



## FAQ's – QUEEN LANE APARTMENTS COMPLEX

**Q: Is there anything unique or out of the ordinary about the design, configuration or construction of the structure that increases the difficulty of this implosion?**

A: The building comprising the Queen Lane Apartments Demolition Project is fairly straightforward in terms of its design and construction. Controlled Demolition, Inc. (CDI) has safely and successfully felled literally hundreds of similar structures over the last half century.

**Q: What is being done to prepare the building for the implosion?**

A: It's a common misconception that CDI's preparatory operations involve the "weakening" of a structure prior to implosion. This is not at all the case. Rather, CDI carefully selects and pre-removes certain non-load bearing partitions, walls and other elements on those floors of the structure where explosives will be placed. This is done so that when these very small quantities of explosives are detonated inside those columns and/or walls supporting the structure, there are no partition walls or piping that might momentarily provide undesired "support" in the structure and prevent the desired failure sequence.

**Q: What kind of explosives will be used, something about how it works, and how much?**

A: As the supporting columns of the building are reinforced concrete, small quantities of dynamite will be placed into holes drilled into the columns on several levels of the building. When detonated, the charges will disrupt the columns, allowing the building to fall in a predetermined area.

**Q: What can you tell me about how the charges are being planted and wired to bring down the building? Is the detonator radio controlled, or electrically wired?**

A: The individual explosives charges will each be primed with a blasting cap of a predetermined delay. These caps will then be wired together utilizing a "non-electric" system. This system is comprised of detonating cord and additional blasting caps. Ultimately, the entire system will be initiated with an electrical blasting cap. This blasting cap has 2 copper wires which will be run to a capacitor discharge blasting machine. When the fire button is pressed, the blasting machine will pulse a charge of 600 volts, detonating the electrical blasting cap and beginning a chain reaction of small explosions throughout the structure.

**Q: How will the building come down? What will it look like?**

A: By removing certain columns or rows of columns in a sequence, CDI can actually force the building to lean slightly before it begins to fail vertically. This gives us a very finite control over the direction of fall and the rate of collapse.

**Q: How will the weather affect the implosion schedule? What are the optimum conditions? What conditions would make it necessary to postpone it for another day?**

A: Under Federal law, explosives cannot be detonated during a thunderstorm. The only other weather that would affect us would be weather that would prevent those people involved in security from having a clear and unobstructed view. (i.e.: fog, "blinding rain," or heavy snowstorm.) Perfect weather conditions would be a dry, clear morning followed by a heavy rainstorm approximately 4 hours following the implosion.

**Q: How much dust?**

A: Dust is an unpreventable byproduct of any type of demolition operation. While different formulas have been created over the years in an attempt to predetermine the amount of dust generated by demolition operations, it is nearly impossible to determine the exact quantity with any accuracy. The amount of dust generated has a lot to do with the materials used in the construction of the structure being demolished. For example, you will generally have larger quantities of dust generated when felling a reinforced concrete building, rather than a structural steel building of the same size. This is due to the fact that the reinforced concrete building simply contains more masonry material which can be pulverized during the demolition to create "dust."



**Q: What can people do to reduce the effects of the dust on their homes? Businesses? Will gas, water or electrical lines to the neighborhood be shut off during the blast? The surrounding houses have flat-roofs that could potentially collect a lot of dust. Does this present a hazard? If so, how will you deal with it in the cleanup?**

A: This is a difficult question to answer as each adjacent property will have its own unique requirements. For instance, the preventative measures which would be recommended for properties located immediately across the street from a structure to be demolished may be quite different from those measures we would recommend for properties located a block or more away. Some simple steps that can be taken by residents or business owners in the area are as follows:

- Be sure all doors and windows are tightly closed;
- Turn off all air-intakes and exhaust fans just prior to the implosion;
- If you have any broken or damaged windows or doors (i.e.: containing large “air gaps”) a piece of tape or rolled up towel should prevent any dust from entering).
- Please remember that just like people, your pets are sensitive to dust. Be sure to bring them inside during the demolition.

Relative to utilities, CDI will not require the disruption of gas, water, or any utility services in the neighborhood during the demolition. In the event that any of the utility companies do, indeed, temporarily disconnect any services, they are doing so at their own discretion. CDI has taken down literally thousands of buildings throughout the world over their six (6) decades of experience. In many cases, utility services have run much closer to or even underneath the structure being demolished. In each of these instances, CDI has successfully completed the demolition with absolutely no adverse effects on those utilities.

**Q: How long will it take the dust cloud to settle?**

A: The “behavior” of the dust generated by the implosion is entirely contingent on wind speed and direction that morning. A good “rule of thumb” is to assume that dust will prevail in the immediate area approximately 4 to 7 minutes following the implosion. We have, however, seen dust dissipate in less than 1 minute in strong winds and, conversely, take up to 15 minutes on a “still” day! Regardless of the wind conditions, you can expect localized areas of dust to continue to be stirred up during the cleanup process. This will be greatly lessened by the use of water during the cleanup process.

**Q: You mentioned pre-inspections of the surrounding homes. How and when will that occur and what will the inspectors be looking for?**

A: The Pre-blast Survey will be conducted prior to the implosion and may continue up until the day before the implosion. People from the neighborhood can expect to see the survey engineers beginning their work prior to the demolition. The inspectors are looking at pre-existing conditions of structures surrounding the project site. They are looking for cracked and/or broken windows, cracks in foundations and/or walls. Extensive photographic and video documentation of these conditions will be made.

**Q: Where will the seismographs be planted and what will they tell you about the implosion?**

A: During the implosion itself, a minimum of six (6) seismographs will be placed in the surrounding neighborhood. These seismographs will be positioned between the structure being demolished and the nearest buildings to remain. Ground vibrations, much like ripples in a pond, will lose strength as they move further away from the building being demolished. By placing them at the closest building to remain rather than near buildings further away from the demolition, they will record the highest vibration level being generated. It is expected that levels reached will be less than ½ of that which the U.S. Bureau of Mines has established as the threshold at which paint would flake in a pre-existing crack in an older damaged masonry structure.