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File 1993-0044

Name: Northcrest Village - Preliminary Plan - NE of Hemlock Drive and 7<sup>th</sup> Street

P r e s e n t	S c a n n e d	<p>A few items are denoted with an asterisk (*), which means they are to be scanned for permanent record on the ISYS retrieval system. In some instances, items are found on the list but are not present in the scanned electronic development file because they are already scanned elsewhere on the system. These scanned documents are denoted with (**) and will be found on the ISYS query system in their designated categories.</p> <p>Documents specific to certain files, not found in the standard checklist materials, are listed at the bottom of the page.</p> <p>Remaining items, (not selected for scanning), will be listed and marked present. This index can serve as a quick guide for the contents of each file.</p>
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X	X	Action Sheet - Approved - 5/4/93	X	X	Grading Plan
X	X	City Council Minutes - 5/19/93, 6/2/93	X		Utility Plan
X		Correspondence			
X		E-mails			
X		Subdivision Summary Form			
X		Legal Ad - 4/27/93, 5/3/93			
X	X	Planning Commission Meeting - 5/4/93 - **			
X		Development Improvements Agreement - Preliminary - not scanned			
X		Returned Notice of Public Hearing mail-outs - sent 4/23/93			
X		Declaration of Restrictive Covenants - draft			
X	X	Ordinance No. 2680 - **			
X		Surrounding Land Use Map			
X	X	Site Development Plan			



**DEVELOPMENT APPLICATION**  
 Community Development Department  
 250 North 5th Street Grand Junction, CO 81501  
 (303) 244-1430

Original  
 On 4/2/93  
 From Office  
 #44 93

**A** Receipt 139  
 Date 4-2-93  
 Rec'd By [Signature]  
 File No. \_\_\_\_\_

We, the undersigned, being the owners of property situated in Mesa County, State of Colorado, as described herein do hereby petition this:

PETITION	PHASE	SIZE	LOCATION	ZONE	LAND USE
<input checked="" type="checkbox"/> Subdivision Plat/Plan	<input type="checkbox"/> Minor <input checked="" type="checkbox"/> Major <input type="checkbox"/> Resub		NORTHEAST of Hemlock Drive AND 7th ST	RSF-2	
<input checked="" type="checkbox"/> Rezone				From: RSF-2 To: PR-2	
<input checked="" type="checkbox"/> Planned Development	<input type="checkbox"/> ODP <input checked="" type="checkbox"/> Prelim <input type="checkbox"/> Final				
<input type="checkbox"/> Conditional Use					
<input type="checkbox"/> Zone of Annex					
<input type="checkbox"/> Text Amendment					
<input type="checkbox"/> Special Use					
<input type="checkbox"/> Vacation					<input type="checkbox"/> Right-of-Way <input type="checkbox"/> Easement

<input checked="" type="checkbox"/> PROPERTY OWNER	<input checked="" type="checkbox"/> DEVELOPER	<input checked="" type="checkbox"/> REPRESENTATIVE
<u>Kay Scott</u> <u>c/o Gregg Cranston</u> Name		<u>Thomas A. Logue</u> Name
<u>1401 No. 15th St.</u> Address		<u>227 So. 9th St.</u> Address
<u>Grand Junction, CO. 81501</u> City/State/Zip		<u>Grand Junction, CO. 81501</u> City/State/Zip
<u>241-4000</u> Business Phone No.		<u>245-4099</u> Business Phone No.

NOTE: Legal property owner is owner of record on date of submittal.

We hereby acknowledge that we have familiarized ourselves with the rules and regulations with respect to the preparation of this submittal, that the foregoing information is true and complete to the best of our knowledge, and that we assume the responsibility to monitor the status of the application and the review comments. We recognize that we or our representative(s) must be present at all hearings. In the event that the petitioner is not represented, the item will be dropped from the agenda, and an additional fee charged to cover rescheduling expenses before it can again be placed on the agenda.

X Thomas A. Logue Signature of Person Completing Application MAR 30, 1993 Date

X Gregg Cranston Signature of Property Owner(s) - Attach Additional Sheets if Necessary Mar. 30, 1993

ROSE T WARD  
736 TULIP DRIVE  
GRAND JUNCTION CO 81506

JOYCE L WEISSER  
555 SANTA CLARA AVENUE  
GRAND JUNCTION CO 81503

CARL ANDERSON  
MARILYN  
701 GALAXY DR  
GRAND JUNCTION CO 81506

RICHARD W FOSTER  
SHARON G  
703 GALAXY DR  
GRAND JUNCTION CO 81506

MELVIN E COOPER  
D E  
707 GALAXY  
GRAND JUNCTION CO 81506

JOHN E HALVORSON  
LINDA A  
711 GALAXY  
GRAND JUNCTION CO 81506

IRWIN I STEWART  
JANE ANN  
715 GALAXY  
GRAND JUNCTION CO 81506

CGS COMPANY  
3620 PONDEROSA WAY  
GRAND JUNCTION CO 81506

TEDDY G STREET  
CALEEN S  
721 GALAXY DR  
GRAND JUNCTION CO 81506

WALTER W MOSHER  
MAUREEN E  
723 GALAXY DR  
GRAND JUNCTION CO 81506

WAYNE D CALLAHAN  
PATRICIA A  
718 GALAXY DR  
GRAND JUNCTION CO 81506

RAMON J WEISS  
CLARICE J  
722 GALAXY LN  
GRAND JUNCTION CO 81506

HAROLD D REESBERG  
BETTY M-MARK REESBERG  
724 GALAXY  
GRAND JUNCTION CO 81506

MARY FRANCES MCCANDLESS  
717 CENTAURI DR  
GRAND JUNCTION CO 81506

THURMAN E RIDDLE  
SHARON LORITA  
715 CENTAURI DR  
GRAND JUNCTION CO 81506

CHARLES R BOTTINELLI  
MARION J  
714 GALAXY DR  
GRAND JUNCTION CO 81506

THOMAS G TADVICK  
CAROL L  
713 CENTAURI DR  
GRAND JUNCTION CO 81506

WALTER GONGAWARE  
ELVA C  
702 GALAXY DR  
GRAND JUNCTION CO 81506

JUDITH E SNODGRASS  
J D  
704 GALAXY DR  
GRAND JUNCTION CO 81506

CHARLES A BUSS  
MARY A  
706 GALAXY DR  
GRAND JUNCTION CO 81506

HUBERT V MEEK  
VIRGINIA A  
708 GALAXY  
GRAND JUNCTION CO 81506

LARRY L HEISERMAN  
JOANN  
2671 ALPHA PLACE  
GRAND JUNCTION CO 81506

MILES KARA  
M E  
705 CENTAURI DR  
GRAND JUNCTION CO 81506

MICHAEL E SUTHERLAND  
PATRICIA L TAYLOR  
703 CENTAURI DR  
GRAND JUNCTION CO 81506

GREGG K KAMPF  
KRISTINE R  
2668 G ROAD  
GRAND JUNCTION CO 81506

COLORADO WEST IMPROVEMENT INC  
P O BOX 2888  
GRAND JUNCTION CO 81502

LAWRENCE T WARD  
ELIZABETH L  
704 26 1/2 ROAD  
GRAND JUNCTION CO 81506

JESSE E SZUGYE  
PATRICIA M  
2652 SACOMA CT  
GRAND JUNCTION CO 81506

THOMAS C WORSTER  
P C  
2655 SACOMA CT  
GRAND JUNCTION CO 81506

CHARLES W QUINN  
VERA M  
2657 SACOMA CT  
GRAND JUNCTION CO 81506

ROY A JOSEPH  
LINDA L  
2654 SACOMA CT

JOEL D GALINDO  
2658 SACOMA CT  
GRAND JUNCTION CO 81506

MICHAEL J MCINANEY  
KATHLEEN M  
2653 SACOMA CT

# 14 93

PAUL D BOWERS  
2631 CENTRAL DR  
GRAND JUNCTION CO 81506

HAROLD D POTTER  
PATSY J  
2636 HICKORY DR  
GRAND JUNCTION CO 81506

DAVID W DIRKS  
KATHLEEN L  
2638 HICKORY DR  
GRAND JUNCTION CO 81506

THOMAS E MILLER  
L A  
2640 HICKORY DR  
GRAND JUNCTION CO 81506

DARRYL L HAYDEN  
SYBLE  
2644 HICKORY DR  
GRAND JUNCTION CO 81506

ROY J LAMBERT  
BLANCHE E  
2615 CHESTNUT DR  
GRAND JUNCTION CO 81506

WINSTON W WILLIAMS  
DOTTIE F  
739 26 1/2 RD  
GRAND JUNCTION CO 81506

GLADE S ISAACSON  
TWILA MAE  
~~2634 1/2 CHESTNUT DR~~  
CO 81506

~~RICHARD T THOME  
BETTY M  
2644 1/2 CHESTNUT DR  
GRAND JUNCTION CO 81506~~

BERNARD E NAVIN  
CAROLYN A  
2646 CHESTNUT DR  
GRAND JUNCTION CO 81506

MATTHEW B BINDER  
KAREN S  
2644 CENTRAL DR  
GRAND JUNCTION CO 81506

SHERMAN D JONES  
NORMA M  
2646 CENTRAL DR  
GRAND JUNCTION CO 81506

A MICHAEL DORING  
MARY L  
715 PINYON CT  
FRUITA CO 81521

ALFRED C GURMENDI  
ZOILA R  
114 - HILLSDALE DR  
STERLING VA 22170

GORDON G BISHOP  
CHERYL K  
724 HEMLOCK  
GRAND JUNCTION CO 81506

SARAH ANN APPEL  
718 HEMLOCK DR  
GRAND JUNCTION CO 81506

KEITH L CORDER  
DOROTHY M - TRUSTEES  
716 HEMLOCK DR  
GRAND JUNCTION CO 81506

JAY D SHULTZ  
W E  
717 26 1/2 RD  
GRAND JUNCTION CO 81506

ALAN W GUERRIE  
721 26 1/2 RD  
GRAND JUNCTION CO 81506

VICTOR L SWAIM  
THRESSEA B  
723 26 1/2 RD  
GRAND JUNCTION CO 81506

MARC RICKS  
TRUSTEE OF RICKS FAM TRUST  
1300 CEDAR AVE  
PROVO UT 84604

CHARLES F REAMS  
605 GUNNISON AVE  
GRAND JUNCTION CO 81501

PAUL D REAMS  
899 24 1/2 RD  
GRAND JUNCTION CO 81505

ROBERT H FOX  
PAMELA  
2517 I RD  
GRAND JUNCTION CO 81505

MELVIN E REAMS  
899 24 1/2 RD  
GRAND JUNCTION CO 81505

EDWARD D DHABOLT  
E A  
714 ASH DR  
GRAND JUNCTION CO 81506

STEVEN C ALEXANDER  
SUSAN L  
2646 HEATHER RD  
GRAND JUNCTION CO 81506

LIONEL W SMOCK  
HARRIET A  
721 HEMLOCK DR  
GRAND JUNCTION CO 81506

SAM J PROVENZA  
KAREN A  
723 HEMLOCK DR  
GRAND JUNCTION CO 81506

JEFFREY P VOGEL  
ROBY ANN  
725 HEMLOCK DR  
GRAND JUNCTION CO 81506

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2637 HICKORY DR  
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KENNETH E MARTIN  
ALICE F  
722 HICKORY CT  
GRAND JUNCTION CO 81506

