

NOTES FOR WEST POINT SLIDE PRESENTATION

Slide 2

- The natural environment is rapidly changing, forcing us to drastically alter our lifestyle if we are to survive!
- Arctic Sea Ice melt is causing weather destabilization. Within the next few years Climate Change deviation will increase exponentially.
- We are approaching eminent danger from the virulent forces of Nature that will make Super-storm Sandy; the blizzards of this winter; and the drought of last summer seem mild.

Slide 3

- The attack upon on cities and the built environment will increase with unrelenting extremes of wind, water and temperature; causing increased property loss and infrastructure damage
- Our existing system was never built to withstand these escalating assaults.

Slide 4

- This chart was taken from a List created by Boone & Hart, which we expanded to profile the Risk Management of each threat.
- The red areas indicate natural threats that currently have little possibility of threat deterrence. We are at the mercy of Nature's wrath to strike us with one perturbation after another.

- Special notice should be made to Pandemic Threats from Asia. They are extremely dangerous, especially for the West Coast.

Slide 5

- This slide shows increased incidence of natural disasters, with the largest percentage increase being droughts, wildfires and pandemic disease.

Slide 6

- This chart shows property loss payments from insurance companies skyrocketing, while premiums so far have remained relatively stable.
- We cannot continue to keep repairing weak structures that are unprepared for extreme Climate Change disasters. Premiums will rise until we can't afford to protect our old buildings anymore
- Every Natural Disaster has Economic Impacts that are draining our economy and wearing down our resiliency.

Slide 7

- Large, sprawling, mega-cities all over the world are disasters waiting to happen. They are totally unsustainable, existing in a bio-engineered environment that is rapidly destabilizing.
- Most structures have not been designed to withstand against natural or deliberate threats.
- They are indefensible!

Slide 8

- This slide illustrates the long tentacles of mega-city supply lines. Each arm is crucial to the life of the city. If one or more arms are cut off, the city ceases operation and eventually dies.
- This vulnerability was demonstrated with Hurricane Katrina striking New Orleans; and Super-storm Sandy striking New York and New Jersey cutting off food, water and power.

Slide 9

- Preparing and Adapting for this ominous future must be totally realistic.
- This slide shows the French Maginot Line that underestimated the adaptability of a German attack.
- With over 2 years of preparation, the French created a defensive barrier about 200 miles long by 15 miles wide. The Germans devised a superior invasion strategy, flanking the entire barrier and defeated all of France in only 6 weeks!
- Likewise, the NIPP has been designed to protect a complicated, inefficient infrastructure that was designed to profit the energy industry during regular climate conditions.
- Due to climate destabilization, the Plan is vulnerable to ongoing environmental disruptions that will culminate in collapse of the United States!
- Within the National Infrastructure are elements that are the cause of this environmental destabilization.
- They must be extricated to bring about stability.

Slide 10

- This Tree demonstrates how the economy will only exist if we have a viable society that is anchored in a stable environment.
- Civilization has always been built on the life force of a strong environment. Once that deteriorates, the social structure decays and the economy disappears.
- Our ARC City concept is an integrated design that overlays all three areas of Ecological, Self-Sustaining and High-Performance into a highly viable environment that will withstand all of Nature's perturbations.

Slide 11

- Creating an Ecological City through Retractive Development, we replace Urban Sprawl with a high-density central city, surrounded by a Bio-Diverse natural environment that stabilizes and strengthens nature through restoration practices.
- We start healing the Earth, at each new city, allowing Nature to help protect us from environmental attack.
- We turn Nature into an ally, instead of a foe!

Slide 12 – Elements of a Self Sustaining City

- We live in a Fortress Structure with built-in Resistance to attack, so that vulnerability is greatly reduced and resilience is simplified.
- It has 12 meter high perimeter walls for preventing intruders

- There are Limited entry-points at the Train Center with security scanners similar to those at airports
- It has Canals & Lakes inside the walls to stabilize water variables
- There is Water Collection & Storage System for 6 months water supply
- All food is locally grown with 365 day Production & Storage for a 6 month minimum food supply
- All Solid & Liquid Waste will have bio-digesting of nutrients back into the soil
- It has a Local Energy Supply System that is changed out every 10 years
- There are On-Site Factories to repair any exterior damage and build a beautiful city inside
- There is a Health Center on-site for all emergencies and general health care
- It has an HVAC system modified by geo-thermal heat storage in the cistern below with Air Filtration protecting against disease, pollen and mold entering our lungs.
- Lastly, there is Oxygen supplementation for when the atmosphere fails

Slide 13

- High Performance cities are the greatest transformative design we can hope to achieve; as a civilization adapting to a rapidly changing environment.

- Current thought on Smart Cities creates a cyber-linkage of physically separate buildings and infrastructure services. The ARC City design is all within one building eliminating the wasted transit time and distances.
- Cyber-security is kept modular and inter-related within the core of city. All city operations, all business operations are inter-linked digitally with external “Other-city” communication permitted by filtering from “cloud” firewalls.
- Our Smart Energy System has full power capabilities located on each city site, using 25 Mw reactors with geothermal energy storage to manage peak demand. There is no energy loss over these short distances and no chance of cyber-terrorism sabotage.
- Human interaction is brought together into a “critical mass”, like nuclear fusion, that produces the greatest amount of new thoughts and activities within a given space.
- These high-density, small-modular cities will become very powerful and impervious to much of the disasters befalling the outside world.

Slide 14 – Let’s look at The World’s Strongest Building. It has:

- High tensile strength, Reinforced Concrete construction with Tension/ Compression ring design at each floor
- All Floor diaphragms transfer loads to massive shear walls going to the Uni-body foundation anchored 150’ deep below ground
- The 10” thick concrete shell will resist small and medium arms fire, as well as repelling gamma rays from nuclear attack.

- The shape is completely aerodynamic, resisting earthquakes, extreme wind, temperatures, flooding and deliberate attack.
- It has an insulated building envelope that eliminates heat transfer, providing constant temperatures all year round.

Slide 15

- This is a new way of living. We live, work and play in a mega-structure. These small, modular cities network together to form clusters in a metropolitan grid
- They reduce commuting, exposure to harsh exterior elements and promote a much more efficient way of living.
- Shown here: yellow area is offices, green is residential, blue is schools, orange is commercial area, while purple are factories and storage

Slide 16

- Nature has declared War on humanity
- Our established environment is evolving to extremes of wind, water and temperature. Many of our existing structures cannot withstand these increasing stresses.
- We must build new cities for the 21st Century!
- We are just starting to fight a hundred year battle for survival and do not understand just how powerful this foe really is.
- Extreme weather events will worsen ten-fold in frequency and intensity from what we have experienced so far.

- The question is... do we continue the current direction of civilization – killing each other; plundering Nature to steal more fossil fuels and minerals; polluting the Earth; and creating more sprawling cities that force us to use ever more finite resources for the sake of connectivity?
- If we continue this way, Climate Change will collapse our civilization within the next 80 years, even though it will be adapted to the requirements of today's infrastructure with Full Spectrum Resilience.

or Do we:

- Create a New Civilization oriented towards Surviving Nature's onslaught and preserving our modern technology and knowledge that we have developed?
- We do this by redefining our defensive parameters and simplifying all 18 sector specific areas of infrastructure into an integrated harmonious design.
- We must put all our efforts into surviving the tumultuous events unfolding before us, as a civilization adapting to a rapidly changing reality.