



# COMMUNITY DEVELOPMENT DEPARTMENT

45175 Ten Mile Road  
Novi, MI 48375  
(248) 347-0415 Phone  
(248) 735-5600 Facsimile  
[www.cityofnovi.org](http://www.cityofnovi.org)

## ZONING BOARD OF APPEALS STAFF REPORT

FOR: City of Novi Zoning Board of Appeals

ZONING BOARD APPEALS DATE: November 14, 2017

REGARDING: 20940 Dunhill Drive, Parcel # 50-22-32-402-013 (PZ17-0048)

BY: Larry Butler, Deputy Director Community Development

### I. GENERAL INFORMATION:

**Applicant**

Compo Builders Inc.

**Variance Type**

Dimensional Variance

**Property Characteristics**

Zoning District:	Single Family Residential
Location:	West of Beck Road and North of Eight Mile Road
Parcel #:	50-22-32-402-013

**Request**

The applicant is requesting a variance from the City of Novi Zoning Ordinance Section 3.1.1 for the proposed increased lot coverage by 1 percent to 26 percent for the building of a Lanai, 25 percent lot coverage allowed by code.

This property is zoned Residential Acreage (R-A).

### II. STAFF COMMENTS:

### III. RECOMMENDATION:

The Zoning Board of Appeals may take one of the following actions:

1. I move that we **grant** the variance in Case No. **PZ17-0048**, sought by \_\_\_\_\_, for \_\_\_\_\_ because Petitioner has shown practical difficulty requiring \_\_\_\_\_.
- (a) Without the variance Petitioner will be unreasonably prevented or limited with respect to use of the property because \_\_\_\_\_.
- (b) The property is unique because \_\_\_\_\_.
- (c) Petitioner did not create the condition because \_\_\_\_\_.

\_\_\_\_\_.

(d) The relief granted will not unreasonably interfere with adjacent or surrounding properties because\_\_\_\_\_.

\_\_\_\_\_.

(e) The relief if consistent with the spirit and intent of the ordinance because

\_\_\_\_\_.

\_\_\_\_\_.

(f) The variance granted is subject to:

1. \_\_\_\_\_.

2. \_\_\_\_\_.

3. \_\_\_\_\_.

4. \_\_\_\_\_.

2. I move that we **deny** the variance in Case No. **PZ17-0048**, sought by

\_\_\_\_\_.

for\_\_\_\_\_ because Petitioner has not shown practical difficulty requiring \_\_\_\_\_.

(a) The circumstances and features of the property including\_\_\_\_\_ are not unique because they exist generally throughout the City.

(b) The circumstances and features of the property relating to the variance request are self-created because\_\_\_\_\_.

\_\_\_\_\_.

(c) The failure to grant relief will result in mere inconvenience or inability to attain higher economic or financial return based on Petitioners statements that \_\_\_\_\_.

(d) The variance would result in interference with the adjacent and surrounding properties by\_\_\_\_\_.

(e) Granting the variance would be inconsistent with the spirit and intent of the ordinance to\_\_\_\_\_.

\_\_\_\_\_.

Should you have any further questions with regards to the matter please feel free to contact me at (248) 347-0417.

Larry Butler  
Deputy Director Community Development  
City of Novi



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## ZONING BOARD OF APPEALS APPLICATION

RECEIVED

SEP 01 2017

CITY OF NOVI  
COMMUNITY DEVELOPMENT

APPLICATION MUST BE FILLED OUT COMPLETELY

<b>I. PROPERTY INFORMATION (Address of subject ZBA Case)</b>				Application Fee: <u>\$250</u>	
PROJECT NAME / SUBDIVISION DUNHILL PARK				Meeting Date: <u>Nov. 14 2017</u>	
ADDRESS 20940 DUNHILL DRIVE		LOT/SIUTE/SPACE # 13		ZBA Case #: <u>PZ 17-0048</u>	
SIDWELL # 50-22-32 -402 -013		May be obtain from Assessing Department (248) 347-0485			
CROSS ROADS OF PROPERTY 8 MILE AND BECK					
IS THE PROPERTY WITHIN A HOMEOWNER'S ASSOCIATION JURISDICTION? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			REQUEST IS FOR: <input checked="" type="checkbox"/> RESIDENTIAL <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> VACANT PROPERTY <input type="checkbox"/> SIGNAGE		
DOES YOUR APPEAL RESULT FROM A NOTICE OF VIOLATION OR CITATION ISSUED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO					
<b>II. APPLICANT INFORMATION</b>					
<b>A. APPLICANT</b>		EMAIL ADDRESS CANDY@COMPOINC.COM		CELL PHONE NO. (248) 640-1488	
NAME DAVID COMPO		TELEPHONE NO. (248) 513-4170			
ORGANIZATION/COMPANY COMPO BUILDERS INC		FAX NO. (248) 513-4173			
ADDRESS 42700 W TEN MILE ROAD		CITY NOVI	STATE MI	ZIP CODE 48375	
<b>B. PROPERTY OWNER</b> <input checked="" type="checkbox"/> CHECK HERE IF APPLICANT IS ALSO THE PROPERTY OWNER					
Identify the person or organization that owns the subject property:		EMAIL ADDRESS		CELL PHONE NO.	
NAME		TELEPHONE NO.			
ORGANIZATION/COMPANY		FAX NO.			
ADDRESS		CITY	STATE	ZIP CODE	
<b>III. ZONING INFORMATION</b>					
<b>A. ZONING DISTRICT</b>					
<input checked="" type="checkbox"/> R-A <input type="checkbox"/> R-1 <input type="checkbox"/> R-2 <input type="checkbox"/> R-3 <input type="checkbox"/> R-4 <input type="checkbox"/> RM-1 <input type="checkbox"/> RM-2 <input type="checkbox"/> MH <input type="checkbox"/> I-1 <input type="checkbox"/> I-2 <input type="checkbox"/> RC <input type="checkbox"/> TC <input type="checkbox"/> TC-1 <input type="checkbox"/> OTHER _____					
<b>B. VARIANCE REQUESTED</b>					
INDICATE ORDINANCE SECTION (S) AND VARIANCE REQUESTED:					
1. Section <u>3.1.1</u>		Variance requested <u>SEE ATTACHED</u>			
2. Section _____		Variance requested _____			
3. Section _____		Variance requested _____			
4. Section _____		Variance requested _____			
<b>IV. FEES AND DRAWINGS</b>					
<b>A. FEES</b>					
<input type="checkbox"/> Single Family Residential (Existing) \$200 <input type="checkbox"/> (With Violation) \$250 <input checked="" type="checkbox"/> Single Family Residential (New) \$250 <input type="checkbox"/> Multiple/Commercial/Industrial \$300 <input type="checkbox"/> (With Violation) \$400 <input type="checkbox"/> Signs \$300 <input type="checkbox"/> (With Violation) \$400 <input type="checkbox"/> House Moves \$300 <input type="checkbox"/> Special Meetings (At discretion of Board) \$600					
<b>B. DRAWINGS    1-COPY &amp; 1 DIGITAL COPY SUBMITTED AS A PDF</b>					
<ul style="list-style-type: none"> <li>• Dimensioned Drawings and Plans</li> <li>• Site/Plot Plan</li> <li>• Existing or proposed buildings or addition on the property</li> <li>• Number &amp; location of all on-site parking, if applicable</li> </ul>			<ul style="list-style-type: none"> <li>• Existing &amp; proposed distance to adjacent property lines</li> <li>• Location of existing &amp; proposed signs, if applicable</li> <li>• Floor plans &amp; elevations</li> <li>• Any other information relevant to the Variance application</li> </ul>		

**ZONING BOARD OF APPEALS APPLICATION ADDITIONAL INFORMATION**

**DUNHILL PARK  
20940 DUNHILL DRIVE, NOVI  
SIDWELL# 50-22-32-402-013**

**APPLICANT  
COMPO BUILDERS INC  
42700 W TEN MILE ROAD  
NOVI, MI 48375**

**III. ZONING INFORMATION**

**B. VARIANCE REQUESTED**

**1. SECTION 3.1.1**

**VARIANCE REQUESTED: INCREASE LOT COVERAGE BY 1% TO 26% TO ACCOMMODATE  
BUILDING A LANAI, CURRENT ORDINANCE ALLOWS FOR 25% LOT COVERAGE**



# ZONING BOARD OF APPEALS APPLICATION

## V. VARIANCE

### A. VARIANCE (S) REQUESTED

DIMENSIONAL     USE     SIGN

There is a five-(5) hold period before work/action can be taken on variance approvals.

### B. SIGN CASES (ONLY)

Your signature on this application indicates that you agree to install a **Mock-Up Sign ten-(10) days** before the schedule ZBA meeting. Failure to install a mock-up sign may result in your case not being heard by the Board, postponed to the next schedule ZBA meeting, or cancelled. A mock-up sign is **NOT** to be actual sign. Upon approval, the mock-up sign must be removed within five-(5) days of the meeting. If the case is denied, the applicant is responsible for all costs involved in the removal of the mock-up or actual sign (if erected under violation) within five-(5) days of the meeting.

### C. ORDINANCE

#### City of Novi Ordinance, Section 3107 – Miscellaneous

No order of the Board permitting the erection of a building shall be valid for a period longer than one-(1) year, unless a building permit for such erection or alteration is obtained within such period and such erection or alteration is started and proceeds to completion in accordance with the terms of such permit.

No order of the Board permitting a use of a building or premises shall be valid for a period longer than one-hundred and eighty-(180) days unless such use is establish within such a period; provided, however, where such use permitted is dependent upon the erection or alteration or a building such order shall continue in force and effect if a building permit for such erection or alteration is obtained within one-(1) year and such erection or alteration is started and proceeds to completion in accordance with the terms of such permit.

### D. APPEAL THE DETERMINATION OF THE BUILDING OFFICIAL

PLEASE TAKE NOTICE:

The undersigned hereby appeals the determination of the Building Official / Inspector or Ordinance made

CONSTRUCT NEW HOME/BUILDING     ADDITION TO EXISTING HOME/BUILDING     SIGNAGE

ACCESSORY BUILDING     USE     OTHER \_\_\_\_\_

## VI. APPLICANT & PROPERTY SIGNATURES

### A. APPLICANT

Applicant Signature

9/1/17  
Date

### B. PROPERTY OWNER

**If the applicant is not the owner, the property owner must read and sign below:**

The undersigned affirms and acknowledges that he, she or they are the owner(s) of the property described in this application, and is/are aware of the contents of this application and related enclosures.

Property Owner Signature

Date

## VII. FOR OFFICIAL USE ONLY

### DECISION ON APPEAL:

GRANTED

DENIED

The Building Inspector is hereby directed to issue a permit to the Applicant upon the following and conditions:

Chairperson, Zoning Board of Appeals

Date



**Community Development Department**  
45175 Ten Mile Road  
Novi, MI 48375  
(248) 347-0415 Phone  
(248) 735-5600 Facsimile  
www.cityofnovi.org

## REVIEW STANDARDS DIMENSIONAL VARIANCE

The Zoning Board of Appeals (ZBA) will review the application package and determine if the proposed Dimensional Variance meets the required standards for approval. In the space below, and on additional paper if necessary, explain how the proposed project meets each of the following standards. (Increased costs associated with complying with the Zoning Ordinance will not be considered a basis for granting a Dimensional Variance.)

### Standard #1. Circumstances or Physical Conditions.

Explain the circumstances or physical conditions that apply to the property that do not apply generally to other properties in the same zoning district or in the general vicinity. Circumstances or physical conditions may include:

- a. **Shape of Lot.** Exceptional narrowness, shallowness or shape of a specific property in existence on the effective date of the Zoning Ordinance or amendment.  
 Not Applicable     Applicable    If applicable, describe below:

THIS LOT ON SMALLER END OF TOTAL # AND BUYER REQUESTS POOR OVER PATIO AREA (LANAI) WHICH IS ONLY 1% IN EXCESS OF REQUIRED 25% LOT COVERAGE  
**and/or**

- b. **Environmental Conditions.** Exceptional topographic or environmental conditions or other extraordinary situations on the land, building or structure.  
 Not Applicable     Applicable    If applicable, describe below:

THIS LOT ABUTS OPEN SPACE AND THE EXACT SAME COVERED LANAI, IE SEPARATED FROM HOME BY 10' AND STAND ALONE IN THE REAR YARD, THIS WOULD BE ALLOWED, THIS ORDINANCE  
**and/or** IS VERY OUT DATED.

- c. **Abutting Property.** The use or development of the property immediately adjacent to the subject property would prohibit the literal enforcement of the requirements of the Zoning Ordinance or would involve significant practical difficulties.  
 Not Applicable     Applicable    If applicable, describe below:

IF THIS LOT WOULD HAVE PROJECTED 1' INTO REAR OPEN SPACE SUBSTANTIAL ALLEGE, THIS WOULD NOT BE AN ISSUE. THERE IS OVER 1/4 ACRE OF OPEN SPACE PER LOT IN THIS COMMUNITY.



## Standard #2. Not Self-Created.

Describe the immediate practical difficulty causing the need for the Dimensional Variance, that the need for the requested variance is not the result of actions of the property owner or previous property owners (i.e., is not self-created).

LOT SQUARE FOOTAGE AND MINIMUM HOME REQUIRED  
SQUARE FOOTAGE OF 2850 + 3 CAR GARAGE AND SMALL FRONT  
PORCH WOULD NOT ALLOW LANAI UNLESS SEPERATED FROM HOME

## Standard #3. Strict Compliance.

Explain how the Dimensional Variance in strict compliance with regulations governing area, setback, frontage, height, bulk, density or other dimensional requirements will unreasonably prevent the property owner from using the property for a permitted purpose, or will render conformity with those regulations unnecessarily burdensome.

A DETACHED LANAI WOULD NOT LOOK CONTIGIOUS, WOULD  
BE AN EYESORE AND BE DANGEROUS TO TRENCH POWER  
UNDERGROUND TO THIS DETACHED STRUCTURE. AS THIS IS ONLY  
1%, THIS REQUEST IS MINIMAL.

## Standard #4. Minimum Variance Necessary.

Explain how the Dimensional Variance requested is the minimum variance necessary to do substantial justice to the applicant as well as to other property owners in the district.

- ① THE LOOK IS IMPROVED
- ② A COVERED LANAI IS HIGHLY REGARDED IN BARRIER FREE RANCHES LIKE THIS
- ③ OTHER OWNERS WILL APPRECIATE THE IMPROVEMENT
- ④ THIS HAS FULL SUPPORT BY THE DEVELOPER & MAJOR.

## Standard #5. Adverse Impact on Surrounding Area.

Explain how the Dimensional Variance will not cause an adverse impact on surrounding property, property values, or the use and enjoyment of property in the neighborhood or zoning district.

SEE ABOVE #4 - SAME PERSONS PLUS  
BARRIER FREE RANCHES WILL CONTINUE TO BE IN HIGH DEMAND  
AS OUR AGING POPULATION DOWNSIZES.

# Hunter Pasteur

## H O M E S

August 30, 2017

City of Novi  
45175 West 10 Mile Road  
Novi, MI 48375

RE: Lot 13 Dunhill Park  
Lot coverage request

(248) 539-5511

32300 Northwestern Hwy.  
Suite 125  
Farmington Hills, MI 48334

To Whom it may concern,

This letter is to inform the Novi ZBA and all members, officers and inspectors that as the owner and developer of the Dunhill Park Development, I encourage and support the requested increased lot coverage for Compo Builders, Inc. who are building on Lot 13 to allow a roof over the patio area behind the approved ranch home for that lot. As the patio is already approved for this home on a foundation, we encourage our buyers to have a covered lanai to enjoy the beautiful open spaces and park areas that we have incorporated into our new development. We also understand that the request reflects only a 1% increase in lot coverage and if the raised patio were detached from the home, it would already be approved.

If there are any further questions regarding this request or our support, please contact me at 248-539-5311 or write me at [randy@hunterpasteurhomes.com](mailto:randy@hunterpasteurhomes.com)

Respectfully,



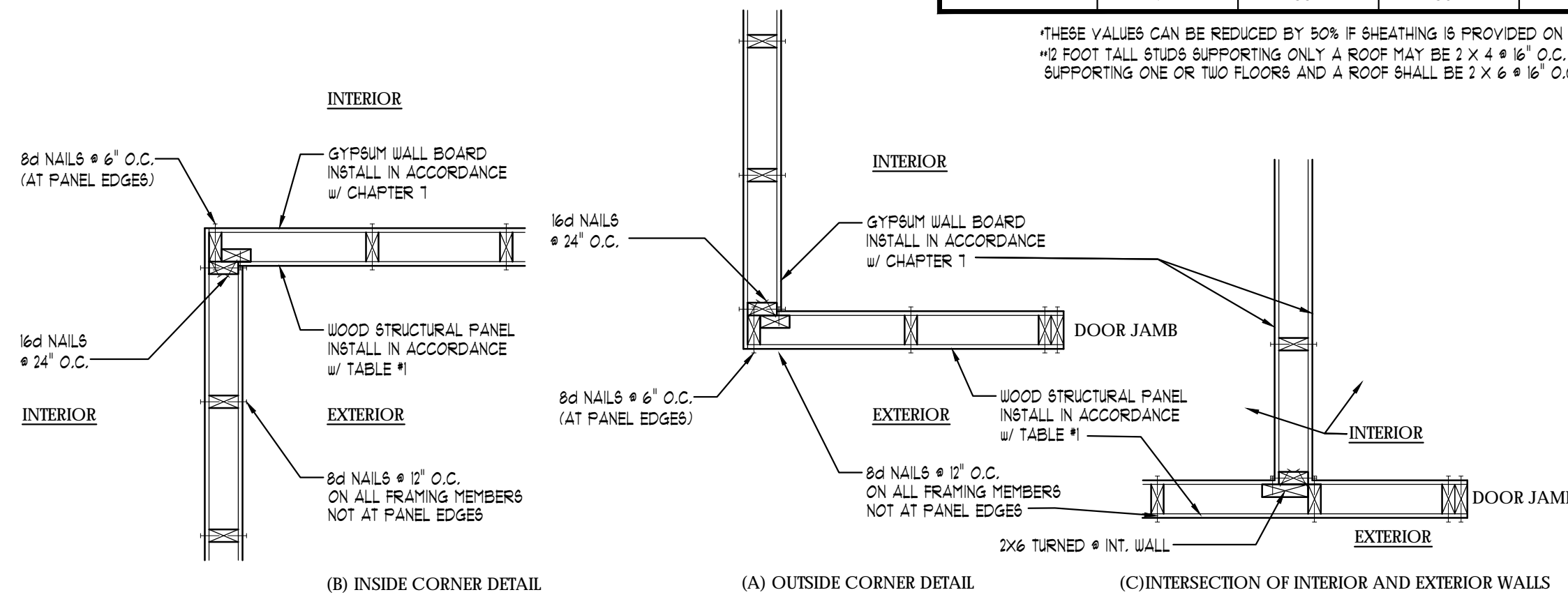
Randy Wertheimer  
Hunter Pasteur Homes, Inc.  
President





LENGTH REQUIREMENTS FOR BRACED WALL PANELS IN A CONTINUOUSLY SHEATHED WALL TABLE #1				
LENGTH OF BRACED WALL PANEL (INCHES)				MAXIMUM OPENING HEIGHT NEXT TO BRACED WALL PANEL (% OF WALL HEIGHT)
8-FOOT WALL	9-FOOT WALL	10-FOOT WALL	12-FOOT WALL**	
48"	54"	60"	72"	100%
32"	36"	40"	48"	85%
24"	27"	30"	36"	65%

\*THESE VALUES CAN BE REDUCED BY 50% IF SHEATHING IS PROVIDED ON INTERIOR AND EXTERIOR  
\*\*2 FOOT TALL STUDS SUPPORTING ONLY A ROOF MAY BE 2' X 4' @ 16" O.C. 2 FOOT TALL STUDS SUPPORTING ONE OR TWO FLOORS AND A ROOF SHALL BE 2' X 6' @ 16" O.C.



