

## EXHIBIT A

### CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE BOARD AGENDA May 3, 2018

The City of Colorado Springs/El Paso County Drainage Board will hold the scheduled meeting at **3:00PM on Thursday, May 3, 2018** in the City Council Chambers at City Hall at 107 N. Nevada Avenue.

**Item 1:** Call to Order.

**Item 2:** Approval of the January 25, 2018 Drainage Board minutes

**Item 3:** Old Business - None

**Item 4:** New Business

**a) Financial Update – (City)**

**b) Request on behalf of Nor'Wood Development to close the Wolf Ranch portion of the Cottonwood Creek Drainage Basin – (City)**

**ACTION REQUESTED:** This action is a request to close the Wolf Ranch portion of the Cottonwood Creek Drainage Basin. The closing of the Wolf Ranch Development would exempt the developer from paying the per acre drainage fee, erase the developer's credits within the Wolf Ranch portion of Cottonwood Creek and eliminate the opportunity for reimbursement for construction of any facilities. Wolf Ranch would still be required to pay the Bridge Fee and Surcharge Fee associated with the Cottonwood Creek Drainage Basin.

**c) Fixed Drainage Fees for Powers Autopark – (City)**

**ACTION REQUESTED:** The City Code referenced above states, *"...The subdivider may determine to build drainage facilities as required by the DBPS prior to subdividing or otherwise developing land. In that event the fees applicable to the land proposed to be subdivided or otherwise developed may, with the approval of the City, be fixed at the time the subdivider contracts for the construction of the drainage facilities in accord with subsections B and C of this section."* This action is requested to fix the fee for the Powers Autopark at the current rate of \$13,241 per acre in the Cottonwood Creek Drainage Basin.

**d) Pursuant to City Code 7.7.902, a fee adjustment in the Cottonwood Creek Drainage Basin is necessary in order to balance the fee with credits owed – (City)**

**ACTION REQUESTED:** The Water Resources Engineering Division is requesting a mid-year adjustment to the Cottonwood Creek Drainage Basin per acre drainage fee.

**e) Elimination of the Cottonwood Creek Surcharge Fee – (City)**

**ACTION REQUESTED:** This request is to eliminate the Surcharge Fee in the Cottonwood Creek Drainage Basin.

**f) Informational**

**g) Housekeeping**

**h) Open Discussion**

**Item 5:** Adjournment

For the Public Works Director/City Engineer

  
Public Works/Water Resources Engineering

**C: (with Attachments)**

Drainage Board Members  
Brian Kelley, City, Public Works/Water Resources Engineering  
Elizabeth Nijkamp, El Paso County Engineering  
Gilbert LaForce, El Paso County Engineering  
Jennifer Irvine, El Paso County Engineering  
Lois Ruggera, City Planning  
Marla Novak, Director, Government Affairs, HBA  
Mary Murray, City Finance  
Mike Cartmell, El Paso County Engineering  
Richard Mulledy, Public Works/Water Resources Engineering  
Steve Rossoll, Public Works/Water Resources Engineering  
Tracy Peters, City Finance

**C: (w/o Attachments)**

Travis Easton, City, Public Works Director  
City Clerk (for posting)  
Fran St. Germain, County Administration  
Henry Yankowski, County Administrator  
Marc Smith, City Attorney  
Public Communications Department



**DATE:** May 3, 2018

**TO:** Brian Kelley, Secretary to the Drainage Board

**FROM:** Steve Rossoll

**SUBJECT:** Eliminating the Surcharge Fee in Cottonwood Creek Drainage Basin

**RE:** Elimination of the Cottonwood Creek Surcharge Fee

**ACTION REQUESTED:** This request is to eliminate the Surcharge Fee in the Cottonwood Creek Drainage Basin.

**BACKGROUND:** At the July 11, 2000 City Council meeting, the Council passed resolution 104-00 (Attached). This resolution adopted an updated Drainage Basin Planning Study for Cottonwood Creek, which eliminated the previous and interim basin fees and established a new fee structure. The new fee structure included a City fee for Cottonwood Creek channel improvements downstream of Rangewood Drive. This City fee has come to be known as the Cottonwood Creek Surcharge Fee.

