# SAN IGNACIO SUBDIVISION DRAINAGE AND GRADING PLAN

1500 Edith Blvd., N.E. in Albuquerque, New Mexico May, 1996

J-14/D

For: Greater Albuquerque Housing Partnership c/o Mr. Chris Vigil 5101 Copper Ave., N.E. Albuquerque, New Mexico 87108

MAY 2 3 1996

By: C. A. Coonce & Associates, Inc. 12324 Pineridge, N. E. Albuquerque, New Mexico 87112

#### **GENERAL DISCUSSION:**

THIS 13 LOT SUBDIVISION IS COMPRISED OF 2.2725 ACRES, AND IS LOCATED ON THE WEST SIDE OF EDITH BLVD., N.E., SOUTH OF ODELIA, N.E. THE TOPOGRAPHY OF THE TRACT SLOPES WESTWARD, AWAY FROM EDITH, AND IT CURRENTLY DRAINS TO THE ALBUQUERQUE/BERNALILLO COUNTY VEHICLE POLLUTION MANAGEMENT PROGRAM HEADQUARTERS SITE. THE CHANGE IN ELEVATION FROM EDITH BLVD TO THE WEST PROPERTY LINE IS APPROXIMATELY 13 FEET. THE EDITH FRONTAGE HAS FOUR CURB CUTS. THE SITE IS HARD PACKED (TREATMENT C) SOIL FROM YEARS OF AUTOMOBILES DRIVING ACROSS THE PROPERTY.

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THE SITE AS IT EXISTS DRAINS TO THE ALBUQUERQUE/BERNALILLO COUNTY VEHICLE POLLUTION MANAGEMENT PROGRAM HEADQUARTERS SITE. IT EXITS THIS PROPERTY TO A 4:1 DROP OF SIX FEET IN THE CITY/COUNTY PROPERTY. IT THEN CROSSES A PAVED CIRCULAR DRIVE INTO A RETENTION POND, WHICH IS DRAINED INTO BROADWAY, N.E. BY AN 18 INCH DRAIN PIPE. THE DRAINAGE AND GRADING PLAN FOR THE CITY/COUNTY FACILITY IS J-14/D021. THE EXISTING TREATMENT IS "C" AND IS IN RAINFALL ZONE 2. THE EXISTING MAX.  $Q_{100}$  IS (2.2725) (3.14) = 7.14 C.F.S.

#### PROPOSED DRAINAGE

THE PLAT, AS PROPOSED, CONTAINS 13 LOTS COMPRISED OF 1.7109 ACRES, AND A CUL-DE-SAC CONTAINING 0.5616 ACRES, FOR A TOTAL AREA OF 2.2725 ACRES. THE DWELLING UNITS AS DESIGNED BY THE ARCHITECT ARE ZERO LOT LINE WITH A ONE CAR GARAGE ON A MINIMUM 5000 S.F. LOT.

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#### FLOOD PLAIN STATUS:

NO PORTION OF THIS TRACT IS WITHIN A FEMA DESIGNATED FLOOD PLAIN.

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FOLLOWING IS THE CIVIL TOOLS SOLUTION FOR THIS SWALE:

#### NATURAL CHANNELS

VARIABLES LIST:

Y - FLOW ELEVATION Q - FLOWRATE S- CHANNEL SLOPE

VARIABLE TO BE SOLVED (Y,Q OR S)? Y

Enter up to 20 cross-section points. Enter <Return> only for distance to end.

Q (CFS) ? 5.31 S (FT/FT) ? .0217

CROSS SECTION POINTS

DIST ELEV COEFF DIST ELEV COEFF

0 65 .030

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#### RESULTS

Y = 64.79 FT A = 2.61 SF P = 17.70 FT V = 2.04 FPS

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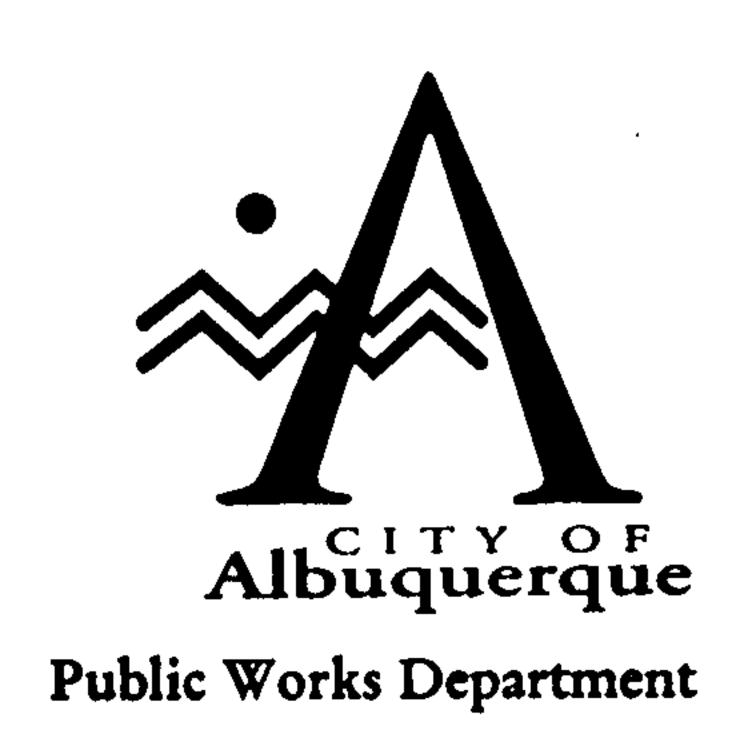
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#### RESULTS

Y = 64.79 FT A = 2.61 SF P = 17.70 FT V = 2.04 FPS

0.93 SUB-CRITICAL FLOW



February 24, 1997

Martin J. Chávez, Mayor

Robert E. Gurulé, Director

Pat Coonce, P.E. C.A. Coonce & Assoc., Inc. 12324 Pineridge NE Albuquerque, NM 87112

RE: SAN IGNACIO SUBDIVISION (J14-D115). ENGINEER'S CERTIFICATION FOR RELEASE OF FINANCIAL GUARANTEES. ENGINEER'S CERTIFICATION DATED 1-30-97.

