

Chester Fire Station

Public Information Session



149 Central St. Existing Fire Station

Chester Fire Station

Existing Facilities Conditions Report:
Needs Assessment Analysis

January 29, 2024

Acre Architects
S2 Architecture
Dillon Consulting
CBCL



Existing Fire Station

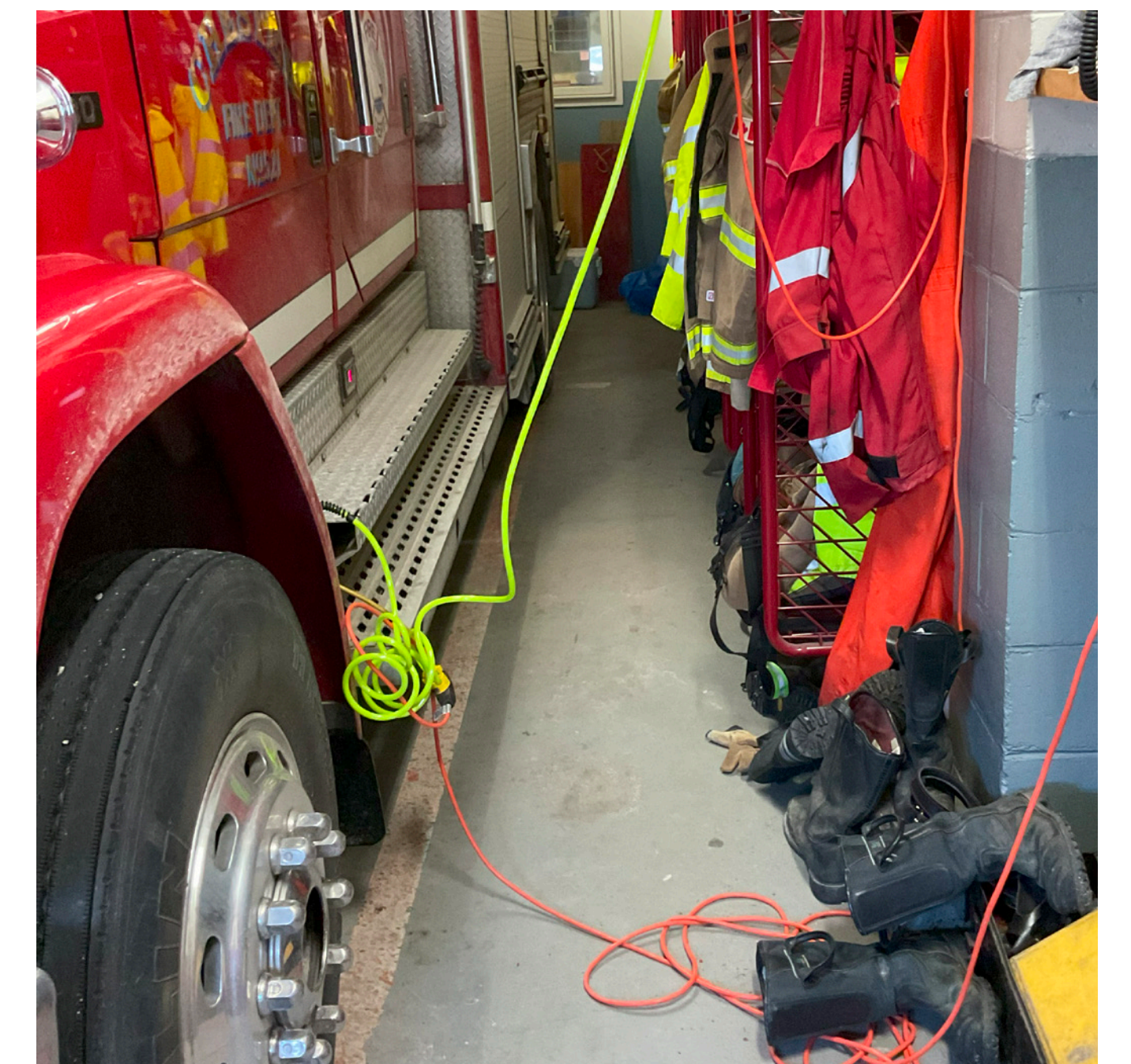
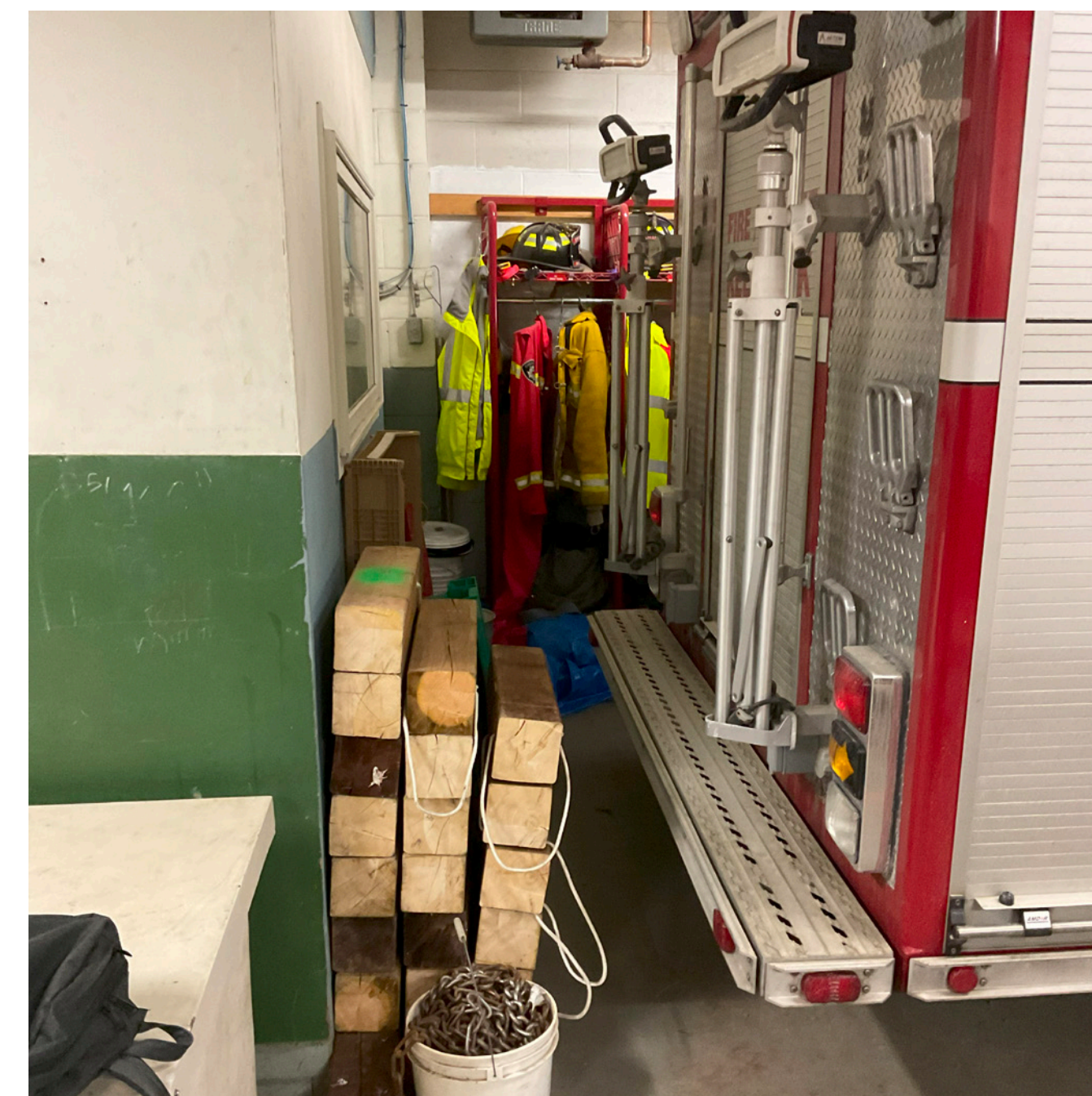
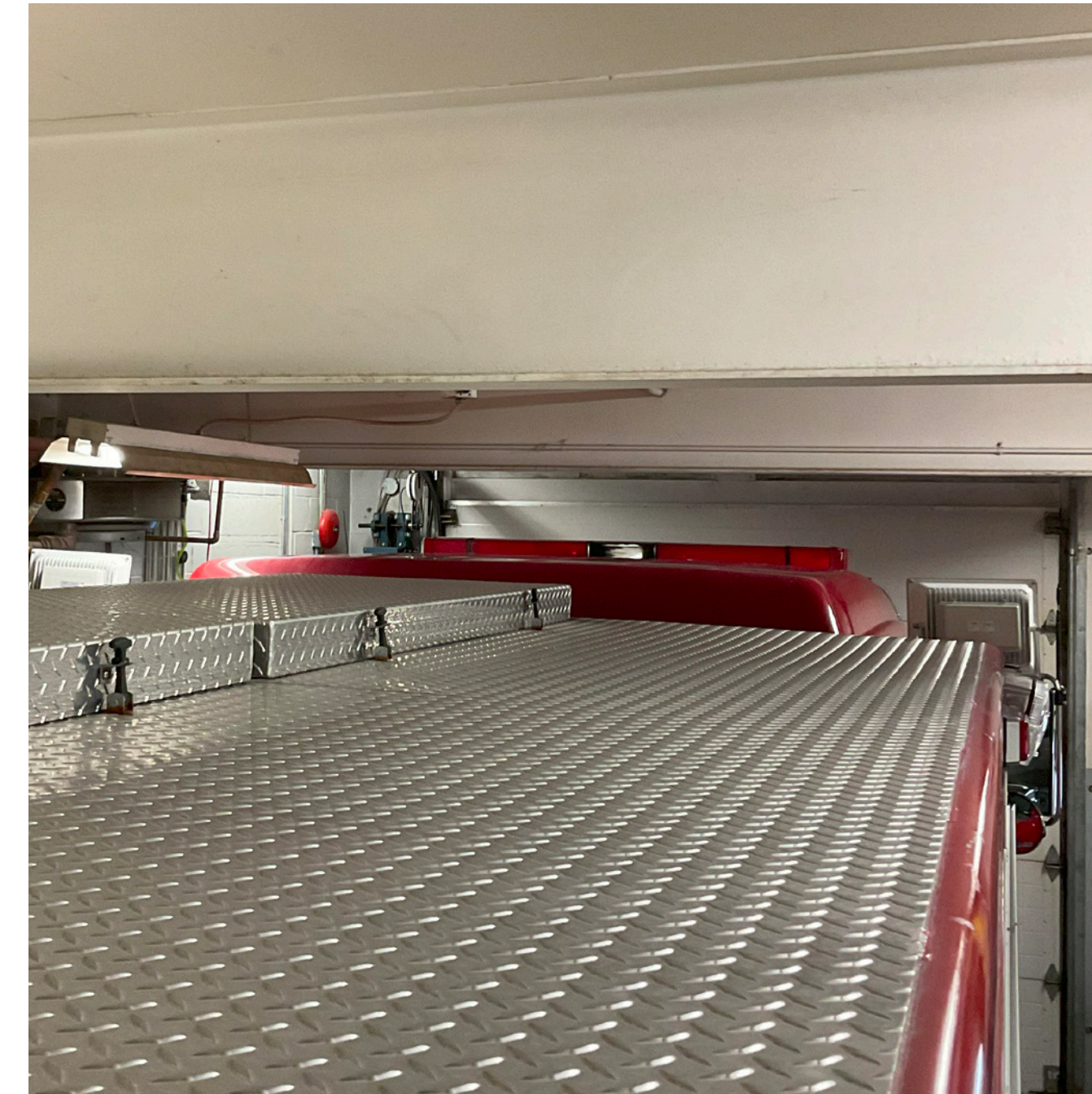
Top Issues

1. Fire station was originally located to serve the 1936 Village of Chester and does not facilitate fast **response times** to the larger Chester Fire Department district we have today.
2. Located on a narrow residential road in a dense neighbourhood, which **slows response times**.
3. Fire truck **tarmac, building** and firefighter **parking is too small**. Expansion is limited by site boundaries and slope.



