

WILSON RANCH

March 12, 1992

Dan Wilson, City Attorney
Grand Junction Colorado

During earlier discussions on annexation of the balance of Wilson Ranch I promised a proposed development schedule. The attachment represents our current plans for phases of development in filings two and three. Needless to say, this schedule is contingent upon market conditions and may be advanced or delayed depending upon the availability of buyers.

Fall of 1992-Spring 1993

Fall of 1993-Spring 1994

Fall of 1994-Spring 1995

Fall of 1995-Spring 1996

1997

Sincerely,



W. D. Garrison
President, GNT Development Corp.

WILSON RANCH • 25 1/2 & G 1/2 Roads

GNT DEVELOPMENT CORP. • Developers of Wilson Ranch and other fine properties
336 Main Street • Suite 209 • Grand Junction, CO 81501 • Office: (303) 241-8312 Site: (303) 242-0281

Asphalt Frontage Road

Interstate 70

Eastbound Lanes

Proposed 55' P.O.W. Alignment

Existing P.O.W. To be Vacated

Section 34

Road

Floyd Fordik Power Road City

Tennis Courts

Pool 1-2 Club House

Note: See Sheet 3 For Multi-Family Details

Grand Valley Canal

Walkway

Canal

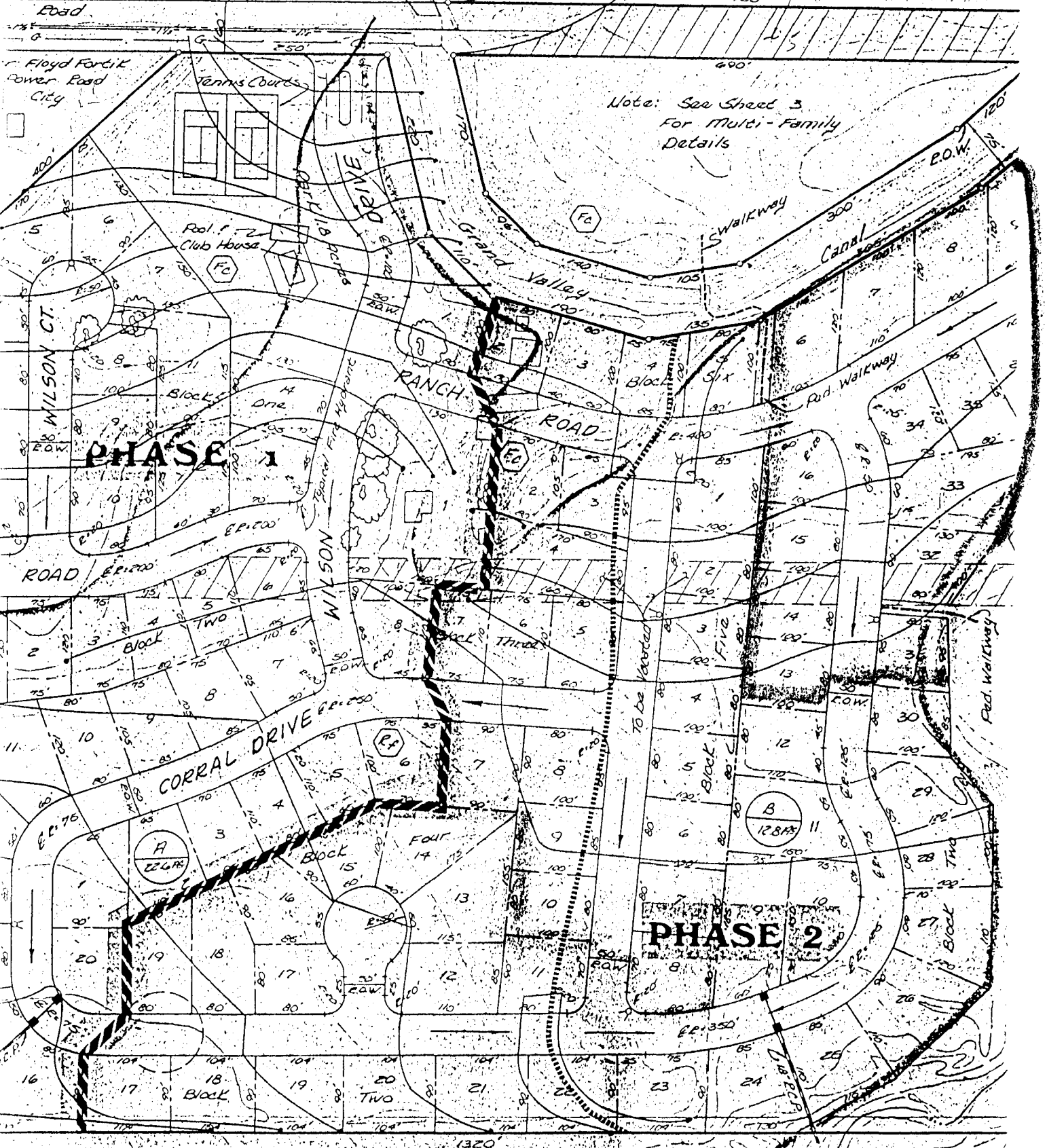
RANCH ROAD

PHASE 1

ROAD

CORRAL DRIVE

PHASE 2





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

Receipt 4089
 Date _____
 Rec'd By _____
 File No. PP-96-130

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

PETITION	PHASE	SIZE	LOCATION	ZONE	LAND USE
<input checked="" type="checkbox"/> Subdivision Plat/Plan	<input type="checkbox"/> Minor <input checked="" type="checkbox"/> Major <input type="checkbox"/> Resub	7.5 acres	I-70 + 25 ³ / ₄ rd	PR	Residential
<input type="checkbox"/> Rezone				From: To:	
<input type="checkbox"/> Planned Development	<input type="checkbox"/> ODP <input type="checkbox"/> Prelim <input type="checkbox"/> Final				
<input type="checkbox"/> Conditional Use					
<input type="checkbox"/> Zone of Annex					
<input type="checkbox"/> Variance					
<input type="checkbox"/> Special Use					
<input type="checkbox"/> Vacation					<input type="checkbox"/> Right-of Way <input type="checkbox"/> Easement
<input type="checkbox"/> Revocable Permit					

<input checked="" type="checkbox"/> PROPERTY OWNER	<input checked="" type="checkbox"/> DEVELOPER	<input checked="" type="checkbox"/> REPRESENTATIVE
<u>GNT DEVELOPMENT</u>	<u>SAME</u>	<u>WD GARRISON</u>
Name	Name	Name
<u>PO Box 308</u>	<u>Box 308</u>	<u>795 GARRISON CT</u>
Address	Address	Address
<u>GR Jct CO 81502</u>	<u>81502</u>	<u>GR Jct CO 81506</u>
City/State/Zip	City/State/Zip	City/State/Zip
<u>243-5902</u>	<u>243-5902</u>	<u>241-5325</u>
Business Phone No.	Business Phone No.	Business Phone No.

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

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

WD Garrison 7-30-95
 Signature of Person Completing Application Date

WD Garrison, PRES. GNT DEV CORP 7-30-95
 Signature of Property Owner(s) - attach additional sheets if necessary Date

SUBMITTAL CHECKLIST

MAJOR SUBDIVISION: PRELIMINARY

Location: I-70 + 25 3/4 Rd

Project Name: Wilson Ranch #5

ITEMS	DISTRIBUTION																		TOTAL REQ'D.									
Date Received _____ Receipt # <u>4089</u> File # <u>PP-96-130</u>	SSID REFERENCE	● City Community Development	● City Dev. Eng.	● City Utility Eng.	● City Property Agent	● City Parks/Recreation	● City Fire Department	● City Attorney	● City Ord. Dept.	○ City Downtown Dev. Auth.	● City Police	● County Planning	○ Walker Field	● School District #51	● Irrigation District <u>6.1. Walker</u>	○ Drainage District <u>1404.5</u>	● Water District <u>142</u>	○ Sewer District		● U.S. West	● Public Service	● GVRP	○ CDOT	○ Corps of Engineers	○ Colorado Geological Survey	● U.S. Postal Service	○ Persigo WWTF	● TCI Cable
DESCRIPTION																												
● Application Fee <u>\$610 + \$15/ACP</u>	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	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	1
● 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	1
● Evidence of Title	VII-2	1		1			1																					
● Names and Addresses	VII-2	1																										
● Legal Description	VII-2	1		1																								
● General Project Report	X-7	1	1	1	1	1	1	1	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
● Elevation Map	IX-21	1																										
● Preliminary Plan	IX-26	1	2	1	1	1	1	1	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
● 11"x17" Reduction of Prelim. Plan	IX-26	1			1	1	1	1	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
● Preliminary Drainage Report	X-12	1	2																									

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

Wilson Ranch Townhomes

Wilson Ranch was zoned as PR 4.4 by Mesa County Commissioners in January 1980. Subsequent approval was given to preliminary plans for 181 total units that would be divided into 105 single family units and 76 multi-family units. The original land parcel zoned was 41.27 acres.

Final plats have been approved for 94 single family homes. All single family detached homes are located south and west of the canal. The 7.5 acres north the canal was designed for the intended 76 townhomes and condominiums. This area is currently in two tax parcels divided by G1/2 Road.

As the current plan is a deviation from the originally approved 76 units I am providing this revised preliminary plan for administrative review. Information submitted is greater than that normally included in a preliminary plan in order that all comments and considerations can be taken into account and the final plat reflect all needed changes.

The earlier plan did not provide an area for canal maintenance. Twenty-five feet from waters edge is required for this purpose. This reduction in area plus design changes from "stacked flats"--condos--has resulted in a density reduction from the planned 76 units to 61. These units are one and two story townhomes varying in size from approximately 1000 square feet to 1400 square feet. Parking is provided by 81 parking places and 38 garages.

All utilities are available to the project. Sewer was brought under the canal with an approved sewer design during March of 1996, Ute water is available in G1/2 Road at the intersection with Wilson Drive. Telephone, electrical and cable TV are available from the

existing Wilson Ranch improvements. Irrigation water is available from the Grand Valley Irrigation Company. A new headgate has been discussed and agreed to by both the developer and canal company. Irrigation will be pressurized.

To accomplish this development it is necessary to realign G1/2 Road to the area immediately south of I-70. A design for G1/2 Road has been reviewed by City Engineering and is included in this submittal. Curb only is provided on the I-70 side and curb, gutter with detached five foot sidewalk are provide on the south. Curb and sidewalk are separated by a ten foot landscape strip to buffer the development from traffic and highway noise. This new alignment will eliminate the sharp and dangerous curve currently in G1/2 Road.

The present G1/2 right-of-way will be vacated and a new one dedicated to the city. I am requesting that the construction of this 1000 plus feet of new road be in lieu of traffic capacity fees for the project.

The interior road is proposed as "private." This designation is requested to eliminate problems concerning street set-backs and maintenance difficulties occasioned by on street 90 degree parking. While the design is more narrow than city standards, it will in all other ways be constructed to city standards. It provides curb, gutter and sidewalks throughout. Storm water management and drainage are provided through the street and a conduit emptying into Leach Creek. A pavement maintenance fund is planned designating a portion of purchase price be set aside for this purpose. This will also assist the city by providing this function from non-city revenues and ensuring that in the future it will not be made a city responsibility.

Landscape planned for the development is extensive. We wish a well-designed, green and attractive development. A contract for landscape maintenance is planned.

The development is planned to complement the existing Wilson Ranch development. It is planned for neither the top nor the bottom of the townhouse market. We intend to offer home owning opportunities to those who either have no desire for yard maintenance responsibilities or who have difficulty affording the amenities of large lots, attached garages and larger homes. It is intended to create reasonable price housing at below the cost of single family detached homes in this area. A tight development of attractive units with smaller square footage will make this possible. To maintain the quality of the area we will be using attractive elevations, a variety of materials for exteriors and strong design and color control through a home owner's association and architectural review board.

As a part of the 7.5 acre site is a 1 acre (approximate) parcel north and east of the re-aligned G1/2 Road. The parcel borders Leach Creek immediately beyond Bookcliff Gardens Nursery. The Nursery has expressed interest in acquiring the area for nursery use. I would like this parcel described and platted as a separate lot which I can convey to Bookcliff Gardens. They have offered to exchange landscape materials for this area. The arrangement would be mutually beneficial to all. It will assist the nursery, the developer and will preserve green, open space. Without such an arrangement it will likely remain open but will be a nuisance area, unattractive and serve no useful purpose.

WILSON RANCH

April 18, 1995

City of Grand Junction
City Engineer and
✓ Community Development

During previous discussions I advised that Wilson Ranch has a planned multi-family area of approximately seven acres with a total density of 76 units. The area designated for these units consists of two approximate 3 1/2 acre parcels, one on the north of G 1/2 Road and one on the south of the road. Development of these parcels was conditioned upon moving G 1/2 Road next to the I-70 ROW and straightening it. I would like to proceed with this prior to obtaining design approval for the 76 units.

In earlier discussions I was advised that a 56' ROW with a 36' mat would meet the necessary road design. I have asked that curb and gutter be waived with landscaping used in its place. Drainage would be captured in a river rock swale on either side of the road. Native grasses would be planted and trees provided for the north side and trees and shrubs for the south side. Additionally a four foot sidewalk would be provided on the south. Drawings of this plan are provided.

