

## **GENERAL NOTES:**

- 1. THE NOTES ON THE DRAWINGS ARE NOT INTENDED TO REPLACE SPECIFICATIONS. IN ADDITION TO GENERAL NOTES, SEE SPECIFICATIONS FOR REQUIREMENTS
- 2. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT, OPENINGS, CHASES, INSERTS, REGLETS, SLEEVES, DEPRESSIONS, AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS.
- 3. ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.
- 4. DO NOT SCALE PLANS.
- 5. SECTIONS AND DETAILS SHOWN ON ANY STRUCTURAL DRAWINGS SHALL BE CONSIDERED TYPICAL FOR SIMILAR CONDITIONS.
- 6. ALL PROPRIETARY PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS WRITTEN INSTRUCTIONS.
- 7. THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE ERECTION IS COMPLETE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCING TO ENSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING TEMPORARY BRACING, GUYS OR TIEDOWNS. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
- 8. ALL APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS SHALL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.

## **DESIGN LOADS:**

1. BUILDING CODE: IRC (2015) INTERNATIONAL RESIDENTIAL BUILDING CODE.

- 2. DESIGN LIVE LOADS: (GROUND SNOW LOAD = 50 PSF) ... 40 PSF + DRIFT AS APPLICABLE ROOF.... LIVING AREAS ..... 40 PSF FRONT PORCH ..... 40 PSF
- 3. DESIGN WIND LOADS ARE BASED ON EXPOSURE B USING 100 MPH BASIC WIND SPEED.
- 4. SEISMIC DESIGN UTILIZES ANALYSIS PROCEDURE SHALL BE EQUIVALENT LATERAL FORCE PROCEDURE PER IBC 2015.

### FOUNDATION NOTES:

1.	FOUNDATIONS HAVE BEEN DESIGNED WITH A PRESUMPTIVE SOIL BEARING CAPACITY OF 2000 PSF TO BE VERIFIED BY THE GENERAL CONTRACTOR IN THE FIELD. IF THE ALLOWABLE SOIL BEARING CAPACITY IS LESS THAN 2000 PSF, THE EXCESSIVE SOIL BEARING PRESSURE COULD RESULT WITH FOUNDATION SETTLEMENT AND MOVEMENT OF THE BUILDING STRUCTURE. L&L STRUCTURAL ENGINEERING SHALL NOT BE RESPONSIBLE AND HELD HARMLESS FOR DAMAGES RESULTING FROM FOUNDATION SETTLEMENT AND MOVEMENT OF THE STRUCTURE RESULTING FROM INADEQUATE SOIL BEARING CAPACITY.
2.	INTERIOR SPREAD FOOTINGS AND EXTERIOR STRIP FOOTINGS SHALL BE FOUNDED ON UNDISTURBED NATIVE SOIL OR COMPACTED STRUCTURAL FILL.

# CONCRETE NOTES:

1. ALL CONCRETE WORK SHALL CONFORM TO ACI 318-LATEST EDITION. 2. CONCRETE STRENGTH AT 28 DAYS SHALL BE 3000 PSI FOR FOOTINGS.

3. ALL CONCRETE SHALL BE AIR ENTRAINED 4% TO 6% PER THE SPECIFICATIONS.

4. CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.

5. CONCRETE MATERIALS:

- A. PORTLAND CEMENT: ASTM C 150, TYPE I OR TYPE II UNLESS OTHERWISE ACCEPTABLE TO ARCHITECT. USE ONE BRAND OF CEMENT THROUGHOUT PROJECT, UNLESS OTHERWISE ACCEPTABLE TO ARCHITECT.
- B. NORMAL WEIGHT AGGREGATES: ASTM C 33. PROVIDE FROM A SINGLE SOURCE FOR EXPOSED CONCRETE. DO NOT USE AGGREGATES CONTAINING SOLUBLE SALTS OR OTHER SUBSTANCES SUCH AS IRON SULFIDES, PYRITE, MARCASITE, OR OCHRE WHICH CAN CAUSE STAINS ON EXPOSED CONCRETE SURFACES. C. LIGHT WEIGHT AGGREGATES: ASTM C 330.
- D. WATER: POTABLE.
- E. AIR-ENTRAINING ADMIXTURE: ASTM C 260.
- F. HIGH-RANGE WATER-REDUCING ADMIXTURE (SUPER PLASTICIZER): ASTM C 494, TYPE F OR TYPE G CONTAINING NOT MORE THAN 1% CHLORIDE IONS.
- 1. FIBER REINFORCEMENT SHALL BE ADDED AND DISTRIBUTED PRIOR TO INCORPORATION OF SUPER PLASTICIZER.
- G. NORMAL RANGE WATER REDUCING ADMIXTURE: ASTM C 494 TYPE A CONTAINING NO CALCIUM CHLORIDE.
- H. ACCELERATING ADMIXTURE: ASTM C 494 TYPE C OR E.
- I. CALCIUM CHLORIDE NOT PERMITTED.

6. REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60 DEFORMED BARS, AND SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH ACI 315-LATEST EDITION.

7. ANCHOR BOLTS SHALL CONFORM TO ASTM A307 OR A36 HOT DIPPED GALVANIZED UNLESS NOTED OTHERWISE ON PLAN.

# STRUCTURAL STEEL NOTES:

1. STRUCTURAL STEEL FABRICATION, ERECTION, AND CONNECTION DESIGN SHALL CONFORM TO AISC "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL"-NINTH EDITION.

- 2. STRUCTURAL STEEL:
  - A) STRUCTURAL STEEL SHALL CONFORM TO ASTM A-36. B) STRUCTURAL TUBING SHALL CONFORM TO ASTM A-500 GR-B C) STRUCTURAL PIPE SHALL CONFORM TO ASTM A-53, TYPE E OR S
- 3. THE FABRICATOR SHALL DESIGN CONNECTIONS FOR THE REACTIONS SHOWN ON THE DRAWINGS OR THE MAXIMUM END REACTION THAT CAN BE PRODUCED BY A LATERALLY SUPPORTED UNIFORMLY LOADED BEAM FOR EACH GIVEN BEAM SIZE AND SPAN.
- 4. FIELD CONNECTIONS SHALL BE BOLTED USING 3/4" DIAMETER ASTM A325 HIGH STRENGTH BOLTS EXCEPT WHERE FIELD WELDING IS INDICATED ON THE DRAWINGS.
- 5. ALL WELDING SHALL CONFORM TO AWS D1.1-LATEST EDITION. WELDING ELECTRODES SHALL BE E70XX.
- 6. STRUCTURAL STEEL PRIMER PAINT. TNEMEC 10-99 ALKYD RUST INHIBITIVE PRIMER, 2.0 TO 3.5 MILS DRY THICKNESS, OR APPROVED ALTERNATE.
- 7. STRUCTURAL STEEL TOP COAT FOR STEEL PERMANENTLY EXPOSED TO VIEW. TNEMEC SERIES 2 TNEMEC-GLOSS ENAMEL, 3.0 TO 5.0 MILS DRY THICKNESS. OR APPROVED ALTERNATE.

## STANDARD ABBREVIATIONS:

- (E) INDICATES EXISTING CONDITIONS OR MEMBERS.
- (TYP.) INDICATES TYPICAL (VIF) - INDICATES GENERAL CONTRACTOR SHALL "VERIFY IN FIELD" EXISTING DIMENSIONS, ELEVATIONS OR CONDITIONS.
- (U.O.N.) INDICATES UNLESS OTHERWISE NOTED.
- T/ INDICATES "TOP OF".
- M.O. INDICATES MASONRY OPENING R.O. - INDICATES ROUGH OPENING
- TBD TO BE DETERMINED
- CJ INDICATES CONTROL JOINT
- S.S. INDICATES STAINLESS STEEL



Reviewed for Code Compliance

Permitting and Inspections Department

Approved with Conditions

09/27/2018

THESE DRAWINGS HAVE BEEN DEVELOPED BY L&L STRUCTURAL ENGINEERING SERVICES, INC. FOR THE TITLED SET ONLY. THE DRAWINGS ARE THE SOLE PROPERTY OF L&L ENGINEERING SERVICES, INC. AND THEY SHALL NOT BE USED, LENT, COPIED OR ALTERED WITHOUT THE WRITTEN CONSENT OF L&L STRUCTURAL ENGINEERING SERVICES, INC.