

**RECEIVED**  
9/18/08

**The Mutual Aid Association of  
the Yonkers Fire Department  
I.A.F.F. Local 628**

**AN ANALYSIS AND REPORT ON  
THE PROPOSED STRUEVER,  
FIDLCO, CAPPELLI PROJECT AND  
ITS IMPACT ON THE YONKERS  
FIRE DEPARTMENT**

September 17, 2008

## SUMMARY

- The Yonkers Fire Department currently consists of 18 Companies staffed each tour with 54 Firefighters, 18 Company Officers, 2 Battalion Chiefs, 1 Safety Officer, 2 Battalion Aide FF's, & 1 Fire Investigations FF. **(See Table 1)**
  
- With the addition of the Truck Company associated with the Ridge Hill Development, the Yonkers Fire Department will consist of 19 Companies staffed each tour with 57 Firefighters, 19 Company Officers, 2 Battalion Chiefs, 1 Safety Officer, 2 Battalion Aide FF's, & 1 Fire Investigations FF. **(See Table 2)**
  
- The SFC project's proposed increase of 2 Companies to the YFD to mitigate the impacts of the SFC project would provide the YFD with a total of 21 Companies staffed each tour with 63 Firefighters, 21 Company Officers, 2 Battalion Chiefs, 1 Safety Officer, 2 Battalion Aide FF's, & 1 Fire Investigations FF. **(See Table 3)**
  
- Local 628 proposes that in order to provide fire protection for the SFC project, without jeopardizing safety and the Departments ability to adequately respond to fires and other emergencies city-wide, the City and the Fire Department need to take the following actions:
  - 1) replace the 2 companies that the Department is currently short,
  - 2) implement the 1 Ladder Company proposed under the Ridge Hill project,
  - 3) increase the YFD by 1 additional Company, and
  - 4) increase the staffing of 9 of the Companies in the SFC projects response area from 3 Firefighters and 1 Officer to 4 Firefighters and 1 Officer
    - This would result in a total of 22 Companies staffed each tour with 75 Firefighters, 22 Company Officers, 2 Battalion Chiefs, 1 Safety Officer, 2 Battalion Aide FF's, & 1 Fire Investigations FF. **(See Table 4)**
    - This would provide sufficient personnel and equipment to respond to a high-rise fire with 11 Companies staffed each tour with a total of 43 Firefighters, 11 Company Officers, 2 Battalion Chiefs, 1 Safety Officer, 2 Battalion Aide FF's, & 1 Fire Investigations FF. **(See Table 5)**
    - This would also provide the Yonkers Fire Department with sufficient available units to respond to additional alarms at the scene of the high-rise fire or to provide fire protection for the rest of the City with 11 Companies staffed each tour with 33 Firefighters and 11 Company Officers. **(See Table 5)**. Note that unless additional Chiefs and Officers were re-called to duty, other Company Officers would be required to assume the functions of Incident Commander and Safety Officer.

## A Brief (recent) History of the Yonkers Fire Department<sup>1</sup>

Prior to 1978, the Yonkers Fire Department was comprised of a total of 20 companies:

- 13 Engine Companies
  - E-302, E-303, E-304, E-305, E-306, E-307, E-308, E-309, E-310, E-311, E-312, E-313, E-314, and
- 7 Truck Companies
  - TL-71, L-72, L-73, L-74, TL-75, L-76, L-70

In 1980, Fire Station 2 on Vineyard Avenue was closed due to the structural condition of the building. Engine Company 302 was relocated to Station 9 and Engine Company 305 was relocated to Station 1.

Due to a fiscal crisis in 1982, Engines 302, 305, 311 and Ladder 76 were disbanded. In June 1983, Engine 302 and 311 were reactivated, however one month later they were disbanded once again. 1984 saw the reactivation of Engine Company 311.

On June 18, 1992 a Hazardous Materials unit designated as Squad 1 was commissioned..

On March 6, 2000 Squad 1 was decommissioned and replaced by Rescue Company # 1.

The Yonkers Fire Department has never fully recovered from the cuts made to the Department during the financial crisis of 1982 and is still short 2 of the 4 Companies that were cut.

As of today the Yonkers Fire Department is comprised of a total of only 18 Companies:

- 11 Engine Companies
  - E-303, E-304, E-306, E-307, E-308, E-309, E-310, E-311, E-312, E-313, E-314, and
- 7 Truck Companies
  - Rescue-1, TL-71, L-72, L-73, L-74, TL-75, L-70
- The current complement of 18 Companies are staffed each tour with 54 Firefighters, 18 Company Officers, 2 Battalion Chiefs, 1 Safety Officer, 2 Battalion Aide FF's, and 1 Fire Investigations FF.

---

<sup>1</sup> <http://www.yfd.org/history.htm>

**CURRENT (09/2008) YONKERS FIRE DEPARTMENT MANPOWER AND PERSONNEL**

Station House	Apparatus	Firefighters	Lt's/Cptn's	Chiefs
Station 1	Tower Ladder	3	1	0
	Rescue	3	1	0
	Safety	0	1	0
Station 3	Engine	3	1	0
	Battalion	1	0	1
Station 4	Ladder	3	1	0
	Engine	3	1	0
Station 6	Engine	3	1	0
Station 8	Engine	3	1	0
Station 9	Ladder	3	1	0
	Engine	3	1	0
Station 10	Engine	3	1	0
Station 11	Engine Squad	3	1	0
Station 12	Tower Ladder	3	1	0
	Engine	3	1	0
	Battalion	1	0	1
Station 13	Ladder	3	1	0
	Engine	3	1	0
Station 14	Ladder	3	1	0
	Engine	3	1	0
Station 7	Engine	3	1	0
	Arson	1	0	0
<b>Totals</b>		<b>57</b>	<b>19</b>	<b>2</b>

12 Stations containing:

- 11 Engine Companies
- 6 Ladder Companies
- 1 Rescue Company
- 1 Arson Unit
- 1 Safety Car
- 2 Battalion Cars

TABLE 1

**CURRENT (09/2008) YONKERS FIRE DEPARTMENT MANPOWER AND PERSONNEL**

Response to 2nd Alarm of Fire in Station 4's District and the resulting effect on the YFD's capability to provide additional Fire & Emergency Protection with the remaining units that are not called to the scene of the 2nd alarm fire

Station House	Apparatus	Firefighters	Lt's/Cptn's	Chiefs
Station 4	Ladder	3	1	0
	Engine	3	1	0
Station 1	Tower Ladder	3	1	0
	Rescue	3	1	0
	Safety	0	1	0
Station 3	Engine	3	1	0
	Battalion	1	0	1
Station 6	Engine	3	1	0
Station 10	Engine	3	1	0
Station 7	Engine	3	1	0
	Arson	1	0	0
<b>1st Alarm Response</b>		<b>26</b>	<b>9</b>	<b>1</b>

Station 8	Engine	3	1	0
Station 9	Ladder	3	1	0
	Engine	3	1	0
Station 12	Battalion	1	0	1
<b>2nd Alarm Response</b>		<b>10</b>	<b>3</b>	<b>1</b>

<b>Total 1st &amp; 2nd Alarms</b>		<b>36</b>	<b>12</b>	<b>2</b>
-----------------------------------	--	-----------	-----------	----------

Leaving the following companies to respond to additional alarms or other emergency situations in the City

Station 11	Engine Squad	3	1	0
------------	--------------	---	---	---

Station 12	Tower Ladder	3	1	0
	Engine	3	1	0

Station 13	Ladder	3	1	0
	Engine	3	1	0

Station 14	Ladder	3	1	0
	Engine	3	1	0

Remaining Personnel Available  
available for the rest of the City  
when there is a 2nd Alarm Response  
required in Station 4's District

