Presentation Outline

1. Introduction
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3. Options
4. Methodology
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Introduction

- A Canadian, employee-owned professional consulting firm specializing in planning, engineering, environmental science and management.

- **Fire & Emergency Services Planning** has been a specialized area for over 35 years.

- **Claudio Covelli - Senior Fire Planning Specialist**, involved with all of the fire services planning studies Dillon has done

- Lead on this project
• To evaluate options for the relocation of Fire Station 2 (one of three existing fire stations).
• Station 2 has reached the end of its useful lifecycle
  o Located in a floodplain
  o Design of building not consistent with industry standards
Options

• **Five Station 2 location options:**
  1. Dennistoun – Dennistoun Avenue / Parkhill Road
  2. Northcrest – 100 Marina Boulevard
  3. Towerhill – Towerhill Road/Fairbairn Street
  4. Sunset – 916 Chemong Road
  5. Heritage – 425 Heritage Trail

• **Recognizing the potential evolution to a four station model, looked at two Station 4 location options:**
  1. Ashburnham Drive/Lansdowne Street East; and,
  2. Parkhill Road West/Ravenwood Drive.

• **A total of 10 site combination options**
Methodology

• Undertook a Multi-Criteria Evaluation on the 10 site options – Four Station Model:
  1. Initial Arriving Company (4 Firefighters (FF) in 4 min.)
  2. Second Arriving Company (8 FF in 6 min.)
  3. Initial Full Alarm Assignment (16 FF in 8 min.)
  4. Risk
  5. Cost
  6. Site Characteristics
  7. Land Use

• Response modelling considered the future road network and planned development.
Methodology

• Minimum staffing used in modeling
  o Existing - 15 firefighters
  o Future with a four station model – 19 firefighters
• NFPA 1710 requirement, Single Family – Initial Full Alarm Assignment – 16 FF and 17 if an aerial is used.
• PFS sends an aerial on an Initial Full Alarm response – in a four station model they would send minimum 17.

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<th>Apparatus</th>
<th>Existing Minimum Staffing</th>
<th>Assumed Minimum Staffing</th>
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<tr>
<td>4*</td>
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# of Firefighters on Duty

15 19

* Station 4 included for modelling future conditions only.
Evaluation Results

- Most highly ranked sites were:
  - Dennistoun
  - Sunset
  - Northcrest

- Purposefully did not zero in on one preferred site to provide flexibility at the next stage.

- All three sites would be suitable – each having their advantages.

- The three highly ranked sites work well in a four station model.
Evaluation Results

- Emergency response coverage is improved with the three highly ranked sites when compared to the existing Station 2 location.
- Emergency response coverage is improved with the three highly ranked sites when comparing a three station model to a four station model.
• Identified three highly ranked sites for a potential relocation of Station 2: Dennistoun, Sunset, and Northcrest.

• City will undertake a more detailed assessment to realize one of the sites (e.g. costing, servicing, approvals).

• Can be done with the knowledge that three sites improve existing response coverage in a three station model.

• The highly ranked sites will not compromise the evolution of the Peterborough Fire Services to a four station model.
Thank you