

# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

3 May 1999

Dennis Lynn Lynn Engineering & Surveying 02 Chaparrel Lane Peralta, New Mexico 87042

RE: ENGINEER'S CERTIFICATION FOR CENTRAL AVE. CARWASH (K11/D59).

**CERTIFICATION DATED 4-9-99** 

Dear Mr. Lynn:

Based upon the information provided in your 4-9-99 Engineer's Certification submittal, the referenced project is approved for Certificate of Occupancy.

If I can be of further assistance, feel free to contact me at 768-2766.

Sincerely,

**Scott Davis** 

PWD, Hydrology Division

c:

Andrew Garcia

file

## DRAINAGE INFORMATION SHEET

PROJECT TITLE: Carwash	ZONE ATLAS/DRNG. FILE #: $\frac{\mathcal{K} \cdot \mathcal{U}}{ 059 }$
DRB #: EPC #:	WORK ORDER #:
LEGAL DESCRIPTION:	
CITY ADDRESS: 5930 Central	
ENGINEERING FIRM: Lynn Engineering a	Surveying CONTACT: Dennis Lynn
ADDRESS: O2 Chaparrel lane Peralta	NM 87042 PHONE: (505) 869-3548
	CONTACT: Steve Padilla
ADDRESS: 6413 Church H:115.W. Alb. A	1M 87105 PHONE: (505) 831-9680
ARCHITECT: Vision Architecture	CONTACT: Andrew Barela
ADDRESS: P.O BOX 136 Chamberino, No	1 88027 PHONE: (505) 882-6173
SULVEYOR: <u>Dennis Lynn Engineering &amp;</u>	ucveying CONTACT: Dennis Lynn
ADDRESS: 02 Chaparrel Lane Peraltage	
*	CONTACT: <u>George Mimbela</u>
ADDRESS: 4411 Apollo ElPaso Tx	< 79904 PHONE: (915) 751-2761
TYPE OF SUBMITTAL:	CHECK TYPE OF APPROVAL SOUGHT:
DRAINAGE REPORT	SKETCH PLAT APPROVAL
DRAINAGE PLAN	PRELIMINARY PLAT APPROVAL
CONCEPTUAL GRADING & DRAINAGE PLAN	S. DEV. PLAN FOR SUB'D. APPROVAL
GRADING PLAN	S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
EROSION CONTROL PLAN	SECTOR PLAN APPROVAL
ENGINEER'S CERTIFICATION	FINAL PLAT APPROVAL
OTHER	FOUNDATION PERMIT APPROVAL
	BUILDING PERMIT APPROVAL
PRI-DESIGN MEETING:	CERTIFICATE OF OCCUPANCY APPROVAL
YES	GRADING PERMIT APPROVAL
NO	PAVING PERMIT APPROVAL
COPY PROVIDED	S.A.D. DRAINAGE REPORT
	DRAINAGE REQUIREMENTS
	OTHER (SPECIFY)
	- Indiana and a second a second and a second a second and
DATE SUBMITTED: 4/9/99	DECEIVE
, .	APR 0 9 1999   ) )
BY:	
2 1/00	HYDROLOGY SECTION



October 26,1998

Dennis Lynn Lynn Engineering & Surveying 02 Chaparrel Lane Peralta, New Mexico 87042

RE: DRAINAGE PLAN FOR CENTRAL AVENUE CAR WASH (K11-D59) ENGINEER'S STAMP DATED 9/23/98

Dear Mr. Lynn:

Based on the information provided on your September 24,1998 submittal, 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, please be advised that a separate permit is required for construction within City R/W. A copy of this approval letter must be on hand when applying for the excavation permit.

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

If I can be of further assistance, please feel free to contact me at 924-3986.

