

A photograph of a fire station interior. On the left, several yellow fire hoses are stacked vertically, with black sleeves featuring the number '2' in yellow. In the foreground, a grey fire helmet is visible. The background shows more yellow hoses and a wall with a grid pattern.

Seattle Fire Department Neighborhood Fire Station #21

Design Commission Review
17 April 08

MILLER HULL



Fire Station #21

7304 Greenwood Avenue N

Neighborhood I Station

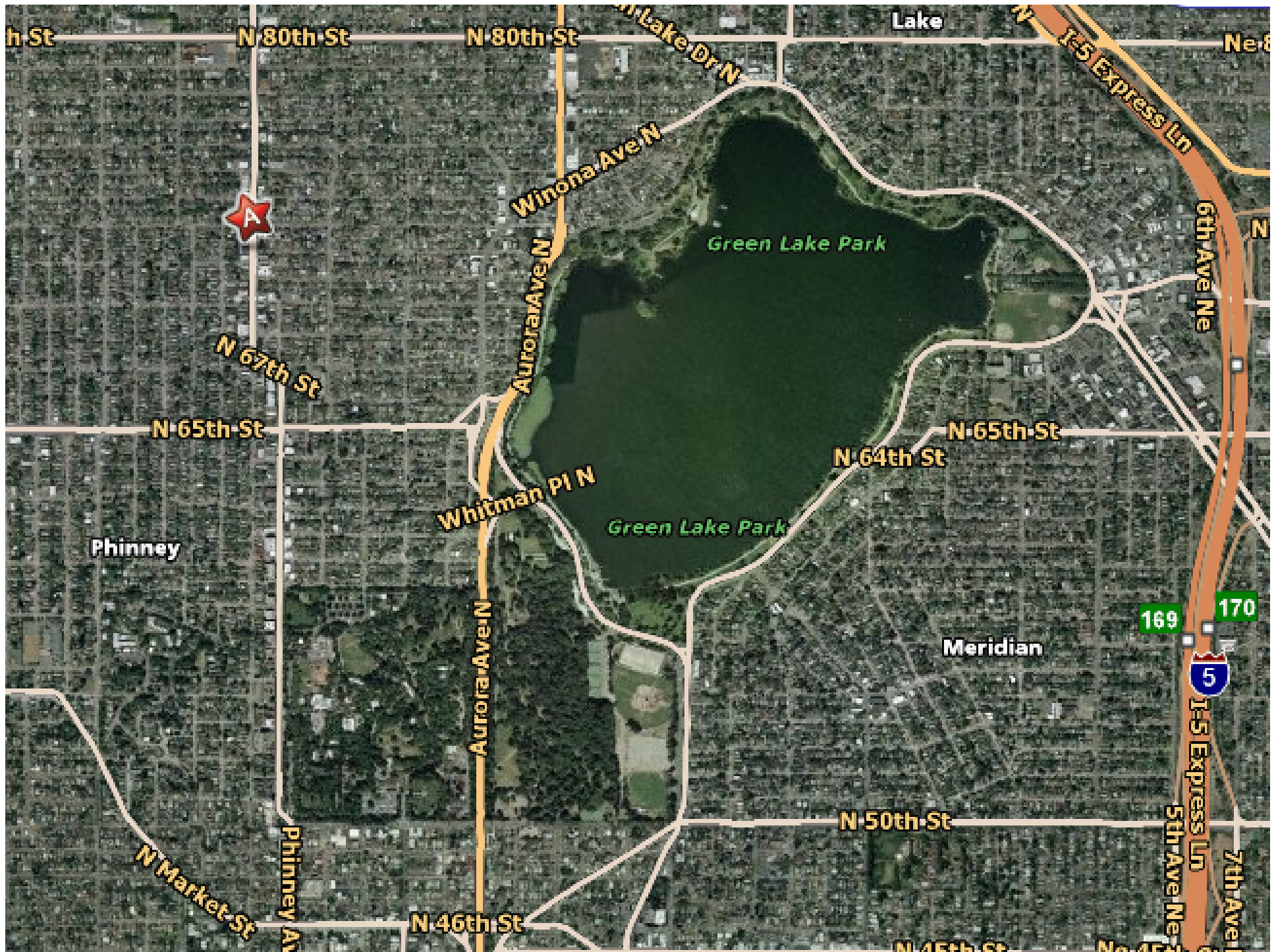
FS21 houses one engine company and the Department's Mass Casualty Unit

The existing station is obsolete and not suited for renovation due to its age (built in 1951), code deficiencies and outdated systems.

FS21 will be rebuilt in the same location but on an expanded site.

Program calls for approximately 9000sf.

An interim facility will be provided during construction to ensure continued emergency service to the neighborhood.





