

## **Detailed Description of the Repurposing Proposal Station 21**

### **Repurposing Station 21**

Fire Rescue Services is mandated to provide River Rescue services for the City of Edmonton. Fire Rescue Services first began using the current Station 21 site in the early 1950's as a Fire Rescue Training Centre and which eventually incorporated River Rescue services with the construction of a boat launch on the site.

The location from which the trained River Rescue crew has been deployed has changed several times but the location of the launch site and the deployment of the River Rescue boat has remained constant. Initially, the crew was deployed from Station 1 in the downtown but later moved to Station 6 which was located at 83 Ave and 103 St. In the early 1980's, Station 6 was moved to its current location at 8105 96 St, further away from Station 21. At about the same time the existing Station 21 building was added to the site and a pumper truck with a trained River Rescue crew was added to the new building. Deployment of the River Rescue boat by this on site crew continued until the late 1990's when, as a city wide cost saving initiative (City 97) the pumper truck and crew were removed. The River Rescue crew has been deployed from Station 6 ever since.

Two problems are evident with current River Rescue operations, both of which are resolved by placing a permanent River Rescue crew at Station 21.

Firstly, the River Rescue crew must currently travel from Station 6 to Station 21 to launch the boat, resulting in a 10 to 15 minute delay. This presents a risk that can be completely resolved by having the River Rescue crew at Station 21.

Secondly, the Ladder and Pumper Trucks located at Station 6 are among the busiest in the City with over 3700 events during 2012. Using the Station 6 crew to answer River Rescue events negatively effects their response in their prime response zone and, conversely, given their significant number of events they respond to, negatively effects their availability for River Rescue events and for appropriate river rescue training.

There has been a growth in river rescue events. The historical average is 40 events a year, with 2012 seeing an increase to 63 for all River Rescue Events. Continued development of river recreation opportunities through River Valley Alliance projects and the City's own initiatives will attract more people to the River Valley and onto the river in the coming years.

## Proposed Secondary Responsibilities for Station 21

However, the operational cost of a 24/7 River Rescue crew at Station 21 is estimated at between 2.6 and 3 million dollars per year. In order to make full and efficient use of the 24/7 deployment of a River Rescue crew in Station 21, additional responsibilities and apparatus need to be added to the operation of the station.

The most substantive of these proposed responsibilities is the deployment of a **Rescue Truck** from Station 21.

A Rescue Truck is a specialty firefighting or emergency service apparatus staffed with a major crew of firefighters assigned to fire and rescue events. The Rescue trucks are also equipped with specialized equipment necessary at technical rescue situations such as auto accidents requiring vehicle extraction, building collapses, confined space rescue and rope rescues. They carry an array of special equipment such as the Jaws of Life, wooden cribbing, generators, winches, hi-lift jacks, cutting torches, circular saws, lights and SCBA air and other forms of heavy equipment unavailable on standard emergency trucks.

There has been a growing number of events in the central core requiring the deployment of a Rescue Truck. Presently, Rescue Trucks are deployed from six stations. Station 1 is the most central of these, with that Rescue Truck responding to over 3000 calls in 2012. On average there are between 250 to 300 calls per year to Station 1 where the Rescue Truck is not available.

The repurposing of Station 21 proposes to place a Rescue Truck at Station 21 and use the on site River Rescue crew to respond to those 250 to 300 calls as backup when a centrally located Rescue Truck is not available for a call in the central core. It is of note that the present deployment model sees Trucks travelling from Station 6 to Station 21 to launch the Rescue Boat. These trips will be eliminated by have the River Rescue Crew at the Launch site.

Further responsibilities for Station 21 would be the storage and deployment of three specialized vehicles which service the entire city: a Mobile Command Unit, Foam Truck and Fan Unit. The Foam Truck and Fan Unit are presently housed at Station 21.

The **Foam Truck** is a 2-ton truck and is equipped to deliver additional foam to crews fighting hydrocarbon fires such as tire or petroleum fires. Decisions on whether to use full lights and sirens in attending a call are determined by the situation.

The Foam Truck is also used to launch the rescue boat housed at Station 21 and to pull the Fan Unit and therefore must be located in the same facility as these apparatus.

The Foam Truck only averages 5 events a year.

The **Fan Unit** is presently housed at Station 21 and would continue to be included in a new facility.

