



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

October 30, 2002

Amy Driscoll, PE
Mark Goodwin & Associates
P.O. Box 90606,
Albuquerque, NM 87199

Re: Eagle Pointe Pond Reclamation Plan
Engineer's Stamp dated 5-16-02, (C19/D21)
Engineer's Certification dated 9-26-02

Dear Ms. Driscoll,

Based upon the information provided in your submittal dated 9-26-02, the above referenced certification is approved for Final Plat. Please submit the plat for my signature.

If you have any questions, please contact me at 924-3986.

Sincerely,

Bradley L. Bingham, PE
Sr. Engineer, Planning Dept.
Development and Building Services

C: file



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

June 5, 2002

Amy Driscoll, PE
Mark Goodwin & Associates
P.O. Box 90606,
Albuquerque, NM 87199

Re: Eagle Pointe Pond Reclamation Plan
Engineer's Stamp dated 5-16-02, (C19/D21)

Dear Ms. Driscoll,

Based upon the information provided in your submittal dated 5-16-02, the above referenced plan is approved for Grading Permit. Please submit a mylar for my signature in order to obtain a Grading Permit. I will sign once I get word that the storm drain in Corona is complete and functioning. That plan will be removing the plug at the inlet and adding the new plug at the outfall. Please remove reference of those two action items from the mylar.

Prior to Final Plat signoff by the City Engineer, the following items must be submitted to my office:

- Letter of Acceptance of the public SD line in Corona,
- Engineer's Certification of your new grading plan,

If you have any questions, please contact me at 924-3986.

Sincerely,

Bradley L. Bingham, PE
Sr. Engineer, PWD
Development and Building Services

C: file



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

March 27, 2001

Mark Goodwin, P.E.
Mark Goodwin & Assoc.
P.O. Box 90606
Albuquerque, New Mexico 87199

**RE: Grading and Drainage Certification
Eagle Point Subdivision (C-19/D21)
Submitted for Release of Financial Guarantees
Engineers Stamp dated 12/16/1999
Engineer's Certification Stamp Dated 2/16/2001**

Dear Mr. Goodwin:

Based upon the information provided in your submittal dated 2/16/2001, the above referenced plan is adequate to satisfy the Grading and Drainage Certification requirements for Release of Financial Guaranty.

If you have any questions, please call me at 924-3986.

Sincerely,

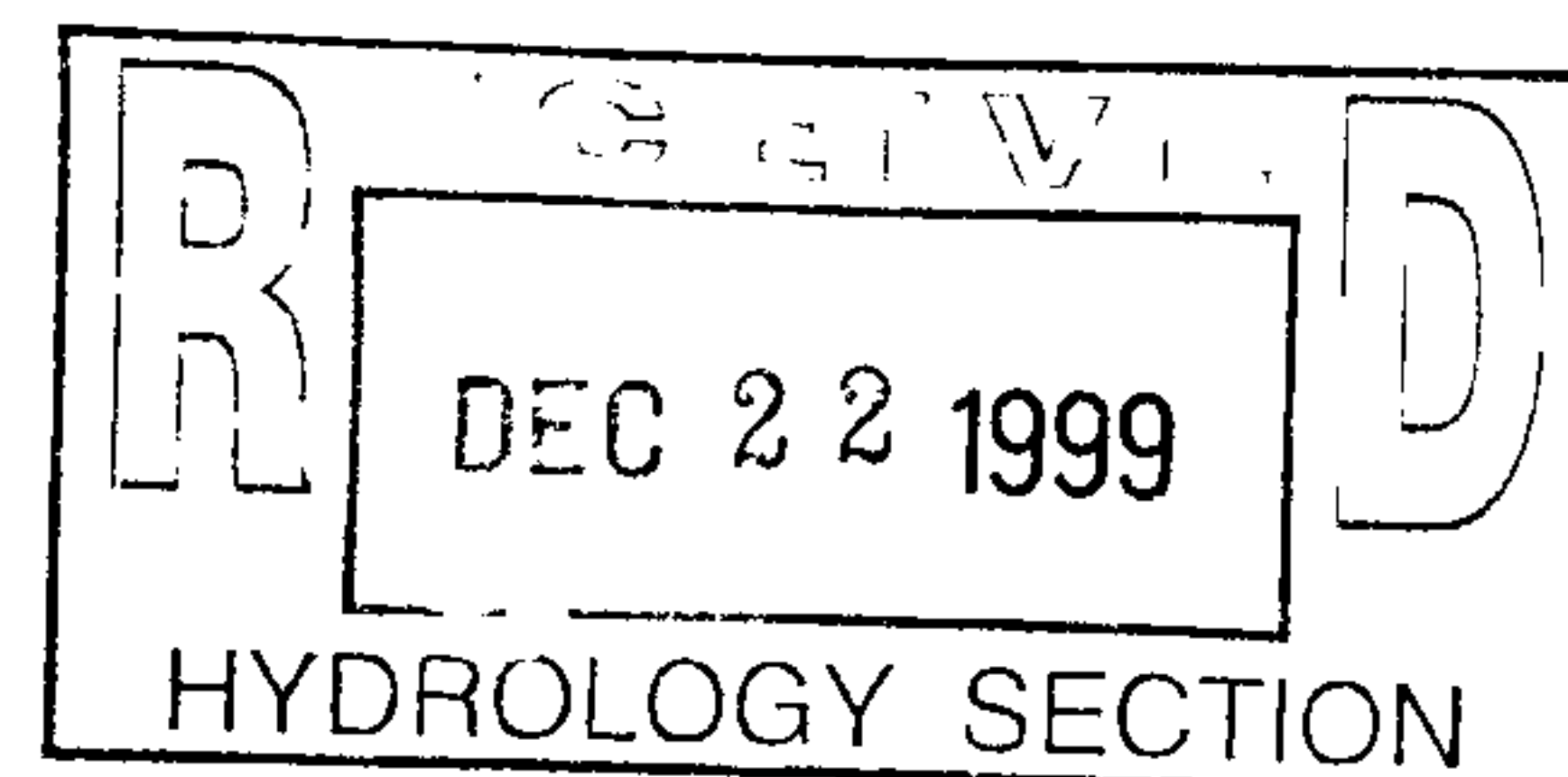
Bradley L. Bingham, P.E.
Senior Civil Engineer, Hydrology
Public Works Dept., C.O.A.

C: Arlene Portillo, PWD – #600481
File

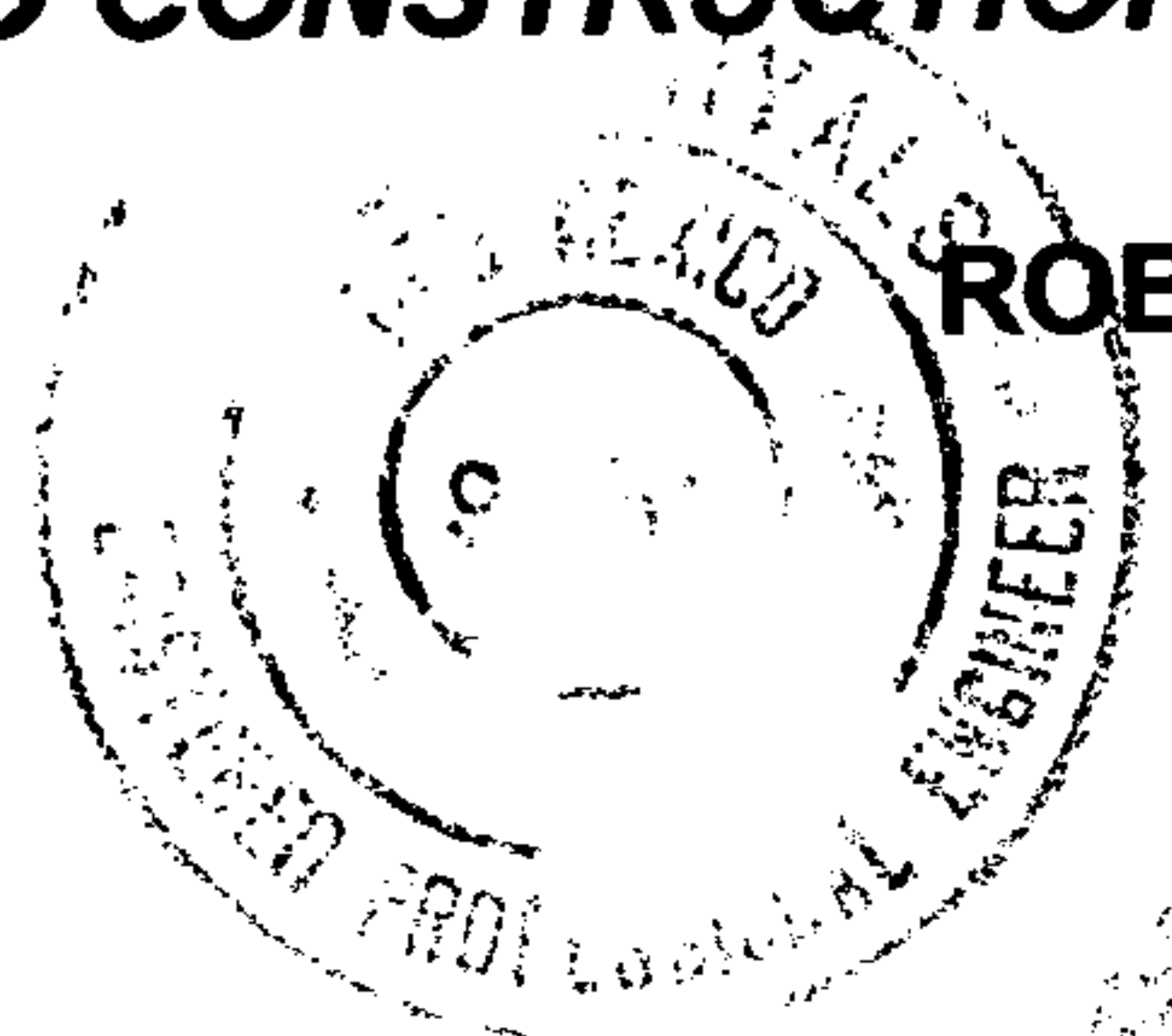
**DRAINAGE REPORT
EAGLE POINT SUBDIVISION
DRB 97-229
(FORMERLY FALCON RIDGE)
(FORMERLY ANGELWOOD SUBDIVISION)**

CITY OF ALBUQUERQUE

**Prepared for: DR HORTON, INC.
PO BOX 550
ALBUQUERQUE, NEWMEXICO**



Prepared by: RYALS ENGINEERING AND CONSTRUCTION SERVICES CO.



ROBERT B. RYALS, PE



Federal Emergency Management Agency

Washington, D.C. 20472

L. B. ...
fed
DIRECTOR'S OFFICE
98 MAR 31 AM 8:23

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

IN REPLY REFER TO:
Case No.: 98-06-777P

The Honorable Martin J. Chavez
Mayor, City of Albuquerque
P.O. Box 1293
Albuquerque, New Mexico 87103-1293

Community: City of Albuquerque,
New Mexico
Community No.: 350002
Panels Affected: 35001C0137 D and 0141 D
Effective Date of **MAR 25 1998**
This Revision:

102-D-A

Dear Mayor Chavez:

This responds to a request that the Federal Emergency Management Agency (FEMA) revise the effective Flood Insurance Rate Map (FIRM) for Bernalillo County, New Mexico and Incorporated Areas (the effective FIRM for your community), in accordance with Part 65 of the National Flood Insurance Program (NFIP) regulations. In a letter dated February 13, 1998, Ms. Susan M. Calongne, P.E., City/County Floodplain Administrator, City of Albuquerque/Bernalillo County, requested that FEMA revise the FIRM to show the effects that construction of a storm drain system along Wyoming Boulevard from Wilshire Avenue to approximately 180 feet south of Corona Avenue in conjunction with existing storm drain systems between Wyoming Boulevard and Interstate 25 (I-25) would have on the flood hazard information shown on the effective FIRM along the north branch of North Domingo Baca Arroyo. This request follows up on a Conditional Letter of Map Revision issued on February 11, 1997.

All data required to complete our review of this request were submitted with letters from Ms. Calongne.

We have completed our review of the submitted data and the flood data shown on the effective FIRM. We have revised the FIRM to modify the elevations and floodplain boundary delineations of the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood) along the north branch of North Domingo Baca Arroyo from approximately 1,400 feet east of Wyoming Boulevard to I-25. As a result of the modifications, the Special Flood Hazard Area (SFHA), the area that would be inundated by the base flood, along this reach was removed from the FIRM. The modifications are shown on the enclosed annotated copies of FIRM Panel(s) 35001C0137 D and 35001C0141 D. This Letter of Map Revision (LOMR) hereby revises the above-referenced panel(s) of the effective FIRM dated September 20, 1996.

The modifications are effective as of the date shown above. The map panel(s) as listed above and as modified by this letter will be used for all flood insurance policies and renewals issued for your community.

The following table is a partial listing of existing and modified base flood elevations (BFEs):

Location	Existing BFE (feet)*	Modified BFE (feet)*
Approximately 2,000 feet west of Louisiana Boulevard	1	None
Approximately 400 feet west of Wyoming Boulevard	1	None

*Depth above ground to the nearest whole foot

Public notification of the modified BFEs will be given in the *Albuquerque Journal* on or about April 29 and May 6, 1998. A copy of this notification is enclosed. In addition, a notice of changes will be published in the *Federal Register*. Within 90 days of the second publication in the *Albuquerque Journal*, a citizen may request that FEMA reconsider the determination made by this LOMR. Any request for reconsideration must be based on scientific or technical data. All interested parties are on notice that, until the 90-day period elapses, the determination to modify the BFEs presented in this LOMR may itself be modified.

Because this LOMR will not be printed and distributed to primary users, such as local insurance agents and mortgage lenders, your community will serve as a repository for these new data. We encourage you to disseminate the information reflected by this LOMR throughout the community, so that interested persons, such as property owners, local insurance agents, and mortgage lenders, may benefit from the information. We also encourage you to prepare a related article for publication in your community's local newspaper. This article should describe the assistance that officials of your community will give to interested persons by providing these data and interpreting the NFIP maps.

We will not physically revise and republish the FIRM and Flood Insurance Study (FIS) report for your community to reflect the modifications made by this LOMR at this time. When changes to the previously cited FIRM panel(s) and FIS report warrant physical revision and republication in the future, we will incorporate the modifications made by this LOMR at that time.

This LOMR is based on minimum floodplain management criteria established under the NFIP. Your community is responsible for approving all floodplain development, and for ensuring all necessary permits required by Federal or State law have been received. State, county, and community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction in the SFHA. If the State, county, or community has adopted more restrictive or comprehensive floodplain management criteria, these criteria take precedence over the minimum NFIP criteria.

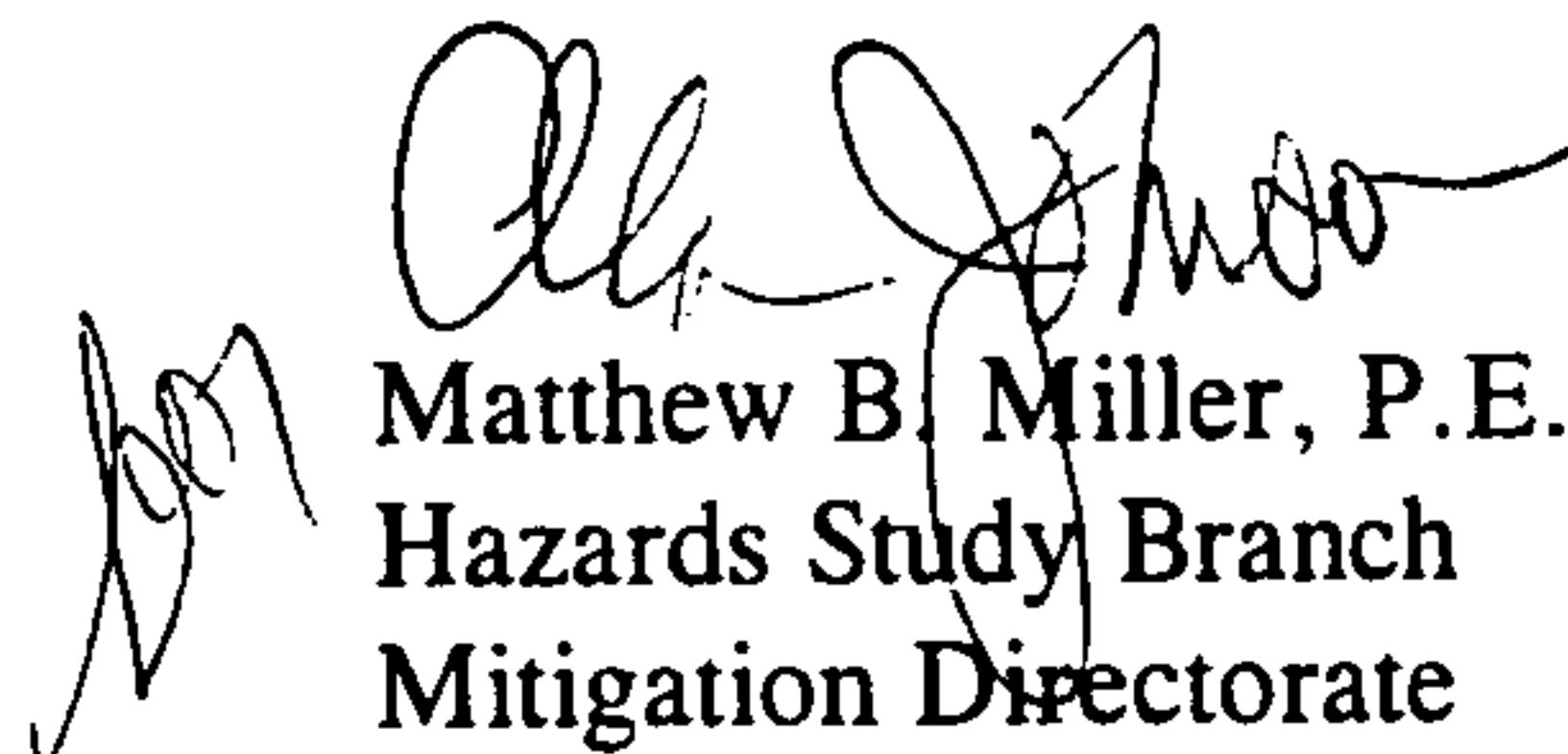
The basis of this LOMR is, in whole or in part, a culvert project. NFIP regulations, as cited in Paragraph 60.3(b)(7), require that communities ensure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained. This provision is incorporated into your community's existing floodplain management regulations. Consequently, the ultimate responsibility for maintenance of the culvert rests with your community.

