ADDENDUM NO. 2 June 19, 2019 223536

RE: HEMLOCK RIDGE AT KILLINGTON OWNERS ASSOCIATION, INC.

HEMLOCK RIDGE CONDOMINIUMS WATER SYSTEM UPGRADE

FROM: DuBOIS & KING, INC.

P.O. Box 339

Randolph, Vermont 05060

(802) 728-3376

TO: **Prospective Bidders**

This Addendum forms part of the Contract Documents and modifies the original Bidding Documents issued by the Hemlock Ridge at Killington Owners Association, Inc., for the Hemlock Ridge Condominiums Water System Upgrade project dated January 25, 2019. Acknowledge receipt of this Addendum in the space provided on Page 1 of the Bid Form. Failure to do so will subject the Bidder to disqualification.

I. Contract Documents (Plan) Changes

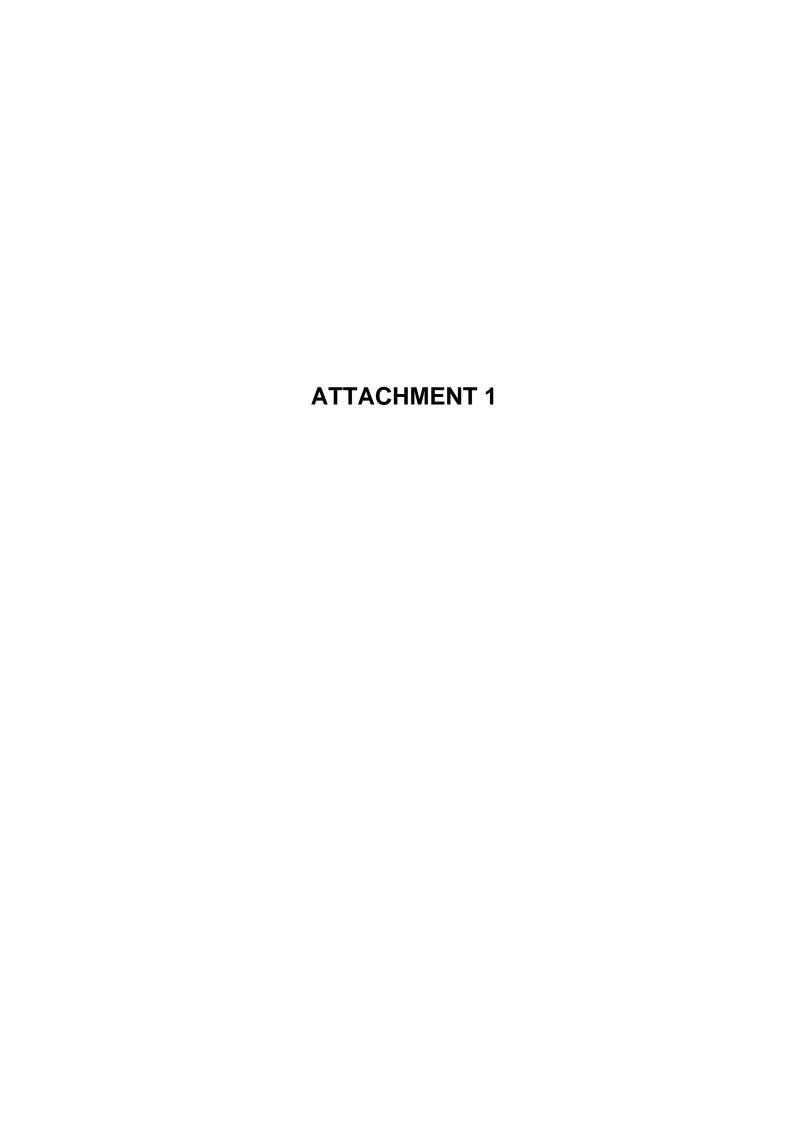
REVISED Sheet S1 and **Sheet S3** are included as **Attachment 1** of this Addendum and replace the corresponding original sheets in the Bid Documents.