	21	7	0
--	----	---	---

TABLE 1-A

**YONKERS FIRE DEPARTMENT MANPOWER AND PERSONNEL  
UPON IMPLEMENTATION OF RIDGE HILL LADDER COMPANY**

Station House	Apparatus	Firefighters	Lt's/Cptn's	Chiefs
Station 1	Tower Ladder	3	1	0
	Rescue	3	1	0
	Safety	0	1	0
Station 3	Engine	3	1	0
	Battalion	1	0	1
Station 4	Ladder	3	1	0
	Engine	3	1	0
Station 6	Engine	3	1	0
Station 8	Engine	3	1	0
Station 9	Ladder	3	1	0
	Engine	3	1	0
Station 10	Engine	3	1	0
	Ladder RIDGE	3	1	0
Station 11	Engine Squad	3	1	0
Station 12	Tower Ladder	3	1	0
	Engine	3	1	0
	Battalion	1	0	1
Station 13	Ladder	3	1	0
	Engine	3	1	0
Station 14	Ladder	3	1	0
	Engine	3	1	0
Station 7	Engine	3	1	0
	Arson	1	0	0
<b>Totals</b>		<b>60</b>	<b>20</b>	<b>2</b>

12 Stations containing:

- 11 Engine Companies
- 7 Ladder Companies
- 1 Rescue Company
- 1 Arson Unit
- 1 Safety Car
- 2 Battalion Cars

TABLE 2

**YONKERS FIRE DEPARTMENT MANPOWER AND PERSONNEL  
SFC's PROPOSED STAFFING**

Station House	Apparatus	Firefighters	Lt's/Cptn's	Chiefs	Increased FF	Increased Off
Station 1	Tower Ladder	3	1	0	0	0
	Rescue	3	1	0	0	0
	Engine SFC	3	1	0	3	1
	Safety	0	1	0	0	0
Station 3	Engine	3	1	0	0	0
	Battalion	1	0	1	0	0
	Ladder SFC	3	1	0	3	1
Station 4	Ladder	3	1	0	0	0
	Engine	3	1	0	0	0
Station 6	Engine	3	1	0	0	0
Station 8	Engine	3	1	0	0	0
Station 9	Ladder	3	1	0	0	0
	Engine	3	1	0	0	0
Station 10	Engine	3	1	0	0	0
Station 11	Engine	3	1	0	0	0
Station 12	Tower Ladder	3	1	0	0	0
	Engine	3	1	0	0	0
	Battalion	1	0	1	0	0
Station 13	Ladder	3	1	0	0	0
	Engine	3	1	0	0	0
Station 14	Ladder	3	1	0	0	0
	Engine	3	1	0	0	0
Station 7	Engine	3	1	0	0	0
	Arson	1	0	0	0	0
<b>Totals</b>		<b>63</b>	<b>21</b>	<b>2</b>	<b>6</b>	<b>2</b>

TABLE 3

**YONKERS FIRE DEPARTMENT MANPOWER AND PERSONNEL  
LOCAL 628's REQUESTED MINIMUM STAFFING**

Station House	Apparatus	Firefighters	Lt's/Cptn's	Chiefs	Increased FF	Increased Off
Station 1	Tower Ladder	4	1	0	1	0
	Rescue	4	1	0	1	0
	Engine SFC	4	1	0	4	1
	Safety	0	1	0	0	0
Station 3	Engine	4	1	0	1	0
	Battalion	1	0	1	0	0
	Ladder SFC	4	1	0	4	1
Station 4	Ladder	4	1	0	1	0
	Engine	4	1	0	1	0
Station 6	Engine	4	1	0	1	0
Station 8	Engine	4	1	0	1	0
Station 9	Ladder	3	1	0	0	0
	Engine	3	1	0	0	0
Station 10	Engine	3	1	0	0	0
	Ladder RIDGE	3	1	0	0	1
Station 11	Engine	3	1	0	0	0
	Rescue SFC	3	1	0	4	1
Station 12	Tower Ladder	3	1	0	0	0
	Engine	3	1	0	0	0
	Battalion	1	0	1	0	0
Station 13	Ladder	3	1	0	0	0
	Engine	3	1	0	0	0
Station 14	Ladder	3	1	0	0	0
	Engine	3	1	0	0	0
Station 7	Engine	3	1	0	0	0
	Arson	1	0	0	0	0
<b>Totals</b>		<b>78</b>	<b>23</b>	<b>2</b>	<b>19</b>	<b>4</b>

TABLE 4



**YONKERS FIRE DEPARTMENT MANPOWER AND PERSONNEL  
LOCAL 628's REQUESTED MINIMUM STAFFING  
FIRST DUE ASSIGNMENT FOR HIGH RISES**

Station House	Apparatus	Firefighters	Lt's/Cptn's	Chiefs
Station 1	Tower Ladder	4	1	0
	Rescue	4	1	0
	Engine SFC	4	1	0
	Safety	0	1	0
Station 3	Engine	4	1	0
	Battalion	1	0	1
	Ladder SFC	4	1	0
Station 4	Ladder	4	1	0
	Engine	4	1	0
Station 6	Engine	4	1	0
Station 8	Engine	4	1	0
Station 9	Ladder	3	1	0
	Engine	3	1	0
<b>Total Manpower 1st Due</b>		<b>43</b>	<b>12</b>	<b>1</b>

**MANPOWER AVAILABLE FOR REST OF THE CITY**

Station 10	Engine	3	1	0
	Ladder RIDGE	3	1	0
Station 11	Engine	3	1	0
	Rescue SFC	3	1	0
Station 12	Tower Ladder	3	1	0
	Engine	3	1	0
	Battalion	1	0	1
Station 13	Ladder	3	1	0
	Engine	3	1	0
Station 14	Ladder	3	1	0
	Engine	3	1	0
Station 7	Engine	3	1	0
	Arson	1	0	0
<b>Available for Rest of City</b>		<b>35</b>	<b>11</b>	<b>1</b>
<b>TOTAL CITY WIDE</b>		<b>78</b>	<b>23</b>	<b>2</b>

TABLE 5

**YONKERS FIRE DEPARTMENT MANPOWER AND PERSONNEL  
LOCAL 628's REQUESTED MINIMUM STAFFING  
FIRST DUE ASSIGNMENT FOR HIGH RISES**

**FDNY HIGH-RISE RESPONSE**

Station	Apparatus	Firefighters	Lt's/Cptn's	Chiefs	Apparatus	FF's	Officers
Station 1	Tower Ladder	4	1	0	4 Engines	20	4
	Rescue	4	1	0	4 Ladders	20	4
	Engine SFC	4	1	0	3 Battalion	3	3
	Safety	0	1	0	1 Rescue	5	1
Station 3	Engine	4	1	0	1 D/C	1	1
	Battalion	1	0	1	1 Squad	5	1
	Ladder SFC	4	1	0	1 FAST	5	1
Station 4	Ladder	4	1	0	1 CFR-D	5	1
	Engine	4	1	0	1 SOC	1	1
Station 6	Engine	4	1	0	1 Safety Ba	1	1
	Engine	4	1	0			
Station 8	Engine	4	1	0			
	Engine	4	1	0			
Station 9	Ladder	3	1	0			
	Engine	3	1	0			
<b>Total Manpower 1st Due</b>		<b>43</b>	<b>12</b>	<b>1</b>	<b>FDNY</b>	<b>66</b>	<b>18</b>

**MANPOWER AVAILABLE FOR REST OF THE CITY**

Station 10	Engine	3	1	0
	Ladder RIDGE	3	1	0
Station 11	Engine	3	1	0
	Rescue SFC	3	1	0
Station 12	Tower Ladder	3	1	0
	Engine	3	1	0
	Battalion	1	0	1
Station 13	Ladder	3	1	0
	Engine	3	1	0
Station 14	Ladder	3	1	0
	Engine	3	1	0
Station 7	Engine	3	1	0
	Arson	1	0	0
<b>Available for Rest of City</b>		<b>35</b>	<b>11</b>	<b>1</b>
<b>TOTAL CITY WIDE</b>		<b>78</b>	<b>23</b>	<b>2</b>

TABLE 6

Fidelco Cappelli (SFC) projects should not be approved by the Yonkers City Council unless SFC and the City of Yonkers agree to increase the Yonkers Fire Department's minimum number of line firefighters on duty at any given time from its current level of 57 firefighters in 19 companies to 78 firefighters in 22 companies. This would bring the firefighting personnel and equipment of the Yonkers Fire Department to a level which Local 628 feels is minimally acceptable. It is the position of the Yonkers Firefighters (Local 628) that the proposed Struever given the nature of the proposed SFC project with its associated high hazard occupancies, the increased workload and types of emergency, rescue, and firefighting operations that the SFC project will create, as well as the cumulative effects that past and current development have had on the Yonkers Fire Department.