project **SITE**

FS#21 GREENWOOD :: NEIGHBORHOOD 1
AREA: +/- 9000 SQ FT
ZONING: NC2P-40, NEIGHBORHOOD COMMERCIAL

project **OBSERVATIONS**

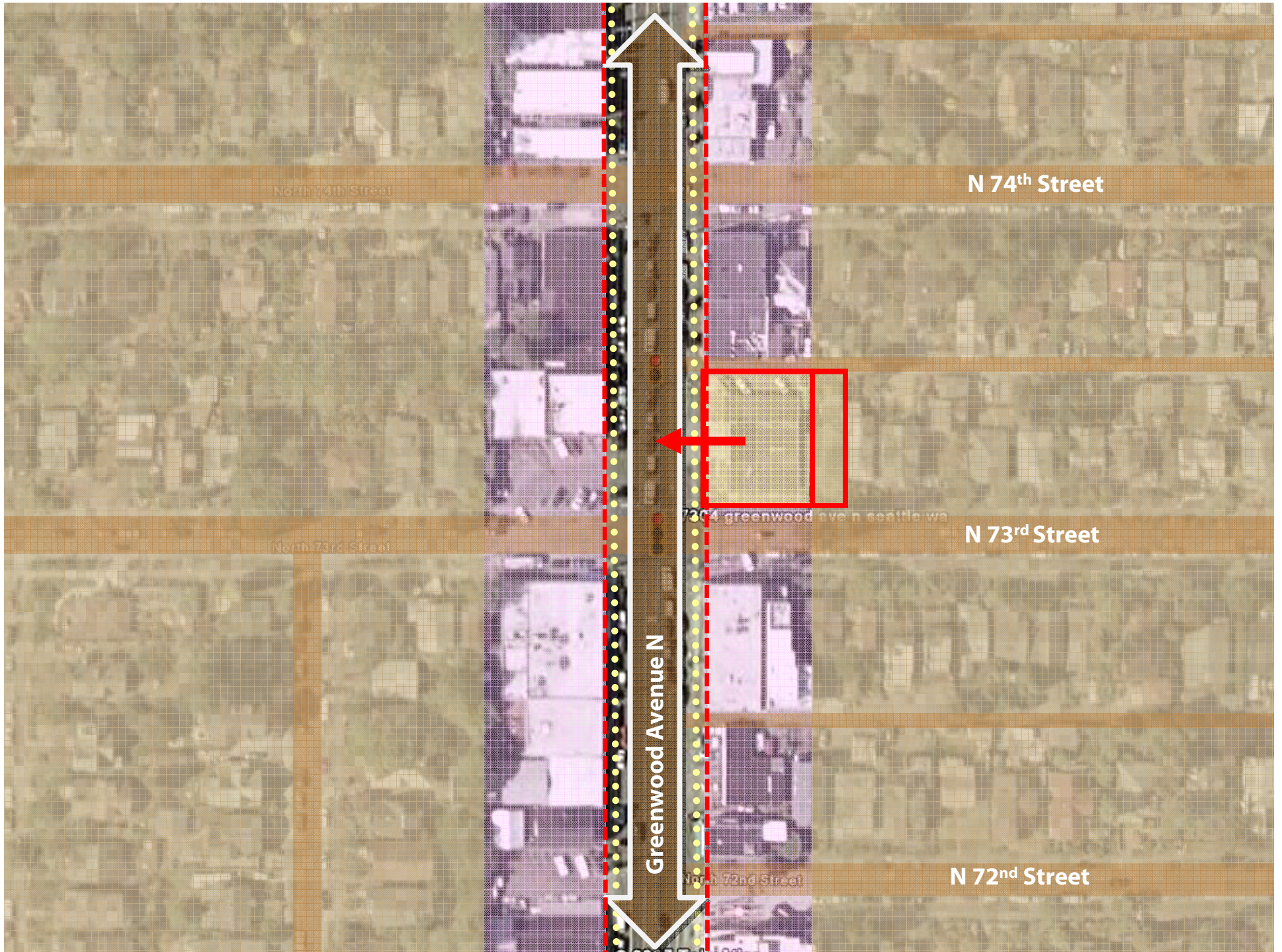
- SLOPING SITE SECTION PROVIDES OPPORTUNITIES
 - DRIVE THRU LAYOUT MAY NOT BE POSSIBLE
 - STATION MEDIATES RETAIL/ RESIDENTIAL EDGE

