



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

June 14, 1994

Mark Goodwin
D. Mark Goodwin & Associates
P.O. Box 90606
Albuquerque, NM 87199

RE: REVISED DRAINAGE PLAN FOR EAST CENTRAL MULTI-SERVICE CENTER
(K19-D103) REVISION DATED 6/6/94.

Dear Mr. Goodwin:

Based on the information provided on your June 6, 1994 resubmittal, the above referenced site is approved for Grading/Paving.

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

Sincerely,

Bernie J. Montoya, CE
Engineering Associate

BJM/d1/WPHYD/8399

c: Andrew Garcia
File

DRAINAGE INFORMATION SHEET

PROJECT TITLE: East Central Multi-Service Center ZONE ATLAS/DRNG, FILE#: K-19/10103
DRB #: _____ EPC #: _____ WORK ORDER #: _____
LEGAL DESCRIPTION: Lots 8 & 9, Block 4, Bevans Addition
CITY ADDRESS: NE Corner of San Pablo & Zuni SE

ENGINEERING FIRM: Mark Goodwin & Associates, PA CONTACT: Mark Goodwin, PE
ADDRESS: PO Box 90606 PHONE: 345-2010
OWNER: City of Albuquerque CONTACT: Snady Smith
ADDRESS: PO Box 1293 PHONE: _____
ARCHITECT: Claudio Vigil Architects CONTACT: Claudio Vigil
ADDRESS: 1305 Tijeras, NW PHONE: 842-1113
SURVEYOR: Aldrich Land Surveyors CONTACT: Tim Aldrich
ADDRESS: PO Box 30701 PHONE: 884-1990
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
____ CERTIFICATION OF OCCUPANCY APPROVAL
____ GRADING PERMIT APPROVAL
☒ PAVING PERMIT APPROVAL
____ S.A.D. DRAINAGE REPORT
____ DRAINAGE REQUIREMENTS
____ OTHER _____ (Specify)

DATE SUBMITTED: 6/6/94

BY: Mark Goodwin
Mark Goodwin, PE

JUN - 6 1994



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

March 21, 1994

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

RE: DRAINAGE PLAN FOR AN ADDITION TO EAST CENTRAL MULTI-SERVICE CENTER
(K19-D103) ENGINEER'S STAMP DATED 3/12/94.

Dear Mr. Goodwin:

Based on the information provided on your March 14, 1994 submittal, the above referenced site is approved for Building Permit. Please a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

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

Sincerely,

Bernie J. Montoya, CE
Engineering Associate

BJM/d1/WPHYD/8399

c: Andrew Garcia
File



D. Mark Goodwin & Associates, P.A.
Consulting Engineers and Surveyors

PROJECT E. Central Multi-Service
SUBJECT Drainage
BY MG DATE 3/12/94
CHECKED _____ DATE _____
SHEET 1 OF 1

The intent of this project is to add a
800 S.F. addition to an existing CDA facility.

The addition will occur in an area that is
currently gravelled or contains sidewalks so
increase in impervious area should be
minimal $\rightarrow$ flow increase should be
negligible.

Site lies in Precipitation Zone 3
 $P = 2.60$ in.

Existing Land Treatments:

$A = 0$

$B = 15\%$

$C = 15\%$

$D = 70\%$

Per Attached AHYMO $Q = 5.67$ cfs
 $V = 9147$ cu. Ft.

Proposed Land Treatments:

$A = 0$

$B = 15\%$

$C = 12\%$

$D = 73\%$

Per Attached AHYMO $Q = 5.73$ cfs
 $V = 9322$ cu. Ft.

