96090119

3074

5410.81

AGREEMENT AND COVENANT

This Agreement and Covenant, between the City of Albuquerque, New Mexico ("City") and Glenridge Park Property Owner ("User") is made in Albuquerque, New Mexico and is entered into as of the date of recording this Agreement with the Bernalillo County Clerk.

1. Recital. The User is the owner of certain real property ("User's Property") located at Glenridge Park Subdivision, in Albuquerque, New Mexico, and more particularly described as: Streets and common areas as shown on Plat of Glenridge Park, Section 27, T. 10N, R. 4E., NMPM, City of ABQ., Bernalillo County, New Mexico, March, 1996, and as described in Exhibit B.

The City is the owner of certain real property, easement or public right-of-way ("City's Property") in the vicinity of, contiguous to, abutting or within User's Property, and more particularly described as: Skyline Road N.E. Public drainage Easements within User's Property located within Glenridge Park Lane, Linn Way, Hendren Lane and Tract A and a 20' drainage Easement.

The User wishes to construct upon, improve or repair and to maintain the following "Improvement" on the City's Easements. Underground Storm Drainage Area, and Streets per Glenridge Park Subdivision Plat. Streets described as Glenridge Park Lane, Linn Way and Hendren Lane.

A sketch of the proposed or existing Improvement is attached as Exhibit A and made a part of this Agreement.

The City agrees to permit the Improvement to exist on the City's Property provided the User complies with the terms of this Agreement.

2. City Use of City's Property and City Liability. The City has the right to enter upon the City's Property at any time and perform whatever inspection, installation, maintenance, repair, modification or removal ("Work") it deems appropriate without liability to the User. If the Work affects the Improvement the City will not be financially or otherwise responsible for rebuilding or repairing the Improvement. The User promptly will repair the Improvement to the City's satisfaction. The cost of repairing the Improvement will be paid by User.

3. User's Responsibility for Improvement. The User will be solely responsible for constructing, maintaining, repairing and, if required, removing the Improvement, all in accordance with standards required by the City as per the approved Grading and Drainage Plan L22-D49 on file at City Hydrology. The User will be solely responsible for paying all related costs. The User will not permit the Improvement to constitute a hazard to the health or safety of the general public or to interfere with the City's use of the City's Property. The User will conform with all

applicable laws, ordinances and regulations.

4. Use of the Improvement. If the City's Property is a public right-of-way, it shall be open to the use of the general public at all times, subject to reasonable curtailment during periods of construction, maintenance or repair.

5. Demand for Repair, Modification or Removal. The City may send written notice ("Notice") to the User requiring the User to repair, modify or remove the Improvement within 30 days ("Deadline") and the User will comply promptly with the requirements of the Notice. If removal is demanded, the City also may require the User to return the City's Property to its original condition by the Deadline. The User will perform all required work by the Deadline, at User's sole expense.

6. Failure to Perform by User and Emergency Work by City. If the User fails to comply with the terms of the Notice by the Deadline stated, or, if the City determines that an emergency condition exists, the City may perform the work itself. The City then may assess the User for the cost of the work and for any other expenses or damages which result from User's failure to perform. The User agrees promptly to pay the City the amount assessed. If the User fails to pay the City within thirty (30) days after the City gives the User written notice of the amount due, the City may impose a lien against User's Property for the total resulting amount.

7. Cancellation of Agreement and Release of Covenant. This Agreement may be cancelled and User's covenants released by the City at will by the City's mailing to the User notice of the City's intention to record a Cancellation and Release with the Bernalillo County Clerk. The Cancellation and Release will be effective thirty (30) days after the date of mailing the notice to the User unless a later date is stated in the notice or the Cancellation and Release. After the effective date, the City will record the Cancellation and Release with the Bernalillo County Clerk.

8. Condemnation. If any part of the User's Property is ever condemned by the City, the User will forego all claims to compensation for any portion of User's structure which encroaches on City Property and for severance damage to the remaining portion of User's structure on User's Property.

9. Assessment. Nothing in this Agreement shall be construed to relieve the User, his heirs, assigns and successors from an assessment against User's Property for improvements to the City Property under a duly authorized and approved Special Assessment District. The parties specifically agree that the value of the Improvement will not reduce the amount assessed by the City.

Approved as to form by
Legal Department 2/23/95

10. Notice. For purposes of giving formal written notice to the User, User's address is:

Glenridge Park Homeowners Assoc.
Joe R. Hahn Interim President
9500 Montgomery Blvd. NE, Ste. 210
Albuquerque, NM 87111

Notice may be given to the User either in person or by mailing the notice by regular U.S. mail, postage paid. Notice will be considered to have been received by the User within 3 days after the notice is mailed if there is no actual evidence of receipt. The User may change User's address by giving written notice of the change by certified mail, return receipt requested, to the City Engineer at P.O. Box 1293, Albuquerque, New Mexico 87103.

11. Indemnification. The User agrees to defend, indemnify and hold harmless the City, its officials, agents and employees from and against any and all claims, actions, suits or proceedings of any kind brought against said parties as a result of User's use of the City's Property. To the extent, if at all, Section 56-7-1 NMSA 1978 is applicable to this Agreement, this Agreement to indemnify will not extend to liability, claims, damages, losses or expenses, including attorney's fees, arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications by the indemnitee, or the agents or employees of the indemnitee; or (2) the giving of or the failure to give direction or instructions by the indemnitee, where such giving or failure to give directions or instructions is the primary cause of bodily injury to persons or damage to property.

12. Term. This Agreement shall continue until revoked by the City pursuant to Section 7 above.

13. Binding on User's Property. The covenants and obligations of the User set forth herein shall be binding on User, his heirs, assigns and successors and on User's Property and constitute covenants running with User's Property until released by the City.

14. Entire Agreement. This Agreement contains the entire agreement of the parties and supersedes any and all other agreements or understandings, oral or written, whether previous to the execution hereof or contemporaneous herewith.

15. Changes of Agreement. Changes to this Agreement are not binding unless made in writing, signed by both parties.

Approved as to form by
Legal Department 2/23/95

16. Construction and Severability. If any part of this Agreement is held to be invalid or unenforceable, the remainder of the Agreement will remain valid and enforceable if the remainder is reasonably capable of completion.

17. Captions. The captions to the sections or paragraphs of this Agreement are not part of this Agreement and will not affect the meaning or construction of any of its provisions.

CITY OF ALBUQUERQUE

By: DCAO
for Lawrence Rael
Chief Administrative Officer
Dated: 8-13-96

USER:

Glenridge Park Homeowner Assoc
By:
Its: Interim President
Dated: 7-31-96

APPROVED:

Robert E. Gurule, Director
Public Works Department
8/9/96

Reviewed by:

Rick Roybal, City Engineer 8/1/96
Construction Management/PWD
8/5/96

CITY'S ACKNOWLEDGEMENTS

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

This instrument was acknowledged before me on August 13, 199 6, by ~~Lawrence Rael~~ Vickie Fisher Asst'g, Chief Administrative Officer for the City of Albuquerque, a New Mexico municipal corporation, on behalf of the corporation.

OFFICIAL SEAL
RENIE HERRERA
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires

Notary Public

My Commission Expires:
1/2/98

Approved as to form by
Legal Department 2/23/95

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

This instrument was acknowledged before me on August 9, 199 6, by Robert E. Gurule, Director, Public Works Department for the City of Albuquerque, a New Mexico municipal corporation, on behalf of the corporation.

Notary Public

My Commission Expires:

1-27-98

USER'S ACKNOWLEDGEMENT

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

OFFICIAL SEAL
Cyd McCoy
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: 4-15-2000

This instrument was acknowledged before me on July 31, 1996, by Joe R. Hahn, Interim President, on behalf of Glenridge Park Homeowners association.

Notary Public

My Commission Expires:

April 15, 2000

STATE OF NEW MEXICO
COUNTY OF BERNALILLO
FILED FOR RECORD
1996 AUG 13 PM 4:14
BK 96-22 PG 3074-30
JUDY D. WOODWARD
CO. CLERK RECORDER
DEPUTY

Approved as to form by
Legal Department 2/23/95

DESCRIPTION

A certain tract of land being comprised of all of the HEIGHTS ADDITION, as the same is shown and designated upon the plat of said addition, filed in the office of the county clerk for Bernalillo County, New Mexico, on April 19, 1948, at Volume B, Page 103, excepting from said HEIGHTS ADDITION, all of Lot 1 of Block 3, all of Lot 1 and Lot 2 of Block 5, all of Lots 1 thru 15, inclusive of Block 7, all of Tract A and Tract B, and Block 1 A, filed March 15, 1984, Vol C2.5, Folio 108, all situate within Section 27, Township 10 North, Range 4 East, N.M.P.M., Albuquerque, Bernalillo County, New Mexico, and being more particularly described as follows BEGINNING at the Southwest corner of the herein described tract, also being a point in the Northerly right of way line of Central Avenue, whence the Cap marking ACS Sta. 1-121 (R) bears N85°46'18"W and is 89.368 feet distant;
THENCE from the above said point of beginning, N00°18'55"E a distance of 142.16 feet,
THENCE N00°24'32"E a distance of 1078.88 feet;
THENCE N89°45'25"W a distance of 105.00 feet,
THENCE N00°22'00"E a distance of 543.98 feet to a point in the Southerly right of way line of Skyline Road N.E.;
THENCE S89°01'00"E along said Southerly right of way line a distance of 527.88 feet;
THENCE leaving said Southerly right of way line, S00°11'10"W a distance of 539.56 feet,
THENCE N89°04'13"W a distance of 110.32 feet,
THENCE S00°26'05"W a distance of 1445.42 feet;
THENCE N82°47'03"W a distance of 265.91 feet,
THENCE S00°22'00"W a distance of 1420.00 feet to a point in the above said Northerly right of way line of Central Avenue N.E.,
THENCE N82°46'51"W a distance of 50.36 feet to the point and place of beginning, and containing an area of 333,094.608 square feet (7.6468 Ac.), more or less

3080 Exhibit A

GLENRIDGE PARK LANE

HEDREN LANE

LINN WAY

CENTRAL AVE.

CATCH BASIN NO.1

CATCH BASIN NO.2

CATCH BASIN NO.3

24" CMP

42' ROW

Robin Drainage Easement Per Glenridge Park Plat March 1996

S 89°01'00"E 527.88'

N89°45'25"W 105.00'

N00°27'32"E 107.38'

N00°27'32"E 143.16'

S00°27'32"W 143.22'

N89°47'03"W 265.91'

N89°04'15"W 110.32'

S00°27'32"W 143.22'

S00°27'32"W 142.00'

SEE LINN AVE. RUNDOWN DRAINAGE EASEMENT DET ON SHEET 9.

5' DRAINAGE ESMT

8" - PVC

12" VCP

18" VCP

18" SAS

8" SAS

18175.90

3081

CITY OF
Albuquerque

July 15, 1996

Martin J. Chávez, Mayor

Mr. Pete Ford
330 Washington SE
Albuquerque, NM 87108

RE: GLENRIDGE PARK (L22-D49)

Dear Mr. Ford:

A drainage covenant will be required for the above referenced project that defines the Homeowner's association as being responsible for the maintenance of on site and off site storm water in the streets, the concrete lined drainage channel, and the underground storm water storage system. Also, indicate on the covenant that ponding of storm waters is intended to take place in the street.

I have enclosed a copy of the City's Standard Agreement & Covenant for you to use.

If I can be of further assistance, please feel free to contact me at 768-3622.

Sincerely,

Lisa Ann Manwill
Engineering Assoc./Hyd.

c: Fred Aguirre - COA
File

PLAT OF
GLENRIDGE PARK
SECTION 27, T.10N., R.4E. N.M.P.M.
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
March, 1998

GENERAL NOTES

1) CENTERLINE (IN LIEU OF R/W MONUMENTATION) TO BE INSTALLED AT ALL CENTERLINE PC'S, PT'S, ANGLE POINTS AND STREET INTERSECTIONS PRIOR TO ACCEPTANCE OF SUBDIVISION STREET IMPROVEMENTS AND WILL CONSIST OF STANDARD FOUR-INCH (4") ALUMINUM ALLOY CAP STAMPED "City of Albuquerque", "Centerline Monumentation", "Survey Marker", "Do Not Disturb", PLS/ 6254"

ACS STA. No. 1-L21(A)
Y=1480854.31
X=420742.98
Z=5534.627
N.M. State Plane Coordinates (Central Zone)
C.F. = 0.99984255
Δ θ = -0°09'08"
Datum = 1927 N.A.D.

SCALE: 1" = 50'

FRANKLIN PLAZA (FILED BK.C10, PG.21, Aug. 1, 1974)

5' PRIVATE DRAINAGE EASEMENT GRANTED BY THIS PLAT
Existing 5' Utility Easement (Apr. 19, 1948, B-103)

GLENRIDGE PARK LANE N.E.

AREA IN PRIVATE ACCESS EASEMENTS = 76,232.67 sq. ft.

TRACT A
(AREA IN PRIVATE ACCESS EASEMENTS AND COMMON AREA=119,138.83 SQ.FT.)
Existing 10' P.U.E. (Vol B-103, Apr. 19, 1948) hereby vacated by this plat. Vacation Action V95-80

COMMON AREA
AREA IN COMMON AREA = 38,905.36 SQ. FT
COMMON AREA, PEDESTRIAN, PRIVATE DRAINAGE, EASEMENT, PUBLIC UTILITY AND PARKING

HENDREN LANE N.E.

KIRBY ST VACATED BY VACATION ACTION V95-80

KIRBY AVENUE AND MEADOWS AVENUE VACATED BY VACATION ACTION V95-80

ORIGINAL LOT LINES PER HENDREN ADDITION

50' PRIVATE ACCESS, PUBLIC UTILITY, PEDESTRIAN AND DRAINAGE EASEMENT

42' PRIVATE ACCESS, PUBLIC UTILITY, PEDESTRIAN AND DRAINAGE EASEMENT

CENTRAL AVENUE N.E.
100' ROW

SKYLINE ROAD N.E.
60' ROW

LINN WAY N.E.

REPLAT BLOCK 1-A-1 HENDREN ADD. (C23-108) (MAR. 15, 1984)

HENDREN ADD. (VOL. B, PG. 103) (APR. 19, 1948)

TR. A - HENDREN ADD.

R/W DEDICATED PER PLAT FILED C23-108

PROPOSED COMMUNITY BUILDING SITE SEE NOTE A

LOT 2A
BLOCK 5
HENDREN ADD.
FILED VOL. 96C, FOLIO 138
APRIL 12, 1996

CHANSLORS REPLAT
(FILED BK C23, PG. 142, APRIL 3, 1984)

GALLAGHER ADDITION
(FILED BK.D7, PG.142, March 25, 1977)

ACS STA. No. 4-L22
Y=1480446.81
X=423364.73
Z=5583.831
N.M. State Plane Coordinates (Central Zone)
C.F. = 0.99964079
Δθ = -0°08'58"
Datum = 1927 N.A.D.

CURVE	RADIUS	LENGTH	TANGENT
C1	75.00'	126.78'	84.55'
C2	22.00'	34.56'	22.00'
C3	20.38'	4.75'	2.38'
C4	96.00'	36.32'	18.38'
C5	96.00'	49.54'	25.33'
C6	96.00'	49.56'	25.35'
C7	96.00'	13.70'	6.86'
C8	96.00'	13.16'	6.59'

GENERAL NOTES:
1. LOT OWNERS ARE THE BENEFICIARIES OF ALL PRIVATE ACCESS EASEMENTS AND COMMON AREAS (TRACT A). MAINTENANCE OF SAID PRIVATE ACCESS EASEMENTS AND COMMON AREAS IS THE RESPONSIBILITY OF SAID LOT OWNERS THROUGH THE GLENRIDGE PARK HOME OWNERS ASSOCIATION
2. Kirby Avenue and Meadows Avenue as shown upon Hendren Addition (April 19, 1948, B-103) are Vacated as per Vacation Action V 95-80.

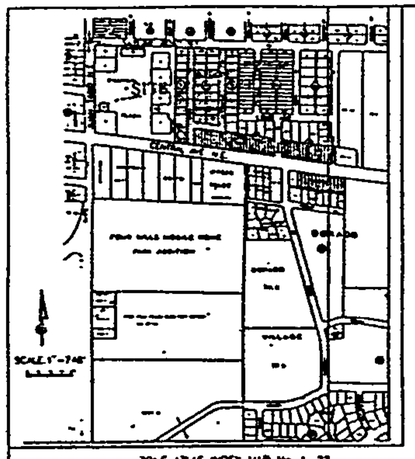
ENVIRONMENTAL HEALTH NOTES:
1. CITY OF ALBUQUERQUE WATER AND SANITARY SEWER SERVICE TO GLENRIDGE PARK MUST BE VERIFIED AND COORDINATED WITH THE PUBLIC WORKS DEPARTMENT, CITY OF ALBUQUERQUE

NOTE A
Existing 5' P.U.E. (Apr. 19, 1948, B-103) & PRIVATE DRAINAGE EASEMENT GRANTED BY THIS PLAT. 539.56

ConSurve Surveying Co.
P.O. Box 8
San Ysidro, New Mexico 87048
(505) 552-9866

SHEET 2 OF 2

3081A



ZONE ATLAS INDEX MAP No. L-22
Vicinity Map

TALOS LOG No 951102152205I5

3082

PLAT OF
GLENRIDGE PARK

SECTION 27, T.10N., R.4E. N.M.P.M.
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
MARCH, 1996

SUBDIVISION DATA

Case No. DRB 95-358
Zone Atlas No. L-22
Gross Subdivision Acreage: 7.64
Total No of Lots Created: 61
Total Mileage of Full-Width Streets Created: 0
Date of Survey: JULY, 1995

DISCLOSURE STATEMENT:

The purpose of this plat is to Replat all of Block 4, lots 2 thru 16 of Block 3, Lots 3 thru 11 of Block 5, Kirby Avenue and Algodones Avenue into sixty-one lots.

PUBLIC UTILITY EASEMENTS

PUBLIC UTILITY EASEMENTS shown on this plat are granted for the common and joint use of

1) PNM Electric Company of New Mexico for the installation, maintenance and service of overhead and underground electrical lines transformers, poles and other equipment, fixtures structures and related facilities reasonably necessary to provide electrical service.

2) PNM Gas Company of New Mexico for installation, maintenance, and service of natural gas lines, valves and other equipment and facilities reasonably necessary to provide natural gas

3) U.S. West for the installation, maintenance and service of all buried and aerial communication lines and other related equipment and facilities reasonably necessary to provide communication services, including but not limited to above ground pedestals and closures.

4) Jones Intercable for the installation, maintenance, and service of such lines cable and other related equipment and facilities reasonably necessary to provide Cable TV service.

Included, is the right to build, rebuild, construct, reconstruct, locate relocate change, remove, modify, renew, operate and maintain facilities for the purposes described above, together with free access to, from, and over said easements, including sufficient working area space for electric transformers, with the right and privilege to trim and remove trees, shrubs or bushes which interfere with the purposes set forth herein. No building, sign, pool (above-ground or subsurface), hot tub, concrete or wood pool decking, or other structure shall be erected or constructed on said easements, nor shall any well be drilled or operated thereon. Property owners shall be solely responsible for correcting any violations of National Electrical Safety Code caused by construction of pools, decking, or any other structures adjacent to, within or near easements shown on this plat

Utilities installed in any A.M.A.F.C.A. EASEMENT requires and A.M.A.F.C.A. Encroachment license Prior to Construction.

City of Albuquerque Water and Sanitary Sewer Service is currently available to these properties.

SURVEYOR'S NOTES

1) BASIS OF BEARINGS: West line Hendren Addition, cited hereon.
2) All distances are ground.
3) Plat shows all easements of record.
4) Data in parentheses are record
5) Adjacent access and utility easements are previously recorded.
6) Any private access easements as shown hereon are for the use and benefit to owners of Lot 1 through 61, and are to be maintained by said lot owners.
7) Unless otherwise indicated, all lot corners are ½ rebar/cap "PS 6256"
8) Rotate Plat bearings Clockwise 00°07'40" to End.

THIS IS TO CERTIFY THAT TAXES ARE CURRENT AND PAID ON UPC: _____

PROPERTY OWNER OF RECORD: _____

BERNALILLO COUNTY TREASURER'S OFFICE: _____

CITY/COUNTY APPROVALS:

		Date
AMAFCA		
CITY SURVEYOR		4/8/96
PROPERTY MANAGEMENT		
CITY ENGINEER / TRANSPORTATION DEVELOPMENT		4-30-96
CITY PLANNING DIRECTOR	Norma S Carrillo	4-9-96
U.S. WEST		4-22-96
PNM ELECTRIC SERVICES		4-22-96
PNM GAS SERVICES	Collin K. Finn	4-30-96
PNM'S 380 GENERAL SERVICES DEPT	Robert W. Kane	4-30-96
UTILITIES DEVELOPMENT	Violet Watson	4/9/96
JONES CABLE CO.		

Approving this plat, PNM Electric Services and Gas Services (PNM) did not conduct a Title Search of the properties shown hereon. Consequently, PNM does not waive nor release any easement or easement rights to which it may be entitled.

DESCRIPTION

A certain tract of land being comprised of all of the HENDREN ADDITION, as the same is shown and designated upon the plat of said addition, filed in the office of the county clerk for Bernalillo County, New Mexico, on April 19, 1948, at Volume B, Page 103, excepting from said HENDREN ADDITION, all of Lot 1 of Block 3, all of Lot 1 and Lot 2 of Block 5, all of Lots 1 thru 15, inclusive of Block 2, all of Tract A and Tract B, and Block 1-A, filed March 15, 1984, Vol. C23, Folio 108, all situate within Section 27, Township 10 North, Range 4 East, N.M.P.M., Albuquerque, Bernalillo County, New Mexico, and being more particularly described as follows:
BEGINNING at the Southwest corner of the herein described tract, also being a point on the Northerly right of way line of Central Avenue, whence the Cop monument ACS Sta. 1+121 (N) bears N85°46'15"W and is 893.66 feet distant;
THENCE from the above said point of beginning, N00°18'35"E a distance of 142.16 feet;
THENCE N00°24'32"E a distance of 107.88 feet;
THENCE N89°43'25"W a distance of 105.00 feet;
THENCE N00°22'00"E a distance of 543.98 feet to a point in the Southerly right of way line of Skyline Road N.E.;
THENCE S89°01'00"E along said Southerly right of way line a distance of 327.88 feet;
THENCE leaving said Southerly right of way line, S00°11'10"W a distance of 339.56 feet;
THENCE N89°04'13"W a distance of 110.32 feet;
THENCE S00°26'00"W a distance of 145.42 feet;
THENCE N82°47'03"W a distance of 285.91 feet;
THENCE S00°22'00"W a distance of 142.00 feet to a point in the above said Northerly right of way line of Central Avenue N.E.;
THENCE N82°46'31"W a distance of 50.36 feet to the point and place of beginning, and containing an area of 333,084.808 square feet (7.648 Ac.), more or less.

FREE CONSENT AND DEDICATION

The foregoing replat of that certain tract of land being a portion of the HENDREN ADDITION, Section 27, T.10N., R.4E., N.M.P.M., along with the granting of Private Road Easements (Granted in Perpetuity), and the Granting of Public Utility Easements, is in accordance with the desires and wishes of the undersigned owner(s) and proprietor(s) thereof.

Electrical Power and Communication easements are reserved for overhead distribution lines for pole type utilities and buried distribution lines, conduits and pipes for underground utilities, and other related equipment where shown or indicated, and including the right of ingress and egress for construction and maintenance, and the right to trim interfering trees shown hereon.

Joe R. Hann
Owners GLENRIDGE PARK JOINT VENTURE - JOE R. HANN - MANAGING JOINT VENTURE

ACKNOWLEDGEMENT
STATE OF NEW MEXICO
COUNTY OF BERNALILLO ss
This foregoing instrument was acknowledged before me this 5 day of Nov., 1995, by: Joe R. Hann
Oct 19 1996
My Commission Expires
Notary Public

SURVEYOR'S CERTIFICATE

I, Jerry Nichols, a Registered Professional Land Surveyor under the Laws of the State of New Mexico, do hereby certify that this Plat was prepared by me, meets the minimum requirements of monumentation and surveys of the Albuquerque Subdivision Ordinance, and that it is true and correct to the best of my knowledge and belief.

Jerry Nichols, N.M., C.S. No. 6256 March 20, 1996

REGISTERED LAND SURVEYOR STATE OF NEW MEXICO 6256

SHEET 1 OF 2

ConSurve Surveying Co.
P.O. Box 9, San Fidel, New Mexico, 87049
(505) 552-9858

CPN-541081 2 of 10

3082

Exhibit "B" to
Agreement & Covenant

CITY OF
Albuquerque

November 18, 1997

Martin J. Chávez, Mayor

James D. Smith, P.E.
Souder, Miller & Associates
1201 Parkway Drive
Suite C
Santa Fe, NM 87505

RE: GLENRIDGE PARK SUBDIVISION (L22-D49). ENGINEER'S CERTIFICATION FOR RELEASE OF FINANCIAL GUARANTEES. ENGINEER'S CERTIFICATION DATED 10-21-97.

Dear Mr. Smith:

Based on the information provided on your October 30, 1997 submittal, City Hydrology accepts the Engineer's Certification of grading and drainage for the Release of Financial Guarantees.

If I can be of further assistance, please feel free to contact me at 924-3984.

Sincerely,

Lisa Ann Manwill, P.E.
Hydrology

c: Terri Martin
Andrew Garcia
File

PROJECT TITLE: Glenridge Park Subdivision ZONE ATLAS/DRNG. FILE #: L-22, D 4/9

DRB #: 95-358 EPC #: _____ WORK ORDER #: 541081

LEGAL DESCRIPTION: Lots 1-61, Glenridge Park Subdivision

CITY ADDRESS: 12,100 Skyline Road NE

ENGINEERING FIRM: Souder Miller & Associates CONTACT: James D. Smith, P.E.

ADDRESS: 1201 Parkway Dr., Suite C Santa Fe, N. M. 87505 PHONE: (505) 473-9211

OWNER: Glenridge Park-Joint Venture CONTACT: Joe Hahn

ADDRESS: #5 Westlake, N.E. Albuq., N.M. 87112 PHONE: 293-2031

ARCHITECT: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

SURVEYOR: ConSurve Surveying Co. CONTACT: Jerry Nickelo

ADDRESS: _____ PHONE: _____

CONTRACTOR: Khani Co. CONTACT: Naser Alikhani

ADDRESS: 13816 Winterwood Way, SE. Albuq., N.M. 87123 PHONE: 299-1000

TYPE OF SUBMITTAL:

____ DRAINAGE REPORT

____ DRAINAGE PLAN

____ CONCEPTUAL GRADING & DRAINAGE PLAN

____ GRADING PLAN

____ EROSION CONTROL PLAN

__/__ ENGINEER'S CERTIFICATION

____ OTHER _____

PRE-DESIGN MEETING:

____ YES

____ NO

____ COPY PROVIDED

CHECK TYPE OF APPROVAL SOUGHT:

____ SKETCH PLAT APPROVAL

____ PRELIMINARY PLAT APPROVAL

____ S. DEV. PLAN FOR SUB'D. APPROVAL

____ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL

____ SECTOR PLAN APPROVAL

____ FINAL PLAT APPROVAL

____ FOUNDATION PERMIT APPROVAL

____ BUILDING PERMIT APPROVAL

____ CERTIFICATE OF OCCUPANCY APPROVAL

____ GRADING PERMIT APPROVAL

____ PAVING PERMIT APPROVAL

____ S.A.D. DRAINAGE REPORT

____ DRAINAGE REQUIREMENTS

____ SUBDIVISION CERTIFICATION

X OTHER Release of (SPECIFY)
- Financial Guarantees.

DATE SUBMITTED: 10-30-97

BY: James D. Smith, P.E.

RECEIVED
OCT 30 1997
HYDROLOGY SECTION

Oct. 30, 1997

To: Lisa Ann Manwill

The attached 5 sheet (blue line prints) all have some drainage information. They have been stamped with my Engineer's Seal.

The 2 copies of Sheet 4 of 10 are marked up from the Surveyor with as-built elevations. These provide the information asked for under items 2 and 3 from the Checklist. I call them "Cut Sheets" since that is what Mary Sandoval refers to them on her check list.

The bound set of 10 pages contain the information on "as-built". You didn't want this set yesterday since it didn't have a stamp on each page. This is extra information that can be thrown away if you don't want it in your file.

I will be out-of-State until 11-4-97; if you want to call me then 1-800-460-5366.

Jim Smith

D.R.B. Case No. 95-358
D.R.C. Project No. _____
Date Submitted ~~_____~~ 3/5/96

EXHIBIT "D"
to Subdivision Improvement Agreement

DEVELOPMENT REVIEW BOARD (D.R.B.)
REQUIRED INFRASTRUCTURE LISTING
for GLENRIDGE PARK JOINT VENTURE
(For Site Development Plan & PLAT)

Following is a summary of Public/Private Infrastructure required to be constructed or financially guaranteed to be constructed for the above development:

Size	Type Improvement	Location	From	To
6"	Water Line	Linn Way	Exist. Kirby St. 12" CIP	Tie in Hendren Lane
8"	Sanitary Sewer	Linn Way	Exist. Kirby St. 12" VCP new MH	MH in Hendren Lane
6"	Water Line	Hendren Lane	Linn Way	Tie into Skyline Rd. 6" CIP
8"	Sanitary Sewer	Hendren Lane	Linn Way MH	MH near Skyline Rd. R/W
28' F-F	Residential Paving, C&G, 4' sidewalk both sides	Glenridge Park Lane	Skyline Road	Linn Way
28' F-F	Residential Paving, C&G, 4' sidewalk both sides	Linn Way	Glenridge Park Lane	Hendren Lane
28' F-F	Residential Paving, C&G, 4' sidewalk both sides Sidewalk Deferral	Hendren Lane	Linn Way All interior sidewalk to be deferred & built on lot-by-lot basis with house.	Skyline Road
125 LF	Drainage Rundown	Easement	Linn Way	Linn Avenue
672~~560~~ LF	24" RCP Storm Drain	Assoc mtt Skyline Rd.	W of Kirby Street	E of Juan Tabo

Grading & Drainage Certification is required prior to release of Financial Guarantees & SIA

On site storm drainage facilities to be privately maintained and owned.

Prepared by: James D. Smith
Print Name: JAMES D. SMITH, P.E.
Firm: Souder, Miller & Associates

Page 1 of 1

Development Review Board Member Approvals

3-05-96	Robert W. Kane 3/5/96	Janine Sena 3.5.96
Transportation Dev. Date	Utility Dev. Date	Parks & Gen. Service Date
3/5/96		3.5.96
City Engineer/Hydrology Date		DRB Acting Chair Date

DRAINAGE INFORMATION SHEET

PROJECT TITLE: GLENRIDGE PARK ZONE ATLAS/DRNG. FILE #: L-22/D49

DRB #: -95-358 EPC #: Z-93-72 WORK ORDER #: _____

LEGAL DESCRIPTION: HENDREN ADDITION

CITY ADDRESS: 12100 SKYLINE ROAD, NE, ALBUQUERQUE, NM

ENGINEERING FIRM: SOUDER, MILLER & ASSOCIATES CONTACT: JIM SMITH

ADDRESS: 1201 PARKWAY DRIVE, SUITE C PHONE: (505) 473-9211

OWNER: GLENRIDGE PARK JOINT VENTURE CONTACT: PETE FORD

ADDRESS: 330 WASHINGTON, SE, ABQ, NM PHONE: 262-9836

ARCHITECT: MASTERWORKS ARCHITECTS CONTACT: JIM CLARK

ADDRESS: 516 11TH ST., NW, ALBUQUERQUE, NM PHONE: 242-1866

SURVEYOR: CONSURVE SURVEYING CONTACT: JERRY NICKELS

ADDRESS: SAN FIDEL, NM PHONE: (505) 552-9898

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

_X_ DRAINAGE REPORT

_X_ DRAINAGE PLAN

____ CONCEPTUAL GRADING & DRAINAGE PLAN

_X_ GRADING PLAN

____ EROSION CONTROL PLAN

____ ENGINEER'S CERTIFICATION

____ OTHER _____

PRE-DESIGN MEETING:

_X_ YES

____ NO

_X_ COPY PROVIDED

CHECK TYPE OF APPROVAL SOUGHT:

____ SKETCH PLAT APPROVAL

____ PRELIMINARY PLAT APPROVAL

_X_ S. DEV. PLAN FOR SUB'D. APPROVAL

____ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL

____ SECTOR PLAN APPROVAL

____ FINAL PLAT APPROVAL

____ FOUNDATION PERMIT APPROVAL

_X_ BUILDING PERMIT APPROVAL

____ CERTIFICATE OF OCCUPANCY APPROVAL

_X_ GRADING PERMIT APPROVAL

____ PAVING PERMIT APPROVAL

____ S.A.D. DRAINAGE REPORT

____ DRAINAGE REQUIREMENTS

____ SUBDIVISION CERTIFICATION

____ OTHER _____ (SPECIFY)

DATE SUBMITTED: 2/7/96

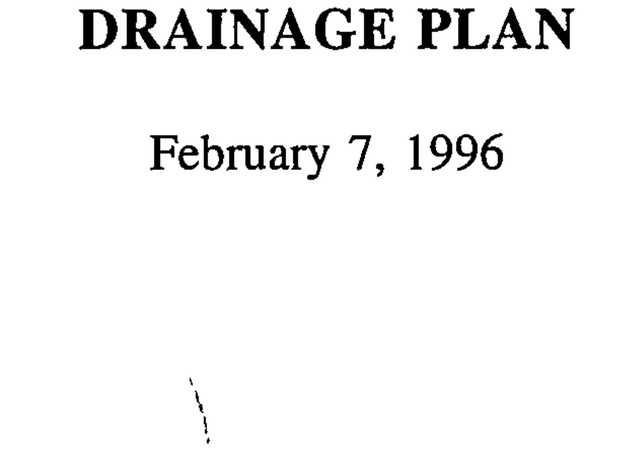
BY: JAMES D. SMITH

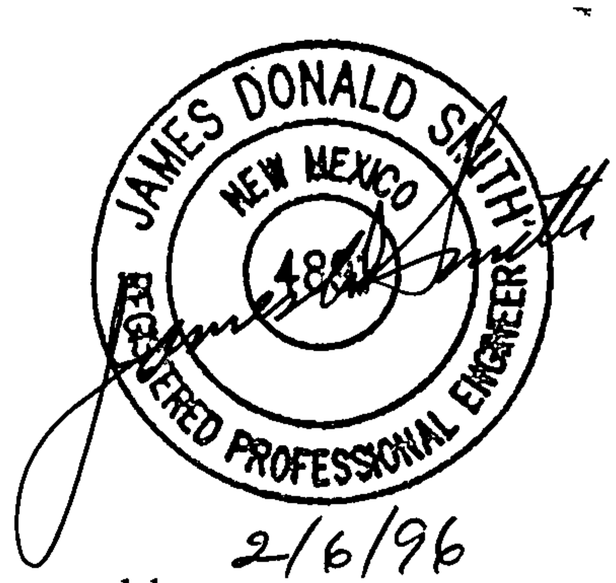
n:\glenridg\draininf.sht

GLENRIDGE PARK
DRAINAGE REPORT AND
DRAINAGE PLAN

February 7, 1996

12100 Skyline Road
Albuquerque, New Mexico





Prepared for:
Glenridge Park Joint Venture
c/o Mr. Pete Ford
330 Washington, SE
Albuquerque, New Mexico 87108

Prepared by:
Souder, Miller & Associates
1201 Parkway Drive, Suite C
Santa Fe, New Mexico 87505
(505) 73-9211

SOUDER, MILLER & ASSOCIATES
ENVIRONMENTAL SCIENTISTS & ENGINEERS

TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY 1

2.0 BASIN CHARACTERISTICS 2
- 2.1 Description of Drainage Area 2
- 2.2 Site Description 2
- 2.3 Watershed Soils 4
- 2.4 Flood Hazard 4
- 2.5 Bench Marks 4

3.0 HYDROLOGIC ANALYSIS 4
- 3.1 Hydrologic Criteria 4
- 3.2 Undeveloped Condition 5
- 3.3 Land Treatment for Runoff Calculations 5
- 3.4 Results of Hydrologic Analysis 5
- 3.5 Street Analysis 6

4.0 HYDRAULIC ANALYSIS 6
- 4.1 Existing Conditions 6
  - 4.1.1 Skyline Road Storm Drain 6
- 4.2 Proposed Conditions 6
  - 4.2.1 Off Site Drainage Channel 6
  - 4.2.2 Catch Basins 6
  - 4.2.3 Storage in Glenridge Park Lane 7
  - 4.2.4 Discharge from Glenridge Park Lane 7
  - 4.2.5 Flood Elevation on Glenridge Park Lane 7
  - 4.2.6 Time to Drain On Site Storage 7

5.0 REFERENCES 7

FIGURES

Preliminary Plat
Drainage and Grading Plan
Landscape Plan for Site Development

APPENDICES

Appendix A. AHYMO Output Hydrograph for Undeveloped Condition (100 year/6 hour)
Appendix B. AHYMO Output Hydrograph for Developed Condition (100 year/6 hour)
Appendix C. AHYMO Output Hydrograph for Developed Condition (10 year/6 hour)
Appendix D. AHYMO Output Hydrograph for Developed Condition (25 year/6 hour)
Appendix E. Spreadsheet Calculations of t_c
Appendix F. Flowmaster™ Output for Off Site Drainage Channel

n:\glenridg\glennarr.doc

DRAINAGE REPORT

February 7, 1996

1.0 EXECUTIVE SUMMARY

The proposed development is generally located east of Juan Tabo, N.E. and north of Central Avenue. The site of the proposed development is an existing subdivision, known as the Hendren Addition. The Hendren Addition plat was filed in 1948. The plat dedicated right-of-way for Kirby Street, Algodones Street, and Linn Avenue. Forty-one single family lots were created on this 7.65 acre site.

