

Lee County Palmona Park Services Including Septic-to-Sewer Conversion Project Description (LeeCountyPD_GPS3)

Lee County proposes to hire a consultant to provide a high-level, conceptual approach to assess impacts of surface water quality and flood control on affordable housing stock in the low- and moderate-income neighborhood known as Palmona Park in unincorporated Lee. This will include planning for septic-to-sewer conversion; related street, sidewalk and drainage improvements; and other improved services designed to preserve the value of affordable housing stock while lessening the risk of surface water contamination and residential flooding within the Caloosahatchee estuary watershed. This planning effort will be coordinated with current County initiatives for storm and coastal surge and regional water quality.

1. A. Project purpose

Lee County proposes a plan to specifically assess neighborhood-wide upgrades that will:

- Extend the safe, habitable lifetime and preserve the economic attainability of residences in Palmona Park, a 538-acre neighborhood with affordable housing stock that includes an LMI population of 1,370, about 87% of the households in the neighborhood;
- Serve as a septic-to-sewer conversion pilot program for small neighborhoods that are a valuable source of affordable housing stock;
- Mitigate the risk of septic field contamination due to riverine flooding, tidal influence or coastal surge;
- Provide the County with a framework to budget for capital improvement and major maintenance projects; and
- Efficiently coordinate this initiative with current County planning for storm and coastal surge and regional water quality.

This planning effort will extend Lee County's current water-quality and storm mitigation planning, which already includes:

- Assessment of water quality risks associated with Basin Management Action Plans (BMAP), specifically for the Caloosahatchee River and Estuary. This assessment will be completed due to findings from the study titled "The Caloosahatchee River – North Fort Myers Nutrient and Bacteria Source Identification Study," completed over two years (2017-2018 and 2019-2020). This microbial source tracking study combined surface water and groundwater sampling to better identify factors contributing to bacteria and nutrient loading to the Estuary. The multiple lines of evidence collected for this study (including chemical tracers, nutrients, stable isotopes, bacterial abundance and molecular markers) indicated a widespread influence of human wastewater on local water quality in North Fort Myers and this area of the Caloosahatchee Estuary, including in Yellow Fever Creek and Hancock Creek, tributaries to the Caloosahatchee. Since 2000, Lee County has completed more than \$28 million in water quality projects, including construction of filter marshes, littoral zones, preserves and restorations of creeks and channels. Another \$23 million is being sought for planning, design and construction of proposed projects.

- Assessment of Riverine Flood risk and Mitigation Project Recommendation – In response to rainy season and Hurricane Irma flooding in 2017, Lee County Commissioners have invested nearly \$6 million in short-term and long-term flood resiliency efforts that include:
 - \$1.9 million for a Southern Lee County Flood Protection Study, which includes modeling to determine the value of potential projects;
 - \$3 million in capital investment projects including sediment removal in canals and ditches;
 - Administrative changes to the East Mulloch Water Control District, including Lee County assuming responsibility for a \$7.1 million CDBG-DR grant to replace sidewalks and drainage systems in the San Carlos Park area; and
 - A maintenance agreement with the South Florida Water Management District for 13 rivers and creeks.
- Assessment of Coastal Storm Surge Risk – FEMA has issued preliminary Lee County Flood Insurance Rate maps resulting from state-of-the-art coastal analysis. These maps will likely become effective in 2021. For mitigation strategy and project recommendations, Lee County continues to participate in the FEMA/NFIP Community Rating System (CRS) and the requirements of the Florida Department of Emergency Management for Local Mitigation Strategy and Comprehensive Emergency Management plans and projects.

Lee County is looking for a conceptual pilot plan that would specifically examine delivering vital public and social services under FEMA’s Community Lifelines, which are explained in the Community Value document.

1. B. Area of Benefit

Generally, the area of benefit is known as Palmona Park, a residential subdivision in the North Fort Myers Community Plan area of Lee County. However, the consultant will be instructed to define the exact boundaries of the study area to include downstream wastewater connections. Offsite improvements may need to be identified, particularly for tie-ins to force mains and gravity sewers and to avoid adverse impacts to existing utility infrastructure.

Palmona Park was originally platted (PB 7, PG 57) in 1926 with a traditional grid pattern; the northern portion of the subdivision, north of San Jose Street, was never developed. The properties are zoned for conventional single and two family residences and mobile homes. Because Palmona Park was platted prior to the adoption of modern zoning codes, most of the properties are non-conforming to existing codes with regard to lot dimensions, setbacks and lot coverage. Some of the original structures built in Palmona Park have been identified as historic sites; these are dwelling units with wood frame and simple construction design.

