Analysis of Brownfields Cleanup Alternatives – Preliminary Evaluation
Former Roth Steel Property
800 Hiawatha Boulevard West, Syracuse, NY 13204

Prepared by Onondaga County Office of Environment on behalf of Onondaga County Industrial Development Agency

I. Introduction and Background

a. Site Location

The site is located at 800 Hiawatha Boulevard West, Syracuse NY, 13204 (herein referred to as "the Site").

a.1 Forecasted Climate Conditions

According the US Global Change Research Program (USGCRP), heat waves, heavy downpours, and sea level rise pose growing challenges to many aspects of life in the Northeast. Some of these factors, most specifically increased precipitation that may affect flood waters and stormwater runoff, are potentially applicable to the cleanup of the Site.

According to FEMA Flood Zone Map 36067C0216F, the Site is located within a Zone X of Onondaga Lake Watershed, where minimal flooding is expected. According to Onondaga County's Hazard Mitigation Plan, the major waterbodies and tributaries within the Oswego River Basin in Onondaga County that experience frequent flooding include, but are not limited to, the Oswego River (of the Oswego River Watershed); Oneida Lake, Oneida River, Butternut Creek, Limestone Creek (of the Oneida River Watershed); and Onondaga Lake, Skaneateles Lake, Otisco Lake, Onondaga Creek, Nine Mile Creek, Ley Creek, Bloody Brook, Harbor Brook, Skaneateles Creek, Seneca River (of the Seneca River [Lower] Watershed). Greater storm frequency and intensity in a changing climate, combined with the fact that a large number of tributaries drain into the Oswego River Basin, may result in more frequent and more powerful flood waters within the Onondaga Lake Watershed, which may result in changes to the flood zone and increased risk of flooding to the Site.

Multiple areas on the Site, such as the former shredder and eddy sorter and former locations of two automotive shredder residue piles, accumulate precipitation and surface water runoff due to the fact they are topographically lower than other areas of the Site. Under current Site conditions, increased participation and extreme weather could result in additional accumulation of precipitation and Sit runoff. Site remediation and future re-development could mitigate runoff.

Based on the nature of the Site and its proposed reuse, changing temperature, rising sea levels, wildfires, changing dates of ground thaw/freezing, changing ecological

zone, saltwater intrusions and changing groundwater table are not likely to significantly affect the Site.

b. Previous Site Use(s) and any previous cleanup/remediation

The Site, formerly known as Roth Steel Corps., is a 24-acre property located in an industrial and commercial area on the southern end of Onondaga Lake and is zoned as an industrial district. It operated as a metal processing and recycling center from the 1950s up until 2014. Pollutants located at the Site include polychlorinated biphenyls (PCBs), volatile and semi-volatile organic compounds (VOCs and SVOCs), metals, glycols, cadmium and lead. Other prior uses that led to Site contamination include the storage and shredding of vehicles, Solvay Process waste, and other scrap materials; onsite disposal of Auto Shredder Residue (ASR) in two underground cells; and unregulated discharges of storm water.

A Consent Order between Roth Steel and the New York Department of Environmental Conservation (NYSDEC) in 2013 led to the removal of 2,179 tons of ASR from the Site and its disposal at Seneca Meadows Landfill. Roth declared bankruptcy and closed the facility in 2014. No additional remediation is known to have been conducted under former ownership.

Onondaga County Industrial Development Agency (OCIDA) purchased the Site from the bankruptcy trustee in October 2015. Currently, the Site is entered into New York State's voluntary brownfield cleanup program and is tracked under State Tracking Number C734083. Since OCIDA's acquisition of the 24-acre property, several remediation efforts have been undertaken. Two massive Automotive Shredder Residue (ASR) piles, totaling 2,545 tons, from the Site and properly disposed at Ontario County and Seneca Meadows Landfills. Additionally, 56 drums of "auto waste" liquids were removed, including three classified as hazardous waste, 11 drums of drill cuttings, 7 rainwater drums, three 250-gallon totes of drilling fluid (one of which was hazardous waste), one drum of DECON water, one drum of mineral spirits, PCB capacitor materials mixed with asbestos waste, one drum of PPE, and one lab pack of aerosol cans/paints. Perimeter fencing has also been placed on the Site to secure it from the public.

c. Site Assessment Findings

Historic Investigations:
Site investigations that took place under previous ownership include: Oil Contamination Study (Faltyn, 1968), ASR Characterization Report (Baumgartner & Associates, 1993), Geotechnical Study (CME Associates, 2004), Limited Phase II Investigation (Passero Associates 2007), and a Site Investigation Report (O'Brien & Gere, 2013). These investigations are described below.

Oil Contamination Study (Faltyn, 1968)
Thirteen soil borings were completed in the northwest corner of the main parcel (with

very limited chemical analysis of soil samples) and a study of the peripheral drainage patterns were used to investigate the presence of oil on the Roth Steel property. Reportedly, oil was released at a discharge pipe onto the Roth Steel property by an adjacent property owner. Indications of oil and tar were detected at some locations within the first three feet BGS with isolated pockets extending to depths of 6 to 7 ft. below ground surface (BGS).

ASR Characterization Report (Baumgartner & Associates, 1993)
At the request of the NYSDEC, a study was conducted to investigate the chemical characteristics of ASR on the Roth Steel property. Two areas of concern were identified, referred to as ASR Disposal Cells #1 and #2. The study determined that the ASR in Cells #1 and #2 is buried 1 to 4 ft. below ground, ranges in thickness from 2 to 4 ft., and was estimated to be 6,300 cubic yards in volume. Twenty-eight of thirty samples contained PCBs averaging 48.5 to 78 ppm in Cells #1 and #2, respectively. TCLP samples were tested for cadmium and lead at 29 locations. In addition, a full TCLP test was performed on one sample from each cell. No samples exceeded the TCLP limits.

Geotechnical Study (CME Associates, 2004)
During this investigation, nine soil borings were advanced to a depth of 6 ft. in the Roth Steel facility parking lot, as part of a subsurface exploration study. The exact location of the borings is unknown as no map was included in the report. Boring logs indicate that the parking lot's subsurface contained fill deposits (silt, sand, gravel, slag, coal ash, glass, brick, ceramic, wire, and solvay waste) and a shallow water table, as high as 6 in. BGS. No environmental testing was performed.

Limited Phase II Investigation (Passero Associates, 2007)
Passero Associates conducted a limited Phase II ESA to characterize the condition of soil and groundwater on the Roth Steel property. They installed five soil borings to investigate ASR Disposal Cells #1 and #2 to a depth of at least 8 ft., and 12 additional borings across the material acceptance/processing/storage area to the south and east of the cells. Several soil samples were also collected from the onsite lagoon. Results show that PCBs, and to a less extent, metals and SVOCs in certain soil samples were in excess of NYSDEC cleanup levels. Groundwater in some areas was observed to be impacted by PCBs and moderate levels of VOCs. It should be noted, however, that the groundwater samples were collected from open geoprobe holes rather than properly constructed monitoring wells, therefore, the analytical results may be biased high due to elevated turbidity in the samples.

Site Investigation Report (O'Brien & Gere, 2013)
On December 28, 2007, a consent order (D7-1015-11-04) between Roth Steel Corporation and NYSDEC was signed which required a study to determine environmental impacts from the ASR Disposal Cells #1 and #2. This work was carried out by Brown and Caldwell in separate Petroleum and Solid Waste Investigations. Drafts reports of these investigations were submitted to NYSDEC in 2008 and 2009, respectively. NYSDEC review of the drafts led to the requirement of

additional investigative activities. A Site Investigation Report was prepared by O'Brien & Gere (2013) and was the culmination of Petroleum and Solid Waste Investigations by Brown and Caldwell in 2009 (only reported in drafts), a Work Plan Addendum by AECOM in 2010, and subsequent investigation activities requested by the NYSDEC and conducted through March 2013. Analytical results detected many different constituents across the Roth Steel Site including: gasoline related VOCs in groundwater; xylene and toluene in soil; chrysene in soil; PCBs in soil; and metals in soil (cadmium, chromium, lead, mercury, manganese and zinc) and groundwater (aluminum, barium, iron, lead, magnesium, manganese, and sodium).

