SEATTLE FIRE STATION 22

Seattle Design Commission Presentation • 30% Review • July 1, 2014

CITY OF SEATTLE

Project Manager, FAS-CDCM:	David Jackson
FAS-CDCM:	David Kunselman
SFD Liason:	Charles Cordova
Public Art Liason:	Kelly Pajek

DESIGN TEAM

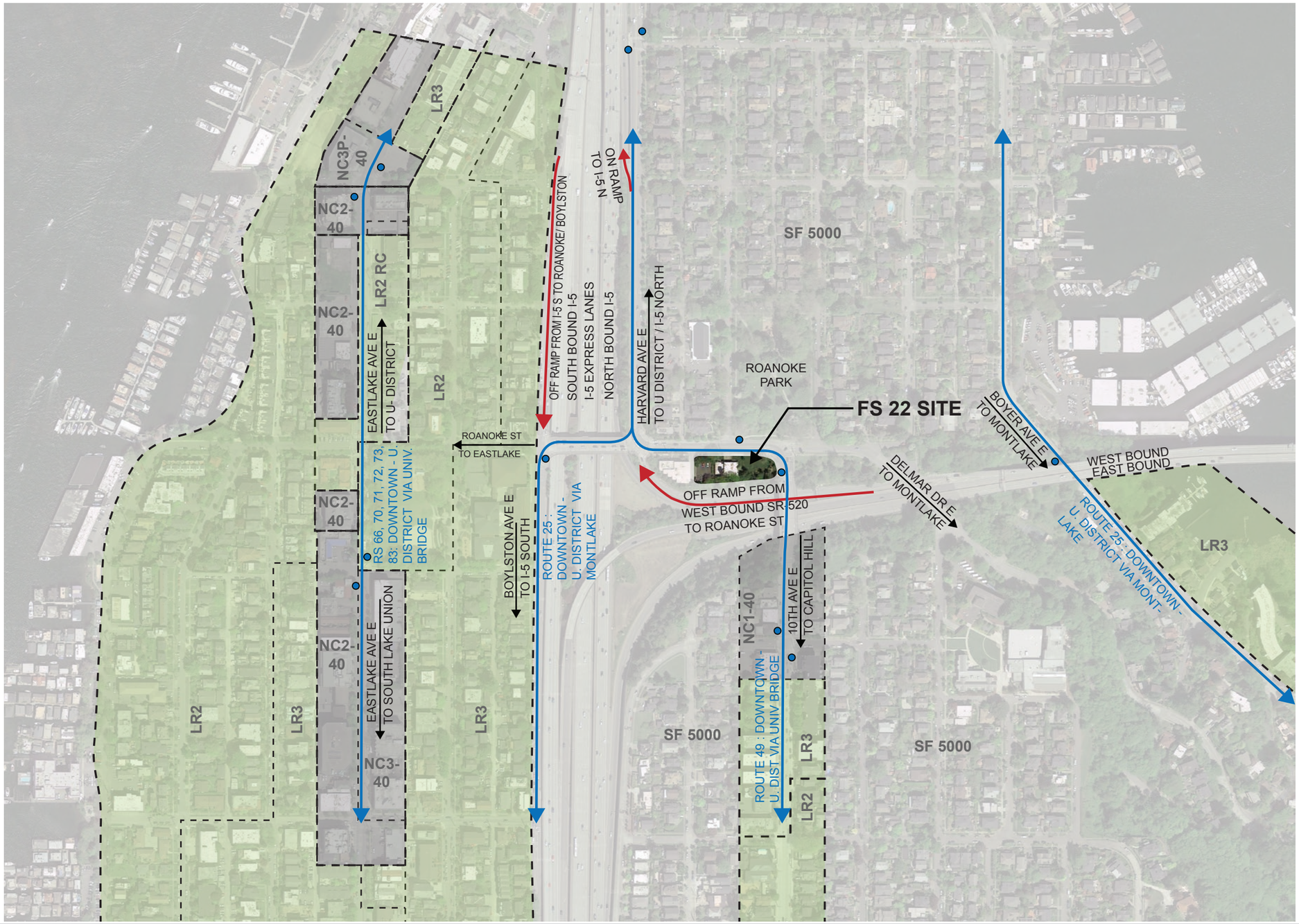
Architect:	Weinstein A+U
Structural Engineer:	Swensen Say Faget
Mechanical Engineer:	The Greenbusch Group
Landscape Architect:	Murase Associates
Civil Engineer:	LPD Engineering
Electrical Engineer:	Sparling
Lighting Design:	Blanca Lighting
Alerting & Signalization:	Tetra Tech

