

**Proposed 2017 FIND Grant Projects - Recommended by Waterways Subcommittee 12/7/16**

| Project                                                    | Council District | Suggested By    | Project Type         | Scope                                                                                    | FIND Cost          | COJ Cost*          | Total Estimated Cost |
|------------------------------------------------------------|------------------|-----------------|----------------------|------------------------------------------------------------------------------------------|--------------------|--------------------|----------------------|
| Joe Carlucci Dock Replacement/ Extension                   | 2                | Current Project | Construction         | Replace and extend the floating dock at boat ramp                                        | \$275,000          | \$345,620          | \$620,620            |
| Half Moon Island Park & Boat Ramp - Phase 2B               | 2                | Current Project | Construction         | Build fishing pier, pavilion, turn lanes & shoreline revetment                           | \$550,000          | \$691,240          | \$1,241,240          |
| Sisters Creek Lighting - Phase 2                           | 2                | Current Project | Construction         | Install second half of parking lot lighting                                              | \$110,000          | \$138,248          | \$248,248            |
| Post Street Floating Dock                                  | 14               | Public          | Design               | Design/permit floating dock at end of Post Street                                        | \$75,000           | \$94,260           | \$169,260            |
| Riverfront Park Fishing Platform                           | 5                | Public          | Design               | Design/permit a fishing platform                                                         | \$60,000           | \$75,408           | \$135,408            |
| St. Johns Marina Ramp Extension                            | 5                | Public          | Design               | Design/permit boat ramp extension into deeper water                                      | \$50,000           | \$62,840           | \$112,840            |
| Mandarin Boat Ramp Dock Extension & ADA Kayak Launch       | 6                | Public          | Design               | Design/permit extension of existing floating dock & new floating dock w/ADA kayak launch | \$75,000           | \$94,260           | \$169,260            |
| Bert Maxwell Dock Modifications                            | 8                | Public & Staff  | Design/ Construction | Modify existing docks to function properly                                               | \$50,000           | \$62,840           | \$112,840            |
| Ribault River Channel Markers                              | 8 & 10           | Public          | Design               | Design/permit channel markers within Ribault River                                       | \$30,000           | \$37,704           | \$67,704             |
| <b>Totals</b>                                              |                  |                 |                      |                                                                                          | <b>\$1,275,000</b> | <b>\$1,602,420</b> | <b>\$2,877,420</b>   |
| <b>Additional projects beyond anticipated funding cap:</b> |                  |                 |                      |                                                                                          |                    |                    |                      |
| Oak Harbor Boat Ramp Dredge                                | 13               | Staff           | Design               | Design/permit dredge project from ramp to channel                                        | \$100,000          | \$125,680          | \$225,680            |
| <b>Totals w/ Additional Project</b>                        |                  |                 |                      |                                                                                          | <b>\$1,375,000</b> | <b>\$1,728,100</b> | <b>\$3,103,100</b>   |

| Funding Break Down                     |             |
|----------------------------------------|-------------|
| Anticipated Total 2017 FIND Dollars ** | \$1,400,000 |
| Anticipated Atlantic Beach Ask         | \$125,000   |
| Anticipated Available FIND Dollars     | \$1,275,000 |
| Anticipated City Match                 | \$1,602,420 |

\* COJ costs includes 12% for PW internal management fees and 0.75% for art in public places - FIND will not match these costs.

\*\* Total FIND award for 2016 was \$1,357,695.

### Potential Alternative FIND Grant Projects - 12/7/16

| Project                                       | Council District | Suggested By    | Project Type        | Scope                                                                        | FIND Cost          | COJ Cost*          | Total Estimated Cost |
|-----------------------------------------------|------------------|-----------------|---------------------|------------------------------------------------------------------------------|--------------------|--------------------|----------------------|
| Metro Park Dock Replacement                   | 7                | Current Project | Construction        | Replace fixed wood docks with floating concrete docks                        | \$1,350,000        | \$1,696,680        | \$3,046,680          |
| Alimacani Bulkhead                            | 2                | Staff           | Design              | Design/permit shoreline stabilization                                        | \$75,000           | \$94,260           | \$169,260            |
| Bert Maxwell Boat Ramp Dredge                 | 8                | Staff           | Design              | Design/permit dredge project from ramp to channel                            | \$75,000           | \$94,260           | \$169,260            |
| Wayne B. Stevens Lighting                     | 14               | Staff           | Design/Construction | Add lighting to boat trailer parking lot                                     | \$125,000          | \$157,100          | \$282,100            |
| Arlington Lions Club Boat Ramp Lighting       | 1                | Staff           | Design/Construction | Add lighting to boat trailer parking lot                                     | \$100,000          | \$125,680          | \$225,680            |
| Oak Harbor Boat Ramp Dredge                   | 13               | Staff           | Design              | Design/permit dredge project from ramp to channel                            | \$100,000          | \$125,680          | \$225,680            |
| Goodby's Creek Boat Ramp Dredge               | 5                | Staff           | Design              | Design/permit dredge project from ramp to channel                            | \$90,000           | \$113,112          | \$203,112            |
| Floating dock in Brooklyn                     | 7                | DIA             | Design              | Desing/permit floating dock for water taxi and recreation vessels            | \$75,000           | \$94,260           | \$169,260            |
| Sisters Creek fishing platform & kayak launch | 2                | Staff           | Design              | Design/permit fishing platform & kayak launch at former bridge               | \$75,000           | \$94,260           | \$169,260            |
| Dames Point Park fishing pier replacement     | 2                | Staff           | Design/Construction | Replace fishing pier                                                         | \$75,000           | \$94,260           | \$169,260            |
| Blue Cypress Boardwalk fishing platforms      | 1                | Public          | Design              | Design/permit fishing platforms along boardwalk                              | \$50,000           | \$62,840           | \$112,840            |
| Liberty Street basin floating dock            | 7                | DIA             | Design              | Design/permit floating dock in newly opened basin                            | \$75,000           | \$94,260           | \$169,260            |
| Southbank Riverwalk floating dock             | 5                | Public & Staff  | Design              | Design/permit 150' floating dock near Chart House                            | \$75,000           | \$94,260           | \$169,260            |
| Zoo dock dredge                               | 7                | Public          | Design              | Design/permit dredge from Zoo dock to Trout River channel                    | \$125,000          | \$157,100          | \$282,100            |
| Mike McCue overflow parking (partner w/COJB)  | 13               | COJB            | Acquisition **      | Acquire land adjacent to boat ramp for overflow parking and park development | \$875,000          | \$3,074,400        | \$3,949,400          |
| Johnston Island (partner with COAB)           | 13               | COAB            | Acquisition **      | Acquire island for future park and boat ramp                                 | \$450,000          | \$1,581,120        | \$2,031,120          |
| <b>Totals</b>                                 |                  |                 |                     |                                                                              | <b>\$3,790,000</b> | <b>\$7,753,532</b> | <b>\$11,543,532</b>  |

\* COJ costs includes 12% for PW internal management fees and 0.75% for art in public places - FIND will not match these costs.

\*\* FIND only reimburses 25% for acquisition projects.



# Public Water Access Facilities in Duval County: DRAFT 12/13/16

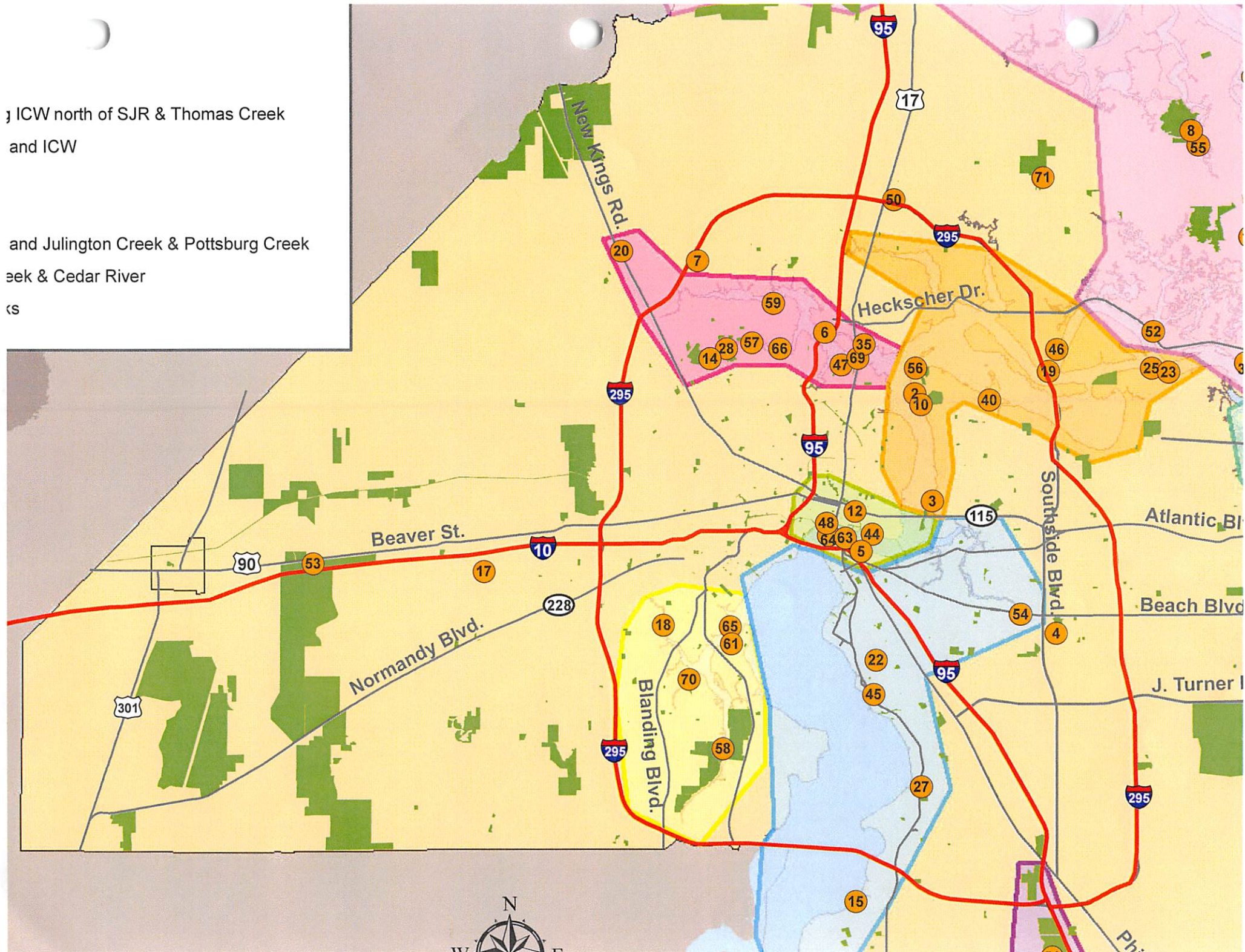
| ID | Name          | Address                    | Manager | Waterbody          | Boat Ramp | Boat Launch | Trailer | Vehicle Access | Water Depth | Marina | Kayak Launch | Launch | Fish Pier | Riverwalk | Scenic Overlook | Restroom | Pump Out | Fuel | Bait | Rentals | Restaurant | Comments                                                                     | Hours       |
|----|---------------|----------------------------|---------|--------------------|-----------|-------------|---------|----------------|-------------|--------|--------------|--------|-----------|-----------|-----------------|----------|----------|------|------|---------|------------|------------------------------------------------------------------------------|-------------|
| 1  | Alachua       | 11060 Hecker Dr.           | COI     | St. Johns River    | yes       | 1           | 1       | 25             | C           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Unimproved ramp, shallow shoals, strong currents                             | 7AM-5PM     |
| 2  | Arundel       | 4372 Richard D. Galtin Rd. | COI     | St. Johns River    | yes       | 2           | 1       | 50             | A           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Strong currents, some shoaling of ramp                                       | SUNRISE-5PM |
| 3  | Arundel       | 5100 Arundel Rd.           | COI     | St. Johns River    | yes       | 2           | 1       | 11             | A           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Limited parking, close access to downtown                                    | SUNRISE-5PM |
| 4  | Beach         | 10013 Andrews Blvd.        | COI     | lake               | yes       | 2           | 1       | 11             | A           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | inland lake, unimproved shoreline launch                                     | DAYLIGHT    |
| 5  | Beaumont      | 6601 Beaumont Ave.         | COI     | small S.R. trib.   | yes       | 2           | 1       | 11             | A           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | unimproved shoreline launch                                                  | DAYLIGHT    |
| 6  | Bert Maxwell  | 8601 Maxwell Rd.           | COI     | Trout River        | yes       | 2           | 3       | 40             | B           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Some shoaling near ramp, vertical clearance limitations down river           | 24/7        |
| 7  | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | inland lake stabilized shoreline launch                                      | DAYLIGHT    |
| 8  | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | kayak launch at adjacent State Park                                          | DAYLIGHT    |
| 9  | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | fee required                                                                 | 24/7        |
| 10 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | unimproved shoreline launch                                                  | DAYLIGHT    |
| 11 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | unimproved shoreline launch                                                  | DAYLIGHT    |
| 12 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | unimproved shoreline launch                                                  | 24/7        |
| 13 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | planned kayak launch and fishing pier                                        | DAYLIGHT    |
| 14 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | No parking for trailers at ramp; shallow plans to improve ramp               | 6AM-10PM    |
| 15 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | bring walk from parking to launch                                            | DAYLIGHT    |
| 16 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | inland lake                                                                  | DAYLIGHT    |
| 17 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | limited parking                                                              | 24/7        |
| 18 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | under James Point bridge (north end)                                         | DAYLIGHT    |
| 19 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Navigation Notice submerged logs in the basin area, use caution              | 5AM-10PM    |
| 20 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | inland lake, stabilized shoreline launch                                     | DAYLIGHT    |
| 21 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | unimproved shoreline launch                                                  | DAYLIGHT    |
| 22 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | unimproved shoreline launch                                                  | 24/7        |
| 23 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | unimproved shoreline launch                                                  | 24/7        |
| 24 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | limited depths in area. Unimproved shoreline launch                          | 24/7        |
| 25 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | fee required; had bait store in past                                         | 24/7        |
| 26 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | limited depths in area                                                       | SUNRISE-5PM |
| 27 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | adjacent to Huguenot Memorial Park; no fee                                   | DAYLIGHT    |
| 28 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | currently closed during Mile Point Project (USACE)                           | DAYLIGHT    |
| 29 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | very limited parking at ramp; sensitive natural area                         | 24/7        |
| 30 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | inland lake                                                                  | DAYLIGHT    |
| 31 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | inland lake                                                                  | DAYLIGHT    |
| 32 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | fee required                                                                 | 24/7        |
| 33 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | fee required                                                                 | 24/7        |
| 34 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | strong currents; heavy boat traffic                                          | 24/7        |
| 35 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | fee required                                                                 | 24/7        |
| 36 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | concessionaire location; fee required; 2 kayak launches (shoreline and boat) | 6AM-8PM     |
| 37 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | limited depths in area, limited parking, on-site security                    | SUNRISE-5PM |
| 38 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | 6AM-5PM     |
| 39 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 40 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 41 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 42 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 43 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 44 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 45 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 46 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 47 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 48 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 49 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 50 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 51 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 52 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 53 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 54 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 55 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 56 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 57 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 58 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 59 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 60 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 61 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 62 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 63 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 64 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 65 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 66 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 67 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 68 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 69 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 70 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 71 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |
| 72 | Bethesda Park | 10700 Key Haven            | COI     | Pumpkin Hill Creek | yes       | 1           | 1       | 5              | D           |        | yes          | shore  | yes       | yes       | yes             | yes      |          |      |      |         |            | Marquette zone 2002 from shore                                               | SUNRISE-5PM |

