

**Application Documentation for Certificate
of Appropriateness
for
9 Waterhouse Street
Cambridge, MA 02138**

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Yanhua Peng
9WReal Estate LLC
50 Mount Vernon Street
Cambridge, MA 02140
617-9920067

09/15/2024

Cambridge Historical Commission
831 Massachusetts Ave. 2nd Fl.
Cambridge, MA 02139
617-349-4683

Dear Cambridge Historical Commission,

We are writing to request a Certificate of Appropriateness for the property located at 9 Waterhouse Street, Cambridge, MA 02138. The property has been under the ownership of 9W Real Estate LLC since 2020 and remained vacant until early this year, when Mathearth Inc., a company specializing in leak detection technology for municipal water systems, began using it as their research and development facility.

First and foremost, we would like to apologize for not seeking the Commission's approval prior to commencing our landscape project. We now understand that any exterior renovations, including landscaping, require prior consultation and approval from the Cambridge Historical Commission. We regret our oversight and sincerely apologize for this lapse in compliance.

We are proud to have Mathearth Inc. as part of our Cambridge community and are dedicated to enhancing both the aesthetic appeal and historical integrity of the property. To this end, we undertook a landscape renovation project. In November 2023, we engaged Zen Associates to design a garden that complements the historic character of the area. After refining the design, we hired 4Ever Patios & Garden Landscape Company to implement the revised design in June 2024.

The project involved installing a 1 ½-foot tall retaining wall in the front yard, designed to create a comfortable seating area where pedestrians can rest and enjoy the view of Cambridge Common across the street. To enhance safety and visibility, we also

added light fixtures on the pillars at both ends of the retaining wall, which will be particularly useful during the shorter daylight hours of winter. During an interior renovation in April, a broken sewage pipe between the house and the street caused basement flooding, necessitating excavation of parts of the yard. This excavation damaged the adjacent asphalt path, which we subsequently repaired by replacing it with a stone-paved walkway. To further address issues with dampness and weed growth, we added gravel to a stepping-stone paver walkway, improving drainage and reducing mosquito breeding around the property.

These updates, along with the addition of beautiful plants, have significantly improved the property's visual appeal and functionality. We have received positive feedback from the community, including residents enjoying the new seating area in a beautiful sunny day, children waiting comfortably while their parents unload strollers, and wildlife such as turkeys sauntering and finding respite in the gravel areas of the garden. We are pleased that these improvements have benefited both the community and the local wildlife.

We believe these updates honor the neighborhood's historical context and enhance its character. The improvements feature durable, timeless materials—such as granite, boulders, gravel, and brick—that align with those used in other historic buildings in the area. We are committed to ensuring that these additions integrate seamlessly into this academically prestigious community.

We respectfully request the Commission's approval for this Certificate of Appropriateness. Should you have any additional suggestions, we would be more than happy to accommodate them to preserve the spirit and aesthetic of Cambridge.

Thank you for considering our application. We look forward to your response.

Sincerely,



Yanhua Peng

Co-owner
9W Real Estate LLC



CAMBRIDGE HISTORICAL COMMISSION

831 Massachusetts Avenue, 2nd Fl., Cambridge, Massachusetts 02139
Telephone: 617 349 4683 TTY: 617 349 6112
E-mail: histcomm@cambridgema.gov URL: www.cambridgema.gov/Historic

APPLICATION FOR CERTIFICATE

1. The undersigned hereby applies to the Cambridge Historical Commission for a Certificate of (check one box): Appropriateness, Nonapplicability, or Hardship, in accordance with Chapter 40C of the Massachusetts General Laws and/or Chapter 2.78 of the Municipal Code.

2. Address of property: 9 Waterhouse Street, Cambridge, Massachusetts

3. Describe the proposed alteration(s), construction or demolition in the space provided below:
(An additional page can be attached, if necessary).

1. Clear Debris: Remove dead bushes, weeds, and any other debris. Plant new trees, shrubs, and perennials in the front yard.
2. Construct Retaining Wall: Build an 18-inch-tall stone retaining wall to create a sitting area. Install Landscape lights underneath the retaining wall to illuminate the area for pedestrians at night.
3. Install Pillars: Erect two pillars with LED light fixtures at either end of the retaining wall to enhance visibility.
4. Place Boulders: Arrange boulders behind the retaining wall for decorative purposes.
5. Create Pathway: Build a gravel and stepping stone paver walkway in the front yard.
6. Renew Walkway: Demolish the existing asphalt and concrete walkway and construct a new paved path leading to the side door of the building.
7. Reference Materias: For additional details, please refer to the schematic design from Zen Associates and the execution proposal from 4Ever Patios & Garden.

I certify that the information contained herein is true and accurate to the best of my knowledge and belief.
The undersigned also attests that he/she has read the statements printed on the reverse.