A 12 inch water line and 12 inch sanitary sewer line were constructed in Kirby Street, between Central Avenue and Skyline Road.

Runoff from this undeveloped site flows into Skyline Road east of Franklin Plaza Shopping Center. Street flow continues along the south curb of Skyline Road until it enters the Buena Ventura/Jane storm drain system at a drop inlet east of Juan Tabo.

Existing Linn Avenue constructed with the development of Gallagher Addition in 1977 dead end at the east property line of this site. Street flow from Linn Avenue pass through two single family lots. The Hendren Addition has no provisions for drainage easements and none were acquired when subsequent plats were filed in 1977.

Glenridge Park subdivision proposed development would establish private roadway easements where presently the dedicated streets of Kirby, Algodones and Linn Avenue are dedicated. The water line and sanitary sewer line in Kirby Street will remain in place. A drainage easement will be dedicated for off site flows plus the private road easements will pass the off site flows through this proposed development.

Glenridge Park drainage management plan proposes to collect all runoff from on site development and route the runoff into an underground storage reservoir where the outfall will be restricted to one cubic foot per second. On site runoff from the 100 year/6 hour storm was determined to be 49,523 cubic feet. The underground storage reservoir will be completely drained.

Off site peak flow during the 100 year/6 hour storm entering Glenridge Park at Linn Avenue will be routed along paved streets and into Skyline Road at the present Kirby Street intersection. However, the proposed Glenridge Park drainage management plan will substantially reduce the volume flowing into Skyline Road. On site storage is estimated at 97,700 cubic feet. The combination of underground storage and private street storage exceeds the developed on site runoff by 48,177 cubic feet. Expressed in different terms the underground storage reservoir will detain runoff that presently occurs in the undeveloped condition plus 48,177 cubic feet that could

be routed directly through the site and release these flows at one cubic foot per second into an existing underground storm drainage system.

Hydrologic calculations, for both off site and on site basins, indicate frequent return period storms up to the 25 year/6 hour storm will be detained on site and routed through the underground system.

2.0 BASIN CHARACTERISTICS

2.1 Description of Drainage Area

The Watershed Area was generally described in the SOUTH EUBANK AREA STORM DRAINAGE ANALYSIS as an area south of Skyline Road, west of Figueroa Street, north of Central Avenue and east of Franklin Plaza Shopping Center and generally northeast of the intersection of Juan Tabo Boulevard and Central Avenue. Pre-development historic directional flows from this watershed flowed east to west near the intersection of Juan Tabo and Central Avenue.

Construction of Skyline Road east of Juan Tabo channeled all runoff in Skyline Road and north of Skyline to its intersection with Juan Tabo. Inlets in Skyline Road near Juan Tabo are the upper most inlets of the Buena Ventura/Jane storm drain system.

Field surveys along east-west Linn Avenue indicate that Linn Avenue intercepts flows from the north and channels the overland flows into the proposed Glenridge Park subdivision. All overland flow south of Linn Avenue flows to Central Avenue.

Franklin Plaza Shopping Center effectively blocked the natural drainage. A retaining wall on the boundary between Franklin Plaza and Glenridge Park, and fill dirt on the commercial lots along the north side of Central Avenue has redirected the natural drainage to Skyline Road at the northeast corner of Franklin Plaza. → no - this site does not discharge - it ponds.

The actual Watershed Area is a well defined rectangular area, consisting of 18.4 acres. The north boundary is the south right-of-way line of Skyline Road, east boundary is the center of Figueroa Street, south boundary is the south right-of-way line of Linn Avenue, and the west boundary is the property line with Franklin Plaza Shopping Center.

2.2 Site Description

The project is a 7.65 acre residential development. The property is currently subdivided into R-1 lots. A plat filed in 1948, Hendren Addition, established 41 lots and the right-of-way for Kirby Street, Algodones Street, and Linn Avenue. Commercial lots fronting on Central Avenue, which were part of the original Hendren Addition, have been developed. Three of the original R-1 lots at the southeast corner of the Hendren Addition have been rezoned commercial and were

replatted into the commercial lots on Central Avenue.

Adjacent development has created a drainage impact on this subdivision. Franklin Plaza Shopping Center was developed in 1974, the Center was permitted to build a retaining wall on its east property line effectively blocking the natural drainage. A pond forms on Hendren Addition and overflows into Skyline Road while the remainder of the pond, approximately one half acre-foot, evaporates and infiltrates. A grading and drainage plan for the existing Hendren Addition would fill the pond and grade Kirby Street north into Skyline Road. When the Gallagher Addition was plated in 1977, the approved subdivision concentrated the flows from the subdivision on Linn Avenue. Linn Avenue dead-ends into Lots 2 and 3, Block 5, Hendren Addition. No easement or provision was made on this private property to receive flows concentrated by the development of Gallagher Addition. At the time Gallagher Addition was approved it was anticipated that Gallagher Addition discharge should be routed to Central Avenue.

The development proposed for this site will improve the overall drainage situation. The existing Hendren Addition with R-1 lots will provide very limited on-site ponding and the existing right-of-way is not adequate for the public to effect any practical drainage management. The proposed Glenridge Park subdivision will build an underground reservoir. The underground reservoir will be built in a common area owned by the Homeowners Association. Storm water from the underground reservoir will be released at a rate of one cubic foot per second through a storm sewer pipe that connects to the existing Skyline Road inlet near its intersection with Juan Tabo. Drainage management of the discharge from this underground reservoir will remain underground until it reaches an open channel in Interstate 40 right-of-way.

Given the fully developed condition of this 7.65 acre site, the runoff from the 100 year/6 hour storm will remain on site and be routed into the underground reservoir. The reservoir will be completely drained at the rate of one cubic foot per second and storage will then be available for the next storm. Total on site detention storage will be provided by the underground reservoir, storm sewers and on street detention. On site storage is estimated at 97,700 cubic feet. On site runoff from the 100 year/6 hour storm was determined to be 49,523 cubic feet, therefore, the excess storage capacity will accommodate off-site runoff in addition to the developed on site runoff.

During a storm event that exceeds the on-site detention storage capacity, the off site flows from Linn Avenue will flow through the proposed development on Glenridge Park Lane and into Skyline Road. Hydrologic calculations indicate any storm less frequent than a 25 year/6 hour return period would discharge on the surface of Skyline Road. All more frequent return period storms would be routed through the underground storage reservoir and release at the rate of one cubic foot per second into a storm sewer.

An inlet will be built near the point were off site flows enter Glenridge Park from Linn Avenue. The inlet and storm sewer pipe will be sized to receive 10 cfs. A capacity of 10 cfs will intercept most frequent storm flow and landscape over watering and direct these flows into the

underground reservoir. Off site flows greater than 10 cfs will overflow the first inlet and be intercepted by a larger cattle guard type inlet in project. The cattle guard inlet drains through a 36 inch pipe into the underground reservoir.

The residents of Glenridge Park will be inconvenienced by off site flows when the underground reservoir and storm sewer system is full and off site flows continue. A portion of Glenridge Park Lane right-of-way either side of the inlets will be flooded. The depth of this street flooding is estimated to be 1.25 feet above top of curb. This depth of street flooding is also the maximum depth for the 100 year/6 hour storm. Glenridge Park Lane will function as an emergency spillway discharging all excess flow on to Skyline Road.

FF needs to be at least 1 ft above this or 2.25 ft above TC.

2.3 Watershed Soils

Soils on site are CLAY, very sandy, with trace of gravel and SAND, very clayey, slight gravel. The SOUTH EUBANK AREA STORM DRAINAGE ANALYSIS described the surficial soils as "sandy loam and very gravelly sand that has been mixed by filling for residential, commercial, or industrial development. Runoff is slow to very rapid, and erosion hazard is slight to severe." "Soils in this Watershed are classified as hydrologic soil group A."

2.4 Flood Hazard

This watershed and project is not within the 100 year flood zone hazard.

2.5 Bench Marks

Elevations shown on the grading and drainage plan were surveyed from two Bench Marks, ACS station No. 4-L22 elevation 5583.831 and station No. 1-L21(R) elevation 5534.627.

3.0 HYDROLOGIC ANALYSIS

3.1 Hydrologic Criteria

The hydrologic analysis of this Watershed utilized the methodology of the City of Albuquerque's Development Process Manual - Volume 2, Design Criteria - Section 22.2, Hydrology, dated January 1993 (DPM 22.2). The principal design storm is the 100 year - 6 hour event. The 10 year - 6 hour was also used for the runoff simulation. Rainfall depth was obtained from NOAA Atlas 2. The rainfall depths incorporated in the runoff computations were:

CUMULATIVE RAINFALL DEPTHS

Rainfall Event	Rainfall Depth (inches)
100 year - 6 hour (P_{360})	2.6
100 year - 1 hour (P_{60})	2.08

10 year - 6 hour (P_{360})	1.7
10 year - 1 hour (P_{60})	1.39

The computer program, AHYMO (ver. 1/94) was used to compute the runoff for the watershed. AHYMO utilizes the unit hydrograph procedure along with initial and uniform losses. Flows were routed through streets. The watershed area is 18.4 acres and was divided into an off site basin and on site basin.

The time to peak for each basin was computed using the SCS Upland Method for sub-basin reach lengths less than 4000 feet. Time of concentration (t_c) for both the proposed Glenridge Park subdivision and the off site area was calculated to be less than 0.2 hours. The longest flow path in the proposed Glenridge Park subdivision is 620 feet (260 of sheet flow on turf (k=0.7) and 360 feet of street flow (k=3)). The corresponding t_c was 0.16 hours. As directed on page B-2 of D.P.M. 22.2, a t_c equal to 0.2 hours was used. The longest flowpath in the off site area is 1100 feet of street flow. The corresponding t_c is 0.08 hours, therefore a t_c of 0.2 hours was used. A minimum time to peak (t_p) of 0.133 hours was used to compute the hydrographs for both areas.

3.2 Undeveloped Condition

In its present undeveloped condition, the peak discharge from the site to Skyline Road during the 100 year/6 hour storm is 55.26 cfs. The volume that flows onto Skyline Road is 1.59 acre-feet; this is the remaining volume after 0.5 acre-feet is retained on site.

The volume of runoff with the existing undeveloped condition is 2.33 times greater than the volume which will flow onto Skyline Road after the development of Glenridge Park. The undeveloped peak discharge is 1.22 times greater than the peak discharge after development.

↑ no, because skyline never sees this much flow the water is mostly retained on site.

3.3 Land Treatment for Runoff Calculations

Land use was determined by field inspection. The off site basin was divided and measured to determine impervious and landscaped areas. The percentage of each land treatment group A=0, B=30.5 percent, C=0, and D=69.5 percent. The proposed Glenridge Park development plan was used for the on site basin. The percentage of each land treatment group A=0, B=30.7 percent, C=0, and D=69.3 percent for the on site basin.

3.4 Results of Hydrologic Analysis

The 100 year/6 hour event produced an peak discharge of 4.1 cfs/acre for the entire watershed. The off site 100 year/6 hour event produced 4.2 cfs/acre.

The off site basin contained 10.8 acres, and produced 100 year/6 hour peak discharge of 45.17 cfs with a volume of 74,840 cubic feet. The same basin, during the 10 year/6 hour storm produced 27.99 cfs with a volume of 43,970 cubic feet.

The on site Glenridge Park development is 7.65 acres, and produced 100 year/6 hour peak discharge of 30.25 cfs with a volume of 49,523 cubic feet. Glenridge Park during the 10 year/6 hour storm produced 18.52 cfs with a volume of 29,081 cubic feet.

3.5 Street Analysis

The SOUTH EUBANK AREA STORM DRAINAGE ANALYSIS reported that Skyline Road at the intersection of Juan Tabo has a street capacity of 151 cfs with 10 year/6 hour flow at 62 cfs and 100 year/6 hour flow at 105 cfs.

4.0 HYDRAULIC ANALYSIS

4.1 Existing Conditions

4.1.1 Skyline Road Storm Drain

The existing drop inlet on Skyline Road, east of Juan Tabo has an invert elevation of 5527. A 30 inch R.C.P. connects this drop inlet to the Buena Ventura/Jane storm drain system.

Glenridge Park drainage management plan will construct a 24 inch R.C.P. from this drop inlet 556 feet east to the west property line of Glenridge Park. This 24 inch R.C.P. will leave Skyline Road right-of-way and enter a drainage easement to the underground storage reservoir. An additional 270 feet of 24 inch R.C.P. will be required to connect to the reservoir. Flow in this 24 inch R.C.P. storm water discharge pipe will be restricted to 1 cfs prior to entering the existing drop inlet on Skyline Road.

4.2 Proposed Conditions

4.2.1 Off Site Drainage Channel

As shown on the Drainage Plan, this concrete drainage channel will be rectangular and convey the estimated off site runoff into the proposed Glenridge Park subdivision. Using Flowmaster™, the velocity in the channel during the 100 year/6 hour peak discharge was calculated to be 11.34 feet/sec. The corresponding depth is 0.40 feet.

4.2.2 Catch Basins

As shown on the Drainage Plan, the underground reservoir will have four catch basin inlets. Catch basins 1 and 2 will be on the east and west flow lines of Glenridge Park Lane. These inlets will also provide the backflow relief of the underground reservoir system. Catch basin 3 will be a large capacity transverse drainage trench intended to intercept the large contributing off site flow and runoff generated from the east side of the proposed Glenridge Park subdivision. Catch basin 4 will be a low capacity transverse drainage trench placed in

the drainage channel described above and intended to intercept a maximum of 10 cfs.

4.2.3 Storage in Glenridge Park Lane

After the designed underground storage volume of 86,800 cubic feet is filled, street flow and backflow from catch basins 1 and 2 will fill 10,900 cubic feet of storage on Glenridge Park Lane. The elevation of this temporary storage is controlled by the water break at the Skyline Road entrance to Glenridge Park Lane. After the street storage volume is exceeded, excess flows will discharge onto Skyline Road.

at what point does this happen? 50 yr-event?

4.2.4 Discharge from Glenridge Park Lane

To determine upstream head and discharge velocity of the emergency overflows onto Skyline Road, the 28 foot street width can be considered to act as a broad crested weir. Using AHYMO.194, the 100 year/6 hour peak discharge after the underground storage is full is calculated to be 45.41 cfs. The calculated volume of runoff is 0.6807 acre-feet (29,651 cubic feet). Using the peak discharge, the maximum upstream head is calculated to be 0.66 feet. The corresponding velocity is 3.74 feet/second.

4.2.5 Flood Elevation on Glenridge Park Lane

.67

The 100 year/6 hour flood elevation of 5545.80 feet is calculated to the addition of the maximum head during overflow onto Skyline Road (0.66 feet) to the water break elevation at the Skyline Road entrance to Glenridge Park Lane (5545.14 feet).

4.2.6 Time to Drain On Site Storage

Based upon a release rate of one cubic foot per second into the Buena Ventura/Jane storm drain system, the 25 year/6 hour and less frequent return period storms will require 27 hours to completely drain all detained storm water.

5.0 REFERENCES

Albuquerque Metropolitan Arroyo Flood Control Authority, January 1994, "AHYMO Computer Program User's Manual".

City of Albuquerque, January 1993, "Development Process Manual, Section 22.2, Hydrology".

Smith Engineering Company for City of Albuquerque Public Works Department, February 1995, "South Eubank Area Storm Drainage Analysis, COA Project No. 4790-01".

Appendix A

AHYMO Output Hydrograph for Undeveloped Condition (100 year/6 hour)

AHYMO PROGRAM (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
RUN DATE (MON/DAY/YR) = 02/06/1996
START TIME (HR:MIN:SEC) = 10:12:13 USER NO.= SMITHJIM.194
INPUT FILE = glenundv.dat

* Glenridge Park Hydrograph for undeveloped condition
START TIME=0.0 HR PUNCH CODE=0 PRINT LINES=-6
RAINFALL TYPE=1 QUARTER=0.0
RAIN ONE=2.08 IN RAIN SIX=2.6 IN
RAIN DAY=3.2 IN DT=0.033333 HRS

COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.
DT = .033333 HOURS END TIME = 5.999940 HOURS

.0000	.0036	.0072	.0109	.0147	.0186	.0225
.0266	.0307	.0350	.0393	.0438	.0484	.0531
.0579	.0629	.0680	.0732	.0787	.0843	.0901
.0961	.1024	.1088	.1156	.1226	.1300	.1377
.1457	.1542	.1632	.1690	.1751	.1817	.1959
.2275	.2761	.3459	.4413	.5665	.7263	.9251
1.1678	1.3923	1.4862	1.5656	1.6361	1.7003	1.7594
1.8143	1.8656	1.9137	1.9589	2.0016	2.0419	2.0801
2.1162	2.1505	2.1830	2.2139	2.2432	2.2507	2.2578
2.2646	2.2712	2.2774	2.2835	2.2893	2.2950	2.3005
2.3058	2.3110	2.3160	2.3209	2.3257	2.3303	2.3349
2.3393	2.3437	2.3480	2.3522	2.3563	2.3603	2.3643
2.3681	2.3720	2.3757	2.3794	2.3830	2.3866	2.3901
2.3936	2.3970	2.4004	2.4037	2.4070	2.4102	2.4134
2.4166	2.4197	2.4228	2.4258	2.4288	2.4318	2.4347
2.4376	2.4405	2.4434	2.4462	2.4489	2.4517	2.4544
2.4571	2.4598	2.4624	2.4651	2.4677	2.4702	2.4728
2.4753	2.4778	2.4803	2.4828	2.4852	2.4876	2.4900
2.4924	2.4948	2.4971	2.4994	2.5018	2.5040	2.5063
2.5086	2.5108	2.5130	2.5152	2.5174	2.5196	2.5218
2.5239	2.5261	2.5282	2.5303	2.5324	2.5344	2.5365
2.5386	2.5406	2.5426	2.5446	2.5466	2.5486	2.5506
2.5526	2.5545	2.5564	2.5584	2.5603	2.5622	2.5641
2.5660	2.5679	2.5697	2.5716	2.5734	2.5753	2.5771
2.5789	2.5807	2.5825	2.5843	2.5861	2.5878	2.5896
2.5914	2.5931	2.5948	2.5966	2.5983	2.6000	

COMPUTE NM HYD ID=2 HYD=101.02 AREA=0.0112 sq mi
PER A=100.0 PER B=0.0 PER C=0.0 PER D=0.0
TP=0.133 HRS MASSRAIN=-1

K = .158033HR TP = .133000HR K/TP RATIO = 1.188220 SHAPE CONSTANT, N = 2.988193
UNIT PEAK = 23.651 CFS UNIT VOLUME = .9992 B = 280.86 P60 = 2.0800
AREA = .011200 SQ MI IA = .65000 INCHES INF = 1.67000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033333

PRINT HYD ID=2 CODE=1 PARTIAL HYDROGRAPH 101.02

RUNOFF VOLUME = .63749 INCHES = .3808 ACRE-FEET
PEAK DISCHARGE RATE = 13.12 CFS AT 1.533 HOURS BASIN AREA = .0112 SQ. MI.

On-site historical

COMPUTE NM HYD ID=3 HYD=101.03 AREA=0.0169 sq mi
PER A=0.O PER B=30.5 PER C=0.0 PER D=69.5
TP=0.133 HRS MASSRAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 46.476 CFS UNIT VOLUME = .9992 B = 526.28 P60 = 2.0800
AREA = .011746 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033333

K = .132633HR TP = .133000HR K/TP RATIO = .997240 SHAPE CONSTANT, N = 3.540182
UNIT PEAK = 12.528 CFS UNIT VOLUME = .9992 B = 323.25 P60 = 2.0800
AREA = .005155 SQ MI IA = .50000 INCHES INF = 1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033333

PRINT HYD ID=3 CODE=1 PARTIAL HYDROGRAPH 101.03

RUNOFF VOLUME = 1.90622 INCHES = 1.7181 ACRE-FEET
PEAK DISCHARGE RATE = 45.17 CFS AT 1.500 HOURS BASIN AREA = .0169 SQ. MI.

ADD HYD ID=4 HYD=101.04 ID=3 ID=2

PRINT HYD ID=4 CODE=1 PARTIAL HYDROGRAPH 101.04

RUNOFF VOLUME = 1.40052 INCHES = 2.0989 ACRE-FEET
PEAK DISCHARGE RATE = 58.26 CFS AT 1.500 HOURS BASIN AREA = .0281 SQ. MI.

*DIVIDE BY MAXIMUM FLOW RATE (3.0 CFS)

DIVIDE HYD ID=4 Q=3.0 ID=5 HYD NO=105.ponded
ID=6 HYD NO=106.STREET
PRINT HYD ID=5 CODE=1 HYDROGRAPH FROM AREA 105.ponded

RUNOFF VOLUME = 1.40052 INCHES = .5130 ACRE-FEET
PEAK DISCHARGE RATE = 3.00 CFS AT 1.233 HOURS BASIN AREA = .0069 SQ. MI.

PRINT HYD ID=6 CODE=1 HYDROGRAPH FROM AREA 106.STREET

RUNOFF VOLUME = 1.40052 INCHES = 1.5859 ACRE-FEET
PEAK DISCHARGE RATE = 55.26 CFS AT 1.500 HOURS BASIN AREA = .0212 SQ. MI.

This maybe flow generated from existing site + The Ballagher Addition, however, this is not an accurate figure for flow coming off this site and entering Skepline. This site retains + infiltrates a majority of this water. This comparison is not really valid

FINISH NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 10:12:13

Appendix B

AHYMO Output Hydrograph for Developed Condition (100 year/6 hour)

```
AHYMO PROGRAM (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
        RUN DATE (MON/DAY/YR) = 02/01/1996
        START TIME (HR:MIN:SEC) = 15:04:05     USER NO.= SMITHJIM.194
        INPUT FILE = glendiv.dat

* Glenridge Park Hydrograph
START              TIME=0.0 HR  PUNCH CODE=0  PRINT LINES=-6
RAINFALL             TYPE=1  QUARTER=0.0
                 RAIN ONE=2.08 IN  RAIN SIX=2.6 IN
                 RAIN DAY=3.2 IN  DT=0.033333 HRS


          COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.
          DT =    .033333 HOURS      END TIME =    5.999940 HOURS
            .0000  .0036  .0072  .0109  .0147  .0186  .0225
            .0266  .0307  .0350  .0393  .0438  .0484  .0531
            .0579  .0629  .0680  .0732  .0787  .0843  .0901
            .0961  .1024  .1088  .1156  .1226  .1300  .1377
            .1457  .1542  .1632  .1690  .1751  .1817  .1959
            .2275  .2761  .3459  .4413  .5665  .7263  .9251
           1.1678 1.3923 1.4862 1.5656 1.6361 1.7003 1.7594
           1.8143 1.8656 1.9137 1.9589 2.0016 2.0419 2.0801
           2.1162 2.1505 2.1830 2.2139 2.2432 2.2507 2.2578
           2.2646 2.2712 2.2774 2.2835 2.2893 2.2950 2.3005
           2.3058 2.3110 2.3160 2.3209 2.3257 2.3303 2.3349
           2.3393 2.3437 2.3480 2.3522 2.3563 2.3603 2.3643
           2.3681 2.3720 2.3757 2.3794 2.3830 2.3866 2.3901
           2.3936 2.3970 2.4004 2.4037 2.4070 2.4102 2.4134
           2.4166 2.4197 2.4228 2.4258 2.4288 2.4318 2.4347
           2.4376 2.4405 2.4434 2.4462 2.4489 2.4517 2.4544
           2.4571 2.4598 2.4624 2.4651 2.4677 2.4702 2.4728
           2.4753 2.4778 2.4803 2.4828 2.4852 2.4876 2.4900
           2.4924 2.4948 2.4971 2.4994 2.5018 2.5040 2.5063
           2.5086 2.5108 2.5130 2.5152 2.5174 2.5196 2.5218
           2.5239 2.5261 2.5282 2.5303 2.5324 2.5344 2.5365
           2.5386 2.5406 2.5426 2.5446 2.5466 2.5486 2.5506
           2.5526 2.5545 2.5564 2.5584 2.5603 2.5622 2.5641
           2.5660 2.5679 2.5697 2.5716 2.5734 2.5753 2.5771
           2.5789 2.5807 2.5825 2.5843 2.5861 2.5878 2.5896
           2.5914 2.5931 2.5948 2.5966 2.5983 2.6000

COMPUTE NM HYD          ID=2  HYD=101.02  AREA=0.0112 sq mi
                         PER A=0.O  PER B=30.7  PER C=0.0  PER D=69.3
                        TP=0.13 HRS  MASSRAIN=-1

        K =  .070850HR   TP =  .130000HR   K/TP RATIO =  .545000
        SHAPE CONSTANT, N =  7.106420
        UNIT PEAK =  31.421   CFS  UNIT VOLUME =   .9997     B =  526.28     P60 = 2.0800
        AREA =     .007762 SQ MI   IA =   .10000 INCHES   INF =   .04000 INCHES PER HOUR
  RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  .033333

        K =  .129641HR   TP =  .130000HR   K/TP RATIO =  .997240
        SHAPE CONSTANT, N =  3.540181
        UNIT PEAK =  8.5497   CFS  UNIT VOLUME =   .9987     B =  323.25     P60 = 2.0800
        AREA =     .003438 SQ MI   IA =   .50000 INCHES   INF =  1.25000 INCHES PER HOUR
  RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  .033333
```

PRINT HYD ID=2 CODE=1 PARTIAL HYDROGRAPH 101.02

RUNOFF VOLUME = 1.90331 INCHES = 1.1369 ACRE-FEET
PEAK DISCHARGE RATE = 30.25 CFS AT 1.500 HOURS BASIN AREA = .0112 SQ. MI.

COMPUTE NM HYD ID=3 HYD=101.03 AREA=0.0169 sq mi
PER A=0.O PER B=30.5 PER C=0.0 PER D=69.5
TP=0.133 HRS MASSRAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 46.476 CFS UNIT VOLUME = .9992 B = 526.28 P60 = 2.0800
AREA = .011746 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033333

K = .132633HR TP = .133000HR K/TP RATIO = .997240 SHAPE CONSTANT, N = 3.540182
UNIT PEAK = 12.528 CFS UNIT VOLUME = .9992 B = 323.25 P60 = 2.0800
AREA = .005155 SQ MI IA = .50000 INCHES INF = 1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033333

PRINT HYD ID=3 CODE=1 PARTIAL HYDROGRAPH 101.03

RUNOFF VOLUME = 1.90622 INCHES = 1.7181 ACRE-FEET
PEAK DISCHARGE RATE = 45.17 CFS AT 1.500 HOURS BASIN AREA = .0169 SQ. MI.

ADD HYD ID=4 HYD=101.04 ID=3 ID=2

PRINT HYD ID=4 CODE=1 PARTIAL HYDROGRAPH 101.04

RUNOFF VOLUME = 1.90504 INCHES = 2.8550 ACRE-FEET
PEAK DISCHARGE RATE = 75.41 CFS AT 1.500 HOURS BASIN AREA = .0281 SQ. MI.

* DIVIDE BY MAXIMUM FLOW RATE
DIVIDE HYD ID=4 Q=30 ID=5 HYD NO=105.UNDERGROUND
ID=6 HYD NO=106.STREET

PRINT HYD ID=5 CODE=1 HYDROGRAPH FROM AREA 105.UNDERGROUND

RUNOFF VOLUME = 1.90504 INCHES = 2.1743 ACRE-FEET
PEAK DISCHARGE RATE = 30.00 CFS AT 1.367 HOURS BASIN AREA = .0214 SQ. MI.

PRINT HYD ID=6 CODE=1 HYDROGRAPH FROM AREA 106.STREET

RUNOFF VOLUME = 1.90504 INCHES = .6807 ACRE-FEET
PEAK DISCHARGE RATE = 45.41 CFS AT 1.500 HOURS BASIN AREA = .0067 SQ. MI.

FINISH NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 15:04:05

Appendix C

AHYMO Output Hydrograph for Developed Condition (10 year/6 hour)

AHYMO PROGRAM (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
RUN DATE (MON/DAY/YR) = 02/03/1996
START TIME (HR:MIN:SEC) = 12:33:15 USER NO.= SMITHJIM.194
INPUT FILE = GLEN10YR.DAT

* Glenridge Park Hydrograph for 10 year/6 hour storm
START TIME=0.0 HR PUNCH CODE=0 PRINT LINES=-6
RAINFALL TYPE=1 QUARTER=0.0
RAIN ONE=1.39 IN RAIN SIX=1.7 IN
RAIN DAY=2.1 IN DT=0.033333 HRS

COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.
DT = .033333 HOURS END TIME = 5.999940 HOURS

.0000	.0019	.0039	.0058	.0079	.0100	.0121
.0143	.0165	.0188	.0211	.0235	.0259	.0285
.0311	.0337	.0365	.0393	.0422	.0453	.0484
.0516	.0550	.0585	.0621	.0659	.0699	.0741
.0785	.0831	.0879	.0918	.0959	.1003	.1097
.1309	.1634	.2100	.2737	.3574	.4642	.5971
.7593	.9093	.9721	1.0251	1.0722	1.1151	1.1546
1.1913	1.2256	1.2577	1.2879	1.3165	1.3434	1.3689
1.3931	1.4160	1.4377	1.4583	1.4779	1.4828	1.4875
1.4919	1.4961	1.5002	1.5041	1.5078	1.5115	1.5150
1.5184	1.5217	1.5249	1.5280	1.5311	1.5340	1.5369
1.5398	1.5425	1.5452	1.5479	1.5505	1.5530	1.5555
1.5579	1.5603	1.5627	1.5650	1.5673	1.5695	1.5717
1.5739	1.5760	1.5781	1.5802	1.5822	1.5843	1.5862
1.5882	1.5901	1.5921	1.5939	1.5958	1.5976	1.5995
1.6012	1.6030	1.6048	1.6065	1.6082	1.6099	1.6116
1.6133	1.6149	1.6165	1.6181	1.6197	1.6213	1.6229
1.6244	1.6260	1.6275	1.6290	1.6305	1.6320	1.6335
1.6349	1.6364	1.6378	1.6392	1.6406	1.6420	1.6434
1.6448	1.6461	1.6475	1.6488	1.6502	1.6515	1.6528
1.6541	1.6554	1.6567	1.6580	1.6592	1.6605	1.6617
1.6630	1.6642	1.6654	1.6667	1.6679	1.6691	1.6703
1.6714	1.6726	1.6738	1.6750	1.6761	1.6773	1.6784
1.6796	1.6807	1.6818	1.6829	1.6840	1.6851	1.6862
1.6873	1.6884	1.6895	1.6906	1.6916	1.6927	1.6938
1.6948	1.6959	1.6969	1.6979	1.6990	1.7000	

COMPUTE NM HYD ID=2 HYD=101.02 AREA=0.0112 sq mi
PER A=0.O PER B=30.7 PER C=0.0 PER D=69.3
TP=0.133 HRS MASSRAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 30.712 CFS UNIT VOLUME = .9991 B = 526.28 P60 = 1.3900
AREA = .007762 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033333

K = .139124HR TP = .133000HR K/TP RATIO = 1.046045 SHAPE CONSTANT, N = 3.375009
UNIT PEAK = 8.0425 CFS UNIT VOLUME = .9984 B = 311.09 P60 = 1.3900
AREA = .003438 SQ MI IA = .50000 INCHES INF = 1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033333

PRINT HYD ID=2 CODE=1 PARTIAL HYDROGRAPH 101.02

RUNOFF VOLUME = 1.11769 INCHES = .6676 ACRE-FEET
PEAK DISCHARGE RATE = 18.52 CFS AT 1.500 HOURS BASIN AREA = .0112 SQ. MI.

COMPUTE NM HYD ID=3 HYD=101.03 AREA=0.0169 sq mi
PER A=0.O PER B=30.5 PER C=0.0 PER D=69.5
TP=0.133 HRS MASSRAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 46.476 CFS UNIT VOLUME = .9992 B = 526.28 P60 = 1.3900
AREA = .011746 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033333

K = .139124HR TP = .133000HR K/TP RATIO = 1.046045 SHAPE CONSTANT, N = 3.375009
UNIT PEAK = 12.057 CFS UNIT VOLUME = .9989 B = 311.09 P60 = 1.3900
AREA = .005155 SQ MI IA = .50000 INCHES INF = 1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033333

PRINT HYD ID=3 CODE=1 PARTIAL HYDROGRAPH 101.03

RUNOFF VOLUME = 1.11995 INCHES = 1.0094 ACRE-FEET
PEAK DISCHARGE RATE = 27.99 CFS AT 1.500 HOURS BASIN AREA = .0169 SQ. MI.

ADD HYD ID=4 HYD=101.04 ID=3 ID=2

PRINT HYD ID=4 CODE=1 PARTIAL HYDROGRAPH 101.04

RUNOFF VOLUME = 1.11903 INCHES = 1.6770 ACRE-FEET
PEAK DISCHARGE RATE = 46.51 CFS AT 1.500 HOURS BASIN AREA = .0281 SQ. MI.