land use **ANALYSIS**

- FS USE NOT PERMITTED AT STREET LEVEL
- PROPERTY LINE SETBACKS MAY IMPACT FORM
- SUBJECT TO GREEN FACTOR REQUIREMENTS







N 74th Street

N 74th Street

North 73rd Street

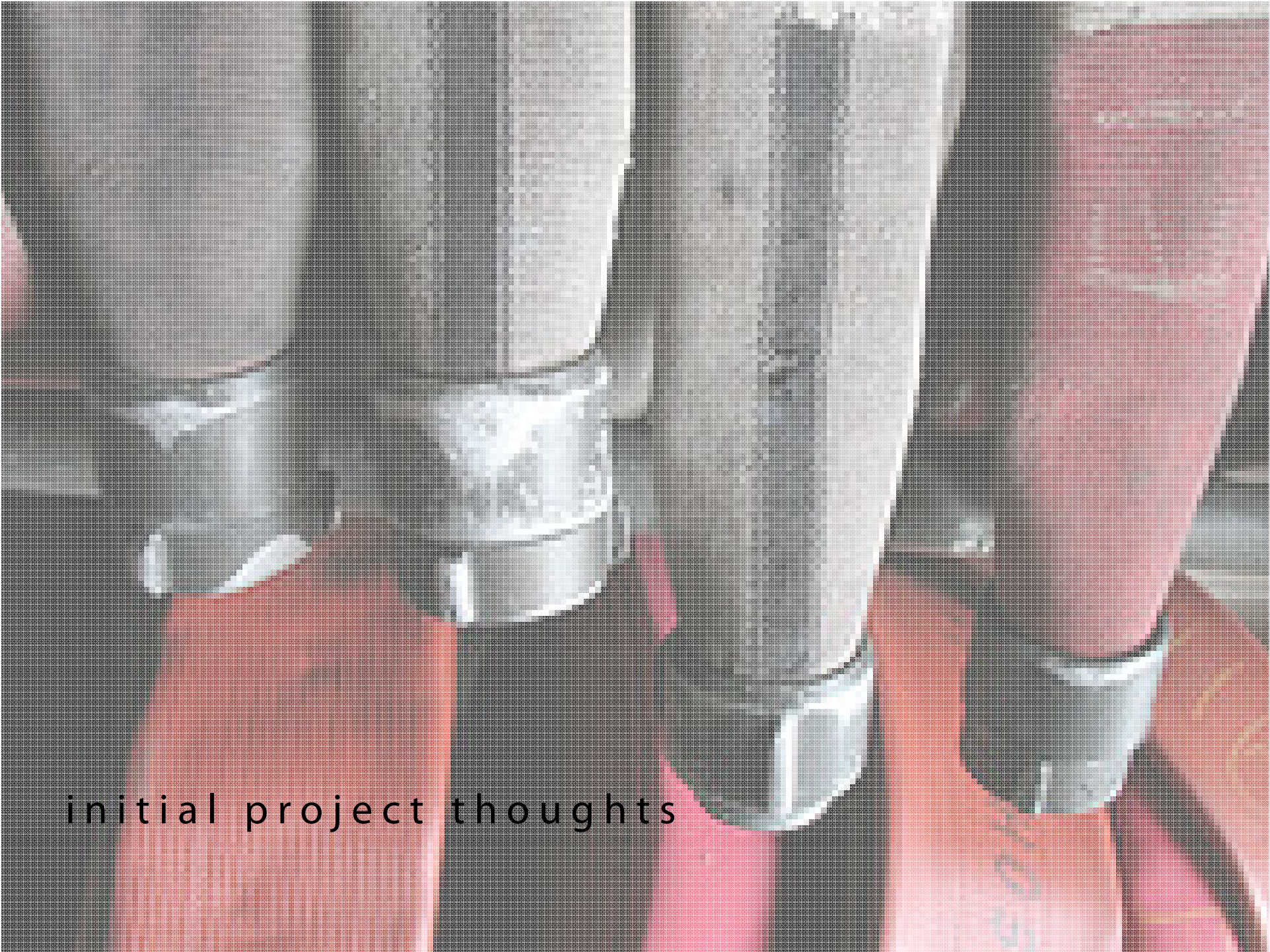
N 73rd Street

Greenwood Avenue N

7304 greenwood ave n seattle wa

N 72nd Street

North 72nd Street

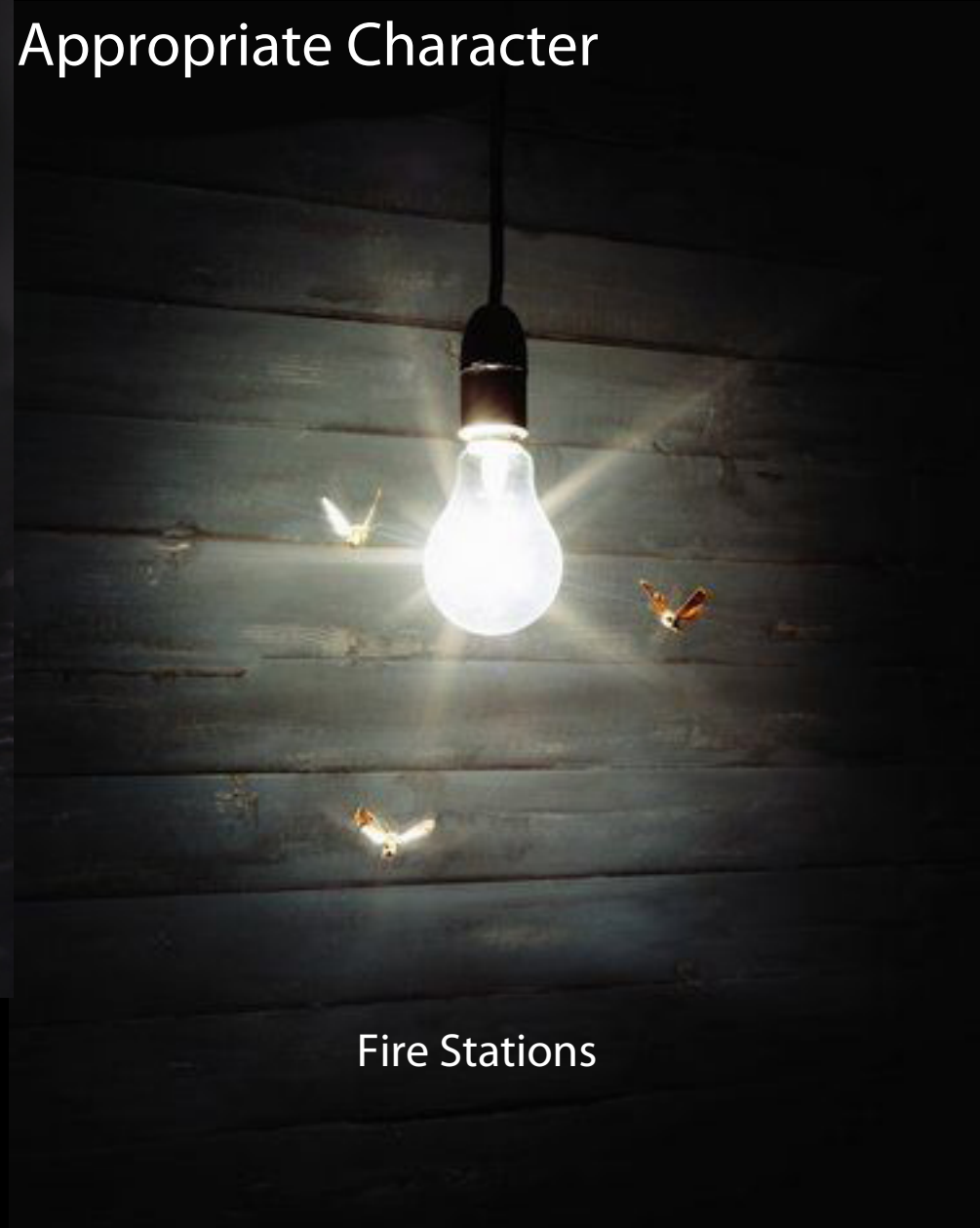


initial project thoughts

Civic Institution : Appropriate Character