It should be noted that the above minimally acceptable staffing request of Local 628 includes the 3 additional firefighters per tour (in 1 additional "RIDGE" ladder company) that has already been determined to be necessary (but not yet implemented) as a result of the Environmental Impact Study for the in-construction Ridge Hill project

Accordingly, in addition to this additional Ridge Hill personnel and ladder company, Local 628 believes that to effectively deal with the currently proposed SFC project and the other completed or in-construction projects throughout the City that the City must first replace the two (2) Companies that were previously cut from the Department and never replaced and that SFC should be required to provide funding for another one (1) new Company and one (1) additional firefighter per tour for each of the nine (9) responding companies in the SFC response area.

In its analysis to arrive at the above minimally acceptable levels of personnel and equipment, Local 628 has not included or projected the additional resources that will be required for any additional projects on Alexander Street or anywhere else in the City. Accordingly, none of Local 628's minimally acceptable levels of manpower and equipment has been allocated to the Alexander Street or other similar potential development projects.

It is the position of the Yonkers Firefighters (Local 628) that the proposed Struever Fidelco Cappelli (SFC) projects should not be approved by the Yonkers City Council unless SFC and the City of Yonkers agree to increase the Yonkers Fire Department's minimum number of line firefighters on duty at any given time from its current level of 57 firefighters in 19 companies to 78 firefighters in 22 companies. This would bring the firefighting personnel and equipment of the Yonkers Fire Department to a level which Local 628 feels is minimally acceptable given the nature of the proposed SFC project with its associated high hazard occupancies, the increased workload and types of emergency, rescue, and firefighting operations that the SFC project will create, as well as the cumulative effects that past and current development have had on the Yonkers Fire Department.

It should be noted that the above minimally acceptable staffing request of Local 628 includes the 3 additional firefighters per tour (in 1 additional "RIDGE" ladder company) that has already been determined to be necessary (but not yet implemented) as a result of the Environmental Impact Study for the in-construction Ridge Hill project

Accordingly, in addition to this additional Ridge Hill personnel and ladder company, Local 628 believes that to effectively deal with the currently proposed SFC project and the other completed or in-construction projects throughout the City that the City must first replace the two (2) Companies that were previously cut from the Department and never replaced and that SFC should be required to provide funding for another one (1) new Company and one (1) additional firefighter per tour for each of the nine (9) responding companies in the SFC response area.

In its analysis to arrive at the above minimally acceptable levels of personnel and equipment, Local 628 has not included or projected the additional resources that will be required for any additional projects on Alexander Street or anywhere else in the City. Accordingly, none of Local 628's minimally acceptable levels of manpower and equipment has been allocated to the Alexander Street or other similar potential development projects.

Shopping Center, Marriot Extended Living facility on Riverdale Avenue, Nursing Home Facility at St. John's Riverside Hospital, expansion of St Joseph's Medical Center and Nursing Home, etc. In addition to the "commercial development" pointed out in the Ridge Hill DEIS, the City of Yonkers in the last decade or so has seen an explosion of residential development which has resulted in single and multiple family homes having been built on almost every available parcel of vacant land in the City. The residential building boom has been so extensive that the City of Yonkers has been compelled to enact legislation designed to prevent the demolition of existing modest-sized homes on large lots so that builders can replace them with "McMansions" or several larger homes on the same lots.

While all of the aforementioned development has taken place, the staffing of the Yonkers Fire Department has not increased by even one (1) firefighter despite the increased workload that has resulted from that development. Indeed, for several years now Yonkers Fire Commissioner Anthony Pagano has been stating that the Yonkers Fire Department is understaffed by at least two (2) companies that were decommissioned during the fiscal crisis of the early 1980's. Commissioner Pagano has diligently appeared before the Yonkers City Council at numerous Budget Hearings to plead that the Yonkers Fire Department be brought back to its full strength by replacing those two (2) companies.

At the present time the City of Yonkers is considering a development plan of immense proportions; perhaps the single largest development project in the history of New York State, excluding New York City. Incredulously, SFC indicates in the DEIS for the SFC project that the addition of two (2) companies to the YFD will be sufficient to mitigate the impacts that the project will have on the YFD.

The question begs to be asked: If the Yonkers Fire Department was already below acceptable levels prior to the recent building and development boom, and Commissioner Pagano's repeated requests to bring back the two (2) cut companies has heretofore not been granted, and no increases in personnel have been made to the Yonkers Fire Department since the early 1980's, then would the proposed addition of two (2) new

companies bring the Yonkers Fire Department to acceptable levels to allow it to safely provide fire, rescue and emergency protection to the City as a whole and the proposed SFC project with its associated sixty (60) story residential towers, ballpark, and other buildings/facilities? Clearly, the answer to that question is a resounding NO.

### A DESCRIPTION OF THE SFC PROJECT<sup>3</sup>

The overall proposed development program for the SFC Project includes approximately:

- 1,386 housing units,
- 473,000 square feet of retail space,
- 90,000 square feet of restaurant space,
- 475,000 square feet of office space,
- 80,000 square feet of cinema space,
- 150 room hotel (approximately 75,000 square feet),
- 49,000 square feet for a new City of Yonkers Fire Department Headquarters,
- 6,600 parking spaces,
- 6,500-seat ballpark,
- approximately 1,200 linear feet of Saw Mill River daylighting
  - 400 linear feet at River Park Center, and
  - 800 linear feet at Larkin Plaza

The SFC development program is divided into four separate and distinct Project sites referred to as: a) Palisades Point; b) River Park Center; c) Cacace Center; and d) Larkin Plaza.

- a) **Palisades Point** is comprised of two parcels totaling 5.80 acres bounded by the Hudson River to the west and the Metro-North Railroad Hudson Line tracks to the east, and is situated nominally between Prospect Street to the north and Saint Mary Street to the south. The length of the Palisade Point's Hudson River shoreline is approximately 840 feet. The Applicant proposes to

---

<sup>3</sup> Draft Environmental Impact Statement, SFC River Park Center

develop a mixed-use residential development with “neighborhood” retail and/or professional office uses, publicly accessible open space along the Hudson River, an extension of the existing Hudson River Esplanade, and on-site structured and at-grade parking, including replacement parking for Scrimshaw House, a condominium development to the north of Palisades Point.

More specifically, Palisades Point includes the following principal components:

- Approximately 436 residential units in (2) two 25-story towers. Each unit averages 1,300 square feet for a total of 567,163 square feet. The projected unit mix will be as follows:
  - 25% 1-bedroom units
  - 50% 2-bedroom units
  - 25% 3-bedroom units
- Approximately 670 parking spaces in two (2) five-story parking garages located adjacent to each tower building (this includes replacement for 184 existing surface parking spaces that currently serve the adjacent Scrimshaw House)
- Approximately 8,700 sf of retail and/or professional office space
- 136,000 sf of publicly accessible open space along the Hudson River with an extension of the Hudson River Esplanade, cantilevered boardwalk, canoe and kayak boat launch, and 57 on-street parking spaces located on the street between the two proposed buildings and in a proposed parking area located at the southern portion of the site
- New road and pedestrian access to the site with a public bridge crossing the Metro-North tracks from Prospect Street to the proposed development

b) **River Park Center** consists of three components: a mixed-use residential and commercial component on the approximately 13 acre site consisting of the area commonly known as “Chicken Island” and certain surrounding parcels; the redevelopment of an approximately 2.5 acre portion of the City Hall and Government Center Garage site and an adjoining parcel (sometimes called “Government Center”); and the redevelopment of a site at the northwest corner of Elm Street and Palisade Avenue (sometimes called “Palisade Avenue Office Building”).

