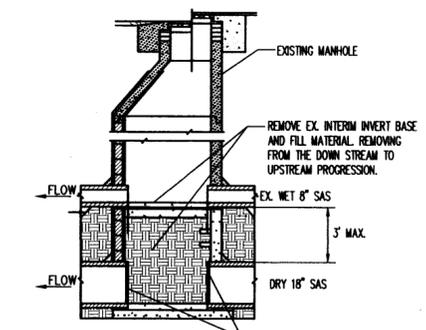
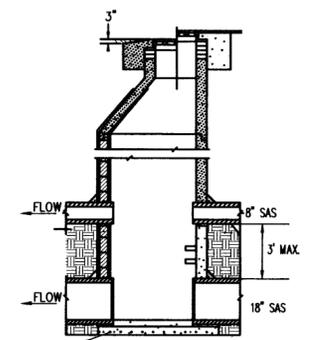


- ### UTILITY NOTES
- THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE INSTALLATION OF ALL WORK RELATED TO MECHANICAL UTILITIES AS SHOWN ON THIS PLAN INCLUDING: TRENCHING, BACKFILL, SUPPORTS, CLEANOUT PADS, SERVICE STOPS AND BOXES, SERVICE LINES, TESTING, CLEANING, AND STABILIZING. ANY WORK NOT ACCEPTED BY THE ARCHITECT OR ENGINEER DUE TO IMPROPER WORKMANSHIP OR LACK OF PROPER COORDINATION SHALL BE REMOVED AND CORRECTLY INSTALLED AT THE CONTRACTOR'S EXPENSE, AS DIRECTED.
  - MINIMUM DEPTHS OF COVER SHALL BE: 36" FOR WATERLINES AND 48" FOR SEWER, EXCEPT AT BUILDING CONNECTION.
  - ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE IAPMO UNIFORM PLUMBING CODE, LATEST EDITION.
  - UTILITY LINES SHALL BE INSTALLED PRIOR TO PAVEMENT, CURB AND GUTTER, AND/OR SIDEWALK, AS APPLICABLE.
  - ROUGH GRADING OF SITE (+0.5) SHALL BE COMPLETED PRIOR TO INSTALLATION OF UTILITY LINES.
  - CONTRACTOR WILL BE RESPONSIBLE FOR CONNECTIONS TO BUILDING DRAIN LINES AND ALL NECESSARY FITTINGS.
  - ALL VALVES SHALL BE ANCHORED PER COA STANDARD DWG. 2333.
  - FIRE LINES SHALL USE PIPE MATERIALS UNDERWRITERS LABORATORIES LISTED AND APPROVED FOR FIRE SERVICE.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WATER METER, FIRE LINE, AND SEWER HOOKUP FEES FOR INSTALLATIONS. OWNER SHALL BE RESPONSIBLE FOR UTILITY EXPANSION CHARGES, PRORATA AND OTHER SPECIAL ASSESSMENTS.
  - CONTRACTOR SHALL VERIFY INVERTS AND LOCATIONS OF EXISTING WATER/SAS LINES PRIOR TO BEGINNING WORK. ALL CONFLICTS SHALL BE BROUGHT TO ATTENTION OF THE ENGINEER AND RESOLVED PRIOR TO BEGINNING WORK.
  - PROVIDE BOLLARDS TO PROTECT METER, AS PER PHM & UPC REQUIREMENTS.



EX. PIGGY BACK MANHOLE MODIFICATION DETAIL ALONG MASTHEAD FROM STA. 18+29 - STA. 33+71 PHASE 1

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE	NO.	BY	NO.	BY		No. _____ Date _____ By _____ Add new service utilities
REVISIONS	DATE	NO.	BY	NO.	BY		
DESIGNED BY	DATE	DESIGNED BY	DATE	DESIGNED BY	DATE	DESIGNED BY	DATE
DRAWN BY	DATE	DRAWN BY	DATE	DRAWN BY	DATE	DRAWN BY	DATE
CHECKED BY	DATE	CHECKED BY	DATE	CHECKED BY	DATE	CHECKED BY	DATE

**WATER SHUT-OFF PLAN:**  
 FOR CONNECTION TO THE EXISTING 10" W.L. STUB AT THE MASTHEAD INTERSECTION SHUT OFF VALVE #A.  
 FOR CONNECTION TO THE EXISTING 12" W.L. AT RUTLEDGE AND WASHINGTON SHUT OFF VALVE #B.  
 FOR CONNECTION TO EXISTING 12" IN SNAPROLL SHUT OFF VALVE #752 AS SHOWN ON THE COA AUTOMATED WATER DISTRIBUTION SYSTEM SECTIONAL MAP NO. D-17.  
 FOR VALVE RELOCATION AT WOLCOTT AND WASHINGTON, SHUT OFF VALVES C, D & E.  
 EXISTING VALVES SHOWN ON THIS PLAN ARE BASED ON AUTOMATED WATER DISTRIBUTION SYSTEM SECTIONAL MAPS, AND ARE NOT EXACT LOCATIONS.

**WATER SHUT-OFF REQUIREMENTS:**  
 CONTRACTOR WILL BE RESPONSIBLE FOR THE TIMING AND COORDINATION OF THE WATER SHUT-OFF REQUIREMENTS.  
 AT LEAST SEVEN (7) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT POW/WATER SYSTEMS DIVISION (857-8200) TO INITIATE IMPLEMENTATION OF THIS WATER SHUT-OFF PLAN. CONTRACTOR SHALL NOT OPERATE CITY VALVES.

**RESTRAINING JOINT TABLE:**

NOTE:  
 1. ALL MECHANICAL JOINTS SHALL BE RESTRAINED AT THE FITTING.  
 2. THE CONTRACTOR SHALL PROVIDE A MINIMUM PIPE LENGTH OF 20 LF IN EACH DIRECTION OF THE MAIN LINE FROM ALL TEES. ALL PIPE JOINTS WITHIN 20 LF ALONG THE MAIN LINE OF TEE SHALL BE RESTRAINED AT THE CONTRACTOR'S EXPENSE.  
 3. THE CONTRACTOR SHALL RESTRAIN ALL PIPE JOINTS IN THE SPECIFIED DISTANCE LISTED IN THE TABLE. (SEE NOTE 2 ABOVE)  
 4. THE CONTRACTOR SHALL RESTRAIN ALL FIRE HYDRANT LINES AND FIRE SERVICE LINES (6" & 8" STUB-OUTS TO LOTS) FROM THE TEE ON THE MAIN TO THE FIRE HYDRANT FLANGE OR CAP.

MECHANICAL JOINTS	LENGTH OF RESTRAINED JOINTS			
	(6")	(8")	(10")	(12")
11.25' H. BEND	2'	3'	3'	3'
22.50' H. BEND	4'	5'	6'	7'
45' H. BEND	8'	11'	13'	16'
90' H. BEND	20'	26'	31'	39'
GATE VALVE	55'	72'	86'	102'
BIFURCY VALVE	---	---	---	---
* REDUCER (6")	---	30'	53'	74'
CAPS	45'	58'	72'	85'

\* REDUCER - ASSUMES SMALLER PIPE IS 6" LARGER PIPE IS AS SHOWN IN THE TABLE.

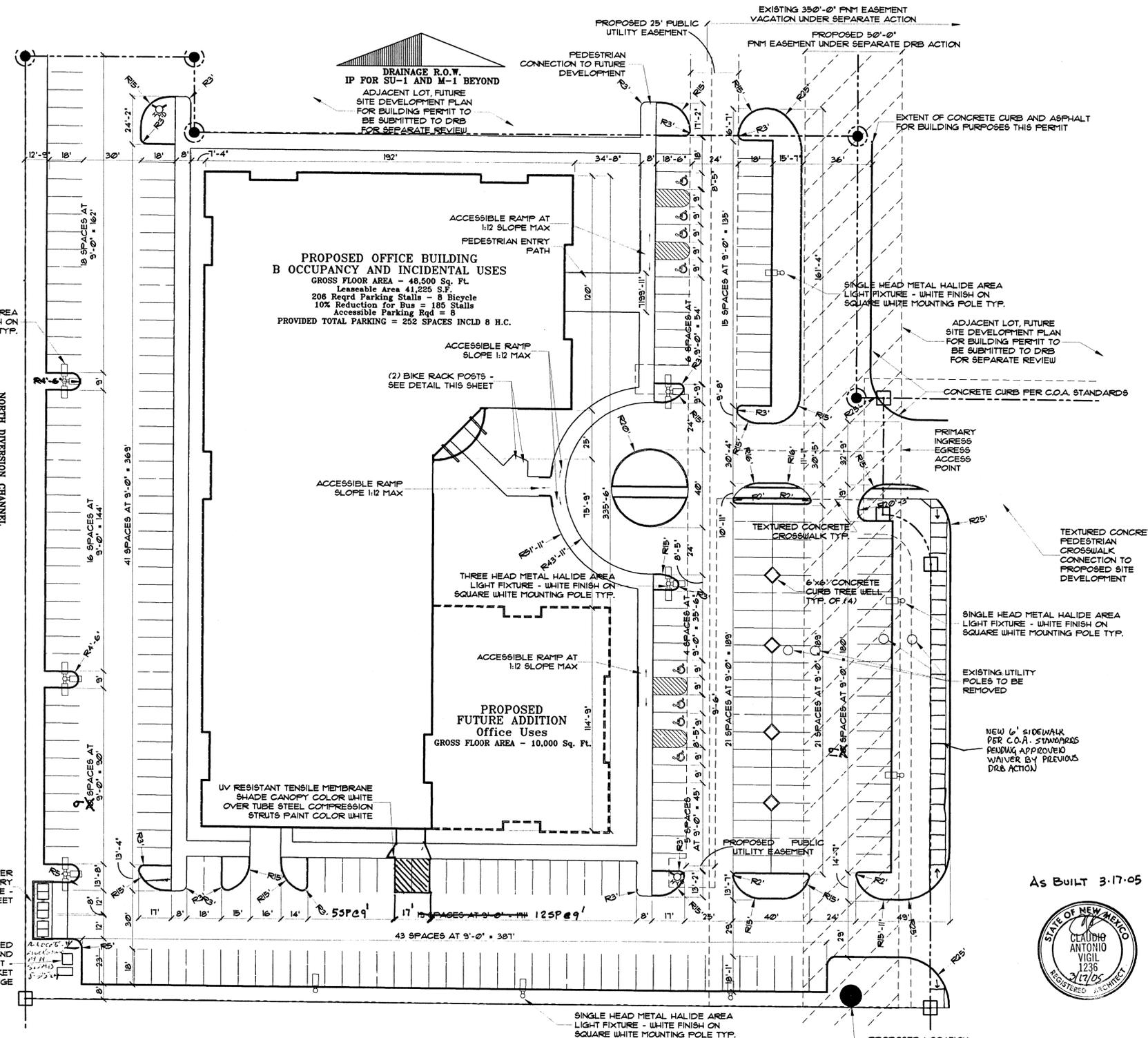
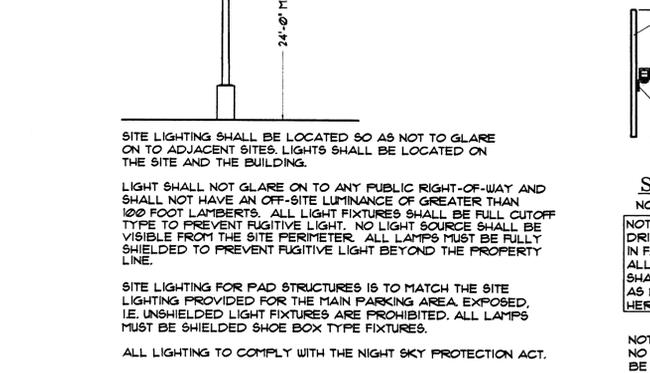
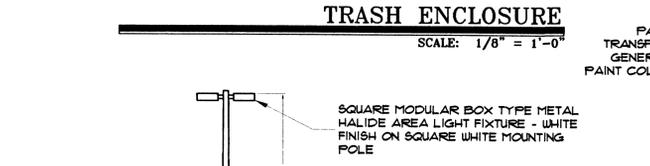
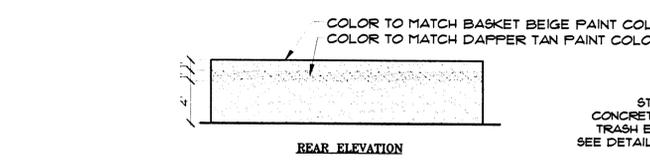
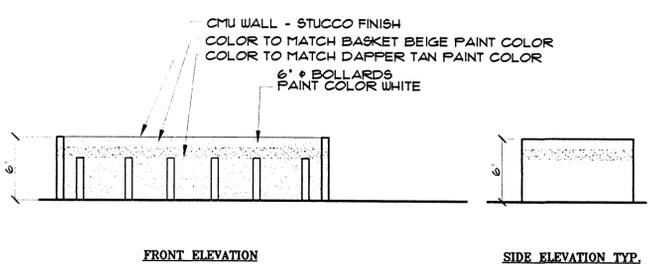
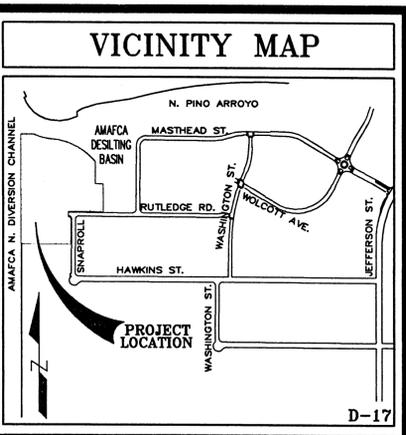
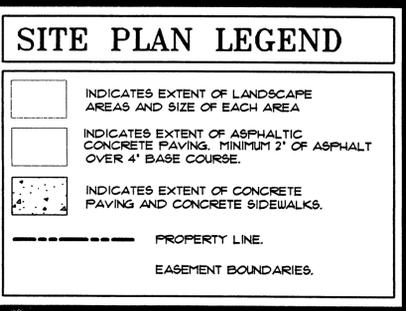
**Bohman & Huston**  
 Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335  
 ENGINEERING • SPATIAL DATA • ADVANCED TECHNOLOGIES

**CITY OF ALBUQUERQUE**  
 PUBLIC WORKS DEPARTMENT  
 ENGINEERING DEVELOPMENT GROUP

**JOURNAL CENTER-PHASE 2**  
 WAREHOUSE/STORAGE - UNIT 1  
 OVERALL UTILITY PLAN

City Project No. **651783** Zone Map No. **D-17** Sheet **13** Of **24**





### SIGNATURE BLOCK

PROJECT NUMBER: 100 3572  
 APPLICATION NUMBER: OADR 0143

IS AN INFRASTRUCTURE LIST REQUIRED? (X) YES ( ) NO IF YES, THEN A SET OF APPROVED DRC PLANS WITH A WORK ORDER IS REQUIRED FOR ANY CONSTRUCTION WITHIN PUBLIC-RIGHT-OF-WAY OR FOR CONSTRUCTION OF PUBLIC IMPROVEMENTS

DRB SITE DEVELOPMENT PLAN APPROVAL:

<i>[Signature]</i>	8-25-04
TRAFFIC ENGINEERING, TRANSPORTATION DIVISION	DATE
<i>[Signature]</i>	8/25/04
PARKS & RECREATION DEPARTMENT	DATE
<i>[Signature]</i>	8-25-04
UTILITIES DEVELOPMENT	DATE
<i>[Signature]</i>	10-13-04
CITY ENGINEER, ENGINEERING DIVISION / AMAFCA	DATE
N/A	
ENVIRONMENTAL HEALTH DEPARTMENT (conditional)	DATE
<i>[Signature]</i>	8-25-04
SOLID WASTE MANAGEMENT	DATE
<i>[Signature]</i>	8/25/04
DRB CHAIRPERSON, PLANNING DEPARTMENT	DATE

PLN2(10706) 12/16/03

### BUILDING CRITERIA

PROJECT: SBS TECHNOLOGIES  
 LEGAL DESCRIPTION:  
 LOT A JOURNAL CENTER PHASE 2 UNIT 2

ZONING CLASSIFICATION: EXISTING: IP PROPOSED: NO CHANGE AND BANK  
 ZONING ATLAS MAP: D-17

CASE HISTORY: DRB-96-463  
 BUILDING TYPE: OFFICE AND INCIDENTAL USES, WHOLESALE AND DISTRIBUTION  
 CONSTRUCTION TYPE: TYPE I IN FULLY SPRINKLED WITH MIN. 6" CLEAR ALL SIDES

GROSS SQUARE FOOTAGE: 48,500 SF  
 NET LEASABLE SQUARE FOOTAGE: 41,225 SF  
 OCCUPANCY GROUP: GROUP B AND INCIDENTAL USES

REQUIRED PARKING: 206 SPACES  
 PROVIDED PARKING: 252 STALLS INCLUDING 8 ACCESSIBLE

PARKING SPACE SIZES:  
 REGULAR CAR PARKING SPACES: 9'-0" x 18'-0" WITH A 2'-0" OVERHANG.  
 VAN ACCESSIBLE HANDICAP PARKING SPACE: 9'-0" x 18'-0" WITH A 2'-0" OVERHANG AND A 9'-0" WIDE ACCESS STRIP.

