### GENERAL NOTES AND SPECIFICATIONS (SUBSEQUENT NOTES ON REMAINING SHEETS)

IT IS THE BUILDER'S/CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL REQUIRED CODES, BOTH STATE AND LOCAL, ARE FOLLOWED. NOTES IDENTIFIED IN THIS DRAWING PACKAGE ARE MEANT AS REFERENCE MATERIAL ONLY, AND ANY CONTENT (TABLES, IMAGES, FIGURES, OR OTHERWISE) NOTED IN THIS DRAWING PACKAGE MUST BE REFERENCED/VERIFIED IN THE MICHIGAN RESIDENTIAL CODE BOOK, AND WITH LOCAL BUILDING DEPARTMENT(S). NOT ALL 2015 MICHIGAN RESIDENTIAL CODE WORDING MAY BE INCLUDED UNDER EACH SECTION REFERENCED IN THIS

CONTENT INCLUDED IN THIS DRAWING PACKAGE EXCERPTED FROM: MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS. 2015 MICHIGAN RESIDENTIAL CODE. INTERNATIONAL CODE COUNCIL INC, 2015

THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY WORK KNOWINGLY PERFORMED CONTRARY TO SUCH LAWS, ORDINANCES, OR REGULATIONS. THE CONTRACTOR SHALL ALSO PERFORM COORDINATION WITH ALL UTILITIES AND STATE SERVICE AUTHORITIES. WRITTEN DIMENSIONS ON THESE DRAWINGS SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE GENERAL CONTRACTOR SHALL VERIFY AND IS RESPONSIBLE FOR ALL DIMENSIONS (INCLUDING ROUGH OPENINGS) AND CONDITIONS ON THE JOB AND MUST NOTIFY OAKBRIDGE

OAKBRIDGE DEVELOPMENT LLC SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, ACTS OR OMISSIONS OF THE CONTRACTOR OR SUBCONTRACTOR, OR FAILURE OF ANY OF THEM TO CARRY OUT WORK IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS. AND DEFECT DISCOVERED IN THE CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF OAKBRIDGE DEVELOPMENT LLC BY WRITTEN NOTICE BEFORE PROCEEDING WITH WORK. REASONABLE TIME NOT ALLOWED OAKBRIDGE DEVELOPMENT LLC TO

CORRECT THE DEFECT SHALL PLACE THE BURDEN OF COST AND LIABILITY FROM SUCH DEFECT UPON THE CONTRACTOR.

OAKBRIDGE DEVELOPMENT LLC SHALL NOT BE RESPONSIBLE FOR DEMOLITION MEANS AND METHODS, ACTS OR OMISSIONS OF THE CONTRACTOR OR SUBCONTRACTOR, OR FAILURE OF ANY OF THEM TO CARRY OUT WORK IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS. ANY DEFECT DISCOVERED IN THE CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF OAKBRIDGE DEVELOPMENT LLC BY WRITTEN NOTICE BEFORE PROCEEDING WITH WORK. REASONABLE TIME NOT ALLOWED OAKBRIDGE DEVELOPMENT LLC TO CORRECT THE DEFECT SHALL PLACE THE BURDEN OF COST AND LIABILITY FROM SUCH DEFECT UPON THE CONTRACTOR.

CONTRACTOR SHALL VERIFY EXISTING SITE AND BUILDING CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO DEMOLITION ACTIVITIES AND

CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS BEFORE COMMENCING WORK.

DEVELOPMENT LLC OF ANY VARIATIONS FROM THESE DRAWINGS.

CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY SHORING, TEMPORARY BRACING, AND OR TEMPORARY SUPPORTS AS REQUIRED TO MAINTAIN STRUCTURAL INTEGRITY OF EXISTING STRUCTURE TO REMAIN AND OR EXISTING BUILDING ELEMENTS TO REMAIN.

CONTRACTOR IS TO VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO DEMOLITION ACTIVITIES AND WORK. CONTRACTOR SHALL REMOVE TRASH AND DEBRIS REGULARLY AS NECESSARY TO ELIMINATED INTERFERENCE WITH ROADS, STREET, WALKS, AND ALL OTHER ADJACENT FACILITIES.

ALL EXISTING EQUIPMENT THAT REMAINS SHALL BE PROTECTED DURING DEMOLITION AND OR CONSTRUCTION TO PREVENT DAMAGE. ANY DAMAGE TO REMAINING EXISTING EQUIPMENT SUSTAINED DURING DEMOLITION AND OR CONSTRUCTION SHALL BE EQUIVALENTLY REPLACED OR EQUIVALENTLY REPAIRED AT NO COST TO THE OWNER.

CONTRACTOR SHALL PROVIDE TRAFFIC HANDLING MEASURES TO PROTECT THE GENERAL PUBLIC AT ALL TIMES, AS NECESSARY AND AS

REQUIRED BY AUTHORITIES HAVING JURISDICTION. DO NOT INTERRUPT EXISTING UTILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY

SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES, AS ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION. WHEN UTILITY SERVICES ARE REQUIRED TO BE REMOVED, RELOCATED, OR ABANDONED, PROVIDE BYPASS CONNECTIONS TO MAINTAIN CONTINUITY OF SERVICE BEFORE PROCEEDING WITH DEMOLITION.

CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES INCLUDING BUT NOT LIMITED TO THE FOLLOWING: ELECTRIC, GAS, WATER, TELEPHONE, STORM SEWER, AND SANITARY SEWER FOR FIELD LOCATION OF ALL UNDERGROUND AND OVERHEAD UTILITY LINES. PRIOR TO COMMENCEMENT OF ANY DEMOLITION WORK, CONTRACTOR SHALL IDENTIFY ALL ELECTRICAL CIRCUITS SERVICING THE AREA INVOLVED WITH THIS DEMOLITION. THOSE CIRCUITS SHALL THEN BE LOCKED OUT AND TAGGED OUT IF THEY DO NOT SERVICE ANY OF THE REMAINING BUILDING. THOSE CIRCUITS WHICH ARE IDENTIFIED TO SERVICE BOTH THE AREA TO BE DEMOLISHED AND THE REMAINING BUILDING SHALL BE SPLIT SO AS TO KILL ALL ELECTRICAL POWER TO THE AREA TO BE DEMOLISHED WHILE MAINTAINING POWER TO THE REMAINDER OF THE BUILDING.

PROTECT EXISTING SITE ELEMENTS AND EXISTING LANDSCAPING TO REMAIN. PROTECTION SHALL INCLUDE BUT NOT BE LIMITED TO EXISTING TREES AND OTHER EXISTING VEGETATION INDICATED TO REMAIN IN PLACE AGAINST UNNECESSARY CUTTING, BREAKING, OR SKINNING OF ROOTS, SKINNING OR BRUISING OF BARK, SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIAL OR EXCAVATED MATERIAL WITHIN DRIP

NOTIFY THE BUILDING OWNER OF ANY MATERIALS, FIXTURES, ETC. TO BE REMOVED THAT ARE DEEMED SALVAGEABLE. TURN OVER ANY REQUESTED ITEMS TO THE BUILDING OWNER IN GOOD AND CLEAN CONDITION.

### ADHERE TO SECTION R314 - SMOKE ALARMS

R314.1 GENERAL. SMOKE ALARMS SHALL COMPLY WITH NFPA 72 AND SECTION R314.

R314.3 LOCATION. SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS:

2. OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS. 3. ON EACH ADDITIONAL STORY OF THE DWELLING, INCLUDING BASEMENTS AND HABITABLE ATTICS BUT NOT INCLUDING CRAWLSPACES

AND UNINHABITABLE ATTICS. R314.3.3 EQUIPMENT REQUIREMENTS. BUILDER TO ADHERE TO 2015 MICHIGAN RESIDENTIAL CODE 'S INSTALLATION, POWER SOURCE, AND

AUDIBLE ALARM NOTIFICATION REQUIREMENTS.

R314.4 INTERCONNECTION. WHERE MORE THAN 1 SMOKE ALARM IS REQUIRED TO BE INSTALLED WITHIN AN INDIVIDUAL DWELLING UNIT IN ACCORDANCE WITH SECTION R314.3, THE ALARM DEVICES SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTUATION OF 1 ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT.

R314.6 POWER SOURCE, SMOKE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHERE SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND, WHERE PRIMARY POWER IS INTERRUPTED, SHALL RECEIVE POWER FROM A BATTERY.

## ADHERE TO SECTION R315 - CARBON MONOXIDE ALARMS

R315.1 GENERAL. CARBON MONOXIDE ALARMS SHALL COMPLY WITH SECTION R315.

R315.2.1 NEW CONSTRUCTION. FOR NEW CONSTRUCTION, CARBON MONOXIDE ALARMS SHALL BE PROVIDED IN DWELLING UNITS. R315.5 POWER SOURCE. CARBON MONOXIDE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHERE SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND, WHERE PRIMARY POWER IS INTERRUPTED, SHALL RECEIVE POWER FROM A BATTERY. R315.6.2 LOCATION. CARBON MONOXIDE DETECTORS SHALL BE INSTALLED IN THE LOCATIONS SPECIFIED IN SECTION R315.3.

## SECTION R302 - FIRE-RESISTANT CONSTRUCTION

R302.1 EXTERIOR WALLS. CONSTRUCTION, PROJECTIONS, OPENINGS AND PENETRATIONS OF EXTERIOR WALLS OF DWELLINGS AND

ACCESSORY BUILDINGS SHALL COMPLY WITH TABLE R302.1(1) R302.5 DWELLING-GARAGE OPENING AND PENETRATION PROTECTION. OPENINGS AND PENETRATIONS THROUGH THE WALLS OR CEILINGS SEPARATING THE DWELLING FROM THE GARAGE SHALL BE IN ACCORDANCE WITH SECTIONS R302.5.1 THROUGH R302.5.3.

R302.6 DWELLING-GARAGE FIRE SEPARATION. THE GARAGE SHALL BE SEPARATED AS REQUIRED BY TABLE R302.6. OPENINGS IN GARAGE WALLS SHALL COMPLY WITH SECTION R302.5. ATTACHMENT OF GYPSUM BOARD SHALL COMPLY WITH TABLE R702.3.5. R302.11 FIREBLOCKING. IN COMBUSTIBLE CONSTRUCTION, FIREBLOCKING SHALL BE PROVIDED TO CUT OFF BOTH VERTICAL AND HORIZONTAL CONCEALED DRAFT OPENINGS AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND THE ROOF

OF A FLOOR-CEILING ASSEMBLY, DRAFTSTOPS SHALL BE INSTALLED SO THAT THE AREA OF THE CONCEALED SPACE DOES NOT EXCEED 1,000 SQUARE FEET (92.9 M2). DRAFTSTOPPING SHALL DIVIDE THE CONCEALED SPACE INTO APPROXIMATELY EQUAL AREAS. SECTION R506 - CONCRETE FLOORS (ON GROUND)

R302.12 DRAFTSTOPPING. IN COMBUSTIBLE CONSTRUCTION WHERE THERE IS USABLE SPACE BOTH ABOVE AND BELOW THE CONCEALED SPACE

R506.1 GENERAL. CONCRETE SLAB-ON-GROUND FLOORS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THIS SECTION OR ACI 332. FLOORS SHALL BE A MINIMUM 31/2 INCHES (89 MM) THICK (FOR EXPANSIVE SOILS, SEE SECTION R403.1.8). THE SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE SHALL BE AS SET FORTH IN SECTION R402.2.

R506.2 SITE PREPARATION. THE AREA WITHIN THE FOUNDATION WALLS SHALL HAVE ALL VEGETATION, TOP SOIL AND FOREIGN MATERIAL REMOVED, AND ADHERE TO SECTIONS; R506.2.1 FILL, R506.2.2 BASE, R506.2.3 VAPOR RETARDER, AND R506.2.4 REINFORCEMENT SUPPORT.

## SECTION N1102 - BUILDING THERMAL ENVELOPE

N1102.1 (R402.1) GENERAL (PRESCRIPTIVE). THE BUILDING THERMAL ENVELOPE SHALL MEET THE REQUIREMENTS OF SECTIONS N1102.1.1

THROUGH N1102.1.4. N1102.1.1 (R402.1.1) INSULATION AND FENESTRATION CRITERIA. THE BUILDING THERMAL ENVELOPE SHALL MEET THE REQUIREMENTS OF TABLE N1102.1.1 BASED ON THE CLIMATE ZONE SPECIFIED IN SECTION N1101.10. N1102.1, INSULATION SHALL MEET THE SPECIFIC REQUIREMENTS *OF SECTIONS N1102.2.1 THROUGH N1102.2.12.* 

N1102.2.1 (R402.2.1) CEILINGS WITH ATTIC SPACES. WHEN SECTION N1102.1.1 WOULD REQUIRE R-38 IN THE CEILING, R-30 SHALL BE DEEMED TO SATISFY THE REQUIREMENT FOR R-36 WHEREVER THE FULL HEIGHT OF UNCOMPRESSED R-30 INSULATION EXTENDS OVER THE WALL TOP PLATE AT THE EAVES. SIMILARLY, R-38 SHALL BE DEEMED TO SATISFY THE REQUIREMENT FOR R-49 WHEREVER THE FULL HEIGHT OF UNCOMPRESSED R-38 INSULATION EXTENDS OVER THE WALL TOP PLATE AT THE EAVES. THIS REDUCTION SHALL NOT APPLY TO THE U-FACTOR

ALTERNATIVE APPROACH IN SECTION N1102.1.3 AND THE TOTAL UA ALTERNATIVE IN SECTION N1102.1.4. N1102.2.2 (R402.2.2) CEILINGS WITHOUT ATTIC SPACES. WHERE SECTION N1102.1.1 WOULD REQUIRE INSULATION LEVELS ABOVE R-30 AND THE DESIGN OF THE ROOF/CEILING ASSEMBLY DOES NOT ALLOW SUFFICIENT SPACE FOR THE REQUIRED INSULATION, THE MINIMUM REQUIRED INSULATION FOR SUCH ROOF/CEILING ASSEMBLIES SHALL BE R-30. THIS REDUCTION OF INSULATION FROM THE REQUIREMENTS OF SECTION N1102.1.1 SHALL BE LIMITED TO 500 SQUARE FEET (46 M2) OR 20 PERCENT OF THE TOTAL INSULATED CEILING AREA, WHICHEVER IS LESS. THIS

REDUCTION SHALL NOT APPLY TO THE U-FACTOR ALTERNATIVE APPROACH IN SECTION N1102.1.3 AND THE TOTAL UA ALTERNATIVE IN SECTION

N1102.2.3 (R402.2.3) EAVE BAFFLE. FOR AIR PERMEABLE INSULATIONS IN VENTED ATTICS, A BAFFLE SHALL BE INSTALLED ADJACENT TO SOFFIT AND EAVE VENTS. BAFFLES SHALL MAINTAIN AN OPENING EQUAL OR GREATER THAN THE SIZE OF THE VENT. THE BAFFLE SHALL EXTEND OVER THE

TOP OF THE ATTIC INSULATION. N1102.4 (R402.4) AIR LEAKAGE. THE BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS N1102.4.1 THROUGH N1102.4.4. R 408.30547D

N1102.4.1 (R402.4.1) BUILDING THERMAL ENVELOPE. THE BUILDING THERMAL ENVELOPE SHALL COMPLY WITH SECTIONS N1102.4.1.1 AND

N1102.4.1.2. R 408.30547D N1102.4.4 (R402.4.4) RECESSED LIGHTING (MANDATORY). RECESSED LUMINAIRES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE SEALED TO LIMIT AIR LEAKAGE BETWEEN CONDITIONED AND UNCONDITIONED SPACES. ALL RECESSED LUMINAIRES SHALL BE IC-RATED AND LABELED AS HAVING AN AIR LEAKAGE RATE NOT MORE THAN 2.0 CFM (0.944 L/S). ALL RECESSED LUMINAIRES SHALL BE SEALED WITH A GASKET OR CAULK BETWEEN THE HOUSING AND THE INTERIOR WALL OR CEILING COVERING. R 408.30547D

## SECTION R1006 - EXTERIOR AIR SUPPLY

R1006.2 EXTERIOR AIR INTAKE. THE EXTERIOR AIR INTAKE SHALL BE CAPABLE OF SUPPLYING ALL COMBUSTION AIR FROM THE EXTERIOR OF THE DWELLING OR FROM SPACES WITHIN THE DWELLING VENTILATED WITH OUTDOOR AIR SUCH AS NONMECHANICALLY VENTILATED CRAWL OR ATTIC SPACES. THE EXTERIOR AIR INTAKE SHALL NOT BE LOCATED WITHIN THE GARAGE OR BASEMENT OF THE DWELLING. THE EXTERIOR AIR INTAKE, FOR OTHER THAN LISTED FACTORY-BUILT FIREPLACES, SHALL NOT BE LOCATED AT AN ELEVATION HIGHER THAN THE FIREBOX. THE EXTERIOR AIR INTAKE SHALL BE COVERED WITH A CORROSION-RESISTANT SCREEN OF 1/4-INCH (6.4 MM) MESH.

R1006.3 CLEARANCE. UNLISTED COMBUSTION AIR DUCTS SHALL BE INSTALLED WITH A MINIMUM 1-INCH (25 MM) CLEARANCE TO COMBUSTIBLES FOR ALL PARTS OF THE DUCT WITHIN 5 FEET (1524 MM) OF THE DUCT OUTLET. R1006.4 PASSAGEWAY. THE COMBUSTION AIR PASSAGEWAY SHALL BE NOT LESS THAN 6 SQUARE INCHES (3870 MM2) AND NOT MORE THAN 55

SQUARE INCHES (0.035 M2), EXCEPT THAT COMBUSTION AIR SYSTEMS FOR LISTED FIREPLACES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FIREPLACE MANUFACTURER'S INSTRUCTIONS.

R1006.5 OUTLET. THE EXTERIOR AIR OUTLET SHALL BE LOCATED IN THE BACK OR SIDE OF THE FIREBOX CHAMBER OR SHALL BE LOCATED OUTSIDE OF THE FIREBOX, AT THE LEVEL OF THE HEARTH AND NOT GREATER THAN 24 INCHES (610 MM) FROM THE FIREBOX OPENING. THE OUTLET SHALL BE CLOSABLE AND DESIGNED TO PREVENT BURNING MATERIAL FROM DROPPING INTO CONCEALED COMBUSTIBLE SPACES



PROPOSED FRONT ELEVATION



PROPOSED REAR ELEVATION



CURRENT FRONT ELEVATION



CURRENT REAR ELEVATION

Stauson Middle School				Murray Ave
8th s	- "		Mulholland Ave	ay Av
8th St	- "		lland	
		J)	Ave	G F
		9		5th-St
		0011		Argus Building
d and a striberty St				
W Liberty St				
	- •	Keppler Ct		
Eberwhite Bivd	422 S Seventh Arbor, MI 48	St, Ann 3103	-	
Monte Para Dalla Bar	-			
		S	5	<u>u</u>
	St. St.	s 7th St		5th St
		7	1 1 1 1 1	W Jefferson St
		9 90 0		
Elder Blvd	Jefferson Ct		6th St	8 4
			_	

OLD WEST SIDE HISTORIC DISTRICT

PROJECT	INFORMATION
HOMEOWN	ERS:

PROJECT INFORMATION
HOMEOWNERS:

PROJECT SITE INFORMATION CLASSIFICATION USE GROUP: YEAR BUILT: PARCEL ID: LEGAL DESCRIPTION:

PROJECT SITE DATA PROPERTY SIZE:

EXISTING 1ST FLOOR SIZE: 639 SF 571 SF HOME SIZE PRIOR TO 1945: HOME ADDITION AFTER 1945: 68 SF EXISTING PORCH: 561 SF EXISTING 2ND FLOOR SIZE: 1,200 SF EXISTING HABITABLE SPACE: **EXISTING GARAGE:** 255 SF **EXISTING TOTAL FOOTPRINT:** 988 SF 285 SF ALLOWABLE 1ST FLOOR ADDITION: PROPOSED 1ST FLOOR ADDITION: 275 SF PROPOSED 2ND FLOOR ADDITION: 275 SF 1ST FLOOR REVISED SIZE: 846 SF 2ND FLOOR REVISED SIZE: 836 SF PROPOSED HABITABLE SPACE: 1,680 SF 1,101 SF PROPOSED TOTAL FOOTPRINT: EXISTING LOT COVERAGE OF HOME: 37% PROPOSED LOT COVERAGE: 41%

ALTSCHULER FAMILY

422 S. SEVENTH STREET

N 30 FT OF S 70 FT OF LOT 2 THOMPSON

SPOOR AND THOMPSON ADDITION

ANN ARBOR, MI 48103

SINGLE FAMILY

09-09-29-309-051

.06 ACRE

DATE:

05.13.2023 PAPER:

ARCH D

SHEET:

## FRAMING NOTES:

R502.1 GENERAL, WOOD AND WOOD-BASED PRODUCTS USED FOR LOAD-SUPPORTING PURPOSES SHALL CONFORM TO THE APPLICABLE PROVISIONS OF THIS SECTION.

R502.1.2 PREFABRICATED WOOD I-JOISTS. STRUCTURAL CAPACITIES AND DESIGN PROVISIONS FOR PREFABRICATED WOOD I-JOISTS SHALL BE ESTABLISHED AND MONITORED IN ACCORDANCE WITH ASTM D5055.

R502.1.3 STRUCTURAL GLUED LAMINATED TIMBERS. GLUED LAMINATED TIMBERS SHALL BE MANUFACTURED AND IDENTIFIED AS REQUIRED IN ANSI/AITC A190.1 AND ASTM D3737.

