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		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**
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		Public notice cards
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		***Planning Commission staff report and exhibits**
		***City Council staff report and exhibits**
		***Summary sheet of final conditions**

DOCUMENT DESCRIPTION:

X	X	Correspondence	X		General Legend and Construction Map
X	X	Report of Geotechnical Investigation for La Cosa Vista Sub.	X		Utility Composite
X	X	Resolution No. MCM 94-11	X	X	Grading and Drainage Plan
X		Treasurer's Certificate of taxes due – 11/28/94	X		Standard Concrete Details - E
X	X	Final Drainage Report	X		Accessible Ramp and Parking Stall Details-Exhibit G
X		Title Commitment - Chicago Title Ins. Co.	X		Standard Sanitary Sewer Details – Exhibit I
X		Storm Water Retention Faciliaty Map	X		Standard Water Line Details – Exhibit H
X		Irrigation Plans Map	X		Standard Storm Drain Details – Exhibit F
X		Street Section Map	X		Posting of Public Notice Signs
X		Sanitary Sewer Line Maps – E & F	X	X	Development Improvements Agreement- **
X		Utilities Locations and Multi-Purpose Easement Details	X	X	Agreement between John Thomas and Sun Inc.- **
X	X	Revised Concept Maps	X		Certification of Plat – 5/5/95
X	X	Composite Plan	X	X	Planning Commission Minutes – 7/11/95 - **
X	X	Subdivision Plat – GIS Historical Maps - **	X		Warranty Deed – Bk 1219 / Pg 562
X	X	Project Overview	X	X	Release of Improvements – Bk 3122 / Pg 641 - **

GRAND JUNCTION ORTHOPAEDICS ASSOCIATES, P.C.

550 Patterson Road, Grand Junction, Colorado 81506 Phone (303) 243-8140 Fax (303) 242-0293

General Orthopaedics
Hand Surgery
Sports Medicine
Arthritis and Joint Disease

William R. Patterson, M.D.
David P. Fisher, M.D.
David M. Mayer, M.D.
Ronald C. Pinson, M.D.
Steven J. Heil, M.D.

October 6, 1993

Mesa County Planning Commission
750 Main Street
Grand Jct, CO 81501

Dear Sirs:

Dr. Fisher and I own land on South Camp Road which we intend to sell to John Thomas who plans to develop the property.

We agree that the current plan being considered by the Planning Commission will be the plan governing the development on the property.

Our intention is to convey the property to Mr. Thomas in the very near future.

Sincerely yours,

William R Patterson

William R. Patterson, MD

David P. Fisher, MD

WRP/lgb

cc

Exhibit 2
Access Agreement

AGREEMENT

THIS AGREEMENT is made this 31st day of December 1979, by and between DISCOVERY '76 CORPORATION, a Colorado corporation having its principal place of business at 519 Grand Avenue, Grand Junction, Colorado 81501, hereinafter referred to as the "Developer," WILLIAM R. PATTERSON, M.D., and DAVID P. FISHER, M.D., whose address is 550 Patterson Road, Grand Junction, Colorado 81501, hereinafter referred to as "Patterson and Fisher," and THOMAS J. WATSON and FRANCES C. WATSON, whose address is 393-1/2 Valley View Way, Grand Junction, Colorado 81501, hereinafter referred to as "Watson," and BERNARR B. JOHNSON and DOROTHY O. JOHNSON, whose address is 11350 Poplar, Loma Linda, California 92354, hereinafter referred to as "Johnson."

W I T N E S S E T H:

WHEREAS, Patterson and Fisher own a parcel of ground described on Exhibit A attached hereto and shown as Parcel A on the plat attached hereto as Exhibit F; and

WHEREAS, Thomas Watson has purchased from Johnson the property more fully described on Exhibit B attached hereto, and shown as Parcel B on Exhibit F, and, in connection with such purchase, Watson executed and delivered to Johnson his note and deed of trust, which deed of trust was recorded in Book 1219, Page 638, of the records of the Mesa County Clerk and Recorder in the principal amount of $149,764.21. Thereafter, it was determined that the amount of this deed of trust was in error, and a correction deed of trust was executed and recorded in Book 1229, Page 24, of the records of the Mesa County Clerk and Recorder for a principal balance of $139,764.21; and

WHEREAS, Watson has agreed to sell to Patterson and Fisher a portion of the property purchased from Johnson and more fully described on Exhibit C attached hereto and shown as Parcel C on Exhibit F; and

WHEREAS, Watson wishes to retain ownership of the property described on Exhibit D attached hereto and and shown as Parcel D on Exhibit F; and

WHEREAS, Patterson and Fisher wish to grant Watson access across Parcels A and C to Parcel D; and

WHEREAS, Johnson wishes to retain access to his property described more fully on Exhibit E and shown as Parcel E on Exhibit F, and Patterson and Fisher and Watson wish to provide for Johnson such access; and

WHEREAS, Developer has an option to purchase Parcels A and C from Patterson and Fisher, and wishes to provide for the orderly development of the property if the options are exercised;

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the parties agree as follows:

1. Patterson and Fisher agree that Johnson will have temporary access to his property across Parcels A and C. Such access shall be over the existing and presently used dirt roadway running from South Camp Road westerly past the home now owned by Cliff Young ("Young Lane"). Such easement shall be along the following described line and shall be 10 feet each side of the following described line: Beginning at the SE corner of government lot 1, Section 35, Township 11 South, Range 101 West of the 6th P.M. to the point of beginning. Thence west 1431.4 feet to a point on the west line of the west half south half of government lot 1. Johnson agrees that such easement shall be temporary, and shall exist only until such time as Parcels A and C are developed by Developer. Developer agrees that in the course of its development of Parcels A and C, it will provide alternate access to Johnson for ingress and egress to his property. Such alternate access shall be by paved roads or lanes constructed in conformity with regulations of the Mesa County Road Department. At the time of the construction and paving of such roadway, Johnson agrees to relinquish any and all easements which Johnson may otherwise have across Parcels A and C.

2. Patterson and Fisher agree to grant Watson temporary access to Parcel D across Parcels A and C. Such easement shall be along the following described line and shall be 10 feet each side of the following described line: Beginning at the SE corner of government lot 1, Section 35, Township 11 South, Range 101 West of the 6th P.M. to the point of beginning. Thence west to a point where the Ute water line intersects. Thence southwesterly along said Ute water line to Parcel D. Upon the development by Developer, Developer agrees to provide alternate access to Parcel D. Such alternate access shall be by paved roads or lanes constructed in conformity with regulations of the Mesa County Road Department. At the time of the construction and paving of such roadway, Watson agrees to relinquish any and all easements which Watson may otherwise have across Parcels A and C.

3. All parties to this agreement stipulate and agree that the deed of trust recorded in Book 1229, Page 24, of the records of the Mesa County Clerk and Recorder correctly evidence the debt of Watson to Johnson. Accordingly, Watson owes to Johnson the sum of $139,764.21, together with interest from October 25, 1979, at the rate of 10% per annum.

3. This contract shall be a covenant running with the land, and shall be binding upon and shall inure to the benefit of the parties hereto, their heirs, successors and assigns.

DISCOVERY '76 CORPORATION

By _____

William R. Patterson, M.D. — David P. Fisher, M.D.

Thomas J. Watson — Frances C. Watson

Bernarr B. Johnson — Dorothy O. Johnson

STATE OF CALIFORNIA } SS.
COUNTY OF San Bernardino }

On December 24, 1979 before me, the undersigned, a Notary Public in and for said County and State, personally appeared Bernarr B. Johnson and Dorothy O. Johnson

known to me to be the person s whose name s are subscribed to the within instrument and acknowledged that they executed the same.

Betty Zaniewski

SAFECO

FOR NOTARY SEAL OR STAMP

OFFICIAL SEAL
BETTY ZANIEWSKI
Notary Public - California
PRINCIPAL OFFICE IN
SAN BERNARDINO COUNTY
MY COMMISSION EXPIRES JULY 26, 1981

Mtg-185 (G.S.) Ack. Individual (Rev. 9-68) Single

WESTERN
COLORADO
TESTING,
INC.

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REPORT OF GEOTECHNICAL INVESTIGATION FOR LA COSA VISTA SUBDIVISION A PORTION OF SECTION 35, T11S, R101W OF THE 6TH PRINCIPLE MERIDIAN MESA COUNTY, COLORADO

Prepared For:

Ciavonne & Associates, Inc.
336 Main Street, #206
Grand Junction, Colorado 81501

Prepared by:

Western Colorado Testing, Inc.
529 25 1/2 Road, Suite B101
Grand Junction, Colorado 81501
(303) 241-7700

September 20, 1993
Job No. 2024931

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INTRODUCTION

This report presents the results of the geotechnical investigation performed at the site of a proposed 40 plus acre subdivision to be located in a portion of the northeast quarter, Section 35, Township 11 south, Range 101 west of the 6th Principle Meridian, Mesa County, Colorado. This investigation was authorized by Mr. Craig Roberts of Ciavonne & Associates, Inc. on September 9, 1993.

Included in this investigation were test borings and a report of our conclusions and recommendations. The scope of our report was limited to the following:

* Evaluating the engineering properties of the subsoils encountered.

* Recommending types and depths of foundation elements.

* Evaluating soil bearing capacity and estimated settlement.

* Presenting recommendations for earthwork and soils related construction with respect to the subsoils encountered.

This report was prepared by the firm of Western Colorado Testing, Inc. (**WCT**) under the supervision of a professional engineer registered in the state of Colorado. Recommendations are based on the applicable standards of the profession at the time of this report within this geographic area. This report has been prepared for the exclusive use of **Ciavonne & Associates, Inc. and the owner**, for the specific application to the proposed project in accordance with generally accepted geotechnical engineering practices.

The scope of this investigation did not include any environmental assessment for the presence of hazardous or toxic materials in the soil or groundwater on or near this site. If contamination is a concern, it is recommended an environmental assessment be performed.

SITE CONDITIONS

The site is bounded on the north and west by farm and/or grassland, on the east by South Camp Road and on the south by grassland for the west half and Wingate Elementary school for the east half. The site presently consists of farm land for north portion, a small orchard near the center and grassland for the south portion. The site is generally sloped to the north, northeast with an approximate grade of 3 to 6 percent. An irrigation ditch crosses the site near the center from east to west and a small knoll with a rock outcropping was observed just south of the center of the site. An old concrete cistern was observed north of the elementary school, near South Camp Road. Other debris and foundations may be encountered in this area.

PROPOSED CONSTRUCTION

The proposed construction will consist of approximately 86 single family dwellings. The proposed residences will be conventional wood framed structures with siding on brick veneer. The structures are planned to be built over reinforced concrete foundations. Light to moderate foundation loads are anticipated.

FIELD EXPLORATION

The field investigation was conducted on September 14, 1993. The exploratory program consisted of eleven (11) soil borings as shown on the Boring Location Plan (Appendix, Figure 1). Borings were located in the field by pacing distances from features shown on the boring location plan. The location of the boring should be considered accurate only to the degree implied by the method used.

Test borings were advanced to depths of approximately 4.5 to 19 feet with a truck mounted Dietrich D-50 soil sampling rig using four inch continuous flight augers. Borings remained open during drilling, and stabilization drilling methods were not required within the depth investigated.

Soil samples were obtained at the sampling intervals shown on the Boring Logs (Appendix, Figures 2 through 12). Recovered samples were extracted in the field, sealed in plastic or brass containers, labeled and protected for transportation to the laboratory for testing. Dames and Moore ring barrel and split barrel samples were obtained while performing Standard Penetration Tests (SPT) driven in general accordance with ASTM D-1586, "Penetration Test and Split Barrel Sampling of Soils". The N-Value, reported in blows per foot, equals the number of blows required to drive the sampler over the last 12 inches of the sample interval.

Stratification lines represent the approximate boundary between soil types, and the transition may be gradual.

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LABORATORY TESTING

The field boring logs were reviewed to outline the depths, thicknesses, and extent of the soil strata, and a testing program was established to evaluate the engineering properties of the recovered samples. Specific tests that were performed include moisture contents, density determinations, particle size analysis, Atterberg limits, soluble sulfates and swell-consolidation tests. These tests were performed in general accordance with current ASTM or state-of-the-art test procedures. An R-Value test was also performed. The R-Value was determined according to the Colorado Department of Transportation procedure which is a modification to ASTM D-2844. The test results are presented on Figures 13 through 19.

Based on the results of this testing program the field logs were reviewed and supplemented as presented in the Appendix, Figures 2 through 12. These final logs represent our interpretation of the field logs, and reflect the additional information gained in the laboratory testing program.

SUBSURFACE CONDITIONS

As shown on the boring logs, Appendix, Figures 2 through 12, the subsurface conditions encountered at the site are fairly uniform. Generally, the soils encountered in the borings consisted of slightly clayey, silty, fine grained sand followed by a sand and gravel material with cobbles. In some cases the fine grained sand or gravelly sand was followed by a clay, sandstone, or weathered claystone bedrock. Water was encountered in some of the borings and was measured 48 hours after drilling at depths ranging from 9 to 15 feet.

The surface material was a slightly clayey, silty to very silty sand which as fine grained, dry to slightly moist and red to red and white in color. Penetration tests indicate the silty sand is loose to medium dense.

The silty sand was followed in all borings except TH-8, TH-10 and TH-11 by a sand and gravel to gravelly sand with cobbles. The sand and gravel with cobbles was slightly moist to wet and red to brown in color. Penetration tests indicate the sand and gravel material is medium dense to dense.

In borings TH-4 the gravelly sand was clayey and was underlain by a high plastic clay material which was very moist, very stiff and grey to olive to light greenish tan in color. The clay extended from 13 feet to the maximum depth explored, 18.5 feet.

In boring TH-11 the upper silty sand was followed by a sandy clay which was stiff to very stiff, moist and olive in color. The sandy clay was encountered at 10 feet and extended to the maximum depth, 12 1/2 feet. In boring TH-8 and TH-10 a bedrock was encountered at depths of 10 and 15 feet, respectively. The bedrock in boring TH-8 was a fine grained silty sandstone which was hard, dry to slightly moist and grey to dark red in color. The bedrock material encountered in TH-10 was a weathered claystone bedrock which was medium hard, moist and grey to brown to dark red. The bedrock material in both borings extended to the maximum depths explored.

The upper silty sand was tested for soluble sulfates with the following results:

Drill Hole	Sample Depth	Description	Soluble Sulfates PPM	Degree of Sulfate Attack on Concrete	Type Cement Recommended
TH-1	2.5-3.5	Sand, Silty	1000	Moderate	Type II

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CONCLUSIONS AND RECOMMENDATIONS

The conclusions and recommendations discussed are based upon the subsurface conditions encountered in the test borings and on the information provided us. If subsurface conditions differing from those described in this report are noted during construction or project characteristics are altered then Western Colorado Testing, Inc. should be notified so that our recommendations may be reviewed and adjusted if necessary.

FOUNDATIONS

The borings indicate some loose silty sand exists, varying in depth and location. Depending on construction some sites may need to be over excavated and replaced with new structural fill. The depth of structural fill needed will depend on site conditions. In addition, some clays were encountered and even though some have high swell potential, they are at a depth that under normal circumstances should have little or no effect on the proposed construction. Clays within 3 feet of foundation bearing depth should be removed and replaced with structural fill. Generally, based on the site and subsurface conditions encountered, in the borings, we recommend the proposed residences be founded on conventional spread footings bearing on the natural soils, exclusive of topsoil, or new structural fill.

The following design and construction details should be observed for spread footing foundation systems.

* Footings placed on the natural soils or new structural fill should be designed for allowable soil bearing pressures as follows:
    - silty sands (below 1 1/2') 1500 psf
    - sand and gravel with cobbles 3500 psf
    - structural fill 3000 psf

The top 12 inches of silty sand should be moisture conditioned to (±)2% of optimum moisture and compacted to a minimum of 95% of ASTM D-698 prior to placing footings. All footings should be proportioned as much as practicable to minimize differential settlement.

* Structural fill placed for support of footings should consist of a granular, non-expansive material compacted to a minimum 95% of the maximum Standard Proctor density (ASTM D-698) at a moisture content (±) 2% of optimum. Structural fill should extend down from the bottom of the footings at a one horizontal to one vertical projection.

* We estimate total settlement for footings designed and constructed as discussed in this section will be one inch or less, which is generally considered acceptable and was used in our analysis.

* Exterior footings and footings in unheated areas should extend to below the frost depth. The local building codes should be consulted, however we would recommend a minimum depth of 24 inches.

* Continuous foundation walls should be reinforced top and bottom to span an unsupported length of at least ten (10) feet.

* All loose or disturbed material encountered at the foundation bearing level should be removed or compacted to a minimum 95% of ASTM D-698.

* A representative of the geotechnical engineer should observe all foundation excavations prior to the placement of fill and concrete.

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LATERAL EARTH PRESSURES

Foundation walls are normally designed to be fairly rigid (unyielding), and should therefor be designed for "at rest" lateral soil pressures. Backfill consisting of the existing soils should be designed to resist an "at rest" (k_0) lateral earth pressure corresponding to an equivalent fluid pressure (EFP) of at least 50 pounds per cubic foot. Walls which are separate from structures and can rotate sufficiently to develop active conditions can be designed to resist a lateral earth pressure corresponding to an equivalent fluid pressure of 40 pcf. These lateral earth pressures do not include sloped backfill, surcharge loads or hydrostatic pressures.

FLOOR SLABS

The natural soils, exclusive of topsoil, are suitable for support of slab-on-grade construction. The following construction details will help mitigate slab movement and should be observed for slab-on-grade construction.

* Floor slabs should be separated from all bearing walls, columns and utility lines with an expansion joint which allows unrestrained vertical movement.

* Floor slabs should be provided with control joints to reduce damage due to shrinkage cracking.

* The top 12 inches of dry silty sands should be moisture conditioned to (±)2% of optimum and recompacted to minimum 95% of ASTM D-698.

* The risk of slab movement could be reduced by removing all clay encountered within 3 feet below the slabs and replacing it with structural fill.

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* All fill placed below the slabs should consist of non-expansive, granular material compacted to at least 95 percent of the maximum standard Proctor density at a moisture content (±)2% of optimum.

* If slabs will have a moisture sensitive covering such as tile, a moisture barrier or capillary relief may be required for some lower levels. A heavy gauge polyethylene sheeting can be used with a 4 inch layer of sand between the slab and sheeting. The sand will mitigate the risk of floor slab curling due to differential curing. An alternate method would be to use a minimum 6 inch layer of gravel below the slab. If used, the gravel should consist of minus 2 inch aggregate with less than 20 percent passing the No. 4 sieve and less then 5 percent passing the No. 200 sieve.

PERIMETER DRAIN SYSTEM

Water was encountered at the depth that should not affect the proposed construction, however, it has been our experience that local perched water table conditions can develop after construction. The source of water could be from excessive irrigation and poor surface drainage accumulating in backfill areas, with subsequent seepage to foundation depth. For this reason a drain system should be provided around exterior foundation walls. The perimeter drain system should be placed at or below the footing level and typically consist of a perforated 4 inch diameter drain pipe surrounded by at least one pipe diameter of free draining gravel. The gravel should extend to the top of the footing or above and should be completely wrapped in a geofabric or filter cloth. The drain lines should be graded to a sump where the water can be removed by pumping. A minimum slope of 1 percent should be used for all drain pipe. The gravel used in the drain system should be minus 2 inch

material having less than 20 percent passing the No. 4 sieve and less than 5 percent passing the No. 200 sieve.

SURFACE DRAINAGE AND LANDSCAPING

The success of shallow foundation and slab-on-grade systems is contingent upon keeping the subgrade soils at a more or less constant moisture content, and by not allowing surface drainage a path to the subsurface. Positive surface drainage away from structures must be maintained at all times. Landscaped areas should be designed and built such that irrigation and other surface water will be collected and carried away from foundation elements.

The final grade of the foundations backfill and any overlying concrete slabs or sidewalks should have a positive slope away from foundation walls on all sides. We recommend a minimum slope of 6 inches in the first 10 feet; however, the slope can be decreased if the ground surface adjacent to foundations is covered with concrete slabs or sidewalks.

Backfill material should be placed near optimum moisture content and compacted to at least 90% of maximum standard Proctor density in landscaped areas and to at least 95% maximum standard Proctor density beneath structural areas (sidewalks, patios, driveways, etc.). All roof downspouts and faucets should discharge well beyond the limits of all backfill. Irrigation within ten (10) feet of the foundation should be carefully controlled and minimized.

STREET PAVEMENTS

The pavement section thickness needed at the site is dependent mainly on the subgrade conditions and the traffic loadings. The near surface soils encountered at the site indicate the pavement subgrade soils are primarily silty sands. The soil was tested for Atterberg limits and size distribution with the results used

to classify the soil using both the Unified and AASHTO classification systems. The soil was then tested to determine the R-value according to the Colorado Highway Department procedure which is a modification to ASTM D-2844.

The upper silty sands were grouped and an "R" value test performed. The "R" value test had a result of 17. Based on the test results, design manual procedures, freeze/thaw conditions and experience with similar projects, the following pavement section alternatives are indicated:

PAVEMENT ALTERNATIVE SECTIONS									
STREET	DESIGN CRITERIA				ALTERNATIVE	PAVEMENT SECTIONS - INCHES			
	"R" VALUE	EDLA	RF	WSN		HBP	ABC	ASC	TOTAL
Cul-De-Sacs	17	5	2.0	2.18	A	3	6		9
					B	2	6	5	13
					C	5			5
Collectors	17	10	2.0	2.41	A	3	8		11
					B	2	6	8	16
					C	5.5			5.5

"R" Value - CDOH Procedures
EDLA - Equivalent Daily Load Application
RF - Regional Factor
WSN - Weighted Structural Number

HBP - Hot Bituminous Pavement
ABC - Aggregate Base Course (Class 6)
ASC - Aggregate Subbase Course (Class 2)

Once the cut and fill operation for the roadways has been determined and/or a better traffic count determined the above sections should be re-evaluated prior to construction.

Aggregate base course material should conform with Class 6 (minus 3/4 inch) specifications of the Colorado Department of Transportation and be compacted to a minimum 95% of AASHTO T-180 at (±)2% of optimum moisture content. Asphaltic concrete should be from an approved mix design, placed and compacted to a minimum of 95% of Marshall density, ASTM D-1559.

Pavement performance is directly affected by the degree of compaction, uniformity, and the stability of the subgrade. It is recommended that the top 12 inches of the subgrade be compacted to a minimum of 100% of the maximum dry density as determined by ASTM D-698 "Standard Proctor Moisture-Density Relationship". The moisture content should also be controlled to between (-) 2 and (+)3 percent of optimum. The final subgrade should be proof rolled immediately prior to placement of the concrete or asphalt to detect any localized areas of instability. Unstable areas should be reworked to provide a uniform subgrade.

Positive drainage should be provided during construction and maintained throughout the life of the pavement. Adequate drainage is essential for continuing performance.

GENERAL

In the event that any changes in the nature, design, or location of the structures are planned, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and conclusions of this report modified or verified in writing.

The analysis and recommendations submitted in this report are based in part upon the data obtained from the eleven (11) soil borings. The nature and extent of variation between the borings may not become evident until construction. If variations then appear, it will be necessary to reevaluate the recommendations in this report.

It is recommended that the geotechnical engineer be provided the opportunity for general review of the final designs and

specifications in order that earthwork and foundation recommendations may be properly interpreted and implemented in the designs and specifications. It is also recommended that the geotechnical engineer be retained to provide continuous engineering services during construction of the foundations, excavations, and earthwork phases of the work. This is to observe compliance with the design concepts, specifications, or recommendations and to modify these recommendations in the event that subsurface conditions differ from those anticipated.

Respectfully Submitted,
WESTERN COLORADO TESTING, INC.

Gary L. Hamacher, P.E.
Senior Geotechnical Engineer
GLH/ac

APPENDIX

WESTERN COLORADO TESTING, INC.

JOB NO. 20[illegible]931
Date 9/20/93
Project La Cosa Vista Subdivision
Location Mesa County, Colorado

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BORING LOCATION PLAN

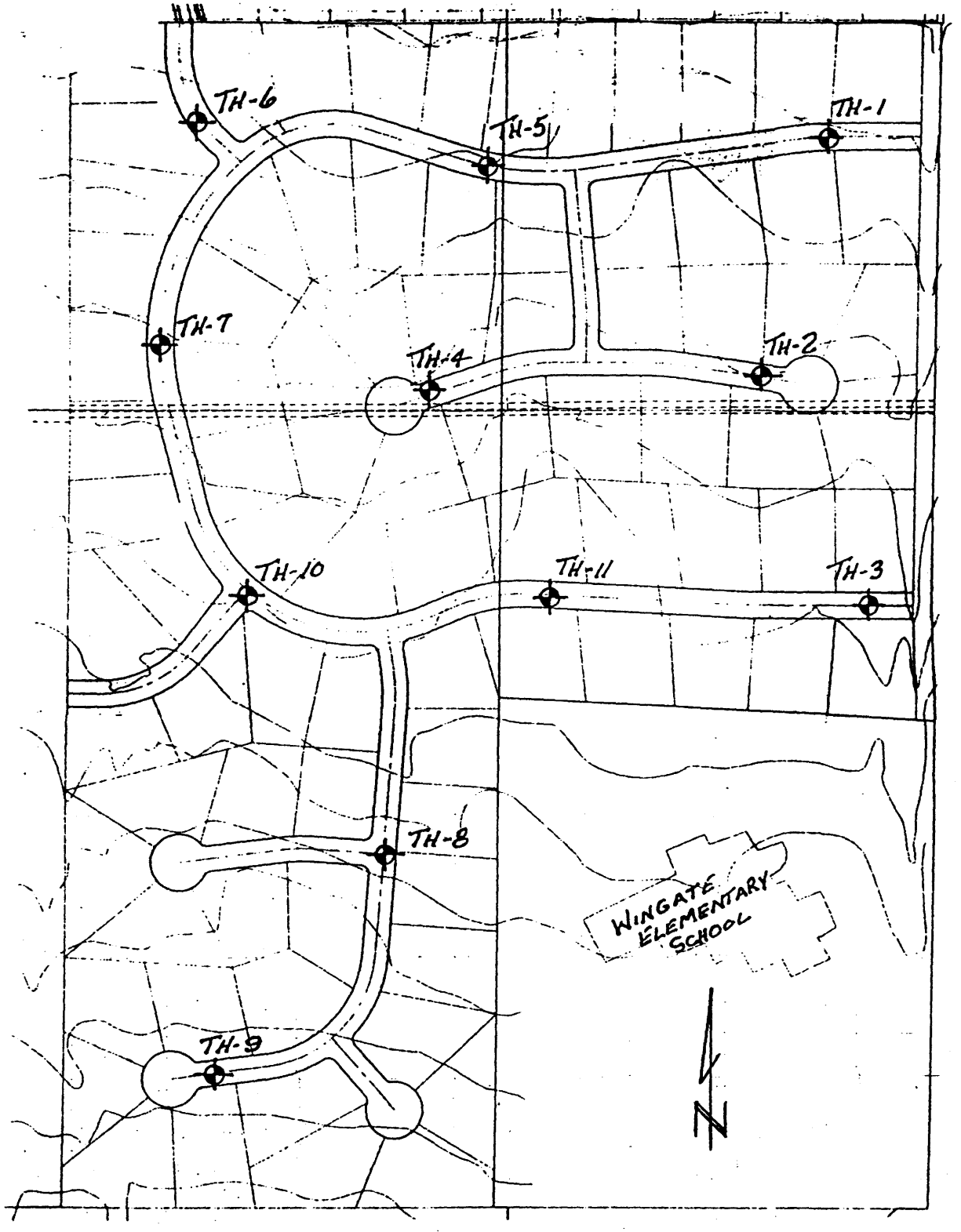

Figure 1

WESTERN COLORADO TESTING, INC.

