

RESOLUTION NO. 89- 111

A RESOLUTION AUTHORIZING THE EXECUTION OF A CERTAIN CONTRACT FOR THE ACQUISITION OF CERTAIN PROPERTY NECESSARY FOR IMPROVING THE DRAINAGE SYSTEM ON KINGS ROAD.

WHEREAS, St. Johns County, Florida, a political subdivision of the State of Florida, hereinafter called "County," has received an offer to convey certain property necessary for improving the drainage system on Kings Road and

WHEREAS, The County is desirous of accepting the proposed Contract offered by the said Richard W. Dowdy and his wife Cathy B. Dowdy upon the terms and conditions contained therein, a copy of such proposed Contract being attached hereto.

NOW, THEREFORE, be it RESOLVED by the Board of County Commissioners of St. Johns County, Florida, as follows:

Section 1. The County accepts the aforementioned Contract as offered by Richard W. Dowdy and Cathy B. Dowdy upon the terms and conditions contained therein.

Section 2. By its acceptance of such proposed Contract, the County agrees:

a. To pay only the following cost involved in obtaining said property from Richard W. Dowdy and Cathy B. Dowdy.

- i. Title Insurance
- ii. Cost of preparation of the Deed
- iii. Cost of recording the deed.
- iv. Any other charges which may be levied necessary to the recording of the deed.

v. All adjustments of taxes are to be made on a pro rata basis at time of closing.

Section 3. The Chairman of the Board of County Commissioners, St. Johns County, Florida, and the Clerk of the Circuit Court for St. Johns County, ex-officio Clerk of the Board of County Commissioners, St. Johns County, Florida, or his designated Deputy Clerk, be, and they are hereby, authorized and directed to duly execute the original of such Contract.

Section 4. This Resolution shall become effective immediately upon its adoption.

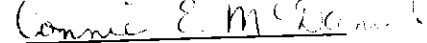
ADOPTED this 23rd day of May 1989.

BOARD OF COUNTY COMMISSIONERS
ST. JOHNS COUNTY, FLORIDA

BY: 

Its Chairman

ATTEST: Carl "Bud" Markel, Clerk

BY: 

Deputy Clerk

CONTRACT

THIS AGREEMENT made and entered into this 23rd day of May, A.D., 1989 by and between ST. JOHNS COUNTY, FLORIDA, a political subdivision of the State of Florida, hereinafter called "County," and Richard W. Dowdy and Cathy B. Dowdy, his wife, hereinafter called "Sellers."

WITNESSETH:

WHEREAS, THE County proposes to improve the drainage system on Kings Road which will encompass the property of the Seller, and

WHEREAS, the County is desirous of purchasing, on a negotiated basis, the property for improving the drainage on Kings Estate Road and Seller is desirous of selling upon the terms and conditions hereinafter expressed.

NOW THEREFORE, it is mutually agreed as follows:

1. Seller shall sell and County shall buy, for the purchase price hereinafter set forth, the following parcel of real property in St. Johns County, Florida to wit:

Lot 8, TARA SUBDIVISION, Map book 13, Page 108, Public Record of St. Johns County, Florida, being a replat of: Tract 14, Unit 3, ST. AUGUSTINE HEIGHTS, Map Book 10, Pages 40 and 41.

2. The purchase price of the property to be acquired by the County shall be \$20,000.00.

3. Conveyance shall be by good and sufficient warranty deed which shall convey the property in fee simple. The County shall be 30 days to make such examination of title as it deems appropriate and shall advise the Seller, in writing, of any defects of title or exceptions thereto and Seller shall have 15 days thereafter to clear such defects or exceptions and to close. The full purchase price shall be paid at the time of closing.

4. It is understood and agreed that the County shall pay for title insurance and for the cost of preparation of the deed, recording the deed and any other charges which may be levied necessary to the recording of the deed.

5. All adjustments of taxes are to be made on a porata basis at time of closing.

IN WITNESS WHEREOF, the parties have hereunto set their hands and seals the day and year first written above.

Signed, sealed and delivered
in the presence of:

Connie E. McDaniel
Witness as to County

Catherine O. Fallyga
Witness as to County

Patti M. Greene
Witness as to Sellers

Marshall Allen
Witness as to Sellers

ST. JOHNS COUNTY, FLORIDA

BY: Harry Walker
Chairman

ATTEST:

Paul "Doc" M. Hall
Clerk of the Circuit Court for
St. Johns County, ex officio Clerk
of the Board of County Commissioners
St. Johns County, Florida

