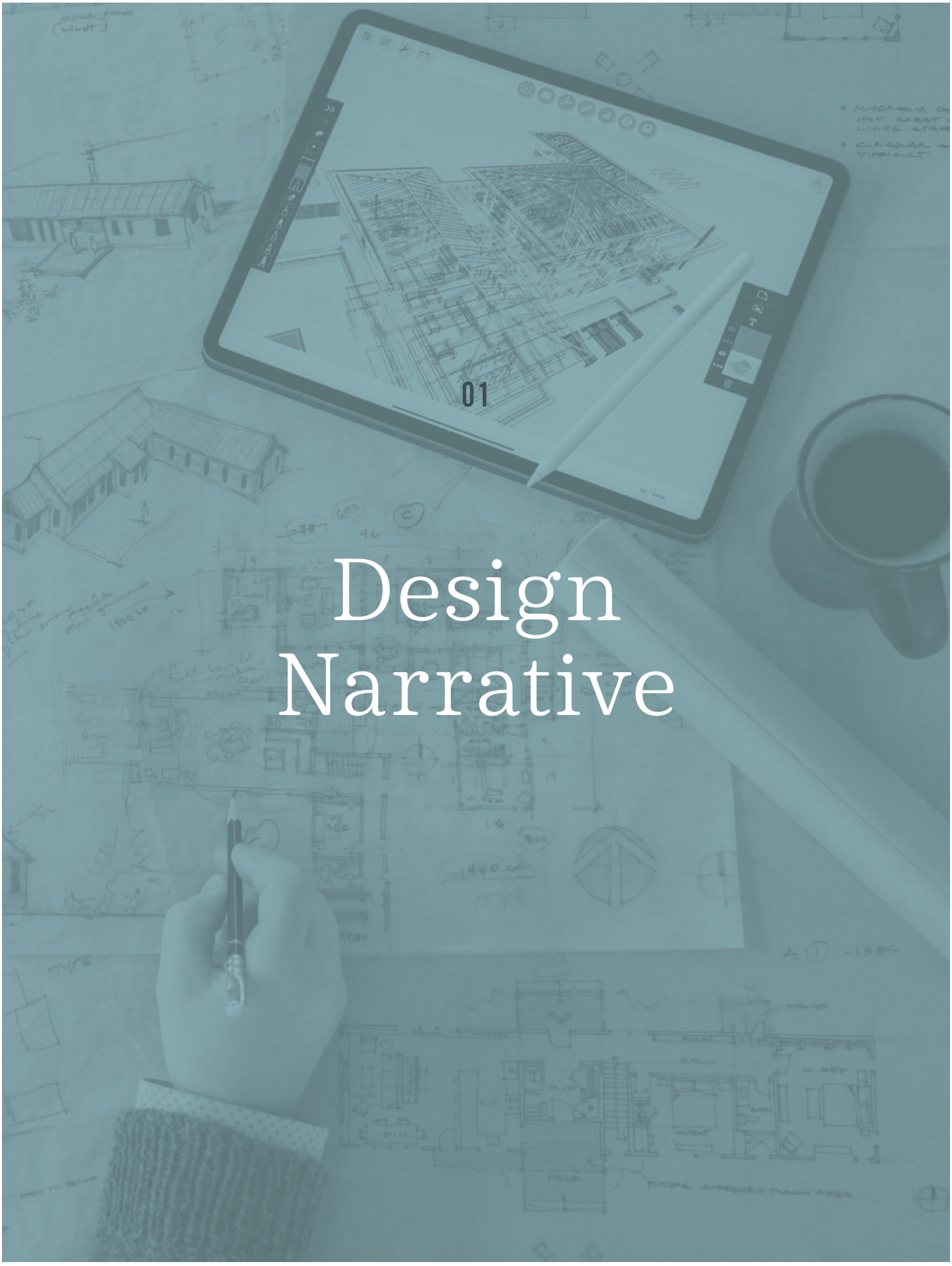
XXX Residence

XXX ROAD, WEST TISBURY, MA

15 RED ARROW ROAD • P.O. BOX 1260
WEST TISBURY, MA 02575

TEL 508.693.4850

SOUTHMOUNTAIN.COM



01

Design Narrative

Design Narrative

written by Architect Greg Milne

MY FIRST IMPRESSION OF XXX AND XXX was formed during an early discussion about the site. Both spoke with reverence and humility about the place they'd chosen to make their home. It was very clear they had an enormous respect for what it had to offer and a wish to develop it thoughtfully. We were instantly aligned.

Chosen for its natural beauty and privacy, the XXX site was two miles from the nearest available electrical tie. Rather than trench two miles or pay a bundle to the owners of the nearer connection, we recommended designing our largest off-grid system to date. XXX and XXX agreed. In addition to the solar and battery electrical infrastructure, we were asked to create a master plan that included a main house, pool terrace, and carport.

Conceptual design commenced under a number of constraints:

A large portion of the property was under a conservation restriction due to its proximity to protected wetlands and XXX. We would need to obtain special permission from the following West Tisbury town boards:

- Planning Board (to exceed maximum house size)
- ZBA (for pool, antenna pole and PV array)

- Conservation Commission (for tree clearing to gain visual access to the pond)

The house design faced similar constraints. Our initial plan, for a gabled roof and dormers, exceeded the town's height restriction, leading to a design shift toward a simplified hipped roofline featuring two wings, stretching north and south.

We explored a variety of relationships between buildings and site, before quickly agreeing to orient the house with major views toward the water and gardens. XXX's request to have a kitchen view that faced the morning sun resulted in the stair hall/ screen that remains one of my favorite elements. The carport was sited to form one edge of the gardens, shielding the more private interior courtyard from the comings and goings of vehicles.

We worked closely with Richard Johnson on the landscape design. The clean slate for the primary site afforded exceedingly picturesque views to XXX, as well as more interior, contemplative views to the tree-lined south and western meadow. A new stone wall would help define the new building and gardens while the pool terrace would act as an edge to the built landscape, leaving all that lay beyond in a non-manicured, native state.

We sited the solar array to maximize potential while showcasing the technology on site. With the help of SMCo's Energy department, we designed a building envelope and HVAC system to minimize energy use/ optimize the size of the solar array.

In November, we flipped the switch on 33 kilowatts of solar coupled with 137 kilowatts of lithium-ion battery storage to power the property during and after construction.

The completed house is light and airy, characterized by private spaces at its periphery and shared spaces at its core. The two-story central volume includes an entry, small bath, kitchen/ dining space, stair hall, with bedrooms for the girls above. This volume steps down to a single-story living space that opens visually to the western waterfront. The master wing stretches east into the garden, housing a bedroom, bath, dressing room and office for XXX and XXX. The northern wing of the house opens into a screened porch with fireplace

and views toward the water. It also contains the guest rooms. In concept and practice, these volumes help define the pool terrace to the west, and along with the Carport, form the northern boundary of the garden to the east, enclosed by a stone wall.

The Carport design echoes that of the house. It's unique cladding allows light, air, and sightlines to the residence to permeate the structure.

Our interior designer, Beth Kostman, worked closely with the family to furnish the house in a way that complements the architecture.

The process itself spanned three years of meetings, countless flights, and a few pounds gained from 7A lunches and Lion Bars. We are grateful for the opportunity to know and work with our clients and friends, the XXX, and look forward to seeing XXX, XXX, XXX and XXX settle into the house - that we all crafted together - and enjoy it generations to come.

02

Project Participants

Architecture, Engineering & Consulting

Architect	Greg Milne
Interior Designer	Beth Kostman
Interiors Assistant	Jill Walsh
Project & Design Oversight	John Abrams
Structural Consultant	Lin Gallant
Landscape Architect	Richard Johnson
Lighting Design	Conceptual Lighting
Archaeological Consultant	Public Archaeology Laboratory, Inc.
Systems Engineering	Marc Rosenbaum
Mechanical Systems Design	Brice Delhougne

Production

Project Lead	Chris Wike
Carpenters	DonE Turnell Primo Lombardi Jean DaSilva Ryan O'Malley Curtis Friedman Ryan Soushek
Shop Lead	Jim Vercruysse
Cabinet Makers	Jon Lange Ken Leuchtenmacher Greg Small
Director of Production	Newell Isbell Shinn
Production Administrator	Rachel Wild
Production Support	Peggy MacKenzie
Director of Energy Technology	Rob Meyers
PV Project Manager	John Guadagno
PV Project Lead	Phil Forest
PV Installer	John Mazza

Trade Partners

Alarm	Electronic Security System	Edgartown, MA	(508)-693-2774
Audio/Visual	Vineyard Sound Integration	Vineyard Haven, MA	(508)-388-3008
Carpet /Rubber Flooring	Parker Carpet	Vineyard Haven, MA	(508)-693-7405
Concrete Slab	Simcik, Inc.	Vineyard Haven, MA	(508)-958-4429
Copper Pan/Gutters	Johnny Copper	Oak Bluffs, MA	(774)-563-0577
***Electrical**	Brissette Electric	West Tisbury, MA	(508)-693-0764
Excavation/Trenching	John Keene Excavation	West Tisbury, MA	(508)-693-5975
Fireplace	Johnny Hoy	West Tisbury, MA	(508)-696-9088
Foundation (Residence)	L&P Simmons	Vineyard Haven, MA	(508)-693-8842
***Generator**	Vineyard Generator	West Tisbury, MA	(508)-560-0394
Handrail	Cor-Metals, Inc.	Mashpee, MA	(508)-539-6683
***HVAC**	Alexander's Air	Edgartown, MA	(508)-627-3300
Insulation	Foam Insulation Tech (FIT)	West Tisbury, MA	(508)-696-6363
***Paint/ Wood Flooring**	WH Russell	Vineyard Haven, MA	(508)-693-3180
***Landscape/Stonework**	Oakleaf Landscape, Inc.	West Tisbury, MA	(508)-696-8869
Plaster	Jason Gale	West Tisbury, MA	(774)-563-8857
***Plumbing**	Seth Williams	Vineyard Haven, MA	(508)-687-9738
Propane	Vineyard Propane & Oil	Vineyard Haven, MA	(508)-693-5080
Roofing/Siding	Jim Airasian	Vineyard Haven, MA	(774)-392-4272
Swimming Pool	Atlantic Pool	Edgartown, MA	(508)-627-7665
Tile	R.W. Tile	Edgartown, MA	(774)-521-8418
Water Supply & Filtration	Island Water Source	Edgartown, MA	(508)-693-4999

** Trade Partners marked with an asterisk are those with whom you may want to maintain longterm relationships. They can perform regular maintenance if you wish, and take care of repairs.*

Primary Materials Suppliers

Appliances	Crane Appliances	Vineyard Haven, MA
Off-Grid Systems	Ameresco Solar	Temecula, CA
	BayWa r.e. Solar Systems LLC	Santa Fe, NM
Shower Doors & Mirrors	Falmouth Glass	East Falmouth, MA
Stone	Plymouth Marble & Granite	Plymouth, MA
Building Materials	Atlantic Plywood	East Providence, RI
	Authentic Roof	Ontario, Canada
	EC Cottle Inc.	West Tisbury & Edgartown, MA
	Foard Panel	West Chesterfield, NH
	Hathaway Mill	New Bedford, MA
	Keiver Willard	Newburyport, MA
	Pioneer Millworks	Farmington, NY
	Vineyard Home Center	Vineyard Haven, MA
	W.R. Robinson Lumber Corp	Wheelright, MA
Windows	Specialty Builder's Supply	Vineyard Haven, MA
	Pinnacle Windows Solution	Hallowell, ME
Woodstove	Vineyard Hearth & Patio	Vineyard Haven, MA

03

Building Data & Documents

Chronology & Building Size

CHRONOLOGY

August 2017	First Contact
February 2018	Feasibility and Pre-Design Began
August 2018	Design Began
March 2019	Construction Began
July 2020	Construction Completed

BUILDING SIZE

Conditioned Space	**Square Footage**
First Floor	2522
Second Floor	766
Lower Level (finished)	727
Total Square Footage	*4015*

Auxiliary Space	**Square Footage**
Carport	1152
Bunker	256
Screened Porch	425
Total Square Footage	*1833*

Air Sealing & Testing

The movement of air through small cracks or holes in a building's envelope can represent 40% of its heating and cooling load. Air leakage also has a major impact on the building's comfort and durability. Our construction documents clearly define the components of the air barrier and how they are connected. We set a target maximum air leakage in the Outline Specification which is typically three to five times tighter than the building code requires. We test air barrier performance after rough inspection and upon completion to ensure that the building is at or below our target.

