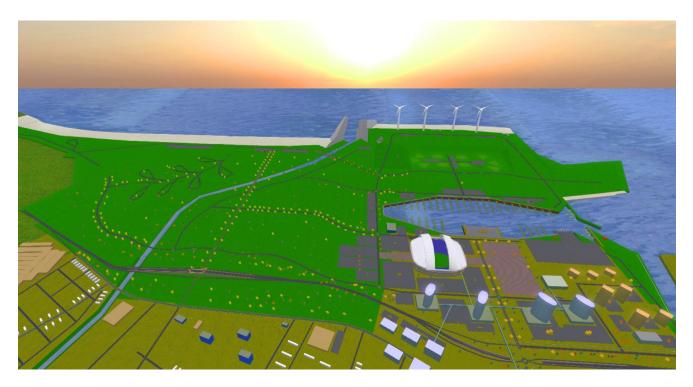


Woodlawn Beach- Photo courtesy of Tim Frenz- www.FrenzFotography.com

Environmental Clean Up and Redevelopment
Bethlehem Steel Plant Property
Lackawanna N.Y.

Prospectus By John Nowak 8-28-2014



Understandably, many in Western New York want a new stadium in their own city or town, but citizens must choose wisely is best for the region and national image.

- ✓ National Waterfront showcase 1275 acres
- √ Stadium (retractable roof) District (235 acres)
- √ Green projects (1,000 acres)
- √ Wood Lawn Beach re-beautification and extension
- ✓ Continuous Waterfront Park system anchor store effect
- √ Tailgating Bills fans a half a mile away from the shoreline protected from the weather
- ✓ Multiple six existing access roads
- √ Connect the light rail transit system to the park
- √ Connect Thruway 1.6 miles to the park
- ✓ Uplift City of Buffalo, Southtowns and W.N.Y.
- √ Attract the Super Bowl
- √ Create thousands of jobs

Index:

Examples of environmental clean up	page 3-4
2) Reclamation, remediation and beautification for a continuous	
waterfront park system	page 4
3) The bigger the challenge, the greater the reward	
4) Bethlehem waterfront park project has five major projects and many	
spin off developments	page 8
5) The crowning jewel of the park is wood lawn beach restoration,	
beautification and extension	page 8
6) Funding sources for the project	page 10
7) Waterfront future bigger picture	page 11
8) 2011 Draft graphical design features	page 12

- A) The Bethlehem Waterfront Park Project would be a significant makeover of Western New York's current national image of the rust belt to a green belt which is priceless. The result would be the return of 1275 acres of waterfront access to the public in a pristine park/plenty of green space projects, harbor and beach setting.
- B) The stadium district development will add significantly to the economic vitality of the region in a state of the art retractable dome/roof stadium beside a large Outer Harbor with 600 to 1,000 boat slips, with an impressive front plaza and boardwalk overlooking the harbor. Elevated enclosed walkways connect the stadium, hotels, splash lagoon, museums, condos and theme attractions. The stadium district development would have a book end or anchor store effect, far enough away from the immediate waterfront and it's green space projects, supporting numerous spin off developments in the outlying and other waterfront areas.
- C) The extension of the light rail transit system to the waterfront and park will highlight the city of Buffalo's Waterfront renewal, new and architectural rich design older buildings, art, stores, restaurants, theaters and hotels (opposite book end, anchor store effect).

EXAMPLES OF ENVIRONMENTAL CLEAN UP:

STEEL STACKS, Bethlehem, PA

"One of the country's largest brownfield sites in the country, the former Bethlehem Steel foundry's blast furnaces are showcased as part of a unique cultural and entertainment campus into what is now known as SteelStacks. Site planning and landscape design were the hallmarks to unifying a new campus that frames what has been reborn as fantastic sculpture"

http://www.wrtdesign.com/projects/detail/steelstac ks/302



Photo © courtesy of Jeffrey Totaro

SHIP CANAL COMMONS PARK, the former Hanna Furnace Steel, Plant Buffalo N.Y.

