PUBLIC WORKS/HYDROLOGY

F18/D23

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F18/D23

25×10

0000 0000 1664

City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

F18 - D23

March 18, 1983

Mr. Dennis Lorenz
Tom Mann & Associates
811 Dallas N.E.
Albuquerque, N.M. 87110

RE: OSUNA COMMERCIAL SUBDIVISION DRAINAGE PLAN

Dear Dennis:

Based on your submittal of March 16, 1983 the referenced plan is approved. Please see that the plan dated 3/3/83 is placed in the City construction sets. Approved copies of "Private Storm Drain Improvements Within City Right-of-Way" should also be included prior to sign-off.

Very truly yours,

Brian G. Burnett
Civil Engineer/Hydrology

BGB/tsl

25 x 10

0000 0000 1665

City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

F18 - D23

March 10, 1983

Mr. Dennis Lorenz
Tom Mann & Associates
811 Dallas N.E.
Albuquerque, N.M. 87110

RE: OSUNA COMMERCIAL SUBDIVISION DRAINAGE PLAN

Dear Dennis:

I have made an initial review of the referenced project and forward the following comments:

1. I would like to clarify a statement made in the drainage plan. Release of the 10-year developed discharge rate is allowed because "downstream capacity" exists in the San Mateo/Osuna storm sewer system. It's important to recognize that the downstream system capacity is responsible for the release rate from any site.

2. It's indicated that offsite flows of 6.1 cfs will be conveyed around the west side of the building. Does the proposed swale have sufficient capacity to convey the flow?

3. It's always helpful to indicate on the plan or on an attached map the boundaries of the off-site watershed. Please submit this information for our files.

4. Approved copies of "Private Storm Drain Improvements Within City Right-of-Way" will be required for the 4" PVC pipe prior to construction plan sign-off.

5. Please see that the P.E. seal is signed and dated.

If you have any questions concerning these matters, please call.

Very truly yours,

Brian

Brian G. Burnett
Civil Engineer/Hydrology

BGB/tsl

25 x 10

0000 0000 1666

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

ATTN: BRIAN BURNETT

RECEIVED
FEB 24 1983
ENGINEERING

DRAINAGE REPORT INFORMATION SHEET

PROJECT TITLE OSUNA COMMERCIAL SUBDIVISION

ZONE ATLAS PAGE NO. F18-D23 CITY ADDRESS OSUNA RD. NE.

LEGAL ADDRESS TRACT C-2 HIGHLAND PARK EAST

ENGINEERING FIRM TOM MANN & ASSOC CONTACT D. LORENZ

ADDRESS 811 DALLAS N.E. PHONE 265-5611

OWNER METRIC INVESTMENTS INC CONTACT JERRY TORR

ADDRESS 1919 OLD TOWN RD. NW PHONE 842-9183

ARCHITECT/(SURVEYOR) TOM MANN & ASSOC CONTACT D. LORENZ

ADDRESS 811 DALLAS NE PHONE 265-5611

DATE SUBMITTED FEB 23, 1983

BY DENNIS LORENZ

BRIAN,

HERE ARE 2 COPIES OF THE SUBJECT DRAINAGE REPORT AND ONE COPY OF OUR PRE-DESIGN AGREEMENT. PLEASE CALL IF YOU HAVE QUESTIONS.

DENNIS.

25×10

0000 0000 1867

2-22-83
DL

Tom Mann Associates, Inc.
Engineers
811 DALLAS, N... • ALBUQUERQUE • NEW MEXICO • 87110 • 50... 265-5611

30092
February 17, 1983

Mr. Brian Burnett
Engineering/Hydrology
City of Albuquerque
P. O. Box 1293
Albuquerque, New Mexico 87103

Release 10-year (free discharge). Use detention pond for flows > 100 year.

Re: Osuna Commercial Subdivision

Dear Brian:

Pursuant to our conversation on February 15, 1983, I have reviewed the drainage calculations submitted by Fred Arfman for the Silver Dollar Drive-In site redevelopment and concur with the findings contained therein. Attached you will find additional calculations showing that there is adequate street capacity and an adequate number of catch basins to carry the developed 10-year runoff.

In light of my findings, I intend to release the 10-year developed flow from the Osuna Commercial Subdivision, at a controlled rate, routed through a detention pond. If you agree with my conclusions, please sign on the line provided below and forward back to this office.

If you have any questions or comments, please do not hesitate to call.

Sincerely,

TOM MANN & ASSOCIATES, INC.

Brian Burnett

Brian Burnett

D. A. Lorenz

DENNIS A. LORENZ
Project Engineer

DAL:ns
enc.

25x10

0000 0000 1668

Goldberg - Mann & Associates, Inc.
Engineers - Planners
811 Dallas St., N.E. Albuquerque, New Mexico 87110 (505) 265-5611

April 1, 1980

9-95

Mr. Fred Aguirre
City of Albuquerque
Engineering Division/Flood Control
P.O. Box 1293
Albuquerque, New Mexico 87103

Re: L. B. Nelson Condominium Project

Dear Fred:

We have been instructed not to work any further on the L. B. Nelson Condominium project. Therefore, please file the plans and we will resubmit if and when the job is reactivated.