Community Centers / Libraries

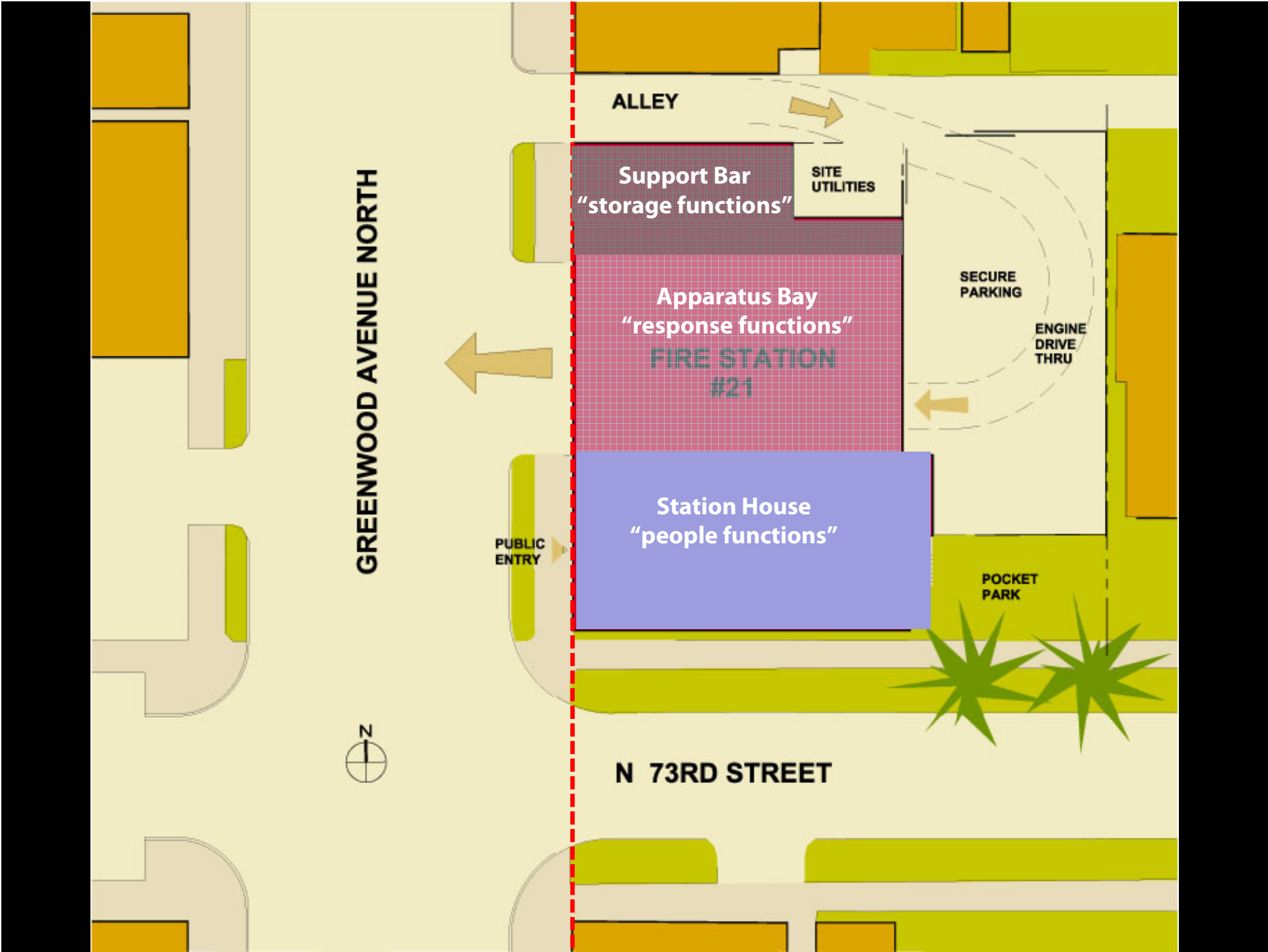


Fire Stations





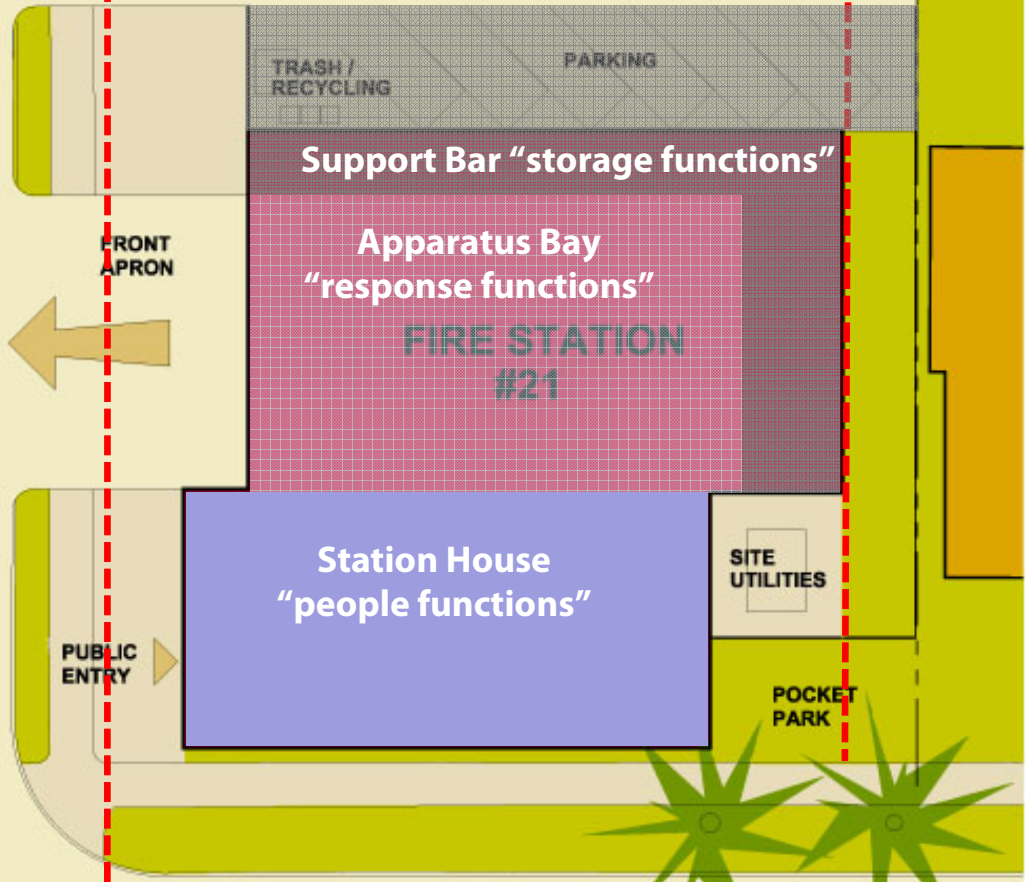
site layout options



GREENWOOD AVENUE NORTH

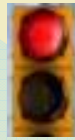


ALLEY



N 73RD STREET

This option is predicated on providing a new traffic light at the alley



Visibility from Apparatus Bay

ALLEY

GREENWOOD AVENUE NORTH

Support Bar "storage functions"

