

MEMORANDUM

TO: Mr. Bob Snow  
~~Robert~~ Engineering  
124 West Magnolia  
Fort Collins, CO 80521

FROM: Rick Richter, Civil Engineer

DATE: 4/10/89

RE: Subdivision Utility Plans

Submitted for your review and comment are utility plans for:

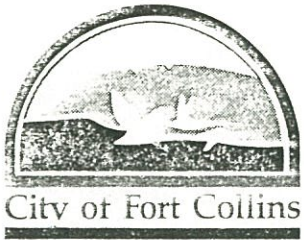
First Replat of Willow Grove Village

Please respond by: 4/20/89

*No Comment*

4-11-89

*Ed Heinze*



MEMORANDUM

TO:

FIRE -

FROM: Rick Richter, Civil Engineer

DATE: 4/10/89

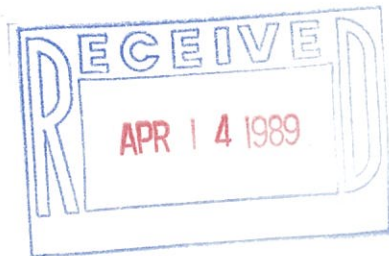
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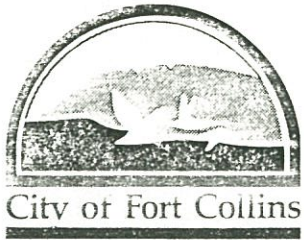
First Replat of Willow Grove Village

Please respond by: 4/20/89

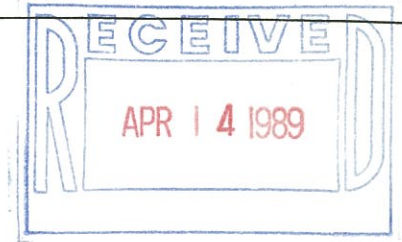
*NO COMMENTS*



*W. JONES 4-12-89*



Development Services  
Planning Department



MEMORANDUM

TO: - - LIGHT & POWER - Doug Martine

FROM: Rick Richter, Civil Engineer

DATE: 4/10/89

RE: Subdivision Utility Plans

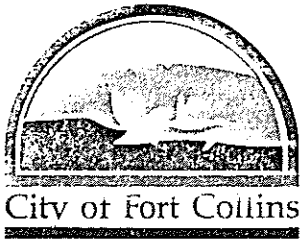
Submitted for your review and comment are utility plans for:

First Replat of Willow Grove Village

Please respond by: 4/20/89

No COMMENTS.

Bruce A. Vogel  
4-13-89



MEMORANDUM

TO: Mr. Gary Huett  
Public Service of Colorado  
209 South Meldrum  
Fort Collins, CO 80521

FROM: Rick Richter, Civil Engineer

DATE: 4/10/89

RE: Subdivision Utility Plans

Submitted for your review and comment are utility plans for:

First Replat of Willow Grove Village

Please respond by: 4/20/89

*No comments.*

*Gary Huett*  
*4/12/89*

**R** PARSONS &  
ASSOCIATES

CONSULTING ENGINEERS

April 6, 1989

Mr. Glen Schlueter  
Stormwater Utility  
City of Fort Collins  
P. O. Box 580  
Fort Collins, Colorado 80522

RE: Willow Grove Village at Cunningham Corner P.U.D., Fort Collins, Colorado

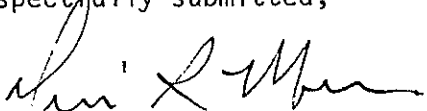
Dear Mr. Schlueter:

In conjunction with the proposed replat of Willow Grove Village, this office has reviewed the Drainage Study and Drainage Improvement Plans for the previous proposal for this site which was approved in 1983 and 1984. The basis for this review was the "Storm Water Drainage Report for Willow Grove Village at Cunningham Corner, a Planned Unit Development in the City of Fort Collins, Colorado" prepared by Taranto, Stanton & Tagge, Consulting Engineers, dated February, 1984. The report indicates that a coefficient of run-off factor, "C", for the developed condition on this tract was considered to be 0.6. The designation for this tract within the report is "Parcel B".

A review of the proposed site plan revisions indicates that the estimated composite "C" factor is 0.6 (Please refer to the attached calculations). Therefore, no change is anticipated in the storm water runoff characteristics from that that has been previously approved.

If you should have any questions or desire additional information, please feel free to contact this office.

Respectfully submitted,



Dennis R. Messner  
Colorado P.E. # 26109

Enclosure

DRM/nc

DETERMINE "C", RUN-OFF COEFFICIENT, FOR PROPOSED REVISION TO SITE PLAN. BASED UPON PLAN PROVIDED BY VAUGHT / FRYE 4-3-89.

CONSIDER IMPERVIOUS AREAS, I.E., STRUCTURES, DRIVES, PARKING, GARAGES, PATIOS, WALKS, ETC.

10-STRUCTURES AT	4,415 sq. ft./ea	=	26,490 sq. ft.
3-STRUCTURES AT	3,850 sq. ft./ea	=	11,550 sq. ft.
WALKWAYS		=	2,015 sq. ft.
4-GARAGES AT	1,092 sq. ft./ea.	=	4,370 sq. ft.
DRIVEWAY & PARKING		=	<u>45,825 sq. ft.</u>

TOTAL IMPERVIOUS AREA 90,250 sq. ft.

TOTAL TRACT AREA = 4.164 ± Acres  
= 181,385 sq. ft.

Land scaped Area = 181,385 - 90,250 = 91,135 sq. ft.

Consider that up to 15% of Landscaped Area may be gravel or similar ground cover.

Balance of Landscaped Area to be considered as lawn with "Avg" slope and Avg between Sandy & Clayey soils.

∴ "C" for impervious area = 0.95 ; "C" for gravel = 0.5  
"C" for lawn = 0.20

$$C = \left( \sum_{i=1}^n C_i A_i \right) / A = \frac{[(0.95 \times 90250) + (0.5 \times 13670) + (0.2 \times 77465)]}{181385}$$

$$C = 0.596 \approx 0.60$$

DATE: 3/20/89

DEPARTMENT: S.D.

ITEM:

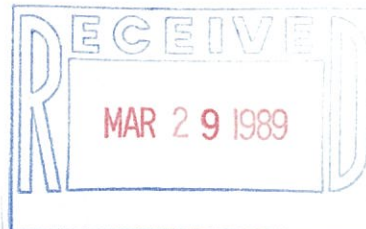
Willow Grove at Cunningham Corner - Replat of Minor Subdivision

           No Problems

  X   Problems or Concerns (see below)

1. More documentation/information is needed to understand what is changing with this replat. If building size and configuration change; grading + runoff coefficients change which also changes the detention requirements. A drainage report update is needed to show what was proposed/approved and what the changes are as well as the effects of those changes. I would suggest the approved report be revised & resubmitted. If not the entire report at least portions of it that pertain to the revisions should be included with the update.

cc: Ted Shepard  
Rick Richter



Date 3/27/89

Signature *Glen D. Schuster*