



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

MAYOR
KEN SCHULTZ

CHIEF
ADMINISTRATIVE OFFICER

GENE ROMO

DEPUTY CAO
PUBLIC SERVICES

FRANK MARTINEZ

DEPUTY CAO
PLANNING/DEVELOPMENT

BILL MUELLER

April 28, 1988

Chris Weiss, P.E.
Weiss-Hines Engineering, Inc.
1100 Alvarado, NE
Albuquerque, New Mexico 87110

RE: REVISED DRAINAGE PLAN FOR LOTS 1 - 4 OF WASHINGTON BUSINESS PARK
(C-17/D1U4) REVISION DATE OF APRIL 21, 1988

Dear Mr. Weiss:

Based on the information provided on your resubmittal of April 21, 1988, revisions as indicated are acceptable for Building Permit approval.

Please be advised that when final certification for Lots 1 through 4 is submitted, items listed on my March 4, 1988 letter to you will need to be addressed.

Please attach a copy of the approved plan to the construction plans prior to sign-off by Hydrology.

If I can be of further assistance, please feel free to call me at 768-2650.

Cordially,

Bernie J. Montoya
Bernie J. Montoya, C.E.
Engineering Assistant

BJM/bsj

DRAINAGE INFORMATION SHEET

PROJECT TITLE: WASHINGTON ^{BUS.} PARK ZONE ATLAS/DRAINAGE FILE # C-17/D104

LEGAL DESCRIPTION: TRACTS B-1, B-2, B-3 CLIFFORD IND. PARK

CITY ADDRESS: WASHINGTON ST + WASHINGTON PL. NE

ENGINEERING FIRM: Weiss-Hines Engineering, Inc. CONTACT: STEVE CLARK

ADDRESS: 1100 Alvarado N.E. PHONE: 266-3444

OWNER: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

ARCHITECT: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

SURVEYOR: _____ CONTACT: _____

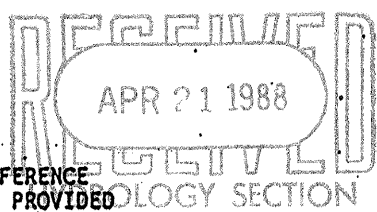
ADDRESS: _____ PHONE: _____

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

____ YES
____ NO
____ COPY OF CONFERENCE RECAP SHEET PROVIDED



DRB. NO. _____
EPC NO. _____
PROJECT NO. _____

TYPE OF SUBMITTAL:

- ____ DRAINAGE REPORT
- DRAINAGE PLAN
- ____ CONCEPTUAL GRADING & DRAIN PLAN
- GRADING PLAN
- ____ EROSION CONTROL PLAN
- ____ ENGINEER'S CERTIFICATION
- Resubmittal

CHECK TYPE OF APPROVAL SOUGHT:

- ____ SECTOR PLAN APPROVAL
- ____ SKETCH PLAT APPROVAL
- ____ PRELIMINARY PLAT APPROVAL
- ____ SITE DEVELOPMENT PLAN APPROVAL
- ____ FINAL PLAT APPROVAL
- BUILDING PERMIT APPROVAL
- ____ FOUNDATION PERMIT APPROVAL
- ____ CERTIFICATE OF OCCUPANCY APPROVAL
- ____ ROUGH GRADING PERMIT APPROVAL
- ____ GRADING/PAVING PERMIT APPROVAL
- ____ OTHER _____ (SPECIFY)