FINISH NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 12:33:15

Appendix D

AHYMO Output Hydrograph for Developed Condition (25 year/6 hour)

```
AHYMO PROGRAM (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
        RUN DATE (MON/DAY/YR) = 02/03/1996
        START TIME (HR:MIN:SEC) = 11:25:20     USER NO.= SMITHJIM.194
        INPUT FILE = GLEN25YR.DAT
  * Glenridge Park Hydrograph for 25 year/6 hour storm
  START              TIME=0.0 HR  PUNCH CODE=0  PRINT LINES=-6
  RAINFALL            TYPE=1  QUARTER=0.0
                   RAIN ONE=1.66 IN  RAIN SIX=2.1 IN
                   RAIN DAY=2.6 IN  DT=0.033333 HRS

              COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.
              DT =    .033333 HOURS      END TIME =    5.999940 HOURS
                .0000  .0032  .0064  .0098  .0131  .0166  .0201
                .0238  .0275  .0313  .0351  .0391  .0432  .0474
                .0517  .0561  .0607  .0654  .0702  .0752  .0804
                .0858  .0913  .0971  .1031  .1093  .1159  .1227
                .1299  .1374  .1454  .1500  .1549  .1601  .1714
                .1967  .2355  .2912  .3673  .4673  .5947  .7534
                .9471 1.1263 1.2013 1.2646 1.3209 1.3721 1.4193
               1.4631 1.5040 1.5424 1.5785 1.6126 1.6447 1.6752
               1.7040 1.7314 1.7574 1.7820 1.8054 1.8114 1.8171
               1.8226 1.8279 1.8330 1.8379 1.8426 1.8472 1.8516
               1.8560 1.8602 1.8643 1.8683 1.8722 1.8760 1.8797
               1.8833 1.8869 1.8904 1.8938 1.8972 1.9005 1.9037
               1.9069 1.9101 1.9131 1.9162 1.9192 1.9221 1.9250
               1.9279 1.9307 1.9335 1.9362 1.9389 1.9416 1.9442
               1.9468 1.9494 1.9520 1.9545 1.9570 1.9594 1.9619
               1.9643 1.9666 1.9690 1.9713 1.9736 1.9759 1.9782
               1.9804 1.9826 1.9848 1.9870 1.9892 1.9913 1.9934
               1.9955 1.9976 1.9997 2.0018 2.0038 2.0058 2.0078
               2.0098 2.0118 2.0137 2.0157 2.0176 2.0195 2.0214
               2.0233 2.0252 2.0270 2.0289 2.0307 2.0325 2.0343
               2.0361 2.0379 2.0397 2.0414 2.0432 2.0449 2.0466
               2.0484 2.0501 2.0518 2.0535 2.0551 2.0568 2.0585
               2.0601 2.0617 2.0634 2.0650 2.0666 2.0682 2.0698
               2.0714 2.0730 2.0745 2.0761 2.0776 2.0792 2.0807
               2.0822 2.0838 2.0853 2.0868 2.0883 2.0898 2.0912
               2.0927 2.0942 2.0957 2.0971 2.0986 2.1000

  COMPUTE NM HYD     ID=2  HYD=101.02  AREA=0.0112 sq mi
                     PER A=0.O  PER B=30.7  PER C=0.0  PER D=69.3
                     TP=0.133 HRS  MASSRAIN=-1

     K =  .072485HR   TP =  .133000HR   K/TP RATIO =  .545000   SHAPE CONSTANT, N =  7.106420
     UNIT PEAK =  30.712   CFS  UNIT VOLUME =  .9991     B =  526.28     P60 = 1.6600
     AREA =     .007762 SQ MI   IA =   .10000 INCHES   INF =   .04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  .033333

     K =  .134384HR   TP =  .133000HR   K/TP RATIO = 1.010405   SHAPE CONSTANT, N =  3.493654
     UNIT PEAK =  8.2694   CFS  UNIT VOLUME =  .9987     B =  319.87     P60 = 1.6600
     AREA =     .003438 SQ MI   IA =   .50000 INCHES   INF =  1.25000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  .033333

  PRINT HYD          ID=2  CODE=1       PARTIAL HYDROGRAPH  101.02

     RUNOFF VOLUME =     1.45446 INCHES     =       .8688 ACRE-FEET
     PEAK DISCHARGE RATE =     23.16 CFS  AT   1.500 HOURS   BASIN AREA =   .0112 SQ. MI.
```

COMPUTE NM HYD ID=3 HYD=101.03 AREA=0.0169 sq mi
PER A=0.O PER B=30.5 PER C=0.0 PER D=69.5
TP=0.133 HRS MASSRAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 46.476 CFS UNIT VOLUME = .9992 B = 526.28 P60 = 1.6600
AREA = .011746 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033333

K = .134384HR TP = .133000HR K/TP RATIO = 1.010405 SHAPE CONSTANT, N = 3.493654
UNIT PEAK = 12.397 CFS UNIT VOLUME = .9992 B = 319.87 P60 = 1.6600
AREA = .005155 SQ MI IA = .50000 INCHES INF = 1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033333

PRINT HYD ID=3 CODE=1 PARTIAL HYDROGRAPH 101.03

RUNOFF VOLUME = 1.45705 INCHES = 1.3133 ACRE-FEET
PEAK DISCHARGE RATE = 34.98 CFS AT 1.500 HOURS BASIN AREA = .0169 SQ. MI.

ADD HYD ID=4 HYD=101.04 ID=3 ID=2

PRINT HYD ID=4 CODE=1 PARTIAL HYDROGRAPH 101.04

RUNOFF VOLUME = 1.45600 INCHES = 2.1820 ACRE-FEET
PEAK DISCHARGE RATE = 58.14 CFS AT 1.500 HOURS BASIN AREA = .0281 SQ. MI.

FINISH NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 11:25:20

Appendix E

Spreadsheet Calculations of t_c

Glenridge Development

		Area by Land Treatment (Table A-4)					Flowpath by Conveyance Factor in feet (Table B-1)						Slope	s uniform Composite	Velocity		w/o areas 1,7,26	w/o areas 1,26
Area No.	Sq. Ft.	A	B	C	D	Total	Turf	Bare	Shallow	Street	Concrete	Total (L)	ft/ft	K or K	(v) fps	L/v	L/v	L/v
1	8,237		7,117		1,120	8,237	20					20	0.007	0.70	0.59	34.1		
2	12,350		5,437		6,913	12,350	240		100			340	0.007	0.87	0.72	469.6	469.6	469.6
3	14,573		2,725		11,848	14,573				260		260	0.007	3.00	2.51	103.6	103.6	103.6
4	8,932				8,932	8,932				240		240	0.007	3.00	2.51	95.6	95.6	95.6
5	6,902				6,902	6,902				240		240	0.007	3.00	2.51	95.6	95.6	95.6
6	15,167		2,276		12,891	15,167				260		260	0.007	3.00	2.51	103.6	103.6	103.6
7	70,290		40,848		29,442	70,290	255					255	0.007	0.70	0.59	435.4		435.4
8	15,167		2,275		12,892	15,167				260		260	0.007	3.00	2.51	103.6	103.6	103.6
9	6,804				6,804	6,804				260		260	0.007	3.00	2.51	103.6	103.6	103.6
10	6,804				6,804	6,804				260		260	0.007	3.00	2.51	103.6	103.6	103.6
11	14,268		2,668		11,600	14,268				260		260	0.007	3.00	2.51	103.6	103.6	103.6
12	11,070		4,871		6,199	11,070	240		100			340	0.007	0.87	0.72	469.6	469.6	469.6
13	2,640		2,640			2,640			100			100	0.007	2.00	1.67	59.8	59.8	59.8
14	1,957		1,957			1,957			100			100	0.007	2.00	1.67	59.8	59.8	59.8
15	12,750		6,110		6,640	12,750	260		100			360	0.007	0.85	0.71	503.7	503.7	503.7
16	15,300		3,461		11,839	15,300				255		255	0.007	3.00	2.51	101.6	101.6	101.6
17	8,230				8,230	8,230				520		520	0.007	3.00	2.51	207.2	207.2	207.2
18	13,332		2,000		11,332	13,332				250		250	0.007	3.00	2.51	99.6	99.6	99.6
19	13,332		2,000		11,332	13,332				250		250	0.007	3.00	2.51	99.6	99.6	99.6
20	14,268		2,668		11,600	14,268				265		265	0.007	3.00	2.51	105.6	105.6	105.6
21	11,070		4,871		6,199	11,070	240		100			340	0.007	0.87	0.72	469.6	469.6	469.6
22	9,765				9,765	9,765				500		500	0.007	3.00	2.51	199.2	199.2	199.2
23	15,175		2,838		12,337	15,175				540		540	0.007	3.00	2.51	215.1	215.1	215.1
24	11,463		5,044		6,419	11,463	260			360		620	0.007	1.26	1.06	587.4	587.4	587.4
25	1,350		1,350			1,350	130					130	0.007	0.70	0.59	222.0	222.0	222.0
26	6,900				6,900	6,900				130		130	0.007	3.00	2.51	51.8		
Total	328,096		103,155		224,941	328,096	205.625		100	300.6						5203.2	4681.9	5117.3
Calc. Acres	7.53																	
Plat Acres	7.65																	
Percent			31.4		68.6									All areas		w/o areas 1,7,26		w/o areas 1,26
Sq. Miles						0.011769				Time of Concentration			tc =	0.16	hours	0.16	hours	0.16 hours
Percent w/o areas 1,7,26			22.7		77.3					Time to Peak			tp=	0.11	hours	0.11	hours	0.11 hours
Sq. Miles w/o areas 1,7,26						0.008705												
Percent w/o areas 1, 26			30.7		69.3													
Sq. Miles w/o areas 1, 26						0.011226												

Off Site Area														s uniform					
		Area by Land Treatment (Table A-4)					Flowpath by Conveyance Factor in feet (Table B-1)						Slope	Composite	Velocity				
Area No.	Sq. Ft.	A	B	C	D	Total	Turf	Bare	Shallow	Street	Concrete	Total (L)	ft/ft	K or K	(v) fps	L/v			
1	70,470		29,270		41,200	70,470				550		550	0.015	3.00	3.67	149.7			
2	26,100				26,100	26,100				550		550	0.015	3.00	3.67	149.7			
3	70,470		29,270		41,200	70,470				550		550	0.015	3.00	3.67	149.7			
4	70,430		29,230		41,200	70,430				760		760	0.015	3.00	3.67	206.8			
5	26,000				26,000	26,000				760		760	0.015	3.00	3.67	206.8			
6	27,600		12,000		15,600	27,600				760		760	0.015	3.00	3.67	206.8			
7	19,500		10,100		9,400	19,500				1100		1100	0.015	3.00	3.67	299.4			
8	17,460				17,460	17,460				1100		1100	0.015	3.00	3.67	299.4			
9	97,440		33,584		63,856	97,440				900		900	0.015	3.00	3.67	244.9			
10	45,000				45,000	45,000				800		800	0.015	3.00	3.67	217.7			
Total	470,470		143,454		327,016	470,470										2131.1			
Acres	10.80																		
Percent			30.5		69.5						Time of Concentration			tc =	0.08	hours			
Sq. Miles	0.016876										Time to Peak			tp=	0.06	hours			

Appendix F

Flowmaster™ Output for Off Site Drainage Channel

Rectangular Channel Analysis & Design
Open Channel - Uniform flow

Worksheet Name: Glenridge

Comment: Drainage Channel from Offsite

Solve For Depth

Given Input Data:

Bottom Width.....	10.00 ft
Manning's n.....	0.013
Channel Slope....	0.0370 ft/ft
Discharge.....	45.41 cfs

Computed Results:

Depth.....	0.40 ft
Velocity.....	11.34 fps
Flow Area.....	4.00 sf
Flow Top Width...	10.00 ft
Wetted Perimeter.	10.80 ft
Critical Depth...	0.86 ft
Critical Slope...	0.0032 ft/ft
Froude Number....	3.16 (flow is Supercritical)

Open Channel Flow Module, Version 3.10 (c) 1990
Haestad Methods, Inc. * 37 Brookside Rd * Waterbury, Ct 06708

CITY OF
Albuquerque

July 15, 1996

Martin J. Chávez, Mayor

Mr. Pete Ford
330 Washington SE
Albuquerque, NM 87108

RE: GLENRIDGE PARK (L22-D49)

Dear Mr. Ford:

A drainage covenant will be required for the above referenced project that defines the Homeowner's association as being responsible for the maintenance of on site and off site storm water in the streets, the concrete lined drainage channel, and the underground storm water storage system. Also, indicate on the covenant that ponding of storm waters is intended to take place in the street.

I have enclosed a copy of the City's Standard Agreement & Covenant for you to use.

If I can be of further assistance, please feel free to contact me at 768-3622.

Sincerely,

Lisa Ann Manwill
Engineering Assoc./Hyd.

c: Fred Aguirre - COA
File

DRAINAGE INFORMATION SHEET

PROJECT TITLE: GLENRIDGE PARK ZONE ATLAS/DRNG. FILE #: L-22/D49

DRB #: -95-358 EPC #: Z-93-72 WORK ORDER #: _____

LEGAL DESCRIPTION: HENDREN ADDITION

CITY ADDRESS: 12100 SKYLINE ROAD, NE, ALBUQUERQUE, NM

ENGINEERING FIRM: SOUDER, MILLER & ASSOCIATES CONTACT: JIM SMITH

ADDRESS: 1201 PARKWAY DRIVE, SUITE C PHONE: (505) 473-9211 821-1465

OWNER: GLENRIDGE PARK JOINT VENTURE CONTACT: PETE FORD

ADDRESS: 330 WASHINGTON, SE, ABQ, NM PHONE: 262-9836

ARCHITECT: MASTERWORKS ARCHITECTS CONTACT: JIM CLARK

ADDRESS: 516 11TH ST., NW, ALBUQUERQUE, NM PHONE: 242-1866

SURVEYOR: CONSURVE SURVEYING CONTACT: JERRY NICKELS

ADDRESS: SAN FIDEL, NM PHONE: (505) 552-9898

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

_X_ DRAINAGE REPORT

_X_ DRAINAGE PLAN

____ CONCEPTUAL GRADING & DRAINAGE PLAN

_X_ GRADING PLAN

____ EROSION CONTROL PLAN

____ ENGINEER'S CERTIFICATION

____ OTHER _____

PRE-DESIGN MEETING:

_X_ YES

____ NO

_X_ COPY PROVIDED

The drawings stamped 3-5-96 are ok for BP. But need updated Infrastructure list + Easements + covents before release of BP

DATE SUBMITTED: ~~3/~~ 3/6/96

BY: JAMES D. SMITH

CHECK TYPE OF APPROVAL SOUGHT:

____ SKETCH PLAT APPROVAL

____ PRELIMINARY PLAT APPROVAL

_X_ S. DEV. PLAN FOR SUB'D. APPROVAL

____ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL

____ SECTOR PLAN APPROVAL

____ FINAL PLAT APPROVAL

____ FOUNDATION PERMIT APPROVAL

_X_ BUILDING PERMIT APPROVAL

____ CERTIFICATE OF OCCUPANCY APPROVAL

_X_ GRADING PERMIT APPROVAL

____ PAVING PERMIT APPROVAL

____ S.A.D. DRAINAGE REPORT

____ DRAINAGE REQUIREMENTS

____ SUBDIVISION CERTIFICATION

____ OTHER _____ (SPECIFY)

RECEIVED
MAR 7

n:\glenridg\draininf.sht

This is same location that Pat Coonce came in on a number of times. Talked to Loren, others.

3/29

G&D R NOT Rcvd.

FIGURE 6
CITY OF ALBUQUERQUE
NOTICE OF D.R.C. MEETING

3-28-96
(DATE)

PROJECT NO: 541081
ZONE ATLAS: L-22

PROJECT NAME: GLENRIDGE PARK SUBD
LOCATION: (CENTRAL, E. OF JUAN TABO)

TYPE OF PROJECT: AHBA ✓ CIP ___ PWC ___ SAD ___ ALL PRIVATE ___

Contact Person: JIM SMITH **Phone:** 821-1465
Firm: SMITH ENGR.

X Scheduled with the D.R.C. on 4-3-96 at 7:30 in Conf. Room 302
___ No DRC Meeting Scheduled. Please return any comments by ___

The Project Is Scheduled For:

/ / Design Report Review
/ / Pre-Design Meeting
/X Preliminary Plan Review
/ / Final Plan Review
/ / Signoff of Plans
/ / ___

The Project Relates To:

/X Water /X San. Sewer /X Paving /X Storm Drainage / / ___

The Attached Package Includes:

/D/ Drawings /S/ Spec's /E/ Estimate /R/ Report /M/ Memo Only

Indicated below are the Departments/Divisions that have received project documents and/or are invited to attend. It will be the Project Managers responsiblity to notify consulting engineering firms of date and time of scheduled meetings.

/D/	DRC Chairman	
/D/	Traffic Repres	Project Review Section — All Drawings
/D/	Water Repres.	Transportation Development — All Drawings
/D/	Hydro Repres.	Utility Design — All Drawings
/D/	Const. Repres.	Hydrology — All Drawings
/D/	Ray Chavez	Construction — All Drawings
/ /	Andre Houle	Traffic Operations — All Drawings
/D/	Sergio Miranda	Street Maintenance — All Paving
/D/	Parks Repres.	Water (Shutoff Plan) — All Water Shutoff
/ /		Parks & Recreation — ALL Landscaping
/ /	Jim Hamel	Utility Coordinator — ALL PWC & CIP
/ /	Rick Roybal	Transit Department — CIP/Memo
/ /	Jim Fink	Construction Coordinator — CIP/Memo
/ /	Joe Dellalonga	Line Maintenance — CIP & SAS/Memo
/ /	Lee Lunsford	City Architect — Arch. Drawings
/ /	Joe Luehring	SAD Engineer — SAD/Memo
/ /	Roger Green	Transportation Develop. — CIP/Memo
/ /	John Liebendorfer	Utility Design — CIP/Water & SAS
/ /	Greg Smith	General Services Dept. — Arch. Drawings
/ /	Richard Sertich	PWD/Legal — Specs & Dwgs.
/ /	CIP Manager	Planning Department — CIP/Memos
/ /	Donald Bartlett	CIP — CIP/Memos
/ /	___	Risk Management — Arch. Drawings

DRCNOTIC. 10/19/95

SOUDER, MILLER & ASSOCIATES
ENVIRONMENTAL SCIENTISTS & ENGINEERS

1201 Parkway Drive, Suite C
Santa Fe, NM 87505
(505) 473-9211
Fax (505) 471-6675

March 1, 1996

Ms. Lisa Ann Manwill
Engineering Assoc./Hydrology
City of Albuquerque
P. O. Box 1293
Albuquerque, New Mexico 87103

RE: GLENRIDGE PARK (L22-D49) DRAINAGE REPORT
Response to comments dated February 15, 1996
Comment #7. P & P Skyline Rd. Storm Drain

Dear Ms. Manwill:

In your letter of February 15, 1996, you requested plan and profile drawings for the storm drain line proposed to be constructed in Skyline Road between the site and Juan Tabo. Attached to this letter is a P & P sheet for this storm drainage line.

You will note on the profile, this storm drain line must cross under the existing 12" sanitary sewer line in Kirby Street/Glenridge Park Lane. We can not cross above this Kirby Street sanitary sewer line and build the proposed underground storage reservoir as presented in the Drainage Report.

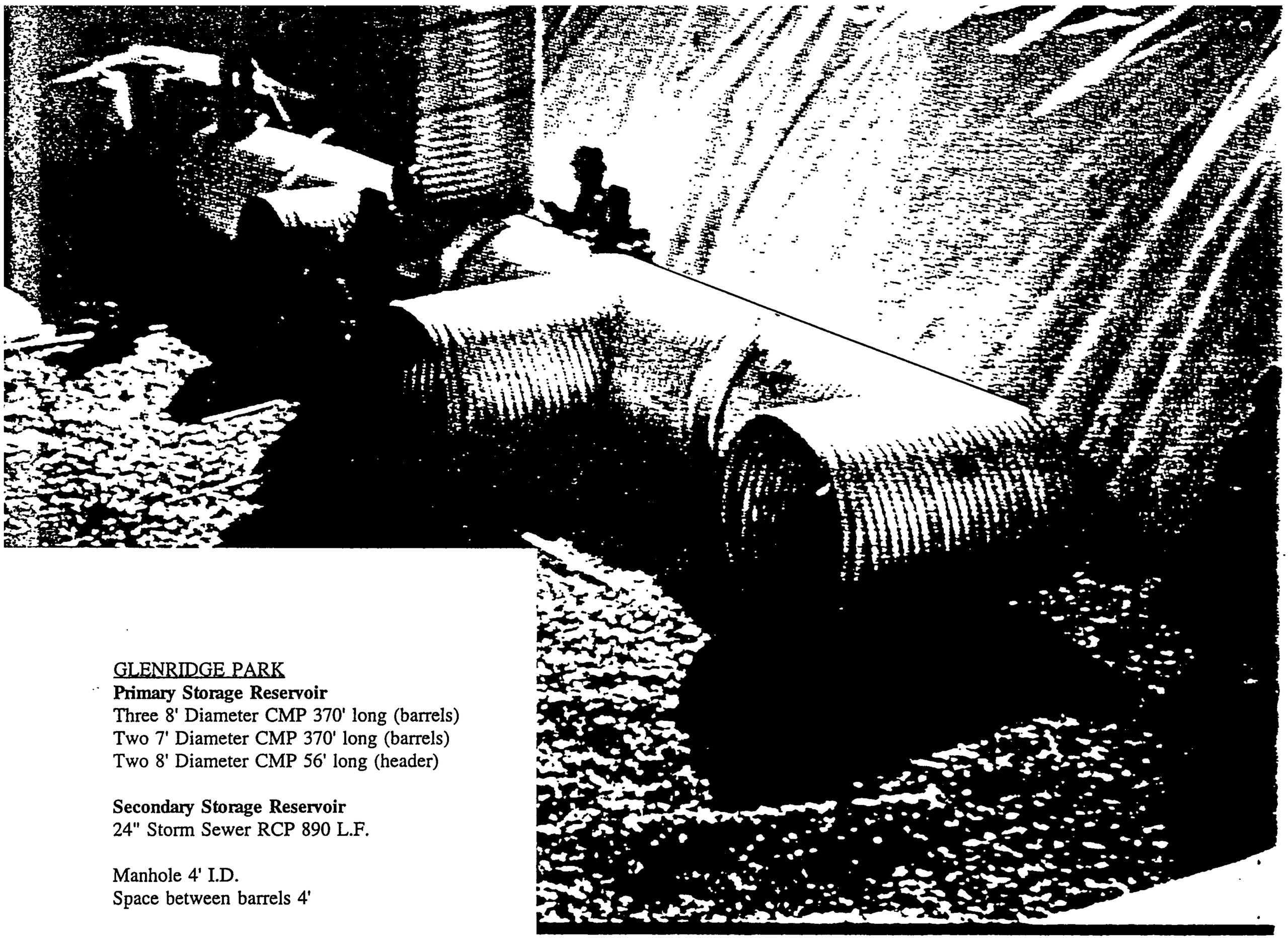
The storm drain in Skyline Road will have a restricted release rate of 1 cfs. The depth of flow at 1 cfs is 0.36 ft. with a velocity of 2.62 ft. per second. See attached calculations.

Your comment #1. asked how the 8 foot diameter storage pipes would be accessed and maintained? Attached are two pictures that are typical; the header is 8' CMP and extending from that pipe will be a 4' or 6' vertical pipe. A manhole cover or lid will be placed on top of this vertical pipe.

This letter should provide the remaining information you requested in your letter of February 15, 1996. Fred indicated last week that a one week deferral would allow completion of Drainage Report review. Please call if you have any questions that need to be addressed before the March 5th DRB meeting.

Sincerely,

James D. Smith, P.E.



GLENRIDGE PARK

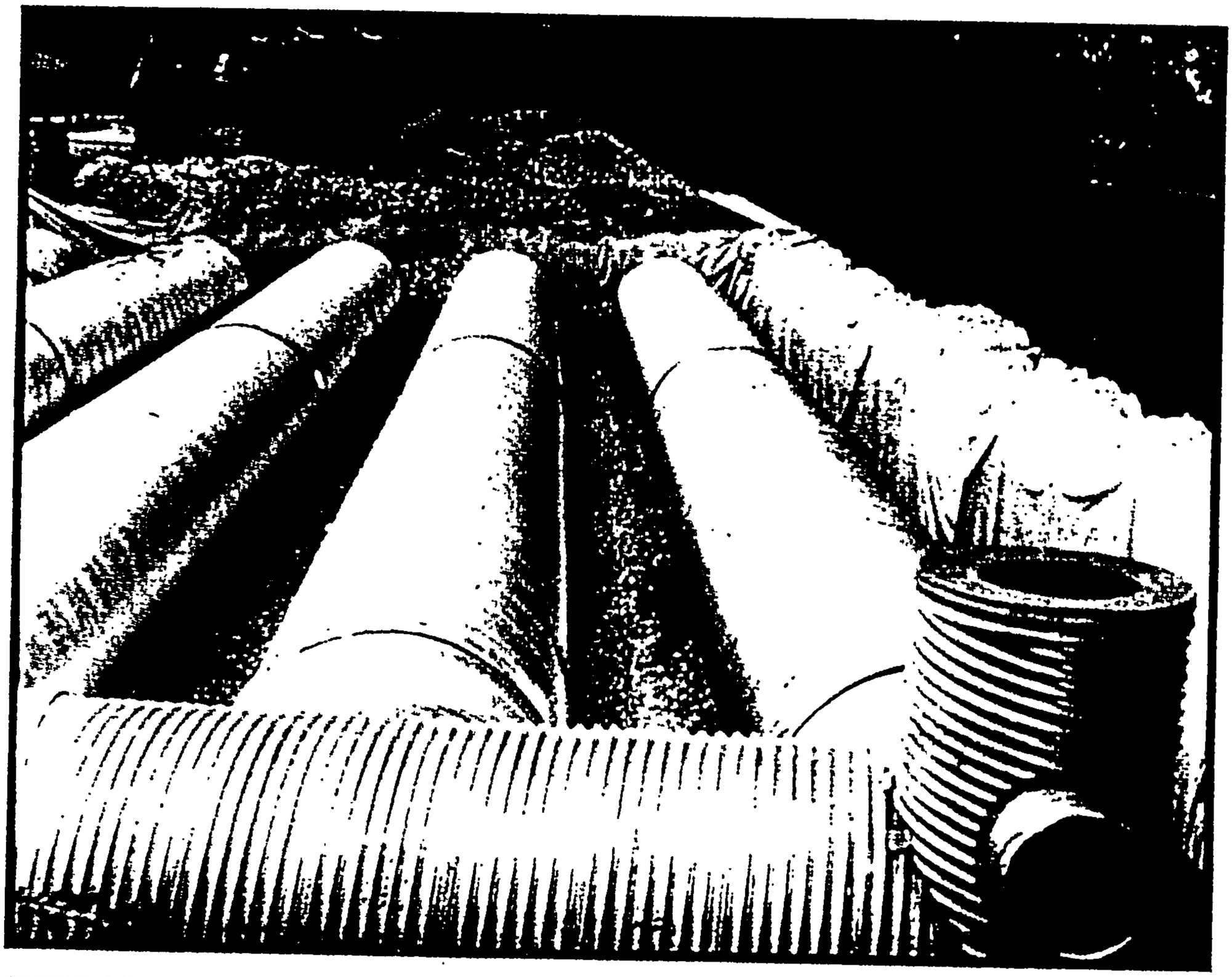
Primary Storage Reservoir

Three 8' Diameter CMP 370' long (barrels)
Two 7' Diameter CMP 370' long (barrels)
Two 8' Diameter CMP 56' long (header)

Secondary Storage Reservoir

24" Storm Sewer RCP 890 L.F.

Manhole 4' I.D.
Space between barrels 4'



GLENRIDGE PARK

Primary Storage Reservoir

Three 8' Diameter CMP 370' long (barrels)
Two 7' Diameter CMP 370' long (barrels)
Two 8' Diameter CMP 56' long (header)

Secondary Storage Reservoir

24" Storm Sewer RCP 890 L.F.

Manhole 4' I.D.
Space between barrels 4'

Circular Channel Analysis & Design
Solved with Manning's Equation

Open Channel - Uniform flow

Worksheet Name: glenridge

Comment: 24 inch pipe

Solve For Actual Depth

Given Input Data:

Diameter.....	2.00 ft
Slope.....	0.0040 ft/ft
Manning's n.....	0.013
Discharge.....	1.00 cfs

Computed Results:

Depth.....	0.36 ft
Velocity.....	2.62 fps
Flow Area.....	0.38 sf
Critical Depth....	0.34 ft
Critical Slope...	0.0047 ft/ft
Percent Full.....	17.90 %
Full Capacity.....	14.31 cfs
QMAX @.94D.....	15.39 cfs
Froude Number.....	0.93 (flow is Subcritical)

Open Channel Flow Module, Version 3.10 (c) 1990
Haestad Methods, Inc. * 37 Brookside Rd * Waterbury, Ct 06708

SOUDER, MILLER & ASSOCIATES
ENVIRONMENTAL SCIENTISTS & ENGINEERS

1201 Parkway Drive, Suite C
Santa Fe, NM 87505
(505) 473-9211
Fax (505) 471-6675

February 23, 1996

5831000

Ms. Lisa Ann Manwill
Engineering Assoc./Hydrology
City of Albuquerque
P. O. Box 1293
Albuquerque, New Mexico 87103

RE: GLENRIDGE PARK (L22-D49) DRAINAGE REPORT
Response to comments dated February 15, 1996

Dear Ms. Manwill:

Response to comments in your letter dated February 15, 1996:
Comment #1.
We have shop drawing that will be available on February 27, 1996, which show how the storage pipes will be accessed for maintenance.

Comment #2.
The Preliminary Plat for Glenridge Park has been revised to include easements for maintenance of the on site storm drainage facilities.

Attached to this letter is a copy of a plat providing a 10' drainage easement. A 10' drainage easement on lot number 54 granted with the Glenridge Park plat plus the 10' easement shown on the attached plat provides a full 20' drainage easement for the Rundown from Linn Avenue.

Comment #3.
Attached is a proposed infrastructure list.

Comment #4.
Attached are calculations for four inlet capacities. Catch Basin #4 is within the 10' Rundown channel from Linn Avenue. The purpose of this inlet is to intercept off site flow and take it underground to avoid nuisance water for residents of Glenridge Park. Catch Basin #3 is a larger cattle guard type to intercept larger off site flow and the flows from Glenridge Park and take these flows underground. Catch Basins #1 and #2 are at the low point in Glenridge Park subdivision. Grades are such that off site flows may be intercepted by any of these catch basins.

Refer to the second page in Appendix B of the Drainage Report, that hydrologic calculation near the bottom shows a runoff volume equal to 2.1743 Ac-Ft. This is the volume at which time the underground storage and street storage is full. The peak discharge rate is 30 cfs at 1.367 hours

RECEIVED
MAR 4 1996

RECEIVED
MAR - 7 1996

into the 100 year 6 hour storm. This indicates that as long as we have a combined inlet capacity of 30 cfs all runoff from Glenridge Park and off site will go underground up to that time. Once the on site storage is full and backs up into the streets, the excess cfs and volume will flow out Glenridge Park Lane into Skyline Road. We actually have greater combined inlet capacity than 30 cfs, but that is due to a selection of standard inlets rather than sized for a certain capacity.

Comment #5.
We understand your concern and will have the owners Surveyor provide in his certification with horizontal control the finished floor elevation. This Certification will be available before the Builder pours the finished floor concrete.

Comment #6.
I have brought this comment to the attention of the Owners. The will look for a better location.

Comment #7.
We have collected survey data on Skyline Road between Juan Tabo and this site for the 24" RCP storm drain. Plan and Profile sheets will be prepared and submitted for your review.

We are hopeful DRB will approve the preliminary plat and site development plan, giving Fred Aguirre final signature when you are satisfied with answers to your comments and the Drainage Report.

Sincerely,

James D. Smith, P.E.

Attachment:
Exhibit "D", Infrastructure List.
Inlet capacity calculations - 13 pages.

Resubmitted Corrected Implist prior to BP

D.R.B. Case No. 95-358
D.R.C. Project No. _____
Date Submitted _____

EXHIBIT "D"
to Subdivision Improvement Agreement

DEVELOPMENT REVIEW BOARD (D.R.B.)
REQUIRED INFRASTRUCTURE LISTING
for GLENRIDGE PARK JOINT VENTURE

Following is a summary of Public/Private Infrastructure required to be constructed or financially guaranteed to be constructed for the above development:

Size	Type Improvement	Location	From	To
6"	Water Line	Linn Way	Exist. Kirby St. 12" CIP	Tie in Hendren Lane
8"	Sanitary Sewer	Linn Way	Exist. Kirby St. 12" VCP new MH	MH in Hendren Lane
6"	Water Line	Hendren Lane	Linn Way	Tie into Skyline Rd. 6" CIP
8"	Sanitary Sewer	Hendren Lane	Linn Way MH	MH near Skyline Rd. R/W
28' F-F	Residential Paving, C&G, 4' sidewalk both sides	Glenridge Park Lane	Skyline Road	Linn Way
28' F-F	Residential Paving, C&G, 4' sidewalk both sides	Linn Way	Glenridge Park Lane	Hendren Lane
28' F-F	Residential Paving, C&G, 4' sidewalk both sides	Hendren Lane	Linn Way	Skyline Road
125 LF ~~863 LF~~ 672 LF	Drainage Rundown	Easement	Linn Way	Linn Avenue
560 LF	24" RCP Storm Drain + Assoc MH	Skyline Rd.	W of Kirby Street	E of Juan Tabo

On site storm drainage facilities to be privately maintained and owned.

Prepared by: _____
Print Name: _____
Firm: Souder, Miller & Associates

Limiter for Financial Guarantee Release

Development Review Board Member Approvals

_____ Transportation Dev. Date

_____ Utility Dev. Date

_____ Parks & Gen. Service Date

_____ City Engineer/Hydrology Date

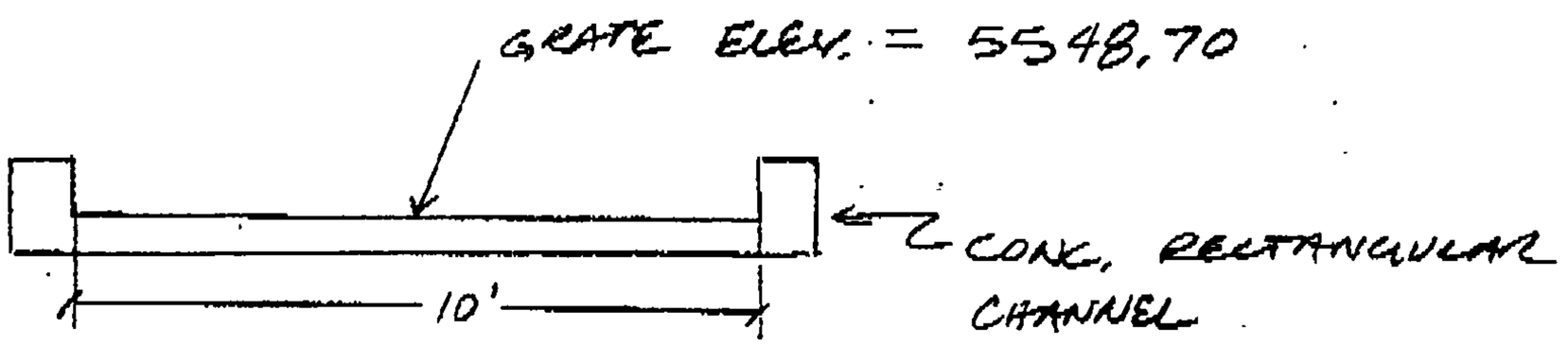
_____ DRB Acting Chair Date

SUBJECT CATCH BASIN 4 CAPACITY PROJECT 7062 PAGE 1/3

CLIENT GLENRIDGE DATE 2/23/96 BY DWL

CHECKED BY

CATCH BASIN 4



CHANNEL CROSS SECTION

GRATE CAPACITY

USING NEENAH R-4999-L9, AND PAGE 56 OF INLET CAPACITIES MANUAL

Q_{DESIGN} = 10 CFS

CHANNEL SLOPE = 0.037 FT/FT = $S_L \cong 0.03$

100% OF FLOW WILL BE CAPTURED AT $\frac{10\ CFS}{10\ FT} = 1\ CFM/FT$

ACTUAL CAPACITY AT $S_L = 0.03 \cong 3.5\ CFS/FT = 3.5(10')$
$= 35\ CFS$

18 R.C.P. CAPACITY

IGNORING ENTRANCE HEAD LOSS AND USING FLOW MASTER(TM)

SLOPE = 0.024
n = 0.013
$Q_{FULL} = 16.27\ CFS < 35\ CFS$

$Q_{FULL} = 16.27\ CFS > 10\ CFS\ (Q_{DESIGN})$

∴ 18" RCP WILL LIMIT INLET CAPACITY AND ALLOW Q_{DESIGN}.