TOTAL LOT AREA: 206,663 SQUARE FEET, 4.74 ACRES  
 NET LOT AREA: 147,028 SQUARE FEET  
 TOTAL PARKING/PAVED AREA: 94,000 SQUARE FEET  
 TOTAL LANDSCAPE AREA REQUIRED: 22,054 SF.  
 TOTAL LANDSCAPE AREA PROVIDED: 42,067 SF.  
 LANDSCAPE TO PARKING AREA RATIO: .45 TO 1



STATE OF NEW MEXICO  
 CLAUDIO VIGIL ARCHITECTS  
 CLAUDIO ANTONIO VIGIL  
 1236  
 2/17/05  
 REGISTERED ARCHITECT

CLAUDIO VIGIL ARCHITECTS  
 SBS TECHNOLOGIES  
 NEW OFFICE BUILDING  
 JOURNAL CENTER  
 ALBUQUERQUE, NEW MEXICO

SHEET  
 SDP2  
 PROJECT NUMBER  
 04080

OWNERSHIP OF INSTRUMENTS OF SERVICE  
 All design concepts, details, plans, specifications, computer files, field data, notes and other documents and instruments prepared by Claudio Vigil Architects, P.C. as instruments of service shall remain the property of Claudio Vigil Architects, P.C. Claudio Vigil Architects, P.C. shall retain all common law, statutory and other reserved rights, including the copyright thereto.

1801 Rio Grande NW, Albuquerque, NM 87104  
 Phone: 505/842-1113 Fax: 505/842-1330

NO PLANS CHECKING OFFICE  
 924-6511  
 APPROVED/DISAPPROVED  
 HYDRANT(S) ONLY  
 8.24.04  
 SIGNATURE & DATE

REGISTERED ARCHITECT  
 MAR 17 2005  
 HYDROLOGY SECTION

0 15' 30' 60'  
 SCALE: 1" = 30'

**GRADING NOTES:**

- 1 ALL WORK DETAILED ON THESE PLANS, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS, 1986 EDITION, AS AMENDED THROUGH UPDATE # 7.
- 2 A CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
- 3 CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS IS THE RESPONSIBILITY OF THE CONTRACTOR. ANY COSTS INCURRED FOR REPAIRS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 4 PAVING/ROADWAY GRADES SHALL BE ±0.05 FT. FROM SHOWN PLAN ELEVATIONS.
- 5 PADS SHALL NOT VARY FROM A TRUE HORIZONTAL PLANE BY MORE THAN ±0.01 FOOT AT ANY POINT. THIS TRUE PLANE SHALL NOT VARY FROM THE SHOWN PAD ELEVATION BY ±0.02 FOOT.
- 6 MAINTENANCE OF DRAINAGE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY ON WHICH THEY ARE CONSTRUCTED. ROOF DRAINS AND APPURTENANCES SHALL BE REGULARLY INSPECTED AND OBSTRUCTIONS REMOVED.
- 7 THE CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE AND FEDERAL REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS AND GRADING OPERATIONS.

- 8 THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL CONSTRUCTION PERMITS AND INSPECTION APPROVALS NECESSARY FOR THE CONSTRUCTION OF THESE FACILITIES AND ALL GRADING OPERATIONS.
- 9 THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.
- 7 DISPOSAL OF ALL WASTE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 10 CONSTRUCTION SAFETY: THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE CONTRACTOR'S SOLE RESPONSIBILITY.
- 11 THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY, ROADWAYS OR ONTO PRIVATE PROPERTY.
- 12 THE CONTRACTOR SHALL EXERCISE CARE SO AS NOT TO DISTURB OR DAMAGE EXISTING FEATURES TO REMAIN DURING ALL PHASES OF CONSTRUCTION.
- 13 ALL SIDEWALKS SHALL HAVE A 2% CROSS-SLOPE UNLESS OTHERWISE INDICATED.

**AS BUILT LEGEND**

✓ TC 77.81 = AS BUILT MATCHES DESIGN ELEVATION  
 FL 77.01  
 TC 77.51 = AS BUILT ELEVATION  
 FL 77.04 77.08

**DRAINAGE CERTIFICATION**

I, Daniel S. Aguirre, NMPE 11955, OF THE FIRM Wilson & Company, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 9-1-04. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY Joaquin Arguelles, Jr., NMPS 7472.

I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 3-28-05 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR Permanent Certificate of Occupancy.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

*DA*  
 Daniel S. Aguirre, NMPE 11955  
 DATE 3/29/05

**DRAINAGE REPORT**

**Site Description**  
 The project site, in Journal Center Phase 2 Unit 2, is located west of the intersection of Masthead St. and Jefferson St. in northeast Albuquerque. It is the first lot in a four-lot business park and is bounded on the north by proposed Tract A-2, on the east by proposed Tract A-4, on the west by the North Diversion Channel and on the south by Rutledge Rd., Snaproll St. and Lot 17-A Interstate Industrial Tract Unit 4.

**Legal Description**  
 Tract A-1 Journal Center Phase 2 Unit 2

**Flood Hazard Zones**  
 The site is not located in a flood zone as shown by Panels 35001C0136D & 35001C0137D.

**Existing Conditions**  
 The site is entirely located in Basin A1 as shown on the "Journal Center-Phase 2 Unit II: Drainage Plan & Basin Map" by Bohannon Huston, Inc., dated 8 November 2002. That plan was an amendment to the approved drainage report for Journal Center Phase 2 Units 1&2 (D17/D3AA). The site was slightly graded to direct flows under the Bohannon Huston, Inc. plan.

**Proposed Conditions**  
 The site is located in Basin A1-b as shown on the "Brunacini @ Journal Center Drainage Plan" by Wilson & Company, Inc., dated 24 August 2004. Under developed conditions for Tract A-1, the site will continue to accept flows from Snaproll St. NE and Rutledge Rd. and from a portion of undeveloped Tract A-4. This basin is indicated as Basin 100 on this plan and flows will be directed through the parking lot and around the building to the northwest corner of the lot and discharged into a temporary retention pond located on Tract A-2.

Developed Condition results are as follows:

- 1) Land Treatment - 56% Land Treatment D, 25% Land Treatment B and 19% Land Treatment C.
- 2) V(10day) = 1.65 Ac-ft

The proposed grading will provide an interim retention pond with a minimum of the above required volume of 1.65 Ac-ft, 3:1 sides slopes and a depth of three feet with one foot of free board. The pond will remain until such time as proposed Tract A-2 is developed, at which time flows from Basin 101 will primarily flow to an outlet structure to be located on the west property line of Tract A-1, with ultimate discharge to the North Diversion Channel.

**Conclusion**  
 The development of this site is designed to adhere to the "Brunacini @ Journal Center Drainage Plan" by Wilson & Company, Inc., dated 24 August 2004". That document indicates interim temporary retention ponding with ultimate discharge to the North Diversion Channel.

**LEGAL DESCRIPTION**

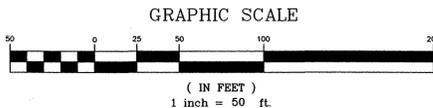
TRACT A-1, JOURNAL CENTER, PHASE 2, UNIT 2

**BENCH MARK**

NGS BRASS TABLE STAMPED "REEVES 2, 1991" GEOGRAPHIC POSITION (NAD 1927)  
 NM STATE PLANE COORDINATES (CENTRAL ZONE) X = 394,062.557 Y = 1,516,507.279  
 GROUND TO GRID FACTOR = 0.99967022 DELTA ALPHA = -00'12'15"  
 NGVD 1929 TRIG ELEVATION = 5074.0

**LEGEND**

- EXISTING INTERMEDIATE CONTOUR
- EXISTING INDEX CONTOUR
- BASIN BOUNDARY LINE
- PROPOSED INTERMEDIATE CONTOUR
- PROPOSED INDEX CONTOUR
- BASIN TAG

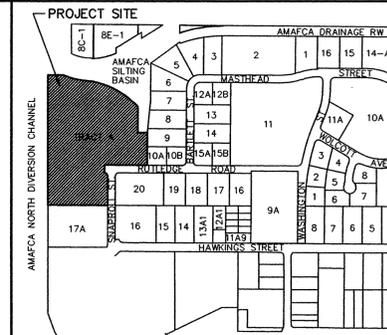


WCEA X4218034  
 AUGUST 2004

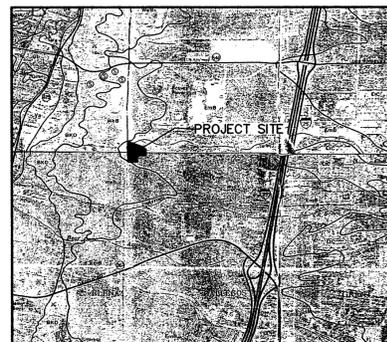
CURVE DATA						
ID	DELTA	TANGENT	ARC	RADIUS	CHORD	CHORD BRG
C1	90°12'33"	25.09	39.36	25.00	35.42	N45°13'40"E
C2	18°39'37"	82.97	164.47	505.00	163.74	S74°39'50"E
C3	30°45'00"	166.69	325.34	606.20	321.45	S61°07'47"E
C4	89°47'27"	24.91	39.18	25.00	35.29	S44°46'20"E
C5	150°52'52"	80.15	159.36	606.20	158.93	S68°38'21"E
C6	90°25'47"	20.15	31.57	20.00	28.39	S80°31'02"E
C7	89°34'13"	19.85	31.27	20.00	28.18	S09°28'58"W
C8	14°35'09"	74.23	147.65	580.00	147.25	N69°39'28"W
C9	08°46'40"	45.76	91.30	535.00	91.19	N79°52'39"W
C10	11°14'28"	49.70	99.08	505.00	98.92	S78°22'24"E

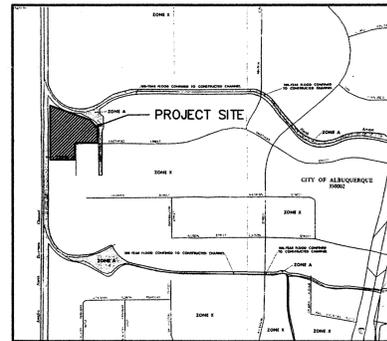
TANGENT DATA		
ID	BEARING	DISTANCE
T1	S76°30'17"E	38.16'
T2	S45°45'17"E	49.94'
T3	S00°19'56"W	60.00'
T4	N54°16'04"E	12.11'
T5	S35°43'56"E	20.00'
T6	S54°16'04"W	12.56'
T7	S00°09'41"W	25.00'
T8	N76°57'03"W	34.64'
T9	N00°00'22"E	40.00'



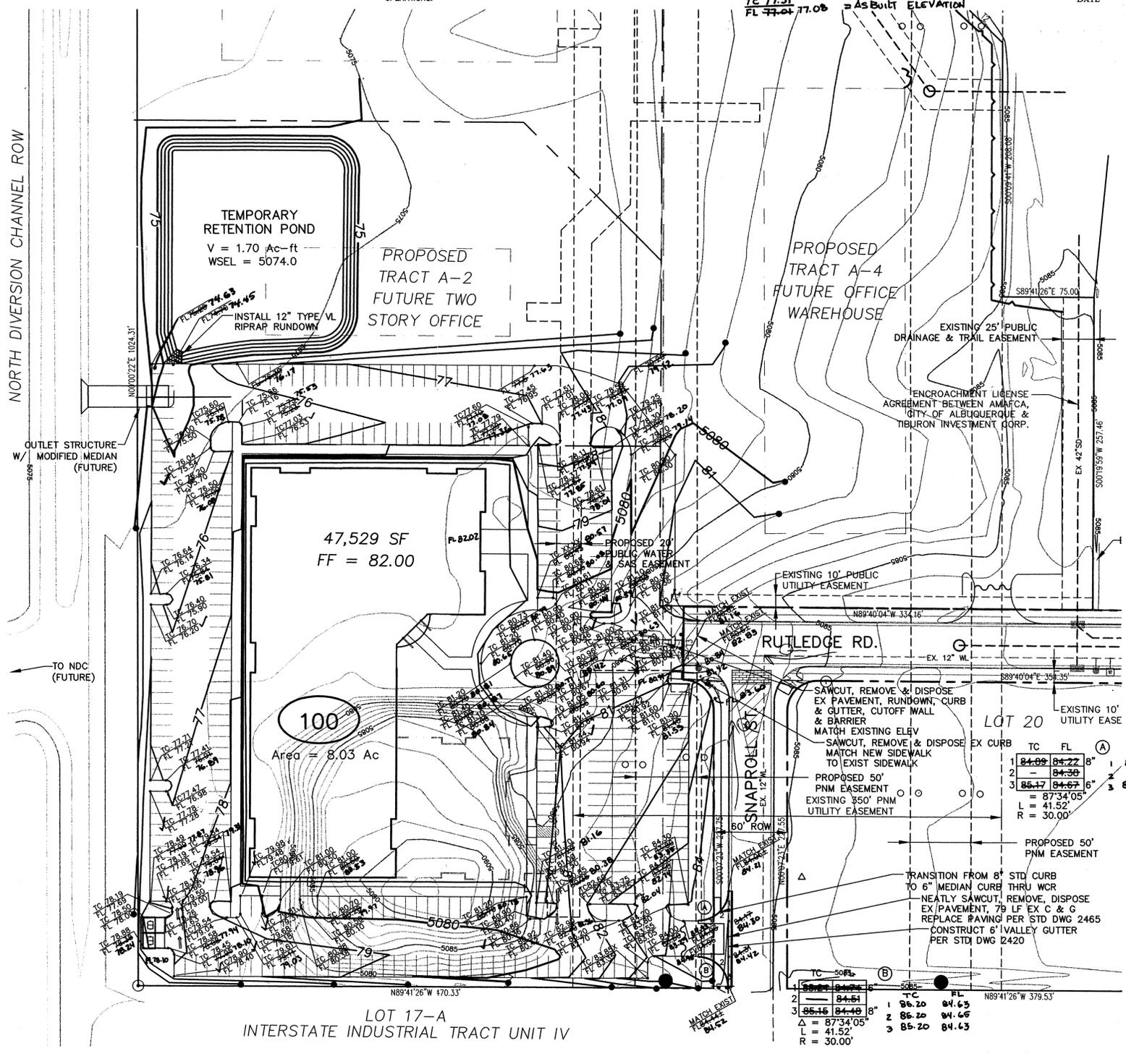
**LOCATION MAP**  
 ZONE ATLAS MAP NO. D-16 & D-17