### WALL BRACING DETAIL

NO SCALE

## GENERAL NOTES

### WOOD TRUSS SPECIFICATIONS

- Designs shall conform with the latest versions of (NDS), "National Design Specification for Wood Construction" by the American Forest & Paper Association, and Design Standard for Metal Plate Connected Wood Truss Construction by the American Institute of Steel Construction, Inc. (AISC) and the local code jurisdiction.
- Trusses shall be spaced as indicated on the plans unless the designer determines that different spacing is required to meet deflection requirements.
- Maximum deflection of floor trusses shall be limited to L/360 for total load and L/480 for live load. Maximum deflection of roof trusses shall be limited to L/240 for total load and L/360 for live load, u.n.c.
- Adequate bracing shall be built into floor and parallel chord roof trusses to compensate for normal dead load deflection.
- Design loads:

### FLOOR JOIST LOADING CRITERIA

FIRST FLOOR LOADING:  
LIVE LOAD 40 P.S.F.  
DEAD LOAD 10 P.S.F.  
TOTAL LOAD 50 P.S.F.  
LIVE LOAD DEFLECTION L/480  
TOTAL LOAD DEFLECTION L/240

SECOND FLOOR LOADING:  
LIVE LOAD 40 P.S.F.  
DEAD LOAD 10 P.S.F.  
TOTAL LOAD 50 P.S.F.  
LIVE LOAD DEFLECTION L/480  
TOTAL LOAD DEFLECTION L/240

FLOOR W/CERAMIC TILE/MARBLE:  
LIVE LOAD 40 P.S.F.  
DEAD LOAD 25 P.S.F.  
TOTAL LOAD 65 P.S.F.  
LIVE LOAD DEFLECTION L/360  
TOTAL LOAD DEFLECTION L/240

### EXT. DECK JOIST LOADING CRITERIA

DECK LOADING:  
LIVE LOAD 30 P.S.F.  
DEAD LOAD 10 P.S.F.  
TOTAL LOAD 40 P.S.F.  
LIVE LOAD DEFLECTION L/360  
TOTAL LOAD DEFLECTION L/240

ROOF TRUSS LOADING CRITERIA  
TOP CHORD LIVE LOAD 20 P.S.F.  
DEAD LOAD 1 P.S.F.  
BOT. CHORD LIVE LOAD 10 P.S.F.  
(UNINHABITABLE ATTICS W/OUT STORAGE)  
LIVE LOAD 20 P.S.F.  
(UNINHABITABLE ATTICS WITH STORAGE)

WIND LOAD 30 MPH OR AS REQUIRED BY CODE

\* A 15% increase on allowable stresses for short term loading is allowed. Drift loading shall be accounted for per the current "Michigan Residential Code" requirements.  
\*\* Add additional attic storage live loads per the current "Michigan Residential Code" requirements.  
\*\*\* Tile, marble, or other special features shall be designed using the appropriate dead loads and deflection limitations. Partition loads shall also be considered where appropriate.

### HANDLING AND ERECTION SPECIFICATIONS

- Trusses are to be handled with particular care during fabrication, bundling, loading, delivery, unloading and installation in order to avoid damage and weakening of the trusses.
- Temporary and permanent bracing for holding the trusses in a straight and plumb position is always required and shall be designed and installed by the erecting contractor. Temporary bracing during installation includes cross bracing between the trusses to prevent toppling or "doming" of the trusses.
- Permanent bracing shall be installed in accordance with the latest of the "National Design Standard", as published by the American Forest & Paper Association and N.D.S.-9 and D.S.B.-95 as published by the truss plate institute. Permanent bracing consists of lateral and diagonal bracing not to exceed spacing requirements of the truss fabricator. Top chords of trusses must be continuously braced by roof sheathing unless otherwise noted on the truss shop drawings. Bottom chords must be braced at intervals not to exceed 10' o.c. or as noted on the truss fabricator's drawings.
- Construction loads greater than the design loads of the trusses shall not be applied to the trusses at any time.
- No loads shall be applied to the truss until all fastening and required bracing is installed.
- The supervision of the truss erecting shall be under the direct control of persons experienced in the installation and proper bracing of wood trusses.
- Field modification or cutting of pre-engineered roof trusses is strictly prohibited without expressed prior written consent and details from a licensed professional structural engineer experienced in wood truss design and modifications.

### SOIL REQUIREMENTS & EARTH WORK AND CONCRETE

- All top soil, organic and vegetative material should be removed prior to construction. Any required fill shall be clean, granular material compacted to at least 95% of maximum dry density as determined by ASTM D-1557.
- Foundations bearing on existing soils have been designed for a minimum allowable soil bearing capacity of 3000 psf, u.n.c.
- Notify the engineer/architect if the allowable soil bearing capacity is less than 3000 psf so that the foundations can be redesigned for the new allowable bearing capacity.

- R311.5.2 HEADROOM  
THE MINIMUM HEADROOM IN ALL PARTS OF THE STAIRWAY SHALL NOT BE LESS THAN 6'-8" MEASURED VERTICALLY FROM THE SLOPED PLANE ADJOINING THE TREAD NOSING OR FROM THE FLOOR SURFACE OF THE LANDING OR PLATFORM.
- R311.5.6 HANDRAILS  
HANDRAILS THAT HAVE MINIMUM AND MAXIMUM HEIGHTS OF 34" AND 38" RESPECTIVELY, MEASURED VERTICALLY FROM THE NOSING OF THE TREAD.
- R311.5.3 STAIR TREADS AND RISERS  
1/2" RISERS W/ RISER HEIGHT 4" TO 5" EACH WITH A TREAD DEPTH OF 10.00" EACH NOSE TO NOSE W/ A NOSE OVERHANG OF 3/8" TO 1/2". THE GREATEST RISER HEIGHT SHALL NOT EXCEED THE SHORTEST BY 3/8". LIKEWISE THE SHORTEST RUN SHALL NOT EXCEED THE GREATEST BY 3/8".
- TYPICAL STRINGERS  
DOUBLE 2X2 MINIMUM STRINGERS AT ENDS AND ONE (1) STRINGER AT CENTER

### STRUCTURAL STEEL SPECIFICATIONS

- Structural steel shapes, plates, bars, etc. are to be ASTM A-36 (unless noted other wise) designed and constructed per the 1993 AISC "Specifications For The Design, Fabrication, and Erection Of Steel For Buildings", and the latest edition of the AISC "Manual Of Steel Construction".
- Steel columns shall be ASTM A-501, Fy36 KSI. Structural tubing shall be ASTM A500, grade B, Fy46 KSI.
- Welds shall conform with the latest AWS D11 "Specifications For Welding In Building Construction", And shall utilize E70XX electrodes unless noted otherwise.
- Bolted connections shall utilize ASTM A-305 bolts tightened to a " snug fit" condition (unless noted otherwise).

### REINFORCING STEEL SPECIFICATIONS

- Reinforcing bars, couels and ties shall conform to ASTM-615 grade 60 requirements and shall be free of rust, dirt, and mud.
- Welded wire fabric shall conform to ASTM A-85 and be positioned at the mid height of slabs U.N.O.
- Reinforcing shall be placed and securely tied in place sufficiently ahead of placing of concrete to allow inspection and correction, if necessary without delaying the concrete placement.
- Extend reinforcing bars a minimum of 36" around corners and lap bars at splices a minimum of 24" U.N.O.
- Welding of reinforcing steel is not allowed.

### STAIRWAYS AND HANDRAILS

R311.1.1 Width:  
Stairways shall not be less than 36 inches (914 mm) in clear width at all points above the permitted handrail height and below the required headroom height. Handrails shall not project more than 4.5 inches (114 mm) on either side of the stairway and the minimum clear width of the stairway at and below the handrail height, including treads and landings, shall not be less than 3'-0" (914 mm) where a handrail is installed on one side and 21 inches (533 mm) where handrails are provided on both sides. The width of spiral stairways shall be in accordance with Section R311.9.1. Exception: The width of spiral stairways shall be in accordance with Section R311.9.1.

R311.1.1 Handrails:  
Handrails shall be provided on at least one side of each continuous run of treads or flights with four or more risers.

R311.1.1 Height:  
Handrail height, measured vertically from the sloped plane adjoining the tread nosing, or finish surface of ramp slope, shall not be less than 34 inches (864 mm) and not more than 38 inches (965 mm).

- Exceptions:
- The use of a volute, turnout or starting easing shall be allowed over the lowest tread.
  - When handrail fittings or bendings are used to provide continuous transition between flights, the transition from handrail to guardrail, or used at the start of a flight, the handrail height at the fittings or bendings shall be permitted to exceed the maximum height.

### SMOKE ALARMS

- R314.3 Smoke Alarms  
Smoke alarms shall be installed in the following locations:
- In each sleeping room.
  - Outside each separate sleeping area in the immediate vicinity of the bedrooms.
  - On each additional story of the dwelling, including basements and habitable attics but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

When more than one smoke alarm is required to be installed within an individual dwelling unit the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit.

### CARBON MONOXIDE DETECTOR

A Carbon monoxide device shall be located in the vicinity of the bedrooms, which may include 1 device capable of detecting carbon monoxide near all adjacent bedrooms, in areas within the dwelling adjacent to an attached garage, and in areas adjacent to any fuel-burning appliances. Carbon Monoxide Detectors shall not be placed within fifteen feet of fuel-burning heating or cooking appliances such as gas stoves, furnaces, or fireplaces, or in or near very humid areas such as bathrooms.

### FLASHING AND WEEPHOLES

R703.1.5 Flashing:  
Flashing shall be located beneath the first course of masonry above finished ground level above the foundation wall or slab and at other points of support, including structural floors, shell angles and lintels when masonry veneers are designed in accordance with Section R703.1. See Section R703.8 for additional requirements.

R703.1.6 Weepholes:  
Weepholes shall be provided in the outside wythe of masonry walls at a maximum spacing of 33 inches (838 mm) on center. Weepholes shall not be less than 3/16 inch (5 mm) in diameter. Weepholes shall be located immediately above the flashing.

R703.8 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 ASTM A117. The Flashing shall extend to the surface of the exterior wall finish. Approved corrosion-resistant flashings shall be installed at all of the following locations:

- 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-resistant barrier for subsequent drainage.
- At the intersection of chimneys or other masonry construction with frame or stucco walls, with projecting lips on both sides under stucco copings.
- Under and at the ends of masonry, wood or metal copings and sills.
- Continuously above all projecting wood trim.
- Where exterior porches, decks or stairs attach to a wall or floor assembly of wood-frame construction.
- At wall and roof intersections. I.T. At built-in gutters.

### FIREPLACES

R1001.0 Hearth extension dimensions.  
Hearth extensions shall extend at least 16 inches (406 mm) in front of and at least 8 inches (203 mm) beyond each side of the fireplace opening. 1 or larger, 1 Where the fireplace opening is 6 square feet (0.6 m<sup>2</sup>) the hearth extension shall extend at least 20 inches (508 mm) in front of and at least 12 inches (305 mm) beyond each side of the fireplace opening.

### EGRESS WINDOW REQUIREMENTS

- Min. net clear opening of 5.7 sq. ft. (second floor bedrooms)
- Min. net clear opening of 5.0 sq. ft. (first floor bedrooms only)
- Min. net clear opening ht. of 24 inches
- Min. net clear opening width of 20 inches
- Max. sill ht. above finish floor of 44 inches

### AREAS THAT REQUIRE SAFETY GLAZING

R308.4 Hazardous locations.  
The locations specified in Sections R308.4.1 through R308.4.7 shall be considered to be specific hazardous for the purposes of glazing.

R308.4.1 Glazing in doors.  
Glazing in fixed and operable panels of swinging, sliding and bifold doors considered to be a hazardous location.

- Exceptions:
- Glazed openings of a size through which a 3-inch diameter (76 mm) sphere is unable to pass.
  - Decorative glazing.

R308.4.2 Glazing adjacent to doors.  
Glazing in an individual fixed or operable panel adjacent to a door shall be considered to be a hazardous location where the bottom exposed edge of the glazing is less than 60 inches (1524 mm) above the floor or walking surface and it meets either of the following conditions:

- Where the glazing is within 24 inches (610 mm) of either side of the door in the plane of the door in a closed position.
- Where the glazing is on a wall perpendicular to the plane of the door in a closed position and within 24 inches (610 mm) of the hinge side of an inswinging door.

- Exceptions:
- Decorative glazing.
  - Where there is an intervening wall or other permanent barrier between the door and the glazing.
  - Where access through the door is to a closet or storage area 3 feet (914 mm) or less in depth. Glazing in this application shall comply with Section R308.4.3.
  - Glazing that is adjacent to the fixed panel of patio doors.

R308.4.3 Glazing in windows.  
Glazing in an individual fixed or operable panel that meets all of the following conditions shall be considered to be a hazardous location:

- The exposed area of an individual pane is larger than 9 square feet (0.836 m<sup>2</sup>).
- The bottom edge of the glazing is less than 18 inches (457 mm) above the floor.
- The top edge of the glazing is more than 36 inches (914 mm) above the floor, and
- One or more walking surfaces are within 36 inches (914 mm), measured horizontally and in a straight line, of the glazing.

- Exceptions:
- Decorative glazing.
  - When a horizontal rail is installed on the accessible side(s) of the glazing 34 to 38 inches (864 to 965) above the walking surface. The rail shall be capable of withstanding a horizontal load of 50 pounds per linear foot (730 N/m) without contacting the glass and be a minimum of 1-1/2 inches (38 mm) in cross sectional height.
  - Outboard panes in insulating glass units and other multiple glazed panes when the bottom edge of the glass is 25 feet (7620 mm) or more above grade, a roof, walking surfaces, or other horizontal (within 45 degrees (0.78 rad.) of horizontal) surface adjacent to the glass exterior.

R308.4.4 Glazing in guards and railings.  
Glazing in guards and railings, including structural baluster panels and nonstructural in-fill panels, regardless of area or height above a walking surface shall be considered to be a hazardous location.

R308.4.5 Glazing and wet surfaces.  
Glazing in walls, enclosures or fences containing or facing hot tubs, spas, whirlpools, saunas, steam rooms, bathrooms, showers and indoor swimming pools where the bottom exposed edge of the glazing is less than 60 inches (1524 mm) measured vertically above any standing or walking surface shall be considered to be a hazardous location. This shall apply to single glazing and each pane in multiple glazing.

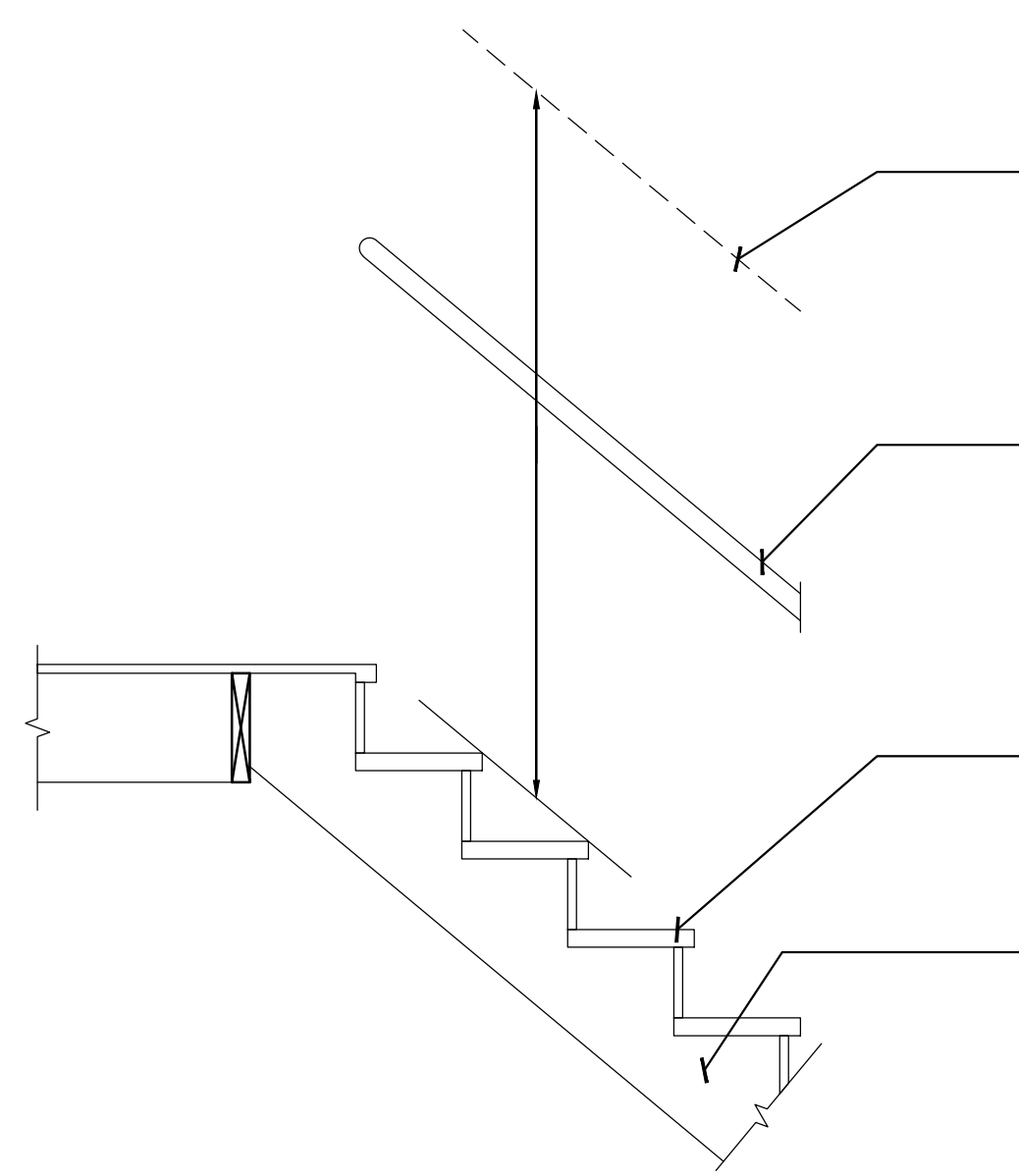
Exceptions:  
Glazing that is more than 60 inches (1524 mm), measured horizontally and in a straight line, from the user's edge of a bathtub, hot tub, spa, whirlpool or swimming pool or from the edge of a shower, sauna or steam room.

