

draft copy

Life Safety Concerns Urge an Alternative to DCPL's Plans to Renovate the Mount Pleasant Library

B. Fenton & Associates
Fire/Life Safety Services & Consulting
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Commissioned by
Advisory Neighborhood Commission 1D
Mount Pleasant

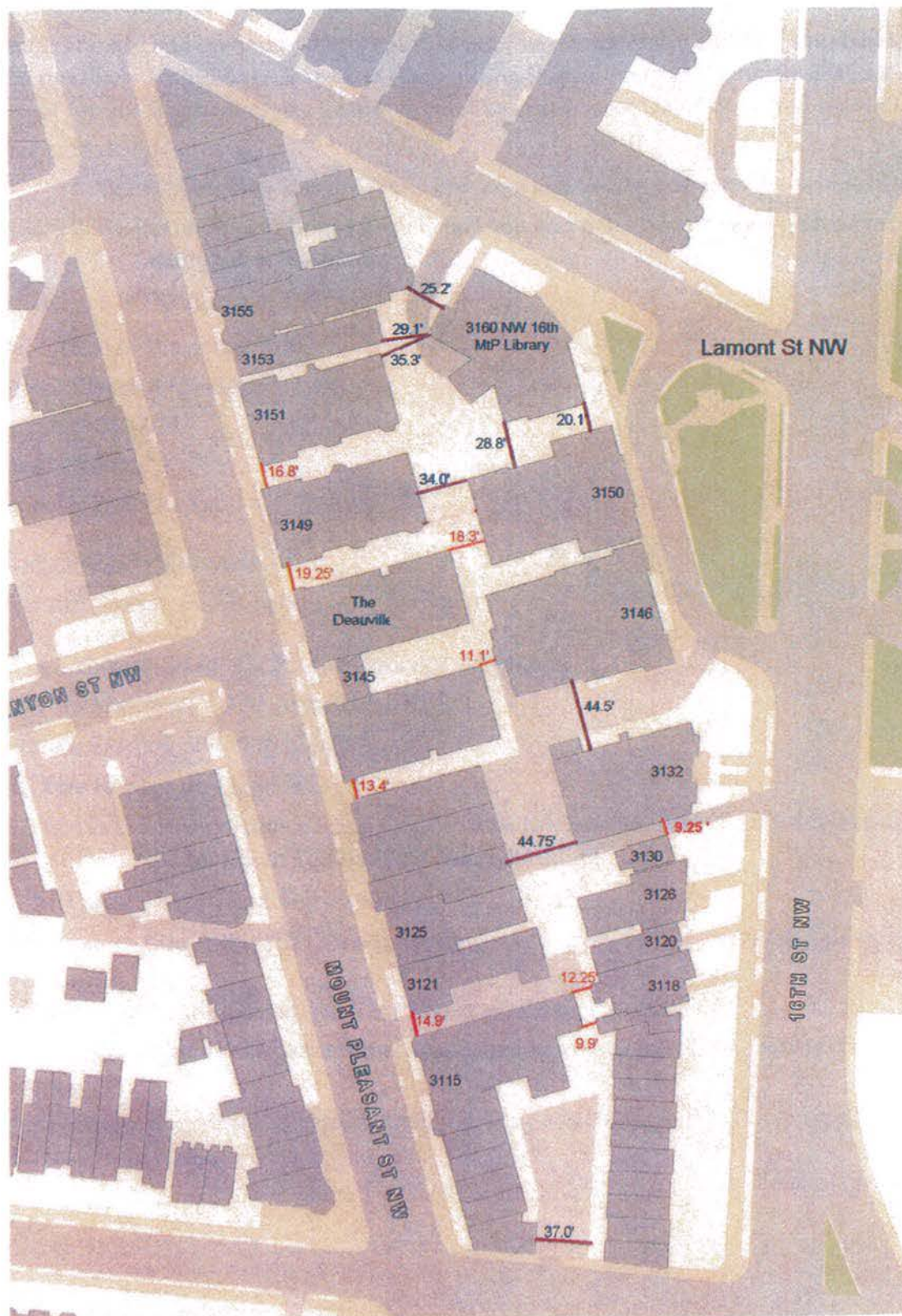
With volunteer collaborative contributions from members of:

All-Ways Mount Pleasant
Historic Mount Pleasant
Mount Pleasant Neighborhood Alliance
Hear Mount Pleasant
Latino Association of Mount Pleasant, Inc.
Mount Pleasant Main Street
Community of Christ | La Casa
Mount Pleasant Business Association
Park Marconi Building Association
3145 Mount Pleasant Tenants Association
3132 16th Sarbin Towers Building Association
Mount Pleasant Condominium

Board of Zoning Adjustment
District of Columbia
CASE NO. 18152
EXHIBIT NO. 35

#35

Appendix R: Map with distances between buildings.



This map shows the access and distances between buildings on the block containing the Mt Pleasant Library and the Deauville Fire.

The distances displayed on the map are of two colors:

Red - for distances less than that were actually leapt by the Deauville fire.

Black - for distances more than that were actually leapt by the Deauville fire.