EDWIN M JAMES  
FAITH L  
705 26 1/2 ROAD

MICHAEL W WIIEST  
DEBORAH L  
736 26 1/2 ROAD  
GRAND JUNCTION CO 81506

DENNIS J EDSON  
734 26 1/2 RD  
GRAND JUNCTION CO 81506

LEIGH R SULLIVAN  
DOROTHY S  
732 26 1/2 RD  
GRAND JUNCTION CO 81506

RODGER E HOWARD  
JACKLYN C  
730 26 1/2 RD  
GRAND JUNCTION CO 81506

WALTER W HALL  
MARILYN JOANN  
2652 CENTRAL DR  
GRAND JUNCTION CO 81506

ROBERT W COE  
I L  
729 TULIP DR  
GRAND JUNCTION CO 81506

GILBERT I ROPER  
NOLA L  
733 TULIP DR  
GRAND JUNCTION CO 81506

KENNETH E DILLARD  
DOROTHY M  
735 TULIP DR  
GRAND JUNCTION CO 81506

BRUCE A WARD  
R T  
736 TULIP DR  
GRAND JUNCTION CO 81506

HAROLD F ELAM  
ELIZABETH C  
734 TULIP DR  
GRAND JUNCTION CO 81506

ALAN M SIMPSON  
LINDA G  
730 TULIP DR  
GRAND JUNCTION CO 81506

CARLA EDEN  
2660 CENTRAL DR  
GRAND JUNCTION CO 81506

H ALBRETHSEN  
A J  
2661 CENTRAL DR  
GRAND JUNCTION CO 81506

EDGARDO F DELUCAS  
JOSEPHINE E  
2657 CENTRAL DR  
GRAND JUNCTION CO 81506

ROBERT D SCHOOLEY  
LINDA V  
2655 CENTRAL DR  
GRAND JUNCTION CO 81506

BILLIE L SMITH  
LAURA P  
2651 CENTRAL DR  
GRAND JUNCTION CO 81506

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NANCY J  
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HENDERSON NV 89014

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CHERYL A  
706 26 1/2 ROAD  
GRAND JUNCTION CO 81506

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HOLLY H  
2660 SACOMA CT  
GRAND JUNCTION CO 81506

W R BRAY  
J L  
702-L GOLFMORE  
GRAND JUNCTION CO 81506

ROBERT L BRAY  
VICTORIA L  
2660 G ROAD  
GRAND JUNCTION CO 81506

ALFRED C GURMENDI  
ZOILA R  
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STERLING VA 22170

MERTON O SMITH  
ESTATE & GENEVIEVE L  
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GRAND JUNCTION CO 81502

ANTHONY F PRINSTER  
ETAL  
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LORI A  
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GRAND JUNCTION CO 81504

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HARRIETTE C S  
565 PEACHWOOD DR  
GRAND JUNCTION CO 81504

CAROL A ROWE  
735 26 1/2 RD  
GRAND JUNCTION CO 81506

JOHN R BYRD  
RENAE A  
729 26 1/2 RD  
GRAND JUNCTION CO 81506

GERALD L BILLINGS  
FERN D  
2649 CENTRAL DR  
GRAND JUNCTION CO 81506

JEFFREY R LIDDLE  
SUSAN C  
2647 CENTRAL DR  
GRAND JUNCTION CO 81506

JEFFREY K WILLIAMS  
BARBARA K  
2645 CENTRAL DR

JAMES D TEPLY  
JUDITH K M  
2637 CENTRAL DR

IRENE D GEBBING  
LIVING TRUST  
2635 CENTRAL DR

ROBERT M HOOKER  
LINDA J  
626 CHACO CT  
GRAND JUNCTION CO 81503

CARL R COOK  
KAY A  
712 ASH DR  
GRAND JUNCTION CO 81506

CALVIN J LUKE  
C  
710 ASH DR  
GRAND JUNCTION CO 81506

JAMES A WARNER  
MARGIE L  
708 ASH DR  
GRAND JUNCTION CO 81506

HELEN STAGGS  
706 ASH DR RT 5  
GRAND JUNCTION CO 81506

FRANK D GORDON  
704 ASH DR  
GRAND JUNCTION CO 81506

J T DURNELL  
JULIA A  
702 ASH DR  
GRAND JUNCTION CO 81506

DEW W SCOTT  
701 - 26 1/2 ROAD  
GRAND JUNCTION CO 81506

ALBERT W MANNEL  
LAURA MAY  
703 26 1/2 RD  
GRAND JUNCTION CO 81506

JAMES R NOLAND  
SHIRLEY A  
709 26 1/2 RD  
GRAND JUNCTION CO 81506

RENA I WILBERT  
711 26 1/2 RD  
GRAND JUNCTION CO 81506

JOHN C WARREN  
EVELYN M  
713 26 1/2 RD  
GRAND JUNCTION CO 81506

LILA GARCIA  
JAMES R - JOHN R GARCIA  
715 HEMLOCK DR  
GRAND JUNCTION CO 81506

DONALD B MAXEY  
703 ASH DR  
GRAND JUNCTION CO 81506

EDNA KIMMINAU  
705 ASH DR  
GRAND JUNCTION CO 81506

HOLLY J KOCH  
707 ASH DR  
GRAND JUNCTION CO 81506

RANDALL T ZLOMKE  
LORRIE A  
711 ASH DR  
GRAND JUNCTION CO 81506

DAVID R FOUTS  
508 33 RD  
CLIFTON CO 81520

GLADE S ISAACSON  
TWILA MAE  
2634 1/2 CHESTNUT DR  
GRAND JUNCTION CO 81506

RICHARD T THOME  
BETTY M  
2644 1/2 CHESTNUT DR  
GRAND JUNCTION CO 81506

#1 L 93

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#44 93

**PRELIMINARY DEVELOPMENT PLAN  
FOR  
NORTHCREST VILLAGE SUBDIVISION**

March, 1993

**Prepared For:**  
Gregg Cranston  
1401 North 1st. Street  
Grand Junction, CO 81501  
303-241-4000



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11-11-1998  
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PROJECT NARRATIVE  
PRELIMINARY DEVELOPMENT PLAN FOR:  
NORTHCREST VILLAGE SUBDIVISION

**INTRODUCTION** - The Northcrest Village Subdivision property was recently annexed by the City of Grand Junction. A previous requested zone change was not accepted by the Grand Junction City Council for a planned 29 lot development. Therefore, a 20 lot subdivision is included as part of this application. The accompanying narrative statement and maps will provide sufficient data to assess the merits of the requested Preliminary Development Plan application. Information gained as a result of this review process will be utilized in the preparation of the final construction documents and final plat.

**LOCATION** - Northcrest Village Subdivision contains approximately 10 acres. Northcrest Village Subdivision is located in the North Grand Junction area, 600 feet north of "G" Road and east of North 7th. Street. The property is located in part of the SW 1/4 of Section 19, Township One North, Range One West, of the Ute Meridian.

**EXISTING LAND USE** - The vacant of any structures. Even though irrigation water is available, the site is in a fallow state. No recent agricultural production has occurred. The site is some-what affected by an existing natural drainage swale which flows to the northwest corner of the property. Topography of the property is considered to be "gently rolling" in nature. The land within Northcrest Village slopes towards the northwest at a average rate of 1.7 percent. The subject property is zoned RSF-2 by the City of Grand Junction.

**SURROUNDING LAND USE** -The surrounding land use in the vicinity of the subject property is considered to be of moderate intensity. Predominate uses include single family dwellings on subdivided tracts. Agricultural production is almost non-existent in the vicinity of Northcrest Village. The attached Surrounding Land Use map depicts the configuration of various properties in the area surrounding Northcrest Village. A study area was selected that includes land lying south of Interstate 70 and north of "G" Road, one quarter mile to the west and one half mile to the east. The selected Study Area best represents what is considered to the immediate neighborhood. The study area contains 129.7 acres and includes 409 individual parcels of land with a resulting density of 3.15 parcels per acre. Platted subdivisions within the study area include:

4/14/93

Do NOT Approve  
New Office

SUBDIVISION ZONING STATUS CHART		
SUBDIVISION NAME	ZONING	CITY/COUNTY
Melody Park	R-1-B	County
Galaxy	R-1-B	County
Nina Mae	R-1-B	County
Sunset Terrace	RSF-4	City
Rolling Acres	R-1-B	County
Terra Del Vista	R-1-B	County
Country Club Height	R-1-B	County
Bella Vista	RSF-4 & R-1-B	City/County
Sacoma Court	R-1-B	County

**PROPOSED LAND USE** - The proposal calls for the ultimate development of 20 single family building sites on 10 acres. Lots range in size from 10,800 square feet to 30,600. The resulting density is 2.0 dwelling units per acre. The accompanying Preliminary Site Development Plan depicts the relationship of each lot to the property boundary, roadway access, and other features of the proposed development.

In addition to the individual lot development standards presented herein, strict architectural controls will be instigated to protect the development from undesirable influences. To achieve this, a set of covenants, conditions and restrictions (C.C. & R's) will be adopted to insure ongoing protection to the future residents of Northcrest Village Subdivision and surrounding property owners. The C.C. & R's will also include provisions for ownership and maintenance of the irrigation system. A copy of a draft set of C.C. & R's has been transmitted to the Planning Department under separate cover. The accompanying Site Development Plan indicates the minimum building setbacks which will be incorporated in determining lot building envelopes.

#46 93 **ACCESS** - Primary access to Northcrest Village will be from North 7th. Street designated as local minor arterial by the City of Grand Junction. Review of the accompanying Surrounding Land Use Map reveal that access is available to North 12th. Street, a major north/south arterial via "G" Road which is also classified as a major arterial. Interstate 70 is located approximately one half mile north of the site.

Proposed roadway improvements call for the construction of approximately 800 feet of new public street. Internal streets will be constructed in accordance with the City's current standards for "Local Streets". The street right-of-way will also serve as a utility corridor. The proposal also

calls for additional widening and the installation of curb, gutter and sidewalk along the sites North 7th. Street frontage. According to the Colorado Highway Department's Trip Generator, approximately 200 average total daily trips would occur after site development is complete. In 1991 Mesa County traffic counts adjacent to Northcrest Village were 2500 average daily trips.