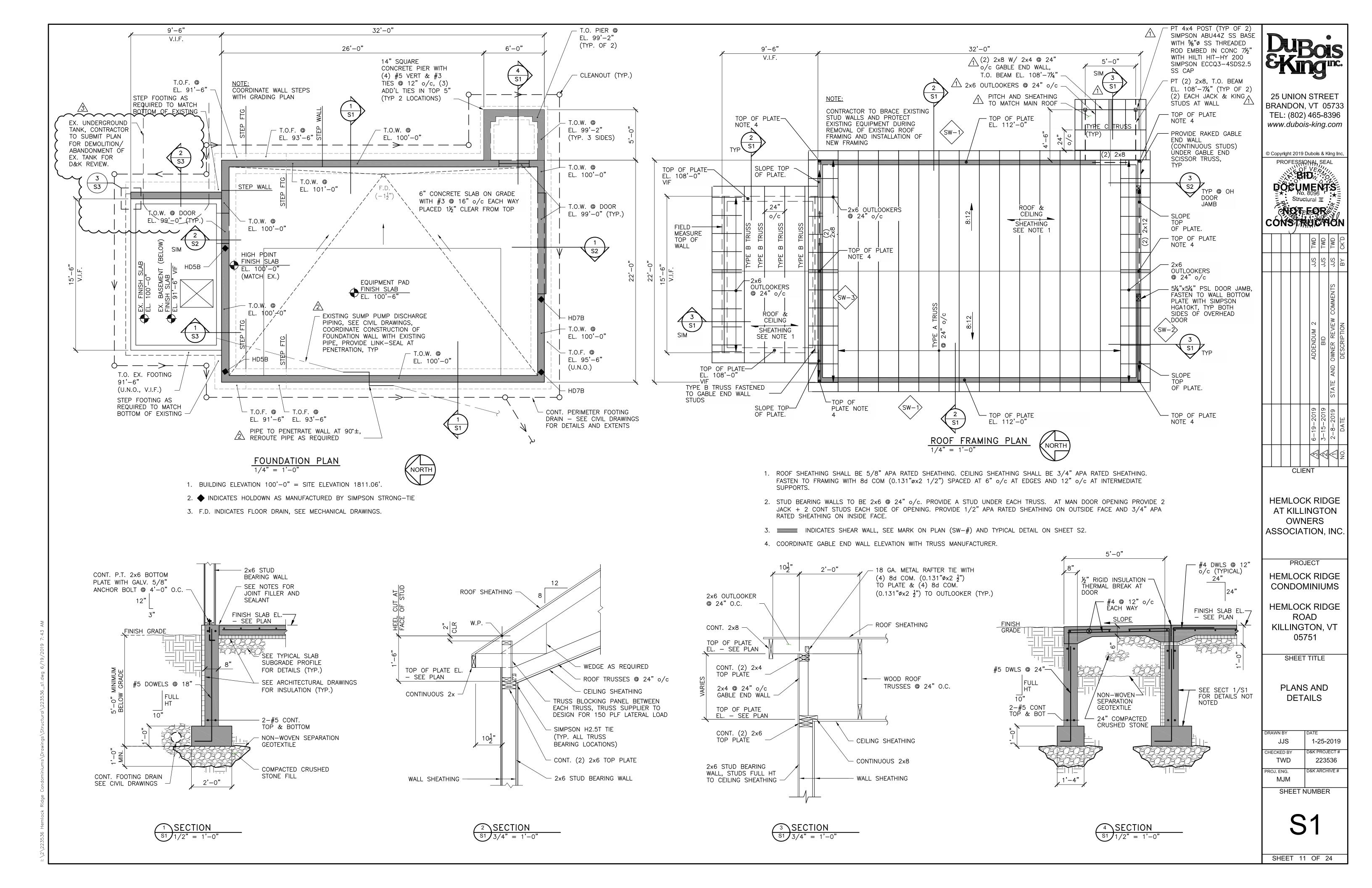
II. Additional Information/Clarifications

- 1. Abandonment of existing tank in basement of existing building will be up to the Contractor to submit a plan of abandonment. Possible methods for abandonment include:
 - a. Removing tank out to existing pit wall and pour new foundation wall; and,
 - b. Removing tank completely and pour new foundation wall.