Project La Cosa Vista Subdivision

Location Mesa County, Colorado

Job No 2024931 Date 9/14/93

9 4

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BORING LOG

DRILL HOLE NO.	LOCATION OF DRILL HOLE	ELEVATION	DATUM	DRILLER	LOGGER
TH-1	See Boring Location Plan	-	-	R. Lancaster	G. Hamacher

WATER LEVEL OBSERVATIONS				TYPE OF SURFACE	DRILL RIG
				Field, native grasses	Dietrich D-50
WHILE DRILLING	END OF DRILLING	24 HOURS AFTER DRILLING	48 HOURS	DRILLING METHOD	TOTAL DEPTH
13'			11'-6"	6" Cont. Flight Augers	18'

DEP. FT	SAMPLE DATA			SOIL DESCRIPTION				LABORATORY DATA				DEP. FT
	SAMPLE NO. & TYPE	"N" BLOWS /FT	% REC.	COLOR	MOIST	CONS.	GEOLOGIC DESCRIPTION & OTHER REMARKS	% MC	DRY DENS pcf	qu tsf	CLASS	
5	D-1	15 (7/8)	100	red	dry to slightly moist	loose to medium dense	sand, fine grained, silty	2.5	95.7			5
10	SP-1	50/9"	100	red	slightly moist	medium dense to dense	sand and gravel, some cobbles	6.7				10
					wet							
15	SP-2	50/6"	30									15
20												20
25												25

Figure 2

WESTERN COLORADO TESTING, INC.

Project La Cosa Vista Subdivision
Location Mesa County, Colorado
Job No 2024931 94 Date 9/14/93
214

BORING LOG

DRILL HOLE NO.	LOCATION OF DRILL HOLE	ELEVATION	DATUM	DRILLER	LOGGER
TH-2	See Boring Location Plan	-	-	R. Lancaster	G. Hamacher

WATER LEVEL OBSERVATIONS				TYPE OF SURFACE	DRILL RIG
				Field, native grasses	Dietrick D-50
WHILE DRILLING	END OF DRILLING	24 HOURS AFTER DRILLING	___ HOURS	DRILLING METHOD	TOTAL DEPTH
None				6" Cont. Flight Augers	7 1/2'

DEP. FT	SAMPLE DATA			SOIL DESCRIPTION				LABORATORY DATA				DEP. FT
	SAMPLE NO. & TYPE	"N" BLOWS /FT	% REC.	COLOR	MOIST	CONS.	GEOLOGIC DESCRIPTION & OTHER REMARKS	% MC	DRY DENS pcf	qu tsf	CLASS	
	B-1			red	dry to slightly moist	loose to medium dense	sand, fine grained, very silty slightly clayey					
5	B-2							6.2			SM-SC	5
				red	slightly moist	medium dense	sand and gravel, silty					
10												10
15												15
20												20
25												25

Figure 3

WESTERN COLORADO TESTING, INC.

214 94

Project La Cosa Vista Subdivision

Location Mesa County, Colorado

Job No 2024931 Date 9/14/93

BORING LOG

DRILL HOLE NO.	LOCATION OF DRILL HOLE	ELEVATION	DATUM	DRILLER	LOGGER
TH-3	See Boring Location Plan	-	-	R. Lancaster	G. Hamacher

WATER LEVEL OBSERVATIONS				TYPE OF SURFACE	DRILL RIG
				Native grasses and trees	Dietrich D-50
WHILE DRILLING	END OF DRILLING	24 HOURS AFTER DRILLING	48 HOURS	DRILLING METHOD	TOTAL DEPTH
None			Covered	6" Cont. Flight Augers	11'

DEP. FT	SAMPLE DATA			SOIL DESCRIPTION				LABORATORY DATA				DEP. FT
	SAMPLE NO. & TYPE	"N" BLOWS /FT	% REC.	COLOR	MOIST	CONS.	GEOLOGIC DESCRIPTION & OTHER REMARKS	% MC	DRY DENS pcf	qu tsf	CLASS	
				red	slightly moist	loose	top soil, silt, sandy					
				red	slightly moist	loose	sand, fine grained, silty					
5	SP-1	5 (2/3)	95					2.5				5
				red	moist	medium dense to dense	sand and gravel, occasional cobble					
10	SP-2	50/10"	90									10
							Auger refusal at 11', offset 5' again auger refusal at 11'					
15												15
20												20
25												25

Figure 4

WESTERN COLORADO TESTING, INC.

214 94

Project La Cosa Vista Subdivision

Location Mesa County, Colorado

Job No 2024931 Date 9/14/93

BORING LOG

DRILL HOLE NO.	LOCATION OF DRILL HOLE	ELEVATION	DATUM	DRILLER	LOGGER
TH-4	See Boring Location Plan	-	-	R. Lancaster	G. Hamacher

WATER LEVEL OBSERVATIONS				TYPE OF SURFACE	DRILL RIG
				Field, native grasses	Dietrich D-50
WHILE DRILLING	END OF DRILLING	24 HOURS AFTER DRILLING	48 HOURS	DRILLING METHOD	TOTAL DEPTH
12'-6"			10'-0"	6" Cont. Flight Augers	18 1/2'

DEP. FT	SAMPLE DATA			SOIL DESCRIPTION				LABORATORY DATA				DEP. FT
	SAMPLE NO. & TYPE	"N" BLOWS /FT	% REC.	COLOR	MOIST	CONS.	GEOLOGIC DESCRIPTION & OTHER REMARKS	% MC	DRY DENS pcf	qu tsf	CLASS	
				red	dry to slightly moist	loose to medium dense	sand, fine grained, silty					
5	SP-1	43 (22/21)	95	red	slightly moist	dense	sand and gravel, some cobbles					5
	SP-2	68 (35/33)	100					3.1				
10				reddish brown	moist	medium dense to dense	sand, fine to coarse grained, gravelly, occasional cobble, slightly clayey					10
					wet							
	SP-3	16 (7/9)	70	grey, lt olive lt greenish tan	moist to very moist	very stiff	clay					
15												15
	D-1	30 (12/18)	100					48.0	72.7		CH	
20												20
25												25

Figure 5

WESTERN COLORADO TESTING, INC.

214 94

Project La Cosa Vista Subdivision

Location Mesa County, Colorado

Job No 2024931 Date 9/14/93

BORING LOG

DRILL HOLE NO.	LOCATION OF DRILL HOLE	ELEVATION	DATUM	DRILLER	LOGGER
TH-5	See Boring Location Plan	-	-	R. Lancaster	G. Hamacher

WATER LEVEL OBSERVATIONS				TYPE OF SURFACE	DRILL RIG
				Field, native grasses	Dietrich D-50
WHILE DRILLING	END OF DRILLING	24 HOURS AFTER DRILLING	___ HOURS	DRILLING METHOD	TOTAL DEPTH
None				6" Cont. Flight Augers	5'

DEP. FT	SAMPLE DATA			SOIL DESCRIPTION				LABORATORY DATA				DEP. FT
	SAMPLE NO. & TYPE	"N" BLOWS /FT	% REC.	COLOR	MOIST	CONS.	GEOLOGIC DESCRIPTION & OTHER REMARKS	% MC	DRY DENS pcf	qu tsf	CLASS	
	B-1			red	dry to slightly moist	loose	sand, fine grained, very silty, slightly clayey	5.7				
5	B-2			reddish brown	dry	medium dense	sand, fine grained, some gravel					5
10												10
15												15
20												20
25												25

Figure 6

WESTERN COLORADO TESTING, INC.

214 94

Project La[illegible]osa Vista Subdivision

Location Mesa County, Colorado

Job No 2024931 Date 9/14/93

BORING LOG

DRILL HOLE NO.	LOCATION OF DRILL HOLE	ELEVATION	DATUM	DRILLER	LOGGER
TH-6	See Boring Location Plan	-	-	R. Lancaster	G. Hamacher

WATER LEVEL OBSERVATIONS				TYPE OF SURFACE	DRILL RIG
				Field, native grasses	Dietrich D-50
WHILE DRILLING	END OF DRILLING	24 HOURS AFTER DRILLING	48 HOURS	DRILLING METHOD	TOTAL DEPTH
17'-0"			15'-0"	6" Cont. Flight Augers	18½'

DEP. FT	SAMPLE DATA			SOIL DESCRIPTION				LABORATORY DATA				DEP. FT
	SAMPLE NO. & TYPE	"N" BLOWS /FT	% REC.	COLOR	MOIST	CONS.	GEOLOGIC DESCRIPTION & OTHER REMARKS	% MC	DRY DENS pcf	qu tsf	CLASS	
0				red to white	dry to slightly moist	loose	sand, fine grained, very silty, slightly clayey					0
	D-1	35 (12/23)	100			medium dense		2.7	107.1			
5												5
				red	slightly moist	dense	sand and gravel, occasional cobble					
	SP-1	54 (24/30)	100				more cobbles at 8 1/2'					
10				brown	moist							10
	SP-2	36 (17/19)	75									
15							dense cobbles at 15'					15
	SP-3	62 (30/32)	70									
20												20
25												25

Figure 7

WESTERN COLORADO TESTING, INC.

Project La Mesa Vista Subdivision 214 94

Location Mesa County, Colorado

Job No 2024931 Date 9/14/93

BORING LOG

DRILL HOLE NO.	LOCATION OF DRILL HOLE	ELEVATION	DATUM	DRILLER	LOGGER
TH-7	See Boring Location Plan	-	-	R. Lancaster	G. Hamacher

WATER LEVEL OBSERVATIONS				TYPE OF SURFACE	DRILL RIG
				Field, native grasses	Dietrich D-50
WHILE DRILLING	END OF DRILLING	24 HOURS AFTER DRILLING	___ HOURS	DRILLING METHOD	TOTAL DEPTH
None				6" Cont. Flight Augers	4 ½'

DEP. FT	SAMPLE DATA			SOIL DESCRIPTION				LABORATORY DATA				DEP. FT
	SAMPLE NO. & TYPE	"N" BLOWS /FT	% REC.	COLOR	MOIST	CONS.	GEOLOGIC DESCRIPTION & OTHER REMARKS	% MC	DRY DENS pcf	qu tsf	CLASS	
	B-1			red to white	dry	loose	sand, fine grained, very silty, slightly clayey					
	B-2			red to white	slightly moist	dense	sand and gravel, cobbles	7.9				
5							Auger refusal at 4', offset 5' refusal at 2 1/2', offset 5' refusal at 4 1/2'					5
10												10
15												15
20												20
25												25

Figure 8

WESTERN COLORADO TESTING, INC.

214

Project La Cosa Vista Subdivision

Location Mesa County, Colorado

Job No 2024931 Date 9/14/93

BORING LOG

DRILL HOLE NO.	LOCATION OF DRILL HOLE	ELEVATION	DATUM	DRILLER	LOGGER
TH-8	See Boring Location Plan	-	-	R. Lancaster	G. Hamacher

WATER LEVEL OBSERVATIONS				TYPE OF SURFACE	DRILL RIG
				Native grasses and brush	Dietrich D-50
WHILE DRILLING	END OF DRILLING	24 HOURS AFTER DRILLING	___ HOURS	DRILLING METHOD	TOTAL DEPTH
None				6" Cont. Flight Augers	12 ½'

DEP. FT	SAMPLE DATA			SOIL DESCRIPTION				LABORATORY DATA				DEP. FT
	SAMPLE NO. & TYPE	"N" BLOWS /FT	% REC.	COLOR	MOIST	CONS.	GEOLOGIC DESCRIPTION & OTHER REMARKS	% MC	DRY DENS pcf	qu tsf	CLASS	
	B-1			red	dry	loose	sand, fine grained, silty, slightly clayey	4.4				
	B-2			red to white	dry to slightly moist	medium dense						
5												5
10				grey dark red	dry to slightly moist	hard	sandstone bedrock, fine grained silty					10
15												15
20												20
25												25

Figure 9

WESTERN COLORADO TESTING, INC.

214 94

Project La Cosa Vista Subdivision

Location Mesa County, Colorado

Job No 2024931 Date 9/14/93

BORING LOG

DRILL HOLE NO.	LOCATION OF DRILL HOLE	ELEVATION	DATUM	DRILLER	LOGGER
TH-9	See Boring Location Plan	-	-	R. Lancaster	G. Hamacher

WATER LEVEL OBSERVATIONS				TYPE OF SURFACE	DRILL RIG
				Native grasses	Dietrich D-50
WHILE DRILLING	END OF DRILLING	24 HOURS AFTER DRILLING	48 HOURS	DRILLING METHOD	TOTAL DEPTH
None			None	6" Cont. Flight Augers	17'-8"

DEP. FT	SAMPLE DATA			SOIL DESCRIPTION				LABORATORY DATA				DEP. FT
	SAMPLE NO. & TYPE	"N" BLOWS /FT	% REC.	COLOR	MOIST	CONS.	GEOLOGIC DESCRIPTION & OTHER REMARKS	% MC	DRY DENS pcf	qu tsf	CLASS	
	SP-1	7 (4/3)	100	red	dry to slightly moist	loose	sand, fine grained, silty,	3.5				
5												5
	D-1	50/5"	50	red	slightly moist to moist	medium dense to dense	sand, medium grained, some gravel and occesional cobble some silty sand (fine grained) lenses	2.4				
10												10
	SP-2	20 (7/13)	90									
15												15
	SP-3	50/2"	NR				possible sandstone at 17'					
20												20
25												25

Figure 10

WESTERN COLORADO TESTING, INC.

Project La Mesa Vista Subdivision

Location Mesa County, Colorado

Job No 2024931 Date 9/14/93

BORING LOG

DRILL HOLE NO.	LOCATION OF DRILL HOLE	ELEVATION	DATUM	DRILLER	LOGGER
TH-10	See Boring Location Plan	-	-	R. Lancaster	G. Hamacher

WATER LEVEL OBSERVATIONS				TYPE OF SURFACE	DRILL RIG
				Orchard, disced	Dietrich D-50
WHILE DRILLING	END OF DRILLING	24 HOURS AFTER DRILLING	48 HOURS	DRILLING METHOD	TOTAL DEPTH
None			9'-0"	6" Cont. Flight Augers	19'

DEP. FT	SAMPLE DATA: SAMPLE NO. & TYPE	"N" BLOWS /FT	% REC.	SOIL DESCRIPTION: COLOR	MOIST	CONS.	GEOLOGIC DESCRIPTION & OTHER REMARKS	LABORATORY DATA: % MC	DRY DENS pcf	qu tsf	CLASS	DEP. FT
				red	moist	loose	sand, fine grained, silty, slightly clayey	16.6				
	SP-1	5 (2/3)		lt brown	moist	loose to medium dense	sand, fine grained, clayey; more clay with depth					
5												5
	D-1	18 (6/12)										
10												10
	SP-2	26 (12/14)		grey olive	moist	very stiff	clay, slightly sandy to sandy sand lenses					
15												15
	SP-3	56 (12/44)		grey brown dark red	moist	medium hard	weathered claystone bedrock					
20												20
25												25

Figure 11

WESTERN COLORADO TESTING, INC.

Project La Cosa Vista Subdivision 214 94

Location Mesa County, Colorado

Job No 2024931 Date 9/14/93

BORING LOG

DRILL HOLE NO.	LOCATION OF DRILL HOLE	ELEVATION	DATUM	DRILLER	LOGGER
TH-11	See Boring Location Plan	-	-	R. Lancaster	G. Hamacher

WATER LEVEL OBSERVATIONS				TYPE OF SURFACE	DRILL RIG
				Native grasses and brush	Dietrich D-50
WHILE DRILLING	END OF DRILLING	24 HOURS AFTER DRILLING	___ HOURS	DRILLING METHOD	TOTAL DEPTH
None				6" Cont. Flight Augers	12 ½'

DEP. FT	SAMPLE DATA			SOIL DESCRIPTION				LABORATORY DATA				DEP. FT
	SAMPLE NO. & TYPE	"N" BLOWS /FT	% REC.	COLOR	MOIST	CONS.	GEOLOGIC DESCRIPTION & OTHER REMARKS	% MC	DRY DENS pcf	qu tsf	CLASS	
0	B-1			red	dry to slightly moist	loose	sand, fine grained, silty, slightly clayey					0
				red to white								
5	B-2											5
10				olive	moist	stiff to very stiff	clay sandy at 11'					10
15												15
20												20
25												25

Figure 12

SWELL CONSOLIDATION TEST 214 94

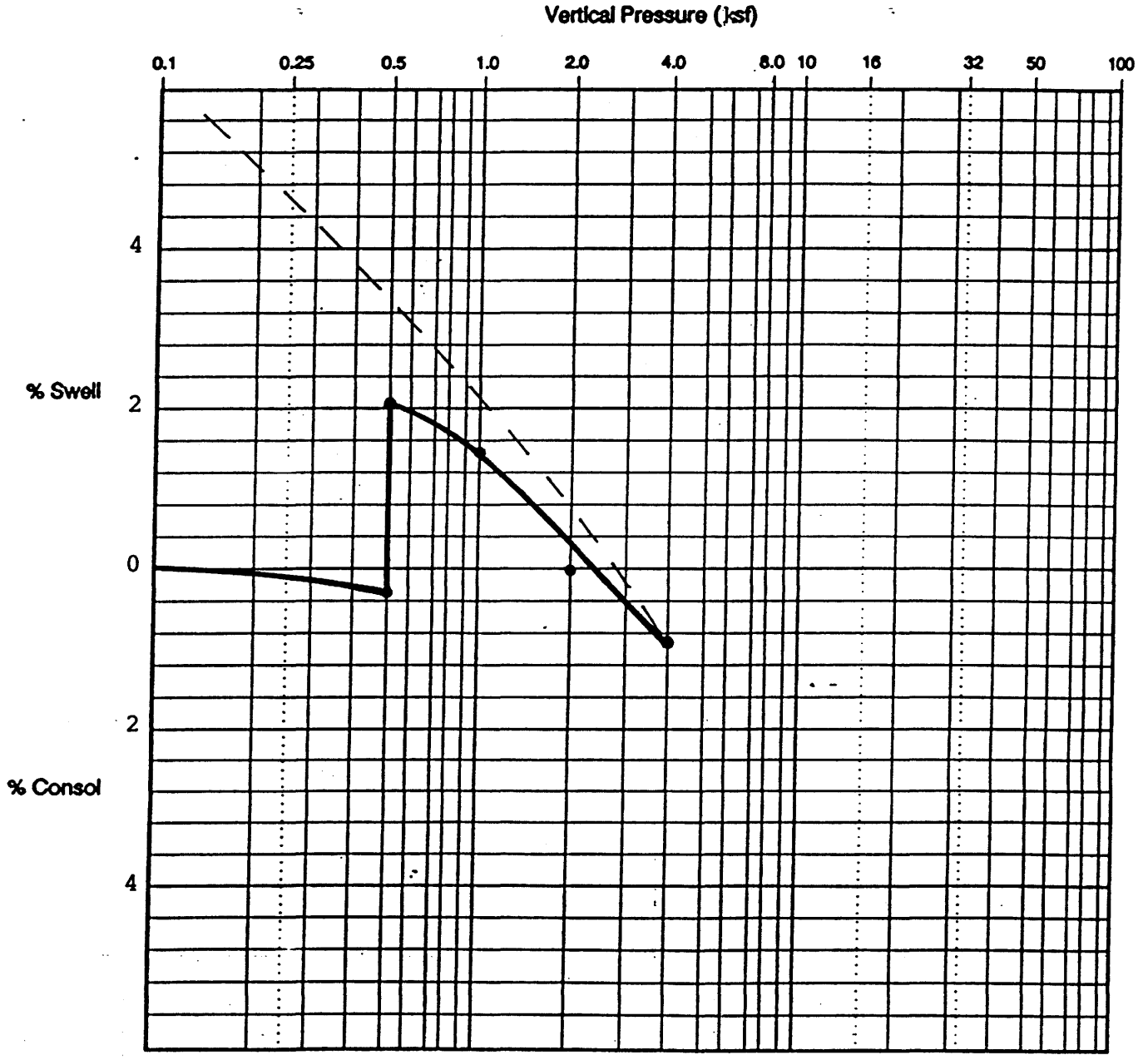
Drill Hole No. TH-4 Sample No. D-1 Sample Depth Interval 17½'-18½'

Sample Description Clay

Initial Water Content 48.0 Dry Unit Weight 72.7 Initial Saturation

Final Water Content 56.3 Specific Gravity ☐ Assumed

Liquid Limit 107 Plastic Limit 44 Plasticity Index 63 Classification CH



WESTERN COLORADO TESTING, INC.	529 25½ Road, Suite B-101 Grand Junction, CO 81505 (303) 241-7700	Project: La Cosa Vista Subdivision
		Location: Mesa County, Colorado
		Job No.: 2024931 Date: 9/20/93

Figure 13

SWELL CONSOLIDATION TEST 214 94

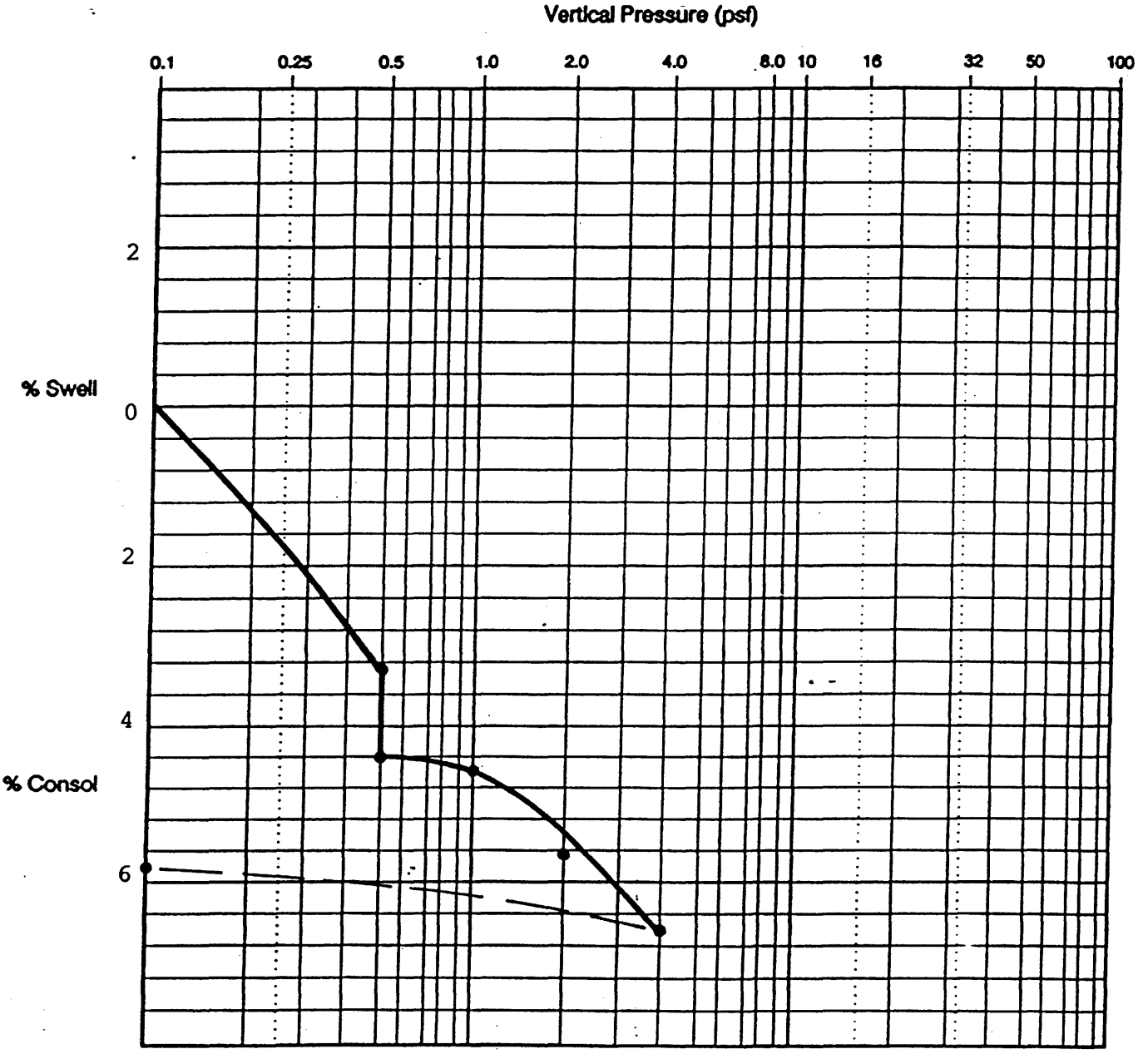
Drill Hole No. TH-10 Sample No. D-1 Sample Depth Interval 7.5-8.5

Sample Description Sand, clayey to clay, sandy

Initial Water Content 19.2 Dry Unit Weight 107.8 Initial Saturation

Final Water Content Specific Gravity - ☐ Assumed

Liquid Limit 27 Plastic Limit 13 Plasticity Index 14 Classification



WESTERN COLORADO TESTING, INC. 529 25½ Road, Suite B-101 Grand Junction, CO 81505 (303) 241-7700	Project: La Cosa Vista Subdivision
	Location: Mesa County, Colorado
	Job No.: 2024931 Date:

Figure 14

LABORATORY REPORT

PHYSICAL PROPERTIES OF SOILS

21 4 9 4

Client Ciavonne & Associates

Job No. 2024931

Lab/Invoice No. _____

Date 9/20/93

Reviewed By _____

Project La Cosa Vista Subdivision

Location Mesa County, Colorado Sampled By G. Hamacher Date 9/14/93

Type of Material Sand, silty Submitted By G. Hamacher Date 9/15/93

Source of Material TH-2 2.0'-5.0' Authorized By Client Date 9/7/93

Sieve Analysis, ASTM D422-

Sieve Size	% Passing Accumulative	Specification
3"		
2½"		
2"		
1½"		
1"		
¾"		
½"		
⅜"		
¼"		
No. 4	100	
8		
10	99	
20	98	
30		
40	97	
50		
100	78	
Finer than 200 ASTM D1140-	49.9	

Soil Classification Unified SM-SC AASHTO A-4(9)

Liquid Limit and Plasticity of Soils ASTM D424- LL = 20 PI = 7

Moisture - Density Relations ☐ ASTM D698- ; ☐ ASTM D1557- ; Method _____ Maximum Dry Density, pcf _____ Optimum Moisture, % _____

Specific Gravity of Soils (minus No. 4 material) ASTM D854- Specific Gravity _____

Resistance 'R' Value of Compacted Soils ASTM D2844- 'R' Value _____

Other:

Natural Moisture Content 6.2%

Copies to:

Figure 15

LABORATORY REPORT

PHYSICAL PROPERTIES OF SOILS

21 94

Client Ciavonne & Associates

Job No. 2024931

Lab/Invoice No. _____

Date 9/20/93

Reviewed By _____

Project La Cosa Vista Subdivision

Location Mesa County, Colorado Sampled By G. Hamacher Date 9/14/93

Type of Material _____ Submitted By G. Hamacher Date 9/15/93

Source of Material TH-4 7.5'-8.5' Authorized By Client Date 9/7/93

Sieve Analysis, ASTM D422-

Sieve Size	% Passing Accumulative	Specification
3"		
2½"		
2"		
1½"		
1"		
¾"	100	
½"	90	
⅜"	86	
¼"		
No. 4	74	
8		
10	61	
20	52	
30		
40	47	
50		
100	30	
Finer than 200 ASTM D1140-	15.7	

Soil Classification

Liquid Limit and Plasticity of Soils ASTM D424- LL = _____ PI = _____

Moisture - Density Relations ☐ ASTM D698- ; ☐ ASTM D1557- ; Method _____ Maximum Dry Density, pcf _____ Optimum Moisture, % _____

Specific Gravity of Soils (minus No. 4 material) ASTM D854- Specific Gravity _____

Resistance 'R' Value of Compacted Soils ASTM D2844- 'R' Value _____

Other:

Natural Moisture Content 3.1%

Copies to:

Figure 16

LABORATORY REPORT

PHYSICAL PROPERTIES OF SOILS

214 9

Client Ciavonne & Associates

Job No. 2024931

Lab/Invoice No. _____

Date 9/20/93

Reviewed By _____

Project La Cosa Vista Subdivision

Location Mesa County, Colorado Sampled By G. Hamacher Date 9/14/93

Type of Material Sand, silty Submitted By G. Hamacher Date 9/15/93

Source of Material TH-9 2.5'-4.0' Authorized By Client Date 9/7/93

Sieve Analysis, ASTM D422-

Sieve Size	% Passing Accumulative	Specification
3"		
2½"		
2"		
1½"		
1"		
¾"		
½"		
⅜"	100	
¼"		
No. 4	98	
8		
10	97	
20	95	
30		
40	90	
50		
100	69	
Finer than 200 ASTM D1140-	43.0	

Soil Classification

Liquid Limit and Plasticity of Soils ASTM D424- LL = _____ PI = _____

Moisture - Density Relations ☐ ASTM D698- ; ☐ ASTM D1557- ; Method _____ Maximum Dry Density, pcf _____ Optimum Moisture, % _____

Specific Gravity of Soils (minus No. 4 material) ASTM D854- Specific Gravity _____

Resistance 'R' Value of Compacted Soils ASTM D2844- 'R' Value _____

Other:

Natural Moisture Content 3.5%

Copies to:

Figure 17

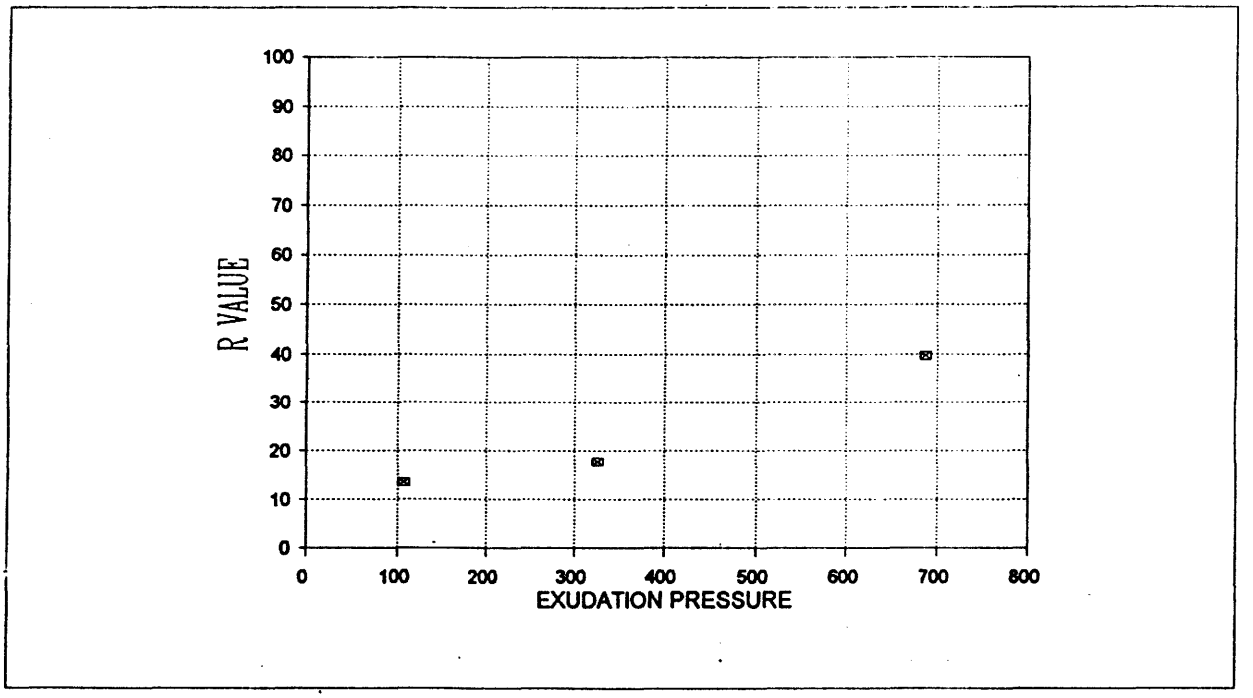
214 94

WESTERN COLORADO TESTING INC.
CONSULTING GEOTECHNICAL ENGINEERS

PROJECT: CIAVONNE & ASSOC.--SOUTH CAMP RD. **JOB NO.** 2024931
LOCATION: TH-2, TH-8 & TH-11 & 2' TO 5' **DATE** 9/15/93

R VALUE CALCULATION ASTM-D2844

SPECIMEN I. D.	A	B	C
Moisture Content	11.7%	12.5%	10.2%
Compaction Foot PSI	175	120	350
Specimen Height, inches	2.60	2.58	2.54
Dry Density, PCF	123.2	119.0	126.7
Ph @ 1000 lb	49	51	33
Ph @2000 lb	116	121	76
Displacement	4.80	5.54	4.18
Expansion Pressure PSI	0.0	0.0	0.0
Exudation Pressure PSI	326	107	688
R Value	18	14	40



R Value at 300 PSI = 17

Figure 18

WESTERN COLORADO TESTING, INC.

Project La Cosa Vista Subdivision
Location Mesa County, Colorado
Job No 2024931 Date 9/20/93

SUMMARY OF SOIL TESTS

Test Hole No.	Sample No.	Sample Depth (ft)	Sample Dia. (in)	Sample Hgt. (in)	Water Content (%)	Density		Void Ratio (e)	Unconfined Compression		Atterberg Limits			Dens Test *	% Pass #200 Sieve	Classification or Remarks
						Wet (pcf)	Dry (pcf)		QU (tsf)	Strain (%)	LL	PL	PI			
TH-1	D-1	2.5-3.5	2.42		2.5	98.1	95.7								29.8	Soluble sulfates, 1000 ppm
TH-1	SP-1	7.5-9.0	1.5		6.7											
TH-2	B-2	2.0-5.0	Bulk		6.2						20	13	7		49.9	SM-SC
TH-3	SP-1	3.0-4.5	1.5		2.5											
TH-4	SP-2	7.5-8.5	1.5		3.1										15.1	
TH-4	D-1	17.5-18.5	2.42		48.0	107.6	72.7				107	44	63	•		
TH-5	B-1	0.0-2.0	Bulk		5.7											
TH-6	D-1	2.5-3.5	2.42		2.7	110.0	107.1								21.6	
TH-7	B-2	2.0-5.0	Bulk		7.9											
TH-8	B-1	0.0-2.0	Bulk		4.4										37.5	
TH-9	SP-1	2.5-4.0	1.5		3.5										43.0	
TH-9	D-1	7.5-8.5	2.42		2.4											
TH-10	SP-1	2.5-4.0	1.5		16.6											
TH-10	D-1	7.5-8.5	2.42		19.2	128.5	107.8				27	13	14	•		
TH-10	SP-3	17.5-19.0	1.5		22.9											
TH-11	B-2	2.5-5.0	Bulk		5.1										37.5	

Figure 19

Mesa Co. Commissioners

Passed: Jan 18, 1994

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1668727 01:59 PM 01/21/94
MONIKA TODD CLK&REC MESA COUNTY CO

RESOLUTION NO. MCM 94-11
PLANNING DIVISION No. C82-93-2
APPROVAL OF A REZONE/ODP/PRELIMINARY/FINAL PLAN
CANYON VIEW SUBDIVISION

WHEREAS, John Thomas sought approval of a rezone/official development plan/preliminary/final plan for a 49.25 acre subdivision for the following described land situated in the County of Mesa, State of Colorado, to wit:

(See attached)

WHEREAS, a hearing before the Board of County Commissioners was held 11 January, 1994.

NOW THEREFORE, THE BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF MESA FINDS AS FOLLOWS:

That the hearing before the Board was held after proper notice.

That the staff recommendation was contained in a staff review dated 16 December, 1993.

That the Mesa County Planning Commission made a recommendation at a public hearing held 16 December, 1993.

That the application is in accordance with relevant Mesa County Land Use Policies and the health, safety and welfare of the residents of Mesa County.

That the application met with Section 5.1 (Mesa County Planned Unit Development Resolution) and Section 5.2 (Subdivision Regulations) of the Mesa County Land Development Code.

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS IN THE COUNTY OF MESA, STATE OF COLORADO, that: the rezone from Planned Residential 4.5 to Planned Unit Development with a density of 2.0 lots per acre, the official development plan for 85 lots, the preliminary plan for 26 lots on 15.5 acres and the final plan for Filing 1 for 11 lots on 6.8 acres of the Canyon View Subdivision application is approved subject to the following conditions:

1. The recommendations of the Geotechnical Report be followed prior to construction of foundations.
2. A 20' utility easement for Lot 12 of Phase 2 be provided for sewer.
3. The location of fire hydrants must be approved by the Grand Junction Rural Fire District.
4. The Drainage Report must be amended to include mapping the 100 year floodplain and/or backwater effects of constrictions to drainage along South Camp Road.
5. A complete irrigation plan signed by the petitioner's engineer must be submitted and reviewed by the Mesa County Engineer.
6. Provide evidence of irrigation water shares.
7. A sidewalk connection between Canyon View Court and Canyon Rim Drive shall be provided.
8. Half street road improvements shall be constructed on South Camp Road, including an 8' bicycle/pedestrian path.
9. The location of the mailbox delivery area must be approved by the Mesa County Traffic Analyst.
10. Homes are single-story in height along South Camp Road.
11. The applicant dedicate 4.5 acres of park land subject to Mayor Theobold's 11/26/93 letter.

DEVELOPMENT APPLICATION

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

Original Do NOT Remove From Office

Receipt 1831
Date 12-5
Rec'd By RSA

File No. 214-94

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				
[ ] Rezone				From: To:	
[X] Planned Development	[X] ODP [ ] Prelim [X] Final		NW of Wingate Elementary on South Camp Road		
[ ] Conditional Use					
[ ] Zone of Annex					
[ ] Text Amendment					
[ ] Special Use					
[ ] Vacation					[ ] Right-of-Way [ ] Easement

[ ] PROPERTY OWNER [ ] DEVELOPER [ ] REPRESENTATIVE

John Thomas	John Thomas	Craig Roberts, Ciavonne & Assoc. Inc.
Name	Name	Name
321 Quail Dr.	321 Quail Dr.	844 Grand Ave.
Address	Address	Address
Grand Jct, CO 81503	Grand Jct, CO 81503	Grand Jct, CO 81501
City/State/Zip	City/State/Zip	City/State/Zip
245-1192	245-1195	241-0745
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 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.

Signature of Person Completing Application — Date 11/25/94

Thomas & Son Inc
by John Thomas Pres

Signature of Property Owner(s) - Attach Additional Sheets if Necessary

SUBMITTAL CHECKLIST

MAJOR SUBDIVISION: FINAL

Location: South Camp Road 214 9[illegible] Project Name: Phase II Canyon View

Date Received _____

Receipt # _____

File # _____

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)	○ City Downtown Dev. Auth.	● City Police	○ County Planning	○ County Bldg. Dept.	○ County Surveyor	● Walker Field	○ School Dist. #51	○ Irrigation District	○ Drainage District	○ Water District	○ Sewer District	● U.S. West	● Public Service	○ GVRP	○ CDOT	○ Corps of Engineers	○ Colorado Geologic Survey	○ U.S. Postal Service	● Persigo WWTF	TOTAL REQ'D.
● Application Fee $740	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	
● 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	
● 11"x17" 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	1	1	1	1	1	1	
● Evidence of Title	VII-2	1			1			1																				
○ Appraisal of Raw Land	VII-1	1			1	1																						
● Names and Addresses	VII-2	1																										
● Legal Description	VII-2	1			1																							
○ Deeds	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 Access Permit	VII-3	1	1																									
○ 404 Permit	VII-3	1	1																									
○ Floodplain Permit*	VII-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	2	1	1	1	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	
● Final Plat	IX-15	1	2	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	IX-11	1	2																									
● Grading & Stormwater Mgmt Plan	IX-17	1	2															1						1	1			
○ Storm Drainage Plan and Profile	IX-30	1	2															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					8																			
● 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																			

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NOTES:
1) An asterisk in the item description column indicates that a form is supplied by the City.
2) Required submittal items and distribution are indicated by filled in circles, some of which may be filled in during the pre-application conference. Additional items or copies may be subsequently requested in the review process.
3) Each submitted item must be labeled, named, or otherwise identified as described above in the description column.

PRE-APPLICATION CONFERENCE

Date: 23 Nov 1994
Conference Attendance: Craig Roberts Tom Dixon
Proposal: Phase II Canyon View
Location: South Camp Road

Tax Parcel Number: _____
Review Fee: $740 + 15 acre
(Fee is due at the time of submittal. Make check payable to the City of Grand Junction.)
Related Files: # 155-94

Additional ROW 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? _____ Estimated Amount: _____
Adjacent Half street improvements/fees required? _____
Revocable Permit required? _____
State Highway Access Permit required? _____

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	○	Screening/Buffering	○	Land Use Compatibility
●	Drainage	○	Landscaping	○	Traffic Generation
○	Floodplain/Wetlands Mitigation	○	Availability of Utilities	○	Geologic Hazards/Soils
○	Other _____				

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.

Tom Thomas for Thomas & Sons Inc Craig Roberts

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

SUBMITTAL CHECKLIST

REVISED **ODP** 214 94

Location: SOUTH CAMP ROAD Project Name: PHASE II CANYON VIEW

ITEMS		DISTRIBUTION																					
DESCRIPTION	SSID REFERENCE	● City Community Development	● City Dev. Eng.	● City Utility Eng.	● City Property Agent	O City Parks/Recreation	● City Attorney	● City G.J.P.C. (8 sets)	O City Downtown Dev. Auth.	● City Fire Dept.	● City Police	O County Planning	O Walker Field	● School Dist #51	O Irrigation District	O Drainage District	● Water District	O Sewer District	● U.S. West	● Public Service	● GVRP	● T.C.I. Cable	TOTAL REQ'D.
● Application Fee	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	
● Application Form*	VII-1	1	1	1	1	1	1	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
● 11"x17" Reduction of Assessor's Map	VII-1	1	1	1	1	1	1	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
● Evidence of Title	VII-2	1			1		1																
● Names and Addresses	VII-3	1																					
● Legal Description	VII-2	1			1																		
● General Project Report	X-7	1	1	1	1	1	1	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
● ODP Drawing	IX-22	1	2	1	1																		
● 11"x17" Reduction of ODP Dwg	IX-22	1				1	1	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

Original Do NOT Remove From Office

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214 94

Original
DO NOT Remove
From Office

2947-353-06-001
Anne Wilson
2139 Buffalo Dr.
Grand Junction, CO 81503

2947-353-06-002
Anne Wilson
2139 Buffalo Dr.
Grand Junction, CO 81503

2947-353-06-003
Anne Wilson
2139 Buffalo Dr.
Grand Junction, CO 81503

2947-353-06-004
Anne Wilson
2139 Buffalo Dr.
Grand Junction, CO 81503

2947-352-00-059
William R. Patterson
12628 Hwy. # 133
Carbondale, CO 81623

2947-352-00-059
Barnard B. & Dorothy O. Johnso
14628 Hwy. # 133
Carbondale, CO 81623

2947-353-00-046
Gloria Triplett
409 Stoneridge Ct.
Grand Junction, CO 81503-1655

2945-192-00-114
Eugene B. Fletcher Incorporated
P.O. Box 821
Rancho Santa Fe, CA 92067

2945-193-04-001
Surf View Development Co.
P.O. Box 821
Rancho Santa Fe, CA 92067

2947-351-00-038
William R. Patterson
550 Patterson Rd.
Grand Junction, CO 81506-1938

2947-351-00-038
David P. Fisher
550 Patterson Rd.
Grand Junction, CO 81506-1938

2947-351-00-942
Mesa Co. Valley School Dist. 51
2115 Grand Ave.
Grand Junction, CO 81501-800

2947-354-00-030
Robert & Lana Turrou
2186 Buffalo Dr.
Grand Junction, CO 81503-2512

2947-354-00-031
May L. Pollen, c/o May L. Bosson
2190 Buffalo Dr.
Grand Junction, CO 81503-2512

2947-354-00-041
Harold C. Adams, et al
2680 Carol Place
Grand Junction, CO 81506

2947-352-00-002
& I. Schnickmann
00 Landshut
Landshut, West Germany 00027

2947-264-00-058
Jack R. & Patricia A. Sommers
397 South Camp Rd.
Grand Junction, CO 81503

2947-263-00-059
Inge M. Fleming
385 South Camp Rd.
Grand Junction, CO 81503

R. Lee Räs
P.O. Box 278
Grand Junction, CO 81502

Garland W. Denton
2189 Canyon Ct. West
Grand Junction, CO 81503

Steven E. Rich
2155 Shenandoah Dr.
Grand Juction, CO 81503

Robert F. Zonts
Viewpoint Bungalow
Manington, WV 26582

Dennis D. Pretti
2122 Bennett
Glenwood Springs, CO 81601

Amer D. Romero
2843 C Oxford Ave.
Grand Junction, CO 81503

Thomas Pound
1313 Bunting Ave.
Grand Junction, CO 81501

John V. Gallina
2135 Galloping Way
Acton, CA 93510

Stephen L. Laiche
408 Ridgeway Dr.
Grand Junction, CO 81503

214 94

William Holgate
1967-1/2 Broadway
Grand Junction, CO 81503

Don Curtis
2453 Broadway
Grand Junction, CO 81503

Canyon View Subdivision - General Project Report

Project Overview

Canyon View Subdivision is seeking approval of a Final Plan for Phase II. In conjunction with the Phase II Final Plan we are requesting approval of a Revised ODP. We believe the Revised ODP is necessary due to the inter-relationships of access and drainage between the Canyon View subdivision and neighboring parcels, as well as the inter-relationship of the Open Space Dedication for the Canyon View subdivision and the adjacent Patterson property.

Much of the natural drainage from this site, which was an agricultural parcel, passed uninhibited to the north onto the Flemming property. The development of Canyon View Subdivision requires the retention of the storm water on the Canyon View site at various locations. If the Flemming parcel is developed in the future, cooperative development of a detention facility will allow the proposed retention facility in Canyon View Phase II to be abandoned, the right-of-way into the Flemming parcel to be completed, and the remainder of the former retention area to be regraded into a viable single family lot.

The Patterson property, adjacent to the west, presently sheet drains onto the Canyon View parcel. If this property is developed in the future, it's storm drainage would be either concentrated to the east into the proposed retention facility, or diverted west, detained, and released into Lime Kiln Gulch. In discussions with Dr. Patterson he has agreed to the latter.

The street layout and lot design shown in the Revised ODP provides the future opportunity with the Flemming property, and reflects the decision and the cooperation with the Patterson property. The decision to accept this lot configuration also allows the dedication of the 4.5 acre Open Space parcel to the City of Grand Junction as per the Annexation Agreement. This open space dedication is applied to 83.3 acres of property which includes the present Canyon View Subdivision (49.29 acres) and the future development of the Patterson property (±34 acres), as shown on the Revised Concept Plan.

The remainder of this narrative focuses on the Canyon View Subdivision Final Plan for Phase II.

A. Project Description

The property is located approximately one mile south of the intersection of South Broadway and South Camp Road. It shares the north and west property line of Wingate Elementary school and is situated north of Buffalo Drive.

Canyon View Subdivision is a 49.29 acre single family residential development. This Final Plan for Phase II is for 20 single family lots on 9.7 acres, and one additional 23.8 acre lot for the remaining land in the subdivision. Each single family lot in this phase is a minimum of 4/10 acre.

The Phase II lots lie in the north west corner of the parcel, the west property line abutting the Schnickmann property, and the north property line abutting the Flemming property.

B. Public Benefit

The developer has participated in the cost sharing for the installation of the South Camp Sanitary Sewer line, and has widened a proportionate share of South Camp Road to Mesa County collector road status. These improvements consisted of a nine foot wide mat widening, construction of a roadside swale for the South Camp storm water, and construction of an 8' asphalt bike path parallel to South Camp Road adjacent to this neighborhood.

The addition of the South Camp Bikeway complies with the overall expansion of the bike trail system in the Grand Valley as proposed in the Multi-Modal Transportation Study and will someday connect the South Camp Bikeway to the Redlands Parkway Bike Trail, and thus access to the Riverfront Trail. A connection with the proposed Monument Road Bikeway will provide access to Colorado National Monument, Tabegauche Trail and downtown. With the recreational emphasis on biking, jogging, walking, and skating, this access will provide numerous choices for recreation activities directly adjacent to the neighborhood.

The developer offers 4.5 acres for park lands, as discussed at the beginning of this narrative, in lieu of paying a Parks & Open Space Fee. This parcel of land is adjacent to Wingate Elementary School, and allows the City options in providing park facilities.

This project provides a transition from the proposed PR-3 east of South Camp Road to the large parcels adjacent to the Colorado National Monument.

Close proximity to Wingate Elementary and Redlands Middle School, convenient access to Colorado National Monument, and the availability of the South Camp Bike Path all contribute to the reduction in the need for automobile use, which benefits the public.

C. Project Compliance, Compatibility, and Impact

1. The Redlands Policies (County Policies) state that the Redlands is to be developed in low density (0 to 4 dwelling units/acre) to medium density (4-10 dwelling units/acre) residential interspersed with a few remaining farms and orchards. This development falls within the low density development designation.

The enlarged park area at Wingate Elementary School was described in the Grand Junction Parks and Recreation Master Plan. The South Camp bike trial is as proposed in the County Multi-Modal Plan.

2. The proposed development complies with the approved ODP and zoning. The surrounding zoning is all residential and of greater or equal density to this parcel. The Buffalo Drive area to the south is residential. Land to the west, north, and east is presently undeveloped.

3. The occupants of this neighborhood will use South Camp Road, Monument Road and the Redlands Parkway. This road network allows quick division and dispersion of traffic based on destination.

The Final Plan Submittal includes the extension of Canyon View Drive for 900 feet. The road follows the 44' road standard with attached 6.5' curb, gutter and sidewalks.

The southwest portion of this site is traversed by an access easement that serves the Schnickmann property to the west and other properties to the west and southwest. This easement is accompanied by an agreement (in this submittal) which allows it to be adjusted so that development can take place while maintaining access to these properties. The phasing of the proposed development will allow this easement transition to take place in a orderly and accommodating fashion.

4. The phase is served by an 8" Ute Water line, adequate to provide drinking water and fire protection for the development.

Fire protection in this area is served by the Grand Junction Rural Fire District, operated by the City of Grand Junction.

This development falls within the Grand Valley Sewer District 201 service area. The new South Camp line was installed with the understanding that each unit connecting to this line would pay a fee structured to cover its proportional share of the construction cost.

5. An existing 3" Ute water line and 20' access easement now bisects the property to serve the Schnickmann Property to the west. The phasing of the project shall accommodate the transition of this existing service to coordinate with the proposed service lines and the abandonment of the easement where required.

6. See Public benefits above for various effects on public facilities.

Site drainage is to be accumulated in the northwest corner of the property. The drainage reports title "A Drainage Report for Canyon View Subdivision", included in this submittal, describes the drainage patterns, rates of flow, and retention structure.

The property now has 108 shares of Redlands Water and Power irrigation water. These shares were intended to irrigate all those lands falling below the concrete ditch noted on the plans. The proposed development would continue the system stated in Phase I and apply irrigation water through a gravity system to this portion of the development as well.

The flow on the concrete lined ditch known as "Goat Lift" will be maintained to insure delivery of irrigation water to downstream users.