Discussion

Please note that the Deauville fire report says that the fire spread rapidly and leaped to the church almost immediately.

More: The fire had started to distort objects near windows in the building immediately to the north. The fire likely would have leaped to the building immediately to the north, 3149 Mt Pleasant St, except for quick arrival of fire gear and massive amounts of water deployed on 3149.

This map demonstrates:

1. The Mt Pleasant library is now the most isolated building on the whole block.
2. All the other buildings have at least one and most two or more pathways for a fire to spread throughout the block.

Sources for Data table, below:

DC Office of Planning Map

Mount Pleasant Corridor

Dated: 2005 12 13

1mm – 3 feet

Bates National Ruler.

Google Earth Software

Line distances between points.

CFA Submission by DCPL for Concept Approval

Core Architecture/HMA² Architects/DCPL

Page 02, Existing Site Plan (Civil)

DC Fire Report on Deauville

18.3 feet is the given distance leaped by the 2008 fire between Deauville north building and the fire start point on the Meridian Hill Baptist Church building.

Data Table - Moving Clockwise:

From eastern side of the MP Library, heading south, from Lamont to Irving, along the 3100 block of 16th.

Across Irving, heading west, from 16th Street to Mount Pleasant.

From Irving, at Mount Pleasant Street, heading north along the 3100 block of Mount Pleasant Street to Lamont.

From Lamont and Mount Pleasant Street, heading east, to the west side of the Mount Pleasant Library.

Table

<i>From</i>	<i>To</i>	<i>Feet, OP map</i>	<i>Feet, Google Earth</i>	<i>Feet, DCPL Plans</i>	<i>Feet, direct measure</i>	<i>Avg</i>	<i>Notes</i>
Library east side	3150 16 th St NW	20.25	19.1	20.3	20.8	20.1	Distance between Library and Park Marconi Apartments
Library east side, at a depth of 40 feet	3150 16 th St NW, at a depth of 40 feet	28.8				28.8	Distance between Library and Park Marconi Apartments, about 40 feet back the Marconi narrows, making the space between the Library wider
3150 16 th St NW	3149 MP St NW	34.5	33.4			34.0	Park Marconi Apartments (3150) to Adalante Cooperative (3149)
3150 16 th St NW	3145 MP St NW	24.45	NA			24.5	Park Marconi Apartments (3150) to Deauville (3145).
3150 16 th St NW	3146 16 th St NW				4.4	4.4	Park Marconi Apartments (3150) to adjacent Meridian Hill Church
3146 16 th St NW	3145 Mt Pl St NW, north building	15.9	14.5			15.2	Meridian Hill Church to Deauville
3146 16 th St NW	3145 Mt Pl St NW, south building	11.1	NA			11.1	Meridian Hill Church to Deauville at closest point
3146 16 th St NW	3132 16 th Street NW	42	47			44.5	Building to Building, Meridian Hill Baptist to Sarbin Towers
3146 16 th St NW	3132 16 th Street NW	24.6				24.6	From ramp alongside south side of Meridian Church to retaining wall bordering yard along north side of Sarbin, narrowest point.
3132 16 th Street NW	Commercial bldgs on MP Street	46.5	43			44.75	The lots of Bank of America, 3131, Dollar Star, 3129 and Pan American Laundry, 3127 all extend same depth

							from Mt Pl Street and are behind Sarbin Towers (3132 16 th St)
3132 16 th Street NW	3130 16 th St NW				9.25	9.25	From Sarbin Towers to a retaining wall along a small boarded up wood house, 3130 16 th . This house was approved for raising. Retaining wall 30" from structure.
3126 16 th Street NW	3121 Mt Pl St NW	34.5	32.75			33.6	Distance across back yards
3118 16 th St NW	3115 Mt Pl St NW	12.0	12.5			12.25	Distance across back yards
3116 ½ 16 th St NW	3115 Mt Pl St NW	9.9				9.9	Distance across back yards, at narrowest point, where 3115 has most depth.
3116A 16 th St NW	3115 Mt Pl St NW	28.5	27.8			28.2	Distance across back yards, from a southern wing of 3115 to townhouse on 16 th St. Close to parking lot that opens on Irving Street behind townhouses on both 16 th St and Mt Pleasant St NW
3100 16 th St NW	3101 Mt Pl St NW	48.0	45.6			46.8	Distance between town houses on 16 th and Mt Pl Streets, also an opening on Irving Street to a parking lot.
3115 Mt Pl St NW	3121 Mt Pl St NW				14.9	14.9	Distance between adjacent buildings, alley space.
3131 Mt Pl St NW	3145 Mt Pl St NW				13.4	13.4	Distance between adjacent buildings, Bank of America and the Deauville. The space has 2 large wooden fences, one near sidewalk and another about 20 feet back.
3145 Mt Pl St NW	3149 Mt Pl St NW				19.25	19.25	Distance between adjacent buildings.

