Table of Contents

File FPP-1996-135 Name: Hill Court Subdivision – Sand Cliff Court – Lot 2, Blk 13, Ridges #4

Present	Scanned	
		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. Documents specific to certain files, not found in the standard checklist materials, are listed at the bottom of the page. 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.
X	X	**Table of Contents**
		***Review Sheet Summary**
X	X	***Application form**
		Review Sheets
X		Receipts for fees paid for anything
X	X	***Submittal checklist**
X	X	***General project report**
		Reduced copy of final plans or drawings
X		Reduction of assessor's map.
		Evidence of title, deeds, easements
X	X	***Mailing list to adjacent property owners**
		Public notice cards
		Record of certified mail
X		Legal description
		Appraisal of raw land
		Reduction of any maps – final copy
		***Final reports for drainage and soils (geotechnical reports)**
		Other bound or non-bound reports
		Traffic studies
X	X	***Review Comments**
X	X	***Petitioner's response to comments**
X	X	***Staff Reports**
		***Planning Commission staff report and exhibits**
		***City Council staff report and exhibits**
		***Summary sheet of final conditions**

DOCUMENT DESCRIPTION:

X	X	Correspondence	X	X	The Cluster Replat – see GIS Historical Maps - **
X	X	Final Drainage Report – 6/3/96	X	X	Composite Plan
X	X	Planning Commission Minutes – 7/2/96 - **			**Hill View Court Subdivision – see below**
X		First American Title Co. – Agreement to Issue Policy-1/8/96	X		Road Plan
X		Treasurer's Certificate of Taxes Due – 5/31/96	X		Road Profile and Details
X	X	Post Development Drainage Map	X		Cross Section
X	X	Subsurface Soils Exploration – 5/24/96	X		Drainage Channel Plan
X		Declaration of covenants, Conditions and Restrictions	X		Cross Sections - Ditch
X	X	Certification of Plat – 1/30/97	X	X	Site Plan
X	X	File Close-out Summary – 9/4/97	X	X	Water and Sewer Plan
X	X	Landscaping Plan	X		Detail Map
X	X	The Ridges – Filing 4 – see GIS Historical Maps - **	X	X	Final Plat
X		Reference Manual – "Ground Water in Basements of the Cluster" – 9/1/83	X		Reference Manual – "Drainage Patterns Affecting the Cluster"– 11/1984

DEVELOPMENT APPLICATION

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

Receipt _____
Date _____
Rec'd By _____

File No. FPP-96-135

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
☒ Subdivision Plat/Plan	☐ Minor ☒ Major ☐ Resub	2.26 acres	Hillview Dr.	PR	Residential
☐ Rezone				From: To:	
☐ Planned Development	☐ ODP ☐ Prelim ☐ Final				
☐ Conditional Use					
☐ Zone of Annex					
☐ Variance					
☐ Special Use					
☐ Vacation					☐ Right-of Way ☐ Easement
☐ Revocable Permit					

☒ PROPERTY OWNER	☒ DEVELOPER	☐ REPRESENTATIVE
Wm Ball	GNT Dev. Corp	WD Garrison
Name	Name	Name
587 Pioneer Rd	Box 308	795 Garrison Ct
Address	Address	Address
Gr Jct Co 81504	Gr Jct CO 81502	Gr Jct CO 81506
City/State/Zip	City/State/Zip	City/State/Zip
243-7745	243-5902	241-5325
~~Business~~ Phone No.	Business Phone No.	~~Business~~ Phone No.
		243-5902

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 required 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 WD Garrison 6-3-96
Signature of Person Completing Application — Date

X Bill Ball by WDG 6-3-96
Signature of Property Owner(s) - attach additional sheets if necessary — Date

SUBMITTAL CHECKLIST

MAJOR SUBDIVISION: FINAL

Location: Lot 2, Blk 13, Ridge #4 Project Name: Hall Court — Colorado Geologic Survey

Date Received 6-3-96

Receipt # 4104

File # FPP 96-135

ITEMS: DESCRIPTION	SSID REFERENCE	● City Community Development	● City Dev. Eng.	● City Utility Eng.	● City Property Agent	● City Parks/Recreation	● City Fire Department	● City Attorney	● City G.J.P.C. (8 sets)	O City Downtown Dev. Auth.	● City Police	● County Planning	O County Building Department	● County Surveyor	O Walker Field	● School Dist. #51	● Irrigation District Redlands WUA	O Drainage District	O Water District	O Sewer District	● U.S. West	● Public Service	O GVRP	● ~~CDOT~~ Ridge ACCO	O Corps of Engineers	● Colorado Geologic Survey 595	● U.S. Postal Service	● ~~Persigo WWTF~~	● TCI Cable			TOTAL REQ'D.
● Application Fee $720 plus $15/acre	VII-1	1																													1
● Submittal Checklist*	VII-3	1																													1
● Review Agency Cover Sheet*	VII-3	1	1	1	1	1	1	1		✓	1	1	✓	1	✓	1	1	✓	✓	✓	1	1	✓	1	✓	1	1	✓	1			18
● Application Form*	VII-1	1	1	1	1	1	1	1	8	✓	1	1	✓	1	✓	1	1	✓	✓	✓	1	1	✓	1	✓	1	1	1	1			27
● Reduction of Assessor's Map	VII-1	1	1	1	1	1	1	1	8	✓	1	1	✓	1	✓	1	1	✓	✓	✓	1	1	✓	1	✓	1	1	1	1			27
● Evidence of Title	VII-2	1			1			1																							3
O Appraisal of Raw Land	VII-1	1			1	1																									1
● Names and Addresses*	VII-2	1																													1
● Legal Description*	VII-2	1			1																										2
O Deeds	VII-1	1			1			1																							1
O Easements	VII-2	1	1	1	1			1													1	1	✓						1		1
O Avigation Easement	VII-1	1			1			1							✓																1
O ROW	VII-2	1	1	1	1			1													1	1	✓						1		1
● Covenants, Conditions & Restrictions	VII-1	1	1					1																							3
O Common Space Agreements	VII-1	1	1					1																							1
● County Treasurer's Tax Cert.	VII-1	1																													1
● Improvements Agreement/Guarantee*	VII-2	1	1	1				1																							4
O CDOT Access Permit	VII-3	1	1																												1
O 404 Permit	VII-3	1	1																												1
O Floodplain Permit*	VII-4	1	1																												1
● General Project Report	X-7	1	1	1	1	1	1	1	8	✓	1	1	✓	1	✓	1	1	✓	✓	✓	1	2	✓	1	✓	1	1	1	1			28
● Composite Plan	IX-10	1	2	1	1																										5
● 11"x17" Reduction Composite Plan	IX-10	1				1	1	1	8	✓	1	1	✓				1	✓	✓	✓	1	1	✓	1	✓	1		1	1			21
● Final Plat	IX-15	1	2	1	1	1	1	1	8	✓	1	1	✓	1	✓	1	1	✓	✓	✓	1	1	✓	1	✓	1	1	1	1			28
● 11"X17" Reduction of Final Plat	IX-15	1							8	✓	1	1		✓	1	1	1	✓	✓	✓	1	1	✓				1		1			17
● Cover Sheet	IX-11	1	2																												3
● Grading & Stormwater Mgmt Plan	IX-17	1	2															✓							✓	1			1		5
● Storm Drainage Plan and Profile	IX-30	1	2															✓			1	1	✓						1		6
● Water and Sewer Plan and Profile	IX-34	1	2	1			1												✓	✓	1	1	✓					1	1		9
● Roadway Plan and Profile	IX-28	1	2															✓													3
● Road Cross-sections	IX-27	1	2																												3
● Detail Sheet	IX-12	1	2																												3
● Landscape Plan	IX-20	2	1	1					8																						12
● Geotechnical Report	X-8	1	1																							1					5
O Phase I & II Environmental Report	X-10,11	1	1																												1
● Final Drainage Report	X-5,6	1	2															✓													3
O Stormwater Management Plan	X-14	1	2															✓							✓						1
O Sewer System Design Report	X-13	1	2	1																✓											1
O Water System Design Report	X-16	1	2	1															✓												1
O Traffic Impact Study	X-15	1	2																					1							1
● Site Plan	IX-29	1	2	1	1		1		8																						14

NOTES: * An asterisk in the item description column indicates that a form is supplied by the City.

PRE-APPLICATION CONFERENCE

Date: 4/3/96
Conference Attendance: Kathy P., Dan Harrison
Proposal: _____
Location: Lot 2, Blk 13, Ridges #4
Tax Parcel Number: 2945-201-06-037
Review Fee: $720 plus $15/acre
(Fee is due at the time of submittal. Make check payable to the City of Grand Junction.)

Additional ROW required? _____
Adjacent road improvements required? _____
Area identified as a need in the Master Plan of Parks and Recreation? _____
Parks and Open Space fees required? yes Estimated Amount: _____
Recording fees required? yes Estimated Amount: _____
Half street improvement fees/TCP required? yes Estimated Amount: _____
Revocable Permit required? _____
State Highway Access Permit required? _____
On-site detention/retention or Drainage fee required? on-site detention

Applicable Plans, Policies and Guidelines _____

Located in identified floodplain? FIRM panel # _____
Located in other geohazard area? _____

Located in established Airport Zone? Clear Zone, Critical Zone, Area of Influence? _____
Avigation Easement required? _____

While all factors in a development proposal require careful thought, preparation and design, the following "checked" items are brought to the petitioner's attention as needing special attention or consideration. Other items of special concern may be identified during the review process.

O Access/Parking	O Screening/Buffering	O Land Use Compatibility
O Drainage	O Landscaping	O Traffic Generation
O Floodplain/Wetlands Mitigation	O Availability of Utilities	O Geologic Hazards/Soils

O Other _____
Related Files: _____

It is recommended that the applicant inform the neighboring property owners and tenants of the proposal prior to the public hearing and preferably prior to submittal to the City.

PRE-APPLICATION CONFERENCE

WE RECOGNIZE that we, ourselves, or our representative(s) must be present at all hearings relative to this proposal and it is our responsibility to know when and where those hearings are.

In the event that the petitioner is not represented, the proposed item will be dropped from the agenda, and an additional fee shall be charged to cover rescheduling expenses. Such fee must be paid before the proposed item can again be placed on the agenda. Any changes to the approved plan will require a re-review and approval by the Community Development Department prior to those changes being accepted.

WE UNDERSTAND that incomplete submittals will not be accepted and submittals with insufficient information, identified in the review process, which has not been addressed by the applicant, may be withdrawn from the agenda.

WE FURTHER UNDERSTAND that failure to meet any deadlines as identified by the Community Development Department for the review process may result in the project not being scheduled for hearing or being pulled from the agenda.

X _____ X _____

Signature(s) of Petitioner(s) Signature(s) of Representative(s)

2945-201-05-019
CARLOS MAESTAS
CANDACE D MAESTAS
380 RIDGE CIRCLE DR
GRAND JUNCTION, CO 81503-4646

2945-201-05-017
LAWRENCE J SLATER
1072 MAROON CREEK RD
ASPEN, CO 81611-3367

2945-201-08-001
RUTH E WALTER
1183 LEXINGTON DR
BARTLETT, IL 60103-5772

2945-201-08-006
TROY MARK PHILLIPS
BUNNY LOUISE PHILLIPS
385 1/2 RIDGE VIEW DR
GRAND JUNCTION, CO 81503-1643

2945-201-08-007
WINFIELD L MILLER
385 RIDGE VIEW DR
GRAND JUNCTION, CO 81503-1643

2945-201-08-008
JOHN MCDERMOTT
PRISCILLA
383 1/2 RIDGE VIEW DR
GRAND JUNCTION, CO 81503-1643

2945-201-08-009
ELIZABETH R COWDEN
383 RIDGE VIEW DR
GRAND JUNCTION, CO 81503-1643

2945-201-08-010
RAYMOND F PARKHILL
ALMA J
381 1/2 RIDGE VIEW DR
GRAND JUNCTION, CO 81503-1643

2945-201-08-002
G & M INVESTMENTS I
2680 CAPRA WAY
GRAND JUNCTION, CO 81506-8207

2945-201-08-003
GEORGE W RICE
VIRGINIA C
3830 HORIZON GLEN CT
GRAND JUNCTION, CO 81506-8758

2945-201-08-021
JAMES L STEVENSON
SANDRA L
382 1/2 HILLVIEW DR
GRAND JUNCTION, CO 81503-4605

2945-201-08-022
RICHARD I OERMAN
VONI M
384 HILLVIEW DR
GRAND JUNCTION, CO 81503-4605

2945-201-08-023
KENNETH E KARP
KATHLEEN R
386 HILLVIEW DR
GRAND JUNCTION, CO 81503-4605

2945-201-08-024
WILLIAM R MCCORMICK
MARGUERITE G
386 1/2 HILLVIEW DR
GRAND JUNCTION, CO 81503-4605

2945-201-08-025
HENRY A GONZALES
MARIA ISABEL
388 HILLVIEW DR
GRAND JUNCTION, CO 81503-4605

2945-201-08-026
JOHN A KORBE
JIMMIE L
388 1/2 HILLVIEW DR
GRAND JUNCTION, CO 81503-4605

2945-201-08-027
HENRY A SMITH
CHERYL K
390 HILLVIEW DR
GRAND JUNCTION, CO 81503-4605

2945-201-08-028
GEORGE W BOGGESS
ROSEMARY J BOGGESS - TRUSTEES
8121 CHASE AVE
LOS ANGELES, CA 90045-2707

2945-201-06-003
DONALD W ANDERSON
J I
393 1/2 HILLVIEW DR
GRAND JUNCTION, CO 81503-4606

2945-201-06-004
DOUGLAS A DIEKMAN
PATRICIA K
393 HILLVIEW DR
GRAND JUNCTION, CO 81503-4606

2945-201-06-005
BRADLEY H FRANK
PAULA D BAGLIONI
391 1/2 HILLVIEW DR
GRAND JUNCTION, CO 81503-4606

2945-201-06-006
GARY WENDALL HINES
391 HILLVIEW DR
GRAND JUNCTION, CO 81503-4606

2945-201-06-007
BRIAN J CINQUEGRANI
387 HILLVIEW DR
GRAND JUNCTION, CO 81503-4606

2945-201-06-008
SUSAN L KNUTSON
385 1/2 HILLVIEW DR
GRAND JUNCTION, CO 81503-4606

2945-201-06-009
JOHN O SCHAEFER
MINTA J
385 HILLVIEW DR
GRAND JUNCTION, CO 81503-4606

2945-201-06-010
WAYNE R ASH
LINDA L ASH
383 1/2 HILLVIEW DR
GRAND JUNCTION, CO 81503-4606

2945-201-06-033
G H GARRETT
2397 MARIPOSA DR
GRAND JUNCTION, CO 81503

2945-201-06-034
G H GARRETT
2397 MARIPOSA DR
GRAND JUNCTION, CO 81503

2945-201-06-035
G H GARRETT
2397 MARIPOSA DR
GRAND JUNCTION, CO 81503

2945-201-06-036
G H GARRETT
2397 MARIPOSA DR
GRAND JUNCTION, CO 81503

2945-173-00-174
GREGORY K HOSKIN
PO BOX 40
GRAND JUNCTION, CO 81502-0040

2945-201-07-944
CITY OF GRAND JUNCTION

250 N 5TH ST
GRAND JUNCTION, CO 81501-2628

2945-201-14-944
CITY OF GRAND JUNCTION

250 N 5TH ST
GRAND JUNCTION, CO 81501-2628

2945-202-06-944
CITY OF GRAND JUNCTION

250 N 5TH ST
GRAND JUNCTION, CO 81501-2628

2945-202-06-945
CITY OF GRAND JUNCTION

250 N 5TH ST
GRAND JUNCTION, CO 81501-2628

2945-202-17-019
DYNAMIC INVESTMENTS INC

391 1/2 HILLVIEW DR
GRAND JUNCTION, CO 81503-4606

2945-202-17-944
CITY OF GRAND JUNCTION

250 N 5TH ST
GRAND JUNCTION, CO 81501-2628

2945-173-00-173
GREGORY K HOSKIN
PO BOX 40
GRAND JUNCTION, CO 81502-0040

2945-173-00-174
GREGORY K HOSKIN
PO BOX 40
GRAND JUNCTION, CO 81502-0040

2945-173-00-186
GENIE INC
PO BOX 3299
GRAND JUNCTION, CO 81502-3299

2945-173-00-189
DYNAMIC INVESTMENTS INC

391 1/2 HILLVIEW DR
GRAND JUNCTION, CO 81503-4606

2945-173-00-190
DYNAMIC INVESTMENTS INC

391 1/2 HILLVIEW DR
GRAND JUNCTION, CO 81503-4606

2945-173-00-191
DYNAMIC INVESTMENTS INC

391 1/2 HILLVIEW DR
GRAND JUNCTION, CO 81503-4606

2945-201-07-022
CONRAD C LITZ
381 RIDGE CIRCLE DR
GRAND JUNCTION, CO 81503-4614

2945-201-07-023
GARY J GARBER
BARBARA JO
383 RIDGE CIRCLE DR
GRAND JUNCTION, CO 81503-4614

2945-201-07-024
TIMOTHY D HERVEY
SHARON C
455 EISENHOWER DR
LOUISVILLE, CO 80027-1153

2945-201-14-010
JOSEPH MICHAEL BUFFA
PO BOX 1122
GRAND JUNCTION, CO 81502-1122

2945-201-14-006
MONICA K GRATTAN
397 RIDGE CIRCLE DR #6
GRAND JUNCTIONON, CO 81503

2945-201-14-008
DAVID S SHOEMAKER
VERNA L C/O R J ARMANTROUT
2291 SHIPROCK RD
GRAND JUNCTION, CO 81503-1189

2945-201-14-001
GARY MAC GRIFFITH
397 RIDGE CIRCLE DR APT 1
GRAND JUNCTION, CO 81503-1683

2945-201-14-002
VICKIE J MILLER
397 RIDGE CIRCLE DR APT 2
GRAND JUNCTION, CO 81503-1683

2945-201-14-003
FOREST M RASSMUSSEN
ILA M C/O BETTE SMITH
397 RIDGE CIRCLE DR APT 3
GRAND JUNCTION, CO 81503-1683

2945-201-14-004
JAMES C PHILLIPS
397 RIDGE CIRCLE DR APT 4
GRAND JUNCTION, CO 81503-1683

2945-201-14-005
MARJORIE P ZIMMERMAN

397 RIDGE CIRCLE DR APT 5
GRAND JUNCTION, CO 81503-1683

2945-201-14-009
ROBERT A LATURNUS
JINELLE K LATURNUS
397 RIDGE CIRCLE DR APT 9
GRAND JUNCTION, CO 81503-1683

2945-201-14-011
RUSSELL A WEBER
YOLANDA I BAREFOOT
397 RIDGE CIRCLE DR APT 11
GRAND JUNCTION, CO 81503-1683

2945-201-14-012
THERESA A HANNA
395 RIDGE VIEW DR
GRAND JUNCTION, CO 81503-4616

2945-201-14-013
JOSEPHINE I WELLS
393 RIDGE VIEW DR # 13
GRAND JUNCTION, CO 81503-4616

2945-201-14-007
MARVIN R APPEL
GEORGIA G APPEL - TRUSTEES
3405 SAINT ANDREWS DR SE
RIO RANCHO, NM 87124-2136

2945-201-05-001
BRUCE R BEECHWOOD
2373 RIDGE CIRCLE DR
GRAND JUNCTION, CO 81503-1641

2945-201-05-002
CARSON INCE
VIRGINIA INCE
2371 RIDGE CIRCLE DR
GRAND JUNCTION, CO 81503-1641

2945-201-05-003
DIANA R BIRDASHAW
2369 1/2 RIDGE CIRCLE DR
GRAND JUNCTION, CO 81503-1641

2945-201-05-004
CAROL L SWINGLE
TODD H SPEECE
392 1/2 RIDGE CIRCLE DR
GRAND JUNCTION, CO 81503-4613

2945-201-05-005
JOSE E TREVINO
MARY D
396 RIDGE CIRCLE DR
GRAND JUNCTION, CO 81503-4613

2945-201-05-006
MARILYN K KASTENS
394 RIDGE CIRCLE DR
GRAND JUNCTION, CO 81503-4613

2945-201-07-005
RICHELLE ASCHENBRENER
4901 W 93RD AVE APT 532
WESTMINSTER, CO 80030-6322

2945-201-07-013
RICHARD P PALMER
KATHERINE D PALMER
PO BOX 8
YAMPA, CO 80483-0008

2945-201-07-012
RAY H POARCH
381 RIDGE VIEW DR
GRAND JUNCTION, CO 81503-1643

2945-201-07-001
DAVID A CALDWELL
KELLIE R THOMAS
394 RIDGE VIEW DR
GRAND JUNCTION, CO 81503-1644

2945-201-07-002
LINDA MAAG
392 1/2 RIDGE VIEW DR
GRAND JUNCTION, CO 81503-1644

2945-201-07-003
RICHARD D DAYVAULT
392 RIDGE VIEW DR
GRAND JUNCTION, CO 81503-1644

2945-201-07-004
DENNIS M HERZOG
KATHRYN K
390 1/2 RIDGE VIEW DR
GRAND JUNCTION, CO 81503-1644

2945-201-07-006
TERRI J MARTINEZ
DELORES J GROOTHIUS
388 1/2 RIDGE VIEW DR
GRAND JUNCTION, CO 81503-1644

2945-201-07-008
LARRY N GILBERT
386 1/2 RIDGE VIEW DR
GRAND JUNCTION, CO 81503-1644

2945-201-07-009
LAURIE JO JOHNSON
386 RIDGE VIEW DR
GRAND JUNCTION, CO 81503-1644

2945-201-07-010
ERIC NICHOLAS GIBB
DIANE ELIZABETH LOOK
384 RIDGE VIEW DR
GRAND JUNCTION, CO 81503-1644

2945-201-07-011
KENNETH A BUNDY
382 1/2 RIDGE VIEW DR
GRAND JUNCTION, CO 81503-1644

2945-201-07-007
STEPHEN R MEACHAM
615 VIEWPOINT DR
GRAND JUNCTION, CO 81506-8222

2945-201-05-020
JAMES L VOYTILLA
128 E COLUMBINE DR
GRAND JUNCTION, CO 81503-1316

2945-201-05-014
GERALD T CALLISON
ELENA W
384 1/2 CLIFF ROSA CT
GRAND JUNCTION, CO 81503-1670

2945-201-05-015
DONALD L KNUDSEN
LINDA L
384 CLIFF ROSA CT
GRAND JUNCTION, CO 81503-1670

2945-201-05-016
EUGENE C MATTESON
NORMA L MATTESON
382 1/2 CLIFF ROSA CT
GRAND JUNCTION, CO 81503-1670

2945-201-05-018
WANDA B WILLCOXON
380 1/2 CLIFF ROSA CT
GRAND JUNCTION, CO 81503-1670

2945-201-05-007
RONALD H WORTH
MARY ELLEN
392 RIDGE CIRCLE DR
GRAND JUNCTION, CO 81503-4613

2945-201-05-008
LINDA NORTON
GLORIA C HAMILTON
390 1/2 RIDGE CIRCLE DR
GRAND JUNCTION, CO 81503-4613

2945-201-05-009
SARA A LESNEFSKY
390 RIDGE CIRCLE DR
GRAND JUNCTION, CO 81503-4613

2945-201-05-010
SARA A LESNEFSKY
390 RIDGE CIRCLE DR
GRAND JUNCTION, CO 81503-4613

2945-201-05-011
CHARLOTTE A FROST
388 RIDGE CIRCLE DR
GRAND JUNCTION, CO 81503-4613

2945-201-05-012
DANIEL P CONNORS
BONITA K
386 1/2 RIDGE CIRCLE DR
GRAND JUNCTION, CO 81503-4613

2945-201-05-013
THERESA J KINKAID
386 RIDGE CIRCLE DR
GRAND JUNCTION, CO 81503-4613

2945-201-06-037
PROFESSIONAL INVESTMENT PROPERTIES INC
383 HILLVIEW DR
GRAND JUNCTION, CO 81503-4606

2945-201-04-944
CITY OF GRAND JUNCTION
250 N 5TH ST
GRAND JUNCTION, CO 81501-2628

City of Grand Junction
Community Development Dept.
250 N 5th Street
Grand Junction, CO 81501

William Boll
587 Pioneer Road
Grand Junction, CO 81504

Dan Garrison
GNT Development
P.O. Box 308
Grand Junction, CO 81502

QED Surveying
1018 Colorado Ave.
Grand Junction, CO 81501

HILL VIEW COURT

Hill View Court is a planned unit development located in the Ridges, filing four. This is a multi-family lot 2.26 acres in size. The use proposed is six duplex buildings for a total of 12 units. Uses adjoining the property include both single and multi-family units. A low rock wall is planned for the entry area and to separate the units from the existing pedestrian and equestrian easement.

The west side of the property abuts a natural rock wall forty to fifty feet in height. This is also the highest portion of the property with the total fall, west to east, being about 25 feet. This land configuration offers beautiful views across the valley to the Bookcliffs on the north. To capture these views we have designed most units to ring the south and west portions of the property and have left maximum open space to the east and north.

We intend to build units which will blend into the existing earth tones of the native landscape and rock wall. Building exteriors will utilize both stucco and stone. The units are planned with opportunity for total exterior and landscape maintenance. This will preserve consistency in design and natural landscape. Xeriscape

with drip irrigation is required for all planting areas.

All public utilities, water, sewer, gas, electric power and telephone are available immediately adjacent to the property. An existing drainage ditch forms the north-south boundary of the property. Due to past drainage problems with the adjoining Clusters units we plan to clean and improve this ditch. Storm water generated on the site will be carried by the six foot walking path to the north where the drainage from both the Clusters and Hill View Court enters a natural drainage flow.

Planning Commission recommendations from the preliminary submission have been incorporated into this final design. Pavement has been reduced, landscaping enhanced, shared driveways utilized, a 20' front yard setback used and the 25' rear setback recognized. The 4' pedestrian easement will continue on the south property line of the development.

We believe this project utilizes a beautiful site, captures great views and uses good planning and engineering for maximum building sites while leaving maximum open area.

STAFF REVIEW

FILE: PP-96-51

DATE: March 26, 1996

STAFF: Kathy Portner

REQUEST: Preliminary Plan--Hill Court Subdivision

LOCATION: Hill View Drive, Ridges

APPLICANT: GNT Development Corp.

EXISTING LAND USE: Undeveloped

PROPOSED LAND USE: Attached Townhomes, 7.1 units per acre

SURROUNDING LAND USE:

NORTH:	Undeveloped
SOUTH:	Single family residential
EAST:	Attached townhomes
WEST:	Open Space

EXISTING ZONING: PR-4

PROPOSED ZONING: No Change

SURROUNDING ZONING:

NORTH:	PR-4
SOUTH:	PR-4
EAST:	PR-4
WEST:	PR-4

RELATIONSHIP TO COMPREHENSIVE PLAN:

The Amended Final Plan for the Ridges, adopted by Planning Commission and City Council, allocated a maximum of 7.1 units per acre for those remaining sites that had originally been designated as Multi-family sites in the Ridges. The proposed Hill Court density is at that maximum.

STAFF ANALYSIS:

The proposed Hill View Court Subdivision consists of 16 townhome units on approximately 2.26 acres for a density of 7.1 units per acre. The maximum overall density for the Ridges is 4 units per acre. With the original Planned Unit Development approved by Mesa County for the Ridges, several sites, including this 2.26 acre site, was designated as a multi-family site. Maximum densities were not established at that time for the multi-family sites, rather densities were established with deed transfers. The deed for this property indicated up to 80 units could be developed on the site.

When annexed to the City, staff researched the overall existing density of the Ridges and calculated the number of units that were remaining that could be assigned to the multi-family sites based on the PR-4 zoning. Those calculations resulted in a maximum density of 7.1 units per acre remaining for all sites in the Ridges that had been designated as multi-family sites. This proposal is for the maximum number of units allocated to the site.

The west side of the property is bordered by a natural rock wall forty to fifty feet in height. Most of the rock wall is within existing designated open space. The Preliminary Geologic Report indicates a rock fall area along this rock wall and recommends a 25' setback from the west property line. The townhomes would have to be reconfigured to meet the required 25' setback and maintain a minimum 20' frontyard setback for garages. The number of units might have to be reduced to meet those required setbacks.

The design of the townhomes creates large areas of hard surface driveways. Staff recommends that those areas be reduced as much as possible in the final design with more shared driveways and the addition of landscaped strips.

In keeping with the Ridges design, the attached sidewalk should be replaced with an 8' wide concrete path through the property from Hill View Drive to the property to the north, where a future path is proposed. The 4' pedestrian easement from the east should be continued along the south property line to Hillview Court.

STAFF RECOMMENDATION:

Staff recommends approval of the Preliminary Plan for Hill Court Subdivision with the following conditions:

1. A minimum 25' setback shall be maintained from the west property line as recommended in the Preliminary Geologic Report.

2. A minimum 20' frontyard setback shall be maintained for all garages.

3. The final design shall incorporate the use of more shared driveways and the addition of landscaped areas to break-up the large areas of hard surface driveways.

4. In lieu of sidewalks along the cul-de-sac, an 8' wide concrete trail shall be provided through the property from Hill View Drive to the property to the north where a future path is proposed.

5. The 4' pedestrian easement from the east must be continued along the south property line of this development to Hill View Court.

RECOMMENDED PLANNING COMMISSION MOTION:

Mr. Chairman, on item 96-51, I move we approve the Preliminary Plan for Hill View Court Subdivision subject to staff recommendations.

6. Final design must show adequate on-site maneuvering for all driveways.

Dan Garrison - agree to reduce to 14 units
will address overall drainage concerns of Clusters
wants to look at modifications of road configuration.

Not to exceed 16 units


HILL VIEW DR.
RIDGE

HILL VIEW COURT

PETITIONER RESPONSE TO STAFF COMMENTS

U.S. West

We agree.

Public Service Company:

Suggestion on open space designated as an utility easement is excellent. Final plat will reflect this change.

City Fire Department:

We will relocate the fire hydrant to the area suggested.

City Development Engineer:

Correctly points out that plans and narrative are contradictory. Street and walkways will be in keeping with the Ridges design---separate street and walking path.

The project engineer has corrected the omissions in the preliminary drainage report.

City Community Development:

1. All units will be moved to recognize the 25' setback, the minimum will be 25' with most further.

2. By moving the units closer to the road to accommodate the 25' or more setback, we will have much less driveway. Landscape areas will be used wherever possible to break-up driveways and add visual relief.

3. Sidewalk will be replaced with a walking path. Location will be discussed and agreed upon with Community Development.

Ridges A.C.C.O.:

1. Drainage review will be done to ensure no adverse effect on the Clusters development.

2. Lot 2 will be redesigned to ensure adequate parking.

Mesa County Planning:

Land use for the parcel is in accordance with the City plan for undeveloped land within Ridges Subdivision, filings 1-6. Of the 2.26 acres available on the parcel 63% is open space, 22% is lots and roads account for 15%. We will attempt to reduce driveways by moving the units closer to the road and using shared drives where possible. Other suggestions for design improvement are welcome.

Potential rock fall was addressed in the geologic report and is the basis of the 25' setback requirement.

City Utility Engineer:

Concerns on water service location were satisfied- a 8" line is planned for the sub-division with connection to the existing line in Hill View Drive.

Maintenance of joint sewer service will be addressed in the CC&R's.

City Parks & Recreation Department:

We were unable to fully understand the request for the pedestrian easement but assume that it corresponds to the Community Development request. We will clarify this need prior to Planning Commission.

Park and Recreation fees -$225 per unit- are understood and accepted.

W. D. Garrison

President, GNT Development Corp March 22, 1996

REVIEW COMMENTS

FILE #PP-96-51 **TITLE HEADING:** Hill Court Subdivision

LOCATION: Hill View, The Ridges Filing #4

PETITIONER: GNT Development Corp.

PETITIONER'S ADDRESS/TELEPHONE: P.O. Box 308
Grand Junction, CO 81502
243-5902

PETITIONER'S REPRESENTATIVE: Dan Garrison

STAFF REPRESENTATIVE: Kathy Portner

NOTE: THE PETITIONER IS REQUIRED TO SUBMIT FOUR (4) COPIES OF WRITTEN RESPONSE AND REVISED DRAWINGS ADDRESSING ALL REVIEW COMMENTS ON OR BEFORE 5:00 P.M., MARCH 22, 1996.

U.S. WEST **3/5/96**
Max Ward **244-4721**

For timely telephone service, as soon as you have a plat and power drawing for your housing development, please.....

MAIL COPY TO:
U.S. West Communications
Developer Contact Group
P.O. Box 1720
Denver, CO 80201

AND

CALL THE TOLL-FREE NUMBER FOR:
Developer Contact Group
1-800-526-3557

We need to hear from you at least 60 days prior to trenching.

PUBLIC SERVICE COMPANY **3/6/96**
Gary Lewis **244-2698**

Due to the "extensive driveways needed for these units" and the separation of the lots from Hillview Court, 14' multi-purpose easements adjacent to all street rights-of-way, per City of Grand Junction specifications, will not be sufficient for installation of gas and electric facilities to this subdivision. Request that all "Open Space" be designated as utility easement in addition to 14' multi-purpose easements as shown.

REDLANDS IRRIGATION DISTRICT **3/7/96**
Gregg Strong **243-2173**

No impact to Redlands facilities.

CITY PROPERTY AGENT **3/8/96**
Steve Pace **256-4003**

No plat to review.

CITY FIRE DEPARTMENT **3/12/96**
Hank Masterson **244-1414**

Move the proposed hydrant south to a location directly opposite the entrance leading to Lots 3 & 4 for better Fire Department access. Minimum fire line size is 6".

CITY DEVELOPMENT ENGINEER **3/14/96**
Jody Kliska **244-1591**

1. The narrative and the plans are contradictory about what is proposed for the street. Please clarify.
2. For preliminary drainage report, please follow the attached checklist. A copy of a drainage basin map for a nearby proposal is attached as an example. It does not appear the preparer of the report is familiar with the City's SWMM Manual and criteria. The SWMM Manual is available for purchase at the City Engineering office.