This determination has been made pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (Public Law 93-234) and is in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, Public Law 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. Pursuant to Section 1361 of the National Flood Insurance Act

of 1968, as amended, communities participating in the NFIP are required to adopt and enforce floodplain management regulations that meet or exceed NFIP criteria. These criteria are the minimum requirements and do not supersede any State or local requirements of a more stringent nature. This includes adoption of the effective FIRM to which the regulations apply and the modifications described in this LOMR.

If you have any questions regarding floodplain management regulations for your community or the NFIP in general, please contact the Consultation Coordination Officer (CCO) for your community. Information on the CCO for your community may be obtained by contacting the Director, Mitigation Division of FEMA in Denton, Texas, at (940) 898-5127. If you have any technical questions regarding this LOMR, please contact Mr. Alan Johnson of our staff in Washington, DC, either by telephone at (202) 646-3403 or by facsimile at (202) 646-4596.

Sincerely,


Matthew B. Miller, P.E., Chief
Hazards Study Branch
Mitigation Directorate

Enclosure(s)

cc: Ms. Susan M. Calongne, P.E.
City/County Floodplain Administrator
City of Albuquerque/Bernalillo County

Mr. John Kelly, P.E.
Acting Executive Engineer
Albuquerque Metropolitan Arroyo
Flood Control Authority

Mr. Donald S. Dixon, P.E.
Vice President for Engineering
Resource Technology, Inc.

CHANGES ARE MADE IN DETERMINATIONS OF BASE FLOOD ELEVATIONS FOR THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, UNDER THE NATIONAL FLOOD INSURANCE PROGRAM

On September 20, 1996, the Federal Emergency Management Agency identified Special Flood Hazard Areas (SFHAs) in the City of Albuquerque, Bernalillo County, New Mexico, through issuance of a Flood Insurance Rate Map (FIRM). The Mitigation Directorate has determined that modification of the elevations of the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood) for certain locations in this community is appropriate. The modified base flood elevations (BFEs) revise the FIRM for the community.

The changes are being made pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (Public Law 93-234) and are in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, Public Law 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65.

A hydraulic analysis was performed to incorporate the effects that construction of a storm drain system along Wyoming Boulevard from Wilshire Avenue to approximately 180 feet south of Corona Avenue in conjunction with existing storm drain systems between Wyoming Boulevard and Interstate 25 would have on the flood hazard information shown on the effective FIRM along the north branch of North Domingo Baca Arroyo and has resulted in removal of the SFHA from the FIRM and modified BFEs for the north branch of North Domingo Baca Arroyo from approximately 1,400 feet east of Wyoming Boulevard to Interstate 25. The table below indicates existing and modified BFEs for selected locations along the affected lengths of the flooding source(s) cited above.

Location	Existing BFE (feet)*	Modified BFE (feet)*
Approximately 2,000 feet west of Louisiana Boulevard	1	None
Approximately 400 feet west of Wyoming Boulevard	1	None

*Depth above ground to the nearest whole foot

Under the above-mentioned Acts of 1968 and 1973, the Mitigation Directorate must develop criteria for floodplain management. To participate in the National Flood Insurance Program (NFIP), the community must use the modified BFEs to administer the floodplain management measures of the NFIP. These modified BFEs will also be used to calculate the appropriate flood insurance premium rates for new buildings and their contents and for the second layer of insurance on existing buildings and contents.

Upon the second publication of notice of these changes in this newspaper, any person has 90 days in which he or she can request, through the Chief Executive Officer of the community, that the Mitigation Directorate reconsider the determination. Any request for reconsideration must be based on knowledge of changed conditions or new scientific or technical data. All interested parties are on notice that until the 90-day period elapses, the Mitigation Directorate's determination to modify the BFEs may itself be changed.

Any person having knowledge or wishing to comment on these changes should immediately notify:

The Honorable Martin J. Chavez
Mayor, City of Albuquerque
P.O. Box 1293
Albuquerque, New Mexico 87103-1293

EAGLE POINT SUBDIVISION

(Formerly Angelwood Subdivision) (Formerly Falcon Ridge Unit II)

Drainage Report

Map C-19-Z

DRB 97-229

LEGAL DESCRIPTION

Lots 1-6 and 27-32, Block 6, Tract 2, Unit 3, North Albuquerque Acres.

HISTORY

DRB

Preliminary Plat, grading plan and infrastructure list approved by DRB as Angelwood Subdivision on January 6, 1998.

First Amendment approved by DRB on September 29, 1998, which changed name from Angelwood to Falcon Ridge Unit II.

Second Amendment approved, November 24, 1998, amended Infrastructure List to defer construction of storm drain and paving improvements on Louisiana Boulevard.

A time extension of one year for Preliminary Plat approval was granted by DRB on March

Presently request is for DRB approval of name change from Falcon Ridge Unit II to Eagle Point Subdivision, approval of revised lot and street layout, approval of revised grading plan and approval of Amended Infrastructure List. Approval of street name changes has also been requested. Approval of requests will cause all the old files to be purged such that the project will go forward as a new plat named Eagle Point Subdivision.

DRC – City Work Order #6004.81

The construction drawings were approved for design by DRC on January 5, 1999. The project name was Falcon Ridge Unit II at time of DRC approval.

FLOOD HAZARD

The site is on FEMA FIRM Map #35001CO137D, September 20, 1996. This FIRM designates the southern half of the site as AO (areas of shallow flooding 1-3 feet deep). FEMA has since issued a Letter of Map Revision that eliminates the flood hazard designation from all areas within the site boundary. See attached LOMR and FIRM MAP.

NORTH ALBUQUERQUE ACRES DRAINAGE MASTER PLAN

The subject site and associated study area are within the jurisdiction of this master drainage plan prepared by Resource Technologies, Incorporated. The site, as shown on Figure 1, is

designated as being a portion of subbasin 942.2. This study, containing 20.8 acres, is that portion of basin 942.2 located east of Louisiana.

The master planned outfall is the existing 30 inch storm drain in Corona Avenue. The line should be sized to convey flow generated over this study area, in a fully developed condition, from a 100 Year-6 Hr storm. The masterplan indicates the designated area as being 19.0 acres and associated peak flow as 66.6 cfs. .

DESCRIPTION

The project lies just east of Louisiana between Corona and Wilshire Avenues. The site covers 12.0 acres, which includes rights of way to the centerline of each of these adjacent streets. The undeveloped site is traversed with what once were tributaries of the North Domingo Baca Arroyo. Sloping from east to west at 3 to 4% existing ground cover at 80% to 90% and soils consisting of decomposed granite, the site is very typical of the east mesa.

This area of Albuquerque has experienced a surge of development in the last 5 years as is indicative of this site, which lies in the middle of four existing subdivisions constructed during this period. Located west of Louisiana, along the north right of way of Wilshire, Sonora Subdivision was developed in 1995. Buena Vista Subdivision located due east across Louisiana from this site was constructed in 1997. La Cueva subdivision just south of Buena Vista was constructed in 1996 and Falcon Ridge was developed just east of this site in 1997.

EXISTING CONDITIONS

Construction of Falcon Ridge Subdivision, located to the east, diverted upstream over land flow to the Lower North Domingo Baca Dam which relieves this site from having to deal with flows blocked by its development and more importantly allowed for the removal of the historic flood plain.

Onsite developed flow as well as flow from adjacent rights of way is another story however due to the out fall not being in service. The existing Corona storm drain presently conveys historic flow intercepted by a temporary diversion channel constructed with Buena Vista subdivision to a private pond also constructed with Buena Vista. The management, per City policy, of these otherwise blocked flows; being the responsibility of that project. Included in the appendix is a drainage basin map which identifies the area presently being served by this system, which basically covers this site from centerline Corona to centerline Wilshire and from west ROW of Louisiana to west boundary of Falcon Ridge. In addition, that section of Corona and Wilshire rights of way between Murrelet and the east boundary of this project also contributes to this system.

of Louisiana south of Corona a

Existing flow from the south half of Corona right of way out falls to a temporary inlet located in line with the future curb of Louisiana, south of Corona approximately 200 feet. The inlet and storm drain were constructed with La Cueva Oeste for the purpose of mitigating offsite flow blocked by that development. In addition a 24 inch culvert located 150 feet east of Louisiana and crossing Corona exists which, when not blocked, diverts flow from the north side of Corona to the south and then to the La Cueva inlet. Apparently the culvert was installed when the county constructed the temporary road section on Corona. The culvert is not considered relevant in this report since with this development it will be abandoned.

The north half of Wilshire right of way and east half of Louisiana right of way were combined with the 5 undeveloped and two developed North Albuquerque Acres lots, to make up basin B1-B.Ex of the existing conditions analysis. The overland flow from this area and the flow channeled by the swale along Wilshire are intercepted by the existing temporary road section in Louisiana. The intercepted flow then sheets across Louisiana to a earthen swale diverting it south to Wilshire where it outfalls. The diverted flow then runs west in the permanent pavement section of Wilshire to a series of inlets designed to intercept the diverted flow. A storm drain conveys the flow which now consists of developed flow from the Wilshire pavement and the diverted historical flow from east of Louisiana, to a detention pond which outfalls to a storm drain in Signal. Constructed with Sonora Subdivision, this system has an as-constructed capacity of 35 cfs. .

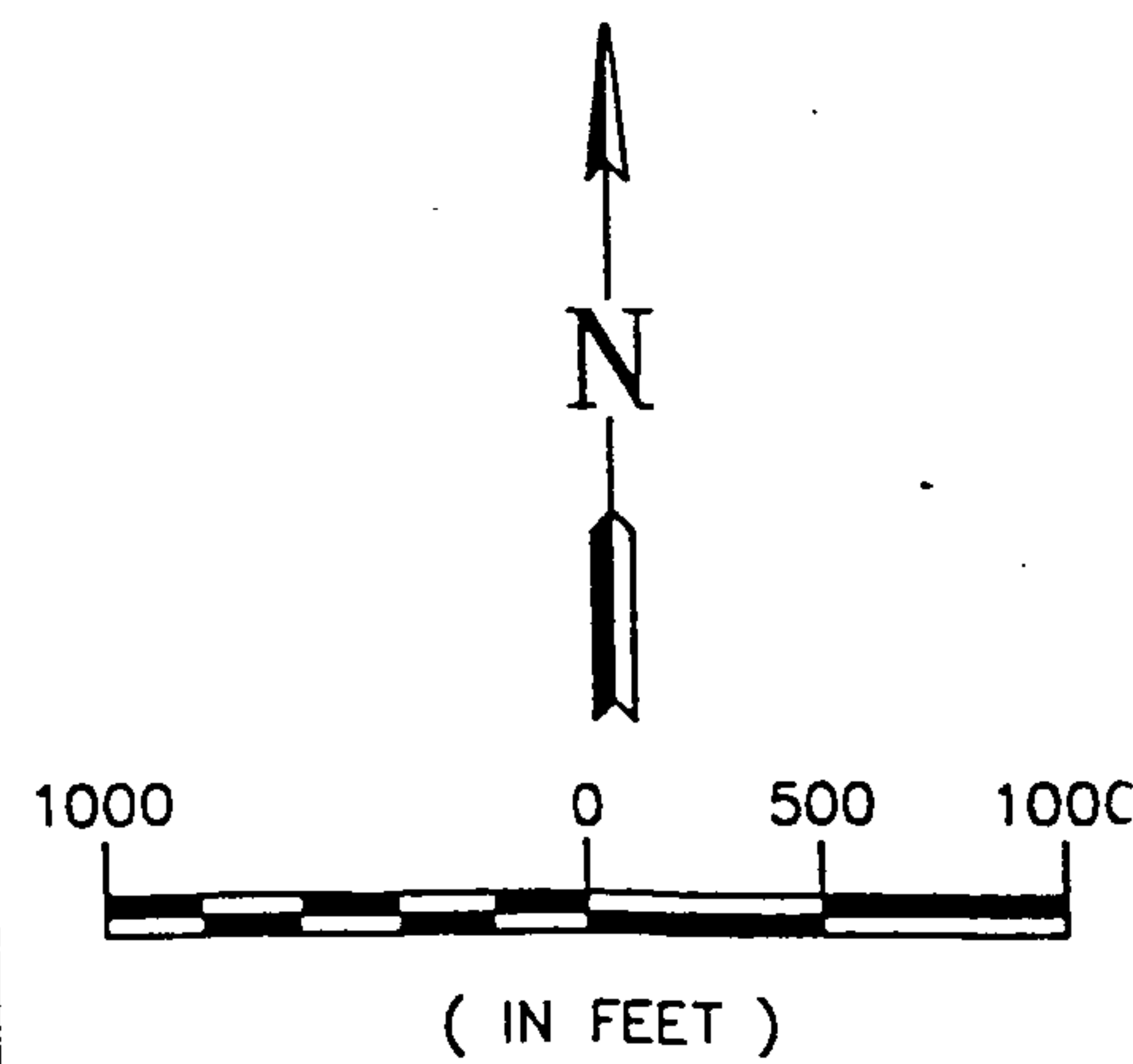
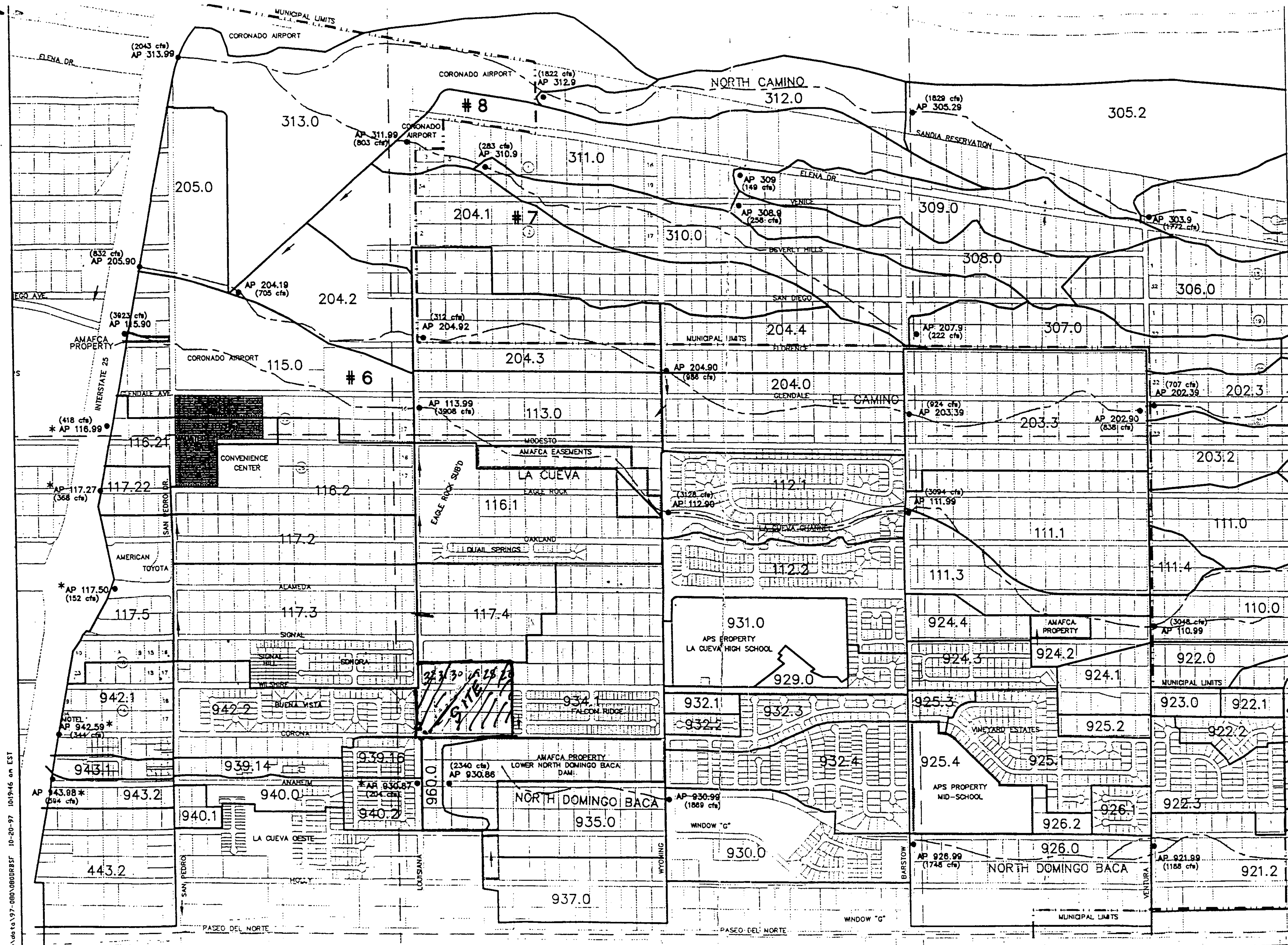
In summary of existing conditions, upstream flow is managed by improvements constructed with the development of Falcon Ridge Subdivision east of the site and historical flow from the study area is managed by temporary and permanent improvements constructed with the development of La Cueva Oeste, Buena Vista and Sonora Subdivisions located down stream of the study area. The permanent master planned outfall for the fully developed condition of the study area, is the existing storm drain in Corona which, to date is not in service. The outfall being available for service is apparently eminent. The anticipated initial system capacity, however, is substantially less than that required for free discharge and additional improvements to increase the capacity have not been programmed.