\* Vessel Use Rating Guide: A = unimproved, B = vessel less than 27 ft, C = jet boat & jet skis, D = hand launch only



g ICW north of SJR & Thomas Creek  
and ICW

and Julington Creek & Pottsburg Creek  
eek & Cedar River  
cs







---

*Framework to Resiliency*  
*JEA Sanitary Sewer System*  
*December 14, 2016*

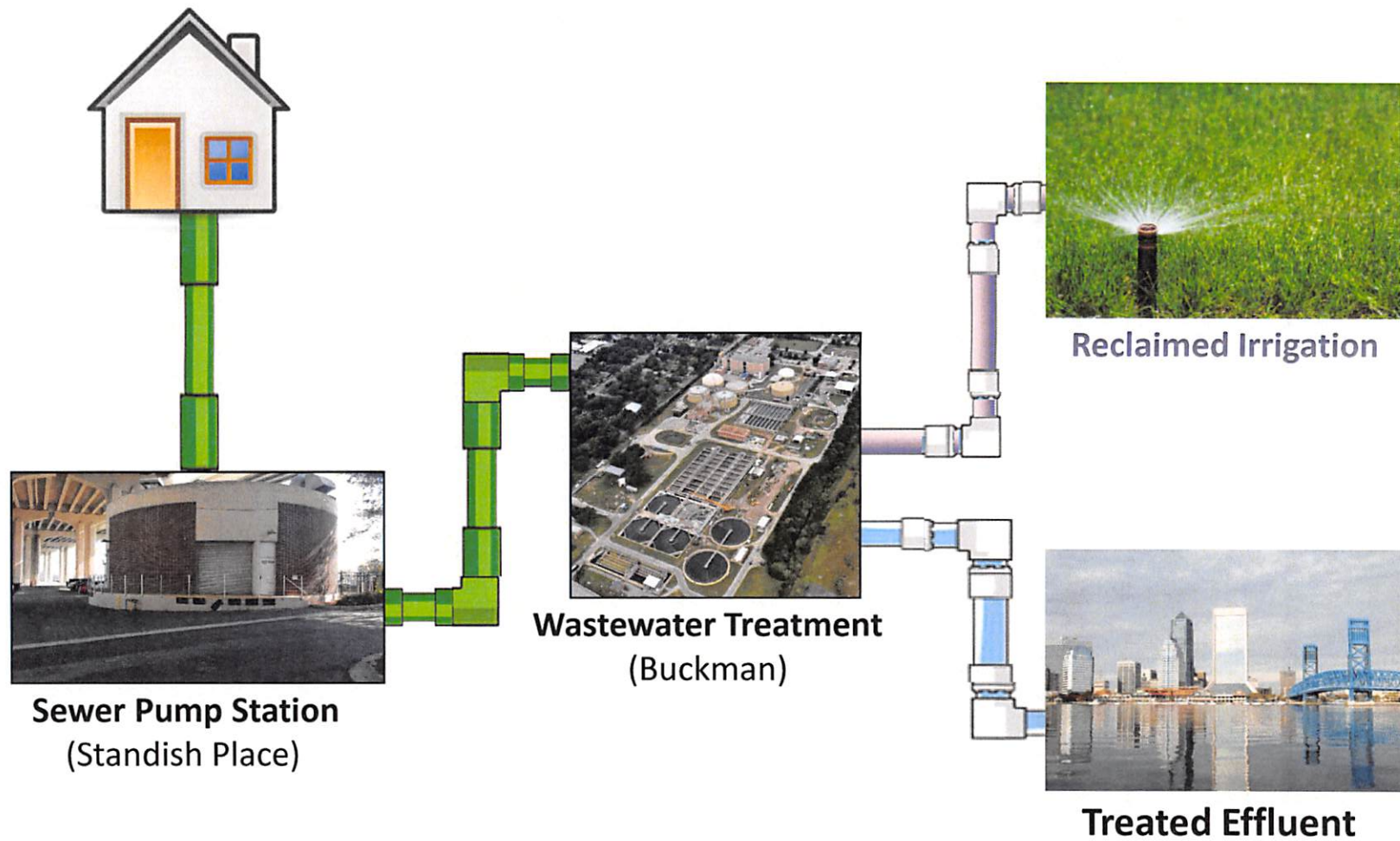
## The JEA Sewer System

- The JEA sewer collection system processes 80 MGD of wastewater
- Wastewater is collected through 3,900 miles of pipe and 1,375 sewer pump stations
- Wastewater is then transferred to one of JEA's wastewater treatment plants for processing
- JEA utilizes treated wastewater in its 16 MGD reclaimed water system





# The Wastewater Process



# JEA Sewer System: Framework to Resiliency

## Resiliency Milestones:

|           |                                                                               |
|-----------|-------------------------------------------------------------------------------|
| Nov, 2016 | Hurricane Matthew Assessment Report                                           |
| Nov, 2016 | Report Major Capital Improvements and Significant O&M Activities              |
| Apr, 2017 | Analyze, Plan and Implement Improvement Activities                            |
| May, 2017 | System Capacity, Management, and Operation, and Maintenance Assessment (CMOM) |
| Dec, 2017 | System Resiliency Assessment                                                  |
| Ongoing   | Communication Improvements                                                    |
| Ongoing   | Regulatory Opportunities                                                      |



# JEA Sewer System: Framework to Resiliency

Nov  
2016

## Hurricane Matthew Assessment Report

- Detail sanitary sewer failures during Hurricane Matthew
- Include sanitary sewer overflow history and benchmarks
- Governor's 90-Day Emergency Rule: Public Notice of Pollution

Nov  
2016

## Report Major Capital Improvements and Significant O&M Activities

- Major capital and O&M in the past twelve months
- Major capital and O&M in the next twelve months
- All 1,375 pump stations will have individual site reviews to improve electrical supply (ex. tree trimming, underground service, generators, controls, etc.)

Apr  
2017

## Analyze, Plan and Implement Improvement Activities

- Review and improve all Functional Response Procedures (Emergency Plans)
- Fortify Sanitary Sewer System power supply systems
- Fortify Sanitary Sewer System communication systems
- Identify other actions to be implemented

May  
2017

## System Capacity, Management, Operation and Maintenance Assessment (CMOM)

- Comprehensive review by an independent source, identified in partnership with FDEP
- Review will be conducted in three phases: analyze, assess and improve
- Improvements will commence when identified

# JEA Sewer System: Framework to Resiliency

Dec  
2017

## System Resiliency Assessment

- Will seek strong partnership with FDEP, potential for state leadership on this issue
- To be conducted in three phases:
  - Immediate opportunities
  - Mid-range defensive actions
  - Longer-term by replacing when needed and building to new resiliency standards

Ongoing

## Communication Improvements

- Identify, design and implement more effective communication plans
- Plans will be tailored to various constituents

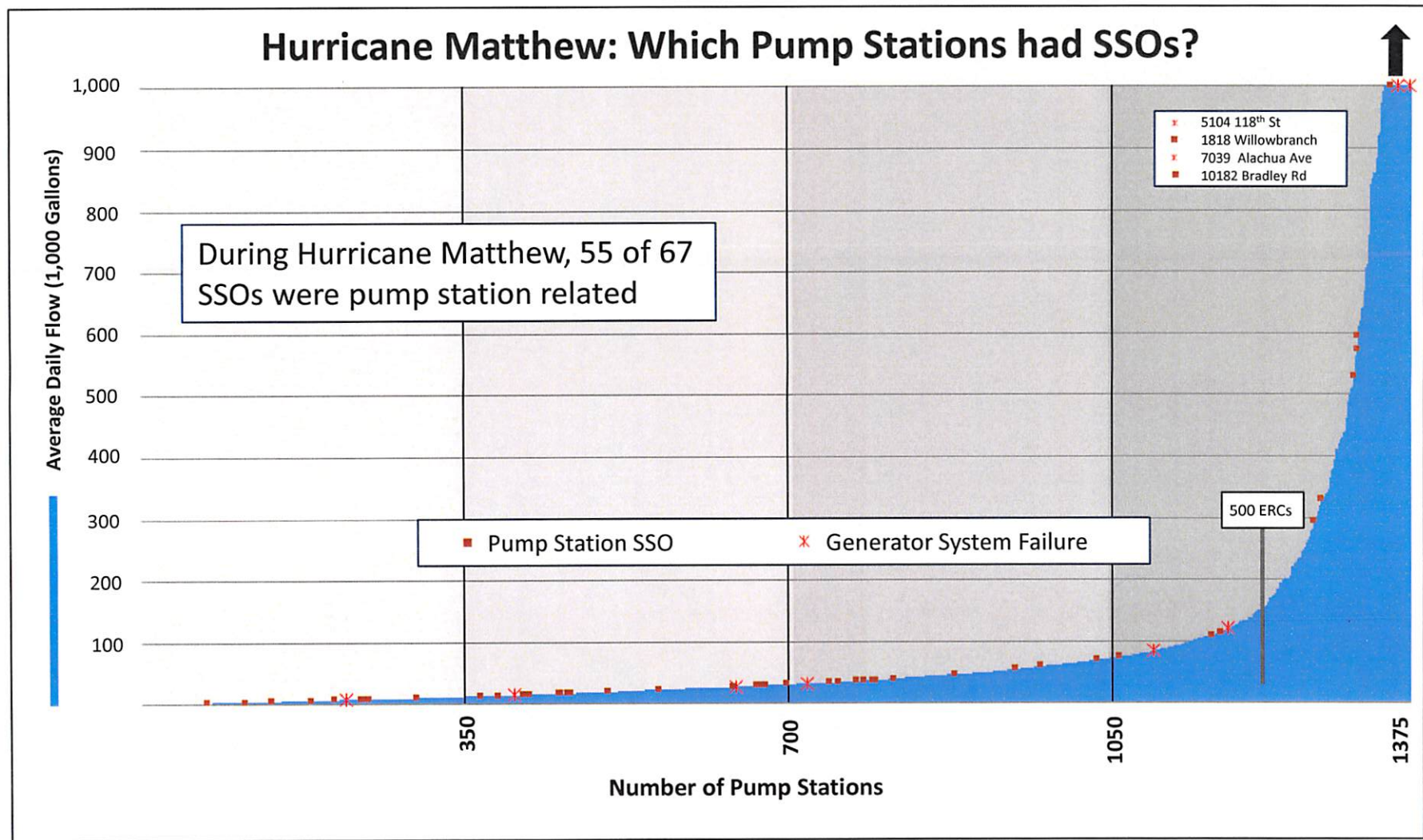
Ongoing

## Regulatory Opportunities – FDEP Partnerships

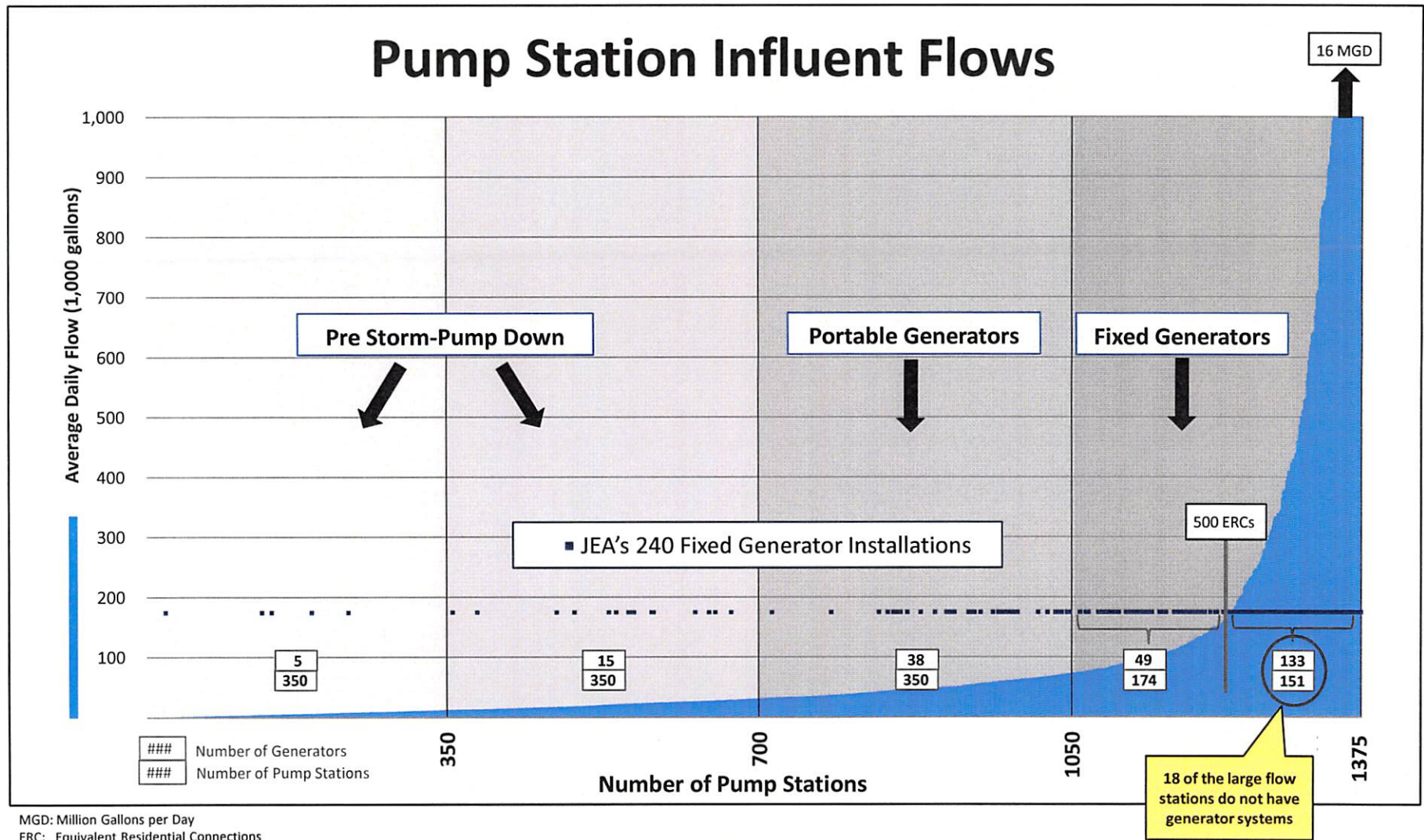
- Engage in the FDEP rule making process as it transitions from the September 26, 2016 Governor's 90-day Emergency Rule: Public Notice of Pollution, to a final rule governing reporting for all statewide pollutant spills
- Returning the system to normal operations **Oct 2016**
- Monitoring and sampling water bodies impacted by Hurricane Matthew related SSO's **Oct 2016**
- Capacity, Management, Operations and Maintenance review
- Resiliency standards design



## Storm Related Sanitary Sewer Overflows (SSOs)



# Generator Assessment - Planned Deployment



MGD: Million Gallons per Day  
ERC: Equivalent Residential Connections



# Installation of New Generators at Pump Stations

## FDEP Rule ≥ 12" Force Main

| Downstream Liftstation | ADF     | ERC   | Year |
|------------------------|---------|-------|------|
| 5th St W               | 900,000 | 2,571 | 1962 |
| Woodmere Dr            | 180,000 | 514   | 1974 |
| Willow Branch          | 165,000 | 471   | 1974 |
| Blue Pacific Ct        | 97,500  | 279   | 1994 |
| Huffman Bv             | 94,875  | 271   | 1975 |

## JEA Standard >500 ERC

| Downstream Liftstation | ADF     | ERC   | Year      |
|------------------------|---------|-------|-----------|
| 5th St W               | 900,000 | 2,571 | 1962      |
| Ellis Rd N             | 200,000 | 571   | 1972      |
| Broadway Av            | 187,500 | 536   | 1988      |
| Woodmere Dr            | 180,000 | 514   | 1974      |
| Mangrove               | 180,000 | 514   | pre -1998 |

- These eight (8) pump stations, currently without generators, experienced SSOs due to the impacts of Hurricane Matthew.
- JEA is currently reviewing the site conditions of the 35 pump stations, which meet either criteria, to determine the feasibility of retrofitting to include generator/transfer switch systems.