The Fan Unit is a trailer that is pulled by the Foam Truck. The Fan Unit is a high powered industrial fan used to clear smoke or contaminated air within buildings, parking facilities and tunnels such as LRT facilities. While not used frequently, it is critical in securing sites so that further rescue activities can be undertaken.

The Fan Unit is required at an average of only 6 events a year.

The current method of deployment requires a primary response vehicle to be taken out of service and the crew to travel to Station 21 to get the required unit and deliver it to the required location. Under this repurposing proposal a member of the River Rescue crew would deploy these apparatus.

The **Mobile Command Unit** is currently housed at Station 19, but like the Foam and Fan apparatus provides a city wide service. Experience has demonstrated that it is easier for Fire equipment to travel from a central location to outlying locations than for outlying locations in to the central core. As such, the Mobile Command Unit will also be moved to Station 21.

The Mobile Command Unit has similar operating attributes as the Foam and Fan trucks as it serves a city-wide function. Moving this unit to the newly staffed facility would create further operational efficiencies. The move would also recognize that the majority of calls for service over the last 4 years have focused on the mature areas of the City, and improve response times to those areas.

The Unit is a full-size fire truck, deployed automatically in all second alarm fires, and acts as a logistic and communication centre to supervise and direct efforts to fight fires that are anticipated to take a longer period to control.

The Mobile Command Unit responds to an average of only 21 events per year.

## **Choosing a Site**

Fire Rescue Services identified a need for the facility to be located between the High Level and Dawson Bridges, reflecting the historical concentration of River Rescue events and the ability to get to all locations within the City. The following five possible locations were identified by Fire Rescue Services as meeting service needs:

1. Cloverdale - 9812 96a St
2. North Rosedale - 9903 Rosedale Road
3. Riverdale - 10296 87 St

4. Queen Elizabeth Park - 10370 Queen Elizabeth Park Road
5. Station 21 - 9315 101 St

The first task for the consultants conducting the Site Location Study was to develop empirical criteria against which the five sites could be evaluated. Once this work was completed, the five sites were ranked as part of a Site Location Study with the following results:

<b>Option</b>	<b>North Rossdale</b>	<b>Cloverdale</b>	<b>Riverdale</b>	<b>Queen Elizabeth Park</b>	<b>Station 21</b>
Institutional and site Characterization	4	2	5	2	1
Economic	2	4	3	4	1
Social	4	2	4	3	1
Environmental	2	4	4	2	1
Aggregated Score	12	12	16	11	4

It was originally contemplated that at least two sites would emerge from this ranking suitable enough for the completion of a full Environmental Impact Screening Assessment. However, Station 21 ranked highest in all groupings of criteria and there was no clear second place site. As a result, a decision was made to proceed with full Environmental Impact Screening Assessment consideration of only Station 21.

### **Consideration of a Non-River's Edge Location.**

While not part of the Site Location Study, consideration of locations other than the river's edge were considered as part of satisfying all conditions, but were ultimately rejected for the following reasons:

- a) Improving River Rescue Services is the driving force behind the proposal to repurpose Station 21. Placing a new station close to the river's edge and continuing to use Station 21 would reduce response time to River Rescue events, but it would not completely eliminate the risk.
- b) As outlined in the Environmental Impact Screening Assessment report, the cost of a new full service facility would be in the order of 11 million dollars while the planned repairs and mechanical upgrades required at Station 21 are in the 3.75 million dollar range. Using an existing building to operate

from considerably reduces the capital costs associated with achieving the operational needs identified in this report.

- c) Operational efficiencies are created by including some specialized equipment and a backup Rescue Truck in the repurposing proposal. There is room in existing Station 21 for all of this equipment. The operational cost of a 24/7 crew is between 2.6 and 3 million dollars per year. Having that crew's priority assignment being River Rescue but also equipping that crew with a Rescue Truck ensures that Fire Rescue Service's financial and personnel resources are fully engaged and being used efficiently.
- d) Locating a crew at a location other than where the boat and launch are located continues the current situation of operating and maintaining two facilities when only one is needed.
- e) Fire Rescue Services has Master Plan criteria that direct the timing and location of new facilities. A completely new full-service station is not required at this time and could not be justified financially.