Consent Order (R7-20121101-89) Post-Removal Letter Report (O'Brien & Gere, September 20, 2013)
The report presents sampling results from materials that remained in place after removal of an ASR pile that was located immediately northwest of the "former" pond. The samples were collected on August 8, 2013 from eight locations shortly after the ASR pile was removed, pursuant to a NYSDEC Consent Order. The ASR pile (2,179 tons) was taken to Seneca Meadows Landfill. Post removal samples (0-4", 4-16") were analyzed for PCBs, arsenic, barium, cadmium, lead, and selenium. The analytical results indicated that elevated levels of PCBs and metals remained on Site.

OCIDA's Remedial Investigations (2016-current):

Canalways Trail Extension Investigation (CHA, February & May 2016)
CHA conducted an environmental investigation along a linear portion of the Site to support the installation of the Canalways Trail Extension. To date, this project has produced environmental data including a 200-ft. deep geotechnical boring, 13 shallow soil boring logs, and analytical data (VOCs, SVOCs, metals, and PCBs) from certain intervals of the shallow borings (1-2 samples per boring). Analytical results showed one exceedance in SVOCs (benzo-a-pyrene) and several metals (arsenic, barium, cadmium, lead, barium, and/or mercury) exceedances.

IRM Investigation Plan & IRM Work Plan (Spectra, May & June 2016, respectively)
The investigation focused on a portion of the Site where the Onondaga Lake Canalways Trail Extension may cross. Fourteen soil borings were drilled in the ASR Disposal Cells to better define the cell boundaries and 85 soil samples were collected to characterize the concentration of PCBs in this area. In addition, waste-material samples (ASR piles, drums) and limited groundwater (3) and surface water (3) samples were also collected.

PCB concentrations exceeded 50 ppm in 3 out of 85 soil samples. Groundwater was sampled for VOCs, SVOCs, PCBs, metals, and glycols. Results indicated exceedances in iron, mercury, and/or sodium. Surface water was analyzed for VOCs, SVOCs, PCBs, and metals. Results included detections in PCBs (>0.1 µg/L) and iron (>300 µg/L).

d. Project Goal

Although a future Site use has not been established, it is likely that the Site will have an ultimate commercial and industrial end-use. Commercial end-use may occur along the portion of the Site that borders West Hiawatha Boulevard. The proposed trail that crosses the northern edge of the Site would be considered "passive" recreation, which is equivalent to commercial use with New York State's remedial program. The central portion of the Site may be used for disposal of dredged sediment, which would constitute an "industrial" use.

II. Applicable Regulations and Cleanup Standards

a. Cleanup Oversight Responsibility

The cleanup will be overseen by the New York State Department of Environmental Conservation and New York State Department of Health. In addition, all documents prepared for this Site are submitted to NYSDEC under State Tracking Number C734083. PCB-related matters are also subject to EPA (TSCA) review and approval.

b. Cleanup Standards for major contaminants

Some portions of the Site, including the Canalways Trail Extension and frontage along Hiawatha Boulevard West, will be remediated to commercial-use soil cleanup objectives. As currently planned, the central portion of the Site, will be remediated to industrial-use soil cleanup objectives. Overall, the selected remedy for the Site is under Track 4 Cleanup which includes restricted use with site-specific soil cleanup objectives, where the shallow exposed soils must meet the generic SCOs based on intended land use.

c. Laws & Regulations Applicable to the Cleanup

Laws and regulations that are applicable to this cleanup include:

- NYSDEC 6 NYCRR Part 375 – BCP Remediation Sites;
- USEPA Toxic Substances Control Act (TSCA) Title 40 of the Code of Federal Regulations Part 761 (PCB cleanup & disposal); and
- City of Syracuse: General Code, Compliance & Zoning.

III. Cleanup Alternatives

a. Cleanup Alternatives Considered

A portion of the Site is planned to contain the Canalways Trail. It will cross a linear strip of land on the Site that borders the Metro Plant. For the most part, the planned Canalways Trail will be constructed at ground level. However, for a linear distance of about 300 ft., the trail will gradually rise from ground level as it becomes elevated

along a pedestrian bridge. The trail will rise to approximately 25 to 30 ft. above ASR Disposal Cells 1 and 2. The majority of the pedestrian bridge crosses over Disposal Cell 1.

To address contamination at the Site where the proposed Canalways Trail Project is planned, three different alternatives were considered, including Alternative #1: No Action, Alternative #2: Hot Spot Removal and Capping, and Alternative #3: More Widespread Excavation and Capping.

b. Evaluation of Cleanup Alternatives

In evaluating potential remedial options, consideration was given as to whether future use of the trail would be considered a "low-occupancy" or "high-occupancy" activity, as defined in 40 CFR 761.3. To assess future contaminant exposure potential to a trail user, anticipated exposure was evaluated considering the length of the trail and a typical walking rate. The portion of the planned trail that is at grade and directly overlying remediation waste is approximately 1100 ft. long. Assuming a conservative walking rate of 2 miles per hour, it would take about 6.25 minutes to walk across the at-grade portion of the trail. For an area to be considered "low-occupancy", there must be less than 335 hours of annual exposure over PCB remediation waste for any individual not wearing dermal and respiratory protection. At a walking rate of 2 miles per hour, an individual would need to cross the at – grade portion of the trail 3,216 times in a calendar year to reach the 335-hour threshold. Considering the seasonal weather conditions in Syracuse, it is reasonable to assume that trail walking would occur primarily during the warmer months (excluding 3 winter months). During a 9-month period (270 days), an individual would need to cross the at-grade portion of the trail approximately 12 times per day to reach the threshold of 335 hours. Since it is highly unlikely that an individual will use the trail this frequently, usage on this portion of the Site would constitute a "low-occupancy" activity. EPA's PCB cleanup level for a "low-occupancy" use is 25 ppm. NYSDEC also provides PCB cleanup levels, depending upon future use. For a commercial or "passive" recreational use (e.g. trail) surface soils in the top 1 ft. cannot exceed 1 ppm. DEC guidance (CP-51) establishes a recommended PCB cleanup level of 10 ppm for subsurface (deeper than 1 ft.) soils.

The effectiveness, implementability, and cost of each alternative was considered in the selection of a recommended cleanup alternative.

Alternative #1: No Action

Previous investigations reveal PCB and metals (arsenic, lead, mercury, barium, cadmium, copper, and iron) contamination in portions of the Site where the Canalways Trail will be positioned.

If no remedial actions were taken, workers constructing the Trailway and trail walkers would potentially be exposed to elevated soil concentrations. The No Action Alternative is not an effective cleanup option for protection of public health.

Alternative #1 would be easy to implement since no actions are proposed.

The cost of Alternative #1 is minimal. There would be no expenditures for excavation, disposal, or capping. Environmental engineering assessment and risk assessment to present this alternative is estimated at approximately $25,000.

Alternative #2: Hot Spot Removal, Disposal, Capping, and Deed Restrictions

Alternative #2 activities will protect workers and trail users from exposure to Site contaminants mentioned in Alternative #1 by removing soil hot spots, capping other areas, and using deed restrictions and fencing to restrict Site use.

In order to reduce the potential health risks to workers constructing the Trailway, Alternative #2 proposes to complete hot spot removal and/or provide 1-foot of approved soil as a cap along the Trail in the elevated portion of the Trail where it rises over the ASR Disposal Cells. The installation of bridge footings will be necessary for portions of the Trail. Therefore, workers would be directly exposed to contaminated soil. In order to prevent direct exposure, an approved plan has been developed to excavate around each proposed bridge footing prior to the start of construction. Removed material will be categorized as hazardous waste if PCBs are 50 ppm or greater and will be taken to a hazardous waste landfill. PCBs less than 50 ppm will be taken to a non-hazardous waste landfill.