"County"
Richard W. Dowdy
Richard W. Dowdy

Cathy B. Dowdy
Cathy B. Dowdy

LAND APPRAISAL REPORT

6820

IDENTIFICATION

Borrower NA Census Tract 213 Map Reference 4F/1N
 Property Address Kings Road
 City St. Augustine County St. Johns State Fla. Zip Code 32086
 Legal Description Lot 8, Tara Subdivision. OR 777/0410
 Sale Price \$ NA Date of Sale NA Loan Term - yrs. Property Rights Appraised Fee Leasehold De Minimis PUD
 Actual Real Estate Taxes \$ 118.(88) (yr.) Loan charges to be paid by seller \$ NA Other sales concessions NA
 Lender/Client St. Johns County Address P. O. Box 349, St. Augustine, FL 32085
 Occupant Unimproved Appraiser C.H.Hunter, Jr. RM Instructions to Appraiser Purchase Order # BO 6172

NEIGHBORHOOD

Location Urban Suburban Rural
 Built Up Over 75% 25% to 75% Under 25%
 Growth Rate Fully Dev. Rapid Steady Slow
 Property Values Increasing Stable Declining
 Demand/Supply Shortage In Balance Over Supply
 Marketing Time Under 3 Mos. 4-6 Mos. Over 6 Mos.
 Present Land Use 60 % 1 Family 40 % 2-4 Family _____ % Apts _____ % Condo _____ % Commercial
 Change in Present Land Use Not Likely Likely (*) Taking Place (*)
 (*) From _____ To _____
 Predominant Occupancy Owner Tenant _____ % Vacant
 Single Family Price Range \$ 60 to \$ 175 Predominant Value \$ 100+-
 Single Family Age New yrs. to 10 yrs. Predominant Age 5 yrs.

Employment Stability Good Avg. Fair Poor
 Convenience to Employment
 Convenience to Shopping
 Convenience to Schools
 Adequacy of Public Transportation
 Recreational Facilities
 Adequacy of Utilities
 Property Compatibility
 Protection from Detrimental Conditions
 Police and Fire Protection
 General Appearance of Properties
 Appeal to Market

Comments including those factors, favorable or unfavorable, affecting marketability (e.g. public parks, schools, view, noise) Neighborhood is composed of mobile homes and single family dwellings. Subject property is located within 2 miles of St. Augustine. School buses transport students to area schools. Fire protection is provided by volunteer fire units.

SITE

Dimensions 120' x 384'+-(subject to survey) 0.99 Acres Corner Lot
 Zoning classification Single family dwellings Present improvements do do not conform to zoning regulations
 Highest and best use: Present use Other (specify) _____
 Elec. Public Other (Describe) Fla P&L Co
 Gas Commercial
 Water Well
 San. Sewer Septic
 Underground Elect. & Tel.
 OFF SITE IMPROVEMENTS
 Street Access: Public Private
 Surface Asphalt
 Maintenance: Public Private
 Storm Sewer Curb/Gutter
 Sidewalk Street Lights
 Topo Below road level (undulating)
 Size Average for the neighborhood
 Shape Rectangular
 View Average (residential)
 Drainage Average (adequate)
 Is the property located in a HUD Identified Special Flood Hazard Area? No Yes
Flood zone C (FEMA MAP)
 Comments (favorable or unfavorable including any apparent adverse easements, encroachments or other adverse conditions) 125147-0139D). Septic tanks and wells are typical for the area. No adverse conditions noted by visual inspection. (Backs up to FEC Railroad which has not affected value of adjoining lots).

MARKET DATA ANALYSIS

The undersigned has reciled three recent sales of properties most similar and proximate to subject and has considered these in the market analysis. The description includes a dollar adjustment, reflecting market reaction to those items of significant variation between the subject and comparable properties. If a significant item in the comparable property is superior to, or more favorable than, the subject property, a minus (-) adjustment is made, thus reducing the indicated value of subject; if a significant item in the comparable is inferior to, or less favorable than, the subject property, a plus (+) adjustment is made, thus increasing the indicated value of the subject.

ITEM	Subject Property	COMPARABLE NO. 1	COMPARABLE NO. 2	COMPARABLE NO. 3
Address	Kings Road Lot 8, Tara S/D	Kings Road Tara S/D Lot 12	Mac Road, Lot 21, Blk 2, Kings Wooded Acres	Oak Lane, Lot 22, Wildwood Estates
Proximity to Subj.		1 block north	1/2 mile southwest	2.25 miles south
Sales Price	\$ NA	\$ 20,000	\$ 25,500	\$ 9,500
Price	\$ Na	\$ 24000A	\$ 25500A	\$ 19000A
Data Source	Inspection	Public Records	Public Records	Public Records
Date of Sale and Time Adjustment	DESCRIPTION NA	DESCRIPTION 3/17/89	DESCRIPTION 7/26/88	DESCRIPTION 3/14/89
Location	Suburban	Suburban	Suburban	Suburban
Site/View	.99Acre/Avg. Low elevation	.83 Acre Superior	1 acre/Avg. Superior	.50 Acre/Avg. Similar
Sales or Financing Concessions	NA NA	None Known	None Known	None Known
Net Adj. (Total)		<input checked="" type="checkbox"/> Plus; <input type="checkbox"/> Minus \$ 800	<input type="checkbox"/> Plus; <input checked="" type="checkbox"/> Minus \$ -5,250	<input checked="" type="checkbox"/> Plus; <input type="checkbox"/> Minus \$ 9,500
Indicated Value of Subject		\$ 20,800	\$ 20,250	\$ 19,000