"Excavating and properly disposing cyanide-contaminated wastes buried under a small portion of the site;..." http://www.dec.nv.gov/chemical/50476.html http://www.ecidany.com/budc-projects-ship-canal-commons







Photos courtesy of Buffalo Urban Development Corporation

OUTER HARBOR, City of Buffalo

City of Buffalo new State Park. "... much of which was **contaminated by industrial and municipal waste** decades ago." http://www.buffalonews.com/city-region/gallagher-beach-small-boat-harbor-to-be-operated-as-a-state-park-20130903

Buffalo's first state park to start taking shape on outer harbor Aug 27, 2014

http://www.buffalonews.com/city-region/downtown-waterfront/buffalos-first-state-park-to-start-taking-shape-on-outer-harbor-20140827 (\$15 million)

RIVER BENDS, former Republic Steel property, South Buffalo

"...\$225 million in state funding to build the first of six buildings on a brownfield site." http://www.buffalonews.com/opinion/buffalo-news-editorials/cuomos-clean-energy-plan-gives-buffalo-the-seeds-for-a-new-economy-20131121

RECLAMATION, REMEDIATION AND BEAUTIFICATION FOR A CONTINUOUS WATERFRONT PARK SYSTEM

Arcelor Mittal Tecumseh Redevelopment Inc.

Gateway Metroport without canal average

South Buffalo Rail road

Wood Lawn Beach

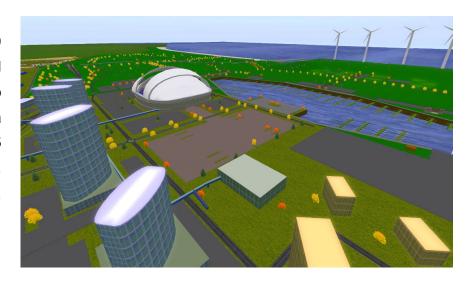
Beach extension/restoration/beautification return land back to the lake

Total Approx 1275 acres entire park

- Lackawanna Bethlehem steel plant was not a chemical plant.
- Most buildings have already been razed and have been ongoing remediation.
- There is no radiation on the project site (confirmed by D.E.C.)
- Approx. 400 acres of land was formed using the by-product of the Steel making process called slag.
- Wikipedia "Basic slag...is largely limestone or dolomite which has absorbed phosphate from the iron ore being smelted. Because of the slowly released phosphate content, and because of its liming effect, it is valued as fertilizer in gardens and farms in steel making areas. However, the most important application is construction." Slag, which is 2,000 degrees when formed, has the characteristics of volcanic rock. Hawaii is built on volcanic rock. Steel slag is relatively safe (not to be confused with refining copper, nickle, etc, slag). Slag is used as a foundation for driveways, roadways, and parking lots in Western New York. Its a very safe material to be used to shape the terrain and build the park.

Phases/sections I, IA, II, and III runs two miles along hamburg turnpike and extends about 2,000 ft towards the waterfront which has the combined approx. total of 400 acres. New York Environmental agency said Phase I's, approx.101 acres is ready for construction.

Phase I's 101 acres, with I A's 9 acres needs some small remediation and Gateway metro port of approx.125 acres have a combined approx. total 235 acres for the Stadium, parking, hotels, condos, splash lagoon, museums/theme attractions.



Phases II and III approx. 300 acres has ongoing relatively easy remediation, would be for green space projects and if needed more allotted acreage for parking space.

• The parking lots surrounding the Stadium would have aesthetics in mind, green spaces and islands with trees, shrubs, natural rocks, clump tall grasses and landscaped lighting. The extension rapid transit light rail to the park would give access to City of Buffalo hotels and parking. Some City of Buffalo residents will choose to ride the light rail transit to games. Stadium district would have three or four high rise hotels/offices if hotel space isn't needed yet (one may be the Bills new office) with their on-site parking, 200 RV/camper sites in the park, picnic shelters, and additional parking in the park.

THE BIGGER THE CHALLENGE, THE GREATER THE REWARD:

Bethlehem Steel property's two miles of lake shore stretches inland 3,400 feet, and has an additional approx. 650 acres divided up into zones 1,2,3,4,5, Tank farm area, Coal/Coke/Ore Storage & Coal Handling Area and Coke Plant & By-Products Facilities (most structures been razed):

Zone 1 consist of 128 acres at the end of Wood Lawn Beach is an even grade plateau of **clean iron slag** ten feet high from the lake's surface. Zone 1 had its top layer 30 feet high of slag excavated, and was sold for profit up until the year 2006.

Zone 2 consist of 82 acres, the New York Environmental agency made public in 2009 a report of plans of remediation (clean up time and cost) SWMUs.

Zones 3, 4 and 5, Tank farm area, Coal/Coke/Ore Storage & Coal Handling Area and Coke Plant & By-Products Facilities consist of approx. 440 acres contains intermittent relatively small surface spills contamination, remediation ongoing. Surface oil tanks been removed, on going remediation, Coke oven and Benzene plant remediation is also ongoing. There are intermittent SWMUs that need remediation. An exhaustive Case Management Study is expected in the fall of 2014

 There are approx. 44 S.W.M.U.s, Solid Waste Management Units (basically pits), the larger SWMUs were created in the higher elevation of the piled slag heap. 24 SWMUs are relatively small.

