SHEPPARD SQUARE HOPE VI Revitalization

GREEN FEATURES OF BLOCK B (ON-SITE RENTAL)

Overview

All rental and homeownership units at the new Sheppard Square development will be constructed according to ***Enterprise Green Community (EGC)*** *standards. Enterprise Green Communities provides a clear, cost-effective framework for all affordable housing development types in any location in the country, including new construction and rehabilitation in multifamily as well as single-family buildings. Housing designed and built to EGC standards has been shown to deliver significant health, economic and environmental benefits to families of all incomes.*

In addition to meeting EGC standards, LMHA will apply for ***LEED-ND (Leadership in Energy and Environmental Design for Neighborhood Development)*** *for the new Sheppard Square community. LEED for Neighborhood Development is a system for rating and certifying green neighborhoods. LEED-ND builds on U.S. Green Building Council's (USGBC) LEED systems, the world's best-known third-party verification that a development meets high standards for environmental responsibility. LEED-ND integrates the principles of New Urbanism, green building, and smart growth into the first national standard for neighborhood design, expanding LEED's scope beyond individual buildings to a more holistic concern about the context of those buildings. For more information on certification and to find other resources, view the USGBC's Neighborhood Development Resources web page.*

Location

Block B of the new Sheppard Square development is bound by Finzer, South Jackson, Jacob and Hancock Streets. At build out, the block will be comprised of 60 units in 5 buildings.

Specific Green Features and Activities

Category	
SITE IMPROVEMENTS:	
Enterprise Green Communities	• Erosion and Sedimentation Control Measures will be implemented through the construction process. • **Landscaping will include 50% native and adaptive plant material (including Willow Oak, Flowering Dogwood, Bald Cypress, Inkberry Holly, Black-eyed Susan, Lobelia, Switchgrass)** • An efficient irrigation system will be installed which includes timer/controllers. Based on watering needs, 50% of irrigation will be a drip system to reduce water usage and increase efficiency. • The project will harvest and retain the first 0.5 inches (min.) of rain in 24-hour period through **pervious pavers**, (2) **bio-filtration swales** and an **underground storm detention system**.
WATER CONSERVATION:	
Enterprise Green Communities	• Low-flow toilets at 1.28 gallons/flush, kitchen faucets at 1.5 gallons/minute and bathroom faucets at 0.5 gallons/minute will be installed.

ENERGY EFFICIENCY:	

Enterprise Green Communities	• **Buildings will certify under Energy Star 3.0 guidelines**, which will ensure energy savings in heating, cooling, hot water, lighting and appliance efficiencies.
	  o **ENERGY STAR rated dishwashers and refrigerators will be installed.**
	  o **Efficient lighting and bulbs will be installed in both building interiors and exteriors.**
	• Individual electric meters will be installed for each residence.
	• Furnaces will be 96% energy efficient.
	• Air-conditioners will have a **Seasonal Energy Efficiency Ratio (SEER) of 16. (All residential air conditioners sold in the United States must have a SEER of at least 13. ENERGY STAR qualified Central Air Conditioners must have a SEER of at least 14.)**