3149 Mt Pl St NW	3151 Mt Pl St NW				16.8	16.8	Distance between adjacent buildings.
3151 Mt Pl St NW, NE corner	Mt Pl Library, SW corner	33.9	36.75			35.3	Distance between buildings, 3151 Mt Pl Street and Library, spanning Library driveway and back yard space
3151 Mt Pl St NW	3153 Mt Pl St NW				7.25	7.25	Distance between adjacent buildings.
3153 Mt Pl St NW	Mt Pl Library, SW corner	30.3	27.8			29.1	West most corner of the Library to Pollo Sabroso
3155 Mt Pl St NW ,	Mt Pl Library, SW corner	24.3	26			25.2	This is a measure of the access at the narrowest part, just before the Library driveway bends to east and wraps behind the Library. Span across Library driveway.
3169 Mt Pl Street	1624 Lamont St NW	10.5	9.3			9.9	Opening on Lamont Street between the back of the Mt Pleasant Pharmacy (3169 MP St) and 1624 Lamont Street NW

Appendix S - Residential buildings on Square 2595

Number	Street	# Units	# Residents	Method, unit count	Notes
3150	16 th Street NW	44	132	mailbox count**	6 story apt building
3132	16 th Street NW	60	180	mailbox count	9 story apt building
3126	16 th Street NW	16	48	mailbox count	5 story apt building
3116 ½	16 th Street NW	2	6	DC real property db, 2 or more units	Town house
3116 B	16 th Street NW	2	6	DC real property db, 2 or more units	Town house
3116 A	16 th Street NW	2	6	DC real property db, 2 or more units	Town house
3114	16 th Street NW	2	6	DC real property db, 2 or more units	Town house
3112	16 th Street NW	2	6	DC real property db, 2 or more units	Town house
3110	16 th Street NW	2	6	DC real property db, 2 or more units	Town house
3108	16 th Street NW	2	6	DC real property db, 2 or more units	Town house
3106	16 th Street NW	2	6	DC real property db, 2 or more units	Town house
3104	16 th Street NW	2	6	DC real property db, 2 or more units	Town house
3102	16 th Street NW	2	6	DC real property db, 2 or more units	Town house
3100	16 th Street NW	2	6	DC real property db, 2 or more units	Town house
1601	Irving St NW	1	3	no information available, conservative estimate	Town house
1605	Irving St NW	2	6	DC real property db, 2 or more units	Town house
3101	Mt Pleasant St NW	3	9	DC real property db, 2 or more units	Town house
3105	Mt Pleasant St NW	2	6	DC real property db, 2 or more units	Town house
3107	Mt Pleasant St NW	1	3	DC real property db, 2 or more units	Town house
3109	Mt Pleasant St NW	1	3	DC real property db, 2 or more units	Town house

Number	Street	# Units	# Residents	Method, un. count	Notes
3115	Mt Pleasant St NW	30	90	mailbox count	5 story apt building
3121	Mt Pleasant St NW	21	63	mailbox count	6 story apt building
3125	Mt Pleasant St NW	12	36	mailbox count	Cooperative
3145 *	Mt Pleasant St NW	100	300	Fire Report, page 5. Appendix J	5 story apt building
3149	Mt Pleasant St NW	16	48	mailbox count	Cooperative
3151	Mt Pleasant St NW	36	108	mailbox count	5 story apt building
3155	Mt Pleasant St NW	6	18	DC real property db	5 story business/condos
3161	Mt Pleasant St NW	1	3	no information available, conservative estimate	Above store apt
3169	Mt Pleasant St NW	1	3	no information available, conservative estimate	Above store apt
1620	Lamont Street NW	1	3	DC real property db, 2 or more units	Row house
1622	Lamont Street NW	3	9	DC real property db, 2 or more units	Row house
1624	Lamont Street NW	1	3	DC real property db, 2 or more units	Row house
		380	1140**		

* Building is currently destroyed by fire and not occupied.

** Mailbox count did not include empty or unlabeled boxes.

*** Estimating 3 persons per unit.

Appendix U – Fire Ladder Truck Access Points on Square 2595

For blocks of tall, older, unsprinkled buildings, fire hydrants and quick access to ladder trucks can mean the difference between safe exit or loss of life. This appendix reviews, first, potential access for ladder trucks, and second, the location of fire hydrants. More hydrants, including along a rear access lane could help.

One pair of access points provides an adequate space for an emergency access lane.

Out of the twelve accesses to the rears of the large apartment buildings on this block, only one pair provide quick, sure access to most of the endangered people: A North-South right-of-way.

- This starts on Lamont St just west of the MtP Library, and proceeds South uninterrupted for about 300 feet. Since this distance is beyond 150 feet, the International Fire Code (IFC) requires an exit. The parking lot of the Baptist Church provide the space for a hammer head turn that meets the IFC standard.
- There is a Southern leg with a fire lane already marked with an entry from Irving St NW.
- The two legs could be joined by moving a wall back a few feet so a fire truck can pass. This throat is 11.1 feet, and is behind the Deauville so a few feet could be widened during reconstruction.
- There is another throat that *is* passable, but could be fixed to make emergency access simple.

The other potential access points could help but do not meet fire standards.

There are 12 access points to the sides & rears of buildings on Square 2595

Clockwise from Library, south on 16th, then west on Irving, north on MP St, east on Lamont.