WEINSTEINA+U
ARCHITECTS + URBAN DESIGNERS

SITE LOCATION

901 E. ROANOKE STREET

SITE VICINITY / ZONING



GREEN SPACE DIAGRAM

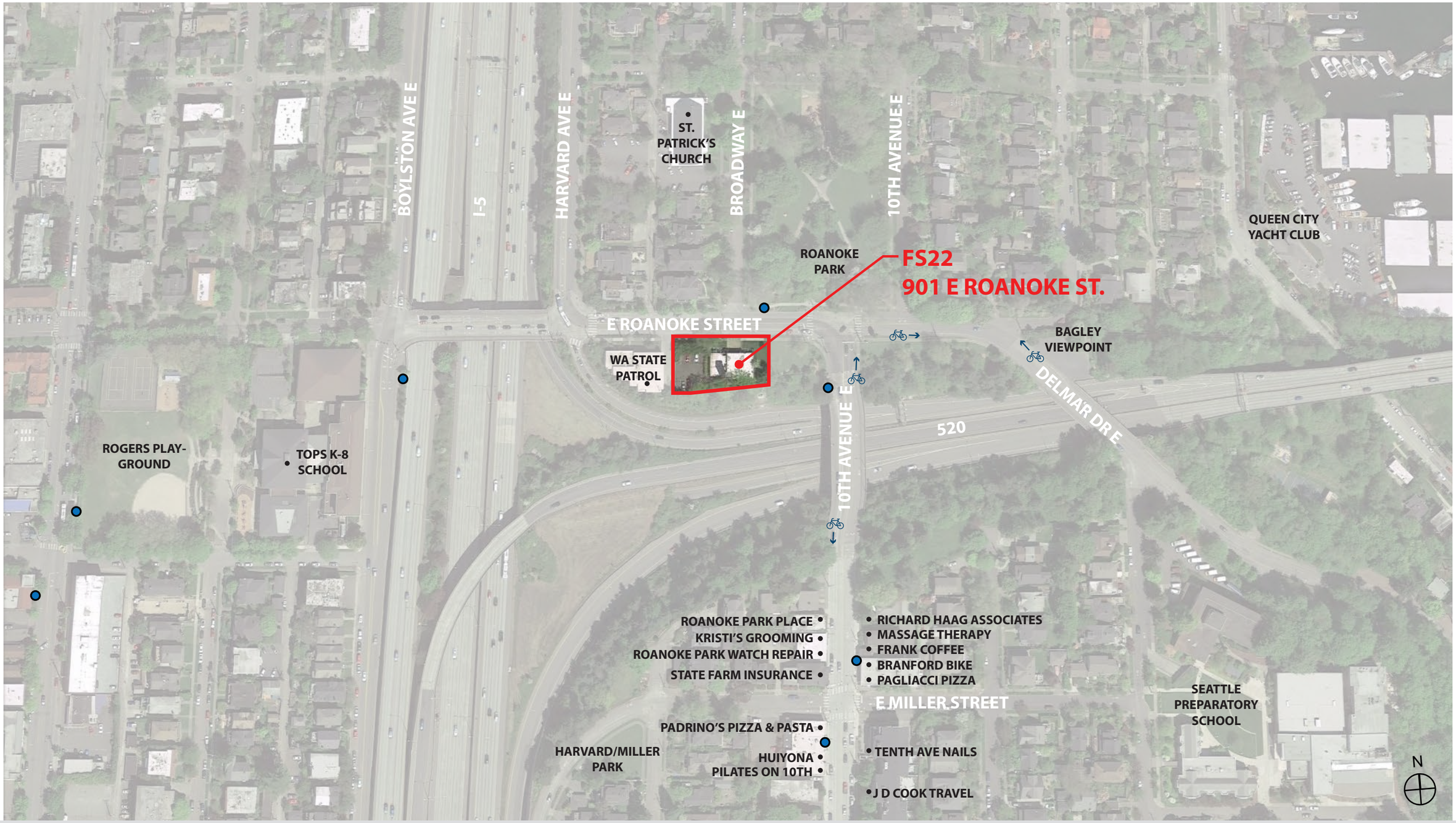
WITHOUT SR-520 LID

GREEN SPACE DIAGRAM

WITH SR-520 LID

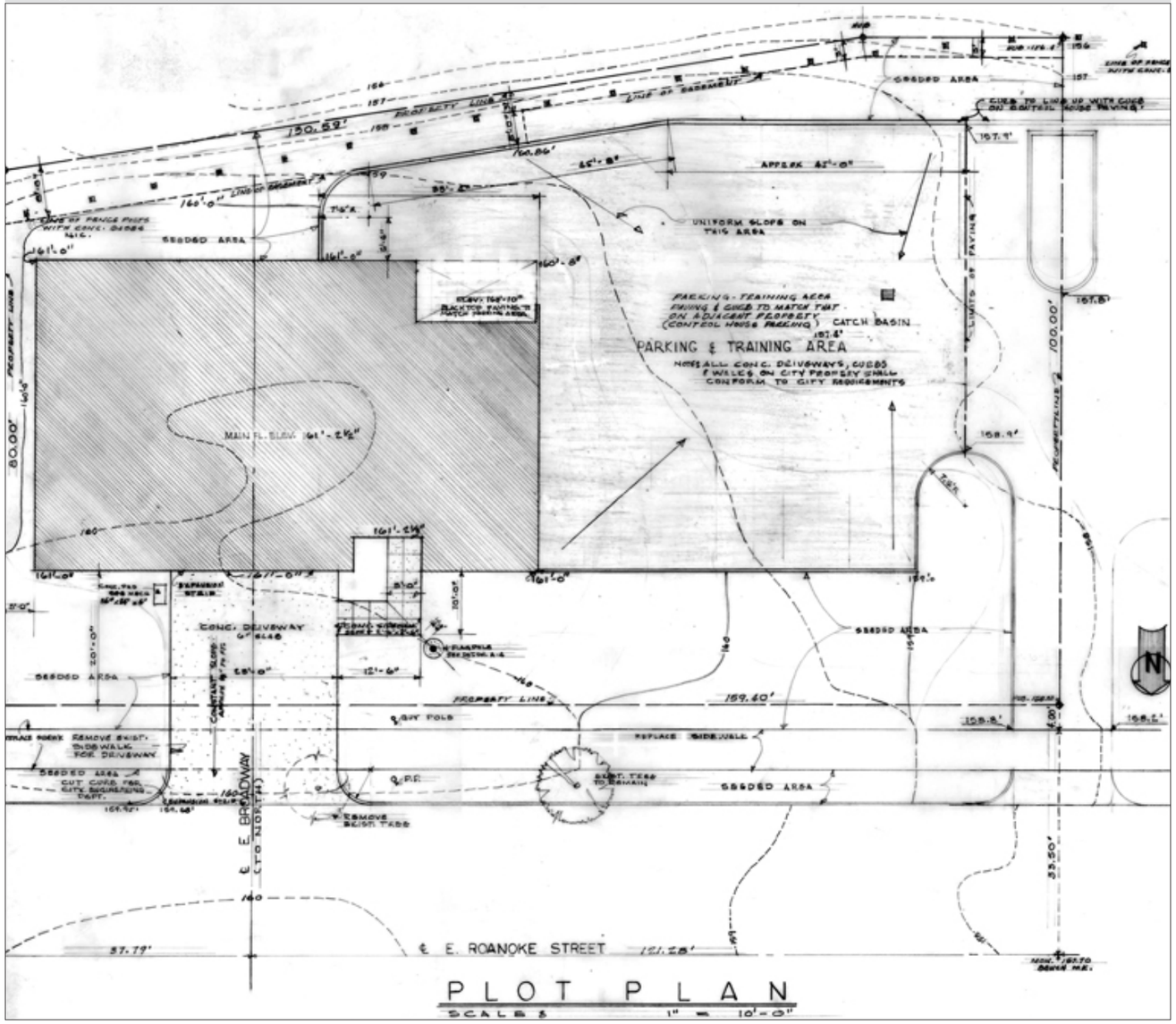
NEIGHBORHOOD CONTEXT

SITE AREA = 14,625 SQ.FT



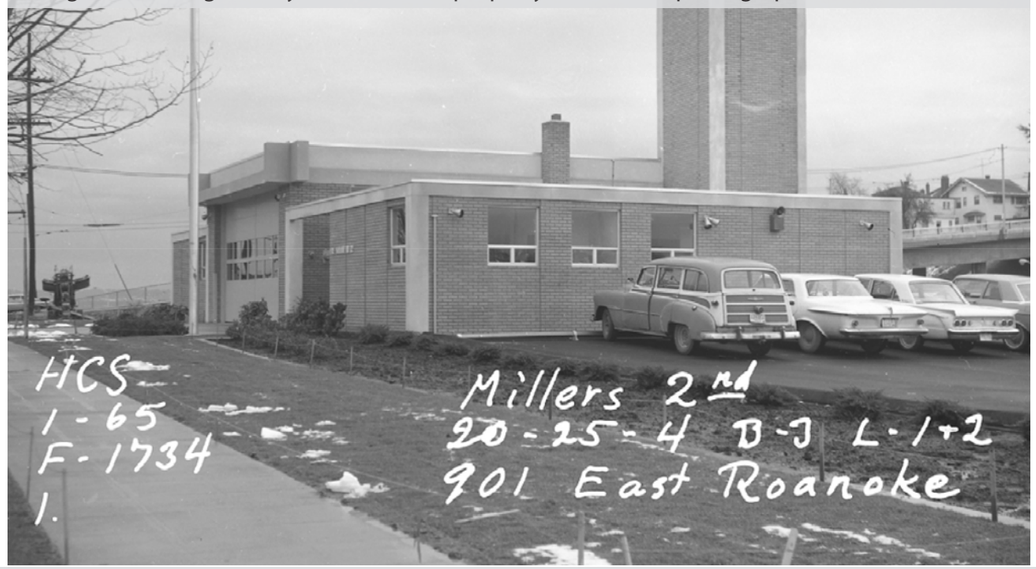
EXISTING BUILDING

Original plot plan of the existing building by architect La Monte Shorett, dated December 1963. NORTH IS DOWN
Image credit: City of Seattle



Existing Fire Station 22, December 2013.

Existing Fire Station 22 shortly after it was built, January 1965.
Image credit: King County Tax Assessor's property record card photograph.



SITE CONTEXT

Broadway E looking south.

Looking southwest along E. Roanoke St.

Looking southeast along E. Roanoke St.

Looking east at sidewalk along E. Roanoke St.

Panoramic view of the site looking southwest from 10th Ave E and E Roanoke St.

NEIGHBORHOOD CONTEXT

Residence, Roanoke Park neighborhood.

From corner of E Roanoke & 10th Ave E looking toward Roanoke Park.

Front yard of FS22 looking north toward Roanoke Park.

Roanoke Park.

Panoramic view of the site looking northwest from 10th Ave Bridge.

SR-520 LID PROJECT

ROANOKE AREA DESIGN

Preliminary design of the SR-520 lid project adjacent to 10th Avenue E:

- Emphasizes the sense of threshold between Roanoke Park and North Capitol Hill.
- Design not yet finalized.
- Construction schedule not yet established.

Image credit: WSDOT Seattle Community Design Process Final Report, July 2012.

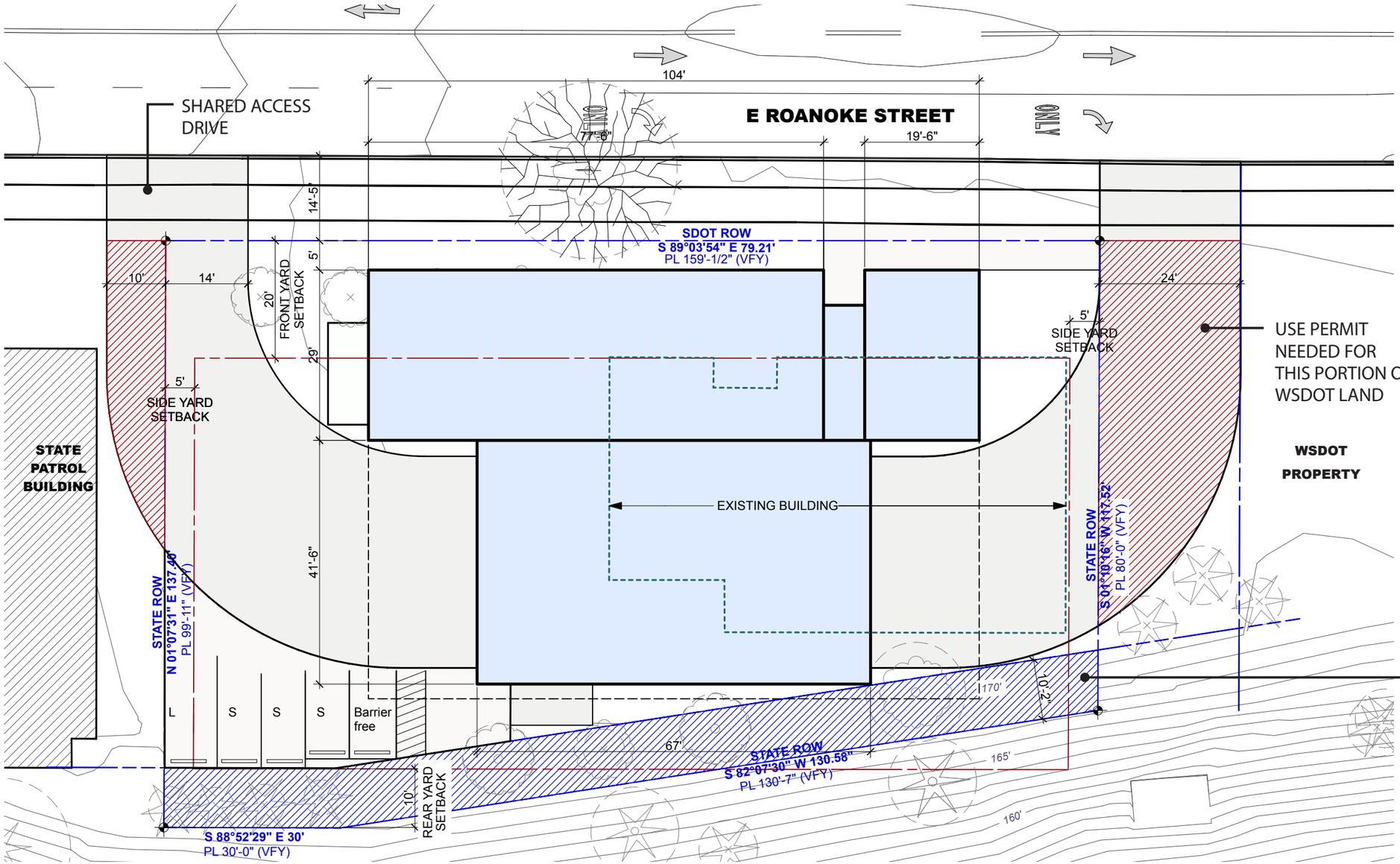
SR-520 LID PROJECT

ROANOKE AREA DESIGN

Aerial view of the proposed SR-520 lid project in relation to FS22.

Image credit: WSDOT simulation.

PROPERTY NEGOTIATIONS



The proposed preliminary designs make use of a portion of the undeveloped WSDOT property at the east to allow for drive-through access. A primary goal of the City and the design team, currently in process, is to:

- Negotiate a revision to the existing use permit to extend the City's use of the west portion of the state property to the east from 10' to 24' for an egress drive.
- Formalize the shared access between the State Patrol and fire station sites.

In exchange, the City would:

- Reserve 10' of land along the south portion of the site for possible future use by WSDOT when SR-520 is widened.

NOT TO SCALE

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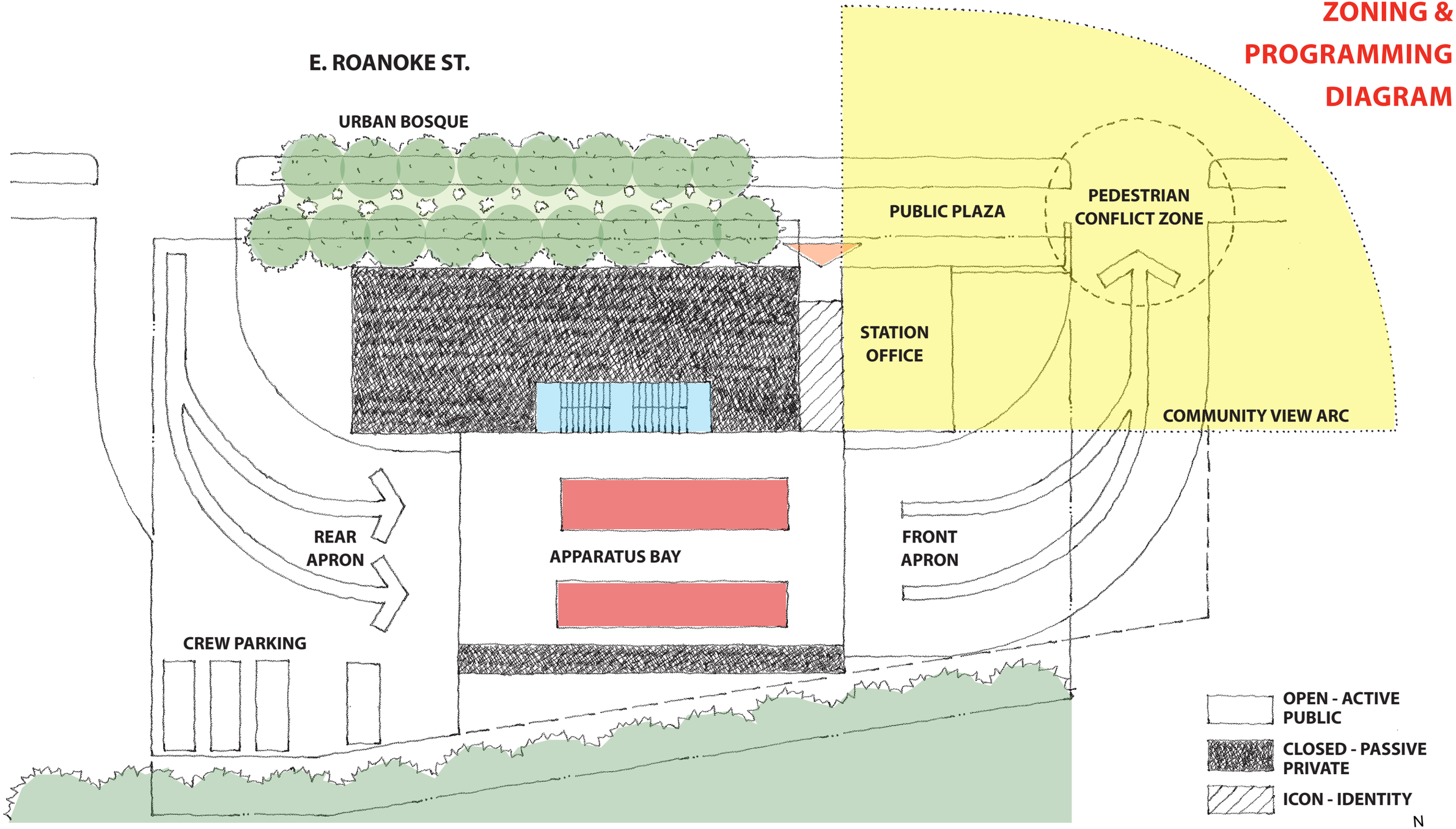
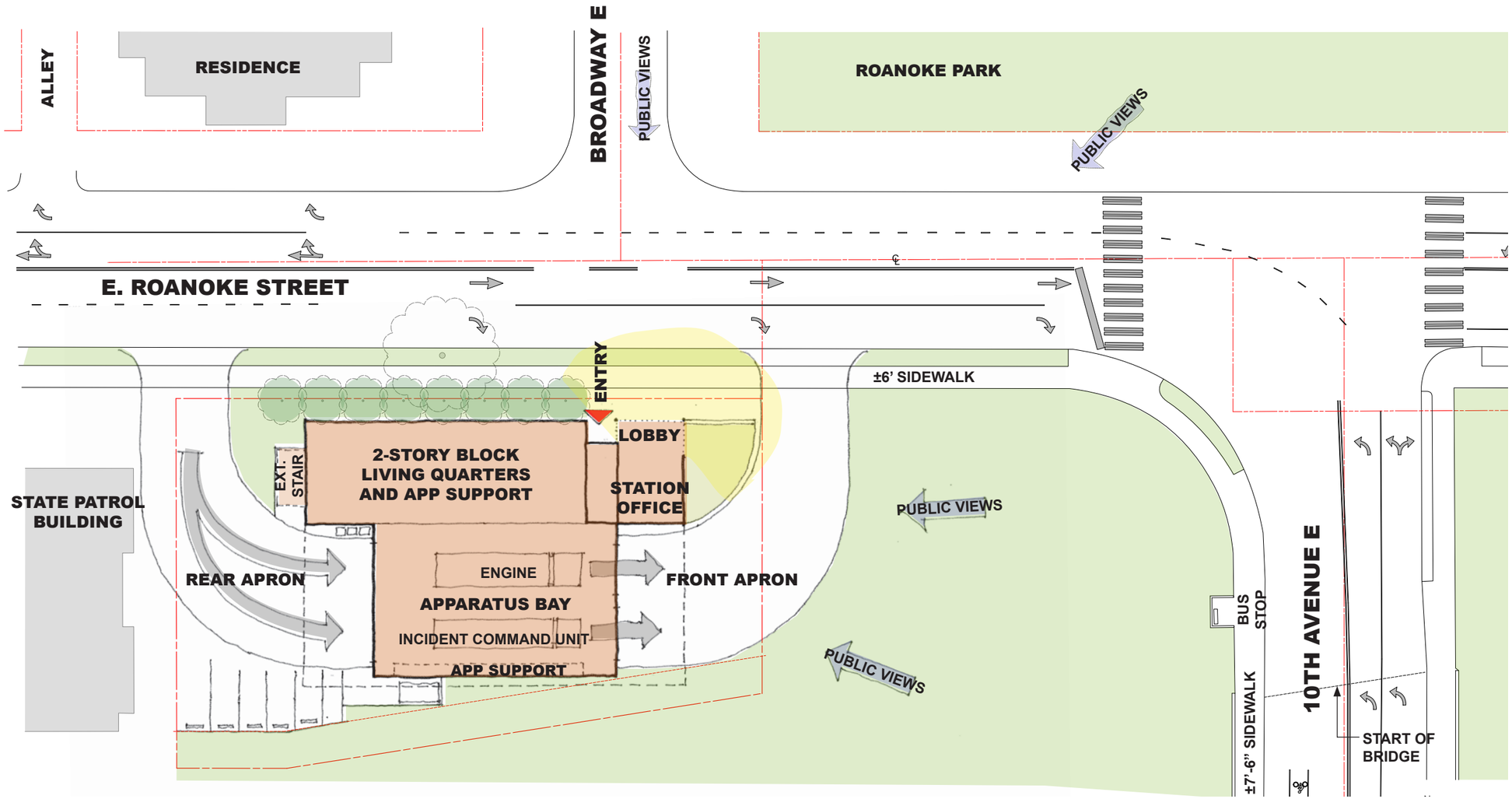
NEIGHBORHOOD CONTEXT & SITE ACTIVITY DIAGRAM