Name of Property Owner of Record: 9W Real Estate LLC

Mailing Address: 50 Mount Vernon Street Cambridge, MA 02140

Telephone/Fax: 617-9920067 E-mail: _penny15job@gmail.com

⇒ Signature of Property Owner of Record: *Janhua Peng*
(Required field; the application will not be considered complete without the property owner's signature)

Name of proponent, if not record owner: Jianna Eagar Mailing Address: 9 Waterhouse Street Cambridge, MA 02138

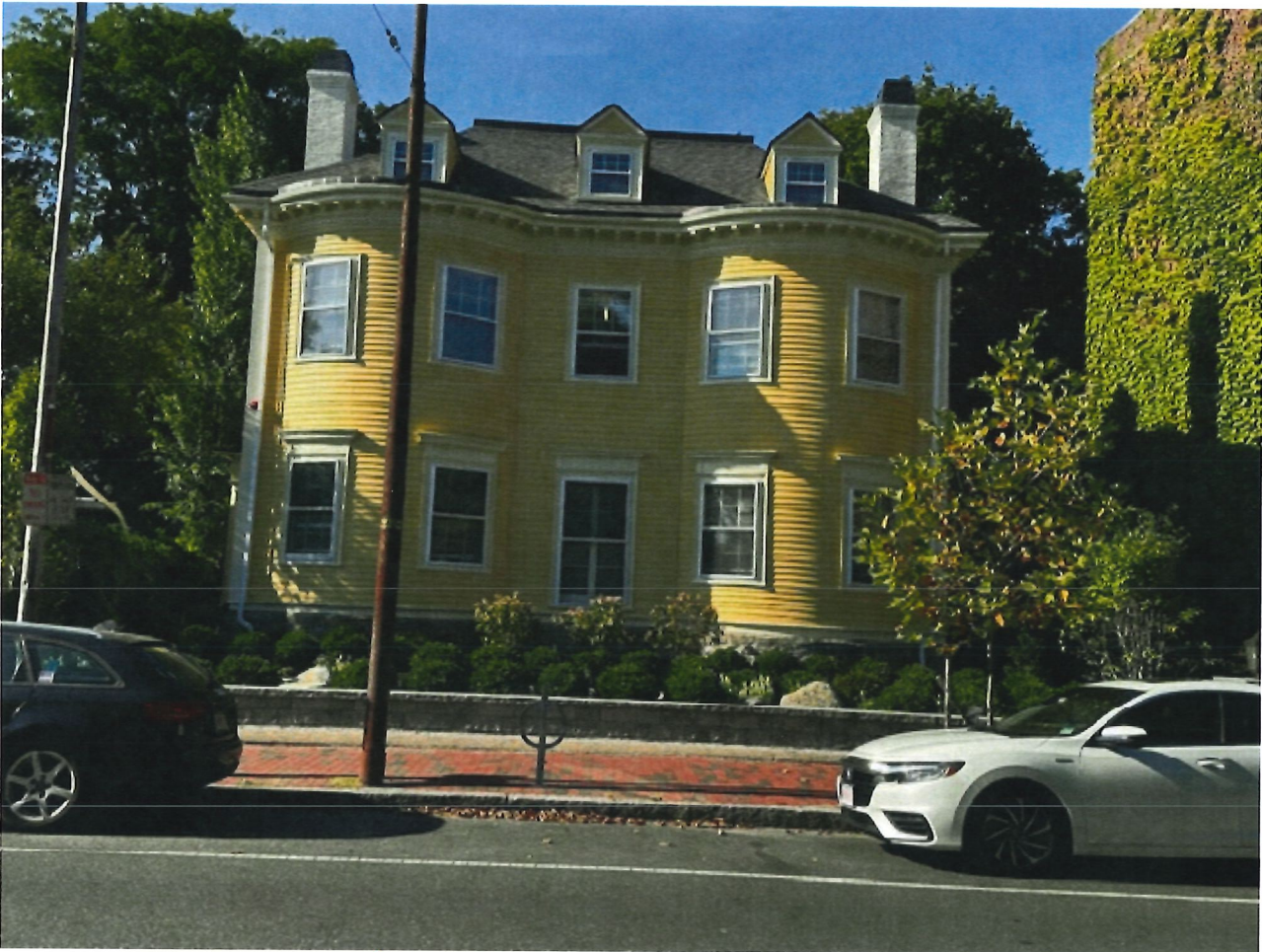
Telephone/Fax: 617-9557477 E-mail: jianna.eagar@mathearth.com

(for office use only):

Date Application Received: _____ Case Number: _____ Hearing Date: _____

Type of Certificate Issued: _____ Date Issued: _____

Front of the building and the sitting wall



Front yard with the sitting wall



Pillar with light fixture



Boulders



Gravel pathway with stepping stones



Paved walkway, pillar with light fixture and sitting wall



Building facade close to the driveway



Building facade close to the apartment complex



ESTIMATE




Prepared For

MathEarth Inc.
9 Waterhouse St.,
Cambridge , MA 12138
(617) 955-7477

4 Ever Patios & Garden Corp.

Marlborough, Ma 01752
Phone: (508) 733-0275
Email: foreverpatiosgarden@yahoo.com
Web: www.4everpatiosgarden.com

Estimate # 480
Date 03/18/2024

Description	Total
\$145,380.00	
PATIO \$10,400.00	
Install CAMBRIDGE With ARMORTEC SHERWOOD 3-PC DESIGN KIT pavers built on a 6" bed of compacted 3/4 crash stone and 1" of Chip stone, Geotextile Stavlization/Separation soil fabric will be installed. Polymatic stone dust swept into the joints. Dimensions 20' x 20'.	
	
WALKWAY \$8,320.00	
Install CAMBRIDGE With ARMORTEC SHERWOOD 3-PC DESIGN KIT pavers built on a 6" bed of compacted 3/4 crash stone and 1" of Chip stone, Geotextile Stavlization/Separation soil fabric will be installed. Polymatic stone dust swept into the joints. Dimensions 4' wide and 80' long.	
PLANTING \$62,475.00	
Prepping and install Trees, Shrubs and Perennials/Ground-cover as described in the plans, spray new soil and Fertilizer Healthy Start on each plants and trees, prepping beds for Ground-cover. Mulching areas as needed.	