### Notes:

ERC's is the Average Daily Flow (ADF) divided by 350 Gallons

All the stations listed above were constructed prior to the 2003 FDEP Rule revision or the JEA Standard was adopted

# Governor's Emergency Rule: Public Notice of Pollution

## Governor's 90-Day Emergency Rule 62ER16-1: Public Notice of Pollution

Effective September 26, 2016

### Requires notification to:

- ☐ Florida Department of Environmental Protection (FDEP)
  - ☐ The highest ranking local elected and appointed officials
  - ☐ The general public via notice to media
  - ☐ Affected property owners
- 
- Ensure prompt notification to public regarding any incident or discovery of pollution
  - Emergency Rule did not include reporting thresholds that exist in current rules
  - Accordingly, JEA moved to a reporting system that includes all events, even those below historic reporting thresholds (ex. five gallons in a grass right-of-way, reclaimed water, etc.)
  - Final Rule expected January, 2017

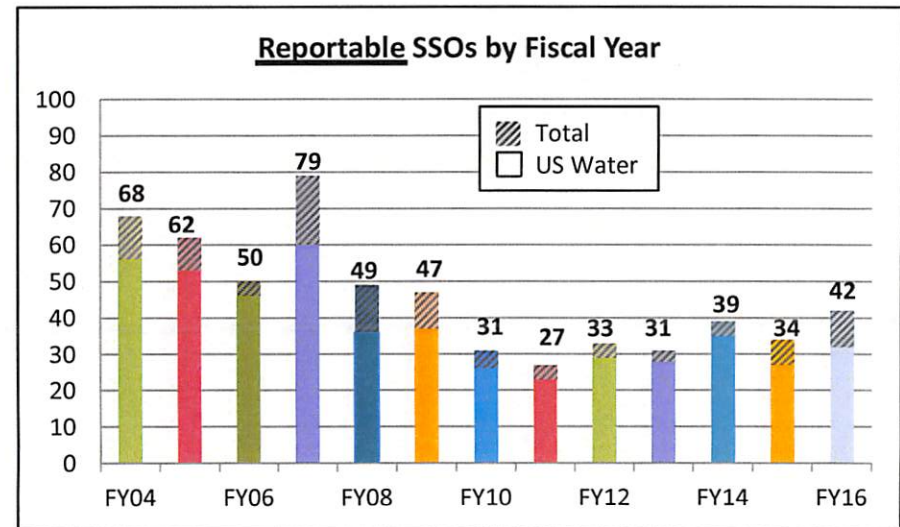


# Reportable and Non-Reportable SSOs

## FDEP Reportable SSOs

- Sewer spills of any volume that reaches designated Waters of the State, or
- Sewer spills  $\geq 1,000$  gallons, or
- Threatens the environment or public health

FDEP reviews all Reportable SSOs quarterly, and JEA submits an Annual Report



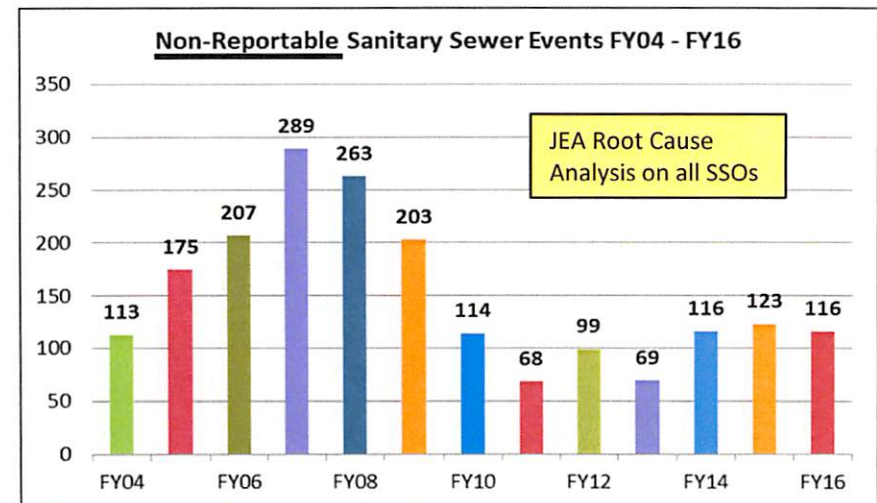
## Non-Reportable SSOs – Local DEP Only

50 to 999 gallons

Not to State Watch Officer

## Non-Reportable SSOs

Sewer spills less than 50 gallons that do not threaten the environment or public health



# JEA Capital Improvement Plan

## Wastewater Collection and Pump Station Funding

| FY           | Amount               |
|--------------|----------------------|
| 2012         | \$27,924,711         |
| 2013         | 21,678,060           |
| 2014         | 22,084,690           |
| 2015         | 25,735,831           |
| 2016         | 44,755,207           |
| 2017         | 58,756,674           |
| 2018         | 61,475,489           |
| 2019         | 55,066,990           |
| 2020         | 41,733,000           |
| 2021         | 40,745,000           |
| <b>Total</b> | <b>\$399,955,652</b> |

## Major Projects (FY16-FY19)

| <u>Project Name</u>                                                             | <u>Amount</u> |
|---------------------------------------------------------------------------------|---------------|
| Southshores River Crossing Force Main                                           | \$14M ✓       |
| Memorial Park/Lane Ave/Timuquana Rd Force Main                                  | \$20M         |
| Pump Station Mechanical and Electrical Rebuilds<br>(McMillan, Alachua, Bradley) | \$20M         |
| Electrical Reliability (New Line Item)<br>(generators, switches, controls, etc) | \$5M          |
| Rehabilitation of 20 to 25 Pump Stations                                        | \$3M/yr       |
| Large Diameter Condition Assessment and Pipe<br>Replacement Program             | \$10M/yr      |

JEA is investing a projected \$250 million into Wastewater Collection and Pump Station Systems during the next five years



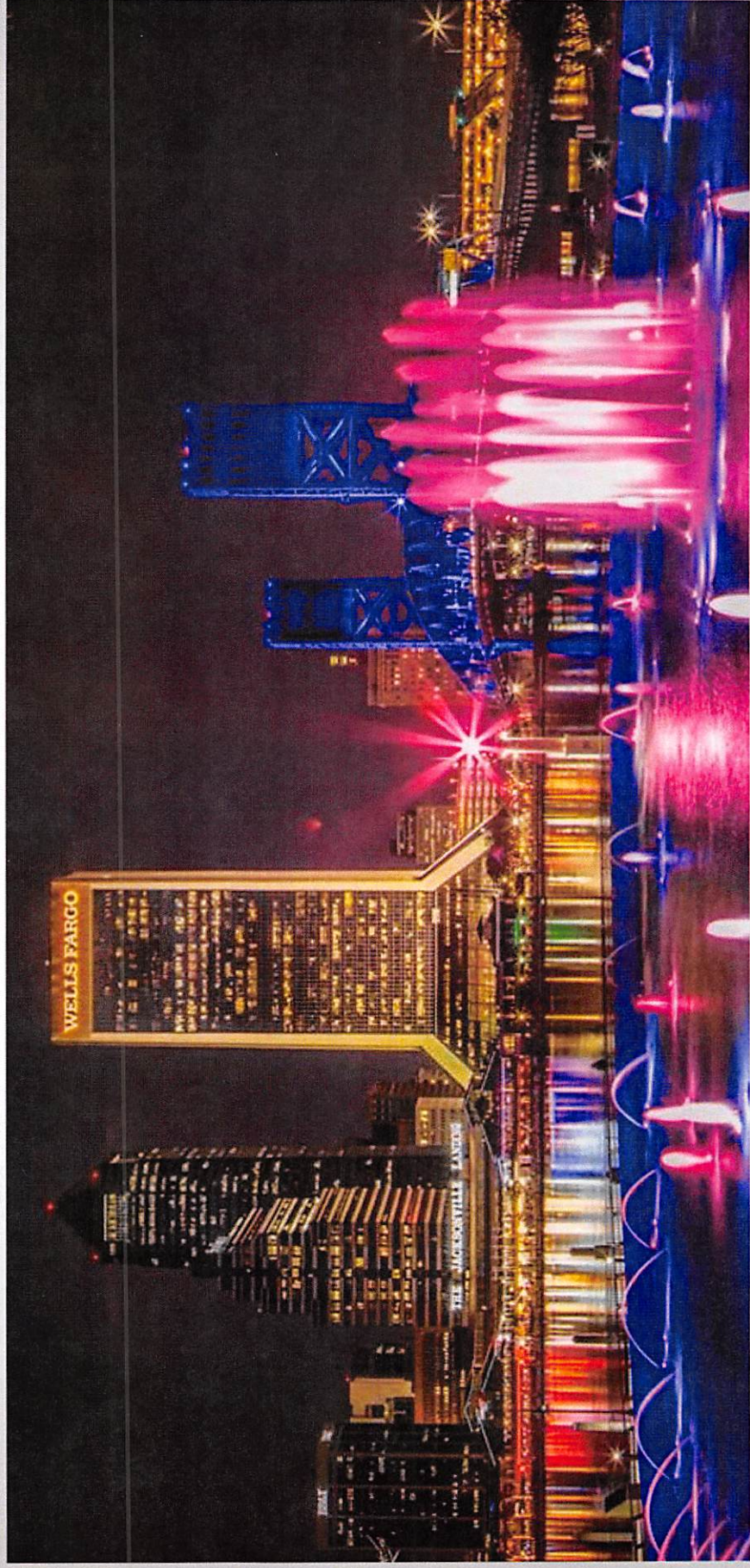


Building Community<sup>sm</sup>



QUESTIONS?

We are here to talk about our favorite city on earth.....







**5 seasoned Architects met for lunch at La Taverna a year and a half ago and we decided to take on a HUGE CHALLENGE.....**

**So, our Challenge was to help Create a VISION that would identify us as a very special and unique place on the planet!**

### **Philosophy - AIA Downtown Visioning**

Celebrate the river experience.

Start with iconic vision of downtown and connectivity.

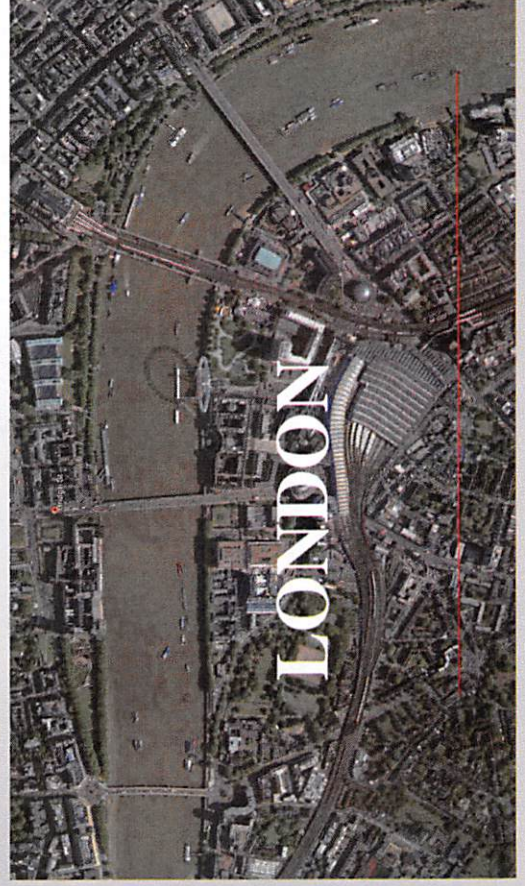
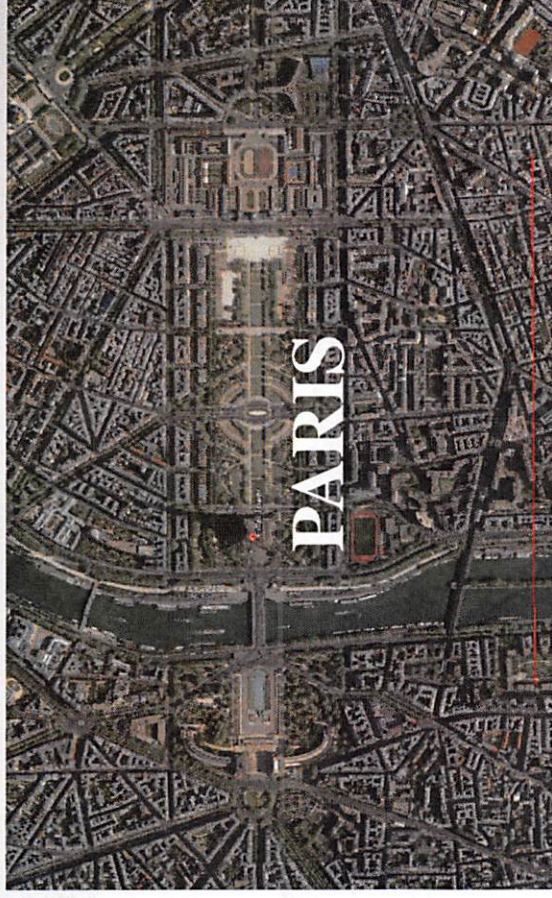
Identify and design around what is uniquely Jacksonville

Embrace the river in design and planning.



We asked each other...

What do all of these cities have in common?