- Some SWMUs contain relatively harmless mill scale or called flake steel from the hot rolled steel process reclaimable as a raw material for steel making, steel plant operations discarded material or discarded common construction material that can be relatively easily handled disposed off-site.
- A few SWMUs contain plant normal operations by-product, such as tar acid, sludge material etc and needs more care to be disposed off-site.
- VERY IMPORTANT FACT: "A dense glacial till (non-permeable layer of clay) unit underlies approximately 38 to 52 feet below ground surface (measured from the top of piled slag heap) which acts as a vertical confining unit to inhibit the downward flow of impacted groundwater." This means contamination can't go straight down pass the glacial till (non-permeable layer of clay), it's a natural barrier to keep contamination from going deeper in the ground and spreading lateral.
- **VERY IMPORTANT:** The removal of material to the glacial till natural barrier (non-permeable layer of clay) and beyond the contaminant lateral migration material to obtain an opportune **totally** cleaned area is potentially feasible.
- Fortunately most larger SWMU's are concentrated or clustered in Zone 2, the park design is already for excavating all of Zone 2 down to the glacial till (non-permeable layer of clay).
- Recently remediation plan/Alternative 4 was chosen for zone 2 and almost done. Consolidate
 (combined the relatively small amount of material from the sludge pit into the tar acid pit), build
 a slurry wall around the tar acid pit, and then cover (cost around 5.5 million). Fortunately they
 didn't choose Plan Alternative 6, <u>Excavate</u> SWMUs ..., Stabilize, and <u>Dispose</u> Off-Site Cost
 \$52 million (2009)." The money if put towards the Alternative 7 plan will have greater and more
 efficient results.
- Alternative 7 (cleanup and reshaping the terrain) involves a much larger scaled cleanup of designers, draftsmen, surveyors, heavy equipment operators, on site lab testing, engineers, larger excavators, bulldozers, transports, possibly incorporate the use of rail way, barges and/or ships will maximize efficiency and lessen total cost in both remediation, shaping the park terrain. Remediation of all SWMUs can be accomplished in relatively rapid succession, will lessen total cost and time.

THE CROWNING JEWEL OF THE PARK IS WOOD LAWN BEACH RESTORATION, BEAUTIFICATION AND EXTENSION

As a diamond is properly cut, the terrain is properly shaped to achieve the most pristine natural and aesthetically appealing environment.

The Waterfront Park design proposal involves the beach surface sand from inland parameter 300 ft to the beach shore line to be extended the full mile of Wood Lawn beach and an additional extension of the beach for a mile partially into Lackawanna. This would achieve the **maximum natural pleasing aesthetics** that the surrounding land has to offer.



Existing Wood Lawn Beach section, surface cleaned and groomed sand 300 ft across would be extended for two miles partially into Lackawanna NY

Similar to California or Florida's wide and even grade instant access to their beaches, the Park design entails the center of the park's waterfront an immediate transition from a park setting of green grass, trees with a road running adjacent to the beach. On the lake side from a wide walking/roller blade/bicycle path and a three foot natural stone fence with entrances begins the predestine groomed sand beach 300 ft out to the shore line. Imagine yourself as if standing on the beach looking to your left the distance of a half a mile stretches the pristine beach to the existing Wood lawn beach with its parameter of trees with sand dunes and beach that subtly arches the bay. Looking on your right at the North end of the beach is perched an elevated partially white canopied amphitheater constructed in the side of the large grass covered berm will offer a spectacular view of the park, beach, bay and sunsets for summer events.

Further research, surveys and test holes would have to be drilled to determine if the extension of Wood lawn Beach is feasible. If found to be feasible the construction plan would perhaps entail as follows:

- Redirecting Smokes creek's 2,600 ft lower section to another excavated course 2,000 feet
 North where the mouth will exit.
- All along the new designated creek course will be excavated. All found contaminants will be removed down to glacial till (non-permeable layer of clay) and lateral until there are no

