



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

December 7, 2001

John MacKenzie, P.E.
Mark Goodwin & Assoc.
P.O. Box 90606
Albuquerque, New Mexico 87199

RE: WASHBURN PIANO (H-17/D54A)
ENGINEERS CERTIFICATION FOR CERTIFICATE OF OCCUPANCY
ENGINEERS STAMP DATED 10/24/2000
ENGINEERS CERTIFICATION DATED 12/3/2001

Dear Mr. MacKenzie:

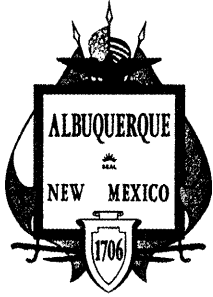
Based upon the information provided in your Engineers Certification submittal dated 12/4/2001, the above referenced site is approved for a Permanent Certificate of Occupancy.

If I can be of further assistance, please contact me at 924-3981.

Sincerely,

Teresa A. Martin
Hydrology Plan Checker
Public Works Department
BA

C: Vickie Chavez, COA
✓ drainage file
approval file



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

November 20, 2000

John M. MacKenzie, P.E.
Mark Goodwin & Assoc,
P.O. Box 90606
Albuquerque, NM 87199

RE: WASHBURN PIANO, The Pavillions @ San Mateo (H17-D54A). GRADING AND DRAINAGE PLAN FOR SITE DEVELOPMENT PLAN FOR BUILDING PERMIT AND FOR BUILDING PERMIT APPROVALS. ENGINEER'S STAMP DATED OCTOBER 24, 2000.

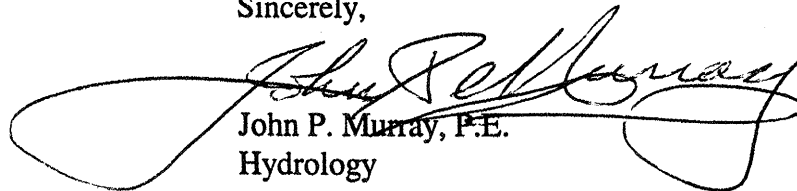
Dear Mr. MacKenzie:

Based on the information provided on your October 26, 2000 submittal, the above referenced project is approved for both Site Development Plan for Building Permit and for Building Permit.

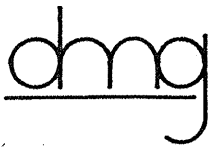
Please attach a copy of this approved plan in the construction sets prior to sign-off by Hydrology.

If I can be of further assistance, please feel free to contact me at 924-3984.

Sincerely,


John P. Murray, P.E.
Hydrology

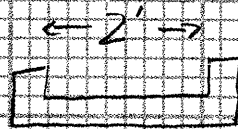
c: Whitney Reiersen
✓ File



D. MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS & SURVEYORS

PROJECT Washburn Piano
SUBJECT Drainage
BY JMM DATE 10/25/00
CHECKED _____ DATE _____
SHEET _____ OF _____

CONCRETE SWALE - SOUTH SIDE OF BUILDING



$$A = 1 \text{ SF}$$

$$WP = 3'$$

$$S = 0.87\%$$

$$Q = \frac{1.49}{.015} (1) \left(\frac{1}{3}\right)^{0.67} (.0087)^{0.5}$$

$$Q = 4.44 \text{ cfs (capacity, 2.7 cfs generated)}$$

OK

Use 3' Opening width

$$L = \frac{Q}{2.9 H^{3/2}} = \frac{2.7}{2.9 (0.5)^{3/2}} = 2.63 \text{ ft}$$

Use 3' wide opening

AHYMO PROGRAM (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
RUN DATE (MON/DAY/YR) = 10/18/2000
START TIME (HR:MIN:SEC) = 07:45:45 USER NO.= M_GOODWN.I01
INPUT FILE = WASHBURN.DAT