Mixed-use residential and commercial development is proposed on the 13.14-acre site that includes the 9.2 acre area known locally as Chicken Island and adjacent properties, and is bounded by Nepperhan Avenue to the south, Elm Street to the north and east, and New Main Street to the west. Included as an integral part of this development is the daylighting of approximately 400 linear feet of the Saw Mill River (from School Street to Henry Herz Street), and the provision of publicly accessible, landscaped open space along approximately 1,100 linear feet of the river as it traverses the site.

Government Center is a 2.5-acre portion of the City Hall site and the adjoining property currently owned by the Salvation Army, situated on the northwest corner of Nepperhan Avenue and New Main Street. It currently includes a 550 space municipal parking garage, the office building known as 87 Nepperhan Avenue and the Salvation Army building located at 110 New Main Street. The Applicant proposes to redevelop Government Center as a mixed-use/parking development comprised of 20,000 sf of street level retail/restaurant space (fronting on New Main Street), 21,000 square feet for the Salvation Army Headquarters (located in a 3-story space at the south end of the proposed building), and a parking structure containing approximately 1,083 public parking spaces and 473 private parking spaces to serve one of the two residential towers to be constructed by the Applicant at River Park Center.



Palisade Avenue Office Building is located on a 0.86-acre site situated on the northwest corner of Elm Street and Palisade Avenue. The northern, western, and eastern edges of Palisade Avenue Office Building parcel adjoin adjacent properties that form the remainder of the urban block. The Applicant proposes to redevelop this parcel as an office building comprised of approximately 225,000 sf of office space and an approximately 450 space parking structure.

The program for the three sites that comprise River Park Center is:

Approximately 465,000 sf of retail

- Approximately 90,000 sf of restaurants
- Approximately 325,000 sf of office space
- Approximately 80,000 sf for movie theaters (total of 2,000 seats)
- Approximately 950 residential units in **two (FIFTY STORY) towers (ON TOP OF AN ELEVEN STORY BASE)**. Each unit is anticipated to average 1,210 square feet for a total of 1,150,200 square feet of new residences:

- Approximately 25% 1-bedroom units
- Approximately 50% 2-bedroom units
- Approximately 25% 3-bedroom units
- An approximately 6,500-seat ballpark

c) **Cacace Center** is a 4.3-acre site bounded by New Main Street on the east, South Broadway on the west and Nepperhan Avenue on the north. The southern edge of the site adjoins adjacent City-owned properties that form the remainder of the block. The Applicant proposes to develop Cacace Center as a mixed-use development comprised of office space, an approximately 150 room hotel, a new City of Yonkers Fire Station (replacing the existing Fire Department Headquarters at 5-7 New School Street), and an

approximately 1,349 space parking structure containing 1,349 public spaces and 0 private spaces.

The program for Cacace Center is:

- Approximately 150 room hotel (approximately 75,000 square feet)
- Approximately 50,000 square foot Fire Department Headquarters and Station (new replacement for existing Fire Department Headquarters)
- Approximately 150,000 square feet of office space (a portion of which will replace municipal office space at the existing City of Yonkers Annex Office Building at 87 Nepperhan Avenue)
- Approximately 1,349 space parking garage all of which will be public spaces

d) **Larkin Plaza** is a 1.9-acre site bounded by Dock Street to the north, Main Street to the south, Buena Vista Avenue to the west and Warburton Avenue to the east. The City is considering making public improvements at Larkin Plaza, including the daylighting of the Saw Mill River and the creation of a new public park (expansion of the existing public park at Larkin Plaza). If the City makes the improvements, the cost is anticipated to be defrayed with grants from the State and potentially the County and the federal government. For the City's benefit, the Applicant has prepared a concept plan for improvements to Larkin Plaza, which shows:

- Daylighting of 800 linear feet of the Saw Mill River with pedestrian "riverwalk" through the site.
- Expansion of the existing public park, together with landscaping and other related improvements (requires the construction of replacement parking for 120 public parking spaces either adjacent to Larkin Plaza or at a nearby off-site location).

The improvements at Larkin Plaza are not a part of the Project proposed to be developed by the Applicant. However, because the City is considering

making the improvements, they constitute a part of the Proposed Action which is the subject of this DEIS.

Although the SFC Project as a whole creates unique impacts to the City of Yonkers and the Yonkers Fire Department, there are several components of the SFC project which will create specific High Risk Hazards that will require the Yonkers Fire Department to provide rescue, emergency, and fire protection to. Some of these High Risk Hazards are:

- **1,386 residential housing units situated in:**
  - **two FIFTY STORY residential high-rise towers ON TOP OF AN ELEVEN STORY BASE and separated by a 6,500-seat ballpark**
  - **two TWENTY FIVE STORY residential high-rise towers on the banks of the Hudson River and just North of a century old Sugar Refinery facility that is one of the highest hazard risks in the City**
- **6,500-seat ballpark**
- **150 room hotel (approximately 75,000 square feet),**
- **473,000 square feet of retail space,**
- **90,000 square feet of restaurant space,**
- **475,000 square feet of office space,**
- **80,000 square feet of cinema space,**
- **6,600 parking spaces, most of which will be in multi-story structures**
- **6,500-seat ballpark,**
- **approximately 1,200 linear feet of Saw Mill River daylighting**
  - **400 linear feet at River Park Center, and**
  - **800 linear feet at Larkin Plaza**

These specific High Hazard Risks will also substantially increase the population of the City both during the day and at night, and will result in a substantial increase in traffic and congestion in an already difficult area of the City to traverse and respond to fires, rescues, and other emergencies.

Local 628 is very concerned about the ability of the Yonkers Fire Department to be able to safely and adequately respond to fire, rescues, and other emergencies at the new

residential high-rise towers that are proposed for the SFC project without jeopardizing the ability to also provide an acceptable level of protection to the rest of the City.

In coming to its conclusions as to the specific number of additional firefighters that will be needed to respond to calls for service in the SFC project Local 628 has analyzed the Standard Operating Procedures (SOP) for Fire Department of the City of New York (FDNY) as they relate to FDNY responses to both residential and commercial high-rise fires. Local 628 also analyzed several national standards including the National Fire Service Incident Management (NFSIM), the National Fire Protection Association (NFPA), the Federal Emergency Management Agency (FEMA), the United States Fire Administration (USFA) as well as other non-fire related organizations such as the Insurance Service Office (ISO) and the International City Managers Association (ICMA). Based on the standards, data, and other information from the above cited sources, Local 628 believes that the requested increase to a total of 78 line firefighters on duty in 22 companies is the minimum acceptable level that should be contemplated for the SFC project.

---

The need for significantly larger firefighting resources to battle fires and other emergencies in high-rise buildings as compared to low-rise structures is universally accepted in the fire service industry and is documented in just about every basic and advanced fire services text and manual. Indeed, an internal Yonkers Fire Department white paper entitled "High-Rise Firefighting" states that according to the New York State Fire Prevention and Building Code a high-rise is defined as a building over seventy (75') feet tall. The white paper goes on to state that the Yonkers Fire Department ladders are capable of reaching approximately 70 feet, and therefore for Yonkers Fire Department purposes, any building exceeding the reach of seventy five (75') feet is considered a high-rise.

The white paper also acknowledges that the Yonkers Fire Department has been dealing with high-rises for many years, and rhetorically asks why there is now such a concern regarding fire protection as it relates to new high-rises which have not yet been completed. The white paper points to three (3) major areas of concern in relation to high-

rise firefighting in Yonkers today and going forward, in contrast to the past. Those areas of concern are:

- 1) The overall number of high-rises planned for the City
- 2) The significantly taller heights of these planned high-rises in the City
- 3) New methods of construction and fire protection systems in these planned high-rises

The white paper points to several general principles of high-rise firefighting:

- 1) The higher a firefighter must climb to reach and extinguish a fire:
  - a. The longer it will take to get there and thus the larger the fire will be
  - b. The more exhausted arriving firefighters will be before even beginning to attack the fire
  - c. The longer it will take to evacuate occupants and/or firefighters
  - d. The less likely fire department ladders will be able to be used for ventilation, rescue, or exterior attack
  - e. The greater the likelihood of water supply problems

The white paper also points out that the greater the number of floors which are potentially exposed above a fire, the larger number of people who will be in danger and possibly in need of rescue. And related to this, the white paper acknowledges that the overwhelming percentage of fire fatalities is from smoke inhalation in an area remote to the fire.