The dedicated right-of ways and private drive also will serve as utility corridors.

#### UTILITY SERVICE

**DOMESTIC WATER** - All lots within Northcrest Village Subdivision will be served by a domestic water distribution system. An existing 18 inch water main is located within North 7th. Street and will be used to provide water service to lots within Northcrest Village Subdivision. A new 8 inch main will be extended within the property. All of the existing water mains are owned and maintained by the Ute Water Conservancy District. Fire hydrants will be placed throughout the development. Sufficient flows and pressure exist to provide adequate water supply for fire protection.

**SANITARY SEWER** - A new sanitary sewage collection system will be constructed to serve all lots within Northcrest Village. Sewer service will be extended from an existing 8 inch main located in North 7th. Street. It is estimated that peak sewage flows generated by the lots within the development will be 5,000 gallons per day.

**ELECTRIC, GAS, PHONE & CATV** - Electric, gas, and communication lines will be extended to each lot within the development from existing lines located adjacent to the proposed development. Other than underground electric lines; gas and communication lines will be located in a "common trench" adjacent to the dedicated road right-of-way.

**IRRIGATION WATER** - According to the Grand Valley Water Users Association, 0.25 cfs of irrigation water is normally available for use by the subject property. Irrigation water is delivered to the southeast property corner through a series of open ditches. A gravity flow, underground pipeline will deliver water to each lot within Northcrest Village Subdivision.

**SOILS** - According to data contained within the Soil Conservation Service (SCS) soil evaluations, soil limitations are not identified as severe for identified building areas within Northcrest Village Subdivision. SCS has identified two soil classification within the property.

Pb - Persayo-Chipeta Clay Loam, Class IVs  
Fr - Fruita Very Fine Sandy Loam, Class IIe

#44 03

**DRAINAGE** - A Drainage Report which evaluates the impacts on existing drainage patterns has been submitted to the City Engineering Department under separate cover. Most of the future drainage will be carried on the ground surface to the proposed street system and to the Northwest property corner. A new outlet control structure will be constructed within

a depressed area in a manner which will control the amount of developed storm water flows which will be discharged from the site. The site is somewhat affected by drainage from off-site sources particularly from land lying to the east.

**DEVELOPMENT SCHEDULE** - The rate at which development of Northcrest Village Subdivision, will occur is dependent upon the City's future growth and housing needs. At this point in time it is anticipated that site development will begin and be completed during the summer of 1993.

# 47 93

City of Northcrest  
Planning Office

# REVIEW COMMENTS

Page 1 of 3

FILE NO. #44-93

TITLE HEADING: Preliminary Plan - North Crest  
Village Subdivision

LOCATION: 600 feet North of G Road, East of 7th Street

PETITIONER: Gregg Cranston

PETITIONER'S ADDRESS/TELEPHONE: 1401 North 1st Street  
Grand Junction, CO  
241-4000

PETITIONER'S REPRESENTATIVE: Thomas A. Logue

STAFF REPRESENTATIVE: Karl Metzner

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**NOTE: WRITTEN RESPONSE BY THE PETITIONER TO THE REVIEW COMMENTS IS  
REQUIRED ON OR BEFORE 5:00 P.M., APRIL 27, 1993.**

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**UTE WATER**  
**Gary R. Mathews**

**4/8/93**  
**242-7491**

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Ute Water will supply this project. 18" main line on West side of 26 1/2 Road. Sufficient flows and pressure exist for fire protection. The proposed 8" water main in Hemlock Court needs to remain on one side or the other. South and East side or North and West side. The 8" water main will be installed approximately 2-3' from curb and gutter. Valves need installed at the fire hydrants.

Policies and fees in effect at the time of application will apply.

**GRAND VALLEY RURAL POWER**  
**Perry Rupp**

**4/8/93**  
**242-0040**

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Grand Valley Rural Power would need a 10' easement along the east side of Lot 12.

**U.S. WEST**  
**Leon Peach**

**4/7/93**  
**244-4964**

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New or additional telephone facilities necessitated by this project may result in a "contract" and up-front monies required from developer, prior to ordering or placing of said facilities. For more information, please call Leon Peach 244-4964.

**PUBLIC SERVICE COMPANY**  
**Dale Clawson**

**4/9/93**  
**244-2695**

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Electric: This is in GVRPL area.

Gas: No objections.

**U.S. POST OFFICE**  
**Synthia L. Palzine**

**4/10/93**  
**244-3465**

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Mail delivery will be rural delivery on RR06.

Choices for delivery are:

1. Centralized - Postal Service will provide neighborhood delivery and collection box units - if developer will do concrete and install.
2. Curb Delivery - Must be no sidewalks - boxes must be on curb and carrier serves from vehicle. Since this is a cul-de-sac, delivery may be on both sides of the street - usually only on right side.

**GRAND JUNCTION FIRE DEPARTMENT**  
**George Bennett**

**4/12/93**  
**244-1400**

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The fire hydrants are to be placed at the following locations:

At the corner of Hemlock Court & 7th Street  
Between Lots 5 & 6, just back of the sidewalk  
Between Lots 19 & 20, just back of the sidewalk

**GRAND JUNCTION POLICE DEPARTMENT**  
**Mark Angelo**

**4/14/93**  
**244-3587**

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Want to confirm access to lots 13, 14, 15 is off Hemlock Court and not North 7th Street? If so, is there access off back of lots from 26 1/2 Road? Access to deep lots 5, 9, 10, 13 use of private drives - turnaround for emergency vehicles?

With Hemlock Court running east and north, how is numbering of the houses going to be assigned to remain constant with current streets? If access to lots 13-16 is from 7th Street, does street improvement address on-street parking for these lots?

**CITY DEVELOPMENT ENGINEER**  
**Gerald Williams**

**4/15/93**  
**244-1591**

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Once applications are received (complete), 1 working day is allowed for processing and distribution, and 10 working days for City review and preparation of comments. Complete applications received by April 1st should be sent out by April 16th. However, full information was not received until April 5, 1993; therefore, we are allowed until April 20, 1993 to submit review comments. Unfortunately, due to current work loads, the full allowed time may be required for review, and comments are not available by April 16th, and are forthcoming. Petitioner response to review comments must be returned by April 27, 1993. Regrettably, late submittal will likely result in reduced time allowed for developer response.

**FILE #44-93 / REVIEW COMMENTS**

**page 3 of 3**

**CITY UTILITIES ENGINEER**  
**Bill Cheney**

**4/14/93**  
**244-1590**

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WATER - Ute Water

SEWER - Proposed sewer alignment appears to be adequate. There may be a capacity problem at Jasmine lift station if development builds out before station is upgraded. Anticipated upgrade is in 1994.

**CITY PARKS & RECREATION DEPARTMENT**  
**Don Hobbs**

**4/8/93**  
**244-1542**

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Based upon \$225 per unit - 20 units = \$4,500.00 due in open space fees.

**GRAND VALLEY WATER USERS**  
**G.W. Klapwyk**

**4/16/93**

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The statement made, pertaining to irrigation water, in the Preliminary Development Plan for North Crest Village Subdivision (page 3) is generally accurate, but to clarify the matter a bit, it should be noted that irrigation water is delivered by the Association to the property thru a headgate located near the southeast property corner. Beyond such point of delivery the Association has no jurisdiction and the water must then be distributed and managed within the subdivision by others.

Please advise if there are any questions.

**COMMUNITY DEVELOPMENT DEPARTMENT**  
**Karl Metzner**

**4/20/93**  
**244-1439**

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Density requested is 2 units per acre which is consistent with surround zoning and densities. Drainage easement on lot 13 should be a separate parcel designated as drainage easement and open space and dedicated to homeowners association for operation and maintenance.

Common access easement should be platted for lots 9 & 10.

Since irrigation is to be underground gravity flow, CCR's should specify watering schedules for all lots to avoid future conflicts in water use.

A one foot non-vehicular access easement should be platted along 26 1/2 Road to prevent future driveway access. Access restriction and setbacks should be noted on plat.

REVIEW COMMENTS

FOR

NORTHWEST VILLAGE

APRIL 20, 1993

Some of the following comments must be addressed as part of the preliminary submittal, and are prefaced with a "P". Other comments are informational for use in preparing for the final submittal, and are prefaced with an "F". All items are similarly red-lined on the plans or report.

Site Plan

- P1. Thirty-foot radius curb returns (at the flowline) are required at the intersection of 7th Street and Hemlock. Curbs shall be vertical, with handicap ramps provided.
- P2. From the east end of the curb returns, provide five-foot transitions from vertical to drive-over curb walks.
- P3. For the current irrigation line configurations, additional easements are required on Lots 1, 7, and 16.
- P4. We suggest consideration of an irrigation easement on the north side of Lot 5 for convenient access to the headgate. Depending upon operation procedures, this may not be merited.
- P5,F1. Based upon past discussion by the Planning Commission and City staff, it is strongly recommended that the drainage easement on Lot 13 be made a tract and maintained by the Homeowners Association. If you have concerns about this, please call so we can discuss it.
- F2. Collection/conveyance drainage facilities must only be designed for the two-year storm runoff event, unless flow passes through private property as shown on Lot 13. This drainageway must be adequate for the 100-year runoff. The easement must be adequate. (This would also apply to swales which convey inflow from off-site.)
- F3. Access to lots directly from 7th Street is not allowed. Therefore, immediately east of and adjacent to the east 7th Street R.O.W., a 1.0 foot wide non-vehicular access easement is required, and dedicated to the City.

Utility Plan

- P1. See note P3, Site Plan.



- P2. See note P4, Site Plan.
- P3. A legend of symbols used is required.
- P4. Water and sewer lines are identified, but the irrigation line is not. Please label or use symbols identified in the legend to clarify.
- P5. Add to the note "Proposed Fire Hydrant" the words "with valve", or show the valve, or indicate in the legend that the symbol used indicates that a fire hydrant complete with valve is represented.
- P6. Although the Grading Plan does not show it, the Drainage Report discusses a swale to be maintained at the north boundary line. How will this work in conjunction with the three standpipes proposed in the same area? Please clarify.
- P7. The standpipe irrigation system as shown would result in continuous wastewater, which may not be discharged to the "storm drain system", but must go into a bona-fide irrigation system. An alternative approach would be to eliminate the standpipes, close the system and connect the ends, with a single valved discharge to drain the system in the fall. Annually draining the lines to the storm drain system is acceptable. The static hydraulic grade line would be the water surface level in the supply ditch.
- P8. Show the drainage facilities, swales, and detention basin on this drawing for perspective.
- F1. Some of the proposed manholes are schematically shown close to gutter sections. Be advised that manhole rims will not be permitted to fall within gutters.

