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VICINITY MAP

Cost Bidding



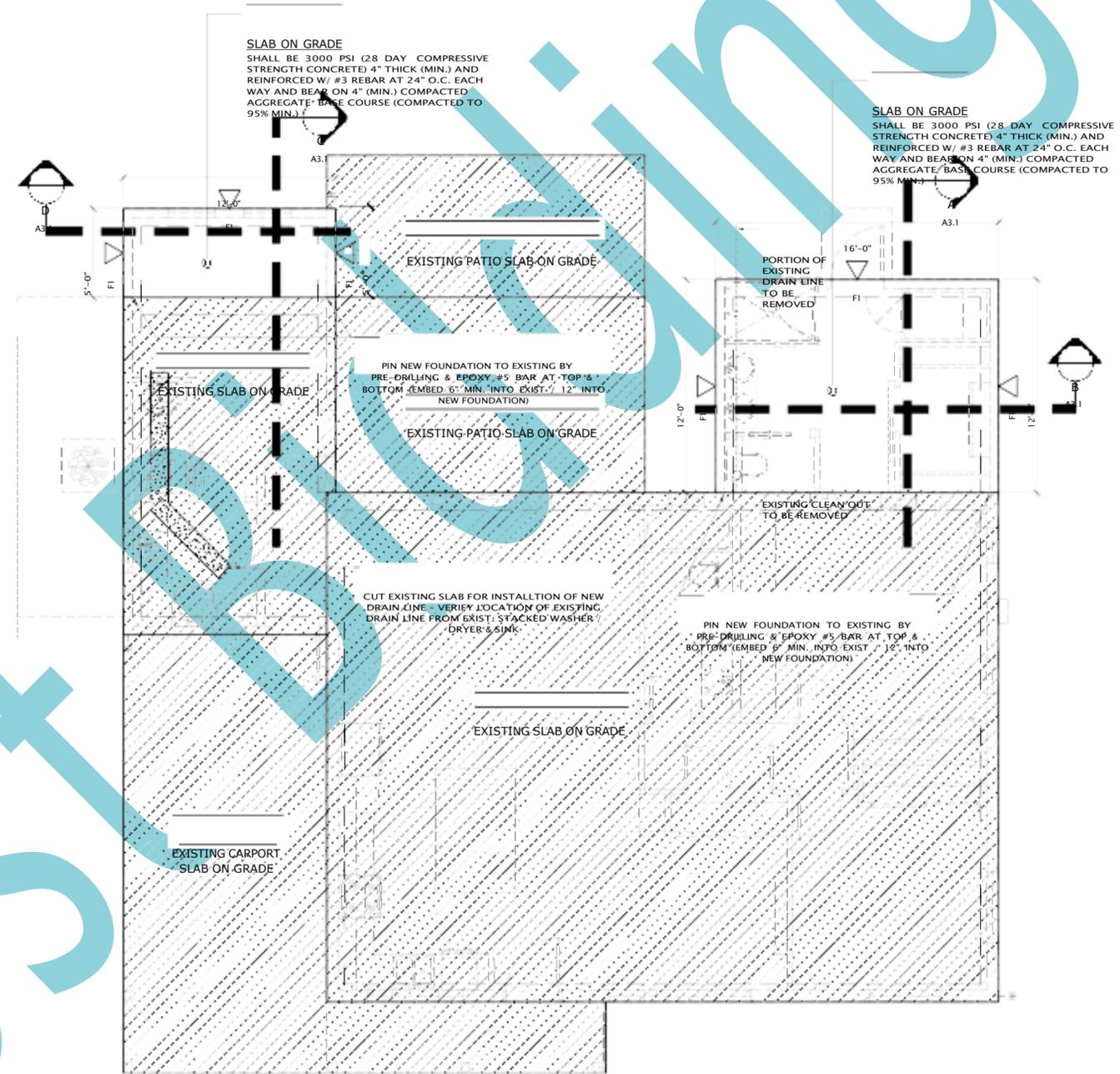
GENERAL FOUNDATION NOTES:

1. SPREAD AND OR CONTINUOUS FOOTING BEARING MATERIALS SHOULD EITHER BE ON UNDISTURBED SOILS OR 95% COMPACTED SOIL IN 12" LIFTS NOT TO EXCEED 4'-0", UNLESS APPROVED BY CERTIFIED INSPECTION OR BUILDING OFFICIAL.
2. BOTTOM OF FOOTING SHALL BE NO LESS THAN 12" BELOW NATURAL GRADE OR CERTIFIED COMPACTED PAD AND ALWAYS BELOW FROST LINE.
3. ALLOWABLE FOUNDATION BEARING PRESSURE SHALL BE 1500 PSI.
4. FINISH GRADE SHALL SLOPE 5% MINIMUM FOR A DISTANCE OF 10'-0" AWAY FROM STRUCTURE TOWARD AND APPROVED WATER DISPOSAL AREA.
5. FINISHED FLOOR SHALL BE A MINIMUM OF 8" ABOVE ADJACENT FINISHED GRADE.
6. SLOPE OF LANDINGS AT DOORWAYS SHALL BE A MINIMUM OF 1" PER 10'-0".
7. UNLESS APPROVED OTHERWISE, ALL CONCRETE SLABS ON GRADE SHALL BE BOUNDED BY CONTROL JOINTS (KEYED OR SAW CUT) SUCH THAT THE ENCLOSED AREA DOES NOT EXCEED 400 SQ. FT. - SAW CUT WITHIN 24 HOUR PERIOD AFTER POUR.
8. ALL FOOTINGS SHALL BE 3000 PSI (28 DAY COMPRESSIVE STRENGTH CONCRETE) WITH HORIZ. #4 REBAR CONTINUOUS (OVERLAP REBAR 30 BAR DIAMETERS) AT TOP & BOTTOM. FOOTING SIZE = 12" (WIDE) X 18" (DEEP), U.N.O.
9. ALL SLABS ON GRADE SHALL BE 3000 PSI (28 DAY COMPRESSIVE STRENGTH CONCRETE), UNLESS NOTED OTHERWISE.
10. ALL SLABS ON GRADE SHALL BE 4" THICK (MIN.) AND BEAR ON 4" (MIN.) COMPACTED AGGREGATE BASE COURSE (COMPACTED TO 95%) UNLESS NOTED OTHERWISE.
11. FOUNDATION WALLS ARE NOT TO BE BACKFILLED UNTIL FLOOR SYSTEM IS COMPLETELY IN PLACE.
12. INSTALL 1/2" DIA. x 12" ANCHOR BOLTS TO 2x6 PRE-TREATED SILL PLATE OVER SILL SEALER AT 48" O.C. & NOT MORE THAN 12" FROM ANY CORNER OR END OF PLATE.
13. IN THE EVENT THAT STEPPED FOOTINGS ARE REQUIRED - HORIZONTAL DIMENSION = 32" (MIN.) ; VERTICAL DIMENSION = 24" (MAX.)
14. ALL REINFORCING STEEL FOR CONCRETE SHALL COMPLY WITH ASTM SPECIFICATION A-615 GRADE 60.
15. CONTRACTOR TO PROVIDE 30' OF #4 COPPER U.F.F.R. WIRE 20' TO BE TIED TO FOOTING STEEL & 10' AVAILABLE AT PANEL LOCATION.
16. WHERE HOLD DOWNS ARE PLACED, ALL REBARS, ANCHOR BOLTS & SSTB BOLTS MUST BE TIED IN PLACE BEFORE POURING ANY CONCRETE. NO "WET STABBING" ALLOWED.

- ▲ INDICATES POINT LOAD FROM ABOVE - SEE FLOOR PLAN
- SIMPSON HOLD DOWN DEVICE - SEE WALL BRACING FLOOR PLAN

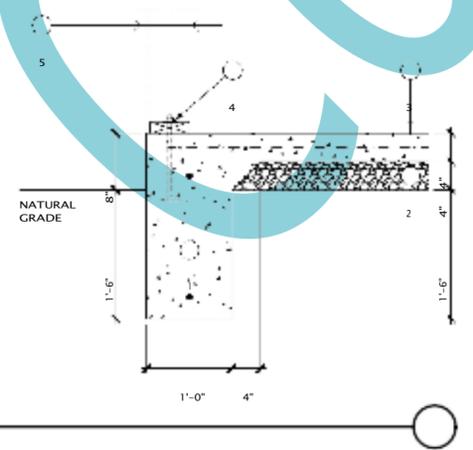
FOOTING SCHEDULE

F1 SEE DETAIL 1 / A1.1



KEY NOTES:

1. CONTINUOUS CONCRETE FOOTING REINF. W/ #4 BARS CONTINUOUS (OVERLAP REBAR 30 BAR DIAMETERS) AT TOP & BOTTOM
2. 4" COMPACTED (95% MIN.) AGG. BASE COURSE
3. 4" CONC. SLAB REINF. W/ #3 BARS AT 24" O.C. EACH WAY
4. 2 X 6 PRE-TREATED SILL PLATE OVER SILL SEALER W/ 1/2" DIA. X 12" ANCHOR BOLTS @ 48" O.C. MAX. & 12" FROM CORNERS & END OF PLATES - INSTALL SO EXTERIOR WALL SHEATHING IS FLUSH WITH FOUNDATION WALL
5. WALL FRAMING - SEE FLOOR PLAN AND TYPICAL WALL SECTION



NOTE: ALL REBAR TO BE 3" CLEAR FROM SOIL

SCALE: 1" = 1'-0"

RENOVATION  
 FOUNDATION PLAN

TYPICAL FOOTING DETAIL

DATE: 9 - 10 - 21  
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FOUNDATION PLAN

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Cost Bidding

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**RENOVATION**

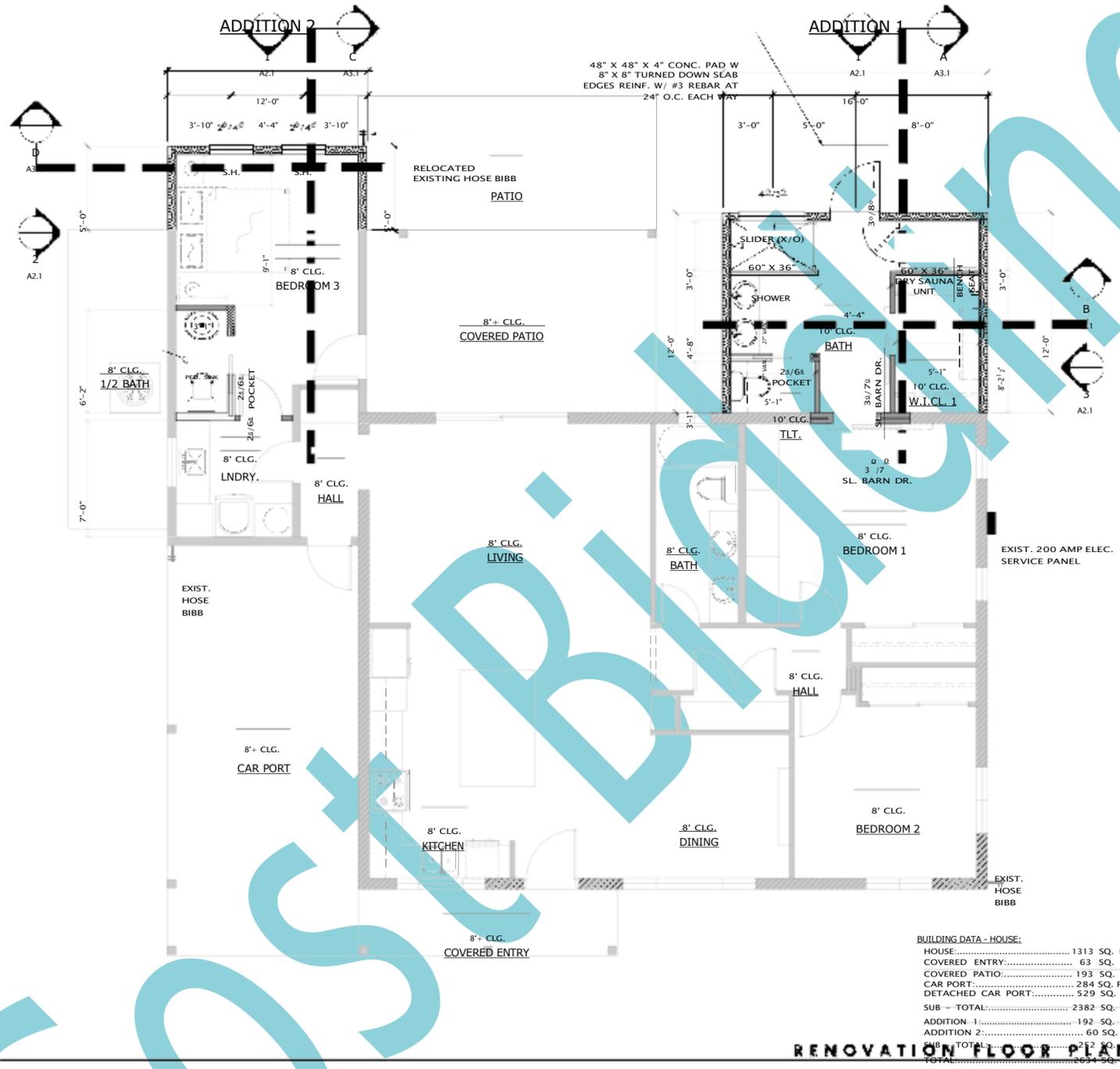
**EXISTING CONDITIONS /  
DEMOLITION FLOOR PLAN**

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EXISTING CONDITIONS / DEMOLITION FLOOR PLAN

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

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- WALL TYPE LEGEND:**
- TYPICAL 2" X 6" EXTERIOR WALL (6" DIM.):
    - EXTERIOR FINISH PER ELEVATIONS
    - "TYVEK" BUILDING WRAP
    - 3/8" PLYWD. / OSB WALL SHEATHING
    - 2" X 6" STUDS @ 16" O.C.
    - WALL INSULATION (R-21 MIN.)
    - 1/2" GYPSUM BOARD
  - TYP. 2" X 6" INTERIOR WALL (5 1/2" DIM.):
    - 1/2" GYPSUM BOARD
    - 2" X 6" STUDS @ 16" O.C.
    - 1/2" GYPSUM BOARD
  - TYP. 2" X 4" INTERIOR WALL (3 1/2" DIM.):
    - 1/2" GYPSUM BOARD
    - 2" X 4" STUDS @ 16" O.C.
    - 1/2" GYPSUM BOARD
- MIN. WIDTH = BEAM WIDTH & / OR GIRDER TRUSS PLYS X MIN. DEPTH = WALL DEPTH - UNLESS NOTED OTHERWISE
- LOAD BEARING INTERIOR WALL SEE FOUNDATION PLAN FOR FOOTING INFO.
- CEILING HEIGHTS:**
- 8' CLG. = 8'-1 1/8" WALL HEIGHT
  - 9' CLG. = 9'-1 1/8" WALL HEIGHT
  - 10' CLG. = 10'-1 1/8" WALL HEIGHT
  - 11' CLG. = 11'-1 1/8" WALL HEIGHT
  - 12' CLG. = 12'-1 1/8" WALL HEIGHT

- GENERAL WINDOW / DOOR NOTES:**
- FACTORY ENERGY PERFORMANCE RATING STICKERS MUST REMAIN ON WINDOWS / SKYLIGHTS UNTIL INSPECTED.
  - ALL BEDROOM WINDOWS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQ. FT. THE MINIMUM NET CLEAR OPENING HEIGHT DIMENSION SHALL BE 2'-4". THE MINIMUM NET CLEAR OPENING WIDTH DIMENSION SHALL BE 20". THE FINISHED SILL HEIGHT SHALL BE NOT MORE THAN 44" ABOVE THE FLOOR.
  - ALL WINDOWS AND DOORS SHALL BE FLASHED ACCORDING TO MANUFACTURER'S INSTALLATION INSTRUCTIONS.
  - ALL WINDOWS AND DOORS SHALL COMPLY WITH THE 2006 IECC INTERNATIONAL ENERGY CONSERVATION CODE.
  - ALL OPERABLE WINDOWS SHALL HAVE SCREENS.
  - CONTRACTOR TO COORDINATE SIZE OF ROUGH OPENINGS FOR DOORS AND WINDOWS WITH MASONRY AND FRAMING CONTRACTORS TO ALLOW FOR USE OF STANDARD SIZE DOOR AND WINDOW. ANY CONFLICT BETWEEN STANDARD SIZES AND ROUGH OPENINGS PRIOR TO START OF CONSTRUCTION SHALL PLACE BURDEN ON CONTRACTOR TO OBTAIN WRITTEN CLARIFICATION FROM WINDOW / DOOR MANUFACTURER.
  - ALL WINDOW UNITS LOCATED IN SLEEPING AREAS ARE TO BE PROVIDED OPERABLE SECTIONS TO CONFORM WITH EMERGENCY EGRESS IN 2018 IRC CODES.

<b>FENESTRATION U-FACTOR WINDOWS &amp; DOORS:</b>	
SKYLIGHT U-FACTOR:	ZONE 2 = .40
GLAZED FENESTRATION SHGC:	ZONE 2 = .25
WINDOW & DOOR MANUFACTURER:	PER OWNER
WINDOW MODEL:	PER OWNER
DOOR MODEL:	PER OWNER
COLOR:	PER OWNER

**BUILDING DATA - HOUSE:**

HOUSE:	1313 SQ. FT.
COVERED ENTRY:	63 SQ. FT.
COVERED PATIO:	193 SQ. FT.
CAR PORT:	284 SQ. FT.
DETACHED CAR PORT:	529 SQ. FT.
SUB - TOTAL:	2382 SQ. FT.
ADDITION 1:	192 SQ. FT.
ADDITION 2:	60 SQ. FT.
SUB - TOTAL:	2634 SQ. FT.
TOTAL:	2634 SQ. FT.