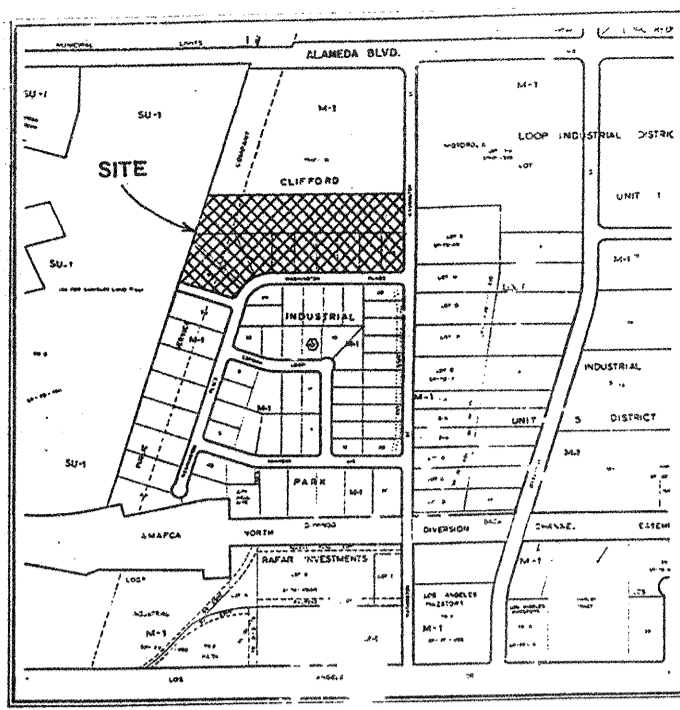
DATE SUBMITTED: 4-21-88

BY: Weiss-Hines Eng. Inc.

REV. 10/85

10

DATE RECEIVED _____
BY _____



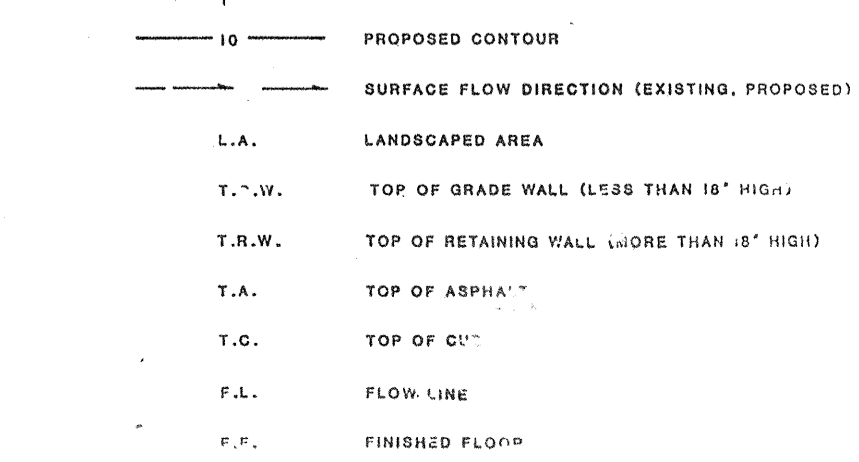
VICINITY MAP 1" = 1200' C-7-Z

NOTES:
 BENCH MARK - ACS BRASS CAP IN CONCRETE (8-C-17, 1975), ELEV. 5110.29
 T.B.M. - TOP OF CONCRETE CURB AT W-NW CURB RETURN AT INTERSECTION OF WASHINGTON ST. & WASHINGTON PL. ELEV. 5109.14
 AREA OF PARCEL - LOTS 1-8 : 3.5057 AC.
 TRACT B-1 : 17.1652 AC.
 TRACT B-2 : 4.9218 AC.
 TRACT B-3 : 7.5019 AC.
 TOTAL 33.0846 AC.