R502.1.5 STRUCTURAL COMPOSITE LUMBER. STRUCTURAL CAPACITIES FOR STRUCTURAL COMPOSITE LUMBER SHALL BE ESTABLISHED AND MONITORED IN ACCORDANCE WITH ASTM D5456.

R502.1.6 CROSS-LAMINATED TIMBER. CROSS-LAMINATED TIMBER SHALL BE MANUFACTURED AND IDENTIFIED AS REQUIRED BY ANSI/APA PRG 320.

R502.1.7 ENGINEERED WOOD RIM BOARD. ENGINEERED WOOD RIM BOARDS SHALL CONFORM TO ANSI/APA PRR 410 OR SHALL BE EVALUATED IN ACCORDANCE WITH ASTM D7672. STRUCTURAL CAPACITIES SHALL BE IN ACCORDANCE WITH ANSI/APA PRR 410 OR ESTABLISHED IN ACCORDANCE WITH ASTM D7672. R502.2 DESIGN AND CONSTRUCTION. FLOORS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THIS CHAPTER, FIGURE R502.2 AND SECTIONS R317 AND R318 OR IN ACCORDANCE WITH ANSI AWC NDS.

R502.3 ALLOWABLE JOIST SPANS, SPANS FOR FLOOR JOISTS SHALL BE IN ACCORDANCE WITH TABLES R502.3.1(1) AND R502.3.1(2). FOR OTHER GRADES AND SPECIES AND FOR OTHER LOADING CONDITIONS, REFER TO THE AWC STJR. R502.4 JOISTS UNDER BEARING PARTITIONS. JOISTS UNDER PARALLEL BEARING PARTITIONS SHALL BE OF ADEQUATE SIZE TO SUPPORT THE LOAD. DOUBLE JOISTS, SIZED TO ADEQUATELY SUPPORT THE LOAD, THAT ARE SEPARATED TO PERMIT THE INSTALLATION OF PIPING OR VENTS SHALL BE FULL DEPTH SOLID BLOCKED WITH LUMBER NOT LESS THAN 2 INCHES (51 MM) IN NOMINAL THICKNESS SPACED NOT MORE THAN 4 FEET (1219 MM) ON CENTER. BEARING PARTITIONS PERPENDICULAR TO JOISTS SHALL NOT BE OFFSET FROM SUPPORTING GIRDERS, WALLS OR PARTITIONS MORE THAN THE JOIST DEPTH UNLESS SUCH JOISTS ARE OF SUFFICIENT SIZE TO CARRY THE ADDITIONAL LOAD

R502.5 ALLOWABLE GIRDER AND HEADER SPANS. THE ALLOWABLE SPANS OF GIRDERS AND HEADERS FABRICATED OF DIMENSION LUMBER SHALL NOT EXCEED THE VALUES SET FORTH IN TABLES R602.7(1), R602.7(2) AND R602.7(3). R502.6 BEARING. THE ENDS OF EACH JOIST, BEAM OR GIRDER SHALL HAVE NOT LESS THAN 11/2 INCHES (38 MM) OF BEARING ON WOOD OR METAL AND NOT LESS THAN 3 INCHES (76 MM) ON MASONRY OR CONCRETE EXCEPT WHERE SUPPORTED ON A 1-INCH BY 4-INCH (25 MM BY 102 MM) RIBBON STRIP AND NAILED TO THE ADJACENT STUD OR BY THE USE OF APPROVED JOIST HANGERS. THE BEARING ON MASONRY OR CONCRETE SHALL BE DIRECT, OR A SILL PLATE OF 2-INCH-MINIMUM (51 MM) NOMINAL THICKNESS SHALL BE PROVIDED UNDER THE JOIST, BEAM OR GIRDER.

R502.7 LATERAL RESTRAINT AT SUPPORTS. JOISTS SHALL BE SUPPORTED LATERALLY AT THE ENDS BY FULL-DEPTH SOLID BLOCKING NOT LESS THAN 2 INCHES (51 MM) NOMINAL IN THICKNESS; OR BY ATTACHMENT TO A FULL-DEPTH HEADER, BAND OR RIM JOIST, OR TO AN ADJOINING STUD OR SHALL BE OTHERWISE PROVIDED WITH LATERAL SUPPORT TO PREVENT ROTATION. EXCEPTIONS: 1. TRUSSES, STRUCTURAL COMPOSITE LUMBER, STRUCTURAL GLUED-LAMINATED MEMBERS AND I-JOISTS SHALL BE SUPPORTED LATERALLY AS REQUIRED BY THE MANUFACTURER'S RECOMMENDATIONS.

R502.9 FASTENING. FLOOR FRAMING SHALL BE NAILED IN ACCORDANCE WITH TABLE R602.3(1). WHERE POSTS AND BEAM OR GIRDER CONSTRUCTION IS USED TO SUPPORT FLOOR FRAMING, POSITIVE CONNECTIONS SHALL BE PROVIDED TO

ENSURE AGAINST UPLIFT AND LATERAL DISPLACEMENT. R502.10 FRAMING OF OPENINGS IN FLOOR FRAMING SHALL BE FRAMED WITH A HEADER AND TRIMMER JOISTS. WHERE THE HEADER JOIST SPAN DOES NOT EXCEED 4 FEET (1219 MM), THE HEADER JOIST SHALL BE A SINGLE MEMBER

THE SAME SIZE AS THE FLOOR JOIST. SINGLE TRIMMER JOISTS SHALL BE USED TO CARRY A SINGLE HEADER JOIST THAT IS LOCATED WITHIN 3 FEET (914 MM) OF THE TRIMMER JOIST BEARING. WHERE THE HEADER JOIST SPAN EXCEEDS 4 FEET (1219 MM), THE TRIMMER JOISTS AND THE HEADER JOIST SHALL BE DOUBLED AND OF SUFFICIENT CROSS SECTION TO SUPPORT THE FLOOR JOISTS FRAMING INTO THE HEADER. R502.11 WOOD TRUSSES. R502.11.1 DESIGN. WOOD TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH APPROVED ENGINEERING PRACTICE. THE DESIGN AND MANUFACTURE OF METAL-PLATE-CONNECTED WOOD TRUSSES SHALL COMPLY

WITH ANSI/TPI 1. THE TRUSS DESIGN DRAWINGS SHALL BE PREPARED BY A REGISTERED PROFESSIONAL WHERE REQUIRED BY THE STATUTES OF THE JURISDICTION IN WHICH THE PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH SECTION R502.11.2 BRACING. TRUSSES SHALL BE BRACED TO PREVENT ROTATION AND PROVIDE LATERAL STABILITY IN ACCORDANCE WITH THE REQUIREMENTS SPECIFIED IN THE CONSTRUCTION DOCUMENTS FOR THE BUILDING AND ON THE INDIVIDUAL

R502.11.4 TRUSS DESIGN DRAWINGS. TRUSS DESIGN DRAWINGS, PREPARED IN COMPLIANCE WITH SECTION R502.11.1, SHALL BE SUBMITTED TO THE BUILDING OFFICIAL AND APPROVED PRIOR TO INSTALLATION.

R502.12 DRAFTSTOPPING REQUIRED, DRAFTSTOPPING SHALL BE PROVIDED IN ACCORDANCE WITH SECTION R302.12. R502.13 FIREBLOCKING REQUIRED. FIREBLOCKING SHALL BE PROVIDED IN ACCORDANCE WITH SECTION R302.11

### SECTION R503 - FLOOR SHEATHING

R503.1 LUMBER SHEATHING. MAXIMUM ALLOWABLE SPANS FOR LUMBER USED AS FLOOR SHEATHING SHALL CONFORM TO TABLES R503.1, R503.2.1.1(1) AND R503.2.1.1(2).

R602.1 GENERAL, WOOD AND WOOD-BASED PRODUCTS USED FOR LOAD-SUPPORTING PURPOSES SHALL CONFORM TO THE APPLICABLE PROVISIONS OF THIS SECTION. **R602.2 GRADE.** STUDS SHALL BE A MINIMUM NO. 3, STANDARD OR STUD GRADE LUMBER.

R602.3 DESIGN AND CONSTRUCTION. EXTERIOR WALLS OF WOOD-FRAME CONSTRUCTION SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THIS CHAPTER AND FIGURES R602.3(1) AND R602.3(2), OR IN ACCORDANCE WITH AWC NDS. COMPONENTS OF EXTERIOR WALLS SHALL BE FASTENED IN ACCORDANCE WITH TABLES R602.3(1) THROUGH R602.3(4). WALL SHEATHING SHALL BE FASTENED DIRECTLY TO FRAMING MEMBERS AND, WHERE PLACED ON THE EXTERIOR SIDE OF AN EXTERIOR WALL, SHALL BE CAPABLE OF RESISTING THE WIND PRESSURES LISTED IN TABLE R301.2(2) ADJUSTED FOR HEIGHT AND EXPOSURE USING TABLE R301.2(3) AND SHALL CONFORM TO THE REQUIREMENTS OF TABLE R602.3(3). WALL SHEATHING USED ONLY FOR EXTERIOR WALL COVERING PURPOSES SHALL COMPLY WITH SECTION R703. STUDS SHALL BE CONTINUOUS FROM SUPPORT AT THE SOLE PLATE TO A SUPPORT AT THE TOP PLATE TO RESIST LOADS PERPENDICULAR TO THE WALL. THE SUPPORT SHALL BE A FOUNDATION OR FLOOR, CEILING OR ROOF DIAPHRAGM OR SHALL BE DESIGNED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE. NOTE: FASTENING SCHEDULE MUST BE ADHERED TO BY FRAMING COMPANY/CREW.

R602.4 INTERIOR LOAD-BEARING WALLS. INTERIOR LOAD-BEARING WALLS SHALL BE CONSTRUCTED, FRAMED AND FIRE-BLOCKED AS SPECIFIED FOR EXTERIOR WALLS.

R602.7.2 RIM BOARD HEADERS. RIM BOARD HEADER SIZE, MATERIAL AND SPAN SHALL BE IN ACCORDANCE WITH TABLE R602.7(1). RIM BOARD HEADERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FIGURE R602.7.2 AND SHALL BE SUPPORTED AT EACH END BY FULL-HEIGHT STUDS.

R602.7.5 SUPPORTS FOR HEADERS. HEADERS SHALL BE SUPPORTED ON EACH END WITH ONE OR MORE JACK STUDS OR WITH APPROVED FRAMING ANCHORS IN ACCORDANCE WITH TABLE R602.7(1) OR R602.7(2). THE FULL-HEIGHT STUD ADJACENT TO EACH END OF THE HEADER SHALL BE END NAILED TO EACH END OF THE HEADER WITH FOUR-16D NAILS (3.5 INCHES × 0.135 INCHES). THE MINIMUM NUMBER OF FULL-HEIGHT STUDS AT EACH END OF A HEADER SHALL BE IN ACCORDANCE WITH TABLE R602.7.5.

R602.8 FIREBLOCKING REQUIRED. FIREBLOCKING SHALL BE PROVIDED IN ACCORDANCE WITH SECTION R302.11.

R602.9 CRIPPLE WALLS. CRIPPLE WALLS WITH A STUD HEIGHT LESS THAN 14 INCHES (356 MM) SHALL BE CONTINUOUSLY SHEATHED ON ONE SIDE WITH WOOD STRUCTURAL PANELS FASTENED TO BOTH THE TOP AND BOTTOM PLATES IN ACCORDANCE WITH TABLE R602.3(1), OR THE CRIPPLE WALLS SHALL BE CONSTRUCTED OF SOLID BLOCKING.

R802.10.1 TRUSS DESIGN DRAWINGS. TRUSS DESIGN DRAWINGS, PREPARED IN CONFORMANCE WITH SECTION R802.10.1, SHALL BE PROVIDED TO THE BUILDING OFFICIAL AND APPROVED PRIOR TO INSTALLATION. THE TRUSS DESIGN DATA SHEET, FIGURE R802.10.1, MAY BE PROVIDED TO THE BUILDING OFFICIAL AT THE TIME OF PERMIT APPLICATION, AS AN ALTERNATIVE TO DESIGN DRAWINGS AS PERMITTED IN SECTION R106.1.4.

R802.10.2 DESIGN. WOOD TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE. THE DESIGN AND MANUFACTURE OF METAL-PLATE-CONNECTED WOOD TRUSSES SHALL COMPLY WITH ANSI/TPI 1. THE TRUSS DESIGN DRAWINGS SHALL BE PREPARED BY A REGISTERED PROFESSIONAL WHERE REQUIRED BY THE STATUTES OF THE JURISDICTION IN WHICH THE PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH SECTION R106.1 R802.10.3 BRACING. TRUSSES SHALL BE BRACED TO PREVENT ROTATION AND PROVIDE LATERAL STABILITY IN ACCORDANCE WITH THE REQUIREMENTS SPECIFIED IN THE CONSTRUCTION DOCUMENTS FOR THE BUILDING AND ON THE INDIVIDUAL

TRUSS DESIGN DRAWINGS. IN THE ABSENCE OF SPECIFIC BRACING REQUIREMENTS, TRUSSES SHALL BE BRACED IN ACCORDANCE WITH ACCEPTED INDUSTRY PRACTICE SUCH AS THE SBCA BUILDING COMPONENT SAFETY INFORMATION (BCSI) GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES. R802.10.4 ALTERATIONS TO TRUSSES. TRUSS MEMBERS SHALL NOT BE CUT, NOTCHED, DRILLED, SPLICED OR OTHERWISE ALTERED IN ANY WAY WITHOUT THE APPROVAL OF A REGISTERED DESIGN PROFESSIONAL.

R802.11 ROOF TIE-DOWN. R802.11.1 UPLIFT RESISTANCE, ROOF ASSEMBLIES SHALL HAVE UPLIFT RESISTANCE IN ACCORDANCE WITH SECTIONS R802.11.1.1 AND R802.11.1.2.

# THIS STRUCTURE SHALL BE ADEQUATELY BRACED FOR WIND LOADS UNTIL THE ROOF, FLOOR AND WALLS HAVE BEEN PERMANENTLY FRAMED TOGETHER AND SHEATHED.

R803.1 LUMBER SHEATHING, ALLOWABLE SPANS FOR LUMBER USED AS ROOF SHEATHING SHALL CONFORM TO TABLE R803.1. SPACED LUMBER SHEATHING FOR WOOD SHINGLE AND SHAKE ROOFING SHALL CONFORM TO THE REQUIREMENTS OF SECTIONS R905.7 AND R905.8. SPACED LUMBER SHEATHING IS NOT ALLOWED IN SEISMIC DESIGN CATEGORY D2.

# SECTION R805 - REQUIREMENTS FOR ROOF COVERINGS

R405.2 ASPHALT SHINGLES. FOR ROOF SLOPES FROM TWO UNITS VERTICAL IN 12 UNITS HORIZONTAL (2:12), UP TO FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (4:12), UNDERLAYMENT SHALL BE TWO LAYERS APPLIED IN THE FOLLOWING MANNER: APPLY A 19-INCH STRIP OF UNDERLAYMENT FELT PARALLEL TO AND STARTING AT THE EAVES. STARTING AT THE EAVE, APPLY 36-INCH-WIDE SHEETS OF UNDERLAYMENT, OVERLAPPING SUCCESSIVE SHEETS 19 INCHES. DISTORTIONS IN THE UNDERLAYMENT SHALL NOT INTERFERE WITH THE ABILITY OF THE SHINGLES TO SEAL.

FOR ROOF SLOPES OF FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (4:12) OR GREATER, UNDERLAYMENT SHALL BE ONE LAYER APPLIED IN THE FOLLOWING MANNER: UNDERLAYMENT SHALL BE APPLIED SHINGLE FASHION, PARALLEL TO AND STARTING FROM THE EAVE AND LAPPED 2 INCHES, DISTORTIONS IN THE UNDERLAYMENT SHALL NOT INTERFERE WITH THE ABILITY OF THE SHINGLES TO SEAL. END LAPS SHALL BE 4 INCHES AND SHALL BE OFFSET BY 6 FEET

R405.4 METAL ROOF SHINGLES. FOR ROOF SLOPES FROM TWO UNITS VERTICAL IN 12 UNITS HORIZONTAL (2:12), UP TO FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (4:12), UNDERLAYMENT SHALL BE TWO LAYERS APPLIED IN THE FOLLOWING MANNER: APPLY A 19-INCH STRIP OF UNDERLAYMENT FELT PARALLEL TO AND STARTING AT THE EAVES. STARTING AT THE EAVE, APPLY 36-INCH-WIDE SHEETS OF UNDERLAYMENT, OVERLAPPING SUCCESSIVE SHEETS 19 INCHES, AND FASTENED SUFFICIENTLY TO HOLD IN PLACE

FOR ROOF SLOPES OF FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (4:12) OR GREATER, UNDERLAYMENT SHALL BE ONE LAYER APPLIED IN THE FOLLOWING MANNER: UNDERLAYMENT SHALL BE APPLIED SHINGLE FASHION, PARALLEL TO AND STARTING FROM THE EAVE AND LAPPED 4 INCHES. END LAPS SHALL BE 4 INCHES AND SHALL BE OFFSET BY 6 FEET.

## SECTION R807 - ATTIC ACCESS

R807.1 ATTIC ACCESS. BUILDINGS WITH COMBUSTIBLE CEILING OR ROOF CONSTRUCTION SHALL HAVE AN ATTIC ACCESS OPENING TO ATTIC AREAS THAT HAVE A VERTICAL HEIGHT OF 30 INCHES (762 MM) OR GREATER OVER AN AREA OF NOT LESS THAN 30 SQUARE FEET (2.8 M2). THE ROUGH-FRAMED OPENING SHALL BE NOT LESS THAN 22 INCHES BY 30 INCHES (559 MM BY 762 MM) AND SHALL BE LOCATED IN A HALLWAY OR OTHER READILY ACCESSIBLE LOCATION. SEE SECTION M1305.1.3 FOR ACCESS REQUIREMENTS WHERE MECHANICAL EQUIPMENT IS LOCATED IN ATTICS.

## SECTION R703 - EXTERIOR COVERING

R703.1 GENERAL, EXTERIOR WALLS SHALL PROVIDE THE BUILDING WITH A WEATHER-RESISTANT EXTERIOR WALL ENVELOPE. THE EXTERIOR WALL ENVELOPE SHALL INCLUDE FLASHING AS DESCRIBED IN SECTION R703.4 R703.1.1 WATER RESISTANCE. THE EXTERIOR WALL ENVELOPE SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT PREVENTS THE ACCUMULATION OF WATER WITHIN THE WALL ASSEMBLY BY PROVIDING A WATER-RESISTANT BARRIER BEHIND THE EXTERIOR VENEER AS REQUIRED BY SECTION R703.2 AND A MEANS OF DRAINING TO THE EXTERIOR WATER THAT ENTERS THE ASSEMBLY. PROTECTION AGAINST CONDENSATION IN THE EXTERIOR WALL ASSEMBLY SHALL BE

R703.1.2 WIND RESISTANCE. WALL COVERINGS, BACKING MATERIALS AND THEIR ATTACHMENTS SHALL BE CAPABLE OF RESISTING WIND LOADS IN ACCORDANCE WITH TABLES R301.2(2) AND R301.2(3). WIND-PRESSURE RESISTANCE OF THE SIDING AND BACKING MATERIALS SHALL BE DETERMINED BY ASTM E330 OR OTHER APPLICABLE STANDARD TEST METHODS. WHERE WIND-PRESSURE RESISTANCE IS DETERMINED BY DESIGN ANALYSIS, DATA FROM APPROVED DESIGN STANDARDS AND ANALYSIS CONFORMING TO GENERALLY ACCEPTED ENGINEERING PRACTICE SHALL BE USED TO EVALUATE THE SIDING AND BACKING MATERIAL AND ITS FASTENING. R703.2 WATER-RESISTIVE BARRIER. ONE LAYER OF NO. 15 ASPHALT FELT, FREE FROM HOLES AND BREAKS, COMPLYING WITH ASTM D226 FOR TYPE 1 FELT OR OTHER APPROVED WATER-RESISTIVE BARRIER SHALL BE APPLIED OVER STUDS OR SHEATHING OF ALL EXTERIOR WALLS. SUCH FELT OR MATERIAL SHALL BE APPLIED HORIZONTALLY, WITH THE UPPER LAYER LAPPED OVER THE LOWER LAYER NOT LESS THAN 2 INCHES (51 MM). WHERE JOINTS OCCUR, FELT SHALL BE LAPPED NOT LESS THAN 6 INCHES (152 MM). THE FELT OR OTHER APPROVED MATERIAL SHALL BE CONTINUOUS TO THE TOP OF WALLS AND TERMINATED AT PENETRATIONS AND BUILDING APPENDAGES IN A MANNER TO MEET THE REQUIREMENTS OF THE EXTERIOR WALL ENVELOPE AS DESCRIBED IN SECTION R703.1. THE WATER-RESISTIVE BARRIER IS NOT REQUIRED FOR DETACHED ACCESSORY BUILDINGS.