Palmona Park is identified in on the Lee Plan’s Future Land Use Map as Central Urban which is described in Lee Plan Policy 1.1.3 as the “urban core” of the county. This is the part of the county that is already most heavily settled and which has or will have the greatest range and highest levels of urban service-- water, sewer, roads, schools, etc.

1. C. Description of the proposed activity

Selection of a consultant will be through a Request for Proposal process that will encourage the bidder to enhance and refine these proposed activities:

- Kick-off meeting to identify needed materials (master plans, existing county reports, plats, easements, etc.) and staff input to:
 - Identify the study area;
 - Finalize the scope of the planning project;
 - Finalize the timeline, deliverables and tasks;
- Review of utility master plans, other county plans and reports;
- Engineering review of FGUA and Lee County Utilities (LCU) current assets (wastewater mains, laterals and other structures), specifically flow demands and water quality issues to make recommendations for accommodating septic-to-sewer conversion with recommendations for placement of lines and methods of conveyance (gravity and force mains);
- Provide guidance on a cost/benefit methodology to assess the value of preserving affordable housing stock against the costs of investing in non-compliant housing;
- Create the overall concept for septic-to-sewer conversion; and
- Identify adaptation alternatives and recommendations.

Against this framework, there are four overarching issues to be addressed in valuing or prioritizing planning recommendations:

First, the plan will be mindful of cost/benefit assessments that value providing solutions to the greatest number of residents for the longest period of time. This plan will assess the overall potential for safe and reasonable investment in housing revitalization in Palmona Park and will focus primarily on including septic-to-sewer conversion and drainage options for flood mitigation.

Second, the plan will identify particular risks and the relative value of those risks on housing, general economic issues faced by residents, and service access needs for Palmona Park's low- and moderate-income households.

Lee County is a HUD-determined MID community, with 42% of its population – approximately 277,000 people having a household income at or below 80% of the area median income. Of Lee's 517 Census block groups, 32% are designated LMAs. Of the total LMI population, nearly 40% live in FEMA's designated Special Flood Hazard Area (SFHA), including Palmona Park. Approximately 86% of the households in Palmona Park are LMI; about 224 households. In Palmona Park, 73% of the houses were built before Lee County joined the NFIP in 1984 and before post-Hurricane Andrew advances in the Florida Building Code. These non-compliant structures are important in the county's stock of affordable and attainable housing. The planning effort will consider the relative cost/value of the loss of this housing stock and the cost of providing social and other government services resulting from the displacement of LMI populations.

This is particularly a problem in Palmona Park where investments valued at 50% or more than the value of the home require that the entire structure be brought up to current regulations of the National Flood Insurance Program. This restricts opportunity for investment to extend the habitable life of a property.

As a result, this regulation is often a barrier to investment in housing by low- and moderate-income households, which are more likely to do bandaid-type repairs and improvements than to take on the expense of an entire upgrade-to-code. As a result, neighborhoods sink into non-compliant decay.

Another particular concern for Palmona Park is access to mass transit. In 2019, LeeTran removed service direct service in Palmona Park due to two factors: 1) low ridership and 2) safety issues from the narrow passages along Woodward Avenue and Stockton Street. Palmona Park residents can access LeeTran's fixed-route bus service via paved walkways to the Route 590, which travels on Pine Island Rd and US 41 every 60 minutes, terminating at Merchants Crossing. The closest existing bus stops are on Pine Island Rd (#10592) and Merchants Crossing (#12246, #12251). Four umbrella-style passenger shelters remain on Woodward Avenue and one on Stockton Street that were installed in approximately 2003.

This plan will consider if street, sidewalk and drainage work which might be required for septic-to-sewer conversion should reasonably include street widening to allow for the resumption of bus service in the neighborhood. LeeTran is also considering whether this neighborhood would benefit from a new on-demand model being reviewed for the larger North Fort Myers area. These changes are two to three years away from materializing.

Third, this plan would consider impacts of the planning process on Lee County's Class 5 membership in the CRS. Lee County requires that this study and its expected outcomes comply with CRS guidelines and will examine opportunities for gaining additional points in the system. In conjunction with this issue, Lee County will consider compliance to Florida Building Codes and recommended updates to the Lee Plan, Lee County's DEO-approved comprehensive plan and any other changes to Lee County Administrative Code or policy.

Finally, recommendations of this planning study will include options for communicating the objectives recommended by the study to Lee County staff who will assume tasks to implement plans and strategies and to the general public which may be affected by the plan.