The white paper concludes with an acknowledgment that as the units of high-rise buildings in any city increases, there will be a commensurate need for additional firefighters. Unfortunately, the white paper did not analyze the specific components of the SFC project as it relates to the current staffing of the Yonkers Fire Department and it did not come to any conclusions as to the number of additional firefighters that would be needed to fight fires and other emergencies in the proposed residential high rise towers.

In order to come to any reasonable conclusions about the number of additional firefighters that will be necessary to provide an adequate level of protection for any

specific hazard, it is necessary to refer to nationally recognized standards and procedures for the minimally accepted levels, and then adjust those minimally accepted levels according to the specific needs and conditions of the jurisdiction. In reaching the conclusions made in this report, Local 628 is satisfied that those conclusions are supported by all recognized national standards when taken together with the specific conditions present in the City of Yonkers and the Yonkers Fire Department.

The National Fire Service Incident Management has developed Model Procedures Guide for High-Rise Fire Fighting which provides a scenario-based example of the resource requirements needed at a working High-Rise Fire:

- The hypothetical fire situation illustrates the resources needed for a scenario consisting of:
  - a fire on the 12<sup>th</sup> floor of a high-rise
  - there is potential for fire extension to the 13<sup>th</sup> floor
  - the elevators cannot be used by firefighters
  - ventilation problems exist on two floors
  - rescue/evacuation procedures will be needed
  
- Basic functional organization and resources needed upon recognition of a working fire:
  - 3 Companies 12<sup>th</sup> floor fire attack (12 personnel)
  - 1 Company on the 13<sup>th</sup> floor (4 personnel)
  - 1 Company (divided) for Lobby Control and Base (4 personnel)
  - 1 Company for staging on the 10<sup>th</sup> floor (4 personnel)
  - 2 Companies for Rescue Evacuation (8 personnel)
  - 1 Company for Ventilation (4 personnel)
  - 1 Company for Stairwell Support (4 personnel)
  - 1 FAST Company (4 personnel)
  - 1 Safety Officer and Safety Liaison (2 personnel)
  - 1 Mask Services Company (2 personnel)

- 2 Chief Officers (4 personnel)
- A total of 52 personnel (37 Firefighters and 15 Officers) in 15 fire apparatus would be needed for the initial fire attack for this scenario
- If the fire was not knocked-down with the initial fire attack, and operations were prolonged for any significant period of time, then a commitment of more companies would be necessary to effectively battle the fire. Among the additional resources needed would be:
  - 4 Companies for Relief Cycling (16 personnel)
  - 2 Companies for Stairway Support (8 personnel)
  - 1 Company for Staging (4 personnel)
  - A total of 28 more personnel (21 Firefighters and 7 Officers) would need to respond, in addition to the initial fire attack
- A total of 80 personnel (58 Firefighters and 22 Officers) in 22 fire apparatus would be needed for the above scenario if the initial fire attack was not successful.
- Noted facts for the above scenario:
  - It is generally noted that this is the MINIMUM requirements for a small working fire in a high-rise
  - A 30 minute breathing apparatus cylinder typically is usable for 10 minutes of work. It can take up to 2 to 3 minutes to enter and exit the fire area, leaving as little as 10 minutes of air for fire suppression activities
  - Water usage at serious high-rise fires will result in elevator loss more than 90% of the time
  - It takes one firefighter per two floors of stairway support and one officer per four or five personnel
  - Rehabilitation and Rehydration of firefighters are critical at a high-rise fire

- As a rule, stair shaft systems in high-rise buildings cannot handle the full occupant load simultaneously
- Ventilation and Evacuation Operations are paramount
- Inoperable windows in high-rise building can make ventilation complicated
- Negative-Stack Effect – When the air temperature outside is higher than the temperature inside the building, negative stack effect can occur. This pushes the smoke downward causing the use of breathing apparatus earlier and relocating the staging farther down from the fire floor
- Core Construction Effect – a fire that reaches the plenum area around the center core of a high-rise can be inadvertently pushed by advancing firefighters. These firefighters may be cut off from escaping the fire, which can circle behind them.
- Pre-Incident Planning – High Rise buildings are very different buildings to extinguish a fire in than low-rise buildings. Expensive training is critical so that each firefighter is familiar with each high-rise building and the operation of the life-safety and fire protection systems that they contain.

A review of Local 628's proposed minimally acceptable levels of personnel and equipment would show that it is consistent with the minimum standards used by the National Fire Service Incident Management (NFSIM) Model Procedures Guide for High-Rise Fire Fighting. Local 628 did not mimic the NFSIM Model Procedures Guide, but rather used it as one of several sources that substantiate Local 628's conclusion as to the minimally acceptable levels of personnel and equipment needed as a result of the SFC project. Local 628's analysis also applied the recommended staffing levels of NFPA 1710 and other fire industry standards to modify the numbers of equipment which should respond to a high-rise structure fire as well as the number of firefighters and fire officers that should respond on that equipment.



In arriving at its minimally acceptable levels of personnel and equipment, Local 628 utilized NFPA 1710, the Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Career Fire Departments. For purposes of our analysis, the most critical sections of NFPA 1710 are as follows:

- 1) (5.2.2.1.1) Engine companies shall be staffed with a minimum of four on-duty personnel
- 2) (5.2.2.2.1) Ladder companies shall be staffed with a minimum of four on-duty personnel.
- 3) (5.2.1.2.2) Each company shall be led by an officer who shall be considered a part of the company of four on-duty personnel
- 4) **(5.2.2.1.2) In jurisdictions with tactical hazards, high hazard occupancies, high incident frequencies, geographical restrictions, or other pertinent factors as identified by the authority having jurisdictions, these companies shall be staffed with a minimum of five (engine) or six (ladder) on-duty members.**
- 5) (5.2.3.2.2) The initial full alarm assignment shall provide for a minimum of 16 FF's (including officers). Note: For a working fire, this list does not include a Safety Officer or 2 additional FF's to upgrade the Initial Rapid Intervention Crew (often referred to as 2in-2out)– as required by Federal Law (29CFR1910-134) to the required FAST team.

Note: this manning is based on a structural fire in a typical 2,000 ft<sup>2</sup>, 2 story, single-family occupancy without a basement and with no exposures. (NFPA 1710 A.5.2.3.2.1).

Since the proposed SFC project contains several tactical hazards, numerous high hazard occupancies, and will create a high incident of frequencies, that NFPA 1710 5.2.2.1.2 should apply, and therefore each of the initial full alarm truck companies should be staffed with a minimum of six (6) personnel and each of the initial full alarm engine companies should be staffed with a minimum of five (5) personnel.

The NFPA is not alone in its recommendation that minimum staffing levels be increased in jurisdictions with high hazard occupancies. The Insurance Service Office (ISO) and the International City Managers Association (ICMA) also agree that high hazard occupancies require a larger fire department response with more densely staffed apparatus.

ISO is a New York based advisory organization that serves the property and casualty insurance industry by providing inspection and statistical services and classifies communities from 1, “the best”, to 10, “the worst.” In rating a municipality and its fire department, ISO reviews three major areas: the Fire Department, the water system and communications. More specifically, ISO considers fire department equipment, personnel and staffing levels, and fire alarm facilities when making its recommended rating. The classification rating is used to gauge the ability of a local fire department to respond to fires and as the resulting rating has a direct bearing on the cost of property insurance for every home and building in a community.

ISO recommends that a minimum of five (5) to six (6) personnel should be on every Engine & Ladder Company in a “high risk” area. The proposed SFC project and its ballpark, high-rise residential towers, and other components most certainly fall into this “high risk” category. Yonkers is currently rated at ISO Class 3, but failure to address the minimum staffing requirements of the SFC project and other past development projects will eventually cause Yonkers’ current ISO rating to fall to a Class 4 or lower rating.