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

- GENERAL FLOOR PLAN NOTES:**
- THE DRAWINGS INDICATE THE GENERAL SCOPE OF THE PROJECT INTERMS OF ARCHITECTURAL DESIGN CONCEPT, THE DIMENSIONS OF THE BUILDING, THE MAJOR ARCHITECTURAL ELEMENTS, AND THE TYPE OF STRUCTURAL, MECHANICAL AND ELECTRICAL SYSTEMS. AS SCOPE OF DOCUMENTS, THE DRAWINGS DO NOT NECESSARILY INDICATE OR DESCRIBE ALL WORK REQUIRED FOR FULL PERFORMANCE AND COMPLETION OR THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. ON THE BASIS OF THE GENERAL SCOPE INDICATED OR DESCRIBED, THE TRADE CONTRACTORS SHALL FURNISH ALL ITEMS REQUIRED FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK. ALL ANGLES ARE 45 DEGREES UNLESS NOTED OTHERWISE.
  - ALL DIMENSIONS ARE TO FACE OF STUD OR FACE OF CONCRETE OR FACE OF MASONRY STEM WALL UNLESS NOTED OTHERWISE. THESE DRAWINGS MUST NOT BE SCALED. WRITTEN DIMENSIONS TAKE PRECEDENCE AND SHALL BE VERIFIED BY THE CONTRACTOR ON THE JOB SITE. SHOULD DISCREPANCIES OCCUR, THE OWNER AND/OR DESIGNER SHALL BE NOTIFIED FOR ACCEPTABLE RESOLUTION BEFORE PROCEEDING WITH THE WORK.
  - THE EXTERIOR SIDE OF ALL EXTERIOR WALLS AND INTERIOR WALLS WHERE REQUIRED SHALL BE BRACED AS REQUIRED PER 2018 IRC SECTION R602.10.4 BRACED WALL PANEL CONSTRUCTION METHOD CS-WSP (CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANEL); CONTINUOUS 3/8" (MIN.) PLYWOOD / OSB WALL SHEATHING WITH 16-INCH STUD SPACING. WOOD STRUCTURAL PANELS SHALL BE INSTALLED W/ 8D NAILS AT 4" O.C. AT ALL PANEL EDGES & 12" O.C. ON ALL FRAMING MEMBERS NOT AT PANEL EDGES.
  - ALL EXTERIOR RATED WALL SHEATHING SHALL BE INSTALLED WITH A 1/8" SEPARATION AT ENDS AND EDGES OF SHEATHING PANELS. DO NOT BUTT PANEL EDGES TIGHT.
  - PROVIDE MIN. 2 X 4 BLOCKING / BACKING IN WALLS AS REQUIRED AT ALL AREAS TO RECEIVE BUILT-IN CABINETS, EQUIPMENT, HARDWARE AND ACCESSORIES (I.E. TOWEL BARS, GRAB BARS, DOOR BUMPERS AND OTHER ITEMS THAT NEED SUBSTANTIAL PULL OUT RESISTANCE AND OR SUPPORT BACKING).
  - ALL EXTERIOR WALLS COMMON TO HABITABLE AREAS SHALL HAVE A MINIMUM R-19. CEILINGS SHALL HAVE A MINIMUM R-38, AND CRAWL SPACES SHALL HAVE A MINIMUM R-13 INSULATION VALUE SPECIFICALLY FOR ZONE 4.
  - INSULATION SHALL BE IN SUBSTANTIAL CONTACT WITH THE SURFACE BEING INSULATED TO AVOID AIR PATHS THAT BYPASS THE INSULATION AND SHALL NOT BE COMPRESSED AND SHALL FILL ALL CAVITIES. CUT INSULATION TO FIT BEHIND ELECTRICAL BOXES. SLICE TO FIT BEHIND AND IN FRONT OF WIRING, PLUMBING AND OTHER HORIZONTAL AND VERTICAL RUNS IN WALL CAVITY.
  - MARKERS SHALL BE INSTALLED FOR BLOW-IN INSULATION AFFIXED TO THE TRUSSES OR JOISTS AND MARKED WITH A MINIMUM INITIAL INSTALLED THICKNESS BY ONE INCH HIGH NUMBERS. ONE MARKER FOR EVERY 300 SQ. FT. OF AREA AND NUMBERS FACING THE ATTIC ACCESS OPENING. LADDER MUST BE PROVIDED AT INSPECTION.
  - ALL EXTERIOR WALL ASSEMBLIES OR BUILDING THERMAL ENVELOPE SHALL BE DURABLY SEALED TO LIMIT INFILTRATION ( ALL SOURCES OF AIR LEAKAGE SHALL BE SEALED).
  - BOTTOM AND TOP PLATE OF EXTERIOR WALLS SHALL BE SEALED WITH SILL GASKET OR CAULKING.
  - ALL DUCT SUPPLY AND RETURN SHALL BE INSULATED MINIMUM R-6 ( EXCEPT DUCTS THAT ARE COMPLETELY INSIDE THE BUILDING THERMAL ENVELOPE).
  - ALL MECHANICAL SYSTEM PIPING INSULATION SHALL BE MINIMUM R-2.
  - ALL CIRCULATING HOT WATER SYSTEMS SHALL BE A MINIMUM R-2 (HOT WATER PIPING ONLY).
  - HEATING AND COOLING UNITS TO BE SIZED IN ACCORDANCE WITH 2018 IRC M1401.3.
  - ALL EXTERIOR WALLS: 2 X 6 STUDS AT 16" O.C. UNLESS NOTED OTHERWISE.
  - INTERIOR BEARING WALL: 2 X 6 STUDS AT 16" O.C. WITH 2 X BLOCKING AT THIRD POINTS TYPICAL UNLESS NOTED OTHERWISE.
  - INTERIOR NON-BEARING WALLS: 2 X 4 STUDS AT 16" O.C. UNLESS NOTED OTHERWISE.
  - POSTS UNDER HEADERS, BEAMS, GIRDERS SHALL BE (2) 2 X STUDS OR GREATER (MATCHING WALL THICKNESS).
  - MULTIPLE STUDS ARE TO BE SPIKED TOGETHER WITH 10d COMMON NAILS AT 8" O.C. ALONG LENGTH & STAGGERED 1/2" ABOUT CENTER LINE.
  - DOUBLE TOP PLATE UNLESS NOTED OTHERWISE - SPLICE PLATES MIN. 24" OR USE SPLICE PLATE STRAPS.
  - WALL SHEATHING TO BE 3/8" OSB / PLYWOOD. LEAVE 1/8" GAPS BETWEEN SHEATHING PANELS & 1/8" GAPS AROUND OPENINGS FOR WINDOWS & DOORS. FASTEN PANELS WITH 2" COMMON (6d) OR 1 3/4" DEFORMED SHANK NAILS AT 6" O.C. ALONG PANEL EDGES AND AT 12" O.C. ALONG THE INTERMEDIATE SUPPORTS. KEEP NAILS 3/8" AWAY FROM PANEL EDGES.
  - ROOF SHEATHING TO BE 5/8" RATED OSB / PLYWOOD W/ "H" CLIPS FASTENED W/ 8d COMMON NAILS AT 6" O.C. ALONG PANEL EDGE AND 12" IN THE FIELD.
  - PROVIDE BLOCKING AS REQUIRED AT ALL AREAS TO RECEIVE BUILT-IN CABINETS, EQUIPMENT, HARDWARE AND ACCESSORIES.
  - ALL DUCTS, AIR HANDLERS, FILTER BOXES AND BUILDING CAVITIES (NOT FOR SUPPLY AIR) USED AS DUCTS SHALL BE SEALED. JOINTS OF DUCT SYSTEMS SHALL BE MADE SUBSTANTIALLY AIR TIGHT BY MEANS OF TAPES, MASTICS, GASKETING OR OTHER APPROVED CLOSURE SYSTEMS.
  - ALL OUTDOOR AIR INTAKES & EXHAUSTS



**RENOVATION FLOOR PLAN**

DATE: 9 - 10 - 21  
 SCALE: AS NOTED  
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SHALL BE PROVIDED WITH DAMPERS (AUTOMATIC OR GRAVITY) TO EFFECTIVELY CLOSE WHEN VENTILATION SYSTEM IS NOT OPERATING.

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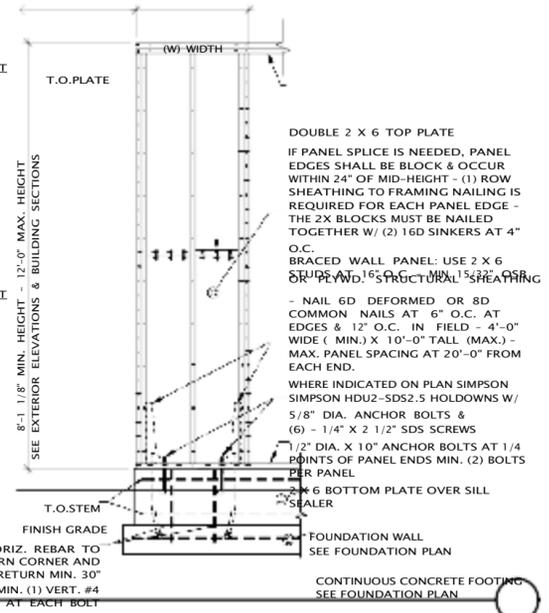
8' WALL HEIGHT MIN. PANEL WIDTH PER ADJACENT CLEAR OPENING HEIGHT (PER IRC TABLE R602.10.5.):	11' WALL HEIGHT MIN. PANEL WIDTH PER ADJACENT CLEAR OPENING HEIGHT (PER IRC TABLE R602.10.5.):
≤ TO 64" = 24" WIDTH	≤ TO 88" = 33" WIDTH
68" = 26" WIDTH	92" = 35" WIDTH
72" = 27" WIDTH	96" = 36" WIDTH
76" = 30" WIDTH	100" = 38" WIDTH
80" = 32" WIDTH	104" = 40" WIDTH
84" = 35" WIDTH	108" = 43" WIDTH
88" = 38" WIDTH	112" = 45" WIDTH
92" = 43" WIDTH	116" = 48" WIDTH
96" = 48" WIDTH	120" = 52" WIDTH

9' WALL HEIGHT MIN. PANEL WIDTH PER ADJACENT CLEAR OPENING HEIGHT (PER IRC TABLE R602.10.5.):	12' WALL HEIGHT MIN. PANEL WIDTH PER ADJACENT CLEAR OPENING HEIGHT (PER IRC TABLE R602.10.5.):
≤ TO 72" = 27" WIDTH	≤ TO 96" = 36" WIDTH
76" = 29" WIDTH	100" = 38" WIDTH
80" = 30" WIDTH	104" = 39" WIDTH
84" = 32" WIDTH	108" = 41" WIDTH
88" = 35" WIDTH	112" = 43" WIDTH
92" = 37" WIDTH	116" = 45" WIDTH
96" = 41" WIDTH	120" = 48" WIDTH
100" = 45" WIDTH	124" = 51" WIDTH
104" = 49" WIDTH	128" = 54" WIDTH
108" = 54" WIDTH	132" = 58" WIDTH

10' WALL HEIGHT MIN. PANEL WIDTH PER ADJACENT CLEAR OPENING HEIGHT (PER IRC TABLE R602.10.5.):
≤ TO 80" = 30" WIDTH
84" = 32" WIDTH
88" = 33" WIDTH
92" = 35" WIDTH
96" = 38" WIDTH
100" = 40" WIDTH
104" = 43" WIDTH
108" = 46" WIDTH
112" = 50" WIDTH
116" = 55" WIDTH
120" = 60" WIDTH



TYPICAL "CS-WSP" BRACED WALL DETAIL  
SCALE: 1/2" = 1'-0" 1

DOUBLE 2 X 6 TOP PLATE  
IF PANEL SPLICE IS NEEDED, PANEL EDGES SHALL BE BLOCK & OCCUR WITHIN 24" OF MID-HEIGHT - (1) ROW SHEATHING TO FRAMING NAILING IS REQUIRED FOR EACH PANEL EDGE - THE 2X BLOCKS MUST BE NAILED TOGETHER W/ (2) 16D SINKERS AT 4" O.C.  
BRACED WALL PANEL: USE 2 X 6 OR PLYWOOD STRUCTURAL SHEATHING  
- NAIL 6D DEFORMED OR 8D COMMON NAILS AT 6" O.C. AT EDGES & 12" O.C. IN FIELD - 4" WIDE ( MIN.) X 10'-0" TALL (MAX.) - MAX. PANEL SPACING AT 20'-0" FROM EACH END.  
WHERE INDICATED ON PLAN SIMPSON SIMPSON HDU2-SDS2.5 HOLD-DOWNS W/ 5/8" DIA. ANCHOR BOLTS & (6) - 1/4" X 2 1/2" SDS SCREWS  
1/2" DIA. X 10" ANCHOR BOLTS AT 1/4 POINTS OF PANEL ENDS MIN. (2) BOLTS PER PANEL  
2" X 6" BOTTOM PLATE OVER SILL SEALER  
FOUNDATION WALL  
SEE FOUNDATION PLAN  
CONTINUOUS CONCRETE FOOTING  
SEE FOUNDATION PLAN

ADDITION 2

ADDITION 1



BRACED WALL FLOOR PLAN  
SCALE: 1/4" = 1'-0"

- BRACED WALL NOTES:
1. THE EXTERIOR SIDE OF ALL EXTERIOR WALLS AND INTERIOR WALLS WHERE REQUIRED SHALL BE BRACED AS REQUIRED PER 2012 IRC SECTION R602.10.4 INTERMITTENT BRACING METHOD "WSP" (WOOD STRUCTURAL PANEL): 3/8" PLYWOOD / OSB WALL SHEATHING WITH 16-INCH STUD SPACING. WOOD STRUCTURAL PANELS SHALL BE INSTALLED W/ 8D NAILS AT 6" O.C. AT ALL PANEL EDGES & 12" O.C. ON ALL FRAMING MEMBERS NOT AT PANEL EDGES.
  2. BRACED WALL PANEL SPACING: PER SECTION R602.10.2.2 LOCATIONS OF BRACED WALL PANELS: A BRACED WALL PANEL SHALL BEGIN WITHIN 10'-0" FROM EACH END OF A BRACED WALL LINE AS DETERMINED IN SECTION R602.10.1.1. THE DISTANCE BETWEEN ADJACENT EDGES OF BRACED WALL PANELS ALONG A BRACED WALL LINE SHALL BE NO GREATER THAN 20'-0".
  3. IF PANEL SPLICE IS NEEDED PANELS SHALL NOT BE SMALLER THAN 24" IN ANY DIRECTION.
  4. USE STANDARD ANCHOR BOLTS: MINIMUM 10 INCHES FOR 2X PLATES, MINIMUM 12 INCHES FOR 3X OR 4X PLATES.
  5. PLYWOOD & O.S.B. ARE INTERCHANGEABLE.
  6. ATTACH BRACE PANELS DIRECTLY TO STUDS. INSTALL GYPSUM BOARD OVER PANELS.
  7. INSTALL MIN. 3/8" THICK WALL SHEATHING W/ LONG DIMENSION OF SHEETS ORIENTED HORIZONTALLY IF STUDS ARE SPACED MORE THAN 16" O.C.
  8. INSTALL BLOCKING BEHIND ALL HORIZONTAL PANEL JOINTS. FLAT 2X BLOCKING MAY BE USED FOR 8D OR SMALLER NAILS; USE MIN. 3X BLOCKING FOR 10D NAILS.
  9. HOLES IN BRACE PANELS FOR ELECTRICAL OUTLETS, SWITCHES, ETC. SHALL BE NEATLY CUT, W/ ROUNDED CORNERS. USE A SABER SAW OR SAWZALL, NOT A SKILSAW. MAX. HOLE SIZE IS 6" DIA.
  10. NAILS FOR INSTALLING SHEATHING SHALL BE COMMON OR GALVANIZED BOX, GUN NAILS OF EQUIVALENT SIZES MAY BE USED. GUN NAILS MUST HAVE FULL ROUND HEADS.
  11. DRIVE NAIL HEADS FLUSH W/ THE OUTER SHEATHING LAYER. INSPECTOR MAY REQUIRE THAT PANELS W/ NAILS DRIVEN SO AS TO DAMAGE THE OUTER SHEATHING LAYER BE REPLACED. USE SPECIAL CARE WHEN USING PNEUMATIC NAIL GUNS.
  12. INSTALL BRACE WALL PANELS W/ 1/8" GAP AT ALL JOINTS AS RECOMMENDED BY MANUFACTURERS. REFER TO INSTALLATION INSTRUCTIONS PER MANUFACTURER.

BRACED WALL SCHEDULE:	
MARK	DESCRIPTION
CS-WSP	SEE DETAIL 1 / A1.4

INDICATES BRACED PANEL LOCATION (SEE PLAN FOR PANEL TYPE & LENGTH).



RENOVATION  
 BRACED WALL  
 FLOOR PLAN

# Cost Bidding

DATE: 9 - 10 - 21

SCALE: AS NOTED

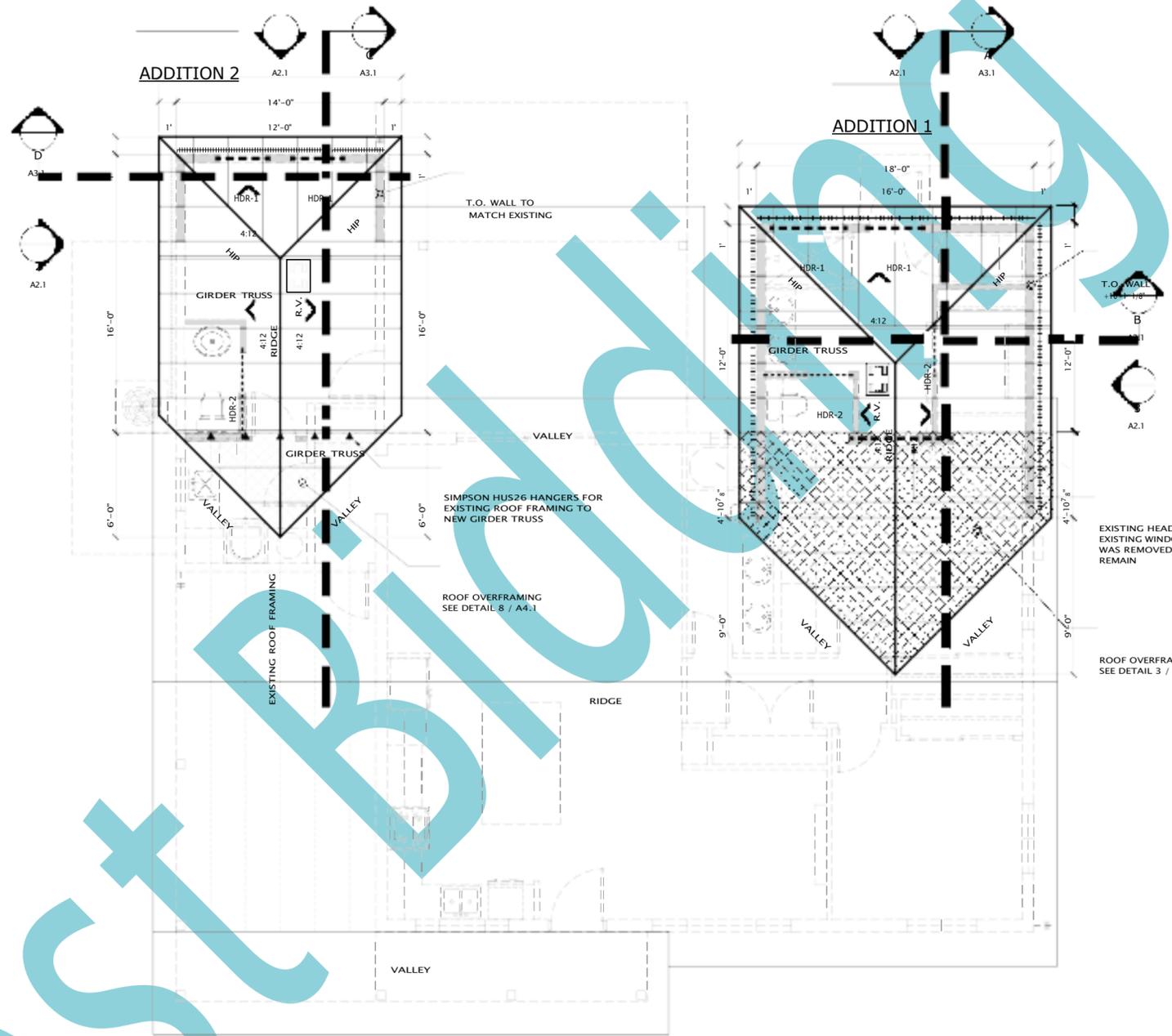
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ROOF FRAMING PLAN  
SCALE: 1/4" = 1'-0"

**GENERAL ROOF NOTES:**

- ENGINEERED ROOF TRUSSES THROUGHOUT - SEALED CALCULATIONS TO BE DELIVERED WITH TRUSSES
- ROOF PITCH = 4:12 MATCH EXIST. U.N.O.
- TYPICAL OVERHANG = 1'-0"
- ALL MULTI-MEMBER ROOF TRUSSES MUST BE SUPPORTED W/ 2 X 6 TO MATCH NUMBER OF PLYS OF ROOF TRUSS - UPPER & LOWER LEVELS.

