

**CITY OF SAN ANTONIO
INTERDEPARTMENTAL MEMORANDUM
PUBLIC WORKS DEPARTMENT**

CONSENT AGENDA

ITEM NO. 19

TO: Mayor and City Council

FROM: Thomas G. Wendorf, P.E., Director of Public Works

THROUGH: Terry M. Brechtel, City Manager

COPIES: Melissa Byrne Vossmer; Andrew Martin; Peter Zanoni; Milo D. Nitschke; and file

SUBJECT: Hollyhock at Huebner Creek Drainage Structure

DATE: June 24, 2004

SUMMARY AND RECOMMENDATIONS

This ordinance ratifies services and amends the professional services contract in the amount of \$56,574.00 for additional professional engineering services, payable to Cantyco, Inc., a non-SBE/MBE, and authorizes \$2,724.95 for engineering contingency expense, for a total amount of \$59,298.95, from 2002 Certificates of Obligation in connection with Hollyhock at Huebner Creek Drainage Structure, an authorized 1994-1999 General Obligation Drainage Improvement Bond project located in Council District 7.

Staff recommends approval of this ordinance.

BACKGROUND INFORMATION

The Hollyhock at Huebner Creek Drainage Structure project provides for an improved low water crossing at Huebner Creek, located on Hollyhock between Strathaven and Babcock Road. Cantyco, Inc. was first awarded a professional services contract in May 1995 to provide for the design of all weather bridge structures on Whitby and Hollyhock streets over Huebner Creek. However, at that time, 1994-1999 General Obligation Drainage Bond funding allowed for the design and construction of only one of the structures. The City of San Antonio decided to move forward with the Whitby bridge, which was completed in December of 1999. In February 2002, additional funding became available through Certificates of Obligation, and with this new source of funding, Cantyco, Inc. received authorization to proceed with the design of the Hollyhock bridge.

Since February of 2002 when Cantyco, Inc. received authorization, the requirements changed considerably, which impacted the design of the bridge structure. In October 2002, the City's Storm Water Division revised the rainfall intensity design criteria for Huebner Creek from 6100 cubic feet per second (cfs) to 6876 cfs. The original rainfall intensity design criteria was calculated prior to the flood the City experienced in 1998. This change made it necessary for Cantyco, Inc. to remodel the design hydraulics accordingly. From December 2002 to the present, numerous public meetings have been held with area landowners. Based on the public's comments regarding the size of the structure, the extensive land acquisition and tree removal required, and concerns regarding the alteration to the area's rural atmosphere, Cantyco, Inc. also minimized the tree removal and channel excavation in an attempt to accommodate their requests. Despite these changes, the community still refused to give their approval of the design.

In March 2004, the community and the City agreed to change the design goal from an all weather bridge structure to that of an improved low water crossing. This will provide for the installation of a small concrete box culvert beneath the roadway that will allow low flows of water to pass under the street, without causing up-stream flooding, and that will require minimal grading outside of the right-of-way. The estimated construction cost has been reduced from \$1,140,252.00 to \$185,704.00.

This ordinance will amend the professional services agreement and authorize funds in the amount of \$18,000.00 payable to Cantyco, Inc. for design services to produce a revised Phase B design to accommodate the new project scope. This ordinance also ratifies services and authorizes funds in the amount of \$38,574.00 for additional services performed by Cantyco, Inc. to remodel the hydraulics. These services included significant additional surveying expenses, resulting from tree locations, additional street cross sections, and expanded topography. In addition, these funds compensate Cantyco, Inc. for time conducting meetings, hydraulic analysis and cost estimates, as well as computer aided design (CAD) for expanding base maps, locating trees, and preparing exhibits.