#### Grading Plan

- P1. Swales must be shown (schematically with arrows at this preliminary stage is adequate) as discussed in the drainage report to convey stormwater inflow from off-site, namely at the south, east, and north boundary of the subdivision.
- P2. For reference, show irrigation facilities, and also sewerline located outside of R.O.W. on the Grading Plan.
- P3. Show all easements.
- P4. The 12-inch CMP (identified incorrectly as 18-inch in the report) must be replaced with PVC or RCP in R.O.W. Since Northwest is the primary user, the developer is responsible for replacing the line to the first catch basin lateral.

## Drainage Report

Currently, we are allowing preliminary submittals of drainage reports to conform to that presented in the proposed SSID manual, which is a reduction in level of detail from that required by currently adopted manuals. As proposed, hydrological and hydraulic calculations are not required, other than perhaps a rule-of-thumb estimate of the amount of surface area that should be reserved for stormwater. (For residential subdivisions using detention, 3% of the total area appears to be a safe rough estimate.) Consequently, sections I, II, and III as presented is adequate for the Preliminary Drainage Report, and no response is required at this time.

The report also contained calculations and procedures. Inasmuch as these were submitted, we will provide general comments regarding them to assist in the preparation of the Final Drainage Report.

- F1. The developer is not responsible for mitigating an increase in runoff due to development of off-site areas. Therefore, analyses may consider the current stormwater inflow from off-site as being both the historical and developed inflow condition. On-site drainage facilities must be capable of conveying the current inflow from off-site through the swales, and as currently designed, through the detention pond as well. However, detention volume is not required for stormwater originated off-site. That is, outlet works from the detention pond may pass the full existing inflow from off-site plus the historic (undeveloped) runoff rate from on-site.

The developer is allowed to detain more, if desired, but it is not required. And if only the on-site runoff is considered for detention volume, then on-site and off-site runoff must be estimated as explained above, and not as presented in the calculations in the Preliminary Drainage Report. Furthermore, " $Q_0$ " would be based upon " $Q_{max}$ ", which is the historic runoff as explained above, not the developed peak runoff. Please call if there are questions regarding this.

- F2. A "Drainage Plan" is referenced on page 4 of the report, which should show design points and other pertinent information which is not shown or is poorly shown on the two drainage area maps attached to the report. For the final, a complete Drainage Map is required.
- F3. When preparing final calculations, be aware that historic runoff releases from the site will not only include that released from the detention pond, but flow-by as well, if any, past the catch basin proposed on 7th Street. Both the inlet capacity (per HEC-12) and pipe capacity must be analyzed to determine interception and flow-by.

- F4. Are times of concentration calculated per City approved methods? What is used?
- F5. Overland times of concentration should not be used for distances beyond 300 feet (see the interim criteria manual).
- F6. UD&FCD's urbanized check is not recognized by the City.
- F7. If weir and orifice outflow do not both begin at the beginning of ponding, then the  $0.65 Q_{max}$  equation does not apply. We apologize for the manual's poor wording on this -- it continues to mislead people, and needs to be re-written. Most two-stage arrangements do not allow for the use of the "basic relationships" for the 100-year condition. The solution as presented in the criteria manual may be direct for the two-year condition (using only the lower outlet), but may only be a reasonable starting point for the 100-year analysis. Use of a stage-depth/volume-discharge graph may allow for quick iteration for the 100-year analysis.
- F8. Allowed 100-year release is a composite of catch basin flow-by (if any) on 7th Street, the lower level orifice at the 100-year maximum ponding level, and the weir.

#### General

Information to be provided on the Preliminary Plan has been divided up and placed upon three drawings. In some instances, this does not present a problem. However, some duplication is required just to allow a simultaneous look at how facilities physically will inter-relate. We would prefer the single drawing on future applications. For this, we only caution you that a change made for one drawing may necessitate the same changes on the other two.

The proposed site will unquestionably involve more than five acres of surface disturbance, and will require an NPDES Construction Activity permit. This must be obtained from CDH, and a copy submitted to the City prior to construction.

## STAFF REVIEW

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FILE # 44-93

DATE: April 27, 1993

STAFF: Karl Metzner

REQUEST: Rezoning from RSF-2 to PR2 and Preliminary plan.

LOCATION: East side of 26 1/2 road, approximately 660 feet north of G road.

APPLICANT: Kay Scott c/o Greg Cranston

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EXISTING LAND USE: Vacant

PROPOSED LAND USE: Residential

SURROUNDING LAND USE:

NORTH: Single family residential

EAST: Single family residential

SOUTH: Residential

WEST: Residential

EXISTING ZONING: RSF-2

PROPOSED ZONING: PR-2

SURROUNDING ZONING:

NORTH: RSF-2

EAST: RSF-2

SOUTH: RSF-2

WEST: RSF-4

---

RELATIONSHIP TO COMPREHENSIVE PLAN/POLICIES/GUIDELINES: The 7th Street Corridor Guidelines support residential development in this area.

STAFF ANALYSIS: Planning Commission previously reviewed this property for a rezone to PR 2.9 and outline development plan. Planning Commission recommended denial and Council denied the project based on the increase in density. The current proposal is for 20 lots on approximately 10 acres. The rezone is requested to allow for the reduction in land area used for roads. Gross density would stay at 2 units per acre with lots ranging from .25 acre to .63 acre. There are no significant technical concerns and all review comments have been adequately addressed by the developer. This project, if approved, would have to resubmit for a final plan/plat process which will require all final engineering and must address all conditions of preliminary approval.

STAFF RECOMMENDATION: Recommend approval subject to all review agency comments. The proposal is in keeping with existing densities in the area and the petitioner has adequately responded to all review comments.

## RESPONSE TO REVIEW COMMENTS

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FILE NO. 44-93, PRELIMINARY PLAN FOR NORTHCREST VILLAGE SUBDIVISION  
LOCATION: 600 FEET NORTH OF G ROAD, EAST OF SEVENTH STREET

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### UTE WATER

Valves have been added to Fire Hydrant note.

### GRAND VALLEY RURAL POWER

A 10 foot easement is provided along the east side of Lot 12 on Revised Sheets 2 and 3.

### US WEST

Comment does not require a response.

### PUBLIC SERVICE COMPANY

Comment does not require a response.

### US POST OFFICE

Comment does not require a response.

### FIRE DEPARTMENT

Fire Hydrants have been relocated as requested and are shown on Revised Sheet 2.

### POLICE DEPARTMENT

A one foot Non-Vehicular Access Easement has been added to Revised Sheet 2 which will prohibit direct driveway access to Seventh Street from Lots 1, 14, 15, and 16. Since the access drive for Lots 9 and 10 is slightly longer than 100 feet it is felt that a turn-around would not be necessary.

### DEVELOPMENT ENGINEER

The following changes have been made to Revised Sheet 2, Site Development Plan:

1. A thirty foot radius curb return at the flowline and five foot transition at the intersection of proposed Hemlock Court and Seventh Street. The intersection improvements will be constructed in accordance with City Standards depicted on Exhibit "G", *Accessible Ramp and Parking Stall Details*.
2. Easement for all proposed irrigation system improvements including a 5 foot easement along the south side of Lot 6.
3. In order to insure on-going maintenance of the grounds within the stormwater detention area a drainage easement is described across a portion of the west half of Lot 13. The owner of Lot 13 will be responsible for the care and use of the area within the easement. The Homeowners Association will be responsible for the operation and maintenance of the drainage control structure and related piping within the easement.

The following changes have been made to Revised Sheet 3, Utility Plan:

1. See Item 1 and 2 above.
2. The words "with valve" have been added to the Proposed Fire Hydrant note.
3. The irrigation delivery system has been modified to be a "closed system" without standpipes. The system is connected to the drainage discharge piping for periodic flushing of the system.

Since all of the existing and proposed utility lines are labeled on the plan, a Legend has not been added to avoid redundancy.

The following changes have been made to Revised Sheet 4, Grading Plan:

1. Arrows to schematically show surface drainage swales.
2. The proposed sanitary sewer line where it crosses Tract "A".
3. The 12" Storm Sewer will be extend full length to an existing inlet located at the SE Corner of Seventh Street and Central Drive. Additionally, the existing inlet will be replaced with the City's current standard inlet.

Other requested modifications and comments required with the Final Plan Submission will be addressed at that time.

UTILITY ENGINEER

Full build is not anticipated to occur until sometime during 1995.

PARKS AND RECREATION DEPARTMENT

Comment does not require a response

GRAND VALLEY WATER USERS

Comment does not require a response.

COMMUNITY DEVELOPMENT DEPARTMENT

A Ingress and Egress Easement for Lots 9 and 10 has been added to Revised Sheet 2.

The CCR's, as submitted, include watering schedules for irrigation.

A one foot non-vehicular access easement has been added to Revised Sheet 2.

SUBDIVISION SUMMARY FORM

City of Grand Junction

Original  
Do NOT Remove  
From Office

TYPE OF SUBMISSION

Preliminary Plan   X    
Final Plat/Plan       

Subdivision Name: NORTHCREST VILLAGE Filing           

Location of Subdivision: TOWNSHIP 1N RANGE 1W SECTION 18 1/4 SE

Type of Subdivision	Number of Dwelling Units	Area (Acres)	% of Total Area
<input checked="" type="checkbox"/> SINGLE FAMILY	<u>20</u>	<u>8.5</u>	<u>85</u>
<input type="checkbox"/> APARTMENTS	_____	_____	_____
<input type="checkbox"/> CONDOMINIUMS	_____	_____	_____
<input type="checkbox"/> MOBILE HOME	_____	_____	_____
<input type="checkbox"/> COMMERCIAL	<u>N.A.</u>	_____	_____
<input type="checkbox"/> INDUSTRIAL	<u>N.A.</u>	_____	_____

Street 1.5 15

Walkways \_\_\_\_\_

Dedicated School Sites \_\_\_\_\_

Reserved School Sites \_\_\_\_\_

Dedicated Park Sites \_\_\_\_\_

Reserved Park Sites \_\_\_\_\_

Private Open Areas \_\_\_\_\_

Easements \_\_\_\_\_

Other (specify) \_\_\_\_\_

10.0 100%

Estimated Water Requirements 6000 gallons/day.

Proposed Water Source Ute Water Conservancy Dist

Estimated Sewage Disposal Requirement 5000 gallons/day.

