



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

February 18, 1993

Bob Ryals
Ryals Engineering
4929 Idlewilde SE
Albuquerque, NM 87108

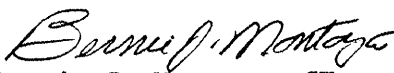
RE: ENGINEER CERTIFICATION FOR BLAKES LOTA BURGER @ 156 WYOMING NE
- (K20-D39) CERTIFICATION STATEMENT DATED 2/17/93.

Dear Mr. Ryals:

Based on the information provided on your February 16, 1993 submittal,
Engineer Certification for the above referenced site is acceptable.

If I can be of further assistance, please feel free to contact me at 768-2667.

Sincerely,


Bernie J. Montoya, CE
Engineering Assistant

BJM/d1/WPHYD/7519

xc: Alan Martinez
File

PUBLIC WORKS DEPARTMENT

DRAINAGE INFORMATION SHEET

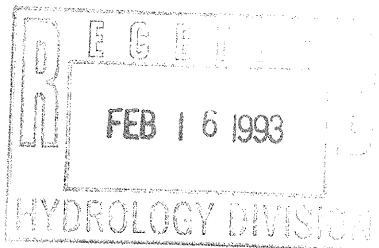
PROJECT TITLE: BLAKES LOTABURGER
156 WYOMING- ZONE ATLAS/DRNG. FILE #: K-20/039
 DRB #: 92-91 EPC #: _____ WORK ORDER #: N/A
 LEGAL DESCRIPTION: LOT 22-A, BLOCK 1, WAGGOMAN-DENISON ADDITION
 CITY ADDRESS: 156 WYOMING BLVD NE
 ENGINEERING FIRM: RYALS ENGINEERING CONTACT: BOB RYALS
 ADDRESS: 4929 Idlewilde SE PHONE: 265-8267
 OWNER: G. BLAKE CHANSLOR CONTACT: BLAKE CHANSLOR
 ADDRESS: 3205 RICHMOND DR NE PHONE: _____
 ARCHITECT: KEN HOVEY CONTACT: KEN HOVEY
 ADDRESS: 335 JEFFERSON SE PHONE: 255-9400
 SURVEYOR: N/A CONTACT: _____
 ADDRESS: _____ PHONE: _____
 CONTRACTOR: N/A CONTACT: _____
 ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

____ DRAINAGE REPORT
 ____ DRAINAGE PLAN
 ____ CONCEPTUAL GRADING & DRAINAGE PLAN
 ____ GRADING PLAN
 ____ EROSION CONTROL PLAN
☒ ENGINEER'S CERTIFICATION
 ____ OTHER

PRE-DESIGN MEETING:

☒ YES
 ____ NO
 ____ COPY PROVIDED



CHECK TYPE OF APPROVAL SOUGHT:

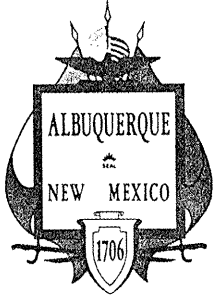
____ SKETCH PLAT APPROVAL
 ____ PRELIMINARY PLAT APPROVAL
 ____ S. DEV. PLAN FOR SUB'D. APPROVAL
 ____ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
 ____ SECTOR PLAN APPROVAL
 ____ FINAL PLAT APPROVAL
 ____ FOUNDATION PERMIT APPROVAL
 ____ BUILDING PERMIT APPROVAL
☒ CERTIFICATE OF OCCUPANCY APPROVAL
 ____ GRADING PERMIT APPROVAL
 ____ PAVING PERMIT APPROVAL
 ____ S.A.D. DRAINAGE REPORT
 ____ DRAINAGE REQUIREMENTS
 ____ OTHER _____ (SPECIFY)

DATE SUBMITTED:

2/16/93

BY:

BRyals



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

September 22, 1992

Bob Ryals
Ryals Engineering
4929 Idlewilde SE
Albuquerque New Mexico 87108

RE: DRAINAGE PLAN FOR BLAKE'S LOTA BURGER @ 156 WYOMING BLVD. NE (K-20/D39)
REVISION DATED SEPTEMBER 13, 1992

Dear Mr. Ryals:

Based on the information provided on your September 15, 1992 resubmittal, the above referenced site is approved for Building Permit.

