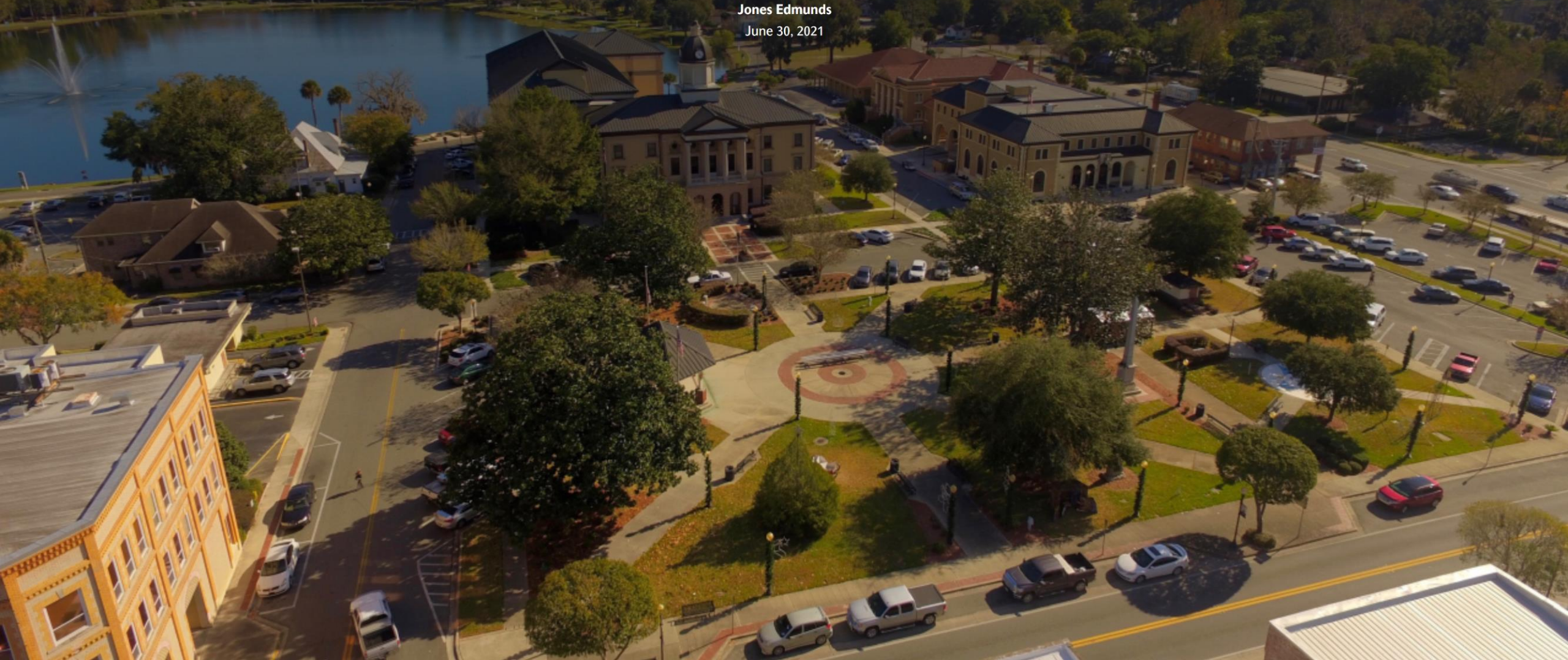


# Bell Road Wastewater Capacity Analysis

Jones Edmunds

June 30, 2021



# Project Goals

-Review existing collection system capacity; collect field data.