BOULDERS	\$11,575.00
Install 17 boulders as the plans about 1-2 tons each boulder	
GRAVEL BED	\$5,200.00
Prepping and install gravel bed with compacted Crashrun and 1/8" of Pea-stone, Landscape fabric will be install to keep weeds away from the bed	
STEP STONE PATH	\$5,400.00
Install stepping stone at the front of the property with natural stone Steps.	
DEMOLITION	\$1,200.00
Demo existing concrete walkway	
METAL ENDING	\$3,200.00
Install metal ending in front step stone path, with crash run and pea-stone	
IRRIGATION	\$4,975.00
<ul style="list-style-type: none"> -Installed 6 drip zones to irrigate all plants. -install a wireless Rain sensor. -install 6 PGV valves with pressure reducer to feed drip lines. -install drip lines with check valve .06gPmat 12" spacing emitters. -install 6 flush valves 1 for each drip valve. 	
IRRIGATION BACKFLOW PREVENTER METER.	\$2,595.00
<ul style="list-style-type: none"> -Provide and install a vacuum breaker preventer for new irrigation system. -provide and install a 2nd. Meter for irrigation system. 	
this includes all permits required.	
WALL	\$10,220.00
Prepping and install retaining wall with TECHO BLOCK SEMMA double sided, 6" of 3/4 Crash stone as base, GeoTextile Stabilization/Separation soil will be installed. Wall will be between 18" to 22" HIGH.	
CAPS	\$2,520.00
Install retaining wall caps with cement glue.	
PILLARS	\$7,200.00
Prepping and install 2 sets of Pillars with Semma Blocks, one pillar of each sides of the wall	

LANDSCAPE LIGHTS \$3,625.00

Install 12 Under cap Lights, Pro-Trade LL2 5.7 in. Ledge light bronze finish w/Removable LED Module 0.8W 2700K and one Pro-Trade TR1 transformer 150W Stainless Steel .

LANDSCAPE PILLARS LAMP LIGHT \$1,400.00

Install 2 pillars Lamps Forstadele light Outdoor Post mount OZ

FENCE \$5,075.00

Install vinyl private fence 7 panels with concrete into the post corners

Subtotal \$145,380.00

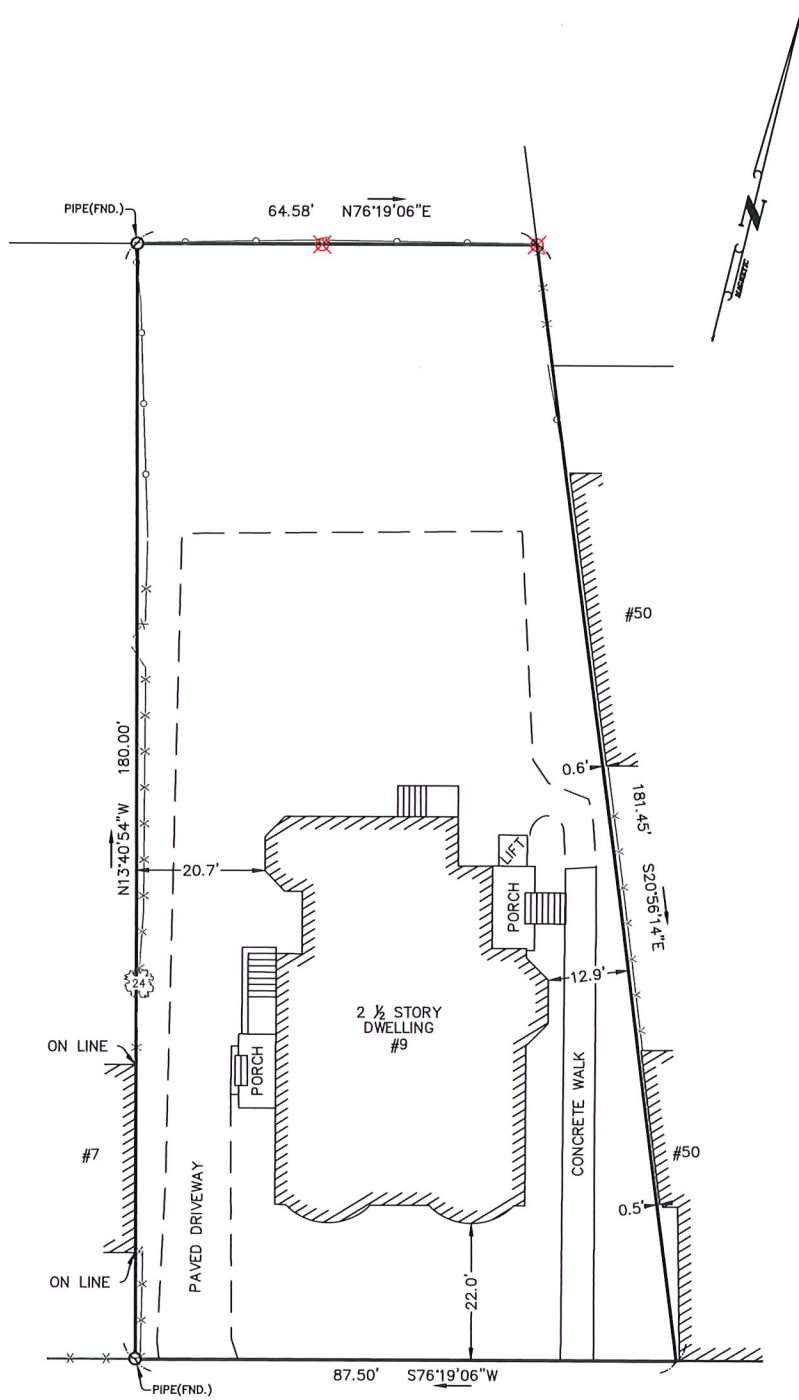
Total **\$145,380.00**

By signing this document, the customer agrees to the services and conditions outlined in this document.

