Table of Contents

File **SPR-1996-219** Name: Office / Warehouse Buildings – East Crete Circle – C-2 Zone

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**
X		Review Sheets
		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
		***Mailing list to adjacent property owners**
		Public notice cards
		Record of certified mail
		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**
		***Staff Reports**
		***Planning Commission staff report and exhibits**
		***City Council staff report and exhibits**
		***Summary sheet of final conditions**

DOCUMENT DESCRIPTION:

		DENIED			
X	X	Correspondence			
X	X	Final Drainage Report – 10/96			
X		Warranty Deed – Bk 1219 / Bk 46 – not conveyed to City			
X		Planning Clearance – not signed or issued			
X		Easement Agreement – not conveyed to City – not recorded copy			
X		Site Plan/Landscape Plan			
		Grading and Drainage Plan			

DEVELOPMENT APPLICATION

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

Receipt _____
Date _____
Rec'd By _____

File No. _____

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

PETITION	PHASE	SIZE	LOCATION	ZONE	LAND USE
☒ Subdivision Plat/Plan	☐ Minor ☐ Major ☒ Resub		E. Crete Circle	C-2	Office/Warehouse
☐ 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
DAKOTA L.L.C.	DAVIS LAND LLC	MARK BRACKELSBERG
Name	Name	Name
710 N. TOWER AVE.	P.O. BOX 2867	3138 Northridge Dr.
Address	Address	Address
CENTRALIA, WA 98531	Grand Junction, Co 81502	Grand Junction, Co 81506
City/State/Zip	City/State/Zip	City/State/Zip
360-736-3873	970-243-2308	970-250-4003
Business Phone No.	Business Phone No.	Business Phone No.

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

We hereby acknowledge that we have familiarized ourselves with the rules and regulations with respect to the preparation of this submittal, that the foregoing information is true and complete to the best of our knowledge, and that we assume the responsibility to monitor the status of the application and the review comments. We recognize that we or our representative(s) must be present at all 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 Mark Brackelsberg 9-11-96
Signature of Person Completing Application Date

X _____, MANAGER 8-20-96
Signature of Property Owner(s) - attach additional sheets if necessary DAKOTA L.L.C. Date

SUBMITTAL CHECKLIST

~~EXPEDITED REVIEW~~ / SITE PLAN REVIEW

Location: E. Crete Circle Project Name: _____

Due 1st working day of month for hearing 1st Tuesday of following month

Date Received 10/7/96

Receipt # 4684

File # SPR-96-219

ITEMS		DISTRIBUTION																														
DESCRIPTION	SSID REFERENCE	● City Community Development	● City Dev. Eng.	● City Utility Eng.	● City Property Agent	~~● City Parks/Recreation Planner~~	● City Fire Department	● City Attorney	~~● City Grd.P.C. 10 sets~~	~~● City Downtown Development~~	● City Police	○ County Planning	● County Bldg. Dept.	~~● County Surveyor~~	○ Walker Field	○ School Dist. #51	● Irrigation District - GVIC	● Drainage District - GJDD	● Water District - Ute	○ Sewer District	● U.S. West	● Public Service	○ GVRP	○ CDOT	○ Corps of Engineers	○ Colorado Geological Survey	○ U.S. Postal Service	○ Persigo WWTF	~~● FOR Subs~~				TOTAL REQ'D.
● Application Fee $25/$360	VII-1	1																														
● Submittal Checklist*	VII-3	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	1	1	1	1	1	1	1				14
● Application Form*	VII-1	1	1	1	1	1	1	1	8	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1				
● Reduction of Assessor's Map July 4 only	VII-1	1	1	1	1	1	1	1	8	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1				
● Evidence of Title title insurance	VII-2	1			1			1																								
○ Appraisal of Raw Land	VII-1	1			1	1																										
● Names and Addresses* 200'	VII-2	1																														
● Legal Description* Property & of	VII-2	1			1			1																								
○ Deeds the easement	VII-1	1			1			1																								
○ Easements	VII-2	1	1	1	1			1													1	1	1									
○ Avigation Easement	VII-1	1			1			1							1																	
○ ROW	VII-3	1	1	1	1			1													1	1	1									
○ Covenants, Conditions, & Restrictions	VII-1	1	1					1																								
○ Common Space Agreements	VII-1	1	1					1																								
● County Treasurer's Tax Cert.	VII-1	1																														
○ Improvements Agreement/Guarantee*	VII-2	1	1	1				1																								
○ CDOT, 404, or Floodplain Permit	VII-3,4	1	1																													
● General Project Report	X-7	1	1	1	1	1	1	1	8	1	1	1			1	1	1	1	1	1	1	1	1	1	1	1	1	1				
~~● Location Map~~ Planning Clearance	~~VII-1~~	1																														
○ Composite Plan	IX-10	1	2	1	1																											
○ 11"x17" Reduction Composite Plan	IX-10	1				1	1	1	8	1	1	1	1				1	1	1	1	1	1	1	1	1	1		1	1			
● Final Plat	IX-15	1	2	1	1	1	1	1	8	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1				
○ 11"x17" Reduction of Final Plat	IX-15	1							8	1	1	1			1	1	1	1	1	1	1	1	1				1					
○ Cover Sheet & Drainage Plan	IX-11	1	2																													
● Grading ~~& Stormwater Mgmt~~ Plan	~~IX-21~~	1	2															1						1								
○ Storm Drainage Plan and Profile	IX-30	1	2															1			1	1	1						1			
○ Water and Sewer Plan and Profile	IX-34	1	2	1															1	1	1	1	1					1	1			
○ Roadway Plan and Profile	IX-28	1	2															1														
○ Road Cross-sections	IX-27	1	2																													
○ Detail Sheet	IX-12	1	2																													
● Landscape Plan	IX-20	2	1	1																												
○ Geotechnical Report	X-8	1	1										1													1						
○ Phase I & II Environmental Report	X-10,11	1	1																													
● Final Drainage Report	X-5,6	1	2															1														
○ Stormwater Management Plan	X-14	1	2															1						1								
○ Sewer System Design Report	X-13	1	2	1																1												
○ Water System Design Report	X-16	1	2	1															1													
○ Traffic Impact Study	X-15	1	2																					1								
● Site Plan	IX-29	1	2	1	1		1		8																							

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

PRE-APPLICATION CONFERENCE

Date: 8/14/96
Conference Attendance: Mark Brackelsberg, Kristen Ashbeck
Proposal: Replat/Site Plan Review
Location: E. Crete Circle

Tax Parcel Number: 2945-102-16-009/019/022
Review Fee: $100 + G&D + D Rpt + Insp.
(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? _____ Estimated Amount: _____
Recording fees required? _____ Estimated Amount: _____
Half street improvement fees/TCP required? Per engineering Estimated Amount: _____
Revocable Permit required? _____
State Highway Access Permit required? _____
On-site detention/retention or Drainage fee required? Per engineering
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.

