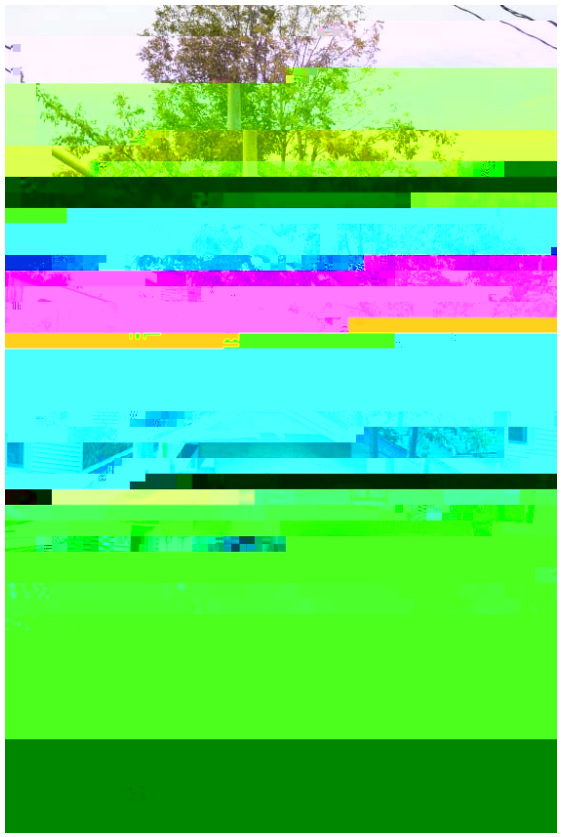


BLUE ISLAND BROWNFIELDS

A Technical Report and Recommendations

Prepared for the City of Blue Island
by The Delta Redevelopment Institute

February 2010

USEPA Grant Number BF-00E42601-0

Delta Redevelopment Institute

1.0 Introduction

This technical report was prepared for the City of Blue Island by the Delta Redevelopment Institute as part of the work plan for a federal EPA Brownfields Assessment grant that was awarded to the City in 2007. The purpose of this report is to educate City staff and other brownfield stakeholders to make for a more informed decision-making process as well as to lay the groundwork for creating new tools that contribute to a more permanent brownfields redevelopment program.

1.1 Unique contribution of municipalities. The term “brownfield” conjures images

small portion of the waste or only recently purchased a piece of property. This liability system is sometimes referred to as "joint and several liability." The liability laws in Illinois were first drafted using the same structure as the federal liability system;[3] however, beginning in 1993, a number of changes to the state statutes related to liability for contaminated sites were put into effect. Most notably, Title XVII of the Illinois Environmental Protection Act passed in 1995 included changes to the environmental cleanup liability scheme in Illinois aimed at encouraging parties to clean up and redevelop brownfields, including exemption of municipalities from remediation costs except in cases where the municipality is actively managing sites and caused contamination. *(See 415 ILCS 5/58.9(a)(2).)* Because liability laws are constantly changing, municipalities should know the latest laws and regulations before acquiring contaminated sites.

- **Ownership and Site Assembly.** In addition to contamination, redevelopment of a site may be complicated by ownership, site assembly, tax and title problems that take time and money tmesolveuding exemp:/TT2 1 Tf0-1.5o-1.5

to address problems. Developers are more willing to take risks on sites in strong markets or in exceptionally good locations within weaker markets. Sites that have manageable environmental concerns may nonetheless sit vacant for years after an owner has obtained an "NFR" letter because of a weak market, a weak location within a market, or a lack of effective marketing. This section of the report is intended to improve understanding of the factors that relate to the marketability of sites and to help target developers or buyers that best fit the Blue Island market.

- **Location, location, location.** The question is what type of location is a particular type of buyer seeking? A multi-national manufacturer is more likely to be looking at a location in China than the U.S. A high-tech firm is often looking for space in hip locations close to colleges or universities. National retailers are often looking for the best corners in any neighborhood or locations very close to other national retailers. Merchants of higher-priced goods seek locations that have relatively high population densities and income. A mixed-use developer is likely to be attracted to sites near transit stations. Blue Island has already identified its rail assets as a key competitive advantage of its location.
- **Demographic statistics.** Different buyers or developers look for different statistics. Statistics are much less important to a local buyer or developer who has already made a commitment to an area based on other factors. However, most national retailers will want to know the population, racial characteristics, income and education level within a 1-, 2- or 3-mile radius of a commercial site. Larger employers will be much more focused on labor statistics and quality of life issues such as schools, housing and recreation opportunities.
- Some free data sources exist; however, they may not be up to date or may not accurately reflect the real trade areas for a site. In weaker markets, it may be worthwhile to pay for more customized analysis of the strongest sites that place the community and location in the most positive light. A customized "competitive advantage analysis" might also address possible concerns about issues such as gains in education attainment and other statistics that are most favorable to a community. Some customized market analysis will be done by the consultants after the selection of priority sites for environmental assessment.