Proposed Means of Sewage Disposal Persigo WWTP



**DRAINAGE REPORT**  
**FOR**  
**NORTHCREST VILLAGE**

April 1, 1993

**Prepared for:**

**Gregg Cranston**  
**1401 North First Street**  
**Grand Junction, CO 81501**

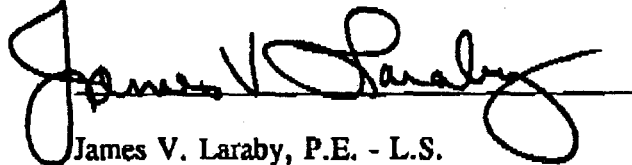
**Prepared by:**

**James V. Laraby, P.E.- L.S.**  
**227 Soth 9th Street**  
**Grand Junction, CO 81501**  
**(303) 245-4099**

Original  
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Date Filed

ENGINEER'S CERTIFICATION

I hereby certify that this report and associated drawings for **DRAINAGE REPORT** for the **Northcrest Village** was prepared by the undersigned.

A handwritten signature in black ink, appearing to read "James V. Laraby", written over a horizontal line.

James V. Laraby, P.E. - L.S.  
State of Colorado, No. 9133

2011/11/13 #22 13  
3:00 PM  
11/13/11

DRAINAGE REPORT

NORTHCREST VILLAGE

I. GENERAL LOCATION AND DESCRIPTION

A. Location

Northcrest Village contains approximately 10 acres. It is located in the North Grand Junction area, 660 feet north of "G" Road and east of North 7th Street. The property is part of the SE 1/4 of Section 35, Township One North, Range One West, of the Ute Meridian.

The property is to be developed into 20 single family lots with areas from 10,000 sq. ft. to 20,000 sq. ft. resulting in a gross density of 2.0 units per acre. All of the land surrounding Northcrest Village has been fully developed. The following is a summary of the adjacent subdivisions.

<u>LOCATION</u>	<u>SUBDIVISION</u>	<u>DESCRIPTION</u>
North	Melody Park	single family
East	Galaxy	single family
South	Nina Mae	single family, irrigation ditch
West	Sunset Terrace	single family

B. Property Description

The property is vacant of structures or dwellings. Even though irrigation water is available for the site, it appears no recent agricultural production has occurred. The site is affected by an existing natural drainage swale which flows to the northwest corner of the property. The topography is gently rolling and slopes towards the northwest at a rate of approximately 1.7 percent. The property is zoned RSF-2.

The drainage for the property flow through an existing 18" corrugated metal pipe. It appears this pipe connects to an existing drainage system with two inlets on the east side of the intersection of Central Drive and No. 7th Street. This drainage system drains west to an existing drainage swale located west of No. 7th Street on the north side of Central Avenue.

II. DRAINAGE BASINS AND SUB-BASINS

A. Major Basin Description. The site drains into one basin tributary to the existing pond located adjacent to North 7th Street at the northwest corner of the site. This basin collects the flow from 13.91 acres offsite located to the east and south of Northcrest. The basin is divided into three smaller sub-basins for ease in determining runoff in the streets, inlets, and storm sewer. The sub-basins are labeled as A-C, inclusive.

#44 93

Original  
No. 1000

**B. Sub-basin Description**

1. Offsite. The flow from the east reaches the proposed detention pond along an existing swale along the north edge of Northcrest. This swale will remain as a drainage easement through the back of the residential lots. The drainage from the south flows to North 7th Street. Curb, gutter, and sidewalk improvements are planned to convey the drainage to the detention pond. An inlet will be constructed near the detention pond to route the storms through the pond.

2. Onsite. The site is divided into three minor sub-basins, A-C. The property was divided into these basins in order to provide the runoff detail for the design of individual structures.

Basin A. This area consists of 7.51 acres, including approximately 5 acres of land located south of Northcrest. This area drains to No. 7th Street and will be transported along a curb, gutter and sidewalk to an inlet that will direct the flow into the detention pond.

Basin B. This area consists of 6.84 acres, including offsites from the developed lots located east of Northcrest. This area drains to the proposed interior road and flows along the road to the end of the cul-de-sac. The runoff will flow to the detention pond through a proposed curb opening. A concrete swale will be constructed from the end of the cul-de-sac to the detention pond.

Basin C. This area consists of 9.55 acres, mainly offsite from an existing subdivision located east of Northcrest. A swale along the north property line will transport the runoff to the detention pond.

#44 = 3

Remove

### III. DRAINAGE DESIGN CRITERIA

A. **Hydrology.** Runoff computation were prepared for the two (2) year (minor) and One Hundred (100) year (major) storm frequency utilizing the Ration Method ( $Q=CIA$ ) and are included in Appendix A of this report. The following information was delineated from the "INTERIM OUTLINE OF GRADING AND DRAINAGE CRITERIA", prepared by the engineering staff, City of Grand Junction, July 1992.

- C Values - Recommended Average Runoff Coefficients
- Average velocities for overland flow
- Overland flow curves
- Intensity - duration curves

Copies of the above referenced charts and graphs are included in Appendix A of this report.

The runoff is to be directed towards an existing pond which will act as a detention facility for not only for Northcrest Village, but also the tributary offsite basins.

The storage volume within the pond was determined utilizing the City's criteria. Release rates and required storage volumes were determined with the "Modified Rational Method" per City's criteria. Since the pond collects runoff from more that Northcrest Village, the acreage of the entire tributary basin was used in determining the size of the required storage volume. The calculation are shown within Appendix A of this report.

B. **Hydraulics.** The hydraulics for the specifice drainage structures were designed utilizing the Weir, Orifice, and inlet design criteria as described in the "INTERIM OUTLINE OF GRADING AND DRAINAGE CRITERIA". A detailed analysis of all structures are included within Appendix B of this report.

**IV. DRAINAGE FACILITY DESIGN**

The following is a summary of the design points and their associated drainage structures.

Design Point	Q (2 yr)	Q (100 yr)	Comments
1	2.7	11.2	Cross pan to be constructed to transport flow north in curb & gutter along the east side of No.7th Street.
2	3.2	13.4	Standard inlet to be constructed to direct flow to detention pond thur a 12 in concrete pipe.
3	2.2	8.9	Curb open will be constructed. Flow to detention pond along a concrete swale.
4	3.0	11.5	Grass swale to transport runoff to detention pond.

Refer to the Drainage Plan and respective calculation for design point locations. Total flow leaving the project is as follows:

<u>Storm</u>	<u>Historic (CFS)</u>	<u>Developed (CFS)</u>
Two (2) year	2.9	7.0
One Hundred (100) year	13.3	26.7

The detention pond outlet is designed as a two stage outlet structure. The outlet configuration and calculations are located in Appendix B of this report.

**V. CONCLUSION**

This drainage study presents the drainage impact created by the development of Northcrest Village. The storm water management system presented herein provides the required storm drainage system to adequately convey the two (2) year and one (100) year storms in such a manner as to minimize the hazards of local flooding.

**Drainage Report  
NorthCrest Village  
Grand Junction, CO**

**APPENDIX A**

# 4 3 2 1

NOV 20 1998  
11:00 AM

PROJECT: NORTHCREST VILLAGE

BY: J. Laraby

DATE: 4/1/93

SUBJECT: RUNOFF CALCULATIONS

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HISTORIC RUNOFF:

2 YEAR 100 YEAR

Drainage area (acres)	2 YEAR	100 YEAR
1. Northcrest Village	10.0	10.0
2. Offsite drainage area	13.9	13.9
<hr/>		
Total Area (A):	23.9	23.9
Runoff coefficient (C):	0.2	0.4
C*A:	4.8	8.4
Time of Concentration (Tc):	56.3	52.3
Ave rainfall intensity (I):	0.60	1.59
Peak runoff rate (Q):	<u>2.9</u>	<u>13.3</u>
Developed Runoff (Q):	<u>7.0</u>	<u>26.7</u>

4/1/93





Subdivision: NORTHCREST VILLAGE  
 Location: GRAND JUNCTION, COLO  
 STORM DRAINAGE SYSTEM DESIGN (Rational Method Procedure)

DESIGN STORM: 100 YEAR

DATE: 4/1/93

PAGE 1 OF 1

STREET	DESIGN AREA POINT	A DESIG. (acres)	C	CA (acres)	sum CA (acres)	t <sub>c</sub> (min)	i (in/hr)	Q (cfs)	Slope (%)	Length L(ft)	VEL. V(fps)	t (min)
BASIN "A"												
	a.1	3.67	0.55	2.02	17.0		3.07	6.2				
	a.2	2.16	0.55	1.19	16.7		3.07	3.6				
	a.3	0.48	0.55	0.26	15.0		3.24	0.9				
1		6.31		3.47	15.0		3.24	11.2				
2	a.4	1.20	0.55	0.66	4.1	15.0	3.25	13.4	1.0	400	0.75	8.9
	Total	7.51		4.13								
BASIN B												
	b.1	3.66	0.55	2.01	19.1		2.91	5.9				
	b.2	1.66	0.55	0.91	18.0		2.99	2.7				
	b.3	1.52	0.55	0.84	2.8	23.1	2.63	7.5	1.5	260	0.85	5.1
3		6.84		3.76	3.8	28.2	2.36	8.9				
BASIN "C"												
	c.1	7.51	0.55	4.13	22.0		2.70	11.2				
	c.2	0.99	0.55	0.54	4.675	22.0	2.70	12.6	1.8	550	0.95	9.6
4	c.3	1.06	0.55	0.58	5.3	31.6	2.19	11.5	0.9	220	0.65	5.6
5		23.91		13.15	13.2	37.3	2.03	26.7				

Division: NORTHCREST VILLAGE  
 Location: GRAND JUNCTION, COLO  
 TIME OF CONCENTRATION HISTORIC

DESIGN STORM: 2 YEAR

DATE: 4/1/93

PAGE 1 OF 1

SUB-BASIN SIGN	AREA Ac	C	INITIAL/OVERLAND TIME (ti)			TRAVEL TIME (Ti)				Tc CHECK (URBANIZED BASINS)		FINAL Tc	
			LENGTH Ft	SLOPE %	ti Min	LENGTH Ft	SLOPE %	VEL FPS	Tc Min	COMP Tc	TOTAL LENGTH		Tc (min)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	a.1.1	0.2	300	1.3	27.0							11.7	
1	a.1.2	0.2				300.0	1.3	0.75	6.7	33.7		11.7	
	a.2.1	0.2	200	2.5	17.0							11.1	
2	a.2.2	0.2				290.0	1.5	0.85	5.7			11.6	
3	a.3	0.2	300	1.5	28.0							11.7	
4	a.4	0.2				400.0	1	0.75	8.9	42.6		12.2	
	b.1.1	0.2	250	1.9	21.0							11.4	
	b.1.2	0.2	520	1.9		270.0	2.5	1.1	4.1	25.1		12.9	
	b.2	0.2	420	1.9	30.0							12.3	
	b.3	0.2	440	2.7		260.0	1.5	0.85	5.1	30.2		12.4	
	c.1.1	0.2	300	0.5	35.0							11.7	
	c.1.2	0.2				550.0	1.8	0.95	9.6	44.6		13.1	
	c.2	0.2				430.0	2.8	1.2	6.0	50.6		12.4	
	c.3	0.2				220.0	0.9	0.65	5.6	56.3		11.2	