Comments on Market Data: Comp #2 is over 6 months old and comp #3 is more than 1 mile from subject but is similar to subject. All comps returned similar value estimates and are given equal weight.

RECONCILIATION

Comments and Conditions of Appraisal: Consideration has been given to easements and restriction lines of record. Violations or encroachments by the fences, walks, driveways or easily removable buildings, in my opinion, are not detrimental to the value or marketability of the property.
 Final Reconciliation: In the appraisal of unimproved residential land, the market approach provides the only reliable approach to value.

I ESTIMATE THE MARKET VALUE, AS DEFINED, OF SUBJECT PROPERTY AS OF May 12, 19 89 to be \$ 20,250

NAME: N/A

PROPERTY ADDRESS: Kings Road, Tara Subdivision, Lot 8

CITY St. Augustine COUNTY St. Johns STATE Florida ZIP CODE 32086

LOCATION INSTRUCTIONS: See location map attached



(FRONT VIEW)



PHOTO

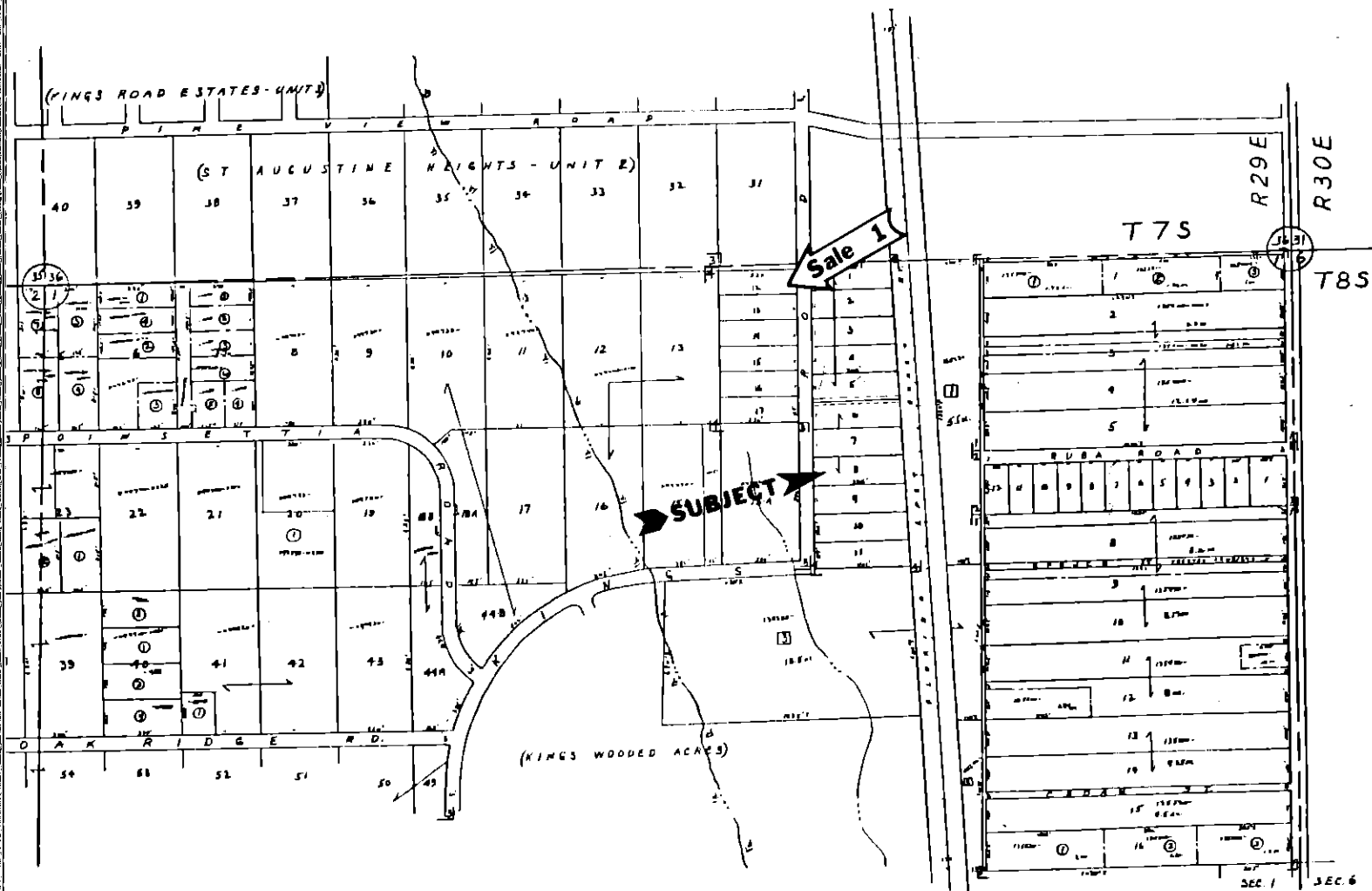


(REAR VIEW)



(STREET VIEW)

SEE 94/363



SEE 54/74

SEE 4F/13

OVERLAYS AERIAL PHOTO #140A (M)

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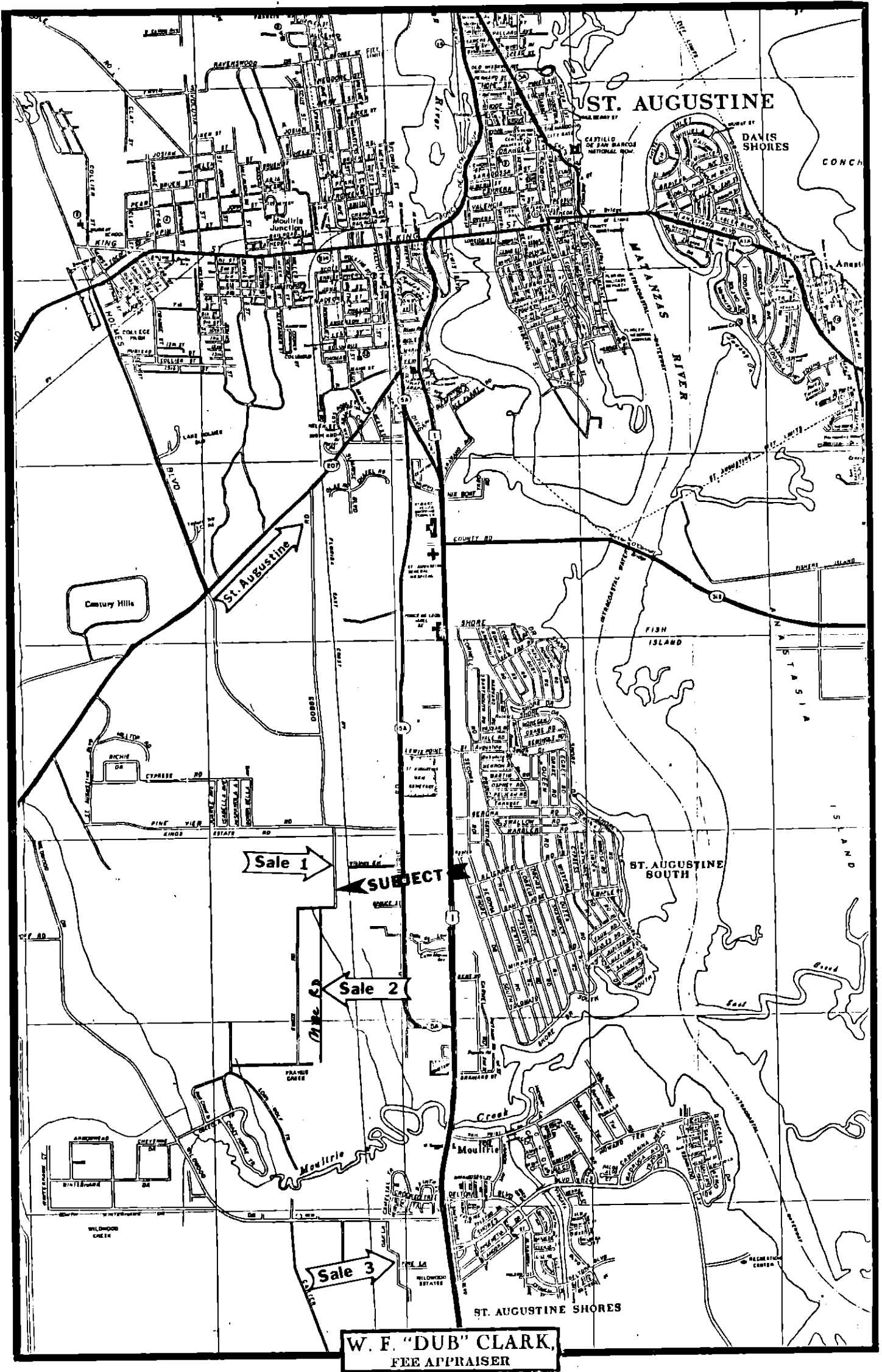
THIS MAP IS FOR INFORMATION PURPOSES ONLY
 IT DOES NOT CONSTITUTE A WARRANTY OF ANY KIND
 THE STATE ASSUMES NO LIABILITY FOR "ERRORS" OR "OMISSIONS"