START TIME=0.0

***** WASHBURN PIANO IN THE PAVILLIONS

RAINFALL TYPE=1 RAIN QUARTER=0.0 IN
RAIN ONE=2.03 IN RAIN SIX=2.39 IN
RAIN DAY=2.79 IN DT=0.033 HR

COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2
DT = .033000 HOURS END TIME = 5.973000 HOURS

| | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|
| .0000 | .0018 | .0036 | .0054 | .0073 | .0092 | .0112 |
| .0132 | .0152 | .0174 | .0195 | .0217 | .0240 | .0264 |
| .0288 | .0312 | .0338 | .0364 | .0391 | .0420 | .0449 |
| .0479 | .0510 | .0543 | .0576 | .0612 | .0649 | .0687 |
| .0728 | .0771 | .0816 | .0869 | .0927 | .0989 | .1075 |
| .1333 | .1740 | .2335 | .3159 | .4253 | .5659 | .7422 |
| .9586 | 1.2196 | 1.3364 | 1.4181 | 1.4898 | 1.5545 | 1.6138 |
| 1.6687 | 1.7199 | 1.7679 | 1.8130 | 1.8555 | 1.8956 | 1.9336 |
| 1.9696 | 2.0037 | 2.0361 | 2.0668 | 2.0961 | 2.1157 | 2.1221 |
| 2.1282 | 2.1339 | 2.1394 | 2.1447 | 2.1498 | 2.1546 | 2.1593 |
| 2.1638 | 2.1682 | 2.1724 | 2.1765 | 2.1805 | 2.1844 | 2.1882 |
| 2.1918 | 2.1954 | 2.1989 | 2.2023 | 2.2056 | 2.2089 | 2.2121 |
| 2.2152 | 2.2183 | 2.2213 | 2.2242 | 2.2271 | 2.2299 | 2.2327 |
| 2.2354 | 2.2381 | 2.2408 | 2.2434 | 2.2459 | 2.2484 | 2.2509 |
| 2.2534 | 2.2558 | 2.2581 | 2.2605 | 2.2628 | 2.2651 | 2.2673 |
| 2.2695 | 2.2717 | 2.2739 | 2.2760 | 2.2781 | 2.2802 | 2.2823 |
| 2.2843 | 2.2863 | 2.2883 | 2.2903 | 2.2922 | 2.2942 | 2.2961 |
| 2.2979 | 2.2998 | 2.3017 | 2.3035 | 2.3053 | 2.3071 | 2.3089 |
| 2.3106 | 2.3124 | 2.3141 | 2.3158 | 2.3175 | 2.3192 | 2.3209 |
| 2.3225 | 2.3241 | 2.3258 | 2.3274 | 2.3290 | 2.3306 | 2.3321 |
| 2.3337 | 2.3352 | 2.3368 | 2.3383 | 2.3398 | 2.3413 | 2.3428 |
| 2.3443 | 2.3457 | 2.3472 | 2.3486 | 2.3501 | 2.3515 | 2.3529 |
| 2.3543 | 2.3557 | 2.3571 | 2.3585 | 2.3598 | 2.3612 | 2.3625 |
| 2.3639 | 2.3652 | 2.3665 | 2.3679 | 2.3692 | 2.3705 | 2.3717 |
| 2.3730 | 2.3743 | 2.3756 | 2.3768 | 2.3781 | 2.3793 | 2.3806 |
| 2.3818 | 2.3830 | 2.3842 | 2.3854 | 2.3866 | 2.3878 | 2.3890 |

*HYDROGRAPH FOR ADJACENT OFF-SITE BASIN ABOVE SUBJECT PROPERTY
*RUNOFF FROM THIS BASIN WILL BE DIRECTED TO SWALE ALONG SOUTH
*SIDE OF SUBJECT PROPERTY (INCLUDES SUBJECT BUILDING)

COMPUTE NM HYD ID=1 HYD NO=101.1 AREA=0.00094 SQ MI
PER A=0.0 PER B=0.0 PER C=10.0 PER D=90.0
TP=0.1333 HR MASS RAINFALL=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE
UNIT PEAK = 3.3401 CFS UNIT VOLUME = .9960 B = 526.28
AREA = .000846 SQ MI IA = .10000 INCHES INF = .04000 I
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT

K = .107672HR TP = .133300HR K/TP RATIO = .807739 SHAPE

UNIT PEAK = .27001 CFS UNIT VOLUME = .9508 B = 382.90
AREA = .000094 SQ MI IA = .35000 INCHES INF = .83000 I
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT

PRINT HYD ID=1 CODE=24

PARTIAL HYDROGRAPH 101.10

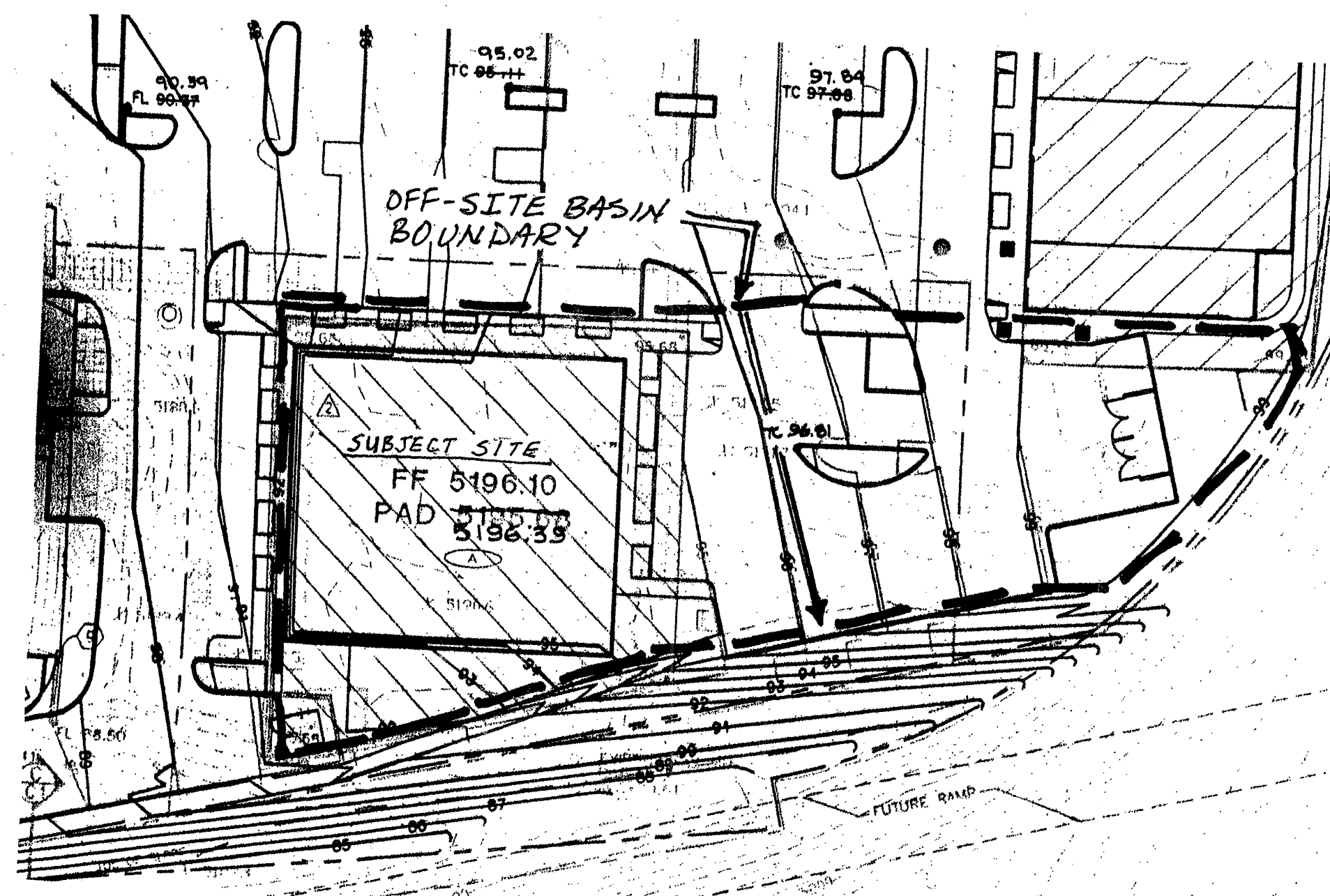
| TIME HRS | FLOW CFS | TIME HRS | FLOW CFS | TIME HRS | FLOW CFS |
|-------------|-------------|-------------|-------------|-------------|-------------|
| .000 | .0 | 1.320 | .7 | 2.640 | .1 |
| .660 | .0 | 1.980 | .7 | 3.300 | .0 |

