



Prince George Fire Training Site Feasibility Study

November 20th, 2023

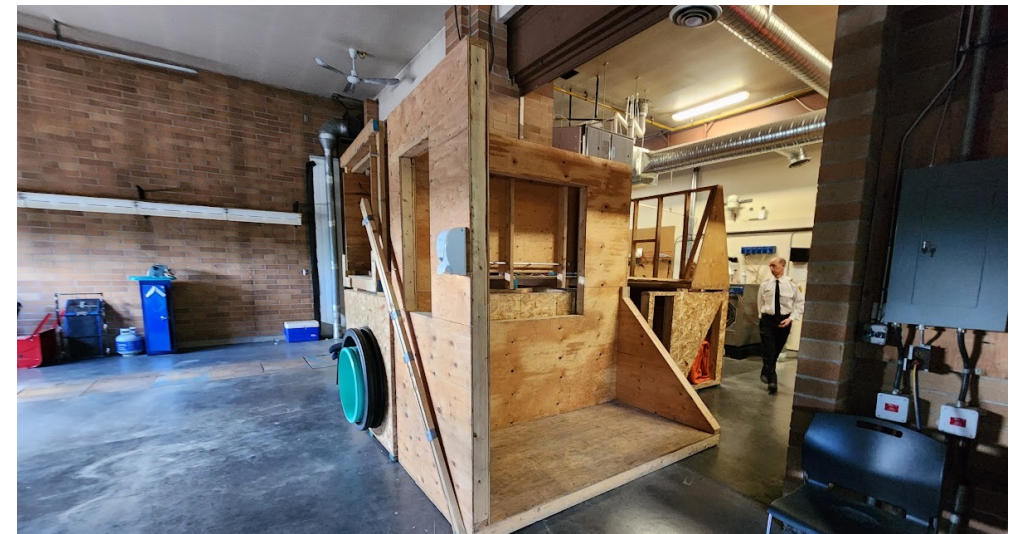


SESSION AGENDA

1. Team Introductions
2. Project Context & Process
3. PGFRS Training Assessment
4. Regional Training Site Opportunity
5. Fire Hall #2 Assessment
6. Fire Hall #5 Assessment
7. Study Conclusions



PGFRS Auto Extrication Yard



PGFRS Training Prop – Hall #2

1. TEAM INTRODUCTIONS

PRIME + LEAD



Quentin Talbot-Kelly
Cornerstone Planning Group

Alec Young
Cornerstone Planning Group



TRAINING EXPERT



Wayne Humphry
FireWorks Consulting Inc.



ARCHITECTURE



Bassem Tawfik
KMBR

Georgia Fisher
KMBR



COST ESTIMATOR



Tim Spiegel
SSA Quantity Surveyors



2. PROJECT CONTEXT



PRINCE GEORGE FIRE & RESCUE

Strategic Plan Update
2022

Dave Mitchell & Associates Ltd.
15 February 2023

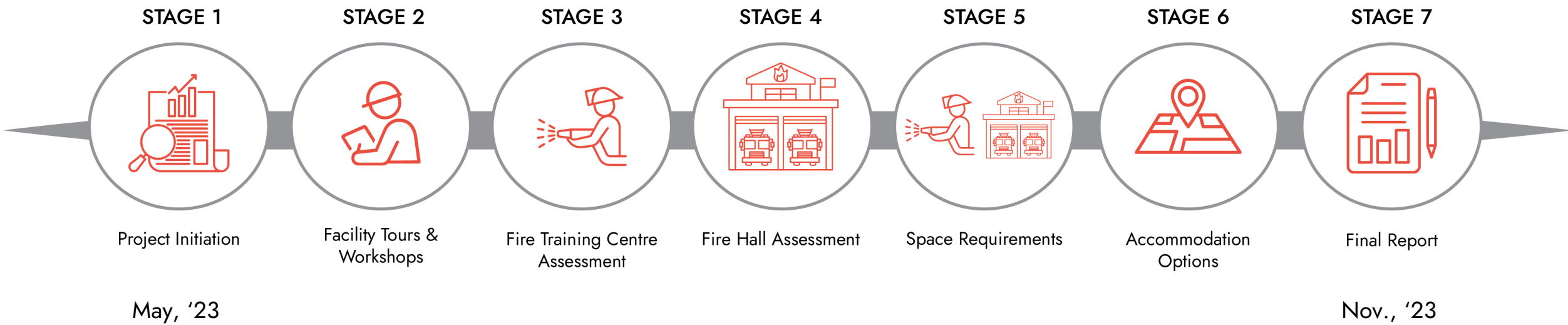
Project Drivers:

- Need for the provision of an appropriate local training site.
- Need for one additional staffed unit at Hall 2.
- Need for the provision of a 5th staffed fire hall in the industrial area.