ST. JOHNS COUNTY, FLORIDA			
OFFICE OF PROPERTY APPRAISAL			
SECTION	TOWNSHIP	RANGE	SECTION
1	8S	29E	4F
SCALE	DATE		
1"=200'	11/27/90		

Location Map

Name N/A

Address Kings Road, Tara S/D, St. Augustine, Florida 32086



DEFINITION OF MARKET VALUE: The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller, each acting prudently, knowledgeably and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby: (1) buyer and seller are typically motivated; (2) both parties are well informed or well advised, and each acting in what he considers his own best interest; (3) a reasonable time is allowed for exposure in the open market; (4) payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and (5) the price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions* granted by anyone associated with the sale.

*Adjustments to the comparables must be made for special or creative financing or sales concessions. No adjustments are necessary for those costs which are normally paid by sellers as a result of tradition or law in a market area; these costs are readily identifiable since the seller pays these costs in virtually all sales transactions. Special or creative financing adjustments can be made to the comparable property by comparisons to financing terms offered by a third party institutional lender that is not already involved in the property or transaction. Any adjustment should not be calculated on a mechanical dollar for dollar cost of the financing or concession but the dollar amount of any adjustment should approximate the market's reaction to the financing or concessions based on the appraiser's judgment.

CERTIFICATION AND STATEMENT OF LIMITING CONDITIONS

CERTIFICATION: The Appraiser certifies and agrees that:

1. The Appraiser has no present or contemplated future interest in the property appraised; and neither the employment to make the appraisal, nor the compensation for it, is contingent upon the appraised value of the property.
2. The Appraiser has no personal interest in or bias with respect to the subject matter of the appraisal report or the participants to the sale. The "Estimate of Market Value" in the appraisal report is not based in whole or in part upon the race, color, or national origin of the prospective owners or occupants of the property appraised, or upon the race, color or national origin of the present owners or occupants of the properties in the vicinity of the property appraised.
3. The Appraiser has personally inspected the property, both inside and out, and has made an exterior inspection of all comparable sales listed in the report. To the best of the Appraiser's knowledge and belief, all statements and information in this report are true and correct, and the Appraiser has not knowingly withheld any significant information.
4. All contingent and limiting conditions are contained herein (imposed by the terms of the assignment or by the undersigned affecting the analyses, opinions, and conclusions contained in the report).
5. This appraisal report has been made in conformity with and is subject to the requirements of the Code of Professional Ethics and Standards of Professional Conduct of the appraisal organizations with which the Appraiser is affiliated.
6. All conclusions and opinions concerning the real estate that are set forth in the appraisal report were prepared by the Appraiser whose signature appears on the appraisal report, unless indicated as "Review Appraiser." No change of any item in the appraisal report shall be made by anyone other than the Appraiser, and the Appraiser shall have no responsibility for any such unauthorized change.

CONTINGENT AND LIMITING CONDITIONS: The certification of the Appraiser appearing in the appraisal report is subject to the following conditions and to such other specific and limiting conditions as are set forth by the Appraiser in the report.