Contractor's plan is subject to Engineer's approval.

This document constitutes Addendum 2 for this project.





GENERAL

- 1. USE STRUCTURAL DRAWINGS IN CONJUNCTION WITH THE SPECIFICATIONS AND ARCHITECTURAL, ELECTRICAL, MECHANICAL
- 2. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE CODES, STANDARDS, AND REGULATIONS.
- 3. DIMENSIONS SHALL NOT BE SCALED FROM DRAWINGS.
- 4. DETAILS SHOWN ARE TYPICAL. SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
- 5. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AND REPORT DISCREPANCIES TO ENGINEER BEFORE PROCEEDING WITH THE WORK.
- 6. CONTRACTOR SHALL SUBMIT COPY OF SHOP DRAWINGS AND PRODUCT DATA TO THE ARCHITECT/ENGINEER, MARKING THE PRODUCT TO BE PROVIDED. A COPY WILL BE PROCESSED AND RETURNED.
- 7. IN CASE OF DISCREPANCIES BETWEEN THE DRAWINGS AND THE SPECIFICATIONS, THE DRAWINGS GOVERN.

SHOP DRAWINGS AND PRODUCT DATA

- 1. SHOP DRAWINGS: SUBMIT ELECTRONICALLY TO THE ENGINEER FOR REVIEW AND PROCESSING.
- 2. PRODUCT DATA: SUBMIT ELECTRONICALLY TO THE ENGINEER FOR REVIEW AND PROCESSING, MARK TO INDICATE ACTUAL PRODUCT TO BE PROVIDED.