**SOILS MAP**  
 REFERENCE: SCS BERNALILLO COUNTY SOIL SURVEY SHEET NO. 11 & 12



**FLOOD INSURANCE MAP**  
 REFERENCE: FLOOD INSURANCE STUDY PANELS 35001C0136D & 35001C0137D

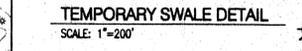
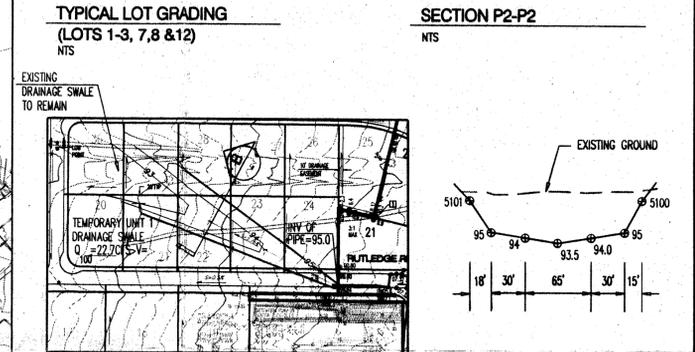
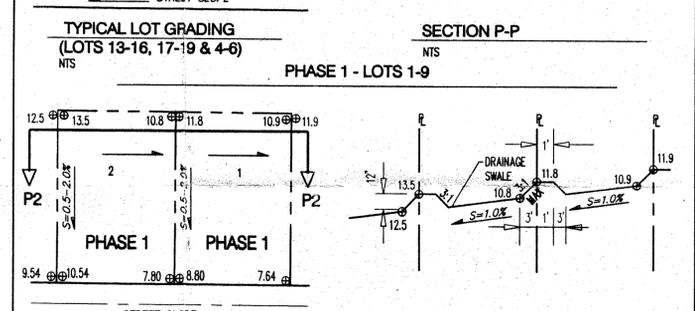
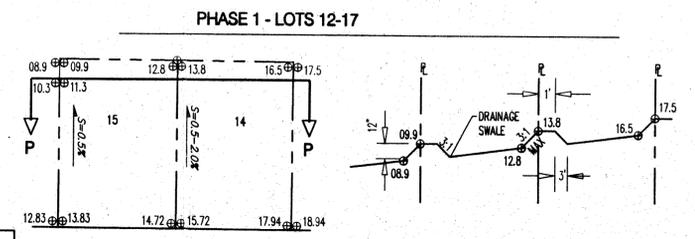
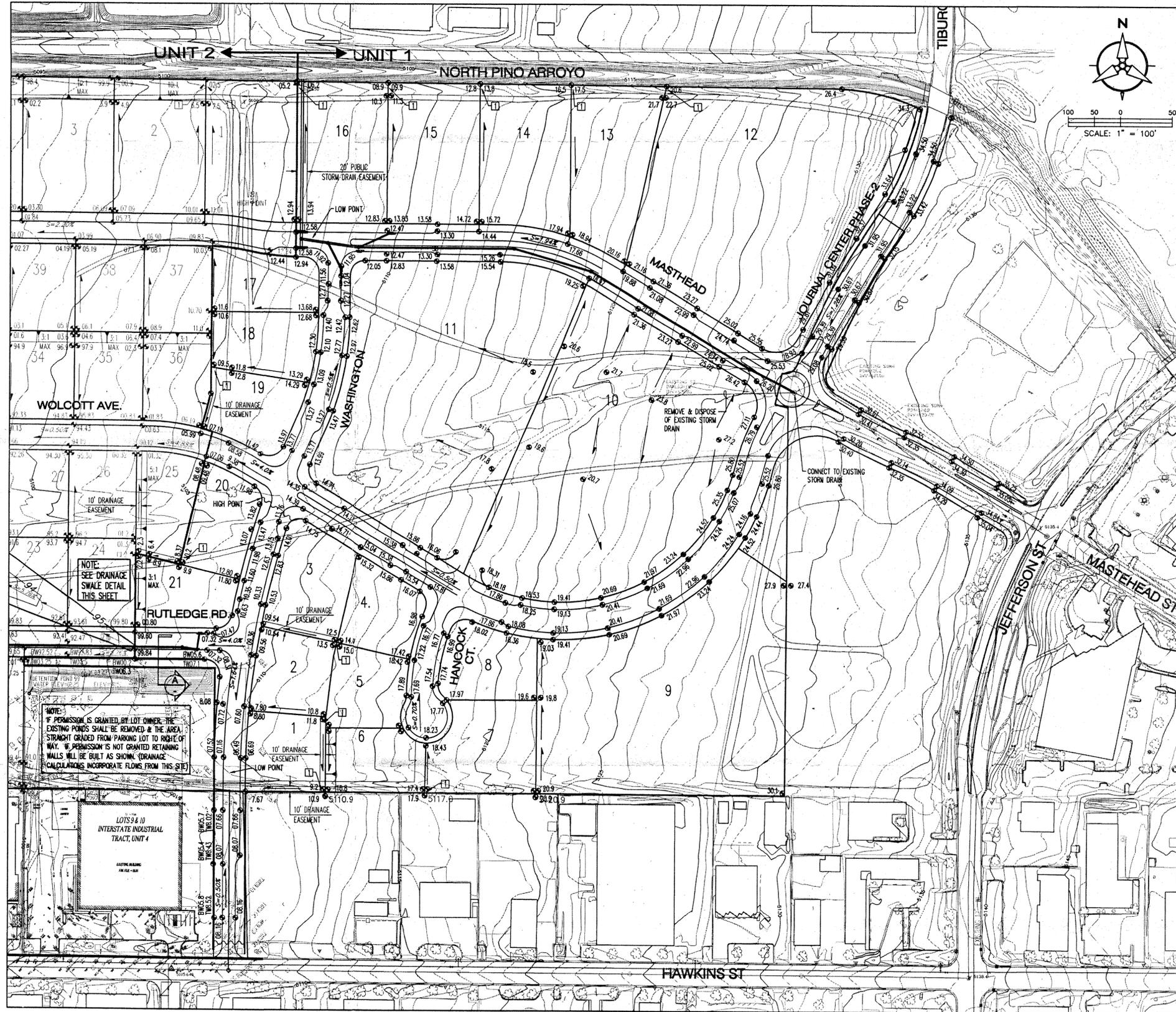


*high pt in snaproll*

<p><b>WILSON &amp; COMPANY</b>                  2600 THE AMERICAN ROAD S.E. SUITE 100                  RIO RANCHO, NEW MEXICO 87124                  (505) 898-8021</p>	CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP <b>BRUNACINI @ JOURNAL CENTER</b> <b>TRACT A-1</b> <b>GRADING PLAN</b>	
	Design Review Committee	City Engineer Approval
City Project No. <b>XXXX.XX</b>	Zone Map No. <b>D-16 &amp; D-17</b>	Sheet <b>1</b> Of <b>1</b>

**KEYED NOTES**

TURNED BLOCK



- GENERAL NOTES**
1. CONTRACTOR MUST OBTAIN A TOPSOIL DISTURBANCE PERMIT FROM THE ENVIRONMENTAL HEALTH DIVISION PRIOR TO CONSTRUCTION.
  2. THE CONTRACTOR IS TO REFER TO EARTHWORK SPECIFICATIONS AS NOTED IN THE SOILS REPORT.
  3. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE, AND FEDERAL MEASURES AND REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.
  4. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM LOTS INTO PUBLIC RIGHT-OF-WAY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AS PER THE DETAIL ON THIS SHEET AND NETTING THE SOIL TO KEEP IT FROM BLOWING AS PER THE EROSION CONTROL DETAIL THIS SHEET.
  5. ALL STREET ELEVATIONS ARE TOP OF CURB UNLESS OTHERWISE NOTED. VALLEY GUTTER ELEVATIONS ARE SHOWN AT FLOWLINE ELEVATIONS.

**LEGEND**

- EXISTING CONTOUR
- PROPOSED CONTOUR
- ⊙ 52.4 SPOT ELEVATION
- CMU RETAINING WALL
- CMU WALL
- SWALE
- DIRECTION OF FLOW
- WATER BLOCK
- SLOPE
- STORM DRAIN INLET
- TEMPORARY GRADING LIMIT
- UNIT BOUNDARY

**Bohannon & Huston**  
 Courtyard One 7500 JEFFERSON NE ALBUQUERQUE NEW MEXICO 87109  
 ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

**CITY OF ALBUQUERQUE  
 PUBLIC WORKS DEPARTMENT  
 ENGINEERING DEVELOPMENT GROUP**

**JOURNAL CENTER-PHASE2  
 WAREHOUSE/STORAGE - UNIT 1  
 GRADING AND DRAINAGE PLAN**

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
Last Design Update			
City Project No.	Zone Map No.	Sheet	Of
	D-17	X	X

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE	NO.	BY	NO.	BY	REVISIONS	DESIGN
ACB Brass Tablet stamped "1-A11-1980"							
Geographic Position (NAD 1927)							
N.M. State Plane Coordinates (Central Zone)							
X = 365,236.60	Y = 1,531,711.91						
Ground-to-Grid Factor = 0.9996588							
U.M. = -0075.36'							
S.D. 1929 Elevation = 5331.73							
CONTRACTOR	DATE	NO.	BY	NO.	BY	REVISIONS	DESIGN
DESIGNED BY: CMG	DATE: 7/2000						
DRAWN BY: CMG/DLM	DATE: 7/2000						
CHECKED BY: BUS	DATE: 7/2000						

**KEYED NOTES**

- TURNED BLOCK
- EXISTING CHANNEL RANDOM

**GRADING AND DRAINAGE CERTIFICATION**

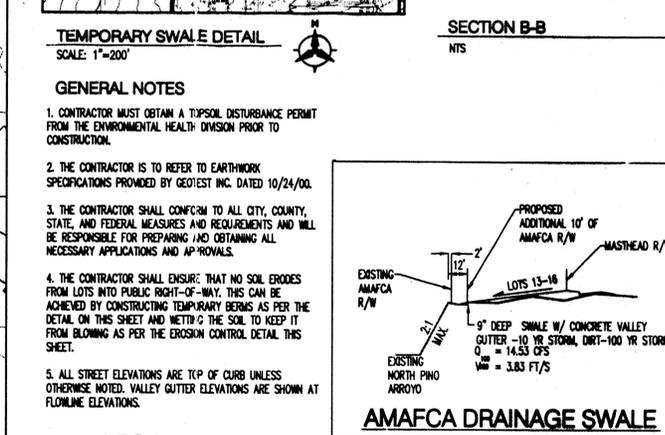
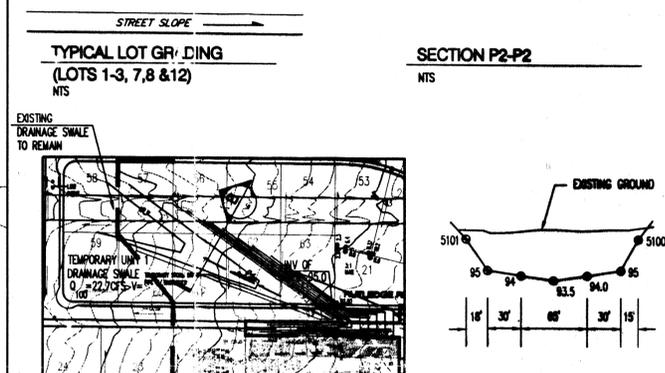
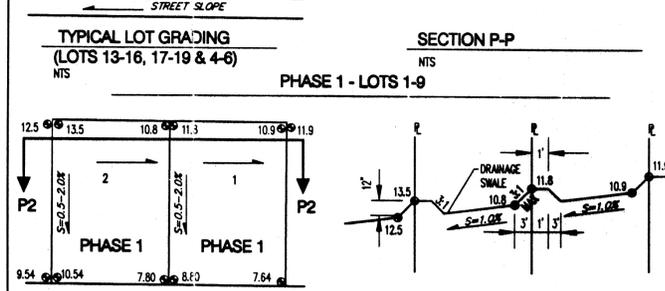
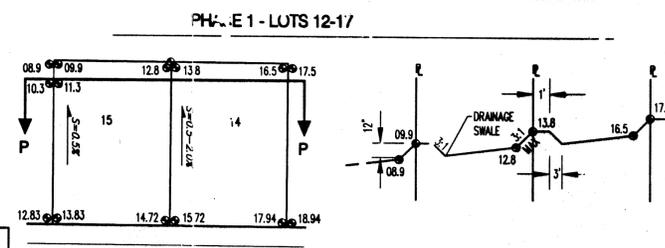
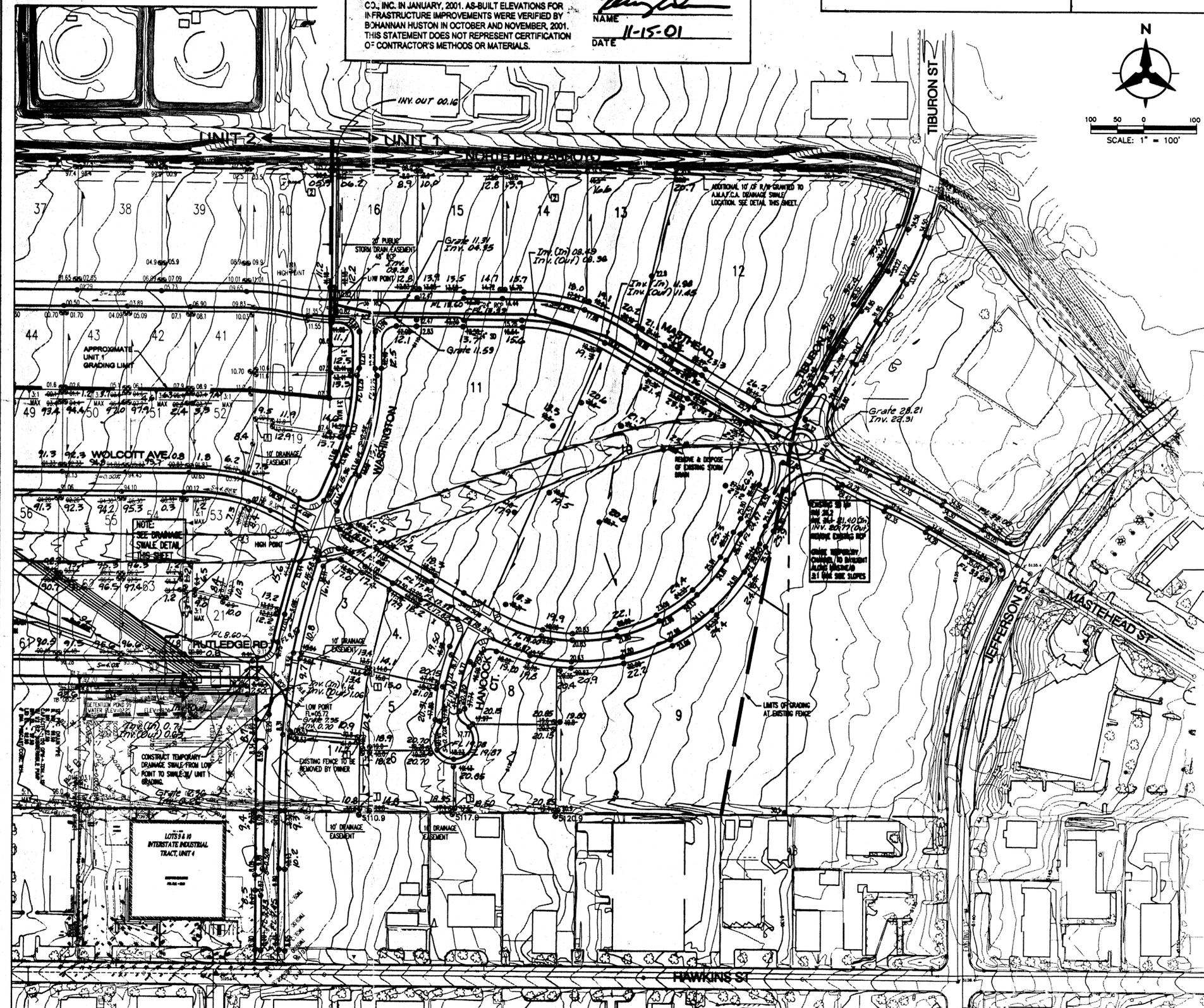
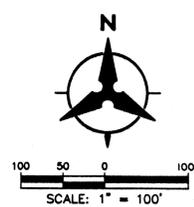
I, **KERRY L. DAVIS** OF BOHANNAN HUSTON, N.M.P.E. # 9984, HEREBY CERTIFY THAT THE AS-BUILT GRADING AND DRAINAGE CONDITIONS OF THE SITE ARE IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED GRADING AND DRAINAGE PLAN (CITY OF ALBUQUERQUE DRAINAGE FILE # D17/D3AA) TO THE BEST OF MY KNOWLEDGE AND BELIEF. AS-BUILT ELEVATIONS ARE SHOWN ON THE PLAN WHERE THE ORIGINAL DESIGN ELEVATION HAS BEEN CROSSED OUT AND THE AS-BUILT ELEVATION ADDED. AS-BUILT ELEVATIONS FOR MASS GRADING WERE VERIFIED BY SPARLING CONSTRUCTION CO., INC. IN JANUARY, 2001. AS-BUILT ELEVATIONS FOR INFRASTRUCTURE IMPROVEMENTS WERE VERIFIED BY BOHANNAN HUSTON IN OCTOBER AND NOVEMBER, 2001. THIS STATEMENT DOES NOT REPRESENT CERTIFICATION OF CONTRACTOR'S METHODS OR MATERIALS.