1. Between 3160 and 3150 16 (south of Library, north of Park Marconi)
2. Between 3150 and 3146 16 (south of Park Marconi, north of Meridian Hill Church)
3. Between 3146 and 3132 16 (south of Meridian Hill Church, north of Sarbin Towers)
4. Between 3132 and 3130 16 (south of Sarbin Towers, north of 3130 16th)
5. Between rear of townhouses 16th and Mt Pl Streets (entrance to parking lot from Irving)
6. Between 3115 and 3121 MP St (north of 3115 MP St, south of 3121 MP St)
7. Between 3131 and 3145 MP St (north of the Bank of America, south of Deauville)
8. Between 3145 and 3149 (north of Deauville, south of Adalante Cooperative)
9. Between 3149 and 3151 (north of Adalante Cooperative, south of 3151 MP)
10. Between 3151 and 3153 (north of 3151 MP St, south of Pollo Sabroso restaurant)
11. Between 3169 MP St and 1624 Lamont (Back of MP Pharmacy and residence Lamont)
12. Between 3155 MP St and 3160 16th (east of Mount Pleasant Condos, west of MP Library)

Four fail by providing less than 10 feet, the absolute minimum width for a ladder truck.

Btwn 3150 & 3146 16 (south of Park Marconi, north of Meridian Hill Church): 4.5 feet

This is a narrow gated space that does lead to the rear of these two buildings.

Btwn 3151 & 3153 (north of 3151 MP St, south of Pollo Sabroso restaurant): 7.4 feet

There is also a locked gate at Mount Pleasant Street, 7'1" high, and fire escapes, 8'1" off ground.

Btwn 3132 & 3130 16 (south of Sarbin Towers, north of 3130 16th): 9.25 feet.

This is a narrow driveway leading to a motorized door for rear parking for Sarbin Towers.

Btwn 3169 MP St & 1624 Lamont (Back of Pharmacy & residence Lamont): 9.3 feet.

This space leads to the rear of several storefronts on MP Street and behind a few residents on Lamont St.

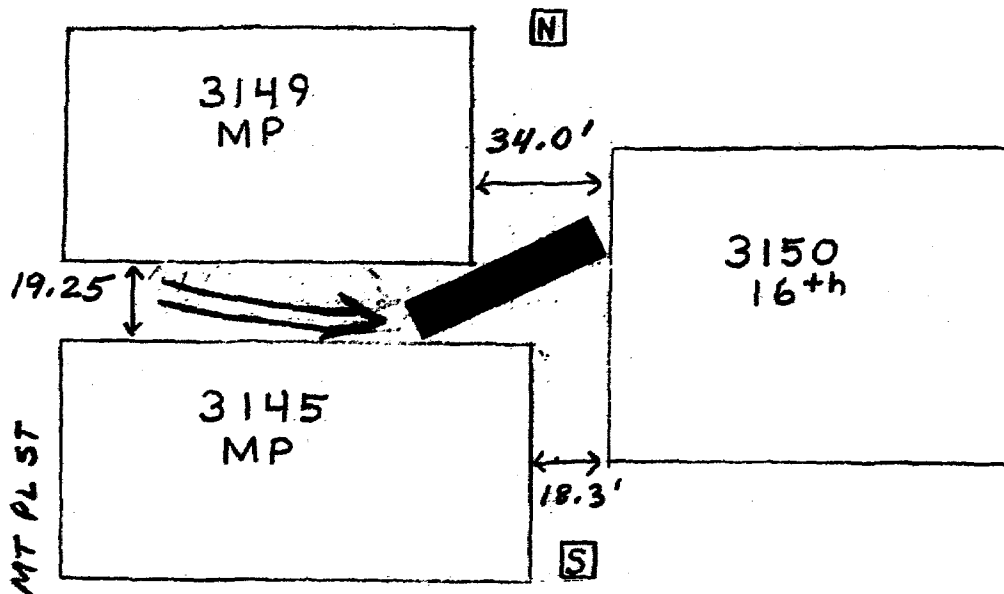
It does not extend into the inner back yards of the larger apartment buildings on the 3100 block.

Four fail, despite accommodating the entry of a ladder truck, but would be soon blocked. These are shown in diagrams which assume the ladder truck's dimensions are ten feet wide and 50 feet long. Actually, including mirrors and other attached equipment which can be lost without loss of core function, trucks are a little over 12 feet wide. Long trucks are needed so ladders can reach residential units on the fifth to eight floors.