Proximity to Wingate Elementary School and the dedication of 4.5 acres of adjacent land to The City of Grand Junction will provide the neighborhood with neighborhood park facilities.

7., 8., 9. - See ODP Submittal.

10. There are no signage plans associated with Phase II.

D. Development Schedule and Phasing

Phase II is planned for development in Spring/Summer of 1995. Phasing of Canyon View subdivision is noted on the Concept Plan.

STAFF REVIEW (Final)

FILE: 214-94

DATE: January 4, 1995

STAFF: Tom Dixon, AICP

REQUEST: Final Plat/Plan review of Phase II consisting of 20 single-family lots and review of a revised Outline Development Plan (ODP)

LOCATION: One mile south of South Broadway on the west side of South Camp Road, Redlands

APPLICANT: John Thomas

EXISTING LAND USE: Mostly undeveloped, residential units under construction

PROPOSED LAND USE: Single-family Residential

SURROUNDING LAND USE:
NORTH: Undeveloped
SOUTH: Institutional (Wingate School)
EAST: Undeveloped
WEST: Agricultural/Single-family Residential

EXISTING ZONING: PR-2

SURROUNDING ZONING:
NORTH: R-2 (Mesa County)
SOUTH: R-2 (Mesa County)
EAST: PR-3 (Mesa County)
WEST: R-2 (Mesa County)

RELATIONSHIP TO COMPREHENSIVE PLAN/POLICIES/GUIDELINES:

This site is subject to the Redlands Goals and Policies. Several recommendations in this adopted document apply to this review. For the Phase II filing, construction of residences should be done with exterior finishes of natural and earth tones. The placement of fences should be restricted in order to maintain open views of the area and to preserve vistas of the nearby Colorado National Monument.

For the ODP, densities along the Monument are limited to one unit per 5 (five) acres. Only structures on such 5-acre parcels are to be allowed within 1,000 feet of the Monument boundary, according to this policy document. Exemptions to this have been granted to existing platted lots.

STAFF ANALYSIS:

Phase II of the Canyon View Subdivision consists of 20 single-family residential lots on 9.7 acres. The revised ODP adds another 23.8 acres to the 49.29-acre subdivision site. The proposed density in Phase II corresponds to the approved overall zoning of 2 units per acre for the entire subdivision. The layout of the proposed lots in Phase II substantially follow the approved ODP and Preliminary Plat which was reviewed in the latter part of 1994.

As proposed, this phase of development will encounter a major drainage problem which was examined, discussed, and considered when this project was first reviewed by Mesa County for approval. The natural drainage pattern flows from south to north and northwest. The proposed solution to the drainage created by Phase II is to disqualify one of the lots (Lot 1 Block Three) and part of a street (Lime Kiln Way) from present development and instead make this area a temporary storm water retention facility. This area is located on the northwest corner of the site and will remain as an easement until subsequent phases of the development provide an alternative permanent means of handling storm water run-off.

As proposed, Phase II will extend Canyon View Drive as the main roadway through the subdivision at this point. All of the proposed lots in this phase will have frontage along this street except for Lot 2, Block Three which is next to the storm water retention facility. Lot 2 will have access onto Lime Kiln Way which will be extended up to the point where it becomes a temporary easement.

The original platting of Phase I included a 14-foot wide temporary access easement extending from west to east to allow some existing residences to the west of Canyon View to have vehicular access to South Camp Road. As Phase II becomes built, the easement is not needed through lots in Phase I. This easement restriction should be eliminated; otherwise, some of the lots in Phase I remain unbuildable. Eventually, it is anticipated that these residences to the west of the subdivision will gain access from a road extension in Phase V. An alternative would be to provide a road connection westward in Phase II following the alignment of the gravel access road.

Another issue concerns pedestrian and bicycle access through the subdivision to the 4.5-acre park site adjacent to Wingate Elementary School which is in the process of being deeded to the City. Phase I provided an easement toward the park although it was platted differently from what was intended in the annexation agreement. Exhibit 1 identifies two alternative alignments which will provide this needed access through the subdivision. The petitioner shall follow one of these alignments in subsequent phases. All pedestrian and bicycle easements shall be 12 feet in width and improved with a minimum 8-foot wide concrete surface.

The revised ODP expands the total area of the Canyon View Subdivision to take in an additional area of almost 24 acres between the original ODP and the Colorado National Monument. This area is identified as portions of Phases V and VI. The policy limiting one residential structure per 5-acre parcel situated within 1,000 feet of the Monument boundary

will apply to these phases.

Issues to be resolved on the final platting of Phase II and ODP:

1) 12-foot wide pedestrian and bicycle easements shall be identified on the amended ODP for future phases. These easements shall follow either alignment A or B, as demonstrated on Exhibit 1. The portion of the easement directly connecting to the dedicated open space shall also provide vehicular access for City of Grand Junction Parks and Recreation maintenance purposes. A similar pedestrian and bicycle easement shall occur in Phase IV, illustrated as alignment C (or an acceptable alternative).

2) The park site shall be platted as a separate and distinct lot or tract with Phase II.

3) The Redlands Goals and Policies restriction of densities along the Colorado National Monument limits one unit per 5 (five) acres. Only residential structures on such 5-acre parcels are to be allowed within 1,000 feet of the Monument boundary.

4) The temporary access easement through Phase I should be eliminated when Phase II is platted.

5) A Development Improvements Agreement for required improvements is necessary prior to platting of Phase II.

6) Future access and potential for development of the area west of Canyon View needs to be evaluated. If this area can be developed at a higher density than the present R-2 zoning under Mesa County, this could affect consideration of road standards within this subdivision.

7) The proposed public street in the ODP, located south of Canyon Court and connecting with South Camp Road, may need to be developed as a residential collector street. This will be evaluated when Phase III occurs. If it is decided that a collector standard is required, a new alignment may be required to meet collector street geometry standards.

8) Other issues identified by reviewing agencies must be satisfied.

STAFF RECOMMENDATION:

Approval of the proposed Final Plan/Plat for Phase II and an amendment to the ODP of the Canyon View Subdivision, with the following issues noted above (1 through 9) to be resolved or satisfied prior to final platting.

SUGGESTED PLANNING COMMISSION MOTION:

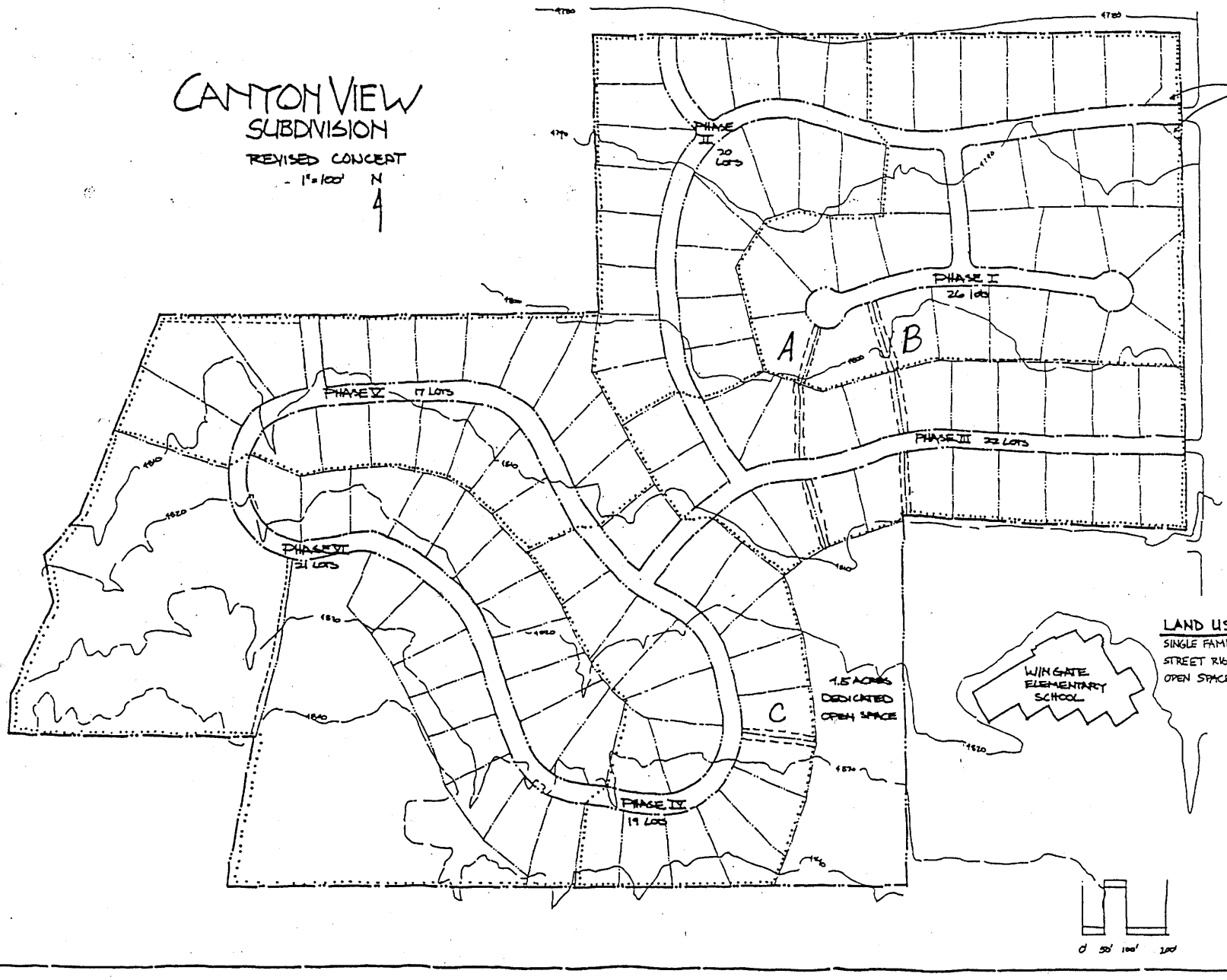
Mr. Chairman, on item #214-94, Final Plan/Plat for Phase II and an amendment to the ODP of the Canyon View Subdivision, I move that we approve the request as recommended by staff.

CANYON VIEW SUBDIVISION

REVISED CONCEPT

- 1"=100'

N



LAND USE	ACRES	% OF TOTAL
SINGLE FAMILY LOTS (125)	67.3	80.8
STREET RIGHT-OF-WAY	11.3	13.5
OPEN SPACE	4.7	5.6
	± 83.3	99.9

0 50' 100' 200'

JOB 9327 — MONTH 11 — DAY 25 — DRAWING 01

1" = 100' DRAWN BY CGR

CIAVONNE & ASSOCIATES INC.
896 GRAND AVE.
GRAND JUNCTION, CO.

EXHIBIT 1

21 9 5

REVIEW COMMENTS

FILE # 214-94

TITLE HEADING: Revised Outline Development Plan/Final Plan - Canyon View

LOCATION: South Camp Road West of 22 Road

PETITIONER: John Thomas

PETITIONER'S ADDRESS/TELEPHONE: 321 Quail Drive
Grand Junction, CO 81503
245-1195

PETITIONER'S REPRESENTATIVE: Craig Roberts/Ciavonne & Associates

STAFF REPRESENTATIVE: Tom Dixon

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., DECEMBER 28, 1994.

T.C.I. CABLEVISION — 12/07/94
Glen Vancil — 245-8777

See attached comments.

SCHOOL DISTRICT #51 — 12/15/94
Lou Grasso — 242-8500

See attached comments.

GRAND VALLEY RURAL POWER — 12/08/94
Perry Rupp — 242-0040

Not in Grand Valley Rural Power service area.

CITY PARKS AND RECREATION DEPT. — 12/06/94
Don Hobbs — 244-1542

The dedication of the 4.5 acre site for a park will be accepted in lieu of an Open Space Fee.

CITY FIRE DEPARTMENT — 12/06/94
Hank Masterson — 244-1414

Hydrant locations and fire line sizes are acceptable. Canyon View Drive, after completion of Phase 2, will be a dead end street in excess of 150' long and will not have a turn around provided. A acceptable turn around for emergency vehicles must be provided.

CITY UTILITY ENGINEER **12/15/94**
Bill Cheney **244-1590**

1. Existing versus proposed water and sewer do not match legend on "Composite Plan".
2. Why doesn't sewer line stationing match center line stationing?
3. Good set of plans. Thank You!

REDLANDS WATER AND POWER **12/13/94**
Gregg Strong **243-2173**

1. Our records show that the owners have a total of 103 shares of RWPC water.
2. Redlands has a 35' ROW from center line of our concrete ditch through property.
3. Redlands will supply water through a new headgate to be installed this Spring on our Goat Lift.
4. Redlands wants to see the proposed drainage plan for this Subdivision and receive a copy of the Final Drainage Report.
5. A "HOLD HARMLESS" clause will be required in the drainage report on Redlands behalf.

CITY DEVELOPMENT ENGINEER **12/14/94**
Jody Kliska **244-1591**

Plat:	The 14' easement adjacent to the streets should be called a multipurpose easement and be labeled and dedicated as such.
Storm Water Facilities:	The SWMM Manual requires sodding or seeding of slopes.
Street Plans:	City Codes require street lights. End of road markers may be used in place of Type 3 barricades.
Cost of Improvements:	Needs to include City Inspection Fees estimated at $1,000, as-built drawings and street lights.
Drainage Report:	Thank you for following the SWMM.

PUBLIC SERVICE COMPANY **12/15/94**
G. Lewis **244-2695**

Gas & Electric: 20' "Access Easement" as shown across north edge of Lot 7 must be maintained as utility easement for existing gas & electric lines. Will require relocation of existing facilities in portion of 20' easement shown to be abandoned.

COMMUNITY DEVELOPMENT DEPARTMENT **12/16/94**
Tom Dixon **244-1447**

See attached comments.

STAFF REVIEW (Preliminary review)

FILE: 214-94

DATE: December 19, 1994

STAFF: Tom Dixon, AICP

REQUEST: Final Plat/Plan review of Phase II consisting of 20 single-family lots and review of a revised Outline Development Plan (ODP)

LOCATION: One mile south of South Broadway on the west side of South Camp Road, Redlands

APPLICANT: John Thomas

EXISTING LAND USE: Mostly undeveloped, residential units under construction

PROPOSED LAND USE: Single-family Residential

SURROUNDING LAND USE:

NORTH: Undeveloped
SOUTH: Institutional (Wingate School)
EAST: Undeveloped
WEST: Agricultural/Single-family Residential

EXISTING ZONING: PR-2

SURROUNDING ZONING:

NORTH: R-2 (Mesa County)
SOUTH: R-2 (Mesa County)
EAST: PR3 (Mesa County)
WEST: R-2 (Mesa County)

RELATIONSHIP TO COMPREHENSIVE PLAN/POLICIES/GUIDELINES:

This site is subject to the Redlands Goals and Policies. Several recommendations in this adopted document apply to this review. For the Phase II filing, construction of residences should be done with exterior finishes of natural and earth tones. The placement of fences should be restricted in order to maintain open views of the area and to preserve vistas of the nearby Colorado National Monument.

For the ODP, densities along the Monument are limited to one unit per 5 (five) acres. Only structures on such 5-acre parcels are to be allowed within 1,000 feet of the Monument boundary, according to this policy document. Exemptions to this have been granted to existing platted lots.

STAFF ANALYSIS:

Phase II of the Canyon View Subdivision consists of 20 single-family residential lots on 9.7 acres. The revised ODP adds another 23.8 acres to the 49.29-acre subdivision site. The proposed density in Phase II corresponds to the approved overall zoning of 2 units per acre for the entire subdivision. The layout of the proposed lots in Phase II substantially follow the approved ODP and Preliminary Plat which was reviewed in the latter part of 1994.

As proposed, this phase of development will encounter a major drainage problem which was examined, discussed, and considered when this project was first reviewed by Mesa County for approval. The natural drainage pattern flows from south to north and northwest. The proposed solution to the drainage created by Phase II is to disqualify one of the lots (Lot 1 Block Three) and part of a street (Lime Kiln Way) from present development and instead make this area a temporary storm water retention facility. This area is located on the northwest corner of the site and will remain as an easement until subsequent phases of the development provide an alternative permanent means of handling storm water run-off.

As proposed, Phase II will extend Canyon View Drive as the main roadway through the subdivision at this point. All of the proposed lots in this phase will have frontage along this street except for Lot 2, Block Three which is next to the storm water retention facility. Lot 2 will have access onto Lime Kiln Way which will be extended up to the point where it becomes a temporary easement.

The original platting of Phase I included a 14-foot wide temporary access easement extending from west to east to allow some existing residences to the west of Canyon View to have vehicular access to South Camp Road. As Phase II becomes built, the easement is not needed through lots in Phase I. This easement restriction should be eliminated; otherwise, some of the lots in Phase I remain unbuildable. Eventually, it is anticipated that these residences to the west of the subdivision will gain access from a road extension in Phase V.

Another issue concerns pedestrian access through the subdivision to the 4.5-acre park site adjacent to Wingate Elementary School which is in the process of being deeded to the City. Phase I provided an easement toward the park although it was platted differently from what was intended in the annexation agreement.

The revised ODP expands the total area of the Canyon View Subdivision to take in an additional area of almost 24 acres between the original ODP and the Colorado National Monument. This area is identified as portions of Phases V and VI.

Issues to be resolved on the final platting of Phase II and ODP:

1) 12-foot wide pedestrian easements through Phases III and IV to the open space area must be identified on the revised ODP. One of these easements must of be for maintenance vehicles to access the park site by a means other than an easement through School District

#51 property.

2) The pedestrian easement in Phase II must align with the pedestrian easement platted in Phase I.

3) The park site shall be platted as a separate and distinct lot or tract with Phase II.

4) The Redlands Goals and Policies restriction of densities along the Colorado National Monument are to limited to one unit per 5 (five) acres. Only structures on such 5-acre parcels are to be allowed within 1,000 feet of the Monument boundary.

5) The temporary access easement through Phase I must be eliminated when Phase II is platted.

6) A Development Improvements Agreement for required improvements is necessary prior to platting of Phase II.

7) Other issues identified by reviewing agencies must be addressed.

STAFF RECOMMENDATION:

Approval of the proposed Final Plan/Plat for Phase II and an amendment to the ODP of the Canyon View Subdivision, with the following issues noted above (1 through 4) to be resolved or satisfied prior to final platting.

SUGGESTED PLANNING COMMISSION MOTION:

Mr. Chairman, on item #214-94, Final Plan/Plat for Phase II and an amendment to the ODP of the Canyon View Subdivision, I move that we approve the request as recommended by staff.

File #214-94

December 27, 1994

Mr. Tom Dixon
Community Development Department
City of Grand Junction
250 North 5th St.
Grand Junction, CO. 81501

Dear Mr. Dixon,

The following is a response to the review Agency Comments concerning the Revised Outline Development Plan and Final Plan Phase II Canyon view submittal dated December 1, 1994, File #214-94.

TCI Cablevision
1. Construction coordination concerning trenching, conduit, backfill, and charges will be complied with as required.

School District 51
1. Sidewalks will be provided with the connection to the bike trail allowing access to the school and park site.

City Parks and Recreation Department
1. The 4.5 acre dedication, shown as Lot 2, Block 4 will be made in lieu of an Open Space Fee.

Grand Junction Fire Department
1. Turn-a-round for Canyon View Drive is shown as suggested..

Grand Junction City Utility Engineer
1. Legend has been corrected. The sewer line does not follow centerline, thus the stationing is different.

Redlands Water & Power
4. A copy of the Final Drainage Report has been mailed to Mr. Strong.
5. The petitioner requests the wording for the "Hold harmless" clause be submitted to the petitioner for review.

City Development Engineer
1. Multi-purpose easement has been labeled as directed.
2. Seeding spec. has been added to construction drawings for the retention area.
3. Additional review fees will be added to the cost estimate sheet. Street lights have been omitted as per annexation agreement. This area (adjacent to the Colorado National Monument) has purposefully omitted street lights to reduce light pollution and to maintain the rural atmosphere.

Community Development Staff

1&2. Easements are not required on an ODP. Adjacent land uses have been added to comply with SSID manual.
3. Park site has been shown on the plat as Lot 2, block 4.
4. 1000' restriction line has been added to the ODP showing the area affected. Lots within this area will be kept to the 5 acre minimum.
5. Temporary Access Easement will be eliminated in Phase 1.

Sincerely,

Craig Roberts
Secretary/Treasurer
Ciavonne & Associates, Inc.

Final Drainage Report

for

Canyon View Subdivision Phase II

December 1994

214 9

Prepared for:

John Thomas
Thomas & Sun, Inc.
321 Quail Drive
Grand Junction, Colorado 81503

Prepared by:

Thompson-Langford Corporation
Engineers and Land Surveyors
529 25 1/2 Road, Suite B210
Grand Junction, Colorado 81505
Ph. (303) 243-6067

Job No. 0208-002

214 94

Engineer's Certification

The following report was prepared by Curt Dwyer under the direction and final review of James E. Langford.

Curtiss P. Dwyer, EIT

James E. Langford, PE & LS
Reg. No. 14847

- *General Site Location and Description*

A. Site And Major Basin Location

This report deals with the storm runoff issues of the second phase of the Canyon View subdivision, located in Section 35, Township 11 South, Range 101 West , of the 6th Principal Meridian, in Mesa County, Colorado. The project is located just west of South Camp Road, and north of both Wingate Elementary School and Quail Estates subdivision.

B. Site and Major Basin Description

1. Areas

Significant major areas are:

Canyon View Subdivision, All Phases	49.292 Acres
Phase II	9.739 Acres
Entire Drainage Basin, North and South Portions	23.834 Acres

2. Ground Cover Types

Due to previous development and agricultural activity, ground cover varies with location in the drainage. In the upper regions of the basin, ground cover consists of sagebrush and wheatgrass, with some rabbitbrush and bluegrass. The lower regions, wholly included in the north portion, are covered by irrigated apricot trees, irrigated alfalfa plants, and miscellaneous native annual grasses.

3. Hydrologic Soil Types

The upper portion of the basin approaches the Colorado National Monument, and according to the SCS, is of the soil series GIB, or Glenberg Sandy Loam. This soil is typical of the gently sloping alluvial fans near the base of the Monument, and its runoff potential is classified as "moderate".

The lower portion of The basin consists of both Tb (Thoroughfare Fine Sandy Loam) and Rh (Redlands Loam). Each of these are alluvial in origin and are derived mainly from sandstone, but also from other rocks such as shale, granite, and limestone.

According to the SCS, a Hydrologic Group of "B" is appropriate to all soils in this area.

- *Existing Drainage Conditions*

A. Major Basin

Generally, the site is located at the base of the Colorado National Monument, 2000 to 3000 feet from the alluvial fans at the Monument's base. The site itself is relatively flat, sloping generally to the north and, to a lesser extent, the east at 2 - 3%. It rests on a barely discernible bench between Limekiln Gulch to the west and the upper extremities of Goat Draw to the East. The most significant of the basins tributary to this project have been directed to a manmade swale along the west edge of South Camp Road.

According to the Mesa County Floodplain Administrator, the site is not near any known 100 year flood plain.

B. Site

The area that will become Canyon View Subdivision Phase II is most appropriately classified as fallow agricultural land, as most of the area is fallow alfalfa fields (to the north), apricot orchards (central) or

grasslands with scrub (south). The area slopes north and east, and runoff has historically flowed into Goat Draw. Since the construction of South Camp Road, storm runoff has drained into a manmade swale on the west side of the road. When it was constructed, this drainage approximated the historical drainage pattern of Goat Draw. Indeed, it is Goat Draw into which the modern drainage eventually flows.

Upstream drainage basins are the canyons of the Colorado National Monument, and are a relatively short distance from the site. Examples of these basins are Red and Ute canyons. Runoff from these basins follow historically established paths and do not impact our site. However, northward flow from the southern portion of the basin (see Appendix A, Diagram "B") flows along the approximate center of this basin, and is the beginning of what will eventually be Goat Draw. As such, it is legitimate upstream inflow to the site.

- *Proposed Drainage Conditions*

A. Changes in Drainage Patterns

The reader is referred to Appendix A for diagrammatic representations of the concepts discussed in this section.

The drainage pattern of the basin will be altered inasmuch as the upstream inflow from the southern portion of the major basin will be intercepted and retained by Retention Basin "B". This basin stretches from the Canyon View/Wingate Elementary property line to a natural ridge that separates the northern portion from the southern portion of the major drainage basin (see Appendix A, Diagram "F"). The upstream inflow from the undeveloped southern portion of the drainage is thus dealt with. Construction of Retention Basin "B" will coincide with the construction of Phase II. With this plan, Retention Basin "B" has been designed to retain 100% of the runoff generated by the 100 year event developed within this portion of the watershed.

The drainage pattern of the north portion of the drainage basin will be altered insofar as it will no longer be allowed to continue to flow north and offsite. Because this phase of Canyon View Subdivision is using a *total retention* method of stormwater runoff management, all stormwater from the northern sub-basin will be retained in Retention Basin "A".

The historic runoff flow path (route), while not immediately apparent on available topographical maps, is the approximate center of the basin (see Appendix A). In the northern portion of the drainage basin, the proposed route will do very little to disrupt this historic route (that is, before it gets to Retention Basin "A"). As proposed, Canyon View Drive will become the new route. This enables the runoff to maintain its historic south-to-north flow tendencies while shifting it only slightly to the west. With this plan, the historic runoff flow path in the southern portion is unchanged before it encounters Retention Basin "B".

Finally, because of the a retention basin at the extreme north end of the basin, the natural beginning of Goat Draw is changed (i.e., delayed).

B. Maintenance Issues

Retention Basin "A" and its maintenance is the property and responsibility of the Canyon View Subdivision Homeowners' Association. Retention Basin "B" will become the property and responsibility of School District 51 once the district accepts ownership of this parcel.

The "sodded or seeded" banks of these basins will have to be maintained during the growing season (mowed and trimmed). Over time, silt deposits may have to be removed from the basins via dredging. Functional maintenance is minimal, as both basins are total retention basins, and hence have no outlet works, underground conveyance pipes, spillways, or other appurtenances that may otherwise be subject to clogging or deterioration.

- *Design Criteria and Approach*

A. General Considerations

This report and analysis were prepared in faithful accordance with the 1994 Grand Junction Storm Water Management Manual (SWMM), which sets forth policies protecting property owners from the adverse effects of changes to quantity, quality, location, or form of stormwater discharge.

