

POTOMAC YARD

LAND DEVELOPMENT EXAMPLE

POTOMAC YARD

Review of Land Packaging

- Arlington Master Plan Approved: 2000
- Alexandria Master Plan Approved: 1999
- Crescent Resources acquired site in 2001

This land development example will focus on the “Biggest Challenges” in each municipality.

- Alexandria: Trunk Sewer Project
- Arlington: Infrastructure

ALEXANDRIA: TRUNK SEWER - TIMELINE

First things first: The Trunk Sewer Project (2001-2003)

- June 2001: Design begins.
- March 2002: Permits issued by City of Alexandria, Virginia Department of Health, CSX Transportation, WMATA (Metro), and Alexandria Sanitation Authority (ASA) in March 2002.
- January 2003: Construction Complete
- March 2004: The City of Alexandria issued Notice of Acceptance

The project was awarded Trenchless Technology's New Installation of the Year

ALEXANDRIA: TRUNK SEWER – FACTS & FIGURES

Budget: \$13,000,000

Actual Total: \$12,100,000

- The new trunk sewer system's capacity was 12,000,000 gallons per day (GPD)
 - Approximately one-third was allocated to the Potomac Yard Development.
 - Approximately one-third was allocated to the City of Alexandria to accommodate excess city flows.
 - The remaining third is for future development in Alexandria.
- A “trenchless” installation technology was mandated in the CDD conditions

POTOMAC YARD: ALEXANDRIA



Drilling vertical shafts using an auger.

Transportation of the pre-fabricated metal shaft liners.



POTOMAC YARD: ALEXANDRIA

Installation of 50 feet long shaft liners, into the pre-drilled holes.