EARTHWORK

- 1. SUBMITTALS: SUBMIT TEST REPORTS ON BORROW MATERIAL, VERIFICATION OF FOOTING SUBGRADE MATERIAL, IN-PLACE SOIL DENSITY TEST AND OPTIMUM MOISTURE-MAXIMUM DENSITY CURVES.
- 2. EXISTING UTILITIES: LOCATE BY HAND EXCAVATION AND PROVIDE PROTECTION FROM DAMAGE. COOPERATE WITH OWNER AND UTILITY COMPANIES FOR MAINTAINING SERVICES.
- 3. PROTECTIONS: PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES IN AREAS OF WORK. BARRICADE OPEN EXCAVATIONS AND PROVIDE WARNING LIGHTS. SLOPE SIDES OF EXCAVATIONS AS REQUIRED FOR SAFE WORKING CONDITIONS. COMPLY WITH REGULATIONS OF AUTHORITIES HAVING JURISDICTION INCLUDING OSHA REGULATIONS FOR ALL EXCAVATION AND BACKFILLING WORK.
- 4. SATISFACTORY SOIL MATERIALS: DEFINED AS THOSE COMPLYING WITH ASTM D 2487 SOIL GROUPS GW, GP, GM, SM, SW AND SP.
- 5. ENGINEERED FILL: ENGINEERED FILL SHOULD BE CLEAN, WELL-GRADED SANDS AND GRAVELS MEETING THE REQUIREMENTS CALLED OUT FOR ITEM 704.08 GRANULAR BACKFILL FOR STRUCTURES IN THE LATEST EDITION OF THE VERMONT AGENCY OF TRANSPORTATION (VTRANS) STANDARD SPECIFICATIONS.
- 6. DRAINAGE FILL MATERIAL: WASHED, NARROWLY GRADED MIXTURE OF CRUSHED STONE OR GRAVEL, ASTM D 448 COARSE-AGGREGATE GRADING SIZE 57 WITH 100 PERCENT PASSING A 1-1/2 INCH SIEVE AND 0 TO 5 PERCENT
- 7. FINE-GRADED GRANULAR MATERIAL CHOKE COURSE: CLEAN MIXTURE OF CRUSHED STONE, CRUSHED GRAVEL AND MANUFACTURED OR NATURAL SAND, ASTM D 448 SIZE 10 WITH 100 PERCENT PASSING A 3/8 INCH SIEVE, 10 TO 30 PERCENT PASSING A NO. 100 SIEVE, AND AT LEAST 5 PERCENT PASSING NO. 200 SIEVE. MATERIAL SHALL COMPLY WITH DELETERIOUS SUBSTANCE LIMITS OF ASTM C 33 FOR FINE AGGREGATE.
- 8. CRUSHED STONE: WASHED, 3/4" CRUSHED STONE FEE OF ORGANICS, DEBRIS, AND OTHER OBJECTIONABLE MATERIAL.
- 9. NONWOVEN SEPARATION GEOTEXTILE: MIRAFI 140N OR APPROVED EQUAL.
- 10. EXCAVATION: REMOVE AND DISPOSE OF MATERIAL ENCOUNTERED TO OBTAIN REQUIRED SUBGRADE ELEVATIONS.
- 11. DEWATERING: PREVENT SURFACE WATER AND GROUND WATER FROM ENTERING EXCAVATIONS, FROM PONDING ON PREPARED SUBGRADES AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA. PROTECT SUBGRADES FROM SOFTENING, UNDERMINING, WASHOUT AND DAMAGE BY RAIN OR WATER ACCUMULATION.
- 12. BACKFILL AND FILL: PLACE SATISFACTORY BACKFILL AND FILL SOIL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH, COMPACTING EACH LAYER TO REQUIRED MAXIMUM DENSITY. DO NOT PLACE MATERIALS ON SURFACES THAT ARE MUDDY, FROZEN, OR CONTAIN ICE OR FROST. USE DRAINAGE FILL UNDER INTERIOR AND EXTERIOR SLABS ON GRADE. USE ENGINEERED FILL UNDER STRUCTURES AND WITHIN 5 FEET OF BUILDING LINES.
- 13. COMPACTION: COMPACT EACH LAYER OF BACKFILL AND FILL SOIL MATERIALS AND THE TOP 12 INCHES OF EXISTING SUBGRADE FOR STRUCTURES, SLABS, STEPS AND PAVEMENTS TO 95 PERCENT MAXIMUM DENSITY AND FOR FOOTINGS TO 98 PERCENT MAXIMUM DENSITY AS DETERMINED BY ASTM D 698. FOR LAWN AND OTHER UNPAVED AREAS, COMPACT TO 92 PERCENT MAXIMUM DENSITY.
- 14. TESTING: CONTRACTOR WILL ENGAGE/EMPLOY SOILS TESTING AND INSPECTION SERVICE FOR QUALITY CONTROL TESTING DURING EARTHWORK OPERATIONS. TYPE AND QUANTITY OF TESTS SHALL BE AS DIRECTED BY THE ENGINEER.
- 15. FOOTINGS: PLACE FOOTINGS ON UNDISTURBED SOIL OR COMPACTED ENGINEERED FILL CAPABLE OF SUPPORTING A SUPERIMPOSED LOAD OF 1 TON PER SQUARE FOOT. SUBGRADE TO BE INSPECTED BY QUALIFIED ENGINEER PRIOR TO FOOTING INSTALLATION. BACKFILL OVER-EXCAVATION AT FOOTING WITH COMPACTED ENGINEERED FILL AS

CONCRETE

- 1. ALL CONCRETE SHALL CONFORM TO REQUIREMENTS AND RECOMMENDATIONS OF ACI 318 "BUILDING CODE REQUIREMENTS OF REINFORCED CONCRETE" AND ACI FIELD REFERENCE MANUAL SP 15.
- 2. CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301," SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS," EXCEPT AS MODIFIED OR SUPPLEMENTED BELOW.
- 3. SHOP DRAWINGS AND DATA: SUBMIT SHOP DRAWINGS COMPLYING WITH ACI SP-66 "ACI DETAILING MANUAL" AND PRODUCT DATA FOR ACCESSORIES, ADMIXTURES AND CURING COMPOUNDS.
- 4. MIX PROPORTIONS AND DESIGNS SHALL BE SUBMITTED FOR APPROVAL. LIMIT MAXIMUM WATER-SOLUBLE CHLORIDE ION CONTENT IN CONCRETE TO 0.3 BY WEIGHT OF CEMENT.