CITY POLICE DEPARTMENT **3/13/96**
Dave Stassen **244-3587**

This development poses no concerns for the Police Department. The design follows current crime prevention (C.P.T.E.D.) standards by having the units face into a central area, thereby enhancing surveillance of the common area.

CITY COMMUNITY DEVELOPMENT **3/14/96**
Kathy Portner **244-1446**

1. The Preliminary Geologic Report indicates a rock fall area and recommends a 25' setback from the west property line. That setback must be maintained. Many of the townhomes are within that setback.
2. The design of the townhomes creates large areas of hard surface driveway. Recommend those areas be reduced as much as possible with the addition of landscaped strips.
3. In keeping with the Ridges design, the attached sidewalk should be replaced with an 8' wide concrete path through the property from Hill View Drive to the property to the north, where a future path is proposed.

TCI CABLEVISION **3/11/96**
Glen Vancil **245-8777**

See attached comments.

RIDGES A.C.C.O. **3/12/96**
C.Adair **241-5028**

1. Review drainage and runoff concerns of new development and how it would impact the existing clusters development and new units.
2. Please define parking space (2 per unit) for Lot 2.

MESA COUNTY PLANNING **3/14/96**
Mike Joyce **244-1642**

The proposed use seems a little intense for the parcel of land. With all of the driveways proposed, will it be a parking lot streetscape? Is there any provisions for a rock fall area next to the 40-50 foot natural rock wall?

CITY UTILITY ENGINEER **3/15/96**
Trent Prall **244-1590**

WATER / IRRIGATION - CITY

1. Please resubmit with water and irrigation alignments.

SEWER - CITY

1. Horizontal alignment appears adequate. Each lot shall have its own sewer service line unless maintenance of joint sewer service lines are addressed in CC&R's.

MESA COUNTY SCHOOL DISTRICT **3/14/96**
Lou Grasso **242-8500**

SCHOOL - CURRENT ENROLLMENT / CAPACITY - IMPACT
Scenic Elementary - 298 / 325 - 4
Redlands Middle School - 552 / 650 - 2
Fruita Monument High School - 1337 / 1100 - 2

CITY PARKS & RECREATION DEPARTMENT **3/15/96**
Shawn Cooper **244-3869**

1. Continue pedestrian easement along/around Hillview Court with continuation of surfacing in current easement.
2. Parks & Open Space Fees - 16 dwelling units @ $225 = $3,600.00.

We're taking television into tomorrow.

TCI Cablevision of Western Colorado, Inc.

March 14, 1996

Hill Court
W.D. Garrison
% Community Development Department
250 North 5th Street
Grand Junction, CO 81501

Ref. No. CON19609

Dear Mr. Garrison;

We are in receipt of the plat map for your new subdivision, **Hill Court**. We will be working with the other utilities to provide service to this subdivision in a timely manner.

I would like to take this opportunity to bring to your attention a few details that will help both of us provide the services you wish available to the new home purchasers. These items are as follows:

1. We require the developers to provide, at no charge to TCI Cablevision, an open trench for cable service where underground service is needed and when a roadbore is required, that too must be provided by the developer. The trench and/or roadbore may be the same one used by other utilities so long as there is enough room to accommodate all necessary lines.

2. We require developers to provide, at no charge to TCI Cablevision, fill-in of the trench once cable has been installed in the trench.

3. We require developers to provide, at no charge to TCI Cablevision, a 4" PVC conduit at all utility road crossings where cable TV will be installed. This 4" conduit will be for the sole use of cable TV.

4. Should your subdivision contain cul-de-sac's the driveways and property lines (pins) must be clearly marked prior to the installation of underground cable. If this is not done, any need to relocate pedestals or lines will be billed directly back to your company.

5. TCI Cablevision will provide service to your subdivision so long as it is within the normal cable TV service area. Any subdivision that is out of the existing cable TV area may require a construction assist charge, paid by the developer, to TCI Cablevision in order to extend the cable TV service to that subdivision.

6. TCI will normally not activate cable service in a new subdivision until it is approximately 30% developed. Should you wish cable TV service to be available for the first home in your subdivision it will, in most cases, be necessary to have you provide a construction assist payment to cover the necessary electronics for that subdivision.

Should you have any other questions or concerns please feel free to contact me at any time. If I am out of the office when you call please leave your name and phone number with our office and I will get back in contact with you as soon as I can.

Sincerely,

Glen Vancil

Glen Vancil,
Construction Supervisor 245-8777

2502 Foresight Circle
Grand Junction, CO 81505
(970) 245-8750

HILLVIEW COURT SUBDIVISION

Final Drainage Report

June 3, 1996

Prepared by
Leslie G. Wood
Professional Engineer #5175

6-3-96

Final Drainage Report Hillview Court Subdivision

I GENERAL LOCATION & DESCRIPTION

Hillview Court Subdivision is located in NE 1/4, NW 1/4 of Section 20, T1S, R1W of the Ute Meridian. The abutting property on the east is duplex homes to the south are single family and to the north are single family. The property abutting the north side and west side is undeveloped. The site has access from Hillview Drive, which is in the Ridges Developments. The roads are paved and do not have curb and gutter but roadside ditches to carry drainage. See the attached vicinity map to show the existing roads.

II EXISTING DRAINAGE CONDITIONS

The acreage of the site is 2.26 Acres with 0.33 acres of proposed street right of way and 1.8 acres of off site drainage. Ground cover consists of native grasses, weeds and 3 small trees. Soil conditions vary from clay on site to clay with major rock out croppings to the west. There is an existing drainage swale on the east side of the site which provides drainage from the row of duplex homes and the single family to the west. There is no other defined drainage on the site, with run off sheet flowing off the property. Water will flow from the site at the north east corner into a man made drainage ditch until the drainage flows past Rana Road into a natural drainage channel.
There are 2 CSP culverts that drain into the drainage swale. A 12" and 15 " provide drainage from the single family area to the south.

III PROPOSED DRAINAGE CONDITIONS

This development will not cause any change in the down stream major basins. Drainage on site will be routed by buildings and swales to the existing man made drainage channel on the

northeast corner of the site. The ownership and maintenance will be the responsibility of the Developer until a Homeowners Association has been formed.

The detention pond which was originally proposed has been eliminated. See copies of letters sent to Jody Kliska dated April 5, 1996 and May 13, 1996. A telephone conversation with Joy on June 3, 1996 confirmed that the City has accepted the proposal as outlined in the letters.

IV The historic 2 and or 10 year storms and the developed 2 and or 10 year and the 100 year developed will be calculated. The Rational Formula Q=CIA was used to calculate the various year storms. The Rational Formula is being used because the area of 4.06 acres, including off site, is so small it does not adapt to computer.

The Manning equation will be used to calculate flow in open channels and utilization of flow charts to determine conduit size.

There are no drainage studies that have been conducted for the immediate area.

V RESULTS AND CONCLUSIONS

	Q2	Q100
Historic	1.0 CFS	5.5 CFS
Developed	2.0 CFS	9.3 CFS

There should be no change to run off rates to private parties as on site run off is being routed to the existing man made channel to the northeast corner of the site. There is to be no detention as the developer is proposing maintenance work and fees instead of detention. This proposal meets the conditions and policy as stated in the SWMM manual.

VI REFERENCES

All criteria used in the report is from the " Storm water Management Manual."

VII APPENDICES

Condition	Frequ.	Tc	C	I	Area	Q
Undeveloped	2	20	0.39	0.68	3.83	1.0
Undeveloped	100	19	0.47	2.77	3.83	5.5
Developed	2	14	0.53	0.81	3.83	2.0
Developed	100	12	0.71	3.41	3.83	9.3

There is no detention or retention so there are no calculations for detention or retention.

The street has a series of grades but taking the least of 0.5% ½ street capacity is 3.7 CFS, while the total street capacity would be 7.4 CFS using the street grade of 2.74% the ½ street capacity is 8.5 CFS, while the 100 years Q is 9.3 CFS. Considering the street is only slightly more than half way through the development the volume of water the street will need to carry is 4.5 to 5 CFS the street capacity is adequate.

There are no inlets on the project.

There is one existing 36" CSP downstream at Rana Road that will carry 50 CFS.

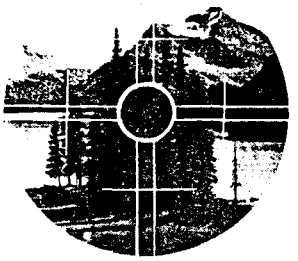
The concrete channel that will carry the storm run off as well as the walkway will carry 14 CFS using an N valve of 0.015 with a velocity of 7 feet per second. When considering the 100 year Q of 9.3 CFS the velocity is 6.6 feet per second. There is 1" of free board which will allow up to 14 CFS.

The existing channel is to be improved so that the bottom width is

2.5 feet with 1:1 side slopes and 2 feet in depth. The channel will then have a minimal capacity of 64 CFS.

Erosion protection will be by landscaping and rip rap.

THE RIDGES FIL. NO.
BLVD.
RIDGES
RIDGES METROPOLITAN DISTRICT
DISTRICT OPEN SPACE
N. DALE CT.
Adjoining T.1S. R.1W.
ROCK RIDGE CONDOS
ROCK RIDGE CONDOS
EXPLORER CT.
SUNNYVILLE
DRIVE
VALLEY CIRCLE
WEST VALLEY CIRCLE
EAST
PROSPECTORS POINT
ENTRADA DRIVE
VALLEY VIEW WAY
MODERN TOWNHOMES
ROAD
RANA CT.
RANA
RIDGE DRIVE
CLIFF ROSA CT.
CIRCLE
RIDGEVIEW CONDOS
VIEW DRIVE
HILL VIEW DRIVE
THE RIDGES
SITE
A REPLAT OF
THE RIDGES FILING NO. SIX
LOS ALTOS SUB.
THE RIDGES FIL. NO. FIVE



Q.E.D.

SURVEYING SYSTEMS, INC.

1018 Colorado Ave., Grand Junction, CO 81501
(970) 241-2370 (970) 464-7568

Jody Kliska, P.E.
Development Engineer
City of Grand Junction
250 North 5th Street
Grand Junction, CO 81501

April 5, 1996

Re: Hillview Court

Dear Ms Kliska:

During the Planning Commission hearing on Hill Court Subdivision, the property owners in the townhomes adjacent to and east of Hill Court Subdivision expressed great concern about ground water. In order to help alleviate their fears and not add to the problem we propose the following:

1. Incorporate the required 8 foot walkway into a drainage channel.
2. Do not detain the excess storm water on site.

The attached sketch shows the walk and also how it would fit into the overall plan. The walk as shown will carry 14 CFS, while the 100 year Q is 9.3 CFS. The walk will carry the 100 year Q and still leave 1.3 feet that is not used to carry water. This would be a very good double use as it is difficult to imagine anyone using the walkway during a 2 year storm let alone the 100 year storm.

The second request is to eliminate the detention requirement so the standing water will not percolate into the soil and cause more ground water problems.

Fees in lieu of detention are calculated at $4,248.00. Water from the north east corner of Hill Court Subdivision is carried in a man made channel until it reaches Rana Road where a 36" culvert discharges in a natural channel. The man made channel as well as a 12" and 15" CSP at Hillview Drive and the 36" CSP at Rana Road need some maintenance.

The inlet to the 15" CSP in a concrete headwall with the end of the CSP protruding 2±". The inlet and out let ends needs cleaning.

The inlet to the 12" CSP is on the south side of Hill View Drive and is in very poor condition. The top 1/3 is bent down and the bottom is silted up so that there is only a

very small opening to carry water, all the outlet is nearly covered leaving the culvert nearly useless. The 36" CSP at Rana Road needs to have the inlet and outlet cleaned.

The man made channel is still functioning but also needs some maintenance. It appears visually that it would be adequate to carry the anticipated flow including the 100 year discharge of 9.3 CFS from Hill View Court Subdivision.
Using Chart 2 on page L-40 of the SWMM Manual the potential flow from the 12", 15" and 36 " culverts was determined. The maximum flow from the 12" is 2 CFS, 15" is 8 CFS and the 36" is 60 CFS. Considering the existing condition of the 12" and 15" culverts the maximum flow would be much less. In its' present condition the 36" culvert could easily carry the flows of 2 CFS, 8 CFS and 9.3 CFS for a total of 19.3 CFS a third of its potential capacity. There would be other water enter the man mad channel but it would be minor.

At this time the capacity of the man made channel is not know, but QED is in the process of developing this information.

The developer Mr. Dan Garrison would be willing to perform maintenance work on the 12", 15" and 36" culverts and improve the manmade channel. The maximum expenditure would be $4,248 for the maintenance work. Any difference not spent on maintenance would be paid to the City for their drainage program.

The attachments, copies of The Ridges Filing No. Six, The Cluster and the tax map show the channel is owned by open space.

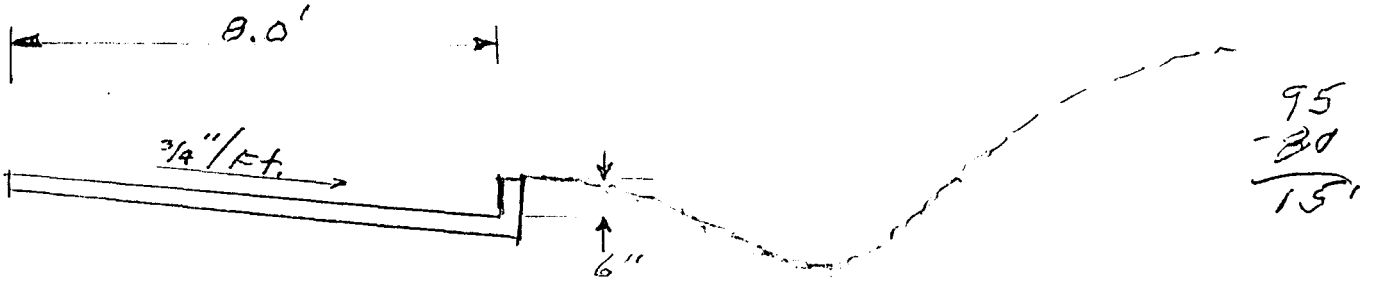
Sincerely,

Leslie G. Wood
Professional Engineer

cc:with attachments
Katherine Portner
Dan Garrison
file - 2

Hillview Court

Possible Side Walk - drainage



$S = \frac{15}{430} = 0.0349$, $A = \frac{8 \times 0.5}{2} = 2$ Ft.^{2}

W.P. $= 8.0 + 0.5 = 8.5$ Ft. , $n = 0.015$

$R = \frac{2}{8.5} = 0.235$

$Q = \frac{1.486}{n} \times A R^{2/3} S^{1/2}$

$Q = \frac{1.486}{0.015} \times 2 \times 0.235^{2/3} \times 0.0349^{1/2} =$

$Q = 99.1 \times 2 \times 0.381 \times 0.187 = 14.1$ CFS.

Try 4" depth of F.L.

$A = \frac{5.3 \times 0.33}{2} = 0.87$ Ft.^{2}

$WP = 5.3 + 0.33 = 5.63$, $R = \frac{0.87}{5.63} = 0.154$

$Q = \frac{1.486}{0.015} \times 0.87 \times 0.154^{2/3} 0.0349^{1/2} =$

$Q = 99.1 \times 0.87 \times 0.29 \times 0.19 = 4.7$ CFS.

Hillcrest Cf

Try 5" depth

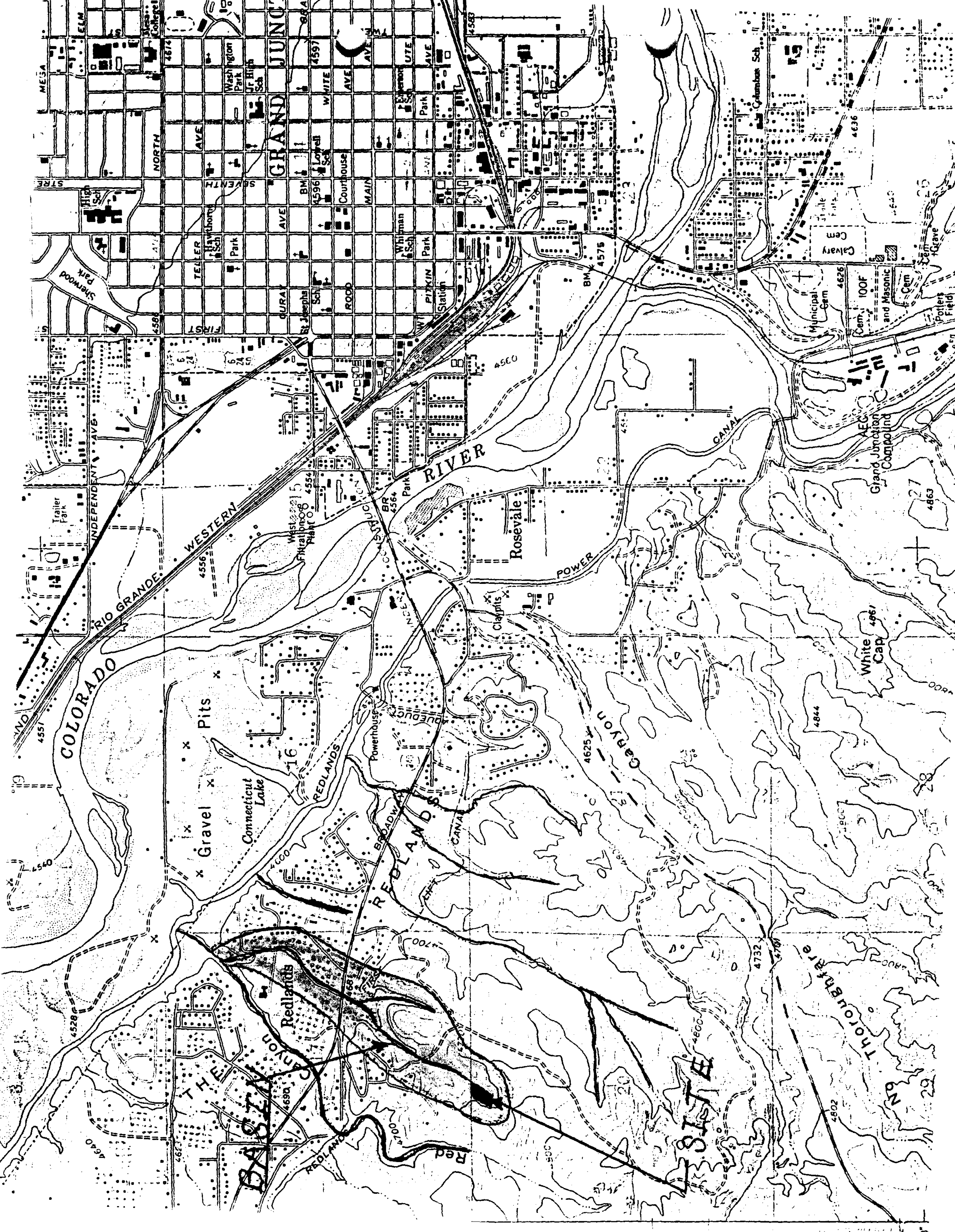
$$A = \frac{6.7 \times 0.42}{2} = 1.41 \text{ Ft}^2$$

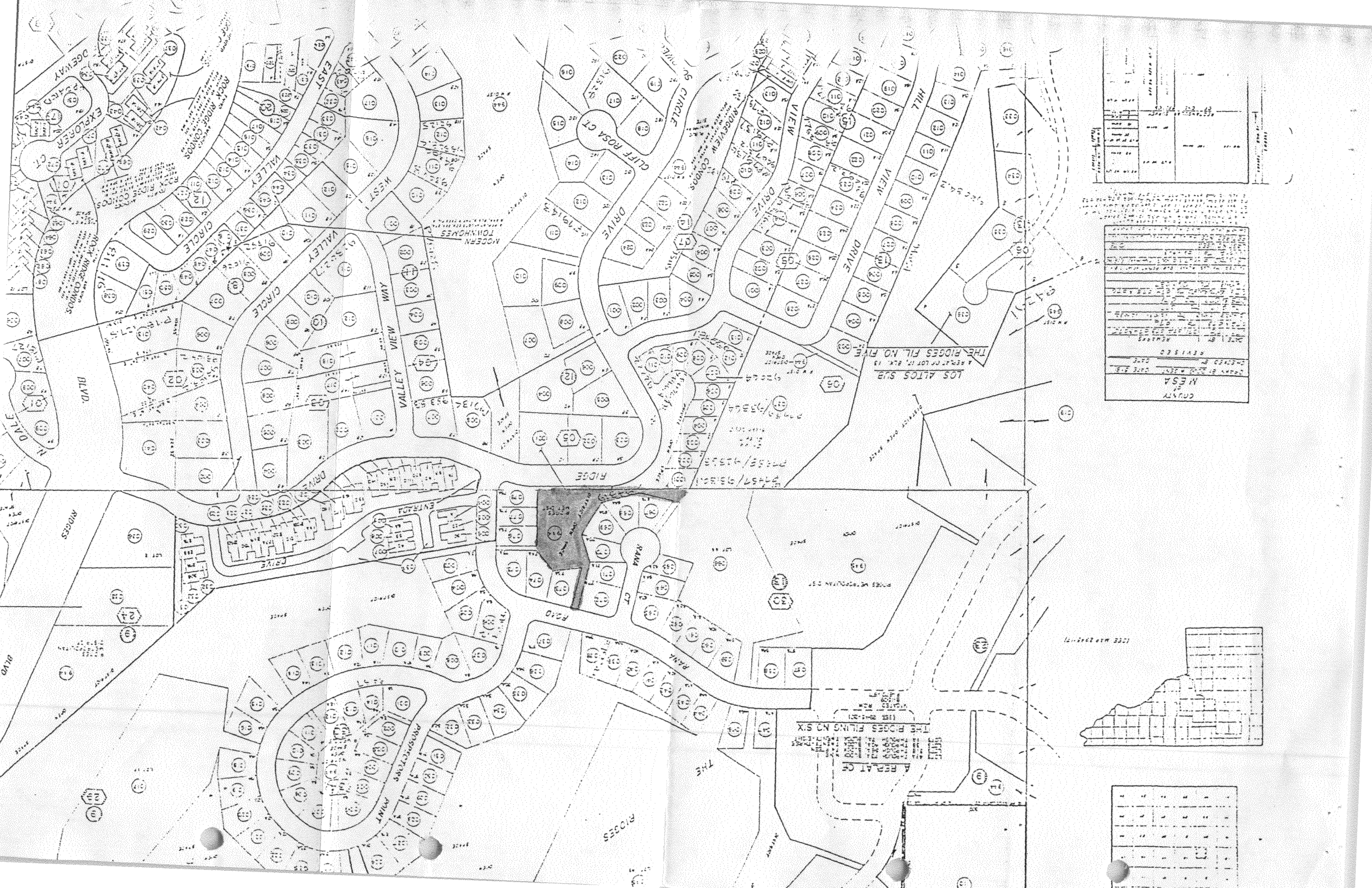
$$WP = 6.67 + 0.42 = 7.09, \quad R = \frac{1.41}{7.09} = 0.199$$

$$Q = 99.1 \times 1.41 \times 0.199^{2/3} \times 0.19$$

$$Q = 26.54 \times 0.34 = 9.0 \text{ cu. ft.}$$

$$Q_{100} = 9.3 \text{ CFS}$$


GRAND JUNCTION
COLORADO RIVER
RIO GRANDE WESTERN
Mesa College
Washington Park
Jr High Sch
Lowell Sch
Courthouse
Emerson Sch
Hawthorne Sch
Whitman Sch
St Josephs Sch
High Sch
Sherwood Park
Station
Columbus Sch
Calvary Cem
Municipal Cem
IOOF Cem
and Masonic Cem
Potters Field
AEC Grand Junction Compound
Trailer Park
Waste Filtration Plant
Rosevale
POWER CANAL
Claypits
White Cap
Gravel Pits
Connecticut Lake
Powerhouse
REDLANDS
BROADWAY
Redlands
Canyon
Thoroughfare
THE BASIN SITE
Red


CLIFF ROSA CT
CLIFF ROSA DRIVE
CLIFF ROSA CIRCLE
VALLEY VIEW DRIVE
VALLEY VIEW WAY
VALLEY VIEW CIRCLE
VALLEY VIEW HILL
RIDGEVIEW CONDOS
ROCK RIDGE CONDOS
MODERN TOWNHOMES
EXPLORER ROAD
PROSPECTORS POINT
ENTRADA
RIDGES BLVD
THE RIDGES FIL. NO. FIVE
A REPLAT OF LOT 17, BLK. 13
LOS ALTOS SUB
THE RIDGES FILING NO SIX
A REPLAT OF
COUNTY OF MESA
REVISED
DRAWN BY
CHECKED BY
DATE SURV.
DATE

THE RIDGES FILING NO. SIX

NOTES

1. USES ALLOWED WILL BE IN ACCORDANCE WITH COVENANTS RECORDED. NECESSARY INTERPRETATIONS WILL BE MADE BY THE RIDGES METROPOLITAN DISTRICT OR THE ARCHITECTURAL CONTROL COMMITTEE.
2. A 5' IRRIGATION AND/OR WATER EASEMENT IS HEREBY GRANTED TO THE RIDGES METROPOLITAN DISTRICT ON ALL LOT LINES AND MAY BE IN WHOLE OR IN PART OR ANY PORTION THEREOF RELEASED BY THE RIDGES METROPOLITAN DISTRICT AT SOME FUTURE DATE AT THEIR DISCRETION.
3. ALL MULTI-FAMILY AREAS ARE TO BE DEVELOPED THROUGH COUNTY PROCESSES AND REGULATIONS, NUMBER OF UNITS PER ACRE IS VARIABLE.
4. PRINCIPLE BUILDINGS WILL REQUIRE AN ENGINEERED FOUNDATION, BASED ON A SOIL INVESTIGATION, PRIOR TO ISSUANCE OF A BUILDING PERMIT.
5. A TEN FOOT WIDE UTILITY EASEMENT IS PROVIDED ACROSS ALL "A" LOTS, ADJACENT AND PARALLEL TO ALL ROADS AND CUL-DE-SACS.

LOT 45 BLOCK NINE
MULTI-FAMILY
7.641 ACRES

MATCH LINE
(SEE SHEET 4)

DISTRICT OPEN SPACE
25.343 ACRES

DISTRICT OPEN SPACE
25.353 ACRES

10' UTILITY EASEMENT

LOT 17 BLOCK NINE
MULTI-FAMILY
2.951 AC

MATCH LINE
(SEE SHEET 3)

MATCH LINE
(SEE SHEET 5)

RAIA COURT

RAIA ROAD

LOT 66
BLOCK THIRTEEN
MULTI-FAMILY
1.581 ACRES

DISTRICT OPEN SPACE (MINI-PARK)
0.813 ACRES

DISTRICT OPEN SPACE
0.093 ACRES

DISTRICT OPEN SPACE
25.353 ACRES

8' EQUESTRIAN AND UTILITY EASEMENT

LOT ONE BLOCK NINE
THE RIDGES FILING NO. TWO

RIDGE DRIVE

SOUTH LINE SW¼ SE¼ SECTION 17, T10S R91W 6TH P.M. BASIS OF BEARINGS

POINT OF BEGINNING

AREA SUMMARY				
SINGLE FAMILY LOTS	28.834 AC	OR	29.45%	154 LOTS
MULTI-FAMILY LOTS	19.900 AC	OR	20.41%	6 LOTS
ROADS	7.639 AC	OR	8.03%	
DISTRICT OPEN SPACE	40.886 AC	OR	42.09%	
TOTAL	97.259 AC	OR	100.00%	

LEGEND
- INDICATES MESA COUNTY BRASS CAP
- INDICATES SET REBAR AND MONUMENT CAP SET IN CONCRETE
- INDICATES SET REBAR AND MONUMENT CAP AT ALL LOT CORNERS
- INDICATES MATCH LINE

SCALE 1"=100'

SHEET 2 of 6

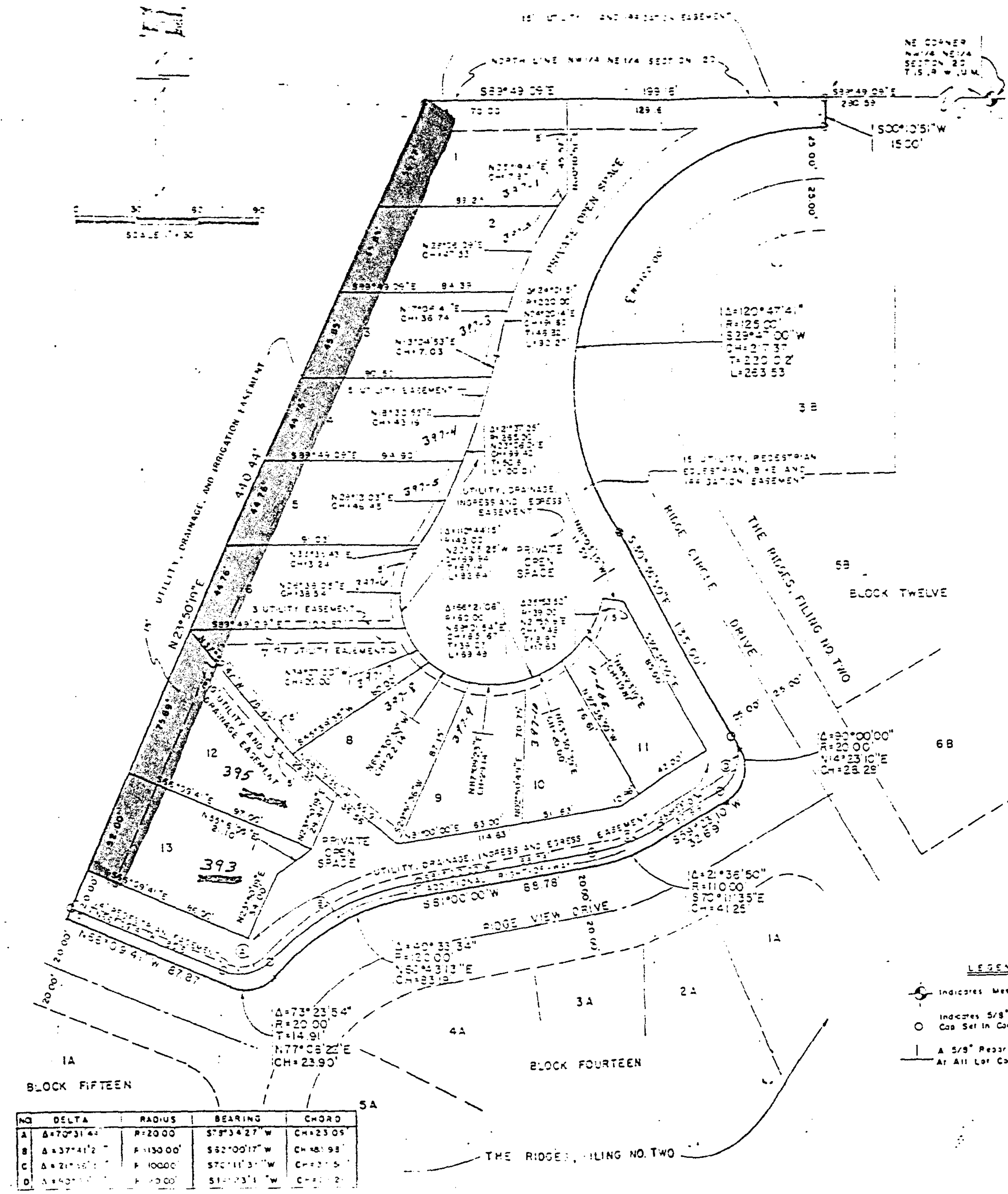
THE RIDGES, FILING NO. SIX

C 16 A-78
Zone PD 4

THE CLUSTER

A REPLAT OF LOT ONE, BLOCK THIRTEEN OF: THE RIDGES, FILING NO. TWO

No Drive Permits Required



NO	DELTA	RADIUS	BEARING	CHORD
A	Δ=70°31'4[illegible]	R=20.00	S[illegible]°34'27"W	CH=23.05
B	Δ=37°41'2[illegible]"	R=130.00'	S62°00'17"W	CH=81.93
C	Δ=21°[illegible]	R=100.00'	S70°11'3[illegible]"W	CH=[illegible]
D	Δ=4[illegible]	R=[illegible]0.00	S1[illegible]°[illegible]3'1[illegible]"W	CH=[illegible]

DEDICATION

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned [illegible] is the owner of that real property situated in the County of Mesa, State of Colorado and being a part of the NW 1/4 NE 1/4 of Section 22, Township 1 South, Range 1 West of the Ute Meridian as shown on the accompanying plat, said real property being more particularly described as follows:

Lot One, Block Thirteen of The Ridges, Filing No. Two.

[illegible]

That all expense for street paving or improvements shall be furnished by the seller or purchaser, not by the County of Mesa.

IN WITNESS WHEREOF said owner has caused his name to be hereunto subscribed this 16 day of October A.D., 1978.

[signature]

STATE OF COLORADO)
COUNTY OF MESA) ss

The foregoing instrument was acknowledged before me this [illegible] day of [illegible] A.D., 1978 by [illegible].

My commission expires [illegible]
Witness my hand and official seal.

[signature]
Notary Public

CLERK AND RECORDER'S CERTIFICATE

STATE OF COLORADO)
COUNTY OF MESA) ss # 1195137

I hereby certify that this instrument was filed in my office at 2:45 o'clock P.M., this 13 day of April A.D., 1979 and is duly recorded in Plat Book No. 12, Page 14[illegible].

[signature]
Clerk and Recorder

Deputy

Fees $ 10.00

COUNTY PLANNING COMMISSION CERTIFICATE

Approved this 5th day of October A.D., 1978. County Planning Commission of the County of Mesa, Colorado.