## **Costs, Social, Environmental and Institutional Constraints**

Policy 3.5.3 of the North Saskatchewan River Valley Area Redevelopment Plan Bylaw states:

*Site Location Study and Environmental Impact Screening Assessment*  
*It is a policy of this Plan that all proposals for the development of a major facility that is publicly owned or is developed on public lands shall be subject to an Environmental Impact Screening Assessment as outlined in Schedule D, and a detailed site location study detailing costs, and social, environmental and institutional constraints which make a River Valley location essential must be prepared for Council approval. These studies shall be undertaken prior to Council committing funds for capital expenditure for the development of this proposal.*

An Environmental Impact Screening Assessment as outlined in schedule D is provided as Attachment 3 of the main report. This repurposing proposal does not propose any changes to the footprint of existing Station 21 or any changes to surfaces surrounding the building. As a result, the impact on the physical environment identified in the Environmental Impact Screening Assessment is neutral. The consultant has recommended that an opportunity be taken to improve bat habitats in the surrounding vegetation, representing a modest net benefit to the environment.

### **Costs**

The costs to make the necessary mechanical upgrades and undertake needed maintenance on Station 21 are estimated at 3.75 million.

While not part of this report it is important to note that the overall costs associated with this repurposing proposal will include the acquisition of a new Rescue Truck at an estimated cost of \$950,000.00. If this report is approved that cost will be included in a subsequent Capital Budget request.

It is also important to note that there is an approved composite maintenance budget with funds earmarked for maintenance and upgrades to the existing boat launch. Work includes general maintenance which is under way now and replacement of the ramp as it enters the water which is before Provincial approving authorities now. Costs were originally estimate at 1 million dollars upgrades have been reduced in scope and are anticipated to cost less than the total budget approval.

The costs of constructing a new facility in a different River's Edge location including the construction of a new boat launch are estimated at approximately 13 million plus \$950,000.00 for the required Rescue Truck.

The costs of constructing a new facility closer to Station 21 than Station 6 and continuing to use the boat launch and storage facilities at Station 21 are estimated to be approximately 11 million plus \$950,000.00 for the required Rescue Truck. This proposal would continue to use the Boat Launch located at Station 21. It is important to note that this option would also involve maintenance costs on Station 21 in order to continue to use the existing building to house the boat, the Foam Truck and Fan Unit

Of all the reasonable options within Fire Rescue Service's current strategic and financial constraints, the repurposing of Station 21 is the most cost-effective option for use as a fully-staffed River Rescue facility with a secondary use as a Rescue Truck backup deployment and to house specialized equipment at the river's edge.

## **Social**

While public response to the repurposing proposal has been mixed, the public consultation process both in the Spring of 2012 and since the direction given by the Community Services Committee of August 20, 2012 have continued to identify community concerns about neighborhood nuisance, additional noise, additional traffic and concerns about safety.

The consultant's Site Location Study compares the location similarities between Station 21 and Station 3 (University Station). Both are on similar local roadways and require travel of at least a block and a half to reach an arterial. Both are flanked by low density residential development and children's play areas. Station 3 has 10 times the number of events as are projected for Station 21 and Fire Rescue Services has not received any complaints about its operation.

The consultant's Site Location Study recommends that a noise measurement and modeling study be done prior to changes to Station 21 are put in place. This will provide a base line against which to provide a reference point for any further discussions.

### **Institutional Constraints**

Fire Rescue Services recommends that the risks created by the 10 to 15 minute delay inherent in the current River Rescue service delivery model must be addressed.

However, in order to place a 24/7 River Rescue crew at Station 21 additional functions must be added to fully utilize the operational resource. Fire Rescue Services recommends that retaining the Foam Truck and Fan Unit on site and adding the Mobile Command Unit and a Rescue Truck will fully engage the crew.

### **Site Conditions**

Previous studies have indicated that there is soil and water contamination in the general area but at this time there is not a full delineation of the contamination nor a complete understanding on how best to mitigate the problem. The River Valley Bylaw specifically requires that Council pass recommendations similar to those included with this report before a capital budget is established for the project. Therefore this report recommends that further study of this issue not be undertaken until after Council has considered the necessity of the project's location within the River Valley. A full understanding of the scope of the problem and the methods to address it will be undertaken before a capital budget is prepared. Rough order of magnitude suggest that the costs of further study are in the range of \$80,000.00 and clean up could range as high as 1.5 million. However, the contamination is there and is on City land and will have to be addressed regardless of what is done with the land.

### **Public Involvement**

Attachment 5 provides a detailed description of the public involvement processes followed throughout this project.

Of particular note is a meeting held with the Rosedale Community League Executive on May 30, 2013. While concerns continued to be expressed at this meeting regarding the overall impact of the proposal, some discussion took place as to what might be done to mitigate some of the impact arising from the proposed repurposing of Station 21.