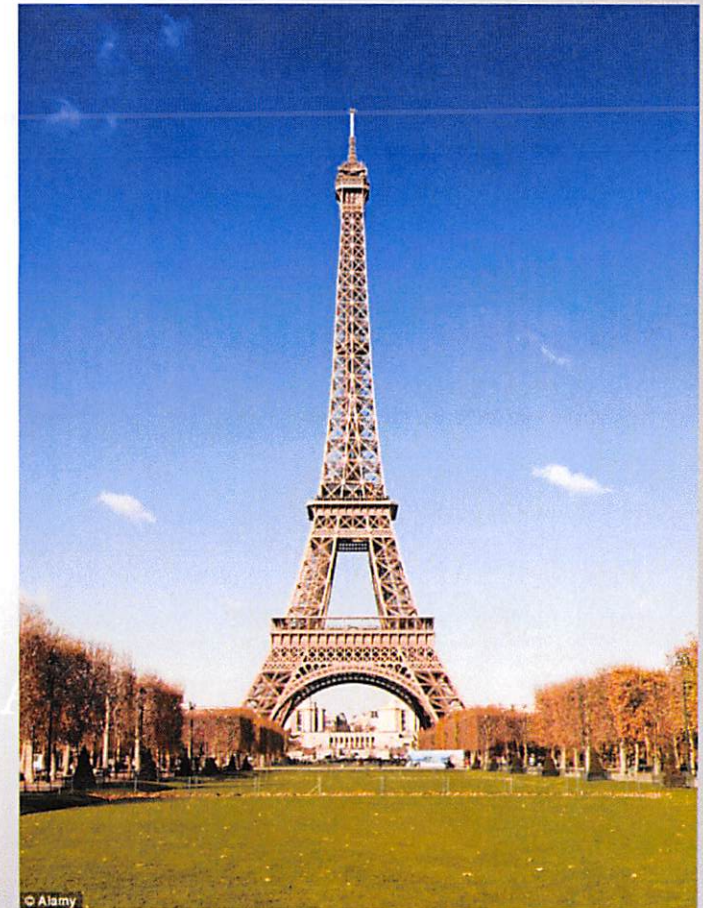


**They all have world class iconic structures and made them  
THE CORE OF THEIR HISTORY AND VISION...**

**ROME**



**PARIS**





**THEY ALL HAVE ICONIC WORLD CLASS STRUCTURES**

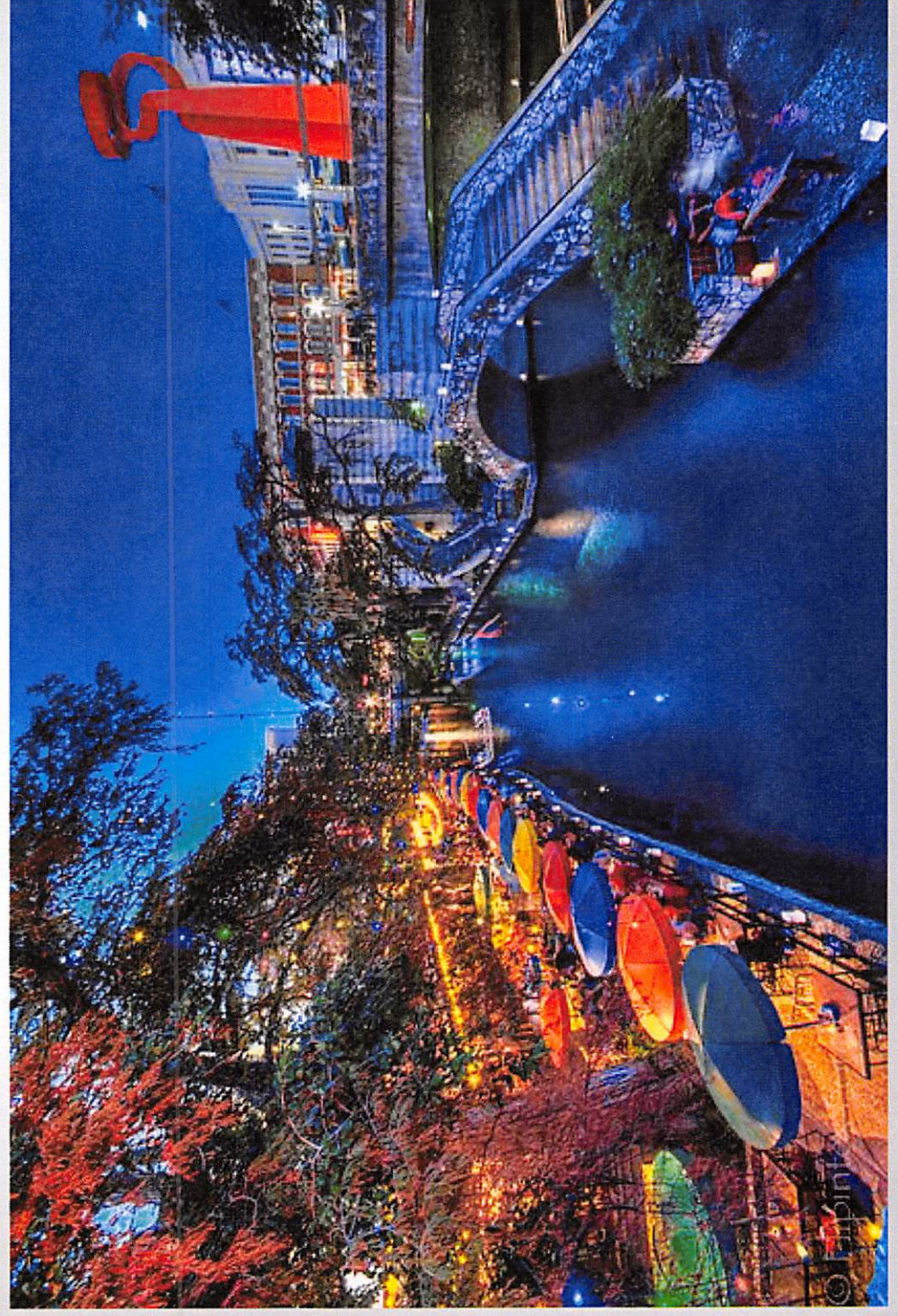
**AND, NOT TO MENTION  
VENICE**

**LONDON**





AND, SPEAKING OF RIVERS.....





THESE AERIALS ARE THE SAME SCALE.....



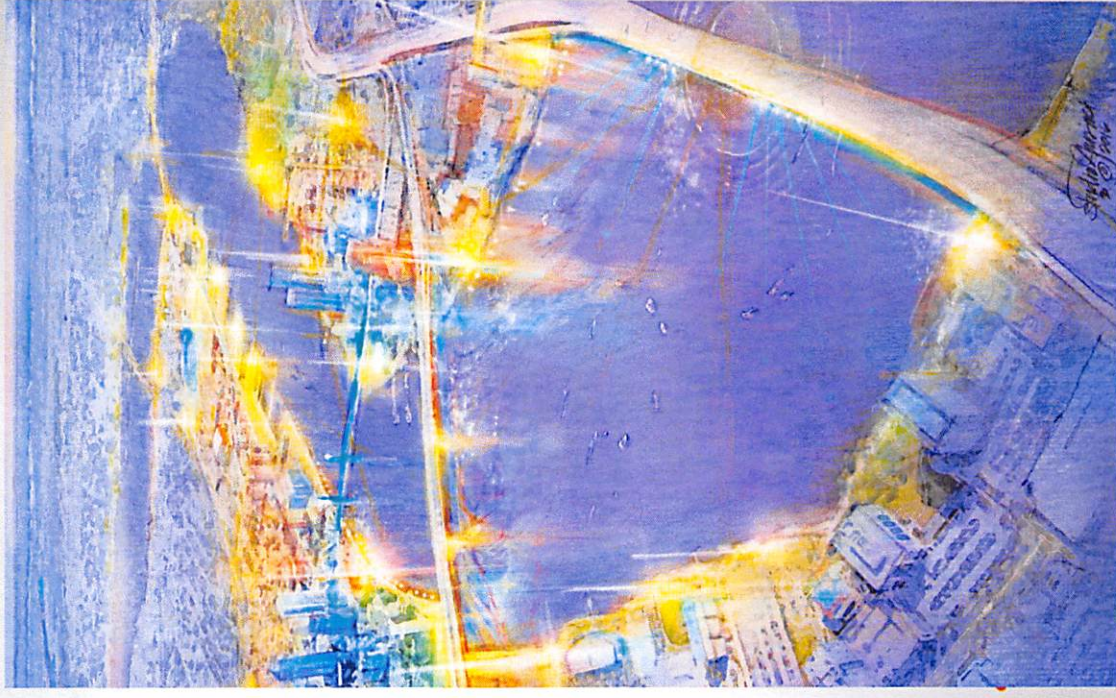


**SO, IF SAN ANTONIO CAN DO THIS,**



© Ron Niebrugge

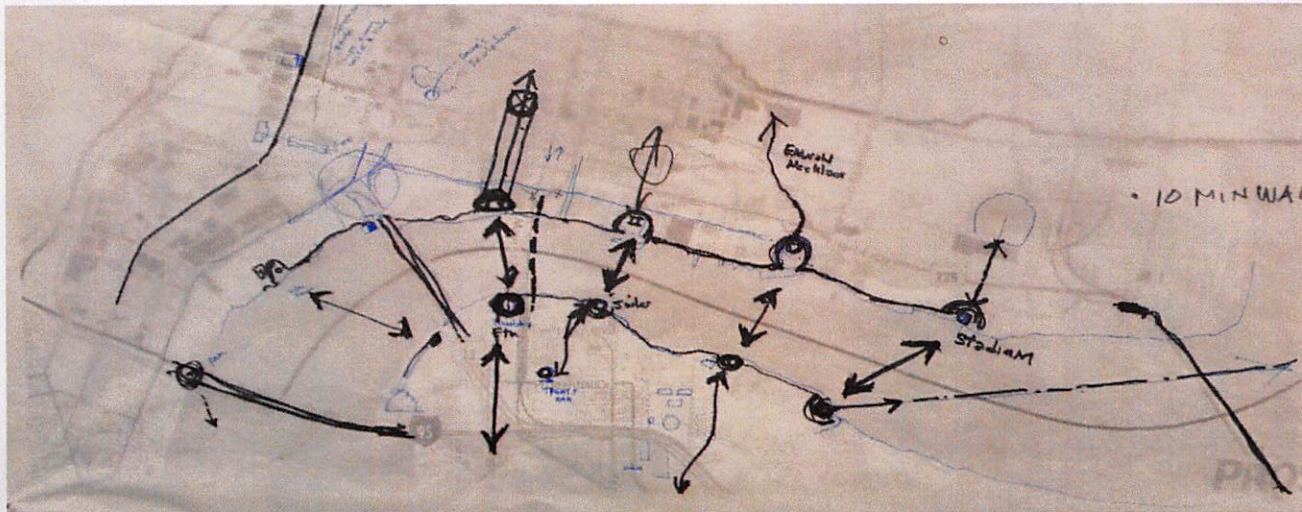
**WE SHOULD BE ABLE TO DO THIS...**



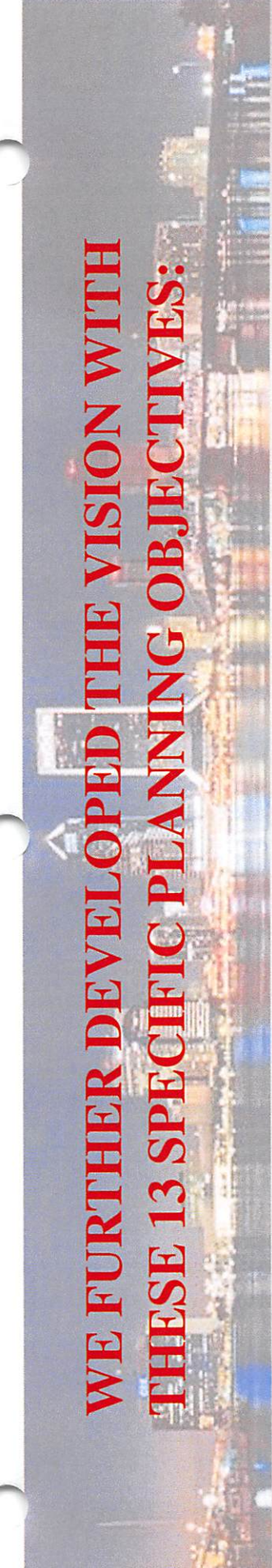


**SO, our Challenge was to help Create a VISION that would identify us as a very special and unique place on the planet!**

**WE COLLECTIVELY CAME UP WITH THE IDEA OF CREATING SEVERAL RIVERWALK “GATEWAY” PLAZAS AT STRATEGIC LOCATIONS ALONG BOTH SIDES OF THE RIVER. THEY WOULD MARK CONNECTIONS TO MAJOR INNER-CITY ACTIVITY CENTERS, SKYWAY EXPRESS AND RIVERWALK. THEN, CREATE VISUAL MARKERS ABOUT A 10 MINUTE WALK APART, THAT WOULD BE SEEN ALONG THE ENTIRE DOWNTOWN LENGTH OF THE RIVER. THE CONCEPTUAL DIAGRAM STARTED WITH THIS SIMPLE FREEHAND SKETCH:**







**WE FURTHER DEVELOPED THE VISION WITH  
THESE 13 SPECIFIC PLANNING OBJECTIVES:**

**KEY FEATURES FOR ALL MAJOR GATEWAY ACTIVITY PLAZAS:**

- ARCHITECTURALLY SIGNIFICANT
- ARTWORK INTENSIVE WITH SCULPTURES, GRAPHICS OR PAINTINGS
- PLAZA FOCUS TO CREATE PEOPLE GATHERING OPPORTUNITIES
- RICH HARDSCAPE AND LANDSCAPING FEATURES
- MUST PROVIDE GATEWAY TO KEY INNER-CITY ACTIVITY CENTERS
- EACH MUST BE VISIBLE FROM ONE OTHER
- MUST HAVE DISTINCTIVE VERTICAL DESIGN ELEMENT OF +/- 100'





## **REMAING SPECIFIC PLANNING OBJECTIVES:**

### **KEY FEATURES FOR ALL MAJOR GATEWAY ACTIVITY PLAZAS:**

- ALL NODES (MAJOR AND MINOR) MUST CONNECT TO WATER TAXIS
- MUST BE EQUIPPED WITH LAZER LIGHT TECHNOLOGIES
- EACH CAN BE FEATURED FOR ONE FULL MONTH EVERY YEAR
- PAID FOR BY INCRIMENTAL DEVELOPMENT THAT WILL BENEFIT DIRECTLY (OR INDIRECTLY) BY ITS PRESENCE
- LOCATED ON THE EXISTING OR FUTURE RIVERWALK SYSTEM
- MUST PROVIDE PERMANENT MARKER WITH OVERAL MAP AND DETAILED BLOW-UP OF AREA SERVED



