

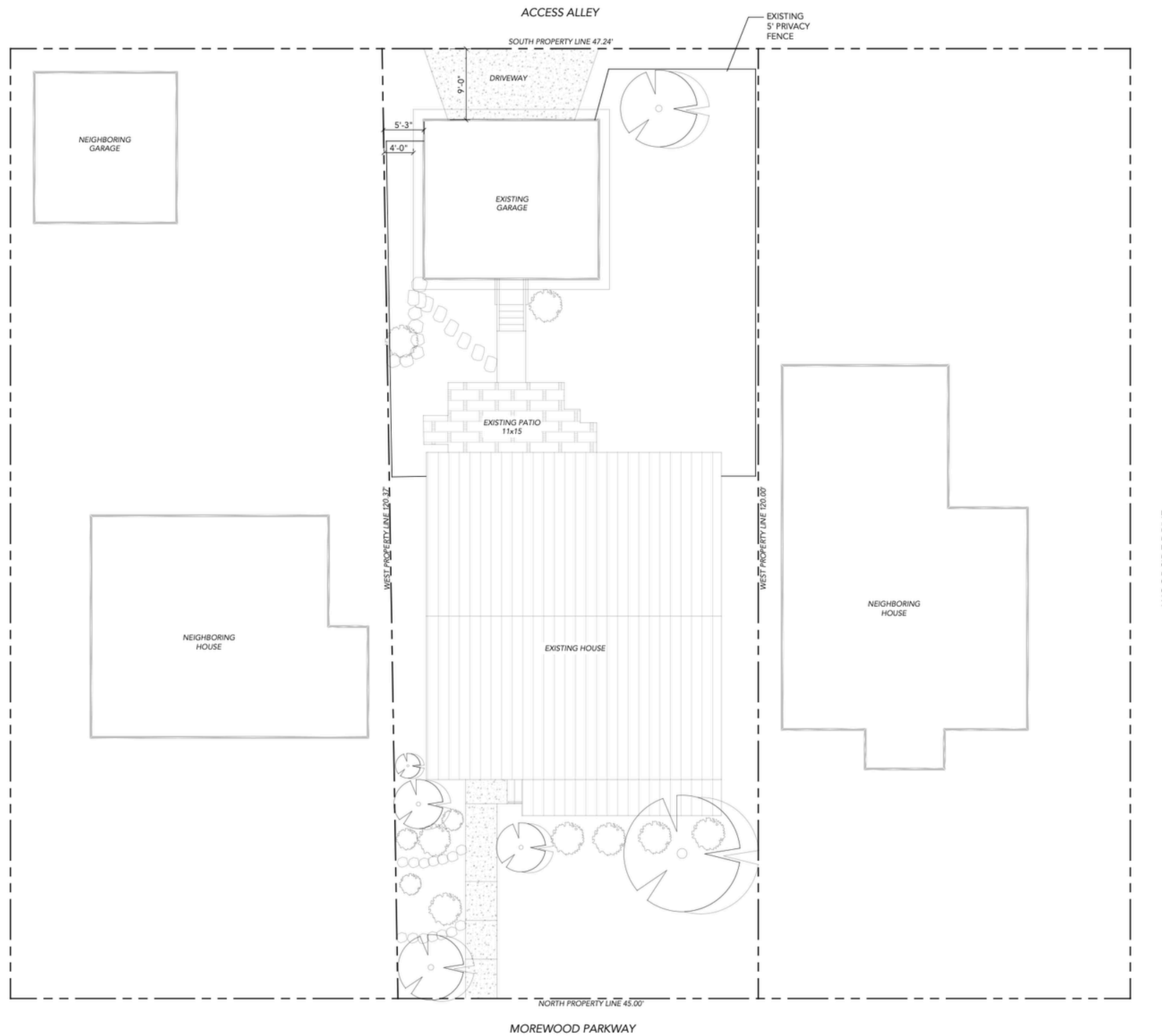
strauss residence

existing photos - home and garden



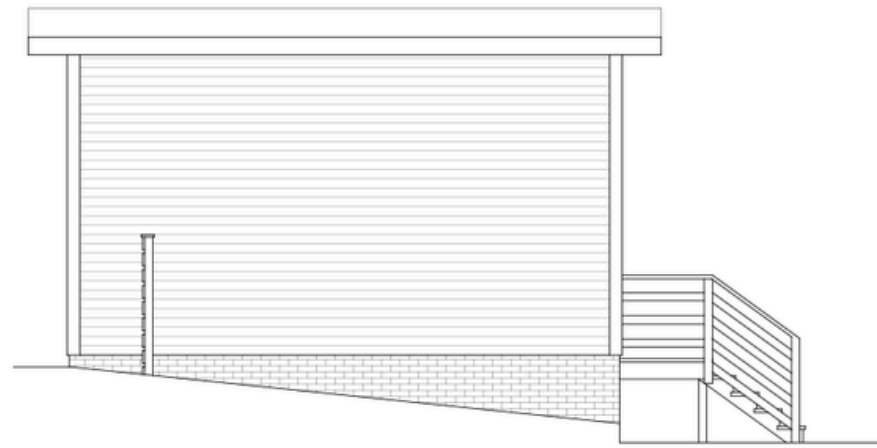
strauss residence

existing photos - garage

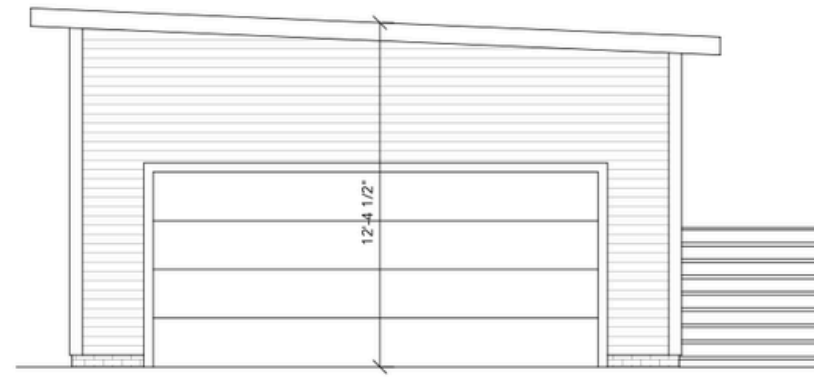


strauss residence

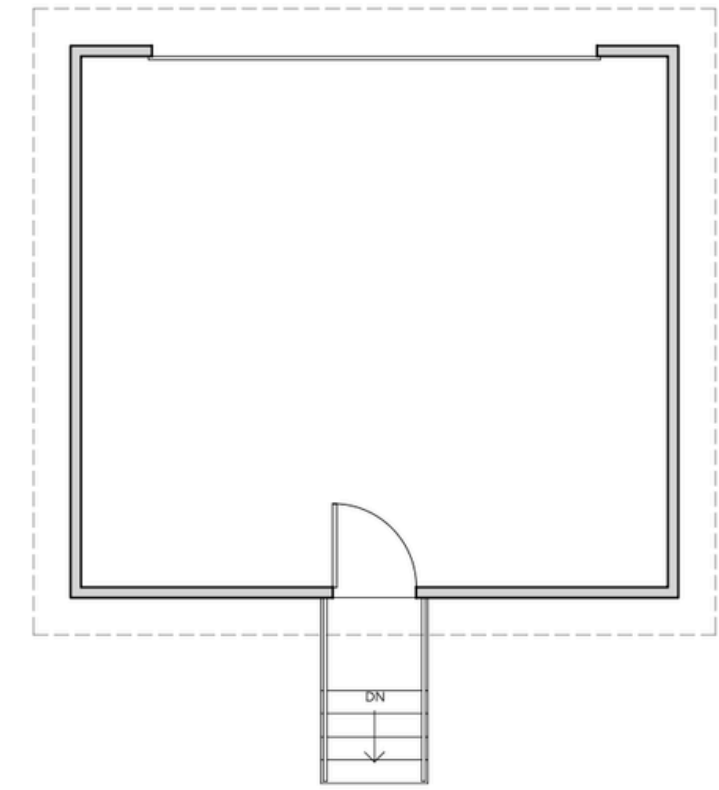