Project Goals:

- Explore the feasibility of developing a Fire Training Site on two potential sites within the City of Prince George
- Examining the spatial and cost implications of expanding capacity of Fire Hall 2
- Examining spatial and cost implications of 5th fire hall to be located within the City

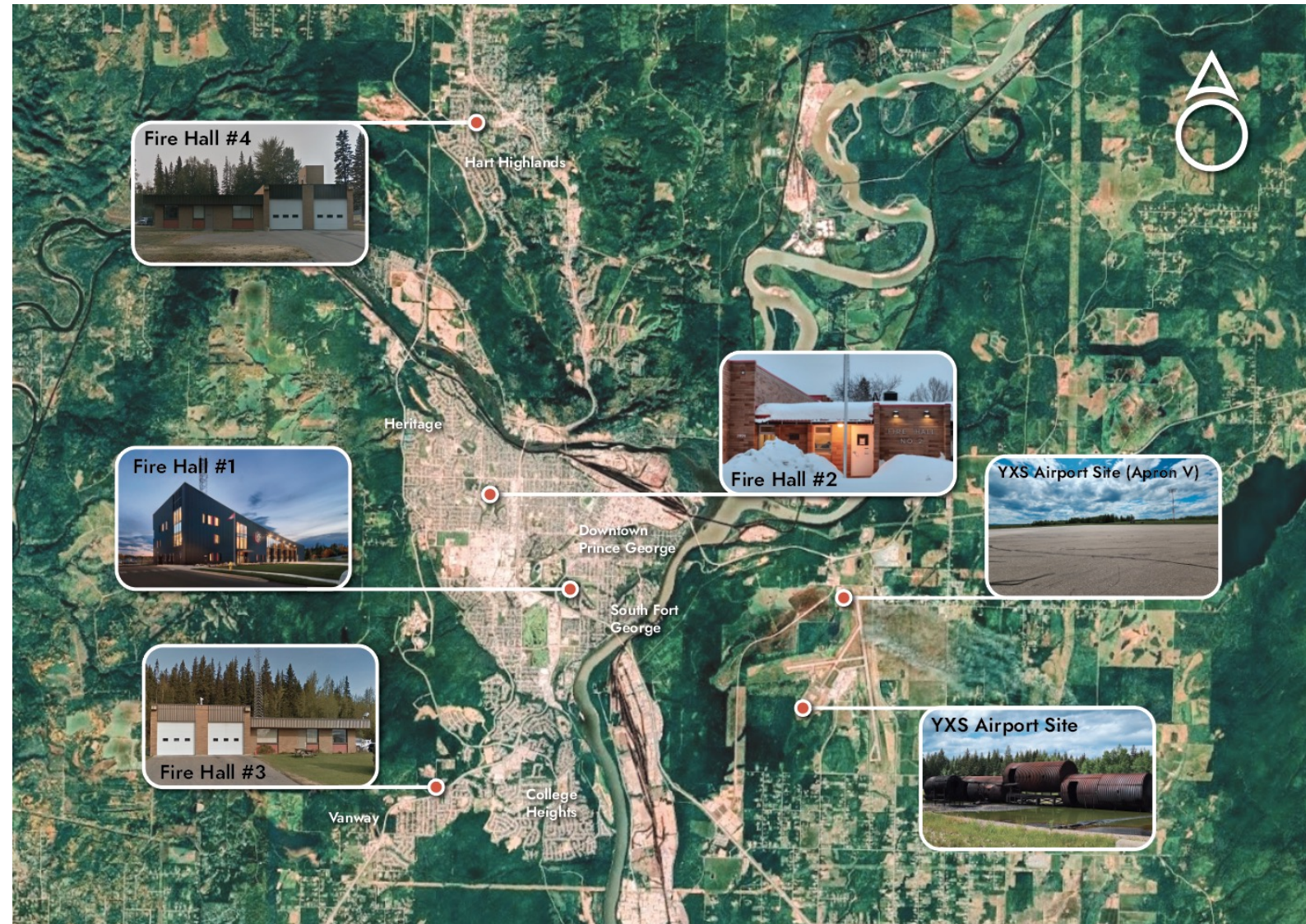
2. PROJECT PROCESS



3. PGFRS TRAINING – Current State

Prince George Training

- Admin training at Fire Hall #1
- Indoor Prop Exercises at Fire Hall #2
- Vehicle Auto Extrication at Fire Hall #3
- Hazmat Trailer at Fire Hall #4
- Emergency Vehicle Driver training at YXS Airport Site (Apron V)
- Aircraft fire training at YXS Airport Site