- **Community assets.** Just as different types of developers or buyers value different types of statistics, they will also value different types of community assets
  - transportation access – rail, highway, air
  - existing employers or proximity to employment centers
  - work force (education level, training resources)
  - quality of life – housing, schools, recreation, aesthetics & image

  - **relationships** – people in your community who can effectively market your community to potential developers, retailers or employers

- **Community Readiness Factors.** In addition to liability, ownership and assembly and market factors, how quickly brownfields will be developed often depends on how prepared a community is to help, or community readiness factors. These factors include whether a community has done advance planning, whether a proposed use is consistent with community plans, whether economic incentives are already in place and whether the community has adequate staff capacity to move the necessary approvals and incentive applications through the approval process.
  - **Consistency with community plans.** A community that has done advance planning will be more attractive to good developers than one that has not. Planning helps insert some predictability into the development approval process. A multi-family housing developer who knows that higher density housing is encouraged in a particular area is more certain of community support and a faster approval process. Market analysis may be needed to determine whether the size or price of the proposed housing is realistic.
  - **Economic development incentives.** Sites that are eligible for some type of economic incentive may get developed faster than sites that are not. Knowledge of the potential incentives that may be available in a community or certain areas within a community can help in attracting buyers or developers. (Part 3 of this report includes information on financial incentives that are currently available in Blue Island.) In addition to tax incentives, municipalities can attract developers by acquiring land, resolving problems that might exist (such as back taxes) and offer properties for sale at discounted prices as an extra incentive.
  - **Staff capacity.** Communities with well-trained professional planning and economic development staff that can not only respond to requests for information, but be proactive in marketing their brownfield properties are more likely to be successful than communities that do not.

It is important for communities to learn about brownfields and consider all of the factors that affect the redevelopment of brownfield properties before setting priorities, determining where to focus their resources now and establishing action steps for the future.

2.0 The Environmental Site Assessment Process

Municipalities can play an important role in redeveloping brownfields by investing in upfront planning and environmental assessment work, which can often take time and money that developers are not willing to spend when faced with easier site options.

If a property has recognized environmental conditions (RECs) or there is known contamination at the site then an environmental assessment is needed. Conducting an environmental assessment according to the recognized standard of practices (ASTM E 1527-05 at the time of writing of this report) can provide the buyer "innocent purchaser" status against future liabilities associated with historic site uses and recognized environmental conditions as well as give comfort to lenders that may be financing the purchase.

This part of the report provides an overview of the environmental assessment process in Illinois. The City's current brownfield assessment grant money will be used to push some of the City's priority redevelopment sites through this process. Understanding the process may be important in making choices on which sites are ready for assessment now.

2.1 Illinois Site Remediation Program (SRP). The Illinois Environmental Protection Agency plays a key role in setting standards for assessment and cleanup of sites through administration of the Illinois Site Remediation Program (SRP). The SRP is a phased approach to investigating and remediating a brownfield site.[4]

Elements of the SRP investigation and remediation, described in detail below, include:

- Phase I Environmental Site Assessment
- Phase II Site Investigation
- Remedial objectives standards
- Site Remediation
- No further Remediation Letter

Remedial Applicants (RAs), which are property owners or interested parties that have the consent of the property owner, enroll in this program on a voluntary basis in order to obtain what is commonly known as a "comfort letter" or a "No Further Remediation Letter." A description

EDR radius map.

2.4 Phase II Environmental Site Assessment. The objective of the Phase II is to confirm the environmental site conditions identified in the Phase I and, if needed, define limits of contamination. The Illinois SRP includes specific requirements for Phase II subsurface sampling such as the frequency of soil samples and groundwater wells as well as the type of laboratory analysis.

Phase II activities are typically more invasive than Phase I activities and generally include magnetometer survey to identify underground structures (e.g. tanks or extensive piping); soil sampling; groundwater sampling; and/or other types of sampling (e.g. building materials). Phase II investigations typically cost more than

$10,000 (and often much more) depending on the size of the site, numbers of RECs, and former site uses.

Phase II activities generally occur in several iterations based on the results of the on-site sampling activities. Initially, soil borings are advanced in areas of RECs to evaluate if subsurface contamination is present. Soil samples are usually laboratory analyzed by an Illinois certified laboratory for the SRP Target Compound List (TCL) which includes volatile organic compounds, semi-volatile organic compound, polynuclear aromatic compounds, metals, polychlorinated biphenyls, and pesticides. If contaminants are found in the soil samples then additional sampling is conducted to determine the extent of the contamination. Subsequent laboratory analysis is usually limited to the contaminants identified during the first round of sampling.

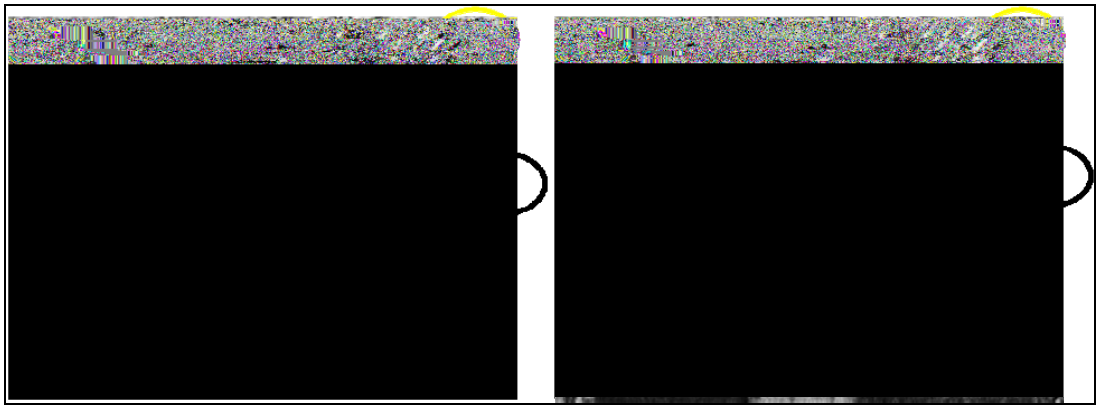
Even though groundwater at a site is not used as drinking water, the Illinois SRP will typically require groundwater sampling in order to determine is contaminants are presence in the groundwater and the potential for those contaminants to migrate offsite due to the natural flow of groundwater.