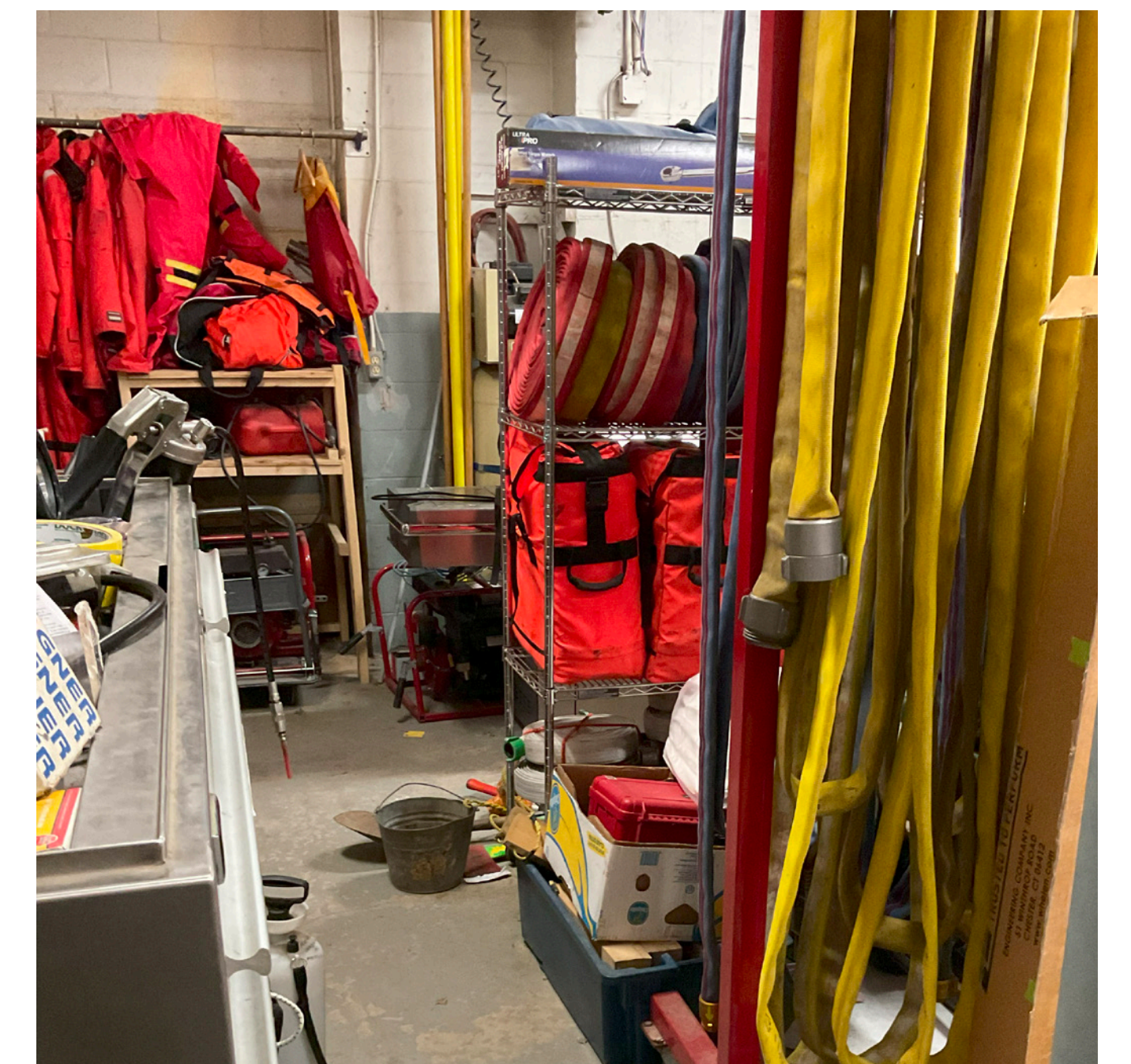
Existing Fire Station Top Issues

4. Fire truck **bays** are **too small** to provide safe operating clearances.
5. Bay doors are too narrow and short for modern fire trucks which results in **expensive** fire truck modifications.
6. No separation of contaminated areas, leads to higher risk of firefighter **cancer and health issues**.
7. Lack of storage results in clutter, **safety hazards** and premature gear degradation.



