# NEW RESIDENCE: YES TOWNHOMES FOUNDATION AND FRAMING DESIGN

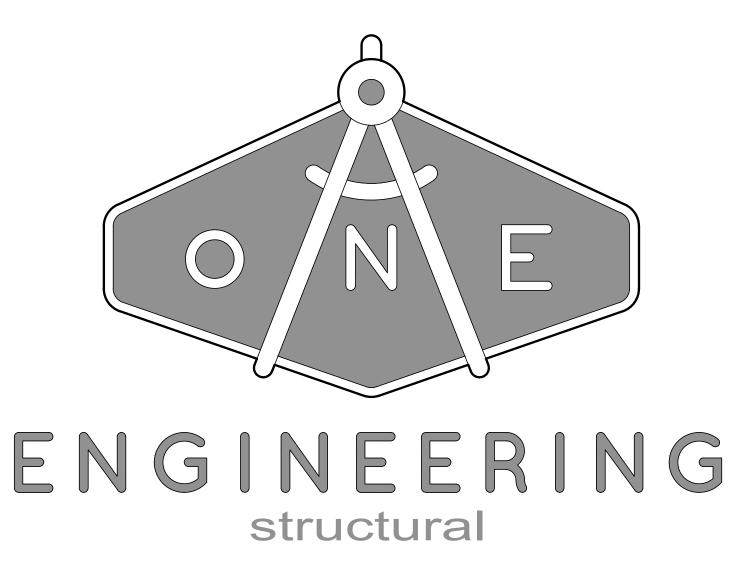
142 UNIVERSITY AVENUE SAN ANTONIO, TEXAS 78201

FOR

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A-1 ENGINEERING, LLC



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TYPICAL FRAMING DETAILS

ENGINEERING

F-12583

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W STRUCTURAL DESIGN. TES LOWING UNDATION AND FRAMING DESIGN: UNIVERSITY AVE
N ANTONIO, TEXAS 78201

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ISSUE DATE: 11.14.2022

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# STRUCTURAL GENERAL NOTES AND SPECIFICATIONS:

## (01 40 00) STRUCTURAL GENERAL NOTES:

- 1)  $\,\,$  THESE DOCUMENTS WERE PREPARED FOR THE SOLE USE OF THIS PROJECT. THIS SET OF DOCUMENTS AND INDIVIDUAL SHEETS ARE COPY RIGHT PROTECTED AND MAY NOT BE REPRODUCED, DISTRIBUTED OR PUBLISHED TO THE PUBLIC OR FOR ANY OTHER USE, PROJECT, CONSTRUCTION, RESEARCH, ILLUSTRATION OR MEDIA WITHOUT EXPRESSED WRITTEN CONSENT BY A-1 ENGINEERING. THE PROJECT OWNER, CONTRACTORS AND CONSULTANTS THAT ARE BIDDING, CONSTRUCTING OR DESIGNING ELEMENTS FOR THIS PROJECT MAY REPRODUCE THESE DOCUMENTS FOR THEIR USE IN THEIR ENTIRETY.
- THE SPECIFICATIONS FOR FASTENERS, ANCHORING SYSTEMS, FRAMING MEMBERS, FOUNDATIONS, MATERIALS AND OVERALL STRUCTURAL DESIGNS PROVIDED IN THESE DOCUMENTS ARE SOLELY APPLICABLE TO THIS DESIGN. DO NOT USE OR INTERPRET THESE SPECIFICATIONS AND DESIGN FOR OTHER USES, PROJECTS OR CONSTRUCTION TYPES OR SYSTEMS.
- 3) UNLESS NOTED OTHERWISE, A-1 ENGINEERING, LLC, IS NOT ACCEPTING THE RESPONSIBILITY OF "DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE" FOR THIS PROJECT. REFER TO CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE FOR GUIDANCE ON THE PROJECT SPECIAL INSPECTIONS AND THE LOCAL BUILDING OFFICIAL.
- 4) THE TEXAS ARCHITECTURAL BARRIERS ACT (ARTICLE 9102, TEXAS CIVIL STATUTES) REQUIRES THE PRIME DESIGN CONSULTANT SUBMIT CONSTRUCTION DOCUMENTS FOR ALL PROJECTS WITH AN ESTIMATED CONSTRUCTION COST OF \$50,000 OR MORE TO THE TEXAS DEPARTMENT OF LICENSING AND REGULATION FOR REVIEW BEFORE COMMENCING CONSTRUCTION. FAILURE TO COMPLY MAY RESULT IN UP TO \$1,000 PER DAY ADMINISTRATIVE PENALTIES FOR EACH VIOLATION. THE OWNER AND PRIME DESIGN CONSULTANT UNDERSTAND A-1 ENGINEERING WILL PERFORM ONLY STRUCTURAL ENGINEERING SERVICES, WHICH DOES NOT INCLUDE SUBMITTING DOCUMENTS TO THE TEXAS DEPARTMENT OF LICENSING AND REGULATION.
- 5) THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE SITE CONDITIONS. IGNORANCE OF CONDITIONS IS NOT (01 33 00) STRUCTURAL SUBMITTALS A BASIS FOR A CLAIM FOR ADDITIONAL COMPENSATION. LAYOUT THE BUILDING BY A LICENSED SURVEYOR.
- 6) DRAWINGS OF SPECIFIC DETAILS ON THE DRAWINGS INDICATE THE INTENT OF THE STRUCTURAL DESIGN AND IN MOST CASES, ARE TYPICAL CONDITIONS OR VERY SIMILAR TO OTHER DETAILS. CONSIDER TYPICAL CONDITIONS NOT NECESSARILY NOTED AS TYPICAL AS TYPICAL FOR OTHER CONDITIONS. NOTIFY THE STRUCTURAL ENGINEER IF FIELD VERIFIED CONDITIONS LIMIT, INHIBIT OR PREVENT THE INTENDED DESIGN FROM BEING CONSTRUCTED.
- 7) UNDERSTANDING THE STRUCTURAL REQUIREMENTS SHOWN ON THE STRUCTURAL DOCUMENTS REQUIRES COOPERATION AMONG ALL PARTIES INVOLVED. DESIGN AND CONSTRUCTION ARE COMPLEX. ALTHOUGH A-1 ENGINEERING DESIGNED THE PROJECT WITH DUE CARE AND DILIGENCE, WE DO NOT GUARANTEE PERFECTION. COMMUNICATION IS NECESSARY. IMMEDIATELY REPORT STRUCTURAL DISCREPANCIES FOR OUR INTERPRETATION. CONSIDER UNRESOLVED DISCREPANCIES AS THE MORE COSTLY INTERPRETATION OF THE
- COMBINING ALL CONSTRUCTION DOCUMENTS WITH THE STRUCTURAL DOCUMENTS DEFINES THE TOTAL PROJECT. THE STRUCTURAL DOCUMENTS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE MEANS OR METHODS OF CONSTRUCTION, VERIFY ALL FIELD CONDITIONS THAT AFFECT NEW AND EXISTING CONSTRUCTION BEFORE STARTING CONSTRUCTION. TAKE ALL MEASURES NECESSARY TO PROTECT THE SAFETY OF THE PUBLIC ALONG WITH THE SAFETY OF THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE BUT NOT BE LIMITED TO BRACING AND SHORING OF DEAD LOADS, CONSTRUCTION LOADS AND WIND LOADS. CORRECT AT OWN EXPENSE ANY SUBSIDENCE STRUCTURAL DAMAGE OR OTHER OBJECTIONABLE CONDITIONS CAUSED BY
- 9) THE STRUCTURAL DRAWINGS WERE DEVELOPED BASED ON OUR INTERPRETATION AND REFERENCE TO ARCHITECTURAL DRAWINGS PROVIDED TO A-1 ENGINEERING. OUR DIMENSIONS, LAYOUT, ORIENTATION, LUGS, DROPS, AND SLOPES SHOULD BE VERIFIED WITH THE ARCHITECT PRIOR TO CONSTRUCTION. A-1 ENGINEERING SHOULD BE CONTACTED PRIOR TO CONSTRUCTION TO ADJUST VERIFIED DIMENSIONS SHOWN ON OUR PLANS.
- 10) WE RECOMMEND THE OWNER, CONTRACTORS AND DESIGN CONSULTANTS FOR THE PROJECT TO HAVE A PRE-CONSTRUCTION MEETING PRIOR TO COMMENCING CONSTRUCTION.
- 11) QUESTIONS AND INQUIRIES BY CONTRACTORS TO THE STRUCTURAL ENGINEER SHOULD BE SENT IN WRITING FOLLOWING A FORMAL "REQUEST FOR INFORMATION (RFI)" PROCESS AND FORM DEVELOPED BY THE CONTRACTOR. ALLOW AT LEAST 5 BUSINESS DAYS FOR A RESPONSE. RFI'S RECEIVED AFTER 3PM WILL BE CONSIDERED RECEIVED THE NEXT BUSINESS DAY.
- 12) CONTRACTORS MAY PROPOSE ALTERNATIVE PRODUCTS AND DESIGNS FROM THOSE SPECIFIED IN THESE DOCUMENTS FOR REVIEW BY THE STRUCTURAL ENGINEER. ALTERNATIVE PRODUCTS AND DESIGNS SHOULD BE SUBMITTED WITH A COVER LETTER OR SUBMITTAL FORM EXPLAINING THE REASON FOR THE ALTERNATIVE PROPOSAL ALONG WITH SUPPORTING DOCUMENTATION THAT SHOWS OR EXPLAINS HOW THE PRODUCT OR DESIGN IS EQUIVALENT OR BETTER THAN THE SPECIFICATION IN THESE DOCUMENTS. SUBMITTAL OF THE ALTERNATIVE PRODUCTS OR DESIGNS DOES NOT IMPLY OR SUGGEST AUTOMATIC APPROVAL OF THE SUBMITTAL ALTERNATIVE PRODUCTS OR DESIGNS USED IN LIEU OF THE SPECIFICATIONS AND DESIGN IN THESE DOCUMENTS WITHOUT APPROVAL MAY REQUIRE REMOVAL.
- 13) THE BUILDING CODE REQUIREMENTS FOR 2018 INTERNATIONAL BUILDING CODE IS THE BASIC CODE DOCUMENT USED IN THE PREPARATION OF THESE STRUCTURAL DOCUMENTS. ADDITIONAL CODES AND REFERENCES ARE AS NOTED. ALL STRUCTURAL WORK SHALL BE ACCORDING TO ALL LOCAL CODES IN ADDITION TO THIS BASIC CODE
- 14) THE STRUCTURAL ENGINEER-OF-RECORD PREPARED SPECIFICATIONS FOR STRUCTURAL RELATED PORTIONS OF THE PROJECT AND HAS INCLUDED THESE SPECIFICATIONS ON THE STRUCTURAL DRAWINGS. ARCHITECTURAL SPECIFICATIONS FOR NON-STRUCTURAL PORTIONS OF THE PROJECT ARE INCLUDED IN THE PROJECT MANUAL.
- THE SUBSURFACE SOILS. THE FINAL FINISHED ELEVATION SHOULD BE CONSIDERED TEMPORARY AND MAY FLUCTUATE WITH SEASONAL MOISTURE CONTENTS. VARIATIONS IN MOISTURE CONTENT MAY RESULT FROM SOURCES SUCH AS SEASONAL DRYING OF THE SOILS. BROKEN PLUMBING, IRRIGATION, AND PRECIPITATION, THE WATER IN AN EFFORT TO MINIMIZE THE FLUCTUATION OF THE FINISHED FLOOR ELEVATION. WE ANTICIPATE THE DIFFERENTIAL MOVEMENTS OF THE SUBSURFACE TO BE AT LEAST 1-INCH VERTICALLY.
- 16) THE FOUNDATION DESIGN DOES NOT CONSIDER THE REMOVAL AND REPLACEMENT OF SOILS OR THE PREPARATION OF THE SELECT STRUCTURAL FILL MATERIAL (BUILDING PAD): CONDITIONING OF SOILS FOR GEOTECHNICAL PURPOSES. WE RECOMMEND CONSULTING WITH A GEOTECHNICAL ENGINEER FOR SITE SPECIFIC GEOTECHNICAL CONSIDERATIONS TO ACCOMMODATE OUR DESIGN.

# STRUCTURAL DESIGN CRITERIA

17) THE DESIGN OF STRUCTURAL FRAMING MEMBERS WAS BASED ON ALLOWABLE STRESS DESIGN METHODS

DESIGN LOAD COMBINATIONS (ALLOWABLE STRESS DESIGN METHOD) D + L + (LR OR S OR R)D + (W OR 0.7E) + L + (LR OR S OR R)

0.6D + 0.7E18) STRUCTURAL DESIGN IS BASED ON THE FOLLOWING LOADING CONDITIONS (WERE APPLICABLE):

REFER TO THE ARCHITECTURAL FLOOR PLANS FOR AREA USE AND OCCUPANCY TO CORRELATE THE APPLICABLE LOADING CONDITION.

- A) IBC 1603.1.1: FLOOR LIVE LOADS: FLOOR LIVE LOADS = 40 PSF
- B) IBC 1603.1.2: ROOF LIVE LOADS:
- ROOF LIVE LOADS = 12/16/20 PSF, TRIBUTARY AREA CONSIDERED, PONDING NOT CONSIDERED ROOF UPLIFT = 5 PSF
- C) DEAD LOADS:
- FLOOR = SELF WEIGHT ROOF = SELF WEIGHT
- D) IBC 1603.1.3: GROUND SNOW LOAD = 5 PSF, IMPORTANCE FACTOR (I) = 1.0
- E) IBC 1603.1.4: WIND LOADS
- V ULT AT EXP. C = 115 MPH
- ASCE 7 METHOD 2 BUILDING AND OTHER STRUCTURES <= 60 STRUCTURE TYPE = BUILDING

- E) IBC 1603.1.5: EARTHQUAKE DESIGN DATA:
- RISK CATEGORY: II SEISMIC IMPORTANCE FACTOR, I<sub>E</sub>: 1.0
- MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETERS: S<sub>s</sub>: 0.051
- S<sub>1</sub>: 0.022 SITE CLASS: D
- DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS: S<sub>DS</sub>: 0.055
- S<sub>D1</sub>: 0.035 SEISMIC DESIGN CATEGORY: A BASIC SEISMIC FORCE-RESISTING SYSTEM(S): CONTINUOUSLY SHEATED SHEAR WALLS
- F) IBC 1603.1.9: ROOF RAIN LOAD RAIN INTENSITY: 4.25" PER HOUR
- 19) IBC 1603.1.6: SOIL DESIGN PARAMETERS:

GREATER THAN OR EQUAL TO 15

A) ALLOWABLE SOIL BEARING CAPACITY (F'P) TOTAL LOAD = 1500 PSF

SUBMIT TO THE STRUCTURAL ENGINEER FOR REVIEW APPROPRIATE SCHEDULES, SHOP DRAWINGS, SAMPLES, TEST REPORTS. AND PRODUCT DATA THAT IS RELATED TO THE STRUCTURAL PORTION OF THE WORK ACCORDING TO AIA DOCUMENT A201 GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION. NO WORK SHALL BE FABRICATED UNTIL STRUCTURAL ENGINEER'S REVIEW HAS BEEN OBTAINED. A LIST OF STRUCTURAL SUBMITTALS REQUIRED FOR THIS PROJECT IS:

DATE BY

FABRICATION / ERECTION DRAWINGS: FOUNDATION REINFORCING STEEL:

15, AS OUTLINED IN CHAPTER 18 OF THE IBC.

THE SOILS SUPPORTING THE FOUNDATION ARE ASSUMED EXPANSIVE WITH AN EFFECTIVE PLASTICITY INDEX (PI) >

REMARKS

EARTHWORK CONSTRUCTION CONSIDERATIONS

(31 23 00) BUILDING PAD - SOIL PREPARATION:

- THE SITE SHOULD BE GRADED SUCH THAT SURFACE WATER RUNOFF IS DIRECTED AWAY FROM ANY EXCAVATIONS DURING CONSTRUCTION. IN ADDITION, SITE GRADING SHOULD ALLOW FOR SURFACE AND ROOF DRAINAGE AWAY FROM THE STRUCTURE DURING ITS DESIGN LIFE. ROOF DRAINS AND DOWNSPOUTS SHOULD DISCHARGE WATER ON ADJACENT PAVEMENTS OR EXTEND AT LEAST FIVE (5) FEET BEYOND THE BUILDING EDGE. WE SUGGEST VERIFYING FINAL GRADES AROUND THE STRUCTURE TO DOCUMENT THAT EFFECTIVE DRAINAGE HAS BEEN
- 2) THE SURFACE SOILS IN THIS VICINITY ARE MOISTURE SENSITIVE, AND SO ANY UNCONTROLLED SURFACE FLOW ACROSS THE SITE COULD RESULT IN UNDESIRED INFILTRATION AND FUTURE DIFFICULTIES WITH SWELL. FOR THIS NATURAL WATER FLOW AND CONTROL EROSION.
- EXPOSURE TO THE ENVIRONMENT MAY WEAKEN THE SOILS AT THE FOUNDATION BEARING LEVEL IF THE EXCAVATIONS REMAIN OPEN FOR EXTENDED PERIODS OF TIME. THEREFORE, FOUNDATION CONCRETE AND SELECT FILL MATERIAL SHOULD BE PLACED AS SOON AS POSSIBLE AFTER THE EXCAVATIONS ARE COMPLETED.

# PREPARATION OF THE EXISTING SUBGRADE SOILS

- 1) EARTHWORK BELOW THE BUILDING SHALL CONSIST OF THE CONSTRUCTION OF A BUILDING PAD OF SELECT COMPACTED FILL MATERIAL OVER MOISTURE CONDITIONED COMPACTED EXISTING SOILS. THE CONTRACTOR SHALL VERIFY THE GRADES ADJACENT TO THE FOUNDATION AND AT THE SITE WILL ALLOW FOR POSITIVE DRAINAGE OF WATER AWAY FROM THE FOUNDATION. ENSURE THE FINISHED FLOOR ELEVATION OF THE FOUNDATION IS AT LEAST 6-INCHES ABOVE THE ADJACENT SOIL GRADE. A 10-FEET WIDE CONCRETE APRON SHALL ALSO BE CONSTRUCTED ALONG THE FULL PERIMETER OF THE BUILDING.
- 2) DISCUSSION OF PAD PREPARATION: PER IBC 1809.2, SUPPORTING SOILS, SHALLOW FOUNDATION SHALL BE BUILT ON UNDISTURBED SOIL, COMPACTED FILL MATERIAL OR CONTROLLED LOW-STRENGTH MATERIAL. COMPACTED FILL MATERIAL SHALL BE PLACED IN ACCORDANCE WITH SECTION 1804.5 AND AS SPECIFIED BY THE GEOTECHNICAL ENGINEER. DEVIATION FROM THIS REQUIREMENT AND RECOMMENDATION MAY RESULT IN EXCESSIVE SETTLEMENT, SOIL CONSOLIDATION, OR SOIL SHRINKAGE.
- ) AN INDEPENDENT SOILS INSPECTOR SHOULD BE RETAINED TO MONITOR, TEST AND REPORT THE PREPARATION AND CONDITION OF THE SOILS DURING CONSTRUCTION. INADEQUATE SOIL PREPARATION MAY RESULT IN EXCESSIVE SOIL SETTLEMENT, CONSOLIDATION OR HEAVING.
- 4) REMOVE THE TOP 8-INCHES OF THE EXISTING SOIL TO INCLUDE ANY ROOTS OR ORGANIC MATERIAL.
- 15) DIFFERENTIAL MOVEMENT OF THE FOUNDATION WILL OCCUR WITH VARIATIONS IN THE MOISTURE CONTENT OF 5) SCARIFY THE EXPOSED SUBGRADE TO A DEPTH OF 8-INCHES. COMPACT THE EXPOSED SCARIFIED SUBGRADE TO DRY DENSITY OF AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY STANDARD PROCTOR COMPACTION TEST METHOD ASTM D-698 AT OPTIMUM MOISTURE CONTENT (-1 TO +3%).
- PROPERTY OWNER SHOULD IMPLEMENT A MAINTENANCE PLAN TO MONITOR AND REMEDIATE THE PONDING OF 6) COORDINATE INSPECTION AND TESTING SERVICES IN ORDER FOR THE SPECIAL INSPECTOR TO TEST THE SUBGRADE MOISTURE/DENSITY AT LEAST EVERY 2,500 SF OF BUILDING PAD AREA FOR "DENSITY CONTROL OF COMPACTION" ACCORDING TO THE LATEST ASTM D-2922 AND ASTM D-3017 (AT LEAST 3 TESTS MINIMUM PER PAD).