If the Phase I investigation identifies that an underground storage tank was or could be present at the site, a magnetometer survey is typically completed. Using a non-invasive electronic probe, a magnetometer survey will help to find underground storage tanks, or other metal structures, without a lot of digging. Once the magnetometer

Excavation. Source: http://www.sxc.hu/photo/279748

Groundwater treatment center. Source: http://www.tucsonaz.gov/ets/Groundwater /Los_Reales/los_reales.html

As excavation is expensive and if the final site use is known it may be worthwhile to conduct additional soil sampling to attempt to reduce the limits of the excavated areas. For example, the following map shows a series of Phase II soil borings that were installed to define the limits of contamination. No contaminants were identified in the red samples at left. Therefore, the RA would have to implement a remediation plan that extended outward to the series of red samples. To reduce the limits of remediation, a second series of soil samples that were closer to the contaminated area were collected, indicated by the red dots at right. The second set of samples was also free of contamination; therefore, the limits of the area to be remediated were reduced resulting in both cost savings associated with remediation and development.



The proposed site remediation strategy is documented in a report called the Remedial Action Plan (RAP). The RAP outlines the proposed remediation scenario that will meet the remediation objectives identified in the Remedial Objectives Report. Upon completion of the corrective actions, a Remedial Action Completion Report is submitted to the Illinois EPA. This report attests that all remediation objectives, site specific response action and data quality objectives

have been successfully obtained. If the remediation is acceptable to the Illinois EPA an NFR letter will be issues within 30 days of Illinois EPA approval of the remedial action completion report. The remedial applicant must submit the NFR letter to the Registrar of Titles of the county in which the remediation site is located within 45 days of receipt of the letter.

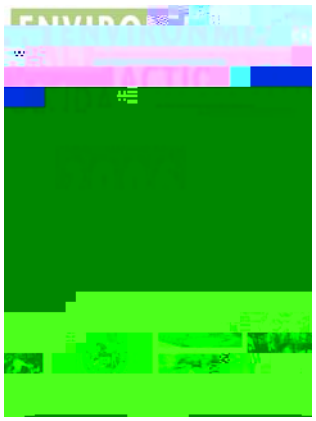
Building Redevelopment Issues: Asbestos and Lead Paint. Phase I Assessments can typically address building concerns such as asbestos or lead paint issues if the consultant is requested to identify these issues before the start of the program. The ASTM standards for Phase I Environmental Site Assessments do not contain requirements for asbestos and lead.. Additionally, the Illinois SRP program does not provide investigation and remediation guidelines for building contaminants. Those types of contaminants will need to be managed under the applicable state and federal guidelines.

The Department's Division of Environmental Health reviews asbestos management plans for elementary and secondary school facilities and inspects abatement projects to ensure compliance with state and federal laws. More recently enacted legislation regulates persons who perform asbestos-related activities in commercial and public buildings and requires that such activities be carried out safely. People who manage or abate asbestos in elementary and secondary schools must be trained and licensed. Asbestos sampling and removal should mirror the Illinois DOH requirements for public buildings.[5]

Lead based paint is a common contaminant in older building. Buildings should be tested for lead based paint and, if the building is to be demolished or significantly rehabbed, construction waste should be tested for lead paint and properly disposed. However, management standards for lead-based paint C&D debris may change in the near future with regard to requirements for lead-testing procedures and disposal methods. Call the Office of Small Business for additional information on lead-based paint waste disposal procedures.

[5] http://www.idph.state.il.us/envhealth/asbestos.htm

increase "green business" as a strategy for creating jobs. Many of the policies in sustainability plans also relate to preventing future brownfields (see Part 4 below).



City of Chicago's Environmental Action Agenda 2006. Source: http://www.cityofchicago.org/environment

3.2 Available Properties. Most developers and tenants are looking for property that is ready to develop immediately or at most within a year. Especially in weaker market areas, municipalities can play a critical role in getting sites ready for development and having an up-to-date inventory of properties that are either ready to go or fully assessed.

Municipalities have a big advantage in assembling land and addressing environmental concerns on property they own because they have lower carrying costs (exemption from taxes and access to lower-interest bonds as a financing source). They also have an advantage in clearing away debts owed on a property by foreclosing on water, demolition or tax liens.

Municipalities that acquire property in order to enforce health & safety laws or eliminate blight, may also avoid legal responsibility for contamination when taking title to property. Although Illinois law governing eminent domain has changed somewhat recently, it may still be used to acquire blighted property, even for private redevelopment, provided a municipality has done its homework. Attorneys are usually important brownfield team members when considering the pros and cons of acquiring brownfield property.

Screen grab of Tinley Park's online available properties listing. Source: http://www.tinleypark.org/

- **Great Lakes Bank/ Blue Island Development Loan Program.** Developed to help small business owners with a low-cost alternative to conventional commercial loans. Below-market rate loans of up to $1 million for new construction; up to $500,000 for acquisition and rehab available on favorable terms. May be used for rehab of commercial buildings (including upper floor apartments), modernization or expansion of new construction. The CenterPoint Small Business Development Center can also help with business planning and explore eligibility for other special loan, loan guarantee or tax incentive programs.
- **New Markets Tax Credit loan programs**. Flexible loans for real estate development or business expansion projects in low-income census tracts. Potential for partial forgiveness. Offered through some banks and non-profit economic development organizations.

- **Financial Incentives for Green Building**
  - **Affordable Housing Grants**

    Green Communities. Offers charrette/planning grants for green projects and additional project funding if projects meet Green Communities criteria.

    IL DCEO energy efficiency affordable housing grants.

