

From Brown to Green: Adaptive Re-Use of Second Generation Industrial Properties

John A. Kilpatrick, Ph.D., MRICS

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Why?

About 300,000 properties in the U.S. classified as “brownfields”

Many more in other countries

U.S. remediation estimates > US\$ 300 Billion

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Why?

Brownfield – no one common definition, but frequently referred to as a “second-generation industrial site” with contamination problems

Why?

Brownfield contamination may be either contained on-site or may be migrating off-site.

Some brownfields are not point-sources, but are affected by externalities

Why?

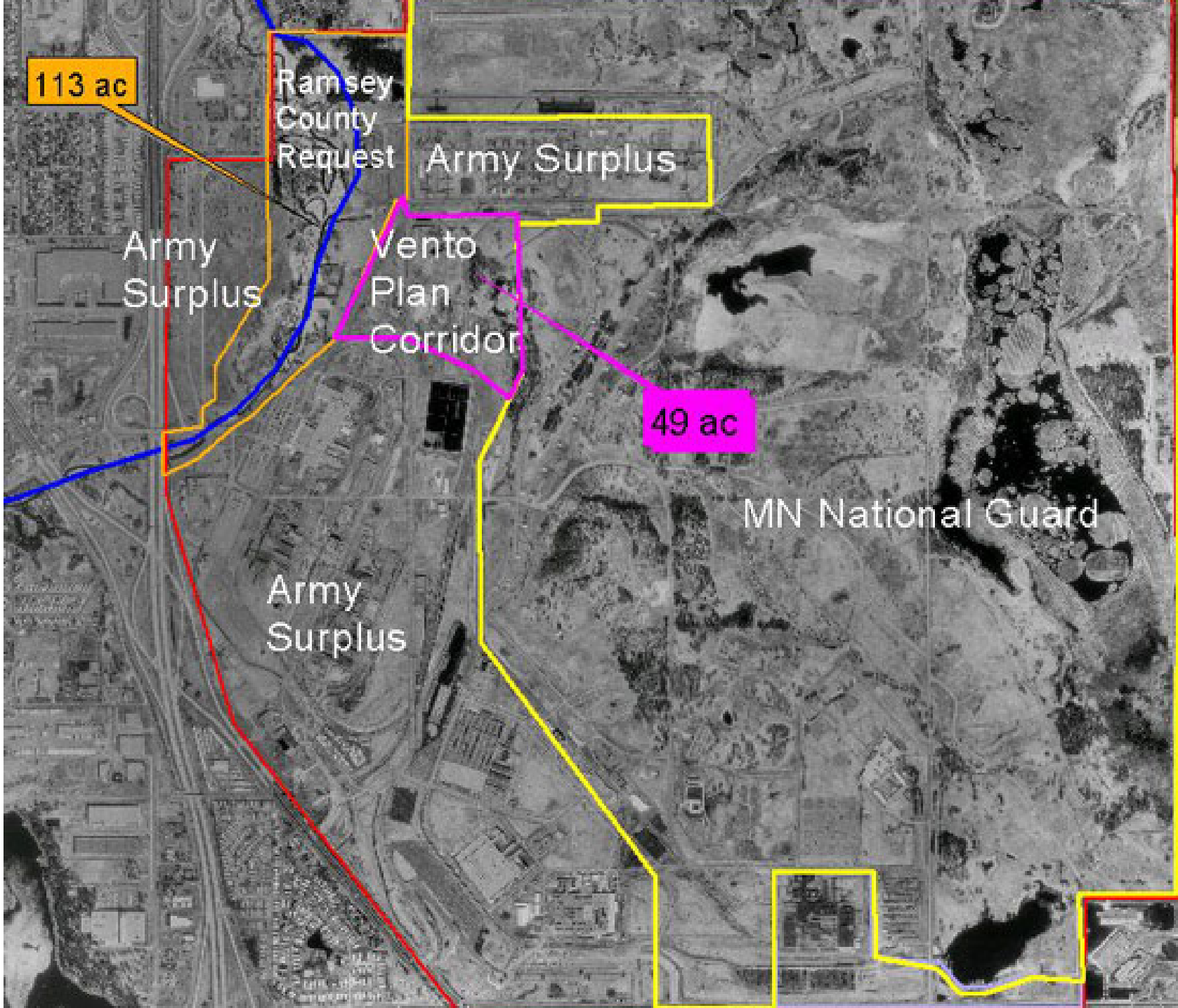
Goal in brownfield remediation is typically two-fold:

1. Remediate the contamination
2. Adaptively re-use the property to some higher and better use

Why?