[signature]
Chairman

BOARD OF COUNTY COMMISSIONERS CERTIFICATE

Approved this 2nd day of April A.D., 1979. Board of County Commissioners of the County of Mesa, Colorado.

[signature]
Chairman

SURVEYOR'S CERTIFICATE

I, James E. Patty Jr., do hereby certify that the accompanying plat of The Cluster, A Replat of Lot One, Block Thirteen of The Ridges, Filing No. Two, a subdivision of a part of the County of Mesa, has been prepared under my direction and accurately represents a field survey of same.

[signature]
James E. Patty Jr.
Registered Land Surveyor
Colorado Registration No. 9662

By: [signature]
Mesa County Road Department

Date: 4-9-79

LEGEND

- Indicates Mesa County Brass Cap
- O Indicates 5/8" Rebar And Monument Cap Set In Concrete
- A 5/8" Rebar And Monument Cap At All Lot Corners

AREA QUANTITIES

Total Acres In Lots	1.139 Ac.	or 63.1%
Total Acres In Open Space	0.667 Ac.	or 36.9%
Total Acres	1.806 Ac.	or 100.00%

THE CLUSTER
A REPLAT OF LOT ONE, BLOCK THIRTEEN OF: TH[illegible]ES, FILING NO. TWO

Q.E.D.
SURVEYING SYSTEMS, INC.
1018 Colorado Ave., Grand Junction, CO 81501
(970) 241-2370 (970) 464-7568

Jody Kliska P.E.
Development Engineer
City of Grand Junction
250 North 5th Street
Grand Junction, CO 81501

May 13, 1996

RE: HILLVIEW COURT

Dear Ms Kliska:

This is a follow up of my letter of April 5, 1996 concerning the existing drainage channel from the northeast corner of Hill Court Subdivision to the 36" culvert at Rana Road.

The channel has been surveyed by Q.E.D., an analysis made and an inspection by myself on May 13, 1996. The channel needs to be cleaned throughout of tumble weeds, lumber and a small area of willows north of the townhomes. The capacity of the channel was calculated on 50 foot intervals using an "n" value of 0.027, which is probably too low of a valve thru the willows. There is a wide range of capacity, from a low of 25 CFS to a high of 274 CFS as the channel approaches Rana Road. This is due to the crossectional area of the channel from 4.95 square feet to 33.32 square feet and the gradient from flat to 16.2%. The largest crossectional areas are in the area of maximum gradient.

My recommendation's are as follows:

1. Clean the entire channel of all foreign matter which includes vegetation, tumble weeds and trash.
2. Increase the crossectional area of the channel to 9 square feet using a trapezoidal template with a bottom width of 2.5 feet and a minimum height of 2 feet with 1:1 side slopes on a gradient of 1.46%.
3. Clean the bottom of the channel only where the gradient is flat so as to maintain a more uniform gradient.
4. Clean inlets and outlets of the 12", 15" and 36" culverts and straighten the inlet to the 12" culvert.

The minimum capacity of the channel would be 64 CFS after the improvements are made. I have rechecked the capacity of the 36" culvert and found that its' capacity is 50 CFS and not the 60 CFS as stated in my prior letter.

I am attaching a profile and crossection of the channel.

Sincerely,

Leslie G. Wood
Professional Engineer

cc: Katherine Portner
Dan Garrison
file-2

Hillview. Ct.

SUBBASIN I.D.	LAND USE OR SURFACE CHARAC-TERISTICS	STORM FREQ.	SCS HYDROLOGIC SOIL GROUP AND NAME (eg - "B:ABERT")								COMPOSITE C VALUE $\Sigma\left(\frac{C \times \%}{100}\right)$
			A:		B:		C:		D:		
			% OF SUBBASIN	"C" VALUE	% OF SUBBASIN	"C" VALUE	% OF SUBBASIN	"C" VALUE	% OF SUBBASIN	"C" VALUE	
Total	Und./Pasture	2					59	0.36	41	0.44	0.39
Total	Und/Pasture	100					59	0.42	41	0.54	0.47
OFF Site	Und.	2							41	0.44	
Site	Imp	2			30	0.94					0.63
Site	Landscape	2					29	0.68			
offsite	Und.	100							41	0.54	
Site	Imp.	100			30	0.97					0.71
Site	Landscaping	100					29	0.68			
ZZ	EXAMPLE		10	.60	40	.70	40	.80	10	.90	.75

SEE APPENDIX "C" FOR SOIL DESCRIPTIONS. SEE TABLE "B-1" FOR APPROXIMATE "C" VALUES

COMPOSITE RUNOFF COEFFICIENTS WORKSHEET | **TABLE "B-2"**

FINAL Drainage
Hillview Ct.

Impact Areas

Roads, Assume 26' wide out-out including curb.

L = 177' x 26 = 4,602 Ft.²

C.D.S = 81' Dia, A = $\frac{\pi 81^2}{4}$ = 5,153 Ft.²

Total Road = 4,602 + 5153 = 9755 Ft.²

Side Walk = 8' wide x 430' = 3440 Ft.²

Area buildings = (62X20 + 13X30) + (64X16+12X52+3X27) + (62X16+46X18+3X26) + (64X20+15X26+8X4) + (61X16+12X52+26X4) + (58X20+40X18) + (56X19+18X43) + (64X20+31X15+3X8) + (56X19+18X43) + (58X20+18X41) + (62X19+30X15+5X7) + (64X20+30X15+5X8 + (62X19+15X30+8X6) + (62X19X30X15+6X8) =

Area = (1,240+390) + (1,024+624+81) + (992+828+78) + (1,280+390+32) + (976+624+104) + (1,160+120) + (1,064+774) + (1,280+465+24) + (1,064+774) + (1,160+738) + (1,178+450+35) + (1,280+450+40) + (1,178+450+48) + (1,178+450+48) =

Area = 1630 + 1729 + 1898 + 1702 + 1704 + 1880 + 1838 + 1769 + 1838 + 1898 + 1663 + 1770 + 1676 + 1676 =

Area = 24,671 Ft.²

Driveway: Assume Drive way = 50% of Dwelling units
= 0.50 X 24,671 = 12,336 Ft.²

Final Drainage
Hillview Ct.

Total Impv. Area
$A = 9755 + 3440 + 24,671 + 12,336$
$A = 50,202\ Ft.^2 = 1.15\ Acre$

OFF Site Drainage:
Do not include A_1 as it is on the townhouse, to the east and is carried off site in drainage easement common to both sites.

$A_2 = \frac{(191+65)}{2} 200 + (75 \times 30)/2$

$A_2 = 25,600 + 1125 = \underline{26,725\ Ft.^2}$

$A_3 = \frac{110 \times 72}{2} + \frac{110 \times 48}{2} =$

$A_3 = 3960 + 2640 = \underline{6,600\ Ft.^2}$

$A_4 = \frac{372 \times 180}{2} = \underline{33,480\ Ft.^2}$

$A_5 = \frac{111 \times 31}{2} = \underline{1721\ Ft.^2}$

$A_{Total} = 26,725 + 6,600 + 33,480 + 1,721$

$A_T = 68,526\ Ft.^2 = 1.57\ Acre$

Total Area = $1.57 + 2.26 = 3.83$ Acre

Final Drainage
Hillview Ct.

Determine $t_c = t_o$
From SWRM Figure E-2

$$T_o = \frac{1.8(1.1-C)\sqrt{L}}{\sqrt[3]{S}}$$

$C = 0.39$, $L = 750$ Ft.

Elev. Diff = $4860 - 4745 = 115'$, $S = \frac{115}{7.50} = 15.33\%$

$$T_o = \frac{1.8(1.1-0.39)\sqrt{750}}{\sqrt[3]{15.33}}$$

$$T_o = \frac{1.8(0.71)\,27.4}{2.48} = 14 \text{ min}$$

Try splitting basin at S.W. corner site

$L_1 = 250$ Ft., $C = 0.39$

Elev. Diff = $4860 - 4784 = 76$

$S = \frac{76}{2.50} = 30.4\%$

$$T_{o_1} = \frac{1.8(1.1-0.39)\sqrt{250}}{\sqrt[3]{30.4}} = \frac{1.8 \times 0.71 \times 15.8}{3.12} = 6 \text{ min}$$

T_{o_2}, $L = 500$ Ft., $C = 0.39$

Elev. Diff = $4784 - 4745 = 39$

$S = \frac{39}{5.00} = 7.8\%$

$$T_{o_2} = \frac{1.8 \times 0.71 \times \sqrt{500}}{\sqrt[3]{7.8}} = \frac{1.8 \times 0.71 \times 22.4}{1.98} = 14. \text{ min}$$

Total time = $6 + 14 =$ **20 min** use

Fig C Drainage
Millview Ct.

$I = 0.68$ for 2 yr,

$Q_2 = CIA$, $C = 0.39$, $I = 0.68$, $A = 3.83$ Acre

$Q_2 = 0.39 \times 0.68 \times 3.83 = \underline{1.0 \text{ CFS. 2 yr. Hist}}$

Q_{100} Historic $C = 0.47$

$$T_{o_1} = \frac{1.8\,(1.1 - 0.47)\sqrt{250}}{\sqrt[3]{30.4}}$$

$$T_{o_1} = \frac{1.8 \times 0.63 \times 15.8}{3.12} = 6 \text{ min}$$

$$T_{o_2} = \frac{1.8 \times 0.63 \times \sqrt{500}}{\sqrt[3]{7.8}}$$

$$T_{o_2} = \frac{1.8 \times 0.63 \times 22.4}{1.98} = 13 \text{ min}$$

$T_{total} = 6 + 13 = 19$ min

$I = 2.77$ in/Hr.

$Q = CIA$, $C = 0.52$, $I = 2.77$, $A = 3.83$

$Q_{100} = 0.52 \times 2.77 \times 3.83 = \underline{5.5 \text{ CFS.}}$ ←

Final Drainage
Hillview Ct.

Imp roofs - roads - Drives - walks
A = 1.15 Acre imp.
Landscaping = 2.26 - 1.15 = 1.11 Acre
Total A = 3.83 Acre
% imp = $\frac{1.15}{3.83}$ = 30%

% landscaping = $\frac{1.11}{3.83}$ = 29%

% off site = $\frac{1.57}{3.83}$ = 41%

Total = 100%

Dev. Tc 2yr.

$$T_{o_1} = \frac{1.8(1.1-0.63)\sqrt{250}}{\sqrt{30.4}}$$

$$T_{o_1} = \frac{1.8 \times 0.47 \times 15.8}{3.12} = 4 \text{ min}$$

$$T_{o_2} = \frac{1.8 \times 0.42 \times \sqrt{500}}{\sqrt[3]{7.8}}$$

$$T_{o_2} = \frac{1.8 \times 0.42 \times 22.4}{1.98} = 10 \text{ min}$$

Total T_c = 14 min

Final Drainage
Hill View Ct.

Dev Tc 100 yr.

$$T_{o_1} = \frac{1.8(1.1-0.71)\sqrt{250}}{\sqrt[3]{30.4}}$$

$$T_{o_1} = \frac{1.8 \times 0.39 \times 15.8}{3.12} = 4 \text{ min}$$

$$T_{o_2} = \frac{1.8 \times 0.39 \sqrt{500}}{\sqrt[3]{7.9}}$$

$$T_{o_2} = \frac{1.8 \times 0.39 \times 22.4}{1.98} = 8 \text{ min.}$$

$$T_c = 4 + 8 = 12 \text{ min.}$$

$I_{2yr.} = 0.81$ in/Hr.
$I_{100yr} = 3.41$ in/Hr.

Q Dev. $Q_2 = 0.63 \times 0.81 \times 3.83 = \underline{2.0 \text{ CFS.}}$

$$Q_{100} = 0.71 \times 3.41 \times 3.83 = \underline{9.3 \text{ CFS.}}$$

	Q	T_c	C	I	A+=2	Q
undeveloped	Q_2	20	0.39	0.68	3.83	1.0
undeveloped	Q_{100}	19	0.47	2.77	3.83	5.5
Developed	Q_2	14	0.53	0.81	3.83	2.0
Developed	Q_{100}	12	0.71	3.41	3.83	9.3

Final Drainage
Hillview Ct.

Storage Vol. From P. N-10 SWMM

$$Td_2 = \sqrt{\frac{507.82\, C_d\, A}{Q_r - \frac{Q_r^2\, T C_d}{53.4\, C A}}} - 19.0 =$$

$$Td_2 = \sqrt{\frac{507.82 \times 0.53 \times 3.83}{1 - \frac{1^2 \times 14}{53.4 \times 0.53 \times 3.83}}} - 19.0 =$$

$$Td_2 = \sqrt{\frac{1030.82}{1 - \frac{14}{108.40}}} - 19.0 =$$

$$Td_2 = \sqrt{\frac{1030.82}{1 - 0.13}} - 19 =$$

$$Td_2 = \sqrt{\frac{1030.82}{0.87}} - 19 =$$

$$Td_2 = \sqrt{1184.85} - 19 =$$

$$Td_2 = 34.42 - 19 = 15.\ \text{min.}$$

Fir[illegible] Drainage
Hillview Ct.

$$Td_{100} = \sqrt{\frac{1972.9\, C_d A}{Q_r - \frac{Q_r^2\, T_{cd}}{209.9\, C_d A}}} - 18.8 =$$

$$Td_{100} = \sqrt{\frac{1972.9 \times 0.71 \times 3.83}{1 - \frac{1^2 \times 12}{209.9 \times 0.71 \times 3.83}}} - 18.8 =$$

$$Td_{100} = \sqrt{\frac{5364.91}{1 - \frac{12}{570.78}}} - 18.8 =$$

$$Td_{100} = \sqrt{\frac{5364.91}{1 - 0.02}} - 18.8 =$$

$$Td_{100} = \sqrt{5474.40} - 18.8$$

$$Td_{100} = 74.0 - 18.8 = 55.2 \text{ min}$$

$$Id_{100} = \frac{104.94}{Td_{100} + 13.3} = \frac{104.94}{55.2 + 18.8} = 1.42 \text{ "/Hr.}$$

Final Drainage Report
Meadow Ct.

$$V = 60\left[T_d(Q_d - Q_r) - Q_r T_{cd} + \frac{K Q_r T_{cd}}{2} + \frac{Q_r^2 T_{cd}}{2 Q_d}\right]$$

$$K = \frac{T_{cr}}{T_{cd}} = \frac{20}{12} = 1.67$$

$$V = 60\left[55.2(9.3 - 1.0) - 1 \times 12 + 1.67 \times 1 \times 12 + \frac{1^2 \times 12}{2 \times 9.3}\right]$$

$$V = 60\left[458.2 - 12 + 20.0 + 0.6\right]$$

$$V = 60\,(466.8) \quad \doteq 28{,}008 \text{ cu. ft.}$$

$$V = \underline{28{,}008 \text{ cu. ft.} = 0.644 \text{ Acre ft.}} \leftarrow$$

Drainage Fee $A = 10{,}000\,(C_{100d} - C_{100h})\,A^{0.7}$

$$\$ = 10{,}000\,(0.71 - 0.47)\,2.26^{0.7}$$

$$\$ = 10{,}000\,(0.24)\,1.77 = \underline{\$\,4{,}248}$$

Pipe at Base = 36"

2 pipes at Hillview ct.
1 - 15" with D + 24" head
1 - 12" with D head.

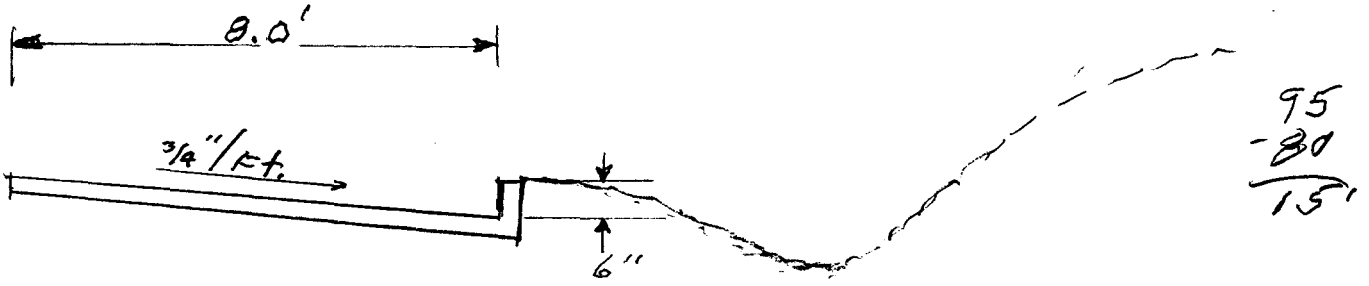
12" is sifted and tapered in on inlet

15" inlet protrudes 2" from headwall both outlets sifted.

36" needs creasing both ends.

Hillview Court

Possible Sidewalk - drainage



$S = \frac{15}{430} = 0.0349$, $A = \frac{8 \times 0.5}{2} = 2$ Ft.^{2}

W.P. $= 8.0 + 0.5 = 8.5$ Ft. , $n = 0.015$

$R = \frac{2}{8.5} = 0.235$

$Q = \frac{1.486}{n} \times A R^{2/3} S^{1/2}$

$Q = \frac{1.486}{0.015} \times 2 \times 0.235^{2/3} \times 0.0349^{1/2} =$

$Q = 99.1 \times 2 \times 0.381 \times 0.187 = 14.1$ CFS.

$V = 14.1/2 = 7.0$

Try 4" depth of F.L.

$A = \frac{5.3 \times 0.33}{2} = 0.87$ Ft.^{2}

$WP = 5.3 + 0.33 = 5.63$, $R = \frac{0.87}{5.63} = 0.154$

$Q = \frac{1.486}{0.015} \times 0.87 \times 0.154^{2/3} 0.0349^{1/2} =$

$Q = 99.1 \times 0.87 \times 0.29 \times 0.19 = 4.7$ CFS.

Try 5" depth

$$A = \frac{6.7 \times 0.42}{2} = 1.41 \text{ Ft}^2$$

$$W.P. = 6.67 + 0.42 = 7.09, \quad R = \frac{1.41}{7.09} = 0.199$$

$$Q = 99.1 \times 1.41 \times 0.199^{2/3} \times 0.19$$

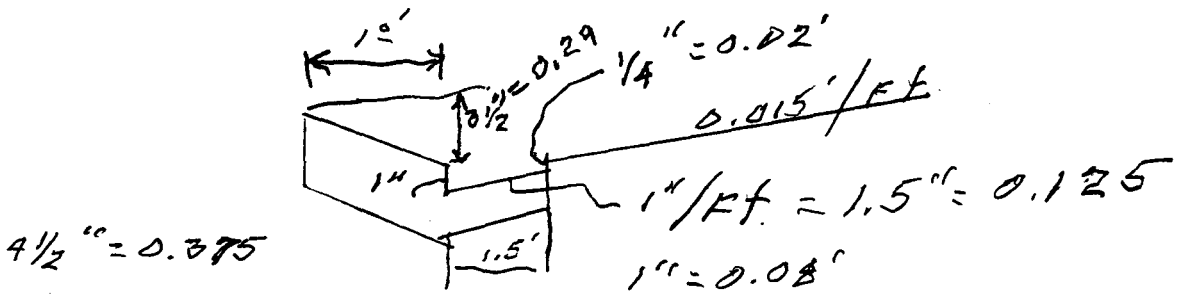
$$Q = 26.54 \times 0.34 = 9.0 \text{ Cu. ft.}$$

$$Q_{100} = 9.3 \text{ CFS}$$

$$V = \frac{9.3}{1.41} = 6.6$$

$$V = \frac{9.0}{1.41} = 6.4 \text{ FT/SEC.}$$

Street Expansion



$$A = 1.5\left[\frac{1.375 + (0.375 - 0.125)}{2}\right] + \left(\frac{0.29 \times 1}{2}\right) + \frac{14 \times 0.21}{2}$$

$$A = 0.47 + 0.145 + 1.47 = 2.085$$

$$W.P. = \sqrt{0.29^2 + 1^2} + 0.08 + \sqrt{1.5^2 + .125^2} + .02 + 14$$

$$W.P. = 1.04 + 0.08 + 1.51 + 14 = 16.63 \text{ Ft.}$$

$$R = \frac{2.085}{16.63} = 0.125 \text{ Ft.}$$

$$n = 0.015, \quad S = 0.005 \text{ FT}, \quad 0.0274$$

Street Cap. Cont.

$$Q = \frac{1.486}{n} A R^{2/3} S^{1/2}$$

0.6% $Q = \frac{1.486}{0.015} \times 2.085 \times 0.125^{2/3} \times 0.006^{1/2}$

0.5% $Q = 99.07 \times 2.085 \times 0.250 \times 0.071 = 3.7$ C.F.S.

$V = \frac{3.7}{2.085} = 1.8$ Ft./Sec.

2.74% $Q = 99.07 \times 2.085 \times 0.250 \times 0.0274^{1/2} = 8.5$ C.F.S.

$V = \frac{8.5}{2.085} = 4.8$ Ft./Sec.

REVIEW COMMENTS

FILE #FPP-96-135 **TITLE HEADING:** Hillview Court Subdivision

LOCATION: Hillview Drive

PETITIONER: GNT Development

PETITIONER'S ADDRESS/TELEPHONE: P.O. Box 308
Grand Junction, CO 81502
243-5902

PETITIONER'S REPRESENTATIVE: Dan Garrison

STAFF REPRESENTATIVE: Bill Nebeker

NOTE: THE PETITIONER IS REQUIRED TO SUBMIT FOUR (4) COPIES OF WRITTEN RESPONSE AND REVISED DRAWINGS ADDRESSING ALL REVIEW COMMENTS ON OR BEFORE 5:00 P.M., JUNE 21, 1996.

CITY COMMUNITY DEVELOPMENT **6/14/96**
Bill Nebeker **244-1447**

NOTE: You're welcome to name your subdivision anything you want, but the street name is two words: "Hill View not Hillview.

When you resubmit with response to comments, in addition to the four copies of full sized drawings with corrections, please submit a reduced copy (11" X 17") of each plan also.

PLAT:

1. Change Hillview Court to Hill View Court.
2. a. Designate open space in center of Hill View Court as Tract A.
   b. Designate remainder of Open Space within subdivision to Tract B.
   c. Tract A & B shall be dedicated to the Hillview Court Subdivision Homeowner's Association. See, "A Guide to Plat Dedications" for wording.
   d. A note shall be placed on the plat that states that Tract A & B shall be maintained by the Hillview Court Subdivision Homeowner's Association.
3. Provide a utility easement over Tract A (within the cul-de-sac) for the proposed sewer and water line.
4. Delete statement on plat, "That all expenses for street paving or improvements shall be furnished by the seller or purchaser, not the City of Grand Junction." This is not standard language used by the City for plat dedications. Please do not put it on any further plats.
5. Provide dedication statements for the equestrian easement, pedestrian easement, and utility easements being dedicated on this plat. If easements are existing, label them as such.
6. Change the plat to clearly delineate the beginning and end of the utility/irrigation/drainage & equestrian easement and the multi-purpose easement at the intersection of Hill View Court and Hill View Drive; and the beginning and end of the multi-purpose easement on the other side of the street; and the easement that connects the multi-purpose easement and the 15' utility/irrigation/pedestrian

& drainage easement south of lot 12. The 10' utility, irrigation, drainage and equestrian easement previously dedicated on this lot continues to the east property boundary.

7. Lots 4, 7, 8, & 9 shall be reconfigured to be located outside of the rear building setback line and lots 1, 6, 7, 10 & 12 shall be reconfigured to be outside the front building setback line OR the building footprints on the site plan shall be dimensioned and shall control for placement of the building on the lot. If the second option is proposed a note on the plat shall refer to the site plan for building permits.

SITE PLAN:

1. Show and dimension perimeter setbacks on site plan.
2. Labeling of easements between the site plan and plat (and other plans) must be consistent. The sliver of open space between this development and lot 3A, Ridges Filing #4 is labeled open space and 10' pedestrian easement on the plat. On the site plan it is labeled open space and 10' utility, irrigation, drainage and equestrian easement. Make necessary corrections.
3. Electric transformer encroaches into pedestrian trail. Relocate trail around transformer. The transformer also blocks the 4' pedestrian easement from the east. Preliminary approval required that this easement be continued to Hill View Court. (This easement is completely blocked by landscaping on property to the east. I suggest that this condition be deleted by the Planning Commission at the final approval.)
4. Provide more detail and dimensions on the site plan so it acts as a site plan, not a schematic drawing. The site plan governs the development on this lot since this is a planned zone. Dimension and identify lots, building footprints, driveways, setbacks, height of structures, etc. Show location of walls and signs that are shown on landscape plan since their proposed location conflicts with easements and improvements.
5. Although the site plan has been appropriately revised to use more shared driveways and to break-up large areas of hard surface, there appears to be inadequate on-site maneuvering in driveways. Paved apron in front of garages must be extended to allow accessibility into garages, otherwise the landscaping won't be safe.
6. Water provider for this site is City of Grand Junction. Make necessary corrections on all plans.

LANDSCAPE PLAN:

1. Landscape plan does not meet SSID specifications. Please review Drawings Standards Checklist - Landscape Plan (page IX-20, Submittal Standards for Improvements and Development (SSID) and Section 5-4-15 (Landscaping Standards) of the Zoning and Development Code, and make necessary changes.
2. Existing copper rose and about half of the proposed copper rose are located within the 8' proposed trail.
3. Move both landscape walls out of the 10' utility, irrigation, drainage and equestrian easements. The walls and sign should be shown on the site plan also.
4. Provide more information for the proposed sign; height, width, etc.
5. Identify existing trees on site that will be retained. I assume the drawing shows 4; I only counted 3 on site and they're not in the location as shown on the landscape plan. More trees are needed on the site, especially since the 3 existing trees will most likely be lost during construction since they're located where structures will be built. The plan shall include at least 12 new trees, in addition to the existing. New trees shall meet specifications in Section 5-4-15.
6. Identify surface treatment of area between units 2 & 3 that is missing from the landscape plan.

CITY DEVELOPMENT ENGINEER **6/14/96**
Jody Kliska **244-1591**

1. The City has published new Standard Contract Documents for Capital Improvement Projects. New Standard Drawings will be available shortly. The contract documents are available at the Public Works office for $10. All construction of public improvements will be required to comply with these specifications.
2. Redlined plans are being returned with these comments. They came pre-redlined, and I have added some more.
3. A stop sign and a street name sign at the intersection with Hillview is required. Please add these to the plans.
4. The drainage plan as presented is acceptable and appears to relieve the concerns expressed by adjacent property owners at the preliminary hearing. Please include the offsite channel improvements as part of the plan set. These plans need to indicate what improvements are proposed and the extent of improvements. Credit toward the calculated drainage fee will be allowed. I would like to walk the channel with the engineer prior to approval of channel improvements.

CITY UTILITY ENGINEER **6/14/96**
Trent Prall **244-1590**

1. PLEASE NOTE: 1996 City of Grand Junction Standard Specifications shall apply for this proposed development. Copies are available for $10 in the Public Works and Utilities office.
2. Improvements agreement: Please increase the following unit prices:
   I.3. to $18 / LF II.3. to $18 / LF
3. Plat: Open space needs to be redefined to include utility easement as sewer line is proposed through the middle of the proposed open space.
4. Landscape plans: Please ensure that 7.5 either side of sewer alignment is clear of "landscape boulders".
5. Sewer and Water Plans:
   A. The City of Grand Junction, rather than Ute as noted on the plans, is the water purveyor for the project.
   B. Please add note stating that water meter pits and setters will be provided by City inspector for installation by the contractor.

      Please add the following notes to the current notes:
      a. No 4" services shall be connected directly into manholes.
      b. The contractor shall notify the City inspection 48 hours prior to commencement of construction.
      c. The Contractor is responsible for all required sewer line testing to be completed in the presence of the City Inspector. Pressure testing will be performed after all compaction of street subgrade and prior to street paving. Final lamping will also be accomplished after paving is completed. These tests shall be the basis of acceptance of the sewer line extension.
      d. The Contractor shall obtain City of Grand Junction Street Cut Permit for all work within existing City right-of-way prior to construction.
      e. A clay cut-off wall shall be placed 10 feet upstream from all new manholes unless otherwise noted. The cut-off wall shall extend from 6 inches below to 6 inches above granular backfill material and shall be 2 feet wide. If native material is not suitable, the contractor shall import material approved by the engineer.

f. Benchmark _____

CITY PARKS & RECREATION **6/13/96**
Shawn Cooper **244-3869**

1. Parks & Open Space fees - 12 @ $225 = $2,700.
2. Island in Hillview Court is to remain property of and maintained by private entity (HOA).
3. Does the equestrian easement allow pedestrian and bicycle uses?

CITY FIRE DEPARTMENT **6/13/96**
Hank Masterson **244-1414**

The looped cul-de-sac proposed is acceptable to the fire department for emergency access, however no parking is allowed on either side of the looped street because fire department vehicles will require the entire street width to drive through the loop. Signage stating "no parking" will be required along this street.

The proposed hydrant must be moved south along Hill View Court about 100'. A revised utility composite reflecting this change must be submitted to the fire department.

CITY POLICE DEPARTMENT **6/13/96**
Dave Stassen **244-3587**

Houses clustered and facing a central location is a good crime prevention technique. The interior island should have street level light that is connected to a photo cell.

MESA COUNTY PLANNING **6/12/96**
Richard Goecke **244-1744**

1. Typically, open space is useable in a PUD; steep sloping "common areas" are of little use and hard to maintain with respect to landscaping, etc.
2. Guest/visitor parking appears to be inadequate. Guest parking in "shared" driveways is a potential shortcoming. The inset of the traffic island could be designed to accommodate 4-6 diagonal parking spaces.
3. The encroachment of platted "lots" into setbacks set up potential future conflicts; i.e. decks, patios, etc. A reduction in the number of proposed lots would:
   - Reduce setback conflicts
   - Relieve parking shortcomings
   - Create more useable open space

MESA COUNTY SCHOOL DISTRICT #51 **6/11/96**
Lou Grasso **242-8500**

SCHOOL - CURRENT ENROLLMENT / CAPACITY - IMPACT
Scenic Elementary - 298 / 325 - 3
Redlands Middle School - 552 / 650 - 1
Fruita Monument High School - 1337 / 1100 - 2

REDLANDS WATER & POWER **6/7/96**
Gregg Strong **243-2173**

Redlands Water and Power Company does not service this area, therefore there is no impact on us.

U.S. WEST **6/6/96**
Max Ward **244-4721**

For timely telephone service, as soon as you have a plat. and power drawing for your housing development, please.....

MAIL COPY TO:
U.S. West Communications
Developer Contact Group
P.O. Box 1720
Denver, CO 80201

AND

CALL THE TOLL FREE NUMBER FOR:
Developer Contact Group
1-800-526-3557

We need to hear from you at least 60 days prior to trenching.

PUBLIC SERVICE COMPANY **6/11/96**
Gary Lewis **244-2698**

If driveways are installed as shown on enclosed "Composite Plan", 14' multi-purpose front lot easements should be sufficient for installation of gas and electric facilities to these lots. If driveways are altered, we request that all "Open Space" also be designated as utility easement, per review of this subdivision on File #PP-96-51, dated 3/6/96.

TCI CABLEVISION **6/11/96**
Glen Vancil **245-8777**

1. We require the developers to provide, at no charge to TCI Cablevision, an open trench for cable service where underground service is needed and when a roadbore is required, that too must be provided by the developer. The trench and/or roadbore may be the same one used by other utilities so long as there is enough room to accommodate all necessary lines.
2. We require developers to provide, at no charge to TCI Cablevision, fill-in of the trench once cable has been installed in the trench.
3. We require developers to provide, at no charge to TCI Cablevision, a 4" PVC conduit at all utility road crossings where cable TV will be installed. This 4" conduit will be for the sole use of cable TV.
4. Should your subdivision contain cul-de-sac's the driveways and property lines (pins) must be clearly marked prior to the installation of underground cable. If this is not done, any need to relocate pedestals or lines will be billed directly back to your company.
5. TCI Cablevision will provide service to your subdivision so long as it is within the normal cable TV service area. Any subdivision that is out of the existing cable TV area may require a construction assist charge, paid by the developer, to TCI Cablevision in order to extend the cable TV service to that subdivision.
6. TCI will normally not activate cable service in a new subdivision until it is approximately 30% developed. Should you wish cable TV service to be available for the first home in your subdivision it will, in most cases, be necessary to have you provide a construction assist payment to cover the necessary electronics for that subdivision.

CITY PROPERTY AGENT **6/14/96**
Steve Pace **256-4003**

See attached red-lined plat for comments.

LATE COMMENTS

RIDGES ARCHITECTURAL CONTROL COMMITTEE **6/21/96**
Munkres / Garrett

1. The Architectural Control Committee requests that the continuation of walking / equestrian trails be prepared in a roadbase material, not cement material!
2. The Architectural Control Committee is concerned that irrigation runoff will impact the Clusters. What is the corporations in depth plan to alleviate any more problems that the Clusters currently experiences with irrigation runoff?

TO DATE, COMMENTS NOT RECEIVED FROM:
City Attorney
U.S. Postal Service
Colorado Geological Survey

HILL VIEW COURT

Petitioner Response to Review Comments

June 21, 1996

CITY COMMUNITY DEVELOPMENT:

Agree on all items.

We are identifying all of Tract A and Tract B as "blanket" easements for utilities and utility maintenance. They will be dedicated appropriately on the final plat. Some confusion may still exist on proper drawing of intersecting easements. I have attempted to correct this but if still not clear, further changes will be made for final plat.

Possible conflicts for setbacks on some lots has been resolved by altering lots to not extend into setback areas. Building footprints have been removed.

Some difficulty exists in using exact dimensions for driveways and parking aprons. I have enlarged parking aprons somewhat. I still wish to avoid making a "sea of asphalt" in the subdivision. By the time all site improvements are complete building footprints will be available. I would like to offer to work with Community Development

prior to drawing building permits to modify drives and aprons to accommodate their concerns on this issue.

Landscape plan will be changed to reflect the suggestions made. Prior to final plat being filed a more exact plan and irrigation plan will be submitted for administrative approval. Pressurized irrigation will be provided. Xeriscape is still planned for all areas.