    Energy Star tax incentives for home energy efficiency and appliance rebates.
  - **Commercial/Industrial Rehab**

    IL DCEO provides LEED project funding and through their SEDAC program, energy efficiency design technical assistance.

    Federal tax incentives for energy efficient buildings and appliances through 2008. Program continuation to be determined within the next 2 months by Congress.
  - **Public/Institutional green building projects Illinois Clean Energy Community Foundation.** Provide grants for renewable energy projects and lighting retrofits.

3.4 Marketing Strategies. Effective brownfield redevelopment programs are based on market analysis and usually include a variety of strategies for marketing available properties and incentives.

- **Market analysis.** This analysis can provide information on what types of developers or business a municipality should target and why.
  - **Retail "gap analysis."** Real estate professionals often rely on commercial data services such as Claritas for basic census and retail expenditure data. This type of analysis can be helpful in identifying gaps in retail suppliers in a specific radius. For example, the Center for Neighborhood Technology has provided some updated analysis for Blue Island which identifies a potential

- **Targeted RFPs, developer forums or tours** focusing on specific types of developers – for example, mixed-use transit-oriented developers in older, inner-ring suburbs.

3.5 Risk Management Strategies.

Municipalities have unique advantages in brownfields redevelopment and can lower risk for developers. However, municipalities still need to protect themselves from risk. To a large extent, the Illinois EPA's issuance of an NFR letter gives both public and private sector comfort that risk from known conditions can be managed. The conditions of the NFR letter spell out the ways in which known risk will be managed. But what about risk from undiscovered conditions that may be found later? Or from claims that may be filed by parties other than environmental agencies? Municipalities can share this risk through development agreements or insurance.

- **Development Agreements**. The environmental clause in development agreements can provide for risk sharing for undiscovered conditions. If the current template lacks this language, it may worth retaining an environmental attorney to provide several options for language that could be used for future agreements.

- **Enforcement of NFR Letter conditions.** Since the NFR letter is often the first line of defense in litigation, it is important for municipalities to understand the typical conditions of these letters and make sure they are being enforced.
  - Maintenance of engineered barriers – who is responsible for

4.2 Stormwater Management and Green Infrastructure. Stormwater management, more recently referred to as green infrastructure, is an important part of the green development process. Managing stormwater on-site, thereby reducing contaminated runoff, can prevent the proliferation of brownfield contamination as well as ground and surface water contamination. On-site stormwater management also protects the health of nearby rivers and streams, prevents flooding, protects habitat for local ecosystem flora and fauna and recharges the local aquifer.

Stormwater management design strategies include native landscaping, naturalized detention, retention, porous pavement, bioswales, vegetated swales, filter strips, rain cisterns, rain gardens, green roofs and increased open space. When redeveloping a site, consider the site's natural stormwater infiltration to maximize the efficiency of existing conditions, thereby reducing the costs of landscaping and reducing the potential of site flooding.

As a City, Blue Island can set more stringent stormwater regulations than the Metropolitan Water Reclamation District through a local stormwater management ordinance. The District is updating its stormwater guidance to develop a draft Watershed Management Ordinance (WMO) in late 2008 or early 2009. The City should educate relevant staff on the ordinance and, if necessary, produce guidance more stringent than the minimum requirements of the WMO. Information on the District's ordinance development is available at http://www.mwrdgc.dst.il.us/Engineering/Stormwater/WMO.htm.

Native landscaping involves the use of plants that are indigenous to the local ecosystem. Native plants are typically more drought and pest tolerant based on their adaptability to the local climate, have deeper root systems, require less maintenance and provide habitat for wildlife.

Naturalized detention areas are a useful stormwater management strategy that can also be used as an aesthetic site design feature. They are designed to store stormwater and release it slowly into the surrounding landscaped areas, or eventually, a sewer system.

Porous or permeable pavement can be used throughout the site to allow stormwater to percolate into the soil naturally. To achieve this, pavers or a porous concrete may be applied for parking lots, throughout landscaped areas and as sidewalks.

A **bioswale** is an infiltration trench, similar to a naturalized detention area, in that it is designed to store and release stormwater slowly. Typically planted with water loving, or hydrophilic, plants, bioswales can often be found around the perimeter of parking areas absorbing run-off from the parking lot and filtering pollutants, before the water leaves the area.

Green roofs, rain cisterns and rain gardens are stormwater design strategies incorporated into the design of a building design. When rain falls on the roof of a typical building, the rain is diverted towards a downspout or gutter, and eventually to a storm sewer. Green roofs allow stormwater to be managed on the roof with the use of a vegetated cover of succulent, drought tolerant plants. This more typical style of green roof known as an 'extensive' system, uses a growing medium such as a lightweight shale or clay and a succulent groundcover like sedum. The extensive green roof system can often be applied to an existing roof, and doesn't require a great deal of struct

cost of urban infrastructure more economical and ensure that greenfield sites are maintained to provide important environmental benefits.

An example of an adaptive reuse project in the region is the recent conversation of a historic bank building in Berwyn, IL into an 8,000 square foot retail center. The Berwyn National Bank Building at Cermak Road and Oak Park Avenue is undergoing a renovation that will maintain the architectural integrity of the building and preserve the local design heritage of the community. Often adaptive reuse and historic preservation practices, such as in the case of the Berwyn bank renovation, work hand-in-hand to allow the developer to update the function of the building, while preserving original architectural features and design integrity.

Though historic preservations failed to get the building officially added to the historic landmark register, the decision was made to preserve it and adapt it for reuse.

The City of Los Angeles has developed an *Adaptive Reuse Program Guide*[7] which presents best practices in identifying opportunities for adaptive reuse for redevelopment.