Jianna Egar

Ever Reyes

Signed on: 04/09/2024
MathEarth Inc.



WATERHOUSE

STREET

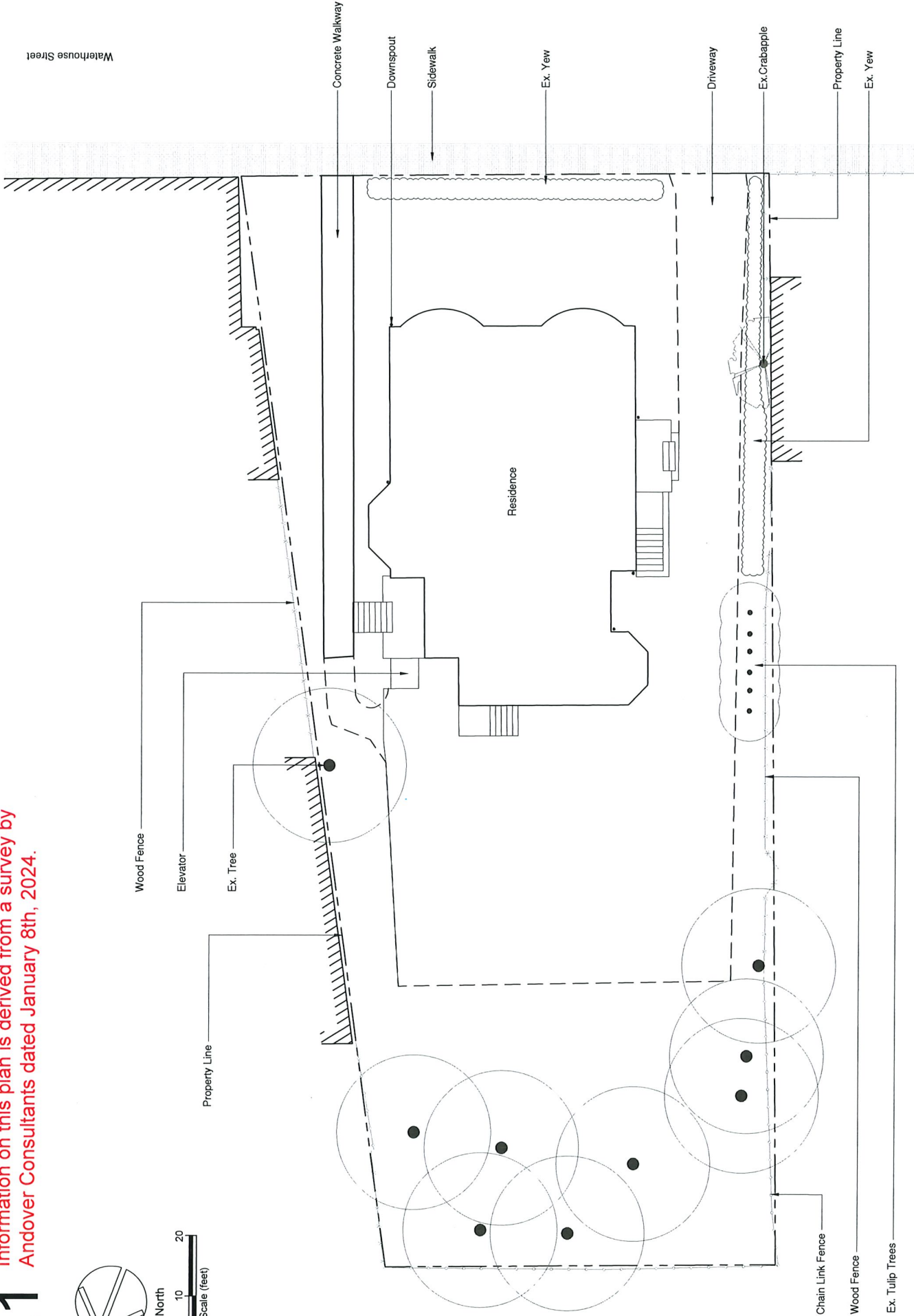
X:\24\24-02 WATERHOUSE\DWG\24-02 WATERHOUSE.DWG

PLOT PLAN
 #9 WATERHOUSE STREET
 CAMBRIDGE, MASS.



L1

Information on this plan is derived from a survey by Andover Consultants dated January 8th, 2024.



MathEarth Inc.

