

PUBLIC MEETING

Neptune Beach City Hall
116 First Street
Neptune Beach, FL 32266

March 30, 2022 | 5PM - 7PM ET

The City of Neptune Beach is holding a public outreach meeting for residents to provide input into the stormwater strategic planning process. The open-house style meeting, which is designed for social distancing, will include information on Neptune Beach's stormwater systems. We are also seeking public input to identify drainage challenges and concerns for inclusion in the upcoming stormwater strategic plan.

The meeting will take place in the Council Chambers at City Hall, **116 First Street, Neptune Beach, 32266**, on **Wednesday, March 30, 2022, at 5 pm.**

If you are interested in providing information or feedback about specific drainage related concerns, please plan to attend the meeting. Residents are encouraged to complete an online survey, in advance of the meeting, that can be accessed using the QR code, or by visiting <https://arcg.is/1brKeL> (*URL is case sensitive*).

Feedback can also be provided at the meeting or via email to Marketing@JonesEdmunds.com.



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STORMWATER STRATEGIC PLANNING

**GOAL: DEVELOP A PLAN FOR
IMPLEMENTING DRAINAGE IMPROVEMENTS**

**IDENTIFY
DRAINAGE
CONCERNS**



**IDENTIFY
IMPROVEMENT
OPTIONS**



Develop budget
estimates for
improvement
options



Rank and prioritize
improvement
options

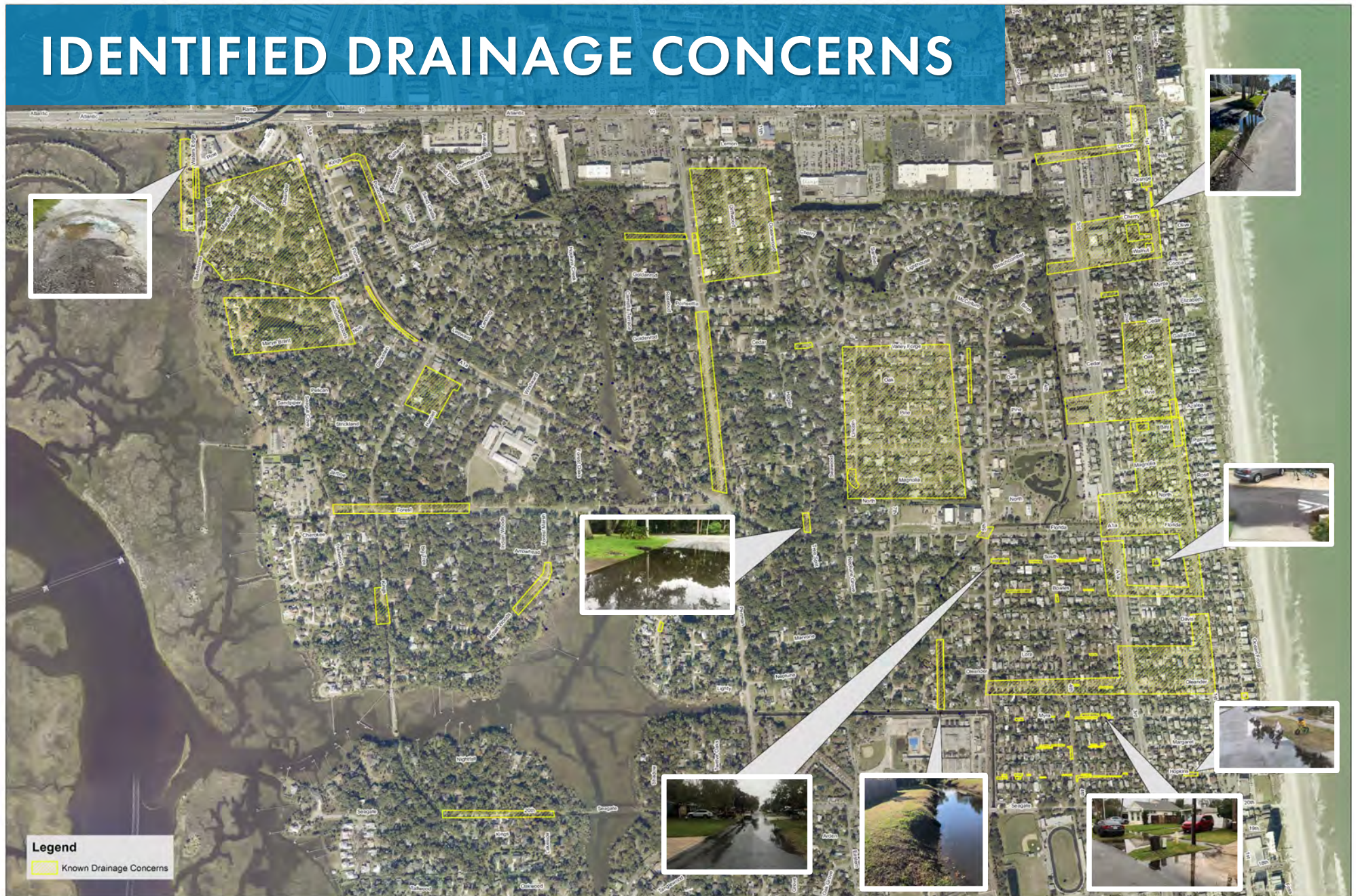


Program the
improvement
options into the
City's Capital
Improvement Plan
within available
budget



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IDENTIFIED DRAINAGE CONCERNS



PERTINENT CITY CODES, FLORIDA STATUTES, AND COMP PLAN OBJECTIVES

CITY COMPREHENSIVE PLAN OBJECTIVE D.2.2

- Identify drainage deficiencies
- Correct deficiencies to protect life, property, water quality, and the natural environment
- Work with FDOT to coordinate stormwater facilities owned by the FDOT
- Subject to the availability of funding, the City shall
 - Update the capital improvement schedule