Thank you.

Yours truly,

GOLDBERG-MANN & ASSOCIATES, INC.

Thomas T. Mann, Jr., P.E.
President

TTM:pe

RECEIVED
APR 08 1980
CITY ENGINEER

25×10

0000 0000 1664

City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

March 20, 1980

Thomas T. Mann, Jr., P.E., President
Goldberg-Mann & Associates, Inc.
811 Dallas Street, N. E.
Albuquerque, New Mexico 87110

Re: L. B. Nelson Condominium Project

Dear Mr. Mann:

The attached are my comments concerning the above referenced Drainage Report submitted to this office on December 18th.

If you have any questions concerning these comments, please feel free to call on me.

Sincerely,

Fred J. Aguirre
Civil Engineer

FJA:pp

✓cc: Drainage File

25×10

0000 0000 1670

March 14, 1980

L. B. NELSON CONDOMINIUM PROJECT

1. There is no name mentioned for the other drainage report as indicated therefore, cannot verify off site drainage plans.

2. Only two ponds are indicated and computed whereas three are specified in the report.

3. The computation for the required pond indicates that a valve of 1.1 inches was used instead of 2.4 inches for the 100 year rainfall, whereby the required ponding is 12,339 C.F. and if 2.4 inches is used, it would be 26,923 C.F.

4. What is the discharge from the pond, and what will happen to the water when it is discharged? Can the downstream facilities handle this additional discharge? Who is going to maintain the pump?

5. Calculations do not comply with new Interim Drainage Guidelines.

6. Proposed landscaping?

7. Storm runoff must be diverted away from the structures.

8. Drainage areas must be outlined and runoff calculations shown. These drainage areas must balance with their respective pond.

9. Is the proposed grading intended to block offsite flows?

10. Are existing contours a result of a recent survey?

11. More detail needed on existing conditions.

12. Close proximity of pond to structure must be addressed in the report.

25×10

0000 0000 1671

3/14/80

L.B. Nelson Condominium Project.

1. There is no name mentioned for the other drainage report as indicated, therefor cannot verify offsite drainage plans.

2. Only two ponds are indicated and computed whereas three are specified in the report.

3. The computation for the required pond indicates that a value of 1.1 inches was used instead of 2.4 inches for the 100-year rainfall, whereby the required ponding is 12,339 c.f. and if 2.4 inches is used it would be 26,923 c.f.

4. What is the discharge from the pond, and what will happen to the water when it is discharged? Can the downstream facillities handle this additional discharge? Who is going to maintain the pump?

~~A. A seperate drainage report should be attached instead of being incorporated on the plan sheet.~~

25×

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5 (6) CALCULATIONS DO NOT COMPLY WITH NEW INTERIM DRAINAGE GUIDELINES

6 (7) PROPOSED LANDSCAPING ?

7 (8) STORM RUNOFF MUST BE DIVERTED AWAY FROM THE STRUCTURES

8 (9) DRAINAGE AREAS MUST BE OUTLINED AND RUNOFF CALCULATIONS SHOWN. THESE DRAINAGE AREAS MUST BALANCE WITH THEIR RESPECTIVE POND.

9 (10) IS THE PROPOSED GRADING INTENDED TO BLOCK OFFSITE FLOWS?

10 (11) ARE EXISTING CONTOURS A RESULT OF A RECENT SURVEY?

11 (12) MORE DETAIL NEEDED ON EXISTING CONDITIONS.

25×10

Goldberg - Mann & Associates, Inc.
Engineers - Planners
811 Dallas St., N.E.
Albuquerque, New Mexico 87110
(505) 265-5611

December 18, 1979

9-95

Mr. Bruno Conegliano
Asst. City Engineer/Hydrology
Engineering Division
P.O. Box 1293
Albuquerque, New Mexico 87103

RECEIVED
DEC 18 1979
CITY ENGINEER

Re: L. B. Nelson Condominium Project

Dear Bruno:

Please find enclosed two (2) prints of the drainage plan for the L. B. Nelson Condominium project on Osuna Road N.E.

If you have any questions or comments, please do not hesitate to call.

Yours truly,

GOLDBERG-MANN & ASSOCIATES, INC.

Thomas T. Mann, Jr., P.E.
President

TTM:pe
Enc. (2)

25 x 10

Goldberg - Mann & Associates, Inc.
Engineers - Planners
811 Dallas St., N.E. Albuquerque, New Mexico 87110 (505) 265-5611

December 18, 1979

9-95

F18-D23

Mr. Bruno Conegliano
Asst. City Engineer/Hydrology
Engineering Division
P.O. Box 1293
Albuquerque, New Mexico 87103

RECEIVED
DEC 18 1979
CITY ENGINEER

Re: L. B. Nelson Condominium Project

Dear Bruno:

Please find enclosed two (2) prints of the drainage plan for the L. B. Nelson Condominium project on Osuna Road N.E.