From Office  
 4/1/93

Subdivision: NORTHCREST VILLAGE  
 Location: GRAND JUNCTION, COLO  
 TIME OF CONCENTRATION HISTORIC

DESIGN STORM: 100 YEAR DATE: 4/1/93

PAGE 1 OF 1

SUB-BASIN	AREA Ac	C	INITIAL/OVERLAND TIME (ti)			TRAVEL TIME (Ti)				Tc CHECK (URBANIZED BASINS)			FINAL	REMARKS
			LENGTH Ft	SLOPE %	ti Min	LENGTH Ft	SLOPE %	VEL FPS	Tc Min	COMP Tc	TOTAL LENGTH	Tc (min)	Tc	
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
a.1.1	0.35		300	1.3	25.0								11.7	
a.1.2	0.35					300.0	1.3	0.75	6.7	31.7			11.7	31.7
a.2.1	0.35		200	2.5	15.0								11.1	
a.2.2	0.35					290.0	1.5	0.85	5.7				11.6	
a.3	0.35		300	1.5	21.0								11.7	
a.4	0.35					400.0	1	0.75	8.9	40.6			12.2	40.6
b.1.1	0.35		250	1.9	18.0								11.4	
b.1.2	0.35		520	1.9		270.0	2.5	1.1	4.1	22.1			12.9	22.1
b.2	0.35		420	1.9	22.0								12.3	
b.3	0.35		440	2.7		260.0	1.5	0.85	5.1	27.2			12.4	27.2
c.1.1	0.35		300	0.5	31.0								11.7	
c.1.2	0.35					550.0	1.8	0.95	9.6	40.6			13.1	40.6
c.2	0.35					430.0	2.8	1.2	6.0	46.6			12.4	46.6
c.3	0.35					220.0	0.9	0.65	5.6	52.3			11.2	52.3

Subdivision: NORTHCREST VILLAGE  
 Location: GRAND JUNCTION, COLO

DESIGN STORM: 2 YEAR

DATE: 4/1/93

TIME OF CONCENTRATION DEVELOPED CONDITIONS

PAGE 1 OF 1

SIGN	SUB-BASIN AREA Ac	C	INITIAL/OVERLAND TIME (ti)			TRAVEL TIME (Ti)				Tc CHECK {URBANIZED BASINS}		FINAL	REMARKS	
			LENGTH Ft	SLOPE %	ti Min	LENGTH Ft	SLOPE %	VEL FPS	Tc Min	COMP Tc	TOTAL LENGTH	Tc (min)		Tc (14)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
	a.1.1	0.4	300	1.3	22.0							11.7		
1	a.1.2	0.4				300.0	1.3	0.75	6.7	28.7		11.7		
	a.2.1	0.4	200	2.5	14.0							11.1		
2	a.2.2	0.4				290.0	1.5	0.85	5.7	19.7		11.6		
3	a.3	0.4	300	1.5	20.0							11.7		
4	a.4	0.4				400.0	1	0.75	8.9	37.6		12.2		
	b.1.1	0.4	250	1.9	19.0							11.4		
	b.1.2	0.4	520	1.9		270.0	2.5	1.1	4.1	23.1		12.9		
	b.2	0.4	420	1.9	24.0							12.3		
	b.3	0.4	440	2.7		260.0	1.5	0.85	5.1	29.1		12.4		
	c.1.1	0.4	300	0.5	28.0							11.7		
	c.1.2	0.4				550.0	1.8	0.95	9.6	37.6		13.1		
	c.2	0.4				430.0	2.8	1.2	6.0	43.6		12.4		
	c.3	0.4				220.0	0.9	0.65	5.6	49.3		11.2		

Division: NORTHCREST VILLAGE  
 Station: GRAND JUNCTION, COLO  
 TIME OF CONCENTRATION DEVELOPED CONDITIONS

DESIGN STORM: 100 YEAR DATE: 4/1/93

PAGE 1 OF 1

SUB-BASIN-----	C	INITIAL/OVERLAND TIME (ti)			TRAVEL TIME (Ti)					Tc CHECK (URBANIZED BASINS)		FINAL Tc	REMARKS
		AREA Ac (2)	LENGTH Ft (4)	SLOPE % (5)	ti Min (6)	LENGTH Ft (7)	SLOPE % (8)	VEL FPS (9)	Tc Min (10)	COMP Tc (11)	TOTAL Tc LENGTH (12)	(13)	
a.1.1	0.55	300	1.3	17.0								11.7	
a.1.2	0.55				300.0	1.3	0.75	6.7	23.7			11.7	
a.2.1	0.55	200	2.5	11.0								11.1	
a.2.2	0.55				290.0	1.5	0.85	5.7	16.7			11.6	
a.3	0.55	300	1.5	15.0								11.7	
a.4	0.55				400.0	1	0.75	8.9	32.6			12.2	
b.1.1	0.55	250	1.9	15.0								11.4	
b.1.2	0.55	520	1.9		270.0	2.5	1.1	4.1	19.1			12.9	
b.2	0.55	420	1.9	18.0								12.3	
b.3	0.55	440	2.7		260.0	1.5	0.85	5.1	23.1			12.4	
c.1.1	0.55	300	0.5	22.0								11.7	
c.1.2	0.55				550.0	1.8	0.95	9.6	31.6			13.1	
c.2	0.55				430.0	2.8	1.2	6.0	37.6			12.4	
c.3	0.55				220.0	0.9	0.65	5.6	43.3			11.2	

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PROJECT: NORTHCREST VILLAGE

BY: J. Laraby

DATE: 4/1/93

SUBJECT: RUNOFF CALCULATIONS

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VOLUME OF POND REQUIRED

Utilizing Modified Rational Method (Pages 22-24,  
Interim Outline of Grading & Drainage Criteria, City  
of Grand Junction, July 1992)

Defintions

$V_{avg} = .50 * V_{max}$   
 $d_{avg} = .67 * d_{max}$   
 $Q_o = .80 * Q_{max}$  or  $.75 * Q_{max}$  (using pond depth instead of "h")  
 $Q_o = .065 * Q_{max}$  (weir and orifice flow)  
 $Td2 = ((633.4CdA / (Q_o - Q_o^2 Tcd / (81.2Cda)))^{.5}) - 15.6$   
 $Td100 = ((2925CdA(Q_o - Q_o^2 Tcd / (234Cda)))^{.5}) - 25$   
 $Id2 = 40.6 / (Td2 + 15.6)$  (intensity at Td2)  
 $Id100 = 117 / (Td100 + 25)$  (intensity at Td100)  
 $Q_d = Cd * A * Id$   
 $K = Tch / Tcd$

2 YEAR POND

100 YEAR POND

Qmax	7.0	26.7
Qo	5.6	21.4
Tc(2)	43.3	37.3
Qo^2*Tcd	1,358	17,018
Td2	24.1	21.7
Id2	1.00	2.72
Qd2	9.6	35.8
K	1.0	1
V	2,500	10,028

PROJECT: NORTHCREST VILLAGE

BY: J. Laraby

DATE: 4/1/93

SUBJECT: RUNOFF CALCULATIONS

---

OUTLET @ 2 YR STORM

Q (Historic)(cfs)	2.9
H-Depth of pond:	1.7
Size Opening(in)	9.7
h:	1.37
Q:	2.9

OUTLET FOR 100 YEAR STORM

Q (Historic)(cfs)	13.3
H-Depth of pond:	2.65
Q(orifice)	4.0
Q(notch)	9.3

Determine size of notch: assume width = 3 times height

$$Q=3.33(W - .1n*H)*H^{1.5}$$

$$Q=3.33(3H-.2*H)*H^{1.5}$$

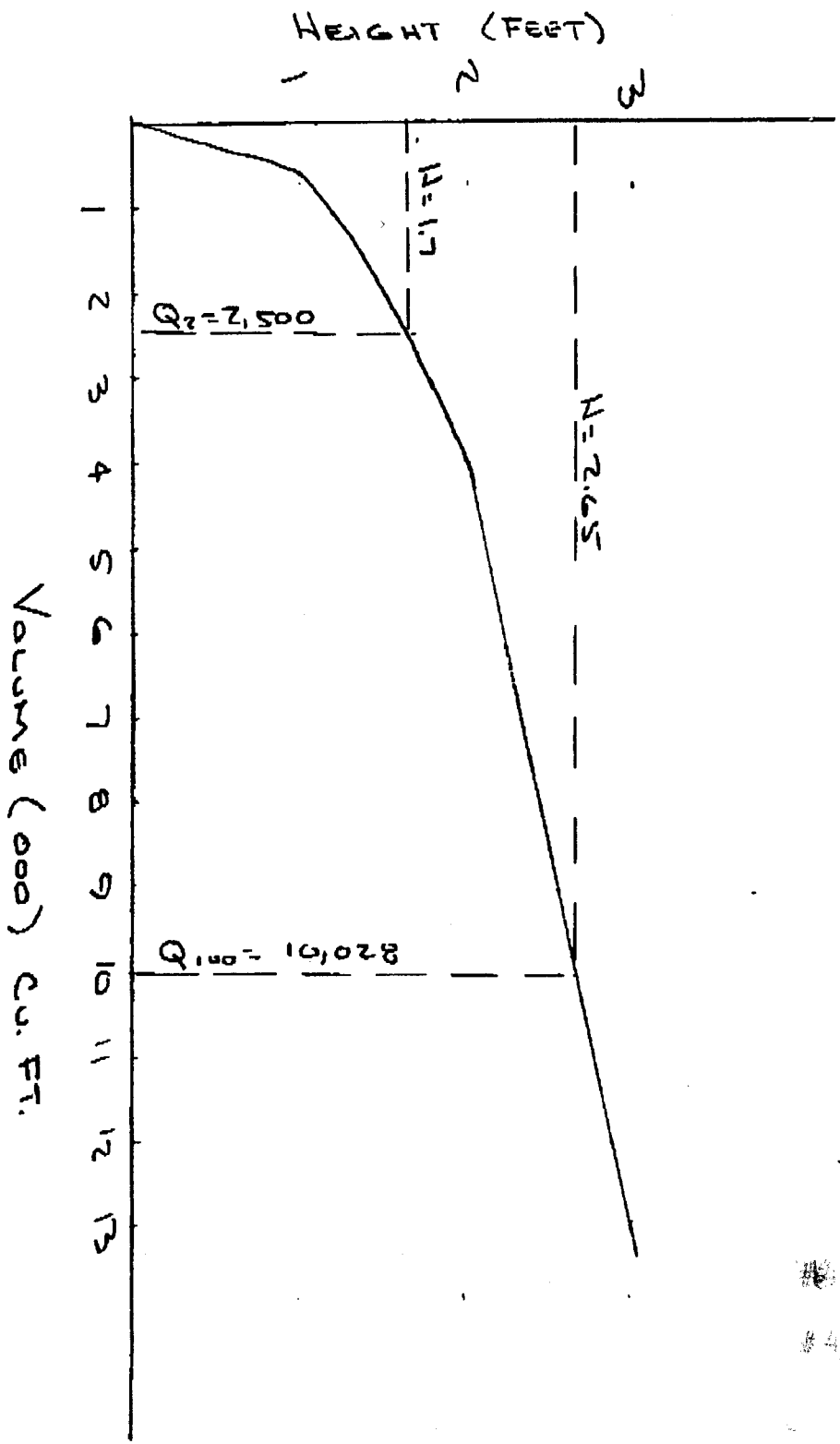
$$Q=9.23 * H^{2.5}$$

Height: 1.003027 or 12"