CITY DEVELOPMENT ENGINEER:

Agree on all items.
In addition to walking the the drainage channel with my engineer I would like my excavation contractor to be present.

CITY UTILITY ENGINEER:

Agree on all items.
Changes have been made and suggested notes added to drawings.

CITY PARKS & RECREATION:
Agree. The equestrian easement is now labeled for pedestrians and horses. Bicycle use is not possible due to grade and rocks.

CITY FIRE DEPARTMENT:

Agree.

CITY POLICE DEPARTMENT:

Agree. Interior island, Tract A, will have a street light. Mail Boxes have also been moved to this location.

MESA COUNTY PLANNING:

Additional visitor parking is being added in Tract A, the island. I do not think I can get "4-6 diagonal parking places without using over half the island. I am trying for 3. Drawings will reflect this change.

MESA COUNTY SCHOOLS, REDLANDS WATER & POWER, U.S. WEST, PUBLIC SERVICE COMPANY, TCI CABLEVISION, and CITY PROPERTY AGENT:

Agree, no conflicts.

STAFF REVIEW - PLANNING COMMISSION - JULY 2, 1996 HEARING

FILE: FPP-96-135
DATE: June 26, 1996
STAFF: Bill Nebeker
REQUEST: Final Plat and Plan for Hill View Court Subdivision; 12 unit townhouse development
LOCATION: Northeast of Ridge View Drive; North side of Hill View Drive
APPLICANT: W.D. Garrison for GNT Development Corp.

EXECUTIVE SUMMARY: Staff recommends approval of this 12 unit townhome development. The applicant has revised the site plan and plat to incorporate Planning Commission's conditions of approval of the preliminary plan. Some more minor issues cannot be resolved until after the final footprint of the building is determined. No building permits will be issued until all issues are resolved and a final plan is approved.

EXISTING LAND USE: Vacant - undeveloped

PROPOSED LAND USE: Attached Townhomes - 5.3 units per acre (approved for 6.19 units per acre)

SURROUNDING LAND USE:

North:	Undeveloped
East:	Attached Townhomes
South:	Single Family Residential
West:	Open Space

EXISTING ZONING: PR-4

SURROUNDING ZONING: PR

RELATIONSHIP TO COMPREHENSIVE PLAN: The Amended Final Plan for the Ridges, adopted by Planning Commission and City Council, allocated a maximum of 7.1 units per acre for those remaining sites that had originally been designated as Multi-Family sites in the Ridges. The proposed Hill View Court Subdivision density is now below that maximum.

STAFF ANALYSIS: The applicant has revised the plan as originally approved by Planning Commission; reducing the number of units from 16 to 12. The reduction has allowed for more usable open space, larger setbacks and less asphalt for driveways. A one way loop road is proposed around a privately owned and maintained landscaped area in the center of the cul-de-

sac. There will be a 14' wide lane, typical of standard residential streets. This design has been approved by the Fire and Public Works Department.

Drainage for the site is directed to the east and north over the street and the proposed pedestrian easement along the east property line. This pedestrian path will serve a dual purpose; to connect with other planned pedestrian facilities to the north and to direct water away from this site and away from The Cluster townhouse development directly to the east. The Ridges Architectural Control Committee have requested that this path be asphalt rather than concrete. A concrete path is required since it is being used for a drainage channel as well as a pedestrian path.

Many technical changes to the final plat, site plan and landscape plan were required of the applicant. Most of those changes have been made. The others will be satisfied before a building permit is issued for any of the townhomes. Since the final product has not been fully determined, there may be minor changes in the driveway configurations and landscaping design. For the most part, the applicant has satisfied city standards for this development. Only minor changes are required on the plat.

Planning Commission approved the preliminary plan for this site at their April hearing. Preliminary Plan approval was based on the following conditions, which have largely been satisfied in the final design.

1 & 2. A minimum 25' setback shall be maintained from the west property line as recommended in the Preliminary Geologic Report; and a minimum 20' front yard setback shall be maintained for all garages.

These conditions have been satisfied on the final plat and plan.

3. The final design shall incorporate the use of more shared driveways and the addition of landscaped areas to break-up the large areas of hard surface driveways.

The applicant has redesigned the driveway area to satisfy this condition. However by doing such, the driveway apron in front of each garage has been reduced so much that it appears that maneuvering in and out of garages and driveways will be difficult. Since building footprints have not yet been determined for each building site, the exact location of the garage in relation to the driveway is unknown at this time. Staff will require that adequate maneuvering area be shown on the final site plan before a building permit is granted for the townhomes.

4. In lieu of sidewalks along the cul-de-sac, an 8' wide concrete trail shall be provided through the property from Hill View Drive to the property to the north where a future path is proposed.

An 8' wide path that will also serve as a drainage way has been provided by the applicant as shown on the final plan and drainage plans. The path conflicts with an electrical

transformer along Hill View Drive. The path must be moved to avoid conflict with the transformer, or the transformer must be relocated. The final site plan must show this revision.

5. The 4' pedestrian easement from the east must be continued along the south property line of this development to Hill View Court.

   A 10' pedestrian and equestrian easement exists along the south property line of this development that will tie into the 4' pedestrian easement adjacent to The Cluster. An electric transformer has been located between the two paths, preventing them from connecting, however the pedestrian easement adjacent to The Cluster is completely overgrown with landscaping and vegetation. There is not foreseeable use of this easement now or in the future. Since pedestrians must use the shoulder of the road to walk anyway, there is no reason to move the transformer. The 10' pedestrian and equestrian easement will not be improved as such.

6. Final design must show adequate on-site maneuvering for all driveways.

   See #3 above.

A Parks and Open Space Fee of $2700, as well as other applicable fees, apply to this development.

STAFF RECOMMENDATION: Approval of the Final Plat for Hill View Court Subdivision, with the following conditions:

1. Revise site plan to show that the 8' pedestrian path does not conflict with the electrical transformer.

2. Prior to receiving a building permit, the final design of the driveways must be approved by staff and shown on the site plan.

3. Prior to receiving a building permit, a revised landscape plan shall be submitted that meets or exceeds SSID specifications and Section 5-4-15 (Landscaping Standards) of the Zoning and Development Code. Revisions as noted on submitted plans will be required. At least 16 trees (4 existing and 12 new) will be required for the site. No landscape boulders shall be placed within 7.5' of either side of the sewer alignment in Tract A.

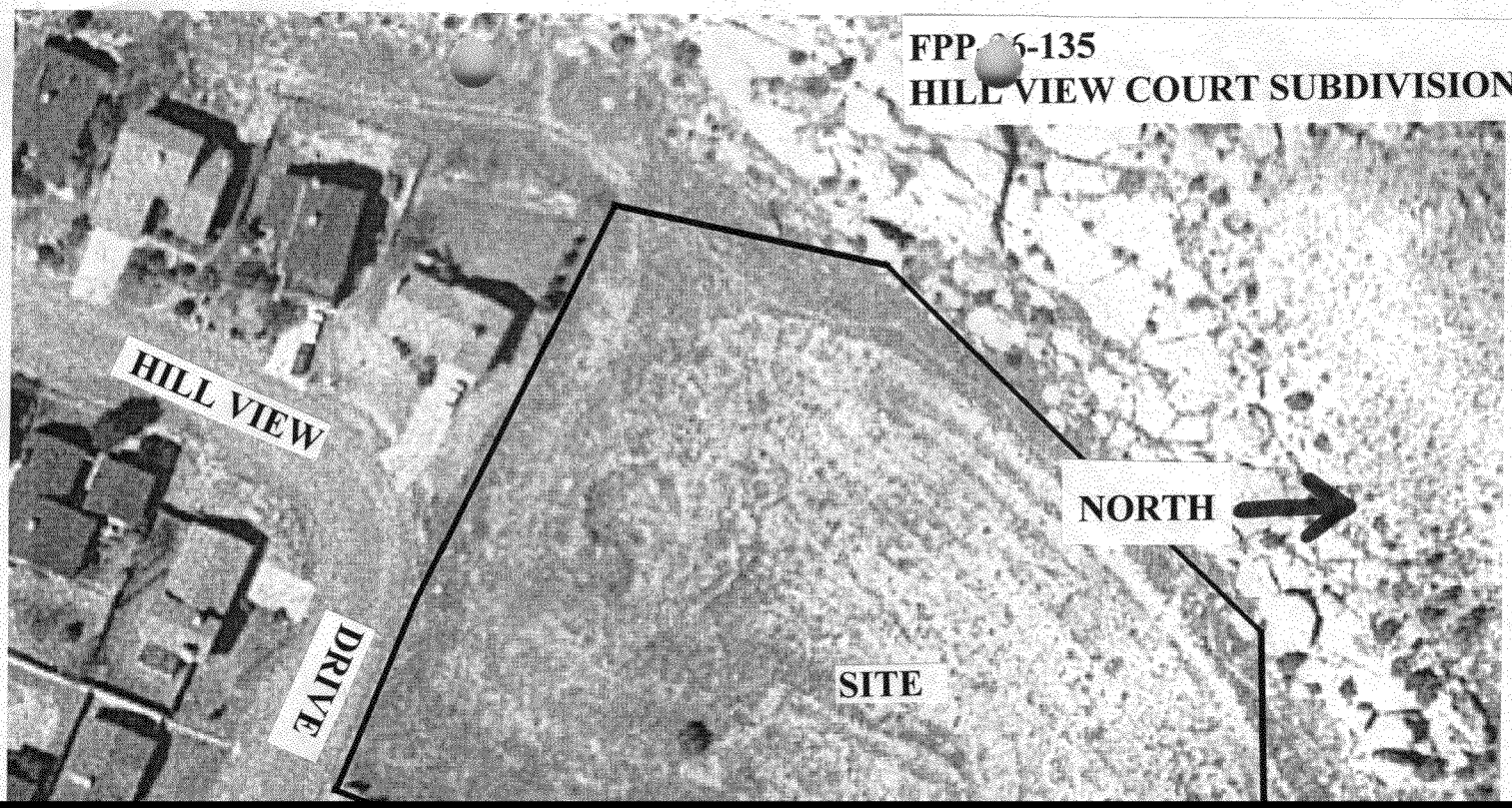
4. Proposed optional parking in the center of Tract A shall be at least 9' wide and 22' long per space.

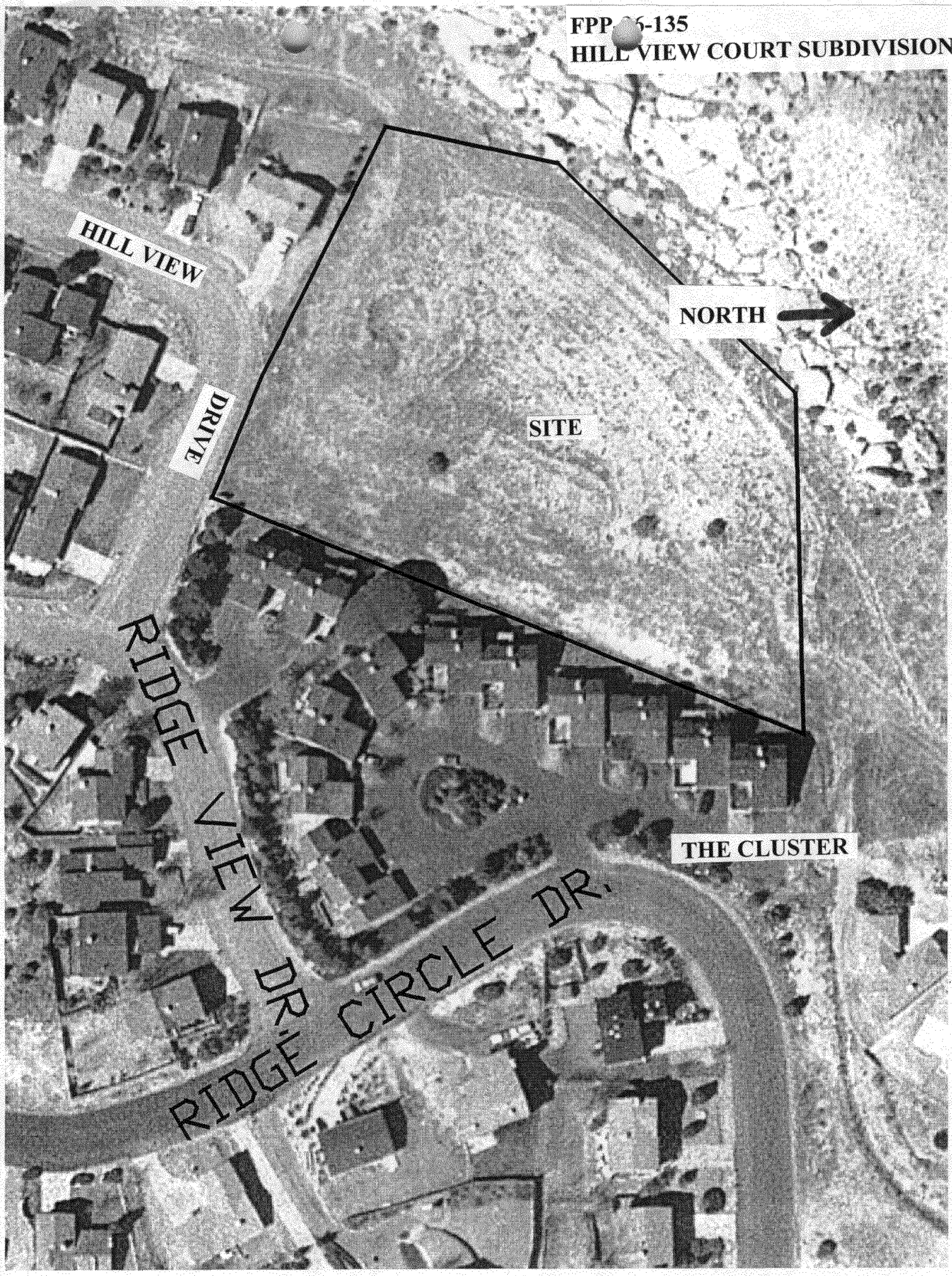
5. "No Parking" signs shall be required along the one way loop road.

6. Other conditions of staff review shall be incorporated into the final plat and plan prior to recordation.

RECOMMENDED PLANNING COMMISSION MOTION:

Mr. Chairman, on item 96-135 I move that we approve the final plan for Hill View Court Subdivision with the conditions in the staff recommendation.


FPP-06-135
HILL VIEW COURT SUBDIVISION
HILL VIEW
DRIVE
SITE
NORTH


FPP 06-135
HILL VIEW COURT SUBDIVISION
HILL VIEW
DRIVE
NORTH
SITE
THE CLUSTER
RIDGE VIEW DR.
RIDGE CIRCLE DR.

STATE OF COLORADO

COLORADO GEOLOGICAL SURVEY
Division of Minerals and Geology
Department of Natural Resources
1313 Sherman Street, Room 715
Denver, Colorado 80203
Phone (303) 866-2611
FAX (303) 866-2461

DEPARTMENT OF NATURAL RESOURCES

August 21, 1996 MA-96-0049

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

Re: Proposed Hillview Court Subdivision -- Northwest of the Intersection of Hill View Drive and Ridge View Drive, Ridges Area, Grand Junction

Gentlemen:

At your request, we have reviewed the materials submitted for and made a site inspection of the site of the proposed residential development project indicated above. The following comments summarize our findings.

(1) The geology of this site consists of a relatively thin and variable deposit of sandy "soil" derived from the underlying Dakota Formation bedrock sandstones and shales. The bedrock is exposed in the proposed open-space area at the west side of the site. There is evidence that some of the surficial "soil" has been removed in the recent past, possibly for use as fill or regrade material in other parts of the Ridges residential-development project. The site generally slopes to the southeast.

(2) We concur with the recommendations made in the submitted Lincoln DeVore, Inc., report regarding foundation designs, earthwork and earth placements, and surface- and subsurface-drainage control for the project. It is likely that there will be a tendency for perched water table(s) to form on bedrock shales to after project buildout (and commencing landscaping irrigation) unless irrigation is kept to relatively low level. For this reason, it will be especially important to install foundation drains for all of the buildings and to finish grade the site so that positive drainage is maintained to keep water away from all of the buildings. Also, the surficial materials are highly susecptible, because of their sandy nature, to accelerated erosion, especially during periods of heavy rainstorm precipitation and runoff. The proposed drainage easement along the southeast side of the parcel should be adequate to carry the runoff from the project area. However, the Ridges area has had moderate to severe drainage problems in the past and you should be certain that the lower (downstream) drainage control is adequate to carry the increased stormwater runoff produced by development of this parcel.

If the recommendations made above and those in the submitted Lincoln DeVore report are followed and made conditions of approval of this development proposal, then we have no geology-related objection to it.

Sincerely,

James Soule

James M. Soule
Engineering Geologist

Kathy P. Hillview File

December 9, 1996

Mr. Dan Garrison
GNT Development
P.O. Box 308
Grand Junction, CO 81502

City of Grand Junction, Colorado
250 North Fifth Street
81501-2668
FAX: (970)244-1599

RE: Hillview Court Pavement

Dear Mr. Garrison:

City staff met with Meritt Sixbey and Ed Morris on Friday, December 6, 1996 to discuss the pavement on Hillview Court. As a result of this meeting, we have agreed to the following:

- Specific areas identified by Richard Bailey, City Quality Assurance Technician, are to be removed and replaced in the spring. These areas are located at the entry to Hillview Court just off Hillview Drive, and on both sides of the vally pan in the lower part of the cul-de-sac. There are also two areas which exhibit evidence of shoving - one is near the manhole and the other is directly in front of the landscape area of the cul-de-sac.
- Because of our concern for the entire paved area, we will conduct a visual inspection in the spring and proof rolling with a loaded water truck. If there is obvious evidence of pumping or pavement failure, the entire street will be removed and repaved.
- If only specific areas are to be removed and replaced, the entire street will be chip sealed once the patching is complete.
- Merritt Sixbey will deliver us a letter from United Co. indicating they will make the necessary pavement repairs as outlined above in the spring.

I understand you will be recording the plat soon. The one outstanding item which needs to be guaranteed is the pedestrian path. The pavement does not need to be monetarily guaranteed, but it has not been accepted and will not be until the remedies outlined above are met.

Thank you for having Merritt and Ed meet with us to resolve the pavement problems. I think we are all working toward the same goal of having a public street which functions as intended and meets city specifications.

Sincerely,

Jody Kliska, P.E.
City Development Engineer

cc: Don Newton, Merritt Sixbey, Ed Morris, Richard Bailey, United Co.

City of Grand Junction, Colorado
250 North Fifth Street
81501-2668
FAX: (970)244-1599

January 27, 1997

W. D. Garrison
GNT Development Corporation
P.O. Box 308
Grand Junction CO 81502

RE: Sand Cliff Court Subdivision

Dear Mr. Garrison:

Below please find a summary of outstanding items required prior to recordation of the plat for Sand Cliff Court Subdivision. I have also provided the status of items which staff is working on.

1. *Development Improvements Agreement (DIA):* Please complete the top portion of the first page of Exhibit "B"; provide the total estimated cost of improvements on the second page of Exhibit "B" and sign at the bottom of the page. The improvement cost estimates you provided are satisfactory. The DIA is enclosed, please return the original for recordation.

2. *Improvements Guarantee:* You have chosen the "cash equivalent" option; please provide us with a check for the total estimated cost of improvements (from Exhibit "B"). The check must be made payable to "City of Grand Junction."

3. *Final Plans:* We have these on record, however, there are a number of changes/additions to a few sheets in the plan set which are detailed later in this letter.

4. *Articles of Incorporation of HOA:* Please provide this document for our records.

5. *CC&R's:* John Shaver is reviewing the latest draft of the covenants and will have comments for you no later than Wednesday, January 29th. Please revise the document accordingly and provide us with an original (w/signatures) for recordation with the plat.

6. *Plat:* Is presently being circulated for signatures. We will provide the original to you to make copies when it is returned to us. We will need 2 full-sized mylar copies and one 11"X17" reduced mylar copy of the *signed original.*

7. *Disk of Plat:* May be obtained from you surveyor; please provide.

8. *UCC Approval:* We have this document; no action required.

9. *City Surveyor Certificate:* We have this document; no action required.

In addition to the above, there are a number of conditions of the final plat/plan approval that remain to be completed prior to plat recordation as follows (conditions from 7/2/96 Planning Commission minutes):

- The final design of the driveways must be approved by staff and shown on the site plan.

- A revised landscape plan shall be submitted that meets or exceeds SSID specifications and Section 5-4-15 (Landscaping Standards) of the *Zoning and Development Code*. Revisions as noted on submitted plans will be required. At least 16 trees (4 existing and 12 new) will be required for the site. No landscape boulders shall be placed within 7.5 feet of either side of the sewer alignment in Tract A.

- Proposed optional parking in the center of Tract A shall be at least 9 feet wide and 22 feet long per space; please indicate on site plan.

- "No Parking" signs shall be required along the one way looped road; please indicate locations on site plan.

- Other conditions of staff review shall be incorporated into the Final Plat and Plan prior to recordation.

Regarding the last condition, I have reviewed the original review comments and assume that comments related to the plat have been completed. Regarding the Site Plan comments; please revise the plan so that comments #1, #4 & #5 are adequately addressed. I have attached a copy of our review comments for reference.

The following fees are also payable at the time of plat recordation:

- Drainage Fee: $ 223.00
- Open Space Fee: 2,700.00
- Recording Fees: we will determine this number once the CC&R's and DIA are finalized.

The drainage fee and open space fee can be paid with one check made payable to "City of Grand Junction." The recording fee check shall be made payable to "Mesa County Clerk and Recorder."

I trust that the above is useful in completing the remaining items prior to plat recordation. If you have any questions or require additional information on any item, please do not hesitate to contact Bill Nebeker or myself (244-1439).

Sincerely yours,

Michael T. Drollinger
Senior Planner

cc: Bill Nebeker, Senior Planner
Jody Kliska, City Development Engineer

encls.

January 28, 1997

Community Development
Grand Junction City
ATTN: Michael T. Drollinger

Re: Sand Cliff Court Subdivision

Dear Michael,

This letter is to provide assurances on those two items discussed during our meeting on January 27, 1997.

The proposed optional parking for Tract A will be constructed to meet or exceed the city standard of 9 feet wide and 22 feet wide.

Two "No Parking" signs will be installed on Sand Cliff Court. One will be at the beginning of the loop and the other approximately half way around the loop.

Sincerely,

W. D. Garrison

FP-1996-135

City of Grand Junction, Colorado
250 North Fifth Street
81501-2668
FAX: (970)244-1599

January 30, 1997

Terry Nichols
Nichols & Associates
751 Horizon Court Suite 102
Grand Junction, CO

RE: Sand Cliff Court As-Builts

Dear Terry:

We have reviewed the as-builts submitted for Sand Cliff Court and have noted the following need to be added to the drawings:

1. Show the degree of bends for the waterline.
2. Show the location of the irrigation line to the site.
3. Provide the typical street section with the pavement structural section.
4. The culvert under the entrance to Sand Cliff Court as constructed goes under the bike path and evidently has a bend in it, which is not shown on this plan. Also indicate the material type of the culvert.

Please call me if you have any questions.

Sincerely,

Jody Kliska, P.E.
City Development Engineer

cc: Trent Prall

FPP-1996-135

City of Grand Junction

Community Development Department
Planning • Zoning • Code Enforcement
250 North 5th Street
Grand Junction, CO 81501-2668

Phone: (970) 244-1430
FAX: (970) 244-1599

February 26, 1997

Mesa County Building Department
750 Main Street
Grand Junction, CO 81501

RE: Sand Cliff Court Subdivision

To Whom It May Concern:

No construction is allowed on Tract "A", Tract "B", or any other common open space area in Sand Cliff Court Subdivision located in the Ridges. All buildings/construction must be contained within the building envelopes as recorded on the plat for Sand Cliff Court Subdivision as recorded in the Mesa County Records in Plat Book No. 15, Page 252.

A City of Grand Junction planning approval (planning clearance) must be obtained prior to the start of any type of construction.

If you have any questions, or wish further clarification, please contact our office.

Sincerely,

Marcia Rabideaux

Marcia Rabideaux
Planning Technician

xc: Merritt Sixbey
Dan Garrison

/mr

City of Grand Junction
Community Development Department
Planning • Zoning • Code Enforcement
250 North 5th Street
Grand Junction, CO 81501-2668

Phone: (970) 244-1430
FAX: (970) 244-1599

April 18, 1997

Dan Garrison
GNT Development Corporation
PO Box 308
Grand Junction, CO 81502

Dear Dan:

As a follow-up to our conversation this morning, the City will require the items detailed below before releasing any funds being held in the Development Improvements Agreement for Hill View Court/Sand Cliff Subdivision.

Please provide a revised landscape plan that meets SSID requirements and details changes to the site. These changes include the location of the sidewalk, retaining walls and any changes in landscaping. The steep slopes between the new sidewalk and The Clusters will require landscaping that stabilizes the soil more than just desert native grasses.

The approved landscape plan is somewhat general. Now that you're nearing completion of this project you probably have a better idea of how the final landscaping will look. Any changes to the approved plan must be shown on the revised plan. Please also include an estimate of the cost of the total landscaping package including retaining walls, from your landscape contractor. Three copies of the revised plan will be required.

If you have any questions please call me at 244-1447.

Sincerely,

Bill Nebeker
Senior Planner

April 22, 1997

Grand Junction City
John Schaver
Asst. City Attorney
205 North 5th St.
Grand Junction, CO 81501

Dear John,

Please note attached letter to me from Community Development.

Now that I am done quietly ranting, raving and stewing, I thought I would write you and see if this is according to Hoyle or even proper.

I put up a cash deposit with an improvements agreement related to sidewalk, landscape and inspection fees. $5948.00 was specifically for sidewalk. I completed the sidewalk, presented a sub-contractor letter certifying the work complete and all bills paid. I have now paid twice for the sidewalk, once to the City and once to the sub-contractor. The sidewalk is built to City Specs., it was inspected from start to finish, the City Engineer has seen it, there are no inadequacies alleged, it is warranted for one year. We went to extra cost to curve the walk, although not required, we bought $800 worth of concrete stamps to keep it from becoming a skate board ramp, we poured extra concrete to change slope and water flow to accommodate neighbors and were required to do none of the above.

Refusing to release my funds smacks of bad faith, total distrust and extortion.

If the purpose of the Improvements Agreement is to "...protect the City from the cost of completing necessary improvements itself...", as the Agreement states, this is accomplished. If the concern is landscape, additional funds are on deposit. If I were to default on that aspect, my obligations are not limited to the amount on deposit.

When I continue to act in good faith, accommodate both reasonable and unreasonable requests and whims, I resent the total distrust, bad faith and extortion which this letter implies. Please advise.

Sincerely,

W. D. Garrison, President, GNT Development, 243-5902

✓ Copy to Community Development

City of Grand Junction

Community Development Department
Planning • Zoning • Code Enforcement
250 North 5th Street
Grand Junction, CO 81501-2668

Phone: (970) 244-1430
FAX: (970) 244-1599

April 18, 1997

Dan Garrison
GNT Development Corporation
PO Box 308
Grand Junction, CO 81502

Dear Dan:

As a follow-up to our conversation this morning, the City will require the items detailed below before releasing any funds being held in the Development Improvements Agreement for Hill View Court/Sand Cliff Subdivision.

Please provide a revised landscape plan that meets SSID requirements and details changes to the site. These changes include the location of the sidewalk, retaining walls and any changes in landscaping. The steep slopes between the new sidewalk and The Clusters will require landscaping that stabilizes the soil more than just desert native grasses.

The approved landscape plan is somewhat general. Now that you're nearing completion of this project you probably have a better idea of how the final landscaping will look. Any changes to the approved plan must be shown on the revised plan. Please also include an estimate of the cost of the total landscaping package including retaining walls, from your landscape contractor. Three copies of the revised plan will be required.

If you have any questions please call me at 244-1447.

Sincerely,

Bill Nebeker
Senior Planner

To: Bill Nebeker
Cc: Kathy Portner,Michael Drollinger,Dan Wilson
From: John Shaver
Subject: Sand Cliff Subdivision
Date: 4/23/97 Time: 9:09AM

Bill,

Earlier this morning I met with Dan Garrision concerning his Sand Cliff subdivision project in the Ridges.
Dan provided me with a copy of your letter of April 18 which inter alia provides that a landscape plan to SSID standards is required, that additional landscaping to stabilize the slope to the Clusters is required and that there will be no partial release of any of the improvement guarantee.

Dan was disturbed and asked me questions about the Code and the City's legal authority to impose what he considers to be new requirements. Please help me understand the project so that I can meaningfully respond to Mr. Garrison.

As to the "revised landscape plan that meets SSID requirements" was the original plan not to standard? If so, why did the review proceed? Do you require an amended plan and then an as built plan? In the third paragraph of your letter you state that "[T]he approved landscape plan is somewhat general". Garrison's point is if its approved its approved, general or not. He asked me by what authority the approved plan is now disapproved.

Garrison also asked by what authority you are now changing the landscape requirement on the slope to the Clusters. Garrison contends that the issue was thoroughly debated at PC and no requirement was made to vegetate with more than was shown. Is this correct? Has the plan changed from what was approved? Did you approve a minor plan change-is it minor?

The last issue that we discussed is the matter of partial release of improvements funds. While your Department could adopt a policy that there are no partial releases, to be defensible it must be uniformly applied. It is my understanding that partial releases have occurred in the past and may be continuing to presently occur. If the DIA shows line items for landscaping how that you would propose on using the sidewalk funds? Was the guarantee not sufficient to cover all of the expenses?

Please advise.

jps

1- SITE NOT BUILT PER THE SITE OR LANDSCAPE PLAN

A - SIDEWALK MOVED

LOTS OF ROCK

NO NATIVE GRASS/WILDFLOWERS

TREES	SHRUBS
~~STARTED~~ 1	10
1	18
1	23
3	7
3	19
9	77

COPY OF BILL

12 UNITS

PLAN - 12 DECID

12 PINE

SHRUBS

27. DARK KNIGHT

15 - RHUS TRILOBATA

25 - ROSA MIRABELLA

22 ~~27~~ - JUNIPERUS HORIZONTALIS

23 - ROSA FOETIDA

6 - PINUS MUGO

~~PROPOSED~~

15 - COTONEASTER APIC

9 - MAHONIA REPENS

35 - POTENTILLA

FLOWERS

7662 KNI ROSA/SINO

RE 4662

61%

~~BLACK~~

KNI

24 TREES

177 SHRUBS

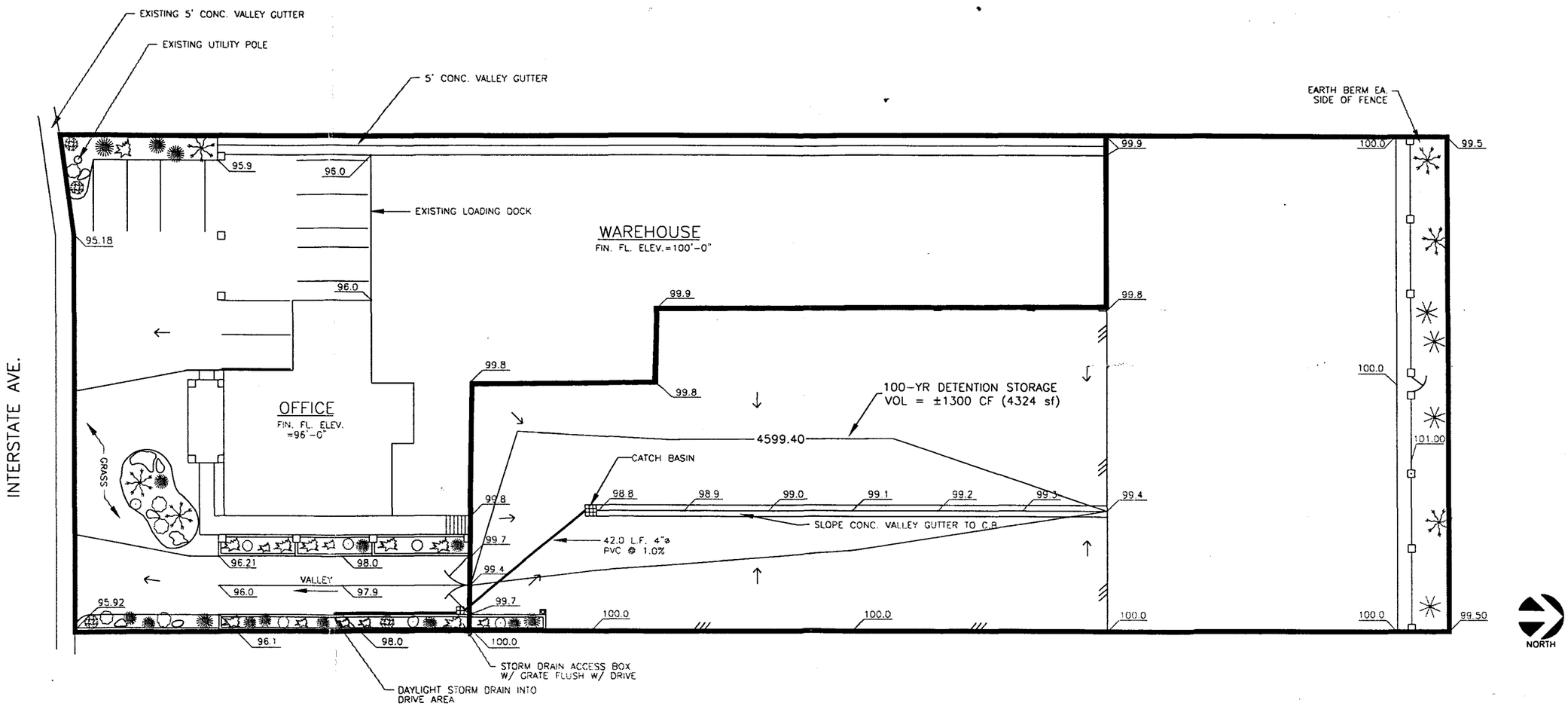
To: BobbieP
From: Bill Nebeker
Subject: Release of Funds
Date: 7/14/97 Time: 3:07PM

Dan Garrison of GNT Development Corp has installed approximately 60% of the landscaping for Sand Cliff Court, his development in the Ridges. The City is holding $7662.80 for these improvements. Please release a check for $4600 to GNT Development Corp. for payment of that portion of the landscaping that has been installed.