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

Also, prior to Certificate of Occupancy release, Engineer Certification for the finish floor must be submitted to our office for review.

If I can be of further assistance, please feel free to contact me at 768-2667.

Sincerely,

Bernie J. Montoya
Bernie J. Montoya, CE
Engineering Assistant

cc: Alan Martinez, Drainage Inspector - PWD

WP+3617

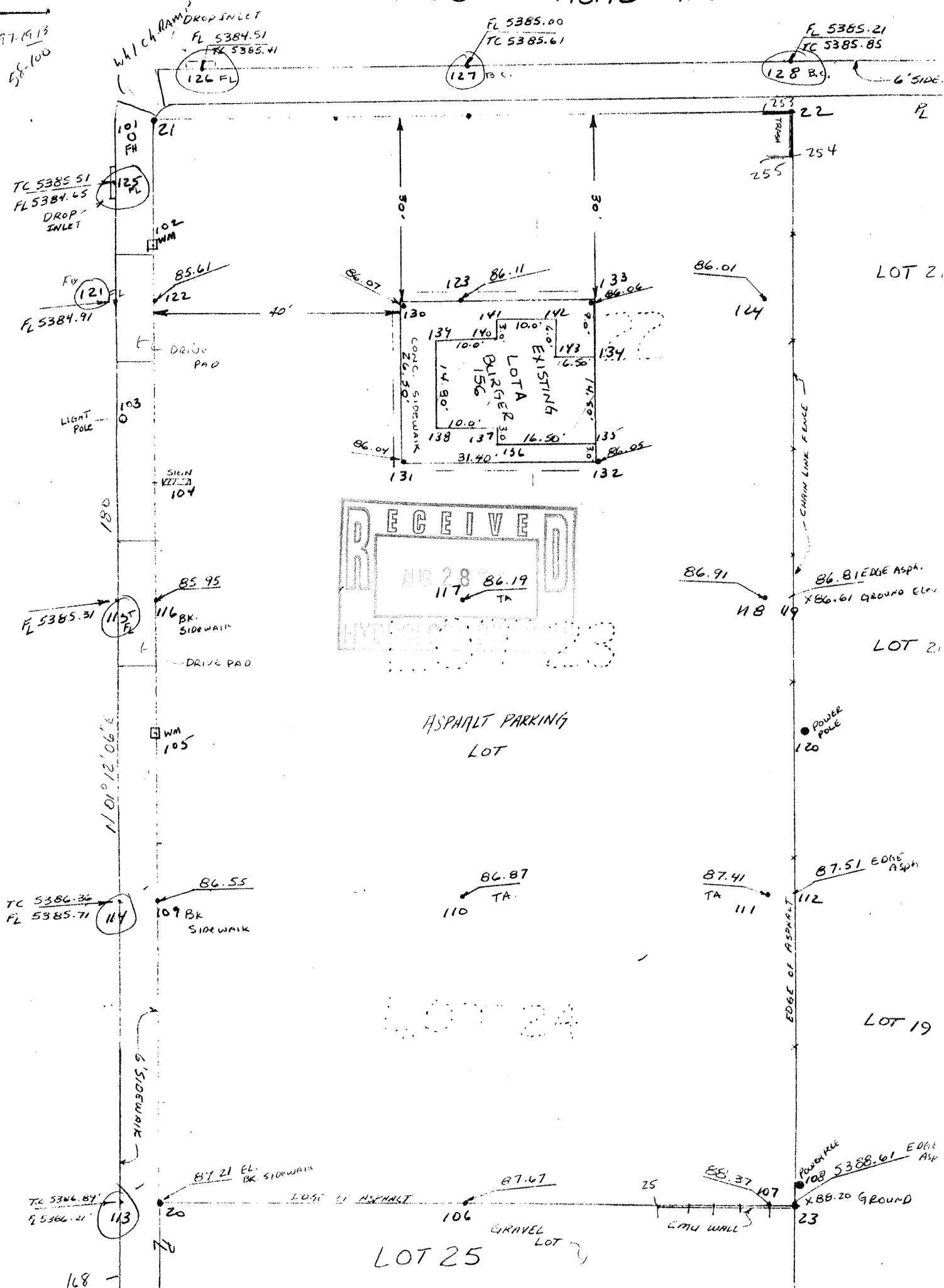
PUBLIC WORKS DEPARTMENT

CHICO ROAD N.E.