Width: 3.00908 or 36"







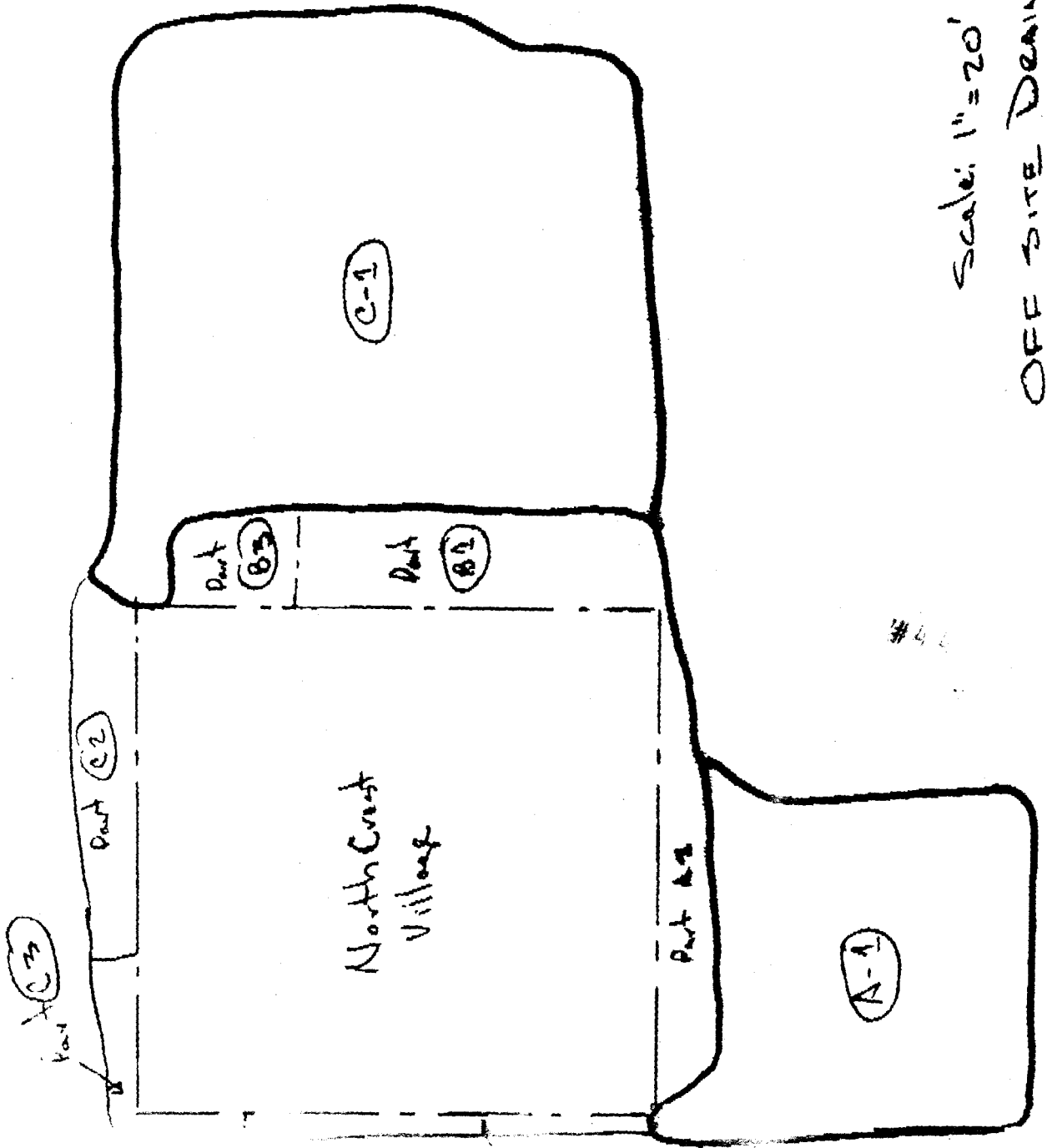
STORAGE-DEPTH-DISCHARGE GRAPH

SUBJECT: RUNOFF CALCULATIONS

DATE: 4/1/93

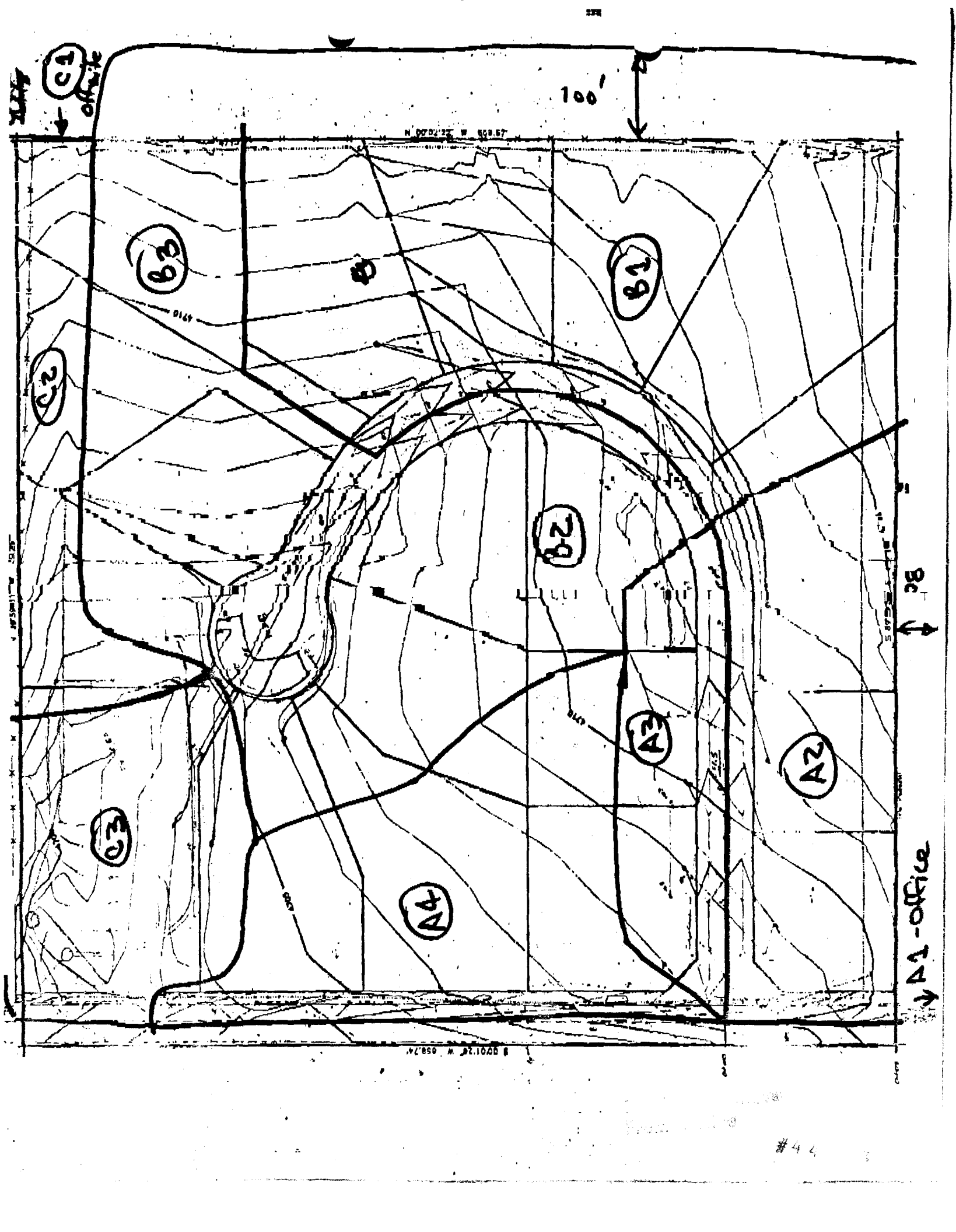
PROJECT: NORTHCREST VILLAGE BY: J. Taraby

56 93



Scale: 1"=20'  
 OFF SITE DRAINAGE AREAS

NORTHCREST VILLAGE 4/1/93



#44



April 1, 1993

Community Development Department  
City of Grand Junction  
250 North 5th. Street  
Grand Junction, CO 81501

RE: NORTHCREST VILLAGE, PRELIMINARY PLAN SUBMITTAL

Dear Staff:


Accompanying is a Preliminary Development Plan and Zone Change Request Application for Northcrest Village Subdivision.

The following items are not included with this application since they are current within your file and have not changed since the last application.

1. Name and address of surrounding property owners.
2. Full sized Assessors Map.
3. Title Policy.
4. Tax Certificate.
5. Legal Description.

If you have any further questions regarding the completeness of this application do not hesitate to contact our office.