R308.4.6 Glazing adjacent to stairs and ramps.  
Glazing where the bottom exposed edge of the glazing is less than 36 inches (914 mm) above the plane of the adjacent walking surface of stairways, landings between flights of stairs and ramps shall be considered to be a hazardous location.

- Exceptions:
- Where a rail is installed on the accessible side(s) of the glazing 34 to 38 inches (864 to 965 mm) above the walking surface. The rail shall be capable of withstanding a horizontal load of 50 pounds per linear foot (730 N/m) without contacting the glass and have a cross-sectional height of not less than 1 1/2 inches (38 mm).
  - Glazing 36 inches (914 mm) or more measured horizontally from the walking surface.

R308.4.7 Glazing adjacent to the bottom stair landing.  
Glazing adjacent to the landing at the bottom of a stairway where the glazing is less than 36 inches (914 mm) above the landing and within a 60-inch (1524 mm) horizontal arc less than 180 degrees from the bottom tread nosing shall be considered to be a hazardous location.

Exception:  
The glazing is protected by a guard complying with Section R312 and the plane of the glass is more than 18 inches (457 mm) from the ground.



R311.5.2 HEADROOM  
THE MINIMUM HEADROOM IN ALL PARTS OF THE STAIRWAY SHALL NOT BE LESS THAN 6'-8" MEASURED VERTICALLY FROM THE SLOPED PLANE ADJOINING THE TREAD NOSING OR FROM THE FLOOR SURFACE OF THE LANDING OR PLATFORM.

R311.5.6 HANDRAILS  
HANDRAILS THAT HAVE MINIMUM AND MAXIMUM HEIGHTS OF 34" AND 38" RESPECTIVELY, MEASURED VERTICALLY FROM THE NOSING OF THE TREAD.

R311.5.3 STAIR TREADS AND RISERS  
1/2" RISERS W/ RISER HEIGHT 4" TO 5" EACH WITH A TREAD DEPTH OF 10.00" EACH NOSE TO NOSE W/ A NOSE OVERHANG OF 3/8" TO 1/2". THE GREATEST RISER HEIGHT SHALL NOT EXCEED THE SHORTEST BY 3/8". LIKEWISE THE SHORTEST RUN SHALL NOT EXCEED THE GREATEST BY 3/8".

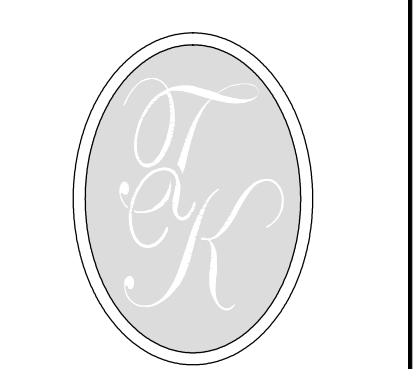
TYPICAL STRINGERS  
DOUBLE 2X2 MINIMUM STRINGERS AT ENDS AND ONE (1) STRINGER AT CENTER

### TYPICAL STAIR DETAIL

### BASEMENT TO FIRST FLOOR

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

FINAL APPROVED  
PLANS XX-XX-XX



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CALL METRO DET 480-487-7271 24 HRS PRIOR TO ANY EXCAVATION.  
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RANCOUR RANCH

JOB No. WO 1350-17  
DRAWN: WABK  
CHECKED: WRB  
REVIEW 7-5-17  
FINAL: 7-7-17  
REVISION 7-11-17  
REVISION 8-8-17

SCALE:  
PER PLAN

SHEET #  
GN1

**TABLE R404.1.2(1)**  
MINIMUM HORIZONTAL REINFORCEMENT FOR CONCRETE BASEMENT WALLS<sup>a,b</sup>

MAXIMUM UNSUPPORTED HEIGHT OF BASEMENT WALL (feet)	LOCATION OF HORIZONTAL REINFORCEMENT
≤ 8	One N. 4 bar within 12 inches of the top of the wall story and one No. 4 bar near mid-height of the wall story
> 8	One N. 4 bar within 12 inches of the top of the wall story and one No. 4 bar near third points in the wall story

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square inch = 6.895 kPa.  
 a. Horizontal reinforcement requirements are for reinforcing bars with a minimum yield strength of 40,000 psi and concrete with a minimum concrete compressive strength of 2,500 psi.  
 b. See Section R404.1.2.2 for minimum reinforcement required for foundation walls supporting above-grade concrete walls.

**TABLE R404.1.2(8)**  
MINIMUM VERTICAL REINFORCEMENT FOR 6-, 8-, 10-, 12-INCH NOMINAL FLAT CONCRETE BASEMENT WALLS<sup>a,b,c,d,e,f,g,h,i,j,k,l,m,n</sup>

MAXIMUM WALL HEIGHT (feet)	MAXIMUM UNBALANCED BACKFILL HEIGHT <sup>a</sup> (feet)	MINIMUM VERTICAL REINFORCEMENT - BAR SIZE AND SPACING (INCHES)											
		Soil classes <sup>b</sup> and design lateral soil (psf per foot of depth)											
		GW, GP, SW, SP 30				GM, GC, SM, SM-SC and ML 45				SC, MI, CL and inorganic CI 60			
Minimum nominal wall thickness (inches)													
		6	8	10	12	6	8	10	12	6	8	10	12
5	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
6	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	5	NR	NR	NR	NR	NR	NR	NR	NR	4 @ 35	NR	NR	NR
7	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	5	NR	NR	NR	NR	NR	NR	NR	NR	5 @ 47	NR	NR	NR
8	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	5	NR	NR	NR	NR	NR	NR	NR	NR	5 @ 48	NR	NR	NR
9	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	5	NR	NR	NR	NR	NR	NR	NR	NR	5 @ 47	NR	NR	NR
10	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	5	NR	NR	NR	NR	NR	NR	NR	NR	5 @ 40	NR	NR	NR

Notes: a. Allowable deflection criterion is L/240, where L is the unsupported height of the basement wall in inches. Interpretation is not permitted. b. Where walls will retain 4 feet or more of unbalanced backfill, they shall be laterally supported at the top and bottom before backfilling. Vertical reinforcement shall be located to provide a cover of 1.25 inches measured from the inside face of the wall. The center of the steel shall not vary from the specified location by more than the greater of 10 percent of the wall thickness or 3/8 inch. c. Concrete cover for reinforcement measured from the inside face of the wall shall not be less than 3/4 inch. Concrete cover for reinforcement measured from the outside face of the wall shall not be less than 1 1/4 inches for No. 5 bars and smaller, and not less than 2 inches for larger bars. d. DR means design is required in accordance with the applicable building code, or where there is no code in accordance with ACI 318. e. Concrete shall have a specified compressive strength,  $f_c$ , of not less than 2,500 psi at 28 days, unless a higher strength is required by footnote (i) or (m). f. The minimum thickness is permitted to be reduced 2 inches, provided the minimum specified compressive strength of concrete,  $f_c$ , is 4,000 psi. g. A plain concrete wall with a minimum nominal thickness of 12 inches is permitted, provided minimum specified compressive strength of concrete,  $f_c$ , is 3,500 psi. h. See Table R611.3 for tolerance from nominal thickness permitted for flat walls. i.  $f_c$  is 4,000 psi. j.  $f_c$  is 3,500 psi. k.  $f_c$  is 4,000 psi. l.  $f_c$  is 3,500 psi. m.  $f_c$  is 4,000 psi. n.  $f_c$  is 3,500 psi.

**TABLE R403.1**  
MINIMUM WIDTH OF CONCRETE PRECAST OR MASONRY FOOTINGS (INCHES)

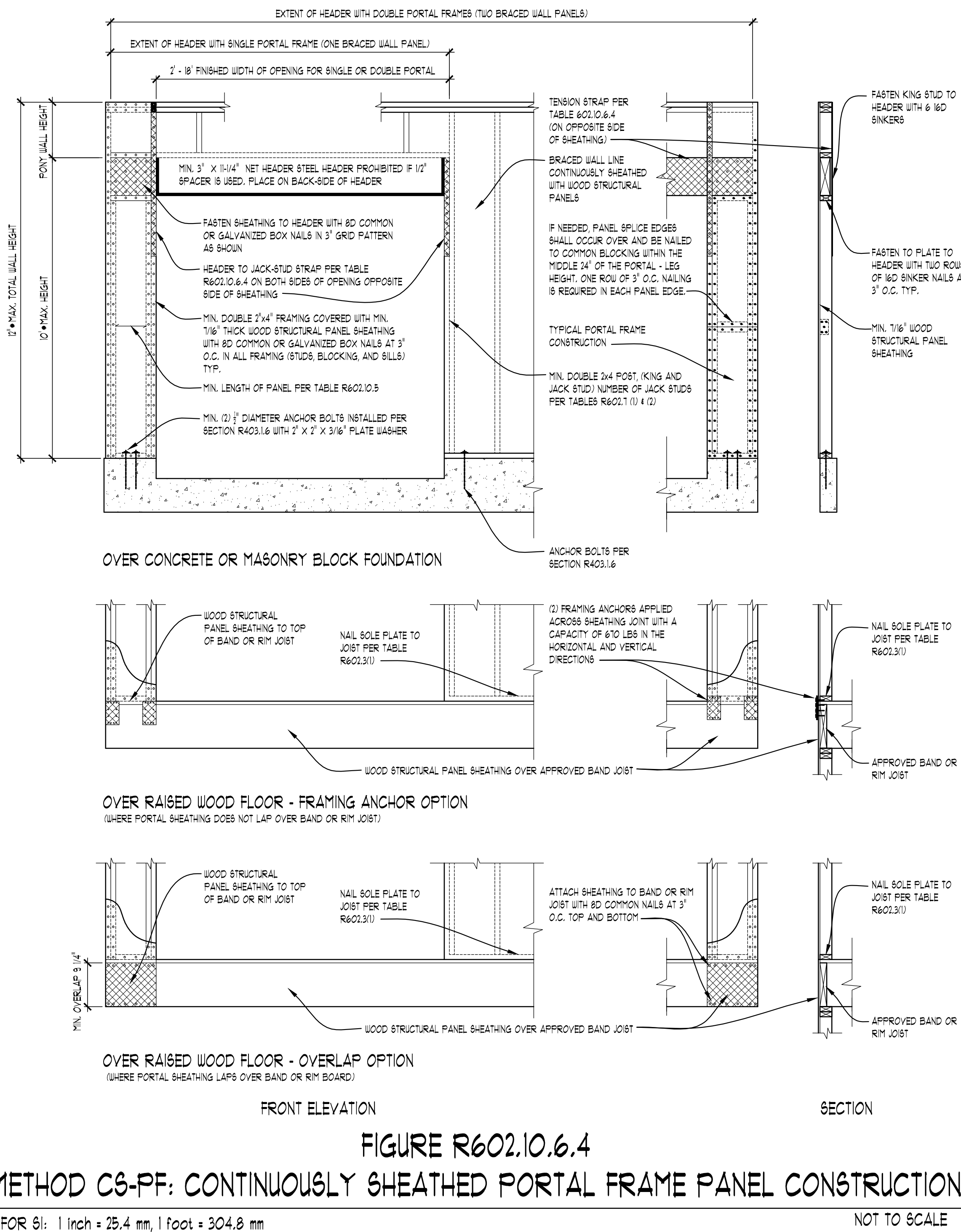
	LOAD BEARING VALUE OF SOIL (PSF)			
	1,500	2,000	3,000	4,000
CONVENTIONAL LIGHT FRAME CONSTRUCTION				
1-STORY	12	12	12	12
2-STORY	15	12	12	12
3-STORY	23	17	12	12
4-INCH BRICK VENEER OVER LIGHT FRAME OR 8-INCH HOLLOW CONCRETE MASONRY				
1-STORY	12	12	12	12
2-STORY	21	16	12	12
3-STORY	32	24	16	12
8-INCH SOLID OR FULLY GROUTED MASONRY				
1-STORY	16	12	12	12
2-STORY	29	21	14	12
3-STORY	42	32	21	16

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square inch = 6.895 kPa.  
 a. Horizontal reinforcement requirements are for reinforcing bars with a minimum yield strength of 40,000 psi and concrete with a minimum concrete compressive strength of 2,500 psi.

**TABLE R602.10.6.4**  
TENSION STRAP CAPACITY FOR RESISTING WIND PRESSURES PERPENDICULAR TO METHODS PFL, PFG AND CS-PF BRACED WALL PANELS

MINIMUM WALL STUD FRAMING NOMINAL SIZE AND GRADE	MAXIMUM PONY WALL HEIGHT (feet)	MAXIMUM TOTAL WALL HEIGHT (feet)	MAXIMUM OPENING WALL HEIGHT (feet)	TENSION STRAP CAPACITY REQUIRED (pounds) <sup>a</sup>					
				Ultimate Design Wind Speed $V_w$ (mph)					
				110	115	130	110	115	130
2 x 4 No. 2 Grade	0	10	18	Exposure B			Exposure C		
				1,000	1,000	1,000	1,000	1,000	1,050
				9	1,000	1,000	1,000	1,000	1,750
				16	1,000	1,025	2,050	2,075	3,950
				18	1,000	1,275	2,375	2,400	2,850
				DR	DR	DR	DR	DR	DR
	1	10	18	Exposure B			Exposure C		
				1,000	1,000	1,475	1,500	1,875	3,125
				9	1,000	1,000	1,475	1,500	3,125
				16	1,775	2,175	3,525	3,550	4,125
				18	2,075	2,500	3,950	3,975	DR
				DR	DR	DR	DR	DR	DR
2 x 6 Stud Grade	2	12	18	Exposure B			Exposure C		
				1,150	1,500	2,850	2,875	3,175	DR
				9	1,150	1,500	2,850	2,875	DR
				16	2,875	3,375	DR	DR	DR
				18	3,425	3,975	DR	DR	DR
				DR	DR	DR	DR	DR	DR
	4	12	18	Exposure B			Exposure C		
				2,275	2,750	DR	DR	DR	DR
				9	2,275	2,750	DR	DR	DR
				12	3,225	3,775	DR	DR	DR
				18	3,225	3,775	DR	DR	DR
				DR	DR	DR	DR	DR	DR

For SI: 1 inch = 25.4 mm, 1 mile per hour = 0.447 m/s.  
 a. DR = Design Required.  
 b. Straps shall be installed in accordance with manufacturer's recommendations.



**TABLE R602.3.1**  
MAXIMUM ALLOWABLE LENGTH OF WOOD STUDS EXPOSED TO WIND SPEEDS OF 100 MPH OR LESS IN SEISMIC DESIGN CATEGORIES A, B, C, AND D1 b,c

HEIGHT (FEET)	ON-CENTER SPACING (INCHES)			
	24	16	12	8
SUPPORTING A ROOF ONLY				
>10	2x4	2x4	2x4	2x4
12	2x6	2x4	2x4	2x4
14	2x6	2x6	2x6	2x4
16	2x6	2x6	2x6	2x4
18	NA a	2x6	2x6	2x6
20	NA a	NA a	2x6	2x6
24	NA a	NA a	NA a	2x6
SUPPORTING ONE FLOOR AND A ROOF				
>10	2x6	2x4	2x4	2x4
12	2x6	2x6	2x6	2x4
14	2x6	2x6	2x6	2x6
16	NA a	2x6	2x6	2x6
18	NA a	2x6	2x6	2x6
20	NA a	NA a	2x6	2x6
24	NA a	NA a	NA a	2x6
SUPPORTING TWO FLOORS AND A ROOF				
>10	2x6	2x6	2x4	2x4
12	2x6	2x6	2x6	2x6
14	2x6	2x6	2x6	2x6
16	NA a	NA a	2x6	2x6
18	NA a	NA a	2x6	2x6
20	NA a	NA a	NA a	2x6
22	NA a	NA a	NA a	NA a
24	NA a	NA a	NA a	NA a

a. Design required.  
 b. Applicability of this table assumes the following: Design load not exceeding 25 psf, but not less than 1310 psf determined by multiplying the ASCE 7-10 tabular base design value by the repetitive use factor, and by the size factor for all species except southern pine. L not less than 1.4 by 100 psi, tributary dimensions for floors and roofs not exceeding 8 feet, maximum span for floors and roofs not exceeding 12 feet, eaves not greater than 2 feet in dimension and exterior sheathing. Where the conditions are not within these parameters, design is required.  
 c. Utility, standard, stud and no. 3 grade lumber of any species are not permitted.

**TABLE R602.3.5**  
SIZE, HEIGHT AND SPACING OF WOOD STUDS<sup>a</sup>

STUD SIZE (inches)	BEARING WALLS				NONBEARING WALLS	
	Laterally unsupported stud height <sup>b</sup> (feet)	Maximum spacing when supporting roof and ceiling only (inches)	Maximum spacing when supporting one floor, roof and ceiling only (inches)	Maximum spacing when supporting two floors, roof and ceiling only (inches)	Laterally unsupported stud height <sup>b</sup> (feet)	Maximum spacing (inches)
2x3 b	-	-	-	-	10	16
2x4	10	24	16	-	24	24
3x4	10	24	24	16	24	24
2x5	10	24	24	-	24	24
2x6	10	24	24	16	24	24

a. Inted heights are distances between points of lateral support perpendicular to the plane of the wall. Increases in unsupported height are permitted where justified by analysis.  
 b. Shall not be used in exterior walls.