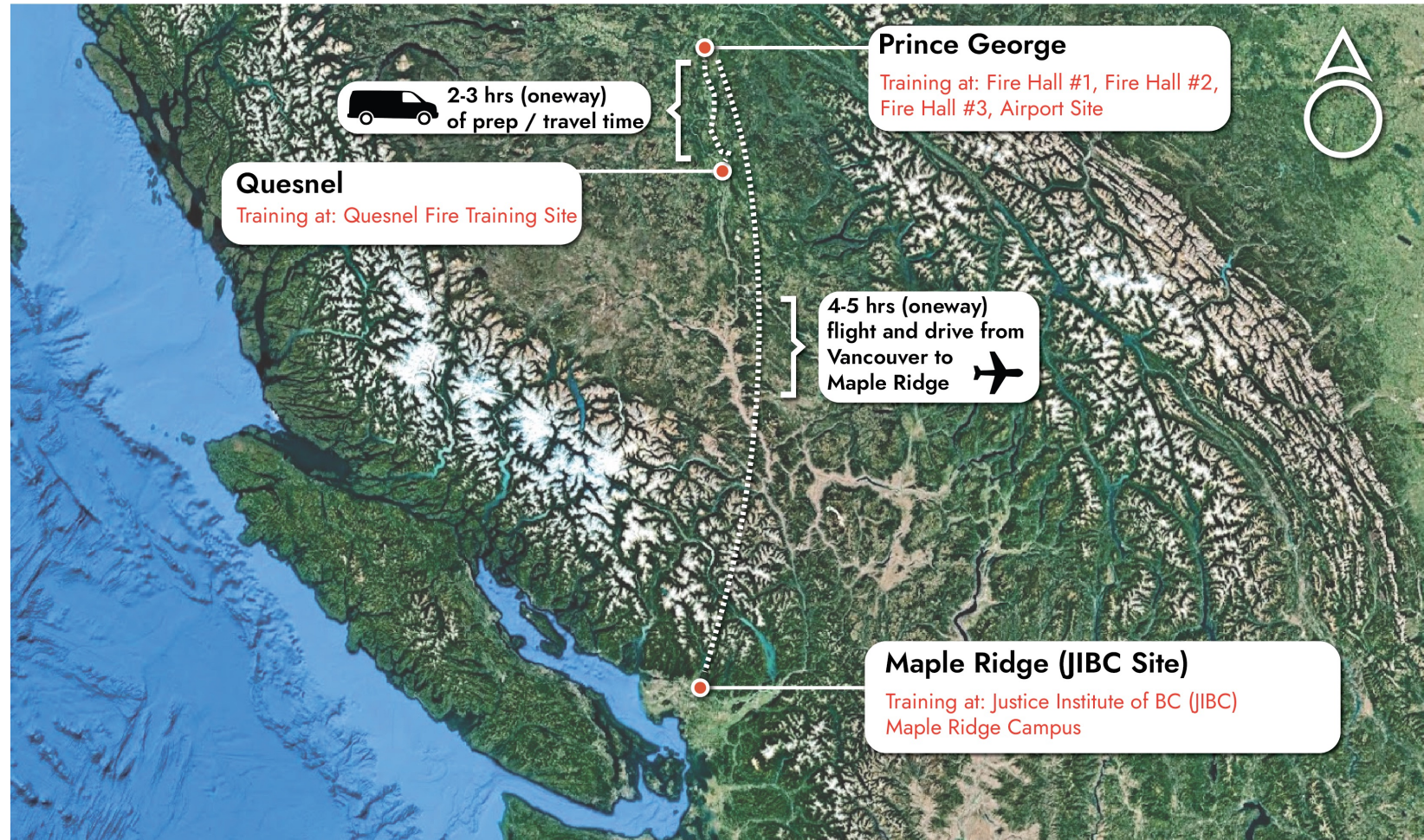
3. PGFRS TRAINING – Current State

Quesnel Training

- Multi-storey burn tower training
- Class A burn outdoor prop training
- Vehicle auto extrication

Justice Institute of BC (Maple Ridge)

- Multi-storey burn tower training
- Classroom training
- Class A prop training
- Vehicle Extrication
- Rail Incident Training



3. PGFRS TRAINING – Current State

PGFRS TRAINING CHALLENGES

- Training equipment and infrastructure fragmented across City
- Poor quality infrastructure, where present.
- Insufficient types and quantity of infrastructure
- Cannot train year-round adding coordination pressures
- Rely on provincial travel to fulfill training requirements
 - Increased operating costs
 - Increased service risk as personnel and equipment are away from City



Hall #2 Condemned Training Tower

3. PGFRS TRAINING – Future Needs

PGFRS requires infrastructure to support an expanding list of exercises/scenarios:

- PPC and PPE exercises
- Hose, Nozzles, and Appliance Techniques / evolutions
- Ground ladder evolutions
- Small equipment / power tool evolutions.
- Ropes and knots skills.
- Rapid Intervention team skills.
- Firefighter self-rescue skills (with RIT).
- Forcible entry exercises
- Confined space procedures
- Interior attack techniques
- Search procedures (theatrical smoke)
- Horizontal ventilation evolutions
- Vertical ventilation evolutions
- Overhaul and salvage procedures
- Rope rescue procedures
- Haz-mat procedures.
- Building utility shut offs procedures
- Fire Department Connections
- Alarm Enunciator Panels
- Elevator Operations
- Various live fire training activities and scenarios: residential, commercial, elevator, stairway, rooftop, and balcony spaces.
- Emergency vehicle operations training
- Pump testing
- Vehicle rescue / auto-extrication exercises
- Vehicle fires
- Traffic control procedures
- Garbage container fires.
- Flammable liquid fires.
- Portable extinguisher exercises.
- Fire investigation live-fire scenarios

3. PGFRS TRAINING – Future Needs

Indoor Training Facility / Warehouse

- Year-round training
- Classroom and practical training space

~1,100 BGm²

Live Fire Burn Building

- Live fire training
- Sea can construction

~500 BGm²

Vehicle Extrication Pad

- Vehicle extrication training

Multi-Purpose Training Prop Pad

- Class A burns, prop burns, apparatus training etc.