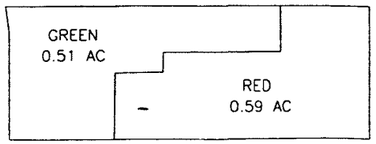
Dan Garrison
GNT Development Corp.
PO Box 308
Grand Junction, CO 81502

File #FPP-96-135

If you have any questions please let me know. Thanks



SUBBASIN DETAIL



GREEN SUBBASIN
NO DETENTION
Q2 = 0.86 CFS
Q100 = 2.32 CFS

RED SUBBASIN
1300 CF DETENTION (100-YR STORM)
Q2 = 0.88 CFS
Q100 = 2.45 CFS

POST-DEVELOPMENT DRAINAGE MAP

1"=30'-0"

To: Jackie Berry
Cc: Randy Booth, BobbieP
From: Bill Nebeker
Subject: Inspection Fees - GNT Development Corp.
Date: 12/5/97 Time: 1:32PM

Regarding acct #A-007144; Dan Garrison has funds on deposit in account number 207-21090 for inspection. $413.20 may be transferred from this fund to pay for part of those inspection fees. The remaining amount, $1011.15 must be paid by him. I spoke to him on the phone today regarding this transfer. Will you rebill him for the remaining amount? Thanks.

3062.82 REMAINING FUNDS FOR L/SING

SUBSURFACE SOILS EXPLORATION

HILLVIEW COURT SUBDIVISION

GRAND JUNCTION, CO

Prepared For:

G N T DEVELOPMENT CORP.
P.O. Box 308
Grand Junction, CO

Prepared By:

LINCOLN-DeVORE, INC.
1441 Motor Street
Grand Junction, CO 81505

May 24, 1996

INTRODUCTION

PROJECT DESCRIPTION

This report presents the results of our geotechnical evaluation performed to determine the general subsurface conditions of the site applicable to construction of attached and detached medium to high density residential construction in the proposed Hillview Court Subdivision. A vicinity map is included in the Appendix of this report.

To assist in our exploration, we were provided with a preliminary plan of the Hillview Court Subdivision, prepared by QED Surveying Systems Inc., of Grand Junction, Colorado. The Boring Location Plan attached to this report is based on that plan provided to us.

We understand that the proposed structures will consist of one or possibly two story, wood framed buildings with the possibility of either half or full basements and possibly concrete floor slabs on grade. Lincoln DeVore has not seen any building plans, but structures of this type typically develop wall loads on the order of 800-2200 plf and column loads on the order of 6-20 kips.

The characteristics of the subsurface materials encountered were evaluated with regard to the type of construction described above. Recommendations are included herein to match the described construction to the soil characteristics found. The information contained herein may or may not be valid for other purposes. If the proposed site use is changed or types of construction proposed, other than noted herein, Lincoln

DeVore should be contacted to determine if the information in this report can be used for the new construction without further field evaluations.

PROJECT SCOPE

The purpose of our exploration was to evaluate the surface and subsurface soil and geologic conditions of the site and, based on the conditions encountered, to provide recommendations pertaining to the geotechnical aspects of the site development as previously described. The conclusions and recommendations included herein are based on an analysis of the data obtained from our field explorations, laboratory testing program, and on our experience with similar soil and geologic conditions in the area.

Specifically, the intent of this study is to:

1. Explore the subsurface conditions to the depth expected to be influenced by the proposed construction.

2. Evaluate by laboratory and field tests the general engineering properties of the various strata which could influence the development.

3. Define the general geology of the site including likely geologic hazards which could have an effect on site development.

4. Develop geotechnical criteria for site grading and earthwork.

5. Identify potential construction difficulties and provide recommendations concerning these problems.

6. Recommend an appropriate foundation system for the anticipated structure and develop criteria for foundation design.

FIELD EXPLORATION AND LABORATORY TESTING

A field evaluation was performed on 4-26-96, and consisted of a site reconnaissance by our geotechnical personnel and the drilling of 3 exploration borings. These 3 shallow exploration borings were drilled within the proposed buildings near the locations indicated on the Boring Location Plan. The exploration borings were located to obtain a reasonably good profile of the subsurface soil conditions. All exploration borings were drilled using a CME 45-B, truck mounted drill rig with continuous flight auger to depths of approximately 5-15 feet. Samples were taken with a standard split spoon sampler, thin walled Shelby tubes, and by bulk methods. Logs describing the subsurface conditions are presented in the attached figures.

The following laboratory tests were performed on representative soil samples to determine their relative engineering properties.

ASTM D-2487	Soil Classification
ASTM D-2435	One Dimensional Consolidation
ASTM D-2937	In-Place Soil Density
ASTM D-2216	Moisture Content of Soil
ASTM D-2844	R-Value of Soils (Hveem-Carmany)

Tests were performed in accordance with test methods of the American Society for Testing and Materials or other accepted standards. The results of our laboratory tests are included in this report. The in-place soil density, moisture content and the standard penetration test values are presented on the attached drilling logs.

FINDINGS

SITE DESCRIPTION

The project site is located in the Northeast Quarter of the Northwest Quarter of Section 20, Township 1 South, Range 1 West of the Ute Principal Meridian, Mesa County, Colorado. More specifically the site is located on Lot 2, Block 13, Filing #4 of The Ridges Subdivision, City of Grand Junction, Colorado. The site contain approximately 2.26 acres.

The topography of the site is that of a slight to moderate hillside, dropping generally to the East-Northeast. The tract is at the base of a rather small hill with prominent sandstone outcrops. The slope gradient on this site ranges from less than 7% in some of the central portions of the tract to in excess of 40% along the West side, near some shallow cut slopes. In general, the steepest native slopes on this site are approximately 18% to 20%, located near the West property line. The exact direction of surface runoff on this site will be controlled by the proposed new construction of the individual structures, the proposed Hillview Court and possibly additional on-site drainage, required by the site drainage plan. Surface drainage on this site can be described as fair to good. Subsurface drainage is considered poor.

On-site erosion can be a significant problem if drainage and vegetation are not carefully controlled. Vegetation will probably be maintained in the immediate area around the building site, but special care should be taken to maintain vegetation on the steeper slopes. We recommend that

runoff from these slopes be carefully controlled to prevent erosion caused by irrigation practices, sheetwash or seepage. It may be necessary to provide culverts or drainage ways to prevent excessive erosion along steeper slopes.

GENERAL GEOLOGY AND SUBSURFACE DESCRIPTION

The geologic materials encountered under the site consist of a thin layer of alluvial and minor amounts of debris fan deposits, which originated on the slopes to the West and, to a minor extent to ancient drainages from the Colorado National Monument to the Southwest. These alluvial soils range in thickness of less than 2' to 6'. Parts of this site has been utilized as a borrow area, in approximately 1979, stripping much of the native alluvial soils for use in the development of THE CLUSTER ZONE PD, immediately East of this site. The site is underlain by a thick sequence of sedimentary rocks. The geologic and engineering properties of the materials found in our 3 exploration borings will be discussed in the following sections.

The surface soils have been designated Soil Type I for purposes of this report. These surface soils are generally slightly red to pink in color and may be quite stratified. Some of these surface soils may include very weathered portions of the underlying sandstone formations.

This Soil Type is classified as a silty sand (SM) of fine to very fine grain size under the Unified Classification System. This soil type is non-plastic and of low to medium density. This soil will have virtually no tendency

to a very low tendency expand upon the addition of moisture. Settlement will be minimal under the recommended foundation loads, providing soft areas or strata are properly moistened and compacted according to recommendations contained in the later portion of this report. This soil will undergo elastic settlement upon application of static foundation pressures. Such settlement is characteristically rapid and should be virtually complete by the end of construction. If the recommended allowable bearing values are not exceeded, and if all other recommendations are followed, differential movement will be within tolerable limits. At shallow foundation depths, assuming soft areas are properly compacted, this soil was found to have an average allowable bearing capacity of 2400 psf with 300 psf minimum bearing required.

The entire site is underlain by the weathered to un-weathered rocks of the Dakota Formation. The Dakota Formation was encountered in the 3 exploration borings placed on this site at shallow to very shallow depths. The Dakota Formation can be described as a stratified series of sandstones, siltstones, mudstones with some shales, claystones and occasional lignite beds. Many of the siltstones, mudstones and shales are carbonaceous, in part. Many of the mudstones and shales of the Dakota Formation exhibit low expansive properties. If lignite beds are encountered, these beds exhibit moderate to very high compressive properties.

The weathered sandstones, to include some siltstones of the Dakota Formation have been designated as Soil Type II for purposes of this report.

This Soil Type is classified as a silty sand (SM) of medium grain size under the Unified Classification System. This soil type is non-plastic and of medium to high density. The following description applies to the weathered portions of the sandstones, which can properly be described as a soil. This soil will have virtually no tendency to expand upon the addition of moisture. Settlement will be minimal under the recommended foundation loads. This soil will undergo elastic settlement upon application of static foundation pressures. Such settlement is characteristically rapid and should be virtually complete by the end of construction. If the recommended allowable bearing values are not exceeded, and if all other recommendations are followed, differential movement will be within tolerable limits. At shallow foundation depths this soil was found to have an average allowable bearing capacity of in excess of 550 psf. No expansive properties were measured during laboratory testing of this soil. Due to the possible presence of thin strata of mudstones and possibly shales, it is recommended that a minimum bearing of 1000 psf be maintained for shallow foundations.

The mudstones of the Dakota Formation were encountered in exploration boring #3 on this tract. These soils have been designated Soil Type III for purposes of this report.

This soil type was classified as a sandy, silty clay (CL) under the Unified Classification System. The Standard Penetration Tests ranged from 33 blows per foot to

in excess of 60 blows per foot. Penetration tests of this magnitude indicate that the soil is somewhat variable and of medium to high density. The moisture content varied from 7.8% to 9.1%, indicating a slightly moist soil. This soil is plastic and is sensitive to changes in moisture content. With decreased moisture, it will tend to shrink, with some cracking upon desiccation. Upon increasing moisture, it will tend to expand. Expansion tests were performed on typical samples of the soil and expansive pressures on the order of 300 psf were found to be typical. Due to previous experience in this general area, with these variable soil types, higher expansive pressures have been encountered. The allowable maximum bearing value was found to be on the order of 5500 psf for shallow foundations. A minimum dead load of 1000 psf will be required, for shallow foundations. This soil was found to contain sulfates in detrimental quantities.

The boring logs and related information show subsurface conditions at the date and location of this exploration. Soil conditions may differ at locations other than those of the exploratory borings. If the structure is moved any appreciable distance from the locations of the borings, the soil conditions may not be the same as those reported here. The passage of time may also result in a change in the soil conditions at the boring locations.

The lines defining the change between soil types or rock materials on the attached boring logs and soil profiles are determined by interpolation and therefore are approximations. The transition between soil types may be abrupt or may be gradual.

GROUND WATER:

No free water was encountered during drilling on this site. In our opinion the true free water surface is fairly deep in this area, and hence, should not affect construction. Seepage moisture may affect construction if surface drainage is not properly controlled.

Due to the proximity of the Dakota Formation, there exists a possibility of a perched water table developing in the alluvial soils which overlie the Dakota Formation or within individual structure excavations. The exploration holes indicate that the top of the Dakota Formation is quite variable and that subsurface drainage would probably be quite slow in many instances. This perched water would probably be the result of increased irrigation due to the presence of lawns and landscaping and roof runoff.

While it is believed that under the existing conditions at the time of this exploration the construction process would not be effected by any free-flow waters, it is very possible that several years after development is initiated, a troublesome perched water condition may develop which will provide construction difficulties. In addition, this potential perched water could create some problems for existing or future foundations on this tract. Therefore it is recommended that the future presence of a perched water table be considered in all design and construction of both the proposed residential structures and any subdivision improvements.

CONCLUSIONS AND RECOMMENDATIONS

GENERAL DISCUSSION

No geologic conditions were apparent during our reconnaissance which would preclude the site development as planned, provided the recommendations contained herein are fully complied with. Based on our investigation to date and the knowledge of the proposed construction, the site condition which would have the greatest effect on the planned development is the expansive mudstones encountered in the underlying Dakota Formation and the presence of sandstone bed which may require ripping prior to construction of utilities and foundations.

Since the exact magnitude and nature of the foundation loads are not precisely known at the present time, the following recommendations must be somewhat general in nature. Any special loads or unusual design conditions should be reported to Lincoln DeVore so that changes in these recommendations may be made, if necessary. However, based upon our analysis of the soil conditions and project characteristics previously outlined, the following recommendations are made.

OPEN FOUNDATION OBSERVATION

Since the recommendations in this report are based on information obtained through random borings, it is possible that the subsurface materials between the boring points could vary. Therefore, prior to placing forms or pouring concrete, an open excavation observation should be performed by representatives of Lincoln DeVore. The purpose of this observa-

tion is to determine if the subsurface soils directly below the proposed foundations are similar to those encountered in our exploration borings. If the materials below the proposed foundations differ from those encountered, or in our opinion, are not capable of supporting the applied loads, additional recommendations could be provided at that time.

EXCAVATION:

Site preparation in all areas to receive structural fill should begin with the removal of all topsoil, vegetation, and other deleterious materials. Prior to placing any fill, the subgrade should be observed by representatives of Lincoln DeVore to determine if the existing vegetation has been adequately removed and that the subgrade is capable of supporting the proposed fills. The subgrade should then be scarified to a depth of 10 inches, brought to near optimum moisture conditions and compacted to at least 90% of its maximum modified Proctor dry density [ASTM D-1557]. The moisture content of this material should be within + or - 2% of optimum moisture, as determined by ASTM D-1557.

In general, we recommend all structural fill in the area beneath any proposed structure or roadway be compacted to a minimum of 90% of its maximum modified Proctor dry density (ASTM D1557). This structural fill should be placed in lifts not to exceed six (6) inches after compaction. We recommend that fill be placed and compacted at approximately its optimum moisture content (+/-2%) as determined by ASTM D 1557. Structural

fill should be a granular, non-expansive soil.

Allowable slope angle for cuts in the native soils is dependent on soil conditions, slope geometry, the moisture content and other factors. Should deep cuts be planned for this site, we recommend that a slope stability analysis be performed when the location and depth of the cut is known.

No major difficulties are anticipated in the course of excavating into the upper surficial soils on the site. Excavation in the underlying sandstones and siltstones of the weathered Dakota Formation may require ripping or demolition techniques. It is probable that safety provisions such as sloping or bracing the sides of excavations over 4 feet deep will be necessary. Any such safety provisions shall conform to reasonable industry safety practices and to applicable OSHA regulations. The OSHA Classification for excavation purposes on this site is Soil Class C for the upper alluvial soils and Soil Class A for the weathered rocks of the Dakota Formation.

EXCAVATION & STRUCTURAL FILL:

Subgrade Site preparation in any areas to receive structural fill should begin with the removal of all topsoil, vegetation, and other deleterious materials. Prior to placing any fill, the subgrade should be observed by representatives of Lincoln DeVore to determine if the existing vegetation has been adequately removed and that the subgrade is capable of supporting the proposed fills. The subgrade should then be scarified to a depth of 10 inches, brought to near optimum moisture conditions and compacted to at least 90% of its maximum modified Proctor dry

density [ASTM D-1557]. The moisture content of this material should be within + or - 2% of optimum moisture, as determined by ASTM D-1557.

Structural Fill In general, we recommend all structural fill in the area beneath any proposed structure or roadway be compacted to a minimum of 90% of its maximum modified Proctor dry density (ASTM D1557). We recommend that fill be placed and compacted at approximately its optimum moisture content (+/-2%) as determined by ASTM D 1557. Structural fill should be a granular, coarse grained, non-free draining, non-expansive soil. This structural fill should be placed in the overexcavated portion of this site in lifts not to exceed 6 inches after compaction. This Structural Fill must be brought to the required density by mechanical means. No soaking, jetting or puddling techniques of any type should be used in placement of fill on this site.

Non-Structural Fill We recommend that all backfill placed around the exterior of the building, and in utility trenches which are outside the perimeter of the building and not located beneath roadways or parking lots, be compacted to a minimum of 80% of its maximum modified Proctor dry density (ASTM D-1557).

Fill Limits To provide adequate lateral support, we recommend that the zone of overexcavation extend at least 3 feet beyond the perimeter of the building on all sides. The Structural

Fill should be a minimum of 3 feet in final compacted thickness.

Field Observation & Testing: During the placement of any structural fill, it is recommended that a sufficient amount of field tests and observation be performed under the direction of the geotechnical engineer. The geotechnical engineer should determine the amount of observation time and field density tests required to determine substantial conformance with these recommendations. It is recommended that surface density tests be taken at maximum 2 foot vertical interval.

The opinions and conclusions of a geotechnical report are based on the interpretation of information obtained by random borings. Therefore the actual site conditions may vary somewhat from those indicated in this report. It is our opinion that field observations by the geotechnical engineer who has prepared this report are critical to the continuity of the project.

Slope Angles Allowable slope angle for cuts in the native soils is dependent on soil conditions, slope geometry, the moisture content and other factors. Should deep cuts be planned for this site, we recommend that a slope stability analysis be performed when the location and depth of the cut is known.

DRAINAGE AND GRADIENT:

Adequate site drainage should be provided in the foundation area both during and after construction to

prevent the ponding of water and the saturation of the subsurface soils. We recommend that the ground surface around the structure be graded so that surface water will be carried quickly away from the building. The minimum gradient within 10 feet of the building will depend on surface landscaping. We recommend that paved areas maintain a minimum gradient of 2%, and that landscaped areas maintain a minimum gradient of 8%. It is further recommended that roof drain downspouts be carried across all backfilled areas and discharged at least 10 feet away from the structure. Proper discharge of roof drain downspouts may require the use of subsurface piping in some areas. Planters, if any, should be so constructed that moisture is not allowed to seep into foundation areas or beneath slabs or pavements.

If adequate surface drainage cannot be maintained, or if subsurface seepage is encountered during excavation for foundation construction, a full perimeter drain is recommended for these buildings. It is recommended that these drains consist of a perforated drain pipe and a gravel collector, the whole being fully wrapped in a geotextile filter fabric. We recommend that these drains be constructed with gravity outlets. If sufficient grade does not exist on the site for a gravity outlet, then a sealed sump and pump is recommended. Under no circumstances should a dry well be used on this site.

To give the buildings extra lateral stability and to aid in the rapidity of runoff, it is recommended that all backfill around the buildings and in utility trenches in the vicinity of the buildings be compacted to a minimum of 85% of its maximum Proctor dry density, ASTM D 698. The native soils on

this site may be used for such backfill. We recommend that all backfill be compacted using mechanical methods. No water flooding techniques of any type may be used in placement of fill on this site.

Should an automatic lawn irrigation system be used on this site, we recommend that the sprinkler heads be installed no less than 5 feet from the building. In addition, these heads should be adjusted so that spray from the system does not fall onto the walls of the building and that such water does not excessively wet the backfill soils.

It is recommended that lawn and landscaping irrigation be reasonably limited, so as to prevent undesirable saturation of subsurface soils or backfilled areas. Several methods of irrigation water control are possible, to include, but not limited to:

* Metering the Irrigation water.
* Sizing the irrigation distribution service piping to limit on-site water usage.
* Encourage efficient landscaping practices.
* Enforcing reasonable limits on the size of high water usage landscaping for each lot and any park areas.

FOUNDATIONS

Assuming that some amount of differential movement can be tolerated, then a shallow foundation system designed on the basis of 3500 psf maximum is recommended. A minimum deadload of 1000 psf should be maintained. All foundations should extend through the native alluvial soils and to the underlying Dakota Formation. If the Dakota Formation is relatively deep, the upper alluvial soils, after compaction, could be used for foundation bearing, utilizing the soil bearing capacities given in a previous portion of this report. To reduce the risk of differential movement it is recommended the entire foundation system be founded on either the upper alluvial soils or the Dakota Formation. In either case, recommendations pertaining to balancing, reinforcing, drainage and inspection are considered extremely important and must be followed.

Contact stresses beneath all continuous walls should be balanced to within + or - 150 psf at all points. Isolated interior column footings should be designed for contact stresses of about 150 psf less than the average used to balance the continuous walls. The criterion for balancing will depend somewhat upon the nature of the structure. Single-story, slab on grade structures may be balanced on the basis of dead load only. Multi-story structures may be balanced on the basis of dead load plus 1/2 live load, for up to 3 stories.

It should be noted that the term "footings" as used above includes the wall on grade or "no footing" type of foundation system. On this particular site, the use of a

more conventional footing, the use of a "no footing", or the use of voids will depend entirely upon the foundation loads exerted by the structure. We would anticipate the use of either narrow footings or no footings on this site.

Stem walls for a shallow foundation system should be designed as grade beams capable of spanning at least 13 feet. These "grade beams" should be horizontally reinforced both near the top and near the bottom. The horizontal reinforcement required should be placed continuously around the structure with no gaps or breaks. A foundation system designed in this manner should provide a rather rigid system and, therefore, be better able to tolerate differential movements associated with swelling clays in the mudstones and siltstones of the Dakota Formation.

Due to the variable thickness of overlying alluvial soils, the existing topography and the anticipated topography of the top of the Dakota Formation, it is possible that mass grading of the site may be utilized to obtain building sites with consistent foundation soils. If mass grading on this site is accomplished, the recommendations for fill placement contained in the Conclusions and Recommendations portion of this report should be carefully followed. The foundation recommendations may require some modifications, depending on the actual materials utilized for the mass grading process.

Due to the presence of hard sandstones which may range in thickness from only a few inches to in excess of 10', the use of a deep foundation system consisting of drilled

piers may prove to be somewhat difficult. If drilled piers are anticipated on this site, recommendations can be made by Lincoln DeVore. It should be noted that if very hard sandstones are encountered, the piers may not achieve proper sockets into the formation.

CONCRETE SLABS ON GRADE

Slabs could be placed directly on the natural soils or on a properly compacted structural fill. We recommend that all slabs on grade be constructed to act independently of the other structural portions of the building. One method of allowing the slabs to float freely is to use expansion material at the slab- structure interface.

Any interior partitions which will be located on slabs on grade should be constructed with a minimum space of 1-1/2 inches at the bottom of the wall. This space should allow for any future potential upward movement of the floor slabs and minimize damage to the walls and roof sections above the slabs.

If a vapor barrier is desired beneath slabs, we recommend that it be overlain by at least 2 inches of sand to decrease the likelihood of curing problems. Unless perched water is anticipated in some areas of this tract, it is not believed that a vapor barrier will be required. An alternate method of reducing finishing problems would be to place the vapor barrier beneath approximately 6 inches of a minus 3/4 inch gravel fill. This method must be very carefully accomplished to minimize excessive puncturing and tearing of the vapor barrier.

It is recommended that floor slabs on grade be constructed with control joints placed to divide the floor into sections not exceeding 360 to 400 square feet, maximum. Also, additional control joints are recommended at all

inside corners and at all columns to control cracking in these areas.

Problems associated with slab 'curling' are usually minimized by proper curing of the placed concrete slab. This period of curing usually is most critical within the first 5 days after placement. Proper curing can be accomplished by continuous water application to the concrete surface or, in some instances by the placement of a 'heavy' curing compound, formulated to minimize water evaporation from the concrete. Curing by continuous water application must be carefully undertaken to prevent the wetting or saturation of the subgrade soils.

EARTH RETAINING STRUCTURES

The active soil pressure for the design of earth retaining structures may be based on an equivalent fluid pressure of 42 pounds per cubic foot. The active pressure should be used for retaining structures which are free to move at the top (unrestrained walls). For earth retaining structures which are fixed at the top, such as basement walls, an equivalent fluid pressure of 55 pounds per cubic foot may be used. It should be noted that the above values should be modified to take into account any surcharge loads, sloping backfill or other externally applied forces. The above equivalent fluid pressures should also be modified for the effect of free water, if any.

The passive pressure for the native alluvial materials may be considered to be 320 psf per foot of depth. For passive resistance in the weathered bedrock materials, we recommend that they be designed based upon the following equation:

$$P_p = 400 + 200Z$$

Z = depth below grade
P_p = passive pressure (psf)

REACTIVE SOILS

Since groundwater in the Grand Junction area and the Ridges area in particular typically contains sulfates in quantities detrimental to a Type I cement, a Type II or Type I-II or Type II-V cement is recommended for all concrete which is in contact with the subsurface soils and bedrock. Calcium chloride should not be added to a Type II, Type I-II or Type II-V cement under any circumstances.

PAVEMENTS

Samples of the surficial native soils that may be required to support pavements have been evaluated using the Hveem-Carmany method (ASTM D-2844) to determine their support characteristics. The results of the laboratory testing are as follows:

AASHTO Classification - A-2(0) Unified Classification - SM
Soil Type # I

R	=	26
Expansion @ 300 psi	=	0 psf
Displacement @ 300 psi	=	4.34

Displacement values higher than 4.00 generally indicate the soil is unstable and may require confinement for proper performance.

Traffic Counts or volumes were not provided to Lincoln DeVore. It is assumed for purposes of this report that the roads will be classified as residential and will contain a minimum amount of truck traffic.

Two methods of design were utilized for this project. First, the 1986 AASHTO procedure, recognized by the Colorado Department of Transportation and second, The Asphalt Institute (MS-1). A design life of 20 years was used, with an annual growth rate of 2%.

Based upon the existing topography, the anticipated final road grades and subsurface soils conditions encountered during the drilling program, a Drainage Factor of 0.8

(1986 AASHTO procedure) and a mean average annual air temperature (MAAT) of 60° Fahrenheit (Asphalt Institute Method) has been utilized for the section analysis.

Calculated Pavement Sections

18K EAL = 5 Soil "R" Value = 26

	1986 AASHTO Drainage Coefficient = 0.8	Asphalt Institute MAAT = 60° F	
AC	3"	3"	AC
ABC	6"	6"	ABC
Subbase	0"	0"	Subbase
FULL DEPTH AC	4"	4"	

SECTION CONSTRUCTION

We recommend that the asphaltic concrete pavement meet the State of Colorado DOT requirements for a **Grade C or CX mix.** If Laboratory Testing values are available, recycled asphalt may be factored and substituted for a portion of the new asphaltic concrete. In addition, the asphaltic concrete pavement should be compacted to 92% minimum and 96% maximum of its maximum theoretical (Rice) density.

The aggregate base course should meet the requirements of State of Colorado DOT Class 5 or Class 6 material, and have a minimum R value of 78. We recommend that the base course be compacted to a minimum of 95% of its maximum

Modified Proctor dry density (ASTM D-1557), at a moisture content within + or -2% of optimum moisture. The native subgrade shall be scarified and recompacted to a minimum of 90% of their maximum Modified Proctor day density (ASTM D-1557) at a moisture content within + or -2% of optimum moisture.

All pavement should be protected from moisture migrating beneath the pavement structure. If surface drainage is allowed to pond behind curbs, islands or other areas of the site and allowed to seep beneath pavement, premature deterioration or possibly pavement failure could result.

LIMITATIONS

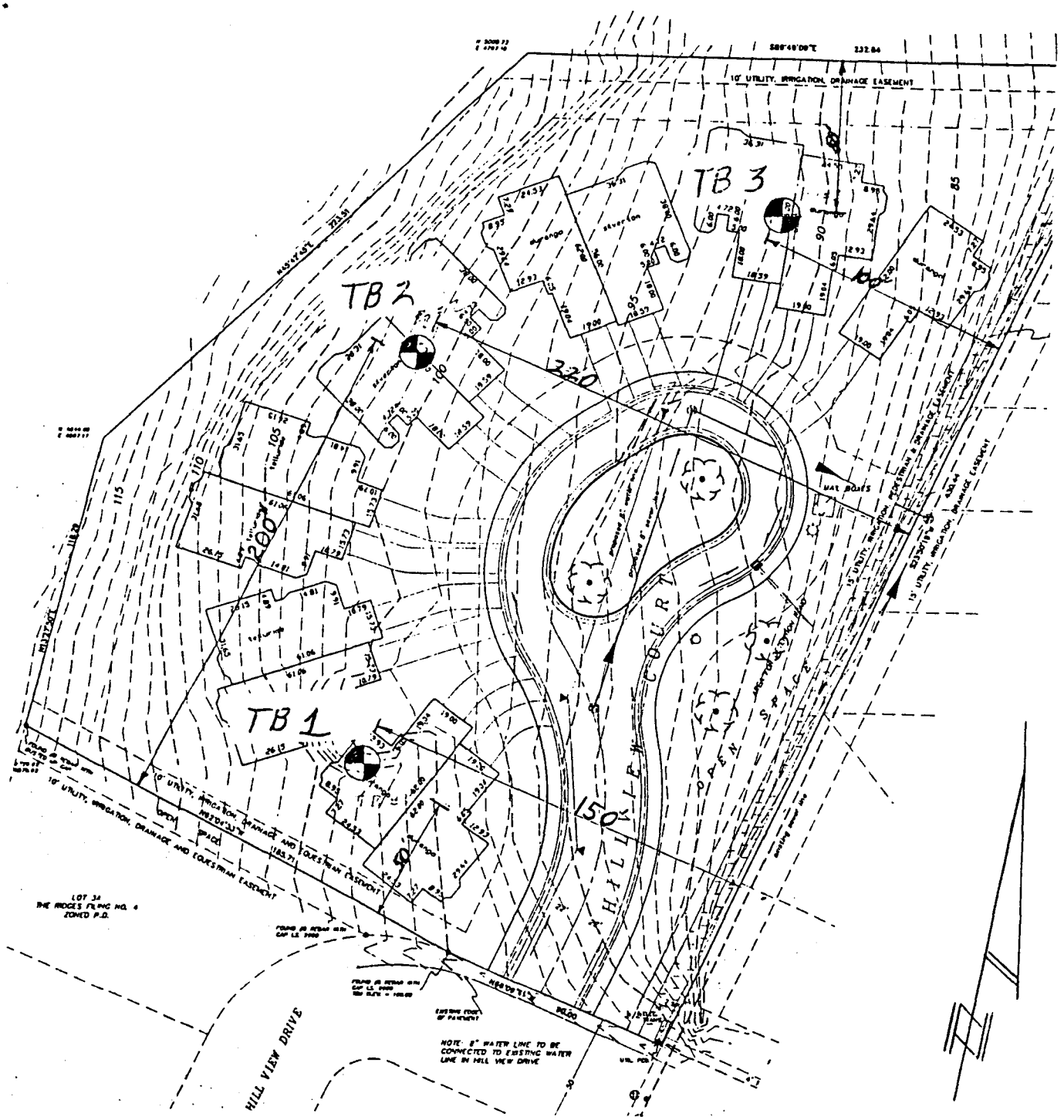
This report is issued with the understanding that it is the responsibility of the owner, or his representative to ensure that the information and recommendations contained herein are brought to the attention of the individual lot purchasers for the subdivision. In addition, it is the responsibility of the individual lot owners that the information and recommendations contained herein are brought to the attention of the architect and engineer for the individual projects and the necessary steps are taken to see that the contractor and his subcontractors carry out the appropriate recommendations during construction.

The findings of this report are valid as of the present date. However, changes in the conditions of a property can occur with the passage of time, whether they be due to natural processes or the works of man on this or adjacent properties. In addition, changes in acceptable or appropriate standards may occur or may result from legislation or the broadening of engineering knowledge. Accordingly, the findings of this report may be invalid, wholly or partially, by changes outside our control. Therefore, this report is subject to review and should not be relied upon after a period of 3 years.

The recommendations of this report pertain only to the site investigated and are based on the assumption that the soil conditions do not deviate from those described in this report. If any variations or undesirable conditions are encountered during construction or the proposed

construction will differ from that planned on the day of this report, Lincoln DeVore should be notified so that supplemental recommendations can be provided, if appropriate.

Lincoln DeVore makes no warranty, either expressed or implied, as to the findings, recommendations, specifications or professional advice, except that they were prepared in accordance with generally accepted professional engineering practice in the field of geotechnical engineering.



BORING LOCATION DIAGRAM

Lincoln DeVore, Inc.
Geotechnical Consultants

HILL VIEW COURT SUB THE RIDGES		
GNT DEVELOPMENT		DATE 5-24-96
JOB NO. 85-450-J	DRAWN EMM	

SOILS DESCRIPTIONS:

SYMBOL	USCS	DESCRIPTION
		Topsoil
		Man-made Fill
	GW	Well-graded Gravel
	GP	Poorly-graded Gravel
	GM	Silty Gravel
	GC	Clayey Gravel
	SW	Well-graded Sand
	SP	Poorly-graded Sand
	SM	Silty Sand
	SC	Clayey Sand
	ML	Low-plasticity Silt
	CL	Low-plasticity Clay
	OL	Low-plasticity Organic Silt and Clay
	MH	High-plasticity Silt
	CH	High-plasticity Clay
	OH	High-plasticity Organic Clay
	Pt	Peat
	GW/GM	Well-graded Gravel, Silty
	GW/GC	Well-graded Gravel, Clayey
	GP/GM	Poorly-graded Gravel, Silty
	GP/GC	Poorly-graded Gravel, Clayey
	GM/GC	Silty Gravel, Clayey
	GC/GM	Clayey Gravel, Silty
	SW/SM	Well-graded Sand, Silty
	SW/SC	Well-graded Sand, Clayey
	SP/SM	Poorly-graded Sand, Silty
	SP/SC	Poorly-graded Sand, Clayey
	SM/SC	Silty Sand, Clayey
	SC/SM	Clayey Sand, Silty
	CL/ML	Silty Clay

ROCK DESCRIPTIONS:

SYMBOL	DESCRIPTION
	SEDIMENTARY ROCKS
	CONGLOMERATE
	SANDSTONE
	SILTSTONE
	SHALE
x x x x x x	CLAYSTONE
	COAL
	LIMESTONE
	DOLOMITE
	MARLSTONE
	GYPSUM
	Other Sedimentary Rocks
	IGNEOUS ROCKS
	GRANITIC ROCKS
	DIORITIC ROCKS
	GABBRO
	RHYOLITE
	ANDESITE
	BASALT
	TUFF & ASH FLOWS
	BRECCIA & Other Volcanics
	Other Igneous Rocks
	METAMORPHIC ROCKS
	GNEISS
	SCHIST
	PHYLLITE
	SLATE
	METAQUARTZITE
	MARBLE
	HORNFELS
	SERPENTINE
	Other Metamorphic Rocks

SYMBOLS & NOTES:

SYMBOL	DESCRIPTION
9/12	9/12 Standard penetration drive Numbers indicate 9 blows to drive the spoon 12" into ground.
ST	ST 2-1/2" Shelby thin wall sample
W_o	W_o Natural Moisture Content
W_x	W_x Weathered Material
Free water	Free water table
γ^o	γ^o Natural dry density
T.B.	T.B. – Disturbed Bulk Sample
②	② Soil type related to samples in report
15' W_x Form.	Top of formation
	Test Boring Location
	Test Pit Location
	Seismic or Resistivity Station. Lineation indicates approx. length & orientation of spread (S = Seismic, R = Resistivity)

Standard Penetration Drives are made by driving a standard 1.4" split spoon sampler into the ground by dropping a 140 lb. weight 30". ASTM test des. D-1586.