RUNOFF VOLUME = 2.05428 INCHES = .1030 ACRE-FEET
PEAK DISCHARGE RATE = 2.76 CFS AT 1.518 HOURS BASIN AREA =

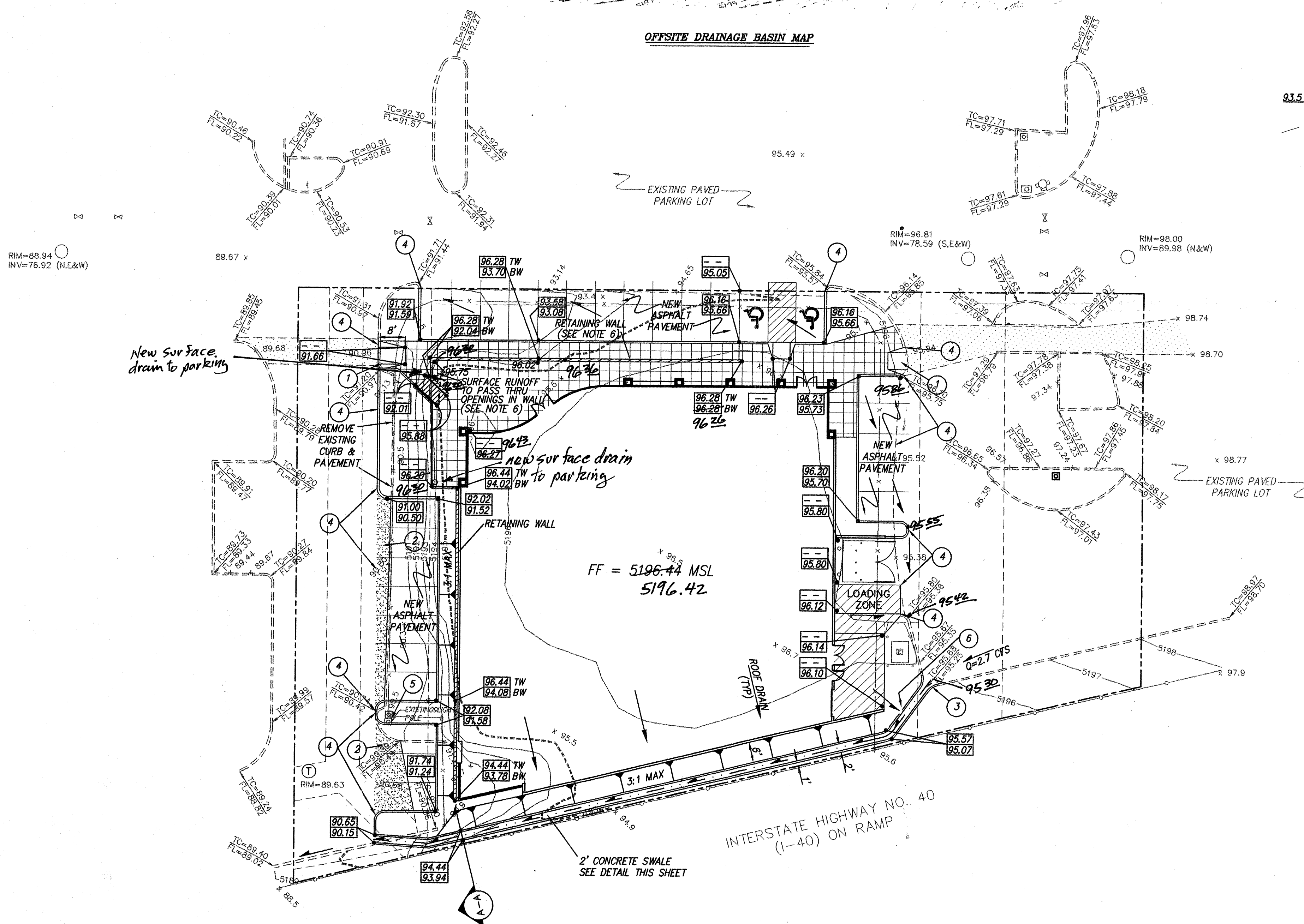
FINISH

NORMAL PROGRAM FINISH

END TIME (HR:MIN:SEC) = 07:45:46

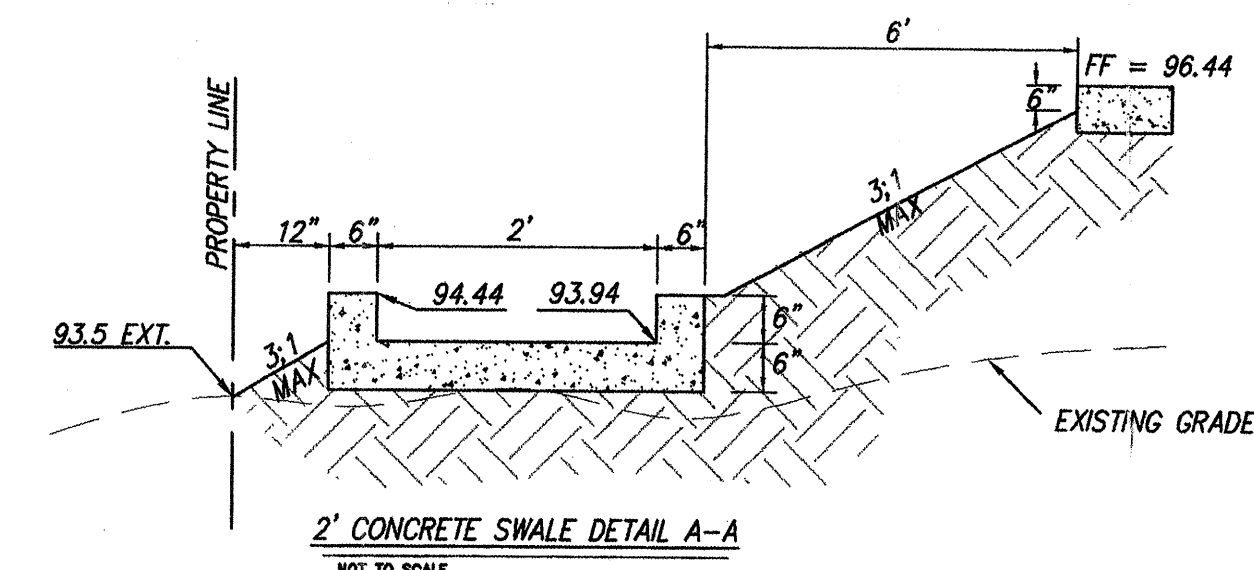


OFFSITE DRAINAGE BASIN MAP



NOTES

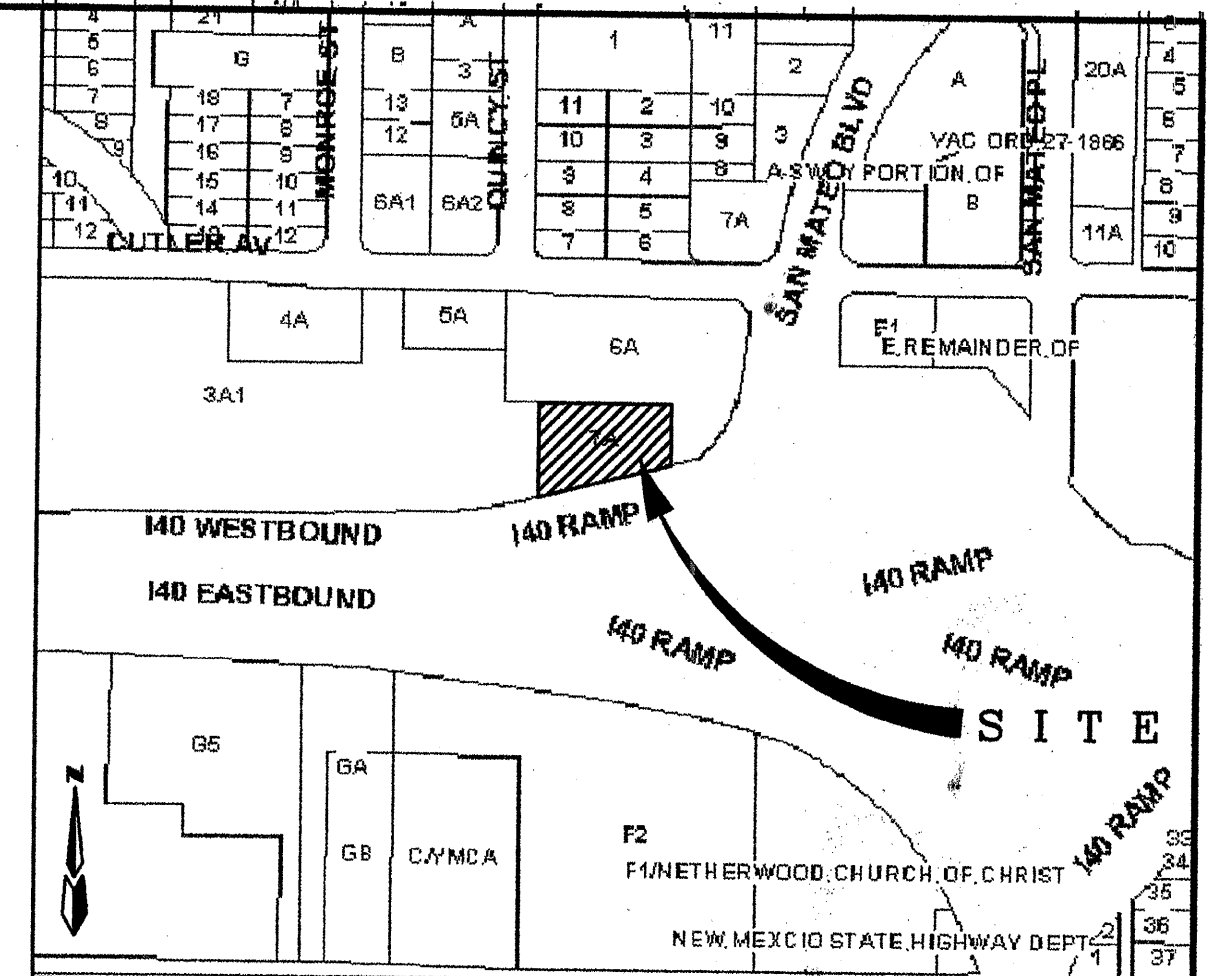
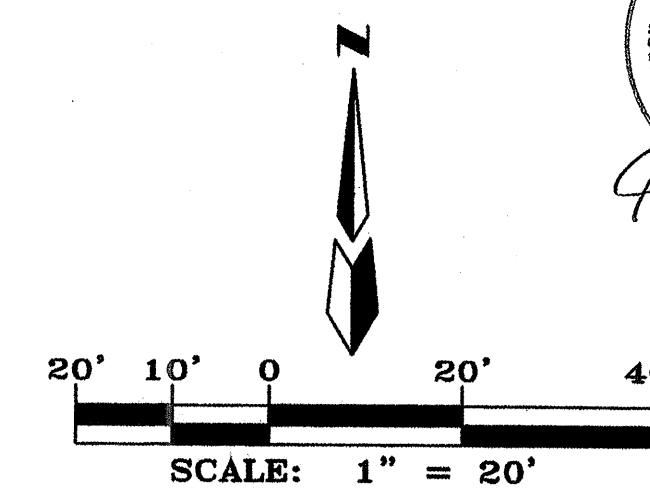
- OFFSITE RUNOFF FROM ADJOINING PARKING AREA EAST OF SITE IS TO BE CONVEYED SOUTH AND INTO NEW CONCRETE SWALE ALONG SOUTH SIDE OF NEW BUILDING.
- CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION SHALL GOVERN ALL WORK.
- THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE AND FEDERAL DUST CONTROL MEASURES AND REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.
- THE CONTRACTOR SHALL ENSURE THAT SOIL DOES NOT ERODE FROM THE BUILDING PAD INTO ADJOINING PARKING AREAS.
- EXISTING TOPOGRAPHY PROVIDED BY ALDRICH LAND SURVEYING DATED SEPTEMBER 2000. THIS IS NOT A BOUNDARY SURVEY. PROPERTY LINES ARE SHOWN FOR ORIENTATION ONLY.
- CONTRACTOR TO PROVIDE CONDUITS THRU WALL AS NECESSARY TO ALLOW CONVEYANCE OF SURFACE RUNOFF TOWARD PARKING SPACES. *not built. Alternate surface drains provided as called out.*