**TABLE R703.7.3**  
ALLOWABLE SPANS FOR LINTELS SUPPORTING MASONRY VENEER<sup>a,b,c</sup>

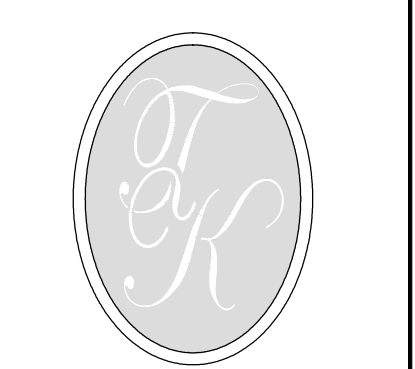
SIZE OF STEEL ANGLE <sup>a,c</sup> (inches)	NO STORY ABOVE	ONE STORY ABOVE	TWO STORIES ABOVE	NO. OF P OR EQUIVALENT REINFORCING BARS <sup>c</sup>
3x3x1/4	6'-0"	4'-6"	3'-0"	1
4x3x1/4	8'-0"	6'-0"	4'-6"	1
5x3x1/4	10'-0"	8'-0"	6'-0"	2
6x3x1/4	14'-0"	12'-0"	7'-0"	2
2-6x3x1/4	20'-0"	9'-6"	9'-6"	4

a. Long leg of angle shall be placed in a vertical position.  
 b. Depth of reinforcing lintels shall not be less than 8 inches and all cells of hollow masonry lintels shall be grouted solid. Reinforcing bars shall extend not less than 8 inches into the support.  
 c. Steel members indicated are adequate typical examples; other steel members meeting structural design requirements may be used.

**TYPICAL CONVENTIONAL ROOF FRAMING**  
 \* RIDGE BEAM SIZE WILL BE EQUAL TO THE RAFTER CUT EDGE \*

RAFTER SPANS	0'-0" - 4'-0"	4'-0" - 8'-0"	8'-0" - 12'-0"	12'-0" - 16'-0"
LUMBER SIZE	2x4	2x6	2x8	2x12

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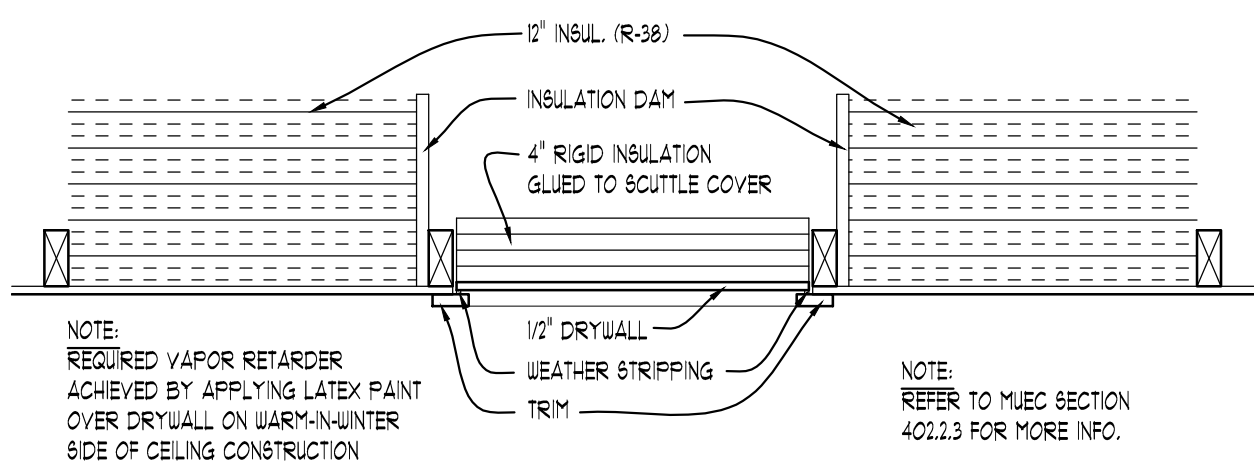
JOB No.	WO 1350-17
DRAWN:	WABK
CHECKED:	WRF
REVIEW	7-5-17
FINAL:	7-7-17
REVISION	7-11-17
REVISION	8-8-17

SCALE:  
 PER PLAN

SHEET #  
 GN2





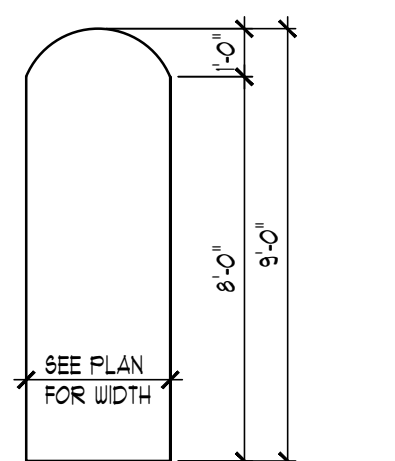


**ATTIC ACCESS DETAIL**

SCALE: 1" = 1'-0"

**PLAN NOTES**

- INTERIOR WALLS:**  
1/2" GYPSUM WALL BOARD ON EACH SIDE OF 2x4 WOOD STUDS @ 16" O.C. 3/16" THICK TYPICAL (UNLESS NOTED OTHERWISE).
- EXTERIOR WALLS:**  
SIDING AND/OR MASONRY WITH AIRSPACE. MOISTURE BARRIER PAPER (HOUSE WRAP) ON 1/8" O.S.B. SHEATHING ON 2x4 WOOD STUDS @ 16" O.C. OR AS NOTED. MIN. R-20 WALL CONSTRUCTION 1/2" GYPSUM WALL BOARD (GLUE & SCREW). WALL TO BE 4" THICK WITH SIDING AND 8" THICK WITH MASONRY (TYPICAL UNLESS NOTED OTHERWISE).
- TRUSSSES TO BEAR ON EXTERIOR WALLS ONLY UNLESS NOTED OTHERWISE.
  - OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH 20-MINUTE FIRE RATED DOORS (OR EQUIVALENT PER 203 MRC SECTION R302.5.1).
  - VENT ALL EXHAUST FANS TO EXTERIOR.
  - WHEN POSSIBLE DIRECT ALL FLUES AND VENTS THAT PENETRATE ROOF BEHIND MAIN RIDGE.
  - INSTALL WATER SUPPLY AND DRAIN BOX (GREY BOX) AT WASHING MACHINE LOCATION.
  - USE MOISTURE RESISTANT DRYWALL AT ALL AREAS SUSCEPTIBLE TO MOISTURE.
  - ALL FIRST FLOOR INTERIOR DOORS TO BE FRAMED 6'-8" TALL. ALL SECOND FLOOR INTERIOR DOORS TO BE FRAMED 6'-9" UNLESS NOTED OTHERWISE. VERIFY W/ BUILDER.
  - PROVIDE GUARDRAIL AT STAIRS DURING CONSTRUCTION.
  - PROVIDE SQUASH BLOCKS UNDER ALL BEARING CONDITIONS.
  - GARAGE WALLS TO BE 2x6 STUDS IF OVER 10'-8" TALL.



**TYP. 9'-0" HIGH ARCH ELEVATION**

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

**NOTE:**  
ALL SMOKE & CARBON MONOXIDE DETECTORS INTERCONNECTED W/ BATTERY BACKUP PER CODE.

**NOTE:**  
DOOR & WINDOW LOCATIONS:  
ALL DOORS & WINDOWS ARE ASSUMED TO BE EITHER IN THE CENTER OF THE WALL MASS OR MIN. 4 INCHES FROM PERPENDICULAR WALL FOR CASING UNLESS NOTED OTHERWISE.

**NOTE:**  
VERIFY DROPPED FLOOR AREAS FOR TILE WITH BUILDER.

**FIREPLACE NOTE**  
ALL FIREPLACE DIMENSIONS & ROUGH OPENINGS TO BE VERIFIED W/ MANUFACTURER SPECS INCLUDING BUT NOT LIMITED TO WIDTH, DEPTH, HEIGHT, CHIMNEY CLEARANCES, ETC. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL SPECS TO CARPENTER PRIOR TO FRAMING.

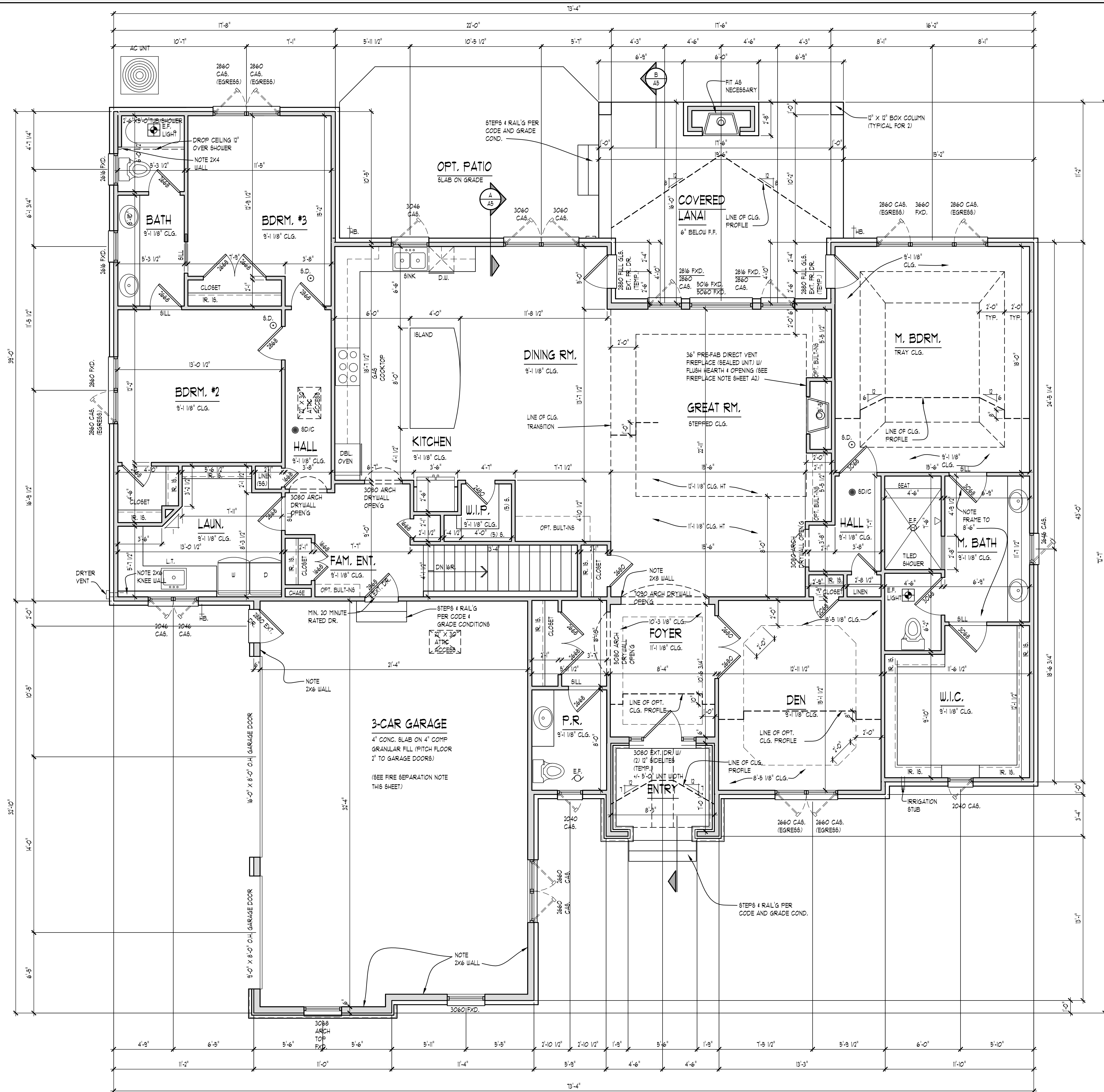
**FIRE SEPARATION NOTE**  
FIRE SEPARATION (R302.6)  
GARAGE SPACE BETWEEN HABITABLE ROOMS SHALL BE SEPARATED FROM ALL HABITABLE ROOMS ABOVE BY NOT LESS THAN 5/8-INCH TYPE X GYPSUM BOARD OR EQUIVALENT. WHERE THE SEPARATION IS A FLOOR-CEILING ASSEMBLY, THE STRUCTURE SUPPORTING THE SEPARATION SHALL ALSO BE PROTECTED BY NOT LESS THAN 1/2-INCH GYPSUM BOARD OR EQUIVALENT. ALL OTHER GARAGE SPACE SHALL BE SEPARATED FROM THE RESIDENCE AND ITS ATTIC AREA BY NOT LESS THAN 1/2-INCH GYPSUM BOARD APPLIED TO THE GARAGE SIDE. DROP CLG. UNDER FLR. ABV. (ENCLOSE MECHANICAL AND STRUCTURAL ELEMENTS) VERIFY W/ BLDG.

**NOTE:**  
PROVIDE MIN. (2) 2 X 4 HEADER AT ALL INTERIOR & EXTERIOR DOOR & WINDOW OPENINGS (UNLESS NOTED OTHERWISE).

**NOTE:**  
PROVIDE MIN. (1) JACK STUD & (1) KING STUD AT EACH END OF ALL HEADERS (UNLESS NOTED OTHERWISE).

**NOTE:**  
PROVIDE MIN. (1) JOIST OR LADDER FRAMING UNDER ALL UPPER FLOOR PARALLEL PARTITIONS.

**NOTE:**  
GROUT ALL CONCRETE BLOCK CORES SOLID THAT SUPPORT POINT LOADS FROM ABOVE (TYPICAL).

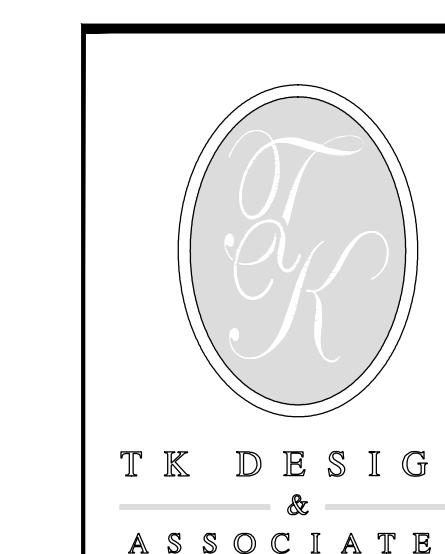


**FIRST FLOOR PLAN**

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

**FINAL APPROVED  
PLANS XX-XX-XX**

**AREA SUMMARY:**  
OVERALL FLOOR AREA: 2850 S.F.  
FIRST FLOOR: 2850 S.F.  
TOTAL AREA: 2850 S.F.



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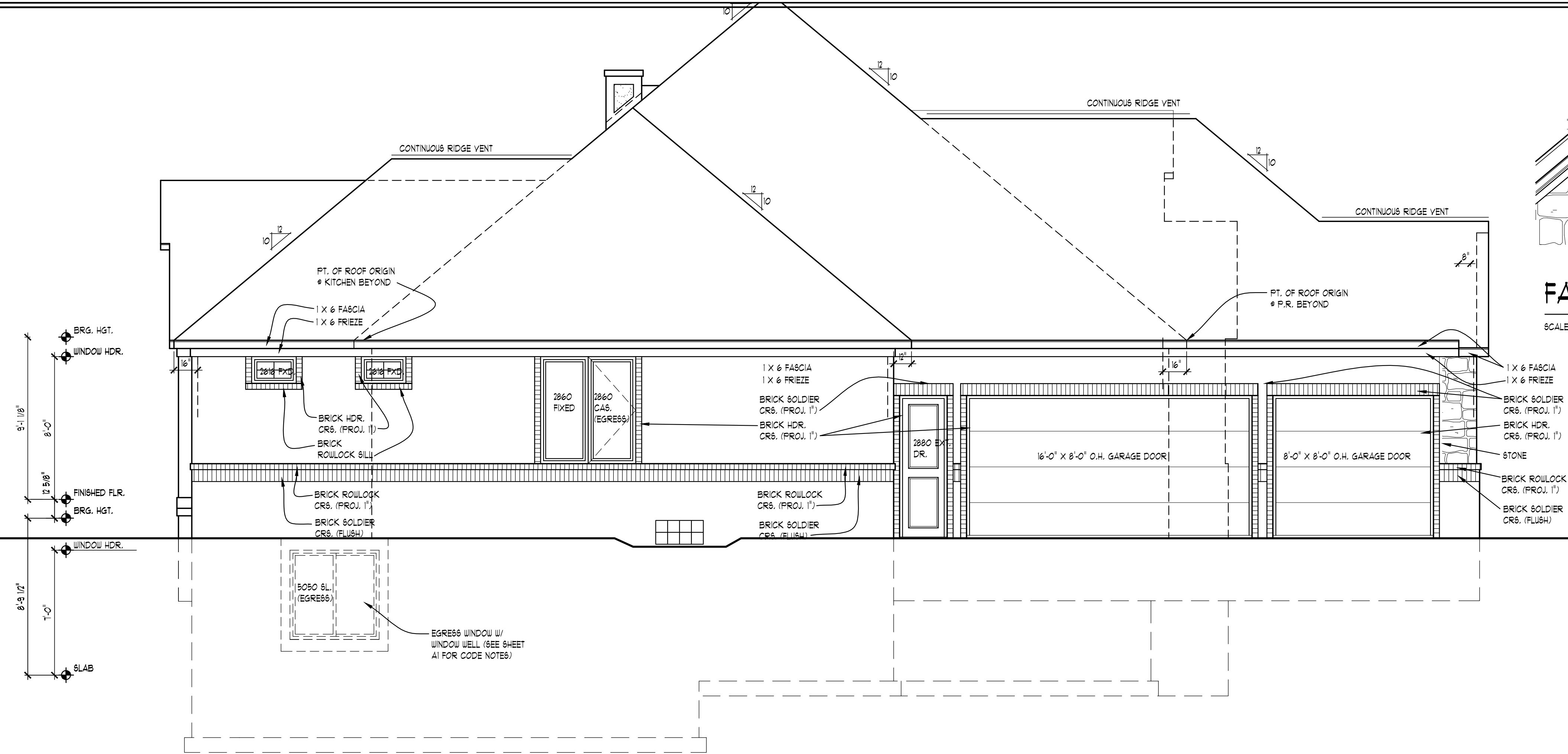
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**COMPO BUILDER'S INC. RANCOUR RANCH**

**JOB No. WO 1350-17**  
**DRAWN: WABK**  
**CHECKED: WRF**  
**REVIEW 7-5-17**  
**FINAL: 7-7-17**  
**REVISION 7-11-17**  
**REVISION 8-8-17**