**ROOF CONSTRUCTION:**

- ASPHALT SHINGLES - MATCH EXIST. HOUSE
- "PALISADE" 35 YEAR SYNTHETIC ROOFING UNDERLAYMENT
- 1/2" (FOR SHINGLES) / 5/8" (FOR TILE) CDX PLYWOOD / O.S.B. ROOF SHEATHING W/ "H" CLIPS FASTENED W/ 8D COMMON NAILS AT 6" O.C. ALONG PANEL EDGE AND 12" IN THE FIELD
- PRE-ENGINEERED ROOF TRUSSES PER TRUSS MANUFACTURER W/ SIMPSON H2.5A OR EQUAL CONNECTORS AT EACH TRUSS TYPICAL
- BLOWN OR BATT INSULATION (R-38)
- 1/2" NON-SAG GYPSUM BOARD CEILING (INTERIOR) / 3/8" ADX PLYWD. SOFFITS AT EAVES / 1/2" NON-SAG EXTERIOR GYPSUM BOARD CEILINGS AT COVERED ENTRY & PATIO LOCATIONS
- 2" X 6" LAMINATED FASCIA BOARD OVER
- 2" X 6" SUB-FASCIA 3/8" ADX PLYWOOD SOFFITS

**NOTE:**  
TOP OF ALL WALLS ARE +9' - 1 1/8" - U.N.O.

**NOTED CEILING HEIGHTS = WALL HEIGHT:**

- A. 8' CLG. = 8'-1 1/8" WALL HEIGHT
- B. 9' CLG. = 9'-1 1/8" WALL HEIGHT
- C. 10' CLG. = 10'-1 1/8" WALL HEIGHT
- D. 11' CLG. = 11'-1 1/8" WALL HEIGHT
- E. 12' CLG. = 12'-1 1/8" WALL HEIGHT

**ROOF TRUSS FRAMING TO BE INSTALLED PER ROOF TRUSS MANUFACTURERS LAYOUT**

**2018 IRC 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.

**HEADERS:**

HDR-1 (2) 2 X 10 DFL #2 HEADER W/ 2" X "WALL THICKNESS" BOTTOM HEADER PLATE - SEE DET. 6 / A2.2

HDR-2 INTERIOR NON - LOAD BEARING LESS THAN OR EQUAL TO 3'-0" USE: (2) FLAT 2" X "WALL THICKNESS" DFL #2 HEADER  
INTERIOR NON - LOAD BEARING GREATER THAN 3'-0" USE: (1) 2 X 8 DFL #2 HEADER WITH A (2) 2" X "WALL THICKNESS" BOTTOM HEADER PLATE

**VENTILATION METHOD:**  
2018 IRC SECTION R806.2 MINIMUM VENT AREA: THE MINIMUM NET FREE VENTILATING AREA SHALL BE 1/150 OF THE AREA OF THE VENTED SPACE.

**ROOF VENTILATION (1 / 150 SQ. FT. MIN. REQ'D.)**

ADDITION 1:	192 SQ. FT.
ADDITION 2:	60 SQ. FT.
<b>TOTAL:</b>	<b>252 SQ. FT.</b>

252 / 150 = 1.68 SQ. FT. X 144 = 242 SQ. IN. OF REQUIRED NET FREE VENTILATION AREA REQUIRED.

**SOFFIT VENTING:**  
2 X "MATCH TOP CHORD" BLOCKING BETWEEN TRUSSES W/ (3) 2" DIA. HOLES & WIRE MESH BACKING (7.39 SQ. IN. OF NFVA) OR EQUAL

**ROOF VENTING:** #  
R.V.

O'HAGEN / ALUMINUM / STANDARD LINE MODEL (72 SQ. IN. OF NFVA).

**ROOF VENTILATION (1 / 150 SQ. FT. REQ.):**

**ADDITION 1:** 192 SQ. FT.  
192 / 150 = 1.28 SQ. FT. X 144 = 184 SQ. IN. OF NET FREE VENTILATION AREA REQUIRED.

**SOFFIT VENTING:**  
50 LIN. FT. X 7.39 SQ. IN. OF NFVA PER LIN. FT. = 370 SQ. IN. NFVA

**ROOF VENTING:**  
1 VENTS X 72 SQ. IN. OF NFVA = 72 SQ. IN. NFVA  
SUB-TOTAL = 370 + 72 = 442 SQ. IN. NFVA (184 SQ. IN. OF NFVA REQUIRED)

**ADDITION 2:** 60 SQ. FT.  
60 / 150 = .4 SQ. FT. X 144 = 58 SQ. IN. OF NET FREE VENTILATION AREA REQUIRED.

**SOFFIT VENTING:**  
29 LIN. FT. X 7.39 SQ. IN. OF NFVA PER LIN. FT. = 214 SQ. IN. NFVA

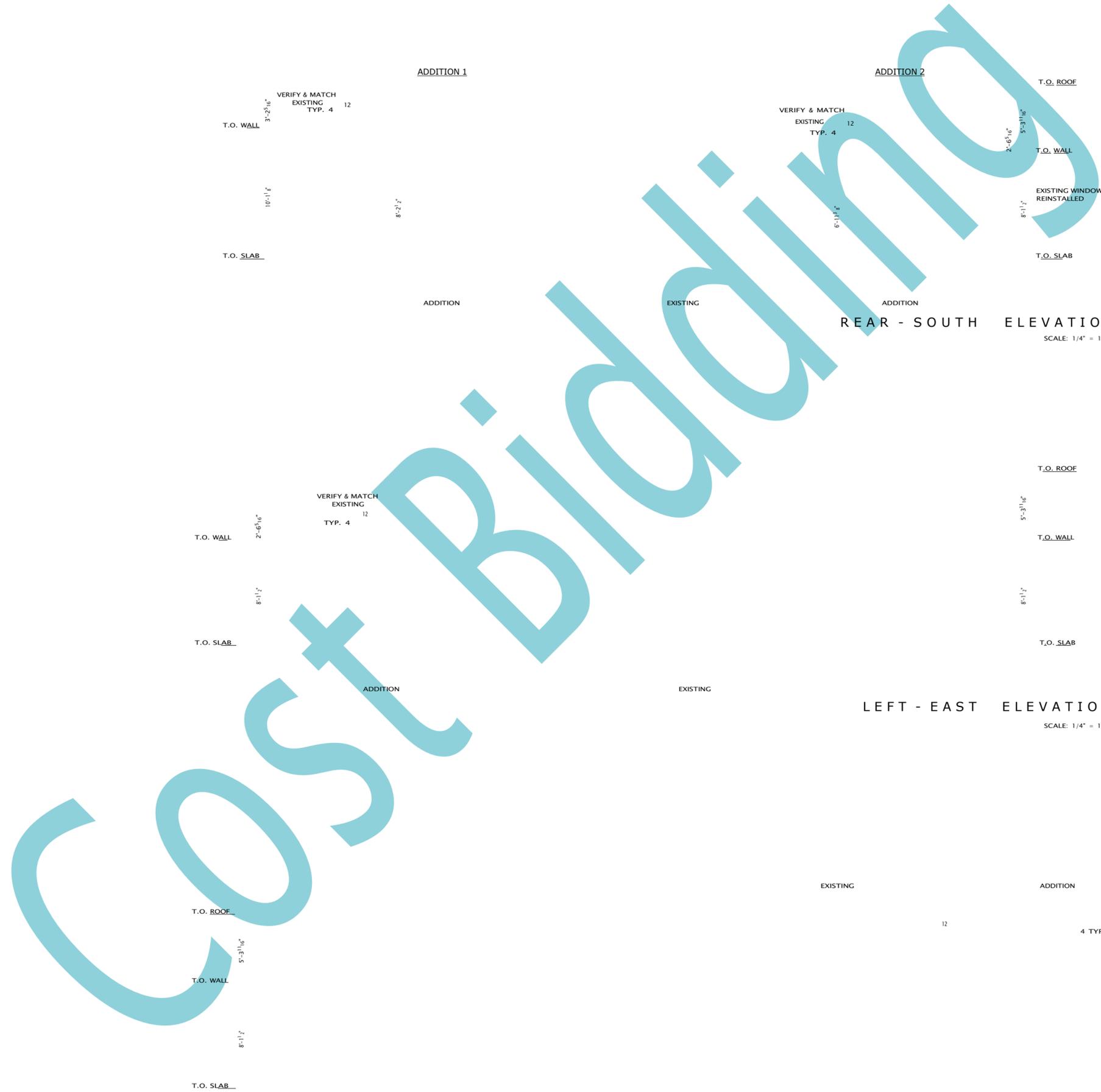
**ROOF VENTING:**  
1 VENTS X 72 SQ. IN. OF NFVA = 72 SQ. IN. NFVA  
TOTAL = 214 + 72 = 286 SQ. IN. NFVA (58 SQ. IN. OF NFVA REQUIRED)



**RENOVATION**

**ROOF FRAMING PLAN**

DATE: 9 - 10 - 21  
SCALE: AS NOTED  
DRAWN:  
JOB:  
SHEET NO.:  
**A**  
**1.5**



**GENERAL ELEVATION NOTES:**

1. VERIFY ALL EXTERIOR FINISH RELATED ITEMS (MATERIALS, COLORS, PATTERNS, TEXTURES, ETC.) W/ OWNER PRIOR TO THE START OF CONSTRUCTION
2. ANY & ALL STUCCO FINISHES TO BE WESTERN 1 KOTE EXTERIOR STUCCO SYSTEM ( ICC REPORT #2729 ) OR EQUAL - VERIFY FINISH TEXTURE & COLOR W/ OWNER
3. STUCCO SURFACE SHALL BE FULLY CURED AND SURFACE SHALL BE FREE OF DIRT AND OR OTHER SURFACE CONTAMINANTS PRIOR TO FINAL STUCCO FINISH OR PAINT
4. EXTERIOR STUCCO EXPANSION JOINTS PER MANUFACTURERS SPECIFICATIONS
5. THE EXTERIOR SIDE OF ALL EXTERIOR WALLS AND INTERIOR WALLS WHERE REQUIRED SHALL BE BRACED AS REQUIRED PER 2018 IRC SECTION R602.10.4 INTERMITTENT BRACING METHOD "WSP" ( WOOD STRUCTURAL PANEL ): 3/8" PLYWOOD / OSB WALL SHEATHING WITH 16-INCH STUD SPACING. WOOD STRUCTURAL PANELS SHALL BE INSTALLED W/ 8D NAILS AT 6" O.C. AT ALL PANEL EDGES & 12" O.C. ON ALL FRAMING MEMBERS NOT AT PANEL EDGES
6. INSTALL EXTERIOR WALL SHEATHING ( OSB / PLYWOOD ) WITH 1/8" GAP BETWEEN ALL JOINTS ( HORIZ. & VERT. ) TO ALLOW FOR EXPANSION MOVEMENT
7. ALL DOORS AND WINDOWS ARE TO BE INSTALLED AND FLASHED PER DOOR AND WINDOW MANUFACTURER
8. ALL OPERABLE WINDOWS SHALL HAVE SCREENS.

**EXTERIOR WALL CONSTRUCTION:**

- EXTERIOR FINISH PER ELEVATIONS
- "TYVEK" BUILDING WRAP - (2) LAYERS AT MANUFACTURED STONE VENEER LOCATIONS
- 3/8" (MIN.) CDX PLYWOOD OR O.S.B. WALL SHEATHING TO BE FLUSH W/ FACE OF C.M.U. FOUNDATION WALL - FASTEN W/ 8D NAILS AT 6" O.C. AT ALL PANEL EDGES & 12" O.C. ON ALL FRAMING MEMBERS NOT AT PANEL EDGES
- 2" X 6" STUDS AT 16" O.C.
- WALL INSULATION (R-21 MIN.) BETWEEN STUDS
- 1/2" GYPSUM BOARD

**ROOF CONSTRUCTION:**

- ASPHALT SHINGLES - MATCH EXIST. HOUSE
- "PALISADE" 35 YEAR SYNTHETIC ROOFING UNDERLAYMENT
- 1/2" (FOR SHINGLES) / 5/8" (FOR TILE) CDX PLYWOOD / O.S.B. ROOF SHEATHING W/ "H" CLIPS FASTENED W/ 8D COMMON NAILS AT 6" O.C. ALONG PANEL EDGE AND 12" IN THE FIELD
- PRE-ENGINEERED ROOF TRUSSES PER TRUSS MANUFACTURER W/ SIMPSON H2.5A OR EQUAL CONNECTORS AT EACH TRUSS TYPICAL
- BLOWN OR BATT INSULATION (R-38).
- 1/2" NON-SAG GYPSUM BOARD CEILING (INTERIOR) / 3/8" ADX PLYWD. SOFFITS AT EAVES / 1/2" NON-SAG EXTERIOR GYPSUM BOARD CEILINGS AT COVERED ENTRY & PATIO LOCATIONS
- 1" X 8" LAMINATED FASCIA BOARD OVER
- 2" X 6" SUB-FASCIA 3/8" ADX PLYWOOD SOFFITS

ROOF TRUSS FRAMING TO BE INSTALLED PER ROOF TRUSS MANUFACTURERS LAYOUT

**NOTE:**

TOP OF WALLS AT ADDITION 1: +10' - 1 1/8"  
TOP OF WALLS AT ADDITION 2: MATCH EXIST.

**EXTERIOR FINISHES:**

- 1 STUCCO:

STUCCO FINISHES TO BE WESTERN 1 KOTE EXTERIOR STUCCO SYSTEM ( ICC REPORT #2729 ) VERIFY FINISH TEXTURE & COLOR W/ OWNER.

- 2 ROOFING:



ASPHALT SHINGLES - MATCH EXIST. HOUSE - SEE ROOF PLAN

- 3 8" FASCIA BOARD:

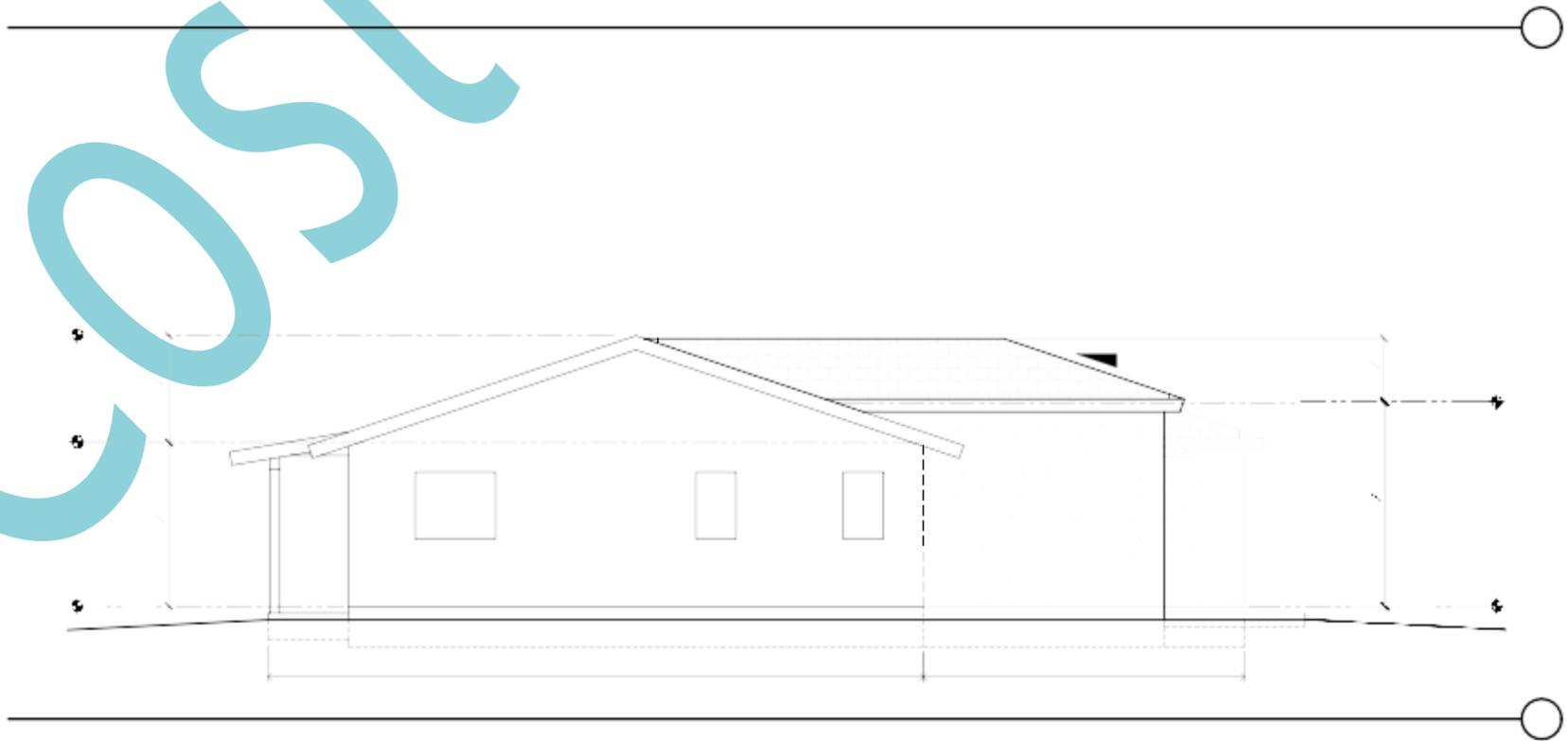
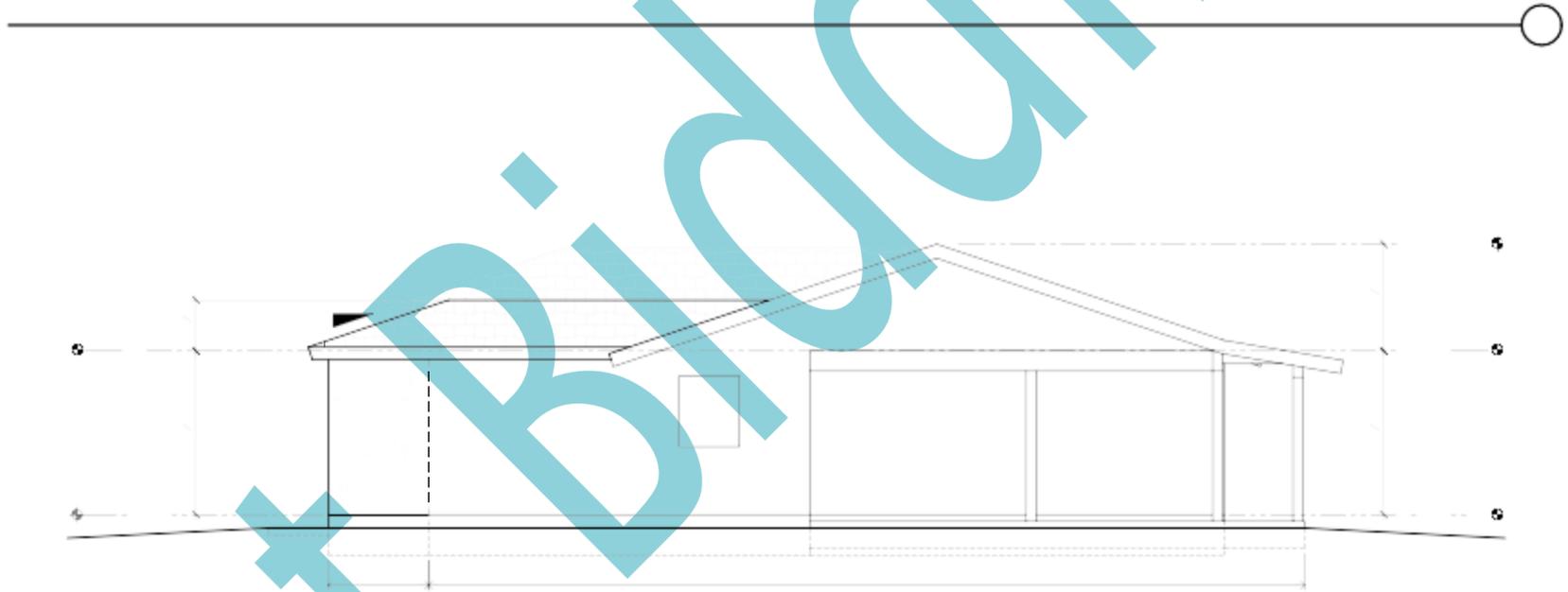
1" X 8" LAMINATED FASCIA BOARD W/ 1" X 4" LAMINATED TRIM BOARD OVER 2" X 6" SUB-FASCIA BOARD W/ 3/8" ADX PLYWOOD SOFFITS - MATCH EXISTING HOUSE



RENOVATION

---

EXTERIOR ELEVATIONS



DATE: 9 - 10 - 21  
 SCALE: AS NOTED  
 DRAWN:  
 JOB:  
 SHEET NO.:  
**A**  
**2.1**

R.V.