☒ Access/Parking	O Screening/Buffering	O Land Use Compatibility
☒ Drainage	☒ 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 Mark Brackelsberg

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

FINAL
DRAINAGE REPORT

MINERVA PARK SUBDIVISION

25½ ROAD & EAST CRETE CIRCLE

CITY OF GRAND JUNCTION

Prepared For:

JOHN DAVIS
1460 North Avenue, Unit H
Grand Junction, Colorado 81501

October 1996

BANNER

Banner Associates, Inc. • Consulting Engineers & Surveyors
2777 Crossroads Blvd. • Grand Junction, CO 81506 • (970)243-2242
605 E. Main • Suite 6 • Aspen, CO 81611 • (970)925-5857

FINAL
DRAINAGE REPORT

MINERVA PARK SUBDIVISION

25½ ROAD & EAST CRETE CIRCLE

CITY OF GRAND JUNCTION

Prepared For:

JOHN DAVIS
1460 North Avenue, Unit H
Grand Junction, Colorado 81501

Prepared By:

BANNER ASSOCIATES, INC.
2777 Crossroads Boulevard
Grand Junction, Colorado 81506

October 1996

CERTIFICATION

I hereby certify that this Final Drainage Report for Minerva Park Subdivision was prepared under my direct supervision.

David E. Chase
Registered Professional Engineer
State of Colorado, #24991

COLORADO REGISTERED
DAVID E. CHASE
24991
PROFESSIONAL ENGINEER

TABLE OF CONTENTS

I. GENERAL LOCATION AND DESCRIPTION

FINAL DRAINAGE REPORT
MINERVA PARK SUBDIVISION

SITE AND MAJOR BASIN LOCATION

Lot 2 and Lot 9 of
Minerva Park Subdivision, being proposed by John Davis, is located northeast of East Crete Circle, as shown on the Vicinity Map that is included in Appendix A of this report. Minerva Park is bounded to the north by a lot occupied by Recordsmaster and land occupied by Paradise Valley Mobile Home Park, to the east by 27 1/2 Road, to the south by land owned by the Moose Lodge, and to the west by land occupied by the Western Region Developmental Center.

SITE AND MAJOR BASIN DESCRIPTION

improvements will be
The proposed ~~Minerva Park Subdivision is~~ approximately 3 acres in size. This area consists mostly of bare ground with some grass understory near the south irrigation ditch. Surface grades range from 0.5 - 2% sloping downward to the southwest. Vegetation covers approximately 10% of the ground as observed in this region. At the time of the writing of this report, piles of fill dirt occupy the eastern half of the site.

In researching the soils on the site, reference was made to the Soil Survey of the Grand Junction Area as issued by the U.S. Department of Agriculture, Soil Conservation Service, November 1955. All soils in this subdivision are classified as Sagers silty clay loam (Bc) as described in Appendix A of this report. This soil is classified as hydrologic soil type D, having low infiltration rates when thoroughly wetted.

II. EXISTING DRAINAGE CONDITIONS

MAJOR BASIN

In researching the floodplain hazard for the area, reference was made to the Flood Insurance Rate Map for the City of Grand Junction as produced by the Federal Emergency Management Agency, revised July, 1992. The existing site lies approximately 1,100 feet east of the 100-year flood delineation for Horizon Drive Channel. Therefore, no part of the proposed filing is within the 100-year flood limits.

SITE

The western boundary is fenced, heavily vegetated, and graded such that no runoff is introduced from off site. The northern boundary is adjacent to a fenced mobile home park that drains to the north. The eastern boundary is 25 1/2 Road including the roadside drainage ditch which accepts runoff from the west half of 25 1/2 Road. The southern boundary is a small irrigation/drainage ditch which accepts all the runoff from this site, and prevents runoff from being introduced from the Moose Lodge parking lot to the south. This ditch is fed from a 12" diameter iron pipe in the southeast corner, flows westward to the parcel's southwest corner where it bends south offsite, and flows into a 10" diameter PVC pipe. This pipe flows under Crete Circle and discharges into a drainage ditch that ultimately flows into the Buthorn Drain. For the purposes of this report, the historic drainage outfall point of the subdivision is considered to be where the ditch bends south in the southwest corner of the parcel.

III. PROPOSED DRAINAGE CONDITIONS

CHANGES IN DRAINAGE PATTERNS

No change in drainage patterns is proposed for the lands adjacent to and surrounding Minerva Park Subdivision. Proposed drainage patterns within the site will be modified, as is customary, to accommodate development and to better control surface flows to designed collection areas. A Preliminary Drainage Map is included in Appendix B that illustrates the existing drainage basin. Upon development, a headwall and outlet pipe structure along the southern ditch will be built in conjunction with strategic grading of the parking lots to create a detention area. Flows from the developed site will be discharged at historic levels through this outlet structure into the existing ditch.

MAINTENANCE ISSUES

Access to the drainage and outlet structure are provided, by design, to be directly from the parking area that borders it. The owner of lot 9, or the land in the southwest portion of the parcel, will claim ownership and maintenance responsibilities for the drainage basin. The developer is currently aware of this required maintenance agreement and it will be written into subsequent sales or lease contracts.

IV. DESIGN CRITERIA & APPROACH

GENERAL CONSIDERATIONS

Due to the isolation of the site on all sides, larger scale master planning for drainage is difficult. Strategic location of a detention area graded into the parking lot lends itself as an attractive and effective layout for stormwater collection. No constraints should be imposed on future adjacent development due to the development of this filing.