As expected, flow increase is negligible

START TIME=0.0
***** HYDROGRAPH FOR E. CENTRAL MULTI SERVICE - EXISTING
RAINFALL TYPE=1 RAIN QUARTER=0.0 IN
RAIN ONE=2.14 IN RAIN SIX=2.60 IN
RAIN DAY=3.10 IN DT=0.03333 HR
COMPUTE NM HYD ID=1 HYD NO=101.1 AREA=0.002000 SQ MI
PER A=0.0 PER B=15 PER C=15 PER D=70
TP=0.1333 HR MASS RAINFALL=-1
PRINT HYD ID=1 CODE=1
FINISH

AHYMO PROGRAM (AHYMO392) - AMAFCA VERSION OF HYMO - MARCH, 1992
 RUN DATE (MON/DAY/YR) = 03/12/1994
 START TIME (HR:MIN:SEC) = 06:35:16 USER NO. = Z_GOODWN.S92
 INPUT FILE = EC.DAT

START TIME=0.0

***** HYDROGRAPH FOR E. CENTRAL MULTI SERVICE - EXISTING

RAINFALL TYPE=1 RAIN QUARTER=0.0 IN

RAIN ONE=2.14 IN RAIN SIX=2.60 IN

RAIN DAY=3.10 IN DT=0.03333 HR

COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2

- PEAK AT 1.40 HR.

DT = .033330 HOURS				END TIME = 5.999400 HOURS		
.0000	.0027	.0055	.0084	.0113	.0143	.0173
.0204	.0236	.0269	.0302	.0337	.0372	.0408
.0445	.0484	.0523	.0564	.0606	.0649	.0694
.0741	.0789	.0839	.0892	.0946	.1003	.1063
.1126	.1192	.1262	.1322	.1385	.1452	.1597
.1922	.2422	.3139	.4119	.5407	.7049	.9093
1.1588	1.3904	1.4871	1.5687	1.6414	1.7074	1.7683
1.8247	1.8775	1.9270	1.9735	2.0174	2.0589	2.0982
2.1354	2.1707	2.2041	2.2359	2.2661	2.2737	2.2807
2.2875	2.2939	2.3001	2.3060	2.3117	2.3172	2.3226
2.3277	2.3328	2.3376	2.3423	2.3470	2.3514	2.3558
2.3601	2.3643	2.3683	2.3723	2.3762	2.3801	2.3838
2.3875	2.3911	2.3947	2.3982	2.4016	2.4050	2.4083
2.4115	2.4147	2.4179	2.4210	2.4241	2.4271	2.4301
2.4330	2.4359	2.4388	2.4416	2.4444	2.4472	2.4499
2.4526	2.4553	2.4579	2.4605	2.4631	2.4656	2.4681
2.4706	2.4731	2.4755	2.4779	2.4803	2.4827	2.4850
2.4873	2.4896	2.4919	2.4942	2.4964	2.4986	2.5008
2.5030	2.5052	2.5073	2.5094	2.5115	2.5136	2.5157
2.5177	2.5198	2.5218	2.5238	2.5258	2.5277	2.5297
2.5317	2.5336	2.5355	2.5374	2.5393	2.5412	2.5430
2.5449	2.5467	2.5486	2.5504	2.5522	2.5540	2.5557
2.5575	2.5593	2.5610	2.5627	2.5645	2.5662	2.5679
2.5696	2.5713	2.5729	2.5746	2.5762	2.5779	2.5795
2.5811	2.5828	2.5844	2.5860	2.5876	2.5891	2.5907
2.5923	2.5938	2.5954	2.5969	2.5984	2.6000	

COMPUTE NM HYD ID=1 HYD NO=101.1 AREA=0.002000 SQ MI

PER A=0.0 PER B=15 PER C=15 PER D=70

TP=0.1333 HR MASS RAINFALL=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE
 CONSTANT, N = 7.106420
 UNIT PEAK = 5.5273 CFS UNIT VOLUME = .9973 B = 526.28
 P60 = 2.1400
 AREA = .001400 SQ MI IA = .10000 INCHES INF = .04000 I
 NCHES PER HOUR

0.033330

K = .121284HR TP = .133300HR K/TP RATIO = .909858 SHAPE
 CONSTANT, N = 3.892621
 UNIT PEAK = 1.5661 CFS UNIT VOLUME = .9922 B = 347.95
 P60 = 2.1400
 AREA = .000600 SQ MI IA = .42500 INCHES INF = 1.04000 I
 NCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT
 = .033330

PRINT HYD ID=1 CODE=1

PARTIAL HYDROGRAPH 101.10

RUNOFF VOLUME = 1.97588 INCHES = .2108 ACRE-FEET
 PEAK DISCHARGE RATE = 5.67 CFS AT 1.500 HOURS BASIN AREA =
 .0020 SQ. MI.