C: Andrew Garcia
Arlene Portillo
File

Sincerely

Semio f Montoya Bernie J. Montoya CE Associate Engineer



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24 HOUR DEVELOPED SUMMARY
  -(s16.66H
     AHYMO SUMMARY TABLE (AHYMO392) - AMAFCA VERSION OF HYMO - MARCH, 1992
                                                                                               RUN DATE (MON/DAY/YR) =09/23/1998
     INPUT FILE = 98005d24.dat
                                                                                                           USER NO. = LYNNESNM. IO1
                                                                                                       TIME TO
                                     FROM TO
                                                                    PEAK
                                                                                  RUNOFF
                                                                                                                     CFS
                                                                                                                               PAGE → 1
                        HYDROGRAPH
                    HYDROGRAPH ID ID IDIDENTIFICATION NO. NO.
                                                        AREA
                                                                  DISCHARGE
                                                                                  VOLUME
                                                                                               RUNOFF
                                                                                                           PEAK
                                                                                                                     PER
     COMMAND
                                                      (SQ MI)
                                                                                  (AC-FT)
                                                                                                                               NOTATION
                                                                    (CFS)
                                                                                              (INCHES) (HOURS)
                                                                                                                     ACRE
                    DEVELOPED SITE WEST CENTRAL CAR WASH
     4.57
                    100-YEAR 24 HOUR RAINFALL
     START
                                                                                                                           TIME~
                                                                                                                                         .00
     *S COMPUTE
     RAINFALL TYPE= 2
*S ONSITE BASIN - A
                                                                                                                            RAIN24≈
                                                                                                                                      2.660
     COMPUTE NM HYD
                            101.00 -
                                                       .00108
                                                                       1.93
                                                                                               1.94612
                                                                                                                    2.789 PER IMP= 73.18
                                                                                    .112
                                                                                                          1.400
24 HOUR UNDEVELOPED SUMMARY - ($16,66H
    AHYMO SUMMARY TABLE (AHYMO392) - AMAFCA VERSION OF HYMO -
                                                                       MARCH, 1992
                                                                                               RUN DATE (MON/DAY/YR) =09/23/1998
    INPUT FILE = 98005U24.DAT
                                                                                                          USER NO. = LYNNESNM. 101
                                     FROM TO
                                                                    PEAK
                                                                                  RUNOFF
                                                                                                         TIME TO
                                                                                                                     CFS
                                                                                                                              PAGE =
                        HYDROGRAPH ID ID
NTIFICATION NO. NO.
                                                       AREA
                                                                 DISCHARGE
                                                                                  VOLUME
                                                                                               RUNOFF
                                                                                                          PEAK
                                                                                                                    PER
    COMMAND
                    IDENTIFICATION
                                                                                                                              NOTATION
                                                                                  (AC-FT)
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                                                                                                         (HOURS)
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                                                                    (CFS)
                                                                                                                    ACRE
    · S
                   DEVELOPED SITE WEST CENTRAL CAR WASH
                   100-YEAR 24 HOUR RAINFALL
    START
                                                                                                                           TIME=
                                                                                                                                        .00
     S COMPUTE
    RAINFALL TYPE= 2
*S ONSITE BASIN - A
                           101.00 - 1
    COMPUTE NM HYD
                                                      .00108
                                                                                               .96756
                                                                                                          1.400
                                                                                                                    1.928 PER IMP=
6 HOUR DEVELOPED SUMMARY
   AHYMO SUMMARY TABLE (AHYMO392) - AMAFCA VERSION OF HYMO -
                                                                                             RUN DATE (MON/DAY/YR) =09/23/1998
                                                                    MARCH, 1992
    INPUT FILE = 98005DV6.DAT
                                                                                                          USER NO. = LYNNESNM. 101