HYDROLOGY

Hydrology calculations will be based on the 2 and 100-year rainfall events and precipitation based on the Depth-Duration-Frequency (DDF) Table "A-2" as obtained from the City of Grand Junction Stormwater Management Manual (SWMM), June 1994. Runoff calculations will be performed using the SCS Curve Number method. Detention basin design will be accomplished by the Modified Rational Method using Haestad Methods software for maximum volume required with historic flow release rates. Parameter selection and design procedures will be based on using a composite Curve Number, an IDF value corresponding to the largest time of concentration (Tc) obtained for each drainage basin and the respective basin area obtained by use of a planimeter or computer.

HYDRAULICS

Hydraulic calculations will be accomplished by Manning's equation for gravity flow in circular channels using Haestad Methods FlowMaster Professional Edition and/or StormCAD software. Detention pond outlet structure design will be based on use of Haestad Methods Pond-2 software. Parameter selection will be determined by the pipe material selected, accompanying pipe characteristics and the City of Grand Junction standards and specifications for storm sewer construction. Analysis and design procedures will be based on individual and combined subcatchments within the development using Manning's formula and the Rational Method for storm sewer sizing. Again, pipeline sizing may be determined using Haestad Methods StormCAD software.

V. RESULTS & CONCLUSIONS

RUNOFF RATES

Runoff rates for the entire parcel are tabulated below.

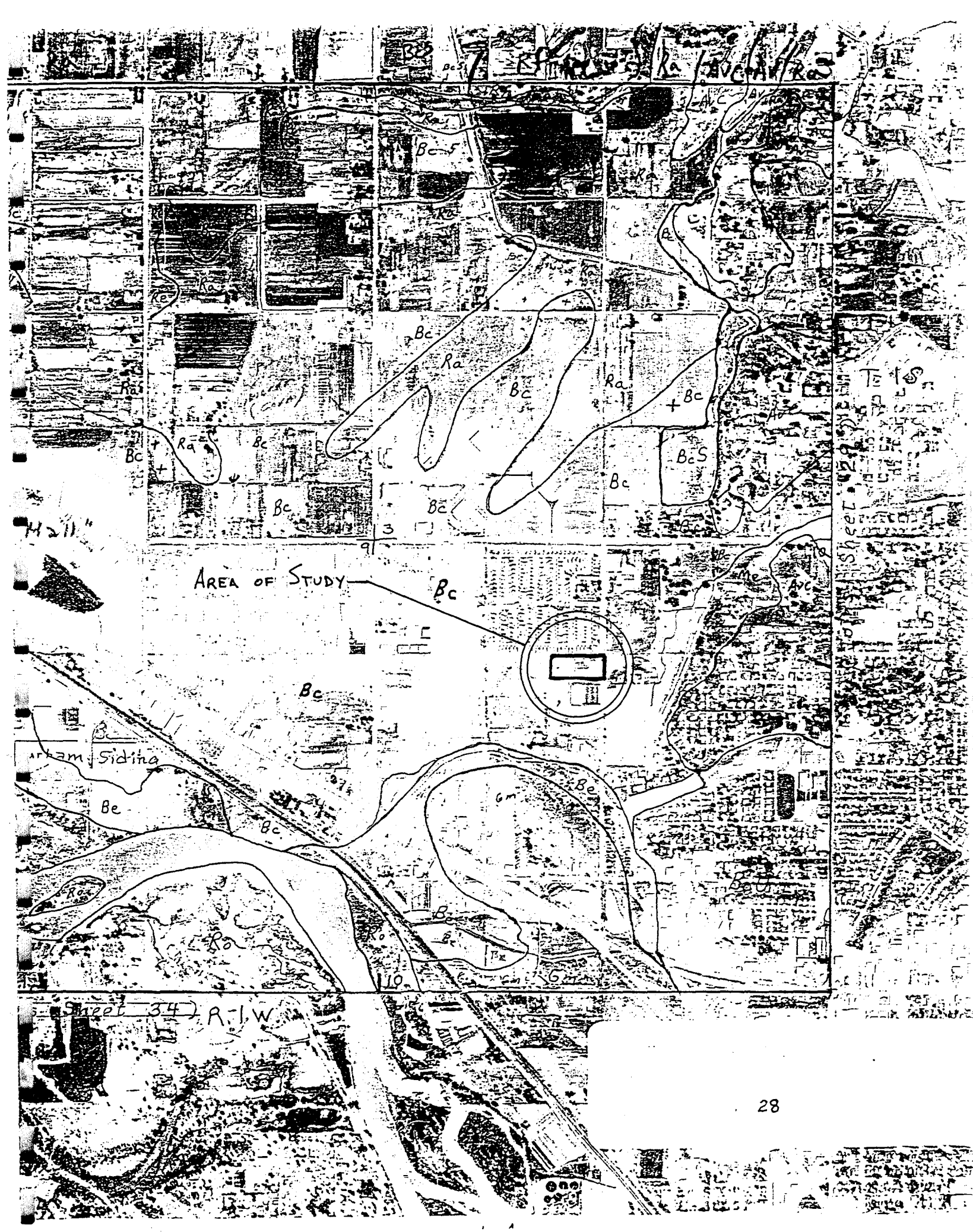
	Historic	Developed
2 year storm:	0 cfs	2 cfs
100 year storm:	4 cfs	7 cfs

The 0 cfs value for the historic 2-year storm event is qualified by noting the small basin area, relatively flat slope, and existing soil conditions. See appendix C for these calculations.

COMPLIANCE

As can be seen above, developing this parcel will significantly affect its total runoff. As is required, however, only the historic runoff rates will be released. These flows will be released into the historic drainage path, the existing drainage/irrigation ditch along the parcel's southern border.