**THESE GUIDING PREMISES EVOLVED INTO  
THE FOLLOWING SKETCH THAT BECAME THE  
ESSENCE OF OUR VISION:**





**WE CLEANED UP THE SKETCH WITH THE FOLLOWING SEQUENCE OF DRAWINGS:**





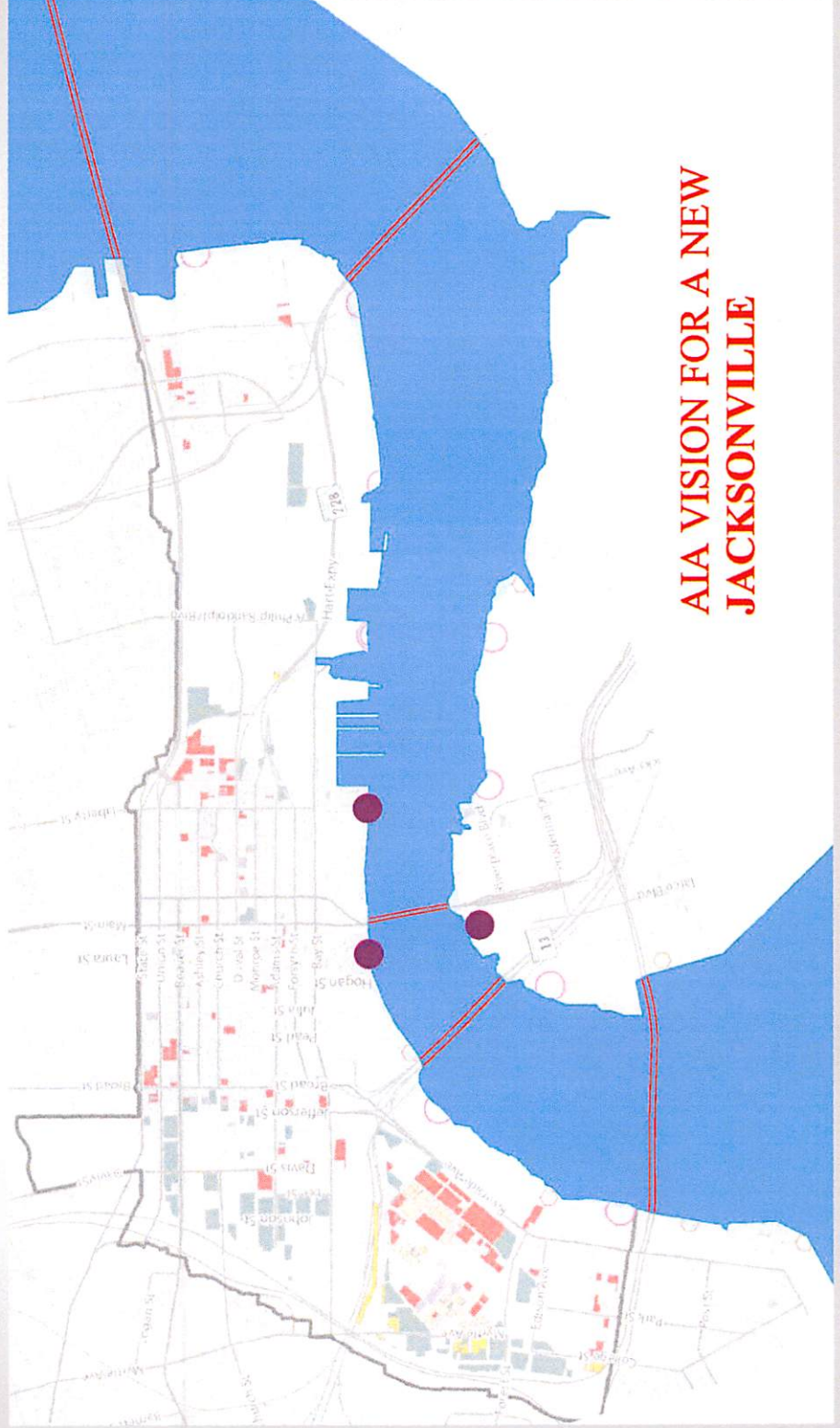
**THIS PURPLE DOT MIGHT BE THE FIRST OF  
THE RIVERWALK GATEWAY PLAZAS**



**AIA VISION FOR A NEW  
JACKSONVILLE**



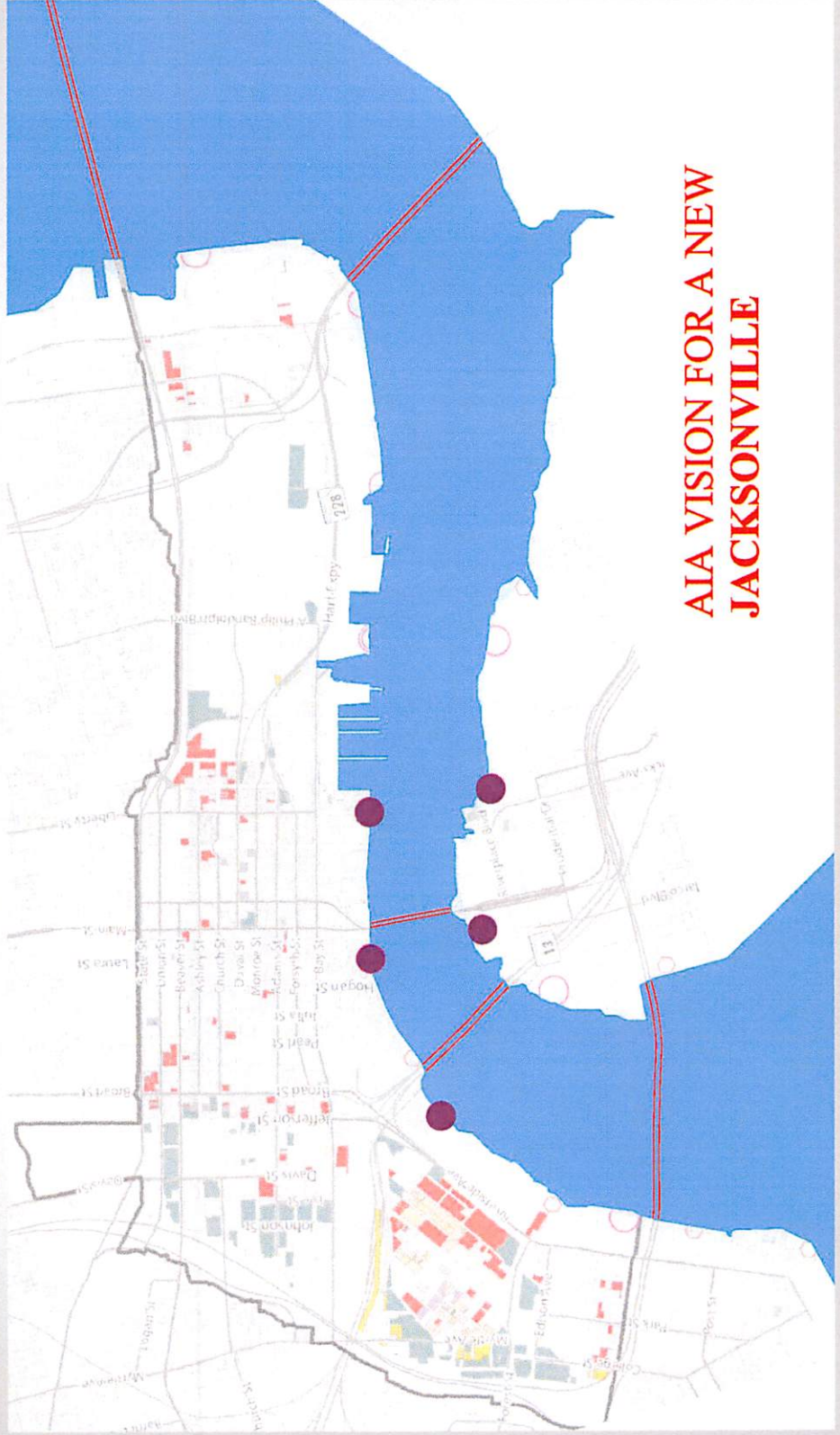
**A COUPLE MORE WILL BE ADDED AS  
PROJECTS DEVELOP ALONG THE  
RIVERFRONT.....**



**AIA VISION FOR A NEW  
JACKSONVILLE**



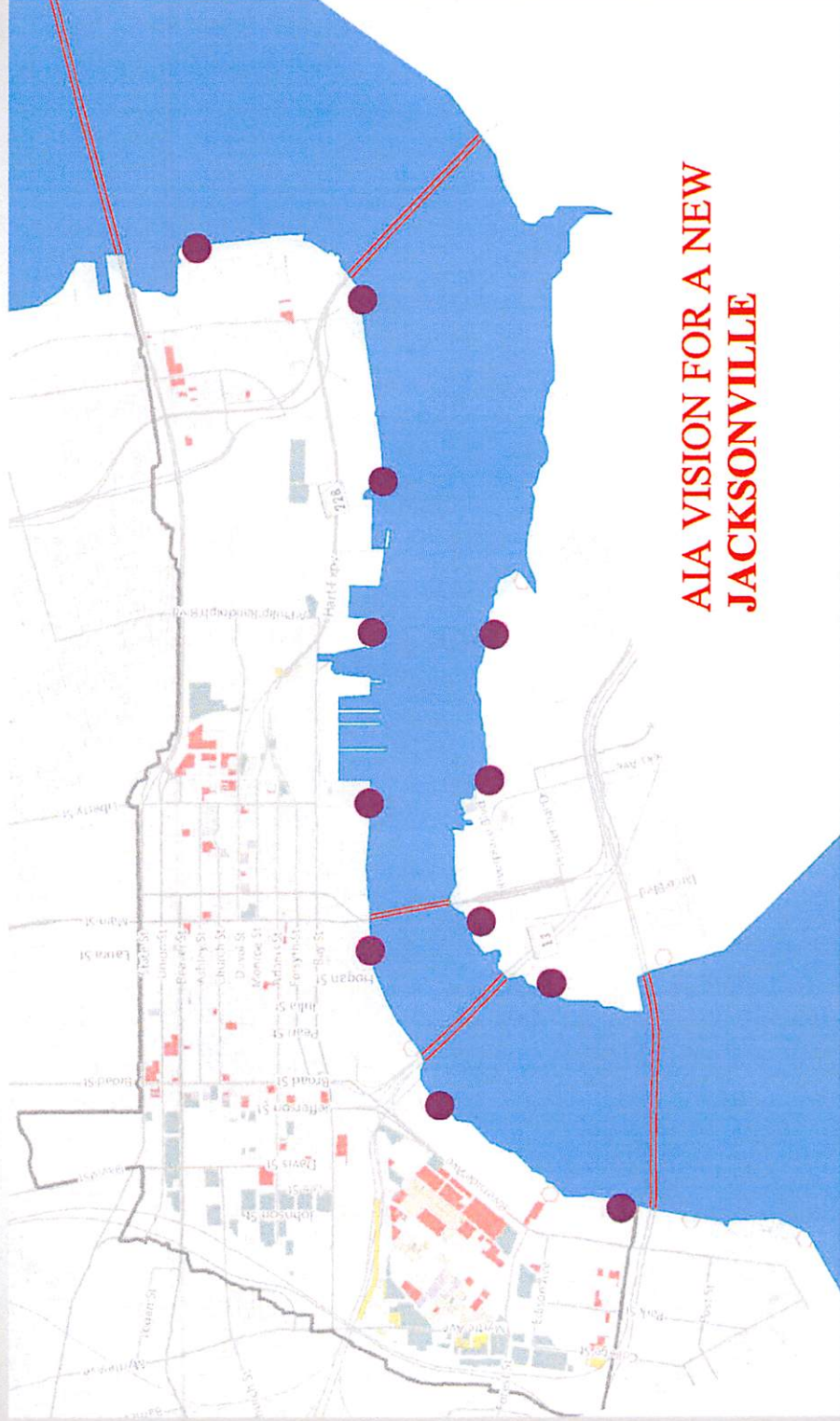
AND A FEW MORE.....THEIR TIMING WILL BE  
DETERMINED BY DEMAND.....



AIA VISION FOR A NEW  
JACKSONVILLE

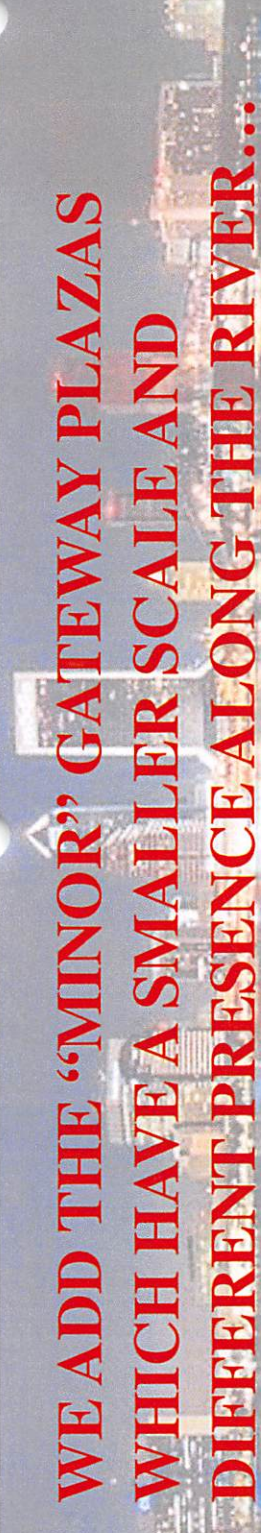


AND THE LAST OF THE GATEWAY PLAZAS ARE  
IDENTIFIED.....