R703.3 NOMINAL THICKNESS AND ATTACHMENTS. THE NOMINAL THICKNESS AND ATTACHMENT OF EXTERIOR WALL COVERINGS SHALL BE IN ACCORDANCE WITH TABLE R703.3(1), THE WALL COVERING MATERIAL REQUIREMENTS OF THIS SECTION, AND THE WALL COVERING MANUFACTURER'S INSTALLATION INSTRUCTIONS. CLADDING ATTACHMENT OVER FOAM SHEATHING SHALL COMPLY WITH THE ADDITIONAL REQUIREMENTS AND LIMITATIONS OF SECTIONS R703.15 THROUGH R703.17. FASTENERS FOR EXTERIOR WALL COVERINGS ATTACHED TO WOOD FRAMING SHALL BE IN ACCORDANCE WITH SECTION R703.3.2 AND TABLE R703.3(1). TABLE R703.3(1) USING SCREW FASTENERS SUBSTITUTED FOR THE NAILS SPECIFIED IN ACCORDANCE WITH TABLE R703.3(2), OR AN APPROVED DESIGN.

R703.4 FLASHING. APPROVED CORROSION-RESISTANT FLASHING SHALL BE APPLIED SHINGLE-FASHION IN A MANNER TO PREVENT ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS. SELF-ADHERED MEMBRANES USED AS FLASHING SHALL COMPLY WITH AAMA 711. FLUID-APPLIED MEMBRANES USED AS FLASHING IN EXTERIOR WALLS SHALL COMPLY WITH AAMA 714. THE FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH. APPROVED CORROSION-RESISTANT FLASHINGS SHALL BE INSTALLED AT THE FOLLOWING LOCATIONS:

1. EXTERIOR WINDOW AND DOOR OPENINGS. FLASHING AT EXTERIOR WINDOW AND DOOR OPENINGS SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH OR TO THE WATER-RESISTIVE BARRIER COMPLYING WITH SECTION 103.2 FOR SUBSEQUENT DRAINAGE. MECHANICALLY ATTACHED FLEXIBLE FLASHINGS SHALL COMPLY WITH AAMA 712. FLASHING AT EXTERIOR WINDOW AND DOOR OPENINGS SHALL BE INSTALLED IN ACCORDANCE WITH ONE OR MORE OF THE FOLLOWING: 1.1. THE FENESTRATION MANUFACTURER'S INSTALLATION AND FLASHING INSTRUCTIONS, OR FOR APPLICATIONS NOT ADDRESSED IN THE FENESTRATION MANUFACTURER'S INSTRUCTIONS, IN ACCORDANCE WITH THE FLASHING MANUFACTURER'S INSTRUCTIONS. WHERE FLASHING INSTRUCTIONS OR DETAILS ARE NOT PROVIDED, PAN FLASHING SHALL BE INSTALLED AT THE SILL OF EXTERIOR WINDOW AND DOOR OPENINGS. PAN FLASHING SHALL BE SEALED OR SLOPED IN SUCH A MANNER AS TO DIRECT WATER TO THE SURFACE OF THE EXTERIOR WALL FINISH OR TO THE WATERRESISTIVE BARRIER FOR SUBSEQUENT DRAINAGE. OPENINGS USING PAN FLASHING SHALL INCORPORATE FLASHING OR PROTECTION AT THE HEAD AND

1.2. IN ACCORDANCE WITH THE FLASHING DESIGN OR METHOD OF A REGISTERED DESIGN PROFESSIONAL.

1.3. IN ACCORDANCE WITH OTHER APPROVED METHODS. 2. AT THE INTERSECTION OF CHIMNEYS OR OTHER MASONRY CONSTRUCTION WITH FRAME OR STUCCO WALLS, WITH PROJECTING LIPS ON BOTH SIDES UNDER STUCCO COPINGS.

3. UNDER AND AT THE ENDS OF MASONRY, WOOD OR METAL COPINGS AND SILLS.

4. CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIM. 5. WHERE EXTERIOR PORCHES, DECKS OR STAIRS ATTACH TO A WALL OR FLOOR ASSEMBLY OF WOOD-FRAME CONSTRUCTION.

6. AT WALL AND ROOF INTERSECTIONS.

7. AT BUILT-IN GUTTERS. R703.5 WOOD, HARDBOARD AND WOOD STRUCTURAL PANEL SIDING. WOOD, HARDBOARD, AND WOOD STRUCTURAL PANEL SIDING SHALL BE INSTALLED IN ACCORDANCE WITH THIS SECTION AND TABLE R703.3. HARDBOARD SIDING SHALL

COMPLY WITH CPA/ANSI A135.6. HARDBOARD SIDING USED AS ARCHITECTURAL TRIM SHALL COMPLY WITH CPA/ANSI A 135.7. R703.5.1 VERTICAL MOOD SIDING. WOOD SIDING APPLIED VERTICALLY SHALL BE NAILED TO HORIZONTAL NAILING STRIPS OR BLOCKING SET NOT MORE THAN 24 INCHES (610 MM) ON CENTER.

R703.5.2 PANEL SIDING. 3/8-INCH (9.5 MM) WOOD STRUCTURAL PANEL SIDING SHALL NOT BE APPLIED DIRECTLY TO STUDS SPACED MORE THAN 16 INCHES (406 MM) ON CENTER WHERE LONG DIMENSION IS PARALLEL TO STUDS. WOOD STRUCTURAL PANEL SIDING 7/16 INCH (11.1 MM) OR THINNER SHALL NOT BE APPLIED DIRECTLY TO STUDS SPACED MORE THAN 24 INCHES (610 MM) ON CENTER. THE STUD SPACING SHALL NOT EXCEED THE PANEL SPAN RATING PROVIDED BY THE MANUFACTURER UNLESS THE PANELS ARE INSTALLED WITH THE FACE GRAIN PERPENDICULAR TO THE STUDS OR OVER SHEATHING APPROVED FOR THAT STUD SPACING. JOINTS IN WOOD, HARDBOARD OR WOOD STRUCTURAL PANEL SIDING SHALL BE MADE AS FOLLOWS UNLESS OTHERWISE APPROVED. VERTICAL JOINTS IN PANEL SIDING SHALL OCCUR OVER FRAMING MEMBERS, UNLESS WOOD OR WOOD STRUCTURAL PANEL SHEATHING IS USED, AND SHALL BE SHIPLAPPED OR

COVERED WITH A BATTEN. HORIZONTAL JOINTS IN PANEL SIDING SHALL BE LAPPED NOT LESS THAN 1 INCH (25 MM) OR SHALL BE SHIPLAPPED OR FLASHED WITH Z-FLASHING AND OCCUR OVER SOLID BLOCKING, WOOD OR WOOD STRUCTURAL PANEL SHEATHING.

R703.5.3 HORIZONTAL WOOD SIDING. HORIZONTAL LAP SIDING SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHERE THERE ARE NO RECOMMENDATIONS THE SIDING SHALL BE LAPPED NOT LESS THAN 1 INCH (25 MM), OR 1/2 INCH (12.7 MM) IF RABBETED, AND SHALL HAVE THE ENDS CAULKED, COVERED WITH A BATTEN OR SEALED AND INSTALLED OVER A STRIP OF FLASHING.

## WINDOWS/DOORS/EGRESS

SECTION R303 - LIGHT, VENTILATION AND HEATING

R303.1 HABITABLE ROOMS. HABITABLE ROOMS SHALL HAVE AN AGGREGATE GLAZING AREA OF NOT LESS THAN 8 PERCENT OF THE FLOOR AREA OF SUCH ROOMS. NATURAL VENTILATION SHALL BE THROUGH WINDOWS, SKYLIGHTS, DOORS, LOUYERS OR OTHER APPROVED OPENINGS TO THE OUTDOOR AIR. THE OPENABLE AREA TO THE OUTDOORS SHALL BE NOT LESS THAN 4 PERCENT OF THE FLOOR AREA BEING VENTILATED.

### **WINDOW NOTES AND FALL PROTECTION**

R312.1 GUARDS. GUARDS SHALL BE PROVIDED IN ACCORDANCE WITH SECTIONS R312.1.1 THROUGH R312.1.4.

R312.2 WINDOW FALL PROTECTION. WINDOW FALL PROTECTION SHALL BE PROVIDED IN ACCORDANCE WITH SECTIONS R312.2.1 WINDOW SILLS AND R312.2.2 WINDOW OPENING CONTROL DEVICES. SECTION R308 - GLAZING MUST ADHERE TO; R308.4.5 GLAZING AND WET SURFACES, R308.4.6 GLAZING ADJACENT TO STAIRS AND RAMPS, AND R308.4.7 GLAZING ADJACENT TO THE BOTTOM STAIR LANDING.

SECTION R310 -EMERGENCY ESCAPE AND RESCUE OPENINGS

R310.1 EMERGENCY ESCAPE AND RESCUE OPENING REQUIRED. BASEMENTS, HABITABLE ATTICS AND EVERY SLEEPING ROOM SHALL HAVE NOT LESS THAN ONE OPERABLE EMERGENCY ESCAPE AND RESCUE OPENING R310.2.1 MINIMUM OPENING AREA. EMERGENCY AND ESCAPE RESCUE OPENINGS SHALL HAVE A NET CLEAR OPENING OF NOT LESS THAN 5.7 SQUARE FEET (0.530 M2). THE NET CLEAR HEIGHT OPENING SHALL BE NOT LESS THAN 24 INCHES (610 MM) AND THE NET CLEAR WIDTH SHALL BE NOT LESS THAN 20 INCHES (508 MM). EXCEPTION: GRADE FLOOR OR BELOW GRADE OPENINGS SHALL HAVE A NET CLEAR OPENING OF NOT LESS THAN 5 SQUARE FEET (0.465 M2). R310.2.2 WINDOW SILL HEIGHT. WHERE A WINDOW IS PROVIDED AS THE EMERGENCY ESCAPE AND RESCUE OPENING, IT SHALL HAVE A SILL HEIGHT OF NOT MORE THAN 44 INCHES (1118 MM) ABOVE THE FLOOR; WHERE THE SILL HEIGHT IS

BELOW GRADE, IT SHALL BE PROVIDED WITH A WINDOW WELL IN ACCORDANCE WITH SECTION R310.2.3. R310.2.3 WINDOW WELLS. THE HORIZONTAL AREA OF THE WINDOW WELL SHALL BE NOT LESS THAN 9 SQUARE FEET (0.9 M2), WITH A HORIZONTAL PROJECTION AND WIDTH OF NOT LESS THAN 36 INCHES (914 MM). THE AREA OF THE WINDOW WELL SHALL ALLOW THE EMERGENCY ESCAPE AND RESCUE OPENING TO BE FULLY OPENED. MUST ADHERE TO SECTION R310.2.3.1 LADDER AND STEPS.

### SECTION R311 - MEANS OF EGRESS

R311.1 MEANS OF EGRESS, DWELLINGS SHALL BE PROVIDED WITH A MEANS OF EGRESS IN ACCORDANCE WITH THIS SECTION. THE MEANS OF EGRESS SHALL PROVIDE A CONTINUOUS AND UNOBSTRUCTED PATH OF VERTICAL AND HORIZONTAL EGRESS TRAVEL FROM ALL PORTIONS OF THE DWELLING TO THE REQUIRED EGRESS DOOR WITHOUT REQUIRING TRAVEL THROUGH A GARAGE.

R311.2 DOOR TYPE AND SIZE. THE REQUIRED EXIT DOOR SHALL BE A SIDE-HINGED DOOR NOT LESS THAN 3 FEET (914 MM) IN WIDTH AND 6 FEET, 8 INCHES (2032 MM) IN HEIGHT R311.3 FLOORS AND LANDINGS AT EXTERIOR DOORS. THERE SHALL BE A LANDING OR FLOOR ON EACH SIDE OF EACH EXTERIOR DOOR. THE WIDTH OF EACH LANDING SHALL BE NOT LESS THAN THE DOOR SERVED. EVERY LANDING SHALL HAVE A DIMENSION OF NOT LESS THAN 36 INCHES (914 MM) MEASURED IN THE DIRECTION OF TRAVEL.

R311.6 HALLWAYS. THE WIDTH OF A HALLWAY SHALL BE NOT LESS THAN 3 FEET (914 MM).

### R312.2 WINDOW FALL PROTECTION.

## SECTION N1104 - ELECTRICAL POWER AND LIGHTING SYSTEMS (MANDATORY)

N1104.1 (R404.1) LIGHTING EQUIPMENT (MANDATORY). A MINIMUM OF 75 PERCENT OF THE LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS OR A MINIMUM OF 75 PERCENT OF THE PERMANENTLY

INSTALLED LIGHTING FIXTURES SHALL CONTAIN ONLY HIGH-EFFICACY LAMPS. N1104.1.1 (R404.1.1) LIGHTING EQUIPMENT (MANDATORY). FUEL GAS LIGHTING SYSTEMS SHALL NOT HAVE CONTINUOUSLY BURNING PILOT LIGHTS.

SECTION G2410 (309) ELECTRICAL **G2410.1 (309.1) GROUNDING.** GAS PIPING SHALL NOT BE USED AS A GROUNDING ELECTRODE.

62410.2 (309.2) CONNECTIONS. ELECTRICAL CONNECTIONS BETWEEN APPLIANCES AND THE BUILDING WIRING, INCLUDING THE GROUNDING OF THE APPLIANCES, SHALL CONFORM TO CHAPTERS 34 THROUGH 43. SECTION G2411 (310)

62411.1 (310.1) PIPE AND TUBING OTHER THAN CSST. EACH ABOYE-GROUND PORTION OF A GAS PIPING SYSTEM OTHER THAN CORRUGATED STAINLESS STEEL TUBING (CSST) THAT IS LIKELY TO BECOME ENERGIZED SHALL BE ELECTRICALLY CONTINUOUS AND BONDED TO AN EFFECTIVE GROUND-FAULT CURRENT PATH. GAS PIPING OTHER THAN CSST SHALL BE CONSIDERED TO BE BONDED WHERE IT IS CONNECTED TO APPLIANCES THAT ARE CONNECTED TO THE EQUIPMENT GROUNDING CONDUCTOR OF THE CIRCUIT SUPPLYING THAT APPLIANCE.

RECEPTACLE OUTLETS E3901.1 GENERAL. OUTLETS FOR RECEPTACLES RATED AT 125 YOLTS, 15- AND 20-AMPERES SHALL BE PROVIDED IN ACCORDANCE WITH SECTIONS E3901.2 THROUGH E3901.11. RECEPTACLE OUTLETS REQUIRED BY THIS SECTION SHALL BE IN

ADDITION TO ANY RECEPTACLE THAT IS: 1 PART OF A LUMINAIRE OR APPLIANCE;

2 LOCATED WITHIN CABINETS OR CUPBOARDS;

3 CONTROLLED BY A WALL SWITCH IN ACCORDANCE WITH SECTION E3903.2, EXCEPTION 1; OR

4. LOCATED OVER 5.5 FEET (1676 MM) ABOVE THE FLOOR. SECTION E3902

GROUND-FAULT AND ARC-FAULT CIRCUIT INTERRUPTER PROTECTION

E3902.1 BATHROOM RECEPTACLES. 125-YOLT, SINGLE-PHASE, 15- AND 20-AMPERE RECEPTACLES INSTALLED IN BATHROOMS SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL. [210.8(A)(1)] E3902.2 GARAGE AND ACCESSORY BUILDING RECEPTACLES. 125-YOLT, SINGLE-PHASE, 15- OR 20-AMPERE RECEPTACLES INSTALLED IN GARAGES AND GRADE-LEVEL PORTIONS OF UNFINISHED ACCESSORY BUILDINGS USED FOR STORAGE OR WORK AREAS SHALL HAVE GROUNDFAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL. [210.8(A)(2)]

E3902.3 OUTDOOR RECEPTACLES. 125-VOLT, SINGLE-PHASE, 15- AN 20-AMPERE RECEPTACLES INSTALLED OUTDOORS SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL. [210.8(A)(3)] **EXCEPTION:** RECEPTACLES AS COVERED IN SECTION E4101.7. [210.8(A)(3) EXCEPTION]

E3902.5 UNFINISHED BASEMENT RECEPTACLES. 125-VOLT, SINGLEPHASE, 15- AND 20-AMPERE RECEPTACLES INSTALLED IN UNFINISHED BASEMENTS SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL. FOR PURPOSES OF THIS SECTION, UNFINISHED BASEMENTS ARE DEFINED AS PORTIONS OR AREAS OF THE BASEMENT NOT INTENDED AS HABITABLE ROOMS AND LIMITED TO STORAGE AREAS, WORK AREAS, AND SIMILAR AREAS. [210.8(A)(5)] EXCEPTION: A RECEPTACLE SUPPLYING ONLY A PERMANENTLY INSTALLED FIRE ALARM OR BURGLAR ALARM SYSTEM. RECEPTACLES INSTALLED IN ACCORDANCE WITH THIS EXCEPTION SHALL NOT BE CONSIDERED AS MEETING THE REQUIREMENT OF SECTION E3901.9. [210.8(A)(5) EXCEPTION]

E3902.6 KITCHEN RECEPTACLES. 125-VOLT, SINGLE-PHASE, 15- AND 20-AMPERE RECEPTACLES THAT SERVE COUNTERTOP SURFACES SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL. [210.8(A)(6)] E3902.7 SINK RECEPTACLES. 125-VOLT, SINGLE-PHASE, 15- AND 20-AMPERE RECEPTACLES THAT ARE LOCATED WITHIN 6 FEET (1829 MM) OF THE OUTSIDE EDGE OF A SINK SHALL HAVE GROUND-FAULT CIRCUIT- INTERRUPTER PROTECTION FOR PERSONNEL. RECEPTACLE OUTLETS SHALL NOT BE INSTALLED IN A FACE-UP POSITION IN THE WORK SURFACES OR COUNTERTOPS. [210.8(A)(7)] E3902.8 BATHTUB OR SHOWER STALL RECEPTACLES. 125-VOLT, SINGLE PHASE, 15- AND 20-AMPERE RECEPTACLES THAT ARE LOCATED WITHIN 6 FEET (1829 MM) OF THE OUTSIDE EDGE OF A BATHTUB OR SHOWER STALL SHALL HAVE

GROUND-FAULT CIRCUIT INTERRUPTER PROTECTION FOR PERSONNEL. [210.8(A)(8)] E3902.9 LAUNDRY AREAS. 125-VOLT, SINGLE-PHASE, 15- AND 20- AMPERE RECEPTACLES INSTALLED IN LAUNDRY AREAS SHALL HAVE GROUNDFAULT CIRCUIT INTERRUPTER PROTECTION FOR PERSONNEL. [210.8(A)(9)] E3902.10 KITCHEN DISHMASHER BRANCH CIRCUIT. GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION SHALL BE PROVIDED FOR OUTLETS THAT SUPPLY DISHMASHERS IN DWELLING UNIT LOCATIONS. [210.8(D)]

E3902.13 ELECTRICALLY HEATED FLOORS. GROUND-FAULT CIRCUITINTERRUPTER PROTECTION FOR PERSONNEL SHALL BE PROVIDED FOR ELECTRICALLY HEATED FLOORS IN BATHROOMS, KITCHENS AND IN HYDROMASSAGE BATHTUB, SPA AND HOT TUB LOCATIONS. [424.44(G)]

# E3902.14 LOCATION OF GROUND-FAULT CIRCUIT INTERRUPTERS. GROUND-FAULT CIRCUIT INTERRUPTERS SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION. [210.8(A)]

CONCRETE-ENCASED ELECTRODE MUST CONSIST OF AT LEAST 20 FT OF EITHER OF THE FOLLOWING [250.52(A)(3)]: 1) ONE OR MORE OF BARE, ZINC-GALVANIZED, OR OTHERWISE ELECTRICALLY CONDUCTIVE STEEL REINFORCING BARS OF NOT LESS THAN ½ IN. DIAMETER, MECHANICALLY CONNECTED TOGETHER BY STEEL TIE WIRES, WELDING, OR OTHER EFFECTIVE MEANS, TO CREATE A 20 FT OR GREATER LENGTH.

2) BARE COPPER CONDUCTOR NOT SMALLER THAN 4 AWG. [250.66(B)] THE REINFORCING BARS OR BARE COPPER CONDUCTOR MUST BE ENCASED BY AT LEAST 2 IN. OF CONCRETE LOCATED HORIZONTALLY NEAR THE BOTTOM OF A CONCRETE FOOTING OR VERTICALLY WITHIN A CONCRETE FOUNDATION THAT'S IN DIRECT CONTACT WITH THE EARTH.

IF MULTIPLE CONCRETE-ENCASED ELECTRODES ARE PRESENT AT A BUILDING/STRUCTURE, ONLY ONE IS REQUIRED TO SERVE AS A GROUNDING ELECTRODE. CONCRETE CONTAINING INSULATION, VAPOR BARRIERS, FILMS, OR SIMILAR ITEMS SEPARATING IT FROM THE EARTH ISN'T CONSIDERED TO BE IN "DIRECT CONTACT" WITH THE EARTH.

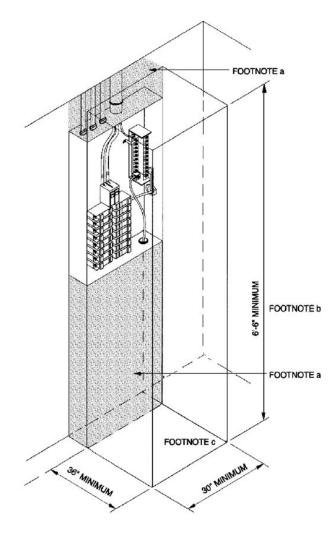
## ELECTRICAL NOTES:

1 ELECTRICAL RECEPTACLES IN BATHROOMS, KITCHENS AND GARAGES SHALL BE G.F.I. ORG.F.I.C. PER NATIONAL ELECTRICAL CODE REQUIREMENTS.

