

TURNBULL BAY ROAD BRIDGE PRESENTATION (UPDATED 9-9-11)

- COUNTY OWNED BRIDGE BUILT IN 1967 WITH 50-YR DESIGN LIFE EXPECTANCY
- CLOSED AUGUST 8TH DUE TO STRUCTURAL ISSUES AFTER 44 YEARS IN CORROSIVE SALTWATER ENVIRONMENT



TURNBULL BAY ROAD BRIDGE PRESENTATION



AUGUST 04, 2011

TO: Mr. Ron Meade, P.E.
District Structures Maintenance Engineer
F003 District 5 Structures Maintenance
1696 N. Kepler Road
DeLand, FL 32724

FROM: Patrick O'Grady
Project Manager
9270 Bay Plaza Blvd., Suite 605
Tampa, FL 33619

PROJECT: District 5 Districtwide Bridge Inspection Service
FF Nos. 244932-1-72-06, 244937 1 72 07,
245155-1-72-04 & 245191-2-72-02

SUBJECT: ADVISORY - BRIDGE CLOSURE - PROMPT CORRECTIVE ACTION
Bridge No. 794022
Routine Inspection - Special Inspection, August 04, 2011
Turnbull Bay Road over Turnbull Creek
Volusia County

COPIES: Thomas L. Morrissey III, P.E. - Volusia County
Thomas A. LoCicero, P.E.

CONTENT: Kisinger Campo and Associates Corp. (KCA) recently performed an interim inspection of the referenced bridge. During this inspection, KCA's inspection team and Professional Engineer observed critical and significant deficiencies to the concrete channel beams that require the closure of this bridge to all traffic. Overall NBI ratings for the SIA Item #59 Superstructure will be coded 1 - "IMMINENT FAILURE".

Please refer to the document following this letter for a complete list of all deficiencies found during the August 4, 2011 Interim Inspection.

RECOMMENDATIONS:

It is recommended that this structure be closed to all vehicular traffic until adequate repairs or replacement is completed.

If you have any questions, please feel free to contact me or our office.



Patrick O'Grady
Kisinger Campo and Associates Corp.
813/554-1919
pogrady@kcaeng.com

FILE: 79402270A_4_26_2111

(hardcopy to follow)

