

DOCKSIDE GREEN



nexterra

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DOCKSIDE GREEN BIOMASS GASIFICATION SYSTEM

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■ Project Description

- Customer: Dockside Green Energy LLP
- Location: Victoria, B.C. on the Upper Harbour
- Application: Residential/Commercial heating and hot water
- Nexterra Scope of Work: Turnkey gasification system
- Capacity: 7 MMBtu/hr
- Fuel Source: Locally sourced, clean urban wood residue
- Fuel Moisture Content: 20 - 55%

■ System Highlights

- Canada's first urban gasification facility
- Air Emissions: 50% below BC Ministry of Environment's most stringent requirements for particulate matter (PM)
- Noise: Meets City of Victoria noise bylaw (55 decibels)
- Dockside Green is one of 16 founding projects for *Clinton Climate Initiative's Climate Positive Development Program*
- Dockside Green biomass plant is owned and operated through a partnership among Vancity Capital, Terasen Energy Services and Corix Utilities

■ Expected System Performance

Annual Thermal Capacity (NG Equivalent)	74,000 MMBtu/yr
Annual Savings	\$400,000 - 600,000/yr
Avoided CO ₂ Emissions	3,460 tonnes/yr (expected load)
Avoided CO ₂ Emissions (Car Equivalent)	850 cars/yr
Avoided CO ₂ Tax (\$30/tonne)	\$103,800/yr
Wood Fuel Trucks Required	60-100 trucks/yr @ 60% capacity
Ash Production (recycled as compost)	220 tonnes/yr @ 60% capacity

"We are delighted with the results of Nexterra's gasification system at Dockside Green and have had overwhelming interest from the general public and media. This is a premier showcase for clean energy technology in a truly sustainable urban development, and we applaud Nexterra on this important achievement."