Brownfields may be as simple as abandoned gas stations, dry cleaners, agricultural chemical spills, or other relatively simple problems.

More complex brownfields include nuclear radiation, complex chemical contamination, or large oil spills



113 ac

Ramsey
County
Request

Army Surplus

Army
Surplus

Vento
Plan
Corridor

49 ac

MN National Guard

Army
Surplus





Valuing Brownfields

Bill Mundy, Ph.D., MAI

John A. Kilpatrick, Ph.D., MRICS

Forthcoming in:

Brownfields 3rd ed.,

(American Bar Association)

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Why?

Valuation becomes important because the public sector is usually unable to accomplish remediation without private sector involvement

Valuation drives all of the economic and financial aspects

Brownfield Valuation occurs in the context of other aspects of the remediation:

- Engineering & remediation
- Legal (title issues, 3rd party damages, civil or criminal penalties, etc.)
- Public-sector involvement (urban planning, public sector needs)
- End-use redevelopment

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Methodological history –

- Appraisal methods -- early 1980's
 - Exxon Valdez Oil Spill (early 1990's)
 - Love Canal
 - Three Mile Island
- Adaptation from eminent domain
 - A physical or legal “taking” of the land

Regulatory aspects –

- U.S. appraisal standards governed by the *Uniform Standards of Professional Appraisal Practice* (USPAP)
- Increasing integration of USPAP and *International Valuation Standards*
- USPAP silent on the subject until 1992
- USPAP major revision on contaminated property valuation in 2002

Four stages of a brownfield:

1. Uncharacterized and unremediated
2. Characterized and unremediated
3. Remediation in progress
4. "Fully" remediated

Note that "fully" is situationally specific

Feasibility analysis – what can be done?

Market feasibility

Economic feasibility

Financial feasibility

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Feasibility analysis drives the determination of highest-and-best-use

1. What is legally permissible?
2. What is physically possible?
3. What is financially feasible?
4. What is maximally productive?

1. *What is legally permissible?*
2. *What is physically possible?*

These are driven by the degree of remediation

Thus, an iterative process in which feasibility, value and remediation level are determined as simultaneous equations

Other valuation issues –

“Traditional” methods (cost, sales comparison, income) may be lacking due to availability of data

Pre- and Post-remediation stigma

Remediation is not a full “cure”

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Dr. John Kilpatrick is an economist and the Managing Partner of Greenfield Advisors, specializing in economic market and valuation analysis, principally in real estate matters, headquartered in Seattle.

Dr. Kilpatrick holds a Ph.D. in Finance from the University of South Carolina, where he also taught Real Estate and Corporate Finance in the Moore School of Business. He served as the founding Administrator of the South Carolina Supercomputer Network and as the Secretary/Treasurer of the Academic Coalition for Intelligent Manufacturing Systems, based in Washington, DC.

Dr. Kilpatrick is the author of four books and numerous journal articles. He is a frequent speaker before national groups, including the U.S. Senate Subcommittee on Science, Technology, and Space and the National Trust for Historic Preservation. His work in real estate finance has been the subject of recent articles in the New York Times, the Boston Globe, and the Wall Street Journal. He is the author of the Chapter 29, Brownfield Valuation, in Lexis-Nexis Matthew Bender's Brownfield Law and Practice. In 2001, the National Park Service honored Dr. Kilpatrick by producing a monograph summarizing his work in the valuation of historic neighborhoods.

His recent clients include the U.S. General Services Administration, the Hearst Family, the Japan Real Estate Institute, and numerous private investors, corporations, university endowments, trusts, and law firms. Among his other honors, Dr. Kilpatrick is a member of the Faculty of Valuation of the Royal Institution of Chartered Surveyors (UK) and is featured in the 2006 edition of Who's Who in America.

The logo for Greenfield Advisors, featuring the company name in a serif font within a dark green rectangular box.

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