Storage

- Prop storage space

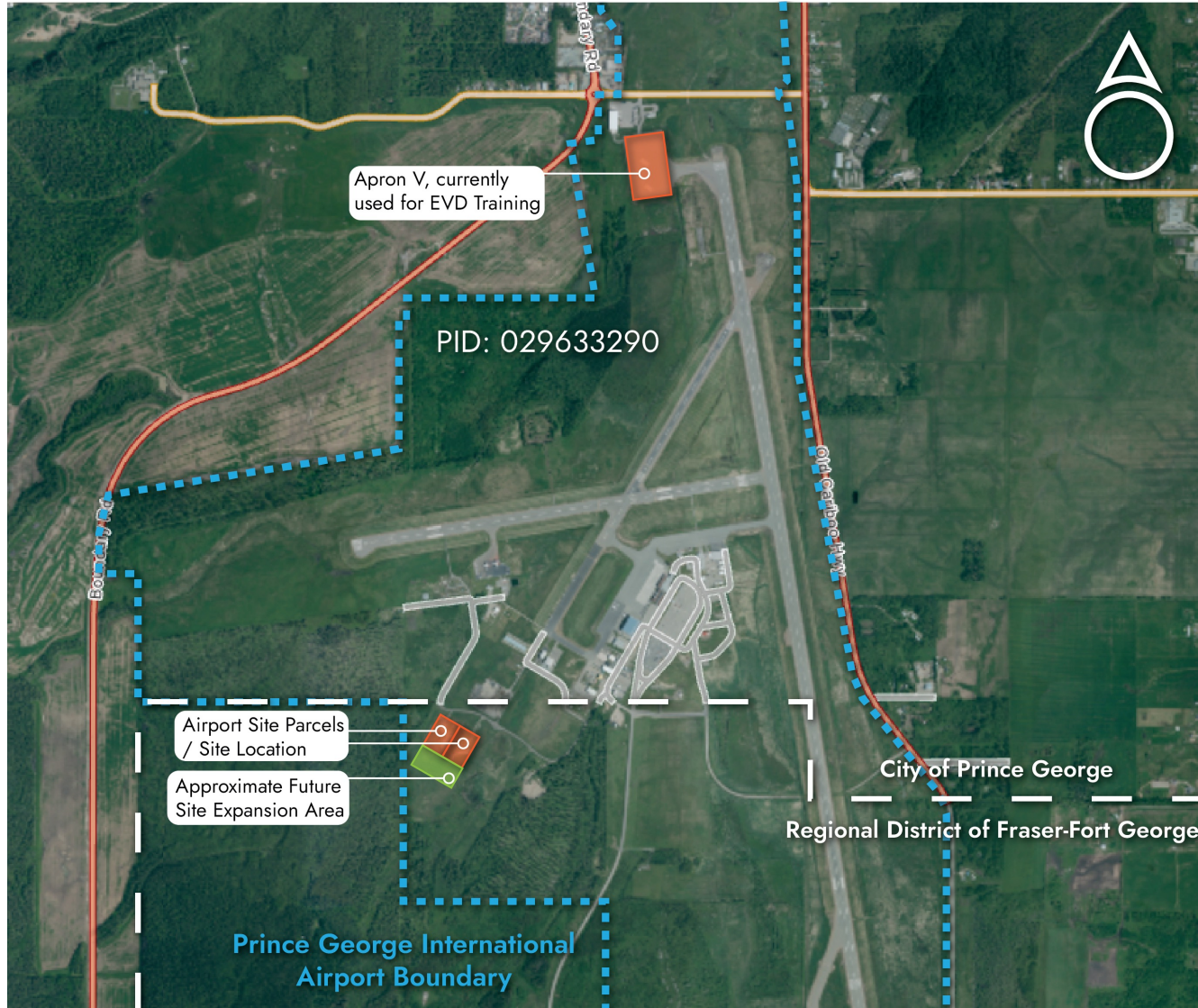
~7,000 m²

3. PGFRS TRAINING – Site Opportunities



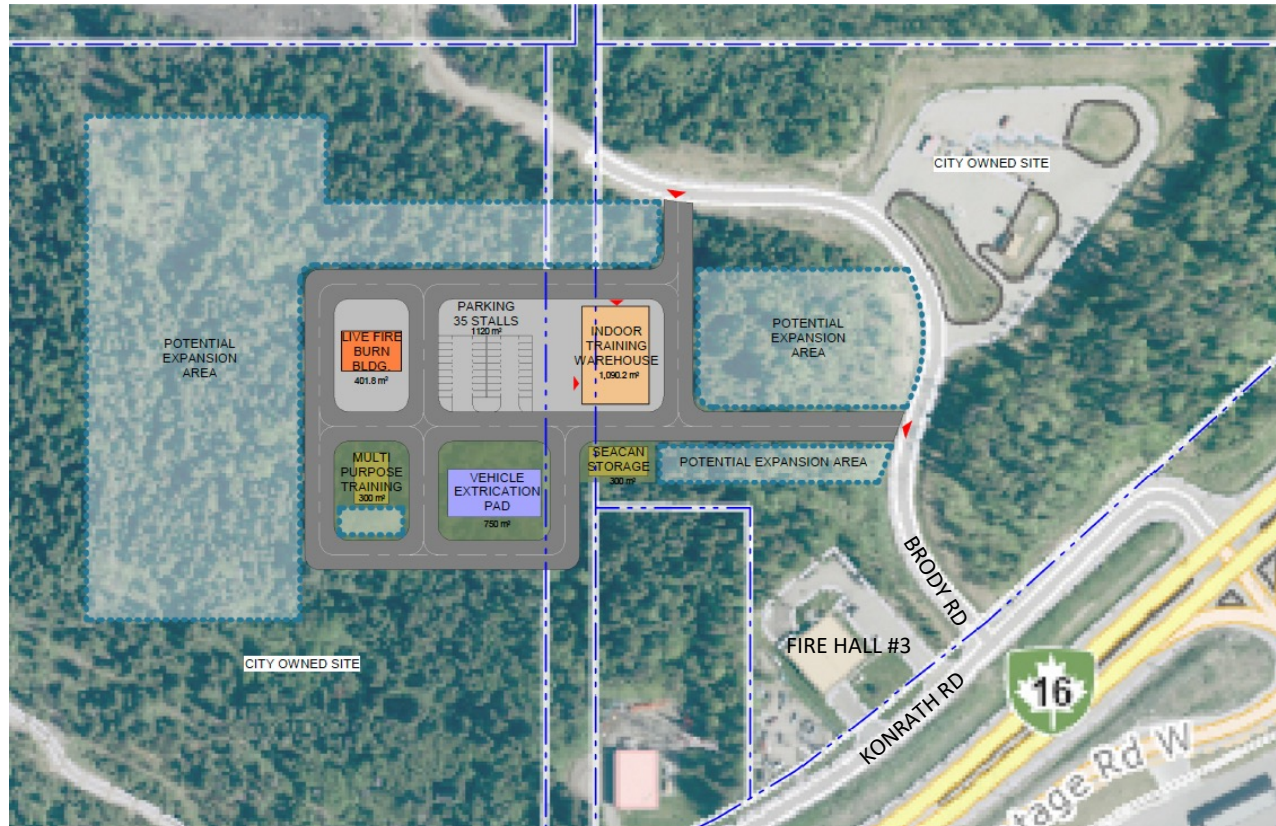
- 2 Parcels
- Location: Within City Limits
- Zoning: AF, U2, P3, AG
- Occupants: Fire Hall No. 3, Public Works
- Combined Area: 218,587 m² (54 acres)

3. PGFRS TRAINING – Site Opportunities



- 1 Parcel
- Address: Air Tanker Rd, YXS Airport
- Zoning: N/A
- Occupants: YXS Fire Rescue Services
- Combined Area: ~77,000 m² or 19 acres
- Permits hydrocarbon burns, aircraft fuselage training