The owners of Canyon View, after having sought the advice of this office, have elected a retention-without-overflow approach to stormwater management for Phase II. Selection of this approach was predicated on the adherence to conditions commensurate with successful retention implementation set forth on page VIII-12 and VIII-13 of the SWMM. See the "Compliance" portion of the "Results and Conclusions" section of this report.

B. Hydrology

Because the owners of Canyon View desire a simple retention facility as the sole means of stormwater control for Phase II, hydrologic methods of analysis and calculations are relatively simple. The design storm is the 100 year 24 hour event, which is defined as 2.01" in Table A-2 in the SWMM. Required volume is given by the following equation:

$$V = \{P_{100,24hr}\} \cdot \{Area\} \cdot C_{100,d}$$

This equation is simply an extension of the Rational Method equation (Q = CIA).

The developed runoff coefficient (Cd) for the north portion of the basin has a value of 0.39 and was determined using Table B-1 in the SWMM (see Appendix "B"). The runoff coefficient of the (undeveloped) southern portion was found similarly. The coefficient for the northern portion is a weighted average between the coefficients recommended for "Residential Areas", those recommended for "Miscellaneous Surfaces" (Pavement and Roofs), and those recommended for "Undeveloped Areas" (Pasture). Note that the value for Residential Area (0.31) is a rough interpolation between the values given in Table B-1 for "1/3 Acre per Unit" and those given for "1/2 Acre per Unit". Lot size for Canyon View Phase II is 0.4 Acres. It has also been recognized that the site is relatively flat, tending more toward the "0-2%" slope than towards the "2%-6%" slope condition. Values were weighted in accordance to the percentage of total area that each occupied (see Appendix A, Diagram "C" and Appendix B for calculations).

North Portion	South Portion
15.825 Acres	8.009 Acres

The undeveloped runoff coefficient (Cu) for the south portion of the basin has a value of 0.35 (Table B-1, SWMM). The runoff from this (southern) portion, ownership of which is being transferred to school district 51, will be retained in Retention Basin "B" (see Appendix B for 100 year retention requirements).

- *Results and Conclusions*

A. Results

Because this report deals with retention facilities, issues such as spillway design, outlet works, and other issues with which one must deal in the design of more complex detention facilities have been omitted. This report sets forth the required retention volume and stops at verifying that the design accommodates it by way of both conveyance *and* retention capacity.

	Available Retention Volume	Required Retention Volume
Retention Basin "A"	47,988 c.f.	45,031 c.f.
Retention Basin "B"	23,363 c.f.	17,531 c.f.

B. Compliance

Per requirements set forth in VIII-12 and VIII-13 of the SWMM, the soil in the areas of the retention ponds have been tested for percolation. The reader is referred to the results and letter prepared by

geotechnical engineer Gary Hamacher of Western Colorado Testing, included in Appendix D, as evidence of compliance with Grand Junction requirements for retention facilities.

In addition to compliance with required retention volume, this project was also analyzed to ensure its capacity to *transport* the 100 year, 24 hour event runoff. The streets and conveyance structures were subjected to the 100 yr runoff to find street inundation limits. The inundation limits for the 100 year event were found to be well within the specified inundation limits for the *2-year* event. It follows that the 2 year storm would be inconsequential with respect to inundation. The result of this analysis was the determination that, even during the 100 yr event, the flow was well within event the 2 yr event limits. Significant (maximum) flow depths are:

Event	Maximum Flow Depth
2 Yr.	0.18'
100 Yr.	0.27'

The storm inlet and underground storm drain have each been verified for the 2 year event, but are also *capable* of carrying the 100 year event. In the event that for some reason the capacity of the inlet and drain were to be exceeded, storm water would cross the center of the road, then flow directly into Retention Basin "A" (see Appendix A, Diagram "C"). It will not flow onto private property behind the sidewalk because the road center is *lower* than the back-of-walk by 0.18'.

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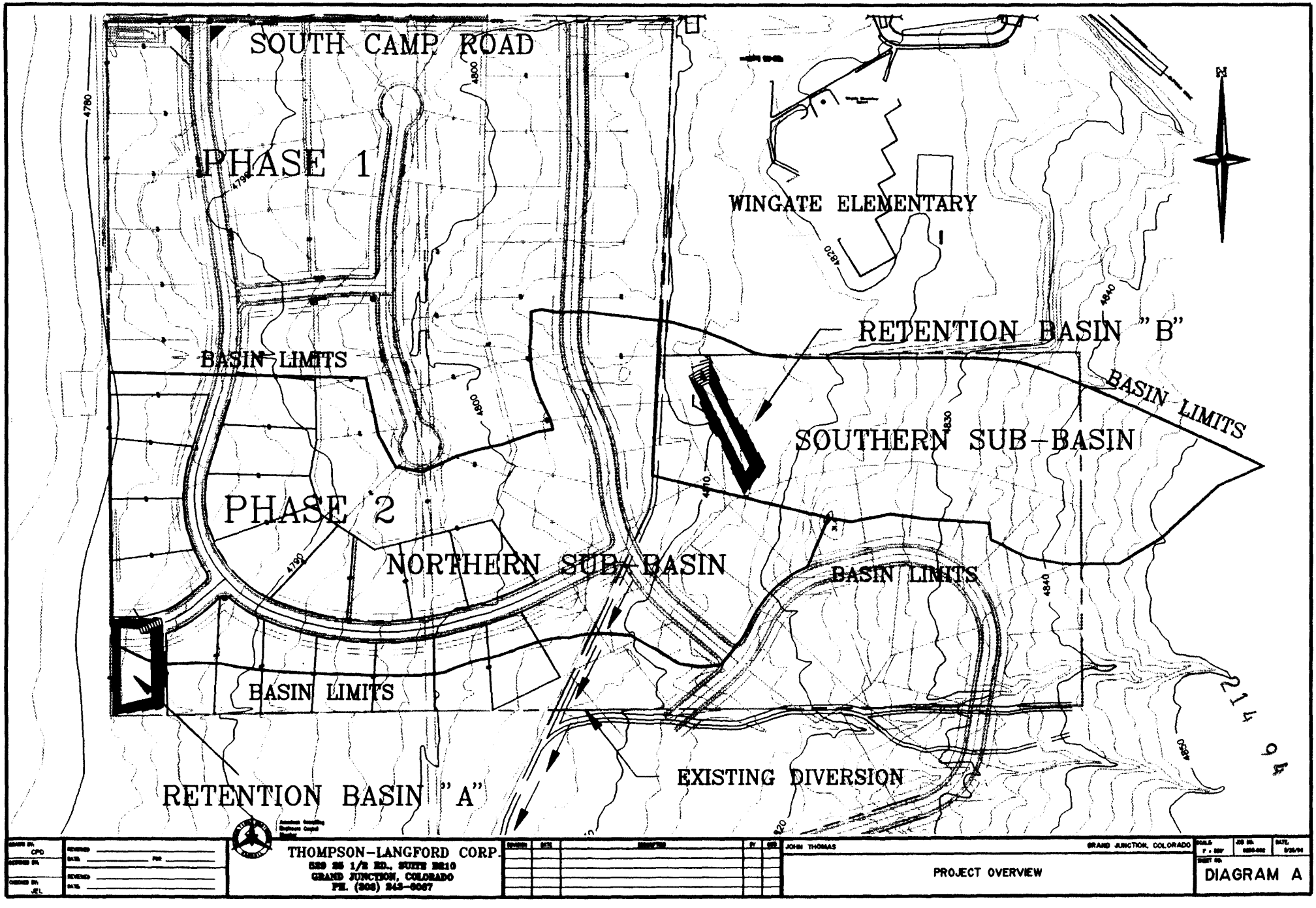
- *References*

- 1994 Stormwater Management Manual (SWMM), City of Grand Junction, June, 1994
- City of Grand Junction Standards, City of Grand Junction, June, 1994
- Soil Survey - Grand Junction Area, Colorado, United States Department of Agriculture - Soil Conservation Service (with the Colorado Agricultural Experiment Station), November, 1955
- Soil Survey of Mesa County Area, Colorado, United States Department of Agriculture - Soil Conservation Service (with the Colorado Agricultural Experiment Station), February, 1978
- Mr. Kelley Pace, Soil Conservation Service - Telephone Conversation September 10, 1993
- Mesa County Storm Drainage Criteria Manual, Mesa County, Colorado, March, 1992
- Meyer, Anderson, Miller, and Van Handel; Inlet Grate Capacities for Gutter Flow and Ponded Water, Neenah Foundary Co., Neenah, Wisconsin

Appendix "A"

Diagrams



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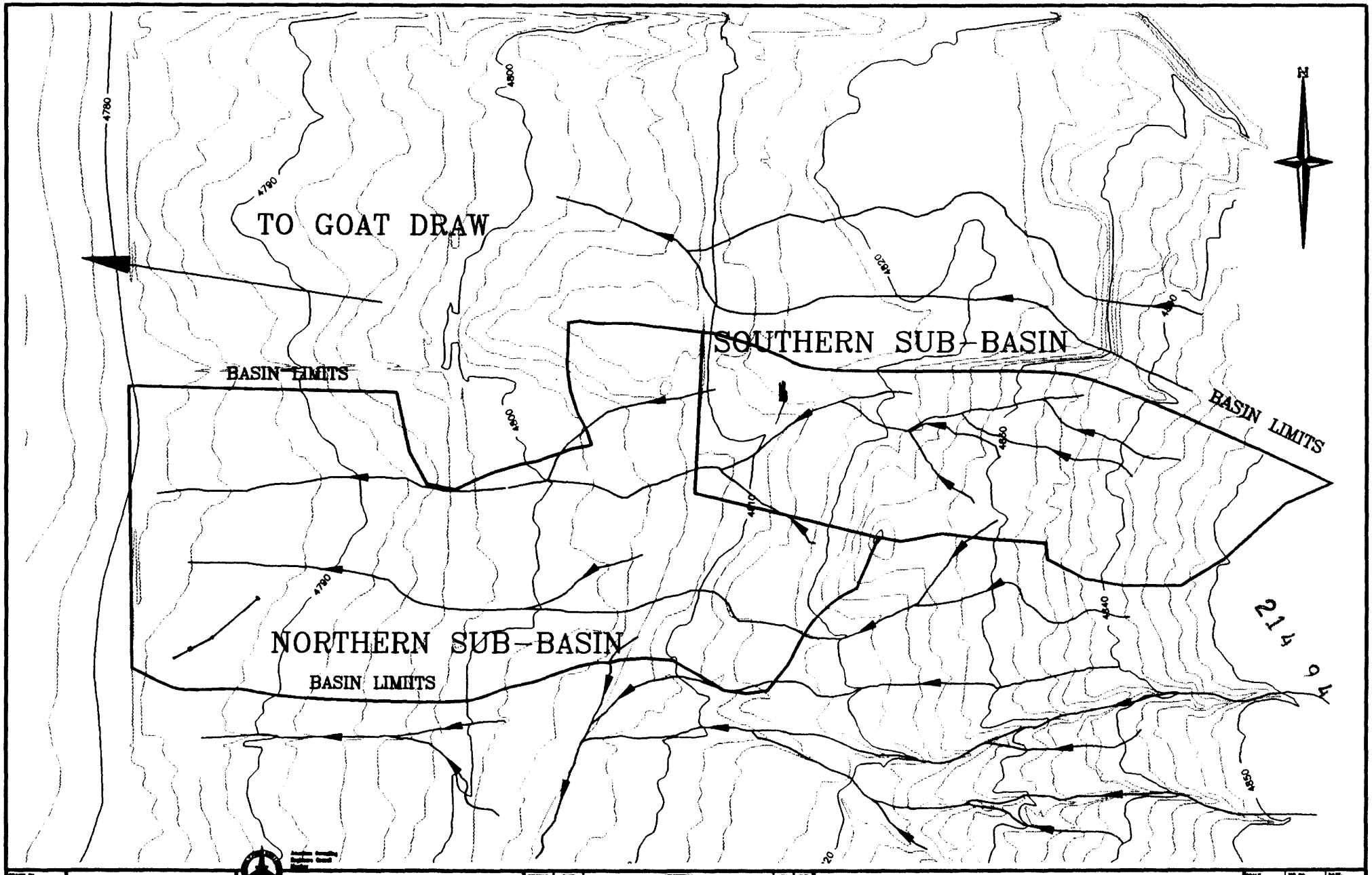
JOHN THOMAS — GRAND JUNCTION, COLORADO

PROJECT OVERVIEW

DIAGRAM A



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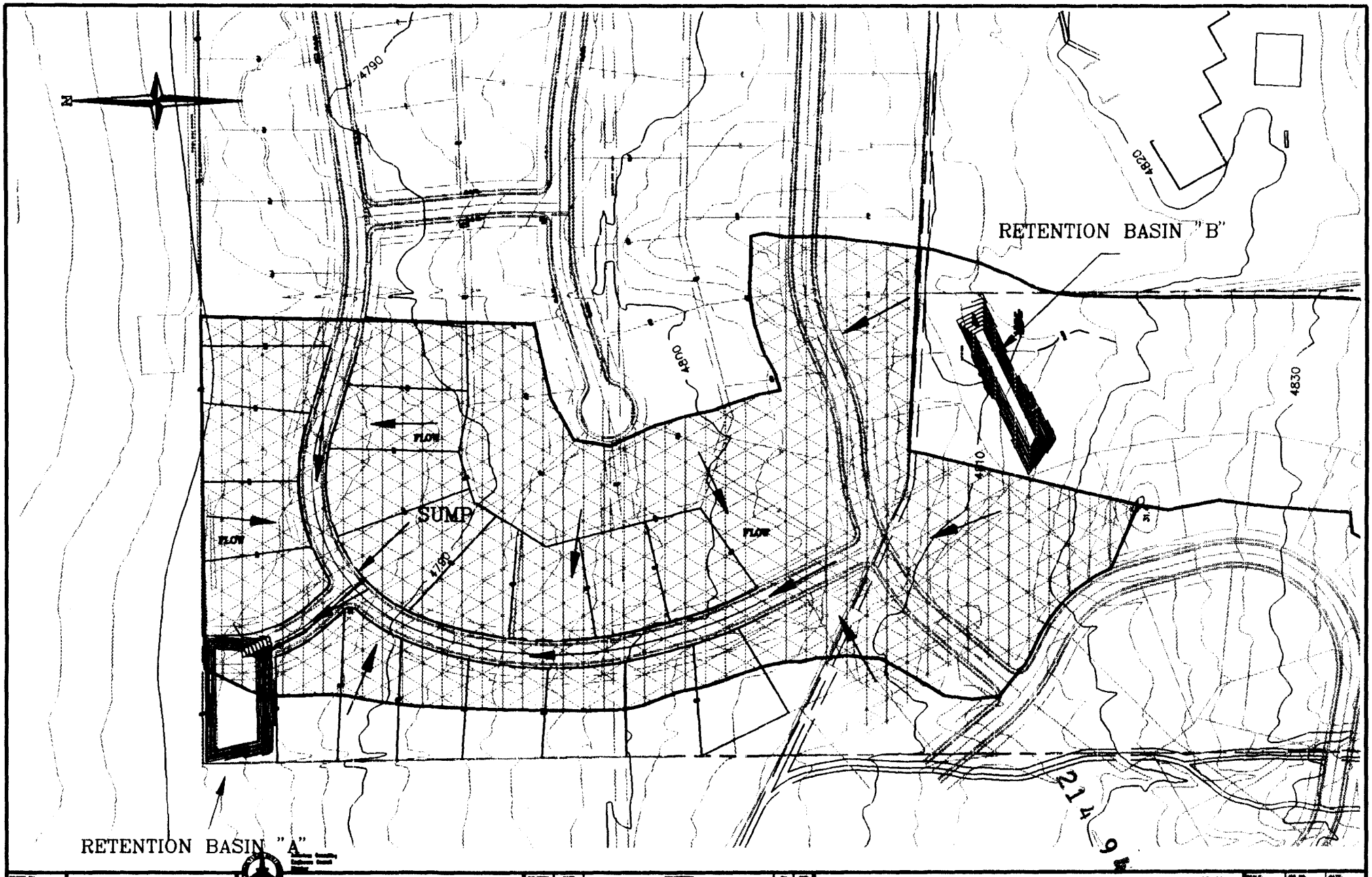
HISTORIC DRAINAGE

DIAGRAM B



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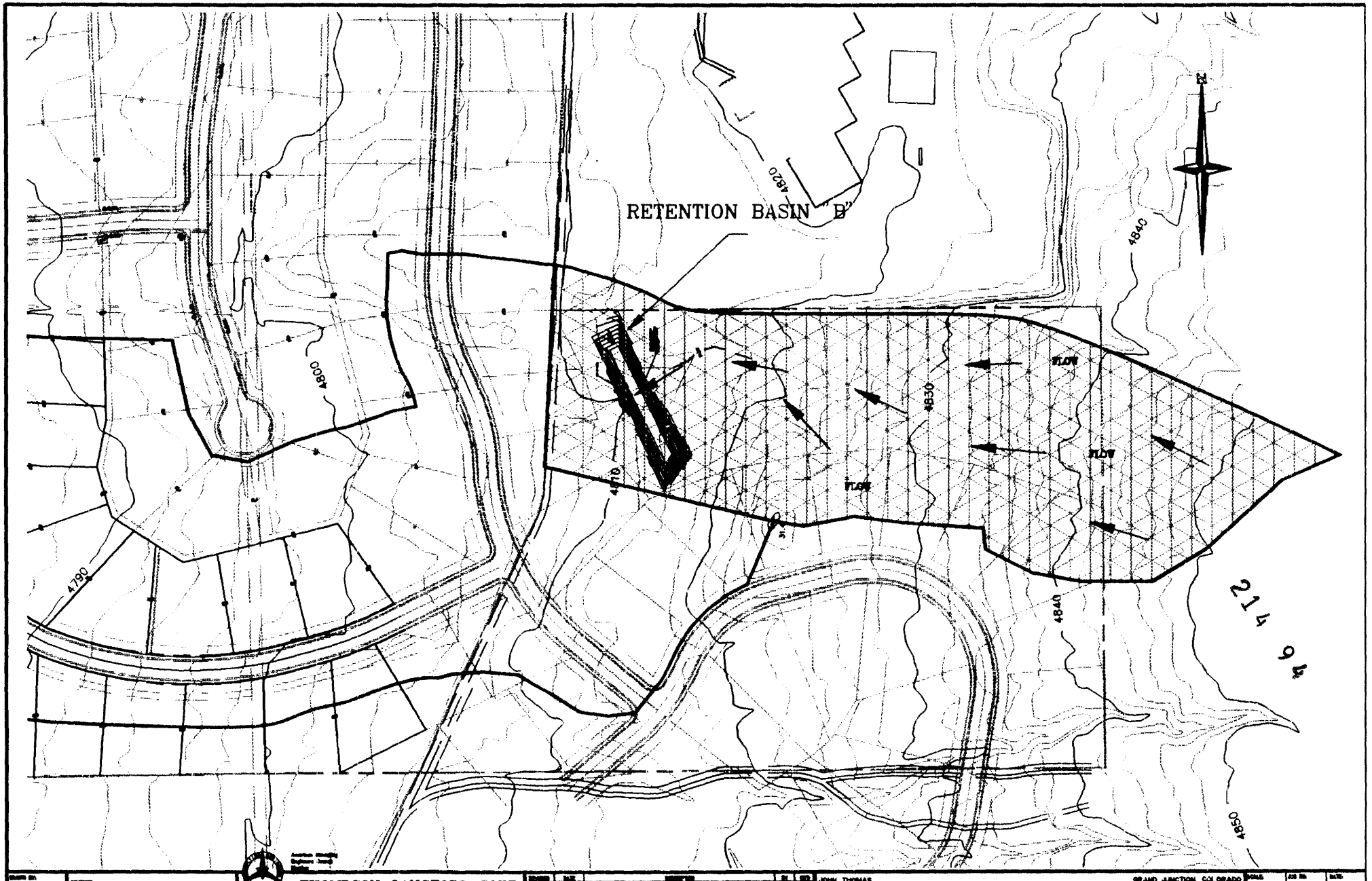
MAJOR DRAINAGE BASIN - NORTH PORTION

DIAGRAM C



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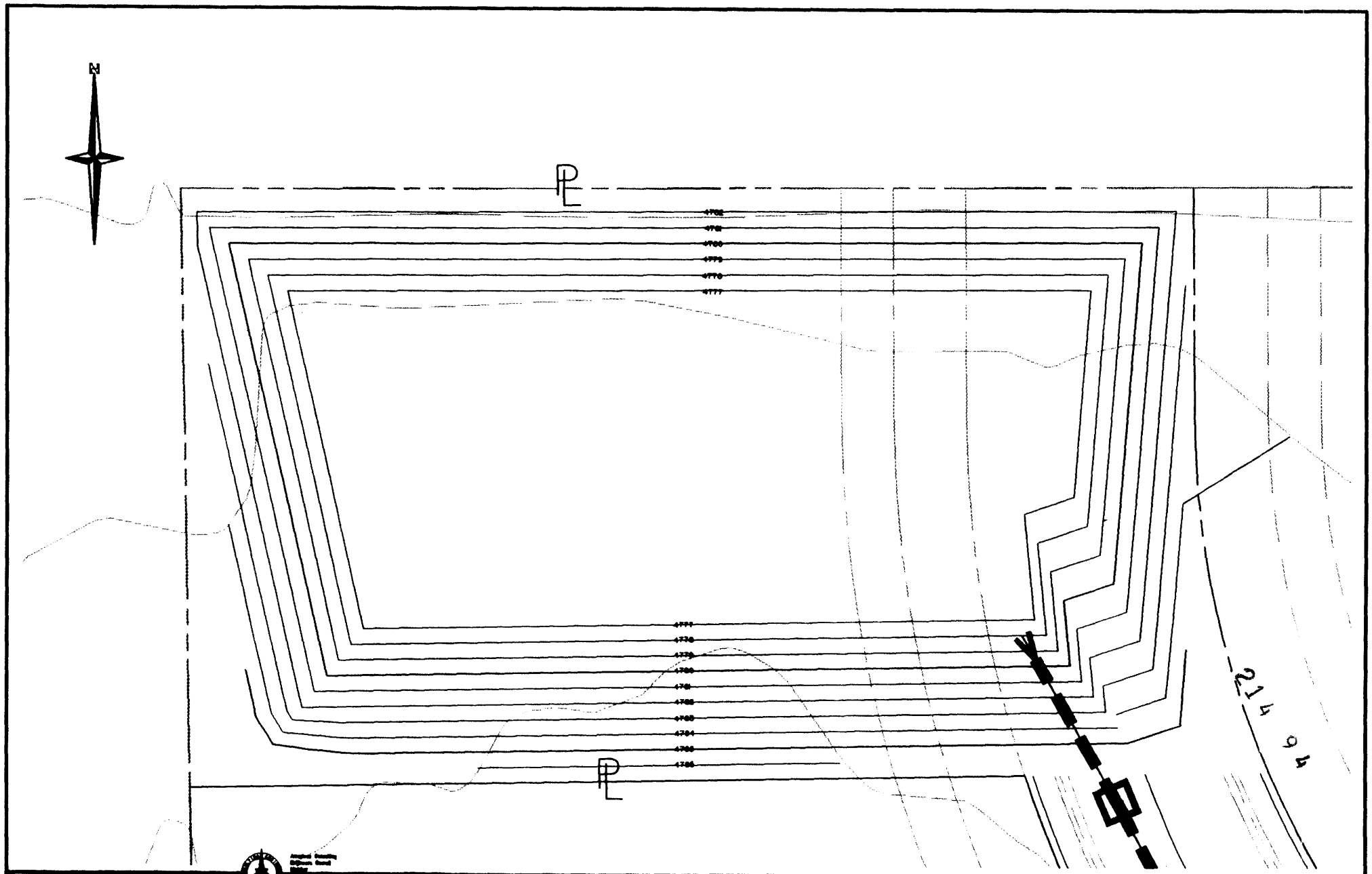
DRAINAGE BASIN SOUTHERN PORTION

DIAGRAM D



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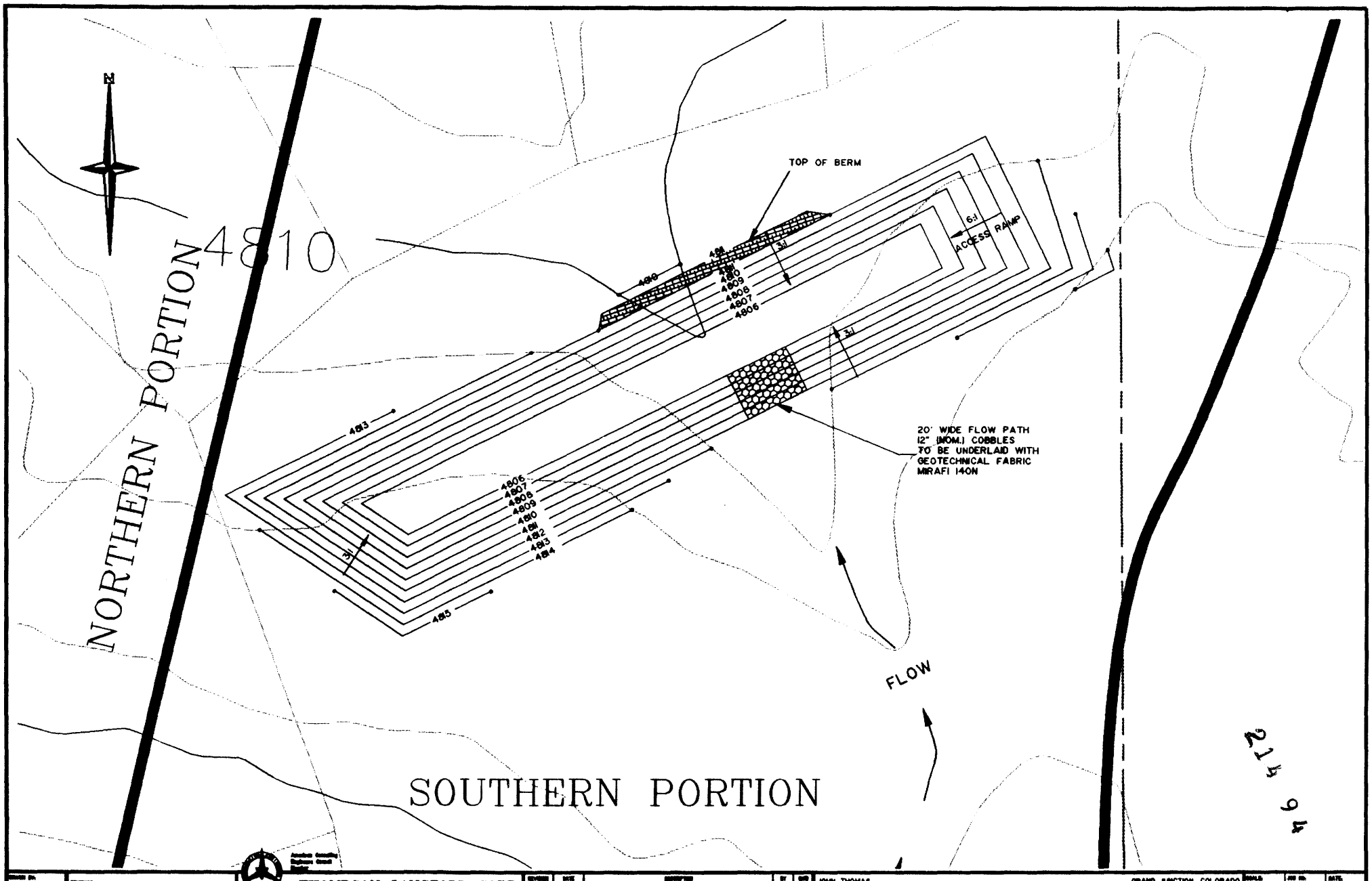
RETENTION BASIN "A"

DIAGRAM E



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RETENTION BASIN "B"

DIAGRAM F

Appendix "B"

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Runoff Calculations

214 94

0208-002

Determination of Rational "C" Values

North Basin Portion

Hydrologic Soil Group "B", 2% - 6% Slope, 100 Yr. Event

Pavement Area = 1.487 Acres = 9.4% {0.96

Residential Area 7.072 Acres = 44.7% {0.28-0.40 (Use 0.31

Undeveloped Area = 5.943 Acres = 45.9% {0.34-0.42 (Use 0.35)

} Table B-

Composite C:

$$C_{North,100} = \frac{9.4\%(0.96) + 44.7\%(0.31) + 45.9(0.35)}{100\%}$$

$C_{North,\ Developed,\ 100\ yr} = 0.39$

South Basin Portion

Entire portion is undeveloped, say

$C_{South,\ Undeveloped,\ 100\ yr} = 0.35$

0208-002

2-year Runoff - North Portion

Peak 2-year runoff

Pavement (9.4% of Total Area)	C = 0.94	Table B-1
Residential Area (44.7%)	C = 0.29	
Undeveloped Area - Pasture (45.9%)	C = 0.29	

Composite Runoff Coefficient:

$$C_{\text{North, Developed, 2-year}} = \frac{9.4\%(0.94) + 44.7\%(0.29) + 45.9\%(0.29)}{100\%}$$

$$C_{\text{North, Developed, 2-year}} = 0.35$$

T_c = 18 Min (See Attached), I = 1.17 in/hr (Table A-1)

Runoff Calculation:

$$Q_2 = CIA = 0.35\,(1.17\ \text{in/hr})\ 15.825\ \text{Acres}$$

$$Q_2 = 6.48\ \text{cfs}$$

Maximum Q Per Gutter = 90% (6.48 cfs) 1/2 gutters = 2.9 cfs

Note: Approximately 90% of storm runoff will come from South.