	CONCRETE	CLASS	MAX W/CM	
CONCRETE USAGE	STRENGTH		RATIO	AIR
FOOTINGS & WALLS	3000 psi	F0, S0, P0, C1	0.50	6% +/- 2%
INTERIOR SLAB-ON-GRADE	3500 psi	F0, S0, P0, C0	0.50	<3%

- 5. REINFORCING STEEL: ASTM A 615 GRADE 60.
- 6. EXPANSION AND ISOLATION JOINT FILLER STRIPS: ASTM D 1751, ASPHALT-SATURATED CELLULOSIC FIBER OR ASTM D 1752 CORK OR SELF-EXPANDING CORK.
- 7. JOINT FILLER: TWO-COMPONENT, SEMIRIGID, 100 PERCENT SOLIDS, EPOXY RESIN WITH A TYPE A SHORE DUROMETER HARDNESS OF 80 OR AROMATIC POLYUREA WITH A TYPE A SHORE DUROMETER HARDNESS OF 90 TO 95 PER ASTM
- 8. VAPOR BARRIER: STEGO INDUSTRIES LLC; STEGO-WRAP 15 MIL CLASS A, OR EQUIVALENT.
- 9. NON-SHRINK GROUT: ASTM C1107, FACTORY PACKAGED, NON-METALLIC AGGREGATE GROUT, NON-CORROSIVE AND NON-STAINING, MIXED WITH WATER TO CONSISTENCY SUITABLE FOR APPLICATION AND A 30-MINUTE
- 10. ALL CONCRETE SHALL BE READY-MIX CONCRETE CONFORMING TO ASTM C 94 EXCEPT THAT ADDITION OF WATER WILL NOT BE PERMITTED.
- 11. ALL REINFORCING MARKED CONTINUOUS (CONT.) SHALL BE LAPPED 64 BAR DIAM, AT SPLICES AND CORNERS AND SHALL BE HOOKED OR EXTENDED 48 BAR DIAM, AT NON-CONTINUOUS ENDS.
- 12. REINFORCEMENT SHALL BE SECURELY TIED IN ITS PROPER PLACE BEFORE AND DURING CONCRETE PLACEMENT OPERATIONS USING APPROVED CHAIRS AND SPACERS AS REQUIRED.
- 13. SLABS ON GRADE SHALL BE PLACED OVER A POROUS 12 INCH LAYER OF COMPACTED DRAINAGE FILL (MINIMUM), UNLESS OTHERWISE SHOWN ON PLANS. PROVIDE #3 AT 16 INCHES ON CENTER PLACED 1 1/2 INCH FROM TOP OF SLAB IN ALL SLABS ON GRADE UNLESS OTHERWISE SHOWN. SLABS SHALL BE PLACED IN ALTERNATE STRIPS, EACH STRIP NOT TO EXCEED 40 FEET WIDE BY 160 FEET LONG. SAWCUT LENGTHS IN PANELS NOT TO EXCEED 20 FEET IN LENGTH OR WIDTH. SAW CUTTING SHALL BE DONE WITH "SOFF-CUT" SAWS. SLAB PANEL LENGTH TO WIDTH RATIO NOT TO EXCEED 1.5.
- 14. THE CONCRETE CONTRACTOR SHALL INSTALL OR GIVE OTHER TRADES AMPLE OPPORTUNITY TO INSTALL ALL ANCHORS, BOLTS, PLATES, NAILERS, SLOTS, CHASES, PIPE SLEEVES, ETC., AS REQUIRED BY THESE TRADES. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE SETTING SCREEDS AND FORMS.
- 15. FOUNDATION WALLS SHALL BE PLACED IN ALTERNATE LENGTHS. CONSTRUCTION OR CONTROL JOINTS SHALL BE PLACED NOT MORE THAN 60 FEET APART NOR MORE THAN 30 FEET FROM A CORNER. NO HORIZONTAL JOINTS SHALL BE PERMITTED EXCEPT AS SHOWN ON PLANS. FOUNDATION WALLS SHALL BE BRACED UNTIL ADJOINING FLOOR CONSTRUCTION IS IN PLACE.
- 16. PROVIDE CLEARANCES FROM FACES OF CONCRETE TO REINFORCEMENT AS FOLLOWS (UNLESS NOTED OTHERWISE): CONCRETE CAST AGAINST EARTH 3" (ALL BARS) CONCRETE EXPOSED TO EARTH OR WEATHER 2" (#6 AND LARGER)