NAME Kerry L. Davis  
DATE 11-15-01

I, Carl Smith, do hereby attest to the fact that the as-built information shown hereon is the result of a field survey performed by me or under my direct supervision, and that the same is true and correct. AS OF 15 JAN 01

Carl Smith  
S.C.T.I. Survey Manager



**LEGEND**

- 54.70 — EXISTING CONTOUR
- 52.4 — PROPOSED CONTOUR
- SPOT ELEVATION
- CMU RETAINING WALL
- CMU WALL
- SWALE
- DIRECTION OF FLOW
- WATER BLOCK
- SLOPE
- STORM DRAIN INLET
- TEMPORARY GRADING LIMIT
- UNIT BOLD DAY
- DRB#

**Bohannan Huston**  
 7500 JEFFERSON NE ALBUQUERQUE NEW MEXICO 87109  
 ENGINEERS PLANNERS PHOTOGRAMMETERS SURVEYORS SOFTWARE DEVELOPERS

**CITY OF ALBUQUERQUE**  
**PUBLIC WORKS DEPARTMENT**  
**ENGINEERING DEVELOPMENT GROUP**

**JOURNAL CENTER-PHASE 2**  
**WAREHOUSE/STORAGE - UNIT 1**  
**GRADING AND DRAINAGE PLAN**

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
City Project No.	Zone Map No.	Sheet	Of
NOV 16 2001	D-17	4	40

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE	NO.	BY	NO.	BY	REVISIONS	DESIGN
AS BUILT	11-15-01						
DESIGNED BY	DATE						
CHECKED BY	DATE						
APPROVED BY	DATE						
RECORDED BY	DATE						
MICRO-FILM INFORMATION							
RECORDED BY	DATE						

# REVISED DRAINAGE MANAGEMENT PLAN FOR: JOURNAL CENTER

REVISED: NOVEMBER, 1990  
PREPARED BY: BOHANNAN-HUSTON, INC.

The purpose of this revised drainage management plan is to update the plan to reflect the development of Journal Center since the plan was first approved in 1984. Since that time, Journal Center has been replatted, new streets constructed and new businesses have moved in. All new development has conformed to the 1984 plan and individual development plans have been approved by the City. The drainage concepts and basins remain substantially identical to the 1984 drainage management plan.

Additional functions of the updated plan will be to guide engineers in preparing future drainage plans and aiding City review of these future plans. Drainage basins which have been altered slightly have been re-analyzed and are shown in the table below to have no significant nor adverse impact on drainage facilities.

The criteria used for the minor re-analysis performed in this updated plan remained identical to that previously used and approved in the original 1984 plan.

The purpose of this plan is to outline drainage patterns, flow rates and facility capacities for the Journal Center Industrial/Commercial Park. The plan also serves to update recommendations made in an October 1980 report entitled *Journal Center Interim Drainage Report* based on current thinking outlined in the Drainage Ordinance and Development Process Manual (DPM).

It is proposed that runoff from sites be allowed to discharge to street rights-of-way or facilities in a free discharge manner. This runoff will be directed to three primary outfalls: the North Pino Arroyo Channel, Jefferson Street storm drain and Los Angeles Blvd. The North Pino Arroyo is a concrete lined with grass free board and discharges runoff into the North Diversion Channel. The Jefferson Street storm drain discharges into the Domingo Baca Arroyo, north of Los Angeles Blvd. Runoff collected in Los Angeles Blvd. discharges into the North Diversion Channel. The accompanying plan identifies flow directions and the location of the primary outfalls.

Runoff rates and facility capacities are contained in the tables below. Based on this information, three points should be highlighted:

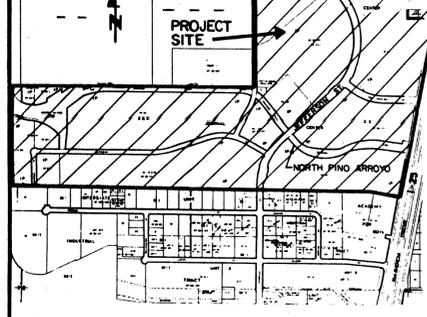
1. Current runoff criteria yields flow rates less than those used in the 1980 report.
2. Approximately 112 cfs will be directed to Los Angeles Blvd. during the 100-year storm. 226 cfs is collected in the storm drain system and conveyed to the Domingo Baca Arroyo. The 112 cfs represents a figure less than the undeveloped flow rate from the site prior to its development.

3. Section 8C of the Drainage Ordinance stipulates that the curb flow line depth shall not exceed 0.5 feet during the 10-year storm in arterial street sections. As the values indicate, this criteria is exceeded at several locations along Jefferson Street.

As provided in Section 8H of the Ordinance, a variance to the requirement outlined in No. 3 is requested for the following reasons:

1. Considerable expense has already been applied to the construction of drainage facilities in the area. The Pino Arroyo Channel and Jefferson Street storm sewer represent an investment of approximately 2 million dollars. Design was guided and approved based upon criteria in effect at the time assuming free discharge from all parcels.
2. The total length of street over which the criteria is exceeded is approximately 3000 feet. This represents a relatively short distance compared to the total length of Jefferson Street running through and south from the project.

BASED ON THE INFORMATION PRESENTED IN THIS PLAN, IT IS PROPOSED THAT A FREE DISCHARGE MANAGEMENT APPROACH BE APPROVED FOR ALL PARCELS WITHIN THE PARK, AND THAT A VARIANCE TO SECTION 8C BE GRANTED FOR THE 10-YEAR FLOW CRITERIA IN JEFFERSON STREET.



LOCATION MAP  
ZONE ATLAS D-17-Z

## BASIN HYDROLOGY (Developed Conditions)

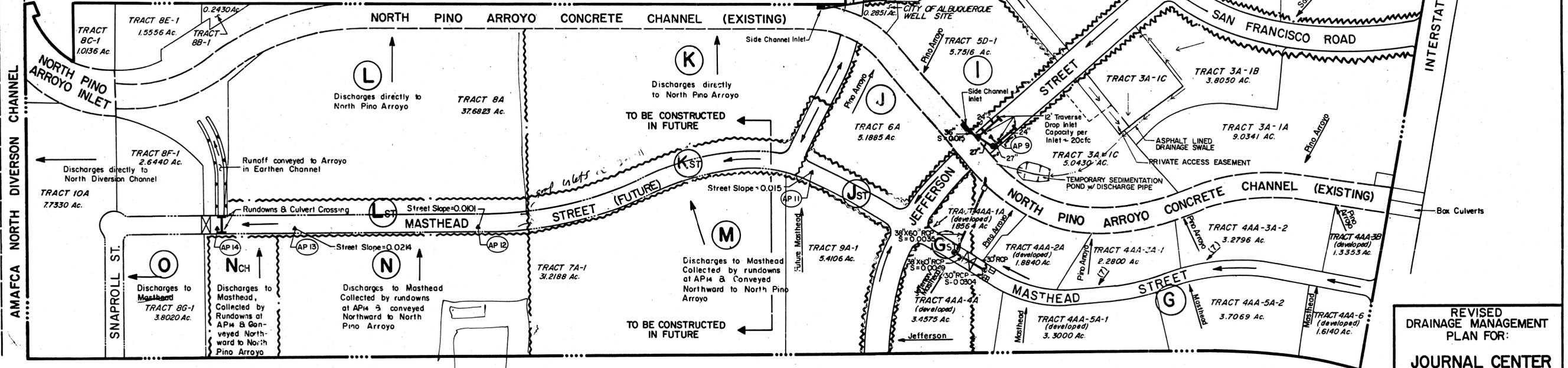
BASIN ID	AREA	DISCHARGES TO	LONGEST REACH (FT.)	SLOPE (AVERAGE)	TC (MIN.)	INTENSITY (IN/HR.)	Q <sub>100</sub>	Q <sub>100</sub> 1980 REPORT
A**	5.4	Headline	1200	0.02	10.0	4.7	61	95
B-1**	18.0	Jefferson	1650		10.0	4.7	68	N.A.
C	27.6	Diversion Berm	1200		10.0	4.7	102	116
D-1	14.3	Tiburon	1000		10.0	4.7	54	N.A.
E-1	13.1	Jefferson	1100		10.0	4.7	49	N.A.
F	19.6	Pino Arroyo	1250		10.4	4.6	72	73
G	22.5	Pino Arroyo	1250		10.4	4.6	83	84
GST	3.0	Jefferson	500		10.0	4.7	12	12
H-1	29.1	Tiburon	1600		10.0	4.7	109	N.A.
I	5.2	Pino Arroyo	450		10.0	4.7	20	21
J	4.6	Pino Arroyo	450		10.0	4.7	17	19
JST	0.6	Masthead	1000		10.0	4.7	3	2
K	15.6	Pino Arroyo	1200		10.0	4.7	59	63
KST	1.3	Masthead	1300		10.0	4.7	5	5
L	15.4	Pino Arroyo	1200		10.0	4.7	58	64
LST	1.4	Masthead	1200		10.0	4.7	5	6
M	25.5	Masthead	1200		10.0	4.7	96	87
N	13.0	Masthead	1200		10.0	4.7	49	51
NCh	3.4	Masthead	650		10.0	4.7	13	14
O	5.3	Snaproll	650	0.02	10.0	4.7	20	22
A-1**	19.6	Headline	N.A.	N.A.	N.A.	N.A.	85	N.A.

## STREET & STORM SEWER HYDRAULICS

AP	CONTRIBUTING BASIN(S)	10-YEAR STORM (all values cfs)				100-YEAR STORM (all values cfs)				COMMENTS		
		Q	STREET CAPACITY	STORM SEWER(S) CAPACITY	FLOW IN STREET	Q	STREET CAPACITY	SS CAPACITY	FLOW IN STREET			
1	A, OF-1	64	112	N.A.	64	N.A.	98	112	N.A.	98	Street has adequate capacity	
2	B-1	45	18-East half of street	N.A.	45	N.A.	68	200	N.A.	45	10 year street capacity exceeded	
3	OF-1, A, B-1	109	36-Full street section (30" RCP)	59	69	40*	166	200	59	126	40	" " "
4	OF-1, Street	115	30-Full street section (48" RCP)	59	73	40	176	170	59	136	40	" " "
5	D-1	35	100 (48" RCP)	0	35	54	100	107	0	54		Basin D-1 runoff collected in Triple 'C' inlets
6	C	67	N.A.	(48" RCP)	N.A.	67	102	N.A.	120	N.A.	102	Basin C runoff collected in 48" RCP inlet. 90 cfs discharged to Paseo del Norte.
7	Street, OF-1, A, B-1, C, D-1	211	36 (72" RCP)	64	147	321	180	232	96	226		10 year street capacity exceeded
8	E-1	32	9-East half of street (36" RCP)	N.A.	32	N.A.	49	104	N.A.	49	N.A.	74 cfs collected by inlets
9	E-1, Street	46	25-East half of street (42" RCP)	0	46	69	200	83	0	69		Runoff conveyed to Pino Arroyo
10	H-1	72	N.A.	(42" RCP)	N.A.	72	109	N.A.	110	N.A.	109	" " "
11	GST, JST	10	160	N.A.	10	N.A.	15	160	N.A.	15	N.A.	" " "
12	AP11, KST, M	76	N.A.	N.A.	76	N.A.	116	130	N.A.	116	N.A.	" " "
13	AP2, N	108	N.A.	N.A.	108	N.A.	165	160	N.A.	165	N.A.	" " "
14	AP13, NCh	117	N.A.	N.A.	N.A.	N.A.	178	N.A.	N.A.	N.A.	N.A.	Runoff collected in concrete rundowns
15	A, OFFSITE	N.A.	N.A.	N.A.	N.A.	N.A.	43.1	84.7	N.A.	43.1	N.A.	" " "

N.A. - Not Applicable  
\* - See Note #6  
\*\* - Using 1994 DPM Hydrology criteria to calculate flows

- ### NOTES
1. Basin Hydrology based on DPM Criteria, Chapter 22 (DPM Edition, 1984).
    - a. Tc - Plate 22.2 13-1 (10 minute minimum)
    - b. Intensity - Plate 22.2 D-2
    - c. "C" for 85% Impervious = 0.80
    - d. Plate 22.2 C-1
    - e. 100 year rainfall = 2.2 in. - Plate 22.2 D-1
  2. Street capacities determined using DPM Criteria, Chapter 22, Plates 22.3 D-1 thru 22.3 D-4 (DPM Edition, 1984).
  3. Storm sewer sized to operate under pressure flow - Plate 22.3 B-5.
  4. Q<sub>10</sub> = 0.657(Q<sub>100</sub>) - Plate 22.2 D-1 (DPM Edition, 1984).
  5. Jefferson Street classified as min. arterial - 10 year street capacities based on 0.5' at curb flowline.
  6. Double 'B' and 'C' inlets assumed to collect an average of 10cfs during 100-year flow.
  7. The south half (max.) of these lots may drain to Masthead Street as necessary.
  8. The drainage basin for this 37 cfs (100-year storm) discharge is located east of and within the right-of-way of I-25. Calculations for this discharge can be found under City Drainage file D-17/D30. Handling of this 37 cfs discharge will occur as follows:
    - a. Interim (undeveloped Basin A and B-1) Plan - As shown, flow is discharged to the surface and will drain by overland flow to Headline Road.
    - b. Ultimate Plan - With the development of Basins A and B-1, the flow will be carried by surface facilities or underground storm drains to the Domingo Baca Arroyo or to Headline Road. This extension of drainage facilities may be performed in phases, i.e., each development will construct only its required portion of the facility, in accordance with the Drainage Ordinance and approved site-specific drainage plans.
  9. The 37 cfs (100-year) offsite flow is labeled OF-1. The 10-year storm value is 24 cfs.
  10. The high point in Headline Blvd. is located at the Lang Ave. intersection. This condition will cause a flow split. Approximately 37 cfs is assumed to flow north on Headline Blvd.