3. PGFRS TRAINING – Accommodation Options



As drawn, ~4.3 acres



As drawn, ~3.7 acres

4. REGIONAL TRAINING SITE OPPORTUNITIY

INTENT

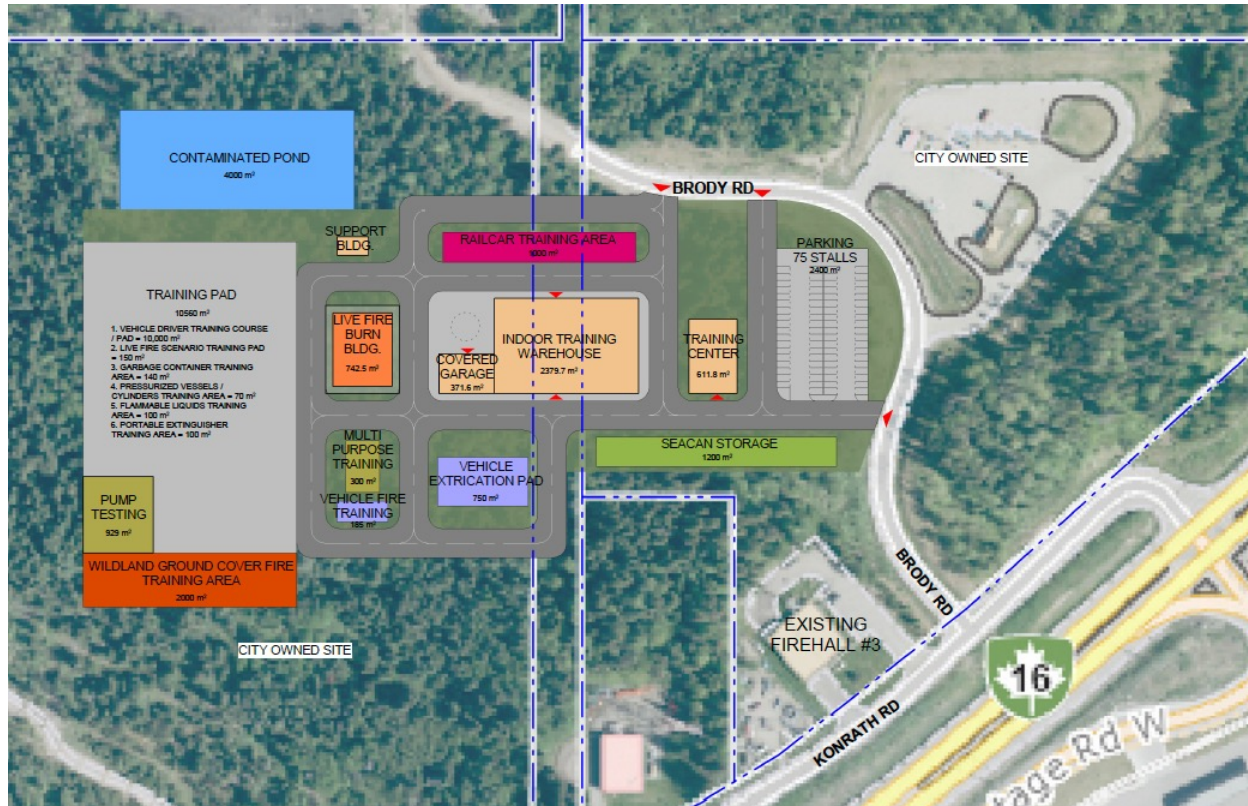
- Engage industry organizations to understand their fire training needs and current training strategies

KEY FINDINGS

- There is a known need for a regional training site
- Currently all engaged organizations must travel for mandatory annual trainings – As far as southern USA.
- Prince George is ideally situated to deliver fire training
- Training requirements are steadily increasing across organizations



4. REGIONAL TRAINING SITE OPPORTUNITY



As drawn, ~13.8 acres



As drawn, ~13.8 acres

Site requirements need to be validated pending further discussions with external industry organizations

5. FIRE HALL #2 ASSESSMENT

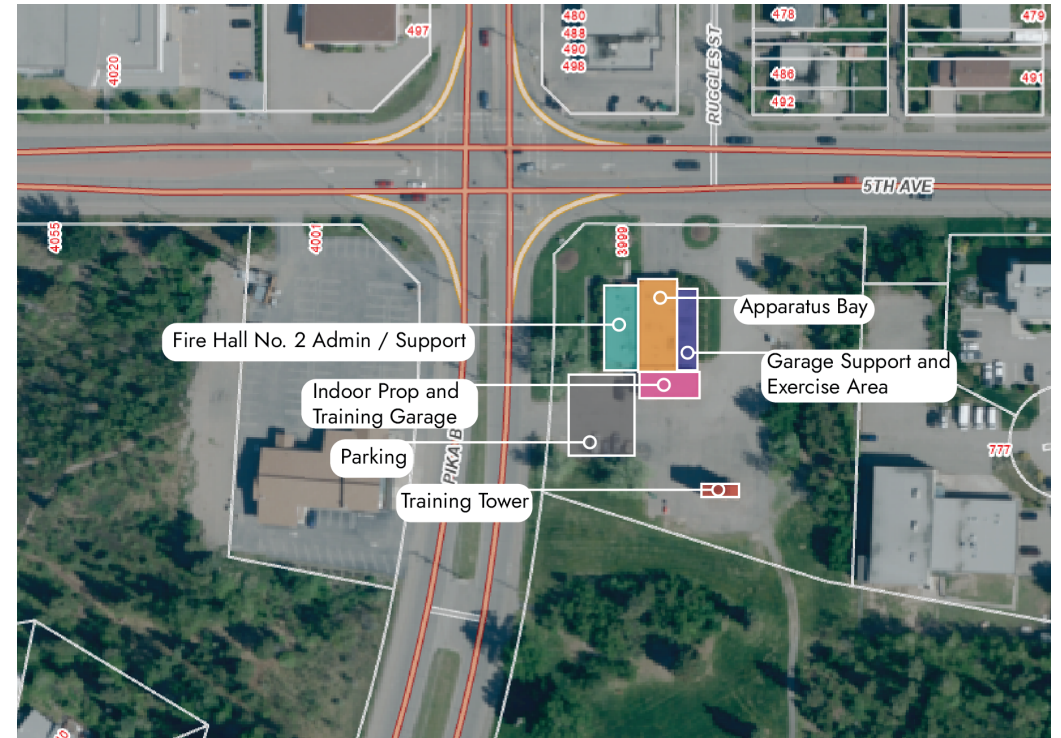
GOAL

- Assess Fire Hall #2 for expansion / redevelopment suitability to accommodate one additional staffed unit.