Dear Mr. Coonce:

Based on the information provided on your February 14, 1997 submittal, City Hydrology accepts the Engineer's Certification of grading and drainage.

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

Sincerely,

Lisa Ann Manwill, P.E.

Engineering Assoc./Hyd.

c: Terri Martin
Andrew Garcia
File





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Dear Mr. Coonce:

Based on the information provided on your February 14, 1997 submittal, City Hydrology has the following comment:

1. Everything appears to be in order however, prior to release of financial guarantees please provide this office with a copy of the as-builts for the entire storm drain to Broadway.

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

Sincerely

Lisa Mnn Manwill, P.E.

Engineering Assoc./Hyd.

c: Andrew Garcia



## C.A. (PAT) COONCE & ASSOC., INC. ENVIRONMENTAL, WATER RESOURCES & SANITARY CONSULTING ENGINEERS

12324 PINERIDGE, N.E. ALBUQUERQUE, N.M. 87112 PHONE (505)296-1089 FAX: (505) 296-0478 FEBRUARY 14, 1997

Ms. Lisa Manwill City of Albuquerque Public Works Dept. P.O. Box 1293 Albuquerque, NM 87103

Re: San Ignacio Subdivision (J-14-D115)

Dear Ms. Manwill:

In response to your letter dated 02/05/97 the following action is being taken.

Item One: The plat was signed by Mr. Fred Aguirre for the City Engineer on 10/15/96 and filed in the Bernalillo County Clerk's office on 10/24/96. A copy is enclosed for your files.

Item Two: The drainage and grading plan, which was signed by me after inspection and supplied to you, has noted on it the As-Built elevations, done by ConSurve Surveying on 01/18/97. The notation for the as-built elevations is listed in the legend. On the enclosed copy I have circled in red those As-Built measured elevations which are on the drawing. All of the finished floor elevations are on the drawing, except for Lot 1, whose pad was not yet in place at that time.

Item Three: I have talked with Danny Montaño, the City Surveyor, about the As-Built City Infrastructure Drawing. He informs me that he shows it as 95% completion as of this date (Feb. 14, 1997). As soon as the asphalt is completed, the manhole rim elevations will be measured and the As-Built survey will be completed. This data will be furnished to the project City Inspector, and will subsequently be available to me to prepare the As-Built drawings.

Sincerely yours,

C. A. Coonce N.M.P.E. # 2934

cc: Chris Vigil Construction



September 10, 1996

Martin J. Chávez, Mayor

Ms. Theresa Thielen 2403 1st N.W. Albuquerque New Mexico 87102

RE: SAN IGNACIO SUBDIVISION (J14/D115) GRADING

Dear Ms. Thielen:

We received your complaint on the grading of the referenced subdivision. Staff from the Hydrology division visited the site on August 29, 1996. We observed the grade differences between the existing homes and the proposed subdivision. Later we reviewed the Grading and Drainage Plan which was submitted by C.A. Coonce and Associates. Also, we discussed the grading problem with the contractor, Chris Vigil.

I have attached a reduced copy of the Grading and Drainage Plan for your review. The plan indicates that there will be a retaining wall constructed between the new and old subdivision. This wall should protect the old subdivision from runoff and soil pressures against existing garden walls. The new retaining wall will be constructed at all the perimeter property lines. Also, a new storm drain will be constructed in Ignacio Court to collect road runoff and safely convey them from the subdivision. Mr. Chris Vigil indicated that the wall would be constructed in about a one month period. If you should have any questions on the plan or have any other concerns please call me at 768-2654.

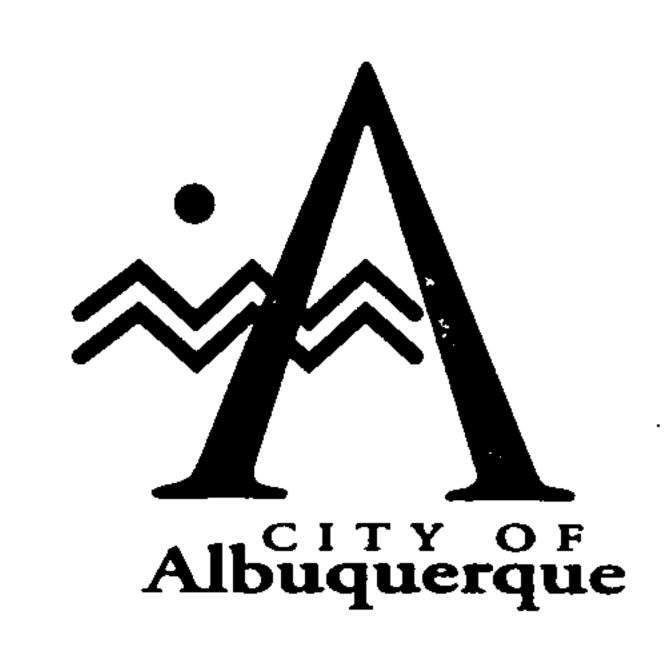
Sincerely,

Carlos-A.-Montoya

c: Ron Short
Robert Gurule
Chris Vigil

A please find out as much as you can and respond. Thanks

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	City of Albuquerque Planning Depar	tment	
	Ron Short, AICP, Dir	ector .	- };;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
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June 25, 1996

Martin J. Chávez, Mayor

Pat Coonce C.A. Coonce & Assoc., Inc. 12324 Pineridge NE Albuquerque, NM 87112

RE: SAN IGNACIO SUBDIVISION (J14-D115) DRAINAGE REPORT SUBMITTAL FOR PRELIMINARY PLAT APPROVAL. ENGINEER'S STAMP DATED MAY 22, 1996

Dear Mr. Coonce:

Based on the information provided on your May 23, 1996 submittal, City Hydrology has the following comments:

- Easements will be required for flow draining through adjacent property to the off site detention pond.
- Is there capacity in the off site detention pond for the flow generated by the proposed development? Keep in mind that historical conditions do not necessarily represent actual downstream capacity.
- If you want to use an 18" pipe and inlet, please indicate this on the plan sheet and show details. You will need permission from the adjacent property owner to install a discharge line.
- 4. You cannot take credit for backyard retention ponds when determining the amount of flow discharged from this site. Your drainage controls must be designed as if no water were being retained.
- 5. I was unable to find the benchmark on the plan sheet.