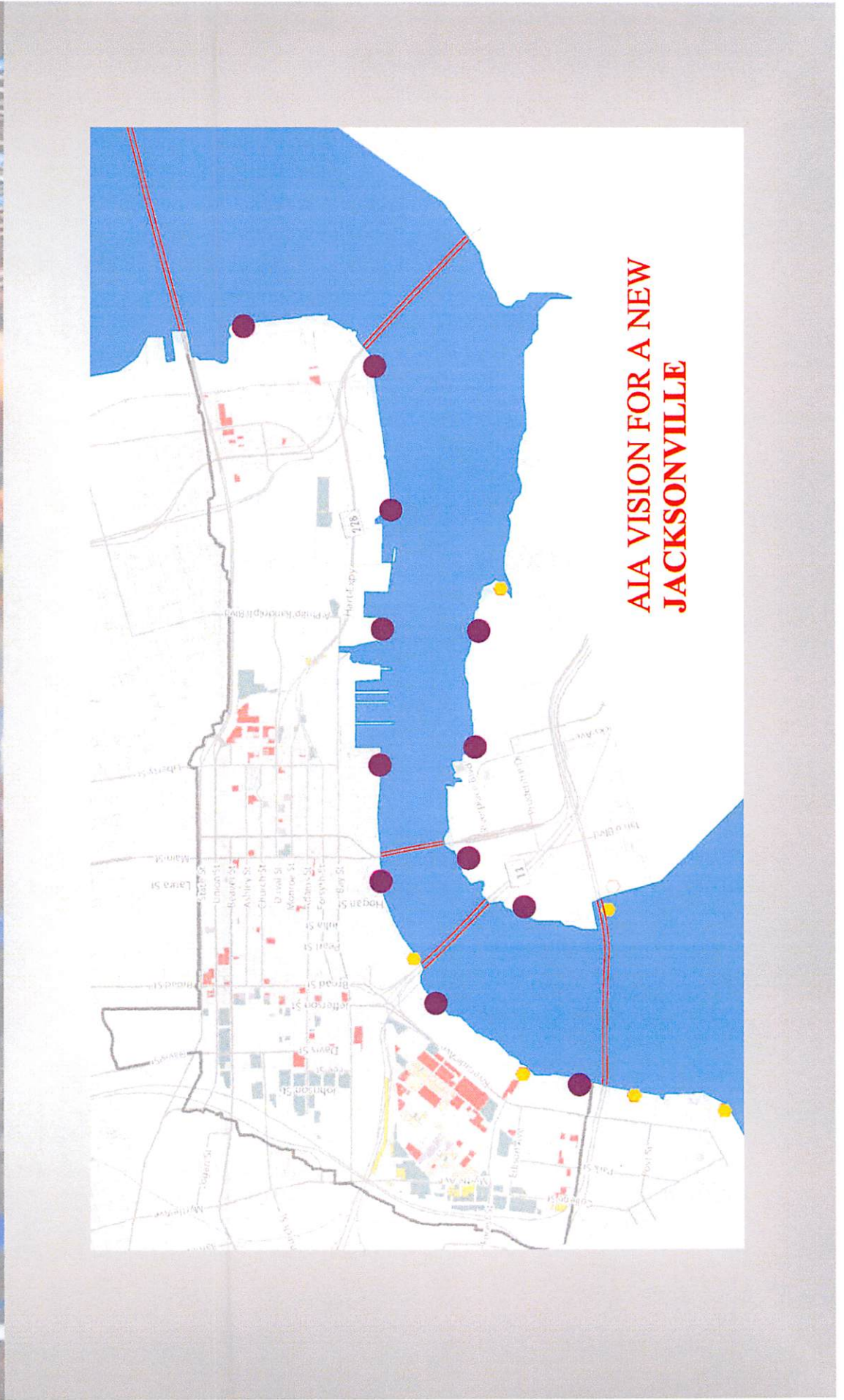


AIA VISION FOR A NEW  
JACKSONVILLE



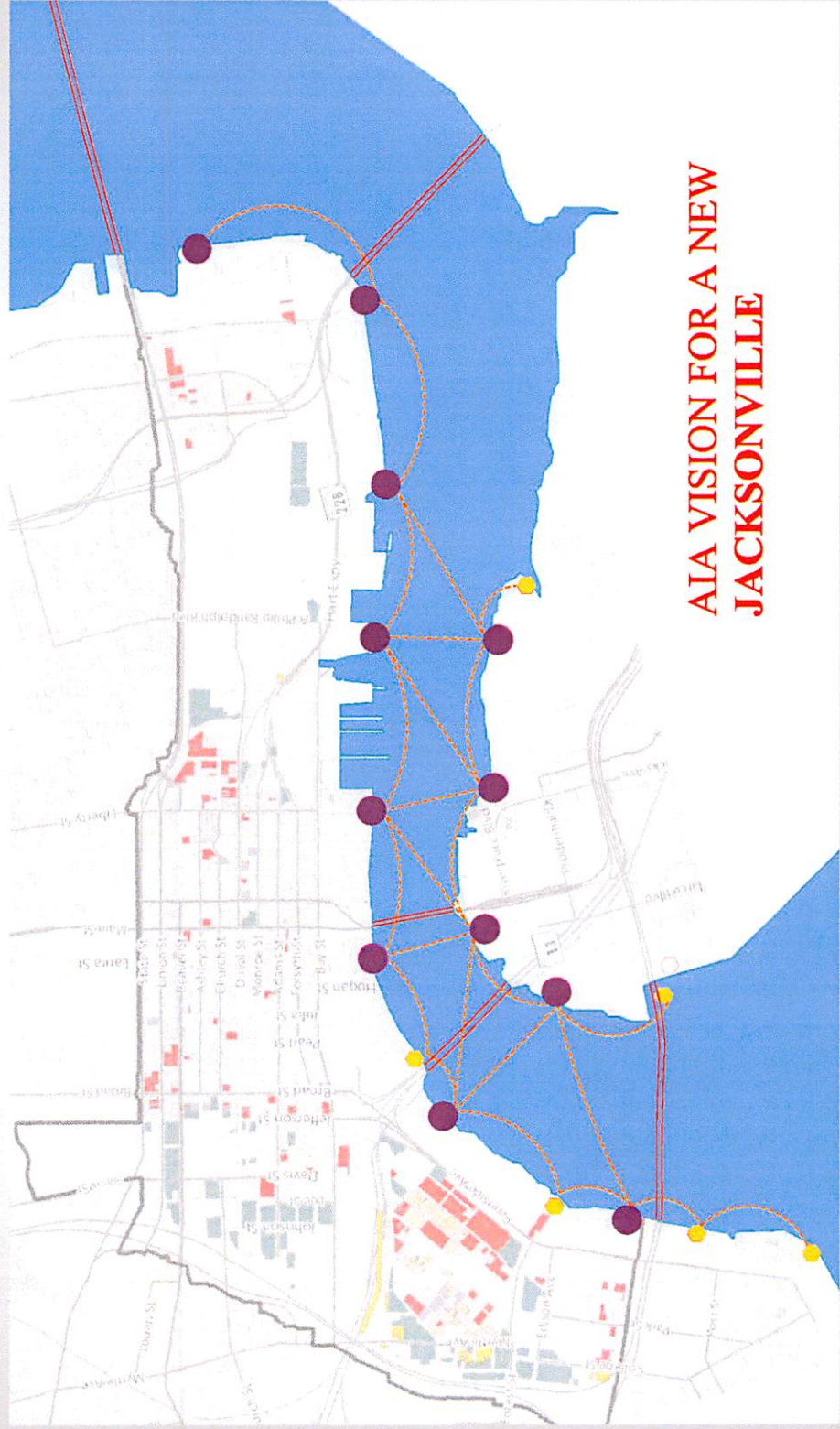


**WE ADD THE “MINOR” GATEWAY PLAZAS  
WHICH HAVE A SMALLER SCALE AND  
DIFFERENT PRESENCE ALONG THE RIVER...**





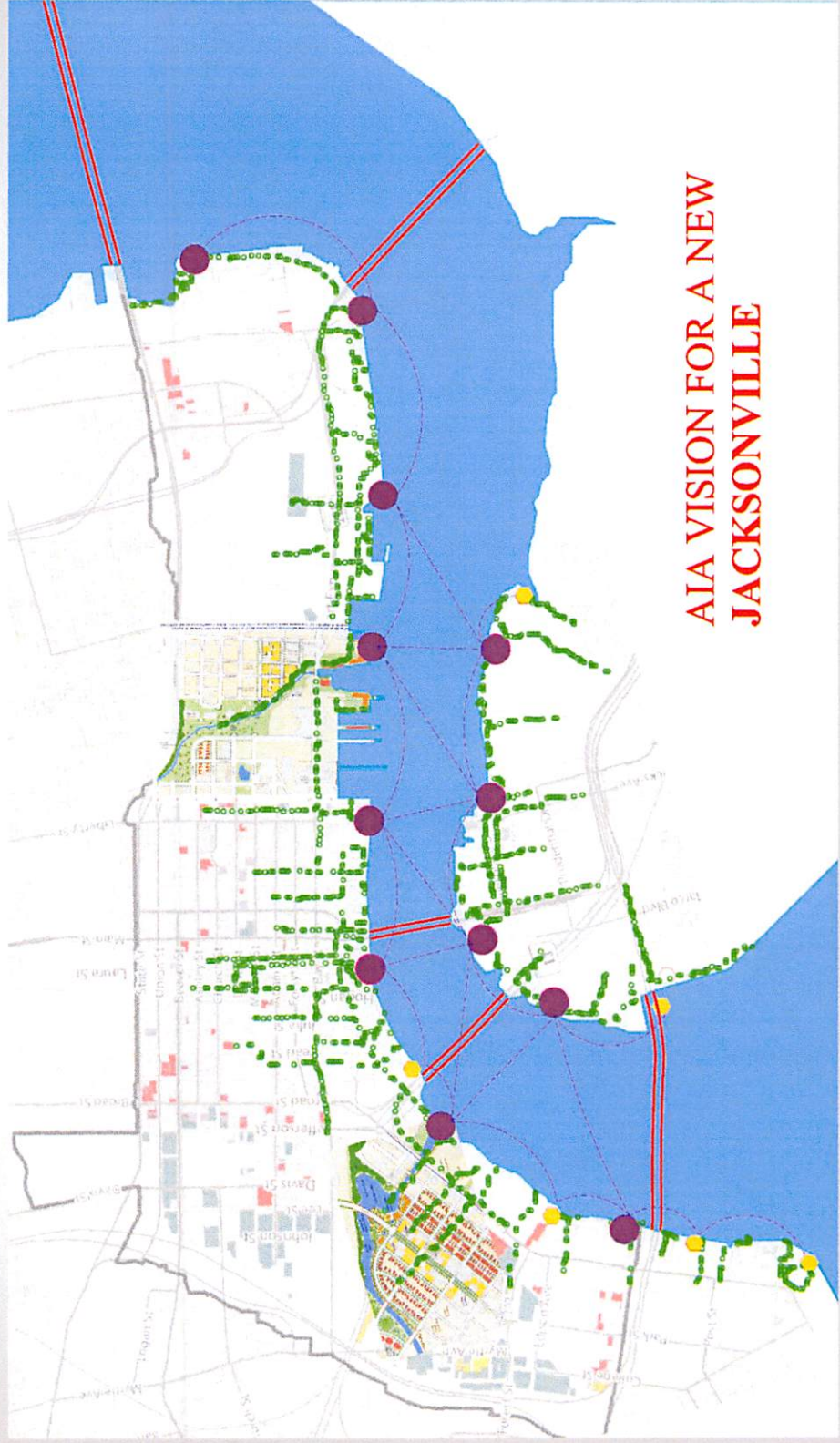
**HERE WE SHOW THE WATER TAXI AND OTHER  
WATER TRANSPORTATION.....**



**AIA VISION FOR A NEW  
JACKSONVILLE**



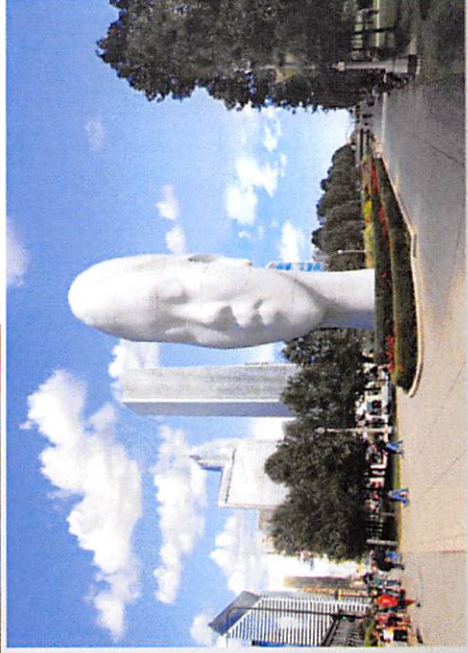
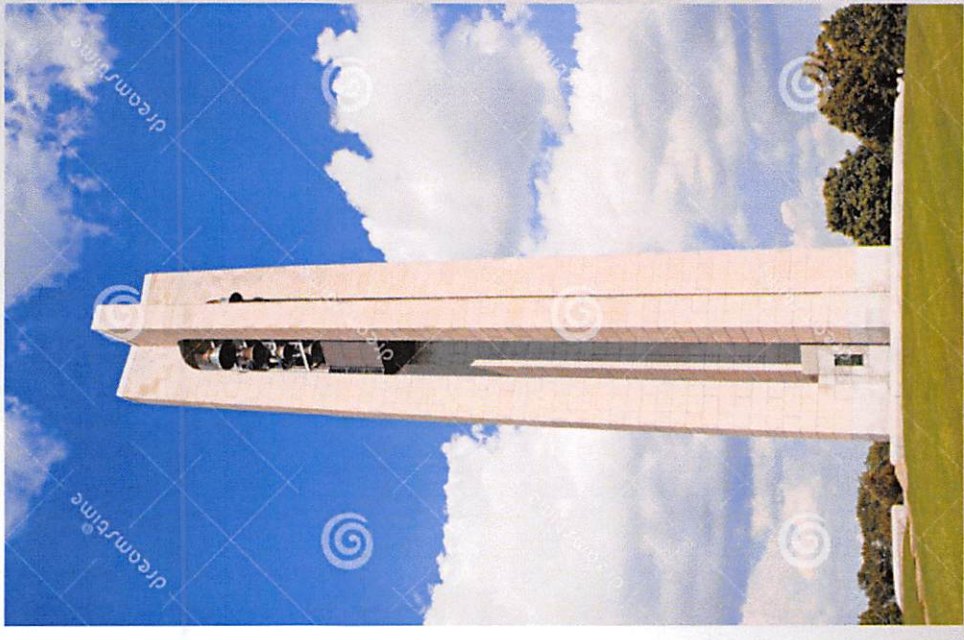
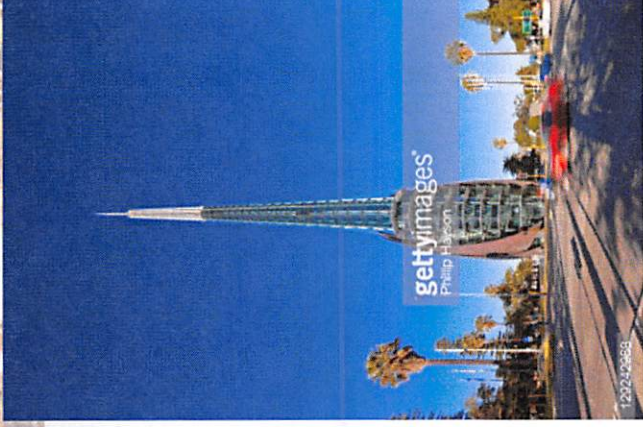
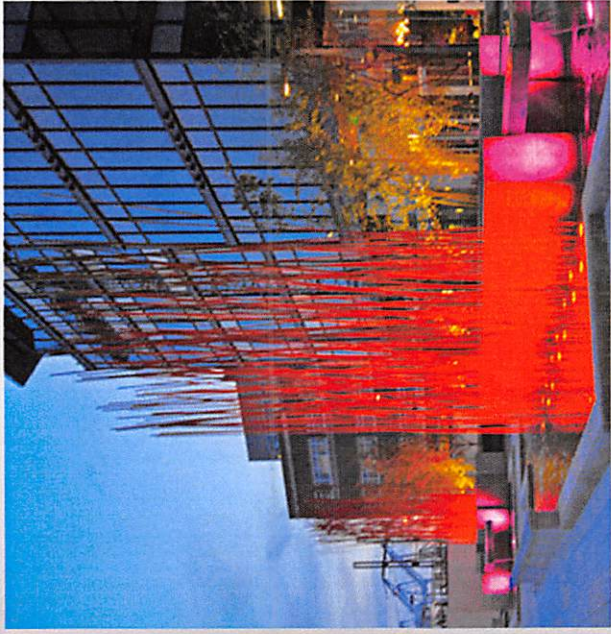
AND WE ADD THE OTHER DEVELOPMENTS  
ALONG WITH THE CONNECTIONS INTO THE  
CITY'S MAJOR ACTIVITY CENTERS...



AIA VISION FOR A NEW  
JACKSONVILLE

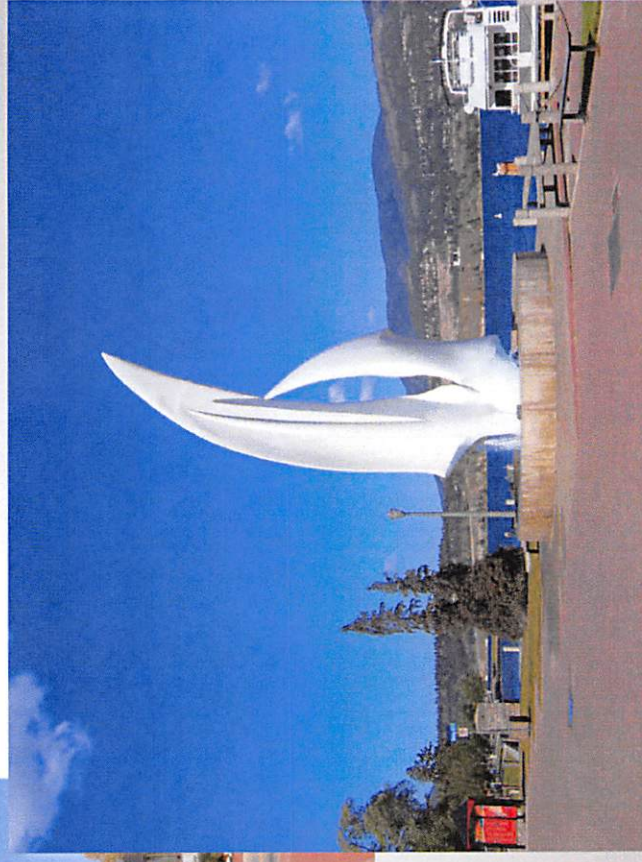
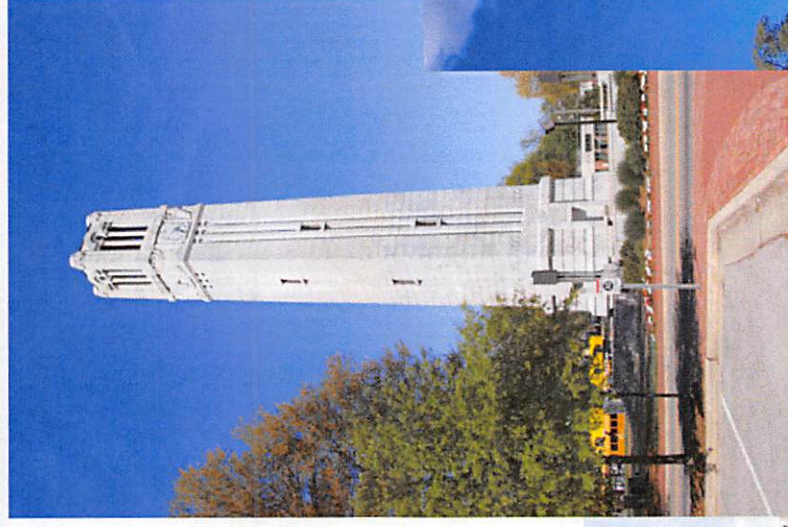
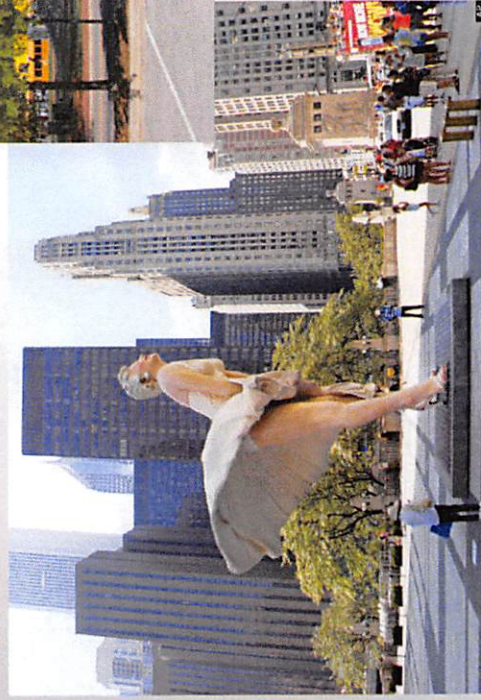


HERE ARE SEVERAL EXAMPLES OF THE KINDS  
OF STRUCTURES AND ARTWORK THAT CAN BE  
FEATURED IN THESE SELECTED GATEWAYS....