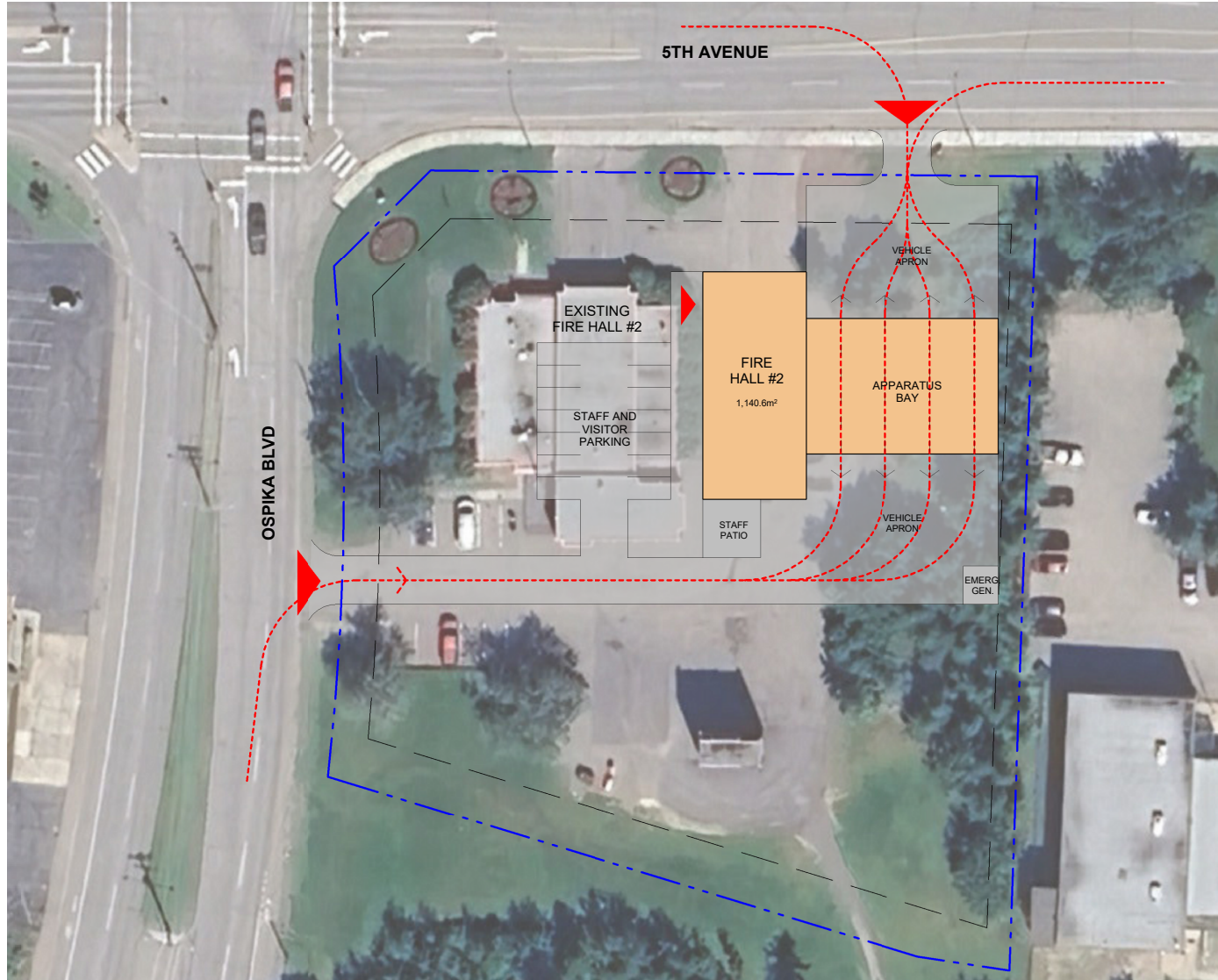


KEY FINDINGS

- ~\$1.6m in scheduled maintenance over next 10-years
- Not suitable for expansion:
 - Building would require code compliance upgrades
 - Current configuration does not lend itself to straight forward expansion
 - Apparatus bay ceiling height would need to be increased
 - Would be significant service disruption requiring relocation



5. FIRE HALL #2 ASSESSMENT



- Able to accommodate 8-on shift and up to 4 apparatus
- Drive through bays
- Assumes training activities take place at new training site
- ~1,050 BGm², 0.6 acre site