If you have any questions or comments, please do not hesitate to call.

Yours truly,

GOLDBERG-MANN & ASSOCIATES, INC.

Thomas T. Mann, Jr., P.E.

Thomas T. Mann, Jr., P.E.
President

TTM:pe
Enc. (2)

25×10

0000/0000 1675

City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

September 20, 1979

Mr. Thomas Mann
Goldberg-Mann & Associates
2329 Wisconsin, NE
Albuquerque, New Mexico 87110

SUBJECT: DEVELOPMENT PLANS FOR L. B. NELSON

Dear Mr. Mann:

I have reviewed the drainage plan for the referenced development, and I am in concurrence with the conceptual schemes submitted. Please notify the owner that construction plans will be approved but Certificate of Occupancy will not be granted without a certification from his Engineer that the grading has been staked and the ponds indicated have been provided in accordance to the approved drainage plan. As I have verbally indicated to you, our inspection prior to granting Certificate of Occupancy has revealed that in too many instances the contractor does not follow the submitted plan which is executed in the absence of any supervision.

Very truly yours,

Bruno Conegliano
Assistant City Engineer
Hydrology

BC:bm
CC: R. E. Leonard, AMAFCA w/attachments
Charles Volz, Building Inspection
R. S. Heller
Fred Aguirre w/attachments
Drainage File

25x10

0000 0000 1676

Goldberg - Mann & Associates, Inc.
Engineers - Planners
911 Pennsylvania St., N.E. Albuquerque, New Mexico 87110 (505) 265-3521

September 17, 1979

9-95

Mr. Bruno Conegliano
Asst. City Engineer/Hydrology
Division of Engineering
P.O. Box 1293
Albuquerque, New Mexico 87103

Re: L. B. Nelson Drainage Plan

Dear Bruno:

Transmitted herewith are two (2) prints of a drainage plan for L. B. Nelson. The plan is for apartment units located in the old Osuna Mobile Home Park on Osuna Boulevard N.E. We have discussed this plan before and I believe that I have addressed all of the comments that you have made. Please review and comment on this plan at your earliest convenience.

Thank you.

Yours truly,

GOLDBERG-MANN & ASSOCIATES, INC.

Thomas T. Mann, Jr., P.E.
President

TTM:pe

25x10

Speed Letter.

RECEIVED
SEP 02 1981
ENGINEERING

To Chuck Easterling

From T. Mann

Subject 9-95 C.B. Nelson - Osuna

-No. 9 & 10 FOLD

MESSAGE

Transmitted herewith are two (2) copies of the revised drainage plan for C.B. Nelson. Also attached is a list of requirements you and Rich Allen agreed upon. Please review & comment. We sent S.O.19 form to Kralich and covenant to owner for his signature.

Date 9/1/81 Signed Tom

REPLY

-No. 9 FOLD

-No. 10 FOLD

Date Signed

Wilson Jones Company
GRAYLINE FORM 44-902 3-PART
© 1976 • PRINTED IN U.S.A.

RECIPIENT—RETAIN WHITE COPY, RETURN PINK COPY

25 × 10

0000 0000 1678

City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

F18-D23

September 17, 1981

Mr. Tom Mann
Tom Mann & Associates
811 Dallas N.E.
Albuquerque, New Mexico 87110

Re: L.B. NELSON - OSUNA PROJECT DRAINAGE REPORT

Dear Tom:

The referenced drainage report is hereby approved based on your submittal of September 2, 1981. Please include on the plans the bench mark and TBM to Mean Sea Level Designation.

Mr. Fred Aguirre will sign off for the Hydrology Section when copies of the revised plan dated 9-1-81 are placed in the construction sets.

Very truly yours,

Brian G. Burnett
Civil Engineer/Hydrology

BGB/fs

MUNICIPAL DEVELOPMENT DEPARTMENT
Richard S. Heller, P.E., City Engineer ENGINEERING DIVISION Telephone (505) 766-7467

25×10

0000 0000 1679

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

DRAINAGE REPORT INFORMATION SHEET

PROJECT TITLE L.B. Nelson - Osuna Project

ZONE ATLAS PAGE NO. F-18 CITY ADDRESS 5712 → 5758 Osuna NE

LEGAL ADDRESS Tract C-2 a replat of Tract 1 Highland Park East

ENGINEERING FIRM Tom Mann & Assoc Inc CONTACT Tom Mann

ADDRESS 811 Dallas NE PHONE 265-5611

OWNER L.B. Nelson CONTACT N/A

ADDRESS 4125 Carlisle NE PHONE

ARCHITECT/~~SURVEYOR~~ design professionals CONTACT George Bolling

ADDRESS 4125 Carlisle N.E. PHONE 881-6336

DATE SUBMITTED 8/28/81

BY T. Mann.

