

School Sister of Notre Dame Redevelopment Police, Fire, and EMS Departments Responses May 12, 2021

Police Department

- The emergency access, from Watertown Plank Road, must be maintained during the winter months (i.e. snowplowed).
The emergency access from Watertown Plank Road will be plowed during the winter months along with the other roads in the development.
- The emergency access must be clearly marked to prevent emergency vehicles from driving off of properly supported access areas.
The emergency access from Watertown Plank Road will be a road and delineated with curb and gutter.
- The emergency access must be able to adequately support multiple emergency support vehicles, in case that area is utilized to for staging or multiple pieces of equipment are parked on that access area.
The emergency access from Watertown Plank Road will be a road designed to support multiple emergency vehicles.
- All pedestrian pathways must be wide enough and constructed of a strong enough base to accommodate an ambulance and/or fire equipment for emergency access to remote areas.
Pedestrian pathways adjacent to the streets will be built to Village standards. The trails on the back sides of the buildings will not be built to accommodate emergency vehicles.
- I anticipate that police related calls will be limited. However, our police officers do respond to all ambulance calls. Since this is the case, police officers will respond along with ambulance personnel, based on the estimates provided by EMS Director, Dr. Jon Robinson.
Noted. Addressed in EMS Section.

Fire Department

- The proposed drawings indicate limited access for the fire department in the event of a car fire in the underground parking area for buildings 1 and 2. We would like additional access points to the underground parking that would allow us to utilize hose and water from our apparatus versus having to hand stretch additional hose lines.
There are seven access points through stairwells and two access points via overhead garage doors.
- Will there be standpipe connections available in all stairwell landings? (garage to third floor)
Yes. There will be standpipe connections available in all stairwell landings from garage to third floor.
- Will the pathways be wide enough and strong enough to support PD Squads, Ambulances and Fire Department unit 2481?
Pedestrian pathways adjacent to the streets will be built to Village standards. The trails on the back sides of the buildings will not be built to accommodate emergency vehicles.

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- Will there be clear markings and cut-out access for the secondary/emergency apparatus entrance on the on the east side of the property?
Yes. The emergency access area will be an additional egress for emergency vehicles only. It will be marked clearly with signage.
- How will the secondary/emergency apparatus entrance access be secured? (chain, fence, gate)
A gated fence will be located just south of the property line along the access road.
- Can the main entrance to the property be widened from two lanes to three lanes to allow easier access for emergency vehicles?
The turn templates show that widening from two to three lanes is not needed.
- What are the plans for the two cisterns/reservoirs currently on the property? (Reservoir south of building contains approx. 155,000 gallons and the reservoir east of the building contains approx. 32,150 gallons)
The cisterns/reservoirs will be removed. Hydrants on municipal water will be installed.
- We need to confirm the width of the cul-de-sac being proposed for the 11 properties off of Green Meadow. Will the fire department apparatus be able to get in and out without having to back up?
Turn templates indicate that the fire trucks can do a Y-turn without encroaching on driveways. Turn templates also indicate that the fire trucks can do a full turn if they encroach 1' onto driveways.

Emergency Medical Services

I have reviewed the questions and concerns of both the Fire and Police Chiefs and concur. I have the additional following concerns and comments:

1) Current Building Code (2015 IBC, Chapter 30, Section 3001)

a. 3002.4 Elevator car to accommodate ambulance stretcher

- i. "Where elevators are provided in building four or more stories above, or four or more stories below, grade plane, not fewer than one elevator shall be provided for fire department emergency access to all floors. The elevator car shall be of such a size and arrangement to accommodate an ambulance stretcher 24" x 84" (610mm x 2134 mmm) with not less than 5-inch (127 mm) radius corners, in the horizontal, open position and shall be identified by the international symbol for emergency medical services (star of life). The symbol shall be not less than 3 inches (76 mm) in height and shall be placed inside on both sides of the hoistway door frame."

The elevators will meet these requirements. The emergency medical services symbol will be at least 3 inches in height and placed inside both sides of the hoistway door frame.

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2) Numbers of Elevators and Elevator Locations

- a. Current building code requires “not fewer than one” elevator. Large complexes in Elm Grove have taken this to mean that **ONLY ONE** elevator needs to meet this Code, not all passenger elevators (if there are more than one).
 - i. Having only 1 elevator being able to handle an EMS stretcher has led to significant and serious delays in accessing and removing patients from the far end of existing buildings/complexes in the Village, despite having a much closer but unusable elevator.
There will be two elevators in each new apartment building. There will be two new elevators in a shared core for Notre Dame and Maria Halls. All elevators will be able to handle a typical 24”x84” stretcher.