The original professional services agreement was approved by City Ordinance Number 82029 on April 13, 1995 and authorized \$65,000.00 for engineering services in connection with the Hollyhock and Whitby at Huebner Creek project. Subsequent Council actions in connection with the Hollyhock at Huebner Creek Drainage Structure project since that time include the following:

- City Ordinance Number 86976 dated November 20, 1997 in the amount of \$6,200.00 ratified services for additional design performed to include a box culvert system, as well as improvements to the existing roadway.
- City Ordinance Number 87831 dated May 21, 1998 in the amount of \$13,500.00 ratified services for additional engineering services associated with the preliminary design revisions of the project.
- City Ordinance 89305, dated February 25, 1999, in the amount of \$18,000.00 authorized and amended the professional services contract for engineering services for the final design phase and construction administration of the project.
- City Ordinance 95283, dated February 14, 2002, in the amount of \$6,270.00 authorized the professional services contract additional professional services to provide a study in order to plan the redesign of the Hollyhock low water crossing.
- City Ordinance 96286, dated February 12, 2002, in the amount of \$71,836.00 authorized and amended the professional services contract to complete the design phase and construct improvements at the Hollyhock crossing.

The total authorized for this professional services agreement by the above-referenced City Ordinances is \$180,806.00. This ordinance will increase the total authorized for this professional services agreement to \$237,380.40.

Project construction is anticipated to begin in May of 2005 and be completed in November of 2005.

POLICY ANALYSIS

Approval of this ordinance will be a continuation of City Council policy to complete previously approved 1994-1999 General Obligation Drainage Improvement Bond funded projects.

FISCAL IMPACT

This is a one-time capital improvement expenditure and is included in the FY 04-09 Capital Improvement Program Budget. Funds in the amount of \$59,298.95 are available from 2002 Certificates of Obligation and are payable as follows:

\$56,574.00 payable to Cantyco, Inc. for additional engineering services

\$ 2,724.95 payable for engineering contingency

COORDINATION

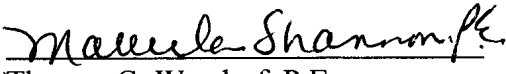
This request for ordinance has been coordinated with the Office of Management and Budget, and the Finance Department.

SUPPLEMENTARY COMMENTS

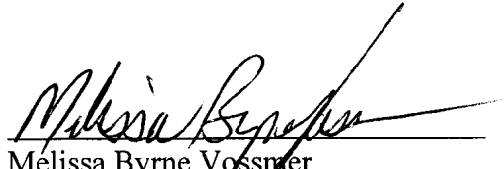
The Discretionary Contracts Disclosure Form required by the Ethics Ordinance is attached.