Part of the reason for the request is to extend the same landscape appearance which Bookcliff Gardens has used for the area bordering G 1/2 and 26 1/2. It is their intention to continue their design to the west end of their property. The landscape proposed for G1/2 would provide continuity and a more attractive roadscape than alternatives. It will also help to buffer the multi-family area from both G 1/2 and I-70.

I have had the area surveyed and a preliminary road plan drawn. I notice that the dimensions of this plan do not match my sketch proposal. I would like to work out design differences and obtain preliminary approval of the concept before having them re-drawn.

I would appreciate your consideration and welcome the opportunity to meet and further explain or clarify any of the above.

Sincerely,



W. D. Garrison
President GNT Development Corp.

WILSON RANCH • 25 1/2 & G 1/2 Roads

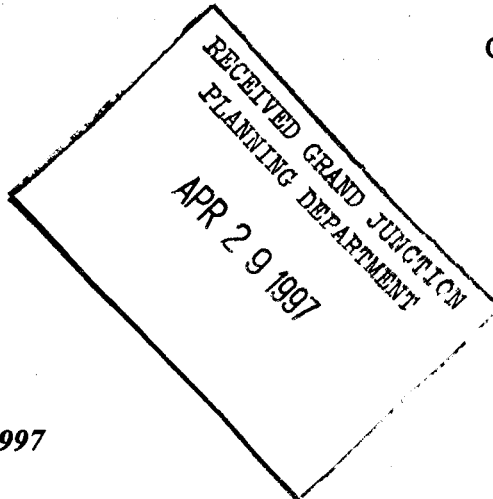
G N T DEVELOPMENT CORP. • Developers of Wilson Ranch and other fine properties
P.O. Box 308 • Grand Junction, CO 81502 • Office: (303) ~~245-1434~~

243-5902



City of Grand Junction, Colorado
250 North 5th Street
81501-2668
Phone (970) 244-1501
FAX (970) 244-1456

April 28, 1997



W. D. Garrison
Wilson Ranch
P.O. Box 308
Grand Junction, CO 81502

Re: Your letter of April 15, 1997

Dear Dan,

I spoke with Kathy Portner concerning your April 15, 1997 letter. Given the significant public input and process which occurred concerning the proposed townhouse development, we are wondering if it makes sense to extend the term of the annexation agreement to file a final plat on the Wilson Ranch multifamily portion.

It may be that enough time has elapsed since the annexation agreement was signed to best serve the public with a "let's start over" process.

Of course, your background would lead you to the immediate conclusion that I am not the final arbiter of such questions: the City Council is. If you would like, please let me know and I can ask the Mayor to schedule this matter for discussion by the City Council at a convenient time.

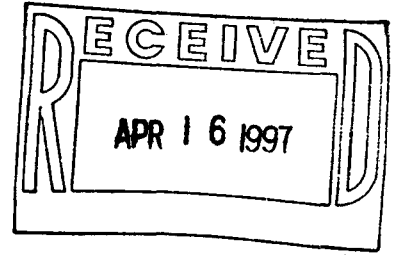
Very Truly,

Dan E. Wilson
City Attorney

dan/wilsonex.doc
04/28/97 10:46 AM

cc: M. Achen
K. Portner
City Council
File

4/23



April 15, 1997

Dan Wilson, City Attorney
Grand Junction City
250 N. 5th Street
Grand Junction, CO 81501

C. Kathy P: my concerns about giving Garrison written confirmation?

Saw: please file weekly file

Dear Dan,

Last October we spoke about the period of time allowed by the Annexation Agreement for filing a final plat on the Wilson Ranch multi-family portion. I requested that the period be extended to 12-31-99. This request was based upon my difficulty in obtaining approval for the final plat. Also included in the discussion were the annexation provisions allowing a preliminary plan approval on an administrative basis and my desire to use these same provisions in future submissions.

You concurred with my requests and I confirmed our discussion with a letter to you on October 31, 1996. No formal response was ever received.

Noting recent changes in City Council I am anxious to preserve this agreement. What do you suggest?

I currently have the property on the market but if a buyer fails to surface I will plan on a new submittal during 1998.

Thanks for your assistance.

Sincerely,

W. D. Garrison, President GNT Development Corp.

REVIEW COMMENTS

Page 1 of 4

FILE #PP-96-130

TITLE HEADING: Wilson Ranch Townhomes (Filing #5
of Wilson Ranch)

LOCATION: I-70 & 25 3/4 Road

PETITIONER: GNT Development

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

PETITIONER'S REPRESENTATIVE: Dan Garrison

STAFF REPRESENTATIVE: Kathy Portner

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

CITY COMMUNITY DEVELOPMENT

6/14/96

Dave Thornton

244-1450

GENERAL COMMENTS:

1. The 119 parking spaces as proposed meets the parking requirement for multi-family development.
2. Please submit a detailed landscaping plan at final plat.
3. The procedure for final approval for the private street into the development is not certain. Please contact Kathy Portner at 244-1446 regarding this.
4. We would like to see as many of the existing trees as possible be retained. Please show on the landscaping plan the location of all existing trees.

CITY DEVELOPMENT ENGINEER

6/14/96

Jody Kliska

244-1591

1. Similar projects which have discharged directly into Leach Creek have been assessed a drainage fee. The calculated fee based on the information provided in the drainage study is \$13,711.25.
2. Please submit the pavement design with the final plans.
3. Indicate the storm drain crossing on the sewer profiles.
4. The centerline profile for G 1/2 Road shows a grade of .13%. The SWMM manual calls for a minimum .5% grade. Is it possible to increase the slope?
5. The request for TCP credit needs to be done in a letter to Community Development detailing the costs of the improvements.

CITY UTILITY ENGINEER

6/14/96

Trent Prall

244-1590

1. PLEASE NOTE: 1996 City of Grand Junction Standard Specifications shall apply for this proposed development. Copies are available for \$10 in the Public Works and Utilities office.
2. As of 6/14/96, the sewer under the canal is still not accepted due to easements not being finalized. Please submit finalized easements as soon as possible.

3. Water: Ute. Please provide a sign off block for Ute on all water related plans.
4. If sewers are to be publicly maintained, ensure plat reflects 20' minimum easements accommodating installation, repair, maintenance and replacement of sewers.
5. Alignments and grades appear adequate. More comments on final submittal.
6. Please add the following notes for the final submittal.
 - A. Contractor shall have one signed copy of plans and a copy of the City of Grand Junction's Standard Specifications at the job site at all times.
 - B. All sewer mains shall be PVC SDR 35 (ASTM 3034) unless otherwise noted.
 - C. All sewer mains shall be laid to grade utilizing a pipe laser.
 - D. All service line connections to the new main shall be accomplished with full body wyes or tees. Tapping saddles will not be allowed.
 - E. No 4" services shall be connected directly into manholes.
 - F. The contractor shall notify the City inspection 48 hours prior to commencement of construction.
 - G. The Contractor is responsible for all required sewer line testing to be completed in the presence of the City Inspector. Pressure testing will be performed after all compaction of street subgrade and prior to street paving. Final lamping will also be accomplished after paving is completed. These tests shall be the basis of acceptance of the sewer line extension.
 - H. The Contractor shall obtain City of Grand Junction Street Cut Permit for all work within existing City road right-of-way prior to construction.
 - I. A clay cut-off wall shall be placed 10 feet upstream from all new manholes unless otherwise noted. The cut-off wall shall extend from 6 inches below to 6 inches above granular backfill material and shall be 2 feet wide. If native material is not suitable, the contractor shall import material approved by the engineer.
 - J. Sewer stub outs shall be capped and plugged east of property line. Stub out shall be identified with a steel fence post buried 1' below finished grade. As-built surveying of stub out required PRIOR to backfill.
 - K. Benchmark _____

CITY FIRE DEPARTMENT

6/12/96

Hank Masterson

244-1414

1. The proposed fire line extension exceeds 1,000 feet in length and estimated fire flows are less than 1000 gallons per minute. Required fire flows for the townhomes will exceed 1000 gpm. To reduce required fire flows, petitioner will be required to install NFPA 13D fire sprinkler systems in all townhomes.
2. The cost of the 13D systems must be included in an Improvements Agreement. Estimated cost of these sprinkler systems is \$1.50 per square foot of floor space.
3. Along with the fire sprinkler systems, the fire line sizes and hydrant locations will be adequate as shown.

CITY POLICE DEPARTMENT

6/12/96

Dave Stassen

244-3587

1. Are the parking garages true garages (enclosed on all sides) or are they covered "carports"? If they are just covered ports, I would STRONGLY suggest not covering them with the set-up as is, the covered parts COULD have a significant problem with thefts from auto. My recommendation would be to do away with the covers and place pedestrian level lights throughout all parking area so that there are no dark areas in the parking lots.

2. If only fencing is to be used, it should be transparent in nature.

MESA COUNTY SCHOOL DISTRICT #51

6/11/96

Lou Grasso

242-8500

SCHOOL - CURRENT ENROLLMENT / CAPACITY - IMPACT

Appleton Elementary - 277 / 250 - 40

West Middle School - 531 / 500 - 20

Grand Junction High School - 1674 / 1630 - 26

U.S. WEST

6/4/96

Max Ward

244-4721

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

MAIL COPY TO:

AND

CALL THE TOLL FREE NUMBER FOR:

U.S. West Communications

Developer Contact Group

Developer Contact Group

1-800-526-3557

P.O. Box 1720

Denver, CO 80201

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

PUBLIC SERVICE COMPANY

6/12/96

Jon Price

244-2693

1. Sewer or water lines cannot be installed in same trench as natural gas - 3 feet horizontal separation.
2. Gas service tap will not be installed under asphalt or concrete.
3. Easements? I suggest a "blanket easement".

U.S. POSTAL SERVICE

6/4/96

Mary Barnett

244-3434

The Postal Service recommends central delivery and will provide the developer with equipment.

UTE WATER

6/7/96

Gary Mathews

242-7491

1. The proposed 8" line in G 1/2 Road needs extended further to the east to the end of property and an 8" inline valve installed.
2. Two inline valves are needed on the canal crossing. One on each side of the canal. Contact with Ute Water is needed to discuss number, cost and location of water meters.
3. Water mains shall be c-900, class 150. Installation of pipe fittings, valves and services including testing and disinfection shall be in accordance with Ute Water standard specifications and drawings.
4. Developer will install meter pits and yokes. Ute will furnish pits and yokes.
5. Construction plans required 48 hours before development begins.
6. Policies and fees in effect at the time of application will apply.

GRAND VALLEY RURAL POWER

6/5/96

Perry Rupp

242-0040

Please note utility easements for power lines.

GRAND VALLEY WATER USERS

6/14/96

Richard Proctor

242-5065

Grand Valley Water Users' Association has no project facilities located within this proposed area. We offer no other comments.

GRAND VALLEY IRRIGATION

6/13/96

Phil Bertrand

242-2762

This subdivision abuts our canal and canal right-of-way. A 25 foot from water edge canal right-of-way must not be encroached upon. The plat must show and state this 25 Grand Valley Irrigation Company canal right-of-way. Must state and clarify single point of delivery for irrigation water. A discharge agreement must be signed if discharge water is to enter the canal.

TO DATE, COMMENTS NOT RECEIVED FROM:

City Parks & Recreation

City Attorney

WILSON RANCH

August 4, 1995

Katherine M. Portner
Planning Supervisor
Community Development
City of Grand Junction

Dear Ms. Portner:

Perhaps you will recall when I came in for the "pre-app" meeting there was some confusion on both of our parts as to "where do I start on this multi-family portion of Wilson Ranch?" This stemmed from having a preliminary plan which had been approved by the County but wishing to make some changes to it before proceeding to a final with full blown engineering and design. I wished to change the number of physical units (not density), allocation between condo's and townhomes, some changes in parking and create a lot for tree storage which I could convey to a nursery. You believed that with these changes we best go to preliminary. I had the idea that this was a design type preliminary and not a full blown land use, major subdivision preliminary. I supplied only design criteria on the portion with units. I should have sought additional clarification-which I did not. I should have also assisted you in pursuing the terms and provisions of my Annexation Agreement-which I did not do.

I am writing now and will meet with you in an attempt to clarify these issues.

Applicable provisions of the Annexation Agreement, attached, are mainly in item 11.

"11. Except as provided for in paragraph 12, below, the City shall propose for its adoption the preliminary and final plats and plans for Wilson Ranch Filing Number 1, Phases I, II, and III, Filing Number 2, and Filing Number 3, as presently approved by Mesa County, for development of the property.

WILSON RANCH • 25 1/2 & G 1/2 Roads

G N T DEVELOPMENT CORP. • Developers of Wilson Ranch and other fine properties
P.O. Box 308 • Grand Junction, CO 81502 • Office: (303) 245-1434

241-5325

On and after the date that a petition to Annex has been found to be valid, pursuant to 31-12-107, C.R.S., any changes or amendments to a plat or plan affecting the Property subject to a Petition to annex shall be allowed by City only if they do not affect the general character of any plat or planned development concerning the Property and such changes or amendments are minor in nature and are the result of faulty engineering and technical data or unforeseen engineering problems. Such changes or amendments, as necessary, shall be subject to City's reasonable approval, which will not be unreasonably withheld. Any changes not meeting the above criteria shall allow the City to fully exercise its land use jurisdiction pursuant to 31-12-115, C.R.S., in reviewing the entirety of the remaining development of the Property."