EXISTING ROOF

R.V.

EXISTING ROOF

EXISTING ROOF

REAR - SW PERSPECTIVE

REAR - SE PERSPECTIVE

ROOF PLAN

TYPICAL WINDOW / DOOR HEADER DETAIL  
SCALE: 1" = 1'-0"

TYPICAL WALL SECTION KEY NOTES:

- UNDISTURBED EARTH OR ENGINEERED FILL
- FOOTING - SEE FOUNDATION PLAN
- 4" COMPACTED (95% MIN.) AGG. BASE COURSE
- 4" CONCRETE SLAB REINF. W/ #3 BARS AT 24" O.C. EACH WAY
- 2" X 6" PRE-TREATED SILL PLATE OVER SILL SEALER W/ 1/2" DIA. X 12" ANCHOR BOLTS @ 48" O.C. MAX. & 12" FROM CORNERS & END OF PLATES
- 2" X 6" STUDS AT 16" O.C. W/ INSUL. (R-21 MIN.) BETWEEN STUDS
- DOUBLE 2" X 6" TOP PLATE - 48" MIN. OVERLAP AT SPLICE LOCATIONS
- 2" X 6" SILL PLATE
- 2" X 6" BOTTOM HEADER PLATE
- DOUBLE 2" X 10" HEADER U.N.O. - SEE ROOF FRAMING PLAN FOR ADDITIONAL INFORMATION
- 2" X 6" STUDS AT 16" O.C. W/ INSUL. (R-21 MIN.) BETWEEN STUDS NOTCHED AT HEADER LOCATIONS
- PRE-ENGINEERED ROOF TRUSSES AT 24" O.C. BY TRUSS MANUF.
- SIMPSON H2.5A CONNECTORS AT EACH TRUSS
- 2" X 6" (MATCH TOP CHORD) BLOCKING W/ (3) 2" DIA. HOLES FOR VENTILATION - ATTACHED W/ SIMPSON LS30 AT 48" O.C. TO TOP PLATE
- 3/8" (MIN.) CDX PLYWOOD OR O.S.B. WALL SHEATHING TO BE FLUSH W/ FACE OF C.M.U. FOUNDATION WALL - FASTEN W/ 8D NAILS AT 6" O.C. AT ALL PANEL EDGES & 12" O.C. ON ALL FRAMING MEMBERS NOT AT PANEL EDGES
- 2" X 6" SUB-FASCIA BOARD
- 1/2" (SHINGLES) / 5/8" (TILE) CDX PLYWOOD / O.S.B. ROOF SHEATHING W/ "H" CLIPS FASTENED W/ 8D COMMON NAILS AT 6" O.C. ALONG PANEL EDGE AND 12" IN THE FIELD
- 1" X 8" LAMINATED FASCIA BOARD OR VERIFY & MATCH EXISTING FASCIA BOARD
- CONTINUOUS METAL DRIP EDGE
- "PALISADE" 35 YEAR SYNTHETIC ROOFING UNDERLAYMENT
- ASPHALT SHINGLES
- WEEP SCREED - SEE DET. 4/A2.2
- "TYVEK" OR EQUAL BUILDING WRAP - (2) LAYERS AT ROCK VENEER LOCATIONS
- WINDOW / DOOR UNIT - SEE FLOOR PLAN
- EXTERIOR FINISH - SEE EXTERIOR ELEVATIONS
- INSULATION BAFFLES AT EACH TRUSS SPACE - EXTEND 24" MIN. INTO ATTIC FROM INSIDE WALL FRAMING
- BATT OR BLOWN INSULATION (R-38) MIN.
- 1/2" NON-SAG GYPSUM BOARD CEILING
- 1/2" GYPSUM BOARD WALL
- NATURAL / NEW FINISHED GRADE TO SLOPE AWAY FROM BUILDING AT 5% (6" PER 10'-0")

T.O. WALL	SEE ROOF PLAN	SEE ROOF PLAN	SEE ROOF PLAN	SEE ROOF PLAN
19	7	13	28	
18	10			
16	11			
14	9			
12	24			
11	25			
10	23			
9	15			29
8	6			5
7	5			4
6	30			22
5	30			22
4	5			5

B.O. HDR.	SEE EXTERIOR ELEVATIONS & DET. 7 / A2.3	SEE EXTERIOR ELEVATIONS & DET. 7 / A2.3	SEE EXTERIOR ELEVATIONS & DET. 7 / A2.3	SEE EXTERIOR ELEVATIONS & DET. 7 / A2.3
19	7	13	28	
18	10			
16	11			
14	9			
12	24			
11	25			
10	23			
9	15			29
8	6			5
7	5			4
6	30			22
5	30			22
4	5			5

T.O. SLAB	NATURAL / FINISHED GRADE			
19	7	13	28	
18	10			
16	11			
14	9			
12	24			
11	25			
10	23			
9	15			29
8	6			5
7	5			4
6	30			22
5	30			22
4	5			5

T.O. WALL	SEE EXTERIOR ELEVATIONS & DET. 7 / A2.3	SEE EXTERIOR ELEVATIONS & DET. 7 / A2.3	SEE EXTERIOR ELEVATIONS & DET. 7 / A2.3	SEE EXTERIOR ELEVATIONS & DET. 7 / A2.3
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18	10			
16	11			
14	9			
12	24			
11	25			
10	23			
9	15			29
8	6			5
7	5			4
6	30			22
5	30			22
4	5			5

- NOTES:**
- INSTALL WEEP SCREED TO TERMINATE MIN. 2" BELOW TOP OF FOUNDATION WALL & A MIN. 6" ABOVE FINISHED GRADE & 2" MIN. ABOVE AT FLAT WORK OR AS REQUIRED BY CODE.
  - LAP MOISTURE BARRIER INTO WEEP SCREED TO DIRECT WATER TO THE EXTERIOR.
  - PROVIDE WATER PROOFING AT THE FOUNDATION TO PROTECT THE SUPPORT STRUCTURE FROM RISING DAMP.

- WOOD FRAME
- EXT. WALL SHEATHING
- "TYVEK" BLDG. WRAP
- 1" FOAM BOARD W/ GALV. WOVEN WIRE MESH
- WESTERN 1 KOTE EXTERIOR STUCCO FINISH SYSTEM - ICC REPORT #2729
- FINISH GRADE / FLAT WORK
- 6" ABOVE FINISHED GRADE OR 2" AT FLAT WORK.
- PERFORATED WEEP SCREED (FRY FWS-875) TERMINATION

- JAMB FLASHING 5
- APPLY CONT. SEAL TO THE MOUNTING FLANGES AT THE TOP (HEAD) AND SIDES (JAMBS) OF WINDOW. EXTEND SEALANT AT JAMBS 8 1/2" ABOVE THE R.O. AT HEAD. EMBED JAMB FLASHING INTO SEALANT AND FASTEN IN PLACE. (FLASHING GOES OVER SEALANT).
- SEAL THE WINDOW FRAME TO OPENING. APPLY A 3/8" NOM. DIA. TO THE BACKSIDE (INTERIOR) OF THE WINDOW FLANGE, IN LINE WITH ANY PRE-PUNCHED HOLES OR SLOTS.
- SEALANT
- 5 JAMB FLASHING
- EXTEND JAMB FLASHING TO OVERLAP SILL FLASHING. EXTEND JAMB FLASHING 8 1/2" ABOVE ROUGH OPENING AT HEAD. TUCK TOP OF JAMB FLASHING UNDER THE FLAP OF WRB AT THE HEAD. SEE DIAGRAM.
- SILL FLASHING
- SHIM AND ADJUST WINDOW TO ACHIEVE SQUARE, PLUMB, AND LEVEL CONDITION. USE CORROSION RESISTANT FASTENERS. FASTEN WINDOWS PER WINDOW MANUFACTURER SPECIFICATIONS.

- 1 WEATHER RESISTANT BARRIER (WRB) TOP LEFT CORNER OF WINDOW
- AT A 45 DEGREE ANGLE, CAREFULLY CUT THE BARRIER ON A DIAGONAL. GENTLY RAISE THE TOP EDGE OF THE BARRIER UP AND TAPE THE TOP CORNERS AND CENTER TO THE EXTERIOR WRB SURFACE ABOVE.
- NOTE: WEATHER RESISTIVE BARRIER (WRB) APPLIED PRIOR

- FLASHING AT HEAD EXTENDS 1" BEYOND JAMB FLASHING.
- 7 HEAD FLASHING
- EMBED BOTTOM OF THE HEAD FLASHING AGAINST THE PREVIOUSLY APPLIED SEALANT (FLASHING GOES OVER SEALANT). EXTEND HEAD FLASHING BEYOND EACH JAMB FLASHING. FASTEN IN PLACE.
- SEALANT
- 3

- INTERIOR VIEW
- SEALANT BEAD BEHIND MOUNTING FLANGE.
- T O  
T H E  
W I N  
D O W

ATTACHMENT FLANGE MUST LAP OVER FOUNDATION 2" MIN.

FOUNDATION - SEE FOUNDATION PLAN



RENOVATION

EXTERIOR DETAILS

DATE: 9 - 10 - 21

SCALE: AS NOTED

DRAWN:

JOB:

SHEET NO.:

A  
2.2

SECTION A  
THROUGH WINDOW JAMB

SEALANT BEAD BETWEEN FLASHING AND MOUNTING FLANGE.

FLASHING

B.O. FOOTING  
PER I.R.C. SECTION R403.1.4 MINIMUM DEPTH EXTERIOR  
FOOTINGS  
SHALL BE PLACED NOT LESS THAN 12" BELOW THE  
UNDISTURBED

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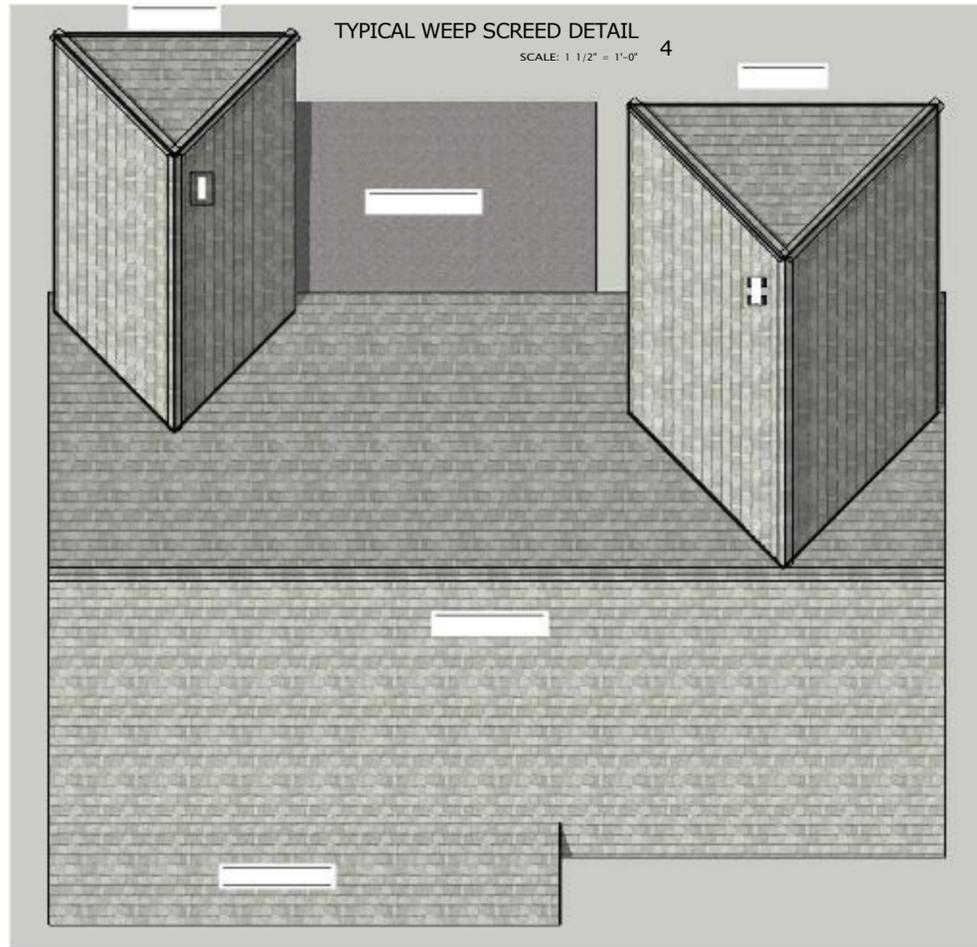
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Cost Bidding



TYPICAL WEEP SCREED DETAIL

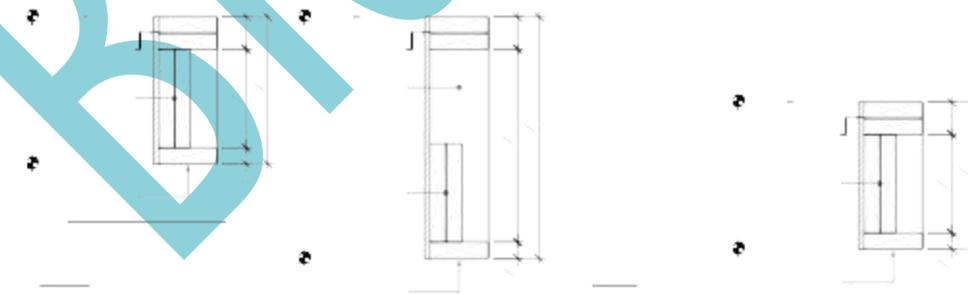
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4



TYPICAL WINDOW FLASHING DETAILS

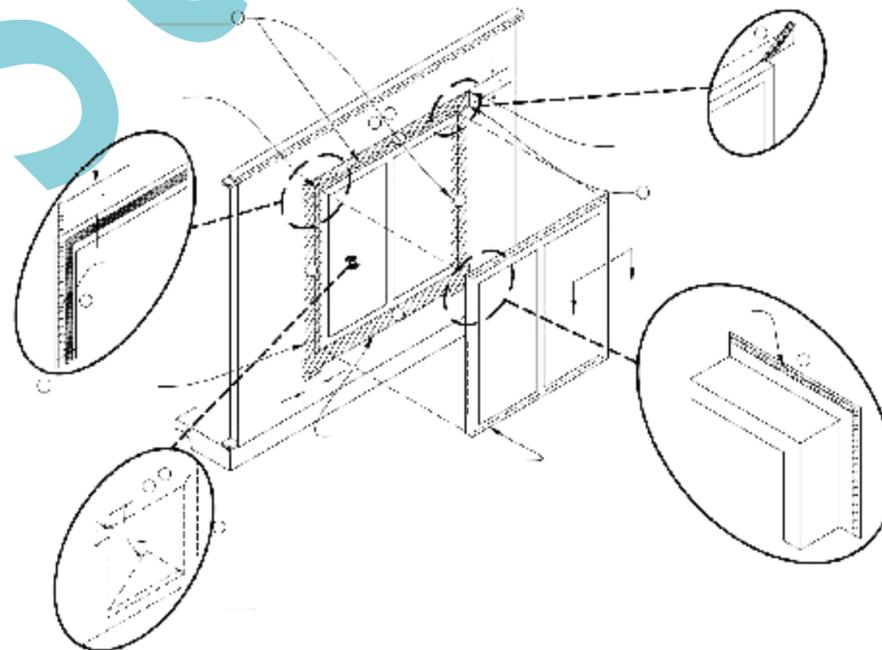
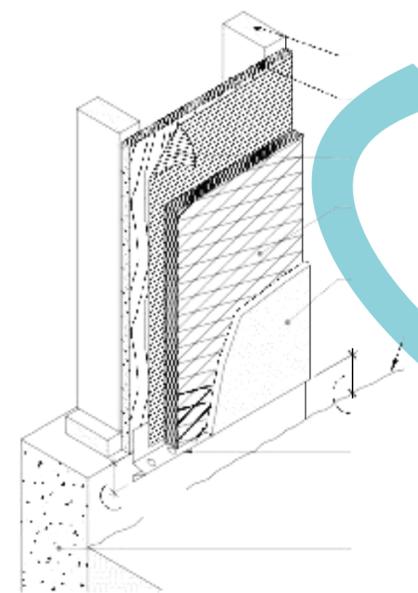
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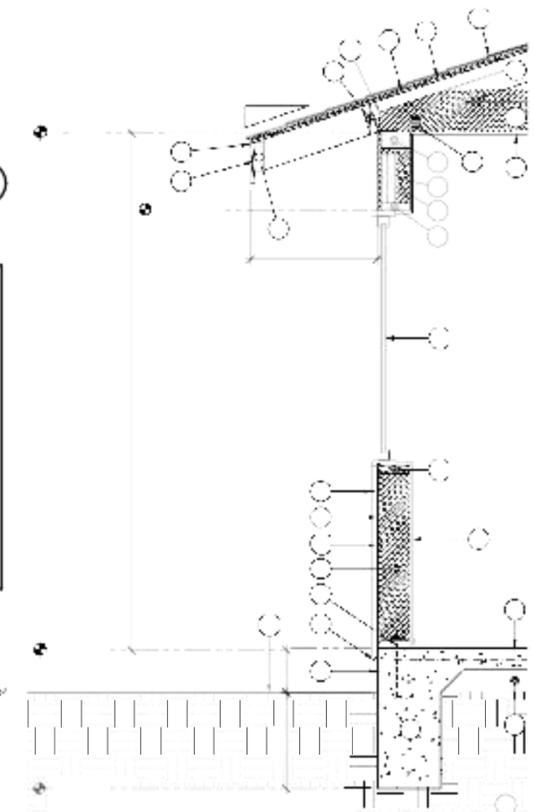
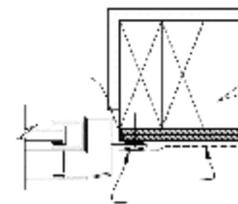
TYPICAL WALL SECTION