6. FIRE HALL #5 ASSESSMENT

GOAL

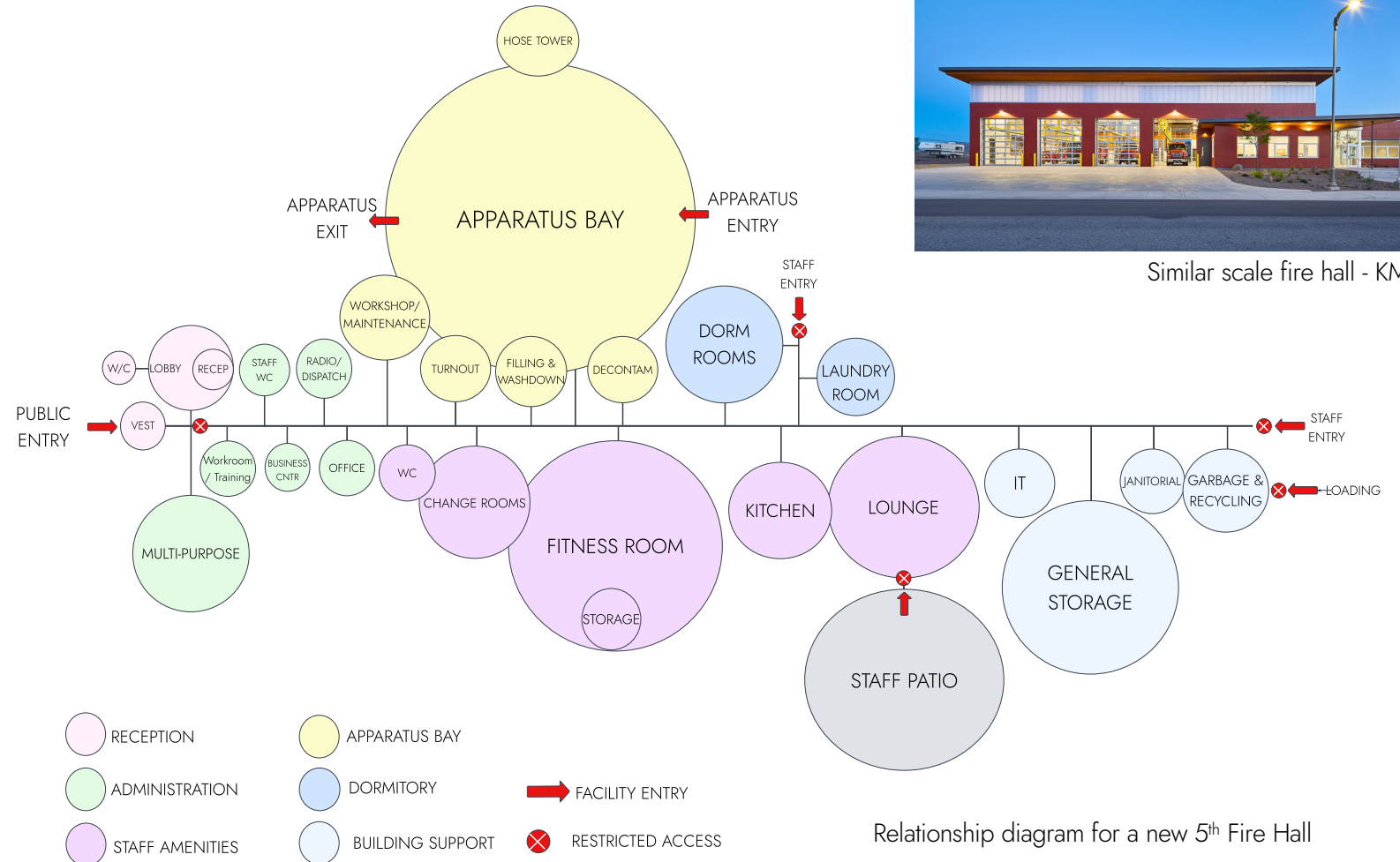
- Assess spatial needs for a new 5th fire hall.

KEY FINDINGS

- Hall should accommodate 8-on shift members and up to 4 apparatus
- ~1,050 BGm², 0.6 acre site



Similar scale fire hall - KMBR



Relationship diagram for a new 5th Fire Hall

7. STUDY CONCLUSIONS

PGFRS TRAINING

- Clear need for improved and renewed training infrastructure
- Require ~1,600 BGm² of facility and ~9,200 m² of outdoor training space.
 - Training Facility / Warehouse
 - Live Fire Burn Building
 - Outdoor Practical Training Areas
- Total site area requirements of ~3.1 acres
- Most suitable site assessed for PGFRS is the site behind Fire Hall #3

Fire Hall #2

- Facility is not suitable for expansion
- Redevelopment requires facility sized ~1,050 BGm² and a site sized 0.6 acres
- There is sufficient space to redevelop at current location

Fire Hall #5

- Hall should accommodate 8-on shift members and up to 4 apparatus
- ~1,050 BGm², 0.6 acre site
- Ideal location is within the City's Industrial Area