                                     FROM TO
                                                                   PEAK
                                                                                  RUNOFF
                                                                                                        TIME TO
                                                                                                                    CFS
                                                                                                                              PAGE = 1
                   HYDROGRAPH ID ID IDENTIFICATION NO. NO.
                                                       AREA
                                                                 DISCHARGE
                                                                                  VOLUME
                                                                                              RUNOFF
                                                                                                          PEAK
                                                                                                                    PER
                                                                                                                              NOTATION
    COMMAND
                                                     (SQ MI)
                                                                   (CFS)
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                                                                                              (INCHES)
                                                                                                         (HOURS)
                                                                                                                    ACRE
                   DEVELOPED SITE WEST CENTRAL CAR WASH
                   100-YEAR 6 HOUR RAINFALL
    4.5
    START
                                                                                                                           TIME-
                                                                                                                                        .00
    S COMPUTE
    RAINFALL TYPE= 1
*S ONSITE BASIN - A
                                                                                                                           RAIN6~
                                                                                                                                     2.200
    COMPUTE NM HYD
                           101.00
                                            1
                                                      .00108
                                                                      1.93
                                                                                   .093
                                                                                              1.60956
                                                                                                          1.400
                                                                                                                    2.789 PER IMP= 73.18
24 HOUR DEVELOPED INPUT DATA+S
                                             DEVELOPED SITE WEST CENTRAL CAR WASH
             100-YEAR 24 HOUR RAINFALL
                     TIME-0.0 FUNCH CODE-0 PRINT LINE-1
START
S COMPUTE
                     TYPE=2 RAIN QUARTER=0 RAIN ONE=1.87
RAINFALL
                     RAIN SIX-2.20 RAIN DAY-2.66 DT-0.200
*S ONSITE BASIN - A
                     ID=1 HYD NO= 101.0 DA=0.00107897 SQ M1
COMPUTE NM HYD
                     PER A=0.001 PER B=26.818 PER C=0.001
PER D=73.18 TF=0.13334 RAIN=-1
                     ID=1 CODE=0
PRINT HYD
24 HOUR DEVELOPED OUTPUT DATA
         AHYMO PROGRAM (AHYMO392) - AMAFCA VERSION OF HYMO - MARCH, 1992
               RUN DATE (MON/DAY/YR) = 09/23/1998
START TIME (HR:MIN:SEC) = 08:34:44
INPUT FILE = 98005d24.dat
                                                         USER NO. = LYNNESHM. IO1
                    DEVELOPED SITE WEST CENTRAL CAR WASH
     * S
                    100-YEAR 24 HOUR RAINFALL
     * S
     START
                          TIME=0.0 PUNCH CODE=0 PRINT LINE=-1
     S COMPUTE
                          TYPE=2 RAIN QUARTER=0 RAIN CNE=1.87
                          RAIN SIX=2.20 RAIN DAY=2.66 DT=0.200
                     COMPUTED 24-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.
                                                END TIME = 24.000000 HOURS
.0362 .0534 .0758 .1773
1.9458 1.9780 2.0031 2.0240
                              .200000 HOURS
                        .0000
                                                                                                                        CILL'S D. LPCO
                                        .0222
                                 .0103
                                1.5109
                         .9790
                                2.0580
                                        2.0724
                                                 2.0855
                                                          2.0976
                                                                   2.1088
                        2.0420
                                                                                                                               TONNIE.
                                        2.1475
                                                 2.1560
2.2078
                       2.1293
                                2.1386
                                                         2,1641
                                                                   2.1718
                                                                           2.1793
                                                          2.2155
                                                                   2,2231
                                                                           2.2305
                                2.1933
                       2.1864
                        2.2379
                                2.2452
                                        2.2524
                                                 2.2595
                                                          2.2665
                       2.2870
                                2.2937
                                        2.3002
                                                 2.3068 2.3132
                                                                   2.3196
                                                                           2.3259
```

2.3504

2.3909

2,4287

2.4643

2,4978

2.5295

2.5596

2.5883

2.3563

2.3965

2.4340

2.4692

2.5024

2.5339

2.5638

2.5923

2.3622

2.4020

2.4391

2.5070

2.5383

2.5680

2.5963

2.3681

2.4442

2.4789

2.5116

2.5426

2.5721 2.6002

2.3321

2.4128

2.4493

2.4837

2.5161

2.5469

2.5762

2.3383

2.4182

2.4543

2,4884

2,5206 2.5512

2.5803

2.3444

2.3853

2.4235

2.4593

2.4931

2.5251

2.5554

2.5843

POTESTO IN THE

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    2.6041
    2.6080
    2.6119
    2.6157
    2.6195
    2.6233
    2.6271

    2.0308
    2.6346
    2.6383
    2.6419
    2.6456
    2.6492
    2.6528

    2.6564
    2.6600
```