DRB-92-191

WYOMING BLVD. N.E.

897.1913
58-100



AHYMO PROGRAM (AHYMO392) - AMAFCA VERSION OF HYMO - MARCH, 1992
RUN DATE (MON/DAY/YR) = 09/14/1992
START TIME (HR:MIN:SEC) = 09:49:09 USER NO. = RYALS_NM.I01
INPUT FILE = BLAKHYD.DAT

* BLAKE'S LOTA BURGER. THIS HYDROGRAPH IS FIGURED USING THE 100 YEAR
* SIX HOUR RAINFALL USING THE NOAA ATLAS 2. THE RAINFALL DISTRIBUTION
* INCREMENTAL TIME IS 0.033333 HOURS. THE TIME TO PEAK IS THE MINIMUM
* VALUE OF 0.133333 HR. THE LAND TREATMENTS ARE FOR THE HISTORICAL,
* THEN THE DEVELOPED CONDITION AND THEN THE EXISTING CONDITIONS.
* THE INITIAL ABSTRACTION AND INFILTRATION ARE THE PROGRAM'S DEFAULT
* VALUES, THESE ARE: IA=0.65 AND INF=1.67 FOR NATURAL LAND, IA=0.50
* AND INF=1.25 FOR THE LANDSCAPED AREA, AND IA=0.10 AND INF=0.04 FOR
* IMPERVIOUS LAND.

START TIME=0.0 HR PUNCH CODE=0 PRINT LINES=-2

RAINFALL TYPE=1 RAIN QUARTER=0.0 IN RAIN ONE=2.02 IN
RAIN SIX=2.37 IN RAIN DAY=2.75 IN DT=0.05

COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.
DT = .050000 HOURS END TIME = 6.000000 HOURS

.0000	.0026	.0052	.0079	.0107	.0137	.0167
.0198	.0231	.0265	.0301	.0338	.0377	.0418
.0462	.0508	.0557	.0609	.0665	.0725	.0790
.0876	.0970	.1243	.1387	.2994	.4708	.7174
1.0548	1.3208	1.4410	1.5413	1.6292	1.7078	1.7790
1.8440	1.9035	1.9584	2.0090	2.0558	2.0990	2.1087
2.1176	2.1258	2.1336	2.1408	2.1477	2.1542	2.1604
2.1664	2.1720	2.1775	2.1827	2.1878	2.1927	2.1974
2.2020	2.2064	2.2107	2.2149	2.2190	2.2230	2.2268
2.2306	2.2343	2.2379	2.2415	2.2449	2.2483	2.2516
2.2549	2.2580	2.2612	2.2642	2.2673	2.2702	2.2731
2.2760	2.2788	2.2816	2.2843	2.2870	2.2897	2.2923
2.2949	2.2974	2.2999	2.3024	2.3048	2.3072	2.3096
2.3120	2.3143	2.3166	2.3188	2.3211	2.3233	2.3255
2.3276	2.3297	2.3319	2.3339	2.3360	2.3381	2.3401
2.3421	2.3441	2.3460	2.3480	2.3499	2.3518	2.3537
2.3556	2.3575	2.3593	2.3611	2.3629	2.3647	2.3665
2.3683	2.3700					

* THIS IS FOR THE UNDEVELOPED CONDITION.