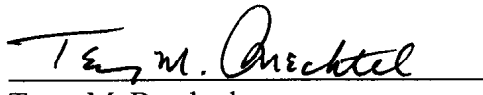
ATTACHMENTS

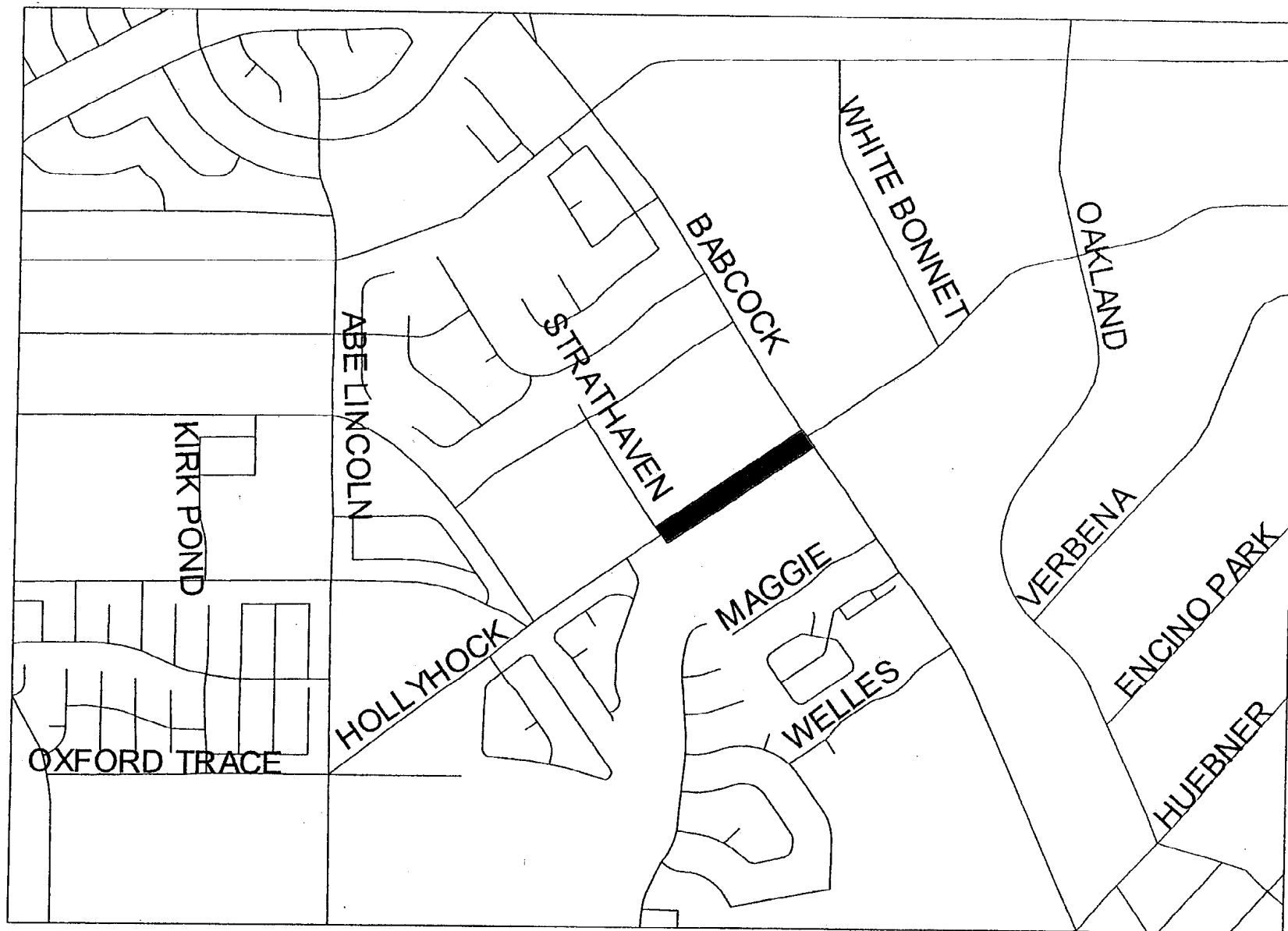
1. Project Map
2. Proposal for Additional Services
3. Discretionary Contracts Disclosure Form


for Thomas G. Wendorf, P.E.
Director of Public Works

Approved:

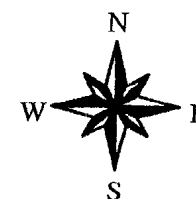

Melissa Byrne Vossmer
Assistant City Manager


Terry M. Brechtel
City Manager



CITY OF SAN ANTONIO
Department of Public Works
Capital Programs Division

HOLLYHOCK - BABCOCK TO STRATHAVEN



CANTYCO, INCORPORATED

dba

STEPHEN J. CANTY & ASSOCIATES

CONSULTING ENGINEERS

P.O. Box 791482

SAN ANTONIO, TEXAS 78279-1482

OFFICES
1110 MOUNT CAPOTE

TELEPHONE
(210) 341-2726

S. J. CANTY, P.E.
TEX. REG. NO. 11592

FAX
(210) 341-2726

May 25, 2004

Dave Matney, P.E.
Project Manager
City of San Antonio Public Works
114 W. Commerce, 5th Floor
San Antonio, Texas 78205

Reference: Hollyhock Drainage Project
Additional Engineering Services

Dear Dave,

Attached with this letter is an invoice for additional services incurred to date on the referenced project. We previously submitted an invoice for Phase B work related to the original design concept. As you know, the project changed significantly from the original Phase "A" design, resulting in increased engineering expenses, which were not included in our scope of work for this design contract. The following paragraphs describe the additional services related to this project that have been previously completed for which we are requesting compensation.