9 Waterhouse St, Cambridge, MA, 12138
Date: March 08, 2024

Existing Conditions

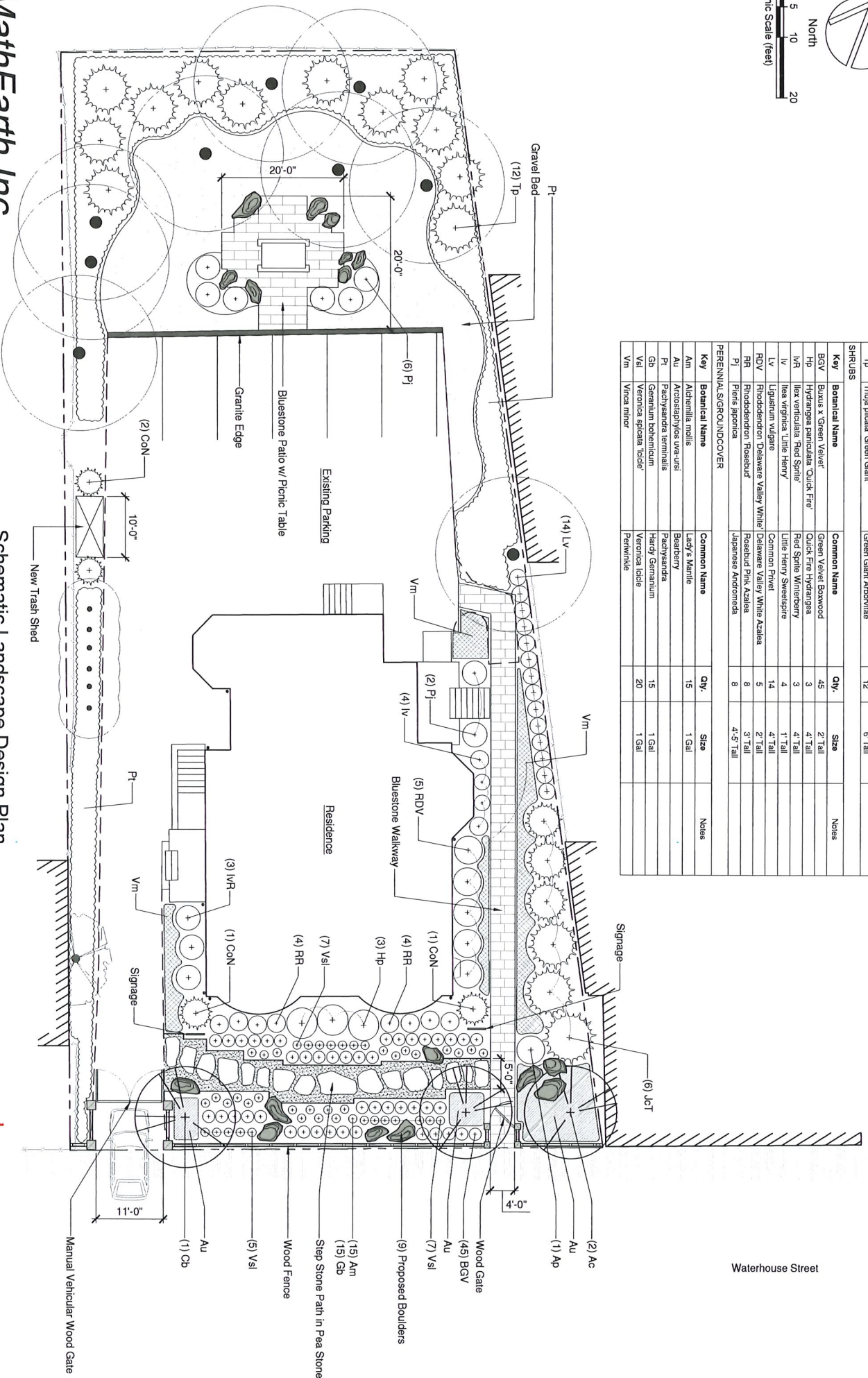
Scale: 1" = 10'-0"



ZEN Associates, Inc.
the balance of art, science, and nature



TREES					
Key	Botanical Name	Common Name	Qty.	Size	Notes
Ap	<i>Acer palmatum</i>	Japanese Maple	1	3' Tall	Dwarf
Ac	<i>Ametancther canadensis</i>	Serviceberry	2	6' Tall	Multi-stem
Co	<i>Carpinus betulus</i>	Hornbeam	1	4' Cal.	
CoN	<i>Chamaecyparis obtusa Nana Gracilis</i>	Hinck Cypress	4	3' Tall	
JeT	<i>Juniperus chinensis 'Torulosa'</i>	Hollywood Juniper	6	5' Tall	
Tp	<i>Thuja plicata 'Green Giant'</i>	Green Giant Arborvitae	12	6' Tall	
SHRUBS					
Key	Botanical Name	Common Name	Qty.	Size	Notes
BGV	<i>Buxus x Green Velvet</i>	Green Velvet Boxwood	45	2' Tall	
Hp	<i>Hydrangea paniculata 'Quick Fire'</i>	Quick Fire Hydrangea	3	4' Tall	
WR	<i>Ilex verticillata 'Red Sprite'</i>	Red Sprite Winterberry	3	4' Tall	
lv	<i>Ilex virginica 'Little Henry'</i>	Little Henry Sweetgum	4	1' Tall	
Lv	<i>Ligustrum vulgare</i>	Common Privet	14	4' Tall	
RDV	<i>Rhododendron 'Delaware Valley White'</i>	Delaware Valley White Azalea	5	2' Tall	
RR	<i>Rhododendron 'Rosebud'</i>	Rosebud Pink Azalea	3	3' Tall	
Pj	<i>Pieris japonica</i>	Japanese Andromeda	8	4-5' Tall	
PERENNIAL/S/GR/DCOVER					
Key	Botanical Name	Common Name	Qty.	Size	Notes
Am	<i>Alchemilla mollis</i>	Lady's Mantle	15	1 Gal	
Au	<i>Arctostaphylos uva-ursi</i>	Bearberry			
Pt	<i>Pachysandra terminalis</i>	Pachysandra			
Gb	<i>Geranium bohemicum</i>	Hardy Geranium	15	1 Gal	
Vsl	<i>Veronica spicata 'Iceberg'</i>	Veronica Iceberg	20	1 Gal	
Vm	<i>Viola minor</i>	Periwinkle			



MathEarth Inc.