 - Incorporate low impact design principles
 - Increase overall resiliency
 - Mitigate flood impacts in the City

FLORIDA STATE STATUTE 177.081.3

Governing bodies are not obligated to perform maintenance within rights-of-way and easements except when it is voluntarily assumed.

SHARED RESPONSIBILITIES

Property owners (city, private, and commercial) shall not create adverse adjacent impacts to other adjacent property owners.

Nuisance: Property owners (city, private, and commercial) shall not create conditions dangerous to human life, safety, welfare, properties, or detrimental to property values including impeding the public's free passage on sidewalks, ingress and egress, and the safe passage of vehicles on public streets.

DRAINAGE LEVEL-OF-SERVICE

CITY DRAINAGE CODE 27-519.n.2

Known flooding problems are those which pose an imminent threat to public safety and/or property including loss of human life, blockage of evacuation and/or emergency vehicle routes, and/or flooding of homes, buildings, or roadways as defined by the following:

- Home/building flooding
- Overtopping existing conveyance ditches and swales.
- Insufficient or lack of positive outfall.
- Standing water in areas or conveyances for more than twenty-four hours.
- Roads over topping greater than one foot in the 100-year, twenty-four-hour event.
- Road being closed to traffic due to extended flooding.

COMP PLAN LEVEL-OF-SERVICE GOALS FOR NEW DEVELOPMENT AND SIGNIFICANT REDEVELOPMENT

Type of Service	Definition	Level-of-Service Goal
Minor Conveyances	Driveway culverts, side drains and subdivision storm sewers	5-year frequency, 24-hour duration storm.
Major Outfall and Conveyances	Outfalls from stormwater managements systems such as retention or detention systems and cross drains	10-year frequency, 24- hour duration; LOS goal for existing or historical and 25-year frequency 24- hour storm duration for new development.



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STORMWATER DEVELOPMENT STANDARDS