The "at grade" portion of the trail will be constructed with a 10-ft. wide asphalt surface. Consistent with 6 NYCRR Part 375-3.8, an asphalt surface will satisfy the NYSDEC capping requirements for a Track 4 restricted commercial-use remedy. A new fence will also be installed at the southern and western edges of the trail. This fence will restrict access between trail and other portions of the Site. Additionally, a chain-link fence already exists on the north edge of the trail separating the former Roth Steel Site from the Onondaga County Municipal Waste Water Treatment Plant. The area between the asphalt walking trail and the fence-lines, will have a 1 ft. compacted soil cover to prevent potential pedestrian exposure. This proposed remedy, along with deed restrictions (that will be established), is consistent with a NYSDEC Track 4 commercial-use ("passive" recreational) cleanup. It also satisfies the USEPA Self-Implementing PCB cleanup requirements for a low occupancy area. USEPA and NYSDEC have approved of this remedy.

An additional component for the remedy, that has not yet been approved by DEC/EPA addresses the elevated section of the trail that crosses over the ASR Disposal Cells. A potential remedy for this area includes "hot spot" removal where PCBs are 50 ppm or greater followed by a 1 ft. soil cover over both ASR Disposal

Cells. The excavated soils will be disposed of as hazardous waste at an offsite landfill. This cleanup plan would require future approval by NYSDEC and USEPA.

The estimated cost of Alternative #2 is $478,000 (see cost breakdown below).

Remediation Task	**Cost**
3-acre cover (1 ft. of soil)	$180,000
Hazardous soil excavation and disposal (~800 yd^3, footings, ASR disposal cell hot spots)	$170,000
Fencing	$ 8,000
Sampling, engineering, and monitoring	$ 75,000
Non-hazardous soil excavation and disposal (~900 yd^3, footings)	$ 45,000
Total Estimated Cost	**$478,000**

Alternative #3: More Widespread Excavation and Capping

A third remedial option (Alternative #3) for the Site is to excavate elevated metal areas along portions of the Trailway area, dispose of the material offsite, place a demarcation layer and apply 1-ft. of approved soil cover. Although Alternative #3 activities will protect workers and trail users from exposure to Site contaminants, it will offer no more additional protection than Alternative #2 and would be performed at a much higher cost.

Implementing Alternative #3 is moderately difficult to implement as it requires more extensive excavation, increased potential for dust generation, and offsite contaminant migration. The increased soil removal will also consume more landfill space, which is a valuable commodity. Increased truck traffic and exhaust fumes also create an additional nuisance to the surrounding community. This alternative provides only a minimal (if any) increase of public safety for future trail users, while creating additional negative aspects during construction.

The estimated cost of Alternative #3 is $968,000 (see cost breakdown below).

Remediation Task	**Cost**
3-acre cover (1 ft. of soil)	$180,000
Hazardous soil excavation and disposal (~800 yd^3, footings)	$170,000
Fencing	$ 8,000
Sampling, engineering, and monitoring	$100,000
Excavate and dispose of elevated metals to 1 ft. depth along trail (1100 yd^3)	$ 80,000
Additional excavation of 10 ppm PCB soils in Disposal Cells (5000 yd^3)	$430,000
Total Estimated Cost	**$968,000**

c. Recommended Cleanup Alternative

The recommended cleanup alternative is Alternative #2 (Hot Spot Removal, Disposal, Capping, and Deed Restrictions). Alternative #1 (No Action) cannot be recommended since it does not address potential exposure risks for the intended site use. Alternative #3 (More Extensive Excavation, Disposal, and Capping) offers no significant protection from Site contaminants than Alternative #2, requires greater costs, is more difficult to implement, and has other negative environmental impacts (increased dust, truck traffic/exhaust fumes, and consumes landfill space).

1. COMMUNITY NEED

a. Target Area and Brownfields

i. Community and Target Area Descriptions

Syracuse is known as "Salt City" from its days of supplying most of the state, including the majority of New York City, with salt between 1850 and 1920 from an early industrial boom in salt production, as well as pottery and candle making. The construction of the Erie Canal was crucial to the development of Syracuse as a major commercial center, bringing in companies like Carrier Corporation, Rockwell International, Crouse-Hinds, and General Electric. Companies utilized Onondaga Lake for their production processes and often disposed of production waste in and around the lake. These activities persisted until the 1950s, when the city's population declined as the move to the suburbs began in earnest. Many industries, such as typewriters, soda ash, lead works, and pharmaceuticals, closed due to innovations in technology and new understanding of environmental health hazards, leaving huge swaths of land contaminated around Onondaga Lake and its vicinity. High property taxes in New York State (NYS) created an inhospitable business environment in Syracuse, which caused many businesses, such as General Electric and Carrier Corporation, to relocate their headquarters out of state. This has shifted the City of Syracuse's labor force from mostly manufacturing-based to predominately service-based, leaving contaminated industrial former manufacturing sites vacant.

Urban renewal efforts in the city were unevenly applied, forcing poor and minority communities to reside in close proximity (the **Target Area**) to these contaminated properties, such as the former Roth Steel facility (the Site), which is adjacent to Onondaga Lake.

ii. Demographic Information and Indicators of Need

Table 1	13204 **Target Area**	City of Syracuse	New York State	National
Population:	5,438[5]	144,142[6]	19,795,791[6]	314,107,084[1]
Unemployment:	17%[7]	5.3%[6]	5.7%[6]	5.0%[2]
Poverty Rate:	53%[4]	35.1%[6]	15.4[6]	15.6%[3]
Percent Minority:	50%+[4]	44%[6]	29.9%[6]	37.2%[1]
Median Household Income	$14,437[7]	$22,901[6]	$58,687[6]	$54,482[3]
Total Number of Property Vacancies	1,152[5]	1,899[5]	16,000[6]	18,600,000[3]
Percent of Population Foreign Born	12%[4]	11%[4]	22.3%[6]	13.1%[6]
Percent of Population with a Disability	31%[4]	29.9%[6]	13.9%[3]	19%[3]
Percentage of Households with Housing Cost Burdens*	68%[4]	--	--	48%[1]
Percentage of Owner Occupied Households	34% (1,927 homes)[7]	38.5%[6]	54.2%[6]	64.4%[3]
City of Syracuse Taxes Owed to Onondaga County (2014)	$6,097,920 (31%)[5]	$19,484,497[5]	--	--
Tax Delinquent Properties	2,071 (38%)[5]	5,385[5]	--	--

[1] 2014 American Community Survey data profile and are available on American FactFinder
[2] Bureau of Labor Statistics (The Employment Situation – March 2016)
[3] 2014 American Community Survey data profile and are available on American FactFinder
[4] 2014 Mapping Economic, Educational & Housing and Neighborhood Opportunity in Onondaga County & Syracuse, NY
[5] Housing in Syracuse and Onondaga County 2014 Community Benchmark Program Report
[6] United States Census Bureau
[7] City of Syracuse Southside Neighborhood Profile
*Housing Cost Burdens are defined as Percentage of household income spent for mortgage **costs** or gross rent. According to HUD programs, households spending more than 30 percent of income for these **housing costs** are considered to be "**cost-burdened**." Households spending more than 50 percent are considered to be "severely **cost-burdened**l by the 2014 Mapping Economic, Educational & Housing and Neighborhood Opportunity in Onondaga County & Syracuse

The **Target Area** is a location of extreme poverty (income below $23,000), especially among African American and Hispanic populations. According to the American Community Survey (2015), one out of every two children within the City of Syracuse is poor; that totals to an estimated 16,600 children, which is 46.9% of all the City's children. The rate of families in poverty within the City was about 26.6% in 2013, and total

poverty was about 33.2% in 2013. Between 2008 and 2012, Syracuse reported a four-year high for its poverty rate and unemployment rate (Wogan, 2013). The vulnerable populations within the **Target Area** include foreign-born residents, disabled populations, and those with housing cost burdens. The redevelopment of the Target Area has been slowed due to lingering industrial pollution problems

iii. Brownfields and Their Impacts

The Site is 24 acres located along the southern shore of Onondaga Lake in an urban area north of the intersection of Hiawatha Boulevard with State Fair Boulevard. It is currently vacant and is zoned as an industrial district. The Site operated as a metal processing and recycling center from the 1950s up until 2014. Pollutants located at the Site include high concentrations of polychlorinated biphenyls (PCBs), volatile and semi-volatile organic compounds (VOCs and SVOCs), metals, glycols, cadmium and lead. Other prior uses that led to site contamination include the storage and shredding of vehicles, Solvay Process waste, and other scrap materials; onsite disposal of Auto Shredder Residue (ASR) in two underground cells; and unregulated discharges of storm water. The site was previously investigated under a Consent Order between Roth Steel and the New York Department of Environmental Conservation (NYSDEC). Roth declared bankruptcy and closed the facility in 2014. Onondaga County Industrial Development Agency (OCIDA) purchased the site from the bankruptcy trustee in 2015. The site is located in an industrial and commercial area on the southern end of Onondaga Lake and is zoned as an industrial district.