TRASH / RECYL

Parking in Lower Tray

SECURE PARKING

Apparatus Bay directly engages the Street

Apparatus Bay "response functions"

FIRE STATION #21

APPARATUS ENTRY / EXIT

FIREFIGHTER ENTRY

SITE UTILITIES

Station House "people functions"

View East to Green Lake & Cascade Mountains

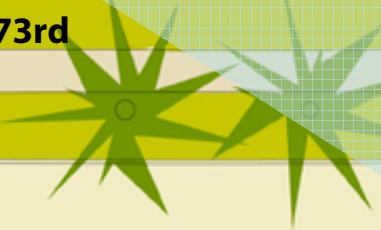
Public Entry addresses the Urban Corner & Engages the Intersection

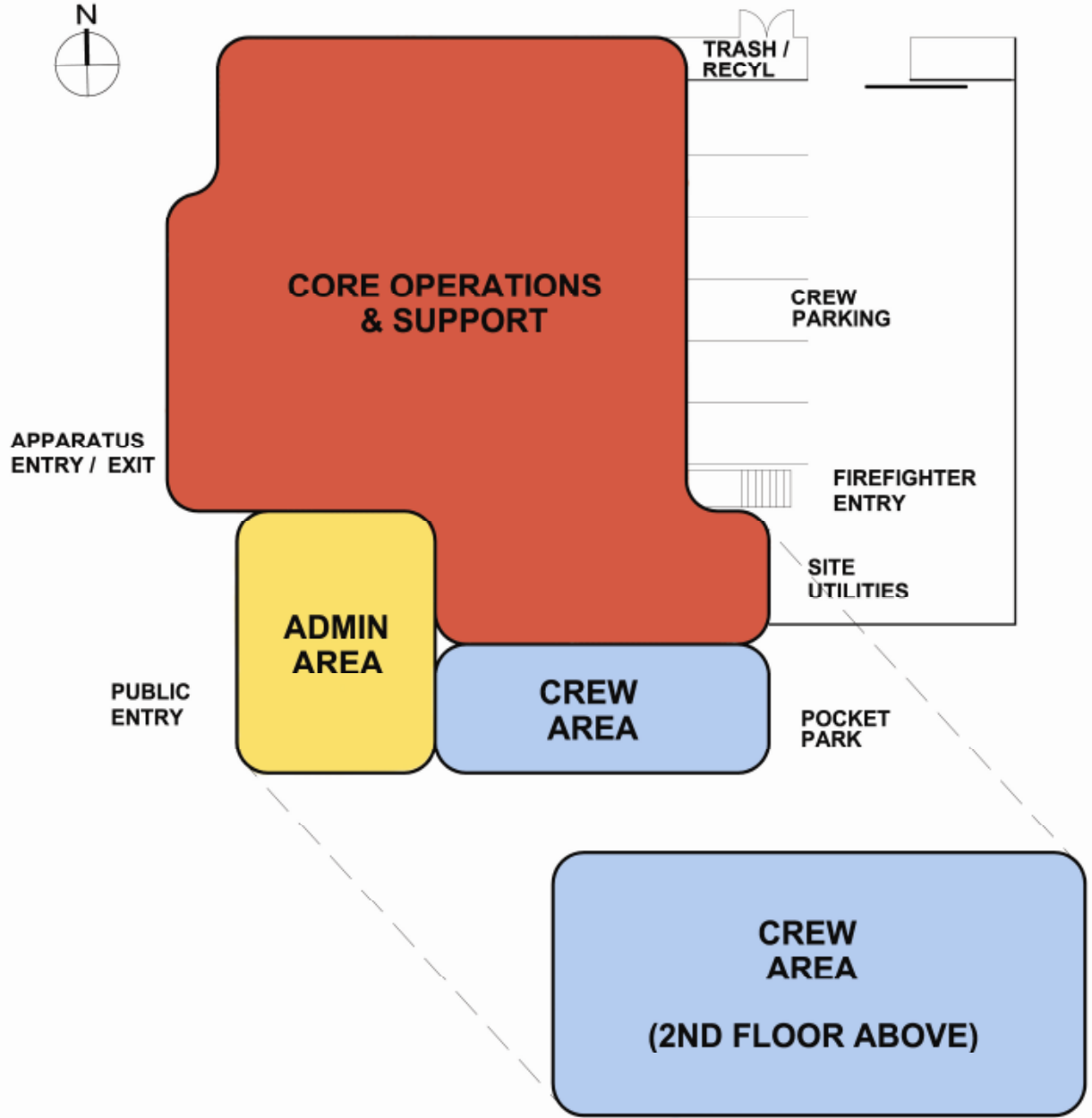
PUBLIC ENTRY

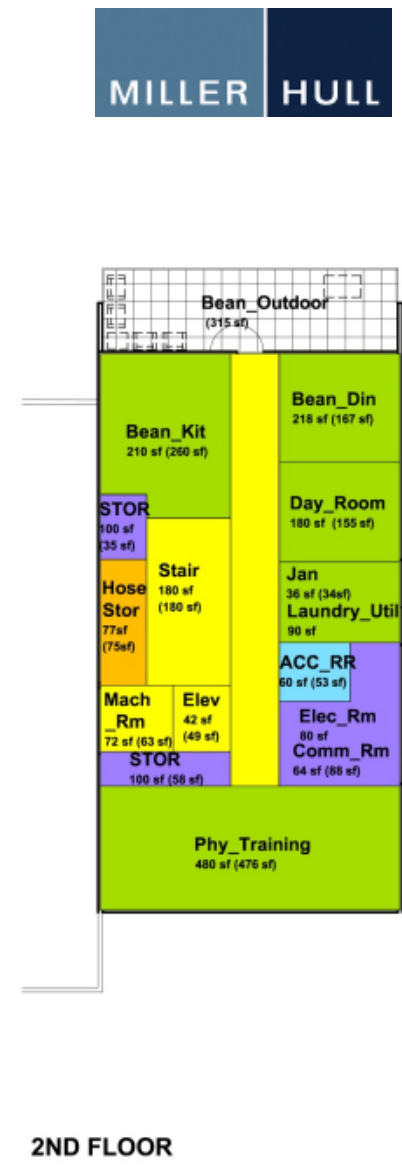
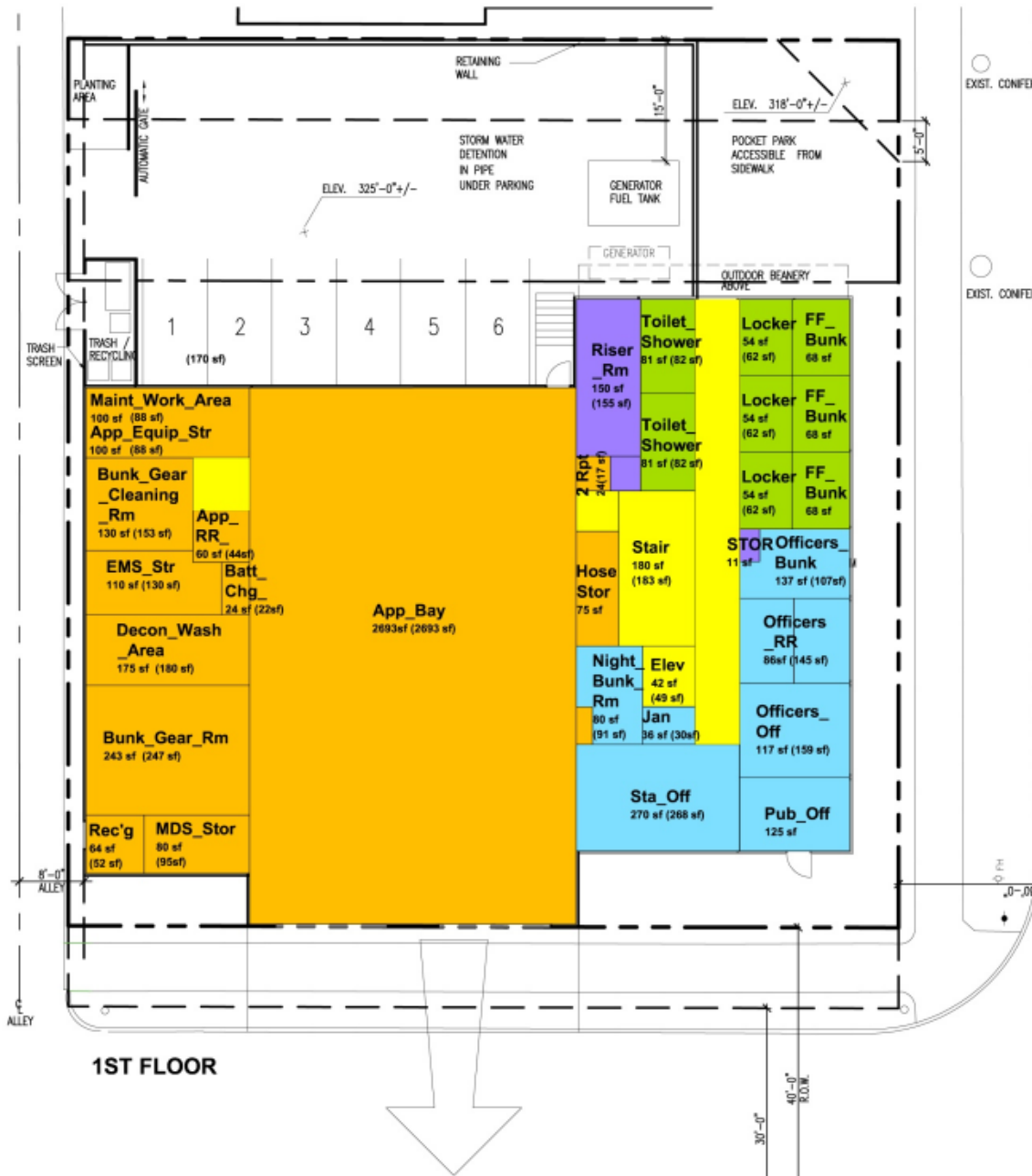
Pedestrian Scale on N 73rd