**SCALE: PER PLAN**

**SHEET # A2**

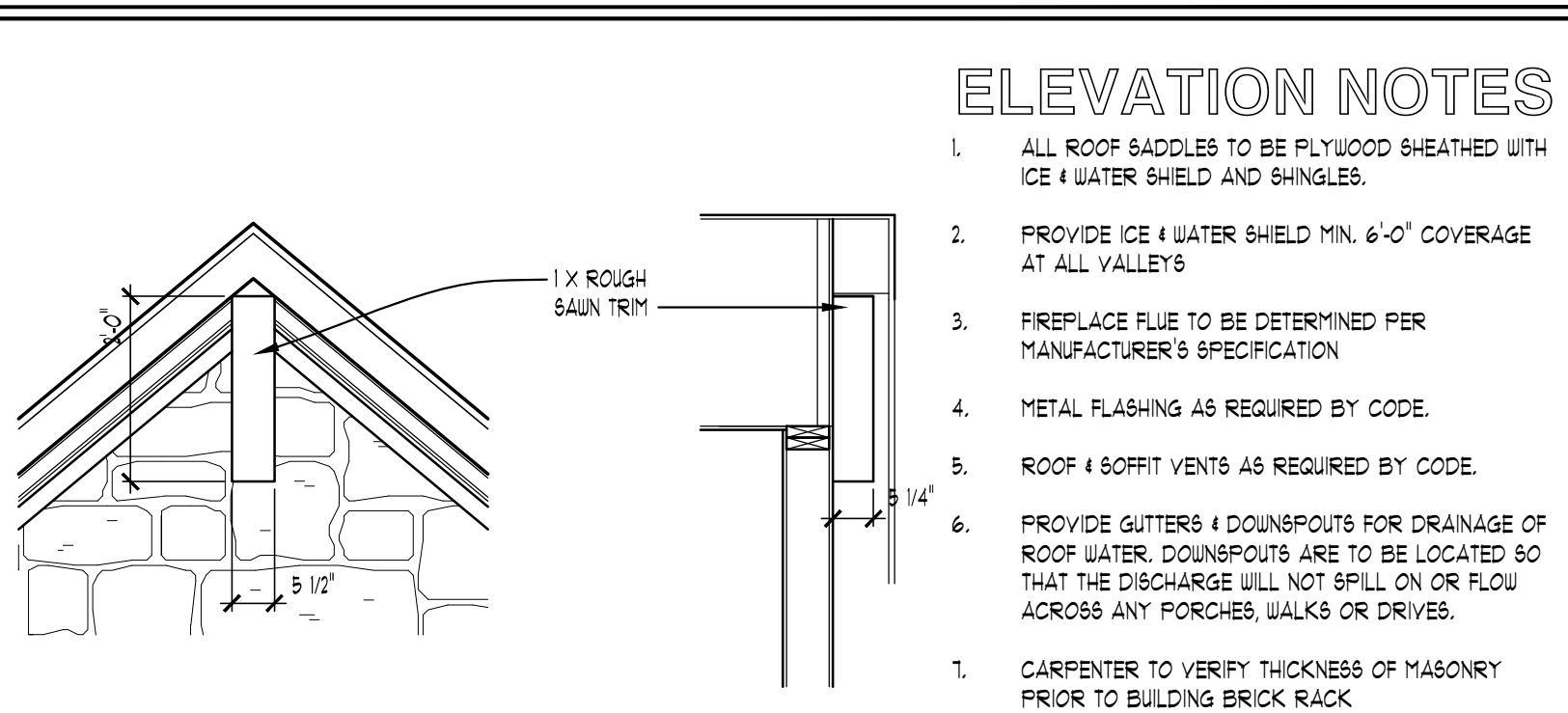


**LEFT ELEVATION**

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

**FALSE TIMBER DETAIL**

SCALE: 1/2" = 1'-0"

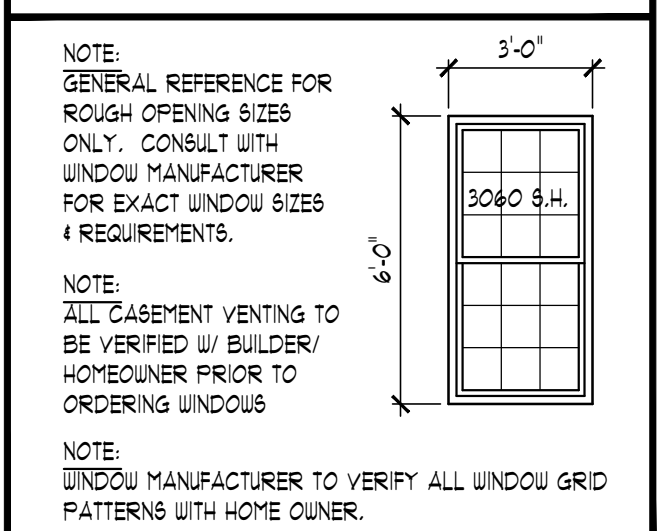


**ELEVATION NOTES**

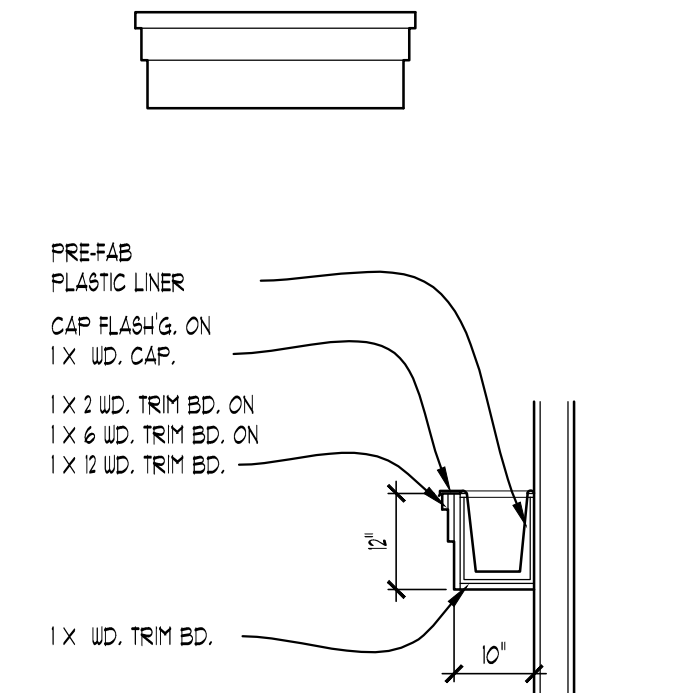
1. ALL ROOF SADDLES TO BE PLYWOOD SHEATHED WITH ICE & WATER SHIELD AND SHINGLES.
2. PROVIDE ICE & WATER SHIELD MIN. 6'-0" COVERAGE AT ALL VALLEYS
3. FIREPLACE FLUE TO BE DETERMINED PER MANUFACTURER'S SPECIFICATION
4. METAL FLASHING AS REQUIRED BY CODE.
5. ROOF & SOFFIT VENTS AS REQUIRED BY CODE.
6. PROVIDE GUTTERS & DOWNSPOUTS FOR DRAINAGE OF ROOF WATER. DOWNSPOUTS ARE TO BE LOCATED SO THAT THE DISCHARGE WILL NOT SPILL ON OR FLOW ACROSS ANY PORCHES, WALKS OR DRIVES.
7. CARPENTER TO VERIFY THICKNESS OF MASONRY PRIOR TO BUILDING BRICK RACK

**NOTE:**  
OVERHANG DIMENSIONS (O.H.) ARE FROM SHEATHING U.N.O.

**TYPICAL WINDOW DESIGNATION**

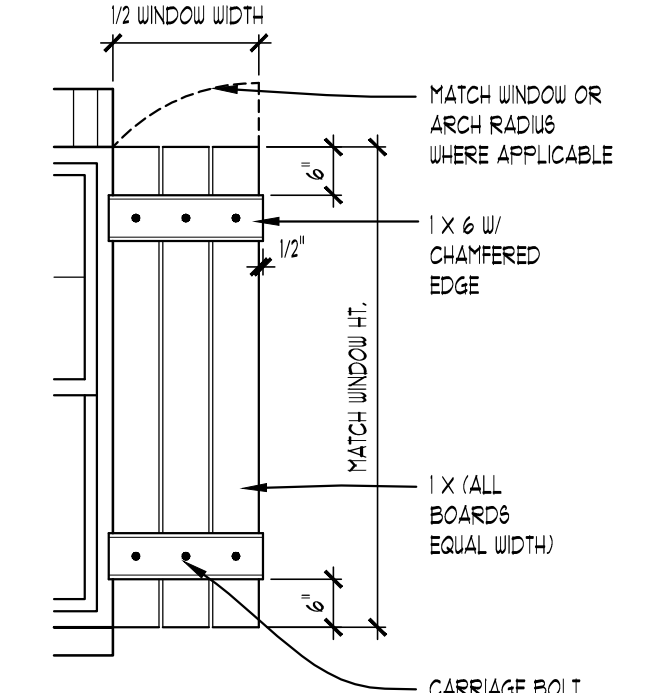


**NOTE:**  
ALL WINDOW SILLS OVER 6'-0" ABOVE EXTERIOR GRADE OR SURFACE BELOW TO BE MINIMUM 1/4" ABOVE FINISHED FLOOR OR HAVE SASH LIMITERS PER CODE REQUIREMENTS



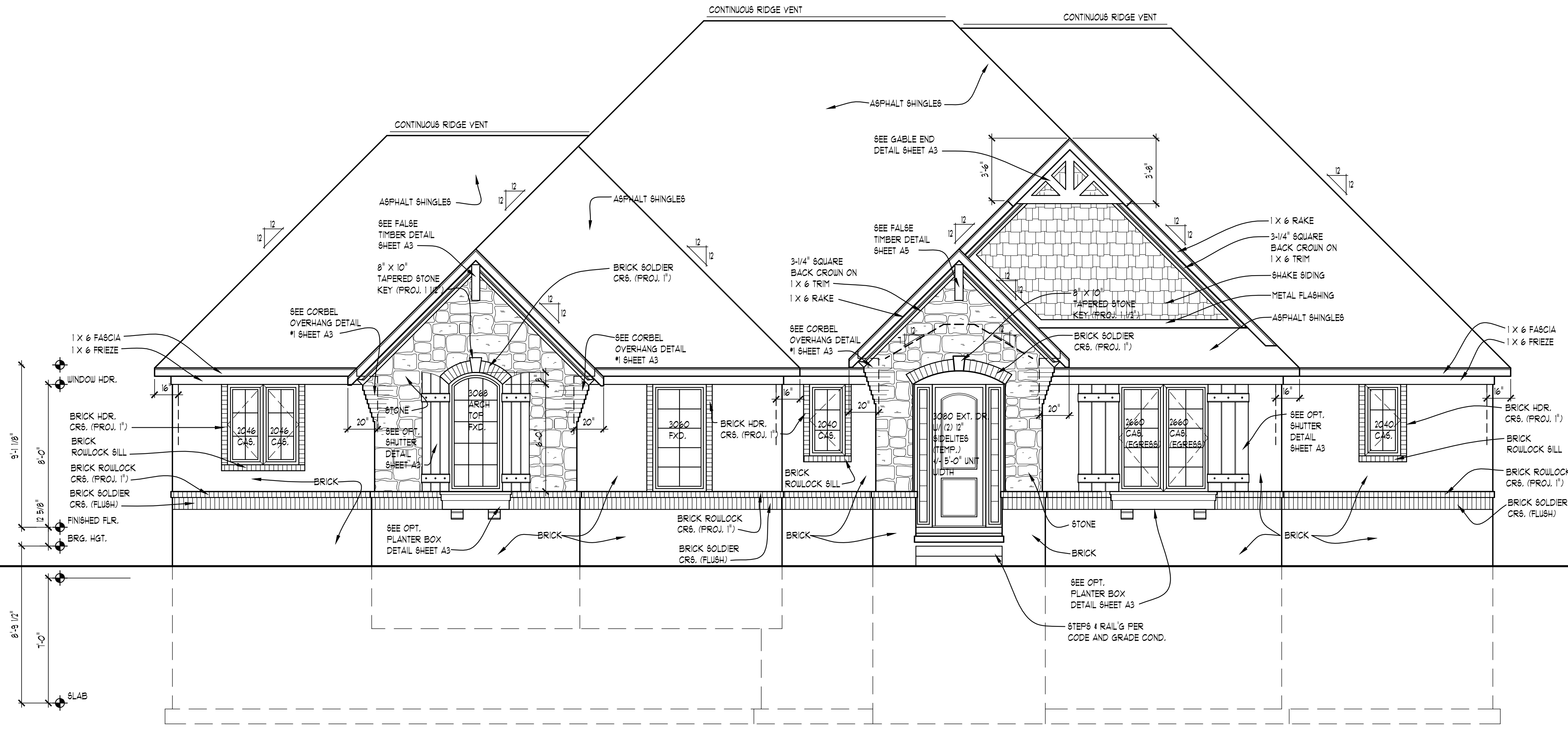
**OPT. PLANTER BOX**

SCALE: 1/2" = 1'-0"



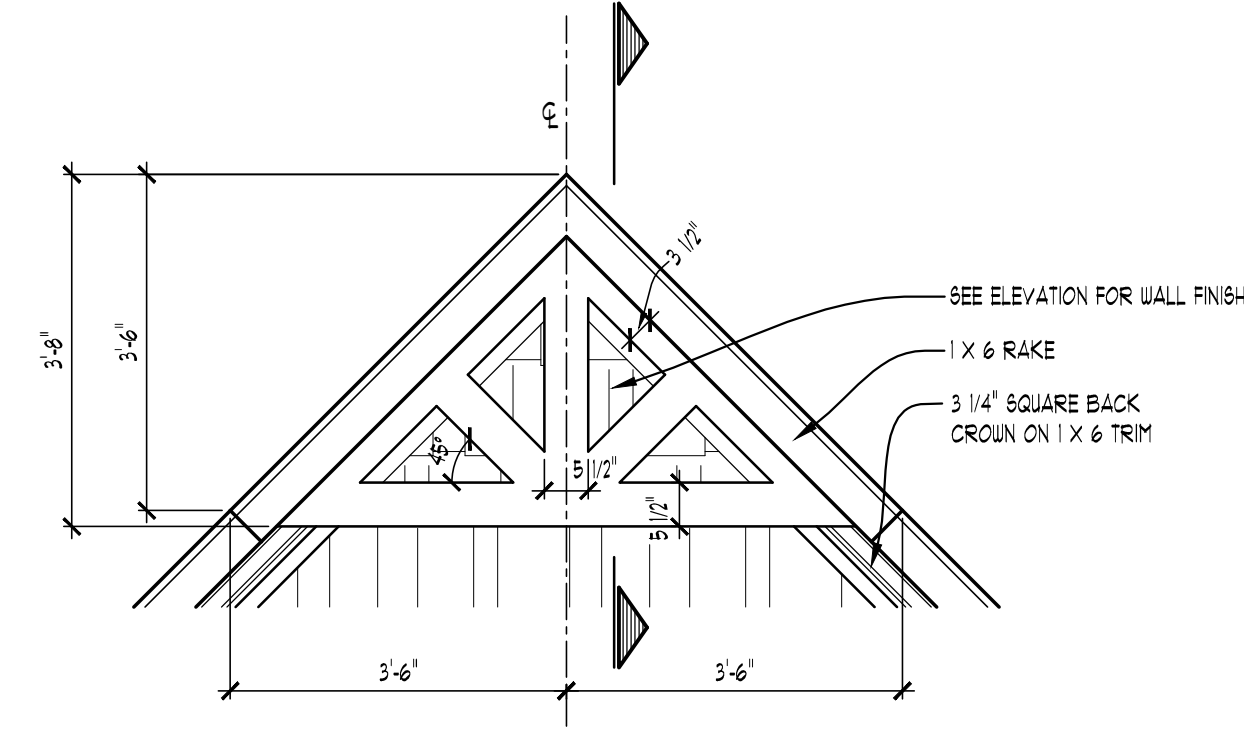
**OPT. SHUTTER DETAIL**

SCALE: 1/2" = 1'-0"



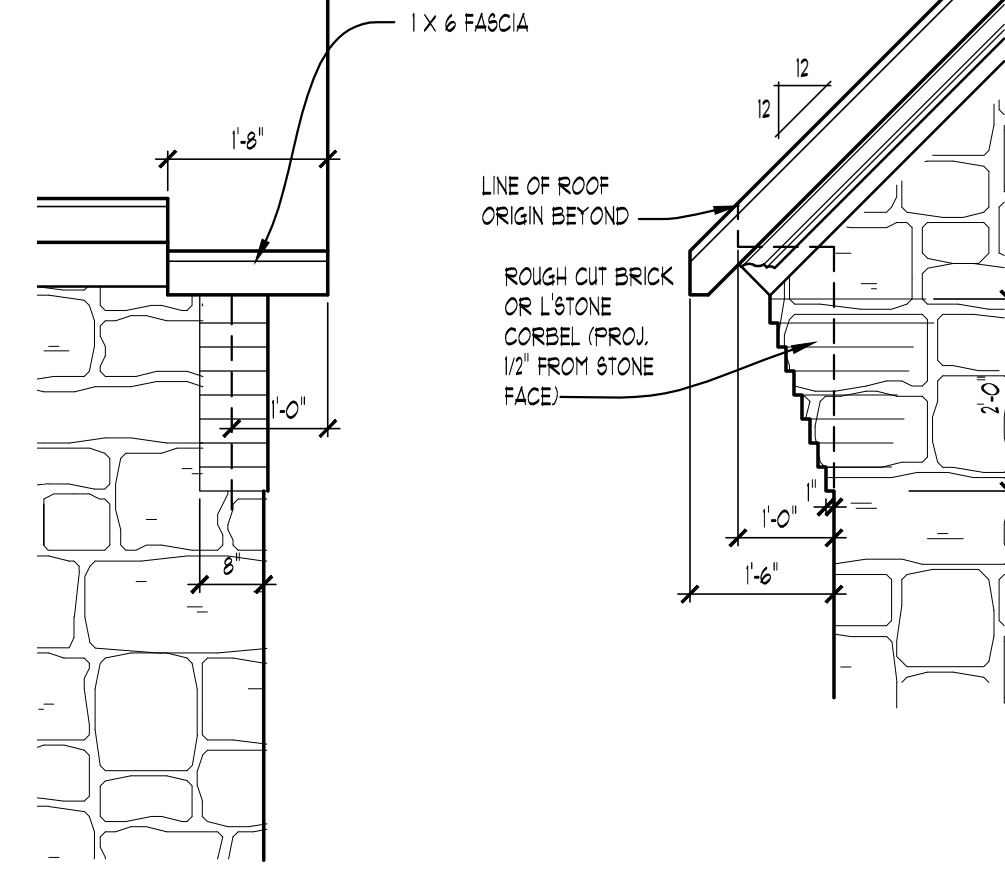
**FRONT ELEVATION**

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



**GABLE END DETAIL**

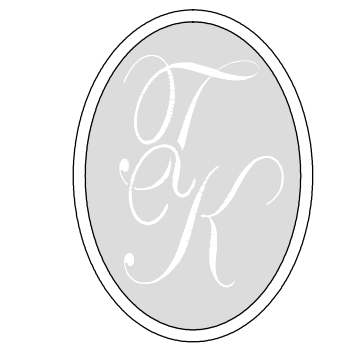
SCALE: 1/2" = 1'-0"