Depth of Flow: Manning's Modified Eqn.

$$Q = 2.9 = \frac{0.56}{0.0165}\ 50\,(0.0267)^{1/2}\ D^{8/3}$$

$$D_2 = 0.18'$$

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- 100 year runoff - North Portion

Determination of T_c:

The flow lines in the developed condition will be the gutters of Canyon View Drive, flowing Northward and westward.

$$T_c = T_o + T_s + T_{ch}$$

T_o: Using the FAA 1970 Method,

$$T_o = \frac{1.8(1.1 - C)L^{0.5}}{S^{0.33}}$$

$C = 0.31$ (Table B-1, SWMM)

$L = 200$ ft

$S = 3\%$ (Avg. Lateral Flow To Gutters)

$$T_o = \frac{1.8(1.1 - 0.31)200^{0.5}}{3^{0.33}}$$

$T_o = 13.9$ min, Say $T_o = 14$ min ←

T_s: The shallow flow length, before it encounters a gutter, is about 350.

Flow Velocity = 1.2 FPS (Fig. E-3)

Flow Time = 350'/1.2 FPS = 292 Seconds

- 100 year runoff (Continued), North Portion

T_{ch}: $T_{ch} \doteq$ 3 minutes

$\therefore$ Time of Concentration = $T_o + T_s + T_{ch} = 10 + \frac{292}{60} + 3 = 18$ min.

Intensity:

$I = 2.99$ in/hr (100 yr. event, T_c = 13 minutes
Table A-1, SWMM)

Area:

Area = 15.825 Ac. (See attached)

Runoff Coefficient:

Composite "C" = 0.39 (See attached)

Runoff Calculation:

$Q_{100} = CIA = 0.39\,(2.99\text{ in/hr})(15.825)$

$Q_{100} = 18.5$ CFS

Sizing Retention Basin:

$$\text{Reqd Volume} = P_{100,24\text{hr}}\, A\, C_{100d} = \frac{2.01''\,(15.825\,Ac)\,43560\,(0.39)}{12''/ft}$$

$V_{req} = 45,031\ ft^3$ (North)

- 100 Year Runoff (Continued), South Portion

Area:

Area = 8.009 Acres (See Attached)

Sizing Retention Basin:

Required Volume = $P_{100,24hr} A C_{100}$

$$= \frac{2.01''}{12''/ft} (8.009 \text{ Acres})(43560 \text{ ft}^2/\text{Acre}) 0.30$$

$V_{req} = 17,531 \text{ ft}^3$ (South)

$Q_{max} = (0.30)\ 2.23 \text{ in/hr}\ (8.009 \text{ Acres})$

$Q_{max} = 5.36$ CFS

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Appendix "C"

Street, Inlet, and Subsurface Flow

Determination of Manning's 'n' value

$n = (n_0 + n_1 + n_2 + n_3 + n_4) M D$ (pg F-2, SWMM)

$n_0 = 0.013$ (Smooth Concrete Gutter w/ Asphalt Pavement)

$n_1 = 0.002$ (Minimal Surface Irregularities)

$n_2 = 0.000$ (The Effects Due To Obstructions, i.e. The wheels of Parked Cars, are addressed in Fig. G-4)

$n_3 = 0.000$ (Negligible vegetation obstruction)

$n_4 = 0.000$ (Negligible obstruction due to variations in Channel cross-section)

$M = 1.000$ (Negligible Channel meandering)

$D = 1.1$ (Some sediment will, over time, be deposited on the Channel (Gutter) bottom)

$n = (0.013 + 0.002 + 0 + 0 + 0) / (1.1)$

Adjusted $n = 0.0165$ (Per pp. F-2 f.f.)

2-year Street Flow

Peak 2-year Runoff : 6.48 cfs (See Attached)

As with the 100 year event, 90% of the storm runoff will flow from the South.

6.48 cfs (90%) $\frac{1}{2}$ = 2.9 cfs Per Gutter

Q_{gutter} = 2.9 cfs

Inlet Sizing

Double Inlet - Use Neenah R-3296-A, Type L Grate

Grate Open Area = 3.6 ft² } Manufacturer's Specifications
Weir Perimeter = 8.8 ft }

Using Neenah Capacity Calculation Methods,
Grate Capacity = 3.25 cfs when ponded depth = 0.23' ok
See App "A"

Note: Grate Capacity = 9.25 cfs (100 year Capacity) when ponded depth = 0.47'

Note: Design factor was to not include vertical curb opening in inlet capacity Calculation (SWMM, Fig. G-6 "Clogging Factors").

Storm Drain Capacity

Specify 24" RCP pipe. See attached (Computer generated) verification.

0208-002

100 Year Street Flow - North Portion

$Q = 0.56 (Z/n) S^{1/2} d^{8/3}$ (Modified Manning's)

$= 0.56 (50/0.0165) 0.0267^{1/2} (0.5)^{8/3}$

$Q = 43.67$ cfs (0.80) ← Gutter Capacity Reduction Factor per Fig. G-4

$Q_{max} = 34.94$ cfs

$Q_{100} = 18.5$ cfs - This flows toward the inlet from two directions. Approximately 90% Comes from the South; approximately 10% Comes from the East

Worst Case: Flow from the South

18.5 cfs (0.90) = 16.7 cfs, or 8.3 cfs per Gutter

Rate

34.9 cfs (Available Single Gutter Capacity) > 8.3 cfs (Reqd Single Gutter Capacity) OK

Actual Depth: $8.3 \text{ cfs} = \frac{0.56}{0.0165} 50 (0.0267)^{1/2} D^{8/3}$ (0.0267 = Minimum Gutter Slope)

Depth

$D = 0.27$ ft ←

Note: This worst-case flow depth for the 100-year event is well within the 2-Year inundation limits!

Circular Channel Analysis & Design
Solved with Manning's Equation

Open Channel - Uniform flow

214 of 2

Worksheet Name: Canyon View Phase II

Comment: 2 Year Event - Qmax = 3.25 cfs

Solve For Actual Depth

Given Input Data:

Diameter.....	2.00 ft
Slope.....	0.0100 ft/ft
Manning's n.....	0.025
Discharge.....	3.25 cfs (Max. Drain Flow, 2 yr. Event)

Computed Results:

Depth.....	0.72 ft
Velocity.....	3.20 fps > 2.5 fps ok
Flow Area.....	1.02 sf
Critical Depth....	0.63 ft
Critical Slope....	0.0165 ft/ft
Percent Full.....	35.93 %
Full Capacity.....	11.76 cfs
QMAX @.94D.....	12.65 cfs
Froude Number.....	0.78 (flow is Subcritical)

Circular Channel Analysis & Design
Solved with Manning's Equation

Open Channel - Uniform flow

2.14 0.4

Worksheet Name: Canyon View Phase II

Comment: 100 Year Event - Qmax = 9.25 cfs

Solve For Actual Depth

Given Input Data:

Diameter.....	2.00 ft
Slope.....	0.0100 ft/ft
Manning's n.....	0.025
Discharge.....	9.25 cfs (Max Drain Flow, 100 yr. Event)

Computed Results:

Depth.....	1.34 ft
Velocity.....	4.15 fps
Flow Area.....	2.23 sf
Critical Depth....	1.09 ft
Critical Slope....	0.0188 ft/ft
Percent Full.....	66.82 %
Full Capacity.....	11.76 cfs
QMAX @.94D.....	12.65 cfs
Froude Number.....	0.67 (flow is Subcritical)

The following is a summary of some of the hand calculations included in this appendix. Even though this project will use *mountable* curb sections, the analysis was made assuming a triangular flow section for reasons of convenience and design conservatism. The following table applies to the north portion.

	Developed, 2 Year Event	Developed, 100 Year Event
Maximum Surface Flow Rate	6.5 cfs	18.5 cfs
Maximum Flow Depth	0.27 ft	0.18 ft

- Inlet

The inlet is a Neenah R-3246-A, which is a double inlet. Its capacity has been designed to handle the 2-year event, but has been verified to pass the 100 year event's runoff. There will be no flow bypass as it is in a sump, receiving runoff from both the south and east. The sump and inlet are located on the north and east side of Canyon View Drive, directly across from the short (as yet unnamed) street that leads directly to Retention Basin "A".

- Drain

The storm drain will have to carry what the inlet accepts, at least the 2 year one-gutter flow (3.25 cfs). This flow will be carried by a 24" aluminum corrugated pipe, laid at a slope of 1.0%. At 24" diameter, and 1.0% slope, the drain will carry runoff at this rate at a depth of 8.6" and a velocity of 3.2 fps (see computer printout, Appendix C). This is in compliance with the SWMM, which states that flow in storm sewer pipes will have a minimum velocity of 2.5 fps (pg. H-1). The full capacity is 11.76 cfs, and Manning's "n" is 0.025 (SWMM Table F-1d).

214 94

Appendix "D"

Geotechnical Considerations

Thomas and Sun, Inc.
John M. Thomas
321 Quail Drive
Grand Junction, CO.
81503

January 25, 1995

Dear Dan,

Recently Phase 2 of Canyon View Sub was submitted to the City for review and approval. Engineering identified street lights as an issue and in their review comments asked for street lights with the explanation that they are required by the code. At the Planning Commission hearing our objection to street lights was heard and the Commission agreed with us, but were advised by counsel that only the Council could overturn the requirement. As a result we have appealed the street light issue to the Council and are scheduled for hearing Wednesday, February 1st.

The purpose of this letter is to bring this to your attention in light of our negotiations at the time of writing the annexation agreement between Canyon View and the City. At that time I specifically asked that an exemption from street lights be written into the agreement. It was not done because you assured me that street lights are not required and that they are installed only at the request of the residents. At the completion of our negotiations on the written agreement you said to me that you and I would have to serve as the institutional memory for this agreement regarding purpose and intent for various issues. Now that such a case has emerged I am asking you to use your influence with Council to inform them of our intent on this issue and to help resolve this in the manner that we both intended. Thanks for your help with this matter.

Sincerely,

John

245-1195

STAFF REPORT TO THE CITY COUNCIL

FILE: #214-94

DATE: January 26, 1995

STAFF: Tom Dixon, AICP

REQUEST: Variance from Section 5-4-10 of the Zoning and Development Code requiring street lights for Canyon View, Phase II.

LOCATION: One mile south of South Broadway on the west side of South Camp Road, Redlands

APPLICANT: John Thomas

EXISTING LAND USE: Mostly undeveloped, residential units under construction

PROPOSED LAND USE: Single-family Residential

SURROUNDING LAND USE:
NORTH: Undeveloped
SOUTH: Institutional (Wingate School)
EAST: Undeveloped
WEST: Agricultural/Single-family Residential

EXISTING ZONING: PR-2

SURROUNDING ZONING:
NORTH: R-2 (Mesa County)
SOUTH: R-2 (Mesa County)
EAST: PR-3 (Mesa County)
WEST: R-2 (Mesa County)

EXECUTIVE SUMMARY: Street lights are required for new subdivisions in the City of Grand Junction. The Zoning and Development Code, under Section 5-4-10 Public Improvements, subsection B., states, "Street signs at all street intersections and street lights shall be required".

The platting of Phase I of Canyon View Subdivision occurred prior to its annexation into the City. Phase I was not required to provide street lights and none were provided. The approval of Phase II by the City's Planning Commission included the requirement for street lighting but this was qualified by the statement, "it is the Commission's general feeling that street lighting in this area should not be required".

Petitioner is appealing the decision to approve the Canyon View Subdivision with the requirement that Phase II include street lighting.

STAFF ANALYSIS: Phase II of the Canyon View Subdivision consists of 20 single-family residential lots on 9.7 acres. The revised ODP adds another 23.8 acres to the 49.29-acre subdivision site. The proposed density in Phase II corresponds to the approved overall zoning of 2 units per acre for the entire subdivision. The layout of the proposed lots in Phase II substantially follow the approved ODP which was reviewed in October, 1994.

The original approval and platting of Phase I, done under Mesa County, did not require street lights. The first phase has finished streets and sidewalks in place and there are several residences under construction.

PLANNING COMMISSION DECISION: Approval of Phase II, Canyon View Subdivision, with conditions. Notation made that street lights should not be required.

Bank of Colorado - Western Slope
GRAND JUNCTION

27 January, 1995

Tom Dixon
City Community Development
City of Grand Junction
Grand Junction, Colorado

Dear Tom:

Please find enclosed recent correspondence sent by me to Linda Dannenberger and referral to you from Linda. I do not agree that you have jurisdiction over this matter based on my review of our improvements agreement with the builder and the county. However, if some action is now required by the city, I would appreciate your immediate attention to my request. Thank you.

Sincerely,

Stephen C. Love
Vice President

200 Grand Ave.
P.O. Box 968
Grand Junction
Colorado 81502
Tel (303) 245-1600
Fax (303) 245-9538

Bank of Colorado - Western Slope
GRAND JUNCTION

20 January, 1995

Linda Dannenberger
Mesa County Planning Department
750 Main Street
Grand Junction, CO 81501

Dear Linda:

In accordance with the terms of our mutual development improvements agreement, Bank of Colorado - Western Slope hereby serves notice that our loan with John Thomas, dba Thomas and Sun, is fully disbursed, and the improvements in Canyon View Subdivision are complete. I have enclosed for your files the final engineering and disbursement report associated with the subdivision improvements.

Please do not hesitate to contact either John or me regarding any questions you may have. It is my understanding that the final utility acceptance information has been provided to you. Thank you.

Sincerely,

Stephen C. Love
Vice President

200 Grand Ave.
P.O. Box 968
Grand Junction
Colorado 81502
Tel (303) 245-1600
Fax (303) 245-9538

THOMPSON-LANGFORD CORPORATION

Engineering & Land Surveying
529 25 1/2 Road, Suite B 210
Grand Junction, Colorado 81505
Phone: 303-243-6067

December 05, 1994

Jim Roussin
Elam Construction, Inc.
1225 South 7th St.
Grand Junction, CO 81501

Re: Canyon View Subdivision, Final Change Orders

Dear Jim:

Please note the following changes made on Pay Estimate No. 3. With the exception of Change No. 29, for the addition of the temporary gravel connection to the existing access, the other changes, 13 thru 28 have been made to adjust the bid quantities to the "As-built" quantities.

Change No. 13, Decrease 8" waterline from 1912 LF to 1906 LF
-6 LF @ $11.40/LF -$ 68.40

Change No. 14, Decrease 8" GV&B from 5 EA to 4 EA
-1 EA @ $490.00/EA -$ 490.00

Change No. 15, Decrease 8" bends,tees or plugs from 9 EA to 5 EA
-4 EA @ $155.00/EA -$ 620.00

Change No. 16, Decrease 8" San. Sew. line from 1892 LF to 1890 LF
-2 LF @ $14.50/LF -$ 29.00

Change No. 17, Decrease CMP removal from 48 LF to 30 LF
-18 LF @ $1.00/LF -$ 18.00

Change No. 18, Decrease 6.5' MCG&SW from 3568 LF to 3561 LF
-7 LF @ $14.65/LF -$ 102.55

Change No. 19, Increase Bike Path price from $7.22/LF to $12.40/LF
750 LF @ $5.18/LF $ 3885.00

Change No. 20, Decrease 6' drainage pan from 80 LF to 51.5 LF
-28.5 LF @ $20.48/LF -$ 583.68

Change No. 21, Decrease Adj. MHs & VBs from 21 LF to 19 LF
-2 LF @ $60.00/LF -$ 120.00

Change No. 22, Decrease 18" Stm. Sew. from 111 LF to 105 LF

-6 LF @ $28.00/LF -$ 168.00

Change No. 23, Delete connection to RW&P canal
-1 LS @ $20.00/LS -$ 20.00

Change No. 24, Decrease 8" Irrig. line from 742 LF to 700 LF
-42 LF @ $8.10/LF -$ 340.20

Change No. 25, Decrease 6" Irrig. line from 3288 LF to 3280 LF
-8 LF @ $6.80/LF -$ 54.40

Change No. 26, Decrease PVC bends & tees from 11 EA to 10 EA
-1 EA @ $65.00/EA -$ 65.00

Change No. 27, Increase 4" Perf. PVC W/rock from 111 LF to 120 LF
9 LF @ $6.10/LF $ 54.90

Change No. 28, Decrease 8" Irrig. GV&B from 2 EA to 1 EA
1 EA @ $440.00/EA -$ 440.00

Change No. 29, Add Temporary connection to gravel road
1 LS @ $800.00/LS $ 800.00

Net Change This Period: $1620.07

To my knowledge, the above items represent all the changes we have made since Pay Estimate No. 2, and constitute the final modifications to this contract. Please sign below if you concure or let me know if you feel any further adjustments are warranted.

Respectfully,

Thompson-Langford Corp.,Inc.

James E. Langford 12/5/94
James E. Langford PE & LS

Elam Construction, Inc.

Harold Elam, PRESIDENT

Thomas & Sun, Inc.

John Thomas 1-11-95
John Thomas

PAY ESTIMATE NO. 3

CANYONVIEW

Process Date: Dec-05-1994

Job. No. 0208-001 Period Ending: Nov-17-1994

OWNER:	**ENGINEER:**	**CONTRACTOR:**
THOMAS & SUN	THOMPSON-LANGFORD CORP.	Elam Construction, Inc.
321 Quail Drive	529 25 1/2 Road, Suite B210	1225 South 7th St.
Grand Junction, CO 81503	Grand Junction, CO 81505	Grand Junction, CO 81501

ITEM	DESCRIPTION	Bid Quantity	Units	Unit Price	Total Contr. Amt.	Quantity This Peri	Quantity to Date	Value to Date	Percent (%) Complete
	WATER SYSTEM								
1.0	8" Waterline	1906	LF	11.40	21,728.40	1,906.00	1906.00	21728.40	100.00%
CO#13									
2.0	Fire Hydrant Assemblies	4	EA	1,030.00	4,120.00	4.00	4.00	4120.00	100.00%
3.0	6" Gate Valve & Boxes	4	EA	390.00	1,560.00	4.00	4.00	1560.00	100.00%
4.0	8" Gate Valve & Boxes	4	EA	490.00	1,960.00	4.00	4.00	1960.00	100.00%
CO#14									
5.0	8" Bends , Tees or Plugs	5	EA	155.00	775.00	5.00	5.00	775.00	100.00%
CO#15									
6.0	Service Assemblies	26	EA	340.00	8,840.00	26.00	26.00	8840.00	100.00%
7.0	Extra 3"cap & 3/4" bleedoff	1	LS	280.00	280.00	0.00	1.00	280.00	100.00%
CO#3									
8.0	Waterline casing pipe	1	LS	146.25	146.25	1.00	1.00	146.25	100.00%
CO#9									
9.0	Waterline flowfill	1	LS	320.60	320.60	1.00	1.00	320.60	100.00%
CO#10									
	SEWER SYSTEM								
1.0	8" PVC Sewer	1890	LF	14.80	27,972.00	0.00	1890.00	27972.00	100.00%
2.0	Sanitary Sewer Manholes	11	EA	1,120.00	12,320.00	1.00	11.00	12320.00	100.00%
3.0	San.Sew MH Drop Connection	1	EA	1,840.00	1,840.00	0.00	1.00	1840.00	100.00%
4.0	4" Single Family Service	26	EA	420.00	10,920.00	0.00	26.00	10920.00	100.00%

ITEM	DESCRIPTION	Bid Quantity	Units	Unit Price	Total Contr. Amt.	Quantity This Peri	Quantity to Date	Value to Date	Percent (%) Complete
	STREETS								
1.0	Clearing & Grubbing (incl. trees)	3.1	AC	2,930.00	9,083.00	0.30	3.10	9083.00	100.00%
2.0 CO#12	Tree removal & Disposal (12" Dia. & Larger)	9	EA	125.00	1,125.00	7.00	9.00	1125.00	100.00%
3.0 CO#17	Remove & Dispose of CMP (all sizes)	30	LF	1.00	30.00	30.00	30.00	30.00	100.00%
4.0 CO#4	Excav. (streets, road widening and channel)	6947	CY	1.24	8,614.28	694.00	6947.00	8614.28	100.00%
5.0 CO#5	Embkmt. (streets, raod widenin and channel)	1560	CY	1.24	1,934.40	780.00	1560.00	1934.40	100.00%
6.0 CO#6	Class-6 (Streets, road widenin and sidewalks)	2091	CY	13.00	27,183.00	2,091.00	2091.00	27183.00	100.00%
7.0	3" Asphalt (streets & road widening)	1133	TON	23.68	26,829.44	1,133.00	1133.00	26829.44	100.00%
8.0 CO#7	2.5' Mountable Curb & Gutter	0	LF	8.71	0.00	0.00	0.00	0.00	0.00%
9.0 CO#8	6.5' Mountable Curb, Gutter & Sidewalks	3561	LF	14.65	52,168.65	3,561.00	3561.00	52168.65	100.00%
10.0 CO#19	8' x 4' Concrete Bike Path	750	LF	12.40	9,300.00	750.00	750.00	9300.00	100.00%
11.0 CO#20	6' Drainage Crosspan	51.50	LF	20.48	1,054.72	51.50	51.50	1054.72	100.00%
12.0 CO#11	Intersection radii & aprons	140	SY	30.71	4,299.40	140.00	140.00	4299.40	100.00%
13.0	Street Signs (name, stop comb	3	EA	75.00	225.00	3.00	3.00	225.00	100.00%
14.0	7'x14' Mailbox Pad	1	LS	600.00	600.00	1.00	1.00	600.00	100.00%
15.0	11'x14' Mailbox Pad	1	LS	900.00	900.00	1.00	1.00	900.00	100.00%
16.0 CO#21	Adj. MH's & Valve Boxes to grade	19	EA	60.00	1,140.00	1.00	19.00	1140.00	100.00%
17.0 CO#1	Excav. for Temp. Rds.	30	CY	1.24	37.20	0.00	30.00	37.20	100.00%
18.0 CO#2	3/4" Rd. base for Temp. Rds.	65	CY	13.00	845.00	48.00	65.00	845.00	100.00%

ITEM	DESCRIPTION	Bid Quantity	Units	Unit Price	Total Contr. Amt.	Quantity This Peri	Quantity to Date	Value to Date	Percent (%) Complete
	DRAINAGE								
1.0	Detention Pond Excav./Embkmt. included in street quantities	0	n/a	0.00	0.00				
2.0	Outlet Works	1	LS	1,030.00	1,030.00	1.00	1.00	1030.00	100.00%
3.0	Curb Opening Inlets	2	EA	990.00	1,980.00	2.00	2.00	1980.00	100.00%
4.0	18" Storm Sewer Outfall	105	LF	28.00	2,940.00	105.00	105.00	2940.00	100.00%
5.0	24" Storm Sewer Outfall	26	LF	38.00	988.00	26.00	26.00	988.00	100.00%
6.0	18" RCP Flared End Section	1	EA	470.00	470.00	1.00	1.00	470.00	100.00%
7.0	24" RCP Flared End Section	1	EA	510.00	510.00	1.00	1.00	510.00	100.00%
8.0	Multi-plate Alum. Box Culvert	70	LF	434.00	30,380.00	70.00	70.00	30380.00	100.00%
9.0	12" NominL Riprap	26	CY	31.00	806.00	26.00	26.00	806.00	100.00%
10.0	4'x4'x8' Gabion Retaining Baskets	2	ea	410.00	820.00	2.00	2.00	820.00	100.00%
	IRRIGATION								
1.0 CO#23	Connection to RW&P Diversion Pipe	0	LS	20.00	0.00	0.00	0.00	0.00	0.00%
2.0 CO#24	8" PVC Irrigation Line	700	LF	8.10	5,670.00	700.00	700.00	5670.00	100.00%
3.0 CO#25	6" PVC Irrigation Line	3280	LF	6.80	22,304.00	3,280.00	3280.00	22304.00	100.00%
4.0 CO#26	PVC Bends & Tees (all sizes)	10	LF	65.00	650.00	10.00	10.00	650.00	100.00%
5.0 CO#27	4" Perf. PVC with 1" clean roc backfill	120	LF	6.10	732.00	110.00	120.00	732.00	100.00%
6.0 CO#28	8" Gate Valve & Box	1	EA	440.00	440.00	1.00	1.00	440.00	100.00%
7.0	6" Gate Valve & Box	8	EA	326.00	2,608.00	8.00	8.00	2608.00	100.00%

ITEM	DESCRIPTION	Bid Quantity	Units	Unit Price	Total Contr. Amt.	Quantity This Peri	Quantity to Date	Value to Date	Percent (%) Complete
8.0	2" Gate Valve & Box w/c to leach field	1	LS	260.00	260.00	1.00	1.00	260.00	100.00%
9.0	Connection to 18" RCP	1	LS	85.00	85.00	1.00	1.00	85.00	100.00%
10.0	2" Services	26	EA	121.00	3,146.00	26.00	26.00	3146.00	100.00%
11.0 CO#29	Temporary connection to gravel access road	1	LS	800.00	800.00	1.00	1.00	800.00	100.00%
				GRAND TOTA	314,770.34			314,770.34	100.00%

PAY ESTIMATE SUMMARY

Contract date:	3/15/94	ORIGINAL CONTRACT AMOUNT:	$288,569.81
Contract estimated time	150	CHANGE ORDERS (+ or -):	$26,200.53
Estimated completion da	8/12/94	CONTRACT AMOUNT TO DATE:	$314,770.34
% Time Used:	164.67%	VALUE INSTALLED TO DATE:	$314,770.34
% Complete:	100.00%	MATERIALS ON HAND:	$0.00
		TOTAL TO DATE:	$314,770.34
		LESS RETAINAGE (0%)	$0.00
		SUBTOTAL:	$314,770.34
		LESS PAYMENTS TO DATE:	~~$300,127.14~~
		TOTAL DUE THIS PERIOD:	**$14,643.20**

ENGINEER: THOMPSON-LANGFORD CORPORATION

BY: _____ DATE: 12/5/94

CONTRACTOR: ELAM CONSTRUCTION, INC.