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

Sincerely

Lisa Ann Manwill

Engineering Assoc./Hyd.

Andrew Garcia
File



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J-14/D115

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THE PLAT, AS PROPOSED, CONTAINS 13 LOTS COMPRISED OF 1.7109 ACRES, AND A CUL-DE-SAC CONTAINING 0.5616 ACRES, FOR A TOTAL AREA OF 2.2725 ACRES. THE DWELLING UNITS AS DESIGNED BY THE ARCHITECT ARE ZERO LOT LINE WITH A ONE CAR GARAGE ON A MINIMUM 5000 S.F. LOT.

THE LOTS AS DESIGNED, WITH THE EXCEPTION OF LOT 8, CAN ACCOMMODATE EITHER A 3 BEDROOM OR 4 BEDROOM DWELLING UNIT. THE DIFFERENCE IN IMPERVIOUS AREA BETWEEN THE TWO DESIGNS IS AN ADDITIONAL 85 S.F. FOR THE 4 BEDROOM UNIT. THE CALCULATIONS WERE BASED ON THE 4 BEDROOM UNITS, EXCEPT FOR LOT 8, IN ORDER TO BE ON THE CONSERVATIVE SIDE.

NINE OF THE 13 LOTS DO NOT BORDER ON THE WEST PROPERTY LINE AND HAVE THEIR ZERO LOT LINE ON THE DOWNHILL SIDE OF THE LOT. ALL OF THE STRUCTURE ROOF DRAINS ARE TO THE STREET, AND NO LOT IS PERMITTED CROSS-LOT DRAINAGE. ON THE NINE LOTS ( 1-6 AND 11-13)THE PRECIPITATION WHICH FALLS IN THE BACK YARD IS RETAINED AND PERCOLATED INTO THE WATER TABLE. IN ORDER TO PREVENT CROSS-LOT DRAINAGE AND MAINTAIN A MAXIMUM SIDE SLOPE OF 3:1 RETAINING WALLS ARE REQUIRED ON SOME OF THE LOTS. THESE LOT LINES ARE INDICATED WITH A T.W. SPOT ELEVATION, LOCATED AT EACH POINT OF THE LOT WHICH REQUIRES A RETAINING WALL FROM ONE T.W. SPOT ELEVATION TO THE NEXT.

THE RUNOFF IS BASED UPON TWO LAND TREATMENTS, THE PERVIOUS BEING LANDSCAPED TREATMENT B AND THE IMPERVIOUS BEING ROOF, PAVING, AND CONCRETE (TREATMENT D). THE RESPECTIVE RUNOFF IS IN C.F.S./ACRE FOR B AND D RESPECTIVELY, IN RAINFALL ZONE 2 IS 2.28 AND 4.70. THE R-O-W CONTAINS 0.5616 ACRES, OF WHICH 0.5248 AC. IS IMPERVIOUS AND 0.0368 AC. IS PERVIOUS LANDSCAPE AREA

THE TOTAL AREA WITHIN THE PLATTED LOTS IS 1.7109 ACRES. OF THIS AREA, THE IMPERVIOUS AREA IS 0.6424 ACRES AND THE IMPERVIOUS AREA IS 1.0685 ACRES. USING THESE AREAS THE TOTAL AFTER LOT DEVELOPMENT FOR THE 100 YEAR MAX Q STORM WILL BE:

(0.0368 + 1.0685) (2.28) + (0.5248 + 0.6424) (4.7) = 2.52 + 5.49 = 8.01 CFS. THIS COMPARES WITH THE EXISTING RUNOFF OF 7.14 CFS , OR AN INCREASE OF ~ 1 CFS.

THE DRAINAGE AT AT THE WESTERN END (DOWNHILL) OF THE CUL-DE-SAC WILL DISCHARGE INTO A DROP INLET. THE DROP INLET WILL BE CONNECTED TO A STORM SEWER SYSTEM WHICH WILL CONVEY THE STORM WATERS THROUGH THE CITY OF ALBUQUERQUE VEHICLE POLLUTION MANAGEMENT PROPERTY TO EITHER AN EXISTING 36" RCP STORM SEWER IN BROADWAY, N.E. OR FRANCISCAN, N.E., IF CITY OWNER SHIP CAN BE SHOWN FOR TRACT 69A; IT WILL ALSO BE NECESSARY TO DEMONSTRATE THAT FRANCISCAN AND KINLEY CAN CARRY THIS ADDITIONAL FLOW. EASEMENTS WILL BE OBTAINED FROM THE CITY OF ALBUQUERQUE AND THE STORM SEWER SYSTEM WILL BE PRESENTED AS A DRC CITY OF ALBUQUERQUE DRAWING. IT APPEARS DOUBTFUL THAT ACCESS CAN BE GAINED THROUGH LOT 69A TO THE NORTH END OF FRANCISCAN.

LOTS 7, 8, AND 9 ADJOINING THE CITY PROPERTY HAVE A TOTAL OF 0.82 CFS FOR THE 100 YEAR Q. THIS FLOW WILL CONTINUE TO ENTER THE CITY PROPERTY EASTERN BOUNDARY IN A SHEET FLOW FASHION. THE DESIGN Q INTO THE DROP INLET WILL BE 8.01 - 0.82 = 7.19 CFS.

#### FLOOD PLAIN STATUS:

NO PORTION OF THIS TRACT IS WITHIN A FEMA DESIGNATED FLOOD PLAIN.

#### EXISTING DRAINAGE FROM OFFSITE:

THIS SITE HAS NO DRAINAGE FROM OFFSITE, EXCEPT FOR AN OCCUPIED DWELLING AT THE SOUTHWEST CORNER, WHICH IS NOT A PART OF THIS SUBDIVISION. THIS DRAINAGE IS UNAFFECTED, AND WILL CONTINUE AS IT NOW FLOWS.