Existing Fire Station Top Issues

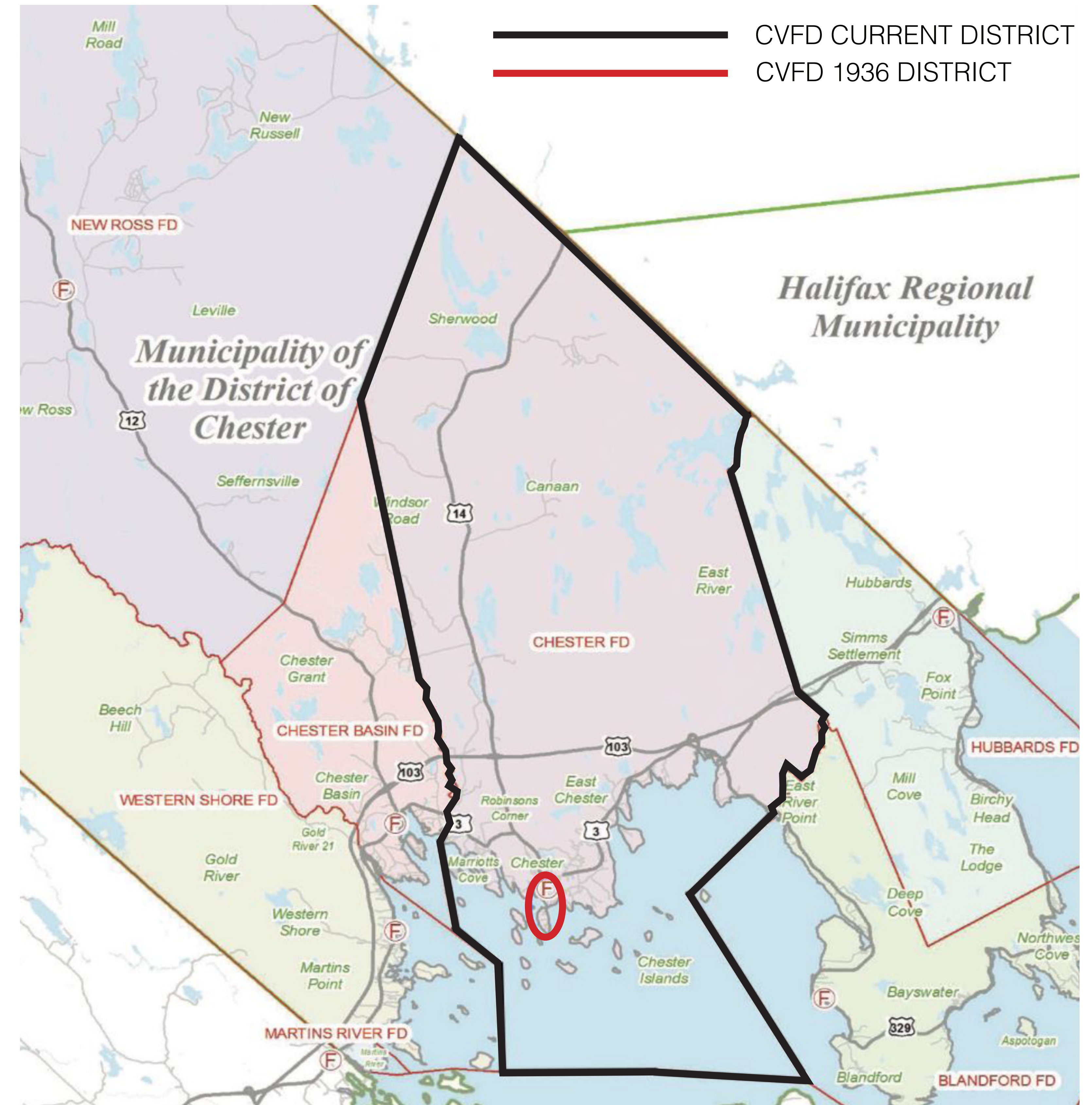
8. Major **upgrades** to building and ventilation systems are required to meet basic building code and remedy existing **health and safety issues**.
9. An essential service building should be designed to protect its community in the event of a disaster. The fire station does not meet **Post-Disaster requirements** and would require an exhaustive study to determine the extent of upgrades needed.



Existing Fire Station Location

Restrictions

- Location within the fire department's district
 - Current location was selected based on 1936 village
 - Far from a major road
 - Majority of volunteer firefighters live outside the village



Existing Fire Station Location

Restrictions

- Residential density
 - Firefighters must navigate through central village and intersections
 - Produces noise pollution
- Central street
 - Road condition
 - Narrow street
 - Winter hazards
 - On-street congestion