3) Elevator Size

- a. The current codes are based on an EMS cot length **WITHOUT** any accessory attachments such as oxygen bottles, defibrillator, etc. These add up to another 8 inches of length. This has necessitated having to put critical patients or patients with hip fractures into the semi-upright (semi-sitting) position to fit into the elevator. This interferes with CPR and/or causes additional pain.
 - i. Our current stretcher dimensions with accessories are 86” x 23”.
 - ii. A backboard that is hand carried has dimensions of 72” x 16”.
- b. The current codes also require the cot to fit **DIAGONALLY**, not lengthwise. Again, this displaces needed personnel during critical situations.

4) Apartment Configuration

- a. Again, access to common call areas (e.g. Bedrooms and Bathrooms) with many of the apartment configurations **DO NOT** allow adequate access to patients in critical situations. Small width hallways and sharp 90 degree turns do not allow the patients to be removed in a horizontal position without essentially bending them and dragging them.
The hallways in the buildings will be six feet wide and in accordance with applicable building codes.

5) Run Volume Impact Analysis

- a. See the attached Excel spreadsheet “Stats for Run Volume Projections”
 - i. Comparisons were made to the Mandel Properties provided: Chiswick Place, Beaumont Place, and Lighthouse.
 - ii. Baseline Statistics for current EGEMS yearly runs, EG age demographics, and Location of EMS call are shown in the upper portion of the spreadsheet, and are used for comparison and validation.
 - iii. Assumptions utilized:
 - 1. Ages of the residents of the new Mandel development will mirror the 3 properties above.
 - 2. The Likely # of people per residence unit were the number provided by Mandel (1.44 for Apartments, 2.62 for SF Homes).
- b. Findings for the Current Mandel Proposal of 230 apartments and 22 Single Family Homes:

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- i. There will be an approximate **6.61% increase in population** for Elm Grove at full occupancy.
- ii. Runs (EMS Calls for Service) generated per year:
 - 1. **18-43 extra EMS runs per year (6.2% to 14.8% Increase)**
 - 2. Lower end: 18 runs if the population ages mirror the other Mandel Properties provided.
 - 3. Upper end: 43 runs if the apartment population ages exceed age 59.
- iii. This equates to 27 to 64.5 additional hours of EMS runs made.
 - 1. Average EMS call is 90 minutes and has 4 EMTs per call
 - 2. This equates to **108 hours (4x27) to 258 hours (4x64.5) of additional time commitment for the EMS volunteers.**

It appears that the calculations do not consider the removal of approximately 100 elderly School Sisters.

6) Concerns:

- a. The additional time commitments for the EMS volunteers will negatively impact those EMTs who can and do respond.
- b. Currently there are fewer and fewer EMS volunteers. As our current staff ages out there are dwindling numbers to replace them.
- c. Approximately 8 personnel (EMTs, Paramedics, Nurse, MD) total are making 90% of the current calls.
- d. As more workload is placed on the remaining EMTs more may leave the service.
- e. If that "Burnout" limit is reached we may need to consider the additional costs of either:
 - i. Supplementing the current EMS staffing with paid Full-Time employees, or
 - ii. Contracting out the entire service to another municipality. The estimate we received for this was over \$2 million/year a number of years ago.

7) Suggestions: Exceed Code and Mandate that:

- a. If 2 or more passenger elevators exist then they all need to be able to accommodate our emergency stretcher.

There will be two elevators in each new apartment building. There will be two new elevators in a shared core for Notre Dame and Maria Halls. All elevators will be able to handle a typical 24"x84" stretcher. We are verifying if the elevator will be able to handle the 23" x 86" stretcher when including accessories and two emergency persons. We should have this answer by the May 13, 2021 Plan Commission meeting.
- b. If only a single passenger elevator exists then it must be positioned within 5 feet of the midpoint of the hallway extent on the floor (i.e. the apartments farthest from the elevator on each side should be equidistant from the elevator).

Not Applicable
- c. The elevator car shall be of such a size and arrangement to accommodate an ambulance stretcher of 26" x 87" in the horizontal open position, AND shall also accommodate at least 2 EMTs to functionally care for the patient.

All elevators will be able to handle a typical 24"x84" stretcher. We are verifying if the elevator will be able to handle the 26" x 87" stretcher when including accessories and two emergency persons. We should have this answer by the May 13, 2021 Plan Commission meeting.

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- d. Design of the apartment layout should allow access to all rooms (except the bathroom) with a backboard measuring 16" x 72" in the horizontal flat position.
The apartment rooms are generous layouts and should be able to accommodate a 16" x 72" backboard in nearly all rooms. There may be some isolated instances where a corridor inside the apartment may require the backboard to be maneuvered to reach a specific room.

- e. An elevator key for "Fire Department Elevator Control/Override" shall be easily accessible to EMS personnel.
A key will be kept on site in a location approved by Emergency Medical Services and the Fire Department.