Samples may be bulk, standard split spoon (both disturbed) or 2-1/2" I.D. thin wall ("undisturbed") Shelby tube samples. See log for type.

The boring logs show subsurface conditions at the dates and locations shown, and it is not warranted that they are representative of subsurface conditions at other locations and times.

LINCOLN DeVORE INC.

COLORADO SPRINGS
PUEBLO – GRAND JUNCTION

EXPLANATION OF BOREHOLE LOGS AND LOCATION DIAGRAMS

BORING NO. 1

SOUTH CENTRAL PORTION OF TRACT

BORING ELEVATION:

DEPTH (FT.)	SOIL LOG	DESCRIPTION			BLOW COUNT /inch	SOIL DENSITY pcf	WATER %
		ALLUVIAL/DEBRIS FAN SI. ORGANIC PINK TO BUFF STRATIFIED					
		SM I ALLUVIAL, SILTY SAND SI. MOIST COMPRESSIBLE Occ. GRAVELS		ST SPT	 03/06	103.8	4.0%
5		SANDSTONE- DAKOTA FORMATION		5	07/12		2.2%
		SM I FIRM, TAN to BUFF COLOR MEDIUM GRAINED POOR TO MEDIUM CEMENTATION DRY VERY FIRM TO DRILL			58/18		
				BULK			
10				10			
		TD @ 8'					
15				15			
20				20			
25				25			
30				30			

Blow Counts are cumulative for each 6 inches of sampler penetration.

NO Free Water During Drilling 4-26-96

LOG OF SUBSURFACE EXPLORATION

LINCOLN - DeVORE, Inc.

Geotechnical Consultants

Grand Junction, Colorado

HILLVIEW COURT SUBDIVISION

THE RIDGES, GRAND JUNCTION, COLO.

GNT DEVELOPMENT

GRAND JUNCTION, COLO.

Date 5-24-96

Job No. 85450-J

Drawn EMM

BORING NO. 2

WEST PORTION OF TRACT

BORING ELEVATION:

DEPTH (FT.)	SOIL LOG	DESCRIPTION			BLOW COUNT /inch	SOIL DENSITY pcf	WATER %
		ALLUVIAL/DEBRIS FAN	SI. ORGANIC				
		PINK TO BUFF	VERY SILTY				
		SM ALLUVIAL, SILTY SAND		SI. MOIST			
		I COMPRESSIBLE	Occ. GRAVELS	ST		115.8	5.9%
5			STRATIFIED	SULFATES 5	10/06		
				SPT	18/12		7.1%
		SANDSTONE- DAKOTA FORMATION			27/18		
		SM FIRM,	TAN COLOR	PEBBLES			
		II POOR TO MEDIUM CEMENTATION		DRY SPT	62/3		2.5%
10		SMALL GRAVELS	VERY FIRM TO DRILL	10			
		MEDIUM GRAINED					
		SM SANDSTONE					
		II BUFF COLOR	FINE GRAINED	SPT	70/3		5.3%
15		FIRM TO DRILL		SI. MOIST 15			
		TD @ 14'					
20				20			
25				25			
30				30			

Blow Counts are cumulative for each 6 inches of sampler penetration.

NO Free Water During Drilling 4-26-96

LOG OF SUBSURFACE EXPLORATION

LINCOLN - DeVORE, Inc.

Geotechnical Consultants

Grand Junction, Colorado

HILLVIEW COURT SUBDIVISION

THE RIDGES, GRAND JUNCTION, COLO.

GNT DEVELOPMENT

GRAND JUNCTION, COLO.

Date 5-24-96

Job No. 85450-J

Drawn EMM

BORING NO. 3

NORTH CENTRAL PORTION OF TRACT

BORING ELEVATION:

DEPTH (FT.)	SOIL LOG	DESCRIPTION		BLOW COUNT /inch	SOIL DENSITY pcf	WATER %
		SM ALLUVIAL, SILTY SAND, Occ. PEBBLE SI. MOIST				
		I COMPRESSIBLE Occ. GRAVELS SULFATES				
		MUDSTONE DAKOTA FORMATION	ST		101.4	7.2%
5		CL SANDY, SILTY CLAY SULFATES	5	17/6		
		III GRAY-BROWN SHALE	SPT	33/12		8.3%
		SILTSTONE FINE SANDSTONE BEDS		51/18		
		FINE PEBBLY SANDSTONE BED SI. MOIST				
		MUDSTONES LOW EXPANSION	SPT	21/6		7.8%
10		CL SANDY, SILTY CLAY	10	38/12		
		III MUDSTONE FIRM TO DRILL		69/18		
		GRAY-BROWN SHALE				
		FINE SANDSTONE AND SILTSTONE BEDS SI. MOIST				
		CL SANDY, SILTY CLAY FIRM TO DRILL	SPT	34/6		9.1%
15		III LOW EXPANSION	15	66/12		
				99/18		
		TD @ 15'				
20			20			
25			25			
30			30			

Blow Counts are cumulative for each 6 inches of sampler penetration.

NO Free Water During Drilling 4-26-96

LOG OF SUBSURFACE EXPLORATION

LINCOLN - DeVORE, Inc.

Geotechnical Consultants

Grand Junction, Colorado

HILLVIEW COURT SUBDIVISION

THE RIDGES, GRAND JUNCTION, COLO.

GNT DEVELOPMENT

GRAND JUNCTION, COLO.

Date 5-24-96

Job No. 85450-J

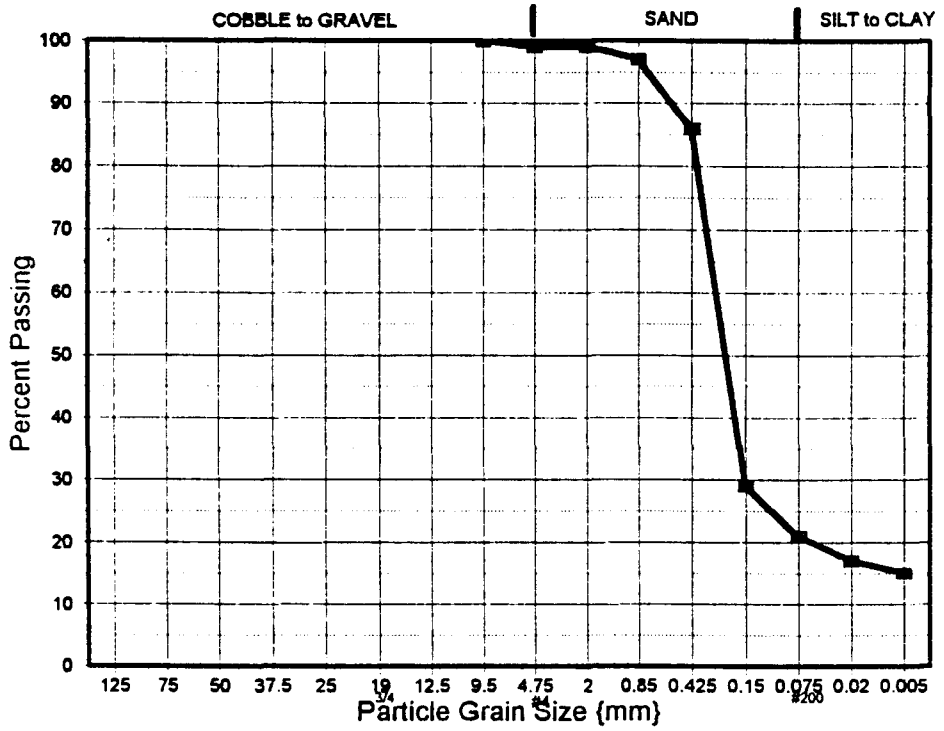
Drawn EMM

Soil Sample: ALLUVIAL, SILTY SAND (SM) Sample No. 1 (Typical)

Job Location: HILLVIEW COURT SUB. Test by: ERS

Natural Water Content 4.0% Boring No.: 1 Depth: 2'

Soil Specific Gravity (Gs 2.66 In-Place Density (pcf): 103.8



Effective size mm

Cu

Cc

Plastic Limit (PL) NP

Liquid Limit (LL)

Plasticity Index (PI) NP

Shrinkage Limit (SL)

Shrinkage Ratio

DIRECT SHEAR:

Shear Angle: deg.

Tan Shear Angle:

Cohesion: psf

Sieve	(mm)	% Passing
5"	125	
3"	75	
2'	50	
1-1/2"	37.5	
1"	25	
3/4"	19	
1/2"	12.5	
3/8"	9.5	100
# 4	4.75	99
#10	2	99
#20	0.85	97
#40	0.425	86
#100	0.15	29
#200	0.075	21.0
	0.02	17
	0.005	15

MOISTURE/DENSITY RELATIONSHIP:

ASTM Method:

Max. Dry Density : pcf

Optimum Moisture :

HVEEM-CARMANY:

'R' Value @ 300 psi: 26

Displacement 300 psi: 4.34

Expansion @ 300 psi: 0

FHA Soil Swell:

% Swell

psf

ALLOWABLE BEARING (net):

Standard Penetration (SPT): 1000 psf

Unconfined Compression (qu): psf

CONSOLIDATION: 2.16% @ 901 psf

3.44% @ 2007 psf

SULFATE SALTS: 50 ppm

PERMEABILITY:

K (20 C): Void Ratio:

SOIL ANALYSIS and SUMMARY

LINCOLN - DeVORE, Inc.

Geotechnical Consultants

Grand Junction, Colorado

HILLVIEW COURT SUBDIVISION

THE RIDGES, GRAND JUNCTION, COLO.

GNT DEVELOPMENT

GRAND JUNCTION, COLO.

Date 5-24-96

Job No. 85450-J

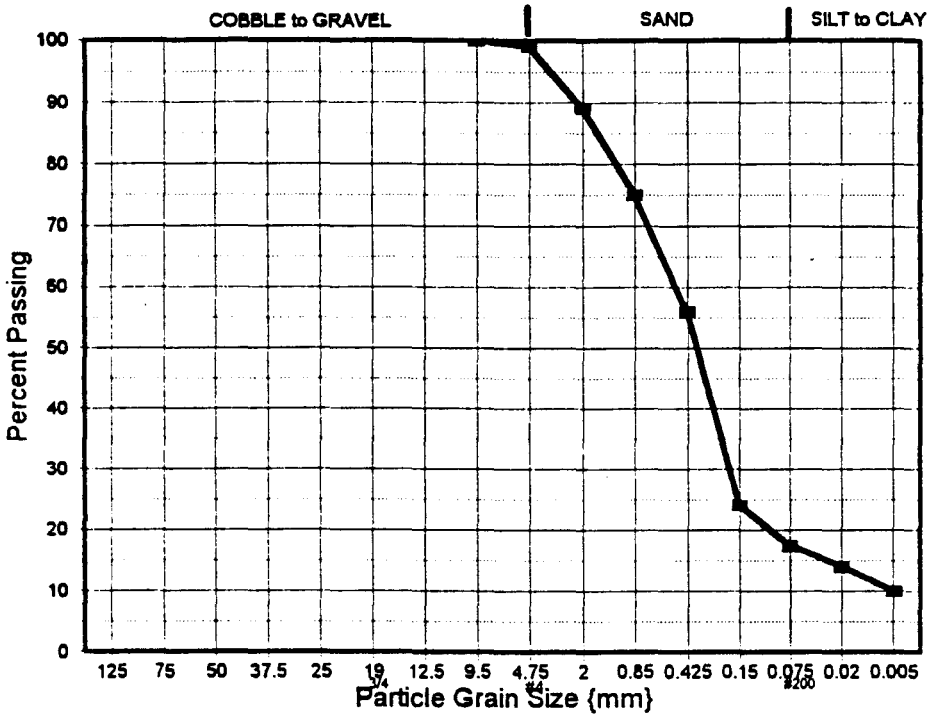
Drawn EMM

Soil Sample: DAKOTA SANDSTONE (SM) Sample No. 1 (Typical)

Job Location: HILLVIEW COURT SUB. Test by: MRS

Natural Water Content 2.5% Boring No.: 2 Depth: 8'

Soil Specific Gravity (Gs): In-Place Density (pcf):



Effective size 0.005 mm

Cu 100

Cc 12

Plastic Limit (PL) NP

Liquid Limit (LL)

Plasticity Index (PI) NP

Shrinkage Limit (SL)

Shrinkage Ratio

DIRECT SHEAR:

Shear Angle: deg.

Tan Shear Angle:

Cohesion: psf

Sieve	(mm)	% Passing
5"	125	
3"	75	
2'	50	
1-1/2"	37.5	
1"	25	
3/4"	19	
1/2"	12.5	
3/8"	9.5	100
# 4	4.75	99
#10	2	89
#20	0.85	75
#40	0.425	56
#100	0.15	24
#200	0.075	17.4
	0.02	14
	0.005	10

MOISTURE/DENSITY RELATIONSHIP:

ASTM Method:

Max. Dry Density : pcf

Optimum Moisture :

HVEEM-CARMANY:

'R' Value @ 300 psi:

Displacement 300 psi:

Expansion @ 300 psi:

FHA Soil Swell:

% Swell

psf

ALLOWABLE BEARING (net):

Standard Penetration (SPT): 5500+ psf

Unconfined Compression (qu): psf

CONSOLIDATION: @ psf

@ psf

SULFATE SALTS: 1000 ppm

PERMEABILITY:

K (20 C): Void Ratio:

SOIL ANALYSIS and SUMMARY

LINCOLN - DeVORE, Inc.

Geotechnical Consultants

Grand Junction, Colorado

HILLVIEW COURT SUBDIVISION

THE RIDGES, GRAND JUNCTION, COLO.

GNT DEVELOPMENT

GRAND JUNCTION, COLO.

Date 5-24-96

Job No. 85450-J

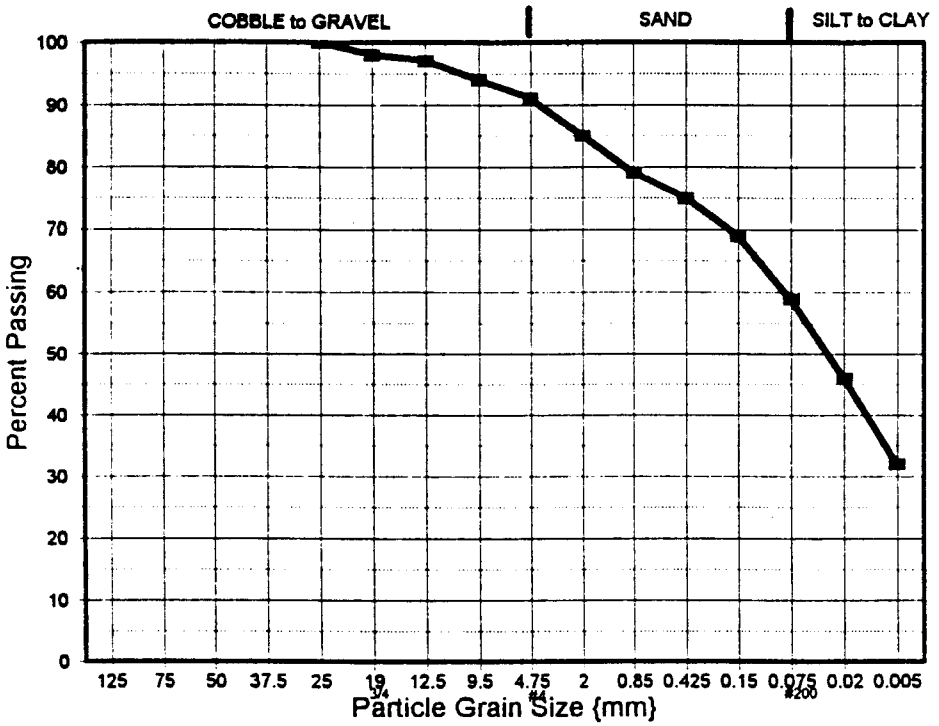
Drawn EMM

Soil Sample: DAKOTA MUDSTONE SILTY CLAY (CL) Sample No III (Typical) 3

Job Location: HILLVIEW COURT SU[illegible] Test by: [illegible]RS

Natural Water Content 7.8% Boring No.: 3 Depth: 8'

Soil Specific Gravity (Gs): In-Place Density (pcf):



Effective size mm

Cu

Cc

Plastic Limit (PL) 2200%

Liquid Limit (LL) 3400%

Plasticity Index (PI) 1200%

Shrinkage Limit (SL)

Shrinkage Ratio

DIRECT SHEAR:

Shear Angle: deg.

Tan Shear Angle:

Cohesion: psf

Sieve	(mm)	% Passing
5"	125	
3"	75	
2'	50	
1-1/2"	37.5	
1"	25	100
3/4"	19	98
1/2"	12.5	97
3/8"	9.5	94
# 4	4.75	91
#10	2	85
#20	0.85	79
#40	0.425	75
#100	0.15	69
#200	0.075	58.8
	0.02	46
	0.005	32

MOISTURE/DENSITY RELATIONSHIP:

ASTM Method:

Max. Dry Density : pcf

Optimum Moisture :

HVEEM-CARMANY:

'R' Value @ 300 psi:

Displacement 300 psi:

Expansion @ 300 psi:

FHA Soil Swell:

0.7 % Swell

273 psf

ALLOWABLE BEARING (net):

Standard Penetration (SPT): 5500+ psf

Unconfined Compression (qu): psf

CONSOLIDATION: @ psf

@ psf

SULFATE SALTS: 2000 ppm

PERMEABILITY:

K (20 C): Void Ratio:

SOIL ANALYSIS and SUMMARY

LINCOLN - DeVORE, Inc.

Geotechnical Consultants

Grand Junction, Colorado

HILLVIEW COURT SUBDIVISION

THE RIDGES, GRAND JUNCTION, COLO.

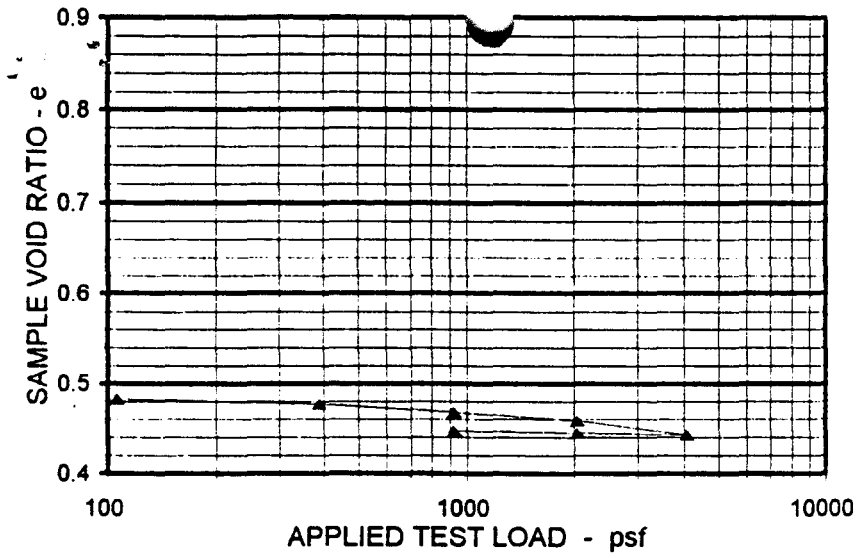
GNT DEVELOPMENT

GRAND JUNCTION, COLO.

Date 5-24-96

Job No. 85450-J

Drawn EMM



The Consolidation Test (ASTM D-2435) Was Run By First Subjecting The Soil Specimen To A 'Seating' Load.

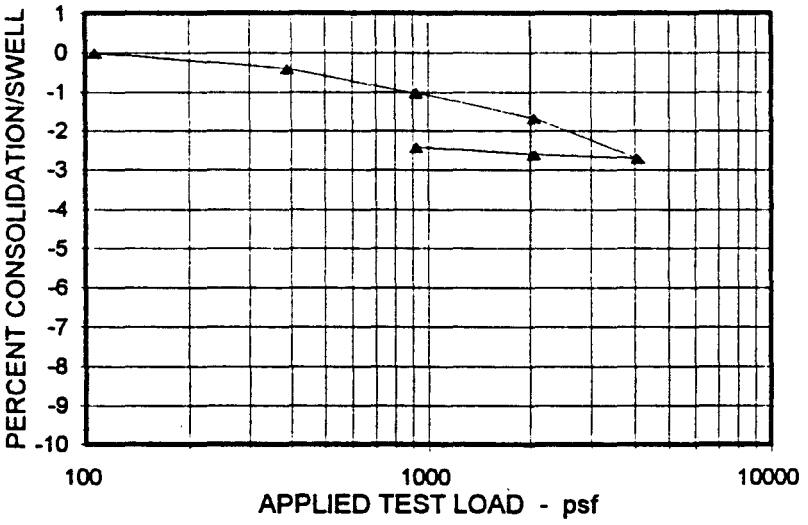
The 'Seating' Load Is To Remove Slack From The Apparatus And To Provide An Accurate Point of Beginning.

The Test Begins With The Specimen At Approximately Natural Moisture Content.

The Sample is Loaded to Approximately 900 psf And Then Saturated With Water.

Any Swell Or Collapse Of The Specimen Is Noted And The Loading Is Continued.

After The Maximum Test Load, The Soil Specimen Is Unload, To Measure Rebound And Swelling Potential, After Consolidation.



LOAD SUMMARY

106	*psf SEATING LOAD*
921	*psf SAMPLE SATURATED*
0	*% SOIL COLLAPSE*
0.02	*% SOIL EXPANSION/SWELL*
0.28	*% SAMPLE REBOUND @ UNLOAD*
2.7	*% MAXIMUM CONSOLIDATION*
4069	*psf MAXIMUM TEST LOAD*

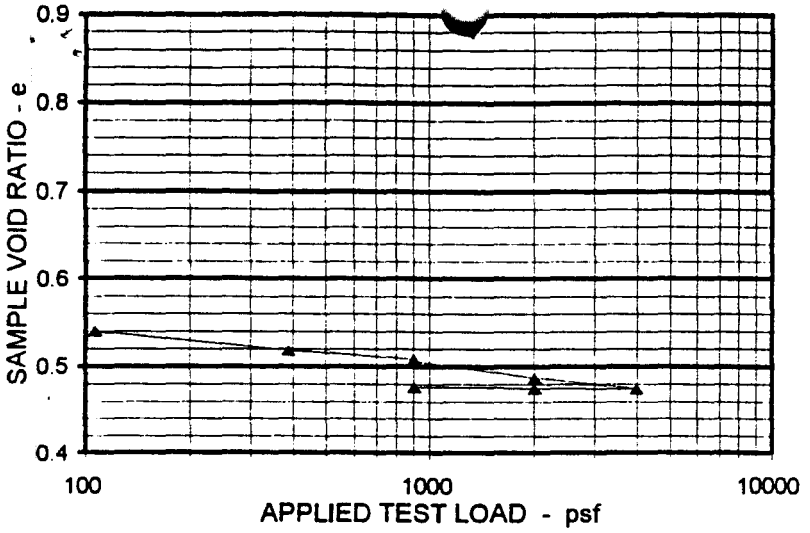
	INITIAL	MAXIMUM LOAD	FINAL LOAD
SOIL DENSITY (pcf)	111.9	115.0	114.7
SOIL MOISTURE (%)	5.9%	16.7%	16.9%
CONSOLIDATION (%)	-0-	2.70%	2.42%
VOID RATIO (e)	0.483	0.443	0.448
SATURATION (%)	33%	100%	100%

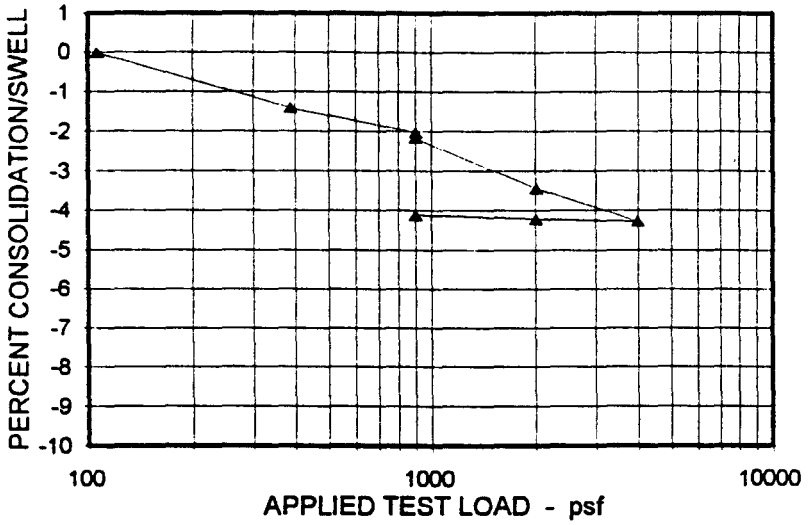
SOIL #:	I
SOIL TYPE:	SM
TEST HOLE #:	2 @ 3'
SAMPLE Gs:	2.66
DIAMETER:	2.5"
AREA inchs:	.03409

SOIL CONSOLIDATION ASTM D-2435

LINCOLN - DeVORE, Inc.
Geotechnical Consultants
Grand Junction, Colorado

HILLVIEW COURT SUBDIVISION
THE RIDGES, GRAND JUNCTION, COLO.
GNT DEVELOPMENT
GRAND JUNCTION, COLO.
Date **5-24-96**
Job No. **85450-J**
Drawn **EMM**





The Consolidation Test (ASTM D-2435) Was Run By First Subjecting The Soil Specimen To A 'Seating' Load.

The 'Seating' Load Is To Remove Slack From The Apparatus And To Provide An Accurate Point of Beginning.

The Test Begins With The Specimen At Approximately Natural Moisture Content.

The Sample is Loaded to Approximately 900 psf And Then Saturated With Water.

Any Swell Or Collapse Of The Specimen Is Noted And The Loading Is Continued.

After The Maximum Test Load, The Soil Specimen Is Unload, To Measure Rebound And Swelling Potential, After Consolidation.

LOAD SUMMARY

106	*psf SEATING LOAD*
901	*psf SAMPLE SATURATED*
0.12	*% SOIL COLLAPSE*
0	*% SOIL EXPANSION/SWELL*
0.16	*% SAMPLE REBOUND @ UNLOAD*
4.27	*% MAXIMUM CONSOLIDATION*
3990	*psf MAXIMUM TEST LOAD*

	INITIAL	MAXIMUM LOAD	FINAL LOAD
SOIL DENSITY (pcf)	107.8	112.6	112.4
SOIL MOISTURE (%)	5.6%	17.8%	18.0%
CONSOLIDATION (%)	-0-	4.27%	4.11%
VOID RATIO (e)	0.540	0.474	0.477
SATURATION (%)	27%	100%	100%

SOIL #:	I
SOIL TYPE:	SM
TEST HOLE #:	1 @ 2'
SAMPLE Gs:	2.66
DIAMETER:	2.5"
AREA inchs:	.03409

SOIL CONSOLIDATION ASTM D-2435

LINCOLN - DeVORE, Inc.
Geotechnical Consultants
Grand Junction, Colorado

HILLVIEW COURT SUBDIVISION
THE RIDGES, GRAND JUNCTION, COLO.
GNT DEVELOPMENT
GRAND JUNCTION, COLO.

Date **5-24-96**

Job No. **85450-J**

Drawn **EMM**

CITY OF GRAND JUNCTION PLANNING COMMISSION
GRAND JUNCTION, COLORADO

FOR	)	**PLANNING COMMISSION DECISION**
W.D. Garrison GNT Development Corporation PO Box 308 Grand Junction, CO 81502	)	**FPP-96-135**

An application by GNT Development Corporation, requesting a final subdivision plat and plan for a 12 unit townhouse development in a PR-4 zone, located northeast of Ridge View Drive on the North side of Hill View Drive (Lot 2, Block 13, The Ridges Filing #4), was considered by the Planning Commission of the City of Grand Junction on July 2, 1996.

After considering all the pertinent testimony and reviewing various data, the Planning Commission approved the final plat and plan with the following conditions:

1. Revise site plan to show that the 8' pedestrian path does not conflict with the electrical transformer.
2. Prior to receiving a building permit, the final design of the driveways must be approved by staff and shown on the site plan.
3. Prior to receiving a building permit, a revised landscape plan shall be submitted that meets or exceeds SSID specifications and Section 5-4-15 (Landscaping Standards) of the Zoning and Development Code. Revisions as noted on submitted plans will be required. At least 16 trees (4 existing and 12 new) will be required for the site. No landscape boulders shall be placed within 7.5' of either side of the sewer alignment in Tract A.
4. Proposed optional parking in the center of Tract A shall be at least 9' wide and 22' long per space.
5. "No Parking" signs shall be required along the one way loop road.
6. Other conditions of staff review shall be incorporated into the final plat and plan prior to recordation.

The undersigned does hereby declare that the said Planning Commission reached its decision as heretofore noted.

Bill Nebeker
Senior Planner

FINAL APPROVAL CHECKLIST
NAME OF DEVELOPMENT

✓ 1. Development Improvements Agreement (DIA) #

✓ 2. Improvements Guarantee (type used: CASH EQUIVALENT) #

✓ 3. Final Plans #

✓ 4. Articles of Incorporation of HOA

✓ 5. CC&Rs

✓ 6. Plat

✓ 7. Disk of Plat

✓ 8. UCC Approval

o 9. TCP Credit Request N/A

✓ 10. City Surveyor Certificate

o 11. N/A

: Minimum required for commencement of construction

✓ FEES
DRAINAGE - $223.00

✓ Open Space Fees - $2700

TCP - $ _____/lot

School Impact Fee - $ 292 /lot

DIA - B 2297
Pgs-669-677
CCR - B2297
Pgs 678-690
FPP-1996-135

CITY OF GRAND JUNCTION
DEPARTMENT OF PUBLIC WORKS & UTILITIES
250 NORTH 5TH STREET
GRAND JUNCTION, CO 81501
(970) 244-4003

TO THE MESA COUNTY CLERK & RECORDER:

THIS IS TO CERTIFY that the herein named Subdivision Plat,

SAND CLIFF COURT SUBDIVISION,

Situated in the NW 1/4 of Section 20,

Township 1 SOUTH, Range 1 WEST,

of the UTE Meridian in the City of Grand Junction, County of Mesa, State of Colorado, has been reviewed under my direction and, to the best of my knowledge, satisfies the requirements pursuant to C.R.S. 38-51-106 and the Zoning and Development Code of the City of Grand Junction for the recording of subdivision plats in the office of the Mesa County Clerk and Recorder.

This certification makes no warranties to any person for any purpose. It is prepared to establish for the County Clerk and Recorder that City review has been obtained. This certification does not warrant: 1) title or legal ownership to the land hereby platted nor the title or legal ownership of adjoiners; 2) errors and/or omissions, including, but not limited to, the omission(s) of rights-of-ways and/or easements, whether or not of record; 3) liens and encumbrances, whether or not of record; 4) the qualifications, licensing status and/or any statement(s) or representation(s) made by the surveyor who prepared the above-named subdivision plat.

Dated this 27 day of January, 1997.

City of Grand Junction,
Department of Public Works & Utilities

By: James L. Shanks
James L. Shanks, P.E., P.L.S.
Director of Public Works & Utilities

1786570 0224PM 01/30/97
MONIKA TODD CLK&REC MESA COUNTY CO

Recorded in Mesa County
Date:
Plat Book: 15 Page: 262
Drawer: CC143
g:\special\platcert.doc

TYPE LEGAL DESCRIPTION BELOW, USING ADDITIONAL SHEETS AS NECESSARY.
USE SINGLE SPACING WITH A ONE (1) INCH MARGIN ON EACH SIDE.