INLET CAPACITY = 16.27 CFS $\cong$ **16 CFS**

Circular Channel Analysis & Design
Solved with Manning's Equation

Open Channel - Uniform flow

Worksheet Name: glenridge

Comment: 18 inch RCP

Solve For Full Flow Capacity

Given Input Data:

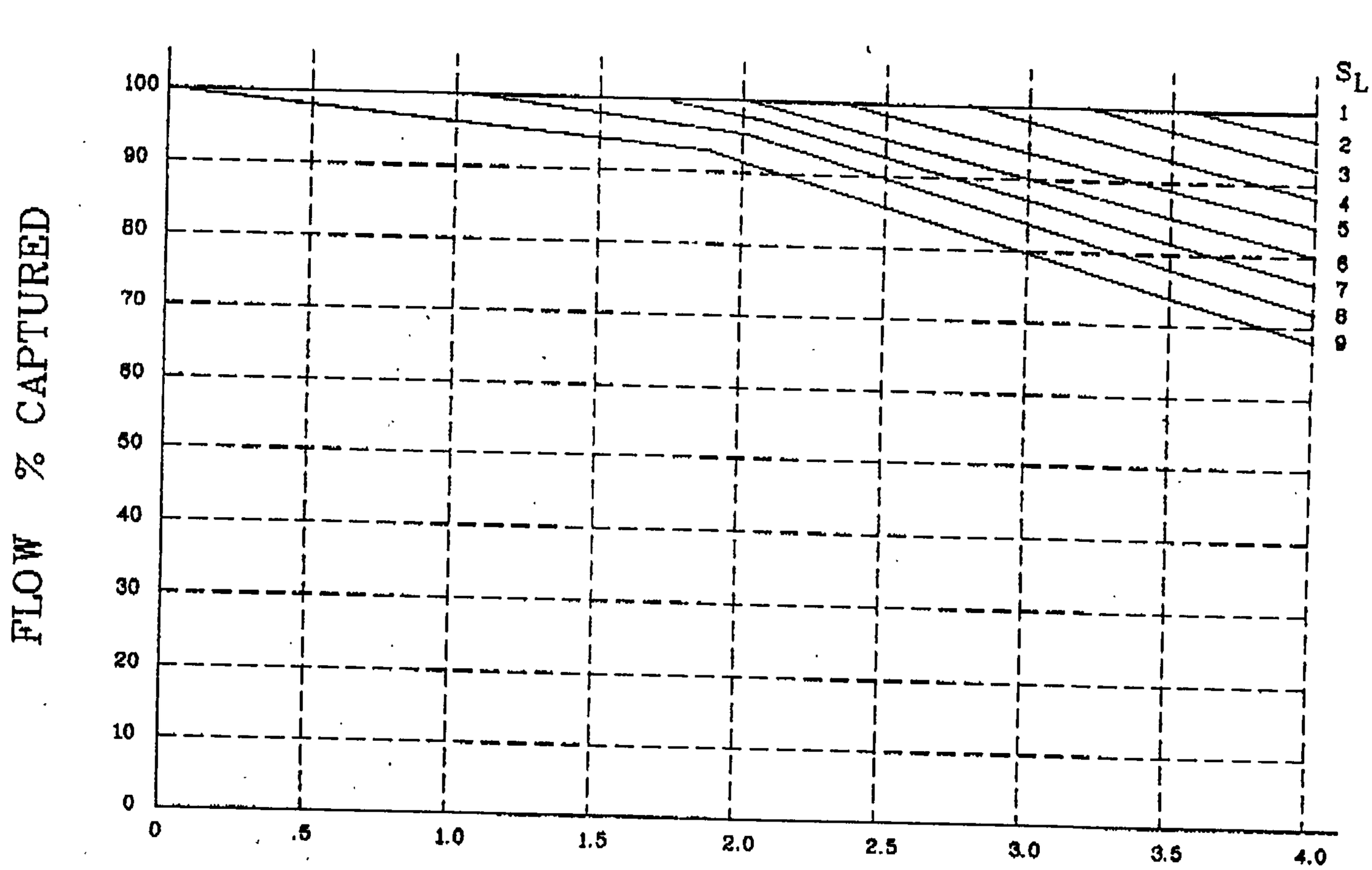
Diameter.....	1.50 ft
Slope.....	0.0240 ft/ft
Manning's n.....	0.013
Discharge.....	16.27 cfs

Computed Results:

Full Flow Capacity.....	16.27 cfs
Full Flow Depth.....	1.50 ft
Velocity.....	9.21 fps
Flow Area.....	1.77 sf
Critical Depth....	1.43 ft
Critical Slope...	0.0208 ft/ft
Percent Full.....	100.00 %
Full Capacity.....	16.27 cfs
QMAX @.94D.....	17.51 cfs
Froude Number.....	FULL

Open Channel Flow Module, Version 3.10 (c) 1990
Haestad Methods, Inc. * 37 Brookside Rd * Waterbury, Ct 06708

R-4999-L9

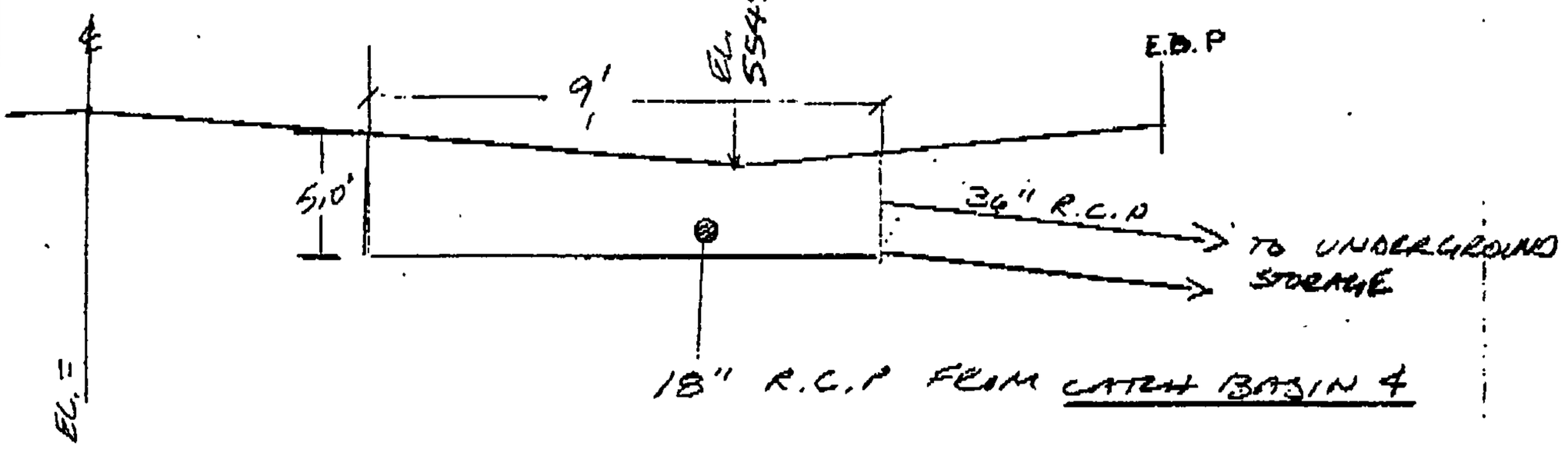

FLOW % CAPTURED
100
90
80
70
60
50
40
30
20
10
0
0
.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
S_L
1
2
3
4
5
6
7
8
9
FLOW CFS/ft

SUBJECT CATCH BASIN 3 CAPACITY PROJECT 7062 PAGE 1/5

CLIENT DATE 2/23/96 BY DWJ

CHECKED BY

CATCH BASIN 3



STREET CROSS SECTION

18" R.C.P. FROM CATCH BASIN 4 WILL HAVE MAXIMUM Q
= 10 CFS

Q_{PEAK} = 45 CFS. (HYMO, 194)

$Q_{PEAK\ DESIGN}$ = 45 - 10 CFS = 35 CFS (FOR INLET)

USING A NEENAH R-4999-L9 WITH

LONGITUDAL SLOPE = S_L = 0.01 FT/FT
GRATE WILL CAPTURE 4.0 CFS/FT (INLET GRATE CAPACITIES MANUAL, NEENAH FOUND. P. 58)

LENGTH OF GRATE REQUIRED

35.0 CFS / 4.0 CFS/FT = 8.75 ≅ 9.0 FT (3-3FT SECTIONS)

INLET TRENCH VOLUME (APPROXIMATE)

HT x WIDTH x LENGTH = 5' x 2.2' x 9' = 99 FT^3

AT Q_p = 45 CFS, TRENCH WILL FILL IN $\frac{99\ FT^3}{45\ CFS}$ = 2.2 SEC.

THE 36" R.C.P. DRAIN CAPACITY IS 47 CFS (FLOWMASTER™)
SOME HEADLOSS IN THE DRAIN EFFICIENCY DUE TO 18" R.C.P. ENTRANCE AND ENTRANCE INTO 36" R.C.P.

F

SUBJECT CATCH BASIN 3 CAPACITY PROJECT 7062 PAGE 2/5

CLIENT GLENRIDGE DATE 2/23/96 BY DWJ

CATCH BASIN 3 CHECKED BY

ESTIMATE HEADLOSS AND Q FOR DRAIN FROM CATCH BASIN 3.

USE CULVERT FLOW

$$Q = C_d A \sqrt{2gh'} \quad (\text{DPM } 22.3)$$

$$h' = h - h_{entrance} - h_f$$

h = HEAD FOR 36" R.C.P. = 150 FT (0.005 FT/FT) = 0.75'

$$h_{ent.} = K_e \frac{V^2}{2g} = 0.50 \left(\frac{(7.6)^2}{2(32.2)}\right) = 0.45'$$

↑ SQ. EDGE

HAZEN WILLIAMS, $h_f = \dfrac{3.022\, V^{1.85}\, L}{C^{1.85}\, D^{1.165}}$

$$= \frac{3.022\,(7.6)^{1.85}\,150}{(100)^{1.85}\,(3)^{1.165}} = 1.07$$

$$A = \pi r^2 = 3.14(1.5)^2 = 7\ FT^2$$

C_d = 0.61 (FLUID SEPARATES)
0.82 (NO FLUID SEPARATION)

$$\boxed{Q_{0.61} = 30\ CFS}$$

$Q_{0.82}$ = 40 CFS

CONSERVATIVELY $Q_{.61}$ = 30 CFS MEANS THAT AT PEAK FLOW, 45 - 30 = 15 CFS OVER FLOWS ONTO LINN WAY

Circular Channel Analysis & Design
Solved with Manning's Equation

Open Channel - Uniform flow

Worksheet Name: glenridge

Comment: 36 in. RCP

Solve For Actual Depth

Given Input Data:

Diameter.....	3.00 ft
Slope.....	0.0050 ft/ft
Manning's n.....	0.013
Discharge.....	45.00 cfs

Computed Results:

Depth.....	2.34 ft
Velocity.....	7.60 fps
Flow Area.....	5.92 sf
Critical Depth....	2.19 ft
Critical Slope...	0.0059 ft/ft
Percent Full.....	78.13 %
Full Capacity.....	47.16 cfs
QMAX @.94D.....	50.73 cfs
Froude Number.....	0.87 (flow is Subcritical)

Open Channel Flow Module, Version 3.10 (c) 1990
Haestad Methods, Inc. * 37 Brookside Rd * Waterbury, Ct 06708

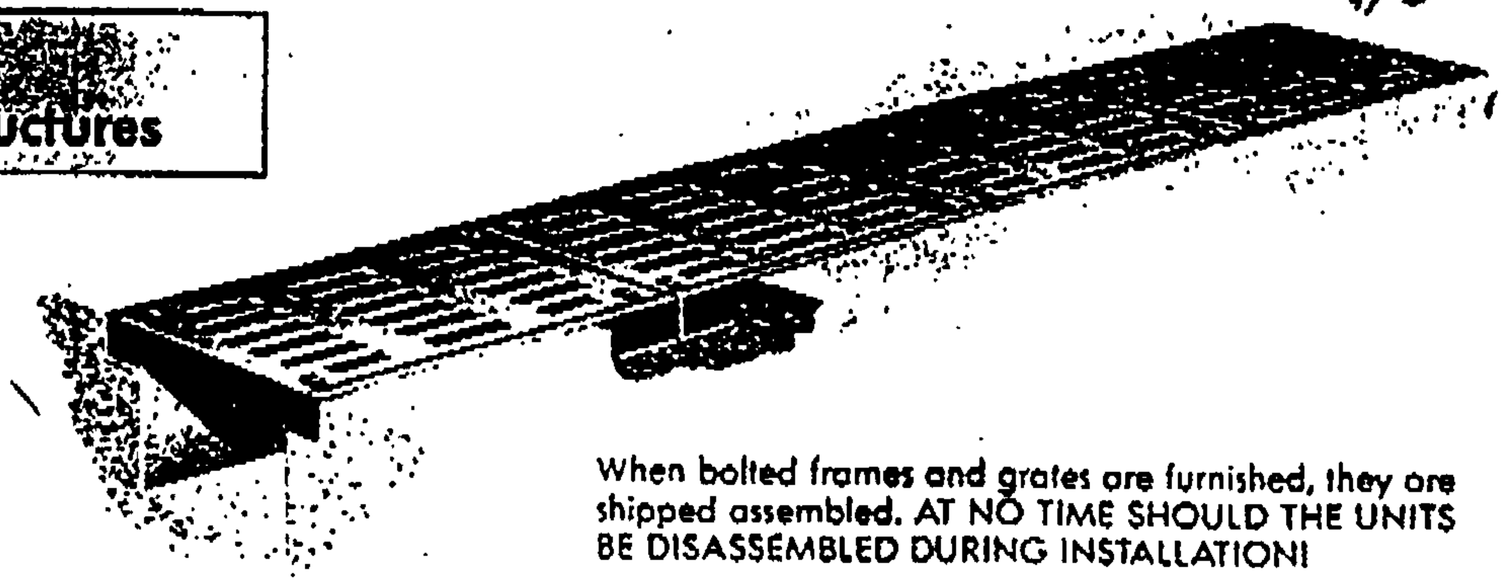
4/5

R-4999 Series Bolted Transverse Drainage Structures

Heavy Duty

Illustrating flat type surface showing Type X frame and Type C grate.

Standard frame and cover sections of this type are bolted and manufactured in 24" standard lengths.

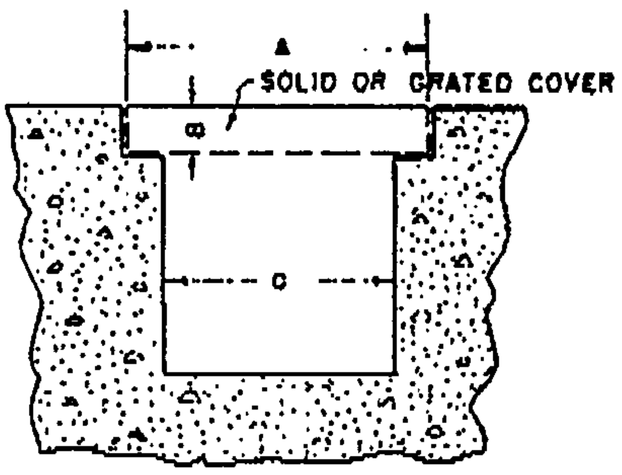


When bolted frames and grates are furnished, they are shipped assembled. AT NO TIME SHOULD THE UNITS BE DISASSEMBLED DURING INSTALLATION!

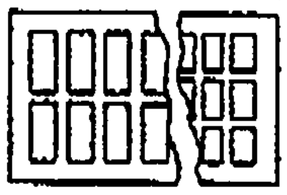
Read Carefully Before Ordering
Specify:
1. Complete catalog number.
2. Length of structure.
3. Type of cover.
4. Perma-Grip surface if required. (See page 229.)
5. End frame sections and number required per unit.
6. If trench drain grates are to be installed in bicycle traffic areas, please advise so that safety standards described on catalog page 89 can be applied.

Catalog No.	Dimensions in inches			Weight per lineal foot (without frame)					
	A	B	C	Type A	Type C	Type D	Type E	Type P	Frame**
R-4999-AX	8	1½	6	19	22	19	22	25	12
R-4999-BX	10	1½	8	24	27	29	27	31	12
R-4999-CX	12	1½	10	28	31	40	36	37	12
R-4999-DX	14	1½	12	33	35	52	47	45	12
R-4999-EX	17	1½	15	39	52	55	49	—	12
R-4999-FX	20	1½	18	54	67	70	70	—	12
R-4999-GX	23	1½	21	60	77	85	—	—	12
R-4999-HX	26	1½	24	71	100	85	—	—	12
R-4999-JX	30	2	27	100	120	100	—	—	17
R-4999-KX	33	2	30	110	140	150	—	—	17
R-4999-LX	36	2	33	120	130	185	—	—	17
R-4999-MX	39	2	36	130	200	180	—	—	17
R-4999-NX	45	2	42	150	245	210	—	—	17
R-4999-OX	51	2	48	190	—	215	—	—	17

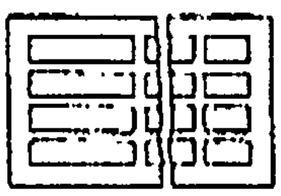
**Weight per foot — includes both sides.



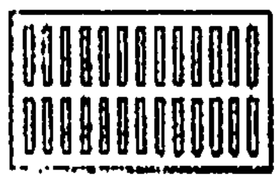
COVER TYPES



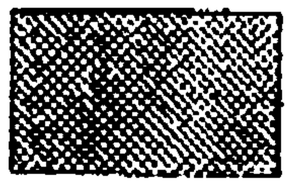
Grate Type A



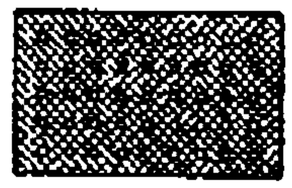
Grate Type C



Grate Type P



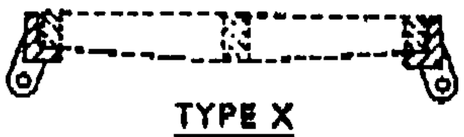
Solid Checkered Type D



Solid Perforated Type E

Type P grates have ¼" slot widths and are especially applicable for areas of heavy pedestrian traffic.

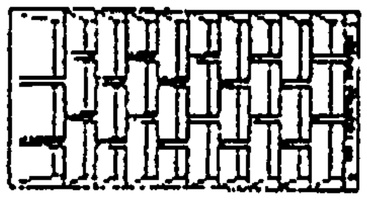
FRAME TYPE



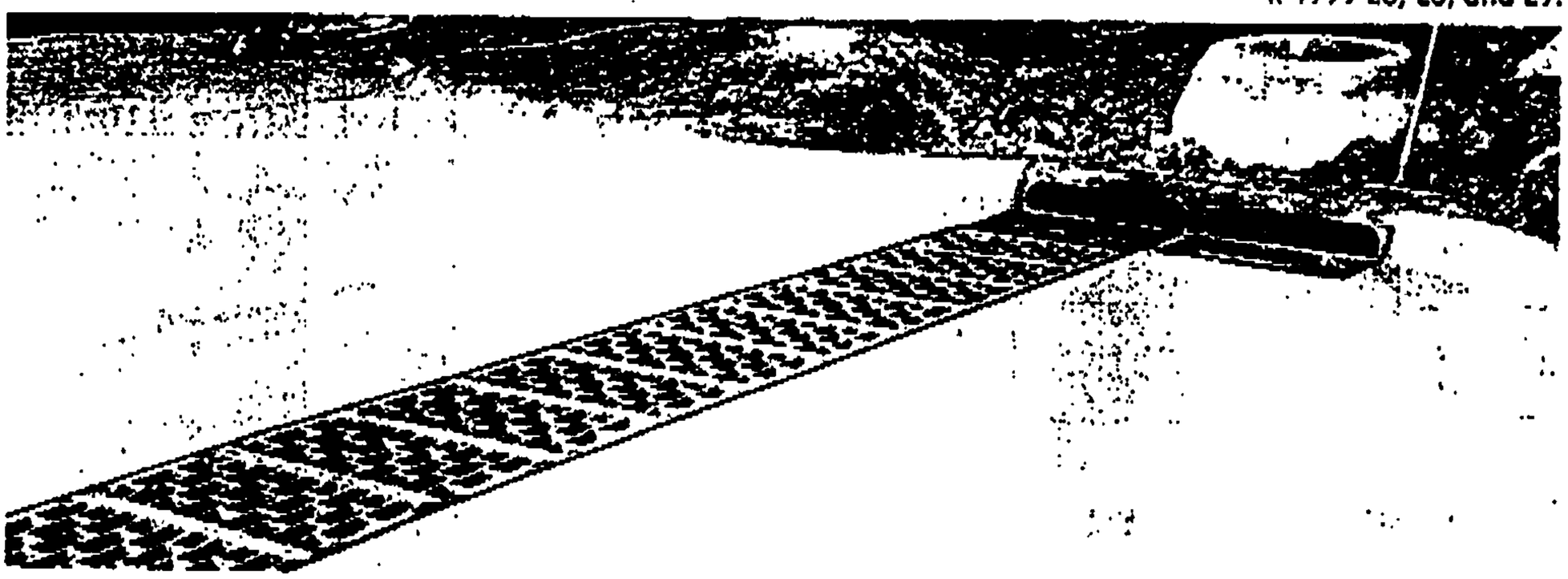
TYPE X

Catalog No.	Dimensions in inches			Grate Wt. per lineal ft.
	A	B	C	
R-4999-L3	14	1½	12	45*
R-4999-L6	24	2	22	88**
R-4999-L9	29¾	2½	26¾	115***

This series furnished standard with Type L grate shown at right.
*Furnished in 2 foot increments only.
**Furnished in 1 or 2 foot increments only.
***Furnished in 1½ or 3 foot increments only.



Grate Type L
Available only on R-4999-L3, L6, and L9.

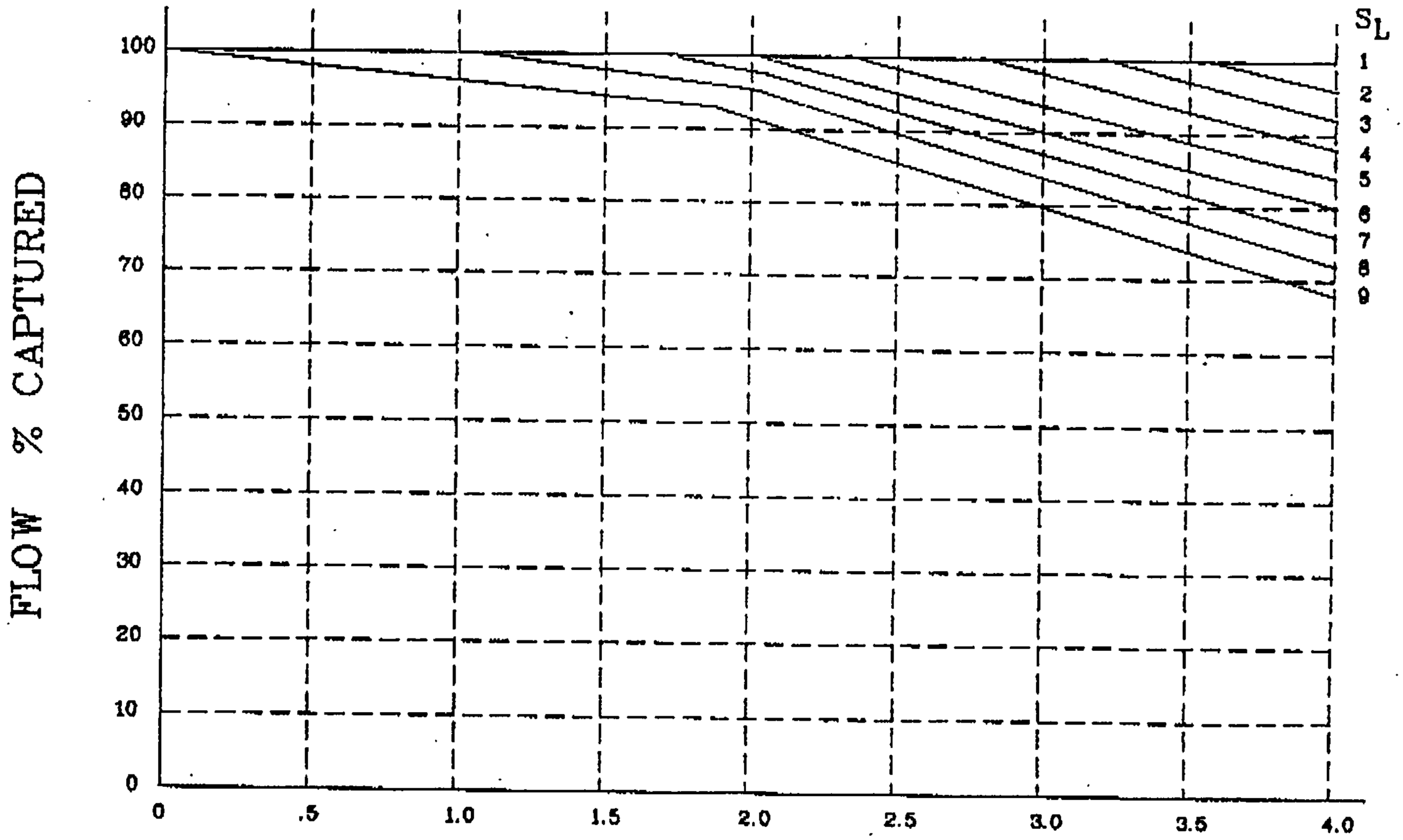


Illustrating R-4999 bolted trench series with Type L grate.

NEENAH FOUNDRY COMPANY

5/5

R-4999-L9

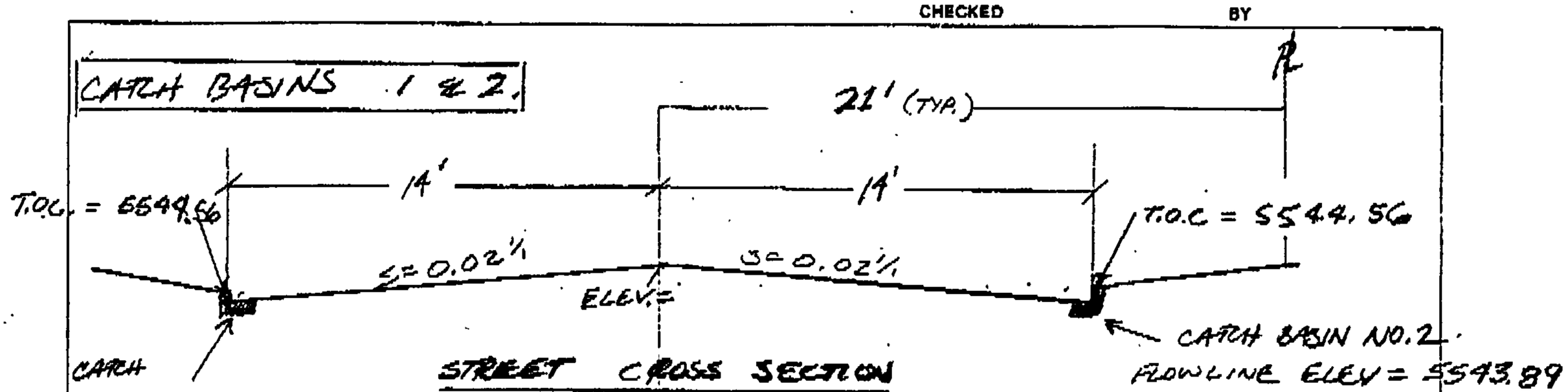

S_L
1
2
3
4
5
6
7
8
9
100
90
80
70
60
50
40
30
20
10
0
FLOW % CAPTURED
0
.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
FLOW CFS/ft

SUBJECT INLET CAPACITIES PROJECT 7062 PAGE 1/5

CLIENT GLENRIDGE PARK DATE 2/23/96 BY DWJ

CHECKED BY

CATCH BASINS 1 & 2.



STREET CROSS SECTION

STREET SLOPE = 0.005 1/1

S_T = 0.02 FT/FT

S_L = 0.005 FT/FT

Q_{PEAK} = 8.65 CFS @ 1.5 HRS (AHYMO.194 FOR CONTRIBUTING AREA)

↳ FOR CB1 AND CB2 TOTAL ∴ ASSUME 4.35 CFS / CATCH BASIN (SEE PAGE 2)

USING A NEENAH # R-3067 LL

SEE TABLE ⟶ K = 15 (SEE PAGE 3)

$Q = K D^{5/3} = 15 (.67)^{5/3}$

Q = 11 CFS FOR EACH CB

PIPE CAPACITY — 24" DIA @ 0.5% (SEE PAGE 415)

PIPE Q = 16 CFS

∴ INLET CAPACITY CONTROLS @ 11 CFS

FOR EACH CB 1 AND CB 2

2/5

AHYMO PROGRAM (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
RUN DATE (MON/DAY/YR) = 02/02/1996
START TIME (HR:MIN:SEC) = 11:17:19 USER NO.= SMITHJIM.194
INPUT FILE = glenarea.dat

*S Glenridge Park Lane Contributing Area Hydrograph
START TIME=0.0 HR PUNCH CODE=0 PRINT LINES=-6
RAINFALL TYPE=1 QUARTER=0.0
RAIN ONE=2.08 IN RAIN SIX=2.6 IN
RAIN DAY=3.2 IN DT=0.033333 HRS

COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.
DT = .033333 HOURS END TIME = 5.999940 HOURS

.0000	.0036	.0072	.0109	.0147	.0186	.0225
.0266	.0307	.0350	.0393	.0438	.0484	.0531
.0579	.0629	.0680	.0732	.0787	.0843	.0901
.0961	.1024	.1088	.1156	.1226	.1300	.1377
.1457	.1542	.1632	.1690	.1751	.1817	.1959
.2275	.2761	.3459	.4413	.5665	.7263	.9251
1.1678	1.3923	1.4862	1.5656	1.6361	1.7003	1.7594
1.8143	1.8656	1.9137	1.9589	2.0016	2.0419	2.0801
2.1162	2.1505	2.1830	2.2139	2.2432	2.2507	2.2578
2.2646	2.2712	2.2774	2.2835	2.2893	2.2950	2.3005
2.3058	2.3110	2.3160	2.3209	2.3257	2.3303	2.3349
2.3393	2.3437	2.3480	2.3522	2.3563	2.3603	2.3643
2.3681	2.3720	2.3757	2.3794	2.3830	2.3866	2.3901
2.3936	2.3970	2.4004	2.4037	2.4070	2.4102	2.4134
2.4166	2.4197	2.4228	2.4258	2.4288	2.4318	2.4347
2.4376	2.4405	2.4434	2.4462	2.4489	2.4517	2.4544
2.4571	2.4598	2.4624	2.4651	2.4677	2.4702	2.4728
2.4753	2.4778	2.4803	2.4828	2.4852	2.4876	2.4900
2.4924	2.4948	2.4971	2.4994	2.5018	2.5040	2.5063
2.5086	2.5108	2.5130	2.5152	2.5174	2.5196	2.5218
2.5239	2.5261	2.5282	2.5303	2.5324	2.5344	2.5365
2.5386	2.5406	2.5426	2.5446	2.5466	2.5486	2.5506
2.5526	2.5545	2.5564	2.5584	2.5603	2.5622	2.5641
2.5660	2.5679	2.5697	2.5716	2.5734	2.5753	2.5771
2.5789	2.5807	2.5825	2.5843	2.5861	2.5878	2.5896
2.5914	2.5931	2.5948	2.5966	2.5983	2.6000	

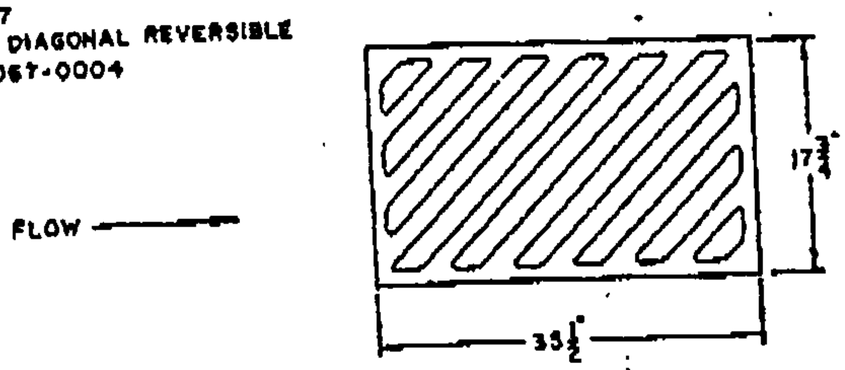
COMPUTE NM HYD ID=2 HYD=101.02 AREA=0.003113 sq mi
PER A=0.0 PER B=25.8 PER C=0.0 PER D=74.2
TP=0.13 HRS MASSRAIN=-1

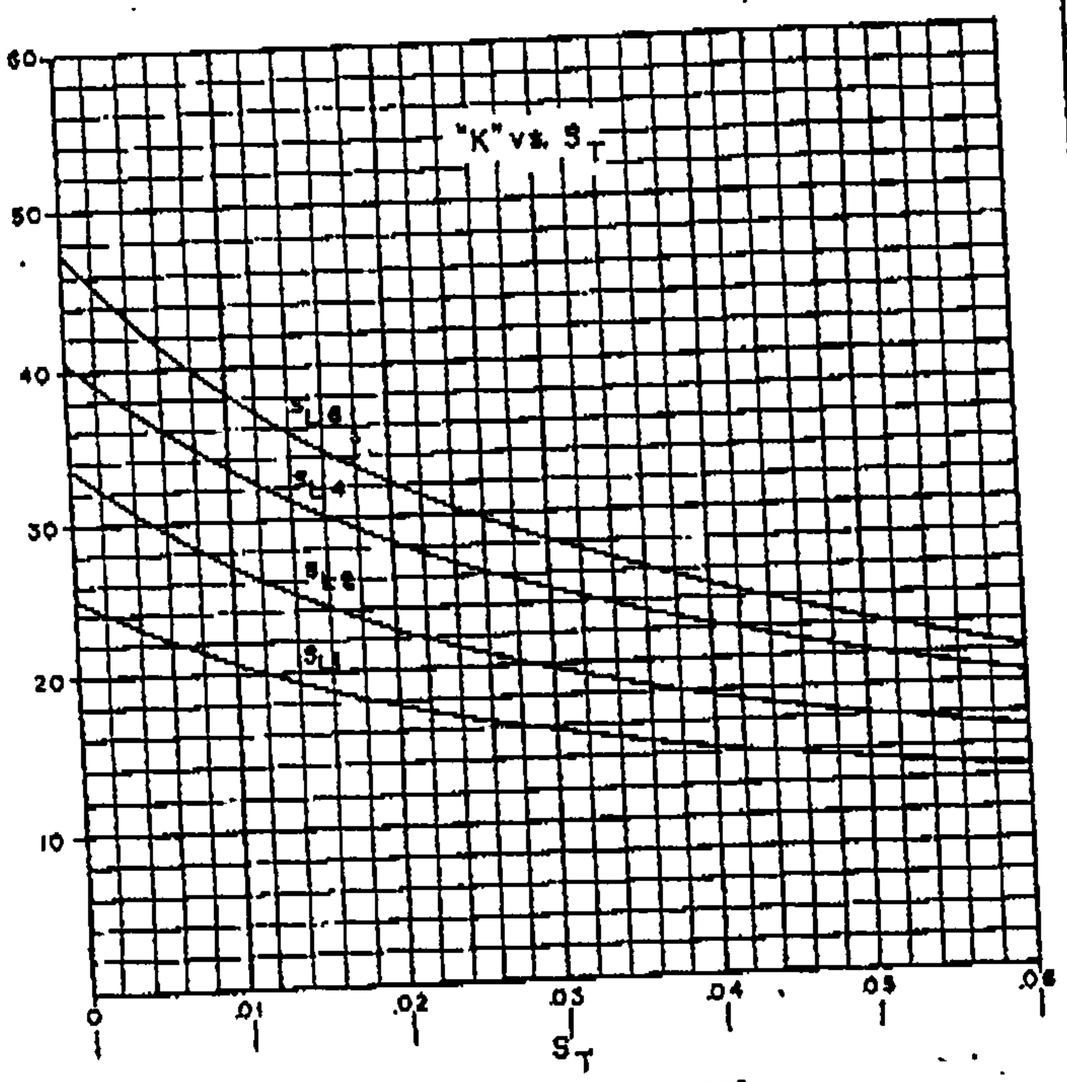
K = .070850HR TP = .130000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 9.3509 CFS UNIT VOLUME = .9989 B = 526.28 P60 = 2.0800
AREA = .002310 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033333

K = .129641HR TP = .130000HR K/TP RATIO = .997240 SHAPE CONSTANT, N = 3.540181
UNIT PEAK = 1.9971 CFS UNIT VOLUME = .9934 B = 323.25 P60 = 2.0800
AREA = .000803 SQ MI IA = .50000 INCHES INF = 1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033333
PRINT HYD ID=2 CODE=1 PARTIAL HYDROGRAPH 101.02

RUNOFF VOLUME = 1.97453 INCHES = .3278 ACRE-FEET
PEAK DISCHARGE RATE = 8.65 CFS AT 1.500 HOURS BASIN AREA = .0031 SQ. MI.