For the most part, improvements to Cottonwood Creek downstream of Rangewood Drive have been completed. There are some remaining minor improvements identified as IGA projects. Therefore the fee has served its purpose and is no longer necessary. The remaining balance (+/- \$100,000) will be used for smaller IGA projects within Cottonwood Creek downstream of Rangewood Drive.

**RECOMMENDATION:** The Water Resources Engineering Division recommends that the Drainage Board approve the request to eliminate the Cottonwood Creek Surcharge Fee.

A recommended motion would be: I move to eliminate the Cottonwood Creek Surcharge Fee.

Resolution No. 104-00

**A RESOLUTION AMENDING THE COTTONWOOD CREEK DRAINAGE BASIN PLANNING STUDY TO INCLUDE THE PRUDENT LINE CONCEPT, ELIMINATING THE CURRENT DETENTION POND FEES AND THE INTERIM DRAINAGE AND BRIDGE FEES, AND REVISING THE 2000 DRAINAGE AND BRIDGE FEES.**

**WHEREAS**, on April 12, 1994, Resolution No. 60-94 was adopted, including approval of the Cottonwood Creek Drainage Basin Planning Study and establishment of a minimum and maximum Drainage and Bridge Fee on an interim basis, and

**WHEREAS**, Resolution 60-94 called for further study of the City's drainage criteria and channel development policies including drainage channel concepts such as a "prudent line" concept, and

**WHEREAS**, Ayres Associates, on behalf of Nor'Wood Development Corporation and LaPlata Investments, submitted an amended Cottonwood Creek Drainage Basin Planning Study, June 2000, that incorporated the "prudent line" concept, and

**WHEREAS**, the City Engineering Division has reviewed the amended Cottonwood Creek Drainage Basin Planning Study and recommends its approval, and

**WHEREAS**, on June 15, 2000, the City/County Drainage Board approved the amended Cottonwood Creek Drainage Basin Planning Study to include the "prudent line" concept, eliminated the current Detention Pond Fees and the Interim Drainage and Bridge Fees and revised the 2000 Drainage and Bridge Fees.

**NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF COLORADO SPRINGS:**

**Section 1:** The amended Cottonwood Creek Drainage Basin Planning Study, including the "prudent line" concept, as submitted by Ayres Associates, June 2000, is approved and adopted.

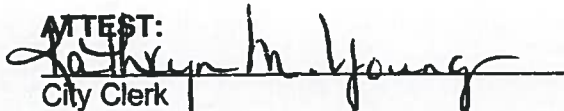
**Section 2:** The existing Detention Pond Fees in the Cottonwood Creek Drainage Basin are eliminated.

