CEILING ASSEMBLIES, CRAWL SPACES AND ATTICS SHALL HAVE A FLAME-SPREAD INDEX NOT TO EXCEED 25 WITH AN ACCOMPANYING SMOKE DEVELOPED INDEX NOT TO EXCEED 450 WHEN TESTED IN ACCORDANCE WITH ASTM E84.

TYPICAL HEADER:
(2) 2x12 WITH
1/2" CONTINUOUS PLYWOOD

TYPICAL INTERIOR WALL CONSTRUCTION:
1/2" GYPSUM BOARD (BOTH SIDES) ON
2x4 WOOD STUDS @ 16" O.C.

TYPICAL EXTERIOR WOOD FRAMED WALL CONSTRUCTION:
STANDARD FACE BRICK VENEER (SEE ELEVATIONS & BUILDER'S SPECIFICATION) PROVIDE WEEP HOLES @ A MAXIMUM OF 32" O.C., WALL TIES SECURED TO WALL STUDS @ 24" O.C. VERTICALLY & 16" HORIZONTALLY & MAX 2.67 S.F. OF BRICK PER TIE
1" (MIN) AIR SPACE ON
'TYVEK' (OR EQUAL) BUILDING WRAP OVER
7/16" OSB WALL SHEATHING ON
2x4 WOOD STUDS @ 16" O.C. WITH R15 CAVITY INSULATION & VAPOR BARRIER AT WARM SIDE
SINGLE BOTTOM PLATE
1/2" GYPSUM BOARD SCREWED TO STUDS
20 MIL CONTINUOUS BRICK FLASHING (@ FIRST MASONRY COARSE & UNDER SILLS)

TYPICAL FIRST FLOOR CONSTRUCTION:
3/4" T&G ADVANTECH GLUED, NAILED & SCREWED TO JOISTS
(PROVIDE 1/4" UNDERLAYMENT @ TILE FLOORS)
2x12 @ 16" O.C. FLOOR JOISTS (U.N.O. ON PLAN)
2x12 RIM JOIST WITH R20 CAVITY INSULATION

TYPICAL CRIPPLE WALL CONSTRUCTION:
BRICK VENEER, BUILDING WRAP, INSULATION, & SHEATHING (SAME AS ABOVE) 2x6 WOOD STUDS @ 16" O.C. WITH R19 CAVITY INSULATION & VAPOR BARRIER (INSULATION RATED TO BE EXPOSED IN UNFINISHED AREAS)

FINISHED GRADE - 4" (MIN) TOP SOIL
COMPACTED BACKFILL

TYPICAL SILL PLATE:
2x6 TREATED WOOD MUD SILL PLATE
SET IN SEALER & ATTACHED TO FOUNDATION WITH
1/2" DIA. x 10" ANCHOR BOLT @ 6'-0" O.C. (MIN.) WITH NUTS & WASHERS. (MIN. OF TWO PER PANEL AND 3 1/2" TO 12" OFF END CORNER)

TYPICAL BASEMENT INSULATION (U.N.O.):
R11 BASEMENT INSULATION BLANKETS (RATED TO BE EXPOSED) TO FULL HT OF WALL (HOLD 6"± OFF FLOOR SLAB) AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS

TYPICAL FOUNDATION WALL:
POURED CONCRETE WALL (3000 PSI) WITH
- (2)#4 REBAR HORIZ. (TOP & BOT.) WITHIN 12" OF TOP & BOT. OF WALL &
- (1)ROW OF (1)#4 REBAR HORIZ. @ MID-SPAN OF WALL &
- NO VERTICAL REBAR
- PLACE REBAR NEAR INSIDE FACE OF WALL & PROVIDE 2" MIN CONCRETE COVER WITH

GREYWALL WATER PROOFING / DAMP-PROOFING ON THE EXTERIOR SIDE OF WALL (T/FOOTING TO GRADE)

TYPICAL BASEMENT FLOOR (U.N.O.):
4" POURED CONCRETE SLAB ON 6 MIL VAPOR BARRIER (LAP JOISTS 12" MIN) ON 4" (MIN.) COMPACTED GRAVEL FILL ON UNDISTURBED SOIL (CAULK/SEAL ALL JOINTS IN FLOOR SLAB)

TYPICAL PERIMETER DRAIN TILE (U.N.O.):
4" DIA. PERFORATED DRAIN TILE IN SLEEVE (INSIDE & OUTSIDE) (CONNECTED TO SUMP PIT) IN 1" WASH STONE BED (6" COVER)

TYPICAL FOOTING:
POURED CONCRETE FOOTING WITH 2x4 KEYWAY ON UNDISTURBED SOIL OR ENGINEERED FILL

A7 WALL SECTION - MASONRY
1/2" = 1'-0"

Sect-2St_Fnd_8_Cripple 2x6_Wall 2x4_Siding 2020-01 (12)

ARCHITECT
CraftStone Architects, Inc.
14150 S. Route 30, Suite 201, Plainfield, Illinois 60544
Phone: (815) 609-1997 Fax: (815) 327-8827
www.CraftstoneArchitects.com
Professional Design Firm #: 184-005597

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Strauch Residence
4279 Lacebark Lane
Lot 166 Ashwood Park South, Naperville, IL
for
Kings Court Builders
P.O. Box 5070 Naperville, IL. 60567-5070

WALL SECTION - DETAILS

DRAWN BY:
EAO

CHECKED BY:
MAB

PROJECT NUMBER:
2009062

SHEET NUMBER:
A3.10
OF 8 SHEETS

Plotted: 11-09-20@12:23pm (ACAD Ver 22.0s (LMS Tech))
Border Rev: 2005-03-18
File Name: 2009062-A3.10.dwg