### LEGEND

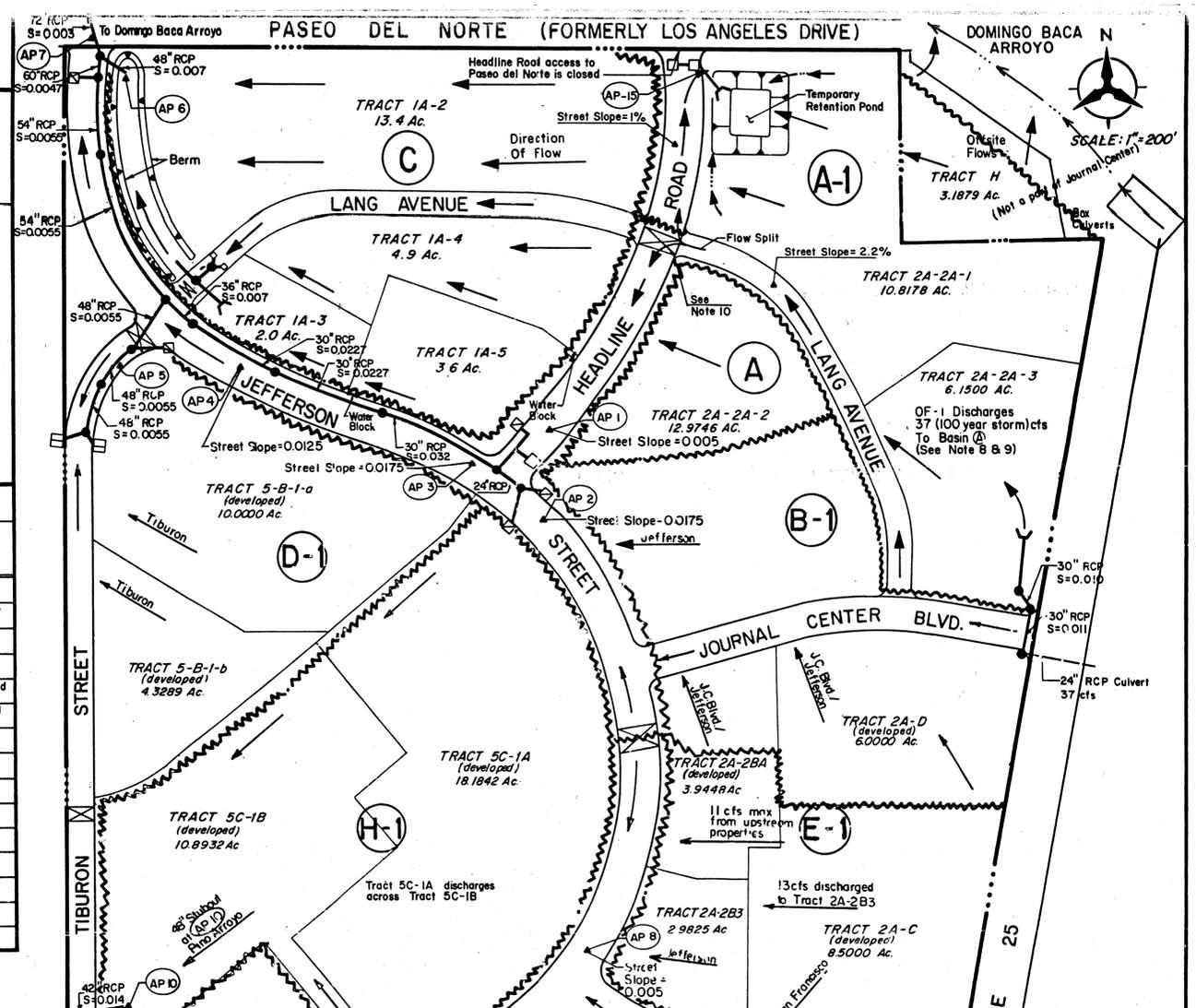
	PROPERTY LINE		TRIPLE 'C' INLET
	BASIN DIVIDE		STORM SEWER & MANHOLE
	WATER BLOCK		MAJOR FLOW DIRECTION & DISCHARGE LOCATION
	DOUBLE 'B' INLET		ANALYSIS POINT
	DOUBLE 'C' INLET		
	DOUBLE 'D' INLET		

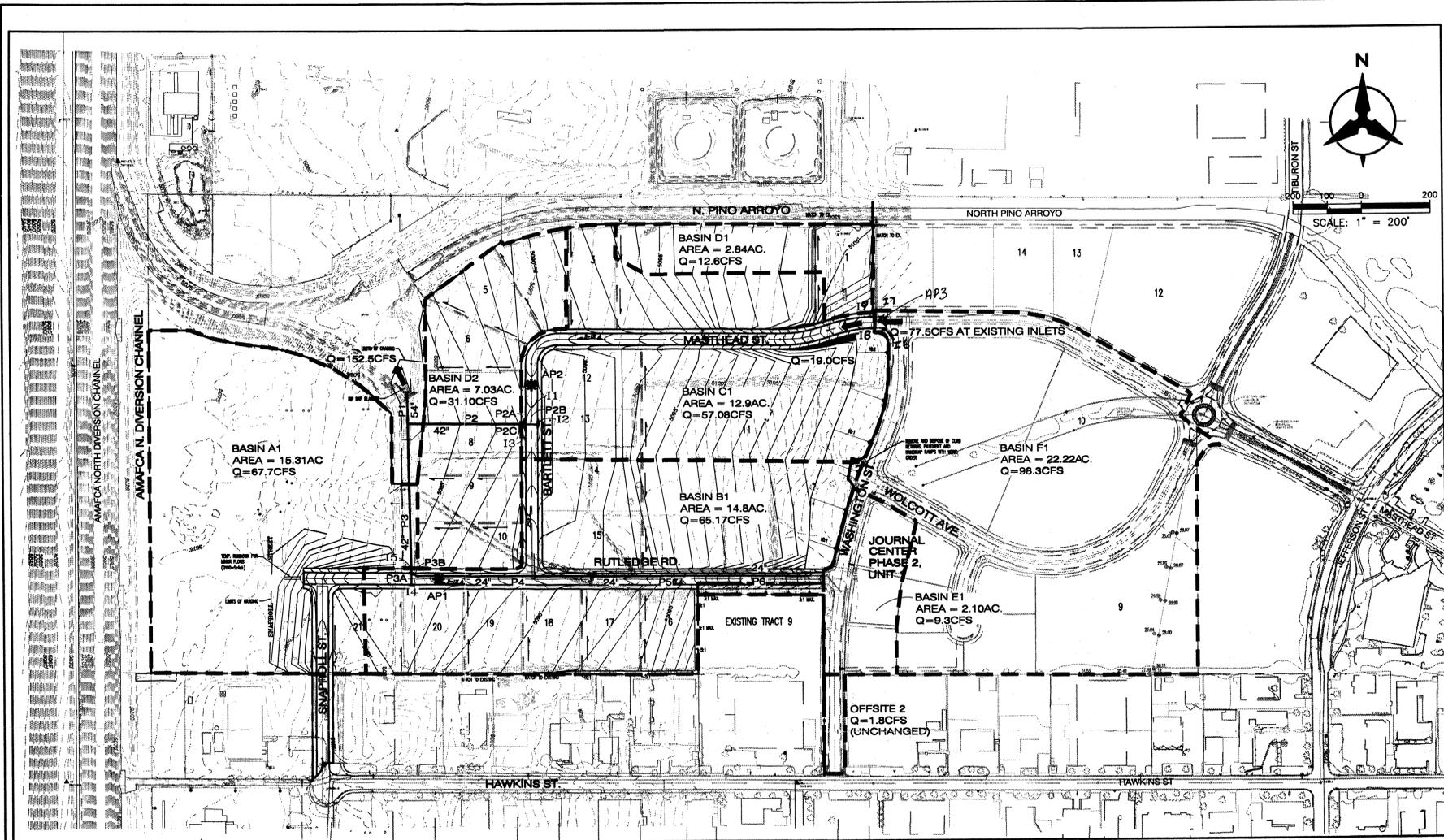
DEVELOPED TRACTS ARE NOTED AS SUCH

REVISED DRAINAGE MANAGEMENT PLAN FOR:  
**JOURNAL CENTER**  
DECEMBER 1992

ORIGINAL PLAN JULY 1984  
REVISION NO. 4 NOVEMBER 1990  
REVISION NO. 5 DECEMBER 1992

JOB No. 901001





**Journal Center Phase - 2 Unit - 2  
Drainage Management Plan**

**Purpose**  
The purpose of this plan is to amend the approved drainage report for Journal Center Phase 2 Units 1&2 (ref. hydrology file # D17/D3AA). Unit 1 has been constructed and this plan amends Unit 2, for the purpose of obtaining preliminary plat approval of Unit 2.

**Site Location and Background Information**  
Journal Center Phase - 2 Unit - 2 is located southwest of Journal Center Phase 1, west of the intersection of Masthead and Jefferson in northeast Albuquerque. This site is bounded on the east by Washington, on the north by the North Pino Arroyo, on the west by the AMAFCA North Diversion Channel and on the south by the existing drainage along Hawkins St. The site is in precipitation zone 2 as defined by Figure A-1 of the DPM section 22.2.A.1. The existing legal description of the site is Tract 8A-1 Journal Center Phase - 2. Please see the vicinity map on this sheet for a graphic depiction of the site location.

The most recent drainage report to address drainage of this site and the surrounding area is entitled "Drainage Report for Journal Center - Phase 2", dated August 25, 2000, and prepared by Bohannan & Huston. That drainage report has been approved (see letter dated 10/3/00 from Brad Bingham to Kerry Davis) and can be found in hydrology file # D17/D3AA. This submission is in full compliance with the guidance and recommendations set forth in that report.

**Existing Conditions**  
The existing conditions of this site are substantially unchanged from the description in the approved drainage report. Some earthwork/borrow was performed for the construction of Unit 1, however existing drainage patterns remain essentially unchanged.

**Proposed Conditions**  
Under proposed conditions the site is 85% land treatment D, with 5% and 10% land treatment B and C respectively. The following changes to basins in the approved drainage report have been made. Please reference the Proposed Basin Map in the approved drainage report:

Basin F in Unit 1 is now Basin F1 where the lots on the west side of Washington are now included in Unit 2 Basin C1. The flow has been decreased from Q=109.1 cfs to Q=95.3 cfs. The sump condition proposed in Unit 1 to capture the flow from Basin F has been modified in this plan. Inlets are proposed west of the existing inlets in Masthead, this portion of the street would be considered "on grade" and the residual flow passing from basin F1 to basin C1 is 19.0 cfs. Basin E in Unit 1 is now Basin E1 where the lots on the west side of Washington are now included in Unit 2, Basin B1. The flow has been decreased from Q=12.8 cfs to Q=11.1 cfs. All of the previously approved basins in Unit 2 have been modified to accommodate earthwork and grading, see this sheet.

Flows from Basins D1 & D2 flow into the North Pino Arroyo (and/or the AMAFCA de-silting basin) and Basin A1 flows to the AMAFCA North Diversion Channel. These flows do not impact flows in any streets.

The residual flow from Basin F1 of 19.0 cfs combines with Basin C1 (Q=57.1 cfs) which flows in the street to inlets in sump condition (AP2) for a total flow of 76.1 cfs. The hydraulic capacity of the street, inlets and pipes are shown in tables on this sheet.

Basins E1 and Offsite 2 (total Q= 11.1 cfs) in Unit 1 flow in Washington to existing inlets in sump. A proposed 24" storm drain will tie to the existing 24" storm drain in Rutledge, and convey the 11.1 cfs to the 48" SD at the low point in Rutledge (AP1).

Basin B1 (Q=65.36 cfs) flows in the street to inlets in sump condition (AP1). In the storm drain this flow combines with the 11.1 cfs in the 24" SD for a total flow in the 48" SD of 76.4 cfs. Flows at AP1 and AP2 combine (Q= 152.5 cfs) and outfall from the 54" SD to the AMAFCA de-silting basin west of basin D2.

Hydraulic capacity calculations for the streets, inlets and pipes are provided on this sheet. The storm drains are designed to operate as gravity systems, without pressure flow.

**Conclusions**  
This drainage submission has been prepared in accordance with City of Albuquerque requirements, and complies with the previously approved drainage report for the area. This plan clearly demonstrates the proposed grading and drainage concepts. The implementation of these concepts will result in the safe passage of the 100 year storm event.

With this submission we request hydrology department approval of this Grading and Drainage Plan for preliminary plat approval.



VICINITY MAP  
ZONE ATLAS ZONE INDEX MAP NO. D-17-Z

LEGAL DESCRIPTION  
TRACT 8A-1, JOURNAL CENTER PHASE 2

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE	MARK	DATE	NO.	BY	REVISIONS	DESIGN
ACROSS TABLE STAMPED "1-A1-1980"		Geographic Position (NAD 1927)					
N.M. State Plane Coordinates (Central Zone)		X= 365,236.60 Y= 1,531,711.91					
Corrected by		Ground-to-GHI Factor= 0.9996658					
Recorded by		UAI= -0015.36"					
		SD 1929 Elevation= 5331.73					

**JOURNAL CENTER - PHASE 2  
Ultimate Development Conditions Basin Data Table**

This table is based on the DPM Section 22.2, Zone: 2

BASIN ID	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages				Q(100) (cfs/ac.)	Q(100) (cfs)	WT E (inches)	V(100) <sub>360</sub> (CF)
			A	B	C	D				
<b>UNIT 1</b>										
F1	967907	22.22	0.0%	5.0%	10.0%	85.0%	4.42	98.28	1.95	157808
E1	91622	2.10	0.0%	5.0%	10.0%	85.0%	4.42	9.30	1.95	14919
<b>UNIT 2</b>										
C1	562195	12.91	0.0%	5.0%	10.0%	85.0%	4.42	57.08	1.95	91544
B1	643724	14.78	0.0%	5.0%	10.0%	85.0%	4.42	65.36	1.95	104820
D1	123807	2.84	0.0%	5.0%	10.0%	85.0%	4.42	12.57	1.95	20160
D2	306295	7.03	0.0%	5.0%	10.0%	85.0%	4.42	31.10	1.95	49875
A1	667021	15.31	0.0%	5.0%	10.0%	85.0%	4.42	67.73	1.95	108613

**Street Capacity Table**  
ASSUMES 36" F-F, 2% CROSS-SLOPE, AND STD. CURB AND GUTTER

	ANALYSIS POINT	FLOW IN STREET cfs	STREET SLOPE	EGL	DEPTH ABOVE FL
Rutledge	AP1	65.2	1.10%	0.98	0.65
Bartlett	AP2	76.1	1.00%	1.04	0.71
Masthead	AP3	42.5	0.20%	0.85	0.79

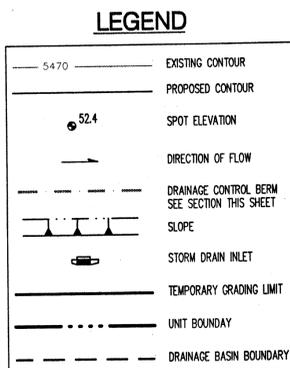
**INLET TABLE**

INLET #	CONTRIBUTING BASIN	INLET TYPE	INLET CONDITION	ACTUAL FLOW cfs	AVAIL HEAD ft	CAPACITY	Notes
I1	1/3 C1 & BYPASS FROM F1	DBL A, DBL WING	sump	25.36	0.85	37.57	INCLUDES A 50% CLOGGING FACTOR
I2	1/3 C1 & BYPASS FROM F1	DBL A, DBL WING	sump	25.36	0.85	37.57	INCLUDES A 50% CLOGGING FACTOR
I3	1/3 C1 & BYPASS FROM F1	DBL A, DBL WING	sump	25.36	0.85	37.57	INCLUDES A 50% CLOGGING FACTOR
I4	1/2 B1	DBL A, DBL WING	sump	32.68	1.00	47.94	INCLUDES A 50% CLOGGING FACTOR
I5	1/2 B1	DBL A, DBL WING	sump	32.68	1.00	47.94	INCLUDES A 50% CLOGGING FACTOR
I6	BASIN F1	EXISTING. DBL A, S WING	on grade	FROM NOMOGRAPH d=1.0', s=0.2%		17.5	FLOW AT INLET = 38.75 CFS
I7	BASIN F1	EXISTING. DBL A, S WING	on grade	FROM NOMOGRAPH d=1.0', s=0.2%		17.5	FLOW AT INLET = 38.75 CFS
I8	BASIN F1	DBL C	on grade	FROM NOMOGRAPH d=.79', s=0.2%		11.75	BYPASS FLOW FROM BASIN F1= 9.50
I9	BASIN F1	DBL C	on grade	FROM NOMOGRAPH d=.79', s=0.2%		11.75	BYPASS FLOW FROM BASIN F1= 9.50