The Site is located on the southern edge of Onondaga Lake, where several other brownfields and Superfund sites are located. There are 12 subsites throughout the City associated with the Onondaga Lake Superfund Site, which include: the Onondaga Lake Bottom; Geddes Brook/Ninemile Creek; Willis Avenue; LCP Bridge Street-Operable Unit 1; Wastebed B/Harbor Brook; Semet Tar Beds; Town of Salina Landfill; Lower Ley Creek; Ley Creek PCB Dredging; General Motors—Inland Fisher Guide; National Grid— Hiawatha Boulevard; and Wastebeds 1-8. These sites are known to have released and potentially released mercury, PCBs, pesticides, creosotes, heavy metals (including lead, cobalt and mercury), polycyclic aromatic hydrocarbons (PHAs) and VOCs such as chlorobenzene.

There are other brownfields in the vicinity, including the following:

- *Smith and Caffrey Steel* (2625 Lodi St.) is a former foundry and may have released solvents from residual steel cutting oil.
- *Superior Lubricants* (2713 Lodi St.) is a registered petroleum bulk storage facility that has withheld information from public records.
- *Seitz Oil* (2717 Lodi St.) operated from at least 1930-1962 and distilled oil from crude. A large fire in 1962 destroyed the facility and there were apparent spills during the fire.
- *Quanta Resources* (2802-2810 Lodi, 103 Wolf) is a Class 2 Inactive Hazardous Waste Site, regulated through NYS Superfund program. Former waste oil recycling facility in operation from 1929-1981.
- *Greyhound Garage and Body Shop* (701 Hiawatha Blvd.) five underground storage tanks were removed; a reported petroleum tank failure occurred in 1988.
- *Penman-Littlehales Chemical Co.* (418 Hiawatha Blvd.) manufactured potash, aqua ammonia, and Prussian blue, which leaked into the surrounding area.

The Site has adverse effects on the adjacent residential neighborhoods that are approximately 2,000 ft. away by causing hazardous and non-hazardous substance air and water exposure routes. Those neighborhoods are some of the poorest sections of the City of Syracuse and would benefit from the revitalization of this brownfield site. Due to the extensive contamination on the site, such as PCBs, VOCs, SVOCs, heavy metals (mercury and lead), and glycols, as well as buildings with asbestos, combined with the inhospitable tax climate, which drove out industrial businesses, this site has little prospect of remediation. Remediating this

site would benefit both the public health of the surrounding neighborhoods by decreasing human exposure to toxic substances, as well as getting a vacant property back into productive use and on the County tax rolls.

b. Welfare, Environmental, and Public Health Impacts

i. Welfare Impacts

There are approximately 1,800 vacant, non-seizable properties within the City of Syracuse, meaning no property owner currently exists and these properties do not generate vital revenue to local government. According to the City of Syracuse Vacant Property Registry, to live next to a vacant property is often times to live next to a breeding ground for nuisance and crime. Vacant structures impact the value of nearby property.

Vacant properties cause neighborhoods to decline, and this has wide-ranging effects on residents, including children and student populations. Of all students in the Syracuse City School District (SCSD), 19% have disabilities, and 84% get free and reduced lunch. According to the *SCSD Transformation through Collaboration Report from May 2012*, 96% of students are in underperforming schools, and only 51% of high school students graduate on time. These numbers represent a larger problem: students are not receiving the help they need at home because poverty places burdens on these families to put food on their table. The rate of families in poverty within the City was about 26.6% in 2013, and total poverty was about 33.2% in 2013. Between 2008 and 2012, Syracuse reported a four-year high for its poverty rate and unemployment rate (Wogan, 2013).City and County efforts have been focused on increasing employment and offering services for those in severe need. Communities outside the **Target Area**, such as neighboring zip code 13214, have better educational opportunities: the graduation rate from high school in this area was 95.5% in 2013, according to Open Data Network. The median household income for 13214 was $62,386, compared to the median income of $14,437 in the **Target Area**. Communities without brownfield or pollution issues appear to fare much better than those such as the **Target Area**, which are inundated with environmental concerns.

According to City of Syracuse crime reports, crime incidence is higher in the **Target Area**. According to City Data, the violent crime (murder, non-negligent manslaughter, forcible rape, robbery, and aggravated assault) rate in 2016 in Syracuse was 436.5 incidences compared to the U.S. average of 202.6. About 80% of those incidences took place in the **Target Area**. The violent crime rate in the City on a scale of 1 (low crime) to 100 (high), is 77, according to *Sperling's Best Places*. The **Target Area** has a rating of 90 on this violent crime scale. Both of these rating are significantly higher than the national average of 31.1.
Syracuse is the fifth largest city in NYS, but ranks 8 in the state for violent crimes per 1,000 residents according to 2013 FBI statistics. These crime numbers demonstrate the other factors holding these impoverished communities hostage to locational variables that make it difficult for them to get out of poverty or overcome violence and health threats.

The construction of Interstate 81 (I-81) (discussed below) caused major barriers to development for these neighborhoods. Through the redlining caused by I-81, residents are cut off from grocery stores, retail areas, parks, and Onondaga Lake itself. The **Target Area** received a D rating, which is considered -least desirable and -declining neighborhoods, and were not eligible for federally backed mortgages. The level of safe walkability around I-81 is low. According to the *Onondaga Lake Rehabilitation Guidance: The 2020 Vision Report*, many community members would like to see downtown Syracuse connected to the lake, the Loop-the-Lake Trail and lakeshore activities by a system of trails to downtown, thus greatly improving access to the lake. I-81 is a major barrier for connection, and a number of brownfield sites, like the ones mentioned above, sit around this interstate system. Impoverished neighborhoods and high crime rates tend to concentrate in areas surrounding I-81.

ii. Cumulative Environmental Issues

In addition to the environmental stress of brownfields and Superfund sites, the community is exposed to the following:

- Reporting to EPA within the **Target Area**: Environmental Products Services of Vermont, Inc.; Feher Rubbish Removal Inc.; NYSDOT Bridge Bin 1049649; NYSDOT Route 690 over CSX NYS; Celi Builders Inc.; Mucci Motor Truck Co. Inc.; Swedish Auto Service; Syracuse Rust Proofing Inc.; Jamesville Penitentiary; Central Auto Recycling; Hess Corp Syracuse Terminal (Exposure Routes: Air, Water, Petroleum, Lead).
- The *Onondaga County Metropolitan Wastewater Treatment Plant* (650 Hiawatha Blvd. W., Syracuse NY 13204) emits odor, noise, and stormwater runoff into Onondaga Lake (Exposure Routes: Air, Water).
- The *CSX Railroad Tracks* that run through the Site have a medium rail traffic volume and emit noise, air, dust, spill pollution, etc. (Exposure Routes: Air, Noise, Water).
- *Midland Sewage Treatment Plant* (Southside neighborhood of Syracuse NY) displaced 35 African-American families when it was built; causes air pollution, loss of landscape/aesthetic degradation, biodiversity loss (wildlife, agro-diversity), waste overflow, surface water pollution/decreasing water (physico-chemical, biological) quality, groundwater pollution or depletion (Exposure Routes: Air, Water).
- The *Centro Bus Garage* emits noise pollution, air pollutants from buses, and heavy traffic (Exposure Routes: Air, Noise).
- *Hiawatha Boulevard* is home to a number of the Onondaga Lake Superfund subsites, and a number of brownfields next to the Onondaga County Metro Wastewater Treatment Plant (Exposure Routes: Air, Water, Skin).
- *Onondaga County Resource Recovery Agency Waste to Energy Facility* emits air pollution by incinerating trash; this is in operation because Cortland County has a landfill that is running a deficit (Exposure Route: Air).
- *Tully Valley Mudboils*, a hydrogeologic phenomenon, cause significant amounts of sediment to Onondaga Creek and Onondaga Lake, causing a major decrease in native fish populations. This influences the turbidity of Onondaga Lake, another factor considered in the Superfund requirements (Exposure Routes: Air, Skin, Water).
- *Interstate 81 (I-81)* (discussed above) caused major barriers to development in these neighborhoods since its construction in 1957, and its impacts are discussed in section 1.b.i (Exposure Route: Air).