1. The Appraiser assumes no responsibility for matters of a legal nature affecting the property appraised or the title thereto, nor does the Appraiser render any opinion as to the title, which is assumed to be good and marketable. The property is appraised as though under responsible ownership.
2. Any sketch in the report may show approximate dimensions and is included to assist the reader in visualizing the property. The Appraiser has made no survey of the property.
3. The Appraiser is not required to give testimony or appear in court because of having made the appraisal with reference to the property in question, unless arrangements have been previously made therefor.
4. Any distribution of the valuation in the report between land and improvements applies only under the existing program of utilization. The separate valuations for land and building must not be used in conjunction with any other appraisal and are invalid if so used.
5. The Appraiser assumes that there are no hidden or unapparent conditions of the property, subsoil, or structures, which would render it more or less valuable. The Appraiser assumes no responsibility for such conditions, or for engineering which might be required to discover such factors.
6. Information, estimates, and opinions furnished to the Appraiser, and contained in the report, were obtained from sources considered reliable and believed to be true and correct. However, no responsibility for accuracy of such items furnished the Appraiser can be assumed by the Appraiser.
7. Disclosure of the contents of the appraisal report is governed by the Bylaws and Regulations of the professional appraisal organizations with which the Appraiser is affiliated.
8. Neither all, nor any part of the content of the report, or copy thereof (including conclusions as to the property value, the identity of the Appraiser, professional designations, reference to any professional appraisal organizations, or the firm with which the Appraiser is connected), shall be used for any purposes by anyone but the client specified in the report, the borrower if appraisal fee paid by same, the mortgagee or its successors and assigns, mortgage insurers, consultants, professional appraisal organizations, any state or federally approved financial institution, any department, agency, or instrumentality of the United States or any state or the District of Columbia, without the previous written consent of the Appraiser; nor shall it be conveyed by anyone to the public through advertising, public relations, news, sales, or other media, without the written consent and approval of the Appraiser.
9. On all appraisals, subject to satisfactory completion, repairs, or alterations, the appraisal report and value conclusion are contingent upon completion of the improvements in a workmanlike manner.
10. Since the flood maps published by the National Flood Insurance Program are vague and poorly defined in some areas, the appraiser has used his best judgement as to the subject property both by visual inspection and plotting on the map. In the absence of a survey, the appraiser assumes no responsibility for the flood zone classification.
11. If subject property is not connected to a public sewerage system and water supply, the appraiser makes no warranty or representation as to the adequacy or quality of the sanitary disposal system, well and well water.

Date: May 15, 1989

Appraiser(s)

C. H. Hunt

RM



Connie H. Hunter, Jr., RM

CLARK, HUNTER & ASSOCIATES FEE APPRAISERS



W. F. "Dub" Clark, SRA

APPRAISER'S QUALIFICATIONS

Connie H. Hunter, Jr.

GENERAL INFORMATION:

Born in St. Augustine, Florida.

Have lived in St. Augustine since birth.

PROFESSIONAL AFFILIATIONS:

Licensed residential building contractor, St. Johns County and State of Florida 1972.

Licensed Real Estate Broker 1976.

RM (1986) - American Institute of Real Estate Appraisers.
(No. 2027) CURRENTLY CERTIFIED.

PROFESSIONAL EDUCATION:

Successfully completed the following courses sponsored by the American Institute of Real Estate Appraisers:

- (1) Course 101, Introduction to Appraising Real Property.
- (2) Course 102, Residential Valuation.
- (3) Standards of Professional Practice.

Various seminars, most recent being "Keys to Market Analysis, Appraisal report as a communication tool, Standards of Professional Practice Update and HP-12 as a valuation tool".

EXPERIENCE:

Have been appraising real estate since 1978. During this period, appraisals have been made on such properties as:

Single family and multi-family dwellings.
Condominiums, PUD's and Apartment complexes.
Commercial buildings, Commercial land.
Lots and acreage.

Extensive experience as a review appraiser.

Approved as a fee basis appraiser by the Veterans Administration.





QUILLEN
MILLS
BRODY, INC.

Dobbs Road - Kings Estate Road
Drainage Study
St. Johns County, Florida

I. Purpose:

At the request of the St. Johns County Engineering and Road and Bridge Departments, Quillen Mills Brody, Inc. has performed a conceptual study of the existing drainage patterns and possible alternative proposals for drainage improvements within the subject area. The limits of the study extend from the north end of Dobbs Road at the S.R. 207 intersection, southward to the Kings Estate Road/Kings Road area and westward to a tributary to Moultrie Creek. Topographic information provided by St. Johns County included aerial photo topographic maps and field survey information obtained by St. Johns Survey Company. The purpose of the study was to evaluate alternative solutions for relief of flooding problems at the Dobbs Road/Kings Estate Road intersection and drainage impairments along Dobbs Road.

II. Drainage Problems:

There appear to be two separate problem areas. The first of which is at the Dobbs Road Connector intersection with Dobbs Road. The problem here is collected standing water with no positive outfall. Runoff drains from both the north and south along Dobbs Road to this point. The problem is further aggravated by a combination of a high water table and an isolated wetland on the east side of Dobbs Road. Water elevations in this area have been further increased by construction activities on the Florida Rock site which impounds water in the wetland area.

The second problem is excessive runoff accumulating at the Kings Estate Road/Dobbs Road intersection. This runoff continues south along Kings Road, however, the natural outfall has been impeded by the platted lots east of Kings Road. Consequently flooding occurs in these lots.

CONSULTING CIVIL ENGINEERS
LAND PLANNERS
SURVEYORS

3175 U.S. 1 SOUTH ST. AUGUSTINE, FLORIDA 32086

(904) 797-8800

(904) 353-6808 (JAX.)