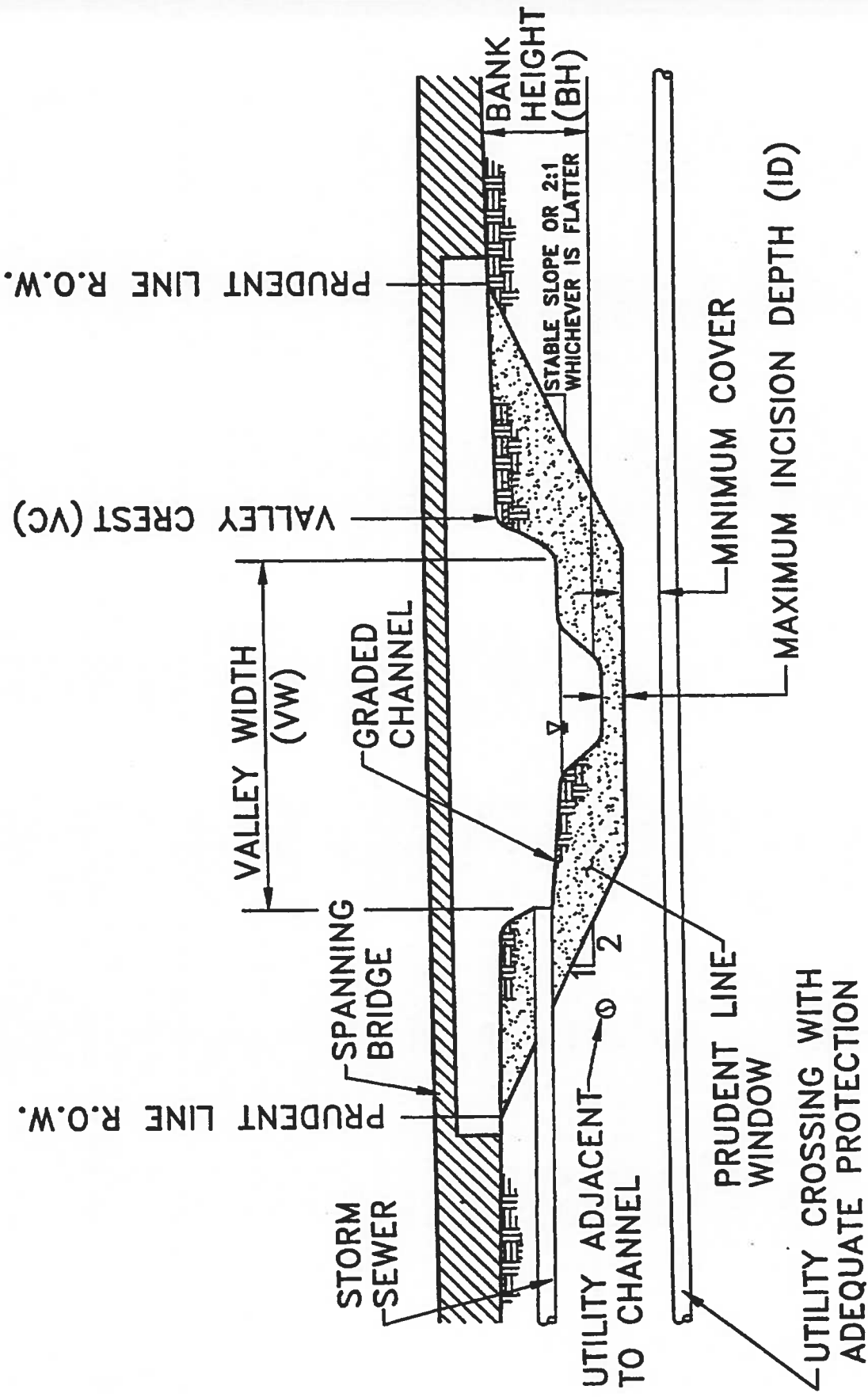
**Section 3:** The Interim Drainage and Bridge Fees, established by Resolution No. 60-94, and modified by resolution annually thereafter, are eliminated.

**Section 4:** The 2000 Drainage and Bridge Fees are revised as follows:  
Drainage Fee -- \$6714/acre (\$5215/acre for capital improvements and \$1499/acre for land); the two components will be annually adjusted using different standard procedures and policies but combined together for collection purposes; **the total drainage fee includes \$372/acre to be paid to the City in cash for cost-sharing of improvements downstream of Rangewood Drive as outlined in the Study.**  
Bridge Fee -- \$582/acre

Dated at Colorado Springs, Colorado this 11th day of July, 2000.

  
Mayor

**ATTEST:**  
  
City Clerk



**TYPICAL PRUDENT LINE  
FOR COTTONWOOD CREEK**



Figure 3.2. Schematic of typical stream cross section depicting prudent line window.