iii. Cumulative Public Health Impacts

The brownfields and other sources of contamination are suspected of contributing to the following health concerns: The Site has high concentrations of PCBs from its decades as a scrap metal recycling facility. PCBs cause both acute and chronic health issues such as disrupted reproductive function, neurobehavioral and developmental deficits, thyroid hormone toxicity, liver damage, increased serum levels of hepatic enzymes, and cancer, as discovered through research from Onondaga Community College and the NYS Department of Environmental Conservation.

Due to a historic prevalence of health concerns stemming from PCBs and mercury, Onondaga County Department of Health is currently conducting a study on the amount these pollutants in local immigrant populations throughout the City of Syracuse to monitor the effects of fish consumption. Great numbers of Burmese, Bhutanese, Nepali, and Somali populations fish the waters of Onondaga Lake and are exposed to these toxins through consumption of fish and contact with the shoreline area. These populations access the shores through these Southern end sites (such as the former Roth Steel property) to fish for sustenance. New American populations may not have the economic stability to shop the local supermarket for their food, or have the transportation to get there; therefore, many rely on the Lake.

Lead contamination in the **Target Area** is of major concern to public health officials. Exposure to lead can come from in-home sources, such as pipes and paint, public spaces such as schools and municipal facilities, or from contaminated environments like the brownfields noted above. Syracuse had the nation's highest percentage of children with lead poisoning between 2009 and 2015, according to a study published in the Journal of Pediatrics. The **Target Area** and downtown Syracuse are widely considered as the epicenter of lead poisoning in the City by local health officials. A study completed by Quest Diagnostics in Syracuse found that lead poisoning can cause lower IQs, long-lasting brain damage, and many other health concerns. The study mentioned above found that 40% of Syracuse children had blood lead levels between 5 and 10 micrograms per deciliter, while 16% had levels exceeding 10 micrograms per deciliter.

The infant mortality rate is 7.1 in Onondaga County, which is significantly higher than the NYS average rate of 5.3, with mortality significantly higher for blacks versus whites. A suspected cause for this is the increased exposure to toxins caused by the higher rate of blacks living in vulnerable, poverty-stricken areas, which are also associated with brownfield properties.

Hunger also plagues the City of Syracuse, with approximately 17,908 individuals with unmet food needs according to the Syracuse Hunger Project. The need lies most heavily within the Northside, Near-West and Southside communities, including the **Target Area**, which is exacerbated by brownfield presence, as described above. According to the US Department of Agriculture, the **Target Area** is both a "Low Income" and "Low Access" to supermarkets tract, indicating a food desert. The Southside and Downtown areas of the City represent the greatest need, with a heavy concentration of low income, high density population and extremely low access to supermarkets with and without a vehicle. The isolating nature of vacant brownfields both reduce access and keep income low as residents without vehicles cannot get out of their immediate neighborhoods to find work or food. Brownfield presence also represents the inability to cultivate and capture food from a contaminated environment.

The alcohol-related motor vehicle injuries and death rate in Onondaga County (47.7 per 100,000) is significantly higher than NYS as a whole (36.2 per 100,000). Data from the Onondaga County Medical Examiner's Office show that in 2010, mortality from heroin-related overdoses was 0.21 per 100,000, while data from 2013 show an increase of more than 20-fold to 4.50 per 100,000. The newborn drug-related discharge rate for 2009-2011 in Onondaga County was 248.3 per 100,000 births, compared to 72.6 per 100,000 births for NYS. Vacant brownfields leave spaces for drug and alcohol-abusers to hide out and fuel these habits, and do not provide beneficial spaces for personal development.

c. Financial Need

i. Economic Conditions

Industrial decline hit an all-time high after the recession hit and companies began leaving the area because of high property tax rates. The City has struggled to rebound economically, and cannot balance the issues of the City, such as loss of businesses, and vacancy of commercial and industrial properties while running at a deficit. Vacant brownfield sites are not producing taxes for the City or County, and are not lucrative to developers because of the costs associated with remediation. The City and County's budget situation has been affected by decades of disinvestment due to high property taxes and the shift of residents to the suburbs. The amount of taxes owed to Onondaga County (Table 1), and tax delinquent property data demonstrate that the ability to pay taxes is associated with the general ability of the municipality to seek out and provide basic resources for residents, and the ability of those residents to find or afford those resources. Higher numbers of tax delinquent properties and taxes owed demonstrates an area of economic and resource struggle within the City of Syracuse. Residents who can no longer work in the City are fleeing to the suburbs and leaving poverty-stricken communities to fend for themselves because of their inability to afford

to move. According to *The Central New York Fetal-Infant Mortality/Morbidity Review*, Syracuse has the second-highest child poverty rate in the US for Hispanics and the worst rate in NYS for blacks. The challenging economic outlook persists today—the following sectors lost jobs in 2016: 1,900 in business professional services, 1,400 in education-health services, 700 in natural resources-mining-construction, and 100 each in financial activities and in other services (Syracuse.com).

ii. Economic Effects of Brownfields According to City of Syracuse Data, the brownfields in Syracuse have a huge burden on City services, including: public safety (fire and police departments), health (air and water pollution), public works (trash, maintenance), and economic development (lack of incentives for developers to purchase contaminated sites). As these brownfields sit, they do not produce property taxes and represent lost income for City residents.

Combined, the brownfields sites mentioned above account for approximately 70-90 acres, and 25% of the developable property in the **Target Area**. The opportunity cost of these vacant properties, compared to an industrial or commercial site, are $6,868/acre/year in property taxes and 20-40 employees per acre, based on the estimated square footage allowed on these sites under current zoning. Area businesses have stated that brownfields act as a barrier for development, which stunts growth and prevents adjacent properties from reaching their full economic potential. Here in Syracuse, for instance, several sites have leveraged financial incentives to invest in cleanups and new facilities. As reported by the New York State Tax Department, private developers invested a total of $41.5 million -- $10.7 million in cleanup costs and $30.8 million in new construction -- on six brownfield sites in the Syracuse area from 2007 to 2012. The benefits of remediating brownfield areas are realized through business re-investment and economic revitalization for the greater Central NY area.

2. PROJECT DESCRIPTION AND FEASIBILITY OF SUCCESS

a. Project Description, Timing, and Implementation

i. Project Description and Alignment with Revitalization Plans

The Site cleanup will align with the following County and City plans and initiatives:

- The *Onondaga Lake Trail Extension Project* will extend the trail through the Site, over CSX railroad, and connect to the City of Syracuse Creek Walk trail. A portion of the site will feature recreational green space for some of the City's poorest census tracts. The site will also become an entry point to the lakefront for communities that have not had those opportunities previously.
- *County Sustainability Plan* calls for the existing structure of the CSX railroad to be used as a multi-modal transportation crossing, with the proposed Lake Extension Trail continuing over the railroad to enable community connections by utilizing existing transportation methods, open up new corridors of transportation and connection through the extension of our lake trail.
- The *City of Syracuse Comprehensive Plan 2040* includes a section on Land Use & Development that will preserve and enhance Syracuse's existing land use patterns while promoting environmentally sustainable land use patterns, transportation options, and site plans. This project is consistent with the Plan.
- The *Comprehensive Economic Development Strategy for Central New York* includes long-range actions to improve area services and public facilities to retain existing businesses and attract new companies to the region, which this grant will do with the brownfield sites listed above.