- 2 PROVIDE ONE SMOKE DETECTOR IN EACH ROOM AND ONE IN EACH CORRIDOR ACCESSING BEDROOMS. CONNECT SMOKE DETECTORS TO HOUSE POWER AND INTER-CONNECT SMOKE DETECTORS SO THAT, WHEN ANY ONE IS TRIPPED, THEY ALL WILL SOUND. PROVIDE BATTERY BACKUP FOR ALL UNITS. 3 CIRCUITS SHALL BE VERIFIED WITH HOME OWNER PRIOR TO WIRE INSTALLATION.
- 4 FINAL SMITCHES FOR TIMERS AND DIMMERS SHALL BE VERIFIED MITH HOME OWNER.

# 5 FIXTURES TO BE SELECTED BY HOME OWNER.

LOCATION OF SECURITY PANELS & CABLE TO BE APPROVED BY HOME OWNER.



### TABLE E3702.14 (Table 210.24) BRANCH-CIRCUIT REQUIREMENTS-SUMMARYa, b

	CIRCUIT RATING		
	15 amp	20 amp	30 amp
Conductors: Minimum size (AWG) circuit conductors	14	12	10
Maximum overcurrent- protection device rating Ampere rating	15	20	30
Outlet devices: Lampholders permitted Receptacle rating (amperes)	Any type 15 maximum	Any type 15 or 20	N/A 30
Maximum load (amperes)	15	20	30

a. These gages are for copper conductors. b. N/A means not allowed.

FOOTNOTE FOR ELECTRICAL IMAGE: FOR SI: 1 INCH = 25.4 MM, 1 FOOT = 304.8 MM.

A. EQUIPMENT, PIPING AND DUCTS FOREIGN TO THE ELECTRICAL INSTALLATION SHALL NOT BE PLACED IN THE SHADED AREAS EXTENDING FROM THE FLOOR TO A HEIGHT OF 6 FEET ABOVE

THE PANELBOARD ENCLOSURE, OR TO THE STRUCTURAL CEILING, WHICHEVER IS LOWER. B. THE WORKING SPACE SHALL BE CLEAR AND UNOBSTRUCTED FROM THE FLOOR TO A HEIGHT OF 6.5 FEET OR THE HEIGHT OF THE EQUIPMENT, WHICHEVER IS GREATER. C. THE WORKING SPACE SHALL NOT BE DESIGNATED FOR STORAGE.

D. PANELBOARDS, SERVICE EQUIPMENT AND SIMILAR ENCLOSURES SHALL NOT BE LOCATED IN BATHROOMS, TOILET ROOMS, CLOTHES CLOSETS OR OVER THE STEPS OF A STAIRWAY. E. SUCH WORK SPACES SHALL BE PROVIDED WITH ARTIFICIAL LIGHTING WHERE LOCATED INDOORS AND SHALL NOT BE CONTROLLED BY AUTOMATIC MEANS ONLY.

05.13.2023

PAPER: ARCH D

**DEMOLITION NOTES:** 

FACILITIES.

OAKBRIDGE DEVELOPMENT LLC SHALL NOT BE RESPONSIBLE FOR DEMOLITION MEANS AND METHODS, ACTS OR OMISSIONS OF THE CONTRACTOR OR SUBCONTRACTOR, OR FAILURE OF ANY OF THEM TO CARRY OUT WORK IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS. AND DEFECT DISCOVERED IN THE CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF OAKBRIDGE DEVELOPMENT LLC BY WRITTEN NOTICE BEFORE PROCEEDING WITH WORK. REASONABLE TIME NOT ALLOWED OAKBRIDGE DEVELOPMENT LLC TO CORRECT THE DEFECT SHALL PLACE THE BURDEN OF COST AND LIABILITY FROM SUCH DEFECT UPON THE CONTRACTOR.

CONTRACTOR SHALL VERIFY EXISTING SITE AND BUILDING CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO DEMOLITION ACTIVITIES AND WORK.

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CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY SHORING, TEMPORARY BRACING, AND OR TEMPORARY SUPPORTS AS REQUIRED TO MAINTAIN STRUCTURAL INTEGRITY OF EXISTING STRUCTURE TO REMAIN AND OR EXISTING BUILDING ELEMENTS TO REMAIN.

CONTRACTOR IS TO VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO

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CONTRACTOR SHALL REMOVE TRASH AND DEBRIS REGULARLY AS NECESSARY TO

ELIMINATED INTERFERENCE WITH ROADS, STREET, WALKS, AND ALL OTHER ADJACENT

ALL EXISTING EQUIPMENT THAT REMAINS SHALL BE PROTECTED DURING DEMOLITION AND OR CONSTRUCTION TO PREVENT DAMAGE. ANY DAMAGE TO REMAINING EXISTING EQUIPMENT SUSTAINED DURING DEMOLITION AND OR CONSTRUCTION SHALL BE EQUIVALENTLY REPLACED OR EQUIVALENTLY REPAIRED AT NO COST TO THE OWNER. CONTRACTOR SHALL PROVIDE TRAFFIC HANDLING MEASURES TO PROTECT THE GENERAL PUBLIC AT ALL TIMES, AS NECESSARY AND AS REQUIRED BY AUTHORITIES HAVING

DO NOT INTERRUPT EXISTING UTILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES, AS ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.

WHEN UTILITY SERVICES ARE REQUIRED TO BE REMOVED, RELOCATED, OR ABANDONED, PROVIDE BYPASS CONNECTIONS TO MAINTAIN CONTINUITY OF SERVICE BEFORE PROCEEDING WITH DEMOLITION.

CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES INCLUDING BUT NOT LIMITED TO THE FOLLOWING: ELECTRIC, GAS, WATER, TELEPHONE, STORM SEWER, AND SANITARY SEWER FOR FIELD LOCATION OF ALL UNDERGROUND AND OVERHEAD UTILITY LINES. PRIOR TO COMMENCEMENT OF ANY DEMOLITION WORK, CONTRACTOR SHALL IDENTIFY ALL ELECTRICAL CIRCUITS SERVICING THE AREA INVOLVED WITH THIS DEMOLITION. THOSE CIRCUITS SHALL THEN BE LOCKED OUT AND TAGGED OUT IF THEY DO NOT SERVICE ANY OF THE REMAINING BUILDING. THOSE CIRCUITS WHICH ARE IDENTIFIED TO SERVICE BOTH THE AREA TO BE DEMOLISHED AND THE REMAINING BUILDING SHALL BE SPLIT SO AS TO KILL ALL ELECTRICAL POWER TO THE AREA TO BE DEMOLISHED WHILE MAINTAINING POWER TO THE REMAINDER OF THE BUILDING.

SHALL INCLUDE BUT NOT BE LIMITED TO EXISTING TREES AND OTHER EXISTING VEGETATION INDICATED TO REMAIN IN PLACE AGAINST UNNECESSARY CUTTING, BREAKING, OR SKINNING OF ROOTS, SKINNING OR BRUISING OF BARK, SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIAL OR EXCAVATED MATERIAL WITHIN DRIP LINES.

NOTIFY THE BUILDING OWNER OF ANY MATERIALS, FIXTURES, ETC. TO BE REMOVED THAT ARE DEEMED SALVAGEABLE. TURN OVER ANY REQUESTED ITEMS TO THE BUILDING OWNER IN GOOD AND CLEAN CONDITION.

PROTECT EXISTING SITE ELEMENTS AND EXISTING LANDSCAPING TO REMAIN. PROTECTION

EPA.GOV STATES THE FOLLOWING, "ANY RENOVATION, REPAIR, OR PAINTING (RRP) PROJECT IN A PRE-1978 HOME OR BUILDING CAN EASILY CREATE DANGEROUS LEAD DUST. EPA REQUIRES THAT RRP PROJECTS THAT DISTURB LEAD-BASED PAINT IN HOMES, CHILD CARE FACILITIES AND PRESCHOOLS BUILT BEFORE 1978 BE PERFORMED BY LEAD-SAFE CERTIFIED CONTRACTORS. GENERALLY, EPA'S LEAD RRP RULE DOES NOT APPLY TO HOMEOWNERS DOING RRP PROJECTS IN THEIR OWN HOMES."

AS WITH ALL REMODEL JOBS, INITIAL MEASUREMENTS (PRE CONSTRUCTION) TAKEN AT SITE (FIELD MEASUREMENTS) BY THE DESIGNER ARE NEVER 100% ACCURATE, AND CAN BE OFF IN THE FOLLOWING WAYS:

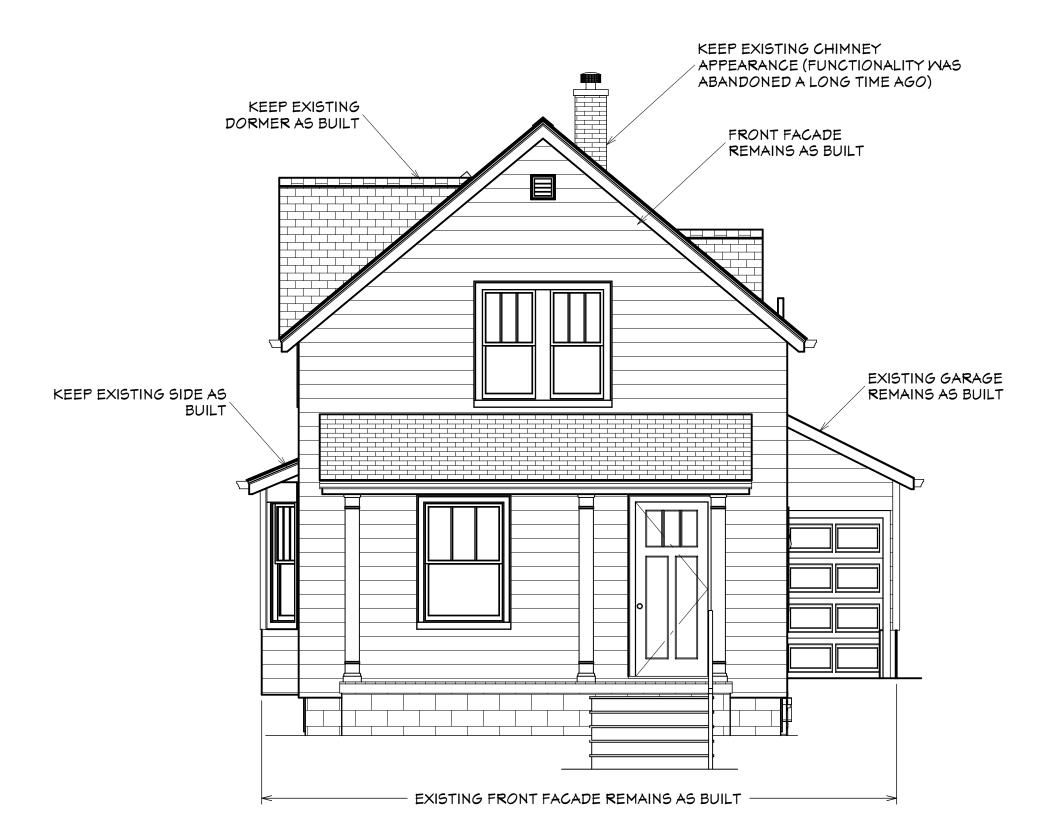
-RELATIVE FLOOR ELEVATIONS OF RELATED STRUCTURES -LENGTH AND WIDTH OF EXISTING STRUCTURES

-WALL BUILD-UPS WITH VARIOUS MATERIALS AFFECTING THICKNESS
-SQUARENESS OF FOUNDATIONS TO LOT LINES

-RELATIVE ORIENTATION OF RELATED STRUCTURES
-LEVELNESS OF EXISTING FOUNDATION
-AGE OF MATERIALS AFFECTING DIMENSIONAL LUMBS

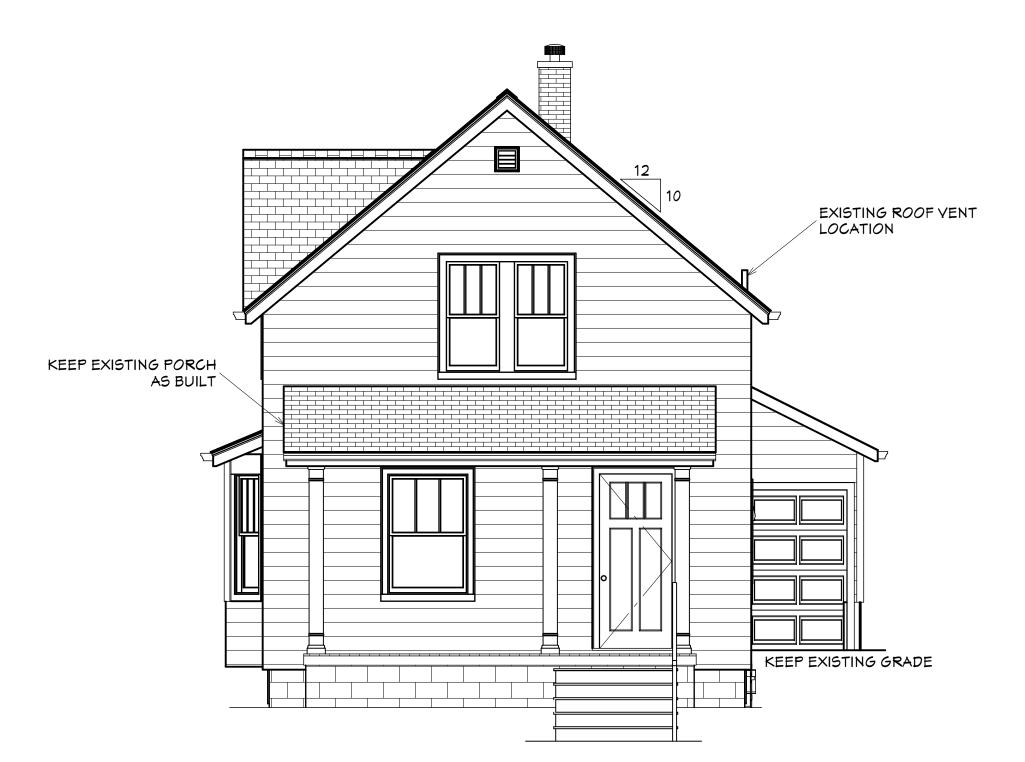
-AGE OF MATERIALS AFFECTING DIMENSIONAL LUMBER -CONSTRUCTION METHODS NOT UP TO CURRENT CODE

-OTHER UNFORESEEN MEASUREMENTS
ALL DIMENSIONS SHOWN RELATING TO THE AFOREMENTIONED CONDITIONS MUST BE
VERIFIED AT THE BEGINNING OF THE PROJECT BY THE CONTRACTOR, AND
CONSTRUCTION MEASUREMENTS AND METHODS MAY NEED TO BE ADJUSTED TO
ACCOUNT FOR MEASUREMENTS THAT MAY NOT ALIGN WITH THOSE ON THE PRINTS.



PROPOSED FRONT ELEVATION

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



EXISTING FRONT ELEVATION

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

NO. DESCRIPTION DATE

CURRENT AND PROPOSED FRONT ELEVATIONS

ALTSCHULER FAMILY 422 S. SEVENTH STREET ANN ARBOR, MI 48103

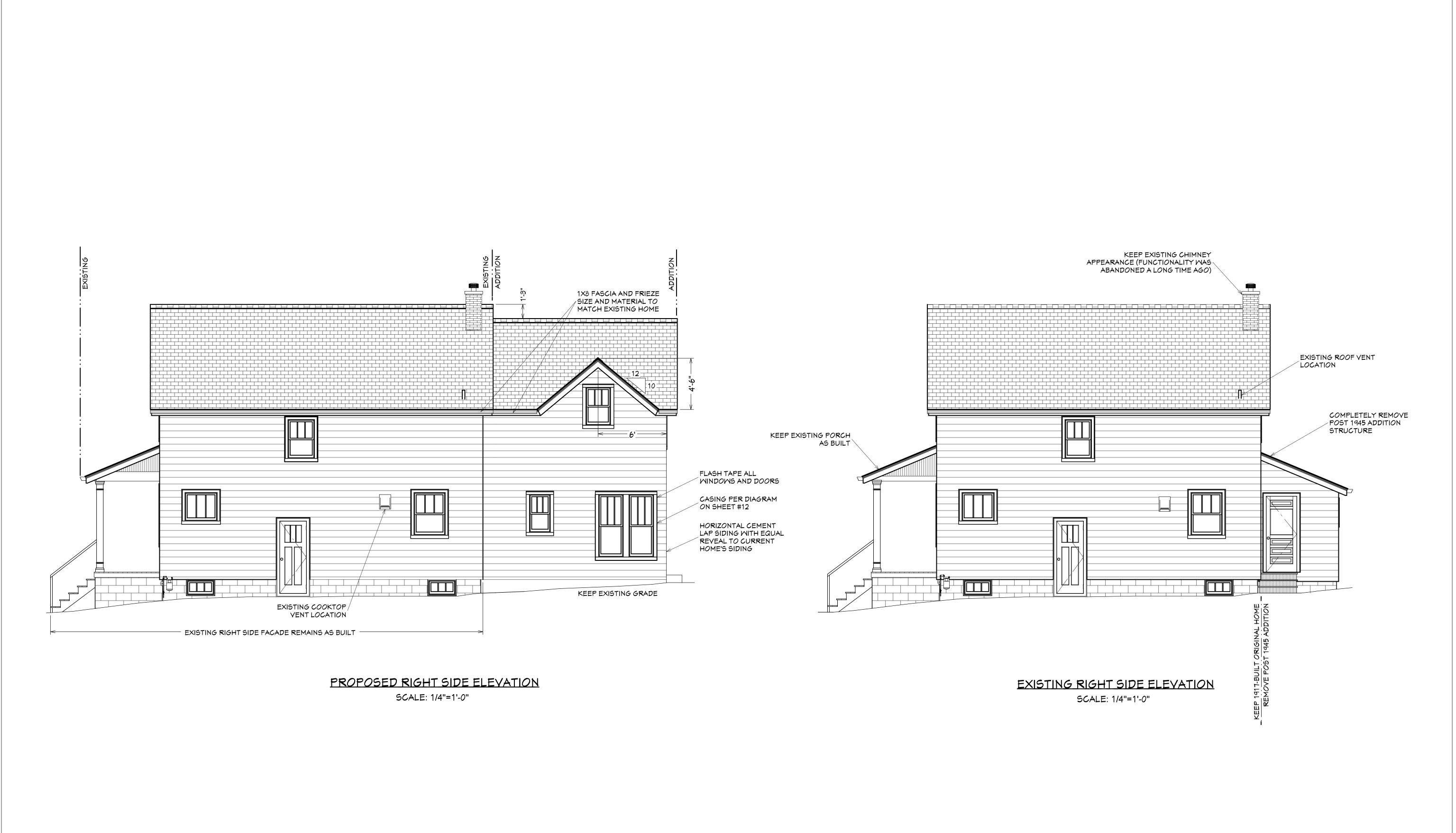
OAKBRIDGE DEVELOPMENT LLC White Lake, MI 48383

DATE:

05.13.2023

PAPER:

SHEET:



CURRENT AND PROPOSED RIGHT SIDE ELEYATIONS

OAKBRIDGE

DEVELOPMENT LLC

White Lake, MI 48383

OakArch.com Info@OakArch.cc

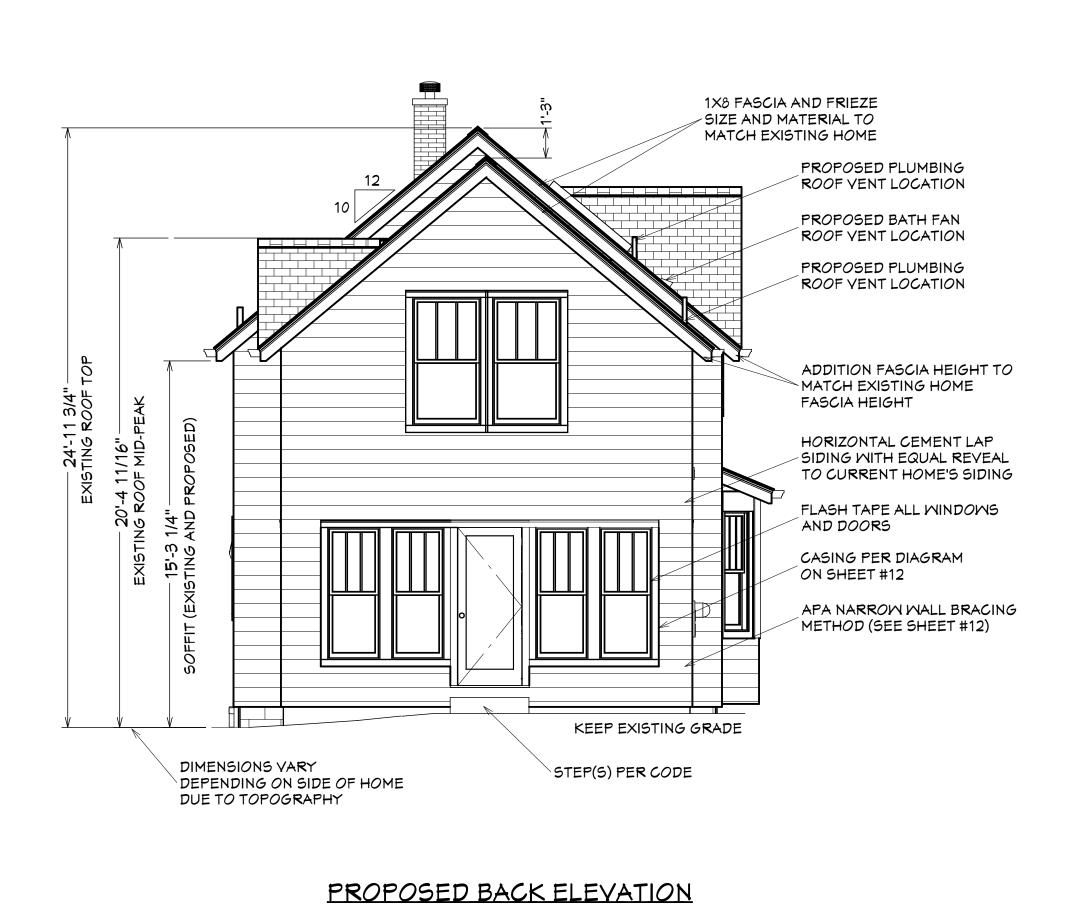
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SCALE: 1/4"=1'-0"