D.- R-3067
IIPTION- DIAGONAL REVERSIBLE
CODE - 3067-0004

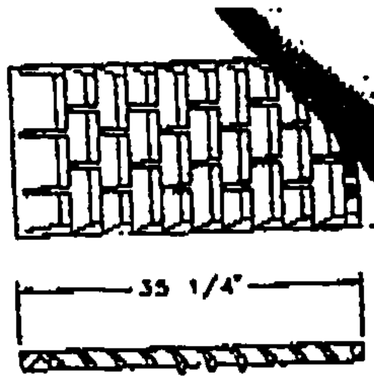


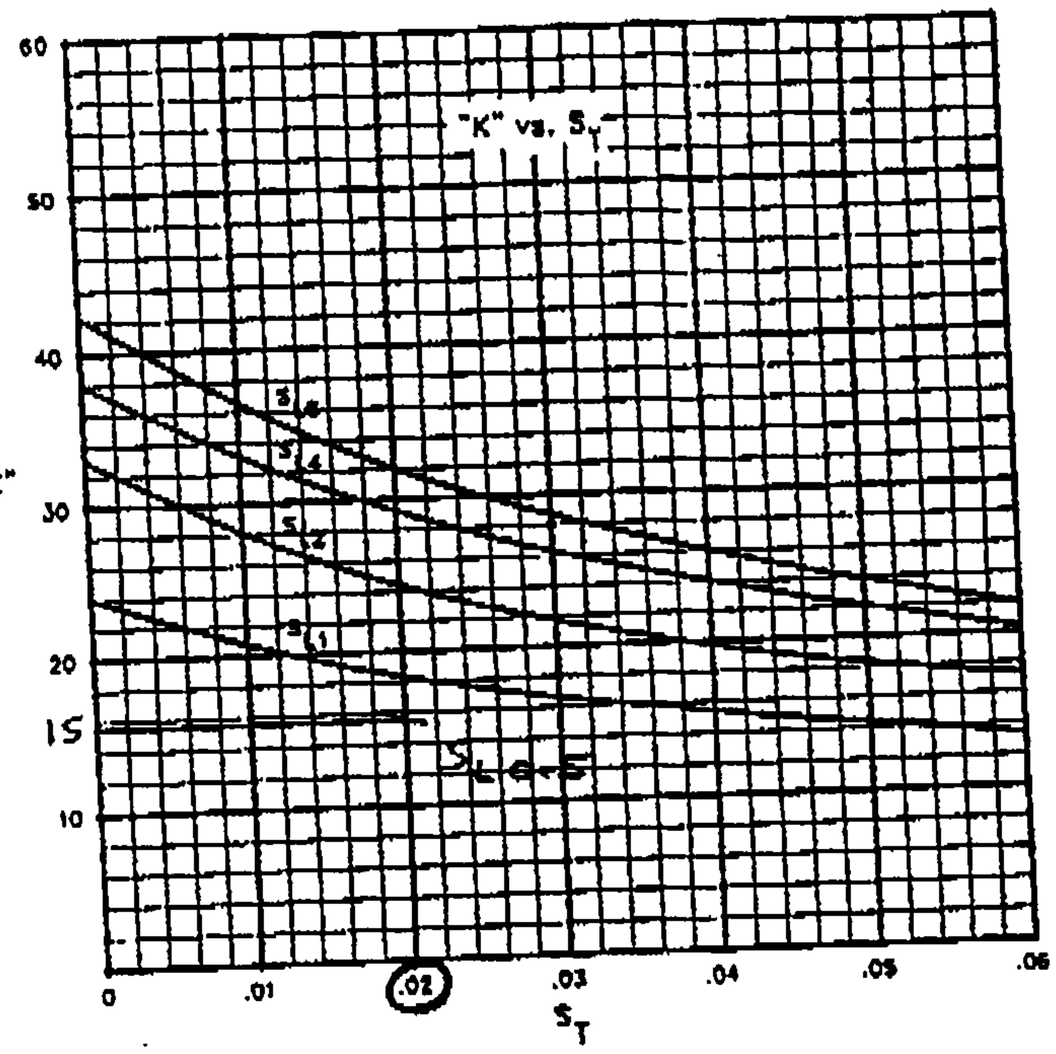


S_T = TRANSVERSE GUTTER SLOPE
S_L = LONGITUDINAL GUTTER SLOPE
K = GRATE INLET COEFFICIENT

CAT. NO. - R-3067-LL
DESCRIPTION = TYPE L
COMP. CODE - 3067-0011

FLOW

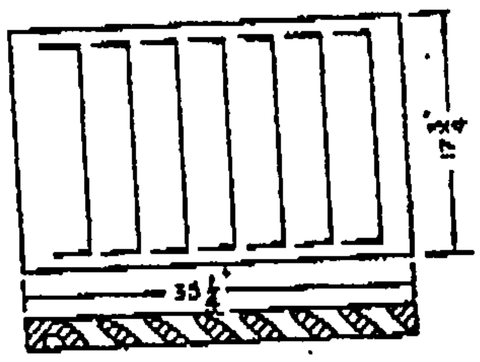


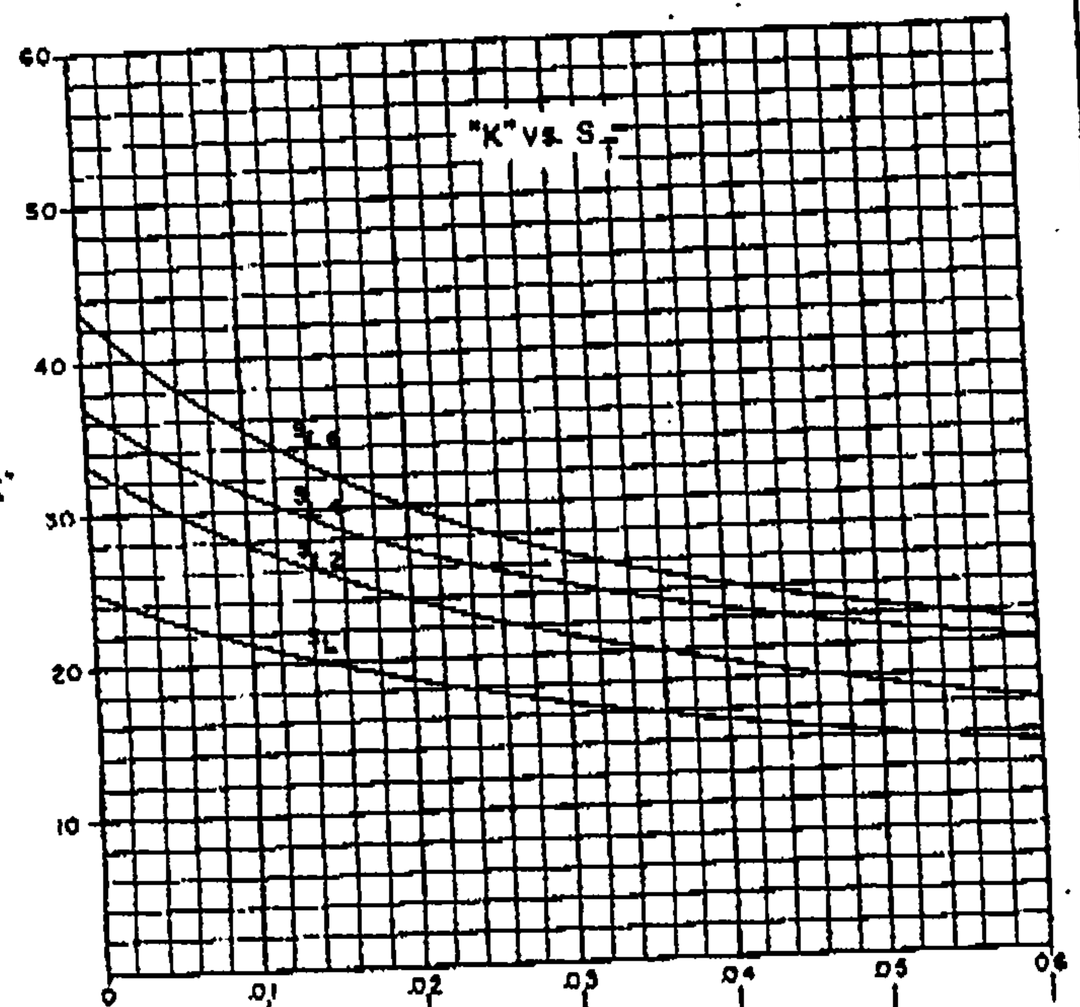


S_T = TRANSVERSE GUTTER SLOPE
S_L = LONGITUDINAL GUTTER SLOPE
K = GRATE INLET COEFFICIENT

T. NO.- R-3067-V
ESCRIPTION- TYPE V
OMP. CODE - 3067-0008

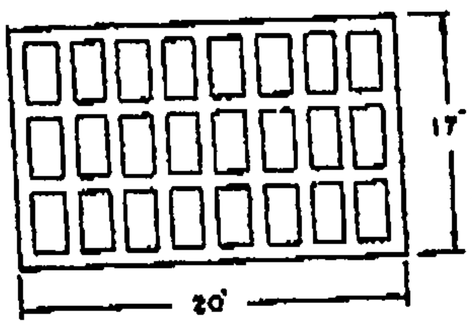
FLOW

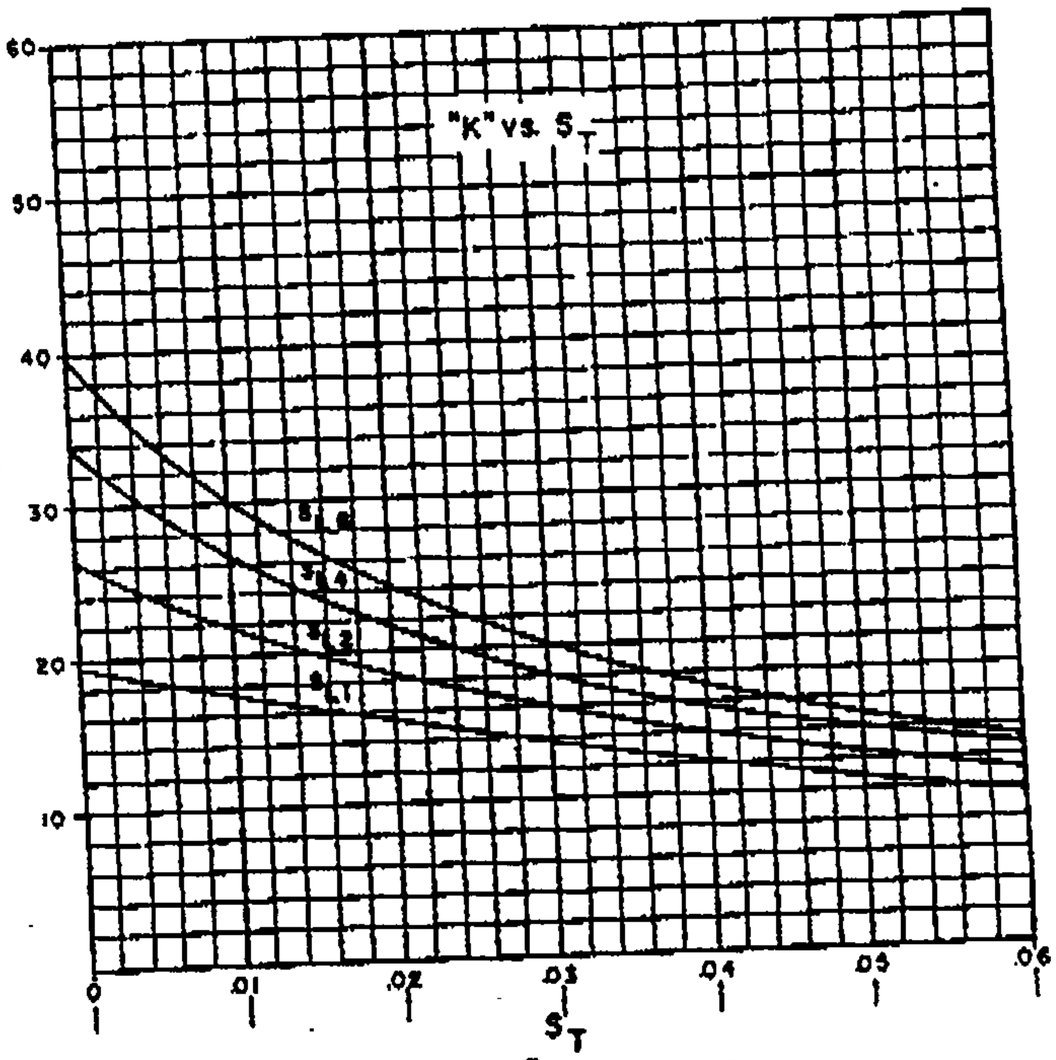




CAT. NO.-R-3070
DESCRIPTION-TYPE A
COMP. CODE - 3070-0002

FLOW





Circular Channel Analysis & Design
Solved with Manning's Equation

Open Channel - Uniform flow

Worksheet Name: glenridge

Description: 24 inch RCP

Solve For Full Flow Capacity

Given Constant Data;

Diameter.....	2.00
Mannings n.....	0.013
Discharge.....	45.24

Variable Input Data	Minimum	Maximum	Increment By
Slope	0.0050	0.0400	0.0050

VARIABLE			COMPUTED	COMPUTED	COMPUTED	COMPUTED
Diameter ft	Channel Slope ft/ft	Mannings 'n'	Discharge cfs	Depth ft	Velocity fps	Capacity Full cfs
2.00	0.0050	0.013	16.00	2.00	5.09	16.00
2.00	0.0100	0.013	22.62	2.00	7.20	22.62
2.00	0.0150	0.013	27.71	2.00	8.82	27.71
2.00	0.0200	0.013	31.99	2.00	10.18	31.99
2.00	0.0250	0.013	35.77	2.00	11.39	35.77
2.00	0.0300	0.013	39.18	2.00	12.47	39.18
2.00	0.0350	0.013	42.32	2.00	13.47	42.32
2.00	0.0400	0.013	45.24	2.00	14.40	45.24

City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

February 15, 1996

Jim Smith
Souder, Miller & Associates
1201 Parkway Drive, Suite C
Santa Fe, NM 87505

RE: GLENRIDGE PARK (L22-D49) DRAINAGE REPORT SUBMITTAL FOR SITE DEVELOPMENT PLAN FOR SUBDIVISION, BUILDING PERMIT, AND GRADING PERMIT APPROVALS. ENGINEER'S STAMP DATED FEBRUARY 6, 1996.

Dear Mr. Smith:

Based on the information provided on your February 7, 1996 submittal, City Hydrology has the following comments:

1. How will the 8 foot diameter storage pipes be accessed and maintained?

2. All on site storm pipe must address maintenance agreements and have easements granted. These easements need to be shown on the plat. Also, the grading plan shows a 20 foot Drainage Easement at the west end of Linn Ave. and the plat shows a 10 foot Drainage Easement. Please update the plat.

Prior to BP →

3. Please provide a copy of your proposed infrastructure list.

Additions to Prior to BP

4. Please provide inlet capacity calculations.

5. The grate elevations of the inlets in Glenridge Park Lane (low point) are shown as 5543.89 feet. Since you plan on ponding 1.25 feet above the top of curb, your finish floor elevations can not be lower than 5546.81, or 2.25 feet above top of curb. I realize that your minimum finish floor elevation is only 0.01 foot lower, however, I am concerned that if the floor elevation is built too low, the home will flood. In essence, you have simulated a floodplain condition in this area and

it is critical that the finish floor is built no less than 5546.81 feet below sea level. Even though this would not be considered a true floodplain, this ponding information needs to be documented on the plat and or in a Drainage Covenant.

6. Can the mailboxes be relocated to an area less likely to flood?

7. Please provide plan and profile drawings for the storm drain line you are constructing adjacent to Skyline between Juan Tabo and this site.

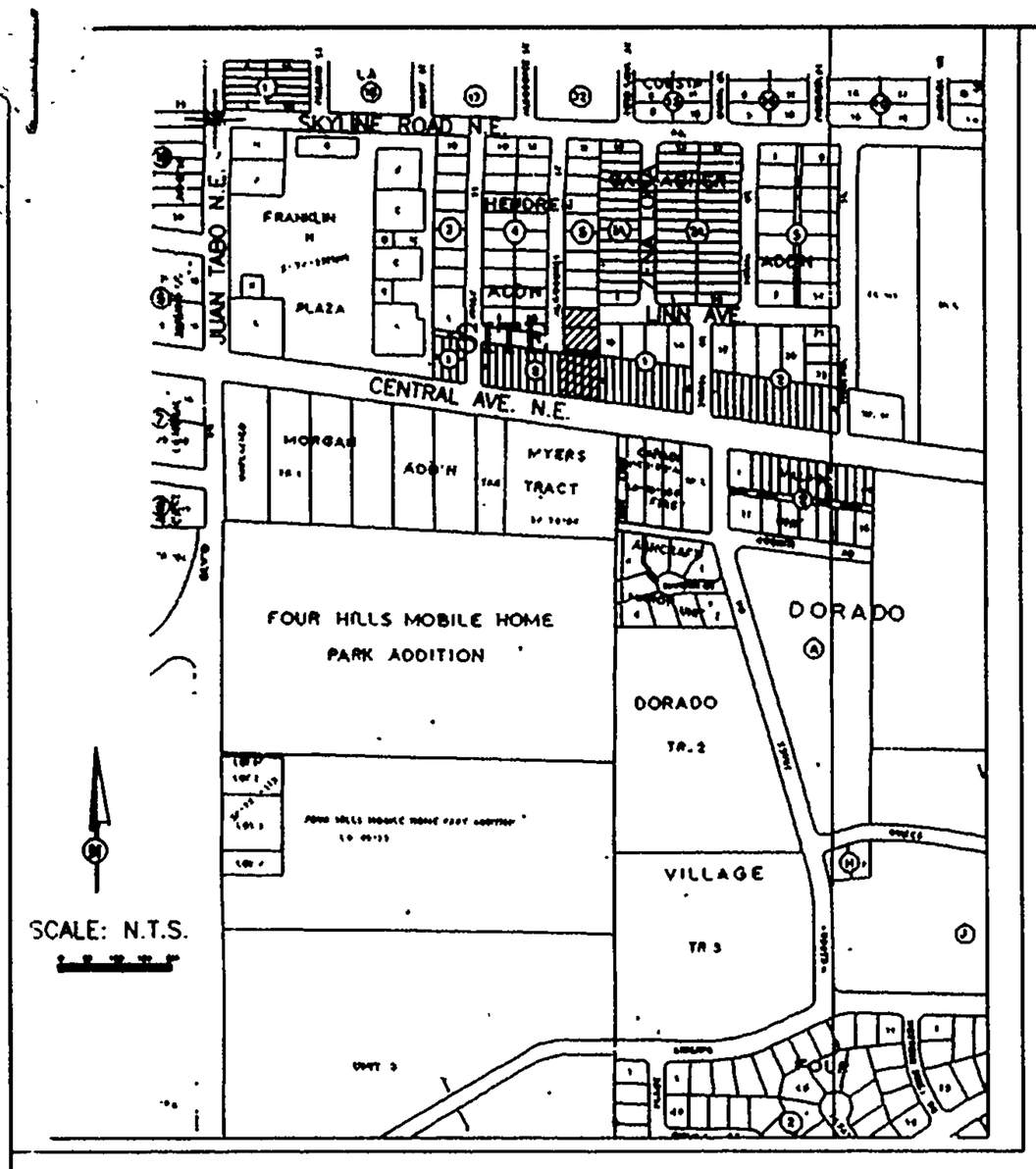
If I can be of further assistance, please feel free to contact me at 768-3622.

Sincerely,

Lisa Ann Manwill
Engineering Assoc./Hyd.

c: Fred Aguirre
Andrew Garcia
File

TALOS LOG. No. 951127153906S9



ZONE ATLAS INDEX MAP No. L-22

Vicinity Map

SUBDIVISION DATA:

Case No. _____

Zone Atlas No. L - 22 - Z

Gross Subdivision Acreage: 0.7892 ACRE

Total No. of Lots Created: 1

Total Mileage of Full-Width Streets Created: 0

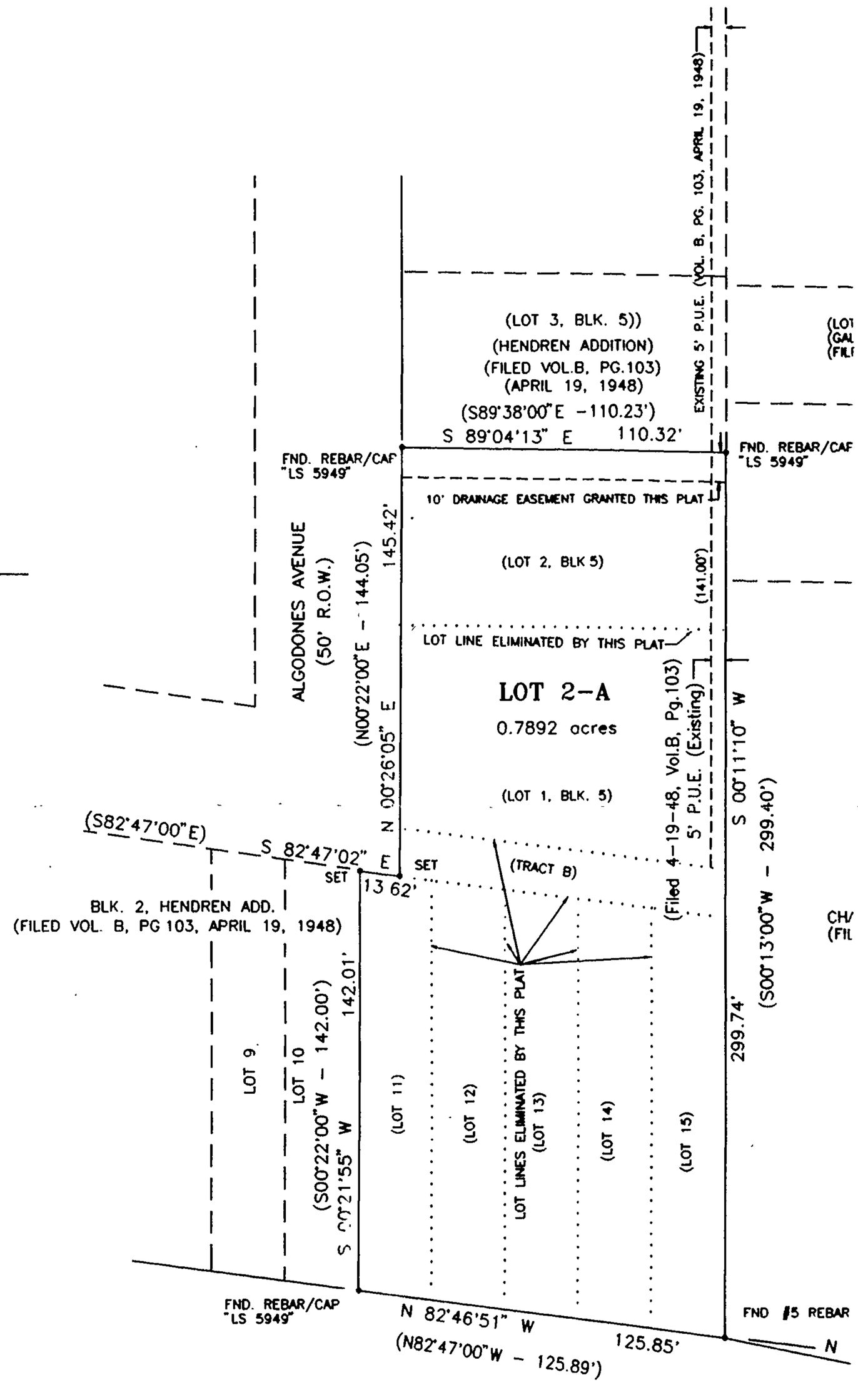
Date of Field Survey: OCTOBER, 1995

DISCLOSURE STATEMENT:

THE PURPOSE OF THIS PLAT IS TO ELIMINATE LOT LINES AS SHOWN HEREON, AND TO GRANT DRAINAGE EASEMENT AS SHOWN HEREON.

NOTES:

1) CITY OF ALBUQUERQUE WATER AND SANITARY SEWER SERVICE IS AVAILABLE TO THESE PROPERTIES.



NOTES:

1) BASIS OF BEARINGS: South Boundary Hendren Addition.
2) All distances are ground.
3) Plat shows all easements of record.
4) Data in Parenthesis are record from Original Plat of Hendren Addition.
5) SET indicates #4 rebar/cap stamped "PS 6256"
6) Rotate Plat bearings Clockwise 00°07'40" to Grid.

THIS IS TO CERTIFY THAT TAXES ARE CURRENT AND PAID ON UPC#: _____

PROPERTY OWNER OF RECORD: _____

BERNALILLO COUNTY TREASURER'S OFFICE:

_____

SURVEYOR'S CERTIFICATE

I, Jerry Nickels, a Registered Professional Land Surveyor under the Laws of the State of New Mexico, do hereby certify that this Plat was prepared by me, meets the minimu requirements of monumentation and surveys of the Albuquerqu Subdivision Ordinance, and that it is true and correct to the b of my knowledge and belief.

Jerry Nickels, N.M. L.S. No. 6256 Februar

PLAT OF LOT 2-A
HENDREN ADDITION
SECTION 27, T.10N., R.4E., N.M.P.M.
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
February, 1996

LEGAL DESCRIPTION

A certain tract of land situate within Section 27, T.10N., R.4E., N.M.P.M., City of Albuquerque, Bernalillo County, New Mexico, and being comprised of Lot 11, Lot 12, Lot 13, Lot 14, and Lot 15, Block Two, Tract B, and Lot 1 and Lot 2, Block Five, of the HENDREN ADDITION, as the same is shown and designated upon the Plat of said Hendren Addition, filed in the Office of the County Clerk of Bernalillo County, New Mexico, on April 19, 1948, at Volume B, Folio 103, and being more particularly described as follows:

BEGINNING at the Southeast corner of the herein described tract, also being the Southeast corner of said Lot 15, Block 2, of the Hendren Addition, also being a point in the Northerly right of way line of Central Avenue, N.E. from whence the Aluminum Cap marking A.C.S. Station 4-L22 bears S78°31'28"E and is 1336.36 feet distant;
THENCE from the above said Point of Beginning, N82°46'51"W along said Northerly right of way line of Central Avenue N.E. a distance of 125.85 feet to the Southwest corner of said Lot 11, being the Southwest corner of the herein described tract;
THENCE N00°21'55"E along the Westerly line of said Lot 11 a distance of 142.01 feet to the Northwest corner of said Lot 11;
THENCE S82°47'02"E along the North line of said Lot 11 a distance of 13.62 feet to the Southwest corner of the above said Tract B;
THENCE N00°26'05"E along the Westerly line of the above said Tract B, Lot 1 and Lot 2 of Block Five of said Hendren Addition a distance of 145.42 feet to the Northwest corner of said Lot 2, Block Five, and also being the Northwests corner of the herein described tract;
THENCE S89°04'13"E along the North line of said Lot 2, Block Five of the Hendren Addition a distance of 110.32 feet to the Northeast corner of said Lot 2, Block Five of the Hendren Addition, also being the Northeast corner of the herein described tract;
THENCE S00°11'10"W along the East line of said Hendren Addtion a distance of 299.74 feet to the point and place of beginning, and containing an area of 0.7892 acre, more or less.

FREE CONSENT AND DEDICATION

The foregoing Replat of the described tract of Land situate within Section 27, T.10N., R.4E., N.M.P.M., City of Albuquerque, Bernalillo County, New Mexico, and the Granting of Drainage Easement as shown hereon is the with free will and consent and in accordance with the desires of the Undersigned owners and proprietors thereof.

OWNER(S) ROBERT E. MORRIS, JR.

ACKNOWLEDGEMENT
STATE OF NEW MEXICO
ss
COUNTY OF BERNALILLO

The foregoing instrument was acknowledged before me this 22 day of Feb, 1996 by ROBERT E. MORRIS, JR.

3/17/97
My Commission Expires

NOTARY PUBLIC

CITY/COUNTY APPROVALS:

A.M.A.F.C.A.	Date
CITY SURVEYOR	Date
PROPERTY MANAGEMENT	Date
CITY ENGINEER	Date
TRANSPORATION DEVELOPMENT	Date
CITY PLANNING DIRECTOR	Date
U.S. WEST	Date
P.N.M. ELECTRIC SERVICES	Date
P.N.M. GAS SERVICES	Date
PARKS AND GENERAL SERVICES DEPT.	Date
UTILITIES DEVELOPMENT	Date
JONES CABLE CO.	Date

RECEIVED 1996 APR 1

ACS STA. No. 4-L22
Y= 1,480,446.81
X= 423,364.73
Z= 5583.831
N.M. STATE PLANE
COORINATES (CENTRAL ZONE)
C.F. = 0.99964079
ΔΘ = -00°08'50"
DATUM = 1927 N.A.D.

SCALE: 1" = 50'

ConSurve Surveying Co.
P.O. Box 9, San Fidel, New Mexico, 87049
(505) 552-9898

996

4-3-96
DATE

PROJECT NO. 5410.01

STANDARD REVIEW COMMENT SHEET

SHEET _____ OF ___

Billy Goolsby /CHAIRMAN DRC-APPLICANT
(USER DEPT./DIVSION)

DM: Lisa Manwell /HYDROLOGY/ENGINEERING
(REVIEWER/REVIEW DEPT./DIVSION)

OJECT: Glenridge Park

OJECT DESCRIPTION STATUS ☐ Pre-Design ☒ Preliminary ☐ Final

FOR REVIEWER DEPT./DIVSION			For User Dept.	
Page No.	Com. No.	COMMENTS	A/D	Remark
	+	Dimension of Easements => Private Easements, Owner maintains systems		
	+	Show typ lot Grading Scheme		
	+	Any type of inlet @ end of Lane to catch offsite flow?		
	+	Show Grades in Common area & Parking		
	+	Show water block & Exist Street Elevs on full out detail		
	+	Talk to Fred about cross-lot swales		

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

March 20, 1996

Jim Smith
Souder, Miller & Associates
1201 Parkway Drive, Suite C
Santa Fe, NM 87505

RE: GLENRIDGE PARK (L22-D49) DRAINAGE REPORT SUBMITTAL FOR SITE DEVELOPMENT PLAN FOR SUBDIVISION, BUILDING PERMIT, AND GRADING PERMIT APPROVALS. ENGINEER'S STAMP DATED MARCH 5, 1996.

Dear Mr. Smith:

Based on the information provided on your March 7, 1996 submittal, the above referenced project is approved for Site Development Plan for Subdivision and Grading Permit. Prior to Building Permit approval, please provide the following information:

1. The Infrastructure List submitted needs to include verbiage stating that the 24 inch storm drain line includes all associated manholes. Please double check the linear footage of the 24" storm drain pipe required. My calculations show approximately 680 feet of pipe required. Also, please insert 24" RCP under the "Size" column and the linear footage under the "Type Improvement" column.

2. A line item, on the infrastructure list, stating that an "Engineer's Certification for grading(including retaining walls and private drainage systems) is required for release of Financial Guarantees."

3. Easements and covenants (including maintenance agreements) for all on-site drainage systems must be submitted prior to Building Permit release. As soon as this paperwork is signed by the owners, and ready to submit to the City for processing, let me know. I may be able to expedite a Building Permit approval with a copy of the documents.

If I can be of further assistance, please feel free to contact me at 768-3622.

Sincerely,

Lisa Ann Manwill
Engineering Assoc./Hyd.

c: Andrew Garcia
File

THE CITY OF ALBUQUERQUE IS AN EQUAL OPPORTUNITY/REASONABLE ACCOMMODATION EMPLOYER

Can have spill over for something over the 100 yr event to Central Ave.

Glenridge Park Drainage Concept
12100 Skyline Road, Albuquerque, New Mexico
January 22, 1996

The drainage management concept is to construct catch basins in Glenridge Park streets receiving on site runoff and deliver these flows into an underground detention reservoir with an outlet into Skyline Rd. storm sewer east of Juan Tabo Blvd. The off site surface flow from Linn Ave. will be channeled into a catch basin as it enters Glenridge Park and delivered into the underground detention reservoir.