To test, we close all the doors and windows, and use a calibrated instrument called a blower door. The blower door depressurizes the building to a standard point (50 Pascals, a metric value) that exceeds the pressure difference the building normally experiences. At that level of depressurization, all holes in the air barrier become inlets for air replacing the air exhausted by the blower door. The air flow rate in cubic feet per minute (CFM50) required to depressurize the building is a quantitative measure of how tight the building is, which we compare with the target value.

In addition, we find where the leaks are. When the building is heated, air leaking in is colder than the interior and is easily visible with an infrared camera. Even if the test indicates that the leakage amount is below the target value, we still want to find and seal any obvious holes.

As stated in the Outline Specification for your home:

"The building will be blower door tested upon completion of the plaster and will not exceed a maximum leakage of 575 CFM50."

TEST RESULT

The final blower door testing at your home yielded a result of 225 CFM50 - less than half the target air leakage. This will contribute to the comfort, durability, and energy efficiency of your home.

Landscape

Landscape
Trade Partner
Oakleaf Lanscape
(508)-696-8869

LANDSCAPE NARRATIVE

The way we see it, buildings are only one element in a greater landscape. To ensure your home fit flawlessly and comfortably into its surroundings, we enlisted the help of Landscape Architect Richard Johnson. He writes:

At the start of this project the site was a consistently second growth forest of oaks and a few pines, with a low shrub understory and very little mid-canopy growth. Closer to the water, larger blueberries, clethra and viburnum occupied the mid canopy.

Because the project is powered only by solar panels, the center of the site needed to be cleared of all vegetation over waist height. This set up a landscape vocabulary of meadow vegetation, wildflowers and grasses, with occasional clumps of blueberries or other shrubs. The house was very carefully sited to take advantage of narrow water views based on pre-existing footpaths through the woods to the shore. Vista pruning was negotiated with Conservation Commission to remove a few trees in these view channels, to remove lower branches of others, and to prune down the shrubs in these channels to roughly 4' in height, allowing improved views through the trunks to the water. This pruning will need to be refreshed every few years. Trees on the south and west side of the house were also removed for improved solar access to the pool, terrace, and master bedroom wing.

The east side of the house was conceived as a garden and lawn, with the entry boardwalk passing through the carport and garden beds to the front door. This garden area is separated from the larger meadow by a rough stone wall bounding the lawn, with several openings for footpaths through the meadow to surrounding woodlands. A row of trees parallels the master bedroom wing on the south, with a smaller row mirroring that on the north side. Non-native plant species are generally confined within this garden area, emphasizing seasonal bloom and beds to be planted by the Owners, while mostly native plant species are used elsewhere around the property. Plantings between the boardwalk and wall are mostly flowers that will also be present in the meadows. Roof runoff from the carport is directed to a rain garden planting, and a row of fruit trees separate the carport from the house. Mowed lawn is limited to the fruit orchard, front garden, and paths through the meadows.

There will be intense deer pressure on this site given the remote location. Native plant species should tolerate this but it would be useful to apply a product such as Liquid Fence around the perimeter of the stone wall and fruit orchard areas in March and again once a month for the growing season. Low fencing for rabbit control may be needed around the beds planted by the owners, or use of another repellent such as dried blood fertilizer every week or two in the spring and early summer.

Meadow areas should be mowed or brush cut once a year in late winter, to prevent woody tree species from establishing and limiting solar access to the photovoltaic array. This timing allows flower and grass seeds to be dispersed and the winter interest of the stems through snow. More frequent mowing around and under the array will be needed.

MAINTENANCE

As stated in the Outline Specifications for your home: All plantings are guaranteed for one calendar year after initial acceptance. To ensure they continue to thrive, we recommend entering into an annual service contract with Oakleaf Landscape.

PLANT LIST

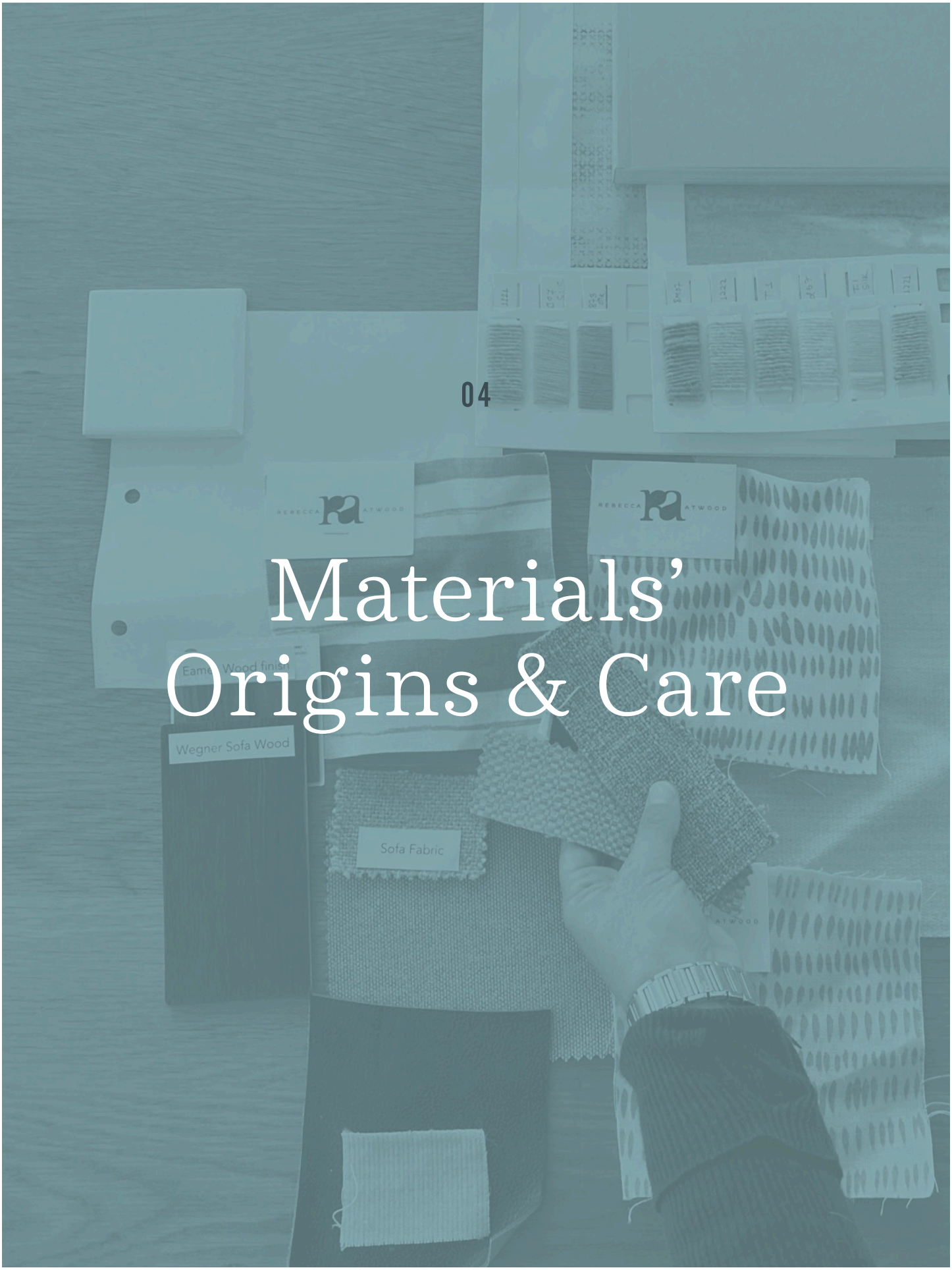
CODE	BOTANICAL NAME	COMMON NAME
AB	Acer rubrum ‘Bowhall’	Bowhall Red Maple
GT	Gleditsia triacanthos ‘Skyline’	Skyline Honeylocust
MV	Magnolia virginiana	Sweetbay Magnolia
MJ	Malus hybrid ‘Jonafree’	Jonafree Apple
MG	Malus hybrid ‘Gold Rush’	Gold Rush Apple
MW	Malus hybrid ‘Wine Crisp’	Wine Crisp Apple
PS	Prunus hybrid ‘Stark’s Sweetheart Apricot’	Stark’s Sweetheart Apricot
PF	Prunus hybrid ‘Flamin Fury Jumbo Peach’	Flamin Fury Jumbo Peach
PH	Prunus hybrid ‘Hardired Nectarine’	Hardired Nectarine
CH	Clethra alnifolia ‘Hummingbird’	Hummingbird Summersweet
IG	Ilex glabra	Inkberry
IP	Ilex pedunculosa	Longstalk Holly
IS	Ilex verticillata ‘Winter Red’	Sparkleberry
IA	Ilex verticillata male	Male Winterberry
IV	Itea virginica ‘Henry’s Garnet’	Henry’s Garnet Sweetspire
RA	Rhododendron arborescens	Sweet Azalea
RC	Rhododendron calendulaceum	Flame Azalea
RB	Rhododendron ‘Coral Bells’	Coral Bells Evergreen Azalea
RF	Rhus aromatica	Fragrant Sumac
VC	Vaccinium corymbosum ‘Blueray’, ‘Jersey’	Highbush Blueberry
AT	Asclepius tuberosa	Butterflyweed
AD	Aster divaricatus	Native Aster
DC	Deschampsia caespitosa	Tufted Hair Grass
EP	Echinacea purpurea ‘Magnus’	Magnus Purple Coneflower
EW	Echinacea purpurea ‘White Swan’	White Swan Coneflower
EM	Oenothera macrocarpa (missouriensis)	Evening Primrose
LC	Lobelia cardinalis	Cardinal Flower
MS	Matteucia struthiopteris	Ostrich Fern
RG	Rudbeckia fulgida	Black Eyed Susan

Notes:

Malus and Prunus trees grafted on semi-dwarf rootstocks

Sod lawns to be Kentucky Bluegrass/Fescue blend, seeded lawn paths to be PN No-Mow Fescue Blend

Seeded meadows to be PN Diverse Prairie Mix for Dry Soil (Prairie Nursery: 1-800-476-9453)



04

Materials' Origins & Care

Origins

When it comes to wood, we lean toward that which has been salvaged, makes efficient use of resources or has an interesting origin. Almost all of the exposed wood in your home has a story.