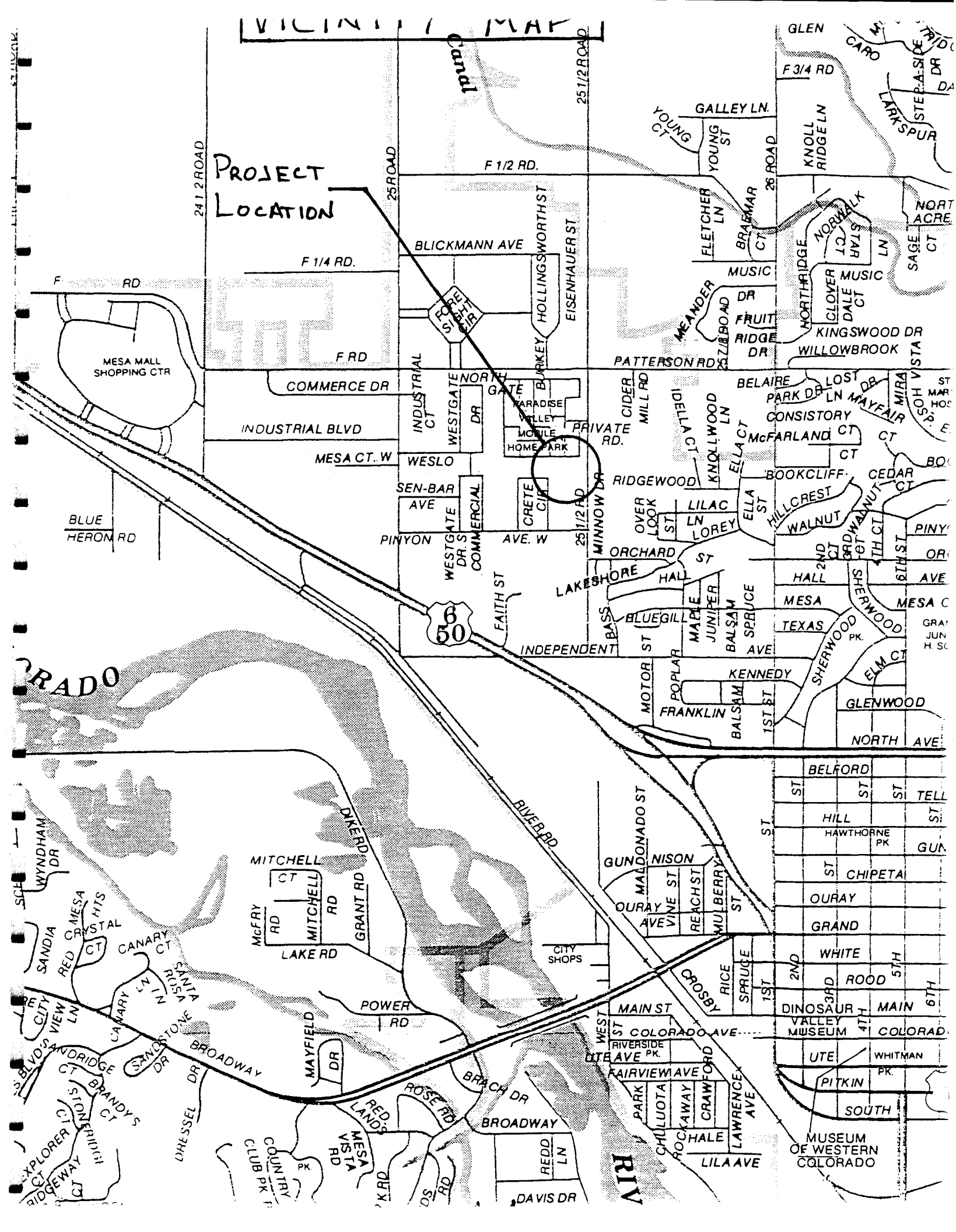
APPENDIX A


AREA OF STUDY
Bc
Ra
Be
Sidina
Sheet 34
R-1-W
T-1-S
10

NONTECHNICAL SOILS DESCRIPTION REPORT
David Hartman

Map Symbol	Soil name and description
Bc	Sagers silty clay loam, 0 to 2 percent slopes This unit is suited for irrigated crops. It has few limitations. Furrow and sprinkler irrigation is suited to this soil. Irrigation water needs to be applied at a rate that insures optimum production without increasing deep percolation, runoff, and erosion. Use of pipe or ditch lining reduces water loss and deep percolation. Tilth and fertility can be improved by returning crop residue to the soil and using a suitable rotation. It is important to time tillage operations based upon proper soil moisture conditions to avoid development of adverse field conditions such as cloddiness. Excessive cultivation can result in the formation of a tillage pan. This pan can be broken by subsoiling when the soil is dry. This unit consists of very deep, well drained soils on old alluvial fans and low terraces. These soils formed in alluvium derived dominantly from Mancos shale. The surface layer is silty clay loam 12 inches thick. The upper 13 inches of the underlying material are silty clay loam, and the lower part to a depth of more than 60 inches is silty clay loam with few fine gypsum crystals. Permeability of this soil is slow. Available water capacity is high. Effective rooting depth is 60 inches or more. Runoff is slow, and the hazard of water erosion is slight. This unit is considered prime farmland. Capability Subclass 2E; irrigated; 7C; nonirrigated