### **Issues that can be resolved prior to repurposing Station 21**

A number of measures that Fire Rescue Services could take to reduce the impact of the repurposed station on the community were identified. Fire Rescue Services felt that a number of these measures were well within the ability of the

service to address prior to the application of a development permit. Of these issues, the following possible solutions were identified:

**1. Creating a buffer along the north side of the site.**

Surplus city land along the north edge of the property Station 21 property could be developed as a landscaped buffer area to reduce noise and visual impact to the community. This idea was talked about with the community leading up to the 2007 Development Permit and a concept design was developed. While an actual park design was not completed some funds were set aside for this development and remain available.

**2. Defining the amount of parking required and possibly removing some of the asphalt on the north end of the site.**

The north side of the current Station 21 building is paved and contains room for more parking spaces than the repurposing proposal calls for. Depending on retaining maneuvering room for boat launching purposes this area could be used for additional landscaping. It has also been indicated that there is some local interest in a location for local community garden opportunities with access to water. Detailed site planning for the parking area within the site of Station 21 has not been done but will be completed before a Development Permit is applied for. Fire Rescue is open to the concept of community gardens and the detailed site planning might identify this area as being suitable.

**3. Developing an operational protocol intended to reduce impact on residential neighbors.**

An operating protocol could be developed to take a number of steps to organize outdoor activities on the site towards the south side of the building, include a designated smoking area, among other functions. This operating protocol might also address issues such as the use of intercoms that are anticipated to create noise.

**4. Use of the Boat Launch by other civic agencies.**

Another protocol could be developed to ensure that use of the boat launch by other civic agencies is restricted to emergencies training and other uses with approval and work directly related to mandated civic responsibilities.

**5. Restricting use of lights and sirens on emergency vehicles**

Building on an operating protocol for noise and disturbance on the site itself, further protocols can be developed to restrict the use of lights and sirens only to instances where the Highway Traffic Act must be contravened in order to respond to an emergency dependant on the City of Edmonton's Law Branch review and approval.

**6. Development of a baseline traffic study on 101 Street**

In order to measure changing traffic patterns and the impact emergency vehicles have on the community of Rosedale, particularly 101 Street, a baseline traffic



study of current traffic frequencies and patterns could be performed. This will allow for issues to be identified and appropriate solutions to be developed.

### **Issues unlikely to be mitigated as part of the repurposing**

Of all the possible mitigating measures discussed with Fire Rescue Services, only one recommended measure was considered unlikely to be explored.

#### **1. Restricting size of crew and number of events.**

While Fire Rescue Services understands the community's concern that the functions of Station 21 might grow in the future, there is no practical way to place a limit on the number of events in a year that Station 21 could respond to. Fire Rescue Services does not limit the number of service calls of any of its emergency response services, and thinks it unwise to apply such a limitation here.

## **Conclusion**

The mandate of Fire Rescue Services is to provide the most efficient, effective municipal services possible to ensure the safety of the City of Edmonton. As Edmonton grows, the service must identify where improvements can be made to ensure operations continue to meet the highest standards of public safety in an ever-evolving city. However, this must be done within reasonable strategic and financial constraints. In this case, the city has evolved to a point where Fire Rescue Services has identified a compelling need to reduce what are unacceptable response times for incidents on the North Saskatchewan River, a need that the service anticipates will become increasingly important to address in the coming years.

Through both qualitative and quantitative examination, Fire Rescue Services has determined that repurposing Station 21 to house a permanent River Rescue crew best satisfies the service's highest-level public safety mandate. Assigning the secondary responsibility of acting as a backup Rescue Truck deployment to the downtown core and housing specialty vehicles on the site allows for further city-wide service improvements and satisfies the need to be efficient and effective with the public dollars that fund the service.

Fire Rescue Services understands the effect that repurposing Station 21 will have on the neighborhood of Rosedale and is confident that any issues can be largely mitigated. Through a wide-ranging engagement with the neighborhood, an understanding of the history of Fire Rescue Services in the community and empirical studies of the site and area, the issues have been identified and the service is prepared to implement solutions to address them as best as possible. Fire Rescue Services prides itself on being a seamless part of the communities they exist in and, more importantly, a good neighbor. The Service is confident it

will be able to continue this track record in Rosedale with an open line of communication and an orientation to ensuring that a permanent River Rescue crew at Station 21 causes negligible impact to the surrounding community.