MATERIAL	USE	ORIGINS
Douglas Fir Heart pine	Beams and ceiling decking in Living Room Structural posts and beams in Kitchen	Both of these materials were salvaged from the deconstructed Curtiss-Wright factory in Buffalo, NY. Erected in 1909, the factory produced engines, propellers and airplanes during World Wars I and II. At the height of production, Curtiss-Wright employed 180,000 workers, and ranked second among United States corporations in the value of wartime contracts (General Motors ranked #1).
Fir	Screen Porch frames, rafters, ceiling decking	This material was originally used as pickle barrels staves at Pick's Pickles in Toronto, Canada. When Pick's changed over from fir to stainless, we were able to repurpose.
Heart Pine	Stair screen wall	We purchased this material from Max Taubert, a Duluth-based collector of reclaimed wood, specializing in deconstructed 20th century buildings (the tagline for his bygone business used to be "logging the industrial forest").
Pine	Carport sheathing	This native-cut eastern white pine was harvested and milled by W.R. Robinson Lumber. The Hardwick-based business has been in the pine and hemlock business for over 50 years.
Redwood	Exterior doors	This material was salvaged from fruit juice tanks at Mazza Vineyard near Lake Erie, PA. In the summer heat, it often smells sweet.
Sinker Cypress	Screen doors	This material is old growth timber that sunk to river bottoms in the South around the turn of the century. The logs used in your project were salvaged from Northern Florida and Southern Georgia. (Many of these trees were likely standing when George Washington was President!)

Exterior Care

We design buildings to “age well” and last, hopefully, for centuries. Although the materials we have selected require little maintenance, they will need regular inspections to ensure their good condition and proper function over time. These inspections can be performed by you, a caretaker, a property maintenance firm, or us.

WINDOWS

Your windows have a clad exterior, little maintenance is required other than periodic cleaning of the clad surface.

Inspect once per year, asking yourself: Have any of the glass seals failed, making the window appear foggy? Does the hardware operate freely - has any of it come loose?

At least once a year, wash the glass and vacuum the screens.

DOORS

Your exterior doors are made from reclaimed redwood, a hearty, rot-resistant wood, they are unfinished and need no treatment.

Inspect once per year, asking yourself: Does the door close easily without sticking? Is the weather-stripping intact and keeping air and water out of the house? Does the hardware operate freely? Is the closer on the screen door working properly?

SIDING & TRIM

Your house is clad in white cedar shingles, and white cedar boarding. Inspect for early signs of decay - these can typically be found close to the ground, around outdoor showers, and where decks meet the house. Inspect to see if any wall shingles are missing. Trim plantings so they don’t touch the house.

GUTTERS & DOWNSPOUTS

Ensure that the downspouts are directing rainwater properly, and that there are no gaps where the downspout has pulled away from the gutter.

At least once a year, clean gutters of debris.

ROOFS

Inspect for missing shingles that may have blown off during major storms. Ensure that tree limbs don’t overhang the roof - they create a path for squirrels, mice and ants to get to the house, as well as put the house at more risk in case of fire or storms. Inspect the roof for moss or lichen, which occur more often on shaded and/or north side roofs that get no sun, and shorten the life of the roof. Inspect any plumbing vent flashing for deteriorated rubber that is allowing water to enter. Ensure that metal or masonry chimneys are structurally sound and that the flashing is intact.

DECKS & STAIRS

Inspect the structural integrity, inspect for decay, and make sure fasteners aren’t poking up and causing a trip hazard. Areas of the deck that aren’t often exposed to the sun can get slippery. Carefully clean them with a power washer.

PESTS

Inspect wood trim for signs of carpenter bee activity. The damage they do usually starts with precise 3/8” diameter holes, sometimes expanding to visible furrows.

Inspect for carpenter ants. They typically like damp areas to nest, so keep dead wood away from the house.

Inspect for signs of mouse activity. If found, identify how they are getting in, and block these entrances with materials they can’t chew through, such as metal mesh, before caulking or otherwise covering the damage.

Similarly block spaces beneath low decks and porches to deter skunk and raccoon activity.

Inspect for bird nests under overhangs, and look for evidence of woodpecker damage.

MECHANICAL SYSTEMS

If there are hoods for ventilation, kitchen exhaust, or a clothes dryer that are close to the ground, check them for blockage and nests.

ELECTRICAL ITEMS

Check that exterior light fixtures are undamaged, and that outdoor receptacles are working and their covers are intact.

Interior Care

Wood Flooring
Trade Partner
Call WH Russell
(508)-693-3180

To ensure a long productive life for your interior finishes, we recommend taking the following precautions.

HARD FINISHES

MATERIAL	USE	CARE
Calacatta Vicenza	Kitchen counters	• For normal cleanup, use a soft damp cloth or sponge. • For stuck-on residues, try warm soapy water and lightly scrub with the pad on the back of many sponges. • After cleaning, rinse thoroughly and use a dry towel to wipe away excess moisture and prevent streaking. • Avoid harsh chemicals, and abrasives. Manufacturer recommends "Bar Keepers Friend" Soft Cleanser. • Always use a trivet when setting down hot objects such as pans or plates. Direct contact with extremely high heat can cause damage. • Note: Quartz is scratch, chip, and stain-resistant. It needs no sealing, or polishing, or reconditioning over time.
Pietra Cardosa (Sandstone)	Dining areas	• For normal cleanup, use a soft damp cloth or sponge. • For stuck-on residue, try warm soapy water, lightly scrub with pad on back of some sponges. • After cleaning, rinse thoroughly and use a dry towel to wipe away excess moisture to prevent streaking. • Avoid harsh chemicals. • Always use a cutting board. Pietra Cardosa is extremely scratch resistant, not scratch proof. • Always use a trivet when setting down hot objects such as pans or plates. Direct contact with extremely high heat can cause damage. • Take care with oils. If oils (olive, canola, any oil-based dressing, etc.) are left on the stone overnight or longer, they may penetrate and discolor. The stone won't absorb oils quickly, but take care to prevent long exposure. • Note: Your Pietra Cardosa has been sealed with Miracle Sealer "511 Impregnator", reapply periodically per manufacturer's specifications.
Tile	Kitchen backsplash	• Wipe glazed wall tiles periodically using a cloth or sponge dampened with a non oil-based cleaner. • Vacuum glazed floor tiles regularly to remove dirt and other gritty particles, then damp mop or sponge with an all-purpose, non-oil-based cleaner. • Remember not to use ammonia, as it will discolor grout.

MATERIAL	USE	CARE
Marble	Dining areas	• For normal cleanup, use a soft damp cloth or sponge. • For stuck-on residues, try warm soap water, lightly scrub with pad on back of some sponges. • After cleaning, rinse thoroughly and use a dry towel to wipe away excess moisture to prevent streaking. • Avoid harsh chemicals. • Please be careful with oils. If oils (olive, canola, any, oil-based dressing, etc.) are left on the stone overnight or longer, they may penetrate and lead to discoloration.

SPECIALTY FLOORING

MATERIAL	USE	CARE
Rubber flooring	Gym	• For normal cleanup, use a soft damp cloth or sponge. • For stuck-on residues, try warm soap water, lightly scrub with pad on back of some sponges.
Vinyl tile flooring	Lower level	• For normal cleanup, use a soft damp cloth or sponge. • For stuck-on residues, try warm soap water, lightly scrub with pad on back of some sponges.

WOOD

MATERIAL	USE	CARE
Walnut	Kitchen island countertop	This material has been sealed with (2) coats of Bona “Amberseal” and finished with (2) coats of Bona “HD Traffic” satin. To maintain finish, use a soft damp cloth or sponge for normal cleanup. Do not use any harsh detergents.
Heart pine	Round columns	This material has been finished with (2) coats of butcher’s wax, with clear matte finish. The heart pine beams need no finish.
White oak	Finish floors and stair	This material has been finished with 25% Rubio Monocoat %5 white. To maintain finish, avoid cleaning with harsh chemicals. Should you ever wish to refinish, call WH Russell to coordinate.
White oak	Window sills, interior doors, and door frames	This material has been finished with Rubio Monocoat “Pure”. To maintain finish, use a soft damp cloth or sponge for normal cleanup. Do not use any harsh detergents.

Note: Wood will last forever unless it is attacked by bacteria and fungi that can only survive in the presence of moisture (to be specific, most harmful organisms thrive when wood is at a moisture content of at least 20%). Therefore, one of our most important tasks (and yours), as our homes are built primarily of wood and wood products, is to keep the wood dry. Be especially conscious of water splashing out of showers and tubs and letting it sit on the floor or woodwork without being cleaned. Be careful at the joint at any countertop and backsplash that water does not sit there; and remember that this applies to any material – (a soapstone counter is attached to a wood frame below, which is attached to a wood wall behind).

05

Operation

Alarm

SYSTEM DESCRIPTION

Your alarm system is configured to monitor the following:

- Smoke
- Low temperature
- Flood
- Motion

All devices are tied to interior sounders that simultaneously annunciate alarms throughout residence and notify the Central Station (regardless of phone lines, power and/or your generator being down).

Upon receiving your signal, the Central Station will notify the local fire and police departments as well as the installer (ESS) and other persons on the list below.

1. Chris Wike (XXX-XXX-XXXX)
2.
3.

We've placed your caretaker at the top of this list so they can assist fire and police as needed. One additional person must be listed as a backup in case they are unavailable. Please be in touch with Electronic Security Systems to let them know who this person will be.

NOTE: Please keep this list current at all times.

SERVICE AGREEMENT

Electronic Security Systems will provide this for you directly.

HOW TO OPERATE

We have set up an in-person meeting for you to review the system in detail with those who installed it. In the event you have any questions before this occurs, Ralph Aiello is available to field these requests after hours.

MAINTENANCE

Your alarm may require periodic maintenance. Please contact Electronic Security Systems to coordinate.

Alarm Trade Partner
Call Electronic Security Systems
(508)-693-2774

After Hours Tech
Call Ralph Aiello
(508)-889-4049

Audio/Visual

A/V Trade Partner
Call Travis Larsen
(508)-388-3008

SYSTEM DESCRIPTION

Your home is equipped with the following audio/visual components:

WHOLE HOUSE

- Satelite (Excede) and Cellular (Verizon) internet

KITCHEN

- (1) smart speaker (**Model: Sonos SL**)

DINING

- (1) wireless/mobile smart speaker (**Model: Sonos Move**)

LIVING ROOM

- (1) 65" smart tv (**Model: LG OLED CX Series**) with access to the following sources: DirecTV, AppleTV, Sony UHD Blu Ray Player
- Surround sound (**Models: 1 Sonos Beam + 2 Sonos One SLs + 1 Sonos Sub**)

COMMON ROOM

- (1) 65" smart tv (**Model: LG OLED CX Series**) with access to the following sources: DirecTV, AppleTV, XBOX, Playstation
- Surround sound (**Models: 1 Sonos Beam + 2 Sonos One SLs + 1 Sonos Sub**)

MASTER BEDROOM

- (1) 55" smart tv (**Model: LG OLED CX Series**) with access to the following sources: DirecTV, AppleTV
- (1) smart speaker (**Model: Sonos SL**)

BAILEY'S ROOM

- (1) smart speaker (**Model: Sonos SL**)

EMILY'S ROOM

- (1) smart speaker (**Model: Sonos SL**)

HOW TO OPERATE

The Living Room, Common Room and Master Bedroom each have a designated universal remote (**Model: Control4 SR-260**). The smart speakers in the kitchen, dining and girls' rooms can be controlled via the Sonos mobile/desktop app below.

LOGINS

VERIZON

Username: XXX

Password: XXX

EXCEDE

Username: XXX

Password: XXX

SONOS

Username: XXX

Password: XXX

MAINTENANCE

No regular maintenance is required. Should any of the above display an error message, we recommend contacting Travis Larsen.