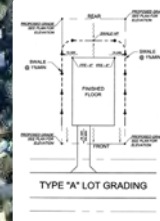
PRE-1980's

- ✗ Stormwater Ponds
- ✗ Curb & Gutter
- ✗ Inlets
- ✗ Grading Plan



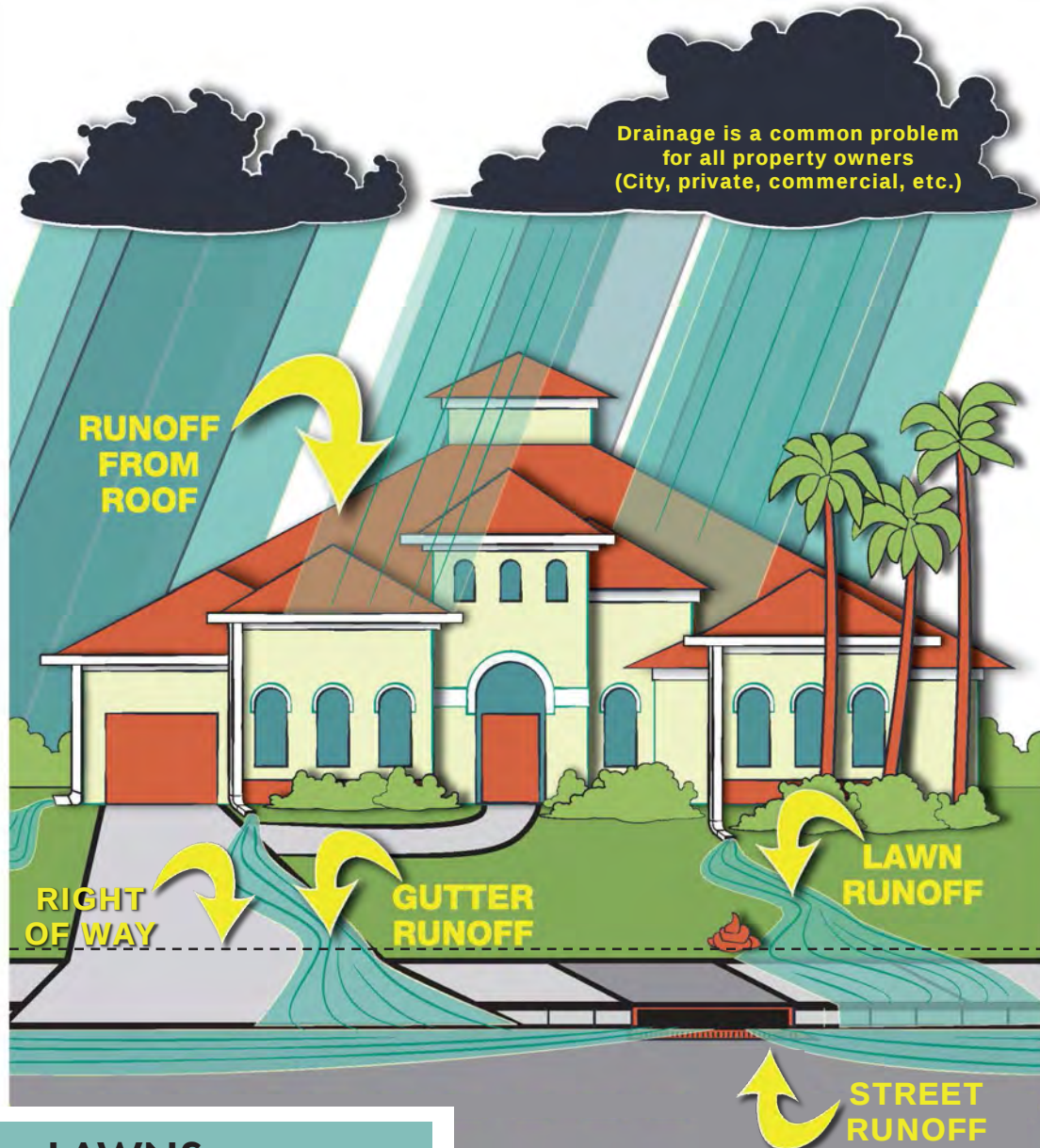
POST-1980's

- ✓ Stormwater Ponds
- ✓ Curb & Gutter
- ✓ Inlets
- ✓ Grading Plan



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RUNOFF SOURCES



LAWNS

ROOFS/GUTTERS

DRIVEWAYS

STREETS



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RETROFIT CHALLENGES

UTILITY CONFLICTS

BUILT-OUT RIGHTS-OF-WAY

LIMITED RIGHTS-OF-WAY SPACE

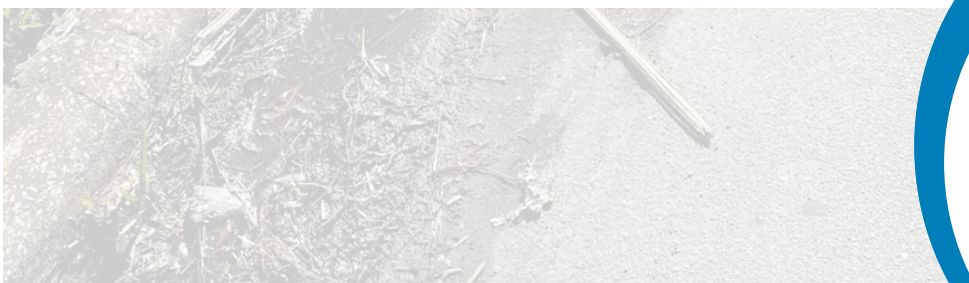
EASEMENTS/PROPERTY ACQUISITION

MAINTENANCE REQUIREMENTS

OFFSITE IMPACTS

PERMITTING

PROCUREMENT/BIDDING PROCESS



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IMPROVEMENT OPTIONS: CURB AND GUTTER