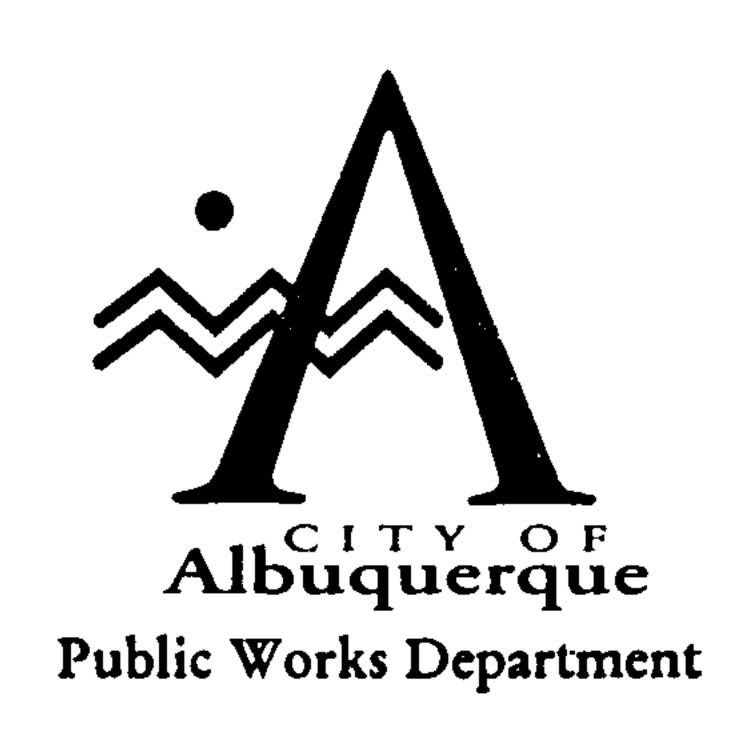
THE EDITH BLVD. DRAINAGE SPLITS FLOW DIRECTION APPROXIMATELY 30 FEET NORTH OF THE CUL-DE-SAC ENTRY TO EDITH. THE FLOWS IN EDITH TO THE NORTH AND SOUTH ARE SMALL. NONE OF THE PROPERTY ON THE WEST SIDE OF EDITH IN THIS REACH FLOWS INTO EDITH. ALL OF THE DRAINAGE IS WESTWARD ACROSS THE ADJACENT LOTS AND TO BROADWAY.

#### DRAINAGE INFORMATION SHEET

PROJECT TITLE: <u>SAN IGNACIO SUBDIVISION</u> ZON	E ATLAS/ DRNG. FILE #: <u>J-14-D 115</u>
DRB #: <u>96-166</u>	WORK ORDER #:548081
LEGAL DESCRIPTION: SAN IGNACIO SUBDIVISION	· 
CITY ADDRESS: 1500 EDITH BLVD., N.E., A	LBUQUERQUE, NM
ENGINEERING FIRM: C.A. COONCE & ASSOC.	CONTACT: C.A. COONCE
ADDRESS: 12324 PINERIDGE, N.E.	PHONE: <u>296-108</u> 9
OWNER: GREATER ALBUQUERQUE HOUSING PARTN	ERSHIP CONTACT: BEN MONTIJO
ADDRESS: 5101 COPPER, ,N.E., 87108	PHONE: 254-1414
ARCHITECT:	CONTACT:
ADDRESS:	PHONE:
SURVEYOR: <u>CONSURVE SURVEYING</u>	CONTACT: JERRY NICKELS
ADDRESS: <u>SAN FIDEL, NM F87049</u>	PHONE: (505) 247-4444
CONTRACTOR: CHRIS VIGIL CONSTRUCTION	CONTACT: CHRIS VIGIL
ADDRESS: 5101 COPPER, N.E., 87108	PHONE: 254-1515
TYPE OF SUBMITTAL: DRAINAGE REPORT	CHECK TYPE OF APPROVAL SOUGHT:  SKETCH PLAT APPROVAL
DRAINAGE PLAN	PRELIMINARY PLAT APPROVAL
CONCEPTUAL GRADING & DRAINAGE PLAN	S. DEV. PLAN FOR SUB'D. APPROVAL
GRADING PLAN	S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
EROSION CONTROL PLAN	SECTOR PLAN APPROVAL
X ENGINEER'S CERTIFICATION	FINAL PLAT APPROVAL
OTHER	FOUNDATION PERMIT APPROVAL
	BUILDING PERMIT APPROVAL
PRE-DESIGN MEETING:	X CERTIFICATE OF OCCUPANCY APPROVAL
YES	GRADING PERMIT APPROVAL
_XNO	PAVING PERMIT APPROVAL
COPY PROVIDED	S.A.D. DRAINAGE REPORT
	DRAINAGE REQUIREMENTS
	X SUBDIVISION CERTIFICATION
	OTHER(SPECIFY)
02/03/97	
DATE SUBMITTED: <u>-01/29/96</u>	
BY: C.A. COONCE Coonce	

#### DRAINAGE INFORMATION SHEET

PROJECT TITLE: <u>SAN IGNACIO SUBDIVISION</u> ZONE A	ATLAS/ DRNG. FILE #: <u>J-14-D 115</u>
DRB #: <u>96-166</u> EPC #:	WORK ORDER #: <u>548081</u>
LEGAL DESCRIPTION:SAN IGNACIO SUBDIVISION	
CITY ADDRESS: 1500 EDITH BLVD., N.E., ALI	BUQUERQUE, NM
ENGINEERING FIRM: C.A. COONCE & ASSOC.	CONTACT: C.A. COONCE
ADDRESS: 12324 PINERIDGE, N.E.	PHONE:
OWNER: <u>GREATER ALBUQUERQUE HOUSING PARTNER</u>	RSHIP CONTACT: BEN MONTIJO
ADDRESS: 5101 COPPER, N.E., 87108	PHONE: 254-1414
ARCHITECT:	CONTACT:
ADDRESS:	PHONE:
SURVEYOR: <u>CONSURVE SURVEYING</u>	CONTACT: JERRY NICKELS
ADDRESS: <u>SAN FIDEL, NM F87049</u>	PHONE: (505) 247-4444
CONTRACTOR:CHRIS VIGIL CONSTRUCTION	CONTACT:CHRIS VIGIL
ADDRESS: <u>5101 COPPER, N.E.,</u> 87108	PHONE: <u>254-1515</u>
TYPE OF SUBMITTAL:  DRAINAGE REPORT  DRAINAGE PLAN	CHECK TYPE OF APPROVAL SOUGHT: SKETCH PLAT APPROVAL PRELIMINARY PLAT APPROVAL
CONCEPTUAL GRADING & DRAINAGE PLAN _	S. DEV. PLAN FOR SUB'D. APPROVAL
GRADING PLAN	S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
EROSION CONTROL PLAN	SECTOR PLAN APPROVAL
X ENGINEER'S CERTIFICATION	FINAL PLAT APPROVAL
OTHER	FOUNDATION PERMIT APPROVAL
	BUILDING PERMIT APPROVAL
PRE-DESIGN MEETING:	X CERTIFICATE OF OCCUPANCY APPROVAL
YES	GRADING PERMIT APPROVAL
X NO	PAVING PERMIT APPROVAL
COPY PROVIDED FEB 14 1997	S.A.D. DRAINAGE REPORT
HYDROLOGY SECTION	DRAINAGE REQUIREMENTS
THUNOLOGI BLANDING	X SUBDIVISION CERTIFICATION
	OTHER(SPECIFY)
DATE SUBMITTED: 02/14/97	
BY: C.A. COONCE Come	