DRAINAGE BOARD AGENDA: June 15, 2000

ITEM NO. 9

## **COTTONWOOD CREEK DRAINAGE BASIN PLANNING STUDY**

**Prepared for**

**Nor'Wood Ltd., Inc.  
and  
LaPlata Investments, Ltd.**

**Colorado Springs, Colorado**

**and**

**City of Colorado Springs**

**Colorado Springs, Colorado**

**AYRES  
ASSOCIATES**

**P.O. Box 270460  
Fort Collins, Colorado 80527  
(970) 223-5556, FAX (970) 223-5578**

**Ayres Project No. 34-0330.00  
COTT6TXT.DOC**

**June 2000**

## **EXECUTIVE SUMMARY**

### **General**

This report addresses the technical and economic feasibility of adopting an erosion risk buffer concept, referred to as the prudent line, as the selected alternative for managing drainage issues in the Cottonwood Creek drainage basin. This concept is a minimum impact option that allows a channel to function in response to natural stimuli by defining a buffer zone within which erosion and flooding can occur without unacceptable impacts on human activities. The prudent line concept is based on a willingness and ability to dedicate sufficient land to allow the stream to function naturally as a trade-off for constructing channel improvements to control the stream. The following Executive Summary presents an overview of this document.

The Cottonwood Creek drainage basin is a rapidly developing 18.6-square-mile area on the north edge of the City of Colorado Springs. It drains a west-facing portion of the larger Monument Creek drainage basin to a confluence west of Interstate 25.

The current Cottonwood Creek Drainage Basin Planning Study (DBPS) was prepared in 1992 for the City of Colorado Springs by URS Consultants (URS 1994). The DBPS was based on current drainage criteria and presented a stream development master plan which was intended to address existing drainage problems and guide construction of new drainage facilities for future land development. The DBPS recommended construction of six regional detention ponds and continuous structural measures (riprap and drop structures) to reduce velocities and stabilize the channel. The high improvement cost associated with the DBPS and the resulting suggested basin fee, together with other factors, resulted in the adoption of the DBPS as an interim plan that is effective until these issues are resolved. This report presents an alternative master plan that addresses some of these unresolved issues in a manner which will lead to full acceptance of a modified DBPS.

Four primary areas were addressed in this report: (1) hydrology, (2) the prudent line alternative, (3) DBPS modifications, and (4) implementation. Each area is summarized individually in the following sections.

This document was prepared with private funds, for NorWood Ltd., Inc. and LaPlata Investments, Ltd., by Ayres Associates of Fort Collins, in association with J.R. Engineering of Colorado Springs.

### **Hydrology**

One of the issues concerning the DBPS was the predicted values of the 100-year streamflow rates adopted as the basis for the master plan. Some people felt that the flow rates were too high, a possible reason for the high channel improvement costs. In order to address this issue, the hydrology was computed for existing land use conditions, then recomputed for future land use conditions. The 100-year peak flow for future land use conditions, as measured at the confluence, dropped from 17,400 to 10,738 cfs. Hydrology is further addressed in Section 2 of this report and supported by Appendix A.

## **The Prudent Line**

Hydraulic and geomorphic studies revealed that floodplain encroachment in the basin is not a major problem. As an unintended result, the development that occurred in accordance with the institutional requirements has, in effect, a prudent line through most of the developed area downstream of Rangewood Drive. In most areas, the channel has sufficient room for lateral movement and flood conveyance. The channel is actively degrading in most areas and a large portion of the suggested improvements in this report are intended to fix the channel's vertical grade.

The position of the prudent line has been computed as part of this project and is shown on the accompanying drawings. Approximately 240 acres of land (excluding land within the 100-year floodplain) will need to be dedicated to accompany the prudent line concept. Since the channel has adequate conveyance, the value of stormwater detention was not found to be cost-effective and a recommendation has been made to delete the regional detention proposed in the DBPS. In addition, most of the channel structures proposed in the DBPS are to "stabilize the channel" or "reduce velocities," but without a specific identified benefit to these costs. This report suggests the elimination of all but a few channel structures which are clearly needed to provide defined benefits and is consistent with the minimum impact prudent line concept.