existing site plan



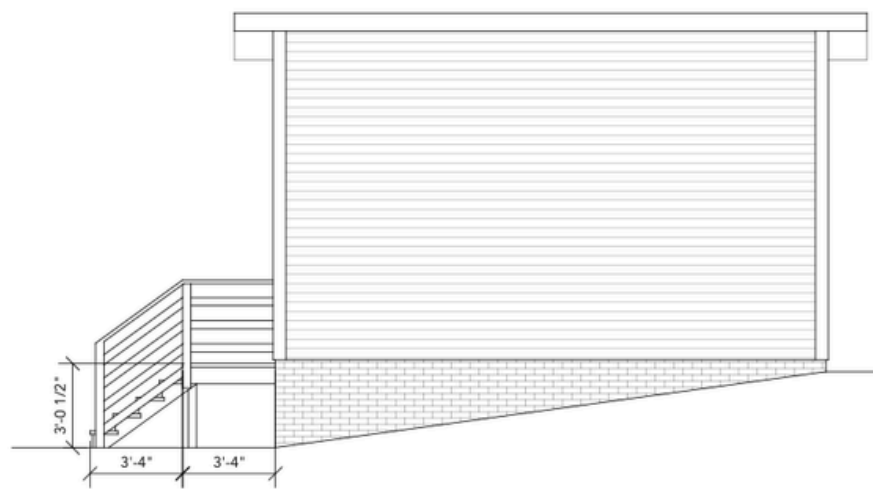
1 EXISTING EAST ELEVATION
1/4" = 1'-0"



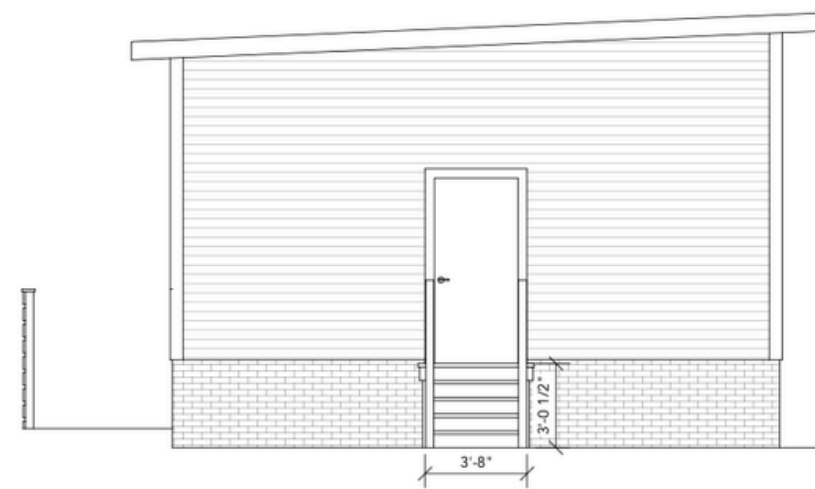
2 EXISTING NORTH ELEVATION
1/4" = 1'-0"



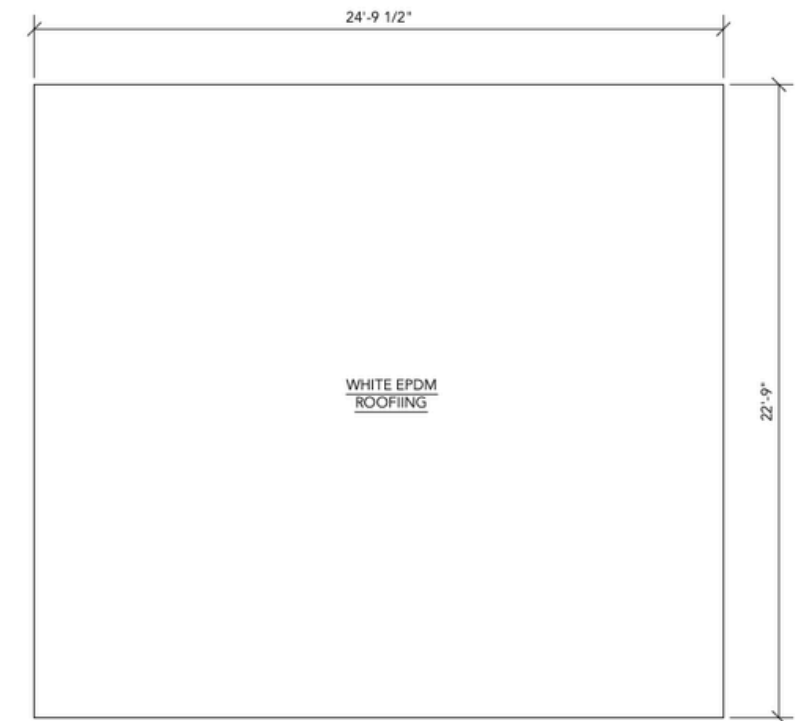
5 EXISTING FLOOR PLAN
1/4" = 1'-0"