**CORBEL OVERHANG DETAIL #1**

SCALE: 1/2" = 1'-0"

**FINAL APPROVED  
PLANS XX-XX-XX**



**TK DESIGN  
&  
ASSOCIATES**

WWW.TKHOMEDSIGN.COM  
26030 PONTIAC TRAIL,  
SOUTH LYON, MI 48178  
PHONE: (248)-446-1960  
FAX: (248)-446-1961

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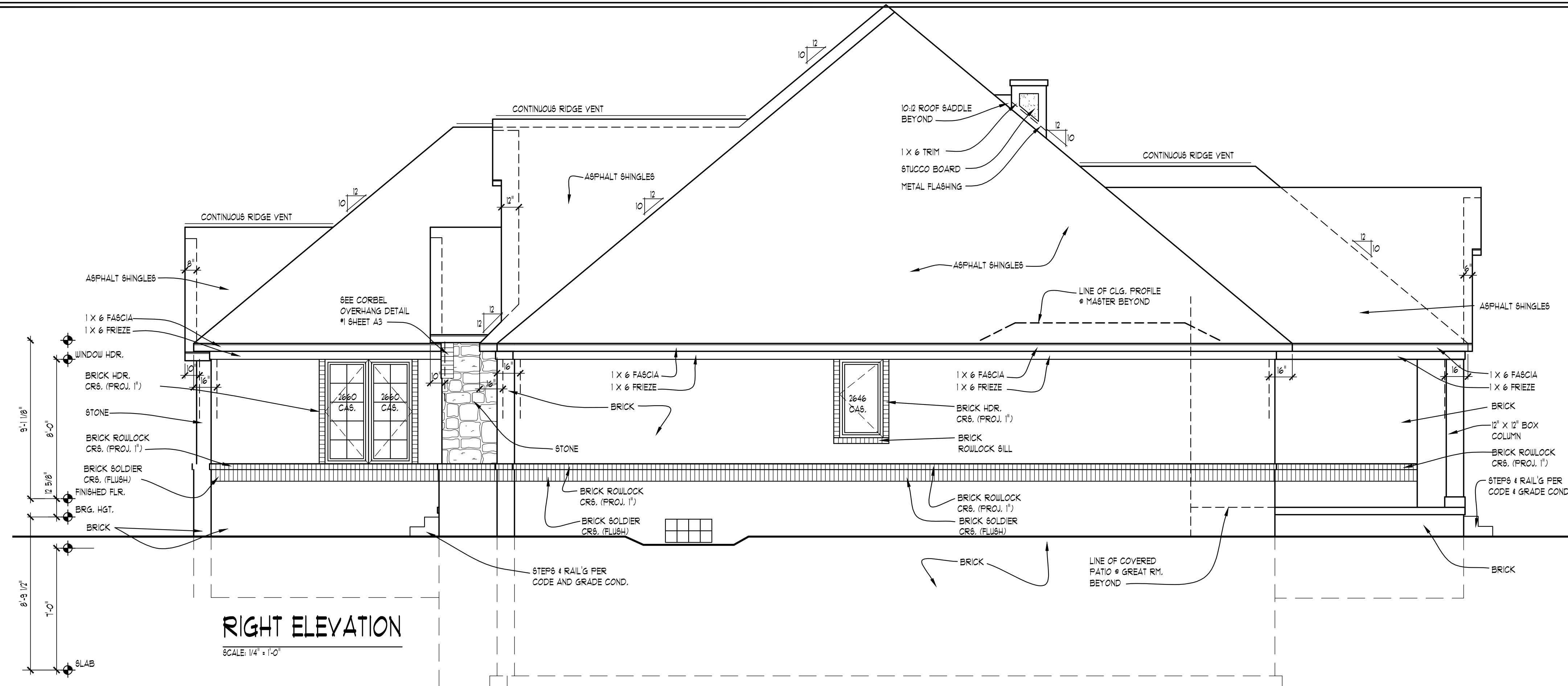
**CLIENT / PROJECT**  
**COMPO BUILDER'S  
INC. INC.**  
**RANCOUR RANCH**

**JOB No. WO 1350-17**  
**DRAWN: WABK**  
**CHECKED: WRF**  
**REVIEW 7-5-17**  
**FINAL: 7-7-17**  
**REVISION 7-11-17**  
**REVISION 8-8-17**

**SCALE:**  
**PER PLAN**

**SHEET #**  
**A3**





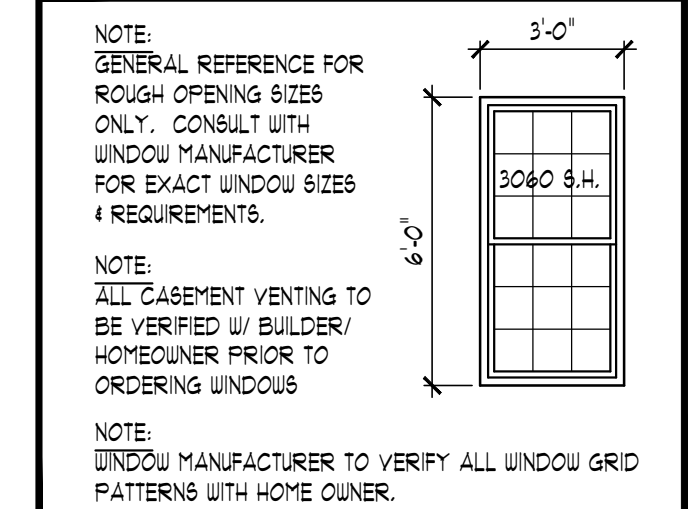
**RIGHT ELEVATION**  
SCALE: 1/4" = 1'-0"

**ELEVATION NOTES**

- ALL ROOF SADDLES TO BE PLYWOOD SHEATHED WITH ICE & WATER SHIELD AND SHINGLES.
- PROVIDE ICE & WATER SHIELD MIN. 6'-0" COVERAGE AT ALL VALLEYS
- FIREPLACE FLUE TO BE DETERMINED PER MANUFACTURER'S SPECIFICATION
- METAL FLASHING AS REQUIRED BY CODE.
- ROOF & SOFFIT VENTS AS REQUIRED BY CODE.
- PROVIDE GUTTERS & DOWNSPOUTS FOR DRAINAGE OF ROOF WATER. DOWNSPOUTS ARE TO BE LOCATED SO THAT THE DISCHARGE WILL NOT SPILL ON OR FLOW ACROSS ANY PORCHES, WALKS OR DRIVES.
- CARPENTER TO VERIFY THICKNESS OF MASONRY PRIOR TO BUILDING BRICK RACK

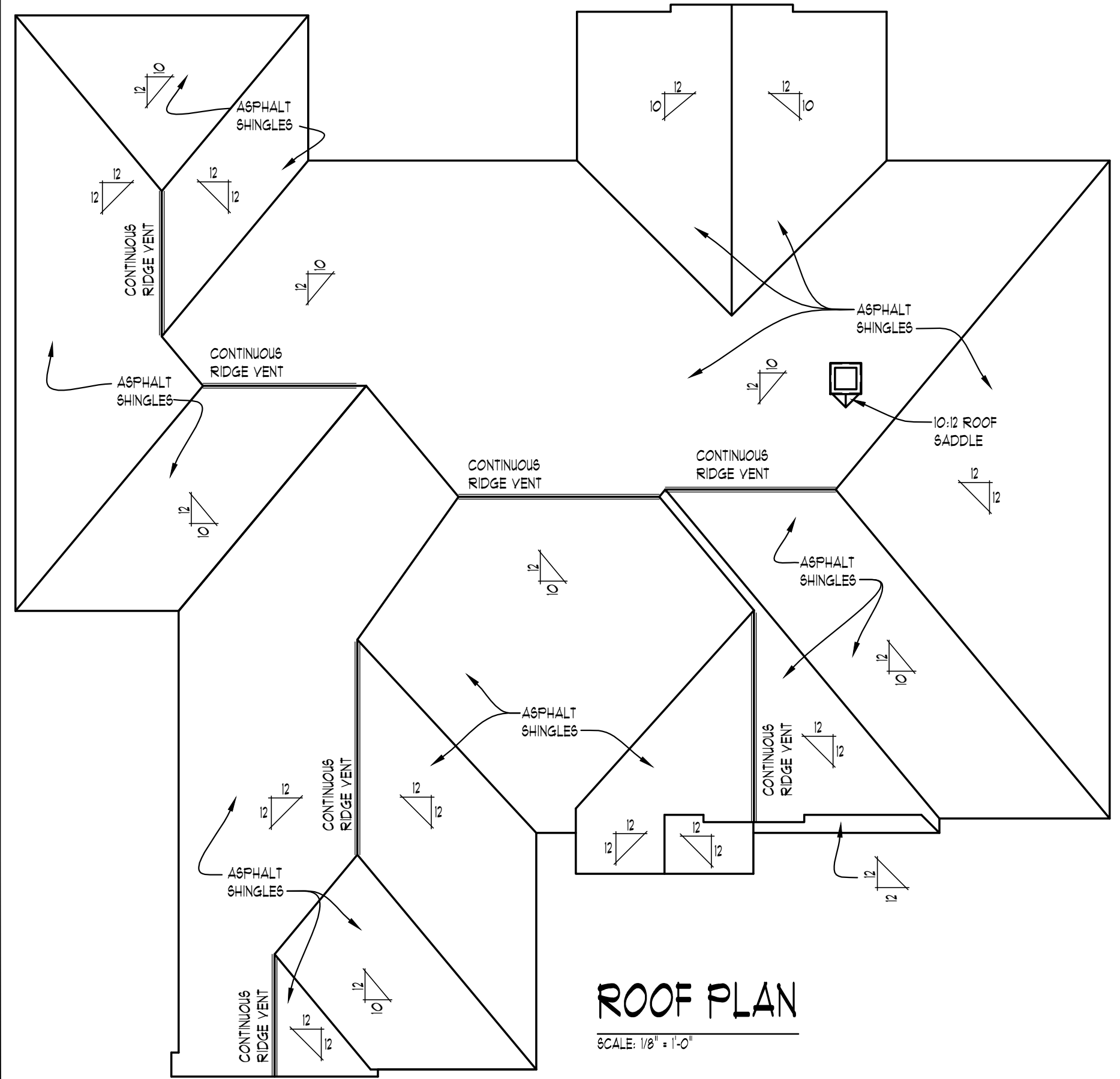
**NOTE:**  
OVERHANG DIMENSIONS (O.H.) ARE FROM SHEATHING U.N.O.

**TYPICAL WINDOW DESIGNATION**

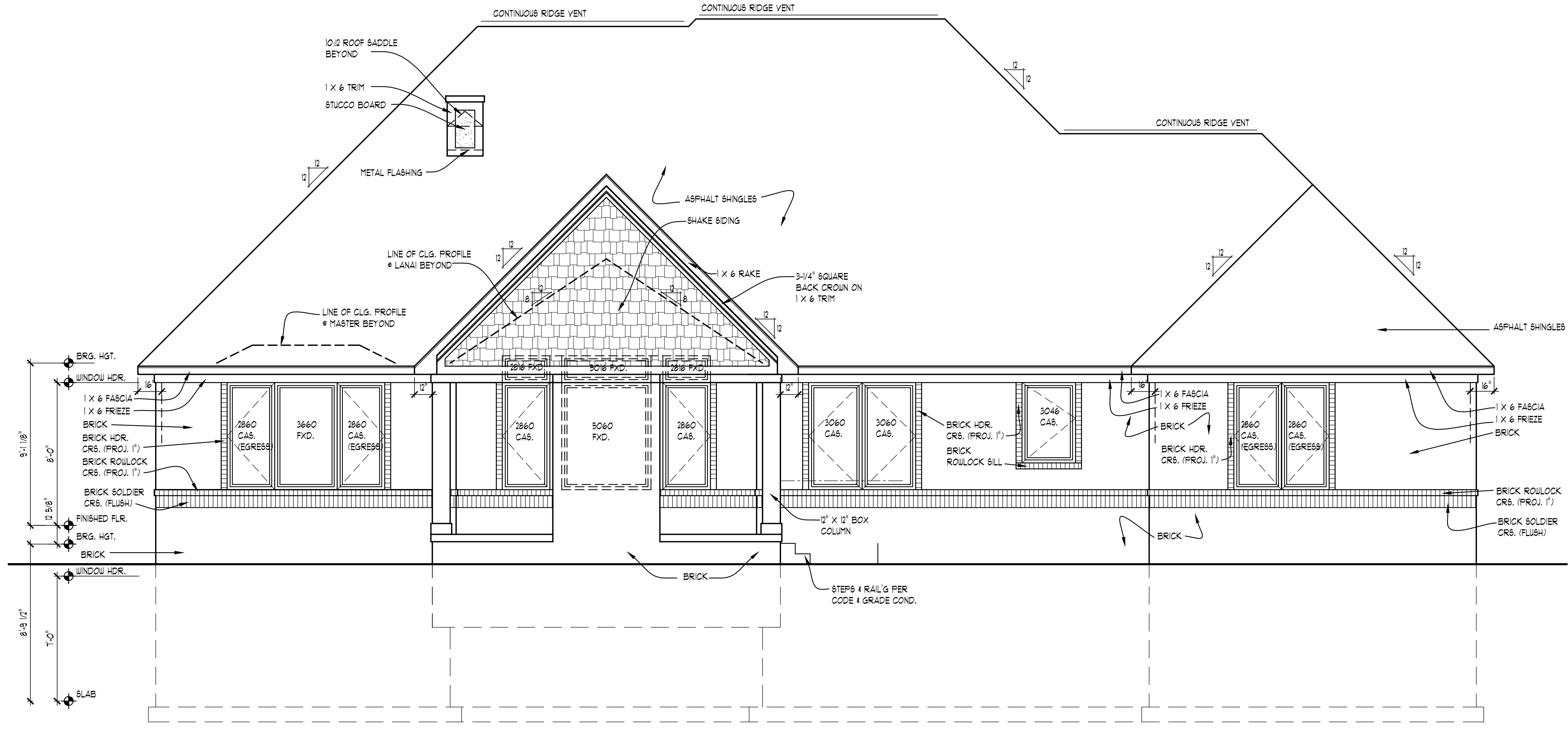


**NOTE:**  
ALL WINDOW SILLS OVER 6'-0" ABOVE EXTERIOR GRADE OR SURFACE BELOW TO BE MINIMUM 2" ABOVE FINISHED FLOOR OR HAVE BASH LIMITERS PER CODE REQUIREMENTS

**ATTIC VENTILATION CALCULATIONS:**  
AREA OF ATTIC OVER HEATED SPACE = 2850 SQ. FT.  
2850/50 = 57 (SQ. FT. REQ'D)  
13' X 144" = 2168" (SQ. INCH CONVERSION)  
RIDGE VENTING:  
2168" / 39" = 55.6" (SQ. INCHES REQ'D)  
2168" / 18" = 120.4" (LINEAR FT. OF RIDGE VENT REQ'D)  
EAVE OR CORNICE VENTING:  
2168" / 39" = 55.6" (SQ. INCHES REQ'D)



**ROOF PLAN**  
SCALE: 1/8" = 1'-0"



**REAR ELEVATION**  
SCALE: 1/4" = 1'-0"

**FINAL APPROVED  
PLANS XX-XX-XX**

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REPORTED TO THE DESIGNER IMMEDIATELY UPON IMMEDIATE  
CALL MET. DRG. AT 800-487-7273 3 DAYS PRIOR TO ANY EXCAVATION  
CONSTRUCTION. THE USER ASSUMES RESPONSIBILITY OF THE DRAWING HOLDER.

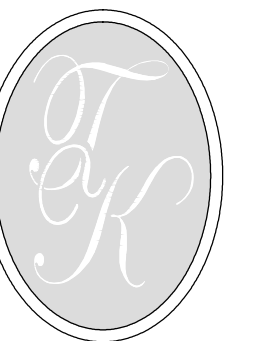
**CLIENT / PROJECT**  
**COMPO BUILDER'S  
INC. RANCOUR RANCH**

JOB No.	WO 1350-17
DRAWN:	WABK
CHECKED:	WRF
REVIEW	7-5-17
FINAL:	7-7-17
REVISION	7-11-17
REVISION	8-8-17

SCALE:  
PER PLAN

SHEET #  
**A4**

FINAL APPROVED  
PLANS XX-XX-XX



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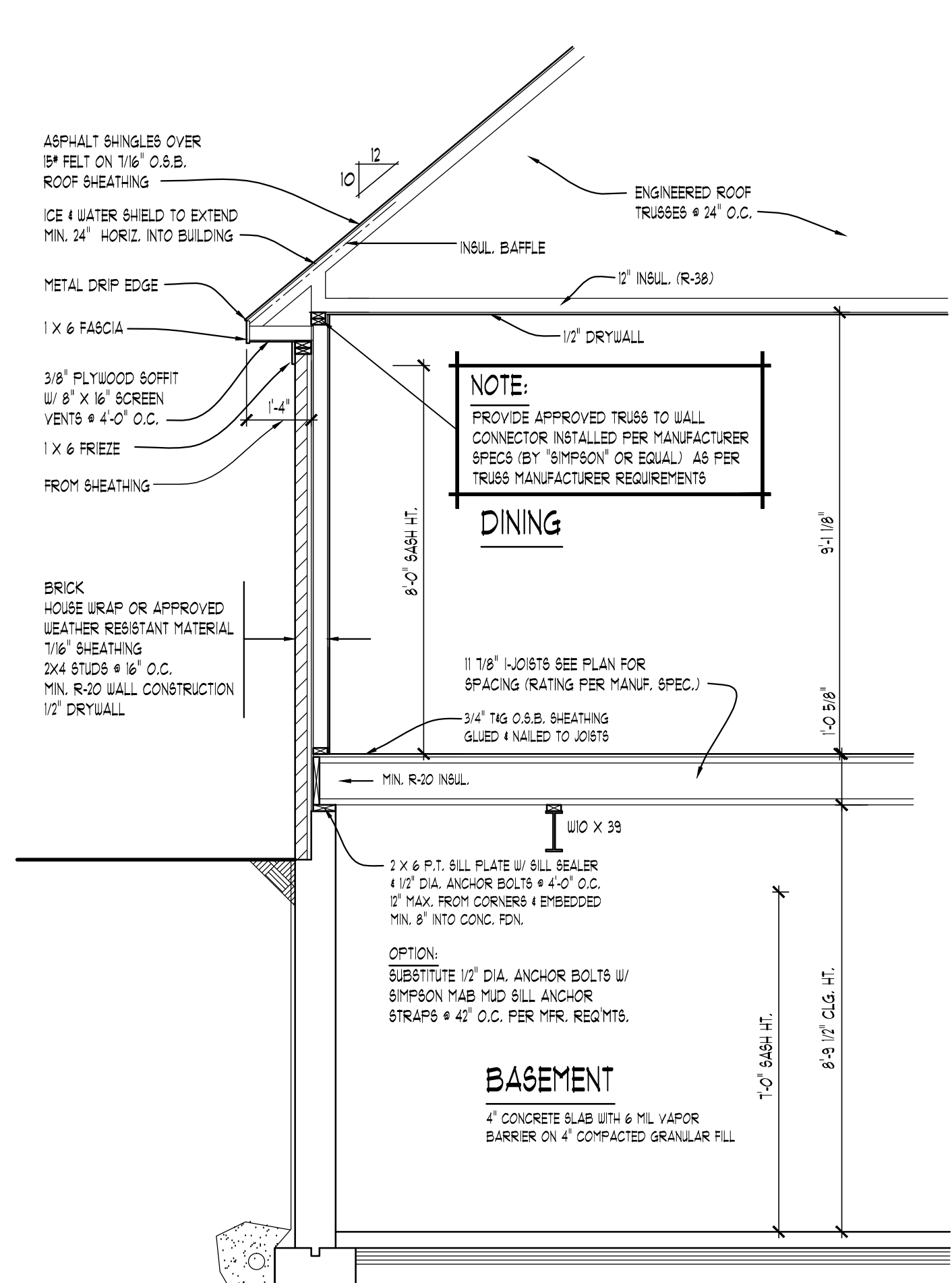
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CONTRACTOR TO FIELD VERIFY ALL DRAWING APPLICABLE  
CONSTRUCTION. DISCREPANCIES AND DESIGN CHANGES SHALL BE  
REPORTED TO THE DESIGNER IMMEDIATELY. IMMEDIATELY  
CALL MET/DG AT 800-487-7273 3 DAYS PRIOR TO ANY EXCAVATION  
CONSTRUCTION IS THE SOLE RESPONSIBILITY OF THE FORMAL HOLDER