August 4, 2011

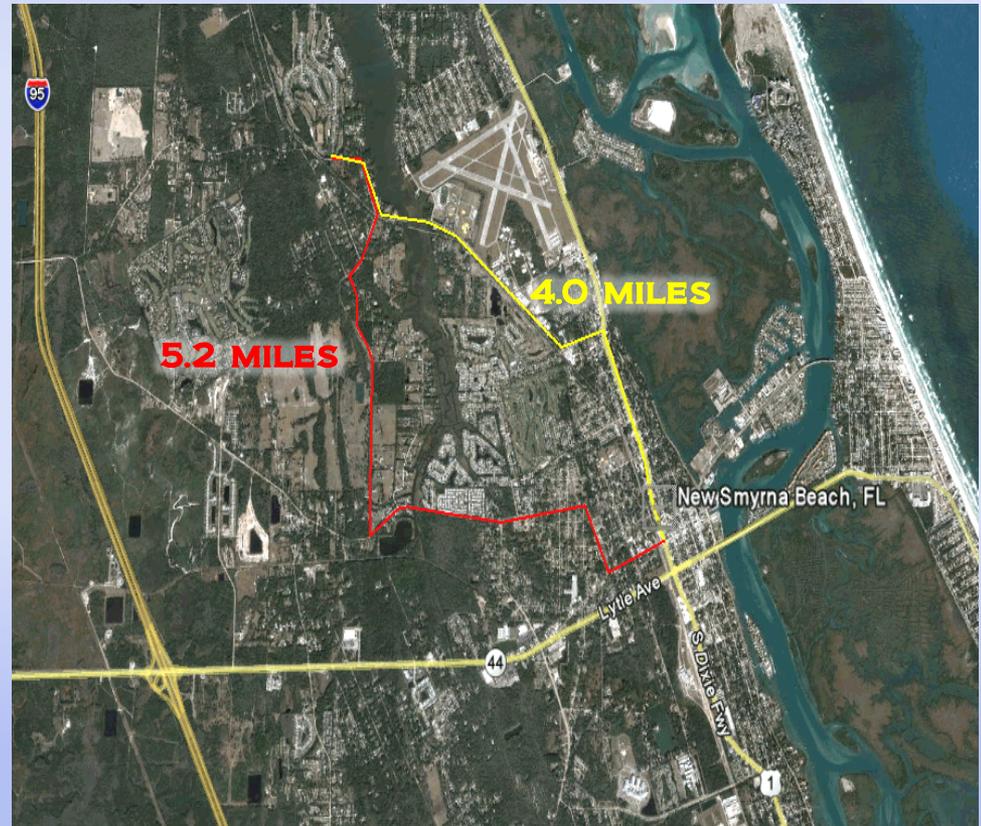
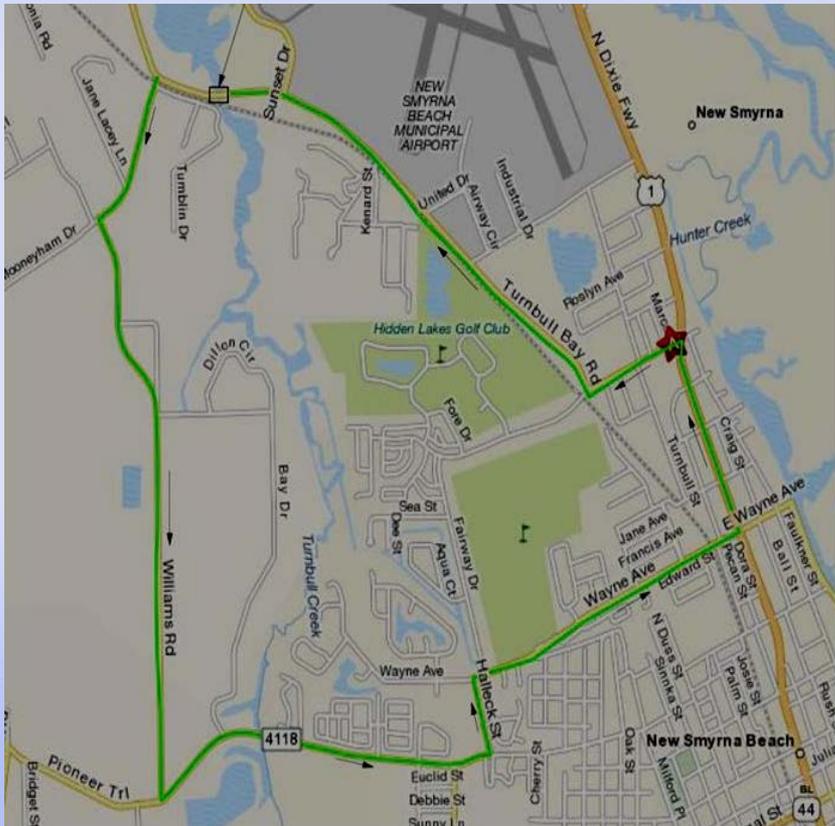
.....During this inspection, KCA's inspection team and Professional Engineer **observed critical and significant deficiencies to the concrete channel beams that require the closure of this bridge to all traffic.**

Overall NBI ratings for the SIA Item #59 Superstructure will be coded **1 - "IMMINENT FAILURE"**.

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MAXIMUM DETOUR DISTANCE IS
6.2 MILES

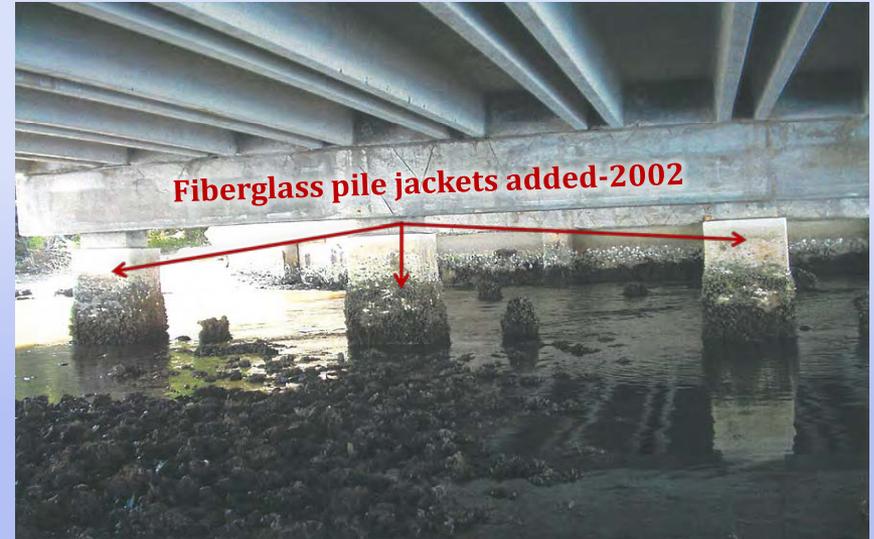
TURNBULL ESTATES TO DOWNTOWN
DETOUR IS 1.2 MILES LONGER



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STRUCTURAL INSPECTIONS AND REPAIRS