INTERIM CONDITION

The necessity of an interim condition is a result of the Corona Storm Drain not being in service . The construction of Louisiana is not feasible until the outfall is available. The profile proposed for Louisiana was designed with a sag vertical curve near the Wilshire intersection. The collection of surface drainage, therefore, can only be accomplished using a drainage inlet that necessitates a storm drain with outfall. This point is too low to access the retention pond planned for the project. Without an outfall therefore Louisiana can not be kept dry. Since, it is not practical to construct the paving at this time it is proposed to also defer the storm drain required for Louisiana .

The interim hydrological condition is the condition that will exist at completion of constructing the improvements proposed with the initial development (i.e. project work order) of this project. These proposed improvements being sufficient to substantially manage any change to existing drainage characteristics caused by this development or otherwise cause hardship to adjacent properties now or in the future. The deferral of construction of items of infrastructure typically being the responsibility of the development will not relieve the development of this responsibility. An agreement to the satisfaction of the City will be executed to assure that all obligations of the development regarding infrastructure, deferred or otherwise, will be satisfied and will run with the land.

Specifically, it is proposed to provide full retention of all on site flow generated from a 100 Year-24 Hr storm. All required onsite infrastructure, including the temporary retention pond and onsite storm drain system to collect and convey drainage to the pond. A manhole located at the pipe entrance to the pond is proposed that will facilitate the easy conversion of the retention pond to a detention pond in the future. The south invert will be plugged for the interim such that that future condition out fall pipe can be installed with initial construction. The section in the



LEGEND

- 107.1 SUBBASIN DESIGNATION
- SUBBASIN BOUNDARY
- EXISTING PLATTING
- EXISTING ARROYO FLOW PATH
- ANALYSIS POINT AND FUTURE CONDITION FLOW RATE
- * FLOW RATE NOT BULKED FOR SEDIMENT
- # 2 POTENTIAL AVULSION LOCATION
- MUNICIPAL LIMITS

FIGURE #3 SUBBASIN MAP

NORTH ALBUQUERQUE ACR
MASTER DRAINAGE PLAN

FUTURE CONDITION

FIGURE 4A

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT



Resource Technology, Inc.
Civil Engineering 1720 - B Randolph Road
Environmental Sciences Albuquerque, New Mexico
Water Resources E-mail: rti@rti.com
Landscape Architecture Telephone: (505) 243-7300
Planning Facsimile: (505) 243-7400

southwest stub street from the pond inlet manhole to Corona and from this point in Corona west to Louisiana is proposed for initial construction. At this junction, a manhole with stubs north and west is proposed as the termination point for initial construction. Construction of the 24" line in Louisiana and 42" out fall line in Corona is to be deferred until the Corona outfall is available for service.

FULLY DEVELOPED CONDITION

For the purpose of analysis this is the hydrological condition of the study area with all streets and properties fully developed. This includes four lanes paving 16 foot paved median and 6 foot sidewalks on Louisiana. As well as 40 foot face to face paving and 4 foot side walks on Wilshire and on Corona. In addition, the undeveloped lots north of Wilshire are assumed developed to the intensity indicated by the master plan.

The fully developed condition assumes the outfall is available with a minimum capacity to free discharge drainage from all areas outside this site boundary (+/-10.0 ac). This worst case scenario would require full retention of all flow from the 10.1 acres within the site boundary, which would essentially be the same onsite condition proposed for the interim. Certainly this situation is not even close to a fair share allocation, to this development, of downstream capacity, however, the scenario presents the minimum that would allow for the full development of Louisiana.

CONCLUSION

The analysis of each of the described hydrological conditions is contained in Appendix "A". The analysis determined the flow rate and volume for each condition. Hydraulic calculations for street flow, inlet size, spillway width and storm drain are included. Retention pond volume and detention pond volume calculations are also contained in Appendix "A".

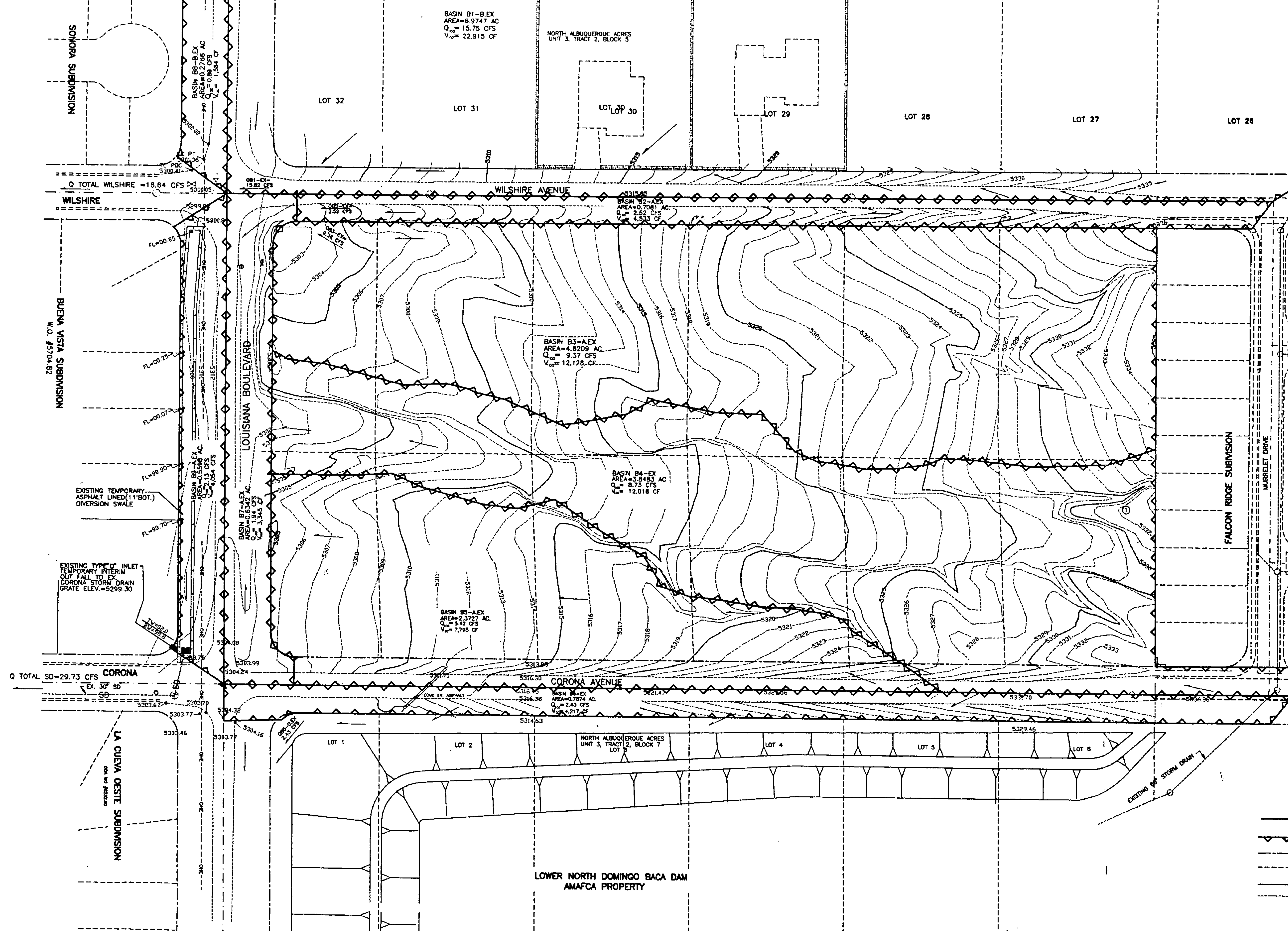
The analysis demonstrates that the changed hydrologic condition, caused by construction of paving improvements proposed for the interim, has little impact downstream. Flow is actually reduced and in all cases well within downstream system capacity.

Upon resolution of downstream issues allowing the Corona Storm Drain to be put in service, it is anticipated that the proposed interim retention pond can be converted to a detention pond with controlled outlet. Desirable to this development, since a detention pond scenario will free up real estate and allow for construction of Louisiana improvements which would be beneficial to this project as well as the other four subdivisions recently developed in this area.

In the interest of being prepared for future outfall availability, detention pond analyses are included in the appendix for different outfall restraints. One scenario analyzed, seems realistic in that it conservatively uses anticipated detention based on 50% of peak discharge allowed over the project area including adjacent right of way and also is factored for all areas outside the site boundary and within this study area to free discharge. The result of this analysis was that a 10" diameter or equivalent orifice set on the out flow side of the pond inlet/outlet manhole will reduce the onsite peak discharge to the Corona Storm Drain from 39.54 CFS to 10.31 CFS. Allowing the remainder of the master planned subbasin east of Louisiana, including all fully developed rights of way and the 6 acres north of Wilshire to free discharge the total flow to Corona would be reduced from 79 to 50 CFS.

EXHIBIT #1

EAGLE POINT SUBDIVISION DRAINAGE BASIN MAP EXISTING CONDITIONS



SCALE 1"=100'

LEGEND

- BASIN BOUNDARY
- ROW LINE
- EXISTING LOT LINE
- STORM DRAIN
- EX. STORM DRAIN

ALBUQUERQUE, NM, DPM (1/93) CRITERIA - SIMPLE PROCEDURE FOR <= 40 ACRES
PX100-6 = PRECIPITATION EXCESS FROM 100-YEAR 6-HOUR STORM
VOL10D = VOLUME OF RUNOFF FROM 100-YEAR 10-DAY STORM
TRTMT CLASS A=UNDISTURBED, B=LAWNS, C=UNPAVED ROADS, D=ROOFS,PAVEMENT: SEE DPM P 22.5-5

***** PROJECT INFO *****

EAGLE POINT SUBDIVISION

BASIN DESCRIPTION: B1-B.EX

RAIN ZONE 3 SEE DPM P 22.2-2

100-YEAR PRECIPITATION (P) DEPTHS, INCHES

1 HR	6 HR	24 HR	4 DAY
2.14	2.60	3.10	3.95

B1=BASIN #

B=DEFINES BASIN OUTFALL

"A"OUTFALLS TO CORONA SD

"B"OUTFALLS WEST OF LOUISIANA IN WILSHIRE

"C" OUTFALLS TO INTERIM RETENTION POND

"D"OUTFALLS SOUTH OF CORONA IN LOUISIANA

.EX DEFINES CONDITION

EX= EXISTING CONDITI INT= INTERIM CONDITION

FD= FULLY DEVELOPED CONDITION

EXISTING CONDITIONS ANALYSIS

303818.00

12/16/99	01:57 PM	EXISTING CONDITION BASIN B1-B.EX				INLD'S 1/2 STREET ROW LA & WILSHIRE				
TRTMT CLASS	AREA SF	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	258,207.66	5.9276	0.66	1.87	11.085	0.326	0.326	0.326	0.326	84.99
B	0.00	0.0000	0.92	2.60	0.000	0.000	0.000	0.000	0.000	0.00
C	16,481.34	0.3784	1.29	3.45	1.305	0.041	0.041	0.041	0.041	5.42
D	29,129.00	0.6687	2.36	5.02	3.357	0.132	0.159	0.207	0.260	9.59
TOTAL	303,818.00	6.9747		2.26	15.747	0.498	0.526	0.573	0.626	100.00
						21,702	22,916	24,979	27,285	CU FT

30845.00

12/16/99	01:57 PM	EXISTING CONDITION BASIN B2-A.EX				SOUTH HALF WILSHIRE				
TRTMT CLASS	AREA SF	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	11,771.20	0.2702	0.66	1.87	0.505	0.015	0.015	0.015	0.015	38.16
B	0.00	0.0000	0.92	2.60	0.000	0.000	0.000	0.000	0.000	0.00
C	5,044.80	0.1158	1.29	3.45	0.400	0.012	0.012	0.012	0.012	16.36
D	14,029.00	0.3221	2.36	5.02	1.617	0.063	0.077	0.100	0.125	45.48
TOTAL	30,845.00	0.7081		3.56	2.522	0.091	0.104	0.127	0.152	100.00
						3,949	4,533	5,527	6,638	CU FT

201287.00

12/16/99 01:57 PM EXISTING CONDITION BASIN B3-A.EX - NORTHERN PORTION ONSITE

TRTMT CLASS	AREA SF	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	181,158.30	4.1588	0.66	1.87	7.777	0.229	0.229	0.229	0.229	90.00
B	0.00	0.0000	0.92	2.60	0.000	0.000	0.000	0.000	0.000	0.00
C	20,128.70	0.4621	1.29	3.45	1.594	0.050	0.050	0.050	0.050	10.00
D	0.00	0.0000	2.36	5.02	0.000	0.000	0.000	0.000	0.000	0.00
TOTAL	201,287.00	4.6209		2.03	9.371	0.278	0.278	0.278	0.278	100.00
						12,128	12,128	12,128	12,128	CU FT

167632.00

12/16/99 01:57 PM EXISTING CONDITION BASIN B4-A.EX CENTER PORTION ONSITE

TRTMT CLASS	AREA SF	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	143,631.00	3.2973	0.66	1.87	6.166	0.181	0.181	0.181	0.181	85.68
B	0.00	0.0000	0.92	2.60	0.000	0.000	0.000	0.000	0.000	0.00
C	15,959.00	0.3664	1.29	3.45	1.264	0.039	0.039	0.039	0.039	9.52
D	8,042.00	0.1846	2.36	5.02	0.927	0.036	0.044	0.057	0.072	4.80
TOTAL	167,632.00	3.8483		2.17	8.357	0.257	0.265	0.278	0.292	100.00
						11,197	11,532	12,102	12,738	CU FT

103354.00

12/16/99 01:57 PM EXISTING CONDITION BASIN B5-A.EX - SOUTHWEST PORTION OF ONSITE INCL'DS N. CORONA ROW

TRTMT CLASS	AREA SF	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	85,095.00	1.9535	0.66	1.87	3.653	0.107	0.107	0.107	0.107	82.334
B	0.00	0.0000	0.66	1.87	0.000	0.000	0.000	0.000	0.000	0.000
C	9,455.00	0.2171	1.29	3.45	0.749	0.023	0.023	0.023	0.023	9.148
D	8,804.00	0.2021	2.36	5.02	1.015	0.040	0.048	0.062	0.078	8.518
TOTAL	103,354.00	2.3727		2.28	5.417	0.171	0.179	0.193	0.209	100.000
						7,428	7,795	8,419	9,116	CU FT

34300.00

12/16/99 01:57 PM EXISTING CONDITION BASIN B6-D.EX CORONA AVENUE-SOUTH 1/2 ROW

TRTMT CLASS	AREA SF	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	20,000.70	0.4592	0.66	1.87	0.859	0.025	0.025	0.025	0.025	58.31
B	0.00	0.0000	0.92	2.60	0.000	0.000	0.000	0.000	0.000	0.00
C	2,222.30	0.0510	1.29	3.45	0.176	0.005	0.005	0.005	0.005	6.48
D	12,077.00	0.2772	2.36	5.02	1.392	0.055	0.066	0.086	0.108	35.21
TOTAL	34,300.00	0.7874		3.08	2.426	0.085	0.097	0.116	0.138	100.00
						3,714	4,217	5,073	6,029	CU FT