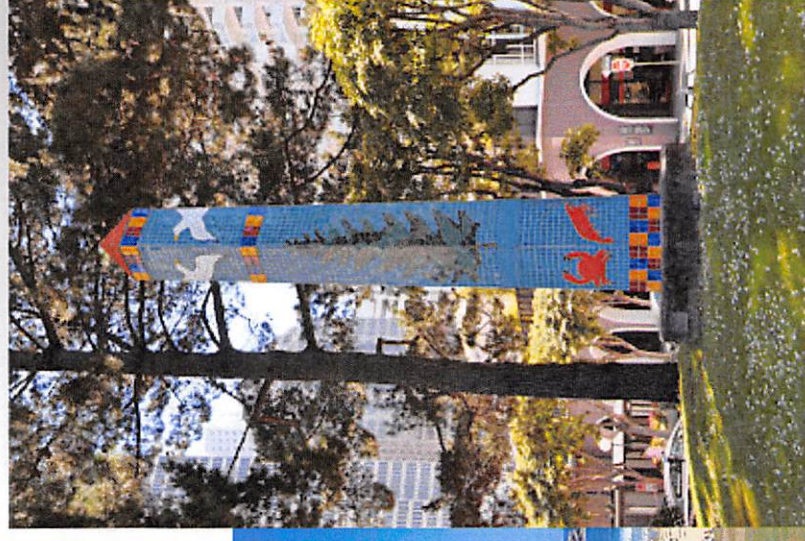
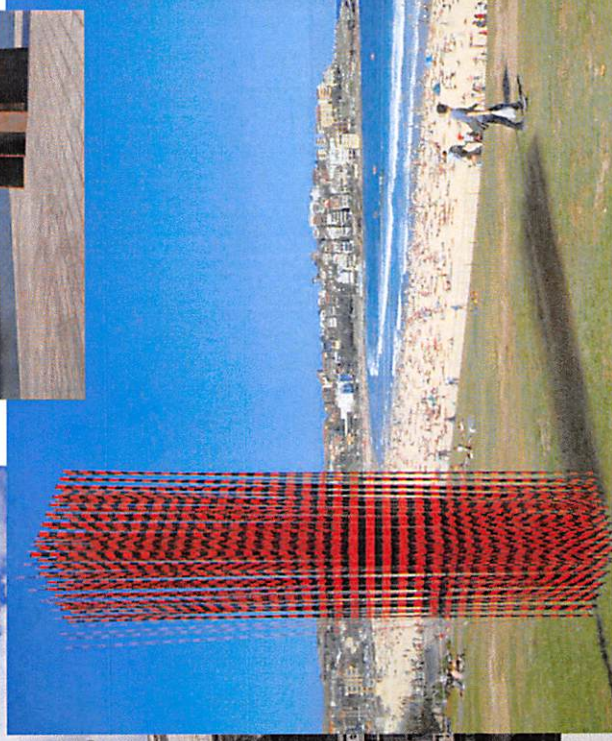
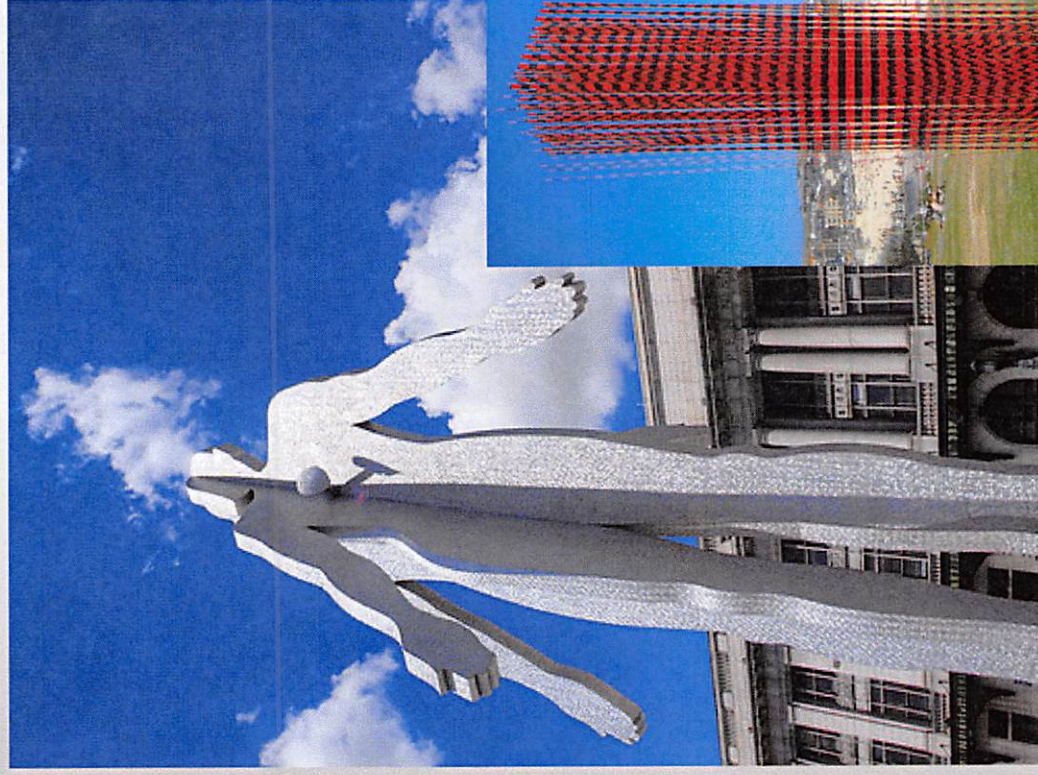


**HERE ARE SEVERAL EXAMPLES OF THE KINDS  
OF STRUCTURES AND ARTWORK THAT CAN BE  
FEATURED IN THESE SELECTED GATEWAYS...**





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FEATURED IN THESE SELECTED GATEWAYS...



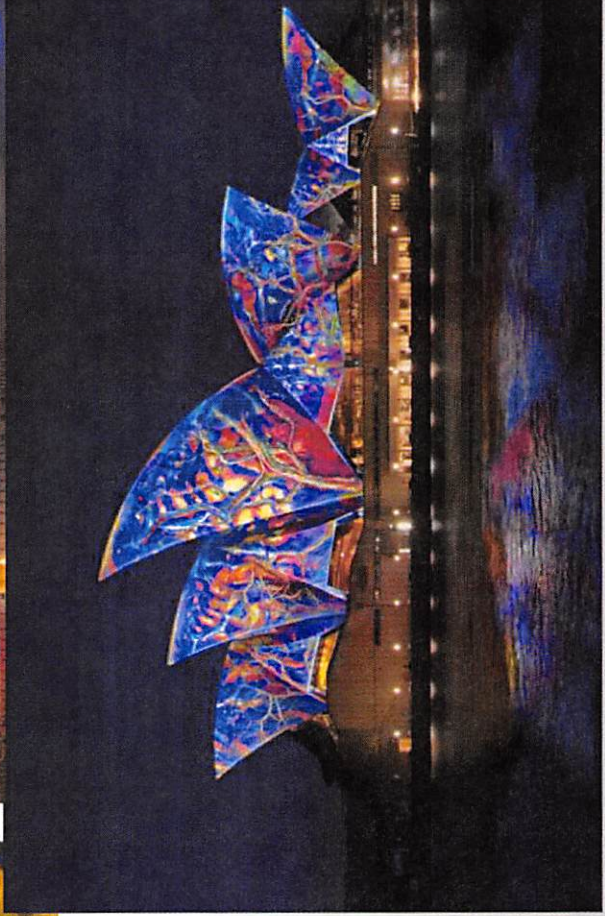
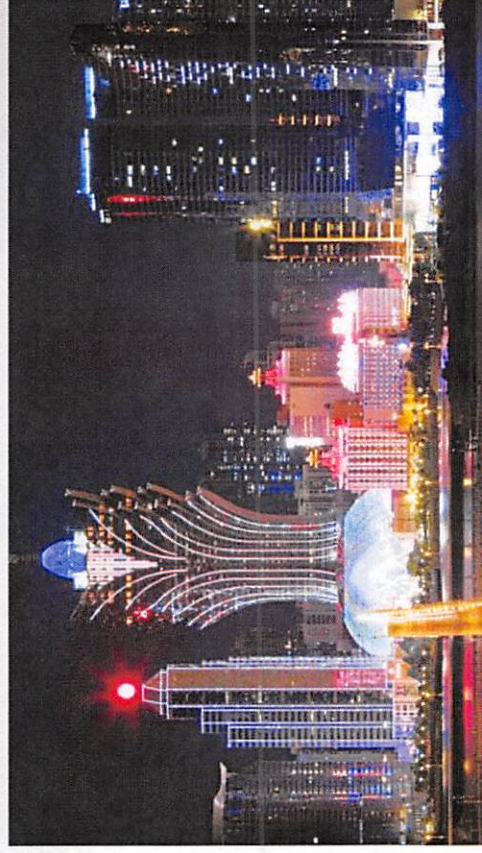
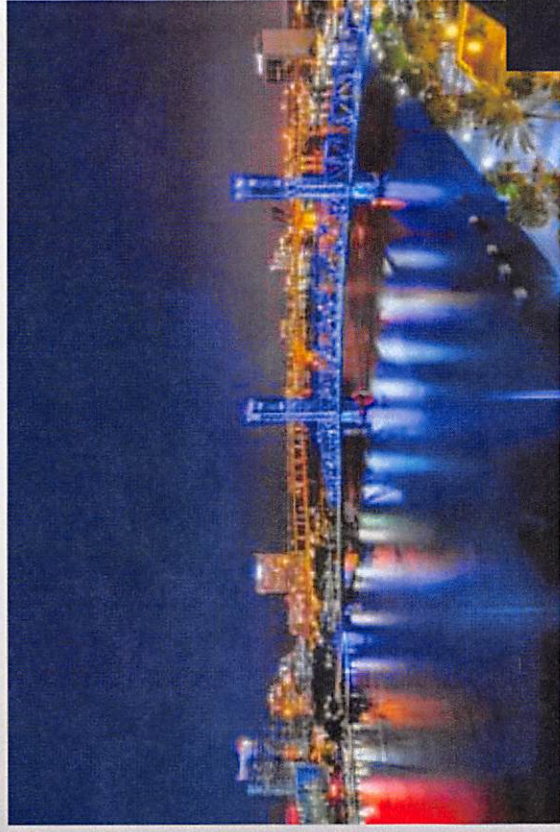


**THIS SKETCH FROM THE KAHN FOLKS  
ALREADY INCORPORATES OUR TOWER  
CONCEPT ALONG THE RIVER.....**



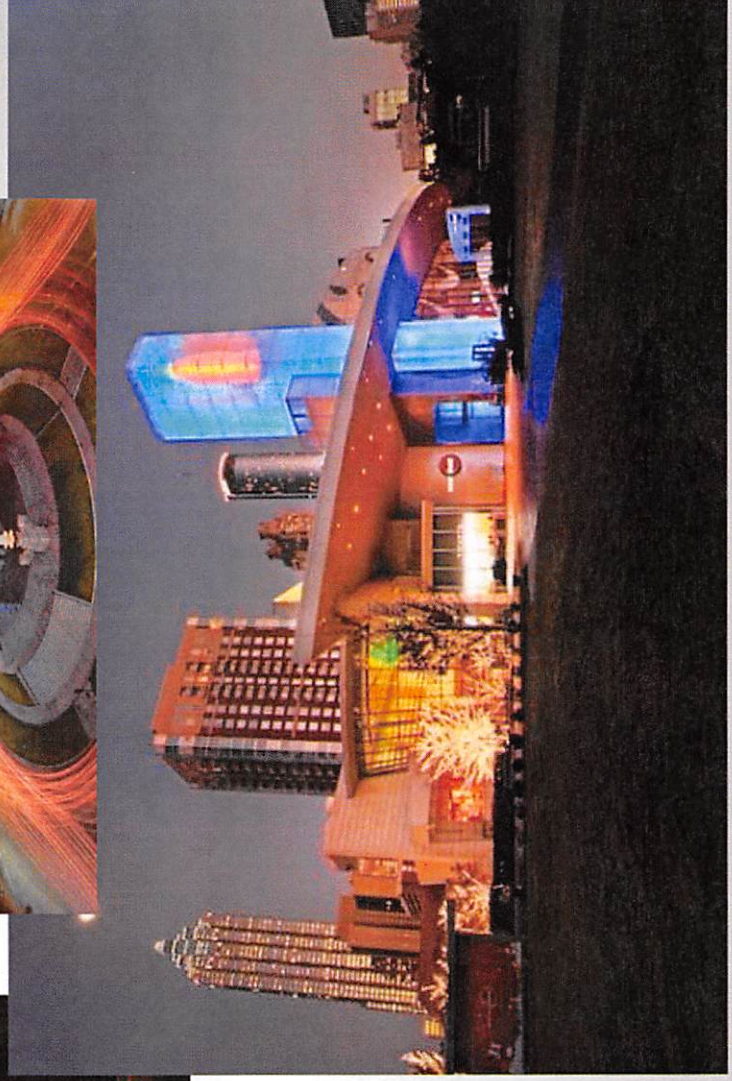
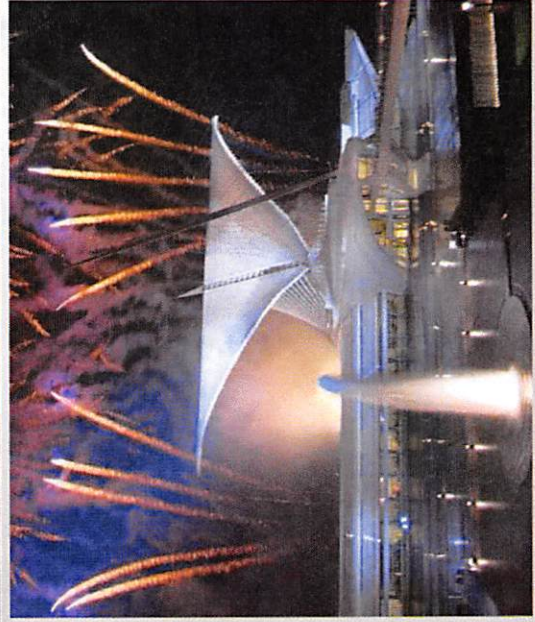
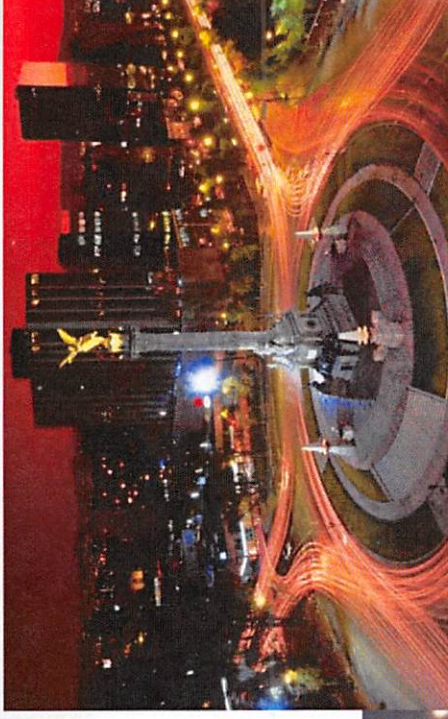
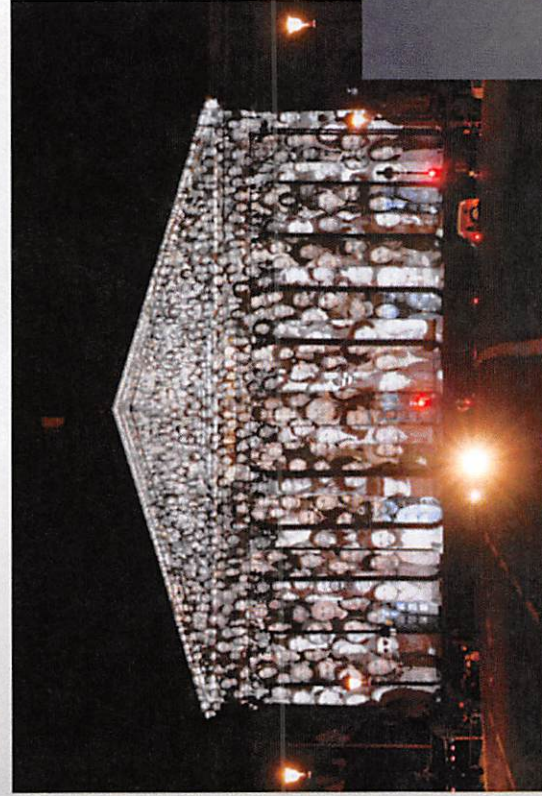