February 5, 1997

Martin J. Chávez, Mayor

Robert E. Gurulé, Director

Pat Coonce C.A. Coonce & Assoc., Inc. 12324 Pineridge NE Albuquerque, NM 87112

RE: SAN IGNACIO SUBDIVISION (J14-D115). ENGINEER'S CERTIFICATION FOR RELEASE OF FINANCIAL GUARANTEES. ENGINEER'S CERTIFICATION DATED 1-30-97.

Dear Mr. Coonce:

Based on the information provided on your February 3, 1997 submittal, City Hydrology has the following comments:

- 1. While I feel confident that you were approved for Final Plat, there is nothing in the Hydrology file to indicate this approval. Please submit a copy of the approved (signed-off) plat. Do you have an approval letter for the grading plan?
- Other than the drop inlet, I can't tell where you took asbuilt elevations. Please provide as-built elevations in accordance with the DPM for the finish pad, top of walls, property corners, flow lines, high points, etc.
- 3. Provide this office with a copy of the as-builts for the entire storm drain to Broadway.

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

Sincerely,

Engineering Assoc./Hyd.

c: Andrew Garcia

File

Good for You, Albuquerque!

41 POP1

### DRAINAGE INFORMATION SHEET

PROJECT TITLE: SAN IGNAGO SUBDIVISION	ZONE ATLAS/DRNG. FILE #: <u>ナルカル</u>
DRD #: 26-/66 EPC #:	WORK ORDER # •
LEGAL DESCRIPTION: San Ignacio Sub	<u>sivision</u>
CITY ADDRESS: 1500 EDITH N.E.	
ENGINEERING FIRM: C.A. Coonceé Ass	
ADDRESS: 12324 Pineridge N.E.	PHONE: <u>296-/089</u>
OWNER: the Greater albuquerque Housing	Partnership CONTACT: Ben Montija
ADDRESS: Silver Ave. N.E.	PHONE: 254-1554
ARCHITECT:	CONTACT:
ADDRESS:	PHONE:
SURVEYOR:	CONTACT:
ADDRESS:	PHONE:
CONTRACTOR: Chr.3 Vigi/Const.	CONTACT: Chris. Vigi
ADDRESS: Silver Ave. N.E.	PHONE: 254-4555
	764-1307
TYPE OF SUBMITTAL:	CHECK TYPE OF APPROVAL SOUGHT:
DRAINAGE REPORT	SKETCH PLAT APPROVAL
DRAINAGE PLAN	X PRELIMINARY PLAT APPROVAL
CONCEPTUAL GRADING & DRAINAGE PLAN	S. DEV. PLAN FOR SUB'D. APPROVAL
X_ GRADING PLAN	S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
EROSION CONTROL PLAN	SECTOR PLAN APPROVAL
ENGINEER'S CERTIFICATION	FINAL PLAT APPROVAL
OTHER	FOUNDATION PERMIT APPROVAL
	BUILDING PERMIT APPROVAL
PRE-DESIGN MEETING:	CERTIFICATE OF OCCUPANCY APPROVAL
<u>X</u> YES	GRADING PERMIT APPROVAL
NO	PAVING PERMIT APPROVAL
COPY PROVIDED	S.A.D. DRAINAGE REPORT
	DRAINAGE REQUIREMENTS
	SUBDIVISION CERTIFICATION
	OTHER(SPECIFY)
DATE SUBMITTED: Qula 9,1996	
BY: Cocomi	JUL 1993
6 0 VV V V V V V V V V V V V V V V V V V	



Martin J. Chávez, Mayor Pat Coonce C.A. Coonce & Assoc., Inc. 12324 Pineridge NE Albuquerque, NM 87112

RE: SAN IGNACIO SUBDIVISION (J14-D115) DRAINAGE REPORT SUBMITTAL FOR PRELIMINARY PLAT APPROVAL. ENGINEER'S STAMP DATED JULY 9, 1996

Dear Mr. Coonce:

Based on the information provided on your July 11, 1996 submittal, the above referenced project is approved for Preliminary Plat.

Prior to your next submittal, please address the following comments:

- 1. Provide all required easement documents for the storm drain system between the project and Broadway Blvd.
- Use reinforced concrete pipe for all portion of the storm drain system located in the City right-of-way.
- 3. Call out what type of inlet you plan to use.
- 4. While I am certain that an 18-inch diameter pipe has capacity for your developed flow, please submit calculations.

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

Sincerely

isa Ánn Manwill

Engineering Assoc./Hyd.