3 EXISTING WEST ELEVATION
1/4" = 1'-0"



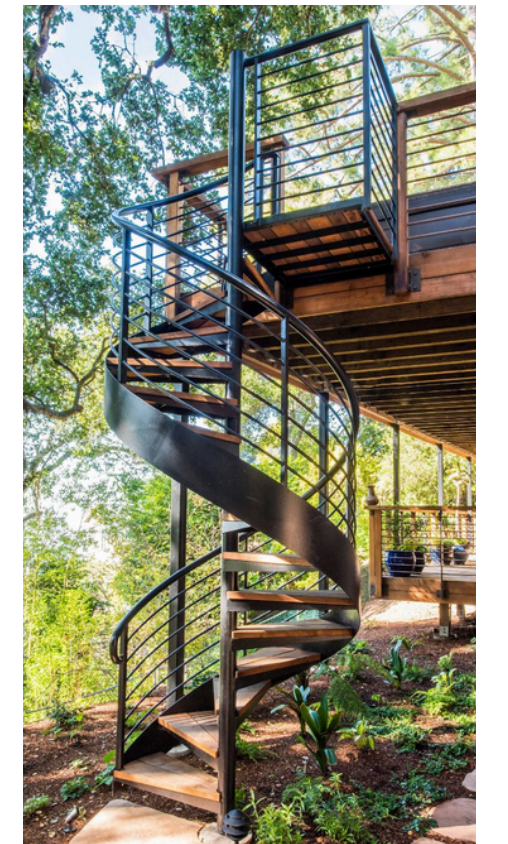
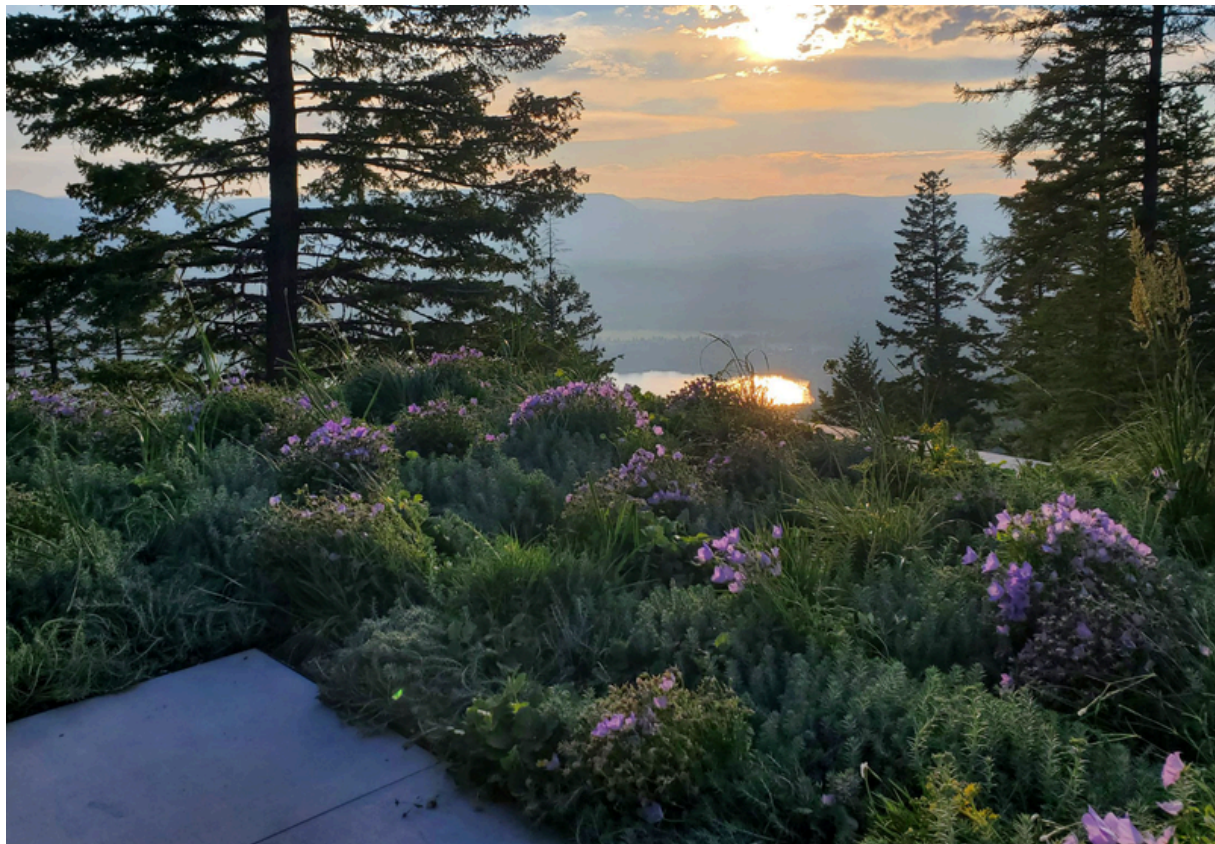
2 EXISTING SOUTH ELEVATION
1/4" = 1'-0"