Glenridge Park underground storage volume will approximate 84,000 cubic feet. When the underground reservoir is full, excess water will fill the private street curb to curb. The combined storage volume of streets and underground reservoir will approximate 100,000 cubic feet. A storm that delivers in excess of 100,000 cubic feet will overflow the water block at entrance (Glenridge Park Lane) and flow into Skyline Rd.

The pipe that drains the underground detention reservoir will initially be restricted to one cubic foot per second discharge into the Skyline/Juan Tabo storm sewer system. It is estimated the volume of water on Glenridge Park streets retained in the subdivision will be about 16,000 cubic feet. At a rate of release of one cubic foot per second, it will take 4 hours and 26 minutes to drain the streets into the underground reservoir. A more probable estimate of time to drain the streets is that off site and on site flow will decline to less than one cubic foot per second at the end of the storm, thereby adding to the volume and extending the time the streets will be flooded to 6 or more hours.

Based on a release rate of one cubic foot per second, the 84,000 cubic feet in the underground detention reservoir will take 24 hours to empty. Again the end of the storm will have incoming flows that replace volume that has been discharged into the storm sewer and the overall time to empty the reservoir will be much longer than 24 hours.

The Glenridge Park underground detention reservoir has a storage capacity in excess of the "100 year return period 24 hour storm" discharge from development of Glenridge Park. When Glenridge Park discharge volume is combined with, off site, Linn Ave. volume the capacity of the underground storage will detain a "20 year return period 6 hour storm." Add to the underground capacity the storage possible on Glenridge Park streets and storage volume would equal a "40 year return period 6 hour storm."

The rationale behind this conceptual drainage management plan is that off site peak discharge entering Glenridge Park is 24.6 cubic feet per second from the "100 year return period six hour storm." This discharge rate should be allowed to flow through Glenridge Park and into Skyline Rd. The underground detention reservoir constructed for Glenridge Park will manage its' own discharge and not contribute to down stream flooding during the "100 year return period 24 hour storm."

When constructed, the Glenridge Park drainage system will be required to handle both the off site and Glenridge Park discharge. It is estimated that the "as constructed" Glenridge Park system will have a detention volume of 100,000 cubic feet using both the underground reservoir and the private streets. This volume is equivalent to discharge volume of a "40 year return period 6 hour storm" for the off site contributing basin and Glenridge Park. All storms with 100,000 cubic feet plus discharge volume will flow over the Glenridge Park Lane water block and into Skyline Rd.

Design Criteria:

1. Glenridge Park on site runoff from "100 year return period 24 hour storm" will be detained on site. Glenridge Park underground detention reservoir volume 84,000 cubic feet.
2. Rate of discharge from underground reservoir into Skyline Rd. storm sewer will be one cubic foot per second.
3. Off site flows (Linn Ave.) entering Glenridge Park will flow into a catch basin. The catch basin and pipe connecting to the underground reservoir will catch flows up to 10 cubic feet per second; the excess will flow into the street and be carried through the subdivision to Skyline Rd.
4. Five or more catch basins will be built into Glenridge Park streets and connected to underground detention reservoir for subdivision runoff.
5. Street sections will carry the excess off site flow to Skyline Rd.
6. A center landscaped area, two acres, will infiltrate. Excess storm water from this landscaped area will form a temporary pond, the pond will overflow into Skyline Rd.
7. The underground detention reservoir will be constructed of 7 ft. diameter and 8 ft. diameter corrugated metal pipe. There will be 5 chambers each 370 feet long. The chambers will be interconnected at intermediate points and at outlet manifold.

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

November 8, 1995

C.A. Coonce
C.A. Coonce & Associates
12324 Pineridge NE
Albuquerque, NM 87112

RE: GLENRIDGE PARK (L22-D49) GRADING AND DRAINAGE PLAN FOR SITE DEVELOPMENT FOR SUBDIVISION APPROVAL. ENGINEER'S STAMP DATED 10-25-95.

Dear Mr. Coonce:

Based on the information provided on your October 25, 1995 submittal, City Hydrology has the following comments:

1. You need to prove that there is downstream capacity in the Juan Tabo storm drain system to accept all the flows from your site. Also, please discuss the historic drainage issues of this site.

2. The Central Avenue storm drain line has no downstream capacity, and therefore no flow from the proposed development may enter Central. When regrading this area, please keep in mind that you must provide a water block at the driveway so that no public waters from Central Avenue enter the site.

√3. Please show, on plan sheet, the location of the rundown that takes the offsite flows from Linn Avenue through the development.

4. Off site flows seem to be quite low. The entire Gallagher Addition drains to the dead-end at Linn Avenue. This subdivision appears to be much larger than the 3.2 acres you indicate in your calculations. Please include an off site basin boundary map with your next submittal

√5. Because Linn Avenue conveys public waters, a drainage easement for the offsite flows will be required. Also, your channel must be built to City standards.

THE CITY OF ALBUQUERQUE IS AN EQUAL OPPORTUNITY/REASONABLE ACCOMMODATION EMPLOYER

November 8, 1995
C.A. Coonce
C.A. Coonce & Associates

6. Please indicated how you calculated the time to peak for the AHYMO runs.

7. Show roof drain locations.

8. Be certain to include flow generated from the Commons area, rear yards, off site flows, and the redirected flows from Central when considering downstream capacity at Juan Tabo and Skyline.

9. A concrete channel is required for cross lot drainage. Proper easements and covenant are also required.

10. Please provide pad elevations in conjunction with finish floor elevations.

11. Provide street hydraulic calculations. The hydraulic jump must be contained within the street right-of-way.

In general, the City's main concern is downstream capacity. If there is no downstream capacity, this grading concept will not work. Please be certain to provide adequate supporting documentation and references with your next submittal.

If I can be of further assistance, please feel free to contact me at 768-3622.

Sincerely,

Lisa Ann Manwill
Engineering Assoc./Hyd.

c: Fred Aguirre
Andrew Garcia
File

DRAINAGE INFORMATION SHEET

PROJECT TITLE: GLENRIDGE PARK ZONE ATLAS/ DRNG. FILE #: L-22/D49

DRB #: -95-358 EPC #: Z-93-72 WORK ORDER #: _____

LEGAL DESCRIPTION: HENDREN ADDITION

CITY ADDRESS: 12100 SKYLINE ROAD, N.E., ALBUQUERQUE, NM

ENGINEERING FIRM: C.A. COONCE & ASSOC. CONTACT : C.A. COONCE

ADDRESS: 12324 PINERIDGE, N.E. PHONE: 296-1089

OWNER: GLENRIDGE PARK JOINT VENTURE CONTACT: PETE FORD

ADDRESS: 330 WASHINGTON,S.E., ABQ, N.M. PHONE: 262-9836

ARCHITECT: MASTERWORKS ARCHITECTS CONTACT: JIM CLARK

ADDRESS: 516 11TH ST., N.W., ALBUQUERQUE, NM PHONE: 242-1866

SURVEYOR: CONSURVE SURVEYING CONTACT: JERRY NICKELS

ADDRESS: SAN FIDEL, NM PHONE: (505) 552-9898

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

_____ DRAINAGE REPORT

__X__ DRAINAGE PLAN

_____ CONCEPTUAL GRADING & DRAINAGE PLAN

__X__ GRADING PLAN

_____ EROSION CONTROL PLAN

_____ ENGINEER'S CERTIFICATION

_____ OTHER

PRE-DESIGN MEETING:

__X__ YES

_____ NO

__X__ COPY PROVIDED

CHECK TYPE OF APPROVAL SOUGHT:

_____ SKETCH PLAT APPROVAL

_____ PRELIMINARY PLAT APPROVAL

__X__ S. DEV. PLAN FOR SUB'D. APPROVAL

_____ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL

_____ SECTOR PLAN APPROVAL

_____ FINAL PLAT APPROVAL

_____ FOUNDATION PERMIT APPROVAL

__X__ BUILDING PERMIT APPROVAL

_____ CERTIFICATE OF OCCUPANCY APPROVAL

_____ GRADING PERMIT APPROVAL

_____ PAVING PERMIT APPROVAL

_____ S.A.D. DRAINAGE REPORT

_____ DRAINAGE REQUIREMENTS

_____ OTHER _____ (SPECIFY)

DATE SUBMITTED: 10/25/95

BY: C.A. COONCE

OCT 25 19

Pat Rourke 296-0718

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
UTILITY DEVELOPMENT DIVISION/HYDROLOGY SECTION

PRE-DESIGN CONFERENCE

DRAINAGE FILE/ZONE ATLAS PAGE NO.: L 22 DATE: 9-8-95/D49

EPC NO.: 293-72 DRB NO.: 95-358 ZONE: _____

SUBJECT: GLENRIDGE PARK

STREET ADDRESS: _____

LEGAL DESCRIPTION: TRACT 1A + Lots 1-15, Block 2; Lots 1-10 & Lot A Block 3 Lots 1-20, Block 4; Lots 1-11 & Lot 13, Blocks 5, Nendrum Add.

APPROVAL REQUESTED:

X	PRELIMINARY PLAT	____	FINAL PLAT
X	SITE DEVELOPMENT PLAN	____	BUILDING PERMIT
____	GRADING/PAVING PERMIT	____	OTHER

	WHO	REPRESENTING
ATTENDANCE:	CA Council	
	Pete Ford	
	FRED J. AGUIRRE	

FINDINGS:

An approved DRAINAGE REPORT PER THE DPM, IS REQUIRED FOR SITE PLAN AND/OR PRELIMINARY PLAT APPROVAL. THIS REPORT MUST ADDRESS the following: ① OFF-SITE FLOWS FROM Linn" AND the PROPOSED TREATMENT OF these FLOWS. NOTE: Given that these FLOWS ARE PUBLIC WATERS, the TREATMENT MUST be to City Standards. ② OFF-SITE FLOWS ENTERING THE SITE FROM CENTRAL. See "South Eubank Study" by Smith Engineering FOR FLOWS in CENTRAL ③ Need to EVALUATE DOWNSTREAM CAPACITY in CENTRAL & SKYLINE TO DETERMINE THE ALLOWABLE DISCHARGE FROM this SITE. ACCORDING TO the "South Eubank Study, the storm DRAIN in CENTRAL is in a PRESSURE FLOW condition with the H.G.L. at approximately the street GRADE. Discharge to the storm DRAIN in CENTRAL may be DIFFICULT.

With your DRAINAGE REPORT please include a copy of the proposed INFRASTRUCTURE LIST and preliminary plat FOR review with the report.

The undersigned agrees that the above findings are summarized accurately and are only subject to change if further investigation reveals that they are not reasonable or that they are based on inaccurate information.

SIGNED:		SIGNED:	OCT 25 1995
TITLE:		TITLE:	ENGINEER DIVISION
DATE:	9/8/95	DATE:	

****NOTE**** PLEASE PROVIDE A COPY OF THIS PRE-DESIGN FORM WITH THE DRAINAGE SUBMITTAL.

Smith Engineering Company
6400 Uptown Boulevard N.E. - Suite 500E
Albuquerque, New Mexico 87110
Telephone 505/884-0700 FAX 505/884-2376

RECEIVED
NOV 28 1995
PWD/TRANS
SEC

FAX TRANSMITTAL SHEET

Date: NOVEMBER 28, 1995

From: THOMAS DALTON

Number of pages (including this sheet): 6

To: LOREN MEINZ

Company: C.O.A.

FAX No: 768-3629

Regarding: SOUTH EDGE

Urgent ☒

Confidential ☐

Note: If any of the fax copies are illegible, or you do not receive the same number of pages as stated above, please contact us immediately at 505/884-0700.

Sent by: TVD Date: 11/28/95 Time: _____

Developed Conditions - new Improvements

BASIN 104, 105

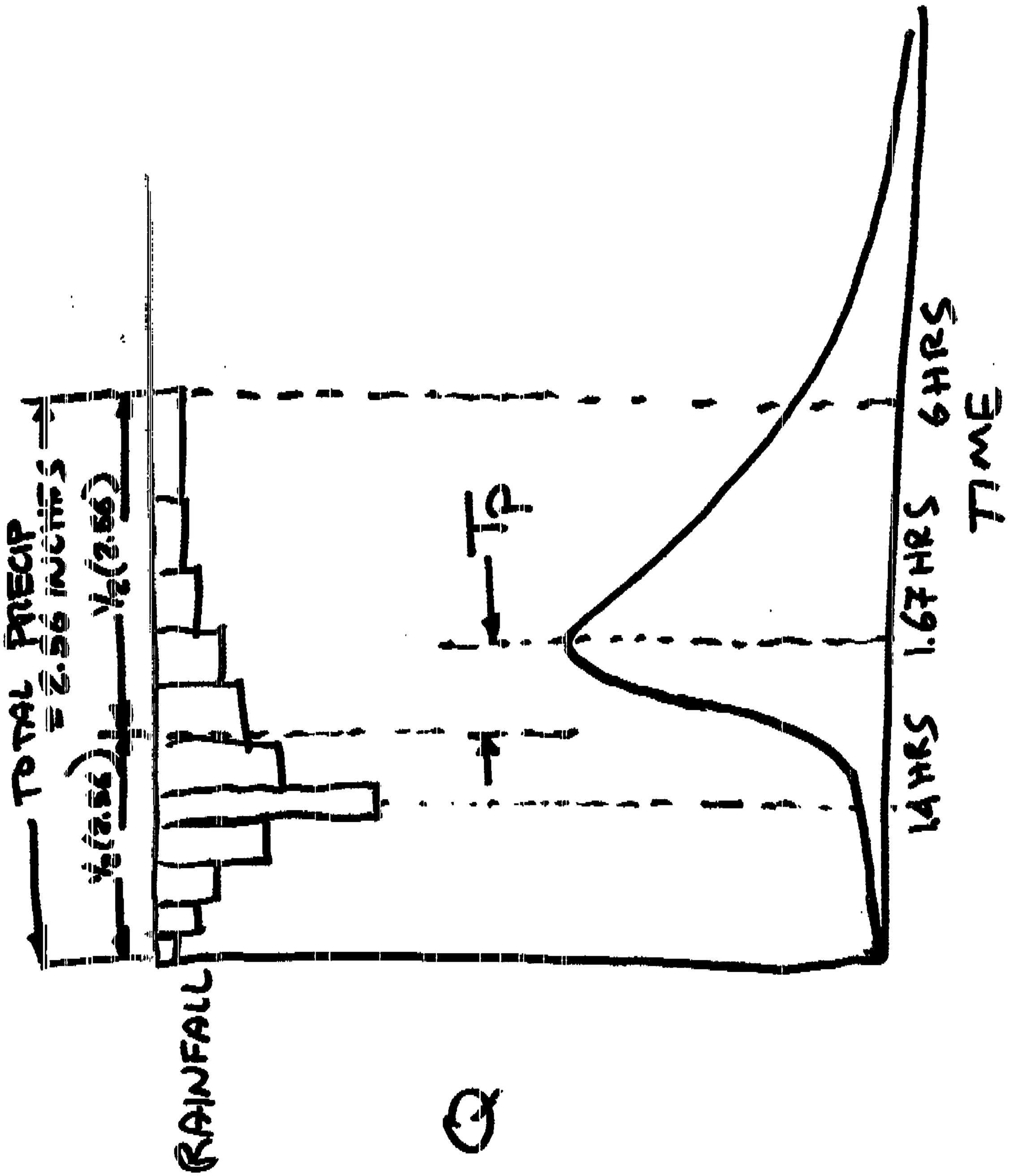
AP # 9 AND 10

TYPICAL HYDROGRAPH

FOR YOUR INFORMATION

(I BELIEVE THIS IS CORRECT.
I DID NOT CHECK IT WITH
CLIFF)

RECEIVED
NOV 28 1995


TOTAL PRECIP
= 2.56 INCHES
½(2.56)
½(2.56)
RAINFALL
Q
T
Q
14 HRS
1.67 HRS
6 HRS
TIME

FILE = EUBANK2.OUT

1.167	7.4	3.000	4.5	4.833	2.2	6.666	.2
1.333	60.2	3.166	3.7	4.999	2.2	6.833	.1
1.500	232.9	3.333	3.2	5.166	2.3	6.999	.1
1.667	145.9	3.500	2.9	5.333	2.3	7.166	.0

RUNOFF VOLUME = 2.20279 INCHES = 10.0705 ACRE-FEET
PEAK DISCHARGE RATE = 237.16 CFS AT 1.533 HOURS BASIN AREA = .0857 SQ. MI.

* DIVIDE HYD 102.1 BY MAXIMUM INFLOW OF CATCH BASIN ON NORTH SIDE OF CENTRAL *
*S DIVIDE BETWEEN MH# S-132 TO MH# S-262
* CB1 IS PIPE FLOW AT FIGUEROA AND CENTRAL
*S**** PIPE HYD "CB1" AND OLF HYD 102.13 IS AP #9 *****
DIVIDE HYD INFLOW ID=13 Q=61 ID I=11 HYD NO=CB1
ID II=12 HYD NO=102.13

PRINT HYD ID=11 CODE=2

AP#9 PIPE FLOW

HYDROGRAPH FROM AREA CB1

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.733	61.0	3.466	3.0	5.199	2.3	6.933	.1
.067	.0	1.800	61.0	3.533	2.9	5.266	2.3	6.999	.1
.133	.0	1.866	61.0	3.600	2.8	5.333	2.3	7.066	.1
.200	.0	1.933	61.0	3.666	2.7	5.399	2.3	7.133	.0
.267	.0	2.000	61.0	3.733	2.6	5.466	2.3	7.199	.0
.333	.0	2.066	57.5	3.800	2.6	5.533	2.3	7.266	.0
.400	.0	2.133	43.1	3.866	2.5	5.599	2.3	7.333	.0
.467	.0	2.200	29.8	3.933	2.5	5.666	2.3	7.399	.0
.533	.0	2.266	21.9	4.000	2.4	5.733	2.3	7.466	.0
.600	.0	2.333	17.2	4.066	2.4	5.799	2.4	7.533	.0
.667	.0	2.400	14.1	4.133	2.4	5.866	2.4	7.599	.0
.733	.0	2.466	11.8	4.200	2.4	5.933	2.4	7.666	.0
.800	.0	2.533	10.1	4.266	2.3	5.999	2.4	7.733	.0
.867	.7	2.600	8.7	4.333	2.3	6.066	2.4	7.799	.0
.933	2.6	2.666	7.6	4.400	2.3	6.133	1.8	7.866	.0
1.000	4.7	2.733	6.7	4.466	2.3	6.199	1.1	7.933	.0
1.067	6.3	2.800	6.0	4.533	2.3	6.266	.7	7.999	.0
1.133	6.9	2.866	5.4	4.600	2.3	6.333	.6	8.066	.0
1.200	9.7	2.933	4.9	4.666	2.2	6.399	.4	8.133	.0
1.267	25.0	3.000	4.5	4.733	2.2	6.466	.4	8.199	.0
1.333	60.2	3.066	4.2	4.800	2.2	6.533	.3	8.266	.0
1.400	61.0	3.133	3.9	4.866	2.2	6.599	.2	8.332	.0
1.467	61.0	3.200	3.6	4.933	2.2	6.666	.2	8.399	.0
1.533	61.0	3.266	3.4	4.999	2.2	6.733	.2		
1.600	61.0	3.333	3.2	5.066	2.2	6.799	.1		
1.667	61.0	3.400	3.1	5.133	2.2	6.866	.1		

RUNOFF VOLUME = 2.20279 INCHES = 6.0386 ACRE-FEET
PEAK DISCHARGE RATE = 61.00 CFS AT 1.367 HOURS BASIN AREA = .0514 SQ. MI.

PRINT HYD ID=12 CODE=2

AP#9 O.L.F.

PARTIAL HYDROGRAPH 102.13

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	.467	.0	.933	.0	1.400	60.2	1.866	23.5
.067	.0	.533	.0	1.000	.0	1.467	142.7	1.933	13.4
.133	.0	.600	.0	1.067	.0	1.533	176.2	2.000	5.8
.200	.0	.667	.0	1.133	.0	1.600	132.8		
.267	.0	.733	.0	1.200	.0	1.667	84.9		
.333	.0	.800	.0	1.267	.0	1.733	54.3		
.400	.0	.867	.0	1.333	.0	1.800	36.4		

RUNOFF VOLUME = 2.20279 INCHES = 4.0318 ACRE-FEET
PEAK DISCHARGE RATE = 176.16 CFS AT 1.533 HOURS BASIN AREA = .0343 SQ. MI.

*
** ROUTE 102.13 THRU 103 **

K = .169062HR TP = .164900HR K/TP RATIO = 1.025241 SHAPE CONSTANT, N = 3.443012
UNIT PEAK = 19.949 CFS UNIT VOLUME = .9995 B = 516.15 P60 = 2.0700
AREA = .010406 SQ MI IA = .52143 INCHES INF = 1.31000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

PRINT HYD ID=12 CODE=2

PARTIAL HYDROGRAPH 104.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.600	107.5	3.200	2.0	4.800	1.1	6.399	.1
.067	.0	1.667	81.1	3.266	1.9	4.866	1.1	6.466	.1
.133	.0	1.733	63.2	3.333	1.8	4.933	1.1	6.533	.1
.200	.0	1.800	52.0	3.400	1.7	4.999	1.1	6.599	.1
.267	.0	1.866	44.8	3.466	1.6	5.066	1.1	6.666	.1
.333	.0	1.933	39.1	3.533	1.5	5.133	1.1	6.733	.0
.400	.0	2.000	34.6	3.600	1.5	5.199	1.1	6.799	.0
.467	.0	2.066	30.4	3.666	1.4	5.266	1.1	6.866	.0
.533	.0	2.133	23.7	3.733	1.4	5.333	1.1	6.933	.0
.600	.0	2.200	16.6	3.800	1.3	5.399	1.1	6.999	.0
.667	.0	2.266	12.1	3.866	1.3	5.466	1.1	7.066	.0
.733	.0	2.333	9.6	3.933	1.3	5.533	1.1	7.133	.0
.800	.0	2.400	8.0	4.000	1.2	5.599	1.1	7.199	.0
.867	.5	2.466	6.8	4.066	1.2	5.666	1.2	7.266	.0
.933	1.6	2.533	5.9	4.133	1.2	5.733	1.2	7.333	.0
1.000	2.6	2.600	5.1	4.200	1.2	5.799	1.2	7.399	.0
1.067	3.4	2.666	4.5	4.266	1.2	5.866	1.2	7.466	.0
1.133	3.7	2.733	3.9	4.333	1.1	5.933	1.2	7.533	.0
1.200	4.6	2.800	3.5	4.400	1.1	5.999	1.2	7.599	.0
1.267	11.3	2.866	3.1	4.466	1.1	6.066	1.2	7.666	.0
1.333	27.8	2.933	2.8	4.533	1.1	6.133	.9		
1.400	57.7	3.000	2.6	4.600	1.1	6.199	.5		
1.467	100.1	3.066	2.3	4.666	1.1	6.266	.3		
1.533	124.6	3.133	2.1	4.733	1.1	6.333	.2		

RUNOFF VOLUME = 2.00178 INCHES = 5.2900 ACRE-FEET
PEAK DISCHARGE RATE = 124.58 CFS AT 1.533 HOURS BASIN AREA = .0496 SQ. MI.

*
*** SUB-BASIN 105 ***
*
COMPUTE NM HYD ID=16 HYD NO = 105
DA= 0.01810 SQUARE MI
A=0
B=0
C=0
D=100
TP=0.1665 HR MASSRAIN=-1

K = .090743HR TP = .166500HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106428
UNIT PEAK = 57.211 CFS UNIT VOLUME = 1.000 B = 526.28 P60 = 2.0700
AREA = .018100 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

PRINT HYD ID=16 CODE=2

PARTIAL HYDROGRAPH 105.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.533	51.1	3.066	1.0	4.600	.5	6.133	.4
.067	.0	1.600	44.0	3.133	.9	4.666	.5	6.199	.2
.133	.0	1.667	38.0	3.200	.9	4.733	.5	6.266	.1
.200	.0	1.733	25.9	3.266	.8	4.800	.5	6.333	.1
.267	.0	1.800	21.6	3.333	.8	4.866	.5	6.399	.1
.333	.0	1.866	19.0	3.400	.7	4.933	.5	6.466	.1
.400	.0	1.933	17.0	3.466	.7	4.999	.5	6.533	.0
.467	.0	2.000	15.2	3.533	.7	5.066	.5	6.599	.0
.533	.0	2.066	13.4	3.600	.6	5.133	.5	6.666	.0
.600	.0	2.133	10.5	3.666	.6	5.199	.5	6.733	.0
.667	.0	2.200	7.3	3.733	.6	5.266	.5	6.799	.0

.733	.0	2.266	5.2	3.800	.6	5.333	.5	6.866	.0
.800	.0	2.333	4.1	3.866	.6	5.399	.5	6.933	.0
.867	.1	2.400	3.4	3.933	.6	5.466	.5	6.999	.0
.933	.6	2.466	2.9	4.000	.6	5.533	.5	7.066	.0
1.000	1.2	2.533	2.5	4.066	.5	5.599	.5	7.133	.0
1.067	1.6	2.600	2.2	4.133	.5	5.666	.5	7.199	.0
1.133	1.7	2.666	1.9	4.200	.5	5.733	.5	7.266	.0
1.200	2.1	2.733	1.7	4.266	.5	5.799	.5	7.333	.0
1.267	5.1	2.800	1.5	4.333	.5	5.866	.5	7.399	.0
1.333	12.4	2.866	1.3	4.400	.5	5.933	.5	7.466	.0
1.400	24.4	2.933	1.2	4.466	.5	5.999	.6		
1.467	41.0	3.000	1.1	4.533	.5	6.066	.5		

RUNOFF VOLUME = 2.31187 INCHES = 2.2317 ACRE-FEET
PEAK DISCHARGE RATE = 51.06 CFS AT 1.533 HOURS BASIN AREA = .0181 SQ. MI.

105

*
**** SUB-BASIN 105 ****
*
COMPUTE NM HYD ID=17 HYD NO = 106
DA= 0.03425 SQUARE MI
A=0
B=26
C=26
D=48
TP=0.1968 HR MASSRAIN=-1

K = .107256HR TP = .196800HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106428
UNIT PEAK = 43.963 CFS UNIT VOLUME = .9998 B = 526.28 P60 = 2.0700
AREA = .016440 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

K = .177854HR TP = .196800HR K/TP RATIO = .903729 SHAPE CONSTANT, N = 3.920592
UNIT PEAK = 31.660 CFS UNIT VOLUME = .9996 B = 349.84 P60 = 2.0700
AREA = .017810 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

PRINT HYD ID=17 CODE=2

PARTIAL HYDROGRAPH 106.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.600	66.5	3.200	1.3	4.800	.5	6.399	.1
.067	.0	1.667	65.7	3.266	1.2	4.866	.5	6.466	.1
.133	.0	1.733	64.1	3.333	1.1	4.933	.5	6.533	.1
.200	.0	1.800	35.3	3.400	1.0	4.999	.5	6.599	.0
.267	.0	1.866	28.8	3.466	.9	5.066	.5	6.666	.0
.333	.0	1.933	24.0	3.533	.9	5.133	.5	6.733	.0
.400	.0	2.000	20.2	3.600	.8	5.199	.5	6.799	.0
.467	.0	2.066	17.3	3.666	.8	5.266	.5	6.866	.0
.533	.0	2.133	14.2	3.733	.7	5.333	.5	6.933	.0
.600	.0	2.200	10.9	3.800	.7	5.399	.5	6.999	.0
.667	.0	2.266	8.2	3.866	.7	5.466	.5	7.066	.0
.733	.0	2.333	6.5	3.933	.6	5.533	.5	7.133	.0
.800	.0	2.400	5.4	4.000	.6	5.599	.5	7.199	.0
.867	.1	2.466	4.7	4.066	.6	5.666	.5	7.266	.0
.933	.4	2.533	4.1	4.133	.6	5.733	.5	7.333	.0
1.000	.8	2.600	3.5	4.200	.6	5.799	.5	7.399	.0
1.067	1.2	2.666	3.1	4.266	.5	5.866	.5	7.466	.0
1.133	1.4	2.733	2.7	4.333	.5	5.933	.5	7.533	.0
1.200	1.7	2.800	2.4	4.400	.5	5.999	.5	7.599	.0
1.267	3.3	2.866	2.2	4.466	.5	6.066	.5	7.666	.0
1.333	9.2	2.933	1.9	4.533	.5	6.133	.4	7.733	.0
1.400	23.3	3.000	1.7	4.600	.5	6.199	.3		
1.467	46.2	3.066	1.6	4.666	.5	6.266	.2		
1.533	65.4	3.133	1.4	4.733	.5	6.333	.1		

RUNOFF VOLUME = 1.65135 INCHES = 3.0165 ACRE-FEET
PEAK DISCHARGE RATE = 68.27 CFS AT 1.567 HOURS BASIN AREA = .0343 SQ. MI.

FILE = EUBANK2.OUT

AP #10 O.L.F.

RUNOFF VOLUME = 1.94823 INCHES = .4662 ACRE-FEET
PEAK DISCHARGE RATE = 1.73 CFS AT 8.566 HOURS BASIN AREA = .0045 SQ. MI.

PRINT HYD ID=25 CODE=2

PARTIAL HYDROGRAPH - 203.03

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.267	8.5	2.533	13.1	3.800	1.6	5.066	.8
.067	.0	1.333	21.1	2.600	11.4	3.866	1.5	5.133	.8
.133	.0	1.400	49.4	2.666	10.0	3.933	1.4	5.199	.8
.200	.0	1.467	96.7	2.733	8.8	4.000	1.3	5.266	.8
.267	.0	1.533	148.6	2.800	7.7	4.066	1.3	5.333	.8
.333	.0	1.600	171.0	2.866	6.8	4.133	1.2	5.399	.8
.400	.0	1.667	157.7	2.933	6.0	4.200	1.1	5.466	.8
.467	.0	1.733	130.3	3.000	5.3	4.266	1.1	5.533	.8
.533	.0	1.800	106.0	3.066	4.7	4.333	1.0	5.599	.8
.600	.0	1.866	87.6	3.133	4.2	4.400	1.0	5.666	.9
.667	.0	1.933	74.2	3.200	3.7	4.466	1.0	5.733	.9
.733	.0	2.000	64.7	3.266	3.4	4.533	.9	5.799	.9
.800	.0	2.066	57.2	3.333	3.0	4.600	.9	5.866	.9
.867	.0	2.133	49.1	3.400	2.7	4.666	.9	5.933	.9
.933	.0	2.200	39.2	3.466	2.5	4.733	.9	5.999	.9
1.000	1.2	2.266	29.9	3.533	2.3	4.800	.9	6.066	.9
1.067	2.7	2.333	22.9	3.600	2.1	4.866	.8	6.133	.8
1.133	3.9	2.400	18.4	3.666	1.9	4.933	.8	6.199	.4
1.200	4.7	2.466	15.3	3.733	1.8	4.999	.8		

RUNOFF VOLUME = 1.94823 INCHES = 8.2473 ACRE-FEET
PEAK DISCHARGE RATE = 171.02 CFS AT 1.600 HOURS BASIN AREA = .0794 SQ. MI.

*
*** ADD HYD CB5 TO HYD CB1 ***
***** PIPE HYD CB5.1 IS AP #10 *****
ADD HYD ID=21 HYD NO=CB5.1 ID 1=24 ID 11=11
PRINT HYD ID=21 CODE=2

AP # 10
PIPE FLOW

HYDROGRAPH FROM AREA CB5.1

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.733	62.0	3.466	4.0	5.199	3.3	6.933	.2
.067	.0	1.800	62.0	3.533	3.9	5.266	3.3	6.999	.1
.133	.0	1.866	62.0	3.600	3.8	5.333	3.3	7.066	.1
.200	.0	1.933	62.0	3.666	3.7	5.399	3.3	7.133	.1
.267	.0	2.000	62.0	3.733	3.6	5.466	3.3	7.199	.1
.333	.0	2.066	58.5	3.800	3.6	5.533	3.3	7.266	.1
.400	.0	2.133	44.1	3.866	3.5	5.599	3.3	7.333	.1
.467	.0	2.200	30.8	3.933	3.5	5.666	3.3	7.399	.0
.533	.0	2.266	22.9	4.000	3.4	5.733	3.3	7.466	.0
.600	.0	2.333	18.2	4.066	3.4	5.799	3.4	7.533	.0
.667	.0	2.400	15.1	4.133	3.4	5.866	3.4	7.599	.0
.733	.0	2.466	12.8	4.200	3.4	5.933	3.4	7.666	.0
.800	.0	2.533	11.1	4.266	3.3	5.999	3.4	7.733	.0
.867	.8	2.600	9.7	4.333	3.3	6.066	3.4	7.799	.0
.933	3.4	2.666	8.6	4.400	3.3	6.133	2.8	7.866	.0
1.000	5.7	2.733	7.7	4.466	3.3	6.199	2.1	7.933	.0
1.067	7.3	2.800	7.0	4.533	3.3	6.266	1.7	7.999	.0
1.133	7.9	2.866	6.4	4.600	3.3	6.333	1.2	8.066	.0
1.200	10.7	2.933	5.9	4.666	3.2	6.399	.9	8.133	.0
1.267	26.0	3.000	5.5	4.733	3.2	6.466	.7	8.199	.0
1.333	61.2	3.066	5.2	4.800	3.2	6.533	.5	8.266	.0
1.400	62.0	3.133	4.9	4.866	3.2	6.599	.4	8.332	.0
1.467	62.0	3.200	4.6	4.933	3.2	6.666	.4	8.399	.0
1.533	62.0	3.266	4.4	4.999	3.2	6.733	.3	8.466	.0
1.600	62.0	3.333	4.2	5.066	3.2	6.799	.2	8.532	.0
1.667	62.0	3.400	4.1	5.133	3.2	6.866	.2		

RUNOFF VOLUME = 2.18235 INCHES = 6.5048 ACRE-FEET
PEAK DISCHARGE RATE = 62.00 CFS AT 1.367 HOURS BASIN AREA = .0559 SQ. MI.

Smith Engineering Company
6400 Uptown Boulevard N.E. - Suite 500E
Albuquerque, New Mexico 87110
Telephone 505/884-0700 FAX 505/884-2376

FAX TRANSMITTAL SHEET

Date: NOVEMBER 27, 1995

From: THOMAS DALTON SEC

Number of pages (including this sheet): 5

To: LOREN MEINZ

Company: C.O.A.

FAX No: 768-3629

Regarding: SOUTH EUBANK

Urgent [X]

Note: If any of the fax copies are illegible, or you do not receive the same number of pages as stated above, please contact us immediately at 505/884-0700. Confidential [ ]

Sent by: TVD Date: 11/27/95 Time: 4:15 P.M.

Developed ~~EXISTING~~ CONDITIONS / no Improvements

AP #11 O.L.F.

AP #12 O.L.F.