III. Site Characteristics:

A. Proposed S.R. 312 Extension to Vogel Plumbing:

This area comprised 150 acres between the Florida East Coast (FEC) railroad track and the westward drainage divide. Small areas which drain directly to the FEC have not been included. A majority of this basin (all west of Dobbs Road) gradually flows overland southeasterly to a dirt road west of Vogel Plumbing, then easterly to Dobbs Road and southerly along Dobbs Road. The developed portion of the basin drains to Dobbs Road. The road ditches drain southerly from the S.R. 312 extension to the Dobbs Road connector at a 0.12% grade. However, from the Dobbs Road connector south to Vogel Plumbing, the road ditch flows north. In order to direct this flow to the south the road ditches would have to be regraded for approximately 2100 feet. The cuts would range from 6" to over 4' to provide a 0.1% grade. This results in a ditch which would exceed 6' in depth in some places. In order to keep a maximum ditch depth of 3-3.5 feet, a gradient in the range of 0.02-0.03% would be required.

B. Vogel Plumbing to Kings Estate Road:

South of Vogel Plumbing the road ditch maintains a positive gradient (0.1% - 0.15%) to the south. A majority of the contributing drainage area here lies west of Dobbs Road and flows gradually overland to the southeast to Cypress Road, then easterly to Dobbs Road, then southerly along Dobbs Road to Kings Estate Road.

C. South of Kings Estate Road:

This area contains 25 acres on both sides of Kings Road. The flow crosses Kings Estate Road through two 18" culverts and flows southward approximately 1500 feet, then overflows to the east onto private property. The eventual natural outfall is another 1000 feet southeast via a culvert underneath the FEC railroad to a natural drainageway.

D. Runoff Estimates:

There are approximately 220 acres presently draining to the Kings Estate Road/Dobbs Road intersection, most of which is overland flow from west of Dobbs Road. If all drainage from the

S.R. 312 extension was included, the total contributing area would be approximately 370 acres. Due to a lack of gradient, the overland flow has a large time of concentration. Hydrographs were run for both a ten and 25 year storm. The 25 year peak discharge was 96 cfs for the smaller basin and 172 cfs for the larger basin. The ten year peak discharges were 74 and 134 cfs respectively. The time to peak was 20 hours. The ten year discharges were used to estimate culvert sizes. For the preliminary purposes of this study these analyses disregard existing retention areas and ponding areas in undeveloped portions of the watershed.

IV. Alternative Solutions:

A. Dobbs Road Connector/Dobbs Road:

1. All drainage from S.R. 312 extension to the south - As discussed in the site characteristics section, from the Dobbs Road connector south to Vogel Plumbing, the road ditches flow to the north. To reverse this grade, cuts up to four feet would be required. In order to provide positive drainage (at a minimum of 0.05% slope), regarding of the ditch all the way to Kings Estate Road (approximately 6700 feet) would be required. The elevation at Kings Estate Road would still be 1/2' below the existing cross-drain. Additionally, at least 4000' of this length should be culverted (18" minimum) to eliminate ditches greater than four feet deep.
2. Split drainage - This alternative involves sending all drainage north of the Dobbs Road connector to the north, and all drainage south of the connector to the south. This could be accomplished by filling the ditches immediately north and south of the Dobbs Road connector to ground level. The north section could then be sloped at 0.10% northward to the the area of the S.R. 312 extension, at which point positive drainage is available to the north. The south section could be sloped to just north of the county road R/W (+ 2300 feet), at which point positive outfall is available to the south.

The constraints on this alternative are that a positive outfall to the north be found which bypasses, without discharging to, the S.R. 312 Extension. Also, the Dobbs Road connector drainage structure must remain in place and this drainage be handled separately.

3. All drainage from Vogel Plumbing to the north - This would require regrading of the ditches for approximately 2100' all the way to S.R. 207. Additionally, approximately 1500' of this length should be culverted (18" minimum) to eliminate ditches greater than four feet deep. Also, this discharge would somehow have to bypass the S.R. 312 extension.
4. Unfeasible alternatives - Use of the S.R. 312 extension as an outfall was not considered, based on input from St. Johns County. Use of the Dobbs Road connector as an outfall was not considered based upon county input, plus a field inspection which revealed no outfall and existing groundwater in the ditches.