Additional Green Activities	• *Use of vegetation to conserve energy (e.g., wind and sun protection of A/C units, pavements, and south facing windows).* • ***Install infrastructure for future electric vehicle charging station.***
MATERIALS BENEFICIAL TO THE ENVIRONMENT:	
Enterprise Green Communities	• **All interior paints and primers will contain low amounts or no amounts of volatile organic compounds (VOCs).** • **All adhesives will contain low amounts or no amounts of VOCs.** • Contractor will commit to following a waste management plan that reduces non-hazardous construction and demolition waste by at least 25% by weight through recycling, salvaging, or diversion strategies. • Contract documents encourage the use of building materials that are composed of at least 25% post-consumer recycled content or at least 50% post-industrial recycled content with respect to framing materials, siding, masonry, roofing, concrete/cement aggregate, drywall/interior sheathing and flooring materials. (Exact amounts to be determined during construction based on availability) • Contract documents encourage the use of products that were extracted, processed, and manufactured within 500 miles of the project site for a minimum of 50% of the building material value (based on cost) with respect to framing materials, siding, masonry, roofing, concrete/cement aggregate, drywall/interior sheathing and flooring materials. (Exact amounts to be determined during construction based on availability). • **Contract documents encourage the use of Certified, Salvaged, and Engineered wood products and materials of at least 25% that are (by cost) engineered framing materials without urea-formaldehyde binders.** • **Roofing will be ENERGY STAR-compliant roofing which reflects heat in lieu of retaining heat.** • **Paving materials will be light colored, high-albedo materials (concrete)** with a solar reflectance of 0.3. Additionally, open grid pavement installed to reduce storm drainage will reduce the heat island effect from paved areas. • **Two (2) recycling storage locations** have been integrated into the site plan for use by future residents.
Additional Green Activities	• *Mandated recycling of demolition material and construction waste. Approximately **75% of demolition material was diverted from the landfill**. Also, all LMHA Contractors are required to recycle items they bring on site, including but not limited to soft drink cans, water bottles, and newspapers.*
HEALTHY LIVING ENVIRONMENT:	
Enterprise Green Communities	• **Any composite wood products used will emit low levels or no levels of Formaldehyde.** • Carpet will not be installed in entryways, laundry rooms, bathrooms, kitchens/kitchenettes, utility rooms, or any rooms on the ground floor level. • **Bathrooms will have ENERGY STAR- labeled exhaust fans that exhaust to the outdoors, are connected to a light switch**, and are equipped with a timer, or other control and operate at a rate of 50 cubic feet per minute (cfm). • Kitchens will have power-vented range hoods that exhaust to the outdoors at an intermittent rate of 100 cfm.

	• The ventilation system will be capable of providing adequate fresh air per the American Society of Heating, Refrigeration and Air-Conditioning Engineer's ASHRAE Standard 62.2-2010. • The clothes dryer exhaust will be ducted directly to the exterior. • Water heater drain pans with drains piped to the exterior will be installed for mold prevention. • **Bathrooms, kitchens and laundry rooms will have durable, cleanable surfaces to prevent mold.** • Water resistant gypsum board will be used in tub and shower enclosures. • **Vapor barriers will be installed under slabs to prevent moisture intrusion.** • **Under slab-radon passive radon control measures will be installed to mitigate radon.** • Architectural design provides water drainage away from windows, walls and foundation. • Garage spaces will be isolated from living spaces to prevent mitigation of any contaminants into the living space. • Wall, floor and joint penetrations will be sealed with low VOC caulking to prevent pest entry. Rodent and corrosion proof screens will be installed on openings greater then ¼".
OPERATIONS AND MAINTENANCE:	
Enterprise Green Communities	• A building maintenance manual will be provided for all multi-family projects. • A resident manual will be provided for all residential units. • An initial orientation between property management and each new resident to highlight the environment and cost-saving features of their unit. • LMHA will collect and monitor project performance on energy, water, and, if possible, healthy living environments for a minimum of five years and allow Enterprise to access this data.
Additional Green Activities	• ***Pilot organic (i.e. food) refuse collection program*** *at one residential block (to be determined) of the new Sheppard Square development. Refuse will be collected and taken to a location off-site or adjacent to the new development to be composted.* • ***Designate 40% of rental units constructed at the new Sheppard Square as "Smoke-Free".***

Proposed Green Features of Blocks A, C, D, E & F:

- Increase household access to natural lighting through use of solar tubes and skylights.
- Use of additional renewable/harvested energy technologies such as geothermal and photovoltaic.
- Collect rain water for on-site irrigation systems.
- Purchase electric vehicles for Maintenance staff.
- Install additional electric vehicle charging stations.