- contaminant signs remaining.
- Once the new creek course is excavated, at each end the cofferdams will be removed to allow the old Smokes creek to take the new course to the lake.
- Old Smokes creek's course section will have at each end built a cofferdam. Water will be pumped out.
- All wind mills would be taken down in zone one which is mostly Hamburg's land, to make way for the one mile extension of Wood lawn beach.
- The city of Lackawanna's most valuable asset, if properly developed, is their waterfront. No other city would block out forever its citizens waterfront, by covering it end to end with wind mills. However there are four windmills that are aesthetically appealing for the park design. The contrast of a few thousands of dollars of tax revenue from an excessive number of windmills, would be as much as a billion dollars of taxable private investment redevelopment (except the stadium) stretching all the way into Lackawanna. Resulting in a new yearly property tax revenue stream of millions of dollars that is desperately needed to uplift the City of Lackawanna, fix the crumbing roads (recently in the news it asked the State to take over), bring jobs, redevelopment and beatification throughout the city.
- Most all land in Zone 1, Zone 2 and partially of Zone 3 on South side of new Smokes creek
 course will be excavated when necessary down to the glacial till (non-permeable layer of clay)
 or if not necessary to original lake bottom and handled according to material, any contaminants
 from SWMUs will be disposed off-site. All slag having no contaminants will be used as fill for
 the park.
- Add sand on to the glacial till or original lake bottom for the proper height and grade of the bay floor and 300 ft beach sand surface, for one mile extension of Wood Lawn Beach. Example Beach restoration "U.S. Army Corps of Engineers, New York District and New York City... sand replenishment.... "...Law 113-2 ... placement of more than 3.5 million cubic yards of sand.."



ttp://www.dvidshub.net/news/112117/army-corps-begins-post-sandy-restoration-work-

The few relatively clean industries currently on Lackawanna's waterfront can be relocated with state and federal grants inland.

BETHLEHEM WATERFRONT PARK PROJECT HAS FIVE MAJOR PROJECTS AND MANY SPIN OFF DEVELOPMENTS.

- (1) W.N.Y. going the extra mile **alternative 7**, Wood Lawn Beach Restoration, Beautification, and Extension (cleanup and reshaping the terrain)
- (2) Stadium District Development
- (3) Hamburg Turn Pike Fast track, beatification and no stop lights.
- (4) Thruway Fast Track Connector connecting thruway 1.6 miles with Hamburg turnpike and direct access to Stadium district along an abandon rail road, no tolls (quick access to waterfront for thruway drivers, attracts visitors).
- (5) Light rail transit system extension (an eighth access) out and along the waterfront to the park

Estimate one year designing and minimum four to maximum eight years total clean up and construction.

FUNDING SOURCES FOR THE PROJECT

I. All 1275 acres of land would be taken over by New York State by eminent domain (paid a reasonable price) for public access and redevelopment. Example New York State recently bought 96 acres for 2.8 million dollars at River Bend Buffalo NY

http://www.buffalonews.com/business/state-buys-96-more-acres-for-riverbend-projects-20140729

- II. The federal Government would provide seed money to cover the complete initial clean up.
 - The project has some challenges but can be reasonably overcome. All contaminates would be removed from the entire 1275 acres, only the steel slag would remain and the original land. Clean soil would be trucked in or transported by trains, barge or ships to conserve cost and cover the slag with soil 18-24 inches for green projects.
- III. The Bethlehem Waterfront Park Project would involve private investment of a billion dollars (not including the stadium which is tax free), four high rise hotels/offices, splash lagoon, high rise condo district, theme attractions and the store & restaurant district on Ridge Rd and beautified Hamburg turn pike. A taxable redevelopment equates to additional \$40,000,000.00 dollars a year tax revenue for City of Lackawanna for road repair, rebeautification of the city and a new city hall.

WATERFRONT FUTURE BIGGER PICTURE

While attending the four recent outer harbor meetings, the Mayor of Buffalo announced in his speech there is 4.8 billion dollars of investment in economic development in the city. I sense a large percentage is spurred on by the clean up and exciting developments around the waterfront in providing public access.

However the bigger picture of Western New York's waterfront clean up effort is best described as setting the goal line at the 50 yard line, then patting each other on our backs and saying well done.

We have a once in a life time opportunity that rarely comes along with the wind (public sentiment) in our favor, driving us forward in cleaning up all the waterfront, making a robust, vibrant green and blue economy. Which will return to us incredible opportunities and tremendous economic vitality. If we drop the ball now and allow industry that no longer needs the waterfront to grow stronger to get it's roots sunk back into the community, it will be to late to stop a larger more polluting industry wanting in on the waterfront. We will be complaining in later years as we do today and be scorned by later generations that we failed to finished the job.

We live in NEW YORK STATE, we are suppose to be known for facing great challenges, finding solutions, triumphing, leading the nation and the world.

The Bethlehem Waterfront Park Project is a legitimate worthy cause for both New York State to take over the waterfront land by eminent domain, the federal government to provide seed money to pay for the complete initial clean up and re-beautification.

John Jerome Nowak

Please contact Fred K. Heinle Director of Development 714 Ridge Rd. RM. 309 Lackawanna, NY 14218, 716-827-6421 for redevelopment inquiries and support for the Bethlehem Waterfront Park Project.