

The City of Richmond Green Alley Program

A Tale of Two Alleys

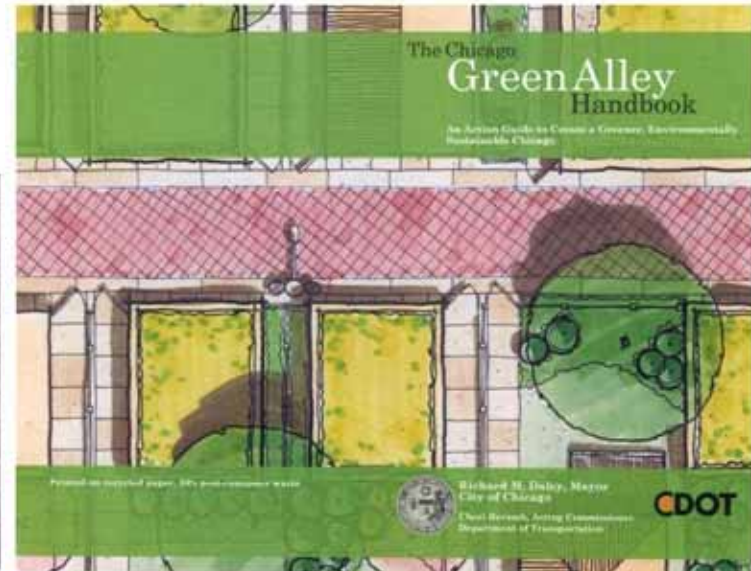


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Chicago Green Alley Program

- Began in 2006
- Over 100 alleys completed



- Monitored regularly
- Sustain garbage truck use and snow plowing

Introduction to “Green” Alleys

- What is a Green Alley?
 - Porous surface
 - Allows rainwater to infiltrate
- What are the Benefits?
 - Reduces the rate of stormwater runoff
 - Reduces stress on the combined sewer system
 - Filters silt and pollutants
 - Heat reduction



Source: Chicago Green Alley Handbook

What was ARB's problem?

5th Street

12th Street



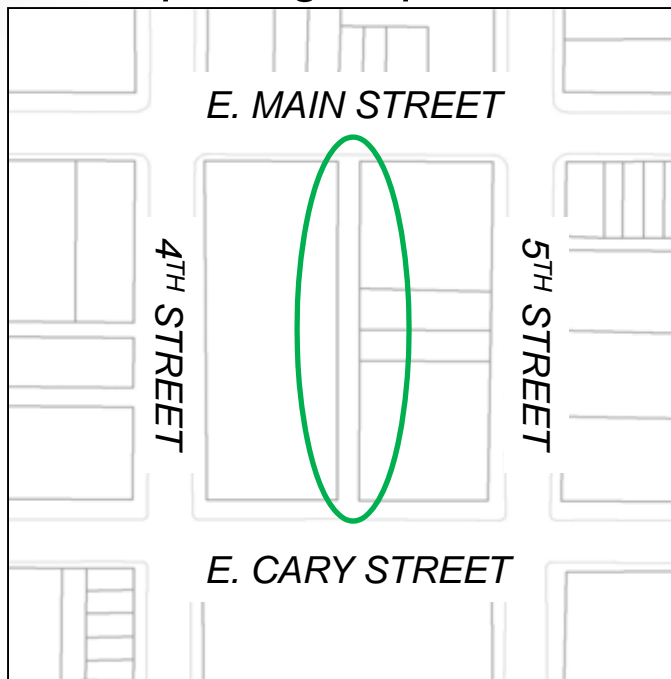
Pervious Technology

- Porous Asphalt
 - Less tar and smaller aggregate than conventional asphalt
 - Conventional installation equipment used
- Pervious Concrete
 - Aggregate with no fines
 - Work in smaller batches and cure covered
- Permeable Interlocking Concrete Pavers
 - Aggregate filled joints
 - Imitate the cobblestone look