9 Waterhouse St, Cambridge, MA, 12138
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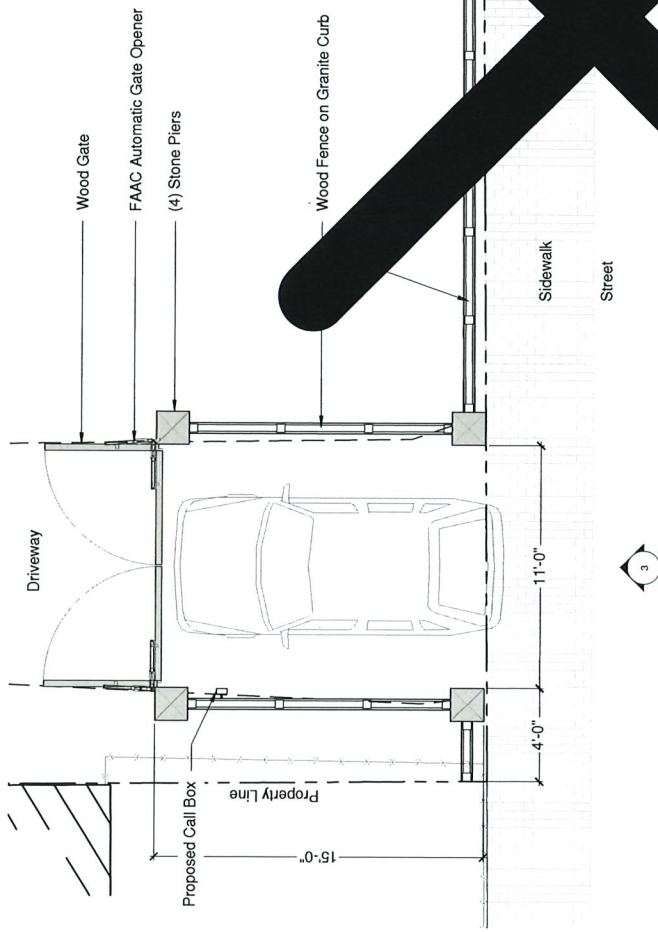
Schematic Landscape Design Plan

Scale: 1" = 10'-0"

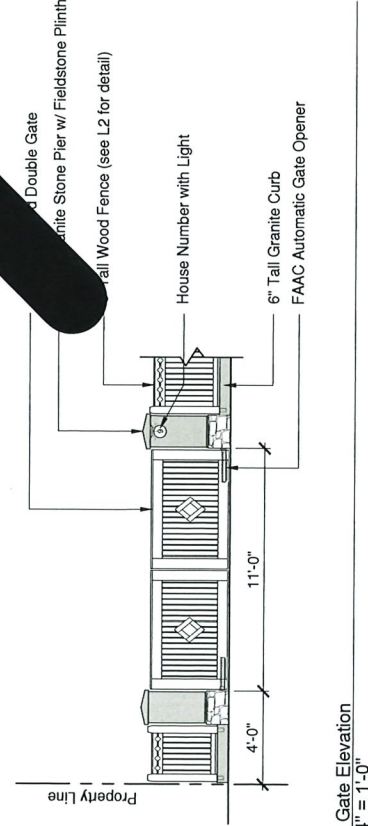
L3

Automatic Gate Option

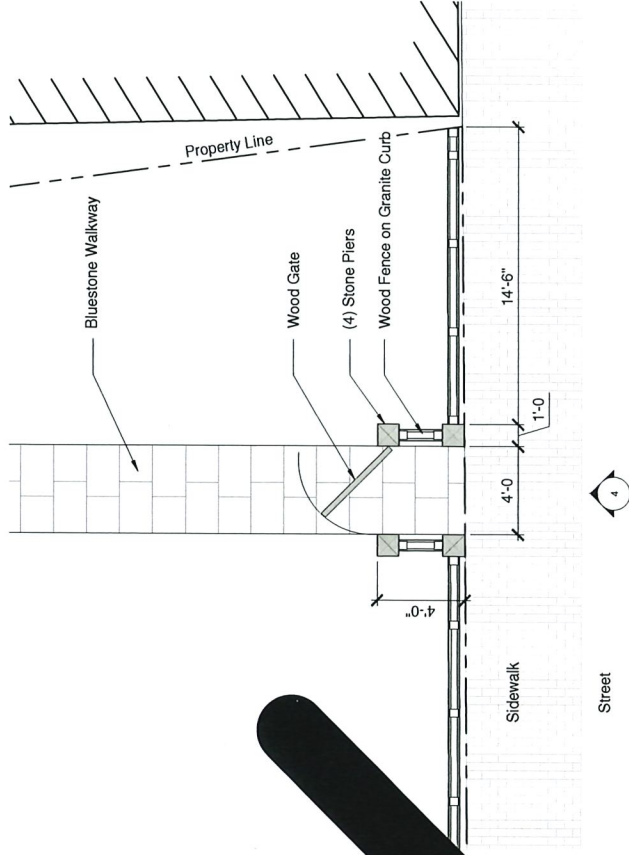
The design on this slide, including vehicular gate, pedestrian gate, vehicular gate elevation, and pedestrian gate elevation, was not materialized in the execution of the final landscape project.