MUNICIPAL DEVELOPMENT DEPARTMENT

Richard S. Heller, P.E., City Engineer ENGINEERING DIVISION Telephone (505) 766-7467

25× 32×

0000 0000 1680

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

CONSTRUCTION PLAN REQUIREMENTS
CHECKLIST

PROJECT TITLE L.B. Nelson - Osuna Project

DATE 8/28/81 ZONE ATLAS PAGE NO. F-18

REVIEWER

LEGAL ADDRESS Tract C-2 a replat of Tract 1 Highland Park East

ENGINEERING FIRM Tom Mann & Assoc Inc CONTACT Tom Mann

ADDRESS 811 Dallas NE PHONE 265-5611

OWNER L.B. Nelson CONTACT N/A

ADDRESS PHONE

ARCHITECT/~~SURVEYOR~~ design professionals CONTACT George Bolling

ADDRESS 4125 Carlisle NE PHONE 881-6336

GENERAL

Yes	No	NA	See Comments	
				1. Professional's Stamp with signature and date: A. Engineer who prepared the Drainage Report B. Engineer or Surveyor who performed survey C. Engineer, Architect or Surveyor who prepared the grading plan.
				2. North arrow with standard engineering scales used: A. 1"=10' for sites less than one (1) acre. B. 1"=20' for sites equal to but less than five (5) acres. C. 1"=50' for sites greater than five (5) acres
				3. Vicinity map with Zone Atlas Page No. and legal description.
				4. Location and Description of the Albuquerque Control Survey Vertical Datum.
				5. Location and Description of the Temporary Bench Mark on site.
				6. Legend indicating symbols and abbreviations used.
				7. Certification of: A. Finish floor elevation in the Flood Zone by Engineer or Surveyor. B. Drainage & Grading Plan by Engineer.

25×10 32×10

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TOPOGRAPHY:

Yes	No	NA	See Comments	
				8. Existing contours (per Subdivision Ordinance A-21A5el and AMAFCA 80-15 Sec. 7A and spot elevations adequately showing conditions on-site and any other significant spot elevations off-site which would increase clarity. Note: Contours and spot elevations should be extended a minimum of 15' beyond property line. Some sites may require more off-site topographic information.
				9. Proposed contours (per Subdivision Ordinance A-21A5el and AMAFCA 80-15 Sec. 7A) superimposed over existing contours, adequately supporting the drainage plan (A-21A11; B-7A).
				10. Proposed and existing contours or spot elevations at the property line adequately demonstrating any changes in grade.
				11. Existing or proposed (City approved) top-of-curb and flowline elevations along streets adjacent to the site with mean sea level designation (This also applies to alleys).
				12. Finish floor elevation(s) with mean sea level designation.
				13. Required spot elevations for the standard City drivepad.

CONSTRUCTION DETAIL:

Yes	No	NA	See Comments	
				14. Swales defined by arrows, spot elevations, and cross-sections.
				15. Elevation at property line at least 4" above top of curb.
				16. Internal contributory drainage areas outlined, including roof areas,
				17. Location of canales, scuppers and drain pipes.
				18. Notes defining property line, asphalt sidewalks, planting areas, ponding areas, and all other areas where definition would increase clarity.
				19. Erosion Control Plan (during construction and for phased construction).
				20. Indication of all easements and rights-of-way on, or adjacent to, the site with dimensions and purpose shown.
				21. Retaining wall required when a vertical grade change greater than 18" is indicated.
				22. Details of ponds, swales, rundowns, curb cuts, water blocks, emergency spillways, retaining walls, pond outlets, safety fences, slopes, and all other significant drainage structures with contours, cross-sections and spot elevations when appropriate. ALL CROSS-SECTIONS MUST BE DRAWN TO STANDARD ENGINEERING SCALE OR ADEQUATELY DIMENSIONED.

25×10 32×10

0000 0000 1682

23. Proposed construction within City right-of-way per City Engineer's Special Order No. 19.

24. Indication of all existing structures on or adjacent (15' minimum) to the site, such as: retaining walls, buildings, pavement, ponds, etc.

25. Indication of street name(s) adjacent to the site.

26. Storm runoff routed through the drivepad or a City approved curb cut.

27. Slopes (cut or fill) with height of less than 18", not steeper than 2:1. Slopes with height greater than 18", not steeper than 3:1.

28. Pond(s)' 100 year water surface:
    A. Elevation
    B. Outlined on the Plan

COMMENTS:

25×10 32×10

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OSUNA DRAINAGE 8/18

1. Floor elevations: Call out as "MINI[illegible]" direct reference to mean sea level
2. Screen on pipe @ Pond 'C'. (Inlet)
3. Stand. detail for pipe through curb (MIN = 4")
4. 100-yr. spillway @ pond 'C' (Point of discharge)
5. Run-off between bldgs. ⇒ Use "rock path" to convey water from Parking Areas. use 1-2-3... pts. of discha
6. Reference my conv. w/ Easterling on 8/17/81.
7. Submit info sheet w/ resubmittal.
8. Refer to earlier drainage report.