RECORD DRAWING

I hereby certify that the information contained on this drawing has been revised in accordance with information furnished by the contractor/surveyor, Wilger Enterprises, and reflects the construction as actually accomplished. This plan as constructed is in substantial compliance with the approved plan.

John M. Mackenzie
John M. Mackenzie NMP# 11619



LEGEND

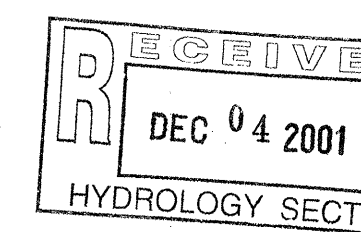
- 5135 --- EXISTING CONTOUR (MAJOR)
- 5136 --- EXISTING CONTOUR (MINOR)
- TC= --- EXISTING TOP OF CURB
- FL= --- EXISTING FLOWLINE
- x 00.00 EXISTING SPOT ELEVATION
- EXISTING CURB AND GUTTER
- o EXISTING SANITARY SEWER MANHOLE
- o EXISTING FIRE HYDRANT
- o EXISTING WATER VALVE
- EXISTING EDGE OF PAVEMENT
- o BOLLARD/POST
- o EXISTING WATER METER
- o SIGN
- o EXISTING ELECTRIC TRANSFORMER
- o EXISTING STREET LIGHT
- o EXISTING CHAIN LINK FENCE
- o EXISTING WOOD FENCE
- TRACT/LOT BOUNDARY
- EASEMENTS
- REMOVE AND REPLACE PAVEMENT
- 87.00 TW PROPOSED TOP OF WALL ELEVATION
- 87.30 BW PROPOSED BASE OF WALL ELEVATION
- 87.00 PROPOSED TOP OF CURB ELEVATION
- 87.30 PROPOSED FLOWLINE ELEVATION
- 87.00 PROPOSED SPOT ELEVATION
- NEW CURB
- MAX. SLOPE 3:1
- NEW RETAINING WALL (STRUCTURAL DESIGN BY OTHERS)
- FLOW DIRECTION
- SWALE
- ROOF DRAIN

KEYNOTES

- NEW HANDICAP RAMP (TYP) PER COA DETAIL 2441.
- REMOVE AND REPLACE WITH NEW PAVEMENT. CLEANLY SAWCUT EXISTING PAVEMENT AND PROVIDE COMPETENT EDGE.
- BUILD 3' WIDE ENTRANCE OPENING TO CONCRETE SWALE MATCH EXISTING FLOW LINE GRADE.
- MATCH EXISTING PAVEMENT GRADE. CLEANLY SAWCUT EXISTING PAVEMENT AND PROVIDE COMPETENT EDGE.
- REMOVE AND RELOCATE EXISTING LIGHT POLE IF NECESSARY.
- PROVIDE 2' OPENING IN SWALE (FL AT OPENING = 95.14) PROVIDE SUFFICIENT EROSION PROTECTION BET. OPENING AND PAVEMENT.

WASHBURN PIANO

GRADING AND DRAINAGE PLAN



MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505)828-2200, FAX (505)797-9539

Designed: JMM Drawn: SPS Checked: DMG Sheet 1 of 1
Scale: 1" = 20' Date: 10/24/00 Job: A0103