ZONING & PROGRAMMING DIAGRAM



PRELIMINARY SITE STUDY

OPTION 1: DRIVE-THROUGH (PREFERRED)



- Drive-through capability immediately upon occupancy.
- Requires successful negotiation between the City and WSDOT for the property exchange.
- Design Team's preferred configuration.

NOT TO SCALE

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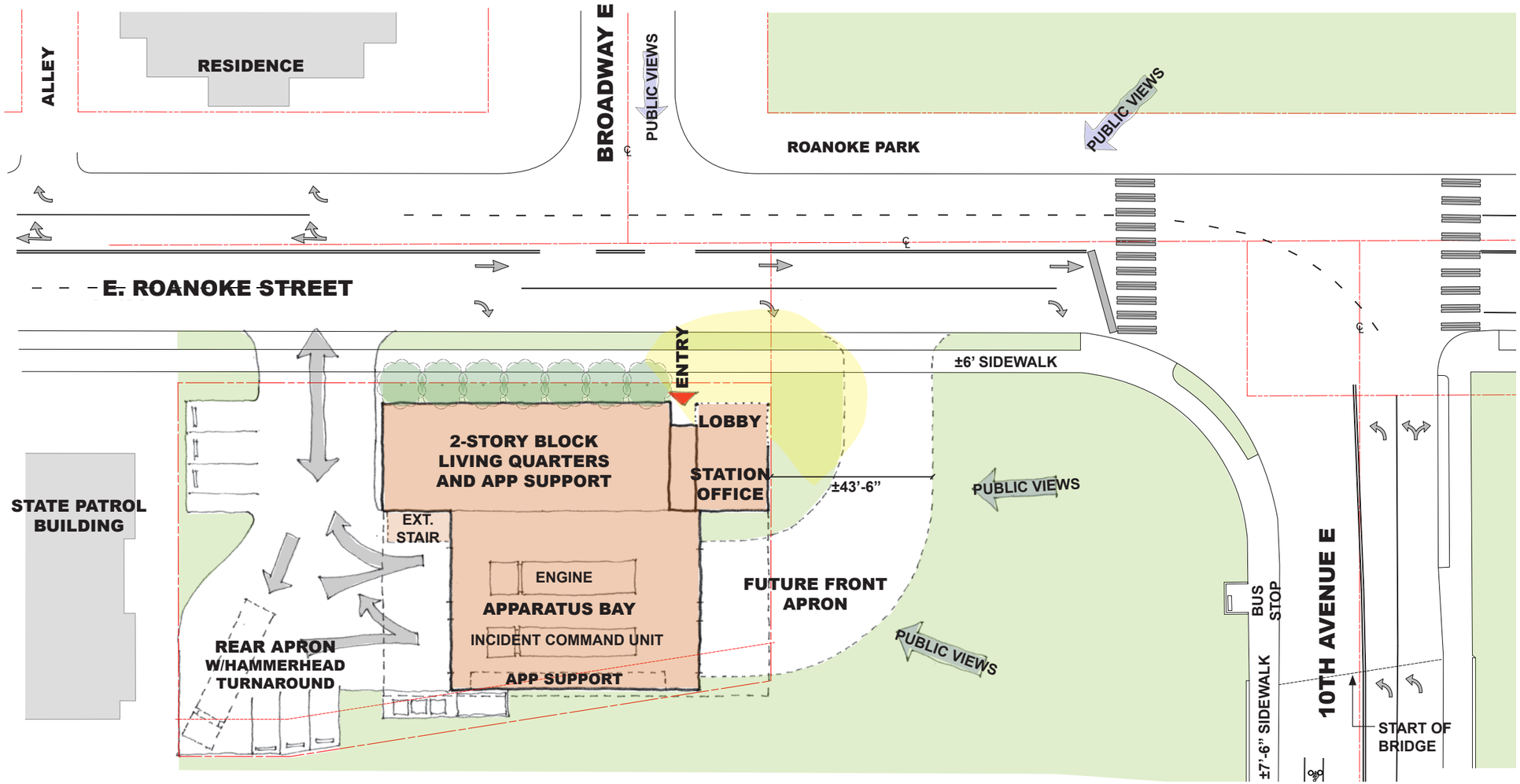
PRELIMINARY SITE STUDY

OPTION 2: HAMMERHEAD



- If a property "swap" is unsuccessful, this could be an interim solution until SR-520 lid project is finished.
- Option 1 massing moved 20' east.

NOT TO SCALE

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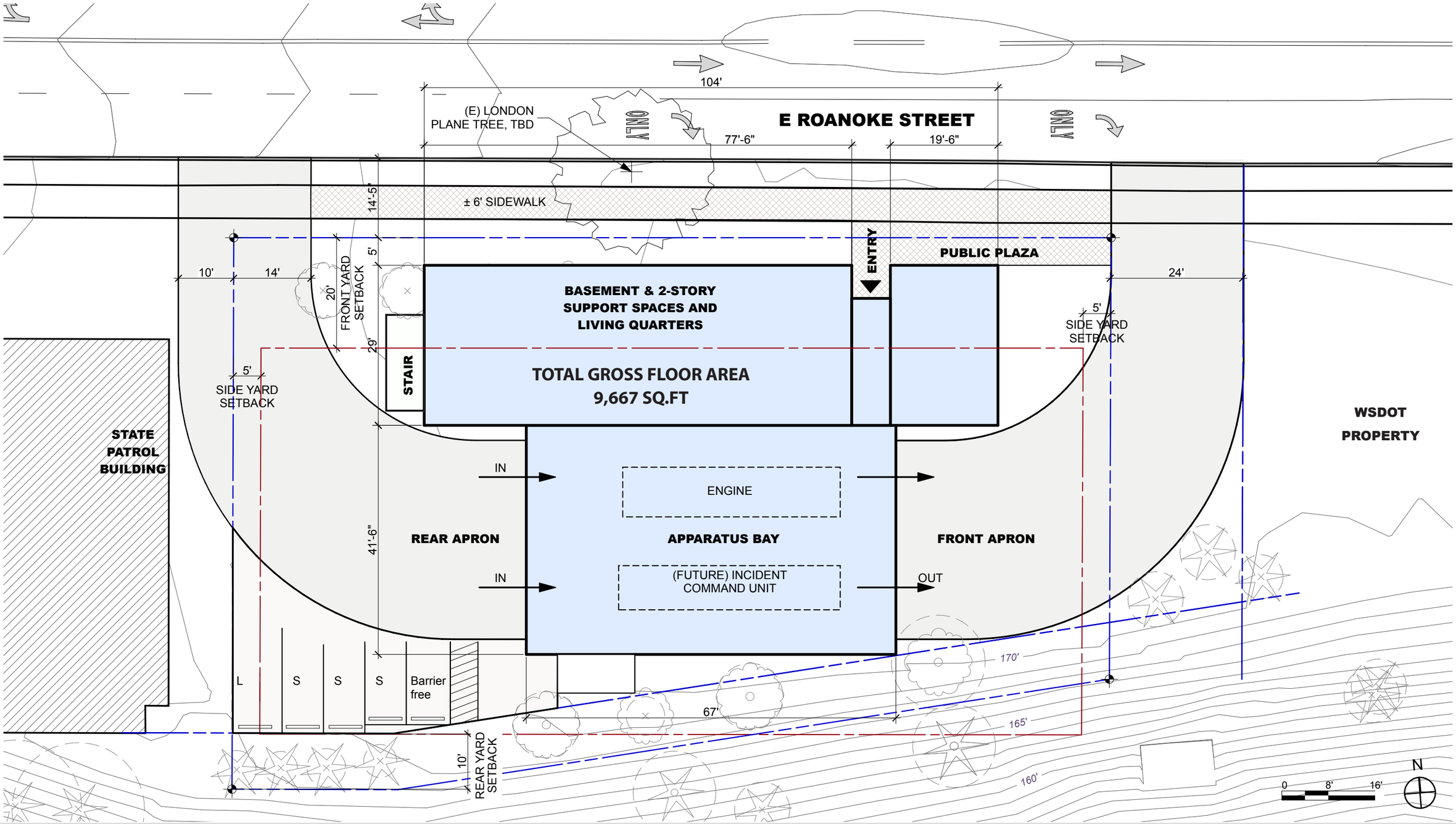
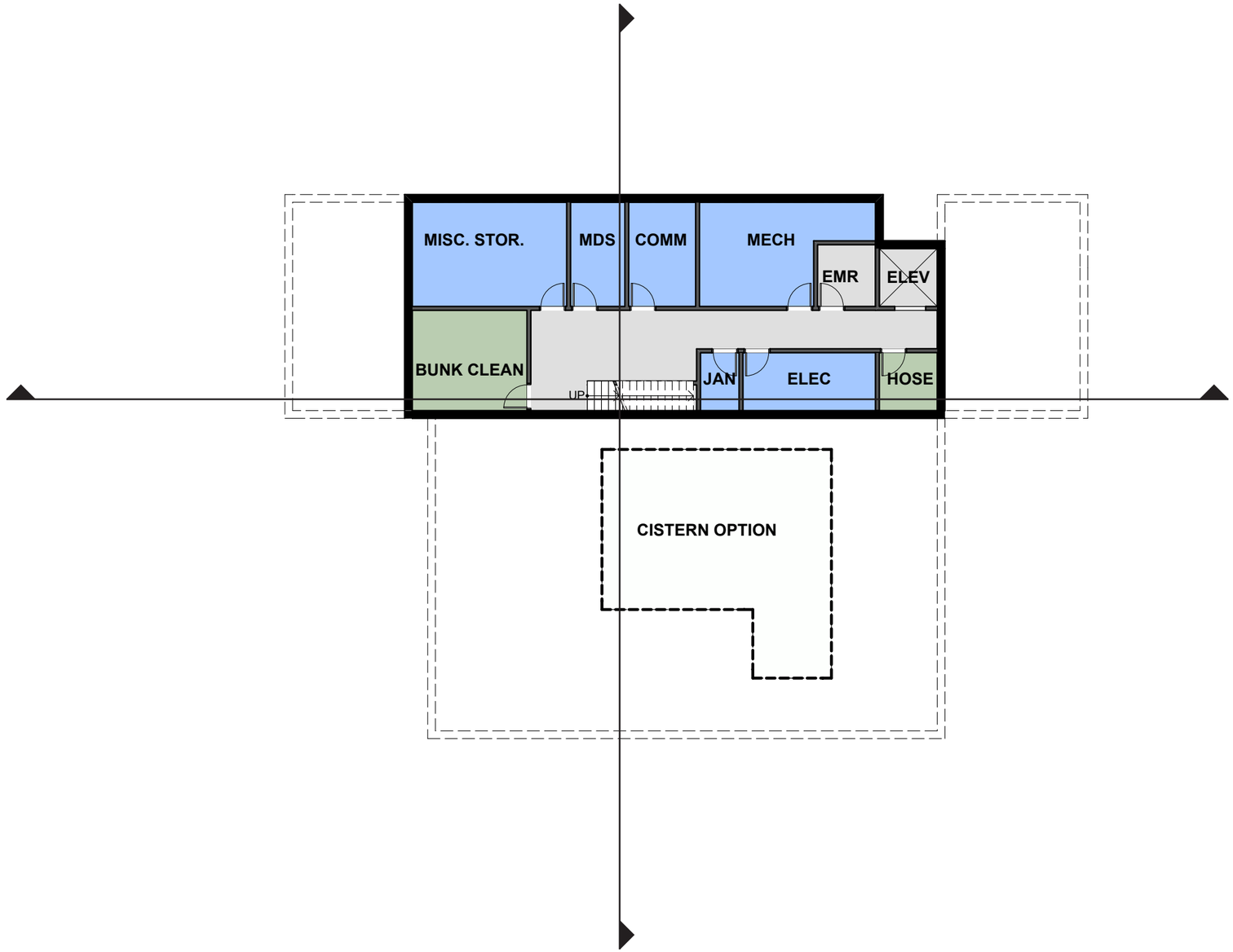
SITE PLAN