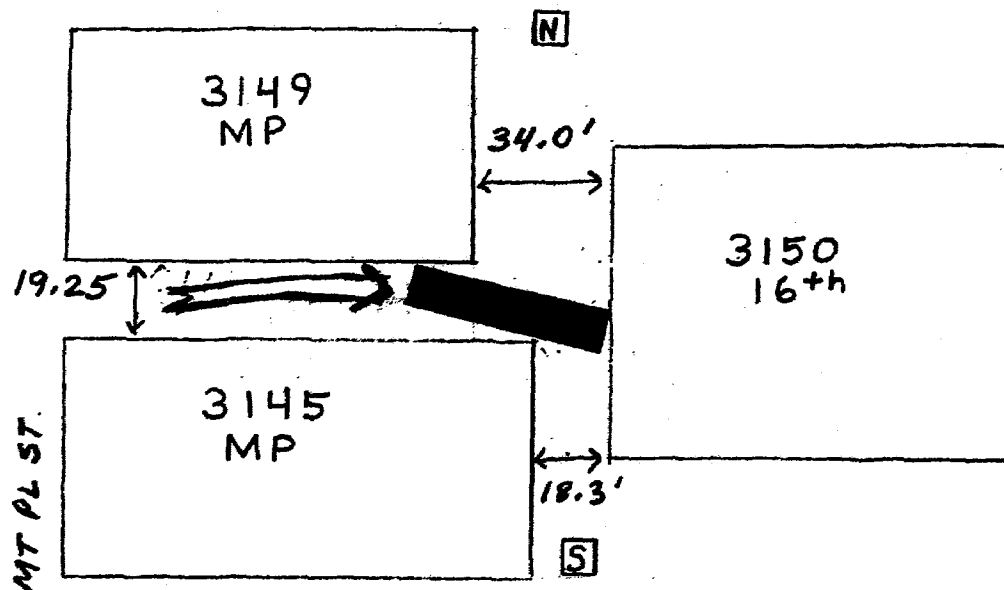
1. Between 3145 and 3149 (north of Deauville, south of Adalante Cooperative)

Although the access at Mount Pleasant Street is 19.25 feet, the setback of 3149 is 100 feet, and 3145 111.6 feet. This means a ladder truck could not turn in either direction to reach the rear of buildings on the corridor.

Turn North Blocked behind 3149 MP St.



Turn South Blocked behind 3145 MP St.



2. Between 3115 and 3121 MP St (north of 3115 MP St, south of 3121 MP St)



There is access to about 75 feet, then blocked by a large dumpster.

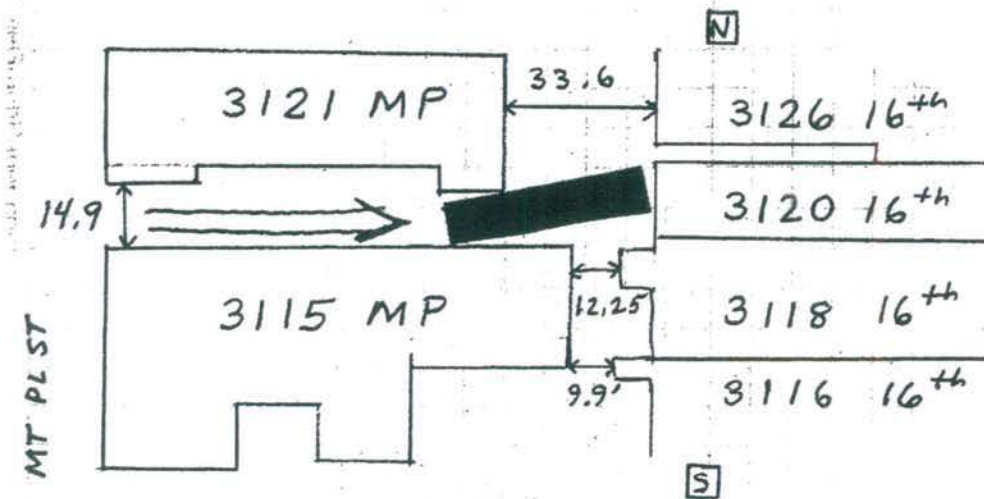
In addition, there is a basement stairwell on the right which projects out about 4 feet.

The depth of the buildings are 100 feet (3121) and 115 feet (3115).

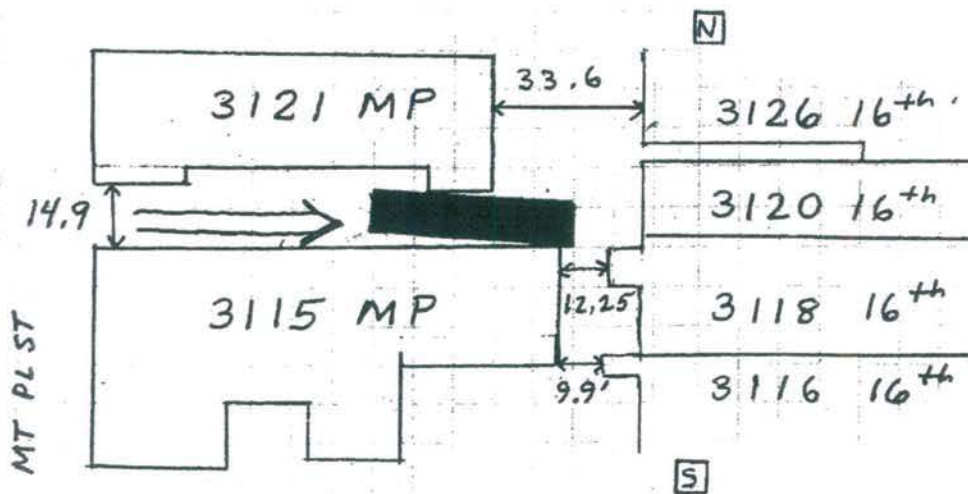
There is little space to make the sharp turn.