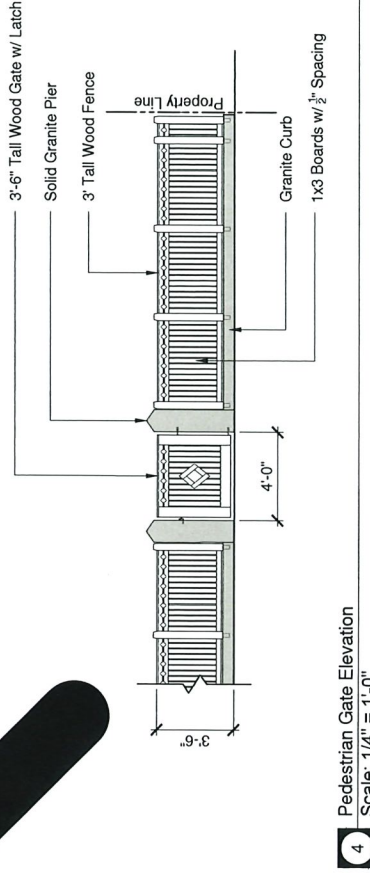
1 Vehicular Gate Plan
Scale: 1/4" = 1'-0"



3 Vehicular Gate Elevation
Scale: 1/4" = 1'-0"



2 Pedestrian Gate Plan
Scale: 1/4" = 1'-0"



4 Pedestrian Gate Elevation
Scale: 1/4" = 1'-0"

We did not use any of the following products in our landscape

415



Electro-mechanical operator for residential swing-leaf gates with single-leaf max width of 3 m (415) and 4 m (415 L)

- "In axis" thrust operator
- Available in versions with a 300 mm (max leaf 3 m) and 400 mm (max leaf 4 m) rod stroke
- Available in versions without a travel limit device
- New control unit with anti-crushing device and virtual encoder with reverse function upon detection of obstacle
- Emergency battery to ensure operation in case of powercut (optional)
- Manual release device with simplified key-protected activation
- 24 Vdc power supply to travel limit devices (if present) for maximum safety, with facility for control and slow-downs
- Horizontal exit for cables to allow near to ground installation (low installation)

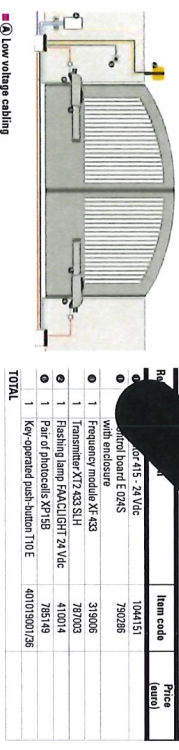
New
• Option to add BUS X18 interface for applications using NO BUS devices

DIMENSIONS AND TECHNICAL SPECIFICATIONS OF 415 - 24 Vdc

Power supply	415	415 LS	415 L	415 LLS	415
Power	24 Vdc	24 Vdc	24 Vdc	24 Vdc	24 Vdc
Current	70 W	70 W	70 W	70 W	70 W
Thrust	3 A	3 A	3 A	3 A	3 A
Rod stroke	280 daN	280 daN	280 daN	280 daN	280 daN
Rod extension speed	300 mm	300 mm	300 mm	300 mm	300 mm
Protection class	1.6 cm/sec	1.6 cm/sec	1.6 cm/sec	1.6 cm/sec	1.6 cm/sec
Leaf max. width (*)	3 m*	3 m*	4 m**	4 m**	4 m**
Travel limit microswitch	NO	YES	NO	YES	YES

(*): Use of the electric lock is recommended over 2.80 m. (**): Use of the electric lock is recommended over 2.80 m.

EXAMPLE OF A TYPICAL INSTALLATION



- Low voltage cabling
 - 3 cables 3x0.50
 - 1 cable 2x0.50
- Power cabling (230 V)
 - 2 cables 3x1.50+1
 - 1 cable 2x1.5+1
 - 1 cable 2x1.5

Notes
IMPORTANT: The configuration does not include the safety devices (i.e. active or passive safety edges) that are to be determined according to the specific "Risk analysis" of each installation (Ref.: UNI-EN 12445 and 12453 European Standards).

F44C

Model	Single leaf max. width (m)	Frequency of use (%)	Control unit	Item code	Price (euro)
S418 - 24 Vdc	2.3	Continuous use	Not included	104301	

The packages include: an electro-mechanical operator, installation accessories, release key.

CONTROL UNITS

Item code	Price (euro)	Item code	Price (euro)
795026		795024	
795028		795024	
795026		795024	
795026		795024	

SPECIFIC ACCESSORIES

Emergency battery support kit* (only for E 120)	Item code: 380525	Price (euro): 795022
BUS X18 interface (if E282S board is used with non BUS photocells)	Item code: 7970150	Price (euro): 795051
Receiving-transmitting module X-COM	Item code: 7970150	Price (euro): 795051
X-COM BOX module	Item code: 795051	Price (euro): 795051

Notes
* (*) The 2 standard Pb batteries are not supplied by F44C. Voltage/current of 12 V/4Ah needed. Dimensions: 80x70x108 mm.