K = .072670HR TP = .133340HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.1 UNIT PEAK = 3.1164 CFS UNIT VOLUME = .8260 B = 526.28 P60 = 1.8700 AREA = .000790 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUK RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .200000SHAPE CONSTANT, N = 7.106420

K = .131032HR TP = .133340HR K/TP RATIO = .982687 SHAPE CONSTANT, N = 3.593445 UNIT PEAK = .70986 CFS UNIT VOLUME = .8476 B = 327.09 P60 = 1.8700 AREA = .000289 SQ MI IA = .50000 INCHES INF = 1.25000 INCHES PER HOUR RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .200000

PRINT HYD

ID-1 CODE-0

PARTIAL HYDROGRAPH 101.00

TIME	PLOW	TIME	FLOW	JIM ( T	FLOW	TIME	FLOW	TIME	FLOW
HRS	CFS	HRS	CFS	HRS	CFS	HRS	CFS	HRS	CFS
.000	.0	5.000	.0	10.000	.0	15.000	.0	20.000	.0
.200	.0	5.200	.0	10.200	.0	15.200	.0	20.200	.0
.400	.0	5.400	.0	10.400	.0	15.400	.0	20.400	.0
.600	.0	5.600	.0	10,600	.0	15.600	.0	20.600	.0
.800	.0	5,800	.0	10.800	.0	15.800	.0	20.800	. 0
1.000	.0	6.000	.0	11.000	.0	16.000	.0	21.000	.0
1.200	.2	6.200	.0	11.200	.0	16.200	.0	21.200	.0
	1.9	6.400	.0	11.400	.0	16.400	.0	21.400	.0
1.400	1.6	6,600	.0	11.600	.0	16,600	.0	21.600	.0
1.600	.8	6.800	.0	11.800	. 0	16.800	.0	21.800	.0
1.800		7.000	.0	12.000	.0	17.000	.0	22.000	.0
2.000	.5	7.200	.0	12,200	.0	17,200	.0	22.200	.0
2.200	.2	7.400	.0	12,400	.0	17.400	.0	22.400	.0
2.400		7.600	.0	12,600	.0	17.600	.0	22,600	.0
2.600	.1	7.800	.0	12.800	.0	17.800	.0	22.800	.0
2.800	.0	8.000	.0	13,000	.0	18,000	.0	23.000	.0
3.000	.0		.0	13.200	.0	18,200	.0	23.200	.0
3.200	.0	8.200	.0	13.400	.0	18.400	.0	23.400	.0
3.400	.0	8.400	.0	13.600	.0	18.600	.0	23,600	.0
3,600	.0	8.600		13.800	.0	18.800	.0	23,800	.0
3.800	.0	8.800	.0	14.000	.0	19.000	.0	24.000	.0
4.000	.0	9.000	.0	14.200	.0	19,200	. 0	24.200	.0
4.200	.0	9.200	.0	14.400	.0	19.400	.0		
4.400	.0	9.400	.0	14.400	.0	19.600	.0		
4.600	.0	9.600	.0		.0	19.800	.0		
4 800	- 0	9.800	.0	14.800	. 0	17.000			

RUNOFF VOLUME = 1.94612 INCHES = .1120 ACRE-FEET PEAK DISCHARGE RATE = 1.93 CFS AT 1.400 HOURS BASIN AREA = .0011 SQ. MI.