FINISH

NORMAL PROGRAM FINISH

END TIME (HR:MIN:SEC) = 06:05:16

START TIME=0.0
***** HYDROGRAPH FOR E. CENTRAL MULTI SERVICE - PROPOSED
RAINFALL TYPE=1 RAIN QUARTER=0.0 IN
RAIN ONE=2.14 IN RAIN SIX=2.60 IN
RAIN DAY=3.10 IN DT=0.03333 HR
COMPUTE NM HYD ID=1 HYD NO=101.1 AREA=0.002000 SQ MI
PER A=0.0 PER B=15 PER C=12 PER D=73
TP=0.1333 HR MASS RAINFALL=-1
PRINT HYD ID=1 CODE=1
FINISH

AHYMO PROGRAM (AHYMO392) - AMAFCA VERSION OF HYMO - MARCH, 1992
 RUN DATE (MON/DAY/YR) = 03/12/1994
 START TIME (HR:MIN:SEC) = 06:37:15 USER NO. = Z_GOODWN.S92
 INPUT FILE = EC.DAT

START TIME=0.0

***** HYDROGRAPH FOR E. CENTRAL MULTI SERVICE - PROPOSED

RAINFALL TYPE=1 RAIN QUARTER=0.0 IN

RAIN ONE=2.14 IN RAIN SIX=2.60 IN

RAIN DAY=3.10 IN DT=0.03333 HR

COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2

- PEAK AT 1.40 HR.

DT = .033330 HOURS			END TIME = 5.999400 HOURS			
.0000	.0027	.0055	.0084	.0113	.0143	.0173
.0204	.0236	.0269	.0302	.0337	.0372	.0408
.0445	.0484	.0523	.0564	.0606	.0649	.0694
.0741	.0789	.0839	.0892	.0946	.1003	.1063
.1126	.1192	.1262	.1322	.1385	.1452	.1597
.1922	.2422	.3139	.4119	.5407	.7049	.9093
1.1588	1.3904	1.4871	1.5687	1.6414	1.7074	1.7683
1.8247	1.8775	1.9270	1.9735	2.0174	2.0589	2.0982
2.1354	2.1707	2.2041	2.2359	2.2661	2.2737	2.2807
2.2875	2.2939	2.3001	2.3060	2.3117	2.3172	2.3226
2.3277	2.3328	2.3376	2.3423	2.3470	2.3514	2.3558
2.3601	2.3643	2.3683	2.3723	2.3762	2.3801	2.3838
2.3875	2.3911	2.3947	2.3982	2.4016	2.4050	2.4083
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2.4330	2.4359	2.4388	2.4416	2.4444	2.4472	2.4499
2.4526	2.4553	2.4579	2.4605	2.4631	2.4656	2.4681
2.4706	2.4731	2.4755	2.4779	2.4803	2.4827	2.4850
2.4873	2.4896	2.4919	2.4942	2.4964	2.4986	2.5008
2.5030	2.5052	2.5073	2.5094	2.5115	2.5136	2.5157
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2.5923	2.5938	2.5954	2.5969	2.5984	2.6000	

COMPUTE NM HYD ID=1 HYD NO=101.1 AREA=0.002000 SQ MI

PER A=0.0 PER B=15 PER C=12 PER D=73

TP=0.1333 HR MASS RAINFALL=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE
 CONSTANT, N = 7.106420
 UNIT PEAK = 5.7642 CFS UNIT VOLUME = .9973 B = 526.28
 P60 = 2.1400
 AREA = .001460 SQ MI IA = .10000 INCHES INF = .04000 I