CLIENT / PROJECT  
**COMPO BUILDER'S  
INC.  
RANCOUR RANCH**

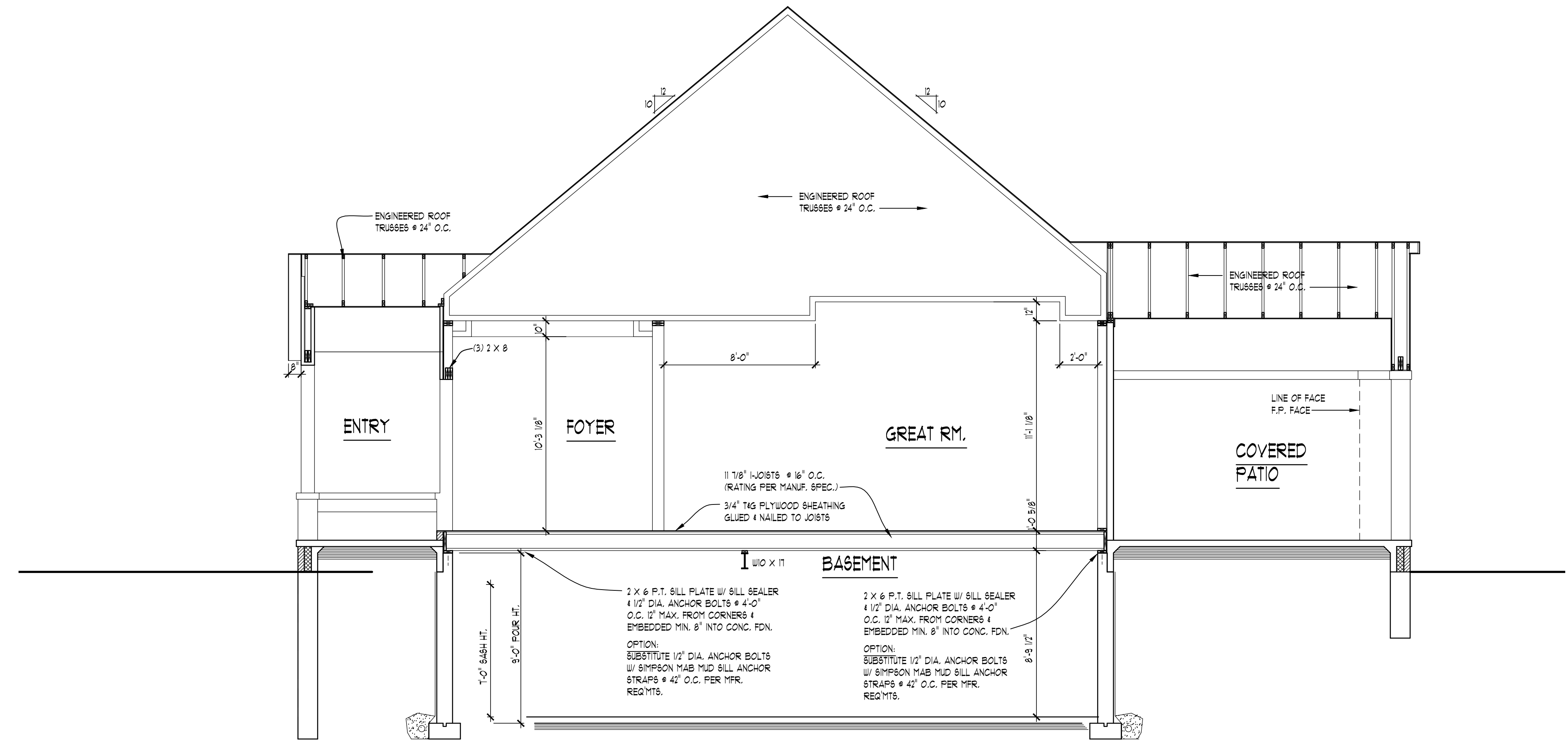
JOB No.	WO 1350-17
DRAWN:	WABK
CHECKED:	WRF
REVIEW	7-5-17
FINAL:	7-7-17
REVISION	7-11-17
REVISION	8-8-17

SCALE:  
PER PLAN

SHEET #  
**A5**



**WALL SECTION A**  
SCALE: 3/8" = 1'-0"



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



**NOTE:**  
 PROVIDE MIN. (1) 2 X 4 HEADER AT ALL INTERIOR & EXTERIOR DOOR & WINDOW OPENINGS (UNLESS NOTED OTHERWISE).

**NOTE:**  
 PROVIDE MIN. (1) JACK STUD & (1) KING STUD AT EACH END OF ALL HEADERS (UNLESS NOTED OTHERWISE).

**NOTE:**  
 PROVIDE MIN. (1) JOIST OR LADDER FRAMING UNDER ALL UPPER FLOOR PARALLEL PARTITIONS.

**NOTE:**  
 GROUT ALL CONCRETE BLOCK CORES SOLD THAT SUPPORT POINT LOADS FROM ABOVE (TYPICAL).

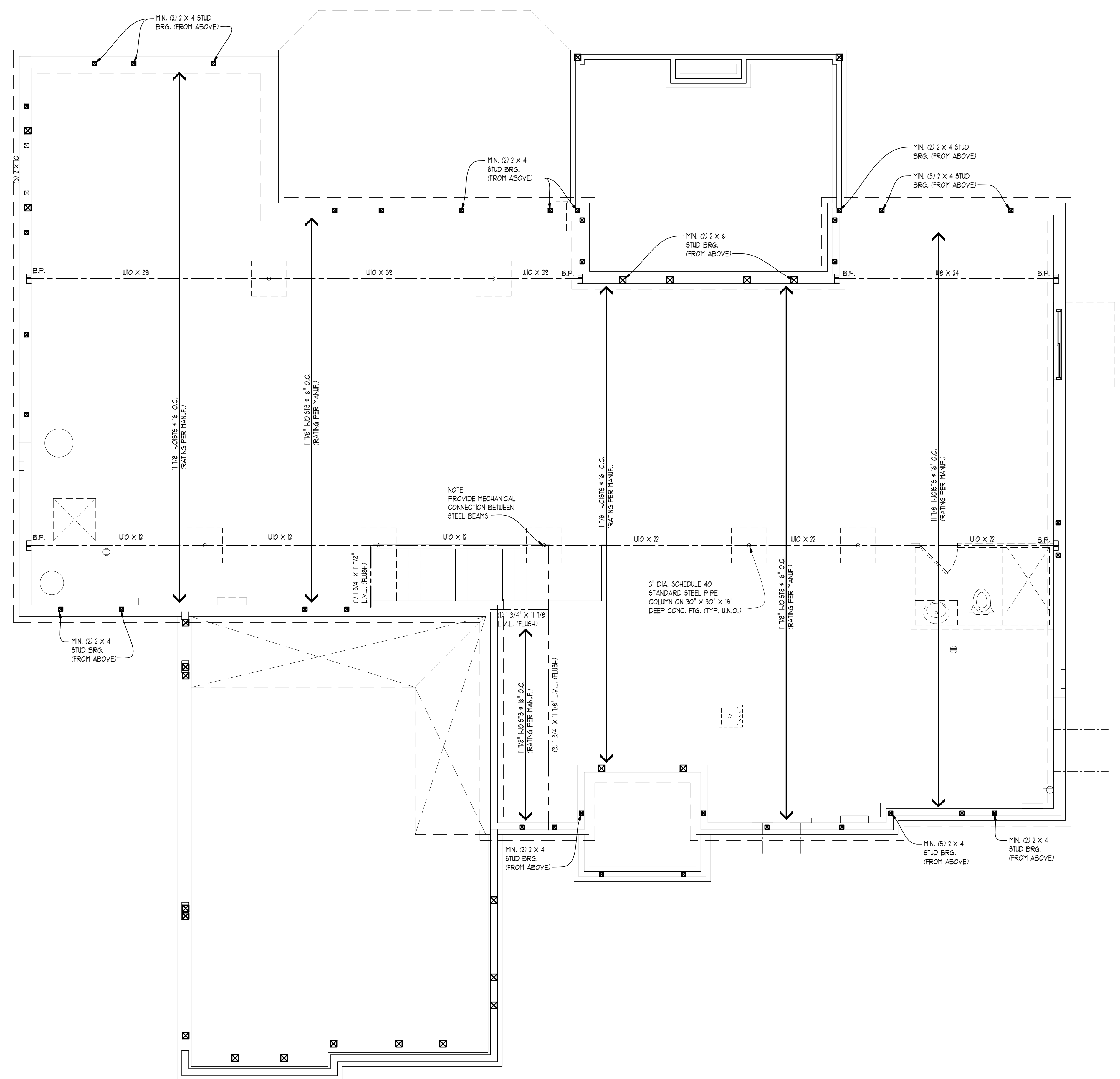
**NOTE:**  
 WOOD BEAM  
 STEEL BEAM

BRG. WALL  
 BRG. WALL ABOVE  
 BRG. WALL & BRG. WALL ABOVE

POINT LOAD  
 POINT LOAD FROM ABOVE

**TRUSS NOTE:**  
 SET C.G. DETAILS BACK 1/2" IN TRUSS PROFILE TO ALLOW ROOM FOR FRAMER TO FLAT TO STRAIGHTEN LINES (VERIFY W/ BUILDER)

- STRUCTURAL SHEATHING NOTES:**
- DESIGNED FOR SEISMIC ZONE A-C AND WIND SPEEDS OF 100 M.P.H. OR LESS
  - WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10 OF THE 2015 IRC CODE
  - BRACING REQUIREMENTS SHALL BE PER TABLE R602.10.1(1)
  - EXTERIOR BRACED WALL PANELS (BW/P) SHALL BE CONSTRUCTED IN ACCORDANCE WITH CS-WSP METHOD AS PRESCRIBED IN SECTION R602.10.4 (U.N.O.)
  - ALL SHEATHABLE SURFACES OF EXTERIOR WALLS (INCLUDING AREAS ABOVE AND BELOW OPENINGS AND GABLE END WALLS) SHALL BE CONTINUOUSLY SHEATHED WITH WOOD STRUCTURAL PANEL (WSP) SHEATHING WITH A MINIMUM THICKNESS OF 3/8". SHEATHING SHALL BE SECURED WITH MINIMUM 6D COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND SPACED AT 12" O.C. AT INTERMEDIATE SUPPORTS
  - LENGTH REQUIREMENTS FOR BRACED WALL PANELS WITH CS-WSP METHOD SHALL BE IN ACCORDANCE WITH TABLE R602.10.4
- PROVIDE 6D COMMON NAILS AT 6" O.C. SPACING AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS OR 1/2 GAL. X 1 3/4" STAPLES AT 3" O.C. SPACING AT PANEL EDGES AND 6" SPACING AT INTERMEDIATE SUPPORTS.
  - R403.1.6. WALLS 24" TOTAL LENGTH OR SHORTER CONNECTING OFFSET BRACED WALL PANELS SHALL BE ANCHORED TO THE FOUNDATION WITH A MINIMUM OF ONE ANCHOR BOLT LOCATED IN THE CENTER THIRD OF THE PLATE SECTION AND SHALL BE ATTACHED TO ADJACENT BRACED WALL PANELS AT CORNERS AS SHOWN IN ITEM 9 OF TABLE R602.10.1
  - SEE CONTINUOUS PORTAL FRAME PANEL CONSTRUCTION DETAIL (CS-PF) SHEET GN-2 FOR HEADER / CORNER FRAMING INFORMATION. HEADER PROVIDED MUST BE MINIMUM 3" X 11 1/4" SOLID SAUN OR LAMINATED VENEER LUMBER (L.V.L.)



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

**TK DESIGN & ASSOCIATES**  
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 SOUTH LYON, MI 48178  
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 REPORTED TO THE DESIGNER IMMEDIATELY.  
 CALL METRO AT 800-487-7273 24 HOURS PRIOR TO ANY EXCAVATION  
 CONSTRUCTION. THE SOLE RESPONSIBILITY OF THE FINDER/HOLDER

**CLIENT / PROJECT**  
 COMPO BUILDER'S  
 INC.  
 RANCOUR RANCH

JOB No.	WO 1350-17
DRAWN:	WABK
CHECKED:	WRF
REVIEW	7-5-17
FINAL:	7-7-17
REVISION	7-11-17
REVISION	8-8-17

SCALE:  
 PER PLAN

SHEET #  
**S1**

**NOTE:**  
PROVIDE MIN. (2) 2 X 4 HEADER AT ALL INTERIOR & EXTERIOR DOOR & WINDOW OPENINGS (UNLESS NOTED OTHERWISE).

**NOTE:**  
PROVIDE MIN. (1) JACK STUD & (1) KING STUD AT EACH END OF ALL HEADERS (UNLESS NOTED OTHERWISE).

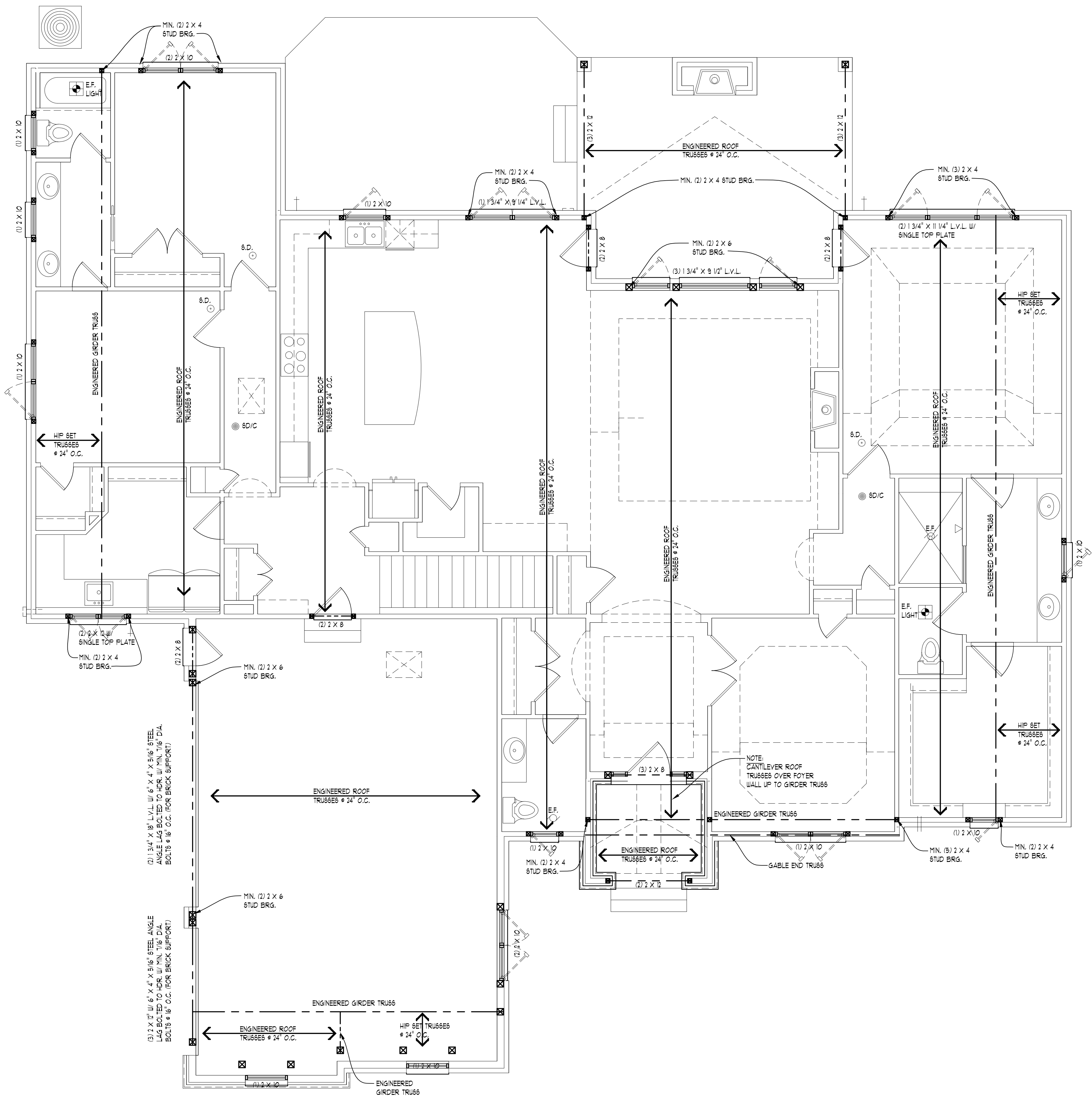
**NOTE:**  
PROVIDE MIN. (1) JOIST OR LADDER FRAMING UNDER ALL UPPER FLOOR PARALLEL PARTITIONS