N 73RD STREET

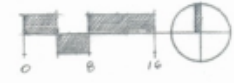
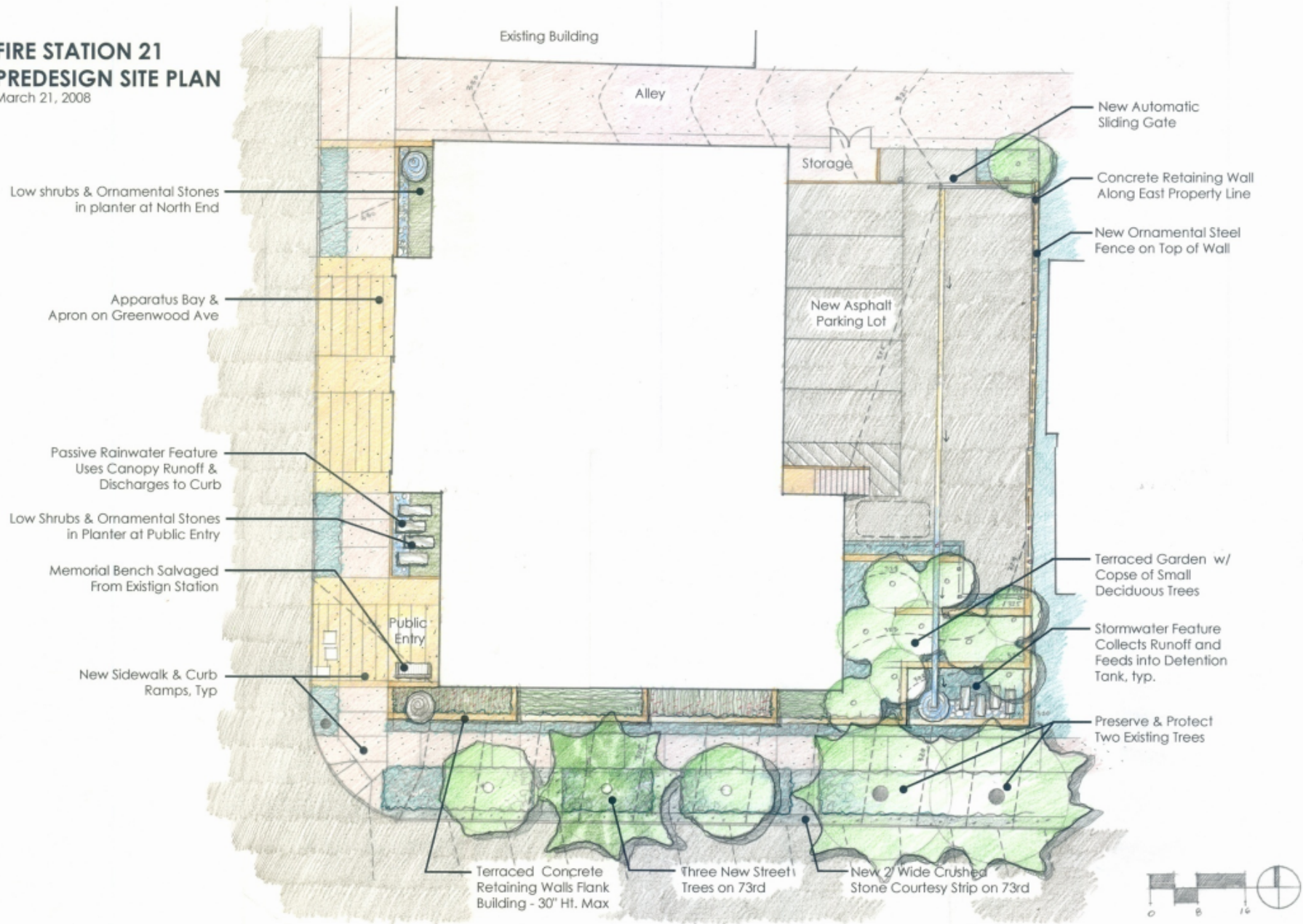