As background for this provision:

January 10, 1980, Mesa County Commissioners approved zoning for Wilson Ranch as PR 4.4 with an outline development plan calling for 105 single family lots and 75 Multi-family units.

April 17, 1980, Mesa County Planning Commission approved a Preliminary Plan for Wilson Ranch which included 76 multi-family units and 105 single family units. At that time the hearing considered all (at that time) appropriate land use items and a preliminary drainage report and maps were provided for the entire property.

I am enclosing copies of the maps and drawings used in this process. The narrative Drainage Report is in the County file which was transferred to the City at time of annexation.

On April 30, 1980 Mesa County Commissioners adopted the Preliminary plans recommended to them by the Planning Commission.

In 1983 the County approved a final plan for Filing 1, Phases I, II, and III. These plans were not used until I purchased Wilson Ranch in 1991. At that time the "Final" was re-activated and I built Filing 1 in three phases. Filing 2, as intended by the original developers, was to include the balance of single family homes. Filing 3 was to include the multi-family portion. I divided their Filing 2 into three parts which are now known as Filings 2, 3, and 4.

I believe that based upon having an approved Preliminary Plan from the County and having it specifically included in my Annexation Agreement its approved status is preserved. Paragraph one of 11. providing "...City shall propose for its adoption the preliminary and final plats and plans for Wilson Ranch..."

The main question at this point seems to be, are the changes requested "minor in nature" and do they "affect the general

character" of the planned development? If they are minor and do not affect the general character, I believe administrative approval is possible which would allow me to go directly to final. I believe that changing from condo's and townhouses to only townhouses, a re-layout of the units with parking and garages is minor, certainly not affecting the general character of the development. In requesting the lot for tree storage for the nursery I am preserving the open space and making it more attractive and useful than would occur otherwise. Again, not changing the general character of the development. I have also dropped the density, changing from 76 units to 67. The general character remains the same and the change, I believe, minor.

After you have an opportunity to review this matter I would like to meet with you again to determine:

1. Will you provide administrative approval?
2. If not, should I proceed with a revised preliminary?
3. If I do, what added materials will be needed?
4. If I choose to retain the approved Preliminary plan which I brought with annexation, what changes would be allowed with administrative approval?

Sincerely,



W. D. Garrison
President, GNT Development Corp.



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

August 2, 1995

WD Garrison
795 Garrison Ct.
Grand Junction, CO 81506

RE: Wilson Ranch, Filing #5

Dear Mr. Garrison:

We have reviewed your submittal for Preliminary Plan review for Wilson Ranch, Filing #5 and find it to be incomplete. A Preliminary Drainage Report was not submitted and the Preliminary Plan was found to be incomplete. I have circled the items that were not included on the Preliminary Plan on the attached Drawing Standards Checklist from the City's Submittal Standards for Improvements and Development Manual. I have also included a copy of the Report Checklist and Outline for the Preliminary Drainage Report.

Section 6-7-1.A of the Zoning and Development Code states that "no submittal shall be accepted unless it is complete". With the large number of submittals we received and the relatively short review time we cannot review incomplete submittals nor allow extensions to the submittal deadline. Therefore, your submittal cannot be reviewed and processed for the September Planning Commission hearing. A complete submittal must be received by September 1, 1995 at 5:00 p.m. for this development proposal to be scheduled for the October Planning Commission hearing. You can pick up the packets and your check at the Community Development Department anytime.

If you have any questions please feel free to call me at 244-1446.

Sincerely,

Katherine M. Portner
Planning Supervisor

*Agreed the Prel. Plan is Admin. Review but
same submittal requirements*

REPORT CHECKLIST AND OUTLINE

PRELIMINARY DRAINAGE REPORT *-Not Submitted*

CHECKLIST	OK	NA
Typed text		
8½ x 11" format		
Bound: Use bar or spiral binder or staple. Do not use a notebook.		
Title Page: Name of report and preparer, date of preparation and revision (if any)		
Exhibits: Maximum 11" high and 32" wide, bound in report and folded as required to 8½ x 11" size		
Maps attached to or contained in the report: Vicinity Map and Preliminary Major Basin Drainage Map		

OUTLINE

- I. GENERAL LOCATION AND DESCRIPTION
 - A. Site and Major Basin Location
 1. Streets in the vicinity
 2. Development in the vicinity
 - B. Site and Major Basin Description
 1. Acreage
 2. Ground cover types
 3. Hydrologic soil types
- II. EXISTING DRAINAGE CONDITIONS
 - A. Major Basin
 1. General topography, drainage patterns and features, canals, ditches, wetlands
 2. Previously determined 100-year floodplains
 - B. Site
 1. Historic drainage patterns
 2. Inflow characteristics from upstream
 3. Discharge characteristics to downstream sub-basins
- III. PROPOSED DRAINAGE CONDITIONS
 - A. Changes in Drainage Patterns
 1. Major basin
 2. Site
 - B. Maintenance Issues
 1. Access
 2. Ownership and responsibility
- IV. DESIGN CRITERIA & APPROACH
 - A. General Considerations
 1. Previous drainages studies performed for the area
 2. Master planning issues (large scale considerations)
 3. Constraints imposed by site and other proposed development
 - B. Hydrology
 1. Design storms and precipitation
 2. Runoff calculation method
 3. Detention/retention basin design method
 4. Parameter selection procedures
 5. Analysis and design procedures
 6. Justification of proposed methods not presented or referenced in SWMM
 - B. Hydraulics
 1. Hydraulic calculation methods
 2. Parameter selection procedures
 3. Analysis and design procedures
 4. Justification of proposed methods not presented or referenced in SWMM

COMMENTS

1. No calculations are required for the Preliminary Drainage Report.
2. It may not be necessary to cover all of the above topics, but the report should address all concerns applicable to the proposed project, even issues not identified above.

KATHY



February 7, 1996

RECEIVED GRAND JUNCTION
PLANNING DEPARTMENT
FEB 7 RECD

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

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

RE: G 1/2 Road - Wilson Ranch Townhomes

Dear Mr. Garrison:

Public Works staff has reviewed your proposed roadway cross-section for G 1/2 Road in conjunction with the development of the Wilson Ranch Townhomes and offer the following comments.

As proposed, the cross-section does not conform with current City standards. Section 5-4-1(E) requires "streets, sidewalks, trails and bike paths shall be constructed in accordance with applicable City of Grand Junction standards." Any variation from city standards must be approved by City Council. Variances to section 5-4 of the code are covered in section 5-4-16 and require recommendation by Planning Commission to the City Council. There is a \$50 advertising fee along with a submission in writing of the request for variance and ten copies of the proposed cross-section. You may contact Kathy Portner in Community Development for submission dates.

Staff recommendation for pavement width is 36', which is the standard residential collector section. Any proposal for a narrower pavement must also be supported by evidence of existing, proposed and future traffic projections. The 36' wide pavement allows us to stripe bike lanes and provides adequate room for turning vehicles at intersections.

Public Works staff supports the concept of omitting sidewalk on the north side of G 1/2 Road adjacent to the I-70 right of way, and supports the detached walk on the south side.

City standards require curb and gutter. The curb serves as a barrier as well as delineation of the roadway edge. The flat gutter proposed does not prohibit vehicles from leaving the pavement edge and allows dirt, mud and debris onto the pavement. With the flat gutter, additional shoulder maintenance is required assure there are no drop-offs than is required with a standard curb.

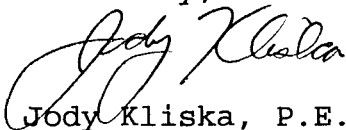
The proposed 10 foot landscaped strip between the pavement and the detached walk is aesthetically pleasing and desirable. However, we have some concerns about the design and maintenance of this area. Based on his experience, the City Streets Superintendent has indicated the depressed area will become filled in with roadway debris such as dirt, rocks, and mud and the flowline will become difficult to maintain as the landscaping matures. This will cause

future drainage maintenance problems. Constructing curb and gutter will eliminate the buildup of debris in the landscaping and the need to try to maintain a flowline through the center of the landscaping. Staff recommendation is standard curb and gutter with landscaping slightly above the top of curb grade.

An acceptable alternative street section which would not require council approval is attached for your information. Basically, it is a modification of one half of the principal arterial street section with 36' of pavement width, curb and gutter and a detached walk.

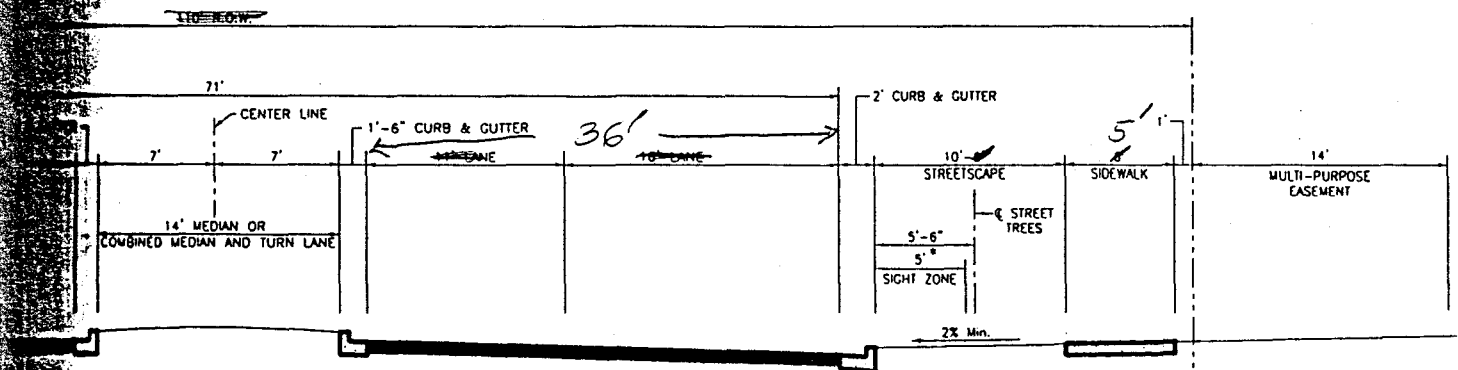
Please call me if you have any questions at 244-1591.

Sincerely,



Jody Kliska, P.E.
City Development Engineer

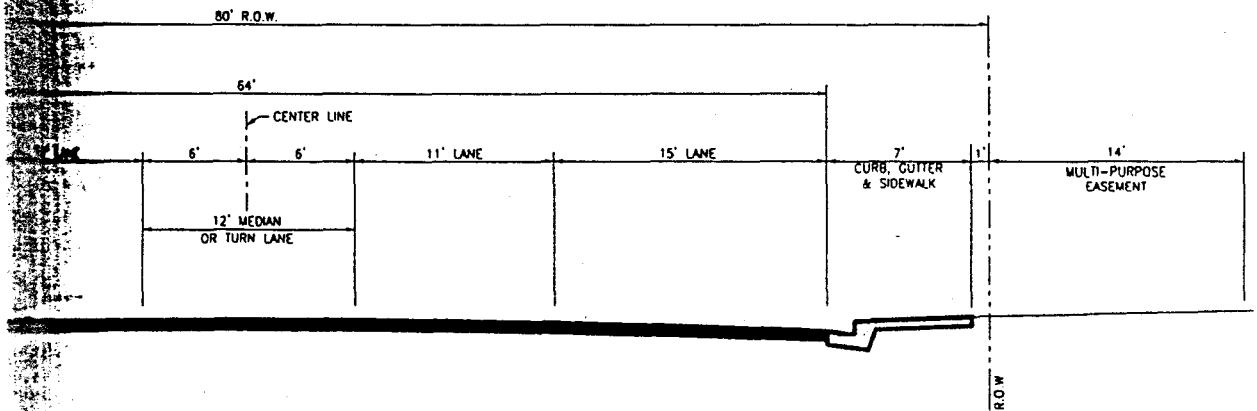
cc: Mark Relph
Don Newton
✓ Kathy Portner
Nichols & Associates



* NO TREES, SHRUBS, SIGNS, STRUCTURES OR OTHER OBSTRUCTIONS OVER 30" IN HEIGHT ALLOWED WITHIN SIGHT ZONE (EXCEPTIONS: TRAFFIC CONTROL SIGNS AND TRAFFIC SIGNAL POLES)

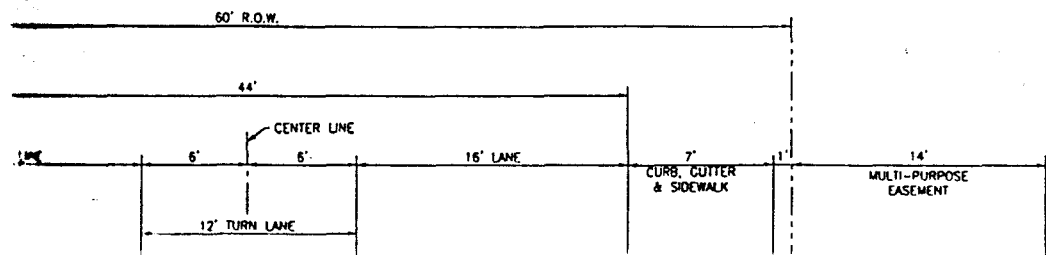
PRINCIPAL ARTERIAL

GREATER THAN 18,000 A.D.T.
(NO ON-STREET PARKING)



MINOR ARTERIAL STREET

8,001 TO 18,000 A.D.T.
(NO ON-STREET PARKING)



- NOTES
- ① MAJOR STREETS SHALL INCLUDE ALL MAJOR AND MINOR ARTERIALS AND COLLECTORS DESIGNATED ON THE GRAND JUNCTION URBANIZED AREA FUNCTIONAL CLASSIFICATION MAP.
 - ② VERTICAL CURBS ARE REQUIRED ON ALL ARTERIAL AND COLLECTOR STREETS.
 - ③ ALL STREETS AND ROADWAYS SHALL BE SURFACED WITH HOT BITUMINOUS PAVEMENT (HBP) OR PORTLAND CEMENT CONCRETE (PCC). ALL PAVEMENT STRUCTURES SHALL BE DESIGNED IN ACCORDANCE WITH THE COLORADO DIVISION OF HIGHWAYS, ROADWAY DESIGN MANUAL (LATEST EDITION), OR OTHER APPROVED METHOD.
 - ④ ADDITIONAL RIGHT-OF-WAY WIDTH WILL BE REQUIRED FOR RIGHT TURN LANES AT INTERSECTIONS OF ARTERIAL STREETS AND WHERE SPEED CHANGE LANES ARE REQUIRED. SEE SECTION 4.8, STATE HIGHWAY ACCESS CODE.
 - ⑤ SEE EXHIBIT "C" FOR DETAILS OF MULTI-PURPOSE EASEMENTS ADJACENT TO ROAD RIGHT-OF-WAY.