Continued w/ Tom Mann on 8/18/81
Said could re-do for $250.00

R H Allen

25× 32×

0000 0000 1684

City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

F18-D23

September 17, 1981

Mr. Tom Mann
Tom Mann & Associates
811 Dallas N.E.
Albuquerque, New Mexico 87110

Re: L.B. NELSON - OSUNA PROJECT DRAINAGE REPORT

Dear Tom:

The referenced drainage report is hereby approved based on your submittal of September 2, 1981. Please include on the plans the bench mark and TBM to Mean Sea Level Designation.

Mr. Fred Aguirre will sign off for the Hydrology Section when copies of the revised plan dated 9-1-81 are placed in the construction sets.

Very truly yours,

Brian G. Burnett

Brian G. Burnett
Civil Engineer/Hydrology

BGB/fs

MUNICIPAL DEVELOPMENT DEPARTMENT
Richard S. Heller, P.E., City Engineer ENGINEERING DIVISION Telephone (505) 766-7467

25x10

0000 0000 1685

Goldberg - Mann & Associates, Inc.
Engineers - Planners
811 Dallas St., N.E. Albuquerque, New Mexico 87110 (505) 265-5611

April 1, 1980

9-95

F18-D23

Mr. Fred Aguirre
City of Albuquerque
Engineering Division/Flood Control
P.O. Box 1293
Albuquerque, New Mexico 87103

Re: L. B. Nelson Condominium Project

Dear Fred:

We have been instructed not to work any further on the L. B. Nelson Condominium project. Therefore, please file the plans and we will resubmit if and when the job is reactivated.

Thank you.

Yours truly,

GOLDBERG-MANN & ASSOCIATES, INC.

Thomas T. Mann, Jr., P.E.
President

TTM:pe

RECEIVED
APR 08 1980
CITY ENGINEER

25 x 10

0000 0000 1686

811 DALLAS, N.E. • ALBUQUERQUE • NEW MEXICO • 87110 • 505-265-5611

Tom Mann Associates, Inc.
Engineers

30094
March 18, 1983

Mr. Jerry Torr
1919 Old Town Road, N.W.
Shop 3
Albuquerque, New Mexico 87104

F18-D23

Re: Osuna Commercial Subdivision
Special Order 19

Dear Jerry:

Transmitted herewith for your review are three (3) copies of the approved Special Order 19 for the subject project. One copy each should be attached to the review sets of plans circulating for building permit approval. The third copy should remain in your files for future approval by the City Inspector. As you may already know, a separate permit will be required by the City to perform the construction of drainage facilities within the City right-of-way. This permit can be obtained from the fourth floor of City Hall by presenting an approved copy of the Special Order 19. This is something that the contractor will need to do.

If you have any questions or comments conerning this information, do not hesitate to call.

Sincerely,

TOM MANN & ASSOCIATES, INC.

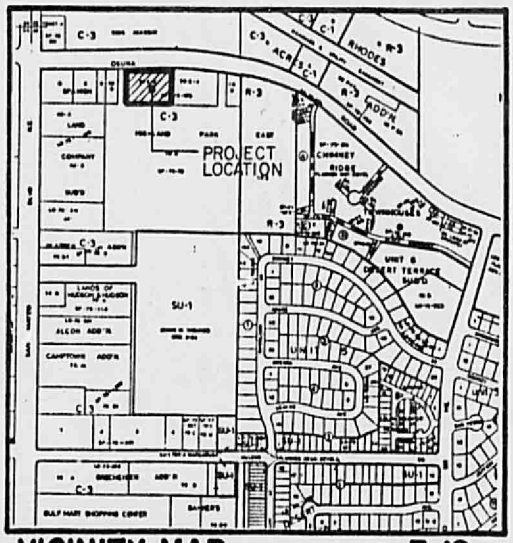
Dennis A. Lorenz
Staff Engineer

DAL:sh
encs.
xc: Fred Aguirre

0000 0000 1687

CITY OF ALBUQUERQUE

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY



VICINITY MAP **F-18**

SCALE: 1" = 800'

REGISTERED PROFESSIONAL ENGINEER
STATE OF NEW MEXICO
3792
AND LAND SURVEYOR

3/15/85

NOTICE TO CONTRACTOR

1. An excavation/construction permit will be required before beginning any work within City right-of-way. An approved copy of these plans must be submitted at the time of application for this permit.
2. All work detailed on these plans to be performed, except as otherwise stated or provided hereon, shall be constructed in accordance with "Contract Documents for City-Wide Utilities and Cash Paving No. 31 "
3. Two working days prior to any excavation, contractor must contact Line Locating Service, 765-1234, for location of existing utilities.
4. Prior to construction, the contractor shall excavate and verify the horizontal and vertical locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
5. Backfill compaction shall be according to ARTERIAL street use.

C-37

APPROVALS	NAME	DATE
A.C.E./DESIGN	J Kelch	17 Mar 85
INSPECTOR		
A.C.E./FIELD		

TITLE: CURB PENETRATION
OSUNA COMMERCIAL SUBDIVISION
5712-5740 OSUNA RD. N.E.