27625.00

12/16/99 01:57 PM BASIN B7-A.EX -- EASTERLY 1/2 LOUISIANA ROW B/W WILSHIRE & CORONA

TRTMT CLASS	AREA SF	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	16,367.40	0.3757	0.66	1.87	0.703	0.021	0.021	0.021	0.021	59.25
B	0.00	0.0000	0.92	2.60	0.000	0.000	0.000	0.000	0.000	0.00
C	1,818.60	0.0417	1.29	3.45	0.144	0.004	0.004	0.004	0.004	6.58
D	9,439.00	0.2167	2.36	5.02	1.088	0.043	0.052	0.067	0.084	34.17
TOTAL	27,625.00	0.6342		3.05	1.934	0.068	0.077	0.092	0.109	100.00
		7.6089				2,952	3,345	4,014	4,761	CU FT

12053.00

12/16/99 01:57 PM BASIN B8-B.EX -- WESTERLY 1/2 LOUISIANA ROW NORTH OF WILSHIRE

TRTMT CLASS	AREA SF	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	6,500.70	0.1492	0.66	1.87	0.279	0.008	0.008	0.008	0.008	53.93
B	0.00	0.0000	0.92	2.60	0.000	0.000	0.000	0.000	0.000	0.00
C	722.30	0.0166	1.29	3.45	0.057	0.002	0.002	0.002	0.002	5.99
D	4,830.00	0.1109	2.36	5.02	0.557	0.022	0.026	0.034	0.043	40.07
TOTAL	12,053.00	0.2767		3.23	0.893	0.032	0.036	0.044	0.053	100.00
						1,385	1,586	1,928	2,311	CU FT

24383.00

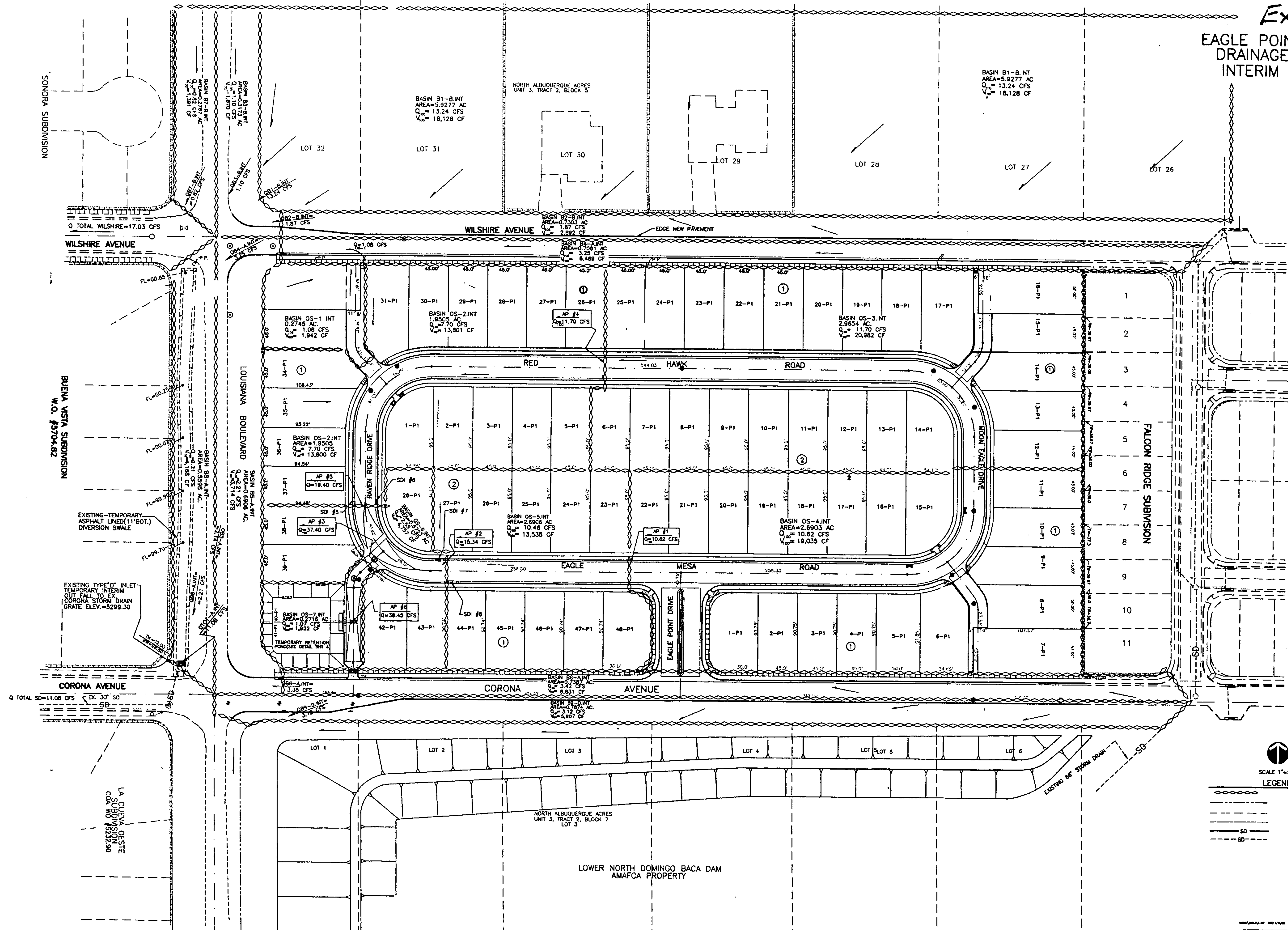
12/16/99 01:57 PM BASIN B9-A.EX --- WESTERLY 1/2 LOUISIANA ROW B/W WILSHIRE&CORONA

TRTMT CLASS	AREA SF	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	8,881.20	0.2039	0.66	1.87	0.381	0.011	0.011	0.011	0.011	36.42
B	0.00	0.0000	0.92	2.60	0.000	0.000	0.000	0.000	0.000	0.00
C	986.80	0.0227	1.29	3.45	0.078	0.002	0.002	0.002	0.002	4.05
D	14,515.00	0.3332	2.36	5.02	1.673	0.066	0.079	0.103	0.129	59.53
TOTAL	24,383.00	0.5598		3.81	2.132	0.079	0.093	0.117	0.143	100.00
						3,449	4,054	5,082	6,231	CU FT

SUMMARY EXISTING CONDITIONS

SUMMARY EXISTING CONDITIONS			QP100-6	VOL6HR	VOL-24HI	VOL-4 DA	VOL 10 D
	AREA-AC.		CFS	CF	CF	CF	CF
TOTAL TO CORONA SD	12.74	2.33	29.73	41,102	43,387	47,271	51,611
TOTAL BY PASS WILSHIRE=	7.25	2.29	16.64	23,087	24,502	26,907	29,596
TOTAL SOUTH OF CORONA	0.79	3.08	2.43	3,714	4,217	5,073	6,029
TOTAL STUDY AREA	20.78	2.35	48.80	67,904	72,106	79,251	87,236
CHECK	20.78						

EXHIBIT #2 **EAGLE POINT SUBDIVISION** **DRAINAGE BASIN MAP** **INTERIM CONDITIONS**



SCALE 1"=50'

LEGEND

- BASIN BOUNDARY
- ROW LINE
- EXISTING LOT LINE
- NEW LOT LINE
- SD — NEW STORM DRAIN
- SD — EX. STORM DRAIN

INTERIM CONDITION:

INTERIM CONDITION IS THE CONDITION THAT WILL EXIST UPON COMPLETION OF OF CONSTRUCTION OF INFRASTRUCTURE REQUIRED OF THIS PROJECT. DOES NOT INCLUDE DEFERRED ITEMS. IMPOVEMENTS PROPOSED TO BE CONSTRUCTED BY THIS PROJECT INCLUDE CONSTRUCTING 1/2 SECTION (24' FACE TO EDGE) STD. CURB AND 4' SIDEWALK FOR CORONA AND WILSHIRE, FROM THE EAST BOUNDARY TO THE EAST ROW OF LOUISIANA. CONSTRUCTING STORM DRAIN IN CORONA FROM THE SW STUB STREET TO A POINT 16' EAST OF LOUISIANA CL. STORM DRAIN INLETS AND SD LATERALS LOCATED WITHIN REACH OF NEW STD CURB AND LATERALS STUBBED AT LOCATIONS OF FUTURE INLETS. STORM DRAIN AND LATERALS IN WILSHIRE ALSO TO BE CONSTRUCTED BETWEEN A POINT 16' EAST OF LOUISIANA C.L. AND STORM INLETS LOCATED ON SOUTH CURB OF WILSHIRE. INLETS IN CORONA AND WILSHIRE WILL REMAIN PLUGGED UNTIL THE DOWN STREAM EXISTING STORM DRAIN IS IN SERVICE. CONSTRUCTION OF LOUISIANA PAVING AND STORM DRAIN WILL ALSO DEPEND ON THE DOWN STREAM CORONA STORM DRAIN SYSTEM BE IN SERVICE . ALL ONSITE PERMANENT IMPROVEMENTS WILL BE CONSTRUCTED INCLUDING ONSITE STORM DRAIN AND INLETS WHICH WILL CONVEY DRAINAGE TO THE PROPOSED INTERIM RETENTION POND. A POND INLET/OUTLET MANHOLE LOCATED IN THE SW STUB STREET AT THE POND ENTRANCE WILL SERVE AS THE JUNCTION FOR FUTURE CONNECTION TO THE CORONA STORM DRAIN AND WILL ALLOW FOR THE FUTURE POSSIBILITY OF CONVERSION OF THE RETENTION POND TO A DETENTION POND.

258,212.00

12/16/99 01:57 PM		INTERIM CONDITION: BASIN B1-B.INT				I- AC TRACTS NORTH OF WILSHIRE				
TRTMT	AREA	AREA	PX100-6	QP100-6	QP100-6	VOL6HR	VOL1D	VOL4D	VOL10D	TRTMT
CLASS	SQUARE FE	ACRES	IN/AC	CFS/AC	CFS	AC-FT	AC-FT	AC-FT	AC-FT	PERCENT
A	209,151.72	4.8015	0.66	1.87	8.979	0.264	0.264	0.264	0.264	81.00
B	0.00	0.0000	0.92	2.60	0.000	0.000	0.000	0.000	0.000	0.00
C	38,731.80	0.8892	1.29	3.45	3.068	0.096	0.096	0.096	0.096	15.00
D	10,328.48	0.2371	2.36	5.02	1.190	0.047	0.057	0.073	0.092	4.00
TOTAL	258,212.00	5.9277		2.23	13.237	0.406	0.416	0.433	0.452	100.00
303818.00						17,698	18,129	18,860	19,678	CU FT

31,806.00

12/16/99 01:57 PM INTERIM CONDITION: BASIN B2-B.INT NORTH 1/2 WILSHIRE

TRTMT CLASS	AREA SQUARE FE	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	23,305.04	0.5350	0.66	1.87	1.000	0.029	0.029	0.029	0.029	73.27
B	0.00	0.0000	0.92	2.60	0.000	0.000	0.000	0.000	0.000	0.00
C	3,177.96	0.0730	1.29	3.45	0.252	0.008	0.008	0.008	0.008	9.99
D	5,323.00	0.1222	2.36	5.02	0.613	0.024	0.029	0.038	0.047	16.74
TOTAL	31,806.00	0.7302		2.56	1.866	0.061 2,670	0.066 2,892	0.075 3,269	0.085 3,691	100.00 CU FT

13800.00

12/16/99 01:57 PM INTERIM CONDITION: BASIN B3-B.INT EAST 1/2 LA. ROW--CL WILSHIRE 250' NORTH

TRTMT CLASS	AREA SF	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	4,518.00	0.1037	0.66	1.87	0.194	0.006	0.006	0.006	0.006	32.74
B	0.00	0.0000	0.92	2.60	0.000	0.000	0.000	0.000	0.000	0.00
C	4,518.00	0.1037	1.29	3.45	0.358	0.011	0.011	0.011	0.011	32.74
D	4,764.00	0.1094	2.36	5.02	0.549	0.022	0.026	0.034	0.042	34.52
TOTAL	13,800.00	0.3168		3.47	1.101	0.038 1671	0.043 1870	0.051 2207	0.059 2584	100.00 CU FT
	303818.00	6.9747								

30,845.00

12/16/99 01:57 PM INTERIM CONDITION: BASIN B4-A.INT SOUTH 1/2 WILSHIRE ROW

TRTMT CLASS	AREA SF	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	0.00	0.0000	0.66	1.87	0.000	0.000	0.000	0.000	0.000	0.00
B	5,459.57	0.1253	0.92	2.60	0.326	0.010	0.010	0.010	0.010	17.70
C	0.00	0.0000	1.29	3.45	0.000	0.000	0.000	0.000	0.000	0.00
D	25,385.44	0.5828	2.36	5.02	2.926	0.115	0.139	0.180	0.226	82.30
TOTAL	30,845.00	0.7081		4.59	3.251	0.124 5,411	0.149 6,469	0.190 8,267	0.236 10,277	100.00 CU FT

333899.00

30,081.00

12/16/99 01:57 PM INTERIM CONDITION: BASIN B5-A.INT EAST 1/2 LA. B/W WILSHIRE & CORONA

TRTMT CLASS	AREA SF	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	14,433.30	0.3313	0.66	1.87	0.620	0.018	0.018	0.018	0.018	47.98
B	0.00	0.0000	0.66	1.87	0.000	0.000	0.000	0.000	0.000	0.00
C	6,185.70	0.1420	1.29	3.45	0.490	0.015	0.015	0.015	0.015	20.56
D	9,462.00	0.2172	2.36	5.02	1.090	0.043	0.052	0.067	0.084	31.46
TOTAL	30,081.00	0.6906		3.19	2.200	0.076	0.085	0.101	0.118	100.00
		7.6653				3,320	3,714	4,384	5,133	CU FT

33,341.00

12/16/99 01:57 PM INTERIM CONDITION: BASIN B6-A.INT NORTH 1/2 CORONA ROW

TRTMT CLASS	AREA SF	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	0.00	0.0000	0.66	1.87	0.000	0.000	0.000	0.000	0.000	0.00
B	5,367.90	0.1232	0.92	2.60	0.320	0.009	0.009	0.009	0.009	16.10
C	0.00	0.0000	1.29	3.45	0.000	0.000	0.000	0.000	0.000	0.00
D	27,973.10	0.6422	2.36	5.02	3.224	0.126	0.153	0.199	0.249	83.90
TOTAL	33,341.00	0.7654		4.63	3.544	0.136	0.162	0.208	0.259	100.00
						5,913	7,078	9,060	11,274	CU FT

12,053.00

12/16/99 01:57 PM INTERIM CONDITION: BASIN B7-B.INT WEST 1/2 LA. NORTH OF WILSHIRE

TRTMT CLASS	AREA SF	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	7,219.75	0.1657	0.66	1.87	0.310	0.009	0.009	0.009	0.009	59.90
B	0.00	0.0000	0.92	2.60	0.000	0.000	0.000	0.000	0.000	0.00
C	1,205.30	0.0277	1.29	3.45	0.095	0.003	0.003	0.003	0.003	10.00
D	3,627.95	0.0833	2.36	5.02	0.418	0.016	0.020	0.026	0.032	30.10
TOTAL	12,053.00	0.2767		2.98	0.823	0.028	0.032	0.038	0.044	100.00
						1,240	1,391	1,648	1,936	CU FT

24,383.00

12/16/99 01:57 PM INTERIM CONDITION: BASIN B8-A.INT WEST 1/2 LOUISIANA B/W CORONA & WILSHIRE

TRTMT	AREA	AREA	PX100-6	QP100-6	QP100-6	VOL6HR	VOL1D	VOL4D	VOL10D	TRTMT
CLASS	SF	ACRES	IN/AC	CFS/AC	CFS	AC-FT	AC-FT	AC-FT	AC-FT	PERCENT
A	6,876.01	0.1579	0.66	1.87	0.295	0.009	0.009	0.009	0.009	28.20
B	0.00	0.0000	0.92	2.60	0.000	0.000	0.000	0.000	0.000	0.00
C	2,925.96	0.0672	1.29	3.45	0.232	0.007	0.007	0.007	0.007	12.00
D	14,581.03	0.3347	2.36	5.02	1.680	0.066	0.080	0.103	0.130	59.80
TOTAL	24,383.00	0.5598		3.94	2.207	0.082	0.096	0.119	0.146	100.00
						3,560	4,168	5,201	6,355	CU FT