2. Risk Mitigation

The primary objective is to assess risks and suggest mitigation guidelines for:

- Impacts on surface water from septic systems;
- Compliance to BMAP and water quality objectives;
- Mitigate the risk of septic field contamination due to riverine flooding, tidal influence, coastal surge or sea level rise; and
- Specifically assessing any potential for exposure to hazardous materials.

3. Tasks and Team

Major tasks and team members associated with this proposal include:

- Response to DEO requests for information including participation in a site visit – Joan LaGuardia, Lee County Performance Analyst, jlaguardia@leegov.com, primary point of contact;
- Review, negotiation and signing of the grant agreement document – Joan LaGuardia;
- Processing of forms and assurances for RFP preparation – Lindsay Cepero, Lee County Procurement Manager, lcepero@legov.com;

- Review of the RFP submission and awarding of the contract – Lindsay Cepero;
- Project management and monitoring – Mark Sunyak; Lee County Utilities Engineering Manager, MSunyak@leegov.com;
- Quarterly reporting and invoicing to DEO for the grant management process – Richard Kolk, Lee County Utilities Fiscal Manager, rkolk@leegov.com;
- Project liaison to the Southern Lee County Flood Protection Study – Luis Molina, Lee County Natural Resources Engineering Manager, LMolina@leegov.com.
- Project liaison to LMI communities and services – Clare Dennehy, Lee County Human and Veteran Services Grants Compliance Coordinator, CDennehy@leegov.com;
- Project liaison for Public Safety and Emergency Management – Britton Holdaway, Emergency Management Planner, bholdaway@leegov.com; and
- Grant project closeout – Richard Kolk.

4. Determination of Funding Requirements

Lee County estimates the cost of this study to be \$115,575 based on these sources and comparable planning contracts:

- Proposal for Professional Services: Naples Manor Stormwater Improvements Preliminary Engineering Study, 2020;
- Collier County: Concept Plan for Palm River Neighborhood Water, Stormwater, and Irrigation Infrastructure Improvements, 2020;
- Lee County Miscellaneous Planning Services for the Green Meadow Road Community Facility Planned Development, 2018;
- Lee County Professional Planning Services for Burnt Store Road, 2018; and
- Lee County Professional Planning Services for LeeTran EEO Plan Update, 2017.

This total also includes:

- An estimate of administrative costs at 5% of the direct planning costs; and
- A contingency of 10% of the direct planning costs to account for unforeseen costs, including potential accommodation of doing business during the COVID-19 pandemic.

The required budget document specifically breaks out estimated costs for tasks.

5. Anticipated Outcomes

Specific outcomes will include recommendations for:

- A high-level, conceptual approach to assess impacts of surface water quality and flood control on affordable housing stock in Palmona Park, Lee County;
- Prioritizing the approach to mitigating the risk and suggestion of general mitigation options;
- Specific planning for septic-to-sewer conversion, related street, sidewalk and drainage – if and where feasible;

- Possible options for achieving the water quality goals of the TMDL and other objectives of the Caloosahatchee River and Estuary BMAP;
- Coordination with current County initiatives for storm and coastal surge and for regional water quality;
- Compliance with all state, NFIP, CRS and FEMA guidance.

6. Compliance to Existing Comprehensive Plan

Palmona Park is included in the North Fort Myers Community Plan as described in Goal 30 of the Lee Plan:

GOAL 30: NORTH FORT MYERS COMMUNITY PLAN. *Improve the livability and economic vitality in the North Fort Myers Community Plan area by: promoting compact, mixed use development in the form of town and neighborhood centers; attracting appropriate investment to revitalize older neighborhoods and commercial corridors; stabilizing and enhancing, existing neighborhoods; and preserving natural resources.*

An objective of Goal 30 is to support the creation and preservation of affordable housing options in safe and attractive neighborhoods and is supported by the following Lee Plan policies:

POLICY 30.1.1: *Continue to implement Neighborhood District Revitalization Plans utilizing Community Development Block Grant (CDBG) funds, as available.*

POLICY 30.1.2: *Explore opportunities to expand programs designed to help maintain, repair, and improve existing owner-occupied housing.*

POLICY 30.4.2: *Support the concept of a single source of sewage service to the North Fort Myers Community Plan area.*

In addition to complying with the Lee Plan, recommendations of this planning effort will consider and comply with The Lee County Local Mitigation Strategy (LMS), approved by the Florida Department of Emergency Management (FDEM); The Lee County Comprehensive Emergency Management Plan (CEMP), also approved by FDEM; The Lee County Utilities Risk and Resiliency Study being delivered to the Environmental Protection Agency as part of the 2018 America's Water Infrastructure Act; Lee County's Flood Hazard Ordinance, which is based on the requirements of membership in the National Flood Insurance Program and its CRS.