AN INDEPENDENT SOILS INSPECTOR SHOULD BE RETAINED TO MONITOR, TEST AND REPORT THE PREPARATION AND CONDITION OF THE SOILS DURING CONSTRUCTION. INADEQUATE SOIL PREPARATION MAY RESULT IN EXCESSIVE SOIL SETTLEMENT, CONSOLIDATION OR HEAVING.

OVER THE COMPACTED EXISTING SOILS:

OPTION 1: PLACE SELECT STRUCTURAL FILL (BASE MATERIAL) IN 8-INCHES LOOSE LIFTS, MOISTURE CONDITION AND COMPACT TO AT LEAST 6-INCHES IN THICKNESS. COMPACTION OF THE FILL MATERIAL SHALL BE COMPLETED WITH A PNEUMATIC TAMPER. COMPACT THE EXPOSED SCARIFIED SUBGRADE TO DRY DENSITY OF AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY STANDARD PROCTOR COMPACTION TEST METHOD ASTM D-698 AT OPTIMUM MOISTURE CONTENT (-2 TO +2%).

OPTION 2: OVER THE COMPACT NATURAL SOIL, BAG FILL THE STRUCTURAL FILL (BASE MATERIAL) IN 8-INCHES MOISTURE CONDITIONED AND COMPACTED LIFTS. FILL MATERIAL SHALL NOT BE BAGGED LOOSE. COMPACT ALL FILL MATERIAL WITH A PNEUMATIC TAMPER. BAG FILL OPTION IS LIMITED TO 2'-0" MAX THICKNESS. REFER TO OPTION 1 IF FILL THICKNESS WILL EXCEED 2'-0" THICK.

3) SELECT FILL BELOW THE SLAB SHALL MEET THE FOLLOWING SPECIFICATIONS:

TEXAS DEPARTMENT OF TRANSPORTATION GRADE A, TYPE I OR II BASE MATERIAL. AT NO TIME SHALL OFFSITE SAND OR "BORROW" (PIT) FILL BE SUBSTITUTED FOR SELECT FILL

- 4) UTILITY TRENCHES WITHIN THE BUILDING SHALL BE CAREFULLY BACKFILLED, MOISTURE CONDITIONED AND COMPACTED SO THAT THE TRENCH DOES NOT BECOME AN AVENUE FOR MOISTURE TO MORE FREELY TRAVEL UNDER THE BUILDING.
- 5) COORDINATE BUILDING OFFICIAL INSPECTION AFTER EXCAVATING FOR BEAMS AND PLACEMENT OF ALL REINFORCING STEEL, WITH FORMWORK IN PLACE. (IBC CHAPTER 109.3.1) THE BUILDING OFFICIAL MAY ACCEPT A REVIEW BY THE STRUCTURAL ENGINEER IN PLACE OF THE BUILDING OFFICIAL CONDUCTING THE REVIEW.
- 6) THE FINISH SURFACE GRADING, FINAL DRAINAGE OF SURFACE WATER AND LANDSCAPING SHALL BE CONSTRUCTED IN A MANNER TO ENSURE POSITIVE DRAINAGE OF WATER AWAY FROM THE FOUNDATION. COMPACT ALL SOILS WITHIN 5' ADJACENT TO THE FOUNDATION WITH A PNEUMATIC TAMPER.
- 7) THE GROUND IMMEDIATELY ADJACENT TO THE FOUNDATION SHALL BE SLOPED AWAY FROM THE BUILDING AT A SLOPE OF NOT LESS THAN ONE UNIT VERTICAL IN 20 UNITS HORIZONTAL (5%) FOR A MINIMUM DISTANCE OF 10-FEET MEASURED PERPENDICULAR TO THE FACE OF THE WALL. IMPERVIOUS SURFACES WITHIN 10-FEET OF THE BUILDING FOUNDATION SHALL BE SLOPED A MINIMUM OF 2% AWAY FROM THE FOUNDATION.

(33 00 00) - CONCRETE:

- ACI 347. EXTEND FORMWORK AT LEAST SIX (6) INCHES BELOW THE FINISH GRADE ELEVATION ON PERIMETER BEAMS. CUT TEMPORARY PORT OPENINGS IN ORDER TO DRAIN EXPOSED TRENCHES DURING CONSTRUCTION IN CASE OF INCLEMENT WEATHER.
- 3.2) TRENCH GRADE BEAMS IN ORDER TO PROVIDE THE BEAM CROSS SECTION INDICATED. BEAM AND SLAB DEPTHS AND WIDTHS INDICATED ARE MINIMUM ACCEPTABLE SIZES. LARGER SIZE BEAMS AND SLABS FORMED BY LESS ACCURATE TRENCHING MAY REQUIRE ADDITIONAL REINFORCING NOT SHOWN WHICH SHALL BE DETERMINED BY THE STRUCTURAL ENGINEER DURING CONSTRUCTION REVIEW. ALL LOOSE DIRT FROM SIDES AND BOTTOMS OF TRENCHES SHALL BE REMOVED. CUT HAUNCHES ON EACH SIDE OF TRENCHES OF ADEQUATE SIZE TO MAINTAIN THE VERTICAL SIDES OF THE TRENCH. PENETRATE EXTERIOR BEAM SOFFITS A MINIMUM OF 30-INCHES BELOW THE FINAL EXTERIOR GRADE OR UNTIL SOLID ROCK IS EXPOSED.
- 3.3) WHERE TREES EXIST WITHIN FIVE FEET OF FOUNDATION, DEEPEN BEAMS A MINIMUM OF 24-INCHES BELOW SPECIFIED BEAM DEPTH FOR A DISTANCE OF TEN FEET IN EACH DIRECTION OF TREE (TOTAL LENGTH OF TWENTY FEET). CUT OFF AND TREAT ALL ROOTS EXTENDING UNDER THE FOUNDATION TO PREVENT ANY FUTURE ROOT GROWTH UNDER THE FOUNDATION. REINFORCE THE DEEPENED BEAM SECTION WITH (2)-#6 BARS CONTINUOUS AND PROVIDE 'Z' TRANSITION BARS AT DEEPENED SECTION ENDS. LAP BOTTOM BEAM REINFORCING.
- THE SOILS SUPPORTING THE FOUNDATION ARE EXPANSIVE WITH AN EFFECTIVE PLASTICITY INDEX (PI) 3.4) TRENCH BELOW THE SLAB THICKNESS FOR PLACING ELECTRICAL CONDUIT AND PLUMBING LINES. BURY ELECTRICAL CONDUIT AND PLUMBING LINES BELOW THE SLAB THICKNESS AND OUTSIDE OF THE GRADE BEAM TRENCHES. DO NOT PLACE CONDUIT OR PLUMBING PIPES UNDER AND PARALLEL TO GRADE BEAMS. WRAP ANY SEWER, STORM, WATER, OR ELECTRICAL PIPING LINES CROSSING GRADE BEAMS WITH PVC SLEEVES FOR PROTECTION FROM GROUND MOVEMENTS. EXTEND SLEEVES AT LEAST 6-INCHES PAST THE TRENCH WIDTH.  ${\tt ISOLATE\ CONCRETE-ENCASED\ GROUNDING\ ELECTRODE\ FROM\ STRUCTURAL\ REINFORCING.}$ 
  - 3.5) REINFORCING STEEL SHALL COMPLY WITH THE REQUIREMENTS OF ASTM A-615, GRADE 60. REINFORCING STEEL SHALL BE CONTINUOUS WITH SPLICES LAPPED AT LEAST 40 DIAMETERS. STIRRUPS AND TIES MAY BE GRADE 40 FOR BARS #3 AND SMALLER. TIE WIRE SHALL BE 18 GAGE ANNEALED TYPE.
  - 3.6) FABRICATE BENT BARS ACCORDING TO ACI 315. INSTALL REINFORCING WITH CLEARANCE FOR CONCRETE COVERAGE AROUND REINFORCING STEEL ACCORDING TO ACI 318. SUBMIT FOR REVIEW FABRICATION AND PLACEMENT SHOP DRAWINGS INDICATING BAR SIZES, SPACINGS, LENGTHS, LAPS, LOCATIONS, AND QUANTITIES OF REINFORCING STEEL, BENDING AND CUTTING SCHEDULES, AND SUPPORTING AND SPACING DEVICES.
  - 3.7) CONCRETE SHALL DEVELOP A 28-DAY COMPRESSIVE STRESS (F'C) OF AT LEAST 3,000 PSI. MIX CONCRETE ACCORDING TO ACI 301. WATER CEMENT RATIO SHALL NOT EXCEED 0.50 (3,000 PSI). USE A MAXIMUM AGGREGATE SIZE OF 1-1/8" OR ACCORDING TO ACI 318. MAXIMUM AGGREGATE SIZE BETWEEN BARS SHALL ALSO PERTAIN TO BETWEEN THE FORMS AND BARS.
  - 3.8) THE PROPORTIONS OF MATERIALS AND USE OF ADMIXTURES INFLUENCE THE CONCRETE STRENGTH ALONG WITH THE MEANS AND METHODS OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THAT THE CONCRETE IS SUITABLE FOR ITS INTENDED PURPOSE. THE ENGINEER RECOMMENDS THE CONTRACTOR CONSIDER THE FOLLOWING IN DETERMINING THE CONCRETE FOR THIS PROJECT: CEMENT SHALL BE TYPE 1 (GRAY). FLY ASH SHALL BE BORAL MATERIALS, CLASS C. IF FLY ASH IS USED, DO NOT EXCEED 20% OF THE TOTAL FLY ASH AND CEMENT USED BY WEIGHT. INCLUDE A POLYMERIC COMPOUND WATER-REDUCING ADMIXTURE THAT COMPLIES WITH ASTM C494. DO NOT ADD AN AIR ENTRAINMENT ADDITIVE. MIX SHALL RESULT IN A FINISHED CONCRETE PRODUCT WITH MOISTURE CONTENTS NECESSARY TO PROPERLY CURE THE CONCRETE. FLOOR SEALERS, HARDENERS, FINISHES AND COVERINGS SHALL BE COMPATIBLE WITH CONCRETE PROPERTIES (I.E., BUT NOT LIMITED TO, MOISTURE AND ALKALINITY PROPERTIES).
- REASON, IT IS STRONGLY URGED THAT FILL OPERATIONS BE PERFORMED IN SUCH A MANNER AS TO ENHANCE 3.9) BEFORE PLACEMENT OF ANY CONCRETE, SUBMIT CONCRETE MIX DESIGN(S) TO BE USED ON THE PROJECT. CONCRETE SHALL BE IN STRICT ACCORDANCE WITH THE MIX DESIGN.
  - 3.10) PLACE AND CURE CONCRETE ACCORDING TO ACI 302. IR. DO NOT USE CONCRETE THAT HAS NOT BEEN PLACED IN THE FORMS BEFORE 1.5 HOURS AFTER THE INITIAL MIXING WATER WAS ADDED, REGARDLESS OF TEMPERATURE OR SLUMP - NO EXCEPTIONS. FINISH ACCORDING TO ACI 117 TOLERANCES.
  - 3.11) COORDINATE STRUCTURAL ENGINEER'S REVIEW AND THE BUILDING OFFICIAL INSPECTION BEFORE EACH 3) INSTALL JOIST WITH RIGHT SIDE UP TO HAVE THE "TOP" STAMP ON THE TOP OF EACH JOIST CONCRETE PLACEMENT. THE BUILDING OFFICIAL SHALL INSPECT FOOTINGS AND FOUNDATIONS (IBC SECTION 110) THE BUILDING OFFICIAL MAY ACCEPT A REVIEW BY THE STRUCTURAL ENGINEER IN PLACE OF THE BUILDING OFFICIAL CONDUCTING THE REVIEW.

- 6.1) ALL LUMBER SHALL BE PS 20, NEW AND UNDAMAGED GRADED LUMBER IN ACCORDANCE WITH NFPA GRADING RULES. LUMBER STRESSES SPECIFIED DO NOT INCLUDE REPETITIVE MEMBER USE. FRAMING MEMBERS SHALL BE S4S UNLESS NOTED OTHERWISE. ALL WOOD BEARING ON CONCRETE OR MASONRY OR PERMANENTLY EXPOSED TO WEATHER SHALL BE WOLMANIZED.
  - A) ROUGH FRAMING: (2x4 - 2x12) SHALL CONSIST OF #2 SOUTHERN YELLOW PINE (SYP) WITH 19 PERCENT MAXIMUM MOISTURE 8) CONSTULT WITH THE STRUCTURAL ENGINEER TO REPAIR OR REINFORCE TRIMABLE JOIST THAT ARE DAMAGED IN CONTENT HAVING NO LESS THAN AN ALLOWABLE BENDING STRESS (FB) OF.

| SIZE | FB       |
|------|----------|
| 2x4  | 1,100 PS |
| 2x6  | 1,000 PS |
| 2x8  | 925 PSI  |
| 2x10 | 800 PSI  |
| 2x12 | 750 PSI  |

FINISH FOR OTHER INTERIOR LOCATIONS.

- A MODULUS OF ELASTICITY OF 1,400,000 PSI, AND AN ALLOWABLE SHEAR STRESS OF 175 PSI.
- B) FRAMING DESIGNATED AS LVL BEAMS ON THE PLANS SHALL CONSIST OF SOLID PLYWOOD BEAMS MANUFACTURED BY THE BOISE-CASCADE TRUS-JOIST CORPORATION OR LOUISIANA PACIFIC AND SHALL HAVE NO LESS THAN AN ALLOWABLE BENDING STRESS (FB) OF 2,600 PSI, A MODULUS OF ELASTICITY OF 1,800,000 PSI, AND AN ALLOWABLE SHEAR STRESS OF 185 PSI (OR LARGER), UNLESS INDICATED OTHERWISE.
- 6.1) NAILS SHALL BE GALVANIZED FOR EXTERIOR LOCATIONS, HIGH HUMIDITY LOCATIONS, AND TREATED WOOD; PLAIN FINISH FOR OTHER INTERIOR LOCATIONS; SIZE AND TYPE TO SUIT APPLICATION. TYPICAL NAILING SHALL BE WITH

COMMON WIRE NAILS. STAPLES SHALL NOT BE USED INSTEAD OF REQUIRED NAILS. BOLTS, NUTS, WASHERS, LAGS AND SCREWS SHALL BE MEDIUM CARBON STEEL; SIZE AND TYPE TO SUIT APPLICATION; GALVANIZED FOR EXTERIOR LOCATIONS, HIGH HUMIDITY LOCATIONS, AND TREATED WOOD; PLAIN

BOTTOM PLATE ANCHORS TO FOUNDATION SHALL BE A307 CARBON STEEL, 1/2-INCH DIAMETER SHANK, WITH 7-INCHES EMBEDMENT INTO THE CONCRETE WITH 90 DEGREE BEND. FASTEN TO PLATES WITH HEXAGONAL HEAD NUTS AND CUT WASHERS. PROVIDE CONTINUOUS BEAD OF SEALANT BETWEEN PLATE AND FOUNDATION. INTERIOR NON-LOAD BEARING WALL BOTTOM PLATES MAY BE FASTENED TO FOUNDATION WITH POWDER DRIVEN FASTENERS INSTEAD OF WITH BOLTS.

PLYWOOD SHEATHING CLIPS SHALL BE SIMPSON STRONG-TIE 18 GAGE GALVANIZED STEEL X PLYWOOD

UNLESS OTHERWISE INDICATED, USE TYPE LUS JOIST HANGERS AS MANUFACTURED BY THE SIMPSON COMPANY FOR FLUSH TYPE JOIST CONNECTIONS TO SUPPORTING BEAMS. COLUMN CAP AND BASE CONNECTIONS SHALL BE AS MANUFACTURED BY THE SIMPSON COMPANY, TYPE AS RECOMMENDED BY THE MANUFACTURER FOR THE SIZE OF JOIST OR COLUMN AND BEAMS BEING CONNECTED.

- 6.2) STORE FRAMING MATERIAL A MINIMUM OF 12-INCHES ABOVE THE GROUND IN A MANNER TO ALLOW FOR PROPER DRAINAGE, VENTILATION AND PROTECTION FROM THE WEATHER.
- 6.3) AT HEADERS BUILT-UP WITH MULTIPLE SYP #1/#2 2X MEMBERS, NAIL TOGETHER WITH AT LEAST 16d NAILS AT 16-INCHES ON CENTER ALONG EACH EDGE AND WITH AT LEAST (1)-16d NAIL PER 6-INCHES NOMINAL DEPTH OF HEADER. PROVIDE PLYWOOD SPACERS BETWEEN 2X MEMBERS TO WIDEN HEADER TO THE WIDTH OF THE STUD
- AT BEAMS BUILT-UP WITH MULTIPLE LVL MEMBERS, SCREW TOGETHER WITH AT LEAST #10 SCREWS AT 12-INCHES ON CENTER ALONG EACH EDGE AND WITH AT LEAST (1) #10 SCREW PER 6-INCHES NOMINAL DEPTH OF HEADER. PROVIDE PLYWOOD SPACERS BETWEEN 2X MEMBERS TO WIDEN HEADER TO THE WIDTH OF THE STUD WALL.
- 6.4) FRAMING MEMBERS SHALL BE INSTALLED WITHIN 1/4-INCH FROM TRUE POSITION. SQUARE END CUTS SHALL BE WITHIN 1/16-INCH PER FOOT OF DEPTH AND WIDTH. END SURFACES SHALL BE CUT TO PROVIDE CONTACT OVER SUBSTANTIALLY THE ENTIRE SURFACE. LENGTHS OF FRAMING MEMBERS SHALL BE 1/16-INCH + UP TO 20-FEET IN LENGTH, AND 1/16-INCH PER 20-FEET OF SPECIFIED LENGTH FOR MEMBERS OVER 20-FEET IN LENGTH.
- 6.5) MAINTAIN SHEATHING SURFACE FLATNESS OF MAXIMUM 1/8-INCH IN 10-FEET OR MORE

- 3.1) CONSTRUCT FORMWORK TO MAINTAIN TOLERANCES AS OUTLINED IN ACI 347. REUSE FORMWORK ACCORDING TO 6.6) INSTALL BUILDING PAPER ON ALL EXTERIOR WALLS. INSTALL HORIZONTALLY AND WEATHER LAP A MINIMUM OF 2-INCHES FOR HORIZONTAL JOINTS AND 6-INCHES FOR VERTICAL JOINTS. STAGGER VERTICAL JOINTS.
  - 6.7) PROTECTION OF WOOD AND WOOD BASED PRODUCTS FROM DECAY SHALL BE PROVIDED IN THE FOLLOWING LOCATIONS BY THE USE OF NATURALLY DURABLE WOOD OR WOOD THAT IS PRESERVATIVE-TREATED IN ACCORDANCE WITH AWPA U1 FOR THE SPECIES, PRODUCT, PRESERVATIVE AND END USE. PRESERVATIVES SHALL BE LISTED IN SECTION 4 OF AWPA U1
    - 1. WOOD JOISTS OR THE BOTTOM OF A WOOD STRUCTURAL FLOOR WHEN CLOSER THAN 18-INCHES OR WOOD GIRDERS WHEN CLOSER THAN 12-INCHES TO THE EXPOSED GROUND IN CRAWL SPACES OR UNEXCAVATED AREA LOCATED WITHIN THE PERIPHERY OF THE BUILDING FOUNDATION.
    - 2. WOOD FRAMING MEMBERS THAT REST ON CONCRETE OR MASONRY EXTERIOR FOUNDATION WALLS AND ARE LESS THAN 8-INCHES FROM THE EXPOSED GROUND.
    - 3. SILLS AND SLEEPERS ON A CONCRETE OR MASONRY SLAB THAT IS IN DIRECT CONTACT WITH THE GROUND UNLESS SEPARATED FROM SUCH SLAB BY AN IMPERVIOUS MOISTURE BARRIER.
    - 4. THE ENDS OF WOOD GIRDERS ENTERING EXTERIOR MASONRY OR CONCRETE WALLS HAVING CLEARANCES OF LESS THAN 1/2-INCH ON TOPS, SIDES, AND ENDS.
    - 5. WOOD SIDING, SHEATHING, AND WALL FRAMING ON THE EXTERIOR OF A BUILDING HAVING A CLEARANCE OF LESS THAN 6-INCHES FROM THE GROUND OR LESS THAN 2-INCHES MEASURED VERTICALLY FROM CONCRETE STEPS, PORCH SLABS, PATIO SLABS AND SIMILAR HORIZONTAL SURFACES EXPOSED TO THE WEATHER.
    - 6. WOOD STRUCTURAL MEMBERS SUPPORTING MOISTURE-PERMEABLE FLOORS OR ROOFS THAT ARE EXPOSED TO THE WEATHER, SUCH AS CONCRETE OR MASONRY SLABS, UNLESS SEPARATED FROM SUCH FLOORS OR ROOFS BY AN IMPERVIOUS MOISTURE BARRIER.
    - 7. WOOD FURRING STRIPS OR OTHER WOOD FRAMING MEMBERS ATTACHED DIRECTLY TO THE INTERIOR OF EXTERIOR MASONRY WALLS OR CONCRETE WALLS BELOW GRADE EXCEPT WHERE AN APPROVED VAPOR RETARDER IS APPLIED BETWEEN THE WALL AND THE FURRING STRIPS OR FRAMING MEMBERS.
    - 8. WOOD PERMANENTLY EXPOSED TO WEATHER.