34,300.00

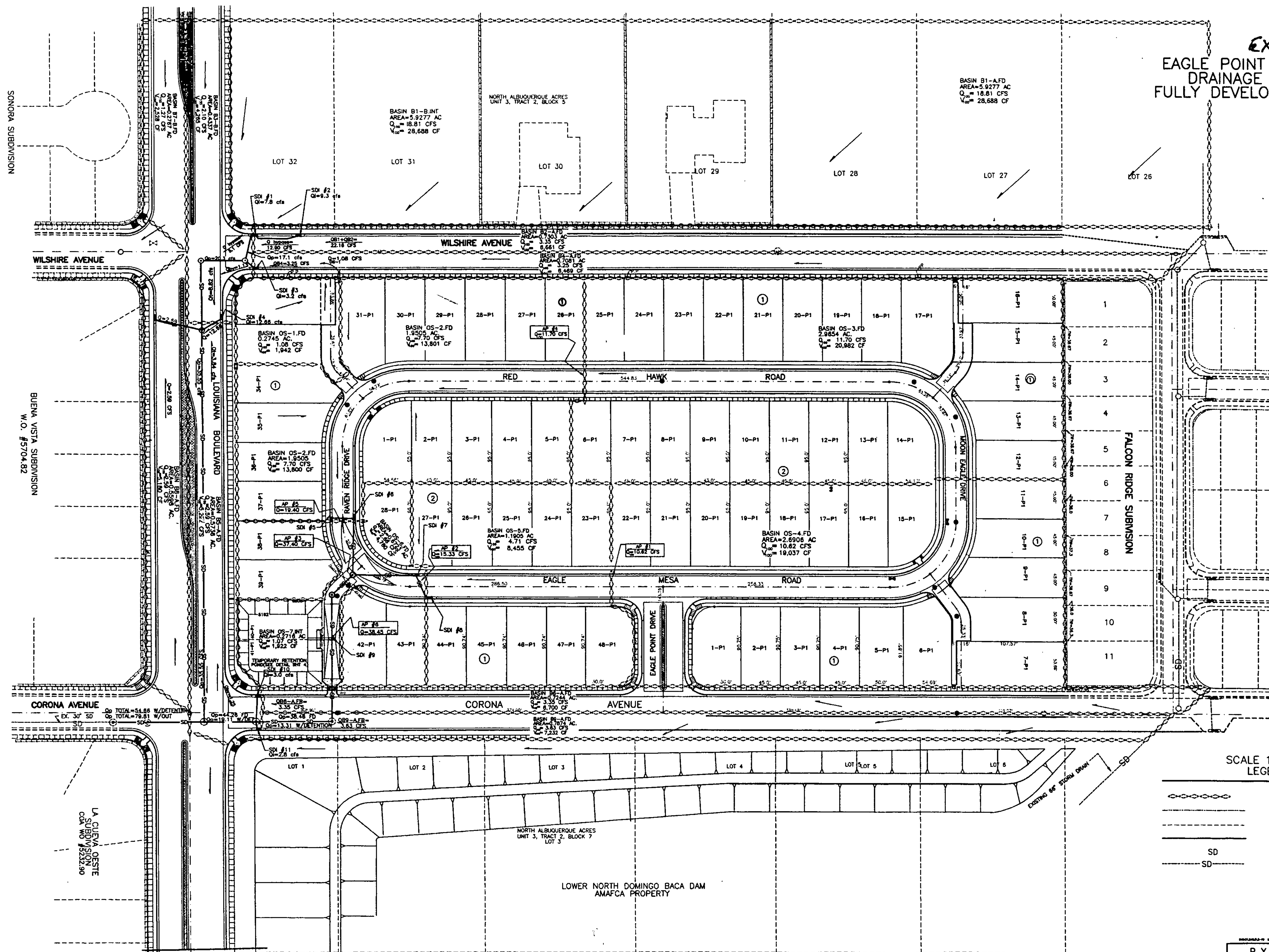
12/16/99 01:57 PM INTERIM CONDITION: BASIN B9-D.INT SOUTH 1/2 CORONA

TRTMT	AREA	AREA	PX100-6	QP100-6	QP100-6	VOL6HR	VOL1D	VOL4D	VOL10D	TRTMT
CLASS	SF	ACRES	IN/AC	CFS/AC	CFS	AC-FT	AC-FT	AC-FT	AC-FT	PERCENT
A	9,432.50	0.2165	0.66	1.87	0.405	0.012	0.012	0.012	0.012	27.50
B	0.00	0.0000	0.92	2.60	0.000	0.000	0.000	0.000	0.000	0.00
C	4,116.00	0.0945	1.29	3.45	0.326	0.010	0.010	0.010	0.010	12.00
D	20,751.50	0.4764	2.36	5.02	2.391	0.094	0.114	0.147	0.185	60.50
TOTAL	34,300.00	0.7874		3.97	3.122	0.116	0.136	0.169	0.207	100.00
						5,042	5,907	7,377	9,020	CU FT

SUMMARY INTERIM OFFSITE

	AREA	CFS/	QP100-6	VOL6HR	VOL1D	VOL4D	VOL10D	
	ACRES	AC.	CFS	CF	CF	CF	CF	
TOTAL OFFSITE DOWN WILSHIRE	7.25	2.35	17.03	23,280	23,280	25,985	27,888	
TOTAL OFFSITE SOUTH OF CORONA	0.79	5.04	3.97	5,042	5,042	5,907	7,377	
TOTAL OFFSITE TO CORONA SD	2.72	4.11	11.20	18,204	18,204	21,429	26,912	
TOTAL=	10.76	2.99	32.19	46,526	46,526	53,321	62,177	
ONSITE TO COR SD	0.27	3.95	1.08	1,693	1,942	2,366	2,839	
ONSITES FULL RETENTION	9.75	3.95	38.46	60,114	68,958	83,994	100,798	0
TOTAL ON & OFFSITE TO CORONA SD	3.00	4.10	12.29	19,897	20,146	23,795	29,751	
	20.78							

EXHIBIT #3 **EAGLE POINT SUBDIVISION** **DRAINAGE BASIN MAP** **FULLY DEVELOPED CONDITION**



SCALE 1"=100'
 LEGEND

- BASIN BOUNDARY
- — — — — ROW LINE
- — — — — EXISTING LOT LINE
- — — — — NEW LOT LINE
- — — — — NEW STORM DRAIN
- — — — — EX. STORM DRAIN
- SD
- SD

FULL DEVELOPMENT :

FULL DEVELOPMENT IS THE HYDROLOGICAL CONDITION OF THE STUDY AREA UPON CONSTRUCTION OF THE SOUTH 1/2 OF CORONA, NORTH 1/2 OF WILSHIRE AND FULL WIDTH (4 LANES AND 16' MEDIAN) CONSTRUCTION OF LOUISIANA. THE 6+ ACRES NORTH OF WILSHIRE ARE ALSO ASSUMED DEVELOPED. THE CORONA STORM DRAIN IS ASSUMED TO BE IN SERVICE WITH CAPACITY TO CONVEY AS A MINIMUM DRAINAGE FROM THESE ADDITIONAL ROAD IMPROVEMENTS. THE OUTFALL IS ABSOLUTLY NECESSARY FOR LOUISIANA CONSTRUCTION SINCE THE PROPOSED DESIGN HAS LOW POINTS WHICH CAN ONLY BE DRAINED BY SUMP INLETS OUTFALLING TO THE CORONA STORM DRAIN . ALTHOUGH SIGNIFICANT IMPROVEMENTS TO THE THE EXISTING CORONA SYSTEM WOULD BE REQUIRED FOR FREE DISCHARGE, THE CITY AND OTHERS HAVE RECENTLY BEEN WORKING ON THE ESTABLISHMENT OF AN INTERIM DESIGN CAPACITY. FOR THE MOST PART THE PLAN UTILIZES EXISTING FACILITIES AND THEREFORE THE COST OF IMPLEMENTATION IS EXPECTED TO BE MINIMAL. UPON THE ADOPTION OF AN INTERIM OUTFALL CAPACITY THE INTERIM FULL RETENTION OF ALL ONSITE FLOW CAN BE REVISED AND THE ALLOCATED FAIR SHARE OF DOWN STREAM CAPACITY BE DETERMINED SUCH THAT THE RETENTION POND CAN BE CONVERTED TO A DETENTION POND BASED ON Q-OUT=MAX FAIR SHARE

258,212.00

12/16/99 01:57 PM FULLY DEVELOPED BASIN B1-B.FD I- AC TRACTS NORTH OF WILSHIRE										
TRTMT CLASS	AREA SF	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	56,806.64	1.3041	0.66	1.87	2.439	0.072	0.072	0.072	0.072	22.00
B	59,388.76	1.3634	0.92	2.60	3.545	0.105	0.105	0.105	0.105	23.00
C	98,120.56	2.2525	1.29	3.45	7.771	0.242	0.242	0.242	0.242	38.00
D	43,896.04	1.0077	2.36	5.02	5.059	0.198	0.240	0.312	0.391	17.00
TOTAL	258,212.00	5.9277		3.17	18.813	0.617	0.659	0.730	0.810	100.00
	333899.00					26,858	28,687	31,797	35,272	CU FT

31,806.00

12/16/99 01:57 PM FULLY DEVELOPED BASIN B2-B.FD NORTH 1/2 WILSHIRE										
TRTMT CLASS	AREA SF	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	0.00	0.0000	0.66	1.87	0.000	0.000	0.000	0.000	0.000	0.00
B	5,693.27	0.1307	0.92	2.60	0.340	0.010	0.010	0.010	0.010	17.90
C	0.00	0.0000	1.29	3.45	0.000	0.000	0.000	0.000	0.000	0.00
D	26,112.73	0.5995	2.36	5.02	3.009	0.118	0.143	0.185	0.233	82.10
TOTAL	31,806.00	0.7302		4.59	3.349	0.128	0.153	0.195	0.243	100.00
						5,572	6,660	8,510	10,577	CU FT

18893.00

12/16/99 01:57 PM FULLY DEVELOPED BASIN B3-B.FD EAST 1/2 LA. ROW--80' SOUTH CL WILSHIRE 250' NORTH

TRTMT CLASS	AREA SF	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	0.00	0.0000	0.66	1.87	0.000	0.000	0.000	0.000	0.000	0.00
B	1,473.65	0.0338	0.92	2.60	0.088	0.003	0.003	0.003	0.003	7.80
C	0.00	0.0000	1.29	3.45	0.000	0.000	0.000	0.000	0.000	0.00
D	17,419.35	0.3999	2.36	5.02	2.007	0.079	0.095	0.124	0.155	92.20
TOTAL	18,893.00	0.4337		4.83	2.095	0.081	0.098	0.126	0.158	100.00
						3,539	4,265	5,498	6,877	CU FT

30,845.00

12/16/99 01:57 PM FULLY DEVELOPED BASIN B4-A.FD SOUTH 1/2 WILSHIRE ROW

TRTMT CLASS	AREA SF	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	0.00	0.0000	0.66	1.87	0.000	0.000	0.000	0.000	0.000	0.00
B	5,459.57	0.1253	0.92	2.60	0.326	0.010	0.010	0.010	0.010	17.70
C	0.00	0.0000	1.29	3.45	0.000	0.000	0.000	0.000	0.000	0.00
D	25,385.44	0.5828	2.36	5.02	2.926	0.115	0.139	0.180	0.226	82.30
TOTAL	30,845.00	0.7081		4.59	3.251	0.124	0.149	0.190	0.236	100.00
						5,411	6,469	8,267	10,277	CU FT

24,988.00

12/16/99 01:57 PM FULLY DEVELOPED BASIN B5-A.FD EAST 1/2 LA. B/W WILSHIRE & CORONA

TRTMT CLASS	AREA SF	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	0.00	0.0000	0.66	1.87	0.000	0.000	0.000	0.000	0.000	0.00
B	3,998.08	0.0918	0.66	1.87	0.172	0.005	0.005	0.005	0.005	16.00
C	0.00	0.0000	1.29	3.45	0.000	0.000	0.000	0.000	0.000	0.00
D	20,989.92	0.4819	2.36	5.02	2.419	0.095	0.115	0.149	0.187	84.00
TOTAL	24,988.00	0.5736		4.52	2.591	0.100	0.120	0.154	0.192	100.00
		0.5736				4,348	5,222	6,709	8,371	CU FT

33,341.00

12/16/99 01:57 PM FULLY DEVELOPED BASIN B6-A.FD NORTH 1/2 CORONA ROW

TRTMT CLASS	AREA SF	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	0.00	0.0000	0.66	1.87	0.000	0.000	0.000	0.000	0.000	0.00
B	5,367.90	0.1232	0.92	2.60	0.320	0.009	0.009	0.009	0.009	16.10
C	0.00	0.0000	1.29	3.45	0.000	0.000	0.000	0.000	0.000	0.00
D	27,973.10	0.6422	2.36	5.02	3.224	0.126	0.153	0.199	0.249	83.90
TOTAL	33,341.00	0.7654		4.63	3.544	0.136 5,913	0.162 7,078	0.208 9,060	0.259 11,274	100.00 CU FT

12,053.00

12/16/99 01:57 PM FULLY DEVELOPED BASIN B7-B.FD WEST 1/2 LA. NORTH OF WILSHIRE

TRTMT CLASS	AREA SF	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	0.00	0.0000	0.66	1.87	0.000	0.000	0.000	0.000	0.000	0.00
B	2,133.38	0.0490	0.92	2.60	0.127	0.004	0.004	0.004	0.004	17.70
C	0.00	0.0000	1.29	3.45	0.000	0.000	0.000	0.000	0.000	0.00
D	9,919.62	0.2277	2.36	5.02	1.143	0.045	0.054	0.070	0.088	82.30
TOTAL	12,053.00	0.2767		4.59	1.271	0.049 2,114	0.058 2,528	0.074 3,230	0.092 4,016	100.00 CU FT

24,383.00

12/16/99 01:57 PM FULLY DEVELOPED BASIN B8-A.FD WEST 1/2 LOUISIANA B/W CORONA & WILSHIRE

TRTMT CLASS	AREA SF	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	0.00	0.0000	0.66	1.87	0.000	0.000	0.000	0.000	0.000	0.00
B	3,901.28	0.0896	0.92	2.60	0.233	0.007	0.007	0.007	0.007	16.00
C	0.00	0.0000	1.29	3.45	0.000	0.000	0.000	0.000	0.000	0.00
D	20,481.72	0.4702	2.36	5.02	2.360	0.092	0.112	0.145	0.183	84.00
TOTAL	24,383.00	0.5598		4.63	2.593	0.099 4,327	0.119 5,181	0.152 6,631	0.189 8,253	100.00 CU FT

34,300.00

12/16/99 01:57 PM FULLY DEVELOPED BASIN B9-D.FD SOUTH 1/2 CORONA

TRTMT CLASS	AREA SF	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	0.00	0.0000	0.66	1.87	0.000	0.000	0.000	0.000	0.000	0.00
B	5,831.00	0.1339	0.92	2.60	0.348	0.010	0.010	0.010	0.010	17.00
C	0.00	0.0000	1.29	3.45	0.000	0.000	0.000	0.000	0.000	0.00
D	28,469.00	0.6536	2.36	5.02	3.281	0.129	0.156	0.202	0.254	83.00
TOTAL	34,300.00	0.7874		4.61	3.629	0.139	0.166	0.212	0.264	100.00
						6,046	7,232	9,249	11,503	CU FT

SUMMARY FULL DEVELOPMENT OFF SITES

	AREA ACRES	QP100YR 6-HR CFS	QP100YR 6-HR CFS	QP 10-YR 24 HR-CF	VOL100 Y CF	VOL4D CF	VOL100 YR 10DAY-CF
TOTAL WILSHIRE INLETS NORTH	6.66	22.16	14.78	32,430	35,347	40,306	
TOTAL WILSHIRE INLETS SOUTH	0.98	4.33	2.89	7,104	8,411	10,633	
TOTAL INLETS CORONA SOUTH	0.79	3.63	2.42	6,046	7,232	9,249	
TOTAL INLETS CORONA NORTH	0.77	3.54	2.36	5,913	7,078	9,060	
TOTAL INLETS LOUISIANA EAST	1.01	4.69	3.12	7,887	9,487	12,208	
TOTAL INLETS LOUISIANA WEST	0.56	2.59	1.73	4,327	5,181	6,631	
TOT. INLETS FREE DISCH.CORONA SD	10.76	40.95	27.30	63,707	72,737	88,087	
WEST LA., N. OF WIL.,OUTFALL WIL	0.28	1.27	0.85	2,528	3,230	4,016	
TOTAL OFF SITES	10.76						
TOT. ONSITES TO RETENTION POND	9.75						
TOTAL	20.78						

