

City of Fort Worth Lake Worth Capital Improvement Implementation Project

Master Projects List

Total Number of Proposed Projects = 35

ID Project Description

DREDGING

1 Area south and west of Goat Island

Single largest area of needed dredging. Based on 6' dredging scenario, prespresents 1.6 million CY or 57% of total dredging volume. Disposal would be convenient at city-owned land west of lake or existing quarries further to the west.

2 Area around Willow Island

Second largest area of needed dredging. Based on 6' dredging scenario, prespresents 1.0 million CY or 36% of total dredging volume. Dredged material would have to be piped across lake to west side disposal areas or disposal sites would have to be located on east side of lake.

3 Area northwest of Goat Island

Third largest area of needed dredging. Based on 6' dredging scenario, prespresents ~ 0.1 million CY or 4% of total dredging volume. Disposal would be convenient at city-owned land west of lake or existing quarries further to the west.

4 Area between Casino Beach and Highway 199

Third largest area of needed dredging. Based on 6' dredging scenario, prespresents ~ 0.1 million CY or 4% of total dredging volume. Dredged material would have to be piped across lake to west side disposal areas or disposal sites would have to be located on east side of lake.

5 Area below Loop 820 and along north shore

Selective dredging candidate.

6 Selective boating lanes above Highway 199 and below Nature Center

Selective dredging candidate.

7 Area around raw water intake and near dam

Selective dredging candidate.

WATERSHED MANAGEMENT AND DRAINAGE

1 Sedimentation dam on Silver Creek

Silver Creek tributary is major sediment contributor. Sedimentation dam will trap sediment prior to reaching Lake Worth. Will require periodic maintenance/sediment removal.

2 Sedimentation dam on Live Oak Creek

Live Oak Creek tributary is major sediment contributor. Sedimentation dam will trap sediment prior to reaching Lake Worth. Will require periodic maintenance/sediment removal.

3 Sedimentation Trap at Quebec Cove

Upstream development combined with steep topography are significant sediment contributors. Cove has been dredged in past.

4 Revegetation/soil stabilization of City of Fort Worth-owned land

Areas disturbed by active erosion patterns and 4-wheeler traffic are minor sediment contributors to Lake Worth.

5 Over-dredge sediment traps at tributary inlets

During dredging operations, strategic areas at tributary inlets will be over-excavated to create additional storage of sediment. Sediment traps could be more easily maintained for future maintenance

6 Watershed Management Overlay District

Creation of overlay district ordinance to enact additional controls over discharge water quality from future developments. Will also work in tandem with existing controls adopted with ISWM.

7 Comanche Creek channel improvements

Proposed to be co-funded between Cities of Lake Worth and Fort Worth. Includes improvement of the Comanche Trail low water crossing.

TxDot may also improve Shawnee Trail low water crossing.

BOAT RAMP IMPROVEMENTS AND STUMP REMOVAL

1 Boat ramp repairs at Arrow S park

Existing boat ramp shows signs of erosion and undermining, complete replacement may be required. Parking area and courtesy dock are in good condition.

2 Boat ramp improvements/expansion at Casino Beach

Existing parking area and boat ramp is good condition. Consider expansion to handle future north site additional traffic.

3 Boat ramp improvements at Sunset Park

Existing one-lane ramp is badly deteriorated. Needs complete rebuilding with all-weather surfacing for parking area.

4 New boat ramp and facilities at Freemons Park

Need to evaluate need for new boat ramp for west shore access, as additional traffic is anticipated from Silver Creek Road future expansion. City-owned lake frontage is limited in this area.

5 Tree stump removal

Most stump removal areas coincide with dredging areas. However there are a few stump removal areas in isolated areas not coinciding with dredging areas. Selective stump removal for boating lanes may be warranted in area between Highway 199 and Nature Center.

6 Navigational Devices

Comprehensive navigational device layout needed for entire lake. Specific needs would be replacing barrier line at dam, possible new barrier line near Nature Center, warning markers in areas above Highway 199 left shallow and with stumps. Additional warning devices near bridges, islands, and marking dredged areas would be included in layout.

PARKS / ACCESS MANAGEMENT

1 Access Control/Cable Fencing

Cable fencing needed along City of Fort Worth properties to deter 4-wheeler entry onto properties. Current 4-wheeler activity is a significant

source of erosion sediment to Lake Worth Reservoir.

2 Connection to existing trails

Provide trails to connect to existing nature trails at Marion Sansom Park.

3 Trail heads

Provide architectural identifying elements, parking and facilities at trail heads for proposed hiking and/or biking trails.

4 Primary bike and jogging trails

Provide system of primary trails to connect lake facilities and amenities.

5 Rehabilitation of overlook facilities

Remove graffiti, enact graffiti management, renovate picnic facilities, improve parking and provide complementary facilities and amenities.

ROAD IMPROVEMENTS

1 Expansion of southwest section of Silver Creek Road

Upgrade of existing Silver Creek Road west from IH 820. Improved access for future development along west side of Lake Worth Reservoir.

WATER SYSTEM IMPROVEMENTS PHASE 1

1 20" Northside III Transmission Main Along Hwy 820

This 20" waterline will improve low pressure problems to the upland areas of the intersection of SH 199 and Loop 820. Provide new delivery point to the area and converts existing NSII to NSIII.

2 10" Northside II Watercross Drive Main

The 10" waterline will provide flow for the residences along the north shore of Lake Worth and provide looped connection with 24" waterline along FM 1886

3 24" Waterline Along FM 1886

This 24" waterline will improve flow from existing 16" west and becomes the delivery point to the Town of Lakeside. Will also provide water for developable land along FM 1886 to Jacksboro Highway.

PHASE 2

4 Northside II 30" Water Supply Line from the North

This 30" waterline will provide an additional delivery point to the Town of Lakeside and the City of Lake Worth from the north side of the NSII pressure plane

5 24" and 8" Waterline Along SH 199

This 24" and 8" waterlines will improve flow and provide an additional supply to the area north of Highway 199 and the Town of Lakeside

PHASE 3

6 24" and 16" NSII Waterline Along SH 199 and Loop 820

The 24" and 16" waterlines will improve flow and complete the water supply loop. Removes need for the Holly pressure plane reducing valve and extends the NSII pressure plane around Lake Worth

WASTEWATER SYSTEM IMPROVEMENTS

1 Love Circle Force Main and Lift Station

This lift station and force main will allow sanitary sewer service to begin at the west side shore of the North Lake Worth

2 Watercress and Love Circle Low Pressure Sanitary Sewer Lines

The low pressure system will provide sanitary sewer service for the residences along the north and west shore of Lake Worth and remove them from septic systems.

3 Woodvale Low Pressure Sanitary Sewer Lines

The low pressure system will provide sanitary sewer service for the residences along the north and east shore of Lake Worth and remove them from septic systems.