4.5 Green Building Codes and Building Guidelines. The purpose of developing green building codes and guidelines is to provide environmental benefit and mitigate pollution, protect natural resources, reduce greenhouse gas emissions, create healthy communities, save money on long-term operating costs and brand development such that market recognition will lead to new economic development opportunities.

Some codes and guidelines are developed and applied locally, such as the *Chicago Energy Conservation Code*. This code provides multiple paths for demonstrating code compliance including prescriptive, performance, and acceptable practice approaches. It requires improvements in energy efficiency including the insulation of floors, roofs and walls as well as the installation of energy efficient windows and mechanical systems. It also establishes standards to

Other municipalities require or promote third-party standards such as the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system and the US EPA's ENERGY STAR standard. LEED offers a set of increasingly popular rating systems that approach new construction, renovation, and ongoing operations with emphases on high performance building systems yielding energy and water conservation, environmentally friendly materials acquisition and waste management, sustainable site selection, occupant health and comfort, and overall building sustainability. A common starting point for these requirements is to impose them on public buildings. Cook County, Illinois has an ordinance

Another option for promoting renewable fuels and saving on fuel costs is through the **Illinois Green Fleets Program**,[9] a voluntary program where businesses, government units, and other organizations in Illinois gain recognition and additional marketing opportunities for having clean, domestic, renewable fuel vehicles in their fleet. It is a program to recognize a fleet manager's progressive efforts in using environmentally friendly vehicles and fuels to improve air quality while promoting our domestic fuels for greater national energy security. To qualify as an Illinois Green Fleet, a fleet must have a portion of its vehicles use natural gas, propane, 85% ethanol (E-85), electricity, biodiesel, or other clean, American fuels.

4.7 Promoting Reuse of Construction & Demolition Waste. The solid waste stream in the Chicago region is made up of 40% of construction and demolition waste material. Many opportunities exist to divert these materials from the landfill for recycling and reuse, while not incurring additional project costs. In many cases, recycling or sending these materials to a reuse center can actually reduce project costs in the way of reduced disposal costs, actual resale or tax donation benefits.

Recycling construction and demolition material requires an organized plan on the construction site to sort materials and identify eventual destination points. A construction waste management plan can help a contractor evaluate the costs and benefits of this process, with a line by line assessment of the market for these raw materials. Metal, concrete, asphalt, brick, and wood are some of the more obvious recyclable construction and demolition

5.0 Next Steps

The City is currently lacking some resources and a process to address brownfield sites. This final chapter includes recommendations on action steps for completing work under the current EPA Brownfield Assessment grant and establishing resources and processes for redevelopment and prevention of brownfields in the future.

5.1 Site Information Database. Mapping and land information was an important part of the City's economic development planning process. Support in terms of mapping and data has been provided by the Center for Neighborhood Technology through outside grant funding. The City has recently acquired staff and equipment for a Geographic Information System (GIS) and is currently working to develop its own database and mapping capacity. The following types of data are helpful in tracking and prioritizing brownfield redevelopment sites:

- Target area (name of target area the site is located in, e.g., South Station TOD)
- Current land use (residential, commercial, industrial, mixed, vacant)
- Current zoning
- Address
- Land Area (s.f.)
- Building Area (s.f.)
- Owner / Taxpayer
- Possible Brownfield? (yes, no or unknown – based on current or former land use)
- Phase 1? (yes, no or unknown)
- Phase 2? (yes, no or unknown)
- NFR Letter? (yes, no or unknown)
- Incentives? (yes, no or unknown)
- In TIF district? (yes, no or unknown)
- TIF district expiration date (year)
- In Enterprise Zone (yes, no or unknown)
- In Class 8 Township (yes, no or unknown)

There may be sensitivity to classifying sites as Possible Brownfields. However, the idea is to be able to generate a list of possible brownfields for purposes of setting priorities and assessing needs for future brownfields assessment or cleanup grant money. It is important to keep the data updated as new information is gathered.

5.2 Site Inventory. The City has identified a number of redevelopment opportunity sites through its economic development plan. The plan is currently in the process of being updated. In addition, the City will need to identify which of the redevelopment opportunity sites are potential brownfields based on what is currently known about their existing and historical use.

5.3 Identify Stakeholders. Once some information on the inventory of Blue Island brownfields is collected, stak

- **Staff (Planning & community development, law).** As discussed in part 3 of this report, professional planning, community development and legal staff play key roles in providing information, securing funding for predevelopment work, marketing and community outreach. Regular updates of the City's economic development plan should include an evaluation of the capacity of existing staff to carry out all of the desired action steps.

- **Technical experts (environmental, economic incentives, legal, etc.).** Outside experts can supplement professional staff and are often retained to provide advice and opinions on issues relating to specific brownfield issues such as environmental liability relating to the exercise of eminent domain or provide sample language for environmental risk clauses in development agreements. Outside experts can also provide extra capacity for more time-consuming activities, such as preparation or updates of a comprehensive plan or zoning ordinance.

- **Outreach coordinators**. Although many chambers of commerce provide networking and joint marketing opportunities for local businesses, it is important to assign time and responsibility for individual check-ins with existing businesses to assess their needs and get an early jump on expansion needs in particular. In the City of Chicago, non-profit industrial councils play a key role in this area.

- **Community volunteers.** In addition to providing essential input into the community's vision plans, community volunteers often are key players in making connections and tapping relationships to attract end users for redevelopment sites.