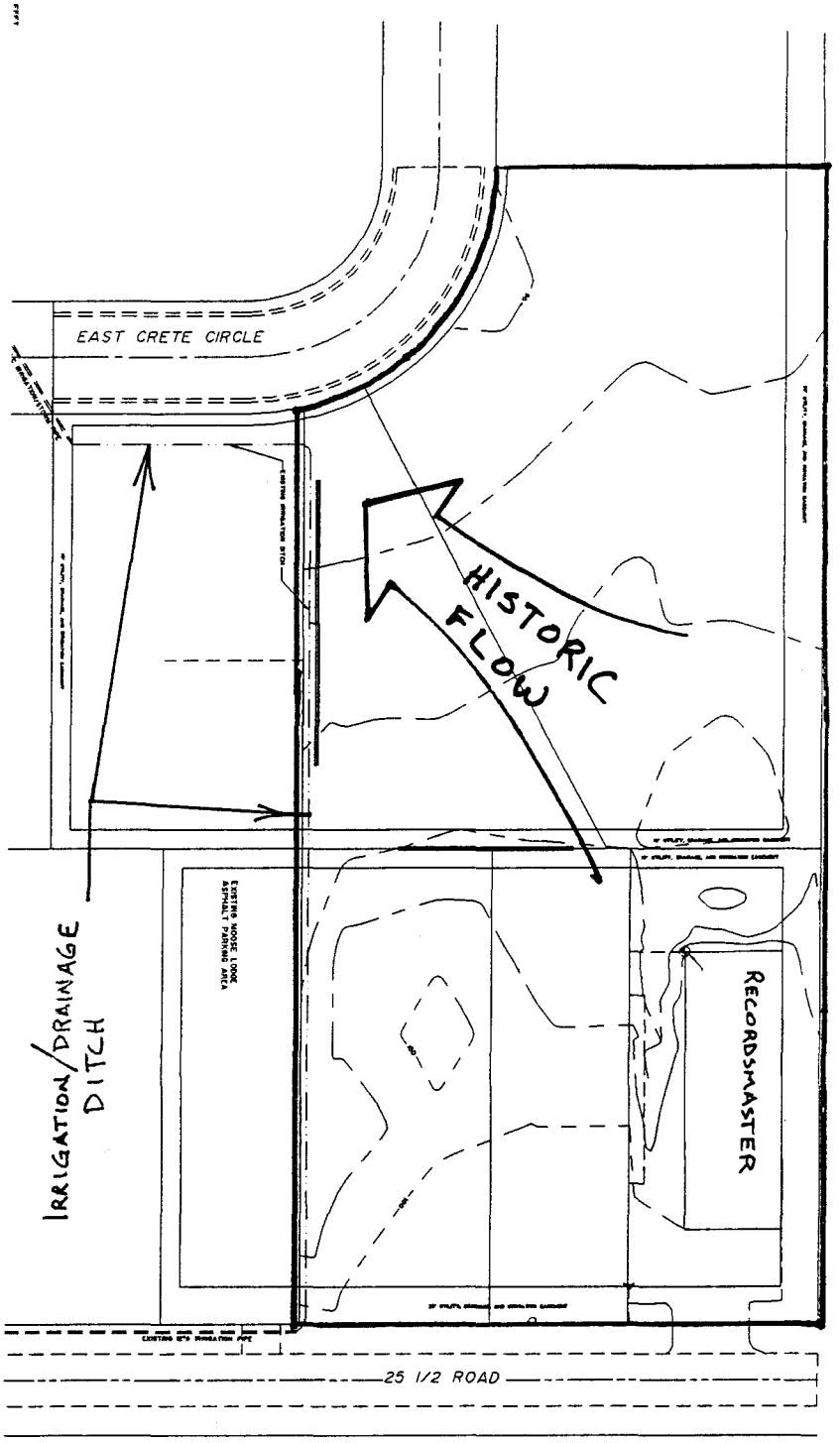
Map Symbol	Soil name and description
	Capability classification is the grouping of soils to show, in a general way, their suitability for most kinds of farming. It is a practical classification based on limitations of the soils, the risk of damage when they are used, and the way they respond to treatment. The soils are classified according to degree and kind of permanent limitation, but without consideration of major and generally expensive landforming that would change the slope, depth, or other characteristics of the soils; without consideration of possible unlikely major reclamation projects. Class II - Some limitations that reduce the choice of crops or require moderate conservation measures. Class VII - Not suited for cultivation. Very severe limitations. Suited for range, woodland or wildlife uses if carefully managed. Usually cannot apply physical practices such as pitting, furrowing, seeding, etc. E - Erosion by wind of water is the major problem. C - Climate is the major hazard. Growing season may be very short; there is a shortage of rainfall or both.


VICINITY MAP
PROJECT LOCATION
24 1/2 ROAD
25 ROAD
25 1/2 ROAD
F 1/2 RD.
F 1/4 RD.
F RD
F 3/4 RD
BLICKMANN AVE
GALLEY LN.
YOUNG CT
YOUNG ST
KNOLL RIDGE LN
26 ROAD
FLETCHER LN
BRAEMAR CT
NORTHRIDGE
NORWALK STAR CT
SAGE CT
MUSIC
MEANDER DR
CLOVER DALE CT
FRUIT RIDGE DR
KINGSWOOD DR
WILLOWBROOK
PATTERSON RD
FORE SIGHT CIR
HOLLINGSWORTH ST
EISENHAUER ST
BURKEY
MESA MALL SHOPPING CTR
COMMERCE DR
INDUSTRIAL BLVD
INDUSTRIAL CT
WESTGATE DR
NORTH GATE
PARADISE VALLEY MOBILE HOME PARK
PRIVATE RD.
CIDER MILL RD
IDELLA CT
KNOLLWOOD LN
ELLA CT
BELAIRE
PARK DR
LOST LN
MAYFAIR
CONSISTORY
McFARLAND CT
MESA CT. W
WESLO
SEN-BAR AVE
CRETE CIR
COMMERCIAL
RIDGEWOOD
BOOKCLIFF
CEDAR CT
BLUE HERON RD
PINYON
AVE. W
WESTGATE DR. S
MINNOW DR
OVER LOOK ST
LILAC LN
LOREY
ELLA ST
HILLCREST
WALNUT
ORCHARD ST
LAKESHORE
HALL
FAITH ST
INDEPENDENT
BASS ST
BLUEGILL
MAPLE
JUNIPER
BALSAM
SPRUCE
TEXAS
MESA
SHERWOOD PK.
SHERWOOD
ELM CT
KENNEDY
MOTOR
POPLAR
FRANKLIN
1ST ST
GLENWOOD
NORTH AVE
6
50
RIVER RD
DIKE RD
MITCHELL CT
MITCHELL RD
McFRY RD
GRANT RD
LAKE RD
WYNDHAM DR
SANDIA
CRYSTAL
RED MESA HTS
CANARY CT
SANTA RISA
CITY VIEW LN
POWER RD
MAYFIELD DR
SANDSTONE DR
SANDRIDGE CT
BRANDYS CT
STONEBRIDGE CT
EXPLORER CT
RIDGEWAY CT
BROADWAY
ROSE RD
BRACH DR
REDLANDS MESA VISTA RD
COUNTRY CLUB PK
REDD LN
DAVIS DR
CITY SHOPS
GUNNISON
MALDONADO ST
REACH ST
MULBERRY ST
VINE ST
OURAY AVE
CHIPETA
GRAND
WHITE
ROOD
MAIN ST
COLORADO AVE
RIVERSIDE PK.
FAIRVIEW AVE
CROSBY
RICE
SPRUCE
1ST
2ND
3RD
4TH
5TH
6TH
BELFORD
HILL
HAWTHORNE PK
DINOSAUR VALLEY MUSEUM
UTE
WHITMAN PK.
PITKIN
SOUTH
PARK
CHLUOTA
ROCKAWAY
CRAWFORD
LAWRENCE AVE
HALE
LILA AVE
MUSEUM OF WESTERN COLORADO