COMPUTE NM HYD ID=1 HYD NO=101.00 AREA=0.0006711 SQ MI
PER A=100.0 PER B=0.0 PER C=0.0 PER D=0.0
TP=0.133333 HR MASS RAIN=-1

K = .159942HR TP = .133333HR K/TP RATIO = 1.199568 SHAPE CONSTANT, N = 2.962187
UNIT PEAK = 1.4029 CFS UNIT VOLUME = .9881 B = 278.72 P60 = 2.0200
AREA = .000671 SQ MI IA = .65000 INCHES INF = 1.67000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

PRINT HYD ID=1 CODE=1

PARTIAL HYDROGRAPH 101.00

RUNOFF VOLUME = .53888 INCHES = .0193 ACRE-FEET
PEAK DISCHARGE RATE = .67 CFS AT 1.500 HOURS BASIN AREA = .0007 SQ. MI.

* THIS IS FOR THE PROPOSED CONDITION

COMPUTE NM HYD ID=2 HYD NO=102.00 AREA=0.0006711 SQ MI
PER A=0.0 PER B=24.4 PER C=0.0 PER D=75.6
TP=0.133333 MASS RAIN=-1

K = .072666HR TP = .133333HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 2.0026 CFS UNIT VOLUME = .9941 B = 526.28 P60 = 2.0200
AREA = .000507 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

K = .132241HR TP = .133333HR K/TP RATIO = .991810 SHAPE CONSTANT, N = 3.559824
UNIT PEAK = .39873 CFS UNIT VOLUME = .9694 B = 324.67 P60 = 2.0200
AREA = .000164 SQ MI IA = .50000 INCHES INF = 1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

PRINT HYD ID=2 CODE=1

PARTIAL HYDROGRAPH 102.00

RUNOFF VOLUME = 1.80823 INCHES = .0647 ACRE-FEET
PEAK DISCHARGE RATE = 1.77 CFS AT 1.500 HOURS BASIN AREA = .0007 SQ. MI.

* THIS IS FOR EXISTING CONDITIONS

COMPUTE NM HYD ID=3 HYD NO=103.00 AREA=.0006711 SQ MI
PER A=0.0 PER B=0.0 PER C=0.0 PER D=100.0
TP=0.133333 HR MASS RAIN=-1

K = .072666HR TP = .133333HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 2.6489 CFS UNIT VOLUME = .9951 B = 526.28 P60 = 2.0200
AREA = .000671 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