5.9

providing free economic development planning assistance to the City through foundation grant sources. The South Suburban Mayors & Managers Association also has foundation grant funding that is potentially available to Blue Island as one of the Calumet River Development Corridor communities. The Metropolitan Planning Council also has grant funding to build capacity for these same communities, and has recently hosted a technical assistance workshop to assess a specific development site. The Urban Land Institute also hosts technical assistance panels for specific redevelopment opportunities. The Delta Institute and Delta Redevelopment Institute can also provide free assistance with a number of sustainability programs including green purchasing.

- **Development Consultants.** A few for-profit development consultants, such as Business Districts, Inc., are active in providing market analysis and support for redevelopment sites and districts in south suburban communities. Some developers and brokers that are active in south suburban communities can also provide development consulting services on a fee for service basis. These developers may have firsthand experience with issues such as development agreement terms, and may have experience and relationships with specific types of retailers or end users.

6.0 Conclusion

This report has provided information to educate City staff and other brownfield stakeholders on factors that should be considered in selecting sites for brownfield assessment grant money as well as the development of an ongoing brownfields development program. The report emphasizes the unique and important role that municipalities can play in the brownfield process and how to manage the associated risks.

In many cases, local government brownfield programs die after the brownfield grant ends. For historical communities like Blue Island with an industrial past, that would be a shame. This report is intended to be useful in putting into place the mechanisms and funding ideas to keep the program going after the current grant work is completed.

7.0 Appendices

APPENDIX A: Glossary of Environmental Terms

RECs: A recognized environmental condition means the presence or likely presence of a regulated substance or pesticide into site structures, surface water, sediments, groundwater, or soil. A REC typically does not include "de minimus" conditions that would not pose a threat to human health or the environment.

SRP: Illinois Site Remediation Program. The Illinois SRP is a voluntary program that site owners can enter to help guide the environmental investigation and remediation of their sites. The benefit of enrolling in the SRP is the receipt of a No Further Remediation letter that provides assurances to future owners and/or developers that the environmental and human health hazards have been mitigated according to the final site use.

Phase I Environmental Site Assessment: A Phase I Environmental Site Assessment is used to identify possible Recognized Environmental Concerns at a site that could pose a liability to a future owner and/or limit site development options. Aspects of a phase I include: site visit, interviews with knowledgeable personnel, records search and reporting. A Phase I assessment should be conducted in accordance with the most current version of ASTM standard E 1527. (For information on the most current version, see www.astm.org). The current standard of practices at the time of publication of this report was ASTM E 1527-05.

Phase II Site Investigation: A Phase II site investigation includes invasive environmental sampling such as soil and ground water sampling and magnetometer survey. The objective of the Phase II is to confirm the environmental site conditions identified in the Phase I and, if needed, define limits of contamination. Within the SRP program, the Phase II activities are documented in a Site Investigation Report

Remediation objectives: Remediation objectives are the final cleanup standards for the site established based on final site use. The Illinois SRP program utilizes the Tiered Approach to Corrective Action (TACO) procedures for establishing remediation objectives. Under the SRP program Tier 1 standards are based on residential use as the final site use and Tier 2 standards are based on a commercial/industrial final use scenario. Tier 3 provides SRP applicants the option to apply risk assessment models to establish site specific standards.

Remedial Action Plan: The remedial action plan describes the proposed remediation/corrective action at the site consistent with the SRP guidelines and standards.

Remediation Action Completion Report: A report submitted under the SRP attesting to the cleanup activities at the site.

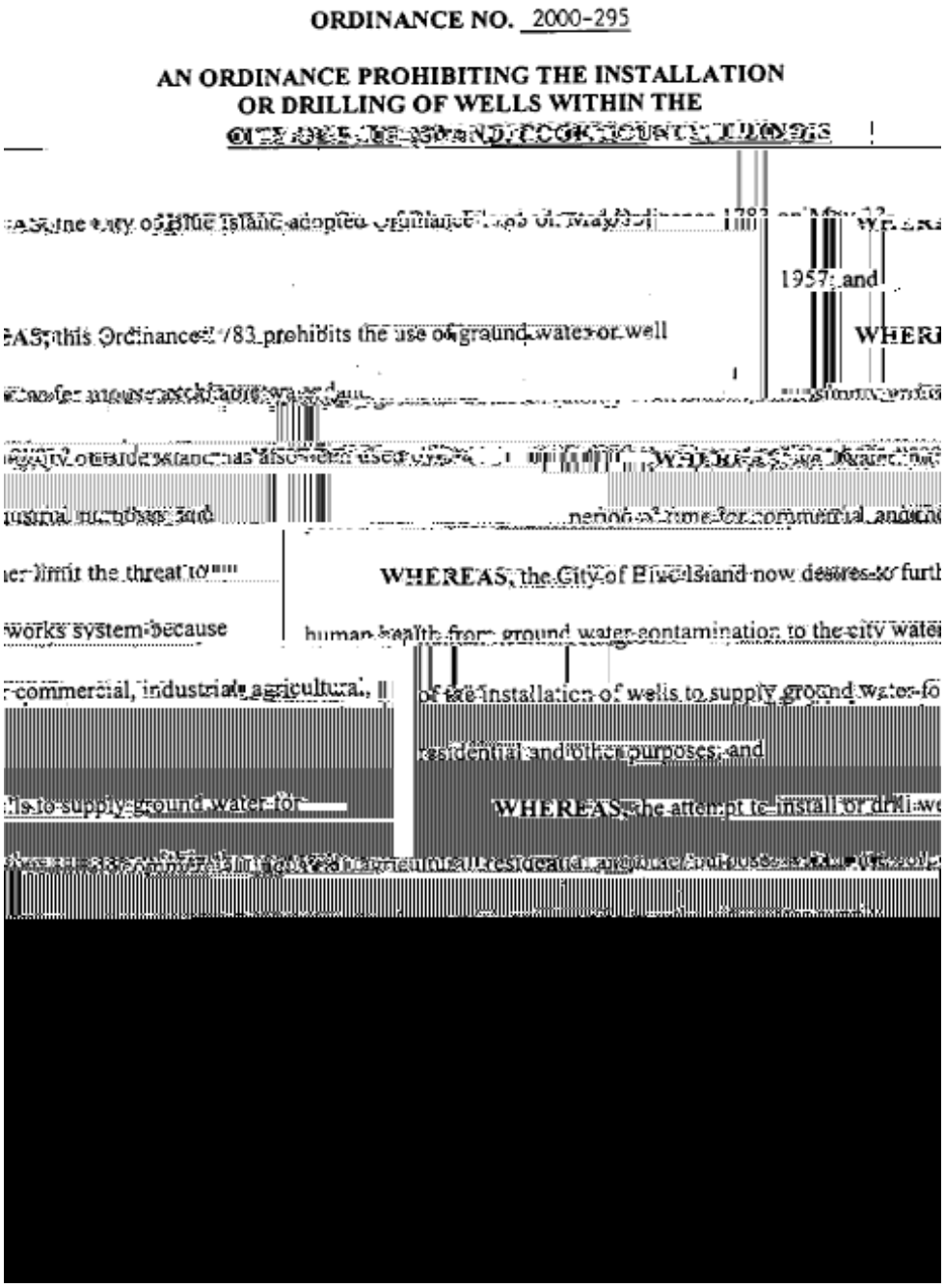
No Further Remediation Letter: A NFR letter documents that the site cleanup activities have been completed. The purposes of the NFR letter is to notify future purchasers of the site of participation in the SRP as well as document engineered barriers or institutional controls that