This grant will help supplement cleanup efforts on behalf of the Onondaga County Industrial Development Agency (OCIDA), who have already developed a Revised Interim Remedial Measure (IRM) Work Plan for this property. The Site has been divided into operable units to make cleanup manageable. The Loop the Lake Operable Unit contains 2 Automotive Shredder Residue (ASR) Waste Cells that will need to be removed and remediated. OCIDA will work with Onondaga County to

promote sustainable cleanup practices through the County's Sustainable Development Plan. OCIDA will continue to pursue additional funding for cleanup to offset costs. Redevelopment funds can be sourced through NYS Regional Economic Development Council (REDC) Consolidated Funding, National Grid Shovel Ready, and NYSDEC Hazardous Waste Grants.

A portion of the site will be utilized for the Onondaga Lake Trail System extension. This trail will go over the existing CSX railroad to utilize existing infrastructure, while creating a multi-modal transportation crossing. CSX railroad will continue to be utilized.

The cleanup of the Trail Operable Unit and construction of the trail will develop safe, reliable and sustainable transportation choices, target federal funding toward existing low-income communities through mixed-use development and land recycling, and enhance the unique characteristics of the Target Area. This will be an investment in healthy, safe, and walkable urban neighborhoods connecting to local environmental assets like Onondaga Lake, which is consistent with HUD Sustainability principles for providing more transportation choices, supporting existing communities, and valuing communities and neighborhoods in planning. Existing infrastructure, such as the CSX railroad that crosses the Site, and the County's Wastewater Treatment Plant, will remain intact and any Site developments will take advantage of infrastructure location. The County's trail will utilize a natural footprint between existing infrastructures and allow multimodal transportation throughout the site. A portion of the site (along Hiawatha Blvd.) will be used for commercial development. Businesses will attract visitors from the Destiny USA property adjacent to the Roth Steelsite.

All Site redevelopment will include a reduction of PCB and other contaminants to appropriate levels, as regulated by USEPA and NYSDEC. Currently, there is no public access to the site. After redevelopment, the site will reenter the tax base and will be utilized by the public using existing transportation infrastructure, as well as a newly developed section of the County's Loop the Lake Trail. For every dollar spent on brownfields assessment and cleanup, approximately 2.5 dollars will be created in private sector investment, as discussed above. Existing water and sewer lines that run along Hiawatha Blvd. along the Site will be utilized if commercial development is selected for a portion of the area's redevelopment.

ii. Timing and Implementation

(a) *Contractor procurement:* The County will be ready to implement the tasks below as soon as the grant is awarded. Through a Request for Proposal process using EPA procurement procedures, OCIDA selected Spectra Environmental Group Inc. to complete the cleanup process for the Site.
The County has received all the executive and administrative approvals from State, county and local jurisdictions to proceed with the tasks below. We will also apprise the community, discussed in Section 3.a.ii., on the progress of this grant.

(b) *Existing Conditions on the Property*: Currently, a Revised Remedial Investigation Work Plan is approved by NYSDEC. Phase I and Phase II investigations have been completed and accepted by NYSDEC and USEPA for the project location. Quality Assurance and Quality Control (QA/QC) measures have been developed by Spectra in compliance with NYSDEC. In addition, a third-party independent data validator will prepare a Data Usability Report consistent with NYSDEC guidance. Spectra will submit, on behalf of OCIDA, a Quality Assurance Project Plan (QAPP) to EPA to assure practices are sufficient to produce data adequate to meet project objectives and minimize data loss. Since Spectra has already submitted a Brownfield Cleanup Program Application to NYSDEC, all environmental investigation and cleanup activity performed prior to this grant application was performed in accordance with NYDEC requirements. The QA/QC will be submitted to EPA as part of the QAPP required through this grant.

This site was selected because of the PCB hot spots inventoried previously by Spectra. This grant will focus on the removal of two former ASR disposal areas positioned under the planned Onondaga Lake Canalways (Loop the Lake) Trail. Additional proposed cleanup work includes miscellaneous waste containers in buildings on Site, and additional remediation necessary to allow public use on the proposed trail.

(c) *Site access:* Since the site is owned by OCIDA, site access has already been obtained. Site access is not required on adjacent properties.

b. Task Descriptions and Budget Table

i. Task Descriptions

Task 1: Community Outreach

OCIDA will implement a Citizen's Participation Plan to keep area citizens and local governmental officials informed about planned and completed activities at the site. The community outreach will include distribution of fact sheets, web site postings, establishment of a document repository, notifications to local media outlets and governmental officials, and public meetings at key points in cleanup with our supporting organizations (FOCUS Greater Syracuse, Northside Urban Partnership and the Onondaga Lake Conservation Corps. It will be particularly important to seek public input in evaluating potential re-use options for the property. The output of this task is a Citizen's Participation Plan.

The cost breakdown is as follows: 120 (Staff Hours) x $125/hour = $15,000 (In-Kind) + $5,000 (Fringe) + $2,000 (Supplies) + $8,000 (Consulting Fees) = **$30,000**

Task 2: Hazardous Soil Excavation and Disposal

In order to reduce the potential health risks to workers constructing the Trailway, Alternative #2 proposes to complete hot spot removal and/or provide 1-foot of approved soil as a cap along the Trail in the elevated portion of the Trail where it rises over the ASR Disposal Cells. The installation of bridge footings will be necessary for portions of the Trail. Therefore, workers would be directly exposed to contaminated soil. In order to prevent direct exposure, an approved plan has been developed to excavate around each proposed bridge footing prior to the start of construction. Removed material will be categorized as hazardous waste if PCBs are 50 ppm or greater and will be taken to a hazardous waste landfill. PCBs less than 50 ppm will be taken to a non-hazardous waste landfill. This proposed remedy is consistent with a NYSDEC Track 4 commercial-use ("passive" recreational) cleanup. It also satisfies the USEPA Self-Implementing PCB cleanup requirements for a low occupancy area. USEPA and NYSDEC have approved of this remedy.

An additional component for the remedy that has not yet been approved by DEC/EPA addresses the elevated section of the trail that crosses over the ASR Disposal Cells. A potential remedy for this area includes "hot spot" removal where PCBs are 50 ppm or greater followed by a 1 ft. soil cover over both ASR Disposal Cells. The excavated soils will be disposed of as hazardous waste at an offsite landfill. This cleanup plan would require future approval by NYSDEC and USEPA.

The cost breakdown is as follows: $170,000 (Consulting Fees)

ii. Budget Table

Budget – Hazardous Cleanup	Task 1	Task 2	Total
Personnel	$15,000	-	**$15,000**
Fringe Benefits	$5,000	-	**$5,000**
Travel	-	-	-
Supplies	$2,000	-	**$2,000**
Contractual (Engineering Consulting)	$8,000	$170,000	**$178,000**
TOTAL BUDGET	**$30,000**	**$170,000**	**$200,000**

c. Ability to Leverage

If additional work (e.g. cleanup/reuse planning, redevelopment) is required to complete tasks identified above, OCIDA is able to create Payment in Lieu of taxes (PILOT) agreements for local developers, and will leverage these funds to complete the cleanup work at the former Roth Steel property. This Brownfield Cleanup Grant award will fund approximately 42% of the total project cost ($478,000) for the Roth Steel Alternative #2 Remediation (as referenced in the Analysis of Brownfield Cleanup Alternatives). Task 1 will allocate $30,000 of grant funding to community outreach and education during the cleanup process. Task 2 will allocate $170,000 for hazardous soil excavation and disposal. Additional funding sources may come from the Syracuse Industrial Development Agency, NYSDEC Brownfield Cleanup Program, Centerstate Corporation for Economic Opportunity, and EPA Region 2 Targeted Brownfields Assessment Program (TBA). Possible cleanup funding sources include EPA cleanup grants, etc. Depending on the end use, redevelopment funds can be sourced through NYS Regional Economic Development Council (REDC) Consolidated Funding, National Grid Shovel Ready, and NYSDEC Hazardous Waste Grants. While these funds are not yet committed to any one project, OCIDA and the City have a track record of leveraging these funds. One example is the National Grid Marketing Grant for Clean Energy that OCIDA managed in 2015, and the Community Development Block Grant managed by the City of Syracuse from 2014-2016.