**STORM DRAIN PIPE TABLE**

PIPE #	Size in.	Slope	PIPE Capacity	ACTUAL FLOW	LENGTH	INVERT IN	INVERT OUT
P6	24	0.0100	22.62	11.08	357.00	92.30	88.73
P5	24	0.0100	22.62	11.08	400.00	98.63	84.63
P4	24	0.0100	22.62	11.08	363.00	84.53	80.70
P3B	24	0.0100	22.62	11.08	20.00	80.60	80.40
P3A	24	0.0210	32.78	32.68	32.00	81.07	80.40
P3	42	0.0060	77.93	76.44	450.00	80.40	77.70
P2C	24	0.0130	25.79	25.36	18.00	80.05	79.81
P2B	24	0.0150	27.71	25.36	46.00	80.50	79.81
P2A	24	0.0130	25.79	25.36	18.00	80.05	79.81
P2	42	0.0060	77.93	76.08	336.00	79.71	77.70
P1	54	0.0065	158.54	152.53	92.00	77.60	77.00

PIPE CAPACITIES ARE BASED ON GRAVITY FLOW USING MANNING'S EQN. WHERE n=0.013



**Bohannan & Huston, Inc.**  
 Courtyard 1 7500 Jefferson St. NE Albuquerque, NM 87109-4395  
 ENGINEERING • SPATIAL DATA • ADVANCED TECHNOLOGIES

**CITY OF ALBUQUERQUE  
PUBLIC WORKS DEPARTMENT  
ENGINEERING DEVELOPMENT GROUP**

**JOURNAL CENTER-PHASE 2  
UNIT II: DRAINAGE PLAN & BASIN MAP**

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No. \_\_\_\_\_ Zone Map No. **D-17** Sheet \_\_\_\_\_ Of \_\_\_\_\_

**KEYED NOTES**

- 1 TURNED BLOCK
- 2 EXISTING CHANNEL RUNDOWN

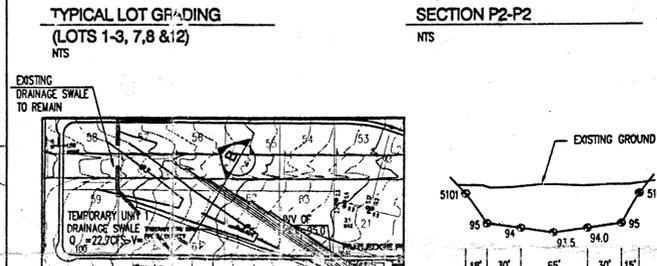
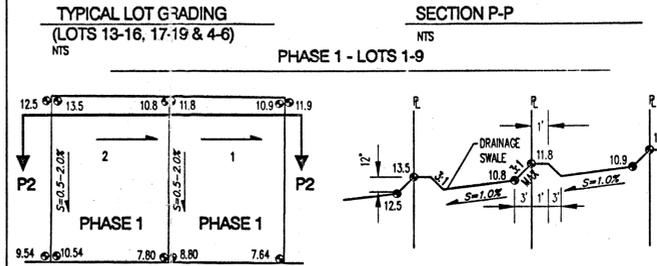
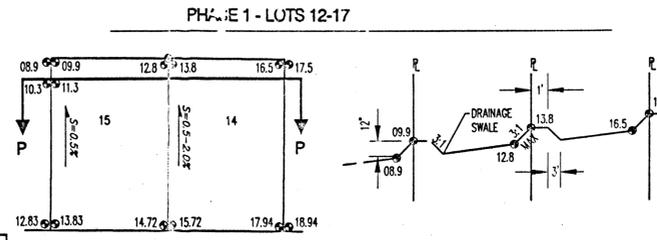
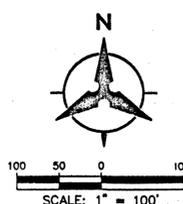
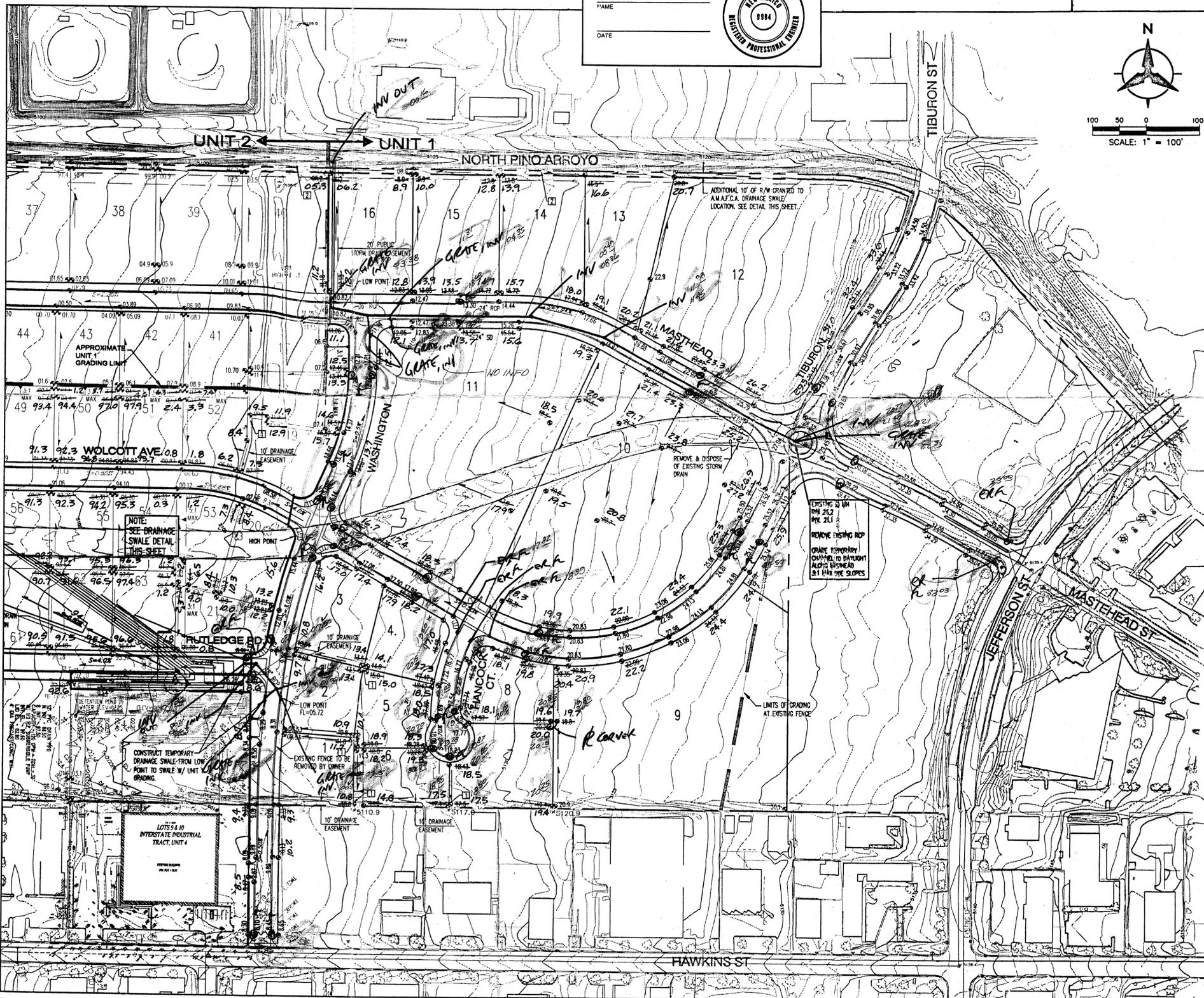
**DRAINAGE CERTIFICATION**

KERRY L. DAVIS OF BOHANNAN HUSTON, N.M.P.E. # 9984, HEREBY CERTIFY THAT THE AS-BUILT DRAINAGE CONDITIONS OF THE SITE ARE IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED GRADING AND DRAINAGE PLAN, TO THE BEST OF MY KNOWLEDGE AND BELIEF. AS-BUILT ELEVATIONS ARE SHOWN ON THE PLAN WHERE THE ORIGINAL DESIGN ELEVATION HAS BEEN CROSSED OUT AND THE AS-BUILT ELEVATION ADDED. AS-BUILT ELEVATIONS WERE VERIFIED BY SEABELL CONSTRUCTION CO., INC., L.S.# \_\_\_\_\_ THIS STATEMENT DOES NOT REPRESENT CERTIFICATION OF CONTRACTOR'S METHODS OR MATERIALS.



I, Carl Smith, do hereby attest to the fact that the as-built information shown hereon is the result of a field survey performed by me or under my direct supervision, and that the same is true and correct. AS OF 15 JAN 01

*Carl Smith*  
Carl Smith S.C.C.I. Survey Manager



**GENERAL NOTES**

- CONTRACTOR MUST OBTAIN A TOPSOIL DISTURBANCE PERMIT FROM THE ENVIRONMENTAL HEALTH DIVISION PRIOR TO CONSTRUCTION.
- THE CONTRACTOR IS TO REFER TO EARTHWORK SPECIFICATIONS PROVIDED BY GEOTEST INC. DATED 10/24/00.
- THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE, AND FEDERAL MEASURES AND REGULATIONS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.
- THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM LOTS INTO PUBLIC RIGHT-OF-WAY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AS PER THE DETAIL ON THIS SHEET AND KETING THE SOIL TO KEEP IT FROM BLOWING AS PER THE EROSION CONTROL DETAIL THIS SHEET.
- ALL STREET ELEVATIONS ARE TOP OF CURB UNLESS OTHERWISE NOTED. VALLEY GUTTER ELEVATIONS ARE SHOWN AT FLOWLINE ELEVATIONS.

**LEGEND**

- 5470 — EXISTING CONTOUR
- — PROPOSED CONTOUR
- 52.4 SPOT ELEVATION
- CMU RETAINING WALL
- CMU WALL
- SWALE
- DIRECTION OF FLOW
- WATER BLOCK
- SLOPE
- STORM DRAIN INLET
- TEMPORARY GRADING LIMIT
- UNIT BOUNDARY

**Bohannan-Houston**  
 Courtyard One 7500 JEFFERSON NE ALBUQUERQUE NEW MEXICO 87109  
 ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

**CITY OF ALBUQUERQUE**  
 PUBLIC WORKS DEPARTMENT  
 ENGINEERING DEVELOPMENT GROUP  
**JOURNAL CENTER-PHASE 2**  
 WAREHOUSE/STORAGE - UNIT 1  
 GRADING AND DRAINAGE PLAN

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.

City Project No. \_\_\_\_\_ Zone Map No. \_\_\_\_\_ Sheet **4** Of **40**

**AS-BUILT INFORMATION**

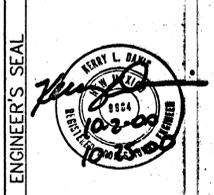
CONTRACTOR	DATE
STARTED BY	DATE
INSPECTOR'S FIELD CHECK BY	DATE
VERIFICATION BY	DATE
CORRECTED BY	DATE

**BENCH MARKS**

ACS Brass Tablet stamped "1-A11-1980"	DATE
Geographic Position (NAD 1987)	DATE
N.M. State Plane Coordinates (Central Zone)	DATE
X = 365,286.00 Y = 1,537,711.91	DATE
Ground-to-BM Factor = 0.9996538	DATE
BM = -0015.38'	DATE
3.00' 1979 Elevation = 5379.79'	DATE

**SURVEY INFORMATION**

FIELD NOTES	DATE
BY	DATE
NO.	DATE



**ENGINEER'S SEAL**

REVISIONS	By	Date
DESIGN		



# REVISED DRAINAGE MANAGEMENT PLAN FOR: JOURNAL CENTER

REVISED: NOVEMBER, 1990  
 PREPARED BY: BOHANNAN-HUSTON, INC.

The purpose of this revised drainage management plan is to update the plan to reflect the development of Journal Center since the plan was first approved in 1984. Since that time, Journal Center has been replatted, new streets constructed and new businesses have moved in. All new development has conformed to the 1984 plan and individual development plans have been approved by the City. The drainage concepts and basins remain substantially identical to the 1984 drainage management plan.

Additional functions of the updated plan will be to guide engineers in preparing future drainage plans and aiding City review of these future plans. Drainage basins which have been altered slightly have been re-analyzed and are shown in the table below to have no significant nor adverse impact on drainage facilities.

The criteria used for the minor re-analysis performed in this updated plan remained identical to that previously used and approved in the original 1984 plan.

The purpose of this plan is to outline drainage patterns, flow rates and facility capacities for the Journal Center Industrial/Commercial Park. The plan also serves to update recommendations made in an October 1980 report entitled *Journal Center Interim Drainage Report* based on current thinking outlined in the *Drainage Ordinance and Development Process Manual (DPM)*.

It is proposed that runoff from sites be allowed to discharge to street rights-of-way or facilities in a free discharge manner. This runoff will be directed to three primary outfalls: the North Pino Arroyo Channel, Jefferson Street storm drain and Los Angeles Blvd. The North Pino Arroyo is a concrete lined with grass free board and discharges runoff into the North Diversion Channel. The Jefferson Street storm drain discharges into the Domingo Baca Arroyo, north of Los Angeles Blvd. Runoff collected in Los Angeles Blvd. discharges into the North Diversion Channel. The accompanying plan identifies flow directions and the location of the primary outfalls.

Runoff rates and facility capacities are contained in the tables below. Based on this information, three points should be highlighted:

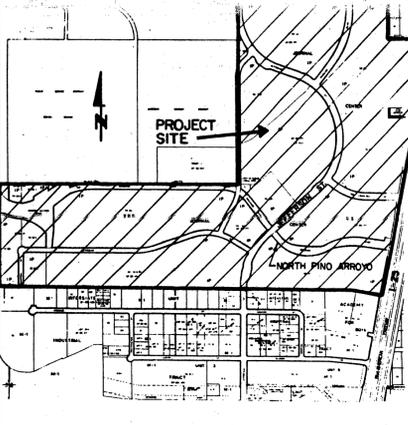
1. Current runoff criteria yields flow rates less than those used in the 1980 report.
2. Approximately 112 cfs will be directed to Los Angeles Blvd. during the 100-year storm. 226 cfs is collected in the storm drain system and conveyed to the Domingo Baca Arroyo. The 112 cfs represents a figure less than the undeveloped flow rate from the site prior to its development.

3. Section 8C of the Drainage Ordinance stipulates that the curb flow line depth shall not exceed 0.5 feet during the 10-year storm in arterial street sections. As the values indicate, this criteria is exceeded at several locations along Jefferson Street.

As provided in Section 6H of the Ordinance, a variance to the requirement outlined in No. 3 is requested for the following reasons:

1. Considerable expense has already been applied to the construction of drainage facilities in the area. The Pino Arroyo Channel and Jefferson Street storm sewer represent an investment of approximately 2 million dollars. Design was guided and approved based upon criteria in effect at the time assuming free discharge from all parcels.
2. The total length of street over which the criteria is exceeded is approximately 3000 feet. This represents a relatively short distance compared to the total length of Jefferson Street running through and south from the project.