FINAL DRAINAGE REPORT

WILSON RANCH TOWNHOMES
Grand Junction, CO

Prepared for:

GNT Development
Grand Junction, CO

Prepared by: Mike Foutz

May 15, 1996

P.O. BOX 60010
751 HORIZON CT
SUITE 102
GRAND JUNCTION
COLORADO 81506
TELEPHONE
970-245-7101
FACSIMILE
970-245-3251

Certification Sheet

May 15, 1996

Development Staff
City of Grand Junction, Colorado

Ladies and Gentlemen:

I certify that this Final Drainage Report for the Wilson Ranch Townhomes was prepared under my direct supervision.



Terry Nichols
State of Colorado, Number 12093
Registered Professional Engineer

Final Drainage Report

WILSON RANCH TOWNHOMES
Grand Junction, CO

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B. SITE AND MAJOR BASIN DESCRIPTION 1

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I. GENERAL LOCATION AND DESCRIPTION

A. Site and Major Basin Location

Wilson Ranch Townhomes is a proposed development in the East Half of section 43, Township 1 North, Range 1 West, Ute Meridian. The development received preliminary approval by Mesa County in 1982 under the jurisdiction of the county land development process and was later annexed by the City of Grand Junction. The subdivision is approximately three miles north of downtown Grand Junction. The property is west of 26 Road, between Interstate 70 and the Grand Valley Canal and is crossed by G 1/2 Road. Other developments in the vicinity included the Wilson Ranch Subdivision on the south.

Because the Site is bounded by Interstate 70 and the Grand Valley Canal, it is separated from a larger "major basin" and does not have offsite inflow. For the purposes of this report the general area surrounding the site will be considered the major basin.

B. Site and Major Basin Description

The property has a total area of 7.67 acres. Existing vegetation consists of approximately 70% cover of native grasses and forbes. Soils on the property consist of a very deep, well drained group classified as Fruita Clay Loam, hydrologic soil classification B. Well drained soils are prevalent in the general area. Much of the area has been or is under cultivation. Runoff is generally routed to Leach Creek, which passes just east of the property. Leach Creek is approximately 15 feet deep with widths varying from 30 to 50 feet. The banks vary from steep to vertical.

II. EXISTING DRAINAGE CONDITIONS

A. Major Basin

The topography of the general area is a series of rolling hills sloping to the south and southwest. Within the developed portions of the general area, stormwater is diverted to drainage ditches and then typically routed to Leach Creek. Irrigated land north of I-70 drains to collection ditches and returns to the Grand Valley Canal (GVC). Leach Creek's 100 year floodplain is considered to be contained within its banks by the National Flood Insurance Program.

B. Site

Topography of the site is defined by a knoll in the center with the surrounding land sloping away from the knoll. The site is bounded on the north by I-70 and on the south by the GVC. Because of these features the only offsite flow onto the site is an irrigation tailwater collection ditch. This collection ditch crosses the site at its narrowest point approximately 250 feet west of Leach Creek and discharges into the GVC. The site lacks well defined collection and discharge features. The lack of defined drainage pathways allow depression storage and infiltration. There are two areas on the site where runoff ponds until there is enough runoff to overtop the depressions and discharge to the GVC. The majority of the site (approximately 7.2 acres) discharges runoff not captured by depression storage into the Grand Valley Canal (GVC). Approximately .5 acres of the site discharges directly into Leach Creek.

The site lies within areas zoned B and C by the National Flood Insurance Program. Though the Flood Insurance Rate Maps (FIRMS) do not necessarily identify all areas subject to flooding, no local features have been identified to suggest that the FIRM is incorrect.

III. PROPOSED DRAINAGE CONDITIONS

A. Changes in Drainage Patterns

Site development will not effect drainage patterns in the surrounding area. The existing irrigation tailwater discharge will be maintained with an open ditch and a culvert. The flow will continue to discharge to the GVC.

Currently approximately 94% of the site drains into the GVC. After development approximately 35% of the site will continue to drain into the GVC. Drainage from the remainder of the site will be routed to Leach Creek.

B. Maintenance Issues

The drainage system will be located within dedicated easements to insure access to all parts of the system. The system will be comprised of curb and gutter, grass channel, and storm drain pipe. Required maintenance will be minimal. A homeowners association will be formed to accept responsibility for maintenance of the drainage system.

IV. DESIGN CRITERIA AND APPROACH

A. General Considerations

Previous drainage studies in the vicinity include a study of Wilson Ranch Subdivision, Filings One, Two, and Three for the City of Grand Junction. The Wilson Ranch Subdivision discharges all runoff to Leach Creek without detention. Because the Wilson Ranch Townhomes site is isolated by the GVC and I-70, development will have minimal affect on adjacent properties. Discharge to the GVC will be maintained at near historic levels by routing runoff from much of the area into Leach Creek.

B. Hydrology

Design storm durations conform with Table VI-2 of the City of Grand Junction Storm Water Management Manual (SWMM). Rainfall intensity information was obtained from the SWMM without adjustment for basin area. Runoff calculations were performed using the Rational Method:

$$Q = CiA$$

Where:

Q = Runoff Rate, cfs

C = Runoff coefficient

i = Intensity, inches/hour

A = Area in acres

C. Hydraulics

Hydraulics calculations and methods followed those recommended in the SWMM. Mannings Equation was used for pipes and the Modified Mannings Equation was used to determine flows in gutters. Mannings roughness coefficients were selected from the book *Modern Sewer Design* or provided by manufacturers. Headloss coefficient were selected from the book *Hydraulic Engineering*.

V. RESULTS AND CONCLUSIONS

A. Existing and Proposed Runoff Rates (2 and 100 year storm events.)

Runoff Rates				
Discharge Point	2 Year		100 Year	
	Historic	Developed	Historic	Developed
Grand Valley Canal	1.9	2.9	6.1	8.0
Leach Creek	0.1	3.1	0.5	8.6
Total Site	2.0	6.0	6.6	16.6

B. Overall Compliance

The design of the proposed drainage system conforms to the requirements of the Grand Junction Stormwater Management Manual. The methods used to analyze stormwater quantities, rates, and volumes have been used in accordance with the policies in Sections I through V of the SWMM. Criteria for design methods were followed as outlined in Tables I-1, and I-2 of the SWMM.

VI. REFERENCES

United States Department of Agriculture, Soil Conservation Service. Unpublished Soil Survey for Mesa County Colorado.

Colorado Water Conservation Board, Floodplain Information Index.

United States Federal Emergency Management Agency, National Flood Insurance Program, 1992 (July). Flood Insurance Rate Map.

County of Mesa, Colorado, 1992 (April). Mesa County Storm Drainage Criteria Manual

City of Grand Junction, Colorado. 1994 (June). Stormwater Management Manual.

Bras, Rafael L., 1990. Hydrology. Addison-Wesley Publishing Company, Inc., U.S.A.

American Public Works Association, 1981. Special Report No. 49, *Urban Stormwater Management*.

VII. APPENDICES



751 Horizon Court - Suite 102
 Grand Junction, Colorado 81506
Wilson Ranch Townhomes

7-Mar-96

CALCULATION OF DISCHARGE DUE TO PROPOSED DEVELOPMENT

After Construction {Area - Intensity - Discharge}

BASIN	AREA		RUNOFF COEF. C2	RUNOFF COEF. C100	REACH	LENGTH ft	SLOPE (S) %	V fps	2Yr	100-Yr	INTENSITY Inches/Hour		DISCHARGE CFS (Q=CiA)	
	SURFACE TYPE	Ac.							TIME MIN.	TIME MIN.	2Yr	100-Yr	2Yr	100-Yr
A	Landscaped	0.31	0.28	0.33	sheet flow	60	3.0	0.13	7.9	7.4				
	Paved & Roofs	0.10	0.93	0.95	shal/conc.	170	1.0	0.60	4.7	4.7				
	Total/Average	0.41	0.44	0.48					12.6	12.2	1.36	3.54	0.2	0.7
B	Landscaped	1.52	0.28	0.33	sheet flow	90	2.0	0.12	11.1	10.4				
	Paved & Roofs	0.71	0.93	0.95		0	2.0	1.00	0.0	0.0				
	Total/Average	2.23	0.49	0.53					11.1	10.4	1.46	3.8	1.6	4.5
C	Landscaped	0.36	0.28	0.33	sheet flow	60	2.0	0.15	9.1	8.5				
	Paved & Roofs	0.72	0.93	0.95	gutter bar ditch	210 120	1.0 0.8	2.00 1.30	1.8 1.5	1.8 1.5				
	Total/Average	1.08	0.71	0.74					12.4	11.8	1.41	3.54	1.1	2.8
D	Landscaped	1.29	0.28	0.33	sheet flow	200	2.0	0.08	16.6	15.6				
	Paved & Roofs	1.56	0.93	0.95	gutter storm sewer	210 450	0.7 0.5	1.70 4.82	2.1 1.6	2.1 1.6				
	Total/Average	2.85	0.64	0.67					20.2	19.2	1.11	2.91	2.0	5.6
E	Landscaped	0.67	0.28	0.33	paved sheet	40	2.0	2.80	0.2	0.2				
	Paved & Roofs	0.41	0.93	0.95	bar ditch	400	0.8	1.30	5.1	5.1				
	Total/Average	1.08	0.53	0.57					5.4	5.4	1.95	4.95	1.1	3.0
Sub-Total (without offsite):											6.0	16.6		
Off site drainage:											0.0	0.0		
Total Ac./weighted C		7.65	0.58	0.61				MAX. Tc	20.2	19.2	TOTAL Q:		6.0	16.6

Historic (Area - Intensity - Discharge)														
BASIN	AREA		RUNOFF COEF. C2	RUNOFF COEF. C100	REACH	LENGTH ft	SLOPE (S) %	V fps	2Yr	100-Yr	INTENSITY Inches/Hour		DISCHARGE CFS (Q=CiA)	
	SURFACE TYPE	Ac.							TIME MIN.	TIME MIN.	2-Yr	100-Yr	2Yr	100-Yr
A	Native grass & scattered trees	1.13	0.25	0.28	Lo	180	5.0	0.07	12.0	11.6				
					Ls	250	1.6	1.90	2.2	2.2				
	Total/Average	1.13	0.25	0.28					14.2	13.8	1.32	3.33	0.4	1.1
B	Native grass & scattered trees	2.8	0.15	0.21	Lo	300	2.2	0.08	22.8	21.3				
					Ls	146	2.2	1.00	2.4	2.4				
	Total/Average	2.8	0.15	0.21					25.2	23.8	0.98	2.57	0.4	1.5
C	Native grass & scattered trees	1.4	0.27	0.33	Lo	100	10.0	0.07	6.9	6.4				
					Ls	155	0.5	0.70	3.7	3.7				
	Total/Average	1.4	0.27	0.33					10.6	10.1	1.46	3.8	0.6	1.8
D	Native grass & scattered trees	1.88	0.26	0.32	Lo	300	2.6	0.06	19.0	17.7				
					Ls	30	6.6	2.50	0.2	0.2				
	Total/Average	1.88	0.26	0.32					19.2	17.9	1.14	2.99	0.6	1.8
E	Native grass & scattered trees	0.44	0.26	0.32	Lo	170	2.3	0.09	14.9	13.9				
					Ls	30	5.0	1.50	0.3	0.3				
	Total/Average	0.44	0.26	0.32					15.3	14.2	1.28	3.33	0.1	0.5
Total								MAX. Tc	25.2	23.8	TOTAL Qh:		2.0	6.6
Ls velocities from SCS nomograph											INCREASE:		4.0	10.0
Total Ac. / weighted C		7.65	0.22	0.28								295.9%	251.7%	

Wilson Ranch Townhomes

Street and storm sewer flow

Flow Through Street, Curb & Gutter

Discharge quantity is calculated by the following formula:

$$Q=0.56*(Z/n)*S^{.5}*d^{2.67}$$

Where:

- Q = Discharge in CFS (Cubic Feet per Second)
- Z = Inverse pavement cross slope
- n = Manning roughness coefficient
- S = Longitudinal slope of the street or gutter
- d = Depth of gutter flow in feet

Capacity For Storm Drain Inlets

curb opening length = grate length

Ponding Q= .6 A (2gH)^{.5}

Clogging factors: grate=0.5, box=0.0

H2 = 0.5 Ft. H100 = 1.0 Ft.