5 EXISTING ROOF PLAN
1/4" = 1'-0"

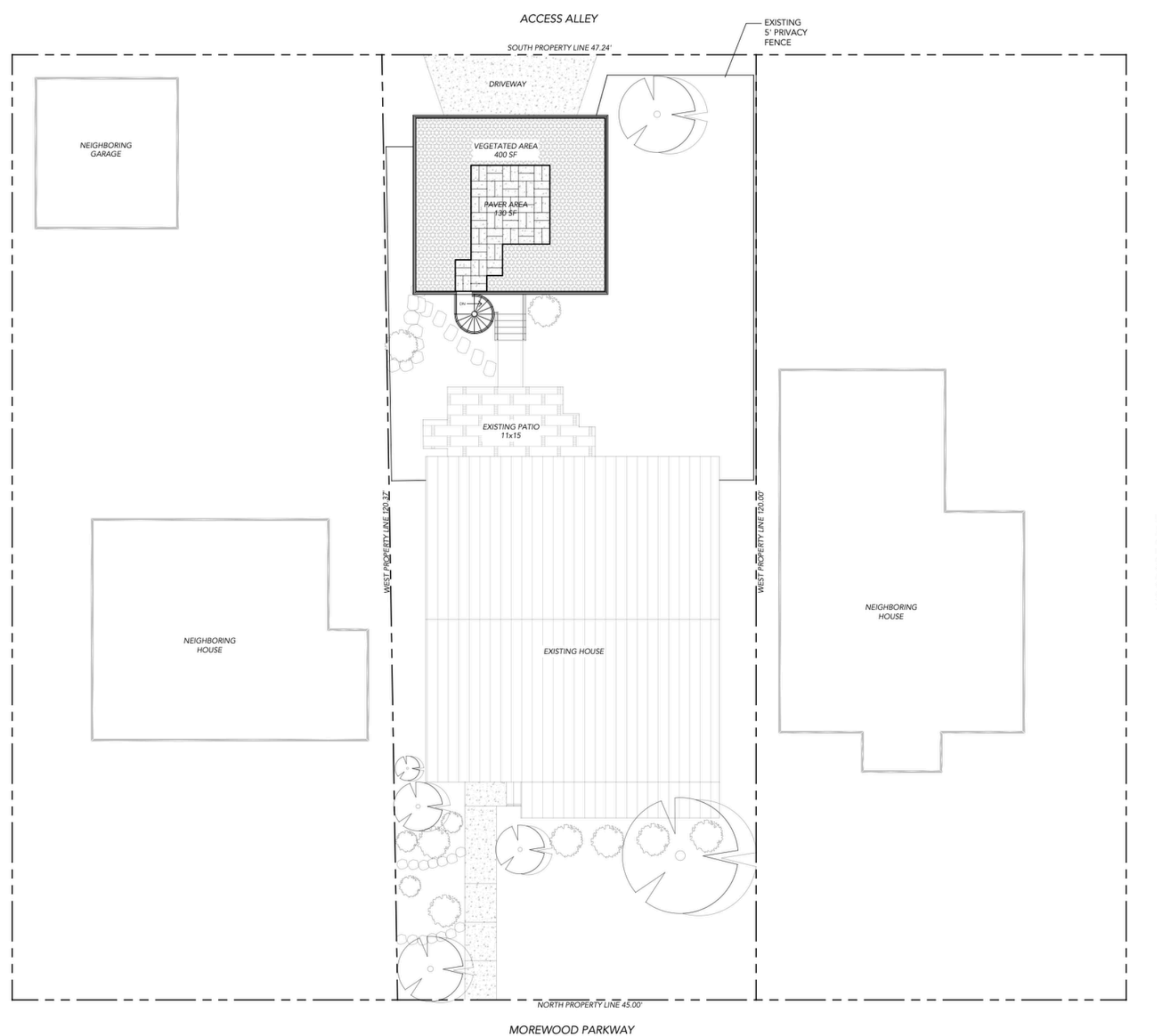
strauss residence

existing garage roof plan and elevations



strauss residence

inspiration photos - green roof

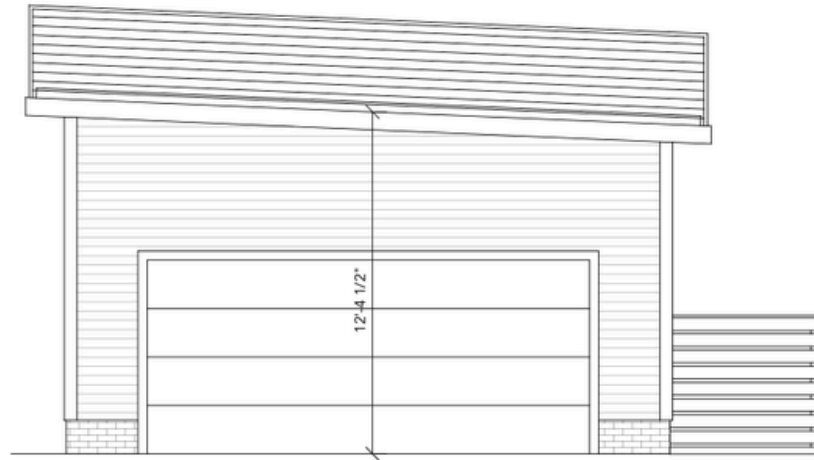


strauss residence

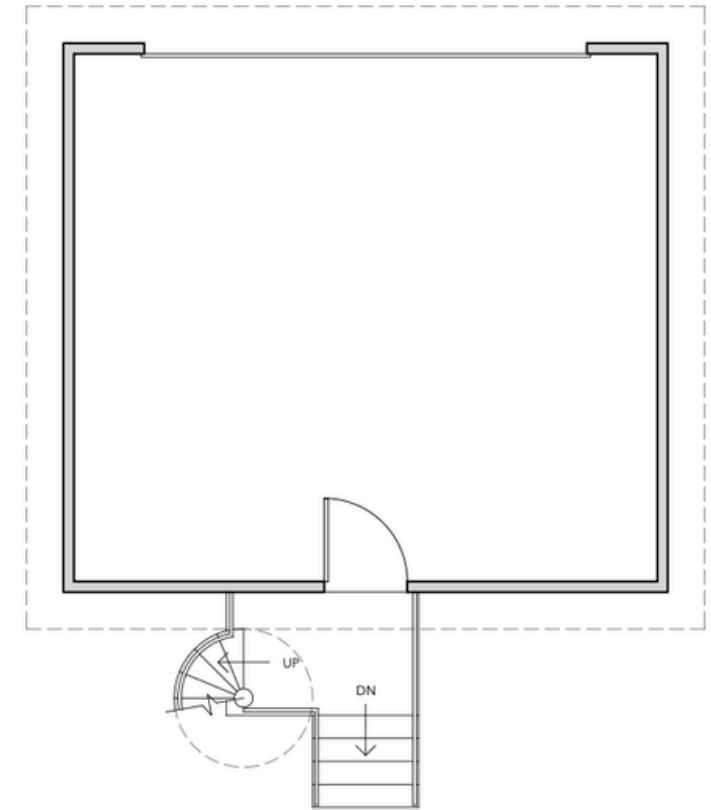