6.1) COORDINATE STRUCTURAL ENGINEER'S REVIEW AND THE BUILDING OFFICIAL INSPECTION.

THE BUILDING OFFICIAL SHALL INSPECT THE PRIMARY STRUCTURAL FRAMING. THE BUILDING OFFICIAL MAY ACCEPT A REVIEW BY A LICENSED PROFESSIONAL ENGINEER IN PLACE OF THE BUILDING OFFICIAL CONDUCTING HIS INSPECTION. (IBC CHAPTER 110.3.4)

1) TRIMABLE JOISTS ARE PREFABRICATED OPEN WEB TRUSS SYSTEMS THAT ALLOW FOR THE ENDS OF THE TRUSS TO BE TRIMMED TO ACCOMODATE REQUIRED SPANS AND FIT UP AS NEEDED. THE TRIMABLE JOIST IS NOT CUSTOM FABRICATED FOR ANY PARTICULAR PROJECT. THE CONTRACTOR SHALL PROVIDE A SUBMITTAL OF THE PROPOSED TRIMABLE JOIST THE MEETS OR EXCEEDS THE SPECIFICATION PROVIDED BELOW.

2) DESIGN CRITERIA:ALL LOADS ON JOIST ARE CONSIDERED UNIFORM DISTRIBUTED LOAD WITH ALLOWANCE FOR REPETITIVE USE (FACTORS) UNLESS NOTED OTHERWISE ON THE PLAN.

DESIGN DEAD LOAD: TOP CHORD: 10 PSF **BOTTOM CHORD: 5 PSF** 

DESIGN FLOOR LIVE LOAD: 40 PSF TOTAL LOAD ALLOABLE DEFLECTION: L/480

4) JOIST SHALL BEAR ON THE BOTTOM CHORD BENEATH THE TRIMABLE END SECTION OF THE JOIST. DO NOT TRIM FULLY REMOVE THE TRIM END SECTION OF THE JOIST END.

5) INSTALL VERTICAL 2X4 STIFFENERS AT ALL LOCATIONS WITH CONCENTRATED LOADS.

6) DO NOT ALTER. MODIFY, CUT OR REMOVE ANY SECTION OR PARTS OF THE TRUSS MEMBERS OR SECTIONS OF THE

7) DO NOT USE THE TRIMABLE JOIST AS A BEAM OR HEADER WITHOUT FIRST CONSULTING THE STRUCTURAL ENGINEER OR THE TRIMABLE JOIST MANUFACTURER.

SYSTEM HAS BEEN INSPECTED AND APPROVED BY THE ENGINEER AND THE BUILDING OFFICIAL.

THE FIELD PRIOR TO INSTALLATION. 9) COORDINATE WITH THE STRUCTURAL ENGINEER AND THE BUILDING OFFICIAL FOR THE INSPECTION OF THE FRAMING PRIOR TO THE INSTALLATION OF INSULATION OR FINISHES. DO NOT PAINT TRIMABLE JOIST UNTIL THE JOIST FRAMING

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DATE: 11.14.2022 MOISES A. CRUZ, P.E. LICENSED ENGINEER TX. NO. 108540 NOTÉ: THESE DRAWINGS ARE INCOMPLETE AND MAY NOT BE USED FOR REGULATORY APPROVAL PERMIT, OR CONSTRUCTION

ISSUE DATE: 11.14.2022

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# TABLE #1

| NAILING SCHEDULE                                  |                                    |  |  |  |
|---|------------------------------------|--|--|--|
| CONNECTION  | NAILING                            |  |  |  |
| JOIST OR TRUSS BEARING ON SILL OR GIRDER, TOENAIL | (3) 8d                             |  |  |  |
| BRIDGING TO JOIST, TOENAIL EACH END               | (2) 8d                             |  |  |  |
| SOLE PLATE TO JOIST OR BLOCKING, FACE NAIL        | 16d AT 16" O.C.                    |  |  |  |
| TOP PLATE TO STUD, END NAIL TO EACH STUD          | (2) 16d                            |  |  |  |
| STUD TO SOLE PLATE                                | (4) 8d TOENAIL OR (2) 16d END NAIL |  |  |  |
| DOUBLE STUDS, FACE NAIL                           | 16d AT 24" O.C.                    |  |  |  |
| DOUBLE TOP PLATES, FACE NAIL                      | 16d AT 16" O.C.                    |  |  |  |
| TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL     | 2 - 16d                            |  |  |  |
| CONTINUOUS HEADER, TWO PIECES                     | 16d AT 16" O.C. ALONG EACH EDGE    |  |  |  |
| CEILING JOISTS TO PLATE, TOENAIL                  | (3) 8d                             |  |  |  |
| CONTINUOUS HEADER TO STUD, TOENAIL                | (4) 8d                             |  |  |  |
| CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL   | (3) 16d                            |  |  |  |
| CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL     | (3) 16d                            |  |  |  |
| RAFTER OR TRUSS TO PLATE, TOE NAIL                | (3) 8d                             |  |  |  |
| BUILT-UP CORNER STUDS                             | 16d AT 24" O.C.                    |  |  |  |

- 1. MINIMUM NAILING SPECIFIED HEREIN SHALL BE PROVIDED UNLESS OTHERWISE NOTED ON DETAILS OR STRUCTURAL NOTES.
- 2. COMMON OR BOX NAILS MAY BE USED. 16d NAILS MAY BE EITHER COMMON OR SINKER.

# TABLE #2B

| STRUCTURAL SHEATHING / DECKING SCHEDULE |                                       |          |                 |                     |                 |                 |           |
|---|---------------------------------------|----------|-----------------|---------------------|-----------------|-----------------|-----------|
| STRUCTURAL                              | CLIE A TLUNIC TV/DE                   | EXPOSURE | THICKNESS       | SPAN                | NAILING PATTERN |                 |           |
| SYSTEM                                  | SHEATHING TYPE CATEGORY (MIN.) RATING | RATING   | EDGE<br>SUPPORT | INTERIOR<br>SUPPORT | NOTES           |                 |           |
| WALL SHEATHING                          | APA RATED SHEATHING                   | EXP. 1   | 7/16"           | 24/16               | 10d AT 6" O.C.  | 10d AT 12" O.C. | 1,2,3,4   |
| ROOF DECKING                            | APA RATED SHEATHING                   | EXP. 1   | 7/16"           | 24/16               | 8d AT 6" O.C.   | 8d AT 12" O.C.  | 1,2,3,4   |
| FLOOR DECKING                           | APA RATED SHEATHING                   | EXP. 1   | 3/4"            | 24/16               | 10d AT 6" O.C.  | 10d AT 12" O.C. | 1,2,3,4,6 |

- 1. STRUCTURAL PANELS SHALL BE LABELED / STAMPED WITH APA APPROVED MARKINGS AND LABELS SHOWING CONFORMANCE WITH SPECIFICATIONS.
- 2. ALL PANELS SHALL BE LAID OUT / ORIENTATED TO BE PERPENDICULAR TO SUPPORTS.
- 3. STAPLES MAY NOT BE SUBSTITUTED FOR NAILS.
- 4. BLOCK EDGES OF ALL WALL, ROOF, AND FLOOR SHEATHING PANELS.
- 5. O.C.= DENOTES ON-CENTER
- 6. TONGUE AND GROOVE

# TABLE #3B (SEE FRAMING PLAN)

| ROOF / CEILING / FLOOR FRAMING SCHEDULE                                    |              |                           |  |  |  |
|--|--------------|---------------------------|--|--|--|
| LABEL MEMBER SIZE GRADE  |              |                           |  |  |  |
| R1         COMMON RAFTER         2 x 6 AT 2'-0" O.C. U.N.O.         SYP #2 |              |                           |  |  |  |
| F1 FLOOR-TRUSS 12" DEEP TRIMMABLE JOIST AT 2'-0" O.C. U.N.O.               |              |                           |  |  |  |
| F2 FLOOR-JOIST 2 x 10 AT 2'-0" O.C. SYF                                    |              |                           |  |  |  |
| GT   | GIRDER TRUSS | 22" DEEP 4X- GIRDER TRUSS |  |  |  |

O.C. = DENOTES ON-CENTER

U.N.O. = DENOTES UNLESS NOTED OTHERWISE

# TABLE #4 (SEE FRAMING PLAN)

| WOOD HEADER SCHEDULE             |  |  |  |  |  |
|----------------------------------|--|--|--|--|--|
| MEMBER HEADER SPECIES JACK STUDS |  |  |  |  |  |
| (2) 2 x 6                        | SYP #2   | (1) SPF #2   |  |  |  |
| (2) 2 x 8                        | SYP #2   | (1) SPF #2   |  |  |  |
| (2) 2 x 10                       | SYP #2   | (2) SPF #2   |  |  |  |
| (2) 2 x 12                       | SYP #2   | (2) SPF #2   |  |  |  |
| (3) 2 x 12                       | SYP #2   | (2) SPF #2   |  |  |  |
|                                  | HEADER (2) 2 x 6 (2) 2 x 8 (2) 2 x 10 (2) 2 x 12 | HEADER SPECIES  (2) 2 x 6 SYP #2  (2) 2 x 8 SYP #2  (2) 2 x 10 SYP #2  (2) 2 x 12 SYP #2 |  |  |  |

# TABLE #5B (SEE FRAMING PLAN)

| WOOD WALL F            | WOOD WALL FRAMING SCHEDULE |         |              |  |  |  |
|------------------------|----------------------------|---------|--------------|--|--|--|
| LEVEL                  | SIZE/SPACING               | SPECIES | TOP OF PLATE |  |  |  |
| 1st FLOOR WALLS        | 2 x 6 AT 24" O.C.          | SPF #2  |              |  |  |  |
| 1st FLOOR BOTTOM PLATE | 2 x 6 TREATED              | SPF #2  |              |  |  |  |
| 1st FLOOR TOP PLATE    | (2) 2 x 6                  | SPF #2  | 8'-1"        |  |  |  |
| 2nd FLOOR WALLS        | 2 x 6 AT 24" O.C.          | SPF #2  |              |  |  |  |
| 2nd FLOOR BOTTOM PLATE | 2 x 6                      | SPF #2  |              |  |  |  |
| 2nd FLOOR TOP PLATE    | (2) 2 x 6                  | SPF #2  | 18'-2"       |  |  |  |
| 3rd FLOOR WALLS        | 2 x 6 AT 24" O.C.          | SPF #2  |              |  |  |  |
| 3rd FLOOR BOTTOM PLATE | 2 x 6                      | SPF #2  |              |  |  |  |
| 3rd FLOOR TOP PLATE    | (2) 2 x 6                  | SPF #2  | 28'-2"       |  |  |  |
| PARAPET WALLS          | 2 x 6 AT 24" O.C.          | SPF #2  |              |  |  |  |
| PARAPET BOTTOM PLATE   | 2 x 6                      | SPF #2  |              |  |  |  |
| PARAPET TOP PLATE      | (2) 2 x 6                  | SPF #2  | 34'-0"       |  |  |  |

# O.C. = DENOTES ON-CENTER

# TABLE #6 (SEE FRAMING PLAN)

| W    | WOOD BEAM SCHEDULE  |         |            |  |  |
|------|---------------------|---------|------------|--|--|
| BEAM | SIZE                | GRADE   | JACK STUDS |  |  |
| B1   | (2) 1.75" x 12" LVL | Fb=2600 | (2) SPF #2 |  |  |
| B2   | (2) 1.75" x 14" LVL | Fb=2600 | (3) SPF #2 |  |  |
| В3   | (2) 1.75" x 16" LVL | Fb=2600 | (4) SPF #2 |  |  |
| B4   | (2) 1.75" x 18" LVL | Fb=2600 | (4) SPF #2 |  |  |
| B5   | (2) 1.75" x 20" LVL | Fb=2600 | (4) SPF #2 |  |  |
| В6   | (2) 1.75" x 22" LVL | Fb=2600 | (4) SPF #2 |  |  |

# TABLE #7 (SEE FRAMING PLAN)

| WOOD HANGER SCHEDULE |  |                        |   |  |  |  |
|----------------------|--|------------------------|---|--|--|--|
| LABEL                | LABEL CONDITION HANGER MODEL TYPE  |                        |   |  |  |  |
| J1>                  | CEILING JOIST TO BEAM SIMPSON STRONG TIE LUS 2 x 4 - LUS24, 2 x 6 - LUS26, 2 x 8 - LUS28, 2 x 10 - LUS210, 2 x |                        |   |  |  |  |
| J2                   | 2X SAWN LUMBER TO BEAM   | SIMPSON STRONG TIE LUS | 2 x 4 - LUS24, 2 x 6 - LUS26, 2 x 8 - LUS28, 2 x 10 - LUS210, 2 x 12 - LUS212 |  |  |  |
| J3                   | LVL BEAM TO LVL BEAM   | THA4X-SERIES           | MATCH LVL DEPTH   |  |  |  |
| J5                   | 4X FLOOR TRUSS TO WOOD BEAM  | THA4X-SERIES           | MATCH TRUSS DEPTH   |  |  |  |

- 1. HANGER AND MODEL TYPE MANUFACTURED BY SIMPSON STRONG TIE
- 2. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR FASTENING TO ACHIEVE FULL DESIGN CAPACITY

# TABLE #8 (SEE FRAMING PLAN)

| WOOD COLUMN SCHEDULE                 |       |                |      |     |  |
|--------------------------------------|-------|----------------|------|-----|--|
| LABEL SIZE MATERIAL BASE MODEL NOTES |       |                |      |     |  |
| K1>                                  | 4 x 4 | TREATED SPF #2 | CB44 | 1,2 |  |

- 1. COLUMN BASE TYPE MANUFACTURED BY SIMPSON STRONG TIE
- 2. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR FASTENING TO ACHIEVE FULL DESIGN CAPACITY.

# TABLE #9 (SEE FRAMING PLAN)

|       | COLUMN CAP SCHEDULE   |           |                                       |                |  |  |
|-------|---|-----------|---------------------------------------|----------------|--|--|
| LABEL | CONDITION   | CAP MODEL | COMMENTS                              | LAYOUT DIAGRAM |  |  |
| (P1)  | CORNER COLUMN<br>WITH MAIN BEAM                                   | LCE       | USE FOR 4x4 AND 6x6<br>WOOD POST      | COLUMN         |  |  |
| (P2)  | INTERMEDIATE<br>COLUMN WITH BEAM                                  | CCQ       | MATCH CAP DIMENSIONS<br>TO BEAM WIDTH | COLUMN BEAM    |  |  |
| (P3)  | CORNER COLUMN<br>WITH MAIN BEAM AND<br>INTERMEDIATE BEAM          | ECCLL     | MATCH CAP DIMENSIONS<br>TO BEAM WIDTH | BEAM COLUMN    |  |  |
| P4    | INTERMEDIATE<br>COLUMN WITH<br>MAIN BEAM AND<br>INTERSECTING BEAM | CCT66     | MATCH CAP DIMENSIONS<br>TO BEAM WIDTH | BEAM           |  |  |

- 1. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR FASTENERS AND INSTALLATION OF CAPS
- 2. CAP MODELS MANUFACTURED BY SIMPSON STRONG TIE.

# TABLE 3.2

| SLAB REINFORCEMENT SCHEDULE                  |    |    |          |             |  |
|--|----|----|----------|-------------|--|
| AREA THICKNESS REBAR SIZE SPACING LAP SPLICE |    |    |          |             |  |
| MAIN SLAB 4" #4 16" O.C. 24" MINIMUM         |    |    |          |             |  |
| PORCH AND PATIO                              | 4" | #4 | 16" O.C. | 24" MINIMUM |  |
| GARAGE SLAB                                  | 5" | #4 | 16" O.C. | 24" MINIMUM |  |

# TABLE 3.3

| GRADE BEAM REINFORCEMENT SCHEDULE   |           |              |                |                             |                |  |  |  |
|-------------------------------------|-----------|--------------|----------------|-----------------------------|----------------|--|--|--|
| TYPE                                | TOP REBAR | BOTTOM REBAR | STIRRUPS       | CORNER BARS                 | LAP SPLICE     |  |  |  |
| INTERIOR GRADE<br>BEAM              | (2) #6    | (2) #6       | #3 AT 18" O.C. | #6 L-BARS TOP<br>AND BOTTOM | 36"<br>MINIMUM |  |  |  |
| PERIMETER<br>EXTERIOR GRADE<br>BEAM | (2) #6    | (2) #6       | #3 AT 18" O.C. | #6 L-BARS TOP<br>AND BOTTOM | 36"<br>MINIMUM |  |  |  |

O.C. = DENOTES ON-CENTER

| AREA                     | THICKNESS | REBAR SIZE | SPACING  | LAP SPLICE  |  |  |  |  |
|--------------------------|-----------|------------|----------|-------------|--|--|--|--|
| MAIN SLAB                | 4"        | #4         | 16" O.C. | 24" MINIMUM |  |  |  |  |
| PORCH AND PATIO          | 4"        | #4         | 16" O.C. | 24" MINIMUM |  |  |  |  |
| GARAGE SLAB              | 5"        | #4         | 16" O.C. | 24" MINIMUM |  |  |  |  |
| O.C. = DENOTES ON-CENTER |           |            |          |             |  |  |  |  |

SHEET SIZE: 24" x 36"

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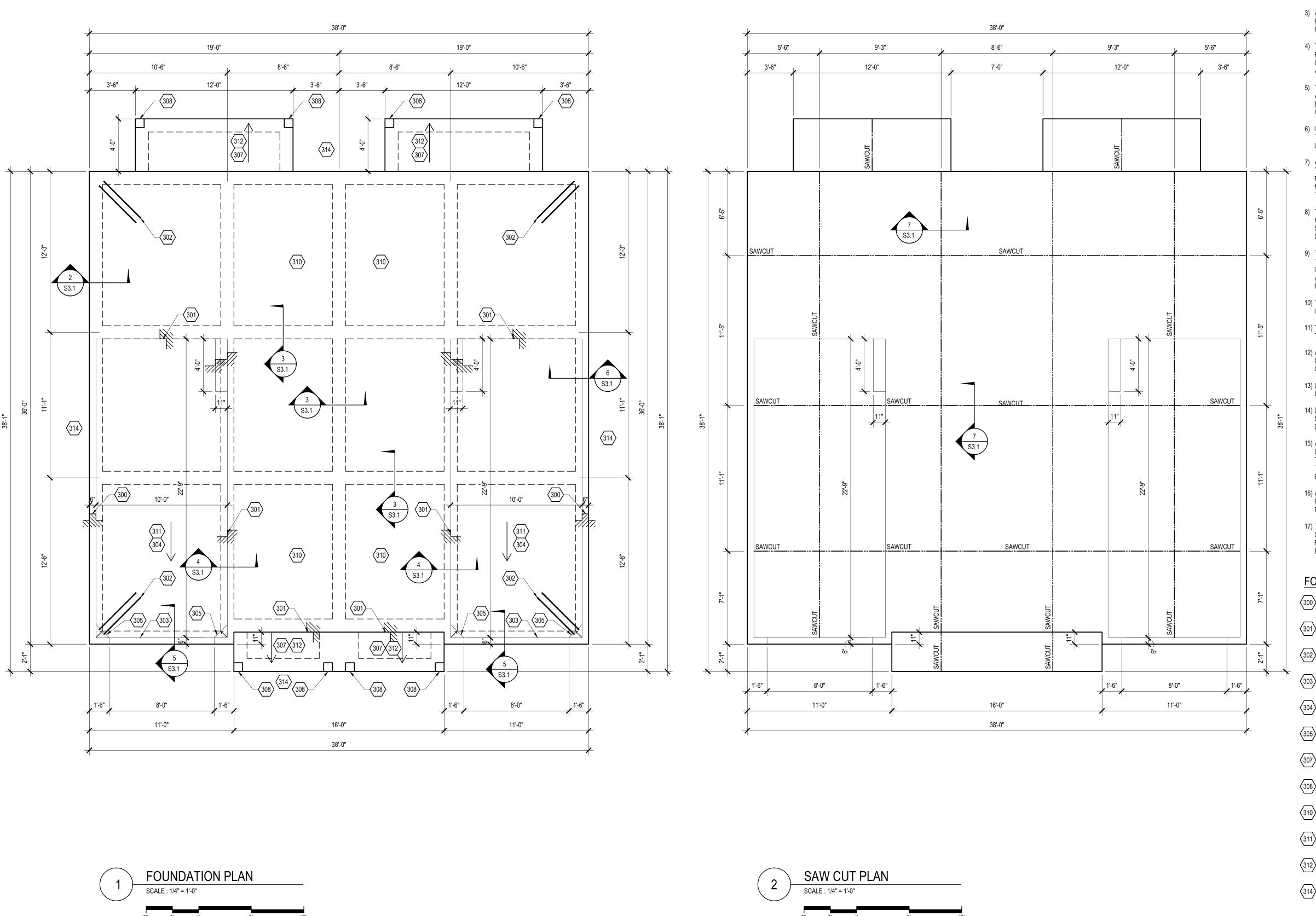
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FOUNDATION PLAN GENERAL NOTES:

OR A CIVIL ENGINEER FOR THE PROJECT.