104'
(E) LONDON
PLANE TREE, TBD
ONLY
E ROANOKE STREET
77'-6"
19'-6"
ONLY
± 6' SIDEWALK
14'-5"
ENTRY
PUBLIC PLAZA
10'
14'
20'
FRONT YARD
SETBACK
5'
29'
BASEMENT & 2-STORY
SUPPORT SPACES AND
LIVING QUARTERS
STAIR
TOTAL GROSS FLOOR AREA
9,667 SQ.FT
24'
5'
SIDE YARD
SETBACK
5'
SIDE YARD
SETBACK
STATE
PATROL
BUILDING
WSDOT
PROPERTY
IN
ENGINE
41'-6"
REAR APRON
APPARATUS BAY
FRONT APRON
IN
(FUTURE) INCIDENT
COMMAND UNIT
OUT
L
S
S
S
Barrier
free
170'
67'
165'
160'
10'
REAR YARD
SETBACK
N
0
8'
16'

BASEMENT PLAN



Core & Operations Support

Administration Area

Crew Area

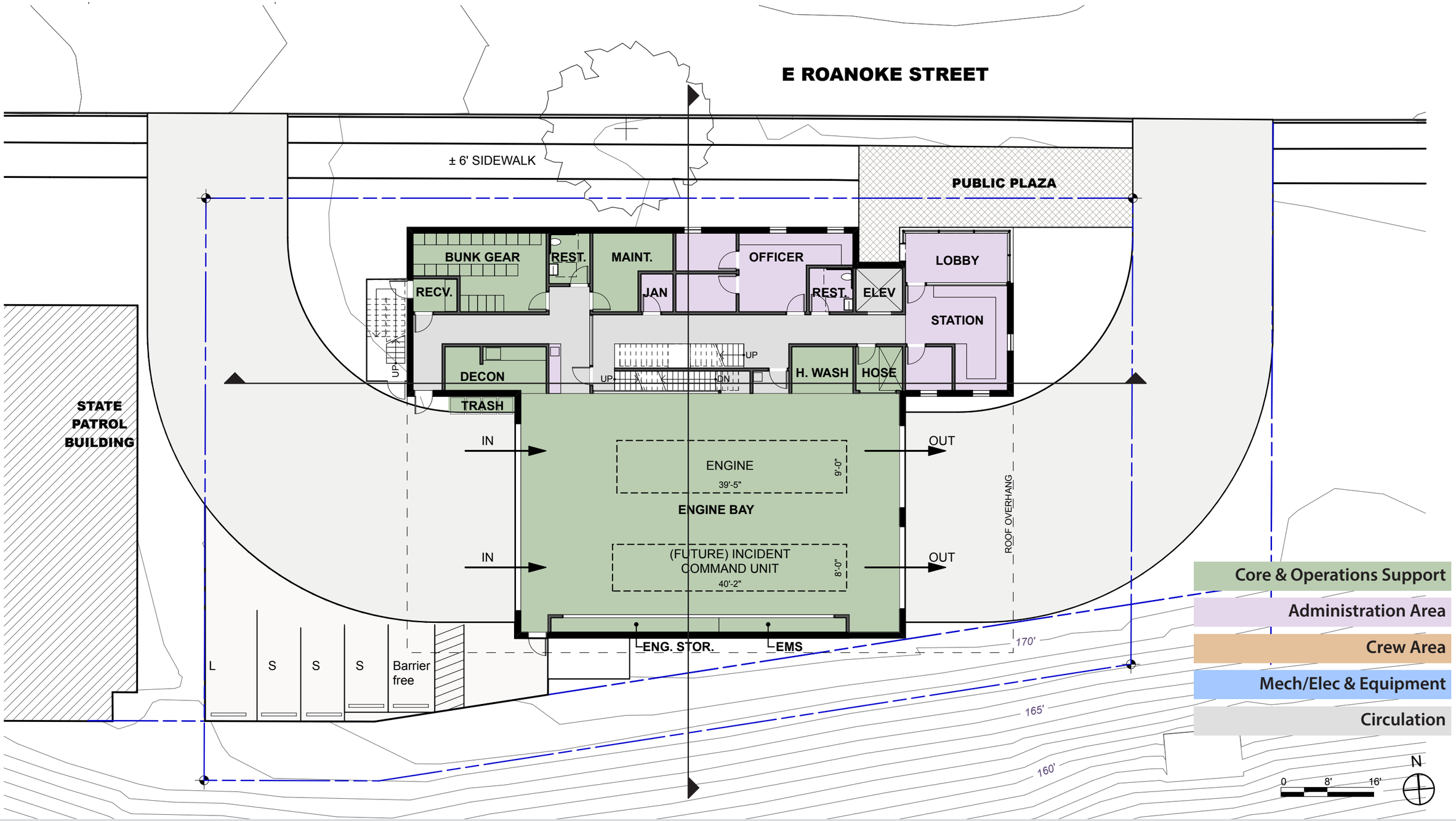
Mech/Elec & Equipment

Circulation

0 8' 16'

N

FIRST FLOOR PLAN



SECOND FLOOR PLAN

Core & Operations Support

Administration Area

Crew Area

Mech/Elec & Equipment

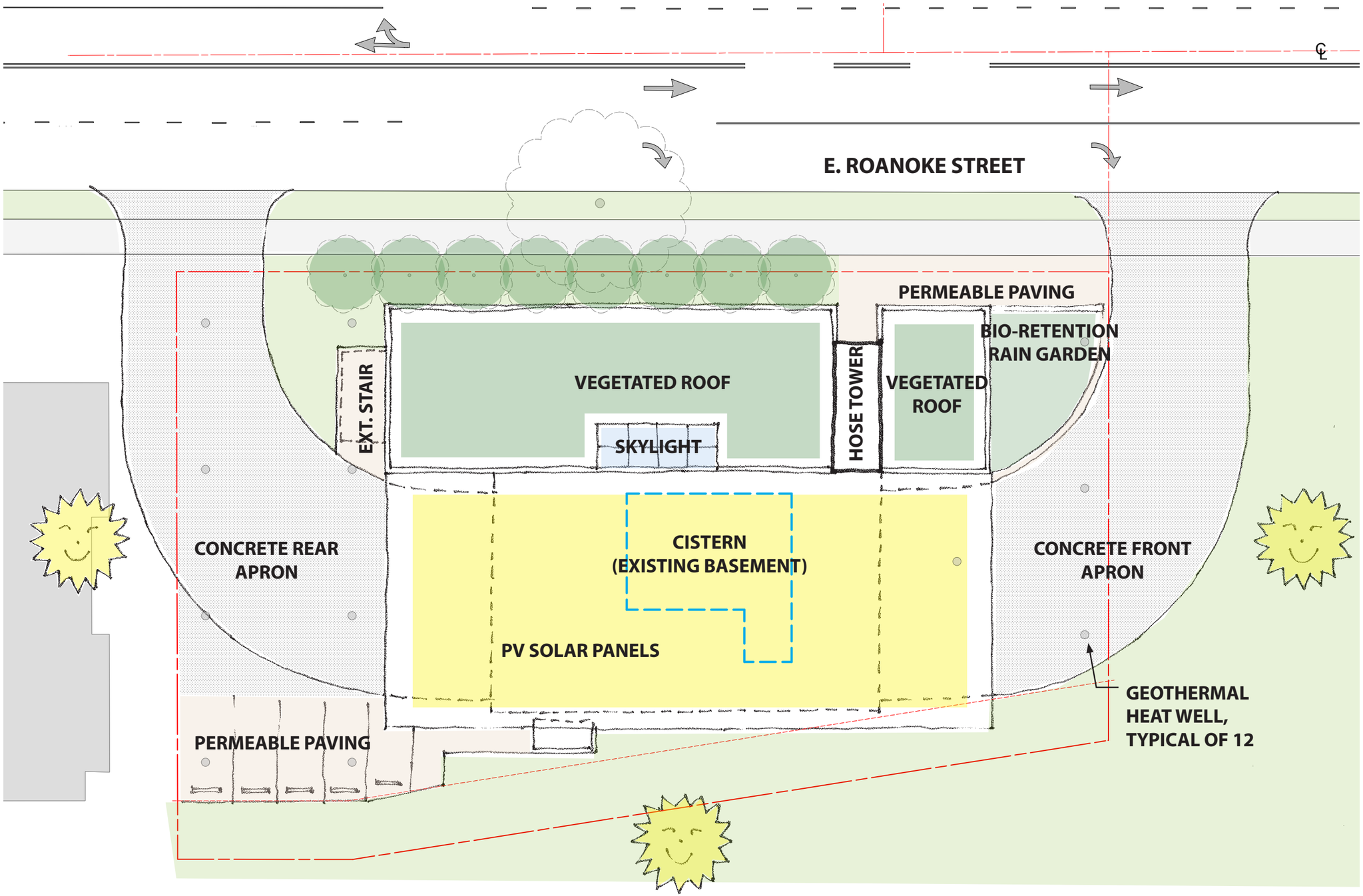
Circulation

0 8' 16'

N

SUSTAINABILITY DIAGRAM

GOAL: LEED PLATINUM



The new Fire Station 22 will be minimum LEED Gold Certified, with a goal of achieving LEED Platinum Certification.