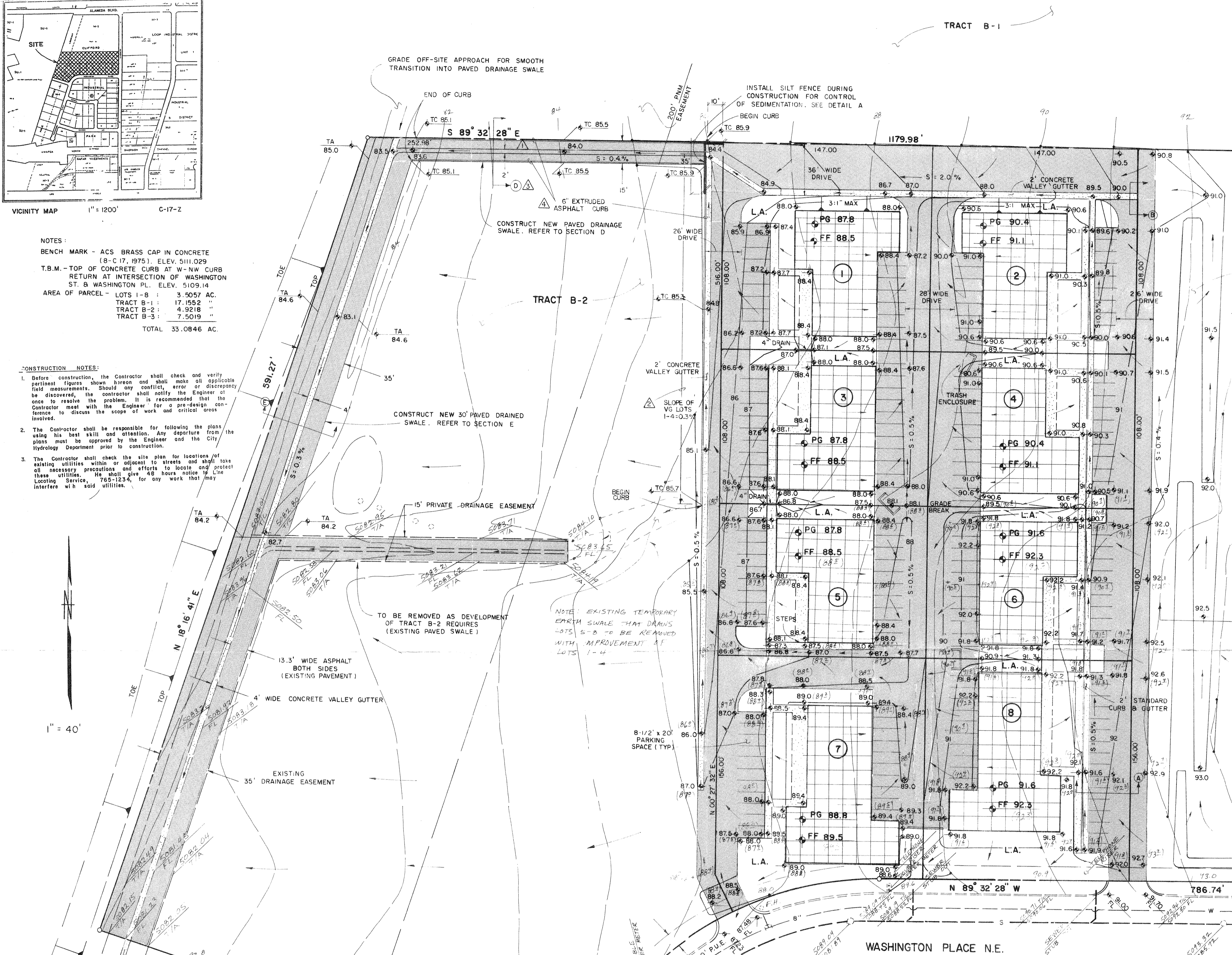
- CONSTRUCTION NOTES:**
- Before construction, the Contractor shall check and verify pertinent figures shown herein and shall make all applicable field measurements. Should any conflict, error or discrepancy be discovered, the contractor shall notify the Engineer at once to resolve the problem. It is recommended that the Contractor meet with the Engineer for a pre-design conference to discuss the scope of work and critical areas involved.
 - The Contractor shall be responsible for following the plans using his best skill and attention. Any departure from the plans must be approved by the Engineer and the City Hydrology Department prior to construction.
 - The Contractor shall check the site plan for locations of existing utilities within or adjacent to streets and shall take all necessary precautions and efforts to locate and protect all these utilities. He shall give 48 hours notice to the Locating Service, 765-1234, for any work that may interfere with said utilities.