PROS

- + Improves stormwater conveyance
- + Improves overall aesthetics
- + Ease of long-term maintenance

CONS

- Cost
- Most invasive construction
- Existing utility conflicts
- Very long construction times (no driveway access or mail delivery)
- Limited emergency response access during construction
- Temporary construction easements
- Grading on private property

Cost	Construction Time	Permitting	Aesthetics	ROW Requirements	Maintenance	Construction Nuisance
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IMPROVEMENT OPTIONS: SWALES



PROS

- + Cost-effective
- + Construction time
- + Less challenging to permit

CONS

- Requires significant ROW
- May eliminate/reduce parking in ROW
- Standing water in swale bottoms
- Maintenance requirements
- Can fill in and reduce capacity over time
- Dips in driveways
- Aesthetics

Cost	Construction Time	Permitting	Aesthetics	ROW Requirements	Maintenance	Construction Nuisance
\$	⌚	📋	👍	↗ ↘	🔧 🔧	🚧



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IMPROVEMENT OPTIONS: INVERTED CROWN



PROS

- + Relatively quick construction
- + Use existing ROW
- + Less invasive effective way of removing roadway ponding
- + Limited conflicts with existing utilities

CONS

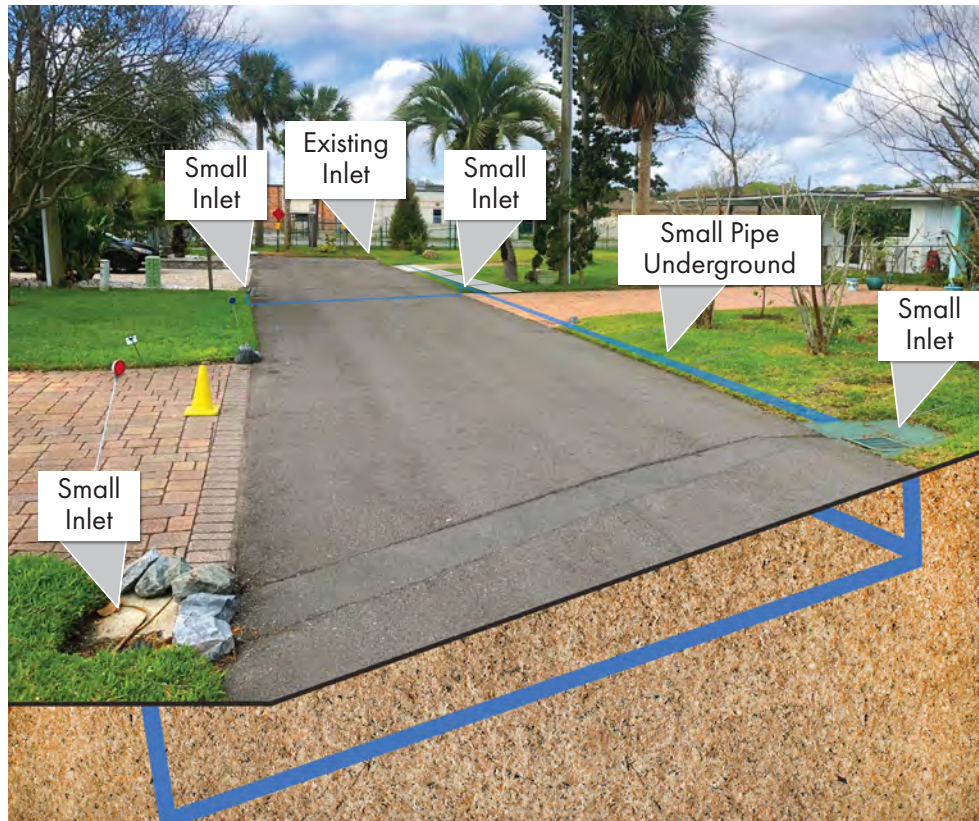
- Makes roadway maintenance more challenging
- Requires more maintenance than traditional roads
- Standing water in roadways during storm events (may impact emergency vehicle access)
- Debris and sediment accumulation in the roadways
- Speed bump removal required
- Not a standard practice on public roads