Dehumidifier

SYSTEM DESCRIPTION

Martha's Vineyard has many summer hours in which the cooling load is low but the humidity is high. The effect of this is most noticeable in finished basement-level spaces. Your home is equipped with a central dehumidifier (**Model: Ultra-Aire 70H**) to control moisture independently of cooling load in your lower level. This system operates as follows:

HVAC Trade Partner
Call Alexander's Air
(508)-627-3300

- Air from a grille in a stair riser in the hall enters the dehumidifier where moisture is removed, and dry air is delivered to the basement mechanical room and makes its way back to the hall via a transfer grille.
- Condensate from the dehumidifier is drained to a condensate pump.

HOW TO OPERATE

This system is designed to operate continuously at the following setpoints.

Season	System Setting	Fan Setting	Setpoint
Winter	ON	Auto Hold	60% RH
Summer (Windows Closed)	ON	Auto Hold	70% RH
Summer (Windows Open)	*Turn system OFF (or it will be trying to dehumidify West Tisbury, unsuccessfully)*		

CONTROLLER

The dehumidifier control is located adjacent to the door to the Gym. The vent setting should always read CLOSED, as the dehumidifier does not have a ventilation function. The fan setting should read AUTO, which keeps the fan off unless the unit is operating to remove moisture.

MAINTENANCE

We recommend replacing the air filter once a year (and have supplied spare filters to get you started.)

Turn system OFF
Summer with windows open

Adjust RH Setpoint
Winter: 60%
Summer: 70%

Generator

Generator Trade Partner
Call Vineyard Generator
(508)-560-0394

SYSTEM DESCRIPTION

Your home is equipped with a 48kW generator (**Model: Generac RG04845**). This generator is connected to six off grid inverter/chargers. The generator provides power to the battery system when available solar energy is insufficient to keep the batteries charged.

HOW TO OPERATE

Battery Charging Operation

Your generator will automatically engage when battery storage reaches a 20% state of charge (SOC) and automatically disengage when battery storage reaches a 40% SOC. The generator will first run for one min to warm up. After that, it will provide power to the house (*Note: Lights may flicker at this time*). After an additional twelve minutes of runtime, the six inverters will start charging the battery.

Note: Your system is equipped with load shedding contactors which disconnect loads when the generator is running to prevent generator overload. The loads programmed to shed include pool equipment, water heaters, exhaust fan and make up air. When battery storage returns to a 40% SOC, the internal transfer switch will automatically revert back to battery power and the load shedding contactor will return to its original state.

Exercise Operation

Yours generator is scheduled to automatically exercise every four weeks. Exercise lasts approximately twelve minutes and is scheduled to begin at 5AM on the first of every month. During exercise, the load shedding relay will engage and temporarily cut off power to the following: pool equipment, water heaters , exhaust fan and make up air.

Fuel Operation

Your generator is connected to two 1,000-gallon propane tanks and rated to consume 2.89 gallons per hour at 20% loading. With two full tanks and load shedding, this system is capable of operating your house for up to 23 days with no solar inputs.

Fuel Operation

We have installed an override switch to provide manual operation of the generator in case of PV and battery system failure. (*Note: The use of manual switch can damage the battery bank and should only be performed by qualified personal.*)

MAINTENANCE

Your generator will require seasonal maintenance. Please contact Vineyard Generator to coordinate.

We also recommend entering into an autofil contract with your propane provider.

Propane Supplier
Call Vineyard Propane
(508)-693-5080

Heating & Cooling

HVAC Trade Partner
Call Alexander's Air
(508)-627-3300

SYSTEM DESCRIPTION

Your home is equipped with an air source heat pump system serving the following zones.

Zone	Model
Living/Kitchen/Dining/Entry	**Mitsubishi PEAD-A15AA7 air handling ducted system**
Master Bedroom/Bath/Office	**Mitsubishi PEAD-A12AA7 air handling ducted system**
Guest Wing	**Mitsubishi PEAD-A12AA7 air handling ducted system**
Second Floor	**Mitsubishi MVZ-A12AA7 air handling ducted system**
Gym	**Mitsubishi MSZ-GL06NA-U1 wall cassette**

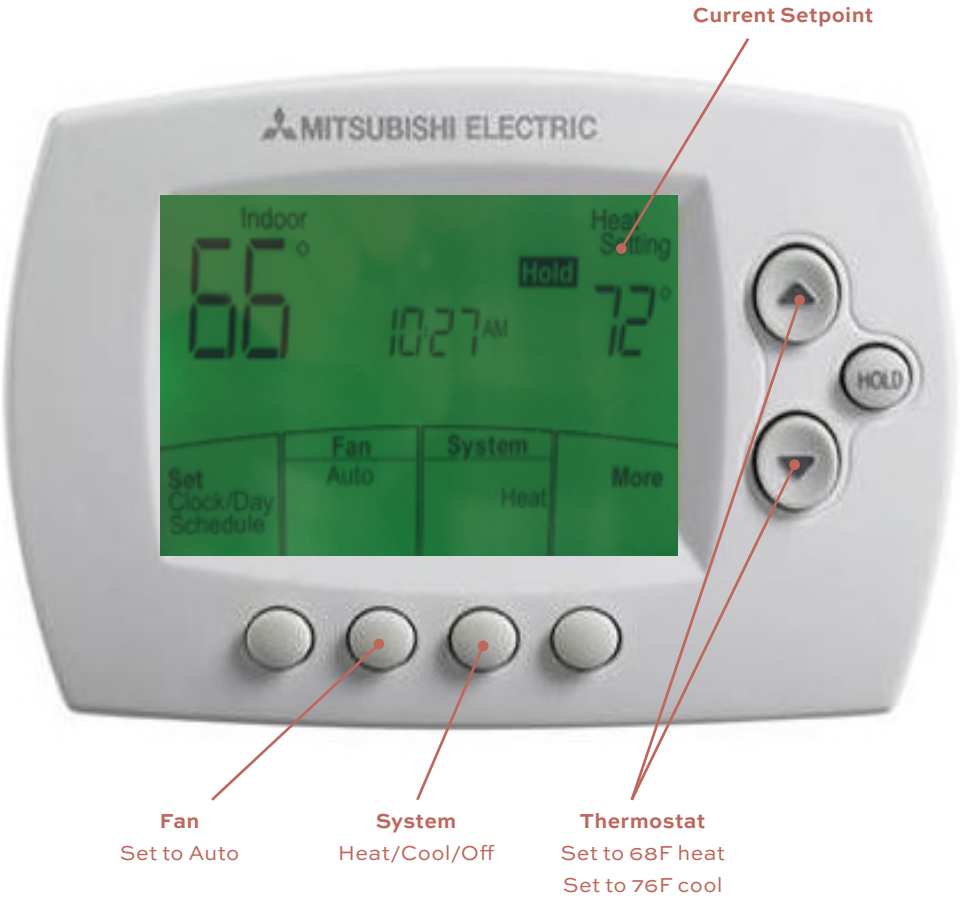
HOW TO OPERATE

Each zone has a dedicated wall-mounted controller (**Model: Mitsubishi MHK1**). The system can also be controlled by a central iPad or any other wifi-enabled device (see Remote Access Controller). To operate, refer to the table and diagrams provided.

OCCUPIED HEATING SEASON	
System Setting	HEAT
Fan Setting	AUTO
Setpoint	70˚F
UNOCCUPIED HEATING SEASON	
System Setting	HEAT
Fan Setting	AUTO
Setpoint	55˚F
WINDOW CLOSED COOLING SEASON	
System Setting	COOL
Fan Setting	AUTO
Setpoint	76˚F
SHOULDER SEASON	
System Setting	OFF
Fan Setting	N/A
Setpoint	N/A

HEAT PUMP THERMOSTAT

Unlike fossil-fueled heating systems, heat pumps do not benefit from daily setpoint adjustment at the thermostat. We have programmed the system using standard setpoints. Feel free to adjust these based on personal comfortable – then "set it, and forget it." *Note: In heating mode, the temperature may reach 2ºF higher than the setpoint. Also, remember that all heat pump zones have to be operated simultaneously in the same mode (heat or cool).*

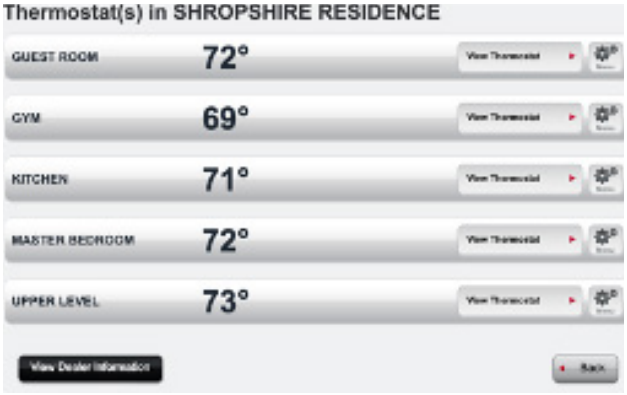


REMOTE ACCESS CONTROLLER

All Mitsubishi thermostats can be accessed from your phone, iPad or your desktop computer using the following credentials.

Use the app from an iOS device	Total Connect Comfort by Honeywell International
Use the webpage from a computer	https://mytotalconnectcomfort.com/portal/
Login: XXX	**Password**: XXX

Controls will appear as follows.



MAINTENANCE

• The return air filters in the ducted systems need to be replaced every six months. (We have supplied spare filters to get you started.)

The four return filter grilles are located as follows:

- Behind the decorative metal screen in the Master Closet
- In the Lower Level Hall (2)
- In the Second Floor Hall

• Once a year the outdoor condenser unit should cleared of any debris and visually inspected for any apparent damage.

• Once a year all the battery powered thermostats should get a new set of AA batteries.

To ensure the above happens, we recommend entering into a biannual service contract with Alexander Air.

KEEPING HEAT PUMPS CLEAR OF SNOW AND LEAVES

In 2015, Winter Storm Juno dumped over two feet of snow on the island; the accompanying high winds caused some intense drifting. One consequence of this is that the outdoor components of some heat pump heating systems got buried in snow, reducing their heat output, and in the worst case, causing them to shut down. If your home is seasonal, we recommend having your caretaker check your heat pump to make sure it is free of snow after any significant snow fall. If you live here year round, you might do this yourself. Think of this as something to do when you shovel out after a storm.

The same is true for leaves in the fall.

If you notice that the heat is off in your home, or receive a low temperature message from your alarm system, contact Alexander's Air.

Hot Water

SYSTEM DESCRIPTION

Your house is equipped with two 80-gallon (**Model: Bradford White RE2H80T10**) heat pump water heaters (HPWH). HPWHs make hot water at an efficiency roughly three times greater than a regular electric water heater.

HOW TO OPERATE

The water temperature can be set at the control interface, with setpoints available between 95˚F and 140˚F. Setting the water temperature higher than 125˚F makes the unit less efficient and increases risk of scalding, yet effectively increases the storage capacity of the water heater if needed.

For further instructions, see the Bradford White Manual provided.

Note: Your heat pump cools and dehumidifies the basement as it extracts heat and moisture from the air. Any byproducts of this process leave the basement through the installed condensate drain and pump.

MAINTENANCE

We recommend cleaning the air filter, located on top of the unit, every three months.

Plumbing Trade Partner
Call Seth Williams
(508)-687-9738

Monitoring System

SYSTEM DESCRIPTION

Your off-grid system has been equipped with a sophisticated monitoring and diagnostic system. The primary purpose of this system is for remote monitoring of system performance.

Over the course of your first 6 months of occupancy, we will optimize the performance of the system under real operating conditions, after which we will provide you the final system documentation.

!