Respectfully,

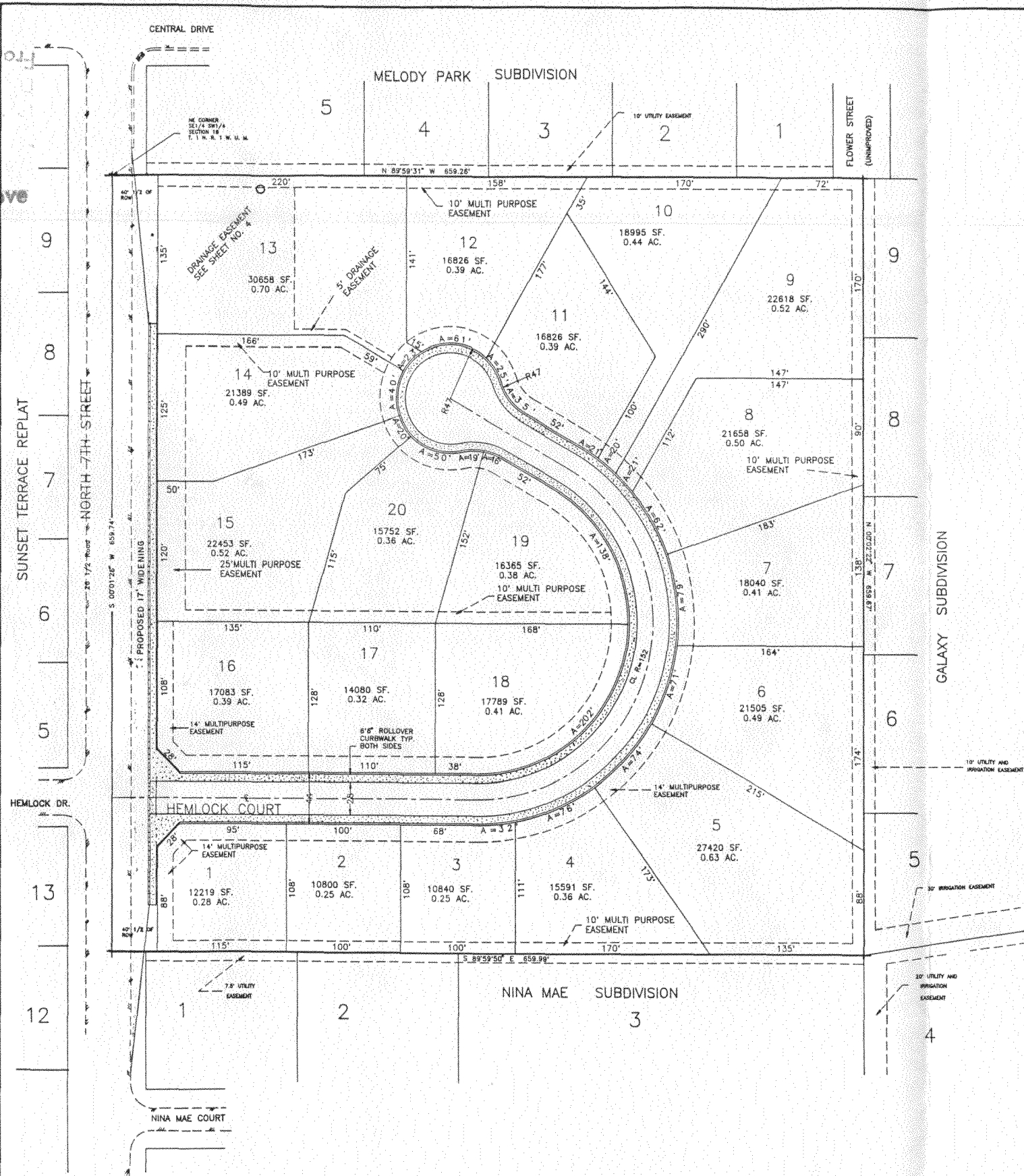
  
Thomas A. Logue

4 4 93  
Drainage  
pipes

Original  
Do NOT Remove  
From Office



Original  
NOT Remove  
from Office



**GENERAL NOTES**

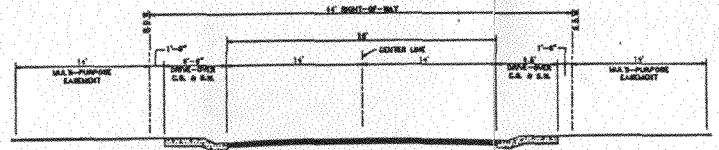
1. This Development is Located in Part of the SW 1/4 of Section 19, Township 1 North Range 1 West, Uta Meridian.
2. This Development is Located in the Uta Water Conservancy District. Estimated Water Requirements is 6000 g.p.d.
3. Sewage Disposal by The Fargo Waste Water Treatment Plant. Estimated Sewage Flows are 6000 gallons per day.
4. Existing Land Use Zone: RSP - 2.
5. Proposed Land Use Zone: PR - 2.

**LAND USE SUMMARY**

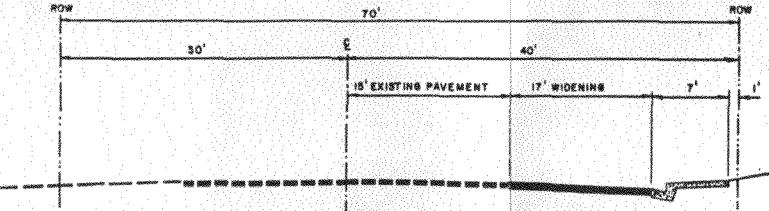
AREA IN LOTS	8.5 AC./85%
AREA IN DEDICATED RIGHT-OF-WAY	1.5 AC./15.0%
TOTAL SITE AREA	10.0 AC./100%
TOTAL LOTS = 20 (2.0 DU/AC)	

**BUILDING SETBACKS**

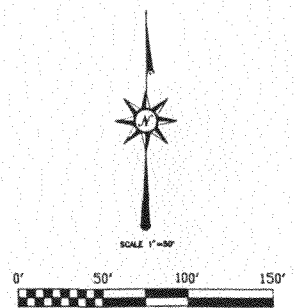
PRINCIPAL BUILDING	ACCESSORY BUILDING
FRONT 20 FT. FROM ROW	LIMITED TO REAR 1/2 OF LOT
REAR 25 FT.	5 FT. OR SBMT. WIDTH
SIDE 10 FT.	5 FT. OR SBMT. WIDTH



TYPICAL HEMLOCK COURT SECTION



TYPICAL NORTH 7TH STREET SECTION



**SHEET INDEX**

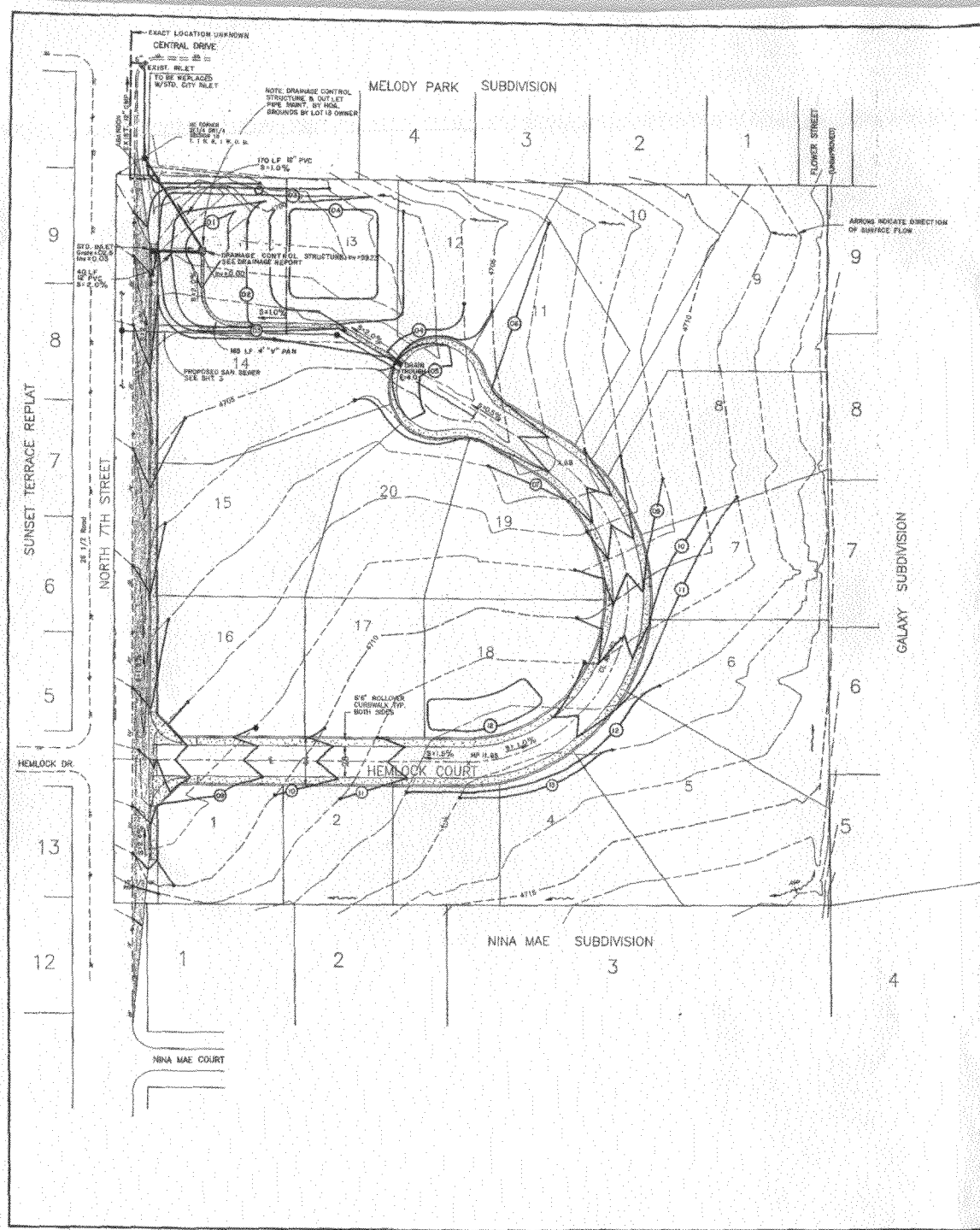
SHEET TITLE	SHEET NO.
LOCATION MAP	ONE
PRELIMINARY SITE DEVELOPMENT PLAN	TWO
PRELIMINARY UTILITY PLAN	THREE
PRELIMINARY GRADING PLAN	FOUR

SITE DEVELOPMENT PLAN  
NORTH CREST VILLAGE

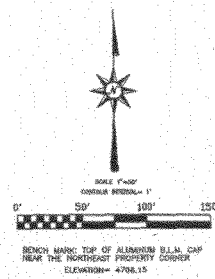
**TAL THOMAS A. LOGUE**  
LAND DEVELOPMENT CONSULTANT

PROJECT NO. 93-201  
DATE: MARCH 1993

SHEET OF  
**2** 4



NOTE: SEE SHEETS 2 & 3 FOR EASEMENT REQUIREMENTS



--- EXISTING CONTOUR  
 — PROPOSED CONTOUR

REV. 4/22/93 PER REVIEW COMMENTS

GRADING PLAN

NORTH CREST VILLAGE

**TAL** THOMAS A. LOBUE  
 LAND SURVEYOR - PROFESSIONAL ENGINEER

PROJECT NO. 93-201 SHEET OF 4

DATE: MARCH 1993 4 4