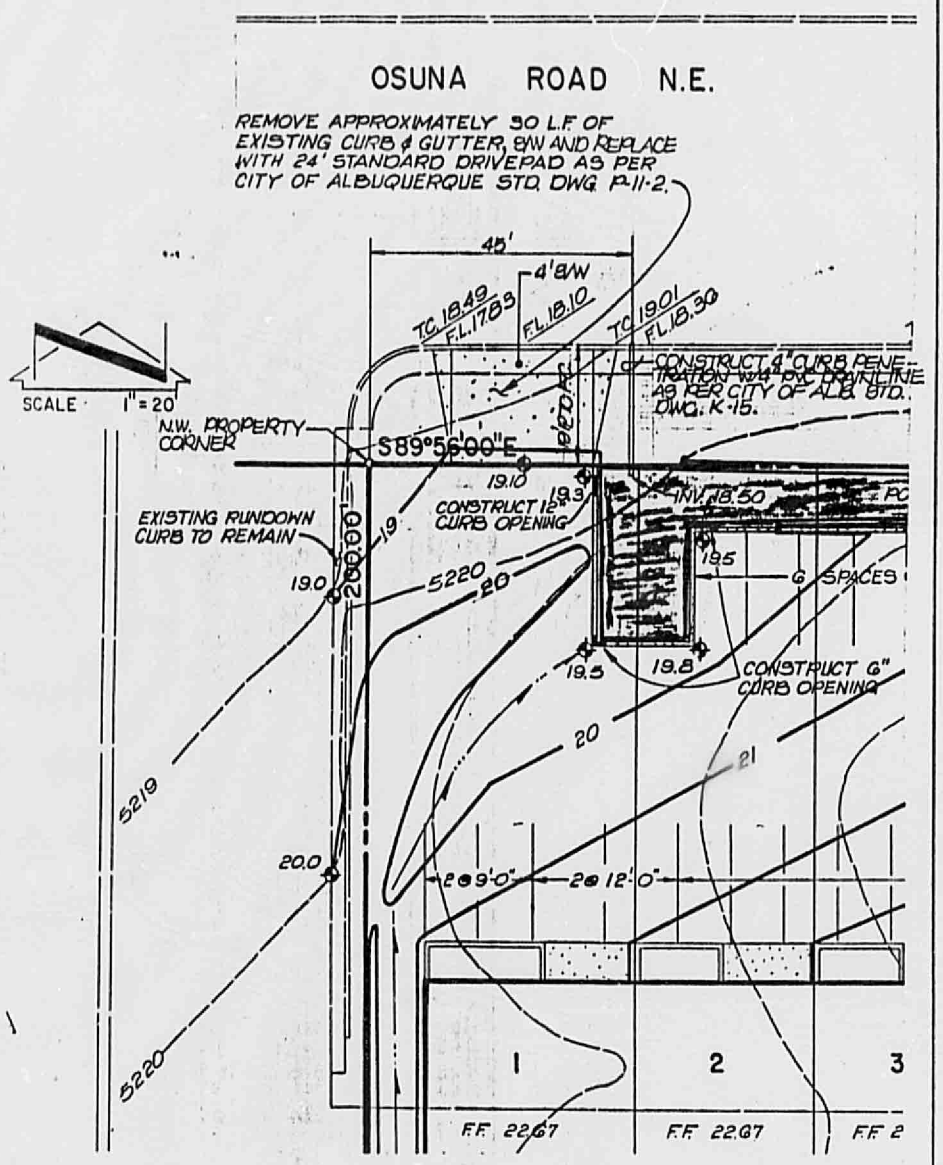
PERMIT NO.
SHEET 1 OF 2
MAP NO. F-18

25x10 32x10

0000 0000 1688

CITY OF ALBUQUERQUE

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY



REGISTERED PROFESSIONAL ENGINEER
STATE OF NEW MEXICO
THOMAS T. JAMES
5792
NEW MEXICO AND LAND SURVEYOR

3/15/83

APPROVALS	NAME	DATE	TITLE: CURB PENETRATION OSUNA COMMERCIAL SUBDIVISION 5712 - 5740 OSUNA RD. N.E.	
A.C.E. / DESIGN	[illegible]	17 Mar 83		
INSPECTOR			PERMIT NO. SHEET 2 OF 2	MAP NO. F · 18
A.C.E. / FIELD				

25×10 32×10

0000 0000 1684

1. CHECK CAPACITY OF OSUNA RD:

A. ASSUME BASIN IS 200' STRIP SOUTH OF OSUNA

$A = 6.20$ AC $\quad C = 0.63$

$L = 1550$

$H = 20'$

$$T_c = 0.0078 \frac{(1550)^{0.77}}{(0.013)^{0.385}} = 12 \text{ min.}$$

$$i_{100} = 2.2''(6.84)(12)^{-.51} = 4.24''/\text{hr}$$

$$i_{10} = 4.24(0.657) = 2.78''/\text{hr.}$$

$$Q(\tfrac{1}{2}\text{ STREET}) = 2.78(6.2)(0.63) = \underline{\underline{10.9 \text{ CFS}}}$$