Cost	Construction Time	Permitting	Aesthetics	ROW Requirements	Maintenance	Construction Nuisance
\$ \$	🕒		👍 👍 👍	↗️	🔧 🔧	🚧 🚧



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IMPROVEMENT OPTIONS: LIGHTER, QUICKER, CHEAPER



PROS

- + Quick construction
- + Can usually be constructed within existing ROW
- + Smaller construction materials
- + Less invasive construction
- + Reduces nuisance standing water
- + Targeted approach

CONS

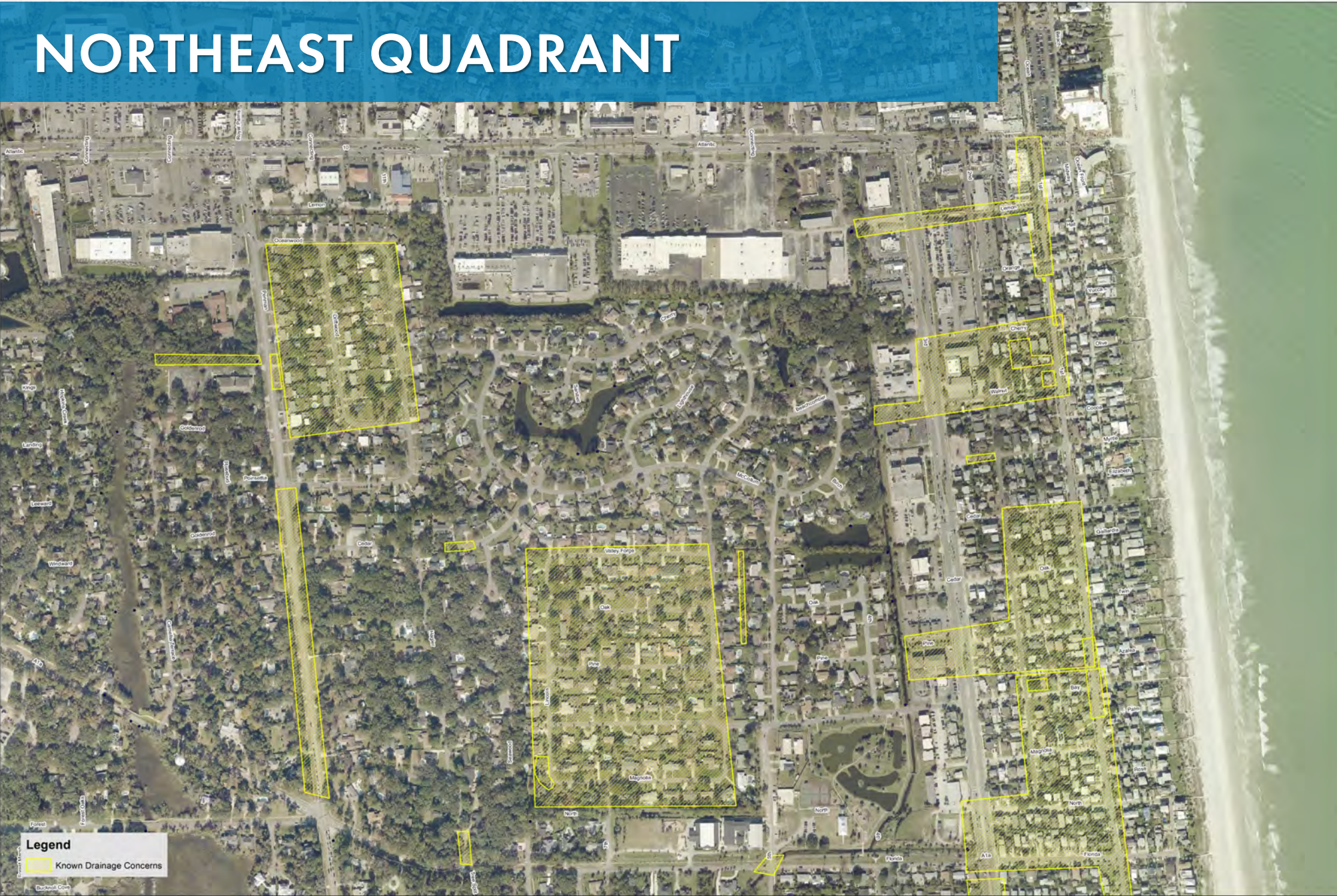
- Existing utility conflicts
- Will not eliminate all standing water
- Targeted approach
- Will not meet level-of-service goals