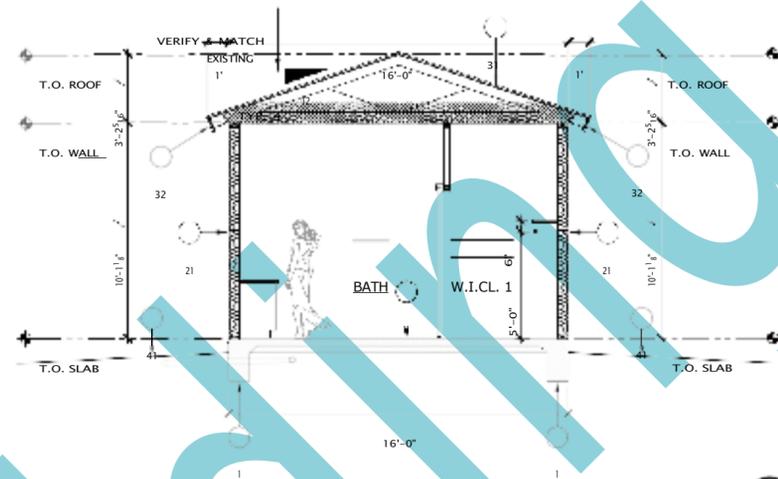
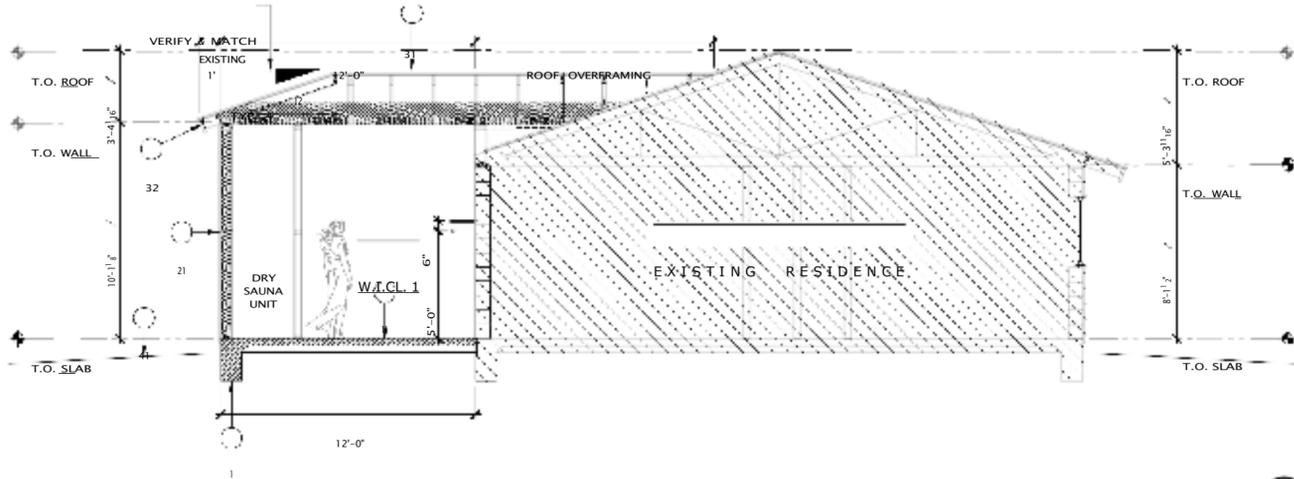
SCALE: 3/4" = 1'-0"

1



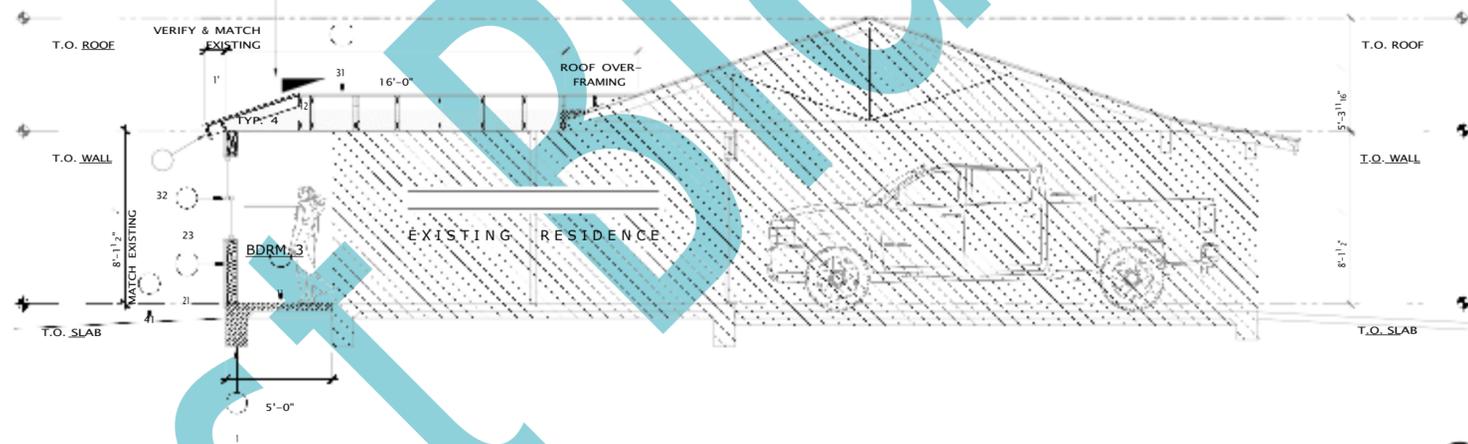
- STEPS**
1. IN WATER SHEDDING FASHION, STARTING AT THE BASE OF THE WALL & WORKING TOWARDS THE TOP, INSTALL THE WRB TO THE FACE OF THE SHEATHING.
  2. APPLY SILL FLASHING.
  3. APPLY BEAD OF SEALANT AT EACH OF WINDOW FLANGE & SET WINDOW USING PAN HEAD SCREWS TO FACILITATE INSPECTION.
  4. APPLY BEAD OF SEALANT AT SIDE JAMBS, EXTEND 8 1/2"
  5. APPLY JAMB FLASHING.
  6. APPLY BEAD OF SEALANT AT HEAD.
  7. APPLY HEAD FLASHING.
  8. REMOVE PREVIOUSLY APPLIED TAPE, ALLOWING WRB TO LAY FLAT OVER HEAD FLASHING. APPLY NEW SHEATHING TAPE OVER DIAGONAL CUT - SEE DIAGRAM.



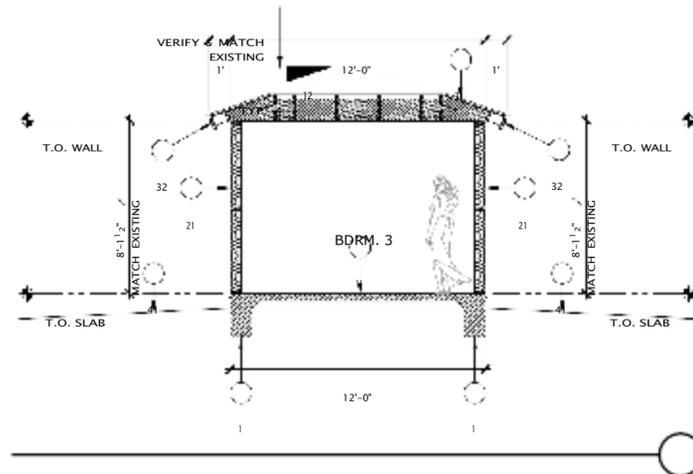


BUILDING SECTION "A" A  
SCALE: 1/4" = 1'-0"

BUILDING SECTION "A" A  
SCALE: 1/4" = 1'-0"



BUILDING SECTION "C" C  
SCALE: 1/4" = 1'-0"



- BUILDING SECTION KEY NOTES:**
- 1 CONCRETE FOOTING / FOUNDATION WALL - SEE FOUNDATION PLAN
  - 11 HOUSE FLOOR CONSTRUCTION (SLAB ON GRADE):
    - 4" CONCRETE SLAB REINFORCED W/ #3 REBAR AT 24" O.C. EACH WAY
    - 4" COMPACTED (95% MIN.) AGG. BASE COURSE
    - UNDISTURBED OR ENGINEERED FILL
  - 21 TYPICAL EXTERIOR WALL CONSTRUCTION:
    - EXTERIOR FINISH PER ELEVATIONS
    - TYVEK® BUILDING WRAP - (2) LAYERS AT MANUFACTURED STONE VENEER LOCATIONS
    - 3/8" (MIN.) CDX PLYWOOD OR O.S.B. WALL SHEATHING TO BE FLUSH W/ FACE OF C.M.U. FOUNDATION WALL - FASTEN W/ 8D NAILS AT 6" O.C. AT ALL PANEL EDGES & 12" O.C. ON ALL FRAMING MEMBERS NOT AT PANEL EDGES
    - 2" X 6" STUDS AT 16" O.C.
    - WALL INSULATION (R-21 MIN.) BETWEEN STUDS
    - 1/2" GYPSUM BOARD
  - 22 INTERIOR WALL CONSTRUCTION:
    - 1/2" GYPSUM BOARD
    - 2" X 4" OR 2" X 6" STUDS AT 16" O.C. - SEE FLOOR PLAN
    - 1/2" GYPSUM BOARD
  - 23 WINDOW / DOOR UNIT - SEE FLOOR PLAN & EXTERIOR ELEVATIONS
  - 24 HEADER / BEAM PER FRAMING PLAN
  - 31 ROOF CONSTRUCTION (TYPICAL):
    - ASPHALT SHINGLES - MATCH EXIST. HOUSE
    - "PALISADE" 35 YEAR SYNTHETIC ROOFING UNDERLAYMENT
    - 1/2" (FOR SHINGLES) / 5/8" (FOR TILE) CDX PLYWOOD / O.S.B. ROOF SHEATHING W/ "H" CLIPS FASTENED W/ 8D COMMON NAILS AT 6" O.C. ALONG PANEL EDGE AND 12" IN THE FIELD
    - PRE-ENGINEERED ROOF TRUSSES PER TRUSS MANUFACTURER W/ SIMPSON H2.5A OR EQUAL CONNECTORS AT EACH TRUSS TYPICAL
    - BLOWN OR BATT INSULATION (R-38)
    - 1/2" NON-SAG GYPSUM BOARD CEILING (INTERIOR) / 3/8" ADX PLYWD. SOFFITS AT EAVES / 1/2" NON-SAG EXTERIOR GYPSUM BOARD CEILING AT COVERED ENTRY & PATIO LOCATIONS
    - 1" X 8" LAMINATED FASCIA BOARD OVER
    - 2" X 6" SUB-FASCIA 3/8" ADX PLYWOOD SOFFITS
  - 32 1" X 8" LAMINATED FASCIA BOARD OVER 2" X 6" SUB-FASCIA OR VERIFY & MATCH EXISTING FASCIA BOARD
  - 33 GIRDER TRUSS PER TRUSS MANUFACTURER  
SEE ROOF FRAMING PLAN - SEE DETAIL 7 / A4.1
  - 34 ROOF OVERFRAMING - SEE DETAIL 8 / A4.1
  - 34 NATURAL GRADE LINE
  - 42 CUT LINE (.....) OF NATURAL GRADE
  - 43 ENGINEERED FILL - 95% COMPACTED SOIL IN 12" LIFTS NOT TO EXCEED 4'-0". UNLESS APPROVED BY CERTIFIED INSPECTION OR BUILDING OFFICIAL.
  - 44 NEW FINISHED GRADE TO SLOPE AWAY FROM BUILDING AT 5% (6" PER 10'-0")



RENOVATION BUILDING SECTIONS

DATE: 9 - 10 - 21  
SCALE: AS NOTED  
DRAWN:  
JOB:  
SHEET NO.:

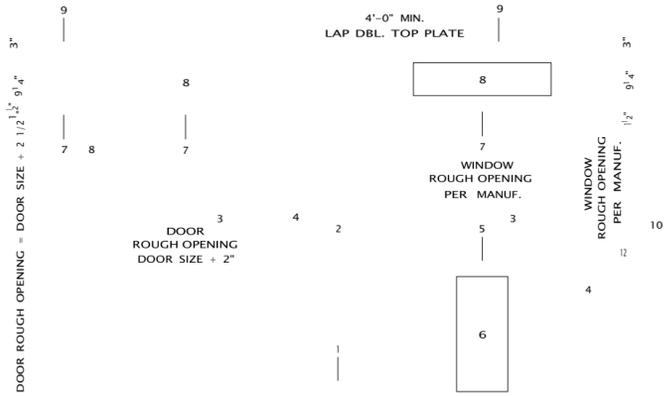
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BUILDING SECTION "D"  
SCALE: 1/4" = 1'-0"  
D

Cost Bidding

**KEY NOTES:**

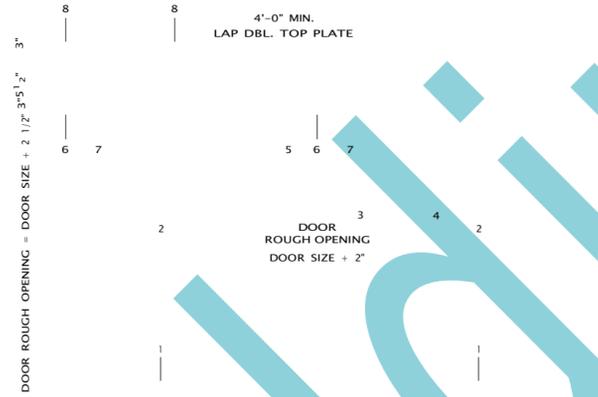
- 2 X 6 PRE-TREATED SILL PLATE OVER SILL SEALER W/ 1/2" DIA. X 10" ANCHOR BOLTS @ 48" O.C. MAX. & 12" FROM CORNERS & END OF PLATES - INSTALL SO EXTERIOR WALL SHEATHING IS FLUSH WITH FOUNDATION WALL
- 2" X 6" PRE-CUT STUDS AT 16" O.C.
- 2" X 6" TRIMMER STUD - DOUBLE TRIMMER STUD FOR OPENINGS 9'-0" AND WIDER
- 2" X 6" KING STUD
- 2" X 6" SILL PLATE
- 2" X 6" CRIPPLE STUDS
- 2" X 6" HEADER PLATE
- HEADER (DOUBLE 2" X 10" MIN. - U.N.O.) - SEE ROOF FRAMING PLAN
- DOUBLE 2" X 6" TOP PLATE
- WALL HEIGHT
  - 8' CLG. = 8'-1 1/8"
  - 9' CLG. = 9'-1 1/8"
  - 10' CLG. = 10'-1 1/8"
  - 11' CLG. = 11'-1 1/8"
  - 12' CLG. = 12'-1 1/8"
- VARIES DEPENDING ON DOOR & WALL HEIGHT
- VARIES DEPENDING ON TOP OF WINDOW & WALL HEIGHT



**TYPICAL EXTERIOR WALL FRAMING**  
SCALE: 1/2" = 1'-0" 1

**KEY NOTES:**

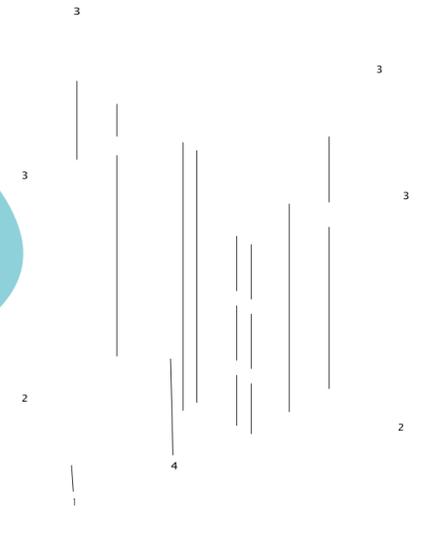
- 2 X "WALL THICKNESS" PRE-TREATED SILL PLATE "RED HEADED" AT 48" O.C. AND FROM END OF PLATES
- 2" X "WALL THICKNESS" PRE-CUT STUDS AT 16" O.C.
- 2" X "WALL THICKNESS" TRIMMER STUD - DOUBLE TRIMMER STUD FOR OPENINGS 9'-0" AND WIDER
- 2" X "WALL THICKNESS" KING STUD
- 2" X "WALL THICKNESS" CRIPPLE STUDS - NOTCHED AT HEADER CONDITION
- (2) FLAT 2" X "WALL THICKNESS" HEADER FOR OPENINGS LESS THAN OR EQUAL TO 3'-0"
- HEADER (2" X 6" MIN. - U.N.O.) FOR OPENINGS GREATER THAN 3'-0"
- DOUBLE 2" X "WALL THICKNESS" TOP PLATE
- WALL HEIGHT
  - 8' CLG. = 8'-1 1/8"
  - 9' CLG. = 9'-1 1/8"
  - 10' CLG. = 10'-1 1/8"
  - 11' CLG. = 11'-1 1/8"
  - 12' CLG. = 12'-1 1/8"
- VARIES DEPENDING ON DOOR & WALL HEIGHT



**TYPICAL INTERIOR WALL FRAMING**  
SCALE: 1/2" = 1'-0" 2

**KEY NOTES:**

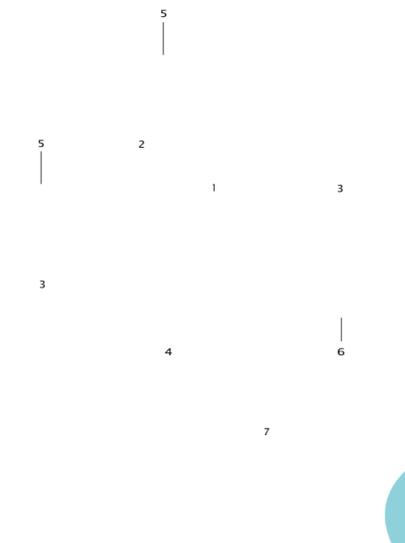
- 2 X "WALL THICKNESS" PRE-TREATED SILL PLATE ANCHORED TO FLOOR - SEE DETAIL 1/A4.1 FOR EXTERIOR CONDITION & 2/A4.1 FOR INTERIOR CONDITION.
- 2" X "WALL THICKNESS" PRE-CUT STUDS AT 16" O.C.
- DOUBLE 2" X "WALL THICKNESS" TOP PLATES - TOP PLATE OF INTERSECTING WALL OVERLAPS CONTINUOUS TOP PLATE OF PRIMARY WALL.
- 2" X 4" LADDER BLOCKING AT 24" O.C. INSTALL BLOCKING W/ WIDE FACE VERT. FOR MAX. BACKING TO WALL FINISH AND MAX. INSULATION TO EXTERIOR WALLS.