BASED ON THE INFORMATION PRESENTED IN THIS PLAN, IT IS PROPOSED THAT A FREE DISCHARGE MANAGEMENT APPROACH BE APPROVED FOR ALL PARCELS WITHIN THE PARK, AND THAT A VARIANCE TO SECTION 8C BE GRANTED FOR THE 10-YEAR FLOW CRITERIA IN JEFFERSON STREET.

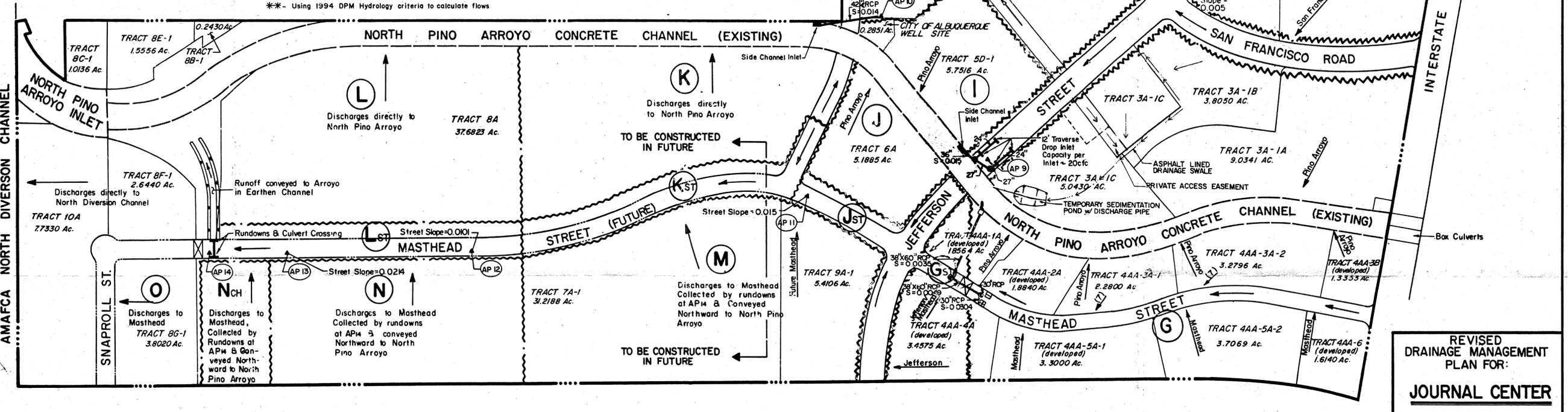


LOCATION MAP  
 ZONE ATLAS D-17-Z

BASIN HYDROLOGY (Developed Conditions)									
BASIN ID	AREA	DISCHARGES TO	LONGEST REACH (FT.)	SLOPE (AVERAGE)	TC (MIN.)	INTENSITY (IN/HR.)	Q 100	Q 100 1980 REPORT	AP
A**	5.4	Headline	1200	0.02	10.0	4.7	61	95	1
B-1**	18.0	Jefferson	1650		10.0	4.7	68	N.A.	2
C	27.6	Diversion Berm	1200		10.0	4.7	102	116	3
D-1	14.3	Tiburon	1000		10.0	4.7	54	N.A.	4
E-1	13.1	Jefferson	1100		10.0	4.7	49	N.A.	5
F	19.6	Pino Arroyo	1250		10.4	4.6	72	73	6
G	22.5	Pino Arroyo	1250		10.4	4.6	83	84	7
GST	3.0	Jefferson	500		10.0	4.7	12	12	8
H-1	29.1	Tiburon	1600		10.0	4.7	109	N.A.	9
I	5.2	Pino Arroyo	450		10.0	4.7	20	21	10
J	4.6	Pino Arroyo	450		10.0	4.7	17	19	11
JST	0.6	Masthead	1000		10.0	4.7	3	2	12
K	15.6	Pino Arroyo	1200		10.0	4.7	59	63	13
KST	1.3	Masthead	1300		10.0	4.7	5	5	14
L	15.4	Pino Arroyo	1200		10.0	4.7	58	64	15
LST	1.4	Masthead	1200		10.0	4.7	5	6	
M	25.5	Masthead	1200		10.0	4.7	96	87	
N	13.0	Masthead	1200		10.0	4.7	49	51	
NCH	3.4	Masthead	650		10.0	4.7	13	14	
O	5.3	Snaproll	650	0.02	10.0	4.7	20	22	
A-1**	19.6	Headline	N.A.	N.A.	N.A.	N.A.	85	N.A.	

STREET & STORM SEWER HYDRAULICS														
AP	CONTRIBUTING BASIN(S)	10-YEAR STORM (all values cfs)					100-YEAR STORM (all values cfs)					COMMENTS		
		Q	STREET CAPACITY	STORM SEWER(S) CAPACITY	FLOW IN STREET	FLOW IN SS	Q	STREET CAPACITY	SS CAPACITY	FLOW IN STREET	FLOW IN SS			
1	A, OF-1	64	112	N.A.	64	N.A.	98	112	N.A.	98	N.A.	Street has adequate capacity.		
2	B-1	45	18-East half of street	N.A.	45	N.A.	68	200	N.A.	45	N.A.	10 year street capacity exceeded.		
3	OF-1, A, B-1	109	36-Full street section	59	69	40*	166	200	59	126	40	" " "		
4	OF-1, AB-1, Street	113	30-Full street section	59	73	40	176	170	59	136	40	" " "		
5	D-1	35	100	(48" RCP)	0	35	54	100	107	0	54	Basin D runoff collected in Triple 'C' inlets.		
6	C	67	N.A.	(48" RCP)	N.A.	67	102	N.A.	120	N.A.	102	Basin C runoff collected in 48" RCP inlet.		
7	Street, OF-1, A, B-1, C, D-1	211	36	(72" RCP)	64	147	321	180	232	96	226	90 cfs discharged to Paseo del Norte.		
8	E-1	32	9-East half of street	N.A.	32	N.A.	49	104	N.A.	49	N.A.	10 year street capacity exceeded.		
9	E-1, Street	46	25-East half of street	83	0	46	69	200	83	0	69	74 cfs collected by inlets.		
10	H-1	72	N.A.	(42" RCP)	N.A.	72	109	N.A.	120	N.A.	109	Runoff conveyed to Pino Arroyo.		
11	GST, JST	10	160	N.A.	10	N.A.	15	160	N.A.	15	N.A.	" " "		
12	API1, KST, M	76	N.A.	N.A.	76	N.A.	116	130	N.A.	116	N.A.	" " "		
13	AP2, N	108	N.A.	N.A.	108	N.A.	165	160	N.A.	165	N.A.	" " "		
14	API3, NCH	117	N.A.	N.A.	N.A.	N.A.	178	N.A.	N.A.	N.A.	N.A.	Runoff collected in concrete rundowns.		
15	A, OFFSITE	N.A.	N.A.	N.A.	N.A.	N.A.	43.1	84.7	N.A.	43.1	N.A.	" " "		

- NOTES**
1. Basin Hydrology based on DPM Criteria, Chapter 22 (DPM Edition, 1984).
    - a. Tc - Plate 22.2 13-1 (10 minute minimum)
    - b. Intensity - Plate 22.2 D-2
    - c. 'C' for 85% Impervious = 0.80 - Plate 22.2 C-1
    - d. 100 year rainfall = 2.2 in. - Plate 22.2 D-1
  2. Street capacities determined using DPM Criteria, Chapter 22, Plates 22.3 D-1 thru 22.3 D-4 (DPM Edition, 1984).
  3. Storm sewer sized to operate under-pressure flow - Plate 22.3 B-5.
  4.  $Q_{10} = 0.657(Q_{100})$  - Plate 22.2 D-1 (DPM Edition, 1984).
  5. Jefferson Street classified as min. arterial - 10 year street capacities based on 0.5' at curb flowline.
  6. Double 'B' and 'C' inlets assumed to collect an average of 10cfs during 100-year flow.
  7. The south half (max.) of these lots may drain to Masthead Street as necessary.
  8. The drainage basin for this 37 cfs (100-year storm) discharge is located east of and within the right-of-way of I-25. Calculations for this discharge can be found under City Drainage file D-17/030. Handling of this 37 cfs discharge will occur as follows:
    - a. Interim (undeveloped Basin A and B-1) Plan - As shown, flow is discharged to the surface and will drain by overland flow to Headline Road.
    - b. Ultimate Plan - With the development of Basins A and B-1, the flow will be carried by surface facilities or underground storm drains to the Domingo Baca Arroyo or to Headline Road. This extension of drainage facilities may be performed in phases, i.e., each development will construct only its required portion of the facility, in accordance with the Drainage Ordinance and approved site-specific drainage plans.
  9. The 37 cfs (100-year) offsite flow is labeled OF-1. The 10-year storm value is 24 cfs.
  10. The high point in Headline Blvd. is located at the Lang Ave. intersection. This condition will cause a flow split. Approximately 37 cfs is assumed to flow north on Headline Blvd.



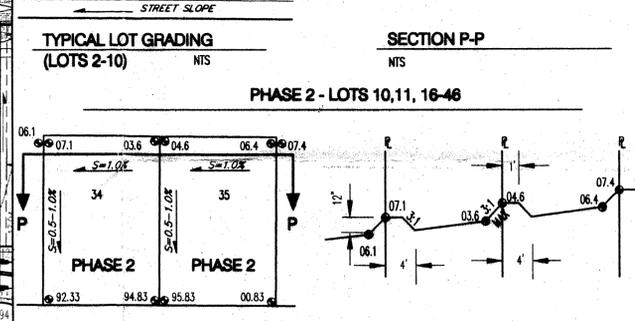
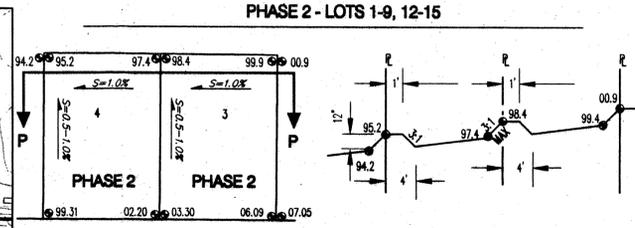
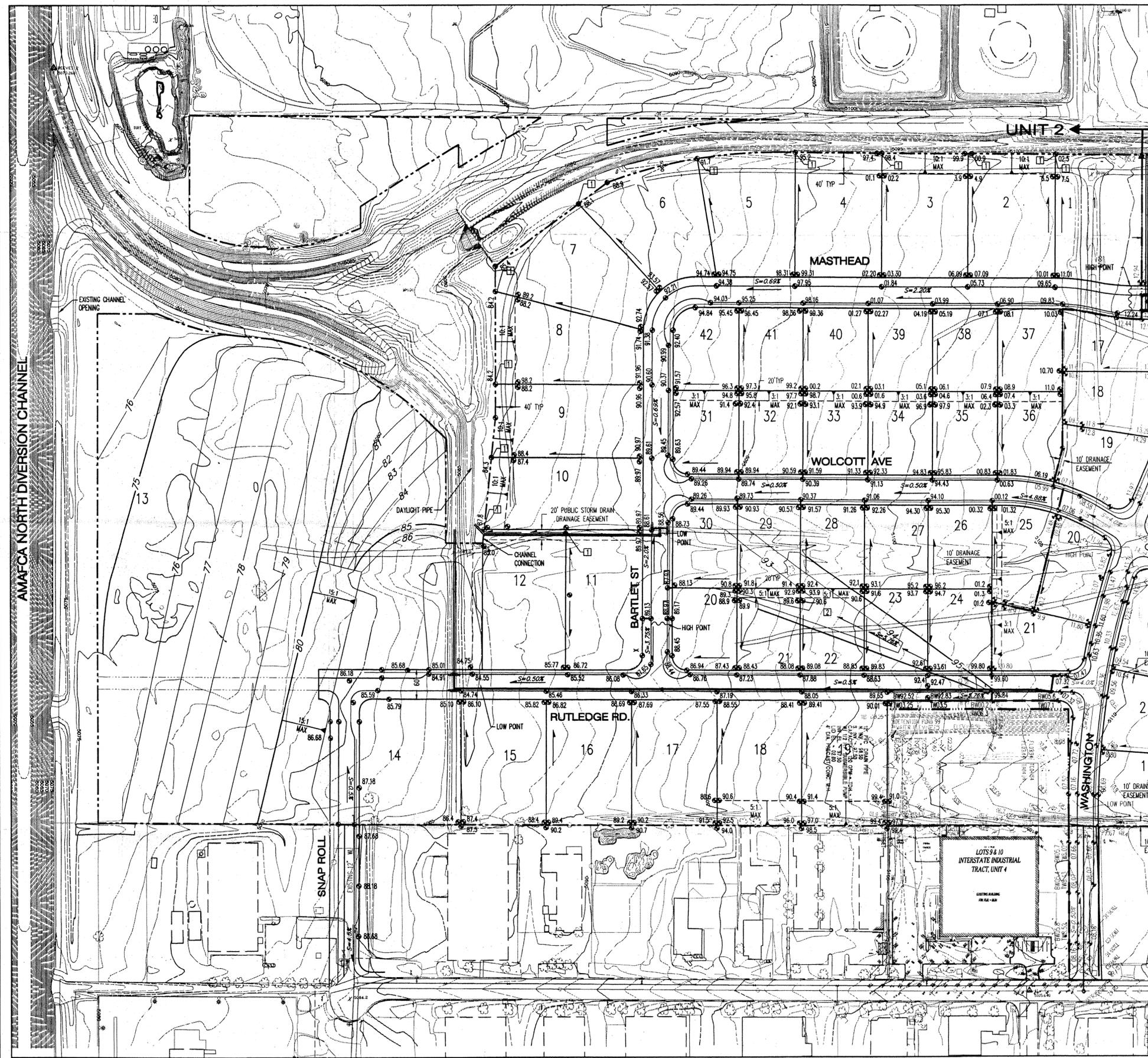
**LEGEND**

- PROPERTY LINE
- BASIN DIVIDE
- WATER BLOCK
- DOUBLE 'B' INLET
- DOUBLE 'C' INLET
- DOUBLE 'D' INLET
- TRIPLE 'C' INLET
- STORM SEWER & MANHOLE
- MAJOR FLOW DIRECTION & DISCHARGE LOCATION
- ANALYSIS POINT
- DEVELOPED TRACTS ARE NOTED AS SUCH

ORIGINAL PLAN: JULY 1984  
 REVISION NO. 4: NOVEMBER 1990  
 REVISION NO. 5: DECEMBER 1992

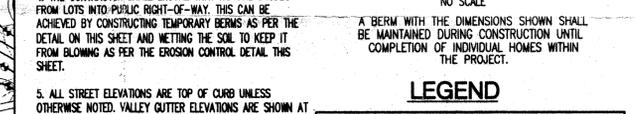
DATE: 12-11-92  
 10-31-94

JOB No. 901001



**GENERAL NOTES**

- CONTRACTOR MUST OBTAIN A TOPSOIL DISTURBANCE PERMIT FROM THE ENVIRONMENTAL HEALTH DIVISION PRIOR TO CONSTRUCTION.
- THE CONTRACTOR IS TO REFER TO EARTHWORK SPECIFICATIONS AS NOTED IN THE SOILS REPORT.
- THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE, AND FEDERAL MEASURES AND REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.
- THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM LOTS INTO PUBLIC RIGHT-OF-WAY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AS PER THE DETAIL ON THIS SHEET AND NETTING THE SOIL TO KEEP IT FROM BLOWING AS PER THE EROSION CONTROL DETAIL THIS SHEET.
- ALL STREET ELEVATIONS ARE TOP OF CURB UNLESS OTHERWISE NOTED. VALLEY GUTTER ELEVATIONS ARE SHOWN AT FLOWLINE ELEVATIONS.