Previous Project Scope of Work

The Phase "A" design was based on both bridge and channel improvements to accommodate a design Q of 6100 cfs. This design concept has evolved as outlined below:

1. In October, 2002, the stormwater management group changed the design Q from 6100 cfs. to 6876 cfs. The higher Q increased the water surface elevation over Hollyhock, expanding the length of roadway impacted by the flood conditions. A preliminary channel design was developed and revised hydraulics were calculated using the new design Q. These hydraulic calculations were based upon the concept approved with the Preliminary Phase A Report that required downstream and upstream channel improvements to be made to reduce or eliminate the flood conditions over Hollyhock.
2. In December, 2002, public meetings were held with area landowners. The meeting included members of the church, which is immediately downstream of Hollyhock. Due to the public's comments, we were directed to minimize the upstream and downstream channel improvements to preserve as many trees as possible. This forced us to raise the box culvert elevations and the resulting roadway elevation. The flow model was revised and hydraulic calculations were rerun to determine the impact.
3. Subsequent meetings were held evaluating various culvert sizes and combinations. The City Engineer recommended that we minimize the channel excavation by letting the flow-line of the box culverts follow the bottom of the existing channel, thus eliminating all channel work and tree removal. We evaluated several multiple box options, remodeled the culvert crossing and reran the hydraulic calculations. This scenario involved very complex hydraulic modeling and extensive engineering analysis.

May 25, 2004
Dave Matney, P.E.
Page Two

4. Cost estimates for the various box culvert scenarios were prepared and compared to the cost of a bridge crossing.

In summary, the current design constraints and modified criteria required the re-evaluation of the previously approved "Phase A" design concept. Several new alternatives were considered which were different from the design approved in Phase "A". In addition, these new alternatives required a much more complex design solution than the original design concept approved as part of Phase "A".

The total cost to date for the previously described "additional services" is 38,574.00 dollars. A summary of the "Level of Effort" incurred to date is presented on the attached sheet. These services include significant additional surveying expenses, resulting from tree locations, additional street cross sections and expanded topography. The services also include engineering time for meetings, hydraulic analysis and cost estimates; and CAD time for expanding base maps, locating trees and preparing exhibits.

Please note that all of the work described above related to this project has been stopped as per your request. The fee for additional services presented above will "close out" the engineering services related to the previous scope of work associated with this project.

Revised/Reduced Scope of Work

The following paragraphs describe the anticipated scope of work related to this project as directed and described by the "City of San Antonio - Interdepartmental Correspondence Sheet" dated March 15, 2004 (copy attached). The revised project scope of work and associated design criteria was presented to the engineer at the "Scope Meeting" held on April 15, 2004 at 10:00 am and is summarized as follows:

1. There is no design criteria included in the City of San Antonio's "Unified Development Code" for "low-water crossings".
2. The design capacity and size of the culvert to be installed is not defined and should be based upon the existing physical constraints including topography, trees and current hydraulic characteristics of the drainage crossing.
3. The culvert should allow the construction of a 28-foot street with future curbs and six(6)-foot sidewalks. In addition, it should be designed utilizing entrance and exit slope rip-rap (6:1) instead of traditional headwall.
4. The installation of the wet well and associated conduit for the "flood warning system" will be included in this scope of work with specifications, size and location to be as directed by City personnel. Actual monitoring equipment and wire to be installed by City personnel.
5. Modification of "flood warning" flashing lights to enhance visibility from Babcock and Strathaven will be performed by the City and is not included in this scope of work.

May 25, 2004
Dave Matney, P.E.
Page Three

6. Pavement improvements for Strathaven and Mondean streets are not included in this scope of work.
7. The existing downstream "car catching" system shall remain and/or be relocated.