B. Kings Estate Road/Dobbs Road

1. Partial outfall to Cypress Road - Drainage from the north could be diverted westward along Cypress Road approximately 1500' where positive outfall to a Moultrie Creek tributary is available. Of this 1500', approximately 900' would involve minor regrading of an existing ditch. The remaining 600' would have to be culverted (30" minimum) to avoid excessive ditch depths through the high ground. This alternative would divert approximately 80% of the watershed contributing to the Kings Estate Road area. Provisions would still be necessary for the remaining 20% of drainage area.
2. Partial outfall to Kings Estate Road - Drainage from the north could be diverted westward along Kings Estate Road approximately 1400' where positive outfall to the Moultrie Creek tributary is available. Of this 1400', approximately 400' would involve minor ditch regrading. The remaining 1000' would have to be culverted (30" minimum) to avoid excessive ditch depths through the high ground. This alternative would divert all of the drainage area north of Kings Estate Road. Provisions would still have to be made for the remaining 25 acres south of Kings Estate Road.
- ③ Construct outfall through the Tara subdivision east of Kings Road - This alternative involves carrying all the drainage across Kings Estate Road and southward along Kings Road. An outfall would have to be constructed to the east of Kings Road. It is not feasible to construct this outfall in the

existing 30 foot drainage easement on the lot 5/6 line, a lot in the vicinity of lot 8 should be purchased for this purpose.

4. Unfeasible alternatives - Diversion of runoff to the west along the existing 60' county road R/W north of Cypress Road was not considered because there is no available positive outfall within this R/W. Use of existing county property or purchase of property north of Kings Estate Road for a detention area was not considered because existing ditch grades are at or below the seasonal high water table and consequently no detention storage would be available. Outfall to the east across the FEC railroad was not considered due to the problems associated with crossing the railroad and the distance to travel through developed areas to reach a positive outfall.

V. Costs:

The following costs are general estimates to provide guidance as to relative costs per alternative. Obviously, many detail type items are not included, but the figures given should cover the major items and allow a comparison of alternatives.

A. Dobbs Road Connector/Dobbs Road

1. All drainage from S.R. 312 extension to the south -

Ditch Regrading 2700 l.f. @ \$1 =	\$ 2,700
Culvert (18") 400 l.f. @ \$30 =	120,000
Driveway Culvert Reset/Replacement, 5 @ \$500 =	2,500
Cross Drains, 3 @ \$1,500 =	4,500
TOTAL =	\$ 129,700

2. Split Drainage -

Ditch Regrading 3500 l.f. @ \$1 =	\$ 3,500
Driveway Culvert/Replacement 25 @ \$500 =	12,500
Cross Drain 2 @ \$1,500 =	3,000
TOTAL =	\$ 19,000

3. All drainage to the north -

Ditch Regrading 600' @ \$1 = \$	600
Culvert (18") 1500 l.f. @ \$30 =	45,000
Driveway Culvert Reset/Replacement 1B @ \$500 =	9,000
Cross Drains 2 @ \$1,500 =	3,000
TOTAL = \$	57,600

B. Kings Estate Road/Dobbs Road

1. Partial outfall to Cypress Road -

Ditch Regrading 900' @ \$1 = \$	900
Culvert (30") 600' @ \$50 =	30,000
Driveway Culvert Reset/Replacement 5 @ \$500 =	2,500
Cross Drains 2 @ \$1,500 =	3,000
TOTAL = \$	36,400

2. Partial outfall to Kings Estate Road -

Ditch Regrading 400' @ \$1 = \$	400
Culvert (30") 1000' @ \$50 =	50,000
Driveway Culvert Reset/Replacement 2 @ \$500 =	1,000
Cross Drains 2 @ \$1,500 =	3,000
TOTAL = \$	54,400

③ Outfall through Tara Subdivision -

Ditch Regrading 400' @ \$1 = \$	400
Driveway Culvert Reset/Replacement 2 @ \$500 =	1,000
Cross Drains 2 @ \$1,500 =	3,000
Lot Purchase =	20,000
TOTAL = \$	24,000

VI. Discussion/Recommendations:

The drainage problem in the Dobbs Road/Dobbs Road connector area is caused by a lack of a positive outfall coupled with a high groundwater table. Although the county does not desire to drain any water to the S.R. 312 extension area, it appears economically unfeasible to route all the drainage to the south. It is cheaper to reroute this drainage to the north, however, that would create additional runoff to the S.R. 312 extension. The most economical solution appears to be splitting the drainage as discussed in the alternatives section. This would provide positive flow away from the Dobbs Road connector in both directions without excessive cuts which would require culvert installation.

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Dobbs Road - Kings Estate Road
Drainage Study
April 1989

The drainage problem in the Kings Estate Road/Dobbs Road/Kings Road is again caused by lack of a positive outfall.

The outfall through the Tara subdivision is the recommended alternative, as it eliminates the need for long lengths of culvert. Should it not be possible to obtain property to construct an outfall, it appears that diversion of drainage from Dobbs Road westerly along Cypress Road would greatly relieve drainage problems to the south. Cypress Road has a 60' R/W which should allow sufficient space for this construction.

These recommendations do not take into account any permitting constraints which may affect the design. Purchase of a lot in the Tara subdivision would provide some room for a detention area, if required. Obviously many other design details and information would be necessary to make a final determination of the feasibility and total costs of all alternatives.