## **DBPS Modifications**

An alternative master plan was developed, in which the prudent line is the central concept. The elements of this plan are described in Sections 3, 4, and 5 of this document and are depicted on the accompanying plan drawings. Costs of that plan were estimated and allocated to the appropriate responsible entities. A total cost reduction of approximately \$11.4 million (January 1992 dollars) is realized from the current DBPS (this figure includes \$4.2 million saved by removing all proposed detention ponds. This reduction results in savings to both the public and private landowners. The resulting basin fee is reduced from \$5,247 (channel improvement and land acquisition) to \$4,757, and the detention fee of \$333 has been eliminated. This is a very significant cost savings, and as such, proves the prudent line concept worthy of full consideration for adoption as the DBPS-selected alternative.

## **Implementation**

The prudent line is a concept that is consistent with the manner in which the basin has developed and is applicable to areas to be developed. Its adoption will result in significant cost savings. There are some institutional issues which need to be resolved to permit its equitable application, considering earlier development that has occurred under other criteria.

This document has been reviewed by the City of Colorado Springs and El Paso County. Their comments have been addressed and are included where appropriate. The plan was presented to the City/County Drainage Board in January 1997 and conditionally approved. The final step is to present this report to the City Council for final approval and adoption.



## Drainage Board Agenda - June 15, 2000

Item No. 9

### Background Information

A prior version of a proposed amendment to the Cottonwood Creek Drainage Basin Planning Study (DBPS), including the prudent line concept, was presented to the Drainage Board in October 1996 and January 1997. The Drainage Board approved the proposed DBPS in January 1997; however, there was no quorum of Drainage Board members. The proposed Study was never taken to City Council for formal action due to City Engineering staff concerns on several issues.

Since then, revisions have been made to key issues noted below:

- Unplatted basin acreage: The Study has been revised to exclude prudent line land, park land and channel/open space land for which developers do not want to pay fees; the revised acreage is 5877 as of the beginning of the last Cottonwood Creek DBPS approval date - 1994. Approximately 240 acres of prudent line land (outside of the 100-year floodplain) will be reimbursable, based on the Park Land Dedication Fee rate. City Engineering will require that all land be platted, even though fees may not be required for a portion of the land being platted.
- Improvements downstream of Rangewood Drive: It was agreed improvements would be equally cost-shared, with 50% of the improvement costs incorporated into the Basin fees and 50% a public cost responsibility. The majority of the improvements in these reaches are adjacent to existing development. Table 5.1 of the Study denotes those improvements for which a separate cash fee will be collected and accounted for by the City of Colorado Springs as a part of the required total drainage fee obligation. These cash fees total \$372/acre (2000 fees). These cash fees will be utilized by the City to construct the necessary drainage improvements as specified in Table 5.1.
- Response to environmental comments from the Corps of Engineers (COE) relating to aesthetics, water quality and costs for maintenance road and access easements: The response to these comments are included in section 7 of the Study (pg. 7.1 and 7.2)
- Encroachments/structures within the prudent line: Encroachments including trails and landscaping will be allowed within the prudent line. Parking lots and other structures or encroachments will not be allowed. Other potential encroachments, due to unusual or special circumstances, will require a request to the City Engineer who will make a final decision.