For Troubleshooting
Call South Mountain
(508)-693-4850

Off-Grid System

For Troubleshooting
Call South Mountain
(508)-693-4850

SYSTEM DESCRIPTION

Your home is equipped with 90 ground-mounted photovoltaic modules. The array is rated at 32.40 kilowatts (kW) DC (at peak) and capable of powering your home without assistance from the utility grid. The point of intersection between the solar array and the off-grid system is the electrical bunker. Within, the source circuits are distributed to DC combiners and then to the system's solar chargers.

There are six 8kW radian hybrid inverters and six solar charge controllers. The inverter's 240V AC single-phase outputs are combined in a combiner panel located next to the inverters. This distribution panel feeds the main electric panel located in the electrical bunker.

During operation, the inverters and chargers manage the distribution of electricity to the loads and battery bank. We have designed the battery storage system to supply you with one to two days of power under normal usage. In the event of a snowstorm or other event that reduces solar access, the system is equipped with a 48 kW backup generator that can supply simultaneous power to the battery and the home. (See Generator page for details.)

HOW IT WORKS

We have designed your system based on assumptions about your average daily use by season and sized the equipment to limit the amount of propane use. Generator run time and related propane use are, however, determined by your personal habits. The most effective strategy to limit generator use is to use electricity when the sun is shining. During extended periods with little to no sun, you may choose to modify your thermostat settings and behavior (use the woodstove, pool, etc.)

Here is a description of how the system operates under different conditions:

Sunny Day (Winter-Summer)

The charge controllers will start the day in a "bulk charge" state. During this charge state, the charge controller is trying to put as much energy as possible, as fast as possible, into the battery. During "bulk charge", you should expect to see solar output in the high 10 or 20 kW range. (*Note: Production is dependent on the sun angle and azimuth*). The charge controller will keep delivering energy into the battery until the battery voltage reaches 56.8 Volt DC. After this threshold is reached, the charge controller will enter an absorption stage and maintain 56.8V DC for 30 minutes to make sure the battery is topped off. Once the 30 minutes has passed, the battery monitor reading will be displaying 100% State of Charge (SOC), after which the charge controller will switch to "float" mode, during which it will try to keep the battery topped off by supplying the same amount of energy that the house requires.

Cloudy Day (Winter)

Similar to Sunny Day (above), the charge controller will start the day in "bulk charge". If the load exceeds the amount of solar energy available, SOC will begin to fall. At 20% SOC, the generator will engage automatically to provide backup power. After the generator kicks on, it will warm up for one minute.

After that point, the energy being delivered to the house will be provided by the generator and no longer by battery power (*Note: Lights may flicker during the changeover.*)

Note: Your system is equipped with load shedding contactors which disconnect loads when the generator is running to prevent generator overload. The loads programmed to shed include pool equipment, water heaters, exhaust fan and make up air. See Equipment List for more information

After an additional 12 minutes of operation, the inverter charger will start delivering energy to the battery. (*Note: The generator will be noisier during this period*). After battery reaches 40% SOC, the inverter will turn off, the system will return to battery power and the generator will turn off after a two-minute cooldown. (Note: *We have decided to not charge the battery to 100% with the generator to provide more opportunity for the solar to charge the battery.*)

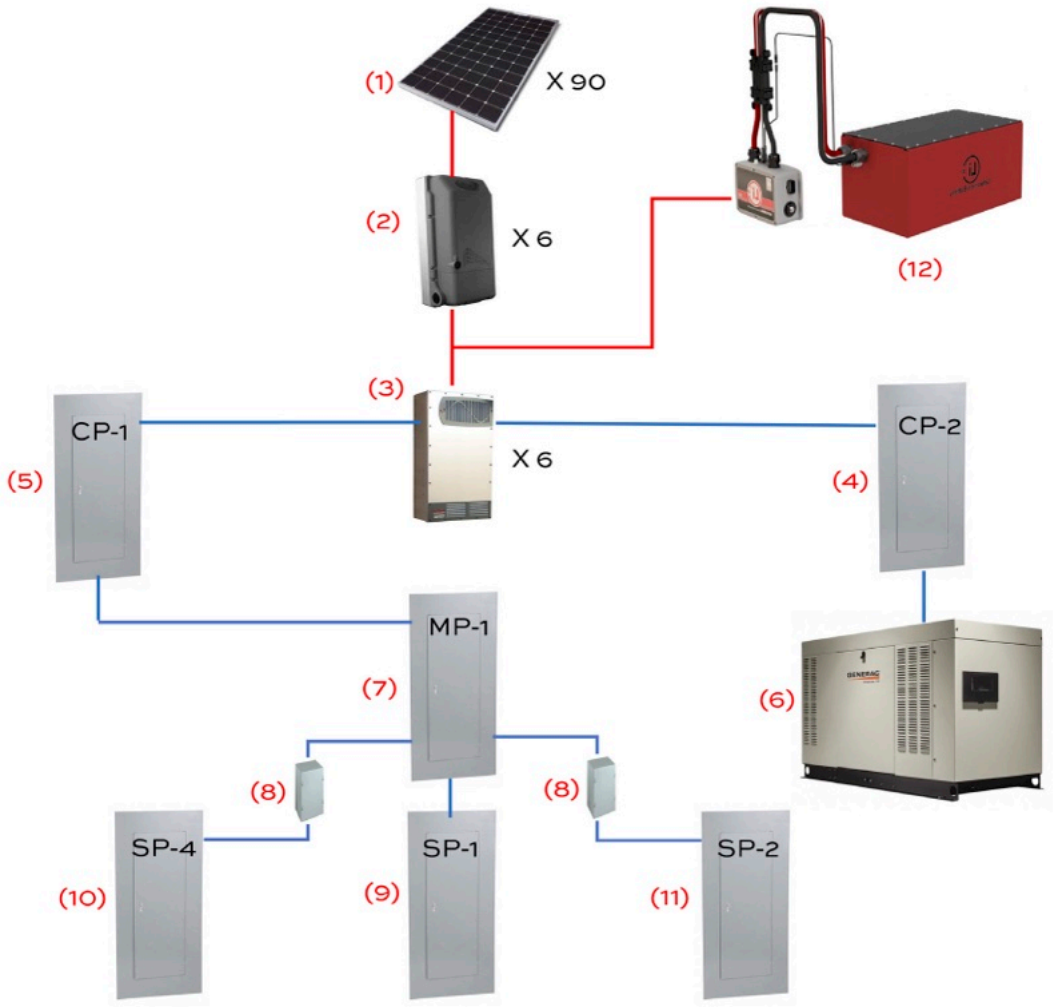
System Failure

Once the system drops below 20% SOC, the inverter charger will send a command signal to engage the generator for 30 minutes. If, after this period, the generator hasn't started, the system will go into a "fault" mode and prevent the generator from running. In the event of a generator malfunction, please contact your caretaker or SMCo. Please also conserve energy in order to prevent the system from going into low battery cut out (LBCO) . (*Note: LBCO requires a manual restart, most likely resulting in electrical disruptions.*)

Emergency

In the event of an emergency, a red button (pictured to right) is located on the right side of the bunker bulkhead. When hit, the entire system will shut down until manually restarted.

SIMPLIFIED SYSTEM SCHEMATIC



EQUIPMENT KEY

1 PV Module (Model: LG 360-watt)
These piece of equipment creates energy from the sun's light. Each panel is rated to generate 360 watts at peak power.

2 Solar Charge Controller (Model: Outback DC FM-100)
This piece of equipment controls battery charge level and PV array production.

3 Inverter (Model: Outback Radian Hybrid Inverter 8000w/240V/60Hz)
This piece of equipment converts DC battery power to AC loads.

4 AC Generator Combiner Panel (CP-1)
This piece of equipment combines a single input from the generator into multiple inverter inputs, and sheds the hot water heater and make up air loads in the event of an overage.

5 AC Generator Combiner Panel (CP-2)
This piece of equipment combines the output of multiple inverters into one panel output.

6 Back up Generator (Model: Generac RG04845)
This piece of equipment generates backup power via the process burning of propane.

7 Main Distribution Panel (MP-1)
This piece of equipment provides power to all subpanels.

8 Load Shedding Contactor
This piece of equipment provides automatic load disconnection to avoid electrical overload and/or promote energy conservation.

9 Subpanel (SP-1)
This piece of equipment provides non-shedded power to the house loads.

10 Subpanel (SP-2)
This piece of equipment provides power to the house loads, but sheds the following in the event of an overage: hot water heaters, make up air.

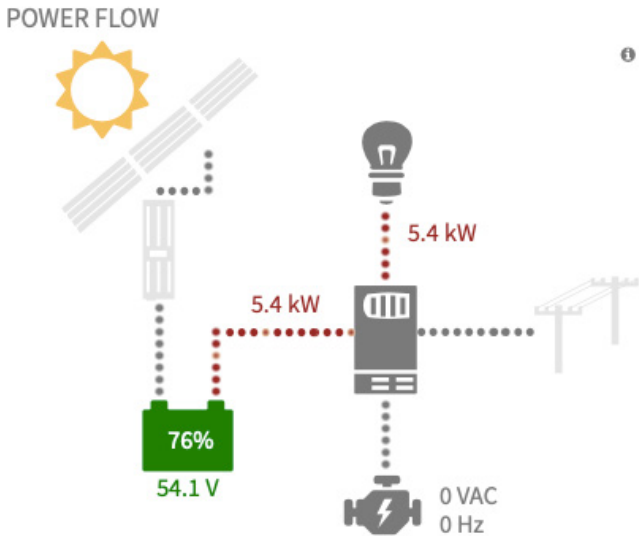
11 Subpanel (SP-4)
This piece of equipment provides power to all pool equipment except for the cover, and sheds in the event of an overage.

MONITORING

We have installed an off grid virtual display to monitor the system operation. It's important to keep an eye on your battery State of Charge SOC and adjust your consumption accordingly to minimize propane use. We have created a shortcut on your iPad to access the following.

Use the webpage from a computer
https://www.opticsre.com

Username: XXX **Password**: XXX



The house also has an LED display providing approximate State of Charge, fault condition and generator operation. This display is looking at battery voltage, therefore, during solar charger input and higher energy output, the SOC reading will be inaccurate. This display will give you a quick look at the system at night without looking at the IPAD display.

MAINTENANCE

Your off-grid system will require maintenance, system monitoring and firmware upgrade. Contact SMCo to coordinate.

Septic System

SYSTEM DESCRIPTION

Your Title V septic system (as shown on the 3/7/19 plan by Schofield, Barbini & Hoehn) is designed to operate as follows:

- House waste runs by gravity to a 2,000 gallon septic tank where the solids are collected.
- The outlet of your septic tank is then gravity fed to a distribution box on the northwest end of the leaching field where liquid waste drains and is broken down.

MAINTENANCE

The septic tank should be pumped out every ten years or so, depending on usage. Contact Araujo Bros to coordinate.

!

Plumbing Trade Partner
Call Seth Williams
(508)-687-9738

!

For Pump Out
Call Araujo Bros
(508)-693-2625

Swimming Pool

Swimming Pool
Trade Partner
Call Atlantic Pool
(508)-627-7665

SYSTEM DESCRIPTION

Your pool is equipped with an air source heat pump (**Model: Pentair Ultra Temp 460964**), filtration system (**Models: StaRite IntelliPro XF Variable Speed Ultra #023056, Pentair Clean & Clear Plus Cartridge Filter System #160332**) and automatic cover (**Model: ECLIPSE Electric**).

HOW TO OPERATE

The heating and filtration systems are programmed to run automatically.

To open and close the automatic pool cover, follow the instructions for wall-mounted keypad, located inside the Dining Room.