ONSITE FULLY DEVELOPED

11,957.00										
12/16/99 01:57 PM BASIN ONSITE OS-1										
TRTMT	AREA	AREA	PX100-6	QP100-6	QP100-6	VOL6HR	VOL1D	VOL4D	VOL10D	TRTMT
CLASS	SF	ACRES	IN/AC	CFS/AC	CFS	AC-FT	AC-FT	AC-FT	AC-FT	PERCENT
A	0.00	0.0000	0.66	1.87	0.000	0.000	0.000	0.000	0.000	0.00
B	4,065.38	0.0933	0.92	2.60	0.243	0.007	0.007	0.007	0.007	34.00
C	1,913.12	0.0439	1.29	3.45	0.152	0.005	0.005	0.005	0.005	16.00
D	5,978.50	0.1372	2.36	5.02	0.689	0.027	0.033	0.042	0.053	50.00
TOTAL	11,957.00	0.2745		3.95	1.083	0.039	0.045	0.054	0.065	100.00
						1693	1942	2366	2839	CU FT

84,964.00										
12/16/99 01:57 PM BASIN ONSITE OS-2										
TRTMT	AREA	AREA	PX100-6	QP100-6	QP100-6	VOL6HR	VOL1D	VOL4D	VOL10D	TRTMT
CLASS	SQUARE FE	ACRES	IN/AC	CFS/AC	CFS	AC-FT	AC-FT	AC-FT	AC-FT	PERCENT
A	0.00	0.0000	0.66	1.87	0.000	0.000	0.000	0.000	0.000	0.00
B	28,887.76	0.6632	0.92	2.60	1.724	0.051	0.051	0.051	0.051	34.00
C	13,594.24	0.3121	1.29	3.45	1.077	0.034	0.034	0.034	0.034	16.00
D	42,482.00	0.9753	2.36	5.02	4.896	0.192	0.232	0.302	0.379	50.00
TOTAL	84,964.00	1.9505		3.95	7.697	0.276	0.317	0.386	0.463	100.00
						12,031	13,801	16,810	20,173	CU FT

129,173.00										
12/16/99 01:57 PM BASIN ONSITE OS-3										
TRTMT	AREA	AREA	PX100-6	QP100-6	QP100-6	VOL6HR	VOL1D	VOL4D	VOL10D	TRTMT
CLASS	SQUARE FE	ACRES	IN/AC	CFS/AC	CFS	AC-FT	AC-FT	AC-FT	AC-FT	PERCENT
A	0.00	0.0000	0.66	1.87	0.000	0.000	0.000	0.000	0.000	0.00
B	43,918.82	1.0082	0.92	2.60	2.621	0.077	0.077	0.077	0.077	34.00
C	20,667.68	0.4745	1.29	3.45	1.637	0.051	0.051	0.051	0.051	16.00
D	64,586.50	1.4827	2.36	5.02	7.443	0.292	0.353	0.458	0.576	50.00
TOTAL	129,173.00	2.9654		3.95	11.701	0.420	0.482	0.587	0.704	100.00
						18,291	20,982	25,557	30,670	CU FT

7.00 117,203.00

12/16/99 01:57 PM BASIN ONSITE OS-4

TRTMT	AREA	AREA	PX100-6	QP100-6	QP100-6	VOL6HR	VOL1D	VOL4D	VOL10D	TRTMT
CLASS	SQUARE FE	ACRES	IN/AC	CFS/AC	CFS	AC-FT	AC-FT	AC-FT	AC-FT	PERCENT
A	0.00	0.0000	0.66	1.87	0.000	0.000	0.000	0.000	0.000	0.00
B	39,849.02	0.9148	0.92	2.60	2.378	0.070	0.070	0.070	0.070	34.00
C	18,752.48	0.4305	1.29	3.45	1.485	0.046	0.046	0.046	0.046	16.00
D	58,601.50	1.3453	2.36	5.02	6.753	0.265	0.321	0.416	0.522	50.00
TOTAL	117,203.00	2.6906		3.95	10.617	0.381	0.437	0.532	0.639	100.00
						16,596	19,038	23,189	27,828	CU FT

52,054.00

12/16/99 01:57 PM BASIN ONSITE OS-5

TRTMT	AREA	AREA	PX100-6	QP100-6	QP100-6	VOL6HR	VOL1D	VOL4D	VOL10D	TRTMT
CLASS	SQUARE FE	ACRES	IN/AC	CFS/AC	CFS	AC-FT	AC-FT	AC-FT	AC-FT	PERCENT
A	0.00	0.0000	0.66	1.87	0.000	0.000	0.000	0.000	0.000	0.00
B	17,698.36	0.4063	0.92	2.60	1.056	0.031	0.031	0.031	0.031	34.00
C	8,328.64	0.1912	1.29	3.45	0.660	0.021	0.021	0.021	0.021	16.00
D	26,027.00	0.5975	2.36	5.02	2.999	0.118	0.142	0.185	0.232	50.00
TOTAL	52,054.00	1.1950		3.95	4.715	0.169	0.194	0.236	0.284	100.00
						7,371	8,455	10,299	12,359	CU FT

29,307.00

12/16/99 01:57 PM BASIN ONSITE OS-6

TRTMT	AREA	AREA	PX100-6	QP100-6	QP100-6	VOL6HR	VOL1D	VOL4D	VOL10D	TRTMT
CLASS	SQUARE FE	ACRES	IN/AC	CFS/AC	CFS	AC-FT	AC-FT	AC-FT	AC-FT	PERCENT
A	0.00	0.0000	0.66	1.87	0.000	0.000	0.000	0.000	0.000	0.00
B	9,964.38	0.2288	0.92	2.60	0.595	0.018	0.018	0.018	0.018	34.00
C	4,689.12	0.1076	1.29	3.45	0.371	0.012	0.012	0.012	0.012	16.00
D	14,653.50	0.3364	2.36	5.02	1.689	0.066	0.080	0.104	0.131	50.00
TOTAL	29,307.00	0.6728		3.95	2.655	0.095	0.109	0.133	0.160	100.00
						4150	4760	5798	6958	CU FT

11,831.00

12/20/99

11:24 AM BASIN ONSITE OS-7

TRTMT CLASS	AREA SF	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	0.00	0.0000	0.66	1.87	0.000	0.000	0.000	0.000	0.000	0.00
B	4,022.54	0.0923	0.92	2.60	0.240	0.007	0.007	0.007	0.007	34.00
C	1,892.96	0.0435	1.29	3.45	0.150	0.005	0.005	0.005	0.005	16.00
D	5,915.50	0.1358	2.36	5.02	0.682	0.027	0.032	0.042	0.053	50.00
TOTAL	11,831.00	0.2716		3.95	1.072	0.038	0.044	0.054	0.064	100.00
						1,675	1,922	2,341	2,809	CU FT

ONSITE SUMMARY

TOTAL ONSITE=	436,489.00	10.02 AC.	3.95	39.54	61,807	70,900	86,359	103,637
ADD ENTRANCE RETURNS		0.0267 AC. W/COR.						
ADD LANDSCAPE BUFFER		0.0564 AC. W/LA.						
CHECK TOTAL		<u>10.1035 AC. CHECK OK</u>						

ON & OFF FULLY DEVELOPI	<u>20.51</u>	79.41
	<u>20.0726</u>	

CRITERIA WITH CONTROLLED OUTFALL AVAILABLE:

ASSUME CORONA STORM DRAIN SYSTEM IN SERVICE EXISTING CAPACITY@50% OF 100 YR
MAX. DISCHARGE FROM ONSITE AND 1/2 OF ADJACENT
ROW IS 1.98 CFS PER AC.. DEVELOPMENT IS RESPONSIBLE
FOR CONTROLLING PEAK FLOW PER AC.OF DEVELOPMENT INCLUDING
ADJACENT ROW FROM EXCEEDING THIS VALUE.

PROJECT AREA OF RETENTION:

ONSITE	10.02 ACRES
1/2 LOUISIANA ROW (B5-A.FD)	0.69 ACRES
1/2 WILSHIRE (B4-A.FD)	0.62 ACRES
1/2 CORONA ROW (B6-A.FD)	0.68 ACRES
TOTAL AREA OF RETENTION	12.01 ACRES

ALLOWABLE PROJECT OUTFALL RATE=1.98X12.01 = 23.77 CFS

REDUCE FOR DIRECT DISCHARGE BASINS:

LA-(B5-A.FD)	Q100, 6 HR =	-2.59 CFS
WILSHIRE-(B4-A.FD)	Q100 , 6HR	-3.25 CFS
CORONA-(B6-A.FD)	Q100 , 6HR	-3.54 CFS
OS-1	Q100 , 6HR.=	-1.08 CFS
TOTAL FREE DISCHARGE=		-10.47 CFS

REMAINING=23.77 CFS -10.44 CFS= 13.30 CFS

THEREFORE ROUTE ONSITE FLOW THROUGH DETENTION POND WITH CONTROLLED OUTLET OF 13.30 CFS WHICH WOULD REDUCE
THE PEAK DISCHARGE TO CORONA SD AT LOUISIANA TO 53.17 CFS FROM 79.41 CFS

PEAK FLOW @ EAST END OF CORONA SD W/ FULL DEVELOPMENT AND DETENTION OF ONSITE FLOW ONLY

THIS VALUE ASSUMES FULL WIDTH STREET SECTIONS COMPLETED FOR LA,, WILSHIRE & CORONA . TRACTS NORTH OF WILSHIRE
HAVE BEEN DEVELOPED . STORM DRAIN AND INLETS ARE IN SERVICE AND INTERCEPTING ALL STREET FLOW
WITHIN SERVICE AREA OF CORONA STORM DRAIN SYSTEM AS REQUIRED BY MASTER PLAN.
ALSO THIS VALUE ASSUMES FREE DISCHARGE OF ALL STREET ROW'S AND PROPERTIES WITHIN THE BASIN EAST OF LOUISIANA
ONLY ONSITE FLOWS WITH IN THIS DEVELOPMENT ARE DETAINED.

POND ON LOT 42 1:1 SIDE SLOPES						Q OUT=	Q OUT=	Q OUT=	Q OUT=	Q OUT=	Q OUT=	Q OUT=
						8" ORI	12" ORI	10" ORI	14" ORI	16.0" ORI	18.0" OR	11.0" OR
5295.00	0.00	1,630.00										
5296.00	1.00	1,812.00	1,630.00	1,721.00	1,721.00	0.0395	1.88	4.22	2.93	5.75	7.50	3.55
5297.00	2.00	2,000.00	1,812.00	1,906.00	3,627.00	0.0833	2.65	5.97	4.14	8.13	10.61	5.01
5298.00	3.00	2,196.00	2,000.00	2,098.00	5,725.00	0.1314	3.25	7.31	5.08	9.95	13.00	6.14
5299.00	4.00	2,399.00	2,196.00	2,297.50	8,022.50	0.1842	3.75	8.44	5.86	11.49	15.01	7.09
5300.00	5.00	2,610.00	2,399.00	2,504.50	10,527.00	0.2417	4.19	9.44	6.55	12.85	16.78	7.93
5301.00	6.00	2,829.00	2,610.00	2,719.50	13,246.50	0.3041	4.59	10.34	7.18	14.07	18.38	8.68
5302.00	7.00	3,056.00	2,829.00	2,942.50	16,189.00	0.3716	4.96	11.17	7.75	15.20	19.85	9.38
5303.00	8.00	3,290.00	3,056.00	3,173.00	19,362.00	0.4445	5.31	11.94	8.29	16.25	21.22	10.03
5304.00	9.00	3,532.00	3,290.00	3,411.00	22,773.00	0.5228	5.63	12.66	8.79	17.24	22.51	10.64
5305.00	10.00	3,781.00	3,532.00	3,656.50	26,429.50	0.6067	5.93	13.35	9.27	18.17	23.73	11.21
5306.00	11.00	3,939.00	3,781.00	3,860.00	30,289.50	0.6954	6.22	14.00	9.72	19.05	24.88	11.76
5307.00	12.00	4,100.00	3,939.00	4,019.50	34,309.00	0.7876	6.50	14.62	10.15	19.90	25.99	12.28
5308.00	13.00	4,264.00	4,100.00	4,182.00	38,491.00	0.8836	6.76	15.22	10.57	20.71	27.05	12.78

FROM AIR/M

MAX W.S.	Q _{MAX}	Vol _{MAX}
	9.47 cfs	.6465
	11.23 cfs	.6103
	12.95	.5579

10" - 05'45"
11" - 05'04"
12" - 04'41"

POND ON LOT 42 2:1 side slopes						Q OUT=	Q OUT=	Q OUT=	Q OUT=	Q OUT=
						8" ORI	12" ORI	10" ORI	14" ORI	11.0" ORI
5295.00	0.00	8.80								
5296.00	1.00	163.00	8.80	85.90	85.90	0.0020	1.88	4.22	2.93	3.55
5297.00	2.00	354.00	163.00	258.50	344.40	0.0079	2.65	5.97	4.14	5.01
5298.00	3.00	582.00	354.00	468.00	812.40	0.0187	3.25	7.31	5.08	6.14
5299.00	4.00	846.00	582.00	714.00	1,526.40	0.0350	3.75	8.44	5.86	7.09
5300.00	5.00	1,136.00	846.00	991.00	2,517.40	0.0578	4.19	9.44	6.55	7.93
5301.00	6.00	1,458.00	1,136.00	1,297.00	3,814.40	0.0876	4.59	10.34	7.18	8.68
5302.00	7.00	1,812.00	1,458.00	1,635.00	5,449.40	0.1251	4.96	11.17	7.75	9.38
5303.00	8.00	2,195.00	1,812.00	2,003.50	7,452.90	0.1711	5.31	11.94	8.29	10.03
5304.00	9.00	2,610.00	2,195.00	2,402.50	9,855.40	0.2262	5.63	12.66	8.79	10.64
5305.00	10.00	3,055.00	2,610.00	2,832.50	12,687.90	0.2913	5.93	13.35	9.27	11.21
5306.00	11.00	3,531.00	3,055.00	3,293.00	15,980.90	0.3669	6.22	14.00	9.72	11.76
5307.00	12.00	3,939.00	3,531.00	3,735.00	19,715.90	0.4526	6.50	14.62	10.15	12.28
5308.00	13.00	4,264.00	3,939.00	4,101.50	23,817.40	0.5468	6.76	15.22	10.57	12.78

MAX W.S.

11" - 07'15" - 12.65 cfs
12" - 09'67" - 11.27 cfs
10" - 09'67" - 11.27 cfs
5231 Ac-ft

POND ON LOT 42 1.75:1 side slopes						Q OUT=	Q OUT=	Q OUT=	Q OUT=	Q OUT=
						8" ORI	12" ORI	10" ORI	14" ORI	11.0" ORI
5295.00	0.00	407.00								
5296.00	1.00	610.00	407.00	508.50	508.50	0.0117	1.88	4.22	2.93	3.55
5297.00	2.00	840.00	610.00	725.00	1,233.50	0.0283	2.65	5.97	4.14	5.01
5298.00	3.00	1,094.00	840.00	967.00	2,200.50	0.0505	3.25	7.31	5.08	6.14
5299.00	4.00	1,371.00	1,094.00	1,232.50	3,433.00	0.0788	3.75	8.44	5.86	7.09
5300.00	5.00	1,672.00	1,371.00	1,521.50	4,954.50	0.1137	4.19	9.44	6.55	7.93
5301.00	6.00	1,996.00	1,672.00	1,834.00	6,788.50	0.1558	4.59	10.34	7.18	8.68
5302.00	7.00	2,343.00	1,996.00	2,169.50	8,958.00	0.2056	4.96	11.17	7.75	9.38
5303.00	8.00	2,714.00	2,343.00	2,528.50	11,486.50	0.2637	5.31	11.94	8.29	10.03
5304.00	9.00	3,108.00	2,714.00	2,911.00	14,397.50	0.3305	5.63	12.66	8.79	10.64
5305.00	10.00	3,526.00	3,108.00	3,317.00	17,714.50	0.4067	5.93	13.35	9.27	11.21
5306.00	11.00	3,762.00	3,526.00	3,644.00	21,358.50	0.4903	6.22	14.00	9.72	11.76
5307.00	12.00	4,009.00	3,762.00	3,885.50	25,244.00	0.5795	6.50	14.62	10.15	12.28
5308.00	13.00	4,265.00	4,009.00	4,137.00	29,381.00	0.6745	6.76	15.22	10.57	12.78

MAX Water Surface Q_{MAX OUT} Vol_{MAX}

12 06.09
11" - 06.7
10" - 07.39
14.05 cfs -
12.14 cfs - .4981 Ac-ft
10.31 cfs - .6167 Ac-ft

1900

Scanned to DMD
mapped
600481
C19/2021

AGREEMENT AND COVENANT

3/23/01

This Agreement and Covenant, between the City of Albuquerque, New Mexico ("City") and D.R. Horton, Inc., ("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 East of Louisiana, North of Corona, in Albuquerque, New Mexico, and more particularly described as: (give legal description and filing information)

Tract I, Eagle Pointe Subdivision, Filed October 20, 2000, Book 2000C, Page 278.

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:

Temporary Public Drainage Easement, filed in Bernalillo County Clerk's office, October 20, 2000, Book 2000C, Page 278.