Existing Fire Station Site

Restrictions

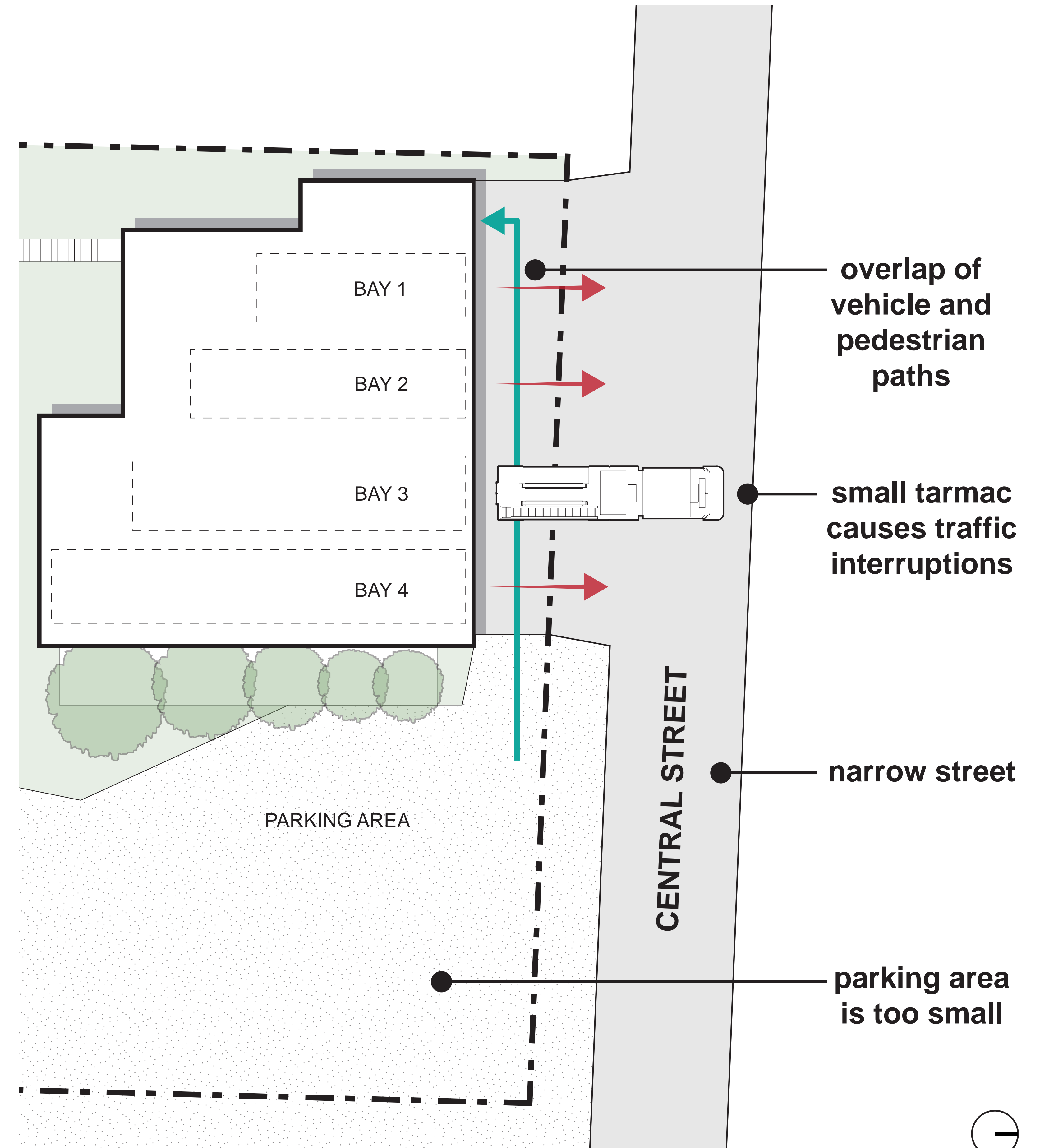
- Site challenges and boundaries restrict building expansion, or developing a new building on site
- Steep slope on west portion of the site
- Insufficient water supply to fill trucks



Existing Fire Station Site

Restrictions