FIRE STATION 21 PREDESIGN SITE PLAN

March 21, 2008



sustainable design



1998
Patagonia Distribution Center
Reno, NV



2000
Bainbridge Island City Hall
Bainbridge Island, WA



National AIA Top Ten Earth Day Awards

2003
Fisher Pavilion
Seattle, WA



2004
Pierce County Environmental Services Building
University Place, WA



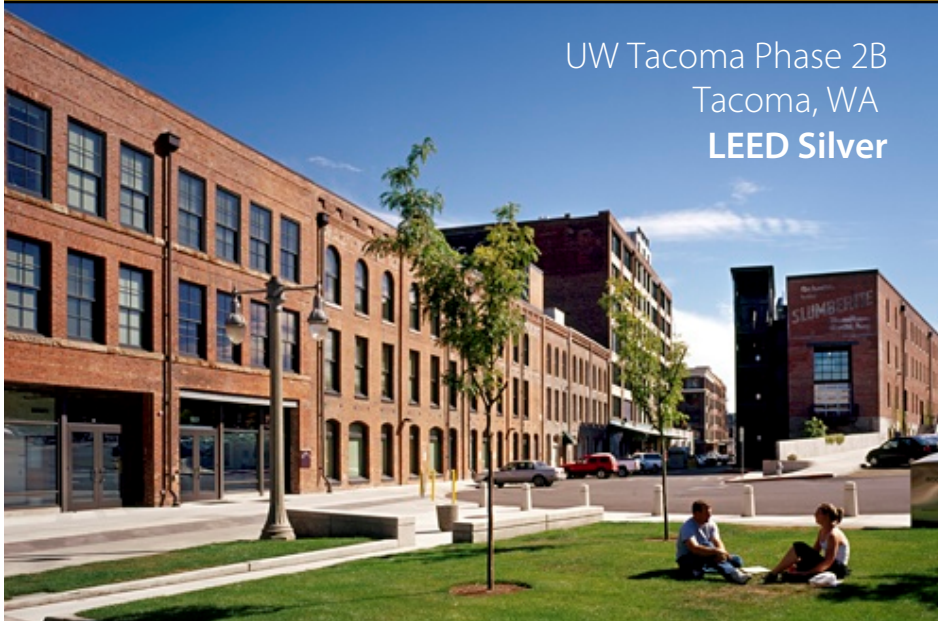


Fisher Pavilion
Seattle, WA
LEED Certified



Bertschi School
Seattle, WA
LEED Gold

LEED™ Certified Projects



UW Tacoma Phase 2B
Tacoma, WA
LEED Silver



UW Merrill Hall
Seattle, WA
LEED Silver



Columbia Springs Environmental Education Center
Vancouver, WA
LEED Platinum



LOTT Alliance
Olympia, WA
LEED Platinum

LEED™ Projects – in design or waiting for certification



ECONET Corporate Headquarters
Lacey, WA
LEED Level TBD



Northgate Library, Community Center & Urban Park
Seattle, WA
LEED Gold



LEED-NC

LEED-NC Version 2.2 Registered Project Checklist

Fire Station 39
Seattle, WA

Yes ? No

Team	GBC	12	1	1	Sustainable Sites	14 Points
Arch			Y		Prereq 1 Construction Activity Pollution Prevention	Required
Arch		1			Credit 1 Site Selection	1
Arch		1			Credit 2 Development Density & Community Connectivity	1
				1	Credit 3 Brownfield Redevelopment	1
Arch		1			Credit 4.1 Alternative Transportation, Public Transportation Access	1
Arch		1			Credit 4.2 Alternative Transportation, Bicycle Storage & Changing Rooms	1
Arch		1			Credit 4.3 Alternative Transportation, Low-Emitting and Fuel-Efficient Vehicles	1
Arch		1			Credit 4.4 Alternative Transportation, Parking Capacity	1
Lndscap	x		1		Credit 5.1 Site Development, Protect or Restore Habitat	1
Arch		1			Credit 5.2 Site Development, Maximize Open Space	1
Civil	x	1			Credit 6.1 Stormwater Design, Quantity Control	1
Civil	x	1			Credit 6.2 Stormwater Design, Quality Control	1
Civil		1			Credit 7.1 Heat Island Effect, Non-Roof	1
Arch		1			Credit 7.2 Heat Island Effect, Roof	1
Elec		1			Credit 8 Light Pollution Reduction	1

Yes ? No

Team	GBC	2	2	1	Water Efficiency	5 Points
Lndscap			1		Credit 1.1 Water Efficient Landscaping, Reduce by 50%	1
Lndscap			1		Credit 1.2 Water Efficient Landscaping, No Potable Use or No Irrigation	1
				1	Credit 2 Innovative Wastewater Technologies	1
Mech		1			Credit 3.1 Water Use Reduction, 20% Reduction	1
Mech			1		Credit 3.2 Water Use Reduction, 30% Reduction	1

Yes ? No

Team	GBC	5	2	10	Energy & Atmosphere	17 Points
FFD			Y		Prereq 1 Fundamental Commissioning of the Building Energy Systems	Required
Mech			Y		Prereq 2 Minimum Energy Performance	Required
Mech			Y		Prereq 3 Fundamental Refrigerant Management	Required
Mech		4		6	Credit 1 Optimize Energy Performance	1 to 10
				3	Credit 2 On-Site Renewable Energy	1 to 3
FFD		1			Credit 3 Enhanced Commissioning	1
				1	Credit 4 Enhanced Refrigerant Management	1
Mech			1		Credit 5 Measurement & Verification	1
FFD			1		Credit 6 Green Power	1

Yes ? No

Team	GBC	6	3	4	Materials & Resources	13 Points
Arch			Y		Prereq 1 Storage & Collection of Recyclables	Required
				1	Credit 1.1 Building Reuse, Maintain 75% of Existing Walls, Floors & Roof	1
				1	Credit 1.2 Building Reuse, Maintain 95% of Existing Walls, Floors & Roof	1
				1	Credit 1.3 Building Reuse, Maintain 50% of Interior Non-Structural Elements	1
Arch		1			Credit 2.1 Construction Waste Management, Divert 50% from Disposal	1
Arch		1			Credit 2.2 Construction Waste Management, Divert 75% from Disposal	1
Arch			1		Credit 3.1 Materials Reuse, 5%	1
				1	Credit 3.2 Materials Reuse, 10%	1
Arch/Struct		1			Credit 4.1 Recycled Content, 10% (post-consumer + ½ pre-consumer)	1
Arch/Struct		1			Credit 4.2 Recycled Content, 20% (post-consumer + ½ pre-consumer)	1
Arch/Lndscap		1			Credit 5.1 Regional Materials, 10% Extracted, Processed & Manufactured Region	1

Arch/Lndscap			1	
Arch			1	
Arch			1	

Yes ? No

Team	GBC	11	2	2	Indoor Environmental Quality	15 Points
Mech			Y		Prereq 1 Minimum IAQ Performance	Required
FFD			Y		Prereq 2 Environmental Tobacco Smoke (ETS) Control	Required
				1	Credit 1 Outdoor Air Delivery Monitoring	1
Arch/Mech				1	Credit 2 Increased Ventilation	1
Arch/FFD			1		Credit 3.1 Construction IAQ Management Plan, During Construction	1
Arch/FFD			1		Credit 3.2 Construction IAQ Management Plan, Before Occupancy	1
Arch			1		Credit 4.1 Low-Emitting Materials, Adhesives & Sealants	1
Arch			1		Credit 4.2 Low-Emitting Materials, Paints & Coatings	1
Arch			1		Credit 4.3 Low-Emitting Materials, Carpet Systems	1
Arch/Struct			1		Credit 4.4 Low-Emitting Materials, Composite Wood & Agrifiber Products	1
				1	Credit 5 Indoor Chemical & Pollutant Source Control	1
Elec			1		Credit 6.1 Controllability of Systems, Lighting	1
Mech			1		Credit 6.2 Controllability of Systems, Thermal Comfort	1
Mech			1		Credit 7.1 Thermal Comfort, Design	1
Mech/Arch/FFD			1		Credit 7.2 Thermal Comfort, Verification	1
Arch			1		Credit 8.1 Daylight & Views, Daylight 75% of Spaces	1
Arch			1		Credit 8.2 Daylight & Views, Views for 90% of Spaces	1

Yes ? No

Team	GBC	2	2	1	Innovation & Design Process	5 Points
Mech	x		1		Credit 1.1 Innovation in Design: VRV First Use Seattle	1
Civil	x		1		Credit 1.2 Innovation in Design: Rainwater Harvesting	1
Lndscap	x		1		Credit 1.3 Innovation in Design: Rain garden	1
				1	Credit 1.4 Innovation in Design: Provide Specific Title	1
ALL			1		Credit 2 LEED® Accredited Professional	1

Yes ? No

38	12	19	Project Totals (pre-certification estimates)	69 Points
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Certified 26-32 points Silver 33-38 points Gold 39-51 points Platinum 52-69 points

Certified: 26-32 credits
Silver 33-38 credits
Gold: 39-51 credits
Platinum: 52-69 credits

Fire Station 39

38 Credits

per update
at Mid-DD Phase

40-41 Credits

with rainwater harvesting for
toilet flushing



discussion