**TYPICAL INTERSECTING WALL DETAIL**  
SCALE: 1/2" = 1'-0" 3

**KEY NOTES:**

- PRE-ENGINEERED GIRDER ROOF TRUSS PER TRUSS MANUF.
- ROOF OVERFRAMING - SEE DETAIL 9 / A5.1
- PRE-ENGINEERED ROOF TRUSSES PER TRUSS MANUF.
- HANGER PER ROOF TRUSS MANUF.
- 5/8" CDX PLYWOOD OR O.S.B. ROOF SHEATHING W/ "H" CLIPS
- 1/2" NON-SAG GYPSUM BOARD
- ALL MULTI-MEMBER ROOF TRUSSES MUST BE SUPPORTED W/ 2 X 6 TO MATCH NUMBER OF PLYS OF ROOF TRUSS - UPPER & LOWER LEVELS SEE DETAIL 5 / A4.1



**GIRDER ROOF TRUSS DETAIL**  
SCALE: 1" = 1'-0" 4

**KEY NOTES:**

- PRE-ENGINEERED ROOF TRUSSES PER TRUSS MANUF.
- PRE-ENGINEERED GIRDER TRUSS PER TRUSS MANUF.
- 1/2" CDX PLYWOOD OR OSB ROOF SHEATHING W/ "H" CLIPS FASTENED W/ 8D COMMON NAILS AT 6" O.C. ALONG PANEL EDGE AND 12" IN THE FIELD
- "PALISADE" 35 YEAR SYNTHETIC UNDERLAYMENT
- COMPOSITE SHINGLES
- ALL MULTI-MEMBER ROOF TRUSSES MUST BE SUPPORTED W/ 2 X 6 TO MATCH NUMBER OF PLYS OF ROOF TRUSS - UPPER & LOWER LEVELS
- CONDITIONED CATHEDRALIZED ATTIC SPACE W/ OPEN CELL SPRAY FOAM INSULATION (ESR-1826 R-38 MIN.) ON UNDERSIDE OF ROOF SHEATHING / FRAMING.
- DOUBLE 2 X 6 TOP PLATE
- SIMPSON LGT GIRDER TIE DOWN - SPECIFIC MODEL NUMBER TO BE DETERMINED BY NUMBER OF PLYS OF THE GIRDER TRUSS



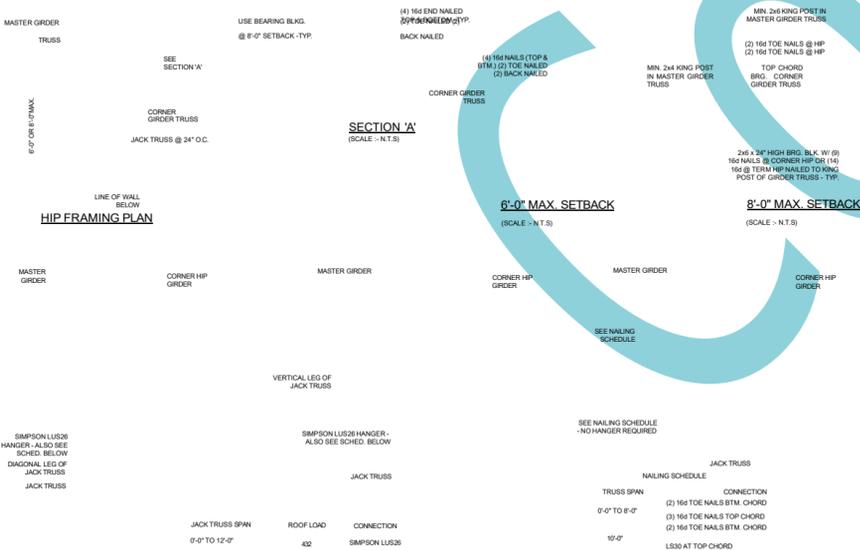
**GIRDER ROOF TRUSS CONNECTION DETAIL**  
SCALE: 1" = 1'-0" 5

**KEY NOTES:**

- 2 X 6 PRE-TREATED SILL PLATE OVER SILL SEALER W/ 1/2" DIA. X 12" ANCHOR BOLTS @ 48" O.C. MAX. & 12" FROM CORNERS & END OF PLATES - INSTALL SO EXTERIOR WALL SHEATHING IS FLUSH WITH FOUNDATION WALL
- 2" X 6" STUDS AT 16" O.C.
- 3/8" (MIN.) CDX PLYWOOD OR O.S.B. WALL SHEATHING TO BE FLUSH W/ FACE OF FOUNDATION WALL - FASTEN W/ 8D NAILS AT 6" O.C. AT ALL PANEL EDGES & 12" O.C. ON ALL FRAMING MEMBERS NOT AT PANEL EDGES
- "TYVEK" BUILDING WRAP
- EXTERIOR FINISH - SEE EXTERIOR ELEVATIONS
- 1/2" GYPSUM BOAD
- CORNER FRAMING - SEE INSIDE / OUTSIDE CORNER DETAIL 2 / A5.1
- DOUBLE 2" X 6" TOP PLATE - TOP PLATE TO OVERLAP AT ALL CORNERS



**CORNER FRAMING DETAILS**  
SCALE: 1" = 1'-0" 6



**NOTE:**

ROOF SHEATHING MAYBE OMITTED IN THE LOCATIONS SHOWN FOR VENTILATION. AS PER MFR.'S INSTALLTION INSTRUCTIONS PROVIDE 1/8" GAP BETWEEN ALL JOINTS WHEN APPLYING OSB TO FRAMING.

PROVIDE H-1 RIDGE TO KICKER

PROVIDE 2X8 FOR ALL HIPs & RIDGES

5/8" ROOF SHEATHING OVER 2X6 DF WD RAFTER AT 24" O.C..

2X4 KICKERS AT 24" O.C., W/ MIN. 2-16D FACE NAILED TO RAFTER

1-VTC2 CLIP AT EA. 2X4 KICKER TO ROOF SHEATHING ABOVE EXST. TRUSS.

2-10D X 1 1/2" TOE-NAILS

OVER FRAME PARALLEL TO TRUSSES

OVER FRAME PERPENDICULAR TO TRUSSES

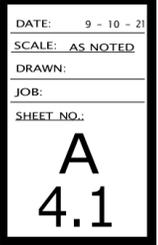
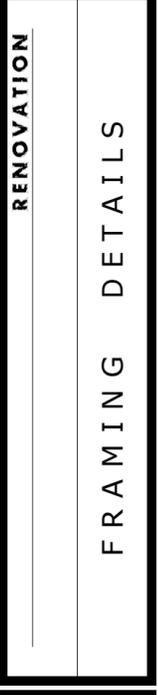
PLAN VIEW AT VALLEY FRAMING OVER ROOF TRUSS

2-16D T.N. AT RAFTER TO VALLEY PLATE  
2X8 CONTINUOUS VALLEY PLATE W/ 2-16D INTO TRUSS WHERE VALLEY PLATE CROSSES TRUSS; SEE PLAN ABOVE

8D NAILING AT 6" O.C. AT SHEATHING TO VALLEY PLATE  
ENGINEERED ROOF TRUSSES AT 24" O.C..

**KEY NOTES:**

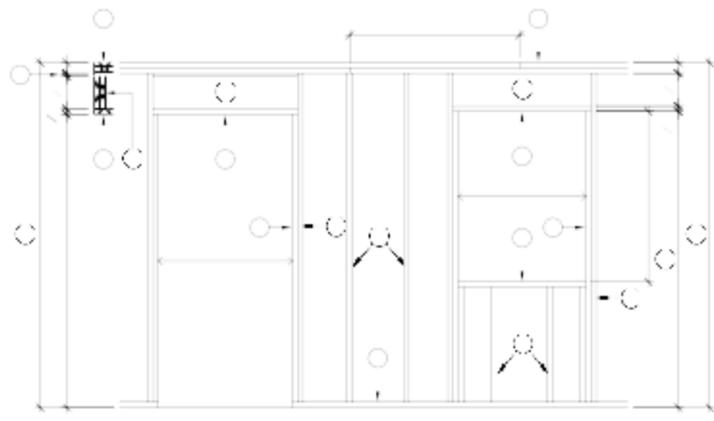
- "PALISADE" 35 YEAR SYNTHETIC ROOFING UNDERLAYMENT OVER 1/2" (SHINGLES) / 5/8" (TILE) CDX PLYWOOD / O.S.B. ROOF SHEATHING W/ "H" CLIPS FASTENED W/ 8D COMMON NAILS AT 6" O.C. ALONG PANEL EDGE AND 12" IN THE FIELD
- APPLY PEEL & STICK RUBBERIZED ASPHALT MEMBRANE BY GRACE CONSTRUCTION PRODUCTS OR EQUAL TO VALLEY - LAP VALLEY 8" MIN. ON EACH SIDE
- 26 GA. GALVANIZED STEEL FLASHING - 24" WIDE W/ 1" V-CRIMP IN MIDDLE TO LIMIT FLOW ACROSS VALLEY - LAP FLASHING 6" MIN.
- APPLY PEEL & STICK RUBBERIZED ASPHALT MEMBRANE BY GRACE CONSTRUCTION PRODUCTS OR EQUAL TO LAP METAL VALLEY FLASHING 4" MIN.
- CONTINUOUS METAL DRIP EDGE
- APPLY PEEL & STICK RUBBERIZED ASPHALT MEMBRANE BY GRACE CONSTRUCTION PRODUCTS OR EQUAL TO LAP METAL DRIP EDGE 2" MIN.
- ROOFING MATERIAL - SEE EXTERIOR ELEVATIONS & BUILDING SECTIONS FOR ADDITIONAL INFORMATION.
- FASCIA BOARD AND / OR EXTERIOR WALL FINISH



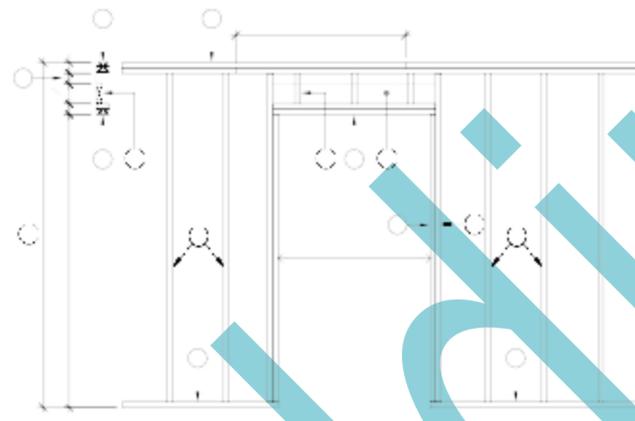
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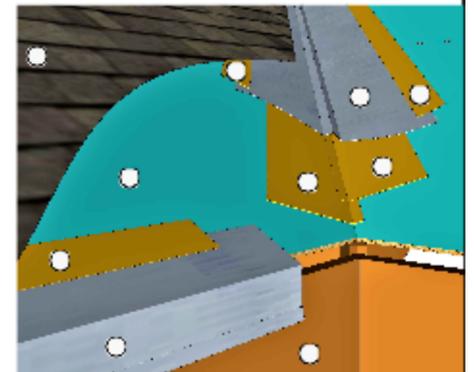
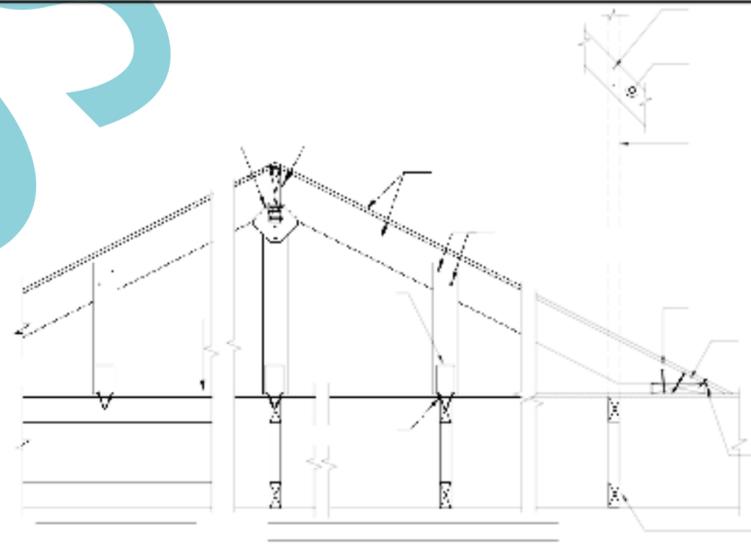
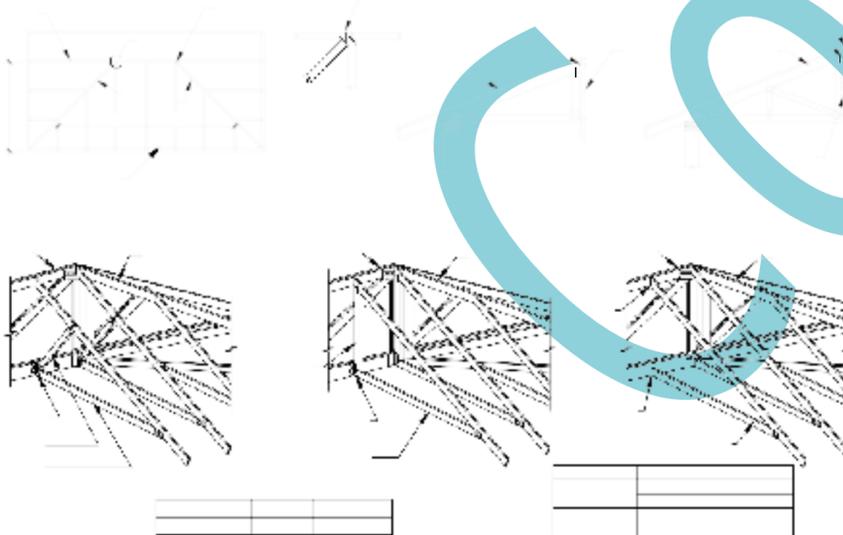
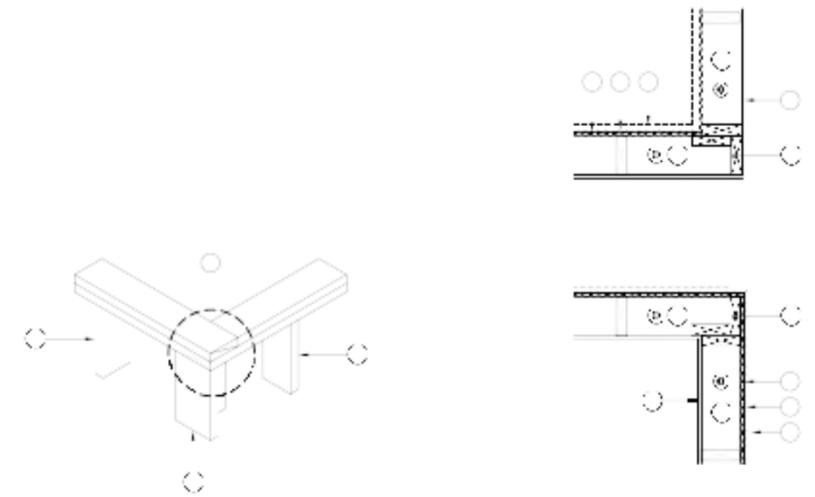
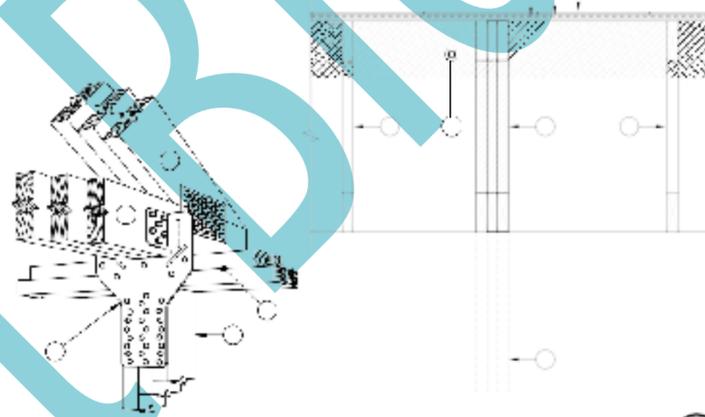
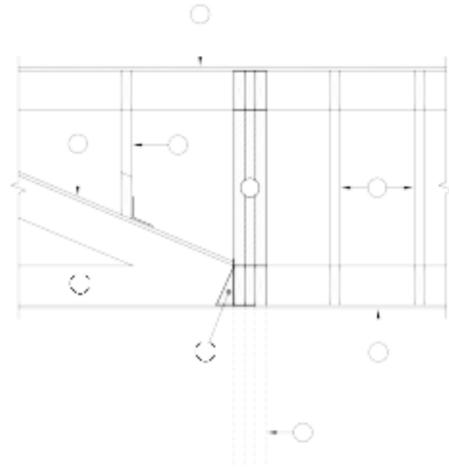
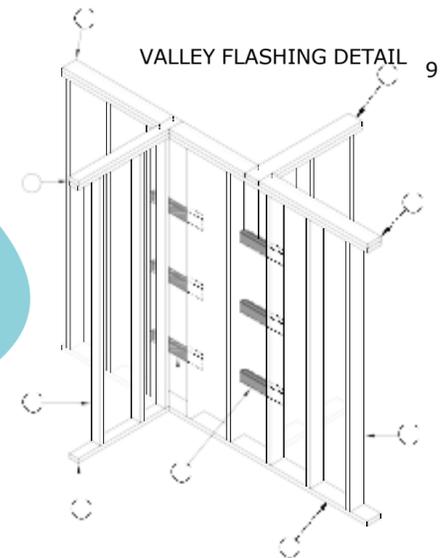
TYPICAL HIP ROOF TRUSS FRAMING DETAILS 7



ROOF OVERFRAMING DETAIL  
SCALE: 1" = 1'-0"



VALLEY FLASHING DETAIL 9



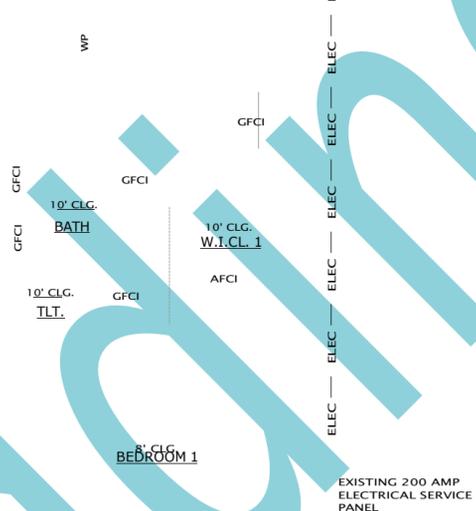
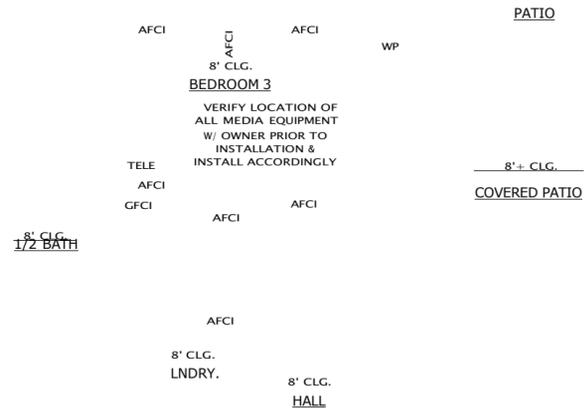
**ADDITION 2**

**ADDITION 1**

CONNECTED TO UTILITY SERVICE - SEE SITE PLAN

**ELECTRICAL LEGEND**

**ELECTRICAL PLAN NOTES:**



- P CEILING MOUNT LIGHT
- R HANGING PENDANT LIGHT
- R RECESSED LED LIGHT
- FS WALL MOUNT LIGHT
- FS WALL MOUNT LIGHT FULLY SHIELDED
- 48" LED FLUORESCENT GARAGE / SHOP LIGHT
- F UNDER CABINET LED LIGHT
- F EXHAUST FAN
- F EXHAUST FAN & LIGHT COMBINATION
- CEILING FAN W/ LIGHT KIT
- CEILING FAN
- TRACK LIGHTING
- ROPE / ABOVE CABINET LED LIGHTING
- S SMOKE DETECTOR
- C CARBON MONOXIDE DETECTOR
- S SINGLE POLE SWITCH
- S<sub>2</sub> DOUBLE POLE SWITCH
- S<sub>3</sub> THREE WAY SWITCH
- S<sub>4</sub> FOUR WAY SWITCH
- DM DIMMER SWITCH
- F FAN SWITCH
- DA DOOR ACTIVATED SWITCH
- GD GARAGE DOOR OPENER
- CONDUIT
- DUPLX - 110 VOLT OUTLET
- 1/2 SWITCHED DUPLX 110 VOLT OUTLET - VERIFY SWITCH LOCATION W/ OWNER
- DOUBLE DUPLX 110 VOLT OUTLET
- 220 220 VOLT
- R/O RANGE 220 VOLT (36" A.F.F.)
- WP WEATHERPROOF (GFCI) OUTLET
- GFCI GROUND FAULT CIRCUIT INTERRUPTER DUPLX 110 VOLT OUTLET
- AFCI ARC FAULT CIRCUIT INTERRUPTER DUPLX 110 VOLT OUTLET FLOOR - 110 VOLT OUTLET VERIFY LOCATION(S) W/ OWNER
- DRYER - 220V
- TELE TELEPHONE
- T.V. CABLE T.V.
- DATA
- T THERMOSTAT
- DB DOOR BELL
- DOOR BELL CHIME
- SPK SPEAKER