Sustainable design strategies include:

- Photovoltaic panels to handle a minimum of 65% of the building's electrical requirements
- Rainwater harvesting to provide 100% of the project's non-potable water needs (flushing, truck-washing, irrigation)
- Geothermal heat pumps to provide primary heat for heating/cooling and domestic hot water
- Vegetated roof
- Stormwater bio-retention (rain garden)
- Permeable paving

NORTH ELEVATION

ROANOKE STREET

0 8' 16'

NORTH ELEVATION

ROANOKE STREET

CLIMBING HYDRANGEA

0 8' 16'

NORTH ELEVATION

ROANOKE STREET

CLIMBING HYDRANGEA
REDTWIG DOGWOOD
MOUNTAIN ASH

0 8' 16'

NORTH ELEVATION

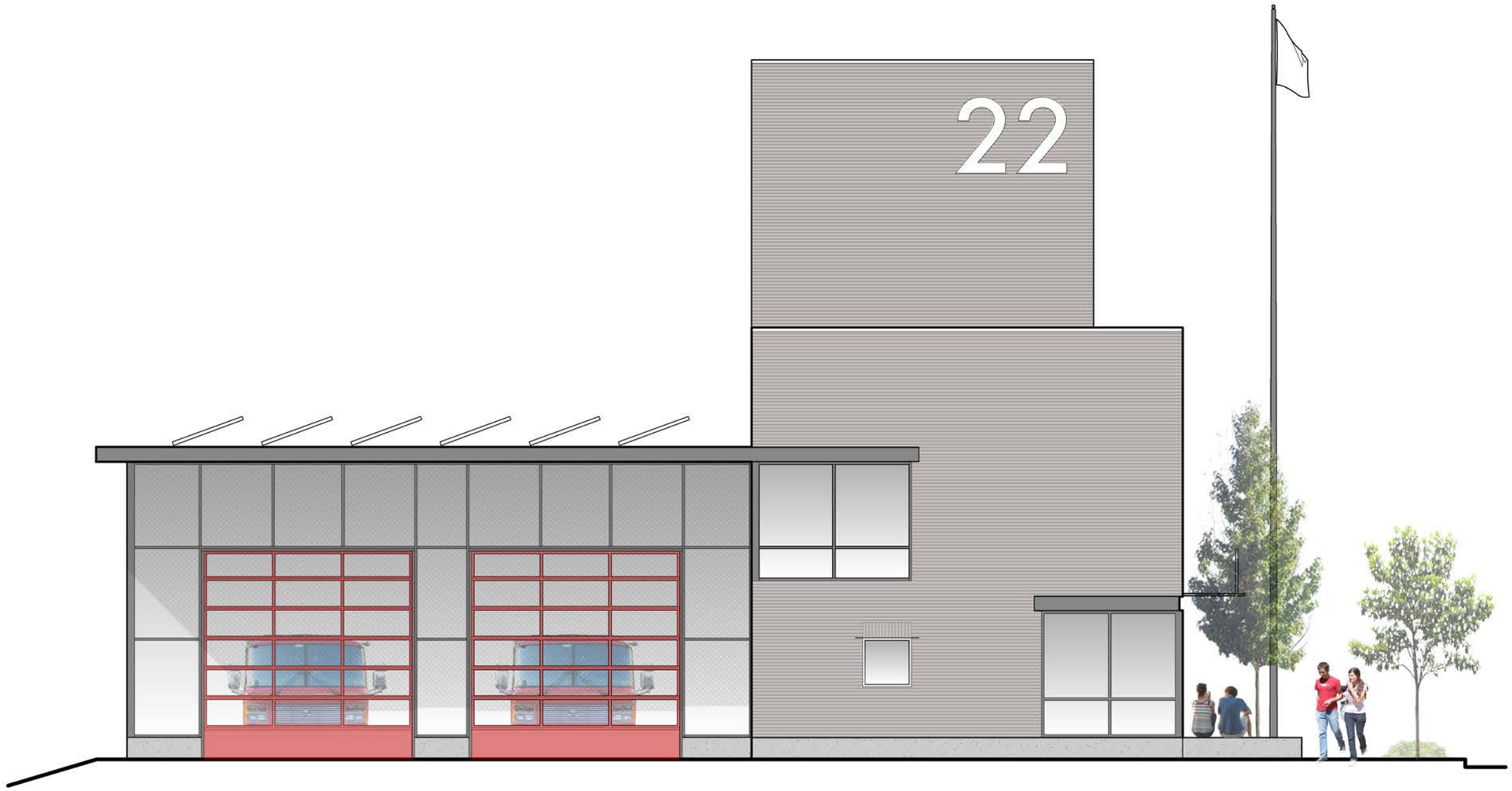
ROANOKE STREET

CLIMBING HYDRANGEA
RED TWIG DOGWOOD
MOUNTAIN ASH
WHITE ROCK ROSE
EDDIE'S WHITE WONDER DOGWOOD

0 8' 16'

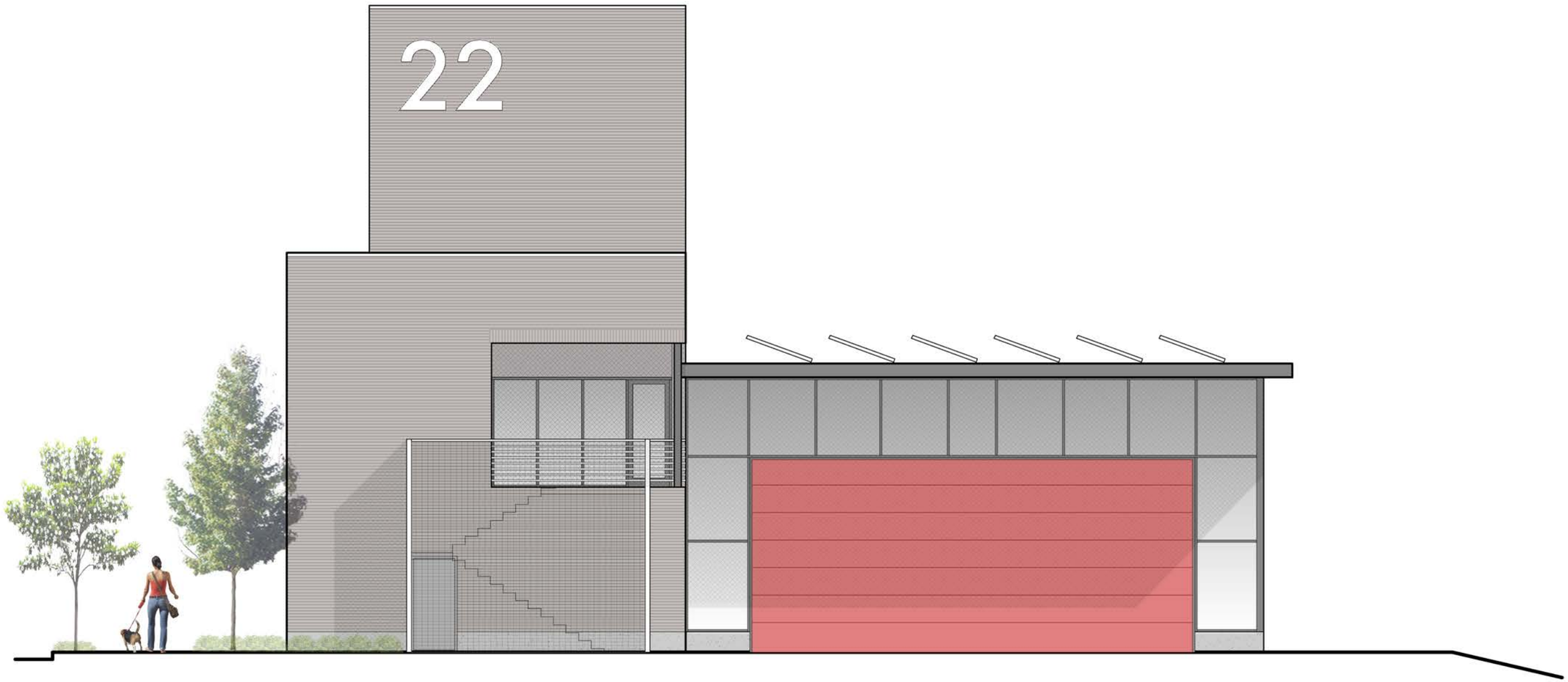
EAST ELEVATION

10TH AVENUE



0 8' 16'

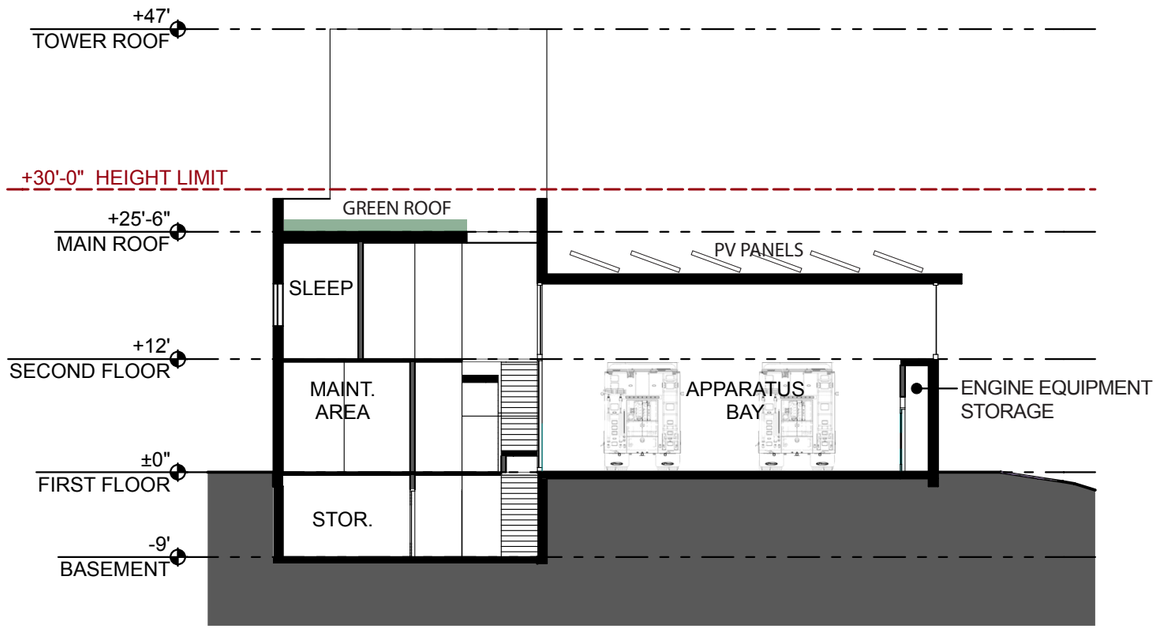
WEST ELEVATION



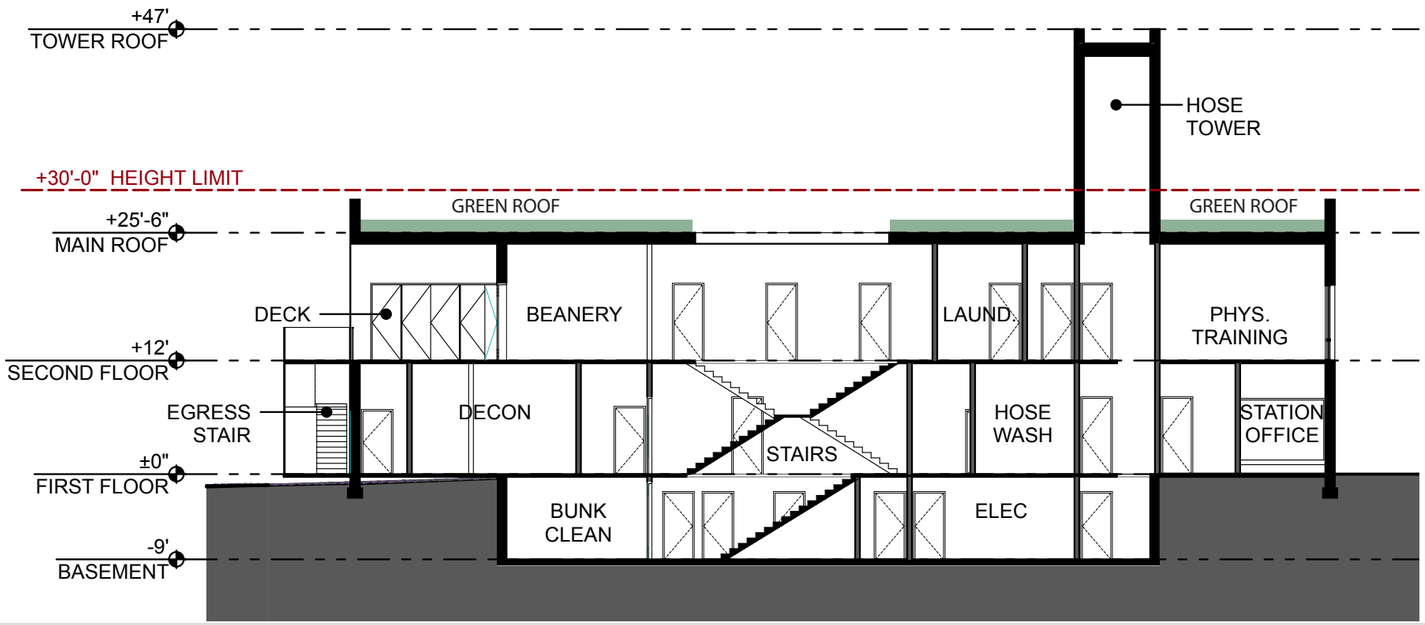
0 8' 16'