# EXISTING BACK ELEVATION

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

CURRENT SHADOW BOARD IS APPROX. 1-1/4" DEEP X 3"
TALL. EMULATE PROFILE ON ADDITION GABLES

CURRENT FASCIA IS 1X8 WOOD.
USE WOOD OR WOOD.
COMPOSITE FASCIA ON ADDITION

CURRENT SOFFIT IS BEAD BOARD. EMULATE PATTERN, OR USE SMOOTH 330" SOFFIT MATERIAL ON ADDITION GABLES

SEE PAGE #12 FOR CURRENT AND PROPOSED WINDOW CASING PROFILE

CURRENT FRONT PEAK DETAIL

REMOVE MINDOMS TO PREP FOR ADDITION

STRUCTURE

REMOVE MINDOM TO PREP FOR ADDITION

STRUCTURE

REMOVE MINDOM TO PREP FOR ADDITION

SHEET TITLE:

CURRENT AND PROPOSED BACK

ELEVATIONS

ALTSCHULER FAMILY
422 S. SEVENTH STREET

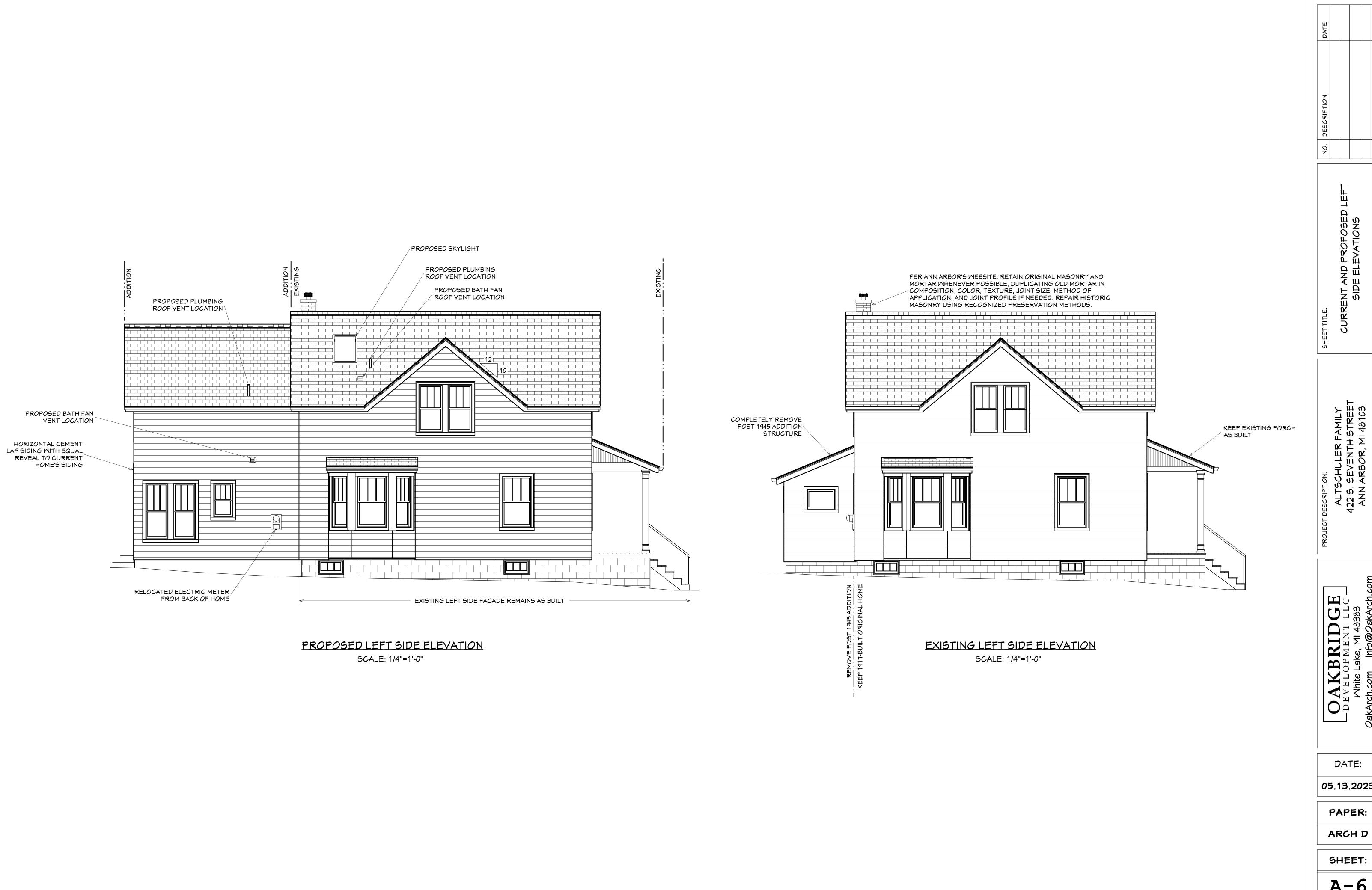
OAKBRIDGE
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White Lake, MI 48383

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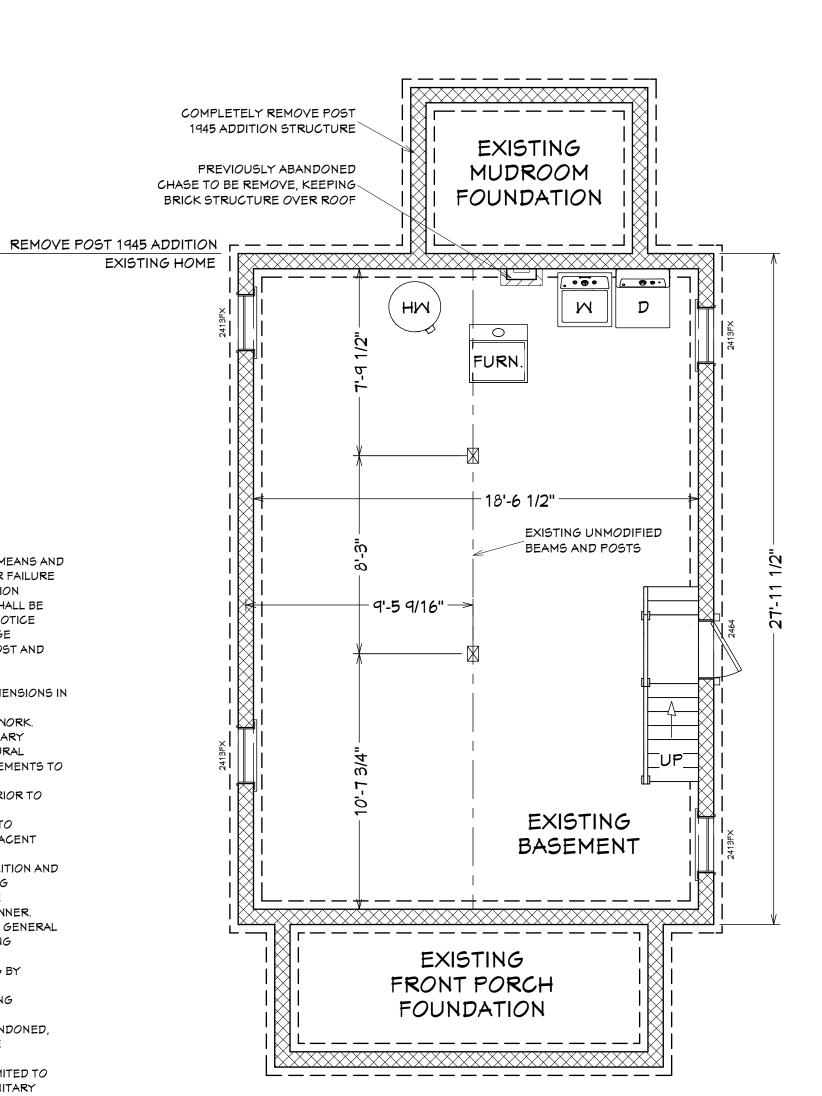
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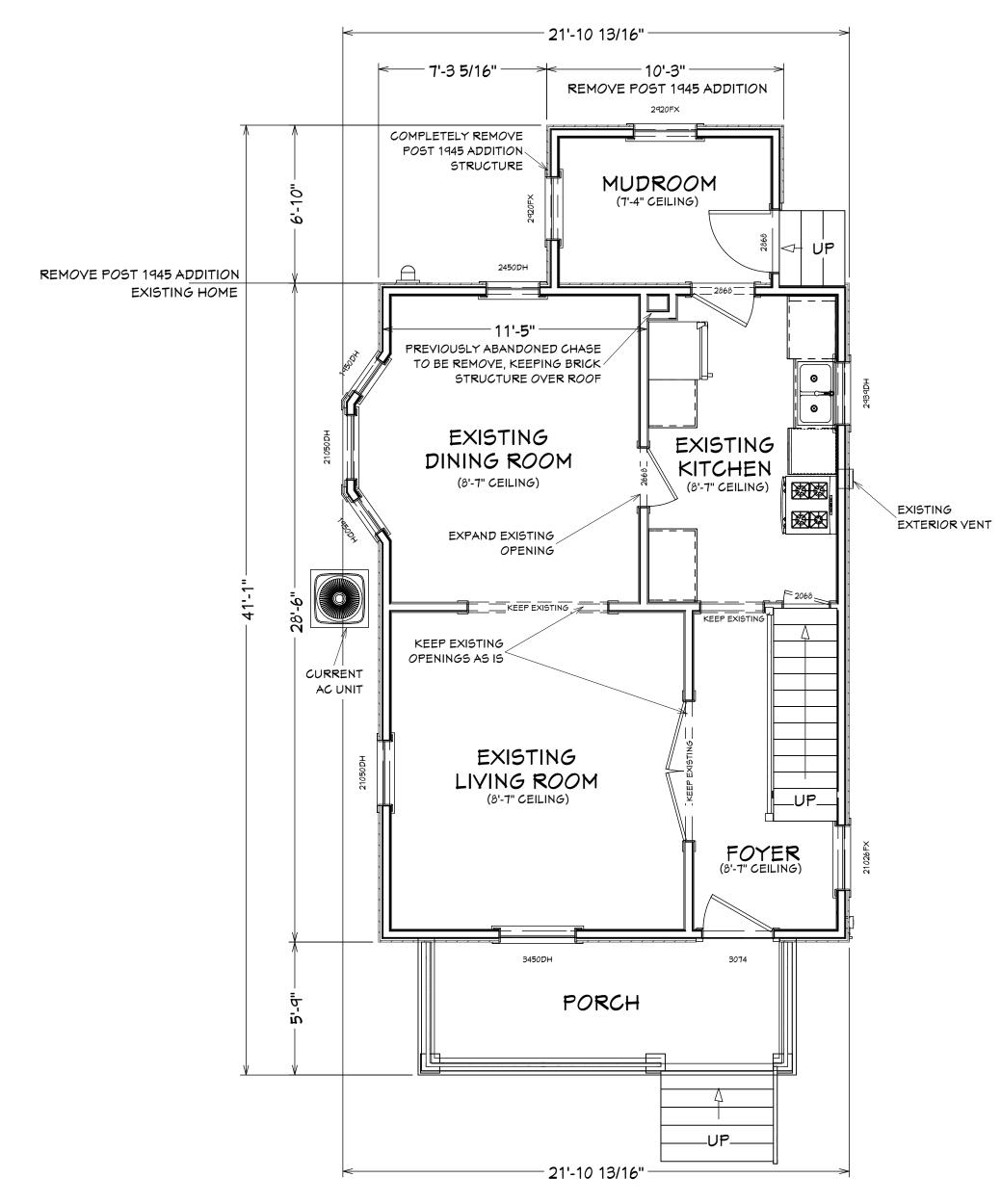
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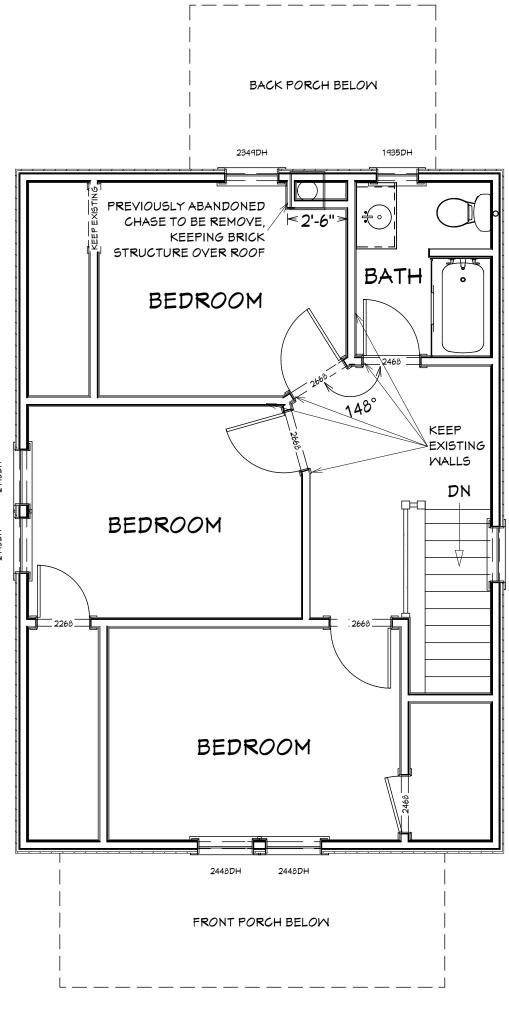
DATE:

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1ST FLOOR **FOUNDATION** SCALE: 1/4"=1'-0" SCALE: 1/4"=1'-0"

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DOCUMENTS. AND DEFECT DISCOVERED IN THE CONSTRUCTION DOCUMENTS SHALL BE

DEVELOPMENT LLC TO CORRECT THE DEFECT SHALL PLACE THE BURDEN OF COST AND

BROUGHT TO THE ATTENTION OF OAKBRIDGE DEVELOPMENT LLC BY WRITTEN NOTICE

BEFORE PROCEEDING WITH WORK. REASONABLE TIME NOT ALLOWED OAKBRIDGE

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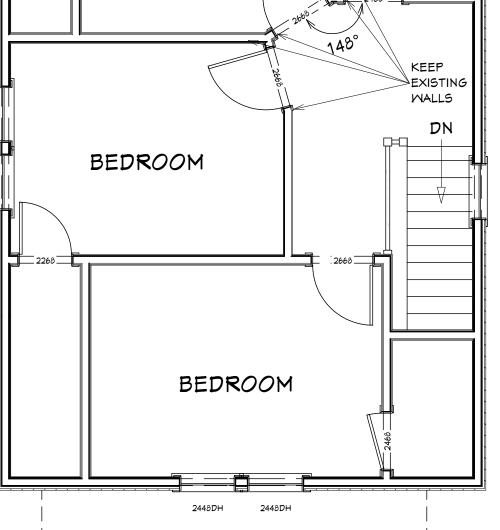
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ALL DIMENSIONS SHOWN RELATING TO THE AFOREMENTIONED CONDITIONS MUST BE VERIFIED AT THE BEGINNING OF THE PROJECT BY THE CONTRACTOR, AND CONSTRUCTION MEASUREMENTS AND METHODS MAY NEED TO BE ADJUSTED TO ACCOUNT FOR MEASUREMENTS THAT MAY NOT ALIGN WITH THOSE ON THE PRINTS.



2ND FLOOR

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

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## **FOUNDATION NOTES:**

ALL FOOTINGS TO REST ON CLEAN, FIRM UNDISTURBED SOIL. STEP FOOTINGS A REQUIRED TO MAINTAIN REQUIRED DEPTH BELOW FINISH GRADES.

INFILTRATION, ALL OPENINGS IN THE EXT. BLDG. ENVELOPE SHALL BE SEALED AGAINST AIR INFILTRATION. THE FOLLOWING AREAS MUST BE SEALED.

- \* JOINTS AROUND WINDOW AND DOOR FRAMES
- \* JOINTS BETWEEN WALL CAVITY AND WINDOW/DR. FME.
- \* JOINTS BETWEEN WALL AND FOUNDATION
- \* JOINTS BETWEEN WALL AND ROOF
- \* JOINTS BETWEEN WALL PANELS

\* UTILITY PENETRATIONS THROUGH EXTERIOR WALLS R401.2 REQUIREMENTS. FOUNDATION CONSTRUCTION SHALL BE CAPABLE OF ACCOMMODATING ALL LOADS IN ACCORDANCE WITH SECTION R301 AND OF TRANSMITTING THE RESULTING LOADS TO THE SUPPORTING SOIL. FILL SOILS THAT SUPPORT FOOTINGS AND FOUNDATIONS SHALL BE DESIGNED, INSTALLED AND TESTED IN ACCORDANCE WITH ACCEPTED ENGINEERING

PRACTICE. GRAVEL FILL USED AS FOOTINGS FOR WOOD AND PRECAST CONCRETE FOUNDATIONS SHALL COMPLY WITH SECTION R403. R401.4 SOIL TESTS. 2015 MICHIGAN RESIDENTIAL CODE STATES: WHERE QUANTIFIABLE DATA CREATED BY ACCEPTED SOIL SCIENCE METHODOLOGIES INDICATE EXPANSIVE, COMPRESSIBLE, SHIFTING OR OTHER QUESTIONABLE SOIL CHARACTERISTICS ARE LIKELY TO BE PRESENT, THE BUILDING OFFICIAL SHALL DETERMINE WHETHER TO REQUIRE A SOIL TEST TO DETERMINE THE SOIL'S CHARACTERISTICS AT A PARTICULAR LOCATION. THIS TEST SHALL BE DONE BY AN APPROVED

THIS HOME DESIGN STATES: IT IS THE SOLE RESPONSIBILITY OF THE BUILDER TO WORK WITH LICENSED SOILS ENGINEERING FIRM TO DETERMINE ADEQUATE FOOTING DESIGN FOR HOME BASED ON LAND SOIL CONDITIONS. FOOTING DESIGN REFERENCED IN THIS SET OF DRAWINGS IS BASED ON A MINIMUM LOAD BEARING VALUE OF SOIL OF 2500(PSF), AND THE DESIGNER OF THESE PLANS IS NOT RESPONSIBLE FOR, AND HAS NOT PERFORMED, ANY SOIL TESTS ON THE LAND WHERE THIS HOUSE WILL GO.

## SECTION R403 - FOOTINGS

R403.1 GENERAL. ALL EXTERIOR WALLS SHALL BE SUPPORTED ON CONTINUOUS SOLID OR FULLY GROUTED MASONRY OR CONCRETE FOOTINGS, CRUSHED STONE FOOTINGS, WOOD FOUNDATIONS, OR OTHER APPROVED STRUCTURAL SYSTEMS WHICH SHALL BE OF SUFFICIENT DESIGN TO ACCOMMODATE ALL LOADS ACCORDING TO SECTION R301 AND TO TRANSMIT THE RESULTING LOADS TO THE SOIL WITHIN THE LIMITATIONS AS DETERMINED FROM THE CHARACTER OF THE SOIL. FOOTINGS SHALL BE SUPPORTED ON UNDISTURBED NATURAL SOILS OR ENGINEERED FILL. CONCRETE FOOTING SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF SECTION R403 OR IN ACCORDANCE WITH ACI 332. R403.1.6 FOUNDATION ANCHORAGE. WOOD SILL PLATES AND WOOD WALLS SUPPORTED DIRECTLY ON CONTINUOUS FOUNDATIONS SHALL BE ANCHORED TO THE FOUNDATION IN ACCORDANCE WITH THIS SECTION. WOOD SOLE PLATES SHALL BE ANCHORED TO THE FOUNDATION WITH MINIMUM 1/2-INCHDIAMETER (12.7 MM) ANCHOR BOLTS SPACED A MAXIMUM OF 6 FEET (1829 MM) ON CENTER OR APPROVED ANCHORS OR ANCHOR STRAPS SPACED AS REQUIRED TO PROVIDE EQUIVALENT ANCHORAGE TO 1/2-INCH-DIAMETER (12.7 MM) ANCHOR BOLTS. BOLTS SHALL EXTEND A MINIMUM OF 7 INCHES (178 MM) INTO CONCRETE OR GROUTED CELLS OF CONCRETE MASONRY UNITS. THE BOLTS SHALL BE LOCATED IN THE MIDDLE THIRD OF THE WIDTH OF THE PLATE. A NUT AND WASHER SHALL BE TIGHTENED ON EACH ANCHOR BOLT. THERE SHALL BE A MINIMUM OF TWO

### AND TERMITES WHERE REQUIRED BY SECTIONS R317 AND R318. SECTION R404 - FOUNDATION AND RETAINING WALLS

R404.1 CONCRETE AND MASONRY FOUNDATION WALLS. CONCRETE FOUNDATION WALLS SHALL BE SELECTED AND CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF SECTION R404.1.3. MASONRY FOUNDATION WALLS SHALL BE SELECTED AND CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF SECTION R404.1.2.

