

# TOWN OF LOXAHATCHEE GROVES

155 F Road Loxahatchee Groves, FL 33470



## AGENDA MEMO

**TO:** Board of Supervisors of the Loxahatchee Water Control District

**FROM:** Richard Gallant, Director of Public Works

**DATE:** January 7, 2025

**SUBJECT:** Report of District Works Improvements for the 2024 Calendar Year

---

**Background:** The Loxahatchee Groves Water Control District (District) is an dependent special district, a legally organized, political subdivision of the State with assessment authority to carry out its responsibilities. The District is responsible for drainage, flood control protection, water management and reclamation of lands, and maintenance and improvements within its boundaries. The District includes approximately 8,000 acres that extend from 162<sup>nd</sup> Drive North to Folsom Road and from Southern Boulevard (SR 80) to one-half mile north of North Road. The District owns, constructs, operates and maintains the works of the District, including public rights-of-way for canals, levees, gated water control structures and a pumping station. While in the past the roads were part of the District, upon the District becoming a dependent district, ownership, and therefore maintenance of the roads are part of the Town and the Town's Public Works Department.

**Capital Improvements of the District Works** – In calendar year 2024, a total of ten culverts were replaced through the capital improvement plan approved by the Board of Supervisors of the District in FY-24. Table 1 below represents those culverts and their locations.

Table 1 Contractor Replaced Culverts

<b>Loxahatchee Groves Water Control District Culvert Replacement Project</b>				
<b>Location</b>	<b>Diameter</b>	<b>Length</b>	<b>Installing Contractor</b>	<b>Material</b>
24th CT N & E rd	72in	40ft	Johnson Davis	Metal
24th CT N & E rd (N side)	18in	20ft	Johnson Davis	ADS Plastic
24th CT N & E rd (S Side)	18in	20ft	Johnson Davis	ADS Plastic
161st Ter N & A rd	72in	40ft	Johnson Davis	Metal
161st Ter N & A rd	24in	40ft	Johnson Davis	ADS Plastic
1823 B rd	96in	40ft	Johnson Davis	Metal
11th Ter & D rd	96in	40ft	Johnson Davis	Metal
12th PI N & F rd	96in	60ft	Johnson Davis	Metal
12th PI N & F rd	24in	80ft	Johnson Davis	ADS Plastic
12th PI N & F rd	18in	50ft	Johnson Davis	ADS Plastic

The Town of Loxahatchee Groves Public Works staff replaced a number of culverts throughout the District. Many of the culverts were replaced due to failure or impact from an external source. Table 2 indicates the location and type of work completed by staff throughout the year.

Table 2 Staff Replaced or Repaired Culverts

<b>Loxahatchee Groves Water Control District Culvert Replacement Project</b>				
<b>Location</b>	<b>Diameter</b>	<b>Length</b>	<b>Material</b>	<b>Work Done</b>
15590 North Rd	18in	20ft	ADS Plastic	Replacement
3508 A rd	18in	20ft	ADS Plastic	Replacement
15405 Fortner Dr	18in	20ft	ADS Plastic	Replacement
East Citrus Dr & F rd	18in	40ft	ADS Plastic	Replacement
35th PI N & E rd	18in	40ft	ADS Plastic	Replacement
849 131st ST	12in	20ft	Plastic	Replacement
14101 Collecting Canal rd	18in	10ft	ADS Plastic	Repair
14659 Collecting Canal rd	18in	5ft	Metal	Repair
1222 E rd	18in	10ft	ADS Plastic	Repair

**Canal Bank Restoration** – During the 2024 calendar year staff and contractors remediated the canal banks in the district canals in several locations. Table 3 indicates the areas of the District in which work was completed and by whom.

*Table 3 Canal Bank Repairs and Works*

<b>Loxahatchee Groves Water Control District Canal Enhancement Project</b>			
<b>Location</b>	<b>Length</b>	<b>Installer</b>	<b>Work Done</b>
Collecting Canal Rd	2,000 ft	WBI Contracting	Reinforced Bank
E Rd S of Okee	760 ft	Staff	Reinforced Bank
E Rd S of North Rd	2,700 ft	Staff	Added Material to Bank
C Rd & Fortner	150 ft	Wynn & Sons	Repaired Bank from Accident

**District Gate Structures** – The District operates a total of four gates on the south end of the Town. They are located at A Rd Canal and Southern, Folsom Canal and Southern, and two and D Rd and Southern. They are currently operational and functioning but require rehabilitation. The FY25 budget provides a minimal amount which will provide for some maintenance and safety items to be address. An investment in the water control structures will need to be made to prevent a catastrophic failure of the gate system.

**District Water Pumping System** – The District operates 1-150HP vertical turbine pump located at D Rd adjacent to the District headquarters. The motor for this was rebuilt and installed in 2023. The vertical turbine pump needs to be evaluated and its replacement budgeted. The current floor is not safe and it is in this years plan to repair or replace the components needed to make it safe for staff. The existing pumping facilities at this location should be enhanced as the irrigation water for the agriculture properties come from the district canals. In the event of catastrophic failure of the existing pump, there is a chance the canal levels could be depleted below operational levels and cause a water shortage to our agricultural residents.