NO. OF BAY LINES

.033330

K = .122659HR TP = .133300HR K/TP RATIO = .920171 SHAPE
 CONSTANT, N = 3.846616
 UNIT PEAK = 1.3968 CFS UNIT VOLUME = .9910 E = 344.81
 P60 = 2.1400
 AREA = .000540 SQ MI IA = .43333 INCHES INF = 1.06333 I
 NCHES PER HOUR

RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT
 = .033330

PRINT HYD ID=1 CODE=1

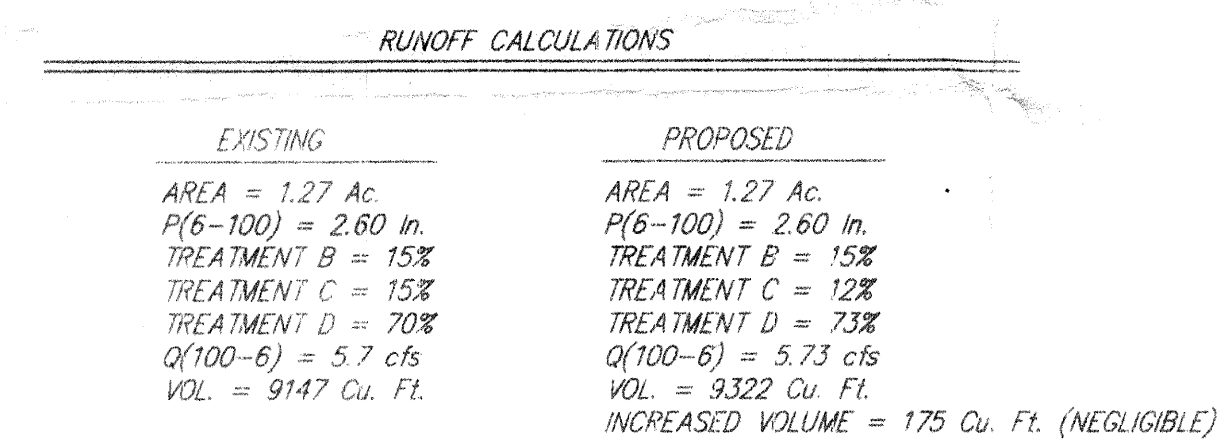
PARTIAL HYDROGRAPH 101.10

RUNOFF VOLUME = 2.00826 INCHES = .2142 ACRE-FEET
 PEAK DISCHARGE RATE = 5.73 CFS AT 1.500 HOURS BASIN AREA =
 .0020 SQ. MI.

FINISH

NORMAL PROGRAM FINISH

END TIME (HR:MIN:SEC) = 06:37:16

[illegible]

VICINITY MAP: _____ ZONE MAP: K-19-Z

TBM (TEMPORARY BENCHMARK)

THE TBM IS LOCATED ON THE TOP OF CURB AT THE CURVE RETURN OF THE
SOUTHEAST CORNER OF THE LOT. ELEV. = 51.55

ACS BENCHMARK

ACS "15--K19" ELEV. = 5337.858'

LEGAL DESCRIPTION

TRACT CA-1 EAST CENTRAL MULTI-SERVICE CENTER
ALBUQUERQUE, NEW MEXICO, BERNALILLO COUNTY.

LEGEND

.....6.35'.....

EXISTING CONTOUR

.....

EXISTING SPOT ELEVATION

.....

EXISTING CURB AND GUTTER

NOTES

1. SEE ARCHITECTURAL PLANS FOR ITEMS TO BE DEMOLISHED.

EAST CENTRAL MULTI-SERVICE CENTER GRADING & DRAINAGE PLAN

 D. MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS & SURVEYORS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200

Designed: DMG	Drawn: STAFF	Checked: DMG	Sheet 1 of 1
Scale: 1"=20'	Date: 3/94	Job: 94021	

MSC\GD20