APPENDIX B

PRELIMINARY MAJOR DRAINAGE BASIN

1 INCH = 100 FEET



APPENDIX C

Quick TR-55 Ver.5.46 S/N:1315430326
Executed: 07:21:08 10-04-1996

MINERVA PARK SUBDIVISION
HISTORIC CONDITIONS

RUNOFF CURVE NUMBER DATA

Composite Area: area

SURFACE DESCRIPTION	AREA (acres)	CN	
DESERT SHRUB, POOR HYD SOIL CON	3.03	88	
COMPOSITE AREA --->	3.03	88.0	(88)

ick TR-55 Ver.5.46 S/N:1315430326
xecuted: 07:42:39 09-27-1996 58.TCT

MINERVA PARK DEVELOPMENT
HISTORIC CONDITIONS

Tc COMPUTATIONS FOR:

SHEET FLOW (Applicable to Tc only)

Segment ID		1	
Surface description		ground	
Manning's roughness coeff., n		0.0110	
Flow length, L (total < or = 300)	ft	300.0	
Two-yr 24-hr rainfall, P2	in	0.700	
Land slope, s	ft/ft	0.0100	
$T = \frac{.007 * (n*L)^{0.8}}{P2^{0.5} * s^{0.4}}$	hrs	0.14	= 0.14

SHALLOW CONCENTRATED FLOW

Segment ID		2	
Surface (paved or unpaved)?		Unpaved	
Flow length, L	ft	200.0	
Watercourse slope, s	ft/ft	0.0100	
$Avg.V = Csf * (s)^{0.5}$	ft/s	1.6135	
where: Unpaved Csf = 16.1345			
Paved Csf = 20.3282			
T = L / (3600*V)	hrs	0.03	= 0.03

CHANNEL FLOW

Segment ID			
Cross Sectional Flow Area, a	sq.ft	0.00	
Wetted perimeter, Pw	ft	0.00	
Hydraulic radius, r = a/Pw	ft	0.000	
Channel slope, s	ft/ft	0.0000	
Manning's roughness coeff., n		0.0000	
$V = \frac{1.49 * r^{2/3} * s^{1/2}}{n}$	ft/s	0.0000	
Flow length, L	ft	0	
T = L / (3600*V)	hrs	0.00	= 0.00

::

TOTAL TIME (hrs) 0.17

Quick TR-55 Version: 5.46 S/N: 1315430326

>>>>> GRAPHICAL PEAK DISCHARGE METHOD <<<<<

MINERVA PARK SUBDIVISION
HISTORIC CONDITIONS

CALCULATED
DISK FILE: PRE-58 .GPD

Drainage Area	(acres)	3.032 --->	0.0047 sq.mi.	
Runoff Curve Number	(CN)	88		
Time of Concentration,Tc	(hrs)	.17		
Rainfall Distribution	(Type)	II		
Pond and Swamp Areas	(%)	0 --->	0.0 acres	

	Storm #1	Storm #2	Storm #3
Frequency (years)	2	100	
Rainfall, P, 24-hr (in)	.7	2.01	
Initial Abstraction, Ia (in)	0.273	0.273	0.273
Ia/p Ratio	0.390	0.136	0.000
Unit Discharge, * qu (csm/in)	634	832	0
Runoff, Q (in)	0.10	0.97	0.00
Pond & Swamp Adjustment Factor	1.00	1.00	1.00
PEAK DISCHARGE, qp (cfs)	0	4	0

Summary of Computations for qu

Ia/p	#1	0.350	0.100	0.000
C0	#1	2.419	2.553	0.000
C1	#1	-0.616	-0.615	0.000
C2	#1	-0.088	-0.164	0.000
qu (csm)	#1	692.986	850.073	0.000
Ia/p	#2	0.400	0.300	0.000
C0	#2	2.364	2.465	0.000
C1	#2	-0.599	-0.623	0.000
C2	#2	-0.056	-0.117	0.000
qu (csm)	#2	618.632	750.561	0.000
* qu (csm)		634	832	0

* Interpolated for computed Ia/p ratio (between Ia/p #1 & Ia/p #2)
If computed Ia/p exceeds Ia/p limits, bounding limit for Ia/p is used.

$$\log(qu) = C0 + (C1 * \log(Tc)) + (C2 * (\log(Tc))^2)$$

qp (cfs) = qu(csm) * Area(sq.mi.) * Q(in.) * (Pond & Swamp Adj.)

APPENDIX D

Quick TR-55 Ver.5.46 S/N:1315430326
Executed: 07:22:38 10-04-1996

MINERVA PARK SUBDIVISION
DEVELOPED CONDITIONS

RUNOFF CURVE NUMBER DATA

Composite Area: area

SURFACE DESCRIPTION	AREA (acres)	CN	
IMPERVIOUS, PAVEMENT, ROOFS	2.77	98	
WESTERN DESERT LANDSCAPE	0.26	88	
COMPOSITE AREA --->	3.03	97.1	(97)

Quick TR-55 Ver.5.46 S/N:1315430326
Executed: 07:49:06 10-04-1996 POST-58.TCT

MINERVA PARK SUBDIVISION
DEVELOPED CONDITIONS

Tc COMPUTATIONS FOR:

SHEET FLOW (Applicable to Tc only)

Segment ID		AB	
Surface description		ASPHALT	
Manning's roughness coeff., n		0.0110	
Flow length, L (total < or = 300)	ft	300.0	
Two-yr 24-hr rainfall, P2	in	0.700	
Land slope, s	ft/ft	0.0100	
$T = \frac{.007 * (n*L)^{0.8}}{P2^{0.5} * s^{0.4}}$	hrs	0.14	= 0.14

SHALLOW CONCENTRATED FLOW

Segment ID		BC	
Surface (paved or unpaved)?		Paved	
Flow length, L	ft	100.0	
Watercourse slope, s	ft/ft	0.0100	
$Avg.V = Csf * (s)^{0.5}$	ft/s	2.0328	
where: Unpaved Csf = 16.1345			
Paved Csf = 20.3282			
T = L / (3600*V)	hrs	0.01	= 0.01