- 1) PRIOR TO EXCAVATION OF SOILS FOR THE FOUNDATION, THE CONTRACTOR SHALL COORDINATE LOCATING EXISTING UTILITY LINES ACROSS THE SITE TO ENSURE THAT NO EXISTING UTILITIES ARE DISTURBED WITH THE EXCAVATION OF THE FOUNDATION.
- 2) SITE TOPOGRAPHY MAY REQUIRE FOR THE FOUNDATION GRADE BEAMS TO BE GREATER THAN 3-FEET IN TOTAL DEPTH. AT A MINIMUM, THE FOUNDATION PERIMETER GRADE BEAMS SHOULD BE CONSTRUCTED TO BE EMBEDDED AT LEAST 36-INCHES BELOW THE GROUND LEVEL OR BEAR DIRECTLY ON ROCK; UNLESS THE FOUNDATION DETAILS NOTE OTHERWISE. AT A MINIMUM, THE FOUNDATION FINISHED FLOOR SHOULD BE AT LEAST 6-INCHES HIGHER THAN THE ADJACENT GROUND UNLESS NOTED OTHERWISE BY THE BUILDING DESIGNER
- 3) ALL EXCAVATED MATERIAL SHOULD BE PROPERLY DISPOSED OF AND NOT REUSED WITHIN THE FOUNDATION FOOTPRINT UNLESS PERMITTED BY THE STRUCTURAL ENGINEER OR A GEOTECHNICAL ENGINEER FOR THE
- 4) THE CONTRACTOR SHOULD COORDINATE THE EXCAVATION OF THE FOUNDATION WITH NEARBY TREES T PROTECT AND PRESERVE TREES THAT ARE INTENDED TO REMAIN. EXCAVATION OF SOILS AROUND THE ROOTS OF TREES CAN PERMANENTLY DAMAGE TREES. A TREE ARBORIST SHOULD BE CONSULTED WITH IF TREE ROOTS ARE ENCOUNTERED OR IF THE EXCAVATION NEAR A TREE IS EXPECTED.
- THE FOUNDATION DESIGN DOES NOT INCLUDE OR ACCOUNT FOR FLATWORK AROUND THE BUILDING. ALL SOILS AND FLATWORK AROUND THE BUILDING SHOULD BE CONSTRUCTED AND INSTALLED IN SUCH A MANNER THAT ENCOURAGES SURFACE WATER TO FLOW AWAY FROM THE BUILDING AND DOES NOT ALLOW FOR SURFACE WATER TO POND OR COLLECT NEAR THE BUILDING.
- 6) IN THE EVENT OF RAIN, THE FOUNDATION GRADE BEAMS SHOULD BE FULLY DRAINED OF ANY STANDING WATER. THE FOUNDATION GRADE BEAM BOTTOMS SHOULD BE CLEARED OF ANY LOOSE SOIL OR DEBRIS. ALLOW AT LEAST 48 HOURS FOR THE SOILS TO DRY PRIOR TO PLACEMENT OF CONCRETE.
- 7) ANY EXISTING CONCRETE FOUNDATION ELEMENTS OR ASPHALT PAVEMENTS THAT ARE ENCOUNTERED DURING THE EXCAVATION OF THE FOUNDATION SHOULD BE FULLY REMOVED TO ALLOW FOR THE EXCAVATION OF THE FOUNDATION. LARGE SURFACES OF CONCRETE OR ASPHALT PAVEMENTS WITHIN THE FOUNDATION FOOTPRINT MAY REMAIN AND NOT BE DEMOLISHED PROVIDED THE PAVEMENT OR FLATWORK DOES NOT INTERFERE WITH THE CONSTRUCTION OF THE FOUNDATION ELEMENTS AS INTENDED ON THE PLANS.
- 8) THE FOUNDATION SHOULD BE CONSTRUCTED WITH THE ARCHITECTURAL OR BUILDING DESIGNER PLANS ON HAND AND IN A COORDINATED REFERENCE BETWEEN THE LATEST ARCHITECTURAL OR DESIGN PLANS AND THE STRUCTURAL PLANS. ANY DISCREPANCY BETWEEN THE PLANS SHOULD BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM TO REVIEW.
- 9) THE CONTRACTOR SHALL COORDINATE INSPECTION AND REVIEW OF THE FOUNDATION CONSTRUCTION WITH THE OWNER AND THE DESIGN TEAM WITH AT LEAST 4 DAY NOTICE PRIOR TO THE DATE OF THE REQUIRED INSPECTION AND AT LEAST 7 DAYS PRIOR TO THE PLACEMENT OF CONCRETE. INSPECTION REQUESTS MADE AFTER 3PM WILL BE CONSIDERED REQUESTS MADE THE FOLLOWING DAY. REQUESTS MADE AFTER 3PM ON FRIDAYS WILL BE CONSIDERED REQUESTS MADE ON THE NEXT BUSINESS DAY.
- 10) THE CONTRACTOR SHOULD MAINTAIN AT LEAST ONE SUPERINTENDENT OR PROJECT MANAGER ON SITE DURING INSPECTION TO ADDRESS DISCREPANCIES.
- 11) THE ADEQUACY OF THE FOUNDATION FORM WORK, DIMENSIONS AND THE SQUARENESS OF THE FOUNDATION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 12) ALL CONCRETE BLEMISHES, HONEYCOMBS AND OTHER IMPERFECTIONS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM AND THE OWNER PRIOR TO REPAIR ATTEMPTS. REPAIRS TO HONEYCOMBS WITHOUT THE GUIDANCE OF THE STRUCTURAL ENGINEER MAY REQUIRE REWORK.
- 13) UNLESS NOTED OTHERWISE, INITIAL AND FINAL CURING OF THE CONCRETE SHALL BE BY WE CURING METHODS ONLY (CONTINUOUS SPRINKLING OR STEAM, OR MOISTURE RETAINING COVER).
- 14) DIMENSIONS SHOWN ASSOCIATED WITH ANY EXISTING ELEMENTS OR BUILDINGS ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO CONSTRUCTION AND DEVELOPMENT OF ANY FABRICATION AND ERECTION
- 15) ADDITIONAL REQUIREMENTS FOR MATERIAL SPECIFICATIONS, DIMENSIONS, REINFORCEMENT AND CONSTRUCTION IS FOUND IN THE STRUCTURAL GENERAL NOTES AND FOUNDATION DETAILS AND KEYNOTES IN THE PLAN SET, ANY DISCREPANCY BETWEEN THE DETAILS AND THE FOUNDATION LAYOUT SHOULD BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER PRIOR TO COMPLETING THE CONSTRUCTION OF THE ELEMENTS AFFECTED BY THE DISCREPANCY.
- 16) ALL PLUMBING LINES THAT CROSS A FOUNDATION GRADE BEAM OR PENETRATE THROUGH A PERIMETER FOUNDATION GRADE BEAM SHALL BE SLEEVED WITH A SLEEVE THAT IS AT LEAST 3-INCHES LARGER THAN PLUMBING PIPE. THE SLEEVED PIPE SHOULD BE CENTERED IN THE SLEEVE.
- 17) THE GROUND IMMEDIATELY ADJACENT TO THE FOUNDATION SHALL BE SLOPED AWAY FROM THE BUILDING AT A SLOPE OF NOT LESS THAN ONE UNIT VERTICAL IN 20 UNITS HORIZONTAL (5%) FOR A MINIMUM DISTANCE OF 10 FEET MEASURED PERPENDICULAR TO THE FACE OF THE WALL. IMPERVIOUS SURFACES WITHIN 10 FEET OF THE BUILDING FOUNDATION SHALL BE SLOPED A MINIMUM OF 2% AWAY FROM THE FOUNDATION.

# FOUNDATION KEYNOTES:

- RAISED CONCRETE CURB AT EXTERIOR WALLS OF GARAGE. MATCH WIDTH OF CURB WITH WIDTH OF WALL FRAMING.
- DROP SLAB. REFER TO ARCHITECTURAL/DESIGNER PLANS FOR DROP. PROVIDE 3/4-INCH DROP MINIMUM IF ARCHITECTURAL OR DESIGNER PLANS DO NOT INDICATE AMOUNT OF DROP.
- (302) ADD(2) #4 REBAR, 4-FT LONG, IN DIAGONAL POSITION TO CORNER.
- LUG AT GARAGE COORDINATE LUG WIDTH ALONG THE GARAGE DOOR WITH OWNER OR GARAGE DOOR MANUFACTURER PRIOR TO CONSTRUCTION.
- GARAGE FLOOR SLOPE: REFER TO ARCHITECTURAL OR DESIGNER PLANS. IF NOT PROVIDED, SLOPE GARAGE FLOOR AT LEAST 1/8-INCH PER FOOT.
- GARAGE FLOOR CRICKET: ADD CRICKET (SLOPED AREA) AT CORNERS OF GARAGE TO ENCOURAGE WATER TO FLOW TOWARDS THE GARAGE DOOR.
- PATIO FLOOR SLOPE: REFER TO ARCHITECTURAL OR DESIGNER PLANS. IF NOT PROVIDED, SLOPE PATIO FLOOR AT LEAST 1/8-INCH PER FOOT.
- RAISED PEDESTAL: AT ALL WOOD OR STEEL COLUMNS, PROVIDE 1-1/2 INCH RAISED CONCRETE PEDESTAL. DIMENSIONS OF THE PEDESTAL SHALL MATCH THE SIZE OF THE WOOD COLUMN OR STEEL BASE PLATE.
- (310) MAIN SLAB: SEE TABLE 3.2 AND 3.3 ON SHEET S1.2
- $\langle$ 311angle GARAGE SLAB: SEE TABLE 3.2 AND 3.3 ON SHEET S1.2
- (312) PATIO SLAB: SEE TABLE 3.2 AND 3.3 ON SHEET S1.2
- FINAL GRADE ALONG THE PERIMETER OF THE BUILDING SHALL BE GRADED AT LEAST 5% FOR A DISTANCE OF 10'-0" OUTWARD FROM THE EDGE OF THE BUILDING. ADD SOD ALONG THE FULL PERIMETER.

# LEGEND:

DENOTES DROP IN FOUNDATION

DENOTES CURB IN FOUNDATION

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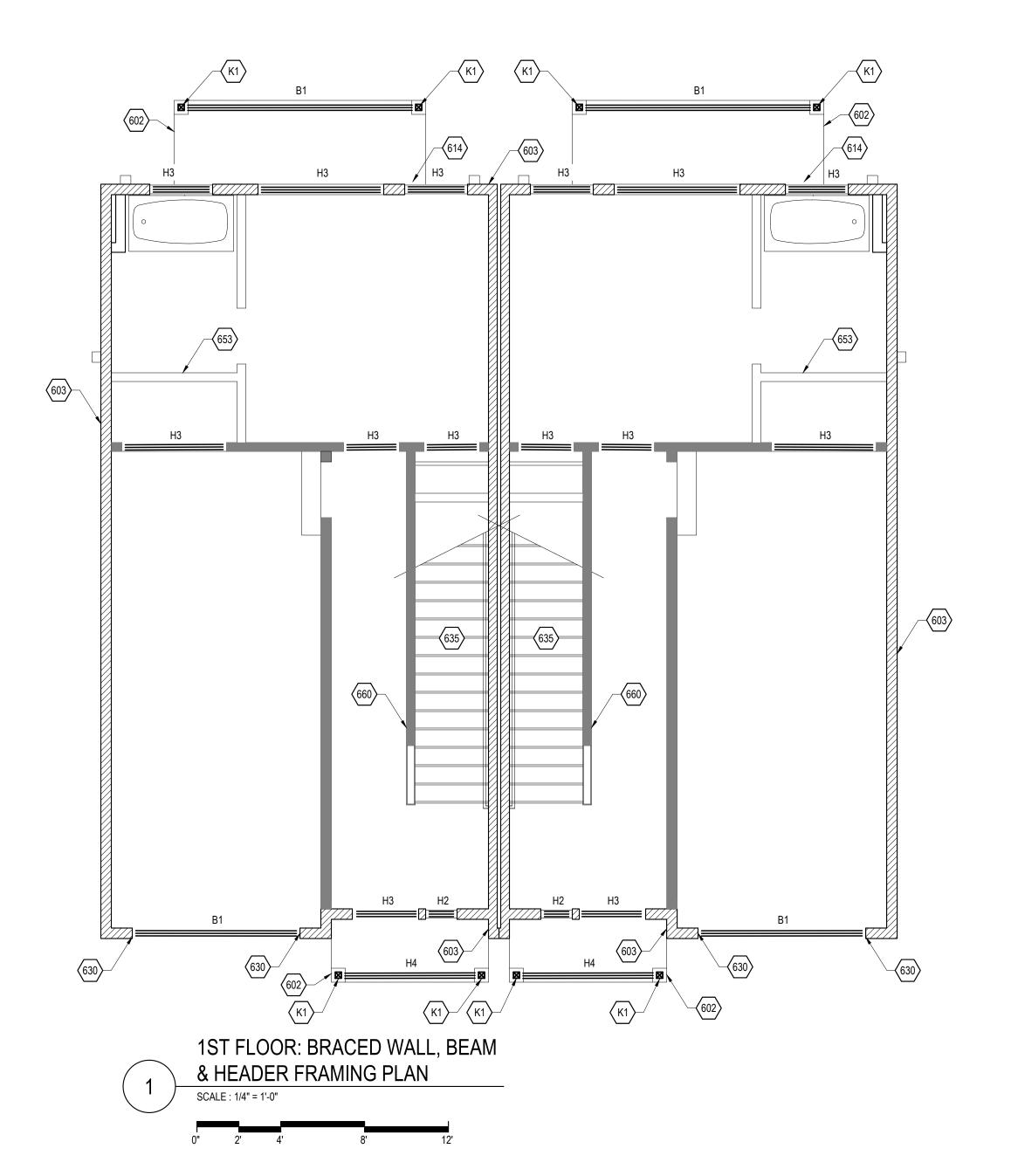
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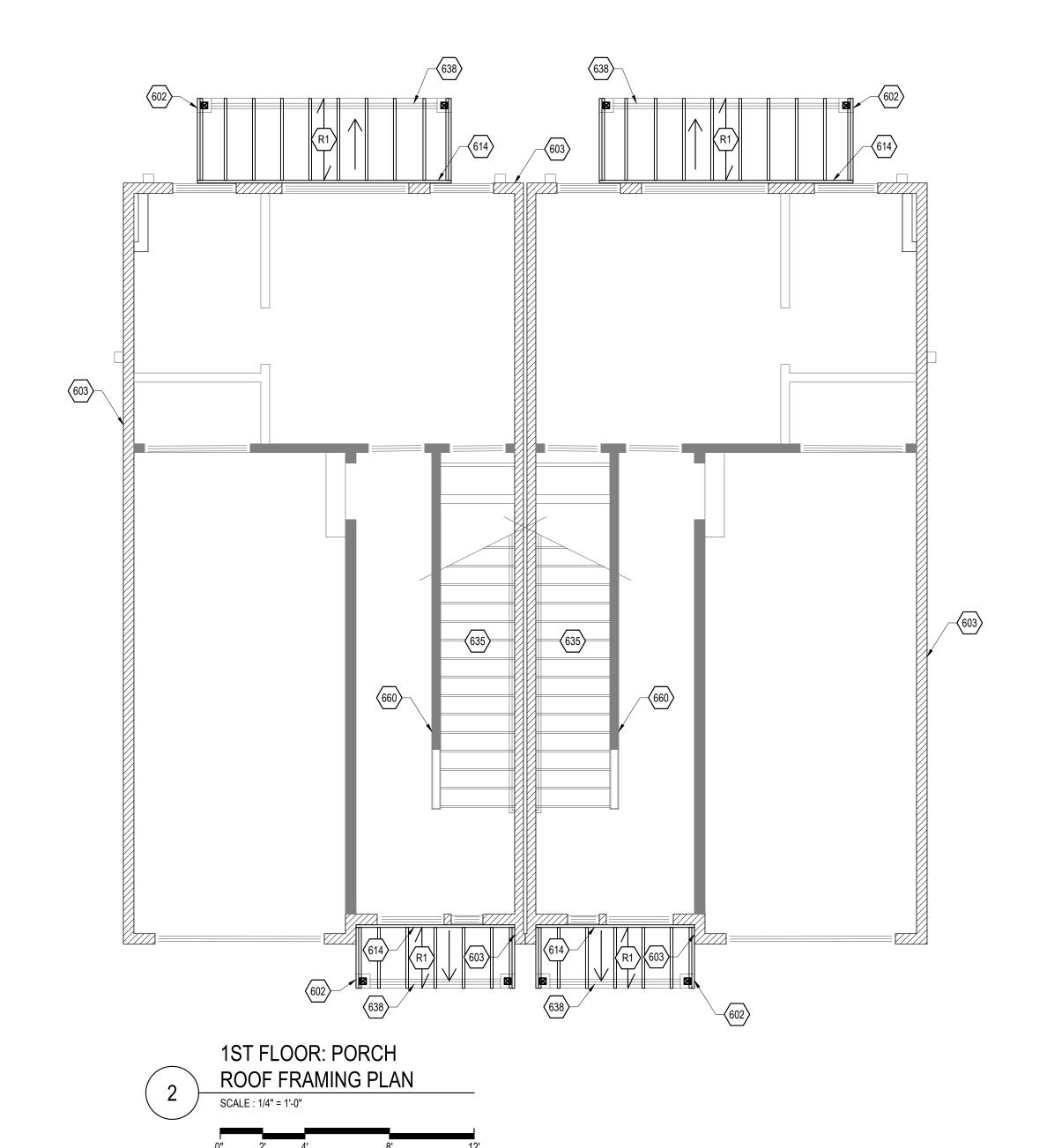
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# WOOD FRAMING PLAN GENERAL NOTES:

- 1) THE FRAMING PLAN IS INTENDED TO SPECIFY THE MAIN STRUCTURAL MEMBERS AND ORIENTATION FOR THE ROOF, FLOOR, WALLS AND CEILING SYSTEM. FRAMING FOR BLOCKING, FURR DOWNS, STAIRS, DROPPED OR RAISED CEILING, REINFORCEMENT FOR WALL MOUNTED ITEMS, FIRE BLOCKING OR PROTECTION AND FRAMING MEMBERS FOR NON-STRUCTURAL ELEMENTS ARE NOT SHOWN AND MAYBE NEEDED. REFER TO THE ARCHITECTURAL/DESIGNER/OWNER PLANS AND OVERALL PROJECT SCOPE, SPECIFICATIONS AND LOCAL BUILDING CODES FOR FRAMING REQUIREMENTS BEYOND THE MAIN STRUCTURAL SYSTEM.
- 2) THE FRAMER SHOULD REFERENCE BOTH THE STRUCTURAL PLANS AND THE ARCHITECTURAL PLANS FOR COORDINATING AND ALIGNING SECOND FLOOR AND ROOF BEAMS AS NEEDED TO ADEQUATELY SUPPORT THE FRAMING. NOTIFY THE STRUCTURAL ENGINEER IF LOWER LEVEL WALLS AND BEAMS DO NOT ALIGN WITH THE LATEST ARCHITECTURAL PLANS.
- 3) DO NOT ALLOW NON-LOAD BEARING WALLS AND CEILINGS TO SUPPORT UPPER FLOORS OR ROOF FRAMING MEMBERS.
- 4) REFER TO STRUCTURAL GENERAL NOTES ON SHEET S1.1 FOR PROJECT SPECIFICATIONS.
- 5) REFER TO SCHEDULES AND TABLES ON SHEET S1.2 FOR DESIGN SPECIFICATIONS.
- 6) WHERE MEMBER SIZES, SPECIFICATIONS, OR DESIGN KEYNOTES ON STRUCTURAL DETAILS AND SECTIONS CONFLICT WITH PROJECT SPECIFICATIONS, SCHEDULES AND TABLES, THE PROJECT SPECIFICATIONS, SCHEDULES AND TABLES SHALL GOVERN
- 7) NOTIFY THE STRUCTURAL ENGINEER IF FIELD VERIFIED CONDITIONS LIMIT, INHIBIT OR PREVENT THE STRUCTURAL FRAME FROM BEING CONSTRUCTED FOLLOWING CONVENTIONAL WOOD FRAMING TECHNIQUES AND PRACTICES.
- 8) ALL FRAMING SHOULD REMAIN EXPOSED AND UNCONCEALED FOR REVIEW BY THE STRUCTURAL ENGINEER WHEN THE ENTIRE STRUCTURAL FRAME IS COMPLETE. THE CONTRACTOR SHOULD NOTIFY THE STRUCTURAL ENGINEER OF ANY AND ALL DEVIATIONS FROM THE PLANS FOR REVIEW BY THE STRUCTURAL ENGINEER. DEVIATIONS FROM THE PLANS MAY NOT BE ACCEPTED BY THE STRUCTURAL ENGINEER AND MAY REQUIRE THE FRAME TO BE REMOVED AND RECONSTRUCTED.
- 9) STRUCTURAL DESIGN OF ROOF FRAMING DOES NOT ACCOUNT FOR CONSTRUCTION LOADS OF ROOF MATERIAL STACKED ALONG THE RIDGE OF ROOF. DO NOT STACK ROOFING MATERIALS AT RIDGE OF ROOF.