proposed site plan



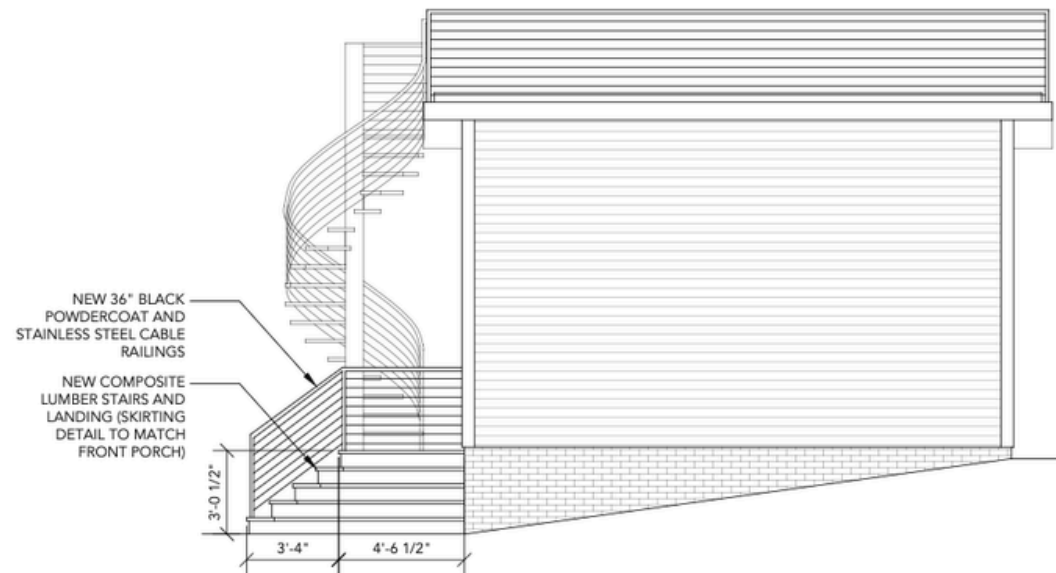
1 PROPOSED EAST ELEVATION
 $\frac{1}{4}'' = 1'-0''$



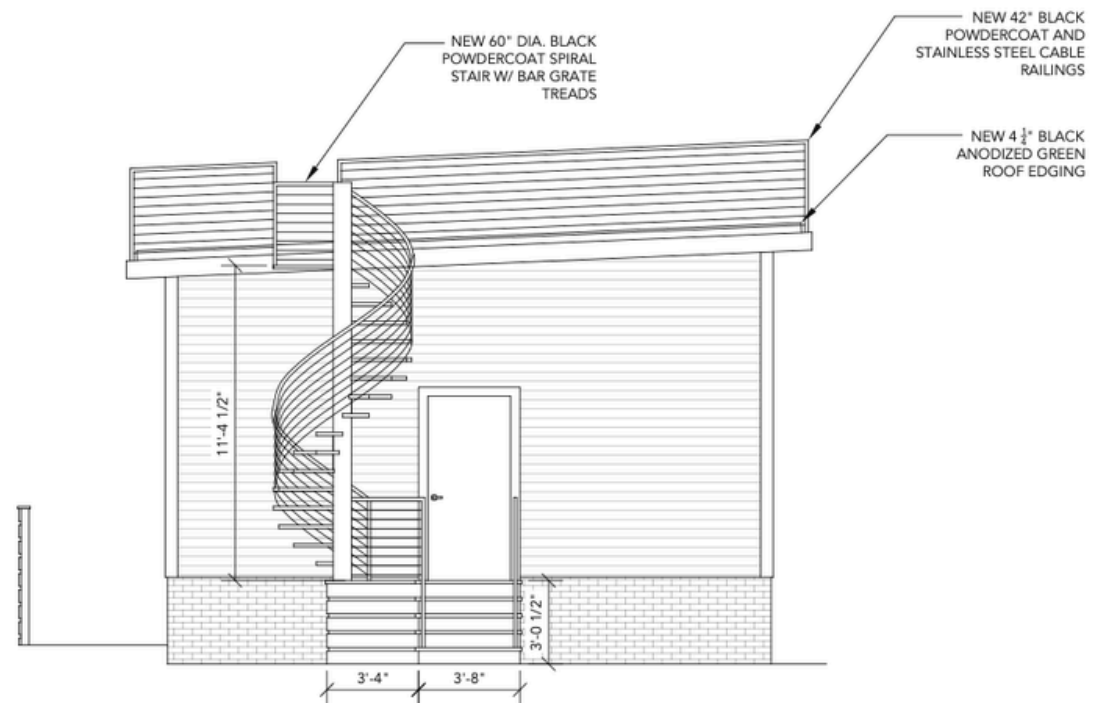
2 PROPOSED NORTH ELEVATION
 $\frac{1}{4}'' = 1'-0''$



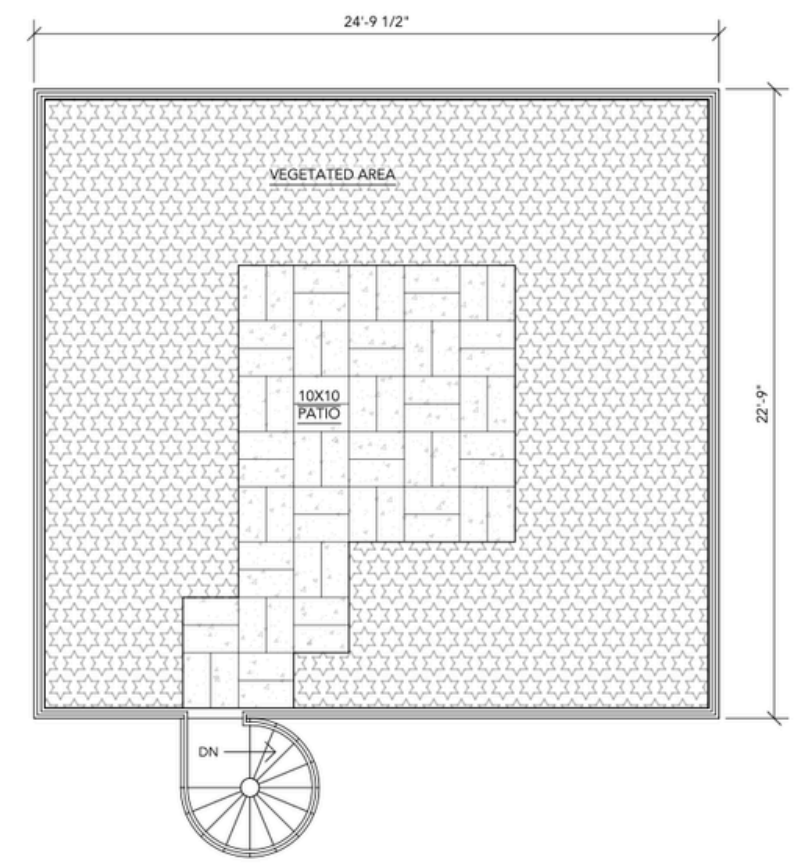
5 PROPOSED FLOOR PLAN
 $\frac{1}{4}'' = 1'-0''$