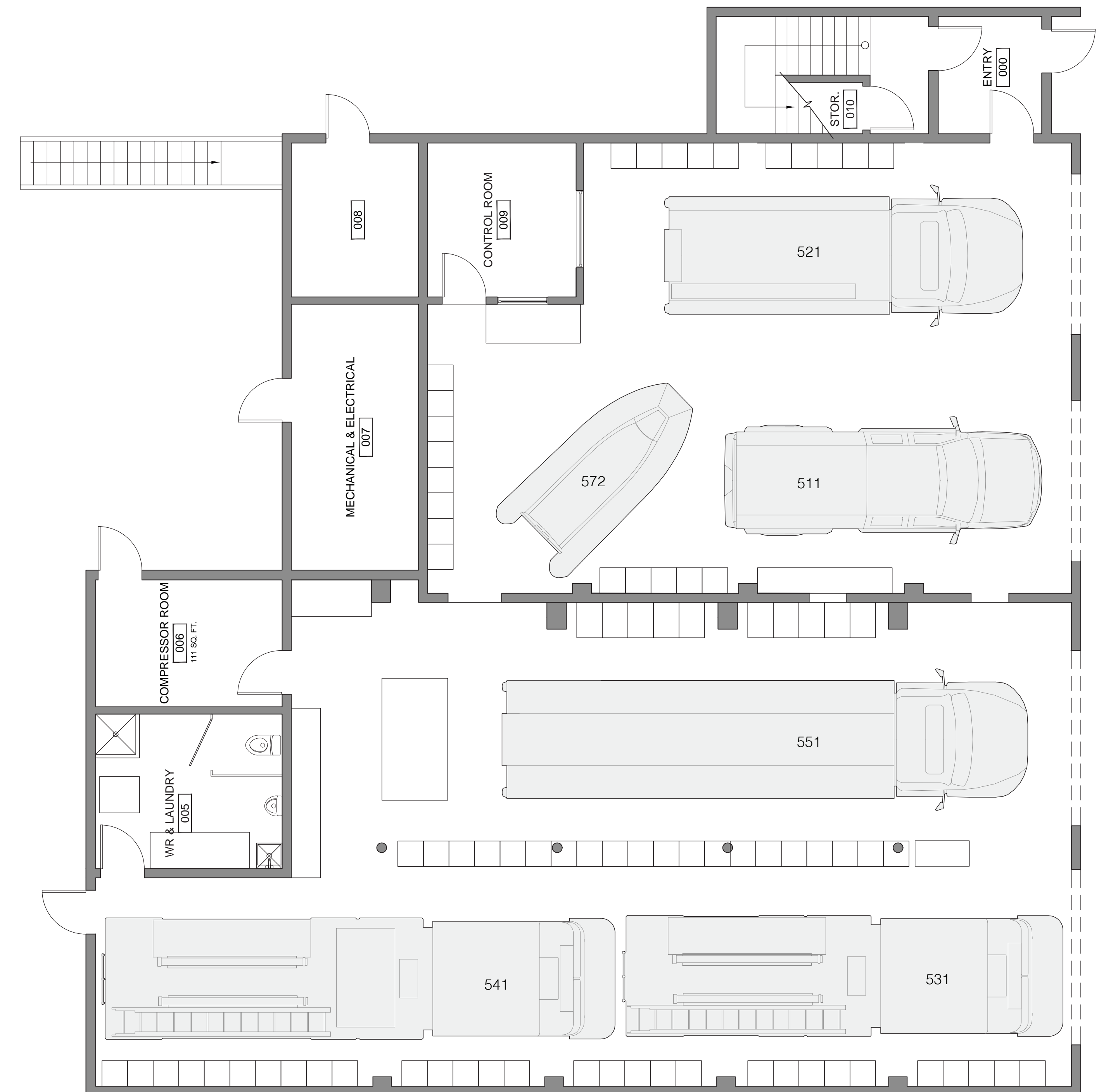
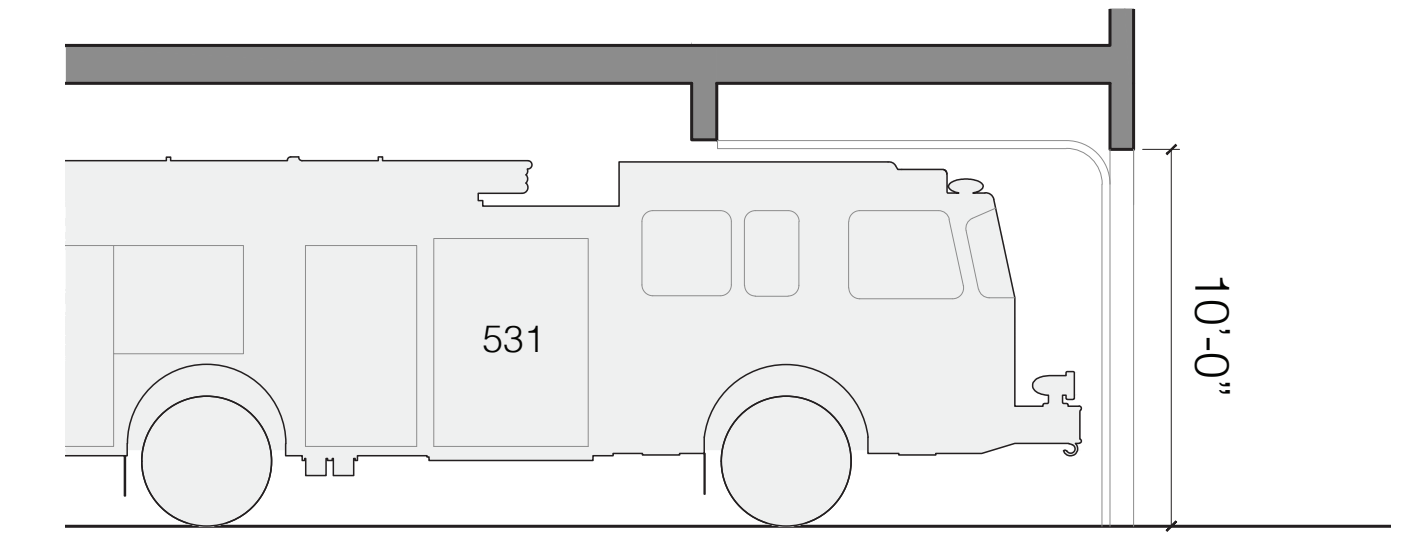
- Tarmac is too small and expansion is limited
- Traffic interruption when backing fire trucks into bays
- Insufficient parking and no room to expand
- Firefighter entry requires walking in front of responding fire trucks