# FRAMING KEYNOTES:

602 EDGE OF LOW ROOF

603 EDGE OF EXTERIOR WALL

- ADD CONTINUOUS 2X NAILER ALONG FACE OF WALL FRAMING. 2X NAILER SHALL BE AT LEAST 2-INCHES DEEPER THAN FRAMING MEMBERS. FULLY FASTEN NAILER TO STRUCTURAL WALL WITH (3) NO. 10 STRUCTURAL WOOD SCREWS AT EACH STUD STRUCTURAL WALL WITH (3) NO. 10 STRUCTURAL WOOD SCREWS AT EACH STUD.
- $\overbrace{\rm 630}$  ADD 2X CRIPPLE STUDS INSIDE OF FRAMING TO SUPPORT INTERSECTING BEAM/HEADER.
- REFER TO ARCHITECTURAL/BUILDING DESIGNER PLANS FOR STAIR LAYOUT. REFER 635 TO THE LOCAL BUILDING CODE FOR RISER RUN AND TREAD HIEGHT. FRAME STAIRS FOLLOWING PERSCRIPTIVE CODE REQUIREMENTS OF THE BUILDING CODE.
- (638) BEAM/HEADER FRAMING BELOW. REFER TO BEAM/HEADER FRAMING PLAN.
- (653) DO NOT BEAR TRUSS ON NON-LOAD BEARING WALLS.
- (660) WOOD FRAMED WALLS FOR ELEVATOR/STAIR ENCLOSURE.

# LEGEND

DENOTES KEYNOTE

DENOTES DIRECTION OF FRAMING (SPAN) FOR CEILING, ROOF AND/OR FLOOR JOISTS/TRUSSES. SEE TABLE #3B, ON SHEET S1.2.

SEE TABLE #4 FOR HEADER, ON SHEET S1.2

SEE TABLE #6 FOR BEAM, ON SHEET S1.2

SEE TABLE #8 FOR COLUMN, ON SHEET S1.2

DENOTES EXTERIOR BRACED WALL PANELS. SEE TABLE #5B, ON SHEET S1.2.

DENOTES INTERIOR BEARING WALLS UNLESS NOTED OTHERWISE. SEE TABLE #5B,

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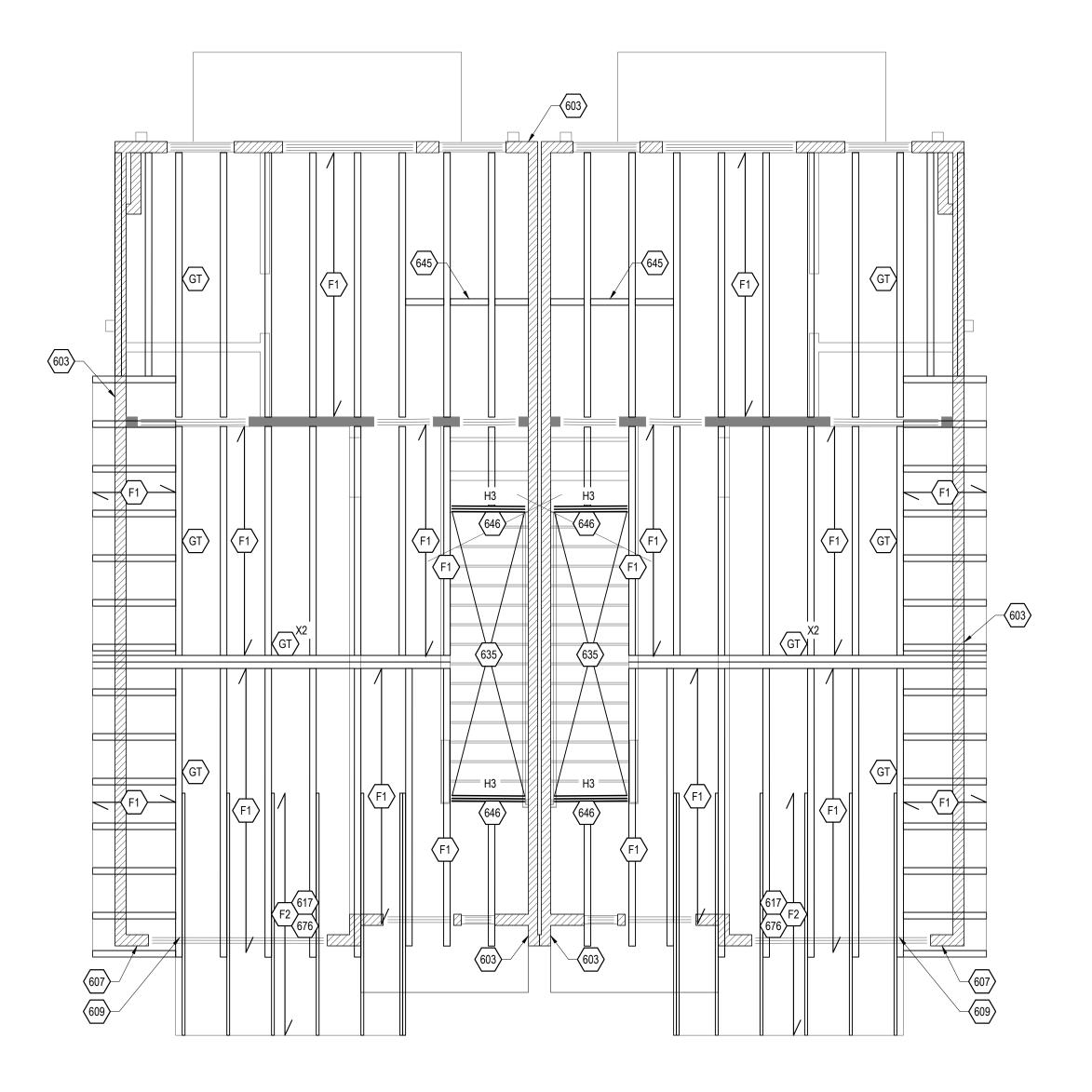
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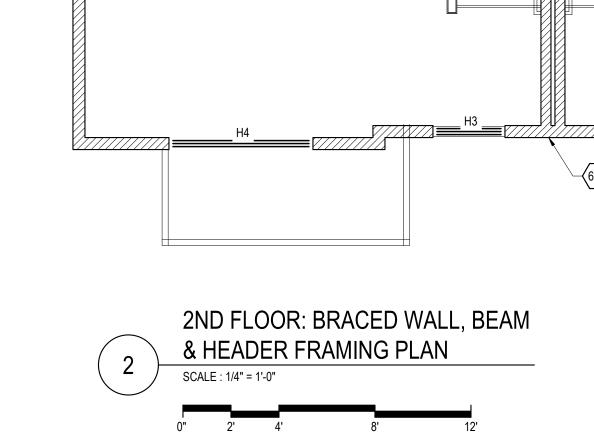
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2ND FLOOR: FLOOR

FRAMING PLAN

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



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# WOOD FRAMING PLAN GENERAL NOTES:

- 1) THE FRAMING PLAN IS INTENDED TO SPECIFY THE MAIN STRUCTURAL MEMBERS AND ORIENTATION FOR THE ROOF, FLOOR, WALLS AND CEILING SYSTEM. FRAMING FOR BLOCKING, FURR DOWNS, STAIRS, DROPPED OR RAISED CEILING, REINFORCEMENT FOR WALL MOUNTED ITEMS. FIRE BLOCKING OR PROTECTION AND FRAMING MEMBERS FOR NON-STRUCTURAL ELEMENTS ARE NOT SHOWN AND MAYBE NEEDED. REFER TO THE ARCHITECTURAL/DESIGNER/OWNER PLANS AND OVERALL PROJECT SCOPE, SPECIFICATIONS AND LOCAL BUILDING CODES FOR FRAMING REQUIREMENTS BEYOND THE MAIN STRUCTURAL SYSTEM.
- 2) THE FRAMER SHOULD REFERENCE BOTH THE STRUCTURAL PLANS AND THE ARCHITECTURAL PLANS FOR COORDINATING AND ALIGNING SECOND FLOOR AND ROOF BEAMS AS NEEDED TO ADEQUATELY SUPPORT THE FRAMING. NOTIFY THE STRUCTURAL ENGINEER IF LOWER LEVEL WALLS AND BEAMS DO NOT ALIGN WITH THE LATEST ARCHITECTURAL PLANS.
- 3) DO NOT ALLOW NON-LOAD BEARING WALLS AND CEILINGS TO SUPPORT UPPER FLOORS OR ROOF FRAMING MEMBERS.
- 4) REFER TO STRUCTURAL GENERAL NOTES ON SHEET S1.1 FOR PROJECT SPECIFICATIONS.
- 5) REFER TO SCHEDULES AND TABLES ON SHEET S1.2 FOR DESIGN SPECIFICATIONS.
- 6) WHERE MEMBER SIZES, SPECIFICATIONS, OR DESIGN KEYNOTES ON STRUCTURAL DETAILS AND SECTIONS CONFLICT WITH PROJECT SPECIFICATIONS, SCHEDULES AND TABLES, THE PROJECT SPECIFICATIONS, SCHEDULES AND TABLES SHALL GOVERN
- 7) NOTIFY THE STRUCTURAL ENGINEER IF FIELD VERIFIED CONDITIONS LIMIT, INHIBIT OR PREVENT THE STRUCTURAL FRAME FROM BEING CONSTRUCTED FOLLOWING CONVENTIONAL WOOD FRAMING TECHNIQUES AND PRACTICES.
- 8) ALL FRAMING SHOULD REMAIN EXPOSED AND UNCONCEALED FOR REVIEW BY THE STRUCTURAL ENGINEER WHEN THE ENTIRE STRUCTURAL FRAME IS COMPLETE. THE CONTRACTOR SHOULD NOTIFY THE STRUCTURAL ENGINEER OF ANY AND ALL DEVIATIONS FROM THE PLANS FOR REVIEW BY THE STRUCTURAL ENGINEER. DEVIATIONS FROM THE PLANS MAY NOT BE ACCEPTED BY THE STRUCTURAL ENGINEER AND MAY REQUIRE THE FRAME TO BE REMOVED AND RECONSTRUCTED.
- 9) STRUCTURAL DESIGN OF ROOF FRAMING DOES NOT ACCOUNT FOR CONSTRUCTION LOADS OF ROOF MATERIAL STACKED ALONG THE RIDGE OF ROOF. DO NOT STACK ROOFING MATERIALS AT RIDGE OF ROOF.

# FRAMING KEYNOTES:

603 EDGE OF EXTERIOR WALL

607 CANTILEVER FRAMING OVER SUPPORT BELOW

(609) ADD FULL DEPTH BLOCKING BETWEEN FRAMING OVER SUPPORT

612 BOTTOM OF BEAM - FLUSH WITH CEILING (BOTTOM OF JOIST)

617 FACE NAIL 2X FRAMING TO FACE OF TRUSS

ADD 2X CRIPPLE STUDS INSIDE OF FRAMING TO SUPPORT INTERSECTING BEAM/HEADER.

REFER TO ARCHITECTURAL/BUILDING DESIGNER PLANS FOR STAIR LAYOUT. REFER TO THE LOCAL BUILDING CODE FOR RISER RUN AND TREAD HIEGHT. FRAME STAIRS FOLLOWING PERSCRIPTIVE CODE REQUIREMENTS OF THE BUILDING CODE.

ADD BLOCKING BETWEEN FRAMING FOR FIRM SUPPORT OF NON-LOAD BEARING WALL ABOVE.

(646) HEADER FOR LANDING ABOVE.

(653) DO NOT BEAR TRUSS ON NON-LOAD BEARING WALLS.

(660) WOOD FRAMED WALLS FOR ELEVATOR/STAIR ENCLOSURE.

BLOCKING FOR JOIST: 2X FULL DEPTH BLOCKING BETWEEN ALL FLOOR JOISTS, CEILING JOIST AND ROOF RAFTERS. BLOCKING DEPTH TO MATCH SIZE OF FRAMING MEMBER BEING BEING DEPTH TO MATCH SIZE OF FRAMING MEMBER BEING REINFORCED.

# **LEGEND**

DENOTES KEYNOTE

DENOTES DIRECTION OF FRAMING (SPAN) FOR CEILING, ROOF AND/OR FLOOR JOISTS/TRUSSES. SEE TABLE #3B, ON SHEET S1.2.

SEE TABLE #4 FOR HEADER, ON SHEET S1.2

SEE TABLE #6 FOR BEAM, ON SHEET S1.2

DENOTES EXTERIOR BRACED WALL PANELS. SEE TABLE #5B, ON SHEET S1.2.

DENOTES INTERIOR BEARING WALLS UNLESS NOTED OTHERWISE. SEE TABLE #5B,

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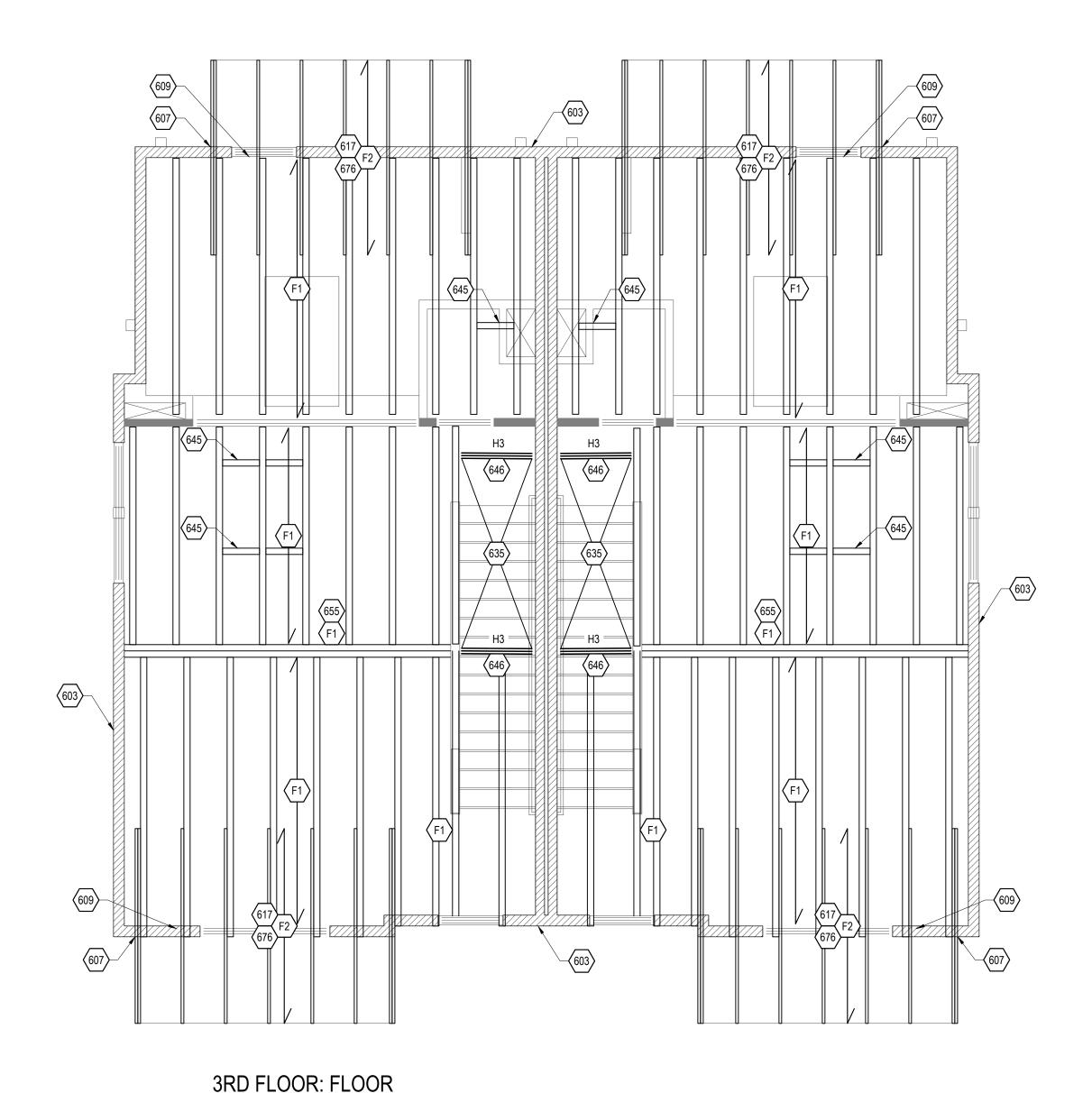
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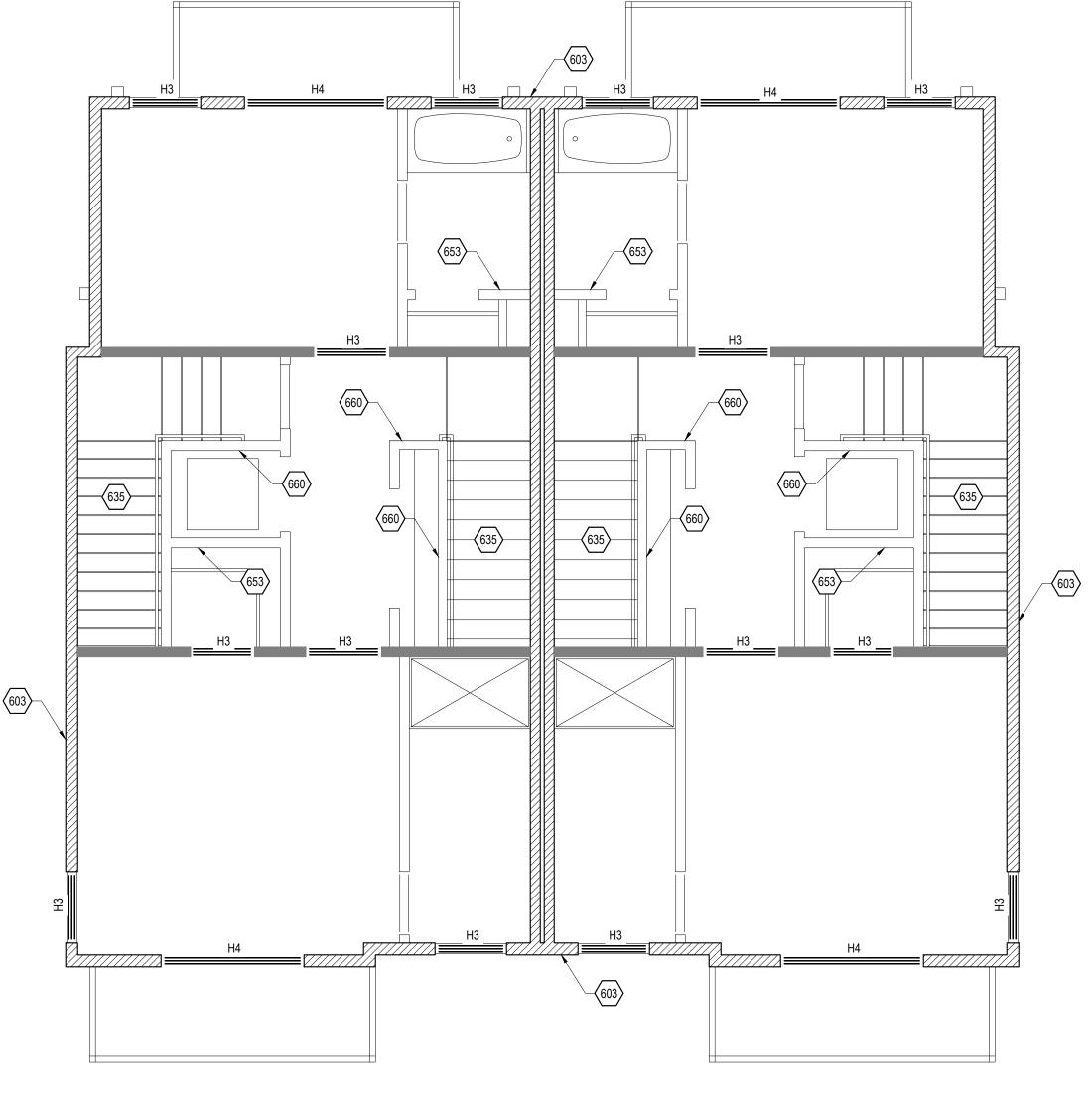
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FRAMING PLAN

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



3RD FLOOR: BRACED WALL, BEAM & HEADER FRAMING PLAN

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

# WOOD FRAMING PLAN GENERAL NOTES:

FLOORS OR ROOF FRAMING MEMBERS.