The User wishes to construct upon, improve or repair and to maintain the following "Improvement" on the City's Property (or already has done so):
Temporary Retention Pond

A sketch of the proposed or existing Improvement is attached as Exhibit A and made a part of this Agreement.
Exhibit B is the approved Final Plat (Exhibit A is the Grading Plan).

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 12-16-99 on file at the City Engineer's office. 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.

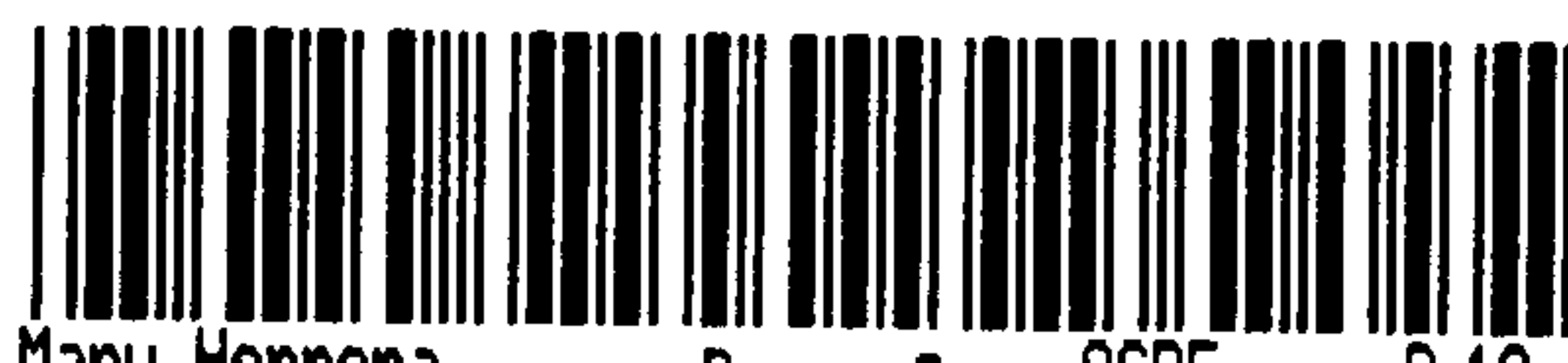
4. Use of the Improvement. If the City's Property is a public right-of-way, it shall be open to the use of the general public at all times, subject to reasonable curtailment during periods of construction, maintenance or repair.

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 canceled, 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.

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

D.R. Horton, Inc.
4400 Alameda NE, Suite B
Albuquerque, NM 87113

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 expense, 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 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 release 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.

16. Construction and Severability. If any part of this Agreement is held to be invalid or unenforceable, 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: *Fred J. Aguirre*
Chief Administrative Officer

Dated: 3-23-01

USER:

By: *J. Mark Ferguson*
Title: City Manager

Dated: 3-15-01

APPROVED:

Fred J. Aguirre 3/23/01
Director, Public Works Dept.

Reviewed by:

Fred J. Aguirre 3/23/01
City Engineer

CITY'S ACKNOWLEDGMENT

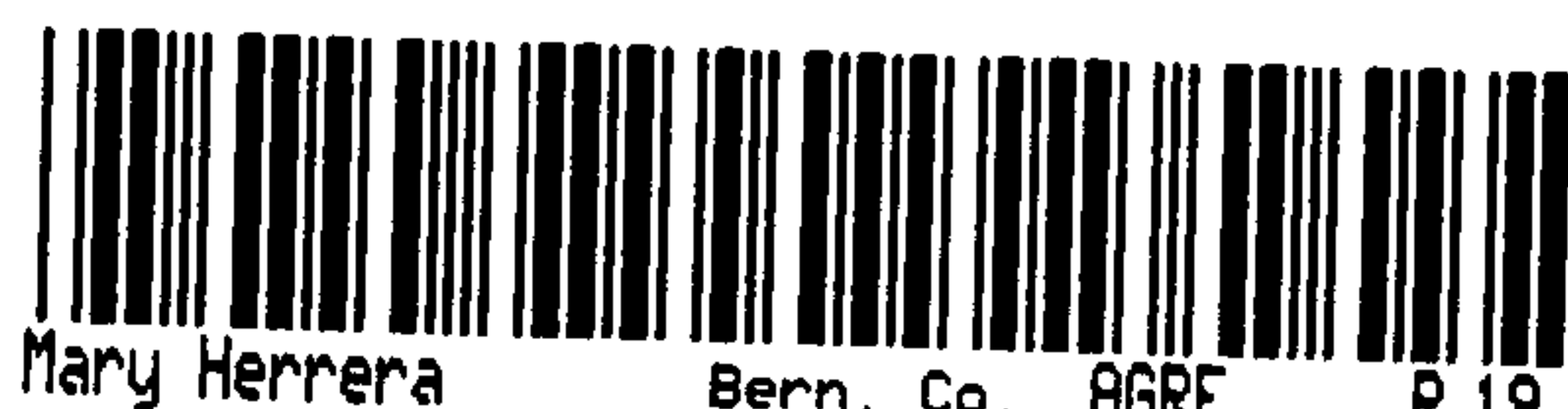
STATE OF NEW MEXICO)
) SS
COUNTY OF BERNALILLO)

This instrument was acknowledged before me on March 23, 2000, by Fred J. Aguirre Chief Administrative Officer for the City of Albuquerque, a New Mexico municipal corporation, on behalf of the corporation.

My Commission Expires:

11-15-2003

Dlora O. Saavedra
Notary Public



Mary Herrera

Bern. Co. AGRE

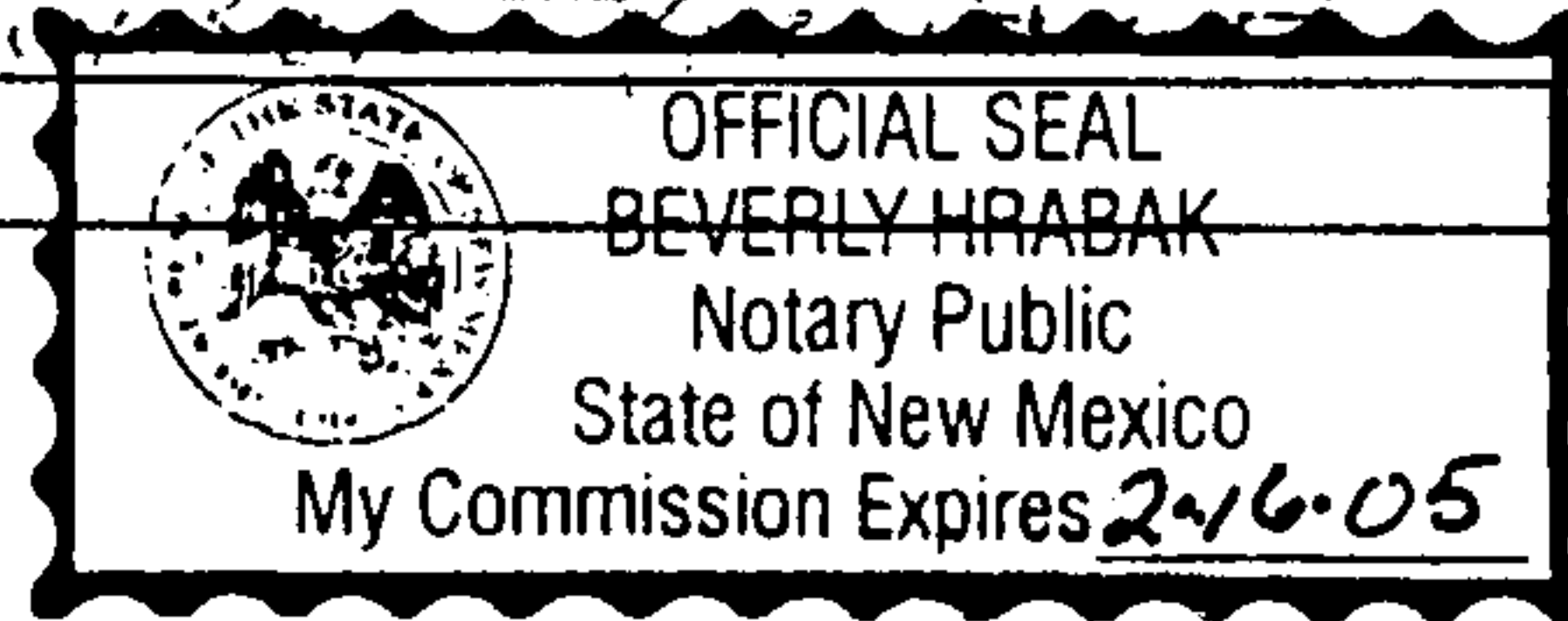
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Page: 4 of 7
03/26/2001 11:11A
BK-A17 Pg-1333

USER'S ACKNOWLEDGMENT

STATE OF New Mexico)
) SS
COUNTY OF Bernalillo)

This instrument was acknowledged before me on March 15,
2000, by S. Mark Tergesen, D. R. Horton, Inc.
on behalf of D. R. Horton, Inc.



My Commission Expires:

February 16, 2005

Notary Public
Beverly Hrabak



Mary Herrera

Bern. Co. AGRE

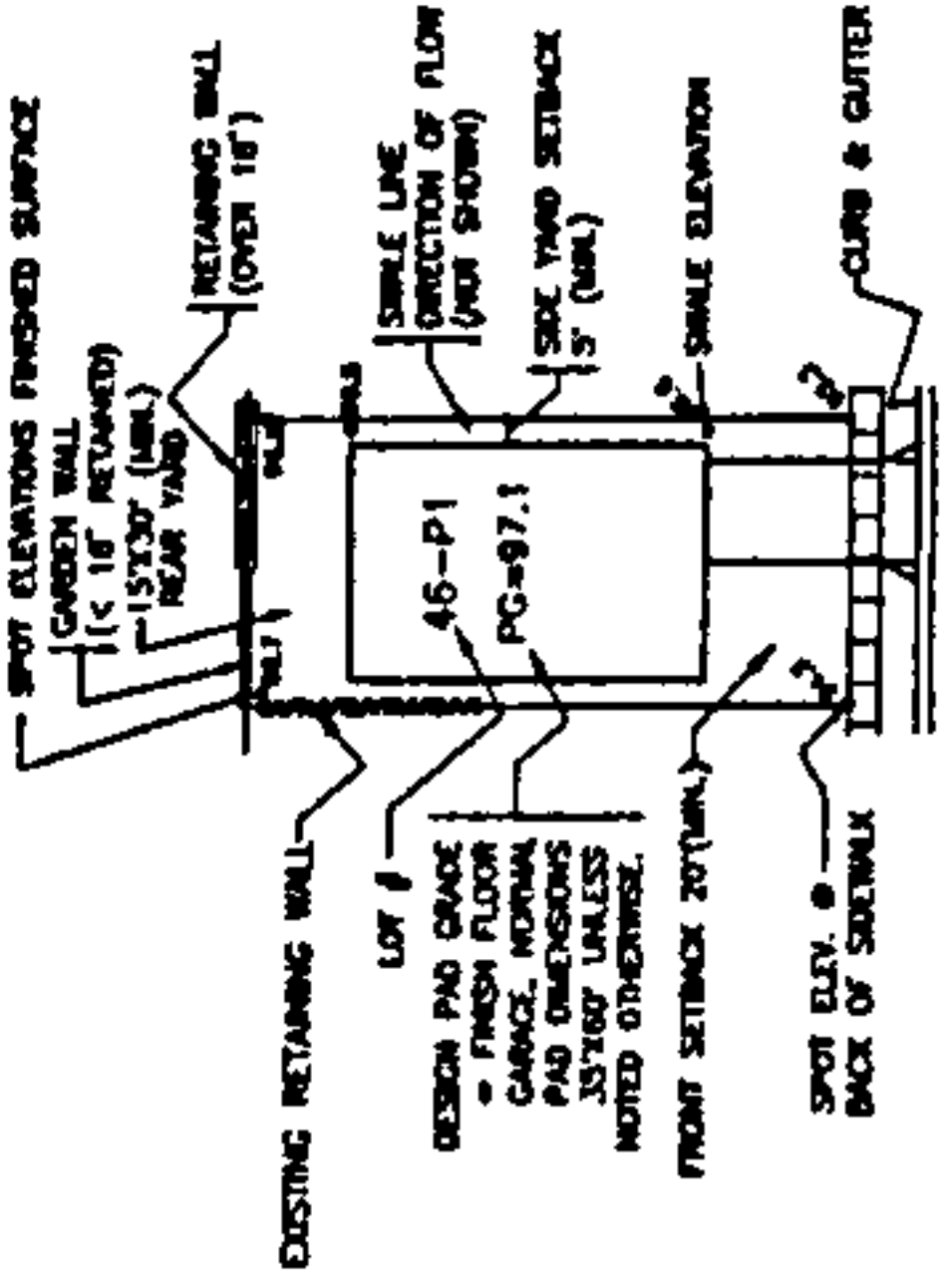
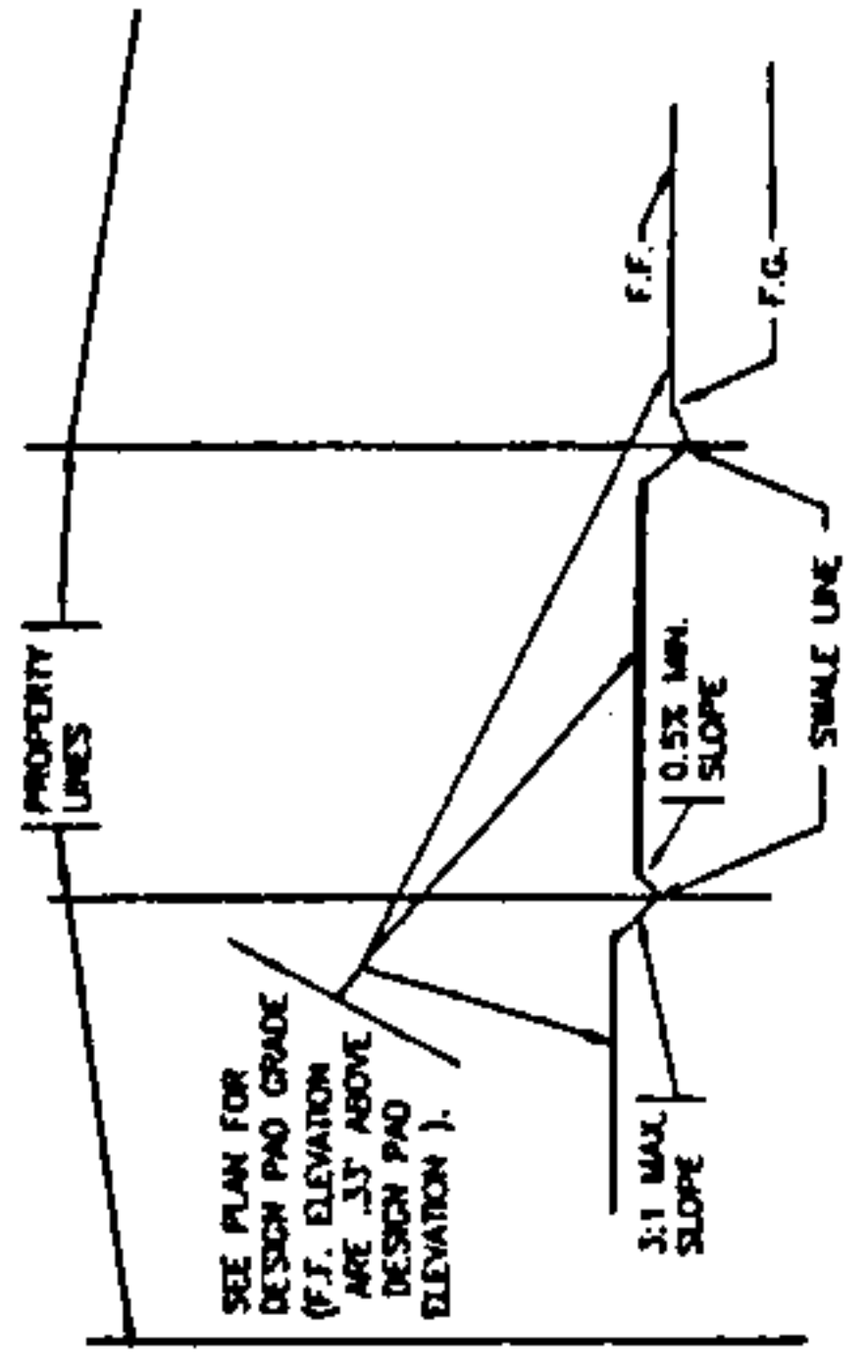
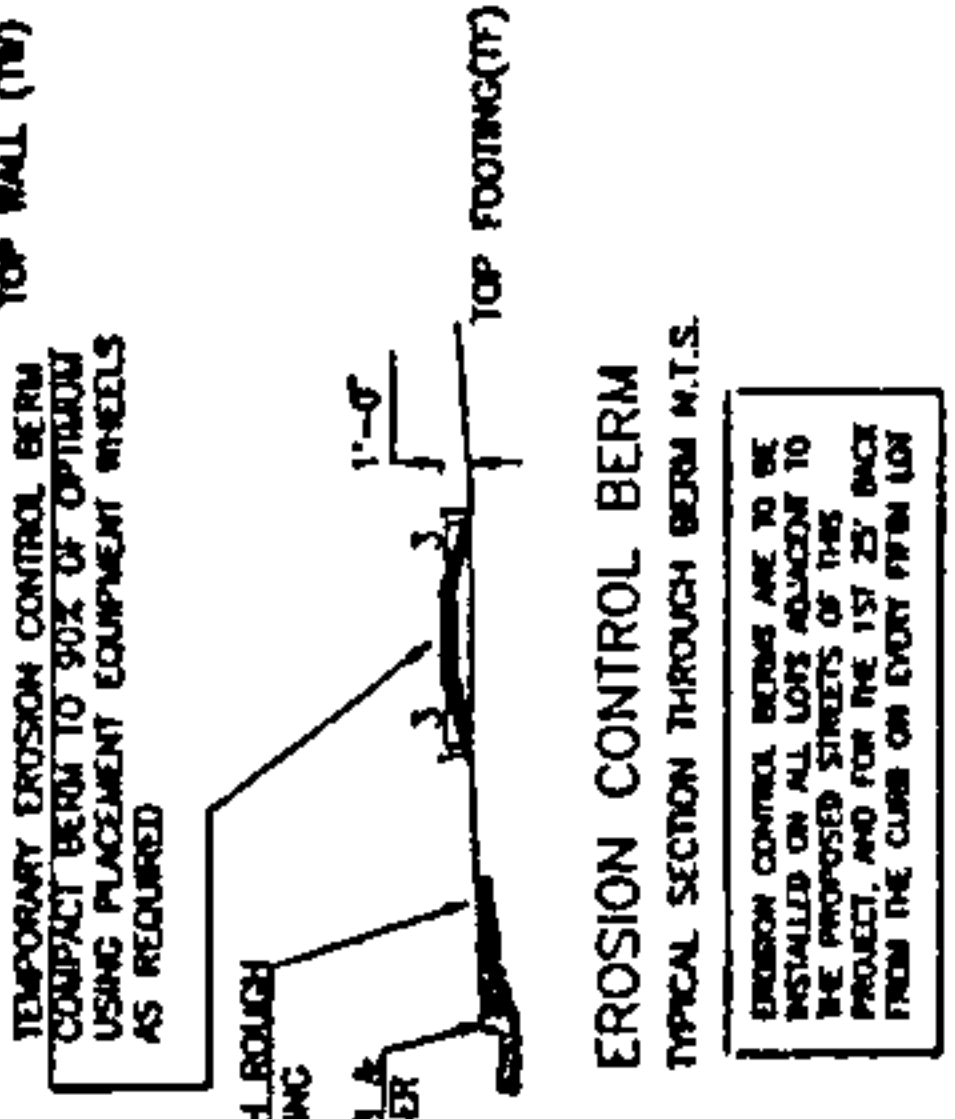
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Page: 5 of 7
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Page: 6 of 7
03/26/2001 11:11A
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Baron Co. AGRE