The International City Managers Association (ICMA) has published a study that also acknowledges the need for more densely staffed apparatus in high hazard areas. In the Second Edition of *Managing Fire Services*, the ICMA acknowledged that some alarms of fire do require multiple crews and sustained efforts. The published document states that “smaller communities often suffer disproportionately large fire losses because of their apparent inability to maintain sufficient initial attack suppression forces. It is this dilemma of cost versus loss that makes careful evaluation and planning so important.”

The published report concludes that “as firefighting tactics were conducted for comparative purposes, five-person fire suppression companies were judged to be 100 percent effective in their task performance, four-person companies 65 percent effective and three-person companies 38 percent effective; six-person companies are judged 20 percent faster than four-person companies.

Each municipality’s Fire Department must apply the minimal industry standards to their specific jurisdiction’s peculiarities and needs. In assessing the impact of the SFC project on the *Yonkers Fire Department, Local 628 studied the response of the Fire Department of the City of New York* and have presented below the specific responses to both high rise residential and commercial building in New York City.

It is undisputed that the Fire Department of the City of New York (FDNY) is the fire service’s authority when it comes to high-rise buildings and dealing with fires and other emergency situations in and surrounding high-rise buildings. There are approximately 1,200 high-rise office buildings in New York City, with the great majority concentrated in Lower and Midtown Manhattan.<sup>4</sup> In addition to these commercial/office buildings, New York City also contains many hundreds of high-rise residential buildings located mainly in Manhattan, but also throughout the other four boroughs of New York City.

A report of a structure fire in a High Rise Residential Multiple Dwelling in New York City is a 10-77 Signal and a full assignment under a 10-77 Signal will typically bring the

---

<sup>4</sup> New York City Bank Building Fire: Compartmentation vs. Sprinklers, Technical Report Series, Federal Emergency Management Agency, United States Fire Administration, (January 31, 1993) Investigated by J. Gordon Routley, pg. 22.

following FDNY response to the scene of the high-rise residential multiple dwelling structure fire:

- 4 Engine Companies (20 personnel)
- 4 Ladder Companies (24 personnel)
- 3 Battalion Chiefs (6 personnel)
- 1 Rescue Company (6 personnel)
- 1 Deputy Chief (2 personnel)
- 1 Squad Company (6 personnel)
- 1 FAST Company (5 personnel)
- 1 CFR-D Engine Company (5 personnel)
- 1 SOC Battalion (2 personnel)
- 1 Safety Battalion (2 personnel)
- A total of 78 personnel will be dispatched for a 10-77 Signal which is designed to provide sufficient units to manage a medium fire and smoke condition in a High-Rise Residential Multiple Dwelling. However, if the Incident Commander feels additional units are required due to specific conditions of the incident or the type of building (mixed occupancy) then a 10-76 Signal (which is detailed hereafter) should be transmitted, which would have the following additional response:
  - 1 Field Communication Unit ( 2 personnel)
  - 1 Mask Service Unit (2 personnel)
  - 1 High Rise Unit (5 personnel)
  - 1 High Rise Command and Control (Engine) Company (4 personnel)

A Second Alarm of a fire in a High-Rise Residential Multiple Dwelling after the 10-77 Signal will call the response of the following units:

- 4 Engine Companies (20 personnel)
- 2 Ladder Companies (12 personnel)
- 1 Satellite Unit (6 personnel)
- 1 Communication Unit (2 personnel)
- 1 RAC Unit (4 personnel)

- 1 TAC Unit (4 personnel)
- 1 Photo Unit (1 personnel)
- This Second Alarm will dispatch another 49 personnel bringing the total FDNY response for a Second Alarm fire in a High-Rise Residential Multiple Dwelling to 127 personnel.

Each subsequent alarm beyond the Second Alarm will cause response of the following additional units:

- 4 Engine Companies (20 personnel)
- 2 Ladder Companies (12 personnel)
- 2 Battalion Chiefs (4 personnel)
- 1 Additional Deputy Chief (2 personnel)
- 1 Additional Rescue Company (6 personnel)

A report of a structure fire in a High-Rise Commercial Building in New York City is a 10-76 Signal and a full assignment under a 10-76 Signal will typically bring the following FDNY response to the scene of the high-rise structure:

- 4 Engine Companies (20 personnel)
- 4 Ladder Companies (24 personnel)
- 1 Rescue Company (6 personnel)
- 4 Battalion Chiefs (8 personnel)
- 1 Division Chief (2 personnel)
- 1 Field Communication Unit ( 2 personnel)
- 1 Mask Service Unit (2 personnel)
- 1 High Rise Unit (5 personnel)
- 1 High Rise Command and Control (Engine) Company (4 personnel)
- A total of 73 personnel under the Command of a Deputy Chief

A second alarm for a fire in a High-Rise Commercial Building in New York City typically will bring the following additional FDNY response to the scene of the high-rise structure:

- 4 additional Engine Companies (20 personnel)
- 2 additional Ladder Companies (12 personnel)
- 1 additional Rescue Company (6 personnel)
- 1 additional Battalion Chief (2 personnel)
- 1 additional Division Chief (2 personnel)
- 1 additional Engine Company (large volume water supply) (6 personnel)
- The second alarm will typically bring an additional compliment of 51 personnel to the scene, for a total of 121 members under the Command of the Deputy Chief

A third alarm for a fire in a High-Rise Commercial Building in New York City typically will bring the following additional FDNY response to the scene of the high-rise structure:

- 4 additional Engine Companies (20 personnel)
- 1 additional Ladder Company (6 personnel)
- 2 additional Battalion Chiefs (4 personnel)
- 1 Mobile Medical Unit (2 personnel)
- 2 Additional Engine Companies (large volume water supply) (12 personnel)
- The third alarm will typically bring an additional compliment of 42 personnel to the scene, for a total of 168 members under the Command of the Deputy Chief

In addition to the increased personnel that the FDNY sends to High-Rise Residential Multiple Dwellings and High-Rise Commercial Buildings, FDNY also employs several different types of apparatus that the Yonkers Fire Department does not currently have at its disposal. Among the specialized apparatus in FDNY's inventory are seven (7) High-Pressure Pumpers<sup>5</sup> which are used to supply the required handline pressures to standpipe

---

<sup>5</sup> In addition to midtown Manhattan's 34 Engine, the following FDNY engine companies are assigned high-pressure pumpers: 6, 10, and 26 in lower Manhattan; 54 and 65, midtown; and 258, Long Island City, Queens. Three high-pressure pumpers are available as spares.

outlets on the upper floors of the tallest "skyscrapers." The following information regarding FDNY's high-pressure pumpers is adapted from an article in Fire Engineering.<sup>6</sup>

Each FDNY high-pressure pumper is capable of supplying 500 gpm at a pump discharge pressure (PDP) of 700 psi utilizing a third-pump stage. If building fire pumps should completely fail, at least one and perhaps two 2 and ½ -inch handlines with 1 and 1/8 -inch nozzle tips can be placed in service on the upper floors of some of New York City's tallest skyscrapers (requiring PDP of nearly 600 psi). It is important to note that the City of Yonkers does not currently have high-pressure pumpers and thus could not supply adequate PDP to supply standpipes on the upper floors of the SFC towers in the event the on-site fire pumps fail to operate properly.

Due to the inherent dangers involved in employing pressures so high, FDNY has developed specific procedures to be followed once the incident commander orders the use of high-pressure pumping operations. Section 5 of FDNY's Firefighting Procedures, Volume 1, Book 5, "High-Rise Office Buildings" lists the following steps to be taken prior to activation of the third pump stage:

The operation must be supervised by a battalion chief.

- Two engine company chauffeurs must be assigned to the high-pressure pumper--one to operate the pumps and the second to monitor the handheld radio and provide a communications link to the officer in charge due to the high noise levels.
- Only special three-inch, high-pressure hose must be used. All high-pressure hose couplings and other necessary fittings are painted white for identification. They are also noticeably heavier than standard couplings and fittings.
- The high-pressure hose must be attached to a dedicated discharge gate located at the rear or on the side of the pumper opposite the pump control panel.

