## Aquidneck Consulting Engineers, LLC, General Notes

1. Aquidneck Consulting Engineers, LLC, (ACE) scope of work is limited to the foundation, concrete walls above grade, existing framing connections to new sill plates, exterior stairs and landing, and deck designs. The existing timber framing was largely concealed during ACE's site visit, therefore we made assumptions regarding its member sizes layout. When the existing residence is raised or moved aside, builder verify the connection mechanisms shown in ACE drawings can be implemented or contact ACE for revisions.
2. Construction must conform to the practices in Rhode Island State Building Code for 1- and 2-Family Dwellings (SBC-2) 11th Edition of July 1, 2013. The builder shall pay particular attention to Section R611 Concrete Walls. Deck and exterior stair framing details and connections per American Wood Council Publication 6 (AWC 6) 'Prescriptive Residential Wood Deck Construction' 2012 IRC Version (www.awc.org).
3. Design Loads in accordance with the more stringent of SBC-2 and American Society of Civil Engineers (ASCE) Publication 7-10 (Minimum Design Loads for Buildings and Other Structures):
-- Ground Snow Load: 30 psf
-- Basic Wind Speed: 136 MPH, Exposure Category C
-- Allowable Soil Bearing Pressure: 2000 psf
4. Should the builder or owner discover conditions in the field that do not conform to ACE drawings, sketches, or details, bring them to our attention immediately.
5. ACE drawings take precedence over standard details in SBC-2 and AWC 6. Specific details, sections, and notes take precedence over general notes.
6. All hold-down and connection hardware is by Simpson Strong-Tie Co., Inc. from their C-2015 (www.strongtie.com); builder may substitute products with the same characteristics and equal or greater capacity. Install per manufacturer's details and instructions U.N.O.
7. All hold-down and connection hardware and fasteners permanently exposed to weather shall be hot-dipped zinc-coated galvanized steel per ASTM A153 or Type 304 or Type 316 Stainless Steel or otherwise corrosion resistant per the guidelines on pp. 13-15 (Corrosion Information) of the Simpson C-2015 Catalog.
8. Elevations on ACE drawings are referenced to NAVD 1988 from the Elevation Certificate prepared by John Mensinger 03-24-2014.

## Flood Hazard Certificates

1. The site is located in an AE (El. 12) Flood Zone according to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map 44003C0134H Panel 134 of September 18, 2013.
2. The site is in a Flood Hazard Area that is NOT a Coastal A-Zone as defined in ASCE Publication 24-05 and is NOT subject to high-velocity wave action.
3. The foundation and framing design satisfy the requirements of SBC-2, ASCE 24-05, and FEMA's Coastal Construction Manual (FEMA P55 August 2011). The foundation and above grade walls will resist collapse and prevent lateral movement beyond permissible deflections from the combined effects of simultaneous gravity and lateral loads, including wind and debris impact.
4. Base Flood Elevation is 12'-0" NAVD. Design Flood Elevation is 13'-0" NAVD. The bottom of the lowest timber structural element of first floor framing is at elevation 14'-0" NAVD.
5. Flood vents by Smart Vent (www.smartvent.com); see plan for sizes and locations.