A preliminary conceptual drawing with "probable cost" of the proposed construction will be prepared by engineer for approval prior to beginning preparation of construction drawings.

Compensation for this work shall be based upon the "fixed fee" method as outlined within our current contract in the amount outlined as follows:

Basic Services (Standard 1995 CSA Contract Form - Phase B Rev., Design & Constr. Phase)

1. Prepare Conceptual Drawing with Probable Construction Cost for Approval by Interested Parties	--- Fixed Fee
2. Prepare Revised Phase "B" Drawings	\$18,000.00 Fixed Fee
3. Prepare Final Construction Drawings and Specifications	% Fee as per Existing Contract
4a. Provide Construction Phase Services	% Fee as per Existing Contract
4b. Deduct for Deletion of Construction Staking and Cut Sheets	<\$500.00>

Additional Services (Over and Above Standard 1995 CSA Contract Form)

1. Hydraulic Remodeling	\$38,574.00
2. Stormwater Pollution Prevention Control Plan (Supercedes 8/9/02 Letter)	<u>3,400.00</u>
Sub-Total:	\$41,974.00

May 25, 2004
Dave Matney, P.E.
Page Four

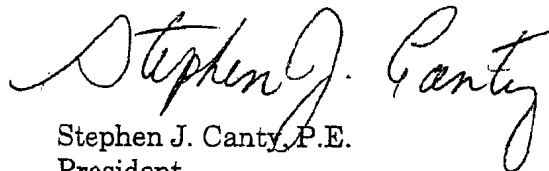
This project will be completed within 90 calendar days of receiving written notice to proceed from the City. Please note that the calendar days associated with the City's review and approval of each phase are not included. The phasing schedule is presented below:

Conceptual Drawings	20 calendar days
Revised Phase "B" Construction Drawings	30 calendar days
95% Final Construction Drawings and Specifications	30 calendar days
Final Construction Drawings and Specifications	<u>10</u> calendar days
Total:	90 calendar days

A detailed level of effort can be provided upon request. Please advise if you have any questions or need additional information.

Sincerely,

CANTYCO, INCORPORATED


Stephen J. Canty, P.E.
President

Job #684-003-00
Attachments

CANTYCO, INCORPORATED

dba

STEPHEN J. CANTY & ASSOCIATES

CONSULTING ENGINEERS

P.O. Box 791482

SAN ANTONIO, TEXAS 78279-1482

S. J. CANTY, P.E.
TEX. REG. NO. 1159Fax
(210) 341-2726OFFICES
1110 MOUNT CAPOTE
TELEPHONE
(210) 341-2726October 2, 2003
(Revised May 25, 2004)

INVOICE

Hollyhock Drainage Project

Description	Hours	Rate	Amount
Design Concept Meetings			
Staff Engineer	15	\$84.00	\$1,260.00
Sr. Project Engineer	15	108.00	1,620.00
Survey			
Additional Street Sections			
Two Man Crew	35	88.00	3,080.00
ThreeMan Crew	10	100.00	1,000.00
Surveyor I	4	53.00	212.00
Chief Surveyor	12	82.00	984.00
Additional Channel Topo			
Two Man Crew	20	88.00	1,760.00
ThreeMan Crew	22	100.00	2,200.00
Surveyor I	6	53.00	318.00
Chief Surveyor	8.5	82.00	697.00
Base Sheets - CADD			
Operator I	20	32.00	640.00
OperatorIV	15	42.00	630.00
Designer X	90	82.00	7,380.00
Exhibits - CADD			
OperatorIV	10.5	42.00	441.00
Designer X	35	82.00	2,870.00
Hydraulic Design			
Staff Engineer	117	84.00	9,828.00
Culvert Design			
Staff Engineer	9	84.00	756.00
Staff Engineer	6	84.00	504.00
Street Design			
Staff Engineer	9.5	84.00	798.00
Staff Engineer	7	84.00	588.00
Cost Estimates			
Staff Engineer	12	84.00	1,008.00