1-1/2" (#5 AND SMALLER) CONCRETE NOT EXPOSED TO EARTH OR WEATHER:

SLABS, WALLS AND JOISTS BEAMS AND COLUMNS (MAIN STEEL AND TIES) 17. ALL CONCRETE SHALL BE CONSOLIDATED USING MECHANICAL VIBRATING EQUIPMENT.

- 3/4" (#11 AND SMALLER) 1-1/2" (ALL BARS)
- 18. FORMED CONCRETE NOT EXPOSED TO VIEW SHALL RECEIVE A ROUGH FORM FINISH; FORMED CONCRETE EXPOSED
- TO VIEW SHALL RECEIVE A SMOOTH FORM FINISH.
- 19. CONCRETE SLABS SHALL RECEIVE A BROOM FINISH FOR INTERIOR AND EXTERIOR CONCRETE.

CONT BENTONITE

FOUNDATION WALL,

SEE SECT 2 THIS

WATERSTOP

EX. BUILDING

FOUNDATION

WALL

SHEET

EQ

3 SECTION

- 20. PENETRATING FLOOR SEALER: PROVIDE SILANE SILOXANE CONCRETE SEALER TO ALL EXPOSED CONCRETE SURFACES IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.
- 21. TESTING: THE CONTRACTOR WILL EMPLOY A TESTING LABORATORY TO PERFORM TESTS FOR QUALITY CONTROL DURING PLACEMENT. TYPE AND FREQUENCY OF TESTS SHALL BE IN ACCORDANCE WITH ACT SU

FOUNDATION INSULATION

#4 DOWELS @ 12" o/c -

VERT, EMBED 4" INTO

(TYP BOTH CORNERS)

EX. CONCRETE W/

HILTI HIT-HY 200

10"

1. FOUNDATION INSULATION: STYROFOAM BRAND EXTRUDED POLYSTYRENE FOAM INSULATION MEETING ASTM C578. TYPE IV, MANUFACTURED BY THE DOW CHEMICAL COMPANY.

#4 DOWELS @ 24" o/c

4" INTO EX. CONCRETE

W/ HILTI HIT-HY 200

EX. BUILDING

ELEVATED SLAB -

HILTI HIT-HY 200

#4 @ 12" o/c —

EDGE OF EX. TANK

CONT 4"x3%" PVC WATERSTOP -

EX. WALL

ËACH WAY

OPENING

EX. BUILDING

FOUNDATIONS

#4 DOWELS x 24" LG

@ 24" o/c, EMBED 4"

INTO EX. CONCRETE W/

ADHESIVE, CENTER IN

BOTH DIRECTIONS, EMBED

WOOD FRAMING:

- 1. ALL WOOD CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" BY THE NATIONAL FOREST PRODUCTS ASSOCIATION AND TO LOCAL BUILDING CODES.
- 2. SECURELY ATTACH WOOD FRAMING TO SUBSTRATE BY ANCHORING AND FASTENING AS INDICATED, COMPLYING WITH ICC INTERNATIONAL BUILDING CODE CHAPTER 23 TABLE "FASTENING SCHEDULE."
- 3. ALL WOOD MEMBERS SHALL BE SPRUCE-PINE-FIR NO. 2 GRADE AND BETTER EXCEPT WHERE NOTED AS FIR ON PLANS.
- 4. ALL PRESERVATIVE TREATED WOOD MEMBERS SHALL BE NO. 2 GRADE AND BETTER SOUTHERN PINE. ALL METAL CONNECTORS, ANCHORS AND FASTENERS USED FOR PRESERVATIVE TREATED WOOD SHALL BE STAINLESS STEEL OR GALVANIZED AS RECOMMENDED BY THE CONNECTOR, ANCHOR OR FASTENER MANUFACTURER.
- 5. CONTINUITY IN FRAMING SHALL BE PROVIDED AT ALL BEARING WALLS IN ORDER TO TRANSFER THE LOADS TO THE FOUNDATION OR OTHER FRAMING.
- 6. ALL WOOD HEADERS AT BEARING WALLS SHALL BE A MINIMUM OF 2-2X8 UNLESS OTHERWISE NOTED ON PLANS. WOOD MEMBERS USED FOR HEADERS OR BUILT-UP BEAMS SHALL NOT HAVE CHECKS OR SPLITS LONGER THAN THE WIDE FACE WIDTH. PROVIDE HALF OF INTERRUPTED STUDS, MINIMUM 1 JACK AND 1 KING STUD, EACH SIDE OF OPENING UNLESS SHOWN
- 7. WOOD TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER TO RESIST LOADS SHOWN ON PLANS. DESIGN OF TRUSSES SHALL CONFORM TO THE REQUIREMENTS OF THE "NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION," TPI-02. THE DESIGN OF TRUSSES SHALL BE STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND SUBMITTED FOR APPROVAL. THE MANUFACTURER SHALL SHOW SPECIAL BEARINGS AND LATERAL BRACING AS REQUIRED BRACING OF WOOD TRUSSES, INCLUDING TEMPORARY BRACING FOR TRUSS INSTALLATION, SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF TPI_DSB_89 "RECOMMENDED DESIGN SPECIFICATION FOR TEMPORARY BRACING OF METAL PLATE CONNECTED WOOD TRUSSES."
- 8. PLYWOOD SHEATHING SHALL BE APA RATED SHEATHING EXPOSURE 1. ALL PLYWOOD SHALL BE EXTERIOR TYPE. PANEL THICKNESS SHALL BE AS SHOWN ON PLANS AND MINIMUM PANEL SPAN RATING SHALL BE 48/24 FOR FLOORS, 40/20 FOR ROOFS AND 32/16 FOR SIDEWALLS. ALL PLYWOOD ROOF SHEATHING SHALL HAVE PLYCLIPS AT MIDSPAN. APPLICATIONS SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF THE AMERICAN PLYWOOD ASSOCIATION.

20 PSF

1.1

120 MPH

93 MPH

+/- 0.18

ASCE 7-10

DESIGN CRITERIA

 CODES: IBC 2015 AND ASCE 7-10, AS AMENDED BY 2015 VERMONT FIRE AND BUILDING SAFETY CODE RISK CATEGORY:

ROOF LOADS: DEAD LOAD: GROUND SNOW LOAD (Pg) FLAT ROOF SNOWLOAD (Pf): EXPOSURE FACTOR (Ce): THERMAL FACTOR (Ct): IMPORTANCE FACTOR (Is):

4. WIND LOAD: ULTIMATE WIND SPEED (Vult): NOMINAL WIND SPEED (Vasd): WIND EXPOSURE: INT. PRESSURE COEFFICIENT (GCpi): COMPONENTS/CLADDING:

5. SEISMIC LOAD: IMPORTANCE FACTOR (Ie): MAPPED SPECTRAL RESPONSE COEFFICIENTS: SITE CLASS: SPECTRAL RESPONSE COEFFICIENTS: SEISMIC DESIGN CATEGORY: SEISMIC FORCE-RESISTING SYSTEM:

ANALYSIS PROCEDURE:

APPLY PENETRATING SEALER TO

EXPOSED CONCRETE SURFACES

✓ ¾" CHAMFER

- FINISH GRADE

- SEE CIVIL

-#5 @ 12"o/c VERT,

STD HOOK IN FOOTING

#5 @ 12" o/c HORIZ

CLEAN EXISTING CONCRETE

TO PLACING NEW CONCRETE

AGAINST EX. FOUNDATION WALL

#4 DOWELS @ 12" o/c, EMBED

HIT-HY 200 ADHESIVE, POSITION

6" FROM TOP OF FOOTING, 2"

FOUNDATION WALL AS REQUIRED

CLEAR @ BOTTOM & SIDE

DURING CONSTRUCTION

CAST FOUNDATION WALL

T.O.F. EL.