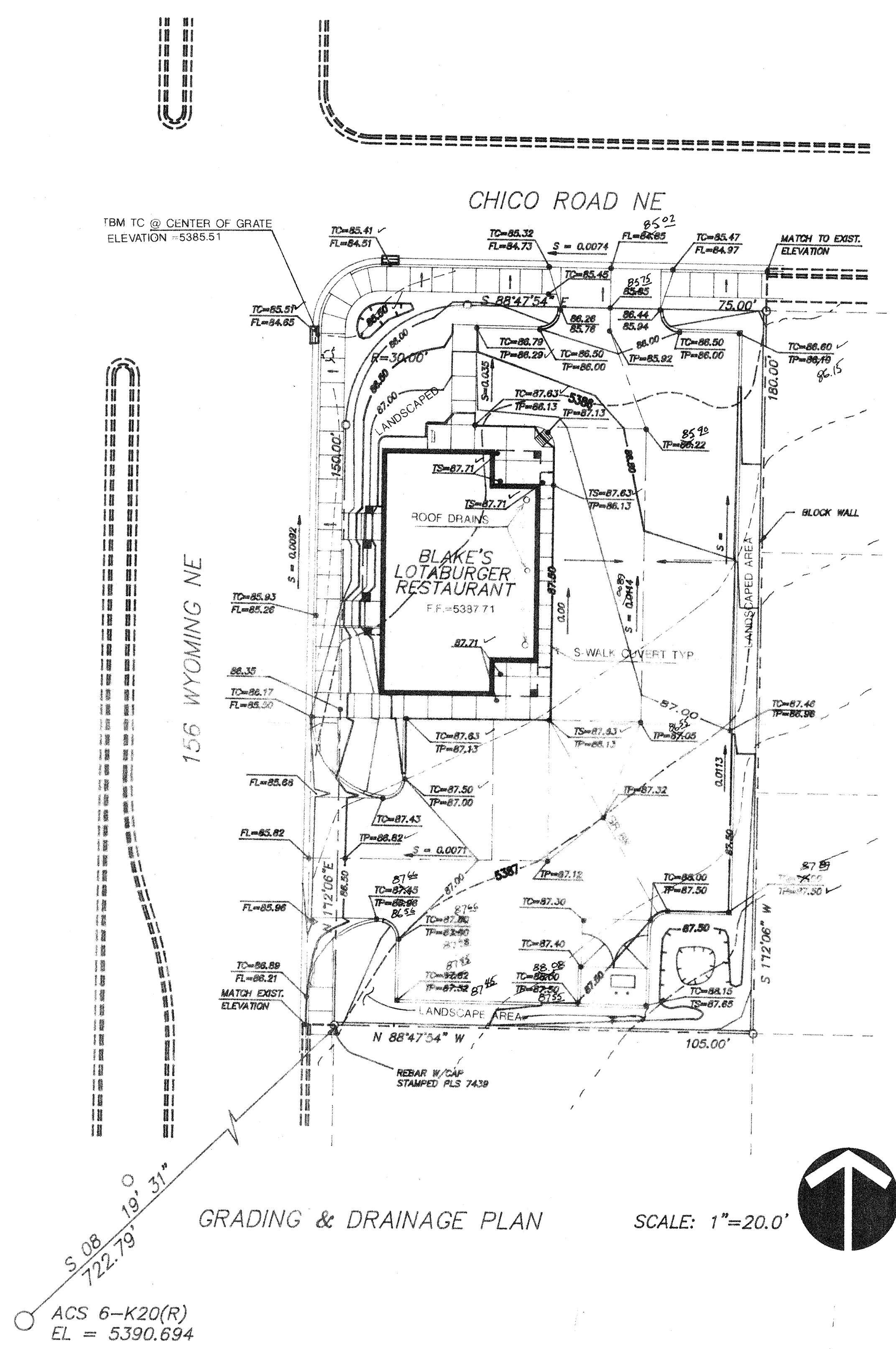
PRINT HYD ID=3 CODE=1

PARTIAL HYDROGRAPH 103.00

RUNOFF VOLUME = 2.13722 INCHES = .0765 ACRE-FEET
PEAK DISCHARGE RATE = 2.00 CFS AT 1.500 HOURS BASIN AREA = .0007 SQ. MI.