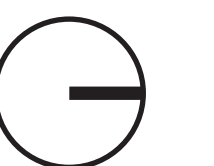
Existing Fire Station Building Size

Restrictions

- Overhead doors too small for modern fire trucks, requiring expensive modification to fire trucks
- Area needed for safe and efficient operations requires a
- Expansion of building limited by structural complexities and site boundaries
- Cannot accommodate appropriate hose drying infrastructure, leading to early degradation and inefficient operations



Current station - 6785
sqft

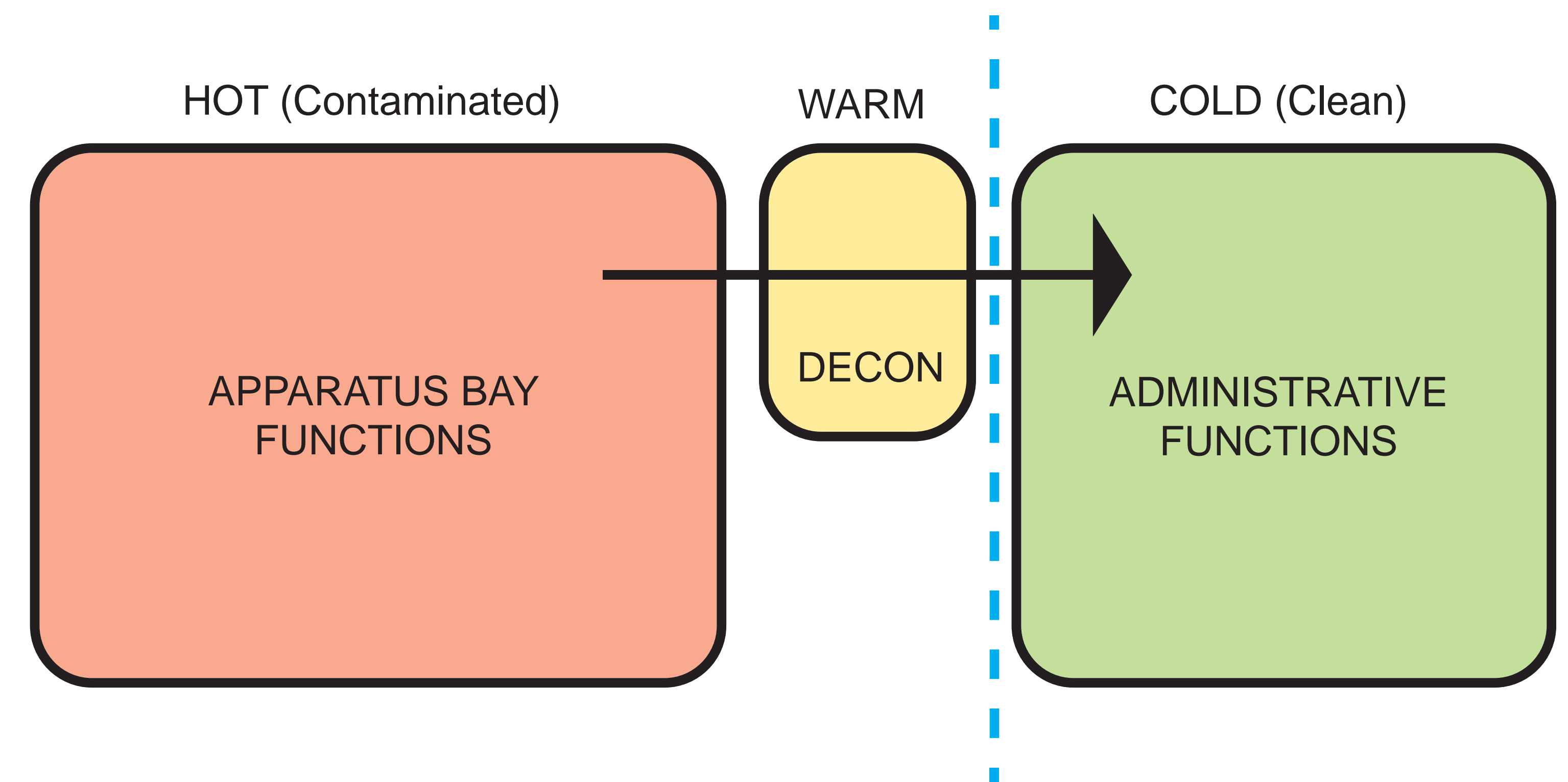


Existing Fire Station

Firefighter Health & Safety

Restrictions

- Contamination separation
 - Hot zone
 - Warm zone
 - Cold zone
- Insufficient ventilation and separation of zones
- No building cooling system
- Poor condition of interior surfaces (water damage)



Existing Fire Station

Firefighter Health & Safety

Restrictions

- Inadequate accessibility and ease of circulation
- Firefighter entry requires walking in front of responding fire trucks, resulting in safety risk
- Lack of storage
- No fitness facilities, as per best practice



Existing Fire Station Post-Disaster Requirements

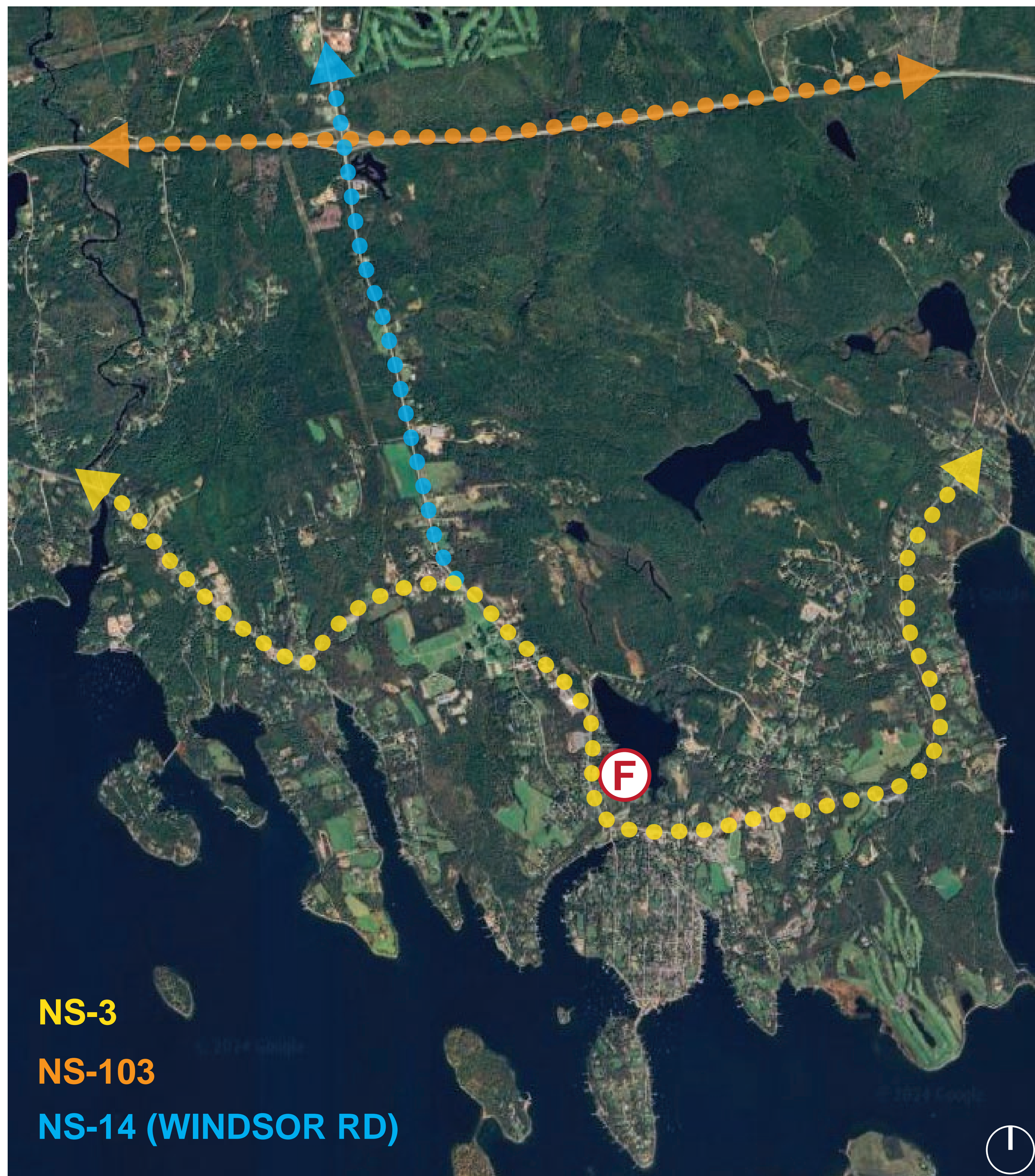
Restrictions

- Mix of structural material types
- Fire station does not meet Post-disaster requirements and would require an exhaustive study to determine the extent of the upgrades needed.
- Hidden structural system would require removal of drywall and finishes for structural analysis