CHANNEL FLOW

Segment ID			
Cross Sectional Flow Area, a	sq.ft	0.00	
Wetted perimeter, Pw	ft	0.00	
Hydraulic radius, r = a/Pw	ft	0.000	
Channel slope, s	ft/ft	0.0000	
Manning's roughness coeff., n		0.0000	
$V = \frac{1.49 * r^{2/3} * s^{1/2}}{n}$	ft/s	0.0000	
Flow length, L	ft	0	
T = L / (3600*V)	hrs	0.00	= 0.00

TOTAL TIME (hrs) 0.15

Quick TR-55 Version: 5.46 S/N: 1315430326

>>>>> GRAPHICAL PEAK DISCHARGE METHOD <<<<<

Minerva Park - Developed Conditions

CALCULATED
DISK FILE: POST-58 .GPD

Drainage Area	(acres)	3.032 --->	0.0047 sq.mi.	
Runoff Curve Number	(CN)	97		
Time of Concentration,Tc	(hrs)	.15		
Rainfall Distribution	(Type)	II		
Pond and Swamp Areas	(%)	0 --->	0.0 acres	

	Storm #1	Storm #2	Storm #3
Frequency (years)	100	2	
Rainfall, P, 24-hr (in)	2.01	.7	
Initial Abstraction, Ia (in)	0.062	0.062	0.062
Ia/p Ratio	0.031	0.088	0.000
Unit Discharge, * qu (csm/in)	889	889	0
Runoff, Q (in)	1.68	0.43	0.00
Pond & Swamp Adjustment Factor	1.00	1.00	1.00
PEAK DISCHARGE, qp (cfs)	7	2	0

Summary of Computations for qu

Ia/p	#1	0.100	0.100	0.000
C0	#1	2.553	2.553	0.000
C1	#1	-0.615	-0.615	0.000
C2	#1	-0.164	-0.164	0.000
qu (csm)	#1	888.556	888.556	0.000
Ia/p	#2	0.100	0.100	0.000
C0	#2	2.553	2.553	0.000
C1	#2	-0.615	-0.615	0.000
C2	#2	-0.164	-0.164	0.000
qu (csm)	#2	888.556	888.556	0.000
* qu (csm)		889	889	0

* Interpolated for computed Ia/p ratio (between Ia/p #1 & Ia/p #2)
If computed Ia/p exceeds Ia/p limits, bounding limit for Ia/p is used.

$$\log(qu) = C0 + (C1 * \log(Tc)) + (C2 * (\log(Tc))^2)$$

qp (cfs) = qu(csm) * Area(sq.mi.) * Q(in.) * (Pond & Swamp Adj.)

Quick TR-55 Version: 5.46 S/N: 1315430326

>>>>> DETENTION STORAGE ESTIMATE <<<<<

MINERVA PARK
DEVELOPED CONDITIONS
VOLUME REQ'D TO DETAIN (7 CFS-4 CFS)--- 3 CFS

CALCULATED
DISK FILE: DPOND-58.DET

Drainage Area (acres) 3.032 0.0047 sq.mi.
Rainfall Distribution (Type) II

	Storm #1	Storm #2	Storm #3
Frequency (years)	100	2	
Peak Inflow, qi (cfs)	7	2	0
Inflow Runoff, Q (in)	1.68	.43	0
Peak Outflow, qo (cfs)	4	0	
qo/qi Ratio	0.571	0.000	0.000
* Vs/Vr Ratio	0.250	0.682	0.000
Inflow Volume, Vr (ac-ft)	0.4	0.1	0.0
STORAGE VOLUME, Vs (ac-ft)	0.1	0.1	0.0

Summary of Volume Computations

C0	0.682	0.682	0.682
C1	-1.430	-1.430	-1.430
C2	1.640	1.640	1.640
C3	-0.804	-0.804	-0.804
* Vs/Vr	0.250	0.682	0.000

$$* \quad Vs/Vr = C0 + (C1*(qo/qi)) + (C2*(qo/qi)^2) + (C3*(qo/qi)^3)$$

Graphical Peak Discharge File Used for Inflow Data:
POST-58 .GPD

REVIEW COMMENTS

FILE #SPR-96-219 **TITLE HEADING:** East Crete Circle Office/Retail/ Warehouse

LOCATION: East Crete Circle

PETITIONER: Davis Land, LLC

PETITIONER'S ADDRESS/TELEPHONE: P.O. Box 2867
Grand Junction, CO 81502
243-2308

PETITIONER'S REPRESENTATIVE: Mark Bracklesberg

STAFF REPRESENTATIVE: Michael Drollinger

NOTE: THE PETITIONER IS REQUIRED TO SUBMIT FOUR (4) COPIES OF WRITTEN RESPONSE AND REVISED DRAWINGS ADDRESSING ALL REVIEW COMMENTS.

CITY COMMUNITY DEVELOPMENT **10/24/96**
Michael Drollinger **244-1446**

1. 52 parking spaces are shown on the Site Plan - parking lots over 50 spaces are required to meet the landscaping requirements in Section 5-5-1F; please revise Site Plan to meet these requirements.
2. Revised plans must be submitted on 24" x 36" sheets as required in the SSID Manual which was previously supplied to you.
3. Please provide calculations for required parking.
4. It appears adequate maneuvering space has not been provided for the westernmost parking spaces on the plans; please revise.
5. Will there be a fence or other buffering on the eastern property line or will access be permitted to the adjoining proposed development. If access is permitted, a cross-access easement shall be provided.
6. Please provide a detail for the type of bike rack proposed.
7. The plans do not clearly indicate the location of the doors on the building; provide either a building elevation and/or revise site plan.
8. Revised plans must be submitted on 24" x 36" sheets as required in the SSID Manual and previously supplied to you.

CITY DEVELOPMENT ENGINEER **10/15/96**
Jody Kliska **244-1591**

1. A drainage easement for the adjoining property to use the detention area is required.
2. The drainage report did not include calculations for the outlet structure of the pond.
3. Walls on the drainage plan are not shown on the site plan. A wall detail is also required.
4. Please indicate on the site plan the parking and circulation areas to be paved.
5. 52 parking spaces are shown on the site plan, 49 are called out in the narrative.