1" = 40'

- LEGEND**
- SIDEWALK, CURB & GUTTER (EXISTING, PROPOSED)
 - PROPOSED ASPHALT
 - BUILDING (EXISTING, PROPOSED)
 - PROPERTY LINE
 - EXISTING SPOT ELEVATION
 - EXISTING CONTOUR
 - PROPOSED SPOT ELEVATION
 - PROPOSED CONTOUR
 - SURFACE FLOW DIRECTION (EXISTING, PROPOSED)
 - L.A. LANDSCAPED AREA
 - T.R.W. TOP OF GRADE WALL (LESS THAN 18" HIGH)
 - T.R.W. TOP OF RETAINING WALL (MORE THAN 18" HIGH)
 - T.A. TOP OF ASPHALT
 - T.C. TOP OF CURB
 - F.L. FLOW LINE
 - F.F. FINISHED FLOOR



SECTION A STANDARD CURB & GUTTER NTS
 SECTION B VALLEY GUTTER NTS
 SECTION C EARTH BERM NTS
 SECTION D DRAINAGE SWALE NTS



RESUBMITTAL - 4-21-88:
 REGRADE PRIVATE DRAINAGE SWALE
 REGRADE WEST VALLEY GUTTER
 REVISE SECTION B CALCULATIONS FOR DRAINAGE SWALE
 INSTALL EXTRUDED ASPHALT CURB
 CHRIS WEISS, P.E. DATE

RESUBMITTAL - 2-23-88:
 AS-BUILT ELEVATIONS SHOWN FOR LOTS 5, 6, 7 & 8 TO INSURE COMPLIANCE WITH ORIGINAL SUBMITTAL AS-BUILT INFORMATION IS SHOWN AS ELEVATIONS (1978)
 CHRIS WEISS, P.E. DATE

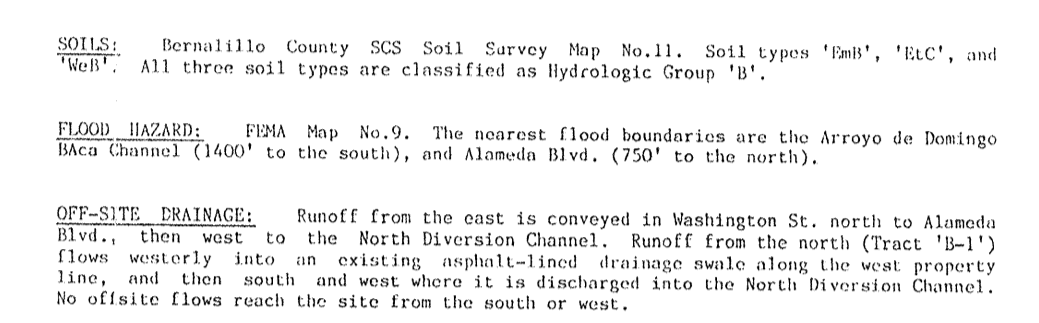
CERTIFICATION STATEMENT
 LOTS 5, 6, 7 & 8 WERE INSPECTED FOLLOWING CONSTRUCTION AND FOUND TO BE IN SUBSTANTIAL COMPLIANCE WITH THIS PLAN.
 CHRIS WEISS, P.E. DATE

SCOPE:
 The proposed improvements consist of eight one-story frame and stucco, slab-on-grade office/warehouse buildings, asphalt-paved drives and parking areas, and landscaped areas. Paved drainage swales will be extended on the west property line, and constructed on the north property line.
 The present site is undeveloped land sloping at 2% from east to west. A 35" wide paved drainage swale line along and inside the south half of the west property line. A 15" wide paved drainage swale runs 250' east from the midpoint of the west property line. The intent of this plan is to show:
 a) Grading relationships between the existing ground elevations and proposed finished elevations in order to facilitate positive drainage to designated discharge points.
 b) The extent of proposed site improvements, including buildings, walks and pavement.
 c) The flow rate/volume of rainfall runoff across or around these improvements and methods of handling these flows to meet City requirements for drainage management.
 d) The relationship of onsite improvements with existing neighboring property to insure an orderly transition between proposed and surrounding grades.