Solving for maximum depth at gutter

Manning Roughness Coefficient= 0.016

Subbasin Drainage	Street Locn. ID	Inverse Pav. x slope 1/ft/ft	Min. Long. Slope S (ft/ft)	Required 2 Year Capacity Q (cfs)	2 year Water Depth d (ft.)	100 Yr Capacity Q (cfs)	100 Yr Water Depth d (Ft.)	Grate Type NEENAH	Open Area Sq. Ft.	Actual Capacity 2 Yr CFS	Require 2 Yr CFS	Actual Capacity 100 Yr CFS	Required 100 Yr CFS	
C	street flow	C1	50.00	0.005	1.10	0.17	2.80	0.24	na					
D	street flow	D1	50.00	0.005	0.35	0.11	0.90	0.16	na					
D	street flow	D2	50.00	0.007	1.66	0.19	4.65	0.27	na					
D	storm drain inlet	SDI1			1.01		2.78		CI-19X27	1.27	4.31	1.01	6.09	2.78
D	storm drain inlet	SDI2			1.01		2.78		CI-19X27	1.27	4.31	1.01	6.09	2.78
E	storm drain inlet	SDI3			0.55		1.51		CI-19X27	1.27	4.31	0.55	6.09	1.51
E	storm drain inlet	SDI4			0.55		1.51		CI-19X27	1.27	4.31	0.55	6.09	1.51

Solving for flow velocity at gutter

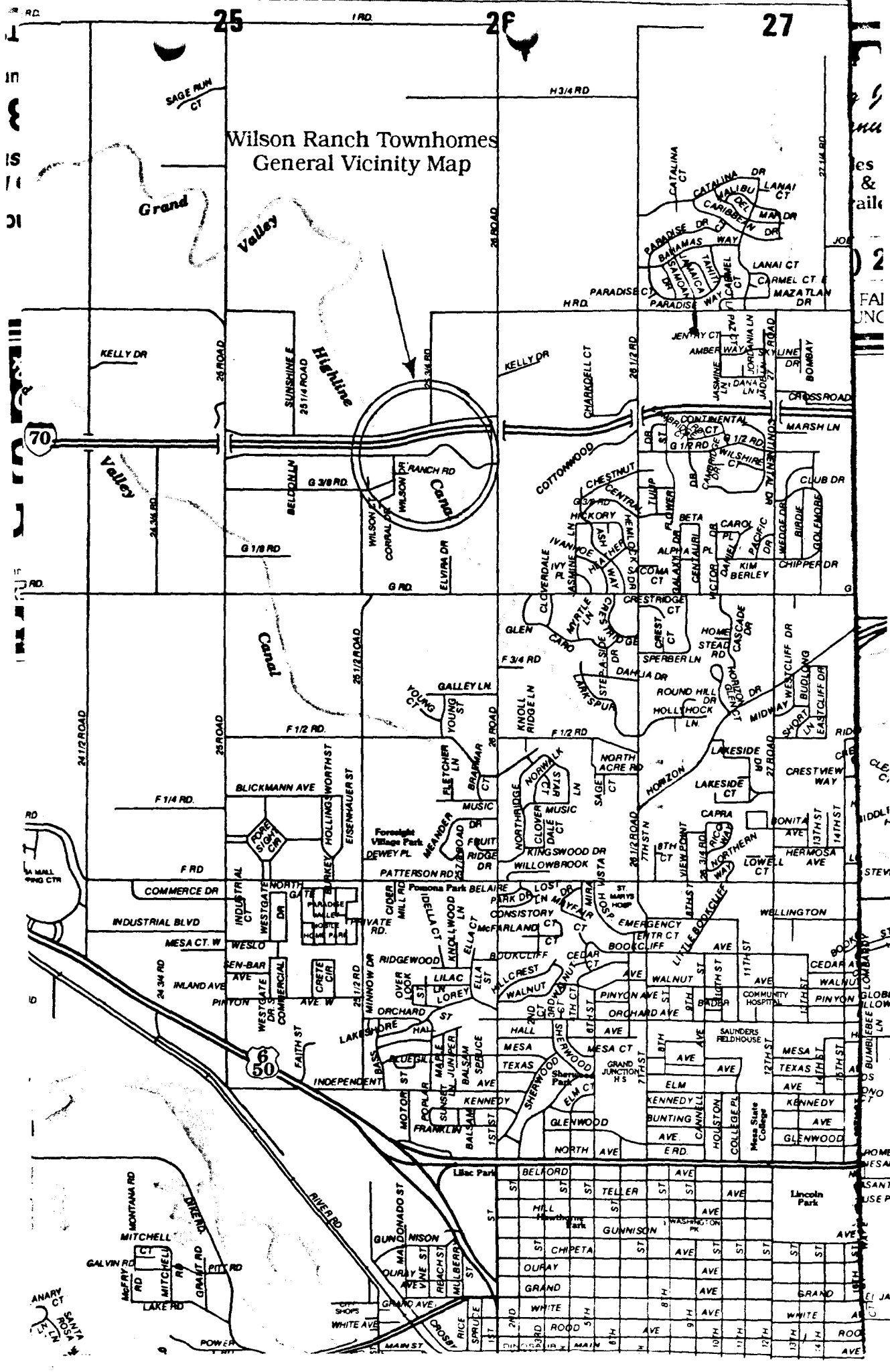
Subbasin Drainage	Street Locn. ID	Inverse Pav. x slope 1/ft/ft	Min. Long. Slope S ft/ft	Required 2 Year Capacity Q (cfs)	2 year Water Velocity (fps)	100 Yr Capacity Q (cfs)	100 Yr Water Velocity (fps)	
C	street flow	C1	50.00	0.005	1.10	1.51	2.80	1.91
D	street flow	D1	50.00	0.005	0.35	1.14	0.90	1.44
D	street flow	D2	50.00	0.007	1.66	1.90	4.65	2.46

Storm Drainage Pipe Capacities

Storm Drain Location	Pipe Diameter (inches)	Slope (ft/ft)	Rough. Coeff. n	Capacity Q (cfs)	Required Q (cfs)	Flow Velocity (fps)	Flow Depth (inches)
Basin D Outfall	15	0.005	0.01	5.94	5.55	4.82	14.6
Basins E + D Outfalls	15	0.015	0.01	10.29	8.70	8.35	14.1

ADS pipe Note: Required storm sewer capacities are based on the 100 yr event

Wilson Ranch Townhomes				
Developed Condition Impervious Area Tabulation				
Trial #5				
Area	Total Area (acres)	area description	Impervious Area	
			(sf)	(acres)
A		G1/2 rd	4300	0.10
Subtotal	0.41		4300	0.10
B		BG1	4320	0.10
		BG2	3600	0.08
		BG3	3600	0.08
		BG4	4000	0.09
		BG5	4000	0.09
		BG6	4000	0.09
		BG7	3600	0.08
		BG8	3600	0.08
Subtotal	2.23		30720	0.71
C		BG12	4320	0.10
		drive/park	13506	0.31
		G 1/2 rd	13549	0.31
Subtotal	1.08		31375	0.72
D		BG9	4000	0.09
		BG10	4320	0.10
		BG11	5040	0.12
		drive/park	29872	0.69
		G 1/2 road	11520	0.26
		parking	13336	0.31
Subtotal	2.85		68088	1.56
E		G 1/2 rd	17760	0.41
Subtotal	1.08		17760	0.41
TOTAL	7.65			3.50



Wilson Ranch Townhomes General Vicinity Map

Grand Valley

Canyon

Wilson Ranch Rd

IN
IS
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25

1 RD

2F

27

70

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COMUNITY

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WALNUT

WALNUT

ANARY
CT

MITCHELL
RD

MITCHELL
RD

LAKE RD

GRANT RD

PITT RD

POWER

WHITE AVE

GRAND AVE

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MAPS

- Preliminary Major Basin Drainage Map
- Final Major Basin Drainage Map

These maps are not included because the site is isolated by Interstate 70 and the Grand Valley Canal and is not a part of a larger "major basin".

Hydrologic Runoff Data

Basin	Area (ac.)	2 Year			100 Year		
		Tc(min)	C	Q(cfs)	Tc(min)	C	Q(cfs)
A	.41	13	.44	.2	12	.48	.7
B	2.23	11	.49	1.6	10	.53	4.5
C	1.08	12	.71	1.1	12	.74	2.8
D	2.85	20	.64	2.0	19	.67	5.6
E	1.08	5	.53	1.1	5	.57	3.0

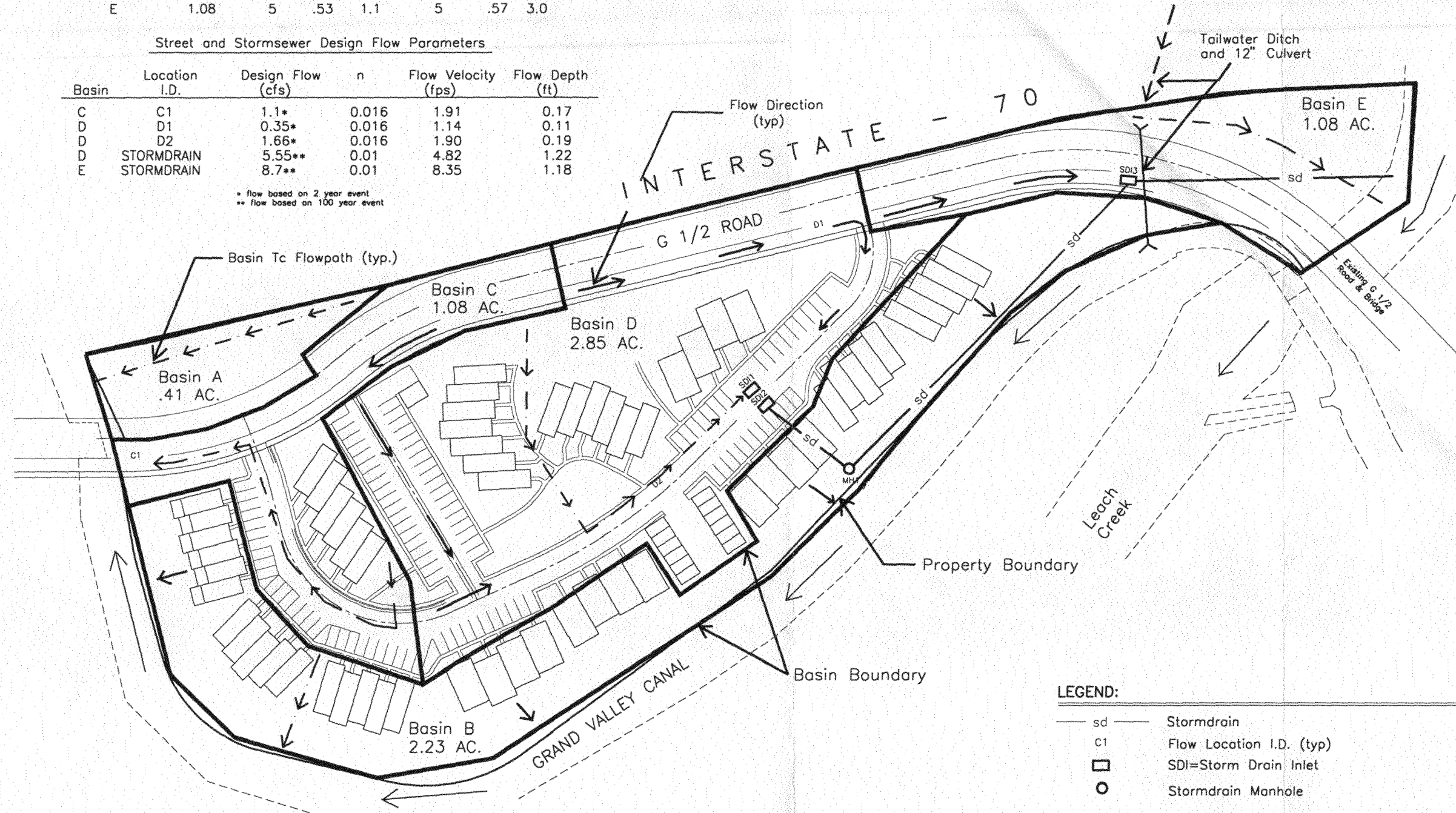
Drain Inlet Design Flow Parameters

Basin	Drain Inlet I.D.	Required 2 Year Capacity	Max. 2 year water Depth (ft)	2 Year Capacity (cfs)
D	SDI1	1.01	.5	4.31
D	SDI2	1.01	.5	4.31
E	SDI3	0.55	.5	4.31
E	SDI4	0.55	.5	4.31

Street and Stormsewer Design Flow Parameters

Basin	Location I.D.	Design Flow (cfs)	n	Flow Velocity (fps)	Flow Depth (ft)
C	C1	1.1*	0.016	1.91	0.17
D	D1	0.35*	0.016	1.14	0.11
D	D2	1.66*	0.016	1.90	0.19
D	STORMDRAIN	5.55**	0.01	4.82	1.22
E	STORMDRAIN	8.7**	0.01	8.35	1.18

* flow based on 2 year event
** flow based on 100 year event



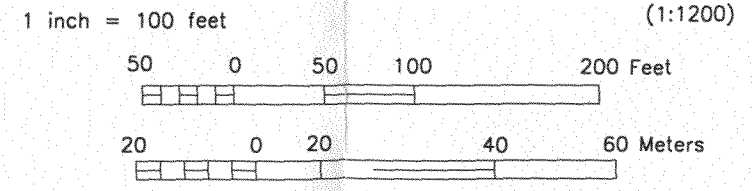
LEGEND:

- sd Stormdrain
- c1 Flow Location I.D. (typ)
- SDI=Storm Drain Inlet
- MH Stormdrain Manhole

NOTES:

1. No inflow from offsite.
2. Existing tailwater flow will be maintained.
3. Total site area is 7.7 acres.
4. Leach Creek's 100 yr floodplain is within its banks in this area.
5. Tailwater ditch collects irrigation water north of I-70 and discharges into the Grand Valley Canal.