Even with the dumpster removed, a ladder truck could not turn into the back yards to either the north or south

Turn North blocked behind 3121 MP St



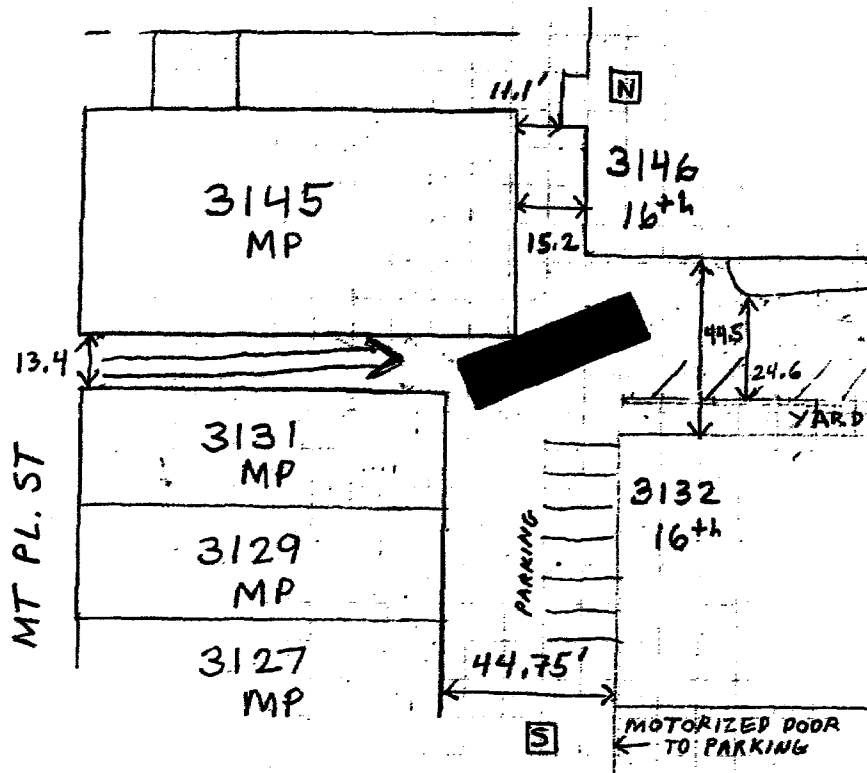
Turn South blocked behind 3115 MP St



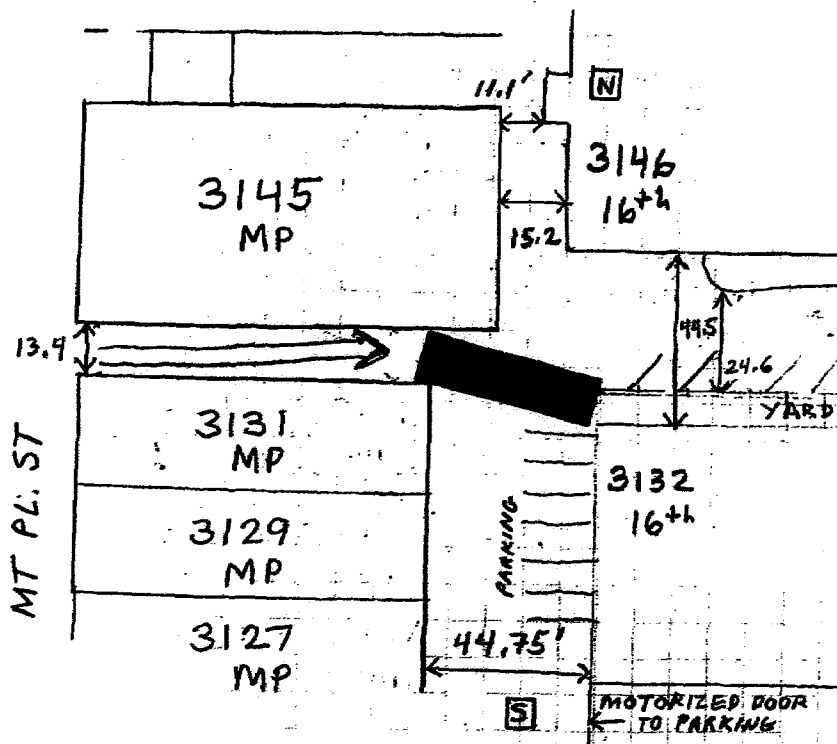
3. Between 3131 and 3145 MP St (north of the Bank of America, south of Deauville)

In addition, behind 2 wooden fences, 10' high, there are dumpsters, and 5 large trees along the south side.

Direct Turn North blocked; Parking south/3146 & west/3132 limit maneuvering space.