---

<sup>6</sup> Fire Engineering, Andrew A. Fredericks, February 1, 1996

- The high-pressure hose must be tethered to a "substantial" object to prevent violent whipping should it fail.
- All personnel must remain at least 50 feet from the high-pressure hose, and this area should be cordoned off with rope or barrier tape.

Despite NFPA 14 requirements for the use of "extra-heavy pattern" fittings on standpipe systems in buildings where pressures will exceed 175 psi, the potential for piping or riser failure is so great that an additional FDNY policy requires that all civilian and fire department personnel evacuate the stairway containing the high-pressure riser. Firefighters are not to enter this stairway unless absolutely necessary and are to exit as quickly as possible. The violent failure of a riser subjected to a pressure of several hundred pounds per square inch would no doubt be lethal to anyone nearby.

Some have argued that the FDNY response to a report of a high-rise structure fire is extraordinarily high and is only that large because of the vast number of firefighting personnel that New York City has on duty at any given time. There may be some small truth to that argument, but there is no doubt that FDNY is the "expert" when it comes to high-rise structure fires, and New York City undoubtedly has the same financial constraints that every other major city has. Certainly, New York City would not expend the monies required to staff the FDNY to levels that allow such responses to high-rise structure fires unless the expenditure was absolutely necessary and justified.

The FDNY has detailed policies and procedures for actions to be taken at high-rise fires. Due to the number of incidents at high-rise office and residential buildings (estimated at well over 300 actual fires per year) these procedures are well practices and have been reinforced through experience.<sup>7</sup> It is based on this "experience" with actual high-rise structure fires that the FDNY has determined the appropriate levels of personnel and

---

<sup>7</sup> New York City Bank Building Fire: Compartmentation vs. Sprinklers, Technical Report Series, Federal Emergency Management Agency, United States Fire Administration, (January 31, 1993) Investigated by J. Gordon Routley, pg. 5.



equipment that are necessary to effectively deal with high-rise occupancies that they respond to on an alarm of fire.

Many other major U.S. cities such as Oakland, California also respond to high-rise structure fires in their jurisdictions with a comparable response to that of FDNY. In the City of Oakland, “for a fire on the 10<sup>th</sup> floor or above of a high-rise, Standard High-Rise Operation Procedures require a minimum of a 5<sup>th</sup> Alarm, bringing a total of 133 City of Oakland firefighter personnel to fight the fire as well as carry equipment aloft and address firefighter fatigue.”<sup>8</sup>

Some have also argued that FDNY justifies its response levels to High-Rise Residential Multiple Dwellings and High-Rise Commercial buildings because many of the thousand of such buildings within the City of New York were constructed prior to the implementation of current building codes and fire protection systems such as automatic sprinklers.

While automatic sprinklers are relatively reliable, they are not always effective, and even when they are effective, they do not always extinguish a fire, but merely contain it until the Fire Department arrives and actually extinguishes the fire. Based on 2002-2004 fires reported to U.S. fire departments, excluding cases of failure or ineffectiveness because of a lack sprinklers in the fire area...sprinklers operate in 93% of all reported structure fires large enough to activate sprinklers. When they operate, they are effective 97% of the time, resulting in a combined performance reliability of 91% for wet pipe sprinklers.<sup>9</sup>

---

<sup>8</sup> City of Oakland, Public Safety Committee, Fire Department – Fire Fighting Capacity for High-Rise Buildings, Deborah Edgely, February 27, 2007, pg. 5.

<sup>9</sup> U.S. Experience With Sprinklers and Other Automatic Fire Extinguishing Equipment, National Fire Protection Association, Fire Analysis and Research Division, John R. Hall, Jr., June 2007, pg. vii.

“A recent NFPA Study concluded that “sprinklers in the area of fire fail to operate in 7% of reported structure fires large enough to activate sprinklers”, and “the majority of sprinkler failures occurred because the system was shut off.”<sup>10</sup>

“When sprinklers fail to operate, the reason most often (66% of failures) given is shutoff of the system before the fire began, as may occur in the course of routine inspection maintenance. Other leading reasons are manual intervention that defeated the system (16%), lack of maintenance (10%) and inappropriate system for the type of fire (6%).”<sup>11</sup>

“When sprinklers operate but are ineffective, the reason usually has to do with an insufficiency of water applied to the fire, either because water did not reach the fire (41% of cases of ineffective performance) or because not enough water was released (29%). Other leading reasons are inappropriate system for the type of fire (14%), lack of maintenance (6%), and manual intervention that defeated the system (6%). Only 4% of cases of sprinkler ineffectiveness are attributable to component damage.”<sup>12</sup>

---

It is widely understood and supported by NFPA fire data that most automatic sprinkler systems are designed to control a fire but not necessarily completely extinguish a fire.<sup>13</sup>

Obviously then, IF the sprinkler system is not shut off before a fire begins, and IF the sprinkler components are not damaged or manually defeated, and IF the fire is large enough to activate the sprinkler, and IF once activated there is a sufficient supply of water applied to the fire, and IF the sprinklers effectively contain the fire, then a sufficient firefighting response will nonetheless be required even in a fully sprinklered building.

---

<sup>10</sup> Id., pg. 13.

<sup>11</sup> Id.

<sup>12</sup> Id.

<sup>13</sup> Reliability of Automatic Sprinkler Systems, Alliance for Fire Safety, William E. Koffel, P.E.

“There are certain fire situations where even a complete sprinkler system will have limited impact: (a) Explosions and flash fires that may overpower the system; (b) Fires that begin very close to a person (e.g., clothing ignition) or unusually sensitive and expensive property (e.g., an art gallery) where fatal injury or substantial property loss can occur before sprinklers can react; and (c) Fires that originate in unsprinklered areas (e.g., concealed wall spaces) or adjacent properties (e.g., exposure fires), which may grow to unmanageable size outside the range of the sprinkler system. These situations can arise when (a) sprinklers standards are based on design fires less severe than explosions or flash fires, as is normally the case; (b) sprinkler objectives are defined in terms of a design fire area larger than the distance implied by a distance implied by a victim intimate with ignition; or (c) sprinkler standards exclude certain potential areas of fire origin from their definition of complete coverage, which is typically but not always the case.”<sup>14</sup>

The proposed SFC project will contain almost 1,400 high-rise residential housing units which will drastically increase calls for service by the Yonkers Fire Department, including working fires. The United States Fire Administration recently published a research study<sup>15</sup> that found that each year, an estimated 15,500 high-rise structure fires cause 60 civilian deaths, 930 injuries, and many millions of Dollars in property loss. Interestingly, the study also stated that almost three-quarters of high-rise fires occur in residential structures and the leading cause of all high-rise fires is cooking.

“High-rise fires are inherently more difficult for the fire service and residential high-rise fires are particularly injurious, more so than fires in residential structures generally. In part, this may be due to the higher population density found in a high-rise. Also, residential high-rise fires cause more injuries per fire than fires in non-residential high-rises. Lastly, the design of high-rises tends to allow toxic smoke and byproducts of fire

---

<sup>14</sup> U.S. Experience With Sprinklers and Other Automatic Fire Extinguishing Equipment, National Fire Protection Association, Fire Analysis and Research Division, John R. Hall, Jr., June 2007, pg. vii.

<sup>15</sup> Highrise Fires, United States Fire Administration, Topical Fire Research Series, Volume 2, Issue 18, January 2002.

to spread throughout a building and injure occupants who may be many floors away from the fire itself.”<sup>16</sup>

High-rise structure fires pose a number of challenges both to the occupants and to the fire service. Several of these include:<sup>17</sup>

- By nature of their height, smoke movement in high-rise structures is very different from that of other structures. Temperature gradients result in varying pressures throughout the structure, which can allow for the rapid, uncontrolled movement of smoke and flame (known as the “stack effect”).
- High-rises often contain multiple types of occupancies, including residential, commercial, restaurant, and underground parking. Each type of occupancy poses a challenge to firefighters and must be approached differently.
- By design, exits from high-rise structures are limited. In an emergency, the movement of people out of a building is particularly difficult.
- The HVAC and other utilities in some high-rises service multiple levels and can facilitate the spread of smoke and flame through a building.
- High-rise structure fires require significantly more personnel and equipment to extinguish than do other types of fires. This further strains the responding fire department and firefighters.