AP #12 PIPE FLOW

FILE = EUBANK2.OUT

HRS	CFS	HRS	CFS	HRS	CFS	HRS	CFS	HRS	CFS
.000	.0	2.000	37.7	4.000	1.1	5.999	.9	7.999	.0
.167	.0	2.166	24.2	4.166	1.1	6.166	.8	8.166	.0
.333	.0	2.333	13.2	4.333	1.0	6.333	.4	8.332	.0
.500	.0	2.500	8.2	4.500	.9	6.499	.3	8.499	.0
.667	.0	2.666	5.7	4.666	.9	6.666	.2	8.666	.0
.833	.0	2.833	4.1	4.833	.9	6.833	.1	8.832	.0
1.000	.5	3.000	3.1	4.999	.9	6.999	.1	8.999	.0
1.167	1.9	3.166	2.5	5.166	.9	7.166	.1	9.166	.0
1.333	10.1	3.333	2.0	5.333	.9	7.333	.0		
1.500	78.1	3.500	1.6	5.499	.9	7.499	.0		
1.667	95.5	3.666	1.4	5.666	.9	7.666	.0		
1.833	59.0	3.833	1.3	5.833	.9	7.833	.0		

RUNOFF VOLUME = 1.72546 INCHES = 4.9794 ACRE-FEET
PEAK DISCHARGE RATE = 104.96 CFS AT 1.600 HOURS BASIN AREA = .0541 SQ. MI.

AP #11

NOTICE: DOES NOT INCLUDE BASIN 104 AND 105

*

**** SUB-BASIN 108 ****

*

COMPUTE NM HYD ID=13 HYD NO = 108
DA= 0.02297 SQUARE MI
A=3
B=7
C=3
D=87
TP=0.1333 HR MASSRAIN=-1

$\frac{2}{3}t_c$

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106428
UNIT PEAK = 78.898 CFS UNIT VOLUME = .9992 B = 526.28 P60 = 2.0700
AREA = .019934 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

K = .133075HR TP = .133300HR K/TP RATIO = .998312 SHAPE CONSTANT, N = 3.536339
UNIT PEAK = 7.2350 CFS UNIT VOLUME = .9985 B = 322.97 P60 = 2.0700
AREA = .002986 SQ MI IA = .50000 INCHES INF = 1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

PRINT HYD ID=13 CODE=2

PARTIAL HYDROGRAPH 108.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.467	61.3	2.933	1.1	4.400	.6	5.866	.6
.067	.0	1.533	63.7	3.000	1.0	4.466	.6	5.933	.6
.133	.0	1.600	46.3	3.066	1.0	4.533	.6	5.999	.6
.200	.0	1.667	34.0	3.133	.9	4.600	.6	6.066	.6
.267	.0	1.733	27.5	3.200	.9	4.666	.6	6.133	.4
.333	.0	1.800	23.5	3.266	.8	4.733	.6	6.199	.2
.400	.0	1.866	20.5	3.333	.8	4.800	.6	6.266	.1
.467	.0	1.933	18.0	3.400	.8	4.866	.6	6.333	.1
.533	.0	2.000	15.9	3.466	.7	4.933	.6	6.399	.1
.600	.0	2.066	13.6	3.533	.7	4.999	.6	6.466	.0
.667	.0	2.133	9.3	3.600	.7	5.066	.6	6.533	.0
.733	.0	2.200	6.1	3.666	.7	5.133	.6	6.599	.0
.800	.0	2.266	4.5	3.733	.6	5.199	.6	6.666	.0
.867	.3	2.333	3.7	3.800	.6	5.266	.6	6.733	.0
.933	1.1	2.400	3.1	3.866	.6	5.333	.6	6.799	.0
1.000	1.6	2.466	2.6	3.933	.6	5.399	.6	6.866	.0
1.067	2.0	2.533	2.2	4.000	.6	5.466	.6	6.933	.0
1.133	1.9	2.600	2.0	4.066	.6	5.533	.6	6.999	.0
1.200	3.0	2.666	1.7	4.133	.6	5.599	.6	7.066	.0
1.267	8.7	2.733	1.5	4.200	.6	5.666	.6	7.133	.0
1.333	20.0	2.800	1.4	4.266	.6	5.733	.6	7.199	.0
1.400	38.3	2.866	1.2	4.333	.6	5.799	.6		

RUNOFF VOLUME = 2.12531 INCHES = 2.6036 ACRE-FEET
PEAK DISCHARGE RATE = 66.89 CFS AT 1.500 HOURS BASIN AREA = .0230 SQ. MI.

*

FILE = EUBANK2.OUT

.833	.0	2.833	4.5	4.833	1.1	6.833	.2	8.832	.0
1.000	.6	3.000	3.4	4.999	1.1	6.999	.1	8.999	.0
1.167	2.3	3.166	2.7	5.166	1.1	7.166	.1	9.166	.0
1.333	11.2	3.333	2.2	5.333	1.1	7.333	.1	9.332	.0
1.500	79.3	3.500	1.9	5.499	1.1	7.499	.1		
1.667	96.9	3.666	1.6	5.666	1.1	7.666	.0		
1.833	58.4	3.833	1.4	5.833	1.2	7.833	.0		

RUNOFF VOLUME = 2.00179 INCHES = 5.2900 ACRE-FEET
PEAK DISCHARGE RATE = 109.01 CFS AT 1.600 HOURS BASIN AREA = .0496 SQ. MI.

*** ADD HYD 104.02 TO SUB-BASIN 105 ***
ADD HYD ID=19 HYD NO=105.1 ID I=16 ID II=17
PRINT HYD ID=19 CODE=5

PARTIAL HYDROGRAPH 105.10

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	2.000	56.2	4.000	1.9	5.999	1.7	7.999	.0
.167	.0	2.166	36.6	4.166	1.8	6.166	1.4	8.166	.0
.333	.0	2.333	19.2	4.333	1.7	6.333	.7	8.332	.0
.500	.0	2.500	11.9	4.500	1.7	6.499	.4	8.499	.0
.667	.0	2.666	8.1	4.666	1.7	6.666	.3	8.666	.0
.833	.0	2.833	5.9	4.833	1.6	6.833	.2	8.832	.0
1.000	1.7	3.000	4.5	4.999	1.6	6.999	.2	8.999	.0
1.167	4.1	3.166	3.5	5.166	1.6	7.166	.1	9.166	.0
1.333	23.6	3.333	3.0	5.333	1.6	7.333	.1	9.332	.0
1.500	127.5	3.500	2.5	5.499	1.6	7.499	.1		
1.667	130.0	3.666	2.2	5.666	1.7	7.666	.0		
1.833	78.7	3.833	2.0	5.833	1.7	7.833	.0		

RUNOFF VOLUME = 2.08473 INCHES = 7.5217 ACRE-FEET
PEAK DISCHARGE RATE = 156.19 CFS AT 1.567 HOURS BASIN AREA = .0677 SQ. MI.

TOTAL FLOW AT SKYLINE AND JUAN TABO INCLUDING BASIN 104 AND 105

*** ADD OLF HYD 105.1 TO OLF HYD 107.12 ***
ADD HYD ID=17 HYD NO=107.2 ID I=19 ID II=18
PRINT HYD ID=17 CODE=5

PARTIAL HYDROGRAPH 107.20

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	2.000	93.8	4.000	3.0	5.999	2.6	7.999	.0
.167	.0	2.166	60.8	4.166	2.9	6.166	2.2	8.166	.0
.333	.0	2.333	32.4	4.333	2.7	6.333	1.1	8.332	.0
.500	.0	2.500	20.2	4.500	2.6	6.499	.7	8.499	.0
.667	.0	2.666	13.8	4.666	2.6	6.666	.5	8.666	.0
.833	.0	2.833	10.0	4.833	2.5	6.833	.3	8.832	.0
1.000	2.3	3.000	7.6	4.999	2.5	6.999	.2	8.999	.0
1.167	6.0	3.166	6.0	5.166	2.5	7.166	.2	9.166	.0
1.333	33.7	3.333	4.9	5.333	2.5	7.333	.1	9.332	.0
1.500	205.6	3.500	4.2	5.499	2.5	7.499	.1		
1.667	223.5	3.666	3.6	5.666	2.6	7.666	.1		
1.833	136.7	3.833	3.3	5.833	2.6	7.833	.0		

RUNOFF VOLUME = 1.92507 INCHES = 12.5011 ACRE-FEET
PEAK DISCHARGE RATE = 259.94 CFS AT 1.567 HOURS BASIN AREA = .1218 SQ. MI.

*
*** ADD O.F HYD 107.2 TO HYD 108 ***
*S TOTAL FLOW GOING INTO JUAN TABO'S CATTLE GUARD
ADD HYD ID=16 HYD NO=108.1 ID I=13 ID II=17
PRINT HYD ID=16 CODE=5

PARTIAL HYDROGRAPH 108.10

TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW

FILE = EUBANK2.OUT

HRS	CFS	HRS	CFS	HRS	CFS	HRS	CFS	HRS	CFS
.000	.0	2.000	109.8	4.000	3.6	5.999	3.3	7.999	.0
.167	.0	2.166	68.3	4.166	3.4	6.166	2.4	8.166	.0
.333	.0	2.333	36.1	4.333	3.3	6.333	1.2	8.332	.0
.500	.0	2.500	22.6	4.500	3.2	6.499	.8	8.499	.0
.667	.0	2.666	15.5	4.666	3.1	6.666	.5	8.666	.0
.833	.1	2.833	11.3	4.833	3.1	6.833	.3	8.832	.0
1.000	3.9	3.000	8.6	4.999	3.1	6.999	.2	8.999	.0
1.167	13.1	3.166	6.9	5.166	3.1	7.166	.2	9.166	.0
1.333	55.7	3.333	5.7	5.333	3.1	7.333	.1	9.332	.0
1.500	272.5	3.500	4.9	5.499	3.1	7.499	.1		
1.667	257.5	3.666	4.3	5.666	3.1	7.666	.1		
1.833	158.6	3.833	3.9	5.833	3.2	7.833	.0		

RUNOFF VOLUME = 1.95685 INCHES = 15.1047 ACRE-FEET
PEAK DISCHARGE RATE = 315.18 CFS AT 1.567 HOURS BASIN AREA = .1447 SQ. MI.

*
* DIVIDE HYD 108.1 BY INFLOW OF CATCH BASINS AND CATTLE GUARD IN JAUN TABO
*S CATTLE GUARD AND CATCH BASINS BETWEEN MH# S-993 TO MH# S-903
* OLF HYD 108.13 IS AT JUAN TABO AND BUENA VENTURA STREET
***** PIPE HYD CB3 AND OLF HYD 108.13 IS AP #12 *****
DIVIDE HYD INFLOW ID=16 Q=88 ID I=17 HYD NO=CB3
ID II=18 HYD NO=108.13

AP#12
PIPE FLOW

PRINT HYD ID=17 CODE=2

HYDROGRAPH FROM AREA CB3

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.933	88.0	3.866	3.9	5.799	3.2	7.733	.1
.067	.0	2.000	88.0	3.933	3.7	5.866	3.2	7.799	.0
.133	.0	2.066	88.0	4.000	3.6	5.933	3.2	7.866	.0
.200	.0	2.133	77.8	4.066	3.5	5.999	3.3	7.933	.0
.267	.0	2.200	59.5	4.133	3.5	6.066	3.2	7.999	.0
.333	.0	2.266	45.7	4.200	3.4	6.133	2.7	8.066	.0
.400	.0	2.333	36.1	4.266	3.3	6.199	2.1	8.133	.0
.467	.0	2.400	29.4	4.333	3.3	6.266	1.6	8.199	.0
.533	.0	2.466	24.6	4.400	3.2	6.333	1.2	8.266	.0
.600	.0	2.533	20.8	4.466	3.2	6.399	1.0	8.332	.0
.667	.0	2.600	17.9	4.533	3.2	6.466	.8	8.399	.0
.733	.0	2.666	15.5	4.600	3.2	6.533	.7	8.466	.0
.800	.0	2.733	13.6	4.666	3.1	6.599	.6	8.532	.0
.867	.5	2.800	12.0	4.733	3.1	6.666	.5	8.599	.0
.933	2.0	2.866	10.7	4.800	3.1	6.733	.4	8.666	.0
1.000	3.9	2.933	9.6	4.866	3.1	6.799	.4	8.732	.0
1.067	5.9	3.000	8.6	4.933	3.1	6.866	.3	8.799	.0
1.133	7.3	3.066	7.8	4.999	3.1	6.933	.3	8.866	.0
1.200	10.0	3.133	7.2	5.066	3.1	6.999	.2	8.932	.0
1.267	22.4	3.200	6.6	5.133	3.1	7.066	.2	8.999	.0
1.333	53.7	3.266	6.1	5.199	3.1	7.133	.2	9.066	.0
1.400	88.0	3.333	5.7	5.266	3.1	7.199	.2	9.132	.0
1.467	88.0	3.400	5.3	5.333	3.1	7.266	.1	9.199	.0
1.533	88.0	3.466	5.0	5.399	3.1	7.333	.1	9.266	.0
1.600	88.0	3.533	4.7	5.466	3.1	7.399	.1	9.332	.0
1.667	88.0	3.600	4.5	5.533	3.1	7.466	.1	9.399	.0
1.733	88.0	3.666	4.3	5.599	3.1	7.533	.1	9.466	.0
1.800	88.0	3.733	4.1	5.666	3.1	7.599	.1		
1.866	88.0	3.800	4.0	5.733	3.2	7.666	.1		

RUNOFF VOLUME = 1.95685 INCHES = 9.0794 ACRE-FEET
PEAK DISCHARGE RATE = 88.00 CFS AT 1.400 HOURS BASIN AREA = .0870 SQ. MI.

Full flow
1.9 to 2.06

PRINT HYD ID=18 CODE=2

A.P.#12 O.L.F. 7

PARTIAL HYDROGRAPH 108.13

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	.467	.0	.933	.0	1.400	28.5	1.866	58.3
.067	.0	.533	.0	1.000	.0	1.467	132.1	1.933	38.0
.133	.0	.600	.0	1.067	.0	1.533	218.3	2.000	21.8

FILE = EUBANK2.OUT

.200	.0	.667	.0	1.133	.0	1.600	216.2	2.066	7.6
.267	.0	.733	.0	1.200	.0	1.667	169.5		
.333	.0	.800	.0	1.267	.0	1.733	121.5		
.400	.0	.867	.0	1.333	.0	1.800	84.9		

RUNOFF VOLUME = 1.95685 INCHES = 6.0253 ACRE-FEET
PEAK DISCHARGE RATE = 227.18 CFS AT 1.567 HOURS BASIN AREA = .0577 SQ. MI.

AP #12 O.L.F.

* * BASIN 200 * * *

**** SUB-BASIN 201 ****
COMPUTE NM HYD ID=21 HYD NO = 201
DA= 0.02777 SQUARE MI
A=0
B=5
C=0
D=95
TP=0.1333 HR MASSRAIN=-1

K = .072645HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106428
UNIT PEAK = 104.16 CFS UNIT VOLUME = .9993 B = 526.28 P60 = 2.0700
AREA = .026382 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

K = .132811HR TP = .133300HR K/TP RATIO = .996335 SHAPE CONSTANT, N = 3.543438
UNIT PEAK = 3.3695 CFS UNIT VOLUME = .9961 B = 323.49 P60 = 2.0700
AREA = .001389 SQ MI IA = .50000 INCHES INF = 1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

PRINT HYD ID=21 CODE=2

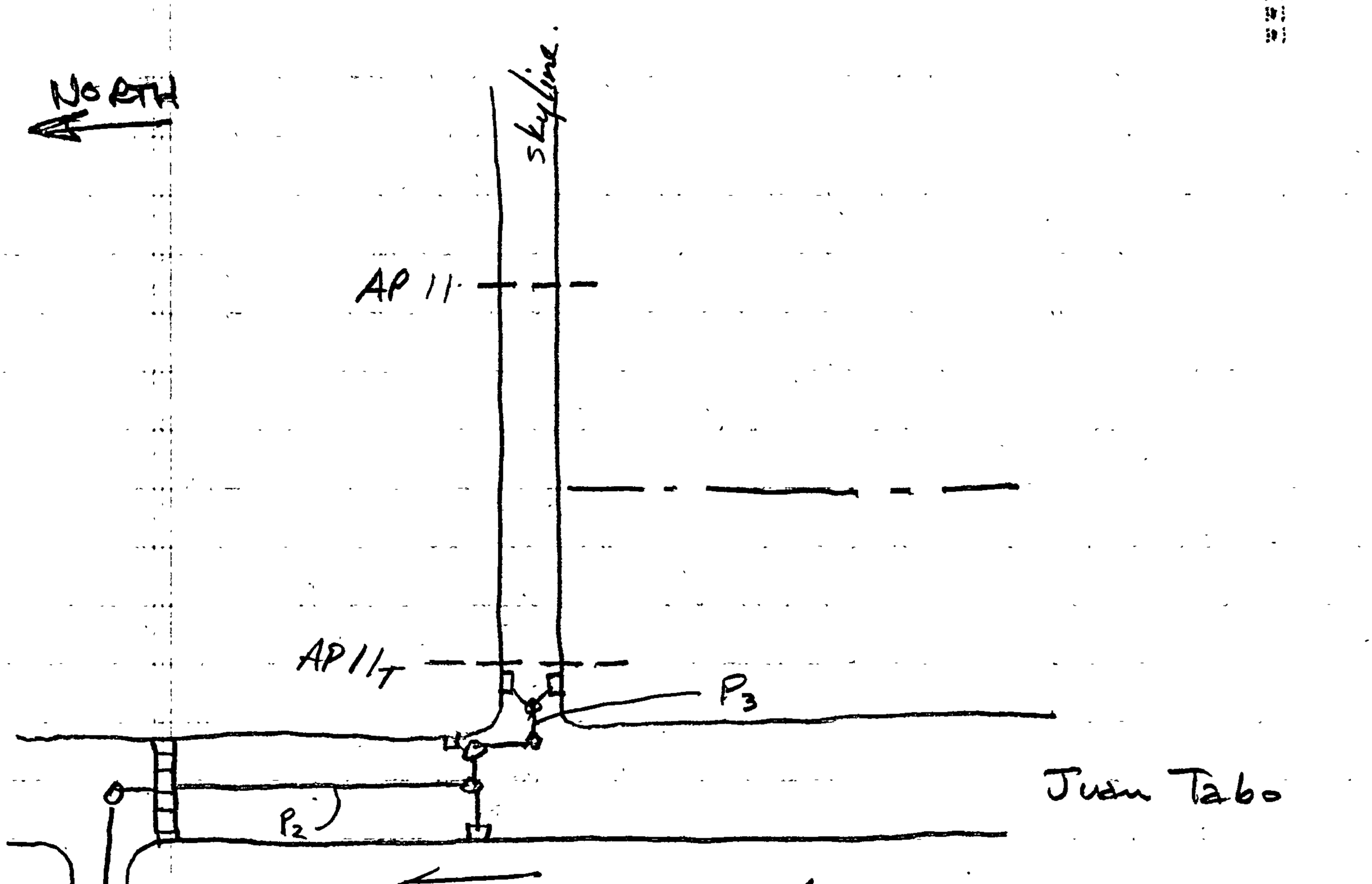
PARTIAL HYDROGRAPH 201.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.467	17.2	2.933	1.5	4.400	.7	5.866	.8
.067	.0	1.533	10.1	3.000	1.4	4.466	.8	5.933	.8
.133	.0	1.600	57.9	3.066	1.3	4.533	.7	5.999	.8
.200	.0	1.667	42.6	3.133	1.2	4.600	.7	6.066	.8
.267	.0	1.733	34.7	3.200	1.1	4.666	.7	6.133	.5
.333	.0	1.800	30.0	3.266	1.1	4.733	.7	6.199	.2
.400	.0	1.866	26.3	3.333	1.0	4.800	.7	6.266	.1
.467	.0	1.933	23.2	3.400	1.0	4.866	.7	6.333	.1
.533	.0	2.000	20.6	3.466	.9	4.933	.7	6.399	.1
.600	.0	2.066	17.7	3.533	.9	4.999	.7	6.466	.0
.667	.0	2.133	12.1	3.600	.9	5.066	.7	6.533	.0
.733	.0	2.200	7.9	3.666	.9	5.133	.7	6.599	.0
.800	.0	2.266	5.8	3.733	.8	5.199	.8	6.666	.0
.867	.4	2.333	4.7	3.800	.8	5.266	.8	6.733	.0
.933	1.4	2.400	3.9	3.866	.8	5.333	.8	6.799	.0
1.000	2.2	2.466	3.3	3.933	.8	5.399	.8	6.866	.0
1.067	2.6	2.533	2.9	4.000	.8	5.466	.8	6.933	.0
1.133	2.5	2.600	2.5	4.066	.8	5.533	.8	6.999	.0
1.200	4.0	2.666	2.2	4.133	.8	5.599	.8	7.066	.0
1.267	11.4	2.733	2.0	4.200	.8	5.666	.8	7.133	.0
1.333	26.1	2.800	1.8	4.266	.8	5.733	.8	7.199	.0
1.400	48.8	2.866	1.6	4.333	.8	5.799	.8	7.266	.0

RUNOFF VOLUME = 2.24012 INCHES = 3.3177 ACRE-FEET
PEAK DISCHARGE RATE = 84.21 CFS AT 1.500 HOURS BASIN AREA = .0278 SQ. MI.

*S EXISTING DETENTION BASIN IN BASIN 201
*S ROUTING RESERVOIR WITH SMALL ORIFICE PIPES AND 20' WEIR
ROUTE RESERVOIR ID=22 HYD NO=201.RES INFLOW=21 CODE=20

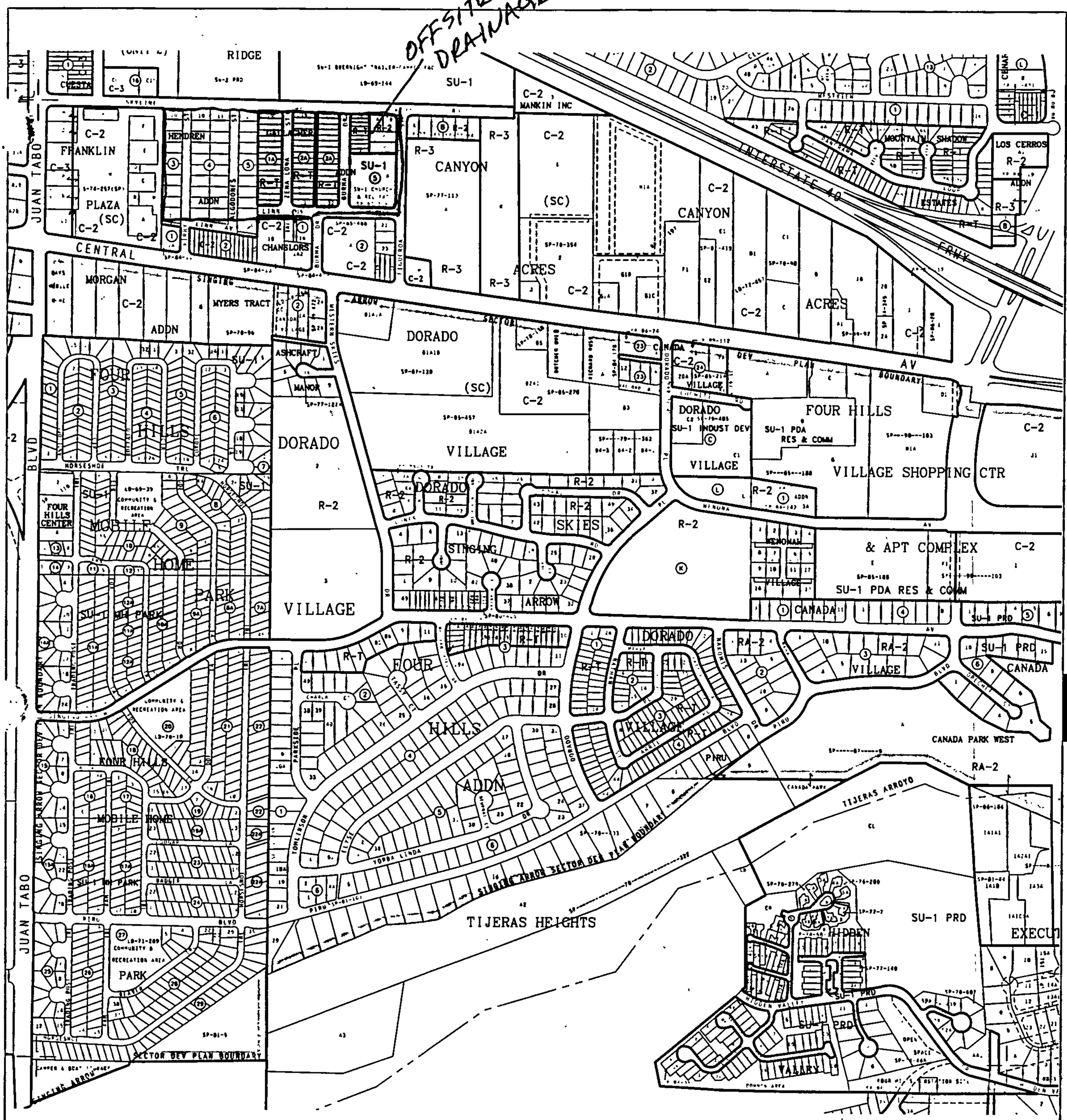
OUTFLOW(CFS)	STORAGE(AC-FT)	ELEV(FT)
0	0	5620
2.5	0.468	5621
3.8	0.937	5622

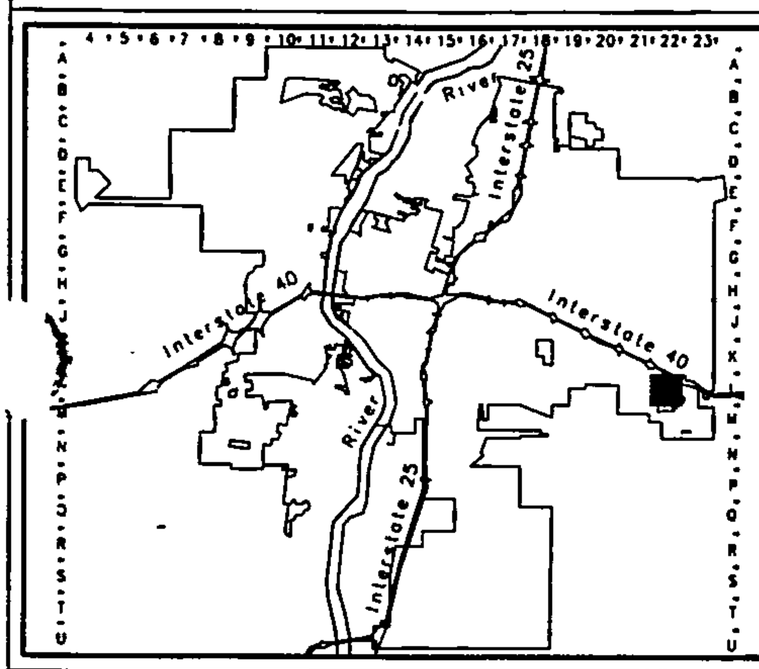


	10 yr	100 yr	(8" curb depth) STREET CAPACITY
AP 11	62 cfs	105 cfs	151 cfs
AP 11T		260 cfs.	
AP 12 pipe	88	88	
AP 12 OLF	106	227	126

P1 88 cfs capacity
P2 28 cfs "
P3 16 cfs. "

OFFSITE DRAINAGE





North

750 375 0 750

Scale: 1" = 750'

Albuquerque Geographic Information System

City of Albuquerque

© Planning Department July 06, 1993

LEGAL DESCRIPTION

T10N

R4E

SEC 27

UNIFORM PROPERTY CODE

1-022-056

L-22-Z

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION/DESIGN HYDROLOGY SECTION

CONFERENCE RECAP

DRAINAGE FILE/ZONE ATLAS PAGE NO.: L-22 DATE: 8/22/89 @ 10:00

PLANNING DIVISION NOS: EPC: _____ DRB: _____

SUBJECT: _____

STREET ADDRESS (IF KNOWN): _____

SUBDIVISION NAME: Blocks 3, 4 & 5 Hendren Addition

APPROVAL REQUESTED:

X	PRELIMINARY PLAT	X	FINAL PLAT
X	SITE DEVELOPMENT PLAN	X	BUILDING PERMIT
____	OTHER	____	ROUGH GRADING
_____			

ATTENDANCE:	WHO	REPRESENTING
	~~Mark Goodwin~~ Terry Brown	D Mark Goodwin & Assoc
	Stuart Reeder	Hydrology Section

FINDINGS:

SITE DEVELOPMENT PLAN APPROVAL WILL REQUIRE AN APPROVED CONCEPTUAL GRADING & DRAINAGE REPORT.

PLATTING & BUILDING PERMIT APPROVALS WILL REQUIRE AN APPROVED FINAL GRADING & DRAINAGE PLAN.

FREE DISCHARGE CAN BE JUSTIFIED; PONDING & PUMPING IS ALLRIGHT. PONDS SHOULD BE EMPTIED W/ IN 6 HRS. IF POSSIBLE PUMP SHOULD EMPTY INTO THE 48" ϕ RCP IN CENTRAL VIA THE GRATE @ THE ENTRANCE TO THIS SITE

The undersigned agrees that the above findings are summarized accurately and are only subject to change if further investigation reveals that they are not reasonable or that they are based on inaccurate information.

SIGNED:	S Reeder	SIGNED:	Terry D. Brown
TITLE:	_____	TITLE:	_____
DATE:	8/22/89	DATE:	8/22/89

NOTE PLEASE PROVIDE A COPY OF THIS RECAP WITH THE DRAINAGE SUBMITTAL

KEN SCHULTZ
MAYOR

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

September 13, 1989

Terry Brown, P.E.
D. Mark Goodwin & Associates
Post Office Box 21307
Albuquerque, New Mexico 87154

RE: CONCEPTUAL GRADING & DRAINAGE PLAN SUBMITTAL OF NORTH CENTRAL WASTE TRANSFER, RECEIVED AUGUST 24, 1989 FOR SITE DEVELOPMENT PLAN APPROVAL (L-22/D49)

Dear Mr. Brown:

Your submittal, referred to above, is approved for Site Development Plan sign-off by the Hydrology Section.

For Building Permit approval, kindly submit the following:

1. Please justify the offsite flow quantity entering the site from Linn Avenue with a previously approved drainage report, or your own hydrologic analysis.

2. Hydraulic calculations will be required for the transition from Linn Avenue to the 6 foot wide channel, and for the 90° turns to assure sufficient capacity will exist in the channel.

3. Please address if the runoff from the proposed 6 foot wide channel will be accepted entirely by the existing catch basin on Central Avenue, or is a separate catch basin with a storm sewer pipe from the channel terminus to the existing 42" RCP justified.

4. Siphon pump specifications and hydraulic calculations will be required. Please label the outfall location for the pump below the building.

5. Swales proposed along natural ground should not be diverted across paved areas.

If you should have any questions, please feel free to call me at 768-2650.

Cordially,

Gilbert Aldaz, P.E.
City/County Floodplain Administrator

GA/bsj
(WP+1285)

DRAINAGE INFORMATION SHEET

PROJECT TITLE: NORTH CENTRAL WASTE TRANSFER ZONE ATLAS/DRNG. FILE #: L-22/D49

LEGAL DESCRIPTION: Blocks 3, 4, and 5, Hendron Addition

CITY ADDRESS: Central Avenue east of Juan Tabo

ENGINEERING FIRM: D. Mark Goodwin and Associates, P.A CONTACT: Mark Goodwin, P.E.

ADDRESS: PO Box 21307, Alb, NM 87154 PHONE: 505/265-0905

OWNER: Bell Werrel CONTACT: Pete Ford

ADDRESS: PO Box 969, Fort Collins, CO PHONE: 505/266-2719

ARCHITECT: Claudio Vigil, Architects CONTACT: Chris Carian

ADDRESS: 825 Pennsylvania NE PHONE: 505/265-3000

SURVEYOR: A & E CONTACT: John Esquibel

ADDRESS: 1330 San Pedro NE, Alb NM 87110 PHONE: 266-8791

CONTRACTOR: n/a CONTACT: _____

ADDRESS: _____ PHONE: _____

RECEIVED
AUG 24 1989
HYDROLOGY SECTION

PRE-DESIGN MEETING:

X YES

___ NO

X COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. _____

EPC NO. _____

PROJ. NO. _____

TYPE OF SUBMITTAL:

___ DRAINAGE REPORT

___ DRAINAGE PLAN

X CONCEPTUAL GRADING & DRAINAGE PLAN

___ GRADING PLAN

___ EROSION CONTROL PLAN

___ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

___ SKETCH PLAT APPROVAL

___ PRELIMINARY PLAT APPROVAL

X SITE DEVELOPMENT PLAN APPROVAL

___ FINAL PLAT APPROVAL

___ BUILDING PERMIT APPROVAL

___ FOUNDATION PERMIT APPROVAL

___ CERTIFICATE OF OCCUPANCY APPROVAL

___ ROUGH GRADING PERMIT APPROVAL

___ GRADING/PAVING PERMIT APPROVAL

___ OTHER _____ (SPECIFY)

DATE SUBMITTED: _____

BY: Terry D Brown for Mark Goodwin, P.E.

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION/DESIGN HYDROLOGY SECTION

CONFERENCE RECAP

DRAINAGE FILE/ZONE ATLAS PAGE NO.: L-22 DATE: 8/22/89 @ 10:00

PLANNING DIVISION NOS: EPC: _____ DRB: _____

SUBJECT: _____

STREET ADDRESS (IF KNOWN): _____

SUBDIVISION NAME: Blocks 3, 4 & 5 Hendren Addition

APPROVAL REQUESTED:

X	PRELIMINARY PLAT	X	FINAL PLAT
X	SITE DEVELOPMENT PLAN	X	BUILDING PERMIT
_____	OTHER	_____	ROUGH GRADING
_____			

ATTENDANCE:	WHO	REPRESENTING
	~~Mark Goodwin~~ Terry Brown	P. Mark Goodwin & Assoc.
	Stuart Reeder	Hydrology Section

FINDINGS:

SITE DEVELOPMENT PLAN APPROVAL WILL REQUIRE AN APPROVED CONCEPTUAL GRADING & DRAINAGE REPORT.

PLATTING & BUILDING PERMIT APPROVALS WILL REQUIRE AN APPROVED FINAL GRADING & DRAINAGE PLAN.

FREE DISCHARGE CAN BE JUSTIFIED; PONDING & PUMPING IS ALLRIGHT. PONDS SHOULD BE EMPTIED W/ IN 6 HRS. IF POSSIBLE PUMP SHOULD EMPTY INTO THE 48" ϕ RCP IN CENTRAL VIA THE GRATE @ THE ENTRANCE TO THIS SITE

The undersigned agrees that the above findings are summarized accurately and are only subject to change if further investigation reveals that they are not reasonable or that they are based on inaccurate information.

SIGNED:	G S Reeder	SIGNED:	Terry D. Brown
TITLE:	_____	TITLE:	_____
DATE:	8/22/89	DATE:	8/22/89

NOTE PLEASE PROVIDE A COPY OF THIS RECAP WITH THE DRAINAGE SUBMITTAL

HYDROGRAPH COMPUTATION WORKSHEET

DATE _____
COMPUTED BY _____
CHECK BY _____

RECEIVED
AUG 24 1989
HYDROLOGY SECTION

PROJECT SOLID WASTE TRANSFER STATION

LOCATION Area I

ANALYSIS POINT # _____

(DR. AREA) A = 0.75 ACRES

T_c 10 MIN

POINT RAINFALL 2.5 IN. FROM PLATE 22.2 D-1

CN = 69 FROM PLATES 22.2 C-2, 22.2 C-3

RUNOFF VOLUME R = 0.5 IN. FROM PLATE 22.2 C-4

COMPUTED T_p = 10 MIN. $T_p = T_c$
(Rounded to even minute)

$q_p = \frac{45.4A}{T_p}$ = 3.4 CFS./INCH OF RUNOFF

$(R \times q_p) = Q_{peak}$ = 1.7 CFS

$t(COLUMN) = (t/T_p)$ $t = T_p(t/T_p)$

$y = \frac{Q}{Q_{peak}}$ $Q = y(Q_{peak})$

Volume = $\frac{0.5}{12}$ x .75 x 43560 = 1360 cf.