have been installed at the site and need to be maintained to protect human health and the environment.

Engineered controls: Physical barriers (e.g. paving or foundations) that have been installed at the site to mitigate exposure to onsite contaminants.

Institutional controls: Non-physical controls (e.g. ordinances, zoning) that apply to the site to mitigate exposure to onsite contaminants.

APPENDIX B: Blue Island Groundwater Ordinance



ORDINANCE NO. 2000-295

AN ORDINANCE PROHIBITING THE INSTALLATION OR DRILLING OF WELLS WITHIN THE

1957; and

WHERE

WHEREAS, the City of Blue Island now desires to furth

human health from ground water contamination to the city wate

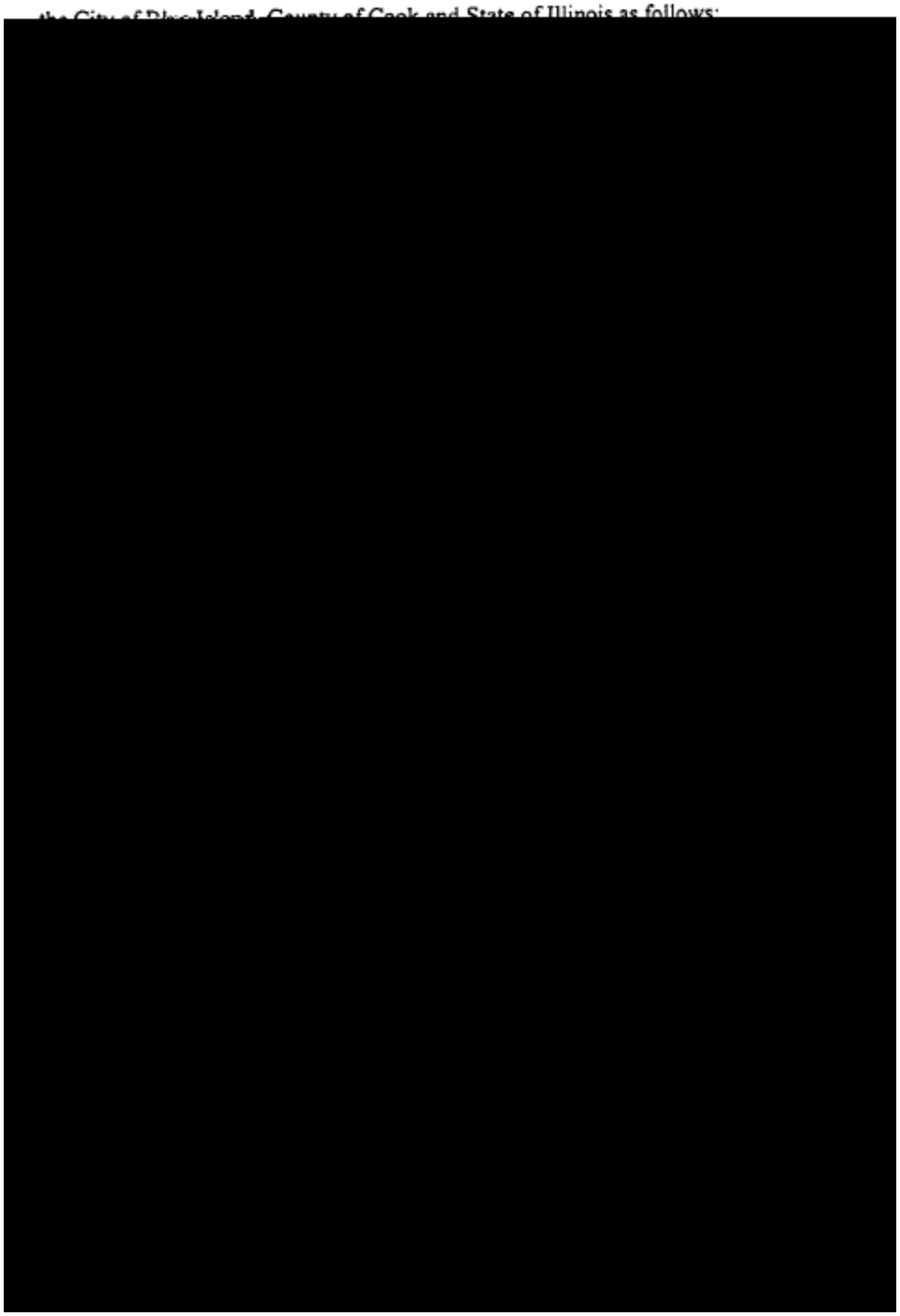
of the installation of wells to supply ground water fo