POTOMAC YARD: ALEXANDRIA

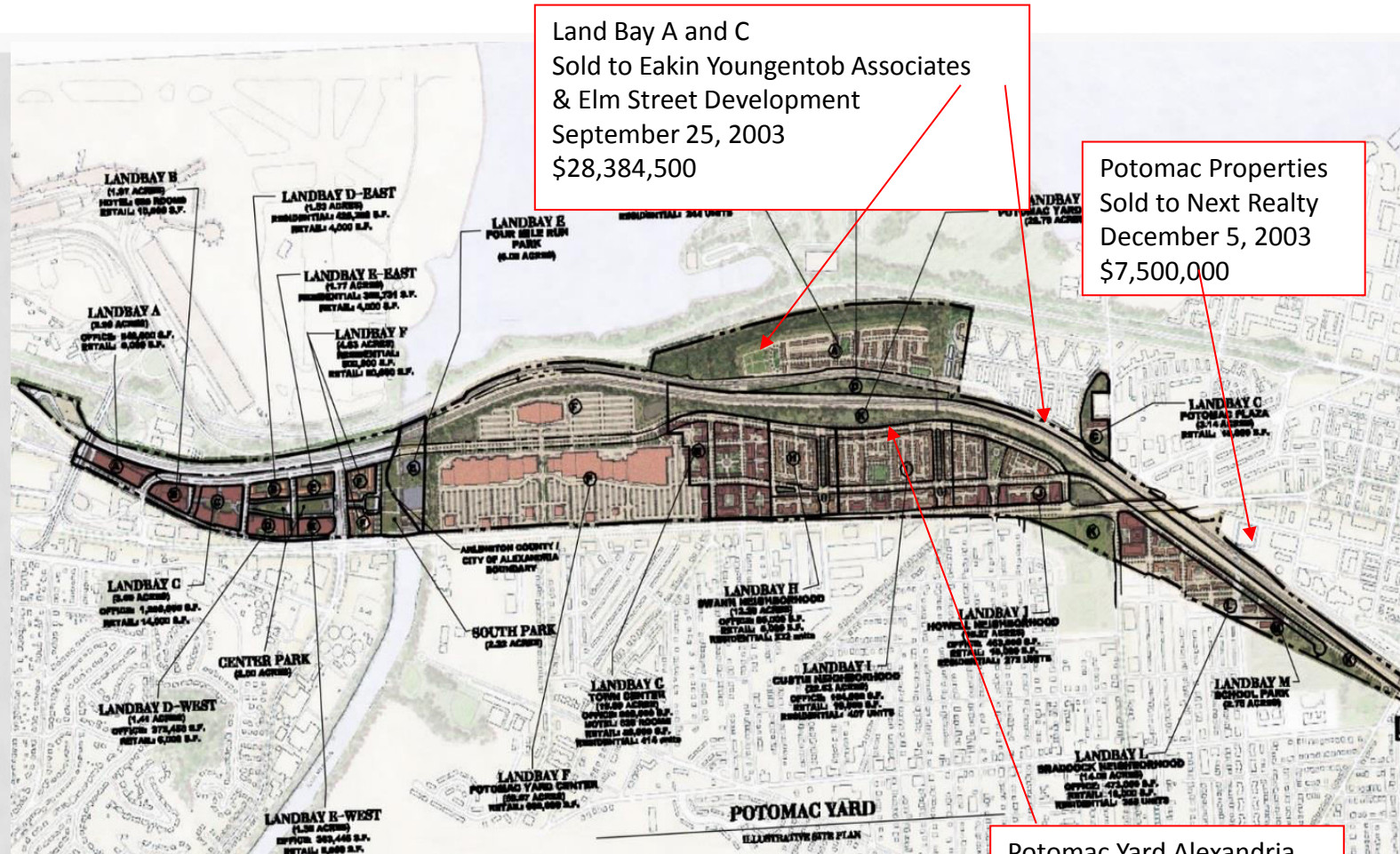
Lowering vertical shaft liner



Micro-tunneling horizontally from within the vertical shaft.



ALEXANDRIA: LAND BAY SALES



ALEXANDRIA: TRUNK SEWER

- By January 2003, the entire pipe system had been successfully installed and only surface restoration remained. The entire project was completed in slightly over 9 months.
- Fourteen months later the City of Alexandria formally accepted the Trunk Sewer. In October of 2004 the Potomac Yard Trunk Sewer was placed into service.
- This is a good example of:
 1. A private developer constructing major off-site infrastructure improvement as part of the land development stage.
 2. This the “public nature” of real estate development and the importance of community stakeholder support. Literally 100,000’s of citizens were inconvenienced by this project and did not receive any direct benefits.
 3. The land developer creates value by making raw land into valuable building sites by completing off-site infrastructure improvements
- The \$13 million Trunk Sewer Project enabled the developer to sell over \$130 million of land bays to building developers.

For more information, students should refer Trunk Sewer video at:
<http://dankohlhepp.com/potomac-yard.html>

ARLINGTON: INFRASTRUCTURE - TIMELINE

- January 2002: Design work began
- Permits issued by City of Alexandria, Arlington County, Virginia Department of Health, Virginia Department of Transportation.
- June 2003: Construction on the on-site infrastructure began
- September 2005: The on-site infrastructure up to base pavement was completed in September 2005.
- The on-site road improvements were each subject to separate and overlapping development agreements with building developers who purchased “unfinished” land bays in 2004 and 2005

ARLINGTON: INFRASTRUCTURE – FACTS & FIGURES

Budget: \$20,000,000

Actual Cost: \$20,000,000

The Arlington Infrastructure includes:

- 5,000 ft. of public roads with associated utilities and traffic signals,
- 1,500 ft. of private roads with utilities.
- Construction of a 1 million gallon per day sanitary sewer pump station located on Arlington County property. The pump station included 50% excess capacity for use by Arlington County.

ARLINGTON: INFRASTRUCTURE

Earthwork Issues:

- Arlington earth work required the removal of 1.2 million cubic yards of excess dirt
- Alexandria earth work require the import of need nearly 650,000 cubic yards
- 40,000 tons of impacted soils had to be handled as special waste.

2-Fold Approach:

1. Create a Model Soil Management Plan (SMP). The SMP was approved by Virginia Department of Environmental Quality in the summer of 2003.
2. Find alternate reuse opportunities for contaminated cinder ballast