BY: _____ DATE: 12-16-94

PROJECT MANAGER

APPROVED FOR PAYMENT:

OWNER: THOMAS & SUN, INC.

BY: _____ DATE: 1-11-95

Paid by John Thomas
From operating

1/30/95

TO: City of Grand Junction - City Council
FROM: Monument Valley Estates Filing #3 Board of Directors

We, the board of directors of Monument Valley Estates Filing #3 wish to express our concern about the proposed addition of street lights in the Canyon View Subdivision. Many of the forty-seven home sites in Monument Valley Filing #3 subdivision view down on the Canyon View subdivision. Any bright continuously illuminated lights as close as the Canyon View subdivision would be detrimental to the quality of life we now enjoy. We would be opposed to having "city" type street lights in our subdivision and think that they are not appropriate for a nearby subdivision as well.

Because of the proximity of Canyon View to The Colorado National Monument we believe that the resulting light pollution would be a negative impact on The Monument. The unique character of this special area should be preserved with as little disturbance to the natural environment as possible.

As the City of Grand Junction encroaches on this semi-urban area we hope that you have the foresight and good judgment to consider this part of the valley as something worth preserving with special consideration.

Thank you ,

Julie Coleman

Julie Coleman, Co-President

Nancy Terrill

Nancy Terrill, Co-President

February 1, 1995

City of Grand Junction, Colorado
250 North Fifth Street
81501-2668
FAX: (303) 244-1599

John Thomas
Thomas and Sun, Inc.
321 Quail Drive
Grand Junction, CO 81503

Dear John:

This is letter is written to memorialize our recent discussions and decisions.

Existing City requirements provide that the developer of new subdivisions must install street lights in certain specified locations and intervals. I believe that the particulars of the street light itself is also detailed. Planning staff had recommended that condition be imposed on your next filing of Canyon View Subdivision. Planning Commission recommended that no lights be required, at your behest. The matter was scheduled for City Council review at tonight's meeting.

You and I discussed two City concerns: safety (the lights illuminate the streets and intersections increasing safety of pedestrian and vehicular traffic) and retrofitting the subdivision in the future (the City's experience is that in the years to come the then existing residents may want lights installed and most frequently the City is asked to pay for all or a part of such later installation).

You persuaded City staff that in the area along South Camp Road lights may not be needed or even desirable, except at "major" intersections (that term has not yet been defined). Part of your concern was "light pollution" in an area that presently enjoys little glare from the Valley floor and few lights existing or proposed. You indicated that you are aware of petitions being circulated by area residents which confirm their desire to minimize the extent of street lighting, in order to preserve the present aesthetics.

I have also spoken with Ranger Ron Young and Superintendent Judith Cordova of the Colorado National Monument, both of whom endorsed your efforts to minimize lights visible from and proximate to the Monument boundaries.

The solution agreed to by the City and you: you will install one City approved street light at the intersection of Canyon View and South Camp Road, as a part of the next filing. You will record covenants (including amending those filed already) to prohibit street lights in the subdivision, except as may be required by the

City at "major" intersections.

The City intends to change its requirements concerning street lights in the general area south of Riggs Hill and west/southwest of the Ridges so that street lights will only be required at "major intersections." You agreed to comment on and offer suggestions to such a draft when available.

I hope I have accurately summarized our conversations and decisions. Let me know if we need to discuss this further at this point or if I have mischaracterized the situation.

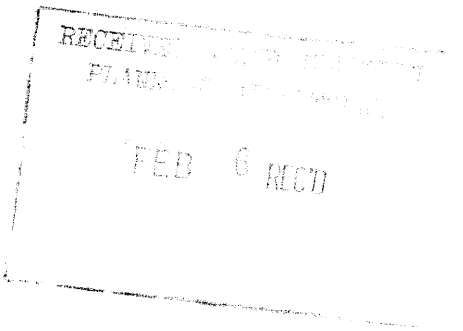
Very truly,

Dan E. Wilson
City Attorney

c: Tom Dixon
Judith Cordova
Jim Shanks

Fletcher Realty INC.
SPECIALIZING IN THE Redlands

February 3, 1995



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

Attn: Tom Dickson
Re: Street lights along the Monument

Dear Tom,

It has been brought to my attention the question regarding the use of steet lights in subdivisions on the Redlands adjacent to the Colorado National Monument. As developer of the Monument Valley area I feel that the use of street lights along the monument distracts from the serenity and environment that we are trying to create in the area. We appreciate the shadows of the Monument during the evening hours and the feeling of a rural environment. Street lights would not enhance the values we want to create. In my opinion, the Colorado National Monument would agree. Thank you for your consideration in this matter.

Sincerely,

David L. Fletcher

David L. Fletcher
Surf View Development Co.

2152 Broadway, P.O. Box 921, Grand Junction, Colorado 81502
Office: (303) 245-7598 Home: (303) 243-7833

February 10, 1995

City of Grand Junction, Colorado
250 North Fifth Street
81501-2668
FAX: (303) 244-1599

Jim Langford
Thompson-Langford Corp.
529 25 1/2 Road Suite B210
Grand Junction, CO 81501

RE: Canyon View Phase II

Dear Jim:

I have enclosed the following forms for your information and use in the construction of Canyon View Phase II subdivision.

Construction Approval and Progress - this form outlines the procedure the City of Grand Junction follows and tracks the dates of approvals and acceptance.

Submittal Requirements for Final Acceptance of Improvements - This is a checklist of submittal items prior to acceptance of public improvements.

Traffic Control Device Specifications for Proposed Developments - This outlines the requirements for sign materials and installation specifications.

A signed and approved Improvements Agreement must be on file with the Community Development Department prior to beginning construction.

Please notify me or Bill Cheney to schedule a pre-construction meeting.

Sincerely,

Jody Kliska, P.E.
City Development Engineer

cc: Bill Cheney
✓ Tom Dixon

21 June 95

Thomas & Son Inc
321 Quail Dr
Grand Jct. CO. 81503

Kathy Portner
Community Planning
City of Grand Junction.

Dear Ms. Portner,

As Developer of Canyon View, I hereby request that the City accept my investment in improvements in South Camp Road in lieu of Transportation Capacity Payment (TCP fees) for phases I and II and future phases until such time as the credit is exhausted.

Sincerely
John M. Thomas
John M. Thomas
Canyon View

OK
6-21-95

1.

9/9/94 Canyon View Subdivision.

Sou. Camp Rd. related work items 0210-001.08

Road widening & Channel reshaping		1165 cut @ 1.24	1444.60
		781 fill @ 1.24	968.44
Tree removal		9 @ 125.00	1125.00
R&D CMP		48 LF @ 1.00	48.00
Class-6	289 cy	289 cy @ 13.00	3757.00
3" HBP	(64 cy)	125 Tm @ 23.68	2960.00
		Channel & Rd Widening =	10,303.04
8'x4" Concrete Path		450 LF @ 7.59	3415.00
Multi Plate Culvert		70 LF 434.00	30,380.00
12" Rip Rap		26 cy 31.00	806.00
Gabions		2 ea 410.00	820.00
		Path & Multiplate =	37,421.00

Called to Kelley Partner 9/9/94 ~ 11:10
244-1446

[signature]

Channel, Multiplates & Rd. Widening Σ = 47,724.04

Public Service®

P.O. Box 849
Grand Junction, CO 81502

Public Service
Company of Colorado

June 14, 1995

John Thomas
Thomas & Sun, Inc.
321 Quail Drive
Grand Junction, CO 81503

Re: Electric service to Canyon View Subdivision - Filing1
JOB/CREG No. 41ER94G67

Dear John:

Per your request of 6/14/95, I have researched costs associated with the relocation of the pole to clear roadway improvements at Canyon View Drive and South Camp Road. Costs were $872.00 and were part of the charges you paid to us in 1994 for Canyon View Subdivision Filing 1. Please let me know if I can be of any further assistance.

Sincerely,

Gary Lewis
Planner

GL

Summary of Canyon View Subdivision Files

	File #	
1.	43-92	Zone of Annexation for Ridges & other properties. According to Dave Thornton some other areas were later deannexed, but this area (**encompassing Phases V and VI of Canyon View**) remained in the city. Zoning of 1du/35 acres was imposed.
2.	155-94	Zone of Annexation for South Camp/Canyon View & Preliminary Plan Zone of annexation to PR-2; annexation agreement; approval of ODP for phases I-III, final plan for phase 1, 6' wide concrete surface for interior ped/bike trails decided by Planning Commission
3.	214-94	Final Filing #2, ODP for 37 acres to the west (zoned 1du/35 ac) but no change of zone requested.
4.	FPP-96-28	Final filing #3, revised ODP for 37 acres to the west and phase IV, rezone to PR-2 for 37 acres to the west

BN 2-16-96

Thomas and Sun, Inc.
John M. Thomas
321 Quail Drive
Grand Junction, CO.
81503

June 26, 1995

Ms. Kathy Portner
Office of Community Development
City of Grand Junction

Dear Ms. Portner,

Thomas and Sun Inc., as developer of Canyon View Subdivision, proposes to encumber Lot 1 in Block 3 of Filing 2 with a building envelope as shown on sheet 1 of this submittal. The lot is currently in use as a storm water retention facility but may be released from this use in the future if certain conditions, as outlined in our Filing 2 development agreement with the City, are met. The building envelope will ensure that any future building on this lot will be consistent with existing use.

Sincerely,

John Thomas

Thomas and Sun, Inc.
John M. Thomas
321 Quail Drive
Grand Junction, CO.
81503

June 26, 1995

Ms. kathy Portner
Office of Community Development
City of Grand Junction

Dear Ms. Portner,

Whereas Canyon View Subdivision was annexed into the City of Grand Junction and whereas the Subdivision is a planned development and whereas the annexation ordinance did not specify setbacks for lots int the Subdivision, Thomas & Sun Inc., the Developer, proposes the following setbacks for code enforcement.

In Filing 1 the minimum front setback shall be 40 (forty) feet. The rear setback shall be 25 (twenty five) feet. The sideyard setbacks shall be 15 (fifteen) feet.

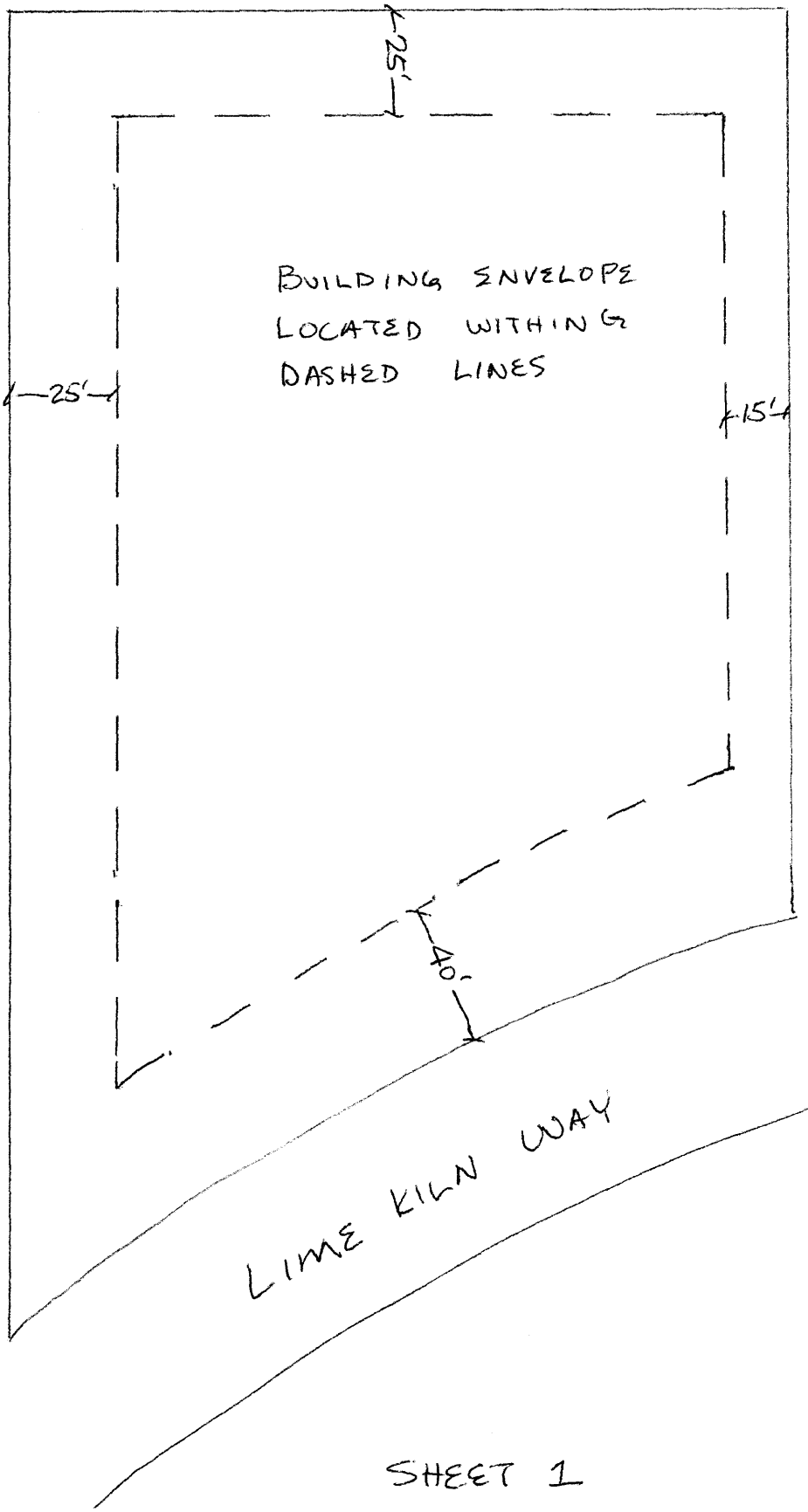
In Filing 2, the front setback shall be 40 (forty) feet. The rear setback shall be 25 (twenty five) feet. The side setbacks shall be 15 (fifteen) feet.

These are consistent with the covenants as recorded and have been in use in the Subdivision since the beginning.

Sincerely,

John Thomas

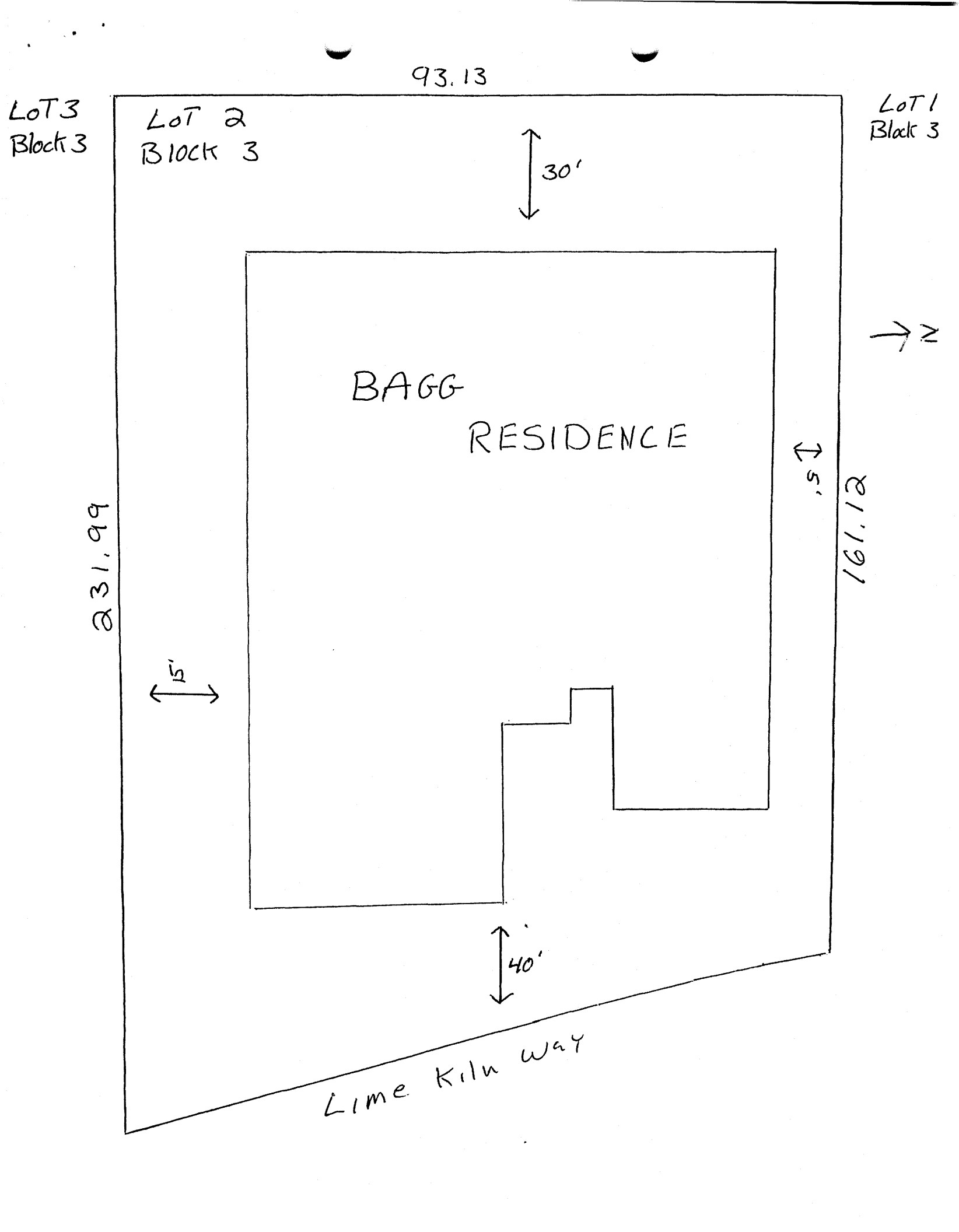
BUILDING ENVELOPE
FOR LOT 1[redacted], BLOCK 3, FILING 2
CANYON VIEW SUBDIVISION



N

NOT TO SCALE

SHEET 1


93.13
LOT 3
Block 3
LOT 2
BLOCK 3
LOT 1
Block 3
30'
BAGG
RESIDENCE
231.99
161.12
5'
15'
40'
Lime Kiln Way

Thomas and Sun, Inc.
John M. Thomas
321 Quail Drive
Grand Junction, CO.
81503

May 30, 1995

From: Architectural Control Committee
To: Dave and Denise Bagg

Dear Mr. and Mrs. Bagg,

Thank you for submitting your plans for our review. The plans submitted to us were drawn by Home Design Services, dated as May 25, 1995 and are for Lot 2, Block 3, Filing 2, Canyon View Subdivision. The site plan showing the location of the structure on the lot is approved as shown in your submittal. A variance is hereby granted to reduce the North sideyard setback to five feet. The size of the structure exceeds the minimum requirement for living space square footage as required by covenant. The elevations as shown are acceptable to the committee.

Approval of the structure as presented is granted with the understanding that the committee requires that samples of roofing and exterior finishes be presented to the committee for approval prior to their application to the structure.

If outbuildings not attached to the primary structure are to be constructed or placed upon the property, prior approval must be obtained from the committee as to size, location and exterior finishes.

Architectural Control Committee

John Thomas

for the committee

STAFF REVIEW

FILE: #PDR-94-214-2

DATE: June 30, 1995

STAFF: Kathy Portner

REQUEST: Canyon View Revised Final Plan

LOCATION: South Camp Road--Redlands

APPLICANT: John Thomas

EXISTING LAND USE: Single Family Residential, 2 units per acre

PROPOSED LAND USE: Same

SURROUNDING LAND USE:

NORTH:	Undeveloped
SOUTH:	Wingate School
EAST:	Undeveloped
WEST:	Agricultural/Single-family Residential

EXISTING ZONING: PR-2 (Planned Residential, 2 units per acre)

PROPOSED ZONING: Same

SURROUNDING ZONING:

NORTH:	R-2 (County)
SOUTH:	PZ (Public Zone)
EAST:	PR-3 (County)
WEST:	R-2 (County)

RELATIONSHIP TO COMPREHENSIVE PLAN:

No City adopted Comprehensive Plan exists for this area.

STAFF ANALYSIS:

Canyon View Subdivision was recently annexed to the City of Grand Junction. At the time of annexation the City zoned the property PR-2 (Planned Residential, 2 units per acre),

however setbacks for the planned zone were never formally adopted for the subdivision. The developer is proposing the following setbacks for filings 1 and 2:

Front Yard	40'
Rear Yard	25'
Side Yard	15'

On corner lots the front yard setback shall apply to only one street frontage. On the side street, the required setback shall be 15' except for garages which face the side street. Garages that face the side street shall have a required setback of 20'.

The setbacks as proposed are consistent with the recorded covenants for the subdivision. As approved by Mesa County with Filing #1, staff proposes the following additions:

Setback for lots along South Camp Road--80' from center line of ROW.

Houses on the lots adjacent to South Camp Road must be single story.

Staff concurs with the proposed setbacks with the above additions.

The developer is also proposing to vary the setbacks on two adjacent lots. The proposal is to increase the required sideyard setback along the south property line of lot 1, block 3 to 25' and decrease the required sideyard setback along the north property line of lot 2, block 3 to 5'. This will maintain a 30' building separation consistent with the general sideyard building separation. Lot 1, block 3 is currently encumbered as a temporary detention site, but may become a buildable lot in the future. Staff concurs with the proposed variance for lots 1 and 2, block 3 of Canyon View, Filing #2.

STAFF RECOMMENDATION:

Staff recommends approval of the proposed setbacks and additions as stated in the staff review, and approval of the variance for lots 1 and 2, block 3, Canyon View Subdivision, Filing #2.

RECOMMENDED PLANNING COMMISSION MOTION:

Mr. Chairman, on item #PDR-94-214-2, I move we approve the setbacks as proposed in the staff recommendation.

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

October 23, 1995

Berndt Holmes
P.O. Box 338
Grand Junction, CO 81502

RE: Access through Canyon View Subdivision (#214-94)

Dear Mr. Holmes:

This is in follow-up to our conversations concerning the access to the Riley property west of Canyon View Subdivision. The concern you relayed, on behalf of your client, was that the access provided was inconvenient and difficult to find. The plat for Canyon View, Filing #2 does show an ingress/egress easement across the south side of lot 6, block 3 from Canyon View Drive. In reviewing the files we have for Canyon View, I believe that John Thomas, the developer of Canyon View, has met his requirement to provide reasonable access for the properties to the west. The zoning approvals did not have specific requirements for the access.

You also stated that your client did not like having to drive over a roll-over curb to access the easement. A continuous curb was required along all internal roads of the subdivision. Cuts in the curb are only allowed at the intersections of public streets. All private driveways access over roll-over curbs.

I can understand your client's concern with the difficulty others may have in finding his home since those properties are addressed off of South Camp Road. The addresses can be changed to Canyon View Drive at the owners' request. Since your client's property is not within the City limits, the address change request would have to be processed through Mesa County Planning. The owners might also consider a small directional sign in the easement indicating what addresses are located up the private drive.

I contacted Beth Roberts, manager of the emergency response, 911, center. I will be supplying her with all the addresses that access through this private easement so she can enter specific directions into the 911 system. So, if a call comes in from one of those addresses, the directions entered into the system should eliminate any confusion as to how to access the properties for emergency purposes.

I hope this adequately answers your questions. If you have other questions you can contact me at 244-1446.

Sincerely,

Katherine M. Portner

Katherine M. Portner
Planning Supervisor

Thomas and Sun, Inc.
John M. Thomas
321 Quail Drive
Grand Junction, CO.
81503

October 23, 1995

From: Architectural Control Committee
Canyon View Subdivision

To: Kathy Portner, Senior Planner
Office of Community Development
City of Grand Junction

Dear Ms. Portner,

This letter is in regard to building setbacks for Canyon View Subdivision as set forth in the planning resolution adopted by the City after annexation of our property. In working with you to craft the resolution we were unclear as to the setback required for lots located on cul-de-sacs. The covenants require a set back of 35' from the front property line. The committee has a policy of granting variances as needed for plus or minus 5' from the stated setback. For your minimum enforcement standard we ask that you adopt 30' as the minimum setback from the front property line. Cul-de-sac lots are subject to the same rear and side yard setbacks as adopted in the planning resolution. This clarification will provide you with an enforcement standard that is consistent with our covenants. Thank you for your help in this matter.