BOLTS PER PLATE SECTION WITH ONE BOLT LOCATED NOT MORE THAN 12 INCHES (305 MM) OR LESS THAN SEVEN BOLT

DIAMETERS FROM EACH END OF THE PLATE SECTION. SILL PLATES AND SOLE PLATES SHALL BE PROTECTED AGAINST DECAY

R404.1.3 CONCRETE FOUNDATION WALLS. CONCRETE FOUNDATION WALLS THAT SUPPORT LIGHT-FRAME WALLS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THIS SECTION, ACI 318, ACI 332 OR PCA 100. R404.1.3.1 CONCRETE CROSS-SECTION. CONCRETE WALLS CONSTRUCTED IN ACCORDANCE WITH THIS CODE SHALL COMPLY WITH THE SHAPES AND MINIMUM CONCRETE CROSS-SECTIONAL DIMENSIONS REQUIRED BY TABLE R608.3. OTHER TYPES OF FORMING SYSTEMS RESULTING IN CONCRETE WALLS NOT IN COMPLIANCE WITH THIS SECTION AND TABLE R608.3 SHALL BE DESIGNED IN ACCORDANCE WITH ACI 318.

## R404.1.3.2 REINFORCEMENT FOR FOUNDATION WALLS.

CONCRETE FOUNDATION WALLS SHALL BE LATERALLY SUPPORTED AT THE TOP AND BOTTOM. HORIZONTAL REINFORCEMENT SHALL BE PROVIDED IN ACCORDANCE WITH TABLE R404.1.2(1). VERTICAL REINFORCEMENT SHALL BE PROVIDED IN ACCORDANCE WITH TABLE R404.1.2(2), R404.1.2(3), R404.1.2(4), R404.1.2(5), R404.1.2(6), R404.1.2(6), R404.1.2(7) OR R404.1.2(8). VERTICAL REINFORCEMENT FOR FLAT BASEMENT WALLS RETAINING 4 FEET (1219 MM) OR MORE OF UNBALANCED BACKFILL IS PERMITTED

TO BE DETERMINED IN ACCORDANCE WITH TABLE R404.1.2(9). R404.1.3.3.7.1 STEEL REINFORCEMENT. STEEL REINFORCEMENT SHALL COMPLY WITH THE REQUIREMENTS OF ASTM A615, A706, OR A996. ASTM A996 BARS PRODUCED FROM RAIL STEEL SHALL BE TYPE R.

R404.1.3.3.7.2 LOCATION OF REINFORCEMENT IN WALL. THE CENTER OF VERTICAL REINFORCEMENT IN BASEMENT WALLS DETERMINED FROM TABLES R404.1.2(2) THROUGH R404.1.2(7) SHALL BE LOCATED AT THE CENTERLINE OF THE WALL. VERTICAL REINFORGEMENT IN BASEMENT WALLS DETERMINED FROM TABLE R404.1.2(8) SHALL BE LOCATED TO PROVIDE A MAXIMUM COVER OF 11/4 INCHES (32 MM) MEASURED FROM THE INSIDE FACE OF THE WALL. REGARDLESS OF THE TABLE USED TO DETERMINE VERTICAL WALL REINFORCEMENT, THE CENTER OF THE STEEL SHALL NOT VARY FROM THE SPECIFIED LOCATION BY MORE THAN THE GREATER OF 10 PERCENT OF THE WALL THICKNESS AND 3/8 INCH (10 MM). HORIZONTAL AND VERTICAL REINFORCEMENT SHALL BE LOCATED IN FOUNDATION WALLS TO PROVIDE THE MINIMUM COVER REQUIRED BY SECTION

R404.1.6 HEIGHT ABOVE FINISHED GRADE. CONCRETE AND MASONRY FOUNDATION WALLS SHALL EXTEND ABOVE THE FINISHED GRADE ADJACENT TO THE FOUNDATION AT ALL POINTS A MINIMUM OF 4 INCHES (102 MM) WHERE MASONRY VENEER IS

USED AND A MINIMUM OF 6 INCHES (152 MM) ELSEWHERE. R404.1.7 BACKFILL PLACEMENT. BACKFILL SHALL NOT BE PLACED AGAINST THE WALL UNTIL THE WALL HAS SUFFICIENT STRENGTH AND HAS BEEN ANCHORED TO THE FLOOR ABOVE, OR HAS BEEN SUFFICIENTLY BRACED TO PREVENT DAMAGE BY THE BACKFILL. NOTE: GARAGE POURED WALLS SHALL ONLY BE BACKFILLED UP TO 9'-0" (WITH SUFFICIENT BRACING) PRIOR TO 100% COMPLETE INSTALLATION AND TIE-IN OF KERKSTA PRECAST INC FLOOR PANEL INSTALLATION BY KERKSTA PRECAST INC. SECTION R405 - FOUNDATION DRAINAGE

R405.1 CONCRETE OR MASONRY FOUNDATIONS. DRAINS SHALL BE PROVIDED AROUND CONCRETE OR MASONRY FOUNDATIONS THAT RETAIN EARTH AND ENCLOSE HABITABLE OR USABLE SPACES LOCATED BELOW GRADE. DRAINAGE TILES, GRAVEL OR CRUSHED STONE DRAINS, PERFORATED PIPE OR OTHER APPROVED SYSTEMS OR MATERIALS SHALL BE INSTALLED AT OR BELOW THE AREA TO BE PROTECTED AND SHALL DISCHARGE BY GRAVITY OR MECHANICAL MEANS INTO AN APPROVED DRAINAGE SYSTEM.

# SECTION R406 - FOUNDATION WATERPROOFING AND DAMPPROOFING

R406.1 CONCRETE AND MASONRY FOUNDATION DAMP-PROOFING. EXCEPT WHERE REQUIRED BY SECTION R406.2 TO BE WATERPROOFED, FOUNDATION WALLS THAT RETAIN EARTH AND ENCLOSE INTERIOR SPACES AND FLOORS BELOW GRADE

R406.2 CONCRETE AND MASONRY FOUNDATION WATERPROOFING. IN AREAS WHERE A HIGH WATER TABLE OR OTHER SEVERE SOIL-MATER CONDITIONS ARE KNOWN TO EXIST, EXTERIOR FOUNDATION WALLS THAT RETAIN EARTH AND ENCLOSE INTERIOR SPACES AND FLOORS BELOW GRADE SHALL BE WATERPROOFED.

## **GRADING NOTES:**

1 CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING UTILITIES.

2 PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING. 3 FINAL GRADE TO CONVEY SURFACE DRAINAGE TOWARD ROCK CHANNELS AND DISPERSION TRENCHES.

4 AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL AND STRIPPED OF TOPSOIL.

5 PLACE FILL SLOPES WITH A GRADIENT STEEPER THAT 3:1 IN LIFTS NOT TO EXCEED 8 INCHES, AND MAKE SURE EACH LIFT IS PROPERLY COMPACTED.

## **EROSION CONTROL NOTES:**

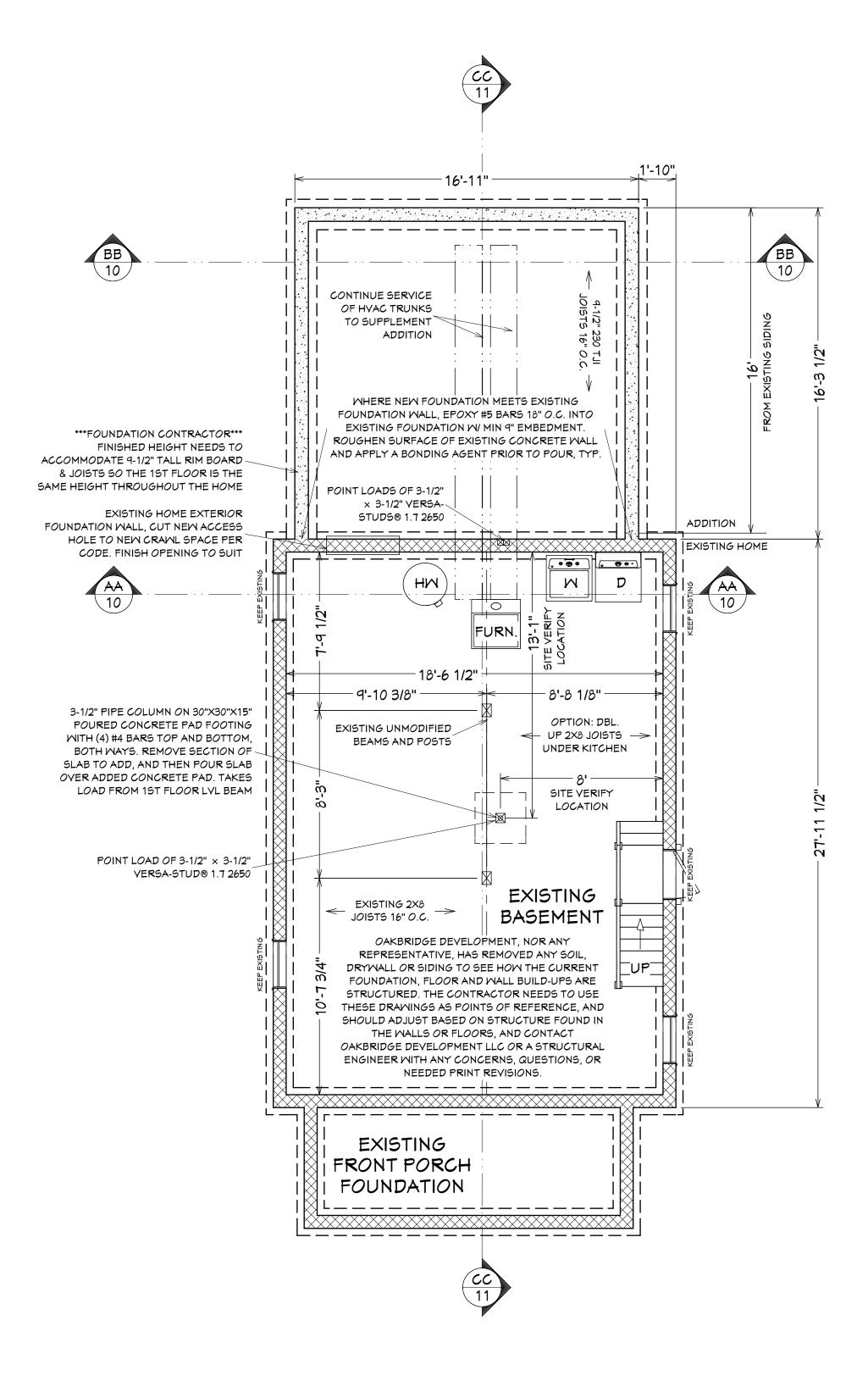
1 INSTALL SILT FENCE PRIOR TO ANY EXCAVATION OR CONSTRUCTION

2 MINIMIZE SITE DISTURBANCE BY TIGHT CONTROL OF EXCAVATION LIMITS.

3 ALL EXPOSED SOIL SHALL BE MULCHED WITH STRAW OR WOOD CHIPS TO MINIMIZE SOIL EROSION. NO SOIL SHALL BE LEFT IN AN EXPOSED CONDITION. IT IS RECOMMENDED THAT THE CONTRACTOR MAINTAIN A STOCK PILE OF THIS MATERIAL ON SITE FOR QUICK APPLICATION.

4 HYDROSEED WITH A WOOD CELLULOSE FIBER MULCH APPLIED AT A RATE OF 2,000#/ACRE. USE AN ORGANIC TACKIFIER AT NO LESS THAN 150 #/ACRE OR PER MANUFACTURE'S RECOMMENDATION IF HIGHER. APPLICATION OF TACKIFIER SHALL BE HEAVIER AT EDGES, IN VALLEYS AND AT CRESTS OF BANKS AND OTHER AREAS WHERE SEED CAN BE MOVED BY WIND OR WATER

5 DISPERSION TRENCHES SHALL OVERFLOW ONTO NATIVE UNDISTURBED GROUND. NO SITE DISTURBANCE BELOW



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

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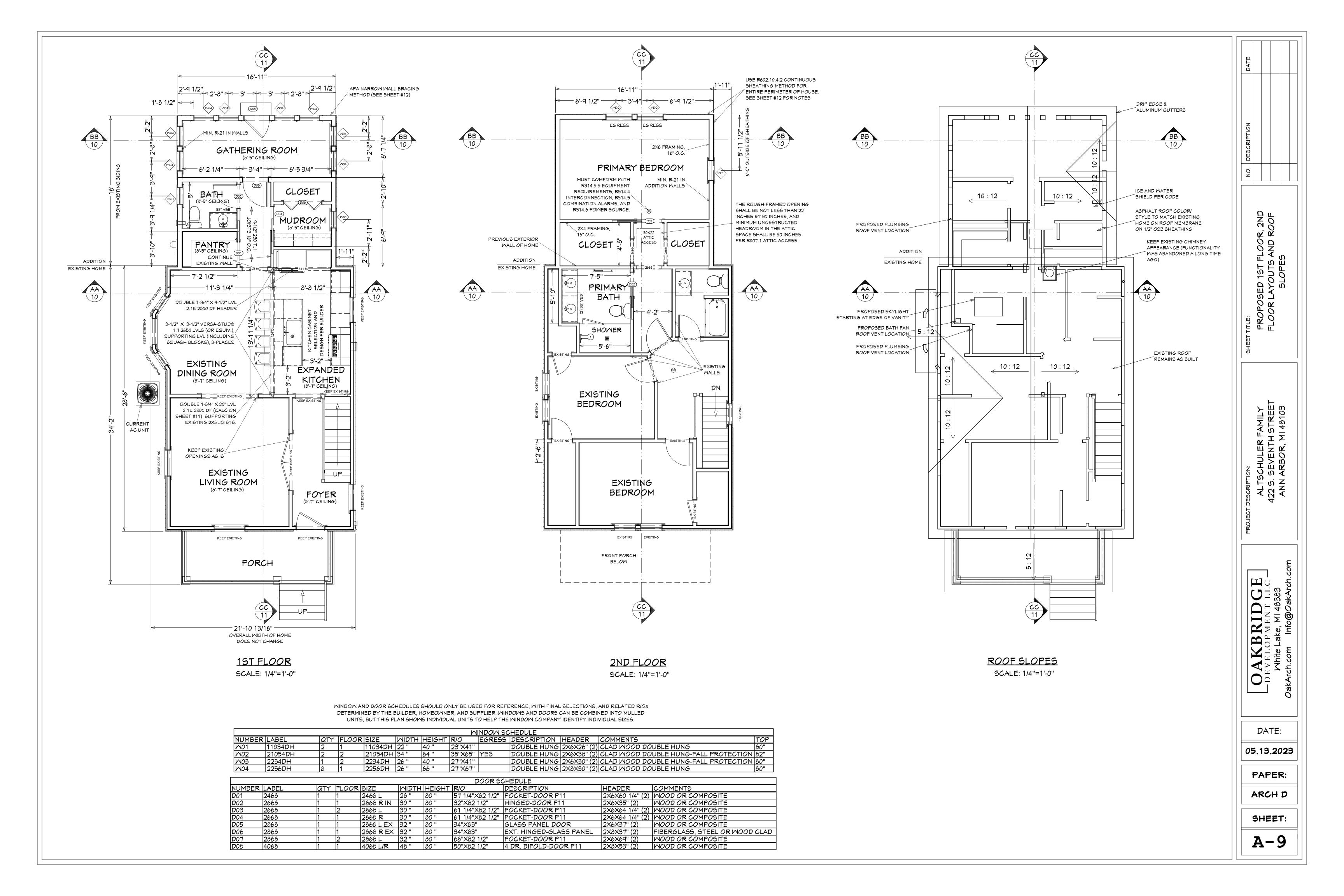
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### RAFTER/CEILING JOIST NOTES:

R802.3.1 CEILING JOIST AND RAFTER CONNECTIONS. CEILING JOISTS AND RAFTERS SHALL BE NAILED TO EACH OTHER IN ACCOR DANCE WITH TABLE R802.5.1(4). AND THE RAFTER SHALL BE NAILED TO THE TOP WALL PLATE IN ACCORDANCE WITH TABLE R602.3(1). CEILING JOISTS SHALL BE CONTINUOUS OR SECURELY JOINED IN ACCORDANCE WITH TABLE R802.5.1(9) WHERE THEY MEET OVER INTERIOR PARTITIONS AND ARE NAILED TO ADJACENT RAF TERS TO PROVIDE A CONTINUOUS TIE ACROSS THE BUILDING WHERE SUCH JOISTS ARE PARALLEL TO THE RAFTERS. WHERE CEILING JOISTS ARE NOT CONNECTED TO THE RAFTERS AT THE TOP WALL PLATE, JOISTS CONNECTED HIGHER IN THE ATTIC SHALL BE INSTALLED AS RAFTER TIES, OR RAFTER TIES SHALL BE INSTALLED TO PROVIDE A CONTINUOUS TIE. WHERE CEILING JOISTS ARE NOT PARAL LEL TO RAFTERS, RAFTER TIES SHALL BE INSTALLED. RAFTER TIES SHALL BE NOT LESS THAN 2 INCHES BY 4 INCHES (51 MM BY 102 MM) (NOMINAL), INSTALLED IN ACCORDANCE WITH THE CONNECTION REQUIREMENTS IN TABLE R802.5.1(9), OR CONNECTIONS OF EQUIVALENT CAPACITIES SHALL BE PROVIDED. WHERE CEILING JOISTS OR RAFTER TIES ARE NOT PROVIDED, THE RIDGE FORMED BY THESE RAFTERS SHALL BE SUPPORTED BY A WALL OR GIRDER DESIGNED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE. COLLAR TIES OR RIDGE STRAPS TO RESIST WIND UPLIFT SHALL BE CONNECTED IN THE UPPER THIRD OF THE ATTIC SPACE IN ACCOR DANCE WITH TABLE R602.3(1). COLLAR TIES SHALL BE NOT LESS THAN 1 INCH BY 4 INCHES (25 MM BY 102 MM) (NOMINAL), SPACED NOT MORE THAN 4 FEET (1219 MM) ON CENTER.

R802.3.2 CEILING JOISTS LAPPED. ENDS OF CEILING JOISTS SHALL BE LAPPED NOT LESS THAN 3 INCHES (76 MM) OR BUTTED OVER BEARING PARTITIONS OR BEAMS AND TOENAILED TO THE BEAR ING MEMBER. WHERE CEILING JOISTS ARE USED TO PROVIDE RESIS TANCE TO RAFTER THRUST, LAPPED JOISTS SHALL BE NAILED TOGETHER IN ACCORDANCE WITH TABLE R802.5.1(9) AND BUTTED JOISTS SHALL BE TIED TOGETHER IN A MANNER TO RESIST SUCH THRUST. JOISTS THAT DO NOT RESIST THRUST SHALL BE PERMITTED TO BE NAILED IN ACCORDANCE WITH TABLE R602.3(1).

### 802.3.3 BLOCKING. BLOCKING SHALL BE A MINIMUM OF UTIL ITY GRADE LUMBER.

R802.4 ALLOWABLE CEILING JOIST SPANS. SPANS FOR CEILING JOISTS SHALL BE IN ACCORDANCE WITH TABLES R802.4(1) AND R802.4(2). FOR OTHER GRADES AND SPECIES AND FOR OTHER LOADING CONDITIONS, REFER TO THE AMC STJR.

R802.5 ALLOWABLE RAFTER SPANS, SPANS FOR RAFTERS SHALL BE IN ACCORDANCE WITH TABLES R802.5.1(1) THROUGH R802.5.1(8). FOR OTHER GRADES AND SPECIES AND FOR OTHER LOADING CONDITIONS, REFER TO THE AMC STJR. THE SPAN OF EACH RAFTER SHALL BE MEA SURED ALONG THE HORIZONTAL PROJECTION OF THE RAFTER

R802.6 BEARING. THE ENDS OF EACH RAFTER OR CEILING JOIST SHALL HAVE NOT LESS THAN 11 /2 INCHES (38 MM) OF BEARING ON WOOD OR METAL AND NOT LESS THAN 3 INCHES (76 MM) ON MASONRY OR CON CRETE. THE BEARING ON MASONRY OR CONCRETE SHALL BE DIRECT, OR A SILL PLATE OF 2-INCH (51 MM) MINIMUM NOMINAL THICKNESS SHALL BE PROVIDED UNDER THE RAFTER OR CEILING JOIST. THE SILL PLATE SHALL PROVIDE A MINIMUM NOMINAL BEARING AREA OF 48 SQUARE INCHES (30 865 MM2 ).

R802.8 LATERAL SUPPORT. ROOF FRAMING MEMBERS AND CEILING JOISTS HAVING A DEPTH-TO-THICKNESS RATIO EXCEEDING 5 TO 1 BASED ON NOMINAL DIMENSIONS SHALL BE PROVIDED WITH LATERAL SUPPORT AT POINTS OF BEARING TO PREVENT ROTATION. FOR ROOF RAF TERS WITH CEILING JOISTS ATTACHED IN ACCORDANCE WITH TABLE R602.3(1), THE DEPTH-TO-THICKNESS RATIO FOR THE TOTAL ASSEMBLY SHALL BE DETERMINED USING THE COMBINED THICKNESS OF THE RAF TER PLUS THE ATTACHED CEILING JOIST. EXCEPTION: ROOF TRUSSES SHALL BE BRACED IN ACCORDANCE WITH SECTION R802.10.3.

