



LAND DEVELOPMENT

QUICK FACTS

DEVELOPER:
REMINGTON
DEVELOPMENT
CORP.

SIZE:
125 HECTARES

**TOTAL
PROJECT VALUE:**
\$750,000,000

**CONSTRUCTION
VALUE:**
\$12,000,000

**PROCUREMENT
MODEL:**
BID BUILD

LAFARGE'S ROLE:
SURFACE WORKS
CONTRACTOR

**LANE
KILOMETRES
CONSTRUCTED:**
6km OF 2-LANE

**COMPLETION
DATE:**
2011

QUARRY PARK

CALGARY, AB

PROJECT OVERVIEW

Quarry Park is a mixed-use community in Calgary, AB. One of the first of its kind, the community is built on the site of a gravel pit owned by Lafarge Canada. For fifty years, the site provided quality gravels and aggregates, but today, it hosts a market, residential development, green space, and corporate office space.

Driven by a culture of sustainability and effective resource management, Quarry Park highlights both Lafarge's construction management and innovative solutions.

Lafarge's scope included new roadway construction, deep and shallow utility installation, curbs and gutters, and aggregate supply and placement.



EFFECTIVE LEADERSHIP

PROJECT MANAGER



GREG MATHER

CONCRETE/ UNDERGROUND SUPERINTENDENT



RICK THIESSEN

PAVING SUPERINTENDENT



TYLER HIGH

BASE & GRADING SUPERINTENDENT



BRIAN POW

QUARRY PARK

CONSTRUCTION MANAGEMENT: A CORE COMPETENCY

Led by a team of experience construction professionals, the creation of Quarry Park was managed effectively from start to finish.

Our management collaborated throughout the project to ensure that focus remained on health and safety, high quality performance, innovative solutions, and effective, timely problem solving. Throughout the project, we retained a focus on environmental protection and brownfield remediation. Relationship building was essential and was created by ensuring that:

- the complete development and execution of project-specific health, safety, and environmental plans followed by regularly scheduled audits and reviews;
- schedules were designed sensibly with slack in critical paths, the coordination of specialized trades, and the flexibility to adjust to external constraints;
- project control systems were both effective and easily accessed by all levels of workers, ensuring transparency and meaningful exchange of information; and
- the experience and knowledge of the team helped provide innovative problem solving and adherence to budget, timeline, and specifications.



QUALITY ACROSS SCOPES

- CUSTOMIZED
QUALITY
ASSURANCE
PROCESSES
- ALIGNMENT OF
QUALITY
MANAGEMENT
PLANS WITH
ENVIRONMENTAL
MANAGEMENT
PLANS
- PROJECT SPECIFIC
HEALTH AND
SAFETY PLAN
- ONGOING
COMMUNICATION
WITH
EMERGENCY
SERVICE
STAKEHOLDERS

QUARRY PARK

QUALITY MANAGEMENT FOR LONG TERM PROTECTION

As one of Western Canada's premiere roadworks constructors, Lafarge drew upon their broad history to ensure the brownfield remediation of an aging aggregates pit resulted in a high quality and responsibly sourced new community.

With close proximity to existing residential communities, along with the intricacies involved with managing changing river levels, upgraded utility corridors, and a complex industrial site, the project leaders ensured that stakeholder engagement remained a priority from day one.

Our quality management culture covers all aspects of the project - from ensuring that everyone on site goes home safely at the end of each day to providing only the highest quality materials to seizing opportunities to learn from each other. The Quality Control Plan established by Lafarge was fully ISO compliant, and included both record keeping and reporting guidelines, along with specified variables, parameters, and means to conduct meaningful quality control testing.

Working in close conjunction with the developer, Remington Development Corporation, Lafarge helped to make the transition from gravel pit to groundbreaking new community a smooth one - establishing a trend of reusing and reidentifying valuable land for new use that has continued in Calgary since 2011.



UNIQUE CHALLENGES:

- COMPLEX REMEDIATION
- HIGH VOLUME URBAN TRAFFIC AREAS
- METHANE GAS MITIGATION
- EFFECTIVE CLOSURE TECHNIQUES
- ONGOING PUBLIC ENGAGEMENT
- FLOOD MANAGEMENT DESIGN



QUARRY PARK

CIRCULAR ECONOMY & RECYCLED MATERIALS



Remington drove a focus on sustainability and recycled materials throughout the project - also a core goal of Lafarge and a good alignment between the teams. Lafarge provided demolished asphalt, concrete, and aggregates to recreate quality road base and paved surfaces. Products such as Aggneo, an end-of-life processing technique diverts used materials away from landfills, and preserves natural aggregate reserves by using recycled concrete and asphalt - building on the concept of a circular economy.

The alignment of Lafarge and Remington's views on sustainability - maximizing existing resources, using creative problem solving, and openness to trying new combinations of products and solutions - has led to a mutually beneficial, long term relationship.

IDENTIFYING CHALLENGES:

- PROTECTION OF FISH AND WILDLIFE HABITAT
- EROSION CONTROL
- MINIMIZING AIR EMISSIONS
- NOISE MITIGATION
- ARCHAEOLOGICAL PROTECTION

QUARRY PARK

WHAT'S A POLDER?

A polder is a low-lying area that is either reclaimed from a body of water, or surrounded by water to some degree.

Quarry Park is similar to a polder - although not completely low-lying, flood mitigation was an important part of the construction of the community.

The design includes:

- an insulated, reinforced and landscaped rip rap berm built at one metre above one-in-100 year flood level;
- a stormwater lift station to discharge rainwater into the Bow River; and
- overland canals to divert and filter water.

The materials used to reinforce the berms - including rip rap and various additional aggregate blends - were all supplied by Lafarge. Our in house quality control team identified which of our quality products were best suited for the application, and because Remington obtained the materials directly from us, provided a more efficient and lower cost option.





PROJECT IMAGES

QUARRY PARK