**KEYED NOTES**

- 1 TURNED BLOCK JUST ABOVE PROPOSED GRADE
- 2 TEMPORARY DAYLIGHT CHANNEL BUILT W/ UNIT 1 TO BE REMOVED W/ UNIT II

**LEGEND**

— 5470 —	EXISTING CONTOUR
— — — — —	PROPOSED CONTOUR
• 52.4	SPOT ELEVATION
— — — — —	CMU RETAINING WALL
— — — — —	CMU WALL
— — — — —	SWALE
— — — — —	DIRECTION OF FLOW
— — — — —	WATER BLOCK
— — — — —	SLOPE
— — — — —	STORM DRAIN INLET
— — — — —	TEMPORARY GRADING LIMIT
— — — — —	UNIT BOUNDARY

**Bohannon Huston**  
 Countywide One 7500 JEFFERSON NE ALBUQUERQUE NEW MEXICO 87109  
 ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

**CITY OF ALBUQUERQUE**  
 PUBLIC WORKS DEPARTMENT  
 ENGINEERING DEVELOPMENT GROUP  
 JOURNAL CENTER-PHASE 2: WAREHOUSE/STORAGE  
 UNIT II: GRADING AND DRAINAGE PLAN

Design Review Committee City Engineer Approval Mo./Day/Yr. Mo./Day/Yr.  
 City Project No. Zone Map No. Sheet X Of X  
 D-17 X X

DRB# BHI JOB NO. 01164

AS-BUILT INFORMATION	
CONTRACTOR	DATE
DESIGNED BY	DATE
CHECKED BY	DATE
RECORDED BY	DATE
MICRO-FILM INFORMATION	
DATE	NO.
BENCH MARKS	
DATE	BY
SURVEY INFORMATION	
DATE	BY
FIELD NOTES	
NO.	BY
ENGINEER'S SEAL	
By	DATE
REVISIONS	DATE
DESIGN	DATE

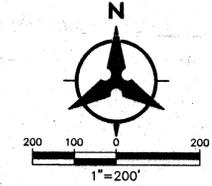
**GENERAL NOTES**

- EXISTING ZONING: IP  
PROPOSED ZONING: IP  
PROPOSED DEVELOPMENT:  
INDUSTRIAL PARK: OFFICE & OFFICE WAREHOUSE PROPERTIES
- GROSS ACREAGE: 87.6139 Acres.  
NET ACREAGE: 71.3789 Acres.  
TOTAL NUMBER OF LOTS: 63 D.U.  
PROPOSED DENSITY: 0.88 D.U./Acre.
- TYPICAL LOT ACREAGE: 4 TYPES  
UNIT 1:  
1-8 0.50-0.79 ACRES  
9-12 4.06-4.60 ACRES  
13 14.1 ACRES  
14-19 1.0 ACRES  
17-2 0.5 ACRES  
UNIT 2:  
1-19 1.0-1.1 ACRES  
20-42 0.5 ACRES
- ALL STREETS AND DRAINAGE IMPROVEMENTS ARE TO BE PUBLIC, TO BE DEDICATED FOR MAINTENANCE TO THE CITY OF ALBUQUERQUE.
- ALL SANITARY AND WATER UTILITIES IN THE STREET R/W ARE TO BE PUBLIC, AND TO BE DEDICATED FOR MAINTENANCE TO THE CITY OF ALBUQUERQUE.
- THIS SUBDIVISION LIES WITHIN THE CITY OF ALBUQUERQUE. WATER AND SANITARY SEWER CAPABILITIES ARE BASED ON THE WATER AND SANITARY SEWER INFRASTRUCTURE IMPROVEMENTS MUST BE APPROVED BY THE CITY OF ALBUQUERQUE.
- DEVELOPMENT REQUIREMENTS FOR INDIVIDUAL LOTS INCLUDING SETBACKS, LANDSCAPING, PARKING ETC. SHALL CONFORM TO THE REQUIREMENTS OF THE JOURNAL CENTER MASTER PLAN.
- LANDSCAPING WITHIN R/W WILL BE MAINTAINED SUBJECT TO APPROVAL BY THE CITY OF ALBUQUERQUE.

NCS TRIANGULATION STATION MONUMENT STAMPED "REEVES"  
GEOGRAPHIC POSITION (NAD 1927)  
N.M. STATE PLANE COORDINATES (CENTRAL ZONE)  
X=393,890.55 Y=1,516,528.81  
GROUND TO GRID FACTOR = 0.99967155  
DELTA ALPHA = -00°12'16"  
NGVD 1929 ELEVATION = 5073.27

**LEGEND**

- SUBDIVISION BOUNDARY LINE
- NEW LOT LINE
- OLD LOT LINE
- ADJOINING PROPERTY LINE
- EASEMENT LINE
- CENTERLINE
- CITY OF ALBUQUERQUE SURVEY CONTROL MONUMENT
- 4" ALUMINUM CAP STAMPED "CITY OF ALBUQUERQUE CENTERLINE MONUMENTATION, DO NOT DISTURB, P.L.S. 6544"



ACS BRASS TABLET STAMPED "1-25-14, 1969"  
GEOGRAPHIC POSITION (NAD 1927)  
N.M. STATE PLANE COORDINATES (CENTRAL ZONE)  
X=399,828.26 Y=1,514,860.93  
GROUND TO GRID FACTOR = 0.99966298  
DELTA ALPHA = -00°11'35"  
NGVD 1929 ELEVATION = 5196.73

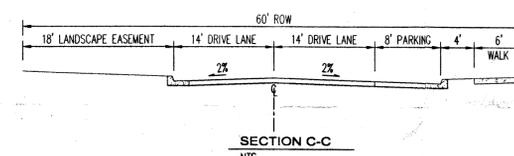
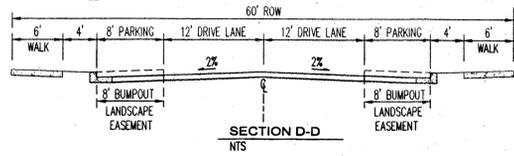
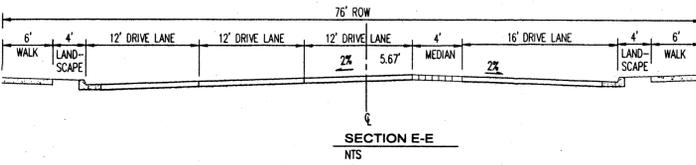
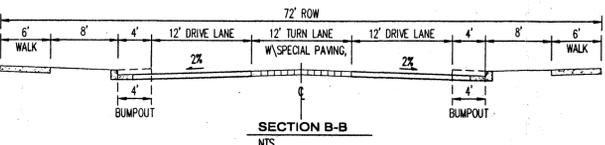
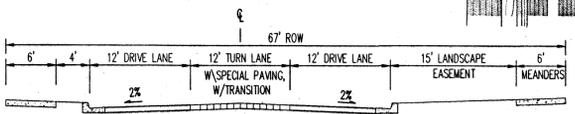
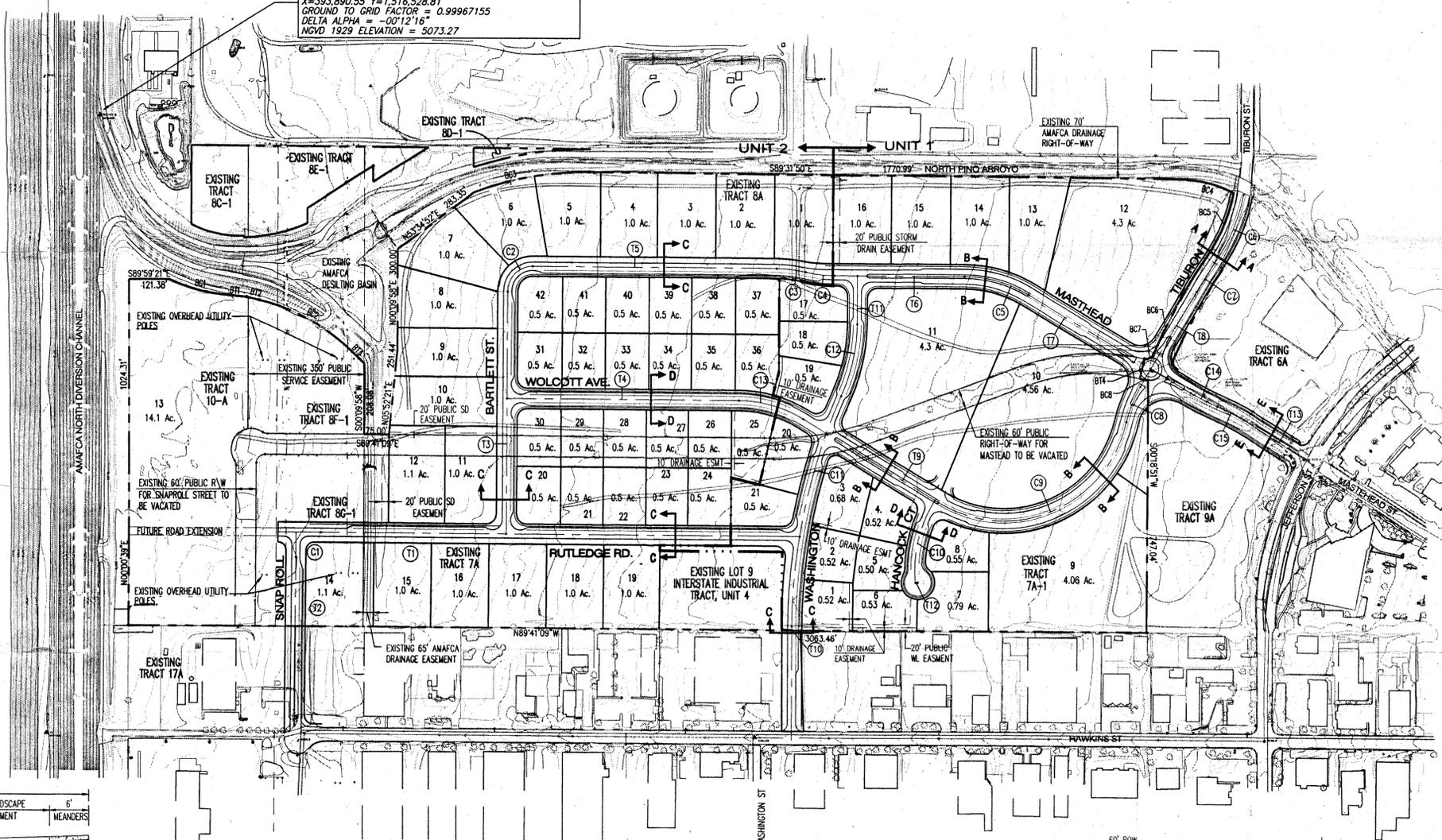
**SURVEY NOTES:**

- ALL BOUNDARY CORNERS ARE MARKED AS SHOWN.
- STREET CENTERLINE MONUMENTATION SHALL BE INSTALLED AT SELECTED CENTERLINE P.C.'S, P.T.S., ANGLE POINTS AND STREET INTERSECTIONS AND SHOWN THUS (C) WILL BE MARKED BY A FOUR (4") ALUMINUM CAP STAMPED "CITY OF ALBUQUERQUE CENTERLINE MONUMENTATION, DO NOT DISTURB, P.L.S. 6544"
- THE SUBDIVISION BOUNDARY WILL BE TIED TO THE NEW MEXICO STATE PLANE COORDINATE SYSTEM AS SHOWN.
- BASIS OF BEARINGS WILL BE NEW MEXICO STATE PLANE GRID BEARINGS.
- DISTANCES SHALL BE GROUND DISTANCES.
- MANHOLES WILL BE OFFSET AT ALL POINTS OF CURVATURE, POINTS OF TANGENCY, STREET INTERSECTIONS AND ALL OTHER ANGLE POINTS TO ALLOW THE USE OF CENTERLINE MONUMENTATION.

APPROVED FOR MONUMENTATION AND STREET NAMES

*[Signature]* 8/25/00  
CITY SURVEYOR DATE

TIBURON INVESTMENT CO.  
*[Signature]* 8.24.00  
DICK ELKINS, TREASURER DATE  
TIBURON INVESTMENT CO.



**CENTERLINE TANGENT DATA**

No.	BEARING	DISTANCE
T1	S 89°40'04"E	1442.32'
T2	S 00°19'57"W	574.18'
T3	S 00°19'57"W	714.30'
T4	S 89°40'04"E	700.41'
T5	S 89°40'04"E	737.28'
T6	S 89°40'04"E	390.23'
T7	S 59°20'37"E	568.21'
T8	N 30°38'23"E	327.53'
T9	S 59°00'27"E	474.09'
T10	N 00°07'39"E	346.33'
T11	N 07°19'56"E	142.89'
T12	N 85°48'20"E	7.13'
T13	S 59°20'37"E	234.60'

**CENTERLINE CURVE DATA**

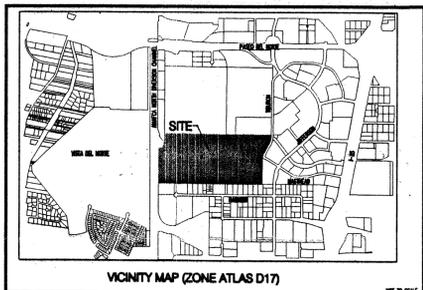
No.	DELTA	TANGENT	ARC	RADIUS
C1	89°58'58"	75.00'	75.00'	117.81'
C2	89°58'57"	75.00'	117.81'	75.00'
C3	131°02'24"	43.88'	87.37'	380.00'
C4	131°02'24"	43.88'	87.37'	380.00'
C5	301°27'27"	102.97'	201.12'	380.00'
C6	223°43'36"	112.71'	222.50'	584.68'
C7	03°31'32"	51.36'	102.68'	1668.66'
C8	17°08'49"	57.29'	113.72'	380.00'
C9	107°28'59"	518.09'	712.85'	380.00'
C10	38°32'41"	132.87'	255.64'	380.00'
C11	24°27'03"	361.55'	712.09'	1668.66'
C12	24°14'46"	107.40'	211.59'	500.00'
C13	30°39'37"	104.17'	203.35'	380.00'
C14	06°23'13"	44.64'	89.18'	800.00'
C14	06°24'47"	44.82'	89.54'	800.00'

**BOUNDARY TANGENT DATA**

No.	BEARING	DISTANCE
B1	S 83°59'21"E	74.17'
B2	S 76°30'00"E	38.16'
B3	S 45°45'00"E	49.94'
B4	S 12°38'46"W	60.00'

**BOUNDARY CURVE DATA**

No.	DELTA	TANGENT	ARC	RADIUS
BC1	18°39'37"	82.97'	164.47'	505.00'
BC2	30°45'00"	166.60'	325.34'	605.20'
BC3	20°24'18"	179.57'	355.34'	997.76'
BC4	24°48'20"	87.81'	172.87'	389.30'
BC5	22°34'36"	106.73'	210.68'	534.68'
BC6	11°06'48"	165.26'	329.48'	1668.66'
BC7	79°29'59"	20.79'	34.69'	25.00'
BC8	02°26'01"	12.85'	25.70'	605.04'



# PRELIMINARY PLAT JOURNAL CENTER- PHASE 2 OFFICE AND OFFICE / WAREHOUSE PROPERTIES

ALBUQUERQUE, NEW MEXICO  
AUGUST 2000

(REPLAT OF TRACTS 7A-1, 8A, 8F-1, 8G-1, 10-A)

**Bohannon Huston**  
Court yard One 7500 JEFFERSON NE Albuquerque NEW MEXICO 87109  
ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

BHI JOB NO. 01164

COPYRIGHT BOHANNAN HUSTON, INC. 2000