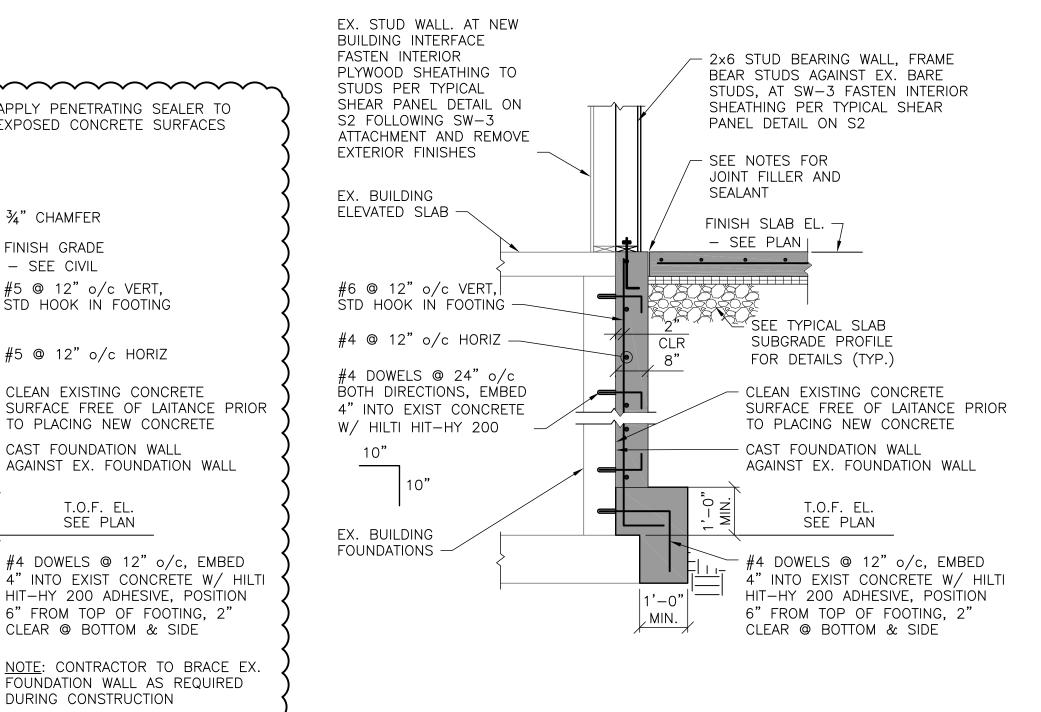
, MIN.

SEE PLAN

1.25 Ss = 0.229 AND S1 = 0.083 Sds = 0.244 AND Sd1 = 0.132

60 PSF, PLUS DRIFT AS REQUIRED

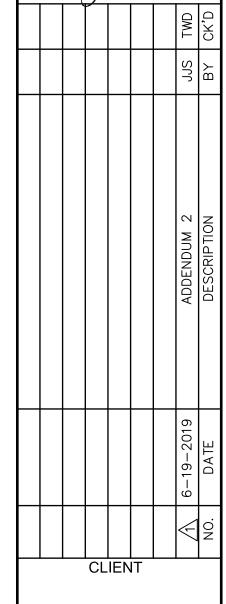
LIGHT-FRAMED WOOD WALLS SHEATHING WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR RESISTANCE, R = 6.5 EQUIVALENT LATERAL FORCE METHOD



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DOCUMENT: . Structural II



HEMLOCK RIDGE AT KILLINGTON OWNERS ASSOCIATION, INC.

PROJECT

HEMLOCK RIDGE

CONDOMINIUMS

HEMLOCK RIDGE ROAD KILLINGTON, VT

SHEET TITLE

05751

NOTES

1-25-2019 CHECKED BY &K PROJECT# TWD 223536 D&K ARCHIVE # PROJ. ENG. SHEET NUMBER

SHEET 13 OF 24