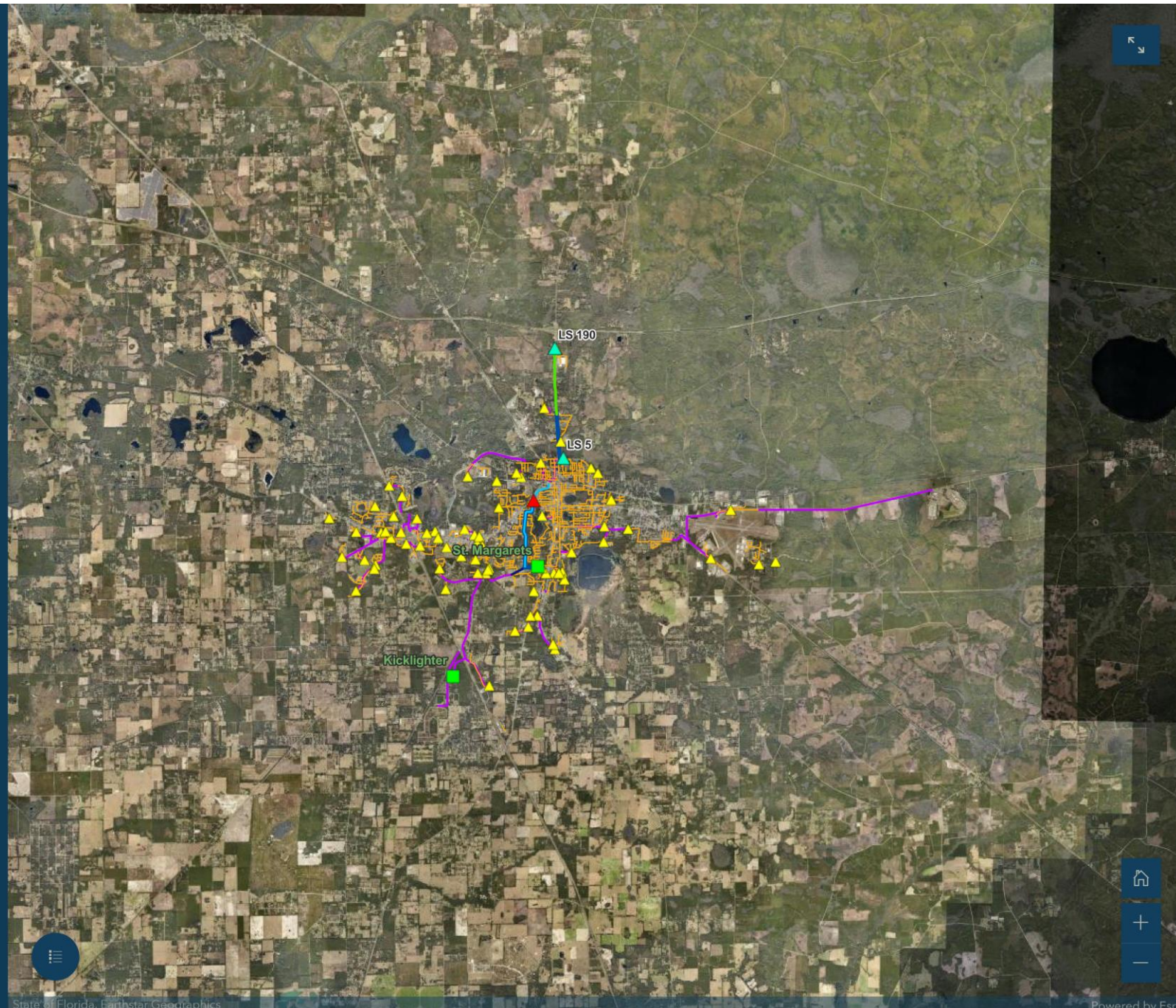
-Develop hydraulic model; calibrate model.

-Develop flow projections over 20-year planning horizon.

-Run model scenarios for Bell Road Development:

1. 130,000 GDP (near-term)
2. 260,000 GDP (near-term)
3. 570,000 GDP (plus future growth)

-Develop recommended improvement projects and cost estimates.