- Lee Davis, President and CEO of Vancity Capital





ESP & Ash Bin



Oxidizer & Piping



Plant Diagram



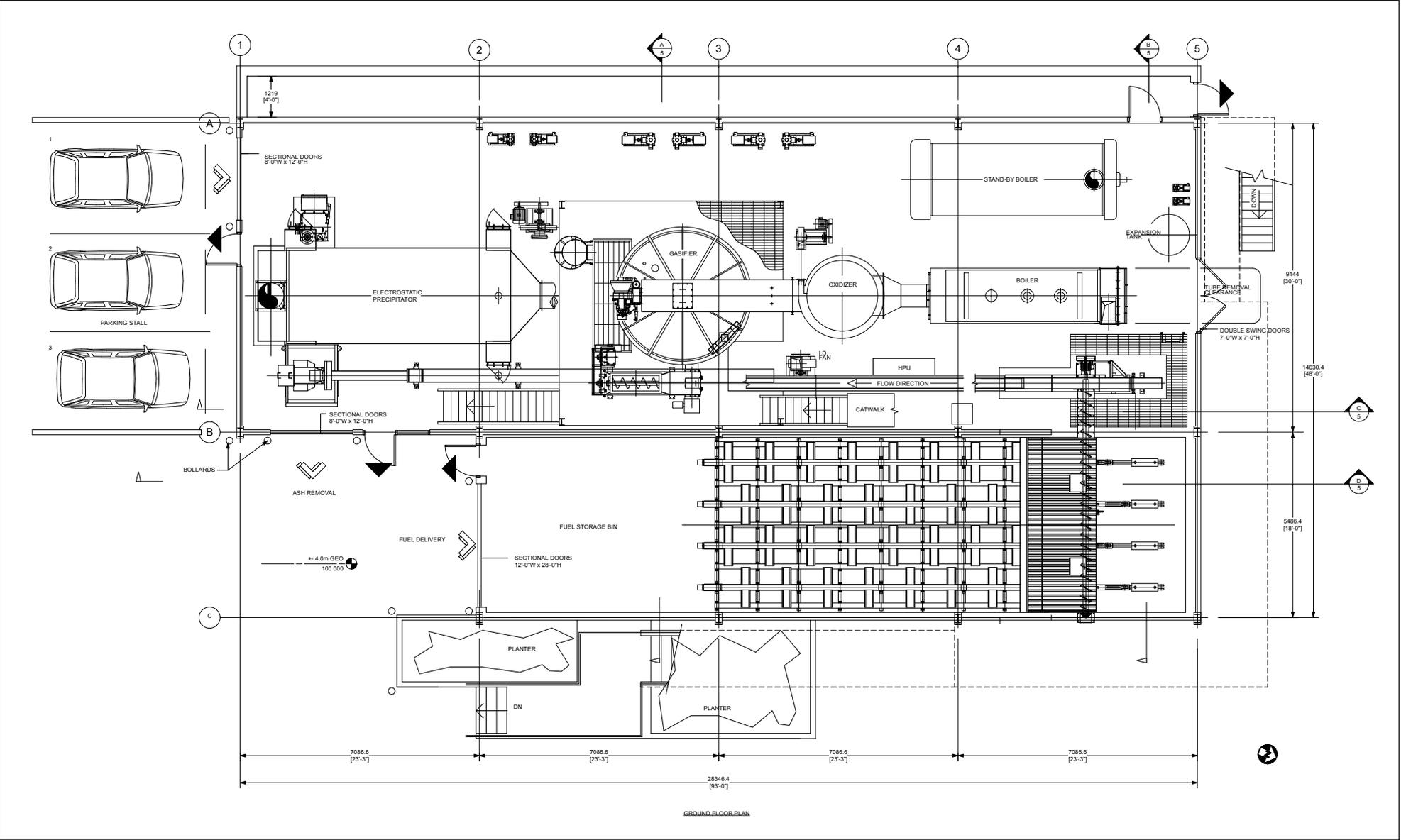
Fuel Storage Bin



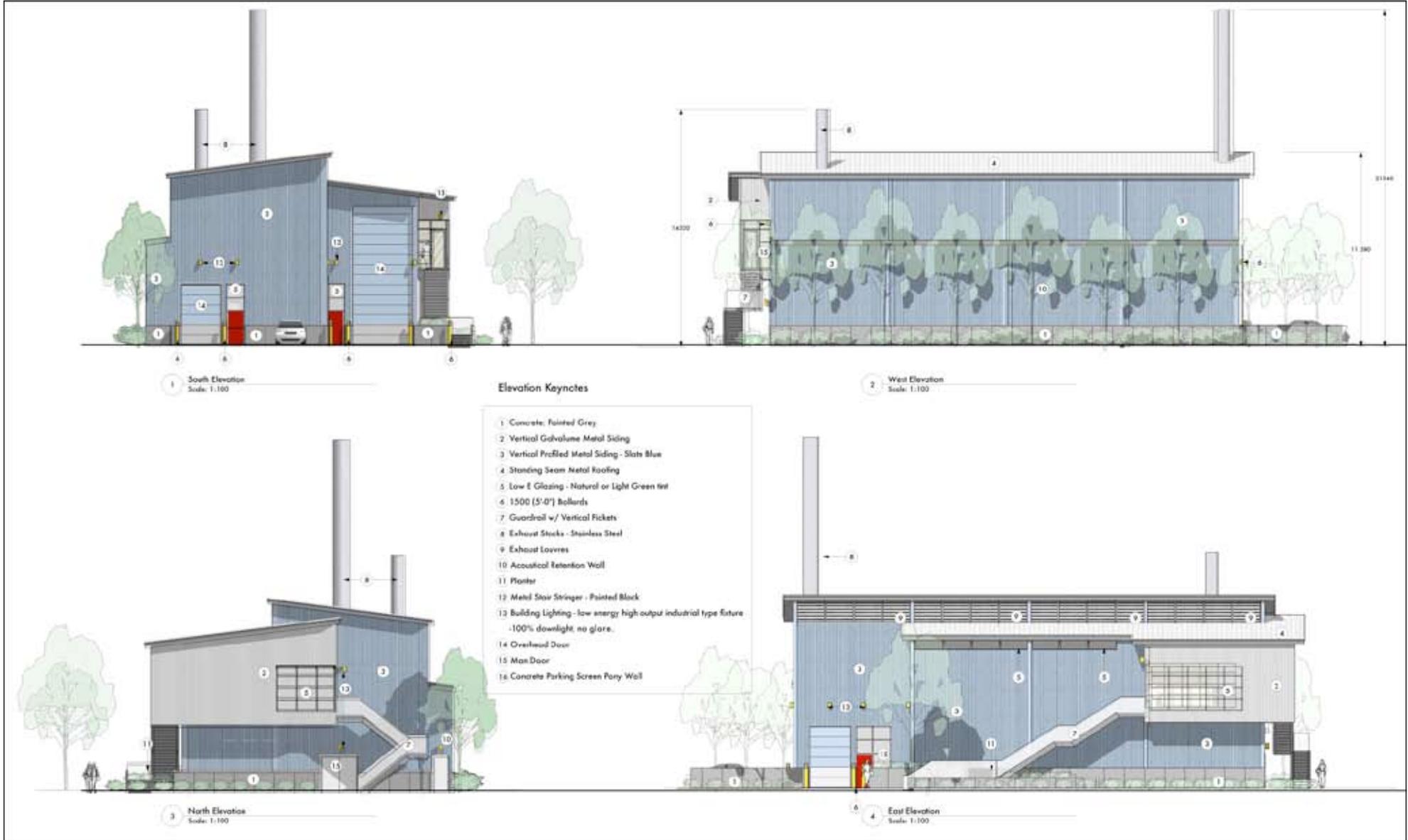
Boiler & Piping



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About Dockside Green Development Victoria, British Columbia

Dockside Green is a 1.3 million-square-foot residential and commercial development in Victoria's Inner Harbour, demonstrating the latest in sustainable design and best practices including green roofs, on-site wastewater treatment, and a biomass gasification district energy system supplying heating and domestic hot water.

Dockside Green's sustainable features include:

- Highest rating LEED® Platinum
- Renewable heating and hot water
- On-site sewage treatment
- On-site car sharing and mini-transit system
- Energy-efficient light fixtures and EnergyStar rated appliances
- Selected by the Clinton Climate Initiative as one of 16 founding members of the "Climate Positive Development Program"

For more information:
www.docksidegreenenergy.com



Courtesy Dockside Green

Partners:



About Nexterra Systems Corp. Vancouver, British Columbia

Nexterra is a leading developer and supplier of advanced biomass gasification solutions that enable customers to self-generate heat and/or power inside-the-fence at institutional and industrial facilities using low cost biomass fuels. Nexterra's strategic relationships include GE Energy, Johnson Controls and Andritz.

Projects include:

- Nexterra Product Development Centre (PDC), Kamloops, BC
- Tolko Industries Ltd., Heffley Creek Division, Kamloops, BC
- University of South Carolina, Columbia, SC
- Dockside Green Development, Victoria, BC
- U.S. Department of Energy (DOE), Oak Ridge National Laboratory, Oak Ridge, TN
- Kruger Products Limited, New Westminster, BC
- University of Northern British Columbia, Prince George, BC

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