3 PROPOSED WEST ELEVATION
 $\frac{1}{4}'' = 1'-0''$



2 PROPOSED SOUTH ELEVATION
 $\frac{1}{4}'' = 1'-0''$



6 PROPOSED ROOF PLAN
 $\frac{1}{4}'' = 1'-0''$

strauss residence

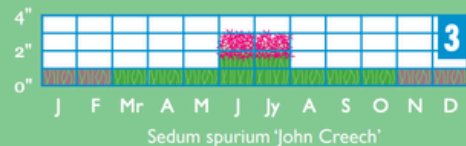
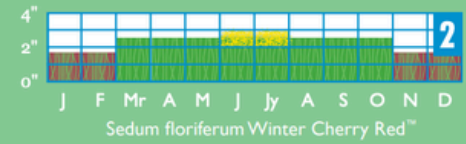
proposed garage roof plan and elevations



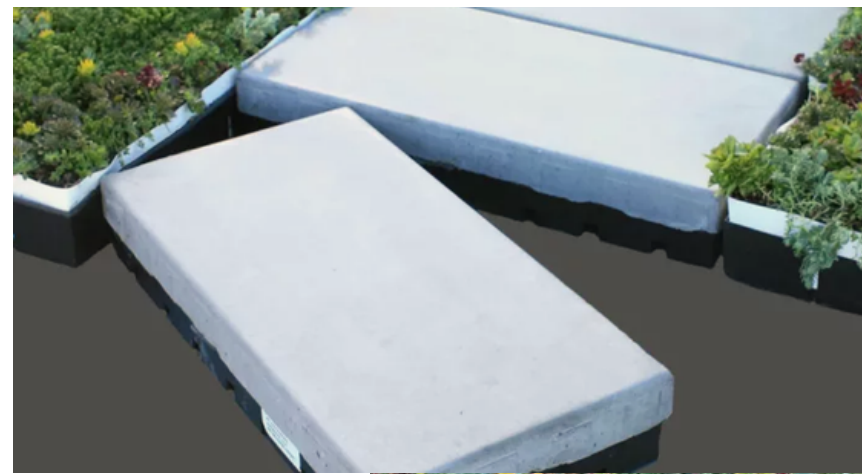
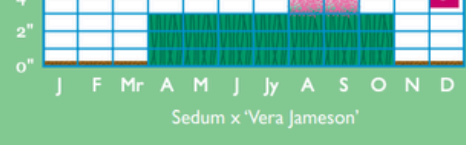
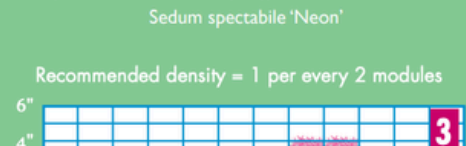
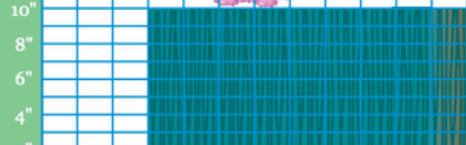
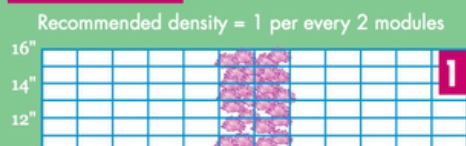
Design Intent: Low maintenance. Playful mix of fall, winter, and early spring colors and textures. Corresponds with school year.

- **Foliage:** Deciduous and Evergreen, green, blue green, burgundy, orange and multicolored.
- **Flowers:** Bright pink, mauve, white, and yellow.
- **Systems:** X-Lite, Lite, Standard

Base Plants



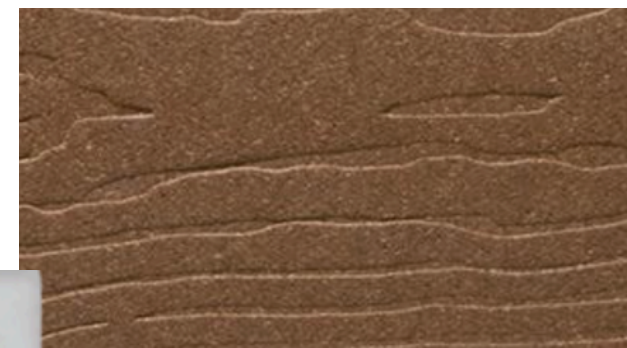
Accent Plants



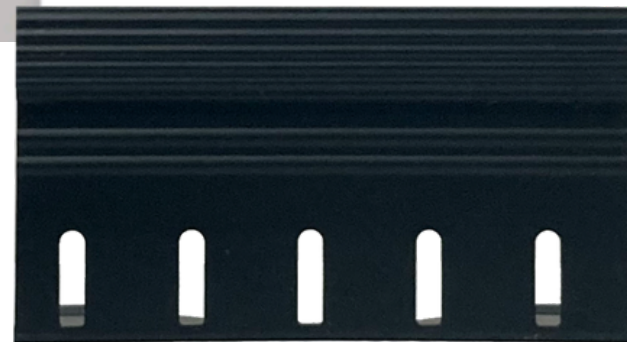
green roof system components



roofstone paver blocks in "natural"