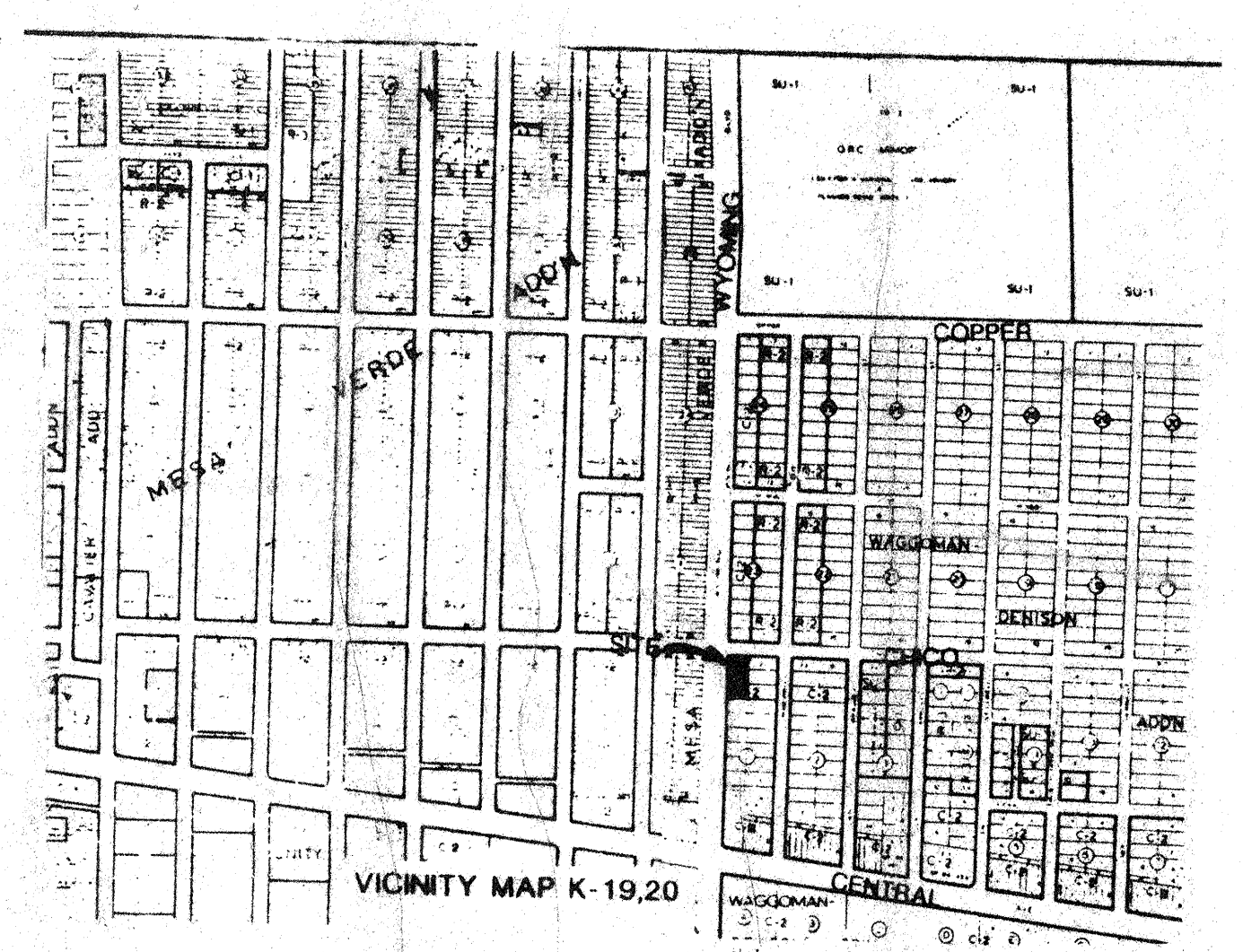
FINISH

NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 09:49:09



- ### LEGEND
- EXISTING LIGHT POLE
 - EXISTING STREET LIGHT
 - EXISTING POWER POLE
 - EXISTING FIRE HYDRANT
 - EXISTING DROP INLET
 - EXISTING CURB AND GUTTER
 - EXISTING EASEMENT
 - PROPERTY LINE
 - EXISTING CONTOUR
 - NEW CONTOUR
 - FINISH GRADE ELEV.

AS CONSTRUCTED



ONSITE HYDROLOGY CALCULATIONS
BLAKE'S LOTABURGER
ALBUQUERQUE, NEW MEXICO
156 WYOMING BLVD. NE

LEGAL DESCRIPTION: LOT 22-A, BLOCK 1, WAGGOMAN - DENISON ADDITION
FLOOD ZONE: AO-1

SITE DESCRIPTION: THE EXISTING IMPROVEMENTS ON THE SITE INCLUDE A BLAKE'S LOTABURGER RESTAURANT BUILDING AND PAVED PARKING LOT WHICH FREELY DRAIN TO EXISTING CATCH BASINS LOCATED AS SHOWN IN WYOMING AND CHICO. THE STORM DRAIN SYSTEM AND STREET FLOWS OUTFALL TO THE STATE FAIR-GROUNDS DETENTION POND FACILITY. THE FIRM FLOOD CONTROL MAPS DO NOT INCLUDE THE IMPACT THIS FACILITY HAS ON THE FLOOD PLAIN UPSTREAM OF IT. IT IS ASSUMED, HOWEVER, THAT THE FACILITY DECREASED FLOOD HAZARD AREAS AND IMPROVED OVER ALL SYSTEM CAPACITY.

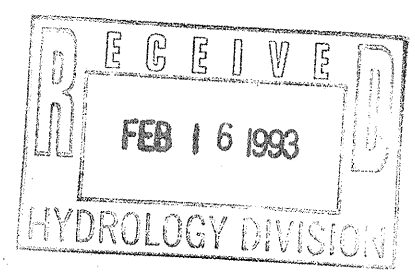
PROPOSED IMPROVEMENTS: IT IS PROPOSED TO COMPLETELY DEMOLISH EXISTING SITE IMPROVEMENTS AND REPLACE THEM WITH A NEW BUILDING, PAVED PARKING LOT AND LANDSCAPED AREAS AS SHOWN.