**District Facilities** – The District and Public Works Department operate from a one-acre facility located at 245 W D Rd. The current facility was built in the 1950’s and in desperate need of replacement. The walls of the shop storage area are compromised and either rotted from age or infested with termites. The pavilion that stores the town and district equipment is held up with old grader blades and is also compromised from age, termites, or wood rot. The office building is a converted shed that was created into an auditorium/office over 50 years ago. This structure is in need of repairs and many employees have expressed concerns with the health of the building. Replacement of the District and Public Works facility should be budgeted in the near future to avoid any major issues.

**Future CIP Projects** – In the FY25 several culverts were included in the CIP plan. Those culverts appear in Table 4. The District Engineer is finalizing the bid documents for these culverts and they should be in process to be replaced in the first quarter of 2025. Other small culverts have been identified as damaged or in need of replacement that will be completed by internal staff. Those appear in Table 5. FY23 identified culverts that were installed but catch basins were not provided at the time of installation. The District Engineer is finalizing the documents to install 18 catch basins onto existing culverts that were installed in 2023.

*Table 4 FY25 ITB Culverts*

<b>Loxahatchee Groves Water Control District FY25 Culvert Replacement Project</b>				
<b>Location</b>	<b>Diameter</b>	<b>Length</b>	<b>Material</b>	<b>Work Done</b>
25th St N & Folsom Rd	48in	100ft	ABS Plastic	Replacement
25th St N & Folsom Rd	48in	40ft	ABS Plastic	Replacement
F Rd & Collecting Canal	96in	90ft	CMP	Replacement
F Rd & Collecting Canal	72in	2 x 60ft	CMP	Replacement
F Rd & Collecting Canal	36in	40ft	ABS Plastic	Replacement
Bunny Ln & D Rd	96in	40ft	CMP	Replacement
Bunny Ln & D Rd	18in	2 x 30ft	ABS Plastic	Replacement
Kerry Ln & F Rd	96in	40ft	CMP	Replacement
Kerry Ln & F Rd	18in	30ft	ABS Plastic	Replacement
Kerry Ln & F Rd	18in	30ft	ABS Plastic	Replacement

*Table 5 Small Culverts to be Replaced by Staff*

<b>Loxahatchee Groves Water Control District Small Culvert Replacement Project</b>				
<b>Location</b>	<b>Diameter</b>	<b>Length</b>	<b>Material</b>	<b>Work Done</b>
13956 North Rd	18in	30ft	ABS Plastic	Replacement
15410 North Rd	18in	30ft	ABS Plastic	Replacement
958 Hyde Park Rd	18in	30ft	ABS Plastic	Replacement
852 Hyde Park Rd	18in	30ft	ABS Plastic	Replacement
959 Hyde Park Rd	18in	30ft	ABS Plastic	Replacement
14042 North Rd	18in	30ft	ABS Plastic	Replacement
15030 Timberlane Pl	18in	30ft	ABS Plastic	Replacement
1531 C Rd	18in	30ft	ABS Plastic	Replacement
1523 C Rd	18in	30ft	ABS Plastic	Replacement

14702 North Rd	18in	30ft	ABS Plastic	Replacement
3975 147th Ave N	18in	30ft	ABS Plastic	Replacement

**Outlook for the District** – Since its creation in 1917, the maintenance component of the operation of the district has been kept to a minimal level. Even with the recent enhancement of staffing in the last year, the work required to maintain the district works is still at or below needed levels just to maintain that which is in the district prevue. Throughout the town there are over 100 roads that require some type of improvement to the stormwater transport system to alleviate flooding concerns of the residents. Add to that there are many District owned culverts that are in need to major repair or replacement. The four gates operated by the district are in urgent need of updating and rehabilitation. The current control system for the gates is so antiquated that several components have to be repaired instead of replaced as they are no longer available, even used. Eventually, the control systems for the gate controls will get to a point where they are no longer serviceable. Water retention during the dry season of the State is becoming an increasing issue, especially North of Okeechobee Blvd. The District is working with various agencies through our grant writing team to secure funding to install controllable weirs north of Okeechobee Blvd and install a second pumping station to transport water north and retain it at a higher level. On the items in need of inclusion of the districts future plans is the removal of sediment from the district canals. The documentation that district has indicates the canal bottoms are to be at 10’ NGVD (8.5’ NAVD). Currently many of the canals are between 15 and 16 feet NGVD. This indicates that between five and six feet of sediment is currently located in all of the canals. With over 30 miles of canals, this task will take many years to correct, once funded. This project needs to be elevated as the canals, besides being used for agricultural purposes, are also available to fire rescue for fire suppression in the event of a fire. With the amount of sediment found in the canals, this might become an issue.

**Staff Recommendation:** Motion to receive and file the Report on District Works