B. STREET CAPACITY.

$S = 0.015$

WIDTH =

$D = 0.45'$

$V = 3.5$ FPS

$V \times D = 1.6$ ✓

CAPACITY @ $D = 0.67'$ = 40 CFS

2. CHECK CAPACITY OF CATCH BASINS

A. ON SOUTH SIDE OF OSUNA THE ARE 5 DBL 'A' INLETS

$S = 0.015$

$D = 0.45'$

$Q_{'A'} = 6 \text{ CFS (EA)} \times 5 = 30 \text{ CFS}$ ✓

22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS
AMPAD

25x10

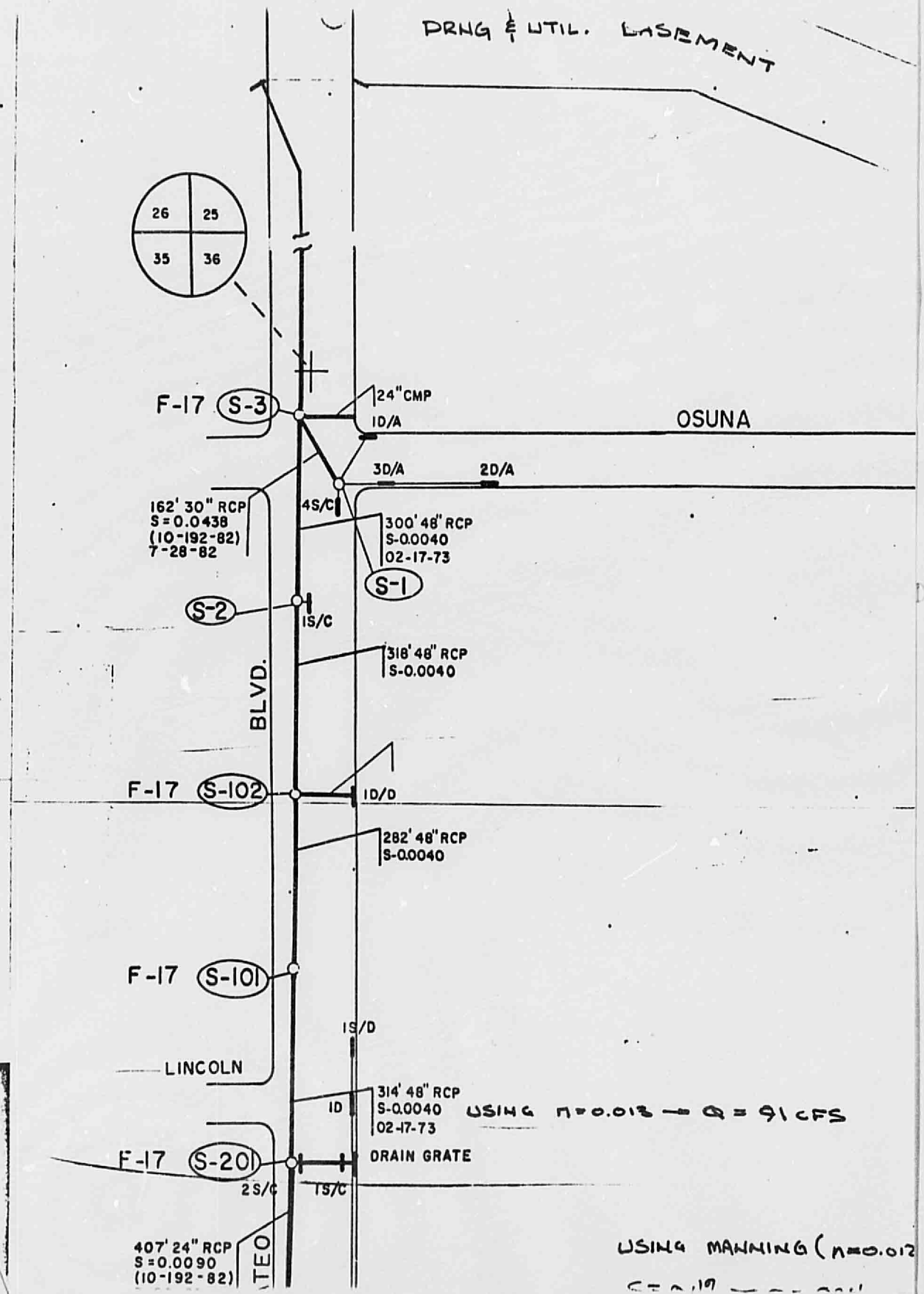
0000 0000 1690

THIS MICROIMAGE IS THE BEST POSSIBLE
REPRODUCTION DUE TO THE POOR QUALITY
OF THE ORIGINAL DOCUMENT

25x10

0000 0000 1691

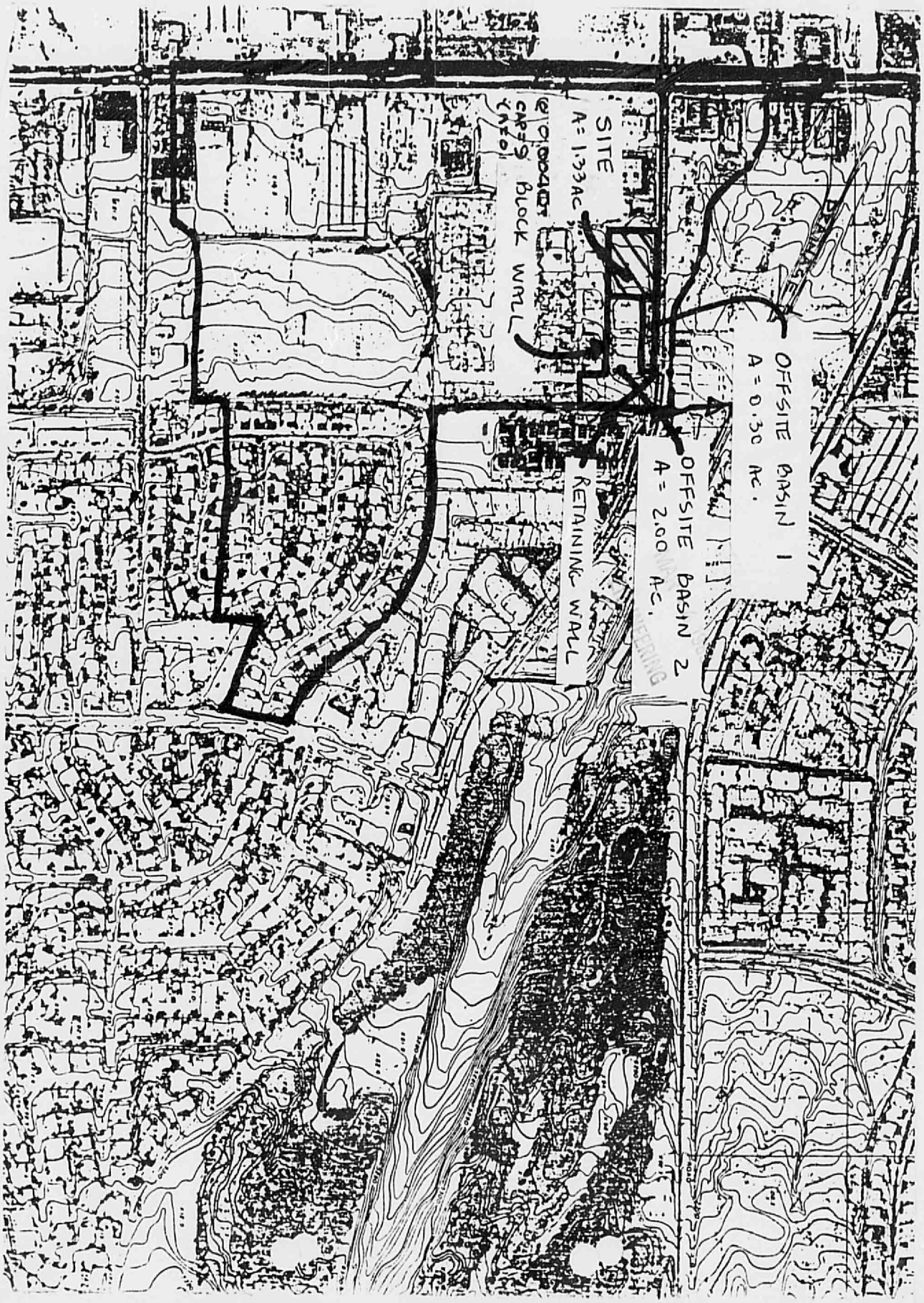
THIS MICROIMAGE IS THE BEST POSSIBLE
REPRODUCTION DUE TO THE POOR QUALITY
OF THE ORIGINAL DOCUMENT