R802.8.1 BRIDGING. RAFTERS AND CEILING JOISTS HAVING A DEPTH-TO-THICKNESS RATIO EXCEEDING 6 TO 1 BASED ON NOMINAL DIMENSIONS SHALL BE SUPPORTED LATERALLY BY SOLID BLOCKING, DIAGONAL BRIDGING (WOOD OR METAL) OR A CONTINUOUS 1-INCH BY 3-INCH (25 MM BY 76 MM) WOOD STRIP NAILED ACROSS THE RAFTERS OR CEILING JOISTS AT INTERVALS NOT EXCEEDING 8 FEET (2438 MM).

BEAMS AND POSTS

OAKBRIDGE DEVELOPMENT NOR ANY REPRESENTATIVE HAS ANY

KNOWLEDGE WHAT THE EXISTING FOOTING DESIGNS ARE (HEIGHT,

DEPTH, WIDTH, MATERIAL, STRUCTURE, DRAINAGE, ETC.)

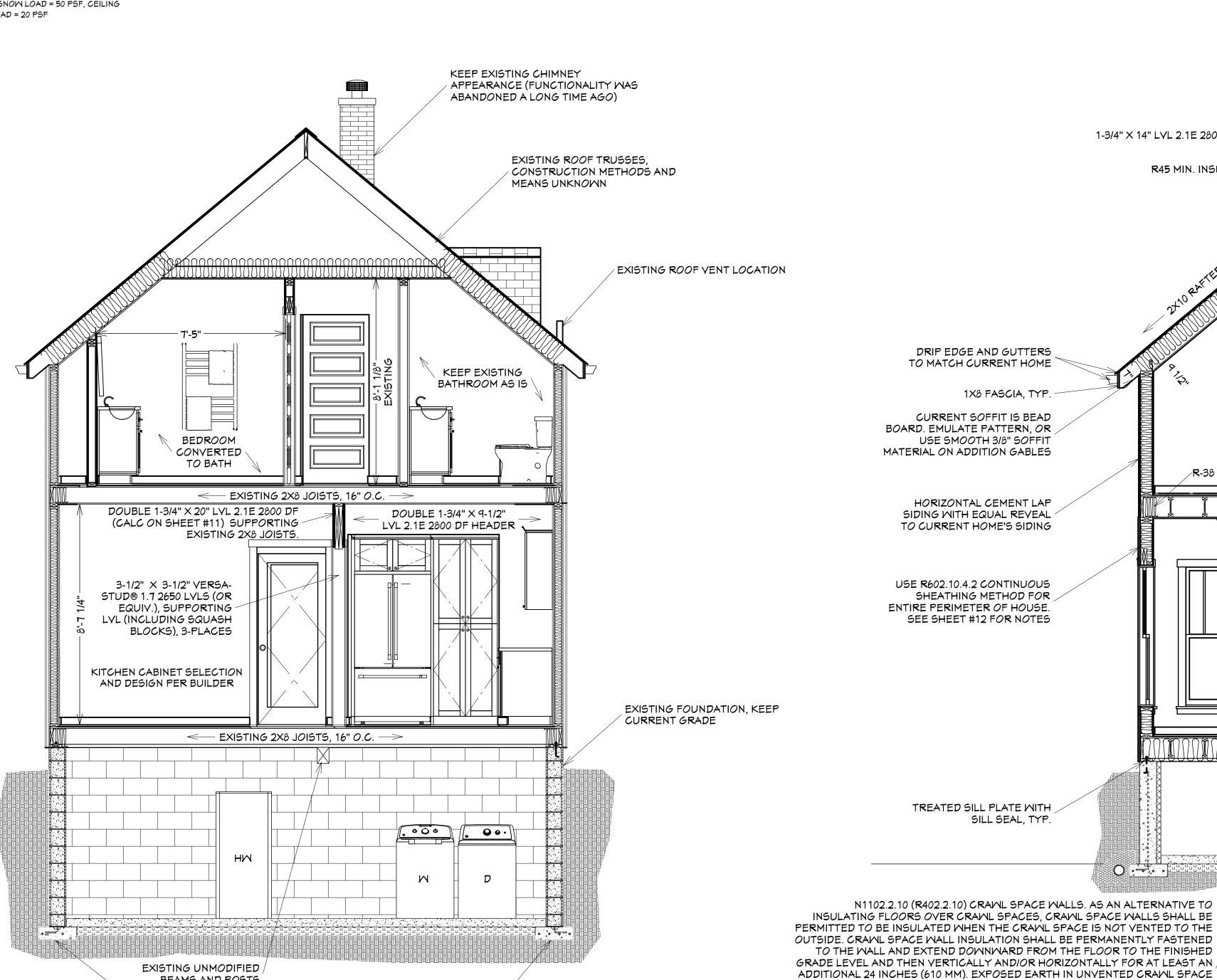
SECTION A-A

SCALE: 3/8"=1'-0"

ADDITION RAFTERS OVER DESIGNED BASED ON ABLE R802.5.1(6) RAFTER SPANS

ATTACHED TO RAFTERS, L/A = 240) DEAD LOAD = 20 PSF

FOR COMMON LUMBER SPECIES (GROUND SNOW LOAD = 50 PSF, CEILING



DOUBLE TOP PLATE DOUBLE 2X HEADER FLASH TAPE NAIL FIN TO HOUSE WRAP, OUTSIDE SURFACE, TYP. 3/4" AIR GAP AROUND ENTIRE UNIT 3/4" SPACERS UNDER YERTICAL EDGES OF WINDOW ONLY. NO SUPPORT UNDER CENTER OF UNITS, TYP. SILL PLATE KING STUD JACK STUD CRIPPLE STUD

FOUNDATIONS SHALL BE COVERED WITH A CONTINUOUS CLASS I VAPOR

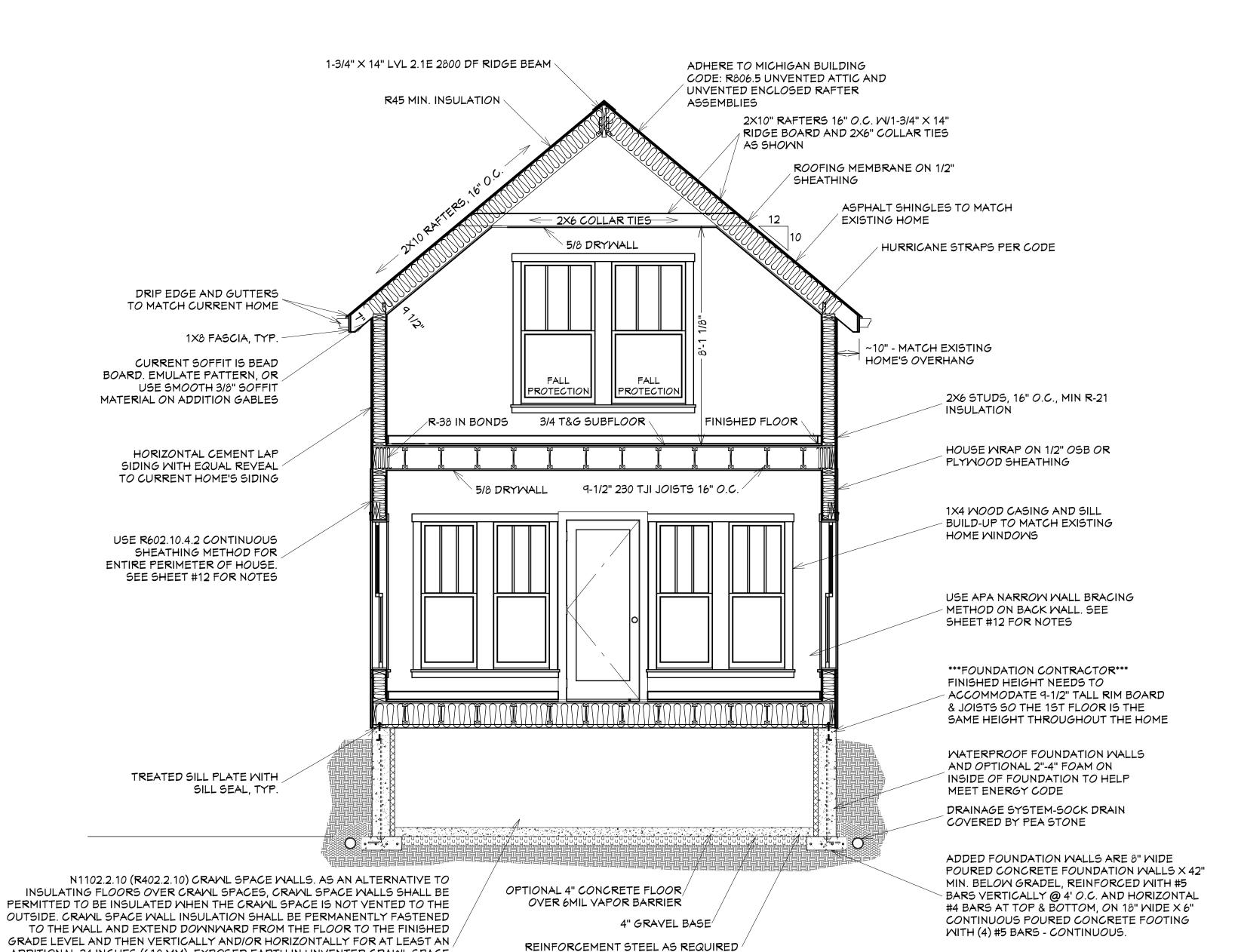
RETARDER IN ACCORDANCE WITH THIS CODE. ALL JOINTS OF THE VAPOR

MM) UP THE STEM WALL AND SHALL BE ATTACHED TO THE STEM WALL.

RETARDER SHALL OVERLAP BY 6 INCHES (153 MM) AND BE SEALED OR TAPED.

THE EDGES OF THE VAPOR RETARDER SHALL EXTEND AT LEAST 6 INCHES (153

GENERAL WINDOW FRAMING DETAIL



SECTION B-B

SCALE: 3/8"=1'-0"

SECT TONO

1.15C+ 1.05.0E 1.0 AR

**M** C

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### RAFTER/CEILING JOIST NOTES: Double 1-3/4" x 20" VERSA-LAM® LVL 2.1E 2800 DF PASSED R802.3.1 CEILING JOIST AND RAFTER CONNECTIONS. CEILING JOISTS AND RAFTERS SHALL BE NAILED TO EACH OTHER IN ACCOR DANCE WITH TABLE R802.5.1(9), AND THE Central LVL Beam (Drop Beam) May 9, 2023 16:56:26 RAFTER SHALL BE NAILED TO THE TOP WALL PLATE IN ACCORDANCE WITH TABLE R602.3(1). CEILING JOISTS SHALL BE CONTINUOUS OR SECURELY JOINED IN ACCORDANCE WITH TABLE BC CALC® Member Report Dry | 1 span | No cant. Build 16959 R802.5.1(4) WHERE THEY MEET OVER INTERIOR PARTITIONS AND ARE NAILED TO ADJACENT RAF TERS TO PROVIDE A CONTINUOUS TIE ACROSS THE BUILDING WHERE SUCH JOISTS Job name: File name: ARE PARALLEL TO THE RAFTERS. WHERE CEILING JOISTS ARE NOT CONNECTED TO THE RAFTERS AT THE TOP WALL PLATE, JOISTS CONNECTED HIGHER IN THE ATTIC SHALL BE 422 S. SEVENTH STREET Description: Address: INSTALLED AS RAFTER TIES, OR RAFTER TIES SHALL BE INSTALLED TO PROVIDE A CONTINUOUS TIE. WHERE CEILING JOISTS ARE NOT PARAL LEL TO RAFTERS, RAFTER TIES SHALL BE ANN ARBOR, MI, 48103 City, State, Zip: Specifier: INSTALLED. RAFTER TIES SHALL BE NOT LESS THAN 2 INCHES BY 4 INCHES (51 MM BY 102 MM) (NOMINAL), INSTALLED IN ACCORDANCE WITH THE CONNECTION REQUIREMENTS IN TABLE ALTSCHULER FAMILY Michael Philp Customer: Designer: R802.5.1(9), OR CONNECTIONS OF EQUIVALENT CAPACITIES SHALL BE PROVIDED. WHERE CEILING JOISTS OR RAFTER TIES ARE NOT PROVIDED, THE RIDGE FORMED BY THESE RAFTERS ESR-1040 OakBridge Development LLC Code reports: Company: SHALL BE SUPPORTED BY A WALL OR GIRDER DESIGNED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE. COLLAR TIES OR RIDGE STRAPS TO RESIST WIND UPLIFT SHALL BE CONNECTED IN THE UPPER THIRD OF THE ATTIC SPACE IN ACCOR DANCE WITH TABLE R602.3(1). COLLAR TIES SHALL BE NOT LESS THAN 1 INCH BY 4 INCHES (25 MM BY 102 MM) (NOMINAL), SPACED NOT MORE THAN 4 FEET (1219 MM) ON CENTER. R802.3.2 CEILING JOISTS LAPPED. ENDS OF CEILING JOISTS SHALL BE LAPPED NOT LESS THAN 3 INCHES (76 MM) OR BUTTED OVER BEARING PARTITIONS OR BEAMS AND TOENAILED TO THE BEAR ING MEMBER. WHERE CEILING JOISTS ARE USED TO PROVIDE RESIS TANCE TO RAFTER THRUST, LAPPED JOISTS SHALL BE NAILED TOGETHER IN ACCORDANCE WITH TABLE R802.5.1(9) AND BUTTED JOISTS SHALL BE TIED TOGETHER IN A MANNER TO RESIST SUCH THRUST. JOISTS THAT DO NOT RESIST THRUST SHALL BE PERMITTED TO BE NAILED IN ACCORDANCE WITH TABLE R602.3(1). 13-11-00 802.3.3 BLOCKING. BLOCKING SHALL BE A MINIMUM OF UTIL ITY GRADE LUMBER. Total Horizontal Product Length = 13-11-00 R802.4 ALLOWABLE CEILING JOIST SPANS. SPANS FOR CEILING JOISTS SHALL BE IN ACCORDANCE WITH TABLES R802.4(1) AND R802.4(2). FOR OTHER GRADES AND SPECIES AND Reaction Summary (Down / Uplift) (lbs) FOR OTHER LOADING CONDITIONS, REFER TO THE AMC STJR. R802.5 ALLOWABLE RAFTER SPANS, SPANS FOR RAFTERS SHALL BE IN ACCORDANCE WITH TABLES R802.5.1(1) THROUGH R802.5.1(8). FOR OTHER GRADES AND SPECIES AND FOR OTHER LOADING CONDITIONS, REFER TO THE AWC STJR. THE SPAN OF EACH RAFTER SHALL BE MEA SURED ALONG THE HORIZONTAL PROJECTION OF THE RAFTER B2, 3-1/2" 2783 / 0 821 / 0 R802.6 BEARING. THE ENDS OF EACH RAFTER OR CEILING JOIST SHALL HAVE NOT LESS THAN 11 /2 INCHES (38 MM) OF BEARING ON WOOD OR METAL AND NOT LESS THAN 3 INCHES (76 MM) ON MASONRY OR CON CRETE. THE BEARING ON MASONRY OR CONCRETE SHALL BE DIRECT, OR A SILL PLATE OF 2-INCH (51 MM) MINIMUM NOMINAL THICKNESS SHALL BE Load Summary PROVIDED UNDER THE RAFTER OR CEILING JOIST. THE SILL PLATE SHALL PROVIDE A MINIMUM NOMINAL BEARING AREA OF 48 SQUARE INCHES (30 865 MM2). Tag Description R802.8 LATERAL SUPPORT. ROOF FRAMING MEMBERS AND CEILING JOISTS HAVING A DEPTH-TO-THICKNESS RATIO EXCEEDING 5 TO 1 BASED ON NOMINAL DIMENSIONS SHALL BE Unf. Lin. (lb/ft) L 00-00-00 13-11-00 Top PROVIDED WITH LATERAL SUPPORT AT POINTS OF BEARING TO PREVENT ROTATION. FOR ROOF RAF TERS WITH CEILING JOISTS ATTACHED IN ACCORDANCE WITH TABLE R602.3(1), THE Unf. Area (lb/ft²) L 00-00-00 13-11-00 Top 40 10 1 Load of 2nd floor DEPTH-TO-THICKNESS RATIO FOR THE TOTAL ASSEMBLY SHALL BE DETERMINED USING THE COMBINED THICKNESS OF THE RAF TER PLUS THE ATTACHED CEILING JOIST. EXCEPTION: ROOF TRUSSES SHALL BE BRACED IN ACCORDANCE WITH SECTION R802.10.3. Controls Summary R802.8.1 BRIDGING. RAFTERS AND CEILING JOISTS HAVING A DEPTH-TO-THICKNESS RATIO EXCEEDING 6 TO 1 BASED ON NOMINAL DIMENSIONS SHALL BE SUPPORTED LATERALLY BY SOLID BLOCKING, DIAGONAL BRIDGING (WOOD OR METAL) OR A CONTINUOUS 1-INCH BY 3-INCH (25 MM BY 76 MM) WOOD STRIP NAILED ACROSS THE RAFTERS OR CEILING JOISTS AT End Shear 2590 lbs 100% 01-11-08 INTERVALS NOT EXCEEDING 8 FEET (2438 MM). Total Load Deflection L/999 (0.096") n∖a n∖a 06-11-08 Live Load Deflection L/999 (0.074") n∖a n∖a 2 06-11-08 ADDITION RAFTERS OVER DESIGNED BASED ON ABLE R802.5.1(6) RAFTER SPANS 0.096" Max Defl. n∖a n∖a FOR COMMON LUMBER SPECIES (GROUND SNOW LOAD = 50 PSF, CEILING Span / Depth ATTACHED TO RAFTERS, $L/\Delta$ = 240) DEAD LOAD = 20 PSF Member TO KEEP AESTHETICS OF CURRENT 3604 lbs n\a 3-1/2" x 3-1/2" 3-1/2" x 3-1/2" 3604 lbs n\a 39.2% Unspecified CHIMNEY AFTER STRUCTURE EXISTING ROOF TRUSSES, KEEP EXISTING CHIMNEY REMOVED ON 1ST AND 2ND FLOOR. CONSTRUCTION METHODS AND APPEARANCE (FUNCTIONALITY WAS FRAME DOWN INTO ATTIC SPACE W MEANS UNKNOWN ABANDONED A LONG TIME AGO) 2X MATERIAL, ADHERED TO Design meets Code minimum (L/240) Total load deflection criteria. DOUBLE RAFTERS FOR SUPPORT Design meets Code minimum (L/360) Live load deflection criteria. Design meets arbitrary (0.5") Maximum Total load deflection criteria. Design based on Dry Service Condition. BC CALC® analysis is based on IBC 2009. Calculations assume member is braced at ends. See engineering report for the unbraced length. Connection Diagram: Full Length of Member DLB RAFTERS SUPPORTING 2X10 DORMER RAFTERS 16" O.C. \_ \_ \_ 2X10" RAFTERS 16" O.C. W/1-3/4" X 14" RIDGE BOARD AND 2X6" COLLAR TIES AS SHOWN Central LVL Beam (Drop Beam) BC CALC® Member Report May 9, 2023 16:56:26 Dry | 1 span | No cant. Build 16959 Job name: File name: KEEP EXISTING DOOR 422 S. SEVENTH STREET Address: Description ANN ARBOR, MI, 48103 City, State, Zip: Specifier: Customer: ALTSCHULER FAMILY Michael Philp Designer: Code reports: ESR-1040 OakBridge Development LLC EXISTING EXISTING HALLMAY **Connection Diagram: Full Length of Member** BEDROOM BEDROOM a minimum = 2" TJI JOISTS 16" O.C. ON b minimum = 2-1/2" d = 24" ~10" - MATCH EXISTING HOME'S OVERHANG HANGERS ON 1-3/4" X 9-PRIMARY Calculated Side Load = 0.0 lb/ft 1/2" LYL W-1/2" BEDROOM Bolts are assumed to be Grade A307 or Grade 2 or higher. THROUGH BOLTS TO Connectors are: 1/2 in. Staggered Through Bolt EXISTING BOND, STAGGERED 16" O.C. USE R602.10.4.2 CONTINUOUS SHEATHING — 9-1/2" 230 TJI JOISTS 16" O.C. → METHOD FOR ENTIRE PERIMETER OF 3-1/2" X 3-1/2" VERSA-STUD® 1.7 2650 HOUSE. SEE SHEET #12 FOR NOTES DOUBLE 1-3/4" X 20" LVL 2.1E 2800 3-1/2" X 3-1/2" YERSA-STUD® 1.7 2650 LYLS STUD (OR EQUIV.), SUPPORTING DF (CALC THIS SHEET) LYLS STUD (OR EQUIY.), SUPPORTING \_\_\_\_\_ LYL (INCLUDING SQUASH BLOCKS) SUPPORTING EXISTING 2X8 JOISTS. LYL (INCLUDING SQUASH BLOCKS) 1X4 WOOD CASING AND SILL BUILD-UP TO KEEP EXISTING MATCH EXISTING HOME WINDOWS PORCH AS BUILT EXISTING EXPANDED FAMILY KITCHEN ROOM \*\*\*FOUNDATION CONTRACTOR\*\*\* FINISHED HEIGHT NEEDS TO ACCOMMODATE 9-1/2" TALL RIM BOARD & JOISTS SO THE 1ST FLOOR IS THE SAME HEIGHT THROUGHOUT THE HOME WATERPROOF FOUNDATION WALLS AND TJI JOISTS 16" O.C. ON HANGERS OPTIONAL 2"-4" FOAM ON INSIDE OF ON 1-3/4" X 9-1/2" LYL W-1/2" FOUNDATION TO HELP MEET ENERGY CODE THROUGH BOLTS TO EXISTING BOND, STAGGERED 16" O.C. DRAINAGE SYSTEM-SOCK DRAIN COVERED BY PEA STONE DATE: ADDED FOUNDATION WALLS ARE 8" WIDE POURED CONCRETE FOUNDATION WALLS X 42" MIN. BELOW GRADEL, REINFORCED 40 04 40 05.13.2023 WITH #5 BARS VERTICALLY @ 4' O.C. AND OPTIONAL 4" CONCRETE FLOOR/ HORIZONTAL #4 BARS AT TOP & BOTTOM. OVER 6MIL VAPOR BARRIER ON 18" WIDE X 6" CONTINUOUS POURED 4" GRAVEL BASE CONCRETE FOOTING WITH (4) #5 BARS -PAPER: CONTINUOUS. REINFORCEMENT STEEL AS REQUIRED OAKBRIDGE DEVELOPMENT NOR ANY N1102.2.10 (R402.2.10) CRAWL SPACE WALLS. AS AN ALTERNATIVE TO INSULATING FLOORS OVER REPRESENTATIVE HAS ANY KNOWLEDGE WHAT THE ARCH D CRAWL SPACES, CRAWL SPACE WALLS SHALL BE PERMITTED TO BE INSULATED WHEN THE EXISTING FOOTING DESIGNS ARE (HEIGHT, DEPTH, CRAWL SPACE IS NOT VENTED TO THE OUTSIDE. CRAWL SPACE WALL INSULATION SHALL BE WIDTH, MATERIAL, STRUCTURE, DRAINAGE, ETC.) PERMANENTLY FASTENED TO THE WALL AND EXTEND DOWNWARD FROM THE FLOOR TO THE FINISHED GRADE LEVEL AND THEN VERTICALLY AND/OR HORIZONTALLY FOR AT LEAST AN SHEET: ADDITIONAL 24 INCHES (610 MM). EXPOSED EARTH IN UNVENTED CRAWL SPACE FOUNDATIONS SHALL BE COVERED WITH A CONTINUOUS CLASS I VAPOR RETARDER IN ACCORDANCE WITH THIS SECTION C-C CODE. ALL JOINTS OF THE VAPOR RETARDER SHALL OVERLAP BY 6 INCHES (153 MM) AND BE A-11SEALED OR TAPED. THE EDGES OF THE VAPOR RETARDER SHALL EXTEND AT LEAST 6 INCHES SCALE: 3/8"=1'-0" (153 MM) UP THE STEM WALL AND SHALL BE ATTACHED TO THE STEM WALL.