	(t/T_p)	t (min.)	y	Q (cfs)
1	0	0	0	0
2	.1		.03	
3	.2		.10	
4	.3		.190	
5	.4		.310	
6	.5		.470	
7	.6		.660	
8	.7		.820	
9	.8		.930	
10	.9		:990	
11	1.0		1.00	
12	1.1		.990	
13	1.2		.930	
14	1.3		.860	
15	1.4		.780	
16	1.5		.680	
17	1.6		.560	
18	1.7		.460	
19	1.8		.390	
20	1.9		.330	
21	2.0		.280	
22	2.2		.207	
23	2.4		.147	
24	2.6		.107	
25	2.8		.077	
26	3.0		.055	
27	3.2		.040	
28	3.4		.029	
29	3.6		.021	
30	3.8		.015	
31	4.0		.011	
32	4.5		.005	
33	5.0		.000	

PLATE 22.2 F-1

HYDROGRAPH COMPUTATION WORKSHEET

DATE _____
COMPUTED BY _____
CHECK BY _____

PROJECT SOLID WASTE TRANSFER STATION

LOCATION Area II

ANALYSIS POINT # _____

(DR. AREA) A = 1.40 ACRES

T_C 10 MIN

POINT RAINFALL 2.5 IN. FROM PLATE 22.2 D-1

CN = 69 FROM PLATES 22.2 C-2, 22.2 C-3

RUNOFF VOLUME R = 0.5 IN. FROM PLATE 22.2 C-4

COMPUTED T_p = 10 MIN. $T_p = T_C$
(Rounded to even minute)

$q_p = \frac{45.4A}{T_p}$ = 6.4 CFS./INCH OF RUNOFF

$(R \times q_p) = Q_{peak}$ = 3.2 CFS

$t(COLUMN) = (t/T_p)$ $t = T_p(t/T_p)$

$y = \frac{Q}{Q_{peak}}$ $Q = y(Q_{peak})$

Volume = $\frac{0.5 \text{ in}}{12}$ x 1.4 x 43560 = 2540 cf

	(t/T_p)	t (min.)	y	Q (cfs)
1	0	0	0	0
2	.1		.03	
3	.2		.10	
4	.3		.190	
5	.4		.310	
6	.5		.470	
7	.6		.660	
8	.7		.820	
9	.8		.930	
10	.9		:990	
11	1.0		1.00	--
12	1.1		.990	
13	1.2		.930	
14	1.3		.860	
15	1.4		.780	
16	1.5		.680	
17	1.6		.560	
18	1.7		.460	
19	1.8		.390	
20	1.9		.330	
21	2.0		.280	
22	2.2		.207	
23	2.4		.147	
24	2.6		.107	
25	2.8		.077	
26	3.0		.055	
27	3.2		.040	
28	3.4		.029	
29	3.6		.021	
30	3.8		.015	
31	4.0		.011	
32	4.5		.005	
33	5.0		.000	

PLATE 22.2 F-1

HYDROGRAPH COMPUTATION WORKSHEET

DATE _____
COMPUTED BY _____
CHECK BY _____

PROJECT SOLID WASTE TRANSFER STATION

LOCATION Area III

ANALYSIS POINT # _____

(DR. AREA) A = 5.8 ACRES

T_c 10 MIN

POINT RAINFALL 2.5 IN. FROM PLATE 22.2 D-1

CN = 93 FROM PLATES 22.2 C-2, 22.2 C-3

RUNOFF VOLUME R = 1.8 IN. FROM PLATE 22.2 C-4

COMPUTED T_p = 10 MIN. $T_p = T_c$
(Rounded to even minute)

$q_p = \frac{45.4A}{T_p}$ = 26.3 CFS./INCH OF RUNOFF

$(R \times q_p) = Q_{peak}$ = 47.3 CFS

$t(COLUMN) = (t/T_p)$ $t = T_p(t/T_p)$

$y = \frac{Q}{Q_{peak}}$ $Q = y(Q_{peak})$

Volume = $\frac{1.8}{12}$ x 5.8 x 43560 = 37,900 cf.

	(t/T_p)	t (min.)	y	Q (cfs)
1	0	0	0	0
2	.1		.03	
3	.2		.10	
4	.3		.190	
5	.4		.310	
6	.5		.470	
7	.6		.660	
8	.7		.820	
9	.8		.930	
10	.9		:990	
11	1.0		1.00	--
12	1.1		.990	
13	1.2		.930	
14	1.3		.860	
15	1.4		.780	
16	1.5		.680	
17	1.6		.560	
18	1.7		.460	
19	1.8		.390	
20	1.9		.330	
21	2.0		.280	
22	2.2		.207	
23	2.4		.147	
24	2.6		.107	
25	2.8		.077	
26	3.0		.055	
27	3.2		.040	
28	3.4		.029	
29	3.6		.021	
30	3.8		.015	
31	4.0		.011	
32	4.5		.005	
33	5.0		.000	

PLATE 22.2 F-1

96090119

54081

L22/D049

AGREEMENT AND COVENANT

This Agreement and Covenant, between the City of Albuquerque, New Mexico ("City") and Glenridge Park Property Owner ("User") is made in Albuquerque, New Mexico and is entered into as of the date of recording this Agreement with the Bernalillo County Clerk.

1. Recital. The User is the owner of certain real property ("User's Property") located at Glenridge Park Subdivision, in Albuquerque, New Mexico, and more particularly described as: Streets and common areas as shown on Plat of Glenridge Park, Section 27, T. 10N, R. 4E., NMPM, City of ABQ., Bernalillo County, New Mexico, March, 1996, and as described in Exhibit B.

The City is the owner of certain real property, easement or public right-of-way ("City's Property") in the vicinity of, contiguous to, abutting or within User's Property, and more particularly described as: Skyline Road N.E. Public drainage Easements within User's Property located within Glenridge Park Lane, Linn Way, Hendren Lane and Tract A and a 20' drainage Easement.

The User wishes to construct upon, improve or repair and to maintain the following "Improvement" on the City's Easements. Underground Storm Drainage Area, and Streets per Glenridge Park Subdivision Plat. Streets described as Glenridge Park Lane, Linn Way and Hendren Lane.

A sketch of the proposed or existing Improvement is attached as Exhibit A and made a part of this Agreement.

The City agrees to permit the Improvement to exist on the City's Property provided the User complies with the terms of this Agreement.

2. City Use of City's Property and City Liability. The City has the right to enter upon the City's Property at any time and perform whatever inspection, installation, maintenance, repair, modification or removal ("Work") it deems appropriate without liability to the User. If the Work affects the Improvement the City will not be financially or otherwise responsible for rebuilding or repairing the Improvement. The User promptly will repair the Improvement to the City's satisfaction. The cost of repairing the Improvement will be paid by User.

3. User's Responsibility for Improvement. The User will be solely responsible for constructing, maintaining, repairing and, if required, removing the Improvement, all in accordance with standards required by the City as per the approved Grading and Drainage Plan L22-D49 on file at City Hydrology. The User will be solely responsible for paying all related costs. The User will not permit the Improvement to constitute a hazard to the health or safety of the general public or to interfere with the City's use of the City's Property. The User will conform with all

applicable laws, ordinances and regulations.

4. Use of the Improvement. If the City's Property is a public right-of-way, it shall be open to the use of the general public at all times, subject to reasonable curtailment during periods of construction, maintenance or repair.

5. Demand for Repair, Modification or Removal. The City may send written notice ("Notice") to the User requiring the User to repair, modify or remove the Improvement within 30 days ("Deadline") and the User will comply promptly with the requirements of the Notice. If removal is demanded, the City also may require the User to return the City's Property to its original condition by the Deadline. The User will perform all required work by the Deadline, at User's sole expense.

6. Failure to Perform by User and Emergency Work by City. If the User fails to comply with the terms of the Notice by the Deadline stated, or, if the City determines that an emergency condition exists, the City may perform the work itself. The City then may assess the User for the cost of the work and for any other expenses or damages which result from User's failure to perform. The User agrees promptly to pay the City the amount assessed. If the User fails to pay the City within thirty (30) days after the City gives the User written notice of the amount due, the City may impose a lien against User's Property for the total resulting amount.

7. Cancellation of Agreement and Release of Covenant. This Agreement may be cancelled and User's covenants released by the City at will by the City's mailing to the User notice of the City's intention to record a Cancellation and Release with the Bernalillo County Clerk. The Cancellation and Release will be effective thirty (30) days after the date of mailing the notice to the User unless a later date is stated in the notice or the Cancellation and Release. After the effective date, the City will record the Cancellation and Release with the Bernalillo County Clerk.

8. Condemnation. If any part of the User's Property is ever condemned by the City, the User will forego all claims to compensation for any portion of User's structure which encroaches on City Property and for severance damage to the remaining portion of User's structure on User's Property.

9. Assessment. Nothing in this Agreement shall be construed to relieve the User, his heirs, assigns and successors from an assessment against User's Property for improvements to the City Property under a duly authorized and approved Special Assessment District. The parties specifically agree that the value of the Improvement will not reduce the amount assessed by the City.

Approved as to form by
Legal Department 2/23/95

10. Notice. For purposes of giving formal written notice to the User, User's address is:

Glenridge Park Homeowners Assoc.
Joe R. Hahn Interim President
9500 Montgomery Blvd. NE, Ste. 210
Albuquerque, NM 87111

Notice may be given to the User either in person or by mailing the notice by regular U.S. mail, postage paid. Notice will be considered to have been received by the User within 3 days after the notice is mailed if there is no actual evidence of receipt. The User may change User's address by giving written notice of the change by certified mail, return receipt requested, to the City Engineer at P.O. Box 1293, Albuquerque, New Mexico 87103.

11. Indemnification. The User agrees to defend, indemnify and hold harmless the City, its officials, agents and employees from and against any and all claims, actions, suits or proceedings of any kind brought against said parties as a result of User's use of the City's Property. To the extent, if at all, Section 56-7-1 NMSA 1978 is applicable to this Agreement, this Agreement to indemnify will not extend to liability, claims, damages, losses or expenses, including attorney's fees, arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications by the indemnitee, or the agents or employees of the indemnitee; or (2) the giving of or the failure to give direction or instructions by the indemnitee, where such giving or failure to give directions or instructions is the primary cause of bodily injury to persons or damage to property.

12. Term. This Agreement shall continue until revoked by the City pursuant to Section 7 above.

13. Binding on User's Property. The covenants and obligations of the User set forth herein shall be binding on User, his heirs, assigns and successors and on User's Property and constitute covenants running with User's Property until released by the City.

14. Entire Agreement. This Agreement contains the entire agreement of the parties and supersedes any and all other agreements or understandings, oral or written, whether previous to the execution hereof or contemporaneous herewith.

15. Changes of Agreement. Changes to this Agreement are not binding unless made in writing, signed by both parties.

Approved as to form by
Legal Department 2/23/95

16. Construction and Severability. If any part of this Agreement is held to be invalid or unenforceable, the remainder of the Agreement will remain valid and enforceable if the remainder is reasonably capable of completion.

17. Captions. The captions to the sections or paragraphs of this Agreement are not part of this Agreement and will not affect the meaning or construction of any of its provisions.

CITY OF ALBUQUERQUE

By: DCAO
for Lawrence Rael
Chief Administrative Officer
Dated: 8-13-96

USER:

Glenridge Park Homeowner Assoc

By:
Its: Interim President
Dated: 7-31-96

APPROVED:

Robert E. Gurule, Director
Public Works Department
8/9/96

Reviewed by:

Rick Roybal, City Engineer 8/1/96
Construction Management/PWD
8/5/96

CITY'S ACKNOWLEDGEMENTS

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

This instrument was acknowledged before me on August 13, 199 6, by ~~Lawrence Rael~~ Vickie Fisher Acting, Chief Administrative Officer for the City of Albuquerque, a New Mexico municipal corporation, on behalf of the corporation.

OFFICIAL SEAL
RENIE HERRERA
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires:

My Commission Expires: 1/2/98

Notary Public

j:\rpd4\agmcov.agm

Approved as to form by
Legal Department 2/23/95

3078

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

This instrument was acknowledged before me on August 9, 199 6, by Robert E. Gurule, Director, Public Works Department for the City of Albuquerque, a New Mexico municipal corporation, on behalf of the corporation.

Felicia Lucero
Notary Public

My Commission Expires:

1-27-98

USER'S ACKNOWLEDGEMENT

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

OFFICIAL SEAL
Cyd McCoy
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: 4-15-2000

This instrument was acknowledged before me on July 31, 1996, by Joe R. Hahn, Interim President, on behalf of Glenridge Park Homeowners association.

Cyd McCoy
Notary Public

My Commission Expires:

April 15, 2000

STATE OF NEW MEXICO
COUNTY OF BERNALILLO
FILED
1996 AUG 13 PM 4:14
96-22 3074 308
BK PG
JUDY D. WOODWARD
CO. CLERK RECORDER

j:\rpd4\agmcov.agm

Approved as to form by
Legal Department 2/23/95

DESCRIPTION

A certain tract of land being comprised of all of the HEIGHTS ADDITION, as the same is shown and designated upon the plat of said addition, filed in the office of the county clerk for Bernalillo County, New Mexico, on April 19, 1948, of Volume B, Page 103, excepting from said HEIGHTS ADDITION, all of Lot 1 of Block 3, all of Lot 1 and Lot 2 of Block 5, all of Lots 1 thru 15, inclusive of Block 7, all of Tract A and Tract B, and Block 1-A, filed March 15, 1984, Vol C2.5, Folio 108, all situate within Section 27, Township 10 North, Range 4 East, N.M.P.M., Albuquerque, Bernalillo County, New Mexico, and being more particularly described as follows.
BEGINNING at the Southwest corner of the herein described tract, also being a point in the Northerly right of way line of Central Avenue, whence the Cap marking ACS Sta. 1-121 (R) bears N85°46'18"W and is 89.368 feet distant,
THENCE from the above said point of beginning, N00°18'55"E a distance of 142.16 feet,
THENCE N00°24'32"E a distance of 1078.88 feet;
THENCE N89°43'25"W a distance of 105.00 feet,
THENCE N00°22'00"E a distance of 543.98 feet to a point in the Southerly right of way line of Skyline Road N.E.;
THENCE S89°01'00"E along said Southerly right of way line a distance of 527.88 feet,
THENCE leaving said Southerly right of way line, S00°11'10"W a distance of 539.56 feet,
THENCE N89°04'13"W a distance of 110.52 feet,
THENCE S00°26'05"W a distance of 145.42 feet,
THENCE N82°47'03"W a distance of 265.91 feet,
THENCE S00°22'00"W a distance of 1420.00 feet to a point in the above said Northerly right of way line of Central Avenue N.E.,
THENCE N82°46'51"W a distance of 50.56 feet to the point and place of beginning, and containing an area of 333,094.608 square feet (7.6468 Ac.), more or less

Exhibit A

GLENRIDGE PARK LANE

HEDREN LANE

CATCH BASIN NO.1

CATCH BASIN NO.2

CATCH BASIN NO.3

24" CMP

Robust Drainage Easement Per Glenridge Park Plat March 1996

LINN WAY

8" PVC

12" VCP

42' ROW

S89°01'00"E 527.88'

N89°41'25"W 105.00'

N89°04'15"W 110.32'

N89°47'03"W 265.97'

SEE LINN AVE. RUNDOWN DRAINAGE EASEMENT DET ON SHEET 9.

CENTRAL AVE.

3081

CITY OF
Albuquerque

July 15, 1996

Martin J. Chávez, Mayor

Mr. Pete Ford
330 Washington SE
Albuquerque, NM 87108

RE: GLENRIDGE PARK (L22-D49)

Dear Mr. Ford:

A drainage covenant will be required for the above referenced project that defines the Homeowner's association as being responsible for the maintenance of on site and off site storm water in the streets, the concrete lined drainage channel, and the underground storm water storage system. Also, indicate on the covenant that ponding of storm waters is intended to take place in the street.

I have enclosed a copy of the City's Standard Agreement & Covenant for you to use.

If I can be of further assistance, please feel free to contact me at 768-3622.

Sincerely,

Lisa Ann Manwill
Engineering Assoc./Hyd.

c: Fred Aguirre - COA
File

PLAT OF
GLENRIDGE PARK
SECTION 27, T.10N., R.4E. N.M.P.M.
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO.
March, 1996

GENERAL NOTES

1) CENTERLINE (IN LIEU OF R/W MONUMENTATION) TO BE INSTALLED AT ALL CENTERLINE PC'S, PT'S, ANGLE POINTS AND STREET INTERSECTIONS PRIOR TO ACCEPTANCE OF SUBDIVISION STREET IMPROVEMENTS AND WILL CONSIST OF STANDARD FOUR-INCH (4") ALUMINUM ALLOY CAP STAMPED "City of Albuquerque", "Centerline Monumentation", "Survey Marker", "Do Not Disturb", PLS/ 6256"

ACS STA. No. 1-L21(A)
Y=1480854.31
X=420742.99
Z=5534.627
N.M. State Plane Coordinates (Central Zone)
C.F. = 0.99964255
$\Delta\alpha$ = -00°09'06"
Datum = 1927 N.A.D.

SCALE: 1" = 50'

FRANKLIN PLAZA (FILED BK.C10, PG.21, Aug. 1, 1974)

3' PRIVATE DRAINAGE EASEMENT GRANTED BY THIS PLAT (Existing 3' Utility Easement (Apr. 19, 1948, B-103))

543.98 N00°22'00"E

REPLAT BLOCK 1-A HENDREN ADD. (C23-106) (MAR. 15, 1984)

R/W DEDICATED PER PLAT FILED C23-108

HENDREN ADD. (VOL. B, PG. 103) (APR. 19, 1948)

TR. A - HENDREN ADD.

142.16 N00°18'53"E

107.88 N00°24'32"E

N89°43'25"W 105.00

FND. #4 REBAR W. 15.94' N

50' PRIVATE ACCESS, PUBLIC UTILITY, PEDESTRIAN AND DRAINAGE EASEMENT

GLENRIDGE PARK LANE N.E.

N00°22'00"E 533.90'

AREA IN PRIVATE ACCESS EASEMENTS = 76,232.67 sq. ft.

42' PRIVATE ACCESS, PUBLIC UTILITY, PEDESTRIAN AND DRAINAGE EASEMENT

Kirby St. Vacated by Vacation Action V95-80

Lots 1-14, Block 1-A, Hendren Add. (C23-106)

Lots 1-12, Hendren Add. (Vol. B, Pg. 103)

Lots 1-10, Hendren Add. (Vol. B, Pg. 103)

Lots 1-10, Hendren Add. (Vol. B, Pg. 103)

Lots 1-27, Block 5, Hendren Add. (Vol. B, Pg. 103)

Lots 1-40, Block 5, Hendren Add. (Vol. B, Pg. 103)

TRACT A
(AREA IN PRIVATE ACCESS EASEMENTS AND COMMON AREA=113,138.83 SQ.FT.)
Existing 10' P.U.E. (Vol. B-103, Apr. 19, 1948) hereby vacated by this plat. Vacation Action V95-80

COMMON AREA
AREA IN COMMON AREA = 34,905.38 SQ. FT
COMMON AREA, PEDESTRIAN, PRIVATE DRAINAGE, EASEMENT, PUBLIC UTILITY AND PARKING

PROPOSED COMMUNITY BUILDING SITE SEE NOTE A

HENDREN LANE N.E.

Alcoholes St. Vacated by Vacation Action V95-80

N00°22'00"E 480.65'

42' PRIVATE ACCESS, PUBLIC UTILITY, PEDESTRIAN AND DRAINAGE EASEMENT

ORIGINAL LOT LINES PER HENDREN ADDITION

CENTRAL AVENUE N.E. 100' ROW

LINN WAY N.E.

SKYLINE ROAD N.E. 60' ROW

S89°01'00"E (APPROVED - 527.75')

527.88

142.00 S00°22'00"W (S00°22'00"W - 142.00')

97.68' N 00°22'00" E

61 0.0944 acres S 00°26'04" W 97.68'
60 0.0792 acres S 00°26'04" W 97.68'
59 0.0792 acres S 00°26'04" W 97.68'
58 0.0792 acres S 00°26'04" W 97.68'
57 0.0793 acres S 00°26'04" W 98.59'
56 0.0837 acres S 00°26'04" W 110.24'
55 0.1329 acres

10' BUILDING SETBACK LINE

145.42' S00°26'05"W (S00°26'05"W - 145.42')

FND. REBAR/CAP "LS 5949"

LOT 2A BLOCK 5 HENDREN ADD. FILED VOL 96C, FOLIO 158 APRIL 12, 1996

S27°22'00"E 148.45'

N89°04'13"W 111.32' (N89°04'13"W - 111.33')

Existing 10' Drainage Easement granted by Plat

0.1102 acres

54 0.0784 acres N 89°38'00" W 97.53'
53 0.0781 acres N 89°38'00" W 96.44'
52 0.0780 acres N 89°38'00" W 96.33'
51 0.0780 acres N 89°38'00" W 96.22'
50 0.0779 acres N 89°38'00" W 96.11'
49 0.0779 acres N 89°38'00" W 96.00'
48 0.1021 acres N 89°38'00" W 95.85'
47 0.0958 acres N 89°38'00" W 95.71'
46 0.0775 acres N 89°38'00" W 95.60'
45 0.0772 acres N 89°38'00" W 95.49'
44 0.0774 acres N 89°38'00" W 95.38'
43 0.0773 acres N 89°38'00" W 95.27'
42 0.0772 acres N 89°38'00" W 95.16'
41 0.0772 acres N 89°38'00" W 95.05'

46.27' 46.38' 43.61'

Existing 5' P.U.E. (Apr. 19, 1948, B-103) & 5' PRIVATE DRAINAGE EASEMENT GRANTED BY THIS PLAT.

539.56

S00°11'10"W (S00°13'00"W - 540.00')

FND. REBAR/CAP "LS 5949"

CHAVSLORS REPLAT (FILED BK.C23, PG. 142, APRIL 3, 1984)

ACS STA. No. 4-L22
Y=1480446.81
X=423364.73
Z=5583.831
N.M. State Plane Coordinates (Central Zone)
C.F. = 0.99964079
$\Delta\alpha$ = -00°08'50"
Datum = 1927 N.A.D.

DEAD END LINN AVE., N.E. 60' ROW

NOTE A: Conveyance subject to 5' P.U.E. and PEDESTRIAN, PRIVATE ACCESS AND PUBLIC UTILITY EASEMENT (EXCLUDES DRAINAGE EASEMENT)

GALLAGHER ADDITION (FILED BK.D7, PG.142, March 25, 1977)

CURVE	RADIUS	LENGTH	TANGENT
C1	75.00'	126.78'	84.55'
C2	22.00'	34.56'	22.00'
C3	20.38'	4.75'	2.38'
C4	96.00'	36.32'	18.38'
C5	96.00'	49.54'	25.33'
C6	96.00'	49.56'	25.35'
C7	96.00'	13.70'	6.86'
C8	96.00'	13.16'	6.59'

GENERAL NOTES:

1. LOT OWNERS ARE THE BENEFICIARIES OF ALL PRIVATE ACCESS EASEMENTS AND COMMON AREAS (TRACT A). MAINTENANCE OF SAID PRIVATE ACCESS EASEMENTS AND COMMON AREAS IS THE RESPONSIBILITY OF SAID LOT OWNERS THROUGH THE GLENRIDGE PARK HOME OWNERS ASSOCIATION.
2. Kirby Avenue and Algodones Avenue as shown upon Hendren Addition (April 19, 1948, B-103) are Vacated as per Vacation Action V 95-80.

ENVIRONMENTAL HEALTH NOTES:

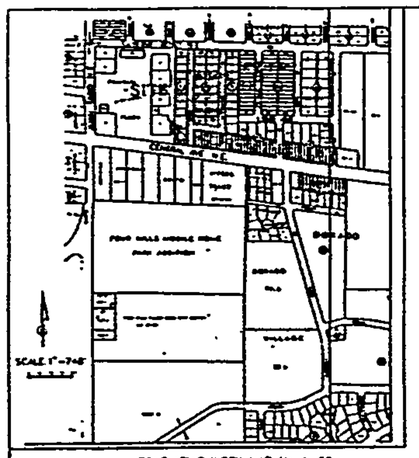
1. CITY OF ALBUQUERQUE WATER AND SANITARY SEWER SERVICE TO GLENRIDGE PARK MUST BE VERIFIED AND COORDINATED WITH THE PUBLIC WORKS DEPARTMENT, CITY OF ALBUQUERQUE.

ConSurve Surveying Co.
P O Box 8
San Fidel, New Mexico 87049
(505) 552-9898

SHEET 2 OF 2

308/A

3082



ZONE ATLAS INDEX MAP No. L-22
Vicinity Map

TALOS LOG No. 951102152205I5

PLAT OF
GLENRIDGE PARK

SECTION 27, T.10N., R.4E. N.M.P.M.
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
MARCH, 1996

SUBDIVISION DATA

Case No. DRB 95-358
Zone Atlas No. L-22
Gross Subdivision Acreage: 7.64
Total No. of Lots Created: 61
Total Mileage of Full-Width Streets Created: 0
Date of Survey: JULY, 1995

DISCLOSURE STATEMENT:

The purpose of this plat is to Replat all of Block 4, Lots 2 thru 10 of Block 3, Lots 3 thru 11 of Block 5, Kirby Avenue and Alydaress Avenue into sixty-one lots.

PUBLIC UTILITY EASEMENTS

PUBLIC UTILITY EASEMENTS shown on this plat are granted for the common and joint use of

1) PNM Electric Company of New Mexico for the installation, maintenance, and service of overhead and underground electrical lines, transformers, poles and other equipment, fixtures, structures and related facilities reasonably necessary to provide electrical service

2) PNM Gas Company of New Mexico for installation, maintenance, and service of natural gas lines, valves and other equipment and facilities reasonably necessary to provide natural gas

3) U S West for the installation, maintenance and service of all buried and aerial communication lines and other related equipment and facilities reasonably necessary to provide communication services, including but not limited to above ground pedestals and closures.

4) Jones Intercable for the installation, maintenance, and service of such lines cable and other related equipment and facilities reasonably necessary to provide Cable TV service

Included, is the right to build, rebuild, construct, reconstruct, locate relocate change, remove, modify, renew, operate and maintain facilities for the purposes described above, together with free access to, from, and over said easements, including sufficient working area space for electric transformers, with the right and privilege to trim and remove trees, shrubs or bushes which interfere with the purposes set forth hereon. No building, sign, pool (above-ground or subsurface), hot tub, concrete or wood pool decking, or other structure shall be erected or constructed on said easements, nor shall any well be drilled or operated thereon. Property owners shall be solely responsible for correcting any violations of National Electrical Safety Code caused by construction of pools, decking, or any other structures adjacent to, within or near easements shown on this plat

Utilities installed in any A.M.A.F.C.A. EASEMENT requires and A.M.A.F.C.A. Encroachment license Prior to Construction.

City of Albuquerque Water and Sanitary Sewer Service is currently available to these properties.

SURVEYOR'S NOTES

1) BASIS OF BEARINGS: West line Hendron Addition, cited hereon.
2) All distances are ground.
3) Plat shows all easements of record.
4) Data in parentheses are record
5) Adjacent access and utility easements are previously recorded.
6) Any private access easements as shown hereon are for the use and benefit to owners of Lot 1 through 61, and are to be maintained by said lot owners.
7) Unless otherwise indicated, all lot corners are ½ rebar/cap "PS 6256"
8) Rotate Plat bearings Clockwise 00°07'40" to Grid.

THIS IS TO CERTIFY THAT TAXES ARE CURRENT AND PAID ON UPC) _____

PROPERTY OWNER OF RECORD: _____

BERNALILLO COUNTY TREASURER'S OFFICE _____

CITY/COUNTY APPROVALS:

AMAFCA	Date
CITY SURVEYOR	04/08/96 Date
PROPERTY MANAGEMENT	Date
CITY ENGINEER / TRANSPORTATION DEVELOPMENT	4-30-96 Date
CITY PLANNING DIRECTOR	4-9-96 Date
U.S. WEST	4-22-96 Date
PNM ELECTRIC SERVICES	4-22-96 Date
PNM GAS SERVICES	4-30-96 Date
PARKS AND GENERAL SERVICES DEPT.	4-30-96 Date
UTILITIES DEVELOPMENT	4/9/96 Date
JONES CABLE CO.	Date

* Approving this plat, PNM Electric Services and Gas Services (PNM) did not conduct a Title Search of the properties shown hereon. Consequently, PNM does not waive nor release any easement or easements rights to which it may be entitled.

DESCRIPTION

A certain tract of land being comprised of all of the HENDRON ADDITION, as the same is shown and designated upon the plat of said addition, filed in the office of the county clerk for Bernalillo County, New Mexico, on April 19, 1948, at Volume B, Page 103, excepting from said HENDRON ADDITION, all of Lot 1 of Block 3, all of Lot 1 and Lot 2 of Block 5, all of Lots 1 thru 15, inclusive of Block 2, all of Tracts A and Tract B, and Block 1-A, filed March 15, 1984, Vol C23, Folio 108, all situate within Section 27, Township 10 North, Range 4 East, N.M.P.M., Albuquerque, Bernalillo County, New Mexico, and being more particularly described as follows.
BEGINNING at the Southwest corner of the herein described tract, also being a point on the Northerly right of way line of Central Avenue, whence the Cap marking ACS Sta. 1-L21 [R] bears N85°46'18"W and is 893.66 feet distant;
THENCE from the above said point of beginning, N00°18'53"E a distance of 142.16 feet;
THENCE N00°24'32"E a distance of 107.88 feet;
THENCE N89°43'25"W a distance of 105.00 feet;
THENCE N00°23'00"E a distance of 543.96 feet to a point in the Southerly right of way line of Sigma Road N.E.;
THENCE S89°01'00"E along said Southerly right of way line a distance of 527.88 feet;
THENCE leaving said Southerly right of way line, S00°11'10"W a distance of 538.56 feet;
THENCE N89°04'13"W a distance of 110.32 feet;
THENCE S00°26'05"W a distance of 145.42 feet;
THENCE N82°47'03"W a distance of 265.91 feet;
THENCE S30°22'00"W a distance of 142.00 feet to a point in the above said Northerly right of way line of Central Avenue N.E.;
THENCE N62°46'51"W a distance of 50.36 feet to the point and place of beginning, and containing an area of 333,094.808 square feet (7.646 Ac.), more or less.

FREE CONSENT AND DEDICATION

The foregoing replat of that certain tract of land being a portion of the HENDRON ADDITION, Section 27, T.10N., R.4E., N.M.P.M., along with the granting of Private Road Easements (Granted in Perpetuity), and the Granting of Public Utility Easements, is in accordance with the desires and wishes of the undersigned owner(s) and proprietor(s) thereof.

Electrical Power and Communication easements are reserved for overhead distribution lines for pure type utilities and buried distribution lines, conduits and pipes for underground utilities and other related equipment where shown or indicated, and including the right of ingress and egress for construction and maintenance, and the right to trim interfering trees unless shown.

Joe R. Hann
Owners GLENRIDGE PARK JOINT VENTURE - JOE R HANN - MANAGING JOINT VENTURE

ACKNOWLEDGEMENT
STATE OF NEW MEXICO
ss
COUNTY OF BERNALILLO
This foregoing instrument was acknowledged before me this 5 day of Nov., 1995, by: Joe R Hann
Oct. 19 1996
My Commission Expires
NOTARY PUBLIC

SURVEYOR'S CERTIFICATE

I, Jerry Nichols, a Registered Professional Land Surveyor under the Laws of the State of New Mexico, do hereby certify that this Plat was prepared by me, meets the minimum requirements of monumentation and surveys of the Albuquerque Subdivision Ordinance, and that it is true and correct to the best of my knowledge and belief.

Jerry Nichols, N.M. L.S. No. 6256 March 20, 1996

REGISTERED LAND SURVEYOR STATE OF NEW MEXICO

SHEET 1 OF 2

ConSurve Surveying Co.
P.O. Box 9, San Fidel, New Mexico, 87049
(505) 552-9858

3082

CPN-541081 2 of 10

Exhibit "B" to
Agreement & Covenant

CONTRACT CONTROL FORM

PRELIMINARY REVIEW

Project # 541081

Contact Person TERRI MARTIN

CCN # 9700247

Phone No. 768-2561

1979

New or (Ext.) #

Type of Agreement : AGREEMENT + COVENANT

Description/Project: GLENRIDGE PARK

Public Works/Div.: PROJECT REVIEW SECTION

Developer: GLENRIDGE PARK JOINT VENTURE

Contract Amount $ 0

SIA Contract Period: 8-13-96 - 5-2-97

Contract Amount $

SW'S Contract Period: ____ - ____

Project Completed Date:

DRAFT CONTRACT:

Rec'd by Legal: 8/6/96 Rejected/Returned to Dept.: 8/6/96 KP

Returned to Legal: 8/9/96 / Approved: 8/9/96 Initials: KP

FINANCIAL GUARANTY:

Letter of Credit No.: ____ Date: ____ Attached: Yes___ No___ Initial____

Other: Type ____ Date: ____ Attached: Yes___ No___ Initial____

FINAL CONTRACT REVIEW

APPROVALS REQUIRED:

	Date Delivered	Returned to Dept.	Approved By	Approval Date:
Purchasing:				
Asst. City Attorney:			KP	8/9/96
CIP:				
City Attorney:				
~~CAO~~ PWO Director	8-9-96 TL		K-EG	8-9-96
Other: X			HM	8/9/96
Council:	EC No.:		Approved:	Date:

DISTRIBUTION:

	Date:	By:
User Department		
Vendor		
City Clerk	8-19-96 TL	
Treasury		

Revised 9/6/95 WP+125805/tsl

ADDENDUM TO COVER PAGE

8-5-96
(Date)

TO: Kevin Curran, Assistant City Attorney, Legal Department

FROM: Project Administrator, Project Review Sec., PWD

SUBJECT: PROJECT TITLE: GLENRIDGE PARK PROJECT # 541081

The attached documents have been review, approved, initialed and/or signed by Billy ~~Ca~~by, DRC Chairman and are submitted for your action as noted.

ITEM	ACTION: Review & Approval	ACTION: Reference
Procedure "A"		
Procedure "B"		
Procedure "B" Modified		
Procedure "C"		
Procedure "C" Modified		
Special Agreement		
Sidewalk Deferral Agreement		
Amendment		
Financial Guarantee		
Construction Paperwork:		
Contractors Proposal		
Performance/Warranty Bonds		
Labor/Material Bonds		
Certificate of Insurance		
Engineers Cost Estimate		
Extension		
Release/Agreement		
Release/Financial Guarantee		
Calling Notice		
Letter of Commitment		
Reduction Letter		
License Agreement		
Easement		
Monitoring Well Permit		
Agreement & Covenant	✓	
Drainage Covenant		
Revocable Permit		
Encroachment		
Permanent Easement		

Other:
1
2
3

Please Call TERRI at 2561 if you have any questions regarding the above or when the documents are ready to be picked up.

ATTACHMENTS (1)