C: Andrew Garcia File 4



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

#### PRE-DESIGN CONFERENCE

DRAINAGE FILE/ZONE ATLAS PAGE NO.:	DATE:
	.: ZONE:
SUBJECT: LIZEATER ABO HOUSIN	<u>/</u>
STREET ADDRESS: EOITH + OOELA	·
LEGAL DESCRIPTION: TRACT AS OF CHAI	DEZ +CONZADO+CONCERCION EHSTER
PORTION OF TRACTOT-13-2, 4	DEZ + CONZADO+ CONCEPCION, EHSTER LOT 13, ROMAD TRACT
APPROVAL REQUESTED: PRELIMINARY PL	
SITE DEVELOPME	
GRADING/PÄVING	
. — GIADING/IAVING	G PERMITOTHER
»· WHO	REPRESENTING
ATTENDANCE: TO CONCE	·
LISA MANUSI	
FINDINGS:	
DEED GRADING CERT	FOR PROPOSED BLOG PAOS
+ Kaich GRADINE	
31.0000000	d'aprading a drainage
2) 20 10 10 10 10 10 10 10 10 10 10 10 10 10	The transfer of the transfer o
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**************************************	FREIWE !!!
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	dings are summarized accurately and are only.
	n reveals that they are not reasonable or that.
they are based on inaccurate information.	SIGNED:
SIGNED:	SIGNED:
TITLE:	TITLE:
DATE:	DATE: //23/96

## C.A. (PAT) COONCE & ASSOC., INC. ENVIRONMENTAL, WATER RESOURCES & SANITARY CONSULTING ENGINEERS

12324 PINERIDGE, N.E. ALBUQUERQUE, N.M. 87112

PHONE (505)296-1089 FAX: (505) 296-0478 AUGUST 16, 1996

Hydrology Department City of Albuquerque

Attn: Lisa Ann Manwill

Subject: J-14/D115, DRB-96-166, Project No. 548081

This memorandum is tendered to document the adequacy of the Double "D" Inlet and the 18" RCP for the design of the Storm Drain System for the San Ignacio Subdivision.

The flows through the inlet of the Double "D" inlet will simulate an orifice and be governed by the orifice equation. The inlet is located in a low point at the end of the cul-de-sac. The inlet area in square feet was calculated from the Dwg. 2206 as 1.771 S.F. The head required at the  $Q_{100}$  design flow of 7.2 CFS for a Double "D" inlet is 0.172' = 2 inches. The available head before overflowing the curb is 0.50 feet.

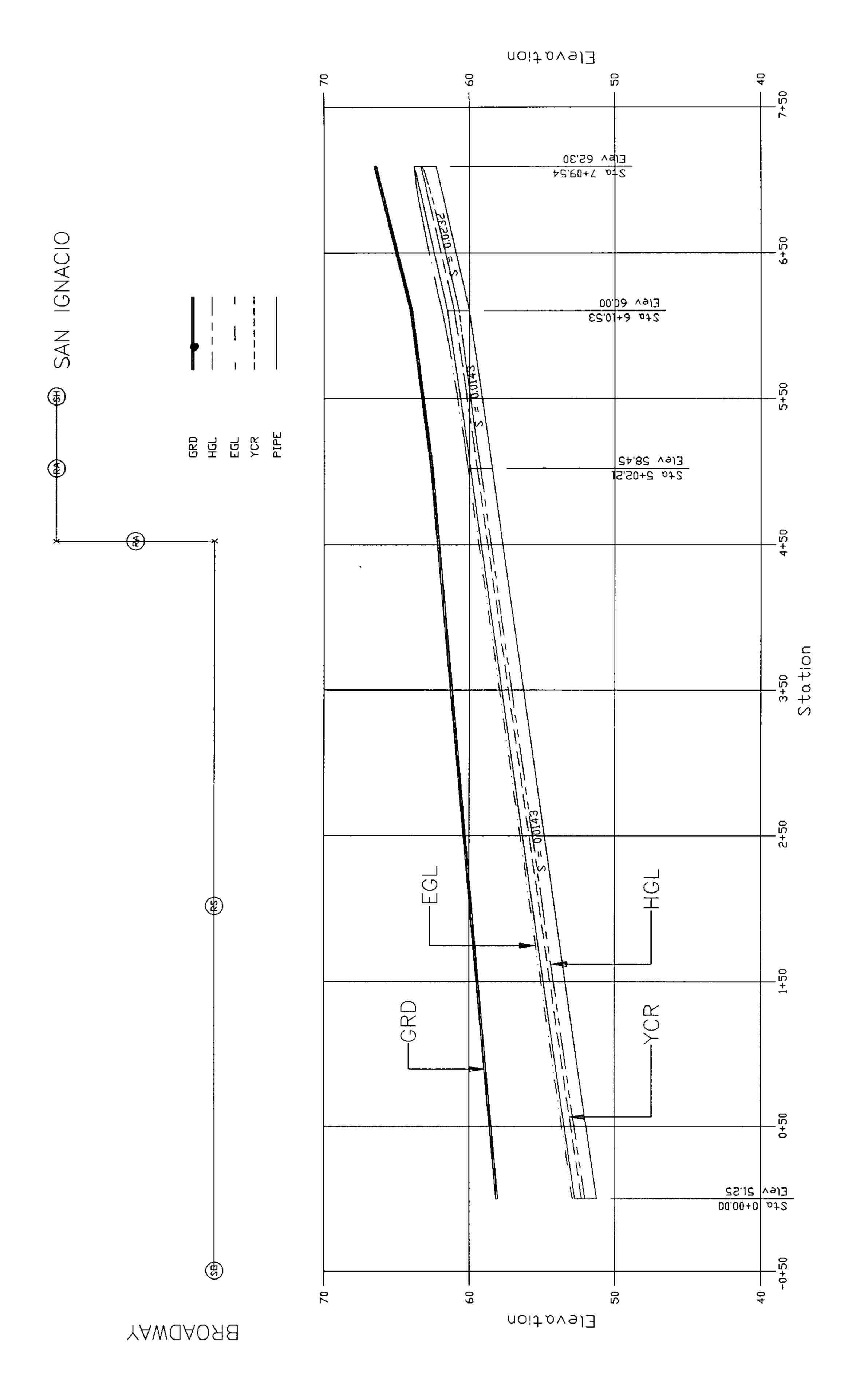
To check the adequacy of the head available for getting a flow rate of 7.2 CFS into the 18" RCP, the culvert equation was used. With the headwater at the full pipe depth (18") and the flow being inlet controlled, the flow rate is 7.49 CFS. Therefore the 2' plus headwater is more than adequate to allow an intake of 7.2 CFS.