****

Lot 2, Block 13, Ridges Filing 4

File Close-out Summary

File #: FLP-1996-135

Name: Hillview (Sand Cliff Ct) Subd - The Ridges

Staff: Bill Nebeker

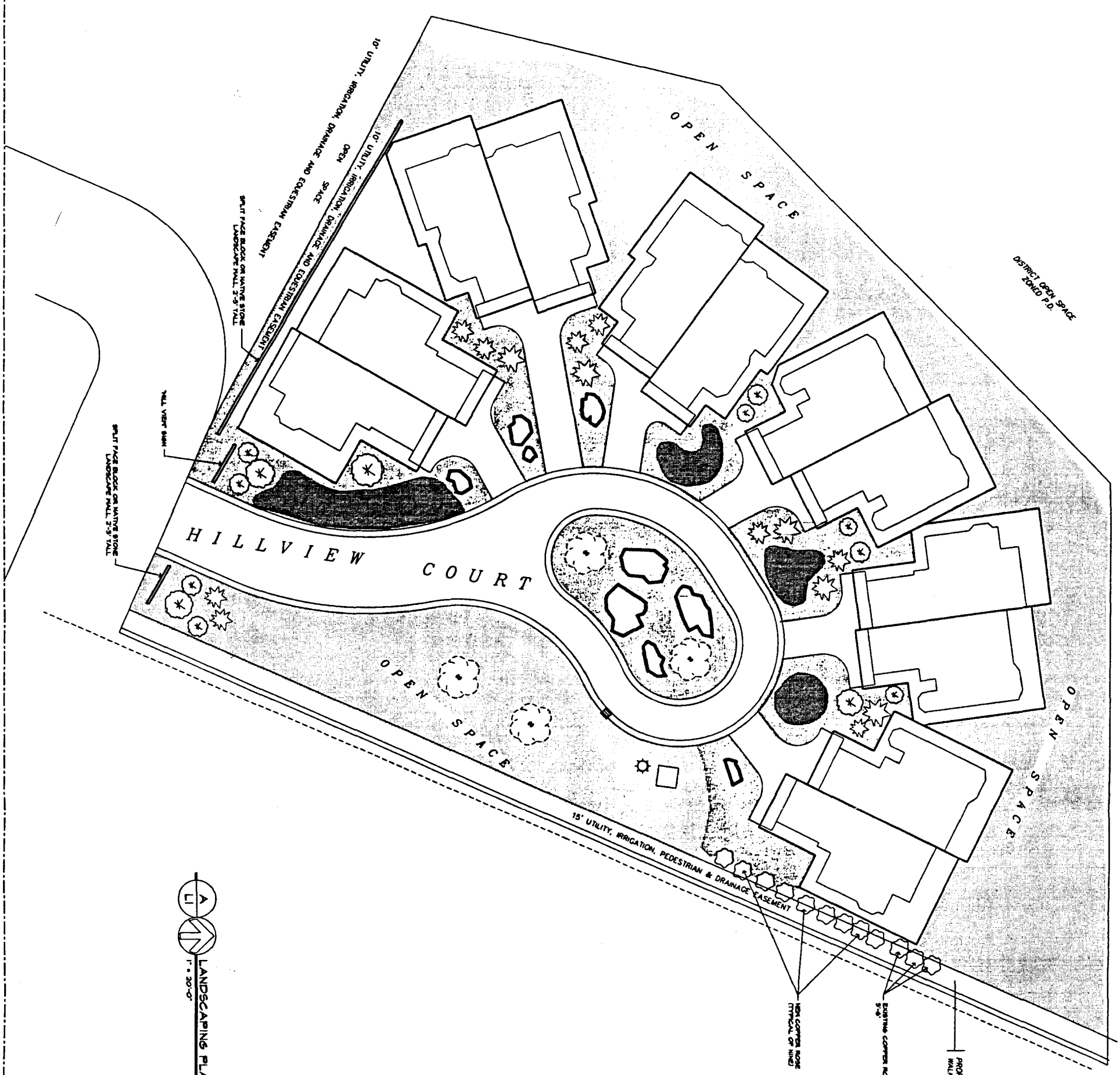
Action: Approved & Platted

Comments: Partial DIA remaining for landscape improvements (cash)

File Turned In: 9-4-97

$3062.82 REMAINING IN DIA FOR L/SCNB IMPROVEMENTS

C:\ACAD12\HILLVL1



A
L1
LANDSCAPING PLAN
1" = 20'-0"

HILL VIEW COURT LANDSCAPE

GENERAL NOTES:

GENERAL LANDSCAPE PLAN FOR THE PROJECT IS LOW WATER/XERISCAPE. IRRIGATION FOR ALL AREAS WILL BE BY METERED DOMESTIC WATER SUPPLY.

LANDSCAPE PLAN IN GENERAL IS HARDY-NATIVE DROUGHT RESISTANT. IF OWNERS SHOULD CHANGE THIS CONCEPT THEY WILL BE RESPONSIBLE TO IRRIGATE. NO AREA MAY BE PLANTED WITHIN FIVE FEET OF FOUNDATIONS.

ALL TREE, SHRUB AND PERENNIAL PLANTINGS WILL BE BY DRIP OR EQUIVALENT METHOD. ESTABLISHMENT OF NATIVE PLANT MIXES (SEEDED) TO BE PLANTED SHOULD NOT REQUIRE IRRIGATION MORE THAN SIX TIMES PER YEAR.

THE FOLLOWING LANDSCAPE CODES ARE USED:
SM&IF - SEEDED NATIVE GRASSES, FLOWERS AND CACTUS
DSS - DECIDUOUS SHRUB SMALL TO MEDIUM
ESS - EVERGREEN - SHRUB OR TREE SMALL TO MEDIUM
FG - FESCUE GRASS

PREFERRED SPECIES FOR EACH CATEGORY ARE LISTED BELOW. ADDITIONAL SUGGESTIONS ARE AVAILABLE FROM COLORADO STATE UNIVERSITY EXTENSION SERVICE. PLANTING SELECTIONS FROM THE EXTENSION SERVICE RECOMMENDATIONS.

ALL PLANTINGS ARE TO BE WITH SOIL PREPARATION AND SPACING RECOMMENDED BY A LANDSCAPE CONTRACTOR, LOCAL NURSERY AND/OR THE EXTENSION SERVICE.

PERENNIAL PLANTS AND HARDY GROUND COVERS:

RUDBECKIA HIRTA FULGAPHUMA - BLACK-EYED SUSAN
HEMEROCALLIS SPP. - DAY LILY
ACHILLEA SPP. - YARROW
ARGEMONE POLYANTHEMOS - BISHOPS WEED
RANUNCULUS REPENS - CREEPING BUTTERCUP
FESCUE OVINA GLAUCA - FESCUE (BLUE)
EUPHORBIA EPITHYMOIDES (POLYCHROMA) - CUSHION SPURGE

DECIDUOUS SHRUB SMALL TO MEDIUM:

BARBERIS THUNBERGII - BARBERRY, JAPANESE
CARAGANA PYGMAEA - CARAGANA PYGMY
FORSYTHIA INTERMEDIA - FORSYTHIA
LONICERA TATARICA - HONEYSUCKLE, TATARIAN
RIBES ALPINUM - CURRANT, ALPINE
ROSA FOETIDA BICOLOR - COPPER ROSE
ROSA RUGOSA - ROSE, RUGOSA
POTENTILLA FRUTICOSA - POTENTILLA

EVERGREEN SHRUB OR TREE SMALL TO MEDIUM:

BERBERIS JULIANAE - BARBERRY, WINTERGREEN
COTONEASTER APICULATA - COTONEASTER, CRANBERRY
COTONEASTER HORIZONTALIS - COTONEASTER, SMALL-LEAVED
PINUS MUGO - MUGO PINE

EXISTING TREES (FOUR) WILL BE RETAINED IF POSSIBLE.

COTTER ROSE SHALL BE ADDED TO EXISTING PLANTINGS TO BUFFER UNITS 11 AND 12 FROM NEIGHBORS.

LANDSCAPE BOULDERS TO BE USED ARE ON SITE.

LANDSCAPE FOR ENTRY AND STREET ISLAND WILL BE INITIATED WHEN INFRASTRUCTURE IS COMPLETED.

INDIVIDUAL UNITS WILL BE LANDSCAPED WITHIN SIXTY DAYS OF COMPLETION.

RE-SEEDING OF NATIVE-CUTS AREAS WILL BE PHASED AFTER ANY TWO ADJOINING BUILDINGS ARE COMPLETED.

LEGEND:

- HARDY DROUGHT RESISTANT GROUND COVER
- FESCUE DROUGHT RESISTANT GRASS
- SEEDED DESERT NATIVE GRASSES, FLOWERS AND CACTUS
- LANDSCAPE BOULDERS
- DECIDUOUS SHRUB (DSS) - SMALL TO MEDIUM
- DECIDUOUS SHRUB OR TREE (ESS) - SMALL TO MEDIUM

DKO ARCHITECTURE
KEITH OBERSTEIN, ARCHITECT
336 MAIN STREET, SUITE 202
GRAND JUNCTION, CO 81501
(970)256-9798

HILLVIEW COURT SUBDIVISION
GRAND JUNCTION, COLORADO

Project # 9610

Phase
DD
Issue Date
05/31/96
Revisions

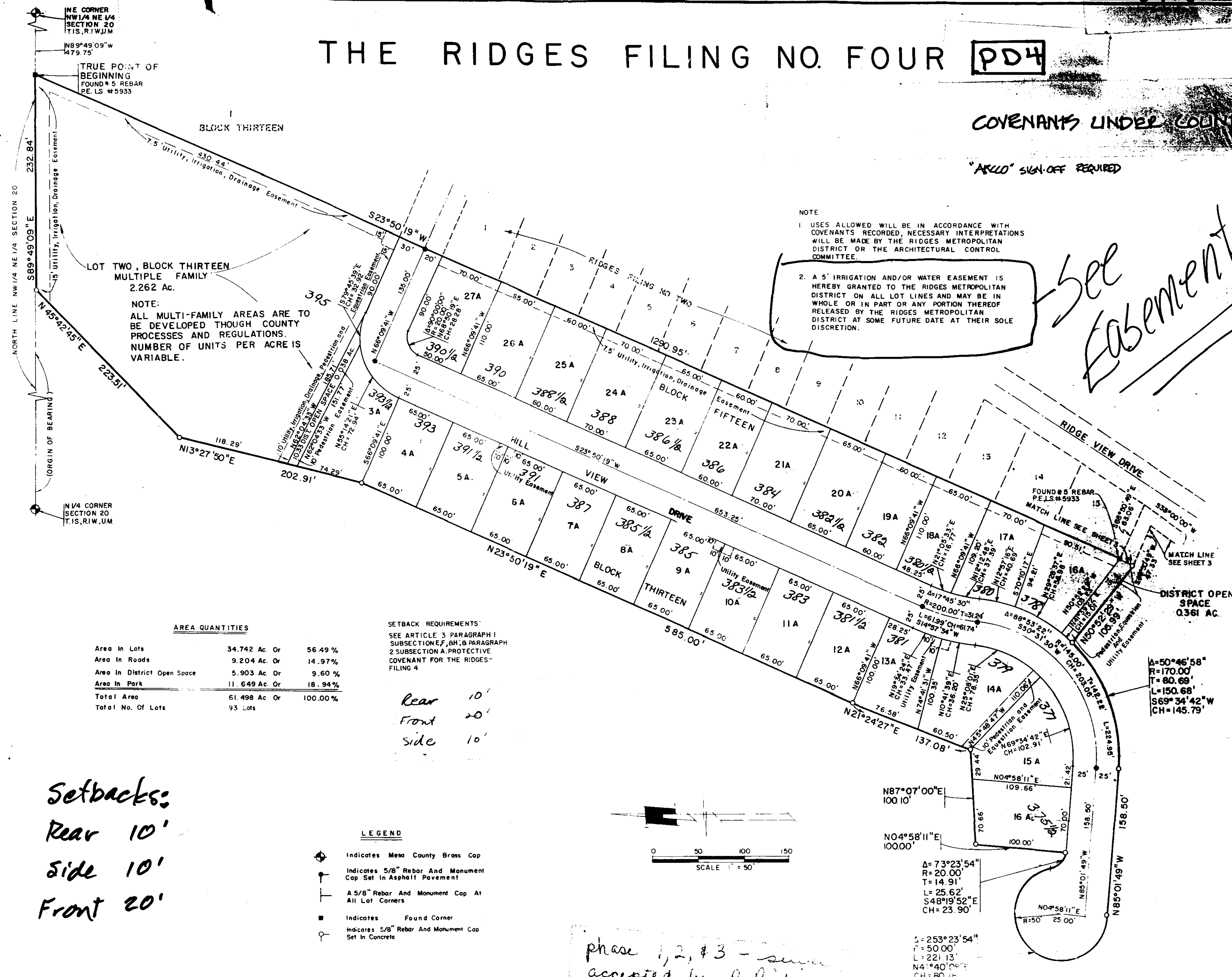
Sheet No. L1

#15E-77 #6418

THE RIDGES FILING NO. FOUR [PD4]

COVENANTS UNDER COUNTER

"ARCCO" SIGN-OFF REQUIRED



NE CORNER NW1/4 NE 1/4 SECTION 20 T.1S., R.1W.,U.M.
N89°49'09"W 479.75'
TRUE POINT OF BEGINNING FOUND # 5 REBAR P.E. L.S. #5933
BLOCK THIRTEEN
7.5' Utility, Irrigation, Drainage Easement
430.44'
S23°50'19"W
232.84'
S89°49'09"E
NORTH LINE NW1/4 NE 1/4 SECTION 20
15' Utility, Irrigation, Drainage Easement
LOT TWO, BLOCK THIRTEEN MULTIPLE FAMILY 2.262 Ac.
NOTE: ALL MULTI-FAMILY AREAS ARE TO BE DEVELOPED THOUGH COUNTY PROCESSES AND REGULATIONS. NUMBER OF UNITS PER ACRE IS VARIABLE.
N45°42'45"E
223.51'
(ORGIN OF BEARING)
N13°27'50"E
118.29'
202.91'
74.29'
N1/4 CORNER SECTION 20 T.1S., R.1W., U.M.
10' Utility, Irrigation, Drainage, Pedestrian and Equestrian Easement
N62°04'33"W 185.71'
10.33' DIST. OPEN SPACE 0.038 Ac.
N62°04'33"W 151.77'
10' Pedestrian Easement
N55°14'21"E CH=72.94'
S79°45'39"E CH=32.92'
RIDGES FILING NO TWO
BLOCK FIFTEEN
HILL VIEW DRIVE
S23°50'19"W 653.25'
1290.95'
N23°50'19"E 585.00'
BLOCK THIRTEEN
RIDGE VIEW DRIVE
FOUND # 5 REBAR P.E. L.S. #5933
MATCH LINE SEE SHEET 3
S33°00'00"W
MATCH LINE SEE SHEET 3
DISTRICT OPEN SPACE 0.361 AC.
Δ=17°45'30" R=200.00' T=31.24 L=61.99' CH=61.74' S14°57'34"W
Δ=88°53'22" S50°31'30"W R=145.00' CH=203.06' T=142.28'
L=224.95'
Δ=50°46'58" R=170.00' T=80.69' L=150.68' S69°34'42"W CH=145.79'
N21°24'27"E 137.08'
N45°48'47"W 110.06'
10' Pedestrian and Equestrian Easement
N69°34'42"E CH=102.91'
N87°07'00"E 100.10'
N04°58'11"E 100.00'
Δ=73°23'54" R=20.00' T=14.91' L=25.62' S48°19'52"E CH=23.90'
N85°01'49"W 158.50'
R=50 25.00'
Δ=253°23'54" R=50.00 L=221.13' N41°40'0" CH=80.18

NOTE:

1. USES ALLOWED WILL BE IN ACCORDANCE WITH COVENANTS RECORDED, NECESSARY INTERPRETATIONS WILL BE MADE BY THE RIDGES METROPOLITAN DISTRICT OR THE ARCHITECTURAL CONTROL COMMITTEE.
2. A 5' IRRIGATION AND/OR WATER EASEMENT IS HEREBY GRANTED TO THE RIDGES METROPOLITAN DISTRICT ON ALL LOT LINES AND MAY BE IN WHOLE OR IN PART OR ANY PORTION THEREOF RELEASED BY THE RIDGES METROPOLITAN DISTRICT AT SOME FUTURE DATE AT THEIR SOLE DISCRETION.

See Easements

AREA QUANTITIES

Area In Lots	34.742 Ac. Or	56.49 %
Area In Roads	9.204 Ac. Or	14.97%
Area In District Open Space	5.903 Ac. Or	9.60 %
Area In Park	11.649 Ac. Or	18.94%
Total Area	61.498 Ac. Or	100.00%
Total No. Of Lots	93 Lots	

SETBACK REQUIREMENTS:
SEE ARTICLE 3 PARAGRAPH I SUBSECTION E,F,8H,8 PARAGRAPH 2 SUBSECTION A. PROTECTIVE COVENANT FOR THE RIDGES-FILING 4

Rear 10'
Front 20'
Side 10'

Setbacks:
Rear 10'
Side 10'
Front 20'

LEGEND

- Indicates Mesa County Brass Cap
- Indicates 5/8" Rebar And Monument Cap Set In Asphalt Pavement
- A 5/8" Rebar And Monument Cap At All Lot Corners
- Indicates Found Corner
- Indicates 5/8" Rebar And Monument Cap Set In Concrete

SCALE 1" = 50'

phase 1, 2, & 3 – accepted by R Rish

SHEET 2 OF 6

THE RIDGES FILIN

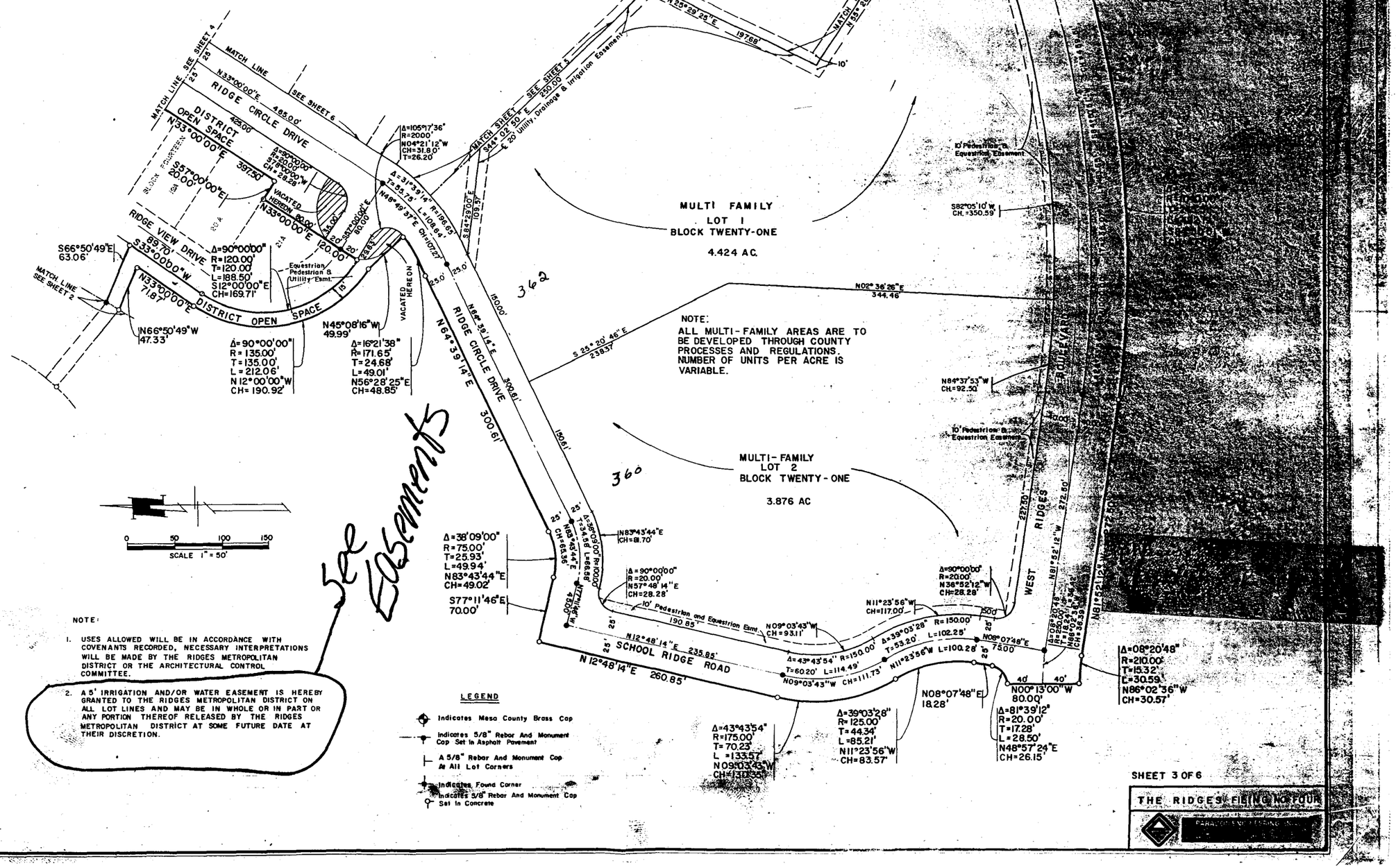
PARAGON

#15E-77

#6418

THE RIDGES FILING NO. FOUR

Setbacks:
Rear 10'
Side 10'
Front 20'



See Easements

NOTE:

1. USES ALLOWED WILL BE IN ACCORDANCE WITH COVENANTS RECORDED, NECESSARY INTERPRETATIONS WILL BE MADE BY THE RIDGES METROPOLITAN DISTRICT OR THE ARCHITECTURAL CONTROL COMMITTEE.
2. A 5' IRRIGATION AND/OR WATER EASEMENT IS HEREBY GRANTED TO THE RIDGES METROPOLITAN DISTRICT ON ALL LOT LINES AND MAY BE IN WHOLE OR IN PART OR ANY PORTION THEREOF RELEASED BY THE RIDGES METROPOLITAN DISTRICT AT SOME FUTURE DATE AT THEIR DISCRETION.

LEGEND

- Indicates Mesa County Brass Cap
- Indicates 5/8" Rebar And Monument Cap Set In Asphalt Pavement
- A 5/8" Rebar And Monument Cap At All Lot Corners
- Indicates Found Corner
- Indicates 5/8" Rebar And Monument Cap Set In Concrete

SHEET 3 OF 6

THE RIDGES FILING NO FOUR

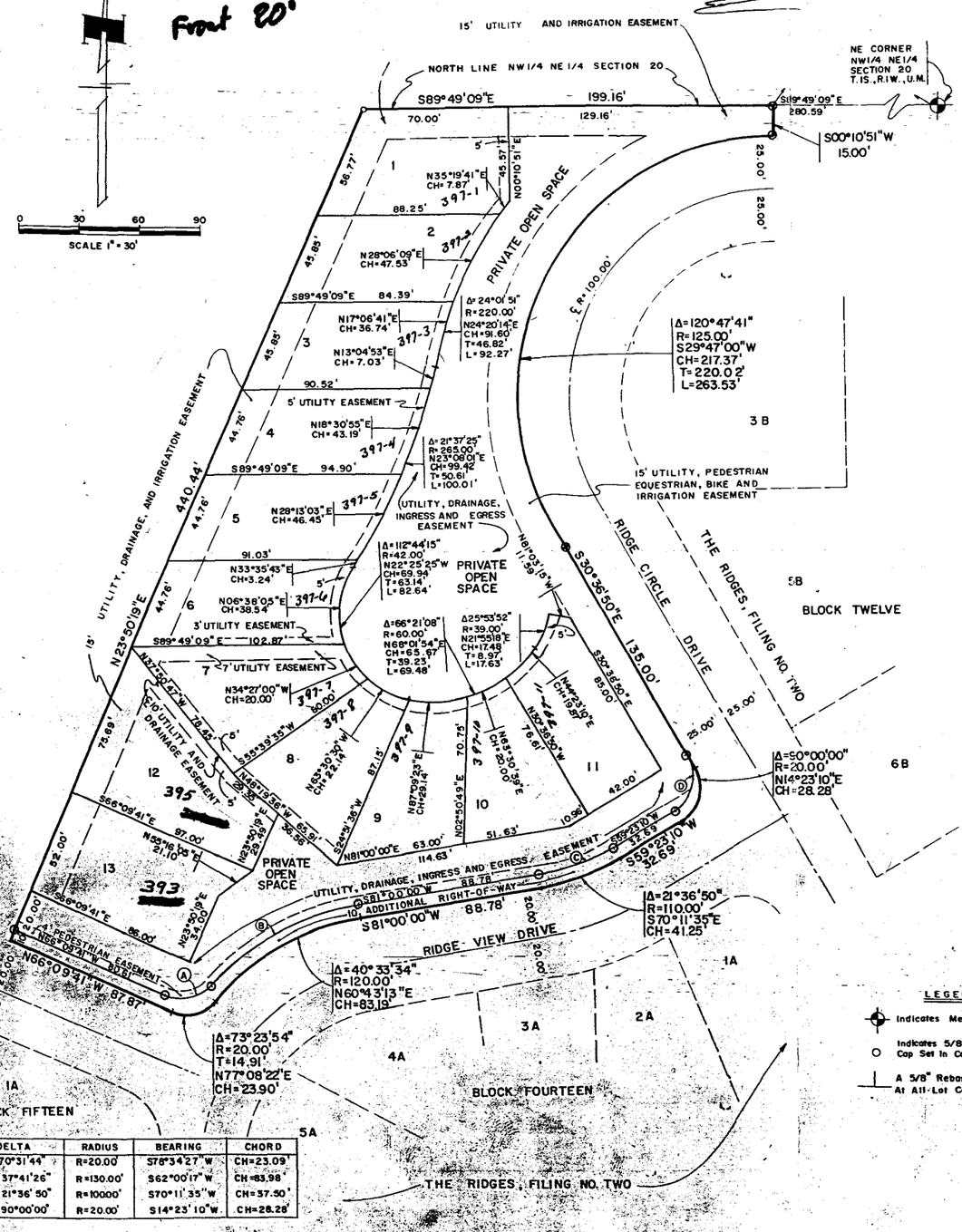
Setbacks:
Rear 10'
Side 10'
Front 20'

CR 16 & 17
Zone PD

No Drive Permits Required

THE CLUSTER

A REPLAT OF LOT ONE, BLOCK THIRTEEN OF: THE RIDGES, FILING NO. TWO



NO	DELTA	RADIUS	BEARING	CHORD
A	Δ=70°31'44"	R=20.00'	S76°34'27"W	CH=23.09'
B	Δ=37°41'26"	R=130.00'	S62°00'17"W	CH=83.98'
C	Δ=21°36'50"	R=10000'	S70°11'35"W	CH=37.50'
D	Δ=90°00'00"	R=20.00'	S14°23'10"W	CH=28.28'

DEDICATION

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned Aryl D. Aldred is the owner of that real property situated in the County of Mesa, State of Colorado and being a part of the NE 1/4 of Section 20, Township 1 South, Range 1 West of the Ute Meridian as shown on the accompanying plat, said real property being more particularly described as follows:

Lot One, Block Thirteen of The Ridges, Filing No. Two.

That said owner has caused the said real property to be laid out and surveyed as The Cluster, A Replat of Lot One, Block Thirteen of: The Ridges, Filing No. Two, a subdivision of a part of Mesa County, Colorado.

That said owner does hereby dedicate to the Public all streets as shown on the accompanying plat forever.

That said owner does hereby dedicate to the Public Utilities those portions of said real property which are labeled as utility, irrigation and drainage easements on the accompanying plat as perpetual easements for the installation and maintenance of utilities, irrigation and drainage facilities, including but not limited to electric lines, gas lines, telephone lines; together with the right to trim interfering trees and brush; with perpetual right of ingress and egress for installation and maintenance of such lines. Such easements and rights shall be utilized in a reasonable and prudent manner.

That all expense for street paving or improvements shall be furnished by the seller or purchaser, not by the County of Mesa.

IN WITNESS WHEREOF said owner has caused his name to be hereunto subscribed this 1st day of October A.D., 1978.

Aryl D. Aldred

STATE OF COLORADO }
COUNTY OF MESA } ss

The foregoing instrument was acknowledged before me this 1st day of October A.D., 1978 by Aryl D. Aldred.

My commission expires 4/22/82.
Witness my hand and official seal.

Notary Public

CLERK AND RECORDERS CERTIFICATE

STATE OF COLORADO }
COUNTY OF MESA } ss

1188787

I hereby certify that this instrument was filed in my office at 3:41 o'clock P.M., this 13 day of April A.D., 1978 and is duly recorded in Plat Book No. 12, Page 147.

Earl Sawyer
Clerk and Recorder

Deputy

Fees $ 10.00.

COUNTY PLANNING COMMISSION CERTIFICATE

Approved this 3rd day of OCTOBER A.D., 1978. County Planning Commission of the County of Mesa, Colorado.

Mary A. Buss
Chairman

BOARD OF COUNTY COMMISSIONERS CERTIFICATE

Approved this 9th day of April A.D., 1979. Board of County Commissioners of the County of Mesa, Colorado.

Maxine Albin
Chairman

SURVEYORS CERTIFICATE

I, James T. Patty Jr., do hereby certify that the accompanying plat of The Cluster, A Replat of Lot One, Block Thirteen of: The Ridges, Filing No. Two, a subdivision of a part of the County of Mesa, has been prepared under my direction and accurately represents a field survey of same.

James T. Patty, Jr.
Registered Land Surveyor
Colorado Registration No. 9960

LEGEND

- Indicates Mesa County Brass Cap
- Indicates 5/8" Rebar And Monument Cap Set in Concrete
- A 5/8" Rebar And Monument Cap At All Lot Corners

By: Bill Bamesberger
Mesa County Road Department

Date: 4-9-79

AREA QUANTITIES

Total Acres in Lots	1.139 Ac.	or 63.1%
Total Acres in Open Space	0.667 Ac.	or 36.9%
Total Acres	1.806 Ac.	or 100.00%

THE CLUSTER
A REPLAT OF LOT ONE, BLOCK THIRTEEN OF: THE RIDGES, FILING NO. TWO

[redacted]

LEGEND

- E T C — ELECTRIC, TELEPHONE, CABLE T.V.
- G — GAS
- I — IRRIGATION
- W — WATER
- STREET LIGHT
- MANHOLE
- FIRE HYDRANT
- S — SEWER
- WATER VALVE

N 5000.73
E 4787.18

S89°49'09"E 232.84

FOUND #5 REBAR WITH CAP PLS 3833
N 5000.00
E 5000.00

10' UTILITY, IRRIGATION, DRAINAGE EASEMENT

DISTRICT OPEN SPACE ZONED P.D.

OPEN SPACE

N45°42'45"E 223.51

80

85

90

95

100

105

110

PROPOSED 8' WIDE WALK & DRAINAGE CHANNEL

CENTER LINE OF EXISTING DITCH

SET BACK LINE

14' MULTI-PURPOSE EASEMENT

E T C G

proposed 8" water line

proposed 8" sewer line

MAIL BOXES

15' UTILITY, IRRIGATION, PEDESTRIAN & DRAINAGE EASEMENT

15' UTILITY, IRRIGATION, DRAINAGE EASEMENT

S23°30'19"W 436.44

THE CLUSTER
ZONED P.D

HALLVIEW COURT

OPEN SPACE

existing sewer line

N 4844.66
E 4607.17

N13°27'30"E 118.29

FOUND #5 REBAR WITH CAP L.S. 9960
N 4729.62
E 4579.82

10' UTILITY, IRRIGATION, DRAINAGE AND EQUESTRIAN EASEMENT

N62°04'33"W 185.71

OPEN SPACE

LOT 3A
THE RIDGES FILING NO. 4
ZONED P.D.

FOUND #5 REBAR WITH CAP L.S. 9960

FOUND #5 REBAR WITH CAP L.S. 9960
TBM ELEV. = 100.00

N88°09'31"W 90.00

EXISTING EDGE OF PAVEMENT

existing 8" sewer

existing 6" water line

NOTE: 6" WATER LINE TO BE CONNECTED TO EXISTING WATER LINE IN HILL VIEW DRIVE

HILL VIEW DRIVE

UTIL. PED.

PRIVATE OPEN SPACE

4' PEDESTRIAN EASEMENT

1 2 3 4 5 6 7 8 9 10 11 12 13

NOTICE:

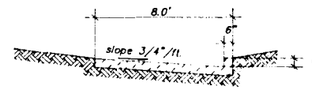
ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.