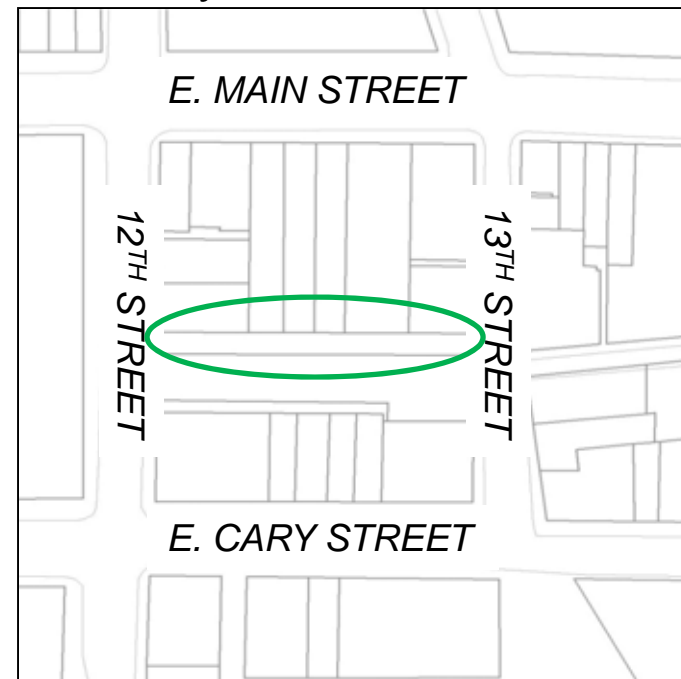


City of Richmond Green Alleys Program

5th Street Alley
Grand Opening September 2010



12th Street Alley
Currently Under Construction



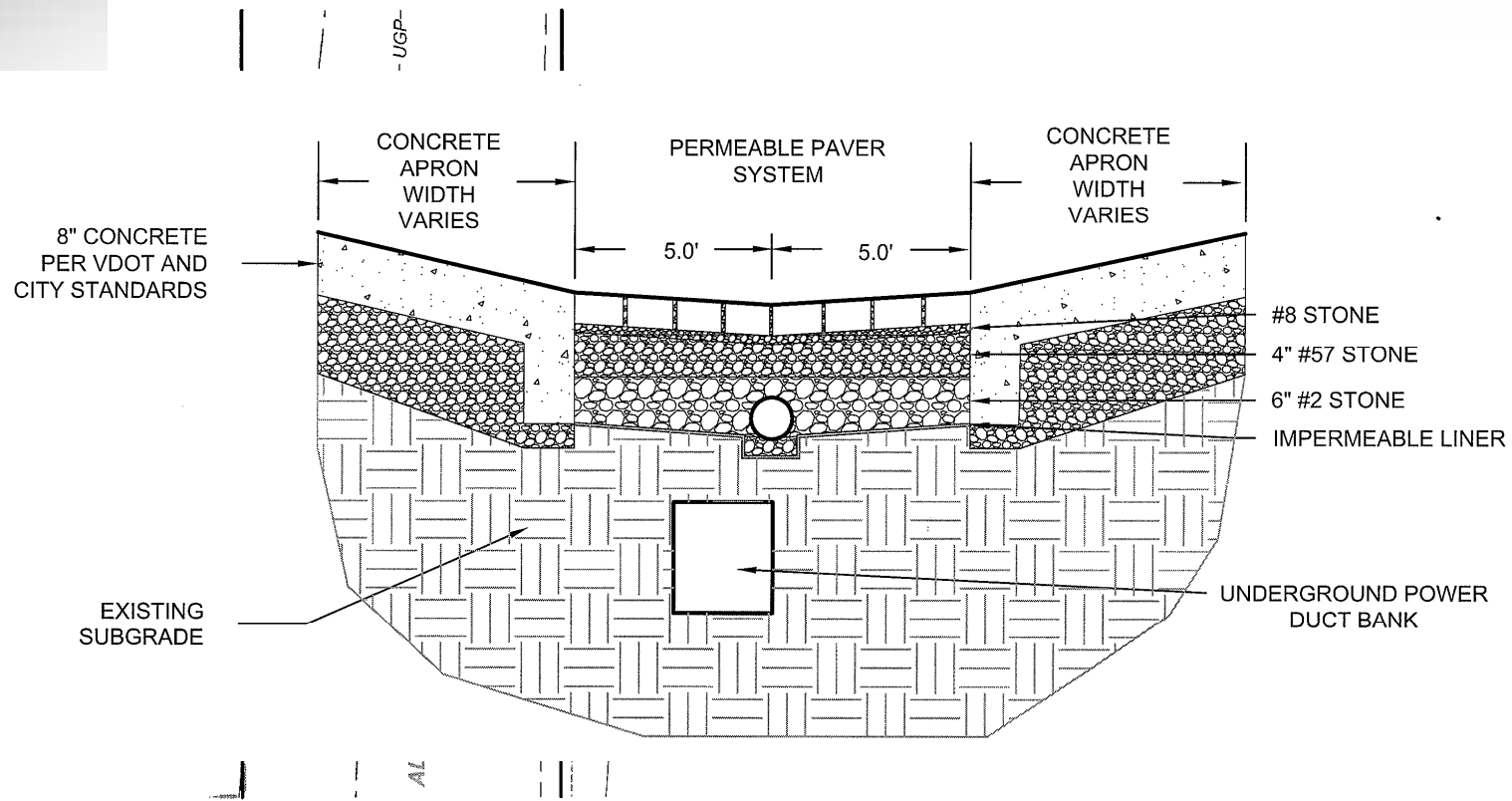
5th Street Green Alley Overview

Design Constraints

- Steep slope
- Several entrances
- Primarily cobblestone w/ asphalt ramps



5th Street Existing Utilities