BUILDING SECTIONS

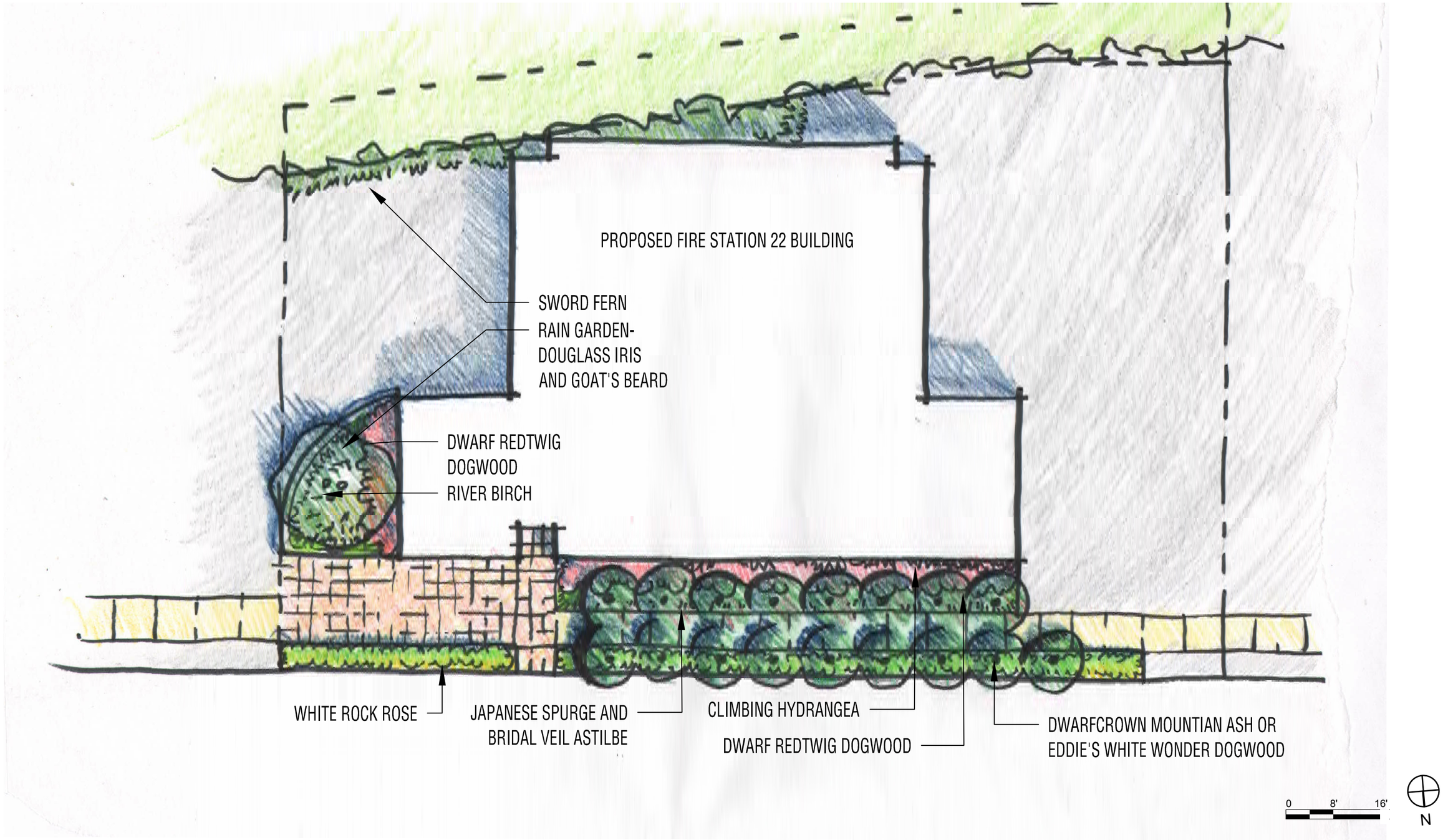
NORTH-SOUTH SECTION



EAST-WEST SECTION



0 8' 16'


PROPOSED FIRE STATION 22 BUILDING
SWORD FERN
RAIN GARDEN-
DOUGLASS IRIS
AND GOAT'S BEARD
DWARF REDTWIG
DOGWOOD
RIVER BIRCH
WHITE ROCK ROSE
JAPANESE SPURGE AND
BRIDAL VEIL ASTILBE
CLIMBING HYDRANGEA
DWARF REDTWIG DOGWOOD
DWARFCROWN MOUNTIAN ASH OR
EDDIE'S WHITE WONDER DOGWOOD
0
8'
16'
N

Roanoke Frontage Garden:

Climbing Hydrangea- *Hydrangea anomala ssp.petiolaris*

Bridal Veil Astilbe- *Astilbe arendsii* 'Bridal Veil'

Japanese Spurge- *Pachysandra terminalis*

Red Cascade Mountain Ash- *Sorbus americana* 'Dwarfcrown'

Red Dogwood- Cornus sericea

Eddie's White Wonder Dogwood- Cornus nuttallii 'Eddie's White Wonder'

White Rockrose- Cistus corbariensis

East Beds and Rain Garden Planter:

River Birch- Betula nigra

Douglas Iris & Goat's Beard

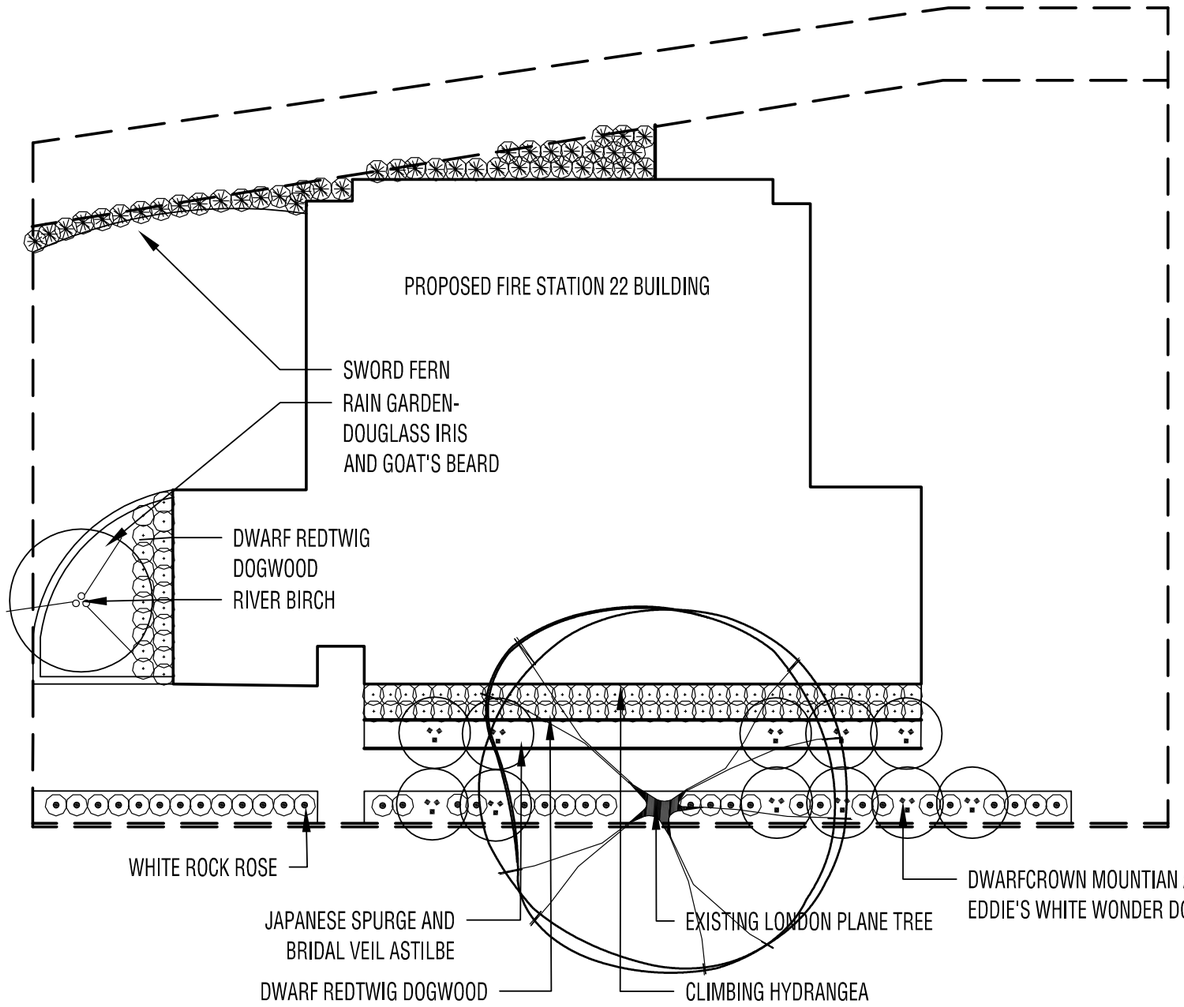
Goat's Beard- Aruncus dioicus

Douglas Iris- Iris douglasiana

Swordfern- Polystichum munitum

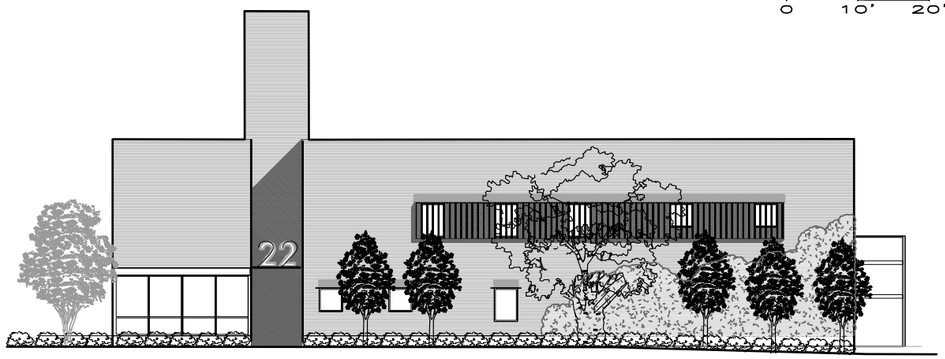
LANDSCAPE DESIGN

OPTION 1: WITH LONDON PLANE TREE



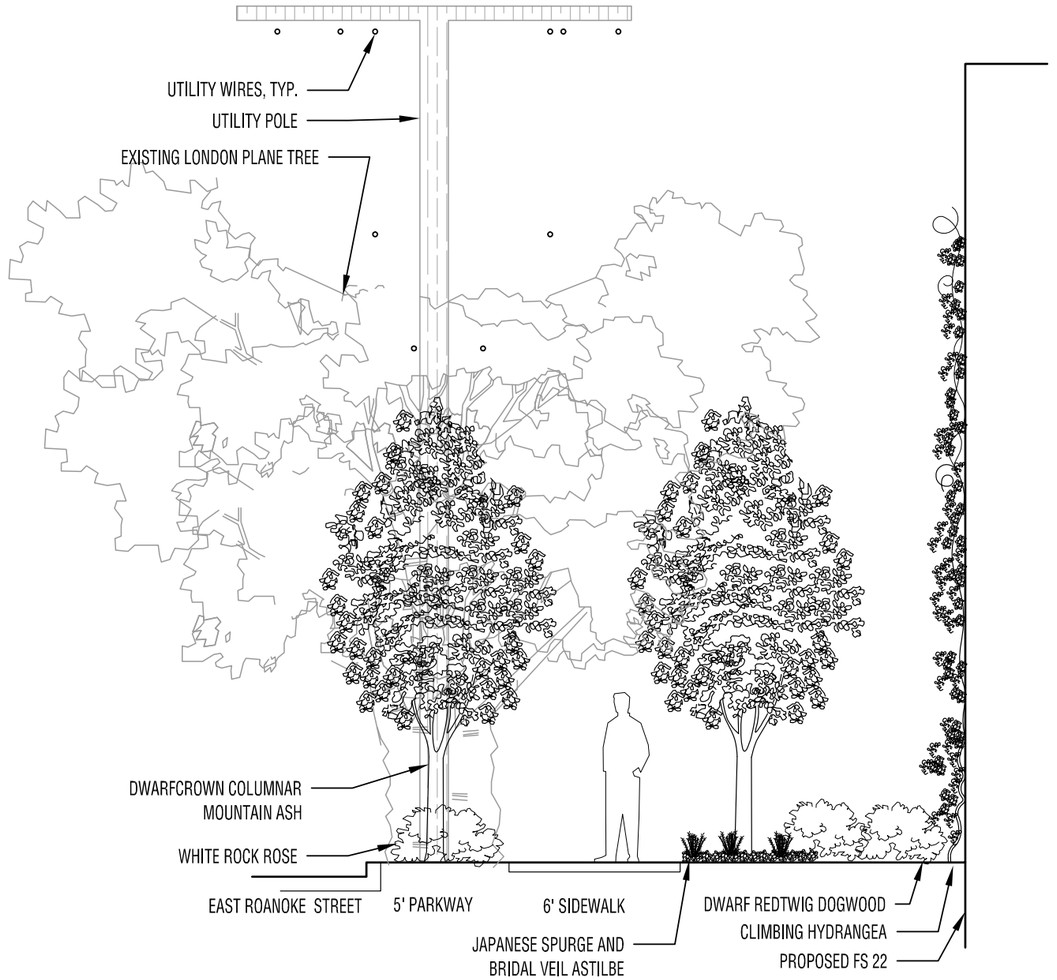
PLAN

0 10' 20' 40'



ELEVATION

0 10' 20' 40'

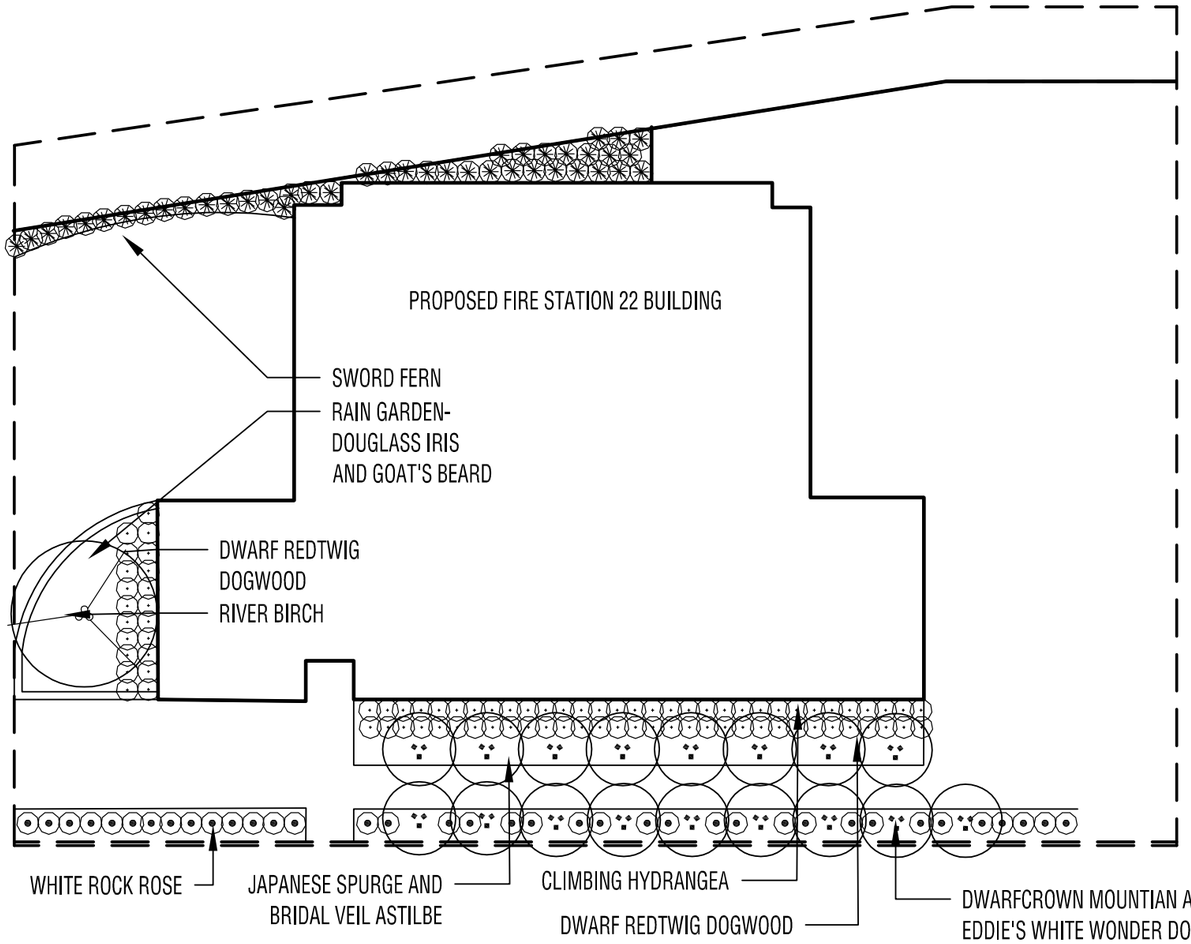


SECTION

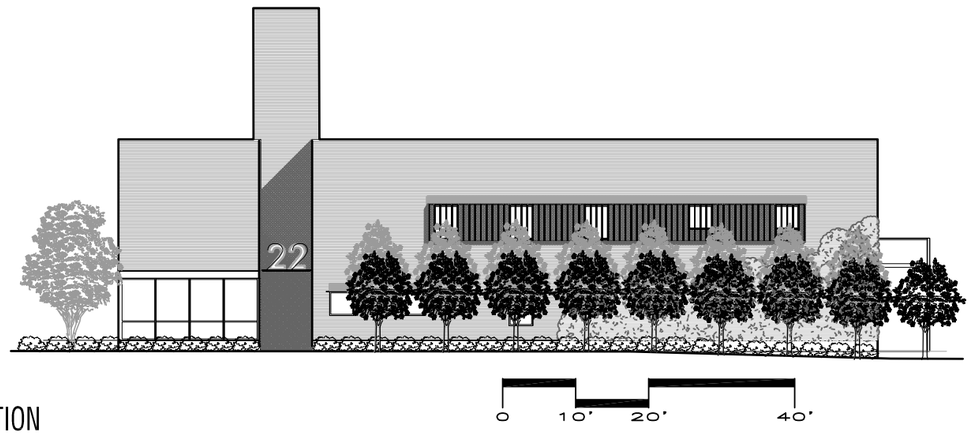
0 8' 16' 32'

