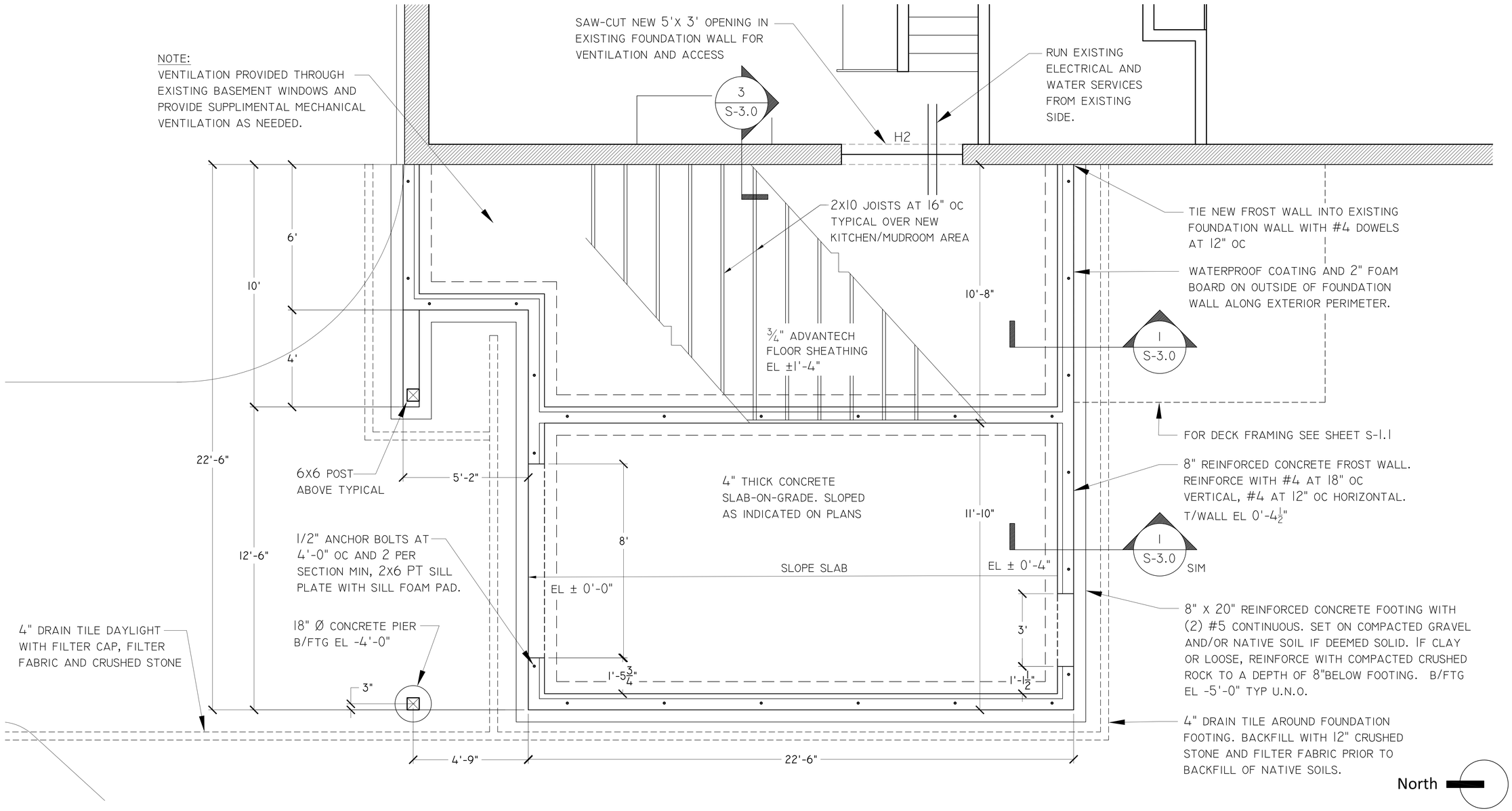

CONCRETE NOTES:

1. CONCRETE WORK SHALL CONFORM TO ACI 301, "STANDARD SPECIFICATION FOR STRUCTURAL CONCRETE IN BUILDINGS," AND ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE." HOT AND COLD WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 305R AND 306R, RESPECTIVELY.
6. CEMENT SHALL CONFORM TO ASTM C150 TYPE I OR II.
7. AGGREGATES SHALL CONFORM TO ASTM C33. MAXIMUM SIZE AGGREGATE SHALL BE 1" NOMINAL AT FOUNDATIONS, AND ¾" NOMINAL AT SLABS ON GROUND, UNLESS NOTED OTHERWISE.
8. MAXIMUM SLUMP SHALL BE 4".
9. PROVIDE CONCRETE MIX DESIGNS INCORPORATING THE FOLLOWING REQUIREMENTS:
   A. FOOTINGS:
      - COMPRESSIVE STRENGTH AT 28 DAYS: 3000 PSI
      - MINIMUM CEMENT CONTENT: 423 LB/CU YD
      - MINIMUM WATER CEMENT RATIO: 0.58
      - AIR ENTRAINMENT: OPTIONAL
   B. WALLS AND SLABS-ON-GROUND:
      - COMPRESSIVE STRENGTH AT 28 DAYS: 4000 PSI
      - MINIMUM CEMENT CONTENT: 517 LB/CU YD
      - MINIMUM WATER CEMENT RATIO: 0.48
      - AIR ENTRAINMENT: 4% TO 6% FOR WALLS; 0% FOR S.O.G.
      - SYNTHETIC FIBERS IN S.O.G. ONLY
10. CONCRETE MIX DURATION TIMES SHALL BE LIMITED TO LESS THAN 90 MINUTES, WITHOUT EXCEPTION FOR ANY REASON.
11. CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.
12. PROVIDE A VAPOR BARRIER UNDER INTERIOR SLABS ON GROUND. VAPOR BARRIER SHALL BE A MINIMUM OF 15 MIL THICKNESS OF EXTRUDED POLYOLEFIN FILM CONFORMING TO ASTM E1745 CLASS A PLASTICS WITH A MODIFIED PERMEANCE NOT EXCEEDING 0.02 PERMS. VAPOR BARRIER SHALL BE EQUAL TO STEGO WRAP BY STEGO INDUSTRIES LLC.
13. REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60 DEFORMED BARS AND SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI 315. WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED.
14. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 AND BE PROVIDED IN FLAT SHEETS.
15. MINIMUM PROTECTIVE CONCRETE COVER OVER REINFORCEMENT, UNLESS NOTED OTHERWISE, SHALL BE:
   A. SURFACES CAST AGAINST AND PERMANENTLY IN CONTACT WITH EARTH: 3"
   B. FORMED SURFACES IN CONTACT WITH EARTH OR EXPOSED TO WEATHER:
      FOR #5 BARS AND SMALLER: 1½"
      FOR #6 BARS AND LARGER: 2"
   C. SURFACES NOT IN CONTACT WITH EARTH OR EXPOSED TO WEATHER:
      FOR #11 BARS AND SMALLER FOR SLABS, WALLS, JOISTS: ¾"
      FOR ALL REINFORCEMENT OF BEAMS, GIRDERS AND COLUMNS: 1½"
17. ANCHOR RODS THAT ARE IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE HOT-DIPPED GALVANIZED.
18. ALL ITEMS TO BE EMBEDDED INTO CONCRETE SHALL BE INSTALLED PRIOR TO PLACEMENT OF CONCRETE. PROVIDE ADDITIONAL REINFORCEMENT AND/OR TEMPLATES AS REQUIRED TO ENSURE THE CORRECT POSITION OF EMBEDMENTS. "WET SETTING" OF EMBEDMENTS (INCLUDING ANCHOR BOLTS) INTO CONCRETE IS PROHIBITED.

WOOD FRAMING NOTES:

1. ALL WOOD FRAMING MATERIAL SHALL BE SURFACED DRY AND USED AT 19% MAXIMUM MOISTURE CONTENT. ALLOWABLE STRESS REQUIREMENTS OF ALL MATERIALS SHALL BE IN ACCORDANCE WITH NDS "NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION WITH COMMENTARY."
2. LUMBER SHALL BE HEM FIR NO2 OR SPRUCE-PINE-FIR NO1/NO2 OR BETTER, WITH MINIMUM ALLOWABLE STRESSES EQUAL TO THE FOLLOWING:
   A. ALLOWABLE BENDING STRESS (Fb) = 875 PSI
   B. ALLOWABLE SHEAR STRESS (Fv) = 135 PSI
   C. ALLOWABLE COMPRESSION PARALLEL TO GRAIN (Fc) = 1,150 PSI
   D. MODULUS OF ELASTICITY (E) = 1,400,000 PSI
3. PROVIDE ONE ROW OF FULL-DEPTH WOOD BLOCKING AT MID-HEIGHT OF ALL LOAD BEARING WALLS UP TO 8'-0" IN HEIGHT, AND AT 4'-0" MAXIMUM FOR FULL HEIGHT OF WALL.
4. BORED OR CUT HOLES SHALL NOT EXCEED ONE-THIRD OF THE DEPTH OF ANY UN-REINFORCED STRUCTURAL WALL STUD. EDGES OF HOLES SHALL NOT BE LOCATED CLOSER THAN 5/8" FROM THE EDGE OF THE STUD. STRUCTURAL WALL STUDS MAY HAVE BORED OR CUT HOLES UP TO ONE-HALF THE STUD DEPTH ONLY IF ADDITIONAL STUDS ARE INSTALLED OR SIMPSON STRONG-TIE TYPE STI1.5 STUD SHOES ARE USED. HOLES ARE NOT ALLOWED IN POSTS OR COLUMNS UNLESS SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS.
5. PROVIDE PRESSURE-TREATED LUMBER AT WALL SILL PLATE MEMBERS, EXTERIOR EXPOSURE, AND ALL LOCATIONS WHERE LUMBER WILL BE IN CONTACT WITH MASONRY OR CONCRETE. TIMBER SHALL BE TREATED SOUTHERN YELLOW PINE IN ACCORDANCE WITH AWPA STANDARD T1.
6. BUILT-UP POSTS AND BEAMS SHALL BE FASTENED TOGETHER WITH A MINIMUM OF TWO 10D NAILS AT 8" o.c. UNO IN PLANS. FASTENING SHALL BE PLACED INTO EACH PLY.
7. EXTERIOR NON-LOAD BEARING INSULATION PANELS SUPPORTING SIDING SHALL BE FASTENED TO WALL STUDS PER SPECIFICATIONS.
8. AT CONNECTIONS NOT SPECIFICALLY DETAILED, FASTENING SHALL BE IN ACCORDANCE WITH THE WOOD FRAMING SECTION IN THE 2015 IBC.
9. NAIL SIZES INDICATED ON THE DRAWINGS ARE COMMON WIRE NAIL SIZES (AS DEFINED BY THE AF&PA), WITH THE FOLLOWING DIMENSIONS:
   6d: 0.113" DIAMETER SHANK, 0.266" DIAMETER HEAD, 2" LONG
   8d: 0.131" DIAMETER SHANK, 0.281" DIAMETER HEAD, 2½" LONG
   10d: 0.148" DIAMETER SHANK, 0.312" DIAMETER HEAD, 3" LONG
   12d: 0.148" DIAMETER SHANK, 0.312" DIAMETER HEAD, 3¼" LONG
   16d: 0.162" DIAMETER SHANK, 0.344" DIAMETER HEAD, 3½" LONG
10. ALL WOOD CONNECTORS (JOIST AND BEAM HANGERS, POST CAPS AND BASES, AND TIES) SHALL BE GALVANIZED STEEL CONNECTORS AS MANUFACTURED BY SIMPSON STRONG-TIE (OR AN APPROVED EQUIVALENT).
11. CONNECTORS AND FASTENERS EXPOSED TO THE WEATHER AND/OR IN CONTACT WITH PRESERVATIVE TREATED LUMBER SHALL BE STAINLESS STEEL. IF ALTERNATE COATINGS ARE PROPOSED BY THE CONTRACTOR OR FASTENER MANUFACTURER, SUBMIT PRODUCT DATA FOR REVIEW PRIOR TO PURCHASE. FASTENERS SHALL MATCH THE TYPE OF CONNECTOR BEING USED.

PLYWOOD SHEATHING NOTES:

1. ALL PLYWOOD CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE AMERICAN PLYWOOD ASSOCIATION (APA) SPECIFICATIONS.
2. ALL ROOF PANEL SHEATHING SHALL BE ½" (NOMINAL), TYPE COX, EXP 1 APA RATED SHEATHING. SUITABLE EDGE SUPPORT SHALL BE PROVIDED BY USE OF CLIPS OR BLOCKING BETWEEN FRAMING, UNLESS OTHERWISE NOTED. CONNECT ROOF SHEATHING WITH 8D COMMON NAILS AT 6" o.c. PERIMETER, 6" o.c. PANEL EDGES AND 12" o.c. IN THE FIELD.
3. ALL FLOOR SHEATHING SHALL BE ¾" (NOMINAL) APA RATED STURD-I-FLOOR, EXP 1, WITH TONGUE AND GROOVE EDGE, UNLESS OTHERWISE NOTED. CONNECT FLOOR SHEATHING WITH 10D COMMON NAILS AT 6" o.c. PERIMETER, 6" o.c. PANEL EDGES AND 12" o.c. IN THE FIELD. FIELD GLUE USING ADHESIVES MEETING APA SPECIFICATION AFG-01, APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
4. ALL WALL PANEL SHEATHING SHALL BE ½" (NOMINAL) TYPE COX, EXP1 APA RATED SHEATHING. UNLESS OTHERWISE NOTED, CONNECT WALL SHEATHING WITH 8D COMMON NAILS AT 6" o.c. PERIMETER, 6" o.c. PANEL EDGES AND 12" o.c. IN THE FIELD, U.N.O.
5. INSTALL ALL PLYWOOD SHEATHING WITH THE LONG DIMENSION OF THE PANEL ACROSS SUPPORTS AND WITH PANEL CONTINUOUS OVER TWO OR MORE SPANS. STAGGER END JOINTS. ALLOW 1/8" SPACING AT PANEL ENDS AND EDGES UNLESS OTHERWISE RECOMMENDING BY THE SHEATHING MANUFACTURER.
6. ALL NAILING NOT OTHERWISE INDICATED SHALL BE IN ACCORDANCE WITH THE "NAILING SCHEDULE" ON THE TYPICAL DETAIL SHEET. NAILING SHALL NOT BE OVERDRIVEN.