(Note: In most cases, pools require a fenced-in perimeter to meet safety requirements. In lieu of fencing as a barrier around the pool and based on section 305.1.2 of the 2015 IRC Swimming Pool Code which substitutes a "powered safety cover that complies with ASTM 1346", your pool requires this cover to meet safety standards. Its use is required to ensure safety when the house is unoccupied.)

WINTERIZING

The pool must be professionally "winterized" every fall (by December 1st is a good rule of thumb) to ensure that it does not freeze. This process should be reversed each April. Contact Atlantic Pool to coordinate.

- Drain the pool 18" below tile and coping.
- Drain and anti-freeze all plumbing lines and equipment.
- Install winter cover.
- Remove all return fittings.
- Install winterizing plugs.
- Inspect spring and anchors.
- Inspect the automatic pool cover for signs of damage.

CLEANING & MAINTENANCE

In Season

- Atlantic Pool will perform weekly maintenance and to ensure proper operation.
- Cartridge filters should be replaced every 12 – 24 months

Off Season

- Add chlorine tab, algaecide or shock as necessary to maintain clear water and prevent algae growth.

Ventilation

HVAC Trade Partner
Call Alexander's Air
(508)-627-3300

WHY WE VENTILATE

South Mountain homes are built to an extraordinary level of airtightness, which results in low energy use, increased durability, and a comfortable, draft-free home. To control the build-up of stale air and excess humidity, we provide a mechanical ventilation system. This system maintains the indoor air quality with little energy penalty. We feel this approach is an especially important part of the efficient, well-sealed homes that we build.

SYSTEM DESCRIPTION

Your home is equipped with one energy recovery ventilator (ERV) (**Model: Zehnder ComfoAir Q600 ERV**). The ERV exhausts stale air from the four bathrooms, the powder room, and the laundry. Fresh air is supplied to the four air handlers, allowing distribution of fresh air throughout the house via heating/cooling ducts. The ERV extracts heat and moisture from the exhaust air and transfers it to the incoming fresh air. This process reduces both heating and cooling loads and brings the temperature of the incoming fresh air closer to that of the living space.

HOW TO OPERATE

The ERV is designed to run continuously at a medium speed when the house is occupied and the windows are closed (house is in heating or cooling mode). Each bathroom has a boost switch that bumps the ERV fans to high speed for 20 minutes.

Operate the ventilation system as follows:

• Set the system to Away when building is unoccupied, via the app to right

• Set the system to Away when building is occupied and windows are open. (*Note: the bathroom boost switches will still operate the ERV as a bathroom exhaust*).

• Set the system to low speed when home is occupied and windows are closed (i.e. heating or cooling seasons).

• As necessary, use the bathroom boost switches for high-speed ventilation of shower moisture and/or odors.

REMOTE ACCESS CONTROLLER

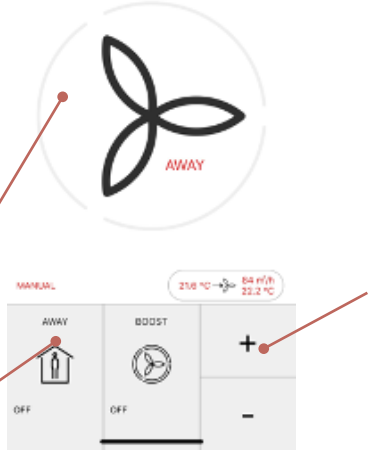
The ventilation system can be accessed from your phone or iPad using the following app.

Use the app from an iOS device
ComfoControl by Zehnder

Username: XXX

Password: XXX

Mode
Set to Manual



Adjust Setting

Current Setting

MAINTENANCE

ERV filters usually need to be replaced every six months. Inspections and maintenance should happen in the spring or early summer before the home is occupied for the summer, and in fall or early winter before the heating season begins. Also, make sure that the air inlet and exhaust hoods (low on the south exterior wall of the Living Room) are clear of leaves and debris. To ensure all of the above happens, we recommend entering into a bi-annual service contract with Alexander Air.

KITCHEN VENTILATION

In addition to the ERV, a kitchen exhaust hood (**Model: Zephyr Roma**) was installed over the cook top. The aluminum mesh filters can be removed and washed either by hand or in the dishwasher. The cleaning process will depend on the how frequently the fan is used. Every 30 hours of use or once per month is a typical rule of thumb. Please refer to the cleaning instructions in the manual provided.

MAKE-UP AIR SYSTEM

To prevent backdrafting of the woodstove when the kitchen hood or clothes dryer is in operation, there is a make-up air system (**Model: Electro Industries EM-MA05**). This consists of a motorized damper that isolates the system from the outdoors when not in use, a washable aluminum mesh filter, a variable speed fan, and an electric heater. It is designed to operate automatically when these appliances are in use.

Well & Water Supply

SYSTEM DESCRIPTION

Your property is served by one well. This 4" PVC well was drilled in 2008 and produces roughly 15 gallons/minute. The main line can be accessed through the basement where it runs through an expansion tank and filtration unit, then to all plumbing fixtures in the house. The well pump is a constant-pressure Grundfos unit which provides up to 15 gallons per minute to the house.

In the basement are the domestic water filter and acid neutralizer. These systems are comprised of two multiple blend 2.5 cubic foot acid neutralization and iron removal filters plumbed in parallel then flowing though one 70,000 grain water softener. The system has a single upflow acid neutralizer which raises the pH of the water to neutral. The calcite slowly dissolves into the acidic water, raising the water's pH level, and reduces corrosion of piping, fixtures and equipment caused by acidic water. There is no flushing required with this filter. It should be checked once annually. The filter media is calcite (Calcium carbonate). There is no iron in the water.

Small amounts of sand, which are occasionally pumped from the well, are filtered out of the water inside the expansion tank. This helps protect plumbing fixtures and equipment from getting clogged.

Note: Water for the irrigation system and Workshop tee off pre-filtration system.

WINTERIZING

Several steps must be taken every fall (by November 15th is a good rule of thumb) to ensure that outdoor water lines do not freeze in the winter. This process should then be reversed in April.

- Drain the outdoor shower's valves/lines, irrigation and swimming pool fill valve blowing out with compressed air. (Contact Seth Williams to coordinate.)
- Drain and remove all hoses from exterior bib cocks.
- Drain the water filter.

MAINTENANCE

Your well may require periodic maintenance. We recommend Island Water Source for this service.

!

Well/Water Trade Partner

Call Island Water Source

(508)-693-4999

!

Plumbing Trade Partner

Call Seth Williams

(508)-687-9738

Woodstove

SYSTEM DESCRIPTION

Your home is equipped with one woodstove (**Model: Morso 6143**) located in the living room.

HOW TO OPERATE

Please refer to the Morso 6100 manual provided. Some basic guidance follows below:

- When building the first fire, keep it small, and expect that there may be some odors from the paint off-gassing. Keep windows open during this time.
- Use only dry firewood;don't burn other materials in the stove.
- Avoid building fires on gusty days, as wind may interfere with good chimney draft.
- Leave the stove door open slightly ajar for the first few minutes of operation, to encourage good draft. (*Note: Please remain in the room until the door is firmly closed.*)
- A small hot fire will produce less creosote in the chimney (and soot on the door glass) than a large heavily-damped fire.
- A light layer of ash in the stove is fine, however, it should not be allowed to build up to the underside of the grate. Remove ash when the stove is fully cold.
- Your home is equipped with a make-up air system (see Ventilation) that activates automatically when the kitchen range hood fan is turned on, preventing the fan from reversing the draft in the chimney and pulling smoke into the house. If you experience this issue, please verify that the make-up air system is operational.

MAINTENANCE

Depending on how much use it gets, your chimney may build up creosote. We recommend having the chimney inspected once per year, in the late spring before summer occupancy, to verify that there is no blockage of the chimney, and to clean the chimney if needed. Contact Merrimen's Chimney Service to coordinate.

!

For A Sweep
Call Merrimen's Chimney
(508)-693-2182

06

Coming & Going Checklist

Coming & Going Checklist

The following steps should be carried out prior to leaving your home for extended periods, vacations, or end-of-season.

- [ ] Set all thermostats to 55ºF in heat mode with the fan set to Auto mode.
- [ ] Set the Ventilation system to Away.
- [ ] Set heat pump water heater to Vacation mode.
- [ ] Open all interior doors.
- [ ] Close and lock all windows.
- [ ] Close window shades to reduce heat loss (leaving south facing window shades open will allow passive solar heat gain).
- [ ] Engage multi-point hardware on all exterior doors by lifting door handles.
- [ ] If the refrigerator and freezer are empty, turn off and leave doors ajar.
- [ ] Disconnect power to all appliances and electronics that do not need to be on; this will eliminate “phantom loads”.