CITY UTILITY ENGINEER **10/16/96**
Trent Prall **244-1590**

1. The two drawings submitted show the water, sewer and gas lines in differing locations. Please pay more attention to this detail when you go to tap one line or the other.
2. Sewer lines do not curve as shown on the plans. Typically they are in straight lines between the manholes.
3. Each building shall have its own sewer service line terminating in the public sewer in E. Crete Circle.
4. Buildings may require grease interceptors for the kitchens. Please contact Dan Tonello with the Industrial Pretreatment section (244-1489) at the Persigo Sewer Treatment Plant for industrial waste review.
5. Please contact Jodi Romero of the City Customer Service Division at 244-1520 for information regarding sewer plant investment fees.

CITY POLICE DEPARTMENT **10/16/96**
Lisa Decamillo **244-3587**

There needs to be a lighting plan for the 100' x 100' west building and the building on the north side. Since there is a 6' privacy fence on the north and west sides, the views of the backs of these buildings are limited to any security or law enforcement officers doing a security check.

CITY FIRE DEPARTMENT **10/15/96**
Hank Masterson **244-1414**

1. A flow test of area fire hydrants is required to determine available flows. Contact the Fire Department to schedule a time for this test.
2. Submit complete sealed plans to the Fire Department for our review and for a fire flow survey. Requirements for any on-site hydrants will depend on required fire flows, available flows, and number of required hydrants.

CITY ATTORNEY **10/10/96**
Dan Wilson **244-1505**

No comment.

MESA COUNTY BUILDING DEPARTMENT **10/08/96**
Bob Lee **244-1656**

Each building shall require a separate building permit. Plans must be scaled. Allow 10-15 days for plan review and permit issuance. West side of Building A will require fire-protection..

GRAND JUNCTION DRAINAGE DISTRICT **10/15/96**
John Ballagh **242-4343**

Flows from this site enter the Buthorn Drain, a Grand Junction Drainage District facility. The Buthorn Drain is at capacity during frequent storm events. On-site detention is strongly recommended.

UTE WATER **10/21/96**

Gary Mathews **242-7491**

1. Contact with Ute Water is needed to discuss back flow prevention if fire protection is needed inside the buildings.
2. Construction plans required 48 hours before development begins.
3. Policies and fees in effect at the time of application will apply.

TO DATE, NO COMMENTS RECEIVED FROM:

City Property Agent
Grand Valley Irrigation
U.S. West
Public Service

570 EAST CRETE CIRCLE

RESPONSE TO REVIEW COMMENTS

CITY COMMUNITY DEVELOPMENT-MICHAEL DROLLINGER

1. Parking shall be 49 spaces as per narrative.
2. Submittal shall be on 24"x36".
3. Parking has been figured as follows: Building A, tentatively reserved, will have 1739 sq.ft. of office space (1739 divided by 300 sq.ft./parking space=5 parking spaces), 443sq.ft. of breakroom/kitchen space=0 parking space, and 7818 sq.ft. of warehouse space (1 employee at the busiest shift=1 parking space), and there are 3 company vehicles which will be parked in the warehouse=0 parking space. Buildings B & C are identical. There will be 14 units 25'x50'. 2 units will be 1129sq. ft. of office space (1129sq.ft.divided by 300 sq.ft. x 2=6 parking spaces, and 121 sq.ft. of kitchen/breakroom space (121sq.ft. divided 0x2=0 parking spaces). The other 12 units in building B & C will have 257sq.ft. of office space each (12 parking spaces) and 993sq.ft. of warehouse space which we will assign 1 parking space per unit (12 parking spaces) for either one employee per unit of warehouse space or 1 company vehicle, which could easily by parked inside the units. This totals 36 spaces and allows for some changes in the use of buildings B & C which have no tenant reservations as of now.
4. See revised site plan.
5. See attached "Easement Deed And Agreement".
6. See revised site plan.
7. See revised site plan.
8. Plans will be on 24"x36" sheets, although what we last submitted was O.Ked by Kristen Ashbeck.

CITY DEVELOPMENT ENGINEER-JODY KLISKA

1. A drainage easement for the adjoining property is attached.
2. See attached drainage report calculations from Banner Engineers.
3. See revised site plan.
4. See revised site plan.
5. See revised site plan. Parking shall be 49 spaces as per narrative.

CITY UTILITY ENGINEER-TRENT PRALL

1. Tapping water, sewer, and gas lines will be done carefully with utility locates done prior to any digging being done.
2. So noted.
3. Yes, this will be done.
4. Called Dan Tonello---no grease interceptors will be required for any of the buildings on the site. See attached copy of the receipt ("revenue recap sheet--$50.00) necessary to clear with Persigo Waste Water Treatment Plant.
5. Contacted Jodi Romero sewer plant investment fee will be $1,237.50 (see attached bid).

CITY POLICE DEPARTMENT-LISA DECAMILLO

Talked with Lisa, we will put 2 outside lights on both the west and north sides of Building A and 2 outside lights on the north side of Building C.

CITY FIRE DEPARTMENT-HANK MASTERSON

1. Met with Hank at the job site and did flow tests on existing fire hydrants which indicated that no additional hydrants or inside sprinkler systems would be necessary. He will communicate findings to Michael Drollinger.
2. So noted.

MESA COUNTY BUILDING DEPARTMENT-BOB LEE

Talked with Bob Lee. Building A will be required to have a 1 hour firewall on the west exterior wall.

GRAND JUNCTION DRAINAGE DISTRICT-JOHN BALLAGH

On site detention will be incorporated in the site plan.

UTE WATER-GARY MATHEWS

1. We will not be required to provide fire protection inside any of the buildings.
2. So noted.
3. So noted.

MARK BRACKELSBERG-REPRESENTATIVE

Grand Junction Community Development Department
Planning • Zoning • Code Enforcement
250 North Fifth Street
Grand Junction, Colorado 81501-2668
(970) 244-1430 FAX (970) 244-1599

February 3, 1997

John Davis
Davis Land, LLC
P.O. Box 2867
Grand Junction CO 81502

RE: SPR-96-218/SPR-96-219

Dear Mr. Davis:

Based on our review of the information in our office and that supplied by your representative we can find no records which indicate that the land on which the above applications are proposed has been subdivided in conformance with our Zoning and Development Code (ZDC) requirements. I have previously forwarded a resubdivision submittal package to Mark Bracklesberg. A formal subdivision of the land in conformance with ZDC standards is required prior to us being able to release a Planning Clearance for the projects.

If you have any questions or require additional information please do not hesitate to contact me.

Sincerely yours,

Michael T. Drollinger
Senior Planner

cc: file

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