Source	Purpose/Role	Amount ($)	Status
Onondaga County Industrial Development Agency	In-kind services toward the management of the cooperative agreement	$50,000	Secured Resource (see attached letter)
Local Developer	Funding to redevelop the Site.	~$100,000	Pending Resource (with assistance of OCIDA PILOT agreements)

3. COMMUNITY ENGAGEMENT AND PARTNERSHIPS

a. Engaging the Community

i. Community Involvement Plan

Three public outreach organizations have demonstrated their support for this grant proposal and have agreed to assist OCIDA in developing a community involvement plan. The plan will detail a schedule of public engagement throughout the entirety of the cleanup process through monthly update meetings held by each organization (FOCUS Greater Syracuse, Onondaga Lake Conservation Corps, and Northside Urban Partnership). At each monthly meeting, the public will develop criteria for the end use of the Site and what a local developer must adhere to in order to fulfill the remediation goals of the nearby neighborhoods. The public will have the opportunity to guide the developer selection process and develop a community plan for this location in which the Site is located.

Tours of cleanup progress will be given to members of the public involved with our three supporting organizations. The surrounding neighborhoods will be encouraged to attend and participate in all planning discussions through an aggressive door-to-door outreach effort. Flyers of public meetings relating to Site cleanup will be handed out, and surveys will be produced electronically every month to solicit input on the cleanup procedures and the future use of the Site. We will allow the public to drive the future use of the Site and assist in all planning throughout the remediation process.

ii. Communicating Progress

- The public outreach coordinator will be responsible for contacting community organizations with updates and information to spread out into the community. The coordinator will also be available for the public to email and call with questions. Open lines of communication between the County and the public during the cleanup will be crucial during this period. We will employ a variety of measures

to keep the community aware of the cleanup activities on the Site. We will utilize the Onondaga County Public Library and the Onondaga County Office of Environment in the County Civic Center as repositories for all Site-related reports and updates.

- We will report progress on our milestones to USEPA, NYSDEC and NYSDOH, and disseminate the information to the community through the press, flyers, radio, etc., and will translate the content to languages such as Mandarin, Bhutanese, Spanish, Chinese, etc. These methods have proven most effective in other redevelopment and remediation activities in the City.
- We will provide updates regarding the stages of the Site cleanup. For each completed milestone, we will update the public and accept feedback on the community's perceptions, questions, and concerns of progress we make.
- We will attend public meetings held by the community organizations discussed in 3.a.iii. to inform them of progress, setbacks, ideas for future use, and allow them to provide their own feedback on the process. The internet will also be used as an outreach platform, since so many citizens have cellphones and computers, and may not be able to attend meetings.
- We will host workshops in the South and Near-west side communities over the duration of the grant to record any concerns the community may have. Informational updates will be provided at said meetings, as well as online.

Community organizations mentioned below hold regular public meetings. These are the most appropriate and effective mans to inform communities near the Site of the coming cleanup and revitalization. The County will record the discussion and ideas generated, and weave them into future planning for the site. At each meeting, updates on the cleanup will be revealed and discussed with the public. Any health hazards that may arise during the cleanup will be brought to the public's attention and precautionary measures will be described. Since the site is not directly adjacent to a residential area, we do not anticipate there being any major health concerns, or community disruption during the duration of cleanup activities.

b. Partnerships with Government Agencies

i. Local Environmental Authority

New York State Department of Environmental Conservation (NYSDEC) works to conserve, improve and protect New York's natural resources and environment and to prevent, abate and control water, land, and air pollution, in order to enhance the health, safety and welfare or the people of the state and their overall economic and social well-being. NYDEC manages a statewide Brownfield Cleanup Program and regulations. NYSDEC will approve on all cleanup work plans for the Site, as well as oversee administration of proposed cleanup procedures.

The *Onondaga County Department of Health* (DoH) works to protect and improve the health of all Onondaga County residents. For this project, the DoH will provide environmental health reports and research on the Site, provide direct outreach to all Onondaga County residents regarding the cleanup of the site, and serve as a point of contact for citizens concerned about the contamination.

ii. Other Governmental Partnerships

The *New York State Department of Health* protects, improves, and promotes the health, productivity and well-being of all New Yorkers. They will assist with public notifications on any potential health hazards during cleanup, or hazards for construction workers. We will contact the NYSDOH to ensure statewide health regulations are addressed during the cleanup procedures, and if any health concern/risk is exposed during the project, we will contact the department to send out a public.

The *New York State Department of Labor* protects workers, assists the unemployed, and connects job seekers to jobs. We will submit work plans to the NYSDOL to allow access to the drum area, and other hazardous areas, by trained and certified asbestos workers.

The New York State Department of State is a principal resource for New York local governments seeking training and technical assistance. We will refer to NYSDOS for help on administrative codes and planning.

Other relevant federal, state, and local governmental agencies: OCIDA will work with EPA on the Grant. The EPA Project Officer and Quality Assurance staff will be integral to ensure that the work is done appropriately. In addition, OCIDA will work with the Syracuse-Onondaga Planning Agency, and the Central New York Regional Development and Planning Board (CNYRPDB) on this project. CNYRPDB is our regional planning commission with extensive EPA funded Brownfields experience and will support OCIDA in a number of ways. They are retained to assist with the management of the grant to ensure compliance with all requirements, serve on the Brownfields Advisory Committee, and also assist OCIDA to find additional fund leveraging to complete the project.

a. Partnerships with Community Organizations

Organization Name	Description	Possible Role
Forging Our Community's United Strength (FOCUS) Greater Syracuse	A community-wide visioning program created with the goal of making Syracuse a better place to live and work started by a ground of Leadership Greater Syracuse graduates and interested residents. The program is loosely modeled after several visioning projects around the country, and came out of the desire to determine a course of action and growth for Syracuse.	Use of surveys to understand the public's vision for the former Roth Steel site, public outreach and planning coordination.
Northside Urban Partnership	Seeks to radically improve the quality of life on the Northside of Syracuse by convening citizens, organizations, businesses and institutions to identify common interests and work towards tangible outcomes.	Public outreach and project updates at public meetings.
Onondaga Lake Conservation Corps	An organization of volunteers that contributes to restoration projects that create and improve wildlife habitat in the Onondaga Lake Watershed. The Corps inspires future stewards of Onondaga Lake and its watershed through a hands-on, experience-based program that offers citizens and organizations the opportunity	They will assist with habitat restoration, and public outreach through volunteerism.

i. Letters of Commitment

Letters of commitment affirming participation of each partner are found the attachment **'Support Letters.'**

b. Partnerships with Workforce Development Programs

We will work with Onondaga Earth Corps to involve local members of the South and Near-West side communities to volunteer at the former Roth Steel site to perform post-cleanup activities including tree planting, site design, planning, and construction. OEC engages youth and young adults in poor urban communities within the City of Syracuse to learn and become invested in environmental career tracks. Through investment in the local community for jobs centered on the Site, these citizens will begin to see themselves as catalysts of change for the City of Syracuse and promote a positive view of the future of our urban community. OCIDA is committed to include local hires in any contracts supplied by this grant, and focus on employment opportunities for local organizations and companies.