- **1992** - RATED STRUCTURALLY DEFICIENT (**ELIGIBLE FOR FEDERAL FUNDS**)
- **2001/02** - COUNTY REPAIRS SUBSTRUCTURE (PILES/CAPS)
(\$84,034)
- **2003** - No LONGER RATED STRUCTURALLY DEFICIENT (**NOT ELIGIBLE FOR FEDERAL FUNDS**)
- **2008** - AGAIN RATED STRUCTURALLY DEFICIENT (**ELIGIBLE FOR FEDERAL FUNDS**)
- **2008** - COUNTY REPAIRS SUPERSTRUCTURE (BEAMS)
- **2010** (Nov) - **FEDERAL FUNDS TO BE AVAILABLE IN LATE 2013**
(FOR CONSTRUCTION)
- **2011** (JULY) - BRIDGE REPLACEMENT CONCEPT REPORT COMPLETED

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STATUS OF BRIDGE REPLACEMENT

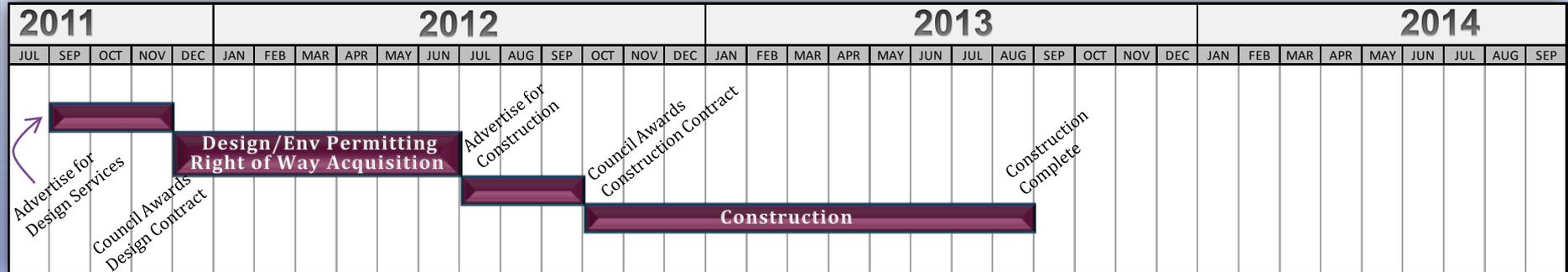
- FDOT (STATE) AGREES TO ACCELERATE FUNDING
- CONSTRUCTION FUNDING NOW AVAILABLE 2012 (JULY) INSTEAD OF LATE 2013
- NO PROCUREMENT SHORTCUTS ALLOWED WITH FEDERAL FUNDS
- SEPT 4, 2011 - AD PLACED FOR DESIGN SERVICES
- **SEPT 8, 2011 – COUNTY COUNCIL APPROVES TEMPORARY REPAIR TO REOPEN BRIDGE**
- JULY 2012 - COMPLETE BRIDGE DESIGN/ROW ACQUISITION/ENVIRONMENTAL PERMITTING
- OCT 2012 – BRIDGE CLOSES TO BUILD NEW BRIDGE
- SEPT 2013 - BRIDGE CONSTRUCTION COMPLETE