Some facts that make Yonkers a difficult municipality for Fire Department purposes:

- Yonkers is located immediately north of New York City and shares its entire southern border with the Borough of The Bronx. As such, Yonkers is in very close proximity to the number one terrorist target in the world, with New York City suffering two major terrorist attacks in the last two decades. Yonkers, then is necessarily considered a potential target of terrorist, especially when

---

<sup>16</sup> Id.

<sup>17</sup> Highrise Fires, United States Fire Administration, Topical Fire Research Series, Volume 2, Issue 18, January 2002.

the proposed high hazard risks associated with the SFC project are added to the numerous other high hazard risks that Yonkers already contains.

- Yonkers is a very old formerly industrial city with very diverse neighborhoods ranging from the lowest to the highest economic incomes and wealth
- Yonkers is bounded by the Hudson River to the West, small communities with largely volunteer fire departments to the North, small towns and villages to the East with very limited mutual aid capabilities, and by the northeast section of The Bronx, which itself is not as densely populated as other parts of The Bronx and New York City, and is therefore not abundantly staffed by the FDNY for mutual aid purposes
- The topography of Yonkers is extremely hilly, with very steep streets that are often impassible during inclement winter weather
- The City of Yonkers lacks a grid-like street system that allows for quick transportation throughout the city with many alternate routes
- Yonkers lacks sufficient east-to-west and west-to-east roads to traverse the city in a timely fashion and also has very few major roads that allow travel from north- to-south and south-to-north.
- Yonkers is divided by one of the State of New York's most vital and utilized highway systems, the New York State Thruway.
- Yonkers is further divided by four (4) County and State Parkways: the Bronx River, Sprain, Saw Mill, and Cross County Parkways.
- Yonkers contains numerous public and private schools and still utilizes an extensive amount of school busing as a result of the Federal Court Ordered School Desegregation case, which causes many primary and secondary roads to be become very congested at various times throughout the school year.
- Yonkers contains an extremely large stock of old, wood frame, single and multiple family housing that is generally in disrepair, often contain illegal apartments, have numerous building and fire code violations, and where numerous fires occur.
- Yonkers is bounded by the Hudson River and traversed by three smaller rivers (Saw Mill River, Sprain River, Bronx River)

- Yonkers is also traversed on its extreme Eastern and Western borders by two (2) major commuter rail lines, including Amtrak service and limited freight service.
- Yonkers is home to two (2) reservoirs: one that is now a lake (Sprain Lake), and the other (Hillview Reservoir) which services NYC. The Hillview Reservoir is a potentially dangerous facility that houses substantial quantities of chlorine and other deadly hazardous materials. Additionally, the Hillview Reservoir will soon undergo major construction to cap the top of the reservoir under one of the largest, if not the largest, “green roof” in the world.
- Yonkers is home to an extremely large and vital component of Con Edison’s electrical supply system to the Hudson Valley and New York City.
- The southern part of Yonkers Hudson River banks contains a large wastewater treatment facility which treats the wastewater from Yonkers as well as from many other parts of Westchester County
- Yonkers is the home of numerous houses of worship and contains religious seminaries for two of the worlds largest religions
- Yonkers is also the location of Yonkers Raceway and Empire City Casino, a facility which attracts thousands of visitors every day and night of the week.
- Yonkers is home to Sarah Lawrence College, a nationally known school of higher education.
- Yonkers contains numerous facilities that house troubled teens, disabled children, and adults, and other special care facilities.

In arriving at its minimum staffing levels that would be necessary to support the SFC project, Local 628 considered each of the above special risks/hazards that the YFD currently provides fire protection and other emergency services for, as well as the SFC project itself. The SFC project cannot be evaluated in a vacuum without considering the other specific jurisdictional characteristics of Yonkers. The SFC project must be examined as it will be situated, as an integral and important part of the larger City of Yonkers.

In addition to fire protection, the following list is illustrative, but not all inclusive, of the services the Yonkers Fire Department currently provides to the citizens of Yonkers:

- Emergency Medical Services
- Extrication Operations
- Hazardous Materials Protection
- High Angle Rescue
- Confined Space Rescue
- Collapse Rescue
- Fire Prevention Services
- Fire Investigations
- Training for the YFD and other paid departments
- Other miscellaneous calls for emergency services

The SFC project will dramatically increase the workload of the Yonkers Fire Department and will introduce new types of calls for service that the Yonkers Fire Department has heretofore not had to be prepared for. Indeed, if Local 628's requested increases are not granted, the Yonkers Fire Department may not be capable of providing all of these new additional calls for service while maintaining the current level of service to the rest of the City of Yonkers. Some very important impacts to the Yonkers Fire Department as a result of the SFC project include:

- A greater number of high-rise buildings at a significantly greater heights
- An increase in the population, estimated at almost 1,400 new families.
- An increase in call volume, potentially beyond YFD's ability to respond thus, routinely stripping other fire stations and increasing response times citywide.
- An increase in response times due to the "vertical response" in high-rise buildings.
- An increase in response times due to an increase in vehicular and pedestrian traffic.

- An increase in the commercial activity, particularly in the downtown.
- An increase in the volume of technical rescue calls i.e. construction accidents, scaffolding emergencies, etc.

In his last several Budget Requests, Fire Commissioner Anthony Pagano has been requesting that two (2) additional fire companies be added to the Yonkers Fire Department to bring it up to an acceptable level. Fire Commissioner Pagano has testified on numerous occasions before the Yonkers City Council during its annual Budget Hearings that his request for two (2) additional fire companies is needed to make up for past cuts to the Department that have never been replaced. Commissioner Pagano stated that in his opinion, the Yonkers Fire Department has been staffed below acceptable levels and that the two (2) additional companies are absolutely necessary to allow the fire Department to continue to provide adequate fire protection to the City as well as to protect the lives of the firefighters that respond to the various calls for service throughout the City.

It is important to note that Commissioner Pagano's repeated requests for two (2) additional companies were not made in response to any particular development projects already built, or in anticipation of any planned development projects, but rather just to bring the Yonkers Fire Department up to reasonable and acceptable levels of staffing to protect the citizens and the firefighters of Yonkers as it currently existed before any new development projects.

Unfortunately, Commissioner Pagano's sincere and correct pleas to for additional staffing and equipment has not been granted, perhaps due to fiscal constraints or other priorities, thus leaving the Yonkers Fire Department with a significant hole in its critical infrastructure. Thus the problem with the current proposed development projects of SFC which cannot be adequately and safely protected by the Yonkers Fire Department unless the previous deficit in manpower and equipment is replaced and additional appropriate and necessary manpower and equipment is provided to deal with the SFC project itself.



If the City of Yonkers had maintained an appropriate level of fire personnel and equipment by filling Commissioner Pagano's repeated requests for two (2) additional fire companies, then SFC's proposal to add an additional two (2) companies to mitigate the impacts of its project on the Yonkers Fire Department might be somewhat reasonable and appropriate. However, SFC's current proposal to add only two (2) additional companies, without taking into account the current deficit of two (2) lost companies is wholly inadequate and unsafe for the residents of the SFC project, the citizens of the surrounding areas and the rest of the City, and to the Yonkers Firefighters who will have to respond to fires and other emergency situations at the SFC project

When all is said and done, the decision making process is beyond the control of Local 628 and the SFC project may indeed be approved as-is, against the warnings of Local 628 and without any of the additional personnel and equipment requested by Local 628. In such an event, Local 628 can only promise to continue to be outspoken as to the lack of personnel and equipment and thus the unreasonable risks the SFC project will have on project residents, the rest of Yonkers' citizens, and the Yonkers Firefighters.