1. THE FOLLOWING APPLIANCES ARE REQUIRED TO HAVE A SEPARATE 20 AMP CIRCUIT: DISHWASHER, TRASH COMPACTOR, SWAMP COOLER, MICROWAVE, OVEN AND WASHER. THE WASHER CIRCUIT MAY SERVE ONE ADDITIONAL OUTLET IN THE LAUNDRY AREA.
2. ELECTRICIAN TO PROVIDE COPPER UFER AT ELECTRIC SERVICE ENTRANCE.
3. ELECTRICIAN SHALL VERIFY LOCATION OF SERVICE ENTRANCE AND METER WITH UTILITY COMPANY PRIOR TO START OF CONSTRUCTION.
4. ELECTRICIAN TO PROVIDE TEMPORARY POWER AS REQUIRED.
5. IF INTERCOM AND/OR SECURITY SYSTEM IS INCLUDED, ELECTRICIAN SHALL VERIFY LOCATIONS WITH GENERAL CONTRACTOR. ELECTRICIAN SHALL HOOK UP ALL APPLIANCES SELECTED BY OWNER.
6. ELECTRICIAN TO PRE-WIRE FOR TELEPHONE, TELEVISION, FUTURE CABLE AND INTERNET (INCLUDING TRIM-OUT).
7. ALL CEILING BOXES TO BE RIGIDLY SECURED TO FRAMING. AS PER PROVIDE A FUSED DISCONNECT MANUFACTURER SPECIFICATIONS TO ALL A/C POWER LOCATIONS.
8. ALL EXTERIOR OUTLETS, BATHROOM OUTLETS, GARAGE OUTLETS TO BE EQUIPPED WITH G.F.C.I.
9. GARAGE AND EXTERIOR OUTLETS TO BE WATERPROOF.
10. TWO OR MORE SEPARATE SMALL APPLIANCE CIRCUITS ARE REQUIRED IN THE KITCHEN, BREAKFAST ROOM, DINNING ROOM OR OTHER SIMILAR AREA.
11. PROVIDE OUTLETS AT KITCHEN SO THAT NO PORTION OF COUNTER IS MORE THAN 24" FROM AN OUTLET.
12. ALL KITCHEN COUNTERTOP OUTLETS SHALL BE ON A DEDICATED 20 AMP G.F.C.I. BREAKER.
13. ALL BATHROOM OUTLETS SHALL BE ON A DEDICATED 20 AMP G.F.C.I. BREAKER.
14. ALL BRANCH CIRCUITS TO BEDROOMS SHALL BE ON A DEDICATED ARC-FAULT CIRCUIT INTERRUPTER BREAKER.
15. PROVIDE ELECTRICAL SERVICE TO HVAC UNIT (VERIFY LOCATION)
16. VERIFY WITH CONTRACTOR LOCATION OF PREFERRED LOCATIONS FOR TV AND PHONE OUTLETS. ANY CHANGES TO THE ELECTRICAL LAY-OUT. VERIFY FOR ANY ADDITIONAL CHANGES.
17. ELECTRICAL PLAN IS STRICTLY DIAGRAMMATIC. CONTRACTOR IS TO OBTAIN ENGINEERING WHEN REQUESTED BY BUILDING OFFICIALS. ALL WORK MUST CONFORM TO 2011 NEC AND 2012 IRC CODES
18. PROVIDE 120 VOLT SINGLE PHASE POWER TO UTILITY ROOF MOUNT A/C UNITS. ALSO PROVIDE COMPLETE WIRING, INCLUDING DISCONNECT SWITCHES, FUSES, CONTROL WIRING, ETC. FOR A/C EQUIPMENT PER MANUFACTURER'S SPECIFICATIONS IN COMPLIANCE WITH THE LATEST N.E.C. - SEE SHEET E-1.2 FOR LOCATIONS OF A/C UNITS.
19. ELECTRICAL LOAD CALCULATIONS AND PANEL SCHEDULE ARE TO BE PROVIDED BY OTHERS

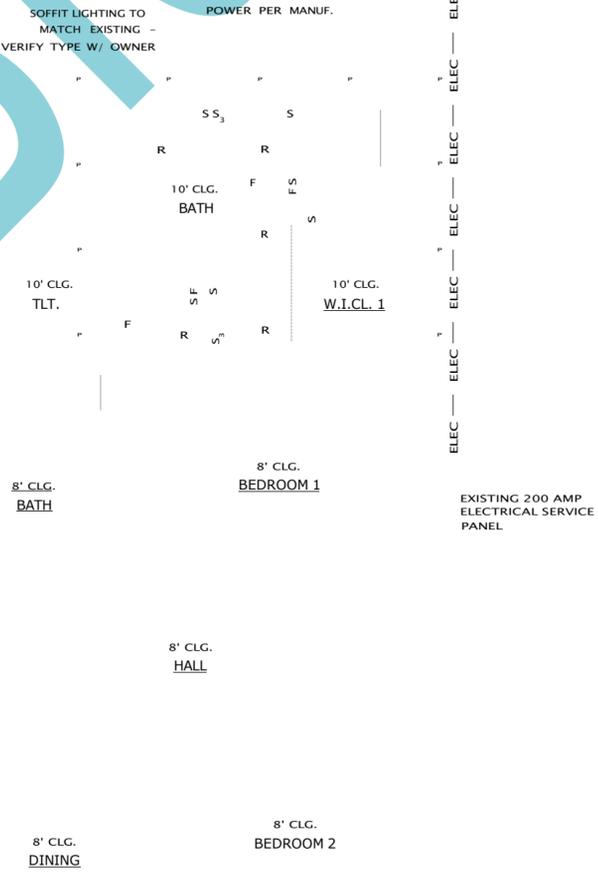
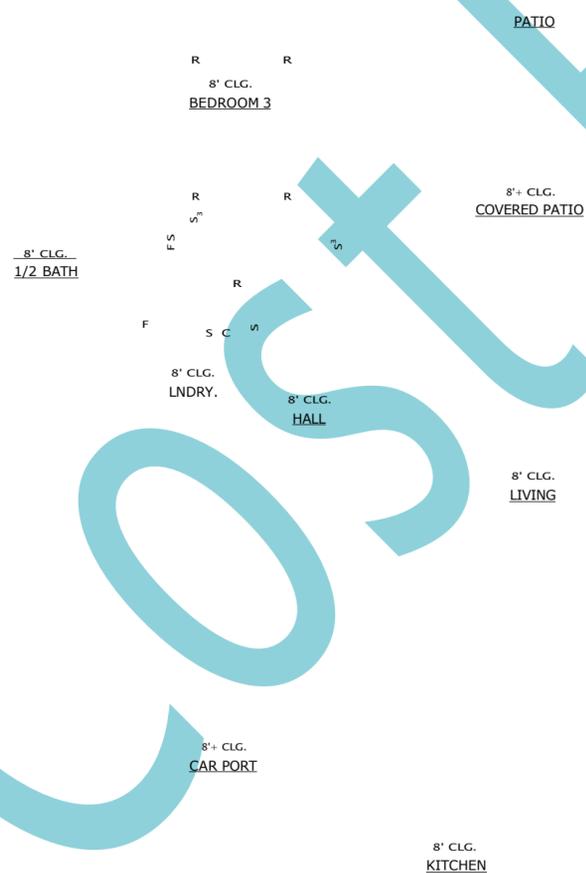
**SCHEMATIC ELECTRICAL POWER PLAN**

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

**ADDITION 2**

**ADDITION 1**

CONNECTED TO UTILITY SERVICE - SEE SITE PLAN



- NOTES:**
1. TOP OF ALL SWITCH BOXES TO BE AT 44"-48" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE
  2. TOP OF ALL OUTLETS TO BE AT 12"-16" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE
  3. MOUNT ALL GARAGE OUTLETS AT 42"-48" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE



**RENOVATION**

**SCHEMATIC ELECTRICAL PLANS**

**RENOVATION**

**SCHEMATIC ELECTRICAL PLANS**

DATE: 9 - 10 - 21  
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**MECHANICAL NOTES (2018 IRC):**

1. THE MECHANICAL LAYOUT IS SCHEMATIC & INTENDED TO SHOW THE MOST PROBABLE LOCATIONS OF EQUIPMENT, DUCTS, REGISTERS, GRILLS, ETC. THE MECHANICAL CONTRACTOR SHALL DESIGN THE ENTIRE HEATING / COOLING SYSTEM(S). SIZING THE EQUIPMENT, DUCTS, GRILLES AND REGISTERS AND SHALL GUARANTEE THE SYSTEM(S) TO PROVIDE COMFORTABLE TEMPERATURE YEAR LONG THROUGHOUT THE LIVEABLE SPACE.
2. ALL WORK TO BE DONE SHALL COMPLY WITH THE APPLICABLE CHAPTERS OF THE 2018 I.R.C.
3. WORK AND INSTALLATION SHALL CONFORM TO ALL APPLICABLE NATIONAL, STATE, LOCAL CODES AND ORDINANCES.
4. THE MECHANICAL CONTRACTOR SHALL COMMUNICATE TO THE OWNER PRIOR TO ANY INSTALLATION, THE TOTAL SYSTEM DESIGN INCLUDING THE INTENDED SYSTEM PERFORMANCE AND REGISTER AND GRILL LOCATIONS.
5. EXTERIOR HEAT PUMPS AND AC COMPRESSORS SHALL BE PLACED ON CONCRETE SLABS. SLABS SHALL BE SEPARATED FROM ANY BUILDING STRUCTURE BY 4" MIN. AND SHALL NOT TOUCH THE BUILDING. EQUIPMENT CLOSE TO ANY LIVEABLE AREA SHALL BE MOUNTED ON VIBRATION ISOLATORS. SLAB SHALL BE 3" MIN. ABOVE GRADE.
6. COMPRESSOR PIPING SHALL BE ISOLATED FROM ALL BUILDING FRAMING WITH INSULATORS.
7. THERMOSTATS SHALL HAVE "ON-OFF" AND "AUTO-FAN" SWITCHES.
8. THERMOSTATS SHALL BE 7 DAY PROGRAMMABLE WITH BATTERY BACK-UP.
9. DOORS TO MECHANICAL ROOMS SHALL BE SOLID CORE WITH WEATHER STRIPPING AND THRESHOLDS FOR TIGHT FITTING INSTALLATION.
10. VENT CLOTHES DRYER TO OUTSIDE WITH A 1" MIN. DIA. EXHAUST DUCT. THE MAX. LENGTH SHALL NOT EXCEED 25'-0" FROM THE DRYER TO THE WALL OR ROOF TERMINATION. THE MAX. LENGTH SHALL BE REDUCED 2.5' FOR EACH 45 DEGREE BEND, AND 5'-0" FOR EACH 90 DEGREE BEND.
11. PROVIDE EXTERIOR SCREENED AND LOUVERED VENT CAPS FOR ALL EXHAUST FANS.
12. THE CONTRACTOR IS RESPONSIBLE FOR TRENCHING ANY BELOW SLAB DUCTS, OR SHALL ARRANGE WITH SUB-CONTRACTOR TO HAVE THIS WORK DONE PRIOR.
13. RETURN AIR DUCTS FROM BEDROOMS EXITING INTO LIVING SPACES (FOR PICK-UP BY THE MAIN RETURN AIR GRILLE) SHALL BE LINED ON THE INSIDE OF THE DUCT FOR NOISE REDUCTION.
14. UNLESS INSTRUCTED OTHERWISE, EACH CLOSED-OFF LIVEABLE ROOM SHALL HAVE ITS OWN RETURN AIR. CUTTING OF DOORS FOR RETURN AIR PURPOSES IS NOT PERMITTED.
15. THE SUPPLY AND RETURN TRUNK LINES SHALL BE RIGID SHEET METAL. INDIVIDUAL BRANCH LINES MAY BE FLEX DUCT AT CONTRACTORS OPTION.
16. THE MECHANICAL CONTRACTOR SHALL CONVEY TO THE GENERAL CONTRACTOR, DUCT SIZES NECESSARY FOR PLENUM AND SOFFIT FRAMING ENCLOSING DUCTS.
17. FLUES FROM ANY GAS APPLIANCES SHALL HAVE THE REQUIRED CLEARANCES TO COMBUSTIBLE MATERIALS AS PER CODE AND MANUF. REQUIREMENTS.
18. PROVIDE SCREENED AND LOUVERED COMBUSTION AIR VENTS (HIGH-LOW) TO MECHANICAL ROOMS WITH GAS APPLIANCES. THE SIZE OF EACH VENT SHALL BE A MINIMUM OF 1 SQ. INCH PER 1000 BTU, OR AS PER CODE. MINIMUM EACH VENT = 100 SQ. INCHES. THIS AIR SHALL NOT BE TAKEN FROM INSIDE THE GARAGE.
19. FOLLOW ALL MECHANICAL CODE REQUIREMENTS FOR GAS FLUE PIPING AND ANNULAR SPACES.
20. ALL CONTROL WIRING SHALL BE 18 GAUGE SOLID COPPER WIRE
21. CONDENSATE PIPING SHALL BE 3/4" PVC SCHEDULE 40 PIPE WITH SOLVENT-CEMENTED JOINTS MADE IN ACCORDANCE WITH 2018 I.M.C. SECTION 1203.3.4.
22. CONDENSATE PIPING WILL BE 3/4" PVC SCHEDULE 40 PIPE EXTENDING AT FULL PIPE SIZE TO OUTSIDE 6" - 24" ABOVE GRADE.
23. REFRIGERANT "SUCTION" LINE SHALL BE INSULATED WITH 3/8" WALL CLOSE CELL INSULATION IN ACCORDANCE WITH 2018 I.M.C. SECTION 1107.
24. ALL REFRIGERANT LINES ARE TO BE TYPE ACR TYPE SOFT COPPER TUBING.
25. ALL FLEXIBLE DUCT TO BE SUPPORTED EVERY 6'-0"
26. ALL SUPPLY AND RETURN DUCTS, TRANSITIONS, AND FLEXIBLE DUCTS SHALL BE INSULATED TO A MIN. R-6
27. ALL DUCTS, AIR HANDLERS, FILTER BOXES, AND BUILDING CAVITIES NOT FOR SUPPLY AIR USED AS DUCTS SHALL BE SEALED. JOINTS AND SEAMS SHALL BE SEALED TO COMPLY WITH SECTION M1501.3 OF THE 2018 I.R.C.
28. CLOTHES DRYER EXHAUST DUCTS TO BE IN ACCORDANCE WITH 2018 I.M.C. SECTION 504.1.2M 504.3, 504.4, 504.5, 504.6, 504.6.1 AND 504.6.2.
29. KITCHEN EXHAUST EQUIPMENT DUCTS TO BE IN ACCORDANCE WITH 2018 I.M.C. SECTION 505.1 AND 505.2. ALL LOAD CALCULATIONS AND DUCT SIZING TO BE IN ACCORDANCE WITH 2018 IECC SECTION 403.5 AND IRC SECTION M1401.3 AND M1601.1.

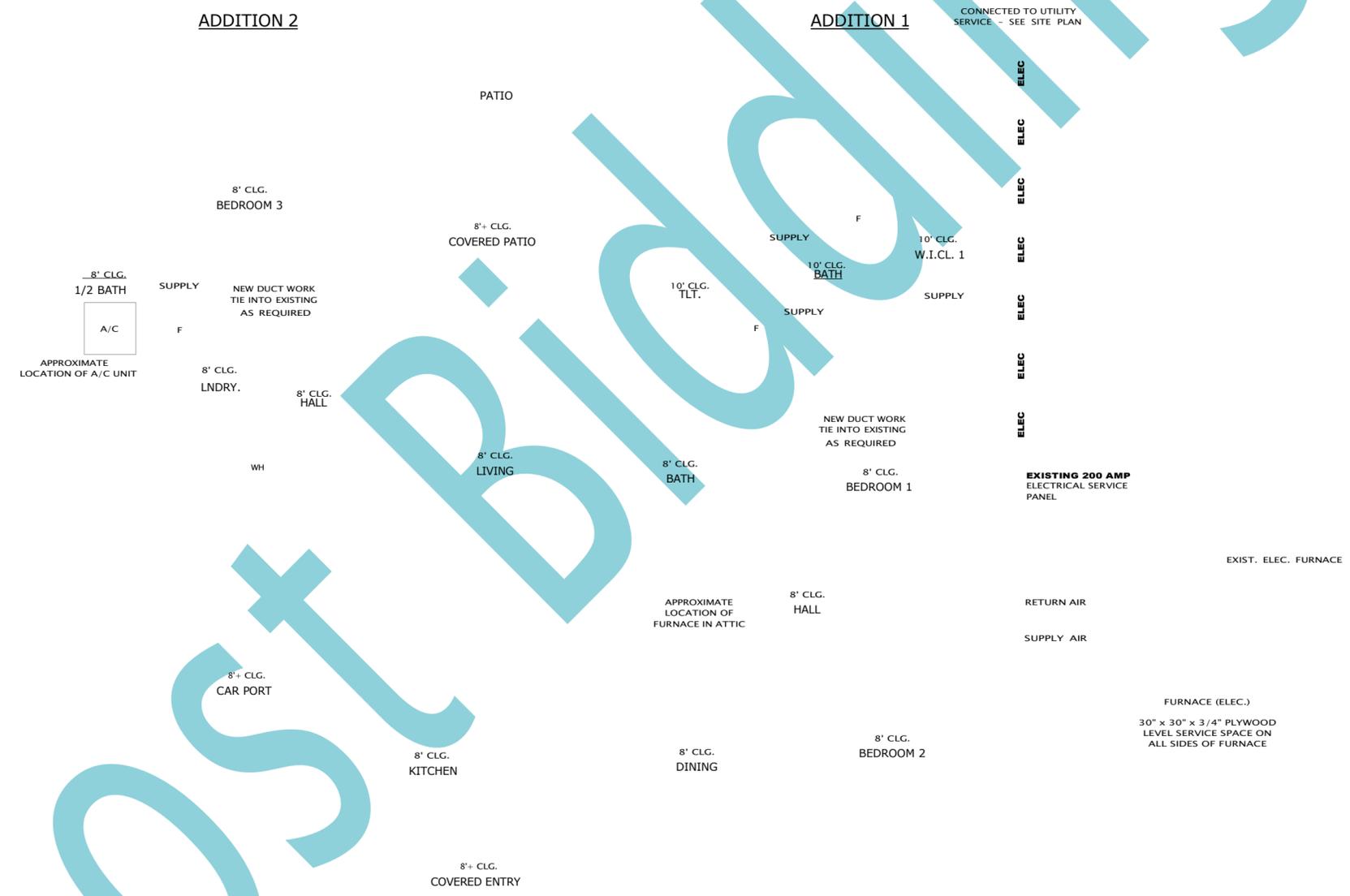
**EXHAUST FANS:**

30. ALL EXHAUST FANS TO BE INSTALLED IN ACCORDANCE WITH MANUF. RECOMMENDATIONS.
31. ALL EXHAUST FANS TO BE PLACED IN ACCORDANCE WITH 2018 I.M.C. SECTION 502.1B.
32. EXHAUST FANS TO BE SIZED IN ACCORDANCE WITH 2018 I.M.C. SECTION 403.3.
33. ALL EXHAUST FANS TO BE DUCTED INDEPENDENTLY TO OUTSIDE.
34. ALL EXHAUST FANS TO BE DUCTED IN 4" ALUMINUM FLEX DUCT. DUCTS TO BE IN ACCORDANCE WITH 2018 I.M.C. SECTION 503.6.
35. ALL EXHAUST FANS TO HAVE A MECHANICAL

RENOVATION

SCHEMATIC MECHANICAL PLAN

DATE: 9 - 10 - 21  
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**NOTES:**