- 1) THE FRAMING PLAN IS INTENDED TO SPECIFY THE MAIN STRUCTURAL MEMBERS AND ORIENTATION FOR THE ROOF, FLOOR, WALLS AND CEILING SYSTEM. FRAMING FOR BLOCKING, FURR DOWNS, STAIRS, DROPPED OR RAISED CEILING, REINFORCEMENT FOR WALL MOUNTED ITEMS, FIRE BLOCKING OR PROTECTION AND FRAMING MEMBERS FOR NON-STRUCTURAL ELEMENTS ARE NOT SHOWN AND MAYBE NEEDED. REFER TO THE ARCHITECTURAL/DESIGNER/OWNER PLANS AND OVERALL PROJECT SCOPE, SPECIFICATIONS AND LOCAL BUILDING CODES FOR FRAMING REQUIREMENTS BEYOND THE MAIN STRUCTURAL SYSTEM.
- 2) THE FRAMER SHOULD REFERENCE BOTH THE STRUCTURAL PLANS AND THE ARCHITECTURAL PLANS FOR COORDINATING AND ALIGNING SECOND FLOOR AND ROOF BEAMS AS NEEDED TO ADEQUATELY SUPPORT THE FRAMING. NOTIFY THE STRUCTURAL ENGINEER IF LOWER LEVEL WALLS AND BEAMS DO NOT ALIGN WITH THE
- LATEST ARCHITECTURAL PLANS. 3) DO NOT ALLOW NON-LOAD BEARING WALLS AND CEILINGS TO SUPPORT UPPER
- 4) REFER TO STRUCTURAL GENERAL NOTES ON SHEET S1.1 FOR PROJECT SPECIFICATIONS.
- 5) REFER TO SCHEDULES AND TABLES ON SHEET S1.2 FOR DESIGN SPECIFICATIONS.
- 6) WHERE MEMBER SIZES, SPECIFICATIONS, OR DESIGN KEYNOTES ON STRUCTURAL DETAILS AND SECTIONS CONFLICT WITH PROJECT SPECIFICATIONS, SCHEDULES AND TABLES, THE PROJECT SPECIFICATIONS, SCHEDULES AND TABLES SHALL GOVERN
- 7) NOTIFY THE STRUCTURAL ENGINEER IF FIELD VERIFIED CONDITIONS LIMIT, INHIBIT OR PREVENT THE STRUCTURAL FRAME FROM BEING CONSTRUCTED FOLLOWING CONVENTIONAL WOOD FRAMING TECHNIQUES AND PRACTICES.
- 8) ALL FRAMING SHOULD REMAIN EXPOSED AND UNCONCEALED FOR REVIEW BY THE STRUCTURAL ENGINEER WHEN THE ENTIRE STRUCTURAL FRAME IS COMPLETE. THE CONTRACTOR SHOULD NOTIFY THE STRUCTURAL ENGINEER OF ANY AND ALL DEVIATIONS FROM THE PLANS FOR REVIEW BY THE STRUCTURAL ENGINEER. DEVIATIONS FROM THE PLANS MAY NOT BE ACCEPTED BY THE STRUCTURAL ENGINEER AND MAY REQUIRE THE FRAME TO BE REMOVED AND RECONSTRUCTED.
- 9) STRUCTURAL DESIGN OF ROOF FRAMING DOES NOT ACCOUNT FOR CONSTRUCTION LOADS OF ROOF MATERIAL STACKED ALONG THE RIDGE OF ROOF. DO NOT STACK ROOFING MATERIALS AT RIDGE OF ROOF.

# FRAMING KEYNOTES:

603 EDGE OF EXTERIOR WALL

607 CANTILEVER FRAMING OVER SUPPORT BELOW

(609) ADD FULL DEPTH BLOCKING BETWEEN FRAMING OVER SUPPORT

617 FACE NAIL 2X FRAMING TO FACE OF TRUSS

- REFER TO ARCHITECTURAL/BUILDING DESIGNER PLANS FOR STAIR LAYOUT. REFER 635 TO THE LOCAL BUILDING CODE FOR RISER RUN AND TREAD HIEGHT. FRAME STAIRS FOLLOWING PERSCRIPTIVE CODE REQUIREMENTS OF THE BUILDING CODE.
- ADD BLOCKING BETWEEN FRAMING FOR FIRM SUPPORT OF NON-LOAD BEARING WALL ABOVE.

(646) HEADER FOR LANDING ABOVE.

(653) DO NOT BEAR TRUSS ON NON-LOAD BEARING WALLS.

DOUBLE FLOOR TRUSS, ALIGN EDGE OF FLOOR TRUSS WITH WALL FRAMING ABOVE. COORDINATE WITH ARCHITECT/DESIGNER PLANS. COORDINATE WITH ARCHITECT/DESIGNER PLANS.

(660) WOOD FRAMED WALLS FOR ELEVATOR/STAIR ENCLOSURE.

BLOCKING FOR JOIST: 2X FULL DEPTH BLOCKING BETWEEN ALL FLOOR JOISTS,
CEILING JOIST AND ROOF RAFTERS. BLOCKING DEPTH TO MATCH SIZE OF FRAMING
MEMBED BEING DEINE DECED. MEMBER BEING REINFORCED.

# **LEGEND**

DENOTES KEYNOTE

DENOTES DIRECTION OF FRAMING (SPAN) FOR CEILING, ROOF AND/OR FLOOR JOISTS/TRUSSES. SEE TABLE #3B, ON SHEET \$1.2.

SEE TABLE #4 FOR HEADER, ON SHEET S1.2

SEE TABLE #6 FOR BEAM, ON SHEET S1.2

DENOTES EXTERIOR BRACED WALL PANELS. SEE TABLE #5B, ON SHEET S1.2.

DENOTES INTERIOR BEARING WALLS UNLESS NOTED OTHERWISE. SEE TABLE #5B ON SHEET S1.2.

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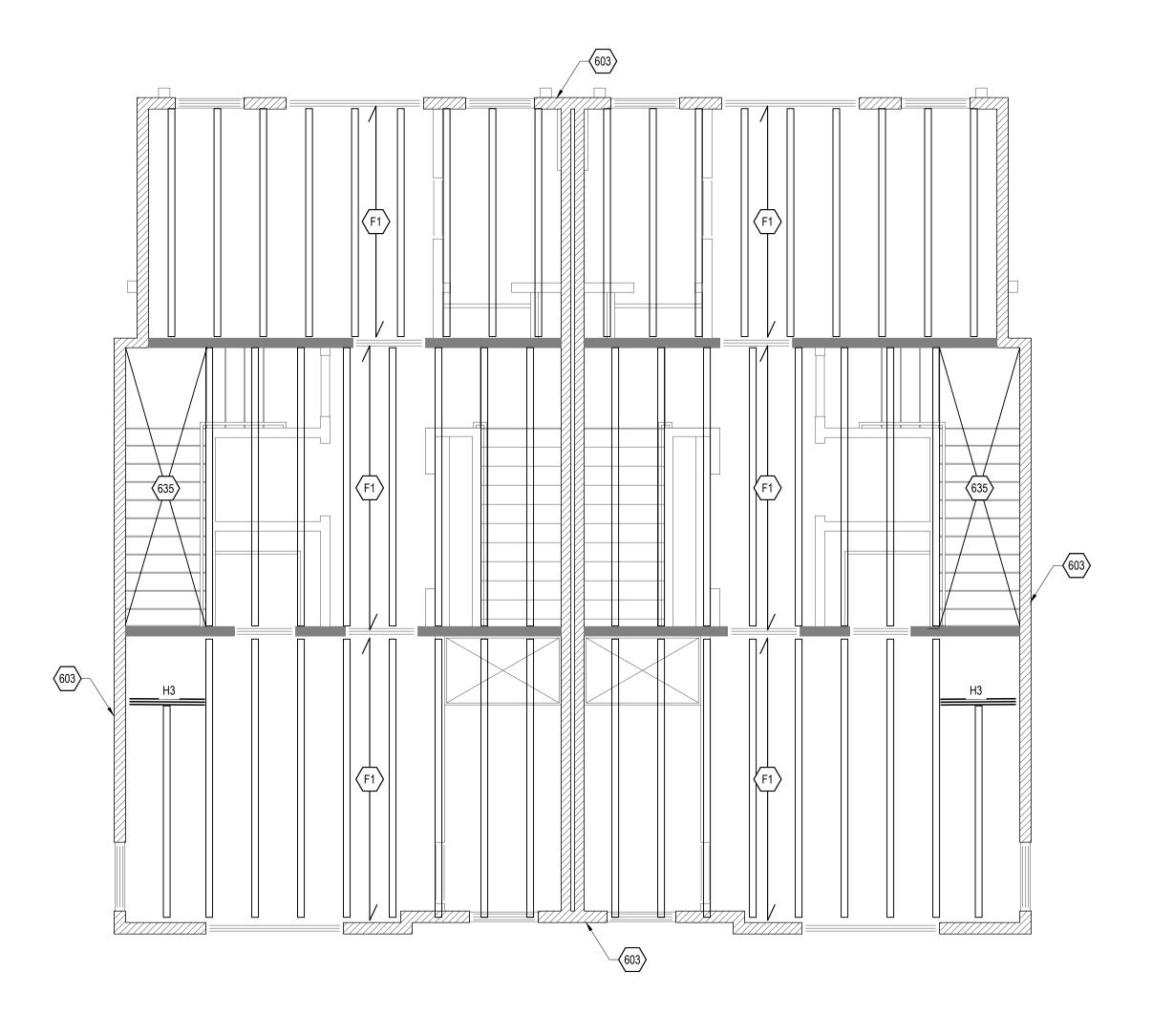
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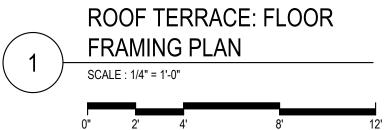
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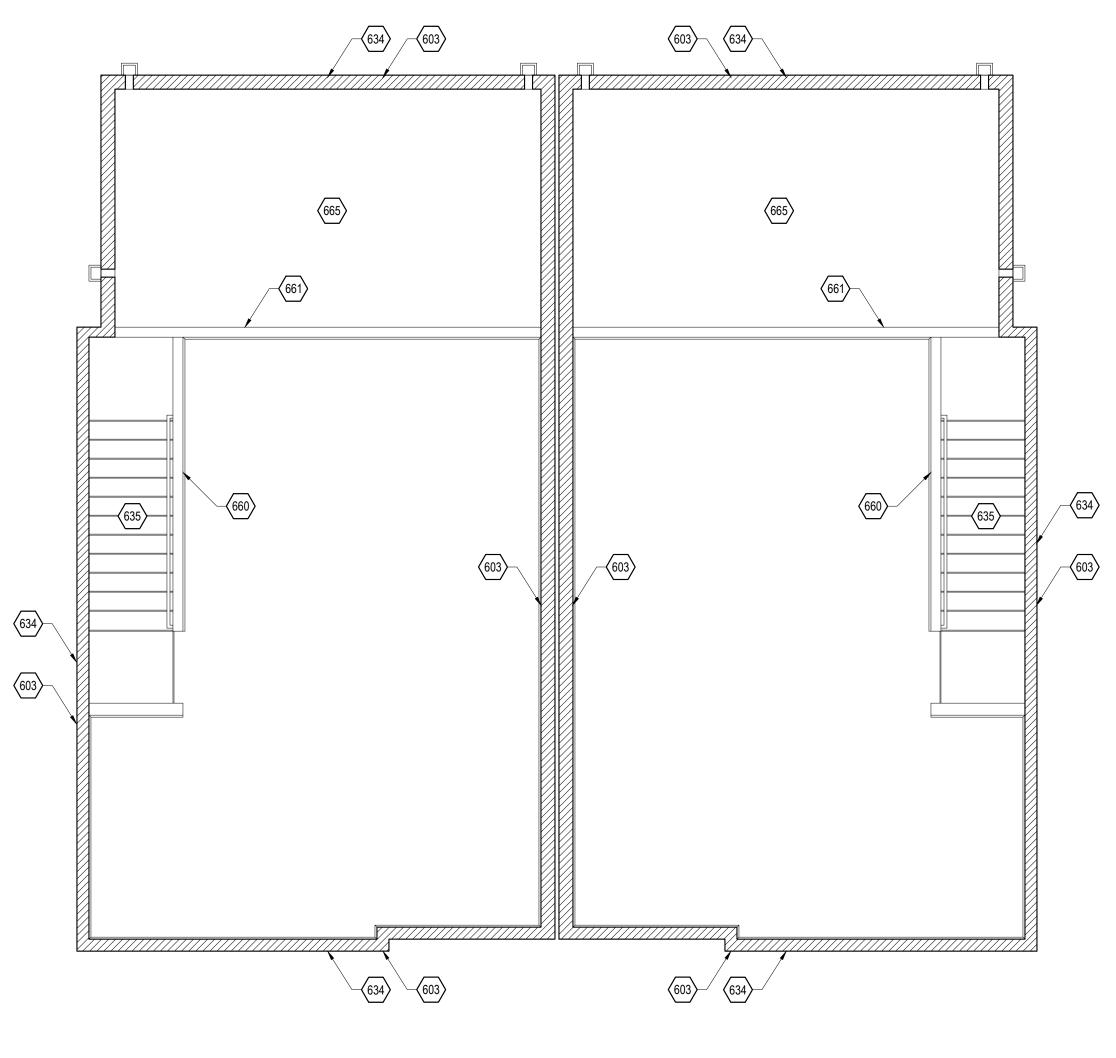
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**ROOF TERRACE: PARAPET** FRAMING PLAN SCALE : 1/4" = 1'-0"

# WOOD FRAMING PLAN GENERAL NOTES:

- 1) THE FRAMING PLAN IS INTENDED TO SPECIFY THE MAIN STRUCTURAL MEMBERS AND ORIENTATION FOR THE ROOF, FLOOR, WALLS AND CEILING SYSTEM. FRAMING FOR BLOCKING, FURR DOWNS, STAIRS, DROPPED OR RAISED CEILING, REINFORCEMENT FOR WALL MOUNTED ITEMS, FIRE BLOCKING OR PROTECTION AND FRAMING MEMBERS FOR NON-STRUCTURAL ELEMENTS ARE NOT SHOWN AND MAYBE NEEDED. REFER TO THE ARCHITECTURAL/DESIGNER/OWNER PLANS AND OVERALL PROJECT SCOPE, SPECIFICATIONS AND LOCAL BUILDING CODES FOR FRAMING REQUIREMENTS BEYOND THE MAIN STRUCTURAL SYSTEM.
- 2) THE FRAMER SHOULD REFERENCE BOTH THE STRUCTURAL PLANS AND THE ARCHITECTURAL PLANS FOR COORDINATING AND ALIGNING SECOND FLOOR AND ROOF BEAMS AS NEEDED TO ADEQUATELY SUPPORT THE FRAMING. NOTIFY THE STRUCTURAL ENGINEER IF LOWER LEVEL WALLS AND BEAMS DO NOT ALIGN WITH THE LATEST ARCHITECTURAL PLANS.
- 3) DO NOT ALLOW NON-LOAD BEARING WALLS AND CEILINGS TO SUPPORT UPPER FLOORS OR ROOF FRAMING MEMBERS.
- 4) REFER TO STRUCTURAL GENERAL NOTES ON SHEET S1.1 FOR PROJECT SPECIFICATIONS.
- 5) REFER TO SCHEDULES AND TABLES ON SHEET S1.2 FOR DESIGN SPECIFICATIONS.
- 6) WHERE MEMBER SIZES, SPECIFICATIONS, OR DESIGN KEYNOTES ON STRUCTURAL DETAILS AND SECTIONS CONFLICT WITH PROJECT SPECIFICATIONS, SCHEDULES AND TABLES, THE PROJECT SPECIFICATIONS, SCHEDULES AND TABLES SHALL GOVERN
- 7) NOTIFY THE STRUCTURAL ENGINEER IF FIELD VERIFIED CONDITIONS LIMIT, INHIBIT OR PREVENT THE STRUCTURAL FRAME FROM BEING CONSTRUCTED FOLLOWING CONVENTIONAL WOOD FRAMING TECHNIQUES AND PRACTICES.
- 8) ALL FRAMING SHOULD REMAIN EXPOSED AND UNCONCEALED FOR REVIEW BY THE STRUCTURAL ENGINEER WHEN THE ENTIRE STRUCTURAL FRAME IS COMPLETE. THE CONTRACTOR SHOULD NOTIFY THE STRUCTURAL ENGINEER OF ANY AND ALL DEVIATIONS FROM THE PLANS FOR REVIEW BY THE STRUCTURAL ENGINEER. DEVIATIONS FROM THE PLANS MAY NOT BE ACCEPTED BY THE STRUCTURAL ENGINEER AND MAY REQUIRE THE FRAME TO BE REMOVED AND RECONSTRUCTED.
- 9) STRUCTURAL DESIGN OF ROOF FRAMING DOES NOT ACCOUNT FOR CONSTRUCTION LOADS OF ROOF MATERIAL STACKED ALONG THE RIDGE OF ROOF. DO NOT STACK ROOFING MATERIALS AT RIDGE OF ROOF.

# FRAMING KEYNOTES:

603 EDGE OF EXTERIOR WALL

ADD 2X PARAPET FRAMING ALONG EDGE OF ROOF. COORDINATE WITH ARCHITECTURAL PLANS.

REFER TO ARCHITECTURAL/BUILDING DESIGNER PLANS FOR STAIR LAYOUT. REFER 635 TO THE LOCAL BUILDING CODE FOR RISER RUN AND TREAD HIEGHT. FRAME STAIRS FOLLOWING PERSCRIPTIVE CODE REQUIREMENTS OF THE BUILDING CODE.

(660) WOOD FRAMED WALLS FOR ELEVATOR/STAIR ENCLOSURE.

ALIGN CENTER OF PONY WALL/CRIPPLE WALL/PONY END WALL TRUSS WITH WALL FRAMING BELOW.