## Foundation Notes

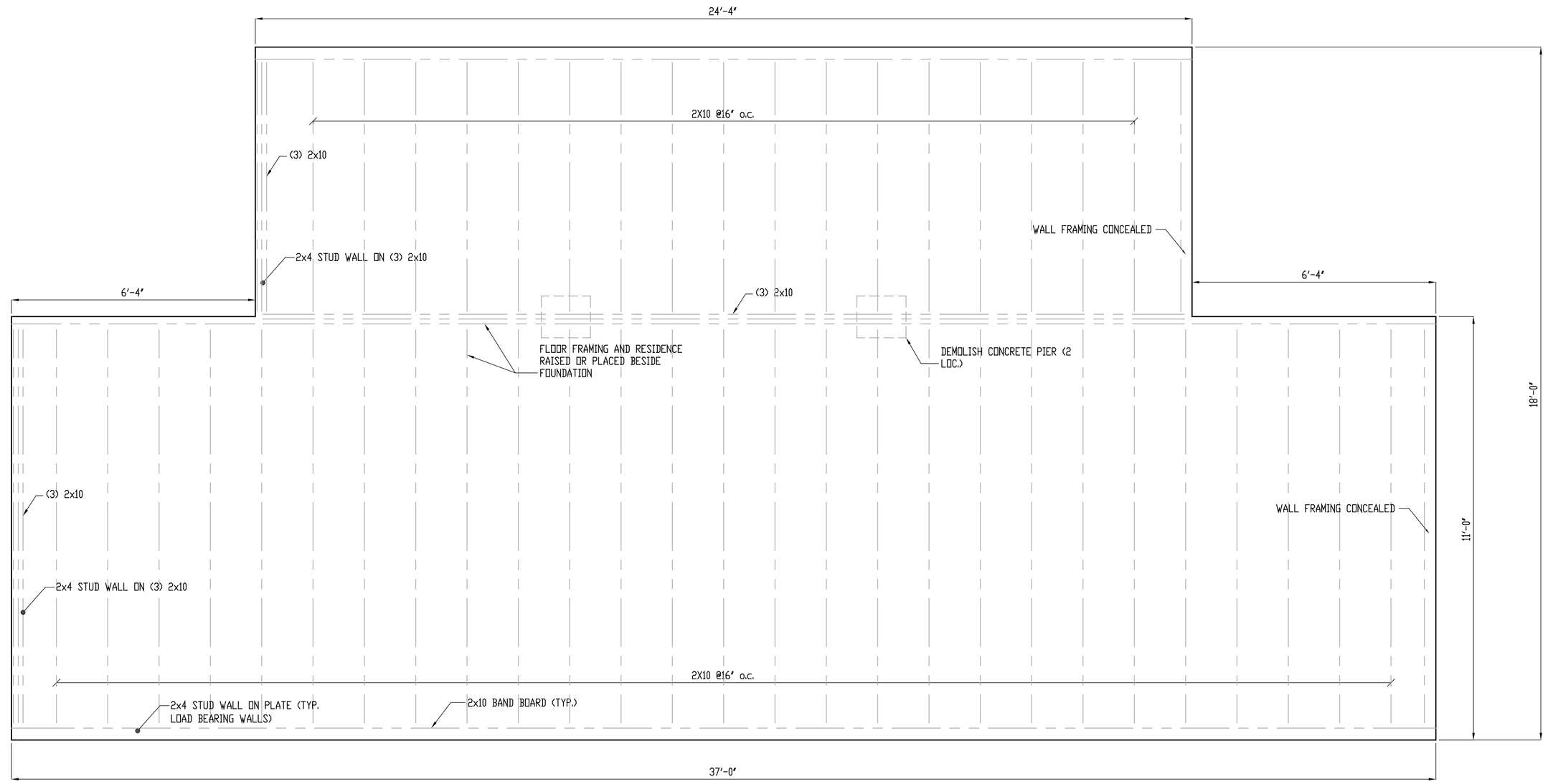
1. The owner is responsible for determining the location of his septic system (if any) and coordinating any modifications to it required by ACE's foundation plan and footing designs.
2. The builder is reponsible for contacting DIG SAFE 811 to identify locations of existing underground utilities and for any modifications required to them to install ACE's foundation design.
3. The builder shall ensure that the site is graded to drain surface water away from foundation walls.
4. The builder will ensure that the bottom of all foundations is 3 ft - 4 in. below finished grade.
5. The builder will ensure that all granular fill supporting slabs is compacted to 95 percent density with min. 6" gravel on top before placing slab.
6. The builder will ensure that all foundation work is protected against frost heaving.
7. The builder will ensure that all concrete footings, piers, and walls are formed.
8. The builder shall place a minimum 6-mil vapor retarder between earth and slab.
9. Anchor bolts shall be fabricated from ASTM A307 steel.
10. Simpson Strong-Tie Co., Inc., Wedge-All Stainless Steel (SS) anchors are from their C-SAS-2012 catalog (www.strongtie.com) and shall be installed per manufacturer's instructions.

## Concrete Notes

1. All concrete work will conform to ACI 318-11 (Building Code Requirements for Structural Concrete).
2. All concrete will have a min. density of 150 pcf and a min. 28-day compressive strength (F'c) of 4,500 psi for walls, slabs, footings, and piers and a maximum .45 water/cementitious material ratio.
3. The builder shall ensure areas under concrete construction are dewatered and that concrete will be placed under dry conditions.
4. The builder shall NOT place concrete directly against earth cuts.
5. Reinforcing steel shall conform to ASTM A615 (Specifications for Deformed Billet Steel Bars for Concrete Reinforcement), Grade 60, including ties and stirrups.
6. Minimum reinforcing steel concrete cover:
   -- 3 in. for concrete cast against and permanently exposed to earth;
   -- 2 in. for concrete with no. 6 bars or larger exposed to earth or weather;
   -- 1-1/2 in. for concrete with no. 5 bars or smaller or with wire mesh exposed to earth or weather; and
   -- 3/4 in. for formed surfaces with no. 11 bars and smaller not exposed to weather or in contact with earth.
7. The builder shall insure that all reinforcing steel and anchor bolts are securely fastened before placing concrete.

## Timber Notes

1. All dimension timber shall be pressure preservative-treating Southern Pine Number 2 quality or better with strengths before pressure preservative-treating that meet or exceed:
   -- Fb = 1,100 psi
   -- Fv = 175 psi
   -- Fc-perpendicular = 565 psi
   -- Fc-parallel = 1,450 psi
   -- E = 1,400,000 psi
3. Builder solid block between joists at each end unless installed with hangers.
4. All beams, joists and rafters must have at least 1-1/2 in. bearing support unless supported by hangers.




PLAN NORTH

1 / S-1 PLAN: EXISTING CONDITIONS & DEMOLTION
SCALE: 1/2"=1'-0"

NOTES:
1. FIELD VERIFY ALL DIMENSIONS.
2. PRIOR TO RAISING OR RE-LOCATING RESIDENCE DEMOLISH DECK ROOF AND REAR SHED.

PROJECT:
BARIS RESIDENCE
11 HARRIS AVENUE
WARWICK, RI

JOB NUMBER: 15-064

AQUIDNECK CONSULTING ENGINEERS, LLC
STRUCTURAL ANALYSIS AND DESIGN
ADMIRAL'S GATE TOWER, 3RD FLOOR
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NEWPORT, RI 02840
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DATE: 01-28-2016
REVISIONS: -

EXISTING CONDITIONS & NOTES

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ISSUED FOR CONSTRUCTION

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