4. PROJECT BENEFITS

a. Welfare, Environmental, and Public Health Benefits

The project will mitigate the following impacts from the Site:

- Induce the redevelopment of vacant buildings on the Site and surrounding neighborhoods.
- Reduce crime through the securing of the Site and development of either commercial or park venues with adequate public safety measures (lighting, payphones, trails, etc.)
- Increase the access of park area for residents in the Near-West and Southside neighborhoods
- Increase sustainable transportation between various parts of the City through a Trail Extension over the Site
- Mitigate odor, stormwater runoff, traffic from garage on Site, and spill pollution.
- Mitigate health consequences of PCB, VOC, SVOC, and heavy metal exposure.
- Improve health outcomes for children by reducing the incidence of lead poisoning, asbestos exposure, improving access to food, and increasing areas for recreation.
- Decrease exposure to PCBs, VOCs, and heavy metals, such as lead and mercury.
- Decrease areas where vagrant populations may go to use drugs or abuse alcohol.

b. Economic and Community Benefits

- The redevelopment of the Site will reduce burden on the Syracuse City Police Department and the Syracuse Fire Department—these agencies will no longer have to worry about vagrant populations at the site, or illegal activities near existing contamination once the site is assessed and cleaned.
- The redevelopment of the site will potentially increase recreation space by ~20 acres, which will bring more visitors and residents of the City to the lakeshore, providing a public benefit and open recreation area to connect to the Onondaga Lake Trailway System.
- The redevelopment of the Site will potentially increase commercial/industrial space, by 15-20 acres, which are estimated to increase tax revenue (property, tax, business license, etc.) by $6,868/year, based on the estimated square footage allowed on these sites under current zoning.
- The redevelopment of the Site has the potential of providing 20-40 jobs per acre, which will reduce the unemployment and poverty rate, and increase business and payroll taxes, and other revenue.
- Increase taxable property by providing a space for developer purchase.
- Decrease tax delinquent property by seizure and remediation of abandoned property.
- Decrease barriers to business and commercial development, therefore increasing jobs for local residents.

5. PROGRAMMATIC CAPABILITY AND PAST PERFORMANCE

a. Audit Findings

OCIDA affirms it has not received any adverse audit findings.

b. Programmatic Capability

Julie Cerio is the Director of Economic Development for OCIDA and will oversee the management by OCIDA of the cleanup grant. Ms. Cerio has appointed Isabelle Harris to take the lead on the Roth Steel Property and work with the selected contractor to fulfill this cleanup grant. Isabelle Harris,Economic Development Specialist for OCIDA will oversee the cleanup work of consultants, headed by John Ciampa, Director of Environmental Remediation and Geophysical Services for Spectra Environmental, Inc. OCIDA selected Spectra through an EPA-approved Request for Proposals process, and together prepared a work plan for the Site. Ms. Harris is a highly qualified economic development specialist with 10+ years of experience in communications and economic development for state and county government. She has worked as the Director of Intergovernmental Relations and the District Director for New York State Senator John A. DeFrancisco. Prior to her work in the Senator‘s Office, Ms. Harris worked as the Research and

Communications Officer for Onondaga County Executive Joanne M. Mahoney. Mr. Ciampa brings considerable project management experience having worked for 38 years as a professional environmental scientist specializing in hydrogeology and geophysical applications.

Mr. Ciampa has extensive project management and professional experience serving both the public and private sectors. He has worked on a diverse range of environmental and geologic projects including hazardous waste remediation, hydrogeologic assessments, site evaluations, regulatory development, environmental permitting, and preparation of expert testimony. He has experience applying for and working within Superfund and Brownfields programs, and completing Site Characterization Plans, Remedial Investigations, Feasibility Studies, Alternatives Analysis Studies, and preparation of Remedial Action Work Plans.

Additional project support will be provided by: Yaicha Winters, a geologist for Spectra whose related project experience includes Phase II Environmental Site Assessment and Remedial Investigation Work Plans, Environmental Services, and Article VII Application for a New 1000 MW Electrical Transmission Line; Frank Peduto, a former NYSDEC employee and current environmental engineer for Spectra whose responsibilities as a Senior Environmental Engineer include certification of Spill Prevention Control and Countermeasure (SPCC) plans, Brownfields Coordinator, Solid Waste Permitting, Petroleum Bulk Audits and Compliance, and Petroleum and Hazardous Waste Investigation and Remediation; and Joseph Krikorian, an environmental scientist for Spectra who has experience performing vapor intrusion studies and soil, water sampling, overseeing Membrane Interface Probe (MIP) investigation and geoprobe investigations, and developing Site Characterization (SC) Work Plans and Remedial Work (RW) Plans.

Administrative support will be provided by Travis Glazier, Director of the Onondaga County Office of Environment and Holly Granat, Project Coordinator for the Onondaga County Office of Environment. Mr. Glazier and Ms. Granat will assist Ms. Harris in the management of the grant activities and communication with Spectra. Mr. Ciampa will be the direct contact for Spectra, and the additional project support provided by Ms. Winters, Mr. Peduto, and Mr. Krikorian will fall under Mr. Ciampa‘s direction.

c. Measuring Environmental Results: Anticipated Outputs and Outcomes

The outputs we anticipate are: Citizen‘s Participation Plan, Remediation Investigation Report, Remedial Action Work Plan (RAWP), and Alternative Analysis Report (AAR). Detailed documentation of the site investigative activities will be maintained during the field activities. Reporting, including ACRES, will include discussions of findings and submission of a final written report, including all laboratory documentation to NYSDEC.

Anticipated outcomes for this project will be the initial determination of the severity of contamination at the site. After this cleanup, OCIDA will better understand the nature of future use for this brownfield site, and the acreage of the site possible for trail/park and commercial/business purposes. This site will increase Onondaga County Parks land by approximately 25% and provide residents of the Near-West and South Side communities as a lakefront recreational site. We recognize that this cleanup grant will not cover the entirety of expenses at the former Roth Steel property, but we know these funds will be a major first step (approximately 5% of the estimated total cost) in the reclamation of this land.

d. Past Performance and Accomplishments

ii. OCIDA has not received an EPA Brownfields Grant but has received other federal or non-federal assistance agreements.

(1) OCIDA received a **National Grid Marketing Grant** *in 2016 for $40,000.*

Purpose and Accomplishments: The purpose of this grant is to support target industry analysis for business

attraction marketing and sales purposes, support outreach initiatives towards industry trade groups, support the creation and distribution of industry-specific publications, profiles and studies, support early stage planning or feasibility studies that prepare assets to be marketed, such as economic development -mega sites,ll industrial parks, multi-use facilities and support for efforts to attract major tourism destination facilities including infrastructure assistance. Through this grant, OCIDA provided marketing outreach support to Air Innovations, Bitzer Scroll, Carrier, and O'Brien & Gere to promote clean energy upgrades and utility infrastructure to accommodate their expansion and provide 2 years of electric service demand charge discounts. Measures of success were noted as the expansion and ability to accomplish energy savings over the duration of the grant, which OCIDA fulfilled.

Compliance with Grant Requirements: OCIDA performed as a regional economic development agency and promoted clean energy savings and updated utility infrastructure to enhance the competitiveness of Upstate New York through financial offsets by assisting these companies expand their businesses to a tax-free zone in NYS. OCIDA also provided PILOT agreements between these companies and their appropriate payment-plan agency to ensure completion of the proposed projects.

(2) OCIDA received a **NYS Combined Funding Application (CFA) Grant** *in 2017 for $682,673.*
This grant has not been executed yet, but must be used by OCIDA for one or more of the following: acquisition of land, buildings, machinery, and/or equipment; demolition and environmental remediation; new construction, renovation or leasehold improvements; acquisition of furniture and fixtures; soft costs of up to 25% of total project costs; and planning and feasibility studies related to a specific capital project or site. OCIDA will likely utilize this grant to acquire brownfield sites and work on securing an environmental engineering firm to perform necessary cleanup procedures to prepare the site for redevelopment.

Additionally, PILOT agreements are an effective means by which OCIDA is able to facilitate the redevelopment of vacant or contaminated property within Onondaga County. Since 2015, OCIDA has entered into 11 PILOT agreements which have a total project investment of over $630,000,000, many of which have returned contaminated properties back into productive use.