Many Herpers

[illegible]

RYALS consulting & engineering, Inc. 4829 Menlo Ave. Albuquerque, N.M. 87108 (505) 255-4701	750-5194 mobile telephone CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT EAGLE POINT SUBDIVISION GRADING PLAN	City Engineer Approval Design Review Committee Last Design Update	Zone Map No. L-9
	TITLE:		City Project No. 6004.81

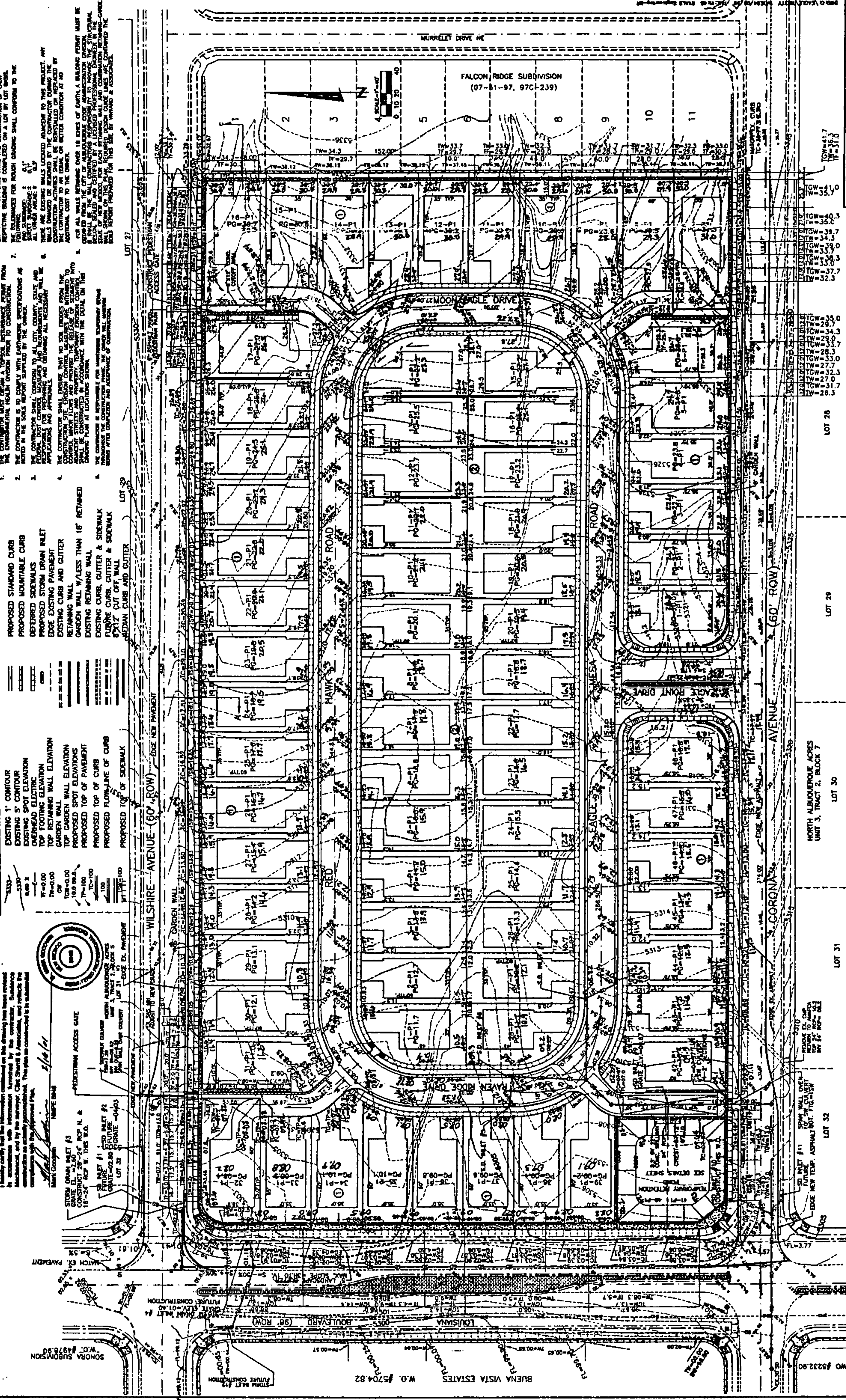


EXHIBIT "B"

PLAT OF EAGLE POINT SUBDIVISION

CITY OF ALBUQUERQUE, BERNALILLO COUNTY
STATE OF NEW MEXICO
AUGUST, 2000

NORTH ALBUQUERQUE ACRES
TRACT 2, UNIT 3
BLOCK 5

FILED: 9-10-31, BK. D1, FOLIO 20

- 22' WIDE PRIVATE ACCESS AND PUBLIC WATER, SANITARY SEWER AND DRAINAGE EASEMENT GRANTED BY THIS PLAT TO THE CITY OF ALBUQUERQUE
- FOR THE BENEFIT OF THE EAGLE POINT HOME OWNERS TO BE MAINTAINED BY THE EAGLE POINT HOME OWNERS ASSOCIATION.
- 22' PUBLIC WATER, SANITARY SEWER AND DRAINAGE EASEMENT GRANTED BY THIS PLAT TO THE CITY OF ALBUQUERQUE

2000104211
Page: 2 of 2
10/28/2000 02:45P
Bernalillo Co Clerk Bernal Co. PLR R 12.00 BK-2000C Pg-276

A.C.S. MONUMENT "10-C18"
Y=1524061.42
X=402318.43
G=0.00000013
ΔG=-0.11118"
CENTRAL ZONE
NAD 1927/SLD 1928
ELEVATION = 5219.41

A.C.S. MONUMENT "9-C18"
Y=1521435.06
X=402298.01
G=0.00000008
ΔG=-0.11118"
CENTRAL ZONE
NAD 1927/SLD 1928
ELEVATION = 5229.79

SCALE: 1" = 80'



STATION	CHORD BEARING	CHORD LENGTH	TAN LENGTH
1+00	N 0° 00' 00" E	0.000	0.000
1+01	N 0° 00' 00" E	0.000	0.000
1+02	N 0° 00' 00" E	0.000	0.000
1+03	N 0° 00' 00" E	0.000	0.000
1+04	N 0° 00' 00" E	0.000	0.000
1+05	N 0° 00' 00" E	0.000	0.000
1+06	N 0° 00' 00" E	0.000	0.000
1+07	N 0° 00' 00" E	0.000	0.000
1+08	N 0° 00' 00" E	0.000	0.000
1+09	N 0° 00' 00" E	0.000	0.000
1+10	N 0° 00' 00" E	0.000	0.000

STATION	CHORD BEARING	CHORD LENGTH	TAN LENGTH
1+11	N 0° 00' 00" E	0.000	0.000
1+12	N 0° 00' 00" E	0.000	0.000
1+13	N 0° 00' 00" E	0.000	0.000
1+14	N 0° 00' 00" E	0.000	0.000
1+15	N 0° 00' 00" E	0.000	0.000
1+16	N 0° 00' 00" E	0.000	0.000
1+17	N 0° 00' 00" E	0.000	0.000
1+18	N 0° 00' 00" E	0.000	0.000
1+19	N 0° 00' 00" E	0.000	0.000
1+20	N 0° 00' 00" E	0.000	0.000

CURVE	ARC	DELTA	CHORD BEARING	CHORD LENGTH	TAN LENGTH
1+00	29.87	89° 59' 57"	N 0° 00' 00" E	0.000	0.000
1+01	14.73	44° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+02	37.24	01° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+03	3.79	0° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+04	4.87	0° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+05	23.26	0° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+06	30.00	0° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+07	33.59	0° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+08	42.38	0° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+09	3.00	0° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+10	4.73	0° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+11	1.99	0° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+12	1.31	0° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+13	3.79	0° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+14	3.79	0° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+15	3.79	0° 59' 58"	N 0° 00' 00" E	0.000	0.000

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Page: 7 of 7
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CURVE	ARC	DELTA	CHORD BEARING	CHORD LENGTH	TAN LENGTH
1+16	26.76	17° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+17	35.29	00° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+18	14.73	15° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+19	14.73	15° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+20	14.73	15° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+21	14.73	15° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+22	14.73	15° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+23	14.73	15° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+24	14.73	15° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+25	14.73	15° 59' 58"	N 0° 00' 00" E	0.000	0.000

CURVE	ARC	DELTA	CHORD BEARING	CHORD LENGTH	TAN LENGTH
1+26	26.76	17° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+27	35.29	00° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+28	14.73	15° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+29	14.73	15° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+30	14.73	15° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+31	14.73	15° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+32	14.73	15° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+33	14.73	15° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+34	14.73	15° 59' 58"	N 0° 00' 00" E	0.000	0.000
1+35	14.73	15° 59' 58"	N 0° 00' 00" E	0.000	0.000

- LEGEND**
- Δ = SET CENTERLINE MONUMENT
4" ALUMINUM CAP STAMPED "CITY OF ALBUQUERQUE
CENTERLINE MONUMENTATION, SURVEY MARKER, DO
NOT DISTURB", PLS#13473
- = SET SURVEY MONUMENT - 1/2" REBAR W/
PLASTIC SURVEY CAP - LPS#13473
- ① = FOUND SURVEY MONUMENT - DESCRIPTION AS NOTED.

CLINT SHERRILL & ASSOC.
730 SAN MATEO S. E.
ALBUQUERQUE, NEW MEXICO 87108
(505) 258-7364 (505) 288-7600 FAX

EAGLE POINT SUBDIVISION			
BERNALILLO COUNTY NM	PROJECT NO.	00012	
DATE: AUGUST, 2000	DRAWN BY	J.R.S.	
REVISION	CHECKED BY	C.S.	
DATES:	SHEET 2 OF 2		

CONTRACT CONTROL FORM

PRELIMINARY REVIEW

Contact Person TERRI
Phone No. 924-3997

Project # 600481
CCN#
New or Ext. # 200100335

Type of Agreement: AGREEMENT + COVENANT

Description/Project Name: EAGLE POINT SUBD
Public Works Dept./Div.: PROJECT REVIEW SECTION
Developer: D.R. HUNTER, INC.
Contract Amount \$ 0 SIA Contract Period: 3/23/01 - Perma.
Contract Amount \$ SIA Contract Period:
Contract Amount \$ S/W Contract Period:

DRAFT CONTRACT:

Rec'd by Legal: Rejected/Returned to Dept.:
Returned to Legal: Approved: Initials:

FINANCIAL GUARANTY:

Letter of Credit No.: Date: Attached: Yes No Initial
Other: Type Date: Attached: Yes No Initial

FINAL CONTRACT REVIEW

APPROVALS REQUIRED:

	<u>Date Delivered</u>	<u>Returned to Dept.</u>	<u>Approved By</u>	<u>Approval Date</u>
Utility Div	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Hydrology Div	<u>8-21-00</u>	<u> </u>	<u>BLB</u>	<u>8/27/00</u>
Transportation Div	<u> </u>	<u> </u>	<u> </u>	<u> </u>
DRC Chairman	<u>3-21-01</u>	<u>3-21-01</u>	<u>CR</u>	<u>3-21-01</u>
Legal Dept	<u>3/21/01</u>	<u>3-22-01</u>	<u>CF</u>	<u>3-21-01</u>
City Engineer	<u>3/22/01</u>	<u>3/23/01</u>	<u>FA</u>	<u>3/23/01</u>
PWD Director	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Finance	<u> </u>	<u> </u>	<u> </u>	<u> </u>
City Clerk	<u> </u>	<u> </u>	<u> </u>	<u> </u>
CAO	<u> </u>	<u> </u>	<u> </u>	<u> </u>

DISTRIBUTION:

	<u>Date:</u>	<u>By:</u>
User Department.	<u>3/27/01</u>	<u>KJ</u>
Vendor	<u> </u>	<u> </u>
City Clerk	<u>4-6-01</u>	<u>MF</u>
Treasury	<u> </u>	<u> </u>
Other: <u> </u>	<u> </u>	<u> </u>

ADDENDUM TO COVER PAGE

8-21-00 03/21/01
(Date)

TO: Kevin Curran, Assistant City Attorney, Legal Department

FROM: Project Administrator, Project Review Sec., PWD

SUBJECT: PROJECT TITLE: LAGUE POINT SUBD PROJECT # 600481

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

03/21/01

<u>ITEM</u>	<u>ACTION</u>		<u>Comments</u>
	<u>Review & Approval</u>	<u>Reference</u>	
Procedure "A".....	☐ ☐ ☐	☐ ☐	_____
Procedure "B".....	☐ ☐ ☐	☐ ☐	_____
Procedure "B" Modified Non Work Order.....	☐ ☐ ☐	☐ ☐	_____
Procedure "C".....	☐ ☐ ☐	☐ ☐	_____
Procedure "C" Modified.....	☐ ☐ ☐	☐ ☐	_____
Special Agreement.....	☐ ☐ ☐	☐ ☐	_____
Sidewalk Deferral Agreement.....	☐ ☐ ☐	☐ ☐	_____
Amendment.....	☐ ☐ ☐	☐ ☐	_____
Assignment.....	☐ ☐ ☐	☐ ☐	_____
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.....	☐ ☐ ☐	☐ ☐	_____
Monitoring Well Permit.....	☐ ☐ ☐	☐ ☐	_____
Agreement & Covenant.....	☒ ☐ ☐	☐ ☐	_____
Drainage Covenant.....	☐ ☐ ☐	☐ ☐	_____
Revocable Permit.....	☐ ☐ ☐	☐ ☐	_____
Encroachment.....	☐ ☐ ☐	☐ ☐	_____
Permanent Easement.....	☐ ☐ ☐	☐ ☐	_____
Temporary Easement.....	☐ ☐ ☐	☐ ☐	_____

Other: _____

Please Call Kathy 3996 at 924-3597 if you have any questions regarding the above or when the documents are ready to be picked up.

No. of Attachments (1)