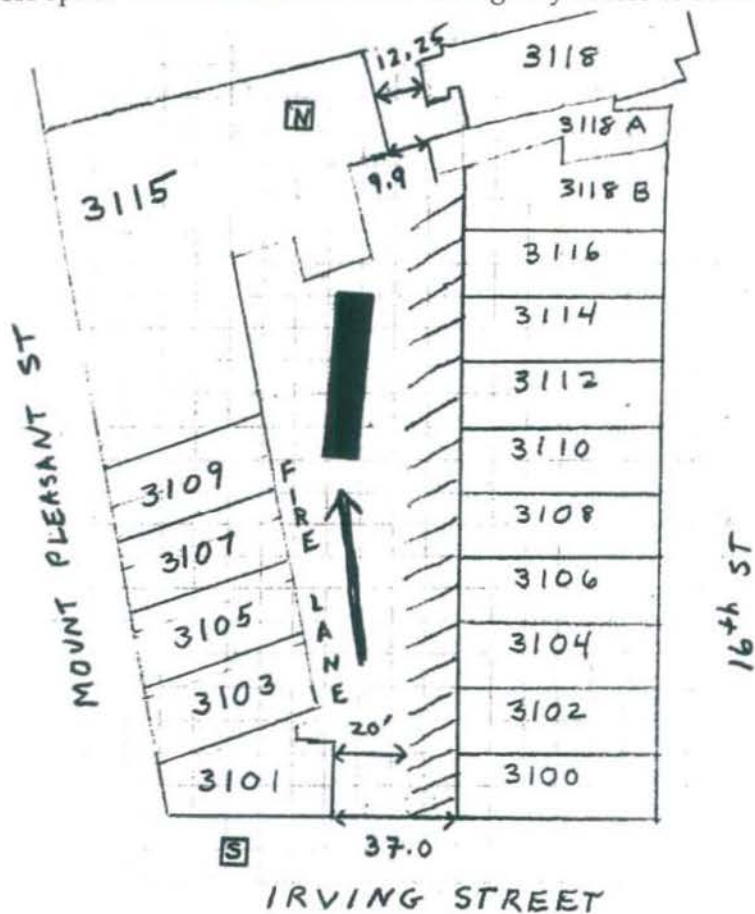
Direct Turn South blocked; Parking south/3146 & west/3132 limit maneuvering space.



4. Between rear of townhouses on 16th & Mt Pl Streets (entrance to parking lot from Irving)
 A fire lane exists in the parking lot on the west side, but access narrows to 9.9 feet at the north end.
 In addition, the parking is graded several feet above the level of the back yards to the north.

Blocked to the north by a passageway just under 10 feet.

Hatched indicates diagonal parking, on East side of parking lot only. These would need to be moved if 9.9 access space were widened to allow emergency access to buildings to the North.



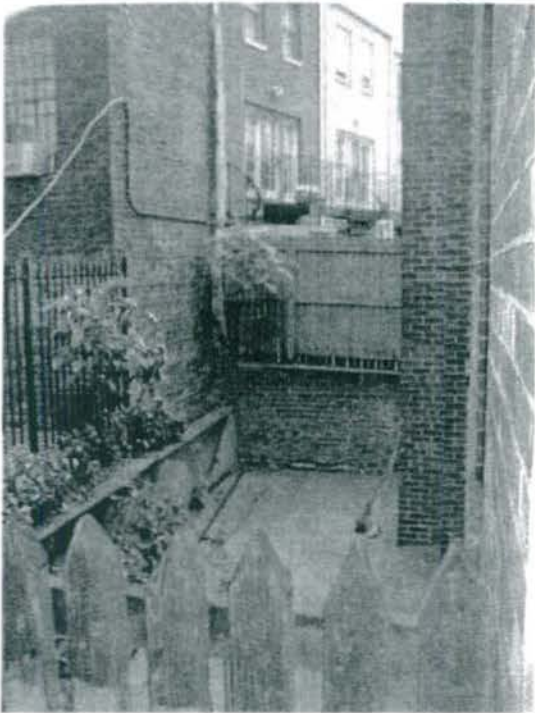
Picture of signage establishing a fire lane on West side of parking lot. The lane is 20 foot wide.



A view facing south of the narrow 9.9 access is shown in the picture below.

At 3118 16th Street, the building could be reconstructed to allow 12-13 feet passage.

If 3 to 4 feet were added to the passage way, it could work. In addition, the grade of the parking lot is several feet above that of the back yard of 3115 MP street.



Picture looking North from the rear of the alley between 3115 – 3121 Mt Pleasant Street.

This shows several hundred feet of mostly clear space to form an emergency access lane. Fire trucks can easily move through wood and chain link fences, so these do not block. There are no cars, no trees in the middle, and the dumpsters are next to buildings, and so no substantial blockages.

In the distance to the left is remains of the Deauville (3145 MP Street)) and to the right, Sarbin Towers.



One access has substantial obstacles limiting ladder truck access to the depth and rear.

Between 3149 and 3151 (north of Adalante Cooperative, south of 3151 Mount Pleasant Street (also residential)).