### Recommendation

Approve the amended Cottonwood Creek Drainage Basin Planning Study, to include the prudent line concept, as submitted by Ayres Associates, June 2000. Eliminate the current Detention Pond Fee (land and facilities) and the Interim Drainage and Bridge Fees and revise the 2000 Drainage and Bridge Fees as follows:

- Drainage Fee -- \$6714/acre: \$5215/acre for capital improvements and \$1499/acre for land; these two components will be annually adjusted by different methods but combined together for collection purposes (includes \$372/acre to be paid to the City in cash for cost-sharing of improvements downstream of Rangewood Dr.)
- Bridge Fee -- \$582/acre



## CITY OF COLORADO SPRINGS

104-00

**DATE:** June 27, 2000**TO:** James H. Mullen, City Manager**FROM:** David S. Zelenok, Public Works Group Support Manager  
Gary R. Haynes, City Engineer

David

G.H.

**SUBJECT: Amendment to the Cottonwood Creek Drainage Basin Planning Study (DBPS) and Basin Fees**

**Summary:** This amendment to the Cottonwood Creek DBPS includes the adoption of an erosion risk buffer concept (prudent line – see attached figure) upstream of Rangewood Drive as the recommended drainage alternative. The concept defines a buffer zone within which erosion and flooding can occur. This prudent line zone will incorporate the dedication of sufficient land to allow the stream to move naturally as a trade-off for constructing significant channel improvements. Hydrologic methods for calculating peak flow rates were also revised, resulting in significant reductions in peak flows and the elimination of several detention ponds. Drainage Basin fees would be revised as specified in the attached resolution. Additional information is provided in the attached DBPS Executive Summary.

**Previous Council Action:** City Council adopted the current Cottonwood Creek DBPS on April 12, 1994 (Resolution 60-94). The Study was adopted with interim drainage and bridge fees and recommended further study and investigation of the City's channel development policies, including the prudent line concept.

**Background:** In 1996, Nor'Wood Development Corporation and LaPlata Investments initiated a private consultant study to investigate the possible incorporation of the prudent line concept into the DBPS. This concept and proposal was originally presented and discussed at Drainage Board meetings in October 1996 and January 1997. Drainage Board approved the proposed DBPS in January 1997, however a quorum was not present. Also, concerns with several issues prevented the item from moving forward for City Council action. Since then, revisions have been made to key issues including (1) verifying proper unplatted basin acreage, (2) cost-sharing of improvements downstream of Rangewood Drive, (3) responding to comments from the Corps of Engineers and (4) encroachments/structures within the prudent line. See the attached "Background Information" from the June 15, 2000 Drainage Board Agenda for more detail. The amended Cottonwood Creek DBPS, including the prudent line concept, was presented, discussed and approved at the June 15, 2000 Drainage Board meeting.

**Financial Implications:** The revised DBPS incorporated drainage improvement costs relating to both developer responsibility and the public (City) responsibility. With the prudent line concept, less structural improvements are required resulting in a \$6.25 Million savings for the City's portion of drainage improvements.

**Board Recommendation:** On June 15, 2000, the Drainage Board unanimously approved the amended Cottonwood Creek DBPS, including the prudent line concept and the revised Drainage and Bridge Fees.

**Stakeholder Process:** During 1996 and 1997, significant public input and comments were received on the proposed prudent line concept and revised DBPS. Since then, additional comments were received from the Corps of Engineers; the consultant responded to the comments and incorporated the comments into the Study.

**Alternatives:** The primary alternative is to continue with the adopted DBPS from 1994. The current adopted DBPS requires more structural channel improvements, including detention ponds, resulting in higher drainage improvement costs and basin fees of \$329/acre greater than the proposed prudent line concept. Development would also be located much closer to the drainage improvements under the current DBPS.

**Recommendation:** Approve the amended Cottonwood Creek Drainage Basin Planning Study to include the prudent line concept. Eliminate the Detention Pond Fee and the Interim Drainage and Bridge Fees. Revise the 2000 Drainage and Bridge Fees in accordance with the attached resolution.

**Proposed Motion:** I move to approve the resolution as presented.

#### Attachments

c:  
Dave Lethbridge, City Engineering  
Tom Bonifas, City Planning