GENERAL NOTES: This Grading/Drainage Plan is an extension of the Master Drainage Report for Clifford Industrial Park, prepared in August, 1982, by Mountain-Houston, Inc., and approved by the City of Albuquerque.
LEGAL: Lots 1-8 and southern portion of Tract 'B' of Clifford Industrial Park, Plat C-21-8A (2 of 4), Metes and bounds on plan.
SURVEYOR: Clouse and Associates, Inc., Albuquerque, NM, December, 1985.
P.L.M.: ACS brass tablet stamped "2437, 1975", contained in a drill hole in top of concrete curb located on west side of Washington St., approximately 0.3 mile north of intersection of Washington St. and Los Angeles Blvd. Elevation = 5,111.029'.
T.B.M.: Top of concrete curb at 8-W curb return at intersection of Washington Street and Washington Place. Elevation = 5,109.14'.
SOILS: Bernalillo County SES Soil Survey Map No. 11. Soil types 'Fm', 'E1C', and 'U1P'. All three soil types are classified as hydrologic Group 'B'.
FLOOD HAZARD: FEMA Map No. 9. The nearest flood boundaries are the Arroyo de Domingo (1400' to the south), and Alameda Blvd. (750' to the north).
OFF-SITE DRAINAGE: Runoff from the east is conveyed in Washington St. north to Alameda Blvd., then west to the North Diversion Channel. Runoff from the north (Tract 'B-1') flows westerly into an existing asphalt-lined drainage swale along the west property line, and then south and west where it is discharged into the North Diversion Channel. No offsite flows reach the site from the south or west.
EROSION CONTROL: All sediment generated during construction is to be retained on the site. Silt fence to be installed as shown on plans.
CALCULATIONS: Calculations are based on the City of Albuquerque D.P.M. Manual, Vol. II for the 100 year-6 hour storm, using the Rational Formula to compare the existing and proposed runoff rates. Tract 'B-1' (offsite, adjacent to the north) flows are included in the calculations since these flows drain through the paved drainage swale inside the west property line of the proposed developed site.

RATIONAL METHOD - Q = C I A

BASIN	AREA (AC)	C ^o	T _c (Min.)	I ₁₀₀ (in.)	Q ₁₀₀ (cfs)
Total Undeveloped	33.08	0.34	20	3.27	36.8
Developed					
Tract B-1	17.16	0.34	15	3.78	22.1
Tract B-2	4.92	0.34	10	4.65	7.8
Lots 1-8	3.51	0.38	10	4.65	14.4
Tract B-3	7.50	0.34	10	4.65	11.9



NOTE:
 I. Discharge from Tracts 'B-1' and 'B-3' and Lots 1-8 at NW corner Tract 'B-2'.
 II. Discharge from entire site at SW corner Tract 'B-2'.

EXISTING CONDITIONS
 $V_{100} = (0.34)(3.27)(33.08) = 36.8 \text{ cfs}$
 $V_{100} = (0.34)(5)(20)(60) = 110,400 \text{ cu.ft.}$

DEVELOPED CONDITIONS
 $Q_{100} = 40.0 \text{ cfs}$ (see Hydrograph II)
 $V_{100} = (40)(5)(25)(60) = 150,000 \text{ cu.ft.}$

SUMMARY
 $Q_{100} = 40.0 - 36.8 = 3.2 \text{ cfs}$ (increase)
 $V_{100} = 150,000 - 110,400 = 39,400 \text{ cu.ft.}$ (increase)

SECTION E SWALE A NTS
 $n = 0.015$
 $s = 0.5\%$
 or $D = 0.5'$, $Q = 14 \text{ cfs}$ (12 cfs req'd)

SECTION D DRAINAGE SWALE NTS
 $n = 0.015$
 $s = 0.4\%$
 $Q_{max} = 68 \text{ cfs}$ (62 cfs req'd)

WEISS-HINES ENGINEERING INC.
 1100 ALVARADO N.E. SUITE B
 ALBUQUERQUE, NEW MEXICO 87110
 (505) 266-3444

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	4/18/88	SW	AS-BUILT
2	4/18/88	SW	AS-BUILT
3	4/18/88	SW	AS-BUILT
4	4/18/88	SW	AS-BUILT
5	4/18/88	SW	AS-BUILT
6	4/18/88	SW	AS-BUILT
7	4/18/88	SW	AS-BUILT
8	4/18/88	SW	AS-BUILT
9	4/18/88	SW	AS-BUILT
10	4/18/88	SW	AS-BUILT

DRAINAGE / GRADING PLAN
WASHINGTON BUSINESS PARK
 SHEET 1 OF 1

RECEIVED
 APR 21 1988
 HYDROLOGY SECTION