SLOPE ROOFING MATERIAL AS PER ARCHITECT. IF NOT PROVIDED, SLOPE ROOFING MATERIAL AT LEAST 1/8-INCH PER FOOT. ROOF TRUSS TO BE LEVEL.

# **LEGEND**

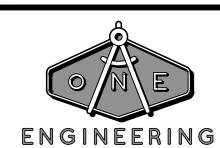
DENOTES KEYNOTE

DENOTES DIRECTION OF FRAMING (SPAN) FOR CEILING, ROOF AND/OR FLOOR JOISTS/TRUSSES. SEE TABLE #3B, ON SHEET S1.2.

SEE TABLE #4 FOR HEADER, ON SHEET S1.2

DENOTES EXTERIOR BRACED WALL PANELS. SEE TABLE #5B, ON SHEET S1.2.

DENOTES INTERIOR BEARING WALLS UNLESS NOTED OTHERWISE. SEE TABLE #5B, ON SHEET \$1.2.



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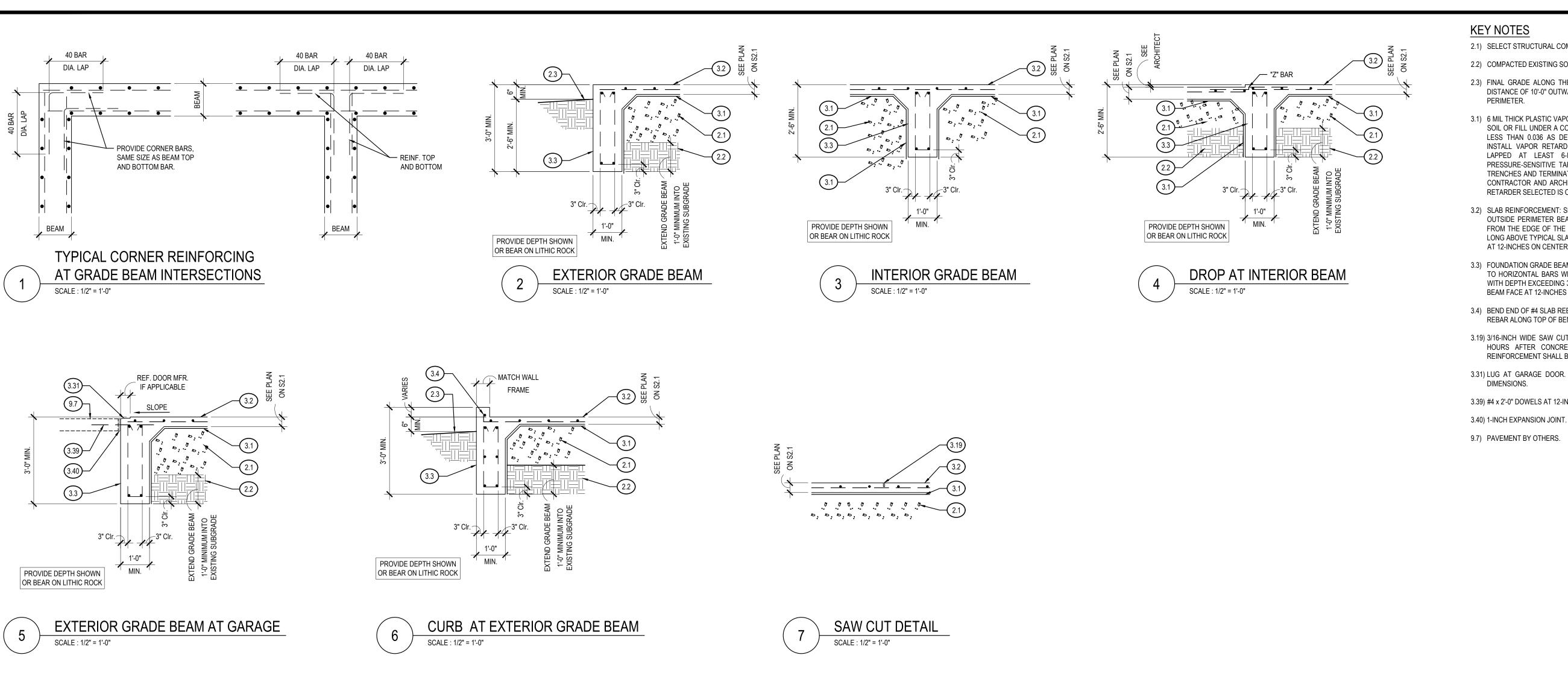
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DATE: 11.14.2022 MOISES A. CRUZ, P.E. LICENSED ENGINEER TX. NO. 108540 NOTE: THESE DRAWINGS ARE INCOMPLETE AND MAY NOT BE USED FOR REGULATORY APPROVAL, PERMIT, OR CONSTRUCTION

ISSUE DATE: 11.14.2022

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**KEY NOTES** 

2.1) SELECT STRUCTURAL COMPACTED FILL

2.2) COMPACTED EXISTING SOIL.

2.3) FINAL GRADE ALONG THE PERIMETER OF THE BUILDING SHALL BE AT LEAST 5% FOR A DISTANCE OF 10'-0" OUTWARD FROM THE EDGE OF THE BUILDING. ADD SOD ALONG THE FULL

3.1) 6 MIL THICK PLASTIC VAPOR RETARDER, TYPE RECOMMENDED TO BE IN CONTACT WITH THE SOIL OR FILL UNDER A CONCRETE SLAB, LISTED IN ASTM 1745 CLASS A WITH A PERMEANCE LESS THAN 0.036 AS DETERMINED BY ASTM E96. POLYETHYLENE IS NOT ACCEPTABLE INSTALL VAPOR RETARDER SOLIDLY WITHIN AND BELOW SLAB SURFACE WITH JOINTS LAPPED AT LEAST 6-INCHES AND TAPED CONTINUOUSLY WITH RECOMMENDED PRESSURE-SENSITIVE TAPE. EXTEND VAPOR RETARDER DOWN THE SIDES OF THE BEAI TRENCHES AND TERMINATE SO THAT IT DOES NOT EXTEND ACROSS THE TRENCH BOTTOM. CONTRACTOR AND ARCHITECT (NOT STRUCTURAL ENGINEER) SHALL VERIFY THAT VAPOR RETARDER SELECTED IS COMPATIBLE WITH PROPOSED FLOOR FINISHES.

3.2) SLAB REINFORCEMENT: SEE TABLE 3.2 ON SHEET S1.2, EXTEND SLAB REINFORCING TO TOF OUTSIDE PERIMETER BEAM BAR. START SLAB STEEL SPACING NOT MORE THAN 6-INCHES FROM THE EDGE OF THE SLAB TOP INSIDE BEAM BAR. ADD (3) #4 DIAGONAL BARS x 4-FEET LONG ABOVE TYPICAL SLAB REINFORCING AT ALL SLAB INTERIOR CORNERS. ADD #4 "Z" BARS AT 12-INCHES ON CENTER WHERE SLAB STEPS DOWN GREATER THAN 3-INCHES.

3.3) FOUNDATION GRADE BEAM REINFORCEMENT: SEE TABLE 3.3 ON SHEET S1.2, LAP #6 "Z" BARS TO HORIZONTAL BARS WHERE BEAM STEPS DOWN GREATER THAN 3-INCHES. FOR BEAMS WITH DEPTH EXCEEDING 3'-0", ADD #4 CONTINUOUS MID-HEIGHT HORIZONTAL BARS AT EACH BEAM FACE AT 12-INCHES ON CENTER

3.4) BEND END OF #4 SLAB REBAR TO ACCOMMODATE CURB. ADD CONTINUOUS #4 REBAR ALONG TOP OF BENT BAR.

3.19) 3/16-INCH WIDE SAW CUT JOINT SEE PLAN FOR SPACING OF JOINT. CUT JOINTS 8 TO 12 HOURS AFTER CONCRETE IS PLACED AND SHALL BE AT LEAST 1-1/2-INCH DEEP. REINFORCEMENT SHALL BE CONTINUOUS THROUGH SAWED JOINTS.

3.31) LUG AT GARAGE DOOR. REFER TO DOOR MANUFACTURER FOR SUGGESTIONS ON LUG

3.39) #4 x 2'-0" DOWELS AT 12-INCHES ON CENTER.

9.7) PAVEMENT BY OTHERS.

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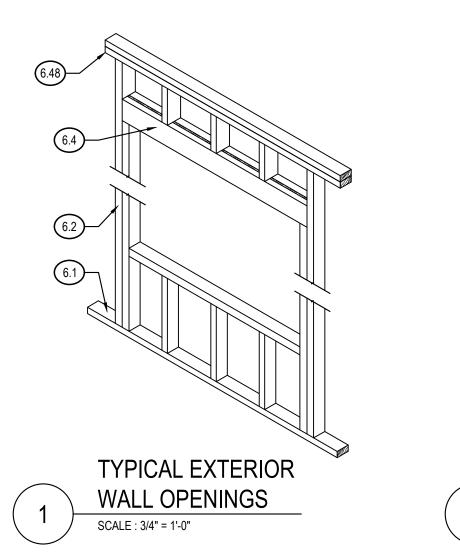
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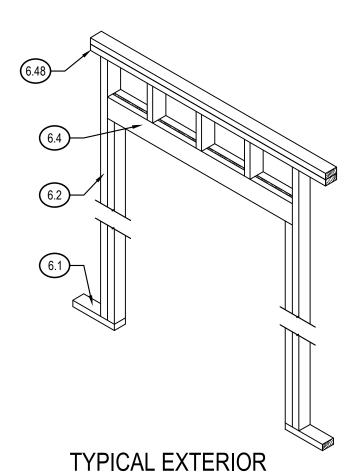
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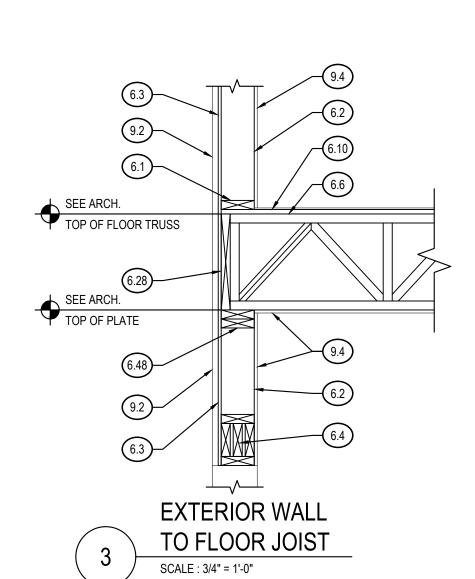
MONTHS FROM THE DATE OF SIGNATURE. SHEET SIZE: 24" x 36"

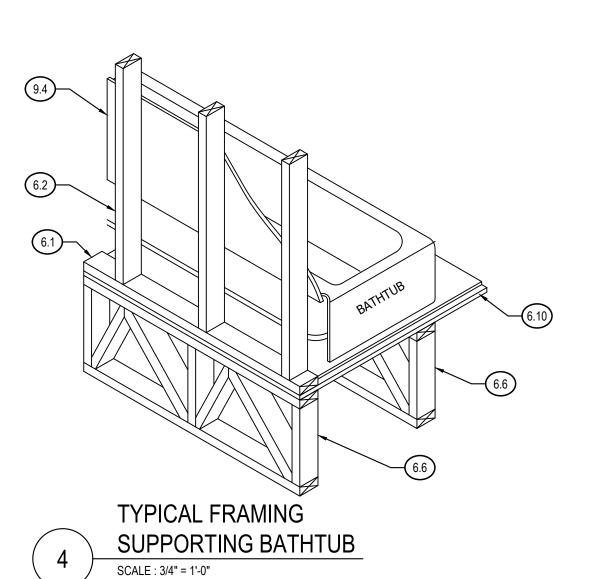


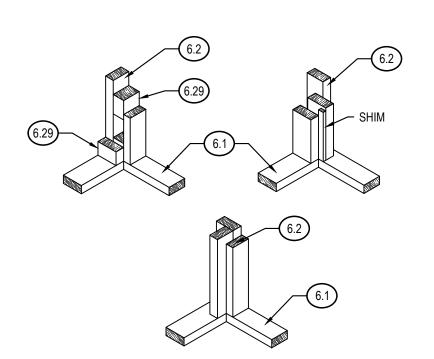


DOOR OPENINGS

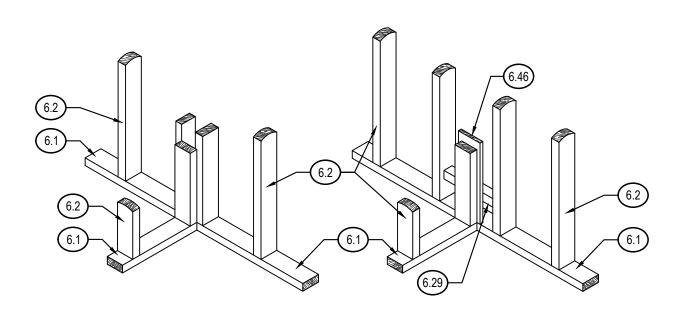
SCALE: 3/4" = 1'-0"



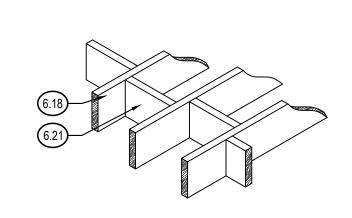




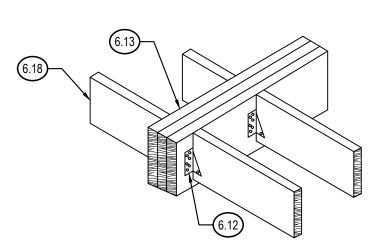




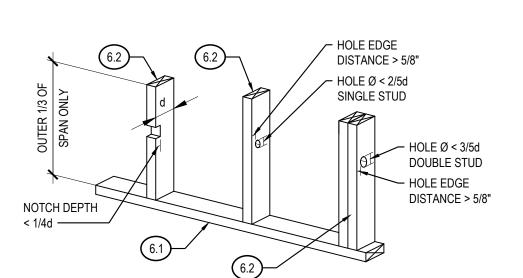
TYPICAL WALL FRAMING AT INTERSECTING PARTITIONS SCALE: 3/4" = 1'-0"



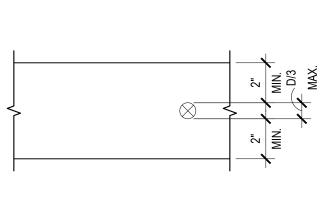
TYPICAL JOIST **BLOCKING** SCALE: 3/4" = 1'-0"



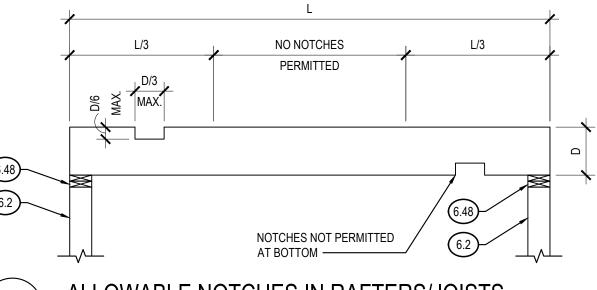
TYPICAL JOIST TO BEAM SCALE: 3/4" = 1'-0"



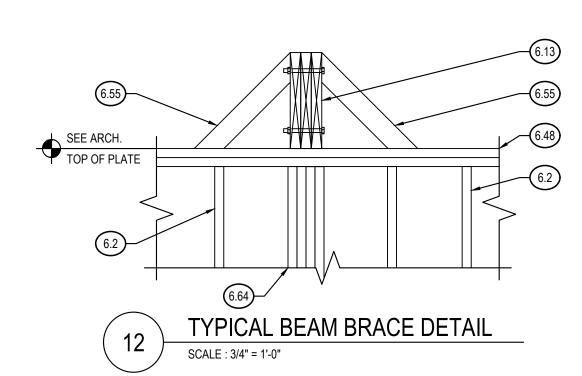
ALLOWABLE STUD NOTCHES SCALE: 3/4" = 1'-0"



ALLOWABLE HOLES IN RAFTERS/JOISTS SCALE: 3/4" = 1'-0"



ALLOWABLE NOTCHES IN RAFTERS/JOISTS SCALE: 3/4" = 1'-0"



# FRAMING KEY NOTES

6.1) WALL SILL PLATE: SEE TABLE 5B, ON SHEET S1.2

SILL PLATE TO CONCRETE FOUNDATION: ANCHOR SILL PLATE TO CONCRETE FOUNDATION WITH 1/2-INCH DIAMETER, A307 "J" BOLTS OR ALL THREAD RODS AT 48-INCHES ON CENTER MAX. EMBED ANCHOR AT LEAST 7-INCHES INTO CONCRETE.

SILL PLATE TO WOOD FRAMING (AT UPPER FLOORS): ANCHOR SILL PLATE TO FLOOR FRAMING WITH 1/4-INCH DIAMETER x 5-INCHES LONG LAG SCREW OR (2) SIMPSON STRONG TIE STRONG DRIVE SDWS TIMBER SCREW (5-INCHES LONG) AT 48-INCHES ON CENTER.

6.2) WALL STUDS: SEE TABLE 5B, ON SHEET S1.2

STUDS SHALL BE DOUBLED AT ALL ANGLES, CORNERS, AND AROUND ALL OPENINGS. NOT LESS THAN (3) STUDS SHALL BE INSTALLED AT EACH WALL CORNER.

PROVIDE 2X SOLID BLOCKING AT MID-HEIGHT OF ALL WOOD STUD BEARING WALLS LOCATED ON THE FIRST FLOOR OF BUILDINGS.

6.3) EXTERIOR STRUCTURAL WALL SHEATHING - SEE TABLE 2, ON SHEET S1.2

ALL EXTERIOR WALLS AND MAIN CROSS STUD PARTITIONS INDICATED ON THE DRAWINGS SHALL BE EFFECTIVELY AND THOROUGHLY SHEATHED.

6.4) HEADER: SEE FRAMING PLAN AND TABLE 4, ON SHEET S1.2

UNLESS NOTED OTHERWISE, ADD (1) 2X CRIPPLE STUD AT EACH END OF THE END AND (1) KING STUD FACE NAILED TO CRIPPLE STUD AT EACH END.

6.6) FLOOR TRUSS: PREFABRICATED 4X WOOD FLOOR TRUSS - SEE PLAN AND TABLE 3B ON SHEET S1.2.

FLOOR AND ROOF TRUSSES SHALL BEAR WITHIN 5-INCHES OF THE WIDTH BENEATH THE DOUBLE TOP PLATE. TOENAIL TRUSS TO TOP PLATE WITH AT LEAST (4) 8d NAILS.

UNLESS OTHERWISE INDICATED ON THE DRAWINGS, ALL CANTILEVERED JOISTS SHALL EXTEND INTO THE BUILDING A DISTANCE EQUAL TO THE CANTILEVER. CANTILEVERED JOISTS RUNNING PERPENDICULAR TO FRAMING INSIDE THE BUILDING SHALL BE CONNECTED TO INSIDE MEMBER WITH STANDARD JOIST HANGERS. CANTILEVERED JOIST RUNNING PARALLEL TO FRAMING INSIDE THE BUILDING SHALL BE NAILED TO THE SIDE OF THE INSIDE MEMBERS WITH 16D NAILS AT 12-INCHES ON

6.7) ROOF RAFTER: 2X CONVENTIONAL ROOF RAFTER - SEE ROOF FRAMING PLAN AND TABLE 3B, ON SHEET

6.10) FLOOR DECKING: SEE TABLE 2B ON SHEET S1.2.

PLACE TONGUE AN GROOVE PLYWOOD FLOOR WITH REQUIRED JOINT SPACES BETWEEN SHEETS AND WITH END JOINTS STAGGERED. PLYWOOD GRAIN SHALL BE PERPENDICULAR TO FRAMING. SECURE SHEETS OVER FIRM BEARING. PROVIDE EDGE BLOCKING AT ALL FLOOR OPENINGS.

6.11) ROOF DECKING: SEE TABLE 2B ON SHEET S1.2

PLACE PLYWOOD ROOF SHEATHING WITH REQUIRED JOINT SPACES BETWEEN SHEETS AND WITH END JOINTS STAGGERED. PLYWOOD GRAIN SHALL BE PERPENDICULAR TO FRAMING.

