

The Inspiration for the King of Prussia Volunteer Fire Company - Station 47 Memorial Park and 9/11 Monument

A speech delivered on the occasion of the Tenth Anniversary of the 9/11/2001 attacks
at the Dedication Ceremony

by Charles E. McDonald Jr., Architect, September 11, 2011

I owe the privilege of my involvement with this project to Joseph White of JJW Incorporated who introduced me to the King of Prussia Volunteer Fire Company.

From my initial thoughts about the project to its conclusion, I felt the goal was to memorialize the horrific events of 9/11, honor those who's lives were taken, and celebrate the courage of first responders and survivors. What we did with this memorial had to embody the gift of their lives and the sacrifices of all as an expression of the American spirit.

In round numbers and allowing for construction tolerances I will try to clearly explain some of those features.

The Site in General

A few of the key symbolic features are already evident to everyone.

Fellow volunteers involved in the project have been made aware of other, less apparent aspects.

I will outline all of these and additionally reveal, to you here today on this tenth anniversary and dedication, other arrangements, built into the Memorial Park and 9/11 Monument of which I've not told another soul.

And, there are a few of which I will not speak, but instead leave for you to discover.

This triangular section of firehouse property was already a memorial site when the idea of a 9/11 Memorial was conceived by Fire Fighter Vince DiSanto.

The William C. Daywalt Sr. Memorial Gazebo you see 'here' (pointing), originally sat for four years at the present location of the 9/11 Monument.

As part of the vision for what the site could become, I immediately saw it as a key feature for a place within the site to sit and reflect.

However, that meant moving it, and that idea was not immediately embraced by the firehouse membership.

On that mound, all alone with no steps to it, the memorial was seldom used.

After much discussion and a bit of time, Vince suggested that if it would be all right with Bill Daywalt Jr., it should be all right with everyone else. After receiving a brief explanation of the concept for the whole site, Bill Jr. graciously agreed that it would be OK to relocate the Gazebo.

To recognize its importance and honor the original location of the Memorial Gazebo, I placed the center of the 9/11 Monument at the exact center where the Gazebo stood.

The design of the rest of the site emanates from that point.

The Site Specifically

If you strike a line from the far acute corner of the property triangle, to the center of the 9/11 Monument and at that point diverge the line by 3 degrees to the North, this 2nd line segment becomes the centerline of the stair and entrance pathway from the parking area.

This 3 degree divergence of the line bisecting the site is meant to represent the countless 3 minutes of silence, now traditionally observed here, and around the world, on 9/11.

The bearing of the line from the far corner of the site to the center of the 9/11 Monument is today marked with two trees. A 3rd tree, a callery pear, like the survivor tree pulled from ground zero, nursed back to life, and now replanted at the New World Trade Center Memorial in New York, will be planted at the stake located between the 9/11 Monument and the 2nd tree.

There are 4 major features on the site: one for each of the 4 Flights that went down on 9/11.

The central feature is the 9/11 Monument.

The other three are arranged as follows:

Radiating from the center of the Monument on the south side of the divergent line is the World Trade Center Patio. On the north side of the divergent line is the William C. Daywalt Sr. Memorial Gazebo, and centered on the divergent line is the entrance pathway and stair.

The World Trade Center Patio depicts the 16 acres of the World Trade Center site plan with its 7 buildings, central Plaza, and 4 bounding streets.

The center points of both the Plaza Patio and the Memorial Gazebo were located by creating 2 intersecting points using a circle and two radiating lines.

Centered on the 9/11 Monument is this circle with a radius of 33 feet.

The two radiating lines from the center of the circle are set at 47 degrees apart and at equal angles on either side of the central divergent line of the entrance path. These lines are also marked by the ends of the low return walls and railings at the top and bottom of the stair.

The 47 degrees is meant to record, for the first time on the site, the station number, 47, of the King of Prussia Volunteer Fire Company.

The 33 foot radius circle used has a circumference of 208 feet.

The North and South World Trade Center Towers both had a footprint of one square acre. A square acre being 208 feet on each side.

The 33 foot radius circle used encloses an area of 3,430 sq. ft., 10 sq. ft. for each of the 343 firefighters who gave their lives saving others on 9/11.

The radiating point for the entrance pathway is at the edge of the center of the top of the stair. A second 33 foot radius circle centered here fully encompasses all four site features, creates the arc at the edge of the entry ramp, and serves as the starting point for the reducing concentric arcs of the entry pathway paving pattern.

The lines which define the sides of the wedge shaped entry path emanate from the center of this circle at the top of the stair, and are set at 13 degrees on either side of the divergent centerline symbolic of the 13 stripes on either side of the American Flag!

(Added note) The 47 degree Gazebo and Patio arrangement symbolic of the firehouse station number, outside of and emanating from the same point as the 13 degree entrance arrangement symbolic of the flag, are together meant to represent the firehouse embracing the flag.

The 9/11 Monument

The design of the 9/11 Monument strives to represent all 4 Flights and events of 9/11.

The circular character of the concrete base and paved walkway are intended to be symbolic of the lack of anything but a roughly circular hole in the ground at the crash site of Flight 93 in Shanksville.