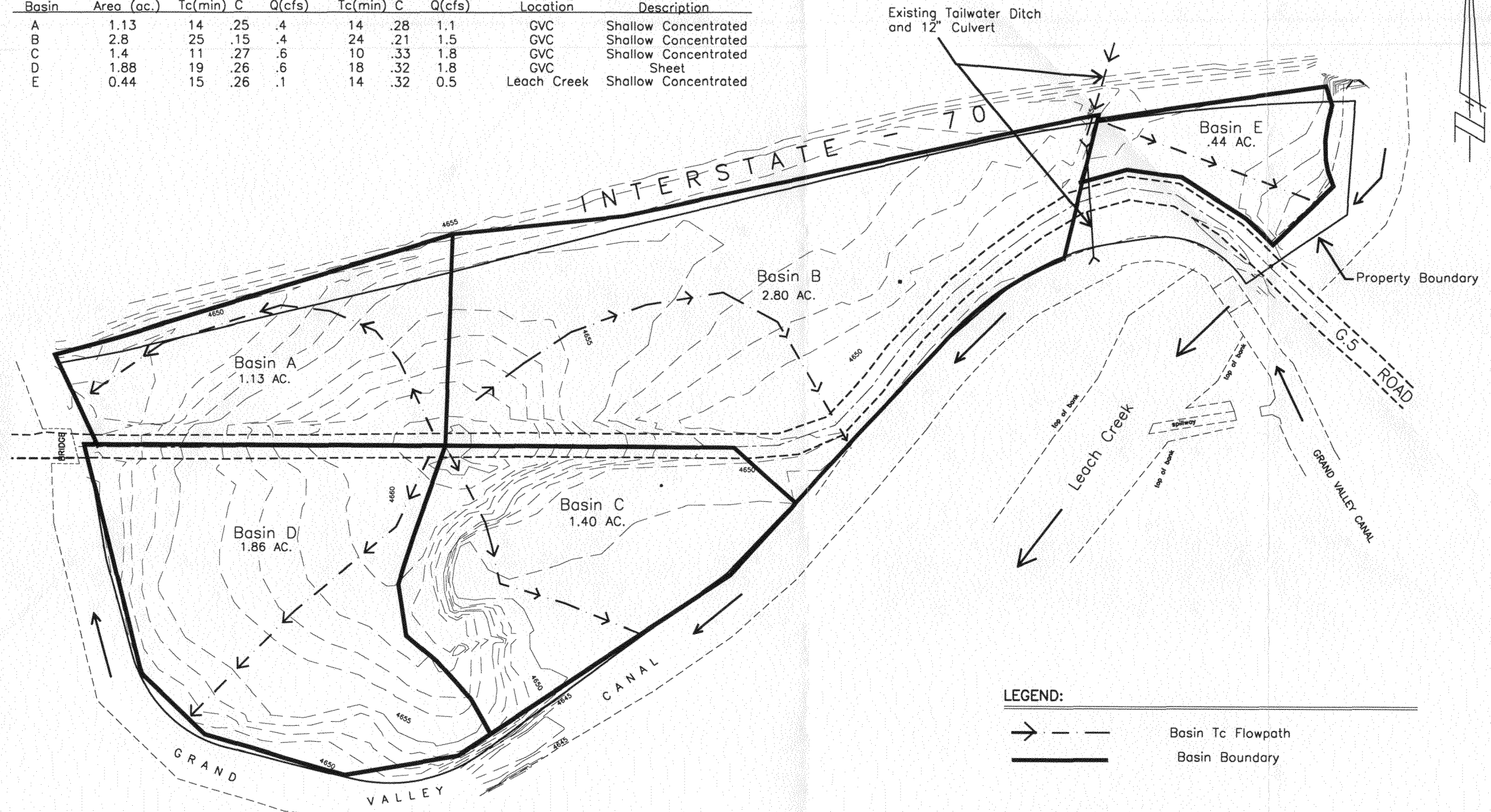
SCALE:



DESIGNED BY	DRAWN BY MF	SURVEY DATE
REVISIONS		
NO.	DATE	REMARKS
POST DEVELOPMENT STORMWATER MGMT MAP WILSON RANCH TOWNHOMES		
NICHOLS ASSOCIATES, INC. CIVIL ENGINEERING • PHOTOGRAMMETRY • SURVEYING 731 Horizon Court • Grand Junction, Colorado 81506 • Phone: 970-245-7101		
DATE DRAWN		
March 19, 1996		
SCALE		
1 inch = 100 feet		
PROJECT NUMBER		
3269		
SHEET NUMBER		
1 OF 1		

Hydrologic Runoff Data

Basin	Area (ac.)	2 Year		100 Year		Discharge Location	Flow Description		
		Tc(min)	C	Tc(min)	C				
A	1.13	14	.25	.4	14	.28	1.1	GVC	Shallow Concentrated
B	2.8	25	.15	.4	24	.21	1.5	GVC	Shallow Concentrated
C	1.4	11	.27	.6	10	.33	1.8	GVC	Shallow Concentrated
D	1.88	19	.26	.6	18	.32	1.8	GVC	Sheet
E	0.44	15	.26	.1	14	.32	0.5	Leach Creek	Shallow Concentrated



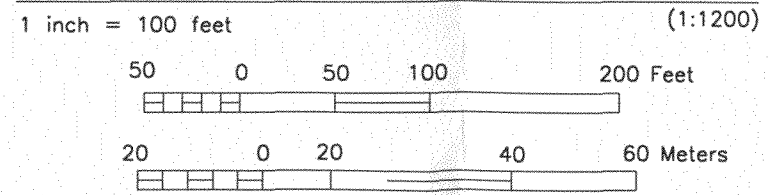
LEGEND:

- Basin Tc Flowpath
- Basin Boundary

NOTES:

1. No inflow from offsite.
2. Existing tailwater flow will be maintained.
3. Total site area is 7.7 acres.
4. Leach Creek's 100 yr floodplain is within its banks in this area.
5. Tailwater ditch collects irrigation water north of I-70 and discharges into the Grand Valley Canal.

SCALE:



DESIGNED BY: _____
 DRAWN BY: MF
 SURVEY DATE: _____

REVISIONS	
NO.	DATE

PREDEVELOPMENT STORMWATER MGMT MAP
 WILSON RANCH TOWNHOMES

CIVIL ENGINEERING • PHOTOGRAMMETRY • SURVEYING
 751 Horizon Court • Grand Junction, Colorado 81508 • Phone: 970-245-7101

NICHOLS ASSOCIATES, INC.

DATE DRAWN
 March 19, 1996

SCALE
 1 inch = 100 feet

PROJECT NUMBER
 3269

SHEET NUMBER
 1 OF 1

Tax Parcel #2701-344-00-130

Beginning at a point on the north line of the SE 1/4 of section 34, T.1 N., R.1 W., Ute Meridian - said point being 596.23' east of the NW corner of the SE 1/4 of said Sec. 34; thence east along said North line 722.83' to the north bank of the Grand Valley Canal, also known as the Highline Canal; thence along the said north bank the following 6 courses and distances:

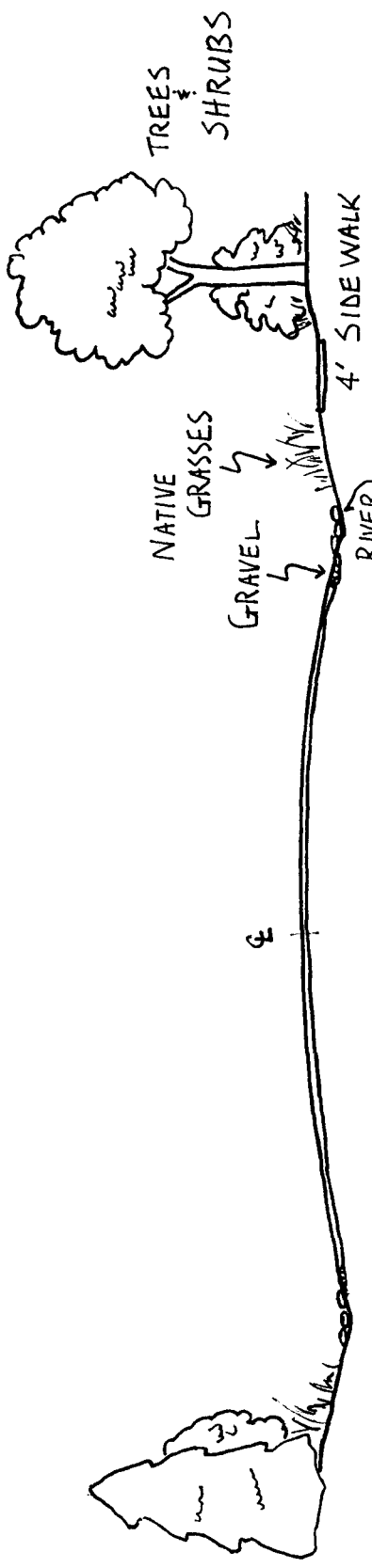
- (1) 545⁰29'15"W 171.38'
- (2) 556⁰44'15"W 301.17'
- (3) 580⁰30'15"W 107.47'
- (4) N74⁰13'45"W 135.85'
- (5) N47⁰02'00"W 80.36'
- (6) N14⁰08'30"W 217.97' to the point of beginning. Parcel

containing 3.36 acres more or less.