25×10

0000 0000 1692

REPRODUCTION DUE TO THE POOR QUALITY
OF THE ORIGINAL DOCUMENT



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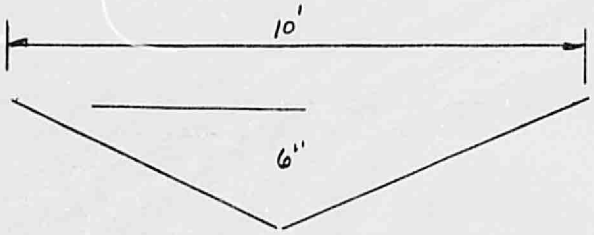
OSUNA COMMERCIAL SUBDIVISION

30092

SWALE CAPACITIES:



$S = 0.01$
$n = 0.02$
$A = 2.5\ SF$
$P = 10.05'$
$R_h = 0.25$

$$Q = \frac{1.49}{0.02}(2.5)(0.25)^{2/3}(0.01)^{1/2}$$

$$Q = 7.4\ CFS$$

$Q_{100\ MAX} = 6.1\ CFS < 7.4\ CFS$ OK ✓

22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS
AMPAD

25×10

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PLANS/PLATS ON FILE

FILE DESC: F18/D23

PLANS/PLATS 2

25x10

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25 x 10