Cost	Construction Time	Permitting	Aesthetics	ROW Requirements	Maintenance	Construction Nuisance
\$	⌚	📋	👍👍	↗↗	🔧	🚧

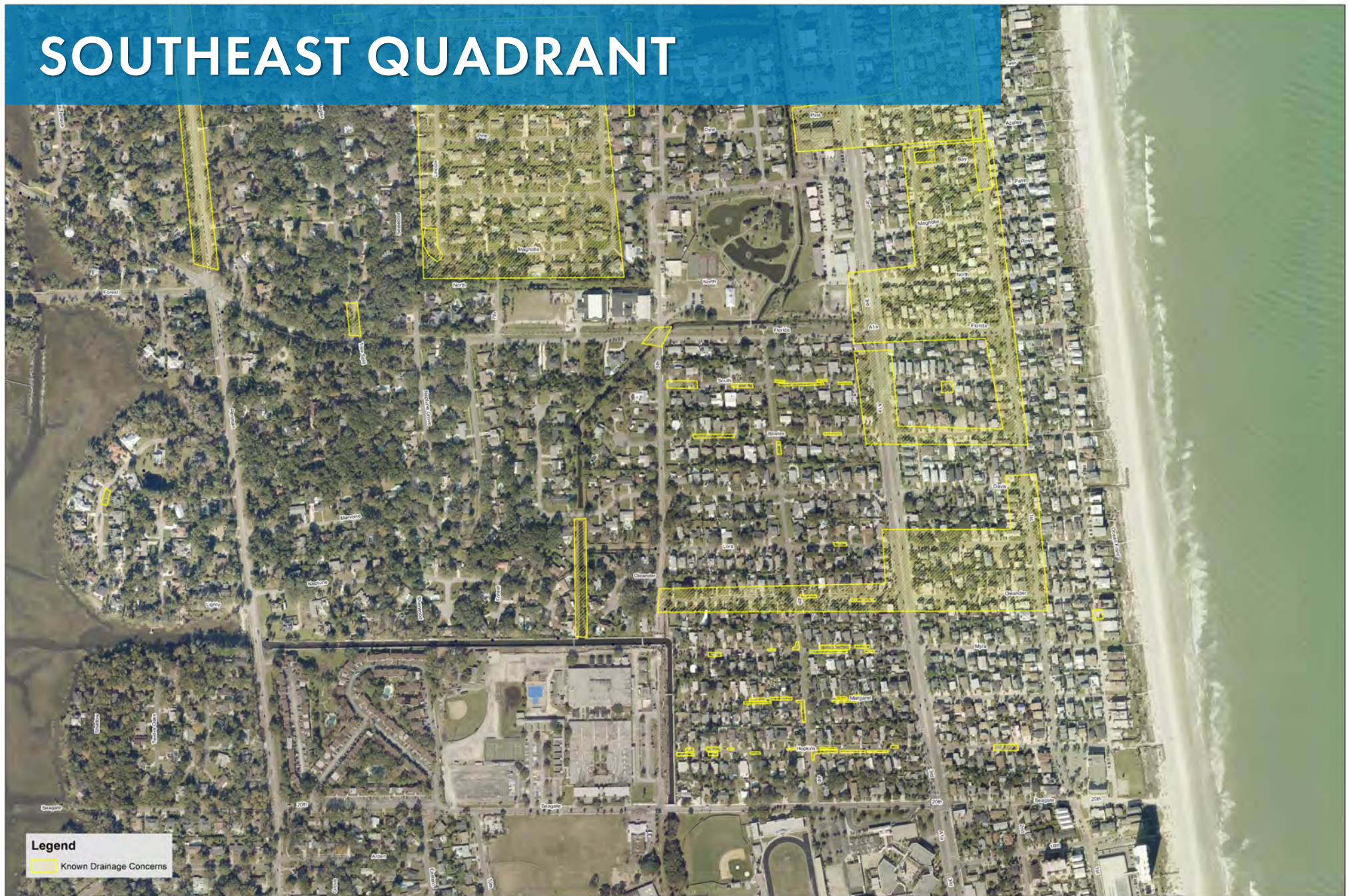


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NORTHEAST QUADRANT



SOUTHEAST QUADRANT



NORTHWEST QUADRANT

Legend

- Known Drainage Concerns

SOUTHWEST QUADRANT

Legend

- Known Drainage Concerns