6.12) JOIST HANGER: SEE TABLE 7, ON SHEET S1.2

6.13) WOOD BEAM - SEE FRAMING PLAN AND TABLE 6, ON SHEET S1.2

6.14) FASCIA BOARD: CONTINUOUS FASCIA BOARD - SEE FRAMING PLAN AND REFER TO ARCHITECT/DESIGNER/OWNER. IF NOT PROVIDED BY OTHERS, SEE TABLE 3B ON SHEET S1.2.

6.15) RIDGE BOARD/BEAM: SEE FRAMING PLAN. SEE TABLE 3B ON SHEET S1.2 FOR RIDGE BOARD AND TABLE 6 ON SHEET S1.2 FOR BEAM, AS APPLICABLE.

6.18) CEILING JOIST: SEE FRAMING PLAN. SEE TABLE 6, ON SHEET S1.2

6.19) ROOF OUTRIGGER: SEE FRAMING PLAN AND TABLE 3 OR 3B, ON SHEET S1.2

6.20) SOFFIT SUPPORT: 2x4 HORIZONTAL SUPPORT FOR SOFFIT. FASTEN TO 2X NAILER ALONG WALL WITH (2) 10d TOE NAILS.

6.21) BLOCKING FOR JOISTS: 2X FULL DEPTH BLOCKING BETWEEN ALL FLOOR JOISTS, CEILING JOISTS AND ROOF RAFTERS. BLOCKING DEPTH TO MATCH SIZE OF FRAMING MEMBER BEING REINFORCED

6.22) COLLAR TIE: 2x4 COLLAR TIE. 24-INCHES BELOW BOTTOM OF RIDGE BOARD. SPACE COLLAR TIES AT 4-FEET ON CENTER OR AT EVERY OTHER ROOF RAFTER. FACE NAIL COLLAR TIE TO RAFTERS WITH (2)

6.24) WALL STUDS AT END WALL OF GABLE: MATCH BUILDING WALL STUDS FROM FLOOR BELOW. SEE TABLE

6.28) RIBBON BLOCKING FOR TRUSS/JOIST FRAMING: CONTINUOUS 2X RIBBON BLOCKING FACE NAILED TO EACH TRUSS/JOIST WITH (2) 16d NAILS.

6.29) BLOCKING FOR STUDS: 2X BLOCKING BETWEEN 2X STUDS AT 32-INCHES ON CENTER ALONG THE FULL HEIGHT OF BLOCKED STUDS. TOE NAIL BLOCKING TO STUDS WITH (2) 8d NAILS PER SIDE.

6.31) PURLIN: CONTINUOUS 2X PURLIN ACROSS THE BOTTOM OF RAFTERS. PURLIN SIZE TO MATCH SIZE OF

6.32) PURLIN SUPPORT: DIAGONAL PURLIN SUPPORT AT 6-FEET ON CENTER MAX. PROVIDE PURLIN SUPPORT AT EACH OF PURLIN LINE. BEAR PURLIN SUPPORT ON NEAREST LOAD BEARING WALL OR STRUCTURAL BEAM. DO NO BEAR PURLIN SUPPORT ON CEILING JOISTS OR FLOOR FRAMING UNLESS SPECIFICALLY NOTED ON THE PLANS. ADD CONTINUOUS 2x4 HORIZONTAL BRACE AT MIDSPAN OF PURLIN SUPPORT.

(2) 2x4 PURLIN SUPPORTS - 10-FEET MAX DIAGONAL LENGTH (2) 2x6 PURLIN SUPPORTS - 14-FEET MAX DIAGONAL LENGTH (2) 2x8 PURLIN SUPPORTS - 18-FEET MAX DIAGONAL LEGNTH (2) 2x10 PURLIN SUPPORTS - 20-FEET MAX DIAGONAL LENGTH

6.46) CONTINUOUS NAILER: CONTINUOUS 2X NAILER. MATCH NAILER DEPTH TO SUPPORTED FRAMING

FASTEN TO STRUCTURAL WALL AS FOLLOWS:

2x4 NAILER: (2) NO. 10 STRUCTURAL WOOD SCREWS AT EACH STUD. 2x6 NAILER: (3) NO. 10 STRUCTURAL WOOD SCREWS AT EACH STUD. 2x8 NAILER: (4) NO. 10 STRUCTURAL WOOD SCREWS AT EACH STUD. 2x10 NAILER: (5) NO. 10 STRUCTURAL WOOD SCREWS AT EACH STUD. 2x12 NAILER: (6) NO. 10 STRUCTURAL WOOD SCREWS AT EACH STUD.

NAILS MAY NOT BE SUBSTITUTED FOR STRUCTURAL WOOD SCREWS.

6.48) DOUBLE TOP PLATE FOR BRACED WALLS: DOUBLE 2X TOP PLATE. SEE TABLE 5B ON SHEET S1.2 FOR MEMBER SIZE. LAP TOP PLATE MEMBERS AT LEAST 24-INCHES FOR CONTINUITY.

6.55) TOP PLATE DIAGONAL BRIDGING TO STUD: 2x4 DIAGONAL BRIDGING AT 2-FEET ON CENTER ALONG FULL LENGTH OF WALL. FASTEN TO TOP OF JOIST/TRUSS AND TO TOP OF PLATE WITH (2) 10d NAILS.

6.64) SOLID BUILT UP 2X FRAMED COLUMN. BUILT UP COLUMN SHALL BE FULL HEIGHT COLUMN TO EXTEND FROM BOTTOM PLATE TO TOP PLATE WITHOUT ANY INTERMEDIATE INTERRUPTIONS OF COLUMN.

9.1) ROOFING MATERIAL - REFER TO ARCHITECT/DESIGNER/OWNER.

9.2) EXTERIOR FINISH - REFER TO ARCHITECTURAL/DESIGNER/OWNER.

9.4) INTERIOR FINISH - REFER TO ARCHITECT/DESIGNER/OWNER.

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SHEET SIZE: 24" x 36"

ANY PARTY, REFERENCING THESE PLANS FOR PRICING OR CONSTRUCTION, SHALL VERIFY ALL FIELD CONDITIONS WHICH WILL AFFECT THEIR SCOPE OF WORK, THE PROCUREMENT OF MATERIAL, AND FABRICATION OF COMPONENTS FOR THE CONSTRUCTION SHOWN ON THESE PLANS PRIOR TO THE START OF CONSTRUCTION. UNLESS OTHERWISE INDICATED, THE DOCUMENTS DO NOT INDICATE THE MEANS AND METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL TAKE ALL MEASURES TO PROTECT THE SAFETY OF THE PUBLIC ALONG WITH THE SAFETY OF PROPERTY AND HIMSELF, DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, RETAINING PROFESSIONAL TO AID IN DEVELOPING, SHORING AND BRACING AND MAINTENANCE OF BRACING AND SHORING SYSTEMS. DESIGN, CONSTRUCT, INSPECT AND MAINTAIN BRACING AND SHORING SYSTEMS TO SUSTAIN PRESCRIBED SERVICE LOADS PER THE INTERNATIONAL BUILDING CODE. THE CONTRACTOR WILL BE REQUIRED TO CORRECT AT HIS OWN EXPENSE ANY SUBSIDENCE, STRUCTURAL DAMAGE OR OTHER OBJECTIONAL CONDITIONS CAUSED BY HIS OPERATIONS.

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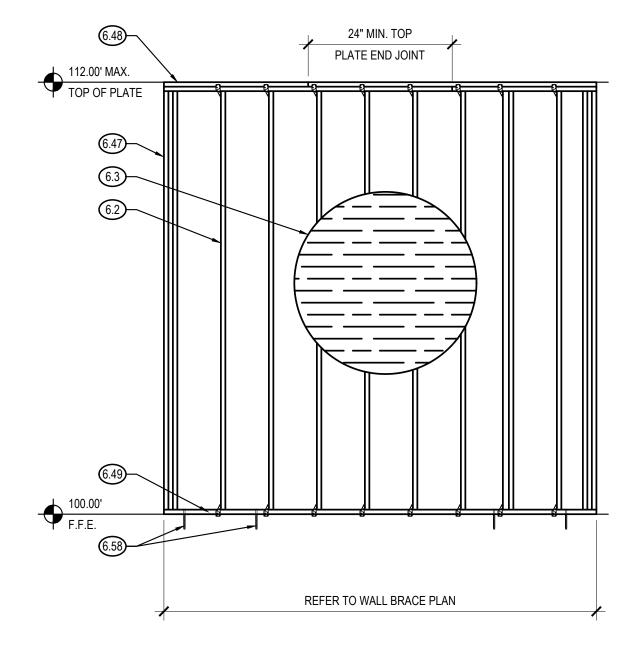
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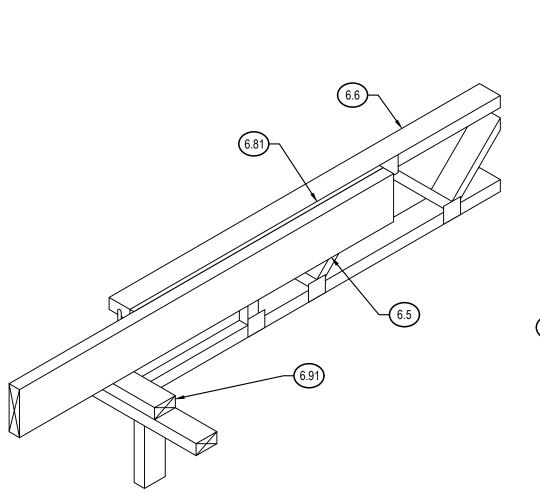
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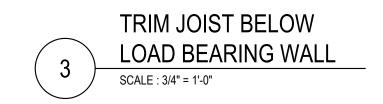


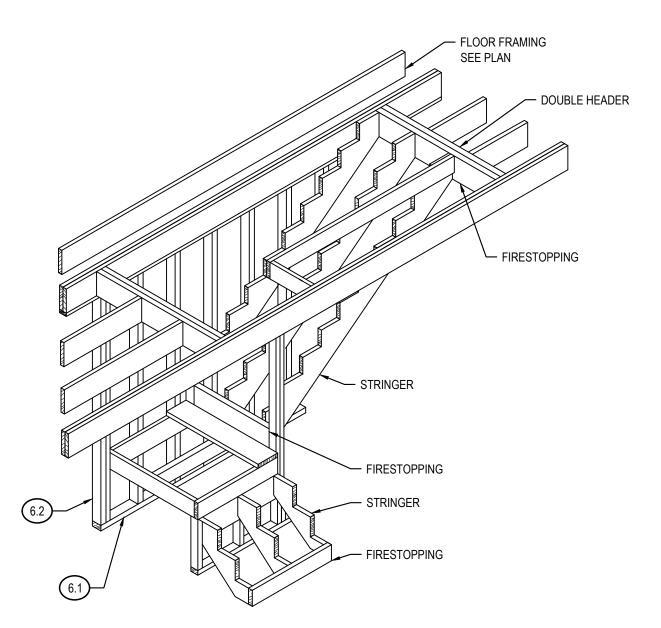




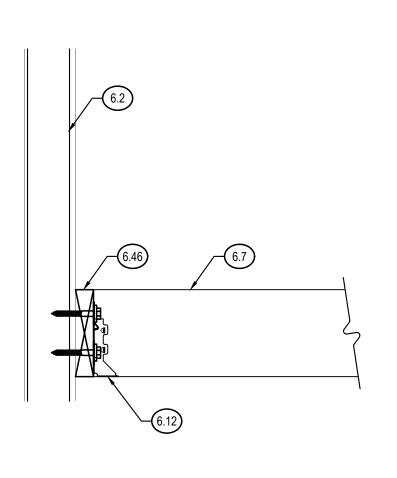


SCALE: 3/4" = 1'-0"

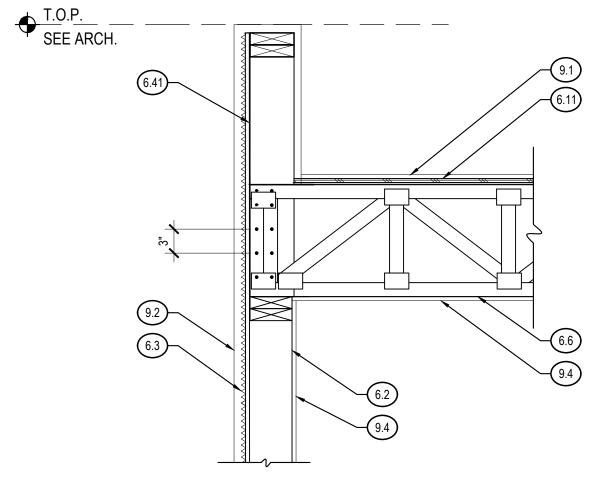


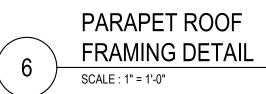


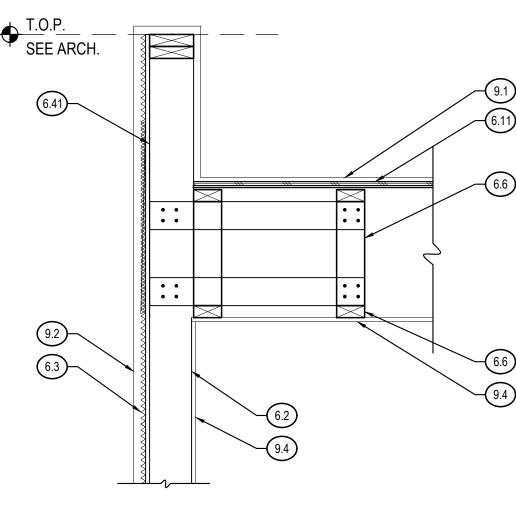




TYPICAL LOW ROOF RAFTER TO WALL SCALE: 1 1/2" = 1'-0"







# PARAPET ROOF FRAMING DETAIL

# FRAMING KEY NOTES

6.2) WALL STUDS: SEE TABLE 5B, ON SHEET S1.2

STUDS SHALL BE DOUBLED AT ALL ANGLES, CORNERS, AND AROUND ALL OPENINGS. NOT LESS THAN (3) STUDS SHALL BE INSTALLED AT EACH WALL CORNER.

PROVIDE 2X SOLID BLOCKING AT MID-HEIGHT OF ALL WOOD STUD BEARING WALLS LOCATED ON THE FIRST FLOOR OF BUILDINGS.

6.3) EXTERIOR STRUCTURAL WALL SHEATHING - SEE TABLE 2, ON SHEET S1.2

ALL EXTERIOR WALLS AND MAIN CROSS STUD PARTITIONS INDICATED ON THE DRAWINGS SHALL BE EFFECTIVELY AND THOROUGHLY SHEATHED.

6.5) FLOOR JOIST: 2X CONVENTIONAL FLOOR JOIST - SEE PLAN AND TABLE 3B ON SHEET S1.2.

6.6) FLOOR TRUSS: PREFABRICATED 4X WOOD FLOOR TRUSS - SEE PLAN AND TABLE 3B ON SHEET S1.2.

FLOOR AND ROOF TRUSSES SHALL BEAR WITHIN 5-INCHES OF THE WIDTH BENEATH THE DOUBLE TOP PLATE. TOENAIL TRUSS TO TOP PLATE WITH AT LEAST (4) 8d NAILS.

UNLESS OTHERWISE INDICATED ON THE DRAWINGS, ALL CANTILEVERED JOISTS SHALL EXTEND INTO THE BUILDING A DISTANCE EQUAL TO THE CANTILEVER. CANTILEVERED JOISTS RUNNING PERPENDICULAR TO FRAMING INSIDE THE BUILDING SHALL BE CONNECTED TO INSIDE MEMBER WITH STANDARD JOIST HANGERS. CANTILEVERED JOIST RUNNING PARALLEL TO FRAMING INSIDE THE BUILDING SHALL BE NAILED TO THE SIDE OF THE INSIDE MEMBERS WITH 16D NAILS AT 12-INCHES ON

6.7) ROOF RAFTER: 2X CONVENTIONAL ROOF RAFTER - SEE ROOF FRAMING PLAN AND TABLE 3B, ON SHEET

6.10) FLOOR DECKING: SEE TABLE 2B ON SHEET S1.2.

PLACE TONGUE AN GROOVE PLYWOOD FLOOR WITH REQUIRED JOINT SPACES BETWEEN SHEETS AND WITH END JOINTS STAGGERED. PLYWOOD GRAIN SHALL BE PERPENDICULAR TO FRAMING. SECURE SHEETS OVER FIRM BEARING, PROVIDE EDGE BLOCKING AT ALL FLOOR OPENINGS.

6.11) ROOF DECKING: SEE TABLE 2B ON SHEET S1.2

PLACE PLYWOOD ROOF SHEATHING WITH REQUIRED JOINT SPACES BETWEEN SHEETS AND WITH END JOINTS STAGGERED. PLYWOOD GRAIN SHALL BE PERPENDICULAR TO FRAMING. SECURE SHEETS OVER FIRM BEARING. PROVIDE SOLID BLOCKING AT ALL PLYWOOD EDGES. PROVIDE PLYWOOD SHEATHING CLIPS (REFERRED TO AS H CLIPS OR PSC CLIPS) AT UNSUPPORTED PLYWOOD ROOF EDGES, SPACED ONE BETWEEN EACH SUPPORT. PROVIDE EDGE BLOCKING AT ALL ROOF OPENINGS. NAIL TO FRAMING MEMBERS AT PLYWOOD EDGES AT 6-INCHES ON CENTER AND AT INTERMEDIATE SUPPORTS AT 6-INCHES ON CENTER. NAIL WITH AT LEAST 8D COMMON NAILS.

6.12) JOIST HANGER: SEE TABLE 7, ON SHEET S1.2

6.41) PARAPET WALL FRAMING - FACE NAIL STUDS TO TRUSS. SEE TABLE 3B ON SHEET S1.2.

6.46) CONTINUOUS NAILER: CONTINUOUS 2X NAILER. MATCH NAILER DEPTH TO SUPPORTED FRAMING

FASTEN TO STRUCTURAL WALL AS FOLLOWS:

2x4 NAILER: (2) NO. 10 STRUCTURAL WOOD SCREWS AT EACH STUD. 2x6 NAILER: (3) NO. 10 STRUCTURAL WOOD SCREWS AT EACH STUD. 2x8 NAILER: (4) NO. 10 STRUCTURAL WOOD SCREWS AT EACH STUD. 2x10 NAILER: (5) NO. 10 STRUCTURAL WOOD SCREWS AT EACH STUD. 2x12 NAILER: (6) NO. 10 STRUCTURAL WOOD SCREWS AT EACH STUD.

NAILS MAY NOT BE SUBSTITUTED FOR STRUCTURAL WOOD SCREWS.

6.47) CORNER STUDS AT END OF BRACED WALL: (2) 2X CORNER STUDS AT EACH END OF BRACED WALL. SEI DETAIL H FOR FRAMING INTERSECTING WALLS TO BRACED WALLS. DO NOT ADD 2X BLOCKING TO CORNER STUDS AT BRACED WALLS.

6.48) DOUBLE TOP PLATE FOR BRACED WALLS: DOUBLE 2X TOP PLATE. SEE TABLE 5B ON SHEET S1.2 FOR MEMBER SIZE. LAP TOP PLATE MEMBERS AT LEAST 24-INCHES FOR CONTINUITY.

6.49) BRACED WALL BOTTOM PLATE ANCHOR:

SILL PLATE TO CONCRETE FOUNDATION: ANCHOR SILL PLATE TO CONCRETE FOUNDATION WITH 1/2-INCH DIAMETER, A307 "J" BOLTS OR ALL THREAD RODS AT 48-INCHES ON CENTER MAX. EMBED ANCHOR AT LEAST 7-INCHES INTO CONCRETE.

SILL PLATE TO WOOD FRAMING (AT UPPER FLOORS): ANCHOR SILL PLATE TO FLOOR FRAMING WITH 1/4-INCH DIAMETER X 5-INCHES LONG LAG SCREW OR (2) SIMPSON STRONG TIE STRONG DRIVE SDWS TIMBER SCREW (5-INCHES LONG) AT 48-INCHES ON CENTER.

6.58) ADD SIMPSON STRONG-TIE TITEN HD ANCHOR AT END OF WALL, ADD ADDITIONAL ANCHOR 24-INCHES FROM END WALL ANCHOR.

6.81) 3/4" MIN. PLYWOOD GLUED AND NAILED TO ONE FACE WITH 10D NAILS 3" O.C.

6.83) 32" X 12" X 3/4" PLYWOOD GLUED AND NAILED TO BOTH FACES WITH 10D NAILS 3" O.C. CENTERED OVER BEARING POINT.

6.91) 2 X 4 SUPPORT PONY WALL

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