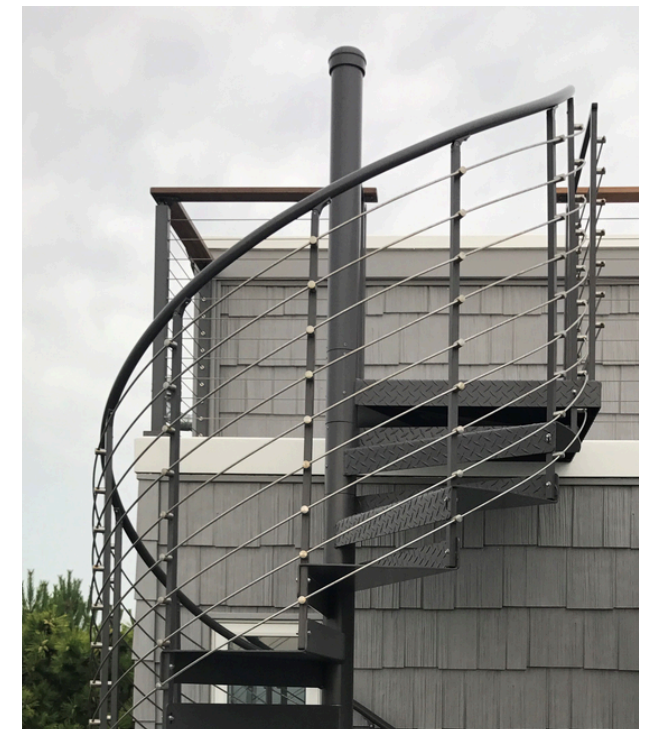
moistureshield composite decking in "walnut"



roofedge system in black anodized



black powdercoat bar grate stair treads



black powdercoat and stainless steel cable railings

green roof sample palette

strauss residence

system components and materials palette

SEE DETAIL #14
OPTIONAL SAFETY GATE, SEE DETAIL #15
SEE DETAIL #8 (ROUND BALUSTER OPTION AVAILABLE)
SEE DETAIL #6
SEE DETAIL #7
SEE DETAIL #9

SEE DETAIL #16
3/16" SMOOTH ALUMINUM, TYP.
STAIR RADIUS +1 [SEE DETAIL #13]
EQ.
EQ.
EQ.
STAIR RADIUS +1 [SEE DETAIL #13]

SEE DETAIL #16
3/16" SMOOTH ALUMINUM, TYP.
STAIR RADIUS +1 [SEE DETAIL #13]
EQ.
EQ.
EQ.
STAIR RADIUS +1 [SEE DETAIL #13]

6X ϕ .41 THRU
SECTION A-A
3/16" SMOOTH ALUMINUM, TYP.
3.25

STAIR RADIUS - A
B
12.00
30°
3/16" SMOOTH ALUMINUM
TREX TREAD COVERS
SEE DETAIL #8
BALUSTER CUPS TO BE SECURED TO TREAD WITH #12-14 X 3/4 LG PAN HEAD SELF-DRILLING SCREW SS
BALUSTERS SECURED TO TREAD WITH CARRIAGE BOLT - 1/4" X 20 X 1.75 LG - ASTM F593 - 18-8
PAN HEAD SCREW - 10-24 X 0.63 LG - PHILLIPS DRIVE

36.0°
72.0°
 ϕ 8.00
 ϕ 4.00
5X ϕ .41 THRU ALL FOR ϕ 0.375" X 3.50" HILTI KIKW BOLT TZ [3.00" MIN. EMBEDMENT]
 ϕ 6.00 B.C.
2X ϕ .26 THRU 5/16-18 UNC THRU

SECURE BALUSTER TO HANDRAIL WITH [2X] #12-14 X 3/4 LG PAN HEAD SELF-DRILLING SCREW SS
1" X 1" X 0.125" ALUMINUM SQ TUBE
DETAIL B SCALE 1 : 4
SECURE BALUSTER TO HANDRAIL WITH [2X] #12-14 X 3/4 LG PAN HEAD SELF-DRILLING SCREW SS
1" X 0.188" ALUMINUM TUBING
DETAIL C SCALE 1 : 4

1 ALUMINUM SPIRAL STAIR (ISO VIEW)

GENERAL REQUIREMENTS:
1. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND OTHER PROJECT DRAWINGS BY OTHER DISCIPLINES. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE CODES LISTED BELOW.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS RELATING TO EXISTING CONDITIONS BY MAKING FIELD SURVEYS AND MEASUREMENTS PRIOR TO COMMENCING FABRICATION OR CONSTRUCTION.
3. THE GENERAL CONTRACTOR SHALL COMPARE AND COORDINATE THE DRAWINGS OF ALL DISCIPLINES AND REPORT ANY DISCREPANCIES BETWEEN THE DRAWINGS TO THE ARCHITECT AND ENGINEER.
4. DETAILS LABELED "TYPICAL" SHALL APPLY TO ALL SITUATIONS THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY DETAILED. SEE DETAIL TITLES FOR APPLICABILITY OF A PARTICULAR DETAIL. TYPICAL DETAILS SHALL APPLY WHETHER OR NOT THEY ARE SPECIFICALLY KEPT AT EACH LOCATION.
5. THE ENGINEER SHALL HAVE FINAL AUTHORITY TO DETERMINE APPLICABILITY OF TYPICAL DETAILS.
6. WHERE CONFLICTS EXIST BETWEEN STRUCTURAL DOCUMENTS, THE STRICTEST REQUIREMENTS, AS INDICATED BY THE STRUCTURAL ENGINEER SHALL GOVERN.
7. THE GENERAL CONTRACTOR SHALL REVIEW AND DETERMINE THAT DIMENSIONS ARE COORDINATED BETWEEN ARCHITECTURAL AND STRUCTURAL DRAWINGS PRIOR TO FABRICATION OR START OF CONSTRUCTION.
8. NO STRUCTURAL MEMBER SHALL BE CUT OR NOTCHED OR OTHERWISE REDUCED IN STRENGTH UNLESS APPROVED BY THE STRUCTURAL ENGINEER.
9. THE GENERAL CONTRACTOR SHALL COORDINATE ARCHITECTURAL, AND MECHANICAL, DRAWINGS FOR ANCHORED, EMBEDDED OR SUPPORTED ITEMS. NOTIFY THE ARCHITECT / ENGINEER OF ANY DISCREPANCIES.
PRIMARY BUILDING CODES AND SPECIFICATIONS:
1. GENERAL BUILDING CODE:
A. INTERNATIONAL RESIDENTIAL CODE, 2015, 2018, 2021
B. INTERNATIONAL BUILDING CODE, 2015, 2018, 2021
C. CBC 2020, 2022
D. IRC 2020, 2022
DESIGN LOADS:
1. PER IRC, 2015, 2018, 2021:
A. LIVE LOADS uniform (surf) 40
B. LIVE LOADS concentrated (ft) 300
C. LIVE LOADS handrail (ft) 50
D. LIVE LOADS handrail concentrated (ft) 200
2. PER IRC, 2015, 2018, 2021:
A. LIVE LOADS uniform (surf) 100
B. LIVE LOADS concentrated (ft) 300
C. LIVE LOADS handrail (ft) 50
D. LIVE LOADS handrail concentrated (ft) 200
3. CBC 2020, 2022
4. IRC 2020, 2022
ALUMINUM MATERIAL:
1. SEE NOTES ON PRIMARY CODES AND SPECIFICATIONS.
2. MATERIALS:
W SHAPES & WT SHAPES..... 6061-T6
C SHAPES & MC SHAPES..... 6061-T6
ANGLES..... 6061-T6
HSS SHAPES..... 6061-T6
DIAMONDED PLATE..... 3003-H32/24 FT
SMOOTH PLATE..... 5052-H32-SH/PL
ALUMINUM PIPE/TUBE..... 6061-T6/51-T8, 6061-T6-PP
HANDRAIL ALUMINUM TUBE..... 6061-T6
WELDING ELECTRODES..... AWS ER 4043
HIGH STRENGTH BOLTS..... ASTM F593C, ASTM A193
HIGH STRENGTH NUTS..... ASTM F593C, ASTM A193
ANCHOR RODS..... ASTM F1554, GRADE 55
WELDED HEADED STUDS..... ASTM A108
DEFORMED BAR ANCHORS..... ASTM A495
MECHANICAL ANCHORS INTO CONCRETE:
1. USE THE FOLLOWING:
A. HILTI KIKW BOLT TZ CARBON AND STAINLESS STEEL ANCHORS (as applicable)
FINISH:
1. POWDER COAT..... PER SPECIFICATION
ERECTION:
1. ENGINEER SHALL BE CONTACTED FOR APPROVAL OF ANY FIELD MODIFICATIONS OF ANCHOR BOLTS OR RODS AND COLUMN BASE PLATES PER GVH.
2. TEMPORARY BRACING OF STRUCTURAL STEEL ELEMENTS IS THE RESPONSIBILITY OF THE CONTRACTOR. STRUCTURAL STABILITY SHALL BE MAINTAINED AT ALL TIMES DURING THE ERECTION PROCESS.
3. CONTRACTOR MUST PROVIDE NOTIFICATION TO THE ERECTOR THAT, BY TESTING, THE FOUNDATION AND SUPPORTING WALLS HAVE ATTAINED SUFFICIENT STRENGTH TO SUPPORT THE STEEL TO BE ERECTED BEFORE ERECTING STRUCTURAL STEEL.
INSTALLATION RESPONSIBILITY:
1. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, SEQUENCES, AND FOR JOB SAFETY.
2. THE ENGINEER DOES NOT HAVE CONTROL, OR CHARGE OF, AND SHALL NOT BE RESPONSIBLE FOR, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES, FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTOR, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