Post-Construction



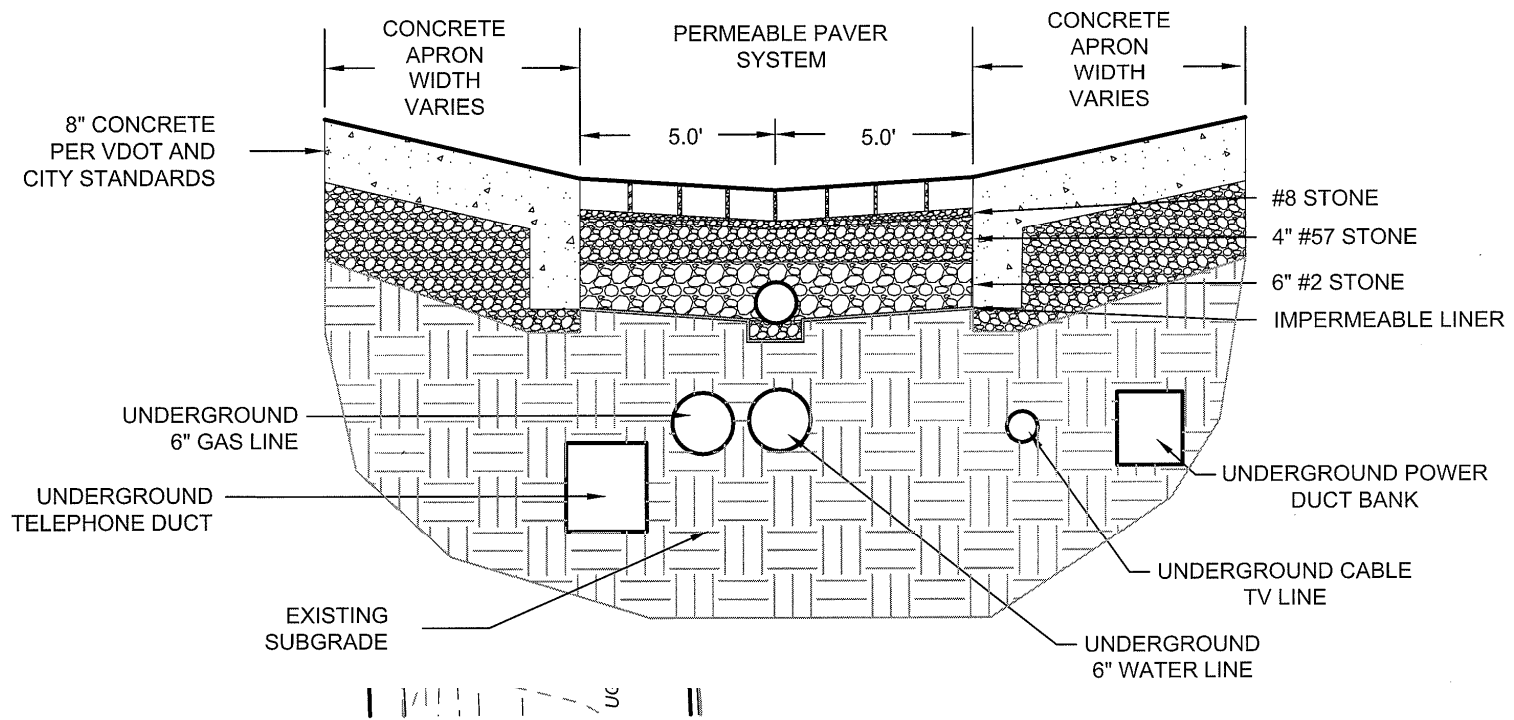
12th Street Green Alley Overview

Design Constraints

- Steep slope
- Several utilities and roof drains
- Primarily cobblestone covered with asphalt



12th Street Existing Utilities



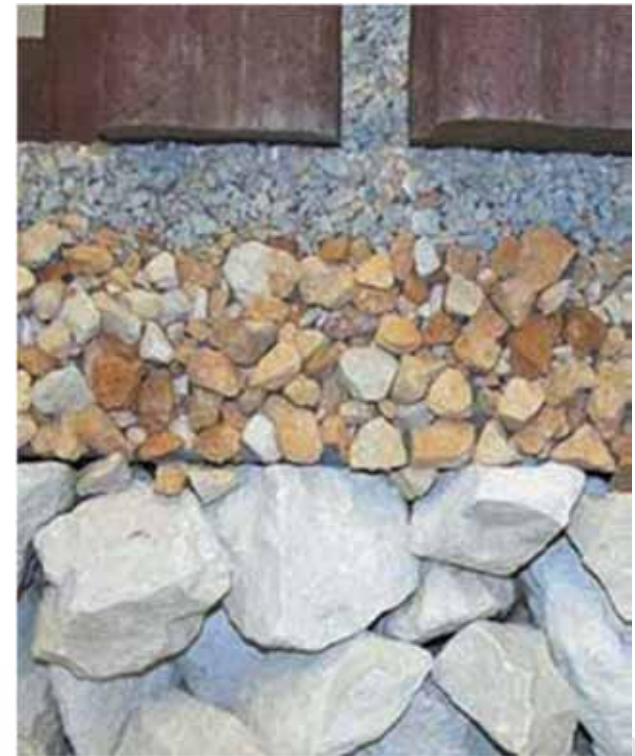
Lessons Learned

- Chose locations wisely
- Get stakeholder feedback & buy-in
- Underground utilities coordination
- Cross-department coordination
- Experienced installer



Maintenance Requirements

- Winter/Snow Treatment
 - Plows are acceptable
 - Salt is acceptable, sand is NOT acceptable
- Surface Cleaning
 - Vacuum annually
 - Inspect annually for clogging, etc.
- Pavers can be reused after underground utility repair



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