### 24 HOUR UNDEVELOPED INPUT DATA

UNDEVELOPED SITE WEST CENTRAL CAR WASH 100-YEAR 24 HOUR RAINFALL \* S

TIME-0.0 PUNCH CODE=0 PRINT LINE=-1 START

\*S COMPUTE RAINFALL

TYPE=2 RAIN QUARTER=0 RAIN ONE=1.87 RAIN SIX=2.20 RAIN DAY=2.66 DT=0.200

\*S ONSITE BASIN - A

COMPUTE NM HYD

TD=1 HYD NO= 101.0 DA=0.00107897 SQ M1 PER A-0.001 PER B-0.001 PER C-99.997 PER D=0.001 TP=0.13334 RAIN=-1

PRINT HYD

ID=1 CODE=0

### 24 HOUR UNDEVELOPED OUTPUT DATA

ANDEVELUPED OUTPUT DATA
ANYMO PROGRAM (ANYMO392) - AMAFCA VERSION OF HYMO - MARCH, 1992
RUN DATE (MON/DAY/YR) = 09/23/1998
START TIME (HR:MIN:SEC) = 08:57:01
USER NO.= LYNNESNM.10
INPUT FILE = 98005U24.DAT USER NO. = LYNNESNM.101

UNDEVELOPED SITE WEST CENTRAL CAR WASH

100-YEAR 24 HOUR RAINFALL \* S

START

\*S COMPUTE RAINFALL

**\*** S

TIME=0.0 PUNCH CODE=0 PRINT LINE=-1

TYPE=2 RAIN QUARTER=0 RAIN ONE=1.87 RAIN SIX=2.20 RAIN DAY=2.66 DT=0.200

```
        2.3321
        2.3383
        2.3444
        2.3504
        2.3563
        2.3622
        2.3681

        2.37399
        2.3965
        2.4020
        2.4074
        2.4128
        2.4287
        2.4340
        2.4391
        2.4442

        2.4493
        2.4543
        2.4693
        2.4643
        2.4692
        2.4740
        2.4789

        2.4837
        2.4884
        2.4931
        2.4978
        2.5024
        2.5070
        2.5116

        2.5469
        2.5516
        2.5256
        2.5295
        2.5339
        2.5383
        2.5426

        2.5469
        2.5512
        2.5596
        2.5638
        2.5680
        2.5721

        2.5762
        2.5803
        2.5843
        2.5883
        2.5923
        2.5963
        2.6002

        2.6304
        2.6308
        2.6383
        2.6419
        2.6456
        2.6423
        2.6271

        2.6364
        2.6604
        2.6604
        2.6449
        2.6456
        2.6492
        2.6528
```

\*S ONSITE BASIN - A

COMPUTE NM HYD

ID=1 HYD NO= 101.0 DA=0.00107897 SQ MI PER A=0.001 PER B=0.001 PER C=99.997 PER D=0.001 TP=0.13334 RAIN=-1

K = .105899HR TP = .133340HR K/TP RATIO = .794206 SHAPE CONSTANT, N = 4.514824 UNIT PEAK = 3.1407 CFS UNIT VOLUME = .8440 B = 388.14 P60 = 1.8700 AREA = .001079 SQ MI IA = .35000 INCHES INF = .83001 INCHES PER HOUR RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .200000

PRINT HYD

1D≈1 CODE≈0

#### PARTIAL HYDROGRAPH 101.00

TIME	FLOW	TIME HRS	FLOW CFS	TIME	FLOW CEG	TIME HRS	FLOW	TIME HRS	FLOW CFS
,000	. 0	. 800	. 0	1.600	1.2	2,400	.0		
.200	. 0	1,000	.0	1.800	.5	2,600	.0		
.400	.0	1.200	.0	2.000	.2	2.800	. 0		
.600	.0	1.400	1.3	2.200	. 1	3.000	.0		

RUNOFF VOLUME = .96756 INCHES = .0557 ACRE-FEET
PEAK DISCHARGE RATE = 1.33 CFS AT 1.400 HOURS BASIN AREA = .0011 SQ. MI.