**MORE IDEAS OF DIFFERENT WAYS WE CAN  
INCORPORATE THESE CONCEPTS ALONG OUR  
ST. JOHNS RIVER....**



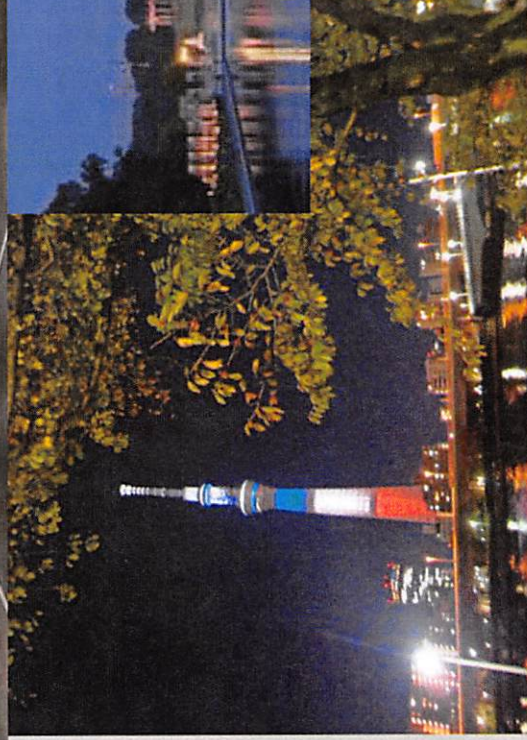
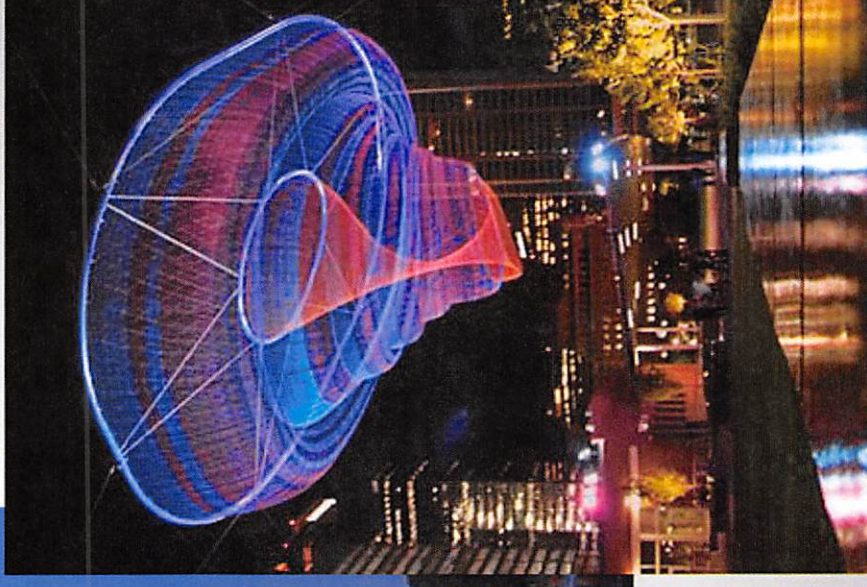
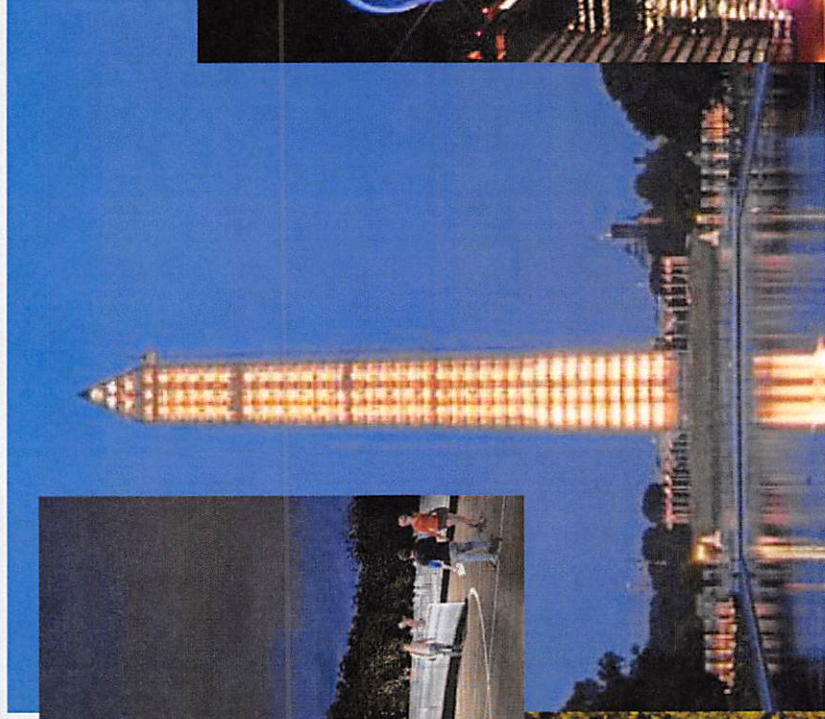
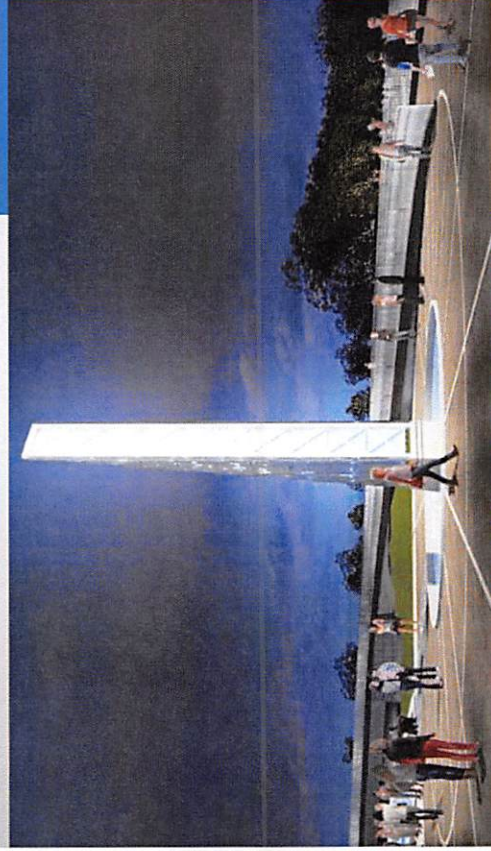


MORE IDEAS OF DIFFERENT WAYS WE CAN  
INCORPORATE THESE CONCEPTS ALONG OUR  
ST. JOHNS RIVER....



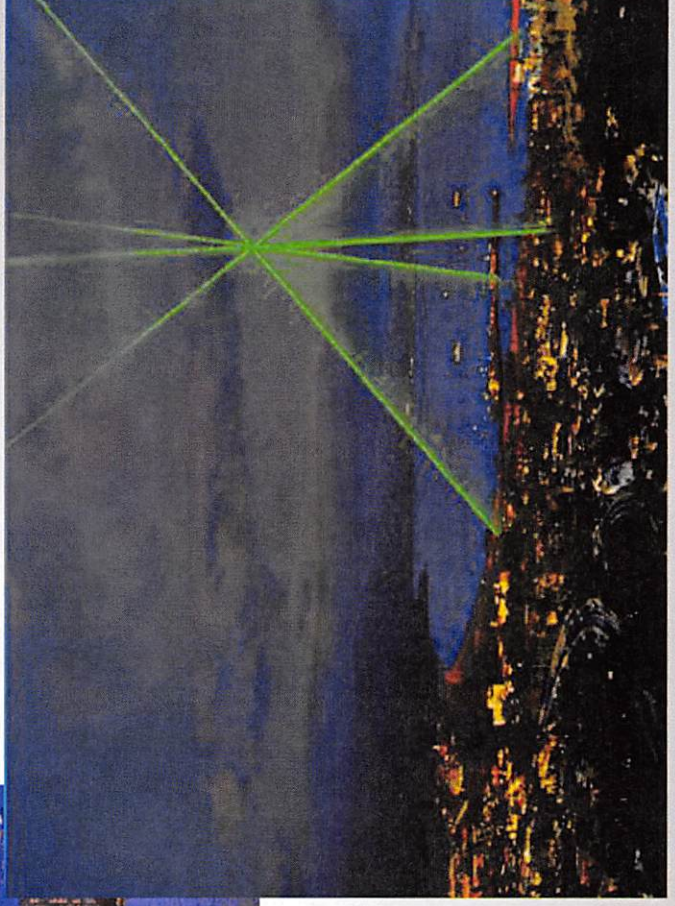
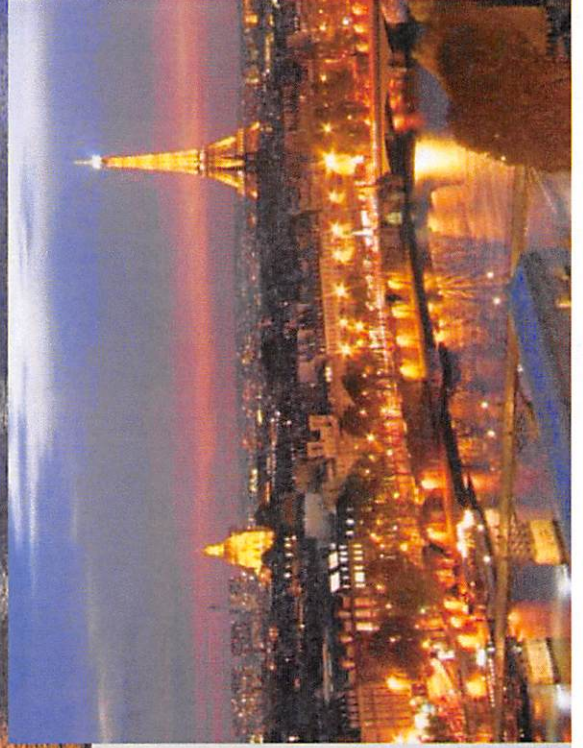
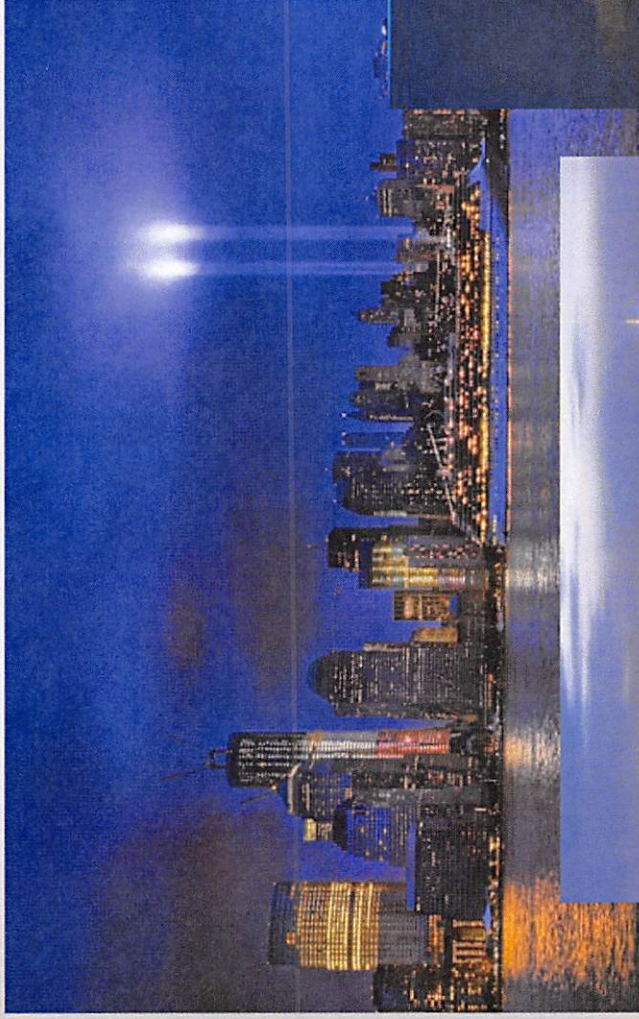
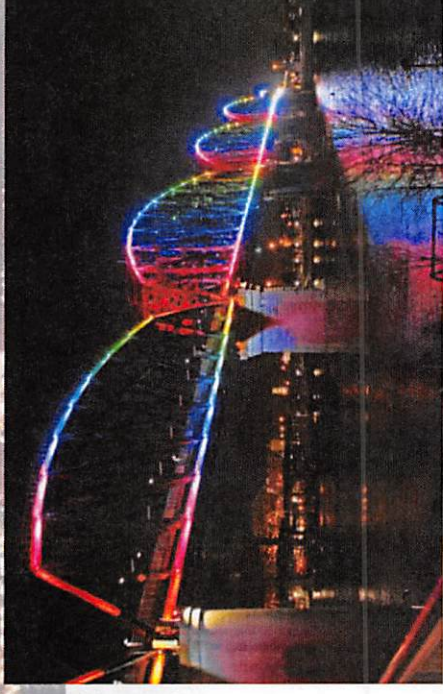


**MORE IDEAS OF DIFFERENT WAYS WE CAN  
INCORPORATE THESE CONCEPTS ALONG OUR  
ST. JOHNS RIVER....**





**EVEN LIGHTING ALONE CAN BE DRAMMATIC  
AT NIGHT.....**





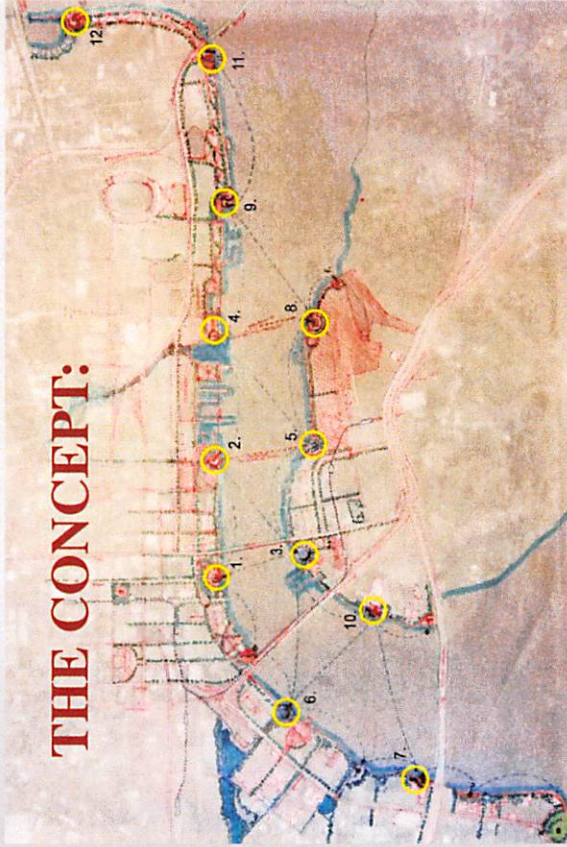
SO, IN CONCLUSION, WE HAVE SHARED OUR VISION  
WITH YOU AND HOPE YOU WILL SEE ITS VALUE AND  
BENEFITS TO ALL OF US WHO PROUDLY CALL  
JACKSONVILLE, HOME.



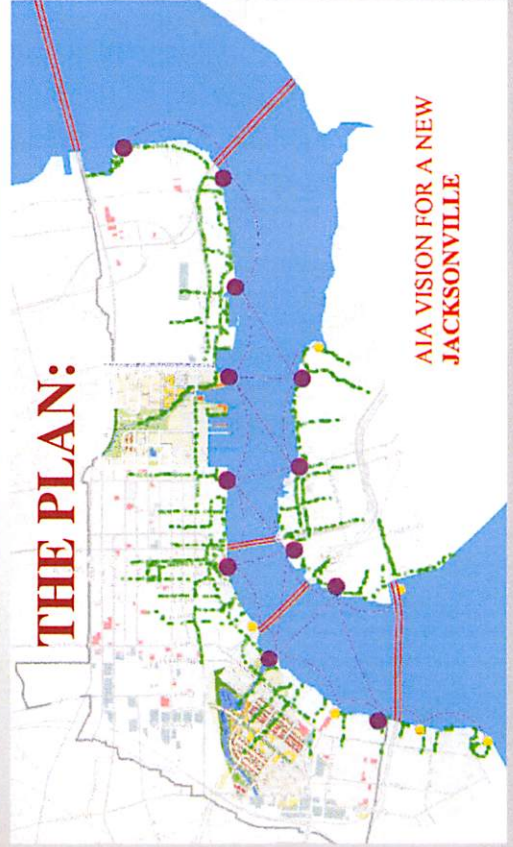


# AIA VISION FOR A NEW JACKSONVILLE...

## THE CONCEPT:



## THE PLAN:



## THE VISION