07

Photos & Sketches

Before & After Photos

ENTRY (FACING OUT) - BEFORE

ENTRY (FACING OUT) - AFTER

ENTRY (FACING IN) - BEFORE

ENTRY (FACING IN) - AFTER

ENTRY PORCH - BEFORE

ENTRY PORCH - AFTER

TERRACE - BEFORE

TERRACE - AFTER

OUTDOOR SHOWER - BEFORE

OUTDOOR SHOWER - AFTER

PATH - BEFORE

PATH - AFTER

DINING ROOM TO POOL - BEFORE

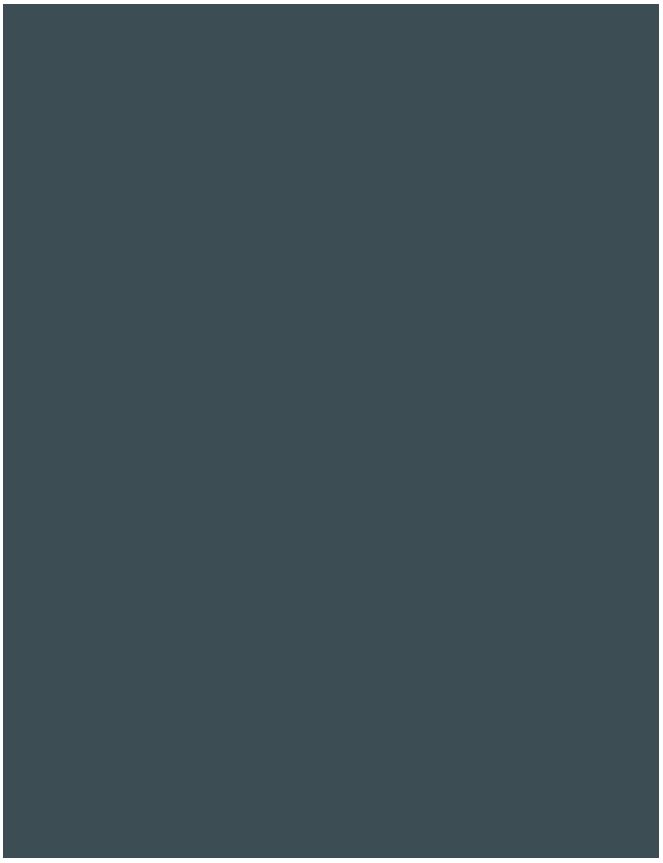
DINING ROOM TO POOL - AFTER

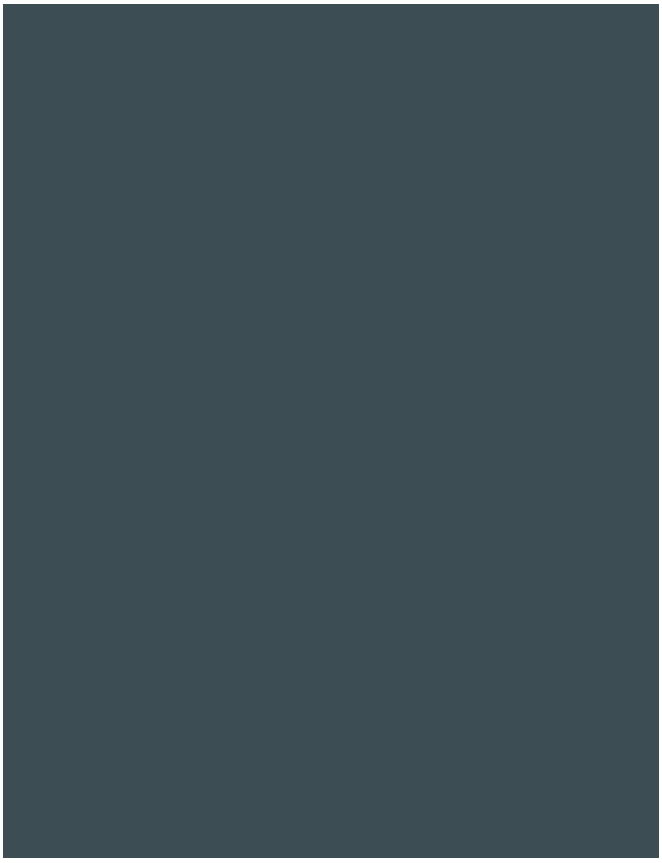
KITCHEN - BEFORE

KITCHEN - AFTER

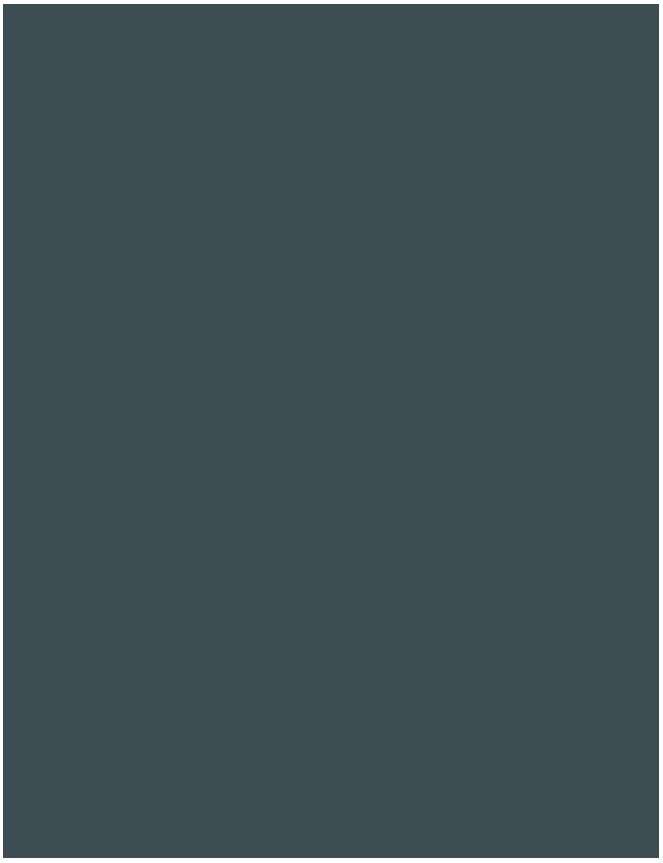
PANTRY/ STAIR SCREEN - BEFORE

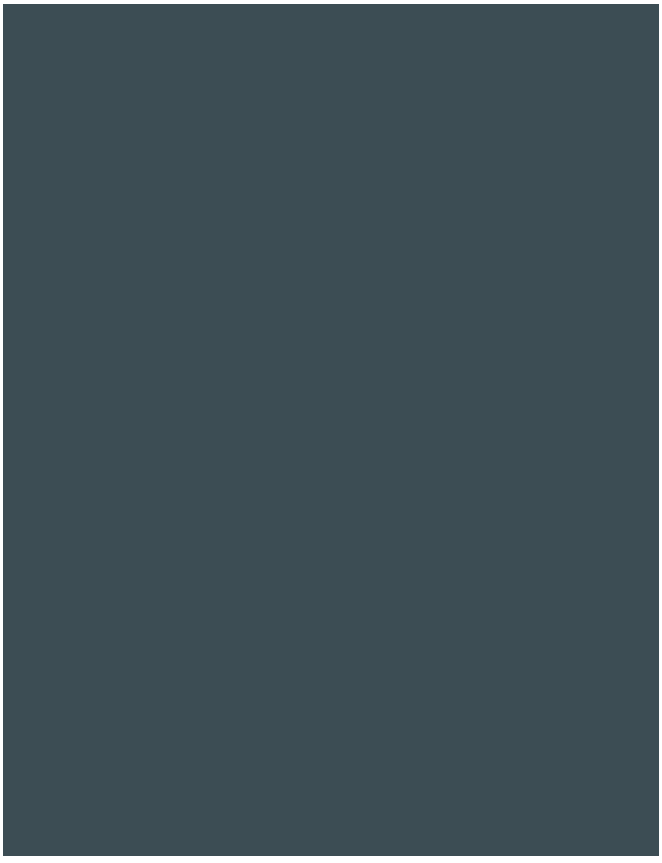
PANTRY/ STAIR SCREEN - AFTER





AXIS LIVING ROOM TO DINING ROOM - BEFORE & AFTER





LOWER LEVEL HALL - BEFORE & AFTER

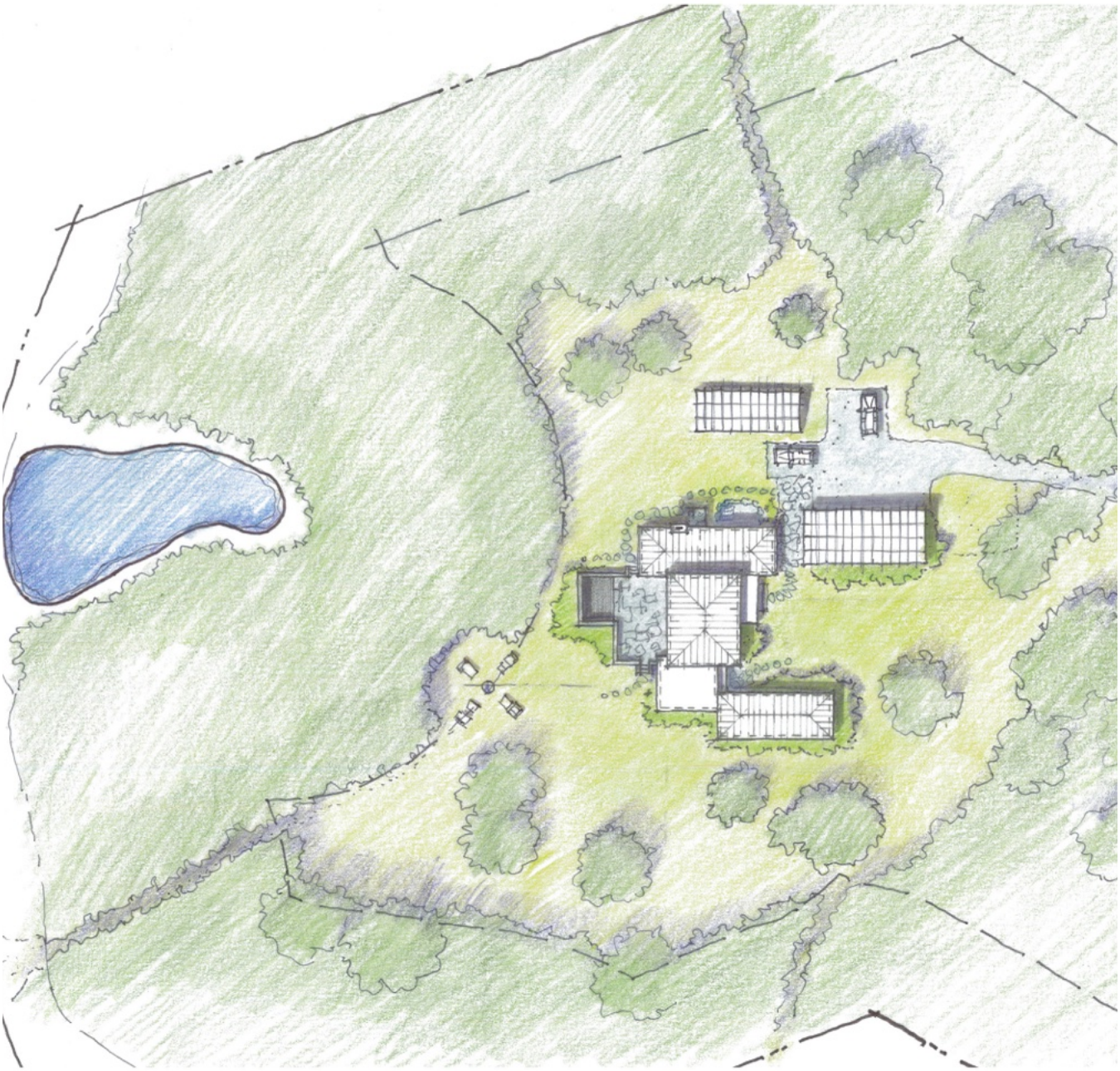
AXIS LIVING ROOM TO MASTER WING - BEFORE