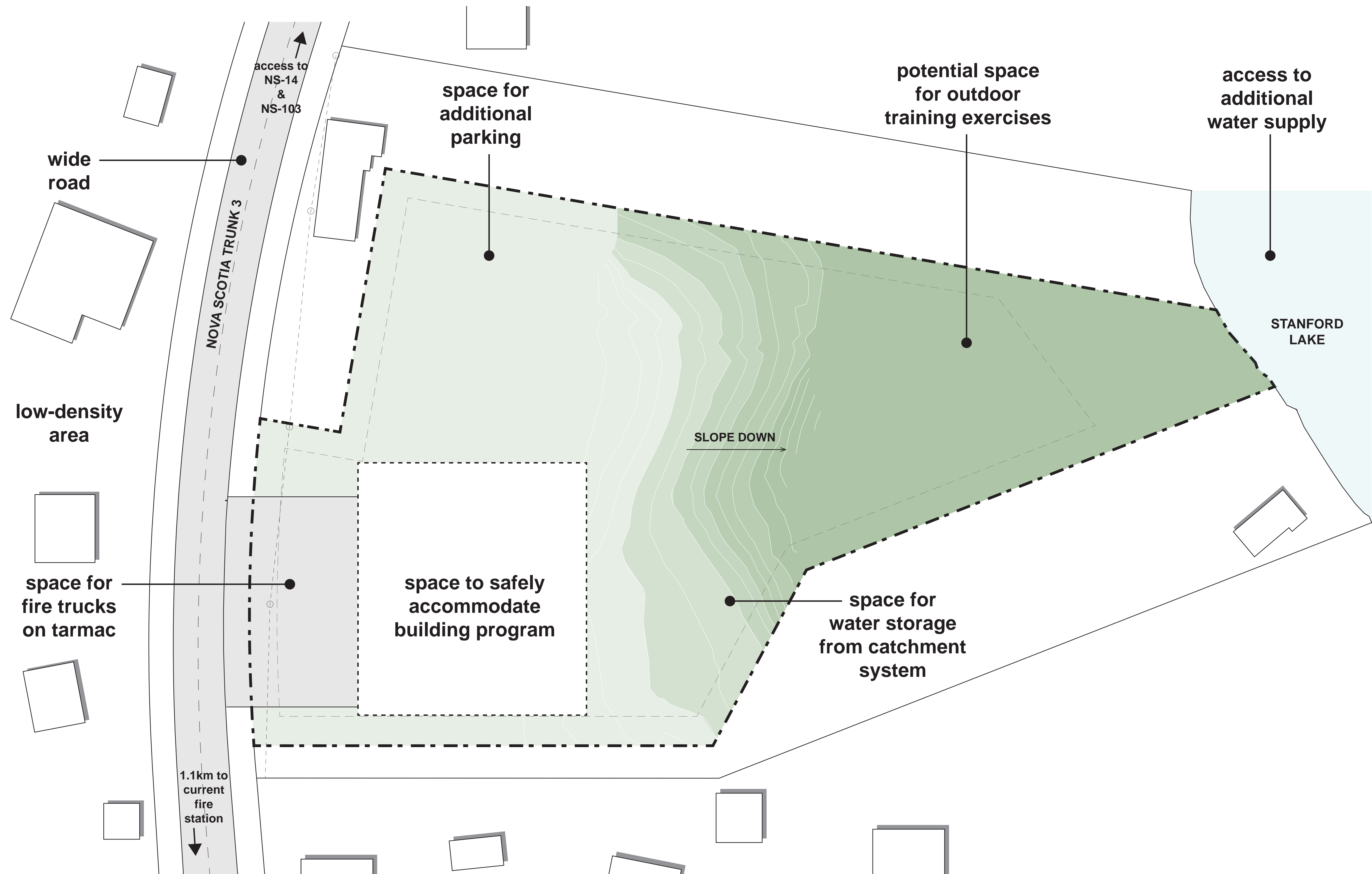


4070 Nova Scotia Trunk 3

New Fire Station



New Fire Station Site Analysis



New Fire Station Precedents and Goals

1. FUNCTIONAL

Create easy-to-maintain, usable spaces with proper storage.

2. EFFICIENT

A thoughtfully organized building that allows for quick response times.

3. SUSTAINABLE

Environmentally conscious design with long-term, low operating costs.

4. HEALTH & SAFETY OF VOLUNTEERS

Design for safe operations and proper separation of containments.



Grand Falls Fire Station - Acre Architects



Grand Falls Fire Station - Acre Architects

New Fire Station Precedents and Goals

5. VOLUNTEER GROWTH & RETENTION

A place that supports the growth, pride, and camaraderie of the volunteers.

6. COMMUNITY INTEGRATION

Inspired by the character of Chester.

7. LONGEVITY & DURABILITY

A long-lasting, disaster-resilient building, always able to serve its community.

8. CIVIC PRIDE

A fire station that brings value to the community for the next 100 years.



Sparwood Fire Station - S2 Architecture



Strathcona Emergency Services Station - S2 Architecture

New Fire Station Site Concept



Thank You!

9736
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