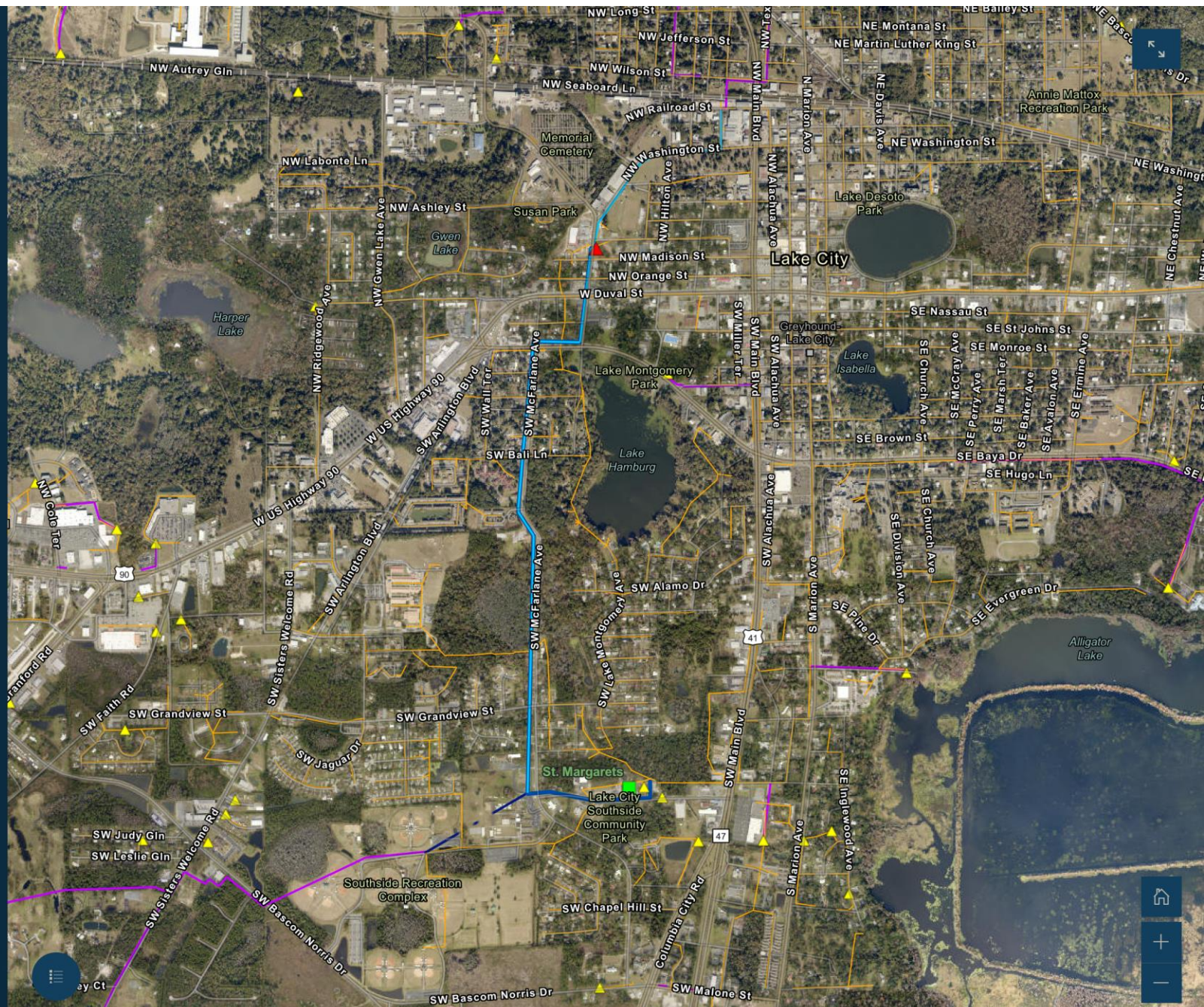
# Youngs Park LS Force Main

## Install 9,900 LF of 12" FM from YP to St Margarets

Install 9,900 LF of 12-inch FM from the new Youngs Park LS to the St Margarets WWTF.

Includes a valve that allows for flow to be diverted to Kicklighter.

| No. | Project Description  | EOPCC     | Construction Contingency (20%) | Professional Services (15%) | Total     |
|-----|--|-----------|--------------------------------|-----------------------------|-----------|
| 5   | Install 9,900 LF of 12-inch FM from the Youngs Park LS to St. Margarets WWTF | 1,694,000 | 338,800                        | 254,100                     | 2,286,900 |



# Kicklighter / St Margarets Flow Optimization

## Install 1,600 LF of 12" FM

Install 1,600 LF of 12-inch FM to divert flow from the St Margarets WWTF to the Kicklighter WRF.

Working toward flow optimization throughout the City system.

Kicklighter WRF

| No. | Project Description                                   | EOPCC   | Construction Contingency (20%) | Professional Services (15%) | Total   |
|-----|---|---------|--------------------------------|-----------------------------|---------|
| 6   | Install 1,600 FL of 12-inch FM to the Kicklighter WRF | 439,400 | 87,880                         | 65,910                      | 593,190 |





# Summary of Projects

| No.                | Project Description  | EOPCC     | Construction Contingency (20%) | Professional Services (15%) | Total            |
|--------------------|--|-----------|--------------------------------|-----------------------------|------------------|
| 1                  | Upsize pumps at LS 5   | 75,000    | 15,000                         | 11,250                      | 101,250          |
| 2                  | Install 12,200 LF of 8-inch FM from LS 190 to LS 5 along Us 441              | 1,570,900 | 314,180                        | 235,635                     | 2,120,715        |
| 3                  | Install 2,900 LF of 10-inch FM along NW Washington Street.                   | 547,500   | 109,500                        | 82,125                      | 739,125          |
| 4                  | Install new Youngs Park LS   | 360,000   | 72,000                         | 54,000                      | 486,000          |
| 5                  | Install 9,900 LF of 12-inch FM from the Youngs Park LS to St. Margarets WWTF | 1,694,000 | 338,800                        | 254,100                     | 2,286,900        |
| 6                  | Install 1,600 FL of 12-inch FM to the Kicklighter WRF                        | 439,400   | 87,880                         | 65,910                      | 593,190          |
| <b>Grand Total</b> |  |           |                                |                             | <b>6,327,180</b> |

- Project 1
- Project 2
- Project 3
- Project 4
- Project 5
- Project 6