TURNBULL BAY ROAD BRIDGE PRESENTATION

ORIGINAL PROJECT SCHEDULE



REVISED (ACCELERATED) PROJECT SCHEDULE



TURNBULL BAY ROAD BRIDGE PRESENTATION

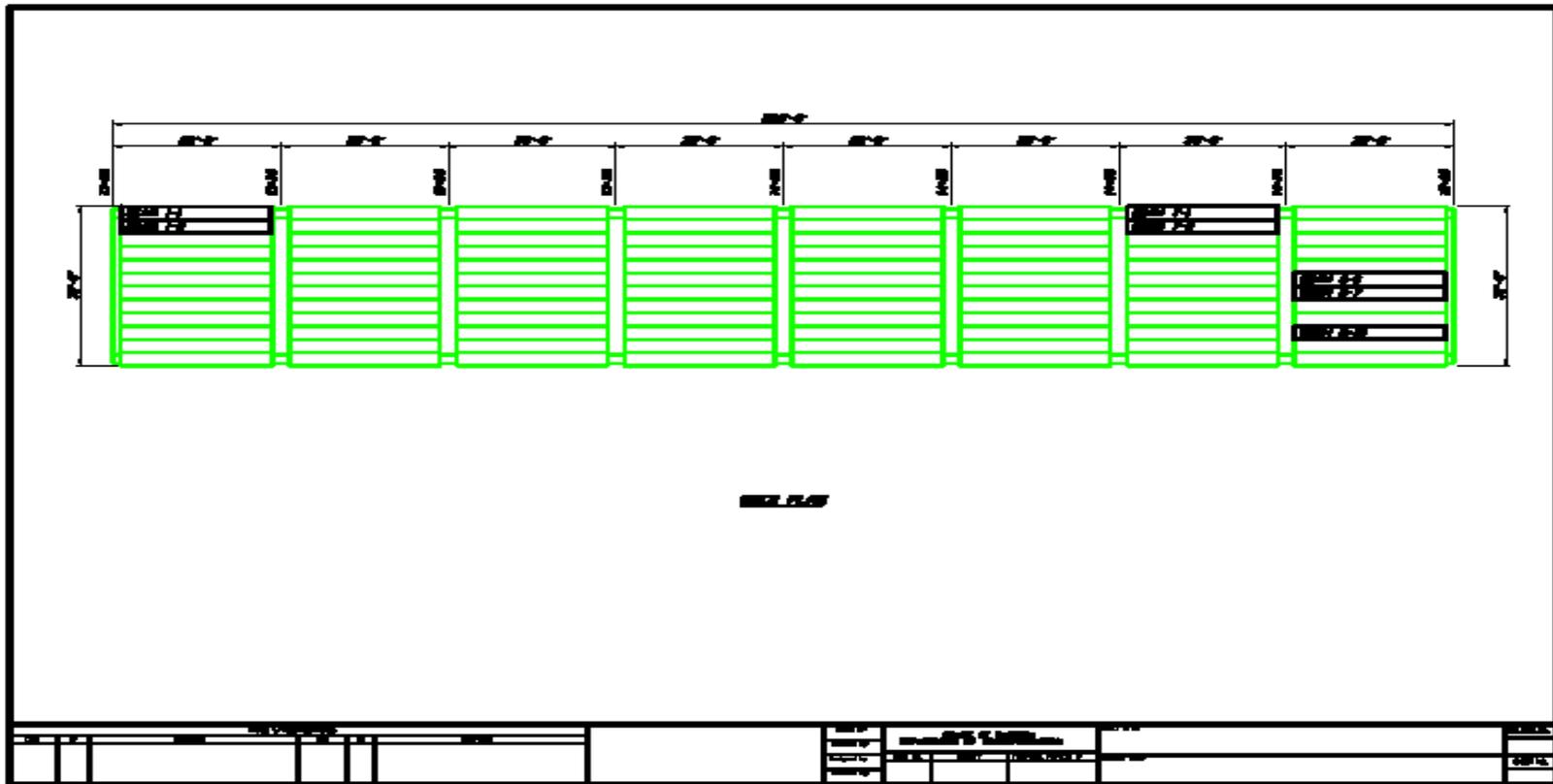
REPAIR TO BE MADE TO REOPEN EXISTING BRIDGE

- **SEPT 8, 2011 - COUNTY COUNCIL APPROVED REPAIR TO BE MADE TO REOPEN BRIDGE AS SOON AS POSSIBLE**
- **SCOPE OF REPAIR - REMOVE AND REPLACE SEVEN (7) CRITICALLY DEFICIENT BEAMS**
- **WEIGHT LIMIT TO BE 21 TONS (42,000 POUNDS) SUFFICIENT FOR SCHOOL BUSES AND EMERGENCY VEHICLES**
- **ESTIMATED COST = \$120,000 - \$200,000**
- **SEPT 13, 2011 - NEW SMYRNA BEACH COMMISSION TO CONSIDER PARTNERING 50%/50% IN THE COST**
- **BRIDGE REOPENING EXPECTED WITHIN 45-90 DAYS**
- **REDUCES BRIDGE CLOSURE DURATION FROM APPROX 2 YEARS TO 1 YEAR OR LESS**

TURNBULL BAY ROAD BRIDGE PRESENTATION

SEVEN (7) DEFICIENT BEAMS TO BE REPLACED

23 - 200



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QUESTIONS / COMMENTS ?