Architectural Control Committee

John M. Thomas, Developer
for the committee

file

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

October 27, 1995

John M. Thomas
Thomas and Sun, Inc.
321 Quail Drive
Grand Junction, CO 81503

RE: Canyon View Subdivision setbacks

Dear Mr. Thomas:

This is in response to your letter dated October 23, 1995 concerning setbacks for Canyon View Subdivision. I have reviewed file #214-94 and find that the intent of establishing the setbacks was clearly to conform with the adopted covenants for the subdivision. However, only the 40' front yard setback was formally adopted.

The minor change provisions of the Zoning and Development allow for setbacks to be considered a minor change if such change doesn't negatively impact adjacent properties. I find your request to allow for 30' frontyard setbacks for lots located on cul-de-sacs to meet that criterion, especially since the 30' setback is still in excess of the 20' setback that is normally required for frontyards.

I have noted on our working copies of the Canyon View plats that the front yard setback shall be 30' for lots located on cul-de-sacs and 40' for all other lots.

Sincerely,

Katherine M. Portner

Katherine M. Portner
Planning Supervisor

To: Beth Meek
From: Kathy Portner
Subject: South Camp properties
Date: 12/11/95 Time: 12:15PM

Beth--You may recall a conversation we had a month or so ago regarding some properties that are accessed through the new Canyon View Subdivision but still have South Camp Road addresses. You had indicated then that you could input general directions into the 911 system so emergency vehicles could find the locations.

From a site check I observed that 374, 377, 379 and 381 South Camp Road are accessed through a private drive easement located between 2166 and 2168 Canyon View Drive. The access road is not that apparent and I had suggested to Mr. Riley, one of the owners, via his attorney, that they sign the access road. They have not done so. Please let me know if these general directions can work in you system.

To: Kathy Portner
Cc: Beth Meek
From: John Linko
Subject: South Camp Rd Properties
Date: 12/22/95 Time: 9:24AM

I received a copy of your email to Beth Meek regarding 4 addresses on South Camp Rd that are accessed via a private drive off of Canyon View Drive. As of this date I have entered the directional information you provided into the CAD system's General Premise file for these addresses. Whenever an incident is created in CAD for one of these addresses, a flag will appear on the telecommunicator's screen indicating that there is general premise information for that address.

Please feel free to contact me with additional questions or concerns.

J Linko

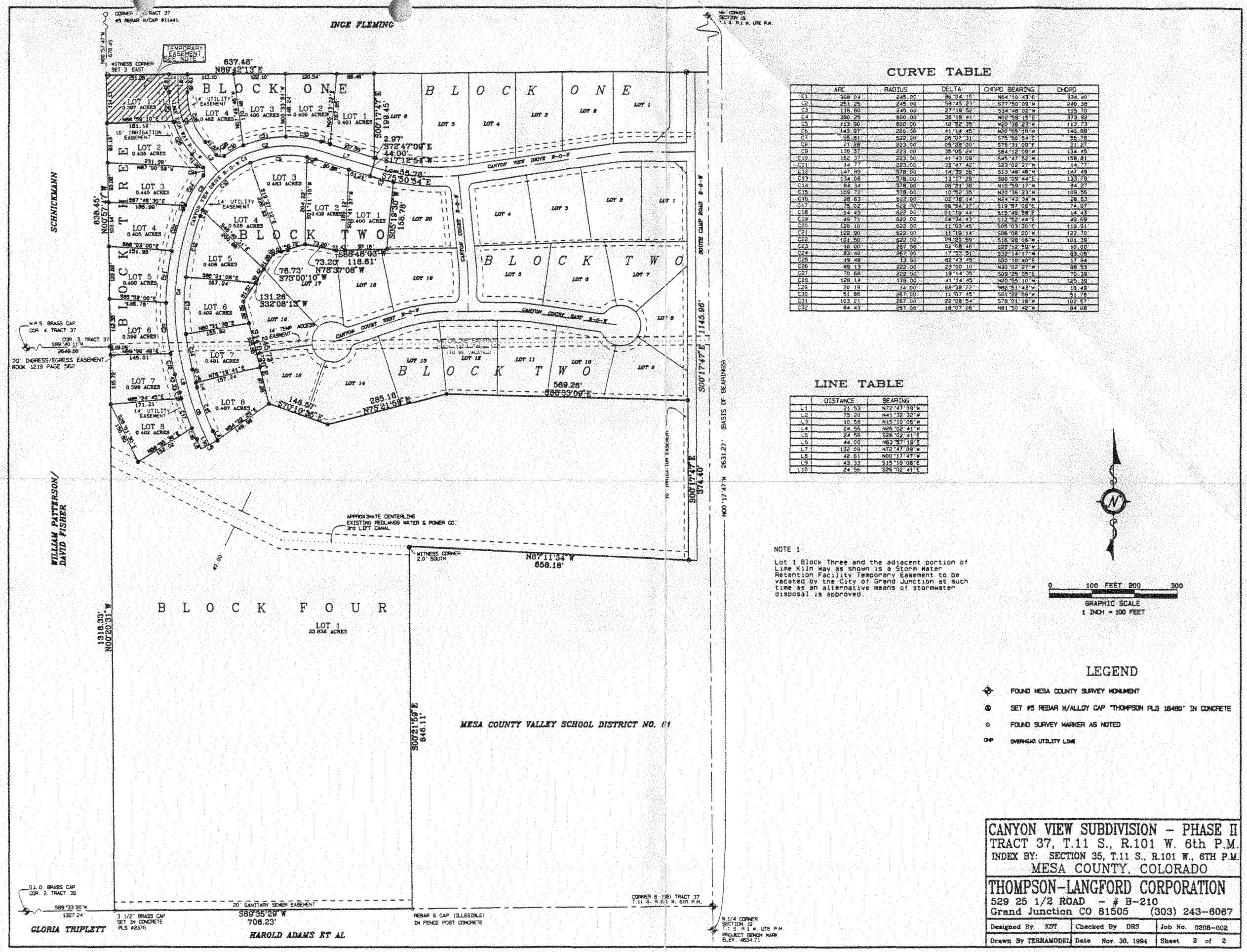
TYPE LEGAL DESCRIPTION (S) BELOW, USING ADDITIONAL SHEETS AS NECESSARY. USE SINGLE SPACING WITH A ONE INCH MARGIN ON EACH SIDE.

****

Original
Remove
From Office

214 94

Lot 1 Block Three of Canyon View Subdivision a plat on file in the office of the Mesa County Clerk and Recorder in Plat Book 14 at Pages 223 & 224 bearing Reception No. 1683108.



CURVE TABLE

	ARC	RADIUS	DELTA	CHORD BEARING	CHORD
C1	368.04'	245.00'	86°04'15"	N64°10'43"E	334.40'
C2	251.25'	245.00'	58°45'23"	S77°50'09"W	240.38'
C3	116.80'	245.00'	27°18'52"	S34°48'02"W	115.70'
C4	380.25'	500.00'	36°18'41"	N02°59'15"E	373.92'
C5	113.90'	500.00'	10°52'35"	N20°36'23"W	113.73'
C6	143.97'	200.00'	41°14'45"	N20°55'10"W	140.89'
C7	55.81'	522.00'	06°07'31"	S75°50'54"E	55.78'
C8	21.28'	223.00'	05°28'00"	S75°31'09"E	21.27'
C9	136.57'	223.00'	35°05'24"	S84°12'09"W	134.45'
C10	162.37'	223.00'	41°43'09"	S45°47'52"W	158.81'
C11	14.77'	223.00'	03°47'42"	S23°02'27"W	14.77'
C12	147.89'	578.00'	14°39'36"	S13°48'48"W	147.49'
C13	134.08'	578.00'	13°17'28"	S00°09'44"E	133.78'
C14	84.34'	578.00'	08°21'38"	N10°59'17"W	84.27'
C15	109.72'	578.00'	10°52'35"	N20°36'23"W	109.56'
C16	28.63'	522.00'	02°38'14"	N24°43'34"W	28.63'
C17	75.02'	522.00'	06°54'37"	S19°57'08"E	74.97'
C18	14.43'	522.00'	01°19'44"	S15°49'58"E	14.43'
C19	49.71'	522.00'	04°34'43"	S12°52'44"E	49.69'
C20	120.10'	522.00'	11°03'45"	S05°03'30"E	119.91'
C21	122.90'	522.00'	11°19'14"	S06°08'00"W	122.70'
C22	101.50'	522.00'	09°20'59"	S16°28'06"W	101.39'
C23	10.00'	267.00'	02°08'46"	S22°12'59"W	10.00'
C24	83.40'	267.00'	17°53'51"	S32°14'17"W	83.06'
C25	19.49'	13.50'	82°43'45"	S00°10'40"E	17.84'
C26	89.13'	222.00'	23°00'10"	N30°02'27"W	88.53'
C27	70.68'	222.00'	18°14'35"	S09°25'05"E	70.39'
C28	126.14'	178.00'	41°14'45"	N20°55'10"W	125.39'
C29	20.19'	14.00'	82°38'22"	N82°51'43"W	18.49'
C30	51.86'	267.00'	11°07'45"	S51°22'58"W	51.78'
C31	103.21'	267.00'	22°08'54"	S78°01'18"W	102.57'
C32	84.43'	267.00'	18°07'08"	N81°55'42"W	84.08'

LINE TABLE

	DISTANCE	BEARING
L1	21.53'	N72°47'09"W
L2	75.20'	N41°32'32"W
L3	10.58'	N15°10'06"W
L4	24.56'	N26°02'41"W
L5	24.56'	S26°02'41"E
L6	44.00'	N63°57'19"E
L7	132.09'	N72°47'09"W
L8	42.61'	N00°17'47"W
L9	43.33'	S15°10'06"E
L10	24.56'	S26°02'41"E

LEGEND

- FOUND MESA COUNTY SURVEY MONUMENT
- SET #5 REBAR W/ALLOY CAP "THOMPSON PLS 18480" IN CONCRETE
- FOUND SURVEY MARKER AS NOTED
- OHP OVERHEAD UTILITY LINE

Original Removed Do NOT Remove From Office

214 94

CANYON VIEW SUBDIVISION – PHASE II

TRACT 37, T.11 S., R.101 W. 6th P.M.
INDEX BY: SECTION 35, T.11 S., R.101 W., 6TH P.M.
MESA COUNTY, COLORADO

THOMPSON-LANGFORD CORPORATION
529 25 1/2 ROAD – # B-210
Grand Junction CO 81505 (303) 243-6067

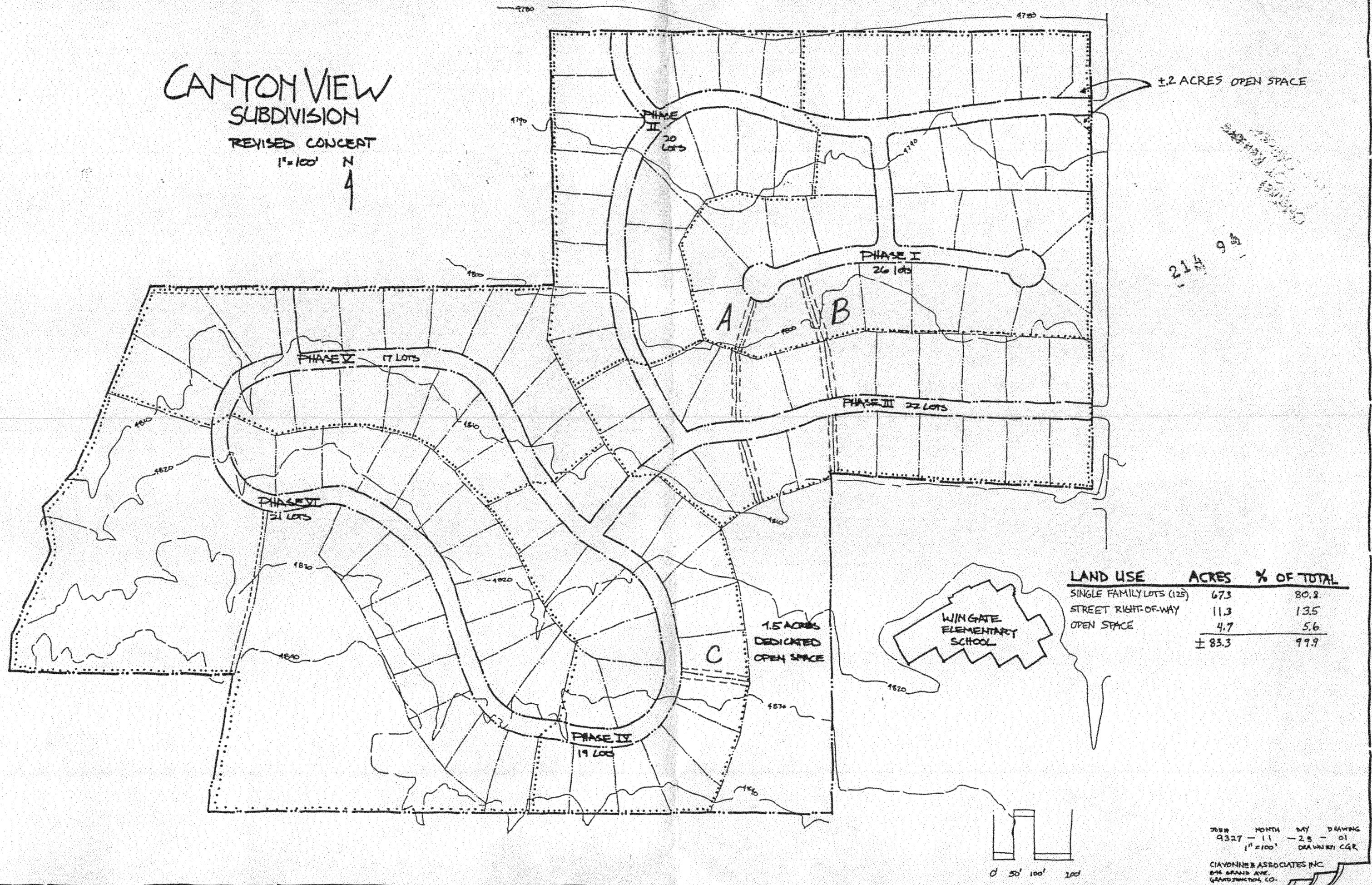
Designed By KST	Checked By DRS	Job No. 0208-002
Drawn By TERRAMODEL	Date Nov. 30, 1994	Sheet 2 of 2

CANYON VIEW SUBDIVISION

REVISED CONCEPT

1" = 100'

N



LAND USE	ACRES	% OF TOTAL
SINGLE FAMILY LOTS (125)	67.3	80.8
STREET RIGHT-OF-WAY	11.3	13.5
OPEN SPACE	4.7	5.6
	± 83.3	99.9

JOB # 9327 — MONTH 11 — DAY 25 — DRAWING 01
1" = 100' DRAWN BY: CGR

CIAVONNE & ASSOCIATES INC.
844 GRAND AVE.
GRAND JUNCTION, CO.

CORNER 2 TRACT 37
#5 REBAR W/CAP #11441

PROJECT LIMITS

100% Q-100 STORM WATER RETENTION FACILITY (SEE SHEET 5 OF CONSTRUCTION SET FOR DETAILS)

KILN WAY

BLOCK 1 PHASE 2

BLOCK 2 PHASE 2

BLOCK 1 PHASE 1

BLOCK 2 PHASE 1

CANYON VIEW DRIVE

SOUTH CAMP ROAD

PREVIOUS CONSTRUCTION PHASE

FUTURE FILING

4780

4790

4800

PROJECT LIMITS

N

(IN FEET)
1 inch = 50 ft.

CONTOUR INTERVAL: 2'

BENCHMARK:
USGS "BM" 497.53' NORTH OF THE N.E. CORNER OF CANYON VIEW, ON WEST SIDE OF SOUTH CAMP ROAD, ELEVATION 4777.00

THIS SITE IS NOT IMPACTED BY THE 100 YEAR FLOOD PLAIN

LEGEND

214 94

American Consulting Engineers Council Member

THOMPSON-LANGFORD CORP.
529 25 1/2 RD., SUITE B210
GRAND JUNCTION, COLORADO
PH. (303) 243-6067

DRAWN BY:	MWT
DESIGNED BY:	JEL/MWT
CHECKED BY:	JEL

REVIEWED _____
DATE: _____ FOR _____
REVIEWED _____
DATE: _____

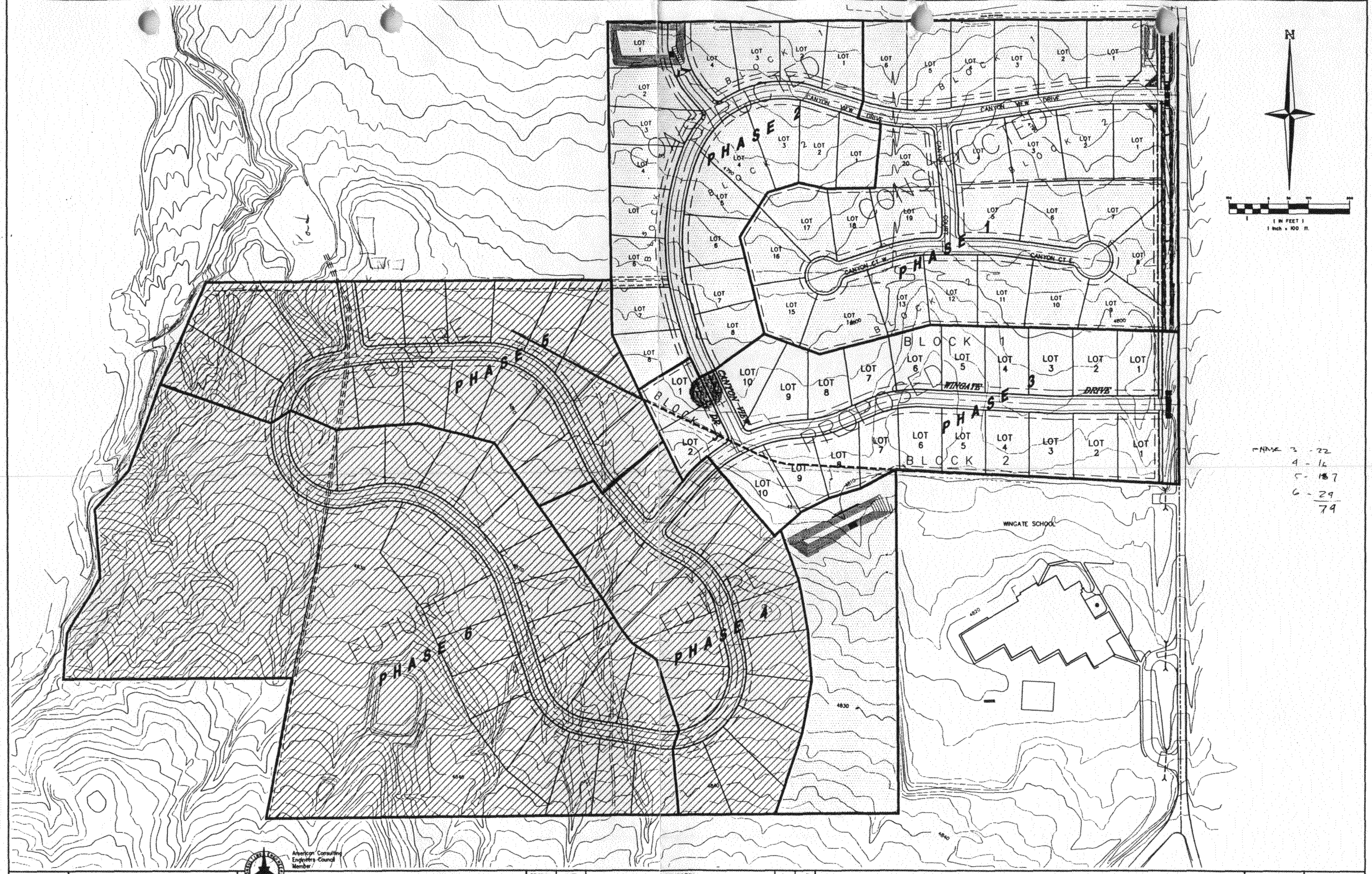
REVISION	DATE	DESCRIPTION	BY	CKD

THOMAS & SUN ENERGY EFFICIENT HOMES — CANYON VIEW PHASE II

COMPOSITE PLAN

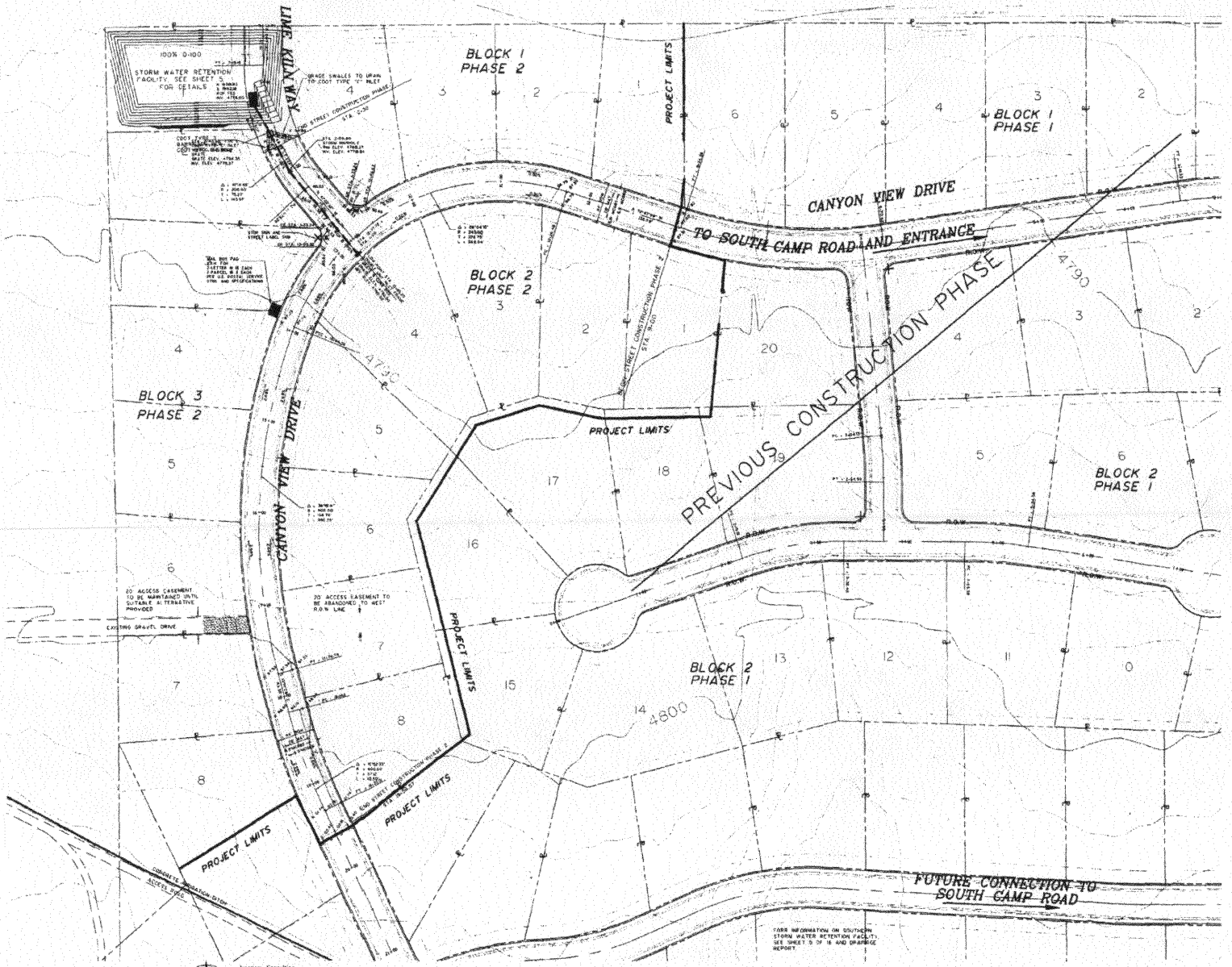
SCALE:	JOB NO:	DATE:
1" = 50'	0208-002	12/1/94

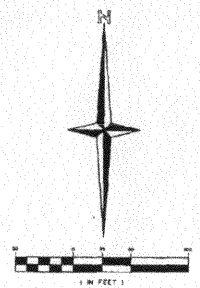
SHEET NO: 1 OF 1



PHASE 3 - 22
4 - 16
5 - 187
6 - 29
79

DRAWN BY: JCS	REVIEWED ______ DATE: ______ FOR ______	THOMPSON-LANGFORD CORP. 529 25 1/2 RD., SUITE B210 GRAND JUNCTION, COLORADO PH. (303) 243-6067	REVISION	DATE	DESCRIPTION	BY	CH'D	THOMAS & SUN ENERGY EFFICIENT HOMES — CANYON VIEW PHASE III	SCALE: Horiz: 1" = 100' Vert:	Project No: 0208-003
CHECKED BY: JEL	REVIEWED ______ DATE: ______	American Consulting Engineers Council Member						PROJECT OVERVIEW	DATE: 11-29-95	SHEET NO: 1 OF 1





BENCHMARK:
USGS "BM" 497.53' NORTH OF THE N.E. CORNER OF CANYON VIEW, ON WEST SIDE OF SOUTH CAMP ROAD. ELEVATION 4777.00

American Consulting Engineers Council Member

THOMPSON-LANGFORD CORP.
529 25 1/2 RD., SUITE B210
GRAND JUNCTION, COLORADO
PH. (303) 243-6067

DRAWN BY: MWT	REVIEWED:	
DESIGNED BY: JEL/MWT	DATE:	FOR:
CHECKED BY: JEL	REVIEWED:	
	DATE:	

REVISION	DATE	DESCRIPTION	BY	CHD

THOMAS & SUN ENERGY EFFICIENT HOMES — CANYON VIEW PHASE II

GRADING AND DRAINAGE PLAN

SCALE: 1" = 50'	JOB NO. 8208-002	DATE: 12/94
SHEET NO. 4 OF 16		