OTHER ACCESSORIES

Key-operated push-button	Item code: 795022	Price (euro): 795022
Photocells and Columns	Item code: 7970150	Price (euro): 795051
Safety devices	Item code: 795022	Price (euro): 795022
Flashing lamps	Item code: 795022	Price (euro): 795022
Transmitters	Item code: 795022	Price (euro): 795022
Various accessories	Item code: 795022	Price (euro): 795022

For spare parts, see page 302-303

Automated systems for swing-leaf gates

MathEarth Inc.

9 Waterhouse St, Cambridge, MA, 12138
Date: March 08, 2024

Automatic Gate Operator



Japanese Maple



Serviceberry Spring



Hornbeam Fall



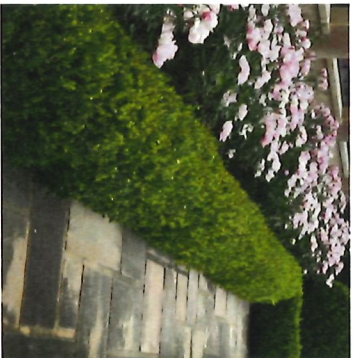
Hinoki Cypress



Hollywood Juniper



Green Giant Arborvitae for Screening



Boxwood Hedge



Hydrangea 'Quick Fire'



Winterberry Winter



Itea 'Little Henry' Fall



Delaware Valley Azalea



Rosebud Azalea



Japanese Andromeda



Lady's Mantle and Geranium



Veronica Iceberg



Bearberry



Pachysandra



Vinca

MathEarth Inc.

9 Waterhouse St, Cambridge, MA, 12138

Date: March 08, 2024

Plant Palette - Shrubs, Perennials, Groundcover

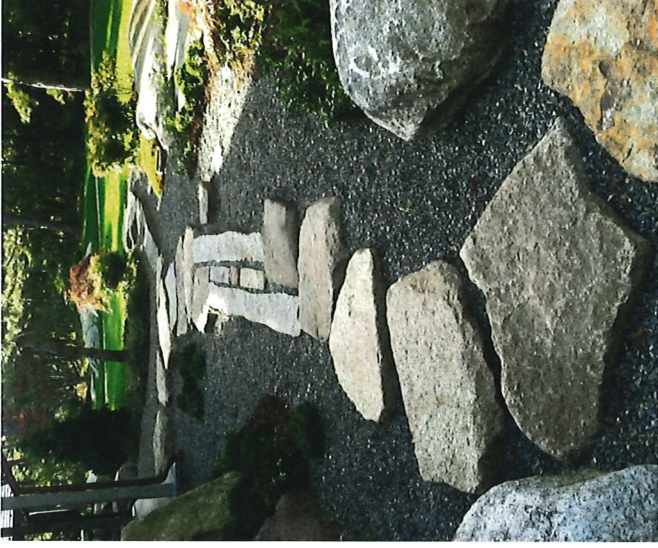


ZEN Associates, Inc.
the balance of art, science, and nature

We did not install any wood fences in our landscape



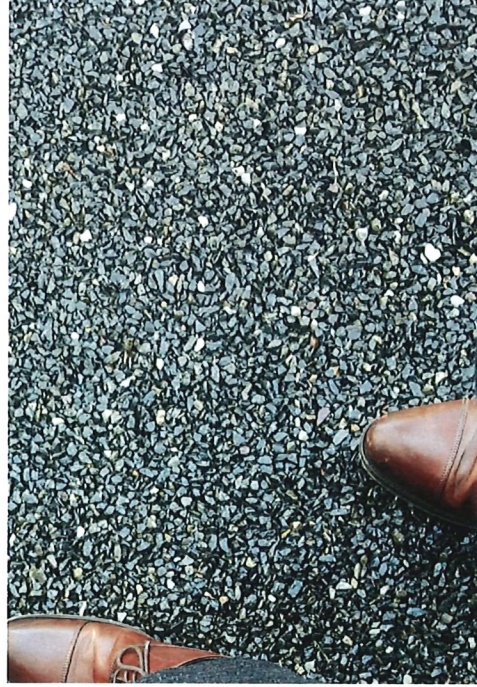
Wood Fence on Granite



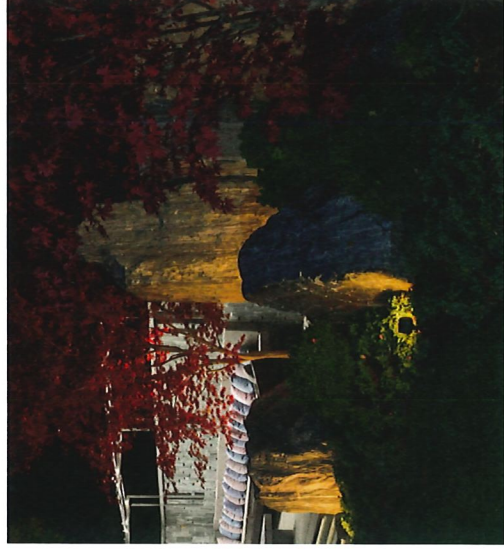
Step Stone Path



Boulder Arrangement



Gravel



Boulders in Plant Bed