**NOTE:**  
GROUT ALL CONCRETE BLOCK CORES SOLID THAT SUPPORT POINT LOADS FROM ABOVE (TYPICAL)

**NOTE:**  
WOOD BEAM  
STEEL BEAM  
BRG. WALL  
BRG. WALL ABOVE  
BRG. WALL & BRG. WALL ABOVE  
POINT LOAD  
POINT LOAD FROM ABOVE

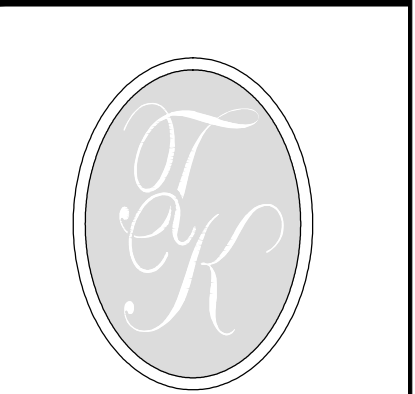
**TRUSS NOTE:**  
SET CLG. DETAILS BACK 1.5" IN TRUSS PROFILE TO ALLOW ROOM FOR FRAMER TO PUR OUT TO STRAIGHTEN LINES (VERIFY W/ BUILDER)

- STRUCTURAL SHEATHING NOTES:**
- DESIGNED FOR SEISMIC ZONE A-C AND WIND SPEEDS OF 100 M.P.H. OR LESS
  - WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10.2 OF THE 2015 IRC CODE
  - BRACING REQUIREMENTS SHALL BE PER TABLE R602.10.1(2)(1)
  - EXTERIOR BRACED WALL PANELS (BWP) SHALL BE CONSTRUCTED IN ACCORDANCE WITH CS-WSP METHOD AS PRESCRIBED IN SECTION R602.10.4 (U.N.O.)
  - ALL SHEATHABLE SURFACES OF EXTERIOR WALLS (INCLUDING AREAS ABOVE AND BELOW OPENINGS AND GABLE END WALLS) SHALL BE CONTINUOUSLY SHEATHED WITH WOOD STRUCTURAL PANEL (WSP) SHEATHING WITH A MINIMUM THICKNESS OF 3/8". SHEATHING SHALL BE SECURED WITH MINIMUM 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND 8" SPACED AT 12" O.C. AT INTERMEDIATE SUPPORTS
  - LENGTH REQUIREMENTS FOR BRACED WALL PANELS WITH CS-WSP METHOD SHALL BE IN ACCORDANCE WITH TABLE R602.10.4
- PROVIDE 6d COMMON NAILS AT 6" O.C. SPACING AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS OR 16 GA. X 1 3/4" STAPLES AT 3" O.C. SPACING AT PANEL EDGES AND 6" SPACING AT INTERMEDIATE SUPPORTS.
  - R403.1.6 WALLS 24" TOTAL LENGTH OR SHORTER CONNECTING OFFSET BRACED WALL PANELS SHALL BE ANCHORED TO THE FOUNDATION WITH A MINIMUM OF ONE ANCHOR BOLT LOCATED IN THE CENTER THIRD OF THE PLATE SECTION AND SHALL BE ATTACHED TO ADJACENT BRACED WALL PANELS AT CORNERS AS SHOWN IN ITEM 3 OF TABLE R602.3(1)
  - SEE CONTINUOUS PORTAL FRAME PANEL CONSTRUCTION DETAIL (CS-PF) SHEET G02 FOR HEADER / CORNER FRAMING INFORMATION. HEADER PROVIDED MUST BE MINIMUM 3" X 11 1/4" SOLID SAUN OR LAMINATED VENEER LUMBER (L.V.L.)



**FIRST FLOOR PLAN STRUCTURE**

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



**TK DESIGN & ASSOCIATES**

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CALL METRO AT 800-487-7273 3 DAYS PRIOR TO ANY EXCAVATION  
CONSTRUCTION OR THE SOLE RESPONSIBILITY OF THE OWNER/HOLDER

**CLIENT / PROJECT**  
**COMPO BUILDER'S INC. RANCOUR RANCH**

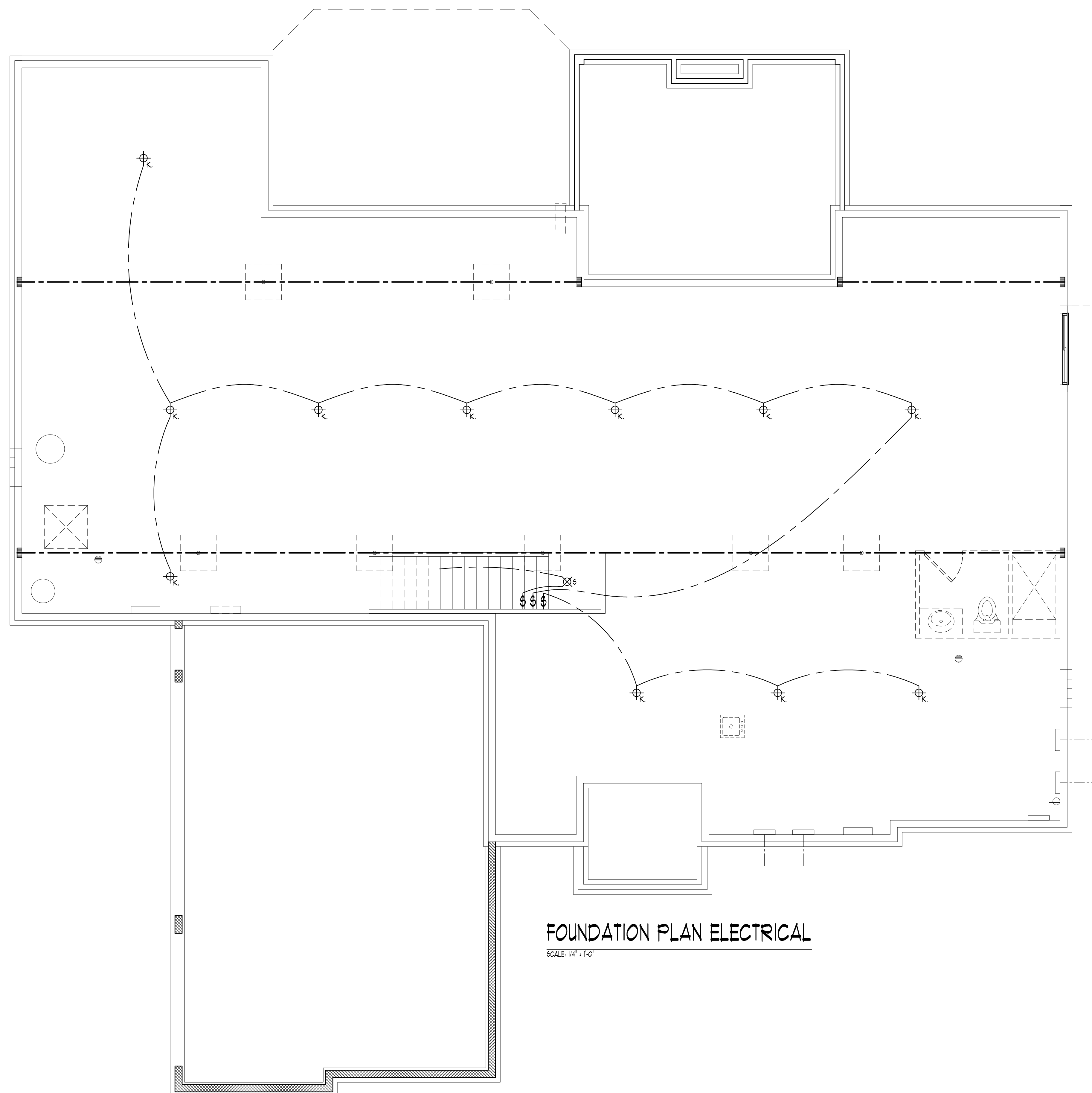
**JOB No. WO 1350-17**  
**DRAWN: WABK**  
**CHECKED: WRF**  
**REVIEW 7-5-17**  
**FINAL: 7-7-17**  
**REVISION 7-11-17**  
**REVISION 8-8-17**

**SCALE: PER PLAN**

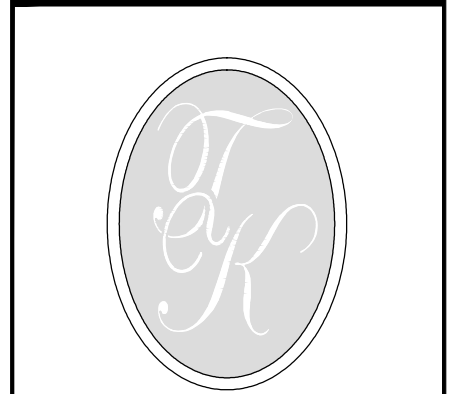
**SHEET # S2**

# ELECTRICAL SYMBOL KEY

GRAPHIC SYMBOL	DESCRIPTION	GRAPHIC SYMBOL	DESCRIPTION
	RECESSED WHITE BAFFLE 6" FIXTURE		PADDLE TYPE CEILING FAN W/ LIGHT
	RECESSED WHITE BAFFLE 4" FIXTURE		RECESSED EXHAUST, LOW NOISE, FAN
	KEYLESS FIXTURE		FAN / LIGHT COMBO
	RECESSED ADJUSTABLE WALL WASH FIXTURE		ELECTRICAL OUTLET WALL MOUNTED
	SURFACE MOUNTED INCANDESCENT FIXTURE		ELECTRICAL OUTLET GROUND FAULT INTERRUPTED TYPICAL WIRED THROUGHOUT ROOM
	HANGING DECORATIVE FIXTURE, PENDANT OR CHANDALIER		WATER PROTECTED ELECTRICAL OUTLET GROUND FAULT INTERRUPTED
	FULL-CHAIN OPERATED SURFACE MOUNTED INCANDESCENT FIXTURE		SPLIT WIRED ELECTRICAL OUTLET CONTROLLED BY A SWITCH
	WALL MOUNTED INCANDESCENT DECORATIVE SCONCE		220 VOLT ELECTRICAL OUTLET
	WALL MOUNTED COMPACT FLUORESCENT LOW PROFILE DECORATIVE SCONCE		ELECTRICAL OUTLET FLOOR MOUNTED
	UNIVERSAL SERIAL BUS		POWER SWITCH
	PHONE LINE		3-WAY POWER SWITCH
	CABLE T.V.		SMOKE DETECTOR INTER-CONNECTED W/ BATTERY BACKUP PER CODE
	GAS LINE		SMOKE DETECTOR / CARBON MONOXIDE DETECTOR INTER-CONNECTED W/ BATTERY BACKUP PER CODE
	SURFACE MOUNTED FLOURESCENT W/ ACRYLIC DIFFUSER		ELECTRIC METER
			GAS METER



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



**TK DESIGN & ASSOCIATES**

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CONTRACTOR IS THE SOLE RESPONSIBILITY OF THE FIRM/HOLDER.

**CLIENT / PROJECT**  
**COMPO BUILDER'S INC.**  
**RANCOUR RANCH**

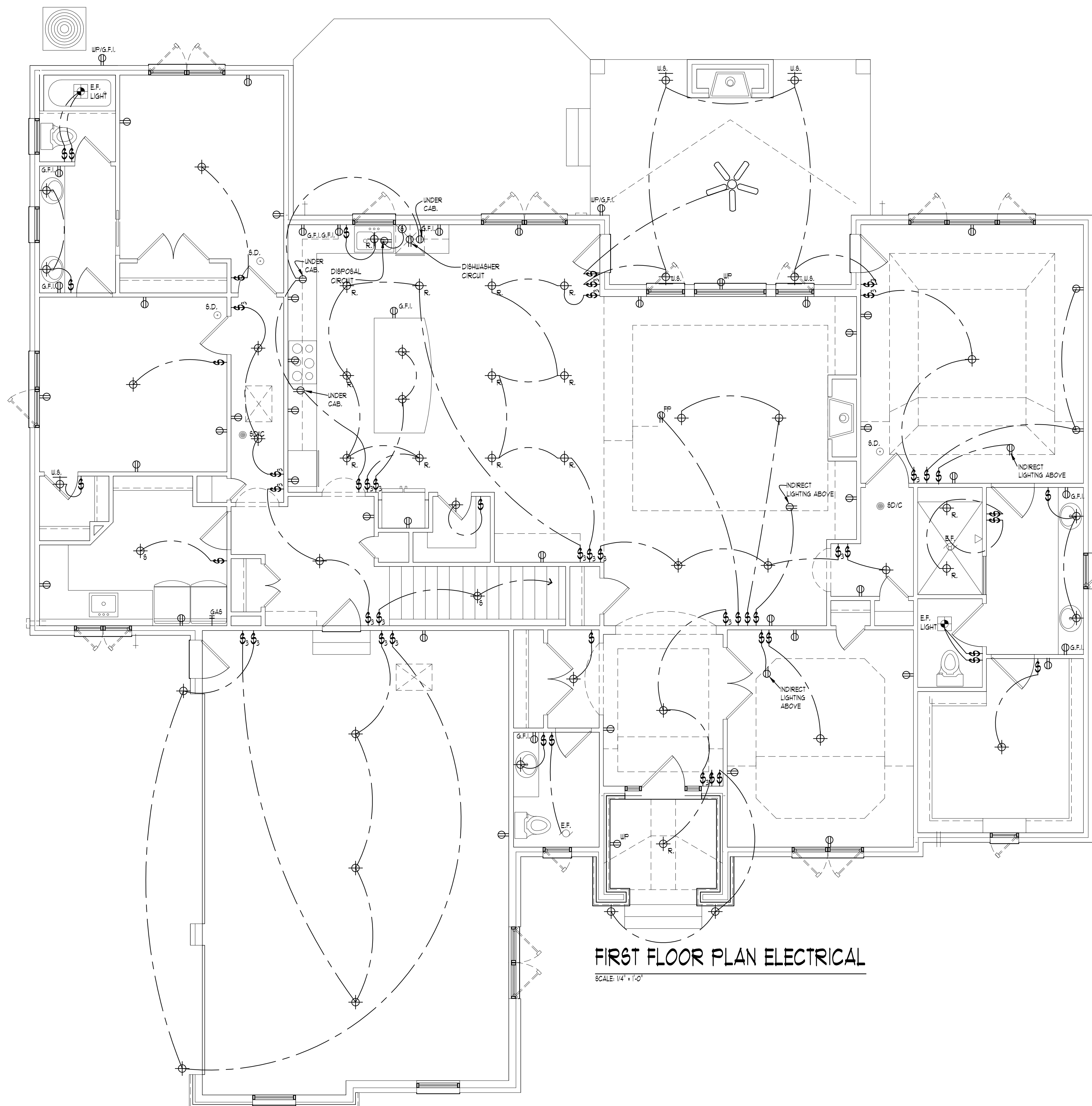
**JOB No. WO 1350-17**  
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**REVISION 7-11-17**  
**REVISION 8-8-17**

**SCALE:**  
**PER PLAN**

**SHEET #**  
**E1**

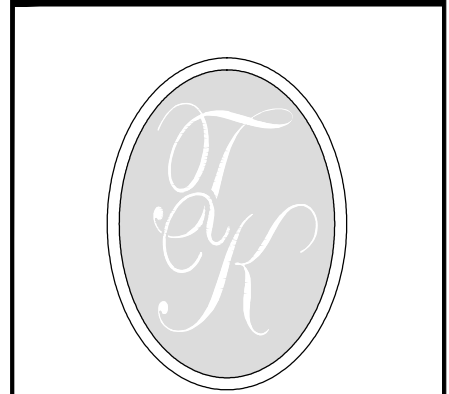
# ELECTRICAL SYMBOL KEY

GRAPHIC SYMBOL	DESCRIPTION	GRAPHIC SYMBOL	DESCRIPTION
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	RECESSED WHITE BAFFLE 4" FIXTURE		RECESSED EXHAUST, LOW NOISE, FAN
	KEYLESS FIXTURE		FAN / LIGHT COMBO
	RECESSED ADJUSTABLE WALL WASH FIXTURE		ELECTRICAL OUTLET WALL MOUNTED
	SURFACE MOUNTED INCANDESCENT FIXTURE		ELECTRICAL OUTLET GROUND FAULT INTERRUPTED TYPICAL WIRED THROUGHOUT ROOM
	HANGING DECORATIVE FIXTURE, PENDANT OR CHANDALIER		WATER PROTECTED ELECTRICAL OUTLET GROUND FAULT INTERRUPTED
	PULL-CHAIN OPERATED SURFACE MOUNTED INCANDESCENT FIXTURE		SPLIT WIRED ELECTRICAL OUTLET CONTROLLED BY A SWITCH
	WALL MOUNTED INCANDESCENT DECORATIVE SCOSCE		220 VOLT ELECTRICAL OUTLET
	WALL MOUNTED COMPACT FLUORESCENT LOW PROFILE DECORATIVE SCOSCE		ELECTRICAL OUTLET FLOOR MOUNTED
	UNIVERSAL SERIAL BUS		POWER SWITCH
	PHONE LINE		3-WAY POWER SWITCH
	CABLE T.V.		SMOKE DETECTOR INTER-CONNECTED W/ BATTERY BACKUP PER CODE
	GAS LINE		SMOKE DETECTOR / CARBON MONOXIDE DETECTOR INTER-CONNECTED W/ BATTERY BACKUP PER CODE
	SURFACE MOUNTED FLOURESCENT W/ ACRYLIC DIFFUSER		ELECTRIC METER
			GAS METER



**FIRST FLOOR PLAN ELECTRICAL**

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



**TK DESIGN & ASSOCIATES**

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 DO NOT SCALE DRAWINGS. USE CALCULATED DIMENSIONS ONLY.  
 CONSTRUCTOR TO FIELD VERIFY ALL DRAWING APPLICABLE  
 CONSTRUCTION. DISCREPANCIES AND DESIGN CHANGES SHALL BE  
 REPORTED TO THE DESIGNER IMMEDIATELY.  
 CALL MET/DIG AT 800-487-7273 3 DAYS PRIOR TO ANY EXCAVATION  
 CONSTRUCTION. THE SOLE RESPONSIBILITY OF THE OWNER/HOLDER.

**CLIENT / PROJECT**  
 COMPO BUILDER'S  
 INC.  
 RANCOUR RANCH

**JOB No.:** WO 1350-17  
**DRAWN:** WABK  
**CHECKED:** WRF  
**REVIEW:** 7-5-17  
**FINAL:** 7-7-17  
**REVISION:** 7-11-17  
**REVISION:** 8-8-17

**SCALE:**  
 PER PLAN

**SHEET #**  
**E2**