## MALL BRACING

R602.10 WALL BRACING. BUILDINGS SHALL BE BRACED IN ACCORDANCE WITH THIS SECTION OR, WHEN APPLICABLE, SECTION R602.12. WHERE A BUILDING. OR PORTION THEREOF, DOES NOT COMPLY WITH ONE OR MORE OF THE BRACING REQUIREMENTS IN THIS SECTION, THOSE PORTIONS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH SECTION R301.1.

R602.10.1 BRACED WALL LINES. FOR THE PURPOSE OF DETERMINING THE AMOUNT AND LOCATION OF BRACING REQUIRED IN EACH STORY LEVEL OF A BUILDING, BRACED WALL LINES SHALL BE DESIGNATED AS STRAIGHT LINES IN THE BUILDING PLAN PLACED IN ACCORDANCE WITH

R602.10.2 BRACED WALL PANELS. BRACED WALL PANELS SHALL BE FULL-HEIGHT SECTIONS OF WALL THAT SHALL NOT HAVE VERTICAL OR HORIZONTAL OFFSETS. BRACED WALL PANELS SHALL BE CONSTRUCTED AND PLACED ALONG A BRACED WALL LINE IN ACCORDANCE WITH THIS SECTION AND THE BRACING METHODS SPECIFIED IN SECTION R602.10.4.

R602.10.3 REQUIRED LENGTH OF BRACING. THE REQUIRED LENGTH OF BRACING ALONG EACH BRACED WALL LINE SHALL BE REFERENCED IN THE 2015 MICHIGAN RESIDENTIAL CODE R602.10.4 CONSTRUCTION METHODS FOR BRACED WALL PANELS. INTERMITTENT AND CONTINUOUSLY SHEATHED BRACED WALL PANELS

SHALL BE CONSTRUCTED IN ACCORDANCE WITH THIS SECTION AND THE METHODS LISTED IN TABLE R602.10.4. R602.10.4.2 CONTINUOUS SHEATHING METHODS. CONTINUOUS SHEATHING METHODS REQUIRE STRUCTURAL PANEL SHEATHING TO BE USED ON ALL SHEATHABLE SURFACES ON ONE SIDE OF A BRACED WALL LINE INCLUDING AREAS ABOVE AND BELOW OPENINGS AND GABLE END WALLS AND SHALL MEET THE REQUIREMENTS OF SECTION R602.10.7.

R602.10.5 MINIMUM LENGTH OF A BRACED WALL PANEL. THE MINIMUM LENGTH OF A BRACED WALL PANEL SHALL COMPLY WITH TABLE R602.10.5. FOR METHODS CS-WSP AND CS-SFB, THE MINIMUM PANEL LENGTH SHALL BE BASED ON THE ADJACENT CLEAR OPENING HEIGHT IN ACCORDANCE WITH TABLE R602.10.5 AND FIGURE R602.10.5. WHERE A PANEL HAS AN OPENING ON EITHER SIDE OF DIFFERING HEIGHTS, THE TALLER OPENING HEIGHT SHALL BE USED TO DETERMINE THE PANEL LENGTH. R602.12.2 SHEATHING MATERIALS. THE FOLLOWING SHEATHING MATERIALS INSTALLED ON THE EXTERIOR SIDE OF EXTERIOR WALLS SHALL BE

USED TO CONSTRUCT A BRACING UNIT AS DEFINED IN SECTION R602.12.3 R602.12.3 BRACING UNIT. A BRACING UNIT SHALL BE A FULL-HEIGHT SHEATHED SEGMENT OF THE EXTERIOR WALL WITHOUT OPENINGS OR VERTICAL OR HORIZONTAL OFFSETS AND A MINIMUM LENGTH AS SPECIFIED HEREIN. INTERIOR WALLS SHALL NOT CONTRIBUTE TOWARD THE

AMOUNT OF REQUIRED BRACING. MIXING OF ITEMS 1 AND 2 IS PROHIBITED ON THE SAME STORY. 1 WHERE ALL FRAMED PORTIONS OF ALL EXTERIOR WALLS ARE SHEATHED IN ACCORDANCE WITH SECTION R602.12.2, INCLUDING WALL AREAS BETWEEN BRACING UNITS, ABOVE AND BELOW OPENINGS AND ON GABLE END WALLS, THE MINIMUM LENGTH OF A BRACING UNIT SHALL BE 3

2 WHERE THE EXTERIOR WALLS ARE BRACED WITH SHEATHING PANELS IN ACCORDANCE WITH SECTION R602.12.2 AND AREAS BETWEEN BRACING UNITS ARE COVERED WITH OTHER MATERIALS, THE MINIMUM LENGTH OF A BRACING UNIT SHALL BE 4 FEET (1219MM). R602.12.4 NUMBER OF BRACING UNITS. EACH SIDE OF THE CIRCUMSCRIBED RECTANGLE, AS SHOWN IN FIGURE R602.12.1, SHALL HAVE, AT A MINIMUM, THE NUMBER OF BRACING UNITS IN ACCORDANCE WITH TABLE R602.12.4 PLACED ON THE PARALLEL EXTERIOR WALLS FACING THE SIDE OF THE RECTANGLE. BRACING UNITS SHALL THEN BE PLACED USING THE DISTRIBUTION REQUIREMENTS SPECIFIED IN SECTION R602.12.5. R602.12.5 DISTRIBUTION OF BRACING UNITS. THE PLACEMENT OF BRACING UNITS ON EXTERIOR WALLS SHALL MEET ALL OF THE FOLLOWING

REQUIREMENTS AS SHOWN IN FIGURE R602.12.5. 1 A BRACING UNIT SHALL BEGIN NOT MORE THAN 12 FEET (3658 MM) FROM ANY WALL CORNER.

2 THE DISTANCE BETWEEN ADJACENT EDGES OF BRACING UNITS SHALL BE NOT GREATER THAN 20 FEET (6096 MM).

3 SEGMENTS OF WALL GREATER THAN  $\delta$  FEET (243 $\delta$  MM) IN LENGTH SHALL HAVE NOT LESS THAN ONE BRACING UNIT. R602.12.6 NARROW PANELS. THE BRACING METHODS REFERENCED IN SECTION R602.10 AND SPECIFIED IN SECTIONS R602.12.6.1 THROUGH R602.12.6.3 SHALL BE PERMITTED WHEN USING SIMPLIFIED WALL BRACING R602.12.6.1 METHOD CS-G. BRACED WALL PANELS CONSTRUCTED AS METHOD CS-G IN ACCORDANCE WITH TABLES R602.10.4 AND R602.10.5 SHALL BE PERMITTED FOR ONE-STORY GARAGES WHERE ALL FRAMED PORTIONS OF ALL EXTERIOR WALLS ARE SHEATHED WITH WOOD STRUCTURAL PANELS. EACH CS-G PANEL SHALL BE EQUIVALENT TO 0.5 OF A BRACING UNIT. SEGMENTS OF WALL THAT INCLUDE A METHOD CS-G PANEL SHALL MEET THE REQUIREMENTS OF SECTION R602.10.4.2. R602.12.7 LATERAL SUPPORT. FOR BRACING UNITS LOCATED ALONG THE EAVES, THE VERTICAL DISTANCE FROM THE OUTSIDE EDGE OF THE TOP WALL PLATE TO THE ROOF SHEATHING ABOVE SHALL NOT EXCEED 9.25 INCHES (235 MM) AT THE LOCATION OF A BRACING UNIT UNLESS LATERAL SUPPORT IS PROVIDED IN ACCORDANCE WITH SECTION R602.10.8.2.

R602.12.8 STEM WALLS. MASONRY STEM WALLS WITH A HEIGHT AND LENGTH OF 48 INCHES (1219 MM) OR LESS SUPPORTING A BRACING UNIT OR A METHOD CS-G, CS-PF OR PFG BRACED WALL PANEL SHALL BE CONSTRUCTED IN ACCORDANCE WITH FIGURE R602.10.9. CONCRETE STEM WALLS WITH A LENGTH OF 48 INCHES (1219 MM) OR LESS, GREATER THAN 12 INCHES (305 MM) TALL AND LESS THAN 6 INCHES (152 MM) THICK SHALL BE REINFORCED SIZED AND LOCATED IN ACCORDANCE WITH FIGURE R602.10.9

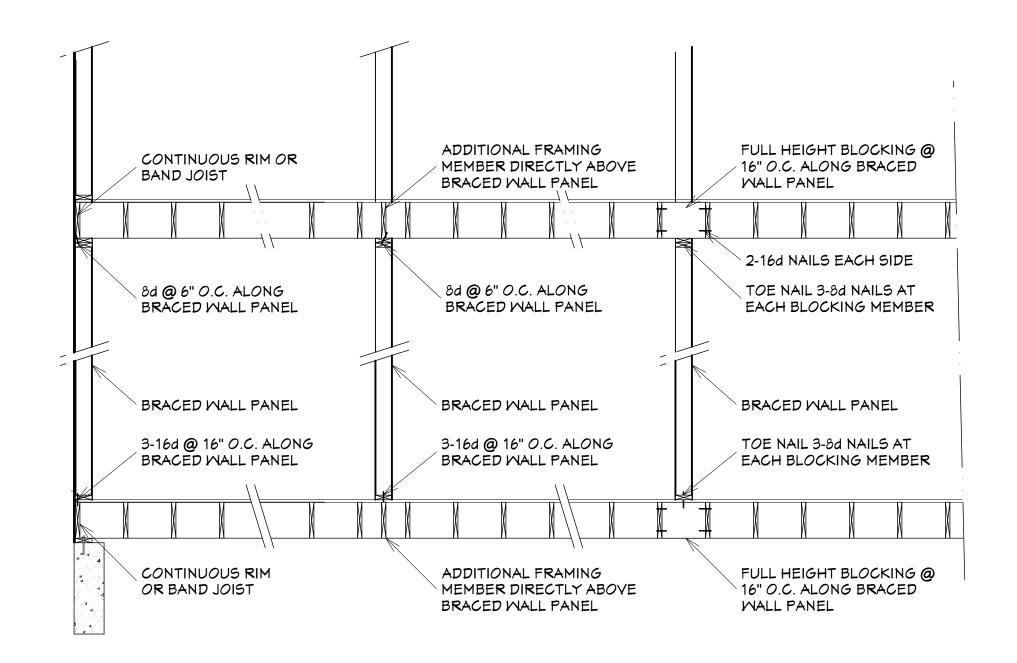


FIGURE R602.10.8(1) BRACED WALL PANEL CONNECTION WHEN PERPENDICULAR TO FLOOR/CEILING FRAMING

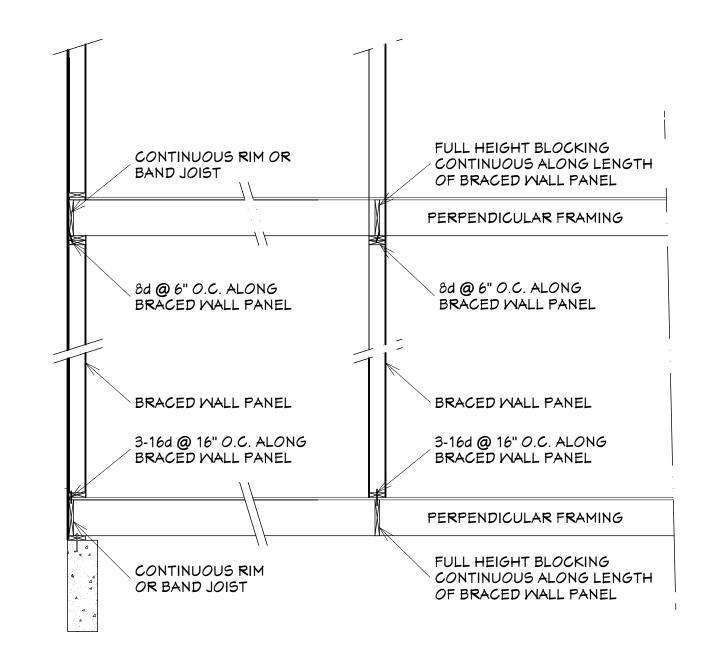
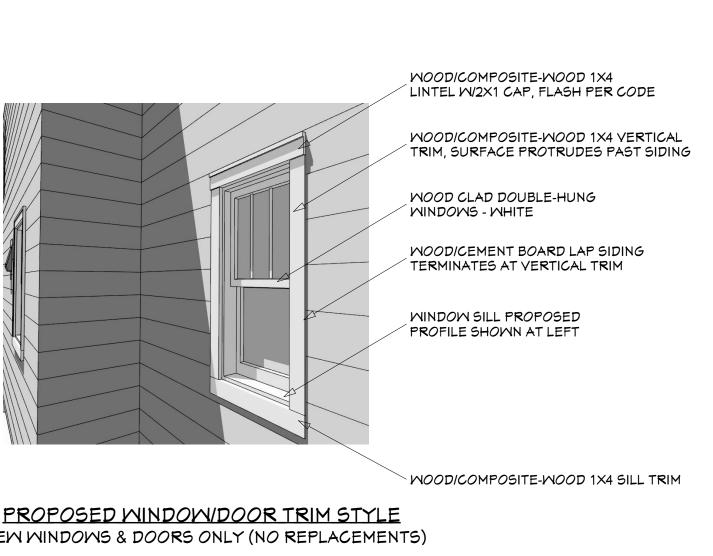


FIGURE R602.10.8(2) BRACED WALL PANEL CONNECTION WHEN PARALLEL TO FLOOR/CEILING FRAMING



NEW WINDOWS & DOORS ONLY (NO REPLACEMENTS)

ALUMINUM SIDING WAS INSTALLED MANY YEARS AGO

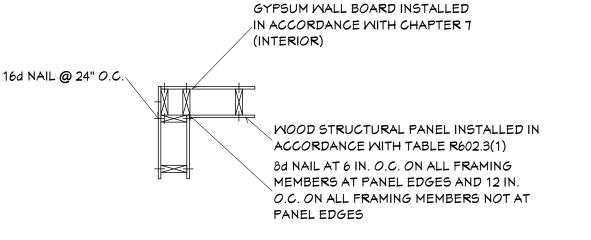


FIGURE R602.10.5 - CORNER FRAMING OUTSIDE CORNER DETAIL

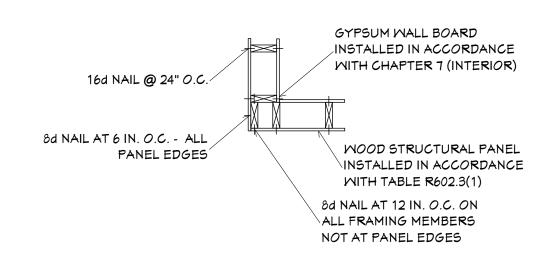
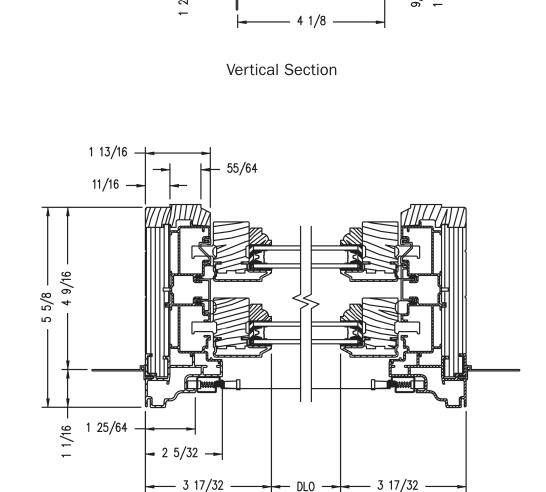
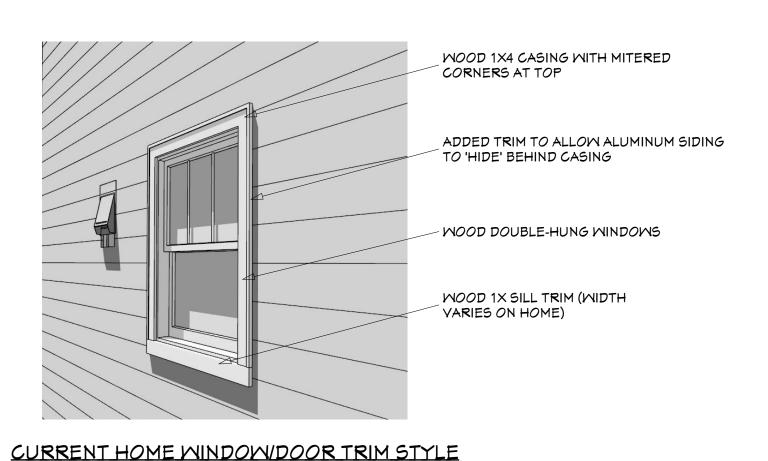


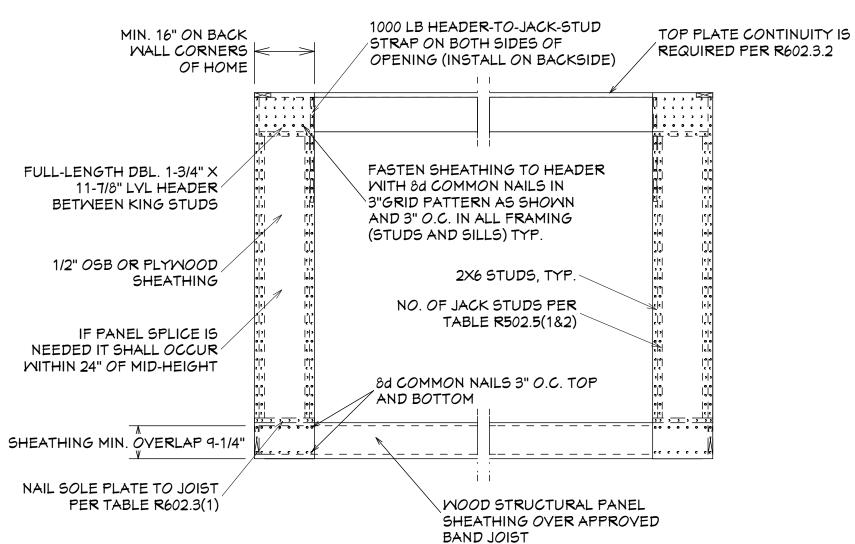
FIGURE R602.10.5 - CORNER FRAMING INSIDE CORNER DETAIL



Horizontal Section

PROPOSED ANDERSEN 400 SERIES PROFILES NEW WINDOWS ONLY (NO REPLACEMENTS)





APA NARROW WALL BRACING METHOD (RECOGNIZED BY IRC SUPPLEMENT IN SECTION R602.10.6.2

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