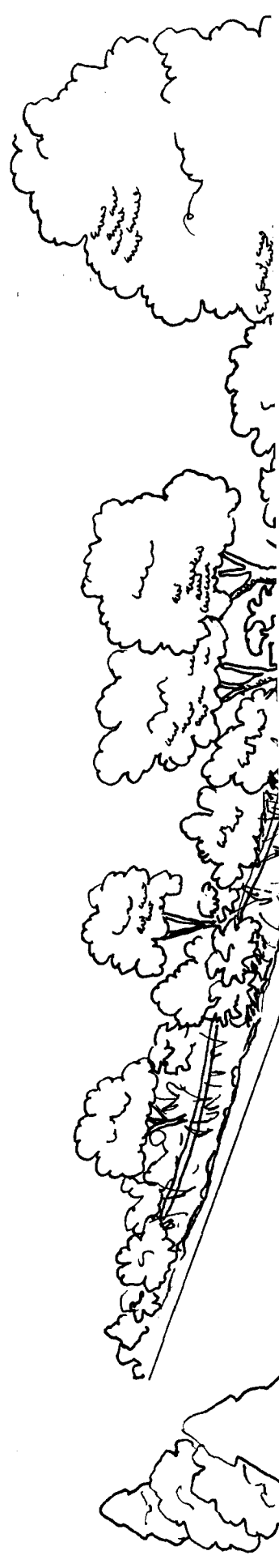
Tax Parcel #2701-341-00-141

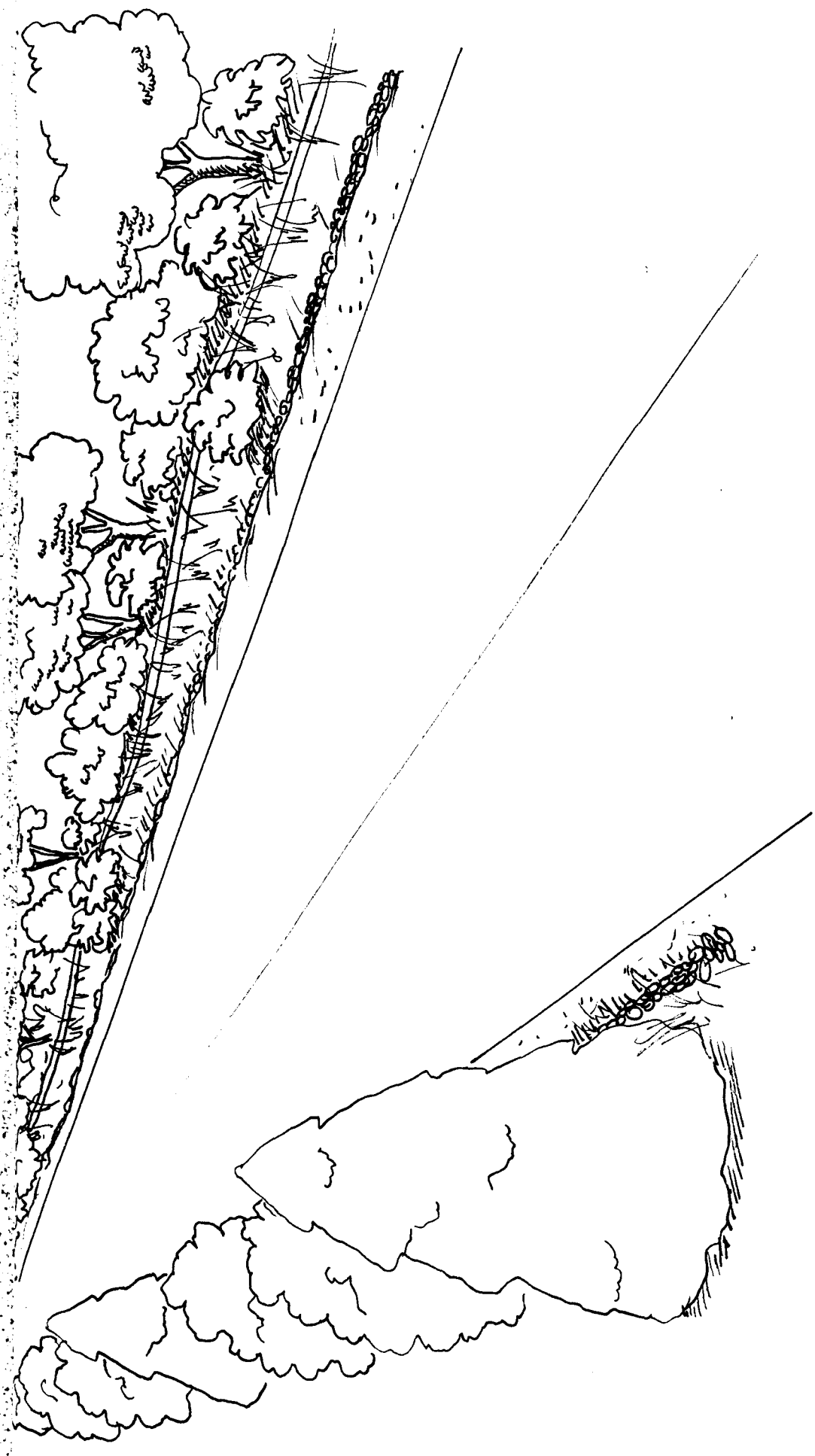
That part of SW4NE4 section 34 in T.1 N., R.1 W. Ute Meridian lying east of Grand Valley canal & S. of I-70 & also that part of SE4NE4 said section 34 lying N. of Leach Wash & S. of I-70. Parcel containing 3.76 acres more or less.

Parcel also includes the current, undescribed, ROW for G 1/2 Road which will be exchanged for new ROW in the above described parcels.



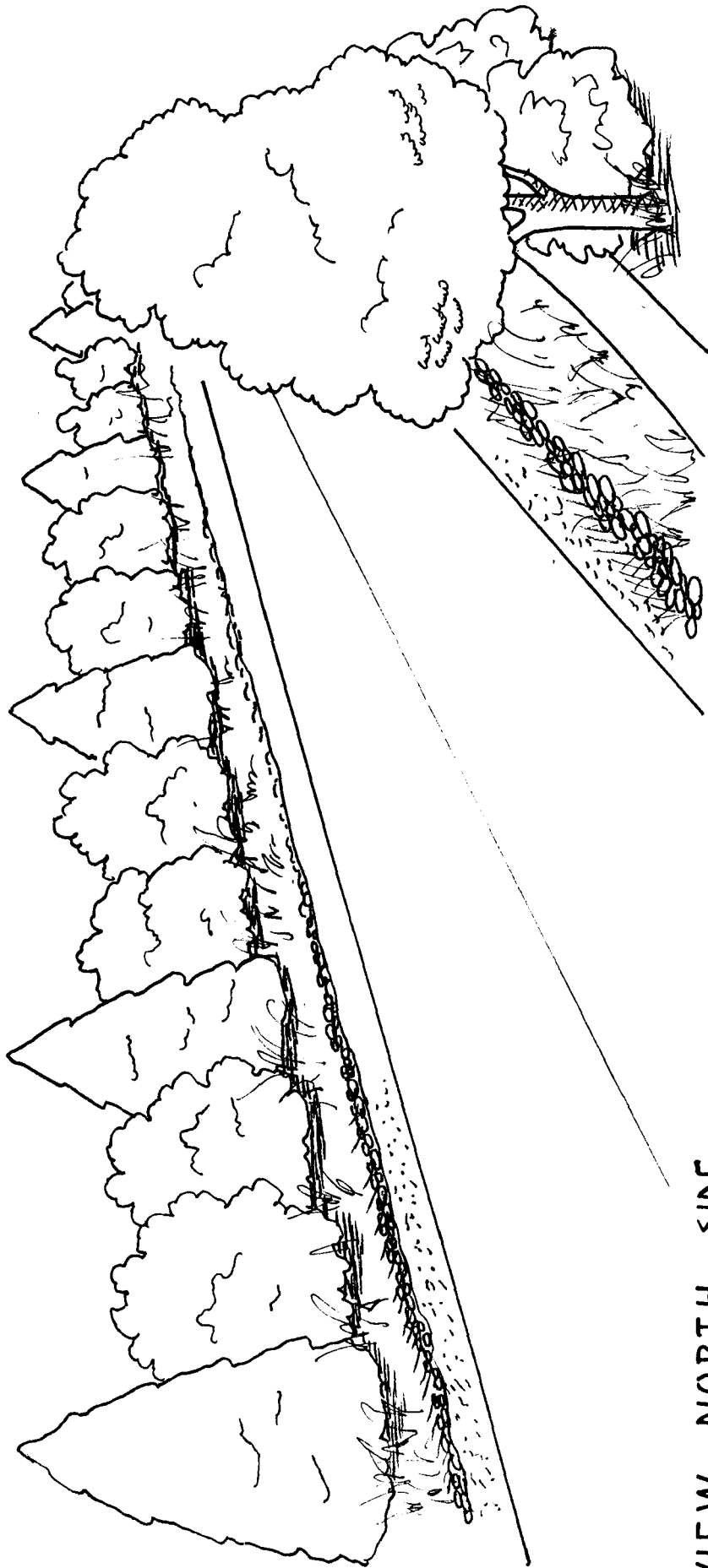
56' R.O.D.W.





VIEW SOUTH SIDE

WILSON
RANCH



VIEW NORTH SIDE

COMPOSITE PLAN
WILSON RANCH TOWNHOMES
 Grand Junction, Mesa County, Colorado

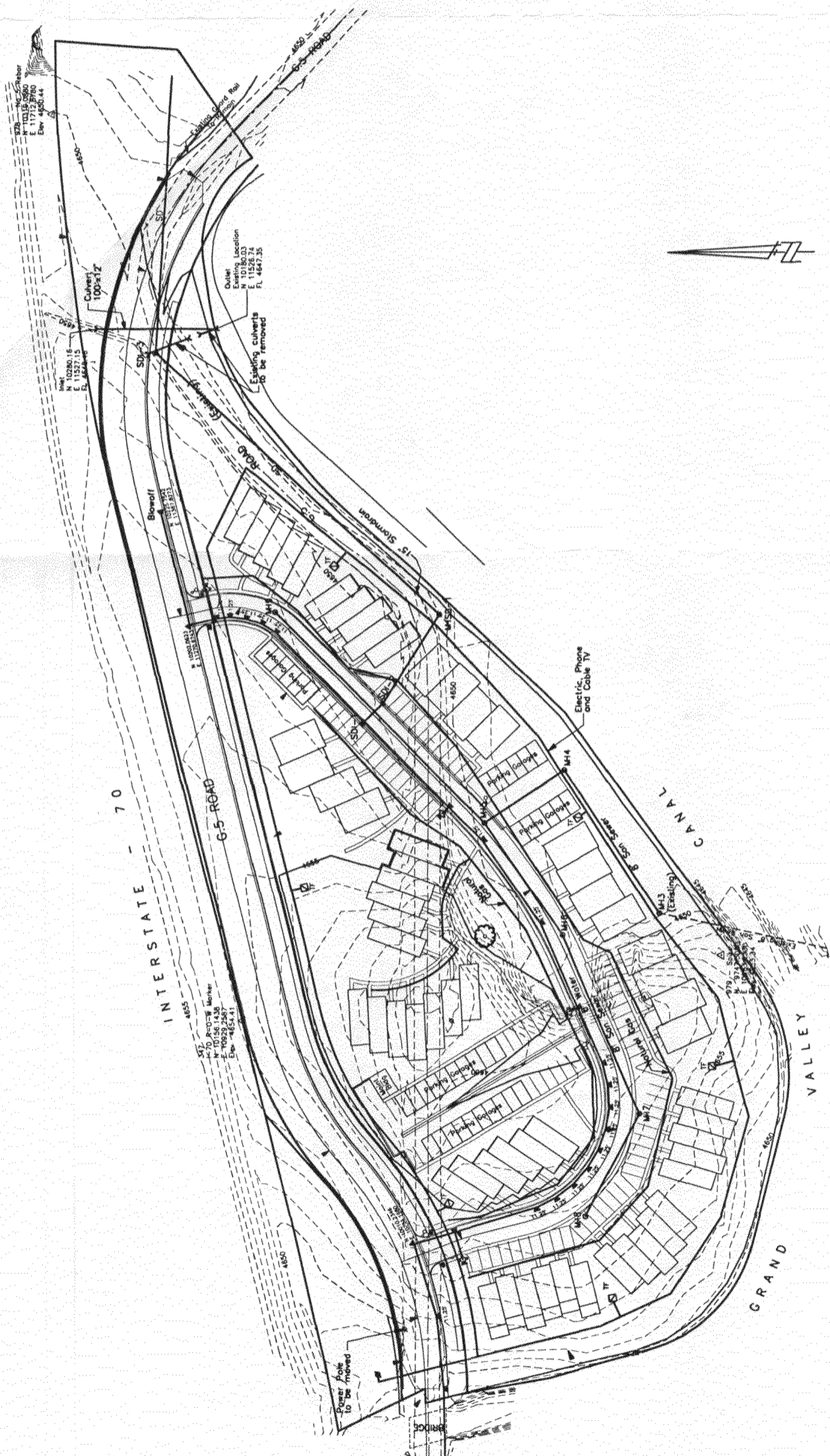
DESIGNED BY	ML/S
DRAWN BY	ML/S
SURVEY DATE	

NO.	DATE	REMARKS

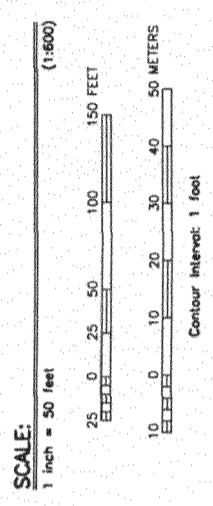
COMPOSITE PLAN
WILSON RANCH TOWNHOMES

NICHOLS ASSOCIATES, INC.
 CIVIL ENGINEERING • PHOTOGRAMMETRY • SURVEYING
 751 Horizon Court • Grand Junction, Colorado 81506 • Phone: 970-245-7101

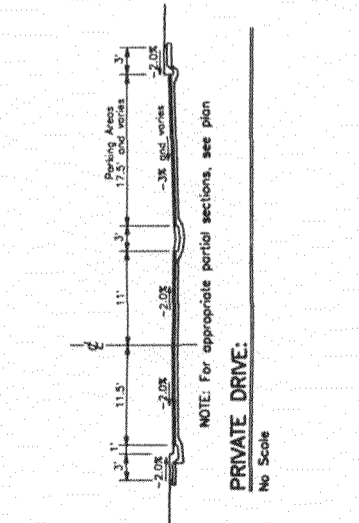
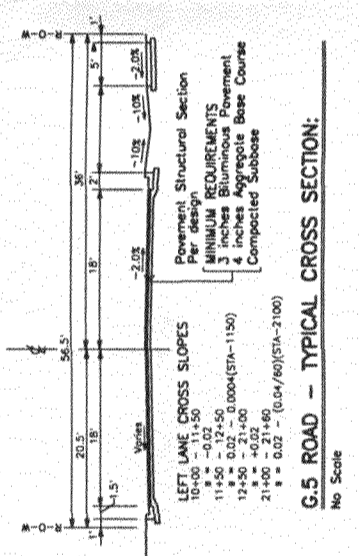
DATE DRAWN	May 13 1996
SCALE	1 inch = 50 feet
PROJECT NUMBER	3269
SHEET NUMBER	2 OF 9