BALUSTER CUPS TO BE SECURED TO TREAD WITH #12-14 X 3/4 LG PAN HEAD SELF-DRILLING SCREW SS
27 SQ.
316 STAINLESS STEEL BALUSTER CUP
 ϕ .23 THRU ALL
1.00
 ϕ 1.25
BALUSTER CUPS TO BE SECURED TO TREAD WITH #12-14 X 3/4 LG PAN HEAD SELF-DRILLING SCREW SS
 ϕ .27 THRU ALL
 ϕ 1.25
 ϕ .20 THRU
1.25

6 TREAD COVER OPTIONS

7 BASEPLATE DETAIL

SHOWN FOR REFERENCE PURPOSE ONLY, BY OTHERS

SEE DETAIL #16
SEE DETAIL #7
SQ. CONC. FTG. DESIGNED BY OTHERS
SQ. CONC. FTG. DESIGNED BY OTHERS

8 BALUSTER TIPS

SHOWN FOR REFERENCE PURPOSE ONLY, BY OTHERS

SEE DETAIL #16
SEE DETAIL #7
BLOCKING & FLOORING SYSTEM TO BE DESIGNED BY OTHERS TO ACCOMMODATE LOADING AS DEFINED IN SCHEDULE

ϕ 1.50" X 0.83" 6063 ALUMINUM HANDRAIL

DIAMETER OF STAIR	30" [5'-0"]	30" [5'-6"]	30" [6'-0"]
A	30.00	33.00	36.00
B	26.00	29.00	34.00
C	9.35	9.41	9.72
D	16.73	19.92	19.92
E	17.48	20.67	20.67
F	6.50"	6.50"	6.50"
G	31" X 31"	34" X 34"	37" X 37"
H	62" X 62"	68" X 68"	74" X 74"
ROTATION W/ 12 TREADS	360	360	360

A. TREAD RADIUS
B. CLEAR WALKING PATH
C. TRUE TREAD DEPTH
D. STEEL TREAD WIDTH
E. WOOD COVER WIDTH
F. HUB HEIGHT
G. PLATFORM SIZE
H. MINIMUM WELL OPENING

9 BALUSTER BASE DETAILS

10 FOUNDATION COLUMN BASE (REF. ONLY, BY OTHERS)

11 FLOOR SUPPORTED BASE (REF. ONLY, BY OTHERS)

1.50" ALUMINUM ROUND TOP CAPPING
1.50" X 1.50" SQUARE ALUMINUM POST
4X ϕ .28 THRU ALL
1" SQ BALUSTERS, TYP.

12 HANDRAIL PROFILES

13 TREAD SIZES AND DIMENSIONS

COLUMNS			
O.D.	I.D.	WALL THICK.	MATERIAL
3.5"	3.00"	0.25"	TUBE
3.5"	2.75"	0.375"	TUBE

HUBS			
O.D.	I.D.	WALL THICK.	MATERIAL
4"	3.56"	0.280"	TUBE

14 PLATFORM RAIL OPTIONS

15 SAFETY GATE

REMOVABLE HINGLE PIN SECURE TO STAIR COLUMN EXTENSION W/ #12-14 X 3/4 LG PAN HEAD SELF-DRILLING SCREW SS

16 COLUMN & HUB DETAILS

ADDRESS		REVISIONS	
REV. NO.	DATE	DESCRIPTION	

2 NOTES

14 PLATFORM RAIL OPTIONS

TITLE: STANDARD SPEC DRAWING

Trox Spiral Stairs
105 S.P. CLEMENT DRIVE
COLLEGEVILLE, PA 19426
1-800-238-3388

DATE: 05/02/2024
DRAWN BY: J. J. JONES
CHECKED BY: J. J. JONES
APPROVED BY: J. J. JONES

strauss residence
spiral stair shop drawing