DESIGN INFORMATION:

1. THE STRUCTURE IS DESIGNED TO CARRY THE FOLLOWING LIVE LOADS, IN ADDITION TO ALL THE DEAD LOADS OF THE VARIOUS SYSTEMS AS PROVIDED TO THE STRUCTURAL ENGINEER AT THE TIME OF THE ISSUANCE OF THESE DRAWINGS, IN CONFORMANCE WITH THE APPLICABLE REQUIREMENTS OF THE FOLLOWING STANDARDS:
   A. INTERNATIONAL RESIDENTIAL CODE (IBC) 2015 AMENDED BY THE MAINE UNIFORM BUILDING AND ENERGY CODE (MUBEC).
   B. ASCE7-10 "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES".
2. GEOTECHNICAL DESIGN CRITERIA:
   A. FOUNDATION DESIGN BEARING CAPACITY IS BASED ON USING THE FOLLOWING ALLOWABLE NET SOIL BEARING PRESSURES:
      - COLUMN FOOTINGS: 2500 PSF
      - CONTINUOUS WALL FOOTINGS: 2500 PSF
   B. NOTIFY THE STRUCTURAL ENGINEER OF RECORD (SER) IF UNSUITABLE MATERIALS ARE ENCOUNTERED BEFORE PROCEEDING WITH THE AFFECTED AREA OF WORK.
3. DEAD LOADS:
   A. EST'IMATED SELF-WEIGHT OF STRUCTURE AND ANY COMPONENTS OR FIXTURES CONSIDERED PERMANENT.
4. SNOW LOAD:
   A. DESIGN GROUND SNOW LOAD, Pg: 60 PSF
   B. TERRAIN CATEGORY: B
   C. SNOW OCCUPANCY CATEGORY: III
   D. SNOW LOAD IMPORTANCE FACTOR, Is: 1.0
   E. SNOW EXPOSURE FACTOR, Ce: 1.0
   F. THERMAL FACTOR, Ct: 1.0
   G. DESIGN FLAT-ROOF SNOW LOAD: 42 PSF
   H. UNBALANCED, DRIFTING AND SLIDING SNOW IN ACCORDANCE WITH CHAPTER 7 OF ASCE 7
6. WIND LOADS:
   A. WIND OCCUPANCY CATEGORY: III
   B. BASIC WIND SPEED (3-SECOND GUST), V(ult): 117 MPH
   C. WIND IMPORTANCE FACTOR, Iw: 1.00
   D. WIND EXPOSURE: B
   E. WIND DIRECTIONALITY FACTOR, Kd: 0.85
   F. TOPOGRAPHIC FACTOR, Kzt: 1.0
   G. ENCLOSURE CLASSIFICATION: ENCLOSED
   H. INTERNAL PRESSURE COEFFICIENT, GCPi: +/-0.18
   I. COMPONENTS & CLADDING LOADS IN ACCORDANCE WITH CHAPTER 6 OF ASCE 7
7. SEISMIC LOADS:
   A. BUILDING OCCUPANCY CATEGORY: III
   B. IMPORTANCE FACTOR, Ie: 1.0
   C. SITE CLASS: D
   D. SHORT PERIOD ACCELERATION Ss (Sds): 0.242 (0.258)
   E. 1-SECOND PERIOD ACCELERATION S1 (Sd1): 0.078 (0.188)
   F. SEISMIC DESIGN CATEGORY: B

Project Name:
Portland ME
107 Mackworth St.

OAK- Architecture
Office of Aaron Kadoch,AIA

base design group, inc.
94 Auburn Street, Unit 206, Portland, Maine 04103
t: 207.553.2070 - f: 207.553.2072
www.basedesigngroup.com

STATE OF MAINE
MIGUEL BETANCOURT
No. 14038
PROFESSIONAL ENGINEER
LICENSED

Drawing Scale: 1/2" = 1'-0"

Drawing Date: 04.29.18

Sheet Title: Proposed Foundation Plan

Sheet Number: S-1.0