The Auto Civil auto-storm program shows the Plan and Profile, utilizing 7.2 CFS, n = 0.013, the slopes as designed, and three manholes with two angular changes in the system. This shows a flow depth of 0.75' (50% of the pipe) at the outfall in Broadway Blvd. Computer printout are attached.

Sincerely yours,

C. A. Coonce

N.M.P.E. # 2934



SAN IGNACIO SIORM DRAIN SYSIEM HYDRAULICS

Q 100 = 7.2 CFS, n = 0.013, PIPE D = 18", 3 MANHOLES

BETWEEN SYSTEM OUTLET AND SYSTEM HEADWATERS

#### 

## SAN IGNACIO SINGLE &DOUBLE "D" INLET

CALCULATED PARAMETERS & C = 0.61

## Orifices -- English Units Civil Tools for Windows

Civil Tools for Windows (08-07-1996, 10:47:20)

Flowrate cfs		Coeff 	Headwater ft	f+	f+
7.200	1.771	0.610	0.690	0.000	0.000 - SINGLE D
7.200	3.542	0.610	0.172	0.000	0.000 - DOUBLE "D"
with Hot 0.5' Available a Double "D" is required					
nith Hot 0.5' Available a Double "D" is required 0.172' \$2" which gives amorging f safety if					
grate is not kept free of debris.					

### SAN IGNACIO COURT

#### DROP INLET

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### Culverts -- English Units

Civil Tools for Windows (07-31-1996, 16:38:05)

Diameter = 18 in

Length = 100 ft

Friction Coeff = .015

Ent+Exit Coeff =

Inlet Control Coeff = .61

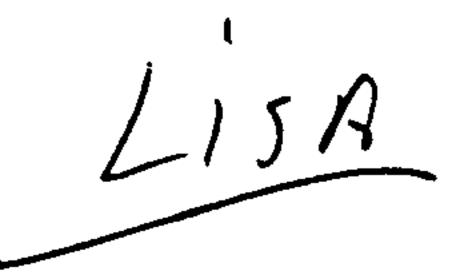
Inv Elev Out = 97 ft

Inv Elev In = 100 ft

Tailwater Elev = 98 ft

Elev Increment = .1 ft

Headwater		Flowrate
ft		cfs
101.50	IC	7.49
101.60	IC	7.98
101.70	IC	8.43
101.80	IC	8.86
101.90	IC	9.28
102.00	IC	9.67
102.10	IC	10.05
102.20	IC	10.42
102.30	IC	10.77
102.40	IC	11.11
102.50	IC	11.44
102.60	IC	11.77
102.70	IC	12.08
102.80	IC	12.39
102.90	IC	12.68
103.00	IC	12.98



9699 MANDINGS42,E1

#### PERMANENT EASEMENT

Grant of Permanent Easement, between the City of Albuquerque ("Grantor"), whose address is P.O. Box 1293, Albuquerque, New Mexico and the City of Albuquerque, a New Mexico municipal corporation ("City"), whose address is P.O. Box 1293, Albuquerque, New Mexico, 87103.

Grantor grants to the City an exclusive, permanent easement ("Easement") in, over, upon and across the real property described on Exhibit "A" attached hereto ("Property") for the construction, installation, maintenance, repair, modification, replacement and operation of a public storm sewer and public sanitary sewer together with the right to remove trees, bushes, undergrowth and any other obstacles upon the Property if the City determines they interfere with the appropriate use of this Easement.

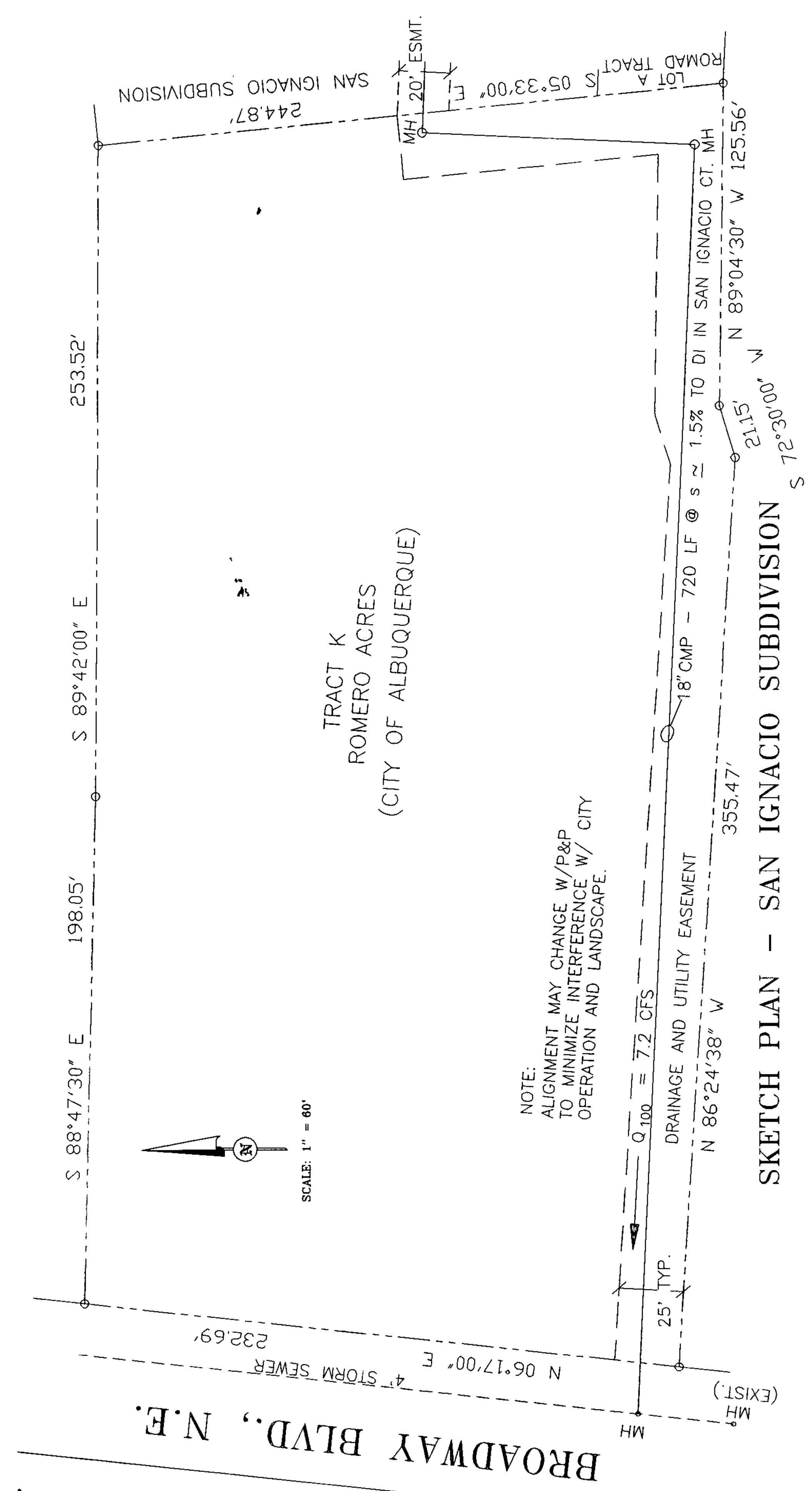
The grant and other provisions of this Easement constitute covenants running with the land for the benefit of the City and its successors and assigns until terminated.