INVOICE TOTAL:

\$38,574.00

PROBABLE LEVEL OF EFFORT**PRELIMINARY PHASE B**

May 25, 2004

Hollyhock Drainage Project

Description	Hours	Rate	Amount
Staff Engineer	95	\$84.00	\$7,980.00
Sr. Project Engineer	8	108.00	864.00
CAD Designer IX	108	77.00	8,316.00
Clerk-Typist	28	30.00	840.00

ESTIMATE:**\$18,000.00**

City of San Antonio
Discretionary Contracts Disclosure*

*For use of this form, see City of San Antonio Ethics Code, Part D, Sections 1&2
Attach additional sheets if space provided is not sufficient.
State "Not Applicable" for questions that do not apply.*

** This form is required to be supplemented in the event there is any change in the information under (1), (2), or (3) below, before the discretionary contract is the subject of council action, and no later than five (5) business days after any change about which information is required to be filed.*

Disclosure of Parties, Owners, and Closely Related Persons

For the purpose of assisting the City in the enforcement of provisions contained in the City Charter and the Code of Ethics, an individual or business entity seeking a discretionary contract from the City is required to disclose in connection with a proposal for a discretionary contract:

(1) the identity of any **individual** who would be a party to the discretionary contract:

Not Applicable

(2) the identity of any **business entity**¹ that would be a party to the discretionary contract:

CANTYCO, INC. dba STEPHEN J. CANTY & ASSOCIATES

and the name of: STEPHEN J. Canty, P.E., President

(A) any individual or business entity that would be a **subcontractor** on the discretionary contract;

BROWN ENGINEERING COMPANY, INC.

and the name of: Jeffery Brown, P.E.

(B) any individual or business entity that is known to be a **partner**, or a **parent** or **subsidiary** business entity, of any individual or business entity who would be a party to the discretionary contract;

NOT APPLICABLE

¹ A *business entity* means a sole proprietorship, partnership, firm, corporation, holding company, joint-stock company, receivership, trust, unincorporated association, or any other entity recognized by law.

- (3) the identity of any *lobbyist* or *public relations firm* employed for purposes relating to the discretionary contract being sought by any individual or business entity who would be a party to the discretionary contract.

NOT APPLICABLE

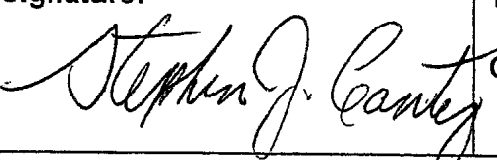
Political Contributions

Any individual or business entity seeking a discretionary contract from the city must disclose in connection with a proposal for a discretionary contract all political contributions totaling one hundred dollars (\$100) or more within the past twenty-four (24) months made directly or indirectly to any *current* or *former member* of City Council, any *candidate* for City Council, or to any *political action committee* that contributes to City Council elections, by any individual or business entity whose identity must be disclosed under (1), (2) or (3) above. Indirect contributions by an individual include, but are not limited to, contributions made by the individual's spouse, whether statutory or common-law. Indirect contributions by an entity include, but are not limited to, contributions made through the officers, owners, attorneys, or registered lobbyists of the entity.

To Whom Made:	Amount:	Date of Contribution:
NONE		

Disclosures in Proposals

Any individual or business entity seeking a discretionary contract with the city shall disclose any known facts which, reasonably understood, raise a question² as to whether any city official or employee would violate Section 1 of Part B, Improper Economic Benefit, by participating in official action relating to the discretionary contract.

Signature: 	Title: President Company: CANTYCO, INC.	Date: 5/25/04

² For purposes of this rule, facts are "reasonably understood" to "raise a question" about the appropriateness of official action if a disinterested person would conclude that the facts, if true, require recusal or require careful consideration of whether or not recusal is required.