- LEGEND:**
- Storm Drain Inlet Without Curb Opening
 - 48-inch Manhole With Ring and Cover
 - SD 15-inch ADS N12 Stormdrain Pipe
 - 12-inch Culvert
 - FF 54.0 Minimum Finished Floor Elevation (typ)
 - ▭ Erosion Control Straw Bales
 - ⊕ Transformer
 - ⊙ Street Light
 - ⊕ Fire Hydrant
 - △ Survey Control Point
 - ⊕ Electrical Control Pole
 - ⊕ Thrust Block with approximate pipe bend angle
 - Utility Easement



- SITE UTILITY VENDORS:**
- Water - Ute Water Conservancy District
 - Sewer - City of Grand Junction
 - Electricity - Grand Valley Rural Power Lines, Inc.
 - Gas - Public Service Company of Colorado
 - Telephone - Grand Valley Telephone Company
 - Cable TV - TCI Communications of Western Colorado
 - Irrigation - Grand Valley Irrigation Company

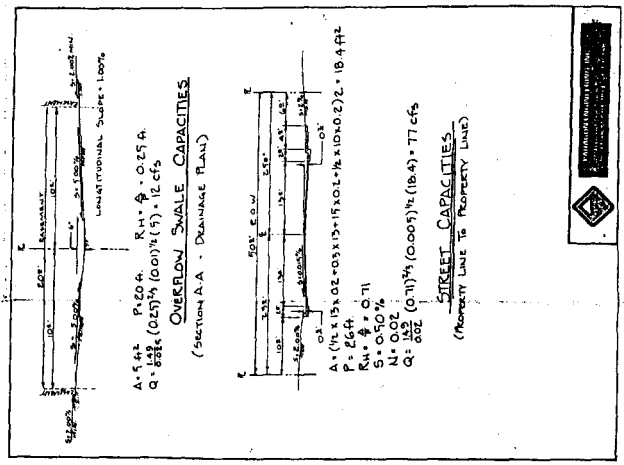
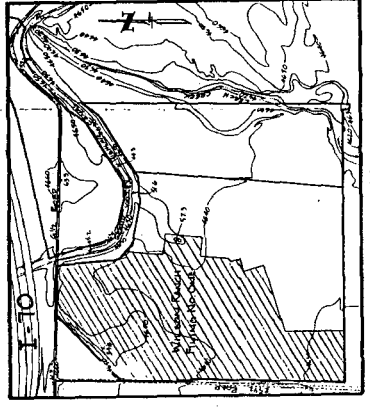


P10
2-10-85
As Shown

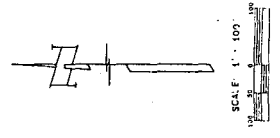
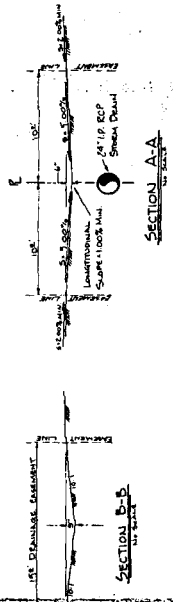
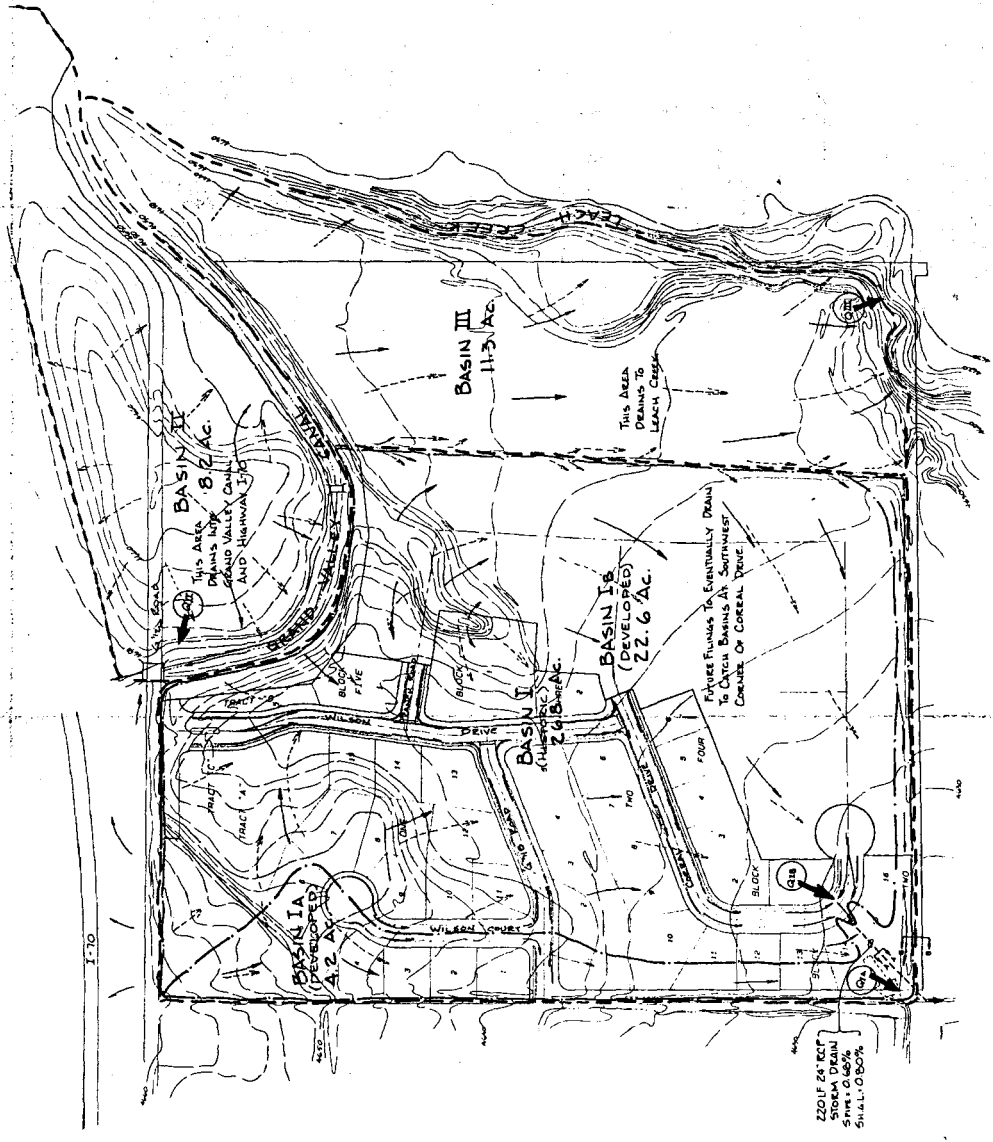
WILSON RANCH
DRAINAGE PLAN

6
01

NOTE: SEE DRAINAGE REPORT FOR RUNOFF DETAILS.
SEE DRAINAGE REPORT FOR DRAINAGE TABLE - HYDRAULIC
VERSUS DEVELOPED



OFFICE COPY
C-8-85

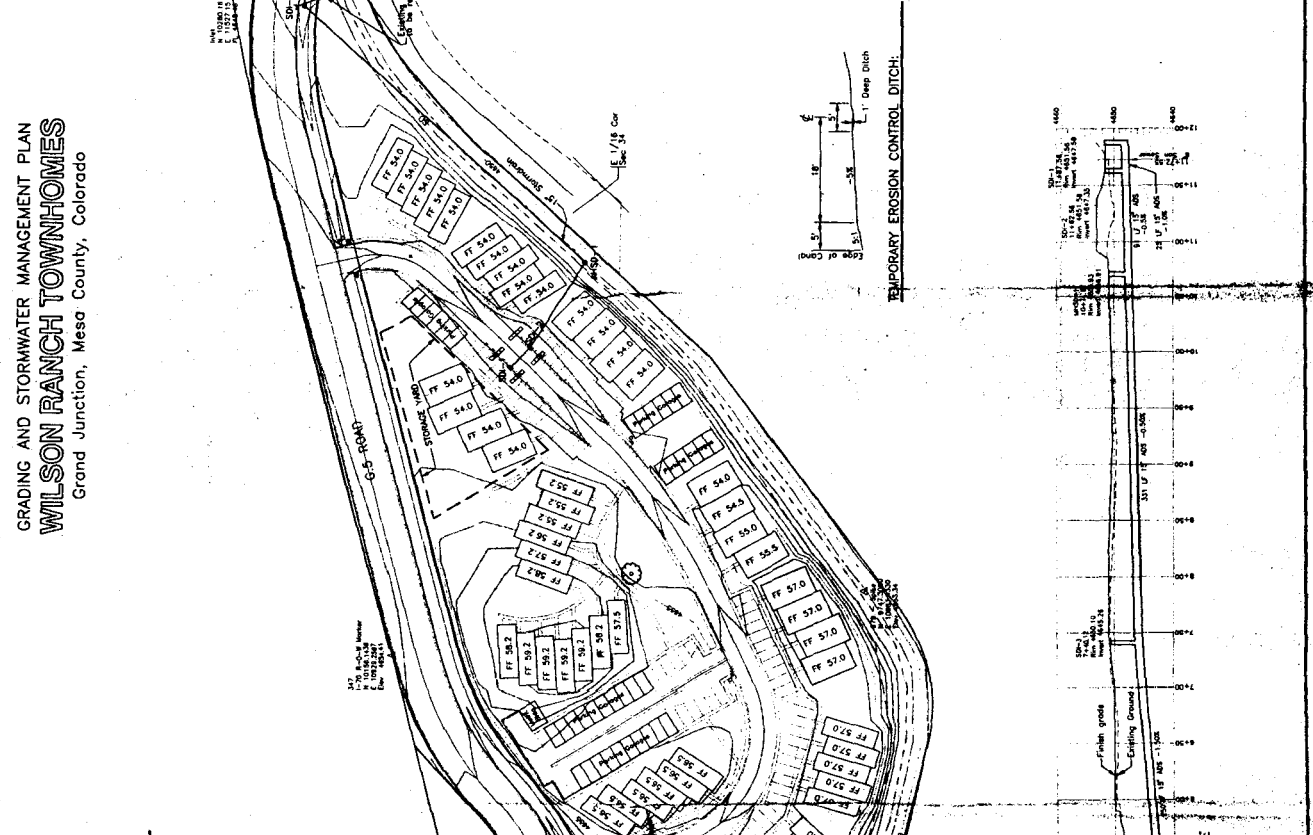


021021-2251-23

SURVEY DATE _____	DRAWN BY _____	REVISIONS NO. DATE REMARKS _____ _____	CIVIL ENGINEERING • PHOTOGRAMMETRY • SURVEYING 751 Mission Court • Grand Junction, Colorado 81508 • Phone: 870-242-1011	NICHOLS ASSOCIATES, INC.	DATE DRAWN Mar. 13, 1998	SCALE 1 inch = 50 feet	PROJECT NUMBER 3289	SHEET NUMBER 4 OF 9
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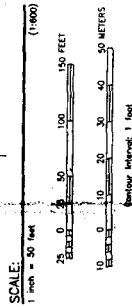
GRADING AND STORMWATER MANAGEMENT PLAN
WILSON RANCH TOWNHOMES

APPROVED FOR CONSTRUCTION: CITY OF GRAND JUNCTION DATE _____	INITIAL ACCEPTANCE: DATE _____ CITY OF GRAND JUNCTION
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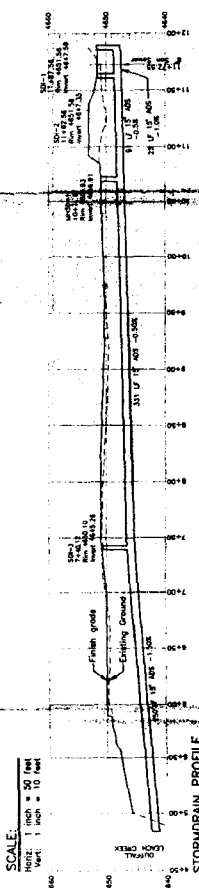
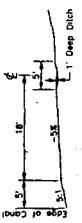
STORM DRAIN INLETS AND MANHOLES:

ID	COORDINATE X	COORDINATE Y	ELEVATION (FT)
SD-1	10264.62	11516.00	4571.38
SD-2	10266.80	11525.33	4553.91
SD-3	10230.81	11508.09	4501.10
SD-4	10230.81	11508.09	4645.28



- LEGEND:**
- Storm Drain Inlet Without Curb Opening
 - 48-inch Manhole With Ring and Cover
 - 15-inch 405 #12 Stormwater Pipe
 - 12-inch Culvert
 - FF 54.0 Minimum Finished Floor Elevation (typ)
 - ▭ Erosion Control Storm Basin
 - ⊕ Street Light
 - ⊕ Fire Hydrant
 - ⊕ Sewer Control Point
 - ⊕ Electrical Power Pole

- NOTES:**
- All work shall be in accordance with the approved plans.
 - All lot stormwater shall be directed to the storm drain.
 - Stormwater shall be directed to the storm drain within 70 feet of a roadway.
 - Final grading shall be in accordance with the approved plan.
 - 12-inch culvert shall be installed to protect the storm drain.
 - Manhole covers shall be installed to match the existing curb.
 - Manhole covers shall be installed to match the existing curb.
 - Site and location of the storm drain will vary as construction progresses.



SCALE:
 1 inch = 50 feet
 1 inch = 10 feet