AXIS LIVING ROOM TO MASTER WING - AFTER

GYM - BEFORE

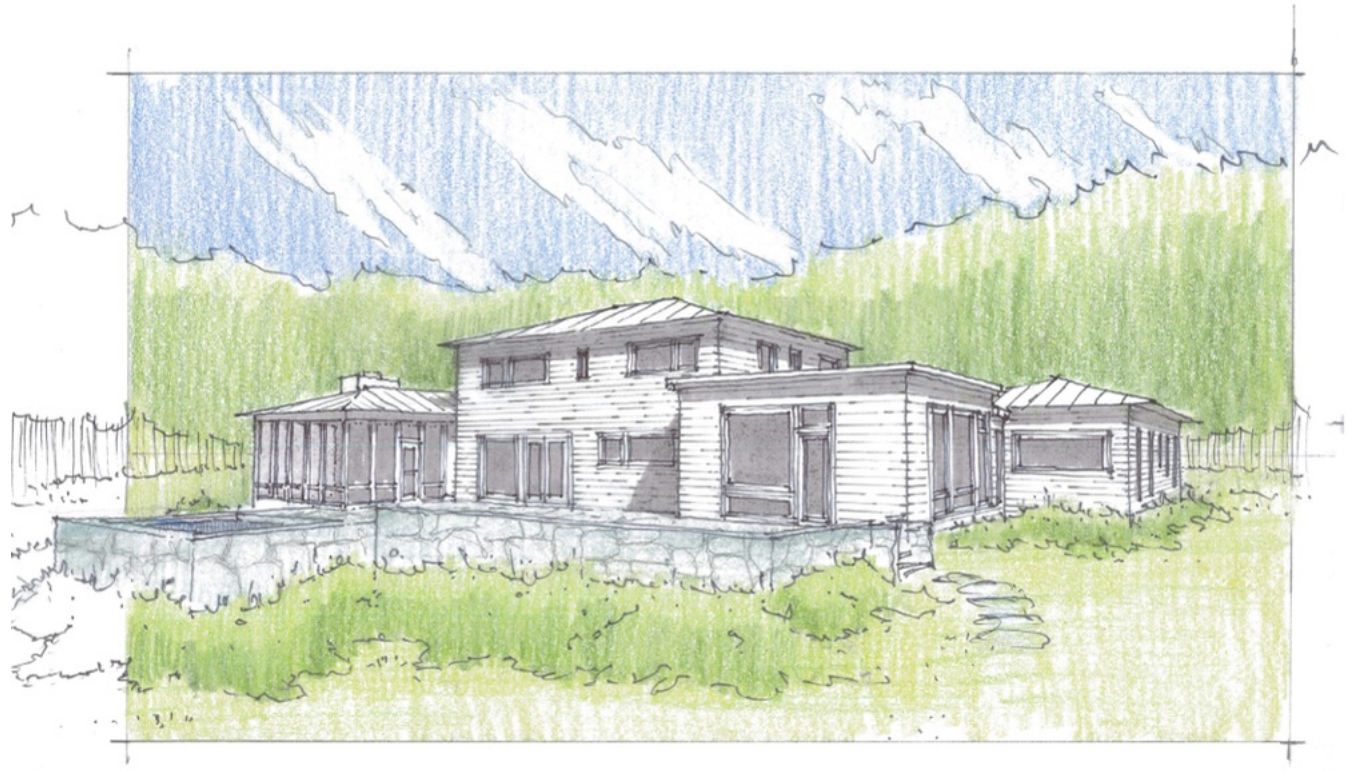
GYM - AFTER

Sketches

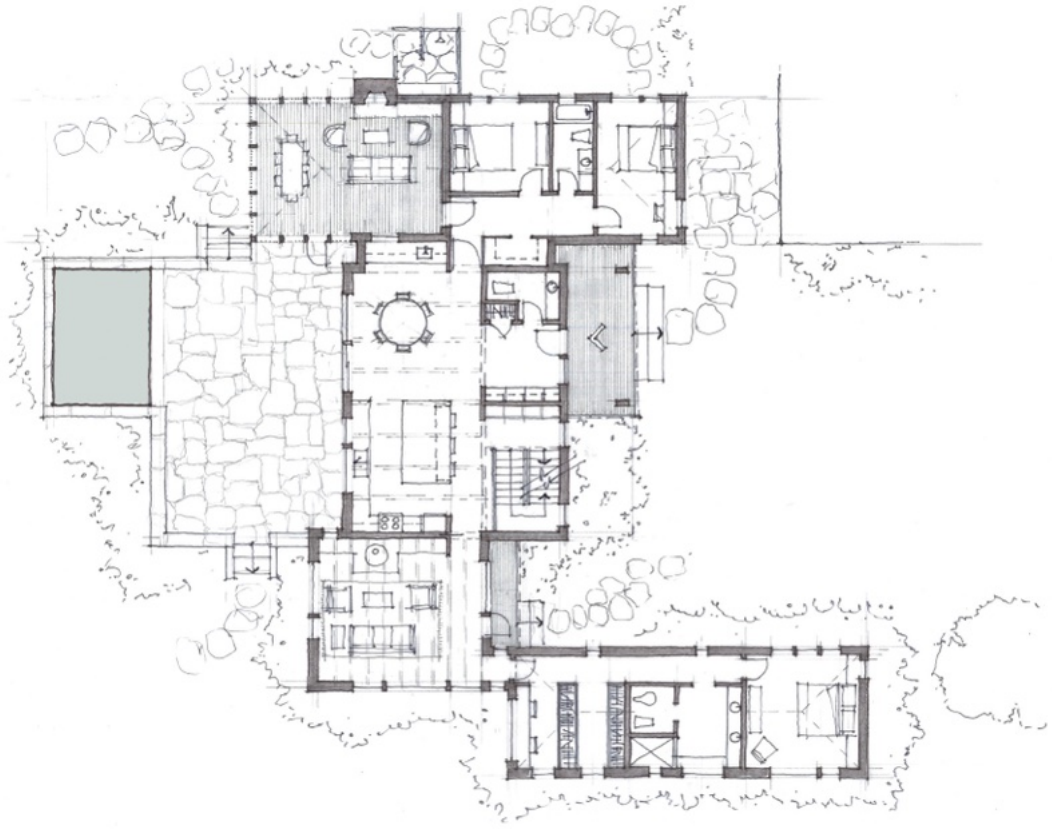


SITE

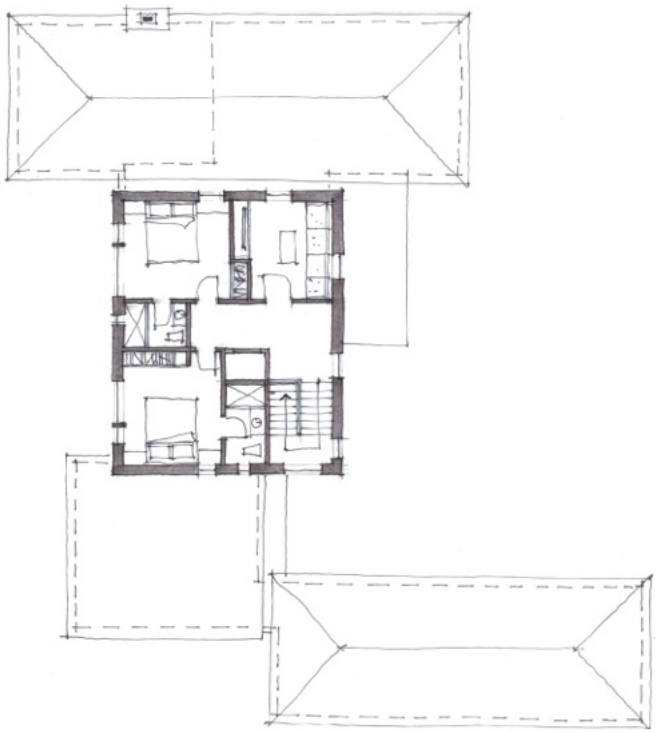
ENTRY SIDE



WATER SIDE



FIRST FLOOR



SECOND FLOOR

08

Warranty

SMCo Warranty

WARRANTY PROVISIONS

We fully warrant all work to be free of defects and to perform as intended for one year from the date of substantial completion and occupancy of the project. Certain products in your home are guaranteed by the manufacturer for a longer period of time, and those important third party warranties are included in this manual. Appliance warranties are included with the appliance manuals. Please see manufacturer's instructions regarding warranty registration.

PERIODIC CORRECTIONS

During the one year period between substantial completion and warranty expiration, we will make warranty repairs and adjustments on an as-needed basis.

WARRANTY WALK-THROUGH

Approximately 30 days prior to expiration of the general warranty, we will, if requested by you, schedule an appointment with you and return to the project to do a walk-through inspection with you to inspect remaining deficiencies. Based on this inspection, we will issue a "Warranty Repair List" of items to be corrected for your review and approval. We will make all repairs listed within 30 days of agreement about this list, or some reasonable time agreed to with you.

OUR PROMISE TO YOU

If you should ever feel that a component or system in your home is not performing up to your expectations, even though it may be past the stated warranty period, please discuss with us. We promise to work with you to make your home as trouble-free as possible.

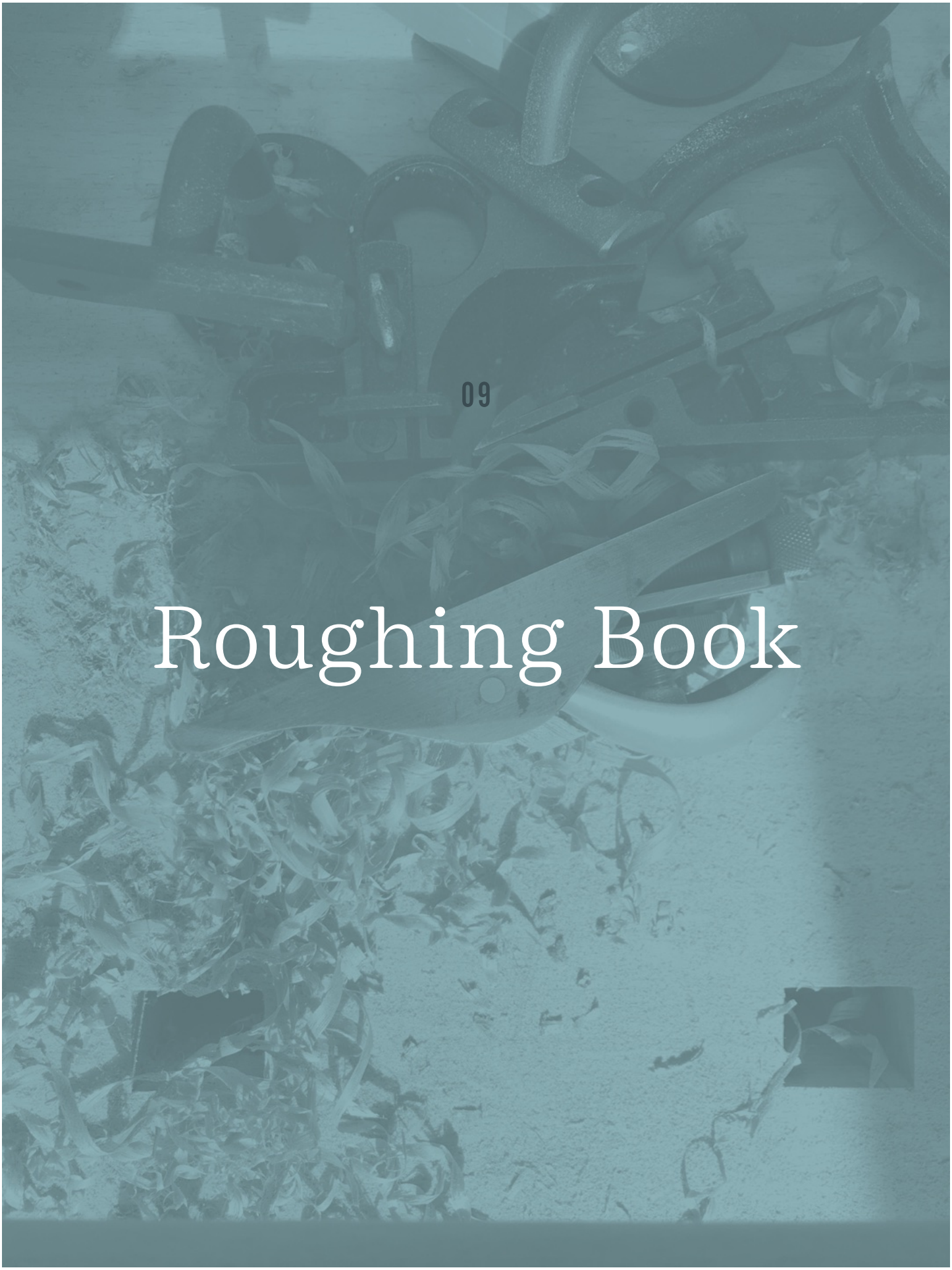
Sometimes our assessment will result in a conclusion, by us, that post-warranty repairs do not qualify as warranty items. In such cases, we are willing to do any and all non-warranty maintenance and repair on your home, at prevailing rates, for as long as you wish.

Equipment Warranty

Warranties only become active upon registration. Some equipment have registration cards which you'll find with this manual, and some can be done online if there are no warranty cards available. Please take a few moments to complete this task.

For any immediate service needs, proof of purchase can be provided by receipts included in original SMCo billing. The specific model numbers and equipment details are listed in various sections of the As-Built Specifications and schedules.

If you have major problems with any equipment, we'd like to know. This helps us to continually refine our appliance and equipment recommendations.



09

Roughing Book

Roughing Book

This is a very important part of your home.

Before it was insulated and sheetrocked, every wall and ceiling was photographed and each photograph was keyed to a plan. This allows you to “look inside the walls” and see every wire, plumbing pipe, and mechanical device. It becomes important, over time, when you need to do repairs or make alterations.

Take a close look before you do alterations and alert repair and service people to its existence when they come to do work.