residential and other purposes; and

WHEREAS, the attempt to install or drill we

NOW THEREFORE BE IT ORDAINED by the Mayor and City Council of

the City of Blue Island, County of Cook and State of Illinois as follows:



SECTION FOUR

In case any violation of this ordinance is not corrected within three (3) days after ...ell, the notice has been served to cease and desist drilling, installation or use of the we...eding at ... jurisdiction's legal representative may institute an appropriate action or proce...w to exact the penalty provided in Section Three, and in addition thereto, may proceed ...at law or in equity against the party responsible for the violation for the purpose ... ordering the person or entity:

1) to restrain, correct or remove the violation or refrain from any further use of the well ...

2) to restrain or correct the installation, drilling or use of the well ...

3) to prevent the occupation or use of the premises where the well has been installed or drilled.

SECTION FIVE

All ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

SECTION SIX

This ordinance shall be in full force and effect from and after its passage, approval and publication as provided by law. A true and complete copy of this ordinance shall be published ... by authority of the corporate authorities.

3

PASSED this 8th day of February, 2000.

CITY CLERK OF THE CITY OF BLUE ISLAND
COUNTY OF COOK AND STATE OF ILLINOIS

VOTING AYE: Ald. Ostling, Jackson, Vasquez, Vargas, Mindeman, Koehler Pegorin, Seibert, Rita, Stone, Poulsen.

VOTING NAY: None

ABSENT: [illegible], Glasgow.

ABSTAIN: None

APPROVED: this 8th day of February, 2000.

MAYOR OF THE CITY OF BLUE ISLAND,
COUNTY OF COOK AND STATE OF ILLINOIS

ATTESTED and Filed in my office this

8th day of February, 2000.

CITY CLERK

PUBLISHED in pamphlet form this

8th day of February, 2000.

APPENDIX C: Model Brownfield Prevention Ordinance

Overview

The following model brownfield prevention ordinance was developed by the Delta Institute for the South Suburban Mayors and Managers Brownfields Coalition. The objective of the draft ordinance was to create an incentive for pollution prevention planning, and to establish an assurance that larger companies have the capacity to address contamination problems should they occur. Such an ordinance would make pollution prevention a requirement for doing business in the community. An overview of the ordinance is provided below followed by example text.

Applicability. The ordinance applies to both large and small owners and operators of facilities that handle hazardous substances, materials, and wastes as defined by the U.S. Superfund Amendments and Reauthorization Act of 1986, the Resource Conservation and Recovery Act (RCRA), and the Illinois Environmental Protection Act, as well as facilities that reprocess construction and demolition materials.

Purpose. The purpose of the ordinance is to require any relevant owner or operator to

Service Office commercial general liability insurance form that would normally be excluded.

The ordinance would begin to instill a culture of pollution prevention within the community. Larger companies will typically already have pollution prevention plans in place and would likely have no difficulty complying with the ordinance. The ordinance would have an impact on smaller companies that that may not have ever considered pollution prevention. Technical assistance, guidance, and training from the municipalities and/or the South Suburban Mayors and Managers Association would have to be provided. Costs for this technical assistance would partially be defrayed through the fees collected as outlined in the ordinance.

Model Brownfield Prevention Ordinance

5. Persons. Any natural person or individual, firm, association, partnership, copartnership, joint venture, company, corporation (including a government corporation), joint stock company, trust, estate, state, local government, county, commission, political subdivision, any interstate body, or any other legal entity, or their legal representatives, agents, or assigns and includes public or private utilities, governmental bodies or agencies, and common carriers.

6.

C. Any owner or operator who applies for anew or renewed business license and handles reprocessable construction/demolition material shall submit a pollution prevention plan as set forth in Section IV plus and annual $1,000 brownfield prevention fee.

D. Fees required under this section must be paid to the [municipality] by [date]. The fees shall be credited to the [municipal] brownfield prevention fund.

Section IV. Pollution Prevention Requirements

Owners or operators submitting pollution plans must include the following specific elements.

1. Written policy demonstrating management and corporate support for the pollution prevention plan and a commitment to implement the planned activities and achieve the established goals.

2. A list of hazardous materials, substances, and/or wastes used, handled, stored, or released at each facility, and/or reprocessable construction/demolition material handled as each facility; and a map, floor plan, or site plan identifying where such materials are handled at each facility

3. A description of the objectives and pollution prevention targets.

4. An update of pollution prevention activities implemented and progress made toward the prior year's targets.

5. A description of activities planned for the current year.

6. An implementation schedule.

7. The plan must be submitted by [date] each year to [municipality] where it will be made available for public review.

Section V. Proof of Pollution Insurance

An owner or operator who ***is*** subject to reporting requirements of the Toxic Chemical Release Reporting: Community Right to Know program or ***is*** a large quantity generator under the Resource Conservation and Recovery Act must provide proof of adequate pollution insurance when applying for a new or renewed business license. A copy of the active policy covering the