LANDSCAPE DESIGN

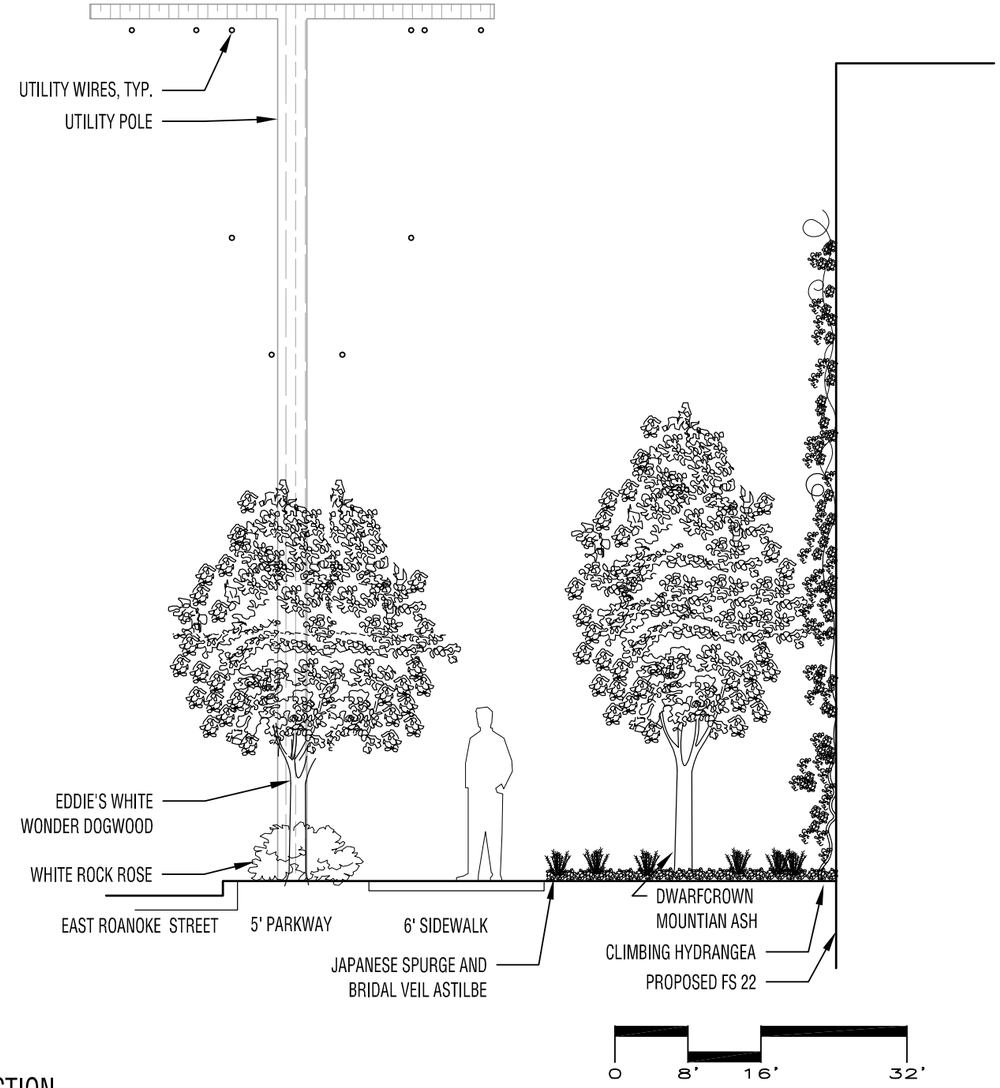
OPTION 2: LONDON PLANE TREE REMOVED



PLAN



ELEVATION



SECTION

MATERIALITY

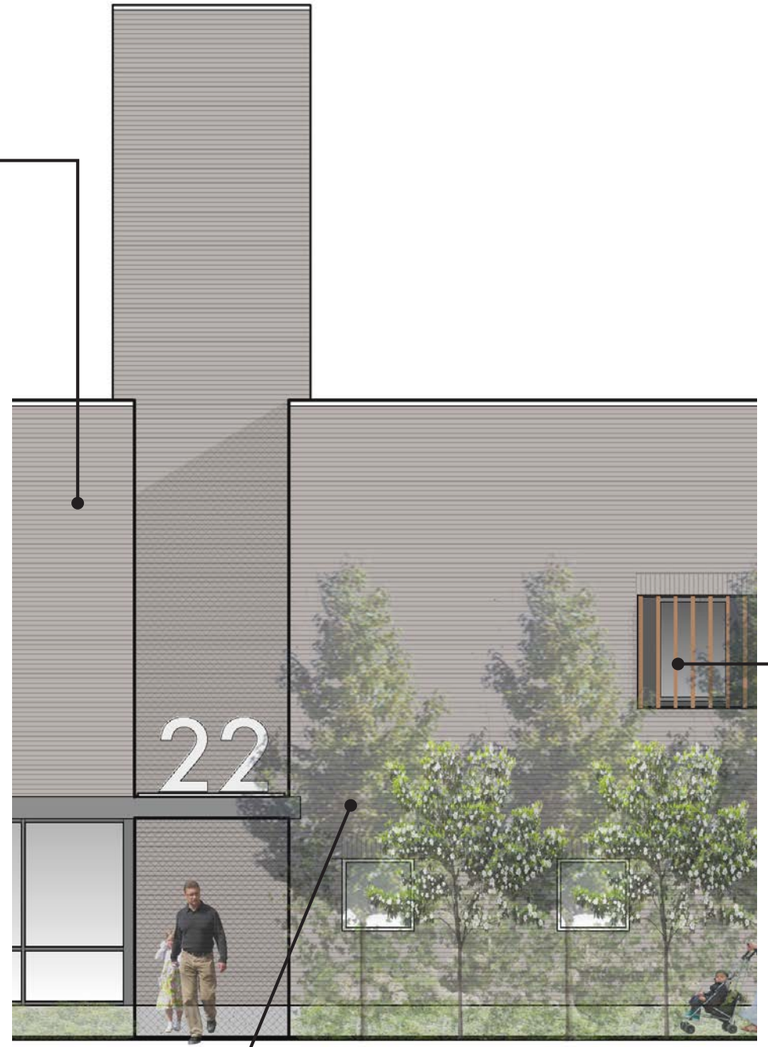
ROANOKE ST ELEVATION (NORTH)

SIENNA IRONSPOT BRICK

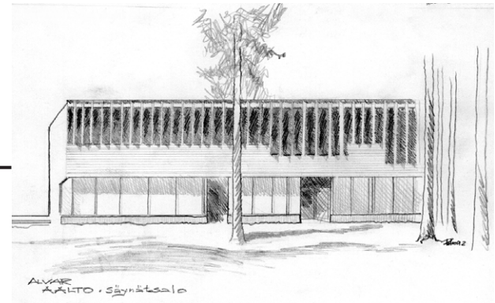
CLIMBING HYDRANGEA

EDDIE'S WHITE WONDER

RED CASCADE MOUNTAIN ASH



WOOD SLATS



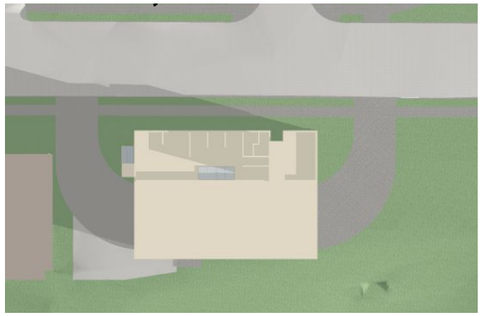
Hotel de ville (Town Hall) Saynatsalo, Finland by Alvar Aalto.

Wood slat precedent image.

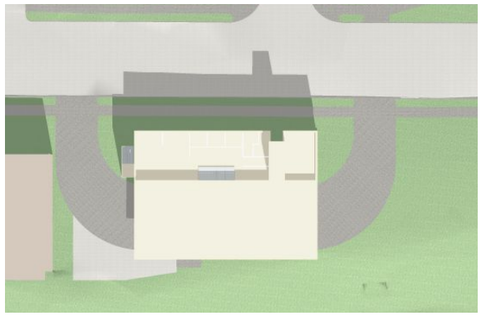
Clyfford Still Museum, Denver by Allied Works.

SUN SHADING DIAGRAMS

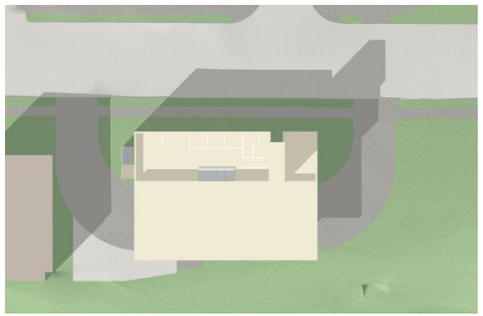
March 20, Spring Equinox



9AM



12PM

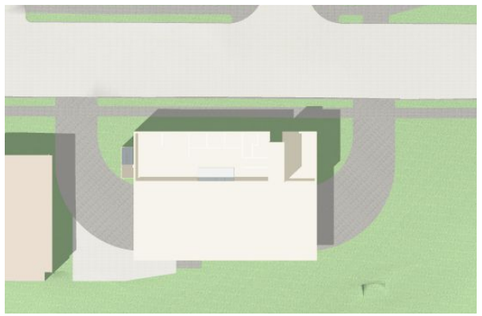


3PM

June 21, Summer Solstice

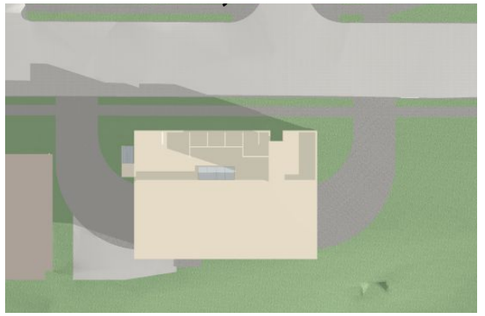
9AM

12PM



3PM

September 22, Autumn Equinox

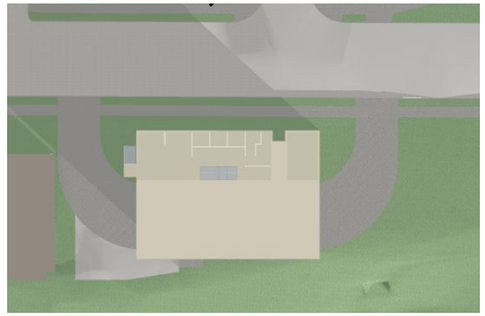


9AM

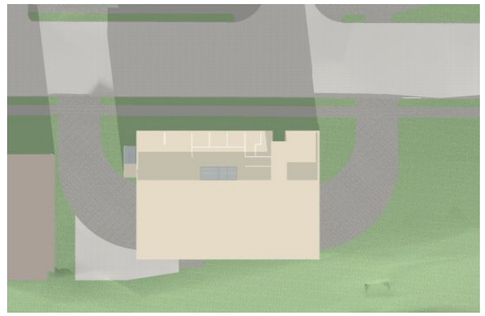
12PM

3PM

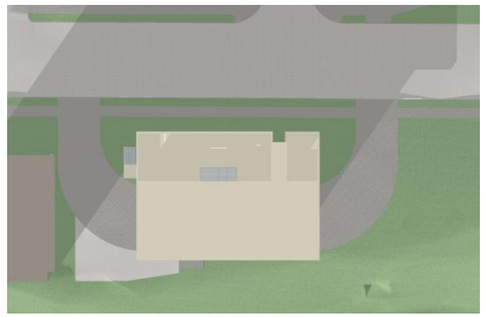
December 21, Winter Solstice



9AM

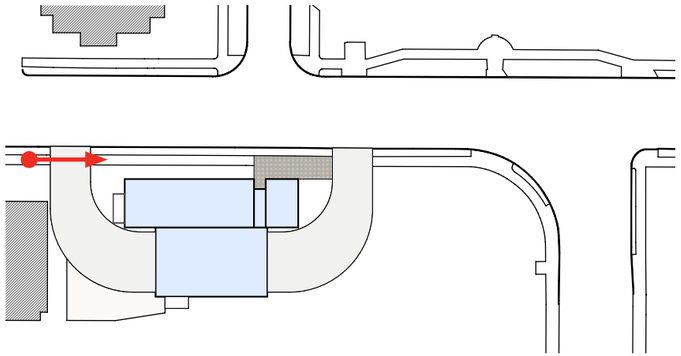


12PM

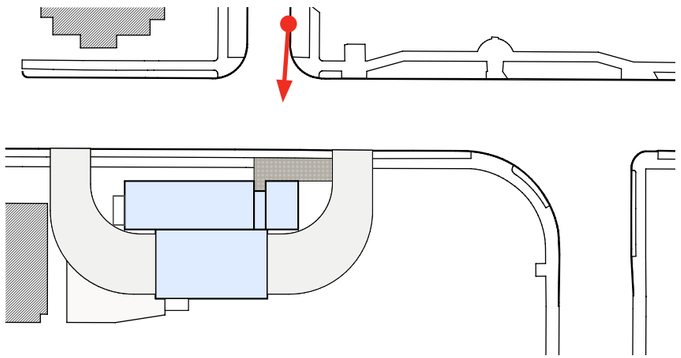


3PM

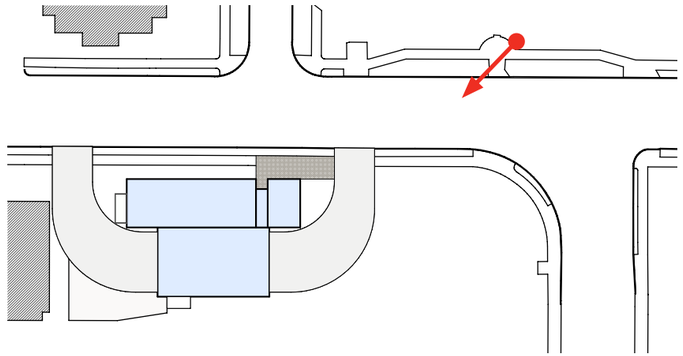
VIEW LOOKING EAST FROM E ROANOKE ST



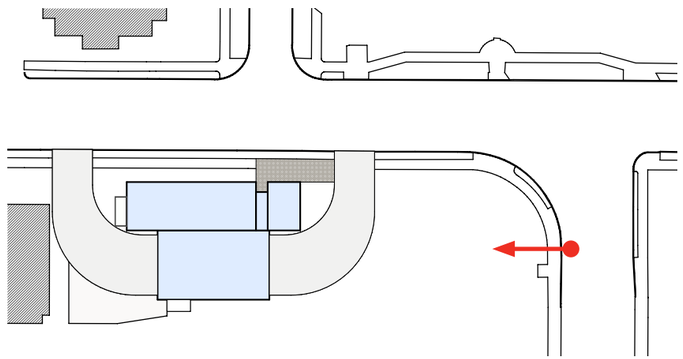
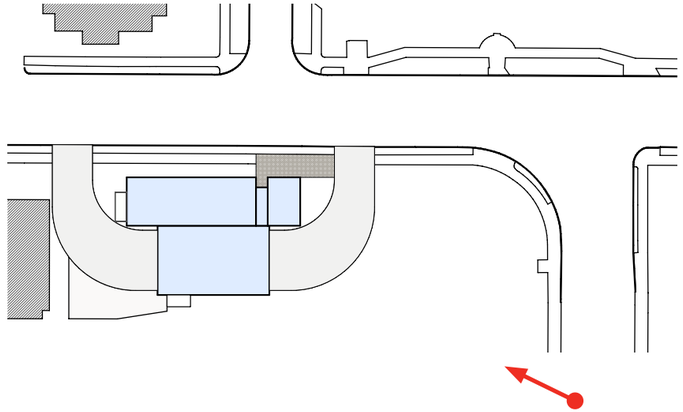
VIEW LOOKING SOUTH FROM BROADWAY E



VIEW LOOKING SOUTHWEST FROM ROANOKE AND 10TH AVE



VIEW LOOKING WEST FROM 10TH AVE



VIEW FROM 10TH AVE BRIDGE