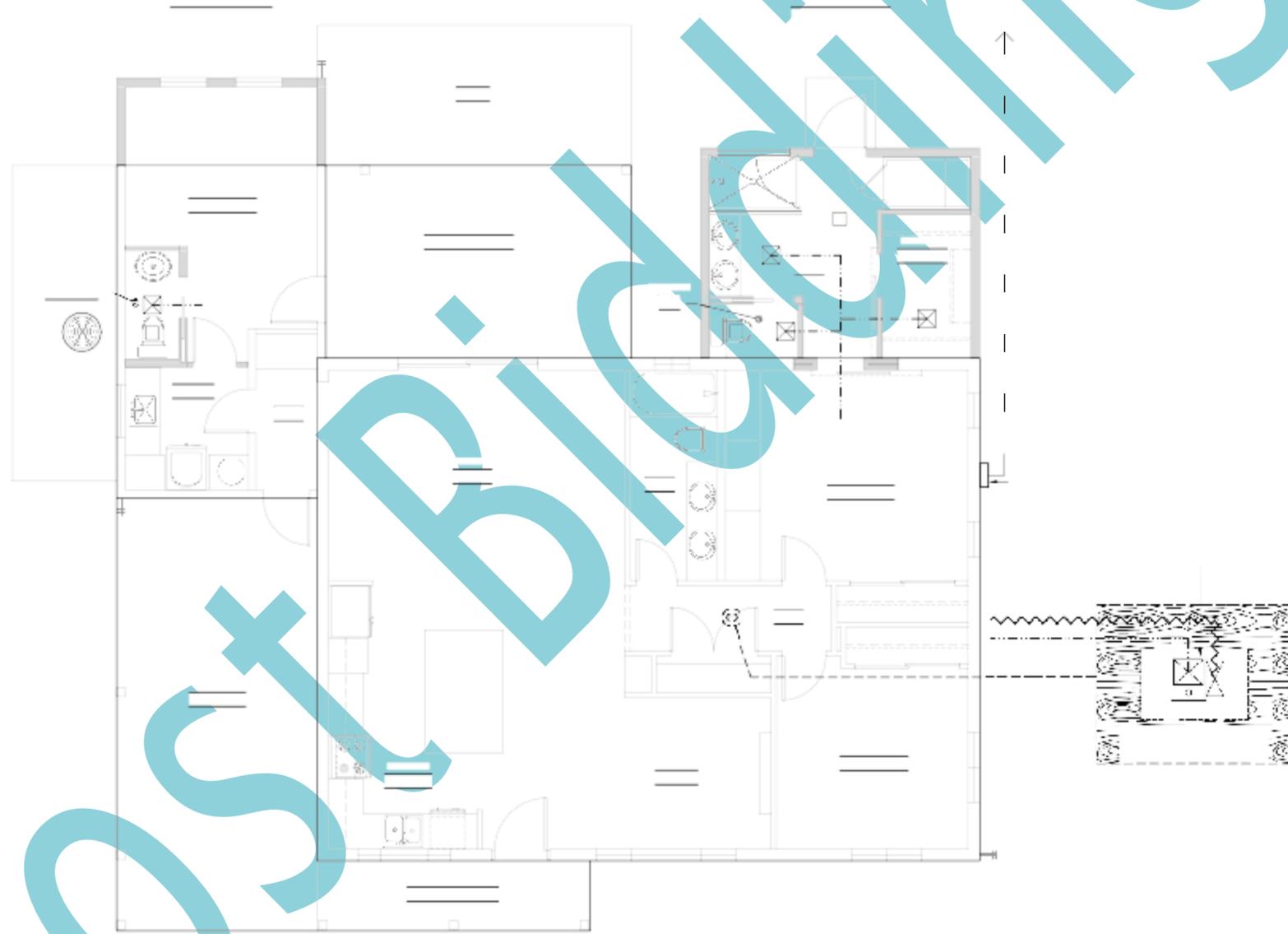
- HVAC UNIT TO BE SIZED BY HVAC CONTRACTOR.
- ALL DUCT SUPPLY & RETURN SHALL BE INSULATED MINIMUM R-6.
- ALL DUCTS, AIR HANDLERS, FILTER BOXES & BUILDING CAVITIES (NOT OR SUPPLY AIR) USED AS DUCTS SHALL BE SEALED. JOINTS OF DUCT SYSTEMS SHALL BE MADE SUBSTANTIALLY AIR TIGHT BY MEANS OF TAPES, MASTICS, GASKETING OR OTHER APPROVED CLOSURE SYSTEMS.
- ALL OUTDOOR AIR INTAKES & EXHAUSTS SHALL BE PROVIDED WITH DAMPERS (AUTOMATIC OR GRAVITY) TO EFFECTIVELY CLOSE WHEN VENTILATION SYSTEM IS NOT OPERATING.
- HVAC CONTRACTOR SHALL VERIFY ALL EQUIPMENT AND DUCT SIZES AND LOCATIONS.
- HVAC CONTRACTOR SHALL VERIFY ALL SYSTEM COMPONENTS AND INSTALLATION SHALL MEET I.R.C. CHAPTER 11-20.

**NOTE:**

DUE TO INDIVIDUAL PREFERENCES AND METHODS OF INSTALLATION, THIS SHEET IS FOR THE BUILDER AND HVAC CONTRACTOR TO LAYOUT AND SIZE THE DUCT WORK. THE DUCT WORK, VENTING, AND OTHER DETAILS WILL VARY DEPENDING ON THE TYPE OF HEATING AND COOLING SYSTEM (FORCED AIR, HOT WATER, ELECTRIC, SOLAR) AND THE TYPE OF ENERGY (GAS, OIL, ELECTRICITY, SOLAR) THAT ARE TO BE USED. THESE CORRESPONDING DETAILS AND SPECIFICATIONS ARE TO BE OBTAINED FROM YOUR

BUILDER, OR HVAC CONTRACTOR.  
SCHEMATIC MECHANICAL PLAN  
SCALE: 1/8" = 1'-0"

BACK DRAFT DAMPER.  
36. ALL EXHAUST TERMINATIONS TO BE PLACED IN  
ACCORDANCE WITH 2018 I.M.C. SECTION 501.2,  
401.4.2 AND 401.5.



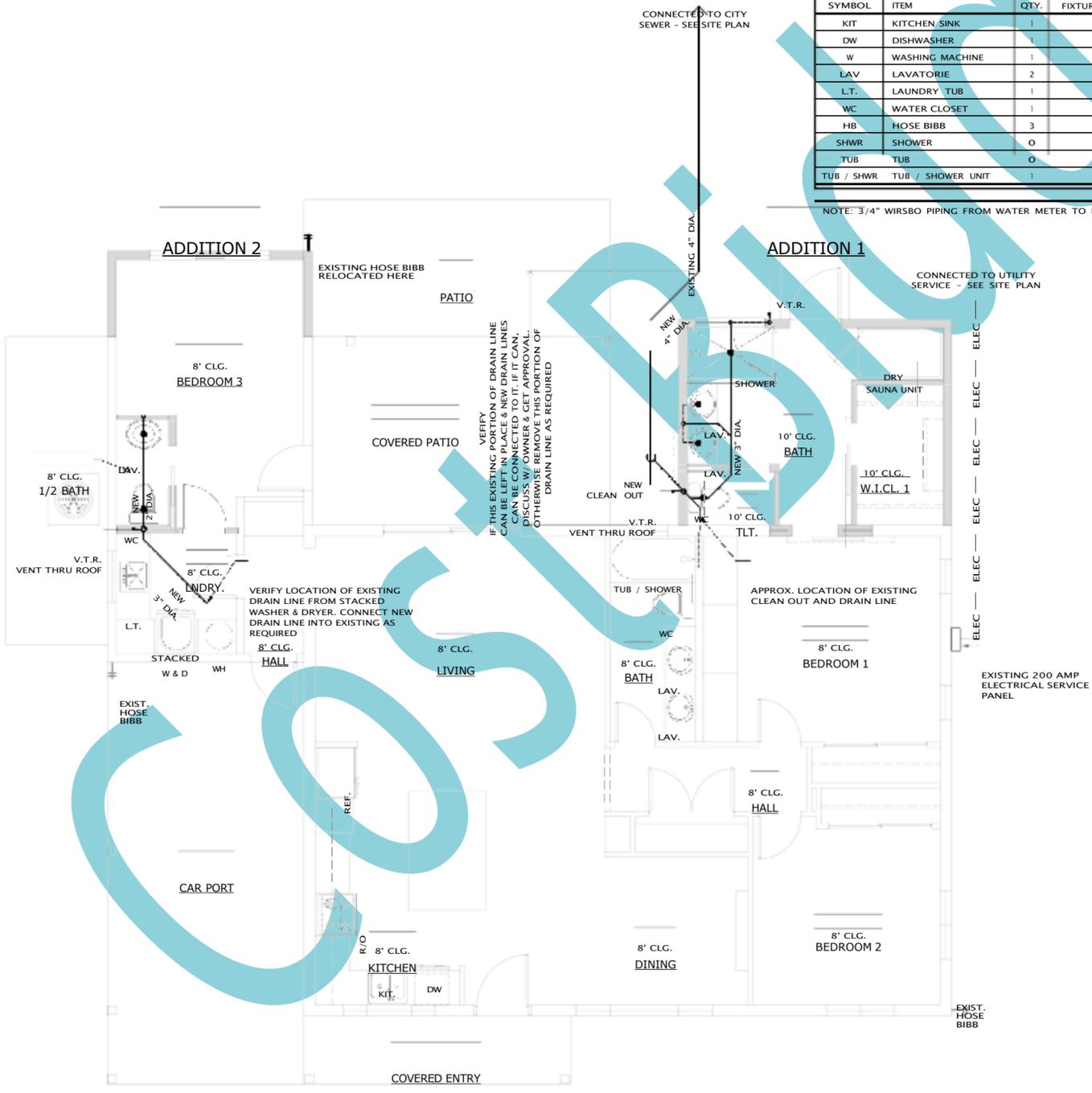


EXISTING DRAINAGE FIXTURE UNIT SCHEDULE				
SYMBOL	ITEM	QTY.	DRAINAGE FIXTURE UNIT VALUE	TOTAL DRAINAGE FIXTURE UNIT VALUE
KIT.	KITCHEN SINK	1	2.0	2.0
W	WASHING MACHINE	1	3.0	3.0
LAV	LAVATORIES	2	1.0	2.0
L.T.	LAUNDRY TUB	1	2.0	2.0
WC	WATER CLOSETS	1	3.0	3.0
SHWR	SHOWER	0	2.0	0
TUB	TUB	0	2.0	0
TUB / SHWR	TUB / SHOWER UNIT	1	2.0	2.0
				14.0 TOTAL UNITS

EXISTING WATER SUPPLY FIXTURE UNIT SCHEDULE				
SYMBOL	ITEM	QTY.	WATER SUPPLY FIXTURE UNIT VALUE	TOTAL WATER SUPPLY FIXTURE UNIT VALUE
KIT	KITCHEN SINK	1	1.4	1.4
DW	DISHWASHER	1	1.4	1.4
W	WASHING MACHINE	1	1.4	1.4
LAV	LAVATORIE	2	.7	1.4
L.T.	LAUNDRY TUB	1	1.4	1.4
WC	WATER CLOSET	1	2.2	2.2
HB	HOSE BIBB	3	2.5	7.5
SHWR	SHOWER	0	1.4	0
TUB	TUB	0	1.4	0
TUB / SHWR	TUB / SHOWER UNIT	1	1.4	1.4
				18.1 TOTAL UNITS

DRAINAGE FIXTURE UNIT SCHEDULE				
SYMBOL	ITEM	QTY.	DRAINAGE FIXTURE UNIT VALUE	TOTAL DRAINAGE FIXTURE UNIT VALUE
KIT.	KITCHEN SINK	0	2.0	0
W	WASHING MACHINE	0	3.0	0
LAV	LAVATORIES	3	1.0	3.0
L.T.	LAUNDRY TUB	0	2.0	0
WC	WATER CLOSETS	2	3.0	6.0
SHWR	SHOWER	1	2.0	2.0
TUB	TUB	0	2.0	0
TUB / SHWR	TUB / SHOWER UNIT	0	2.0	0
SUB-TOTAL				11.0 TOTAL UNITS

WATER SUPPLY FIXTURE UNIT SCHEDULE				
SYMBOL	ITEM	QTY.	WATER SUPPLY FIXTURE UNIT VALUE	TOTAL WATER SUPPLY FIXTURE UNIT VALUE
KIT	KITCHEN SINK	0	1.4	0
DW	DISHWASHER	0	1.4	0
W	WASHING MACHINE	0	1.4	0
LAV	LAVATORIE	3	.7	2.1
L.T.	LAUNDRY TUB	0	1.4	0
WC	WATER CLOSET	2	2.2	4.4
HB	HOSE BIBB	0	2.5	0
SHWR	SHOWER	1	1.4	1.4
TUB	TUB	0	1.4	0
TUB / SHWR	TUB / SHOWER UNIT	0	1.4	0
SUB-TOTAL				7.9 TOTAL UNITS



NOTE: 3/4" WIRSBO PIPING FROM WATER METER TO HOUSE

NOTE: 3/4" WIRSBO PIPING FROM WATER METER TO HOUSE

**PLUMBING NOTES:**  
PLUMBING CONTRACTOR TO PLACE ALL PIPING AND FITTINGS IN FIELD PER CURRENT JURISDICTION CODE REQUIREMENTS - INSULATE HOT WATER LINES.

**WATER PIPING NOTES:**  
1. WATER IS SUPPLIED BY A 1" WATER LINE FROM WATER METER.  
2. WATER HEATER SHALL BE SUPPLIED WITH A MINIMUM 3/4" COLD LINE.  
3. WATER HEATER SHALL HAVE A MINIMUM 3/4" LINE OUT SERVING THE FIXTURES LISTED.  
4. (1) 1/2" WATER LINE SHALL FEED NO MORE THAN (6) FIXTURE UNITS.  
5. ALL INDIVIDUAL FIXTURE SUPPLIES SHALL HAVE A 1/2" FEED LINE.  
6. ICE MAKER SHALL HAVE A MINIMUM 1/4" FEED LINE.  
7. LOOPED HOT WATER LINES FOR RECIRCULATION PUMP ARE REQUIRED.

**WASTE WATER PIPING NOTES:**  
1. FOLLOW ALL MINIMUM PIPE SIZE NOTES.  
2. WATER HEATER SHALL BE SUPPLIED WITH A MINIMUM 3/4" COLD LINE.  
3. VENTS SHALL EXIT THE ROOF AND EXTEND A MINIMUM 12" ABOVE FINISH SURFACE.  
4. PIPES GOING THROUGH FOOTINGS OR UNDER FOOTINGS OR STEM WALLS SHALL BE SLEEVED.  
5. PIPE THROUGH FOOTINGS SHALL NOT AFFECT THE STRUCTURAL INTEGRITY OF THE FOOTING. A CONTINUOUS FOOTING SIZED PER THE FOUNDATION PLAN MUST BE ABOVE OR BELOW THE PIPE.  
6. VERIFY ALL FINISH FLOOR HEIGHTS IN REGARDS TO SEWER LATERAL TO ASSURE PROPER DRAINAGE FALL.  
7. SEWER LATERAL MAY FALL AT A MINIMUM OF 1/4" FOR 3" PIPE AND 1/8" FOR 4" PIPE.

**PLUMBING NOTES (2018 I.R.C.):**  
1. VERIFY IN FIELD THE LOCATION OF THE CONNECTION TO THE WASTE TREATMENT SYSTEM LOCATION.  
2. PROVIDE DISHWASHER WITH AN APPROVED AIR GAP DEVICE.  
3. ALL FIXTURES WITH HOSE OUTLETS SHALL BE EQUIPPED WITH APPROVED BACK FLOW PREVENTERS (VACUUM BREAKERS).  
4. ISOLATE ALL PIPING FROM FRAMING WITH INSULATORS.  
5. INSULATE ALL HOT WATER PIPES AND COLD WATER PIPES EXPOSED TO POTENTIAL FREEZING CONDITIONS. USE FIBERGLASS PIPE INSULATION IN CRAWL SPACES AND IN EXPOSED LOCATIONS.  
6. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE THE ACTUAL LAYOUT OF ALL GAS, WATER AND WASTE LINES.  
7. INSULATE ALL PLUMBING WALLS WITH SOUND DEADENING BATTS.  
8. TANKLESS WATER HEATER (GAS) W/ EXPANSION TANK & RECIRCULATING PUMP - TANKLESS WATER HEATER IS A SEALED COMBUSTION DIRECT VENT HIGH EFFICIENCY (90+ % AFUE) UNIT - IT USES OUTSIDE AIR FOR COMBUSTION, NOT AIR INSIDE YOUR HOME. IT HAS (2) PVC PIPES PER MANUF. SPECS. THAT BRING IN COMBUSTION AIR FROM OUTDOORS AND THEN EXHAUSTS THE GASES BACK TO THE OUTDOORS.  
9. PROVIDE THERMAL EXPANSION TANK AT WATER SUPPLY.  
10. SEE FLOOR PLAN FOR LOCATION OF HOSE BIBBS (FROST FREE) WITH BACK FLOW PREVENTION  
11. PROTECT WITH PLASTIC SLEEVES ALL COPPER LINES WHICH HAVE POTENTIAL OF COMING IN CONTACT WITH CONCRETE OR MASONRY.  
12. DIELECTRIC UNIONS SHALL BE REQUIRED ON WATER PIPING OF DISSIMILAR METAL MATERIALS.  
13. ISLAND SINKS SHALL BE LOOP VENTED.  
14. THE AUTO WASHER BOX FOR WASHING MACHINE SHALL HAVE A SINGLE LEVER TYPE HOSE TURN OFF FOR BOTH HOT AND COLD WATER - GLOBE VALVES ARE NOT ACCEPTED.  
15. SOLDER FOR COPPER PIPING SHALL HAVE A MAXIMUM LEAD CONTENT OF .002% (TWO TENTHS OF ONE PERCENT)  
16. VENTS SHALL BE A MINIMUM OF 10'-0" FROM ANY AIR INTAKE.  
17. SEE PLUMBING SPECIFICATIONS DIVISION 15 SECTION 15400.  
18. AT OPENINGS AROUND VENTS, PIPES, WASTE LINES, ETC. IN CEILINGS AND FLOOR PENETRATIONS, PROVIDE AN APPROVED FLAME AND HOT GAS SEALANT.  
19. PROVIDE CODE APPROVED SEDIMENT TRAPS AT GAS FIRED APPLIANCES, EXCLUDING ILLUMINATING FIXTURES, RANGES, CLOTHES DRYERS AND OUTDOOR GRILLS - SEE I.R.C. SECTION G2419.4  
20. ALL PLUMBING WORK SHALL BE TESTED, THEN INSPECTED BY BUILDING OFFICIAL TO ENSURE COMPLIANCE WITH THE REQUIREMENTS OF THIS CODE.  
21. THE PLUMBER SHALL BE FAMILIAR WITH THE PLUMBING REQUIREMENTS OF THE 2018 I.R.C.  
22. WOOD FRAMED STRUCTURAL MEMBERS SHALL NOT BE DRILLED, NOTCHED OR ALTERED IN ANY MANNER EXCEPT ALLOWED BY CODE.

**THERE ARE NO GAS APPLIANCES**

NOTE: DUE TO INDIVIDUAL PREFERENCES, MATERIALS AND METHODS OF INSTALLATION, THIS SHEET IS FOR THE BUILDER AND PLUMBING CONTRACTOR TO LAYOUT AND SIZE ALL REQUIRED WORK AND MATERIAL ACCORDINGLY. THE REQUIRED WORK, MATERIALS, INSTALLTION, AND OTHER

Cost Bidding

DETAILS WILL VARY DEPENDING ON THE TYPE OF INDIVIDUAL PREFERENCES, MATERIALS AND METHODS OF INSTALLATION THAT ARE TO BE USED. THESE CORRESPONDING DETAILS AND SPECIFICATIONS ARE TO BE OBTAINED FROM YOUR BUILDER, OR PLUMBING CONTRACTOR.

SCHMATIC PLUMBING PLAN

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