WITNESS my hand and seal this 4th day of September, 1996.
RECOMMENDED: APPROVED:
Sarah B. Kotchiain
Sarah Kotchian, Director  Lawrence Rael
Environmental Health Department Chief Administrative Officer
PRECOMMENDED:
(mué ce
Robert E. Gurule, Director
Public Works Department
12/3/9/20/9/20
<u>CITY'S NOTARY</u>
STATE OF NEW MEXICO )
) SS.
COUNTY OF BERNALILLO
This instrument was acknowledged before me on 4th day of Sept, 1990
by <u>Courrence Rael</u> , Chief Administrative Officer, of the City of Albuquerque, a municipal corporation, on behalf of said corporation.
OFFICIAL SEAL
RENIE HERRERA NOTARY PUBLIC
STATE OF NEW MEXICO  Notary Public
My Commission Expires
My Commission Expires:
113198

**5 6** 

TRACT "K", ROMERO ACRES, AS THE SAME IS SHOWN

LEGAL DESCRIPTION:



C

STORM ADWAY OFFSITE



Martin J. Chávez, Mayor Pat Coonce C.A. Coonce & Assoc., Inc. 12324 Pineridge NE Albuquerque, NM 87112

RE: SAN IGNACIO SUBDIVISION (J14-D115) DRAINAGE REPORT SUBMITTAL FOR PRELIMINARY PLAT APPROVAL. ENGINEER'S STAMP DATED MAY 22, 1996

Dear Mr. Coonce:

Based on the information provided on your May 23, 1996 submittal, City Hydrology has the following comments:

- 1. Easements will be required for flow draining through adjacent property to the off site detention pond.
- 2. Is there capacity in the off site detention pond for the flow generated by the proposed development? Keep in mind that historical conditions do not necessarily represent actual downstream capacity.
- If you want to use an 18" pipe and inlet, please indicate this on the plan sheet and show details. You will need permission from the adjacent property owner to install a discharge line.
- 4. You cannot take credit for backyard retention ponds when determining the amount of flow discharged from this site. Your drainage controls must be designed as if no water were being retained.
- 5. I was unable to find the benchmark on the plan sheet.

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

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### DRAINAGE INFORMATION SHEET

PROJECT TITLE: SANIGNACIO SUBDIVISION Z	ONE ATLAS/DRNG. FILE #: $J-14/0/15$
DRB #: 96-166 EPC #:	WORK ORDER #:
LEGAL DESCRIPTION: TRS. A.B. EC LANDS OF CHAVEZ	ELYPIN TR 67-R-2- RAMEN INTR
CITY ADDRESS: 1500 EDITA BLUD. N.E.	
ENGINEERING FIRM: C.A. COONCE & ASSIGN, INC.	CONTACT: PAR CONCE.
ADDRESS: 12324 PINERIDGE N.E.	·
OWNER: GREATER BBQ. HIUSING PARTNERSHIP.	CONTACT: BENMONTHED
ADDRESS: 5101. Copper Ave. N.E	
ARCHITECT:	CONTACT:
ADDRESS:	PHONE:
SURVEYOR:	
	CONTACT:
ADDRESS:	PHONE:
CONTRACTOR: CHRIS VIGIL CONST. CO.	CONTACT: CHRIS VIGIL
ADDRESS: 5/11 Copper Ave. N.E.	PHONE: 254-/5/5
TYPE OF SUBMITTAL:	CK TYPE OF APPROVAL SOUGHT:
DRAINAGE REPORT	SKETCH PLAT APPROVAL
DRAINAGE PLAN	PRELIMINARY PLAT APPROVAL
CONCEPTUAL GRADING & DRAINAGE PLAN	S. DEV. PLAN FOR SUB'D. APPROVAL
GRADING PLAN	S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
EROSION CONTROL PLAN	SECTOR PLAN APPROVAL
ENGINEER'S CERTIFICATION	FINAL PLAT APPROVAL
OTHER	FOUNDATION PERMIT APPROVAL
	BUILDING PERMIT APPROVAL
PRE-DESIGN MEETING:	CERTIFICATE OF OCCUPANCY APPROVAL
* X YES	GRADING PERMIT APPROVAL
NO	PAVING PERMIT APPROVAL
COPY PROVIDED	S.A.D. DRAINAGE REPORT
$\frac{1}{2}$	DRAINAGE REQUIREMENTS
	SUBDIVISION CERTIFICATION
56	OTHER (SPECIFY)
· -	
DATE SUBMITTED: Come 5/2-3/96	MAY 2 3 1996
BY: Caconi	HYDROLOGY L.

196 0478

w the deterior pond

- 1) It there capacites for the flow generated by the proposed development? Keep in mind that historical conditions do not necessarily represent cietual down appooitie
- Essements will be required to trainifer this flow training thorough adjacent proporte.
- 13 you will need permussion from call Til you want to use 10" pipe and weet, please whow on plan détails. Ailso, this scenarie will meed to be approved be downstream prop owner.
- 4) You can mot take orealid for By net pend. Your structure must be sixed as if no water were retained.
  - BM en plan wheat,