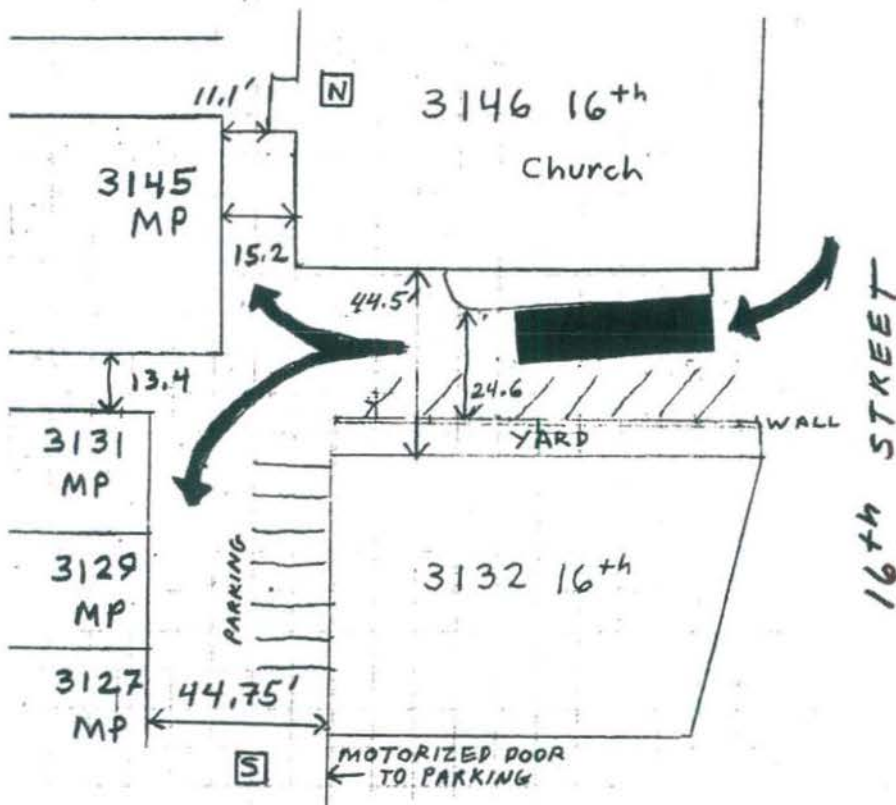


Two tall trees, taller than the buildings are in the center of a 16'8" access. In addition there are sunken stairwells projecting out about 4', with railings set in concrete.

Towards the rear of the 2 buildings, the buildings expand closer to one another by about 4'.

This leaves 3 openings.

1. Between 3146 and 3132 16 (south of Meridian Hill Church, north of Sarbin Towers)



This access is unsuitable for fast access by ladder trucks to the rear of the tall residential buildings. The blockages include metal gates, and parking to the south of 3146 16th Street, and parking to the west of 3132 16th Street. Because of the need to remove a large numbers of cars, this access is not likely to meet the 8 minute response rule. However, this opening would allow for use of pumper trucks. Fire hydrants exist to the west at the north end of 3145 Mt Pl Street, and on 16th Street NW, across from 3126 16th Street.

2 & 3. Two access points are directly West and South of the MP Library.

Both of these are blocked by proposed additions.

Of these two, the access between 3155 MP St and 3160 16 offers the most direct entry into a desired North-South emergency access route between the Mt Pleasant and 16th St buildings.

Entry from the south side of the library, between the Library and Park Marconi, would involve a 90 degree turn. Extra accommodations may need to be made to allow for such a wide turn for a 50 foot ladder truck.

A ladder truck entering via Lamont Street west of the Library could rescue residents in their units even five to eight stories up and reach units in back within the eight-minute standard set by the International Fire Code. Without this emergency access lane, this response standard cannot be reasonably met.

In contrast to the other access points around the block, which could only reach 2-4 buildings, this north-south route could access the rear of nearly 20 buildings heading south.

With a combined access from the Meridian Hill Baptist Church parking lot, this could provide either an egress, so it is not a dead end, or a 50 foot cut that would allow for a "hammerhead" or 3 point turn.

There are locations along this north south route that are wider than 26 feet, which provides for the installation of a fire hydrant. More notes on Fire hydrants below.

Fire hydrants – On or Near Square 2595

Only one hydrant is not on the square. Access to all others require stringing extra length of hose, and across roads.

Number	Location	Distance from a central point in north south route
1	Across from the library on north side of Lamont Street, alongside the Majestic apartments. 200' west of 16 th Street. Not on square.	255
2	In front of 1665 Lamont Street, north side of street, 30' east of Mount Pleasant Street. Not on square.	455
3	On east side of 16 th Street, 3100 block, in front of Bell-Lincoln school, directly across from 3126 16 th Street NW. Not on square.	334
4	On the border between 3149 – 3145 Mount Pleasant Street NW east side of Mt Pleasant Street. The only hydrant on square.	128
5	1600 block of Irving Street, north side between MP Street and 16 th , 25' east of MP Street. Not on square.	510

* The point used lies behind the site of the Deauville between the Park Marconi and Meridian Hill Baptist buildings. This is a central area for the middle and northern part of the corridor which has about a dozen apartment buildings.

Hydrants on a fire-access lane behind the buildings would shave minutes off of set-up time, and could save lives, and help prevent fire jumps to adjoining buildings.

Source: walk-thru, measures, Google Earth line measures.