ARLINGTON: INFRASTRUCTURE

CSX and Metro
Railways

Contaminated
Soil
Dump Site

US Route 1



ARLINGTON: INFRASTRUCTURE

Arlington County
Waste Water
Treatment Plant

Existing Office
Buildings on U.S. Route
1

Impacted Soil
Pile

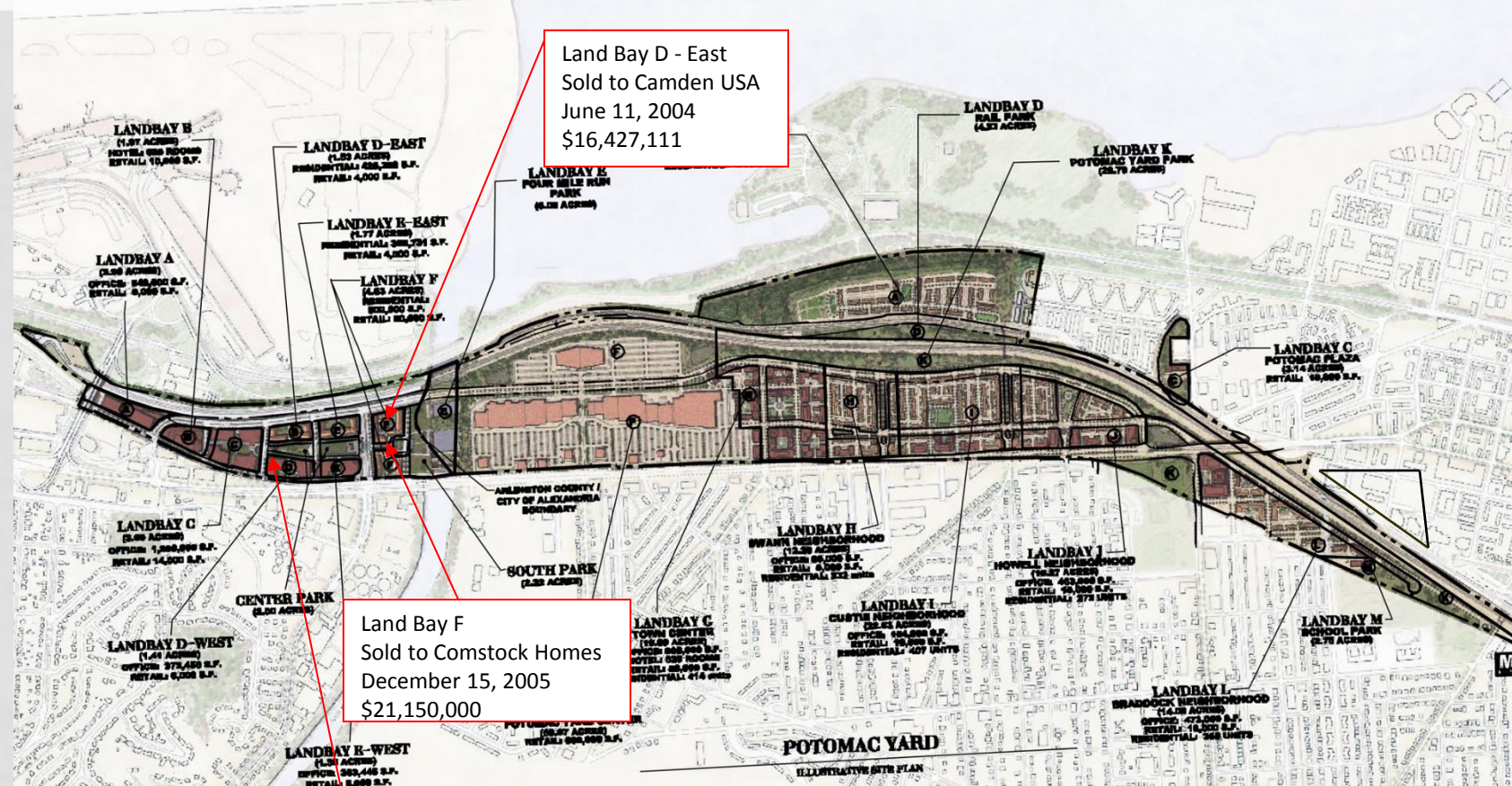
Finished
Road



ARLINGTON: INFRASTRUCTURE



ARLINGTON: LAND BAY SALES



ARLINGTON: INFRASTRUCTURE

The Land Developer Created Value By:

1. Solving the Contaminated Soil issues and
2. Constructing the Arlington Infrastructure.

The Land Developer was able to sell all of the Land Bays to Building Developers:

1. June 11, 2004: Land Bay D-East was sold Camden Property Trust, a multi-family developer and REIT, for \$16,427,000
2. December 28, 2004: Land Bays B,C. D-West, and E were sold to Meridian Development, a mixed-use property developer, for \$80,000,000
3. December 15, 2005: Land Bay F was sold to Comstock Homes, a condominium developer, for \$21,150,000

POTOMAC YARD: LAND DEVELOPMENT WRAP-UP

Over five years, the Land Developer did the following:

- Purchased the property for \$122 million.
- Constructed the Alexandria Trunk Sewer for \$12.1 million
- Constructed the Arlington Infrastructure for \$20 million
- Incurred Other Cost of \$3 million
 - Total Costs: \$158 million
- Sold Alexandria Land Bays for \$140.9
- Sold Arlington Land Bays for \$117.6 million
 - Total Revenues: 258.5 million
- Indicated Spread or Economic Profit: \$100.5 million

This is good example of creating Value in the land development Stage