HYDROLOGY METHOD: AHYMO COMPUTER PROGRAM, AMAFCA HYDROLOGIC MODEL
REFERENCE: ALBUQUERQUE DPM SECTION 22.2 (AUGUST, 1991)

HYDROLOGIC PARAMETERS:

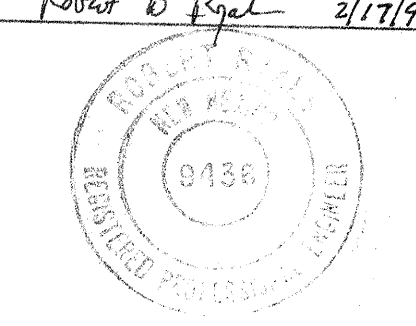
1. RAINFALL - 100 YR 6 HR DURATION = 2.37 INCHES (NOAA ATLAS 2)
2. LAND TREATMENTS
 - A) HISTORICAL: NATURAL, AREA= 18709.09 SF
 - B) EXISTING: BLDG. AND PAVED AREA = 18709.09 SF
 - C) PROPOSED: BLDG. AND PAVED AREAS, AREA = 14137.04 SF
LANDSCAPED AREAS, AREA = 4572.05 SF
TOTAL AREA = 18709.09 SF
3. TIME OF CONCENTRATION = 10 MIN.
4. KUNOPF VOLUME AND PEAK DISCHARGE:
 - A) HISTORICAL:
VOLUME (100 YR 6 HR FROM AHYMO) = 840.71 CF
PEAK DISCHARGE (100 YR 6 HR FROM AHYMO) = 0.67 CFS
 - B) PROPOSED:
VOLUME (100YR 6 HR FROM AHYMO) = 2818.34 CF
PEAK DISCHARGE (100 YR 6 HR FROM AHYMO) = 1.77 CFS
 - C) EXISTING:
VOLUME (100YR 6HR FROM AHYMO) = 3332.34 CF
PEAK DISCHARGE (100YR FROM AHYMO) = 2.00 CFS
5. CONCLUSION: DUE TO IMPROVEMENTS OF THE DOWN STREAM STORM DRAIN SYSTEM AND TO THE ADDITION OF LANDSCAPED AREAS TO PROPOSED SITE IMPROVEMENTS, RESULTING IN A DECREASE IN PEAK DISCHARGE FROM EXISTING CONDITIONS, IT IS PROPOSED TO FREE DISCHARGE DRAINAGE TO WYOMING AND CHICO AS SHOWN. PROPERTY LINE GRADES WERE SET AS CLOSE AS PRACTICAL TO 1 FOOT ABOVE FLOW LINE OF GUTTER IN WYOMING AND CHICO AND FINISHED FLOOR WAS SET AT 2.21 FEET ABOVE THE HIGHEST FLOW LINE ELEVATION ADJACENT TO THE BUILDING. THESE GRADES SATISFY THE CRITERIA FOR GRADING ADJACENT TO A FLOOD ZONE AO-1.

SEE DRAINAGE FILE FOR COMPLETE CALCULATIONS



I, ROBERT B. RYALS, A REGISTERED PROFESSIONAL ENGINEER, CERTIFY THAT I HAVE INSPECTED THE SITE AND HAVE FOUND THE CONSTRUCTION TO BE IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED DRAINAGE & GRADING PLAN.

Robert B. Ryals 2/17/93



	DESIGN BY:	CITY OF ALBUQUERQUE
	R.R.	GRADING AND DRAINAGE PLAN
	DRAWN BY:	BLAKE'S LOTABURGER
	J.C.D.	156 WYOMING N. E.
RYALS engineering & construction services 4929 Idelwild S.E. Albuquerque, NM 87108 (505) 265-8267 269-1142 mobile telephone		SHEET NO. 1 OF 1