DESCRIPTION:
LOT TWO, BLOCK THIRTEEN
THE RIDGES FILING NO.4
MESA COUNTY, COLORADO

AREA SUMMARY

OPEN SPACE = 1.42 ACRES = 63%
LOTS = 0.51 ACRES = 22%
ROAD = 0.33 ACRES = 15%
TOTAL = 2.26 ACRES = 100%

N

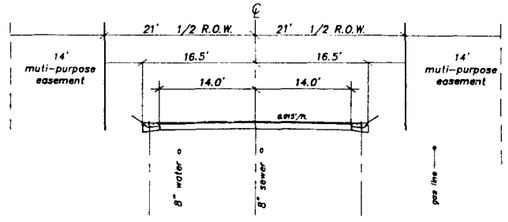


SECTION A – A
SIDEWALK & DRAINAGE CHANNEL

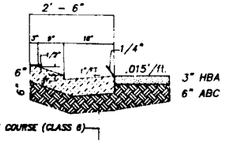
0' 20' 40' 60'

UTILITY COMPOSITE

WATER	REDLANDS WATER AND POWER
SEWER	CITY OF GRAND JUNCTION SEWER
ELECTRIC	PUBLIC SERVICE
TELEPHONE	US WEST COMMUNICATIONS
GAS	PUBLIC SERVICE COMPANY
IRRIGATION	REDLANDS WATER AND POWER



ROAD SECTION
(TYPICAL)



DRIVE OVER CURB & GUTTER
PER CITY OF GRAND JUNCTION SPECS.
1"IN = 10.0'FT
(TYPICAL)

SCALE: 1"IN = 2.0'FT

Note: FLOWLINE IS .36' LOWER ELEV. THAN CENTERLINE

HILLVIEW COURT SUBDIVISION

COMPOSITE PLAN

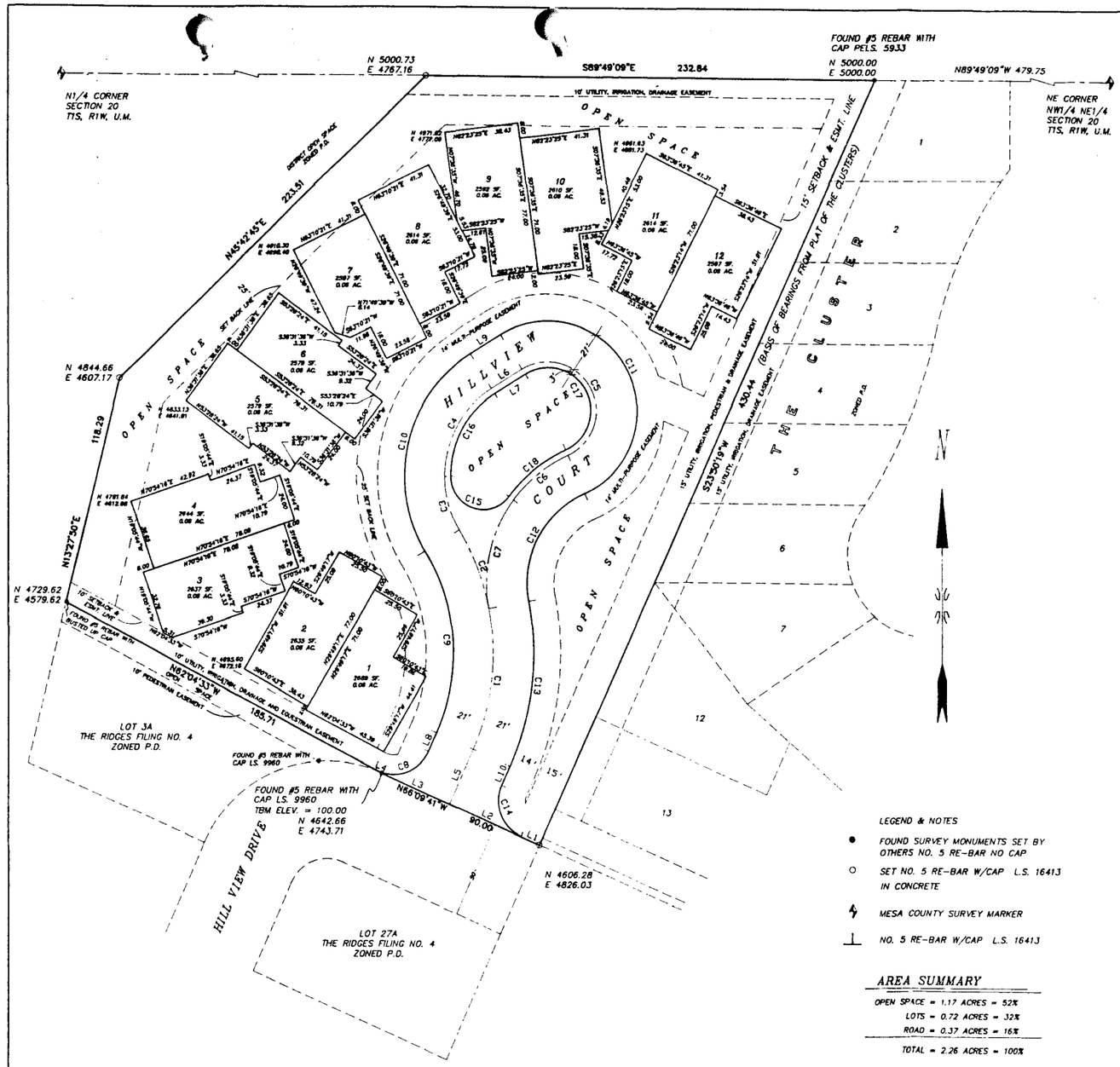
SITUATED IN THE NE1/4 NW1/4 OF SECTION 20, T1S, R1W OF THE UTE MERIDIAN

FOR:	GARRISON
SCALE:	1" = 20'
DATE:	6/2/96

Q.E.D. SURVEYING SYSTEMS Inc.
1018 COLO. AVE.
GRAND JUNCTION
COLORADO 81501
(970) 241-2370
464-7568

SURVEYED BY:	DS GD
DRAWN BY:	DMM MEM
ACAD ID:	HILLSITE
SHEET NO.	
FILE:	95361

HILLVIEW COURT SUBDIVISION



DEDICATION

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, Merritt Construction, Inc., a Colorado Corporation, and GNT Development Corp., a Colorado Corporation are the owners of that real property situated in the City of Grand Junction, County of Mesa, State of Colorado, and is described in Book ____ at Page ____ of the Mesa County Clerk and Recorders Office, and being situated in the NE1/4 NW1/4 Section 20, Township 1 South, Range 1 West of the Ute Meridian, Mesa County, Colorado as shown on the accompanying plat, said property being additionally described as follows:

Lot 2, Block 13, THE RIDGES FILING NO. FOUR

That said owners have caused the said real property to be laid out and surveyed as HILLVIEW COURT SUBDIVISION, a subdivision of a part of City of Grand Junction, County of Mesa, State of Colorado.

That said owners do hereby dedicate and set apart real property as shown and labeled on the accompanying plat as follows:

All streets and rights-of-way as shown on the accompanying plat to the City of Grand Junction, for the use of the public forever;

All Multi-purpose easements to the City of Grand Junction for the use of the public utilities as perpetual easements for the installation, operation, maintenance and repair of utilities and appurtenances thereto including, but not limited to electric lines, cable TV lines, natural gas pipelines, sanitary sewer lines, water lines, telephone lines, and also for the installation and maintenance of traffic control facilities, street lighting, and grade structures;

All Irrigation Easements to the Property owners of the lots and tracts hereby platted as perpetual easements for the installation, operation, maintenance and repair of private irrigation systems;

All Drainage Easements and Open Space to the Property owners of lots and tracts hereby platted as perpetual easements for the conveyance of runoff water which originates within the area hereby platted or from upstream areas, through natural man-made facilities above or below ground;

All easements include the right of ingress and egress on, along, over, under, and through and across by the beneficiaries, their successors, or assigns, together with the right to trim or remove interfering trees and brush, and in Drainage easements, the right to dredge; provided, however, that the beneficiaries of said easements shall utilize the same in a reasonable and prudent manner. Furthermore, the owners of lots or tracts hereby platted not burden nor overburden said easements by erecting or placing any improvements thereon which may prevent reasonable ingress and egress to and from the easement.

That all expenses for street paving or improvements shall be furnished by the seller or purchaser, not the City of Grand Junction.

IN WITNESS WHEREOF said owners have caused theri names to be hereunto subscribed this _____ day of _____ A.D., 199__.

_____ _____

Merritt Construction, Inc., a Colorado Corp. By:

GNT Development Corp., a Colorado Corp. By:

STATE OF COLORADO)
) S.S.
COUNTY OF MESA)

The foregoing instrument was acknowledged before me this _____ day of _____ A.D., 199__ by _____ as president of Merritt Construction, Inc., a Colorado Corporation, and _____ as president of GNT Development Corp., a Colorado Corporation.

_____ _____

My commission expires:

Notary Public

Address

CLERK AND RECORDERS CERTIFICATE

STATE OF COLORADO)
) S.S.
COUNTY OF MESA)

I hereby certify that this instrument was filed in my office at _____ o'clock __ M. this _____ day of _____ A.D., 199__ and is duly recorded in Plat Book No. _____, Page _____

CITY APPROVAL

This plat of HILLVIEW COURT SUBDIVISION, a subdivision of the City of Grand Junction, County of Mesa, and State of Colorado was approved and accepted this _____ day of _____ A.D. 199__ .

_____ _____

City Manager

President of Council

SURVEYOR'S CERTIFICATE

I, Max E. Morris, certify that the accompanying plat of HILLVIEW COURT SUBDIVISION, a subdivision of a part of the City of Grand Junction, County of Mesa, State of Colorado has been prepared under my direct supervision and accurately represents a field survey of same. I further certify that this plat conforms to all applicable requirements of the Zoning and Development Code of the City of Grand Junction and all applicable state laws and regulations.

_____ _____

Max E. Morris, Q.E.D. Surveying Systems Inc.
Colorado Registered Professional Land Surveyor L.S. 16413

Date

LEGEND & NOTES

- ● FOUND SURVEY MONUMENTS SET BY OTHERS NO. 5 RE-BAR NO CAP
- ○ SET NO. 5 RE-BAR W/CAP L.S. 16413 IN CONCRETE
- ϟ MESA COUNTY SURVEY MARKER
- ⊥ NO. 5 RE-BAR W/CAP L.S. 16413

AREA SUMMARY

OPEN SPACE = 1.17 ACRES = 52%
LOTS = 0.72 ACRES = 32%
ROAD = 0.37 ACRES = 16%
TOTAL = 2.26 ACRES = 100%

CURVE TABLE

CURVE#	RADIUS	LENGTH	CHORD	CHORD BEARING	DELTA ANGLE	TANGENT
C1	122.00	73.57	72.46	S06°33'46"W	34°33'05"	37.94
C2	122.00	43.68	43.45	S20°58'13"E	20°30'53"	22.08
C3	53.00	28.94	28.58	N15°35'04"W	31°17'10"	14.84
C4	53.00	53.39	51.16	N28°54'59"E	57°42'58"	29.21
C5	25.00	81.96	49.88	S28°18'19"E	187°50'27"	364.80
C6	72.00	36.61	36.22	N51°02'52"E	29°08'06"	18.71
C7	72.00	59.30	57.64	N12°53'01"E	47°11'35"	31.45
C8	20.00	38.84	29.27	N70°52'53"E	94°05'08"	21.48
C9	101.00	97.07	93.38	S03°41'40"E	55°03'58"	52.65
C10	74.00	114.95	103.74	N13°16'24"E	89°00'07"	72.72
C11	46.00	150.81	91.78	S28°18'19"E	187°50'27"	671.24
C12	51.00	67.94	63.03	N27°27'04"E	76°19'41"	40.08
C13	143.00	86.23	84.93	S06°33'46"W	34°33'05"	44.47
C14	20.00	31.42	28.28	N21°09'41"W	90°00'00"	20.00
C15	17.00	42.60	32.30	S71°43'50"E	143°34'41"	51.67
C16	50.00	50.37	48.26	N28°54'59"E	57°42'58"	27.55
C17	22.00	72.13	43.90	S28°18'19"E	187°50'27"	321.03
C18	75.00	38.14	37.73	N51°02'52"E	29°08'06"	19.49

LINE TABLE

LINE#	BEARING	DISTANCE
L1	N66°09'41"W	10.17
L2	N66°09'41"W	41.00
L3	N66°09'41"W	38.83
L4	N62°04'33"W	3.60
L5	S23°50'19"W	30.67
L6	S57°46'28"W	18.74
L7	S57°46'28"W	18.74
L8	S23°50'19"W	10.46
L9	S57°46'28"W	18.74
L10	N23°50'19"E	10.67

NOTICE:

ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.

HILLVIEW COURT SUBDIVISION

FINAL PLAT

SITUATED IN THE NE1/4 NW1/4 OF SECTION 20, T1S, R1W OF THE UTE MERIDIAN

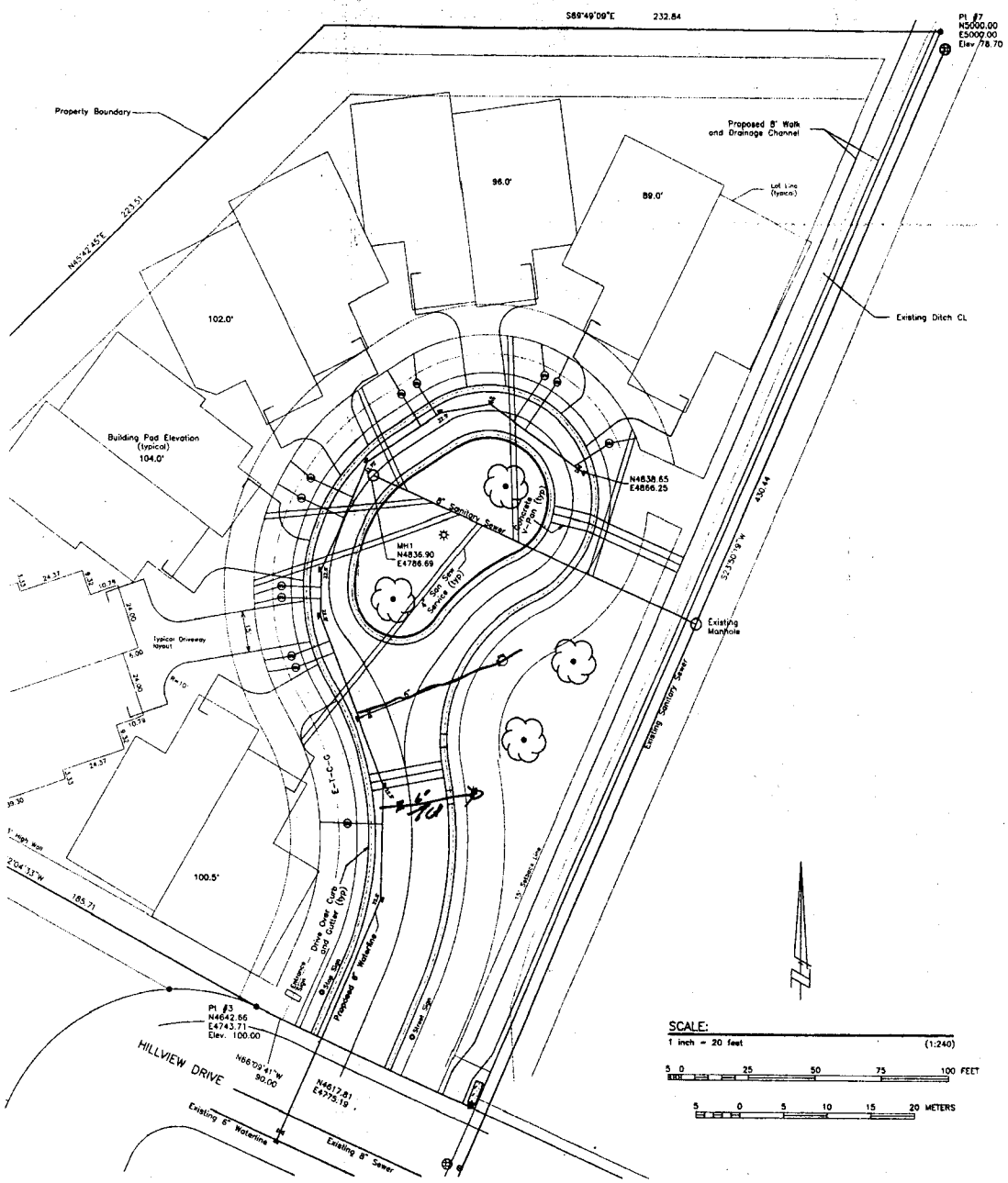
FOR: GARRISON

SCALE: FEET 0 15 30 / 0 3 10 METERS — 1IN = 30FT

DATE: 5/15/96

Q.E.D. SURVEYING SYSTEMS Inc.
1018 COLO. AVE.
GRAND JUNCTION
COLORADO 81501
(970) 241-2370
464-7568

SURVEYED BY: DS GD
DRAWN BY: DMM MEM
ACAD ID: HILLFIN
SHEET NO.
FILE: 95361



SCALE:
1 inch = 20 feet (1:240)

5 0 25 50 75 100 FEET

5 0 5 10 15 20 METERS

APPROVED FOR CONSTRUCTION:
CITY OF GRAND JUNCTION DATE

INITIAL ACCEPTANCE:
CITY OF GRAND JUNCTION DATE

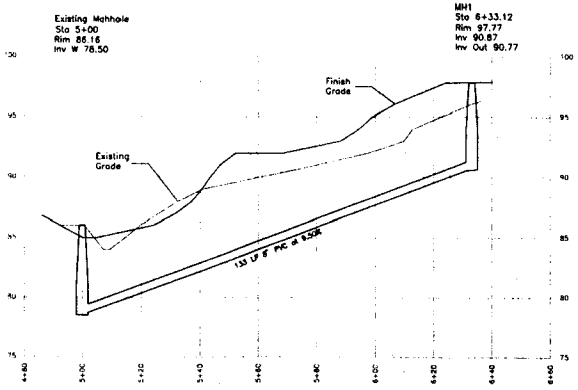
NOTES:

1. All work shall be in accordance with approved engineering plans and specifications and with City of Grand Junction specifications and standard details.
2. Water mains shall be C-900, Class 150. Installation of pipe fittings, valves, and services including testing and disinfection shall be in accordance with City of Grand Junction standard specifications and drawings.
3. Contractor shall have one signed copy of plans and a copy of the City of Grand Junction Standard Specifications on the job site at all times.
4. Water Main cover shall be a minimum of 48 inches.
5. All Water service lines shall be seamless 3/4" type K copper pipe.
6. Blowoff to be installed at all terminations of 8-inch mains as required by The City.
7. Joint restraints (retainers) may be used instead of thrust blocks at 11.25 and 22.5-degree elbow locations and other locations as approved by engineer. They may not be used at fire hydrants and fire hydrant tee locations.
8. Sanitary sewer main line shall be 8-inch PVC SDR 35. Individual service lines shall be 4 inch PVC SDR 35.
9. Cleanouts shall be installed at ends and at a maximum spacing of 100' along individual sanitary sewer service lines.
10. All sewer mains shall be laid to grade with a pipe laser.
11. All service line connections to the new main shall be made with full body wyes or tees. Topping saddles will not be used.
12. Sanitary sewer services shall not be connected directly to manholes.
13. A clay cut-off wall shall be placed 10 feet upstream from all new manholes unless otherwise noted. The cut-off wall shall extend from 6 inches below to 6 inches above granular backfill material and shall be 2 feet wide. If native material is not suitable the contractor shall import material approved by the engineer.
14. The contractor is responsible for all required sewer line testing to be completed in the presence of a City inspector. Pressure testing will be performed after compaction of the street subgrade and prior to paving. Final lamping will be done before paving is completed. These tests will be the basis for acceptance of the work.
15. The contractor shall notify City inspection 48 hours prior to commencement of construction.
16. The location of utilities shown on these plans is as determined from surface evidence. Actual locations and utilities may vary. Contractor shall verify all utility locations prior to construction.
17. SURVEY CONTROL - Control points for horizontal and vertical control are shown on drawings.

LEGEND:

- Water Meter
- Fire Hydrant
- Water Valve
- Thrust Block

SEWER PROFILE



DESIGNED BY | DRAWN BY | SURVEY DATE

REVISIONS

NO.	DATE	REMARKS	BY

WATER AND SEWER PLAN
HILLVIEW COURT

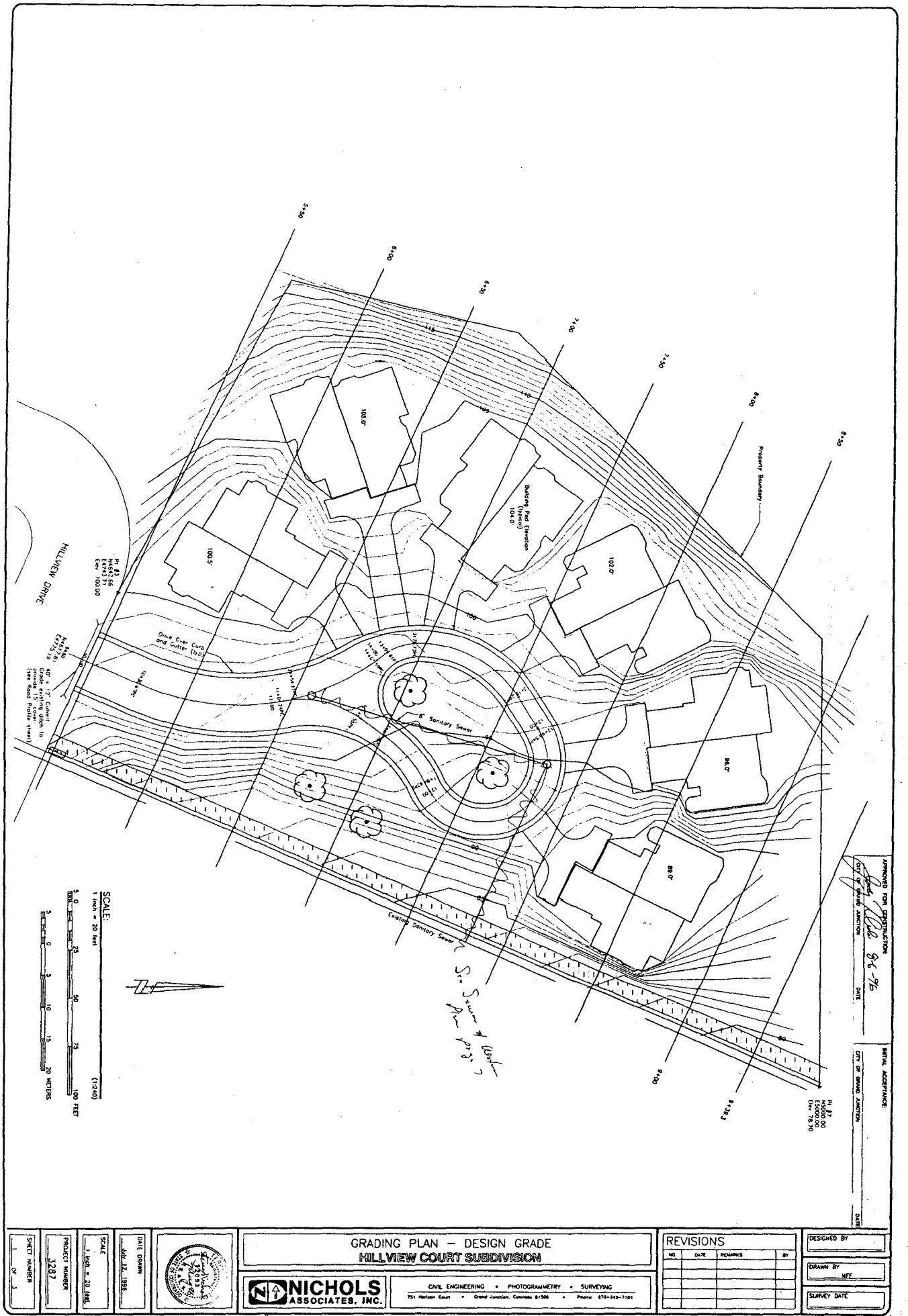
NICHOLS ASSOCIATES, INC.
CIVIL ENGINEERING • PHOTOGRAMMETRY • SURVEYING
751 Horizon Court • Grand Junction, Colorado 81506 • Phone: 970-248-7101

TERRY NICHOLS 13089 STATE OF COLORADO

DATE DRAWN: August 9, 1996
SCALE: 1 inch = 20 feet
PROJECT NUMBER: 3287
SHEET NUMBER: 7 OF 10

FPP-1996-135

E:\USER\PROJECTS\3287\SEW.dwg 12:05:28 PM Mon Aug 12 1996 NICHOLS ASSOCIATES, INC.



APPROVED FOR CONSTRUCTION:
CITY OF GRAND JUNCTION
DATE 8-6-96

INITIAL ACCEPTANCE:
CITY OF GRAND JUNCTION
DATE

GRADING PLAN – DESIGN GRADE
HILLVIEW COURT SUBDIVISION

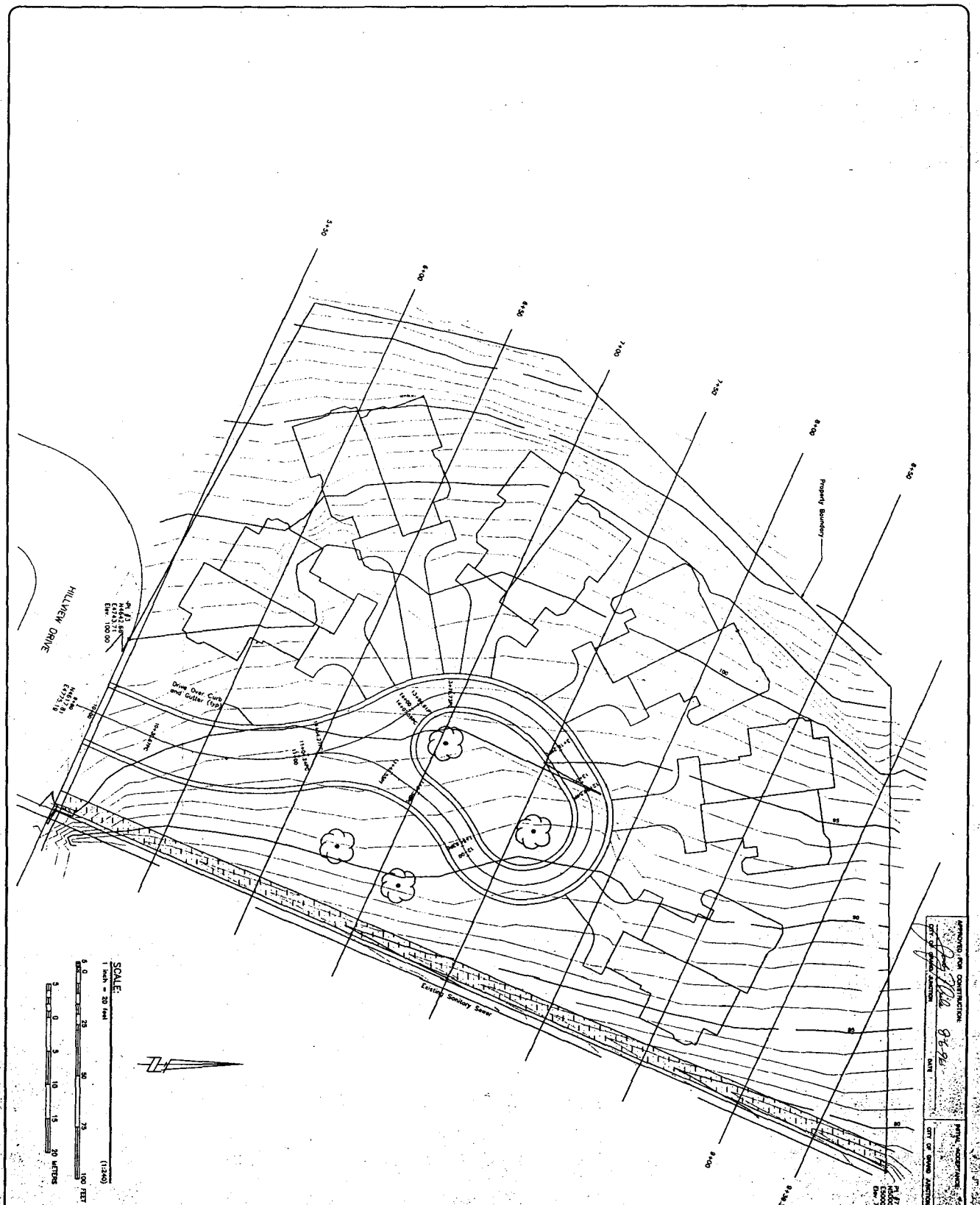
NICHOLS ASSOCIATES, INC.
CIVIL ENGINEERING • PHOTOGRAMMETRY • SURVEYING
751 Horizon Court • Grand Junction, Colorado 81506 • Phone 970-243-7101

REVISIONS			
NO.	DATE	REMARKS	BY

DESIGNED BY
DRAWN BY MEE
SURVEY DATE

SHEET NUMBER 1 OF 1
PROJECT NUMBER 3287
SCALE 1 INCH = 20 FEET
DATE DRAWN JUNE 12, 1996

FPP-1996-195



APPROVED FOR CONSTRUCTION
CITY OF GRAND JUNCTION
DATE

FINAL ACCEPTANCE
CITY OF GRAND JUNCTION
DATE

GRADING PLAN – EXISTING GRADE
HILLVIEW COURT SUBDIVISION

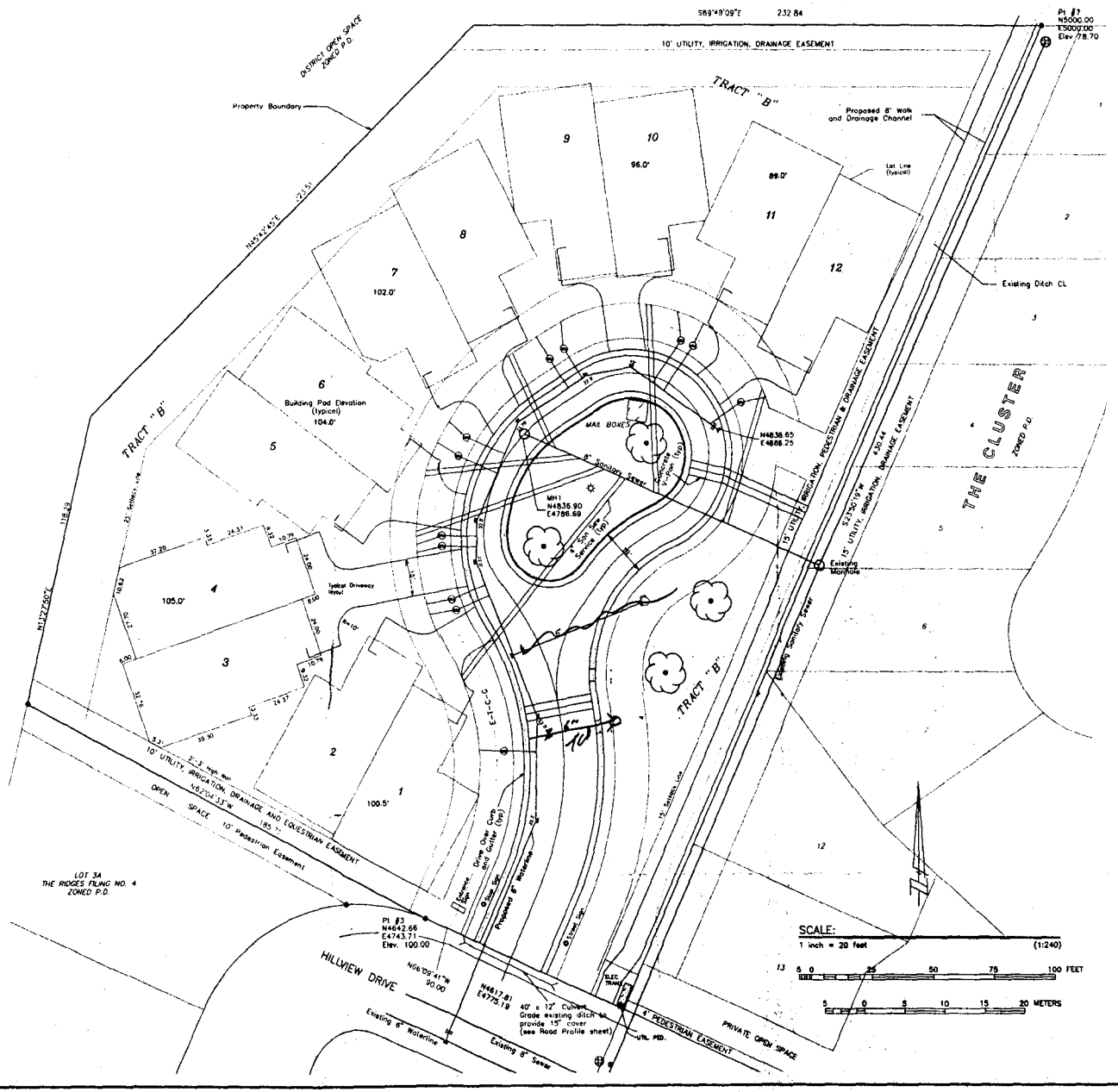
NICHOLS ASSOCIATES, INC.
CIVIL ENGINEERING · PHOTOGRAMMETRY · SURVEYING

REVISIONS

NO.	DATE	REMARKS	BY

DESIGNED BY
DRAWN BY
CHECKED BY

SHEET NUMBER 1 OF 1
PROJECT NUMBER 3287
SCALE 1 Inch = 20 feet
DATE DRAWN July 11, 1996



APPROVED FOR CONSTRUCTION
CITY OF GRAND JUNCTION DATE

INITIAL ACCEPTANCE.
CITY OF GRAND JUNCTION DATE

DESIGNED BY | DRAWN BY | SURVEY DATE

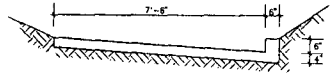
REVISIONS

NO.	DATE	REMARKS	BY

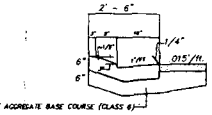
NOTES:

1. The site is located in the NE1/4 of the NW1/4 of section 20, T1S, R1W, of the Ute Meridian.
2. No parking shall be allowed on the one-way loop.
3. All driveways shall be paved.
4. Slope finish grade away from buildings at a minimum of 3% for 3'.
5. Trash collection will be by individual pickup.

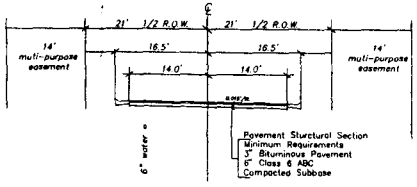
SIDEWALK AND DRAINAGE CHANNEL



DRIVE OVER CURB AND GUTTER



TYPICAL ROAD SECTION



AREA SUMMARY:

Open Space:	1.42 acres	63%
Lots:	0.51 acres	22%
Road:	0.33 acres	15%
Total:	2.26 acres	100%

UTILITY VENDORS:

Water	City of Grand Junction
Sewer	City of Grand Junction
Electric	Public Service
Telephone	US West Communications
Gas	Public Service
Irrigation	Redlands Water and Power

LEGEND:

- Water Meter
- Fire Hydrant
- Water Valve
- Thrust Block
- E-T-C-G — Electric, Telephone, Cable T.V., Gas
- Light

SITE PLAN
HILLVIEW COURT

NICHOLS ASSOCIATES, INC.
CIVIL ENGINEERING • PHOTOGRAMMETRY • SURVEYING
751 Horizon Court • Grand Junction, Colorado 81506 • Phone: 970-245-7101

TERRY NICHOLS 12503 12 Aug 96 REGISTERED LAND SURVEYOR STATE OF COLORADO

DATE DRAWN: August 9, 1996

SCALE: As Shown

PROJECT NUMBER: 3287

SHEET NUMBER: 5 OF 10

C:\USER\PROJECTS\3287SITE Mon Aug 12 08:37:37 1996 Nichols Associates, Inc.