Upon and exactly within this circular base sits a dual-sloped, pyramidal pentagon of granite representing the Pentagon and Flight 77.

Rising up out of this pentagon are the tops of the World Trade Towers in Stainless Steel and serve as the base for each of the 2 actual World Trade Center Beam Sections.

The towers are purposefully represented in a very literal way to pay special homage symbolically to those first victims on the planes; at, and trapped above the impact floors at the tops of the buildings, where the majority of lives lost were located.

In order to represent the buildings I had to scale them down, and in a meaningful way. This need converged with a desire to incorporate the yearly observance cycle of the events of 9/11 into the design.

Working with the sizes of the actual buildings, the site limitations, selected materials and the dimensions of the World Trade Center Beam Sections received, was a bit of a puzzle. But after some time the number 52 came to the fore--a year--expressed in terms of 52 weeks, allowed all of these conditions to exist together.

Therefore, the Stainless Steel Towers of the Monument as well as the World Trade Center Site Plan Patio in pavers, are exactly 1/52nd scale or 52 times smaller than they actually were.

Given it's immense size, an additional reduction in scale was required for the Pentagon. In fact, exactly twice as small. The footprint and height of the Pentagon Base are at 1/104th scale or 104 times smaller than the actual Pentagon building.

The North/South compass orientation of all these represented buildings, are as they actually were and are.

If you align the center of the 9/11 Monument approximately with the flag pole, that alignment is the North/South direction.

The Monument being north of the flagpole; the southern point of the Pentagon pointing due south. The North #1 Tower, north of the South #2 Tower and similarly on the Plaza Patio.

The circular First Responders Walkway on the outside of the 9/11 Monument encloses an area of 343 square feet, symbolic of the 343 firefighters who gave their lives on 9/11 that others might be spared.

The circular concrete base that the granite pentagon sits on has a circumference of 47 feet, again, the station number of the King of Prussia Volunteer Fire Company.

The 1/104rth scaled Pentagon footprint fits exactly within and upon this circular base.

The approximately 8 inch vertical sides of the pentagon base are exactly proportional to the footprint representing the 73 foot height of the actual Pentagon building.

The size of the open courtyard at the center of the pentagon is marked by the lines created where the bottom slope and top slope of the pentagon meet.

The sloped top surfaces of the granite pentagon have been designed as they are for several reasons. The most practical of which is that it needed to be able to shed rain and snow.

Conceptually, it is connotative of the resiliency of the American spirit, that what we do as a people is push upward and onward. No setback, challenge, or disaster will get the best of us. *And we do this* with the optimism that we can make tomorrow better than today!

Taking advantage of the polished surfaces of the granite on the facets of the pentagon, the angles of the granite were set based on an adult's eye level and position on the walkway, so that as you walk around the Monument reflections of the two twisted steel sections come and go at chaotic angles, momentarily re-creating images of the destruction at Ground Zero which we will never forget, but which those who come after us will never have experienced.

The jewel at the center of the top of the pentagon will be a shallow pyramidal pentagon of glass, encasing and illuminating a folded American flag which was flown over Bagram Air Force Base in Afghanistan. The flag case will cap a time capsule being prepared by the firehouse.

The Towers and Beam Sections

The World Trade Tower beam sections are both approximately 33" x 12" 5'-0" long weighing about 650 pounds each. The studs you see are 3/4" diameter x 3" long with 1 1/4" diameter heads.

The beam sections have been mounted atop each tower to correlate with the orientation of the elevator cores of each building.

In the tops of the towers 40 lights are mounted flush in the stainless and structural steel beneath, symbolic of the 40 passengers and crew of Shanksvilles' Flight 93, the first Americans to take offensive action in response to the events of 9/11, saving countless others at whatever it's target was to have been. 20 points of light per tower, arranged in a circle, to illuminate the beam sections and draw our eyes and hearts towards the heavens!

The biggest component for the design of the towers that you do not see today are the 4 foot square, 10 foot high, sheared-top glass cases to be mounted on the stainless steel towers to shield the beam sections from the elements.

The sharply angled tops of the glass cases are designed to be reminiscent of the new World Trade Tower #2.

This very important, single feature, is the only one which connects the Past with the Future.

It's uncertain how long it may take the firehouse to raise what's required to get this portion funded, but I know all are anxious to see the project fully completed.

Finally, if you stand at the center of the Plaza Patio and look toward the center of the 9/11 Monument, that line of sight marks the point of impact of Flight 11 on the far side of the North Tower; and the point of impact of Flight 175 on this side of the South Tower.

And, if you stand at the center of the Memorial Gazebo and look towards the center of the 9/11 Monument, that line of sight marks the point of impact of Flight 77 on the far (west) face of the Pentagon. Continuing that line westward traces the approximate flight bearing of Flight 93, before it crashed into a field in Shanksville, Pennsylvania!

In closing, I would like to say that this project required each of us involved, to discover our limits, and then go beyond them.

It is my hope that this Memorial Park and 9/11 Monument will become a place which touches us spiritually and serves the need of the firehouse and community for a tangible remembrance.

Thank You.

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